

THE CITY RECORD.

VOL. XLII. NUMBER 12640.

NEW YORK, TUESDAY, DECEMBER 8, 1914.

PRICE, 3 CENTS.

THE CITY RECORD.

OFFICIAL JOURNAL OF THE CITY OF NEW YORK.
Published Under Authority of Section 1526, Greater New York Charter, by the
BOARD OF CITY RECORD.
JOHN PURROY MITCHEL, MAYOR.
FRANK L. POLK, CORPORATION COUNSEL. WILLIAM A. PRENDERGAST, COMPTROLLER.

Supervisor's Office, Municipal Building, 5th floor.
Published daily, at 9 a. m., except legal holidays, at Nos. 96 and 98 Reade street (north side), between West Broadway and Church street, New York City.
Subscription, \$9.30 per year, exclusive of supplements. Daily issue, 3 cents a copy.
SUPPLEMENTS: Civil List (containing names, salaries, etc., of the City employees), Two Dollars; Official Canvass of Votes, 10 cents; Registry Lists, 5 cents each assembly district; Law Department Supplement, 10 cents; Annual Assessed Valuation of Real Estate, 25 cents each section; postage prepaid.
ADVERTISING: Copy for publication in the City Record must be received at least TWO (2) days before the date fixed for the first insertion; when proof is required for correction before publication, copy must be received THREE (3) days before the date fixed for the first insertion. COPY for publication in the corporation newspapers of Brooklyn must be received at least THREE (3) days before the date fixed for the first insertion.
Entered as Second-class Matter, Post Office at New York City.

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EXECUTIVE DEPARTMENT.

Hearing on Cuts Made by Board of Aldermen in the Budget for 1915.

NOTICE IS HEREBY GIVEN that there will be a hearing at TWO O'CLOCK, WEDNESDAY, DECEMBER 9, 1914, in the Board of Estimate Room, City Hall, on the cuts made by the Board of Aldermen in the budget for 1915.
d5.9 THEODORE ROUSSEAU, Secretary.

BOARD OF ESTIMATE AND APPORTIONMENT

Notice of Public Hearing.

Hearing by the Committee on Franchises on the Advisability of Operating Additional Motor Omnibus Lines in the City of New York.

PUBLIC NOTICE IS HEREBY GIVEN that the Committee on Franchises of the Board of Estimate and Apportionment will hold a public hearing on FRIDAY, DECEMBER 18, 1914, at 2.30 p. m., in ROOM 16, CITY HALL, BOROUGH OF MANHATTAN, as follows:

1. On the advisability of granting franchises to maintain and operate additional motor omnibus lines.
2. On the applications for such franchises now pending from the following companies:

- (a) New York Motor Bus Company, Inc.
- (b) Manhattan Motor Bus Company, Inc.
- (c) Fifth Avenue Coach Company.
- (d) People's Five Cent Bus Corporation.

3. On the report submitted to said Committee by the Bureau of Franchises, suggesting the laying out of east and west side and crosstown routes, accompanied by a form of contract to be submitted to all applicants for motor omnibus franchises, as a basis for the submission of offers under the conditions outlined in the report. Copies of the report, form of contract and map, showing graphically the routes applied for and proposed, may be obtained by all persons interested at the office of the BUREAU OF FRANCHISES, Room 1307 Municipal Building, Centre and Chambers Streets, Borough of Manhattan, after December 12, 1914.

Dated December 4, 1914.

JAMES D. MCGANN, Assistant Secretary.

BOARD OF ALDERMEN.

Public Hearing by Committee on Buildings.

PUBLIC NOTICE IS HEREBY GIVEN that the Committee on Buildings of the Board of Aldermen will hold a public hearing in the City Hall, Borough of Manhattan, on FRIDAY, DECEMBER 11, 1914, at 2 o'clock p. m., on the following matters:

No. 1071. Proposed ordinance regulating the construction, operation and maintenance of elevators in the City of New York.

No. 1073. Proposed ordinance to amend "An Ordinance establishing the fire limits in the City of New York, establishing additional restricted limits."
All persons interested are requested to attend.
d7.11 P. J. SCULLY, City Clerk and Clerk of the Board of Aldermen.

PUBLIC SERVICE COMMISSION—FIRST DISTRICT.

No. 154 NASSAU STREET, NEW YORK CITY.

Calendar for the Week Commencing December 7, 1914.

Tuesday, December 8, 1914—10.30 a. m.—Room 305—Case No. 1882—New York Consolidated Railroad Company et al.—"Service and equipment on elevated lines"—Whole Commission. 10.30 a. m.—Room 305—Case No. 1885—New York Railways Company—"Rerouting direction of cars of Madison Street line operating on Chambers and Duane Streets"—Whole Commission. 11 a. m.—Room 310—Case No. 1772—Staten Island Midland Railway Company and Richmond Light and Railroad Company—"Additional cars and service"—Commissioner Cram. 11 a. m.—Room 305—Case No. 1884—New York Consolidated Railroad Company—"Service and facilities at station on Centre Street loop"—Whole Commission. 2.30 p. m.—Room 305—Case No. 1851—Van Brunt Street and Erie Basin Railroad Company et al.—"Through routes and joint rates; apportionment of fares"—Whole Commission.

Wednesday, December 9, 1914—2.30 p. m.—Room 305—Case No. 1778—Third Avenue Railway Company—"Application for approval of issue of \$6,650,000 bonds"—Commissioner Maltbie.

Friday, December 11, 1914—11 a. m.—Room 305—R. T. 6795—Bradley Contracting Company—Joint District Council of Carpenters of Greater New York, complainant—"Alleged violations of Labor Law"—Whole Commission. 12.15 p. m.—Room 305—Broadway-Fourth Avenue Rapid Transit Railroad—"Opening of bids for the construction of Section No. 4 of Routes 4 and 36"—Whole Commission.

Meeting of the Committee of the Whole held Tuesday, Wednesday, Thursday and Friday at 10.30 a. m. in the Committee Room.

Regular meeting of the Commission held every Tuesday and Friday at 12.15 p. m. in Room 310.

Board of City Record.

Abstract of Transactions for Week Ended October 10, 1914:
CITY RECORD, \$153.45; cash sales of CITY RECORD, \$104.81; total, \$258.26.
Vouchers Transmitted to the Comptroller—Contracts, \$9,127.53; payrolls, \$1,952.90; total, \$11,080.43.

Open Market Orders Issued After Competitive Bidding.

Name of Lowest Bidder.	Number of Orders.	Printing.	Stationery.	Books.	Total.
W. F. Albers	1			\$16 50	\$16 50
American Bank Note Co.	3	\$5,584 90			5,584 90
W. Bratter & Co.	18	67 95	\$41 15	2,163 60	2,272 70
M. B. Brown Ptg. & Bdg. Co.	35	9,808 54	128 11	3,307 70	13,244 35
P. J. Collison & Co.	12	61 39	45 52		106 91
Graham-Chisholm Co.	5	27 00		20 55	47 55
Koller & Smith Co.	3	5 45	2 00		7 45
Library Bureau	2	5 22			5 22
J. J. Little & Ives Co.	1	573 40			573 40
The O'Connell Press	1	1,000 00			1,000 00
C. S. Nathan	3	39 39			39 39
The J. W. Pratt Co.	31	1,252 70	369 62		1,622 32
	115	\$18,425 94	\$586 40	\$5,508 35	\$24,520 69

DAVID FERGUSON, Supervisor of the City Record.

Abstract of Transactions for Week Ended October 17, 1914:
RECORD, \$22.22; interest on daily balances, 31 cents; total, \$152.73.
Moneys Received—Subscriptions to the CITY RECORD, \$130.20; cash sales of CITY RECORD, \$8,617.54.

Open Market Orders Issued After Competitive Bidding.

Name of Lowest Bidder.	Number of Orders.	Printing.	Stationery.	Books.	Total.
W. F. Albers	2			\$11 50	\$11 50
American Bank Note Co.	1	\$396 00			396 00
W. Bratter & Co.	37	671 00	\$59 00	2,213 45	2,943 45
The Brooklyn Daily Eagle	1	3 40			3 40
M. B. Brown Ptg. & Bdg. Co.	34	175 39	65 32	4,311 51	4,552 22
P. J. Collison & Co.	4	21 94	5 75		27 69
Graham-Chisholm Co.	6	1 70		68 20	69 90
Herald Square Press	5	15 25	12 75		28 00
Koller & Smith Co.	4	50 80			50 80
Library Bureau	4	16 61	6 41		23 02
C. S. Nathan	4	86 90			86 90
The O'Connell Press	1	4 50			4 50
The J. W. Pratt Co.	43	465 45	560 73		1,026 18
	146	\$1,908 94	\$709 96	\$6,604 66	\$9,223 56

DAVID FERGUSON, Supervisor of the City Record.

Board of Examiners.

November 24, 1914.

Meeting called to order at 2 p. m.
Present: Messrs. Charles Buek, Lewis Harding, William Crawford, John Kenlon, Cecil F. Shallcross and D. Everett Waid.

The Clerk announced that Mr. Just was out of town; whereupon, on motion, Mr. Buek was designated as Acting Chairman. On motion, minutes laid on the table.

Mr. Buek announced that the Superintendent of Buildings for the Borough of Richmond, Mr. W. J. McDermott, accompanied by Mr. Nolan of his office, and Mr. Kennedy from the office of the Corporation Counsel, desired to appear before the Board, relative to points raised in Appeal 228 of 1914; whereupon, on motion, the Board received the Superintendent and his assistants in conference, before proceeding with the calendar.

Appeal 230 of 1914, Alteration 3871 of 1914, premises 138 East 27th Street, Manhattan, John Martin, appellant.

Appearance: Mr. B. B. Davenport.
On motion, disapproved.

Appeal 231 of 1914, New Building 7909 of 1914, premises 1248 Fiftieth Street, Brooklyn, Samuel Gardstein, appellant.

Appearance: Mr. Samuel Gardstein.
On motion, approved.

Appeal 232 of 1914, Alteration 3970 of 1914, premises 210-226 West 44th Street, Manhattan; H. J. Krapp, appellant.

Appearance: Mr. H. J. Krapp.
On motion, approved on condition that a fireproof partition enclosing kitchen be built at the point marked "A," so as not to obstruct the exit stairs near that point; also on condition that a stairway at least three feet four inches (3 ft. 4 in.) wide be built from the balcony to the main floor of the roof garden at the point marked "B," and on the further condition that, except the fireproof doors at each end, all interior walls enclosing kitchen shall be unpierced.

Adjourned.
EDW. V. BARTON, Clerk.

BOARD OF ESTIMATE AND APPORTIONMENT

Minutes of Meeting of Board of Estimate and Apportionment, Held in Room 16, City Hall, Wednesday, November 25, 1914.

The Board met in pursuance of an adjournment.

Present—John Purroy Mitchel, Mayor; William A. Prendergast, Comptroller; George McAneny, President, Board of Aldermen; Marcus M. Marks, President, Borough of Manhattan; Lewis H. Pounds, President, Borough of Brooklyn; Douglas Mathewson, President, Borough of The Bronx; Maurice E. Connolly, President, Borough of Queens; and Charles J. McCormack, President, Borough of Richmond.

The Mayor, Hon. John Purroy Mitchel, presided.

Approval of Minutes (Cal. No. 1).

The Minutes of the meeting held November 6, 1914, were approved as printed in the CITY RECORD November 21, 1914.

PUBLIC HEARINGS.

On Franchises.

Manhattan Bridge Three Cent Line (Cal. No. 2).

The public hearing was opened on the form of contract modifying contract dated July 10, 1912, granting a franchise to the Manhattan Bridge Three Cent Line by substituting a new route on Fulton Street, Ashland Place and Lafayette Avenue, Borough of Brooklyn, for a portion of its existing route on Rockwell Place, Fourth and Atlantic Avenues.

At the meeting of November 20, 1914 (Cal. No. 12), the hearing was continued until this day.

An affidavit of publication of the notice of continued hearing was received from the CITY RECORD.

No one appeared in opposition to or in favor of the proposed grant.

The Secretary presented the following:

Manhattan Bridge Three Cent Line, 215 Montague Street, Brooklyn, N. Y., November 19, 1914.

To the Board of Estimate and Apportionment of The City of New York:

Gentlemen—Under date of September 25, 1913, we applied to your Board for an amendment of our franchises by substituting for our original route through Rockwell Place and other streets in Brooklyn a route through Ashland Place and Lafayette Avenue, and by permitting us to use overhead electric power on the Manhattan Bridge, its plazas and approaches. The application for substitution of routes was at first favorably acted upon and a contract was drafted and advertised, but objections were then raised to the proposed Ashland Place route on the ground that it was undesirable to grant any franchise for operation of surface cars through Ashland Place until the trend of traffic development in that neighborhood should have become apparent. For this reason it was suggested to us by certain members of the Board that our application should be withdrawn for the present.

It was also suggested that under existing traffic conditions the operation of a road on our present route in Brooklyn would be unfortunate, and we were requested to abandon that portion thereof not now in use. We expressed our willingness to comply with this request on condition that we be permitted to abandon also our route across Manhattan from the Manhattan Bridge to the North River, the operation of which has become undesirable owing to the operation by the Brooklyn & North River Company over the same route under a subsequently granted franchise, and on condition that terminal loops be constructed for our use on the Manhattan plaza of the Manhattan Bridge, and that we be permitted to use overhead electric power on the Manhattan Bridge, its plazas and approaches, and that we be relieved from our obligations to pay four per cent. per annum on the cost of terminal loops and facilities used by us. The Franchise Committee, with whom the matter was discussed, have expressed themselves as of the opinion that these conditions were fair and reasonable and have further indicated their intention of so reporting to this Board.

Assuming that this Board will be in accord with the views thus expressed by the Franchise Committee, we are prepared to consummate the matter, and to that end we hereby withdraw our application dated September 2, 1913, for an amendment of our franchise by substituting the Ashland Place route for the Rockwell Place route; and simultaneously we present herewith our new petition dated this 19th day of November, 1914, for an amendment to our said franchise, embodying the recommendations of the Franchise Committee. Yours very respectfully,

MANHATTAN BRIDGE THREE CENT LINE, by FREDERICK W. ROWE, President.

Note—For action on petition dated November 19, 1914, see Calendar Number 41.

Franchise Committee, Board of Estimate and Apportionment, City of New York, November 24, 1914.

To the Board of Estimate and Apportionment:

Gentlemen—The Franchise Committee has had before it for some time the application of the Manhattan Bridge Three Cent Line for the right to substitute a new route on Fulton Street, Ashland Place and Lafayette Avenue, Borough of Brooklyn, for the portion of the route for which it now has a franchise on Rockwell Place, Flatbush, Fourth, Atlantic and Third Avenues.

Much opposition was presented to such modification of route and the Committee is of the opinion that until the proposed plan to widen Fulton Street at this point shall be disposed of and Ashland Place shall have reached its ultimate development, no such application ought to be entertained. To reach the Flatbush Avenue station of the Long Island Railroad by the construction of the route through Bridge Street, Hoyt Street, Livingston Street, Third Avenue and Atlantic Avenue presents many difficulties of operation and is undesirable for the reason that it would increase traffic congestion, particularly at the crossing of Fulton Street. All the substitute routes suggested by the Committee brought forth well grounded objections, so that it has proved practically impossible to find a route to which no valid objection could be made.

In view of the undesirable features of the present proposed route, as above stated, the Company has been urged to abandon that portion of the same and has consented so to do, expressing its willingness to withdraw the pending petition, thus making the intersection of Flatbush Avenue and Fulton Street the Brooklyn terminal of the railway, and not attempt to construct the line to Flatbush Avenue station of the Long Island Railroad, for the time being at least. This is the present operation. The Company is further willing to abandon all franchise rights which it now has in Brooklyn, with the exception of the portion on Flatbush Avenue Extension.

The Company has never been able to obtain trackage rights over the tracks of other companies on Canal Street in Manhattan, and for that reason the terminal of the railway has been the Manhattan end of the Manhattan Bridge. The Committee took this question up with representatives of the companies owning the tracks on Canal Street, and the Committee feels that as a result it is practically impossible for the Manhattan Bridge Three Cent Line to ever obtain, under the existing laws, the trackage rights necessary to operate to the North River.

The Company will also ask to abandon the portion of its franchise rights in the Borough of Manhattan other than on the bridge and bridge approaches, and the Committee sees no objection to that procedure, under the circumstances.

The existing franchise of the Company requires the operation on the bridge and bridge approaches by the underground contact system similar to that used in the Borough of Manhattan. It was the purpose of the Company to switch its cars from the underground contact system to the overhead trolley system at the Brooklyn end of the bridge. The Company asks that the franchise be modified, permitting the operation of the overhead system on the bridge as well as in the Borough of Brooklyn. If the franchise rights in the Borough of Manhattan are abandoned, there seems to be no objection to the operation of the overhead system on the bridge. This would obviate the necessity of changing from the underground contact system to the overhead trolley system at some point on the route, and would be a considerable saving to the Company in that the cars would necessarily be equipped for one system only.

The Company asks that it be relieved from the payment of four per cent. per annum upon the cost of terminal loops or other terminal facilities on the bridge because of its giving up the franchise right in the Boroughs of Manhattan and Brooklyn, as before stated, and also that a part of the initial payment be refunded to the Company.

The Committee does not feel that it would be justified in waiving the annual charge upon the cost of terminal loops and facilities, but it believes that the initial payment required at the time of the granting of the franchise was probably greater than would have been the case had the grant been made for a route from the Manhattan end of the bridge to the intersection of Flatbush Avenue and Fulton Street only, which route will be the only one authorized after the abandonment of the portions of the franchise, as above stated. Under the circumstances the Committee recommends that one-half of the initial payment, that is \$7,500, be the amount of the adjustment, and since the initial sum under the franchise has already been paid, it recommends that the annual payment upon terminal loops and facilities be waived until they shall have amounted in the aggregate to \$7,500.

The Committee, therefore, recommends that the Board should consider favorably an application, if made by the Company, for the modification of the existing franchise:

First—By the elimination of the right to operate in Canal Street and other streets in the Borough of Manhattan and the elimination of the rights to operate on all streets in the Borough of Brooklyn, with the exception of Flatbush Avenue Extension from the bridge terminal to the intersection of Flatbush Avenue Extension and Fulton Street.

Second—By permitting the use of the overhead trolley system on the Manhattan Bridge and its approaches, instead of the underground contact system now required by the franchise.

Third—By amending the contract so as to authorize the Comptroller to withdraw from the general fund the sum of \$7,500, which is one-half of the initial payment of \$15,000 paid by the Company on July 25, 1912, pursuant to Section 4, Subdivision 2, of the franchise contract dated July 10, 1912, and credit the same to a special account, from which account a voucher shall be drawn and charged on November 1 of each year for a sum equal to four per cent. per annum upon the cost of terminal loops and other terminal facilities, as required to be paid by Section 4, Subdivision 2, of said franchise contract, for the year ending September 30 next preceding.

The Committee further recommends that the Company be permitted to withdraw the application dated September 25, 1913, for the right to change its line in the Borough of Brooklyn, as hereinbefore stated, and in the event that the Company fails to withdraw the petition, then the Board should deny the same before taking favorable action upon the modifications of the franchise aforesaid.

Pursuant to these recommendations, the hearing upon the application for the change of line in the Borough of Brooklyn should be closed and the papers filed.

Respectfully submitted,

JOHN PURROY MITCHEL, Mayor, GEORGE McANENY, President, Board of Aldermen; DOUGLAS MATHEWSON, President, Borough of The Bronx, Franchise Committee.

Which report was accepted and the recommendations therein contained were approved by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The Chair declared the hearing closed. The papers were ordered filed. (See Cal. No. 41.)

Telephone, Telegraph and Electric Wires on White Plains Road and Gun Hill Road, Borough of The Bronx (Cal. No. 3).

The public hearing was opened, pursuant to the provisions of Sections 525 and 527 of the Greater New York Charter, of all persons interested, in order that this Board may determine whether, in its opinion, the electrical conductors in White Plains Road between Gun Hill Road and 242nd Street and in Gun Hill Road between Webster Avenue and the Boston Post Road shall be placed underground.

At the meeting of October 30, 1914, the hearing was continued until November 27, 1914, at the request of the President of the Borough of The Bronx, who reported he had held hearings, but had not had an opportunity to look over the testimony. By motion adopted November 13, 1914, this day was fixed as the date for the continued hearing.

At the meeting of October 30, 1914 (Cal. No. 3), a report was presented from the Bureau of Franchises submitting for the consideration of the Board four forms of resolutions approved by the Corporation Counsel, providing, first, for the removal of the wires on both streets; second, for the removal of wires on White Plains Road only; third, for the removal of the wires on Gun Hill Road only, and, fourth, for the denial of the request on both streets.

An affidavit of publication of the notice of continued hearing was received from the CITY RECORD. No one appeared in opposition or in favor.

At the request of the President of the Borough of The Bronx the hearing was continued until the meeting of December 18, 1914.

REPORTS.

From the Department of Finance.

President, Borough of Brooklyn—Transfer of Appropriation and Modification of Schedules (Cal. No. 4).

The Secretary presented a communication dated November 14, 1914, from the President of the Borough of Brooklyn requesting a transfer within the appropriation for said office for 1914; and the following report of the Comptroller, recommending approval thereof and modification of schedules:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 20, 1914.

To the Board of Estimate and Apportionment, The City of New York:

Gentlemen—On November 14, 1914, the President of the Borough of Brooklyn requested the transfer of \$300 from Account No. 626, Contract or Open Order Service, General Plant Service, Care of Sewers, to Account No. 601, Materials, Sewer Materials.

The present unencumbered balance in Account No. 601, Sewer Materials, is \$18.11. It is desired to purchase the following materials for the remainder of the year:

Fire brick	\$18 00
80 pieces spruce plank, at 68 cents.....	54 40
30 barrels of cement.....	54 00
10 yards of Cowboy sand.....	15 00
3 granite heads, at \$17.50.....	52 50
8 Mudsills, at \$7.50.....	60 00
Vitrified sewer pipe	35 00
	\$288 90

Owing to the wear and tear caused to manholes by heavy auto trucks, a large number of the manholes have broken, so that the original estimate for replacing these manholes was insufficient. For this reason the balance in Account No. 601 has been so reduced as to make it impossible to provide therefrom for the purchases listed, amounting to \$288.90, unless the transfer thereto of the \$300 requested is allowed.

An examination shows that a sufficient balance of funds remains available in Account No. 626 to permit the transfer requested.

The adoption of the attached resolutions, approving the proposed transfer requested, and the schedules as revised, is therefore recommended.

Respectfully, WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to the provisions of Section 237 of the Greater New York Charter, hereby approves the transfer of funds appropriated to the Office of the President of the Borough of Brooklyn for the year 1914, as follows:

FROM	
Contract or Open Order Service, General Plant Service.	
626 Care of Sewers	\$300 00
TO	
Materials.	
601 Sewer Materials	300 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves the

schedules, as revised, for the office of the President of the Borough of Brooklyn, for the year 1914, as follows:

<i>Materials.</i>	
601 Sewer Materials	\$3,986 00
<i>Contract or Open Order Service, General Plant Service.</i>	
626 Care of Sewers	13,865 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Fire Department; Health Department; Brooklyn Disciplinary Training School for Boys; Department of Parks, Borough of Queens—Transfer of Appropriations and Modification of Schedules (Cal. No. 5).

The Secretary presented a communication dated November 17, 1914, from the Commissioner of Parks, Borough of Queens, requesting a transfer of \$3,000 to said department from the appropriations made to the Fire and Health Departments for 1914, a communication of same date from the Commissioner of the Fire Department in relation thereto; and the following report of the Comptroller recommending approval thereof and modification of schedules:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 20, 1914.

To the Board of Estimate and Apportionment, The City of New York:

Gentlemen—In a communication dated November 17, 1914, the Department of Parks, Borough of Queens, requested the transfer of funds amounting to \$3,000

<i>FROM</i>	
<i>FIRE DEPARTMENT.</i>	
<i>Purchase of Equipment.</i>	
1696 Motorless Vehicles and Equipment	\$450 00
<i>Materials, General Plant Materials.</i>	
1704 Maintenance of Apparatus and Equipment	300 00
<i>Contract or Open Order Service, General Repairs.</i>	
1706 Care of Buildings and Grounds	450 00
<i>HEALTH DEPARTMENT.</i>	
<i>Supplies.</i>	
1855 Fuel Supplies, Riverside Hospital	1,400 00
<i>BROOKLYN DISCIPLINARY TRAINING SCHOOL FOR BOYS.</i>	
<i>Supplies.</i>	
2713 Food Supplies	400 00
\$3,000 00	

TO
DEPARTMENT OF PARKS, BOROUGH OF QUEENS.
Purchase of Equipment.

1392 Motor Vehicles and Equipment	\$3,000 00
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The transfer is requested to provide for the purchase of an Oldsmobile car, at a cost of \$3,000.00.

The Commissioner stated that the 1910 Peerless car now in service is in very bad condition, and that the cost of maintaining it is so excessive that it will be more profitable for the City to purchase a new car than to continue the operation of the old one.

The old car can be used by the department for various purposes not requiring a very high degree of efficiency.

The Commissioners of the Fire and Health Departments have acquiesced in the proposed transfers.

The Brooklyn Disciplinary Training School for Boys having been discontinued by resolution of your board on August 31, 1914, it is now proposed to utilize a portion of the unencumbered balance in Account No. 2713.

A sufficient balance of funds remains in the accounts enumerated to permit the transfer of funds requested.

The adoption of the attached resolutions approving the proposed transfer and schedules as revised is therefore recommended.

Respectfully, WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to the provisions of Section 237 of the Greater New York Charter, hereby approves the transfer of funds appropriated for 1914, as follows:

<i>FROM</i>	
<i>FIRE DEPARTMENT.</i>	
<i>Purchase of Equipment.</i>	
1696 Motorless Vehicles and Equipment	\$450 00
<i>Materials, General Plant Materials.</i>	
1704 Maintenance of Apparatus and Equipment	300 00
<i>Contract or Open Order Service, General Repairs.</i>	
1706 Care of Buildings and Grounds	450 00
<i>HEALTH DEPARTMENT.</i>	
<i>Supplies.</i>	
1855 Fuel Supplies	1,400 00
<i>Riverside Hospital</i>	
<i>BROOKLYN DISCIPLINARY TRAINING SCHOOL FOR BOYS.</i>	
<i>Supplies.</i>	
2713 Food Supplies	400 00
\$3,000 00	

TO
DEPARTMENT OF PARKS, BOROUGH OF QUEENS.
Purchase of Equipment.

1392 Motor Vehicles and Equipment	\$3,000 00
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Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves of the schedules, as revised, for the Fire Department, Health Department, Brooklyn Disciplinary Training School for Boys and Department of Parks, Borough of Queens, as follows:

<i>FIRE DEPARTMENT.</i>	
<i>Purchase of Equipment.</i>	
1696 Motorless Vehicles and Equipment	\$350 00
<i>Materials, General Plant Materials.</i>	
1704 Maintenance of Apparatus and Equipment— (Modification included in a later schedule.)	
<i>General Repairs.</i>	
1706 Care of Buildings and Grounds	60,950 00
<i>HEALTH DEPARTMENT.</i>	
<i>Supplies.</i>	
1855 Fuel Supplies—	
Administration:	
Care of Buildings and Grounds	\$1,000 00
Promoting Public Health—	
Child Hygiene	1,000 00
Infants' Milk Station	500 00
Infectious Diseases	2,400 00
Sanitary Inspection	75 00
Laboratory Service, Research and Vaccine	1,300 00
Hospital Service:	
Willard Parker and Reception	17,000 00
Riverside	29,000 00
Kingston Avenue	23,000 00
Tuberculosis Sanitarium, Otisville	17,900 00
Total Fuel Supplies	
\$93,175 00	

BROOKLYN DISCIPLINARY TRAINING SCHOOL FOR BOYS.

Supplies.

2713 Food Supplies	\$17,226 75
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DEPARTMENT OF PARKS, BOROUGH OF QUEENS.

Purchase of Equipment.

1392 Motor Vehicles and Equipment	\$6,552 40
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Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

President, Borough of Queens—Transfer of Appropriation and Modification of Schedules (Cal. No. 6).

The Secretary presented a communication, dated November 10, 1914, from the President of the Borough of Queens, requesting transfer within the appropriation for said office for 1912; and the following report of the Comptroller, recommending approval thereof, and modification of schedules:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 21, 1914.

To the Board of Estimate and Apportionment, The City of New York:

Gentlemen—On November 10, 1914, the President of the Borough of Queens requested transfers within appropriations made to that Department for the year 1912, as follows:

<i>FROM</i>	
<i>Supplies and Materials.</i>	
2024 General Administration	\$28 90
<i>Sewers—</i>	
2026 Maintenance	28 10
2031 Public Buildings and Offices	27 00
<i>Repairs and Replacements by Contract or Open Order.</i>	
<i>Highways, Maintenance—</i>	
2036 Repairs to Curbs	20 00
<i>Housing, Storage and Repairs of Apparatus, Machines, Harness and Vehicles, except Automobiles—</i>	
2047 Highways	8 00
<i>Contingencies.</i>	
2073 Sewers	7 00
<i>Purchase and Original Equipment of Apparatus, Machines, Harness and Vehicles, except Automobiles—</i>	
2077 Highways	62 36
Total	
\$181 36	

TO
Contingencies.

2072 Highways	\$181 36
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The purpose of the transfers requested is to provide funds for the payment of bills presented by the Long Island Railroad Company for demurrage and freight service incurred in the delivery of paving blocks in 1912. It appears that considerable difficulty was experienced in obtaining proper checks on these bills, resulting in consequent delay in having them vided. This, however, has now been accomplished and the transfers are necessary to provide funds to liquidate the liability. Sufficient amounts remain unencumbered in the accounts enumerated to permit the transfer requested.

It is therefore recommended that the attached resolutions approving the transfers requested and the schedules as revised be adopted.

Very truly yours,

WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to the provisions of Section 237 of the Greater New York Charter, hereby approves the transfer of funds appropriated to the office of the President of the Borough of Queens, for the year 1912, as follows:

<i>FROM</i>	
<i>Supplies and Materials.</i>	
2024 General Administration	\$28 90
<i>Sewers—</i>	
2026 Maintenance	28 10
2031 Public Buildings and Offices	27 00
<i>Repairs and Replacements by Contract or Open Order.</i>	
<i>Highways, Maintenance—</i>	
2036 Repairs to Curbs	20 00
<i>Housing, Storage and Repairs of Apparatus, Machines, Harness and Vehicles, Except Automobiles—</i>	
2047 Highways	8 00
<i>Contingencies.</i>	
2073 Sewers	7 00
<i>Purchase and Original Equipment of Apparatus, Machines, Harness and Vehicles, Except Automobiles—</i>	
2077 Highways	62 36
Total	
\$181 36	

TO
Contingencies.

2072 Highways	\$181 36
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Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves the schedules as revised, for the office of the President of the Borough of Queens for the year 1912, as follows:

<i>Supplies and Materials.</i>	
2024 General Administration	\$317 59
<i>Sewers—</i>	
2026 Maintenance	6,240 55
2031 Public Buildings and Offices	8,952 90
<i>Repairs and Replacements by Contract or Open Order.</i>	
<i>Highways, Maintenance—</i>	
2036 Repairs to Curbs	307 50
<i>Housing, Storage and Repairs of Apparatus, Machines, Harness and Vehicles, Except Automobiles—</i>	
2047 Highways	1,749 67
<i>Contingencies.</i>	
2072 Highways	4,405 20
2073 Sewers	1,819 55
<i>Purchase and Original Equipment of Apparatus, Machines, Harness and Vehicles, Except Automobiles—</i>	
2077 Highways	16,836 88

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Department of Parks, Borough of Brooklyn—Transfer of Appropriation and Modification of Schedules (Cal. No. 7).

The Secretary presented a communication, dated November 16, 1914, from the Commissioner of Parks, Borough of Brooklyn, requesting a transfer within the appropriation for said department for 1914; and the following report of the Comptroller, recommending approval thereof and modification of schedules:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 20, 1914.

To the Board of Estimate and Apportionment, The City of New York:

Gentlemen—On November 16, 1914, the Department of Parks, Borough of Brooklyn, requested a transfer of \$350 within the appropriation made to that department for the year 1914 from Account No. 1305, Materials, Highway Materials, to

Account No. 1294, Supplies, Forage and Veterinary Supplies, Care of Menagerie, \$250, and No. 1296, Supplies, Office Supplies, \$100.

On November 10, 1914, the following animals purchased by public subscription were received in Prospect Park: Eight lions, one leopard, two hyenas, eleven bears, eight wolves, three jackals, one zingo, one coyote, one kangaroo, twenty-seven monkeys and one ass. The appropriation in the 1914 budget for Forage Supplies is insufficient to provide for this large increase in the menagerie. The greater part of amount requested is to provide meat for the lions, wolves and leopard.

The Commissioner of Parks, Brooklyn, intends to send out about 5,000 circulars to various citizens of the Borough of Brooklyn, informing them that trees can be purchased for spring planting in the City streets at cost; which includes all necessary accessories, such as soil, stake, tree guard, etc. The present balance of funds in Office Supplies Account is only sufficient for the regular needs of the department for the remainder of the year and cannot be made to cover this additional expense for postage.

Sufficient balance of funds remains in Account No. 1305 to permit the transfer requested.

The adoption of the attached resolutions approving the proposed transfer and schedules as revised is therefore recommended.

Respectfully, WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to the provisions of section 237 of the Greater New York Charter, hereby approves transfer of funds appropriated to the Department of Parks, Borough of Brooklyn, for the year 1914, as follows:

FROM		
Materials.		
1305 Highway Materials	.....	\$350 00
TO		
Supplies, Forage and Veterinary Supplies.		
1294 Care of Menagerie	.....	\$250 00
1296 Office Supplies	.....	100 00
		\$350 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves of the schedules, as revised for the Department of Parks, Borough of Brooklyn, for the year 1914, as follows:

Materials.		
1305 Highway Materials	.....	\$19,041 16
Supplies, Forage and Veterinary Supplies.		
1294 Care of Menagerie	.....	6,926 25
1296 Office Supplies	.....	940 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Bellevue and Allied Hospitals—Transfer of Appropriation and Modification of Schedules (Cal. No. 8).

The Secretary presented a communication dated November 5, 1914, from the Board of Trustees of Bellevue and Allied Hospitals, requesting transfer within the appropriations for said department for 1913 and 1914; and the following report of the Comptroller recommending approval thereof; and modification of schedules:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 17, 1914.

To the Board of Estimate and Apportionment, The City of New York:

Gentlemen—In a communication dated November 5, 1914, the Board of Trustees of Bellevue and Allied Hospitals requested the transfer of \$11.58 and \$600 within the appropriations made to that department for 1913 and 1914, respectively. The increases and decreases in the accounts affected by the proposed transfer are as follows:

FROM		
Contract or Open Order Service.		
1913—405 Motor Vehicle Repairs	.....	\$11 58
TO		
1913—406 Contingencies		\$11 58
FROM		
Contract or Open Order Service.		
1914—2089 General Repairs	.....	\$600 00
TO		
Supplies.		
1914—2076 Office Supplies	.....	\$600 00

The appropriation for Account No. 1913—406 was \$4,474.17. The disbursements amounted to \$4,447.75, leaving a balance of \$26.42. A bill of \$36 for rental of a gas range used on the boat "Southfield," the day camp for tuberculosis patients, located at the foot of East 26th Street, remains outstanding against this account and the transfer of \$9.58 will provide the full balance to permit payment being made.

The appropriation for Account No. 2076 was \$3,170. The total charges made to this account to November 10, 1914, amounted to \$3,159.19, leaving a balance of \$10.81. The department having adopted a new rule of notifying by mail the relations or friends of patients admitted to the various hospitals, the cost of postage has been materially increased. An additional allowance of \$600 is therefore necessary to cover postage expense to the end of the year.

The balances in Accounts Nos. 405 and 2089 respectively, are sufficient to permit the requested transfers being effected.

The adoption of the attached resolutions approving the transfer of funds as indicated and the schedules, as revised, is accordingly recommended.

Respectfully, WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to the provisions of Section 237 of the Greater New York Charter, hereby approves of transfer of funds appropriated to Bellevue and Allied Hospitals for the year 1913, as follows:

FROM		
Contract or Open Order Service.		
405 Motor Vehicle Repairs	.....	\$9 58
TO		
406 Contingencies		\$9 58

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves of the schedules, as revised, for Bellevue and Allied Hospitals for the year 1913, as follows:

Contract or Open Order Service.		
405 Motor Vehicle Repairs	.....	\$4,265 50
406 Contingencies	.....	4,483 75

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to the provisions of Section 237 of the Greater New York Charter, hereby approves of transfer of funds appropriated to Bellevue and Allied Hospitals for the year 1914, as follows:

FROM		
Contract or Open Order Service.		
2089 General Repairs	.....	\$600 00

to

Supplies.

2076 Office Supplies \$600 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves of the schedules, as revised, for Bellevue and Allied Hospitals for the year 1914, as follows:

Supplies.

2076 Office Supplies \$3,770 00

Contract or Open Order Service.

2089 General Repairs \$42,400 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Department of Education—Transfer of Appropriation and Modification of Schedules (Cal. No. 9).

The Secretary presented a resolution adopted by the Board of Education on November 11, 1914, requesting a transfer within the appropriation for the Department of Education for 1914; and the following report of the Comptroller recommending approval thereof and modification of schedules:

City of New York, Department of Finance, Comptroller's Office, November 21, 1914.

To the Board of Estimate and Apportionment:

Gentlemen—On November 11, 1914, the Board of Education requested transfer of \$4,000 within the Special School Fund appropriations for the year 1914. In connection therewith I report as follows:

It is proposed to transfer:

FROM		
Purchase of Equipment, General Plant Equipment, Furniture.		
921 Borough of Manhattan	.....	\$500 00
Supplies, Educational and Recreational Supplies.		
887 Borough of Brooklyn	.....	2,000 00
Purchase of Equipment, Janitorial Equipment.		
931 Purchase and Storage of Supplies	.....	1,500 00
		\$4,000 00
TO		
Supplies, Office Supplies.		
880 Supervision of Building Construction and Alteration	.....	\$500 00
Purchase of Equipment, Educational and Recreational Equipment.		
902 Borough of Brooklyn	.....	2,000 00
Supplies, Laundry, Cleaning and Disinfecting Supplies.		
884 Purchase and Storage of Supplies	.....	1,500 00
		\$4,000 00

The transfer of \$500 from General Plant Equipment, Furniture, 921, Borough of Manhattan, is for the purpose of replenishing the appropriation for postage and other office supplies in Code No. 880, Office Supplies, Bureau of Supervision of Building Construction and Alteration, which is insufficient for its purposes.

The transfer of \$2,000 from Educational and Recreational Supplies to Equipment, Borough of Brooklyn, is due to the fact that it was impracticable in making the budget for 1914 to determine the exact distribution of the total appropriation between supplies and equipment, because of the lack of adequate accounting and statistical information which would make an accurate segregation possible. Thus far more money has been needed for Equipment than for Supplies. The transfer of \$1,500 from Janitorial Equipment to Laundry, Cleaning and Disinfecting Supplies is explained in the same way.

Existing balances permit of the transfers.

I recommend the adoption of the attached resolutions granting the request.

Respectfully, WM. A. PRENDERGAST, Comptroller and Chairman, Committee on Education.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to the provisions of section 237 of the Greater New York Charter, hereby approves transfer of funds appropriated to the Department of Education for the year 1914, as follows:

FROM		
Supplies, Educational and Recreational Supplies.		
887 Borough of Brooklyn	.....	\$2,000 00
Purchase of Equipment.		
General Plant Equipment, Furniture—		
921 Borough of Manhattan	.....	500 00
Janitorial Equipment—		
931 Purchase and Storage of Supplies	.....	1,500 00
		\$4,000 00

TO

Supplies.

Office Supplies—

880 Supervision of Building Construction and Alteration \$500 00

Laundry, Cleaning and Disinfecting Supplies—

884 Purchase and Storage of Supplies 1,500 00

Purchase of Equipment.

Educational and Recreational Equipment—

902 Borough of Brooklyn 2,000 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves of the schedules, as revised, for the Department of Education, for the year 1914, as follows:

Supplies.

Office Supplies—

880 Supervision of Building Construction and Alteration \$10,000 00

Laundry, Cleaning and Disinfecting Supplies—

884 Purchase and Storage of Supplies 67,805 94

Educational and Recreational Supplies—

887 Borough of Brooklyn 523,862 01

Purchase of Equipment.

Educational and Recreational Equipment—

902 Borough of Brooklyn 45,670 88

General Plant Equipment, Furniture—

921 Borough of Manhattan 35,494 19

Janitorial Equipment—

931 Purchase and Storage of Supplies 17,332 61

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Department of Water Supply, Gas and Electricity—Transfer of Appropriation and Modification of Schedules (Cal. No. 10).

The Secretary presented a communication dated November 9, 1914, from the Commissioner of Water Supply, Gas and Electricity requesting a transfer within the appropriation for said Department for 1914; and the following report of the Comptroller, recommending approval thereof and modification of Schedules:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 17, 1914.

To the Board of Estimate and Apportionment, The City of New York:

Gentlemen—On November 9, 1914, the Department of Water Supply, Gas and Electricity requested transfer of \$900 from Account No. 2256, Contract or Open Order Service, Light, Heat and Power, Illumination, Power and Heat Control, Illumination, Power and Heat Service, Lighting Public Buildings, Manhattan and The Bronx, to Account No. 2244TW, Contract or Open Order Service, General Repairs, Water Supply, Water Revenue Allowance.

The purpose of the foregoing request is to provide for the cost of repairs to the large distribution main at Alley Creek, Bayside, L. I., which is the connecting main between Bayside and the Douglaston section in the Third Ward, Borough of Queens.

A recent test of this main indicated a leakage amounting to between 300,000 and 400,000 gallons daily. Should this condition be allowed to continue it will become necessary in a short time to purchase water from the Citizens' Water Supply at the rate of \$65 per million gallons. For the time being water must be purchased from outside companies while the pressure is shut off and tests are being made.

In view of the urgency of this work, the adoption of the attached resolutions approving the transfer as requested and the schedules as revised is therefore recommended. Respectfully,

WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to the provisions of section 237 of the Greater New York Charter, hereby approves of the transfer of funds appropriated to the Department of Water Supply, Gas and Electricity for the year 1914, as follows:

	FROM	
	Contract or Open Order Service, Light, Heat and Power; Illumination, Power and Heat Control; Illumination, Power and Heat Service; Lighting Public Buildings.	
2256	Manhattan and The Bronx.....	\$900 00

	TO	
	Contract or Open Order Service, General Repairs.	
2244TW	Water Supply—Tax Levy Allowance	\$900 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves the schedules, as revised, for the Department of Water Supply, Gas and Electricity for the year 1914, as follows:

	Contract or Open Order Service; Illumination, Power and Heat Control; Illumination, Power and Heat Service; Lighting Public Buildings.	
2256	Manhattan and The Bronx—	

General	\$734,921 08
Armories	44,425 00
Total allowance	\$779,346 08

	Contract or Open Order Service, General Repairs.	
2244TW	Water Supply—	

General	\$85,422 50
Relocating and relaying portions of 48-inch distribution main in East New York Avenue, Borough of Brooklyn.....	73,220 00
Improvement, Mount Prospect Reservoir.....	6,000 00
Schedule total	\$164,642 50

Tax Levy Allowance	\$32,317 50
Water Revenue Allowance	132,325 00
Total Allowance	\$164,642 50

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Advertising; Miscellaneous—Transfer of Appropriation and Modification of Schedules (Cal. No. 11).

The Secretary presented the following report of the Comptroller: City of New York, Department of Finance, Comptroller's Office, November 19, 1914.

To the Honorable Board of Estimate and Apportionment:

Gentlemen—In the budget for the current year an appropriation to the amount of \$3,500 was made by the Board of Estimate and Apportionment under Code 3040 for the repair and maintenance of city owned buildings.

This appropriation has been entirely exhausted, owing to the great increase in the number of city owned buildings, and the Bureau of City Revenue is now without any funds to make such needed repairs. Because of this fact the City receives no revenue or very little revenue from property that would bring a fair return if placed in good tenable condition.

In many cases the roofs of the buildings are in very bad condition, and it is essential that repairs thereto be made at once in order to prevent the further deterioration that will occur during the winter season.

For the purpose of securing funds with which to maintain and repair City owned buildings, I would request that a transfer be made, pursuant to section 237 of the Greater New York Charter of the sum of \$2,500

	FROM	
	Advertising, Fixed Charges and Contributions.	
3005	Advertising not otherwise provided for, including arrearages.....	\$2,500 00

	TO	
	Miscellaneous, Contract or Open Order Service, General Repairs.	
3040	Repairs and Maintenance of City Owned Buildings.....	\$2,500 00

Respectfully,

WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to the provisions of section 237 of the Greater New York Charter, hereby approves the transfer of funds appropriated for the year 1914 as follows:

	FROM	
	Advertising, Fixed Charges and Contributions.	
3005	Advertising not otherwise provided for, including arrearages.....	\$2,500 00

	TO	
	Miscellaneous, Contract or Open Order Service, General Repairs.	
3040	Repairs and Maintenance of City-Owned Buildings.....	\$2,500 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves the schedules, as revised, for Advertising, Fixed Charges and Contributions and Miscellaneous, The City of New York.

	Advertising, Fixed Charges and Contributions.	
3005	Advertising, Not Otherwise Provided for, Including Arrearages....	\$49,847 50
	Miscellaneous, Contract or Open Order Service, General Repairs.	
3040	Repairs and Maintenance of City-Owned Buildings.....	\$6,000 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Department of Bridges; Board of Elections—Transfer of Appropriation and Modification of Schedules (Cal. No. 12).

The Secretary presented a communication dated November 11, 1914, from the Commissioner of Bridges requesting a transfer to said Department of \$5,000 from

the appropriation made to the Board of Elections for 1914; and the following report of the Comptroller recommending approval thereof and modification of schedules:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 18, 1914.

To the Board of Estimate and Apportionment, The City of New York:

Gentlemen—On November 11, 1914, the Commissioner of Bridges requested the transfer of \$5,000 in the 1914 Budget appropriations made to the Board of Elections in Account No. 187, Fixed Charges and Contributions, Advertising, to replenish the following accounts appropriated to the Department of Bridges:

2767	Supplies, Forage and Veterinary Supplies	\$100 00
2770	Supplies, Laundry, Cleaning and Disinfecting Supplies.....	50 00
2772	Supplies, General Plant Supplies	200 00
2775	Equipment, Motor Vehicle Equipment	100 00
2776	Equipment, General Plant Equipment	800 00
2777	Materials, General Plant Materials	3,035 00
2778	Contract or Open Order Service, General Repairs.....	400 00
2780	Contract or Open Order Service, Storage of Motor Vehicles.....	215 00
2785	Contract or Open Order Service, Motor Vehicle Repairs.....	100 00

\$5,000 00

The purpose of the foregoing request is to provide funds for the purchase of supplies, materials and equipment from the accounts indicated. These consist of forage supplies, paint brushes, electric lamps, bass brooms, lumber, pipe, pipe fittings, bolts, nuts, rivets, wood block, etc.

The following statement shows amounts requested for transfer and amounts recommended:

	Requested.	Recommended.
2767 Forage	\$100 00	\$100 00
2770 Oil, salt, etc.....	50 00	50 00
2772 Blueprints, carbons	200 00	200 00
2775 Automobile tires	100 00	100 00
2776 Paint brushes, air hose, boiler, etc.....	800 00	400 00
2777 Wood blocks, lumber and hardware.....	3,035 00	1,550 00
2778 Repairs to electric lamps, etc.....	400 00	200 00
2780 Storage, automobile	215 00	200 00
2785 Automobile repairs	100 00	100 00
	\$5,000 00	\$2,900 00

Investigation made by an examiner of this department shows that the amount recommended, namely, \$2,900.00, will be sufficient to meet the requirements of the Department of Bridges for the purposes stated.

The Board of Elections, in a letter dated November 16, 1914, consented to the proposed transfer of \$5,000 being made to the Department of Bridges.

The adoption of the attached resolutions approving the transfer of funds amounting to \$2,900 as indicated, and the schedules as revised is therefore recommended.

Respectfully,

WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to the provisions of Section 237 of the Greater New York Charter, hereby approves transfer of funds appropriated for the year 1914, as follows:

	FROM	
	BOARD OF ELECTIONS.	
	Fixed Charges and Contributions.	
187	Advertising	\$2,900 00

	TO	
	DEPARTMENT OF BRIDGES.	
2767	Supplies, Forage and Veterinary Supplies.....	\$100 00
2770	Supplies, Laundry, Cleaning and Disinfecting Supplies.....	50 00
2772	Supplies, General Plant Supplies	200 00
2775	Equipment, Motor Vehicle Equipment	100 00
2776	Equipment, General Plant Equipment	400 00
2777	Materials, General Plant Materials	1,550 00
2778	Contract or Open Order Service, General Repairs.....	200 00
2780	Contract or Open Order Service, Storage of Motor Vehicles.....	200 00
2785	Contract or Open Order Service, Motor Vehicle Repairs.....	100 00
		\$2,900 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves of the schedules as revised for the Board of Elections for the year 1914 as follows:

	Fixed Charges and Contributions.	
187	Advertising	\$264,033 96
	Tax Levy Allowance.....	214,100 00
	Revenue Bond Allowance.....	49,933 96
Total		\$264,033 96

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves of the schedules as revised for the Department of Bridges, for the year 1914, as follows:

2767	Supplies, Forage and Veterinary Supplies.....	\$1,350 00
2770	Supplies, Laundry, Cleaning and Disinfecting Supplies.....	364 10
2772	Supplies, General Plant Supplies	3,100 00
2775	Equipment, Motor Vehicle Equipment.....	1,800 00
2776	Equipment, General Plant Equipment.....	4,910 00
2777	Materials, General Plant Materials.....	63,735 00
2778	Contract or Open Order Service, General Repairs.....	22,001 00
2780	Contract or Open Order Service, Storage of Motor Vehicles.....	920 00
2785	Contract or Open Order Service, Motor Vehicle Repairs.....	1,100 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Board of Estimate and Apportionment—Transfer of Appropriation and Modification of Schedules (Cal. No. 13).

The Secretary presented the following report of the Comptroller: Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 17, 1914.

To the Board of Estimate and Apportionment, The City of New York:

Gentlemen—On November 9, 1914, the Director of the Bureau of Standards requested a transfer of \$650 from the Board's contingency account to replenish certain accounts of the Standard Testing Laboratory. In connection therewith I report as follows:

It is requested that \$30 be transferred to Supplies, No. 34, Office Supplies; \$300 to No. 36, General Plant Supplies; \$270 to Purchase of Equipment, No. 40, General Plant Equipment, and \$50 to Contract or Open Order Service, No. 41, Transportation, Carfare.

As a result of the passage of the Boylan Law, which became effective July 1, 1914, the additional duty devolved upon the Laboratory of analyzing all drugs submitted by the Police Department. This necessitated the employment of 6 additional Chemists, the funds for which were allowed by your Board on July 30th. These men are obliged to appear in court as experts in all drug cases. The budget allowance for carfares has proved insufficient for this reason.

In addition to the increased work imposed by the analysis of drugs by the Laboratory, which necessitates the use of a greater quantity of chemicals, glassware and incidentals, the general rise in the cost of all laboratory supplies, caused by the war, has contributed to the depletion of the Laboratory's budget appropriations.

I recommend the adoption of the attached resolutions granting the request. Respectfully,
WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to the provisions of section 237 of the Greater New York Charter, hereby approves of the transfer of funds appropriated to the Board of Estimate and Apportionment for the year 1914, as follows:

	FROM	
45TC Contingencies	\$650 00	
	To	
	Supplies.	
34 Office Supplies, Analyzing and Testing	\$30 00	
36 General Plant Supplies, Analyzing and Testing	300 00	
	Purchase of Equipment	
40 General Plant Equipment, Analyzing and Testing	270 00	
	Contract or Open Order Service.	
41 Transportation, Carfare, Analyzing and Testing	50 00	
		\$650 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves of the schedules, as revised, for the year 1914, as follows:

BOARD OF ESTIMATE AND APPORTIONMENT.

45TC Contingencies—		
General	\$73,030 39	
Bureau of Records—		
Salaries Regular Employees—		
Stenographer (male)	\$1,800 00	
Typewriting Copyist (male), 2 at \$900	1,800 00	
Telephone Operator	750 00	
Clerk	300 00	
Annual rate	\$4,650 00	2,800 00
Bureau of Contract Supervision:		
Salaries Regular Employees—		
Examiner, 2 at \$3,000	\$6,000 00	
Expert Accountant	3,000 00	
Examiner	1,800 00	
Clerk	1,950 00	
Clerk	1,200 00	
Clerk	750 00	
Clerk, 2 at \$480	960 00	
Stenographer and Typewriter, 3 at \$900	2,700 00	
Photographer	1,200 00	
Electrical Engineer	4,000 00	
Assistant Engineer	5,000 00	
Assistant Engineer, 2 at \$4,500	9,000 00	
Assistant Engineer, 2 at \$2,400	4,800 00	
Assistant Engineer	2,100 00	
Mechanical Engineer	2,400 00	
Engineer Inspector, 2 at \$1,800	3,600 00	
Inspector	1,650 00	
Draftsman	1,650 00	
Annual Rate	\$53,760 00	40,000 00
Bureau of Standards:		
Salaries Regular Employees—		
Expert Accountant	\$4,000 00	
Expert Accountant	3,500 00	
Examiner	3,000 00	
Examiner	2,100 00	
Examining Inspector, Purchase and Supplies	1,800 00	
Salary and Grade Examiner, 2 at \$3,000	6,000 00	
Salary and Grade Examiner, 3 at \$2,400	7,200 00	
Salary and Grade Examiner, 2 at \$2,100	4,200 00	
Stenographer and Typewriter, 2 at \$900	1,800 00	
Stenographer and Typewriter, 2 at \$750	1,500 00	
Typewriting Copyist	750 00	
Clerk	900 00	
Clerk	480 00	
Clerk	300 00	
Draftsman, 3 at \$1,350	4,050 00	
Draftsman, 5 at \$1,200	6,000 00	
Chemist, 6 at \$1,800	10,800 00	
Balance Unassigned	600 00	
Annual rate	\$58,980 00	\$40,250 00
Bureau of Standards:		
Wages Temporary Employees—		
Assistant Salary Standardization Expert, at \$10 per day (406 days)	\$4,060 00	
Assistant Salary Standardization Expert, at \$8 per day (501 days)	4,008 00	
Assistant Salary Standardization Expert, at \$6 per day (242 days)	1,452 00	
Assistant Salary Standardization Expert, at \$5 per day (38 days)	190 00	
Assistant Salary Standardization Expert, at \$4 per day (161 days)	644 00	
Clerk, at \$300 per annum (1 month)	25 00	
Mechanical Draftsman, at \$1,200 per annum (6 months 5 days)	614 00	
Architectural Draftsman, at \$1,200 per annum (9 months 15 days)	948 39	
Multigraph Operator, at \$3 per day (59 days)	177 00	
Stenographer and Typewriter, at \$3 per day (30 days)	90 00	
Annual rate	\$12,208 39	12,090 39
Committee on Taxation:		
Executive Secretary, 7 months, at yearly rate of	\$4,000 00	
Stenographer and Clerk, 7 months, at yearly rate of	1,500 00	
Stenographer and Typewriter, 7 months, at yearly rate of	900 00	
Clerk, 7 months, at yearly rate of	300 00	
Experts and traveling expenses thereof	7,500 00	
Contingencies and general expenses	2,000 00	
Annual rate	\$16,200 00	13,408 33
Pension Commission:		
Pension Expert at per annum rate	\$3,600 00	
Pension Expert at per annum rate	2,040 00	
Actuary at per annum rate	3,600 00	
Actuarial Clerk at per annum rate	1,500 00	
Structural Steel Draftsman, 3 at \$1,500, at per annum rate	4,500 00	
Stenographer and Tabulator at per annum rate	1,800 00	

Stenographers and Typewriters, 3 at \$900, at per annum rate	2,700 00
Clerk, 7 at \$900, at per annum rate	6,300 00
Tabulating Machine Operator at per annum rate	900 00
Clerks, Card Indexers, 2 at \$900, at per annum rate	1,800 00
Clerk, Card Indexer, at per annum rate	720 00
Clerks, 41 at \$600, at per annum rate	24,600 00
Tabulating Machine Operators, 10 at \$600, at per annum rate	6,000 00
Clerk at per annum rate	300 00
Balance unassigned	7,140 00

Annual rate	\$67,500 00	21,973 66
Equipment and Expense		4,866 07
Mayor's Committee on Food Supply, miscellaneous expenses		500 00
		\$208,918 74

Supplies.

34 Office Supplies—		
Efficiency	\$347 20	
Analyzing and Testing	346 00	
		\$693 20
36 General Plant Supplies—		
Standardization of Supply	\$20 00	
Analyzing and Testing	1,450 00	
		1,470 00
	Purchase of Equipment.	
40 General Plant Equipment—		
Analyzing and Testing		6,695 00
	Contract or Open Order Service.	
41 Transportation—		
Storage of Motor Vehicles—		
Efficiency	\$348 00	
Analyzing and Testing	300 00	
		\$648 00
Hire of Automobiles—		
Efficiency	\$100 00	
Carfare—		
Efficiency	\$480 00	
Analyzing and Testing	300 00	
		\$780 00
Expressage and Deliveries—		
Analyzing and Testing	\$75 00	
		1,603 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Department of Education; Manhattan Trade School for Girls; New York Parental School, Borough of Queens—Appropriation of Funds and Modification of Schedules (Cal. No. 14).

(On November 20, 1914 (Cal. No. 103), the resolution of the Board of Education in this matter was referred to the Comptroller.)

The Secretary presented a resolution adopted by the Board of Education on November 11, 1914, requesting an appropriation to the Special Trade School Fund of \$1,291.20 realized from the sale of products of the Manhattan Trade School for Girls and the New York Parental School, Queens; and the following report of the Comptroller recommending approval thereof and modification of schedules:

City of New York, Department of Finance, Comptroller's Office, November 18, 1914.

To the Board of Estimate and Apportionment:

Gentlemen—On November 11, 1914, the Board of Education requested the appropriation of \$1,291.20, realized from the sale of products of the Manhattan Trade School for Girls (\$1,048.05), and of the New York Parental School, Queens (\$243.15) and paid into the City Treasury, to the Special Trade School Fund, pursuant to the provisions of Section 1066 of the Greater New York Charter, as amended by chapter 35 of the Laws of 1913.

The statute provides that all moneys realized from the sale of products of trade and truant schools shall at once be appropriated to the said fund for use in the borough in which the property was sold.

I recommend the adoption of the attached resolutions granting the request and approving the schedules. Respectfully,

WM. A. PRENDERGAST, Comptroller, and Chairman Committee on Education.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to the provisions of section 1066 of the Greater New York Charter, as amended, hereby appropriates one thousand and forty-eight dollars and five cents (\$1,048.05), representing the proceeds of the sale of products of the Manhattan Trade School for Girls, to the Special Trade School Fund of the Borough of Manhattan, and two hundred and forty-three dollars and fifteen cents (\$243.15), representing the proceeds of the sale of products of the New York Parental School, Queens, to the Special Trade School Fund of the Borough of Queens, which amount together aggregate \$1,291.20, and transfers said moneys thereto from the suspense account entitled, "Sales of Property by Department of Education."

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves the schedules as modified for the Department of Education, as follows:

SPECIAL TRADE SCHOOL FUND.

Borough of Manhattan	\$23,597 62
Borough of Queens	1,494 33

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Department of Water Supply, Gas and Electricity—Transfer and Appropriation of Funds and Modification of Schedules (Cal. No. 15).

The Secretary presented two communications dated November 7, 1914, from the Commissioner of Water Supply, Gas and Electricity, requesting an appropriation from Brooklyn water revenues and a transfer within the appropriation to said department for the year 1914; and the following report of the Comptroller recommending approval thereof and modification of schedules:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 21, 1914.

To the Board of Estimate and Apportionment:

Gentlemen—In a communication dated November 7, 1914, the Department of Water Supply, Gas and Electricity requested additional allotment of \$12,410.50 water revenues, as follows: \$7,190.50 to Account No. 2199W, Personal Service, Wages, Temporary Employees, Water Supply, Pumping, Water Revenue Force; and \$5,220 to Account No. 2201W, Personal Service, Wages, Temporary Employees, Water Supply, Distribution, Water Revenue Force.

The purpose of the request referred to is to provide for an adequate water supply for the Borough of Brooklyn for the remainder of the present year.

Owing to lack of rain this past summer and autumn, the supply of surface water has been diminished to such an extent that it became necessary to reopen practically all of the pumping stations which had been closed for periods of from one to three

years in order to maintain even the normal supply of water for the Borough of Brooklyn.

The pumping stations reopened in the past few months are: Forest Park, Morris Park, St. Albans, Shetucket, Rosedale and Baldwins.

These stations are operated by high pressure boilers, and under the laws require that an Engineer and Stoker be present during their operation, which is twenty-four hours every day.

The amount required to be furnished in Account No. 2199W, Water Supply, Pumping, Water Revenue Force, is to be prorated as follows:

20 Enginemen, at \$4.50 per day (76 days each).....	\$6,840 00
27 Enginemen, at \$4.50 per day (8 days each).....	972 00
21 Stokers, at \$3 per day (76 days each).....	4,788 00
27 Stokers, at \$3 per day (8 days each).....	648 00
Total.....	\$13,248 00
Less balance in account.....	4,283 00

Amount required \$8,965 00

The difference between the amount required, \$8,965, and the amount requested, \$7,190.50, will be adjusted by the reduction of the number of days of employment in other classes of work paid from this account.

The amounts provided for the employment of 27 Enginemen and 27 Stokers represent moneys expended from the amount appropriated to this account for vacations, and is a reimbursement. This reimbursement is necessary owing to the fact that the stations referred to had to be opened in some cases before the expiration of the vacation period.

In some of the stations the employees have served without remuneration for the past five or six weeks.

There is no doubt whatever that these pumping stations which have been reopened will continue to be operated until the end of the present year and that they will remain in operation until the spring thaw again sets in.

The amount of \$5,220, requested to replenish Account No. 2201W, Water Supply, Distribution, Water Revenue Force, is to provide funds for the employment of the necessary force to take care of the distribution system and to pay employees for the time already worked by them and for which they have received no remuneration.

Owing to serious breaks occurring in the different distribution mains throughout the year, in particular during the past winter, the services of nearly all the employees, principally Caulkers and Laborers, who could be requisitioned throughout the regular working force, were required on all Sundays and holidays. The most important of these emergency cases were the several breaks occurring in the large 48-inch distribution main, which is now being relocated and relaid in East New York Avenue, Borough of Brooklyn, at a cost of over \$70,000.

The consequence of these conditions is that all moneys appropriated for this kind of work were quickly expended and the sum referred to, namely, \$5,220, is required not only to pay the cost of carrying on the work until the end of the present year on a conservative estimate of cost, but also to pay the amount due, \$3,653.71, to those employees who have served without remuneration for a considerable period.

The budget estimate for the year 1914 for this purpose was figured on the basis of 303 days of employment for these same employees.

The line item changes in the accounts affected are as follows:

Ac- count.	Title.	Transfer.	
		Increase.	Decrease.
2197	Assistant Foreman, at \$3.50 per day	\$32 00	
	Carpenter at \$5 per day		\$50 00
	Painter at \$4 per day		40 00
	Bricklayer at \$6 per day		24 00
	Laborer at \$2.50 per day		150 00
2201	Foreman at \$5 per day	20 00	
	Plumber at \$5.50 per day	55 00	
	Blacksmith at \$4.50 per day		45 00
	Blacksmith's Helper, at \$3 per day		30 00
	Caulker at \$4 per day	1,704 00	
	Tapper at \$4 per day		20 00
	Valveman at \$3 per day		45 00
	Inspector at \$4 per day		400 00
	Laborer at \$2.50 per day	4,205 00	
	Assistant Foreman at \$4 per day	8 00	
2199	Engineman at \$4.50 per day	7,641 00	
	Oiler at \$3 per day		162 00
	Stoker at \$3 per day	1,326 00	
	Pipefitter at \$5.50 per day		517 00
	Blacksmith at \$4.50 per day		36 00
	Blacksmith's Helper at \$3 per day		24 00
	Bricklayer at \$6 per day		12 00
	Tinsmith at \$4.75 per day		14 25
	Rigger at \$3.75 per day		11 25
	Laborer at \$2.50 per day		1,000 00
Total		\$14,991 00	\$2,580 50

In reference to the request for an allotment of water revenues amounting to \$5,220, previously referred to in a communication dated November 7, 1914, a transfer of \$232 was requested to be made from Account No. 2197W, Personal Service, Wages, Temporary Employees, Water Supply, Collection and Storage, Water Revenue Force, to Account No. 2201W, Personal Service, Wages, Temporary Employees, Water Supply, Distribution, Water Revenue Force.

The purpose of the foregoing transfer is to use all available moneys in the temporary wages accounts for the purpose of replenishing, in addition to the allotment of water revenues requested, the accounts from which the employees working on the distribution system are paid.

It will be seen from the foregoing that the additional allotment of funds required is \$12,410.50.

In view of the facts stated the adoption of the attached resolutions approving the proposed transfer of funds amounting to \$232, the allotment of water revenues for \$12,410.50, as requested, and the schedules, as revised, is therefore recommended.

Respectfully, WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to the provisions of Section 237 of the Greater New York Charter, hereby approves of the transfer of funds for the Department of Water Supply, Gas and Electricity for the year 1914, as follows:

FROM	
Maintenance, Improvement and Extension of the Water Supply System in the Borough of Brooklyn During the Year 1914.	
S-495 Personal Service, Wages, Temporary Employees, Water Supply, Collection and Storage, Water Revenue Force, Water Revenue Allowance	\$232 00

TO	
Maintenance, Improvement and Extension of the Water Supply System in the Borough of Brooklyn During the Year 1914.	
S-497 Personal Service, Wages, Temporary Employees, Water Supply, Distribution, Water Revenue Force, Water Revenue Allowance....	\$232 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to the provisions of Subdivision 1 of Section 242 of the Greater New York Charter, hereby appropriates from the water revenues received in the Borough of Brooklyn during the year 1914 the sum of twelve thousand four hundred and ten dollars and fifty cents (\$12,410.50) for the use of the Department of Water Supply, Gas and Electricity, in

the maintenance, improvement and extension of the water supply system during the year 1914, said appropriation to be in addition to all appropriations heretofore made for said purpose, and to be used to replenish the accounts as follows: Seven thousand one hundred and ninety dollars and fifty cents (\$7,190.50) to the account entitled "Personal Service, Wages, Temporary Employees, Water Supply, Pumping, Water Revenue Force," and five thousand two hundred and twenty dollars (\$5,220) to the account entitled "Personal Service, Wages, Temporary Employees, Water Supply, Distribution, Water Revenue Force."

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves of the schedules, as revised, for the Department of Water Supply, Gas and Electricity for the year 1914, as follows:

Personal Service, Wages, Temporary Employees, Water Supply, Collection and Storage.

2197W Water Revenue Force—	
Foreman, at \$5 per day (10 days).....	\$50 00
Foreman, at \$4 per day (13 days).....	52 00
Assistant Foreman, at \$4 per day (70 days).....	280 00
Assistant Foreman, at \$3.50 per day (14 days).....	49 00
Foreman Carpenter, at \$5 per day (10 days).....	50 00
Carpenter, at \$5 per day (40 days).....	200 00
Painter, at \$4 per day (30 days).....	120 00
Bricklayer, at \$6 per day (14 days).....	84 00
Mason's Helper, at \$3 per day (40 days).....	120 00
Tinsmith, at \$4.75 per day (10 days).....	47 50
Well Driver, at \$3 per day (10 days).....	30 00
Laborer, at \$2.50 per day (300 days).....	750 00

Schedule Total \$1,832 50

Water Revenue Allowance \$1,832 50

Personal Service, Wages, Temporary Employees, Water Supply, Pumping.

2199W Water Revenue Force—	
Engineman, at \$4.50 per day (3,674 days).....	\$16,533 00
Oiler, at \$3 per day (500 days).....	1,500 00
Stoker, at \$3 per day (3,104 days).....	9,312 00
Pipefitter, at \$5.50 per day (15 days).....	82 50
Pipefitter's Helper, at \$3 per day (15 days).....	45 00
Boilermaker, at \$4.25 per day (15 days).....	63 75
Foreman Machinist, at \$5 per day (5 days).....	25 00
Machinist, at \$4.50 per day (95 days).....	427 50
Machinist's Helper, at \$3 per day (5 days).....	15 00
Patternmaker, at \$5 per day (2 days).....	10 00
Blacksmith, at \$4.50 per day (2 days).....	9 00
Blacksmith's Helper, at \$3 per day (2 days).....	6 00
Bricklayer, at \$6 per day (2 days).....	12 00
Tinsmith, at \$4.75 per day (2 days).....	9 50
Wireman, at \$4.50 per day (5 days).....	22 50
Rigger, at \$3.75 per day (2 days).....	7 50
Coal Passer, at \$2.50 per day (224 days).....	560 00
Laborer, at \$2.50 per day (230 days).....	575 00
Balance unassigned	4 00

Schedule Total \$29,219 25

Water Revenue Allowance \$29,219 25

Personal Service, Wages, Temporary Employees, Water Supply, Distribution.

2201W Water Revenue Force—	
Foreman Machinist, at \$5 per day (5 days).....	\$25 00
Foreman, at \$5 per day (9 days).....	45 00
Foreman, at \$4 per day (20 days).....	80 00
Assistant Foreman, at \$4 per day (12 days).....	48 00
Assistant Foreman, at \$3 per day (92 days).....	276 00
Plumber, at \$5.50 per day (30 days).....	165 00
Machinist, at \$4.50 per day (40 days).....	180 00
Machinist's Helper, at \$3 per day (47 days).....	141 00
Blacksmith, at \$4.50 per day (10 days).....	45 00
Blacksmith's Helper, at \$3 per day (10 days).....	30 00
Caulker, at \$4 per day (1,426 days).....	5,704 00
Tapper, at \$4 per day (5 days).....	20 00
Valveman, at \$3 per day (5 days).....	15 00
Driver, at \$2.50 per day (10 days).....	25 00
Inspector, at \$4 per day (500 days).....	2,000 00
Laborer, at \$2.50 per day (3,628 days).....	9,070 00
Automobile Engineman, at \$1,200 per annum (30 days).....	96 77
Balance Unassigned	1 23

Schedule Total \$17,967 00

Water Revenue Force \$17,967 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Police Department—Amendment of Issue of Special Revenue Bonds (Cal. No. 16).

(The resolution of the Board of Aldermen authorizing the issue of Special Revenue bonds in this matter was concurred in to the extent of \$758.40 by the Board of Estimate and Apportionment on November 13, 1914 (Cal. No. 39).)

The Secretary presented the following report of the Comptroller: Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 17, 1914.

To the Board of Estimate and Apportionment, The City of New York:

Gentlemen—On November 13, 1914, your board passed the following resolution by unanimous consent:

"Resolved, That the resolution adopted by the Board of Aldermen on June 23, 1914, requesting an issue of special revenue bonds in the sum of \$1,000.77, the proceeds whereof to be used by the Police Department for the purpose of providing funds for additional compensation for Chief Lineman, Lineman, Wireman and Cable Splicer (Electrician), be and the same is approved by and concurred in by the Board of Estimate and Apportionment to the extent of \$758.40, and for the purpose of providing means therefor the Comptroller be and is hereby authorized, pursuant to the provisions of subdivision 8, section 188 of the Greater New York Charter, to issue special revenue bonds of The City of New York to an amount not exceeding \$758.40, redeemable from the tax levy of the year succeeding the year of their issue."

The above resolution should be amended by adding thereto the words "all obligations contracted for hereunder to be incurred on or before December 31, 1914."

A resolution so amended is therefore submitted herewith for your approval.

Respectfully, WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That the following resolution adopted by the Board of Estimate and Apportionment on November 13, 1914:

"Resolved, That the resolution adopted by the Board of Aldermen on June 23, 1914, requesting an issue of special revenue bonds in the sum of \$1,000.77, the proceeds whereof to be used by the Police Department for the purpose of providing funds for additional compensation for Chief Lineman, Lineman, Wireman and Cable Splicer (Electrician), be and the same is approved of and concurred in by the Board of Estimate and Apportionment to the extent of \$758.40, and for the purpose of providing means therefor, the Comptroller be

and is hereby authorized, pursuant to the provisions of subdivision 8, section 188 of the Greater New York Charter, to issue special revenue bonds of the City of New York to an amount not exceeding \$758.40, redeemable from the tax levy of the year succeeding the year of their issue."

—be and hereby is amended to read as follows:

Resolved, That the resolution adopted by the Board of Aldermen on June 23, 1914, requesting an issue of special revenue bonds in the sum of \$1,000.77, the proceeds whereof to be used by the Police Department for the purpose of providing funds for additional compensation for Chief Lineman, Lineman, Wireman and Cable Splicer (Electrician), be and the same is approved of and concurred in by the Board of Estimate and Apportionment to the extent of \$758.40, and for the purpose of providing means therefor, the Comptroller be and is hereby authorized, pursuant to the provisions of subdivision 8, section 188 of the Greater New York Charter, to issue special revenue bonds of the City of New York to an amount not exceeding \$758.40, redeemable from the tax levy of the year succeeding the year of their issue; all obligations contracted for hereunder to be incurred on or before December 31, 1914.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

President, Borough of Manhattan; Municipal Court of The City of New York—Acquisition of Property as a Site for a Municipal Court House (Cal. No. 17).

The Secretary presented a report of the Comptroller, recommending an issue of \$926.33 corporate stock for the purpose of providing means for the payment of additional interest from October 17, 1914, to November 17, 1914, on awards made in connection with the proceeding to acquire title by The City of New York to certain lands and premises at and near the southeasterly corner of Second street and Second avenue, Borough of Manhattan, selected as a site for a Municipal Court House.

(On September 21, 1914 (Cal. No. 143), a resolution was adopted, on the recommendation of the Comptroller, authorizing the issue of \$191,690.52 corporate stock for the payment of awards and interest, but the Comptroller reports it will be necessary to provide for the additional interest on account of the unforeseen delay in the adoption of the resolution and ordinance providing for the issuance of corporate stock to meet these obligations.)

Which was laid over until December 4, 1914, under Rule 19.

From Bureaus of the Board.

Bureau of Public Improvements.

Fort Hamilton Parkway, Borough of Brooklyn—Transfer of Jurisdiction from the Department of Parks to the President, Borough of Brooklyn; and General Question of Jurisdiction and Control Over Certain Streets of the City (Cal. No. 18).

(At a meeting of the Board held November 13, 1914 (Cal. No. 91), the communication from the Commissioner of Parks in the Fort Hamilton Parkway matter was referred to the Chief Engineer for report.)

The Secretary presented the following report of the Chief Engineer:

Report No. 14156.

November 19, 1914.

Hon. JOHN PURROY MITCHEL, Mayor, President, of the Board of Estimate and Apportionment:

Sir—At a meeting of the Board of Estimate and Apportionment held on November 13, 1914, a communication from the Commissioner of Parks for the Borough of Brooklyn requesting the Board to transfer jurisdiction and control over Fort Hamilton Parkway from the Department of Parks to the President of the Borough of Brooklyn, was referred to the Chief Engineer of the Board.

This question of jurisdiction and control over certain streets of The City of New York is not a new one. For various reasons a number of streets, especially in the Boroughs of Manhattan and Brooklyn, have from time to time been placed under the jurisdiction and control of the Department of Parks by special acts of the Legislature, and in a number of cases such control has again been transferred to the Borough Presidents. In the case of most of these streets, especially those which were put under the control of the Park Department in the Borough of Brooklyn, there is no obvious reason for this action.

On November 18, 1910, the Board denied the request of the President of the Borough of Brooklyn for the placing of that portion of Bushwick Avenue between Myrtle Avenue and Jamaica Avenue under the exclusive care and control of the Department of Parks. A special act of the Legislature, chapter 396 of the laws of 1909, had given specific authority to the Board to make this transfer, but the act was permissive. In reporting upon the request your engineer referred to the desirability of transferring from the Department of Parks to the Borough authorities control over a number of streets which seemed to be ordinary highways, and were in no sense parkways, a list of such streets having been given in the report of the Department of Parks for the year 1905. In this report it was stated that

"It is not improbable that some of these transfers were made before the streets were improved and for the express purpose of imposing upon the city at large the cost of their improvement, relieving the owners of the abutting property of this expense. The Park Commissioner distinctly states that he would require an additional appropriation for the maintenance of Bushwick Avenue if it were transferred to his Department, although I am at a loss to understand just how such an additional appropriation would be expended. In my judgment there are ample reasons for transferring a number of streets in the Borough of Brooklyn from the jurisdiction of the Department of Parks to that of the Borough President, while I know of no adequate reason for taking the control of this portion of Bushwick Avenue from the Borough President and placing it in the Department of Parks."

In December, 1911, the Board was requested to transfer jurisdiction over Lincoln Road between Bedford and Ocean Avenues, in the Borough of Brooklyn, from the jurisdiction of the Borough President to that of the Park Department, this also to be done under a permissive act of the Legislature, chapter 200 of the laws of 1907. In reporting upon this matter your engineer stated that

"The transfer of jurisdiction which is recommended is undoubtedly prompted by a desire to restrict the traffic on this street, which it is believed can be done if it is placed under the control of the Park Department. * * * I have never been able to understand why any street of a normal width, and improved in the manner usually followed in street development, should be placed under the control of the Department of Parks. * * * There are certain thoroughfares of exceptional width, with several roadways for different kinds of traffic and upon which several rows of trees have been planted, the control and custody of which naturally belong in the Department of Parks, but ordinary streets which lead to a park or some park entrance cannot be placed in this class, however extensively they may be used to gain access to a park."

The Board decided to exercise the authority given it under the act of the Legislature, and did transfer jurisdiction over this short portion of Lincoln Road from the Borough President to the Park Department.

The Legislature of 1913 adopted an amendment to the Charter by inserting a new section known as Section 243a, which reads as follows:

"The Board of Estimate and Apportionment with the concurrence of the Board of Aldermen may transfer the jurisdiction and control of any street from any department, board or office to another department, board or office."

At the meeting of the Board of Estimate and Apportionment held on May 29th, the Board considered a request of the President of the Borough of Manhattan that jurisdiction over Columbus Circle, Mail Street and portions of West End Avenue, Fifth Avenue, Fifty-ninth Street, Seventy-second Street, Eighty-second Street, Ninety-sixth Street and One Hundred and Tenth Street, be transferred from the Department of Parks to the President of the Borough. In reporting upon this request your engineer stated that

"The streets included in this list naturally form a part of the street system and in my judgment there is no reason for control over them being exercised by authority differing from that over other improved roadways."

The Board adopted a resolution authorizing this transfer of jurisdiction, which resolution was concurred in by the Board of Aldermen by resolution adopted on July 15, 1913, and approved by the Mayor on August 14, 1913. (Approved resolution 1231.)

On May 1, 1914, the Board considered a communication from the Commissioner of Parks for the Borough of Brooklyn requesting transfer of jurisdiction from the Department of Parks to the President of the Borough of Brooklyn over portions of Elderts Lane, Glenmore Avenue, Miller Avenue, Pitkin Avenue and Stone Avenue. In reporting upon this request your engineer called attention to the fact that there were still three streets, or portions of streets, namely, Bushwick Avenue, Pennsylvania Avenue and Vermont Street, placed under the jurisdiction of the Department of Parks by chapter 535 of the laws of 1897, which, with the possible exception of Bushwick Avenue, were of such a character that they might be properly transferred to the President of the Borough. The Board adopted a resolution making the transfer requested by the Commissioner of Parks, in accordance with the law of 1913, above referred to, and this action was concurred in by the Board of Aldermen, by resolution adopted June 9, 1914, and approved by the Mayor June 13, 1914. (Approved resolution 331.)

It will be seen that the Board has been consistently transferring jurisdiction over streets which are not properly parkways and have no park features from the Park Department to the President of the Borough in which they are located, the only exception to this policy having been the transfer of Lincoln Road, in the Borough of Brooklyn, from the President of the Borough to the Park Department.

Fort Hamilton Avenue, transfer of which is now requested, is somewhat different from the streets above referred to in that it is a diagonal street extending directly from the Ocean Parkway at a point very near Prospect Park to the southern end of the Shore Road, and crosses the street system of the Borough of Brooklyn diagonally. It is, therefore, a direct connection between Brooklyn's largest park and the southerly end of what is to be its finest parkway. It is a street which, for the greater part of its distance, is 100 feet in width and is divided in the conventional manner into a roadway of 50 feet and two sidewalks 25 feet wide. It is devoid of any park features and is not even lined with trees. The southerly end of the street passing by the Fort Hamilton reservation for a distance of slightly over half a mile is stated by the Park Commissioner in his communication to be only 50 feet wide with a roadway of 37 feet in width. Except for the fact that it is a direct connection between the Ocean Parkway and the end of the Shore Road, it is in no sense a parkway, while owing to lack of provision for the care of the road surface it has not been well maintained and is greatly inferior as a drive to other streets in this vicinity that have not this peculiar strategic position. If the street were 150 feet wide and could be given some parkway features by the planting of trees and shrubs or by the provision of a double roadway it would be admirably adapted for a parkway and could therefore be consistently maintained by the Park Department.

Whether or not this street could be transferred by the Board from the Park Department to the President of the Borough, in accordance with the provisions of section 243-a of the Charter, is not entirely clear. In an opinion addressed by the Corporation Counsel to the President of the Borough of Brooklyn on April 7th, 1913, in reply to a request for advice as to whether a resolution adopted by the Local Board of the Flatbush District, directing the fencing of a vacant lot lying on the east side of Fort Hamilton Avenue, between Thirty-eighth and Thirty-ninth streets, could properly be carried out and whether a petition for the laying of a sidewalk in front of the same lot could be acted upon, in view of the fact that this street is under the control of the Department of Parks, attention is called to the following facts:

Fort Hamilton Avenue was laid out, opened and graded under the provisions of Chapter 513 of the Laws of 1869, as amended by chapter 112 of the laws of 1870. This act provided for the levying of an assessment for benefit for the acquisition of the property and also authorized certain commissioners named in the act to regulate and grade the street for public travel and assess the expense upon the property fronting on the street. Chapter 665 of the laws of 1892 provided that Fort Hamilton Avenue should thereafter be under the exclusive charge and management of the Park Commissioner and should be known as Fort Hamilton Parkway; that the commissioner should make and enforce rules for the public use of the street and that "such amount as the said park commissioner of the City of Brooklyn shall from time to time determine to be necessary for the maintenance and improvement of the same, shall annually be raised by the Board of Supervisors of the County of Kings and collected in the taxes of the then current year and paid over to the said Park Commissioner of the City of Brooklyn."

When the City of Brooklyn became a part of the greater City of New York the administrative control of Fort Hamilton Parkway became vested in the Department of Parks of the city. The Corporation Counsel concludes that "no power is vested in the local boards or in the Borough President to maintain or improve any of the streets, avenues, or parkways placed by the charter under the jurisdiction of the Park Board or the Commissioner of Parks. Such power must rest, therefore, in the body or officer having the care and control of such streets, avenues or parkways."

The opinion above referred to was written on April 7th, 1913, while Chapter 331 of the laws of 1913 did not become a law until April 19, 1913, so that it seems reasonable to suppose that this act authorizing the Board of Estimate and Apportionment, with the concurrence of the Board of Aldermen, to "transfer the jurisdiction and control of any street from any department, board or office to another department, board or office," would give sufficient authority to the Board to make such transfer, even though a street may previously have been placed under the control of the Park Department by legislative enactment.

I believe that the public interest would be promoted by the transfer requested by the Commissioner of Parks, but in view of the peculiar circumstances outlined and the opinion of the Corporation Counsel referred to, I would suggest that his advice be asked before any action is taken.

Respectfully,

NELSON P. LEWIS, Chief Engineer.

Which was referred to the Corporation Counsel.

Museum of Natural History; Board of Estimate and Apportionment—Collection, Classification and Preservation of Boring Samples and Records in Preparation of Geological Maps of The City of New York—Appointment of Expert Geologist (Cal. No. 19).

The Secretary presented a report from the Chief Engineer of the Board stating that the issue of corporate stock in the sum of \$5,000, authorized by the Board on July 9, 1914 (Cal. No. 6), to meet the expense of collecting, classifying and permanently preserving boring samples and records and the preparation of geological maps of the city, has been approved by the Board of Aldermen and is now available; that for the work of selecting and classifying these samples and the preparation of the geological maps the services of an expert geologist are required, and recommending that Dr. Charles P. Berkey, Associate Professor of Geology at Columbia University, who has served as the Consulting Geologist of the Board of Water Supply, be designated to act as such expert, at a compensation of \$25 a day for time actually employed. It is further recommended that the Board apply to the Municipal Civil Service Commission for the exemption of Dr. Berkey under paragraph 8, Rule XII, of the Civil Service Commission, this course being in accordance with the advice contained in a communication dated November 6, 1914, from the Corporation Counsel, presented at this meeting with the report of the Chief Engineer.

Which matter was referred to the Committee on Salaries and Grades.

Bureau of Contract Supervision.

Department of Health—Approval of Revised Contracts, Plans, Specifications, Etc. (Cal. No. 20).

The Secretary presented a communication dated August 4, 1914, from the Commissioner of Health, transmitting for approval revised specifications and contract form for the construction, plumbing, etc., of a pavilion to be erected at Riverside Hospital, North Brother Island; and the following report of the Bureau of Contract Supervision:

City of New York, Board of Estimate and Apportionment, Municipal Building, Bureau of Contract Supervision, November 17, 1914.

To the Board of Estimate and Apportionment:

Gentlemen—On August 6, 1914, you referred to the Bureau of Contract Supervision a communication from the Board of Health, dated August 4, 1914, requesting approval of the revised forms of contracts, plans and specifications for the erection and completion of a concrete pavilion for venereal diseases at Riverside Hospital, North Brother Island, Borough of The Bronx. The estimates of cost for the items of work, as revised, are stated to be as follows:

Item.	Estimated Cost.
1. General construction	\$46,500 00
2. Plumbing	3,500 00
3. Heating	2,000 00
Total	\$52,000 00

On May 1, 1913, the Board of Estimate and Apportionment approved the forms of contracts, plans, specifications and estimates of cost for the work, as follows:

Item.	Estimated Cost.
1. General construction	\$45,000 00
2. Plumbing	5,000 00
3. Heating	2,000 00
Total	\$52,000 00

On July 22, 1913, the lowest bids received for the work were as follows:

Item.	Estimated Cost.
1. General construction	\$65,800 00
2. Plumbing	4,431 00
3. Heating	2,564 00
Total	\$72,795 00

On November 14, 1913, the Board of Health requested an additional issue of corporate stock in the sum of \$25,000 in order to complete the building in accordance with the plans and specifications previously prepared and on which the above bids were received.

Engineers of this Bureau made numerous suggestions to the Health Commissioner and to the Architects, indicating where the plans could be modified so that the building could be constructed within the amount originally appropriated and available for the work. The modifications suggested were agreed to by both the Health Commissioner and the architects, and are incorporated in the plans and specifications now submitted for approval.

The form of contract, plans and specifications were amended in a number of minor details since being submitted for approval and are now satisfactory.

The plans, as modified, were approved by the Department of Water Supply, Gas and Electricity on November 14, 1914.

The estimates of cost are reasonable and are to be charged to the corporate stock fund entitled "C. D. H.—3E, Department of Health, Construction of a Concrete Pavilion for Venereal Diseases at Riverside Hospital." The authorization in the sum of \$55,000 was approved by the Board of Estimate and Apportionment on July 17, 1911, and by the Board of Aldermen on July 25, 1911.

On November 16, 1914, an unencumbered balance of \$52,380.96 remained in the fund.

I recommend the adoption of the attached resolution approving the request, with the amendments noted. Respectfully, TILDEN ADAMSON, Director.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to its resolution adopted on July 11, 1912, hereby approves the form of contract, plans and specifications (as amended) and estimates of cost for the erection and completion of a concrete pavilion for venereal diseases at Riverside Hospital, North Brother Island, Borough of The Bronx, under the jurisdiction of the Department of Health, as follows:

1. General construction, at an estimate of cost in the sum of forty-six thousand five hundred dollars (\$46,500);
2. Plumbing, at an estimate of cost in the sum of three thousand five hundred dollars (\$3,500);
3. Heating at an estimate of cost in the sum of two thousand dollars (\$2,000);

—the cost to be charged to the corporate stock fund entitled "C. D. H.—3E, Department of Health, Construction of a Concrete Pavilion for Venereal Diseases at Riverside Hospital," and be it further

Resolved, That, in the event that the aggregate sum of the lowest bids received for the three items of work (general construction, plumbing and heating) is equal to or less than the aggregate sum of the three items herein approved (although the amount of the lowest bid for one or more items may exceed the amount approved for said item or items), then the awards for the three items, provided all three are awarded, may be made without further approval by the Board of Estimate and Apportionment, and be it further

Resolved, That, in the event that the aggregate sum of the lowest bids received for the three items exceeds the aggregate sum of the three items herein approved, no award for any item shall be made and the amount of such estimated cost upon the bids so received may be reconsidered, in its discretion, by the Board of Estimate and Apportionment or by any official designated by the Board, provided that any of such bids is within the amount authorized and available for such work.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Department of Health—Approval of Revised Contract, Plans, Specifications, Etc. (Cal. No. 21).

The Secretary presented a communication dated August 20, 1914, from the Secretary, Department of Health, transmitting for approval revised specifications and contract form for the construction of a concrete dormitory to be erected at the Riverside Hospital, North Brother Island; and the following report of the Bureau of Contract Supervision:

City of New York, Board of Estimate and Apportionment, Municipal Building, Bureau of Contract Supervision, November 17, 1914.

To the Board of Estimate and Apportionment:

Gentlemen—On August 21, 1914, you referred to the Bureau of Contract Supervision a communication from the Board of Health, dated August 20, 1914, requesting approval of the revised forms of contracts, plans and specifications for the erection and completion of a concrete dormitory at Riverside Hospital, North Brother Island, Borough of The Bronx. The estimates of cost are stated to be as follows:

Item.	Estimated Cost.
1. General construction	\$75,500 00
2. Plumbing	7,000 00
3. Heating	2,500 00
Total	\$85,000 00

On May 1, 1913, the Board of Estimate and Apportionment approved the forms of contracts, plans, specifications and estimates of cost for the work, as follows:

Item.	Estimated Cost.
1. General Construction	\$74,500 00
2. Plumbing	8,000 00
3. Heating	2,500 00
Total	\$85,000 00

On July 22, 1913, the lowest bids received for the work were as follows:

Item.	Estimated Cost.
1. General Construction	\$85,900 00
2. Plumbing	6,890 00
3. Heating	2,684 00
Total	\$95,474 00

On November 14, 1913, the Board of Health requested an additional issue of corporate stock in the sum of \$10,000 in order to complete the building in accordance with the plans previously prepared and on which the above bids were received.

Engineers of this Bureau made numerous suggestions to the Health Commissioner and the Architects indicating where the plans could be modified and the building constructed within the amount originally appropriated for the work. The modifications suggested were agreed to by both the Health Commissioner and the Architects and are incorporated in the plans and specifications now submitted for approval.

The form of contract and specifications were amended in a number of minor details since being submitted for approval and are now satisfactory. The plans and specifications, as modified, were approved by the Department of Water Supply, Gas and Electricity on November 14, 1914.

The plans are now satisfactory and the estimates of cost are reasonable.

The cost of the work is to be charged to the corporate stock fund, entitled "C. D. H. 3B, Department of Health, Construction of Dormitory for Female Help at Riverside Hospital." The authorization in the sum of \$90,000 was approved by the Board of Estimate and Apportionment on July 17, 1911, and by the Board of Aldermen on July 25, 1911. On November 16, 1914, an unencumbered balance of \$85,714.29 remained in the fund.

I recommend the adoption of the attached resolution approving the request, with the amendments noted. Respectfully, TILDEN ADAMSON, Director.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to its resolution adopted on July 11, 1912, hereby approves the form of contract, plans and specifications (as amended), and estimates of cost for the erection and completion of a concrete dormitory at Riverside Hospital, North Brother Island, Borough of The Bronx, under the jurisdiction of the Department of Health, as follows:

1. General construction, at an estimate of cost in the sum of seventy-five thousand, five hundred dollars (\$75,500).
2. Plumbing, at an estimate of cost in the sum of seven thousand dollars (\$7,000).
3. Heating at an estimate of cost in the sum of two thousand five hundred dollars (\$2,500).

—the cost to be charged to the corporate stock fund entitled "C. D. H. 3B, Department of Health, Construction of Dormitory for Female Help at Riverside Hospital," and be it further

Resolved, That in the event that the aggregate sum of the lowest bids received for the three items of work (General Construction, Plumbing and Heating) is equal to or less than the aggregate sum of the three items herein approved (although the amount of the lowest bid for one or more items may exceed the amount approved for said item or items), then the awards for the three items, provided all three are awarded, may be made without further approval by the Board of Estimate and Apportionment, and be it further

Resolved, That in the event that the aggregate sum of the lowest bids received for the three items exceeds the aggregate sum of the three items herein approved, no award for any item shall be made and the amount of such estimated cost upon the bids so received may be reconsidered, in its discretion, by the Board of Estimate and Apportionment, or by any official designated by the Board, provided that any of such bids is within the amount authorized and available for such work.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Department of Public Charities—Approval of Form of Contract, Plans, Specifications, Etc. (Cal. No. 22).

The Secretary presented a communication dated November 5, 1914, from the Commissioner of Public Charities, transmitting for approval form of contract, specifications, etc., for furnishing labor and materials required for fire protection work on buildings on Randalls Island and in the New York City Farm Colony, Borough of Richmond, under the jurisdiction of said Department; and the following report of the Bureau of Contract Supervision:

City of New York, Board of Estimate and Apportionment, Municipal Building, Bureau of Contract Supervision, November 17, 1914.

To the Board of Estimate and Apportionment:

Gentlemen—On November 9, 1914, you referred to the Bureau of Contract Supervision a communication from the Commissioner of Public Charities, dated November 5, 1914, requesting the approval of the form of contract, plans, specifications and an estimate of cost in the sum of \$34,000 for furnishing all labor and materials required for fire protection work in the groups of buildings under the jurisdiction of the Department of Public Charities on Randall's Island and in the New York City Farm Colony, Borough of Richmond. The cost is to be paid from a corporate stock fund of \$37,000 authorized by the Board of Estimate and Apportionment on June 26, 1913, and concurred in by the Board of Aldermen on July 15, 1913, entitled "C. C. H.—54, Installation of Fire Protection Devices at Randalls Island and at City Farm Colony, Richmond." On November 16, 1914, no part of this fund had been expended.

The specifications provide for the construction of new walls extending completely across the buildings, from the cellar to and through the roof, like a party wall, and the utilization of existing walls for use as fire barriers. In this way the buildings are to be divided into "Fire Units." Passages from one unit to another are provided for by openings in the fire barriers, protected by Standard Fire Doors, through which in case of fire in one unit the occupants may be transferred on their beds in safety to the adjacent unit and the fire door closed. The specifications, as submitted to the Bureau of Contract Supervision, provided for maintenance and repairs of existing work; this has been eliminated, with the exception of a few minor changes to comply with the requirements governing City work, the specifications are satisfactory for the kind of work to be done.

A revised estimate of cost, due to the omission of repair work, is \$30,000.

I recommend the adoption of the attached resolution approving the form of contract, plans and specifications, as amended, at an estimated cost of \$30,000.

Respectfully,

TILDEN ADAMSON, Director.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to the resolution adopted on July 11, 1912, hereby approves the form of contract and specifications (as amended), plans and estimate of cost in the sum of thirty thousand dollars (\$30,000) for furnishing all labor and material required for fire protection work in the groups of buildings under the jurisdiction of the Department of Public Charities on Randalls Island, and in the New York City Farm Colony, Borough of Richmond, the cost to be charged to the corporate stock fund entitled "C. C. H.—54, Installation of Fire Protection Devices at Randalls Island and at City Farm Colony, Richmond"; and be it further

Resolved, That if no bids are received for such work within such estimated cost, the amount of such estimated cost upon the bids so received may be reconsidered, in its discretion, by the Board of Estimate and Apportionment, or by any official designated by the Board, provided that any of such bids is within the amount authorized and available for such work.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Department of Parks, Borough of Queens—Approval of Preliminary Drawings, Specifications, Etc. (Cal. No. 23).

The Secretary presented a communication dated October 30, 1914, from the Commissioner of Parks, Borough of Queens, transmitting for approval preliminary contract for services of Messrs. Erdmann and Hahn, architects, in connection with the

construction of an addition to the Administration Building in Forest Park, Borough of Queens; and the following report of the Bureau of Contract Supervision, recommending approval thereof:

City of New York, Board of Estimate and Apportionment, Municipal Building, Bureau of Contract Supervision, November 17, 1914.

To the Board of Estimate and Apportionment:

Gentlemen—On October 30, 1914, you referred to the Bureau of Contract Supervision, a communication from the Commissioner of Parks, Borough of Queens, dated October 30, 1914, requesting approval of a form of preliminary contract, at a cost of \$100 for the services of Messrs. Erdmann and Hahn, Architects, for the preparation of preliminary drawings and specifications of a proposed new addition to the Administration building in Forest Park, Borough of Queens.

The cost is to be paid from the corporate stock fund entitled "C. D. P.—407, Department of Parks, Queens, Improvement of Forest Park."

On July 10, 1914, the Board of Estimate and Apportionment authorized an appropriation of \$26,000 for this fund, which was deemed to be passed by the Board of Aldermen on August 27, 1914, as provided under section 48 of the Greater New York Charter. On November 16, 1914, no part of this fund had been expended.

The proposed work consists of alterations to the present administration building and the construction of a new, one-story addition, similar in design and materials to the existing building, at a cost of \$8,500, including architect's fees.

The plans and estimate of cost for the proposed work are reasonable. The form of contract is standard, as approved by the Corporation Counsel. The rate of compensation is satisfactory.

I recommend the adoption of the attached resolution, approving the contract and the cost in the amount of \$100.

Respectfully,

TILDEN ADAMSON, Director.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to its resolution of July 11, 1912, hereby approves the form of preliminary contract for the services of Messrs. Erdmann and Hahn, 101 Park Avenue, Manhattan, as architects for the preparation of preliminary drawings and specifications of a proposed new addition to the Administration building in Forest Park, Borough of Queens, under the jurisdiction of the Department of Parks, Borough of Queens, at a cost of one hundred dollars (\$100), the cost to be charged to the corporate stock fund "C. D. P.—407, Department of Parks, Queens, Improvement of Forest Park."

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Bureau of Franchises.

Manhattan and Queens Traction Corporation (Cal. No. 24).

Report and financial statement of the Manhattan and Queens Traction Corporation for the year ending September 30, 1914.

This report was presented to the Board at the meeting of November 13, 1914 (Cal. No. 79), and was referred to the Bureau of Franchises.

The Secretary presented the following:

Bureau of Franchises, November 18, 1914.

Hon. JOHN PURROY MITCHEL, Mayor, Chairman of the Board of Estimate and Apportionment:

Sir—Section 5, Eleventh, of the contract dated October 29, 1912, granting the South Shore Traction Company a franchise for a street surface railway upon and over the Queensboro Bridge and upon and along Thomson Avenue, Hoffman Boulevard and other streets and avenues, in the Borough of Queens, which, with the consent of the Board of Estimate and Apportionment, was assigned to the Manhattan and Queens Traction Corporation, provides for the filing of an annual report not later than November 1 of each year for the year ending September 30 next preceding, giving certain specified details in relation to capital stock, funded and floating debts, receipts from and expenses for operation, etc. Pursuant to this provision, the Manhattan and Queens Traction Corporation has filed with the Board a report for the year ending September 30, 1914, containing the required information. This report was presented to the Board at its meeting of November 13, 1914, and referred to the Bureau of Franchises.

An examination of the report filed shows that the Company has issued no stock; that two hundred shares of stock have been subscribed for but not issued; that it has no funded debt and that the amount of floating debt is \$93,823.22—an increase of \$26,128.29 over the amount shown by the report filed in 1913.

The total number of fare passengers carried during the year was 5,568,586; the total receipts of the Company, derived from passenger revenue, \$207,606.78, and the total expenses of operation, including track and terminal privileges on the Queensboro Bridge, three per cent. of the gross earnings and interest charges is \$207,163.18.

As the report filed in 1913 was for practically but nine months of that year—to wit, from December 28, 1912 (the date of the commencement of operation by the Manhattan and Queens Traction Corporation), to September 30, 1913—it is impossible to make a direct comparison between the operating receipts and operating expenses for the two years. An approximate comparison can be made as follows:

The average receipts per month for the period ending September 30, 1913, were \$9,265.25, and for the year ending September 30, 1914, \$17,300.56, or an approximate increase of \$8,035.31. The average operating expenses for 1913 were \$8,681.73 per month, and for 1914, \$17,263.60 per month, or an approximate monthly increase of \$8,581.87.

The contract further provides that the Company shall pay as annual compensation for the grant, exclusive of the amounts paid for the use of the bridge structure, tracks upon the bridge and terminal facilities—during the first term of five years, expiring October 29, 1917, three per cent. of its gross receipts, with a minimum annual payment of \$3,500 per year. As stated above, the gross receipts were \$207,606.78. Three per cent. of this amount is \$6,228.20, which was paid into the Department of Finance on November 5, 1914.

It is to be noted that the compensation to the City for the year ending September 30, 1914, is \$2,728.20 in excess of the minimum fixed by the contract.

The Company having complied with the provisions of the contract relative to the submission of an annual report, it is recommended that the papers in the matter be filed and that a copy of the report be forwarded to the Comptroller of the City.

Respectfully,

JOHN A. McCOLLUM, Acting Chief of Bureau.

The papers were ordered filed and a copy of the report of the Bureau of Franchises directed to be forwarded to the Comptroller.

Mount Sinai Hospital (Cal. No. 25).

Communication from Mount Sinai Hospital stating that because of existing financial conditions, it is unable to take advantage of consent to install, maintain and use a tunnel under and across East 100th Street east of Fifth Avenue, Borough of Manhattan.

This communication was presented to the Board at the meeting of November 13, 1914 (Cal. No. 82), and was referred to the Bureau of Franchises.

The Secretary presented the following:

The Mount Sinai Hospital, Fifth Avenue and 100th Street, New York, November 9, 1914.

Board of Estimate and Apportionment, Municipal Building, City:

Gentlemen—Under date of October 30th I sent a communication to the Department of Finance, Bureau of City Revenue and Markets, in which I informed that department that the Hospital, because of the present stringent financial condition, would be unable to take advantage of the franchise granted it for the construction of a tunnel between the present and the proposed new hospital buildings.

I have since been informed that this communication should have been addressed to you. Permit me to state at this time that it is the Hospital's intention to ask for a new franchise so soon as financial conditions improve.

Very truly yours,

A. KLAUSNER, Assistant Secretary.

Bureau of Franchises, November 18, 1914.

Hon. JOHN PURROY MITCHEL, Mayor, Chairman of the Board of Estimate and Apportionment:

Sir—By resolution adopted by the Board of Estimate and Apportionment November 13, 1913, and approved by the Mayor December 3, 1913, consent was granted to the Mount Sinai Hospital to install, maintain and use a tunnel under and across East 100th Street at a point about 110 feet east of the easterly line of Fifth Avenue,

Borough of Manhattan, connecting properties of the grantee on opposite sides of the said street, the tunnel to be used as a passageway and to contain pipes for the conveyance of water, steam and electric current between the hospital buildings. The grantee accepted the consent and duly paid into the City treasury the required nominal compensation of \$25 per annum, to November 1, 1914. Section 13 of the consent provided that the tunnel should be completely constructed by January 1, 1915.

Under date of November 9, 1914, the Hospital addressed a communication to the Board, stating that because of the present stringent financial condition it would be unable to take advantage of the consent, and adding that it is the Hospital's intention to request a new consent when financial conditions improve. At the meeting of the Board held November 13, 1914, that communication was referred to the Bureau of Franchises.

In view of the fact that it is uncertain when the Hospital will be in a position to construct the tunnel, it would seem advisable that the consent be revoked, and I would recommend that in revoking the consent the Board authorize the Comptroller to cancel the charge for the privilege as of November 1, 1914.

In accordance with the procedure of the Board in similar cases, the customary provision requiring the deposit of a security fund with the Comptroller was omitted from the consent for the tunnel, as the hospital is a charitable and benevolent institution, and therefore the resolution herewith submitted contains no provision for the return of a deposit.

Respectfully,

JOHN A. McCOLLUM, Acting Chief of Bureau.

The following was offered:

Whereas, By resolution adopted by the Board of Estimate and Apportionment November 13, 1913, and approved by the Mayor December 3, 1913, consent was granted to the Mount Sinai Hospital to construct, maintain and use a tunnel fourteen feet in width and eleven feet in height, outside dimensions, under and across East 100th Street, at a point about 110 feet east of the easterly line of Fifth Avenue, Borough of Manhattan, connecting properties of the hospital on opposite sides of said street, and the grantee duly accepted the said consent and complied with the terms and conditions thereof, including the payment of the nominal compensation for the privilege to November 1, 1914; and

Whereas, The Mount Sinai Hospital has now presented a petition, dated November 9, 1914, to the Board of Estimate and Apportionment, reciting that owing to present stringent financial conditions it is unable to take advantage of the said consent at this time; now, therefore, be it

Resolved, That the aforesaid resolution adopted by the Board of Estimate and Apportionment November 13, 1913, and approved by the Mayor December 3, 1913, granting consent to the Mount Sinai Hospital to construct, maintain and use a tunnel under and across East 100th Street, at a point about 110 feet east of the easterly line of Fifth Avenue, Borough of Manhattan, be and it hereby is rescinded; and be it further

Resolved, That the Comptroller be and he hereby is authorized to cancel the annual charge for the said tunnel as of November 1, 1914, the date to which payment has already been made for the privilege; and be it further

Resolved, That this resolution shall not become effective unless and until the Mount Sinai Hospital shall execute an instrument in writing, releasing The City of New York from any and all claims of any kind, character or description whatsoever, held, or claimed to be held, under the terms and conditions of the aforesaid consent, and agreeing to quit-claim, waive and surrender to The City of New York any and all rights and privileges in and upon said East 100th Street, in the Borough of Manhattan, held, or claimed to be held, under or by virtue of the said consent, and file the same with the Board of Estimate and Apportionment of The City of New York within sixty (60) days of the date of the approval of this resolution by the Mayor.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

United Electric Service Company (Cal. No. 26).

Report and financial statement of the United Electric Service Company for year ending September 30, 1914.

This report was presented to the Board at the meeting of November 13, 1914 (Cal. No. 75), and was referred to the Bureau of Franchises.

The Secretary presented the following:

Bureau of Franchises, November 20, 1914.

Hon. JOHN PURROY MITCHEL, Mayor, Chairman of the Board of Estimate and Apportionment:

Sir—The United Electric Service Company, pursuant to the provisions of its franchise contract with The City of New York dated December 16, 1909, submitted to the Board at its meeting held November 13, 1914, a statement to the effect that it has no wires in the streets of the City, as it leases all those used by it from the New York Telephone Company, together with a report as to its operations for the year ending September 30, 1914. This report shows that the amount of its capital stock is \$2,500, the same as it had outstanding at the time it submitted its last report, and that it has no debt. Its report for the year ending September 30, 1913, showed a floating debt of \$800, so it will be seen that it has entirely eliminated all outstanding obligations except in so far as its capital stock may be considered a liability. The total income is stated to be \$26,760.43, which is nearly one thousand dollars more than its income during the previous year, while the total expenses are reported to be \$23,854.18, which is approximately \$1,500 more than the total expenses for the year ending September 30, 1913.

Under the contract the Company is required to pay the City two per cent. of its gross receipts during the first five-year period, with a minimum of \$1,200. The actual percentage amounts to but \$535.21, so that the Company in paying the minimum is required to pay \$664.79 more than if no minimum were prescribed. To this extent the City is the gainer by virtue of the clause requiring a minimum payment.

As the report and the return of the Company regarding its wires apparently comply with the terms of its franchise, it is recommended that the same be filed.

Respectfully,

JOHN A. McCOLLUM, Acting Chief of Bureau.

Which was ordered filed.

New York Quotation Company (Cal. No. 27).

Report and financial statement of the New York Quotation Company for the year ending September 30, 1914.

This report was presented to the Board at the meeting of November 13, 1914 (Cal. No. 73), and was referred to the Bureau of Franchises.

The following was presented:

Bureau of Franchises, November 20, 1914.

Hon. JOHN PURROY MITCHEL, Mayor, Chairman of the Board of Estimate and Apportionment:

Sir—Pursuant to the franchise contract dated July 2, 1913, by and between The City of New York and the New York Quotation Company, that Company, under date of November 2, 1914, submitted its report for the year ending September 30, and furnished a map of its conductors in the streets of the City as of the same date. This report was presented to the Board at its meeting held November 13, 1914, and referred to this Bureau.

The report shows that the amount of capital stock outstanding is \$500,000, the same as it was by the last report, and that the Company has a total debt of \$250,000, all of which is funded. This debt is \$20,000 in excess of the indebtedness on September 30, 1913, but at that time \$195,000 was funded debt and \$35,000 floating debt. The floating debt, however, has been eliminated during the year for which the present report is made. On the present funded debt the Company pays interest at the rate of 6 per cent. per annum, but has paid no dividends on its stock during the year. The total receipts of the Company during the period for which the report is made were \$218,673.45, while its total expenses exceeded its receipts, they being \$231,530.13. No comparison can be made with the receipts of the Company for the year ending September 30, 1913, as the report submitted at that time merely covered the period between the date of the contract (July 2, 1913) and September 30, 1913.

Under its contract, the Company is obligated to pay the City during the first period of five years, three per cent. of its gross receipts annually, with a minimum of \$8,000 a year. The actual percentage for the present year amounts to but \$6,560.20, so the Company was required to pay the minimum, which is \$1,439.80 in excess of the actual percentage. The percentage paid last year exceeded the minimum. It may be that this is due to the fact that as the Company is controlled by the New York Stock

Exchange and its activities are confined merely to the furnishing of quotations, as made from time to time on said Exchange, by means of tickers located in brokers' offices, the European war and the resulting closing of the Stock Exchange have greatly diminished its earnings.

On September 30 the report further shows that the Company had 922 tickers located in 77 buildings. The map furnished by the Company shows that it has constructed during the year three subsidiary connections from its cables under the streets, one containing 50 wires to 61 Broadway, one containing 32 wires to 50 Broad Street, and one containing 31 wires to 15 Wall Street.

As the report and map appear to be in compliance with the provisions of the contract, it is recommended that the same be filed.

Respectfully,
JOHN A. McCOLLUM, Acting Chief of Bureau.
Which was ordered filed.

Leonard C. Smith (Cal. No. 28).

Consent to install, maintain and use a ten-inch salt water pipe in West 155th Street from the ice plant of the grantee on the northerly side of said street between Eighth Avenue and the Harlem River to a point near the Harlem River.

The Secretary presented the following:

Bureau of Franchises, November 19, 1914.

Hon. JOHN PURROY MITCHEL, Mayor, Chairman of the Board of Estimate and Apportionment:

Sir—By resolution adopted by the Board of Estimate and Apportionment July 10, 1913, and approved by the Mayor July 11, 1913, consent was granted to Leonard C. Smith to install, maintain and use a ten-inch salt water pipe in West 155th Street, Borough of Manhattan, from his artificial ice plant on the northerly side of said street between Eighth Avenue and the Harlem River to a point near the Harlem River, for the purpose of obtaining salt water for condensing purposes.

Sections 2 and 12 of the said resolution, respectively, provided that the grantee pay to the City the sum of \$726.20 per annum for the privilege, and deposit with the Comptroller security in the sum of \$1,000, the first payment and the security to be turned over to the Comptroller within sixty days of the date of the approval of the resolution by the Mayor, and the annual payments to be made thereafter, in advance, on November 1 of each year. In spite of the fact that Section 12 of the resolution provides that the grantee deposit the security before exercising any rights under the consent, Mr. Smith immediately obtained administrative permits and installed and made use of the pipe without first making the payment and security deposit. In spite of promises to make the payment and deposit the security, Mr. Smith failed to do so and, on February 20, 1914, a report from this Bureau was presented to the Board and a resolution was adopted notifying Mr. Smith, pursuant to Section 1 of the consent, that if the compensation and security were not paid before April 22, 1914, the Board would revoke the consent on May 1, 1914, and direct the Borough President to remove the pipe. Subsequently, Mr. Smith paid to the City the required compensation for the privilege to November 1, 1914, and a resolution was adopted by the Board on May 1, 1914, amending Section 12 of the consent by extending the time for depositing the security to November 1, 1914.

Under date of November 10, 1914, the Department of Finance has informed me that Mr. Smith had not filed the security, and under date of November 11 I called his attention to the default and requested to be advised as to his intentions, not later than November 14, 1914. No reply whatsoever was received to that communication, and in response to a telephonic inquiry, the Department of Finance informed this office on November 19th that Mr. Smith had not yet deposited the security, nor had he paid the compensation of \$726.20 due on November 1 for the year ending October 31, 1915.

In view of the fact that Mr. Smith so constantly fails to meet the requirements of the Board's consent, I would suggest that the consent be revoked and the President of the Borough of Manhattan be directed to immediately remove the pipe, at the expense of Mr. Smith.

Section 1 of the consent reserves to the Board the right to revoke it upon sixty days' notice, and I would recommend that such notice be now given.

Respectfully,
JOHN A. McCOLLUM, Acting Chief of Bureau.

The following was offered:

Resolved, That Leonard C. Smith be and he hereby is notified, under and pursuant to Section 1 of the consent granted by this Board by resolution adopted July 10, 1913, and approved by the Mayor July 11, 1913, to install, maintain and use a ten-inch pipe under and along West 155th Street, from his premises on the northerly side of said street at a point 322 feet east of the easterly line of Eighth Avenue to a point near the Harlem River, Borough of Manhattan, that this Board will, on Friday, February 5, 1915, adopt a resolution rescinding and revoking the said consent and directing the President of the Borough of Manhattan to remove the said pipe and restore the street surface to its original condition, at the sole cost and expense of the said Leonard C. Smith, as follows, to wit:

Whereas, By resolution adopted by the Board of Estimate and Apportionment July 10, 1913, and approved by the Mayor July 11, 1913, consent was granted to Leonard C. Smith to install, maintain and use a ten-inch pipe from his premises on the northerly side of West 155th Street at a point 322 feet east of the easterly line of Eighth Avenue to a point near the Harlem River in said street, Borough of Manhattan, for the purpose of obtaining salt water; and

Whereas, Section 2 of the said resolution provides that the grantee shall pay into the treasury of the City of New York, as compensation for the privilege, the sum of seven hundred and twenty-six and 20/100 dollars (\$726.20) per annum, such payments to be made in advance on November 1 of each year, the first payment to be made within sixty (60) days of the approval of the consent by the Mayor, and Section 12 of the said resolution provides that the grantee shall deposit with the Comptroller security in the sum of one thousand dollars (\$1,000) also within sixty (60) days of the date of approval of the consent by the Mayor; and

Whereas, The said Leonard C. Smith installed, maintained and used the pipe and failed to make the payment or deposit as required, and the Board of Estimate and Apportionment adopted a resolution on February 20, 1914, notifying the said Leonard C. Smith that unless the payment and deposit were made before April 22, 1914, the Board would revoke the consent on May 1, 1914, and direct the President of the Borough of Manhattan to remove the pipe at the expense of the said Leonard C. Smith; and

Whereas, The said Leonard C. Smith subsequently paid to the City compensation in full for the privilege to November 1, 1914, and requested an extension of time to that date in which to make the deposit, and the Board of Estimate and Apportionment adopted a resolution on May 1, 1914, which was approved by the Mayor May 22, 1914, amending the said consent so as to authorize the Comptroller to receive the payment for the privilege to November 1, 1914, and to receive the security deposit on or before November 1, 1914, and the said Leonard C. Smith duly filed an instrument accepting the said consent, as required therein; and

Whereas, The said Leonard C. Smith has failed to make payment to the City for the privilege on November 1, 1914, for the year ending October 31, 1915, and has failed to deposit with the Comptroller the security of one thousand dollars (\$1,000) on or before November 1, 1914; now, therefore, be it

Resolved, That the resolution adopted by the Board of Estimate and Apportionment July 10, 1913, and approved by the Mayor July 11, 1913, as amended by resolution adopted May 1, 1914, and approved by the Mayor May 22, 1914, granting consent to Leonard C. Smith to install, maintain and use a ten-inch pipe under and along West 155th Street, between Eighth Avenue and the Harlem River, in the Borough of Manhattan, be and it hereby is rescinded; and be it further

Resolved, That the President of the Borough of Manhattan be and he is hereby requested and directed to immediately remove the said pipe and restore the street surface to its original condition, at the expense of the said Leonard C. Smith, and advise the Board when such work has been performed and whether or not the costs have been paid.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The Staten Island Rapid Transit Railway Company (Cal. No. 29).

Application of The Staten Island Rapid Transit Railway Company to be relieved from the further annual payment of \$100 each, for the right to construct, maintain and use two additional tracks across South Street, First Ward, and one track across Richmond Terrace, Third Ward, Borough of Richmond.

This application was presented to the Board at the meeting of October 2, 1914 (Cal. No. 45), and was referred to the Bureau of Franchises.

The Secretary presented the following:

September 24th, 1914.

To the Board of Estimate and Apportionment of The City of New York:

Gentlemen—Under date of October 29th, 1909, a contract was entered into between The City of New York and the Staten Island Rapid Transit Railway, whereby an exchange of certain parcels of land in the Borough of Richmond, between the City and the Railway Company, was authorized and approved by your Honorable Board, and in connection therewith, a franchise was given, granting the right to the Railway Company to construct additional tracks across and under certain streets and avenues, viz:

South Street, in Ward 1, authorizing the construction of a double track tunnel under said street which divides the Light House grounds of the United States, and the Railway Company.

Central Avenue, Union Avenue, Harbor Road, South Avenue and Richmond Terrace, all in Ward 3, authorizing the construction of two tracks across the first four highways and a single track across Richmond Terrace.

The grant of the privilege is subject to numerous conditions, all of which have been complied with, so far as Central Avenue, Union Avenue, South Avenue and Harbor Road are concerned, but up to the present time no work has been done in connection with the double track tunnel under South Street in the 1st Ward and the single track across Richmond Terrace in the 3rd Ward, for the following reasons:

South Street.

This street is the dividing line between property of the Railway Company and the United States Light House Grounds. A tunnel under the street necessarily will require a tunnel for about 473 feet under the Light House Grounds. To construct the tunnel under the Light House Grounds, permission must be secured from Congress.

Up to the present time the Railway Company has not secured such permission and will not be able to do so within the limited time before the franchise expires, viz: October 29th, 1914.

Richmond Terrace.

The franchise provides for one single track across Richmond Terrace. This track was intended to connect the main line track of The Staten Island Rapid Transit Railway with land and land under water lying on the north side of Richmond Terrace, the upland being the property of said Company.

An application for a grant of land under water was made some time ago but refused on the grounds that the Railway Company did not have complete title to the upland.

Upon examination it was disclosed that a small interest in said upland was in an estate which cannot, for some time, clear the title and it may be several years before title can be cleared and the grant of land under water secured. For this reason we cannot utilize the crossing for some time in the future.

In Section 2, Article 6, it is stipulated that in the event of any tracks not so constructed, within the prescribed time, the right so granted shall cease, and in such event, the Railway Company shall not be required to make any further payments for the privilege of constructing and maintaining such tracks not constructed, but shall continue to pay the City for each crossing which it constructed within the time limit.

We therefore respectfully ask that we be relieved from the further annual payment of \$100 each for South Street in the 1st Ward and Richmond Terrace in the 3rd Ward, but that nothing herein contained shall be taken to diminish the rights of the Company under said contract in Central Avenue, Union Avenue, Harbor Road and South Avenue. Respectfully,

THE STATEN ISLAND RAPID TRANSIT RAILWAY CO. By S. P. KRETZER, Secretary, Assistant Treasurer.

Bureau of Franchises, November 16, 1914.

Hon. JOHN PURROY MITCHEL, Mayor, Chairman of the Board of Estimate and Apportionment:

Sir—The application of the Staten Island Rapid Transit Railway Company, dated September 24, 1914, requesting that the Company be relieved from the further annual payment of \$100 each for the right to construct two additional tracks across South Street, First Ward, and one track across Richmond Terrace, in the Third Ward, both in the Borough of Richmond, was referred to this Bureau at the meeting held October 2, 1914.

These two crossings were authorized by resolution of the Board adopted September 17, 1909, and approved by the Mayor September 21, 1909, and by contract dated October 29, 1909, which granted to the Staten Island Rapid Transit Railway Company the right to construct and maintain two additional tracks across South Street, First Ward; Central Avenue, Union Avenue, Harbor Road and South Avenue, in the Third Ward, and one track across Richmond Terrace at a point 550 feet, more or less, east of Western Avenue, Third Ward. Under the terms of this contract, the Company agreed to make an annual payment of \$100 for each crossing during the first term of ten years, and \$150 annually for each crossing during the second term of fifteen years, and also to make a security deposit of \$1,000. This contract further provided in Section 1, Paragraph 6:

"The Company shall commence the construction of the tracks herein authorized under South Street, First Ward, within three years and complete the same within five years from the date upon which this contract is signed by the Mayor and shall commence and complete the construction of the other tracks herein authorized within two years from such date; otherwise the rights herein granted shall cease and determine as to such tracks not so constructed. In the event of the right so ceasing, the Company shall not be required to make any further payments for the privilege of constructing and maintaining said tracks under this contract, but shall continue paying to the City the sum fixed by this contract for each crossing which it constructs within the time limit herein fixed."

The contract of October 29, 1909, was modified by a contract dated November 15, 1911, which extended the time for completion of the tracks across Richmond Terrace, as follows:

Section 1, Paragraph Sixth:

"The Company shall commence the construction of the tracks herein authorized under South Street, First Ward, within three years and complete the same within five years from the date upon which this contract is signed by the Mayor, and shall complete the construction of the track herein authorized across Richmond Terrace within five years from such date, and shall commence and complete the construction of the other tracks herein authorized within two (2) years from such date; otherwise the rights herein granted shall cease and determine as to such tracks not so constructed."

"In the event of the rights so ceasing, the Company shall not be required to make any further payments for the privilege of constructing and maintaining said tracks under this contract, but shall continue paying to the City the sum fixed by this contract for each crossing which it constructs within the time-limit herein specified."

Pursuant to this contract, the Company deposited a New York City bond of the value of \$1,000 with the Comptroller, as security, and has made all the payments required up to the year ending September 30, 1914. It has also constructed and is operating at the present time the additional tracks across Central Avenue, Union Avenue, Harbor Road and South Avenue, Third Ward. It has not, however, constructed the two additional tracks across South Street, or the track across Richmond Terrace.

It can, therefore, be seen that since the Company has not constructed the tracks across South Street, First Ward, and Richmond Terrace, Third Ward, its rights ceased and determined on October 29, 1914, under the terms of the contract dated October 29, 1909, as amended by contract dated November 15, 1911, and the Company is relieved from making any further payments for the tracks not constructed.

It is, therefore, recommended that the rights of the Staten Island Rapid Transit Railway Company to construct two additional tracks across South Street, First Ward, and one track across Richmond Terrace 550 feet, more or less, east of Western Avenue, be deemed ceased and determined as of October 29, 1914, so as to make the forfeiture a matter of record, and the Company be relieved from making any further payments after that time, and that nothing herein be construed to affect the rights of the Company to the tracks constructed and now operated by the Company across Central Avenue, Union Avenue, Harbor Road and South Avenue, in the Third Ward, Borough of Richmond.

It is further recommended that the Comptroller be authorized to accept the sum of

Fifteen Dollars and Eighty-nine Cents (\$15.89), being the amount due to the City for the period between September 30, 1914, up to the time payment has been made, and October 29, 1914, for the two crossings herein ceased and determined.

A resolution to this effect is herewith submitted for adoption if the Board so sees fit. Respectfully,
JOHN A. McCOLLUM, Acting Chief of Bureau.

The following was offered:

Whereas, By the terms and conditions of the contract dated October 29, 1909, between The City of New York and the Staten Island Rapid Transit Railway Company, it was provided that the Company shall commence the construction of the tracks authorized therein in South Street, First Ward, within three (3) years, and complete the same within five (5) years from the date of said contract, and commence and complete the construction of the track authorized across Richmond Terrace within two years from such date, otherwise the rights to construct such tracks across these streets to be deemed to have ceased and determined and the Company relieved from making any further payment for the tracks not constructed; and

Whereas, The contract between The City of New York and the Staten Island Rapid Transit Railway Company was amended by contract dated November 15, 1911, which extended the time for the completion of the track across Richmond Terrace until October 29, 1914; and

Whereas, The Staten Island Rapid Transit Railway Company has not constructed and completed the two additional tracks across South Street, First Ward, and one track across Richmond Terrace, 550 feet, more or less, east of Western Avenue, on or before October 29, 1914, as provided under the terms of the contract dated October 29, 1909, as amended November 15, 1911; and

Whereas, By a petition dated September 24, 1914, the Staten Island Rapid Transit Railway Company has requested that it be relieved from making any further annual payments of one hundred dollars (\$100) each for two crossings, one consisting of two additional tracks across South Street, First Ward, and the other, one track across Richmond Terrace, 550 feet, more or less, east of Western Avenue, as authorized in the contract between The City of New York and the Staten Island Rapid Transit Railway Company, dated October 29, 1909; now, therefore, be it

Resolved, That the rights of the Staten Island Rapid Transit Railway Company to construct and operate two additional tracks across South Street, First Ward, and one track across Richmond Terrace, 550 feet, more or less, east of Western Avenue, be deemed to have ceased and determined as of October 29, 1914, and the said Company be relieved from making any further payments for these tracks herein declared ceased and determined from October 29, 1914; and be it further

Resolved, That the Comptroller be authorized to accept the sum of Fifteen and 89-100 dollars (\$15.89) in full payment of the amount due to the City from September 30, 1914, to October 29, 1914, on the two crossings herein declared ceased and determined; and be it further

Resolved, That nothing herein be construed to affect the rights of the Company to the tracks authorized by said contract dated October 29, 1909, constructed and now operated by the said Company upon Central Avenue, Union Avenue, Harbor Road and South Avenue, in the Third Ward, Borough of Richmond.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

COMMUNICATIONS, PETITIONS, ETC.

From Citizens and Public Bodies.

The Staten Island Rapid Transit Railway Company (Cal. No. 30).

The Secretary presented an application from The Staten Island Rapid Transit Railway Company for a refund of certain compensation paid and security deposited under contract dated August 1, 1912, by and between the City and the Company, authorizing the Company to construct, maintain and operate certain additional tracks across Nicholas and Granite Avenues, Third Ward, Borough of Richmond, as the Company claims it could not obtain certain properties through which these tracks were to be constructed, and therefore, could not avail itself of the privilege, and further, that the right to construct, maintain and operate said tracks ceased and determined August 1, 1913, as provided in the contract.

Which was referred to the Bureau of Franchises.

Patrick Ryan Construction Corporation (Cal. No. 31).

The Secretary presented an application from the Patrick Ryan Construction Corporation for a refund of security deposited under the terms and conditions of consent to construct, maintain and operate

(a) A bridge over and across the Boulevard between Ditmars and Potter Avenues;

(b) A thirty-six inch gauge railroad track across and on the surface of VanAlst Avenue, Howland Street, Hallet Street, Crescent Street, Merchant Street and Goodrich Street, between Ditmars and Potter Avenues, Long Island City, Borough of Queens.

—as the Company has ceased to use the streets and they have been restored to their original condition.

The consent to construct, maintain and operate these structures was granted by resolution adopted by the Board November 26, 1913, approved by the Mayor December 2, 1913, and expired by limitation November 22, 1914.

Which was referred to the Bureau of Franchises.

American District Telegraph Company (Cal. No. 32).

The Secretary presented a communication from the counsel for the American District Telegraph Company, correcting error in the annual report of said Company for the year ending September 30, 1914, under and pursuant to Section 2-Twentieth of contract dated February 20, 1913, granting said Company a franchise to construct, maintain and operate wires or other electrical conductors in conduits, for the operation of a signal service for the calling of messengers in the Borough of Manhattan.

The annual report of the Company was presented to the Board at the meeting of November 13, 1914 (Cal. No. 74), and was referred to the Bureau of Franchises. The communication was referred to the Bureau of Franchises.

Mercantile Burglar Alarm Company (Cal. No. 33).

The Secretary presented a report and financial statement from the Mercantile Burglar Alarm Company for the year ending September 30, 1914, under and pursuant to Section 2-Twentieth of contract dated October 29, 1912, granting said Company a franchise to construct, maintain and operate electrical conductors in conduits for the operation of a burglar alarm system in that portion of the Borough of Manhattan south of the northerly line of Reade Street.

Which was referred to the Bureau of Franchises.

Holmes Electric Protective Company (Cal. No. 34).

The Secretary presented a communication from the Secretary of the Holmes Electric Protective Company, transmitting to the Board, under and pursuant to the provisions of Section 2-Fifteenth of contract dated October 14, 1914, granting said Company a franchise, forms of contracts for burglar alarm service to financial institutions, persons, corporations, protection of stores, protection of safes, watchman's supervisory signal service and temporary burglar alarm service.

Which was referred to the Bureau of Franchises.

Public Service Commission—Construction of the Utica Avenue Extension of the Eastern Parkway Rapid Transit Railroad (Cal. No. 35).

The Secretary presented a communication dated November 19, 1914, from the Flatbush Taxpayers' Association, urging the construction of the Utica Avenue extension of the Eastern Parkway Rapid Transit Railroad.

Which was referred to the Public Service Commission.

From City, Borough and County Officials.

Public Recreation Commission—Appropriation for the Construction of a Field House in the Betsy Head Playground (Cal. No. 36).

The Secretary presented a communication, dated November 19, 1914, from the Acting Secretary of the Public Recreation Commission, requesting the release of \$19,000, being a part of the interest accumulated on the principal of the Betsy Head

Legacy, said amount to be used for the construction of a field house in the Betsy Head Playground.

Which was referred to the Comptroller.

New York Central and Hudson River Railroad Company (Cal. No. 37).

The Secretary presented a communication from the Corporation Counsel stating that the Department of Water Supply, Gas and Electricity has laid a twenty-inch main on the bridge spanning the tracks of the New York Central and Hudson River Railroad Company at Fordham, Borough of The Bronx, such bridge forming a continuation of Fordham Road, and the Company has submitted an agreement for execution.

The Corporation Counsel requests to be furnished with any information the Bureau of Franchises may have in connection with the bridge.

The communication was referred to the Bureau of Franchises.

Department of Docks and Ferries—Retirement of Various Employees (Cal. No. 38).

The Secretary presented four communications dated November 19, 1914, from the Commissioner of Docks, requesting the retirement, pursuant to Chapter 669 of the Laws of 1911, as amended, of the following employees in the Department of Docks and Ferries:

George W. Carpenter, Inspector of Dredging.

Robert Kyles, Tug Engineer.

John F. Trenly, Inspector of Pier Construction.

Michael Sponza, Laborer.

Which were referred to the Committee on Salaries and Grades.

Communications from the Mayor's Office (Cal. No. 39).

The Secretary presented communications from the Mayor's office, returning duly approved by his Honor, the Mayor, on November 13 and 20, 1914, resolutions adopted by this Board October 30 and November 13, 1914, as follows:

(a) Revoking resolution adopted October 2, 1914, approved by the Mayor October 14, 1914, rescinding consent granting Mason and Hanger Company permission to install, maintain and operate a compressed air pipe line in the vicinity of Van Cortlandt Park, Borough of The Bronx, authorizing the Comptroller to refund the security deposit of \$3,000 and the proportionate part of the annual charge from March 15 to November 1, 1914. (Approved November 13, 1914.)

(b) Revoking consent granted Mason and Hanger Company to install, maintain and operate a compressed air pipe line under and across certain streets and avenues in the vicinity of Van Cortlandt Park, Borough of The Bronx, authorizing the Comptroller to refund the security deposit of \$3,000 and the proportionate part of the annual charge from January 8, 1914, to November 1, 1914. (Approved November 13, 1914.)

(c) Granting a franchise to the Kings County Refrigerating Company to construct, maintain and operate conduits along certain streets and avenues in the Borough of Brooklyn, for the purpose of supplying refrigeration to consumers in Wallabout Market and the streets immediately adjacent thereto, and consenting to the surrender and cancellation of contract dated August 13, 1907, by and between the City and said Company, granting said Company a franchise to construct, maintain and operate certain conduits in Wallabout Market and vicinity, in the Borough of Brooklyn. (Approved November 13, 1914.)

(d) Granting F. V. Smith, Inc., an extension of time until January 1, 1915, to continue to maintain and use a narrow gauge railroad track across the bridge carrying Tremont Avenue over Westchester Creek, Borough of The Bronx, for the purpose of transporting material to be used in regulating and grading Tremont Avenue, under contract with the City. (Approved November 20, 1914.)

(e) Granting the Standard Oil Company of New York permission to construct, maintain and use a tunnel under and across Kingsland Avenue south of Greenpoint Avenue, Borough of Brooklyn, to contain pipes for the conveyance of steam, water, oil and electric current between properties of the grantee. (Approved November 20, 1914.)

(f) Granting the Standard Oil Company of New York permission to construct, maintain and operate a tunnel under and across Greenpoint Avenue west of Kingsland Avenue, Borough of Brooklyn, to contain pipes for the conveyance of water, steam, oil and electric current between properties of the grantee. (Approved November 20, 1914.)

Which were ordered filed.

New York Sewer Plan Commission—Board of Estimate and Apportionment—Appropriation from Contingent Fund (Cal. No. 40).

The Secretary presented a communication from the New York Sewer Plan Commission, dated November 18, 1914, stating that the amount which the Commission was authorized to draw upon the contingent fund of the Board, to meet its current expenses, will not be sufficient to carry it through the year. The Commission desires to secure the services of a stenographer during the month of December, this place being provided in the budget of the Bureau of Sewer Plan for 1915. To provide for salaries of its present staff, this additional place and miscellaneous expenses, the Commission requests the consent of the Board to draw upon the contingent fund for the present year to the amount of \$359.20, in addition to the sums already authorized.

Which was laid over for one week (December 4, 1914).

FIXING DATES FOR FUTURE HEARINGS.

On Franchises.

Manhattan Bridge Three Cent Line (Cal. No. 41).

Modification of contract dated July 10, 1912, as amended by contract dated December 2, 1913, granting said Company a franchise to construct, maintain and operate a street surface railway upon and along certain streets in the Boroughs of Manhattan and Brooklyn, and upon, along and over the Manhattan Bridge. (See Cal. No. 2.)

The Secretary presented the following:

Bureau of Franchises, November 21, 1914.

Hon. JOHN PURROY MITCHEL, Mayor, Chairman of Board of Estimate and Apportionment:

Sir—Under date of November 19, 1914, the Manhattan Bridge Three Cent Line petitioned the Board for the modification of its franchise—

First. By the elimination of a portion of its route in the Borough of Brooklyn and all of its route in the Borough of Manhattan with the exception of the Manhattan Bridge and its Manhattan terminal and approach.

Second. By permitting the operation of overhead electric power on the Manhattan Bridge and its approaches instead of the underground contact system now required by the franchise.

Third. By providing for the installation of appropriate terminal loops and other terminal facilities.

Under the same date the Company addressed a communication to the Board withdrawing its application dated September 25, 1913, for the right to change its line in the Borough of Brooklyn. Both the petition and the letter withdrawing the application have been presented to the Board, pursuant to its understanding with the Franchise Committee, which will present a report upon the matter at an early date.

It is recommended that the Board fix December 18 as the date for the preliminary public hearing, and that the Mayor be requested to designate the newspapers in which the notice of such hearing must be published, pursuant to law.

Respectfully,
JOHN A. McCOLLUM, Acting Chief of Bureau.

To the Board of Estimate and Apportionment of The City of New York:

The Manhattan Bridge Three Cent Line by this petition respectfully prays that its contract with The City of New York, bearing date the 10th day of July, 1912, as amended by contract dated December 2, 1913, whereby the said Manhattan Bridge Three Cent Line is granted the right and privilege to construct and operate a street surface railroad upon certain routes in the Boroughs of Manhattan and Brooklyn, City of New York, be amended as follows:

I. By withdrawing and abrogating the right and privilege by said contract to petitioner granted, to construct, maintain and operate a street surface railroad in the marginal way, West, Desbrosses, Vestry, Washington, Greenwich and Canal streets in the Borough of Manhattan, and in Fulton Street, Rockwell Place, Flatbush, Fourth, Atlantic and Third Avenues and Livingston, Hoyt and Bridge Streets, in the Borough of Brooklyn.

II. By permitting petitioner to use overhead electric power on the Manhattan Bridge, its plazas and approaches.

III. By providing for the installation of appropriate terminal loops and other terminal facilities by the City to be used by petitioner without expense to it.

Dated, November 19, 1914.

MANHATTAN BRIDGE THREE CENT LINE, By FREDERICK W. ROWE, President.

(Seal.)

State of New York, County of Kings, ss.:

On the 19th day of November, 1914, before me personally came Frederick W. Rowe, to me known, who, being by me duly sworn, did depose and say, that he resides in the Borough of Brooklyn, City of New York; that he is the president of Manhattan Bridge Three Cent Line, the corporation described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

CHARLES E. GRAU, Commissioner of Deeds for City of New York. Residing in New York County. Certificates filed in New York County Clerk's Office and Register's of New York and Kings County.

The following was offered:

Whereas, The foregoing petition from Manhattan Bridge Three Cent Line, dated November 19, 1914, was presented to the Board of Estimate and Apportionment at a meeting held November 25, 1914.

Resolved, That in pursuance of law this Board sets Friday, the eighteenth day of December, 1914, at 10.30 o'clock in the forenoon, and Room 16, in the City Hall, Borough of Manhattan, as the time and place when and where such petition shall be first considered, and a public hearing be had thereon, at which citizens shall be entitled to appear and be heard, and be it further

Resolved, That the petition and these resolutions shall be published for at least twice in two daily newspapers in The City of New York, to be designated by the Mayor, and for at least ten (10) days in the City Record immediately prior to such date of public hearing. The expense of such publication to be borne by the petitioner.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The petition was then referred to the Bureau of Franchises.

MATTERS LAID OVER FROM PREVIOUS MEETINGS.

Presidents, Boroughs of Queens and Richmond; Department of Street Cleaning—Removal of Snow, Winter, 1914-1915 (Cal. No. 42).

At the meeting of the Board on November 20, 1914 (Cal. No. 30), the President of the Borough of Queens moved that the plan of snow removal work for the Boroughs of Manhattan, Brooklyn and The Bronx approved at that meeting be applied to the Boroughs of Queens and Richmond, and requested that the motion be placed on the Calendar for consideration at the meeting of November 25, 1914.

The plan above referred to proposes to use sewers to dispose of snow as an emergency measure and to pay employees of City departments one and one-half times the rate of compensation during the time of employment in emergency snow removal work, while on temporary leave of absence without pay in the departments where they are regularly employed. This plan was recommended by the Committee on Street Cleaning of the Board.

Which matter was laid over for one week (December 4, 1914).

Department of Docks and Ferries—Exchange of Land with Harway Improvement Company (Cal. No. 43).

The Secretary presented a report of the Committee on Port and Terminal Facilities on the petition of the Harway Improvement Company, wherein said company offers certain lands, claimed to be owned by it, and required by the City for the construction of the Bensonhurst Storm Water Outlet of the Coney Island Drainage Canal, in exchange for certain other lands in the vicinity to which both the City of New York and the Harway Improvement Company claim title.

(The above mentioned petition was presented to the Board on March 13, 1914 (Cal. No. 51), and referred to the Committee on Port and Terminal Facilities.)

(On July 30, 1914 (Cal. No. 337), the Board adopted a modified drainage plan for this improvement.)

(On September 21, October 2, 16, 23, 30 and November 13, 1914, this matter was laid over; on the latter date (Cal. No. 97) until this meeting.)

(On October 30, 1914, a communication was presented from the Acting President, Borough of Brooklyn, transmitting for adoption map showing change of Drainage Plans for Maps Z, AA and EE, showing relocation of Bensonhurst Storm Water Outlet.)

(This plan corrects a slight error in the plan adopted by the Board on July 30, 1914.)

The Secretary also presented a communication dated November 2, 1914, from the Corporation Counsel stating that on October 16, 1914, he was directed by the Board to suspend until further notified the proceeding for acquiring title to land required for the Coney Island Drainage Canal pending a determination by the Board as to the proposed amendment of the opening proceeding, and that in the absence of further instructions he assumes that the Board intended only to have the proceeding suspended in so far as it relates to property which would be affected by the proposed amendment. He also states that the taking of testimony in this proceeding was completed on August 11, 1914, but that several hearings had been held since that time at the request of the attorneys for some of the interested property owners. Since the date of the closing of taking testimony the Commissioners have been considering the testimony and making up the awards. He advises that he will defer suspending the proceeding as to property not affected by the amendment unless he receives further notification.

Which matter was laid over; and the Secretary was directed to request the Corporation Counsel to suspend action in the entire proceeding relating to the Coney Island Drainage Canal, pending the receipt of further advice from the Board.

Department of Parks, Borough of Brooklyn—Approval of Proposed Contract Between The City of New York, the Nassau Electric Railroad Company and the Coney Island and Brooklyn Railroad Company, Relative to the Liability for the Expense of Relocating the Railroad Tracks on the 15th Street and 9th Avenue Plaza of Prospect Park, Brooklyn (Cal. No. 44).

The Secretary presented a report of the Committee on Corporate Stock Budget referring to the communication from the Commissioner of Parks, Borough of Brooklyn, transmitting for the approval of the Board a proposed contract between the City of New York, the Nassau Electric Railroad Company and the Coney Island and Brooklyn Railroad Company relative to the liability for the expense of relocating the railroad tracks on the 15th Street and 9th Avenue Plaza of Prospect Park, Brooklyn.

(On April 24, 1914 (Cal. No. 38), the above matter was referred to the Committee on Corporate Stock Budget.)

(On July 9 and 30, August 27, September 21, October 2, 9 and 23, and November 6 and 13, 1914, this matter was laid over; on the latter date (Cal. No. 100) until this meeting.)

Which was laid over for two weeks (December 11, 1914).

Department of Docks and Ferries—Issue of Corporate Stock (Cal. No. 45).

(On October 2, 1914 (Cal. No. 48), the request of the Commissioner of Docks in this matter was referred to the Committee on Corporate Stock Budget, as were also, on November 13, 1913 (Cal. No. 86), resolutions adopted by the Commissioners of the Sinking Fund on November 4, 1914, recommending this appropriation.)

(On November 20, 1914 (Cal. No. 19), the report of the Corporate Stock Budget Committee thereon was presented to the Board and laid over for one week, under Rule 19.)

The Secretary presented a communication dated September 24, 1914, from the Commissioner of Docks, requesting an issue of corporate stock for the purpose of paying the costs and expenses for acquiring property at West 44th to West 48th streets, North River, Borough of Manhattan, in the sum of \$25,000, and property adjacent to the proposed Barge Canal Terminal in South Brooklyn in the sum of \$25,000.

The Secretary also presented a communication dated November 4, 1914, from the Secretary, Commissioners of the Sinking Fund, transmitting two resolutions adopted

by said Commission on November 2, 1914, recommending these issues of Corporate Stock; and the following report of the Committee on Corporate Stock Budget:

City of New York, Board of Estimate and Apportionment, Municipal Building, Bureau of Contract Supervision, November 16, 1914.

To the Board of Estimate and Apportionment:

Gentlemen—On November 13, 1914, you referred to the Committee on Corporate Stock Budget two resolutions of the Commissioners of the Sinking Fund, adopted November 2, 1914, pursuant to the provisions of section 180 of the Charter, recommending to the Board of Estimate and Apportionment the authorization of corporate stock for the uses and purposes of the Department of Docks and Ferries, as follows:

For the costs and expenses of acquiring property at	
West 44th to West 48th street, North River.....	\$25,000 00
Adjacent to the proposed Barge Canal Terminal in South Brooklyn....	25,000 00
	\$50,000 00

These funds are necessary to meet orders of the Supreme Court as follows:

West 44th to West 48th Street.....	\$7,061 08
Canal Barge Terminal	1,132 36

It is probable that considerable additional expense will be involved in these proceedings:

Title to the West 48th Street property vested in the City on August 1, 1913, and to the Terminal property on October 10, 1913.

The Board of Estimate and Apportionment has reserved out of the available balance in the amount of corporate stock which may be legally authorized, the sum of \$3,075,000 for the North River property and \$2,361,620.35 for the Terminal property. No authorizations of corporate stock for these purposes have been made.

We recommend the adoption of the attached resolutions authorizing the corporate stock as recommended by the Commissioners of the Sinking Fund.

WM. A. PRENDERGAST, Comptroller; GEORGE McANENY, President, Board of Aldermen; LEWIS H. POUNDS, President, Borough of Brooklyn; DOUGLAS MATHEWSON, President, Borough of The Bronx; Corporate Stock Budget Committee.

The following resolution was offered:

Resolved, That, pursuant to the provisions of section 180 of the Greater New York Charter and the recommendations of the Commissioners of the Sinking Fund by resolution adopted November 4, 1914, the Board of Estimate and Apportionment hereby authorizes the Comptroller to issue, from time to time, as may be required, corporate stock of The City of New York, in the manner provided by section 169 of the Greater New York Charter, to an amount not exceeding twenty-five thousand dollars (\$25,000), the proceeds whereof, to the amount of the par value thereof, to be applied to the payment of awards, costs and expenses in the proceeding to acquire property for a terminal station adjacent to the proposed Barge Canal Terminal at South Brooklyn under the jurisdiction of the Department of Docks and Ferries.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That, pursuant to the provisions of section 180 of the Greater New York Charter and the recommendation of the Commissioners of the Sinking Fund by resolution adopted November 4, 1914, the Board of Estimate and Apportionment hereby authorizes the Comptroller to issue, from time to time, as may be required, corporate stock of The City of New York in the manner provided by section 169 of the Greater New York Charter, to an amount not exceeding twenty-five thousand dollars (\$25,000), the proceeds whereof, to the amount of the par value thereof, to be applied to the payment of awards, costs and expenses in the proceeding to acquire title to the property between West 44th street and West 48th street, North River, for the uses and purposes of the Department of Docks and Ferries.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Department of Water Supply, Gas and Electricity—Issue of Corporate Stock (Cal. No. 46).

(On May 22, 1914 (Cal. No. 44), the request of the Commissioner of Water Supply, Gas and Electricity in this matter was referred to the Committee on Corporate Stock Budget and on July 2, 1914 (Cal. No. 318), the request of the Commissioner of Water Supply, Gas and Electricity for an issue of corporate stock for improvements in the water system of Manhattan and The Bronx was also referred to the Committee on Corporate Stock Budget.)

(On November 20, 1914 (Cal. No. 20), the report of the Committee on Corporate Stock Budget was presented to the Board and laid over for one week under Rule 19.)

The Secretary presented a communication dated May 16, 1914, from the Commissioner of Water Supply, Gas and Electricity, requesting an issue of corporate stock for an extension of the water distribution system of the various boroughs, in the sum of \$640,000; also a communication from the Commissioner of Water Supply, Gas and Electricity, dated June 29, 1914, requesting an issue of corporate stock to connect the distribution system in the Boroughs of Manhattan, The Bronx and Brooklyn, with the Catskill pressure shafts, in the sum of \$235,000; and the following report of the Committee on Corporate Stock Budget:

City of New York, Board of Estimate and Apportionment, Municipal Building, Bureau of Contract Supervision, October 19th, 1914.

To the Board of Estimate and Apportionment:

Gentlemen—On June 19, 1914, you referred to the Corporate Stock Budget Committee a request of the Commissioner of Water Supply, Gas and Electricity, dated May 16, 1914, for an issue of corporate stock to the amount of \$640,000 for extension of the water distribution system of the various boroughs, apportioned as follows:

Boroughs of Manhattan and The Bronx.....	\$355,000 00
Borough of Brooklyn	125,000 00
Borough of Queens	60,000 00
Borough of Richmond	100,000 00

Total	\$640,000 00
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In support of this request the following data was submitted:

1. List of contracts prepared.
2. List of streets for which mains have been requested and approved by the Department.
3. Estimate of anticipated requests to be approved in the months of July, August and September.
4. Estimate of materials required.
5. Money balances available.

This data has been carefully examined by the Bureau of Contract Supervision, and, in view of the lateness of the season for construction work and present financial conditions, the estimate has been reduced to \$255,000 apportioned as follows:

Manhattan and The Bronx	\$175,000 00
Brooklyn	80,000 00

These amounts are made up as follows:

<i>Boroughs of Manhattan and The Bronx—Contracts Prepared.</i>	
Hauling and Laying, Manhattan—	
Broadway, Jacobus Place, etc.....	\$11,000 00
(This contract was on the Board of Estimate Calendar of May 22, 1914, but was withdrawn by the Chief Engineer of the Department of Water Supply on account of low balances in the funds.)	
Furnishing, Delivering and Laying, Bronx—	
Southern Boulevard	\$45,000 00
East 225th St., Bailey Ave., Fordham Road, Cedar Ave., East 184th St., Sedgwick Ave.	16,000 00
University Ave. (in advance of paving).....	25,000 00
Streets approved, for which no contracts have been prepared (see attached list of streets)	65,000 00
Stock needed for hauling and laying contracts	35,000 00

Total	\$197,000 00
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Balances available, September 24, 1914	2,062 00
Deduct 10 per cent. from estimate on basis of recent contract awards.....	\$194,938 00
	19,494 00
Amount needed	\$175,444 00
<i>Borough of Brooklyn.</i>	
Streets for which mains have been requested and approved (see attached list)	\$85,000 00
Materials required for labor construction force.....	5,000 00
Total	\$90,000 00
Stock available for contracts	10,000 00
	\$80,000 00
Balances available September 24, 1914	2,155 00

Amount needed

Practically all of the work included in this estimate is extension work, as distinguished from improvement work, and will add to the revenue of the City.

Also, on July 2, 1914, the Board of Estimate and Apportionment referred to the Corporate Stock Budget Committee, a communication from the Commissioner of Water Supply, Gas and Electricity, in which among other requests, was one for \$235,000 corporate stock to connect the distribution systems in the Boroughs of Manhattan, Bronx and Brooklyn, with the Catskill pressure shafts.

This money will provide for sufficient connections to make available all of the first installment of the Catskill water. It will permit of the shutting down of all the pumping stations except at 179th Street, where about 1,000,000 gallons per day will be furnished to the high ground in the present tower service, will improve the low pressure distribution service and materially assist the high pressure service. It is essential that these connections should be ready as soon as the Catskill water is available, which should be at the beginning of 1916.

We recommend the adoption of the attached resolution granting the requests in the following amounts:

Water supply distribution service, Manhattan and Bronx.....	\$175,000 00
Water supply distribution service, Brooklyn	80,000 00
Connections to shafts Catskill Aqueduct	235,000 00

Total

Respectfully, ALEX. BROUGH, Deputy and Acting Comptroller; GEORGE McANENY, President, Board of Aldermen; LEWIS H. POUNDS, President, Borough of Brooklyn; DOUGLAS MATHEWSON, President, Borough of The Bronx, Corporate Stock Budget Committee.

The following resolution was offered:
Resolved, That the Board of Estimate and Apportionment, pursuant to the provisions of Section 178 of the Greater New York Charter, hereby approves of the issue of corporate stock of The City of New York to the amount of four hundred and ninety thousand dollars (\$490,000), to provide means for water supply purposes as follows:

The Extension and Improvement of the Water Supply Distribution System, Boroughs of Manhattan and The Bronx.....	\$175,000 00
Borough of Brooklyn	80,000 00
Connecting the Water Supply Distribution system in the Boroughs of Manhattan, The Bronx and Brooklyn with the Catskill pressure shafts	235,000 00

—and the Comptroller be and he is hereby authorized to issue said corporate stock of The City of New York in the manner provided by Section 169 of the Greater New York Charter, the proceeds thereof to the amount of the par value of the stock to be applied to the purposes aforesaid, provided however, that no part of the proceeds of the corporate stock herein authorized shall be available until after the Board of Estimate and Apportionment has approved forms of contracts, plans, specifications and estimates of cost pertaining to the same, and that no part of such proceeds shall be used for the payment of fees of any architect, engineer or expert until after a contract with such architect, engineer or expert has been approved by the Board of Estimate and Apportionment, and that no part of the proceeds of corporate stock herein authorized shall be used for the payment of any salary or wage of departmental employees, except after approval by the Board of Estimate and Apportionment, and in accordance with the schedules to be adopted by said Board; and be it further

Resolved, That the Commissioner of Water Supply, Gas and Electricity is directed to submit to this Board for its approval forms of contracts, plans, specifications and estimates of cost, prior to advertising for bids for work chargeable to the proceeds of the corporate stock herein authorized and said Commissioner is also directed to submit to this board for its approval all preliminary and final agreements with an architect or architects, engineer or engineers, expert or experts, whenever such agreements or contracts are chargeable against corporate stock herein authorized.

Which was adopted by the following vote:
Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Fire Department—Issue of Corporate Stock (Cal. No. 47).

(On July 9, 1914 (Cal. No. 234), the request of the Fire Commissioner in this matter was referred to the Committee on Corporate Stock Budget.)

(On November 20, 1914 (Cal. No. 21), the report of the Committee on Corporate Stock Budget was presented to the Board and laid over for one week, under Rule 19.)

The Secretary presented a communication dated July 6, 1914, from the Fire Commissioner, requesting an issue of corporate stock for motor fire apparatus, in the sum of \$560,500; and the following report of the Committee on Corporate Stock Budget, recommending an issue of \$308,000:

City of New York, Board of Estimate and Apportionment, Municipal Building, Bureau of Contract Supervision, November 5, 1914.

To the Board of Estimate and Apportionment:

Gentlemen—On July 9, 1914, you referred to the Committee on Corporate Stock Budget a request of the Fire Commissioner, dated July 6, 1914, for \$560,500 in corporate stock for motor fire apparatus, as follows

Motorizing present apparatus	\$305,000 00
Apparatus for new companies.....	255,500 00

Motorizing Present Apparatus.

As no appropriation has been made for the purchase of horses for the Fire Department, it will be necessary to provide sufficient apparatus to replace horses which die or become unsuited for service. It has been the experience of the Fire Department that about eleven or twelve per cent. of its live stock must be replaced each year.

The expenditure of existing authorizations will reduce the number of horses in the department to approximately eleven hundred. To replace during 1915 the usual quota of loss of this reduced total of live stock will require at least \$185,000 for the purchase of tractors and tenders.

Apparatus for New Companies.

There are about twenty new companies to be organized during the coming year. After taking into consideration an offsetting reduction in double companies and the possibility of utilizing in the new companies, motor engines at present located in the high pressure zone, or of tractorizing such engines, if now horse-drawn, it would appear that \$123,000 will be sufficient for apparatus for new companies.

We recommend the adoption of the attached resolution granting the request to the extent of \$308,000. Respectfully,

WM. A. PRENDERGAST, Comptroller; GEORGE McANENY, President, Board of Aldermen; LEWIS H. POUNDS, President, Borough of Brooklyn; DOUGLAS MATHEWSON, President, Borough of The Bronx; Corporate Stock Budget Committee.

The following resolution was offered:

Resolved, That, pursuant to the provisions of section 47 of the Greater New York Charter, as amended, the Board of Estimate and Apportionment hereby approves of the issue of corporate stock of The City of New York to an amount not exceeding three hundred and eight thousand dollars (\$308,000) to provide for the purchase of motor fire apparatus for the Fire Department, as follows:

Tractors and tenders for present apparatus	\$185,000 00
Apparatus for new companies	123,000 00

—and when authority therefor shall have been obtained from the Board of Aldermen, the Comptroller be and hereby is authorized to issue said corporate stock of The City of New York in the manner provided by section 169 of the Greater New York Charter, maturing not more than fifteen (15) years after the date of issue, the proceeds thereof to the amount of the par value of the stock to be applied to the purposes aforesaid. Provided, however, that no part of the proceeds of the corporate stock herein authorized shall be available until after the Board of Estimate and Apportionment has approved forms of contract, plans, specifications and estimates of cost pertaining to the same and that no part of such proceeds shall be used for the payment of fees of any architect, engineer or expert until after a contract with such architect, engineer or expert has been approved by the Board of Estimate and Apportionment and that no part of the proceeds of corporate stock herein authorized shall be used for the payment of any salary or wage of departmental employees, except after approval by the Board of Estimate and Apportionment and in accordance with the schedules to be adopted by said Board; and be it further

Resolved, That the Fire Commissioner is directed to submit to this Board for its approval forms of contract, plans, specifications and estimates of cost, prior to advertising for bids for work chargeable to the proceeds of the corporate stock herein authorized, and said Commissioner is also directed to submit to this Board for its approval all preliminary and final agreements with an architect or architects, engineer or engineers, expert or experts, whenever such agreements or contracts are chargeable against corporate stock herein authorized.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Public Service Commission for the First District—Approval of Award of Contract to Smith, Hauser & McIsaac, Inc., for the Construction of Section No. 2 of Route No. 48 of the Seventh Avenue-Lexington Avenue Rapid Transit Railroad, and the Issue of Corporate Stock Therefor (Cal. No. 48).

(On September 25, 1914 (Cal. No. 42), the requisition of the Public Service Commission in this matter was referred to the Comptroller and to the Bureau of Contract Supervision.)

(On November 13 and 20, 1914 (Cal. No. 128), the report of the Comptroller thereon was presented to the Board and laid over for one week and referred to the Committee on Transit.

The Secretary presented the following requisition of the Public Service Commission for the First District for the consent of the Board to the award of the contract to Smith, Hauser & McIsaac, Inc., for the construction of Section No. 2 of Route No. 48 of the Seventh Avenue-Lexington Avenue Rapid Transit Railroad and the issue of Corporate Stock therefor; communication from the Secretary of said Commission relative thereto; and report of the Comptroller recommending approval thereof:

State of New York, Public Service Commission for the First District, Tribune Building, 154 Nassau Street, New York.

Board of Estimate and Apportionment of The City of New York:

The Public Service Commission for the First District herewith transmits to you for your consent as required by law a proposed contract between The City of New York, Interborough Rapid Transit Company, and Smith, Hauser & McIsaac, Inc., for the construction of Section No. 2 of Route No. 48, being that part of the proposed Seventh Avenue-Lexington Avenue Rapid Transit Railroad (William Street), which begins at a point under Beekman Street in the Borough of Manhattan about sixty-two (62) feet west of the westerly building line of William Street curving thence southerly under private property into William Street, extending thence southerly under William Street and easterly under Hanover Square to a point about opposite the easterly building line of Pearl Street.

The Public Service Commission for the First District requests your Honorable Board to consent to said contract herewith transmitted and to prescribe a limit to the amount of bonds available to meet the requirements of the City's obligation under said contract, to wit, the sum of one million one hundred and twenty-seven thousand three hundred and thirty-five dollars (\$1,127,335) and also to direct the Comptroller of The City of New York to issue the bonds of said City at such a rate of interest as the Commissioners of the Sinking Fund of said City may prescribe for the purpose of providing the necessary means to meet the City's share of executing said contract, to wit, the sum of one million one hundred and twenty-seven thousand three hundred and thirty-five dollars (\$1,127,335).

The Public Service Commission for the First District does hereby, pursuant to Section 45 of the Greater New York Charter, make request for the authorization of such corporate stock for the full amount sufficient to pay the entire estimated expense to the City of executing such contract, to wit, the sum of one million one hundred and twenty-seven thousand three hundred and thirty-five dollars (\$1,127,335).

This requisition is a subrequisition on account of and not in addition to the requisition made by the Public Service Commission for the First District, under date of March 18, 1913, upon your Honorable Board for twenty-eight million two hundred thousand dollars (\$28,200,000), for the purpose of carrying out the contract dated March 19, 1913, known as Contract No. 3, between The City of New York, acting by the Public Service Commission for the First District, and Interborough Rapid Transit Company for additional rapid transit railroads, and the appropriation made thereunder by your Honorable Board on March 18, 1913.

In witness whereof the Public Service Commission for the First District has caused its official seal to be hereto affixed and attested by its Secretary, and these presents to be signed by its Chairman this 22d day of September, 1914.

(Seal.)

PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT, by MLO R. MALTBIE, Acting Chairman.

Attest: TRAVIS H. WHITNEY, Secretary.

State of New York, Public Service Commission for the First District, Tribune Building, 154 Nassau Street, September 22, 1914.

To the Board of Estimate and Apportionment of The City of New York:

Sirs—With reference to the contract for the construction of Section 2 of Route 48 (William Street-Beekman Street to Pearl Street) transmitted to you to-day for your consent as required by law, I am directed by the Commission to call to your attention the following situation with respect to the assumption by the City of primary liability for damages in connection with that work.

On March 13, 1913, the Board of Estimate and Apportionment, following receipt of resolutions adopted by the Commission, adopted resolutions in part as follows:

"Resolved, That, in compliance with said resolution of the Public Service Commission, the Board of Estimate and Apportionment hereby requests said Commission to incorporate in the contract or contracts for the construction of a rapid transit railroad in William street, from Beekman street to Old Slip, in the Borough of Manhattan, City of New York, provisions to enure to the benefit of abutting property owners, that The City of New York shall be primarily liable for damages recoverable by such property owners for injury to person or property resulting from the construction of such rapid transit railroad in William street, whether due to defective plans or to the negligence of the City or of the contractor, without prejudice, however, to the City's claims or rights of action or rights of recovery over against contractors or others for any such damages; and be it further

"Resolved, That this Board will not approve any contract for construction of such rapid transit railroad in William street, as aforesaid, unless such provisions are contained therein; * * *

Provisions carrying out the spirit of these resolutions were inserted in the form of contract for the construction of the subway under William Street, upon which a public hearing was held as required by the Rapid Transit Act. Thereafter, rather extended conferences were held with representatives of abutting property owners over the form of these provisions in which the Corporation Counsel participated. After such consideration and a thorough study of the matter such primary liability provision was finally inserted in the contract in the following language (p. 155):

"Article XLVII-A. The above provisions of this Chapter relative to the Contractor's liability shall remain in full force and effect, but in pursuance of the suggestion of the Appellate Division of the Supreme Court in and for the First Judicial Department in *Matter of Public Service Commission (Park Place Route)*, 154 App. Div. 587, 591 and of the resolutions relative thereto adopted by the Commission and by the Board of Estimate and Apportionment of the City it

is understood and agreed that the City shall be primarily liable to the owners of abutting property and of buildings thereon for physical damages to such property and buildings howsoever caused by the construction of the Works. The Contractor shall, however, indemnify and save harmless the City against and from any and all such damages and claims therefor, and all costs and expenses in connection therewith; provided, however, that the City shall upon the written request of the Contractor afford him all reasonable opportunity to assist in the defense against such claims.

The Commission is informed that such primary liability clause as so inserted in the contract has been approved by the Corporation Counsel, but that in view of the resolutions heretofore adopted by your Honorable Board in respect of such primary liability the Corporation Counsel desires that the Commission in transmitting the contract for approval should call the attention of your Honorable Board to the variation in phraseology of the provision as inserted in the contract from the text of the resolution adopted on March 13, 1913. Respectfully yours,

TRAVIS H. WHITNEY, Secretary.

INVITATION TO CONTRACTORS.

Part of the Seventh Avenue-Lexington Avenue Rapid Transit Railroad.
The Public Service Commission for the First District (hereinafter called the "Commission") invites proposals to construct Section No. 2 of Route 48, a part of the Seventh Avenue-Lexington Avenue Rapid Transit Railroad.

The points within the City of New York between which the said part is to run and the route or routes to be followed are briefly as follows:

Section No. 2. Beginning at a point under Beekman Street, in the Borough of Manhattan, about sixty-two (62) feet west of the westerly building line of William Street, curving thence southerly under private property into William Street, extending thence southerly under William Street and easterly under Hanover Square to a point about opposite the easterly building line of Pearl Street.

The general plan of construction calls for a subsurface railroad having two tracks. The Contractor will not be required to provide or lay tracks, ties or ballast, nor to do station finish work.

The work under the contract will include the care and support of buildings, vaults, sewers, pipes, railroads and other surface, subsurface and overhead structures, the maintenance of traffic and the restoration of pavements and other surfaces.

The method of construction, unless otherwise permitted by the Commission, will be by trench excavation under cover.

Bidders must examine the form of contract and the specifications and contract drawings; must visit the location of the work and inform themselves of the conditions along the line of the work and make their own estimates of the facilities and difficulties attending the execution of the work.

A fuller description of the work and other requirements, provisions, details and specifications are given in the form of contract and in the contract drawings therein referred to. Copies of the form of contract, bond and contractor's proposal and of the contract drawings may be inspected and purchased at the office of the Commission, No. 154 Nassau Street, Borough of Manhattan, New York City. The forms of contract, bond and contractor's proposal and the contract drawings are to be deemed a part of this invitation.

The City of New York (hereinafter called the "City") and the Interborough Rapid Transit Company will both be parties to the contract; the Interborough Rapid Transit Company being a party for the purpose of disbursing part of its contribution toward the cost of construction as provided in the contract dated March 19, 1913, between the City and said Company for additional rapid transit railroads. The liability of Interborough Rapid Transit Company will be limited to an amount equal to fifty per centum (50 per cent.) of the total estimated amount to be paid to the Contractor under the contract.

Partial payments to the Contractor will be made as the work proceeds as provided in the contract.

The Contractor must complete the work within twenty-eight (28) months from the delivery of the contract.

At the time of the delivery of the contract the Contractor must furnish security to the City by depositing a bond, cash or securities in the sum of five hundred thousand dollars (\$500,000). As further security fifteen per centum (15%) of the amounts certified from time to time to be due to the Contractor will be deducted until the amounts so deducted and retained shall equal ten per centum (10%) of the total estimated amount to be paid to the Contractor under the contract. Thereafter there shall be so deducted and retained for such purpose ten per centum (10%) of the amounts certified from time to time to be due to the Contractor.

Sealed bids or proposals will be received at the office of the Commission, at No. 154 Nassau Street, Borough of Manhattan, New York City, until the 15th day of September, 1914, at twelve fifteen (12.15) o'clock p. m., at which time, or at a later date to be fixed by the Commission, the proposals will be publicly opened.

Proposals must be in the form prescribed by the Commission.

A statement, based upon the estimate of the Chief Engineer of the Commission, of the quantities of the various classes of the work and of the nature and extent as near as practicable of the work is to be found in the schedule in the form of contractor's proposal. The quantities given in such schedule are approximate only, being given as a basis for the uniform comparison of bids and no claim is to be made against the City on account of any excess or deficiency, absolute or relative, in the same, except as provided in the specifications and form of contract.

Every proposal must when submitted be enclosed in a sealed envelope endorsed "Proposal for Constructing Part of Rapid Transit Railroad—Route No. 48, Section No. 2," and must be delivered to the Commission or its Secretary; and in the presence of the person submitting the proposal, it will be deposited in a sealed box in which all proposals will be deposited. No proposal will be received unless accompanied by a separate certified check for fifty thousand dollars (\$50,000) payable to the order of the Comptroller of the City and drawn upon a national or state bank or trust company satisfactory to the Commission and having its principal office in New York City. Such check must not be enclosed in the envelope containing the proposal.

The Unit Prices must not be improperly balanced, and any bid which the Commission considers detrimental to the City's interests may be rejected.

No proposal, after it shall have been deposited with the Commission, will be allowed to be withdrawn for any reason whatever.

The award of the contract will be made by the Commission as soon as practicable after the opening of the proposals.

Deposits made by bidders whose proposals are not accepted will be returned within three (3) days after the contract is executed and delivered and its provisions in respect of the bond or deposit are complied with, unless all proposals shall be rejected in which event such deposits will be returned within three (3) days after such rejection. The deposit of the successful bidder will be returned when the contract is executed and its provisions in respect of the bond or deposit are complied with.

The right to reject any and all bids is reserved.

New York, August 21, 1914.

PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT, By

EDWARD E. McCALL, Chairman.

TRAVIS H. WHITNEY, Secretary.

PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT.

Contract for the Construction of a Part of a Rapid Transit Railroad, Route No. 48,

Section No. 2.

Approved as to form this day of , 1914.

....., Acting Corporation Counsel.

RAPID TRANSIT RAILROAD—CONTRACT.

Route No. 48, Section No. 2.

Agreement made this day of , 1914, between The City of New York, hereinafter called the City, acting by the Public Service Commission for the First District, hereinafter called the Commission, party of the first part, Interborough Rapid Transit Company, a corporation organized and existing under the laws of the State of New York, hereinafter called the Interborough Company, and the party of the second part, and hereinafter called the Contractor, part* of the third part.

Whereas on or about the 19th day of March, 1913, the City, acting by the Commission, entered into a contract with the Interborough Company for the equipment, maintenance and operation of certain additional rapid transit railroads or extensions of the rapid transit railroads now operated by the Interborough Company under lease from the City therein specifically described, including the Railroad to be constructed

*Here insert y or ies as the case may be.

hereunder, and as one of the terms and conditions of such contract the Interborough Company agreed to contribute toward the cost of construction of such railroads and to disburse part of its said contribution through the medium of construction contracts to which it should be a party for the purpose of making such disbursement; and

Whereas, the Commission by due advertisement, pursuant to law, has invited contractors to submit to the Commission proposals for making this contract; and

Whereas, the Contractor has thereupon submitted to the Commission a proposal, which has been accepted; and

Whereas, the Board of Estimate and Apportionment of the City has consented to this contract;

Now, Therefore, in consideration of the mutual covenants and agreements hereinafter contained, and under the authority of chapter 4 of the laws of 1891, entitled "An Act to provide for Rapid Transit Railways in Cities of over One Million Inhabitants," and of the various acts amending the same, the parties do hereby, the City for itself and its successors, the Interborough Company for itself, its successors and assigns, and the Contractor for* and assigns,

Agree with one another as follows:

CHAPTER I.

General Provisions and Definitions.

Outline of Contract.

Article I. The Contractor agrees to construct the part hereinafter described of a Rapid Transit Railroad, with its appurtenances. The City and the Interborough Company agree to pay to the Contractor the sums of money hereinafter mentioned at the times and in the manner and upon the terms and conditions hereinafter set forth.

Brief Description of Route.

Article II. The Railroad to be constructed under this contract forms part of a certain route adopted by the Commission on May 28, 1912, which is known as the Park Place, William and Clark Street Route or Route No. 48. The part to be constructed under this contract consists of

Section No. 2.

Beginning at a point under Beekman Street, in the Borough of Manhattan, about sixty-two (62) feet west of the westerly building line of William Street, curving thence southerly under private property into William Street, extending thence southerly under William Street and easterly under Hanover Square to a point about opposite the easterly building line of Pearl Street.

The location of the tracks and the dimensions and other characteristics of the Railroad are given in the specifications forming a part of this contract and in the contract drawings hereinafter mentioned.

Statute Incorporated Herein.

Article III. This contract is made pursuant to the Rapid Transit Act, which is to be deemed a part hereof as if it were incorporated herein.

Marginal Notes, Etc.

Article IV. Titles, headings, running headlines and marginal notes are printed hereon merely for convenience and shall not be deemed to be any part of this contract for any purpose whatever.

Definitions of Words.

Article V. The following words and expressions used in this contract shall, except where by the context it is clear that another meaning is intended, be construed as follows:

"City."

(1) The word "City" to mean The City of New York and any other corporation or division of government to which the ownership, rights, powers and privileges of The City of New York under the Rapid Transit Act shall hereafter come, belong or appertain.

"Commission."

(2) The word "Commission" to mean the Public Service Commission for the First District and any other board, body, commission, official or officials to which or to whom the powers now belonging to the said Commission in respect of the location, construction, equipment, maintenance and operation of rapid transit railroads under the provisions of the Rapid Transit Act shall, by virtue of any act or acts, hereafter pass or be held to appertain.

"Interborough Company."

(3) The words "Interborough Company" to mean Interborough Rapid Transit Company, party of the second part to this contract, and its successors and assigns.

"Contractor."

(4) The word "Contractor" to mean the part* of the third part to this contract, and assigns and any and every person or corporation who or which shall at any time be liable in the place or for the part of the third part to perform any obligations under this contract assumed by the said part of the third part. For convenience the Contractor is hereinafter referred to as if the Contractor were an individual. The word "he" shall, as the sense may require, include "she," "it" and "they"; the word "him" shall include "her," "it" and "them"; and the word "his" shall include "her," "its" and "their."

"Comptroller."

(5) The word "Comptroller" to mean the Comptroller of the City and the officer or board to whom or to which his powers now existing under the Rapid Transit Act shall come to appertain.

"Engineer."

(6) The word "Engineer" to mean the Chief Engineer of the Commission or his duly authorized representative and any successor or successors duly appointed or any deputy or substitute for him who shall be appointed by the Commission or by its authority.

"Inspector."

(7) The word "Inspector" to mean any representative of the Engineer designated by him to act as inspector.

"Rapid Transit Act."

(8) The words "Rapid Transit Act" to mean chapter 4 of the laws of 1891, as amended by chapters 102 and 556 of the laws of 1892, chapters 528 and 752 of the laws of 1894, chapter 519 of the laws of 1895, chapter 729 of the laws of 1896, chapter 616 of the laws of 1900, chapter 587 of the laws of 1901, chapters 533, 542, 544 and 584 of the laws of 1902, chapters 562 and 564 of the laws of 1904, chapters 599 and 631 of the laws of 1905, chapters 472, 606 and 607 of the laws of 1906, chapters 429 and 534 of the laws of 1907, chapter 472 of the laws of 1908, chapter 498 of the laws of 1909, chapters 205, 504, 505 and 506 of the laws of 1910, chapter 888 of the laws of 1911, chapter 226 of the laws of 1912 and chapters 100, 510, 524 and 540 of the laws of 1913 and chapter 118 of the laws of 1914, or as heretofore otherwise amended.

"Railroad."

(9) The word "Railroad" to mean the part of a Rapid Transit Railroad which the Contractor agrees by this contract to build, together with all appurtenances thereto which are to be constructed or provided by the Contractor.

"The Works."

(10) The words "the Works" to mean all the matters and things herein agreed to be furnished or done by or on the part of the Contractor.

"New York."

(11) The words "New York" to mean the City of New York according to its boundaries at the date of this contract.

"Daily Newspaper."

(12) The words "daily newspaper" to mean any paper regularly published in New York on every day or every day except Sundays and holidays.

"Notice."

(13) The word "notice" to mean a written notice.

"Direction, Etc."

(14) The words "directed," "required," "permitted," "ordered," "designated," "prescribed" or words of like import used in the specifications or upon the drawings to mean, respectively, the direction, requirement, permission, order, designation or prescription of the Engineer, and similarly the words "approved," "acceptable," "satisfactory" or words of like import to mean, respectively, approved by, or acceptable or satisfactory to, the Engineer.

"Ton."

(15) The word "ton" to mean the short ton of two thousand (2,000) pounds.

*Here insert, if a corporation, itself, its successors; if a single individual, himself, his executors, administrators; if several individuals, themselves, jointly and severally, and their and each of their executors, administrators.

†Here and in like blanks hereafter insert y or ies, as the case may be.

‡Here insert, as the case may be, either its successors, or his executors, administrators, or their executors, administrators.

Legal Address of Contractor—Address May Be Changed.

Article VI. The Contractor hereby designates Room No. _____ on the _____ floor of the building No. _____ in the Borough of _____ in the City of New York, as the place where all notices, directions and other communications to the Contractor may be served, mailed or delivered. The delivering at the aforesaid place or depositing in a post-paid wrapper directed to the aforesaid place in any post-office box regularly maintained by Post Office Department of any notice, letter or other communication to the Contractor shall be deemed to be sufficient service thereof upon the Contractor as of the date of such delivery or deposit. Such address may be changed at any time by an instrument in writing executed and acknowledged by the Contractor and delivered to the Commission. Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, direction or other communication upon the Contractor personally, or if the Contractor be a corporation, upon any officer or director thereof.

Contractor Responsible for Acts of Sub-contractor's Employees.

Article VII. If the Contractor shall cause any part of this contract to be performed by a sub-contractor, the provisions of this contract shall apply to such sub-contractor and his officers, agents and employees in all respects as if he and they were employees of the Contractor; and the Contractor shall not be in any manner thereby discharged from his obligations and liabilities hereunder, but shall be liable hereunder for all acts and negligence of the sub-contractor, his officers, agents and employees as if they were employees of the Contractor. The employees of the sub-contractor shall be subject to the same provisions hereof as employees of the Contractor; and the work and materials furnished by the sub-contractor shall be subject to the provisions hereof as if furnished directly by the Contractor.

Commission May Disapprove Sub-contractor.

Article VIII. The Contractor before making any sub-contract of the work shall state in writing to the Commission the name of the proposed sub-contractor, the portion of the work which such sub-contractor is to do or the materials which such sub-contractor is to furnish, the place of business of such sub-contractor and such other information as the Commission may require. The Commission shall have the right to require the Contractor not to award any sub-contract to a person, firm or corporation disapproved of by the Commission.

CHAPTER II.

Work to Be Done, Prices, Etc.

Work to Be Done.

Article IX. The Contractor shall furnish all the labor and materials, plant, power, tools, supplies and other means of construction necessary or proper for constructing and completing the Railroad and performing all the work which the Contractor agrees by this contract to perform in the manner and within the time hereinafter specified. He shall complete the Railroad and do all work and furnish all labor and materials in and about the construction of the Railroad to the satisfaction of the Commission and in accordance with this contract and the specifications and drawings herein mentioned at the prices herein agreed upon and fixed therefor; provided, however, that said contract drawings may from time to time be altered or modified as hereinafter provided.

Construction Includes Incidental Work.

Article X. In order to construct the Railroad it will be necessary to take up and relay the sidewalk and roadway pavement or other surface material, and to protect, support and maintain all buildings and other structures, including their foundations, and all elevated railroads, water mains, gas pipes, electric subways, poles and wires, pneumatic tubes, steam pipes, mail tubes, vaults, including vaults of abutting property, and other surface, subsurface and overhead structures with their connections as the same may be met along the route; to build sewers both along the route and other streets; to make or remake the necessary manholes, catch basins and other sewer connections therewith; to move, alter, readjust or rebuild water mains, gas pipes, electric subways, pneumatic tubes, steam pipes, mail tubes, vaults, including vaults of abutting property, and other surface, subsurface and overhead structures with their connections; and to do all such additional and incidental work as may be necessary for the completion and restoration of the street pavements and other surfaces and of all surface, subsurface and overhead structures and of all abutting property and buildings which may have been directly or indirectly affected, disturbed or injured by the Contractor in the progress of the work of construction to as useful, safe, durable and good a condition as existed before construction was begun. All such work of every description including underpinning or the maintaining, protecting and securing wherever necessary of all buildings and structures of whatsoever nature and elevated railroads affected by or interfered with during the construction of the Railroad, is part of the work which is included in this contract and which the Contractor agrees to perform for the prices herein agreed upon.

Prices.

Article XI. The City and the Interborough Company will pay in the respective proportions and amounts and in the manner hereinafter provided, and the Contractor shall receive, in full compensation for constructing and completing the Railroad (including all incidental work) and for performing and completing the Works and for all expense in connection therewith or incidental thereto, including the furnishing of all labor, materials, plant, power, tools, supplies and other means of construction and including administration, superintendence and insurance, and for all loss or damage arising out of the nature of the work aforesaid or from the action of the elements or from any unforeseen obstruction or difficulty encountered in the prosecution of the work, and for all risks of any description connected with the work, and and for all expenses incurred by or in consequence of the suspension or discontinuance of the work as herein specified, the prices contained in the Schedule of Unit Prices following. It is specifically understood and agreed, however, that the Interborough Company is a party to this contract solely for the purpose of making its contribution toward the cost of construction of the Railroad, as provided in the said contract dated March 19, 1913, and its sole obligation under this contract is to make the payments in the manner and to the amount hereinafter provided.

Schedule of Unit Prices.

Item 1. For earth excavation above mean high water (except excavation for sewers, pipes and ducts), including the disposal of it, etc., the sum of dollars (\$) per cubic yard.

Item 2. For earth excavation below mean high water (except excavation for sewers, pipes and ducts), including the disposal of it, etc., the sum of dollars (\$) per cubic yard.

Item 2-A. For earth excavation, both above and below mean high water, for sewers, pipes and ducts, including the disposal of it, etc., the sum of dollars (\$) per cubic yard.

Item 4-Q. For safely and permanently underpinning at the beginning of construction and for maintaining, protecting and securing during construction buildings on Beekman and William Streets and Hanover Square, as follows:

(1) For the building Nos. 165 to 167 William Street, the sum of dollars (\$).

(2) For the group of buildings Nos. 157 to 163 William Street the sum of dollars (\$).

(3) For the group of buildings Nos. 164 to 168 William Street the sum of dollars (\$).

(4) For the building No. 162 William Street the sum of dollars (\$).

(5) For the group of buildings Nos. 156 to 160 William Street the sum of dollars (\$).

(6) For the building Nos. 145 to 155 William Street the sum of dollars (\$).

(7) For the group of buildings Nos. 144 to 154 William Street the sum of dollars (\$).

(8) For the building Nos. 135 to 141 William Street the sum of dollars (\$).

(9) For the building Nos. 123 to 133 William Street the sum of dollars (\$).

(10) For the building Nos. 111 to 121 William Street the sum of dollars (\$).

(11) For the group of buildings Nos. 122 to 140 William Street the sum of dollars (\$).

(12) For the building No. 120 William Street the sum of dollars (\$).

(13) For the building No. 118 William Street the sum of dollars (\$).

(14) For the building No. 116 William Street the sum of dollars (\$).

(15) For the group of buildings Nos. 110 to 114 William Street the sum of dollars (\$).

(16) For the building Nos. 107 to 109 William Street the sum of dollars (\$).

(17) For the building Nos. 103 to 105 William Street the sum of dollars (\$).

(18) For the building Nos. 99 to 101 William Street the sum of dollars (\$).

(19) For the building Nos. 93 to 97 William Street the sum of dollars (\$).

(20) For the building No. 91 William Street the sum of dollars (\$).

(21) For the group of buildings Nos. 85 to 89 William Street the sum of dollars (\$).

(22) For the building No. 100 William Street the sum of dollars (\$).

(23) For the building No. 92 William Street the sum of dollars (\$).

(24) For the building No. 90 William Street the sum of dollars (\$).

(25) For the building Nos. 84 to 88 William Street the sum of dollars (\$).

(26) For the building Nos. 81 to 83 William Street the sum of dollars (\$).

(27) For the building Nos. 80 to 82 William Street the sum of dollars (\$).

(28) For the group of buildings Nos. 71 to 77 William Street the sum of dollars (\$).

(29) For the building Nos. 67 to 69 William Street the sum of dollars (\$).

(30) For the building Nos. 74 to 78 William Street the sum of dollars (\$).

(31) For the building No. 72 William Street the sum of dollars (\$).

(32) For the building Nos. 68 to 70 William Street the sum of dollars (\$).

(33) For the building Nos. 61 to 63 William Street the sum of dollars (\$).

(34) For the building Nos. 57 to 59 William Street the sum of dollars (\$).

(35) For the building No. 55 William Street the sum of dollars (\$).

(36) For the building Nos. 62 to 64 William Street the sum of dollars (\$).

(37) For the building No. 60 William Street the sum of dollars (\$).

(38) For the building Nos. 56 to 58 William Street the sum of dollars (\$).

(39) For the building Nos. 51 to 53 William Street the sum of dollars (\$).

(40) For the building Nos. 45 to 49 William Street the sum of dollars (\$).

(41) For the building Nos. 44 to 46 Wall Street the sum of dollars (\$).

(42) For the building Nos. 52 to 54 William Street the sum of dollars (\$).

(43) For the building No. 48 Wall Street the sum of dollars (\$).

(44) For the building Nos. 37 to 39 William Street the sum of dollars (\$).

(45) For the building Nos. 39 to 41 Exchange Place the sum of dollars (\$).

(46) For the building No. 55 Wall Street the sum of dollars (\$).

(47) For the building Nos. 25 to 29 William Street the sum of dollars (\$).

(48) For the building No. 23 William Street the sum of dollars (\$).

(49) For the building Nos. 17 to 21 William Street the sum of dollars (\$).

(50) For the building Nos. 11 to 15 William Street the sum of dollars (\$).

(51) For the building Nos. 26 to 28 William Street the sum of dollars (\$).

(52) For the building Nos. 16 to 22 William Street the sum of dollars (\$).

(53) For the Delmonico building between Beaver Street and South William Street the sum of dollars (\$).

(54) For the Seligman building between South William Street and Stone Street the sum of dollars (\$).

(55) For the building Nos. 60 to 62 Beaver Street the sum of dollars (\$).

(56) For the Old Cotton Exchange building between Stone Street and Pearl Street the sum of dollars (\$).

(57) For the building No. 31 Beekman Street the sum of dollars (\$).

(58) For the group of buildings Nos. 34 to 38 Beekman Street the sum of dollars (\$).

Item 6. For concrete masonry, in place, the sum of dollars (\$) per cubic yard.

Item 7. For protective concrete masonry, in place, outside of waterproofing, the sum of dollars (\$) per cubic yard.

Item 8. For rubble stone masonry, in place, the sum of dollars (\$) per cubic yard.

Item 8-A. For dry rubble masonry, in place, the sum of dollars (\$) per cubic yard.

Item 9. For brick masonry, in place, the sum of dollars (\$) per cubic yard.

Item 9-D. For the removal and disposal of old masonry of whatever kind, as required by Section No. 427 of the Specifications, the sum of dollars (\$) per cubic yard.

Item 10. For hollow terra cotta brick or tile masonry of any thickness, in place, the sum of dollars (\$) per cubic yard.

Item 11. For grout of Portland cement, the sum of dollars (\$) per barrel of Portland cement used.

Item 12. For timber piles, in place and prepared, the sum of dollars (\$) per lineal foot.

Item 13. For timber foundations, placed and fastened, the sum of dollars (\$) per thousand feet, board measure.

Item 14. For broken stone or gravel, in place, other than that used in concrete, the sum of dollars (\$) per cubic yard.

Item 15. For waterproofing, treated woven fabric (except dry ply), laid with coal-tar pitch or asphalt, in place, as follows:

(a) For one-ply, the sum of dollars (\$) per square yard.

(b) For two-ply, the sum of dollars (\$) per square yard.

(c) For three-ply, the sum of dollars (\$) per square yard.

(d) For four-ply, the sum of dollars (\$) per square yard.

(e) For five-ply, the sum of dollars (\$) per square yard.

(f) For six-ply, the sum of dollars (\$) per square yard.

(i) For dry-ply, the sum of dollars (\$) per square yard.

Item 16. For waterproofing, brick laid in asphalt mastic, in place, the sum of dollars (\$) per cubic yard.

Item 17. For vitrified or cast-iron drain pipe, in place, as follows:

(a) For twelve (12) inch vitrified pipe, the sum of dollars (\$) per lineal foot.

(b) For ten (10) inch vitrified pipe, the sum of dollars (\$) per lineal foot.
 (c) For eight (8) inch vitrified pipe, the sum of dollars (\$) per lineal foot.
 (d) For six (6) inch vitrified pipe, the sum of dollars (\$) per lineal foot.
 (e) For four (4) inch vitrified pipe, the sum of dollars (\$) per lineal foot.
 (g) For six (6) inch cast-iron pipe, the sum of dollars (\$) per lineal foot.
 (h) For four (4) inch cast-iron pipe, the sum of dollars (\$) per lineal foot.
 (i) For ten (10) inch cast-iron pipe, the sum of dollars (\$) per lineal foot.

Item 17-A. For cast-iron pipe and fittings, including specials, "extra heavy," in place, as follows:
 (a) For three (3) inch, the sum of dollars (\$) per lineal foot.
 (b) For four (4) inch, the sum of dollars (\$) per lineal foot.
 (c) For six (6) inch, the sum of dollars (\$) per lineal foot.
 (d) For eight (8) inch, the sum of dollars (\$) per lineal foot.

Item 18. For Tunnel ducts in place as required by Section No. 407 of the Specifications, the sum of dollars (\$) per duct foot.

Item 18-A. For Railroad ducts in place as required by Section No. 407 of the Specifications, the sum of dollars (\$) per duct foot.

Item 19. For riveted steel, painted and erected, the sum of dollars (\$) per ton.

Item 20. For steel beams and shapes with connections, painted and erected, the sum of dollars (\$) per ton.

Item 21. For steel rods and bars built in concrete, the sum of dollars (\$) per ton.

Item 25. For miscellaneous iron castings such as manhole heads and covers, gratings, etc., but not including castings for sewer work or pipes, in place, the sum of dollars (\$) per ton.

Item 25-C. For miscellaneous iron furnishings for sewer manholes and basins, both cast and wrought, such as manhole and basin heads, covers, inlet gratings or bars, manhole steps, etc., but not including pipe, in place, the sum of dollars (\$) per ton.

Item 26. For special wire forms, in place, the sum of dollars (\$) per pound.

Item 27-B. For one and three-fourths (1 3/4) inch seasoned oak or ash hand-rail, in place, including finishing, oiling and connections, the sum of dollars (\$) per lineal foot of rail.

Item 28. For steel gratings, for ventilation, in place, including frames, etc., the sum of dollars (\$) per square foot.

Item 29. For vault lights, in place, the sum of dollars (\$) per square foot.

Item 30. For street surface restored, as follows:
 (a) Within curb lines, including curbs and all structures and growths therein or thereon, the sum of dollars (\$) per square yard.
 (c) For repavement of roadways between curb lines with Asphalt pavement, the sum of dollars (\$) per square yard.
 (f) For repavement of roadways between curb lines with Granite Block pavement, the sum of dollars (\$) per square yard.
 (g) For repavement of roadways between curb lines with Asphalt Block pavement, the sum of dollars (\$) per square yard.
 (i) For new bluestone curb, in place, including all incidental work, labor and material, the sum of dollars (\$) per lineal foot.
 (k) For new eight (8) inch granite curb in place, including all incidental work, labor and material, the sum of dollars (\$) per lineal foot.

Item 32. For wrought-iron electric conduits, in place, in stations as follows:
 (a) For three-fourths (3/4) inch wrought-iron conduits, the sum of dollars (\$) per lineal foot.
 (b) For one and one-half (1 1/2) inch wrought-iron conduits, the sum of dollars (\$) per lineal foot.
 (c) For two (2) inch wrought-iron conduits, the sum of dollars (\$) per lineal foot.
 (d) For one (1) inch wrought-iron conduits, the sum of dollars (\$) per lineal foot.

Item 33. For cast-iron outlet boxes, in place, in stations, the sum of dollars (\$) each.

Item 34. For cast-iron pipe and fittings, including specials "extra heavy," in place, in stations, as follows:
 (a) For six (6) inch, the sum of dollars (\$) per lineal foot.
 (b) For three (3) inch, the sum of dollars (\$) per lineal foot.

Sewers.
Vitrified and Cast-iron Pipe.

Item 37. For twelve (12) inch vitrified pipe sewer, the sum of dollars (\$) per lineal foot.

Item 38. For fifteen (15) inch vitrified pipe sewer, the sum of dollars (\$) per lineal foot.

Item 39. For eighteen (18) inch vitrified pipe sewer, the sum of dollars (\$) per lineal foot.

Item 40. For twenty (20) inch vitrified pipe sewer, the sum of dollars (\$) per lineal foot.

Item 41. For twenty-four (24) inch vitrified pipe sewer, the sum of dollars (\$) per lineal foot.

Item 42. For cast-iron sewer pipe (straight pipe) in place in the work, the sum of dollars (\$) per ton.

Item 43. For cast-iron sewer pipe (special castings) in place in the work, the sum of dollars (\$) per ton.

Egg-shaped Brick or Concrete Sewers.

Item 45. For 3 feet 6 inches by 2 feet 4 inches, the sum of dollars (\$) per lineal foot.

Circular Sewers—Brick or Concrete or Reinforced Concrete.

Item 54-A. For 4 feet 6 inches, the sum of dollars (\$) per lineal foot.

Surface, Subsurface and Overhead Structures.

Item 76. For the temporary and permanent support and maintenance of elevated railroad structures and their appurtenances, and all work incidental thereto, as follows:
 (a) For elevated railroad columns supported entirely upon the Railroad structure, the sum of dollars (\$) per column.
 (b) For elevated railroad columns supported partly or entirely off the Railroad structure, the sum of dollars (\$) per column.

Pipes in Streets.
 For Work and Materials as Called for by the Specifications—Water Pipes.

For water pipes, including all appurtenances, in place, as follows:
 Item 79. For 6-inch water pipe, the sum of dollars (\$) per lineal foot.
 Item 82. For 12-inch water pipe, the sum of dollars (\$) per lineal foot.
 Item 83. For 16-inch water pipe, the sum of dollars (\$) per lineal foot.

Item 88-A. For service connections for water pipes, all sizes, the sum of dollars (\$) each.

Gas Pipes.
 For cast-iron gas pipes, including all appurtenances, in place, as follows:
 Item 90. For 4-inch gas pipe, the sum of dollars (\$) per lineal foot.
 Item 91. For 6-inch gas pipe, the sum of dollars (\$) per lineal foot.
 Item 92. For 8-inch gas pipe, the sum of dollars (\$) per lineal foot.
 Item 93. For 10-inch gas pipe, the sum of dollars (\$) per lineal foot.
 Item 94. For 12-inch gas pipe, the sum of dollars (\$) per lineal foot.

Item 96. For 20-inch gas pipe, the sum of dollars (\$) per lineal foot.

Item 97. For 24-inch gas pipe, the sum of dollars (\$) per lineal foot.

Item 99-A. For wrought-iron by-passing pipes upon or below the street surface, in place, as follows:
 (b) For 8-inch by-passing pipe, the sum of dollars (\$) per lineal foot.
 (e) For 16-inch by-passing pipe, the sum of dollars (\$) per lineal foot.

Item 99-B. For wrought-iron by-passing pipes above the street surface, on trestle, in place, as follows:
 (b) For 16-inch by-passing pipe, the sum of dollars (\$) per lineal foot.
 (c) For 20-inch by-passing pipe, the sum of dollars (\$) per lineal foot.
 (g) For 8-inch by-passing pipe, the sum of dollars (\$) per lineal foot.
 (h) For trestle to support by-passing pipes, in place in the work, sum of dollars (\$) per lineal foot of trestle.

Item 99-D. For service connections for gas pipes, all sizes, the sum of dollars (\$) each.

New Water and Gas Pipe.

Item 100. For new cast-iron hub and spigot straight pipe actually used, as measured in place in the work, the sum of dollars (\$) per ton.

Item 101. For new cast-iron hub and spigot pipe, special castings, actually used, as measured in place in the work, the sum of dollars (\$) per ton.

High Pressure Fire System Pipes, Standard Spigot and Groove.
 For high pressure fire system pipes, including all appurtenances, in place, as follows:
 Item 102. For 8-inch high pressure fire system water pipe, the sum of dollars (\$) per lineal foot.
 Item 103. For 12-inch high pressure fire system water pipe, the sum of dollars (\$) per lineal foot.
 Item 104. For 16-inch high pressure fire system water pipe, the sum of dollars (\$) per lineal foot.

New Cast-iron Spigot and Groove Pipe for High Pressure Fire System.

Item 107. For new cast-iron spigot and groove straight pipe actually used, as measured in place in the work, the sum of dollars (\$) per ton.

Item 108. For new cast-iron spigot and groove pipe, special castings, actually used, as measured in place in the work, the sum of dollars (\$) per ton.

Steam Pipes.
 For steam pipes, including specials, insulation, protection and all other appurtenances, in place, as follows:
 Item 109. For 6-inch steam pipe, the sum of dollars (\$) per lineal foot.
 Item 110. For 8-inch steam pipe, the sum of dollars (\$) per lineal foot.
 Item 111. For 10-inch steam pipe, the sum of dollars (\$) per lineal foot.
 Item 112. For 12-inch steam pipe, the sum of dollars (\$) per lineal foot.
 Item 113. For 15-inch steam pipe, the sum of dollars (\$) per lineal foot.

Item 114-B. For service connections for steam pipes, all sizes, the sum of dollars (\$) each.

New Steam Pipes.
 For new steel welded flanged steam pipes, including specials and all other appurtenances, actually used, as measured in place in the work, as follows:
 Item 115. For new 6-inch steam pipe, the sum of dollars (\$) per lineal foot.
 Item 116. For new 8-inch steam pipe, the sum of dollars (\$) per lineal foot.
 Item 117. For new 10-inch steam pipe, the sum of dollars (\$) per lineal foot.
 Item 118. For new 12-inch steam pipe, the sum of dollars (\$) per lineal foot.
 Item 119. For new 15-inch steam pipe, the sum of dollars (\$) per lineal foot.

Air Pipes.
 For air pipes, including all appurtenances, in place, as follows:
 Item 121. For 6-inch air pipe, the sum of dollars (\$) per lineal foot.

New Air Pipe.
 For new air pipe, including specials and all other appurtenances actually used, as measured in place in the work, as follows:
 Item 123. For new 6-inch air pipe, the sum of dollars (\$) per lineal foot.

Mail Tubes.
 For mail tubes, including all appurtenances, in place, as follows:
 Item 125. For 8-inch mail tube, the sum of dollars (\$) per lineal foot.

Item 126-A. For 2 1/4-inch Postal tube, the sum of dollars (\$) per lineal foot.

Item 126-B. For new 2 1/4-inch Postal tube actually used, as measured in place in the work, the sum of dollars (\$) per lineal foot.

Item 126-C. For new mail tube, including all appurtenances, actually used, as measured in place in the work, as follows:
 (a) For new 8-inch mail tube, straight pipe, the sum of dollars (\$) per lineal foot.
 (b) For new 8-inch mail tube, curved, pipe, the sum of dollars (\$) per lineal foot.

Item 126-F. For 2 1/4-inch Western Union tube, the sum of dollars (\$) per lineal foot.

Item 126-G. For new 2 1/4-inch Western Union tube actually used, as measured in place in the work, the sum of dollars (\$) per lineal foot.

Ducts Found in Streets.
Electric Ducts and Conduits in Streets.

Item 127. For electric ducts and conduits in place, as provided in Section No. 62 of the Specifications, the sum of dollars (\$) per duct foot.

Item 127-A. For wrought-iron pipe electric ducts and conduits, in place, as provided in Section No. 62 of the Specifications, as follows:
 (a) For 2 1/2-inch wrought-iron pipe, the sum of dollars (\$) per lineal foot.
 (b) For 3-inch wrought-iron pipe, the sum of dollars (\$) per lineal foot.
 (c) For 3 1/2-inch wrought-iron pipe, the sum of dollars (\$) per lineal foot.
 (d) For 4-inch wrought-iron pipe, the sum of dollars (\$) per lineal foot.
 (e) For 4 1/2-inch wrought-iron pipe, the sum of dollars (\$) per lineal foot.
 (f) For 2-inch Edison conduit, the sum of dollars (\$) per lineal foot.
 (g) For 2 1/2-inch Edison conduit, the sum of dollars (\$) per lineal foot.
 (h) For 3-inch Edison conduit, the sum of dollars (\$) per lineal foot.

Item 127-C. For service connections for electric ducts, all sizes, the sum of dollars (\$) each.

Quantities.
Prices for Work Not Susceptible of Classification.

Article XII. In case any work or materials shall be required to be done or furnished in or about the Works which it is elsewhere in this contract expressly provided shall be paid for under this Article, or in case any work or materials shall be required to be done or furnished in or about the Works which are not contemplated,

mentioned, specified or indicated or otherwise provided for in this contract or in the specifications forming a part of this contract or in or upon the contract drawings and which in the opinion of the Engineer are not susceptible of classification under the Items of the Schedule of Unit Prices, the Contractor shall, if ordered by the Engineer, do and perform such work and furnish such materials at and for the actual and necessary net cost in money to the Contractor for labor and for materials incorporated in the work and in addition thereto ten per centum (10%) of such net cost, and the Contractor shall have no claim in excess of the above such payment being in full compensation for the performance of such work and the furnishing of such materials and for all expense in connection therewith or incidental thereto, including the expense of plant, power, tools, supplies and other means of construction, administration, superintendence and insurance, and for all the loss, damage, risks and expenses hereinbefore in Article XI mentioned. Payment shall not be made under this Article for any such work or materials which are so required to be done or furnished in or about the Works and which are not contemplated, mentioned, specified or indicated or otherwise provided for in this contract or in the specifications forming a part of this contract or in or upon the contract drawings so far as such work or materials may be, in the opinion of the Engineer, susceptible of classification under the Items of the Schedule of Unit Prices, which work or materials shall be paid for in part or in whole, as the case may be, at the unit prices given in the Items of the Schedule.

Daily Report in Detail Required.

In case any work or material shall be required to be done or furnished under the provisions of this Article, for cost plus ten per centum (10%), the Contractor shall at the end of each day during the progress thereof furnish to the Engineer daily time slips showing the name and number of each workman employed thereon, the number of hours employed thereon, the character of work he is doing and the wages paid or to be paid to him and also a daily memorandum of the material delivered on the work showing the amount and character of such material, from whom purchased and the amount paid or to be paid therefor. If required by the Engineer or the Commission, the Contractor shall produce any books, vouchers, records and memoranda showing the work and materials actually paid for and the actual prices therefor. Such daily time slips and memoranda shall not, however, be binding upon the City, and if any question or dispute shall arise as to the correct cost of such work or material, the determination of the Engineer upon such question or dispute shall be final and conclusive.

Engineer to Fix Unit Prices.

Instead of the method above described in this Article for paying for any such work or materials to be paid for under this Article, the Engineer may, but only with the approval of the Commission, agree with the Contractor upon unit prices or a lump sum price for such work or materials. Such additional unit prices or such lump sum price shall be embodied in a supplemental schedule which shall be deemed to be a part of this contract in all respects as if such additional unit prices or such lump sum price had been originally a part of the Schedule of Unit Prices contained in this contract.

Quantities Approximate Only.

Article XIII. The quantities of the various classes of work to be done and materials to be furnished under this contract, specified in the Contractor's Proposal, are approximate and only for the purpose of comparing, on a uniform basis, the bids offered for the Works; and neither the City nor the Commission nor any member of the Commission, nor the Interborough Company is to be held responsible that any of the said estimated quantities shall be found even approximately correct in the construction of the Works; and the Contractor shall make no claim for damages or for anticipated profit or for loss of profit because of a difference between the quantities of the various classes of work actually done or materials actually delivered and the estimated quantities of items stated in the Contractor's Proposal or because of the entire omission of any of the quantities of items stated in the Contractor's Proposal.

Right of Commission to Amplify Drawings.

Article XIV. The Commission shall have the right, during the progress of the work, to amplify the drawings, to add explanatory specifications and to furnish additional specifications and drawings.

Drawings May Be Modified.

Article XV. The Commission further reserves the right to alter, in any way it may deem necessary for the public interests, the drawings aforesaid, in part or altogether, at any time during the progress of the work, without constituting grounds for any claim by the Contractor for payment or allowance for damages or extra service other than is provided for items of the different classes of construction under the Items of the Schedule or in Article XII.

Contractor Bound to Complete in Best Manner.

Article XVI. The Contractor shall complete the entire work to the satisfaction of the Commission and in accordance with the specifications and contract drawings and according to the other provisions of this contract and within the time specified in this contract in the most workmanlike manner and with the highest regard to the safety of life and property and according to the lines, levels and directions given by the Engineer.

Best Machinery, Tools, Etc., to Be Used.

Article XVII. The Contractor shall furnish of the best description all labor and materials, plant, tools, supplies and other means of construction necessary to construct and put in complete working order all work covered by the specifications, contract drawings and other provisions of this contract, including all additional specifications, drawings and details issued or required as herein provided.

Contractor Has Examined Locations, Drawings, Etc.

Article XVIII. The Contractor hereby represents that prior to the execution of this contract he has examined in detail on the ground the location mentioned herein and indicated on the contract drawings and that he has fully examined the contract drawings and has read each and every clause and section of this contract and the specifications and has had full opportunity to consider the same and make necessary investigations relating thereto; and he shall not make any claim for, or have any right to, damages or an extension of time for completion of the Works or any other concession because of any misinterpretation or misunderstanding of this contract or of the specifications or of the contract drawings or because of any lack of information.

No Acceptance to Obviate Necessity for Sound Work, Etc.

Article XIX. No acceptance of any part of the Works or of materials therefor shall relieve the Contractor of his obligation to furnish sound material and perform sound work, whether with respect to such part or to any other part of the Works.

Inspection.

Article XX. The Commission contemplates, and the Contractor hereby approves, the most thorough and minute inspection by the Commission and its Engineer and by their representatives or subordinates of all work and materials and of the manufacture or preparation of such materials from the beginning of construction to the final completion of the Works. It is the intention of the Commission that its Engineer shall draw the attention of the Contractor to all defects in workmanship or materials or other errors or variations from the requirements of this contract. But no omission on the part of the Commission or its Engineer or any officer, member or subordinate of the Commission to point out such defects, errors or variations shall give the Contractor any right or claim against the City or the Interborough Company or shall in any way relieve the Contractor from his obligations according to the terms of this contract.

Contractor to Afford Facilities for Inspection.

Article XXI. The Contractor shall at all times give to the Commission and its members, to the Engineer and his assistants and subordinates and to any person designated by the Commission or its Chairman all facilities, whether necessary or convenient, for inspecting the materials to be furnished and the work to be done under this contract. The members of the Commission, the Engineer and all employees of the Commission bearing his authorization or the authorization of the Commission or its Chairman shall be admitted at any time summarily and without delay to any part of the Works or to inspection of materials at any place or stage of their manufacture, preparation, shipment or delivery.

Engineer to Be Furnished Facilities.

Article XXII. The Engineer shall be furnished with every reasonable facility for ascertaining whether the work is in accordance with the requirements and intention of this contract, even to the extent of uncovering or taking down portions of finished work. Should the work thus exposed or examined prove satisfactory, the uncovering or taking down and the replacing of the covering or the making good of the parts removed shall be paid for at the contract prices for the class of work done; but should the work exposed or examined prove unsatisfactory, such uncovering, taking down, replacing and making good shall be at the expense of the Contractor.

Inspection Not to Relieve Contractor of Obligations.

Article XXIII. The inspection of the work shall not relieve the Contractor of

any of his obligations to fulfill this contract as herein prescribed, and defective work shall be made good and unsuitable materials will be rejected, notwithstanding that such work and materials have been previously accepted or estimated for payment. If the work or any part thereof shall be found defective before the final acceptance of the whole work, the Contractor shall forthwith make good such defect, in a manner satisfactory to the Engineer, and if any materials brought upon the ground for use in the work or selected for the same shall be condemned by the Engineer as unsuitable or not in conformity with the specifications, the Contractor shall forthwith remove such material.

Engineer's Determination—To Be Final Upon Contractor.

Article XXIV. To prevent disputes and litigations, the Engineer shall in all cases determine the classification, amount, quality, acceptability and fitness of the several kinds of work and materials which are to be paid for under this contract, shall determine every question in relation to the Works and the construction thereof and shall determine every question which may arise relative to the fulfillment of this contract on the part of the Contractor. His determination and estimate shall be final and conclusive upon the Contractor, and in case any question touching this contract shall arise between the parties hereto, such determination and estimate shall be a condition precedent to the right of the Contractor to receive any money under this contract.

Engineer to Explain Specifications.

Article XXV. The Engineer shall make all necessary explanations as to the meaning and intention of the specifications, shall give all orders and directions contemplated therein or thereby and in every case in which a difficult or unforeseen condition shall arise in the performance of the work required by this contract.

Contractor to Obey Directions.

The Contractor shall promptly obey and follow every direction which shall be given by the Engineer, including any direction which the Engineer shall give by way of withdrawal, modification or reversal of any previous direction given by him.

Other Contractors.

During the progress of the work it will be necessary for other contractors and persons to do work in or about the construction or equipment of the Railroad. The Contractor shall afford to such other contractors or persons such facilities as the Engineer may require.

Contiguous Contract Sections.

Wherever any work performed or to be performed by the Contractor under this contract shall adjoin, affect or interfere with any work performed or to be performed by any other contractor or contractors of the Commission, including the work within twenty (20) feet of the division lines between the Railroad and adjoining work, the Engineer shall decide any question or dispute between the Contractor and such other contractor or contractors and shall determine which of them shall perform or complete any work and the manner, time and method in which they shall perform their respective work and the facilities which each shall afford to the other or others.

Differences Between Contractor and Other Contractors.

Wherever any work performed or to be performed by the Contractor under this contract shall adjoin, affect or interfere with any work performed or to be performed by the Interborough Company, its successors or assigns, or by any contractor or contractors of the Interborough Company, its successors or assigns, in connection with the equipment of the Railroad, the Engineer shall determine the manner, time and method in which the Contractor shall perform his work and the facilities which he shall afford to the Interborough Company, its successors or assigns, or to such other contractor or contractors.

Substitute for Chief Engineer.

Article XXVI. Any engineer substituted by the Commission in place of the Chief Engineer during his absence, illness or inability, or when the Commission shall so determine shall, during his official connection, have all the power and authority of the Chief Engineer and in all respects be recognized as such Chief Engineer.

CHAPTER III.

Specifications.

Specifications and Drawings to Be Interpreted as Requiring Railroad of Highest Class.—Where Text of Contract Doubtful Best Materials and Workmanship Required.

Section No. 1. The specifications and the contract drawings hereinafter mentioned, taken in connection with the other provisions of this contract, are intended by the Commission to be full and comprehensive and to show all the work required to be done. But in a work of this magnitude it is impossible either in advance to show all details or precisely to forecast all exigencies. The specifications and the contract drawings are to be taken, therefore, as indicating the amount of work, its nature and the method of construction so far as the same are now distinctly apprehended. The Railroad is to be constructed for actual use and operation as an intraurban railroad of the highest class, adapted to the necessities of the people of New York in the best manner, according to the best rules and usages of railroad construction, and in the event of any doubt as to the meaning of any portion of the specifications or of the contract drawings or of the text of this contract, the same shall be interpreted as calling for the best construction, both as to materials and workmanship, capable of being supplied or applied. All the clauses of the specifications and all the parts of the contract drawings are, therefore, to be understood, construed and interpreted as intending to produce the results hereinbefore stated.

To Construct in Accordance With Specifications.

Section No. 2. The Contractor shall construct and complete the Railroad strictly in accordance with the requirements of these specifications; and if in these specifications or this contract or on the contract drawings any matter or thing requisite be not contemplated, mentioned, specified or indicated or otherwise provided for, nevertheless the same is deemed to be included and the Contractor shall do the same as a part of the work hereunder at the unit prices for each class of work where in the opinion of the Engineer applicable or as provided in Article XII.

Maps and Drawings.

Section No. 3. The contract drawings referred to in this contract and these specifications are each countersigned by the Engineer, stamped with the seal of the Commission and, except typical drawings hereinbelow designated, bear the general title:

Route No. 48, Section No. 2, Contract Drawing No.

—and are designated or numbered as follows:
A-2, B-295, B-296, B-297, C-1 to C-21 inclusive, C-401 and C-601 and are dated March 13, 1914, and the following typical drawings, which are all countersigned by the Engineer, stamped with the seal of the Commission and bear the general title:

Contract Drawing No.

—and are designated or numbered as follows:
B-288 and B-289, dated October 22, 1913, B-298, dated February 2, 1914, and C-1006, dated April 2, 1914.

Typical Sections and Dimensions.

Section No. 4. The sections and dimensions shown on the contract drawings are typical sections and dimensions which should be applicable to the greater part of the work. Working drawings to amplify the contract will be furnished by the Commission to the Contractor, from which the shop drawings shall be made by him. The first of these working drawings will be given to the Contractor within thirty (30) days after this contract is delivered and the remainder from time to time as may be reasonably required by the Contractor. Where, however, changes are deemed necessary they may be ordered under Article XV of this contract and the Engineer shall issue such drawings and specifications as may be necessary.

Supplementary Drawings.

Section No. 5. In addition to the contract drawings already mentioned, the Commission has had prepared a set of maps and drawings bearing the same seal and general title as the contract drawings, but designated as Supplementary Drawings. These supplementary drawings exhibit certain information which the Commission has received from its Engineer of the general nature of the soil underlying portions of the route, the nature and position of elevated railroads, water mains, gas and other pipes, sewers, electric subways, manholes, hydrants, catch basins and other surface, subsurface and overhead structures, and the character, size and position of the foundations of many of the buildings along the route of the Railroad.

Supplementary Drawings may Be Examined.

Section No. 6. These supplementary drawings and samples of materials taken in connection with test borings may be seen at the office of the Engineer. They are exhibited to the Contractor without any guarantee on the part of the Commission as to their completeness or correctness. The Contractor may have copies (blue-prints) of these supplementary drawings for such aid, if any, as may be derived from them, on the payment of the cost of blue-printing.

In Case of Difficulties Not Indicated on Supplementary Drawings.

Section No. 7. If in the prosecution of the work difficulties of any nature be encountered which are not indicated or suggested by the supplementary drawings or by the samples of the test borings or if additional surface, subsurface or overhead structures or obstructions be discovered or if any surface, subsurface, or overhead structures or obstructions be found of different size or in different positions or of different nature from those shown on the supplementary drawings or if in any other way such supplementary drawings be found erroneous, incomplete or misleading, the Contractor shall take every necessary or proper precaution to overcome the unforeseen difficulty and shall support, maintain, protect, remove, relay, adjust or readjust, as the case may be, the additional or different surface, subsurface or overhead structures according to the direction of the Engineer and as provided in this contract and these specifications.

Specifications Do Not Include All Requirements.

Section No. 8. The specifications do not include all requirements, but are requirements in addition to those elsewhere given or provided in this contract. The specifications and the other provisions of this contract and the contract drawings are intended to be explanatory of one another. Should, however, any discrepancy appear or any misunderstanding arise as to the import of anything contained in either, the explanation or decision of the Engineer shall be final and conclusive.

Sub-Divisions of Specifications.

Section No. 9. These specifications are grouped in sub-divisions as follows:

1. Brief Description of the Work.
2. General Clauses.
3. General Manner of Prosecution and Maintenance of Traffic.
4. Railroad tracks, mains and other surface, subsurface and overhead structures.
5. Excavation.
6. Backfilling.
7. Piling and Timbering.
8. Cement.
9. Mortar.
10. Masonry.
11. Concrete.
12. Brick Masonry.
13. Stone Masonry.
14. Waterproofing.
15. Steel and Iron.
16. Painting.
17. Drains and Pumps.
18. Sewers.
19. Requirements for pipes.
20. Ducts.
21. Conduits.
22. Surfaces restored.
23. Gratings, hand rails, etc.
24. Special matters.

SUBDIVISION 1.**Brief Description of the Work.****General Nature.**

Section No. 10. The Railroad is to be an underground railroad or subway. The general details of construction and the location of the various tracks, junctions, grades, etc., are indicated more particularly on the contract drawings.

The Contractor will not be required to provide or lay tracks, ties or ballast under this contract.

Stations to Be Constructed.

Stations are to be constructed at such places as are indicated on the drawings, but station finish work is not included in the work to be done under this contract. Station construction must, however, be kept so advanced that station finish contractors can complete their work coincidentally with the completion of the railroad.

Incidental Work.

Section No. 11. In addition to the construction of the Railroad, it will be necessary to do various incidental work which is generally referred to in Article X hereof.

Ventilating Chambers and Gratings.

Section No. 12. In order to provide for a frequent renewal of air in the railroad, chambers for the installation of necessary ventilating devices shall be built at the sides of the railroad and in connection therewith. These chambers shall be generally of the form and dimensions shown on the drawings, varying somewhat with the requirements of local conditions. They will be so arranged that the air will discharge through gratings placed generally in the sidewalks in the roofs of the chambers. If, owing to local conditions, it becomes necessary to lead the air to gratings or other outlets away from the chambers, suitable air-ways, ducts or flues shall be constructed. The chambers will be built at the places and as indicated on the drawings.

Payment for Chamber Doors.

The chambers will be provided with suitable steel doors and with steel ladders reaching to the street for use as exits in case of emergency. Such doors and ladders will be paid for as riveted steel, Schedule Item 19.

Partition Walls.

Also in connection with the ventilation of the railroad, partition walls shall be constructed between the tracks.

Refuge Niches.

Openings, or refuge niches, shall be provided in all partition walls at suitable intervals.

At stations the walls between the tracks will be omitted.

Other openings with gratings will be built at or over the station for the purpose of admitting air to the Railroad.

SUBDIVISION 2.**General Clauses.****Prevention of Water Percolation.**

Section No. 13. It is the very essence of these specifications to secure a railroad structure underground which shall be free from the percolation of ground or outside water. The mixing and placing of the concrete and the placing and protection of the waterproofing shall be with this end in view.

Best Quality of Work.

Section No. 14. All materials and workmanship must be of the best class in every respect, and the Engineer is to be the sole judge of their quality and efficiency.

Rapidity and Safety.

Section No. 15. All the work shall be prosecuted in the manner, according to local conditions, best calculated to promote rapidity in construction, to secure safety to life and property and to reduce to the minimum any interference with abutting property and the public travel. Decking of the streets, paving, or other surface work affecting, or affected by, street traffic shall be prosecuted during such hours as will reduce such interference to a minimum. Night work shall be conducted, in accordance with the directions of the Engineer, so that annoyance to occupants of abutting property shall be reduced to a minimum, and the Engineer may, if in his judgment conditions so require, direct that night work be omitted.

Contract Section Part of System.

Section No. 16. The Railroad forms part of an extensive rapid transit railroad system, which the interests of the City imperatively require shall be completed and put into operation without delay. If the Contractor shall not prosecute his work in such manner as to make it probable, in the judgment of the Engineer, that the work will be completed within the time limited, the Contractor, if directed by the Commission, shall increase the number of shifts and the number of men in each shift to such extent as may be necessary to insure the completion of the work within the time required by this contract or within the shortest possible time thereafter.

Emergencies.

Section No. 17. In case of emergencies involving danger to life or property, continuous work with an increased force may be ordered by the Engineer for such time as may be necessary.

Permits.

Section No. 18. No work shall be begun until the Commission shall issue to the Contractor a permit authorizing him to proceed. No permits for excavation will be issued until the Contractor has given satisfactory assurance to the Engineer that the structural steel and other material needed for construction will be available. The Contractor must conduct his work so as to avoid advancing the excavation at any place ahead of the delivery on the work or on property owned or leased by the City of

the structural steel required for such place, unless otherwise permitted by the Engineer. If the Contractor elects, and is permitted to advance the excavation ahead of such steel delivery, it will become necessary for him to support and maintain the trenches until the steel can be obtained; this he shall do entirely at his own risk and expense. The permits are to be in such form and shall cover such portions of the work as the Commission shall prescribe.

When to Be Filed With Borough President.

Section No. 19. Before any opening is made in the surface of a street, a copy of the permit issued by the Commission shall have been filed with the Borough President not less than five (5) days, unless the Engineer shall expressly direct work to begin within a less period.

Notice Regarding Commencement of Work.

Section No. 20. At least one (1) week before commencing work on any part of the route, whether on the Railroad or on the sewers lying off the line of the Railroad, the Contractor shall give notice in writing to the Engineer of his intention to commence such operations; and at least one (1) week before commencing or resuming manufacture of any article called for by these specifications, the Contractor shall give notice in writing to the Engineer of his intention to commence or resume such manufacture, with the name and address of the maker and the amount and description of the material to be manufactured.

Shafts and Dumping Platforms.

Section No. 21. Detail plans showing the proposed location, and proposed methods of construction of shafts, dumping platforms, and all other appurtenances in connection with the shaft working plants, shall be submitted to the Engineer and must receive his approval before permits will be granted for such plants and appurtenances to be constructed and put in operation.

City Ordinances and Regulations to Be Observed.

Section No. 22. In all operations connected with the Works, all ordinances of the City and of the Board of Health and all laws of this State which are applicable to and control or limit in any way the actions of those engaged in the work or affecting the materials belonging to them shall be respected and strictly complied with, and the Contractor shall further strictly comply with all applicable Federal, State and Municipal regulations regarding the transportation of materials in and around the City and Harbor of New York.

Requirements of Borough President, Etc., to Be Observed.

Section No. 23. Whenever the construction of the Works under the provisions of this contract shall interfere with, disturb or endanger any sewer, water pipe, gas pipe or other duly authorized subsurface structure, the work of construction at such points shall be conducted in accordance with the reasonable requirements of the Borough President or the Commissioner of Water Supply, Gas and Electricity or other officer or local authority having the care of and the jurisdiction or control over such subsurface structures so interfered with, disturbed or endangered.

Building and Water Permits; Shut-off for Water Pipes, Etc.

Section No. 24. The Contractor shall at his own cost procure all permits necessary or requisite for the underpinning of buildings and the reconstruction thereof; he shall, at his own cost, provide for the water supply necessary for his work and he shall bear the cost of any inspection charge in connection therewith. He shall bear the cost of all work, labor and material in connection with bagging, cutting and capping and installing circulation connection and temporary drips for gas pipes where in the opinion of the Engineer it is necessary to cut off the supply of same; and also in connection with replacing and restoring such pipes to their original condition, except where it is necessary to resort to by-passing as provided in Section No. 52, and of the shutting off and restoration of the flow in water mains where such work applied to the maintenance and support thereof as provided in Section No. 59.

Storage on Cross-streets.

Section No. 25. On cross-streets adjacent to the work, only such material may be stored as may be necessary, in case of an emergency, to sheet or to support the excavation; or a reasonable amount of such structural and other material as may be absolutely necessary to avoid delay in construction may be stored; such material must not be allowed to accumulate but must be replenished from day to day. The amount to be so allowed shall be determined by the Engineer.

No material of any nature shall be stored along the streets occupied by the Railroad.

Material Stored.

Section No. 26. Excavated sand, gravel or stone that in the judgment of the Engineer is suitable for use in mortar, concrete, or masonry, also structural and other material to be used in the work, may be stored in such locations other than the surface of streets for such periods as may be approved by the Engineer.

Approval of Engineer Revocable.

Section No. 27. In any case material may be stored only with the approval of the Engineer, revocable at any time; and if so ordered, such material shall be removed immediately by the Contractor at his own expense on receipt of the order or within a period of time to be therein stated.

Access to Fire Hydrants.

Section No. 28. Wherever the work is being carried on, free access must be given to every fire hydrant and fire alarm box, and when required, hydrants shall be extended by suitable tube or piping to an accessible point as approved by the Engineer and to the satisfaction of the Chief of the Fire Department. Materials must not be piled at any time or place within ten (10) feet of any fire hydrant or fire alarm box; and where materials are unavoidably piled or placed in the vicinity of a fire hydrant or fire alarm box, and to such height as to prevent the same from being readily seen, the position of such hydrant or fire alarm box shall be indicated by suitable signals, both day and night.

Fire Alarm Telegraph System to Be Safeguarded.

The Contractor shall at his own expense guard, maintain and protect the existing wires, cables, ducts, manholes, posts and poles of the Fire Department. He shall not cause the interruption of the existing Fire Alarm Telegraph service. No Fire Department wire, cable, duct, manhole, post or pole shall be disturbed except in the presence of a representative of the Bureau of Fire Alarm Telegraph. In case any such wire, cable, duct manhole, post or pole shall be disturbed, it shall be restored to its original condition by the Contractor at his own expense.

Work to Be Cleared.

Section No. 29. The Contractor shall at his own expense keep the work, streets and all public places occupied by him clear of all refuse and rubbish that may accumulate from any source whatever and leave them in a neat condition; but this is in no way to be construed as placing upon the Contractor the usual duties of the Street Cleaning Department.

Assistance to Be Rendered to Owners of Buildings.

Section No. 30. Where access to any adjacent property is temporarily cut off, owing to the occupancy of the street by the Contractor, he must, at his own cost, render every assistance to the owner or occupant in handling such materials of any description, including all material to be removed by the Department of Street Cleaning, as may have to be taken to or removed from such property; such materials shall be taken to or from the nearest accessible point that in the opinion of the Engineer is convenient for handling.

Waste Material.

Section No. 31. Waste material of any character will under no conditions be permitted to remain on the streets, but must immediately on its becoming unfit for use in the work be carted away and disposed of by the Contractor at his own expense, as hereinbefore provided; nor shall such materials be allowed to accumulate in the trenches.

Conveniences for Men.

Section No. 32. Necessary conveniences, properly secluded from public observation, shall be constructed and maintained by the Contractor at his own expense wherever needed for the use of the Contractor's employees, to the satisfaction of the Engineer and the sanitary authorities.

Fences.

Section No. 33. Wherever necessary the Contractor shall erect and maintain at his own expense fences for the protection of adjoining property and of the adjoining public places.

Advertisements Forbidden.

Section No. 34. The using of fences and buildings during construction for advertising purposes, other than the name and address of the Contractor, is forbidden; all temporary buildings and fences erected by the Contractor shall be neat in appearance and shall be painted as directed by the Engineer.

Barricades.

Section No. 35. Barricades and bridges shall be erected by the Contractor at his

own cost, for the protection of the work or use of the public; they shall be substantial in character and neat in appearance.

Construction Drawings.

Section No. 36. The Engineer will prepare and furnish to the Contractor, from time to time as required, drawings amplifying such details of the contract drawings as may be necessary and drawings necessary to show the adjustment and reconstruction of all surface and subsurface structures wherever the reconstruction of the same is necessitated by the construction of the Railroad. These drawings must be strictly followed, unless local conditions should develop during construction, suggesting changes, when, with the approval of the Engineer, such changes may be permitted.

Working and Shop Drawings.

Section No. 37. The Contractor shall make all working or shop drawings which may be required in addition to the contract drawings, or in addition to such other drawings as the Commission may issue in amplification of such contract drawings, as explained above. All working or shop drawings shall be submitted in duplicate to the Engineer for his approval, which approval shall be indicated by his countersigning one set of such working or shop drawings and returning the same to the Contractor. Should the working or shop drawings be not approved by the Engineer, then the Engineer shall return one set of such working or shop drawings, with the necessary corrections and changes indicated thereon; and the Contractor must make such corrections and changes, and again submit drawings in duplicate for the approval of the Engineer; and no work called for by said working or shop drawings shall be done until the approval of the Engineer be obtained, which must be given or refused within twenty (20) working days after delivery to him at his office of such drawings in duplicate. Immediately upon final approval of such working or shop drawings by the Engineer, the Contractor shall furnish the Commission with four (4) additional copies of such approval drawings.

Lines and Grades.

Section No. 38. During the progress of the work the Commission will give, through the Engineer, to the Contractor, suitable points, marks or benches, indicating the line and grade of the Railroad and of the sewers, such points or bench marks to be established at such intervals as the Engineer deems necessary for the Contractor to be able to perform his work. The principal lines and grades are to be given by the Engineer, who may change them from time to time, as may be authorized and directed by the Commission. The stakes and marks given by the Engineer shall be carefully preserved by the Contractor, who shall give to the Engineer all necessary assistance and facilities for establishing benches and plugs and for making measurements.

Orders, How Given.

Section No. 39. Orders and directions may be given orally by the Engineer to, and shall be received and promptly obeyed by, the Contractor or his representative or any superintendent, overseer or foreman of the Contractor who may have charge of the particular work in relation to which the orders or directions are given, and a confirmation in writing of such orders or directions will be given to the Contractor by the Engineer if so requested. If confirmation in writing is not requested by the Contractor, the oral orders and directions shall govern. The Contractor or his duly authorized representative shall be present at all times on the work to receive orders and directions from the Engineer.

Imperfect Work.

Section No. 40. Any imperfect construction which may be discovered before the final acceptance of the work, shall be corrected immediately on the requirement of the Engineer and at the Contractor's expense, notwithstanding that it may have been overlooked by the proper Inspector.

Damaged Work to Be Replaced.

Section No. 41. All work of whatever kind which during its progress and before its final acceptance shall become damaged from any cause shall be broken up or removed and be replaced by good and sound work at the Contractor's expense.

Condemned Material to Be Removed.

Section No. 42. If any material brought on the ground for use in the work or selected for the same shall be condemned by the Engineer as unsuitable or not in conformity with the specifications, the Contractor shall forthwith remove such material at his own expense.

Competent Men.

Section No. 43. The Contractor shall employ only competent, skillful and faithful men to do the work. Whenever the Engineer shall notify the Contractor in writing that in his opinion any man on the work is incompetent, unfaithful or disorderly, such man shall be discharged from the work and shall not again be employed on it.

SUBDIVISION 3.

General Manner of Prosecution and Maintenance of Traffic. Access to Buildings, Etc.

Section No. 44. No building shall, without the consent of the occupant and without notice to the Engineer, be deprived of means of access thereto; and where streets are open, suitable bridges shall be built and maintained at the Contractor's expense, to permit owners and occupants to reach their premises. Where necessary, proper and easy means for passengers to reach and leave street cars shall be maintained.

Conduct of Work.

Section No. 46. Generally the Contractor will be permitted to conduct his work in the most expeditious manner possible, having due regard for the safety of persons and property and facilities for traffic and under such instructions as the Engineer may give from time to time.

Facilities for Travel.

Section No. 47. All necessary facilities are to be furnished by the Contractor at his own expense for the benefit of street travel both on longitudinal and cross streets.

Decking of Streets and Sidewalks.

Section No. 48. In order to minimize interference with traffic and inconvenience to abutting property owners, during the construction of the Railroad, on all parts of the work the streets and sidewalks shall be substantially decked or covered over, and every precaution must be taken to keep traffic free from interruption.

Street Intersections.

Section No. 49. The street intersections, except where working shafts are located, shall be kept at all times open for traffic for their full width.

Where the decking is temporarily removed from any part of the street, the opening shall be protected by suitable fencing and bridging. In all cases the Contractor shall at all times at his own expense keep all the street crossings on the lines of the sidewalks in a clean and neat condition, bridging gutters and low places where water might collect.

Close Observance of Preceding Requirements.

Section No. 50. The Commission will insist upon the close observance of the above requirements, and no departure therefrom will be allowed, excepting upon the written permission of the Commission.

Openings for Ventilation.

Section No. 51. Wherever the excavations are decked, or where gases are liable to accumulate, suitable openings shall be provided for proper ventilation.

By-Passing Gas Mains.

Section No. 52. Wherever the excavations are decked, all gas pipes the services of which cannot temporarily be dispensed with shall be by-passed, if directed by the Engineer, temporary pipes to take their place being laid upon, above or below the street or sidewalk surfaces. These temporary by-passing pipes, if laid upon or below the street surface, will be paid for at the prices stipulated in Schedule Item 99-A. If laid above the street or sidewalk surface, they will be paid for at the prices stipulated in Schedule Item 99-B. These prices are to include the cost of all excavation, backfilling, temporary paving (including maintenance of same), and the restoration of the permanent paving both upon the completion of the by-passing installation and upon the restoration of the original system, all bagging, cutting and capping and installing circulation connections, and all other work, labor and material of whatever character necessary to provide a temporary and independent system of gas supply to take the place of the system originally in the street; to connect such temporary system with the mains in the intersecting streets where necessary; to transfer all house and lamp services to such temporary system where necessary; to remove and dispose of the material of such temporary system and to restore the original system; and no allowance will be made therefor under any other Schedule Item or otherwise. No allowance will be made for the maintenance of such temporary system. All maintenance will be considered as of the original system, and will be as provided for in Section No. 59. The material of the temporary system shall upon removal become the property of the Contractor. All pipe included in Schedule Item 99-A shall be wrought iron of a quality and manufacture to be approved by the Engineer. If laid

on a trestle (Schedule Item 99-B) the pipes shall be flanged, or of other approved connection, and sizes twenty (20) inches in diameter or less shall be rolled wrought-iron pipe.

Temporary Pipes, Etc.

Section No. 53. Temporary pipes, if laid upon or above the street or sidewalk surfaces, shall be neatly and substantially placed in a manner to cause the minimum of inconvenience to the abutting property owners and to the public. Where by-passing pipes are to cross a street overhead, the trestles must be of such a height as to give a minimum clear head room underneath the pipe and its supports of fourteen (14) feet.

The trestle shall be measured along its centre line from out to out of end bents and shall be paid for per lineal foot of trestle so measured, whether one or more pipes are supported thereon.

The trestles to support the by-passing pipes shall be of a design approved by the Engineer and shall be painted an approved color.

SUBDIVISION 4.

Street Railroad Tracks, Mains and Other Surface, Sub-surface and Overhead Structures.

Notice to Be Given to Interested Parties.

Section No. 55. Notice shall be given by the Contractor to all individuals, companies and the proper city officials, owning or having charge of surface, subsurface or overhead structures along any part of the work, of his intention to commence operations along such part of the route, at least one (1) week in advance, and the Contractor shall file with the Engineer at the same time a copy of said notice; and he shall co-operate with the proper parties, officers or officials in charge of such structures and shall furnish them with all reasonable facilities to inspect the methods of caring for their property.

Plans for Rearrangement Procedure.

Section No. 56. In the re-arrangement of surface, subsurface or overhead structures requiring removal and relaying or reconstruction due to interference with the Railroad structure a tentative plan will be made by the Engineer, which will be submitted to the parties interested; if any reasonable changes are then requested by any of the said parties within ten (10) days after the submission of the tentative plan, such changes will then be made, if in the judgment of the Engineer they will best conserve the interest of all parties concerned; a further plan will then be made which, on the approval of the Engineer, will be final.

Reconstruction or Relaying, Etc.

Section No. 57. Whenever it becomes necessary to cut, move, change, or reconstruct any surface, subsurface or overhead structures, or connections therewith, such work shall be done according to the reasonable satisfaction of the owners of such structures.

Reasonable Dispatch.

Section No. 58. All work of reconstruction or alteration shall be done with reasonable dispatch, and facilities are to be provided so that said work will interfere as little as possible with the practical working and use of such structures.

Maintenance, Support, Etc.—Protection from Injury.

Section No. 59. The Contractor shall at all times, by suitable bridging or other supports, maintain and support in an entirely safe condition for the usual service and to the reasonable satisfaction of the owners, all surface, subsurface and overhead structures and all their appurtenances encountered or affected during the prosecution of his work; if the maintenance of such usual services makes it necessary, the Contractor shall temporarily remove and relay or reconstruct any such surface, subsurface and overhead structure and shall restore the same prior to the completion of this contract. Also, in order that access may be had in emergencies to gates or valves on water or gas mains and to electric manholes, where such gates or valves and manholes are decked over, trap doors of a suitable size shall be provided in the decking. All surface, subsurface and overhead structures and all their appurtenances, and all surfaces of whatever character along the line of the work shall be protected from injury, and the Contractor shall fully restore such surface, subsurface and overhead structures and all their appurtenances or surfaces to, and shall leave them in, as useful, safe, durable and good a condition as existed before construction was begun. All the above, including also all changes of surface, subsurface and overhead structures and all their appurtenances made by the Contractor for his own convenience in executing his work, shall be done at the Contractor's own expense and included in the prices stipulated in the Schedule for excavation except as otherwise herein specifically provided.

Necessary Permanent Change of Pipes.

Section No. 60. (1) Changes of water, gas or other scheduled pipes, made necessary because of physical interference of such scheduled pipes with the Railroad structure, Railroad ducts or Railroad duct manholes, and requiring the removal, relaying or reconstruction of such scheduled pipes in other than the original position, will be paid for at the prices stipulated in Schedule Items 79, 82, 83, 90, 91, 92, 93, 94, 96, 97, 102, 103, 104, 109, 110, 111, 112, 113, 121, 125, 126-A and 126-F. These prices are per lineal foot of such scheduled pipes laid, including the removal, relaying or reconstruction of all their service connections, all other appurtenances of whatever character and all other work, labor and material incidental thereto, made necessary because of the physical interference of such scheduled pipes with the Railroad structure, Railroad ducts or Railroad duct manholes, and no allowance will be made therefor under any other Schedule Item or otherwise; excepting that:

Payment for New Pipes.

(2) If new pipes have to be provided to take the place of such scheduled pipes, and are ordered by the Engineer, such new pipes will be paid for in addition to the price paid for laying, etc., at the prices stipulated in Schedule Items 100, 101, 107, 108, 115, 116, 117, 118, 119, 123, 126-B, 126-C and 126-G, which prices are to cover the cost of the delivery of the new pipes actually used as measured in place in the work, and the removal and disposal of the old pipes. This does not relieve the Contractor, however, of his obligation to preserve all pipe that is in good condition and can be reclaimed and used, in order to avoid the necessity whenever possible of providing new pipe.

Payment for Excavation Outside of Net Lines.

(3) If such scheduled pipes in their new locations are outside of the ordered net lines of excavation for the Railroad structure, Railroad ducts or Railroad duct manholes, necessitating additional excavation and restoration of street surface, such excavation will be paid for at the price stipulated in Schedule Item 2-A (which price shall include all the matters referred to in Section No. 92) and such restoration of street surface will be paid for at the prices stipulated in Schedule Item 30, but only for such width as is prescribed in Section No. 61 for the excavation to be paid for. Any additional excavation and restoration of street surface, outside of the ordered net lines of excavation for the Railroad structure, Railroad ducts or Railroad duct manholes, necessitated for service connections and for other appurtenances for scheduled pipes located either inside or outside the ordered net lines of excavation for the Railroad structure, Railroad ducts or Railroad duct manholes, will not be measured or paid for separately, but compensation therefor will be deemed to be included in the prices for excavation and street surface restored specified in this subdivision (3) and in the prices for scheduled pipes specified in subdivision (1) of this Section No. 60.

Changes of Service Connections.

(4) Changes of the service connections of such scheduled pipes made necessary because of the physical interference of such service connections with the Railroad structure, Railroad ducts or Railroad duct manholes, whether the main pipe line is or is not changed, will be paid for at the prices stipulated in Schedule Items 88-A, 99-D and 114-B, which prices are for each such service changed and are to include the cost of all connections, all wrought-iron pipe sleeves of whatever description, insulation where necessary, all appurtenances of whatever character and all other work, labor and material incidental to the removing, relaying or reconstructing of such service connections, and no allowance will be made therefor under any other Schedule Item or otherwise.

Section No. 61.

Measurements in Pipe Excavation.

(1) In the estimate and payment for earth excavation for pipe laying, allowance will be made for a width of trench two (2) feet wider than the interior diameter of the pipe and a depth six (6) inches deeper than the invert of the pipe, measured from the surface of the street on the line of the trench. Where, in the opinion of the Engineer, the trench for laying pipes thirty (30) inches or more in diameter requires to be close sheeted, allowance will be made in the estimate for payment for earth excavation for a width of trench three (3) feet wider than the interior diameter of the pipe, when the trench is so sheeted.

Valve Chambers, Excavation for.

(2) For the building of valve chambers and other structures and for the setting of valves, valve boxes and hydrants, the total excavation to be allowed will be that within vertical planes one (1) foot outside of the outside lines of such structures, valves, valve boxes or hydrants, the depth being taken as the distance from the street surface to the lowest part of the structure or appurtenance.

Intersection of Two Trenches.

(3) At the intersection of two trenches or at the intersection of a pipe or other trench with an excavation made by the Contractor under orders from the Engineer, for any purpose whatsoever, the cubical contents of the intersection will be allowed only once. Under no circumstances will a double allowance be made for any excavation.

Measurement for Rock Excavation for Pipe Laying.

(4) In the measurement for rock excavation for pipe laying, allowance will be made for a width of trench two (2) feet wider than the interior diameter of the pipe and for a depth of trench eight (8) inches deeper than the invert of twenty (20) inch or smaller pipe and twelve (12) inches deeper than the invert of pipe of larger diameter, measured from the surface of the rock on the line of the trench. No additional allowance will be made for the removal of rock under the bells to give the required clearance.

Rock Excavation for Valve Chambers.

(5) For building of valve chambers and other structures and for the setting of valves, valve boxes and hydrants, the total amount of rock excavation will be the same as specified for earth excavation, except that the depth will be taken as the distance from the surface of the rock to the lowest part of the structure or appurtenance.

Section No. 62.

Necessary Permanent Changes of Electric Conduits and Ducts.

(1) Changes of electric conduits or ducts found in the street made necessary because of physical interference of such conduits or ducts with the Railroad structure, Railroad ducts or Railroad duct manholes, and requiring the removal, relaying or reconstruction of such conduits or ducts in other than the original position, will be paid for at the prices stipulated in Schedule Items 127 and 127-A. The price per duct foot as provided in Schedule Item 127 is to include the cost of conduits or ducts in place (except wrought-iron pipe ducts), of furnishing any new conduits or ducts which may be necessary, of all manholes, vaults, service boxes and their appurtenances, of drawing cables and providing new cables where necessary, of relaying and reconstructing of all services and all other work, labor and material incidental to and necessary for the completed conduit or duct lines, made necessary because of the physical interference of such conduits or ducts with the Railroad structure, Railroad ducts or Railroad duct manholes, and no other allowance will be made therefor under any other Schedule Item or otherwise excepting that:

Payment for Excavation Outside of Net Lines.

(2) If such conduits or ducts in their new locations are outside of the ordered net lines of excavation for the Railroad structure, Railroad ducts or Railroad duct manholes, necessitating additional excavation and restoration of street surface, such excavation will be paid for at the price stipulated in Schedule Item 2-A (which price shall include all the matters referred to in Section No. 92) and such restoration of street surface will be paid for at the prices stipulated in Schedule Item 30, but only for such width as is prescribed in subdivision (5) of this Section No. 62 for the excavation to be paid for. Any additional excavation and restoration of street surface outside the ordered net lines of excavation for the Railroad structure, Railroad ducts or Railroad duct manholes, necessitated for service connections and for other appurtenances of conduits or ducts located either inside or outside the ordered net lines of excavation for the Railroad structure, Railroad ducts or Railroad duct manholes, will not be measured and paid for separately, but compensation therefor will be deemed to be included in the prices for excavation and street surface restored specified in this subdivision (2) and in the prices for conduits or ducts specified in subdivision (1) of this Section No. 62.

Changes of Service Connections.

(3) Changes of the service connections of such conduits or ducts made necessary because of the physical interference of such service connections with the Railroad structure, Railroad ducts or Railroad duct manholes, whether the main conduit or duct line is or is not changed, will be paid for at the price stipulated in Schedule Item 127-C, which price is for each such service changed and is to include the cost of all connections, all wrought-iron pipe sleeves of whatever description, all appurtenances of whatever character and of all other work, labor and material incidental to the removing, relaying or reconstructing of such service connections and no other allowance will be made therefor under any other Schedule Item or otherwise.

Payment for Wrought Iron Pipe Ducts.

(4) Wrought-iron pipe ducts (including Edison tube mains) will be paid for at the prices stipulated in Schedule Item 127-A, which prices are to include all the work, labor and material specified under Schedule Item 127.

Measurement in Conduit and Duct Excavation.

(5) In the estimate and payment for excavation for conduit and duct laying and for the building of manholes, vaults, service boxes and their appurtenances, allowance will be made for a width of trench eight (8) inches wider than the duct bank or other structure, the depth measured on the line of the trench being taken as the distance from the street surface to the lowest part of the structure.

Maintenance of Railroads.

Section No. 63. The Contractor shall maintain and support, in a manner that will cause the minimum interference with traffic, all elevated railroads crossing the line of the work.

Elevated Railroads.

The Contractor shall maintain and support, both temporarily and permanently, in a safe condition all elevated railroads and their appurtenances, including the reconstruction and building where necessary of all column foundations and parts of column foundations lying within and without the net lines of the Railroad structure. Payment therefor (including the cost of such work in the cases of on and off line sewer trenches) will be made at the prices stipulated in Schedule Item 76, which prices shall include the cost of all incidental work, labor and material, and no allowance will be made therefor under any other Schedule Item or otherwise.

Facilities to Be Given Owners to Make Extensions.

Section No. 64. In the event of the owners or the City desiring to make any addition, alteration or extension to their structures or to do any work to or in connection with surface, subsurface or overhead structures owned by them or it or to lay any new structure in or across a street occupied by the Works at the time the work under this contract is in progress, the Contractor by written permission shall give said owners or the City all reasonable opportunity to perform such work; provided such work or alteration for the benefit solely of the owners of subsurface structures does not cause the Contractor any serious loss or delay, as shall be determined by the Commission. The written permission from the Contractor, with three (3) prints of plans or sketches or a description indicating the proposed work in detail, shall be submitted to and approved by the Engineer before any work shall be proceeded with under such written permission.

SUBDIVISION 5.

Excavation.

Width of Excavation.

Section No. 65. Special care must be taken to avoid damage wherever excavation under cover is being done or where open excavation is permitted. The width of such excavation shall not exceed the width actually necessary, in the opinion of the Engineer, for the proper prosecution of the work. All excavations shall be of such width, in addition to that of the Railroad, as shall be necessary, in the opinion of the Engineer, for the proper and expeditious progress of the work, and to permit the laying and readjusting of all sewers, mains, subways and other subsurface structures encountered along the route and contiguous to the Railroad.

Depth of Trenches.

Section No. 66. Trenches shall be excavated to such depth, both in soft ground and in rock, as may be necessary to permit the laying of such concrete bed, special foundation or drain pipes as may be deemed necessary by the Engineer.

Sides to Be Secured.

Section No. 67. The sides of the excavations shall be secured against slips by suitable sheet piling or sheeting, held in place by braces, shores or waling timbers, special precautions being taken where there is additional pressure, due to the presence of buildings or other structures. Where a movement of the ground might cause the settlement of an adjacent building, the sheeting must be started, if near the building, before the elevation of the bottom of the foundation of the building is reached; if

away from the building, at such depth of the excavation as the Engineer may permit; and the excavation must not be made in advance of or below the bottom of the sheeting.

Filling Back of Sheetting.

Section No. 68. Sheetting shall be driven wherever possible, but when it is placed against the sides of the excavation, the space or voids back of the sheeting must be immediately and carefully filled with suitable material to prevent as far as possible the natural ground back of the sheeting from moving.

Buildings Underpinned.

Section No. 69. The Contractor at the beginning of construction will be required to safely and permanently underpin, and during construction will be required to maintain, protect and secure, such buildings along the line of the Railroad as are enumerated in Schedule Item 4-Q.

Underpinning Defined.

By underpinning is meant such method of construction as will transmit the foundation loads directly through the underpinning structure to such lower level as is necessary to secure the buildings and which will relieve the adjacent ground from improper lateral pressures. The underpinning shall be designed to furnish a safe and permanent support for each independent building. To accomplish this result, the Contractor shall use such methods of underpinning, pneumatic or otherwise, as special conditions may require and the Engineer shall approve.

Before the work is proceeded with, the Contractor shall submit to the Engineer drawings in duplicate indicating the proposed typical and special methods of underpinning.

Payment for Underpinning.

Section No. 70. Payment for safely and permanently underpinning at the beginning of construction and for maintaining, protecting and securing during construction the buildings enumerated in Schedule Item 4-Q will be made at the prices stipulated in such Schedule Item, which prices shall be deemed to include payment for all work, labor and material of whatever nature required in connection with safely and permanently underpinning at the beginning of construction and for maintaining, protecting and securing the entire building or groups of buildings, such as side walls, both interior and along transverse streets; partition walls, both parallel and perpendicular to the building front; interior columns and any other work which may be required, and no allowance will be made therefor under any other Schedule item or otherwise. The prices are not to include the payment for underpinning or for maintaining, protecting and securing vaults, area ways, retaining walls, stoops or porches but the payment for such work, when required, shall be deemed to be included in the prices stipulated for excavation in Schedule Items 1 and 2. If ordered by the Engineer, the Contractor shall dig test pits alongside the building foundations. Payment for such test pits will be made to the Contractor as and at the price stipulated in Schedule Item 2-A. (See Section No. 427.)

Payment for Sheetting.

Section No. 71. No payment shall be made to the Contractor for sheeting left in the ground or in the work, unless the Engineer shall in writing require it to be left in, in which case payment shall be made to the Contractor for the sheeting so left in as measured by the Engineer, and at one-half the current market price for new material of the same grade, character and dimensions, and without any allowance or payment for placing the same or the expense thereof. This section applies only to the sheeting in trench work.

Timber for Temporary Purposes.

Section No. 72. All timber used for sheeting, shoring, bracing, decking or other temporary purposes shall be sound and free from any defects that may impair its strength. It shall be provided, placed and removed at the Contractor's own cost and expense. The top or wearing surface of all decking used for carriageways shall be of hard, yellow pine (unless otherwise permitted), sound, straight, and free from all shakes and large, loose knots. All sheeting and timber used temporarily shall be put in place by skilled mechanics, keyed tight by wedges where necessary, and so arranged as to be withdrawn readily without endangering the adjoining soil.

Vaults of Abutting Property.

Section No. 73. The removal, where necessary, of all walls and other parts of vaults of abutting property along the line of the Railroad that are within the ordered net lines of excavation shall be considered as earth excavation as provided in Section No. 87, but the restoration of all such walls and other parts of vaults originally within the ordered net lines of excavation when in the opinion of the Engineer susceptible of classification, will be paid for at the unit prices specified in the Schedule applicable in the opinion of the Engineer to the several classes of work and material involved in such restoration; or when in the opinion of the Engineer not susceptible of classification such work will be paid for as provided under Article XII.

The above is not to be construed, however, as applicable to any work beyond the ordered net lines of excavation, which shall be done at the Contractor's own cost and expense.

Vaults Disturbed.

Section No. 74. Wherever vaults of abutting property are broken through or otherwise disturbed, the Contractor shall at his own cost and expense provide all materials for and erect a six (6) inch hollow tile wall laid in Portland cement mortar, as a temporary partition, on or about the building line, or as directed, that will afford proper protection to the owner or occupant of the adjoining premises. Upon the completion of the restoration of the vault such wall shall, unless otherwise directed, be immediately removed and disposed of by the Contractor at his own cost and expense.

Blasting.

Section No. 77. Whenever rock or material requiring blasting is encountered in any trench or tunnel, all necessary precautions must be exercised by the Contractor, as required by the ordinances of the City relative to blasting. Explosives shall be used only of such character and strength as may be permitted by the Commission, and the right is reserved for the Engineer to direct that in special cases ordinary blasting powder only, in small charges, shall be used. Blasting shall not be done between the hours of 11 p. m. and 7 a. m., without the express permission of the Engineer and then only under such restrictions as he may impose.

Storage of Explosives.

Section No. 78. No larger quantity of explosives shall be kept on the line of the work than will be actually required for the twelve (12) hours of work next ensuing, and it shall be kept under lock, the key to which is to be in the hands of only the foreman or other equally trustworthy person. The amount of explosives kept in any one place shall not exceed the limit permitted by any ordinance of the City or as may be determined by the Commission. Caps and exploders shall not be kept in the same place with dynamite and other explosives. During freezing weather, special precautions shall be taken as to the care and manipulation of dynamite.

Near Sub-Surface Structures.

Section No. 79. Whenever any subsurface structure is encountered in or alongside of the trench, the right is reserved to direct that all rock within five (5) feet of the same shall be removed by means other than blasting.

Compacted Backfill.

Section No. 81. Any excess excavation in the bottom of the trench below the net line of excavation will be replaced by a compacted backfill placed at the Contractor's expense. (See Section No. 93.)

Pumping.

Section No. 83. Whenever water is encountered in trenches, the same shall be removed by hauling or pumping, great care being taken when pumping that the surrounding particles of soil be not disturbed or removed. If necessary to prevent such disturbance, the pumping must be done by a series of driven wells whose points are protected by fine wire cloths, the rate of flow at each well being made so slow as not to remove the particles of soil; or the pumping must be done by other means approved by the Engineer. The discharge from all pumps shall be conducted into the adjacent sewers, and the discharge pipes shall be so arranged as to be readily inspected at all times to ascertain if the water is free from particles of soil.

Carts to Be Tight.

Section No. 84. All carts, buckets and other vehicles used by the Contractor for the removal of material shall be tight and so arranged and so loaded as not to spill. Whenever a cart, bucket or other vehicle so used is leaky or unsuitable, it shall be immediately withdrawn from the work on notification by the Engineer.

Material Removed Expeditiously.

Section No. 85. Excavated material shall be removed expeditiously and disposed of, in any place selected by the Contractor, subject to the ordinances and regulations of the City authorities governing the disposal of such material, and the regulations

Valve Chambers, Excavation for.

(2) For the building of valve chambers and other structures and for the setting of valves, valve boxes and hydrants, the total excavation to be allowed will be that within vertical planes one (1) foot outside of the outside lines of such structures, valves, valve boxes or hydrants, the depth being taken as the distance from the street surface to the lowest part of the structure or appurtenance.

Intersection of Two Trenches.

(3) At the intersection of two trenches or at the intersection of a pipe or other trench with an excavation made by the Contractor under orders from the Engineer, for any purpose whatsoever, the cubical contents of the intersection will be allowed only once. Under no circumstances will a double allowance be made for any excavation.

Measurement for Rock Excavation for Pipe Laying.

(4) In the measurement for rock excavation for pipe laying, allowance will be made for a width of trench two (2) feet wider than the interior diameter of the pipe and for a depth of trench eight (8) inches deeper than the invert of twenty (20) inch or smaller pipe and twelve (12) inches deeper than the invert of pipe of larger diameter, measured from the surface of the rock on the line of the trench. No additional allowance will be made for the removal of rock under the bells to give the required clearance.

Rock Excavation for Valve Chambers.

(5) For building of valve chambers and other structures and for the setting of valves, valve boxes and hydrants, the total amount of rock excavation will be the same as specified for earth excavation, except that the depth will be taken as the distance from the surface of the rock to the lowest part of the structure or appurtenance.

Section No. 62.

Necessary Permanent Changes of Electric Conduits and Ducts.

(1) Changes of electric conduits or ducts found in the street made necessary because of physical interference of such conduits or ducts with the Railroad structure, Railroad ducts or Railroad duct manholes, and requiring the removal, relaying or reconstruction of such conduits or ducts in other than the original position, will be paid for at the prices stipulated in Schedule Items 127 and 127-A. The price per foot as provided in Schedule Item 127 is to include the cost of conduits or ducts in place (except wrought-iron pipe ducts), of furnishing any new conduits or ducts which may be necessary, of all manholes, vaults, service boxes and their appurtenances, of drawing cables and providing new cables where necessary, of relaying and reconstructing of all services and all other work, labor and material incidental to and necessary for the completed conduit or duct lines, made necessary because of the physical interference of such conduits or ducts with the Railroad structure, Railroad ducts or Railroad duct manholes, and no other allowance will be made therefor under any other Schedule Item or otherwise excepting that:

Payment for Excavation Outside of Net Lines.

(2) If such conduits or ducts in their new locations are outside of the ordered net lines of excavation for the Railroad structure, Railroad ducts or Railroad duct manholes, necessitating additional excavation and restoration of street surface, such excavation will be paid for at the price stipulated in Schedule Item 2-A (which price shall include all the matters referred to in Section No. 92) and such restoration of street surface will be paid for at the prices stipulated in Schedule Item 30, but only for such width as is prescribed in subdivision (5) of this Section No. 62 for the excavation to be paid for. Any additional excavation and restoration of street surface outside the ordered net lines of excavation for the Railroad structure, Railroad ducts or Railroad duct manholes, necessitated for service connections and for other appurtenances of conduits or ducts located either inside or outside the ordered net lines of excavation for the Railroad structure, Railroad ducts or Railroad duct manholes, will not be measured and paid for separately, but compensation therefor will be deemed to be included in the prices for excavation and street surface restored specified in this subdivision (2) and in the prices for conduits or ducts specified in subdivision (1) of this Section No. 62.

Changes of Service Connections.

(3) Changes of the service connections of such conduits or ducts made necessary because of the physical interference of such service connections with the Railroad structure, Railroad ducts or Railroad duct manholes, whether the main conduit or duct line is or is not changed, will be paid for at the price stipulated in Schedule Item 127-C, which price is for each such service changed and is to include the cost of all connections, all wrought-iron pipe sleeves of whatever description, all appurtenances of whatever character and of all other work, labor and material incidental to the removing, relaying or reconstructing of such service connections and no other allowance will be made therefor under any other Schedule Item or otherwise.

Payment for Wrought Iron Pipe Ducts.

(4) Wrought-iron pipe ducts (including Edison tube mains) will be paid for at the prices stipulated in Schedule Item 127-A, which prices are to include all the work, labor and material specified under Schedule Item 127.

Measurement in Conduit and Duct Excavation.

(5) In the estimate and payment for excavation for conduit and duct laying and for the building of manholes, vaults, service boxes and their appurtenances, allowance will be made for a width of trench eight (8) inches wider than the duct bank or other structure, the depth measured on the line of the trench being taken as the distance from the street surface to the lowest part of the structure.

Maintenance of Railroads.

Section No. 63. The Contractor shall maintain and support, in a manner that will cause the minimum interference with traffic, all elevated railroads crossing the line of the work.

Elevated Railroads.

The Contractor shall maintain and support, both temporarily and permanently, in a safe condition all elevated railroads and their appurtenances, including the reconstruction and building where necessary of all column foundations and parts of column foundations lying within and without the net lines of the Railroad structure. Payment therefor (including the cost of such work in the cases of on and off line sewer trenches) will be made at the prices stipulated in Schedule Item 76, which prices shall include the cost of all incidental work, labor and material, and no allowance will be made therefor under any other Schedule Item or otherwise.

Facilities to Be Given Owners to Make Extensions.

Section No. 64. In the event of the owners or the City desiring to make any addition, alteration or extension to their structures or to do any work to or in connection with surface, subsurface or overhead structures owned by them or it or to lay any new structure in or across a street occupied by the Works at the time the work under this contract is in progress, the Contractor by written permission shall give said owners or the City all reasonable opportunity to perform such work; provided such work or alteration for the benefit solely of the owners of subsurface structures does not cause the Contractor any serious loss or delay, as shall be determined by the Commission. The written permission from the Contractor, with three (3) prints of plans or sketches or a description indicating the proposed work in detail, shall be submitted to and approved by the Engineer before any work shall be proceeded with under such written permission.

SUBDIVISION 5.

Excavation.

Width of Excavation.

Section No. 65. Special care must be taken to avoid damage wherever excavation under cover is being done or where open excavation is permitted. The width of such excavation shall not exceed the width actually necessary, in the opinion of the Engineer, for the proper prosecution of the work. All excavations shall be of such width, in addition to that of the Railroad, as shall be necessary, in the opinion of the Engineer, for the proper and expeditious progress of the work, and to permit the laying and readjusting of all sewers, mains, subways and other subsurface structures encountered along the route and contiguous to the Railroad.

Depth of Trenches.

Section No. 66. Trenches shall be excavated to such depth, both in soft ground and in rock, as may be necessary to permit the laying of such concrete bed, special foundation or drain pipes as may be deemed necessary by the Engineer.

Sides to Be Secured.

Section No. 67. The sides of the excavations shall be secured against slips by suitable sheet piling or sheeting, held in place by braces, shores or waling timbers, special precautions being taken where there is additional pressure, due to the presence of buildings or other structures. Where a movement of the ground might cause the settlement of an adjacent building, the sheeting must be started, if near the building, before the elevation of the bottom of the foundation of the building is reached; if

away from the building, at such depth of the excavation as the Engineer may permit; and the excavation must not be made in advance of or below the bottom of the sheeting.

Filling Back of Sheetting.

Section No. 68. Sheetting shall be driven wherever possible, but when it is placed against the sides of the excavation, the space or voids back of the sheeting must be immediately and carefully filled with suitable material to prevent as far as possible the natural ground back of the sheeting from moving.

Buildings Underpinned.

Section No. 69. The Contractor at the beginning of construction will be required to safely and permanently underpin, and during construction will be required to maintain, protect and secure, such buildings along the line of the Railroad as are enumerated in Schedule Item 4-Q.

Underpinning Defined.

By underpinning is meant such method of construction as will transmit the foundation loads directly through the underpinning structure to such lower level as is necessary to secure the buildings and which will relieve the adjacent ground from improper lateral pressures. The underpinning shall be designed to furnish a safe and permanent support for each independent building. To accomplish this result, the Contractor shall use such methods of underpinning, pneumatic or otherwise, as special conditions may require and the Engineer shall approve.

Before the work is proceeded with, the Contractor shall submit to the Engineer drawings in duplicate indicating the proposed typical and special methods of underpinning.

Payment for Underpinning.

Section No. 70. Payment for safely and permanently underpinning at the beginning of construction and for maintaining, protecting and securing during construction the buildings enumerated in Schedule Item 4-Q will be made at the prices stipulated in such Schedule Item, which prices shall be deemed to include payment for all work, labor and material of whatever nature required in connection with safely and permanently underpinning at the beginning of construction and for maintaining, protecting and securing the entire building or groups of buildings, such as side walls, both interior and along transverse streets; partition walls, both parallel and perpendicular to the building front; interior columns and any other work which may be required, and no allowance will be made therefor under any other Schedule Item or otherwise. The prices are not to include the payment for underpinning or for maintaining, protecting and securing vaults, area ways, retaining walls, stoops or porches but the payment for such work, when required, shall be deemed to be included in the prices stipulated for excavation in Schedule Items 1 and 2. If ordered by the Engineer, the Contractor shall dig test pits alongside the building foundations. Payment for such test pits will be made to the Contractor as and at the price stipulated in Schedule Item 2-A. (See Section No. 427.)

Payment for Sheetting.

Section No. 71. No payment shall be made to the Contractor for sheeting left in the ground or in the work, unless the Engineer shall in writing require it to be left in, in which case payment shall be made to the Contractor for the sheeting so left in as measured by the Engineer, and at one-half the current market price for new material of the same grade, character and dimensions, and without any allowance or payment for placing the same or the expense thereof. This section applies only to the sheeting in trench work.

Timber for Temporary Purposes.

Section No. 72. All timber used for sheeting, shoring, bracing, decking or other temporary purposes shall be sound and free from any defects that may impair its strength. It shall be provided, placed and removed at the Contractor's own cost and expense. The top or wearing surface of all decking used for carriages shall be of hard, yellow pine (unless otherwise permitted), sound, straight, and free from all shakes and large, loose knots. All sheeting and timber used temporarily shall be put in place by skilled mechanics, keyed tight by wedges where necessary, and so arranged as to be withdrawn readily without endangering the adjoining soil.

Vaults of Abutting Property.

Section No. 73. The removal, where necessary, of all walls and other parts of vaults of abutting property along the line of the Railroad that are within the ordered net lines of excavation shall be considered as earth excavation as provided in Section No. 87, but the restoration of all such walls and other parts of vaults originally within the ordered net lines of excavation when in the opinion of the Engineer susceptible of classification, will be paid for at the unit prices specified in the Schedule applicable in the opinion of the Engineer to the several classes of work and material involved in such restoration; or when in the opinion of the Engineer not susceptible of classification such work will be paid for as provided under Article XII.

The above is not to be construed, however, as applicable to any work beyond the ordered net lines of excavation, which shall be done at the Contractor's own cost and expense.

Vaults Disturbed.

Section No. 74. Wherever vaults of abutting property are broken through or otherwise disturbed, the Contractor shall at his own cost and expense provide all materials for and erect a six (6) inch hollow tile wall laid in Portland cement mortar, as a temporary partition, on or about the building line, or as directed, that will afford proper protection to the owner or occupant of the adjoining premises. Upon the completion of the restoration of the vault such wall shall, unless otherwise directed, be immediately removed and disposed of by the Contractor at his own cost and expense.

Blasting.

Section No. 77. Whenever rock or material requiring blasting is encountered in any trench or tunnel, all necessary precautions must be exercised by the Contractor, as required by the ordinances of the City relative to blasting. Explosives shall be used only of such character and strength as may be permitted by the Commission, and the right is reserved for the Engineer to direct that in special cases ordinary blasting powder only, in small charges, shall be used. Blasting shall not be done between the hours of 11 p. m. and 7 a. m., without the express permission of the Engineer and then only under such restrictions as he may impose.

Storage of Explosives.

Section No. 78. No larger quantity of explosives shall be kept on the line of the work than will be actually required for the twelve (12) hours of work next ensuing, and it shall be kept under lock, the key to which is to be in the hands of only the foreman or other equally trustworthy person. The amount of explosives kept in any one place shall not exceed the limit permitted by any ordinance of the City or as may be determined by the Commission. Caps and exploders shall not be kept in the same place with dynamite and other explosives. During freezing weather, special precautions shall be taken as to the care and manipulation of dynamite.

Near Sub-Surface Structures.

Section No. 79. Whenever any subsurface structure is encountered in or alongside of the trench, the right is reserved to direct that all rock within five (5) feet of the same shall be removed by means other than blasting.

Compacted Backfill.

Section No. 81. Any excess excavation in the bottom of the trench below the net line of excavation will be replaced by a compacted backfill placed at the Contractor's expense. (See Section No. 93.)

Pumping.

Section No. 83. Whenever water is encountered in trenches, the same shall be removed by bailing or pumping, great care being taken when pumping that the surrounding particles of soil be not disturbed or removed. If necessary to prevent such disturbance, the pumping must be done by a series of driven wells whose points are protected by fine wire cloths, the rate of flow at each well being made so slow as not to remove the particles of soil; or the pumping must be done by other means approved by the Engineer. The discharge from all pumps shall be conducted into the adjacent sewers, and the discharge pipes shall be so arranged as to be readily inspected at all times to ascertain if the water is free from particles of soil.

Carts to Be Tight.

Section No. 84. All carts, buckets and other vehicles used by the Contractor for the removal of material shall be tight and so arranged and so loaded as not to spill. Whenever a cart, bucket or other vehicle so used is leaky or unsuitable, it shall be immediately withdrawn from the work on notification by the Engineer.

Material Removed Expeditiously.

Section No. 85. Excavated material shall be removed expeditiously and disposed of, in any place selected by the Contractor, subject to the ordinances and regulations of the City authorities governing the disposal of such material, and the regulations

of the United States Government as to the disposal or dumping of material in and about or near the Harbor of New York.

When Excavated Material May be Taken by City.

Section No. 86. If at any time during the course of construction the City shall desire for city purposes any part of the material excavated and the cost of such disposal shall not exceed the cost to the Contractor of the method in which he is then disposing of it, the Commission may order such material dumped or turned over to the City at a point designated without cost to the City.

Earth Excavation Defined.

Section No. 87. Earth excavation includes the excavation of all materials of whatever nature encountered in the trenches, except as provided in Section No. 427.

Excavation in Trenches, How Measured.

Section No. 88. The net outside width of the Railroad structure, as ordered and indicated on the drawings, and the depth of the Railroad structure, also as ordered and indicated on the drawings, are the ordered net lines of excavation, and will govern as to width and depth in the measurements for payment for excavation for the Railroad. No deduction from the volume of excavation determined by the ordered net lines of excavation will be made on account of vault or area space or spaces occupied by pipes and other subsurface structures. Under no circumstances will a double allowance be made for any excavation.

No Allowance Outside of Ordered Net Lines.

Section No. 89. There will be no measurement or allowance made nor money paid for excavation outside (below or wider than) the net measurement lines as above indicated; and no allowance shall be made for any excess excavation caused by slips or slides. It is understood and agreed that for all such matters the Contractor has estimated and allowed in the unit prices of the Schedule.

Changes of Street Grade.

Section No. 90. When the contract drawings indicate that the grade of any street, park or parkway is to be raised or when the Engineer shall order such grade to be raised, the Contractor shall fill in such places to the changed grade as required and such work shall be measured and paid for at the price stipulated for earth excavation in Schedule Item 1.

Payment for Excavation.

Section No. 91. Excavation except as elsewhere provided, shall be paid for at the prices stipulated in Schedule Items 1 and 2.

Prices for Excavation to Include.

Section No. 92. The prices stipulated for excavations in Schedule Items 1 and 2, are to include the cost of the disposal of the materials excavated, of backfilling, of all decking and bridging, of all sheeting and bracing, and of maintaining and supporting of trenches during and after excavation, of pumping and bailing, and of the maintenance and support, with all incidental work, labor and material of any kind, of all surface, subsurface and overhead structures and surfaces of whatever nature and their appurtenances, payment for the maintenance and support of which is not herein elsewhere specifically provided for under other Schedule Items.

SUBDIVISION 6.

Backfilling.

Quality of Material—How Placed.

Section No. 93. The trenches at the sides of and over the top of the Railroad and wherever backfilling is necessary, including any void spaces of vaults or other structures below the ordered net lines of excavation which it may be necessary to fill or grade in order to provide the sub-grade for the Railroad, shall be backfilled with sand, gravel or other good, clean earth, free from perishable material and from stones exceeding six (6) inches in diameter, and not containing in any place a proportion of stone of or below that size exceeding one (1) part of stone to five (5) parts of earth. The filling shall be compacted by flooding with water, or in cases where flooding with water is not practicable, it shall be compacted by ramming in layers not exceeding six (6) inches in depth, as required by the Engineer.

Subsurface Structures—Frozen Material Not Permitted.

Section No. 94. Whenever pipes, sewers or other subsurface structures are met with, the filling must be carefully packed, rammed and tamped under and about such subsurface structures, special tools being used for the purpose. No filling of trenches with frozen earth will in any case be permitted nor will any filling be permitted over frozen material.

Sheeting Removed.

Section No. 95. As fast as the work of filling permits, sheeting and other timber supporting the sides of the excavation shall be carefully withdrawn, and the spaces left by the removal of such material carefully backfilled, but if directed by the Engineer, the sheeting shall be left in place.

How Paid for.

Section No. 96. The cost of backfilling is deemed to be included in the prices stipulated for earth excavation in Schedule Items 1, 2 and 2-A.

SUBDIVISION 7.

Piling and Timbering.

Character of Piles.

Section No. 97. If in the judgment of the Engineer the ground is of such character as to require piling, the Contractor shall drive such piles as the Engineer directs. The piles shall be of good, sound pine or spruce, or other acceptable timber, straight and free from shakes; they shall be not less than twelve (12) inches in diameter at the butt end, nor less than six (6) inches in diameter at the point, and shall be driven to the satisfaction of the Engineer and by means of a steam hammer driver if so required by him. If necessary the points of the piles shall be protected by proper shoes, and the butts by rings or caps. Piles shall not be spliced unless permitted by the Engineer, and then in such manner as he directs. Piles shall be carefully cut off to the grade given by the Engineer.

Piles to be Driven in Required Location.

Section No. 98. Piles shall be driven in the position and manner and to the depth ordered; if driven in a wrong position or injured in any way by driving they must be withdrawn and replaced by others. After being driven they shall be cut off to a true plane for proper adjustment with capping timber or masonry.

Payment for Timber Piles.

Section No. 99. Timber piles will be paid for at the price stipulated in Schedule Item 12, which price shall include the cost of furnishing, driving and preparing the piles ready for the capping timbers or masonry; the portion cut off and removed will not be included in the length measured for payment. No test piles, guide piles, or piles other than those that are a part of the finished foundation and are included within the net width of the finished foundation will be paid for.

Concrete Piles.

Section No. 100. If in the judgment of the Engineer special conditions so require, piles of reinforced concrete of an approved form of construction shall be used.

Payment for Piles Other Than Timber Piles.

Section No. 101. Payment for piles other than timber piles will be as provided in Article XII.

Grillage.

Section No. 102. Timber grillage foundations shall be built if so directed by the Engineer.

Foundation Timber.

Section No. 103. All foundation timber shall be of pine or spruce, or other timber permitted by the Engineer, sound and free from shakes. It shall be of such dimensions, and laid in such manner, as the special drawings to be issued shall require, and held in place by bolts, spikes or good seasoned oak or locust tree-nails.

Foundation Timber, Measurement and Payment.

Section No. 104. No wastage is to be allowed for, and the estimate of the quantities of foundation timber used will be based on the amount ordered by the Engineer and placed according to his directions. Payment for foundation timber will be made at the price stipulated in Schedule Item 13.

SUBDIVISION 8.

Cement.

Portland Cement.

Section No. 105. All cement used in the work shall be true Portland cement, by which is meant the finely pulverized product, resulting from the calcination to incipient fusion of a properly proportioned intimate mixture of argillaceous and calcareous earths or rocks, to which no addition greater than three (3) per centum has been made subsequent to calcination.

Brand to be Approved.

Section No. 106. Before any cement is furnished, the brand shall receive the approval of the Engineer. Cement, to be acceptable, shall be of a well-known brand

which has been in successful use for large engineering works in America for at least five (5) years, and which has an established reputation for uniform character. Preference will be given to cements which, by their records, show a tendency to maintain high strength of mortar with increased age.

Inspection.

Section No. 107. Cement shall be subject to inspection at the place of manufacture or on the work, and to such tests as may be ordered by the Engineer. The Engineer or his representatives shall have access at all time and places to inspect the methods of manufacture, storage and protection, and shall have liberty to inspect the daily laboratory records of tests and analyses at the cement works.

Tests.

Section No. 108. In general, tests will conform to the methods recommended by the Committee on Uniform Tests of Cement of the American Society of Civil Engineers. Unless otherwise directed, samples will be taken at the place of manufacture by a representative of the Engineer, and sent to the Commission's laboratory, where the tests will be made. If required, tests will be made on the individual samples, without intermixing.

Specific Gravity and Color.

Section No. 109. The cement shall have a specific gravity of not less than 3.10 nor more than 3.25 after being thoroughly dried at a temperature of 212 degrees Fahr. The color shall be uniform, bluish gray, free from yellow or brown particles.

Chemical Analyses.

Section No. 110. Chemical analyses of cement made from time to time shall show a reasonably uniform composition. Cement shall contain not more than 1.75 per centum of sulphuric anhydride (SO₃) nor more than 4 per centum of magnesia (MgO).

Fineness.

Section No. 111. The fineness of the cement shall be such that it shall leave by weight a residue of not more than eight (8) per centum on a No. 100, and not more than twenty-five (25) per centum on a No. 200 sieve; the wires of the sieves being respectively 0.0045 and 0.0024 inch in diameter.

Time of Setting.

Section No. 112. It shall not develop initial set in less than thirty (30) minutes unless a more quickly-setting cement is specifically required, and shall develop hard set in not less than one (1) hour nor more than ten (10) hours.

Soundness.

Section No. 113. Pats of neat cement, after remaining one (1) day in moist air, shall be kept in air or water of normal temperature for at least twenty-eight (28) days, or shall be exposed to an atmosphere of steam, above boiling water, in a loosely closed vessel for at least five (5) hours; and the separate parts under any of these conditions, shall remain hard without any indications of checking, cracking, distortion, disintegration or blotching.

Tensile Strength.

Section No. 114. Neat cement briquettes shall have at the end of one (1) day in moist air a breaking strength, per square inch of sectional area, of not less than one hundred and fifty (150) lbs.; at the end of seven (7) days—one (1) day in air, six (6) days in water—of not less than five hundred (500) lbs.; at the end of twenty-eight (28) days—one (1) day in air, twenty-seven (27) days in water—of not less than six hundred (600) lbs. The strength at twenty-eight (28) days shall be not less than that at seven (7) days.

Mortar Briquettes.

Mortar briquettes, composed of one (1) part of cement and three (3) parts of standard Ottawa sand, by weight, shall have at the end of seven (7) days—one (1) day in air, six (6) days in water—a breaking strength, per square inch of sectional area, of not less than two hundred (200) lbs.; and at the end of twenty-eight (28) days—one (1) day in air, twenty-seven (27) days in water of not less than three hundred (300) lbs. The strength at twenty-eight (28) days shall show an increase of not less than fifty (50) lbs. over the strength at seven (7) days.

Long Time Tests.

Section No. 115. Tests will be made from time to time extending over longer periods than twenty-eight (28) days. If such tests show a tendency to unsoundness or unusual reduction in strength with increased age, the Engineer shall have the right to prohibit the further use of that brand and to require that another brand be substituted.

Storage During Tests.

Section No. 116. All cement shall be held in storage to allow ample time for tests to be made before the cement is required for use in the work.

How Contained.

Section No. 117. Cement shall be packed and delivered in canvas sacks or other strong, well-made packages, plainly marked with the manufacturer's brand, and sealed in an approved manner. The weights of such packages shall be uniform.

Method of Storing.

Section No. 118. The Contractor shall at all times keep in store on the work, or at some point convenient thereto, an abundant supply of cement, so as to guard against possible shortage. It shall be stored in a weather-tight building, with a tight floor a proper distance above the ground, and with sufficient floor space to admit of storing each lot of cement, of not more than two hundred (200) barrels, or its equivalent, separately, so as to facilitate identification of each individual lot in case of necessity for further tests or rejection. Cement that has become partially set or otherwise damaged shall not be used.

SUBDIVISION 9.

Mortar.

Cement and Sand.

Section No. 119. All mortar shall be prepared from accepted cement and clean, sharp sand, approved by the Engineer. These ingredients shall be thoroughly mixed dry in the proportions as specified below; water shall then be added, so as to produce a stiff paste. Water used in mortar, grout or concrete must be clean, fresh water, no salt water being permitted. The mortar shall be freshly mixed for the work on hand, in proper boxes made for that purpose, and no mortar shall be used that has stood beyond such limit of time as may be determined by the Engineer.

Sand.

Sand used for mortar shall be clean, and shall be graded from fine to coarse to the satisfaction of the Engineer. It shall contain no grains which will not pass a one-fourth (1/4) inch mesh screen, nor more than six (6) per centum by weight which will pass a one hundred (100) mesh screen.

Sand shall be of such quality that mortar composed of one (1) part of Portland cement and three (3) parts of sand by weight will have a tensile and compressive strength equal to mortar of the same consistency made with one (1) part of the same cement and three (3) parts of standard Ottawa sand.

How Measured.

Section No. 120. For purposes of mixture, three hundred and seventy-five (375) pounds of Portland cement shall be estimated at three and one-half (3 1/2) cubic feet of volume. The proportions for brick and stone masonry shall be one (1) part cement to two (2) parts sand; for pointing, one (1) part cement and one (1) part sand; for concrete masonry, as specified under the head of concrete; and for other classes of work, as directed by the Engineer.

Grout.

Section No. 121. If required by the Engineer, a grout, consisting of one (1) part fine, clean and sharp sand and one (1) part of Portland cement, shall be pumped in under pressure, so as to completely fill all the voids in or behind the masonry.

Payment for Grout.

Section No. 122. When grout is ordered and used, it shall be paid for at the price herein provided, Schedule Item 11.

SUBDIVISION 10.

Masonry.

Laid in Portland Cement.

Section No. 123. All masonry, except as otherwise specified, shall be laid in Portland cement mortar, and shall be built to the forms and dimensions shown on the drawings, or as directed by the Engineer from time to time; and the system of joining or bonding ordered by the Engineer shall be strictly followed.

Water Not to Interfere.

Section No. 124. Care must be taken that no water shall interfere with the proper laying of masonry in any of its parts.

Freezing Weather.

Section No. 125. During freezing weather no masonry shall be built unless

properly protected against frost, and masonry shall not be built in exposed places where in the opinion of the Engineer it is impracticable to give such protection. During freezing weather or when there is frost in the materials to be used in the masonry, the materials shall be heated. The Contractor shall provide such appliances, subject to the approval of the Engineer, as are necessary for the heating of the sand, stone and other materials.

Protected in Freezing Weather.

Section No. 126. During freezing weather all masonry shall be protected by a suitable covering of salt hay, canvas, tarpaulin or by such material or in such ways as may be necessary to insure it against freezing.

Hot Weather.

Section No. 127. During hot weather all masonry, especially concrete, shall be kept wet by sprinkling and properly covered until it has become thoroughly set and hardened.

Pointing.

Section No. 128. Unless otherwise permitted, every joint that is to be pointed shall be raked out, within two days after being laid, to a depth of at least two inches.

Mortar for Pointing.

Section No. 129. Pointing of the face joints of masonry shall be thoroughly made with cement mortar mixed in the proportion of one (1) part of cement to one (1) part of sand, except where otherwise specially provided.

Season for Pointing.

Section No. 130. No pointing shall be done in freezing weather, and masonry laid between December 1 and April 1 shall not be pointed until permitted by the Engineer.

Defective Masonry.

Section No. 131. Any masonry which is found to be defective from any cause whatsoever, before the final completion and acceptance of the work, must be removed and properly rebuilt, or if damaged during such time must be properly repaired.

Stone Cleaned.

Section No. 132. All stone before being laid shall be thoroughly cleaned and if so directed by the Engineer shall be washed.

SUBDIVISION 11.

Concrete.

Composition.

Section No. 133. The concrete shall be composed of gravel or broken stone, or a mixture of both, free from all dust and dirt, and mixed together with the proportion of mortar specified below. The water used in mixing concrete must be clean, fresh water, no salt water being permitted.

Sand.

Section No. 134. Sand for concrete shall be of the kind specified for mortar in Subdivision 9.

Stone.

Section No. 135. Stone for concrete shall be sound, clean gravel, or sound, hard, broken limestone, or trap rock, or a mixture of such gravel and broken stone may be used. If a mixture of gravel and broken stone is used the Engineer may require that the gravel and broken stone be stored separately on the work and mixed in single batches as needed.

Sizes of Stone.

Section No. 136. The gravel or broken stone or the mixture of gravel and broken stone shall be graded from fine to coarse, and that which is all of one size, or practically so, shall not be used. It shall be screened or washed so as to remove all dust, and it shall contain no pieces that will pass through a hole three-eighths ($\frac{3}{8}$) inch in diameter, and no pieces that will not pass through a hole one and three-fourths ($1\frac{3}{4}$) inches in diameter. Broken stone or gravel for concrete, graded as above, but between three-eighths ($\frac{3}{8}$) and three-fourths ($\frac{3}{4}$) inch in diameter, may be required and used in special parts of the work.

Rubble Concrete.

Section No. 137. In concrete where the thickness is thirty (30) inches or more, if permitted by the Engineer, the Contractor may imbed in the same, pieces of clean, sound stone whose greatest diameter does not exceed twelve (12) inches and whose least diameter or thickness is not less than three-quarters ($\frac{3}{4}$) of the greatest diameter. These stones shall be set by hand in the concrete as the layers are being rammed, and so placed that each stone is completely and perfectly imbedded. No two (2) stones shall be within six (6) inches of each other and no stones shall be within four (4) inches of an exposed face, nor shall any such stone be placed nearer than six (6) inches to any metal built in the concrete for reinforcing the same.

Proportions.

Section No. 138. The proportions of cement, sand and stone (or gravel) used in making concrete shall be by volume as cast into the measuring box, and shall be as follows:

Section No. 139. Concrete in floors, sidewalls and roof one (1) part of cement, two (2) parts of sand and four (4) parts of stone.

Section No. 140. Protective concrete outside of waterproofing lines on bottom, sides and roof, one (1) part of cement, two (2) parts of sand and four (4) parts of stone.

Mixing by Machine.

Section No. 141. Whenever practicable, concrete shall be machine mixed. A rotary machine of a pattern approved by the Engineer, and mixing only one batch at a time, shall be used. Concrete shall not be mixed on the surface of the street or decking on the line of the work, unless specifically permitted, but the mixing shall be done as close as practicable to the work so as to avoid too great a lapse of time between the mixing and the placing of the concrete in the forms.

Mixing by Hand.

Section No. 142. When concrete is mixed by hand the stone or gravel shall be spread on a platform in a bed about six (6) inches thick, and shall be thoroughly wet. Sand shall be spread on a platform and the requisite portion of cement spread on the sand. After thoroughly mixing the cement and sand, the dry mixture thus formed shall be spread evenly over the bed of stone wet as above, and the whole turned over until thoroughly mixed, but not less than four (4) turnings on the mixing board will be allowed in any case, water being added as necessary. Care shall be taken to keep the bed of concrete wet and avoid piling.

How Laid.

Section No. 143. Concrete shall be placed immediately after mixing in layers of such thickness as may be directed by the Engineer, and shall be thoroughly compacted throughout the mass by ramming or spading, special tamping bars or tools being used as approved by the Engineer. The amount of water used in making the concrete shall be as approved by the Engineer. If a small amount of water has been used in mixing, ramming shall be continued until the water flushes to the surface; as a rule, however, concrete shall be placed wet.

Made Smooth to Receive Waterproofing.

Section No. 144. The surface of concrete to which waterproofing is to be applied shall be made smooth at the time of placing and shall be carefully protected from injury by barricades or otherwise until thoroughly set.

Time for Hardening.

Section No. 145. Concrete shall be allowed to set for twelve (12) hours, or more, if so directed, before any work shall be laid upon it; and no walking over or working upon it shall be allowed while it is setting. Concrete shall not be flooded with water before being thoroughly set.

Earth Rammed.

Section No. 146. Before laying concrete on earth the earth shall be rammed as directed.

Surface Rough for Bonding.

Section No. 147. Wherever a section of concrete is necessarily left unfinished, leaving a surface which will be hard set before additional concrete can be laid, care shall be taken to flush the cement to such surface, and such dovetails or grooves shall be formed as may be necessary to insure a good bond with the new work; and if deemed necessary by the Engineer, the joints shall be reinforced with steel bars or dowels, to be furnished and placed by the Contractor at his own expense.

Joints Cleaned.

Section No. 148. In all cases of joints of old with new work the old surfaces shall be thoroughly cleaned and wet, and a coating of mortar or cement shall be applied, if required, before placing the concrete.

Forms.

Section No. 149. Suitable forms shall be provided by the Contractor to support the concrete while being placed in the walls or roofs. These forms shall be immediately replaced by new ones as soon as they commence to lose their proper shape.

Before being used they shall be carefully cleaned of cement and dirt in order to provide a perfectly smooth face to the exposed surface of the concrete. The forms shall be made of wood, kept carefully planed; or made of metal sufficiently thick to retain their shape without the use of wood.

Certain Forms Not Permitted.

Section No. 150. No forms made of wood, and covered with iron will be permitted.

Forms; How Made.

Section No. 151. The joints in forms shall be water-tight. If forms are made of wood the boards shall be tongued and grooved where required by the Engineer.

Precautions in Placing.

Section No. 152. Every precaution shall be taken to construct the forms in such a manner as will insure a smooth and even surface on concrete which is to remain exposed; except that on track ceilings through stations, on ceilings over platforms, and on walls within the limits of station finish work, the concrete shall be left with a rough surface to insure a proper bond between it and the station finish plaster which is to be applied under another contract. For obtaining this rough concrete surface, the Contractor shall provide special forms approved by the Engineer.

Forms, How Set.

Section No. 153. The forms shall be set true to line, firmly secured, and be so tight as not to allow water in the mortar to escape; they shall be thoroughly wet before placing the concrete and shall be removed as soon after the concrete has been placed as in the judgment of the Engineer may be done with safety to the work. Immediately on the removal thereof the faces that will remain exposed shall be carefully examined and any irregularities of the surface corrected; projections shall be removed and voids filled with mortar. If, however, the voids are such as to indicate an excessive loss of mortar, portions of the concrete shall be cut out to the fullness of such defects and the space refilled with a rich concrete or mortar in such proportions and in such manner as the Engineer may direct.

Reinforcement Steel.

Section No. 154. Where reinforcement steel or wire mesh is used, efficient means shall be provided to maintain it in the exact position it is to occupy in the completed work, and to prevent it from becoming dislodged, or moved in any manner, when concrete is placed.

Surface Finish.

Section No. 155. Exposed faces of concrete shall be left with the natural cement finish, the object in view being to obtain a generally smooth finished surface of uniform color. Immediately following the removal of the forms, the removal of the projections and the filling of voids as provided above, the exposed surface shall be rubbed down in such a manner, approved by the Engineer, as will insure this result.

Within Station Limits.

The preceding paragraph of this Section does not apply within station limits.

Impervious to Water.

Section No. 156. It is intended to obtain concrete impervious to water; the concrete shall be mixed and deposited with this end in view, and on the roof of the Railroad, if waterproofing is not used, the top surface of the concrete shall be carefully troweled as may be directed in order to add to its imperviousness.

Drip-pans.

The surfaces of drip-pans under ventilating openings and other surfaces which require special provision for drainage shall be troweled.

Measurement and Payment.

Section No. 157. Concrete masonry shall be measured in place in the work to the prescribed net lines ordered by the Engineer and shall be paid for at the prices stipulated in Schedule Items 6 and 7, which prices are deemed to include the cost of all scaffolding, centers, forms, etc., and removing the same, all troweling where required, and all other incidental work, labor and material.

SUBDIVISION 12.

Brick Masonry.

Quality.

Section No. 159. Bricks for masonry shall be of the best quality common bricks, burned hard entirely through, regular and uniform in shape and size and of compact texture.

Hollow Terra Cotta Blocks.

Section No. 160. Hollow terra cotta blocks or bricks may be required on the outside of walls of the structure or at such other places as the Engineer may direct. They shall be of the best porous terra cotta as approved by the Engineer, and shall be of such thickness and shall be laid in such manner as hereinafter specified or as the Engineer may direct.

In Stations.

Similar terra cotta blocks or bricks may be required in station work.

How Laid.

Section No. 161. All brick masonry shall be laid in mortar of the quality described in Subdivision 9, except that in exposed locations coloring matter may be added, if required by the Engineer. The bricks shall be laid to line with joints in the face work not exceeding one-quarter ($\frac{1}{4}$) of an inch in the beds, and three-eighths ($\frac{3}{8}$) of an inch on ends; the bricks to be thoroughly wet before laying and to be completely imbedded in mortar under the bottom and on the sides and ends at one operation, care being taken to have every joint full of mortar.

All exterior surfaces shall be smooth and regular.

Cleaned.

Section No. 162. The inside faces of all arches and other exposed parts shall have all the mortar scraped off and washed clean immediately after the centers have been struck, and shall be pointed and left in neat condition.

No "Bats" or Culls.

Section No. 163. All bricks of whatever nature shall be carefully culled and if necessary gauged before laying, at the expense of the Contractor. No "bats" shall be used except in large masses of brickwork, where a moderate proportion, to be determined by the Engineer, may be used, but nothing smaller than half bricks.

Racked or Toothed.

Section No. 164. All unfinished work shall be racked back or toothed, as directed by the Engineer, and before new work is joined to it the faces of the brick in the old work must be scraped entirely clean, scrubbed with a stiff brush and be well moistened.

Special Bricks.

Section No. 165. Where necessary to make a neat joint in connection with steel framework, or at corners, curves, or other similar places, special bricks of proper shape shall be furnished and used. All centers and forms shall be made to fit the curves of the work; they shall be put up and removed in a manner satisfactory to the Engineer.

Payments.

Section No. 166. Brick masonry shall be measured to the lines indicated and shown on the drawings or as ordered by the Engineer and shall be paid for as herein stipulated in Schedule Item 9 for common brick masonry, and Schedule Item 10 for hollow terra cotta brick or tile masonry of any thickness ordered, except as specified in Section No. 74; these prices are to include the cost of all scaffolding, forms, centers, etc., and the removal of the same, of all plastering and pointing, and of all other work incidental thereto.

SUBDIVISION 13.

Stone Masonry.

Where Used.

Section No. 167. Rubble stone masonry will be used at such places as the Engineer may require.

How Laid.

Section No. 168. Rubble stone masonry shall be made of sound, clean stone of suitable size, quality and shape for the work in hand and shall be laid in mortar mixed in the proportion of one (1) part of cement to three (3) parts of sand. All beds and joints shall be well filled with mortar and the work must be thoroughly bonded.

Dry Rubble Masonry.

Section No. 169. In connection with the construction of sewers, or wherever else directed by the Engineer, dry rubble masonry shall be used. It shall consist of sound, clean stone not less than three inches thick and one cubic foot contents laid on natural beds, with such spalls as are required for leveling, and bonded to give the greatest degree of strength.

Measurements and Payments.

Section No. 170. Rubble stone masonry shall be measured in place in the work

and to the lines ordered by the Engineer, and it shall be paid for as herein stipulated under Schedule Item 8 if with mortar, and under Schedule Item 8-A if dry.

Other Masonry.

Section No. 171. In case, during the progress of the work stone masonry of a different class than that specified above shall be required by the Engineer, the same shall be constructed according to specifications applicable to the best work of such class, and it shall be paid for as provided in Article XII.

SUBDIVISION 14.

Waterproofing.

General Limits of Waterproofing.

Section No. 172. In general, waterproofing of the structure will be limited to the roof between stations and to those surfaces near ground water or mean high water if ground water level is found for any reason to be below mean high water. At other places free drainage shall be provided by pipe drains, hollow tile or broken stone.

At Stations.

At stations the roof and sidewalls also shall be waterproofed.

Protective Masonry.

Section No. 173. The protective masonry shall be concrete, common bricks or hollow terra cotta blocks as directed, laid and paid for as herein elsewhere provided, and shall be not less than four (4) inches in thickness.

Laid Against Sheeting.

Section No. 174. In places where permanent sheeting is placed at the waterproofing line, the waterproofing, if permitted by the Engineer, may be applied against the sheeting.

Surfaces to Be Made Smooth.

Section No. 175. All surfaces to which waterproofing is to be applied shall be made as smooth as possible; on these surfaces there shall be spread hot melted pitch in a uniformly thick layer; on this layer of pitch shall be laid a treated woven fabric of such material as may be approved by the Engineer; this process shall be repeated until such number of layers as may be required by the Engineer have been placed and a final coat of pitch shall then be applied.

"Ply" Defined.

Section No. 176. The term "ply" as used in these specifications shall mean a layer of treated woven fabric (except the dry-ply), both sides of which shall be coated with pitch at the time of laying.

Number of Plies.

Section No. 177. The number of plies of waterproofing over the roof between stations shall in no case be less than three (3), except as hereinafter provided where brick laid in asphalt mastic is used.

At Stations.

On the sidewalls at stations the same conditions as in the preceding paragraph shall apply.

Brick in Asphalt Mastic.

Section No. 178. On the sides and bottom of the structure below a line two (2) feet above ground water, or, if ground water is below mean high water level, then two (2) feet above mean high water, one (1) ply of waterproofing, as described above, shall be used with one or more layers of brick laid in asphalt mastic; the number of layers of brick to be determined by the Engineer.

In any case where brick laid in asphalt mastic is not used, the number of plies shall be as local conditions require and as directed by the Engineer.

At Stations.

The requirements in the preceding paragraphs of this section likewise shall apply to the roof of the structure within station limits and over the tracks passing through the station within said limits.

Quality of Brick.

Section No. 179. The quality of brick shall be the same as provided in Subdivision 12. The brick shall be properly dried and shall be heated before laying.

Measurements and Payments.

Section No. 180. Brick in asphalt mastic will be measured in place to the lines ordered by the Engineer, and will be paid for at the price herein stipulated. Schedule Item 16.

Ply Substituted for Brick in Asphalt.

Section No. 181. Six (6) plies of waterproofing may be substituted for brick in asphalt mastic, if approved by the Engineer, and will be paid for as provided for fabric waterproofing.

Asphalt Mastic.

Section No. 182. Asphalt mastic shall contain not less than one-third (1/3) asphalt, the other ingredients to be sand and limestone dust or sand and cement. The ingredients are to be in proportions governed by local requirements and weather conditions. In melting and mixing the mastic its temperature shall not exceed 350 degrees Fahr. All packages containing asphalt shipped to the work must be distinctly labeled with the manufacturer's name and the brand or number of the mixture.

Leaks Stopped.

Section No. 183. Any masonry that is found to leak at any time prior to the completion of the work and final acceptance thereof by the Commission shall be cut out and the leak stopped, at the sole expense of the Contractor.

Pitch.

Section No. 184. Pitch shall consist of either coal-tar or asphalt as the Engineer shall elect; it must be delivered on the work in packages that are plainly marked with the manufacturer's brand, indicating the grade and quality of the material.

Quality of Coal-Tar Pitch.

Section No. 185. The coal-tar pitch shall be straight-run pitch containing not less than twenty-five per centum (25%) and not more than thirty-two per centum (32%) of free carbon, which will soften at approximately 70 degrees Fahr., and melt at 120 degrees Fahr., being a grade in which distillate oils distilled therefrom shall have a specific gravity of 1.05.

Asphalt.

Section No. 186. The asphalt used shall consist of fluxed natural asphalt, or asphalt prepared by the careful distillation of asphaltic petroleum, subject to the approval of the Engineer, but however prepared, it shall comply with the following requirements:

The asphalt shall contain in its refined state not less than ninety-five (95) per centum of bitumen soluble in cold carbon disulphide, and at least ninety-eight and one-half (98½) per centum of the bitumen soluble in cold carbon disulphide, shall be soluble in cold carbon tetrachloride. The remaining ingredients shall be such as not to exert an injurious effect on the work.

The asphalt shall not flash below 350 degrees Fahr. when tested in the New York State Closed Oil Tester. When twenty (20) grams of the material are heated for five (5) hours at a temperature of 325 degrees Fahr. in a tin box two and one-half (2½) inches in diameter it shall not lose over five (5) per centum by weight, nor shall the penetration at 77 degrees Fahr. after such heating be less than one-half (½) of the original penetration.

The melting point of the material shall be between 150 degrees and 175 degrees Fahr., as determined by the Kraemer and Sarnow method.

The consistency shall be determined by the penetration which must be between 75 and 100 at 77 degrees Fahr.

A briquette of the solid bitumen of cross section of one square centimeter shall have a ductility of not less than twenty (20) centimeters at 77 degrees Fahr., the material being elongated at the rate of five (5) centimeters per minute. (Dow moulds.)

All tests herein specified must be conducted according to methods approved by the Engineer.

Penetrations indicated herein, refer to the depth of penetration in hundredth centimeters of a No. 2 cambric needle weighted to one hundred (100) grams at 77 degrees Fahr. acting for five (5) seconds.

Woven Fabric for Waterproofing.

Section No. 187. The fabric to be used shall be a woven fabric which shall have been treated with pitch before being brought on the work. The fabric and the material used in its treatment shall be approved by the Engineer.

Concrete to Be Dry.

Section No. 188. All concrete shall be dry before water-proofing is attached. If, in the judgment of the Engineer, it is impracticable to have the concrete dry, then there shall be first laid a layer of treated felt of approved quality, on the upper surface of which is to be spread the first layer of coal tar pitch or asphalt; the said layer of felt shall then be paid for as a dry-ply, Schedule Item 15 (i).

Each layer of pitch must completely and entirely cover the surface on which it is spread without cracks or blow holes.

Fabric Waterproofing to Be Carefully Laid.

Section No. 189. The fabric must be rolled out into the pitch while the latter is still hot, and pressed against it so as to insure its being completely stuck over its entire surface, great care being taken that all joints are well broken by overlapping, and that unless otherwise permitted, the ends of the rolls of the bottom layers are carried upon the inside of the layers on the sides, and those of the roof down on the outside of the layers on the sides so as to secure a full lap of at least one (1) foot. Especial care must be taken with this detail.

Precautions After Laying.

Section No. 190. When the finishing layer of concrete is laid over or next to the waterproofing material, care must be taken not to break, tear or injure in any way the outer surface of the pitch.

Skilled Labor to Be Employed.

Section No. 191. None but competent men, especially skilled in work of this kind, shall be employed to lay the waterproofing.

Measurements and Payment.

Section No. 192. Measurements will be made on the basis of actual area covered and the number of plies used; both as ordered by the Engineer, no account being taken of laps, and the waterproofing will be paid for at the prices stipulated in Schedule Item 15.

SUBDIVISION 15.

Steel and Iron.

Open Hearth Process.

Section No. 193. Steel shall be made by the open-hearth process.

Chemical and Physical Properties.

Section No. 194. The chemical and physical properties of finished material shall conform to the following limits:

Properties.	Structural Steel.	Rivet Steel.	Steel Castings.
Phos. (Max.)	.04%	.04%	.05%
Sulph. (Max.)	.05%	.04%	.05%
Mn. (Max.)	.60%	.60%	.80%
Si. (Max.)	.10%	.10%	.35%
Ult. Str.	60000±4000	50000±4000	65000 (Min.)
Yield Point (Min.)	55% Ult.	55% Ult.	35000
Elongation, Min. % in 8 inches	150000	150000	
	Ult. Ten. Str.	Ult. Ten. Str.	
Elongation, Min. % in 2 inches			20%
Fracture	Silky.	Silky.	Silky, or Fine granular
Cold Bends without Fracture	180° flat.	180° flat.	120° (d.=3t.)

Yield Point.

Section No. 195. The yield point shall be that strain beyond which the elongation ceases to be proportional to the weight imposed, and may be indicated by drop of beam. The speed of testing shall be governed by the Inspector.

Soundness and Finish.

Section No. 196. Sufficient discard shall be made to insure sound material free from piping or excessive segregation. The material shall be finished straight and smooth, and shall be free from all seams, flaws, cracks, defective edges, or other defects. Any imperfection which may develop during the progress of the work will be sufficient cause for rejection.

Steel Castings.

Section No. 197. Steel castings shall be true to pattern and free from injurious imperfections.

Standard Test Pieces.

Section No. 198. Sample pieces for tensile and bending tests of plates, shapes and bars shall be cut from such portions of the finished product of each melt as the Inspector may designate, and shall be stamped by him; they shall have both faces rolled and both edges milled to the usual form of a standard test specimen—one and one-half (1½) inches wide on a gauged length of nine (9) inches—or with both edges parallel. The area of the minimum section shall be not less than one-half (½) square inch.

Test for Angles.

Section No. 199. Angles three-quarters (¾) of an inch and less in thickness shall open flat, and angles one-half (½) of an inch and less in thickness shall bend shut, cold, under blows of a hammer, without sign of fracture. This test shall be made only when required by the Inspector.

Rivet Rods.

Section No. 200. Rivet rods shall be tested as rolled.

Test Pieces for Steel Castings.

Section No. 201. For steel castings the test piece shall be turned to a uniform minimum section of one-half (½) inch diameter, for a length of at least two and one-half (2½) inches. Specimens for bending shall be one (1) inch by one-half (½) inch in section.

Tests for Rivet Steel.

Section No. 202. Rivet steel, when nicked and bent around a bar of the same diameter as the rivet rod, shall give a gradual break and a fine, silky, uniform fracture.

Treatment of Test Specimens.

Section No. 204. For steel castings the number of tests will depend on the character and importance of the castings. Specimens shall be cut cold from coupons molded and cast on some portion of one or more castings from each melt. The coupons shall be annealed with the castings before being cut off.

Number of Tests.

Section No. 205. At least one tensile and one bending test shall be made from each melt of steel as rolled. In case steel differing three-eighths (¾) inch or more in thickness is rolled from one melt, a test shall be made from the thickest and from the thinnest material rolled. Rolled steel shall be tested in the condition in which it comes from the rolls.

Rejection at Shop.

Material which, subsequent to tests at the mills and its acceptance there, develops weak spots, brittleness, cracks or other imperfections, or is found to have injurious defects, will be rejected at the shop and shall be replaced by the manufacturer at his own cost.

Retests.

If the above tests do not fulfill the requirements of these specifications, duplicate tests may be made at the discretion of the Inspector, he selecting and stamping the duplicate test pieces. If these retests meet all the requirements, the melt shall be accepted.

Variation in Weight.

Section No. 206. A variation in weight or cross-section of any piece of steel of more than two and one-half (2½) per centum from that specified, shall be sufficient cause for rejection, except in case of sheared plates exceeding one hundred (100) inches in width, where the variation may be five (5) per centum.

Material Marked.

Section No. 207. Every finished piece of steel shall have the melt number and the name of the manufacturer stamped or rolled upon it. Bars for reinforcing concrete, rivet and lattice steel, and other small parts, may be bundled, with above marks on an attached metal tag.

Test Pieces and Facilities for Testing.

Section No. 208. The Contractor shall furnish, without extra charge, such standard test pieces as may be necessary to determine the uniform quality of the material and also the use of a reliable testing machine, with the necessary labor for testing.

Chemical Analyses.

Section No. 209. Chemical determinations of the percentages of carbon, phosphorus, sulphur and manganese shall be made by the manufacture from a test ingot, so taken, during the casting of each melt of steel as to fairly represent the melt. Two (2) copies of such analyses shall be furnished to the Engineer or his Inspector.

Mill Orders.

Section No. 210. The Engineer shall be furnished complete copies in triplicate of all mill orders, and no material shall be rolled nor work done before the Engineer has been notified so that he may arrange for the inspection.

The Engineer shall be furnished complete copies of shipping invoices in triplicate with each shipment. Each invoice shall show the scale weight of each individual piece.

Wrought Iron. Double Rolled.

Section No. 211. All wrought iron shall be double rolled, tough, fibrous and uniform in character. It shall be thoroughly welded in rolling and be free from surface defects.

Method of Testing.

Section No. 212. The methods specified for testing rolled steel shall apply generally to wrought iron. Standard test specimens shall show an ultimate strength of at least fifty thousand (50,000) lbs. per square inch, and an elongation of at least eighteen (18) per centum in eight (8) inches, with fracture wholly fibrous. Specimens shall bend cold with the fibre, through one hundred and thirty-five degrees (135°), without sign of fracture, with inner radius not to exceed the thickness of the piece tested. When nicked and bent the fracture shall show at least ninety (90) per centum fibrous.

Cast Iron.

Chemical Requirements.

Section No. 213. Cast iron shall be tough, gray iron made by the Cupola process and shall contain not more than six-tenths (0.6) per centum of phosphorous and not more than twelve one-hundredths (0.12) per centum of sulphur. No mill cinder iron, white or burnt iron or scrap of any kind will be permitted in the composition.

Test Bar.

Section No. 214. The quality of the iron entering into castings shall be determined by means of the "Arbitration Bar." This is a bar one and one-quarter (1¼) inches in diameter and fifteen (15) inches long, cast under the same circumstances as those which attended the casting of the full-sized piece. This bar shall sustain at the center, when resting upon two dull knife edges twelve (12) inches apart, a load of three thousand (3,000) pounds with a deflection of at least one-tenth (0.1) of an inch before rupture.

Number of Test Bars.

Two (2) sets of two (2) bars shall be cast from each heat; one set from the first and the other set from the last iron entering into the castings. Each set of two bars is to be made in a single mold.

True to Pattern.

Section No. 215. Castings must be sound, true to pattern, free from cracks, flaws, excessive shrinkage, and have smooth, clean surfaces. They must be neatly chiseled and wirebrushed before leaving the foundry. Castings which do not accurately conform to dimensions on the plans will be rejected. Each casting shall have its distinguishing letter or number cast on it at the place indicated on the plans.

Workmanship.

Quality.

Section No. 216. The workmanship shall be equal to the best practice in modern bridge works.

Shearing and chipping shall be neatly and accurately done and all portions of the work exposed to view neatly finished. All nuts exposed to view on the final structure shall be hexagonal. Lattice bars shall have neatly rounded ends, concentric with rivet holes.

Rods and Bars, Deformed Sections.

Section No. 217. Rods and bars to be used for reinforcing concrete shall be deformed as approved by the Engineer; plain bars will not be used.

Bent Rods.

Section No. 218. Bent rods shall be bent uniformly to template in a machine or press approved by the Engineer. They may be bent either at the shop or on the work. In special cases bending hot and annealing may be required.

Material Straightened in Shop.

Section No. 219. All material shall be straightened in the shop before being worked in any way, and again straightened after punching and before assembling, if required by the Engineer or Inspector.

Size of Rivets.

Section No. 220. The size of rivets called for on plans shall be understood to mean the actual size of the cold rivet before heating.

Rivet Holes.

Section No. 221. All holes shall be accurately spaced and punched. The diameter of the punch shall be not more than one-sixteenth (1/16) inch greater than the diameter of the rivet. The diameter of the die shall be as small as may be required to punch a clean hole.

Punching.

Section No. 222. Punching shall be accurately done. Drifting to enlarge unfair holes will not be allowed. If the holes must be enlarged to admit the rivet they shall be reamed. Poor matching of holes will be cause for rejection.

Sub-Punching and Reaming.

Section No. 223. Where sub-punching and reaming are required the punch used shall have a diameter not less than three-sixteenths (3/16) inch smaller than the diameter of the rivet. Holes shall then be reamed to a diameter not more than one-sixteenth (1/16) inch larger than the nominal diameter of the rivet. All reaming shall be done with twist drills after the material is assembled and firmly bolted together. The use of lubricants in reaming is not allowed.

Drilling.

Section No. 224. All material over seven-eighths (7/8) of an inch thick shall be drilled from the solid. Material over five-eighths (5/8) of an inch and not exceeding seven-eighths (7/8) of an inch in thickness shall be sub-punched and reamed.

Sheared Edges.

Section No. 225. Sheared edges of plates, exceeding five-eighths (5/8) of an inch in thickness in main members, shall be planed at least one-eighth (1/8) of an inch.

Burrs Removed.

Section No. 226. All burrs on rivet holes shall be removed.

Assembling.

Section No. 227. Riveted members shall have all parts well pinned up and firmly drawn together with bolts before riveting is commenced. Contact surfaces shall be painted.

Riveting.

Section No. 228. Rivets when driven shall completely fill the holes, and shall be machine driven wherever possible. They shall have full concentric heads or they shall be countersunk when so required. Rivet heads shall not be flattened to less than one-half (1/2) the diameter of the rivet on the line of the shank, unless countersunk. Loose, burned or otherwise defective rivets shall be cut out and replaced. In cutting out defective rivets great care shall be taken not to injure the adjacent material. If necessary they shall be drilled out.

Distances from center of rivet to edge of sheared plate shall be not less than 1¼" for ¾" rivets and 1½" for 7/8" rivets; distances from center of rivets to a rolled edge shall be not less than 1½" for ¾" rivets and 1¾" for 7/8" rivets. The minimum pitch for ¾" rivets shall be 2½" and for 7/8" rivets 2¾". When material is sub-punched and reamed the pitch for ¾" rivets may be made 2¼" and for 7/8" rivets 2½".

Use of Bolts.

Section No. 229. Generally the use of bolts instead of rivets will not be permitted, but when used in special cases the holes shall be reamed parallel, and the bolts turned to a driving fit, with the threads entirely outside of the holes. Washers not less than one-quarter (1/4) inch thick shall be used under the nuts. Bolts must be thickly coated with red lead paint before insertion, so as to seal the hole against moisture.

Templates.

Section No. 230. All holes for field rivets except those in connection of lateral and sway bracing shall be sub-punched and accurately drilled to an iron template, fitted with bushings, or reamed and match marked while the connecting parts are temporarily assembled in the shop. In case of splices of upper chords or other compression members, the abutting ends shall be brought to a forcible bearing.

Finished Members.

Section No. 231. Finished members shall be true and free from twists, bends or open joints. Ends of floor beams and stringers shall be faced square and true.

Rods Upset.

Section No. 232. Rods and bars which are to receive a thread shall be properly upset. Where threads are cut on steel, they shall be properly filleted.

Annealing.

Section No. 233. Steel, except in minor details, which has been partially heated,

shall be properly annealed. All steel casting shall be annealed. Welds in steel will not be allowed.

Abutting Surfaces Faced.

Section No. 234. All abutting surfaces shall be accurately planed or faced, so as to insure even bearings, except where otherwise noted on the plans.

Stiffeners—Splice Plates and Fillers.

Section No. 235. Stiffeners of plate girders shall be faced on the ends and brought to a true contact bearing with the flange angles. Web splice plates and fillers under stiffeners shall be cut to fit within one-eighth (1/8) of an inch of flange angles.

Web Plate Projections.

Section No. 236. Web plates must not project beyond the flange angles or be more than one-quarter (1/4) inch back of face of angles.

Bed Plates Planed.

Section No. 237. Expansion bed plates shall be planed true and smooth. The finishing cut of the planing tool shall be fine and correspond with the direction of expansion.

Details Boxed.

Section No. 238. Nuts, bolts, rivets and other similar material shall be boxed.

Weight Marked.

Section No. 239. The scale weight shall be plainly marked upon every piece and box.

Inspection.

Section No. 240. Free access and information shall be given by the Contractor for a thorough inspection of material and workmanship.

Contractor Responsible.

Section No. 241. The Inspector shall make detailed reports of his inspection to the Engineer and may notify the Contractor of any defects in the material or workmanship, but all acceptances made by him shall be considered temporary, and his inspection shall in no way relieve the Contractor of full responsibility for the character and accuracy of the work until its completion and final acceptance by the Engineer.

Errors in Drawings.

Section No. 242. The Contractor shall be responsible for all errors which can be discovered by checking or examining the plans.

Inspector's Office.

Section No. 243. The Contractor shall furnish for the use of the Inspector a suitably equipped office at the mills and at the shops.

Loading and Shipping.

Section No. 244. All parts shall be carefully loaded and protected from injury during transportation by such means as will be satisfactory to the Inspector. After delivery of materials at the work the Contractor will be required to store the same on skids at least twelve (12) inches above the ground and to keep the same in good condition. Any piece showing injurious effects of rough handling at any stage until the final acceptance of the work may be rejected.

Payments for Steel.

Section No. 245. The prices to be paid for steel are as herein provided in Schedule Items 19, 20 and 21. Schedule Item 20 includes all single beams or shapes, whether milled or otherwise, with connections or other end details. These prices include the cost of material delivered and erected in the work. These prices are to include also the cost of all necessary cleaning and painting (where painting is required) and of all other incidental work. The quantity of metal to be paid for shall be the number of pounds actually placed in accordance with the drawings or orders.

Payments for Miscellaneous Castings.

Section No. 246. For miscellaneous castings, but not including castings for sewer work or pipes, payment will be made at the price stipulated in Schedule Item 25, which price includes the cost of material delivered and erected in the work, also the cost of all necessary cleaning and painting (where painting is required) and of all other incidental work, labor and material.

Special Wire Forms.

Where Placed.

Section No. 247. Special wire forms, of a type and weight to be approved by the Engineer, are to be furnished and placed around the flanges of beams and girders which are to be completely encased in concrete and at such other places as may be required, in order to hold the concrete in place.

Payment.

Section No. 248. Special wire forms, wherever used, will be paid for as stipulated in Schedule Item 26, which price is deemed to include the material in place and all work necessary and incidental thereto.

SUBDIVISION 16.

Painting.

Number of Coats.

Section No. 249. All metal work, excepting as otherwise herein provided, shall be painted with three (3) coats of paint, as follows: shop coat, second coat and finishing coat.

The finishing coat will be a gray paint if adjacent to concrete, otherwise a black paint.

Inspection.

Section No. 250. Paint shall be subject to inspection at the place of manufacture and to such tests as may be ordered by the Engineer. The Engineer shall have access, at all times, to all places to inspect the methods of manufacture, and shall have liberty to inspect the daily laboratory records and analyses of all such paints as are subject to his inspection.

The Contractor shall furnish all facilities required for the proper inspection of the paint and its manufacture. All containers will be sealed by the Inspector at the time of inspection.

Proportions by Weight.

Section No. 251. All proportions mentioned in this specification are by weight except when otherwise noted.

Formulae.

Section No. 252. The paint formulae are as follows:
Paint Formulae.

	Shop Coat.	Second Coat.	Finishing Coat.	
			Gray.	Black.
Pigment	500 pounds	49%	57%	26%
Vehicle	16½ gal.	51%	43%	74%

Vehicle Formulae.

	Second Coat.	Finishing Coat.	
		Gray.	Black.
Raw linseed oil 2/3 by volume.....	90%	92%	92%
Boiled linseed oil 1/3 by volume.....	..	..	..
Drier	10%	8%	8%

Pigment Formulae.

	Shop Coat.	Second Coat.	Finishing Coat.	
			Gray.	Black.
Red lead	100%	30%	..	25%
Red iron oxide	42%	..	..
Lampblack	5%	*..	50%
Magnesium silicate	10%	..	10%
Silica	13%	10%	15%
Sublimed white lead.....	60%	..
White zinc	30%	..

Weight.

The standard weight of second coat shall be 12 pounds 10 ounces, per gallon.
The standard weight of finishing coat (gray) shall be 14 pounds 6 ounces, per gallon.

* Use sufficient lampblack to make standard shade.

The standard weight of finishing coat (black) shall be 9 pounds 5 ounces, per gallon.

Preparation of Paint.

Section No. 253. The shop coat of paint shall be mixed as needed, in such quantities as can be used before it thickens in the container. Any paint which settles and thickens before use shall be rejected and a new paint mixed.

The second and finishing coats shall be furnished in a ready mixed form and shall be used without the subsequent addition of any material.

Allowable Variation.

All paints must be properly prepared, using only the specified materials in the proportions stated, with an allowable variation therefrom of not over two per centum (2%) in the quantity of any material therein. The paint must not vary more than four (4) ounces per gallon from the standard weight.

Raw Linseed Oil.

Section No. 254. Raw linseed oil shall conform to the specifications of the American Society for Testing Materials for the purity of raw linseed oil from North American seed, adopted August 25, 1913.

Boiled Linseed Oil.

Boiled linseed oil shall be made of pure linseed oil heated with lead and manganese salts and shall comply with the following requirements:

Specific gravity at 60° F., minimum	0.934
Iodine value (Hanus), minimum	175
Unsaponifiable matter, maximum	1.6%
Fatty acids, maximum	3%
Ash, maximum	0.4%
Moisture, maximum	0.5%
Flash point, minimum	527° F.
Bromine addition number, minimum	105
Bromine substitution number (30) minutes maximum	5
Foots, maximum	1.25%

When boiled linseed oil is flowed over a plate of glass and allowed to drain in a vertical position, it must dry free from tackiness in fifteen (15) hours at 70° F.

Drier.

The drier shall be a pure oil drier consisting of lead and manganese salts dissolved in linseed oil and thinned with turpentine as follows:

Manganese Dioxide.

15 pounds of manganese dioxide plus 10 pounds of varnish makers' red lead, to 50 gallons of oil, boiled to proper consistency and thinned with 50 gallons of turpentine.

Turpentine.

Turpentine shall conform to the proposed specification of the American Society for Testing Materials.

Red Lead for Shop Coat.

Section No. 255. Red lead for the shop coat shall be of the best quality, free from all adulteration and shall contain not less than 80% nor more than 90% true red lead (Pb₃O₄), not over 1% inert hearth materials (such as silica and alumina) and not more than 0.1% metallic lead; the remainder shall be pure lead monoxide (PbO). It must contain no organic coloring matter and when shaken up with water shall show no alkaline reaction. It shall be of such fineness that 99½% will pass through a standard 200 mesh sieve.

Red Lead for Second and Finishing Coats.

Red lead for the second and finishing coats shall be of the best quality, free from all adulteration and shall contain not less than 85% true red lead (Pb₃O₄), not over 1% inert earth materials (such as silica and alumina) and not more than 0.1% metallic lead; the remainder shall be pure lead monoxide (PbO). It must contain no organic coloring matter, and when shaken up with water shall show no alkaline reaction. It shall be of such fineness that 99½% will pass through a standard 200 mesh sieve.

Lampblack.

Dry lampblack must be absolutely neutral and contain at least 98%, by weight, of pure carbon. The tinting power of lampblack used in the finishing coat must be the same as the standard sample.

Magnesium Silicate.

Magnesium silicate shall be a finely ground material of crystalline structure and shall equal the standard sample.

Silica.

Silica shall be ground from rock crystal and water floated. It shall be 99% pure silica (SiO₂) and shall be of such fineness that 99% shall pass through a standard 200 mesh sieve. It shall equal the standard sample.

Red Iron Oxide.

Red iron oxide shall contain at least 85% ferric oxide, the remainder to consist of silicates. The oxide shall contain no soluble sulphates, no free acids, shall give a neutral reaction and shall contain not over 0.1% sulphur in any form. It shall be free from grit and shall equal the standard sample in shade, quality and tinting power.

Sublimed White Lead.

Sublimed white lead shall be a true basic sulphate of lead containing not less than 15% combined lead monoxide (PbO), not over 5% zinc oxide (ZnO), and shall contain not more than 0.075% free sulphur dioxide (SO₂). Sublimed white lead shall equal in whiteness, fineness, body and covering qualities the standard sample.

White Zinc.

White zinc shall be "American process," and shall contain at least 98%, by weight, oxide of zinc (ZnO), not more than 0.2% of sulphur in any form, nor more than 0.075% free sulphur dioxide (SO₂). White zinc shall equal in whiteness, fineness, body and covering qualities the standard sample.

Fineness, Second and Finishing Coats.

Section No. 256. The paint for the second and finishing coats shall be so finely ground that it will pass each of the following tests:

(a) When a small amount is placed upon a piece of glass and the glass placed in a vertical position, there shall be no separation of the oil from the pigments for at least one hour. This test is to be conducted at 70° F.

(b) Take a ¾ inch test tube and fill with pure raw linseed oil to a height of 3½ inches and add paint until the height of the oil is five (5) inches from the bottom. Cork, shake well and let stand in a vertical position for two (2) hours. The opaque mass must not have settled down more than ½ inch and there must be no separation of the coarser particles in the bottom of the test tube. This test is to be conducted at 70° F.

(c) At least 98% of the extracted pigment shall pass through a standard 200 mesh sieve.

(d) When rubbed with a spatula on a piece of glass there shall be no feeling of grittiness.

Standard Sieve.

Section No. 257. By standard 200 mesh sieve is meant the 200 mesh sieve described in the specifications of the American Society for Testing Materials for Portland Cement, adopted August 16, 1909.

Color.

Section No. 258. The shade of the gray finishing coat shall match the shade of the standard sample.

Drying.

The paint shall dry under normal conditions, dust free, in twelve (12) hours, and so as to be satisfactorily recoated in not less than twenty-four (24) nor more than forty-eight (48) hours.

Water.

The amount of hygroscopic moisture in the finished paint shall not exceed ½ of 1%.

Rosin.

There shall be no rosin in the paint as indicated by the Liebermann-Storch reaction.

Working Quality.

Section No. 259. The paint shall not liver nor curdle and shall cover properly and work freely under the brush. The pigment shall remain in suspension in a satisfactory manner.

Tests.

Section No. 260. Tests will be made against standard samples. Such analyses as required will be made by the Engineer.

Distance.

Due to the cost of inspection, the Contractor will be required to obtain paint

which is made within a reasonable distance from New York, and in as large quantities as practicable. By distance from New York is meant the distance by railroad of the paint factory from Manhattan Island. The maximum factory distance is shown in the following tables:

For quantities of less than 250 gallons made at one time, 25 miles.
For quantities of 250 to 500 gallons made at one time, 100 miles.
For quantities of 500 to 1500 gallons made at one time, 200 miles.
For quantities over 1500 gallons made at one time, 700 miles.

Standard Samples.

Samples of standard ingredients, and of the finished paints are on file in the office of the Engineer. Paints and their ingredients shall conform to these standard samples. The contractor shall submit separate samples of all ingredients intended for use in the paints, and upon approval of same, shall then submit two one pint samples of paint for approval.

In those details where no special instructions are given, the paint and its manufacture shall conform to the best accepted practice.

Original Packages.

All materials for shop coat shall be delivered, inspected and sampled in their original packages.

Shop Coat.

Section No. 261. All iron shall be scraped free from scale and rust, and receive one coat of red lead paint as herein specified, before leaving the shop. All surfaces which come in contact or are enclosed shall be painted before being assembled. All turned or faced surfaces shall receive a coat of white lead and tallow before leaving the shops. If the Engineer so directs, the shop coat will be omitted on members or parts of members to be buried in concrete.

Damaged Shop Coat to Be Renewed.

Where the shop coat has become damaged before or after erection, through any cause whatever, it shall be renewed with the same kind of paint as originally used, such renewal to be considered only as a part of the original shop coat.

Structural Steel and Rods.

Structural steel and rods to be imbedded in concrete shall be protected from the weather before being put in place, and shall be cleaned and scale and rust removed before being incased in the concrete. Rods shall not be painted.

Field Painting.

After erection the metal shall be thoroughly cleaned of all dirt, rust or scale by stiff wire brushes or sand blast, as directed, and afterwards dusted. The Engineer may require that all steel after cleaning shall be wiped with a cloth dipped in a mixture composed of one-half (½) benzine and one-half (½) turpentine. When the above mixture has practically dried but before becoming absolutely dry, the steel shall be thoroughly and evenly painted with the second coat prescribed herein. No paint shall be applied until the cleaning has been passed upon by the Inspector.

Finishing Coat, When Applied.

The finishing coat shall be applied at such time after the application of the second coat and before final acceptance of the work, as in the judgment of the Engineer shall be advisable. All steel work adjacent to concrete, such as flanges of roof beams, exposed surfaces of wall columns, shall be painted with the gray finishing coat. All other steel work shall be painted with the black finishing coat. The finishing coat will be applied between stations only; at stations a third coat will not be required under this contract.

Surfaces in Contact.

Section No. 262. Surfaces of exposed members inaccessible after erection, shall be cleaned and painted before erection.

Recesses.

All recesses that might contain water, or through which water could enter, must be filled with thick paint or a waterproof cement of ground skins before receiving final painting.

Surfaces Close Together.

All surfaces so close together as to prevent the insertion of a brush, must be painted thoroughly by using a piece of cloth, if necessary.

Workmanship.

Section No. 263. All paint shall be well brushed out so as to show a smooth even film of uniform thickness. Round brushes shall be used exclusively in applying paint, except that the Engineer may permit the use of flat brushes on large flat surfaces only.

Rainy or Freezing Weather.

Section No. 264. Painting in rainy or freezing weather or on wet or damp surfaces will not be permitted.

Payments.

Section No. 265. Payment for painting is included in the prices for steel and iron.

SUBDIVISION 17.

Drains and Pumps.

Railroad to Be Drained.

Section No. 266. Every part of the Railroad must, so far as possible, be so arranged that any water finding access thereto will be led automatically to the City sewers.

Floor of Railroad as Conduit.

Section No. 267. Where the Railroad is on an inclined gradient, and is constructed in dry, porous soil, the floor of the Railroad may be depended on to act as a conduit. At the bottom of the inclined gradient connections must be made with a sewer or with subdrains lying beneath the Railroad and draining into the sewers.

Sub-drains.

Section No. 268. Along such parts of the work where the soil is not porous, or where the floor of the Railroad cannot, in the judgment of the Engineer, be used as a conduit, there shall be laid, beneath the rail level and on a continuous descending gradient, drain pipes of vitrified salt-glazed stoneware. Such pipes shall be of the best quality, thoroughly and perfectly burnt, without warps, cracks or imperfections, well and smoothly glazed over the entire and outer surfaces and perfect in shape. These drain pipes shall be of such diameter not exceeding twelve (12) inches, as the Engineer may direct. Each drain shall be laid in the concrete or directly in the soil with tight or open joints, as directed, and in such manner and in such position as, in the opinion of the Engineer, local circumstances require.

Connections and Cross Drains.

Section No. 269. Where drain pipes connect with the City sewers, the junction shall be protected by suitable traps and back-pressure valves or gate valves where necessary, to prevent back rush of water or gas from the sewers. Connections with the Railroad shall be as necessity demands and all as directed by the Engineer. Cross drains to connect with the main drains will be placed at such places and in such manner as the Engineer shall direct; also vertical drains at the sides of the Railroad. These drains shall be of vitrified pipe or of cast iron as directed.

Broken Stone for Drainage.

Section No. 270. Broken stone shall be placed for the purposes of drainage, as indicated on the drawings or as required by the Engineer.

Sumps.

Section No. 271. At the low points of the grade of the Railroad where the same passes below the bottom of adjacent sewers there shall be constructed sumps connected with the sub-drains or the floor of the Railroad. Such sumps must be watertight, with a capacity of not less than eight hundred (800) gallons each.

Pumps.

Section No. 272. Adjacent to each sump a suitable enclosure shall be provided in which two (2) pumps shall be placed, each of which shall have ample capacity to remove all the water entering the sump at that point under ordinary conditions. These pumps shall be arranged to operate automatically. Under this contract the Contractor will furnish only the pumps required and set them in place as directed, including the necessary pipe and drainage connections between the sumps and sewers.

Capacity.

Section No. 273. If in the opinion of the Engineer the service requires it, each of these pumps shall be able to remove from the sump eight hundred gallons per minute.

Discharge to Sewers, Etc.

Section No. 274. The discharge of such pumps shall be into the City sewers, and all piping, valves, etc., in connection therewith, shall be installed as a part of this contract.

Payment for Drains.

Section No. 275. All drains shall be measured in place and the actual net length as laid for each class of drain will be paid for at the prices stipulated in Schedule

Items 17 and 17-A. These prices will be deemed to include providing and laying the pipe and all specials of any nature whatsoever such as bends, tees, wyes, hand-holes, etc., and all material necessary for jointing the same. Where back-pressure valves or gate valves are required the cost of setting the same will be included in the above, but the Contractor will be paid in addition the actual and necessary net cost of such valves plus ten (10) per centum.

Section No. 276. For broken stone for drainage, furnished and placed, Section No. 270, payment will be made as provided in Schedule Item 14.

Section No. 277. For pumps as prescribed in Section No. 272, including the pipe connections with sumps and sewers, the Contractor will be paid as provided in Article XII.

The station drainage also must be arranged for as prescribed in Section No. 269.

It will be necessary to lay soil pipes in the floors and walls of the stations. These pipes are to be cast-iron, "extra heavy." They will be placed in positions as shown on the drawings and will be paid for at the price stipulated in Schedule Item 34.

SUBDIVISION 18.

Sewers.

Section No. 278. All sewers and appurtenances shall be built of the materials, to the sizes and dimensions, on the lines and grades, at the depths, with the connections, and in the manner called for by these specifications and shown on the drawing.

Section No. 279. If, in the opinion of the Engineer, it is impracticable during the progress of the work to construct any sewers, manholes, or other appurtenances according to the contract drawings, owing to the presence of unknown subsurface structures or other contingencies, the Contractor shall construct such sewers, manholes or appurtenances in the location given by and according to the directions of the Engineer.

General Clauses Apply.

Section No. 280. The general clauses in this contract relating to excavation, backfilling, cement, mortar, masonry, waterproofing, piling, timber work of all kinds, care of streets and public places, maintenance of surface, subsurface and overhead structures, protection of persons and property, repaving or restoring of the surface of the street or other public places, responsibility of the Contractor, authority of the Engineer to examine and condemn materials, and the power of the Commission and the Engineer in all or any other respects to enforce this contract, apply to the construction and reconstruction of sewers, both along the route occupied by the Railroad and elsewhere, except as herein otherwise expressly provided.

Section No. 281. Should postponement or delay be occasioned by the precedence of paving or other contracts, which may be either let or executed by the Borough President, Commissioner of Water Supply, Gas and Electricity, or other heads of departments, either before or after the execution of this contract, on the line of the work, no claims for damages therefor shall be made or allowed; nor shall any claim for damages be made or allowed in consequence of the street or the sewers not being in the condition contemplated by the parties at the time of making this contract.

Size of Trenches.

Section No. 282. The trenches for sewers and basin culverts, in streets off the route of the Railroad, shall have vertical sides and shall be six (6) inches wider on each side than the greatest external width of the sewer or culvert, but shall be not less than three (3) feet in width.

In streets along the route of the Railroad the trenches shall be six (6) inches wider than the greatest external width of the sewer or its foundations, on the side farthest away from the subway, but in no case will a width be allowed greater than that specified for sewers off the line of the Railroad. Trenches shall be excavated to the depth and to the form of the sewer or its foundation. Payments for excavation will be based on the requirements as above.

Limit of Trench Opening.

Section No. 283. Not more than one hundred (100) feet of trench in sewers off the line of the Railroad shall be opened at any time in advance of the sewer already completed, unless by permission of the Engineer and then only for such distances as he shall specify.

Excavation Completed in Advance.

Section No. 284. The excavation of trenches shall be fully completed a sufficient distance in advance of the laying of the sewer, and the exposed end of the sewer shall in all cases be fully protected.

Trenches for Manholes and Receiving Basins.

Section No. 285. Where the foundation for a manhole or a receiving basin extends beyond the line of such manhole or receiving basin, the excavation required shall be to the lines of the smallest rectangle enclosing the full dimensions of the exterior of the foundation, and shall have vertical sides to the surface, but it shall, in all cases, be six (6) inches larger than the greatest external dimension of the manhole or receiving basin.

Foundations.

Section No. 286. Where the ground does not afford a sufficiently solid foundation, the trench shall be excavated to such increased depth as the Engineer may deem necessary, and this extra depth and all other irregularities in the bottom of the trench shall be filled up to the required level and form with such material and in such manner as the Engineer shall direct. If so directed, piles shall be driven and a timber or reinforced concrete foundation shall be constructed, as elsewhere provided in these specifications, to support the sewer.

Testing of Grades.

Section No. 287. When the trench is properly prepared, and before laying any sewer, the Contractor shall notify the Engineer, who will thereupon cause the grades for the sewer to be tested, and if correct the sewer shall then be laid in the presence of the Inspector, and no construction work shall be done in his absence.

Trenches to Be Kept Free from Water.

Section No. 288. The trenches shall be kept entirely free from water while the foundation and the masonry are being constructed or the sewer laid. In no case shall water be allowed to flow over the invert or foundation or through the sewer until the mortar is thoroughly set.

Gutters and Passageways to Be Kept Open.

Section No. 289. At all times, gutters shall be kept open for surface drainage, and the streets and sidewalks shall be kept clear and free for the passage of carts, wagons, carriages and pedestrians, and as otherwise provided in these specifications.

Cross-Walks, Sidewalks and Roadways to Be Kept Clear.

Section No. 290. Where any cross-walks or roadway is cut by the trench, it shall be temporarily replaced by a timber bridge with side railings, according to the direction and approval of the Engineer. The work shall at all times be conducted so as to cause as little inconvenience as practicable to the public.

Disposition of Paving Material.

Section No. 291. All curb, gutter, flagging, paving and macadam stones, necessary to be removed, which in the judgment of the Engineer are suitable to be used again, shall be stored in such places as the Engineer shall direct, or shall be removed as provided in these specifications; in all cases a passageway on the sidewalks and in the roadway shall be preserved free from obstructions.

Flow of Sewers to Be Maintained.

Section No. 292. The Contractor shall provide for the flow of all sewers, drains and water-courses interrupted during the progress of the work, and shall restore and make good all connections, and shall immediately cart away all offensive matter, in such manner and with such precautions as the Engineer may direct. All temporary house connections shall be made by closed iron pipes, with suitable provision for preventing leakage at points. Wooden troughs for such connections will not be permitted.

Quality of Brick for Sewers.

Section No. 293. In the construction of brick masonry none but the best quality of common brick burned hard entirely through, regular and uniform in shape and size and of compact texture, shall be used. They shall be culled as they are brought on the ground, and bats and bricks of improper quality are to be removed from the work. A limited number of bats may be used in manholes and closures, and in the outer ring of the sewers where more than two (2) rings of bricks are required.

How Laid.

Section No. 294. The bricks shall be properly wet immediately before laying. Every brick is required to be laid in a full joint of mortar, made as described in these specifications, on its bed, end and side, at one operation. In no case is mortar to be slushed or grouted in afterward. The bricks shall be neatly and truly laid, every second course to line, and the joints shall be carefully struck on the inside.

Racked Back or Toothing.

Section No. 295. All brick work, as it progresses, shall be racked back in courses, and in no case will it be allowed to be toothing, unless by special permission from the Engineer.

Brick or Stone Inverts.

Section No. 296. All inverts, or bottom curves, shall be formed from profiles accurately made according to the dimensions of the sewer, and correctly set according to the grades furnished. The masonry shall be allowed to set for twenty-four (24) hours before the arch is turned. Vitrified brick or granite paving blocks shall be used for the inner ring of the invert when required by the Engineer, and whenever so used they must be thoroughly jointed, so as to be water-tight along the inner surface of the sewer. The last course of the invert masonry below the springing line shall be laid as headers.

Brick Arches.

Section No. 297. The arches or upper curves shall be formed on strong centers of correct form, according to the sizes and shapes required, and keyed with stretchers in full joints of mortar. The extrados of the arch shall be plastered with mortar one (1) inch thick, mixed in the proportion of one (1) part of cement to two (2) parts of sand. The centers shall not be removed or withdrawn in less than thirty-six (36) hours, or until the work is thoroughly set, and until the filling in of the arch is properly put into place to a depth which is at least one (1) foot above the crown of the arch. The centers in all cases shall be struck and not drawn, so as not to crack or injure the work. Should any crack or settlement appear in the arch after the centers are removed, so much of the work as the Engineer may require shall be taken down immediately and replaced.

Spurs.

Section No. 298. Vitrified or cast-iron sewer pipes or spurs, equal in every respect to those described elsewhere in these specifications, and of a size required by the Engineer, but not less than six (6) inches interior diameter with hubs moulded for house connections, and of sufficient length to project at least four (4) inches beyond the exterior of the sewer, shall be built into the walls of brick sewers and at such an angle as indicated on the drawing, or as the Engineer may direct.

How Built in.

Section No. 299. Spurs shall be built in wherever similar house connections exist in the present sewer which is to be reconstructed under this contract, but in no case shall the distance be more than twenty (20) feet between spurs. In the case of the construction of new sewers where no sewers existed previously, except sewers crossing intersecting streets, they shall be built opposite each house, and where there are no houses, they shall be not more than fifteen (15) feet apart on each side of the sewer or at such frequent intervals as local conditions may require. They shall be set so that their inner ends shall be flush with the inner face of the sewer, at such height in the walls as the Engineer may direct, and each pipe shall be sealed on the outside with an approved earthen-ware cover set in mortar.

Iron Chain Spurs.

Section No. 300. Where the sewers to be built under this contract will be at a depth greater than thirteen (13) feet below the established grade of the street (or below the surface of the street where final grades have not been established), cast-iron chain spurs or bends, of the design shown on the drawings, not less than six (6) inches in diameter and of the weight of extra heavy soil pipe, shall be used unless otherwise ordered by the Engineer. Where house drains are to be connected to these spurs, extra heavy soil pipe and fittings shall be used for the riser between the spur and the house drain. Where the spurs are provided for future connections, risers of extra heavy soil pipe shall be placed in each spur and shall be brought to a point thirteen (13) feet below the established grade of the street, the end of which shall be sealed with an approved cover laid in cement mortar. The joints of this pipe shall be packed, leaded and caulked in accordance with these specifications for laying water-mains.

Under Another Structure.

Section No. 301. Wherever the sewer passes under another structure, extra heavy soil pipe shall be laid from the spur to the outside of such structure, brought up to a point thirteen (13) feet below the established grade of the street, caulked and sealed as provided above. All pipes passing under such structures shall be laid in concrete.

Concrete May Be Substituted for Brick.

Section No. 302. If, during the construction of the sewers, it is deemed advisable to interchange concrete and brick, the Contractor may, with the approval of the Engineer, build such sewers of either kind and quality herein specified.

Steel Bars Used if Ordered.

Section No. 303. Concrete sewers shall be reinforced with steel bars, if so indicated on the drawings or directed by the Engineer.

Profiles and Inverted Centers for Inverts.

Section No. 304. Proper profiles for the concrete inverts shall be set up at the required distances, and the concrete for the bottom and invert of the sewer shall be deposited in place and rammed and worked down to the required shape. The concrete for the bottom and invert, if so directed, shall be placed in alternate lengths extending between every other pair of profiles, so that opportunity may be given to properly work the concrete in place.

Invert to Be Protected.

Section No. 305. The concrete of the invert shall be protected during the progress of the work with planking, or by such other suitable methods as the Engineer shall direct and for so long a time as he may require.

Forms, Moulds, Etc.

Section No. 306. Suitable forms or moulds, of the size and design to be approved by the Engineer, shall be provided by the Contractor to support the concrete of the sidewalls and roof while the same is being rammed into the permanent work.

Defective Work.

Section No. 307. If any void or irregular or defective work is discovered upon removing the forms or moulds, such void or work shall be cut out and filled with a rich concrete or mortar mixed in such proportions and of such materials as provided elsewhere in these specifications.

Joints.

Section No. 308. No joints between different sections of the walls of a sewer shall, in any case, be a straight line, but shall always be stepped or toothing, so as to give a broken joint in the manner to be approved by the Engineer.

Spur Pipes, Branches, Etc.

Section No. 309. In so far as they will be applicable to sewers constructed of concrete, the provisions and requirements for spurs, branches, etc., in brick sewers shall be understood to govern in such construction.

Vitrified Pipe Sewers—Quality of Pipe.

Section No. 310. Tile pipe sewers shall be built of vitrified, salt glazed stone-ware pipe, with extra deep and wide sockets and corrugated spigot ends. The pipe shall be of the best quality, thoroughly and perfectly burnt, without warps, cracks or imperfections, well and smoothly glazed over the entire inner and outer surfaces and perfect in shape. The pipe shall be subject to all tests ordered in conformity with any requirements of the Bureau of Sewers of the Borough in which the work is located, at any time previous to its being used.

Dimensions.

Section No. 311. The size of the pipes shall be designated by their interior diameters. Each pipe shall be a true cylinder, of even thickness throughout, and shall conform to the following scheduled dimensions:

Double Strength Tile Pipe; Extra Deep and Wide Sockets.

Diameter.	Thickness of Shell.	Depth of Socket.	Length of Plain, Straight Pipe.	Weight of Pipe Per Foot.	Annular Space.
6 inches	5/8 inch	2 1/2 inches	2 feet	16 pounds	5/8 inch
8 inches	3/4 inch	2 3/4 inches	3 feet	25 pounds	5/8 inch
10 inches	7/8 inch	2 3/4 inches	3 feet	37 pounds	5/8 inch
12 inches	1 inch	3 inches	3 feet	45 pounds	5/8 inch

Diameter.	Thickness of Shell.	Depth of Socket.	Length of Plain, Straight Pipe	Weight of Pipe Per Foot.	Annular Space.
15 inches	1 1/4 inch	3 inches	3 feet	75 pounds	5/8 inch
18 inches	1 1/2 inch	3 1/4 inches	3 feet	118 pounds	5/8 inch
20 inches	1 3/4 inch	3 1/2 inches	3 feet	148 pounds	5/8 inch
22 inches	1 7/8 inch	3 3/4 inches	3 feet	157 pounds	5/8 inch
24 inches	2 inches	4 inches	3 feet	190 pounds	5/8 inch

"Specials."

Section No. 312. All "special" vitrified pipe shall conform to the dimensions given for plain, straight pipe.

Spur Pipes.

Section No. 313. Pipes having spurs not less than six (6) inches in diameter with hubs moulded thereon for house connections shall be furnished and laid at such points as indicated on the drawings or as directed by the Engineer, and when not immediately used, they shall be sealed on the outside with approved vitrified earthenware covers set in mortar.

Risers.

Section No. 314. The provisions for risers on brick sewers shall also apply to pipe sewers.

Pipe Sewers; How Laid.

Section No. 315. All pipes shall be laid in concrete cradles of the required form and dimensions. The minimum thickness of concrete under the outside of the shell, or barrel, shall be six (6) inches. The first layer of concrete shall be for the full width of the cradle, and deposited continuously to the height of the outside bottom of the shell of the pipe; before the concrete has set the pipe shall be firmly bedded therein true to line and grade and the remainder of the concrete immediately deposited and carefully tamped in such a manner as to avoid disturbing the sewer. The ends of the pipes shall abut against each other and in such manner that there shall be no shoulder or unevenness of any kind along the bottom half of the sewer on the inside. Unless otherwise ordered, not less than fifteen (15) feet of pipe shall be laid at any one time, in any one length of trench, and it shall be exposed for at least twenty-four (24) hours for inspection.

Joining Hub and Spigot Pipes.

Section No. 316. Before inserting the spigot end of the pipe into the hub or socket, the lower half of each socket shall be plastered on the inside with a layer of cement mortar mixed in the proportion of one (1) part of cement to one and one-half (1 1/2) parts of sand and of a sufficient thickness to bring the inverts of the abutting pipes flush and even with the established flow line. After pipes are fitted, the space between the inside of the upper half of each socket and the outside of the entering pipe shall be filled with cement mortar, mixed as above specified, and the outside of the joint shall be thoroughly sealed with the same kind of mortar and the joints carefully wiped to a smooth bevel outside, and all mortar that may be left on the inside of the pipe must be thoroughly removed and the inside of the pipe left clean and smooth throughout.

The ends of pipes which enter masonry shall be neatly cut to fit the face of the masonry. When directed, such cutting shall be done before the pipes are built in.

Iron Pipe Sewers.

Section No. 317. Sewers of iron pipe, of the quality and laid in the manner described elsewhere in these specifications for the laying of water mains, shall be laid wherever indicated on the drawings or at such places as the Engineer shall direct.

Special Castings.

Section No. 318. Wherever such pipes are laid through vaults, they shall, when required by the Engineer, be provided with special castings for manholes, which shall be fitted with a cover bolted on so as to make an air-tight joint, according to the drawings to be furnished by the Engineer.

Ventilation.

Section No. 319. Whenever, in the opinion of the Engineer, it becomes necessary to provide ventilation for sewers under other structures, iron pipe shall be laid from the sewer to the surface of the street and fitted with proper gratings according to the drawings to be furnished by the Engineer.

Connections.

Section No. 320. All existing sewers, culverts, drains and house connections intercepted by the proposed sewers, culverts or receiving basins shall be connected with the new work by proper curves and grades and in such manner as the Engineer shall direct; and all drains, basins or culverts rendered unnecessary or becoming disused by the work herein contemplated shall be filled in and made solid with good, wholesome earth in the manner directed. Provision shall also be made for the connection of future sewers or basins by constructing brick spurs or inserting vitrified pipe at the points indicated on the contract drawings and at other points as the Engineer may direct. These connections shall be closed with bulkheads not less than eight (8) inches in thickness and of the quality specified for brick masonry.

Fresh Work to be Protected.

Section No. 321. All fresh work shall be carefully protected from injury in every way. No wheeling or walking will be allowed on it and any portion injured must be relaid by the Contractor; no walking or working over the pipes after they are laid, except as may be necessary in tamping the earth and backfilling, will be allowed until there is at least two and one-half (2 1/2) feet of earth over them.

Pipes to be Kept Clean.

Section No. 322. The interior of pipe sewers shall be carefully freed from all dirt, cement and superfluous material of every description as the work progresses, for which purpose a disc, mould or plate, attached to a rod sufficiently long to pass two (2) joints from the end of the pipe last laid, shall be continuously worked through.

Exposed Ends of Pipes to be Protected.

Section No. 323. The exposed ends of pipe sewers shall, in all cases, be protected with a board or other stopper carefully fitted to the pipe, to prevent earth or other substances from washing in, and in no case shall brick or stone be used for that purpose.

Manholes.

Section No. 324. The masonry of manholes shall be carried up so that the top of the iron head when set shall be at the level of the established grade of the street at that point or to such height as the Engineer may direct, and from templates correctly made and set at top and bottom, between which no less than eight (8) lines shall be drawn. Where manholes are not built to the established grade of the street, they shall be covered, when necessary, by selected bluestone slabs eight (8) inches in thickness, to support the manhole heads. All joints shall be neatly struck and pointed on the inside. Each manhole shall be plastered thoroughly on the outside with cement mortar one (1) inch in thickness, mixed in the proportion of one (1) part of cement to two (2) parts of sand.

Foundations.

Section No. 325. The foundations for manholes shall be of concrete or masonry of the kind indicated on the drawings and shall be not less than twelve (12) inches below the invert elevation of the sewer, except as otherwise indicated on the drawings. When foundation additional to that indicated on the drawings is required, it shall be built as directed by the Engineer.

Pipe Connections.

Section No. 326. Sewer pipes shall be built in and trimmed, when necessary, so as to be flush with the inner face of the manhole, and an arch, laid in cement mortar, shall be turned over the pipe.

Vitrified Bricks or Granite Blocks.

Section No. 327. The invert shall be built of vitrified brick, granite paving blocks or concrete masonry, as indicated on the contract drawings.

Use of Bats.

Section No. 328. A reasonable number of bats not smaller than half bricks may be used in the construction of manholes or receiving basins, provided all interstices are thoroughly filled with mortar.

Steps.

Section No. 329. Standard steps of good quality of galvanized wrought iron, of the size, length and shape required for steps, shall be built into the interior sides of all manholes at a distance apart of not more than fifteen (15) inches vertically and they shall be so arranged that the lowest step shall be not more than two (2) feet above the bench at the bottom of the manholes nor more than two (2) feet above the invert of the sewer where there is no bench. Each manhole head shall be cast with a wrought-iron step on the inside, when directed by the Engineer.

Bluestone.

Section No. 330. Hammer-dressed bluestone shall be furnished and laid of the form and thickness required as indicated on the drawings or as otherwise directed.

Manhole Heads and Covers.

Section No. 331. A cast-iron manhole head and cover of the quality specified for cast iron, and except in special cases, of the pattern adopted by the President of the Borough in which the work is located, and in dimensions, weight and all other respects satisfactory to the Engineer shall be fitted on a bed of mortar to each of the above described manholes. Manhole heads and covers which do not conform to these specifications shall be removed at once from the work.

Perforations.

Section No. 332. Covers to be used on manholes in the street shall be perforated. Those used on sidewalk manholes shall be tight-fitting, without perforations.

Weights.

Section No. 333. Each manhole head and cover shall have its weight distinctly marked upon it with oil paint. The following shall be allowed as the minimum and maximum weights:

Street manhole heads, 475 to 500 pounds;
Street manhole cover, 135 to 150 pounds;
Sidewalk manhole head, 300 to 310 pounds;
Sidewalk manhole cover, 100 to 110 pounds.

Noiseless Heads and Covers.

Section No. 334. When the pavement of the street is asphalt or wooden block, the manhole shall be fitted with a noiseless head and cover, to be approved by the Engineer, where new heads and covers are necessary.

Sealed Heads in Vaults.

Section No. 335. All manholes in vaults or other structures shall be provided with sealed manhole heads and covers according to the design indicated on the drawings.

Emergency Manholes.

Section No. 336. Where a sewer crosses under the Railroad, emergency manholes shall be provided when directed by the Engineer and according to drawings to be furnished by him.

Manholes to be Completed.

Section No. 337. Manholes shall in all cases be fully and completely built and fitted with their covers as the work progresses, and the sewers shall not be laid beyond or in advance of any uncompleted manhole.

Receiving Basins.

Section No. 338. Receiving basins shall be built as located on the drawings or as the Engineer shall direct and in accordance with the drawings to be furnished. Each portion of the basin shall be built to the size and of the materials designated on said drawings and shall be thoroughly plastered, both inside and outside, with cement mortar in the proportion of one part of cement to two parts of sand.

Foundations.

Section No. 339. The foundations for receiving basins shall be of concrete or masonry of the kind indicated on the drawings and shall extend not less than twelve (12) inches below the finished floor of the basin, except as otherwise indicated on the drawings. When additional foundation is required, it shall be built as directed by the Engineer.

Stone Flooring.

Section No. 340. The flooring shall be of hammer-dressed North River bluestone flagging, not less than three (3) inches thick, in not more than two (2) pieces, and shall be well set in full bed of mortar and rammed into place. The floor may be finished with cement mortar mixed in the proportion of one (1) part of cement to one (1) part of sand if so directed by the Engineer. The mortar shall be spread, while fresh, upon the concrete base and before the latter shall have reached its first set; it shall be in such quantity that after thorough manipulation it shall be one (1) inch in thickness.

Headstone and Gutter Stone.

Section No. 341. Where head stone and gutter stone are required they shall be of sound, durable granite of the dimensions indicated on the drawings, hammer dressed to an even surface and cut to the satisfaction of the Engineer. Cast-iron basin heads and gutter pieces of the design indicated on the drawings shall be set instead of the above when required.

Cast-Iron Cover.

Section No. 342. A cast-iron cover of approved pattern weighing not less than eighty (80) nor more than ninety-five (95) pounds shall be fitted to the opening in the head stone.

Grate Bar.

Section No. 343. A grate bar made according to the drawings shall be fastened solidly into the said head stone in the manner indicated.

Cast-Iron Trap.

Section No. 344. A cast-iron trap of the form and dimensions indicated on the drawings free from imperfections, and properly coated with coal-tar pitch varnish shall be furnished and built into place as directed by the Engineer.

Joints.

Section No. 345. The joints shall be tightly fitted with an oakum gasket or with cement mortar if so directed.

Iron Steps.

Section No. 346. Galvanized iron steps of the same design required for manholes shall be built into the walls.

Culvert Pipe.

Section No. 347. The culvert pipe for connections with sewers shall be twelve (12) inch vitrified pipe unless otherwise indicated on the drawings, and of the kind and quality previously described, and shall be laid, in all cases, in a concrete cradle of the form and dimensions required for pipe sewers in accordance with the directions of the Engineer. In case it becomes necessary to connect any basin already built with the work to be constructed, so much of such culverts as in the opinion of the Engineer may be necessary shall be taken up and rebuilt or relaid with vitrified pipe, or brick as the case may be, in the manner described above and reconnected in a straight line from the basin to the sewer.

Flush Tanks.

Section No. 348. Automatic flush tanks of a type approved by the Engineer shall be built where indicated on the drawings or where directed by the Engineer.

Waterproofing.

Section No. 349. Whenever, in the opinion of the Engineer, it is necessary to waterproof a sewer, chamber or receiving basin, or its appurtenances, it shall be done as indicated on the drawings or as directed by the Engineer and in the manner described elsewhere in these specifications.

Mortar.

Section No. 350. All masonry shall be laid in Portland cement mortar of the quality described in these specifications. It shall be mixed in the proportion of one (1) part of cement to two (2) parts of sand, excepting as otherwise specially provided.

Concrete.

Section No. 351. All concrete for sewers shall be made in the proportion of one (1) part of cement to two (2) parts of sand and four (4) parts of stone of the quality described in Subdivision 11.

Paving.

Section No. 352. On the completion of each section of one hundred feet of sewer, the sidewalks and roadways shall be restored as provided under Subdivision 22.

Permit for Connections.

Section No. 353. The Commissioner of Public Works shall have the right to connect any sewer or sewers with the sewers herein described or to grant permits to any person or persons to make connections therewith at any time before it is finally completed, and the Contractor shall not interfere with or place obstructions in the way of such person or persons as may be employed in building such new sewer or sewers or in making such connections. This is not to be construed, however, as permitting the introduction of storm water or sewage into any sewer being constructed under this contract before its final completion.

Thoroughly Cleaned.

Section No. 354. During the progress of the work, and until the entire completion and final acceptance thereof, the sewers, drains, basins, culverts and connections shall be kept thoroughly cleaned throughout, and left clean, and the drainage of any old sewer that may be taken up or intercepted shall be provided for and taken care of by the Contractor, all at his own expense.

Payment for Sewers.

Section No. 355. Payment for sewers will be made for sewer complete at the prices stipulated in Schedule Items 37 to 41, inclusive, 45 and 54-A, except as is hereinafter specifically provided in Section No. 361 with respect to cast-iron pipe sewers and other sewer construction for which no prices are provided in the Schedule of Unit Prices on a lineal foot basis. The price for each class of sewer as stipulated in Schedule Items 37 to 41, inclusive 45 and 54-A is per lineal foot of sewer complete and includes compensation for all the work, labor and material applicable thereto as given in Sections Nos. 278 to 354, inclusive, and as otherwise provided in this contract and as indicated on the drawings, except as is specifically provided in Sections Nos. 356, 357, 358 and 359.

Excavation.

Section No. 356. In addition to the price for completed sewer, as above provided, excavation will be paid for at the price stipulated for in Schedule Item 2-A (which price shall include compensation for all the matters referred to in Section No. 92), on the basis of size of trench stipulated in Sections Nos. 282 and 285. Payment for street surface restored shall be as provided in Schedule Item 30.

Steel Beams and Reinforcing Rods.

Section No. 357. Where steel beams or reinforcing rods are required and ordered, such beams and rods will be paid for, in addition to the price stipulated for the sewer, at the price stipulated for furnishing and placing such material and all work incidental thereto in Schedule Item 20 or 21.

Automatic Flush Tanks.

Section No. 358. Where automatic flush tanks are built as provided in Section No. 348 they will be paid for as provided in Article XII.

Waterproofing.

Section No. 359. Where waterproofing is required and placed in accordance with Section No. 349 it will be paid for at the price stipulated in Schedule Item 15 or 16.

Cast-iron Pipe.

Section No. 361. All cast-iron pipe sewers wherever built and all other sewer construction for which no prices are provided in the Schedule of Unit Prices on a lineal foot basis will be paid for at the prices stipulated in the Schedule of Unit Prices for the various classes of work and materials entering into the construction of such cast-iron pipe sewers or of such other sewer construction.

Payment for cast-iron sewer pipe used in the construction of cast-iron pipe sewers will be made at the prices stipulated in Schedule Items 42 and 43.

Manholes and Receiving Basins.

For all manholes or receiving basins constructed in connection with cast-iron pipe sewers or other sewers for which no prices are provided in the Schedule of Unit Prices on a lineal foot basis, the cast-iron, wrought iron or steel furnishings (except pipes), will be paid for at the price stipulated in Schedule Item 25-C, which item, however, is applicable only to the class of work covered by this section.

All extra heavy soil pipe for drains and connections made necessary by the construction of cast-iron pipe sewers or other sewer construction for which no prices are provided in the Schedule of Unit Prices on a lineal foot basis will be paid for at the price stipulated in Schedule Item 17-A.

House Connections.

Section No. 362. Compensation for maintaining, supporting or constructing all house or other drainage connections made necessary by the construction of cast-iron pipe sewers or other sewer construction for which no prices are provided in the Schedule of Unit Prices on a lineal foot basis is included in the prices stipulated in the Schedule for the several classes of work and materials entering into the construction of such cast-iron pipe sewers and of such sewer construction.

Sewers Under Station Platforms.

Wherever a sewer passes under a station or station platform, all the requirements with respect to extra heavy soil pipe, special manhole castings, ventilating pipes, and sealed manhole covers, as included in Sections Nos. 301, 318, 319 and 335 respectively, apply in every respect.

SUBDIVISION 19.

Requirements for Pipes.

General.

Section No. 363. Whenever it is necessary to relay any water main, all new material required for the same shall be of the quality and laid in the manner specified below, and subject to the various clauses of these specifications applicable thereto.

Pipes to Be Cylinders.

Section No. 364. The pipes shall be circular cylinders, with the inner and outer surfaces concentric, and of the full interior diameter required.

Hub and Spigots.

Section No. 365. The hub or socket and the spigot end shall be shaped in exact conformity with the standards of the Department of Water Supply, to be furnished by the Commission, and will be tested by circular gauges.

Workmanship.

Section No. 366. The seat or shoulder of the socket and the end of the spigot shall be straight and even, and at right angles to the axis of the pipe, so as to make a smooth, tight joint. Special care will be required in making the sockets and spigots to conform to the drawings and all pipes will be rigorously inspected at these points. No pipe will be received whose eccentricity at either the spigot or socket end exceeds one-eighth ($\frac{1}{8}$) of an inch, or whose dimensions differ by more than one-eighth ($\frac{1}{8}$) of an inch from those required.

Interior Diameter.

Section No. 367. The pipes shall be designated by dimensions of the interior diameter.

Lugs, Etc.

Section No. 368. Bands, lugs, buttons, or ribs of such forms and dimensions as the Engineer may direct, shall, if required, be cast on the pipes.

Length of Pipe.

Section No. 369. The straight pipe shall be twelve (12) feet long, exclusive of hub; other pipe as may be directed.

Straightness.

Section No. 370. All straight pipes shall be straight in the direction of the axis of the cylinder.

Thickness and Weight.

Section No. 371. The thickness of the pipes, branches and special castings shall correspond with the standards of the Department of Water Supply. The weight for straight pipe, per twelve (12) foot length, shall be as follows:

	Of 3 ft.	Of 4 ft.	Of 6 ft.	Of 12 ft.
60-inch pipes.....	special			
48-inch pipes.....	9,886 pounds each			
42-inch pipes.....	special			
36-inch pipes.....	5,920 pounds each			
30-inch pipes.....	4,460 pounds each			
24-inch pipes.....	2,965 pounds each			
20-inch pipes.....	1,979 pounds each			
16-inch pipes.....	1,458 pounds each			
12-inch pipes.....	1,018 pounds each			
8-inch pipes.....	542 pounds each			
6-inch pipes.....	416 pounds each			

High-Pressure Pipes.

Section No. 372. For high-pressure fire system standard spigot and grooves—the weights for straight pipes, with lugs, shall be as follows, in pounds per length:

	Of 3 ft.	Of 4 ft.	Of 6 ft.	Of 12 ft.
8-inch	355	420	550	935
12-inch	615	745	1,000	1,765
16-inch	1,005	1,215	1,635	2,905
20-inch	1,475	1,795	2,425	4,320
24-inch	2,105	2,585	3,535	6,385

All requirements as to weights, laying, tests, etc., shall be in strict accordance with the standard requirements of the Department of Water Supply, Gas and Electricity.

To Be Calipered.

Section No. 373. The thickness of the metal of the pipes and special castings will be tested by calipers after the castings have been freed from sand and cleaned.

Variations in Thickness.

Section No. 374. No pipe will be received when the thickness of metal is less by more than one-twelfth ($\frac{1}{12}$) of an inch than the thickness required by the standards.

Variation in Weight.

Section No. 375. Any straight pipe the weight of which is deficient by more than the following stated percentages of the standard weight, will be rejected:

For pipe 16 inches or less in diameter, 5 per cent.

For pipe over 16 inches in diameter, 4 per cent.

Excess weight in any one pipe not to exceed the above stated percentages will be paid for. The total weight, however, to be paid for shall not exceed for each size of pipe received, the sum of the standard weights of the same number of pieces of the given size, by more than two per centum (2%).

(The term "Standard Weight" as above used in connection with straight pipe shall be taken to mean the standard weight corresponding to the actual laying length of the pipe as furnished.)

Variation in Weight of Special Castings.

Any special casting the weight of which is deficient by more than the following stated percentages of the standard weight will be rejected:

For special castings 12 inches or less in diameter..... 10%

For special castings over 12 inches in diameter..... 8%

Excess weight in any one special casting, not to exceed the following stated percentages, will be paid for:

For special castings 12 inches or less in diameter..... 8%

For special castings over 12 inches in diameter..... 6%

The total weight, however, to be paid for shall not exceed for the special castings received, the sum of the standard weights of the same number of special castings, by more than five per centum (5%).

Straight Pipe Cast Vertically.

Section No. 376. All straight pipes shall be cast vertically, and all pipes 12 inches or more in diameter shall be cast with the hub end down.

Clean and Smooth.

Section No. 377. All the castings shall be made in such moulding-sand or loam as will leave the surface clean and smooth.

Castings, How Marked.

Section No. 378. All the castings shall have cast on the outer side in raised letters of not less than two (2) inches in length and one-eighth ($\frac{1}{8}$) of an inch in relief, in such manner as the Engineer may designate, the year in which they are cast, the running number of the castings of the same size and form, the letters D. W. S., and the initials or name of the Contractor, and of the foundry where cast, and in case any pipe shall be condemned, the letters D. W. S. shall be erased by the Contractor.

Quality of Cast-Iron.

Section No. 379. The metal of which the castings are to be cast (which shall be remelted in a cupola or air-furnace) shall be pig-iron, made without any admixture of cinder-iron, or other inferior metal, and shall be of such character as to make a pipe strong, tough and of an even grain, entirely free from uncombined carbon when seen under the microscope, and such as will bear, satisfactorily, drilling and cutting, and shall have a tensile strength of at least sixteen thousand (16,000) pounds to the square inch.

Imperfections.

Section No. 380. The castings shall be free from scoria, sand holes, air bubbles, and other defects and imperfections.

Castings to Be Cleaned.

Section No. 381. The castings shall be perfectly cleaned and no lumps shall be left on the inner surface of the barrels or sockets, or on the outer surface of the spigot end. The castings shall be subject to hammer inspection. Iron-wire brushes shall be used, as well as softer brushes, to remove the loose dust. No acid or other liquid shall be used in cleaning the castings.

Pipes to Be Coated.

Section No. 382. Every pipe, branch and special casting shall be carefully coated inside and out with coal-tar pitch and oil. Every casting shall likewise be entirely free from rust when the coating is applied. If the casting cannot be dipped immediately after being cleaned, the surface shall be oiled with linseed oil, to preserve it until it is ready to be dipped. No casting shall be dipped after rust has set in.

Pitch.

Section No. 383. The coal-tar pitch shall be made from coal tar distilled until the naphtha is entirely removed and the material mixed with linseed oil so as to make a smooth, tough and tenacious coating. Pitch which becomes hard and brittle when cold will not answer for this use.

Temperature of Pitch.

Section No. 384. Pitch of the proper quality having been obtained, it shall be carefully heated in a suitable vessel to a temperature of three hundred (300) degrees Fahrenheit, and shall be maintained at not less than this temperature during the time of dipping. The material will thicken and deteriorate after a number of pipes have been dipped; fresh pitch shall, therefore, be frequently added, and occasionally the vessel shall be entirely emptied of its old contents and refilled with fresh pitch.

Temperature of Castings.

Section No. 385. Every casting shall attain a temperature of three hundred (300) degrees Fahrenheit, before being removed from the vessel of hot pitch. It shall then be slowly removed and laid on skids to drip.

To Be Inspected Before Shipping.

Section No. 386. No casting shall be dipped until the authorized inspector has examined it as to cleaning and rust, and subjected it thoroughly to the hammer test. It may then be dipped, after which it will be passed to the hydraulic press to meet the required water test. The proper coating shall be tough and tenacious when cold on the pipes, and not brittle or with any tendency to scale off.

Tests.

Section No. 387. The castings must be capable of sustaining a pressure, in the hydraulic press, of three hundred (300) pounds to a square inch, and any casting which shows any defect by leaking, sweating or otherwise, will be rejected. This test shall be made at the foundry, and at the expense of the Contractor.

Weighed and Marked.

Section No. 388. The castings shall be weighed, and the weight distinctly marked on the castings in white paint. The Contractor shall provide at the foundry where the pipes and castings are to be manufactured proper sealed scales and weights for weighing the castings, which shall be done at the expense of the Contractor, under the supervision of the Inspector.

Blocking and Wedges.

Section No. 389. Each pipe over eight (8) inches inside diameter, unless otherwise ordered, shall be placed on two (2) blocks and four (4) wedges of hemlock timber, the wedges to rest on the blocks and the pipe on the wedges.

Timber for Blocking.

Section No. 390. The blocks and wedges shall be of sound hemlock timber; 48 and 36-inch pipe shall be laid on blocks 4 feet long, 12 inches wide and 6 inches thick, with wedges 18 inches long, 6 inches wide, 4 inches thick on one end and $\frac{1}{2}$ inch thick on the other; 30 and 24-inch pipe on blocks 3 feet long, 10 inches wide and 5 inches thick, with wedges 15 inches long, 5 inches wide and $3\frac{1}{2}$ inches thick on one end and $\frac{1}{2}$ inch thick on the other end; 12 and 20-inch pipe on blocks 2 feet long, 8 inches wide and 4 inches thick with wedges 12 inches long, 4 inches wide, 3 inches thick on one end and $\frac{1}{2}$ inch thick on the other.

Joints.

Section No. 391. The spigot of the pipe shall be inserted into the hub to within from one-fourth ($\frac{1}{4}$) to one-eighth ($\frac{1}{8}$) of an inch of the full depth of the hub, and the space around the pipe shall be equalized so as to give as nearly as possible an equal space for the packing. The space between the pipe and hub shall be packed with clean, sound jute packing yarn, free from tar, far enough to leave the proper space for lead. The remaining space shall then be filled by running it full of lead to a depth of four (4) inches, with a bead outside of the face of the hub large enough to allow for caulking, so that when the joint is properly caulked the lead will be flush with the hub of the pipe. After the joint shall have been run with lead, it shall be caulked by means of proper tools, so as to make a water-tight joint.

Lead.

Section No. 392. The lead to be used shall be of the best quality of pure, soft lead, and in every respect suitable for the purpose.

Notice of Interruption to Be Given.

Section No. 393. In case it becomes necessary to cut any connection with any other main, house or hydrant, or in any way to interfere with the continuous and normal flow of water, due notice shall be sent at least forty-eight (48) hours in advance to the Engineer and to the Commissioner of Water Supply, and the Contractor shall, if so ordered, make a temporary by-pass or other arrangement to preserve the flow of water while breaking connections.

Connections Interfered With.

Section No. 394. All connection cut, interfered with or injured shall be restored under the directions of the Engineer, without delay and in accordance with the rules and regulations of the Department of Water Supply governing such matters, to a suitable condition as good as existed before commencing work.

Stop Cocks, Etc.

Section No. 395. Stop cocks, boxes, branches, curved pipe, and other specials according to the standards of the Department of Water Supply shall be set where necessary.

Specifications of Owners Apply.

Section No. 396. For gas pipes, steam pipes, air pipes, mail tubes and any other pipes not herein enumerated, the standard weights and all other requirements shall be in accordance with the standard specifications and requirements of the several owners of such structures.

SUBDIVISION 20.

Ducts.

Form of.

Section No. 397. The ducts to contain cables for transmitting electricity shall generally be of the one-way form with circular holes for Railroad ducts and of the four-way form with circular holes for Tunnel ducts unless otherwise ordered by the Engineer.

Definition.

Tunnel ducts are those incorporated in the Railroad structure, all others for use in connection with the Railroad are termed Railroad ducts.

Dimensions.

Section No. 398. The dimensions and form of each piece shall conform to the following requirements:

Length of one way ducts shall be eighteen (18) inches and of four way ducts not less than twenty-four (24) inches nor more than thirty-six (36) inches, except that a sufficient number of short pieces of various lengths shall be furnished to lay on curves and to piece out at manholes so as to bring the ends of all ducts in a vertical plane.

The minimum inside diameter of holes shall be such as to pass a mandrel three and one-half ($3\frac{1}{2}$) inches in diameter.

The outside dimensions of one way ducts shall be not less than five (5) inches nor more than five and one-quarter ($5\frac{1}{4}$) inches measured at right angles to the flat of each side. The outside dimensions of four way ducts shall be not less than nine and three-quarters ($9\frac{3}{4}$) inches nor more than ten (10) inches measured in the same way.

The thickness of the outside and partition walls measured at the thinnest part shall be not less than five-eighths ($\frac{5}{8}$) of an inch for one-way ducts, nor less than three-fourths ($\frac{3}{4}$) of an inch for four-way ducts.

The ducts shall be made square on outer lines. One way ducts shall have the outside corners cut off to leave a flat surface of not less than two and three-fourths ($2\frac{3}{4}$) inches, the ends to be cut smooth and at right angles to the axis of the duct and beveled on inside for one-half ($\frac{1}{2}$) of an inch. Four way ducts shall have the outside corners rounded to a radius of two and one-half ($2\frac{1}{2}$) inches, the ends to be cut smooth and at right angles to the axis of the bore with each hole reamed to a depth of one-half ($\frac{1}{2}$) of an inch with a taper of three-eighths ($\frac{3}{8}$) to one.

Four-way ducts shall have dowel holes of not less than three-eighths ($\frac{3}{8}$) nor more than seven-sixteenths ($\frac{7}{16}$) of an inch in diameter extending along the entire horizontal axis of the duct. These dowel holes shall be located at the intersection of the partition walls and at the intersections of the partitions and side walls.

Combing.

Section No. 399. One way ducts shall be combed on each face adjacent to the corner of the duct with at least five (5) longitudinal combings, each combing to have a width of one-fourth ($\frac{1}{4}$) of an inch and a depth of not less than one-sixteenth ($\frac{1}{16}$) of an inch. Four-way ducts shall be combed on each face with seven (7) longitudinal combings whose total width shall not exceed three and one-half ($3\frac{1}{2}$) inches, each combing to have a width of one-fourth ($\frac{1}{4}$) of an inch and a depth of not more than one-sixteenth ($\frac{1}{16}$) of an inch.

Quality and Workmanship.

Section No. 400. All ducts shall be manufactured of the best clay, mixed thoroughly and in proper proportions, burnt hard through its entire thickness until well vitrified but in no case so burnt as to be fused and scoriated. The clay used shall be plastic and smooth, perfectly free from limestone, lime pebbles, pyrites and chalk, and sufficiently fireproof to acquire proper density before vitrification takes place. The clay shall be well pulverized and made perfectly homogeneous, and the surface of each piece both inside and outside shall be thoroughly glazed in the most approved manner with good salt glaze. The ducts shall be sound and without soft spots, stones, gravel, cracks, breaks or blisters, and the interior surface shall be free from warts, titts, nodules, chips, breaks, rough spots or cracks, that in the opinion of the Engineer may prove injurious. Each duct shall be practically straight and under no circumstances will any piece be accepted which shall have a bow, curve, or kink sufficient to prevent the passage of a mandrel three and one-half ($3\frac{1}{2}$) inches in diameter and twenty-four (24) inches long. No piece will be accepted if it shall have a bow, bend or kink in more than one direction. Throughout its entire length the bore shall be straight, smooth and circular. The center of the bore shall be exactly in the center of one-way ducts.

Inspection.

Section No. 401. All ducts shall be subject to inspection at the place of manufacture and on the work and at any other time and place as may be required by the Engineer. All rejected ducts shall be promptly removed by the Contractor at his expense.

How Laid.

Section No. 402. The ducts shall be laid in beds of cement mortar, about one-quarter of an inch in thickness, with broken joints both horizontally and vertically, true to line and grade, and so placed that there shall be no shoulders or offsets in the bore. All interstices shall be filled with mortar. In laying ducts care must be taken to close abutting joints so that the ends of all consecutive ducts shall be practically in contact on all sides.

Dowel Pins.

Section No. 403. Each piece of four way duct shall be supplied with at least two dowel pins placed in opposite sides. These dowel pins shall be of wrought iron three and one-half ($3\frac{1}{2}$) inches long of circular cross-section five-sixteenths ($\frac{5}{16}$) of an inch in diameter. The surface shall be smooth, the ends tapered and at the middle of its length shall be cut a spur or feathering on one side which shall project sufficiently to prevent the dowel pin entering the dowel pin hole beyond such spur. The diameter of the dowel pin shall not be reduced more than one-sixteenth ($\frac{1}{16}$) inch to make the spur.

Unbleached Muslin.

Section No. 404. Two (2) strips of thick unbleached muslin six (6) inches wide and coated with neat cement mortar, shall be used to wrap each joint, the ends of the wrap to lap four (4) inches. The muslin shall be not less than 56x60 count, weight not less than four (4) ounces to the yard and width thirty-six (36) inches. Where ducts are laid on curves, the wraps must be doubled if required, to protect the openings between the ends of the ducts on the outer line of the duct and to exclude all mortar from duct openings. Metal wraps will not be permitted.

Mandrels.

Section No. 405. Ducts shall be laid with a linked mandrel of a length and diameter to be prescribed, which shall be drawn through each duct as it is laid, so as to remove all projections of mortar that may be in the ducts; the mandrel shall also be equipped with a suitable swab to remove all loose material in the ducts; the mandrel is to be left in each duct until the succeeding duct is laid.

To Be Rodded.

Section No. 406. After the duct bank has been completed and in the case of Railroad ducts, the trench backfilled, the manholes built and heads set, and in the case of Tunnel ducts, the Railroad structure completed, the ducts shall be rodded by passing a wooden mandrel through the bore. This mandrel shall be of approved design, three and one-fourth ($3\frac{1}{4}$) inches in diameter, eight (8) inches long and screwed to the end of the rod. If obstructions are found in rodding the ducts which can not be removed by cleaners, so as to give a clear and smooth opening sufficient to pass the above mandrel without damaging the duct, the duct shall be removed and relaid. All ducts during construction and after being rodded shall be plugged with suitable plugs to be furnished by the Contractor. If wooden plugs are used they shall be immersed in water for at least eight (8) hours before being put in place.

Payments.

Section No. 407. Railroad ducts shall be paid for per duct foot in place at the price stipulated for Railroad ducts, in Schedule Item 18-A and Tunnel ducts shall be paid for per duct foot in place at the price stipulated for Tunnel ducts in Schedule Item 18, which prices shall include the cost of furnishing, laying and rodding the ducts, of furnishing and placing the concrete envelope for the Railroad ducts, and of all incidental work, labor and material, not otherwise provided for. For Railroad ducts and Railroad duct manholes outside the net lines of the Railroad structure, excavation and restoration of street surface shall be paid for at the prices stipulated in Schedule Items 2-A and 30; and changes of surface and subsurface structures both inside and outside the net lines of the Railroad structure made necessary because of physical interference with Railroad ducts or Railroad duct manholes shall be measured and paid for as provided in Sections Nos. 60, 61 and 62. The ducts to be provided under Schedule Items 18 and 18-A shall include only those intended solely for the purpose of the operation of the Railroad.

Measurement for Excavation.

In the estimate and payment for excavation for Railroad ducts and Railroad duct manholes outside the net lines of the Railroad structure, allowance will be made for a width of trench eight (8) inches wider than the duct structure or manhole, the depth, measured on the line of the trench, being taken as the distance from the street surface to the lowest part of the structure.

Location of Duct Line.

Section No. 408. Generally the Railroad duct lines will be constructed as indicated on the contract drawings, but to escape existing subsurface structures they may be placed in another location as ordered. Railroad duct manholes shall be built as indicated on the drawings or as directed by the Engineer. These manholes shall be generally at intervals of about four hundred (400) feet. They may vary in form to adapt the work to local conditions. They will be paid for at the prices stipulated in the various Schedule Items for similar work and material for the Railroad structure. (See Section No. 427.)

Drain Pipe.

The four (4) inch drain pipe for the duct manholes shall be vitrified pipe of the best quality, thoroughly and perfectly burnt, without imperfections, well and smoothly glazed inside and outside and perfect in shape. It shall be paid for at the price stipulated in Schedule Item 17 (e), which price shall include all work, labor and material incidental to furnishing and laying the pipe in place (including the proper connections with the sewers) except that excavation and the restoration of the street surface, which will be paid for at the prices stipulated in Schedule Items 2-A and 30. In the estimate and payment for such excavation allowance will be made for a width of trench two (2) feet wider than the interior diameter of the pipe and a depth six (6) inches deeper than the invert of the pipe measured from the surface of the street on the line of the trench.

Duct Manholes.

Section No. 409. Tunnel duct manholes shall be built at the ends of the stations to provide for the passage of the ducts under the station platforms. They may vary in form as may be necessary to adapt the work to local conditions. They are to be considered as part of the Railroad structure, and paid for at the schedule prices for such work.

At manholes, ducts will be laid to conform to the special conditions.

Openings to the street surface shall be provided from all manholes. Ten (10) inch cast-iron pipe will be used for this purpose in some cases. Such pipe when used will be measured in place in the work and will be paid for at the price stipulated in Schedule Item 17 (i).

SUBDIVISION 21.

Conduits.

Open Construction Required.

Section No. 410. In all work where iron pipe conduits are installed for a part of their length in the structure and for another part as open construction, the ends of such runs shall be carried outside of said structure as open construction and shall terminate in outlet or junction boxes located by the Engineer.

Usually to Be Built in.

Section No. 411. The iron pipe conduits required by Section No. 410 will be built mainly in the walls, roofs or other parts of the stations; portions, however, of the runs will be left exposed, to be covered later by the station finish work.

Quality of Iron Pipe Conduit.

Section No. 412. All iron conduits used for any purpose in connection with the work herein shall be of the best grade (Galvduct or equal) standard weight wrought-iron or steel piping, protected inside and out by a coat of zinc or enamel. It shall be delivered to the work in bundles of full length pipes, each length marked with the trademark of the manufacturer. It shall bend cold ninety (90) degrees about a radius equal to ten diameters without signs of flaw or fracture in either pipe or enamel.

Cleaning and Workmanship.

Section No. 413. All conduits shall be carefully cleaned before and after erection, and all ends shall be reamed free from burrs, and inside surfaces shall be free from all imperfections liable to injure the cable.

Joints Watertight.

Section No. 414. All joints shall be made with standard couplings, well treated with red lead, and screwed up to make a water-tight job.

Support and Protection.

Section No. 415. Conduits built into concrete or other parts of the structure shall be properly protected and supported, so that the same shall not be injured by the building operations.

Strap Supports.

Section No. 416. Conduits not built into the structure shall be supported by approved pipe straps located not more than eight feet apart, or in any other manner designated by the Engineer, and they shall be kept boxed or otherwise suitably protected from injury.

Bends and Offsets.

Section No. 417. Bends and offsets may be made in the field if proper tools are used, but in no case shall deformed, split or crushed conduit be erected. Not more than two right angle bends shall be made between any two outlet boxes without special approval of the Engineer.

Measurement and Payment.

Section No. 418. Measurements for the above iron pipe conduits shall be per lineal foot of single conduit placed in the work in accordance with the requirements and payment for the same shall be as herein stipulated in Schedule Item 32.

Outlet and Pull Boxes and Payment for Same.

Section No. 419. All outlet boxes shall be made of cast-iron, with openings threaded for the conduit ends, and conduits shall be screwed into these openings and made up with red lead to effect a water-tight joint. Covers shall be of cast-iron and water-tight, and no other boxes or covers shall be used except under special permission of the Engineer. Cast-iron outlet boxes furnished and placed in the work shall be paid for at the price stipulated in Schedule Item 33.

SUBDIVISION 22.

Surfaces Restored.

Pavement to Be Restored.

Section No. 420. As soon as the structure in any excavation or trench made within a street shall be completed and the trench backfilled, a temporary pavement shall be laid and maintained for at least four (4) months in a condition satisfactory to the Engineer; and whenever after such time the earth shall, in the opinion of the Engineer, have become sufficiently settled, the Contractor shall proceed to restore the surface to a condition similar to, and equally as good as, that existing previous to the commencement of construction.

Provisions Apply to Sewer Trenches.

Section No. 421. All the requirements as to street surface restored shall apply to the trenches for sewers, pipes, or other subsurface structures along or off the line of the Railroad.

Other Pavement May Be Laid.

Section No. 422. Nothing contained in these specifications shall be understood or construed as prohibiting the Contractor from making any arrangement with the President of the Borough or such other officer of the City as may be in charge of street paving to lay a better or other form of street pavement in the existing roadway between curb lines, or to make arrangements with any property owner to lay another style of sidewalk or other surface covering within curb lines in place of the sidewalk or other surface covering taken up; in which case the Contractor shall file

with the Commission a copy of his contract with such municipal officer or with such property owner, duly acknowledge in writing by both parties.

In case the municipal officer in charge of street paving or any property owner desires to lay a pavement in the existing roadway between curb lines, or a sidewalk or other surface covering within curb lines, affected by this contract, different from the one removed, and shall notify the Commission in writing that he has failed to make satisfactory arrangements for such work with the Contractor, then the Commission, in its discretion, may direct the Contractor to finish and dress off the filling over his work to such grade as the Engineer may select, and further direct him to remove from the area to be restored all material of whatever nature not required to be relaid, and to permit another contractor to lay such roadway pavement, sidewalk or other surface covering; in which case the liability of the Contractor under this contract shall cease, as far as that part of his work is concerned, whenever the Engineer shall report to the Commission that the instructions of the Commission have been complied with, exactly the same as if the Contractor had fully completed the restoration as hereinbefore provided.

The cost of all work of finishing and dressing off the filling over his work and of the removal of all materials not required, referred to above, will be included in the prices stipulated for earth excavation; and such work is not to be considered in any sense as "street surface restored."

Payment for Street Surface Restored.

Section No. 423. Payment for street surface restored will be made at the prices stipulated in Schedule Item 30 (a) within curb lines and in Schedule Item 30 (c), (f) and (g) between curb lines, which prices shall be deemed to include the cost of restoring all curbs, manhole heads and covers, gratings, vault lights, etc., that formed a part of the original street surface; and of all temporary surfaces and pavements (including maintenance of same) that may be necessary to maintain traffic pending the final placing of the permanent paving.

New Bluestone or Granite Curb.

When required by the Engineer, the Contractor shall furnish and set contiguous to ventilating grating work and station vault light work new bluestone or eight (8) inch granite curb dressed to fit the structure. This new curb, in place, including all work, labor and material incidental thereto, will be paid for at the prices stipulated in Schedule Items 30 (i) and (k).

New Curb Line.

When required by the Engineer, the Contractor shall set such new curbs, or restore the old curbs contiguous to such grating and vault light work when new ones are not ordered, at a new line to be established by the President of the Borough, and such additional roadway pavement as may be required thereby will be paid for at the unit price specified in the Schedule applicable thereto.

Measurements.

Section No. 424. The measurement for payment for street surface restored will be to the ordered net lines of excavation.

Outside of Net Lines.

Section No. 425. All other street surfaces outside the ordered net lines of excavation, either along or off the line of the Railroad, that may have become damaged, directly or indirectly, as a result of the Contractor's operations, shall be restored by the Contractor at his own cost and expense to a condition similar to and equally as good as that existing previous to the commencement of construction.

SUBDIVISION 23.

Gratings, Hand-Rails, Etc.

Steel Gratings.

Section No. 426. Steel gratings shall be provided and placed over fan and other ventilating chambers, and over station approaches, at places shown on the drawings, or at other places if required by the Engineer. They will be constructed as shown on the detailed drawings for gratings.

Steel gratings also shall be provided and placed over stations as prescribed in the preceding paragraph.

Measurement and Payment.

Gratings will be measured to include the outer lines of the frame of the grating at the street surface and payment therefor will be made at the price stipulated in Schedule Item 28, which price shall include the grating in place in the work, all frames and framing, painting, and all incidental work, labor and material.

Hand-rails.

Seasoned oak or ash hand-rails, of one or more horizontal rails may be placed in the Railroad at points where directed by the Engineer. The rails shall be free from knots, sap-wood, shakes and other defects and shall not have a cross grain between supports greater than one-fourth ($\frac{1}{4}$) the diameter of the rail. The rails shall be sandpapered to a smooth finish and shall receive two (2) coats of boiled linseed oil. They shall be securely fastened to the wall of the Railroad by means of expansion bolts, and as shown on the contract drawings. Measurements for payment for hand-rails will be per lineal foot of rail in place in the work, and payment therefor will be made at the price stipulated in Schedule Item 27-B, which price shall include furnishing and placing the hand-rails complete, including finishing, oiling and connections.

Vault Lights.

The roofs of the stations, where under sidewalks, shall, to as great an extent as possible, consist of vault light construction. These lights shall be made with lenses, not exceeding three (3) inches in diameter, of strong glass set in cement, in frames or panels, and the joint between the glass and the cement shall be made watertight by the use of an approved elastic composition which shall also serve to protect the glass from breaking due to the contraction of the supporting slab. The panels shall be provided with non-slipping treads, buttons or other devices all of design approved by the Engineer; and shall be of sufficient strength to carry, when supported in a manner similar to that in which they are to be permanently set, an equally distributed load of at least five hundred (500) lbs. per square foot without signs of failure, deformation or permanent set, when such test load is removed. The right is reserved to test at least one (1) frame or panel in every ten (10), as selected by the Engineer, and, if that fail, then the whole lot may be rejected. The vault lights must be set in place with cement, lead or other means to be absolutely waterproof; and the joint between the vault light construction and the supporting walls or beams shall be made watertight by the use of an approved elastic composition. Any tests required shall be at the Contractor's expense.

Measurement and Payment.

The area for payment for vault lights shall be to lines not exceeding one (1) foot outside of the inner faces of the supporting walls, and the price paid will be as provided in Schedule Item 29, which price shall include all work, labor and material incidental to the completed vault lights in place.

SUBDIVISION 24.

Special Matters

Explanation.

Section No. 427. The provisions of this subdivision are for the purpose of covering matters which are special to this contract and which are not fully covered in the general specifications, but except as herein otherwise expressly provided the foregoing specifications are to be construed as applying to special matters. In case of any conflict between the provisions of the foregoing general specifications and the provisions of this subdivision, the provisions of this subdivision shall govern.

Property at William and Beekman Streets.

The Railroad will pass under the properties at and near the southwest corner of William and Beekman Streets known as No. 169 William Street, Nos. 171 William Street and 35 Beekman Street and No. 33 Beekman Street and designated as Lots 2, 1, and 39 in Block 92 in Section 1. These properties have been acquired by the City and the buildings thereon will be razed substantially to the sidewalk level by other contractors. The Contractor will be permitted to prosecute his work within the limits of these properties in open trench excavation without cover and he may, as provided in Article LIII, use such properties outside the net lines of the Railroad for his plant and for other purposes in the prosecution of the work. The removal of all foundation walls and other parts of buildings or vaults in such properties within the ordered net lines of excavation will be considered as earth excavation as provided in Section No. 87. The surface limiting the amounts to be paid for within the ordered net lines of excavation in such properties shall be deemed to be at the average curb elevation of the existing curbs of Beekman and William Streets in front of such properties at the points where such curbs are intersected by the centre line of the Railroad; and no deduction from the volume of excavation determined by the ordered net lines of excavation will be made on account of basements or cellars below such surface nor will any payment or allowance be made for any materials projecting above such surface. The Railroad will also pass under, and through the lower portion

of, the building Nos. 165 and 167 William Street, and along Beekman Street, William Street and Hanover Square, the Railroad will pass in very close proximity to the buildings on both sides of the street. Extraordinary precautions must be exercised by the Contractor to insure the safety of all such buildings. The Contractor will not be required permanently to underpin that portion of said building Nos. 165 and 167 William Street which is vertically above the Railroad structure until the completion of said structure; but he shall permanently and safely underpin all other portions of said building at the beginning of construction and shall maintain, protect and secure all said building, including the portion thereof vertically above the Railroad structure, during construction and upon the completion of the Railroad structure shall permanently and safely underpin the portion of said building which is vertically above the Railroad structure, payment therefor being made, as provided in Section 70, at the price stipulated in Schedule Item 4-Q; and he shall repair any damage to said building and restore said building as provided in Article XLVII.

Foundation Masonry.

Along William Street the foundations of some of the buildings will extend inside of the net lines of excavation for the Railroad. Such foundation masonry projecting within the net lines of excavation for the Railroad shall be removed and disposed of at the price stipulated in Schedule Item 9-D, which price shall include all work, labor and material in connection with the removal and disposal of such foundation masonry including any iron or steel imbedded therein. The removal and disposal of walls or foundations of areas, vaults, stairways, etc., is provided for under Section No. 73 and is not to be included under Schedule Item 9-D.

Railroad Duct Line.

At the intersection of William and Beekman Streets, the Railroad duct line will be kept in the streets and will not follow the line of the Railroad through the property acquired by the City.

Damages to Buildings.

The Contractor shall repair any damage to abutting buildings and restore such buildings as provided in Article XLVII.

CHAPTER IV.

Security to Be Furnished by Contractor.

Contractor's Bond.

Article XXVII. Simultaneously with the execution and delivery of this contract the Contractor shall give security for the performance of his obligation by filing with the Comptroller a bond in the form annexed hereto and entitled "Form of Contractor's Bond," executed by the Contractor and by two or more sureties to be corporations or persons approved by the Commission in the sum of five hundred thousand dollars (\$500,000). The execution of the bond must be duly proved before the delivery in the form essential to proof to entitle a deed to record in the State of New York, and full affidavits of justification of sureties must be added. In case any of the sureties upon the bond shall become insolvent or unable in the opinion of the Commission to pay promptly the amount of such bond to the extent to which such surety might be liable, then the Contractor within ten (10) days after notice by the Commission to the Contractor shall, by supplemental bond or otherwise, substitute another and sufficient surety approved by the Commission in place of the surety so insolvent or unable. If the Contractor shall fail, within such ten (10) days or such further time, if any, as the Commission may grant, to substitute another and sufficient surety, then the Contractor shall, if the Commission shall so elect, be deemed to be in default in the performance of his obligations hereunder and upon the said bond, and in addition to any and all other remedies the Commission may terminate this contract or may bring any proper suit or proceeding against the Contractor and the sureties or either of them or may require the Comptroller or the Interborough Company or both the Comptroller and the Interborough Company to deduct from any moneys then due or which thereafter may become due to the Contractor under this contract the amount for which the surety insolvent or unable as aforesaid shall have justified on the bond; and the Interborough Company shall pay over any amount so deducted by it to the Comptroller; and the moneys so deducted (including any moneys so deducted and paid by the Interborough Company to the Comptroller) shall be held by the Comptroller as collateral security for the performance of the condition of the bond; and such moneys shall in such case be deemed to have been paid by the City or the Interborough Company, as the case may be, to the Contractor upon this contract.

Deposit of Cash or Securities.

Article XXVIII. The Contractor may, upon the approval of the Commission, deposit with the Comptroller in lieu of said bond cash equal in amount to the entire amount of the said bond or securities which are worth not less than the entire amount of such bond. If securities be deposited, they shall be securities which are lawful for the investment of funds of savings banks within the State of New York and shall be approved by the Commission. A schedule of such securities with their values shall be hereto annexed, entitled "Schedule of Securities," and there shall be deposited with such securities the written approval of the Commission which it shall give when satisfied as to the character and value thereof. All securities when deposited must be payable to, or run in favor of, or be transferred to, the Comptroller. In case any of the securities so deposited shall, in the opinion of the Commission, at any time cease to be of the character of securities which are lawful for the investment of funds of savings banks within the State of New York or shall, in the opinion of the Commission, at any time become of less value than the value stated for it or them in the said schedule, then within ten (10) days after notice to the Contractor of the objection of the Commission, the Contractor shall either substitute securities which shall be approved by the Commission as of the character aforesaid and as being of at least the value of the former securities to which the Commission shall have objected as such value was originally stated in the said schedule or shall deposit with the Comptroller in cash the amount of such value of such former securities as so originally stated. In case the Contractor shall not within such ten (10) days or such further time, if any, as the Commission may grant, substitute such new securities or make such deposit of cash, he shall, if the Commission so elect, be deemed to be in default in the performance of his obligations under this contract; and in addition to any and all other remedies against the Contractor the Commission may require the Comptroller or the Interborough Company or both the Comptroller and the Interborough Company to deduct from any moneys then due or which thereafter may become due to the Contractor under this contract the amount of the original valuation of such securities objected to; and the Interborough Company shall pay over any amount so deducted by it to the Comptroller; and the Comptroller shall hold the moneys so deducted (including any moneys so deducted and paid by the Interborough Company to him) in lieu of such securities, as if part of the original deposit or as if deposited with him as aforesaid, and such amount shall in such case be deemed to have been paid to the Contractor upon this contract. The securities so objected to shall upon such substitution of securities or deposit of cash in lieu thereof be returned to the Contractor.

City to Collect Interest.

The City shall from time to time collect all interest, dividends and other income on any securities deposited by the Contractor and shall pay the same, when and as collected, to the Contractor. If the securities are in the form of coupon bonds, the coupons as they respectively become due shall be delivered to the Contractor. If the deposit be made in cash, interest shall be paid to the Contractor on such deposit at the average rate of interest received by the City on its bank balances during such period. Provided, however, that the Contractor shall not be entitled to interest, dividends or other income on any cash which shall be used or applied as hereinafter provided or on any securities the proceeds of which shall be used or applied as hereinafter provided.

Deposit to Be Security for Faithful Performance.

Article XXIX. The said deposit, whether in cash or securities, in the form and as the same shall at any time be, shall be security for the faithful performance by the Contractor of all the conditions, covenants and requirements specified and provided for in this contract. In case of any default on the part of the Contractor in such performance and in the further case that the City shall for or by reason of such default, whether by reason of employment of another contractor or contractors or otherwise, incur or become liable for expense or be required to make any payment or incur or suffer any loss or damage, then the Comptroller shall, upon the requirement of the Commission, forthwith pay or apply to the use of the City the amount of such expense, payment, loss or damage, including any liquidated damages, out of the said deposit in cash or securities or out of the portion of the deposit remaining at the time.

Sales of Securities.

Article XXX. If such deposit be in securities, the Comptroller shall, upon the requirement of the Commission, in order to make such payment or application to the use of the City, sell at public auction in New York any of the securities which may

then constitute part of such deposit upon notice to be published in three (3) daily newspapers, the first publication to be not less than ten (10) days before the sale and such publication to be made three (3) times within such ten (10) days. The Comptroller in his discretion may, and upon the requirement of the Commission shall, adjourn such sale from time to time by announcement at the time and place appointed for such sale or for such adjourned sale or sales; and without further notice or publication, he may make such sale at the time and place to which the same may be so adjourned. The Comptroller shall, upon the requirement of the Commission, deduct from the proceeds of any such sale, all expenses thereof and of such advertisement and pay and apply to the use of the City so much of the residue of such proceeds as may be necessary for the purpose aforesaid. And the Contractor within ten (10) days after notice from the Commission so to do, or such further time, if any, as the Commission may grant, shall by further deposit, according to the requirement of the Commission, of money or securities of the character aforesaid approved by the Commission restore the said deposit with the Comptroller to the full amount originally required; and in case the Contractor shall not within such ten (10) days or such further time, if any, as may be granted by the Commission, make such further deposit of money or securities, he shall, if the Commission so elect, be deemed to be in default in the performance of his obligations under this contract; and in addition to any and all other remedies against the Contractor, the Commission may require the Comptroller or the Interborough Company or both the Comptroller and the Interborough Company to deduct from any moneys then due or which thereafter may become due to the Contractor under this contract such amount as may be necessary to restore the said deposit with the Comptroller to the full amount originally required; and the Interborough Company shall pay over any amount so deducted by it to the Comptroller; and the Comptroller shall hold the money so deducted (including any money so deducted and paid by the Interborough Company to him) as if part of the original deposit or as if deposited with him as aforesaid; and such moneys shall in such case be deemed to have been paid to the Contractor upon this contract. In addition to, or in lieu of, the sale above provided for, the Commission may, in the name and in behalf of the City, bring any appropriate suit or proceeding in any proper court to enforce the lien and claim of the City in and upon the said deposit, whether such deposit be in money or securities.

Retention of Security.

Article XXXI. If at any time when the Contractor shall otherwise be entitled to a return of the said deposit, there shall be pending any claim for injury or alleged injury to person or property occurring or alleged to have occurred on account of the work hereunder, whether by reason of the negligence, fault or default of the Contractor or otherwise, or any claim for infringement or alleged infringement of patents or any other claim on account of any neglect, fault or default or alleged neglect, fault or default of the Contractor, for which it shall be claimed that the City shall be liable, then and in that case the said deposit, including all interest, dividends and other income thereafter accruing thereon, or such part thereof as the Commission may prescribe shall, upon the requirement of the Commission, be reserved by the Comptroller as security against such claims for a time not exceeding the time when such claims would be legally barred. If and when the liability of the City on such claim or claims shall have been established by a judgment of a court of competent jurisdiction or such claim or claims shall have been admitted by the Contractor to be valid, the City may deduct the amount of such claim or claims from the said deposit before the balance of the said deposit shall be returned to the Contractor as hereinafter provided. For the purpose of making such deduction the Comptroller may sell any of the securities which may constitute part of such deposit in the manner provided in Article XXXII.

On Completion of Works.

Article XXXII. When the Contractor shall have fully completed the Works according to the terms of this contract and the Commission shall so certify, the Comptroller shall pay and deliver to the Contractor the said deposit or so much thereof as shall not be reserved, or shall not have been used or applied, for any of the purposes herein mentioned.

Retained Percentages.

Article XXXIII. In addition and as further security there shall be deducted fifteen per centum (15%) of the amounts certified from time to time to be due to the Contractor until the amount so deducted and retained shall equal ten (10) per centum of the total estimated amount to be paid to the Contractor under this contract as calculated from the estimated approximate quantities and the prices contained in the Schedule of Unit Prices in the Contractor's Proposal. Thereafter there shall be so deducted and retained for such purpose ten per centum (10%) of the amounts certified from time to time to be due to the Contractor. Such retained percentages shall be held as further security for the faithful performance by the Contractor of all the conditions, covenants and requirements specified and provided for in this contract. The Contractor may from time to time withdraw portions of the amounts so retained upon depositing with the Comptroller corporate stock of the City of a market value equal to the amount so withdrawn from the City or the Interborough Company, as the case may be, in which event the provisions of this chapter in respect of securities shall apply to such corporate stock. The Interborough Company shall pay to the Contractor such portion of the amounts retained by it as are to be so withdrawn from it upon the certificate of the Comptroller that such corporate stock of a market value equal to such amount to be withdrawn from it has been so deposited with him.

CHAPTER V.

Payments to Contractor.

Amounts to Be Paid by Interborough Company.

Article XXXV. The Contractor shall look to the Interborough Company for the payment of the sums earned under this contract to an amount up but not exceeding *(\$) dollars, which the Interborough Company agrees to pay at the times and in the manner and upon the terms and conditions herein provided, and to the City for all sums over and above such amount. The Interborough Company shall not be liable hereunder beyond said amount. In order to assist the Contractor to prosecute the work advantageously, the Engineer shall from time to time as the work progresses, but not more often than once a month, make in writing an estimate in duplicate, such as in his opinion shall be just and fair, of the amount and value of the work done and materials incorporated in the work by the Contractor according to the terms of this contract (but it is understood that in making such estimates the Engineer shall not necessarily be governed by the prices contained in the Schedule of Unit Prices), provided, however, that estimates may at any time be withheld or reduced if, in the opinion of the Engineer, the work is not proceeding in accordance with this contract.

Estimates and Partial Payments.

The first such estimate shall be of the amount and value of the work done and materials incorporated in the work since the Contractor commenced the performance of this contract on his part. Every subsequent estimate except the final estimate shall be of the amount and value of the work done and materials incorporated in the work since the last preceding estimate was made, provided, however, that no such estimate shall be required to be made when, in the judgment of the Engineer, the total value of the work done and materials incorporated in the work since the last preceding estimate amounts to less than ten thousand (\$10,000) dollars. The Engineer shall further include accepted structural steel delivered on the site of the work or on property owned or leased by the City, but not incorporated in the work, at an amount equal to sixty (60) per centum of an average price for such steel. Such average price shall be obtained by dividing the sum of the unit prices stipulated in Schedule Items 19 and 20 by two. But the quantity of such structural steel included in any partial estimate or estimates shall not exceed the quantity of such material, as determined by the Engineer, required for the ensuing six months, and any material included in a partial estimate which may subsequently become unsatisfactory shall be deducted from succeeding partial estimates. No materials not incorporated in the work, excepting such structural steel, shall be included in any estimate.

Not by Strict Measurement.

Article XXXVI. Such estimates shall not be required to be made by strict measurement, but they may be made by measurement or by estimation or partly

*This blank shall be filled in before the contract is executed with an amount equal to fifty per centum (50%) of the total estimated amount to be paid to the Contractor under the contract as calculated from the estimated approximate quantities and the prices contained in the Schedule of Unit Prices in the Contractor's Proposal.

by one method and partly by the other, and it shall be sufficient if they are approximate only.

Vouchers.

Article XXXVII. Upon each such estimate being made and certified in writing to the Commission, the Commission shall forthwith prepare and certify two vouchers aggregating eighty-five (85) or ninety (90) per centum of the amount stated in such estimate or certified to be the value of the work done and materials furnished as provided in Article XXXIII. One of such vouchers shall be payable by the City and the other of such vouchers shall be payable by the Interborough Company. The voucher payable by the City shall be for an amount equal to fifty per centum (50%) of such estimate less fifty per centum (50%) of the amount to be deducted from such estimate as retained percentages as provided in Article XXXIII. The voucher payable by the Interborough Company shall be for an amount equal to fifty per centum (50%) of such estimate less fifty per centum (50%) of the amount to be deducted from such estimate as retained percentages as provided in Article XXXIII. The Commission shall thereupon transmit the voucher payable by the Interborough Company accompanied by a duplicate original of such estimate to the Interborough Company for payment and the Interborough Company within thirty (30) days after the receipt of such voucher shall pay the same to the Contractor. The voucher payable by the City shall be paid within thirty (30) days after the date of the certification of such voucher by the Commission. Provided, however, that the City may and the Interborough Company may, and upon the requirement of the Commission shall, at all times reserve and retain from said partial payments or any of them, in addition to the ten (10) or fifteen (15) per centum mentioned in Article XXXIII, any sum or all sums which by the terms hereof or of any law of the State of New York either the City or the Interborough Company or both the City and the Interborough Company may be authorized to reserve or retain.

Final Estimate.

Article XXXVIII. Whenever, in the opinion of the Engineer, the Contractor shall have completely performed this contract on his part and all work under this contract, the Engineer shall so certify in writing and in duplicate to the Commission, and in his certificate shall state, from actual measurements, the whole amount of work done by the Contractor and also the value of such work under and according to the terms of this contract and also the balance remaining of the maximum amount specified in Article XXXV hereof for which the Interborough Company is liable hereunder after deducting all such sums as shall theretofore have been paid by the Interborough Company to the Contractor under the provisions of this contract (including interest, if any, paid under the provisions of Article XXXIX hereof) and any other sum or sums which the Engineer shall state in such certificate should be deducted. Upon the receipt of such certificate the Commission shall forthwith prepare and certify two final vouchers (or one, payable by the Interborough Company, in the event hereinafter specified) aggregating the amount remaining after deducting from the amount or value of such work done under and according to the terms of this contract as stated in such certificate all such sums as shall theretofore have been paid to the Contractor under any of the provisions of this contract (exclusive of interest, if any, paid under the provisions of Article XXXIX) and also any sum or all such sums of money as by the terms hereof either the City or the Interborough Company or both the City and the Interborough Company may be authorized to reserve or retain; provided, however, that nothing herein contained shall be construed to affect the right hereby reserved, of the Commission to reject the whole or any portion of the aforesaid work should the said certificate be found or known to be inconsistent with the terms of this contract or otherwise improperly given. All prior certificates upon which partial payments may have been made, being merely estimates, shall be subject to correction in the final certificate, which final certificate may be made without notice thereof to the Contractor or of the measurements upon which it is based. One of such final vouchers shall be payable by the City and the other shall be payable by the Interborough Company. The voucher payable by the Interborough Company shall be for the balance remaining of such maximum amount specified in Article XXXV hereof for which the Interborough Company is liable hereunder or so much thereof as may have been certified by the Engineer; provided, however, that if such balance or so much thereof as may have been certified by the Engineer shall equal or exceed the amount aforesaid remaining from the amount or value of the work done under and according to the terms of this contract as stated in such certificate after making the deductions aforesaid, then the voucher payable by the Interborough Company shall be for such remaining amount, and no voucher shall in that case be prepared or certified for payment by the City. The Commission shall transmit such voucher payable by the Interborough Company accompanied by the duplicate original of such final certificate to the Interborough Company and the Interborough Company on or before the expiration of ninety (90) days after the receipt of such voucher and certificate shall pay the amount due on such voucher. The voucher payable by the City shall be for the difference between the amount aforesaid remaining from the amount or value of the work done under and according to the terms of this contract as stated in such certificate after making the deductions aforesaid and the amount of the voucher payable by the Interborough Company. The City shall pay the amount due on such voucher payable by it on or before the expiration of ninety (90) days after the acceptance of the work herein agreed to be done by the Contractor and the filing of a certificate of the completion and acceptance of the work in the office of the Comptroller signed by the Engineer and the Commission.

Interest on Delayed Payments.

Article XXXIX. If the payment of the amount due the Contractor on any voucher shall be delayed beyond the time stipulated in Article XXXVII in the case of partial payment or Article XXXVIII in the case of final payment, the City shall pay if the delay shall occur in the case of a voucher payable by the City and the Interborough Company shall pay if the delay shall occur in the case of a voucher payable by the Interborough Company to the Contractor interest on such amount at the rate of four and one-half per centum (4½%) per annum for the period of such delay; it being understood that such payments of interest, if any, are to be in lieu of any claim of the Contractor for alleged damages for breach of contract or otherwise in case of delayed payments. Provided, however, that the Contractor shall not be entitled to interest on any sum or sums which by the terms hereof or of any law of the State of New York either the City or the Interborough Company or both the City and the Interborough Company may be authorized to reserve or retain. The term for which interest shall be paid shall be reckoned, in the case of a partial payment by the City from the thirtieth day after the certification of such voucher by the Commission, and in the case of a partial payment by the Interborough Company from the thirtieth day after the receipt of such voucher by the Interborough Company, and in the case of a final payment by the City from the ninetieth day after the acceptance of the work by the Commission and the filing of such certificate of the completion and acceptance of the work in the office of the Comptroller, and in the case of a final payment by the Interborough Company from the ninetieth day after the date of the receipt of such voucher and the final certificate by the Interborough Company, to the date of payment of the voucher. The date of payment of a voucher shall be considered the day on which the voucher is ready for payment as evidenced by the records of the Department of Finance or of the Interborough Company, as the case may be. If interest shall become due on any partial payment, the amount thereof, as determined by the Commission, shall be added to a succeeding payment. If interest shall become due on a final payment, it shall be paid on a supplementary voucher prepared by the Commission and forwarded to the Comptroller or the Interborough Company, as the case may be, for payment in the usual manner. But the provisions of this Article as to payment by the Interborough Company of interest on any final payment due from the Interborough Company shall be subject, as between the City and the Interborough Company, to the provisions of Article XII of said contract dated March 19, 1913, to the effect that if, after the contribution of the Interborough Company shall have been exhausted, there shall accrue any valid claim against the Interborough Company in connection therewith, whether by reason of outstanding contracts or otherwise, the City shall on demand of the Interborough Company promptly settle and pay such claim or claims. Provided, however, that the Interborough Company shall not be entitled to charge to cost of construction or cost of equipment under the said contract of March 19, 1913, interest on any payment the delay in the payment of which has been occasioned otherwise than in good faith or for causes beyond the control of the Interborough Company.

No Estoppel.

Article XL. The City shall not nor shall any department or officer thereof be precluded or estopped by any return or certificate made or given by the Commission, any Engineer, or other officer, agent or appointee thereof under any provision of this contract from at any time either before or after the final completion and acceptance

of the work and payment therefor pursuant to any such return or certificate showing the true and correct classification, amount, quality and character of the work done and materials furnished by the Contractor or any other person under this contract or from showing at any time that any such return or certificate is untrue and incorrect or improperly made in any particular or that the work and materials or any part thereof do not in fact conform to the specifications; and the City shall not be precluded or estopped, notwithstanding any such return or certificate and payment in accordance therewith, from demanding and recovering from the Contractor such damages as it may sustain by reason of his failure to comply with this contract or the specifications.

No Waiver.

Article XLI. Neither the acceptance of the Commission or its Engineer or any of its employees nor any order, measurement or certificate by the Engineer nor any order by the Commission for payment of money nor any payment for, nor acceptance of, the whole or any part of the work nor any extension of time nor any possession taken by the Commission or its employees shall operate as a waiver of any portion of this contract or of any power herein reserved to the Commission or of any right to damages herein provided; nor shall any waiver of any breach of this contract be held to be a waiver of any other or subsequent breach.

Final Payment to Terminate Liability of City.

Article XLII. The acceptance by the Contractor of the final payment by the City or the final payment by the Interborough Company in the event that no final voucher shall be prepared or certified for payment by the City as aforesaid shall be and shall operate as a release to the City from all claim and liability to the Contractor for anything done or furnished for, or relating to, the work or for any act, neglect, fault or default of the Commission, the City, the Interborough Company or of any person relating to or affecting the work, except only the claim against the City for the remainder, if any there be, of the amounts kept or retained by the City as provided in this contract. The acceptance by the Contractor of payments by the Interborough Company, whether partial or final, aggregating the maximum amount specified in Article XXXV hereof shall be and shall operate as a release to the Interborough Company from all claim and liability to the Contractor hereunder.

Contractor's Claims for Damage—Statement of Damage to Be Filed by Engineer.

Article XLIII. If the Contractor shall claim compensation for any damage sustained by reason of any act, neglect, fault or default of the City or the Commission or its agents, he shall, within ten (10) days after the sustaining of such damage, make a written statement to the Engineer of the nature of the damage sustained. On or before the fifteenth day of the month succeeding that in which any such damage shall have been sustained, the Contractor shall file with the Engineer an itemized statement of the details and amount of such damage, and unless such statement shall be made as thus required, his claim for compensation may in the discretion of the Commission be forfeited and invalidated and he shall not be entitled to payment on account of any such damage.

Lien Law.

Article XLIV. All the provisions of the Lien Law relating to liens under contracts for public improvements and the discharge and enforcement thereof shall be deemed to apply to the moneys of the Interborough Company to the extent of the amount thereof due or to become due to the Contractor under this contract as though such moneys were the moneys of the City applicable to this contract, provided, however, that the notice of such lien and all subsequent notices relating thereto shall be served upon the Interborough Company as well as upon the Comptroller and the Commission.

If at any time before or within thirty (30) days after the whole work agreed herein to be performed has been completed and accepted by the City, any person or persons claiming to have performed any labor or furnished any material toward the performance or completion of this contract shall file with the Commission and with the Comptroller (and with the Interborough Company in case a lien is sought upon the moneys of the Interborough Company as aforesaid) any such notice as is described in the Lien Law, the City or the Interborough Company or both the City and the Interborough Company may retain from any moneys which would otherwise be payable to the Contractor hereunder by the City or the Interborough Company an amount or amounts sufficient to satisfy and discharge the amount in such notice claimed to be due, together with the costs of any action or actions brought to enforce such lien created by the filing of such notice, until such lien shall be discharged as provided by law. If such lien shall be foreclosed according to law, then the City or the Interborough Company or both the City and the Interborough Company may pay the amount necessary to satisfy such lien, with interest and costs, to the person entitled thereto, and such payment shall be deemed to be a payment hereunder to the Contractor by the City or the Interborough Company or both the City and the Interborough Company, as the case may be. If the amount or amounts so retained shall not be sufficient to satisfy such lien so foreclosed with interest and costs, the deficiency may be retained by the City or the Interborough Company or both by the City and the Interborough Company out of any moneys thereafter becoming due to the Contractor hereunder.

CHAPTER VI.

Contractor's Liability for Injuries to Persons or Property.

Contractor Approves Drawings as Involving No Damage.

Article XLV. The Contractor expressly admits and covenants that the drawings and specifications and other provisions of this contract, if the work be done without fault or negligence on the part of the Contractor, do not involve any danger to the foundations, walls or other parts of adjacent, abutting or overhead buildings or structures or surfaces; and the Contractor will at his own expense make good any damage that shall, in the course of construction, be done to any such foundations, walls or other parts of adjacent, abutting or overhead buildings or structures or surfaces. The liability of the Contractor under this covenant is absolute and is not dependent upon any question of negligence on his part or on the part of his agents, servants or employees, and the neglect of the Engineer to direct the Contractor to take any particular precautions or to refrain from doing any particular thing shall not excuse the Contractor in case of any such damage.

It is the intention of the parties to this contract that in addition to indemnifying the City against all claims for damages, the Contractor shall also be liable to the owners of adjacent, abutting or overhead property or of buildings or structures thereon and to all tenants or occupants of such buildings or structures for all physical injuries to property or person which may be occasioned by the work of construction, even in cases where such owners, tenants or occupants have no legal claim against the City for such injuries.

Traffic to Be Maintained.

Article XLVI. The Contractor shall during the performance of the work safely maintain the traffic on streets, avenues, highways and other public places as provided in the specifications and shall take all necessary precautions and place proper guards for the prevention of accidents and shall put up and keep at night suitable and sufficient lights.

Indemnification for Accidents, Etc.

Article XLVII. The Contractor shall be solely responsible for all physical injuries to person or property occurring on account of the work hereunder, and shall indemnify and save harmless the City from liability upon any and all claims for damages on account of such injuries to person or property and from all costs and expenses in suits which may be brought against the City for such injuries to person or property; it being distinctly understood, stipulated and agreed that the Contractor shall be solely responsible and liable for and shall fully protect and indemnify the City against all claims for damages to person or property occasioned by or resulting from blasting or other methods or processes in the work of construction whether such damages be attributable to negligence of the Contractor or his employees or otherwise.

The Contractor shall upon the completion of the work of underpinning and other work connected with the construction of the Works satisfactorily repair any damage to abutting buildings that may have resulted from the construction of the Works or any operation connected therewith and shall satisfactorily restore such buildings; provided, however, that the owners of such buildings shall permit him to do such work of repair and restoration. The Engineer shall have the right to order any such repairs and restorations and the Contractor must abide by his decision as to whether such repairs or restorations are necessary and as to whether the necessity therefor has been occasioned by reason of the construction of the Works or any operation connected therewith. The Contractor shall not be relieved from the obligation to make such repairs and restorations by any claim that the damage was unavoidably incurred by reason of any operation carried on by him, whether such operation was ordered by the Commission or the Engineer or not. The Contractor further admits that the cost of all repairs and restorations is included in the prices mentioned in the Schedule of Unit Prices.

Liability of City.

Article XLVII-A. The above provisions of this Chapter relative to the Con-

tractor's liability shall remain in full force and effect, but in pursuance of the suggestion of the Appellate Division of the Supreme Court in and for the First Judicial Department in Matter of Public Service Commission (Park Place Route), 154 App. Div. 587, 591, and of the resolutions relative thereto adopted by the Commission and by the Board of Estimate and Apportionment of the City, it is understood and agreed that the City shall be primarily liable to the owners of abutting property and of buildings thereon for physical damages to such property and buildings howsoever caused by the construction of the Works. The Contractor shall, however, indemnify and save harmless the City against and from any and all such damages and claims therefor and all costs and expenses in connection therewith; provided, however, that the City shall, upon the written request of the Contractor, afford him all reasonable opportunity to assist in the defense against such claims.

Money Due the Contractor May Be Retained to Meet Claims.

Article XLVIII. In case any claim shall be made at any time by any person or corporation against the Contractor or the City for injury or alleged injury to person or property occurring or alleged to have occurred on account of the work hereunder, whether by reason of the negligence, fault or default of the Contractor or otherwise, or for any infringement or alleged infringement of patents or for any neglect, fault or default or alleged neglect, fault or default of the Contractor, the amount of such claim or so much thereof as the Commission may deem reasonable shall, upon the requirement and in the discretion of the Commission, be retained by the Comptroller or by the Interborough Company or both by the Comptroller and the Interborough Company out of any moneys then due or thereafter growing due to the Contractor hereunder (in addition to the other sums herein authorized to be so retained) as security for the payment of such claim or claims. If and when the liability of the City or the Contractor on such claim or claims shall have been established by a judgment of a court of competent jurisdiction or such claim or claims shall have been admitted by the Contractor to be valid, the said claim or claims may be paid from the amount so retained and the balance, if any, paid to the Contractor. Should there be any unsatisfied claim or claims for injury or alleged injury to person or property occurring or alleged to have occurred on account of the work hereunder, whether by reason of the negligence, fault or default of the Contractor or otherwise, or for any infringement or alleged infringement of patents or for any neglect, fault or default or alleged neglect, fault or default of the Contractor at the time when the final voucher or vouchers for the work are prepared and certified, the Commission shall have the right to retain out of the final payment or payments and to deduct from the amount of the final voucher or vouchers a sum in its judgment sufficient to protect the City in regard to all unsatisfied claims as aforesaid and in case the amount thus retained should be insufficient to pay the amount adjudicated to be due upon such claim or claims, the City may sue for and recover from the Contractor the amount or balance as a debt from the Contractor to the City. The Commission may further, if in its judgment such a course is necessary or proper, at the time of preparing and certifying the final voucher or vouchers and as a condition of preparing and certifying the same, require the Contractor to continue his bond or other security or any part thereof, as security against any claims then unsatisfied or not presented, for a time not exceeding the time when such claims would be legally barred.

Examinations of Abutting Property.

Article XLIX. In order to safeguard the owners and tenants of adjacent or abutting property and at the same time prevent unjust or fraudulent claims against the Contractor or the City in respect thereto, the Engineer shall cause a detailed examination of all adjacent or abutting property to be made before construction is begun. The owner or tenant of each parcel or his or their duly authorized representative shall be invited to be present by a notice in writing delivered to a person apparently in charge of the premises, and the Contractor or his duly authorized representative shall attend and with the Engineer shall make such detailed examination. A complete record of the existing conditions of each parcel shall be made in triplicate, signed by the Engineer and the Contractor, and one copy shall be delivered to the owner, one to the Contractor and one shall be retained by the Commission. At such times as the Engineer may direct, and upon the completion of the work, or upon notice to the Engineer by the owner or tenant that physical injury has occurred, further examination shall be made and the findings recorded and filed as above.

Damage to Works During Construction.

Article L. All risk of loss or damage to the Works, or to any part thereof or to any of the materials, plant, tools, appliances or other things used in doing the work prior to final completion is assumed and shall be borne by the Contractor, and any such loss or damage shall be made good by the Contractor at his own cost, and the construction shall be carried forward by him in accordance with this contract without additional cost to the City or the Interborough Company by reason of such loss or damage.

CHAPTER VII.

City to Secure Contractor Against Interference by Injunctions, Etc.

City's Assurances to Contractor of Right to Construct.

Article LI. The City hereby stipulates and covenants to and with the Contractor that the City will secure and assure to the Contractor, so long as the Contractor shall perform the stipulations of this contract, the right to construct the Railroad as prescribed in this contract, free of all right, claim or other interference, whether by injunction, suit for damages or otherwise, on the part of any owner, abutting owner, or other person; but not including any interference, legal or otherwise, by patentees or persons claiming to be patentees of tools, methods or appliances.

Claims for Infringement of Patents.

Article LII. The Contractor shall hold himself and shall be responsible for any claims made against the City for any infringement of patents by the use of patented tools, articles or appliances in the performance or completion of the work or by the use of any process connected with the work or by the use of any materials used upon the work; and he shall have harmless and indemnify the City from and against all costs, expenses and damages which the City shall be obliged to pay by reason of any such infringement.

Real Estate Acquired by City.

Article LIII. The Railroad will pass under the properties at and near the southwest corner of William and Beekman Streets known as No. 169 William Street, Nos. 171 William Street and 35 Beekman Street and No. 33 Beekman Street and designated as Lots 2, 1 and 39 in Block 92 in Section 1. These properties have been acquired by the City and the buildings thereon will be razed substantially to the sidewalk level by other contractors. The City will give the Contractor possession of said properties within thirty (30) days after written demand is made by the Contractor upon the Commission for said properties, and the Contractor may thereafter use said properties, subject to the provisions of this contract, as a site for plant in connection solely with the construction of the Railroad and for other purposes in connection solely with such construction for the period during which, in the opinion of the Commission, such property is necessary for the construction of the Railroad. The Railroad will also pass under, and through the lower portion of, the building Nos. 165 and 167 William Street. The Contractor shall, as herein provided, safely and permanently underpin said building and shall maintain, protect and secure the same during construction. The City will acquire such rights, terms, easements or privileges in the property Nos. 165 and 167 William Street as, in the opinion of the Commission, it shall be necessary to acquire for the purpose of constructing the Railroad under, and through the lower portion of, said building, provided, however, that this covenant shall not apply to or include any damages for physical injuries to said building referred to in Chapter VI hereof, whether or not compensation for such damages be awarded in a condemnation proceeding. If compensation for any such damages shall be included in an award in condemnation proceedings, the Contractor shall, upon demand by the Commission, promptly reimburse the City for any payments made by it on account thereof. The Commission will acquire such rights, terms, easements or privileges within sixty (60) days after written demand is made by the Contractor upon the Commission for the same; and in case the City shall fail to acquire such rights, terms, easements or privileges within said sixty (60) days and in case the Contractor shall be actually and necessarily delayed by reason of such failure and cannot, notwithstanding such failure, with reasonable diligence make up for the delay so occasioned by speedier work when the Contractor shall not be so delayed, then as provided in Article LV, the date for the completion of the Works shall be extended by resolution of the Commission by the amount of the time of such delay as determined by the Commission; but no allowance by way of damages will be made for such delay. Whenever in the opinion of the Commission such properties are no longer required by the Contractor for the construction of the Railroad or in case the Commission in any of the events stated in Article LXII shall require the Contractor to discontinue the work or any part thereof and shall require the Contractor to quit and surrender said properties, the Contractor shall

forthwith quit and surrender the same; and in case of his failure so to do, the Commission may remove him therefrom and charge the expense of such removal to him.

CHAPTER VIII.

Time for Completion, Damages for Delay, Etc.

Commencement and Completion of Work.

Article LIV. Time is of the essence of this contract. The Contractor shall begin actual work within sixty (60) days after the date of delivery of this contract and shall thenceforth prosecute the work continuously and diligently. The entire work covered by this contract shall be completed in all respects within twenty-eight (28) months from the date of delivery of this contract.

Damages.

Article LV. In the event of delay in completion of the Works beyond the period herein prescribed or beyond the period to which such time may be extended by resolution of the Commission for good cause shown, the City shall, whether the working force be increased as provided in the specifications or not, be paid damages for such delay. Inasmuch as the amount of such damages will be extremely difficult to ascertain, especially in view of the fact that the Railroad is only a part of a complete system, the remainder of which is to be constructed under other contracts, it is hereby expressly agreed that such damages shall be liquidated and paid as follows: The Contractor shall pay to the City for each and every day, except Sundays and legal holidays, that he shall be in default in completing the entire work to be done under this contract the sum of three hundred dollars (\$300), which sum is hereby agreed upon not as a penalty but as liquidated damages which the City will suffer by reason of such default. The City shall have the right to deduct or to require the Interborough Company to deduct and pay to the City such amounts from any moneys due or which may thereafter become due to the Contractor under this contract. But in case the Contractor shall be delayed by reason of any labor strike not caused or instituted or provoked by the Contractor or by any sub-contractor, agent or representative of the Contractor or in case the Contractor shall be delayed by any injunction or by any interference of public authority or by any failure of the City to put him in possession of any of the properties mentioned in Article LIII as therein provided or by the suspension of the whole or any part of the work by the Commission as provided in Article LVIII and in case the Contractor cannot notwithstanding such strike, injunction, interference, failure or suspension, with reasonable diligence make up for the delay so occasioned by speedier work when the Contractor shall not be so delayed, then the said date for completion shall except as hereinafter provided, be extended by resolution of the Commission to a date later than the expiration of the said period of twenty-eight months by the amount of the time of such delay as determined by the Commission.

Commission May Intervene in Case of Injunctions.

Article LVI. But no injunction, strike or interference of public authority shall be ground for such extension unless and until the Contractor shall give the Commission notice of the injunction or other cause of delay, with copies of the injunction or other orders and of the papers upon which the same shall have been granted, and no extension will be granted except for the delay occasioned after the giving of such notice. Nor shall any extension be granted in any case unless the Contractor shall prove to the satisfaction of the Commission all the facts which entitle him to such extension. The Commission and the City or either shall be accorded the right to intervene or become a party to any suit or proceeding in which any such injunction shall be obtained, and to move to dissolve the same or otherwise, as the Commission or the City may deem proper. If necessary the Corporation Counsel or the Counsel to the Commission or both shall be authorized by the Contractor to appear, for that purpose, as counsel or attorneys for him.

Suspension of Work and Additional Time for Performance.

Article LVII. The Commission reserves the right of temporarily suspending the execution of the whole or any part of the work herein contracted to be done, if it shall deem it for the interest of the City so to do, without compensation to the Contractor for such suspension other than extending the time for completing the work as hereinbefore provided as much as it may have been delayed by such suspension.

Extensions Not Cumulative.

Article LX. Only the actual delay necessarily resulting from one or more of the causes above mentioned shall be ground for extension of time, and in case the Contractor shall be delayed at any time or for any period by two or more of the causes above mentioned, only one period of extension, if any, shall be granted for such delay and the Contractor shall not be entitled to a separate extension for each one of the causes so operating, it being understood that only the actual period of necessary delay, as determined by the Commission, irrespective of the number of causes contributing to produce such delay, will be ground for extension of time.

Permission to Complete Contract Not a Waiver.

Article LXI. The permitting of the Contractor to go on and finish the work or any part of it after the time fixed for its completion or after the date to which the time for completion may have been extended or the making of payments to the Contractor after any of such periods shall in no wise operate as a waiver on the part of the City or the Interborough Company of any of its rights under this contract.

CHAPTER IX.

Remedies in Case of Contractor's Default.

In Case of Default.

Article LXII. If the work to be done under this contract shall be abandoned by the Contractor, or if this contract shall be assigned or the work sublet by him otherwise than as herein specified, or if at any time the Engineer shall be of opinion, and shall so certify in writing to the Commission, that the performance of this contract is unnecessarily or unreasonably delayed or that the Contractor is wilfully violating any of the provisions or covenants of this contract or of the specifications or is not executing the same in good faith and in accordance with the terms hereof, or if the work be not fully completed within the time named in this contract for its completion or within the time to which the completion of the contract may be extended by the Commission, or (in view of the necessity for special skill and ample financial resources in the prosecution of the work) if the Contractor shall become insolvent or bankrupt or if his property or affairs shall be put in the hands of a receiver or receivers, then and in any of such cases

May Take Charge of Work.

(1) The Commission may notify the Contractor, by a written notice, to discontinue all work or any part thereof under this contract, and thereupon the Contractor shall discontinue the work or such part thereof, and the Commission shall thereupon have the right to contract for the completion of the Works or such part thereof in the manner prescribed by law or to place such and so many persons as it may deem advisable, by contract or otherwise, to work and complete the work herein described or such part thereof, to take possession of and use any or all of the materials, plant tools, equipment, supplies and property of every kind provided by the Contractor for the purpose of his work, and to procure other materials for the completion of the same, and to charge the expense of said labor and materials to the Contractor. The expense so charged shall be deducted and paid by the City out of such moneys as may be due or may at any time thereafter grow due to the Contractor under and by virtue of this contract; and the Interborough Company shall, upon the requirement of the Commission, deduct and pay to the City out of such moneys as may be due or may at any time thereafter grow due to the Contractor from it under and by virtue of this contract, the amount of such expense or such portion thereof as the Commission shall require, to be applied by the City to the payment of such expense, and such moneys so deducted and paid to the City shall be deemed to have been paid to the Contractor by the Interborough Company upon this contract. And in case such expense shall exceed the amount which would have been payable under this contract if the same had been completed by the Contractor, he shall pay the amount of such excess to the City; and in case such expense shall be less than the amount which would have been payable under this contract if the same had been completed by the Contractor, he shall forfeit all claim to the difference; and when any particular part of the work is being carried on by the Commission, by contract or otherwise, under the provisions of this Article, the Contractor shall continue the remainder of the work in conformity with the terms of this contract and in such manner as in no wise to hinder or interfere with other contractors of the Commission or with the persons or workmen employed, as above provided, by the Commission, by contract or otherwise, to do any part of the work, or to complete the same under the provisions of this Article.

The Contractor shall also in any and every such case and in the case of any and every act, neglect, delay, fault or default of the Contractor, in addition to the liability above expressed, pay to the City as liquidated damages for any delay resulting therefrom in the construction and completion of said portion of said rapid transit railroad which the Contractor herein agrees to construct with its appurtenances the

sum of three hundred dollars (\$300) for each and every day, except Sundays and legal holidays, of such delay, which sum is hereby agreed upon not as a penalty but as liquidated damages which the City will suffer by reason of such delay in the construction and completion of said railroad. And

Or Proceed Upon Bond.

(2) The City may also proceed as to the Commission shall seem proper upon the bond or other security in its possession. And

Or May Bring Suit.

(3) The City may also bring any suit or proceeding for specific performance or for injunction or to recover damages or to obtain any other relief or for any other purpose proper under this contract.

Engineer's Certificate of Expense.

Article LXIII. In case the Commission shall by contract or otherwise complete the Works or any part thereof under the provisions of Article LXII, the Engineer, upon the completion of the Works or such part thereof or at any time thereafter upon demand in writing by any party hereto or from time to time during the course of the completion of the Works or such part thereof upon demand by the Commission, shall certify to the amount of the expense incurred by the City in the completion of the Works or such part thereof, and said certificate shall be final and conclusive and admissible in evidence against the Contractor in any litigation arising or growing out of this contract.

City May Use All Remedies.

Article LXIV. The City may avail itself of each and every remedy herein specifically given to the City or now or hereafter existing at law or in equity or by statute, and each and every such remedy shall be in addition to every other remedy so specifically given or otherwise so existing and may be exercised from time to time and as often and in such order as may be deemed expedient by the Commission, and the exercise, or the beginning of the exercise, of one remedy shall not be deemed to be a waiver of the right to exercise, at the same time or thereafter, any other remedy, except that no two inconsistent remedies shall be exercised at the same time.

CHAPTER X.

Miscellaneous Provisions.

Changes in the Contract.

Article LXV. No correction or change in this contract shall be made except by written instrument duly authorized by the Commission and consented to by the Contractor and by the sureties upon his bond, and if any such correction or change affects the obligations of the Interborough Company hereunder, by the Interborough Company; but this provision shall not limit or affect the right to prescribe variations whether of construction or of location of route as in this contract elsewhere provided.

Members of Commission or Interborough Not Liable.

Article LXVI. No claim shall be made by the Contractor against any member of the Commission or any officer or director of the Interborough Company personally under or by reason of this contract or any of its articles or provisions.

Contractor Not to Assign, Sublet, Etc.

Article LXVII. The Contractor shall not assign, transfer, convey, sublet or otherwise dispose of this contract or his right, title or interest in or to the same or any part hereof without the previous consent in writing of the Commission, and he shall not assign by power of attorney or otherwise any of the moneys to become due and payable under this contract unless by and with the like consent. If the Contractor shall without such previous written consent assign, transfer, convey, sublet or otherwise dispose of this contract or of his right, title or interest herein or any of the moneys to become due under this contract, to any other person, company or corporation, this contract may at the option of the Commission be revoked and annulled and the City and the Interborough Company shall thereupon be relieved and discharged from any and all liability and obligations growing out of the same to the Contractor and to his assignee or transferee; and no right under this contract or to any money to become due hereunder shall be asserted against the City or the Interborough Company in law or in equity by reason of any so-called assignment of this contract or any part thereof or of any moneys to grow due hereunder unless authorized as aforesaid by the written consent of the Commission; provided that nothing herein contained shall be construed to hinder, prevent or affect an assignment by the Contractor for the benefit of his creditors made pursuant to the statutes of the State of New York.

Provisions in Case Commission Ceases.

Article LXVIII. In case the Commission shall cease to exist, the Legislature may provide what public officer or officers shall exercise the powers and duties of the Commission under and by virtue of this contract; and in default of such provision, such powers and duties shall be deemed to be vested in the Mayor of the City. In case any officer or officers other than the Commission shall hereafter have the powers of the Commission or any of them, then the provisions of this contract shall be applicable to such officer or officers to the extent to which the powers of the Commission shall appertain to such officer or officers, and any official act or determination of such officer or officers or of the Commission shall be sufficient hereunder, anything herein to the contrary notwithstanding, if the same be done or had by lawful vote or resolution or in such manner as the Legislature may from time to time prescribe.

Labor Law.

Article LXIX. The Contractor agrees to comply with the provisions of the Labor Law, including Section Three thereof as re-enacted by Chapter 36 of the Laws of 1909. The Contractor further agrees and stipulates that no laborer, workman or mechanic in the employ of the Contractor, sub-contractor or other person doing or contracting to do the whole or a part of the work contemplated by this contract, shall be permitted or required to work more than eight hours in any one calendar day, except in cases of extraordinary emergency caused by fire, flood or danger to life or property; and further, that the wages to be paid for a legal day's work as hereinbefore defined to all classes of such laborers, workmen or mechanics upon the work contemplated by this contract or upon any material to be used upon or in connection therewith, shall be not less than the prevailing rate for a day's work in the same trade or occupation in the Borough of the City, where the work hereby contemplated, about or in connection with which such labor is performed, is in its final or completed form to be situated, erected or used; and that each such laborer, workman or mechanic employed by the Contractor or by any sub-contractor or other person on, about or upon the work contemplated by this contract, shall receive such wages herein provided for. This contract shall be void and of no effect unless the Contractor shall comply with the provisions of this section. In obedience to the requirements of Section Fourteen of the Labor Law it is further provided that if the provisions of the said Section Fourteen are not complied with, this contract shall be void.

All Necessary Legal Provisions Deemed Inserted Herein.

Article LXX. It is the intent and understanding of the parties to this agreement that each and every provision of law required to be inserted in this contract should be and is inserted herein. Furthermore, it is hereby stipulated that every such provision is to be deemed to be inserted herein; and if, through mistake or otherwise, any such provision is not inserted or is not inserted in correct form, then this contract shall forthwith, upon the application of any party, be amended by such insertion so as to comply strictly with the law and without prejudice to the rights of any party hereunder.

Provision in Case of Unlawful Provision.

Article LXXI. If this contract contains any unlawful provision not an essential part of the general structure of the contract and which shall not appear to have been a controlling or very material inducement to the making thereof, the same shall be deemed to be of no effect and shall, upon the application of any party, be stricken from this contract without affecting the binding force of the contract as it shall remain after omitting such provision.

Interborough Company a Party to the Contract.

Article LXXII. The Interborough Company is a party to this contract solely for the purpose of paying out its contribution toward the cost of construction of the Railroad as provided in the said contract dated March 19, 1913, and the fact that it is a party to this contract with the City and the Contractor shall not deprive it of any rights, claims or remedies which as owner or lessee of any elevated railroad or abutting property or otherwise; it might otherwise possess or assert against the City or the Contractor.

Testimonium.

In witness whereof, this contract has been executed for The City of New York by the Public Service Commission for the First District under and by resolution duly adopted by the Commission and the seal of the Commission has been hereto affixed

and attested by its Secretary and these presents have been signed by its Chairman; and the Interborough Rapid Transit Company has caused its corporate seal to be hereto affixed and attested by its Secretary and these presents to be signed by its President; and the Contractor has [hereunto set hand and seal] [caused corporate seal to be hereto affixed and these presents to be executed by proper officers] the day and year first above written.

THE CITY OF NEW YORK, by the PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT.

Attest: Secretary.
INTERBOROUGH RAPID TRANSIT COMPANY, by President.
Attest: Secretary.

Acknowledgment for Commission.

State of New York, County of New York, ss.:

On the day of 1914, before me personally appeared Edward E. McCall and Travis H. Whitney, to me known and known to me to be the said Edward E. McCall, the Chairman, and the said Travis H. Whitney, the Secretary of the Public Service Commission for the First District; and the said Edward E. McCall and Travis H. Whitney being by me duly sworn, did depose and say, each for himself, and not the one for the other, the said Edward E. McCall, that he resides in the Borough of Manhattan, in the City, County and State of New York, that he is the Chairman of the said Commission and that he subscribed his name to the foregoing contract by virtue of the authority thereof; and the said Travis H. Whitney, that he resides in the Borough of Brooklyn, in the County of Kings, City and State of New York, that he is the Secretary of the said Commission and that he subscribed his name thereto by like authority; and both the said Edward E. McCall and Travis H. Whitney that they know the seal of the said Commission and that one of the seals affixed to the foregoing contract is such seal and that the same was affixed to the foregoing contract by the authority of the said Commission and of a resolution duly adopted by the same.

Acknowledgment for I. R. T. Co.

State of New York, County of New York, ss.:

On the day of 1914, before me personally appeared Theodore P. Shonts and H. M. Fisher, to me known and known to me to be the said Theodore P. Shonts, the President, and the said H. M. Fisher, the Secretary, of Interborough Rapid Transit Company, the corporation named in the foregoing contract, and they being by me duly sworn, did depose and say, each for himself and not one for the other, the said Theodore P. Shonts, that he resides in the Borough of Manhattan, in the City, County and State of New York, that he is the President of the said Interborough Rapid Transit Company and that he subscribed his name to the foregoing contract by virtue of the authority thereof; and the said H. M. Fisher, that he resides in Plainfield, in the State of New Jersey, that he is the Secretary of the said Interborough Rapid Transit Company and that he subscribed his name thereto by like authority; and both the said Theodore P. Shonts and H. M. Fisher that they know the seal of the said Interborough Rapid Transit Company and that one of the seals affixed to the foregoing contract is such corporate seal and that the same was affixed to the foregoing contract by the authority of the Board of Directors of Interborough Rapid Transit Company and of a resolution duly adopted by the same.

Acknowledgment for Contractor.

State of New York, County of New York, ss.:

On this day of 1914, before me personally appeared to me known and known to me to be the individual described in and who executed the foregoing instrument, and he duly acknowledged to me that he executed the same.

State of New York, County of New York, ss.:

On this day of 1914, before me personally appeared to me known, who, being by me first duly sworn, did depose and say: That he resides in of the State of; that he is of the corporation described in and which executed the foregoing instrument; that he knows the corporate seal of said company; that one of the seals affixed to said contract is such corporate seal, and that it was affixed thereto by order of the Board of Directors of said company, and that he signed his name thereto by like authority. (Note.—If the Contractor, upon the approval of the Commission, deposits securities in lieu of a bond, a description of such securities with their values shall be inserted below.)

(Form of Contractor's Bond, Form of Contractor's Proposal, Affidavit of Verification and Index follow here.)

City of New York, Board of Estimate and Apportionment, Municipal Building, Bureau of Contract Supervision, October 19, 1914.

To the Board of Estimate and Apportionment:

Gentlemen—On September 25, 1914, you referred to the Comptroller a communication from the Public Service Commission for the First District, dated September 22, 1914, transmitting for the consent of your Board a proposed contract to be entered into between The City of New York, the Interborough Rapid Transit Company and the contracting firm of Smith, Hauser and McIsaac, Inc., for the construction of Section No. 2, of Route No. 48, a part of the Seventh Avenue-Lexington Avenue Rapid Transit Railroad, extending through William Street, between Beekman and Pearl Streets, in Manhattan, at an estimated cost to the City of \$1,127,335.

The Commission, in submitting this contract, requested the Board to consent to its award to the firm of Smith, Hauser and McIsaac, Inc., to prescribe the limit of \$1,127,335 to the amount of bonds available to meet the requirements of the City's obligation, and to direct the Comptroller to issue bonds to said amount, the same to be made a charge against the appropriation made by your Board on March 18, 1913, of \$28,200,000, for the purpose of carrying out the terms of Contract No. 3.

This contract has been awarded to the low bidder among six competitors, in a total amount of \$2,254,670. Of this total amount the contract requires the City to contribute 50 per cent. or \$1,127,335, and the Interborough Rapid Transit Company 50 per cent., or not to exceed \$1,127,335.

William Street is only 40 feet wide between building lines, with a twenty-foot roadway. The standard subway along this route will be twenty-seven feet wide. At stations, the outer walls will extend exactly to the building lines, requiring cutting off all masonry foundation footings of buildings to enable the contractor to construct the station walls to various depths approximately 30 feet below the street surface. There will be one station extending from Cedar street to Wall street and another from John street to Ann street; in other words, 60 per cent. of the distance from Wall to Ann street will be station work.

It was because of the likelihood of damages to buildings along this street, following such construction, that the property holders undertook action through the Courts to fix primarily all liability for damages upon the City. All previous contracts have invariably placed such liability upon the contractor. Upon the suggestion of the Appellate Division of the Supreme Court, your Board on March 13, 1913, in conformity with resolution of the Public Service Commission, requested said Commission to incorporate in the proposed contract for this work provisions making the City primarily liable for damages to persons or property to be recoverable by owners, whether due to defective plans, or to the negligence of the City or of the contractor, without prejudice, however, to the City's claims or rights of action or rights of recovery over against contractors or others for any such damage. It was resolved by this Board, further, that no approval would be given any such contract unless such provisions were contained therein.

The Commission, by separate communication to the Board, under date of September 22, 1914, has noted these conditions and the new article incorporated in the contract, designated as Article XLVII-A, to meet the Board's requirements. Although differing somewhat in phraseology from the resolution requesting such inclusion, it seems to attain the spirit of the result desired, and has had the approval of the Corporation Counsel. It provides as follows:

"Article XLVII-A. The above provisions of this Chapter relative to the Contractor's liability, shall remain in full force and effect, but in pursuance of the suggestion of the Appellate Division of the Supreme Court in and for the First Judicial Department in *Matter of Public Service Commission (Park Place Route)*, 154 App. Div., 587, 591, and of the resolutions relative thereto adopted by the Com-

*If the Contractor is an individual, use the words enclosed in the first bracket; if a corporation, use the words enclosed in the second bracket.

mission and by the Board of Estimate and Apportionment of the City, it is understood and agreed that the City shall primarily be liable to the owners of abutting property and of buildings thereon for physical damages to such property and buildings, howsoever caused by the construction of the works. The Contractor shall, however, indemnify and save harmless the City against and from any and all such damages and claims therefor and all costs and expenses in connection therewith; provided, however, that the City shall upon the written request of the Contractor afford him all reasonable opportunity to assist in the defense against such claims." I recommend the adoption of the attached resolutions consenting to the award of the contract, limiting the amount of bonds available and authorizing and directing the Comptroller to issue the necessary Corporate Stock. Respectfully,

WM. A. PRENDERGAST, Comptroller.

The President of the Board of Aldermen, for the Transit Committee, presented the following report:

New York, November 25th, 1914.

To the Honorable Board of Estimate and Apportionment:

Sirs—At a meeting of your Board on November 20th, 1914, there was referred to the Transit Committee reports of the Comptroller recommending the approval of the award of contracts for construction of Sections 1 and 2, Route No. 48, Seventh and Lexington Avenue subway.

This reference was made for the purpose of permitting the Transit Committee to give a public hearing to the property owners and others interested in the question of placing gas mains and other sub-surface structures on trestles above the surface of the street.

Your Committee held such a hearing on the afternoon of Tuesday, November 24th, at which all those interested were given an opportunity to be heard. Representatives of the Public Service Commission, who were also present, stated that the plans of the Commission, filed with the contract, provide for carrying all mains and pipes in the gutters, except at three of the street intersections, and except for that portion of the work between Hanover Square and Old Slip. At these intersections, it was explained, trestles must be used; but these will cross William Street and will not run along it longitudinally.

Your Committee has been assured that the Public Service Commission will adopt as light a form of trestle as will possibly hold the weight of the pipes; but the Commission feels bound to reserve the right to change these plans if at any time in the course of the work it is shown that conditions of public safety so require. It will, of course, be appreciated, that such details of construction must be left to the discretion of the Public Service Commission and its engineers, and your Committee feels that every possible effort will be made to follow the methods outlined herein.

Upon this understanding your Committee recommends the approval of the contracts as awarded. Respectfully submitted,

GEORGE MCANENY, President, Board of Aldermen; LEWIS H. POUNDS, President, Borough of Brooklyn; DOUGLAS MATHEWSON, President, Borough of The Bronx; Committee on Transit.

(The foregoing report also refers to Cal. No. 49.)

Mr. E. P. Doyle appeared in opposition to carrying mains along the streets on trestles.

Hon. Leroy T. Harkness, representing the Public Service Commission for the First District, appeared and addressed the Board.

Mr. Lazarus White, representing the contractor, also addressed the Board.

The following resolution was offered:

Resolved, That, pursuant to the provisions of Section 37 of the Rapid Transit Act, being Chapter 4 of the Laws of 1891, as amended, and the provisions of Section 45 of the Greater New York Charter, and the requisition of the Public Service Commission for the First District, duly made by said Commission on September 22, 1914, the Board of Estimate and Apportionment hereby consents to the proposed contract to be entered into between The City of New York, acting by the Public Service Commission for the First District, the Interborough Rapid Transit Company and Smith, Hauser and McIsaac, Inc., as contractor, for the following purposes:

For the construction by Smith, Hauser & McIsaac, Inc., of Section No. 2 of Route No. 48, being that portion in the Borough of Manhattan of the proposed Seventh Avenue-Lexington Avenue Rapid Transit Railroad beginning at a point under Beekman Street, in the Borough of Manhattan, about sixty-two (62) feet west of the westerly building line of William Street, curving thence southerly under private property into William Street, extending thence southerly under William Street and easterly under Hanover Square to a point about opposite the easterly building line of Pearl Street, at an estimated cost to the City of one million one hundred and twenty-seven thousand three hundred and thirty-five dollars (\$1,127,335), being fifty (50) per cent. of the total estimated contract cost of two million two hundred and fifty-four thousand six hundred and seventy dollars (\$2,254,670). The liability of the Interborough Rapid Transit Company in the construction of Section No. 2 of Route No. 48, hereinabove described, will be limited to an amount equal to fifty (50) per centum of the total estimated amount to be paid to the contractor under the contract; and be it further

Resolved, That the Board of Estimate and Apportionment prescribes that the limit to the amount of proceeds of corporate stock available to meet the requirements of the City's obligation under said contract shall be one million one hundred and twenty-seven thousand three hundred and thirty-five dollars (\$1,127,335); and be it further

Resolved, That the Comptroller be and he is hereby authorized and directed to issue corporate stock of The City of New York to the amount of one million one hundred and twenty-seven thousand three hundred and thirty-five dollars (\$1,127,335) at such rate of interest as the Commissioners of the Sinking Fund shall prescribe, the proceeds to the amount of the par value thereof to be applied to the purposes mentioned in the communication of the Public Service Commission for the First District to this Board, dated September 22, 1914, and as specifically set forth in this resolution, said issue of corporate stock to be charged against the appropriation made by this Board on March 18, 1913, of twenty-eight million two hundred thousand dollars (\$28,200,000), for the purpose of carrying out the contract dated March 19, 1913, known as Contract No. 3.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Public Service Commission for the First District—Approval of Award of Contract to Frederick L. Cranford, Inc., for the Construction of Section No. 1 of Route No. 48 of the Seventh Avenue-Lexington Avenue Rapid Transit Railway, and Issue of Corporate Stock Therefor (Cal. No. 49).

(On October 16, 1914 (Cal. No. 64), the requisition of the Public Service Commission for the First District in this matter was referred to the Comptroller and to the Bureau of Contract Supervision.)

(On November 13 and 20, 1914 (Cal. No. 129), the report of the Comptroller thereon was presented and laid over for one week and referred to the Committee on Transit.)

The Secretary presented the following requisition of the Public Service Commission for the First District, for the consent of the Board to the award of the contract to Frederick L. Cranford, Inc., for the construction of Section No. 1 of route No. 48 of the Seventh Avenue-Lexington Avenue Rapid Transit Railway (extending from Park Place, near West Broadway, under Park Place and the United States Post Office building and Beekman street to a point west of William street, Borough of Manhattan), and the issue of Corporate Stock therefor; and report of the Comptroller recommending approval thereof:

State of New York, Public Service Commission for the First District, Tribune Building, 154 Nassau Street, New York City.

To the Board of Estimate and Apportionment of The City of New York:

The Public Service Commission for the First District herewith transmits to you for your consent, as required by law, a proposed contract between The City of New York, Interborough Rapid Transit Company and Frederick L. Cranford, Inc., for the construction of a part of the Seventh Avenue-Lexington Avenue Rapid Transit Railroad, Route No. 48, Section No. 1 (Park Place and Beekman Street), which said section is described as follows:

Beginning at a point under Park Place, in the Borough of Manhattan, about one hundred and seventeen (117) feet east of the easterly building line of West Broadway and extending thence easterly under Park Place, the United States Post Office building and Beekman street, to a point about sixty-two (62) feet west of the westerly building line of William Street.

The Public Service Commission for the First District requests your Honorable

Board to consent to said contract herewith transmitted and to prescribe a limit to the amount of bonds available to meet the requirements of the City's obligation under said contract, to wit, the sum of seven hundred and eighty-five thousand six hundred and eighty-one dollars and seventy-five cents (\$785,681.75), and also to direct the Comptroller of The City of New York to issue the bonds of said City at such a rate of interest as the Commissioners of the Sinking Fund of said City may prescribe, for the purpose of providing the necessary means to meet the City's share of executing said contract, to wit, the sum of seven hundred and eighty-five thousand six hundred and eighty-one dollars and seventy-five cents (\$785,681.75).

The Public Service Commission for the First District does hereby, pursuant to Section 45 of the Greater New York Charter, make request for the authorization of such corporate stock for the full amount sufficient to pay the entire estimated expense to the City of executing said contract, to wit, the sum of seven hundred and eighty-five thousand six hundred and eighty-one dollars and seventy-five cents (\$785,681.75).

This requisition is a sub-requisition on account of and not in addition to the requisition made by the Public Service Commission for the First District under date of March 18, 1913, upon your Honorable Board for twenty-eight million two hundred thousand dollars (\$28,200,000) for the purpose of carrying out the contract dated March 19, 1913, known as Contract No. 3, between The City of New York, acting by the Public Service Commission for the First District, and Frederick L. Cranford, Inc., for additional rapid transit railroads and the appropriation made thereunder by your Honorable Board on March 18, 1913.

In witness whereof the Public Service Commission for the First District has caused its official seal to be hereto affixed and attested by its Secretary and these presents to be signed by its Chairman this 13th day of October, 1914.

PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT, by EDWARD E. McCALL, Chairman.
(L. S.)

Attest: TRAVIS H. WHITNEY, Secretary.

INVITATIONS TO CONTRACTORS.

Part of the Seventh Avenue-Lexington Avenue Rapid Transit Railroad.

The Public Service Commission for the First District (hereinafter called the "Commission") invites proposals to construct Section No. 1 of Route No. 48, a part of the Seventh Avenue-Lexington Avenue Rapid Transit Railroad.

The points within the City of New York between which the said part is to run and the route or routes to be followed are briefly as follows:

Section No. 1. Beginning at a point under Park Place, in the Borough of Manhattan, about one hundred and seventeen (117) feet east of the easterly building line of West Broadway, and extending thence easterly under Park Place, the United States Post Office building and Beekman Street to a point about sixty-two (62) feet west of the westerly building line of William Street.

The general plan of construction calls for a subsurface railroad having two tracks. The Contractor will not be required to provide or lay tracks, ties or ballast nor to do station finish work.

The work under the contract will include the care and support of buildings, vaults, sewers, pipes, railroads and other surface, subsurface and overhead structures, the maintenance of traffic and the restoration of pavements and other surfaces.

The method of construction will be partly by trench excavation under cover and partly by tunneling, unless otherwise permitted by the Commission.

Bidders must examine the form of contract and the specifications and contract drawings, must visit the location of the work and inform themselves of the conditions along the line of the work and make their own estimates of the facilities and difficulties attending the execution of the work.

A fuller description of the work and other requirements, provisions, details and specifications are given in the form of contract and in the contract drawings therein referred to. Copies of the forms of contract, bond and contractor's proposal and of the contract drawings may be inspected and purchased at the office of the Commission, No. 154 Nassau Street, Borough of Manhattan, New York City. The forms of contract, bond and contractor's proposal and the contract drawings are to be deemed a part of this invitation.

The City of New York (hereinafter called the "City") and the Interborough Rapid Transit Company will both be parties to the contract; the Interborough Rapid Transit Company being a party for the purpose of disbursing part of its contribution toward the cost of construction, as provided in the contract dated March 19, 1913, between the City and the said Company for additional rapid transit railroads. The liability of Interborough Rapid Transit Company will be limited to an amount equal to fifty per centum (50%) of the total estimated amount to be paid to the Contractor under the contract.

Partial payments to the Contractor will be made as the work proceeds, as provided in the contract.

The Contractor must complete the work within twenty-eight (28) months from the delivery of the contract.

At the time of the delivery of the contract the Contractor must furnish security to the City by depositing a bond, cash or securities in the sum of four hundred thousand dollars (\$400,000). As further security fifteen (15) per centum of the amounts certified from time to time to be due to the Contractor will be deducted until the amounts so deducted and retained shall equal ten (10) per centum of the total estimated amount to be paid to the Contractor under the contract. Thereafter there shall be so deducted and retained for such purpose ten per centum (10%) of the amounts certified from time to time to be due to the Contractor.

Sealed bids or proposals will be received at the office of the Commission, No. 154 Nassau Street, Borough of Manhattan, New York City, until the 9th day of October, 1914, at twelve fifteen (12:15) o'clock p. m., at which time, or at a later date to be fixed by the Commission, the proposals will be publicly opened.

Proposals must be in the form prescribed by the Commission.

A statement, based upon the estimate of the Chief Engineer of the Commission, of the quantities of the various classes of the work and of the nature and extent, as near as practicable, of the work is to be found in the schedule in the form of contractor's proposal. The quantities given in such schedule are approximate only, being given as a basis for the uniform comparison of bids, and no claim is to be made against the City on account of any excess or deficiency, absolute or relative, in the same except as provided in the specifications and form of contract.

Every proposal must when submitted be enclosed in a sealed envelope endorsed "Proposal for Constructing Part of Rapid Transit Railroad—Route No. 48, Section No. 1," and must be delivered to the Commission or its Secretary; and in the presence of the person submitting the proposal it will be deposited in a sealed box in which all proposals will be deposited. No proposal will be received unless accompanied by a separate certified check for forty thousand dollars (\$40,000), payable to the order of the Comptroller of the City and drawn upon a national or state bank or trust company satisfactory to the Commission and having its principal office in New York City. Such check must not be enclosed in the envelope containing the proposal.

The Unit Prices must not be improperly balanced, and any bid which the Commission considers detrimental to the City's interests may be rejected.

No proposal, after it shall have been deposited with the Commission, will be allowed to be withdrawn for any reason whatsoever.

The award of the contract will be made by the Commission as soon as practicable after the opening of the proposals.

Deposits made by bidders whose proposals are not accepted will be returned within three (3) days after the contract is executed and delivered and its provisions in respect of the bond or deposit are complied with, unless all proposals shall be rejected, in which event such deposits will be returned within three (3) days after such rejection. The deposit of the successful bidder will be returned when the contract is executed and delivered and its provisions in respect of the bond or deposit are complied with.

The right to reject any and all bids is reserved.
New York, September 15, 1914.

PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT, by EDWARD E. McCALL, Chairman.
TRAVIS H. WHITNEY, Secretary.

PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT.

Contract for the Construction of a Part of a Rapid Transit Railroad, Route No. 48, Section No. 1.

Approved as to form this day of _____, 1914.

....., Acting Corporation Counsel.

RAPID TRANSIT RAILROAD.

CONTRACT.

Route No. 48, Section No. 1.

Agreement made this _____ day of _____, 1914, between The City of New York, hereinafter called the City, acting by the Public Service Commission for the First District, hereinafter called the Commission, party of the first part, Interborough Rapid Transit Company, a corporation organized and existing under the laws of the State of New York, hereinafter called the Interborough Company, party of the second part, and

hereinafter called the Contractor, part* of the third part.

Whereas, on or about the 19th day of March, 1913, the City, acting by the Commission, entered into a contract with the Interborough Company for the equipment, maintenance and operation of certain additional rapid transit railroads or extensions of the rapid transit railroads now operated by the Interborough Company under lease from the City therein specifically described, including the Railroad to be constructed hereunder, and as one of the terms and conditions of such contract the Interborough Company agreed to contribute toward the cost of construction of such railroads and to disburse part of its said contribution through the medium of construction contracts to which it should be a party for the purpose of making such disbursement; and

Whereas, the Commission by due advertisement, pursuant to law, has invited contractors to submit to the Commission proposals for making this contract; and

Whereas, the Contractor has thereupon duly submitted to the Commission a proposal, which has been accepted; and

Whereas, the Board of Estimate and Apportionment of The City of New York has consented to this contract;

Now, therefore, in consideration of the mutual covenants and agreements hereinafter contained, and under the authority of chapter 4 of the laws of 1891, entitled, "An Act to provide for Rapid Transit Railways in Cities of over One Million Inhabitants," and of the various acts amending the same, the parties do hereby, the City for itself and its successors, the Interborough Company for itself, its successors and assigns and the Contractor for

Agree each with the other as follows:

CHAPTER I.

General Provisions and Definitions.

Outline of Contract.

Article I. The Contractor agrees to construct the part hereinafter described of a Rapid Transit Railroad, with its appurtenances. The City and the Interborough Company agree to pay the Contractor the sums of money hereinafter mentioned at the times and in the manner and upon the terms and conditions hereinafter set forth.

Brief Description of Route.

Article II. The Railroad to be constructed under this contract forms part of a certain route adopted by the Commission on May 28, 1912, and known as the Park Place, William and Clark Street Route, or Route No. 48. The part to be constructed under this contract consists of

Section No. 1.

Beginning at a point under Park Place, in the Borough of Manhattan, about one hundred and seventeen (117) feet east of the easterly building line of West Broadway and extending thence easterly under Park Place, the United States Post Office building and Beekman Street to a point about sixty-two (62) feet west of the westerly building line of William Street.

The location of the tracks and the dimensions and other characteristics of the Railroad are given in the specifications forming a part of this contract and in the contract drawings hereinafter mentioned.

Statute Incorporated Herein.

Article III. This contract is made pursuant to the Rapid Transit Act, which is to be deemed a part hereof as if it were incorporated herein.

Marginal Notes, etc.

Article IV. Titles, headings, running headlines and marginal notes are printed hereon merely for convenience and shall not be deemed to be any part of this contract for any purpose whatever.

Definitions of Words.

Article V. The following words and expressions used in this contract shall, except where by the context it is clear that another meaning is intended, be construed as follows:

"City."

(1) The word "City" to mean The City of New York, and any other corporation or division of government to which the ownership, rights, powers and privileges of The City of New York under the Rapid Transit Act, shall thereafter come, belong or appertain.

"Commission."

(2) The word "Commission" to mean the Public Service Commission for the First District, and any other board, body, commission, official or officials, to which or to whom the powers now belonging to the said Commission in respect of the location, construction, equipment, maintenance and operation of Rapid Transit Railroads under the provisions of the Rapid Transit Act shall, by virtue of any act or acts, hereafter pass or be held to appertain.

"Interborough Company."

(3) The words "Interborough Company" to mean Interborough Rapid Transit Company, party of the second part to this contract, and its successors and assigns.

"Contractor."

(4) The word "Contractor" to mean the part† of the third part to this contract, and§ and assigns and any and every person or corporation who or which shall at any time be liable in the place or for the part of the third part to perform any obligations under this contract assumed by the said part of the third part. For convenience the Contractor is hereinafter referred to as if the Contractor were an individual. The word "he" shall, as the sense may require, include "she," "it" and "they"; the word "him" shall include "her," "it" and "them"; and the word "his" shall include "her," "its" and "their."

"Comptroller."

(5) The word "Comptroller" to mean the Comptroller of The City of New York, and the officer or board to whom or to which his powers now existing under the Rapid Transit Act shall come to appertain.

"Engineer."

(6) The word "Engineer" to mean the Chief Engineer of the Commission or his duly authorized representative and any successor or successors duly appointed or any deputy or substitute for him who shall be appointed by the Commission or by its authority.

"Inspector."

(7) The word "Inspector" to mean any representative of the Engineer designated by him to act as inspector.

"Rapid Transit Act."

(8) The words "Rapid Transit Act" to mean chapter 4 of the laws of 1891 as amended by chapters 102 and 556 of the laws of 1892, chapters 528 and 752 of the laws of 1894, chapter 519 of the laws of 1895, chapter 729 of the laws of 1896, chapter 616 of the laws of 1900, chapter 587 of the laws of 1901, chapters 533, 542, 544 and 584 of the laws of 1902, chapters 562 and 564 of the laws of 1904, chapters 599 and 631 of the laws of 1905, chapters 472, 606 and 607 of the laws of 1906, chapters 429 and 534 of the laws of 1907, chapter 472 of the laws of 1908, chapter 498 of the laws of 1909, chapters 205, 504, 505 and 506 of the laws of 1910, chapter 888 of the laws of 1911, chapter 226 of the laws of 1912, chapters 100, 510, 524 and 540 of the laws of 1913, and chapter 118 of the laws of 1914, or as heretofore otherwise amended.

"Railroad."

(9) The word "Railroad" to mean the part of a Rapid Transit Railroad which the Contractor agrees by this contract to build, together with all appurtenances thereto which are to be constructed or provided by the Contractor.

"The Works."

(10) The word "Works" to mean all the matters and things herein agreed to be furnished or done by or on the part of the Contractor.

*Here insert y or ies, as the case may be.

†Here insert, if a corporation, itself, its successors; if a single individual, himself, his executors, administrators; if several individuals, themselves, jointly and severally, and their and each of their executors, administrators.

‡Here and in like blanks hereafter insert y or ies, as the case may be.

§Here insert, as the case may be, either its successors, or his executors, administrators, or their executors, administrators.

"New York."

(11) The words "New York" to mean the City of New York, according to its boundaries at the date of this contract.

"Daily Newspaper."

(12) The words "daily newspaper" to mean any paper regularly published in New York on every day or every day except Sundays and holidays.

"Notice."

(13) The word "notice" to mean a written notice.

"Directed," Etc.

(14) The words "directed," "required," "permitted," "ordered," "designated," "prescribed" or words of like import used in the specifications or upon the drawings to mean, respectively, the direction, requirement, permission, order, designation or prescription of the Engineer, and similarly the words "approved," "acceptable," "satisfactory" or words of like import to mean, respectively, approved by, or acceptable or satisfactory to the Engineer.

"Ton."

(15) The word "ton" to mean the short ton of two thousand (2,000) pounds.

Legal Address of Contractor—Address May Be Changed.

Article VI. The Contractor hereby designates Room No. _____ on the floor of the building No. _____, in the Borough of _____, in the City of New York, as the place where all notices, directions and other communications to the Contractor may be served, mailed or delivered. The delivering at the aforesaid place or depositing in a post-paid wrapper directed to the aforesaid place in any post-office box regularly maintained by the Postoffice Department, of any notice, direction or other communication to the Contractor shall be deemed to be sufficient service thereof upon the Contractor as of the date of such delivery or deposit. Such address may be changed at any time by an instrument in writing executed and acknowledged by the Contractor and delivered to the Commission. Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, direction or other communication upon the Contractor personally or if the Contractor be a corporation, upon any officer or director thereof.

Contractor Responsible for Acts of Sub-contractor's Employees.

Article VII. If the Contractor shall cause any part of this contract to be performed by a sub-contractor, the provisions of this contract shall apply to such sub-contractor and his officers, agents and employees in all respects, as if he and they were employees of the Contractor; and the Contractor shall not be in any manner thereby discharged from his obligations and liabilities hereunder, but shall be liable hereunder for all acts and negligence of the sub-contractor, his officers, agents and employees as if they were employees of the Contractor. The employees of the sub-contractor shall be subject to the same provisions hereof as employees of the Contractor; and the work or materials furnished by the sub-contractor shall be subject to the provisions hereof, as if furnished directly by the Contractor.

Commission May Disapprove Sub-contractors.

Article VIII. The Contractor, before making any sub-contract of the work, shall state in writing to the Commission the name of the proposed sub-contractor, the portion of the work which such sub-contractor is to do or the materials which such sub-contractor is to furnish, the place of business of such sub-contractor and such other information as the Commission may require. The Commission shall have the right to require the Contractor not to award any sub-contract to a person, firm or corporation disapproved of by the Commission.

CHAPTER II.**Work to Be Done, Prices, Etc.****Work to Be Done.**

Article IX. The Contractor shall furnish all the labor and materials, plant, power, tools, supplies and other means of construction necessary or proper for constructing and completing the Railroad and performing all the work which the Contractor agrees by this contract to perform in the manner and within the time hereinafter specified. He shall complete the Railroad and do all work and furnish all labor and materials in and about the construction of the Railroad to the satisfaction of the Commission and in accordance with this contract and the specifications and drawings herein mentioned at the prices herein agreed upon and fixed therefor; provided, however, that said contract drawings may from time to time be altered or modified as hereinafter provided.

Construction Includes Incidental Work.

Article X. In order to construct the Railroad it will be necessary to take up and relay the sidewalk and roadway pavement or other surface material and to protect, support and maintain all buildings and other structures, including their foundations, and all surface, subsurface and elevated railroads, water mains, gas pipes, electric subways, poles and wires, pneumatic tubes, steam pipes, mail tubes, vaults, including vaults of abutting property, and other surface, subsurface and overhead structures with their connections, as the same may be met along the route; to build sewers both along the route and other streets; to make or remake the necessary manholes, catch basins and other sewer connections therewith; to move, alter, readjust or rebuild water mains, gas pipes, electric subways, pneumatic tubes, steam pipes, mail tubes, vaults, including vaults of abutting property, and other surface, subsurface and overhead structures with their connections; and to do all such additional and incidental work as may be necessary for the completion of the Railroad and the reconstruction and restoration of the street pavements and other surfaces and of all surface, subsurface and overhead structures and of all abutting property and buildings which may have been directly or indirectly affected, disturbed or injured by the Contractor in the progress of the work of construction, to as useful, safe, durable and good a condition as existed before construction was begun. All such work of every description, including underpinning or the maintaining, protecting and securing wherever necessary of all buildings and structures of whatsoever nature, monuments, and surface, subsurface and elevated railroads affected by or interfered with during the construction of the Railroad, is part of the work which is included in this contract and which the Contractor agrees to perform for the prices herein agreed upon.

Prices.

Article XI. The City and the Interborough Company will pay in the respective proportions and amounts and in the manner hereinafter provided and the Contractor shall receive in full compensation for furnishing the necessary plant and all the materials and labor, and for performing and completing all the work which is necessary or proper to be furnished or performed in order to complete the Railroad (including all incidental work) and also for all loss or damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen obstruction or difficulty encountered in the prosecution of the work, and for all risks of any description connected with the work, and for all expenses incurred by or in consequence of the suspension or discontinuance of the work as herein specified, the prices contained in the schedule of unit prices following. It is specifically understood and agreed, however, that the Interborough Company is a party to this contract solely for the purpose of making its contribution toward the cost of construction of the Railroad, as provided in the said contract dated March 19, 1913, and its sole obligation under this contract is to make the payments in the manner and to the amount hereinafter provided.

Schedule of Unit Prices.

Item 1. For earth excavation above mean high water (except tunnel excavation and excavation for sewers, pipes and ducts), including the disposal of it, etc., the sum of six dollars and thirty-five cents (\$6.35) per cubic yard.

Item 2. For earth excavation below mean high water (except tunnel excavation and excavation for sewers, pipes and ducts), including the disposal of it, etc., the sum of six dollars and thirty-five cents (\$6.35) per cubic yard.

Item 2-A. For earth excavation, both above and below mean high water, for sewers, pipes and ducts other than street railroad ducts, including the disposal of it, etc., the sum of six dollars and thirty-five cents (\$6.35) per cubic yard.

Item 4. For underpinning buildings on Park Place, including all incidental work, labor and material, per lineal front foot of building underpinned, as follows:

(a) For buildings less than seven (7) stories in height the sum of seventy-five dollars (\$75) per front foot.

(b) For buildings from seven (7) to twelve (12) stories, inclusive, in height the sum of one hundred and fifty dollars (\$150) per front foot.

Item 4-E. For maintaining, protecting and securing buildings on Park Place, including all incidental work, labor and material, the sum of one hundred and fifty dollars (\$150) per lineal front foot of building maintained, protected and secured.

Item 4-N. For maintaining, protecting and supporting during construction the United States Court House and Post Office Building, the sum of twenty-eight thousand dollars (\$28,000).

Item 4-AA. For safely and permanently underpinning at the beginning of construction and for maintaining, protecting and securing during construction, buildings on Beekman Street, as provided in Section No. 446 of the Specifications, as follows:

(1) For the building No. 34 Park Row and No. 1 Beekman Street, the sum of four thousand three hundred and twenty dollars (\$4,320).

(2) For the building No. 145 Nassau Street and No. 38 Park Row, the sum of twenty-one thousand seven hundred and fifty dollars (\$21,750).

(3) For the building Nos. 3 to 9 Beekman Street, the sum of twelve thousand six hundred and twenty-five dollars (\$12,625).

(4) For the building No. 140 Nassau Street and No. 14 Beekman Street, the sum of nine thousand nine hundred dollars (\$9,900).

(5) For the building No. 132 Nassau Street and No. 13 Beekman Street, the sum of four thousand three hundred and forty dollars (\$4,340).

(6) For the group of buildings Nos. 16 to 32, inclusive, Beekman Street, the sum of thirteen thousand five hundred and eighty-five dollars (\$13,585).

(7) For the building Nos. 15 and 17 Beekman Street, the sum of seven thousand five hundred dollars (\$7,500).

(8) For the group of buildings Nos. 19 to 29, inclusive, Beekman Street, the sum of eight thousand one hundred dollars (\$8,100).

Item 5. For tunnel excavation, including timbering, the disposal of material, etc., the sum of nine dollars and twenty cents (\$9.20) per cubic yard.

Item 6. For concrete masonry, in place, the sum of eight dollars and eighty cents (\$8.80) per cubic yard.

Item 7. For protective concrete masonry, in place, outside of waterproofing, the sum of eight dollars and eighty cents (\$8.80) per cubic yard.

Item 8. For rubble stone masonry, in place, the sum of six dollars and fifty cents (\$6.50) per cubic yard.

Item 8-A. For dry rubble masonry, in place, the sum of six dollars (\$6) per cubic yard.

Item 9. For brick masonry, in place, the sum of twenty dollars (\$20) per cubic yard.

Item 9-D. For the removal and disposal of concrete, as required by Section No. 446 of the Specifications, the sum of seventy-five dollars (\$75) per cubic yard.

Item 10. For hollow terra cotta brick or tile masonry of any thickness, in place, the sum of fifteen dollars (\$15) per cubic yard.

Item 11. For grout of Portland cement, the sum of three dollars (\$3) per barrel of Portland cement used.

Item 12. For timber piles, in place and prepared, the sum of fifty cents (\$0.50) per lineal foot.

Item 13. For timber foundations, placed and fastened, the sum of seventy-five dollars (\$75) per thousand feet, board measure.

Item 14. For broken stone or gravel, in place, other than that used in concrete, the sum of two dollars and fifty cents (\$2.50) per cubic yard.

Item 15. For waterproofing, treated woven fabric (except dry-ply), laid with coal-tar pitch or asphalt, in place, as follows:

(a) For one-ply, the sum of fifty cents (\$0.50) per square yard.

(b) For two-ply, the sum of seventy cents (\$0.70) per square yard.

(c) For three-ply, the sum of eighty-five cents (\$0.85) per square yard.

(d) For four-ply, the sum of one dollar (\$1) per square yard.

(e) For five-ply, the sum of one dollar and twenty-five cents (\$1.25) per square yard.

(f) For six-ply, the sum of one dollar and fifty cents (\$1.50) per square yard.

(i) For dry-ply, the sum of thirty-five cents (\$0.35) per square yard.

Item 16. For waterproofing, brick laid in asphalt mastic, in place, the sum of twenty-five dollars (\$25) per cubic yard.

Item 17. For vitrified or cast-iron drain pipe, in place, as follows:

(a) For twelve (12) inch vitrified pipe, the sum of one dollar (\$1) per lineal foot.

(b) For ten (10) inch vitrified pipe, the sum of eighty cents (\$0.80) per lineal foot.

(c) For eight (8) inch vitrified pipe, the sum of seventy cents (\$0.70) per lineal foot.

(d) For six (6) inch vitrified pipe, the sum of sixty cents (\$0.60) per lineal foot.

(e) For four (4) inch vitrified pipe, the sum of fifty cents (\$0.50) per lineal foot.

(g) For six (6) inch cast-iron pipe, the sum of one dollar (\$1) per lineal foot.

(h) For four (4) inch cast-iron pipe, the sum of seventy-five cents (\$0.75) per lineal foot.

(i) For ten (10) inch cast-iron pipe, the sum of one dollar and fifty cents (\$1.50) per lineal foot.

Item 17-A. For cast-iron pipe and fittings, including specials, "extra heavy," in place, as follows:

(a) For three (3) inch, the sum of one dollar (\$1) per lineal foot.

(b) For four (4) inch, the sum of one dollar and twenty-five cents (\$1.25) per lineal foot.

(c) For six (6) inch, the sum of one dollar and fifty cents (\$1.50) per lineal foot.

(d) For eight (8) inch, the sum of one dollar and seventy-five cents (\$1.75) per lineal foot.

Item 18. For tunnel ducts, in place, as required by Section No. 407 of the Specifications, the sum of twelve cents (\$0.12) per duct foot.

Item 18-A. For Railroad ducts, in place, as required by Section No. 407 of the Specifications, the sum of fifteen cents (\$0.15) per duct foot.

Item 19. For riveted steel, painted and erected, the sum of seventy-two dollars (\$72) per ton.

Item 20. For steel beams and shapes with connections, painted and erected, the sum of sixty-two dollars (\$62) per ton.

Item 21. For steel rods and bars built in concrete, the sum of seventy-five dollars (\$75) per ton.

Item 25. For miscellaneous iron castings such as manhole heads and covers, gratings, etc., but not including castings for sewer work or pipes, in place, the sum of seventy-five dollars (\$75) per ton.

Item 25-C. For miscellaneous iron furnishings for sewer manholes and basins, both cast and wrought, such as manhole and basin heads, covers, inlet gratings or bars, manhole steps, etc., but not including pipe, in place, the sum of one hundred dollars (\$100) per ton.

Item 26. For special wire forms, in place, the sum of fifteen cents (\$0.15) per pound.

Item 27-B. For one and three-fourths (1 3/4) inch seasoned oak or ash hand-rail, in place, including finishing, oiling and connections, the sum of fifty cents (\$0.50) per lineal foot of rail.

Item 28. For steel gratings for ventilation, in place, including frames, etc., the sum of one dollar and fifty cents (\$1.50) per square foot.

Item 29. For vault lights, in place, the sum of one dollar and fifty cents (\$1.50) per square foot.

Item 30. For street surface restored, as follows:

(a) Within curb lines, including curbs and all structures and growths therein or thereon, the sum of two dollars and fifty cents (\$2.50) per square yard.

(c) For repavement of roadways between curb lines with Asphalt pavement, the sum of three dollars (\$3) per square yard.

(f) For repavement of roadways between curb lines with Granite Block pavement, the sum of two dollars (\$2) per square yard.

(g) For repavement of roadways between curb lines with Asphalt Block pavement, the sum of four dollars (\$4) per square yard.

(i) For new bluestone curb, in place, including all incidental work, labor and material, the sum of one dollar and twenty-five cents (\$1.25) per lineal foot.

(j) For repavement of roadways between curb lines with Wooden Block pavement, the sum of three dollars (\$3) per square yard.

(k) For new eight (8) inch granite curb, in place, including all incidental work, labor and material, the sum of two dollars and fifty cents (\$2.50) per lineal foot.

Item 32. For wrought-iron electric conduits, in place, in stations, as follows:

(a) For three-fourths (3/4) inch wrought-iron conduits, the sum of thirty cents (\$0.30) per lineal foot.

- (b) For one and one-half (1½) inch wrought-iron conduits, the sum of forty cents (\$0.40) per lineal foot.
 (c) For two (2) inch wrought-iron conduits, the sum of fifty cents (\$0.50) per lineal foot.
 (d) For one (1) inch wrought-iron conduits, the sum of forty cents (\$0.40) per lineal foot.
 Item 33. For cast-iron outlet boxes, in place, in stations, the sum of one dollar and twenty-five cents (\$1.25) each.
 Item 34. For cast-iron pipe and fittings, including specials, "extra heavy," in place, in stations, as follows:
 (a) For six (6) inch the sum of three dollars (\$3) per lineal foot.
 (b) For three (3) inch the sum of two dollars (\$2) per lineal foot.

Sewers.**Vitrified and Cast-iron Pipe.**

- Item 38. For fifteen (15) inch vitrified pipe sewer, the sum of three dollars and fifty cents (\$3.50) per lineal foot.
 Item 39. For eighteen (18) inch vitrified pipe sewer, the sum of four dollars (\$4) per lineal foot.
 Item 40. For twenty (20) inch vitrified pipe sewer, the sum of five dollars (\$5) per lineal foot.
 Item 41. For twenty-four (24) inch vitrified pipe sewer, the sum of six dollars (\$6) per lineal foot.
 Item 42. For cast-iron sewer pipe (straight pipe) in place, in the work, the sum of forty dollars (\$40) per ton.
 Item 43. For cast-iron sewer pipe (special castings) in place, in the work, the sum of seventy-five dollars (\$75) per ton.
 Egg-Shaped Brick or Concrete Sewers.
 Item 45. For 3 feet 6 inches by 2 feet 4 inches, the sum of ten dollars (\$10) per lineal foot.
 Item 47. For 4 feet by 2 feet 8 inches, the sum of twelve dollars (\$12) per lineal foot.

Surface, Subsurface and Overhead Structures.

- Item 75. For street surface railroads (except as provided in Section No. 446), including the support, reconstruction, rebuilding, etc., where necessary (but not including permanent masonry supports, if required and added, and not including additional vaults, if required and constructed, in excess of the number existing), as follows:

- (a) For electric (underground trolley) railroads, the sum of fifteen dollars (\$15) per lineal foot of single track.
 (b) For horse, storage battery or other independent motor operated railroads, the sum of two dollars (\$2) per lineal foot of single track.
 Item 76. For the temporary and permanent support and maintenance of elevated railroad structures and their appurtenances, and all work incidental thereto, as follows:

- (a) For elevated railroad columns supported entirely upon the Railroad structure, the sum of one thousand dollars (\$1,000) per column.
 (b) For elevated railroad columns supported partly or entirely off the Railroad structure, the sum of eight hundred dollars (\$800) per column.
 Item 76-D. For the support, maintenance, underpinning, safety and protection of the subsurface rapid transit railroad in Broadway with its appurtenances, equipment and rolling stock and for the safety and protection of all passengers and other persons and of all property therein, the sum of ten thousand dollars (\$10,000).
 Item 76-E. For the support, maintenance, underpinning, safety and protection of the subsurface rapid transit railroad in Park Row with its appurtenances, equipment and rolling stock and for the safety and protection of all passengers and other persons and of all property therein, the sum of thirty-six thousand dollars (\$36,000).
Pipes in Streets—For Work and Materials as Called for by the Specifications.

For water pipes, including all appurtenances, in place, as follows:

- Item 79. For 6-inch water pipe, the sum of one dollar and fifty cents (\$1.50) per lineal foot.
 Item 82. For 12-inch water pipe, the sum of two dollars and fifty cents (\$2.50) per lineal foot.
 Item 84. For 20-inch water pipe, the sum of four dollars (\$4) per lineal foot.
 Item 85. For 24-inch water pipe, the sum of six dollars (\$6) per lineal foot.
 Item 88-A. For service connections for water pipes, all sizes, the sum of twenty dollars (\$20) each.

Gas Pipes.

- For cast-iron gas pipes, including all appurtenances, in place, as follows:
 Item 90. For 4-inch gas pipe, the sum of one dollar (\$1) per lineal foot.
 Item 91. For 6-inch gas pipe, the sum of one dollar (\$1) per lineal foot.
 Item 92. For 8-inch gas pipe, the sum of one dollar and fifty cents (\$1.50) per lineal foot.
 Item 95. For 16-inch gas pipe, the sum of three dollars (\$3) per lineal foot.
 Item 99-A. For wrought-iron by-passing pipes upon or below the street surface, in place, as follows:
 (a) For 6-inch by-passing pipe, the sum of two dollars and fifty cents (\$2.50) per lineal foot.
 (b) For 8-inch by-passing pipe, the sum of two dollars and fifty cents (\$2.50) per lineal foot.
 (c) For 12-inch by-passing pipe, the sum of three dollars and fifty cents (\$3.50) per lineal foot.
 Item 99-B. For by-passing pipes above the street surface, on trestle, in place, as follows:
 (a) For 12-inch by-passing pipe, the sum of three dollars and fifty cents (\$3.50) per lineal foot.
 (g) For 8-inch by-passing pipe, the sum of two dollars and fifty cents (\$2.50) per lineal foot.
 (h) For trestle to support by-passing pipes, in place in the work, the sum of three dollars (\$3) per lineal foot of trestle.
 Item 99-D. For service connections for gas pipes, all sizes, the sum of twenty dollars (\$20) each.

New Water and Gas Pipes.

- Item 100. For new cast-iron hub and spigot straight pipe actually used, as measured in place in the work, the sum of forty dollars (\$40) per ton.
 Item 101. For new cast-iron hub and spigot pipe, special castings, actually used, as measured in place in the work, the sum of eighty dollars (\$80) per ton.
High Pressure Fire System Pipes, Standard Spigots and Grooves.
 For high pressure fire system pipes, including all appurtenances, in place, as follows:
 Item 102. For 8-inch high pressure fire system water pipe, the sum of two dollars (\$2) per lineal foot.
 Item 103. For 12-inch high pressure fire system water pipe, the sum of three dollars (\$3) per lineal foot.
 Item 104. For 16-inch high pressure fire system water pipe, the sum of three dollars (\$3) per lineal foot.
New Cast-Iron Spigot and Groove Pipes for High Pressure Fire System.
 Item 107. For new cast-iron spigot and groove straight pipe actually used, as measured in place in the work, the sum of fifty dollars (\$50) per ton.
 Item 108. For new cast-iron spigot and groove pipe, special castings, actually used, as measured in place in the work, the sum of eighty dollars (\$80) per ton.

Steam Pipes.

- For steam pipes, including specials, insulation, protection and all other appurtenances, in place, as follows:
 Item 109. For 6-inch steam pipe, the sum of eight dollars (\$8) per lineal foot.
 Item 109-A. For 4-inch steam pipe, the sum of seven dollars (\$7) per lineal foot.
 Item 110. For 8-inch steam pipe, the sum of fifteen dollars (\$15) per lineal foot.
 Item 114-B. For service connections for steam pipes, all sizes, the sum of seventy dollars (\$70) each.

New Steam Pipes.

- For new steel welded flanged steam pipes, including specials and all other appurtenances, actually used, as measured in place in the work, as follows:
 Item 115. For new 6-inch steam pipe, the sum of seven dollars (\$7) per lineal foot.
 Item 116. For new 8-inch steam pipe, the sum of nine dollars (\$9) per lineal foot.

Item 120-A. For new steam pipe, odd sizes, as follows:

- (b) For 4-inch steam pipe, the sum of six dollars (\$6) per lineal foot.

Air Pipes.

For air pipes, including all appurtenances, in place, as follows:

- Item 122-B. For 2-inch air pipe in connection with mail tubes, the sum of one dollar and seventy-five cents (\$1.75) per lineal foot.

New Air Pipes.

For new air pipes, including specials and all other appurtenances, actually used, as measured in place in the work, as follows:

- Item 124-B. For new 2-inch air pipe in connection with mail tubes, the sum of one dollar and seventy-five cents (\$1.75) per lineal foot.

Mail Tubes.

For mail tubes, including all appurtenances, in place, as follows:

- Item 125. For 8-inch mail tube, the sum of five dollars (\$5) per lineal foot.
 Item 126-C. For new mail tubes, including all appurtenances, actually used, as measured in place in the work, as follows:

- (a) For new 8-inch mail tube, straight pipe, the sum of five dollars (\$5) per lineal foot.
 (b) For new 8-inch mail tube, curved pipe, the sum of six dollars (\$6) per lineal foot.

- Item 126-D. For 1¼-inch Western Union tube, the sum of two dollars and fifty cents (\$2.50) per lineal foot.

- Item 126-E. For new 1¼-inch Western Union tube actually used as measured in place in the work, the sum of two dollars (\$2) per lineal foot.

Ducts Found in Streets—Electric Ducts and Conduits in Streets.

(Other Than Street Railroad Ducts Which Are Provided for in Schedule Item 75 (a).)
 Item 127. For electric ducts and conduits in place, as provided in Section No. 62 of the Specifications, the sum of one dollar and fifty cents (\$1.50) per duct foot.

Item 127-A. For wrought-iron pipe electric ducts and conduits, in place, as provided in Section No. 62 of the Specifications, as follows:

- (a) For 2½-inch wrought-iron pipe, the sum of fifty cents (\$0.50) per lineal foot.

- (b) For 3-inch wrought-iron pipe, the sum of fifty cents (\$0.50) per lineal foot.

- (f) For 2-inch Edison conduit, the sum of one dollar (\$1) per lineal foot.

- (h) For 3-inch Edison conduit, the sum of one dollar and twenty-five cents (\$1.25) per lineal foot.

- (n) For 2-inch wrought-iron pipe, the sum of one dollar (\$1) per lineal foot.

- Item 127-C. For service connections for electric ducts, all sizes, the sum of twenty-five dollars (\$25) each.

Quantities.**Prices for Work not Susceptible of Classification.**

Article XII. In case any work or materials shall be required to be done or furnished in or about the Works which it is elsewhere in this contract expressly provided shall be paid for under this Article, or in case any work or materials shall be required to be done or furnished in or about the Works which are not contemplated, mentioned, specified or indicated or otherwise provided for in this contract or in the specifications forming a part of this contract or in or upon the contract drawings and which, in the opinion of the Engineer, are not susceptible of classification under the Items of the Schedule of Unit Prices, the Contractor shall if ordered by the Engineer do and perform such work and furnish such materials at and for the actual and necessary net cost in money to the Contractor for labor and for materials incorporated in the work and in addition thereto ten per centum (10%) of such net cost, and the Contractor shall have no claim in excess of the above, such payment being in full compensation for the performance of such work and the furnishing of such materials and for all expense in connection therewith or incidental thereto as aforesaid, including the expense of plant, power, tools, supplies and other means of construction, administration, superintendence and insurance, and for all the loss, damage, risks and expenses hereinbefore in Article XI mentioned. Payment shall not be made under this Article for any such work or materials which are so required to be done or furnished in or about the Works and which are not contemplated, mentioned, specified or indicated or otherwise provided for in this contract or in the specifications forming a part of this contract or in or upon the contract drawings so far as such work or materials may be, in the opinion of the Engineer, susceptible of classification under the Items of the Schedule of Unit Prices, which work or materials shall be paid for in part or in whole, as the case may be, at the unit prices given in the Items of the Schedule.

Daily Report in Detail Required.

In case any work or material shall be required to be done or furnished under the provisions of this article, for cost plus ten (10) per centum, the Contractor shall at the end of each day during the progress thereof furnish to the Engineer daily time slips showing the name and number of each workman employed thereon, the number of hours employed thereon, the character of work he is doing and the wages paid or to be paid to him and also a daily memorandum of the material delivered on the work showing the amount and character of such material, from whom purchased and the amount paid or to be paid therefor. If required by the Engineer or the Commission, the Contractor shall produce any books, vouchers, records or memoranda showing the work and materials actually paid for and the actual prices therefor. Such daily time slips and memoranda shall not, however be binding upon the City and if any question or dispute shall arise as to the correct cost of such work or material, the determination of the Engineer upon such question or dispute shall be final and conclusive.

Engineer to Fix Unit Prices.

Instead of the method above described in this Article for paying for any such work or materials to be paid for under this Article, the Engineer may, but only with the approval of the Commission, agree with the Contractor upon unit prices or a lump sum price for such work or materials. Such additional unit prices or such lump sum price shall be embodied in a supplemental schedule which shall be deemed to be a part of this contract in all respects as if such additional unit prices or such lump sum price had been originally a part of the Schedule of Unit Prices contained in this contract.

Quantities Approximate Only.

Article XIII. The quantities of the various classes of work to be done and materials to be furnished under this contract specified in the Contractor's Proposal are approximate and only for the purpose of comparing, on a uniform basis, the bids offered for the Works; and neither the City nor the Commission nor any member of the Commission nor the Interborough Company is to be held responsible that any of the said estimated quantities shall be found even approximately correct in the construction of the Works; and the Contractor shall make no claim for damages or for anticipated profit or for loss of profit because of a difference between the quantities of the various classes of work actually done or materials actually delivered and the estimated quantities of items stated in the Contractor's Proposal or because of the entire omission of any of the quantities of items stated in the Contractor's Proposal.

Right of Commission to Amplify Plans.

Article XIV. The Commission shall have the right, during the progress of the work, to amplify the plans, to add explanatory specifications and to furnish additional specifications and drawings.

Drawings May Be Modified.

Article XV. The Commission further reserves the right to alter, in any way it may deem necessary for the public interests, the drawings aforesaid, in part or altogether, at any time during the progress of the work, without constituting grounds for any claim by the Contractor for payment or allowance for damages or extra service other than is provided for items of the different classes of construction under the Items of the Schedule or in Article XII.

Contractor Bound to Complete in Best Manner.

Article XVI. The Contractor shall complete the entire work to the satisfaction of the Commission and in accordance with the specifications and contract drawings and according to the other provisions of this contract and within the time specified in this contract in the most workmanlike manner and with the highest regard to the safety of life and property and according to the lines, levels and directions given by the Engineer.

Best Machinery, Tools, Etc., to Be Used.

Article XVII. The Contractor shall furnish of the best description all labor and materials, plant, tools, supplies and other means of construction necessary to construct and put in complete working order all work covered by the specifications, contract drawings and provisions of this contract, including all additional specifications, drawings and details issued or required as herein provided.

Contractor Has Examined Locations, Plans, Etc.

Article XVIII. The Contractor hereby represents that prior to the execution of this contract he has examined in detail on the ground the location mentioned herein and indicated on the plans, and that he has fully examined the plans and has read each and every clause and section of this contract and the specifications and has had full opportunity to consider the same and make necessary investigations relating thereto; and he agrees that he will not make any claim for, or have any right to, damages or an extension of time for completion of the Work, or any other concession, because of any misinterpretation or misunderstanding of this contract or the specifications or of the plans, or because of any lack of information.

No Acceptance to Obviate the Necessity for Sound Work, Etc.

Article XIX. No acceptance of any part of the Work or of materials thereof shall relieve the Contractor of his obligation to furnish sound material and perform sound work, whether with respect to such part or to any part of the Work.

Inspection.

Article XX. The Commission contemplates, and the Contractor hereby approves, the most thorough and minute inspection by the Commission and its Engineer, and by their representatives or subordinates, of all work and materials and of the manufacture or preparation of such materials from the beginning of construction to the final completion of the Works. It is the intention of the Commission that its Engineer shall draw the attention of the Contractor to all defects in workmanship or materials, or other errors or variations from the requirements of this contract. But no omission on the part of the Commission or its Engineer or any officer, member or subordinate of the Commission to point out such defects, errors or variations shall give the Contractor any right or claim against the City or the Interborough Company or shall in any way relieve the Contractor from his obligations according to the terms of this contract.

Contractor to Afford Facilities for Inspection.

Article XXI. The Contractor shall at all times give to the Commission and its members, to the Engineer and his assistants and subordinates, and any person designated by the Commission or its Chairman, all facilities, whether necessary or convenient, for inspecting the materials to be furnished and the work to be done under this contract. The members of the Commission, the Engineer and all employees of the Commission bearing his authorization or the authorization of the Commission or its Chairman, shall be admitted at any time summarily and without delay to any part of the Work or to inspection of materials at any place or stage of their manufacture, preparation, shipment or delivery.

Engineer to Be Furnished Facilities.

Article XXII. The Engineer shall be furnished with every reasonable facility for ascertaining whether the work is in accordance with the requirements and intention of this contract, even to the extent of uncovering or taking down portions of finished work. Should the work thus exposed or examined prove satisfactory, the uncovering or taking down and the replacing of the covering or the making good of the parts removed shall be paid for at the contract prices for the class of work done; but should the work exposed or examined prove unsatisfactory, such uncovering, taking down, replacing and making good shall be at the expense of the Contractor.

Inspection not to Relieve Contractor of Obligations.

Article XXIII. The inspection of the work shall not relieve the Contractor of any of his obligations to fulfill this contract as herein prescribed, and defective work shall be made good and unsuitable materials will be rejected, notwithstanding that such work and materials have been previously overlooked by the Engineer and accepted or estimated for payment. If the work or any part thereof shall be found defective before the final acceptance of the whole work, the Contractor shall forthwith make good such defect, in a manner satisfactory to the Engineer, and if any material brought upon the ground for use in the work, or selected for the same, shall be condemned by the Engineer as unsuitable or not in conformity with the specifications, the Contractor shall at his own expense forthwith remove such material.

Engineer's Determination to Be Final and Conclusive Upon Contractor.

Article XXIV. To prevent disputes and litigations, the Engineer shall in all cases determine the classification, amount, quality, acceptability and fitness of the several kinds of work and materials which are to be paid for under this contract; shall determine all questions in relation to the Work and the construction thereof, and shall in all cases determine every question which may arise relative to the fulfillment of this contract on the part of the Contractor. His determination and estimate shall be final and conclusive upon the Contractor, and in case any question shall arise between the parties hereto, touching this contract, such determination and estimate shall be a condition precedent to the right of the Contractor to receive any money under this contract.

Engineer to Explain Specifications.

Article XXV. The Engineer shall make all necessary explanations as to the meaning and intention of the specifications, shall give all orders and directions contemplated therein or thereby and in every case in which a difficult or unforeseen condition shall arise in the performance of the work required by this contract.

Contractor to Obey Directions.

The Contractor shall promptly obey and follow every direction which shall be given by the Engineer, including any direction which the Engineer shall give by way of withdrawal, modification or reversal of any previous direction given by him.

Other Contractors.

During the progress of the work it will be necessary for other contractors and persons to do work in or about the construction or equipment of the Railroad. The Contractor shall afford to such other contractors or persons such facilities as the Engineer may require.

Contiguous Contract Sections.

Whenever any work performed or to be performed by the Contractor under this contract shall adjoin, affect or interfere with any work performed or to be performed by any other contractor or contractors of the Commission, including the work within twenty (20) feet of the division lines between the Railroad and adjoining work, the Engineer shall decide any question or dispute between the Contractor and such other contractor or contractors and shall determine which of them shall perform or complete any work and the manner, time and method in which they shall perform their respective work and the facilities which each shall afford to the other or others. The provisions of this paragraph apply to any work performed or to be performed by the Contractor under this contract which may adjoin, affect or interfere with any work performed or to be performed by any other contractor or contractors of the Commission in connection with the construction of the rapid transit railroad now under construction along Broadway or in connection with the construction of the proposed rapid transit railroad along Nassau Street.

Facilities Afforded to Other Contractors.

Wherever any work performed or to be performed by the Contractor under this contract shall adjoin, affect or interfere with any work performed or to be performed by the Interborough Company, its successors or assigns, or by any contractor or contractors of the Interborough Company, its successors or assigns, in connection with the equipment of the Railroad, the Engineer shall determine the manner, time and method in which the Contractor shall perform his work and the facilities which he shall afford to the Interborough Company, its successors or assigns, or to such other contractor or contractors.

Substitute for Chief Engineer.

Article XXVI. Any engineer substituted by the Commission in place of the Chief Engineer during his absence, illness or inability or when the Commission shall so determine, shall, during his official connection, have all the power and authority of the Chief Engineer, and in all respects be recognized as such Chief Engineer.

CHAPTER III.**Specifications.**

Specifications and Drawings Require Railroad of Highest Class—Where Text of Contract Doubtful Best Materials and Workmanship Required.

Section No. 1. The specifications and contract drawings hereinafter mentioned and taken in connection with the other provisions of this contract are intended by the Commission to be full and comprehensive, and to show all the work required to be done. But in a work of this magnitude it is impossible either in advance to show all details, or precisely to forecast all exigencies. The specifications and contract drawings are to be taken, therefore, as indicating the amount of work, its nature and the method of construction so far as the same are now distinctly apprehended. The Railroad is intended to be constructed for actual use and operation as an intraurban railroad of the highest class, adapted to the necessities of the people of New York, in the best manner, according to the best rules and usages of railroad construction, and in the event of any doubt as to the meaning of any portion or portions of the specifications or contract drawings, or of the text of the contract, the same shall be interpreted as

calling for the best construction, both as to materials and workmanship, capable of being supplied or applied under the then existing local conditions. All the clauses of the specifications, and all the parts of the contract drawings, are, therefore, to be understood, construed and interpreted as intending to produce the results hereinbefore stated.

Contractor to Construct in Accordance with Specifications.

Section No. 2. The Contractor shall construct and complete the Railroad strictly in accordance with the requirements of these specifications; if in these specifications or this contract or on the contract drawings any matter or thing requisite be not contemplated, mentioned, specified or indicated or otherwise provided for, nevertheless the same is deemed to be included and the Contractor shall do the same as part of the work hereunder at the unit prices for each class of work where in the opinion of the Engineer applicable or as provided in Article XII.

Contract Drawings.

Section No. 3. The contract drawings referred to in this contract and these specifications are each countersigned by the Engineer, stamped with the seal of the Commission and, except typical drawings hereinbelow designated, bear the general title:

Route No. 48, Section No. 1.

Contract Drawing No.

and are designated or numbered as follows:

A-1, B-311, C-1 to C-17 inclusive, C-401, C-501, C-502 and C-601, and are dated May 5, 1914, and the following typical drawings, which are all countersigned by the Engineer, stamped with the seal of the Commission and bear the general title:

Contract Drawing No.

—and are designated or numbered as follows:

B-288 and B-289, dated October 22, 1913, B-298, dated February 2, 1914, and C-1006, dated April 2, 1914.

Typical Sections and Dimensions.

Section No. 4. The sections and dimensions shown on the contract drawings are typical sections and dimensions which should be applicable to the greater part of the work. Working drawings to amplify the contract will be furnished by the Commission to the Contractor. The first of these drawings will be given to the Contractor within thirty (30) days after the contract is delivered and the remainder from time to time as may be reasonably required by the Contractor. Where, however, changes are deemed necessary they may be ordered under Article XV of this contract and the Engineer shall issue such plans and specifications as may be necessary.

Supplementary Drawings.

Section No. 5. In addition to the contract drawings already mentioned, the Commission has had prepared a set of maps and plans, bearing the same seal and general title as the contract drawings, but designated as Supplementary Drawings. These supplementary drawings exhibit certain information which the Commission has received from its Engineer of the general nature of the soil underlying portions of the route, the nature and position of surface, subsurface and elevated railroads, water mains, gas and other pipes, sewers, electric subways, manholes, hydrants, catch basins and other surface, subsurface and overhead structures.

Supplementary Drawings May Be Examined.

Section No. 6. These supplementary drawings can be seen at the office of the Engineer, also samples of material taken in connection with test borings. They are exhibited to the Contractor without any guarantee on the part of the Commission as to their completeness or correctness. The Contractor may have copies (blue-prints) of these drawings for such aid, if any, as may be derived from them, on the payment of the cost of blue-printing.

In Case of Difficulties Not Indicated on Supplementary Drawings.

Section No. 7. If, in the prosecution of the work, difficulties of any nature be encountered which are not indicated or suggested by the supplementary drawings, or by the samples of the test borings, or if additional surface, subsurface or overhead structures or obstructions be discovered or found of different size or in different positions or of different nature from those shown on the supplementary drawings, or if in any way such supplementary drawings be found erroneous, the Contractor shall take every necessary or proper precaution to overcome the unforeseen difficulty, and is to support, maintain, protect, remove, relay, adjust or readjust, as the case may be, the additional or different surface, subsurface or overhead structures according to the direction of the Engineer, and as provided in this contract and these specifications.

Specifications do Not Include all Requirements.

Section No. 8. The specifications do not include all requirements, but are requirements in addition to those elsewhere given or provided in this contract. The specifications and the other provisions of this contract and the contract drawings are intended to be explanatory of one another. Should, however, any discrepancy appear or any misunderstanding arise as to the import of anything contained in either, the explanation or decision of the Engineer shall be final and conclusive.

Subdivisions of Specifications.

Section No. 9. These specifications are grouped in subdivisions as follows:

1. Brief Description of the Work.
2. General Clauses.
3. General Manner of Prosecution and Maintenance of Traffic.
4. Street Railroad Tracks, Mains and Other Surface, Subsurface and Overhead Structures.
5. Excavation.
6. Backfilling.
7. Piling and Timbering.
8. Cement.
9. Mortar.
10. Masonry.
11. Concrete.
12. Brick Masonry.
13. Stone Masonry.
14. Waterproofing.
15. Steel and Iron.
16. Painting.
17. Drains and Pumps.
18. Sewers.
19. Requirements for Pipes.
20. Ducts.
21. Conduits.
22. Surfaces Restored.
23. Gratings, Hand-rails, etc.
24. Tunneling.
25. Special Matters.

SUBDIVISION 1.**Brief Description of the Work.****General Nature.**

Section No. 10. The Railroad is to be an underground railroad or subway. The general details of construction and the location of the various tracks, junctions, grades, etc., are indicated more particularly on the contract drawings.

The Contractor will not be required to provide or lay tracks, ties or ballast under this contract.

Stations to be Constructed.

A station is to be constructed at the place indicated on the drawings, but station finish work is not included in the work to be done under this contract. Station construction must, however, be kept so advanced that station finish contractors can complete their work coincidentally with the completion of the Railroad.

Incidental Work.

Section No. 11. In addition to the construction of the Railroad, it will be necessary to do various incidental work which is generally referred to in Article X hereof.

Ventilating Chambers and Gratings.

Section No. 12. In order to provide for a frequent renewal of air in the Railroad, chambers for the installation of necessary ventilating devices shall be built at the sides of the Railroad and in connection therewith. These chambers shall be generally of the form and dimensions shown on the drawings, varying somewhat with the requirements of local conditions. They will be so arranged that the air will discharge through gratings placed generally in the sidewalks in the roofs of the chambers. If, owing to local conditions, it becomes necessary to lead the air to gratings or other outlets away from the chambers, suitable air-ways, ducts or flues shall be constructed.

The chambers will be built at the places and as indicated on the drawings.

Payment for Chamber Doors.

The chambers will be provided with suitable steel doors and with steel ladders reaching to the street for use as exits in case of emergency. Such doors and ladders will be paid for as riveted steel, Schedule Item 19.

Also in connection with the ventilation of the Railroad partition walls shall be constructed between the tracks as shown on the drawings.

Openings, or refuge niches, shall be provided in all partition walls at suitable intervals.

At stations the walls between the tracks will be omitted.

Other openings with gratings will be built at or over the stations for the purpose of admitting air to the Railroad.

SUBDIVISION 2.

General Clauses.

Prevention of Water Percolation.

Section No. 13. It is the very essence of these specifications to secure a railroad structure underground which shall be free from the percolation of ground or outside water. The mixing and placing of the concrete and the placing and protection of the waterproofing shall be with this end in view.

Best Quality of Work.

Section No. 14. All materials and workmanship must be of the best class in every respect, and the Engineer is to be the sole judge of their quality and efficiency.

Rapidity and Safety.

Section No. 15. All the work shall be prosecuted in the manner, according to local conditions, best calculated to promote rapidity in construction, to secure safety to life and property and to reduce to the minimum any interference with abutting property and the public travel. Decking of the streets, paving, or other surface work affecting, or affected by, street traffic shall be prosecuted during such hours as will reduce such interference to a minimum. Night work shall be conducted, in accordance with the directions of the Engineer, so that annoyance to occupants of abutting property shall be reduced to a minimum, and the Engineer may, if in his judgment conditions so require, direct that night work be omitted.

Railroad a Part of Extensive System.

Section No. 16. The Railroad forms part of an extensive rapid transit railroad system, which the interests of the City imperatively require shall be completed and put into operation without delay. If the Contractor shall not prosecute his work in such manner as to make it probable in the judgment of the Engineer that the work will be completed within the time limited, the Contractor, if directed by the Commission, shall increase the number of shifts and the number of men in each shift to such extent as may be necessary to insure the completion of the work within the time required by this contract or within the shortest possible time thereafter.

Emergencies.

Section No. 17. In case of emergencies involving danger to life or property, continuous work with an increased force may be ordered by the Engineer for such time as may be necessary.

Permits.

Section No. 18. No work shall be begun until the Commission shall issue to the Contractor a permit authorizing him to proceed. No permits for excavation will be issued until the Contractor has given satisfactory assurance to the Engineer that the structural iron and steel and other material needed for construction will be available. The Contractor must conduct his work so as to avoid advancing the excavation at any place ahead of the delivery on the work or on property owned or leased by the City of the structural iron and steel required for such place, unless otherwise permitted by the Engineer. If the Contractor elects and is permitted to advance the excavation ahead of such steel delivery it will become necessary for him to support and maintain the trenches until the steel can be obtained; this he shall do entirely at his own risk and expense. The permits are to be in such form and shall cover such portions of the work as the Commission shall prescribe.

When to be Filed with Borough President.

Section No. 19. Before any opening is made in the surface of a street, a copy of the permit issued by the Commission shall have been filed with the Borough President not less than five (5) days, unless the Engineer shall expressly direct work to begin within a less period.

Notice Regarding Commencement of Work.

Section No. 20. At least one (1) week before commencing work on any part of the route, whether on the Railroad or on the sewers lying off the line of the Railroad, the Contractor shall give notice in writing to the Engineer of his intention to commence such operations; and at least one (1) week before commencing or resuming manufacture of any article called for by these specifications, the Contractor shall give notice in writing to the Engineer of his intention to commence or resume such manufacture with the name and address of the maker and the amount and description of the material to be manufactured.

Shafts and Dumping Platforms—Plans Required.

Section No. 21. Detailed plans showing the proposed location and proposed methods of construction of shafts, dumping platforms and all other appurtenances in connection with the shaft working plants shall be submitted to the Engineer and receive his approval before permits will be granted for such plants and appurtenances to be constructed and put into operation. (See Article LIII.)

City Ordinances and Regulations to Be Observed.

Section No. 22. In all operations connected with the Work, all ordinances of the City and of the Board of Health and all laws of this State which are applicable to and control or limit in any way the actions of those engaged in the work or affecting the materials belonging to them shall be respected and strictly complied with, and the Contractor shall further strictly comply with all applicable Federal, State and Municipal regulations regarding the transportation of materials in and around the City and Harbor of New York.

Requirements of Borough President, Etc., to be Observed.

Section No. 23. Whenever the construction of the work under the provisions of this contract shall interfere with, disturb or endanger any sewer, water pipe, gas pipe, or other duly authorized subsurface structure, the work of construction at such points shall be conducted in accordance with the reasonable requirements of the Borough President or of the Commissioner of Water Supply, Gas and Electricity or other officer or local authority having the care of and the jurisdiction or control over such subsurface structures so interfered with, disturbed or endangered.

Building and Water Permits.

Section No. 24. The Contractor shall procure all permits necessary or requisite for the underpinning of buildings and the reconstruction thereof: he shall, at his own cost, provide for the water supply necessary for his work and he shall bear the cost of any inspection charge in connection therewith. He shall bear the expense absolutely necessary in the bagging of gas pipes where it is necessary to cut off the supply of same, except where it is necessary to resort to by-passing as provided in Section No. 52, and of the shutting off and restoration of the flow in water mains where such work applies to the maintenance and support thereof as provided in Section No. 59 of the specifications.

Storage on Cross-streets.

Section No. 25. On cross-streets adjacent to the work, only such material may be stored as may be necessary, in case of an emergency, to sheet or to support the excavation; or a reasonable amount of such structural and other material as may be absolutely necessary to avoid delay in construction may be stored; such material must not be allowed to accumulate, but must be replenished from day to day. The amount to be so allowed shall be determined by the Engineer.

No material of any nature shall be stored along the streets occupied by the Railroad.

Material Stored.

Section No. 26. Excavated sand, gravel or stone that in the judgment of the Engineer is suitable for use in mortar, concrete or masonry, also structural and other material to be used in the work, may be stored in such locations other than the surface of streets for such periods as may be approved by the Engineer.

Approval of Engineer Revocable.

Section No. 27. In any case material may be so stored only with the approval of the Engineer, revocable at any time; and if so ordered, such material shall be removed immediately by the Contractor at his own expense on receipt of the order or within a period of time to be therein stated.

Access to Fire Hydrants.

Section No. 28. Wherever the work is being carried on, free access must be given to every fire hydrant and fire alarm box, and when required, hydrants shall be

extended by suitable tube or piping to an accessible point as approved by the Engineer, and to the satisfaction of the Chief of the Fire Department. Materials must not be piled at any time or place within ten (10) feet of any fire hydrant or fire alarm box; and where materials are unavoidably piled or placed in the vicinity of a fire hydrant or fire alarm box, and to such height as to prevent the same from being readily seen, the position of such hydrant or fire alarm box shall be indicated by suitable signals, both day and night.

Fire Alarm Telegraph System to be Safeguarded.

The Contractor shall guard, maintain and protect the existing wires, cables, ducts, manholes, posts and poles of the Fire Department. He shall not cause the interruption of the existing Fire Department Fire Alarm Telegraph service. No Fire Department wire, cable, duct, manhole, post or pole shall be disturbed except in the presence of a representative of the Bureau of Fire Alarm Telegraph. In case of the disturbance of any of the former, the same shall be restored to its existing condition by the Contractor at his own expense.

Work to Be Kept Clear.

Section No. 29. The Contractor shall at his own expense keep the work, streets and all public places occupied by him clear of all refuse and rubbish that may accumulate from any source whatever and leave them in a neat condition; but this is in no way to be construed as placing upon the Contractor the usual duties of the Street Cleaning Department.

Assistance to be Rendered to Owners of Buildings.

Section No. 30. Where access to any adjacent property is temporarily cut off, owing to the occupancy of the street by the Contractor, he must, at his own cost, render every assistance to the owner or occupant in handling such materials of any description, including all material to be removed by the Department of Street Cleaning, that has to be taken to or removed from such property; such material shall be taken to or from the nearest accessible point that in the opinion of the Engineer is convenient for handling.

Waste Material.

Section No. 31. Waste material of any character will under no conditions be permitted to remain on the streets, but must immediately on its becoming unfit for use in the work be carted away and disposed of by the Contractor as hereinbefore provided; nor shall such materials be allowed to accumulate in the trenches.

Conveniences for Men.

Section No. 32. Necessary conveniences, properly secluded from public observation, shall be constructed and maintained by the Contractor at his own expense wherever needed for the use of the Contractor's employees, to the satisfaction of the Engineer and the sanitary authorities.

Fences.

Section No. 33. Wherever necessary the Contractor shall erect and maintain at his own expense fences for the protection of adjoining property and of the adjoining public places.

Advertisements Forbidden.

Section No. 34. The using of fences and buildings during construction for advertising purposes, other than the name and address of the Contractor, is forbidden; all temporary buildings and fences erected by the Contractor shall be neat in appearance and shall be painted as directed by the Engineer.

Barricades.

Section No. 35. Barricades and bridges shall be erected by the Contractor at his own cost, for the protection of the work or use of the public; they shall be substantial in character and neat in appearance.

Construction Drawings.

Section No. 36. The Engineer will prepare and furnish to the Contractor, from time to time as required, drawings and plans amplifying such details of the contract drawings as may be necessary, and drawings and plans necessary to show the adjustment and reconstruction of all surface and subsurface structures wherever the reconstruction of the same is necessitated by the construction of the Railroad. These plans must be strictly followed, unless local conditions should develop during construction, suggesting changes, when, with the approval of the Engineer, such changes may be permitted.

Working and Shop Drawings.

Section No. 37. The Contractor shall make all working or shop drawings which may be required in addition to the contract drawings, or in addition to such other drawings as the Commission may issue in amplification of such contract drawings, as explained above. All working or shop drawings shall be submitted in duplicate to the Engineer for his approval, which approval shall be indicated by his countersigning one set of such working or shop drawings and returning the same to the Contractor. Should the working or shop drawings be not approved by the Engineer, then the Engineer shall return one set of such working or shop drawings, with the necessary corrections and changes indicated thereon; and the Contractor must make such corrections and changes, and again submit plans in duplicate for the approval of the Engineer; and no work called for by said working or shop drawings shall be done until the approval of the Engineer be obtained, which must be given or refused within twenty (20) working days after delivery to him at his office of such plans in duplicate. Immediately upon final approval of such working or shop drawings by the Engineer, the Contractor shall furnish the Commission four additional copies of such approved drawings.

Lines and Grades.

Section No. 38. During the progress of the work the Commission will give, through the Engineer, to the Contractor, suitable points, marks or benches, indicating the line and grade of the Railroad and of the sewers; such points or bench marks to be established at such intervals as the Engineer deems necessary for the Contractor to be able to perform his work. The principal lines and grades are to be given by the Engineer, who may change them from time to time as may be authorized and directed by the Commission. The stakes and marks given by the Engineer shall be carefully preserved by the Contractor, who shall give to the Engineer all necessary assistance and facilities for establishing benches and plugs and for making measurements.

Notice, How Given.

Section No. 39. Orders and directions may be given orally by the Engineer to, and shall be received and promptly obeyed by, the Contractor or his representative or any superintendent, overseer or foreman of the Contractor who may have charge of the particular work in relation to which the orders or directions are given, and a confirmation in writing of such orders or directions will be given to the Contractor by the Engineer if so requested. If confirmation in writing is not requested by the Contractor, the oral orders and directions shall govern. The Contractor or his duly authorized representative shall be present at all times on the work to receive orders and directions from the Engineer.

Imperfect Work.

Section No. 40. Any imperfect construction which may be discovered before the final acceptance of the work shall be corrected immediately on the requirement of the Engineer and at the Contractor's expense, notwithstanding that it may have been overlooked by the proper inspector.

Damaged Work to be Replaced.

Section No. 41. All work of whatever kind which during its progress and before its final acceptance shall become damaged from any cause shall be broken up or removed and be replaced by good and sound work at the Contractor's expense.

Condemned Materials to be Removed.

Section No. 42. If any material brought on the ground for use in the work or selected for the same shall be condemned by the Engineer as unsuitable or not in conformity with specifications, the Contractor shall forthwith remove such materials at his own expense.

Competent Men.

Section No. 43. The Contractor shall employ only competent, skillful and faithful men to do the work. Whenever the Engineer shall notify the Contractor in writing that in his opinion any man on the work is incompetent, unfaithful or disorderly, such man shall be discharged from the work and shall not again be employed on it.

SUBDIVISION 3.

General Manner of Prosecution and Maintenance of Traffic.

Access to Buildings, Etc.

Section No. 44. No building shall, without the consent of the occupant, and after notice to the Engineer, be deprived of means of access thereto; and, where streets are open, suitable bridges shall be built and maintained at the Contractor's expense to permit owners and occupants to reach their premises. Where necessary, proper and easy means for passengers to reach or leave street cars shall be maintained.

Conduct of Work.

Section No. 46. Generally, the Contractor will be permitted to conduct his work in the most expeditious manner possible, having due regard for the safety of persons and property and facilities for traffic and under instructions as the Engineer may give from time to time.

Facilities for Travel.

Section No. 47. All necessary facilities are to be furnished by the Contractor at his own expense for the benefit of street travel, both on longitudinal and cross streets.

Decking of Streets and Sidewalks.

Section No. 48. In order to minimize interference with traffic and inconvenience to abutting property owners, during the construction of the Railroad, on all parts of the work the streets and sidewalks shall be substantially decked or covered over, and every precaution must be taken to keep traffic free from interruption.

Street Intersections.

Section No. 49. The street intersections, except where working shafts are located, shall be kept at all times open for traffic for their full width. Where the decking is temporarily removed from any part of the street the opening shall be protected by suitable fencing and bridging. In all cases the Contractor shall at all times at his own expense keep all the street crossings on the lines of the sidewalks in a clean and neat condition, bridging gutters and low places where water might collect.

Close Observance of Above Requirements.

Section No. 50. The Commission will insist upon the close observance of the above requirements, and no departure therefrom will be allowed, excepting upon the written permission of the Commission.

Openings for Ventilation.

Section No. 51. Wherever the excavations are decked, or where gases are liable to accumulate, suitable openings shall be provided for proper ventilation.

By-passing Gas Mains.

Section No. 52. Wherever the excavations are decked or in tunnel, all gas pipes the services of which cannot temporarily be dispensed with shall be by-passed, if directed by the Engineer, temporary pipes to take their place being laid upon, above or below the street or sidewalk surfaces. These temporary by-passing pipes, if laid upon or below the street surface, will be paid for at the prices stipulated in Schedule Item 99-A. If laid above the street or sidewalk surface, they will be paid for at the prices stipulated in Schedule Item 99-B. These prices are to include the cost of all excavation, backfilling, temporary paving (including maintenance of same), and the restoration of the permanent paving both upon the completion of the by-passing installation and upon the restoration of the original system, and all bagging, cutting and capping and installing circulation connections, and all other work, labor and material of whatever character necessary to provide a temporary and independent system of gas supply to take the place of the system originally in the street; to connect such temporary system with the mains in the intersecting streets where necessary; to transfer all house and lamps services to such temporary system where necessary; to remove and dispose of the material of such temporary system and to restore the original system; and no allowance will be made therefor under any other Schedule Item or otherwise. No allowance will be made for the maintenance of such temporary system. All maintenance will be considered as of the original system, and will be as provided for in Section No. 59. The material of the temporary system shall upon removal become the property of the Contractor. All pipe included in Schedule Item 99-A shall be wrought iron of a quality and manufacture to be approved by the Engineer. If laid on a trestle (Schedule Item 99-B) the pipes shall be flanged, or of other approved connection, and sizes twenty (20) inches in diameter or less shall be rolled wrought-iron pipe.

Temporary Pipes, Etc.

Section No. 53. Temporary pipes, if laid upon or above the street or sidewalk surfaces, shall be neatly and substantially placed in a manner to cause the minimum of inconvenience to the abutting property owners and to the public. Where by-passing pipes are to cross a street overhead, the trestles must be of such a height as to give a minimum clear head room underneath the pipe and its supports of fourteen (14) feet. The trestle shall be measured along its center line from out to end of end bents and shall be paid for per lineal foot of trestle so measured whether one or more pipes are supported thereon.

The trestles to support by-passing pipes shall be of a design approved by the Engineer and shall be painted an approved color.

SUBDIVISION 4.**Street Railroad Tracks, Mains and Other Surface, Subsurface and Overhead Structures.****Notice to be Given to Interested Parties.**

Section No. 55. Notice is to be given by the Contractor to all individuals, companies and the proper city officials, owning or having charge of surface, subsurface or overhead structures along any part of the work, of his intention to commence operations along such part of the route, at least one (1) week in advance, and the Contractor shall file with the Engineer at the same time a copy of said notice; and he shall co-operate with the proper parties, officers or officials in charge of such structures and shall furnish them with all reasonable facilities to inspect the methods of caring for their property.

Plans for Rearrangement Procedure.

Section No. 56. In the re-arrangement of surface, subsurface or overhead structures requiring removal and relaying or reconstruction due to interference with the railroad structure a tentative plan will be made by the Engineer, which will be submitted to the parties interested; if any reasonable changes are then requested by any of the said parties within ten (10) days after the submission of the tentative plan, such changes will then be made, if in the judgment of the Engineer they will best conserve the interest of all parties concerned; a further plan will then be made which, on the approval of the Engineer, will be final.

Reconstruction or Relaying, etc.

Section No. 57. Whenever it becomes necessary to cut, move, change, or reconstruct any surface, subsurface or overhead structures, or connections therewith, such work shall be done according to the reasonable satisfaction of the owners of such structures.

Reasonable Dispatch.

Section No. 58. All work of reconstruction or alteration shall be done with reasonable dispatch, and facilities are to be provided so that said work will interfere as little as possible with the practical working and use of such structures.

Maintenance, Support, Etc.—Protection From Injury.

Section No. 59. The Contractor shall at all times, by suitable bridging or other supports, maintain and support in an entirely safe condition for the usual service and to the reasonable satisfaction of the owners, all surface, subsurface and overhead structures and all their appurtenances encountered or affected during the prosecution of his work; if the maintenance of such usual service makes it necessary, the Contractor shall temporarily remove and relay or reconstruct any such surface, subsurface and overhead structure and shall restore the same prior to the completion of this contract. Also, in order that access may be had in emergencies to gates or valves on water, gas or steam mains and to electric manholes, where such gates or valves and manholes are decked over, trap doors of a suitable size shall be provided in the decking. All surface, subsurface and overhead structures and their appurtenances, and all surfaces of whatever character along the line of the work shall be protected from injury, but should any injury occur the Contractor shall fully restore such surface, subsurface or overhead structures and their appurtenances or surfaces to as good a condition as existed before the injury was done. All the above, including also all changes of surface, subsurface or overhead structures and their appurtenances made by the Contractor for his own convenience in executing his work, shall be done at the Contractor's own expense and included in the prices stipulated in the Schedule for excavation except as otherwise herein specifically provided.

Necessary Permanent Changes of Pipes.**Section No. 60.**

(1) Changes in water, gas or other scheduled pipes, made necessary because of physical interference of such scheduled pipes with the Railroad structure, Railroad ducts or Railroad duct manholes, and requiring the removal, relaying or reconstruction of such scheduled pipes in other than the original position, will be paid for at the prices stipulated in Schedule Items 79, 82, 84, 85, 90, 91, 92, 95, 102 to 104 inclusive, 109, 109-A, 110, 122-B, 125 and 126-D. These prices are per lineal foot of such scheduled pipes laid including the removal, relaying or reconstruction of all their service connections, all other appurtenances of whatever character and all other work, labor and material incidental thereto, made necessary because of the physical interference of such scheduled pipes with the Railroad structure, Railroad ducts or Railroad duct

manholes, and no allowance will be made therefor under any other Schedule Item or otherwise; excepting that:

Payment for New Pipes.

(2) If new pipes have to be provided to take the place of such scheduled pipes and are ordered by the Engineer, such new pipes will be paid for in addition to the price paid for laying, etc., at the prices stipulated in Schedule Items 100, 101, 107, 108, 115, 116, 120-A, 124-B, 126-C and 126-E, which prices are to cover the cost of the delivery of the new pipes actually used as measured in place in the work, and the removal and disposal of the old pipes. This does not relieve the Contractor, however, of his obligation to preserve all pipe that is in good condition and can be reclaimed and used, in order to avoid the necessity whenever possible of providing new pipe.

Payment for Excavation Outside Net Lines.

(3) If such scheduled pipes in their new locations are outside the ordered net lines of excavation for the Railroad structure, Railroad ducts or Railroad duct manholes, necessitating additional excavation and restoration of street surface, such excavation will be paid for at the price stipulated in Schedule Item 2-A (which price shall include all the matters referred to in Section No. 92) and such restoration of street surface will be paid for at the prices stipulated in Schedule Item 30, but only for such width as is prescribed in Section No. 61 for the excavations to be paid for. Any additional excavation and restoration of street surface, outside the ordered net lines of excavation for the Railroad structure, Railroad ducts or Railroad duct manholes, necessitated for service connections and for other appurtenances for scheduled pipes located either inside or outside the ordered net lines of excavation for the Railroad structure, Railroad ducts or Railroad duct manholes, will not be measured or paid for separately but compensation therefor will be deemed to be included in the prices for excavation and street surface restored specified in this subdivision (3) and in the prices for scheduled pipes specified in subdivision (1) of this Section No. 60.

Changes of Service Connections.

(4) Changes of the service connections of such scheduled pipes made necessary because of the physical interference of such service connections with the Railroad structure, Railroad ducts or Railroad duct manholes, whether the main pipe line is or is not changed, will be paid for at the prices stipulated in Schedule Items 88-A, 99-D and 114-B, which prices are for each such service changed and are to include the cost of all connections, all wrought-iron pipe sleeves of whatever description, insulation where necessary, all appurtenances of whatever character, and all other work, labor and material incidental to the removing, relaying or reconstructing of such service connections, and no allowance will be made therefor under any other Schedule Item or otherwise.

Measurements in Pipe Excavation.

Section No. 61. In the estimate and payment for earth excavation for pipe laying, allowance will be made for a width of trench two (2) feet wider than the interior diameter of the pipe and a depth six (6) inches deeper than the invert of the pipe, measured from the surface of the street on the line of the trench. Where, in the opinion of the Engineer, the trench for laying pipes thirty (30) inches or more in diameter requires to be close sheeted, allowance will be made in the estimate for payment for earth excavation for a width of trench three (3) feet wider than the interior diameter of the pipe, when the trench is so sheeted.

Excavation for Valve Chambers.

For the building of valve chambers and other structures and for the setting of valves, valve boxes and hydrants, the total amount of earth excavation to be allowed will be that within vertical planes one (1) foot outside of the outside lines of such structures, valves, valve boxes or hydrants, the depth being taken as the distance from the street surface to the lowest part of the structure or appurtenance.

Intersection of Two Trenches.

At the intersection of two trenches or at the intersection of a pipe or other trench with an excavation made by the Contractor under orders from the Engineer, for any purpose whatsoever, the cubical contents of the intersection will be allowed only once. Under no circumstances will a double allowance be made for any excavation.

Necessary Permanent Changes of Electric Conduits and Ducts.**Section No. 62.**

(1) Changes of electric conduits or ducts found in the street made necessary because of physical interference of such conduits or ducts with the Railroad structure, Railroad ducts or Railroad duct manholes, and requiring the removal, relaying or reconstruction of such conduits or ducts in other than the original position, will be paid for at the prices stipulated in Schedule Items 127 and 127-A. The price per foot as provided in Schedule Item 127 is to include the cost of conduits or ducts in place (except wrought-iron pipe ducts), of furnishing any new conduits or ducts which may be necessary, of all manholes, vaults, service boxes and their appurtenances, of drawing cables and providing new cables where necessary, of relaying and reconstructing all services and all other work, labor and material incidental to and necessary for the completed conduit or duct lines made necessary because of the physical interference of such conduits or ducts with the Railroad structure, Railroad ducts or Railroad duct manholes, and no allowance will be made therefor under any other Schedule Item or otherwise excepting that:

Payment for Excavation Outside Net Lines.

(2) If such conduits or ducts in their new locations are outside the ordered net lines of excavation for the Railroad structure, Railroad ducts or Railroad duct manholes, necessitating additional excavation and restoration of street surface, such excavation will be paid for at the price stipulated in Schedule Item 2-A (which price shall include all the matters referred to in Section No. 92) and such restoration of street surface will be paid for at the prices stipulated in Schedule Item 30, but only for such width as is prescribed in subdivision (5) of this Section No. 62 for the excavations to be paid for. Any additional excavation and restoration of street surface outside the ordered net lines of excavation for the Railroad structure, Railroad ducts or Railroad duct manholes necessitated for service connections and for other appurtenances of conduits or ducts located either inside or outside the ordered net lines of excavation for the Railroad structure, Railroad ducts or Railroad duct manholes will not be measured and paid for separately, but compensation therefor will be deemed to be included in the prices for excavation and street surface restored specified in this subdivision (2) and in the prices for conduits or ducts specified in subdivision (1) of this Section No. 62.

Changes of Service Connections.

(3) Changes of the service connections of such conduits or ducts made necessary because of the physical interference of such service connections with the Railroad structure, Railroad ducts or Railroad duct manholes, whether the main conduit or duct line is or is not changed, will be paid for at the price stipulated in Schedule Item 127-C, which price is for each such service changed and is to include the cost of all connections, all wrought-iron pipe sleeves of whatever description, all appurtenances of whatever character and of all other work, labor and material incidental to the removing, relaying or reconstructing of such service connections, and no allowance will be made therefor under any other Schedule Item or otherwise.

Payment for Wrought-Iron Pipe Ducts.

(4) Wrought-iron pipe ducts (including Edison tube mains) will be paid for at the prices stipulated in Schedule Item 127-A, which prices are to include all the work, labor and material specified under Schedule Item 127.

Measurements in Conduit and Duct Excavation.

(5) In the estimate and payment for excavation for conduit and duct laying and for the building of manholes, vaults, service boxes and their appurtenances, allowance will be made for a width of trench eight (8) inches wider than the duct bank or other structure, the depth, measured on the line of the trench, being taken as the distance from the street surface to the lowest part of the structure.

Maintenance of Railroads.

Section No. 63. The Contractor shall maintain and support, in a manner that will cause the minimum interference with traffic, all surface, subsurface and elevated railroads along the line of or crossing the line of the work.

Surface Railroads.

The Contractor shall maintain and support, both temporarily and permanently, in a safe condition all street surface railroads, including all appurtenances of such railroads; he shall rebuild either in their original or in new locations all parts of such surface railroads, including all appurtenances of such railroads, whose reconstruction or rebuilding may be necessitated by the construction of the work. Payment therefor (including the cost of such work in the cases of on and off line sewer trenches) will be made at the prices stipulated in Schedule Item 75, except as provided in Section No. 446 with respect to the street surface railroads supported on the existing subsurface rapid transit railroads in Broadway and Park Row, which prices will include the cost of all work, labor and material incidental thereto, and no allowance will be made

therefor under any other Schedule Item or otherwise. If permanent masonry supports are ordered and added, they will be paid for at the prices stipulated in the Schedule for the several classes of work or material applicable thereto. The Contractor will be required to support street surface railroads upon compacted backfill in lieu of masonry piers, unless the Engineer shall order such masonry piers. The cost of such compacted backfill will be deemed to be included in the prices stipulated for excavation.

Elevated Railroads.

The Contractor shall maintain and support both temporarily and permanently in a safe condition all elevated railroads and their appurtenances, including the reconstruction and building where necessary of all column foundations and parts of column foundations lying within and without the net lines of the Railroad structure. Payment therefor (including the cost of such work in the cases of on and off line sewer trenches) will be made at the prices stipulated in Schedule Item 76, which prices shall include the cost of all incidental work, labor and material, and no allowance will be made therefor under any other Schedule Item or otherwise. The prices stipulated in Schedule Item 76 are per elevated railroad column supported. No separate allowance or payment will be made, however, for the columns supporting the intermediate landings of the stairways of the Park Place Station of the Sixth Avenue Elevated Line, but payment for maintaining and supporting said stairways and the columns supporting the intermediate landings of said stairways is deemed to be included in the prices stipulated in said Schedule Item 76 for supporting the columns of the elevated railroad structure proper.

Subsurface Railroads.

The Contractor shall support and maintain both temporarily and permanently in a safe condition, all subsurface railroads and their appurtenances. Payment therefor will be made as provided in Section No. 446.

Facilities to be Given Owners to Make Extensions.

Section No. 64. In the event of the owners or the City desiring to make any addition, alteration or extension to their structures, or do any work to or in connection with surface, subsurface or overhead structures owned by them, or it, or to lay any new structure in or across a street occupied by the Work, at the time the work under this contract is in progress, the Contractor, by written permission, shall give said owners or the City all reasonable opportunity to perform such work; provided such work or alteration for the benefit solely of the owners of subsurface structures does not cause the Contractor any serious loss or delay, as shall be determined by the Commission. The written permission from the Contractor, with three prints of plans or sketches, or a description indicating the proposed work in detail, shall be submitted to and approved by the Engineer before any work shall be proceeded with under such written permission.

SUBDIVISION 5.

Excavation.*

Width of Excavation.

Section No. 65. Special care must be taken to avoid damage wherever excavation under cover is being done or where open excavation is permitted. The width of such excavation shall not exceed the width actually necessary, in the opinion of the Engineer, for the proper prosecution of the work. All excavations shall be of such width, in addition to that of the Railroad, as shall be necessary, in the opinion of the Engineer, for the proper and expeditious progress of the work, and to permit the laying and readjusting of all sewers, mains, subways and other subsurface structures encountered along the route and contiguous to the Railroad.

Depth of Trenches.

Section No. 66. Trenches shall be excavated to such depth as may be necessary to permit the laying of such concrete bed, special foundation or drain pipes as may be deemed necessary by the Engineer.

Sides to be Secured.

Section No. 67. The sides of the excavations shall be secured against slips by suitable sheet piling or sheeting, held in place by braces, shores or waling timbers, special precautions being taken where there is additional pressure, due to the presence of buildings or other structures. Where a movement of the ground might cause the settlement of an adjacent building, the sheeting must be started, if near the building, before the elevation of the bottom of the foundation of the building is reached; if away from the building, at such depth of the excavation as the Engineer may permit; and the excavation must not be made in advance of or below the bottom of the sheeting.

Filling Back of Sheeting.

Section No. 68. Sheeting shall be driven wherever possible, but when it is placed against the sides of the excavation, the spaces or voids back of the sheeting must be immediately and carefully filled with suitable material to prevent as far as possible the natural ground back of the sheeting from moving.

Buildings Underpinned Within Certain Limits.

Section No. 69.

(1) The Contractor, as described in Section No. 446, at the beginning of construction will be required safely and permanently to underpin, and during construction will be required to maintain, protect and secure, the buildings along Beekman Street enumerated in Schedule Item 4-AA. The Contractor shall secure buildings in Park Place adjacent to the excavation, either in accordance with Sections Nos. 67 and 68, in the case of buildings supported on firm soils when a slope represented by one (1) foot vertical to two (2) feet horizontal, inclined downward from the bottom outer edge of any building foundation, intersects or passes beneath the bottom outer edge of the completed Railroad structure; or

Underpinning Defined.

(2) When compliance with the provisions of Sections Nos. 67 and 68, pursuant to (1) above, is not sufficient to secure adjacent buildings in Park Place or when necessary to prevent improper pressure against the Railroad structure when completed, the Contractor shall safely and permanently underpin adjacent buildings the foundations of which are above the bottom of the adjacent excavation for the Railroad. By underpinning is meant such method of construction as will transmit the foundation loads directly through the underpinning structure to such lower level as is necessary to secure the buildings and which will relieve the adjacent ground from improper lateral pressures. The underpinning shall be designed to furnish a safe and permanent support for each independent building. To accomplish this result, the Contractor shall use such methods of underpinning, pneumatic or otherwise, as special conditions may require and the Engineer shall approve; or

Securing Other Than Underpinning.

(3) The Contractor shall, subject to and only with the approval of the Engineer, in lieu of underpinning buildings in Park Place construct such form of permanent construction as may be necessary to maintain, protect and secure the adjacent buildings against displacement, provided the safety of the completed Railroad structure will not be endangered by improper pressures from such form of construction and such adjacent buildings.

Before the work is proceeded with, the Contractor shall submit to the Engineer drawings in duplicate indicating the proposed typical and special methods of underpinning; or of maintaining, protecting and securing the adjacent buildings.

Payment for Underpinning and Securing.

Section No. 70. When underpinning of a building in Park Place is necessary and the work is done as provided in (2) of Section No. 69, payment will be made at the prices stipulated in Schedule Item 4; when a building in Park Place is maintained, protected and secured as provided in (3) of Section No. 69, payment will be made at the price stipulated in Schedule Item 4-E; and when a building in Park Place is secured as provided in (1) of Section No. 69, payment for the work shall be deemed to be included in the prices stipulated in the Schedule for excavation, as provided in Section No. 92. The prices stipulated in Schedule Items 4 and 4-E are per lineal front foot of building underpinning or maintained, protected and secured. In the case of underpinning a building in Park Place of varying stories in height, the varying portions will be classified under and paid for at the price stipulated in Schedule Item 4 applicable to each portion. The lineal front foot measurement does not mean the perimeter measurement of a building front, along the lines of stoops, bay windows, etc., but the straight front measured parallel to the street building line along the street traversed by the Railroad, and at the sidewalk level. Where the excavation for the Railroad projects into a transverse street, as at stations, and it is necessary to underpin or to maintain, protect and secure a building, the lineal front foot measurement will be increased by the measurement in such transverse street within the limits of the Railroad. The prices shall include payment for all work, labor and material of whatever nature required in connection with underpinning or with maintaining, protecting

* For excavation where tunneling methods are used, see Subdivision 24.

and securing the building proper, such as side walls, both interior and along transverse (except as noted above) streets; partition walls, both parallel and perpendicular to the building front; interior columns and any other work which may be required, and no allowance will be made therefor under any other Schedule Item or otherwise. The prices are not to include the payment for underpinning or for maintaining, protecting and securing vaults, area ways, retaining walls, stoops or porches, but the payment for such work, when required, shall be deemed to be included in the prices stipulated for excavation in Schedule Items 1 and 2. In cases where there is a building which has not been underpinned or maintained, protected and secured but it is necessary to underpin or maintain, protect and secure vaults, area ways, retaining walls, stoops or porches in front of such building, the payment of such work shall be deemed to be included in the prices stipulated for excavation in Schedule Items 1 and 2. If ordered by the Engineer, the Contractor shall dig test pits alongside the building foundations to determine the necessity for underpinning or for maintaining, protecting and securing a building. Payment for such test pits will be made at the price stipulated in Schedule Items 2-A.

Payment for Sheeting.

Section No. 71. No payment shall be made to the Contractor for sheeting left in the ground or in the work, unless the Engineer shall in writing require it to be left in, in which case payment shall be made to the Contractor for the sheeting so left in as measured by the Engineer, and at one-half the current market price for new material of the same grade, character and dimensions, and without any allowance or payment for placing the same or the expense thereof. This section applies only to the sheeting in trench work.

Timber for Temporary Purposes.

Section No. 72. All timber used for sheeting, shoring, bracing, decking or other temporary purposes, shall be sound and free from any defects that may impair its strength. It shall be provided, placed and removed at the Contractor's own cost and expense. The top or wearing surface of all decking used for carriageways shall be of hard yellow pine (unless otherwise permitted), sound, straight, and free from all shakes, and large loose knots. All sheeting and timber used temporarily shall be put in place by skilled mechanics, keyed tight by wedges where necessary, and so arranged as to be withdrawn readily without endangering the adjoining soil.

Vaults of Abutting Property.

Section No. 73. The removal, where necessary, of all walls or other parts of vaults of abutting property along the line of the Railroad that are within the ordered net lines of excavation shall be considered as earth excavation as provided in Section No. 87, but the restoration of all such walls and other parts of vaults, also areas and coal holes, originally within the ordered net lines of excavation, when susceptible of classification, will be paid for at the unit prices stipulated in the Schedule applicable in the opinion of the Engineer to the several classes of work and material involved in such restoration; or when in the opinion of the Engineer not susceptible of classification such work will be paid for under Article XII.

The above is not to be construed, however, as applicable to any work beyond the ordered net lines of excavation, which shall be done at the Contractor's own cost and expense.

Vaults Disturbed.

Section No. 74. Wherever vaults of abutting property are broken through or otherwise disturbed, the Contractor shall at his own cost and expense provide all materials for and erect a six-inch hollow tile wall laid in Portland Cement Mortar, as a temporary partition, on or about the building line, or as directed, that will afford proper protection to the owner or occupant of the adjoining premises. Upon the completion of the restoration of the vault, such wall shall unless otherwise directed be immediately removed and disposed of by the Contractor at his own cost and expense.

Blasting.

Section No. 77. Whenever rock or material requiring blasting is encountered in any trench or tunnel, all necessary precautions must be exercised by the Contractor, as required by the ordinances of the City relative to blasting. Explosives shall be used only of such character and strength as may be permitted by the Commission, and the right is reserved for the Engineer to direct that in special cases ordinary blasting powder only, in small charges, shall be used. Blasting shall not be done between the hours of 11 P. M. and 7 A. M. without the express permission of the Engineer, and under such restrictions as he may impose.

Storage of Explosives.

Section No. 78. No larger quantity of explosives shall be kept on the line of the work than will be actually required for the twelve (12) hours of work next ensuing, and it shall be kept under lock, the key to which is to be only in the hands of the foreman or other equally trustworthy person. The amount of explosives kept in any one place shall not exceed the limit permitted by any ordinance of the City, or as may be determined by the Commission. Caps and exploders shall not be kept in the same place with dynamite and other explosives. During freezing weather, special precautions shall be taken as to the care and manipulation of dynamite.

Near Sub-surface Structures.

Section No. 79. Whenever any subsurface structure is encountered in or alongside of the trench, right is reserved to direct that all material within five (5) feet of the same shall be removed by means other than blasting.

Compacted Backfill.

Section No. 81. Any excess excavation in the bottom of the trench below the net line of excavation shall be replaced by a compacted backfill placed at the Contractor's expense. (See Section No. 93.)

Pumping.

Section No. 83. Whenever water is encountered in trenches, the same shall be removed by bailing or pumping, great care being taken when pumping that the surrounding particles of soil be not disturbed or removed. If necessary to prevent such disturbance, the pumping must be done by a series of driven wells whose points are protected by fine wire cloths, the rate of flow at each well being made so slow as not to remove the particles of soil; or the pumping must be done by other means approved by the Engineer. The discharge from all pumps shall be conducted into the adjacent sewers, and the discharge pipes shall be so arranged as to be readily inspected at all times to ascertain if the water is free from particles of soil.

Carts to be Tight.

Section No. 84. All carts, buckets or other vehicles used by the Contractor for the removal of material shall be tight and so arranged and so loaded as not to spill over. Whenever a cart, bucket or other vehicle so used is leaky or unsuitable, it shall be immediately withdrawn from the work on notification by the Engineer, or his duly qualified assistant, in charge of that portion of the work.

Removed Expeditiously.

Section No. 85. Excavated material shall be removed expeditiously and disposed of, in any place selected by the Contractor, subject to the ordinances and regulations of the City authorities governing the disposal of such material, and the regulations of the United States Government as to the disposal or dumping of material in and about or near the Harbor of New York.

When Excavated Material May Be Taken by City.

Section No. 86. If at any time during the course of construction the City shall desire for city purposes any part of the material excavated, and the cost of such disposal shall not exceed the cost to the Contractor of the method in which he is then disposing of it, the Commission may order such material dumped or turned over to the City at a point designated without cost to the City.

Earth Excavation. Definition Of.

Section No. 87. Earth excavation includes the excavation of all materials of whatever nature encountered in the trenches, including boulders.

Excavation in Trenches. How Measured.

Section No. 88. The net outside width of the railroad structure, as ordered and indicated on the plans, and the depth of the railroad structure, also as ordered and as indicated on the plans, are the ordered net lines of excavation and will govern as to width and depth in the measurements for payment for excavation for the Railroad, except in tunnel excavation. The top surface of the subbase floor under the Post Office building and the bottom surface of the floor of the subsurface railroad now being built in Broadway will limit the upper surface for measurement and payment at the respective points. No deduction from the volume of excavation determined by the ordered net lines of excavation will be made on account of vault or area space or spaces occupied by pipes and other subsurface structures, except as provided above. Under no circumstances will a double allowance be made for any excavation.

No Allowance Outside of Ordered Net Lines.

Section No. 89. There will be no measurement or allowance made nor money

paid for excavation outside (below or wider than) the net measurement lines as above indicated; and no allowance shall be made for any excess excavation caused by slips or slides. It is understood and agreed that for all such matters the Contractor has estimated and allowed in the unit prices of the Schedule.

Change of Street Grade.

Section No. 90. When the contract drawings indicate that the grade of any street, park or parkway is to be raised or when the Engineer shall order such grade to be raised, the Contractor shall fill in such places to the changed grade as required. Such work shall be measured and paid for at the price stipulated for earth excavation, Schedule Item 1.

Payment for Excavation.

Section No. 91. Excavation shall be paid for at the prices stipulated in Schedule Items 1 and 2.

Price for Excavation to Include.

Section No. 92. The prices stipulated for excavation in Schedule Items 1, 2 and 2-A are to include the cost of the disposal of the materials excavated, of backfilling, of all decking and bridging, of all sheeting and bracing, and of maintaining and supporting of trenches during and after excavation, of all pumping and bailing, and of the maintenance and support, with all incidental work, labor and material of any kind, of all surface, subsurface and overhead structures and surfaces of whatever nature and their appurtenances, payment for the maintenance and support of which is not herein elsewhere specifically provided for under other Schedule Items.

SUBDIVISION 6.

Backfilling.

Quality of Material—How Placed.

Section No. 93. The trenches at the sides of and over the top of the subway and wherever backfilling is necessary, including any void spaces of vaults or other structures below the ordered net lines of excavation which it may be necessary to fill or grade in order to provide the sub-grade for the railroad, shall be backfilled with sand, gravel or other good, clean earth, free from perishable material and from stones exceeding six (6) inches in diameter, and not containing in any place a proportion of stone of or below that size exceeding one (1) part of stone to five (5) parts of earth. The filling shall be compacted by flooding with water or, in cases where flooding with water is not practicable it shall be compacted by ramming in layers, not exceeding six (6) inches in depth, as required by the Engineer.

Sub-surface Structures—Frozen Material Not Permitted.

Section No. 94. Whenever pipes, sewers, or other subsurface structures are met with, the filling must be carefully packed, rammed and tamped under and about such subsurface structures, using special tools for the purpose. No filling of trenches with frozen earth will in any case be permitted, nor will any filling be permitted over frozen material.

Sheeting Removed.

Section No. 95. As fast as the work of filling permits, sheeting and other timber supporting the sides of the excavation shall be carefully withdrawn, and the spaces left by the removal of such material carefully backfilled, but if directed by the Engineer, the sheeting shall be left in place. (See Section No. 71.)

How Paid for.

Section No. 96. The cost of backfilling is deemed to be included in the prices stipulated for earth excavation in Schedule Items 1, 2 and 2-A.

SUBDIVISION 7.

PILING AND TIMBERING

Character of Piles

Section No. 97. If, in the judgment of the Engineer, the ground is of such character as to require piling, the Contractor shall drive such piles as the Engineer directs. The piles shall be of good, sound pine or spruce, or other acceptable timber, straight and free from shakes; they shall be not less than twelve (12) inches in diameter at the butt end, nor less than six (6) inches in diameter at the point, and shall be driven to the satisfaction of the Engineer and by means of a steam hammer driver if so required by him. If necessary, the points of the piles shall be protected by proper shoes, and the butts by rings or caps. Piles shall not be spliced unless permitted by the Engineer, and then in such manner as he directs. Piles shall be carefully cut off to the grade given by the Engineer.

Piles to Be Driven in Required Location.

Section No. 98. Piles shall be driven in the position and manner and to the depth ordered; if driven in a wrong position or injured in any way by driving they must be withdrawn and replaced by others. After being driven they shall be cut off to a true plane for proper adjustment with capping timber or masonry.

Payment for Timber Piles.

Section No. 99. Timber piles will be paid for at the price stipulated in Schedule Item 12, which price is to cover the cost of furnishing, driving and preparing the piles ready for the capping timbers or masonry, and the portion cut off and removed will not be included in the length measured for payment. No test piles, guide piles or piles other than those that are a part of the finished foundation and are included within the net width of the finished foundation will be paid for.

Concrete Piles.

Section No. 100. If, in the judgment of the Engineer, special conditions so require, piles of reinforced concrete of an approved form of construction shall be used.

Payment.

Section No. 101. Payment for piles other than timber piles will be made as provided in Article XII.

Grillage.

Section No. 102. Timber grillage foundations shall be built if so directed by the Engineer.

Foundation Timber.

Section No. 103. All foundation timber shall be of pine or spruce, or other timber permitted by the Engineer, sound and free from shakes. It shall be of such dimensions, and laid in such manner, as the special drawings to be issued shall require, and shall be held in place by bolts, spikes or good seasoned oak or locust tree-nails.

Measurement and Payment.

Section No. 104. No wastage is to be allowed for, and the estimate of the quantities of foundation timber used will be based on the amount ordered by the Engineer and placed according to his directions. Payment for foundation timber will be made at the price stipulated in Schedule Item 13.

SUBDIVISION 8.

Cement.

Portland Cement.

Section No. 105. All cement used in the work shall be true Portland cement, by which is meant the finely pulverized product, resulting from the calcination to incipient fusion of a properly proportioned intimate mixture of argillaceous and calcareous earths or rocks, to which no addition greater than three (3) per centum has been made subsequent to calcination.

Brand to Be Approved.

Section No. 106. Before any cement is furnished, the brand shall receive the approval of the Engineer. Cement, to be acceptable, shall be of a well-known brand which has been in successful use for large engineering works in America for at least five (5) years, and which has an established reputation for uniform character. Preference will be given to cements which, by their records, show a tendency to maintain high strength of mortar with increased age.

Inspection.

Section No. 107. Cement shall be subject to inspection at the place of manufacture or on the work, and to such tests as may be ordered by the Engineer. The Engineer or his representatives shall have access at all times and places to inspect the methods of manufacture, storage and protection, and shall have liberty to inspect the daily laboratory records of tests and analyses at the cement works.

Tests.

Section No. 108. In general, tests will conform to the methods recommended by the Committee on Uniform Tests of Cement of the American Society of Civil Engineers. Unless otherwise directed, samples will be taken at the place of manufacture by a representative of the Engineer, and sent to the Commission's laboratory, where the tests will be made. If required, tests will be made on the individual samples, without intermixing.

Specific Gravity and Color.

Section No. 109. The cement shall have a specific gravity of not less than 3.10 nor more than 3.25 after being thoroughly dried at a temperature of 212 degrees Fahrenheit. The color shall be uniform, bluish gray, free from yellow or brown particles.

Chemical Analyses.

Section No. 110. Chemical analyses of cement made from time to time shall show a reasonably uniform composition. Cement shall not contain more than 1.75 per centum of sulphuric anhydride (SO₂) nor more than 4 per centum of magnesia (MgO).

Fineness.

Section No. 111. The fineness of the cement shall be such that it shall leave by weight a residue of not more than eight (8) per centum on a No. 100, and not more than twenty-five (25) per centum on a No. 200 sieve; the wires of the sieves being respectively 0.0045 and 0.0024 inch in diameter.

Time of Setting.

Section No. 112. It shall not develop initial set in less than thirty (30) minutes unless a more quickly-setting cement is specifically required, and shall develop hard set in not less than one (1) hour nor more than ten (10) hours.

Soundness.

Section No. 113. Pats of neat cement, after remaining one (1) day in moist air, shall be kept in air or water of normal temperature for at least twenty-eight (28) days, or shall be exposed to an atmosphere of steam, above boiling water, in a loosely closed vessel for at least five (5) hours; and the separate parts under any of these conditions shall remain hard without any indication of checking, cracking, distortion, disintegration or blotching.

Tensile Strength.

Section No. 114. Neat cement briquettes shall have at the end of one (1) day in moist air a breaking strength, per square inch of section area, of not less than one hundred and fifty (150) lbs.; at the end of seven (7) days—one (1) day in air, six (6) days in water—of not less than five hundred (500) lbs.; at the end of twenty-eight (28) days—one (1) day in air, twenty-seven (27) days in water—of not less than six hundred (600) lbs. The strength at twenty-eight (28) days shall be not less than that at seven (7) days.

Mortar Briquettes.

Mortar briquettes, composed of one (1) part of cement and three (3) parts of standard Ottawa sand, by weight, shall have at the end of seven (7) days—one (1) day in air, six (6) days in water—a breaking strength, per square inch of sectional area, of not less than two hundred (200) lbs.; and at the end of twenty-eight (28) days—one (1) day in air, twenty-seven (27) days in water—of not less than three hundred (300) lbs. The strength at twenty-eight (28) days shall show an increase of not less than fifty (50) lbs. over the strength at seven (7) days.

Long-Time Tests.

Section No. 115. Tests will be made from time to time extending over longer periods than twenty-eight (28) days. If such tests show a tendency to unsoundness or unusual reduction in strength with increased age, the Engineer shall have the right to prohibit the further use of that brand and to require that another brand be substituted.

Storage During Tests.

Section No. 116. All cement shall be held in storage to allow ample time for tests to be made before the cement is required for use in the work.

How Contained.

Section No. 117. Cement shall be packed and delivered in canvas sacks or other strong, well-made packages, plainly marked with the manufacturer's brand, and sealed in an approved manner. The weights of such packages shall be uniform.

Methods of Storing.

Section No. 118. The Contractor shall at all times keep in store on the work, or at some point convenient thereto, an abundant supply of cement, so as to guard against possible shortage. It shall be stored in a weather-tight building, with a tight floor a proper distance above the ground, and with sufficient floor space to admit of storing each lot of cement, of not more than two hundred (200) barrels, or its equivalent, separately, so as to facilitate identification of each individual lot in case of necessity for further tests or rejection. Cement that has become partially set or otherwise damaged shall not be used.

SUBDIVISION 9.

Mortar.

Ingredients—Mixing.

Section No. 119. All mortar shall be prepared from accepted cement and clean, sharp sand, approved by the Engineer. These ingredients shall be thoroughly mixed dry in the proportions as specified below; water shall then be added, so as to produce a stiff paste. Water used in mortar, grout or concrete must be clean, fresh water, no salt water being permitted. The mortar shall be freshly mixed for the work on hand, in proper boxes made for that purpose, and no mortar shall be used that has stood beyond such limit of time as may be determined by the Engineer.

Sand.

Sand used for mortar shall be clean and shall be graded from fine to coarse to the satisfaction of the Engineer. It shall contain no grains which will not pass a one-fourth (1/4) inch mesh screen nor more than six per centum (6%) by weight which will pass a 100 mesh screen. Sand shall be of such quality that mortar composed of one (1) part Portland cement and three (3) parts sand by weight will have a tensile and compressive strength equal to mortar of the same consistency made from one (1) part of the same cement and three (3) parts standard Ottawa sand.

How Measured.

Section No. 120. For purposes of mixture, three hundred and seventy-five (375) pounds of Portland cement shall be estimated at three and one-half (3 1/2) cubic feet of volume. The proportions for brick and stone masonry shall be one (1) part cement to two (2) parts sand; for pointing, one (1) part cement and one (1) part sand; for concrete masonry, as specified under the head of concrete; and for other classes of work, as directed by the Engineer.

Grout.

Section No. 121. If required by the Engineer, a grout, consisting of one (1) part fine, clean and sharp sand and one (1) part of Portland cement shall be pumped in under pressure, so as to completely fill all the voids in or behind the masonry.

Payment for Grout.

Section No. 122. Where grout is ordered and used, it shall be paid for at the price herein provided, Schedule Item 11.

SUBDIVISION 10.

Masonry.

Laid in Portland Cement.

Section No. 123. All masonry, except as otherwise specified, shall be laid in Portland cement mortar, and shall be built of the forms and dimensions shown on the plans, or as directed by the Engineer from time to time; and the system of joining or bonding ordered by the Engineer shall be strictly followed.

Water Not to Interfere With.

Section No. 124. Care must be taken that no water shall interfere with the proper laying of masonry in any of its parts.

Freezing Weather.

Section No. 125. During freezing weather no masonry shall be built unless properly protected against frost, and masonry shall not be built in exposed places where in the opinion of the Engineer it is impracticable to give such protection. During freezing weather or when there is frost in the materials to be used in the masonry, the materials shall be heated. The Contractor shall provide such appliances, subject to the approval of the Engineer, as are necessary for the heating of the sand, stone and other materials.

Protected in Freezing Weather.

Section No. 126. During freezing weather all masonry shall be protected by a suitable covering of salt hay, canvas, tarpaulin or by such material or in such ways as may be necessary to insure it against freezing.

Hot Weather.

Section No. 127. During hot weather all masonry, especially concrete, shall be kept wet by sprinkling and properly covered until it has become thoroughly set and hardened.

Pointing.

Section No. 128. Unless otherwise permitted, every joint that is to be pointed shall be raked out, within two days after being laid, to a depth of at least two inches.

Mortar for Pointing.

Section No. 129. Pointing of the face joints of masonry shall be thoroughly made with cement mortar mixed in the proportion of one (1) part of cement to one (1) part of sand, except where otherwise specially provided.

Season for Pointing.

Section No. 130. No pointing shall be done in freezing weather, and masonry

laid between December 1st and April 1st shall not be pointed until permitted by the Engineer.

Defective Masonry.

Section No. 131. Any masonry which is found to be defective from any cause whatsoever, before the final completion and acceptance of the work, must be removed and properly rebuilt, or if damaged during such time must be properly repaired.

Stone Cleaned.

Section No. 132. All stone before being laid shall be thoroughly cleaned, and washed if so directed by the Engineer.

SUBDIVISION 11.

Concrete.

How Composed.

Section No. 133. The concrete shall be composed of gravel or broken stone, or a mixture of both, free from all dust and dirt, and mixed together with the proportion of mortar specified below. The water used in mixing concrete must be clean, fresh water, no salt water being permitted.

Sand.

Section No. 134. Sand for concrete shall be of the kind herein specified for mortar.

Stone.

Section No. 135. Stone for concrete shall be sound, clean gravel, or sound, hard, broken limestone, or trap rock, or a mixture of such gravel and broken stone. If a mixture of gravel and broken stone is used, the Engineer may require that the gravel and broken stone be stored separately on the work and mixed in single batches as needed.

Sizes of Stone.

Section No. 136. The gravel or broken stone or the mixture of gravel and broken stone shall be graded from fine to coarse, and that which is all of one size, or practically so, shall not be used. It shall be screened or washed so as to remove all dust, and it shall contain no pieces that will pass through a hole three-eighths ($\frac{3}{8}$) inch in diameter, and no pieces that will pass through a hole one and three-quarters ($1\frac{3}{4}$) inches in diameter. Broken stone or gravel for concrete, graded as above but between the three-eighths ($\frac{3}{8}$) and three-quarters ($\frac{3}{4}$) inch in diameter, may be required for use in special parts of the work.

Rubble Concrete.

Section No. 137. In concrete where the thickness is thirty (30) inches or more, if permitted by the Engineer, the Contractor may imbed in the same pieces of clean, sound stone whose greatest diameter does not exceed twelve (12) inches and whose least diameter or thickness is not less than three-quarters ($\frac{3}{4}$) of the greatest diameter. These stones shall be set by hand in the concrete as the layers are being rammed, and so placed that each stone is completely and perfectly imbedded. No two (2) stones shall be within six (6) inches of each other and no stones within four (4) inches of an exposed face, nor shall any such stone be placed nearer than six (6) inches to any metal built in the concrete for reinforcing the same.

Proportions.

Section No. 138. The proportions of cement, sand and stone (or gravel) used in making concrete shall be by volume as cast into the measuring box and shall be as follows:

Section No. 139. Concrete in floor, sidewalls and roof one (1) part of cement, two (2) parts of sand and four (4) parts of stone.

Section No. 140. Protective concrete outside of waterproofing lines on sides and roof, one (1) part of cement, two (2) parts of sand and four (4) parts of stone.

Mixing by Machine.

Section No. 141. Whenever practicable, concrete shall be machine mixed. A rotary machine of a pattern approved by the Engineer, and mixing only one batch at a time, shall be used. Concrete shall not be mixed on the surface of the street or decking on the line of the work, unless specifically permitted, but the mixing shall be done as close as practicable to the work, so as to avoid too great a lapse of time between the mixing and placing of the concrete in the forms.

Mixing by Hand.

Section No. 142. When concrete is mixed by hand the stone or gravel shall be spread on a platform in a bed about six (6) inches thick, and shall be thoroughly wet. Sand shall be spread on a platform and the requisite portion of cement spread on the sand. After thoroughly mixing the latter, the dry mixture thus formed shall be spread evenly over the bed of stone wet as above, and the whole turned over until thoroughly mixed, but not less than four (4) turnings on the mixing board shall be allowed in any case, water being added as necessary. Care shall be taken to keep the bed of concrete wet and avoid piling.

How Laid.

Section No. 143. Concrete shall be placed immediately after mixing in layers of such thickness as may be directed by the Engineer, and shall be thoroughly compacted throughout the mass by ramming or spading, special tamping bars or tools being used as approved by the Engineer. The amount of water used in making the concrete shall be as approved by the Engineer. If a small amount of water has been used in mixing, ramming shall be continued until the water flushes to the surface; as a rule, however, concrete shall be placed wet.

Made Smooth to Receive Waterproofing.

Section No. 144. Concrete to which waterproofing is to be applied shall be made smooth at the time of laying and shall be carefully protected from injury by barricades or otherwise, if necessary, until thoroughly set.

Time for Hardening.

Section No. 145. Concrete shall be allowed to set for twelve (12) hours, or more, if so directed, before any work shall be laid upon it; and no walking over or working upon it shall be allowed while it is setting. Concrete shall not be flooded with water before being thoroughly set.

Earth Rammed.

Section No. 146. Before laying concrete on earth the earth shall be rammed as directed.

Surface Rough for Bonding.

Section No. 147. Wherever a section of concrete is necessarily left unfinished, leaving a surface which will be hard set before additional concrete can be laid, care shall be taken to flush the cement to such surface, and such dovetails or grooves shall be formed as may be necessary to insure a good bond with the new work; and if deemed necessary by the Engineer, the joints shall be reinforced with steel bars or dowels furnished and placed by the Contractor at his own expense.

Joints Cleaned.

Section No. 148. In all cases of joints of old with new work the old surfaces shall be thoroughly cleaned and wet, and a coating of mortar or cement shall be applied, if required, before placing the concrete.

Forms.

Section No. 149. Suitable forms shall be provided by the Contractor to support the concrete while being placed in the walls or roofs. These forms shall be immediately replaced by new ones as soon as they commence to lose their proper shape. Before being used they shall be carefully cleaned of cement and dirt in order to provide a perfectly smooth face to the exposed surface of the concrete. The forms shall be made of wood, kept carefully planed; or made of metal sufficiently thick to retain their shape without the use of wood.

Certain Forms Not Permissible.

Section No. 150. No forms made of wood, and covered with iron, will be permitted.

Forms, How Made.

Section No. 151. The joints in forms shall be water-tight. If forms are made of wood, the boards shall be tongued and grooved where required by the Engineer.

Precautions in Placing.

Section No. 152. Every precaution shall be taken to construct the forms in such a manner as will insure a smooth and even surface on concrete which is to remain exposed; except that on track ceilings through stations, on ceilings over platforms, and on walls within the limits of station finish work the concrete shall be left with a rough surface to insure a proper bond between it and the station finish plaster which is to be applied under another contract. For obtaining this rough concrete surface the Contractor shall provide special forms approved by the Engineer.

Forms, How Set—Forms Removed—Surface Irregularities Corrected—Defective Work Replaced.

Section No. 153. The forms shall be set true to line, firmly secured, and be so tight as not to allow water in the mortar to escape; they shall be thoroughly wet before placing the concrete and shall be removed as soon after the concrete has been

placed as in the judgment of the Engineer may be done with safety to the work. Immediately on the removal thereof the faces that will remain exposed shall be carefully examined and any irregularities of the surface corrected; projections shall be removed and voids filled with mortar. If, however, the voids are such as to indicate an excessive loss of mortar, portions of the concrete shall be cut out to the fullness of such defects and the space refilled with a rich concrete or mortar in such proportions and in such manner as the Engineer may direct.

Reinforcement Steel.

Section No. 154. Where reinforcement steel or wire mesh is used, efficient means shall be provided to maintain it in the exact position it is to occupy in the completed work, and to prevent it from becoming dislodged, or moved in any manner, when concrete is placed.

Surface Finish.

Section No. 155. Exposed faces of concrete shall be left with the natural cement finish, the object in view being to obtain a generally smooth finished surface of uniform color. Immediately following the removal of the forms, the removal of the projections and the filling of voids, as provided above, the exposed surfaces shall be rubbed down in such a manner, approved by the Engineer, as will insure this result.

Within Station Limits.

The preceding paragraph of this Section does not apply within station limits.

Impervious to Water—Drip Pans.

Section No. 156. It is intended to obtain concrete impervious to water; the concrete shall be mixed and deposited with this end in view, and on the roof of the Railroad, if waterproofing is not used, the top surface of the concrete shall be carefully troweled as may be directed in order to add to its imperviousness.

The surfaces of drip-pans under ventilating openings and other surfaces which require special provision for drainage shall be troweled.

Concrete, How Measured and Paid for.

Section No. 157. Concrete masonry shall be measured in place in the work to the prescribed net lines ordered by the Engineer and shall be paid for at the prices stipulated in Schedule Items 6 and 7; which prices are to include the cost of all scaffolding, centers, forms, etc., and removing the same, all troweling where required, and all other work, labor and material incidental thereto.

SUBDIVISION 12.

Brick Masonry.

Quality.

Section No. 159. Bricks for masonry shall be of the best quality common bricks, burned hard entirely through, regular and uniform in shape and size and of compact texture.

Hollow Terra Cotta Blocks.

Section No. 160. Hollow terra cotta blocks or bricks may be required on the outside of walls of the structure or at such other places as the Engineer may direct. They shall be of the best porous terra cotta as approved by the Engineer, and shall be of such thickness and shall be laid in such manner as hereinafter specified or as the Engineer may direct.

In Stations.

Similar terra cotta blocks or bricks may be required in station work.

How Laid.

Section No. 161. All brick masonry shall be laid in mortar of the quality above described, except that in exposed locations coloring matter may be added, if required by the Engineer. The bricks shall be laid to line with joints in the face work not exceeding one-quarter ($\frac{1}{4}$) of an inch in the beds, and three-eighths ($\frac{3}{8}$) of an inch on ends; the bricks to be thoroughly wet before laying and to be completely embedded in mortar under the bottom and on the sides and ends at one operation, care being taken to have every joint full of mortar.

All exterior surfaces shall be smooth and regular.

Cleaned.

Section No. 162. The inside faces of all arches and other exposed parts shall have all the mortar scraped off and washed clean immediately after the centers have been struck, and shall be pointed and left in neat condition.

No "Bats" or Culls.

Section No. 163. All bricks of whatever nature shall be carefully culled and if necessary gauged before laying, at the expense of the Contractor. No "bats" shall be used except in large masses of brickwork, where a moderate proportion, to be determined by the Engineer, may be used, but nothing smaller than half bricks.

Racked or Toothing.

Section No. 164. All unfinished work shall be racked back or toothing, as directed by the Engineer, and before new work is joined to it the faces of the brick in the old work must be scraped entirely clean, scrubbed with a stiff brush and be well moistened.

Special Bricks.

Section No. 165. Where necessary to make a neat joint in connection with steel framework, or at corners, curves, or other similar places, special bricks of proper shape shall be furnished and used. All centers and forms shall be made to fit the curves of the work; they shall be put up and removed in a manner satisfactory to the Engineer.

Payments.

Section No. 166. Brick masonry shall be measured to the lines indicated and shown on the plans or as ordered by the Engineer and shall be paid for as herein stipulated in Schedule Item 9 for common brick masonry and Schedule Item 10 for hollow terra cotta brick or tile masonry of any thickness ordered, except as specified in Section No. 74; these prices are to include the cost of all scaffolding, forms, centers, etc., and the removal of the same, of all plastering and pointing, and of all other work incidental thereto.

SUBDIVISION 13.

Stone Masonry.

Rubble Stone Masonry—Where Used.

Section No. 167. Rubble stone masonry will be used, if required by the Engineer, for supporting the street railroads over the roof of the Railroad where permanent supports are required and at such other places as the Engineer may require.

How Laid.

Section No. 168. Rubble stone masonry shall be made of sound, clean stone of suitable size, quality and shape for the work in hand and shall be laid in mortar mixed in the proportion of one (1) part of cement to three (3) parts of sand. All beds and joints shall be well filled with mortar and the work must be thoroughly bonded.

Dry Rubble Masonry.

Section No. 169. In connection with the construction of sewers, or wherever else directed by the Engineer, dry rubble masonry shall be used. It shall consist of sound, clean stone not less than three inches thick and one cubic foot contents laid on natural beds and bonded to give the greatest degree of strength, with such spalls as are required for leveling.

Measurements and Payments.

Section No. 170. Rubble stone masonry shall be measured in place in the work and to the lines ordered by the Engineer, and it shall be paid for as herein stipulated under Schedule Item 8 if with mortar, and under Schedule Item 8-A if dry.

Other Masonry.

Section No. 171. In case, during the progress of the work, stone masonry of a different class than that specified above shall become necessary and shall be required by the Engineer, the same shall be constructed according to specifications applicable to the best work of such class, and it shall be paid for as provided in Article XII of the contract.

SUBDIVISION 14.

Waterproofing.

General Limits of Waterproofing.

Section No. 172. In general, waterproofing of the structure will be limited to the roof and to those surfaces near ground water or mean high water if ground water level is found for any reason to be below mean high water. At other places free drainage shall be provided by pipe drains, hollow tile or broken stone.

At Stations.

At the station the sidewalls also shall be waterproofed.

Protecting Masonry.

Section No. 173. The protecting masonry shall be concrete, common bricks or hollow terra cotta blocks as directed, laid and paid for as herein elsewhere provided, and shall be not less than four (4) inches in thickness.

Laid Against Sheeting.

Section No. 174. In places where permanent sheeting is placed at the water-

proofing line, the waterproofing, if permitted by the Engineer, may be applied against the sheeting.

Surfaces to Be Made Smooth.

Section No. 175. All surfaces to which waterproofing is to be applied shall be made as smooth as possible; on these surfaces there shall be spread hot melted pitch in a uniformly thick layer; on this layer of pitch shall be laid a treated woven fabric of such material as may be approved by the Engineer; this process shall be repeated until such number of layers as may be required by the Engineer have been placed and a final coat of pitch shall then be applied.

Definition of Term "Ply."

Section No. 176. The term "ply" as used in these specifications shall mean a layer of treated woven fabric (except the dry ply), both sides of which shall be coated with pitch at the time of laying.

Number of Plies.

Section No. 177. The number of plies of waterproofing over the roof between stations shall in no case be less than three (3), except as hereinafter provided where brick laid in asphalt mastic is used.

At Stations.

On the sidewalls at the station the same conditions as in the preceding paragraph shall apply.

Brick in Asphalt Mastic.

Section No. 178. On the sides and bottom of the structure below a line two (2) feet above ground water, or, if ground water is below mean high water level, then two (2) feet above mean high water one (1) ply of waterproofing, as described above, shall be used with one or more layers of brick laid in asphalt mastic; the number of layers of brick to be determined by the Engineer.

In any case where brick in asphalt mastic is not used, the number of plies shall be as local conditions require and as directed by the Engineer.

At Stations.

The requirements in the preceding paragraphs of this section likewise shall apply to the roof of the structure within station limits and over the tracks passing through the station within said limits.

Quality of Brick.

Section No. 179. The quality of brick shall be the same as provided in Subdivision 12. The brick shall be properly dried and shall be heated before laying.

Measurements and Payments.

Section No. 180. Brick in asphalt mastic will be measured in place to the lines ordered by the Engineer, and will be paid for at the price stipulated in Schedule Item 16.

Ply Substituted for Brick in Asphalt.

Section No. 181. Six (6) plies of waterproofing may be substituted for brick in asphalt mastic, if approved by the Engineer, and will be paid for as provided for fabric waterproofing.

Asphalt Mastic.

Section No. 182. Asphalt mastic shall contain not less than one-third (1/3) asphalt, the other ingredients to be sand and limestone dust or sand and cement. The ingredients are to be in proportions governed by local requirements and weather conditions. In melting and mixing the mastic its temperature shall not exceed 350 deg. Fahr. All packages containing asphalt shipped to the work must be distinctly labeled with the manufacturer's name and the brand or number of the mixture.

Leaks Stopped.

Section No. 183. Any masonry that is found to leak at any time prior to the completion of the work and final acceptance thereof by the Commission shall be cut out and the leak stopped, at the sole expense of the Contractor.

Pitch.

Section No. 184. Pitch shall consist of either coal-tar or asphalt as the Engineer shall elect; it must be delivered on the work in packages that are plainly marked with the manufacturer's brand, and indicating the grade and quality of the material.

Quality of Coal-Tar Pitch.

Section No. 185. The coal-tar pitch shall be straight-run pitch containing not less than twenty-five (25) per centum and not more than thirty-two (32) per centum of free carbon, which will soften at approximately 70 deg. F., and melt at 120 deg. F., being a grade in which distillate oils distilled therefrom shall have a specific gravity of 1.05.

Quality of Waterproofing Asphalt.

Section No. 186. The asphalt used shall consist of fluxed natural asphalt, or asphalt prepared by the careful distillation of asphaltic petroleum, subject to the approval of the Engineer, but however prepared, it shall comply with the following requirements:

The asphalt shall contain in its refined state not less than 95 per centum of bitumen soluble in cold carbon disulphide, and at least 98 1/2 per centum of the bitumen soluble in cold carbon disulphide shall be soluble in cold carbon tetrachloride. The remaining ingredients shall be such as not to exert an injurious effect on the work.

The asphalt shall not flash below 350 degrees Fahr. when tested in the New York State Closed Oil Tester. When 20 grams of the material are heated for five hours at a temperature of 325 degrees Fahr. in a tin box two and one-half (2 1/2) inches in diameter it shall not lose over 5% by weight, nor shall the penetration at 77 degrees Fahr. after such heating be less than one-half (1/2) of the original penetration.

The melting point of the material shall be between 150 degrees and 175 degrees Fahr., as determined by the Kraemer and Sarnow methods.

The consistency shall be determined by the penetration, which must be between 75 and 100 at 77 degrees Fahr.

A briquette of the solid bitumen of cross section of one square centimeter shall have a ductility of not less than 20 centimeters at 77 degrees Fahr., the material being elongated at the rate of five (5) centimeters per minute. (Dow moulds.)

All tests herein specified must be conducted according to methods approved by the Engineer.

Penetrations indicated herein refer to the depth of penetration in hundredth centimeters of a No. 2 cambric needle weighted to 100 grams at 77 degrees Fahr. acting for 5 seconds.

Woven Fabric for Waterproofing.

Section No. 187. The fabric to be used shall be a woven fabric which shall have been treated with pitch before being brought on the work. The fabric and the material used in its treatment shall be approved by the Engineer.

Concrete to Be Dry.

Section No. 188. All concrete shall be dry before waterproofing is attached. If, in the judgment of the Engineer, it is impracticable to have the concrete dry, then there shall be first laid a layer of treated felt of approved quality, on the upper surface of which is to be spread the first layer of pitch; the said layer of felt shall then be paid for as a dry-ply, Schedule Item 15 (i).

Each layer of pitch must completely and entirely cover the surface on which it is spread without cracks or blow holes.

Fabric Waterproofing to Be Carefully Laid.

Section No. 189. The fabric must be rolled out into the pitch while the latter is still hot, and pressed against it so as to insure its being completely stuck over its entire surface, great care being taken that all joints are well broken by overlapping, and that, unless otherwise permitted, the ends of the rolls of the bottom layers are carried up on the inside of the layers on the sides, and those of the roof down on the outside of the layers on the sides so as to secure a full lap of at least one (1) foot. Especial care must be taken with this detail.

Precautions After Laying.

Section No. 190. When the finishing layer of concrete is laid over or next to the waterproofing material, care must be taken not to break, tear or injure in any way the outer surface of the pitch.

Skilled Labor to Be Employed.

Section No. 191. None but competent men, especially skilled in work of this kind, shall be employed to lay the waterproofing.

Measurements and Payments.

Section No. 192. Measurements will be made on the basis of actual area covered by the number of plies ordered, no account being taken of laps, and the waterproofing will be paid for as herein stipulated, Schedule Item 15.

Subdivision 15.

Steel and Iron.

Open Hearth Process.

Section No. 193. Steel shall be made by the open hearth process.

Chemical and Physical Properties.

Section No. 194. The chemical and physical properties of finished material shall conform to the following limits:

Properties.	Structural Steel.	Rivet Steel.	Steel Castings.
Phos. (Max.)	.04%	.04%	.05%
Sulph. "	.05%	.04%	.05%
Mn. "	.60%	.60%	.80%
Si. "	.10%	.10%	.35%
Ult. Str.	60000±4000	50000±4000	65000 (Min.)
Yield Point (Min.)	55% Ult.	55% Ult.	35000
Elongation, Min. % in 8 inches	1500000	1500000	
	Ult. Ten. Str.	Ult. Ten. Str.	
Elongation, Min. % in 2 inches			20%
Fracture	Silky.	Silky.	Silky, or Fine Granular.
Cold Bends without Fracture	180° flat.	180° flat.	120° (d.=3t.)

Yield Point.

Section No. 195. The yield point shall be that strain beyond which the elongation ceases to be proportional to the weight imposed, and may be indicated by drop of beam. The speed of testing shall be governed by the Inspector.

Soundness and Finish.

Section No. 196. Sufficient discard shall be made to insure sound material free from piping or excessive segregation. The material shall be finished straight and smooth, and shall be free from all seams, flaws, cracks, defective edges or other defects. Any imperfection which may develop during the progress of the work will be sufficient cause for rejection.

Steel Castings.

Section No. 197. Steel castings shall be true to pattern and free from injurious imperfections.

Standard Test Pieces.

Section No. 198. Sample pieces for tensile and bending tests of plates, shapes and bars shall be cut from such portions of the finished products of each melt as the Inspector may designate, and shall be stamped by him; they shall have both faces rolled and both edges milled to the usual form of a standard test specimen—one and one-half (1 1/2) inches wide on a gauged length of nine (9) inches—or with both edges parallel. The area of the minimum section shall be not less than one-half (1/2) square inch.

Tests for Angles.

Section No. 199. Angles three-quarters (3/4) of an inch and less in thickness shall open flat, and angles one-half (1/2) of an inch and less in thickness shall bend shut, cold, under blows of a hammer, without sign of fracture. This test shall be made only when required by the Inspector.

Rivet Rods.

Section No. 200. Rivet rods shall be tested as rolled.

Test Pieces for Steel Castings.

Section No. 201. For steel castings the test piece shall be turned to a uniform minimum section of one-half (1/2) inch diameter, for a length of at least two and one-half (2 1/2) inches. Specimens for bending shall be one (1) inch by one-half (1/2) inch in section.

Tests for Rivet Steel.

Section No. 202. Rivet steel, when nicked and bent around a bar of the same diameter as the rivet rod shall give a gradual break and a fine, silky, uniform fracture.

Treatment of Test Specimens.

Section No. 204. For steel castings the number of tests will depend on the character and importance of the castings. Specimens shall be cut cold from coupons molded and cast on some portion of one or more castings from each melt. The coupons shall be annealed with the castings before being cut off.

Number of Tests.

Section No. 205. At least one tensile and one bending test shall be made from each melt of steel as rolled. In case steel differing three-eighths (3/8) inch or more in thickness is rolled from one melt, a test shall be made from the thickest and from the thinnest material rolled. Rolled steel shall be tested in the condition in which it comes from the rolls.

Rejection at Shop.

Material which, subsequent to tests at the mills and its acceptance there, develops weak spots, brittleness, cracks or other imperfections, or is found to have injurious defects, will be rejected at the shop and shall be replaced by the manufacturer at his own cost.

Retests.

If the above tests do not fulfill the requirements of these specifications, duplicate tests may be made at the discretion of the Inspector, he selecting and stamping the duplicate test pieces. If these retests meet all the requirements, the melt shall be accepted.

Variation in Weight.

Section No. 206. A variation in weight or cross section of any piece of steel of more than two and one-half (2 1/2) per centum from that specified shall be sufficient cause for rejection, except in case of sheared plates exceeding one hundred (100) inches in width, where the variation may be five (5) per centum.

Material Marked.

Section No. 207. Every finished piece of steel shall have the melt number and the name of the manufacturer stamped or rolled upon it. Bars for reinforcing concrete, rivet and lattice steel, and other small parts, may be bundled, with above marks on an attached metal tag.

Test Pieces and Facilities for Testing.

Section No. 208. The Contractor shall furnish, without extra charge, such standard test pieces as may be necessary to determine the uniform quality of the material and also the use of a reliable testing machine, with the necessary labor for testing.

Chemical Analysis.

Section No. 209. Chemical determinations of the percentages of carbon, phosphorus, sulphur and manganese shall be made by the manufacturer from a test ingot, so taken, during the casting of each melt of steel as to fairly represent the melt. Two copies of such analyses shall be furnished to the Engineer or his Inspector.

Mill Orders.

Section No. 210. The Engineer shall furnish copies in triplicate of all mill orders, and no material shall be rolled or work done before the Engineer has been notified so that he may arrange for the inspection.

Shipping Invoices.

The Engineer shall be furnished complete copies of shipping invoices, in triplicate, with each shipment. Each invoice shall show the scale weight of each individual piece.

Wrought Iron.

Requirements.

Section No. 211. All wrought iron shall be double rolled, tough, fibrous and uniform in character. It shall be thoroughly welded in rolling and be free from surface defects.

Method of Testing.

Section No. 212. The methods specified for testing rolled steel shall apply generally to wrought iron. Standard test specimens shall show an ultimate strength of at least fifty thousand (50,000) lbs. per square inch, and an elongation of at least eighteen (18) per centum in eight (8) inches, with fracture wholly fibrous. Specimens shall bend cold with the fibre, through one hundred and thirty-five (135) degrees, without sign of fracture, with inner radius not to exceed the thickness of the piece tested. When nicked and bent the fracture shall show at least ninety (90) per centum fibrous.

Cast Iron.

Chemical Requirements.

Section No. 213. Cast iron shall be tough, gray iron made by the Cupola process and shall contain not more than six-tenths (0.6) per centum of phosphorus, and not more than twelve one-hundredths (0.12) per centum of sulphur. No mill cinder iron, white or burnt iron or scrap of any kind will be permitted in the composition.

Test Bar.

Section No. 214. The quality of the iron entering into castings shall be determined by means of the "Arbitration Bar." This is a bar one and one-quarter (1 1/4)

inches in diameter and fifteen (15) inches long, cast under the same circumstances as those which attended the casting of the full-sized piece. This bar shall sustain at the centre, when resting upon two dull knife edges, twelve (12) inches apart, a load of three thousand (3,000) pounds with a deflection of at least one-tenth (1-10) of an inch before rupture.

Number of Test Bars.

Two (2) sets of two (2) bars shall be cast from each heat; one set from the first and the other set from the last iron entering into the castings. Each set of two bars is to be made in a single mold.

True to Pattern.

Section No. 215. Castings must be sound, true to pattern, free from cracks, flaws, excessive shrinkage, and have smooth, clean surfaces. They must be neatly chiseled and wirebrushed before leaving the foundry. Castings which do not accurately conform to dimensions on the plans will be rejected. Each casting shall have its distinguishing letter or number cast on at the place indicated on the plans.

Workmanship.

Quality.

Section No. 216. The workmanship shall be equal to the best practice in modern bridge works.

Shearing and chipping shall be neatly and accurately done, and all portions of the work exposed to view neatly finished. All nuts exposed to view on the final structure shall be hexagonal. Lattice bars shall have neatly rounded ends, concentric with rivet holes.

Rods and Bars to Form Sections.

Section No. 217. Rods and bars to be used for reinforcing concrete shall be deformed as approved by the Engineer; plain bars will not be used.

Bent Rods.

Section No. 218. Bent rods shall be bent uniformly to template in a machine or press approved by the Engineer. They may be bent either at the shop or on the work. In special cases bending hot and annealing may be required.

Material Straightened in Shop.

Section No. 219. All material shall be straightened in the shop before being worked in any way and again straightened after punching and before assembling, if required by the Engineer or Inspector.

Size of Rivets.

Section No. 220. The size of rivets called for on plans shall be understood to mean the actual size of the cold rivet before heating.

Rivet Holes.

Section No. 221. All holes shall be accurately spaced and punched. The diameter of the punch shall be not more than one-sixteenth (1-16) inch greater than the diameter of the rivet. The diameter of the die shall be as small as may be required to punch a clean hole.

Punching.

Section No. 222. Punching shall be accurately done. Drifting to enlarge unfair holes will not be allowed. If the holes must be enlarged to admit the rivet they shall be reamed. Poor matching of holes will be cause for rejection.

Subpunching and Reaming.

Section No. 223. Where subpunching and reaming are required, the punch used shall have a diameter not less than three-sixteenths (3-16) inch smaller than the rivet. Holes shall then be reamed to a diameter not more than one-sixteenth (1-16) inch larger than the nominal diameter of the rivet. All reaming shall be done with twist drills after the material is assembled and firmly bolted together. The use of lubricants in reaming is not allowed.

Drilling.

Section No. 224. All material over seven-eighths (7/8) of an inch thick shall be drilled from the solid. Material over five-eighths (5/8) of an inch and not exceeding seven-eighths (7/8) of an inch in thickness shall be subpunched and reamed.

Sheared Edges.

Section No. 225. Sheared edges of plates, exceeding five-eighths (5/8) of an inch in thickness in main members, shall be planed at least one-eighth (1/8) of an inch.

Burrs Removed.

Section No. 226. All burrs on rivet holes shall be removed.

Assembling.

Section No. 227. Riveted members shall have all parts well pinned up and firmly drawn together with bolts, before riveting is commenced. Contact surfaces shall be painted.

Riveting.

Section No. 228. Rivets when driven shall completely fill the holes, and shall be machine driven wherever possible. They shall have full concentric heads or they shall be countersunk when so required. Rivet heads shall not be flattened to less than one-half (1/2) the diameter of the rivet on the line of the shank, unless countersunk. Loose, burnt or otherwise defective rivets shall be cut out and replaced. In cutting out defective rivets, great care shall be taken not to injure the adjacent material. If necessary, they shall be drilled out.

Distances from centre of rivet to edge of sheared plates shall not be less than 1 1/4 inches for 3/4-inch rivets, and 1 3/8 inches for 7/8-inch rivets; distances from centre of rivets to a rolled edge shall be not less than 1 1/8 inches for 3/4-inch rivets and 1 1/4 inches for 7/8-inch rivets. The minimum pitch for 3/4-inch rivets shall be 2 1/2 inches, and for 7/8-inch rivets 2 3/4 inches. When material is subpunched and reamed the pitch for 3/4-inch rivets may be made 2 1/4 inches, and for 7/8-inch rivets, 2 3/8 inches.

Use of Bolts.

Section No. 229. Generally the use of bolts instead of rivets will not be permitted, but when used in special cases the holes shall be reamed parallel, and the bolts turned to a driving fit, with the threads entirely outside of the holes. Washers not less than one-quarter (1/4) inch thick shall be used under the nuts. Bolts must be thickly coated with red lead paint before insertion, so as to seal the hole against moisture.

Templates.

Section No. 230. All holes for field rivets, excepting those in connections of lateral and sway bracing, shall be subpunched and accurately drilled to an iron template, fitted with bushings or reamed and match marked while the connecting parts are temporarily assembled in the shop. In case of splices of upper chords or other compression members, the abutting ends shall be brought to a forcible bearing.

Finished Members.

Section No. 231. Finished members shall be true and free from twists, bends or open joints. Ends of floor beams and stringers shall be faced square and true.

Rods Upset.

Section No. 232. Rods and bars which are to receive a thread shall be properly upset. Where threads are cut on steel, they shall be properly filleted.

Annealing.

Section No. 233. Steel, except in minor details, which has been partially heated, shall be properly annealed. All steel castings shall be annealed. Welds in steel will not be allowed.

Abutting Surfaces Faced.

Section No. 234. All abutting surfaces shall be accurately planed or faced, so as to insure even bearings, except where otherwise noted on the plans.

Stiffeners—Splice Plates and Fillers.

Section No. 235. Stiffeners of plate girders shall be faced on the end and brought to a true contact bearing with the flange angles. Web splice plates and fillers under stiffeners shall be cut to fit within one-eighth (1/8) of an inch of flange angles.

Web Plate Projections.

Section No. 236. Web plates must not project beyond the flange angles or be more than one-quarter (1/4) inch back of face of angles.

Bed Plates Planed.

Section No. 237. Expansion bed plates shall be planed true and smooth. The finishing cut of the planing tool shall be fine and correspond with the direction of expansion.

Details Boxed.

Section No. 238. Nuts, bolts, rivets and other similar material shall be boxed.

Weight Marked.

Section No. 239. The scale weight shall be plainly marked upon every piece and box.

Inspection.

Section No. 240. Free access and information shall be given by the Contractor for a thorough inspection of material and workmanship.

Contractor Responsible.

Section No. 241. The Inspector shall make detailed reports of his inspection to the Engineer and may notify the Contractor of any defects in the material or workmanship, but all acceptances made by him shall be considered temporary, and his inspection shall in no way relieve the Contractor of full responsibility for the character and accuracy of the work until its completion and final acceptance by the Engineer.

Errors in Plans.

Section No. 242. The Contractor shall be responsible for all errors which can be discovered by checking or examining the plans.

Inspector's Office.

Section No. 243. The Contractor shall furnish for the use of the Inspector a suitably equipped office at the mills and at the shops.

Loading and Shipping.

Section No. 244. All parts shall be carefully loaded and protected from injury during transportation by such means as will be satisfactory to the Inspector. After delivery of materials at the work, the Contractor will be required to store the same on skids at least twelve (12) inches above the ground and to keep the same in good condition. Any piece showing injurious effects of rough handling at any stage until the final acceptance of the work may be rejected.

Payments for Steel.

Section No. 245. The prices to be paid for steel are as herein provided in Schedule Items 19, 20 and 21. Item 20 includes all single beams or shapes, whether milled or otherwise, with connections or other end details. These prices include the cost of material delivered and erected in the work. These prices are to include also the cost of all necessary cleaning and painting (where painting is required) and of all other incidental work. The quantity of metal to be paid for shall be the number of pounds actually placed in accordance with the drawings or orders.

Miscellaneous Castings, Payments For.

Section No. 246. For miscellaneous castings, but not including castings for sewer work or pipes, payment will be made as provided in Schedule Item 25, which price includes the cost of material delivered and erected in the work; also the cost of all necessary cleaning and painting (where painting is required) and of all other incidental work, labor and material.

Special Wire Forms.

Where Placed.

Section No. 247. Special wire forms, of a type and weight to be approved by the Engineer, are to be furnished and placed around the flanges of beams and girders and at other places as may be required which are to be completely encased in concrete, in order to hold the concrete in place.

Wire Forms, Payment For.

Section No. 248. Special wire forms wherever used will be paid for as stipulated in Schedule Item 26, which price is to include the material in place and all work necessary and incidental thereto.

SUBDIVISION 16.

Painting.

Number of Coats.

Section No. 249. All metal work, excepting as otherwise herein provided, shall be painted with three (3) coats of paint, as follows: shop coat, second coat and finishing coat.

The finishing coat will be a gray paint if adjacent to concrete, otherwise a black paint.

Inspection.

Section No. 250. Paint shall be subject to inspection at the place of manufacture and to such tests as may be ordered by the Engineer. The Engineer shall have access, at all times, to all places to inspect the methods of manufacture, and shall have liberty to inspect the daily laboratory records and analyses of all such paints as are subject to his inspection.

The Contractor shall furnish all facilities required for the proper inspection of the paint and its manufacture. All containers will be sealed by the Inspector at the time of inspection.

Proportion by Weight.

Section No. 251. All proportions mentioned in this specification are by weight, except when otherwise noted.

Formulae.

Section No. 252. The paint formulae are as follows:

Section No. 222. The paint formulae are as follows:				
	Shop Coat.	Second Coat.	Finishing Coat.	
		Per Cent.	Gray.	Black.
			Per Cent.	Per Cent.
Paint Formulae.				
Pigment	500 pounds	49	57	26
Vehicle	16½ gallons	51	43	74
Vehicle Formulae.				
Raw linseed oil	2-3 by volume	90	92	92
Boiled linseed oil	1-3 by volume	..	..	..
Drier .....	..	10	8	8
Pigment Formulae.				
Red lead	100 per cent.	30	..	25
Red iron oxide .....	..	42	..	..
Lampblack .....	..	5	*	50
Magnesium silicate .....	..	10	..	10
Silica .....	..	13	10	15
Sublimed white lead .....	..	..	60	..
White zinc .....	..	..	30	..

*Use sufficient lampblack to make standard shade.

Weight.

The standard weight of second coat shall be 12 pounds 10 ounces per gallon. The standard weight of finishing coat (gray) shall be 14 pounds 6 ounces per gallon. The standard weight of finishing coat (black) shall be 9 pounds 5 ounces per gallon.

Preparation of Paint.

Section No. 253. The shop coat of paint shall be mixed as needed, in such quantities as can be used before it thickens in the container. Any paint which settles and thickens before use shall be rejected and a new paint mixed.

The second and finishing coats shall be furnished in a ready mixed form and shall be used without the subsequent addition of any material.

Allowable Variation.

All paints must be properly prepared, using only the specified materials in the proportions stated, with an allowable variation therefrom of not over two (2) per centum in the quantity of any material therein. The paint must vary not more than four (4) ounces per gallon from the standard weight.

Raw Linseed Oil.

Section No. 254. Raw linseed oil shall conform to the specifications of the American Society for Testing Materials for the purity of raw linseed oil from North American seed, adopted August 25, 1913.

Boiled Linseed Oil.

Boiled linseed oil shall be made of pure linseed oil heated with lead and manganese salts and shall comply with the following requirements:

Specific gravity at 60 degrees F.	minimum	934
Iodine value (Hanus)	minimum	175
Unsaponifiable matter	maximum	1.6%
Fatty acids	maximum	3%
Ash	maximum	0.4%
Moisture	maximum	0.5%
Flash point	minimum	527° F.
Bromine addition number	minimum	105
Bromine substitution number (30 min.)	maximum	5
Foots	maximum	1.25%

When boiled linseed oil is flowed over a plate of glass and allowed to drain in a vertical position, it must dry free from tackiness in fifteen (15) hours at 70 degrees F.

Drier.

The drier shall be a pure oil drier consisting of lead and manganese salts dissolved in linseed oil and thinned with turpentine as follows:

Manganese Dioxide.

Fifteen (15) pounds of manganese dioxide plus 10 pounds of varnish makers'

red lead, to 50 gallons of oil, boiled to proper consistency and thinned with 50 gallons of turpentine.

Turpentine.

Turpentine shall conform to the proposed specification of the American Society for Testing Materials.

Red Lead for Shop Coat.

Section No. 255. Red lead for the shop coat shall be of the best quality, free from all adulteration and shall contain not less than 80 per cent. nor more than 90 per cent. "true red lead" (Pb_3O_4), not over 1 per cent. inert hearth materials (such as silica and alumina) and not more than 0.1 per cent. metallic lead; the remainder shall be pure lead monoxide (PbO). It must contain no organic coloring matter and when shaken up with water shall show no alkaline reaction. It shall be of such fineness that 99½ per cent. will pass through a standard 200 mesh sieve.

Red Lead for Second and Finishing Coat.

Red lead for the second and finishing coats shall be of the best quality, free from all adulteration and shall contain not less than 85 per cent. true red lead (Pb_3O_4), not over 1 per cent. inert hearth materials (such as silica and alumina) and not more than 0.1 per cent. metallic lead; the remainder shall be pure lead monoxide (PbO). It must contain no organic coloring matter and when shaken up with water shall show no alkaline reaction. It shall be of such fineness that 99½ per cent. will pass through a standard 200 mesh sieve.

Lamp Black.

Dry lampblack must be absolutely neutral and contain at least 98 per cent., by weight, of pure carbon. The tinting power of lampblack used in the finishing coat must be the same as the standard sample.

Magnesium Silicate.

Magnesium silicate shall be a finely ground material of crystalline structure and shall equal the standard sample.

Silica.

Silica shall be ground from rock crystal and water floated. It shall be 99 per cent. pure silica (SiO_2) and shall be of such fineness that 99 per cent. shall pass through a standard 200 mesh sieve. It shall equal the standard sample.

Red Iron Oxide.

Red iron oxide shall contain at least 85 per cent. ferric oxide, the remainder to consist of silicates. The oxide shall contain no soluble sulphates, no free acids, shall give a neutral reaction and shall contain not over 0.1 per cent. sulphur in any form. It shall be free from grit and shall equal the standard sample in shade, quality and tinting power.

Sublimed White Lead.

Sublimed white lead shall be a true basic sulphate of lead containing not less than 15 per cent. combined lead monoxide (PbO), not over 5 per cent. zinc oxide (ZnO), and shall contain not more than .075 per cent. free sulphur dioxide (SO_2). Sublimed white lead shall equal in whiteness, fineness, body and covering qualities the standard sample.

White Zinc.

White zinc shall be "American process," and shall contain at least 98 per cent., by weight, oxide of zinc (ZnO), not more than 0.2 per cent. of sulphur in any form, nor more than .075 per cent. free sulphur dioxide (SO_2). White Zinc shall equal in whiteness, fineness, body and covering qualities the standard sample.

Fineness, Second and Finishing Coats.

Section No. 256. The paint for the second and finishing coats shall be so finely ground that it will pass each of the following tests:

(a) When a small amount is placed upon a piece of glass and the glass placed in a vertical position, there shall be no separation of the oil from the pigments for at least one (1) hour. This test is to be conducted at 70 degrees F.

(b) Fill a ¾ inch test tube with pure raw linseed oil to a height of 3½ inches and add paint until the height of the oil is five (5) inches from the bottom. Cork, shake well and let stand in a vertical position for two (2) hours. The opaque mass must not have settled down more than ½ inch and there must be no separation of the coarser particles in the bottom of the test tube. This test is to be conducted at 70 degrees F.

(c) At least 98 per cent. of the extracted pigment shall pass through a standard 200 mesh sieve.

(d) When rubbed with a spatula on a piece of glass there shall be no feeling of grittiness.

Standard Sieve.

Section No. 257. By standard 200 mesh sieve is meant the 200 mesh sieve described in the specification of the American Society for Testing Materials for Portland Cement, adopted August 16, 1909.

Color.

Section No. 258. The shade of the gray finishing coat shall match the shade of the standard sample.

Drying.

The paint shall dry under normal conditions, dust free, in 12 hours, and so as to be satisfactorily recoated in not less than 24 nor more than 48 hours.

Water.

The amount of hygroscopic moisture in the finished paint shall not exceed ½ of 1 per cent.

No Rosin.

There shall be no rosin in the paint as indicated by the Liebermann-Storch reaction.

Working Quality.

Section No. 259. The paint shall not liver nor curdle and must cover properly and work freely under the brush. The pigment shall remain in suspension in a satisfactory manner.

Tests.

Section No. 260. Tests will be made against standard samples. Such analyses as required will be made by the Engineer.

Distance.

Due to the cost of inspection, the Contractor will be required to obtain paint which is made within a reasonable distance from New York, and in as large quantities as practicable. By distance from New York is meant the distance by railroad of the paint factory from Manhattan Island. The maximum factory distance is shown in the following tables:

For quantities of less than 250 gallons made at one time,	25 miles.
For quantities of 250 to 500 gallons made at one time,	100 miles.
For quantities of 500 to 1,500 gallons made at one time,	200 miles.
For quantities of over 1,500 gallons made at one time,	700 miles.

Standard Samples.

Samples of standard ingredients and of the finished paints are on file in the office of the Engineer. Paints and their ingredients shall conform to these standard samples. The Contractor shall submit separate samples of all ingredients intended for use in the paints, and upon approval of same, shall then submit two one-pint samples of paint for approval.

In those details where no special instructions are given, the paint and its manufacture shall conform to the best accepted practice.

Original Packages.

All material for shop coat shall be delivered, inspected and sampled in their original packages.

Section No. 261. All iron shall be scraped free from scale and rust, and shall receive one coat of red lead paint as herein specified, before leaving the shop. All surfaces which come in contact or are enclosed shall be painted before being assembled. All turned or faced surfaces shall receive a coat of white lead and tallow before leaving the shop. If the Engineer so directs, the shop coat will be omitted on members or parts of members to be imbedded in concrete.

Damaged Shop Coat to Be Renewed.

Where the shop coat has become damaged before or after erection, through any cause whatever, it shall be renewed with the same kind of paint as originally used, such renewal to be considered only as a part of the original shop coat.

Structural steel and rods to be imbedded in concrete shall be protected from the weather before being put in place, and shall be cleaned and scale and rust removed before being incased in the concrete. Rods shall not be painted.

Field Painting.

After erection the metal shall be thoroughly cleaned of all dirt, rust or scale by stiff wire brushes or sand blast, as directed, and afterward dusted. The Engineer may require that all steel after cleaning shall be wiped with a cloth dipped in a mixture composed of one-half (½) benzine and one-half (½) turpentine. When the

above mixture has practically dried but before becoming absolutely dry the steel shall be thoroughly and evenly painted with the second coat prescribed herein. No paint shall be applied until the cleaning has been passed upon by the Inspector.

Finishing Coat—When Applied.

The finishing coat shall be applied at such time after the application of the second coat and before final acceptance of the work as in the judgment of the Engineer shall be advisable. All steel work adjacent to concrete, such as flanges of roof beams and exposed surfaces of wall columns, shall be painted with the gray finishing coat. All other steel work shall be painted with the black finishing coat. The finishing coat will be applied between stations only; at the station a third coat will not be required under this contract.

Surfaces in Contact.

Section No. 262. Surfaces of exposed members inaccessible after erection shall be cleaned and painted before erection.

Recesses.

All recesses that might contain water, or through which water could enter, must be filled with thick paint or a waterproof cement of ground skins before receiving the final painting.

Surfaces Close Together.

All surfaces so close together as to prevent the insertion of a brush must be painted thoroughly by using a piece of cloth, if necessary.

Workmanship.

Section No. 263. All paint shall be well brushed out so as to show a smooth, even film of uniform thickness. Round brushes shall be used exclusively in applying paint, except that the Engineer may permit the use of flat brushes on large, flat surfaces only.

Rainy or Freezing Weather.

Section No. 264. Painting in rainy or freezing weather or on wet surfaces will not be permitted.

Payments.

Section No. 265. Payment for painting is included in the prices for steel and iron.

SUBDIVISION 17.

Drains and Pumps.

Railroad to be Drained.

Section No. 266. Every part of the Railroad must, so far as possible, be so arranged that any water finding access thereto will be led away automatically to the City sewers.

Floor of Railroad as Conduit.

Section No. 267. Where the Railroad is on an inclined gradient, and is constructed in dry, porous soil, the floor of the Railroad may be depended on to act as a conduit. At the bottom of the inclined gradient connections must be made with a sewer or with sub-drains lying beneath the Railroad and draining into the sewer.

Sub-drain.

Section No. 268. Along such parts of the work where the soil is not porous, or where the floor of the Railroad cannot, in the judgment of the Engineer be used as a conduit, there shall be laid, beneath the rail level and on a continuous descending gradient, drain pipes of vitrified salt-glazed stoneware, of the quality described in these specifications for sewer pipe. These drain pipes shall be of such diameter not exceeding twelve (12) inches, as the Engineer may direct. Each drain shall be laid in the concrete or directly in the soil with tight or open joints, as directed, and in such manner and in such position as, in the opinion of the Engineer, local circumstances require.

Connections and Cross Drains.

Section No. 269. Where drain pipes connect with the City sewers, the junction shall be protected by suitable traps and back-pressure valves or gate valves where necessary, to prevent back rush of water or gas from sewers. Connections with the Railroad shall be as necessity demands and as directed by the Engineer. Cross drains to connect with the main drains will be placed at such places and in such manner as the Engineer shall direct; also vertical drains at the sides of the Railroad. These drains shall be of vitrified pipe or of cast iron as directed.

Broken Stone for Drainage.

Section No. 270. Broken stone shall be placed for the purpose of drainage as indicated on the plans or as required by the Engineer.

Sumps.

Section No. 271. At the low points of the grade of the Railroad where the same passes below the bottom of adjacent sewers there shall be constructed sumps connected with the subdrains or the floor of the Railroad. Such sumps must be watertight, with a capacity of not less than eight hundred (800) gallons each.

Pumps for Tunnel Drainage.

Section No. 272. Adjacent to each sump a suitable enclosure shall be provided in which two pumps shall be installed, each of which shall have ample capacity to remove all the water entering the sump at that point under ordinary conditions. These pumps shall be arranged to operate automatically. Under this contract the Contractor will furnish only the pumps required and set them in place as directed, including the necessary pipe and drainage connections between the sumps and sewers.

Capacity.

Section No. 273. If, in the opinion of the Engineer, the service requires it, each of these pumps shall be able to remove from the sump eight hundred (800) gallons per minute.

Discharge to Sewers, Etc.

Section No. 274. The discharge of such pumps shall be into the City sewers, and all piping, valves, etc., in connection therewith, shall be installed as a part of this contract.

Payments for Drains.

Section No. 275. All drains shall be measured in place and the actual net length as laid for each class of drain will be paid for as herein provided in Schedule Items 17 and 17-A. The prices therein provided for each class of pipe will include providing and laying the pipe and all specials of any nature whatsoever such as bends, tees, wyes, hand-holes, etc., and all material necessary for jointing the same. Where back-pressure valves or gate-valves are required the cost of setting the same will be included in the above, but the Contractor will be paid in addition the actual net cost of such valves plus ten (10) per centum.

Payment for Broken Stone.

Section No. 276. For broken stone for drainage, furnished and placed, Section No. 270, payment will be made as provided in Schedule Item 14.

Payment for Pumps.

Section No. 277. For pumps, Section No. 272, including the pipe connections with sumps and sewers, the Contractor will be paid as provided in Article XII.

Station Drainage—Soil Pipes.

The station drainage also must be arranged for as prescribed in Section No. 269. It will be necessary to lay soil pipes in the floors and walls of the station. These pipes are to be cast iron, "extra heavy." They will be placed in positions as shown on the drawings and will be paid for at the prices stipulated in Schedule Item 34.

SUBDIVISION 18.

Sewers.

In Accordance with Plans and Specifications.

Section No. 278. All sewers and appurtenances shall be built of the materials, of the sizes and dimensions, on the lines and grades, at the depths, with the connections, and in the manner called for by these specifications and shown on the drawings.

Change of Location.

Section No. 279. If, in the opinion of the Engineer, it is impracticable during the progress of the work to construct any sewers, manholes, or other appurtenances, according to the Contract Drawings, owing to the presence of unknown subsurface structures or other contingencies, the Contractor shall construct such sewers, manholes or appurtenances in the location given by and according to the directions of the Engineer.

General Clauses Apply.

Section No. 280. The general clauses in this contract relating to excavation, back-filling, cement, mortar, masonry, waterproofing, piling, timber work of all kinds, care of streets and public places, maintenance of surface, subsurface and overhead structures, protection of persons and property, repaving or restoring of the surface of the street or other public places, responsibility of the Contractor, authority of the Engineer to examine and condemn materials, and the power of the Commission and Engineer in all or any other respects to enforce this contract, apply to the construction and reconstruction of sewers, both along the route occupied by the Railroad and elsewhere, except as herein otherwise expressly provided.

No Claims for Damages.

Section No. 281. Should postponement or delay be occasioned by the precedence of paving or other contracts, which may be either let or executed by the Borough

President, Commissioner of Water Supply, Gas and Electricity, or other heads of departments, either before or after the execution of this contract, on the line of the work, no claims for damages therefor shall be made or allowed; nor shall any claim for damages be made or allowed in consequence of the street or the sewers not being in the condition contemplated by the parties at the time of making this contract.

Size of Trenches.

Section No. 282. The trenches for sewers and basin culverts, in streets off the route of the Railroad, shall have vertical sides and shall be six (6) inches wider on each side than the greatest external width of the sewer or culvert, but shall be not less than three (3) feet in width.

In streets along the route of the Railroad the trenches shall be six inches wider than the greatest external width of the sewer or its foundation, on the side farthest away from the subway, but in no case will a width be allowed greater than that specified for sewers off the line of the Railroad. Trenches shall be excavated to the depth and to the form of the sewer or its foundation. Payments for excavation will be based on the requirements as above.

Limit of Trench Opening.

Section No. 283. Not more than one hundred (100) feet of trench in sewers off the line of the Railroad shall be opened at any one time in advance of the sewer already completed, unless by permission of the Engineer, and for a distance specified.

Excavation Completed in Advance.

Section No. 284. The excavation of trenches shall be fully completed a sufficient distance in advance of the laying of the sewer, and the exposed end of the sewer shall in all cases be fully protected.

Trenches for Manholes and Receiving Basins.

Section No. 285. Where the foundation for a manhole or a receiving basin extends beyond the line of such manhole or receiving basin, the excavation required in earth shall be to the lines of the smallest rectangle enclosing the full dimensions of the exterior of the foundation, and shall have vertical sides to the surface, but it shall, in all cases, be six inches larger than the greatest external dimension of the manhole or receiving basin.

Foundations.

Section No. 286. Where the ground does not afford a sufficiently solid foundation the trench shall be excavated to such increased depth as the Engineer may deem necessary, and this extra depth, and all other irregularities in the bottom of the trench, shall be filled up to the required level and form, with such material, and in such manner, as the Engineer shall direct. If so directed, piles shall be driven and a timber or reinforced concrete foundation shall be constructed, as elsewhere provided in these specifications, to support the sewer.

Testing of Grades.

Section No. 287. When the trench is properly prepared, and before laying any sewer, the Contractor shall notify the Engineer, who will, thereupon, cause the grades for the sewer to be tested, and if correct the sewer shall then be laid in the presence of a duly authorized inspector, and no construction work shall be done in his absence.

Trenches to be Kept Free from Water.

Section No. 288. The trenches shall be kept entirely free from water while the foundation and the masonry are being constructed or the sewer laid. In no case shall water be allowed to flow over the invert or foundation or through the sewer until the mortar is thoroughly set.

Gutters and Passageways to be Kept Open.

Section No. 289. At all times, gutters shall be kept open for surface drainage, and the streets and sidewalks shall be kept clear and free for the passage of carts, wagons, carriages and street or steam railroad cars or pedestrians, and as otherwise provided in these specifications.

Cross-walk, Sidewalk and Roadway to be Kept Clear.

Section No. 290. Where any cross-walk or roadway is cut by the trench, it shall be temporarily replaced by a timber bridge with side railings, according to the direction and approval of the Engineer. The work shall at all times be conducted so as to cause as little inconvenience as practicable to the public.

Disposition of Paving Material.

Section No. 291. All curb, gutter, flagging, paving and macadam stones, necessary to be removed, which in the judgment of the Engineer are suitable to be used again, shall be stored in such places as the Engineer shall direct, or shall be removed as provided in these specifications; in all cases a passageway on the sidewalks and in the roadway shall be preserved free from needless obstructions.

Flow of Sewers to be Maintained.

Section No. 292. The Contractor shall provide for the flow of all sewers, drains and water-courses interrupted during the progress of the work, and shall restore and make good all connections, and shall immediately cart away all offensive matter, in such manner and with such precautions as the Engineer may direct. All temporary house connections shall be made by closed iron pipes, with suitable provision for preventing leakage at joints. Wooden troughs for such connections will not be permitted.

Quality of Brick for Sewers.

Section No. 293. In the construction of brick masonry none but the best quality of common brick burned hard entirely through, regular and uniform in shape and size and of compact texture, shall be used. They shall be culled as they are brought on the ground, and bats and bricks of improper quality are to be removed from the work. A limited number of bats may be used in manholes and closures, and in the outer ring of the sewers where more than two rings of brick are required.

How Laid.

Section No. 294. The bricks shall be properly wet immediately before laying. Every brick is required to be laid in a full joint of mortar, made as described in these specifications, on its bed, end and side, at one operation. In no case is mortar to be slushed or grouted in afterward. The bricks shall be neatly and truly laid, every second course to line, and the joints to be carefully struck on the inside.

Racked Back or Toothing.

Section No. 295. All brick work, as it progresses, shall be racked back in courses, and in no case will it be allowed to be toothing, unless by special permission from the Engineer.

Brick or Stone Inverts.

Section No. 296. All inverts, or bottom curves, shall be formed from profiles accurately made according to the dimensions of the sewer, and correctly set according to the grades furnished. The masonry shall be allowed to set for twenty-four (24) hours before the arch is turned. Vitrified brick or granite paving blocks shall be used for the inner ring of the invert when required by the Engineer, and whenever so used they must be thoroughly jointed, so as to be water-tight along the inner surface of the sewer. The last course of the invert masonry below the springing line shall be laid as headers.

Brick Arches.

Section No. 297. The arches or upper curves shall be formed on strong centres of correct form, according to the sizes and shapes required, and keyed with stretchers in full joints of mortar. The extrados of the arch shall be plastered with mortar one inch thick, mixed in the proportion of one part of cement to two parts of sand. The centres shall not be removed or withdrawn in less than thirty-six (36) hours, or until the work is thoroughly set, and until the filling in of the arch is properly put into place to a depth which is at least one foot above the crown of the arch. The centres in all cases shall be struck and not drawn, so as not to crack or injure the work. Should any crack or settlement appear in the arch after the centres are removed, so much of the work as the Engineer may require shall be taken down immediately and replaced.

Spurs.

Section No. 298. Vitrified or iron sewer pipes or spurs, equal in every respect to those described elsewhere in these specifications, and of a size required by the Engineer, but not less than six inches interior diameter with hubs moulded for house connections, and of sufficient length to project at least four inches beyond the exterior of the sewer, shall be built into the walls of brick sewers and at such an angle as indicated on the plan, or as the Engineer may direct.

How Built In.

Section No. 299. Spurs shall be built in wherever similar house connections exist in the present sewer which is to be reconstructed under this contract, but in no case shall the distance be more than twenty (20) feet between spurs. In the case of the construction of new sewers where no sewers existed previously, except sewers crossing intersecting streets, they shall be built opposite each house, and where there are no houses, they shall be not more than fifteen (15) feet apart on each side of the sewer or at such frequent intervals as local conditions may require. They shall be set so that their inner ends shall be flush with the inner face of the sewer, at such height in the

walls as the Engineer may direct, and each pipe shall be sealed on the outside with an approved earthen-ware cover set in mortar.

Iron Chair Spurs.

Section No. 300. Where the sewers to be built under this contract will be at a depth greater than thirteen (13) feet below the established grade of the street (or below the surface of the street where final grades have not been established), cast-iron chair spurs, of the designs shown on the drawings not less than six inches in diameter and of the weight of extra heavy soil pipe, shall be used unless otherwise ordered by the Engineer. Where house drains are to be connected to these spurs, extra heavy soil pipe and fittings shall be used for the riser between the spur and the house drain. Where spurs are provided for future connections, risers of extra heavy soil pipe shall be placed in each spur and shall be brought to a point thirteen feet below the established grade of the street, the end of which shall be sealed with an approved cover laid in cement mortar. The joints of this pipe shall be packed, leaded and caulked in accordance with these specifications for laying water-mains.

Under Another Structure.

Section No. 301. Wherever the sewer passes under another structure, extra heavy soil pipe shall be laid from the spur to the outside of such structure, brought up to a point thirteen (13) feet below the established grade of the street, caulked and sealed as provided above. All pipes passing under such structures shall be laid in concrete. Concrete may be substituted for brick.

Section No. 302. If, during the construction of the sewers, it is deemed advisable to interchange concrete and brick, the Contractor may, with the approval of the Engineer, build such sewers of either kind and quality herein specified.

Steel Bars Used if Ordered.

Section No. 303. Concrete sewers shall be reinforced with steel bars, if so indicated on the plans or directed by the Engineer.

Profiles and Inverted Centres for Inverts.

Section No. 304. Proper profiles for the concrete inverts shall be set up at the required distances, and the concrete for the bottom and invert of the sewer shall be deposited in place and rammed and worked down to the required shape. The concrete for the bottom and invert, if so directed, shall be placed in alternate lengths extending between every other pair of profiles, so that opportunity may be given to properly work the concrete in place.

Invert to be Protected.

Section No. 305. The concrete of the invert shall be protected during the progress of the work with planking, or by such other suitable methods as the Engineer shall direct and for so long a time as he may require.

Forms, Moulds, Etc.

Section No. 306. Suitable forms or moulds, of the size and design to be approved by the Engineer, shall be provided by the Contractor to support the concrete of the side walls and roof while the same is being rammed into the permanent work.

Defective Work.

Section No. 307. If any voids, or irregular or defective work is discovered upon removing the forms or moulds, such voids or work shall be cut out and filled with a rich concrete or mortar mixed in such proportions and of such materials as provided elsewhere in these specifications.

Joints.

Section No. 308. No joints between different sections of the walls of a sewer shall, in any case, be a straight line, but shall always be stepped or toothing, so as to give a broken joint in the manner to be approved by the Engineer.

Spur Pipes, Branches, Etc.

Section No. 309. In so far as they will be applicable to sewers constructed of concrete, the provisions and requirements for spurs, branches, etc., in brick sewers shall be understood to govern in such construction.

Vitrified Pipe Sewers—Quality of Pipe.

Section No. 310. Tile pipe sewers shall be built of vitrified, salt glazed stoneware pipe, with extra deep and wide sockets and corrugated spigot ends. The pipe shall be of the best quality, thoroughly and perfectly burnt, without warps, cracks or imperfections, well and smoothly glazed over the entire inner and outer surfaces and perfect in shape. The pipe shall be subject to all tests ordered in conformity with any requirements of the Bureau of Sewers of the Borough in which the work is located, at any time previous to its being used.

Dimensions.

Section No. 311. The size of the pipes shall be designated by their interior diameters. Each pipe shall be a true cylinder, and of even thickness throughout, and shall conform to the following scheduled dimensions:

Double Strength Pipe; Extra Deep and Wide Sockets.

Dimensions.

Diameter.	Thickness of Shell.	Depth of Socket.	Length of Plain Straight Pipe.	Weight of Pipe Per Foot.	Annular Space.
Inches.	Inches.	Inches.	Feet.	Pounds.	Inches.
6	$\frac{5}{8}$	$2\frac{1}{2}$	2	16	$\frac{5}{8}$
8	$\frac{3}{4}$	$2\frac{3}{4}$	3	25	$\frac{5}{8}$
10	$\frac{7}{8}$	$2\frac{3}{4}$	3	37	$\frac{5}{8}$
12	1	3	3	45	$\frac{5}{8}$
15	$1\frac{1}{4}$	3	3	75	$\frac{5}{8}$
18	$1\frac{1}{2}$	$3\frac{1}{4}$	3	118	$\frac{5}{8}$
20	$1\frac{3}{4}$	$3\frac{1}{2}$	3	148	$\frac{5}{8}$
22	$1\frac{5}{8}$	$3\frac{3}{4}$	3	157	$\frac{5}{8}$
24	2	4	3	190	$\frac{5}{8}$

"Special."

Section No. 312. All "special" vitrified pipe shall conform to the dimensions given for plain straight pipe.

Spur Pipes.

Section No. 313. Pipes having spurs not less than six inches in diameter with hubs moulded thereon for house connections shall be furnished and laid at such points as indicated on the plan or as directed by the Engineer, and when not immediately used, they shall be sealed on the outside with approved vitrified earthenware covers set in mortar.

Risers.

Section No. 314. The provisions for risers on brick sewers shall also apply to pipe sewers.

Pipe Sewers, How Laid.

Section No. 315. All pipes shall be laid in concrete cradles of the required form and dimensions. The minimum thickness of concrete under the outside of the shell, or barrel, shall be six (6) inches. The first layer of concrete shall be for the full width of the cradle, and deposited continuously to the height of the outside bottom of the shell of the pipe; before the concrete has set the pipe shall be firmly bedded therein true to line and grade and the remainder of the concrete immediately deposited and carefully tamped in such a manner as to avoid disturbing the sewer. The ends of the pipes shall abut against each other and in such manner that there shall be no shoulder or unevenness of any kind along the bottom half of the sewer on the inside. Unless otherwise ordered, not less than fifteen (15) feet of pipe shall be laid at any one time, in any one length of trench, and it shall be exposed for at least twenty-four (24) hours for inspection.

Joining Hub and Spigot Pipes.

Section No. 316. Before inserting the spigot end of the pipe into the hub or socket, the lower half of each socket shall be plastered on the inside with a layer of cement mortar mixed in the proportion of one (1) part of cement to one and one-half (1½) parts of sand and of a sufficient thickness to bring the inner bottom surfaces of the abutting pipes flush and even with the established flow line. After pipes are fitted, the space between the inside of the upper half of each socket and the outside of the entering pipe shall be filled with cement mortar, mixed as above specified, and the outside of the joint shall be thoroughly sealed with the same kind of mortar and the joints carefully wiped to a smooth bevel outside, and all mortar that may be left on the inside of the pipe must be thoroughly removed and the inside of the pipe left clean and smooth throughout.

Pipes to be Cut.

The ends of pipes, which enter masonry, shall be neatly cut to fit the face of the masonry. When directed, such cutting shall be done before the pipes are built in.

Iron Pipe Sewers.

Section No. 317. Sewers of iron pipe, of the quality and laid in the manner

described elsewhere in these specifications for the laying of water mains, shall be laid wherever indicated on the plans or at such places as the Engineer shall direct.

Special Castings.

Section No. 318. Wherever such pipes are laid through vaults, they shall, when required by the Engineer, be provided with special castings for manholes, which shall be fitted with a cover bolted on so as to make an air-tight joint, according to the plans to be furnished by the Engineer.

Ventilators.

Section No. 319. Whenever, in the opinion of the Engineer, it becomes necessary to provide ventilation for sewers under other structures, iron pipe shall be laid from the sewer to the surface of the street and fitted with proper gratings, according to the plans to be furnished by the Engineer.

Connections.

Section No. 320. All existing sewers, culverts, drains and house connections intercepted by the proposed sewers, culverts or receiving basins shall be connected with the new work by proper curves and grades and in such manner as the Engineer shall direct; and all drains, basins or culverts rendered unnecessary or becoming disused by the work herein contemplated shall be filled in and made solid with good, wholesome earth in the manner directed. Provision shall also be made for the connection of future sewers or basins by constructing brick spurs or inserting vitrified pipe at the points indicated on the Contract Drawings and at other points as the Engineer may direct. These connections shall be closed with bulkheads not less than eight inches in thickness and of the quality specified for brick masonry.

Fresh Work to Be Protected.

Section No. 321. All fresh work shall be carefully protected from injury in every way. No wheeling or walking will be allowed on it and any portion injured must be relaid by the Contractor; no walking or working over the pipes after they are laid, except as may be necessary in tamping the earth and refilling, will be allowed until there is at least two and one-half (2½) feet of earth over them.

Pipes to Be Kept Clean.

Section No. 322. The interior of pipe sewers shall be carefully freed from all dirt, cement and superfluous material of every description as the work progresses, for which purpose a disc, mould or plate, attached to a rod sufficiently long to pass two joints from the end of the pipe last laid, shall be continuously worked through.

Exposed Ends of Pipes to Be Protected.

Section No. 323. The exposed ends of pipe sewers shall, in all cases, be protected with a board or other stopper carefully fitted to the pipe, to prevent earth or other substances from washing in, and in no case shall brick or stone be used for that purpose.

Manholes.

Section No. 324. The masonry of manholes shall be carried up so that the top of the iron head when set shall be at the level of the established grade of the street at that point or to such height as the Engineer may direct, and from templates correctly made and set at top and bottom, between which not less than eight lines shall be drawn. Where manholes are not built to the established grade of the street, they shall be covered, when necessary, by selected bluestone slabs eight inches in thickness, to support the manhole heads. All joints shall be neatly struck and pointed on the inside. Each manhole shall be plastered thoroughly on the outside with cement mortar one inch in thickness, mixed in the proportion of one part of cement to two parts of sand.

Foundations.

Section No. 325. The foundations for manholes shall be of concrete or masonry of the kind indicated on the plans and shall be not less than twelve (12) inches below the invert elevation of the sewer, except as otherwise indicated on the plan. When foundation additional to that indicated on the plan is required, it shall be built as directed by the Engineer.

Pipe Connections.

Section No. 326. Sewer pipes shall be built in and trimmed, when necessary, so as to be flush with the inner face of the manhole, and an arch, laid in cement mortar, shall be turned over the pipe.

Vitrified Bricks or Granite Blocks.

Section No. 327. The invert shall be built of vitrified brick, granite paving blocks or concrete masonry, as indicated on the Contract Drawings.

Use of Bats.

Section No. 328. A reasonable number of bats not smaller than half bricks may be used in the construction of manholes or receiving basins, provided all interstices are thoroughly filled with mortar.

Steps.

Section No. 329. Standard steps of good quality of galvanized wrought iron, of the size, length and shape required for steps, shall be built into the interior sides of all manholes at a distance apart of not more than fifteen (15) inches vertically and they shall be so arranged that the lowest step shall be not more than two feet above the bench at the bottom of the manholes nor more than two feet above the invert of the sewer where there is no bench. Each manhole head shall be cast with a wrought-iron step on the inside, when directed by the Engineer.

Bluestone.

Section No. 330. Hammer-dressed bluestone shall be furnished and laid of the form and thickness required as indicated on the plans or as otherwise directed.

Manhole Head and Cover.

Section No. 331. A cast-iron manhole head and cover of the quality specified for cast-iron, and except in special cases, of the pattern adopted by the President of the Borough in which the work is located, and in dimensions, weight and all other respects satisfactory to the Engineer, shall be fitted on a bed of mortar to each of the above described manholes. Manhole heads and covers which do not conform to these specifications shall be removed at once from the work.

Perforations.

Section No. 332. Covers to be used on manholes in the street shall be perforated. Those used on sidewalk manholes shall be tight-fitting, without perforations.

Weights.

Section No. 333. Each manhole head and cover shall have its weight distinctly marked upon it with oil paint. The following shall be allowed as the minimum and maximum weights:

- Street manhole head, 475 to 500 pounds;
- Street manhole cover, 135 to 150 pounds;
- Sidewalk manhole head, 300 to 310 pounds;
- Sidewalk manhole cover, 100 to 110 pounds.

Noiseless Heads and Covers.

Section No. 334. When the pavement of the street is asphalt or wooden block, the manhole shall be fitted with a noiseless head and cover, to be approved by the Engineer, where new heads and covers are necessary.

Sealed Heads in Vaults.

Section No. 335. All manholes in vaults or other structures shall be provided with sealed manhole heads and covers according to the design indicated on the plans.

Emergency Manholes.

Section No. 336. Where a sewer crosses under the subway, emergency manholes shall be provided when directed by the Engineer and according to plans to be furnished by him.

Manholes to Be Completed.

Section No. 337. Manholes shall in all cases be fully and completely built and fitted with their covers as the work progresses, and the sewers shall not be laid beyond or in advance of any uncompleted manhole.

Receiving Basins.

Section No. 338. Receiving basins shall be built as located on the plans or as the Engineer shall direct and in accordance with the plans to be furnished. Each portion of the basin shall be built of the size and materials designated on said drawings and shall be thoroughly plastered, both inside and outside, with cement mortar in the proportion of one part of cement to two parts of sand.

Foundations.

Section No. 339. The foundations for receiving basins shall be of concrete or masonry of the kind indicated on the plans and shall extend not less than twelve (12) inches below the finished floor of the basin, except as otherwise indicated on the plans. When additional foundation is required, it shall be built as directed by the Engineer.

Stone Flooring.

Section No. 340. The flooring shall be of hammer-dressed North River bluestone flagging, not less than three inches thick, in not more than two pieces, and shall be well set in a full bed of mortar and rammed into place. The floor may be finished

with cement mortar mixed in the proportion of one part of cement to one part of sand if so directed by the Engineer. The mortar shall be spread, while fresh, upon the concrete base and before the latter shall have reached its first set; it shall be in such quantity that after thorough manipulation it shall be one inch in thickness.

Head Stone and Gutter Stone.

Section No. 341. Where head stone and gutter stone are required they shall be of sound, durable granite of the dimensions indicated on the plans, hammer dressed to an even surface and cut to the satisfaction of the Engineer. Cast-iron basin heads and gutter pieces of the design indicated on the plans shall be set instead of the above when required.

Cast-Iron Cover.

Section No. 342. A cast-iron cover of approved pattern weighing not less than eighty (80) nor more than ninety-five (95) pounds shall be fitted to the opening in the head stone.

Grate Bar.

Section No. 343. A grate bar made according to the plan shall be fastened solidly into the said head stone in the manner indicated.

Cast-Iron Trap.

Section No. 344. A cast-iron trap of the form and dimensions indicated on the plan free from imperfections, and properly coated with coal pitch varnish, shall be furnished and built into place as directed by the Engineer.

Joints.

Section No. 345. The joints shall be tightly fitted with an oakum gasket or with cement mortar if so directed.

Iron Steps.

Section No. 346. Galvanized iron steps of the same design required for manholes shall be built into the walls.

Culvert Pipes.

Section No. 347. The culvert pipe for connections with sewers shall be 12-inch vitrified pipe unless otherwise indicated on the plan, and of the kind and quality previously described, and shall be laid, in all cases, in a concrete cradle of the form and dimensions required for pipe sewers in accordance with the directions of the Engineer. In case it becomes necessary to connect any basin already built, with the work to be constructed, so much of such culverts as in the opinion of the Engineer may be necessary shall be taken up and rebuilt or relaid with vitrified pipe, or brick as the case may be, in the manner described above and reconnected in a straight line from the basin to the sewer.

Flush Tanks.

Section No. 348. Automatic flush tanks of a type approved by the Engineer shall be built where indicated on the plans or where directed by the Engineer.

Waterproofing.

Section No. 349. Whenever, in the opinion of the Engineer, it is necessary to waterproof a sewer, chamber or receiving basin, or their appurtenances, it shall be done as indicated on the plans or as directed by the Engineer and in the manner described elsewhere in these specifications.

Mortar.

Section No. 350. All masonry shall be laid in Portland cement mortar of the quality described in these specifications. It shall be mixed in the proportion of one (1) part of cement to two (2) parts of sand, excepting as otherwise specially provided.

Concrete.

Section No. 351. All concrete for sewers shall be made in the proportion of one (1) part of cement to two (2) parts of sand and four (4) parts of stone of the quality described in Subdivision 11.

Paving.

Section No. 352. On the completion of each section of one hundred (100) feet of sewer, the sidewalks and roadway shall be restored as provided under Subdivision 22.

Permits for Connections.

Section No. 353. The Commissioner of Public Works shall have the right to connect any sewer or sewers with the sewers herein described or to grant permits to any person or persons to make connections therewith at any time before it is finally completed, and the Contractor shall not interfere with or place obstructions in the way of such person or persons as may be employed in building such new sewer or sewers or in making such connections. This is not to be construed, however, as permitting the introduction of storm water or sewage into any sewer being constructed under this contract before its final completion.

Thoroughly Cleaned.

Section No. 354. During the progress of the work, and until the entire completion and final acceptance thereof, the sewers, drains, basins, culverts and connections shall be kept thoroughly cleaned throughout, and left clean, and the drainage of any old sewer that may be taken up or intercepted shall be provided for and taken care of by the Contractor, all at his own expense.

Payment for Sewers.

Section No. 355. Payment for sewers will be made for sewer complete at the prices stipulated in Schedule Items 38 to 41 inclusive, 45 and 47, except as is hereinafter specifically provided in Section No. 361 with respect to cast-iron pipe sewers and other sewer construction for which no prices are provided in the Schedule of Unit Prices on a lineal foot basis. The price for each class of sewer as stipulated in Schedule Items 38 to 41 inclusive, 45 or 47 is per lineal foot of sewer complete and includes compensation for all the work, labor and material applicable thereto as given in Sections Nos. 278 to 354, inclusive, and as otherwise provided in this contract and as indicated on the drawings, except as is specifically provided in Sections Nos. 356, 357, 358, 359 and 361.

Payment for Excavation and Surface Restored.

Section No. 356. In addition to the price for completed sewer, as above provided, excavation will be paid for at the price stipulated in Schedule Items 2-A (which price shall include compensation for all the matters referred to in Section No. 92), on the basis of size of trench stipulated in Sections Nos. 282 and 285. Payment for street surface restored shall be made at the prices stipulated in Schedule Item 30.

Payment for Steel Beams and Reinforcing Rods.

Section No. 357. Where steel beams or reinforcing rods are required and ordered, such beams and rods will be paid for in addition to the price bid for the sewer and at the prices herein stipulated for furnishing and placing such material and all work incidental thereto, in Schedule Item 20 or 21.

Payment for Flush Tanks.

Section No. 358. Where automatic flush tanks are built as provided in Section No. 348 of the specifications they will be paid for as herein provided in Article XII of the contract.

Payment for Waterproofing.

Section No. 359. Where waterproofing is required and placed in accordance with Section No. 349 it will be paid for at the prices stipulated in Schedule Item 15 or 16.

Cast-iron Pipe Sewers.

Section No. 361. All cast-iron pipe sewers wherever built and all other sewer construction for which no prices are provided in the Schedule of Unit Prices on a lineal foot basis will be paid for at the prices stipulated in the Schedule of Unit Prices for the various classes of work and materials entering into the construction of such cast-iron pipe sewers or of such other sewer construction.

Payment for Pipe.

Payment for cast-iron sewer pipe used in the construction of cast-iron pipe sewers will be made at the prices stipulated in Schedule Items 42 and 43.

Payment for Cast-iron Furnishings.

For all manholes or receiving basins constructed in connection with cast-iron pipe sewers or other sewers for which no prices are provided in the Schedule of Unit Prices on a lineal foot basis, the cast-iron, wrought-iron or steel furnishings (except pipes) will be paid for at the price stipulated in Schedule Item 25-C, which Schedule Item, however, is applicable only to the class of work covered by this section.

Payment for Soil Pipe.

All extra heavy soil pipe for drains and connections made necessary by the construction of cast-iron pipe sewers or other sewer construction for which no prices are provided in the Schedule of Unit Prices on a lineal foot basis will be paid for at the price stipulated in Schedule Item 17-A.

House and Drainage Connections.

Section No. 362. Compensation for maintaining, supporting or constructing all house or other drainage connections made necessary by the construction of cast-iron pipe sewers or other sewer construction for which no prices are provided in the

Schedule of Unit Prices on a lineal foot basis is included in the prices stipulated in the Schedule for the several classes of work and materials entering into the construction of such cast-iron pipe sewers and of such other sewer construction.

Sewers Under Station Platforms.

Wherever a sewer passes under a station or station platform, all the requirements with respect to extra heavy soil pipe, special manhole castings, ventilating pipes, and sealed manhole covers, as included in Sections Nos. 301, 318, 319 and 335 respectively, apply in every respect.

SUBDIVISION 19. Requirements for Pipes. General.

Section No. 363. Whenever it is necessary to relay any water main, all new material required for the same shall be of the quality and laid in the manner specified below, and subject to the various clauses of these specifications applicable thereto.

Pipes to be Cylinders.

Section No. 364. The pipes shall be circular cylinders, with the inner and outer surfaces concentric, and of the full interior diameter required.

Hubs and Spigots.

Section No. 365. The hub or socket and the spigot end shall be shaped in exact conformity with the standards of the Department of Water Supply, to be furnished by the Commission, and will be tested by circular gauges.

Workmanship.

Section No. 366. The seat or shoulder of the socket and the end of the spigot shall be straight and even, and at right angles to the axis of the pipe, so as to make a smooth, tight joint. Special care will be required in making the sockets and spigots to conform to the drawings and all pipes will be rigorously inspected at these points. No pipe will be received whose eccentricity at either the spigot or socket end exceeds one-eighth ($\frac{1}{8}$) of an inch, or whose dimensions differ by more than one-eighth ($\frac{1}{8}$) of an inch from those required.

Interior Diameter.

Section No. 367. The pipes shall be designated by dimensions of the interior diameter.

Lugs, Etc.

Section No. 368. Bands, lugs, buttons or ribs shall, if required, be cast on the pipes, of such forms and dimensions as the Engineer may direct.

Length of Pipe.

Section No. 369. The straight pipe shall be twelve (12) feet long, exclusive of hub; other pipe as may be directed.

Straightness.

Section No. 370. All straight pipes shall be straight in the direction of the axis of the cylinder.

Thickness and Weights.

Section No. 371. The thickness of the pipes, branches and special castings shall correspond with the standards of the Department of Water Supply. The weight for straight pipe per twelve (12) foot length shall be as follows:

60-inch pipes, special.	
48-inch pipes, 9,886 pounds each.	
42-inch pipes, special.	
36-inch pipes, 5,920 pounds each.	
30-inch pipes, 4,460 pounds each.	
24-inch pipes, 2,965 pounds each.	
20-inch pipes, 1,979 pounds each.	
16-inch pipes, 1,458 pounds each.	
12-inch pipes, 1,018 pounds each.	
8-inch pipes, 542 pounds each.	
6-inch pipes, 416 pounds each.	

High Pressure Fire System.

Section No. 372. The weights for high-pressure fire system standard spigot and grooves, straight pipes, with lugs, shall be as follows, in pounds per length:

	Of 3 ft.	Of 4 ft.	Of 6 ft.	Of 12 ft.
8-inch.....	355	420	550	935
12-inch.....	615	745	1,000	1,765
16-inch.....	1,005	1,215	1,635	2,905
20-inch.....	1,475	1,795	2,425	4,320
24-inch.....	2,105	2,585	3,535	6,385

All requirement as to weights, laying, tests, etc., shall be in strict accordance with the standard requirements of the Department of Water Supply, Gas and Electricity.

Will be Calipered.

Section No. 373. The thickness of the metal of the pipes and special castings will be tested by calipers after the castings have been freed from sand and cleaned.

Variation in Thickness.

Section No. 374. No pipe will be received when the thickness of metal is less by more than one-twelfth ($\frac{1}{12}$) of an inch than the thickness required by the standards.

Variation in Weight.

Section No. 375. Any straight pipe the weight of which is deficient by more than the following stated percentages of the standard weight, will be rejected:

- For pipe 16 inches or less in diameter, 5 per cent.
- For pipe over 16 inches in diameter, 4 per cent.

Excess weight in any one pipe not to exceed the above stated percentages will be paid for. The total weight, however, to be paid for shall not exceed for each size of pipe received, the sum of the standard weights of the same number of pieces of the given size, by more than two (2) per centum.

(The term "Standard Weight" as above used in connection with straight pipe shall be taken to mean the standard weight corresponding to the actual laying length of the pipe as furnished.)

Variation of Weight of Special Castings.

Any special casting the weight of which is deficient by more than the following stated percentages of the standard weight will be rejected:

- For special castings 12 inches or less in diameter..... 10 per cent.
- For special castings over 12 inches in diameter..... 8 per cent.

Excess weight in any one special casting, not to exceed the following stated percentages, will be paid for:

- For special castings 12 inches or less in diameter..... 8 per cent.
- For special castings over 12 inches in diameter..... 6 per cent.

The total weight, however, to be paid for shall not exceed for the special castings received, the sum of the standard weights of the same number of special castings, by more than five (5) per centum.

Straight Pipe Cast Vertically.

Section No. 376. All straight pipes shall be cast vertically, and all pipes twelve (12) inches or more in diameter shall be cast with the hub end down.

Clean and Smooth.

Section No. 377. All the castings shall be made in such moulding-sand or loam as will leave the surface clean and smooth.

Marking.

Section No. 378. All the castings shall have cast on the outer side in raised letters of not less than two (2) inches in length and one-eighth ($\frac{1}{8}$) of an inch in relief, in such manner as the Engineer may designate, the year in which they are cast, the running number of the castings of the same size and form, the letters D. W. S., and the initials or name of the Contractor, and of the foundry where cast, and in case any pipe shall be condemned, the letters D. W. S. shall be erased by the Contractor.

Quality of Cast-Iron.

Section No. 379. The metal of which the castings are to be cast (which shall be remelted in a cupola or air-furnace) shall be pig-iron, made without any admixture of cinder-iron, or other inferior metal, and shall be of such character as to make a pipe strong, tough and of an even grain, entirely free from uncombined carbon when seen under the microscope, and such as will bear, satisfactorily, drilling and cutting, and shall have a tensile strength of at least sixteen thousand (16,000) pounds to the square inch.

Imperfections.

Section No. 380. The castings shall be free from scoria, sand holes, air bubbles, and other defects and imperfections.

Castings to Be Clean.

Section No. 381. The castings shall be perfectly cleaned and no lumps shall be

left on the inner surface of the barrels or sockets, or on the outer surface of the spigot end. The castings shall be subject to hammer inspection. Iron-wire brushes shall be used, as well as softer brushes, to remove the loose dust. No acid or other liquid shall be used in cleaning the castings.

Pipes to Be Coated.

Section No. 382. Every pipe, branch and special casting shall be carefully coated inside and out with coal pitch and oil. Every casting shall likewise be entirely free from rust when the coating is applied. If the casting cannot be dipped immediately after being cleaned, the surface shall be oiled with linseed oil, to preserve it until it is ready to be dipped. No casting shall be dipped after rust has set in.

Pitch.

Section No. 383. The coal-tar pitch shall be made from coal-tar distilled until the naphtha is entirely removed and the material mixed with linseed oil so as to make a smooth, tough and tenacious coating. Pitch which becomes hard and brittle when cold will not answer for this use.

Temperature of Pitch.

Section No. 384. Pitch of the proper quality having been obtained, it shall be carefully heated in a suitable vessel to a temperature of three hundred (300°) degrees Fahrenheit, and shall be maintained at not less than this temperature during the time of dipping. The material will thicken and deteriorate after a number of pipes have been dipped; fresh pitch shall, therefore, be frequently added, and occasionally the vessel shall be entirely emptied of its old contents and refilled with fresh pitch.

Temperature of Casting.

Section No. 385. Every casting shall attain a temperature of three hundred (300°) degrees Fahrenheit, before being removed from the vessel of hot pitch. It shall then be slowly removed and laid on skids to drip.

To Be Inspected Before Dipping.

Section No. 386. No casting shall be dipped until the authorized inspector has examined it as to cleaning and rust, and subjected it thoroughly to the hammer test. It may then be dipped, after which it will be passed to the hydraulic press to meet the required water test. The proper coating shall be tough and tenacious when cold on the pipes, and not brittle or with any tendency to scale off.

Tests.

Section No. 387. The castings must be capable of sustaining a pressure, in the hydraulic press, of three hundred (300) pounds to a square inch, and any casting which shows any defect by leaking, sweating or otherwise, will be rejected. This test shall be made at the foundry, and at the expense of the Contractor.

Weighed and Marked.

Section No. 388. The castings shall be weighed, and the weight distinctly marked on the castings in white paint. The Contractor shall provide at the foundry where the pipes and castings are to be manufactured proper sealed scales and weights for weighing the castings, which shall be done at the expense of the Contractor, under the supervision of the Inspector.

Blocking and Wedges.

Section No. 389. Each pipe over eight (8) inches inside diameter, unless otherwise ordered, shall be placed on two (2) blocks and four (4) wedges of hemlock timber, the wedges to rest on the blocks and the pipe on the wedges.

Timber for Blocking.

Section No. 390. The blocks and wedges shall be of sound hemlock timber; 48 and 36-inch pipe shall be laid on blocks 4 feet long, 12 inches wide and 6 inches thick, with wedges 18 inches long, 6 inches wide, 4 inches thick on one end and $\frac{1}{2}$ inch thick on the other; 30 and 24-inch pipe on blocks 3 feet long, 10 inches wide and 5 inches thick, with wedges 15 inches long, 5 inches wide and $\frac{3}{4}$ inches thick on one end and $\frac{1}{2}$ inch thick on the other end; 12 and 20-inch pipe on blocks 2 feet long, 8 inches wide and 4 inches thick with wedges 12 inches long, 4 inches wide, 3 inches thick on one end and $\frac{1}{2}$ inch thick on the other.

Joints.

Section No. 391. The spigot end of the pipe shall be inserted into the hub to within from one-fourth ($\frac{1}{4}$) to one-eighth ($\frac{1}{8}$) of an inch of the full depth of the hub, and the space around the pipe shall be equalized so as to give as nearly as possible an equal space for the packing. The space between the pipe and hub shall be packed with clean, sound jute packing yarn, free from tar, far enough to leave the proper space for lead. The remaining space shall then be filled by running it full of lead to a depth of four (4) inches, with a bead outside of the face of the hub large enough to allow for caulking, so that when the joint is properly caulked the lead will be flush with the hub of the pipe. After the joint shall have been run with lead, it shall be caulked by means of proper tools, so as to make a water-tight joint.

Lead.

Section No. 392. The lead to be used shall be of the best quality of pure, soft lead, and in every respect suitable for the purpose.

Notice of Interruption to be Given.

Section No. 393. In case it becomes necessary to cut any connection with any other main, house or hydrant, or in any way to interfere with the continuous and normal flow of water, due notice shall be sent at least forty-eight (48) hours in advance to the Engineer and to the Commissioner of Water Supply, and the Contractor shall, if so ordered, make a temporary by-pass or other arrangement to preserve the flow of water while breaking connections.

Connections Interfered With.

Section No. 394. All connections cut interfered with or injured shall be restored under the directions of the Engineer, without delay and in accordance with the rules and regulations of the Department of Water Supply governing such matters, to a suitable condition as good as existed before commencing work.

Stop Cocks, Etc.

Section No. 395. Stop cocks, boxes, branches, curved pipe, and other specials according to the standards of the Department of Water Supply shall be set where necessary.

Specifications of Owners Apply.

Section No. 396. For gas pipes, steam pipes, air pipes, mail tubes and any other pipes not herein enumerated, the standard weights and all other requirements shall be in accordance with the standard specifications and requirements of the several owners of such structures.

SUBDIVISION 20.

Ducts.

Form of.

Section No. 397. The ducts to contain cables for transmitting electricity shall generally be of the one-way form with circular holes for Railroad ducts and of the one-way or two-way form with circular holes for Tunnel ducts unless otherwise ordered by the Engineer.

Definition.

Tunnel ducts are those incorporated in the Railroad structure. All other ducts for use in connection with the Railroad are termed Railroad ducts.

Dimensions.

Section No. 398. The dimensions and form of each piece shall conform to the following requirements:

The length of one-way ducts shall be eighteen (18) inches and of two-way ducts not less than twenty-four (24) inches nor more than thirty-six (36) inches, except that a sufficient number of short pieces of various lengths shall be furnished to lay on curves and to piece out at manholes so as to bring the ends of all ducts in a vertical plane.

The minimum inside diameter of holes shall be such as to pass a mandrel three and one-half ($3\frac{1}{2}$) inches in diameter.

The outside dimensions of one-way ducts shall be not less than five (5) inches nor more than five and one-quarter ($5\frac{1}{4}$) inches measured at right angles to the flat of each side. The outside dimensions of two-way ducts shall be not less than nine and three-quarters ($9\frac{3}{4}$) inches nor more than ten (10) inches on the flat side, and the same as one-way ducts on the other side.

The thickness of the outside and partition walls measured at the thinnest part shall be not less than five-eighths ($\frac{5}{8}$) of an inch for one-way ducts, nor less than three-quarters ($\frac{3}{4}$) of an inch for two-way ducts.

The ducts shall be made square on outer lines. One-way ducts shall have the outside corners cut off to leave a flat surface of not less than two and three-fourths ($2\frac{3}{4}$) inches, the ends to be cut smooth and at right angles to the axis of the duct and beveled on the inside for one-half ($\frac{1}{2}$) of an inch. Two-way ducts shall have the outside corners rounded to a radius of two and one-half ($2\frac{1}{2}$) inches, the ends to be cut smooth and at right angles to the axis of the bore with each hole reamed to a depth of one-half ($\frac{1}{2}$) an inch with a taper of three-eighths ($\frac{3}{8}$) to one.

Two-way ducts shall have dowel holes of not less than three-eighths ($\frac{3}{8}$) nor

more than seven-sixteenths (7-16) of an inch in diameter extending along the entire horizontal axis of the duct. These dowel holes shall be located at the intersections of the partition and side walls.

Combing.

Section No. 399. One-way ducts shall be combed on each face adjacent to the corner of the duct with at least five (5) longitudinal combings, each combing to have a width of one-fourth ($\frac{1}{4}$) of an inch and a depth of not less than one-sixteenth (1-16) of an inch. Two-way ducts shall be combed on the flat side with seven (7) longitudinal combings whose total width shall not exceed three and one-half ($3\frac{1}{2}$) inches, and the same as one-way ducts on the other side, each combing to have a width of one quarter ($\frac{1}{4}$) of an inch and a depth of not more than one-sixteenth (1-16) of an inch.

Quality of Workmanship.

Section No. 400. All ducts shall be manufactured of the best clay, mixed thoroughly and in proper proportions, burnt hard through their entire thickness until well vitrified but in no case so burnt as to be fused or scoriated. The clay used shall be plastic and smooth, perfectly free from limestone, lime pebbles, pyrites and chalk, and sufficiently fireproof to acquire proper density before vitrification takes place. The clay shall be well pulverized and made perfectly homogeneous, and the surface of each piece both inside and outside shall be thoroughly glazed in the most approved manner with good salt glaze. The ducts shall be sound and without soft spots, stones, gravel, cracks, breaks or blisters, and the interior surface shall be free from warts, tits, nodules, chips, breaks, rough spots or cracks that in the opinion of the Engineer may prove injurious. Each duct shall be practically straight and under no circumstances will any piece be accepted which shall have a bow, curve or kink sufficient to prevent the passage of a mandrel three and one-half ($3\frac{1}{2}$) inches in diameter and twenty-four (24) inches long. No piece will be accepted if it shall have a bow, bend or kink in more than one direction. Throughout its entire length the bore shall be straight, smooth and circular. The center of the bore shall be exactly in the center of one-way ducts.

Inspection.

Section No. 401. All ducts to be subject to inspection, both at the place of manufacture and on the work and at any other time and place required by the Engineer. All rejected ducts shall be promptly removed by the Contractor at his own expense.

How Laid.

Section No. 402. The ducts shall be laid in beds of cement mortar about one-fourth ($\frac{1}{4}$) of an inch in thickness, with broken joints both horizontally and vertically, true to line and grade, and so placed that there shall be no shoulders or offsets in the bore. All interstices shall be filled with mortar. In laying ducts care must be taken to close abutting joints so that the ends of all consecutive ducts shall be practically in contact on all sides.

Dowel Pins.

Section No. 403. Each piece of two-way duct shall be supplied with two dowel pins placed in opposite sides. These dowel pins shall be of wrought iron three and one-half ($3\frac{1}{2}$) inches long of circular cross-section five-sixteenths (5-16) of an inch in diameter. The surface shall be smooth, the ends tapered and at the middle of its length shall be cut a spur or feathering on one side which shall project sufficiently to prevent the dowel pin entering the dowel pin hole beyond such spur. The diameter of the dowel pin shall not be reduced more than one-sixteenth (1-16) inch to make the spur.

Wraps.

Section No. 404. Two (2) strips of thick, unbleached muslin six (6) inches wide and coated with neat cement mortar shall be used to wrap each joint, the ends of the wrap to lap four (4) inches. The muslin shall be not less than 56x60 count, weight not less than four (4) ounces to the yard and width thirty-six (36) inches. Where ducts are laid on curves, the wraps must be doubled if required, to protect the openings between the ends of the ducts on the outer line of the duct and to exclude all mortar from duct openings. Metal wraps will not be permitted.

Mandrels.

Section No. 405. Ducts shall be laid with a link mandrel of a length and diameter to be prescribed, which shall be drawn through each duct as it is laid, so as to remove all projections of mortar that may be in the ducts; the mandrel shall also be equipped with a suitable swab to remove all loose materials in the ducts; the mandrel is to be left in each duct until the succeeding duct is laid.

To Be Rodded.

Section No. 406. After the duct bank has been completed and in the case of Railroad ducts, the trench backfilled, the manholes built and heads set, and in the case of Tunnel ducts, the Railroad structure completed, the ducts shall be rodded by pushing a wooden mandrel through the bore. This mandrel shall be of approved design, three and one-fourth ($3\frac{1}{4}$) inches in diameter, eight (8) inches long and screwed to the end of the rod. If obstructions are found in rodding the ducts which cannot be removed by cleaners so as to give a clear and smooth opening sufficient to pass the above mandrel without damaging the duct, the duct shall be removed and relaid. All ducts during construction and after being rodded shall be plugged with suitable plugs to be furnished by the Contractor. If wooden plugs are used they shall be immersed in water for at least eight (8) hours before being put in place.

Payments.

Section No. 407. Railroad ducts shall be paid for per duct foot in place at the price stipulated for Railroad ducts in Schedule Item 18-A, and Tunnel ducts shall be paid for per duct foot in place at the price stipulated for Tunnel ducts in Schedule Item 18, which prices shall include the cost of furnishing, laying and rodding the ducts, of furnishing and placing the concrete envelope for the Railroad ducts and of all incidental work, labor and material not otherwise specifically provided for. For Railroad ducts and Railroad duct manholes outside the net lines of the Railroad structure, excavation and restoration of street surface shall be paid for at the prices stipulated in Schedule Items 2-A and 30; and changes of surface and subsurface structures, both inside and outside the net lines of the Railroad structure, made necessary because of physical interference with Railroad ducts or Railroad duct manholes shall be measured and paid for as provided in Sections Nos. 60, 61 and 62. The ducts to be provided under Schedule Items 18 and 18-A shall include only those intended solely for the purpose of the operation of the Railroad.

Measurement for Excavations.

In the estimate and payment for excavation for Railroad ducts and Railroad duct manholes outside the net lines of the Railroad structure, allowance will be made for a width of trench eight (8) inches wider than the duct structure or manhole, the depth, measured on the line of the trench, being taken as the distance from the street surface to the lowest part of the structure.

Location of Duct Line.

Section No. 408. Generally the Railroad duct line will be constructed as indicated on the contract drawings, but to escape existing subsurface structures it may be placed in another location as ordered. Railroad duct manholes shall be built as indicated on the drawings or as directed by the Engineer. These manholes shall be generally at intervals of about four hundred (400) feet. They may vary in form to adapt the work to local conditions. They will be paid for at the prices stipulated in the various Schedule Items for similar work and material for the Railroad structure.

Drain Pipe.

The drain pipes for the duct manholes shall be vitrified pipe of the best quality, thoroughly and perfectly burnt, without imperfections, well and smoothly glazed inside and outside and perfect in shape. They shall be paid for at the price stipulated in Schedule Item 17, which price shall include all work, labor and material incidental to furnishing and laying the pipe in place and including the proper connections with the sewers, except excavation and the restoration of the street surface, which will be paid for at the prices stipulated in Schedule Items 2-A and 30. In the estimate and payment for such excavation allowance will be made for a width of trench two (2) feet wider than the interior diameter of the pipe and a depth six (6) inches deeper than the invert of the pipe measured from the surface of the street on the line of the trench.

SUBDIVISION 21.

Conduits.

Open Construction Required.

Section No. 410. In all work where iron pipe conduits are installed for a part of their length in the structure and for another part as open construction, the ends of such runs shall be carried outside of said structure as open construction and shall terminate in outlet or junction boxes located by the Engineer.

Usually to Be Built in.

Section No. 411. The iron pipe conduits required by Section No. 410 will be built mainly in the walls, roof or other parts of the station; portions, however, of the runs will be left exposed, to be covered later by the station masonry work.

Quality of Iron Pipe Conduit.

Section No. 412. All iron conduits used for any purpose in connection with the work shall be of the best grade (galvanized or equal) standard weight wrought-iron or steel piping, protected inside and out by a coat of zinc or enamel. They shall be delivered to the work in bundles of full length pipes, each length marked with the trade-mark of the manufacturer. They shall bend only ninety (90) degrees about a radius equal to ten (10) diameters without signs of flaw or fracture in either pipe or enamel.

Cleaning and Workmanship.

Section No. 413. All conduits shall be carefully cleaned before and after erection, and all ends shall be reamed free from burrs, and inside surfaces shall be free from all imperfections liable to injure the cable.

Joints Watertight.

Section No. 414. All joints shall be made with standard couplings, well treated with red lead, and screwed up to make a water-tight job.

Support and Protection.

Section No. 415. Conduits built into concrete or other parts of the structure shall be properly protected and supported, so that they shall not be injured by the building operations.

Strap Supports.

Section No. 416. Conduits not built into the structure shall be supported by approved pipe straps located not more than eight (8) feet apart, or in any other manner designated by the Engineer, and they shall be kept boxed or otherwise suitably protected from injury.

Bends and Offsets.

Section No. 417. Bends and offsets may be made in the field if proper tools are used, but in no case shall deformed, split or crushed conduit be erected. Not more than two right angle bends shall be made between any two outlet boxes without special approval of the Engineer.

Measurement and Payment.

Section No. 418. Measurements for the above iron pipe conduits shall be per lineal foot of single conduit placed in the work, in accordance with the requirements, and payment for the same shall be made at the price stipulated in Schedule Item 32.

Outlet and Pull Boxes and Payment for Same.

Section No. 419. All outlet boxes shall be made of cast iron, with openings threaded for the conduit ends, and conduits shall be screwed into these openings and made up with red lead to effect a water-tight joint. Covers shall be of cast iron and water-tight, and no other boxes or covers shall be used except under special permission of the Engineer. Cast-iron outlet boxes furnished and placed in the work shall be paid for at the price stipulated in Schedule Item 33.

SUBDIVISION 22.

Surfaces Restored.

Pavement to be Restored.

Section No. 420. As soon as the structure in any excavation or trench made within a street shall be completed and the trench backfilled, a temporary pavement shall be laid and maintained for at least four (4) months in a condition satisfactory to the Engineer; and whenever after such time the earth shall, in the opinion of the Engineer, have been sufficiently settled, the Contractor shall proceed to restore the surface to a condition similar to, and equally as good as, that existing previous to the commencement of construction.

Provisions Apply to Sewer Trenches.

Section No. 421. All the requirements as to street surface restored shall apply to the trenches for sewers, pipes or other subsurface structures along or off the line of the Railroad.

Other Pavement May Be Laid.

Section No. 422. Nothing contained in these specifications shall be understood or construed as prohibiting the Contractor from making any arrangement with the President of the Borough, or such other officer of The City of New York as may be in charge of street paving, to lay a better or other form of street pavement in the roadway between curb lines, or to make arrangements with any property owner to lay another style of sidewalk, or other surface covering within curb lines, in place of the sidewalk or other surface covering taken up; in which case the Contractor shall file with the Commission a copy of his contract with such municipal officer or with such property owner, duly acknowledged in writing by both parties.

Other Contractors May Lay Pavement.

In case the municipal officer in charge of street paving, or any property owner desires to lay a pavement in the roadway between curb lines, or a sidewalk, or other surface covering within curb lines, affected by this contract, different from the one removed, and shall notify the Commission in writing that he has failed to make satisfactory arrangements for such work with the Contractor, then the Commission, in its discretion, may direct the Contractor to finish and dress off the filling over his work to such grade as the Engineer may select, and further direct him to remove from the area to be restored all material of whatever nature not required to be relaid, and to permit another contractor to lay such roadway pavement, sidewalk or other surface covering; in which case the liability of the Contractor under this contract shall cease, as far as that part of his work is concerned, whenever the Engineer shall report to the Commission that the instructions of the Commission have been complied with, exactly the same as if the Contractor had fully completed the restoration as hereinbefore provided. The cost of all work of finishing and dressing off the filling over his work and of the removal of all materials not required, referred to above, will be included in the prices stipulated for earth excavation, and such work is not to be considered in any sense as "street surface restored."

Payment for Street Surface Restored.

Section No. 423. Payment for street surface restored will be made at the prices stipulated in Schedule Item 30 (a) within curb lines and Schedule Item 30 (e), (f), (g) and (j) between curb lines, which prices shall include the cost of restoring all curbs, manhole heads and covers, gratings, vault lights, etc., that formed a part of the original street surface, and of all temporary surfaces and pavements (including maintenance of same) that may be necessary to maintain traffic pending the final placing of the permanent paving. The support of the street surface between the street railroad tracks and between the rails of each track will not constitute "street surface restored"; that is, the Contractor will not be paid for street surface restored in cases where the original pavement between such street railroad tracks and such rails is not removed and replaced; nor will the area of the top surface of the rails or slot of the street railroads be measured and paid for as "street surface restored."

New Bluestone and Granite Curb.

When required by the Engineer, the Contractor shall furnish and set contiguous to ventilating grating work and station vault light work new bluestone or eight (8) inch granite curb dressed to fit the structure. This new curb, in place, including all work, labor and material incidental thereto, will be paid for at the prices stipulated in Schedule Items 30 (i) and (k).

New Curb Line.

When required by the Engineer, the Contractor shall set such new curbs, or restore the old curbs contiguous to such grating and vault light work when new ones are not ordered, at a new line to be established by the President of the Borough, and such additional roadway pavement as may be required thereby will be paid for at the unit price specified in the Schedule applicable thereto.

Measurements.

Section No. 424. The measurement for payment for street surface restored will be to the ordered net lines of excavation.

Outside of Net Lines.

Section No. 425. All other street or park surfaces outside of the ordered net lines of excavation, either along or off the line of the Railroad, that may have become damaged, directly or indirectly, as a result of the Contractor's operations, shall be restored by the Contractor at his own cost and expense to a condition similar to and equally as good as that existing previous to the commencement of construction.

SUBDIVISION 23.

Gratings, Hand-Rails, Etc.

Steel Gratings.

Section No. 426. Steel grating shall be provided and placed over fan and other ventilating chambers, and over station approaches, at places shown on the drawings, or at other places if required by the Engineer. They will be constructed as shown on the detailed drawings for gratings.

Steel gratings also shall be provided and placed over stations as prescribed in the preceding paragraph.

Measurement and Payment.

Gratings will be measured to include the outer lines of the frames of the gratings at the street surface and payment therefor will be made at the price stipulated in Schedule Item 28, which price shall include the grating in place in the work, all frames and framing, painting and all incidental work, labor and material.

Hand-Rails.

Seasoned oak or ash hand-rails, of one or more horizontal rails may be placed in the Railroad at points where directed by the Engineer. The rails shall be free from knots, sap-wood, shakes and other defects and shall have a cross grain between supports not greater than one-fourth ($\frac{1}{4}$) the diameter of the rail. The rails shall be sand-papered to a smooth finish and shall receive two coats of boiled linseed oil. They shall be securely fastened to the wall of the Railroad by means of expansion bolts, and as shown on the contract drawings. Measurements for payment for hand-rails will be per lineal foot of rail in place in the work, and payment therefor will be made at the price stipulated in Schedule Item 27-B, which price shall include furnishing and placing the hand-rails complete, including finishing, oiling and connections.

Vault Lights.

The roof of the station, where under sidewalks, shall, to as great an extent as possible, consist of vault light construction. These lights shall be made with lenses, not exceeding three (3) inches in diameter, of strong glass set in cement, in frames or panels, and the joint between the glass and the cement shall be made water-tight by the use of an approved elastic composition which shall also serve to protect the glass from breaking due to the contraction of the supporting slab. The panels shall be provided with non-slipping treads, buttons or other devices all of design approved by the Engineer; and shall be of sufficient strength to carry, when supported in a manner similar to that in which they are to be permanently set, an equally distributed load of at least five hundred (500) pounds per square foot without signs of failure, deformation or permanent set, when such test load is removed. The right is reserved to test at least one (1) frame or panel in every ten (10), as selected by the Engineer; and, if that fail, then the whole lot may be rejected. The vault lights must be set in place with cement, lead or other means to be absolutely waterproof; and the joint between the vault light construction and the supporting walls or beams shall be made water-tight by the use of an approved elastic composition. Any tests required shall be at the Contractor's expense.

Measurement and Payment.

The area for payment for vault lights shall be to lines not exceeding one (1) foot outside of the inner faces of the supporting walls, and payment will be made at the price stipulated in Schedule Item 29, which price shall include all work, labor and material incidental to the completed vault lights in place.

SUBDIVISION 24.

Tunneling.

Work, How to Proceed.

Section No. 427. The portion of the Railroad in Beekman Street and under Park Row from approximately the westerly building line of Park Row to the westerly side of the fan chamber located in Beekman Street, between William and Nassau Streets, will be excavated by tunneling. The tunnel shall be lined with concrete masonry and shall be kept dry by the use of drains, waterproofing, grouting, or such other methods as may be directed by the Engineer.

Method Suited to Conditions.

Section No. 428. Tunneling shall be done by methods best suited to the local conditions, which methods shall be approved by the Engineer before the work is commenced. The methods may, and if so required by the Engineer shall, be changed from time to time if in the judgment of the Engineer local conditions so require. The approval by the Engineer of the methods of tunneling or the failure of the Engineer to call attention to improper or inadequate methods or to require a change in methods will not relieve the Contractor of his responsibility for the proper execution of the work.

Drilling and Blasting.

Section No. 429. When material requiring blasting is met the Contractor shall blast to the extent directed and with explosives of such power and in such quantities and positions as will not make the excavation unduly large.

Precautions.

Section No. 430. The Contractor shall comply with all the requirements for storage and care of materials for blasting and with the precautions for blasting given in Subdivision 5, which Subdivision shall be deemed to apply to tunneling to the extent to which it is applicable.

Ventilating and Lighting.

Section No. 431. To assure the safety of the work and the workmen during construction the Contractor shall provide adequate ventilation and lighting.

To Prevent Settlement.

Section No. 432. The Contractor must take every precaution to prevent any settlement or movement of the materials surrounding the excavation and to secure the safety of the work and the workmen. Permanent and temporary timbering shall be used whenever necessary. Permanent timbering shall be kept clear of the net outside lines of the Railroad structure. Temporary timbering shall be removed wherever practicable before placing the concrete lining; where not practicable to remove the temporary timbering before placing the lining, it shall be left in place until the construction will permit of its removal without endangering the work or the workmen and without causing movement or settlement of the material surrounding the excavation.

Outside the Net Lines.

Section No. 433. All space outside the net outside lines of the roof and sidewalks shall be filled with concrete or other approved material.

Grout.

Section No. 434. To insure filling all space in the lining or outside the net outside lines of the roof and sidewalks grout consisting of one part of fine, clean and sharp sand and one part of Portland cement shall be pumped in under pressure from time to time, as directed by the Engineer, through grout pipes which the Contractor at his own expense shall provide for the purpose.

Leaks Stopped.

Section No. 436. Special care must be used in mixing and placing the concrete lining to prevent percolation of water through it. In case leaks develop, the Contractor at his own expense shall furnish all the work, labor and material necessary and shall stop such leaks.

Measurements for Excavation.

Section No. 437. In the estimate and payment for tunnel excavation and for concrete masonry in the tunnel such tunnel excavation and concrete masonry will be measured and paid for to the net outside line of the floor at the bottom of the tunnel and (because of the impracticability in tunnel excavation of excavating to an exact line and because of additional space required where timbering is necessary) to a line one (1) foot two (2) inches outside the net outside line of the roof and sidewalks of the tunnel. Such outside line at the sides and top of the tunnel governing the measurements for allowance and payment for such tunnel excavation and concrete is called, for convenience, the pay line for excavation and concrete for the roof and sidewalks.

No Measurements Outside Net Lines.

Section No. 438. No measurement will be made or money paid for excavation made of concrete or other materials (except grout if ordered), placed outside (below, above or wider than) the net outside line of the floor or the pay line for excavation and concrete for the roof and sidewalks.

Excess Excavation.

Section No. 439. No allowance will be made or money paid for any excess excavation caused by slips or slides or for any reason whatsoever or for any masonry or other materials (except grout, if ordered), necessary to fill the spaces caused thereby. It is understood and agreed that for all such matters the Contractor has estimated and allowed in the unit prices of the Schedule.

Material Within Net Outside Lines.

Section No. 440. No material shall project within the net outside lines of the Railroad structure. If, however, any material lies between the net outside lines of the Railroad structure and the pay line for excavation and concrete for the roof and sidewalks, the excavation and concrete will be measured and paid for out to such pay line, as provided in Section No. 437, and no deduction will be made on account of the fact that the material lies partly or wholly within such pay line.

Payment Outside Net Lines.

Section No. 441. Any additional excavation beyond the net outside lines of the floor or the pay line for excavation for the roof and sidewalks which the Engineer shall require to be made for chambers, skew backs of arches, sump holes, drains or for any other purpose shall be measured to the lines ordered by the Engineer and will be paid for at the price stipulated for tunnel excavation in Schedule Item 5.

Tunnel Excavation.

Section No. 442. Excavating by tunneling, as described in Section No. 427, defined as tunnel excavation, shall be paid for at the price stipulated in Schedule Item 5, which price shall be deemed to cover all expense due to the presence of quicksand or other soft material, boulders, etc., the cost of all pumping and bailing, of all timbering and removal of timbering, of all filling behind the timbering, of the removal and disposal of all excavated material, of blasting, of all ventilation and lighting, of maintaining, protecting and securing all surface, subsurface and overhead structures of whatever nature and their appurtenances, including the rapid transit railroad along Nassau Street, if and as built (except buildings and the subsurface railroad in Park Row), and of restoring them to as useful, safe, durable and good a condition as existed before work was begun; and of all other work, labor and material incidental to the excavation of the tunnel, including any expense that may arise from cave-ins or from any unexpected obstacles. (See Section No. 446.)

Payment for Concrete Masonry.

Section No. 444. Concrete masonry for tunnel work will be measured in place in the work to the lines prescribed in Section No. 437, and will be paid for at the price stipulated in Schedule Item 6. (See Section No. 157.)

Payment for Grout.

Section No. 455. Where grout is ordered and used, it will be paid for at the price stipulated in Schedule Item 11.

SUBDIVISION 25.

Special Matters.

General Provisions Govern.

Section No. 446. The provisions of this subdivision are for the purpose of covering matters which are special to this contract and which are not fully covered in the general specifications, but except as herein otherwise expressly provided the foregoing specifications are to be construed as applying to special matters. In case of any conflict between the provisions of the foregoing general specifications and the provisions of this subdivision, the provisions of this subdivision shall govern.

Rapid Transit Railroads in Park Row and Mail Street—Contractor to Procure Permits.

The Contractor shall maintain, support, secure, protect and underpin, both temporarily and permanently, in a safe condition the subsurface rapid transit railroads in Park Row and Mail Street and the subsurface rapid transit railroad now under construction in Broadway and, if and as built, the subsurface rapid transit railroad in Nassau Street, together with all appurtenances, equipment and rolling stock of said railroads. If any damage or injury shall occur to any of such rapid transit railroads or their appurtenances, equipment or rolling stock, the Contractor shall forthwith make good such damage or injury. The Contractor shall comply with all reasonable requirements of the Interborough Rapid Transit Company, as lessee of the rapid transit railroads in Park Row and Mail Street, or of any other lessee or operator of said railroads, and, if the New York Consolidated Railroad Company or any other lessee or operator shall operate the rapid transit railroad now under construction in Broadway or the proposed rapid transit railroad in Nassau Street during the term of this contract, with all reasonable requirements of said New York Consolidated Railroad Company, as lessee of said railroad in Broadway and of said railroad in Nassau Street, or of any other lessee or operator of said railroads, to the end that the safe and continuous operation of trains in said rapid transit railroads shall not be interfered with and that said rapid transit railroads, their appurtenances, equipment and rolling stock shall be maintained at all times in a safe condition. The Contractor shall at his own expense procure any and all permits from the lessees or operators of said rapid transit railroads which may be necessary for maintaining, supporting, protecting, securing and underpinning any of said railroads. All methods of maintaining, supporting, protecting, securing and underpinning said railroads must be approved by the Engineer before any work on or affecting said railroads is commenced. Such methods may, and if required by the Engineer shall, be changed during construction if in the judgment of the Engineer conditions so require. But the approval by the Engineer of the methods of doing the work or the failure of the Engineer to require any change in methods or to call attention to improper or inadequate methods will not relieve the Contractor of his responsibility.

Contractor Responsible.

The Contractor shall be solely responsible for the support, maintenance, safety and protection of such rapid transit railroads with their appurtenances, equipment and rolling stock, and for the safety and protection of all passengers and other persons therein and shall be solely responsible and liable for any damage thereto and any injuries to persons or property therein incurring on account of the performance of the work under this contract, whether due to the negligence, fault or default of the Contractor or not. And the Contractor, in addition to indemnifying the City from liability upon any and all claims on account of any such damage or on account of any such injuries to person or property and from all costs and expenses in suits which may be brought against the City for any such damage or injury, shall also indemnify and save harmless the Interborough Rapid Transit Company, its successors and assigns, and the New York Consolidated Railroad Company, its successors and assigns, and any other operator or lessee of any of said railroads and any person or corporation constructing said rapid transit railroad in Broadway or said rapid transit railroad in Nassau Street from loss on account of any such damage and from liability upon any and all claims for damages on account of any such injuries, all as more particularly provided in Chapter VI of this contract. And as more particularly provided in such Chapter VI the liability of the Contractor hereunder is absolute and is not dependent upon any question of negligence on his part or on the part of his agents, servants or employees, and neither the approval by the Engineer of the methods of doing the work nor the failure of the Engineer to call attention to improper or inadequate methods or to require a change in methods nor the neglect of the Engineer to direct the Contractor to take any particular precautions or to refrain from doing any particular thing shall excuse the Contractor in case of any such damage or injury.

Payments.

Payment for the support, maintenance, underpinning, safety and protection of the subsurface rapid transit railroad in Broadway (including surface railroads and subsurface structures supported thereon) with its appurtenances, equipment and rolling stock and for the safety and protection of all passengers and other persons and of all property therein will be made at the price stipulated in Schedule Item 76-D. Payment for the support, maintenance, underpinning, safety and protection of the subsurface rapid transit railroad in Park Row (including surface railroads and subsurface structures supported thereon except where the bank of Railroad ducts crosses the railroad) with its appurtenances, equipment and rolling stock for the safety and protection of all passengers and other persons and of all property therein will be made at the price stipulated in Schedule Item 76-E. Payment for the maintenance, securing, safety and protection of the subsurface rapid transit railroad in Mail Street with its appurtenances, equipment and rolling stock and for the safety and protection of all passengers and other persons and of all property therein is deemed to be included in the price for earth excavation stipulated in Schedule Item 1. Payment for the maintenance, securing, safety and protection of the subsurface rapid transit railroad in Nassau Street, if and as built, with its appurtenances, equipment and rolling stock and for the safety and protection of all passengers and other persons and of all property therein is deemed to be included in the price for tunnel excavation stipulated in Schedule Item 5. The prices stipulated in Schedule Items 76-D and 76-E include the cost of all incidental work, labor and material and no allowance will be made in connection therewith under any other schedule item or otherwise. Partial payments will be made under Schedule Items 76-D and 76-E as provided in Article XXXV.

Concrete Steel Piles.

Concrete steel piles and steel sheet piling have been placed under a portion of the subsurface railroad now being built under Broadway to facilitate supporting it while the Railroad is being built, the location of such piles and sheet piling being indicated on the contract drawings. The Contractor may utilize such piles and sheet piling in shoring and supporting such subsurface railroad during the construction of the Railroad and upon completion of the work shall remove all such piles or parts of piles as would interfere with the operation of the Railroad or the proper construction of the Railroad.

Excavation.

Excavation under the subsurface rapid transit railroad in Broadway will be measured and paid for inside the net outside lines of the Railroad, the bottom or subgrade of such rapid transit railroad limiting the upper surface for such measurement and payment; and no deduction from the volume of such excavation will be made whether such space is wholly excavated or not. No allowance will be made or money paid for excavation beyond the lines specified above.

United States Court House and Post Office Building.

The Railroad will pass under the northerly part of the United States Court House and Post Office building between Broadway and Park Row. The Contractor shall maintain, protect, buttress, shore and support during construction and shall permanently and safely underpin the above mentioned building. Payment for maintaining, protecting, shoring and supporting such building during construction will be made at the price stipulated in Schedule Item 4-N, which price shall include compensation for making good any damage to such building and its appurtenances. Payment for the piers and footings (including excavation for same) and for all other work, labor and material required for permanently and safely underpinning the Court House and Post Office building will be made at the prices stipulated in Schedule for the several classes of work or material applicable thereto. In the measurement and payment for excavation for said piers allowance will be made for the total excavation, outside the ordered net lines of excavation for the Railroad structure, within vertical planes passing through the net outside lines of the footings of such piers, as ordered or indicated on the drawings, and for a depth from the top surface of the floor of the subbasement to the bottom of the pier or footing.

Precautions.

Along Beekman Street the Railroad will pass in very close proximity to the buildings on both sides of the street. Extraordinary precautions must be exercised by the Contractor to insure the safety of such buildings. The Contractor at the beginning of construction will be required safely and permanently to underpin, and during construction will be required to maintain, protect and secure, such buildings as enumerated in Schedule Item 4-AA. All such work will be paid for at the prices stipulated in Schedule Item 4-AA, which prices shall include all the work, labor and material of whatever character required safely and permanently to underpin at the beginning of construction and maintain, protect and secure during construction the entire building or group of buildings enumerated and no allowance will be made therefor under any other Schedule Item or otherwise. Before any work is proceeded with in connection with safely and permanently underpinning and maintaining, protecting and securing the foregoing buildings, the Contractor shall submit to the Engineer drawings in duplicate indicating the proposed methods of doing such work.

Railroad Ducts.

A line of forty (40) Railroad ducts will be laid in Park Place and Mail Street and across Park Row from the Tunnel duct manhole at Park Place and West Broadway to the easterly side of Park Row to connect with the manhole opposite Mail Street of the existing rapid transit railroad, and thence will be laid along the easterly side of Park Row and through Beekman Street to William Street. Payment for all work, labor and material involved in constructing such bank of forty (40) Railroad ducts, including the work across the existing rapid transit railroad in Park Row, will be made at the prices stipulated in the Schedule applicable thereto. Concrete removed and disposed of, in the roof of said existing rapid transit railroad in Park Row, will be paid for at the price stipulated in Schedule Item 9-D. The Contractor shall procure from the Interborough Company a permit for the reconstruction of the roof of the rapid transit railroad in Park Row required in connection with the construction of said Railroad ducts.

The Contractor shall repair any damage to abutting buildings and restore such buildings as provided in Article XLVII.

Appendix to Specifications.

This indenture made this _____ day of _____, 1914, between the United States of America (hereinafter referred to as the United States), acting by William G. McAdoo as Secretary of the Treasury of the United States, party of the first part, and The City of New York, a municipal corporation of the State of New York (hereinafter referred to as the City), having its residence and place of business in the City Hall, in the Borough of Manhattan, City of New York, which said City Hall has no street number, party of the second part.

Whereas, by deed bearing date the 11th day of April, 1867, and recorded in the New York County Register's office on April 16, 1867, in Liber 1012 of Conveyances at page 142, the City conveyed to the United States all those certain lots, pieces or parcels of land, situate in the Borough of Manhattan, in the City of New York, in the County and State of New York, bounded by Broadway, Park Row and Mail Street, as more particularly described in the said deed, upon the following conditions, namely:

"Upon the express condition, however, that the premises above described and every part and parcel thereof and any building that may be erected thereon shall at all times hereafter be used and occupied exclusively as and for a Post Office and Court House for the United States of America and for no other purpose whatever. And upon the further condition that if the said premises shall at any time or times cease to be used for the purposes above limited or for some one of them or if the same shall be used for any other purposes than those above specified the said premises hereby conveyed and all right, title, estate and interest therein shall revert to and be reinvested in the said parties of the first part, their successors or assigns. And said parties of the first part shall thereupon become the absolute owners of the said premises and every part thereof with the appurtenances, and they may then re-enter the said premises and forever thereafter use, occupy or alien the said premises and every part thereof in the same manner and to the same extent as if these presents had not been executed."

Whereas, the United States has erected upon said premises a building known as the United States Court House and Post Office Building, and which premises together with such building is hereinafter referred to as the Premises, and

Whereas, the City, acting by the Public Service Commission for the First District (hereinafter referred to as the Commission), pursuant to the provisions of the Rapid Transit Act of the State of New York, being Chapter 4 of the Laws of 1891, as amended, on or about the 19th day of March, 1913, entered into a contract for the equipment, maintenance and operation of additional rapid transit railroads, wherein and whereby the City obligated itself to construct a two-track underground rapid transit railroad (known as the Park Place, William and Clark Street Route), to run under, through and across the Premises in the course of the route of said rapid transit railroad from Park Place to Beekman Street, and

Whereas, said William G. McAdoo, as such Secretary of the Treasury, by an Act of the Congress of the United States of America, approved by the President of the United States of America on August 9, 1912, entitled "An Act to Permit the Construction of a Subway and the Maintenance of a Railroad under the Post Office Building, at or near Park Place in the City of New York," (37 U. S. Stat. L. 268), is authorized, in his discretion, to grant, convey and release unto the City for such consideration, nominal or otherwise, and upon such terms, conditions, provisos and limitations, if any, as he shall deem proper, such temporary rights and easements, and such permanent and perpetual underground rights, easements and rights of way in, under, through and across the Premises as he shall deem necessary or proper for the construction, and for the maintenance and operation in perpetuity, of such rapid transit railroad; the said rapid transit railroad to be constructed as in said Act of Congress provided, and reference to the said Act being hereby made, and

Whereas, the Commission is authorized by said Rapid Transit Act, for and in behalf of the City, to acquire by conveyance or grant to the City, to be delivered to the Commission, and to contain such terms, conditions, provisos and limitations as the Commission shall deem proper, any real estate, and any rights, terms and interest therein, and any and all rights, privileges, franchises and easements which, in the opinion of the Commission, it shall be necessary to acquire for the purpose of constructing and operating such rapid transit railroad free of interference and right of interference, and

Whereas, the Commission, for the purpose of constructing and operating such rapid transit railroad free of interference and right of interference, deems it necessary for and in behalf of the City to acquire upon the terms, conditions, provisos and limitations, hereinafter set out, for and on behalf of the City the certain temporary rights and easements, and the certain permanent and perpetual rights, easements and rights of way hereinafter mentioned and described in, under, through and across the Premises, and

Whereas, the said William G. McAdoo, as the said Secretary of the Treasury, acting for and in the name and on behalf of the United States, as in said Act of Congress provided, in the exercise of his discretion, has determined and deems it

necessary and proper to grant, convey and release unto the City for the sum of One Dollar and upon the terms, conditions, provisos and limitations hereinafter set out, the certain temporary rights and easements and the certain permanent and personal underground rights, easements and rights of way, hereinafter mentioned and described in, under, through and across the Premises for the construction and for the maintenance and operation in perpetuity of such rapid transit railroad.

Now, therefore, this indenture witnesseth, that the United States of America acting by said William G. McAdoo as Secretary of the Treasury of the United States, in consideration of the sum of One Dollar, lawful money of the United States to the United States paid by the City, and in further consideration of and subject to the terms, conditions, provisos and limitations of the kind and nature hereinafter set out, upon the part of the City agreed to be kept, paid, observed, carried out and performed, has granted, conveyed and released, and does hereby grant, convey and release unto the City, its successors and assigns forever, a permanent and perpetual underground right, easement and right of way in, under, through and across the Premises for the maintenance and operation in perpetuity free of interference and right of interference, except as hereinafter set out, of a two-track underground rapid transit railroad. The said two-track underground rapid transit railroad shall be constructed substantially at and upon the location shown on the drawing marked "Plans" hereinafter referred to, hereto attached and made a part hereof, and the tracks of the said rapid transit railroad at and upon the location and within the limits of the Premises, shall be placed in one and the same subway or tunnel, which such subway or tunnel shall have a width that shall not exceed forty (40) feet, outside dimensions and the top of the roof of such subway or tunnel within the limits of the Premises shall not be less than thirty-five (35) feet beneath the present established grade of the surface of the street at the point of intersection of the centre line of Broadway and the centre line of Park Place, if said centre line of Park Place were projected easterly to the said centre line of Broadway. The said rapid transit railroad within such limits and within the Premises shall also be constructed substantially as indicated on the two drawings hereto annexed and made a part hereof, which drawings bear the seal of the Commission and are entitled "State of New York Public Service Commission for the First District Engineering Department Route No. 48 Section No. 1 dated July 30, 1914, signed by Robert Ridgway, Acting Chief Engineer, one of such drawings being numbered File 2701, Drg. No. 5 and marked "Plan to accompany deed from United States to the City of New York conveying easements under United States Court House and Post Office Building in New York City," and the other of said drawings being numbered File 2701, Drg. No. 6 and marked "Section to accompany deed from United States to the City of New York, conveying easements under United States Court House and Post Office Building in New York City."

Together with, and including, the right permanently and perpetually to maintain said rapid transit railroad and the said subway or tunnel therefor, and permanently and perpetually to maintain and operate said rapid transit railroad through said subway or tunnel and for that purpose to enter upon, use and occupy said portion of the subsurface of the Premises, it being expressly agreed, however, that upon the completion of the said subway or tunnel the width of the said subsurface occupied by the said subway or tunnel, exclusive of any space occupied by the platforms or their appurtenances hereinafter referred to, shall not exceed forty (40) feet as aforesaid, and that the roof of said subway or tunnel shall be at least thirty-five (35) feet beneath the surface of the street as hereinbefore set forth.

To have and to hold the same unto the City, its successors and assigns forever.

The United States, acting by said William G. McAdoo as said Secretary of the Treasury, in consideration of the said sum of One Dollar and in further consideration of and subject to the terms, conditions, provisos and limitations hereinafter contained, and upon the part of the City to be kept, paid, observed, carried out and performed, has also granted, conveyed and released and does hereby grant, convey and release unto the City, its successors and assigns, a temporary right and easement for the construction of said rapid transit railroad in, under, through and across the Premises;

Together with, and including the right to construct such rapid transit railroad and for such purposes, and as incidental thereto, properly, adequately and safely to maintain, support, shore, buttress and underpin the said United States Court House and Post Office Building and to excavate such soil and other materials under the said building and to remove such portion of the foundations, walls and floors of the said building as may be necessary for the purposes indicated and to remove and dispose of such soil and other excavated material together with such portions of the foundations, walls and floors of said building as may be necessary to remove for the said purposes without accounting therefor, and to enter into and take possession of such portion of the sub-basement of the said building as may be necessary for the purpose of constructing said rapid transit railroad, and either temporarily or permanently to remove and relocate such machinery and appurtenances of the said building (including any and all subsurface pipes or structures used by or in connection with the Post Office) as may be necessary for the purpose of constructing the said rapid transit railroad, and for the purpose of maintaining, supporting, shoring, buttressing and underpinning the said building and of making such excavations and removals, to such places and positions as may be determined and approved by the then Secretary of the Treasury of the United States or by such person or persons as may from time to time be directed by and be acting for such then Secretary of the Treasury to make such determination and approval. Together with, and including, the right to the City to construct and maintain during the period of constructing the said rapid transit railroad, and subway or tunnel, a shaft and hoist at the westerly side and a shaft and hoist at the easterly side of the said building, at the locations as shown on the attached drawings hereinafter referred to, for the purpose of removing such soil and other excavated material together with such portions of the foundations, walls and floors or said building from the said sub-basement to the surface of the street and for bringing in materials from the surface of the street to the said sub-basement, such shafts and hoists to be located, and to be of the kind, character and nature as shown upon the attached drawings hereinafter referred to and made a part hereof.

To have and to hold the said temporary rights and easements unto the City, its successors and assigns during the period of the construction of and until the said subway or tunnel and rapid transit railroad shall be completed.

It is expressly understood and agreed, however, and as part of the terms and limitations hereof, that such temporary rights and easements and such permanent and perpetual underground rights, easements and rights of way hereinafter granted, do not include any right to enter upon, use or occupy or remove any portion of the said building, except as hereinbefore provided, nor do said easements and rights include the right to enter upon, use or occupy or remove any portion of the said building above the sub-basement thereof except for the purpose of the construction and maintenance, during the construction of the said subway or tunnel, of the shafts and hoists hereinafter referred to; nor do the said rights and easements include the right to enter upon, use or occupy or remove any portion of the walls or floors of the said building above the sub-basement thereof except for the purposes of such shafts and hoists or to interfere with the continued occupancy of the said building above the sub-basement thereof except and so far as said occupancy may necessarily be interfered with by reason of the proper operation and maintenance, during the construction of the said subway or tunnel and rapid transit railroad, of such shafts and hoists, nor do such rights and easements include the right to interfere with the continued occupancy of those portions of the sub-basement of the said building upon which the City is not hereby granted the right to enter. Such subway or tunnel and rapid transit railroad within the Premises shall be completed within a reasonable time and the construction thereof shall be carried on with due expedition.

It is, however, understood and agreed that the foregoing grant of such temporary rights and easements and such permanent and perpetual underground rights, easements and rights of way in, under, through and across the Premises are subject, in addition to any terms, conditions, provisos and limitations above set out, to the following terms, conditions, provisos and limitations, to wit:

I. 1. If and when any of such machinery and appurtenances (including any and all sub-surface pipes or structures used by or in connection with the Post Office) shall be relocated as aforesaid the City at its own cost and expense shall cause the same together with various parts, appliances and connections thereof to be properly attached and connected so as to place them in a condition in which they are capable of as efficiently and properly performing their intended purposes and functions as they respectively were at the time they were removed from their present location. If during the construction of said subway and tunnel and said rapid transit railroad by reason of such relocation or because of interference with existing heat, steam or electric plants and connections caused by the construction of said subway and tunnel and said rapid transit railroad (including such shafts or hoists) the existing heat, steam and electric service is shut off or interrupted, the City will and shall at its own cost and expense make or cause to be made such arrangements as may be necessary to supply

the said building with such heat and steam and electric power as may be necessary and proper to carry on, without interruption, the business of the Post Office and United States Court in said building.

2. The said shafts and hoists shall be so operated and controlled as not to create unnecessary or unreasonable interference with the passage of pedestrians and vehicles in and upon the streets and sidewalks adjoining and adjacent to the Premises. All liability hereafter assumed by the City as indemnification of the United States, its custodians and officials and employees or any of them, as to the construction, operation and maintenance of said subway or tunnel and rapid transit railroad, shall apply to the construction, operation and maintenance of the said hoists and shafts.

The said shafts and hoists will be so operated, constructed and controlled, as not to interfere with any pending plans for reconstruction work in and about the said United States Court House and Post Office Building or any part thereof.

II. In consideration of the above grants, conveyances and releases the City hereby binds itself, its successors and assigns,

1. To properly, adequately and safely, during the construction of the said subway and tunnel and said rapid transit railroad, underpin, buttress, shore, support and maintain the United States Court House and Post Office Building and each and every part and portion thereof.

2. To properly, adequately and safely support and maintain the said United States Court House and Post Office Building and each and every part and portion thereof during the maintenance and operation of the said subway and tunnel and said rapid transit railroad to the extent that such support and maintenance are affected and properly required by such maintenance and operation.

3. The continued occupancy of the said building above the sub-basement thereof and of such portions of the sub-basement as the City is not hereunder granted the right to enter upon shall not be interfered with except so far as may be necessarily required for the purposes of such shafts and hoists hereinbefore referred to or necessarily required for maintaining, supporting and underpinning the said building.

4. In the event that any accident or mishap arising from, out of or on account of the construction, maintenance or operation of the said subway and tunnel and said rapid transit railroad or any of them should so interfere with the use and occupation of the said building as at present used and occupied by the United States or any part or portion thereof that it shall be and become necessary for the United States to procure space and quarters for the purpose of its Post Office Department or for Court House purposes outside of the said building, the City will and shall reimburse the United States for any and all proper, reasonable and necessary costs and expense to which it shall or may be put by reason of such interference with the use and occupation of the said building.

5. That any removals of the machinery and appurtenances of said building (including any and all sub-surface pipes or structures used by or in connection with the Post Office) and relocations of the same shall be made without expense to the United States and shall be made as expeditiously and with as little inconvenience to the United States as possible, and all such machinery and appurtenances (including any and all sub-surface pipes or structures used by or in connection with the Post Office) so removed and relocated shall be either restored upon the completion of the construction of the said subway and tunnel and rapid transit railroad to the positions at present occupied by them or else the same shall be relocated in some other proper and convenient position to be determined as hereinbefore provided, and upon the completion of the construction of said subway and tunnel and rapid transit railroad, in, under, through and across the Premises including the completion of the underpinning and supporting of the said building as aforesaid, all portions of the said building and machinery therein, and all appurtenances thereof (including any and all sub-surface pipes or structures used by or in connection with the Post Office) interfered with by the said construction shall be restored to and left in as good a condition as the same were in at the date of this Indenture, necessary changes, removals and relocations due to the construction of the said subway and tunnel and rapid transit railroad or due to said underpinning and supporting alone excepted.

6. To remove the said shafts and hoists on the said Broadway and the said Park Row sides of the said building, and to restore the pavements and sidewalks adjoining and adjacent to the Premises so that the same shall be in good order and repair, and in the event that the said building shall have been injured or damaged in any way whatsoever by the construction, operation or maintenance of said shafts and hoists or through any other cause whatsoever arising out of the construction of the subway and tunnel and rapid transit railroad within the Premises, the same shall be restored to as good order and repair as the same was in at the date of this Indenture.

7. That in the event that the United States should, at any time hereafter erect upon the plot of land occupied by the United States Court House and Post Office Building or upon any part or portion thereof, a new building, buildings or structures of any kind for use as authorized by the deed of April 11, 1867, from the City to the United States, hereinbefore recited, and the total cost and expense of any such building, buildings or structures, or of the foundations thereof, shall be increased and be of greater amount than would otherwise be the case were it not for the existence and presence of the said subway and tunnel structure and the rapid transit railroad to be constructed in, under, through and across the Premises as herein contemplated, the City expressly assumes and agrees promptly to pay to the United States, as part of the consideration herein as aforesaid, such sum or sums of money as shall equal any such increased cost and expense of any such new building, buildings or structures or foundation and supports thereof; any such increase and difference in cost and expense as aforesaid shall be determined by comparing the actual and reasonable cost and expense of any such building, buildings or structures and of the foundations and supports thereof, when completed, with what the proper and reasonable cost and expense of any such building, buildings or structures or of the foundations and supports thereof would have been had the said subway or tunnel and rapid transit railroad not been constructed in, under, through and across the Premises.

8. To forever indemnify and save harmless the United States, its respective custodians, officials and employees who may, from time to time, be in charge of and exercise a control over and upon the Premises or any part thereof from and against any and all suits, damages, judgments, litigations, claims of any kind whatsoever, costs, expense and charges of any kind which may be instituted, recovered, made, incurred or which may be claimed by any person or persons whomsoever (whether arising or growing out of any liability which does or may exist either under the laws of the State of New York, whether common or statutory or whether now or hereafter existing; or which may be allowed by or grow out of or result from any statutes, rules or regulations of the United States or of any of its Executive Departments and whether now in force or whether hereafter enacted or promulgated, which impose or may impose liability for either person or property damage of any kind whatsoever upon the United States, its custodians, officials and employees or any of them as aforesaid) and which said damages, judgments, claims, costs and expense, as aforesaid, may be or are occasioned and arise by reason of or through the construction, operation or maintenance of the said subway and tunnel and rapid transit railroad, or the said shafts and hoists in the manner hereinbefore referred to and contemplated hereby or which may grow out of the entering in, upon and under the Premises by the City its contractors, its or their respective agents, successors or assigns, its or their employees or persons in and under their control and irrespective of whether such entry be permissive or otherwise.

III. As part of the consideration moving to the United States for the grants hereinbefore contained, the City agrees that at any time after two years from the date hereof it will, upon the written requirement of the then Secretary of the Treasury of the United States, addressed to the Commission or its successor or, in the event that there be no successor, to the Mayor of the City (such requirement to be based upon the request of the then Postmaster General of the United States that such requirement be made and upon his certificate that a practicable plan for the utilization of the platforms hereinafter referred to in connection with the receipt and dispatch of the United States mails has been prepared), at its own proper cost and expense construct within the Premises and alongside of said subway and tunnel platforms for mail purposes not exceeding four (4) in number. If two platforms are required they shall be placed on each side of said subway and tunnel, and shall be of the same general kind, size, height and character as are shown upon the plans hereinbefore referred to, and made a part hereof. The City shall also construct and install such chutes and elevator shafts as shall be necessary to permit of adequate and proper connection between said platforms and the sub-basement floor of the United States Court House and Post Office Building, for the purposes of receiving and dispatching United States mails from each of said platforms to and from trains passing through said subway or tunnel, and to and from the said sub-basement floor of said United States Court House and Post Office Building. The plans and details of construction and the places of installation of such plat-

forms, chutes and elevator shafts shall be such as the then Secretary of the Treasury and the then Postmaster General of the United States shall approve. Should two platforms be required, the length of each of same shall not exceed seventy feet and the width of each of the same shall not exceed twelve feet measured from the center of the nearest line of columns of said building. Should four platforms be required the length of each of same shall not exceed thirty feet and the width of each of same shall not exceed twelve feet measured from the center of the nearest line of columns of said building. The aggregate number of elevator shafts shall not exceed four and the aggregate number of chutes shall not exceed eight, and the location of the said shafts and chutes shall be determined by the then Secretary of the Treasury and approved by the then Postmaster General of the United States.

All terms, conditions, provisos and limitations on the part of the City hereinbefore agreed to be kept and performed shall apply to each and every thing that may be done by the City in and upon the premises above described under and pursuant to anything in this article contained.

IV. The City further covenants and agrees, which covenant and agreement are evidenced by the Mayor of the City joining in the execution of this Indenture (the said Mayor being thereunto authorized by resolutions of the Board of Estimate and Apportionment and the Sinking Fund Commission of the City, copies of which resolutions are hereto annexed) that this Indenture and the grants herein made to the City by the United States are made at the express request and instance of the City and are made by the United States upon the express proviso and condition that the City agrees, and the City does hereby agree, that the grant of the said easements and rights herein described and set out do not constitute a breach of the condition contained in the deed under which the United States holds the Premises or contained in any muniment or muniments of title covering or relating to the Premises; and the City, upon like proviso and condition, evidenced as aforesaid, covenants and agrees that it is and shall be forever conclusively estopped from claiming that by reason of the execution of this Indenture or by reason of anything which may be done or suffered to be done pursuant to the terms hereof, there has been any breach of any condition or limitation imposed upon the United States by or under such deed or any muniment or muniments of title by virtue of which the United States holds and enjoys the Premises.

The City further agrees that any agreement, covenant, or obligation herein on the part of United States, shall be wholly released and discharged, if ever and whenever the title to the Premises shall for any reason revert or be conveyed to the City.

No claim shall be made against the said William G. McAdoo or against the Mayor of the City or against any member of the Commission personally under or by reason of this Indenture or of its articles or provisions.

In witness whereof, the said William G. McAdoo, as Secretary of the Treasury of the United States of America, has executed these presents for and on behalf of the United States of America and the official seal of the Treasury Department of the United States of America has been hereto affixed, and The City of New York acting by its Mayor has executed these presents and the corporate seal of said City has been hereto affixed, and the Public Service Commission for the First District has caused its official seal to be hereto affixed and attested by its Secretary and these presents to be signed by its Chairman, all the day and year first above written.

UNITED STATES OF AMERICA, by....., as Secretary of the Treasury of the United States of America; THE CITY OF NEW YORK, by....., Mayor.

Attest:, City Clerk.
THE CITY OF NEW YORK BY THE PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT, by....., Chairman.

Attest:, Secretary.
CHAPTER IV.
SECURITY TO BE FURNISHED BY CONTRACTOR.
Contractor's Bond.

Article XXVII. Simultaneously with the execution and delivery of this contract the Contractor shall give security for the performance of his obligation by filing with the Comptroller a bond in the form annexed hereto, entitled, "Form of Contractor's Bond," executed by the Contractor and by two or more sureties to the corporations or persons approved by the Commission in the sum of four hundred thousand dollars (\$400,000). The execution of the bond must be duly proved before the delivery of the bond in the form essential to proof to entitle a deed to record in the State of New York and full affidavits of justification of sureties must be added. In case any of the sureties upon the bond shall become insolvent or unable in the opinion of the Commission to pay promptly the amount of such bond to the extent to which such surety might be liable, then the Contractor within ten (10) days after notice by the Commission to the Contractor shall, by supplemental bond or otherwise, substitute another and sufficient surety approved by the Commission in place of the surety so insolvent or unable. If the Contractor shall fail, within such ten (10) days or such further time, if any, as the Commission may grant, to substitute another and sufficient surety, then the Contractor shall, if the Commission so elect, be deemed to be in default in the performance of his obligations hereunder and upon the said bond, and in addition to any and all other remedies the Commission may terminate this contract or may bring any proper suit or proceeding against the Contractor and the sureties or either of them or may require the Comptroller or the Interborough Company or both the Comptroller and the Interborough Company to deduct from any moneys then due or which thereafter may become due to the Contractor under this contract the amount for which the surety insolvent or unable as aforesaid shall have justified on the bond; and the Interborough Company shall pay over any amount so deducted by it to the Comptroller; and the moneys so deducted (including any moneys so deducted and paid by the Interborough Company to the Comptroller) shall be held by the Comptroller as collateral security for the performance of the condition of the bond; and such moneys shall in such case be deemed to have been paid by the City or the Interborough Company, as the case may be, to the Contractor upon this contract.

Deposit of Cash or Securities.
Article XXVIII. The Contractor may upon the approval of the Commission deposit with the Comptroller in lieu of said bond cash equal in amount to the entire amount of the said bond or securities which are worth not less than the entire amount of such bond. If securities be deposited, they shall be securities which are lawful for the investment of funds of savings banks within the State of New York and shall be approved by the Commission. A schedule of such securities with their values shall be annexed hereto and entitled "Schedule of Securities," and there shall be deposited with such securities the written approval of the Commission which it shall give when satisfied as to the character and value thereof. All securities when deposited must be payable to, or run in favor of, or be transferred to, the Comptroller. In case any of the securities so deposited shall, in the opinion of the Commission, at any time cease to be of the character of securities which are lawful for the investment of funds of savings banks within the State of New York or shall, in the opinion of the Commission, at any time become of less value than the value stated for it or them in the said schedule, then within ten (10) days after notice to the Contractor of the objection of the Commission, the Contractor shall either substitute therefor securities which shall be approved by the Commission as of the character aforesaid and as being of at least the value of the former securities to which the Commission shall have objected as such value was originally stated in the said schedule or shall deposit with the Comptroller in cash the amount of such value of such former securities as so originally stated. In case the Contractor shall not within such ten (10) days or such further time, if any, as the Commission may grant substitute such new securities or make such deposit of cash, he shall, if the Commission so elect, be deemed to be in default in the performance of his obligations under this contract; and in addition to any and all other remedies against the Contractor, the Commission may require the Comptroller or the Interborough Company or both the Comptroller and the Interborough Company to deduct from any moneys then due or which thereafter may become due to the Contractor under this contract, the amount of the original valuation of such securities objected to; and the Interborough Company shall pay over any amount so deducted by it to the Comptroller; and the Comptroller shall hold the moneys so deducted (including any moneys so deducted and paid by the Interborough Company to him) in lieu of such securities, as if part of the original deposit or as if deposited with him as aforesaid, and such moneys shall in such case be deemed to have been paid to the Contractor upon this contract. The securities so objected to shall upon such substitution of securities or deposit of cash in lieu thereof be returned to the Contractor.

City to Collect Interest.
The City shall from time to time collect all interest, dividends and other income on any securities deposited by the Contractor, and shall, when and as collected, pay the same to the Contractor. If the securities are in the form of coupon bonds

the coupons as they respectively become due shall be delivered to the contractor. If the deposit be made in cash, interest shall be paid to the Contractor on such deposit at the average rate of interest received by the City on its bank balances during such period. Provided, however, that the Contractor shall not be entitled to interest, dividends or other income on any cash which shall be used or applied as hereinafter provided or on any securities the proceeds of which shall be used or applied as hereinafter provided.

Deposit to be Security for Faithful Performance.

Article XXIX. The said deposit, whether in cash or securities, in the form and as the same shall at any time be, shall be security for the faithful performance by the Contractor of all the covenants, conditions and requirements specified and provided for in this contract. In case of any default on the part of the Contractor in such performance, and in the further case that the City shall for or by reason of such failure, whether by reason of employment of another contractor or contractors or otherwise, incur or become liable for expense or be required to make any payment or incur or suffer any loss or damage, then the Comptroller shall, upon the requirement of the Commission, forthwith pay or apply to the use of the City the amount of such expense, payment, loss or damage, including any liquidated damages, out of the said deposit in cash or securities or out of the portion of the deposit remaining at the time.

Sale of Securities.

Article XXX. If such deposit be in securities, the Comptroller shall, upon the requirement of the Commission, in order to make such payment or application to the use of the City, sell at public auction in New York any of the securities which may then constitute part of such deposit upon notice to be published in three daily newspapers, the first publication to be not less than ten (10) days before the sale and such publication to be made three times within such ten (10) days. The Comptroller in his discretion may, and upon the requirement of the Commission shall, adjourn such sale from time to time by announcement at the time and place appointed for such sale or for such adjourned sale or sales; and without further notice or publication, he may make such sale at the time and place to which the same shall be so adjourned. The Comptroller shall, upon the requirement of the Commission, deduct from the proceeds of any such sale all expenses thereof and of such advertisement and pay and apply to the use of the City so much of the residue of such proceeds as may be necessary for the purpose aforesaid. And the Contractor within ten (10) days after notice from the Commission so to do shall by further deposit, according to the requirement of the Commission, of money or securities of the character aforesaid approved by the Commission restore the said deposit with the Comptroller to the full amount originally required; and in case the Contractor shall not within such ten (10) days or such further time, if any, as may be granted by the Commission make such further deposit of money or securities, he shall, if the Commission so elect, be deemed to be in default in the performance of his obligations under this contract; and in addition to any and all other remedies against the Contractor the Commission may require the Comptroller of the Interborough Company or both the Comptroller and the Interborough Company to deduct from any moneys then due or which thereafter may become due to the Contractor under this contract such amount as may be necessary to restore the said deposit with the Comptroller to the full amount originally required; and the Interborough Company shall pay over any amount so deducted by it to the Comptroller; and the Comptroller shall hold the money so deducted (including any money so deducted and paid by the Interborough Company to him) as if part of the original deposit or as if deposited with him as aforesaid; and such moneys shall in such case be deemed to have been paid to the Contractor upon this contract. In addition to, or in lieu of, the sale above provided for, the Commission may, in the name and in behalf of the City, bring any appropriate suit or proceeding in any proper court to enforce the lien and claim of the City in and upon the said deposit, whether such deposit be in moneys or securities.

Retention of Security.

Article XXXI. If at any time when the Contractor shall otherwise be entitled to a return of the said deposit, there shall be pending any claim for injury or alleged injury to person or property occurring or alleged to have occurred on account of the work hereunder, whether by reason of the negligence, fault, or default of the Contractor or otherwise, or any claim for infringement or alleged infringement of patents or any other claim on account of any neglect, fault or default or alleged neglect, fault or default of the Contractor, for which it shall be claimed that the City shall be liable, then and in that case the said deposit, including all interest, dividends and other income thereafter accruing thereon, or such part thereof as the Commission may prescribe shall, upon the requirement of the Commission, be reserved by the Comptroller as security against such claims for a time not exceeding the time when such claims would be legally barred. If and when the liability of the City on such claim or claims shall have been established by a judgment of a court of competent jurisdiction or such claim or claims shall have been admitted by the Contractor to be valid, the City may deduct the amount of such claim or claims from the said deposit before the balance of the said deposit shall be returned to the Contractor as hereinafter provided. For the purpose of making such deduction the Comptroller may sell any of the may sell any of the securities which may constitute part of such deposit in the manner provided in Article XXX.

On Completion of Works.

Article XXXII. When the Contractor shall have fully completed the works according to the terms of this contract and the Commission shall so certify, the Comptroller shall pay and deliver to the Contractor the said deposit, or so much thereof as shall not be reserved or shall not have been used or applied for any of the purposes herein mentioned.

Retained Percentages.

Article XXXIII. In addition and as further security there shall be deducted fifteen per centum (15%) of the amounts certified from time to time to be due to the Contractor until the amount so deducted and retained shall equal ten (10) per centum of the total estimated amount to be paid to the Contractor under this contract as calculated from the estimated approximate quantities and the price contained in the Schedule of Unit Prices in the Contractor's proposal. Thereafter there shall be so deducted and retained for such purpose ten per centum (10%) of the amounts certified from time to time to be due to the Contractor. Such retained percentages shall be held as further security for the faithful performance by the Contractor of all the conditions, covenants and requirements specified and provided for in this contract. The Contractor may from time to time withdraw portions of the amounts so retained upon depositing with the Comptroller corporate stock of the City of a market value equal to the amount so withdrawn from the City or the Interborough Company, as the case may be, in which event the provisions of this chapter in respect of securities shall apply to such corporate stock. The Interborough Company shall pay to the Contractor such portion of the amounts retained by it as are to be so withdrawn from it upon the certificate of the Comptroller that such corporate stock of a market value equal to such amount to be withdrawn from it has been so deposited with him.

CHAPTER V.

PAYMENTS TO CONTRACTOR.

Amount to Be Paid by Interborough Company—Estimate and Partial Payments.

Article XXXV. The Contractor shall look to the Interborough Company for the payment of the sums earned under this contract to an amount up to but not exceeding* dollars (\$), which the Interborough Company agrees to pay at the times and in the manner herein provided, and to the City for all sums over and above such amount. The Interborough Company shall not be liable hereunder beyond said amount. In order to assist the Contractor to prosecute the work advantageously, the Engineer shall, from time to time, as the work progresses, but not more often than once a month, make in writing an estimate in duplicate, such as in his opinion shall be just and fair, of the amount and value of the work done and materials incorporated in the work by the Contractor according to the terms of this contract (but it is understood that in making such estimates the Engineer shall not necessarily be governed by the prices contained in the Schedule of Unit Prices), provided, however, that estimates may at any time be withheld or reduced, if, in the opinion of the Engineer, the work is not proceeding in accordance with this contract. The first such estimate shall be of the amount and value of the work done and materials incorporated in the work since the Contractor commenced the performance of this contract on his part. Every subsequent estimate except the final estimate shall be of the amount and value of the work done

*This blank shall be filled in before the contract is executed with an amount equal to fifty per centum (50%) of the total estimated amount to be paid to the Contractor under the contract as calculated from the estimated approximate quantities and the prices contained in the Schedule of Unit Prices in the Contractor's Proposal.

and materials incorporated in the work since the last preceding estimate was made, provided, however, that no such estimate shall be required to be made when, in the judgment of the Engineer, the total value of the work done and materials incorporated in the work since the last preceding estimate amounts to less than ten thousand (\$10,000). The Engineer shall further include accepted structural steel of all classes delivered on the site of the work or on property owned or leased by the City, but not incorporated in the work at an amount equal to sixty (60) per centum of an average price for such steel. Such average price shall be obtained by dividing the sum of the prices stipulated in Schedule Items 19 and 20 by two. But the quantity of such structural steel included in any partial estimate or estimates shall not exceed the quantity of such material, as determined by the Engineer, required for the ensuing six (6) months, and any material included in a partial estimate which may subsequently become unsatisfactory shall be deducted from succeeding partial estimates. All such steel so accepted shall be and become the property of the City. No materials not incorporated in the work, excepting such structural steel, shall be included in any estimate. Whenever the Contractor shall in the opinion of the Engineer have fully completed all work necessary for the temporary support, maintenance, safety and protection of the subsurface rapid transit railroads in Broadway and Park Row, with their appurtenances, in accordance with the terms of this contract, the Engineer shall, subject, however, to all the provisions of this contract, include in the next partial estimate after the completion of such work one-half (½) of the prices stipulated in Schedule Items 76-D and 76-E. Whenever the Contractor shall in the opinion of the Engineer have fully completed all work necessary for the permanent support, maintenance, underpinning, safety and protection of such subsurface rapid transit railroads with their appurtenances in accordance with the terms of this contract and shall in the opinion of the Engineer have completed the construction of the Railroad under and adjacent to such subsurface rapid transit railroads and shall have completed all other work which in the opinion of the Engineer might affect such subsurface rapid transit railroads, the Engineer shall, subject, however, to all the provisions of this contract, include the remaining one-half (½) of the prices stipulated in Schedule Items 76-D and 76-E in the next partial estimate after the completion of such work.

Not by Strict Measurement.

Article XXXVI. Such estimates shall not be required to be made by strict measurement, but they may be made by measurement or by estimation, or partly by one method and partly by the other, and it shall be sufficient if they are approximate only.

Vouchers.

Article XXXVII. Upon each such estimate being made and certified in writing to the Commission, the Commission shall forthwith prepare and certify two vouchers aggregating eighty-five (85) or ninety (90) per centum of the amount stated in such estimate or certified to be the value of the work done and materials furnished as provided in Article XXXIII. One of such vouchers shall be payable by the City and the other of such vouchers shall be payable by the Interborough Company. The voucher payable by the City shall be for an amount equal to fifty per centum (50%) of such estimate less fifty per centum (50%) of the amount to be deducted from such estimate as retained percentages as provided in Article XXXIII. The voucher payable by the Interborough Company shall be for an amount equal to fifty per centum (50%) of such estimate less fifty per centum (50%) of the amount to be deducted from such estimate as retained percentages as provided in Article XXXIII. The Commission shall thereupon transmit the voucher payable by the Interborough Company accompanied by a duplicate original of such estimate to the Interborough Company for payment and the Interborough Company within thirty (30) days after the receipt of such voucher shall pay the same to the Contractor. The voucher payable by the City shall be paid within thirty (30) days after the date of the certification of such voucher by the Commission. Provided, however, that the City may and the Interborough Company may, and upon the requirement of the Commission, shall at all times reserve and retain from said partial payments or any of them, in addition to the ten (10) or fifteen (15) per centum mentioned in Article XXXIII, any sum or sums which by the terms hereof, or of any law of the State of New York, either the City or the Interborough Company, or both the City and the Interborough Company, may be authorized to reserve or retain.

Final Estimate.

Article XXXVIII. Whenever, in the opinion of the Engineer, the Contractor shall have completely performed this contract on his part and all work under this contract, the Engineer shall so certify in writing and in duplicate to the Commission, and in his certificate shall state, from actual measurements, the whole amount of work done by the Contractor and also the value of such work under and according to the terms of this contract and also the balance remaining of the maximum amount specified in Article XXXV hereof for which the Interborough Company is liable hereunder after deducting all such sums as shall theretofore have been paid by the Interborough Company to the Contractor under the provisions of this contract (including interest, if any, paid under the provisions of Article XXXIX hereof) and any other sum or sums which the Engineer shall state in such certificate should be deducted. Upon the receipt of such certificate the Commission shall forthwith prepare and certify two final vouchers (or one, payable by the Interborough Company, in the event hereinafter specified) aggregating the amount remaining after deducting from the amount or value of the work done under and according to the terms of this contract as stated in such certificate all such sums as shall theretofore have been paid to the Contractor under any of the provisions of this contract (exclusive of interest, if any, paid under the provisions of Article XXXIX) and also any such sum or all such sums of money as by the terms hereof either the City or the Interborough Company or both the City and the Interborough Company may be authorized to reserve or retain; provided, however, that nothing herein contained shall be construed to affect the right, hereby reserved, of the Commission to reject the whole or any portion of the aforesaid work should the said certificate be found or known to be inconsistent with the terms of this contract or otherwise improperly given. All prior certificates upon which partial payments may have been made, being merely estimates, shall be subject to correction in the final certificate, which final certificate may be made without notice thereof to the Contractor, or of the measurements upon which it is based. One of such final vouchers shall be payable by the City and the other shall be payable by the Interborough Company. The voucher payable by the Interborough Company shall be for the balance remaining of such maximum amount specified in Article XXXV hereof for which the Interborough Company is liable hereunder or so much thereof as may have been certified by the Engineer; provided, however, that if such balance or so much thereof as may have been certified by the Engineer shall equal or exceed the amount aforesaid remaining from the amount or value of the work done under and according to the terms of this contract as stated in such certificate after making the deductions aforesaid, then the voucher payable by the Interborough Company shall be for such remaining amount, and no voucher shall in that case be prepared or certified for payment by the City. The Commission shall transmit such voucher payable by the Interborough Company accompanied by the duplicate original of such final certificate to the Interborough Company and the Interborough Company on or before the expiration of ninety (90) days after the receipt of such voucher and certificate shall pay the amount due on such voucher. The voucher payable by the City shall be for the difference between the amount aforesaid remaining from the amount or value of the work done under and according to the terms of this contract as stated in such certificate after making the deductions aforesaid and the amount of the voucher payable by the Interborough Company. The City shall pay the amount due on such voucher payable by it on or before the expiration of ninety (90) days after the acceptance of the work herein agreed to be done by the Contractor and the filing of a certificate of the completion and acceptance of the work in the office of the Comptroller signed by the Engineer and the Commission.

Interest on Delayed Payments.

Article XXXIX. If the payment of the amount due the Contractor on any voucher shall be delayed beyond the time stipulated in Article XXXVII in the case of partial payment, or Article XXXVIII in the case of final payment the City shall pay if the delay shall occur in the case of a voucher payable by the City and the Interborough Company shall pay if the delay shall occur in the case of a voucher payable by the Interborough Company to the Contractor interest on such amount at the rate of four and one-half (4½) per centum per annum for the period of such delay; it being understood that such payments of interest, if any, are to be in lieu of any claim of the Contractor for alleged damages for breach of contract or otherwise in case of delayed payments. Provided, however, that the Contractor shall not be entitled to interest on any sum or sums which by the terms hereof or of any law of the State of New York either the City or the Interborough Company or both the City and the Interborough Company may be authorized to reserve or retain. The term for which interest shall be paid shall be reckoned, in the case of a partial

payment by the City from the thirtieth day after the certification of such voucher by the Commission and in the case of a partial payment by the Interborough Company from the thirtieth day after the receipt of such voucher by the Interborough Company, and in the case of a final payment by the City from the ninetieth day after the acceptance of the work by the Commission and the filing of such certificate of the completion and acceptance of the work in the office of the Comptroller, and in the case of a final payment by the Interborough Company from the ninetieth day after the date of the receipt of such voucher and the final certificate by the Interborough Company, to the date of payment of the voucher. The date of payment of a voucher shall be considered the day on which the voucher is ready for payment as evidenced by the records of the Department of Finance or of the Interborough Company, as the case may be. If interest shall become due on any partial payment the amount thereof, as determined by the Commission, shall be added to a succeeding payment. If interest shall become due on a final payment it shall be paid on a supplementary voucher prepared by the Commission and forwarded to the Comptroller or the Interborough Company, as the case may be, for payment in the usual manner. But the provisions of this Article as to payment by the Interborough Company of interest on any final payment due from the Interborough Company shall be subject, as between the City and the Interborough Company, to the provisions of Article XII of said contract dated March 19, 1913, to the effect that if, after the contribution of the Interborough Company shall have been exhausted, there shall accrue any valid claim against the Interborough Company in connection therewith, whether by reason of outstanding contracts or otherwise, the City shall on demand of the Interborough Company promptly settle and pay such claim or claims.

Provided, however, that the Interborough Company shall not be entitled to charge to cost of construction or cost of equipment under the said contract of March 19, 1913, interest on any payment the delay in the payment of which has been occasioned otherwise than in good faith or for causes beyond the control of the Interborough Company.

No Estoppel.

Article XL. The City shall not, nor shall any Department or officer thereof, be precluded or estopped by any return or certificate made or given by the Commission, any Engineer, or other officer, agent or appointee thereof under any provision of this contract, from at any time either before or after the final completion and acceptance of the work and payment therefor pursuant to any such return or certificate, showing the true and correct classification, amount, quality and character of the work done and materials furnished by the Contractor or any other person under this contract, or from showing at any time that any such return or certificate is untrue and incorrect or improperly made in any particular, or that the work and materials, or any part thereof, do not in fact conform to the specifications; and the City shall not be precluded or estopped, notwithstanding any such return or certificate and payment in accordance therewith, from demanding and recovering from the Contractor such damages as it may sustain by reason of his failure to comply with this contract or the specifications.

No Waiver.

Article XLI. Neither the acceptance of the Commission or its Engineer, or any of its employees, nor any order, measurement or certificate by the Engineer, nor any order by the Commission for payment of money, nor any payment for, nor acceptance of, the whole or any part of the work, nor any extension of time nor any possession taken by the Commission, or its employees, shall operate as a waiver of any portion of this contract or of any power herein reserved to the Commission, or of any right to damages herein provided; nor shall any waiver of any breach of this contract be held to be a waiver of any other or subsequent breach.

Final Payment to Terminate Liability of City.

Article XLII. The acceptance by the Contractor of the final payment by the City aforesaid or the final payment by the Interborough Company in the event that no final voucher shall be prepared or certified for payment by the City as aforesaid shall be and shall operate as a release to the City from all claim and liability to the Contractor for anything done or furnished for, or relating to, the work or for any act, neglect, fault or default of the Commission, the City, the Interborough Company or of any person relating to or affecting the work, except only the claim against the City for the remainder, if any there be, of the amounts kept or retained by the City as provided in this contract. The acceptance by the Contractor of payments by the Interborough Company, whether partial or final, aggregating the maximum amount specified in Article XXXV hereof shall be and shall operate as a release to the Interborough Company from all claim and liability to the Contractor hereunder.

Contractor's Claims for Damages.

Article XLIII. If the Contractor shall claim compensation for any damage sustained by reason of any act, neglect, fault or default of the City or the Commission or their agents, he shall, within ten (10) days after the sustaining of such damage, make a written statement to the Engineer of the nature of the damage sustained. On or before the fifteenth day of the month succeeding that in which any such damage shall have been sustained, the Contractor shall file with the Engineer an itemized statement of the details and amount of such damage, and, unless such statement shall be made as thus required, his claim for compensation may in the discretion of the Commission be forfeited and invalidated and he shall not be entitled to payment on account of any such damage.

Lien Law.

Article XLIV. All the provisions of the Lien Law relating to liens under contracts for public improvements and the discharge and enforcement thereof shall be deemed to apply to the moneys of the Interborough Company to the extent of the amount thereof due or to become due to the Contractor under this contract as though such moneys were the moneys of the City applicable to this contract, provided, however, that the notice of such lien and all subsequent notices relating thereto shall be served upon the Interborough Company as well as upon the Comptroller and the Commission.

If at any time before or within thirty (30) days after the whole work agreed herein to be performed has been completed and accepted by the City, any person or persons claiming to have performed any labor or furnished any material toward the performance or completion of this contract shall file with the Commission and with the Comptroller (and with the Interborough Company in case a lien is sought upon the moneys of the Interborough Company as aforesaid) any such notice as is described in the Lien Law, the City or the Interborough Company, or both the City and the Interborough Company may retain from any moneys which would otherwise be payable to the Contractor hereunder by the City or the Interborough Company an amount or amounts sufficient to satisfy and discharge the amount in such notice claimed to be due, together with the costs of any action or actions brought to enforce such lien created by the filing of such notice, until such lien shall be discharged as provided by law. If such lien shall be foreclosed according to law, then the City or the Interborough Company or both the City and the Interborough Company may pay the amount necessary to satisfy such lien with interest and costs, to the person entitled thereto, and such payment shall be deemed to be a payment hereunder to the Contractor by the City or the Interborough Company or both the City and the Interborough Company, as the case may be. If the amount or amounts so retained shall not be sufficient to satisfy such lien so foreclosed with interest and costs, the deficiency may be retained by the City or the Interborough Company or both by the City and the Interborough Company out of any moneys thereafter becoming due to the Contractor hereunder.

CHAPTER VI.

CONTRACTOR'S LIABILITY FOR INJURIES TO PERSONS OR PROPERTY.

Contractor Approves Drawings as Involving no Damage.

Article XLV. The Contractor expressly admits and covenants that the drawings and specifications and other provisions of this contract, if the work be done without fault or negligence on the part of the Contractor, do not involve any danger to the foundations, walls or other parts of adjacent, abutting or overhead buildings or structures or surfaces, including said rapid transit railroads in Broadway, Park Row, Mail Street and Nassau Street, their appurtenances, equipment and rolling stock, and the Contractor will at his own expense make good any damage that shall in the course of construction, be done to any such foundations, walls or other parts of adjacent, abutting or overhead buildings or structures or surfaces. The liability of the Contractor under this covenant is absolute and is not dependent upon any question of negligence on his part, or on the part of his agents, servants or employees, and the neglect of the Engineer to direct the Contractor to take any particular precautions or to refrain from doing any particular thing, shall not excuse the Contractor in case of any such damage.

It is the intention of the parties to this contract that in addition to indemnifying the City against all claims for damages, the Contractor shall also be liable to the owners of adjacent, abutting or overhead property, buildings or structures, including

said rapid transit railroads in Broadway, Park Row, Mail Street and Nassau Street, their appurtenances, equipment and rolling stock, and to all tenants, lessees or occupants of such buildings or structures, for all physical injuries to property or person which may be occasioned by the work of construction, even in cases where such owners, tenants, lessees or occupants have no legal claim against the City for such injuries.

Traffic to be Maintained.

Article XLVI. The Contractor shall during the performance of the work, safely maintain the traffic on streets, avenues, highways, or other public places, as provided in the specifications, and shall take all necessary precautions to place proper guards for the prevention of accidents, and shall put up and keep at night suitable and sufficient lights.

Indemnification for Accidents, etc.

Article XLVII. The Contractor shall be responsible for all physical injuries to person or property occurring on account of the work hereunder, and shall indemnify and save harmless the City from liability upon any and all claims for damages on account of such injuries to person or property, and from all costs and expenses in suits which may be brought against the City for such injuries to person or property; it being distinctly understood, stipulated and agreed that the Contractor shall be responsible and liable for and shall fully protect and indemnify the City against all claims for damages to person or property occasioned by or resulting from blasting or other methods or processes in the work of construction whether such damages be attributable to negligence of the Contractor or his employees or otherwise.

Damages Repaired.

The Contractor shall upon the completion of the work of underpinning and other work connected with the construction of the Works satisfactorily repair any damage to abutting buildings that may have resulted from the construction of the Works or any operation connected therewith and shall satisfactorily restore such buildings; provided, however, that the owners of such buildings shall permit him to do such work of repair and restoration. The Contractor shall also upon the completion of the work of underpinning and other work connected with the construction of the Works satisfactorily repair any damage to said rapid transit railroads in Broadway, Park Row, Mail Street and Nassau Street or their appurtenances that may have resulted from the construction of the Works or any operation connected therewith and shall satisfactorily restore such rapid transit railroads and their appurtenances. The Engineer shall have the right to order any such repairs and restorations and the Contractor must abide by his decision as to whether such repairs or restorations are necessary and as to whether the necessity therefor has been occasioned by reason of the construction of the Works or any operation connected therewith. The Contractor shall not be relieved from the obligation to make such repairs and restorations by any claim that the damage was unavoidably incurred by reason of any operation carried on by him whether such operation was ordered by the Commission or the Engineer or not. The Contractor further admits that the cost of all repairs and restorations is included in the prices mentioned in the Schedule of Unit Prices.

Contractor's Liability.

Article XLVII-A. The above provisions of this Chapter relative to the Contractor's liability shall remain in full force and effect, but in pursuance of the suggestion of the Appellate Division of the Supreme Court in and for the First Judicial Department in *Matter of Public Service Commission (Park Place Route)*, 154 App. Div. 87, 591 and of the resolutions relative thereto adopted by the Commission and by the Board of Estimate and Apportionment of the City it is understood and agreed that the City shall be primarily liable to the owners of abutting property and of buildings thereon for physical damages to such property and buildings howsoever caused by the construction of the Works. The Contractor shall, however, indemnify and save harmless the City against and from any and all such damages and claims therefor and all costs and expenses in connection therewith; provided, however, that the City shall upon the written request of the Contractor afford him all reasonable opportunity to assist in the defense against such claims.

Money Due Contractor May be Retained to Meet Claims.

Article XLVIII. In case any claim shall be made at any time by any person or corporation against the Contractor or the City for injury or alleged injury to person or property occurring or alleged to have occurred on account of the work hereunder, whether by reason of the negligence, fault or default of the Contractor or otherwise, or for any infringement or alleged infringement of patents or for any neglect, fault or default or alleged neglect, fault or default of the Contractor, the amount of such claim or so much thereof as the Commission may deem reasonable shall, upon the requirement and in the discretion of the Commission, be retained by the Comptroller or by the Interborough Company or both by the Comptroller and the Interborough Company out of any moneys then due or thereafter growing due to the Contractor hereunder (in addition to the other sums herein authorized to be so retained) as security for the payment of such claim or claims. If and when the liability of the City or the Contractor on such claim or claims shall have been established by a judgment of a court of competent jurisdiction or such claim or claims shall have been admitted by the Contractor to be valid, the said claim or claims may be paid from the amount so retained and the balance, if any, paid to the Contractor. Should there be any unsatisfied claim or claims for injury or alleged injury to person or property occurring or alleged to have occurred on account of the work hereunder, whether by reason of the negligence, fault or default of the Contractor or otherwise, or for any infringement or alleged infringement of patents or for any neglect, fault or default or alleged neglect, fault or default of the Contractor, at the time when the final voucher or vouchers for the work are prepared and certified, the Commission shall have the right to retain out of the final payment or payments and to deduct from the amount of the final voucher or vouchers a sum in its judgment sufficient to protect the City in regard to all unsatisfied claims as aforesaid and in case the amount thus retained should be insufficient to pay the amount adjudicated to be due upon such claim or claims, the City may sue for and recover from the Contractor the amount or balance as a debt from the Contractor to the City. The Commission may further, if in its judgment such a course is necessary or proper, at the time of preparing and certifying the final voucher or vouchers and as a condition of preparing and certifying the same, require the Contractor to continue his bond or other security or any part thereof as security against any claims then unsatisfied or not presented for a time not exceeding the time when such claims would be legally barred.

Examinations of Abutting Property.

Article XLIX. In order to safeguard the owners and tenants of adjacent or abutting property and at the same time prevent unjust or fraudulent claims against the Contractor or the City in respect thereto, the Engineer shall cause a detailed examination of all adjacent or abutting property to be made before construction is begun. The owner or tenant of each parcel or his or their duly authorized representative, shall be invited by a notice in writing delivered to a person apparently in charge of the premises, to be present, and the Contractor, or his duly authorized representative, shall attend and with the Engineer shall make such detailed examination. A complete record of the existing conditions of each parcel shall be made in triplicate, signed by the Engineer and the Contractor, and one copy shall be delivered to the owner, one to the Contractor and one shall be retained by the Commission. At such times as the Engineer may direct, and upon the completion of the work, or upon notice to the Engineer by the owner or tenant that physical injury has occurred, further examination shall be made and the findings recorded and filed as above.

Damage to Works During Construction.

Article L. All risk of loss or damage to the Works, or to any part thereof, or to any of the materials, plant, tools, implements or other things used in doing the work, prior to final completion, is assumed and shall be borne by the Contractor, and any such loss or damage shall be made good by the Contractor at his own cost, and the construction shall be carried forward by him in accordance with this contract, without additional cost to the City or the Interborough Company by reason of such loss or damage.

CHAPTER VII.

CITY TO SECURE CONTRACTOR AGAINST INTERFERENCE BY INJUNCTIONS, ETC.

City's Assurances to Contractor of Right to Construct.

Article LI. The City hereby stipulates and covenants to and with the Contractor that the City will secure and assure to the Contractor so long as the Contractor shall perform the stipulations of this contract, the right to construct the Railroad as prescribed in this contract free of all right, claim or other interference, whether by injunction, suit for damages or otherwise, on the part of any owner, abutting owner, or other person; but not including any interference, legal or otherwise, by patentees or persons claiming to be patentees of tools, methods or appliances.

Claims for Infringements of Patents.

Article LII. The Contractor shall hold himself and shall be responsible for any claims made against the City for any infringement of patents by the use of patented tools, articles or appliances in the performance or completion of the work or by the use of any process or method connected with the work or by the use of any materials used upon the work; and he shall save harmless and indemnify the City from and against all costs, expenses and damages which the City shall incur or be obliged to pay by reason of any such infringement.

City to Acquire Real Estate.

Article LIII. The City will secure and assure to the Contractor, so long as the Contractor shall perform the stipulations of this contract, a temporary right and easement for the construction of the Railroad in, under, through and across the northerly portion of the property of the United States in the block bounded by Broadway, Park Row and Mail Street, which temporary right and easement is mentioned and described in the form of deed from the United States to the City, a copy of which is printed as a part of this contract as an appendix to the specifications. The said temporary right and easement shall include the right to construct the Railroad and for such purposes, and as incidental thereto, properly, adequately and safely to maintain, support, shore, buttress and underpin the United States Court House and Post-Office Building erected upon said block and to excavate such soil and other materials under the said building and to remove such portion of the foundations, walls and floors of the said building as may be necessary for the purposes indicated and to remove and dispose of such soil and other excavated material together with such portions of the foundations, walls and floors of said building as may be necessary to remove for the said purposes without accounting therefor, and to enter into and take possession of such portion of the subbasement of the said building as may be necessary for the purpose of constructing the Railroad, and either temporarily or permanently to remove and relocate such machinery and appurtenances of the said building (including any and all sub-surface pipes or structures used by or in connection with the Post Office) as may be necessary for the purpose of constructing the Railroad, and for the purpose of maintaining, supporting, shoring, buttressing and underpinning the said building and of making such excavations and removals, to such places and positions as may be determined and approved by the then Secretary of the Treasury of the United States or by such person or persons as may from time to time be directed by and be acting for such then Secretary of the Treasury to make such determination and approval. Together with, and including, the right to construct and maintain during the period of constructing the Railroad a shaft and hoist at the westerly side and a shaft and hoist at the easterly side of the said building, at the locations as shown on the drawings referred to in the said form of deed from the United States to the City (which drawings are on file in the office of the Commission), for the purpose of removing such soil and other excavated material together with such portions of the foundations, walls and floors of said building from the said subbasement to the surface of the street and for bringing in materials from the surface of the street to the said subbasement, such shafts and hoists to be located, and to be of the kind, character and nature as shown upon the said drawings referred to in the said form of deed.

Limits of Easement.

Such temporary right and easement shall not include any right to enter upon, use or occupy or remove any portion of the said building except as hereinbefore provided, nor shall said easement and right include the right to enter upon, use or occupy or remove any portion of the said building above the subbasement thereof except for the purpose of the construction and maintenance, during the construction of the Railroad, of the shafts and hoists hereinbefore referred to; nor shall the said right and easement include the right to enter upon, use or occupy or remove any portion of the walls or floors of the said building above the subbasement thereof except for the purposes of such shafts and hoists or to interfere with the continued occupancy of the said building above the subbasement thereof except and so far as said occupancy may necessarily be interfered with by reason of the proper operation and maintenance, during the construction of the Railroad, of such shafts and hoists, nor shall such right and easement include the right to interfere with the continued occupancy of those portions of the subbasement of the said building upon which the City is not granted under the terms of said form of deed the right to enter.

Contractor to Replace Machinery, Etc.

If and when any of such machinery and appurtenances (including any and all sub-surface pipes or structures used by or in connection with the Post Office) shall be relocated as aforesaid, the Contractor at his own cost and expense shall cause the same together with various parts, appliances and connections thereof to be properly attached and connected so as to place them in a condition in which they are capable of as efficiently and properly performing their intended purposes and functions as they respectively were at the time they were removed from their original location. If during the construction of the Railroad, by reason of such relocation or because of interference with existing heat, steam or electric plants and connections caused by the construction of the Railroad (including such shafts or hoists) the existing heat, steam and electric service is shut off or interrupted, the Contractor will and shall at his own cost and expense make or cause to be made such arrangements as may be necessary to supply the said building with such heat and steam and electric power as may be necessary and proper to carry on, without interruption, the business of the Post-Office and United States Court in said building.

Not to Interfere with Traffic.

The said shafts and hoists shall be so operated and controlled by the Contractor as not to create unnecessary or unreasonable interference with the passage of pedestrians and vehicles in and upon the streets and sidewalks adjoining and adjacent to the said Court House and Post Office Building. All liability hereafter assumed by the Contractor as indemnification of the United States, its custodians and officials and employees or any of them, as to the construction of the Railroad, shall apply to the construction, operation and maintenance of the said hoists and shafts.

The said shafts and hoists shall also be so operated, constructed and controlled by the Contractor, as not to interfere with any pending plans for reconstruction work in and about the said United States Court House and Post Office Building or any part thereof.

United States Court House and Post-Office Building.

The Contractor shall properly, adequately and safely, during the construction of the Railroad, underpin, buttress, shore, support and maintain the United States Court House and Post-office Building and each and every part and portion thereof, all as more particularly provided in Section 446 of the Specifications.

The continued occupancy of the said building above the sub-basement thereof and of such portions of the sub-basement as the City is not granted under the terms of said form of deed the right to enter upon shall not be interfered with except so far as may be necessarily required for the purposes of such shafts and hoists hereinbefore referred to or necessarily required for maintaining, supporting and underpinning the said building.

In the event that any accident or mishap arising from, out of or on account of the construction of the Railroad should so interfere with the use and occupation of the said building as used and occupied at the date of delivery of said deed by the United States or any part or portion thereof that it shall be and become necessary for the United States to procure space and quarters for the purpose of its Post Office Department or for Court House purposes outside the said building, the Contractor shall reimburse the United States and the City for any and all proper, reasonable and necessary costs and expense to which they or either of them shall or may be put by reason of such interference with the use and occupation of the said building.

Removal of Machinery.

Any removals of the machinery and appurtenances of said building (including any and all sub-surface pipes or structures used by or in connection with the Post Office) and relocations of the same shall be made by the Contractor at his own expense and without expense to the United States and shall be made as expeditiously and with as little inconvenience to the United States as possible, and all such machinery and appurtenances (including any and all sub-surface pipes or structures used by or in connection with the Post Office, so removed and relocated shall be either restored by the Contractor at his own expense upon the completion of the construction of the Railroad to the positions occupied by them at the date of delivery of said deed or else the same shall be relocated by the Contractor at his own expense in some other proper and convenient position to be determined as hereinbefore provided, and upon the completion of the construction of the Railroad, in, under, through and across the said land of the United States including the completion of the underpinning and supporting of the said building as aforesaid, all portions of the said building and machinery therein and all appurtenances thereof (including any and all

sub-surface pipes or structures used by or in connection with the Post Office) interfered with by the said construction shall be restored by the Contractor at his own expense to and left in as good a condition as the same were in at the date of said deed, necessary changes, removals and relocations due to the construction of the Railroad or due to said underpinning and supporting alone excepted.

Indemnification.

The Contractor shall at his own expense remove the said shafts and hoists on the said Broadway and the said Park Row sides of the said building, and shall restore the pavements and sidewalks adjoining and adjacent to the said Court House and Post Office Building so that the same shall be in good order and repair. And in the event that the said building shall have been injured or damaged in any way whatsoever by the construction, operation or maintenance of said shafts and hoists or through any other cause whatsoever arising out of the construction of the Railroad, the same shall be restored to as good order and repair as the same was in at the date of said deed; payment therefor being included in Schedule Item 4-N.

The Contractor shall forever indemnify and save harmless the United States, its respective custodians, officials and employees who may, from time to time, be in charge of and exercise a control over and upon the above described land of the United States or any part thereof from and against any and all suits, damages, judgments, litigations, claims of any kind whatsoever, costs, expense and charges of any kind which may be instituted, recovered, made, incurred or which may be claimed by any person or persons whomsoever (whether arising or growing out of any liability which does or may exist either under the laws of the State of New York, whether common or statutory or whether now or hereafter existing; or which may be allowed by or grow out of or result from any statutes, rules or regulations of the United States or of any of its Executive Departments and whether now in force or whether hereafter enacted or promulgated, which impose or may impose liability for either personal or property damage of any kind whatsoever upon the United States, its custodians, officials and employees or any of them as aforesaid) and which said damages, judgments, claims, costs and expense, as aforesaid, may be or are occasioned and arise by reason of or through the construction of the Railroad or the construction, operation or maintenance of the said shafts and hoists in the manner hereinbefore referred to and contemplated hereby or which may grow out of the entering in, upon and under the above described premises by the Contractor, irrespective of whether such entry be permissive or otherwise.

The Contractor shall not do anything in or upon the said land of the United States which is not authorized and permitted by, and within the terms of, the said deed and the rights and easements thereby granted or to be granted to the City, and the Contractor shall indemnify and save harmless the City from all loss, damage and expenses suffered or incurred or to which it may be put (including all loss, damage and expenses and indemnifications paid to the United States or for which the City shall be liable to the United States under the terms of said deed) by reason of any failure of the Contractor to observe or comply with any of his obligations under this Article or to observe or comply with any of the terms and conditions of said deed.

It is expected that the said deed for said temporary right and easement through the said United States Court House and Post Office property will be executed and delivered before or shortly after the execution and delivery of this contract. The City will secure said temporary right and easement for the Contractor within thirty (30) days after written demand is made by the Contractor upon the Commission therefor. In case the City shall fail to secure said temporary right and easement for the Contractor within such thirty (30) days and in case the Contractor shall be actually and necessarily delayed by reason of such failure and cannot, notwithstanding such failure, with reasonable diligence make up for the delay so occasioned by speedier work when the Contractor shall not be so delayed, then as provided in Article LV the date for the completion of the Works shall be extended by resolution of the Commission by the amount of the time of such delay as determined by the Commission; but no allowance by way of damages will be made for such delay. Whenever in the opinion of the Commission the use of said United States Court House and Post Office property as permitted by said temporary right and easement is no longer required by the Contractor for the construction of the Railroad or in case the Commission in any of the events stated in Article LXII shall require the Contractor to discontinue the work or any part thereof and shall require the Contractor to quit and surrender said property, the Contractor shall forthwith quit and surrender the same; and in case of his failure so to do the Commission may remove him therefrom at his own risk and charge the expense of such removal to him.

CHAPTER VIII.

TIME FOR COMPLETION, DAMAGES FOR DELAY, ETC.

Commencement and Completion of Work.

Article LIV. Time is of the essence of this contract. The Contractor shall begin actual work within sixty (60) days after the date of delivery of this contract and shall thenceforth prosecute the work continuously and diligently. The entire work covered by this contract shall be completed in all respect within twenty-eight (28) months from the date of delivery of this contract.

Damages for Delay.

Article LV. In the event of delay in completion of the Works beyond the period herein prescribed, or beyond the period to which such time may be extended by resolution of the Commission for good cause shown, the City shall—whether the working force be increased, as provided in the specifications or not—be paid damages for such delay. Inasmuch as the amount of such damages will be extremely difficult to ascertain, especially in view of the fact that the Railroad is only a part of a complete system, the remainder of which is to be constructed under other contracts, it is hereby expressly agreed that such damages shall be liquidated and paid as follows: The Contractor shall pay to the City for each and every day, except Sundays and legal holidays, that he shall be in default in completing the entire work to be done under this contract the sum of three hundred dollars (\$300), which sum is hereby agreed upon not as a penalty but as liquidated damages which the City will suffer by reason of such default. The City may deduct or may require the Interborough Company to deduct or may both deduct and require the Interborough Company to deduct such amounts from any moneys due or which may thereafter become due to the Contractor under this contract. But in case the Contractor shall be actually and necessarily delayed by reason of any labor strike not caused or instituted or provoked by the Contractor or by any subcontractor, agent or representative of the Contractor or in case the Contractor shall be actually and necessarily delayed by any injunction or by any interference of public authority or by the suspension of the whole or any part of the work by the Commission as provided in Article LVIII or by the failure of the Commission to put him in possession of the temporary right and easement in the United States Court House and Post Office property referred to in Article LIII as therein provided, and in case the Contractor cannot, notwithstanding such strike, injunction, interference, suspension or failure, with reasonable diligence make up for the delay so occasioned by speedier work when the Contractor shall not be so delayed, then the said date for completion shall except as hereinafter provided be extended by resolution of the Commission to a date later than the expiration of the said period of twenty-eight (28) months by the amount of the time of such delay as determined by the Commission.

Commission May Intervene in Case of Injunctions.

Article LVI. But no injunction, strike or interference of public authority shall be ground for such extension unless and until the Contractor shall give the Commission notice of the injunction or other cause of delay, with copies of the injunction or other orders and of the papers upon which the same shall have been granted, and no extension shall be granted except for the delay occasioned after the giving of such notice. Nor shall any extension be granted in any case unless the Contractor shall prove to the satisfaction of the Commission all the facts which entitle him to such extension. The Commission and the City, or either, shall be accorded the right to intervene or become a party to any suit or proceeding in which any such injunction shall be obtained, and to move to dissolve the same or otherwise, as the Commission or the City may deem proper. If necessary the Corporation Counsel or the Counsel to the Commission, or both, shall be authorized by the Contractor to appear, for that purpose, as counsel or attorneys for him.

Suspension of Work and Additional Time for Performance.

Article LVIII. The Commission reserves the right of temporarily suspending the execution of the whole or any part of the work herein contracted to be done, if it shall deem it for the interest of the City so to do, without compensation to the Contractor for such suspension, other than extending the time for completing the work as hereinbefore provided as much as, in the opinion of the Commission, it may have been delayed by such suspension.

Extensions Not Cumulative.

Article LX. Only the actual delay necessarily resulting from one or more of the causes above mentioned shall be ground for extension of time, and in case the Contractor shall be delayed at any time or for any period by two or more of the causes above mentioned, only one period of extension, if any, shall be granted for such delay and the Contractor shall not be entitled to a separate extension for each one of the causes so operating, it being understood that only the actual period of necessary delay, as determined by the Commission, irrespective of the number of causes contributing to produce such delay, will be ground for extension of time.

Permission to Complete Contract Not a Waiver.

Article LXI. The permitting of the Contractor to go on and finish the work, or any part of it, after the time fixed for its completion, or after the date to which the time for completion may have been extended, or the making of payments to the Contractor after any of such periods, shall in no wise operate as a waiver on the part of the City or the Interborough Company of any of its rights under this contract.

CHAPTER IX.

REMEDIES IN CASE OF CONTRACTOR'S DEFAULT.

In Case of Default.

Article LXII. If the work to be done under this contract shall be abandoned by the Contractor, or if this contract shall be assigned, or the work sublet by him, otherwise than as herein specified, or if at any time the Engineer shall be of opinion, and shall so certify in writing to the Commission that the performance of this contract is unnecessarily or unreasonably delayed, or that the Contractor is wilfully violating any of the provisions or covenants of this contract, or of the specifications, or is not executing the same in good faith and in accordance with the terms hereof, or if the work be not fully completed within the time named in this contract for its completion or within the time to which the completion of this contract may be extended by the Commission, or (in view of the necessity for special skill and ample financial resources in the prosecution of the work) if the Contractor shall become insolvent or bankrupt or if his property or affairs shall be put in the hands of a receiver or receivers, then and in any of such cases.

May Take Charge of Work.

(1) The Commission may notify the Contractor, by a written notice, to discontinue all work or any part thereof under this contract, and thereupon the Contractor shall discontinue the work or such part thereof, and the Commission shall thereupon have the right to contract for the completion of the Works or such part thereof in the manner prescribed by law or to place such and so many persons as it may deem advisable, by contract or otherwise, to work and complete the work herein described or such part thereof, to take possession of and use any or all of the materials, plant, tools, equipment, supplies and property of every kind provided by the Contractor for the purpose of his work, and to procure other materials, plant, tools, equipment, supplies and property for the completion of the same, and to charge the expense of said labor, materials, plant, tools, equipment, supplies and property to the Contractor. The expense so charged may be deducted and paid by the City out of such moneys as may be due or may at any time thereafter grow due to the Contractor under and by virtue of this contract; and the Interborough Company shall, upon the requirement of the Commission, deduct and pay to the City out of such moneys as may be due or may at any time thereafter grow due to the Contractor from it under and by virtue of this contract, the amount of such expense or such portion thereof as the Commission shall require, to be applied by the City to the payment of such expense, and such moneys so deducted and paid to the City shall be deemed to have been paid to the Contractor by the Interborough Company upon this contract. And in case such expense of completing the Works or such part thereof shall exceed the amount which would have been payable under this contract for the same work and materials if this contract had been completed by the Contractor, he shall pay the amount of such excess with interest to the City; and in case such expense shall be less than the amount which would have been payable under this contract for the same work and materials if this contract had been completed by the Contractor, he shall forfeit all claim to the difference; and when any particular part of the work is being carried on by the Commission, by contract or otherwise, under the provisions of this Article, the Contractor, unless he shall have been directed to discontinue all work, shall continue the remainder of the work in conformity with the terms of this contract and in such manner as in no wise to hinder or interfere with other contractors of the Commission or with the persons or workmen employed, as above provided, by the Commission, by contract or otherwise, to do any part of the work or to complete the same under the provisions of this Article. The Contractor shall also in any and every such case and in the case of any and every act, neglect, delay, fault or default of the Contractor, in addition to the liability above expressed, pay to the City as liquidated damages for any delay resulting therefrom in the construction and completion of said portion of said rapid transit railroad which the Contractor herein agrees to construct with its appurtenances the sum of three hundred dollars (\$300) for each and every day, except Sundays and legal holidays, of such delay, which sum is hereby agreed upon not as a penalty but as liquidated damages which the City will suffer by reason of such delay in the construction and completion of said railroad. And

Or Proceed Upon Bond.

(2) The City may also proceed as to the Commission shall seem proper upon the Bond or other surety in its possession. And

Or May Bring Suit.

(3) The City may also bring any suit or proceeding for specific performance or for injunction or to recover damages or to obtain any other relief or for any other purpose proper under this contract.

Engineer's Certificate of Expense.

Article LXIII. In case the Commission shall by contract or otherwise complete the Works or any part thereof under the provisions of Article LXII, the Engineer, upon the completion of the Works or such part thereof or at any time thereafter upon demand in writing by any party hereto or from time to time during the course of the completion of the Works or such part thereof upon demand by the Commission, shall certify to the amount of the expense incurred by the City in the completion of the Works or such part thereof, and said certificate shall be final and conclusive and admissible in evidence against the Contractor in any litigation arising or growing out of this contract.

Remedies.

Article LXIV. The City may avail itself of each and every remedy herein specifically given to the City or now or hereafter existing at law or in equity or by statute, and each and every such remedy shall be in addition to every other remedy so specifically given or otherwise so existing and may be exercised from time to time and as often and in such order as may be deemed expedient by the Commission, and the exercise, or the beginning of the exercise, of one remedy shall not be deemed to be a waiver of the right to exercise, at the same time or thereafter, any other remedy, except that no two inconsistent remedies shall be exercised at the same time.

CHAPTER X.

MISCELLANEOUS PROVISIONS.

Changes in the Contract.

Article LXV. No correction or change in this contract shall be made except by written instrument duly authorized by the Commission and consented to by the Contractor and by the sureties upon his bond, and if any such correction or change affects the obligations of the Interborough Company hereunder, by the Interborough Company; but this provision shall not limit or affect the right to prescribe variations whether of construction or location of route as in this contract elsewhere provided.

Members of Commission Not Liable.

Article LXVI. No claim shall be made by the Contractor against any member of the Commission or any officer or director of the Interborough Company personally under or by reason of this contract or any of its articles or provisions.

Contractor Not to Assign. Sublet. Etc.

Article LXVII. The Contractor shall not assign, transfer, convey, sublet or otherwise dispose of this contract or his right, title or interest in or to the same or any part thereof without the previous consent in writing of the Commission, and he shall not assign by power of attorney or otherwise any of the moneys to become due and payable under this contract unless by and with the like consent. If the Contractor shall without such previous written consent assign, transfer, convey, sublet or otherwise dispose of this contract or of his right, title or interest therein or any of the moneys to become due under this contract, to any other person, company or corporation, this contract may at the option of the Commission be revoked and annulled and

the City and the Interborough Company shall thereupon be relieved and discharged from any and all liability and obligations growing out of the same to the Contractor and to his assignee or transferee; and no right under this contract or to any money to become due hereunder shall be asserted against the City or the Interborough Company in law or in equity by reason of any so-called assignment of this contract or any part thereof or of any moneys to grow due hereunder unless authorized as aforesaid by the written consent of the Commission; provided that nothing herein contained shall be construed to hinder, prevent or affect an assignment by the Contractor for the benefit of his creditors made pursuant to the statutes of the State of New York.

Provisions in Case Commission Ceases.

Article LXVIII. In case the Commission shall cease to exist, the Legislature may provide what public officer or officers shall exercise the powers and duties of the Commission under and by virtue of this contract; and in default of such provision, such powers and duties shall be deemed to be vested in the Mayor of the City. In case any officer or officers other than the Commission shall hereafter have the powers of the Commission or any of them, then the provisions of this contract shall be applicable to such officer or officers to the extent to which the powers of the Commission shall appertain to such officer or officers, and any official act or determination of such officer or officers or of the Commission shall be sufficient hereunder, anything herein to the contrary notwithstanding, if the same be done or had by lawful vote or resolution or in such manner as the Legislature may from time to time prescribe.

Labor Law.

Article LXIX. The Contractor agrees to comply with the provisions of the Labor Law, including Section Three thereof as re-enacted by Chapter 36 of the Laws of 1909. The Contractor further agrees and stipulates that no laborer, workman or mechanic in the employ of the Contractor, sub-contractor or other person doing or contracting to do the whole or a part of the work contemplated by this contract, shall be permitted or required to work more than eight hours in any one calendar day, except in cases of extraordinary emergency caused by fire, flood or danger to life or property; and further that the wages to be paid for a legal day's work as hereinbefore defined to all classes of such laborers, workmen or mechanics upon the work contemplated by this contract or upon any material to be used upon or in connection therewith, shall be not less than the prevailing rate for a day's work in the same trade or occupation in the Borough of the City, where the work hereby contemplated about or in connection with which such labor is performed, is in its final or completed form to be situated, erected or used; and that each such laborer, workman or mechanic employed by the Contractor or by any sub-contractor or other person on, about or upon the work contemplated by this contract, shall receive such wages herein provided for. This contract shall be void and of no effect, unless the Contractor shall comply with the provisions of this section. In obedience to the requirements of Section Fourteen of the Labor Law it is further provided that if the provisions of the said Section Fourteen are not complied with this contract shall be void.

All Necessary Legal Provisions Deemed Inserted Herein.

Article LXX. It is the intent and understanding of the parties to this contract that each and every provision of law required to be inserted in this contract should be and is inserted herein. Furthermore, it is hereby stipulated that every such provision is to be deemed to be inserted herein and if, through mistake or otherwise, any such provision is not inserted or is not inserted in correct form, then the contract shall forthwith, upon the application of either party, be amended by such insertion so as to comply strictly with the law, and without prejudice to the rights of either party hereunder.

Provisions in Case of Unlawful Provision.

Article LXXI. If this contract contains any unlawful provision not an essential part of the general structure of the contract and which shall not appear to have been a controlling or very material inducement to the making thereof the same shall be deemed to be of no effect, and shall upon the application of either party, be stricken from the contract without affecting the binding force of the contract as it shall remain after omitting such provision.

Interborough Co. a Party to Contract.

Article LXXII. The Interborough Company is a party to this contract solely for the purpose of paying out its contribution toward the cost of construction of the Railroad as provided in the said contract dated March 19, 1913, and the fact that it is a party to this contract with the City and the Contractor shall not deprive it of any rights, claims or remedies which as owner or lessee of any elevated or subsurface railroad or abutting property or otherwise it might otherwise possess or assert against the City or the Contractor.

In Witness Whereof, this contract has been executed for The City of New York by the Public Service Commission for the First District under and by virtue of a resolution duly adopted by the Commission and the seal of the Commission has been hereto affixed and attested by its Secretary and these presents to be signed by its Chairman; and the Interborough Rapid Transit Company has caused its corporate seal to be hereto affixed and attested by its Secretary and these presents to be signed by its President; and the Contractor has [hereunto set hand and seal] [caused corporate seal to be hereto affixed and these presents to be executed by proper officers] the day and year first above written.

THE CITY OF NEW YORK, by the PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT.

By _____, Chairman.

Attest: _____, Secretary.

INTERBOROUGH RAPID TRANSIT COMPANY,

By _____, President.

Attest: _____, Secretary.

State of New York, County of New York, ss.:

On the _____ day of _____, 1914, before me personally appeared Edward E. McCall and Travis H. Whitney, to me known and known to me to be the said Edward E. McCall, the chairman, and the said Travis H. Whitney, the secretary of the Public Service Commission for the First District; and the said Edward E. McCall and Travis H. Whitney being by me duly sworn, did depose and say, each for himself and not the one for the other, the said Edward E. McCall, that he resides in the Borough of Manhattan, in the City, County and State of New York, that he is the chairman of the said Commission and that he subscribed his name to the foregoing contract by virtue of the authority thereof; and the said Travis H. Whitney, that he resides in the Borough of Brooklyn, in the County of Kings, City and State of New York, that he is the secretary of the said Commission and that he subscribed his name thereto by like authority; and both the said Edward E. McCall and Travis H. Whitney that they know the seal of the said Commission and that one of the seals affixed to the foregoing contract is such seal and that the same was affixed to the foregoing contract by the authority of the said Commission and of a resolution duly adopted by the same. State of New York, County of New York, ss.:

On the _____ day of _____, 1914, before me personally appeared Theodore P. Shonts and H. M. Fisher, to me known and known to me to be the said Theodore P. Shonts, the President, and the said H. M. Fisher, the Secretary, of Interborough Rapid Transit Company, the corporation named in the foregoing Contract, and they being by me duly sworn, did depose and say, each for himself and not the one for the other, the said Theodore P. Shonts, that he resides in the Borough of Manhattan, in the City, County and State of New York, that he is the President of the said Interborough Rapid Transit Company and that he subscribed his name to the foregoing Contract by virtue of the authority thereof; and the said H. M. Fisher, that he resides in Plainfield, in the State of New Jersey, that he is the Secretary of the said Interborough Rapid Transit Company and that he subscribed his name thereto by like authority; and both the said Theodore P. Shonts and H. M. Fisher that they know the seal of the said Interborough Rapid Transit Company and that one of the seals affixed to the foregoing Contract is such seal and that the same was affixed to the foregoing contract by the authority of the Board of Directors of Interborough Rapid Transit Company and of a resolution duly adopted by the same. State of New York, County of New York, ss.:

On this _____ day of _____, 1914, before me personally came _____ to me known and known to me to be the individual described in and who executed the foregoing instrument, and he duly acknowledged to me that he executed the same. State of New York, County of New York, ss.:

On this _____ day of _____, 1914, before me personally appeared _____ to me known, who, being by me first

*If the contractor is an individual, use the words enclosed in the first bracket; if a corporation, use the words enclosed in the second bracket.

duly sworn, did depose and say: That he resides in _____, in the State of _____; that he is _____, the corporation described in and which executed the foregoing instrument; that he knows the corporate seal of said corporation; that one of the seals affixed to said contract is such corporate seal, and that it was affixed thereto by order of the Board of Directors of said corporation, and that he signed his name thereto by like authority.

(Note.—If the Contractor, upon the approval of the Commission, deposits securities in lieu of a bond, a description of such securities with their values shall be inserted below.)

(Form of Contractor's Bond; Form of Contractors' Proposal; Affidavit of Verification and Index follow here.)

City of New York, Department of Finance, Comptroller's Office, October 28, 1914.

To the Board of Estimate and Apportionment:

Gentlemen—On October 13, 1914, the Public Service Commission for the First District transmitted for the consent of this Board a proposed contract to be entered into between The City of New York, the Interborough Rapid Transit Company and Frederick L. Cranford, Inc., as contractor, for the construction of Section No. 1, Route No. 48, of the Seventh Avenue-Lexington Avenue division of the Rapid Transit Railroad, at an estimated cost to the City of \$785,681.75.

The Commission requested this Board to prescribe the limit of \$785,681.75 to the amount of bonds to be made available to meet the requirements placed upon the City of the proposed contract and to direct the Comptroller to issue bonds to said amount, such bonds to be charged against the appropriation of \$28,200,000 made by the Board of Estimate on March 18, 1913, for the purposes of Contract No. 3.

The contract has been awarded to the low bidder among seven competitors. The estimated total amount of this contract is \$1,571,363.50, one-half of which, but not to exceed \$785,681.75, will be payable by the Interborough Rapid Transit Company, and one-half payable by the City.

Article XI of Contract No. 3 provides that—

"The fixation of the amounts for which the Lessee shall be liable under the construction contracts shall, so far as practicable, be so arranged that at all times the City's and the Lessee's share of the cost of construction of the Railroad shall be substantially the same.

" * * * the Lessee * * * agrees that the Commission shall so fix the amount for which the Lessee shall be liable under the construction contracts as to bring its contribution * * * as rapidly as may be up to a level with that of the City."

The following summary has been prepared from data furnished by the Public Service Commission, assuming to show the relative obligations of the City and the Interborough Rapid Transit Company, on lines to be operated by the latter, up to but not including this contract:

The City	\$47,910,839 53
The Interborough Rapid Transit Company	41,087,248 31

Excess of City commitments over Interborough..... \$6,823,591 22

The expectant demands to be made on the Interborough for outlays incidental to the diagonal connection at 42nd Street, covering fee for Grand Union Hotel property, easement through the New York Central property and the cost of construction within the limits of said latter property, will total between four and five million dollars, or assuming five millions, will reduce the above stated excess to \$1,823,591.22.

The estimated cost of this proposed contract, for construction of Section 1, Route 48, viz., \$1,571,363.50, it is proposed to divide equally between the City and the Interborough Company, i. e., \$785,681.75 to each, thus maintaining the excess City obligation at the figure stated.

The totals would apparently then stand as follows:

The City	\$48,696,652 28
The Interborough	41,872,930 06

It is believed by the Commission, in view of some uncertainty that exists with respect to the amount of carrying and overhead charges to be included, that it would be unwise to reduce this excess at this time below the figure noted.

This proposed contract with Frederick L. Cranford, Inc., provides for the construction of a two-track railroad extending from a point east of West Broadway, eastward through Park Place, under the General Post Office and down Beekman Street to near William Street, where it connects with Section 2 of the William Street line. A station will be constructed between points about 150 feet east of Broadway and Church Street, respectively, with entrances, however, near the Broadway end only.

At the crossing of Broadway the tracks will be 58 feet below the surface of the street and thus cross under the existing subway at that point. This lowers the station at its only entrance end to a depth 48 feet below the street, requiring escalators, and these (one ascending and one descending) will operate from a mezzanine floor to the train platform level. As street entrances to this mezzanine platform there are provided two stairways against the north building line near Broadway, and one stairway from within the Woolworth Building leading from its present Park Place entrance. I direct attention to these provisions for entrance because it seems to me that this station should be provided with an entrance at the Church Street end, for, as now planned, passengers detraining from the rear cars for points west of Church Street would be subjected to an unnecessary travel of nearly one thousand feet.

This contract contains the article previously noted by me as having been incorporated in the contract for the William Street section of this route on the suggestion of the Appellate Division of the Supreme Court, and at the request of this Board, the purpose of which is to fix liability for damages to abutting property on the City; the contractor, however, to indemnify the City against loss from all such claims.

The easement granted by the United States Government for passage under the Post Office Building, made part of the contract, besides ensuring the safeguarding of the building and equipment, requires the City, at any time after two years and on the written requirement of the Postmaster General, to construct alongside the subway from two to four platforms with chutes and elevator shafts, as may be necessary for mail handling.

I recommend the adoption of the attached resolution consenting to the contract award, limiting the amount of bonds available and authorizing and directing the Comptroller to issue the necessary corporate stock. Respectfully,

WM. A. PRENDERGAST, Comptroller.

The President of the Board of Aldermen, for the Transit Committee, presented the report printed in connection with Cal. No. 48.

The following resolution was offered:

Resolved, That, pursuant to the provisions of Section 37 of the Rapid Transit Act, being Chapter 4 of the Laws of 1891, as amended, and the provisions of Section 45 of the Greater New York Charter, and the requisition of the Public Service Commission for the First District, duly made by said Commission on October 13, 1914, the Board of Estimate and Apportionment hereby consents to the proposed contract to be entered into between The City of New York, acting by the Public Service Commission for the First District, the Interborough Rapid Transit Company and Frederick L. Cranford, Inc., as contractor, for the following purposes:

For the construction by Frederick L. Cranford, Inc., of Section No. 1, of Route No. 48, being that portion in the Borough of Manhattan, of the proposed Seventh Avenue-Lexington Avenue Rapid Transit Railroad, beginning at a point under Park Place, about one hundred and seventeen (117) feet east of the easterly building line of West Broadway and extending thence easterly under Park Place, the United States Post Office building and Beekman Street, to a point about sixty-two (62) feet west of the westerly building line of William Street, at an estimated cost to the City of seven hundred and eighty-five thousand six hundred and eighty-one dollars and seventy-five cents (\$785,681.75), being fifty (50%) per cent. of the total estimated contract cost of one million five hundred and seventy-one thousand three hundred and sixty-three dollars and fifty cents (\$1,571,363.50). The liability of the Interborough Rapid Transit Company in the construction of Section No. 1 of Route No. 48, hereinabove described, will be limited to an amount equal to fifty (50%) per centum of the total estimated amount to be paid to the contractor under the contract; and be it further.

Resolved, That the Board of Estimate and Apportionment prescribes that the limit to the amount of proceeds of corporate stock available to meet the requirements of the City's obligation under said contract shall be seven hundred and eighty-five thousand six hundred and eighty-one dollars and seventy-five cents (\$785,681.75); and be it further.

Resolved, That the Comptroller be and he is hereby authorized and directed to issue corporate stock of The City of New York to the amount of seven hundred and

eighty-five thousand six hundred and eighty-one dollars and seventy-five cents (\$785,681.75) at such rate of interest as the Commissioners of the Sinking Fund shall prescribe, the proceeds to the amount of the par value thereof to be applied to the purposes mentioned in the communication of the Public Service Commission for the First District to this Board dated October 13, 1914, and as specifically set forth in this resolution, said issue of corporate stock to be charged against the appropriation made by this Board on March 18, 1913, of twenty-eight million two hundred thousand dollars (\$28,200,000) for the purpose of carrying out the contract dated March 19, 1913, known as Contract No. 3.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

National Guard and Naval Militia, County of New York—Modification of Schedule (Cal. No. 50).

The Secretary presented a report of the Comptroller recommending approval of a schedule for National Guard and Naval Militia, County of New York, for the year 1914, to take effect as of November 5, 1914, for the special revenue bond allowance under the provisions of subdivision 7, section 188 of the Charter, of \$399 for the wages of one additional Armorer at \$4 per day for 57 days, and one Laborer at \$3 per day for 57 days in the Headquarters, First Battalion, Signal Corps.

(On November 20, 1914 (Cal. No. 35), the above report was laid over for one week.)

Which was laid over for one week (December 4, 1914).

Police Department—Modification of Schedules (Cal. No. 51).

(On November 20, 1914 (Cal. No. 38), the report of the Comptroller in this matter was presented and laid over until this meeting.)

The Secretary presented a communication dated August 14, 1914, from the Police Commissioner, requesting a modification of schedules for 1914; and the following report of the Comptroller recommending approval thereof:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 17, 1914.

To the Board of Estimate and Apportionment, The City of New York:

Gentlemen—On August 14, 1914, the Police Department requested the modification of Account No. 1601, Personal Service, Salaries, Regular Employees, Safeguarding Life and Property, Uniformed Force, Surgeons, etc.

It is requested that the lines in the account referred to, reading:

Lieutenant, 579 at \$2,250.....	\$1,302,750 00
Sergeant, 635 at \$1,750.....	1,111,250 00

Total.....	\$2,414,000 00
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—be made to read as follows:

Lieutenants at \$2,250 not to exceed 524, Sergeants at \$1,750 not to exceed 726	\$2,414,000 00
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The purpose of this change in combining the two lines referred to into one line is to decrease the number of Lieutenants at \$2,250 and to correspondingly increase the number of Sergeants at \$1,750. There are now more Lieutenants in the department than are required and a corresponding insufficient number of Sergeants.

The Police Commissioner by the changes recommended expects to increase the efficiency of the Department without increasing its cost.

The adoption of the attached resolution, approving the schedules as revised, is therefore recommended. Respectfully,

WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves the schedule as revised for the Police Department for the year 1914, to take effect November 26, 1914, as follows:

Revenue Bonds. Tax Levy.

Personal Service, Salaries Regular Employees, Safeguarding Life and Property, Uniformed Force, Surgeons, Etc.	
1601 Surgeon, 25 at \$3,500.....	\$87,500 00
Captain, detailed as Chief Inspector.....	3,500 00
Captain, former Inspector, 4 at \$3,500.....	14,000 00
Captain, 111 at \$2,750.....	305,250 00
Captain detailed as Inspector, 19 from \$2,750 to \$3,500.....	14,250 00
First Grade Detective, 150 at \$2,250.....	337,500 00
Lieutenant, at \$2,250, not to exceed 524; Sergeant at \$1,750, not to exceed 726.....	2,414,000 00
Patrolman	11,828,599 38
Matron, 70 at \$1,000.....	70,000 00
Boiler Inspector, 2 at \$1,300.....	2,600 00
Superintendent of Telegraph	4,000 00
Assistant Superintendent of Telegraph.....	3,000 00
Assistant Superintendent of Telegraph.....	2,700 00
Chief Lineman, 1 at \$4.80 per day (365 days).....	\$144 30
Increased from \$1,500 per annum to \$4.80 per day, as of June 6, 1914.....	1,500 00
	\$144 30 \$15,088,399 38
Tax Levy	\$15,088,399 38
Special Revenue Bonds	144 30
Total Allowance	\$15,088,543 68

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Department of Finance—Issue of Special Revenue Bonds (Cal. No. 52).

(On October 30, 1914 (No. 80-A), the resolution of the Board of Aldermen in this matter was referred to the Comptroller.)

(On November 20, 1914 (Cal. No. 54), the report of the Comptroller thereon was laid over for one week under Rule 19.)

The Secretary presented a resolution of the Board of Aldermen adopted on October 13, 1914, requesting an issue of Special Revenue Bonds in the sum of \$1,100, the proceeds whereof to be used by the Comptroller for payment of rent for the storage of ten army wagons in the Fidelity Storage Warehouse Company's building, Borough of Manhattan; and the following report of the Comptroller recommending approval thereof:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 17, 1914.

To the Board of Estimate and Apportionment, The City of New York:

Gentlemen—On October 13, 1914, the Board of Aldermen adopted the following resolution:

"Resolved, That in pursuance of Subdivision 8, Section 188 of the Greater New York Charter, The Board of Estimate and Apportionment be, and it is hereby, requested to authorize the Comptroller to issue special revenue bonds to the amount of \$1,100, the proceeds whereof to be used by the Comptroller for payment of rent for the storage of ten army wagons in the Fidelity Storage Warehouse Company's building at 107 West 96th Street, Borough of Manhattan, for a period from June 1, 1912, to March 31, 1914, the same being a charge against the County of New York."

The foregoing resolution was referred to the Comptroller on October 30, 1914, by the Board of Estimate and Apportionment for investigation and report.

An examination discloses that two ambulances and eight army wagons were stored in the building No. 107 West 96th Street, Borough of Manhattan, from June 1, 1910, to March 31, 1914, at which latter date they were removed to the Armory of the First Field Hospital.

The charges for the storage of the equipment referred to were paid up to June 1, 1912, under authority of resolutions adopted by the Commissioners of the Sinking

Fund of The City of New York, and there is now due to the Fidelity Storage Warehouse Company the sum of \$1,100 for the period from June 1, 1912, to March 31, 1914.

At a meeting held on June 25, 1914, the Commissioners of the Sinking Fund adopted the following resolution:

"Resolved, That the Comptroller be and is hereby authorized to pay to the Fidelity Storage Warehouse Company the sum of one thousand one hundred dollars (\$1,100), without the necessity of entering into a lease, for the storage of two ambulances and eight army wagons at No. 107 West 96th Street, Borough of Manhattan, for use of the First Field Hospital, under the jurisdiction of the Armory Board, for a period from June 1, 1912, to March 31, 1914, the same being full payment of all claims of the Fidelity Storage Warehouse Company."

Section 177 of Article 9 of the Military Law of the State of New York, as amended by Chapter 558 of the Laws of 1913, reads, in part, as follows:

"The expenses of erecting, altering, repairing, enlarging, renting, equipping, furnishing and maintaining armories * * * and for properly preserving the arms, uniforms, harness, wagons, equipment * * * shall be a charge upon the counties composing the brigade districts within the bounds of which is located any arsenal or armory occupied by the national guard or naval militia, and when apportioned as in this chapter provided, shall be levied, collected and paid in the same manner as other county charges are levied, collected and paid."

The expense of storage referred to having been provided for by law and authorized by resolution of the Commissioners of the Sinking Fund, the adoption of the attached resolution approving and concurring in the resolution adopted by the Board of Aldermen on October 13, 1914, is therefore recommended.

Respectfully, WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That the resolution adopted by the Board of Aldermen on October 13, 1914, requesting an issue of special revenue bonds in the sum of eleven hundred dollars (\$1,100), the proceeds whereof to be used by the Comptroller for payment of rent of ten army wagons in the Fidelity Storage Warehouse Company's building at No. 107 West 96th Street, Borough of Manhattan, for a period from June 1, 1912, to March 31, 1914, the same being a charge against the County of New York, be and the same is hereby approved of and concurred in by the Board of Estimate and Apportionment, and for the purpose of providing means therefor, the Comptroller be and is hereby authorized, pursuant to the provisions of Subdivision 8 of Section 188 of the Greater New York Charter, to issue special revenue bonds of The City of New York to an amount not exceeding eleven hundred dollars (\$1,100), redeemable from the tax levy of the year succeeding the year of their issue.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Department of Finance—Issue of Special Revenue Bonds (Cal. No. 53).

(On October 30, 1914 (No. 80C), the resolution of the Board of Aldermen in this matter was referred to the Comptroller.)

(On November 20, 1914 (Cal. No. 55), the report of the Comptroller thereon was laid over for one week under Rule 19.)

The Secretary presented a resolution of the Board of Aldermen adopted on October 13, 1914, requesting an issue of Special Revenue Bonds in the sum of \$1,500, the proceeds whereof to be used by the Comptroller for the payment of rent of premises No. 5 West 66th street, known as the Durland Company Riding Academy, Borough of Manhattan, for the use of the mounted drills of Company A, First Battalion, Signal Corps, N. G., N. Y.; and the following report of the Comptroller recommending approval thereof:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 14, 1914.

To the Board of Estimate and Apportionment, The City of New York:

Gentlemen—October 13th, 1914, the Board of Aldermen adopted the following resolution:

"Resolved, That, in pursuance of subdivision 8, section 188, of the Greater New York Charter, the Board of Estimate and Apportionment be and it is hereby requested to authorize the Comptroller to issue special revenue bonds to the amount of one thousand five hundred dollars (\$1,500), the proceeds whereof to be used by the Comptroller for the payment of rent of premises No. 5 West 66th Street, known as the Durland Company Riding Academy, Borough of Manhattan, for the use of the mounted drills of Company A, First Battalion, Signal Corps, N. G., N. Y., under lease to the City from May 1st, 1914, to December 31st, 1914, the same being a charge against the County of New York."

In connection therewith it is reported as follows:

Section 183 of the Military Law of the State of New York, as amended by chapter 165 of the Laws of 1912, reads in part as follows:

"In The City of New York * * * the application of the major general, commanding officer of naval militia, an officer commanding a brigade, or an officer commanding a battalion composed of separate troops, batteries or companies therein, for a suitable accommodation for brigade or other headquarters, shall be made to a board herein termed the Armory Board. If the Armory Board approves of such an application, it shall make its recommendations to the Commissioners of the Sinking Fund, who, if they concur therein, shall specify the sums to be appropriated therefor, and such sums shall be included by the Comptroller of said City in his departmental estimates for the ensuing year, and the Board of Estimate and Apportionment and the Board of Aldermen are hereby directed to include such sums in the budget for the ensuing year. * * *"

On April 7, 1914, the Commanding Officer of Company A, First Battalion, Signal Corp, N. G., N. Y., requested the Armory Board to rent the premises at No. 5 West 66th Street, for the use of the mounted drills of that company from May 1 to December 31, 1914. Prior to this date the premises of the Central Park Riding Academy at 59th Street and 7th Avenue had been used for this purpose, but the owners refused to continue to allow the occupancy of these quarters on other than a month to month basis.

At the meeting of the Armory Board on May 13, 1914, a resolution was adopted, requesting the Comptroller to lease the premises at No. 5 West 66th Street, and requesting the Commissioners of the Sinking Fund to concur therein, and on May 1, 1914, the Commissioners of the Sinking Fund adopted a resolution concurring in the resolution of the Armory Board. A lease was drawn up, dated May 25, 1914, and the Comptroller requested an issuance of special revenue bonds for payment of the rent at an annual rate of two thousand two hundred and fifty dollars (\$2,250) per annum. It will be necessary to provide one thousand five hundred dollars (\$1,500) for this purpose for the period from May 1 to December 31, 1914, as there are no funds available in the appropriations entitled "Rents, 1914," that can be utilized for this purpose.

The adoption of the attached resolution concurring in the resolution adopted by the Board of Aldermen on October 13, 1914, is therefore recommended.

Respectfully, WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That the resolution adopted by the Board of Aldermen on October 13, 1914, requesting an issue of special revenue bonds in the sum of one thousand five hundred dollars (\$1,500), the proceeds whereof to be used by the Comptroller for the payment of rent of premises No. 5 West 66th Street, known as the Durland Company Riding Academy, Borough of Manhattan, for the use of the mounted drills of Company A, First Battalion, Signal Corps, N. G., N. Y., under lease to the City from May 1, 1914, to December 31, 1914, the same being a charge against the County of New York, be and the same is hereby approved of and concurred in by the Board of Estimate and Apportionment, and for the purpose of providing means therefor, the Comptroller be and is hereby authorized, pursuant to Subdivision 8 of Section 188 of the Greater New York Charter, to issue special revenue bonds of The City of New York to an amount not exceeding one thousand five hundred dollars (\$1,500), redeemable from the tax levy of the year succeeding the year of their issue.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

District Attorney, Richmond County—Issue of Special Revenue Bonds and Modification of Schedule (Cal. No. 54).

(On September 21, 1914 (Cal. No. 122), the request of the District Attorney of Richmond County in this matter was referred to the Comptroller.)

(On November 20, 1914 (Cal. No. 57), the report of the Comptroller thereon was presented and laid over for one week, under Rule 19.)

The Secretary presented a communication from the District Attorney of Richmond County, dated September 12, 1914, requesting an issue of Special Revenue Bonds in the sum of \$250, the proceeds whereof to be used for the purpose of providing funds for special expenses of the Office of the District Attorney of Richmond County in the prosecution of certain criminal actions; and the following report of the Comptroller recommending approval thereof and modification of schedule:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 17, 1914.

To the Board of Estimate and Apportionment:

Gentlemen—On September 12, 1914, the District Attorney of Richmond County requested \$250 special revenue bonds, pursuant to the provisions of Section 1542 of the Greater New York Charter.

Section 1542 provides in part as follows:

"It shall be lawful, however, for the Board of Estimate and Apportionment, in its discretion, and upon the certificate of the district attorney of any such county, that the public interests demand for the proper conduct of a criminal action of exceptional difficulty that an additional appropriation be made for that purpose, to make such appropriation and to authorize the Comptroller to issue special revenue bonds to provide the necessary means therefor."

The District Attorney states that on October 23, 1913, upon his application, Special Revenue Bonds were authorized under Section 1542 of the Charter for the investigation and prosecution of certain criminal cases in Richmond County, known as the "Skunk's Misery Cases"; that all of the indictments in those cases were disposed of except those against one Souvy for arson, burglary and criminally receiving stolen property, and that said Souvy being a fugitive from justice he was unable to try the indictments.

The District Attorney further states that through the efforts of his office Souvy was apprehended in Montreal, Canada, and upon extradition proceedings being instituted he was brought back to Richmond County, and lodged in the County Jail, and that the indictments against him will come up for trial in the December term of the County Court.

The District Attorney certifies that the prosecution of Souvy will be a case of exceptional difficulty and that an additional appropriation of \$250, in addition to an available unencumbered balance of \$59.56, is necessary for the proper prosecution of the indictments hereinbefore referred to.

The Chief Clerk of the District Attorney's office states that by reason of the fact that to extradite Souvy from Montreal the District Attorney had to bring proceedings in Albany, in order to obtain the necessary papers from the Governor, and also in Washington, D. C., to have the same properly authenticated by the Secretary of State, that two detectives were sent to Montreal to bring Souvy back, that it will be necessary to bring two witnesses from Montreal, and to maintain them so that they may appear at the trial, and that it will also be necessary to bring a prisoner from the Auburn State Prison to attend the trial of the said Souvy in the capacity of a witness, it is estimated that the total expenditures necessarily incurred in the bringing of Souvy within the jurisdiction of the State and the trying of the indictments will be in the neighborhood of \$300.

The adoption of the attached resolutions approving the request and modifying the schedules, as revised, is therefore recommended.

Respectfully,

WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment, pursuant to the provisions of Section 1542 of the Greater New York Charter, hereby approves of an issue of special revenue bonds to an amount not exceeding two hundred and fifty dollars (\$250) to provide funds for the special expenses of the office of the District Attorney for Richmond County for the proper prosecution of criminal actions in Richmond County known as the "Skunk's Misery Cases," and for the purpose of providing means therefor, the Comptroller be and is hereby authorized to issue special revenue bonds of The City of New York to an amount not exceeding two hundred and fifty dollars (\$250) redeemable from the tax levy of the year succeeding the year of their issue.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves the schedule, as revised, for the office of the District Attorney of Richmond County for the year 1914 as follows:

DISTRICT ATTORNEY, RICHMOND COUNTY.

3666 Contingencies	\$950 00
Tax Levy Allowance	\$700 00
Revenue Bond Allowance	250 00
Total Allowance	\$950 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Department of Finance—Issue of Corporate Stock to Replenish Fund for Street and Park Openings (Cal. No. 55).

(On November 20, 1914 (Cal. No. 58), the report of the Comptroller in this matter was laid over for one week, under Rule 19.)

The Secretary presented the following report of the Comptroller:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 13, 1914.

To the Board of Estimate and Apportionment, City of New York:

Gentlemen—Supplementing my report to your board under date of August 17, 1914, concerning the liquidation of the City's indebtedness to the Fund for Street and Park Openings, caused by the imposition upon the City of a portion of the costs and expenses of certain street opening proceedings, I am submitting herewith a statement showing the amount due from The City of New York to the Fund for Street and Park Openings, in connection with entries in the Bureau for the Collection of Assessments and Arrears from July 1 to September 30, 1914, for:

(1) One-third the estimated value of buildings taken for street purposes, as provided in section 980 of the Greater New York Charter.

(2) For costs and expenses to be borne and paid by The City of New York, pursuant to certain resolutions adopted by the Board of Estimate and Apportionment and

(3) For the vacation and cancellation of assessments.

These obligations for the third quarter of the year amount to \$91,831.39. The proceedings affected and the amounts due from the City on each, form part of the resolution accompanying this report.

Statement of Amounts Due the Fund for Street and Park Openings on Proceedings Entered for Collection from July 1 to September 30, 1914, and for Assessments Vacated and Cancelled During the Same Period.

1. One-third estimated value of buildings taken as provided in section 980 of the Charter	\$50,732 09
2. Costs and expenses to be borne and paid by the City, pursuant to certain resolutions adopted by the Board of Estimate and Apportionment	37,936 51
3. Assessments vacated and cancelled	3,162 79

Total

Distribution of the City's Obligations by Boroughs.

	(1)	(2)	(3)	Totals.
Manhattan	\$6,625 36	\$1,764 10		\$8,389 46

	(1)	(2)	(3)	Totals.
The Bronx	\$27,033 51	.....	1,398 69	28,432 20
Brooklyn	12,834 07	879 93	.....	13,714 00
Queens	10,864 51	30,431 22	.....	41,295 73
	\$50,732 09	\$37,936 51	\$3,162 79	\$91,831 39

Amount previously provided for the first half of the year 1914..... \$371,426 27
Amount to be provided as above 91,831 39

Total for nine months ended September 30, 1914..... \$463,257 66
For the reasons above stated, I would recommend that the Comptroller be authorized to issue corporate stock in the sum of ninety-one thousand eight hundred and thirty-one dollars and thirty-nine cents (\$91,831.39), as provided in section 174 of the Greater New York Charter, and that the proceeds to the amount of the par value thereof be placed to the credit of the Fund for Street and Park Openings.

A resolution to that effect is submitted herewith. Respectfully,
WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That, pursuant to the provisions of section 174 of the Greater New York Charter, the Comptroller be and hereby is authorized to issue corporate stock of the City of New York, as provided by subdivision 2 of section 169 of the Greater New York Charter, to the amount of ninety-one thousand eight hundred and thirty-one dollars and thirty-nine cents (\$91,831.39), the proceeds to the amount of par value thereof to be applied to the replenishment of the Fund for Street and Park Openings.

(1) For amounts chargeable to The City of New York under the provisions of section 980 of the Greater New York Charter in the following proceedings, namely:

Acquiring title to Parker street, from Protectory to Willington Avenues, Borough of The Bronx, confirmed May 12, 1914.....	\$1,833 33
Acquiring title to White Plains Road, from a point near old Unionport Road to a point near Thwaite's Place, etc., Borough of The Bronx, confirmed June 10, 1914.....	3,205 00
Acquiring title to East 213th Street, from Bronx Boulevard to Boston Road, Borough of The Bronx, confirmed May 12, 1914.....	5,303 33
Acquiring title to Lyvere Street, between Zerega Avenue and West Farms Road, Borough of The Bronx, confirmed May 19, 1914.....	16,191 85
Acquiring title to Bronx River Avenue from Walker and Rosedale Avenues, to East 174th Street, Borough of The Bronx, confirmed July 23, 1914.....	500 00
Acquiring title to Malbone Street, from the line between 24th and 29th Wards, and New York Avenue to Lefferts Avenue, Borough of Brooklyn, confirmed May 21, 1914.....	9,193 40
Acquiring title to Erasmus Street, from Bedford to Nostrand Avenues, Borough of Brooklyn, confirmed May 21, 1914.....	3,640 67
Acquiring title to Hamilton Place, from Borden Avenue to Grand Street, Borough of Queens, confirmed May 25, 1914.....	4,674 71
Acquiring title to Shaler Street, from Kossuth Place to Cornelia Street, Borough of Queens, confirmed June 26, 1914.....	2,672 97
Acquiring title to Ely Avenue, from Mott to Grand Avenues, Borough of Queens, confirmed April 29, 1914.....	866 67
Acquiring title to Wiel Place, from Flushing Avenue to North Washington Avenue, Borough of Queens, confirmed July 13, 1914.....	866 67
Acquiring title to Crescent Street from Hunter Avenue to Winthrop Avenue, Borough of Queens, confirmed June 17, 1914.....	1,783 49
	\$50,732 09

(2) For costs and expenses to be borne and paid by The City of New York, pursuant to certain resolutions adopted by the Board of Estimate and Apportionment, on the dates indicated, in the matter of reapportioning the cost and expense of the following proceedings, namely:

Acquiring title to West 218th Street, from Seaman Avenue to Ninth Avenue, Borough of Manhattan, confirmed July 10, 1914. Resolution directing that 12 per cent. of the cost and expense be borne and paid by The City of New York, adopted November 19, 1909.....	\$6,625 36
Acquiring title to Avenue C, between Gravesend and Coney Island Avenues, Borough of Brooklyn, confirmed April 18, 1910. Resolution directing that 8 per cent. of the cost and expense be borne and paid by The City of New York, adopted April 19, 1907.....	879 93
Acquiring title to Hamilton Place, from Borden Avenue to Grand Street, Borough of Queens, confirmed May 25, 1914. Resolution directing that 8 per cent. of the cost and expense be borne and paid by The City of New York, adopted March 8, 1907.....	2,842 81
Acquiring title to Ely Avenue, from Mott to Grand Avenues, Borough of Queens, confirmed April 29, 1914. Resolution directing that 5 per cent. of the cost and expense be borne and paid by The City of New York, adopted May 17, 1907.....	5,858 45
Acquiring title to Crescent street, from Hunter Avenue to Winthrop Avenue, Borough of Queens, confirmed June 17, 1914. Resolution directing that 12½ per cent. of the cost and expense be borne and paid by The City of New York, adopted May 4, 1906.....	21,729 96
	\$37,936 51

(3) For assessments vacated and cancelled in the following proceedings, namely:

Acquiring title to a new avenue (Pinehurst), between Fort Washington and Havan Avenues, etc., Borough of Manhattan, confirmed July 7, 1910. Opening, etc., Northern Avenue, between 181st Street and Fort Washington Avenue, Borough of Manhattan, confirmed March 18, 1912.....	\$929 99
Opening, etc., 178th Street, from Broadway to Havan Avenue, Borough of Manhattan, confirmed March 22, 1910.....	65 45
Opening, etc., Riverside Drive and Parkway, from 135th Street to Boulevard Lafayette, Borough of Manhattan, confirmed April 27, 1910.....	415 36
Widening, etc., Riverside Drive, from 158th to 165th Street, Borough of Manhattan, confirmed June 19, 1911.....	248 30
Acquiring title to Gun Hill Road, from Jerome Avenue to Moshulu Parkway, Borough of The Bronx, confirmed June 16, 1911.....	105 00
Acquiring title to Jerome Avenue, etc., Borough of The Bronx, confirmed April 3, 1905, and January 18, 1911.....	118 84
Opening, etc., Woodlawn Road, from Jerome Avenue to Bronx Park, Borough of The Bronx, confirmed December 20, 1909.....	231 55
Acquiring title to Tremont Avenue, from Eastern Boulevard to Fort Schuyler Road, Borough of The Bronx, confirmed December 30, 1912.....	217 99
Acquiring title to Westchester Avenue, from Bronx River to Main Street, Borough of The Bronx, confirmed February 28, 1913.....	189 25
	641 06
	\$3,162 79

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Department of Finance—Issue of Corporate Stock to Replenish the Street Improvement Fund (Cal. No. 56).

(On November 20, 1914 (Cal. No. 59), the report of the Comptroller in this matter was laid over for one week under Rule 19.)

The Secretary presented the following report of the Comptroller:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 13, 1914.

To the Board of Estimate and Apportionment, City of New York:

Gentlemen—Supplementing my report to your board under date of August 17, 1914, concerning provision for the payment to the Street Improvement Fund, on account of indebtedness imposed upon the city or caused by the city's assumption of a

portion of the costs and expenses of certain street improvement proceedings, I submit below a statement showing the amount payable by the City of New York to the Street Improvement Fund, accrued from July 1 to September 30, 1914, due:

- (1) To property being non-assessable for more than one-half of its fair value owing to the restriction contained in section 947 of the Charter;
- (2) To reductions made by the Board of Assessors;
- (3) To reductions made by the Board of Revision of Assessments; and
- (4) To the vacation and cancellation of assessments.

These obligations aggregate for the third quarter of the year \$215,279.11. The proceedings involved and the amount of the City's liability upon each, form part of the resolution accompanying this report.

Statement of Costs and Expenses to be Borne and Paid by the City of New York in Street Improvement Proceedings Entered for Collection from July 1 to September 30, 1914, Including Assessments Vacated and Cancelled During the Same Period.

(1) Non-assessable under section 947 of the Charter.....	\$5,975 62
(2) Reductions determined by Board of Assessors	151,646 93
(3) Reductions determined by Board of Revision of Assessments.....	298 96
(4) Assessments vacated and cancelled	57,357 60

Total..... \$215,279 11

Distribution of the City's Obligations by Boroughs.

	(1)	(2)	(3)	(4)	Totals.
Manhattan	\$291 36	.....	\$8,741 31	.....	\$9,032 67
The Bronx.....	77,583 66	\$298 96	41,588 34	.....	119,470 96
Brooklyn	62,367 97	.....	405 33	.....	62,773 30
Queens	\$5,975 62	11,403 94	.....	6,494 77	23,874 33
Richmond .....	.....	.....	127 85	.....	127 85
	\$5,975 62	\$151,646 93	\$298 96	\$57,357 60	\$215,279 11

Amount previously provided for the first half of 1914..... \$239,171 06
Amount to be provided as above..... 215,279 11

Total for nine months ended September 30, 1914..... \$454,450 17

For the reasons above stated, I would recommend that corporate stock, to the amount of \$215,279.11, be issued as provided in section 422 of the Greater New York Charter, and that the proceeds to the amount of the par value thereof be placed to the credit of the Street Improvement Fund.

A resolution to that effect is submitted herewith.

Respectfully,

WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That pursuant to the provisions of section 422 of the Greater New York Charter, the Comptroller be and hereby is authorized to issue corporate stock of The City of New York as provided by subdivision 6 of section 169 of the Greater New York Charter, to the amount of two hundred and fifteen thousand two hundred and seventy-nine dollars and eleven cents (\$215,279.11), the proceeds to the amount of the par value thereof to be applied to the replenishment of the Street Improvement Fund, as follows:

(1) For amounts paid or to be paid from the Street Improvement Fund and chargeable to the City of New York under section 947 of the Greater New York Charter, in the following proceedings, namely:

Regulating and grading Harmon street, from Grandview to Forest avenues, Borough of Queens, confirmed July 14, 1914	\$4,698 72
Regulating, grading, etc., Marion street, between Paynter and Washington avenues, Borough of Queens, confirmed August 18, 1914	1,276 90
	\$5,975 62

(2) For amounts chargeable to the City of New York by reason of reductions determined by the Board of Assessors in the following proceedings, namely:

Regulating, grading, etc., West 215th street, from Park Terrace East to Indian road, Borough of Manhattan, confirmed June 30, 1914	\$291 36
Sewers, East 170th street, between Morris Avenue and the Grand Boulevard and Concourse, Borough of The Bronx, confirmed June 30, 1914.....	1,668 22
Regulating, grading, etc., Albany road, from Bailey Avenue, north of 230th street, to 233rd street, Borough of The Bronx, confirmed June 30, 1914.....	5,166 16
Paving West 231st street, from Corlears Avenue to Bailey Avenue, Borough of The Bronx, confirmed August 25, 1914	532 10
Paving West 230th street, from Broadway to Corlears Avenue, Borough of The Bronx, confirmed September 8, 1914	5,266 70
Regulating, grading, etc., West 172nd street, from Aqueduct Avenue to Jessup Avenue, Borough of The Bronx, confirmed September 17, 1914.....	804 22
Regulating, grading, etc., Rosedale Avenue, from Walker to Tremont Avenues, Borough of The Bronx, confirmed September 17, 1914	3,668 75
Sewer, West 254th street, from Broadway to Fieldston Road, Borough of The Bronx, confirmed September 17, 1914	214 00
Regulating, grading, etc., Boston Road, between White Plains Road and north line of City, Borough of The Bronx, confirmed September 24, 1914.....	56,245 29
Sewers, Lafayette Avenue, between Longwood Avenue and Tiffany Street, Borough of The Bronx, confirmed September 24, 1914.....	2,772 11
Regulating, grading, etc., Westchester Avenue, from Main Street (West Farms Road) to Eastern Boulevard, Borough of The Bronx, confirmed September 24, 1914	1,246 11
Regulating, grading, etc., Roebing Street, between Division Avenue and Broadway, Borough of Brooklyn, confirmed June 30, 1914.....	5,279 37
Regulating, grading, etc., Stewart Avenue, between Flushing Avenue and Grand Street, Borough of Brooklyn, confirmed July 14, 1914.....	525 83
Regulating, grading, etc., Benson Avenue, between 22nd and 25th Avenues, Borough of Brooklyn, confirmed July 28, 1914.....	600 00
Regulating, grading, etc., Bay 35th Street, between 86th Street and Cropsey Avenue, Borough of Brooklyn, confirmed July 28, 1914.....	34,301 83
Paving Troutman Street, between Irving and St. Nicholas Avenues, Borough of Brooklyn, confirmed September 15, 1914.....	164 16
Sewer basins, Grafton Street, S. E. and S. W. corners of Blake Avenue, Borough of Brooklyn, confirmed September 22, 1914.....	577 42
Paving Flatbush Avenue, from Fulton to Concord Street, Borough of Brooklyn, confirmed September 24, 1914.....	20,571 36
Paving Carroll Street, from Bedford Avenue to Rogers Avenue, Borough of Brooklyn, confirmed September 29, 1914.....	348 00
Regulating, grading, etc., Cleveland Avenue, between Thompson and Greenpoint Avenues, Borough of Queens, confirmed June 30, 1914.....	6,707 30
Regulating, grading, etc., First Street (Grant Avenue), between Thomson and Greenpoint Avenues, Borough of Queens, confirmed June 30, 1914.....	3,891 32
Regulating and grading Hamilton Street, between Paynter and Webster Avenues, Borough of Queens, confirmed July 14, 1914.....	300 00
Sidewalks, Bay View Avenue, between Forest Avenue and The Strand, Borough of Queens, confirmed August 18, 1914.....	505 32
	\$151,646 93

(3) For amounts chargeable to the City of New York by reason of reductions determined by the Board of Revision of Assessments in the following proceedings, namely:

Regulating, grading, etc., McGraw Avenue, from Unionport Road to Beach Avenue, Borough of The Bronx, confirmed June 30, 1914.....	\$298 96
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(4) For assessments vacated and cancelled in the following proceedings, namely:

Broad Street outlet sewer, etc., Borough of Manhattan, confirmed May 9, 1907	175 00
Regulating, etc., West 177th Street, from Fort Washington Avenue to Riverside Drive, Borough of Manhattan, confirmed June 18, 1912.....	183 30

Paving, etc., 179th street, from Broadway to Havan avenue, Borough of Manhattan, confirmed January 3, 1911.....	1,079 18
Regulating, etc., Riverside drive, between 158th street and 165th street, Borough of Manhattan, confirmed June 6, 1913.....	7,303 83
Regulating, etc., Westchester avenue, from Bronx River to Main street, Borough of The Bronx, confirmed October 8, 1908.....	6,596 03
Regulating, etc., Westchester square, Borough of The Bronx, confirmed September 3, 1912.....	165 00
Sewer, etc., Lafayette avenue, Borough of The Bronx, confirmed August 30, 1912.....	3,465 95
Regulating, etc., St. Ann's avenue, from 138th street to 156th street, Borough of The Bronx, confirmed July 20, 1894.....	1,693 06
Sewer, etc., Moshulu parkway, etc., Borough of The Bronx, confirmed April 7, 1910.....	13,593 17
Sewer, etc., Gunhill road, etc., Borough of The Bronx, confirmed January 13, 1911.....	5,007 05
Regulating, etc., East 210th street, from DeKalb avenue to Wayne avenue, Borough of The Bronx, confirmed January 31, 1911.....	4,177 54
Regulating, etc., Rochambeau avenue, from 212th street to Van Cortlandt avenue, Borough of The Bronx, confirmed February 25, 1913.....	490 04
Regulating, etc., Wayne avenue, from Reservoir to Gun Hill road, Borough of The Bronx, confirmed June 13, 1911.....	1,942 03
Sewer, etc., Farragut street, etc., Borough of The Bronx, confirmed April 19, 1904.....	154 63
Basins, etc., Crescent avenue, etc., Borough of The Bronx, confirmed May 21, 1912.....	23 05
Sewer, etc., Westchester avenue, from Blackrock avenue to East 177th street, Borough of The Bronx, confirmed June 24, 1913.....	1,407 94
Sewer, etc., Haviland avenue, etc., Borough of The Bronx, confirmed March 17, 1914.....	1,069 10
Sewer, etc., Havemeyer avenue, etc., Borough of The Bronx, confirmed March 26, 1914.....	1,803 75
Regulating, etc., Georgia avenue, between Belmont and Sutter avenues, Borough of Brooklyn, confirmed March 17, 1914.....	25 82
Paving, etc., Doscher street, between Liberty and Belmont avenues, Borough of Brooklyn, confirmed November 6, 1912.....	233 07
Regulating, etc., Doscher street, between Liberty and Belmont avenues, Borough of Brooklyn, confirmed December 24, 1912.....	146 44
Sewer, etc., Catalpa avenue, from Myrtle avenue to Buchanan avenue, Borough of Queens, confirmed March 3, 1914.....	31 11
Sewer, etc., Cypress avenue, from Myrtle avenue to Cooper street, Borough of Queens, confirmed May 23, 1913.....	6,365 00
Regulating, etc., Stockholm street, from Brooklyn Borough Line to Onderdonk avenue, Borough of Queens, confirmed April 23, 1914.....	35 25
Sewer, Van Alst avenue, from Harris avenue to Paynter avenues, Borough of Queens, confirmed March 1, 1912.....	50 00
Sewer, etc., Rockaway road, from Leffert's to Freedom avenues, etc., Borough of Queens, confirmed June 30, 1914.....	13 41
Sewer, etc., Tottenville, etc., Borough of Richmond, confirmed November 19, 1908.....	127 85
	\$57,357 60

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Department of Finance—Issue of Corporate Stock to Provide for Payment of Assessments Against Property of the City (Cal. No. 57).

(On November 20, 1914 (Cal. No. 60), the report of the Comptroller in this matter was laid over for one week, under Rule 19.)

The Secretary presented the following report of the Comptroller:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 16, 1914.

To the Board of Estimate and Apportionment of The City of New York:

Gentlemen—Supplementary to my report to your board under date of August 17, 1914, in the matter of providing for the prompt payment to the several assessment funds for local improvements of the City's obligations on account of assessments

imposed directly against property of The City of New York, there is submitted below a statement of such assessments as were entered in the Bureau for the Collection of Assessments and Arrears from July 1 to September 30, 1914.

In several instances payment has been withheld pending an examination of the titles for the purpose of definitely determining the ownership of the property in question.

The authority for the payment of assessments on City-owned property is contained in section 176 of the Charter, which directs that corporate stock shall be issued by the Comptroller when so authorized by the Board of Estimate and Apportionment to enable him to pay any and all assessments imposed upon The City of New York by reason of the laying out, opening, regulating and grading or improving any and all streets, roads, avenues, public parks, squares or places, or the construction of sewers.

These obligations for the third quarter of the year amount to \$163,389.67. The proceedings affected and the amount due on each form part of the resolution accompanying this report.

Statement of Assessments Against Property of The City of New York Entered in the Bureau for the Collection of Assessments and Arrears from July 1 to September 30, 1914.

	Street Improvement Fund.	Fund for Street and Park Openings.	Total.
1. Manhattan	\$6,473 57	\$669 68	\$7,143 25
2. The Bronx	116,110 82	9,119 05	125,229 87
3. Brooklyn	16,352 88	1,901 53	18,254 41
4. Queens	11,411 13	1,339 75	12,750 88
5. Richmond		11 26	11 26
	\$150,348 40	\$13,041 27	\$163,389 67

Amount previously provided for the first half of 1914..... \$245,314 65

Amount to be provided as above..... 163,389 67

Total for nine months ended September 30, 1914..... \$408,704 32

For the reasons stated I would therefore recommend that corporate stock to the amount of one hundred and sixty-three thousand three hundred and eighty-nine dollars and sixty-seven cents (\$163,389.67) be issued as provided by section 176 of the Charter, to enable the Comptroller to pay assessments for local improvements levied directly upon the property of the City of New York from July 1 to September 30, 1914.

A resolution to that effect is submitted herewith.

Respectfully,

WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That, pursuant to the provisions of section 176 of the Greater New York Charter, the Comptroller be and hereby is authorized to issue corporate stock of The City of New York, in the manner provided by subdivision 3 of section 169 of said Charter, to the amount of one hundred and sixty-three thousand three hundred eighty-nine dollars and sixty-seven cents (\$163,389.67) to provide for the payment of assessments imposed upon the real property of The City of New York, by reason of the laying out, opening, regulating and grading or improving any or all streets, roads, avenues, public parks, squares or places, or the construction of sewers, as set forth in the following schedules:

Manhattan	\$7,143 25
The Bronx	125,229 87
Brooklyn	18,254 41
Queens	12,750 88
Richmond	11 26
	\$163,389 67

Distributed as follows:

Street Improvement Fund.....	\$150,348 40
Fund for Street and Park Openings.....	13,041 27
	\$163,389 67

Borough of Manhattan.

	Section.	Block.	Lot.	Map No.	Amount.	Use of Property.
Receiving Basins, S. E. corners of 43d and 44th Streets, N. E. and N. W. corners of 46th Street and Third Avenue, confirmed September 22, 1914.....	5	1320	7	83	\$44 70	Public School.
Regulating, grading, etc., W. 215th Street, from Broadway to Park Terrace East, confirmed September 24, 1914.....	8	2243	10	27	2,608 00	Isham Park.
			20	22	1,500 00	Isham Park.
		2250	1	9	1,500 00	Isham Park.
			32	12	20 25	Isham Park.
		2252	12	3	700 00	Isham Park.
			100	1	80 37	Waterfront.
			110	5	20 25	Isham Park.
Acquiring title to West 218th Street, from Seaman Avenue to Ninth Avenue, confirmed July 10, 1914.....	8	2197	75	48	210 16	Waterfront.
		2252	100	2a		
Acquiring title to unnamed street adjoining the property acquired for the New York and Brooklyn Bridge, extending from William to North William Streets, confirmed July 27, 1914.....	1	121	27	1	168 35	Approach to Manhattan and Brooklyn Bridge.
			27	2	111 84	
			27	3	129 40	
			27	4	49 93	
Total, Borough of Manhattan.....					\$7,143 25	

Borough of The Bronx.

	Section.	Block.	Lot.	Map No.	Amount.	Use of Property.
Regulating, grading, etc., Albany road, from Bailey avenue, north of 230th street, to 233rd street, confirmed June 30, 1914.....	12	3266	65	1	\$2,816 80	Fire Department and Public Place.
			68	2		
Sewers, East 146th street, between Brook avenue and St. Ann's avenue, confirmed July 21, 1914.....	10	2557	1	1	13,894 84	St. Mary's Park.
Receiving basins, West 231st street and Albany crescent, southeast and southwest corners, confirmed July 21, 1914.....	12	3266	65	17	39 77	Fire Department.
			68	16	71 13	Public Place.
Paving West 231st street, from Corlears avenue to Bailey avenue, confirmed August 25, 1914.....	13	3404	125	23	1,471 80	Borough President.
		3403	46	29	39 60	Public Library.
Paving West 230th street, from Broadway to Corlears avenue, confirmed September 8, 1914.....	8	3402	621	1	315 72	Bridge.
			636	6	434 12	Bridge.
Regulating, grading, etc., Albany road, Sedgwick avenue, Bailey avenue, etc., confirmed September 17, 1914.....	12	3237	1	85	925 00	Public Place.
		3266	65	57	551 00	Fire Department.
			68	255	20 00	Public Place.
		3422	1	313	24,959 46	Van Cortlandt Park.
Paving Cedar avenue, from Sedgwick avenue to West 179th street, confirmed September 17, 1914.....	11	2881	100	46	1,513 81	Fire Department.
Regulating, grading, etc., Baychester avenue, from Boston road to Pelham Bay Park, confirmed September 17, 1914.....	15	4335	1	641	23,013 53	Pelham Bay Park.
Regulating, grading, etc., Westchester avenue, from Main street (West Farms road) to Eastern boulevard, confirmed September 24, 1914.....	18	5381	85	390	101 25	Public Place.
			75	391	12 00	Public Place.
	15	4335	1	1438	45,930 99	Pelham Bay Park.
	12	3257	111	72	284 71	Police Department.
Acquiring title to Summit place, from Heath to Bailey avenue, confirmed May 23, 1914.....	15	4049	49	468	25 23	Fire Department.

	Section.	Block.	Lot.	Map No.	Amount.	Use of Property.
Acquiring title to White Plains road, from a point near Old Unionport road to a point near Thwaite's place, etc.		4333	1	89	7,138 37	
			1	89A	199 81	
			1	89B	549 20	
	16	4336	1	89E	921 73	Bronx Park.
Total, Borough of The Bronx					\$125,229 87	

Borough of Brooklyn.

	Section.	Block.	Lot.	Map No.	Amount.	Use of Property.
Regulating, grading, etc., Roebling street, between Division avenue and Broadway, etc., confirmed June 30, 1914.....	8	2178	20	68½	\$2,359 24	Public Place.
		2177	45	138	132 00	Public School.
Sewers, 18th avenue, between 60th and 61st streets, confirmed July 14, 1914.....	17	5519	1	14	349 04.	Public School Site.
Regulating, grading, etc., Benson avenue, between 22d and 25th avenues, confirmed July 28, 1914	21	6878	48	29	698 70	Public School.
Sewer, East 17th street, from Avenue M to Avenue N, confirmed August 25, 1914.....	20	6727	1	117	322 40	Athletic Field (Education).
Paving Barrett street, from East New York avenue to Blake avenue, confirmed September 8, 1914	12	3535	16	13	669 66	Public School.
Paving Union street, from Bedford to Rogers avenues, confirmed September 8, 1914....	5	1274	1	1	1,803 76	Armory.
Regulating, grading, Vandevort avenue, from Lombardy street to Meeker avenue, confirmed September 8, 1914	10	2811	1	3	397 14	School Site.
Regulating, grading Willoughby avenue, between St. Nicholas and Cypress avenues, confirmed September 8, 1914	11	3212	1	1	738 63	Public School.
Sewers, Union street, between Utica and Rochester avenues, confirmed September 8, 1914	5	1398	1	101	456 78	Lincoln Terrace Park.
Sewer in Bullion street (now Skillman avenue), between Kingsland and Debevoise avenues, confirmed September 8, 1914	10	2885	1	1	1,272 50	Public Charities.
Sewer, Robinson street, between Bedford and Rogers avenues, confirmed September 8, 1914	16	5049	55	20	544 62	Public School.
Sewer, Suydam street, between St. Nicholas avenue and Borough line, confirmed September 8, 1914	11	3212	1	1	321 65	Public School.
Receiving basins, Dumont and Miller avenues, northwest and southwest corners, confirmed September 8, 1914	12	3793	1	1	203 97	Linton Park.
Flagging sidewalks, St. Johns place, between Schenectady and Utica avenues, confirmed September 8, 1914	15	4828	37	22	93 00	Public Charities.
Paving 59th street, from 12th avenue to Fort Hamilton avenue, confirmed September 15, 1914	17	5702	1	53	226 79	Public School.
Paving Flatbush avenue, from Fulton to Concord street, confirmed September 24, 1914.	1	119	1	171	1,235 00	McLaughlin Park.
		120	34	177	29 50	Public Park.
		131	6	198	75 00	Public School.
		133	1	47	900 00	Manual Training School.
		168	1	1215	8 00	Board of Water Supply.
		174	1	1353	87 50	Public School.
	4	926	1	1473	3 00	Subway.
		928	6	1503	47 50	Public Library.
	7	2048	34	63	240 00	Subway.
		2079	21	7	1,300 00	Board of Health.
		2084	59	114	370 00	Subway.
		2088	30	1006	87 50	Public Charities.
		2093	4	140	450 00	Subway.
			7	141	200 00	Subway.
			8	142	185 00	Subway.
			9	143	200 00	Subway.
			10	144	120 00	Subway.
			1	541	8 00	Subway.
			3	542	9 00	Subway.
	2094		1	1007	6 00	Subway.
			2	1008	10 00	Subway.
			40	1022	17 00	Subway.
			42	1023	26 00	Subway.
			44	1024	9 00	Subway.
			45	1025	7 50	Subway.
			46	1026	11 00	Subway.
			47	1027	8 50	Subway.
			48	1028	7 50	Subway.
			49	1029	7 00	Subway.
	2095		62	1067	10 00	Subway.
			63	1068	13 00	Subway.
	2107		15	1248	6 00	Subway.
			16	1249	7 00	Subway.
			17	1250	9 00	Subway.
			18	1251	12 00	Subway.
			19	1252	8 00	Subway.
			20	1253	7 00	Subway.
			21	1254	7 50	Subway.
			22	1255	9 00	Subway.
			23	1256	10 00	Subway.
Acquiring title to Malbone street, from the line between 24th and 29th Wards, and New York avenue to Lefferts avenue, confirmed May 21, 1914.....	15	4794	37	710	267 29	Public School.
Acquiring title to Erasmus street, from Bedford to Nostrand avenues, confirmed May 21, 1914	16	5103	10	2	984 42	High School.
			58	1	9 02	Public School.
Acquiring title to 71st street, from 15th to New Utrecht avenues, confirmed June 30, 1914	19	6180	1	12	37 52	Public School.
Acquiring title to Avenue C, between Gravesend and Coney Island avenues, confirmed April 18, 1910	16	5371	1	13	603 28	School Site.
Total, Borough of Brooklyn.....					\$18,254 41	

Borough of Queens.

	Ward.	Block.	Lot.	Map No.	Amount.	Use of Property.
Sewer, Rockaway Road, between Lefferts avenue and Freedom avenue, confirmed June 30, 1914.....	4	1	1	5815	\$1,840 00	Forest Park.
		130	1	4953	4,232 00	Forest Park.
		164	1	4910	325 46	Public School.
		176	6	2675	43 79	Fire Department Site.
		176	6	2674	52 00	Fire Department Site.
		186	28	3716	386 40	Public School.
		247	3	2607	322 50	Public School.
		536	15	858	184 00	Public School.
		260	29	1950	9 20	Sinking Fund.
		66	51	3538	138 00	Public School.
		1	1	5816	1,405 46	Forest Park.
Sewers, Chichester avenue, between Greenwood and Lefferts avenues, confirmed July 14, 1914.....	4	469	16	173	154 00	Public School.
Regulating, grading, etc., Skillman Place, between Jackson and Hunter avenues, confirmed September 8, 1914.....	1	113	1	20	2,079 01	Queensboro Bridge.
Outlet Sewer, Broadway, from Vernon avenue to East River, confirmed September 8, 1914	1	10	1	6600	26 56	Rainey Park.
		11	21	6340	15 94	Rainey Park.
		12	25	6343	31 87	Rainey Park.
		14	1	3	45 65	Dock.
		13	11	8	9 62	Dock.
		43	9	6050	4 15	Borough Hall Site.
		13	14	6345	24 90	Public School.
		32	30	145	18 59	School Site.
		128	1	4941	34 03	School Site.
		171	24	1797	28 00	Public School.
Acquiring title to Ely avenue, from Nott to Grand avenue, confirmed April 29, 1914..	1	81	32	2018	35 61	Police Department.
Acquiring title to Wiel Place, from Flushing avenue to North Washington avenue, confirmed July 13, 1914.....	1	154	65	5	593 30	Public School.

	Ward.	Block.	Lot.	Map No.	Amount.	Use of Property.
Acquiring title to Crescent street, from Hunter avenue to Winthrop avenue, confirmed June 17, 1914.....	1	81	32	2160	43 71	Police Department.
		90	25	825	14 49	Public School.
		26	824	72 48		Public School.
		31	823	14 49		Public School.
		10	804	65 23		Public School.
		11	805	65 23		Public School.
		12	806	65 23		Public School.
		13	807	65 23		Public School.
		14	808	130 45		Public School.
		16	809	65 23		Public School.
	108	1	517	50 55		Queensboro Bridge.
	109	4	411	58 52		Queensboro Bridge.
Total, Borough of Queens.....					\$12,750 88	

Borough of Richmond.

	Ward.	Map Page.	Lot.	Map No.	Amount.	Use of Property.
Acquiring title to Amboy Road, from Foster's Road to Huguenot avenue, confirmed July 17, 1914.....	5	26	100	87	\$11 26	Public School.
Total, Borough of Richmond.....					\$11 26	

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond.—16.

Nathan Marcus—Award for Damages (Cal. No. 58).

(On November 20, 1914 (Cal. No. 61), the report of the Comptroller in this matter was laid over for one week, under Rule 19.)

The Secretary presented the following report of the Comptroller:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 10, 1914.

To the Board of Estimate and Apportionment, The City of New York:

Gentlemen—I have been advised by the Corporation Counsel under date of October 29, 1914, that a writ of certiorari sued out by the City to review the award made by the Board of Assessors of The City of New York to Nathan Marcus in the sum of \$16,000, pursuant to Chapter 737 of the Laws of 1911, as amended by Chapter 577 of the Laws of 1913, in the matter of the ascertainment of damages sustained by the owners of real property fronting upon the streets approaching the Manhattan Bridge over the East River, in the Borough of Manhattan, has been withdrawn, and that the said award should be paid to Nathan Marcus without interest.

To provide means for the payment of this obligation, corporate stock should be issued to the amount of \$16,000, pursuant to section 2 of Chapter 737 of the Laws of 1911, as amended by Chapter 577 of the Laws of 1913.

A resolution to that effect is herewith submitted.

Respectfully,

WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That, pursuant to the provisions of section 2 of chapter 737 of the Laws of 1911, as amended by chapter 577 of the Laws of 1913, the Comptroller be and hereby is authorized to issue corporate stock of The City of New York, in the manner provided by section 169 of the Greater New York Charter, to the amount of sixteen thousand dollars (\$16,000), the proceeds to the amount of the par value thereof to be applied in payment of an award made by the Board of Assessors to Nathan Marcus in the matter of the ascertainment of damages sustained by owners of real property fronting upon the streets approaching the Manhattan Bridge over the East River, in the Borough of Manhattan, and contained in the certificate of awards made by the Board of Assessors, dated March 27, 1914.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond.—16.

Department of Docks and Ferries—Acquisition of Property for Terminal Facilities Along the South Brooklyn Waterfront (Cal. No. 59).

The Secretary presented a communication from the Comptroller relating to the application of the First Construction Company by William H. Reynolds, President, requesting that the Board of Estimate and Apportionment consent to the modification of the option accepted by the Board on August 27, 1913.

The proposed modification would eliminate the property contained in the option described as Parcel No. 10:

"Commencing at the point of intersection of the northerly side of Sigourney street with the easterly side of Columbia street; running thence northerly to the southerly side of Bay street; thence easterly along the southerly side of Bay street to the westerly side of Hicks street; thence southerly along the westerly side of Hicks street to the northerly side of Sigourney street; thence westerly along the northerly side of Sigourney street to the point or place of beginning."

It is maintained by the First Construction Company that the foregoing described property was included in error in the option but in consideration of the suggested elimination the First Construction Company proposes to transfer to the City all its right, title and interest in certain streets included in the option to which the First Construction Company claims title.

(On May 22, 1913, the Board adopted a resolution authorizing the acquisition by condemnation proceedings, of property in the Erie Basin section of the Borough of Brooklyn required as a classification yard for the proposed Municipal Terminal railroad and on August 28, 1913, this resolution was amended.)

(On November 13 and 20, 1914 (Cal. No. 132), this matter was laid over; on the latter date until this meeting.)

Which was laid over for one week (December 4, 1914).

Board of Estimate and Apportionment; Committee on Port and Terminal Facilities—Resignation of Chairman (Cal. No. 60).

The Secretary presented a communication, dated October 29, 1914, from the Comptroller tendering his resignation as Chairman and member of the Committee on Port and Terminal Facilities of the Board.

(On November 6, 13 and 20, 1914, this matter was laid over; on the latter date (Cal. No. 125) until this meeting.)

Which was laid over for one week (December 4, 1914).

Northern Union Gas Company; Central Union Gas Company; Westchester Lighting Company (Cal. No. 61).

Extension of gas mains in the Borough of The Bronx, which may be required to connect existing mains with premises of applicants for service under permits to be issued by the President of the Borough of The Bronx and the Commissioner of Water Supply, Gas and Electricity, containing stipulation recommended by the Law Department.

At the meeting of November 20, 1914 (Cal. No. 124), action was deferred until this day, at the request of the President of the Borough of The Bronx.

The matter was laid over until the meeting of December 4, 1914, at the request of the President of the Borough of The Bronx.

President, Borough of Manhattan—Rescission of Issue of Corporate Stock (Cal. No. 62).

The Secretary presented a communication dated October 5, 1914, from the President of the Borough of Manhattan requesting the rescission of \$22,500 of the corporate stock authorization of \$25,000 adopted by the Board on June 19, 1914 (Cal. No. 49), for the construction of a mezzanine floor and for other work in Washington Market under the jurisdiction of the Borough President.

(On October 9, 1914 (No. 101), the aforementioned communication was presented to the Board and referred to the Committee on Corporate Stock Budget, and on October 16, 1914 (No. 88), consideration of this request was laid over to October 23, 1914.)

The Secretary presented a supplemental communication from the President of the Borough of Manhattan, dated September 29, 1914, requesting the rescission of the resolution authorizing the issue of corporate stock for the above purpose.

(On October 23 and 30 and November 13 and 20, 1914 (Cal. No. 118), this matter was laid over; on the latter date to this meeting.)

(On October 30 a petition was submitted by shareholders of Washington Market urging the abandonment of the proposed improvement.)

The Secretary also presented a report of the Committee on Corporate Stock Budget, in the matter of the request for the rescission of the Corporate Stock authorization.

Hon. Cyrus C. Miller appeared in opposition to the rescission of the issue of corporate stock in this matter.

Which was laid over for one week (December 4, 1914).

Department of Docks and Ferries—Issue of Corporate Stock (Cal. No. 63).

The Secretary presented a communication, dated November 17, 1914, from the Commissioner of Docks, requesting an issue of \$45,000 corporate stock to provide for the cost of building a pier by contract on the Ocean side of Coney Island in front of Dreamland Park, Borough of Brooklyn.

On November 20, 1914 (Cal. No. 93), the above matter was referred to the Committee on Corporate Stock Budget for report at this meeting.

The Secretary also presented a report of the Committee on Corporate Stock Budget, recommending the appropriation.

Which was laid over for one week (December 4, 1914), under Rule 19.

Board of Estimate and Apportionment—Replenishment of Contingency Account (Cal. No. 64).

The Secretary presented a communication dated November 28, 1914, showing the condition of the appropriation for Contingencies, Board of Estimate and Apportionment and the amount required to replenish said account to meet expenses chargeable thereto for the remainder of the year 1914.

(On November 20, 1914 (Cal. No. 102), the above communication was laid over until this meeting.)

Which was referred to the Committee on the Organization of the Board.

Department of Finance—Status of the Fund for Street and Park Openings (Cal. No. 65).

The Secretary presented a communication dated July 29, 1914, from the Comptroller showing the status of the Fund for Street and Park Openings.

(On July 30, September 21 and 25, October 2, 16, 23 and 30, and November 6, 13 and 20, 1914, this matter was laid over; on the latter date (Cal. No. 133) until this meeting.)

Which matter was laid over.

Policy of the Board with Respect to Advancing Street Opening Proceedings (Cal. No. 66).

The Secretary presented a communication from the Chief Engineer of the Board, dated July 21, 1914, submitting a list of proceedings for acquiring title to streets which should be authorized or advanced.

(On July 30, 1914 (Cal. No. 112), action was taken on several items in the above communication and the matter was then laid over until September 21, 1914, as was also the question of general policy on Street Opening proceedings.)

(On September 21, 25, October 2, 16, 23, 30 and November 6, 13 and 20, 1914, this matter was laid over; on the latter date (Cal. No. 134) until this meeting.)

Which matter was laid over.

MATTERS CONSIDERED BY UNANIMOUS CONSENT.

The following matters not on the Calendar for this day were considered by unanimous consent:

Department of Bridges—Improvement of Rapid Transit Facilities Between Manhattan and Queens Boroughs (No. 67).

Messrs. John Adikes and James Frank; and Leroy T. Harkness, representing the Public Service Commission for the First District, appeared and addressed the Board on the subject.

The President of the Board of Aldermen informed those speakers appearing that the appropriation for this purpose was under consideration.

Public Service Commission for the First District—Removal of Elevated Structure from Lower Fulton Street, Borough of Brooklyn (No. 68).

The Secretary presented a communication, dated November 21, 1914, from the President of the Brevoort Savings Bank, urging the removal of the elevated structure from lower Fulton Street, Borough of Brooklyn, and the provision in its place of a suitable subway with a direct connection to the Borough of Manhattan.

Which was referred to the Committee on Transit.

Board of Estimate and Apportionment—Preparation of Map of The City of New York (No. 69).

(On November 20, 1914, the request of the Chief Engineer of the Board in this matter was referred to the Committee on Salaries and Grades.)

The Secretary presented a communication dated November 16, 1914, from the Chief Engineer of the Board requesting authority to draw upon the Contingent Fund of the Board for \$1,200 in addition to the sum already authorized, for the purpose of completing the work of preparing the map of the City of New York; and the following report of the Committee on Salaries and Grades:

City of New York, Board of Estimate and Apportionment, Municipal Building, Bureau of Standards, November 23, 1914.

To the Board of Estimate and Apportionment:

Gentlemen—On November 16, 1914, the Chief Engineer of the Board of Estimate and Apportionment requested authority to draw upon the Contingent Fund of the Board for \$1,200, in addition to the sum already authorized, for the purpose of completing the work of preparing the map of the City of New York. The request was referred to the Committee on Salaries and Grades on November 20, 1914. The Bureau of Standards reports thereon as follows:

"Early in the year 1913 the Chief Engineer of the Board of Estimate and Apportionment started work upon the preparation of an official map of the City of New York. The need of such a map was so apparent that early in the present year the Chief Engineer suggested to the Mayor that it would be very desirable to have the map completed, lithographed and available for use by the several departments which are to prepare exhibits for the Panama-Pacific Exposition,

for which the Board of Estimate and Apportionment has made an appropriation and appointed a committee to take the matter in charge. In order to hasten the work, draftsmen from several departments were temporarily loaned to the office of the Chief Engineer, but, by degrees, they were being recalled by their respective department heads.

"On May 29, 1914, the Chief Engineer called attention of the Board of Estimate and Apportionment to this fact and stated that the plan he had in mind, of having the map available for use by the end of the present year, could not be carried out unless more certain provision was made for assistance. He requested authority to secure a sufficient number of draftsmen necessary to complete the work, the total expenditure not to exceed \$7,500, and to be charged to the Contingent Fund of the Board for 1914. On June 5, 1914, the Board of Estimate and Apportionment adopted the following resolution:

"Resolved, That the Board of Estimate and Apportionment hereby authorizes the Chief Engineer of the Board to secure a sufficient number of draftsmen necessary to complete the work of preparing a map of the City of New York, to be used by the various Departments and Boroughs which will prepare exhibits for the Panama-Pacific Exposition, the compensation of said Draftsmen to correspond with the grades for said position already established for the Board of Estimate and Apportionment, the total expenditure therefor not to exceed the sum of seventy-five hundred dollars (\$7,500), and to be charged to the Contingent Fund of the Board of Estimate and Apportionment for the year 1914."

"The appropriation of \$7,500 became exhausted on November 20, 1914. There is still some work to be done before the map can be properly made use of, and it is estimated that the sum of \$1,200 will be required. The Chief Engineer states that this will permit him to complete the map by the end of the present year."

Your Committee feels that it is important to complete the map as early as possible, as the value of it would be very great, not only for the purpose of special exhibits, such as at the Panama-Pacific Exposition, but in the every-day work of the various city departments, and, in view of this, recommends that the request of the Chief Engineer be approved by the adoption of the attached resolution.

Respectfully,

WM. A. PRENDERGAST, Comptroller; GEORGE McANENY, President, Board of Aldermen, Committee on Salaries and Grades.

The following resolution was offered:

Resolved, That the resolution adopted by the Board of Estimate and Apportionment on June 5, 1914, reading as follows:

"Resolved, That the Board of Estimate and Apportionment hereby authorizes the Chief Engineer of the Board to secure a sufficient number of draftsmen necessary to complete the work of preparing a map of the City of New York, to be used by the various Departments and Boroughs which will prepare exhibits for the Panama-Pacific Exposition, the compensation of said Draftsmen to correspond with the grades for said position already established for the Board of Estimate and Apportionment, the total expenditure therefor not to exceed the sum of seventy-five hundred dollars (\$7,500), and to be charged to the Contingent Fund of the Board of Estimate and Apportionment for the year 1914";

—be and the same hereby is amended to make the amount authorized eight thousand seven hundred dollars (\$8,700).

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

President, Borough of The Bronx—Modification of Schedule (No. 70).

The Secretary presented a communication dated November 12, 1914, from the President of the Borough of The Bronx, requesting a modification of schedule for 1914; and the following report of the Comptroller recommending approval thereof:

Department of Finance, City of New York, Bureau of Municipal Investigation and Statistics, November 25, 1914.

To the Board of Estimate and Apportionment, The City of New York:

Gentlemen—On November 12, 1914, the President of the Borough of The Bronx requested a modification of the schedule supporting the appropriation made to that department in Account No. 468 T. S., Personal Service, Wages Temporary Employees, Care of Highways, Tax Levy and Special and Trust Fund Force, for 1914.

Relative to this modification it is proposed that the lines reading:

Engineer at \$4.75 per day (827 days).....	\$3,928 25
Flagger at \$4.50 per day (805 days).....	3,622 50
Laborer at \$2.50 per day (88,442½ days).....	221,106 25

Total \$228,657 00

—be made to read as follows:

Engineer at \$4.75 per day (849 days).....	\$4,032 75
Flagger at \$4.50 per day (886½ days).....	3,989 25
Laborer at \$2.50 per day (88,254 days).....	220,635 00

Total \$228,657 00

It will be seen that the effect of these proposed changes is to increase the number of days provided for Engineer at \$4.75 per day by 22 days, and for Flagger at \$4.50 per day by 81½ days, which is adjusted in the schedule by reducing the number of days for Laborer at \$2.50 per day by 188½ days or a corresponding decrease of \$471.25. By this means it will be possible to provide sufficient engineers to permit the operation of steam rollers for certain necessary repair work partly completed on University Avenue between Washington Bridge and Burnside Avenue, and for other highway repairs not yet commenced on Park Avenue, between 149th Street and 156th Street where examination shows there are numerous depressions in the pavements. The Borough President also desires to repair other streets of macadam pavement providing weather conditions are favorable. The increase of 81½ days in the position of flagger is to permit the completion of resetting curb and sidewalk flagging on Jerome Avenue near Bainbridge Avenue necessitated by the widening of the roadway. The Superintendent of Highways has also submitted a list of 23 places in the borough for which flaggers will be required in relaying sidewalks on city property, relaying crosswalks and repairing the curb.

The line item changes in detail are as follows:

Account No.	Title.	Schedule Transfer.	
		Increase.	Decrease.
468 T. S.	Engineer at 4.75 per day.....	\$104 50	
	Flagger at \$4.50 per day.....	366 75	
	Laborer at \$2.50 per day.....		\$471 25
Total		\$471 25	\$471 25

These changes produce no increase in the schedule total. The adoption of the attached resolution approving the schedule, as revised, is therefore recommended.

Respectfully,

WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That the Board of Estimate and Apportionment hereby approves the schedule, as revised, for the office of the President of the Borough of The Bronx for the year 1914, as follows:

Personal Service, Wages, Temporary Employees, Care of Highways.

468TS	Tax Levy and Special and Trust Fund Force—	
	Foreman at \$5 per day (322 days).....	\$1,610 00
	Foreman at \$4 per day (7,653 days).....	30,612 00
	Carpenter at \$4.50 per day (511 days).....	2,299 50
	Paver at \$5 per day (3,680 days).....	18,400 00
	Rammer at \$4 per day (1,945 days).....	7,780 00
	Painter at \$4 per day (961 days).....	3,844 00
	Engineer at \$4.75 per day (849 days).....	4,032 75
	Flagger at \$4.50 per day (886½ days).....	3,989 25
	Fireman at \$3 per day (583 days).....	1,749 00
	Laborer at \$2.75 per day (1,468 days).....	4,037 00
	Laborer at \$2.50 per day (88,254 days).....	220,635 00
	Asphalt Foreman at \$5 per day (450 days).....	2,250 00
	Engineer at \$4.75 per day (426 days).....	2,023 50

Fireman at \$3 per day (225½ days).....	676 50
Asphalt Worker at \$3 per day (1,125 days).....	3,375 00
Asphalt Worker at \$2.50 per day (5,625 days).....	14,062 50

Schedule Total \$321,376 00

Tax Levy Allowance \$301,953 96

Special and Trust Fund Allowance 19,422 04

Total Allowance \$321,376 00

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Department of Water Supply, Gas and Electricity—Authority to Advertise for Bids for Electric Lighting for the Year 1915 in the Boroughs of Manhattan and The Bronx (No. 71).

(On November 20, 1914 (Cal. No. 149), the request of the Commissioner of Water Supply, Gas and Electricity in this matter, was referred to the Comptroller.)

The Secretary presented a communication, dated November 19, 1914, from the Commissioner of Water Supply, Gas and Electricity, requesting authorization to advertise for bids for electric lighting for the year 1915 in a sub-division of the City comprising the Boroughs of Manhattan and The Bronx taken together; and the following report of the Comptroller recommending approval thereof:

City of New York, Board of Estimate and Apportionment, Municipal Building, Bureau of Contract Supervision, November 25, 1914.

To the Board of Estimate and Apportionment:

Gentlemen—Under date of November 19, 1914, the Commissioner of the Department of Water Supply, Gas and Electricity requested that he be permitted to advertise for electric street lighting in the district comprising the Boroughs of Manhattan and The Bronx taken together as one group.

Under section 530 of the Greater New York Charter, as amended, it is prescribed that:

"Separate contracts shall be made for such lighting in each of the Boroughs of The City of New York, or in such sub-divisions of The City of New York that may appear to the Board of Estimate and Apportionment to be for the best interest of the City."

A similar request has been approved by your Board on request of the Department of Water Supply, Gas and Electricity for some years past.

I recommend that the request be granted inasmuch as it has proved beneficial to the City in the past, and in all probability will be to the City's advantage in this case. One of the important bidders has plants, and supplies lights in each of the two Boroughs, and as the bid is usually based on a sliding scale, depending upon the number of lights supplied, a better rate may be obtained by the grouping requested.

I therefore recommend the adoption of the attached resolution.

Respectfully,

WM. A. PRENDERGAST, Comptroller.

The following resolution was offered:

Resolved, That, pursuant to the provisions of Section 530 of the Greater New York Charter, as amended, the Commissioner of Water Supply, Gas and Electricity be and is hereby authorized and empowered to advertise for bids for electric lighting for the year 1915 in a subdivision of the City comprising the Boroughs of Manhattan and The Bronx, taken together.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens and Richmond—16.

Public Service Commission for the First District—Removal of Elevated Railroad Structure from Lower Fulton Street, Borough of Brooklyn (No. 72).

The Secretary presented a communication, dated November 23, 1914, from the 28th Ward Taxpayers' Protective Association, urging action by the Board toward the removal of the elevated railroad tracks from lower Fulton Street, Brooklyn.

Which was referred to the Committee on Transit.

Department of Docks and Ferries—Completion of the Jamaica Bay Improvement (No. 73).

The Secretary presented a communication, dated November 23, 1914, from the Secretary, Brooklyn League, containing resolution adopted by said Association at its meeting held November 19, 1914, urging the expedition of the Jamaica Bay Improvement.

Which was referred to the Committee on Port and Terminal Facilities.

Territory Bounded by Hampton Street, Junction Avenue, South Railroad Avenue and Corona Avenue, Borough of Queens—Changing Map (No. 74).

(On November 20, 1914 (Cal. No. 66), this matter was referred to the Committee on the City Plan.)

The Secretary presented the following communication:

November 17, 1914.

Hon. JOHN PURROY MITCHEL, Mayor of New York City:

Dear Sir—As a property owner of "Elmhurst," Borough of Queens, L. I., I hereby desire to add my protest to the many others sent in regard to the building of a "Railroad Freight Station" at Elmhurst, Long Island, by the Long Island Railroad Company. Yours very truly,

PETER SCHWAGERL, 24 Victor Place, Elmhurst, L. I.

The Secretary also presented communications from George W. Stevens, Rev. H. B. Belcher, W. B. Dickinson, George T. G. and Clarence L. Pitcher, protesting against the Long Island Railroad Company building a railroad freight station at Elmhurst, Long Island.

Which communications were referred to the Committee on the City Plan.

Pittsburg Contracting Company (No. 75).

The Secretary presented a communication from the Pittsburg Contracting Company, stating it would not require the use of the bridge across the roadway of McCombs Road at its intersection with Aqueduct Avenue near 176th Street, Borough of The Bronx, after January 1, 1915, and requesting a refund of the compensation paid from January 1, 1915, to November 1, 1915.

This consent was granted by resolution adopted by the Board November 9, 1911; approved by the Mayor November 15, 1911.

The communication was referred to the Bureau of Franchises.

Department of Street Cleaning—Facilitating and Improving the Work of Collecting Ashes in the Borough of Brooklyn (No. 76).

The Secretary presented a communication, dated November 21, 1914, from the Secretary, Medical Society of the County of Kings, enclosing resolutions adopted by said Association at its meeting held November 17, 1914, protesting against the continuance of the unsanitary method of collecting ashes in the Borough of Brooklyn and urging that steps be taken for such collections with less annoyance and greater security to the health of the Public.

Which was referred to the Commissioner of Street Cleaning for report.

Department of Education—Acquisition of Property as a Site for School Purposes (No. 77).

The Secretary presented a communication, dated November 11, 1914, from the Fremont Republican Club of the Second Assembly District, Brooklyn, urging the purchase by the City of a suitable site centrally located within the Second Assembly District of Brooklyn for the erection thereon of a high school.

Which was referred to the Board of Education for report.

Brooklyn Public Library; Department of Education—Enlarging the Ridgewood Branch of Library (No. 78).

The Secretary presented a communication, dated November 24, 1914, from Mr. Frank Rollins, Principal, Bushwick High School, Brooklyn, urging the use of plot of ground on Irving Avenue, Brooklyn, situated near the Bushwick High School for the erection of a public library building.

A similar communication was presented to the Board at the meeting held November 20, 1914 (Cal. No. 150), and was referred to the Board of Trustees, Brooklyn Public Library, for report.

Which was referred to the Board of Trustees, Brooklyn Public Library.

President, Borough of The Bronx—Issue of Corporate Stock (No. 79).

The Secretary presented a communication, dated November 19, 1914, from the President, Borough of The Bronx, submitting, in response to resolution adopted October 30, 1914, revised estimate of corporate stock requirements for his office up to October 31, 1915.

The Borough President states that in pursuance of said resolution he has reviewed the requests for issues of corporate stock returned to him by the Secretary of the Board and with the exception of the request for the issue of \$2,500 corporate stock for the improvement of market site on Willis Avenue extending from Southern Boulevard to 137th Street, renews all of the requests given in order of their urgency and with the addition of the request for the issue of \$1,200 corporate stock to provide for the improvement of the public place at the intersection of Bergen Avenue and East 149th Street.

Which was referred to the Committee on Corporate Stock Budget.

Department of Parks, Borough of Queens—Issues of Corporate Stock (No. 80).

The Secretary presented a communication, dated November 20, 1914, from the Commissioner of Parks, Borough of Queens, renewing request, in response to resolution adopted on October 30, 1914, for the issue of \$55,125 corporate stock for engineering work, construction of jetties, etc., at the beach front of Seaside Park, Rockaway Beach, and \$20,000 corporate stock for the purchase of woodland adjoining Upland Park, Jamaica, and submitting additional request for the issue of corporate stock for improvements in various parks in the Borough of Queens.

Which was referred to the Committee on Corporate Stock Budget.

Department of Water Supply, Gas and Electricity—Issue of Corporate Stock (No. 81).

The Secretary presented a communication, dated November 23, 1914, from the Commissioner of Water Supply, Gas and Electricity, in response to resolution adopted by the Board on October 30, 1914, renewing request for an issue of \$122,244.05 corporate stock to provide for the payment of judgment obtained by Juengst Bros.

Which was referred to the Committee on Corporate Stock Budget.

Department of Parks, Boroughs of Manhattan and Richmond—Retirement of Frank Schall, Laborer (No. 82).

The Secretary presented a communication, dated November 21, 1914, from the Commissioner of Parks, Boroughs of Manhattan and Richmond, recommending the retirement, pursuant to Chapter 669 of the Laws of 1911, as amended, of Frank Schall, Laborer, in said Department.

Which was referred to the Committee on Salaries and Grades.

Department of Docks and Ferries—Retirement of Various Employees (No. 83).

The Secretary presented three communications dated November 23, 1914, from the Commissioner of Docks, requesting the retirement, pursuant to Chapter 669 of the Laws of 1911, as amended, of the following employees in the Department of Docks and Ferries:

Martin Murphy, Laborer;
Demetrio Freco, Laborer;
J. Frank Johnson, Transman and Computer.

Which were referred to the Committee on Salaries and Grades.

Registers, New York and Bronx Counties—Establishment of Various Grades of Positions (No. 84).

The Secretary presented a communication dated November 24, 1914, from the Register of Bronx County, referring to his communication presented to the Board on April 24, 1914 (Cal. No. 37), protesting against the request contained in the communication from the Register of New York County, presented to the Board at its meeting held April 17, 1914 (Cal. No. 4), and referred to the Committee on Salaries and Grades, for the establishment of various positions for the purpose of carrying out the provisions of Chapter 837 of the Laws of 1913, and withdrawing said protest in view of the fact that an appropriation has been made by the Board to do part of the work referred to in Chapter 837 of the Laws of 1913, and further requesting that the Board proceed with the establishment of these positions at the earliest possible date.

Which was referred to the Committee on Salaries and Grades.

Department of Parks, Borough of Queens—Establishment of a Special Fund (No. 85).

The Secretary presented a communication dated November 24, 1914, from the Commissioner of Parks, Borough of Queens, requesting the establishment of a special fund of \$1,500 for the Department of Parks, Borough of Queens, to provide for the cutting of firewood.

This request does not involve the appropriation of any funds, but will simply permit the Department to make use of moneys received by it from the Board of Education in payment for wood delivered.

Which was referred to the Comptroller.

Department of Public Charities; Bellevue and Allied Hospitals; President, Borough of Manhattan; Court of Special Sessions—Issues of Special Revenue Bonds (No. 86).

The Secretary presented four resolutions of the Board of Aldermen, adopted November 10, 1914, requesting issues of special revenue bonds, pursuant to the provisions of subdivision 8, section 188, of the Charter, as follows:

A—\$94,100 for the purpose of replenishing various accounts for the Department of Public Charities for the year 1914.

B—\$76,000 for the purpose of replenishing various accounts for Bellevue and Allied Hospitals for the year 1914.

C—\$4,004.12 for the purpose of providing means for the care and operation of the building Nos. 47-51 Lafayette Street, from September 16 to December 31, 1914, under the jurisdiction of the President of the Borough of Manhattan.

D—\$2,000 for the purpose of providing means for replenishing the contingent account in the Transportation Account of the Court of Special Sessions for the year 1914.

Which were referred to the Comptroller.

Brooklyn Public Library—Erection of New Building for Ridgewood Branch (No. 87).

The Secretary presented a communication, dated November 24, 1914, from Rev. Charles C. Jaeger, urging the erection of a new building for the Ridgewood Branch of the Brooklyn Public Library.

(On January 30, 1914 (Cal. No. 4), communication from the President Brooklyn Public Library requesting the Board to authorize purchase of sites for library buildings in the Ridgewood and Marcy Avenue sections of Brooklyn, was referred to the Comptroller.)

Which was referred to the Comptroller.

President, Borough of Manhattan; Department of Bridges—Transfer of Appropriation (No. 88).

The Secretary presented the following communication from the Corporation Counsel, which was ordered printed in the minutes, placed on file, and the Secretary directed to notify the departments affected:

City of New York, Law Department, Office of the Corporation Counsel, New York, November 24, 1914.

Board of Estimate and Apportionment of The City of New York:

Sirs—I am in receipt of the following communication, dated November 23, 1914, and signed by Joseph Haag, Secretary:

"I transmit herewith certified copy of a resolution adopted by the Board of Estimate and Apportionment on November 20, 1914, authorizing the transfer of \$9,040 from the President, Borough of Manhattan, to the Department of Bridges within appropriations for the year 1914. I also enclose a copy of the report of the Comptroller recommending this transfer.

"You will note that this transfer is authorized, subject to the approval of the Corporation Counsel as to the legality of the work of repairing and repainting the 155th Street viaduct, for which such transfer is made, being performed by the labor forces under the jurisdiction of the Commissioner of Bridges.

"I would thank you to let me have your advice in this matter at the earliest possible date."

From the report of the Comptroller, copy of which is enclosed with your Secretary's letter, the necessity for prompt action is immediate, and the benefit to the City under the proposed plan is manifest. I advise you that the resolution has been properly adopted and that action may be taken pursuant thereto.

Respectfully yours,

FRANK L. POLK, Corporation Counsel.

On motion, the Board adjourned to meet Friday, December 4, 1914, at 10.30 o'clock a. m.

JOSEPH HAAG, Secretary.

MUNICIPAL CIVIL SERVICE COMMISSION.

Eligible List for Automobile Engineman, Promulgated December 2nd, 1914.

1. Benjamin, Edgar B. (N. Q.), 16 West 64th St., 92.40.
2. Read, Henry R., 45 Kingston Ave., Brooklyn, 90.90.
3. Meyers, Wm. A. (N. Q.), 209 St. Marks Ave., Brooklyn, 89.50.
4. Roche, Frank J., 118 West 63rd St., 87.30.
5. Dobbins, Edwin C., 187 High St., Brooklyn, 87.30.
6. Brennen, Thos. F., 31 St. Marks Pl., N. Brighton, S. I., 86.60.
7. Blank, John B. (N. Q.), 47 49th St., Corona, L. I., 85.80.
8. Schumacher, Harry (N. Q.), 2112 Metropolitan Ave., Borough of Queens, 85.30.
9. Dempsey, Daniel G., 123 East 88th St., 84.80.
10. Moore, Joseph F., 503 West 169th St., 82.80.
11. Dixon, Robt. W., Jr. (N. Q.), 1007 60th St., Brooklyn, 82.20.
12. Mooney, Joseph J., 3 Pulaski St., Brooklyn, 82.10.
13. Hinchy, Denis J. (N. Q.), 236 West 126th St., 82.
14. English, Fredk. J., 737 58th St., Brooklyn, 81.30.
15. Davies, Wash. G. (N. Q.), 35 North Oxford St., Brooklyn, 81.20.
16. Lephardt, Chas. H., Jr. (N. Q.), 22 Ash St., Flushing, L. I., 81.20.
17. Harvey, Francis H. (N. Q.), 49 West 112th St., 81.20.
18. Kress, Geo. H., Jr., 72 Manor Rd., W. Brighton, S. I., 80.90.
19. Cleary, Joseph L. (N. Q.), 585 Linden Ave., Brooklyn, 80.90.
20. Beagan, Chas. M. (N. Q.), 1664 Pacific St., Brooklyn, 80.60.
21. Kehoe, William H., 37 Catherine St., 80.50.
22. Russell, Patk. A., 166 East 84th St., 80.40.
23. Muller, Charles, 83 So. 9th St., Brooklyn, 79.90.
24. Knoener, Chas. E., 507 West 159th St., 79.90.
25. Finn, Arthur V., 1589 Second Ave., 79.60.
26. VanGallera, Edward, 179 Norris Ave., Jamaica, 79.30.
27. McCabe, Alexander G., 139 West 64th St., 79.20.
28. Baird, Joseph M., 359 West 47th St., 79.20.
29. Guthrie, Wm. A., 119 East 130th St., 79.
30. Galbraith, James, 333 East 90th St., 78.90.
31. Rieder, Francis, 529 East 82nd St., 78.80.
32. O'Connor, Wm. E., 4390 Liberty Ave., Ozone Park, L. I., 78.80.
33. Kennedy, Roy H., 67 West 108th St., 78.60.
34. Segni, Joseph L., 240 13th St., Brooklyn, 78.50.
35. Lang, Richard, 434 West 38th St., 78.30.
36. Franklin, Lester G., 1062 Jackson Ave., Bronx, 78.20.
37. Downey, Stephen M., 621 Monroe St., Brooklyn, 78.10.
38. Furlong, Chas. H., 190 Devoe St., Brooklyn, 78.10.
39. Maher, Edw., 8701 19th Ave., Brooklyn, 77.90.
40. Gerken, Christian, 959 4th Ave., Brooklyn, 77.80.
41. Breisacher, Daniel, 666 Jefferson Pl., Bronx, 77.70.
42. Wells, Wm. B., Foster and New York Aves., Brooklyn, 77.60.
43. Dorman, Wm. A., 444 Madison St., Brooklyn, 77.60.
44. Baumann, Harry, 388 St. Marks Ave., Brooklyn, 77.30.
45. Kehoe, Chas. G., 822 East 163rd St., 77.20.
46. Glennen, Chas. C., 6 Henderson Pl., 77.20.
47. Katz, Joseph A., 1037 College Ave., Bronx, 77.20.
48. Daly, Robt. E., 162 Richmond Ave., Arrochar, S. I., 77.10.
49. Van Vorst, James E., 71 West 104th St., 77.10.
50. Jenkins, Henry A., 217 West 121st St., 77.10.
51. Beatty, Matthew, 505 W. 41st St., 77.10.
52. Steers, Francis A., 1469 Bergen St., Bklyn., 76.60.
53. Farrell, Geo. A., 53 Horatio St., 76.60.
54. Reidt, Geo. E., 176 East 5th St., Bk., 76.40.
55. Post, Fredk. E., 1259 Lincoln Pl., Bklyn., 76.40.
56. Finn, Richard J., 1589 2d Avenue, 76.40.
57. Mehnert, Wm. J., 777 Fresh Pond Rd., Bk., 76.40.
58. Smith, Bertram G., 127 Covert St., Bk., 76.30.
59. Callan, John F., 509 West 179th St., 76.20.
60. Barton, Geo. R., 111 Forbell Ave., Bk., 76.10.
61. Donovan, Wm. J., 139 West 128th St., 76.10.
62. Carter, Percy M., 5 Ditmas Ave., Bklyn., 76.10.
63. White, Edward, 405 Boulevard, Rockaway Beach, L. I., 76.
64. Southerland, Wm. E., 2101 8th Avenue, 76.
65. Birnie, Otis W., 352 Willis Ave., Bronx, 76.
66. Hall, Frank L., 172 East 82d St., 75.90.
67. Grant, Samuel, 100 East 4th St., Bklyn., 75.90.
68. Freer, Frank L., 2493 Lorillard St., Bx., 75.80.
69. Kenahan, Richard A., 310 West 18th St., 75.80.
70. Shotwell, John W., 607 Washington Avenue, Mariner's Harbor, S. I., 75.80.
71. Taelman, Edgar A., 345 Pacific St., Bklyn., 75.70.
72. Nichol, Harold, 49 Decker Avenue, Pt. Richmond, S. I., 75.70.
73. McGowan, James J., 709 10th Avenue, 75.70.
74. Regan, John D., 562 West 149th St., 75.70.
75. Rowe, Moxey L., 706 Amsterdam Ave., 75.60.
76. Cuthbert, James, 7016 6th Ave., Bklyn., 75.50.
77. Welch, John T., 2088 Arthur Ave., Bx., 75.40.
78. Orth, Richard C., 575 Fairview Avenue, Ridgewood, L. I., 75.40.
79. Miller, Charles F., 2222 8th Ave., 75.30.
80. Mulligan, James J., 436 9th Ave., 75.20.
81. Schleyer, Emil F., 368 East 32d St., Bk., 75.10.
82. Valentine, Lucas, 2017 Silver St., Ridgewood, L. I., 75.10.
83. Page, Fred. H., Bay Shore, L. I., 75.
84. Eitel, Wm. C., 507 West 171st St., 75.
85. Smith, John J., 473 Manhattan Ave., 75.
86. Bayer, Fred. J., 122 East 98th St., 75.
87. Speirs, Herman H., 54 Stanton St., 75.
88. Feeney, Charles E., 313 15th St., Bklyn., 75.
89. Diepold, Geo. W., 82 Academy St., L. I. C., 75.
90. Hayward, John, 170 East 90th St., 75.
91. Hieronimus, Henry C., 15 Neck Rd., Bklyn., 75.
92. Pearsall, Wright, 934 East 98th St., Bk., 75.
93. Leider, Herman, 869 Stebbins Ave., 75.
94. Benesch, Emil, 37 Worthington St., Windfield, L. I., 74.90.
95. Dunn, James J. P., Jr., 2194 7th Avenue, 74.90.
96. Steedman, Chas. O., 833 Courtlandt Ave., Bx., 74.90.
97. Kaufman, Geo. A., 321 Jay St., Bklyn., 74.80.
98. Bub, Fredk. T., 404 Woodbine St., Bk., 74.80.
99. Iba, Alvin August, 1060 52d St., Bklyn., 74.50.
100. Weiss, Rudolph, 248 Wallabout St., Bk., 74.50.
101. Havekost, John T., 1518 Bryant Ave., Bx., 74.50.
102. Coffey, Cornelius, 2124 8th Avenue, c/o Kavanagh, 74.50.
103. Dick, John A., 61 Stewart St., Brooklyn, 74.40.
104. Mullins, James F., 830 Chaffee St., Glendale, L. I., 74.30.
105. Brown, Wm. J., 521 75th St., Brooklyn, 74.30.
106. Scheibing, Wm., 247 West 111th St., 74.30.
107. Montenes, Wm. J., 153 Berry St., Brooklyn, 74.30.
108. Schaeffer, Wm. E., 368 Lenox Avenue, 74.

109. Stott, Geo. L. B., 328 Bleecker St., Brooklyn, 73.90.
110. Flammang, Otto J., 2940 West 22nd St., Brooklyn, 73.90.
111. Brown, Frank H., 246 East 33rd St., 73.90.
112. Bennett, Benj. F., 1285 Fulton St., Brooklyn, 73.90.
113. Reynolds, Geo. H., Jr., 76 West 35th St., 73.60.
114. Dray, Richard O., 234 Maryland Ave., Rosebank, S. I., 73.60.
115. Malcke, Theo. W., 1640 Overing St., Bronx, 73.60.
116. Hemrick, John A., 102 Lott St., Brooklyn, 73.60.
117. Hayes, Bertram, 536 West 145th St., 73.60.
118. Fusco, Robt., Glen Cove, L. I., 73.60.
119. Melzer, Lawrence, 277 New Jersey Ave., Brooklyn, 73.30.
120. Lancer, Charles H., 634 Ocean View Ave., Woodhaven, L. I., 73.30.
121. Forbach, Fredk., 2059 8th Avenue, 73.20.
122. Adler, John P., 987 Post Avenue, Port Richmond, S. I., 73.10.
123. Kehoe, John M., 399a 14th St., Brooklyn, 73.
124. Hertrich, Joseph M., 206 East 80th St., 72.90.
125. Handy, Raymond F., 600 East 22nd St., Brooklyn, 72.90.
126. Sieber, John W., 20 Russell Place, Brooklyn, 72.90.
127. Schoonmaker, Robt. R., 254 West 143rd St., 72.90.
128. Buss, Albert N., 347 West 17th St., 72.70.
129. Cavanagh, Lee W., 9 East 5th St., Brooklyn, 72.70.
130. Fay, Lawrence A., 2059 Webster Avenue, Bronx, 72.50.
131. Hageman, William H., 24 Hogan Place, Winfield, L. I., 72.20.
132. Farmer, Philip J., Jr., 17 West 63rd St., 72.20.
133. Allison, Leon H., 380 East 139th St., 72.20.
134. Ormsby, Leonard D., 462 Convent Avenue, 71.80.
135. Hanke, Otto O. K., 871 Bedford Avenue, Brooklyn, 71.50.
136. Chambers, William, Jr., 144 11th St., L. I. City, 71.50.
137. Sweeney, Jas. F., 173 Conover St., Brooklyn, 71.50.
138. Byrne, Thos. A., 1185 Nostrand Ave., Brooklyn, 71.50.
139. Quinn, Leo L., 192 Elm St., W. N. Brighton, S. I., 71.50.
140. Vlk, Joseph C., 109 Vanderventer Avenue, Astoria, L. I., 71.50.
141. Cordes, Francis F., 66a Schaeffer St., Brooklyn, 71.50.
142. Whiting, Prentiss A., 251 West 92nd St., 71.50.
143. Maynard, Forster J., 118 Broadway, Flushing, L. I., 71.50.
144. Wimmer, Henry W., 120 East 4th St., 71.50.
145. Campbell, Bernard, Pennyfield, Westchester Co., N. Y., 71.50.
146. Dreher, John A., 209 E. 188th St., 71.50.
147. Prescott, Edw. R., 24 Perry St., 71.50.
148. Pickel, Geo. P., 2767 Marion Avenue, Bronx, 71.50.

Promotion to Assistant Medical Superintendent, 5th Grade. Promulgated December 2nd, 1914.

Bellevue and Allied Hospitals.
Fleming, Mark L., Bellevue Hospital, 89.29.

Promotion to Assistant Medical Superintendent, 4th Grade. Promulgated December 2nd, 1914.

Bellevue and Allied Hospitals.
Thornton, Michael J., Bellevue Hospital, 80.76.

Promotion to Assistant Surveyor, Grade E. Promulgated December 2, 1914.
Department of Taxes and Assessments, The Bronx.
Lloyd Kingsley, 4260 Broadway, 80.

FIRE DEPARTMENT.

Bureau of Fire Prevention.

LIST OF REQUIREMENTS.

Week Ending December 5th, 1914.

CLASSIFICATION.

- A—Auxiliary fire appliances.
B—Fire escape orders.
C—Fireproofing and structural alterations.
D—Electrical installations.
E—Obstruction of exits.
F—Exits and exit signs.
G—Fireproof receptacles and rubbish.
H—"No smoking."
I—Diagrams on programs and miscellaneous.
J—Discontinue use of premises.
K—Volatile inflammable oils and explosives.
L—Certificates and miscellaneous.
M—Dangerous condition of heating or power plants.
O—Discontinue use of oil lamps.
S S—Standpipes and sprinklers.
D R—Fire drills.
W—Interior alarms.

Premises.	Order No.	Issued Against.	Classification.
Manhattan.			
155 Allen Street	31248-LF	Adolph Lucker	E
21-23 Ann Street	31050-LF	Isabella Squire, Goff Estate	E
33 Barclay Street	30802-LF	Columbia College Trustees	C
2 Bleecker Street	31211-LF	Jacob H. Schiff	C
40 Bond Street	31022-LF	Estate Geo. E. Kitchings	DR
40 Bond Street	31023-LF	Estate Geo. E. Kitchings	W
40 Bond Street	31024-LF	Conrad Mayer	DR
40 Bond Street	31025-LF	Albert Segall	DR
40 Bond Street	31026-LF	Isidor Moss	DR
40 Bond Street	31027-LF	Isaac Sussman	DR
40 Bond Street	31028-LF	Greenberg & Pearl	DR
40 Bond Street	31029-LF	John Johannis	DR
40 Bond Street	31030-LF	Strawgate & Lotenberg	G
40 Bond Street	31031-LF	Strawgate & Lotenberg	DR
40 Bond Street	31032-LF	Samuel Horowitz	DR
171 Bowery	30684-LF	Nathan Schulman	E
171 Bowery	30685-LF	Nathan Schlsman	E
392 Broadway	31020-LF	Estate Charles Baudoine	DR
392 Broadway	31021-LF	Estate Charles Baudoine	W
404 Broadway	31014-LF	Mary I. Barbey	W
404 Broadway	31015-LF	Mary L. Barbey	DR
427-429 Broadway	31048-LF	John M. Hayward Estate	B
434-438 Broadway	31016-LF	Metropolitan Life Insurance Co.	W
434-438 Broadway	31017-LF	Metropolitan Life Insurance Co.	DR
512 Broadway	31095-LF	Eliza W. Perkins Estate	SS
524-528 Broadway	31018-LF	Interstate Land Holding Co.	W
524-528 Broadway	31019-LF	Interstate Land Holding Co.	DR
653-5 Broadway	30984-LF	Roggen Brothers & Co.	G
1263 Broadway	30946-LF	Charles E. Riker	A
1263 Broadway	30947-LF	French, Shriner & Urner	A
48 Avenue C	31184-LF	Elizabeth Donovan	C-B
85 Chambers St. and 67 Reade St.	31058-LF	Stephen Upson	DR
85 Chambers St. and 67 Reade St.	31059-LF	Stephen Upson	W
28 East 10th Street	30573-LF	406 West 31st St. Co.	DR
28 East 10th Street	30574-LF	406 West 31st St. Co.	W
28 East 10th Street	30575-LF	406 West 31st St. Co.	SS-C-A
33-5 West 17th St.	31002-LF	Jacob Klein	G
33-5 West 17th St.	31003-LF	Jacob Klein	C
33-5 West 17th St.	31004-LF	Post & Company	G
33-5 West 17th St.	31005-LF	Post & Company	C

Premises.	Order No.	Issued Against.	Classification.
33-5 West 17th St.	31006-LF	Post & Company	DR
33-5 West 17th St.	31007-LF	L. Jacobson & Son	G
33-5 West 17th St.	31008-LF	L. Jacobson & Son	DR
33-5 West 17th St.	31009-LF	Louis Frank	DR
33-5 West 17th St.	31010-LF	Louis Frank	C
33-5 West 17th St.	31011-LF	The Consolidated Gas Co.	C
543-545 East 11th St.	31636-LF	Methodist Episcopal Corporation	E
726-728 East 11th St.	31268-LF	Wm. L. Marshall	SS
17 East 12th Street	31077-LF	Julia C. S. Grant	C
17 East 12th Street	31078-LF	Julia C. S. Grant	W
17 East 12th Street	31079-LF	Julia C. S. Grant	DR
17 East 12th Street	31080-LF	Samuel Weisberg	A-C-I
17 East 12th Street	31081-LF	Samuel Weisberg	G
17 East 12th Street	31082-LF	Goldman & Dancis	G
17 East 12th Street	31083-LF	Goldman & Dancis	A-I-C
17 East 12th Street	31084-LF	Hechtman & Giffler	A
17 East 12th Street	31085-LF	Hechtman & Giffler	G
17 East 12th Street	31086-LF	Bergman & Guberman	C
17 East 12th Street	31087-LF	Bergman & Guberman	A-C
17 East 12th Street	31088-LF	Standard Trucking Co.	C-G
17 East 12th Street	31089-LF	Standard Trucking Co.	A
17 East 12th Street	31090-LF	Abraham Montag	A
17 East 12th Street	31091-LF	Abraham Montag	G
17 East 12th Street	31092-LF	Lieberman & Lieberman	A-C
17 East 12th Street	31093-LF	Lieberman & Lieberman	G
17 East 12th Street	31094-LF	Lieberman & Lieberman	G
36-38 East 12th Street	30509-LF	Clara A. M. Creer	B
12-16 East 14th St. and 7-9 East 13th Street	31263-LF	Est. Henry Spingler	C
12-16 East 14th St. and 7-9 East 13th Street	31264-LF	Vogel & Sconwry	DR
12-16 East 14th St. and 7-9 East 13th Street	31265-LF	Arthur L. Brouse	DR
12-16 East 14th St. and 7-9 East 13th Street	31266-LF	Spero-Michael Co.	DR
12-16 East 14th St. and 7-9 East 13th Street	31267-LF	Est. Henry Singler	DR
Foot of East 16th St., Willard Parker Hospital	29885-LF	Willard Parker Hospital	SS
Foot of East 16th St., Willard Parker Hospital	29886-LF	Willard Parker Hospital	SS
Foot of East 16th St., Willard Parker Hospital	29887-LF	Willard Parker Hospital	SS
13 East 17th Street	31216-LF	Mrs. Lizzie Armstrong	W
13 East 17th Street	31217-LF	Mrs. Lizzie Armstrong	DR
13 East 17th Street	31218-LF	Dickes & Block	DR
39 East 19th Street	31185-LF	Ernest de Grandmont	DR
39 East 19th Street	31186-LF	Ernest de Grandmont	G
39 East 19th Street	31187-LF	Ernest de Grandmont	L
39 East 19th Street	31188-LF	Louis Gidding	A
39 East 19th Street	31189-LF	Louis Gidding	DR
39 East 19th Street	31190-LF	The Caprice Dress Co.	G
39 East 19th Street	31191-LF	The Caprice Dress Co.	C-I
39 East 19th Street	31192-LF	The Caprice Dress Co.	DR
39 East 19th Street	31193-LF	Jonas Finger	DR
39 East 19th Street	31194-LF	Schechter & Metz	DR
39 East 19th Street	31195-LF	Schechter & Metz	A-I
39 East 19th Street	31196-LF	Schechter & Metz	G-C
39 East 19th Street	31197-LF	Ginsburg & Cohen	G
39 East 19th Street	31198-LF	Ginsburg & Cohen	DR
39 East 19th Street	31199-LF	Est. Thomas Adams, Sr.	DR
39 East 19th Street	31200-LF	Est. Thomas Adams, Sr.	SS
24-26 East 21st Street	31097-LF	Baldwin & Ritsert Co.	DR
24-26 East 21st Street	31098-LF	Drucker Brothers	DR
24-26 East 21st Street	31099-LF	The Bruno Works	DR
24-26 East 21st Street	31100-LF	Kuhlmann & Borchert	DR
24-26 East 21st Street	31101-LF	Beattie-Delve Co.	DR
24-26 East 21st Street	31102-LF	Dora Herman	DR
24-26 East 21st Street	31102-LF	Dora Herman	DR
24-26 East 21st Street	31103-LF	Coleman & Co.	DR
24-26 East 21st Street	31104-LF	Miller & Mantague	DR
24-26 East 21st Street	31105-LF	Leo M. Lowenthal	DR
24-26 East 21st Street	31106-LF	Elm Mfg. Co.	DR
24-26 East 21st Street	31107-LF	The Art Ornament Co.	DR
24-26 East 21st Street	31108-LF	Cohen Brothers	DR
24-26 East 21st Street	31109-LF	Naum & Singer	DR
24-26 East 21st Street	31110-LF	Joseph Friedman Button Co.	DR
24-26 East 21st Street	31111-LF	Charles R. Hayes Co.	DR
24-26 East 21st Street	31112-LF	Finn Press	DR
24-26 East 21st Street	31113-LF	M. Rosenthal Co.	DR
24-26 East 21st Street	31114-LF	Bernhardt, Wirtschafter	DR
24-26 East 21st Street	31115-LF	C. A. Gosford Co.	DR
24-26 East 21st Street	31116-LF	Paul Overhage, Inc.	DR
24-26 East 21st Street	31117-LF	Jake Giniger	DR
24-26 East 21st Street	31118-LF	E. Oppenheimer Co.	DR
24-26 East 21st Street	31119-LF	S. Glass Fur Co.	DR
24-26 East 21st Street	31120-LF	Stacey & Sharpe	DR
24-26 East 21st Street	31121-LF	Onyx Button Co.	DR
24-26 East 21st Street	31122-LF	Schaller & Syring	DR
24-26 East 21st Street	31123-LF	Royden Marble	DR
24-26 East 21st Street	31124-LF	Pearl Waste Co.	DR
24-26 East 21st Street	31125-LF	Hobart Mfg. Co.	DR
24-26 East 21st Street	31126-LF	D. J. Roberts	DR
24-26 East 21st Street	31127-LF	Charles H. Lawrence	DR
24-26 East 21st Street	31128-LF	Max Wassermann	DR
24-26 East 21st Street	31129-LF	Abraham Beller	W
24-26 East 21st Street	31130-LF	Abraham Beller	DR
28 East 22d Street	31222-LF	Crown Raincoat Co.	I
28 East 22d Street	31223-LF	Crown Raincoat Co.	G
28 East 22d Street	31224-LF	Crown Raincoat Co.	DR
28 East 22d Street	31225-LF	Ches Brand Neckwear Co.	G-C
28 East 22d Street	31226-LF	Ches Brand Neckwear Co.	DR
28 East 22d Street	31227-LF	Ches Brand Neckwear Co.	I
28 East 22d Street	31228-LF	Ralph Gordon	C-G
28 East 22d Street	31229-LF	Ralph Gordon	C
28 East 22d Street	31230-LF	Ralph Gordon	DR
28 East 22d Street	31231-LF	Contential Fair Importing Co.	A
28 East 22d Street	31232-LF	Contential Fair Importing Co.	G
28 East 22d Street	31233-LF	Contential Fair Importing Co.	DR
28 East 22d Street	31234-LG	Slatter & Appel Co.	G
28 East 22d Street	31235-LF	Slatter & Appel Co.	DR
28 East 22d Street	31236-LF	New York Shield Co.	DR
28 East 22d Street	31237-LF	George Willcomb Co.	DR
28 East 22d Street	31238-LF	George Willcomb Co.	A
28 East 22d Street	31239-LF	L. H. Cohen Co.	A-C
28 East 22d Street	31240-LF	L. H. Cohen Co.	G-C
28 East 22d Street	31241-LF	L. H. Cohen Co.	DR
28 East 33d Street	31638-LF	Henri Graux	G
430-432 East 59th Street	30087-LF	Samuel Heyman et al.	C
2-6 East Broadway	31209-LF	Lawrence Holding Co.	SS
2-6 East Broadway	31210-LF	Lawrence Holding Co.	SS
431 East Houston Street	30519-LF	Jacob Fass	A
1110-14 1st Avenue	31074-LF	Plaza Machine Co.	DR
1110-14 1st Avenue	31075-LF	Susan F. Buse et al.	DR

Premises.	Order No.	Issued Against.	Classification.	Premises.	Order No.	Issued Against.	Classification.
1110-14 1st Avenue.....	31076-LF	Susan F. Buse et al.....	W	12-14 West 18th St.....	31270-LF	Charles Seiffert and Kopel Bloom.....	G
281 Grand St. and 84 Forsythe	30636-LF	Davis Levy.....	A-C	12-14 West 18th St.....	31271-LF	Adelman & Luchs.....	G
Street.....				12-14 West 18th St.....	31272-LF	The Washington Auto Coat Co.....	A
281 Grand St. and 84 Forsythe	30642-LF	Barnet Berger.....	C-I	12-14 West 18th St.....	31273-LF	Emil Deutsch.....	G
Street.....				12-14 West 18th St.....	31274-LF	Morris Scherer.....	G
281 Grand St. and 84 Forsythe	30643-LF	Isaac Davis.....	F-E	12-14 West 18th St.....	31275-LF	George N. Heller.....	G
Street.....				12-14 West 18th St.....	31276-LF	The Schwartz Skirt House.....	G
281 Grand St. and 84 Forsythe	30645-LF	Morris Ferry.....	A	9 West 20th Street.....	30554-LF	Sandberg & Brother.....	L
Street.....				9 West 20th Street.....	30559-LF	Dr. Marvin Co.....	A
281 Grand St. and 84 Forsythe	30647-LF	Wolf Schwartz & Sons.....	C	9 West 20th Street.....	30562-LF	Cohen & Stessel.....	C
Street.....				9 West 20th Street.....	30568-LF	Edward P. Slevin.....	C
281 Grand St. and 84 Forsythe	30650-LF	Abraham Tabachnik.....	C	28-30 West 20th St. and 31-33 West			
Street.....				19th Street.....	31158-LF	Estate Thomas D. Holland.....	C
350-54 1/2 Greenwich St.....	31181-LF	Andrew Davey.....	E	28-30 West 20th St. and 31-33 West			
350-54 1/2 Greenwich St.....	31182-LF	Andrew Davey.....	E	19th Street.....	31159-LF	Estate Thomas D. Holland.....	DR
14-16 Irving Place.....	30797-LF	Walter Wolcott.....	L	28-30 West 20th St. and 31-33 West			
41 Harrison Street.....	31049-LF	Frederick W. Rheinlander.....	F	19th Street.....	31160-LF	Consolidated Gas Co.....	C
82-84 Jefferson St. and 535 Water				28-30 West 20th St. and 31-33 West			
Street.....				19th Street.....	31161-LF	Barnet Savitch.....	DR
150-156 Lafayette St.....	31068-LF	Cily Wolfson.....	E	28-30 West 20th St. and 31-33 West			
150-156 Lafayette St.....	31069-LF	Aberdeen Realty Co.....	DR	19th Street.....	31162-LF	Scher & Winkelman.....	C
187-93 Lafayette St.....	31066-LF	Aberdeen Realty Co.....	W	28-30 West 20th St. and 31-33 West			
187-93 Lafayette St.....	31067-LF	August F. Trenkmann Est.....	DR	19th Street.....	31163-LF	Scher & Winkelman.....	DR
105 Lexington Avenue.....	31620-LF	August F. Trenkmann Est.....	W	28-30 West 20th St. and 31-33 West			
658 Lexington Avenue.....	31070-LF	John McDermott.....	B	19th Street.....	31164-LF	The New Toy Mfg. Co.....	C
658 Lexington Avenue.....	31071-LF	C. Alfred Capen et al.....	W	28-30 West 20th St. and 31-33 West			
928 Madison Avenue.....	26048-LF	C. Alfred Capen et al.....	DR	19th Street.....	31165-LF	The New Toy Mfg. Co.....	DR
930 Madison Avenue.....	30464-LF	Frank W. Bruns.....	E	28-30 West 20th St. and 31-33 West			
1295-1303 Madison Ave.....	30793-LF	Frank W. Bruns.....	E	19th Street.....	31166-LF	The New Toy Mfg. Co.....	A-C
1295-1303 Madison Ave.....	30794-LF	Morris Newgold.....	G	28-30 West 20th St. and 31-33 West			
1295-1303 Madison Ave.....	30795-LF	Morris Newgold.....	A-F	19th Street.....	31167-LF	Levy & Auerbach.....	G
14 Maiden Lane.....	31619-LF	Union Dime Savings Bank.....	SS-B	28-30 West 20th St. and 31-33 West			
227-9 Mercer Street.....	31249-LF	Alfred D. Pell.....	C	19th Street.....	31168-LF	Levy & Auerbach.....	DR
227-9 Mercer Street.....	31250-LF	Aaron Appell.....	G	28-30 West 20th St. and 31-33 West			
227-9 Mercer Street.....	31251-LF	Aaron Appell.....	A-L	19th Street.....	31169-LF	Levy & Auerbach.....	C
227-9 Mercer Street.....	31252-LF	L. R. Fisher Co.....	G	28-30 West 20th St. and 31-33 West			
227-9 Mercer Street.....	31253-LF	L. R. Fisher Co.....	A-L	19th Street.....	31170-LF	George Herbert.....	DR
227-9 Mercer Street.....	31254-LF	Patrick Durnin.....	A	28-30 West 20th St. and 31-33 West			
227-9 Mercer Street.....	31255-LF	Joseph Piero.....	A	19th Street.....	31171-LF	King & King.....	DR
227-9 Mercer Street.....	31256-LF	Joseph Piero.....	C-G	28-30 West 20th St. and 31-33 West			
227-9 Mercer Street.....	31257-LF	Sam Harris.....	A	19th Street.....	31172-LF	King & King.....	DR
227-9 Mercer Street.....	31258-LF	Sam Harris.....	C	147 Wooster Street.....	31405-LF	Meyer J. Wohlgenuth.....	W
227-9 Mercer Street.....	31259-LF	Est. Robert Goelet.....	C	147 Wooster Street.....	31406-LF	Meyer J. Wohlgenuth.....	DR
86-88 Monroe Street.....	31056-LF	John Hayes.....	A	148 Wooster Street.....	31401-LF	Elizabeth V. Cockroft.....	W
86-88 Monroe Street.....	31057-LF	Isaac Daniel.....	DR	148 Wooster Street.....	31402-LF	Elizabeth V. Cockroft.....	DR
94 Monroe Street.....	31046-LF	Isaac Daniel.....	W	149-153 Wooster Street.....	31477-LF	R. F. Kilpatrick.....	W
94 Monroe Street.....	31047-LF	Jacob Furgath.....	DR	149-153 Wooster Street.....	31478-LF	R. F. Kilpatrick.....	DR
Nassau Ferry House, Ft. of East				158 Wooster Street.....	31399-LF	Estate Isabel Stiebel.....	W
Houston Street.....	31635-LF	Jacob Furgath.....	W	158 Wooster Street.....	31400-LF	Estate Isabel Stiebel.....	DR
24-34 New Chambers St.....	31033-LF	Nassau Ferry Co.....	A	160-162 Wooster Street.....	31371-LF	Ernest L. Kahn.....	W
24-34 New Chambers St.....	31034-LF	The Jacob New Realty Co.....	DR	160-162 Wooster Street.....	31372-LF	Ernest L. Kahn.....	DR
24-34 New Chambers St.....	31035-LF	The Jacob New Realty Co.....	W	203-205 Wooster St.....	31409-LF	D. A. Cushman Realty Co.....	W
24-34 New Chambers St.....	31036-LF	The Chambers Printing Co.....	DR	203-205 Wooster St.....	31410-LF	D. A. Cushman Realty Co.....	DR
24-34 New Chambers St.....	31037-LF	George M. Gattler.....	DR	310 West End Avenue.....	31577-LF	Consolidated Gas Co.....	C
24-34 New Chambers St.....	31038-LF	Reid Ice Cream Co.....	DR	2-8 West End Avenue.....	31385-LF	National Gum & Mica Co.....	DR
24-34 New Chambers St.....	31039-LF	Meyer Sender.....	DR	2-8 West End Avenue.....	31386-LF	National Gum & Mica Co.....	W
24-34 New Chambers St.....	31040-LF	Patrick J. Gallagher.....	DR	567 Broome Street.....	31486-LF	Estate Henry Yates.....	J-G
24-34 New Chambers St.....	31041-LF	George W. Miller.....	DR	2315-17 3rd Avenue.....	31356-LF	Morris J. Mallinson.....	F
211 Park Row.....	31062-LF	The Schwartz Printing Co.....	DR	536 Broadway.....	31588-LF	Jacob Kaplan.....	DR
211 Park Row.....	31063-LF	Robert Kommel.....	DR	536 Broadway.....	31589-LF	Samuel Krohnberg.....	DR
214 Pearl St.....	30501-LF	Robert Kommel.....	W	536 Broadway.....	31590-LF	Samuel Mendelsohn.....	DR
56-58 Pine Street.....	31622-LF	Robert B. Roosevelt.....	C	536 Broadway.....	31591-LF	Eclipse Silk Waist Co.....	DR
94 Prince Street.....	31012-LF	Emily B. Hopkins.....	A	536 Broadway.....	31592-LF	Joseph & N. Horowitz.....	DR
94 Prince Street.....	31013-LF	Mary S. Martin et al.....	DR	536 Broadway.....	31593-LF	David & E. L. Mayer.....	DR
28-32 West 3d St. and 219 Greene		Mary S. Martin et al.....	W	536 Broadway.....	31594-LF	Postal Life Insurance Co.....	DR
Street.....				536 Broadway.....	31595-LF	Postal Life Insurance Co.....	W
28-32 West 3d St. and 219 Greene	30993-LF	New York Lap Robe Co.....	G	536 Broadway.....	31596-LF	O. B. Potter Properties, Inc.....	DR
Street.....				92-96 Bleecker Street.....	31500-LF	O. B. Potter Properties, Inc.....	W
28-32 West 3d St. and 219 Greene	31054-LF	Geo. H. Schumann Est. et al.....	DR	92-96 Bleecker Street.....	31501-LF	Samuel & Harry Cohn.....	DR
Street.....				92-96 Bleecker Street.....	31502-LF	Louis Robinson.....	DR
28-32 West 3d St. and 219 Greene	31055-LF	Geo. H. Schumann Est. et al.....	W	92-96 Bleecker Street.....	31503-LF	Barney Schapero.....	DR
Street.....				92-96 Bleecker Street.....	31504-LF	Isaac Friedman.....	DR
28-32 West 3d St. and 219 Greene	30994-LF	Martin Steinthal Co.....	G	92-96 Bleecker Street.....	31505-LF	Joseph W. Goddard.....	DR
Street.....				92-96 Bleecker Street.....	31506-LF	Ruben Sidenberg.....	SS
31-5 West 15th Street.....	30686-LF	Augusta Katz et al.....	C	111-113 Bleecker Street.....	31497-LF	Ruben Sidenberg.....	SS
15 West 17th Street.....	31279-LF	The Wohl Raeder Co.....	C	389 Broome Street.....	31357-LF	Mary B. Reeve et al.....	W
15 West 17th Street.....	31280-LF	Duberstein & Levine.....	C	389 Broome Street.....	31358-LF	Mary B. Reeve et al.....	DR
15 West 17th Street.....	31281-LF	Duberstein & Levine.....	G	419-421 Broome Street.....	31397-LF	Wilkinson Brothers Co.....	W
15 West 17th Street.....	31282-LF	Ludwig Hahn.....	DR	419-421 Broome Street.....	31398-LF	Wilkinson Brothers Co.....	DR
15 West 17th Street.....	31283-LF	The Edgar Co.....	I-C	83 Canal St. and 34 Eldridge.....	31449-LF	Est. Samuel J. Silberman.....	W
15 West 17th Street.....	31284-LF	Rosenstein & Wachtel.....	C-I	83 Canal St. and 34 Eldridge.....	31450-LF	Est. Samuel J. Silberman.....	DR
15 West 17th Street.....	31285-LF	Frederick Hacker Co.....	DR	125-31 Canal Street.....	31437-LF	Elizur V. Foote.....	W
15 West 17th Street.....	31286-LF	Benjamin Brannheim Co.....	G	125-31 Canal Street.....	31438-LF	Elizur V. Foote.....	DR
20 West 17th Street.....	31134-LF	The 20 West 17th St. Co.....	C	206-208 Canal Street.....	31525-LF	The Minken-Zisk Co.....	DR
20 West 17th Street.....	31135-LF	The 20 West 17th St. Co.....	C	206-208 Canal Street.....	31526-LF	The Minken-Zisk Co.....	C
20 West 17th Street.....	31136-LF	Fisher & Walsh.....	DR	206-208 Canal Street.....	31527-LF	The Minken-Zisk Co.....	C-A
20 West 17th Street.....	31137-LF	Louis R. Engleman, Inc.....	DR	206-208 Canal Street.....	31528-LF	The G. G. Chemical Co.....	DR
20 West 17th Street.....	31138-LF	Louis R. Engleman, Inc.....	C	206-208 Canal Street.....	31529-LF	The G. G. Chemical Co.....	A
20 West 17th Street.....	31139-LF	Antonio Griffean Co.....	DR	264 Canal Street.....	31431-LF	Mary R. J. DuBois et al.....	W
20 West 17th Street.....	31140-LF	Antonio Griffean Co.....	C	264 Canal Street.....	31432-LF	Mary R. J. DuBois et al.....	DR
20 West 17th Street.....	31141-LF	Trubin Brothers.....	DR	405-11 East 4th Street.....	31514-LF	Forest Box & Lumber Co.....	C
20 West 17th Street.....	31142-LF	Hymen & Binder.....	DR	405-11 East 4th Street.....	31515-LF	Forest Box & Lumber Co.....	DR
20 West 17th Street.....	31143-LF	Moses Galpeer.....	C	405-11 East 4th Street.....	31516-LF	James Lake's Sons.....	DR
20 West 17th Street.....	31144-LF	Moses Galpeer.....	C	405-11 East 4th Street.....	31517-LF	James Lake's Sons.....	C-G
20 West 17th Street.....	31145-LF	Louis Felsenheld.....	DR	405-11 East 4th Street.....	31518-LF	James Lake's Sons.....	A
20 West 17th Street.....	31146-LF	Louis Felsenheld.....	I	405-11 East 4th Street.....	31519-LF	Morris Lichenstein.....	DR
20 West 17th Street.....	31147-LF	Max Singer & Co.....	DR	405-11 East 4th Street.....	31520-LF	Morris Lichenstein.....	C-G
20 West 17th Street.....	31148-LF	Max Singer & Co.....	I	405-11 East 4th Street.....	31521-LF	Morris Lichenstein.....	A-C
20 West 17th Street.....	31149-LF	Max Singer & Co.....	C	133-141 West 21st St.....	30733-LF	Tip Top Waist Co.....	G
20 West 17th Street.....	31150-LF	Pinas & Kimmel.....	DR	133-141 West 21st St.....	30739-LF	Harry Greger & Co.....	C-I
20 West 17th Street.....	31151-LF	Pinas & Kimmel.....	G	133-141 West 21st St.....	30741-LF	Louis Hochstein.....	E-G
20 West 17th Street.....	31152-LF	Pinas & Kimmel.....	C-I	133-141 West 21st St.....	30743-LF	Alexander Watterson.....	I
20 West 17th Street.....	31153-LF	N. Y. Dress Costume Co.....	DR	133-141 West 21st St.....	30744-LF	Harry Leibman & David Hurwitz.....	G
20 West 17th Street.....	31154-LF	N. Y. Dress Costume Co.....	G	133-141 West 21st St.....	30749-LF	Israel & Max Lidz.....	G
20 West 17th Street.....	31155-LF	N. Y. Dress Costume Co.....	A-C-I	57 West 24th Street.....	30816-LF	C. E. Stevens Co.....	A-C
20 West 17th Street.....	31156-LF	Colgan Engraving Co.....	DR	57 West 24th Street.....	30818-LF	John Murgatroyd.....	A-C-I
20 West 17th Street.....	31157-LF	Colgan Engraving Co.....	A	57 West 24th Street.....	30819-LF	Ignatz Wasserman.....	A-C
33-35 West 17th Street.....	30995-LF	The Ormond Realty Co.....	DR	57 West 24th Street.....	30820-LF	Edwin Moody.....	A
33-35 West 17th Street.....	30996-LF	The Ormond Realty Co.....	W	57 West 24th Street.....	30822-LF	Carl Demmler.....	A
33-35 West 17th Street.....	30997-LF	The Ormond Realty Co.....	C	57 West 24th Street.....	30824-LF	Consolidated Gas Co.....	C
33-35 West 17th Street.....	30998-LF	The Ormond Realty Co.....	C	107-113 West 25th St.....	30712-LF	Altman & Dickman.....	C
33-35 West 17th Street.....	30999-LF	The Bedell Co.....	G-C	107-113 West 25th St.....	30713-LF	Louis Stein & Co.....	C
33-35 West 17th Street.....	31000-LF	The Bedell Co.....	DR	107-113 West 25th St.....	30718-LF	Hoffman Brothers.....	G
33-35 West 17th Street.....	31001-LF	Jacob Klein.....	DR	107-113 West 25th St.....	30723-LF	Manhattan Furrier Supply Company.....	G
55-61 West 17th Street.....	31246-LF	Hubert De Stuers et al.....	DR	405-11 East 4th St.....	31522-LF	Cyrus H. Fay.....	F
55-61 West 17th Street.....	31247-LF	Hubert De Stuers et al.....	W	405-11 East 4th St.....	31523-LF	Cyrus H. Fay.....	DR
121-125 West 17th Street.....	31295-LF	The Reffon Realty Co.....	C	405-11 East 4th St.....	31524-LF	Cyrus H. Fay.....	W
121-125 West 17th Street.....	31296-LF	The Reffon Realty Co.....	DR	40 East 21st Street.....	31536-LF	Edelsa Dress Mfg. Co.....	DR
121-125 West 17th Street.....	31297-LF	The Reffon Realty Co.....	W	40 East 21st Street.....	31537-LF	Monogram Negligee Co.....	DR
121-125 West 17th Street.....	31298-LF	George P. Williams.....	DR	40 East 21st Street.....	31538-LF	F. Newman.....	DR
121-125 West 17th Street.....	31299-LF	Merle, Boemerwald & Reichmand.....	DR	40 East 21st Street.....	31539-LF	Doernberg & Stein.....	DR
121-125 West 17th Street.....	31300-LF	Hananer, Arnstein & Siegel, Inc.....	DR	40 East 21st Street.....	31540-LF	Cartoon & Marcus.....	DR
121-125 West 17th Street.....	31301-LF	Isaac Ginsberg & Bro.....	DR	40 East 21st Street.....	31541-LF	Ideal Costume Co.....	DR
10 West 18th Street.....	26868-LF	Morris Hirson-Jersey Cloak Co.....	DR				
12-14 West 18th St.....	31269-LF	The B. & L. Construction Co.....	C				

Premises.	Order No.	Issued Against.	Classification.	Premises.	Order No.	Issued Against.	Classification.
40 East 21st Street.....	31542-LF	Newell Mfg. Co.....	DR	51-53 West 39th Street.....	31563-LF	Prince Pierre Troubetsky.....	F-A
40 East 21st Street.....	31543-LF	Bloch & Cohen.....	DR	51-53 West 39th Street.....	31564-LF	Kate Wragge.....	DR
40 East 21st Street.....	31544-LF	Fairchild Advertising Co.....	DR	51-53 West 39th Street.....	31565-LF	Kate Wragge.....	G
40 East 21st Street.....	31545-LF	O. L. Cushman Co.....	DR	51-53 West 39th Street.....	31566-LF	Catherine Carlisle.....	DR
40 East 21st Street.....	31546-LF	Gertrude V. Morgan.....	DR	51-53 West 39th Street.....	31567-LF	John F. Paris.....	DR
40 East 21st Street.....	31547-LF	Gertrude V. Morgan.....	W	51-53 West 39th Street.....	31568-LF	Carl C. Ulmarch.....	DR
431-437 East 102nd St.....	31487-LF	George T. Diefenthaler.....	SS	51-53 West 39th Street.....	31569-LF	Consolidated Gas Co.....	C
431-437 East 102nd St.....	31488-LF	Harlem Market Warehouse Co.....	A	51-53 West 39th Street.....	31570-LF	Elize Bachman.....	DR
431-437 East 102nd St.....	31489-LF	Harlem Market Warehouse Co.....	DR	51-53 West 39th Street.....	31571-LF	Wm. F. Paris.....	DR
431-437 East 102nd St.....	31490-LF	Nicholas Mack & L. Fiore.....	DR	51-53 West 39th Street.....	31572-LF	Wm. F. Paris.....	W
431-437 East 102nd St.....	31491-LF	Geo. T. Diefenthaler.....	W	123 West 40th Street.....	31513-LF	Edward H. Van Ingen.....	J
431-437 East 102nd St.....	31493-LF	Max Cohn.....	A	86 West 119th St. and 170-8 Lenox Avenue.....	31485-LF	Maison Bergere.....	F
431-437 East 102nd St.....	31494-LF	Max Cohn.....	DR	264 West 124th Street.....	31499-LF	Fred Wappers.....	G
71-77 Grand Street.....	31512-LF	Broad Street Holding Co.....	SS	9-11 White Street.....	31383-LF	Mary J. Kingsland.....	W
75 John Street.....	31496-LF	South Manhattan Realty Co.....	SS	9-11 White Street.....	31384-LF	Mary J. Kingsland.....	DR
149-151 Lafayette St.....	31530-LF	J. Archibald Murray.....	W	77 White Street.....	31361-LF	Est. John M. Dodd.....	W
149-151 Lafayette St.....	31531-LF	J. Archibald Murray.....	DR	77 White Street.....	31362-LF	Est. John M. Dodd.....	DR
33 Lisenard Street.....	31433-LF	Est. Jacob Gattgen.....	W	214-216 William St.....	31411-LF	Metropolitan Realty Co.....	W
33 Lisenard Street.....	31434-LF	Est. Jacob Gattgen.....	DR	214-216 William St.....	31412-LF	Metropolitan Realty Co.....	DR
92 Mott Street.....	31465-LF	John Bade et al.....	W	257-259 William Street.....	31413-LF	Washington H. Taylor.....	W
92 Mott Street.....	31466-LF	John Bade et al.....	DR	257-259 William Street.....	31414-LF	Washington H. Taylor.....	DR
161 Mulberry Street.....	31359-LF	Vincenzo DeLuca.....	W	116-118 Wooster Street.....	31407-LF	Bryant Real Estate Co.....	W
161 Mulberry Street.....	31360-LF	Vincenzo DeLuca.....	DR	116-118 Wooster Street.....	31408-LF	Bryant Real Estate Co.....	DR
80 Nassau Street.....	31507-LF	Jacob Corday.....	C-G	136 Wooster Street.....	31481-LF	N. Jacorus.....	W
80 Nassau Street.....	31508-LF	Jacob Corday.....	G	136 Wooster Street.....	31482-LF	N. Jacorus.....	DR
80 Nassau Street.....	31509-LF	Jacob Corday.....	G	146 Wooster Street.....	31403-LF	Elizabeth V. Cockroft.....	W
80 Nassau Street.....	31510-LF	James B. Colgate.....	C-B	146 Wooster Street.....	31404-LF	Elizabeth V. Cockroft.....	DR
80 Nassau Street.....	31511-LF	James B. Colgate.....	G	13-15 West 28th St.....	30825-LF	Sigmund Schmerzler.....	I
114 Park Place.....	31447-LF	Wm. R. Stewart.....	W	28-32 West 36th St.....	30551-LF	Rivoli Realty Co.....	C-SS
114 Park Place.....	31448-LF	Wm. R. Stewart.....	DR	110-112 West 39th St.....	30805-LF	Andre & Jacques Bustanoby.....	F
161-165 Perry Street.....	31441-LF	Anna E. Carroll.....	DR	14 West 40th St.....	31633-LF	Charles Banks Estate.....	F
161-165 Perry Street.....	31442-LF	Anna E. Carroll.....	W	128 West 42nd St.....	30986-LF	Jennie E. Thorley.....	E
465 Pearl Street.....	31453-LF	Est. Peter S. Titus.....	DR	38-40 West 43rd St.....	31242-LF	Pentalpha Realty Co.....	SS
465 Pearl Street.....	31454-LF	Est. Peter S. Titus.....	W	311-319 West 43rd St.....	31072-LF	Arthur H. Scribner.....	W
538-40 Pearl Street.....	31445-LF	Horace F. Peyser.....	W	311-319 West 43rd St.....	31073-LF	Arthur H. Scribner.....	DR
538-40 Pearl Street.....	31446-LF	Horace F. Peyser.....	DR	44-50 West 45th St. and 43 West 44th Street.....	31243-LF	Seaboard Realty Co.....	SS
53 Pitt Street.....	31427-LF	Nathan Garfield.....	W	44-50 West 45th St. and 43 West 44th Street.....	31244-LF	Seaboard Realty Co.....	SS
53 Pitt Street.....	31428-LF	Nathan Garfield.....	DR	3-5-7 West 61st St. and 4-6-8 West 62nd St.....	30493-LF	Columbus Circle Realty Co.....	A
106 Prince Street.....	31429-LF	Dons Eckhoff.....	W	424 West 140th St.....	27269-LF	Carl J. Stein.....	G
106 Prince Street.....	31430-LF	Dons Eckhoff.....	DR	81 Walker Street.....	31287-LF	Chicago Spring Butt Co.....	DR
362-72 2nd Avenue.....	31375-LF	Hamilton Fish Corp.....	DR	81 Walker Street.....	31288-LF	Sarah McMarsh.....	W
362-72 2nd Avenue.....	31376-LF	Hamilton Fish Corp.....	W	81 Walker Street.....	31289-LF	Sarah McMarsh.....	DR
386-88 2nd Avenue.....	31373-LF	E. W. Bliss Bldgs., Inc.....	W	81 Walker Street.....	31290-LF	Hanson & Van Winkle Co.....	DR
386-88 2nd Avenue.....	31374-LF	E. W. Bliss Bldgs., Inc.....	DR	81 Walker Street.....	31291-LF	Acorn Leather Specialty Co.....	C
245 7th Avenue.....	31365-LF	7th Ave. Property Corp.....	W	81 Walker Street.....	31292-LF	Acorn Leather Specialty Co.....	DR
245 7th Avenue.....	31366-LF	7th Ave. Property Corp.....	DR	33 Warren St. and 29 Murray St.....	31064-LF	Jane W. Slevin.....	DR
429 Sixth Avenue.....	31369-LF	J. Gordon Robinson.....	W	33 Warren St. and 29 Murray St.....	31065-LF	Jane W. Slevin.....	W
429 Sixth Avenue.....	31370-LF	J. Gordon Robinson.....	DR	60-62 Warren St. and 81-83 West Broadway.....	31060-LF	Robert L. Morrell et al.....	W
510-512 Sixth Avenue.....	31367-LF	Louisa Appell.....	W	60-62 Warren St. and 81-83 West Broadway.....	31061-LF	Robert L. Morrell.....	DR
510-512 Sixth Avenue.....	31368-LF	Louisa Appell.....	DR	530 West End Avenue.....	31245-LF	Frank M. Lockman.....	SS
48 Sheriff Street.....	31425-LF	Herman M. Kaplan.....	W	378 West Broadway.....	31052-LF	Mary N. Perkins.....	DR
48 Sheriff Street.....	31426-LF	Herman M. Kaplan.....	DR	378 West Broadway.....	31053-LF	Mary N. Perkins.....	W
52 Stanton Street.....	31393-LF	Louis Leavitt.....	W	25 Willett Street.....	30679-LF	Jacob Stein.....	A
52 Stanton Street.....	31394-LF	Louis Leavitt.....	DR	68 William St. and 35 Cedar Street.....	31045-LF	City Investment Co.....	A
179 Stanton Street.....	31395-LF	Est. Yetta Lapias.....	W	71 Lighthouse Street.....	8176-LC	The Union Pacific Tea.....	A
179 Stanton Street.....	31396-LF	Est. Yetta Lapias.....	DR	56 Leonard Street.....	8134-LC	C. H. Selick.....	A-O
178 Suffolk Street.....	31423-LF	Est. Geo. Folsom.....	W	1303 Lexington Ave.....	8174-LC	A. Nierenberg.....	A-H
178 Suffolk Street.....	31424-LF	Est. Geo. Folsom.....	DR	80 Maiden Lane.....	8147-LC	Ricketts & Banks.....	A-K
145 Spring Street.....	31435-LF	Est. Mary A. Post.....	DR	95 Madison Avenue.....	8179-LC	Pomeroy & Fischer.....	H
145 Spring Street.....	31436-LF	Est. Mary A. Post.....	W	2060 Madison Avenue.....	8104-LC	Wm. H. Borman.....	H-A-G
157 Spring Street.....	31479-LF	Charles B. Prettyman.....	DR	1105 Park Avenue.....	8137-LC	Max Carmel.....	A
157 Spring Street.....	31480-LF	Charles B. Prettyman.....	W	356 Pearl Street.....	8094-LC	Frank Cella.....	A-C
84 Thomas Street.....	31443-LF	Est. Erastus Titus.....	DR	1406 2nd Avenue.....	8136-LC	Abraham Cohen.....	A
84 Thomas Street.....	31444-LF	Est. Erastus Titus.....	W	637 2nd Avenue.....	8116-LC	Caroline Haas.....	K-A
91-3 Thompson Street.....	31599-LF	Katherine F. Wadsworth.....	DR	172 7th Avenue.....	8154-LC	J. Henschel & Co.....	A-G-O-K
91-3 Thompson Street.....	31601-LF	Consolidated Gas Co.....	C	441 10th Avenue.....	8201-LC	Joseph Kaplan & Son.....	H-A
91-3 Thompson Street.....	31602-LF	Frank E. Hatch Co.....	DR	496 10th Avenue.....	8126-LC	Moses Loewenstein & Son.....	A-G
91-3 Thompson Street.....	31603-LF	Nicholas Schroeder.....	G	66-68 University Place.....	8215-LC	Hazelton Brothers.....	H
91-3 Thompson Street.....	31604-LF	Nicholas Schroeder.....	DR	205 West Street.....	8166-LC	Pruden & Thompson Co.....	A-H
62 University Place.....	31451-LF	Elizabeth L. Goodnow.....	W	132 West 14th Street.....	8224-LC	Acme Gas & Electric Co.....	C-A-K
62 University Place.....	31452-LF	Elizabeth L. Goodnow.....	DR	159 West 23rd Street.....	8156-LC	C. & B. Zettler.....	A-O
10 Walker Street.....	31457-LF	Est. A. Morton Ferris.....	DR	142 West 27th Street.....	8209-LC	Manhattan Photogravure Co.....	A
10 Walker Street.....	31458-LF	Est. A. Morton Ferris.....	W	541-47 West 29th Street.....	8177-LC	W. & J. Sloane.....	G-D-L
16 Walker Street.....	31463-LF	Wm. Patterson.....	DR	507-9 West 35th Street.....	8120-LC	B. & L. Auto Lamp Co.....	K-A-G
16 Walker Street.....	31464-LF	Wm. Patterson.....	W	116-18 West 50th Street.....	8210-LC	Singer Sewing Machine.....	G
27-29 Walker Street.....	31421-LF	John L. Lawrence.....	W	139-141 West 55th St.....	7970-LC	John Thevenet.....	L-G-L-C
27-29 Walker Street.....	31422-LF	John L. Lawrence.....	DR	225-7 West 58th Street.....	8204-LC	Cutting-Larson Co.....	C
57 Walker Street.....	31459-LF	Est. Laura Conkling.....	W	16 West 61st Street.....	8117-LC	U. S. Light & Heating Co.....	H-A-L-K
57 Walker Street.....	31460-LF	Est. Laura Conkling.....	DR	243-245 West 64th St.....	8190-LC	Minerva Motors Co.....	A-H-G-C
78-80 Walker Street.....	31381-LF	Charles Laue.....	DR	172 West 65th Street.....	8059-LC	John Corner & Son.....	G-A-H
78-80 Walker Street.....	31382-LF	Charles Laue.....	W	2323 Westchester Ave.....	8175-LC	Benjamin Belincoff.....	A-H-O
85 Walker Street.....	31455-LF	Etagloc Holding Co.....	W	61 Ann Street.....	8076-LC	Charles W. Gandineer.....	H-G
85 Walker Street.....	31456-LF	Etagloc Holding Co.....	DR	4859 Broadway.....	8129-LC	Wm. C. Moir.....	L-A-H
12 Washington Place.....	31389-LF	Thomas Morgan et al.....	W	130 Chambers Street.....	8138-LC	Acker, Merrill & Condit.....	A
12 Washington Place.....	31390-LF	Thomas Morgan et al.....	DR	79 Avenue D.....	8072-LC	F. Debski.....	G
21 Washington Place.....	31461-LF	Est. Elizabeth Bradford.....	W	113 Eighth Avenue.....	8157-LC	L. Feldman.....	O-G-A
21 Washington Place.....	31462-LF	Est. Elizabeth Bradford.....	DR	589 Eleventh Avenue.....	8218-LC	Leon Cohen.....	G
81-85 Washington Street.....	31379-LF	Daniel J. Faour et al.....	W	3-5 East 1st Street.....	8219-LC	Joseph Bordaky.....	A
81-85 Washington Street.....	31380-LF	Daniel J. Faour et al.....	DR	312-316 East 23d Street.....	8111-LC	J. F. Fradley Co.....	K-A
11-13 West Houston Street.....	31391-LF	Charles A. Gould.....	W	318-326 East 23d Street.....	8114-LC	American Lithograph Co.....	A
11-13 West Houston Street.....	31392-LF	Charles A. Gould.....	DR	14-18 East 32d Street.....	8074-LC	Aaron B. Morgenstein.....	H-A
17 West Houston Street.....	31419-LF	Frederick Ayer.....	W	317 East 34th Street.....	8151-LC	Precision Machine Co.....	G-A
17 West Houston Street.....	31420-LF	Frederick Ayer.....	DR	221 East 58th Street.....	8183-LC	Walter S. Sullivan.....	H-A-G
19 West Houston Street.....	31415-LF	Thornton Woodbury et al.....	W	503-507 East 72d Street.....	809-21C	D. S. Hess.....	H-G-O
19 West Houston Street.....	31416-LF	Thornton Woodbury et al.....	DR	310 East 75th Street.....	8113-LC	Otto F. Becker.....	A-L
69-71 West Houston Street.....	31417-LF	Ristori Leerberger.....	W	439 East 82d Street.....	8194-LC	Albert Thiele.....	G-A
69-71 West Houston Street.....	31418-LF	Ristori Leerberger.....	DR	614-16 East 83d Street.....	8081-LC	Joseph Galati.....	G
77-83 West Houston Street.....	31387-LF	Mary Helen Smith et al.....	W	403 East 89th Street.....	8058-LC	Henry Schroeder.....	A-C-H
77-83 West Houston Street.....	31388-LF	Mary Helen Smith et al.....	DR	769 First Avenue.....	8164-LC	Wm. Ladew Feed Co.....	H
260 West Street.....	31377-LF	P. J. Carlin Construction Co.....	W	Herald Square.....	8188-LC	New York Herald Co.....	C-G
260 West Street.....	31378-LF	P. J. Carlin Construction Co.....	DR	150-156 Lafayette St.....	8063-LF	Farmer-Zehr Engraving Co.....	A-C
410 West Broadway.....	31439-LF	Josephine Brooks.....	W	71 Lighthouse Street.....	8176-LC	The Union Pacific Tea Co.....	A
410 West Broadway.....	31440-LF	Josephine Brooks.....	DR	503 Fifth Avenue.....	27330-F	Levi P. Morton.....	C-B
460 West Broadway.....	31363-LF	Est. Alfred Rigny.....	W	142-4 Henry Street.....	27959-F	Garfield Development Co.....	SS
460 West Broadway.....	31364-LF	Est. Alfred Rigny.....	DR	142-4 Henry Street.....	27960-F	Garfield Development Co.....	C-A-G
55-57 West 3rd Street.....	31495-LF	Livingston Holding Co.....	SS	153-155 West 32d Street.....	29616-F	Penn. Terminal Real Estate Co.....	C
19 West 20th Street.....	31532-LF	Nathan Lamb.....	DR	31 West 57th Street.....	30103-F	Est. Jacob Rothschild.....	W
19 West 20th Street.....	31533-LF	The Paris American Dress Co.....	DR	338 East 69th Street.....	31607-F	Joseph Heiman.....	B-C-F-E
19 West 20th Street.....	31534-LF	Welhelmina C. Blatchford.....	DR	338 East 69th Street.....	31608-F	Women's Mutual Benefit Society.....	J
19 West 20th Street.....	31535-LF	Welhelmina C. Blatchford.....	W	338 East 69th Street.....	31609-F	Joseph Heiman.....	D
27 West 27th Street.....	31483-LF	American Button & Die Co.....	A	338 East 69th Street.....	31610-F	Joseph Heiman.....	W
27 West 27th Street.....	31484-LF	Joseph Hodler & Eisenberg.....	A	338 East 69th Street.....	31611-F	Joseph Heiman.....	J
11 West 32nd Street.....	31551-LF	Morris Freundlich.....	DR	40-2 West 17th Street.....	29439-F	Oltrogge Corporation.....	SS
11 West 32nd Street.....	31552-LF	William Jackmans Sons.....	DR	13-15 West 27th Street.....	31354-F	Meebra Realty Co.....	SS
11 West 32nd Street.....	31553-LF	Doubleday Page & Co.....	DR	133-137 West 27th Street.....	27702-F	Lowell Construction Co.....	SS-A
11 West 32nd Street.....	31554-LF	Cage Brothers & Co.....	DR	2315-2317 Third Avenue.....	31355-F	Est. Julia Elkus.....	C-B
11 West 32nd Street.....	31555-LF	Julius Frank.....	DR	13-15 West 27th Street.....	31354-F	Meebra Realty Co.....	SS
11 West 32nd Street.....	31556-LF	R. Wallace & Sons Mfg. Co.....	DR	563-565 Greenwich Street.....	8211-C	Gordon & Dilworth.....	H-A
11 West 32nd Street.....	31557-LF	Duchheim & Company.....	DR				
11 West 32nd Street.....	31558-LF	John R. Keim.....	DR				
11 West 32nd Street.....	31559-LF	Est. Eva Deutsch.....	W				
11 West 32nd Street.....	31560-LF	Est. Eva Deutsch.....	DR				
51-53 West 39th Street.....	31561-LF	Kate Strack.....	DR				
51-53 West 39th Street.....	31562-LF	Prince Pierre Troubetsky.....	DR				

Premises.	Order No.	Issued Against.	Classification.	Premises.	Order No.	Issued Against.	Classification.
Bronx—				217 Havemeyer St. and 268 So. 5th St.	31336LF	Est. Mrs. Emily Huber.....	A
829-41 East 134th St.	31476-LF	Phillips, Jones Co.	DR	1382-4 Jefferson Ave.	30930LF	1st German New Church.....	A
829-41 East 134th St.	31475-LF	Phillips, Jones Co.	W	12-14 Lexington Ave.	31330LF	Jos. A. Riggi.....	A
250-258 East 139th St.	31473-LF	Edward Gustavesen	DR	644 McDonough St.	31318LF	Presbyterian Church.....	A
250-258 East 139th St.	31474-LF	Edward Gustavesen	W	105 Madison St.	31701LF	Evan Griffith.....	M
213-21 East 134th St.	31467-LF	Frank Westergreen	W	107 Madison St.	31700LF	Wm. S. Williamson.....	M
213-21 East 134th St.	31468-LF	Frank Westergreen	DR	128 Meserole St.	30893LF	Meserole Av. Church.....	A
480-502 East 144th St.	31469-LF	Silk Finishing Co. of America	DR	376 Ninth Street	31691LF	Wm. A. Middleton.....	C
480-502 East 144th St.	31470-LF	Silk Finishing Co. of America	W	772-4 Pacific St. and 603-11 Dean St.	31337LF	Wm. H. Rich & Son.....	A
796 East 176th Street	31471-LF	Biograph Co.	W	772-4 Pacific St. and 603-11 Dean St.	31338LF	Wm. H. Rich & Son.....	G
796 East 176th Street	31472-LF	Biograph Co.	DR	574-84 Park Ave.	30915LF	Morgan Casket Co.....	C
1344-1346 Stebbins Ave.	31578-LF	Zion Hebrew Institution	G	1328 Park Place	30924LF	The Reorganized Ch. of Jesus Christ..	A
1344-1346 Stebbins Ave.	31579-LF	Central Union Gas	C	43-5 Patchen Ave.	31343LF	Trinity Baptist Ch.....	A
1898 Jerome Avenue	30980-LF	Lillian Zwirzman	D	359 Pearl St.	30884LF	Pierce, Butler & Pierce Mfg. Co.....	B-E
1898 Jerome Avenue	30981-LF	Lillian Zwirzman	D	1738 Pitkin Ave.	31315LF	Max Engel.....	DR
823 Ritter Place	30528-F	Department of Education	C-F-A	1738 Pitkin Ave.	31314LF	Kalman Altman.....	DR
167th St., south side, 200 feet west of Bryant Avenue	31042-LF	Protestant Episcopal Diocese of N. Y.	F	1738 Pitkin Ave.	31313LF	Harry & Morris Schneidman.....	DR
2733-35 3rd Avenue	31214-LF	Jacob Schiller	A	1738 Pitkin Ave.	31312LF	Jacob Bernstein.....	DR
2733-35 3rd Avenue	31215-LF	Jacob Schiller	G	1738 Pitkin Ave.	31311LF	Kalman Stein.....	DR
2968 Valentine Avenue	8189-LC	Louis Joeck	D-A-G	1738 Pitkin Ave.	31310LF	Aaron Freed.....	DR
259th St. and Liebig Ave.	8184-LC	Wm. L. Purcell	A-G-H	1738 Pitkin Ave.	31309LF	Jos. Schonerman.....	DR
15 Westchester Square	8054-LC	Frank Van Riper	O	1738 Pitkin Ave.	31308LF	Isaac Langer.....	DR
2126 Westchester Ave.	8171-LC	J. B. Braithwart	O	36-40 Stagg St.	31702LF	Samuel Weiner.....	A
128 West Fordham Road	8096-LC	Edward Hurley	A-G	38 So. 6th St. and 27 Dunham Place	31651LF	B'klyn Union Gas Co.....	C
128 West Fordham Road	8216-LC	Wm. Eiseinan	A-H-G	38 So. 6th St. and 27 Dunham Place	31652LF	Haas-Wood Stock Co.....	A-D
4706 White Plains Ave.	8203-LC	Lilian Weiss	A-G-K-O	186 So. 8th St.	31687LF	Pauline Price.....	G
213th St. and Jerome Ave.	8131-LC	Charles Volk	A-H-G	377-81 Throop Ave.	31670LF	John Grogan.....	A
1122 Beach Avenue	8095-LC	John Rohrbach	A-H-G	151 Twentieth Street	29869-LF	John Kanauga.....	C
351 Bedford Ave., Park Boulevard	8139-LC	Wm. H. Bolton	D	151 Twentieth Street	29870-LF	John Voslek.....	C
779 Crotona Park North	8056-LC	Harris Ratner	A-G-H	151 Twentieth Street	29871-LF	Paul Avon.....	C
792 Courtlandt Avenue	8200-LC	Benjamin Mandelkorn	K-G-C	151 Twentieth Street	29872-LF	John Bopkie.....	C
420 East 237th St.	8169-LC	Wm. Schmitt	A-H-G	151 Twentieth Street	29873-LF	Joseph Bock.....	C
2763 Morris Avenue	8185-LC	Wm. T. Trand	A-G	151 Twentieth Street	29874-LF	Andrea Giragino.....	C
E. S. Park Ave., N. of 138th St.	8220-LC	American Express Co.	L-G	151 Twentieth Street	29875-LF	Pete Parstinock.....	C
685 Rhineland Ave.	8178-LC	Garvey Brothers	A-G	151 Twentieth Street	29876-LF	Mike Warpkop.....	C
270 St. Anns Avenue	8196-LC	L. Levenstim & Son	H-A-G-D-O	230 Troy Avenue	29877-LF	Charles Angelback.....	G
740 Trinity Avenue	8197-LC	Frank J. Beck	C	59 Varet Street	29660-LF	Louis Levy.....	C
836 Trinity Avenue	8127-LC	J. Brunnings	O-A-G	150-168 Van Brunt St., 20-38 Summit St. and 9-27 Imlay Street	29830-LF	Cobb Estate.....	C
604 Union Avenue	8170-LC	Jacob Weinberg	H-G-O	100-4 Willoughby Street	30927-LF	Joseph Ruppert.....	E
843 Union Avenue	30773-F	Hebrew Free School	J	40-42 Walton Street	29761-LF	Abraham Dennis.....	C-G-A
843 Union Avenue	30664-F	Josephine Isilei	J	40-42 Walton Street	29766-LF	David Hallenberg.....	C
843 Union Avenue	30775-F	Josephine Isilei	C-B-F	44 Walton Street	29767-LF	Harry Goodwillig and Norman Zimmerman	C
843 Union Avenue	30776-F	Josephine Isilei	D	44 Walton Street	29763-LF	Abraham Kulik and Harry Tietelbaum	C-G
843 Union Avenue	30777-F	Josephine Isilei	W	36-44 Walton Street	29769-LF	Brooklyn Union Gas Co.....	C
Richmond—				36-38 Walton Street	29770-LF	Walton Pants Co.....	C
139 Hope Ave., Ft. Wadsworth	8133-LC	Michael Berardini	A-G	40-42 Walton Street	29773-LF	Max Gold.....	C
2 Livingston Place	8214-LC	Carl W. Walser	G-A	233-235 Wallabout St. (Front)	29774-LF	Isaac Berkowitz.....	A
108 St. Mary's Ave., Rosebank	8087-LC	J. Rosso	A-G-H	36-38 Walton Street	29775-LF	John F. Blake.....	C
166 Maple Ave., Rosebank	8070-LC	Richmond Borough Dairy	A-H	36-38 Walton Street	29778-LF	Samuel Wolf.....	C
177 Myrtle Ave., W. N. Brighton	8066-LC	Henry W. Grassmeyer	A-H-G	44 Walton St. and 241 Wallabout St. (Front and Rear)	29780-LF	Frank Brewing Co.....	A
38 Theresa Pl., Tompkinsville	8091-LC	Frank C. Howland	H-A	233-235 Wallabout Street (Rear)	29781-LF	Frank Brewing Co.....	A
81 Wadsworth Av., Ft. Wadsworth	8069-LC	Peter P. Falco	A-G-H	237-9 Wallabout St. (Front)	29783-LF	Max Edelstein.....	C
Brooklyn—				237-9 Wallabout St. (Front)	29784-LF	Bartolo Cresmanio.....	C
W. S. Ocean Parkway, near Park Place	29746-LF	Paul Schmidt	W	237-9 Wallabout St. (Front)	29785-LF	Mrs. Emma M. Kissel.....	C
272 Palmetto Street	30878-LF	St. Paul's Lutheran Church	A	36-44 Walton St. and 233-35-41 Wallabout St.	29787-LF	Mrs. Emma M. Kissel.....	C
140-2 Pennsylvania Ave.	30136-LF	Young Men's Christian Assn.	A	1738 Pitkin Ave.	31307-LF	Mrs. Isaac Gross.....	D
12 Powers Street	30130-LF	Joseph Madwany	A	1738 Pitkin Ave.	31306-LF	Mrs. Isaac Gross.....	DR
230 Powers Street, rear	30124-LF	Mrs. Mary Kramer	C	148 Raymond St.	31341-LF	A. I. Namm & Son.....	C
28 Rodney Street	29654-LF	A. & Z. Mfg. Co.	C	151-3 Raymond St.	30854-LF	The Cowperthwaite Co.....	G
141-53 Roebling St., 1-17 Hope St. and 320-8 Metropolitan Ave.	30143-LF	Joseph Lidsky	C	131-3 Russell St.	30918-LF	Evangelical Lutheran Ch. of Messiah..	A
141-53 Roebling St., 1-17 Hope St. and 320-8 Metropolitan Ave.	30145-LF	Samuel & Jacob Hyman	C	637-41 St. Marks Ave.	31331-LF	Ernest Tschantre.....	A
141-53 Roebling St., 1-17 Hope St. and 320-8 Metropolitan Ave.	30147-LF	Jacob Schwartz	C	61-5 Schermerhorn St.	31349-LF	The German Evangelical Church of Brooklyn	A
141-53 Roebling St., 1-17 Hope St. and 320-8 Metropolitan Ave.	30149-LF	Goodman Collar Co.	C	335 Schermerhorn St.	31319-LF	Brooklyn Storage Warehouse. Co.....	A
141-53 Roebling St., 1-17 Hope St. and 320-8 Metropolitan Ave.	30153-LF	Brooklyn Union Gas Co.	C	23 Sidney Place	31342-LF	Brooklyn Union Gas Co.....	C
503-5 Rockaway Avenue	30913-LF	Joseph Zwerling	C	17-27 South 3rd St.	31328-LF	August Kremer.....	D
613 Sterling Place	29655-LF	Arthur H. Waterman	C	17-27 South 3rd St.	31329-LF	August Kremer.....	DR
613 Sterling Place	29656-LF	Arthur H. Waterman	G	S. W. Cor. Third Ave. and Schermerhorn St.	30923-LF	The Baptist Temple.....	A-C-E-F
611 Sterling Place	29657-LF	Arthur H. Waterman	G	543 Atlantic Avenue	31677LF	Salvation Army, Eva Booth, Commander	A
611 Sterling Place	29658-LF	Arthur H. Waterman	C	628-30 Broadway and 59-61 Throop Avenue	31692LF	Morris Blumberg.....	G
615 Sterling Place	29659-LF	Arthur H. Waterman	C	628-30 Broadway and 59-61 Throop Avenue	31693LF	Morris Blumberg.....	A-G
141-151 South 5th St.	29747-LF	Samuel W. Farber	C	1720-8 Broadway	31703LF	Frederick Mills Bros.....	E
200 St. Nicholas Ave.	29750-LF	St. Andrews Lutheran Church	A	337-57 Eldert St.	31689LF	Seyser, Green Co.....	D
32-4 South 9th Street	29757-LF	Levine Bros.	C	337-57 Eldert St.	31690LF	Seyser, Green Co.....	DR
17-19 Saratoga Avenue	29650-LF	Christian F. Keller	A	350-62 Flushing Ave.	29749LF	Hon. J. T. Fetherston, Commissioner, Department of Street Cleaning	A
67-9 Schermerhorn St.	29691-LF	Brooklyn Bureau of Charities	A	716 Flushing Ave.	31671LF	Harris Zoberg.....	E-G
S. W. cor. Schermerhorn St. and Flatbush Avenue	30882-LF	Young Women's Christian Assn.	SS	716 Flushing Ave.	31672LF	Harris Zoberg.....	A-G
226-228 Seventh Avenue	29754-LF	Valentine Newburger	G	403 Franklin Ave.	31681LF	John E. & Chas. G. Simpson.....	C
121 Siegel Street	29646-LF	Maxwell Freund	G	361 Fulton St.	31653LF	Brooklyn Union Gas Co.....	C
64-70 Third Avenue	30885-LF	Svenska Lutheran Bethlehemskran.	A	361 Fulton St.	31654LF	Stephen S. Pettit.....	C
523-525 Third Avenue	29751-LF	Charles A. Schieren Co.	A	361 Fulton St.	31655LF	Jacob Davis & Morris Weiss.....	A-C-D
232-236 Throop Avenue	29752-LF	H. Simon & Son	C	361 Fulton St.	31656LF	Jacob Davis & Morris Weiss.....	G
232-236 Throop Avenue	29753-LF	H. Simon & Son	C	326-8 Grand St.	31685LF	Samuel Goldstein.....	C
430-432 Twelfth Street	30889-LF	Ansonia Clock Co.	A	283-289 Green Ave.	31683LF	The Brooklyn Met. Cl. Co.....	C-G
94-6 Throop Ave. and 67-9 Bartlett Street	29838-LF	Brooklyn Union Gas Co.	C	283-289 Greene Ave.	31684LF	Brooklyn Union Gas Co.....	C
94-6 Throop Ave. and 67-9 Bartlett Street	29840-LF	Louis Landsman	G	826 Kent Ave.	31686LF	Tony Turtie.....	G
94-6 Throop Ave. and 67-9 Bartlett Street	29841-LF	Samuel Adenbaum	G	954-76 Kent Ave.	31665LF	Julius Kayser & Co.....	A
94-6 Throop Ave. and 67-9 Bartlett Street	29842-LF	Samuel Adenbaum	C	59 Liberty Ave.	31695LF	Philip Rosenthal.....	DR
94-6 Throop Ave. and 67-9 Bartlett Street	29844-LF	Joseph Breslow & Herman Goldstein	G	59 Liberty Ave.	31697LF	Cohen Bros.....	DR
94-6 Throop Ave. and 67-9 Bartlett Street	29845-LF	Joseph Breslow & Herman Goldstein	C	59 Liberty Ave.	31696LF	Cohen Bros.....	D
94-6 Throop Ave. and 67-9 Bartlett Street	29848-LF	Samuel L. Berland	C	39 Moore St. and 43 Manhattan Avenue	31641LF	Morris Goldstein.....	G
94-6 Throop Ave. and 67-9 Bartlett Street	29849-LF	Samuel L. Berland	G	39 Moore St. and 43 Manhattan Avenue	31642LF	Morris Goldstein.....	A-C
142-6 Adams St.	31321LF	Hamilton Bank N. Co.	DR	39 Moore St. and 43 Manhattan Avenue	31643LF	Samuel Arbeit.....	A
142-6 Adams St.	31320LF	Hamilton Bank N. Co.	D	39 Moore St. and 43 Manhattan Avenue	31644LF	David Gurshman.....	G
628-30 B'way and 59-61 Throop Avenue	31694LF	Jos. H. Storch	C	39 Moore St. and 43 Manhattan Avenue	31645LF	David Gurshman.....	A-C
587 Central Ave.	31317LF	Chas. F. Bates	E	39 Moore St. and 43 Manhattan Avenue	31646LF	A. & M. Bromberg.....	A-C
81 Columbia St.	31345LF	Philip Meagher	M	39 Moore St. and 43 Manhattan Avenue	31647LF	A. & M. Bromberg.....	G
463-476 Decatur St.	31347LF	St. Marks Cong. Church	A	39 Moore St. and 43 Manhattan Avenue	31648LF	Brooklyn Union Gas Co.....	C
855 Driggs Ave. and 184 B'way	31699LF	Chas. Voelkening	F	285-7 No. 6th St.	31666LF	Diamond Candy Co.....	A
1012-14 Eighth Ave.	31350LF	Prospect Heights Presby. Ch.	A-C	470-2 Rodney St.	31688LF	N. Y. Bottle Box Co.....	A
664 Flushing Ave.	29884LF	Samuel Goodman	C	284 Sackman St. (F. & R.)	31668LF	Jos. Freerman.....	A
403 Franklin Ave.	31680LF	Edward Stretzel	A				
95 Graham Ave.	31333LF	B'klyn Phonograph Co.	G				
95 Graham Ave.	31332LF	B'klyn Phonograph Co.	G				
283-9 Greene Ave.	31682LF	The B'klyn Met. Cl. Co.	A-G-M				
824-8 Greene Ave.	31322LF	Greene Ave. Bap. Ch.	A				
217 Havemeyer St. and 268 So. 5th St.	31316LF	Est. Mrs. Emily Huber	A				

Premises.	Order No.	Issued Against.	Classification.	Premises.	Order No.	Issued Against.	Classification.
284 Sackman St. (F. & R.).....	31669-LF	Samuel Meyerson & Son.....	A	161 4th Street, Elmhurst.....	LC 2058B&Q	John H. Walsh	H-A-G
126-42 13th St.....	31327-LF	Mrs. Mary Barth.....	DR	215 Fulton St., Jamaica.....	LC 2060B&Q	A. A. Anger, M. D.	H-A-G
126-42 13th St.....	31326-LF	Mrs. Mary Barth.....	D	46th St., near Astoria Ave., East			
126-42 13th St.....	31325-LF	Mrs. Mary Barth.....	C	Elmhurst.....	LC 2138B&Q	Lionel G. Skillman	H-A-G
126-42 13th St.....	31324-LF	Adolph & Samuel Treines.....	DR	3117 Fulton Ave., Richmond			
126-42 13th St.....	31323-LF	Kasebier-Chatfield Shellac Co.....	DR	Hill.....	LC 2054B&Q	O. C. Meyer	A-G
92-4 Utica Ave.....	31667-LF	The Pentecostal Ch.....	A	Floral Park Road, Little Neck.....	LC 2137B&Q	Samuel Weeks	H-A-G
39-45 Ainslie Street.....	29694-LF	Julius Levy	G	55 Ibis Street, Forest Hills.....	LC 2088B&Q	John Miller	H-A-G-D
N. S. Avenue R, 75 feet West of				Jamaica Creek, Springfield.....	LC 2090B&Q	Alex. Schubert	L-A-C
East 17th Street.....	30894-LF	Congregation of King's Highway.....	A	143 Jackson Ave., Long Island			
668 Broadway.....	29647-LF	Max Rubinson.....	M	City.....	LC 2089B&Q	Aug. Froschauser	H-A-G
1480-1486 Broadway.....	29880-LF	Lefstein & Rosenfeld Co.....	A	112 Maple Ave., Richmond Hill			
1643 Bergen Street.....	29760-LF	Baptist Church.....	A		LC 2061B&Q	Wm. Woodin	G-A
514 Bedford Avenue.....	30140-LF	Bessie Graboy.....	G	Trains Meadow Road, near Jack-			
514 Bedford Avenue.....	30139-LF	Bessie Graboy.....	D	son Ave., Elmhurst.....	LC 2064B&Q	Queens Borough Corporation.....	A-G
293-7 Bedford Avenue.....	29744-LF	Mrs. Fannie Klauber.....	G	125th Street, Elmhurst.....	LC 2063B&Q	Albert Barends	H-A-G
46 Boerum St. (rear).....	30873-LF	Charles Carmel.....	A			Long Island Bond and Mortgage Guar-	
1057 Bushwick Avenue.....	29879-LF	Turn Verin Club.....	A	15 Union Hall Street, Jamaica.....	LC 2065B&Q	antee Co.	H-A-G
54-60 Classon Avenue.....	29664-LF	Hubert Brennan & Edward L. White.....	G	401 Vernon Avenue, Long Island			
54-60 Classon Avenue.....	29665-LF	Hubert Brennan & Edward L. White.....	G	City.....	LC 2091B&Q	N. Y. Architectural Terra Cotta Co....	A
103 Cook Street (rear).....	29648-LF	Success Trousers Mfg. Co.....	C				
103 Cook Street (rear).....	29649-LF	Success Trousers Mfg. Co.....	G-C				
103 Cook Street (rear).....	29644-LF	Harry Ganz & William Dufman.....	C				
103 Cook Street (rear).....	29645-LF	Harry Ganz & William Dufman.....	G-C				
537-555 Columbia St.....	29758-LF	H. Kohnstamm & Co.....	C				
278-80 Calyer Street.....	29755-LF	Otto Schwartz & Co.....	C				
470 De Kalb Avenue.....	29693-LF	Methodist Episcopal Church.....	A				
1031 De Kalb Avenue.....	30863-LF	O. K. Express Co.....	A				
1368-70 De Kalb Ave.....	30883-LF	Max A. & Max H. Friedman.....	A				
431 Eleventh Street.....	29748-LF	Elbert Y. Haviland.....	A				
35-7 Emerson Place.....	30135-LF	Rudolph Vagt.....	C				
291-3 Essex St. (rear).....	29792-LF	Bernard Davidson.....	C				
1511 Fiftieth Street.....	29759-LF	Phillip Glickstein.....	C				
5302-4 53rd Street.....	29695-LF	Kings County Lighting Co.....	C				
1374 55th St. and 5502-8 14th Ave.	30128-LF	Kings County Lighting Co.....	C				
5202-4 14th Avenue.....	30129-LF	Kings County Lighting Co.....	C				
6301-3 14th Avenue.....	30126-LF	Kings County Lighting Co.....	C				
9119 4th Avenue.....	30127-LF	Kings County Lighting Co.....	C				
9924 4th Avenue.....	30125-LF	Kings County Lighting Co.....	C				
237-43 15th St. (rear building).....	30926-LF	James Burns & Wm. Hurley.....	A				
5904 Fort Hamilton Parkway.....	30907-LF	Isaac J. Rosenstein.....	G				
133-143 Floyd St. (rear).....	30917-LF	Greater N. Y. Metal Bed Co.....	C				
321-327 Flushing Ave.....	29663-LF	Hubert Brennan & Edward White.....	G				
60 Moore Street.....	30132-LF	Alexander Reisenberger & Joseph	G				
		Altkrug	G				
244-46 Metropolitan Ave.....	30134-LF	Joseph Adler	G				
244-46 Metropolitan Ave.....	30133-LF	Joseph Adler	A				
374-6 Metropolitan Ave. (rear).....	29643-LF	Antony Belin	G				
1463-65 Myrtle Avenue.....	29878-LF	Frank Eller	A				
263-7 N. Henry Street.....	30903-LF	Thomas Gregory Galvanizing Works.....	A				
796 Nostrand Avenue.....	29883-LF	Isaac Blumberg.....	G				
620 New Lots Road.....	29653-LF	New Lots Reformed Church.....	A				
240-46 North 10th St.....	30881-LF	Bellis & Co.....	A				
240-46 North 10th St.....	30880-LF	Edgar Z. Hebbard & Henry Wentz.....	A				
367-9 94th Street.....	30895-LF	Kings County Lighting Co.....	C				
394-404 Flushing Ave.....	29807-LF	Franklin Brewing Co.....	C				
1352 Fulton Street.....	30870-LF	Joseph F. Ryan.....	E				
308 Graham Avenue.....	29756-LF	Savichnas & Co.....	A				
467 Glenmore Avenue.....	29698-LF	Aronoff & Bernstein.....	D				
467 Glenmore Avenue.....	29699-LF	Aronoff & Bernstein.....	D				
122-30 Havemeyer St.....	29651-LF	Max Finkelstein.....	G				
122-30 Havemeyer St.....	29652-LF	Max Finkelstein.....	C				
785-97 Humboldt St.....	30908-LF	Solomon Kahn & German Kahn.....	A				
16-48 Java Street.....	29639-LF	S. Weisselass & Co.....	G				
16-48 Java Street.....	30916-LF	Samuel Weissglass.....	G				
590 Knickerbocker Ave.....	30886-LF	St. Paul's Evangelical Congregation.....	A				
347 Lorimer Street.....	30138-LF	Morris Waltzer.....	C				
347 Lorimer Street.....	30137-LF	William Juskowski.....	C				
352-54 Livingston St.....	29829-LF	William Spence.....	C				
352-54 Livingston St.....	29828-LF	William Spence.....	C				
192-4 Lawrence Avenue.....	29882-LF	Ridley Memorial M. E. Church.....	C				
834-44 Manhattan Ave.....	30860-LF	Greenpoint Methodist Episcopal Church.....	A				
58 Moore Street.....	30131-LF	Alexander Reisenberger & Joseph	G				
		Altkrug	G				
37-9 Morrill St. and 111-113 Cook							
Street.....	29690-LF	Abraham Rasenkranz.....	C				
374-6 Metropolitan Ave, Rear.....	29640-LF	Stevens Express & Trucking Company.....	A				
374-6 Metropolitan Ave, Rear.....	29641-LF	Anton Murler.....	G				
374-6 Metropolitan Ave, Rear.....	29642-LF	Frank A. Yankus.....	G				
1537 Bedford Ave.....	LC 2069B&Q	Sudella Co., Inc.....	L				
500 Bergen St.....	LC 2051B&Q	John J. Gammell.....	L-A-G				
794 E. 3rd St.....	LC 2053B&Q	Oscar Markowitz.....	H-A-G				
125 E. 19th St.....	LC 2071B&Q	Harry A. Fogg.....	H-A-G				
284 Hicks St.....	LC 2074B&Q	American Veneziani Paint Co.....	H-A-G				
1805 Avenue J.....	LC 2067B&Q	Chas. L. Huisling.....	H-A-G				
294 Marion St.....	LC 2055B&Q	Noble A. Weir.....	G-A				
986 Nostrand Ave.....	LC 2077B&Q	James Clark.....	D-A-H				
5206 7th Ave.....	LC 2079B&Q	Isidor Cohen.....	A-H				
7607 3rd Ave.....	LC 2081B&Q	Bluestone Bros.....	A-M-D				
6923 3rd Ave.....	LC 2082B&Q	Harry Schultz.....	D-A				
4521 12th Ave.....	LC 2083B&Q	Morris Dieblatt.....	H-A-G				
2222 Tilden Ave.....	LC 2084B&Q	Flatbush Auto Co.....	L-A				
246 Washington Ave.....	LC 2085B&Q	Frank W. Robbins.....	H-A-G				
251 E. 19th St.....	LC 2037B&Q	Albert H. Dollard.....	H-C				
4902 5th Avenue.....	LC 2161B&Q	Paul G. Wolff.....	H-A-C				
6518-22 Ft. Hamilton Park-							
way.....	LC 2153B&Q	Robert A. Hill.....	H-A-G-C				
70 Richardson St.....	LC 2163B&Q	Albert Eckstein.....	A				
116-19 Wallabout St.....	LC 2162B&Q	Meyers Garage, Inc.....	L-G-A-O				
106-12 South 3rd St.....	29790-F	Brooklyn Eastern District Dispensary	C				
		and Hospital	C				
36-44 Walton St. and 233-35-41							
Wallabout St.....	29788-F	Mrs. Emma M. Kissel.....	W				
Queens.							
16 Chestnut St., Long Island City.....	31664-LF	Thomas Pallante	G				
98-100 South Chase Ave., Ham-							
mels, Rockaway.....	31679-LF	Amanda Hamilton.....	A				
272 Flushing Ave., L. I. City.....	29697-LF	American Apothecaries Co.....	A				
943-945 Van Alst Ave.....	29745-LF	Italian M. E. Church.....	C				
N. W. cor. Wave Crest Ave. and							
Wat Jean Court, Far Rockaway.....	29836-LF	Queens Borough Gas & Electric Co.....	C				
N. W. cor. Wave Crest Ave. and							
Wat Jean Court, Far Rockaway.....	29837-LF	Eisenberg Catering Co.....	A-F				
Bay 3rd St., East Elmhurst.....	LC 2057B&Q	John W. Starkie.....	H-A-G				
139 Broadway, Long Island City							
	LC 2086B&Q	M. D'Simone	H-A-G				
45 Baxter Avenue, Elmhurst.....	LC 2135B&Q	J. Bourguignon.....	A-G-H				
10 Dennington Ave., Wood-							
haven.....	LC 2087B&Q	Chas. A. Peffers.....	H-A-G				
68 Drew Ave., Union Course.....	LC 2136B&Q	Fred Catapano.....	H-A-G				
Eastern Ave., 100 feet south of							
Boulevard, east side, Rockaway							
Park.....	LC 2160B&Q	Gus Hallen.....	A-C				
214 46th Street, Corona.....	LC 2059B&Q	James M. Miles.....	H-A-G				

ROBERT ADAMSON, Fire Commissioner.

DEPARTMENT OF FINANCE

WARRANTS MADE READY FOR PAYMENT IN DEPARTMENT OF FINANCE
MONDAY, DECEMBER 7, 1914.

Below is a statement of warrants made ready for payment on the above date, showing therein the Department of Finance voucher number, the dates of the invoices or the registered number of the contract, the date the voucher was filed in the Department of Finance, the name of the payee and the amount of the warrant.

Where two or more bills are embraced in the warrant, the dates of the earliest and latest are given, excepting that, when such payments are made under a contract, the registered number of the contract is shown in the place of the second invoice date.

Where the word "final" is shown after the name of the payee, payment will not be made until thirty days after the completion and acceptance of the work, but all of the other warrants mentioned will be forwarded through the mail unless some reason exists why payment is to be made in person, in which event written notice will be promptly given to the claimant.

In making a written or verbal inquiry at this office for any of the above mentioned warrants, it is requested that reference be made by the Department of Finance voucher number.

WILLIAM A. PRENDERGAST, Comptroller.

Finance Voucher No.	Invoice Dates or Contract Number.	Received in Department of Finance.	Name of Payee.	Amount.
Board of Aldermen.				
156564		12- 4-14	The American District Telegraph Company	\$0 50
156563	10- 1-14, 11- 1-14	12- 4-14	United Electric Service Company.....	9 60
156562	7- -14, 9- -14	12- 4-14	The Western Union Telegraph Company	6 01
156561		12- 4-14	Francis W. Weeks.....	5 23
156560	11-30-14	12- 4-14	M. B. Brown Ptg. & Bdg. Co.....	4 50
156554	10-31-14	12- 4-14	John Manning	31 63
156557	11-30-14	12- 4-14	John Manning	1 75
Commissioners of Accounts.				
156875		12- 5-14	Albert J. Frohock.....	\$500 00
150924			Foster Scott Ice Company.....	3 24
154635	11-20-14	11-30-14	William H. Lippincott.....	90 00
Armory Board.				
150158	37009	11-19-14	Nicholas Gas Fixture M'fg. Co.....	\$364 45
147408	37279	11-13-14	Electric Const'n & Supply Co....Final	422 30
153920	10-31-14	11-27-14	F. L. Robinson.....	40 00
Department of Bridges.				
155056	10- 1-14, 11-19-14	12- 1-14	Thos. W. Kiley Co.....	\$46 33
155043	10-24-14	12- 1-14	Thos. W. Kiley & Co.....	30 00
Bellevue and Allied Hospitals.				
152474			Samuel E. Hunter.....	\$583 06
155460	10-23-14	12- 2-14	Swan & Finch Company.....	62 50
155477	4-17-14	12- 2-14	L. Straus & Sons.....	23 19
155480	10- 7-14	12- 2-14	Charles R. Bard.....	8 06
155483	10-30-14	12- 2-14	Watters Laboratories	2 34
155482	10-14-14, 10-16-14	12- 2-14	E. Leitz	35 25
155479	10-10-14	12- 2-14	E. F. Mahady Company.....	1 75
155524	10-20-14	12- 2-14	Frank A. Hall & Sons.....	6 00
155526	9-19-14, 9-22-14	12- 2-14	The Republic Rubber Tire & Shoe Co., Inc.	30 10
155523	9-15-14	12- 2-14	Welsbach Gas Lamp Co.....	5 98
152466		11-24-14	B. M. Bamber, Asst. Supt. of Training Schools	9 65
155485	10-20-14	12- 2-14	C. J. Tagliabue Mfg. Co.....	26 00
155486	9-26-14, 10- 2-14	12- 2-14	The Fairbanks Company.....	19 00
155510			J. C. McCarty & Co.....	35 16
155511	9-23-14, 10-21-14	12- 2-14	The American Laundry Machinery Company	15 25
155512	10-22-14	12- 2-14	John Lucas & Co., Inc.....	11 50
152465		11-24-14	Mary E. Wadley, Asst. Supt. of Nurses	37 30
155522		12- 2-14	Gurney Elevator Company.....	45 00
155521	10-14-14	12- 2-14	Dimock & Fink Co.....	9 00
155520	10-14-14, 10-22-14	12- 2-14	The Frank Richard & Gardner Co....	75 70
155519	10-17-14, 10-24-14	12- 2-14	Sibley and Pitman.....	37 38
155518			The J. L. Mott Iron Works.....	22 41
152467		11-24-14	Mark L. Fleming, M. D.....	4 75
155461			J. T. Baker Chemical Co.....	8 10
155464	10-15-14, 10-30-14	12- 2-14	Stanley & Patterson.....	5 80
155463	10-10-14	12- 2-14	Crane and Stendicke, Inc.....	3 84
155466	10-21-14	12- 2-14	D. P. Winne Company.....	1 88
155462	10-24-14	12- 2-14	Patapsco Guano Co.....	3 98
155507	10-14-14	12- 2-14	The Blake & Knowles Steam Pump Works	13 00
155508	10-22-14	12- 2-14	Stanley and Patterson, Inc.....	7 00
155509	10-24-14	12- 2-14	W. R. Ostrander & Co.....	5 17
155517	7-30-14, 10- 9-14	12- 2-14	The Knickerbocker Supply Company.	24 06
155513	10- 7-14	12- 2-14	Theo. W. Morris and Co.....	7 75
155514	8- 2-14	12- 2-14	L. Barth and Son.....	4 65
155515	10-30-14	12- 2-14	Duparquet, Huot & Moneuse Co.....	29 85
155516	10- 5-14	12- 2-14	The Fairbanks Company	24 25
Court House Board.				
154158			Pierce Butler and Pierce Mfg. Corp., successors to Colwell Lead Company.	\$4 08
City Magistrates' Courts, First Division.				
156469		12- 4-14	Edward B. Reinius	\$5 00
155925	11-30-14	12- 3-14	Knickerbocker Ice Company	22 99
155926	11- 1-14	12- 3-14	New York Towel Supply Co.....	29 95
155920	11-30-14	12- 3-14	Hillard Mfg. Co.	9 75
155919	11-20-14	12- 3-14	Hillard Mfg. Co.	12 00
155921	11-30-14	12- 3-14	Monahan Express Company	1 50
155916		12- 3-14	Jesse Bernhard, Acting Chief Clerk...	3 15
155917		12- 3-14	Jesse Bernhard, Acting Chief Clerk...	34 05
155918			Jesse Bernhard, Acting Chief Clerk...	1 25

Finance Voucher No.	Invoice Dates or Contract Number.	Received in Department of Finance.	Name of Payee.	Amount.	Finance Voucher No.	Invoice Dates or Contract Number.	Received in Department of Finance.	Name of Payee.	Amount.	
155930	11-24-14	12-3-14	J. Reimer	3 25	149072	7-31-14	110	11-18-14	Silver, Burdett & Company.....	17 40
155927	12-1-14	12-3-14	Nicola Mitarotonda	5 00	151313	8-12-14	110	11-21-14	Silver, Burdett & Company.....	15 08
155928	11-30-14	12-3-14	G. Casamassima	4 50	154708	9-30-14		11-30-14	Trow Directory Printing & Bookbinding Co.	90 00
City Magistrates' Courts, Second Division.					154704	9-26-14		11-30-14	Department of the Interior, United States Geological Survey	38 40
155069	11-24-14	11-25-14	A. Pearson's Sons	\$76 50	154677	12-30-13		10-26-14	Library Bureau	46 25
153768	11-7-14	11-18-14	A. Pearson's Sons	54 00	154679	7-7-14		11-30-14	A. B. Dick Co.	58 80
Supreme Court, First Department.					154683	9-16-14	9-18-14	11-30-14	J. E. Linde Paper Co.....	61 40
155924	11-1-14	12-3-14	The Lawyers Co-Operative Pub. Co...	\$15 50	155827	9-3-14	9-30-14	12-3-14	Godfrey Keeler Co.	74 00
Supreme Court, Kings County.					155849	8-31-14		12-3-14	W. H. Quinn	25 00
155420	10-31-14	12-2-14	Clynta Water Company	4 50	155846	8-3-14		12-3-14	The Royal Co. of N. Y., Assignee of American Ornamental Iron Works....	8 45
155421	10-31-14	12-2-14	Patrick Dougherty	2 00	155845				H. Sacks	15 03
155422	11-1-14	12-2-14	The Crescent Towel Supply Co.....	3 00	151318	8-19-14	152	11-21-14	Ginn & Company	12 00
155424	11-25-14	12-1-14	Van Brunt Tandy	18 52	156671	10-14-14	11-6-14	12-4-14	Hugh D. McGrane	75 00
155423	11-17-14	12-2-14	The Banks Law Publishing Co.....	15 00	155854	10-14-14		12-3-14	J. L. Fries	7 97
County Clerk, Bronx County.					155853	10-6-14	10-7-14	12-3-14	W. A. Leonard	18 06
155406	11-30-14	12-2-14	Wm. G. Helfried	\$21 00	155850	10-1-14		12-3-14	Stolz & Greenberg	2 55
155405	11-1-14	12-2-14	J. Schapiro	18 65	155851	10-7-14		12-3-14	William E. Mason	24 90
149810		11-19-14	J. Bennett Southard	160 00	155852	10-13-14		12-3-14	J. Sommer	8 00
155404	10-31-14	12-2-14	Berkshire Springs Company	3 15	155939	11-13-14		12-2-14	Hugh D. McGrane	380 00
County Clerk, Kings County.					155938	11-13-14		12-2-14	Hugh D. McGrane	320 00
156863			G. Van Casteel	\$8 00	155820	10-8-14		12-3-14	Art Wood Novelty Co.....	15 00
County Clerk, Richmond County.					155822	10-10-14		12-3-14	M. J. Johnstone	17 00
156311		12-4-14	George D. Sharpe, Postmaster	\$37 74	155825	10-7-14		12-3-14	James I. Newman	19 00
Board of City Record.					148952		36418	11-18-14	Abraham P. Kramer	139 50
152821	5-4-14	10-19-14	M. B. Brown Ptg. & Bdg. Co.....	\$235 74	154680	9-18-14		11-30-14	Hogan & Son	74 23
152423	10-7-14	10-24-14	The J. W. Pratt Co.	355 24	154943	7-27-14	10-1-14	12-1-14	Hammacher, Schlemmer & Co.....	97 34
152417	10-7-14	10-20-14	M. B. Brown Ptg. & Bdg. Co.....	914 90	155071	9-10-14		12-1-14	L. E. Knott Apparatus Co.....	44 49
152425			The J. W. Pratt Co.	300 02	155813	9-19-14		12-3-14	John A. Scollay, Inc.	15 00
152424	10-13-14	10-22-14	The J. W. Pratt Co.	216 11	155862	9-8-14	9-25-14	12-3-14	Edward D. Fox	86 59
152421	10-22-14	11-4-14	The J. W. Pratt Co.	179 41	154608	10-5-14	805	11-30-14	Henry Holt & Company.....	32 00
152422	10-27-14	11-7-14	The J. W. Pratt Co.	367 13	155819	9-1-14		12-3-14	Nathan Frey	23 00
152420			The J. W. Pratt Co.	578 94	155818	10-15-14		12-3-14	John H. O'Rourke Co.....	20 00
152819	9-23-14	11-6-14	M. B. Brown Ptg. & Bdg. Co.....	3,188 44	155816	9-10-14		12-3-14	Godfrey Keeler Co.....	15 00
152824	10-31-14	11-24-14	The Evening Post Job Printing Office.	826 61	154947	9-9-14	10-21-14	12-1-14	F. W. Devoe and C. T. Reynolds Co..	72 50
152818	10-3-14	11-5-14	M. B. Brown Ptg. & Bdg. Co.....	4,342 81	151321	9-25-14	38621	11-21-14	Paul Baron	5 90
152820	10-9-14	10-20-14	M. B. Brown Ptg. & Bdg. Co.....	387 25	150434	10-8-14	38621	11-20-14	Paul Baron	32 98
152419	9-24-14	11-2-14	Graham-Chisholm Company	182 59	150572	9-29-14	38621	11-20-14	Paul Baron	14 60
152418	10-19-14	10-30-14	M. B. Brown Ptg. & Bdg. Co.....	228 51	150565	9-25-14	38621	11-20-14	Paul Baron	6 10
152825	11-2-14	11-24-14	Stillman Appellate Printing Co.....	743 35	150538	9-29-14	38621	11-20-14	Paul Baron	4 60
College of The City of New York.					150540	9-29-14	38621	11-20-14	Paul Baron	3 25
150991			A. Klein	\$324 00	150431	10-3-14	38621	11-21-14	Paul Baron	6 50
150991			Benjamin Gruber, Assignee of A. Klein	199 00	152504		39366	11-24-14	C. L. Dooley, Inc.	249 00
District Attorney, New York County.					152496		39380	11-24-14	M. Newman and J. Siegler.....	579 00
155120			Bartholomew Moynahan	\$131 30	152511		39789	11-24-14	C. L. Dooley, Inc.	240 00
155123		12-1-14	Frank S. Beard	235 00	152513		39789	11-24-14	C. L. Dooley, Inc.	170 00
156392		12-4-14	West & Flint	1,379 25	152534		35393	11-24-14	Eugene B. Hedden, George Hildebrand and J. C. Gordon as a Sub-Committee of a Committee of Sub-Contractors, Assignee of Richard E. Henningham...	32,845 27
154760			Henry S. Sanders	11 70	152533		35488	11-24-14	James MacArthur Co.	13,650 00
156385		12-4-14	Hillard Mfg. Co.	13 50	152509		40406	11-24-14	Commercial Construction Co.	720 00
156388		12-4-14	Jacob Luban	36 00	Department of Finance.					
156375	11-17-14	11-30-14	Benj. H. Tyrrel.....	93 00	156273				New York and Cincinnati Realty Co..	\$745 00
156382		12-4-14	Arthur C. Train.....	96 40	156272				New York and Cincinnati Realty Co..	337 00
156383	11-30-14	12-4-14	The Western Union Telegraph Co....	52 96	156180				New York and Cincinnati Realty Co..	337 00
156378	11-31-14	12-4-14	Knickerbocker Ice Co.	10 06	156179				New York and Cincinnati Realty Co..	236 00
156377	12-1-14	12-4-14	Economy Clean Towel Supply Co.....	10 50	156178				New York and Cincinnati Realty Co..	337 00
156376	12-1-14	12-4-14	M. Zelkowitz	20 00	156177				The Brooklyn, Manhattan and New Jersey Realty Company	170 00
156389	10-23-14	12-4-14	Geo. R. Read & Co.....	500 00	156176				New York and Cincinnati Realty Co..	337 00
156391			Daniel W. Quinn, Jr.....	41 30	156173				New York and Cincinnati Realty Co..	1,083 00
155119		12-1-14	W. G. Briggs, Stenographer.....	11 50	156174				New York and Cincinnati Realty Co..	233 00
155124		12-1-14	James E. Lynch	80 40	156175				New York and Cincinnati Realty Co..	337 00
156371	11-24-14	12-4-14	Frank Tourist Co.	62 45	156411				Asylum of St. Vincent De Paul.....	817 58
156387		12-4-14	Louis Espresso	101 81	156447				Catholic Home Bureau	432 50
156372			Joseph Kasper	13 80	156412				German Hospital of Brooklyn	1,205 50
156373		12-4-14	Robert G. Sjostrom.....	76 00	156413				German Hospital of Brooklyn	1,043 14
156369		12-4-14	George Trojan	12 00	156414				German Odd Fellows' Home and Orphan Asylum	681 07
156370		12-4-14	Otto E. Wagner, Detective.....	6 00	156415				Good Counsel Training School for Young Girls	1,670 39
156374		12-4-14	Isidor Wasservogel, Asst. Dist. Atty..	21 75	156416				House of Calvary	77 50
155121		12-1-14	Bartholomew Moynahan	123 80	156418				House of Calvary	1,090 00
151924	11-16-14	11-23-14	The C. G. Braxmar Co.....	10 00	156419				House of Mercy	141 37
District Attorney, Bronx County.					156420				House of St. Giles the Cripple.....	213 08
152553		11-24-14	New York Telephone Co.....	\$209 33	156421				Howard Orphanage and Industrial School	2,663 00
152545	11-14-14	11-24-14	A. R. Lewis.....	125 00	156422				Lincoln Hospital and Home	4,259 57
152555			Cobb, Macey, Dohme, Inc.....	145 88	156423				Lincoln Hospital and Home	42 20
District Attorney, Queens County.					156424				Lincoln Hospital and Home	3,707 32
154754		11-30-14	John J. Sullivan	\$19 60	156446				Lincoln Hospital and Home	50 55
154968		12-1-14	Joseph J. Delaney	1 40	156447				New York Foundling Hospital.....	32,156 56
Department of Docks and Ferries.					156448				New York Eye and Ear Infirmary.....	838 60
152737	39253	11-24-14	New York Telephone Co.....	\$17 59	156425				New York Eye and Ear Infirmary.....	136 65
152738	39443	11-24-14	Moses G. Byers	1,087 59	156428				New York Eye and Ear Infirmary.....	58 85
152744	11-13-14	11-24-14	Liberty Manufacturing Co.....	300 00	156429				New York Homeopathic Medical College and Flower Hospital.....	1,446 60
152739	9-30-14	11-24-14	John P. Kane Co.....	550 00	156430				The Brooklyn Eye and Ear Hospital..	384 85
152740			A. Schrader's Sons, Inc.....	196 00	156431				The Jewish Protectory and Aid Society	5,760 73
152748	11-6-14	11-8-14	Robins Dry Dock and Repair Co.....	645 00	156432				Wayside Home	356 71
152741	10-17-14	11-24-14	Pattison & Bowns	723 81	156433				Sea Breeze Hospital	34 10
152736	40462	11-24-14	John W. Peale.....	5,587 70	156434				Sea Breeze Hospital	657 20
Board of Elections.					156435				New York Hospital	2,611 95
155674	10-30-14	12-2-14	Robert A. Becker	\$5 50	156436				New York Homeopathic Medical College and Flower Hospital.....	26 25
155677	11-16-14	12-2-14	McMullan Trucking Co.....	33 00	156437				Rockaway Beach Hospital and Dispensary	357 75

Finance Voucher No.	Invoice Dates or Contract Number.	Received in Department of Finance.	Name of Payee.	Amount.	Finance Voucher No.	Invoice Dates or Contract Number.	Received in Department of Finance.	Name of Payee.	Amount.
156409			Robert H. Bergman	1,125 00	155685		12- 2-14	The Western Union Telegraph Co....	18 59
156408			James M. Fitzpatrick	1,325 00	155684			Marion B. McMillan, M. D., Director..	15 35
156407			Edward D. Dowling	1,430 00	155683		12- 2-14	Marion B. McMillan, M. D., Director..	23 90
156410			Philip J. Schmidt	265 00	155714			Mrs. Hannah Blum	14 40
156508		12- 4-14	Southwestern Surety Insurance Company	10 00	155682			Thomas J. Fenley	7 50
156505		12- 4-14	Joseph Haray	14 29	155707	11- 5-14	12- 2-14	Van Kannel Revolving Door Co.	20 00
156509		12- 4-14	American Surety Company	75 00	155704	11-17-14	12- 2-14	Henry J. Fink	11 33
156510		12- 4-14	National Surety Company	20 00	155703	11-12-14	12- 2-14	Goodyear Rubber Company	13 90
156488		12- 4-14	Patrick J. Carley	9 73	155700	11-16-14	12- 2-14	The Kny-Scheerer Co.	1 95
156489		12- 4-14	Municipal Liens Co.	9 61				Law Department.	
156490		12- 4-14	Louis Martz	8 21	156449		12- 4-14	John D. Elson	\$40 00
156491			Barnet Smolin, Assignee	91 74	156448			J. K. Brown Company	50 00
156475		12- 4-14	Catherine B. Smith	79 35	156579	11-19-14	12- 4-14	The Frank Shepard Company	1 25
156474		12- 4-14	J. Joseph Mott	12 00	156580			The American District Telegraph Co..	2 00
156893		12- 5-14	Steve Jacholsky	31 50	156581		12- 4-14	Samuel K. Probasco	10 10
156511		12- 4-14	Municipal Liens Company	85 59	153524	11-19-14	11-25-14	Joseph Cunningham	48 00
156974			The National City Bank of New York.	625,000 00	156582		12- 4-14	W. J. O'Sullivan	30 95
156506		12- 4-14	George Fleer	3 00	156596			Frank L. Polk, Corporation Counsel..	500 00
155806			Adigio Manzi or Walter A. Swett, Atty.	61 25	149641		11-18-14	John Standfast	5 00
155438			T. E. Quinn	67 00	156450		12- 4-14	Michael Schafer	45 00
155779		12- 3-14	Frederick Rosenberg	11 19				The Mayoralty.	
155984		12- 3-14	Fidelity Storage Warehouse Co.	1,100 00	155728		12- -14	New York & B'klyn Towel Supply Co.	\$4 20
155983		12- 3-14	Moses Monday and Joseph Monday	150 00	155732	10-31-14	12- 2-14	The Briarcliff Lodge Assn.	3 90
157380			Guaranty Trust Company of New York	25,000 00	155731	10-31-14	12- 2-14	John Manning	13 02
			Fire Department.		155730	10-31-14	12- 2-14	Foster-Scott Ice Co.	6 75
152771	11- 6-14	40094	Empire Rubber & Tire Co.	\$59 80	155729	10- 5-14, 10-15-14	12- 2-14	Underwood Typewriter Co., Inc.	1 75
152770	10-31-14	38338	Standard Oil Co. of New York	220 09	155734	10-29-14	12- 2-14	The Banks Law Publishing Co.	4 25
152769	10-21-14	36104	Mount Carmel Iron Works	1,600 14	155733	10-20-14	12- 2-14	Scofield & Co.	3 50
155944			Keuffel & Esser Co.	2 97				Public Administrator, Bronx County.	
155943	10- 6-14		The Photoprint Co.	16 40	155868	11-28-14	12- 3-14	E. P. Prendergast & Co.	\$4 40
155952	11- 9-14		New York Bottling Co.	14 40				Bronx Parkway Commission.	
147913		37320	John W. Sands	1,209 45	155298	11- 4-14	12- 1-14	Webster Avenue Garage	\$3 85
155963	10-21-14	10-27-14	Cornelius Ten Eick, Inc.	31 25	155303	11- 6-14	12- 1-14	S. M. Wilson	17 76
155964	10-21-14		The Laidlaw Co., Inc.	4 05	155293			Theodosius F. Stevens	250 00
155962	11-11-14		Eugene Dietzgen Co.	1 00	155299			A. J. Picard & Co.	18 31
155959	10- 9-14		The Linde Air Products Co.	2 00	155300	8-24-14	12- 1-14	Ford Motor Co.	8 65
155958	10-24-14		American Type Founders Co.	1 12	155301			Scarsdale Garage Co.	3 50
155957	10-23-14		Prest-o-Lite Co., Inc.	1 50	155302	11- 4-14	12- 1-14	J. Matthews, Jr.	6 00
155956	11- 7-14		Elberon Hygeia Ice Co.	10 90				Department of Parks, Boroughs of Manhattan and Richmond.	
155947			Summers Supply Co.	33 00	154835	10- 1-14	11-30-14	Phoenix Sand & Gravel Co.	\$89 66
155946	10-15-14		The B. F. Goodrich Co.	1 98				Police Department.	
155972	10- 8-14		Detroit Cadillac Motor Car Co.	3 50	156267	10- 1-14	12- 3-14	Clark & Morton	\$10 00
155973	10-13-14		International Motor Co.	10 60	156268	11-11-14	12- 3-14	Hull, Grippen & Co.	50
155948	10- 8-14		Knickerbocker Towel Supply Co.	44 00	156266			Colt, Stratton Co.	1 00
155953	10-19-14		Crown Stamp Works	15	156265	11- 7-14	12- 3-14	Richardson & Boynton Co.	4 48
155951	9-28-14		The Photoprint Co.	9 84	156264	11- 7-14	12- 3-14	Nason Mfg. Co.	13 50
155950	11- 2-14		Frederick Fennikoh.	2 08	156261	11-14-14	12- 3-14	E. G. Soltmann	1 50
155949	10- 7-14		The American Multigraph Sales Co.	14 20				President of the Borough of Manhattan.	
155955	10-31-14		Knickerbocker Ice Co.	2 08	151764	10-28-14	26979	The Sicilian Asphalt Paving Co.	\$283 82
155954	11- 1-14		Great Bear Spring Co.	1 20	151755	10-19-14	32782	The Sicilian Asphalt Paving Co.	576 51
155969	11- 9-14		Harry S. Hout, Inc.	9 35	151756	10-29-14	33782	The Sicilian Asphalt Paving Co.	189 73
155968	11-12-14		Buick Motor Co.	1 40	151757	11-16-14	33780	The Sicilian Asphalt Paving Co.	398 06
155967	10-13-14		James C. Nichols, Inc.	1 20	151762	11-16-14	32772	The Sicilian Asphalt Paving Co.	289 03
155966	10-14-14		Detroit Cadillac Motor Car Co.	4 65	151763	11-16-14	32780	Uvalde Contracting Co., assignee of the Sicilian Asphalt Paving Co.	745 19
155965	10-21-14		Ford Motor Co.	12 25				Marcus M. Marks, President.	200 00
155970	11- 7-14		Lowe Motor Supplies Co.	13 30	156518		40163	Rafferty Bros.	Final 1,148 05
155933			Robert Adamson, Fire Commissioner, as Trustee and Treasurer, New York Fire Dept. Relief Fund.	459 09	146676		40404	The Asphalt Construction Co.	Final 15,261 56
155934			Robert Adamson, Fire Commissioner, as Trustee and Treasurer, New York Fire Dept. Relief Fund.	5,012 00	156540	11- 9-14	12- 4-14	Chicago Spring Butt Co.	11 88
152768	40498	11-24-14	Ganford Company, Inc.	5,002 25	156539	11-12-14	12- 4-14	Montgomery & Co., Inc.	26 80
			Department of Health.		156536	9- 9-14	12- 4-14	A. F. Brombacher & Co.	5 50
155694	10- 1-14		Chas. E. Miller	10 18	156534	11-10-14	12- 4-14	Manning, Maxwell & Moore.	8 08
152692		39505	New York Telephone Co.	499 51	156533	11-11-14	12- 4-14	The Gutta Percha & Rubber Mfg. Co.	24 00
152686	10-31-14	38694	Robt. P. Lawless	239 64	156532	11-16-14	12- 4-14	Dahl Manufacturing Co.	7 92
152683	10-31-14	38570	Borden's Cond. Milk Co.	1,210 42	156531	10-22-14	12- 4-14	Samuel Lewis	1 50
152691	10-28-14	40666	Syndicate Trading Co.	300 72	156529	11-12-14	12- 4-14	A. Pearson's Sons	5 05
152685	10-31-14	38572	Conron Bros. Co.	691 92	156530	10-16-14	12- 4-14	Henry Bainbridge & Co.	12 00
152690	10- 8-14	40648	Louis S. Gimbel	46 17	156528	11-12-14	12- 4-14	Crandall Packing Co.	22 73
152689	10-23-14	40650	O. M. Gottesman	128 29	156527	9-30-14	12- 4-14	Vacuum Oil Co.	84 96
152684	11- 1-14	38565	Swift & Co.	4,925 49	151758	11-16-14	33275	Harlem Contracting Co.	206 65
152687	3-30-14	39229	Lewis De Groff & Son	494 42	151759	11-16-14	33752	Harlem Contracting Co.	140 93
152688	10-29-14	38699	Burns Bros.	415 51	151760	11-16-14	27563	The Asphalt Construction Co.	177 31
155689			Benj. E. Weeks	6 00	153947	11- 6-14	11-27-14	Coleman & Krause, Inc.	36 00
155690			Standard Oil Co. of N. Y.	30 00	151753		27824	Uvalde Asphalt Co.	47 23
155688	11-13-14		Meyer-Denker-Sinram Co.	14 00	151754		24851	Uvalde Asphalt Paving Co.	69 11
155691	9-30-14		Richmond Ice Co.	3 13				President of the Borough of The Bronx	
155692	11-19-14		Parke Davis Co.	11 20	152775	6- 9-14	39716	Barrett Manufacturing Co.	Final \$5,053 18
153851	11- 6-14		A. P. W. Paper Co.	86 25	152776	9- 4-14	40287	Barrett Manufacturing Co.	5,539 24
155696	10-31-14		Knickerbocker Ice Co.	11 04	152779		40277	Spadaro Contr. Co., Inc.	2,040 00
156013	11-10-14		Agent and Warden of Sing Sing Prison	3 95	148329		40344	C. A. Crane	Final 460 00
156014	11-16-14		Agent and Warden of Clinton Prison.	1 50	154229		39171	J. P. Binzen	4 00
156016			Agent and Warden of Auburn Prison.	20 10	152780		39171	Spadaro Contracting Co., Inc.	3,349 17
155986			G. E. Stechert & Co.	1 57				President of the Borough of Brooklyn.	
155163	11-17-14		Powers-Weightman-Rosengarten Co.	64 59	156251	11- 7-14	12- 3-14	Cook Electric Co.	\$5 00
155154			Conron Bros. Co.	96 72	156252	11-19-14	11-23-14	Norton & Gorman Contracting Co.	14,479 82
155713			Marion B. McMillan, M. D., Director.	96 53	156254	11-19-14	12- 3-14	Van Brunt Tandy	7 00
155708	11-14-14		Johnston Heating Co.	37 00	156256	5-20-14	12- 3-14	Elmer & Amend	47 42
155709	11- -14		Lunny & Handibode	5 20	156257	11-23-14	12- 3-14	Stevenson & Marsters	3 00
155996	11-17-14		S. Dana Hubbard, M. D., Chief.	61 70	156243	11-23-14	12- 3-14	Cook Electric Co.	3 50
156021	10-29-14		Atlantic Basin Iron Works	98 00	156244	11-23-14	12- 3-14	Cook Electric Co.	26 00
156004	9-10-14		L. C. Smith & Bros. Typewriter Co.	50	156249			Hall & Ruckel	78
156003	8-12-14		Underwood Typewriter Co., Inc.	50	156241	11-18-14	12- 3-14	C. R. Macatlay Co.	9 75
156002	11-23-14		Harris Gruszinsky	2 50	156240	6-16-14, 8- 4-14	12- 3-14	Samuel Kaplan	3 25
156019	10-17-14		Jenkins Bros.	19 45	156238	3-25-14	12- 3-14	The Bedford Auto Top Co.	14 00
156018	11-16-14		Gifford-Wood Co.	3 00	156253		11-27-14	Stevenson & Marsters	60 30
156611	10-16-14		Dr. Fred. S. Westmoreland	5 25	156237	11-20-14	12- 3-14	Pittsburgh Plate Glass Co.	6 40
152693		31652	Luke A. Burke & Sons Co., Inc.	2,500 00	156250	11-10-14, 11-14-14	12- 3-14	P. W. Taylor	7 00
156020	11-14-14		F. E. Whitney	9 00	146933		40143	Murphy Brothers	Final 3,627 99
156017	11-19-14		Bausch & Lomb Optical Co.	30 90	146934		38342	B. Picon & Son	Final 160 00
156010	11-18-14		Whitall, Tatum Company	42 12	155209	11-17-14	12- 1-14	Abraham & Straus	10 00
153850	10-30-14		M. M. Elish & Co.	66 00	155229	11-24-14	12- 1-14	Audley Clarke Company	33 40
156009			James S. Barron & Co.	28 50	155235	11-18-14	12- 1-14	Arthur Tickle	19 50
156011	10-28-14		J. M. Thorburn & Co.	26 20	156643		12- 4-14	Thomas F. Moran, General Bookkeeper	14 65
156012	11-17-14		Miller, Tompkins & Co.	8 55	148227		12- 4-14	Joseph F. Clarke	5 31
155693	11- 6-14		H. T. Jarrett	29 40	152817		11-16-14	Barrett Mfg. Co.	2,466 45
156008			Eimer & Amend	33 20	156235	11-25-14	12- 3-14	MacFarlane Cont. Co.	480 60
156023			Marion B. McMillan, M. D., Director Bureau of Food Inspection	37 15				Goodyear's India Rubber Selling Company	26 64
155701	11-10-14		The Auto Supply Co.	10 80	155271		12- 1-14	James A. Heaney	10 35
155702	11-16-14		The I. S. Remson Manufacturing Co.	22 40	155270		12- 1-14	F. Loeb, Jr.	7 25
155706	11- 4-14		G. A. Feld Company	25 80	155269		12- 1-14	Thomas E. O'Brien, Inc.	6 00
155711			Marion B. McMillan, M. D., Director of Bureau of Food Inspection	64 27				President of the Borough of Queens.	
155681			Marion B. McMillan, M. D., Director of Food Inspection	4 00	152766	11-20-14	38683	Peace Bros.	\$199 89
155680			A. T. Tallmadge, M. D., Medical Inspector	8 20	152767		38680	Title Guarantee & Trust Company of the Borough of Queens, Assignee of Clancy & Van Alst.	216 40
					152765		33562	Borough Asphalt Co., Assignee of Cannon Engineering Co.	750 42
					152764		33561	Borough Asphalt Co., Assignee of Cannon Engineering Co.	686 27
					150360	9- 1-14	11-19-14	E. G. Soltmann	113 81
					156091	11-18-14	12- 3-14	Joseph Elliott	3 50

Finance Voucher No.	Invoice Dates or Contract Number.	Received in Department of Finance.	Name of Payee.	Amount.	Finance Voucher No.	Invoice Dates or Contract Number.	Received in Department of Finance.	Name of Payee.	Amount.
156090	11-1-14	12-3-14	Empire State Window Cleaning & Towel Supply Co.	4 68	154458	11-28-14	11-28-14	John F. Ryan, Bookkeeper	42 90
156098	11-2-14	12-3-14	A. Rudolph	4 00	154459	11-28-14	11-28-14	William J. Doherty, 2d Dep. Com.	17 00
156102	11-5-14	12-3-14	Stewart-Warner Speedometer Corporation	4 75	154460	11-28-14	11-28-14	Edward E. McMahon, Supt.	4 80
156129	10-26-14	12-3-14	Cavanagh Bros. & Co.	82 75	155597	11-10-13	11-2-14	Baker, Voorhis & Company	6 00
156130	11-18-14	12-3-14	Conner Fendler & Co.	6 00	154089	9-30-14.10-31-14	11-27-14	R. F. Stevens Co.	32 94
156132	11-20-14	12-3-14	The Long Island Hardware Co.	3 15	154071	10-6-14.10-21-14	11-27-14	The American Laundry Machinery Company	77 60
156143	11-9-14	12-3-14	T. C. Moore & Co.	3 10	156271	12-1-14	12-3-14	Commissioner of Records, New York County.	\$14 00
156144	11-5-14	12-3-14	The Madison Avenue Stables, J. P. Connell, Prop.	10 00	152456	11-19-14	11-24-14	Commissioner of Records, Kings County.	696 38
156145	11-12-14	12-3-14	John Keinath	3 50	154404	11-20-14	11-28-14	Register, Bronx County.	47 00
155721	11-18-14	12-3-14	John W. Moore, Superintendent	154 05	154402	11-25-14	11-28-14	The Banks Law Publishing Co.	90 00
156149	11-18-14	12-3-14	Montross & Clarke Co.	56 60	155716	10-30-14.11-13-14	11-18-14	G. W. Bromley & Co.	14 20
156146	11-20-14	12-3-14	Freeman & Grady	16 00	155715	10-30-14.11-13-14	11-18-14	Sheriff, Bronx County.	18 58
156147	11-20-14	12-3-14	The E. R. Merrill Spring Co.	9 00	149087	10-30-14.11-13-14	11-18-14	Timothy J. Duane, Deputy Sheriff	42 15
156134	11-16-14	12-3-14	Edward E. Buhler Co.	40 00	155931	12-2-14	12-2-14	Sheriff, Queens County.	257 57
156133	9-18-14	12-3-14	The Long Island Hardware Co.	7 50	155932	12-2-14	12-2-14	Thomas F. Adams, Chief Clerk	218 05
156150	11-5-14	12-3-14	Madison Avenue Stables, J. H. Connell, Prop.	80 00	153871	11-25-14	12-3-14	Sheriff, Richmond County.	23 75
154019	9-18-14	11-27-14	Keuffel & Esser Co.	84 33	153870	11-30-14	12-3-14	Schutte Brothers	26 30
156107	11-18-14	12-3-14	Cavanagh Bros. & Co.	8 00	155869	12-1-14	12-3-14	M. McQuade & Co.	5 50
156106	11-11-14	12-3-14	The Combination Rubber Mfg. Co.	37 50	156044	10-31-14	12-3-14	Department of Street Cleaning.	8 39
156101	11-11-14	12-3-14	The Motor Car Equipment Co.	2 00	156028	9-15-14	12-3-14	Municipal Garage	35 00
156100	11-11-14	12-3-14	The Long Island Hardware Co.	6 10	151246	10-22-14	12-3-14	J. W. Gasteiger & Son	59 19
156099	6-2-14	12-3-14	Western Electric Co.	6 00	156043	8-31-14	11-21-14	The Cutler Hammer Mfg. Co.	13 55
156622	7-3-13. 8-29-13	12-4-14	The Long Island Railroad Company	10 00	154448	9-9-14	11-28-14	Municipal Garage	42 00
156623	11-17-14.11-27-14	12-4-14	John W. Moore, Superintendent	1 03	156042	11-7-14	12-3-14	The Maintenance Co.	13 75
155722	11-11-14	12-3-14	Louis P. Eldridge	4 50	156041	11-3-14	12-3-14	Trautman Rubber Co.	8 95
155723	11-11-14	12-3-14	William H. Mayer	2 00	156037	11-3-14	12-3-14	George Weiderman Electric Co., Inc.	9 25
156137	11-11-14	12-3-14	The Long Island Hardware Co.	4 75	156034	5-28-14	12-3-14	A. F. Brombacher & Co.	26 45
156140	4-20-14	12-3-14	Long Island Vacuum Cleaning Co.	12 50	154441	4-18-14	11-28-14	Stanley & Patterson, Inc.	63 76
156141	11-5-14	12-3-14	Remington Typewriter Co.	11 25	156035	4-18-14	12-3-14	Dimock & Fink Co.	5 28
156142	11-5-14	12-3-14	Bausch & Lomb Optical Co.	83 88	156036	4-18-14	12-3-14	John Simmons Co.	1 33
154026	11-7-14	11-27-14	Newman & Carey Company	15 30	156030	8-31-14	12-3-14	Sibley & Pitman	53 22
154023	11-6-14	11-27-14	Continental Public Works Co.	29 75	156029	8-31-14	12-3-14	Standard Oil Co. of New York	11 48
154021	10-21-14	12-2-14	The Hastings Pavement Co.	14 78	156047	6-30-14. 7-31-14	12-3-14	Municipal Garage	37 20
155725	10-22-14.10-28-14	11-27-14	James H. Johnson	53 37	156046	8-25-14.10-10-14	12-3-14	Municipal Garage	33 02
154025	10-22-14.10-28-14	11-27-14	The Cleveland Trinidad Paving Co.	\$17 50	156048	12-31-13	12-3-14	John Simmons Co.	8 98
156125	11-1-14	12-3-14	Jas. Thompson & Sons	7 45	155907	12-31-13	12-3-14	John J. O'Brien, Chief Clerk	77 70
156127	10-31-14	12-3-14	F. H. Van Duzer	24 20	155982	11-21-14	12-3-14	Department of Taxes and Assessments.	20 07
156128	10-31-14	12-3-14	Zorn & Schrengauer	50 30	155979	11-21-14	12-3-14	Keuffel & Esser Co.	13 75
156117	10-23-14	12-3-14	T. J. Mullen	16 00	155981	11-24-14	11-19-14	Columbia Frame & Art Co.	1 00
156116	10-1-14	12-3-14	Dennis McCarthy	14 50	155980	11-24-14	12-3-14	J. B. Lyon Co.	6 25
156115	11-3-14	12-3-14	H. W. Koenig	3 00	155977	11-24-14	12-3-14	Kolesch & Co.	52 80
156121	11-2-14	12-3-14	Chas. Schneider	48 63	155978	11-24-14	12-3-14	Andrew J. Caplis	12 90
156120	11-1-14	12-3-14	E. J. O'Connor	23 37	152349	10-27-14	11-24-14	William R. Plaatje	114 80
156119	9-24-14	12-3-14	E. J. O'Connor	20 58	152336	10-27-14	11-24-14	Standard Oil Co. of New York	100 35
156124	10-31-14	12-3-14	Jas. Thompson & Sons	16 72	152735	11-10-14	11-24-14	Joseph Dixon Crucible Co.	585 25
156123	9-30-14	12-3-14	Jas. Thompson & Sons	10 78	152734	11-10-14	11-24-14	Builders Iron Foundry	666 66
156122	10-31-14	12-3-14	Staten Island Shipbuilding Co.	24 00	155433	11-17-14	12-2-14	Herbert D. Pease and A. J. Provost, Jr.	269 07
154645	9-30-14	11-30-14	John E. Donovan	32 00	156078	10-31-14	12-2-14	State Law Reporters, Inc.	81 00
155908	10-31-14	12-3-14	John L. Halloran	32 00	155249	10-31-14	12-1-14	Remington Typewriter Co.	2 70
155910	10-31-14	12-3-14	John L. Halloran	32 00	155254	11-10-14	12-1-14	Kanouse Mountain Water Co., Inc.	5 87
155909	10-31-14	12-3-14	Dr. J. Ed. McNicol	22 00	155253	10-31-14	12-1-14	W. H. Ladue's Sons	3 60
155911	10-9-14	12-3-14	Dr. J. Ed. McNicol	22 00	155252	11-12-14	12-1-14	Knickerbocker Towel Supply Co.	23 45
156114	10-9-14	12-3-14	The E. Howard Clock Co.	19 50	155257	11-12-14.11-16-14	12-1-14	Knickerbocker Supply Co.	4 13
156113	10-31-14	12-3-14	George C. Goelze	21 00	155256	10-8-14.11-9-14	12-1-14	Theo. Moss & Co.	13 85
156118	11-4-14	11-30-14	Manz Clock Company	5 00	155255	11-12-14	12-1-14	Chas. E. Miller	13 09
154664	11-4-14	11-30-14	Frederick Burger & Son	24 60	155245	11-12-14	12-1-14	Mead & Taft Co.	5 63
154663	6-22-14	11-30-14	Jas. Thompson & Sons	43 30	155244	11-13-14	12-1-14	The Fairbanks Co.	13 25
154667	6-22-14	11-30-14	Remington Typewriter Co.	28 00	155243	10-29-14	12-1-14	The John Ellice Co.	10 58
156112	11-2-14	12-3-14	G. Gilligan	6 25	155238	9-1-14	12-1-14	Consolidated Gas Co. of N. Y.	84 57
156111	4-1-14	12-3-14	Brady Brothers	6 00	156079	9-1-14	12-3-14	New York Blue Print Paper Co.	15 00
156110	8-29-14	12-3-14	O. W. Boyd	1 05	152388	8-22-14	11-24-14	The New Paltz Times; Mrs. C. J. Ackert, publisher	360 78
156069	9-18-14	12-3-14	Austrian Pencil Co. of Hoboken, N. J., Oscar Schlichting, Mgr.	1 75	152394	7-31-14	11-24-14	George W. Hudson	\$105 50
156070	10-6-14	12-3-14	Austrian Pencil Co. of Hoboken, N. J., Oscar Schlichting, Mgr.	1 75	152673	7-31-14	11-24-14	The Keepsdry Construction Co.	200 00
156068	9-18-14	12-3-14	Austrian Pencil Co. of Hoboken, N. J., Oscar Schlichting, Mgr.	2 00	152676	7-31-14	11-24-14	N. Y. and N. J. Globe Gas Light Co., Ltd.	6,899 75
154641	10-1-14	11-30-14	Charles Bardes	7 50	152671	8-1-14	11-24-14	The Jamaica Gas Light Co.	328 16
154642	11-2-14	11-30-14	Charles Bardes	7 50	152670	8-1-14	11-24-14	The Jamaica Gas Light Co.	10 00
154646	9-30-14	11-30-14	John E. Donovan	18 99	152675	9-1-14	11-24-14	The Newtown Gas Co.	711 50
154643	6-12-14	11-30-14	John E. Donovan	35 64	152678	9-1-14	11-24-14	The Newtown Gas Company	2,773 90
154652	10-22-14	11-30-14	The Cleveland Trinidad Paving Co.	26 61	152677	7-31-14	11-24-14	Queens Borough Gas and Electric Co.	383 56
154826	7-20-14	11-30-14	Harry Butler	98 40	152669	39121	11-24-14	Richmond Hill and Queens County Gas Light Co.	716 66
152323	10-20-14	11-24-14	Buff & Buff Mfg. Co.	\$1,092 00	152674	39121	11-24-14	The Woodhaven Gas Light Co.	313 50
156333	10-20-14	11-24-14	Lee Bros. Storage & Van Co.	230 00	152672	10-1-14	11-24-14	The Woodhaven Gas Light Co.	1,041 71
156334	10-20-14	11-24-14	James L. Meeks	70 00	152680	7-31-14	11-24-14	The Bronx Gas and Electric Company	7,618 67
156339	10-20-14	11-24-14	Arthur H. Waterman, Agent	75 00	152682	7-31-14	11-24-14	New York and Queens Gas Co.	707 85
156337	10-20-14	11-24-14	H. U. Singh	100 00	152681	7-31-14	11-24-14	The New York Steam Co.	352 40
156331	10-20-14	11-24-14	William C. Bergen	83 32	156451	4-8-14	12-2-14	New York and Queens Gas Co.	220 05
156336	10-20-14	11-24-14	Riker & Hegeman Co.	112 34	155387	4-8-14	12-2-14	Joseph H. Tonyan	4 55
156335	10-20-14	11-24-14	National Railway Publication Company	90 00	156453	4-8-14	12-2-14	New York Letter Co.	19 25
156332	10-20-14	11-24-14	Josephine Collins	50 00	155390	11-20-14	12-2-14	Eloise Murray, Collector of Taxes, School District No. 3, Town of Greenburgh, Westchester County, N. Y.	360 78
156338	10-20-14	11-24-14	Thos. J. Tuomey	100 00	155395	11-17-14	12-2-14	Aug. A. Juengst, Collector of Taxes, School District No. 1, Town of Somers, County of Westchester, N. Y.	922 62
154132	10-20-14	11-24-14	The Bell Telephone Company of Pennsylvania	12 55	155396	10-31-14	12-2-14	Floyd M. Grant, Collector of Taxes, School District No. 1, Town of White Plains, County of Westchester, N. Y.	22 21
156344	10-20-14	12-4-14	Travis H. Whitney, Secretary	21 00	154792	11-17-14	11-30-14	Keuffel & Esser Co.	24 73
156340	10-20-14	12-4-14	Herman A. D. Hollmann, Auditor	26 30	155792	11-17-14	11-30-14	Pure Oil Company	60 00
152300	9-30-14.10-31-14	11-24-14	The American District Telegraph Company	13 70	155790	11-17-14	11-30-14	Standard Oil Co. of New York	56 81
156343	10-20-14	12-4-14	Jesse O. Shipman, Division Engineer	74 98	155791	11-17-14	11-30-14	G. W. Bromley & Co.	30 00
156341	10-20-14	12-4-14	Geo. L. Lucas, General Inspector	240 97	155789	11-17-14	11-30-14	A. Hamilton & Son	27 90
156342	10-20-14	12-4-14	John H. Myers, Div. Engr.	102 42	155794	11-17-14	11-30-14	United States Wood Preserving Co.	1 77
152311	39235	11-24-14	Rapid Transit Subway Construction Co.	4,662 71	155795	11-17-14	11-30-14	Receiver of Taxes	19 21
152312	37711	11-24-14	The Snare & Triest Company	8,522 56	155796	11-17-14	11-30-14	Receiver of Taxes	3 22
152310	37288	11-24-14	E. E. Smith Contracting Co.	22,000 00	155793	11-17-14	11-30-14	Paterno Construction Co.	6 80
152313	40312	11-24-14	Thomas Crimmins Contracting Co.	10,156 68	155792	11-17-14	11-30-14	Estate of Hellmuth Kranish, Hellmuth Kranich, Exec.	11 43
154047	10-21-14	11-27-14	John Wanamaker, New York	\$17 00	155790	11-17-14	11-30-14	John A. Hilliker	5 77
155584	11-6-14	12-2-14	John Moonan	10 00	155791	11-17-14	11-30-14	Receiver of Taxes, Department of Finance	9 20
155582	10-1-14	12-2-14	Geo. D. Harris & Company, Inc.	42 00	155789	11-17-14	11-30-14	Samuel Mann	52 50
155580	6-25-14	12-2-14	Tower Manufacturing & Novelty Co.	7 65	155788	11-17-14	11-30-14	Henry U. Singh	17 00
155581	8-31-14	12-2-14	Great Bear Spring Co.	6 00	155375	11-10-14	12-2-14	Munson Supply Co.	6 30
155577	11-2-14	12-3-14	Lehn & Fink	3 00	155381	8-31-14	12-2-14	J. C. Muller	14 75
155578	11-6-14	12-2-14	William Finan	30 25	155382	10-20-14	12-2-14	Sundh Electric Company	11 40
155579	11-6-14	12-2-14	Bruen, Ritchey & Co.	5 50	155385	7-27-14	12-2-14	Hefner & Sons	31 60
155574	10-12-14	12-2-14	The Haral Soap Co.	89 00					
155575	10-21-14	12-2-14	G. S. Blakeslee & Co.	1 50					
155606	11-12-14	12-2-14	New York French Range Co.	8 00					
155594	10-29-14.11-								

Finance Voucher No.	Invoice Dates or Contract Number.	Received in Department of Finance.	Name of Payee.	Amount.	Finance Voucher No.	Invoice Dates or Contract Number.	Received in Department of Finance.	Name of Payee.	Amount.
155388	10-14-14	12-2-14	Auto Wind Shield Company.....	3 00	147251			Merritt H. Smith, Chief Engineer.....	6 15
156456		12-4-14	Henry F. Fallot, Collector, School District No. 23, O. B., Massapequa, L. I..	337 75	154800	11-10-14	11-30-14	Nason Manufacturing Co.....	30 43
155398	11-18-14	12-2-14	E. Belcher Hyde	10 00	154798	10-17-14	11-30-14	Knickerbocker Supply Company.....	6 30
155380			Egleston Brothers & Co.....	37 06	153643	6-25-14	11-27-14	Cranford Brothers	31 37
155379	11-9-14	12-2-14	Hyde Windlass Company.....	18 25	154802	7-23-14	11-30-14	F. N. Dubois & Co.....	49 76
155378			The Gutta Percha & Rubber Mfg. Co..	62 30	155799			John S. Shea	23 06
155374	11-21-14	12-2-14	The Linde Air Products Company....	2 00	155798			United States Wood Preserving Co....	2 83
155373	11-2-14	12-2-14	Indian Refining Company.....	15 84	155780		12-3-14	Jacob Spangenberg	30 81
153407			Thomas F. Bannon, Acting Water Registrar	161 47	155781		12-3-14	Lina M. Struckhausen	3 00
					154405		11-28-14	Wm. Ulmer Brewery	100 00
					154793	11-16-14	11-30-14	G. A. Feld Company.....	3 75

VOUCHERS RECEIVED IN DEPARTMENT OF FINANCE, MONDAY, DECEMBER 7, 1914.

A statement is herewith submitted of all vouchers filed in the Department of Finance on this date, in which is shown the Department of Finance voucher number, the date of the invoices or the registered number of the contract, the name of the payee and the amount of the claim. Where two or more bills are embraced in one voucher the date of the earliest is given, excepting that when such vouchers are submitted under a contract the registered number of the contract is shown instead.

WILLIAM A. PRENDERGAST, Comptroller.

Finance Voucher No.	Invoice Date or Contract Number.	Name of Payee.	Amount.	Finance Voucher No.	Invoice Date or Contract Number.	Name of Payee.	Amount.
157700	11-2-14	Department of Public Charities	24 85	157228	38513	Hammacher, Schlemmer Co.	24 00
157701	10-21-14	Oil & Grease Co. of America	4 75	157229	107	E. Steiger & Co.....	94
157702	9-26-14	Hull, Grippen & Co.....	3 50	157230	38488	Parker P. Simmons Co.....	192 00
157703	10-24-14	James S. Barron & Co.....	4 40	157231	39348	Fredk. Pearce Co.	7 65
157704	11-7-14	The Kny-Scheerer Co.....	14 50	157232	38445	The H. B. Claffin Co.....	13 13
157705	10-26-14	Agent and Warden of Auburn Prison	39 08	157233	38519	Alfred Field & Co.....	15
157706	11-10-14	W. & J. Sloane	66 40	157234	39346	Henry Allen	2 14
157707	9-26-14	Hull, Grippen & Co.....	9 96	157235	38473	Hugo L. Grote	70 00
157708	10-27-14	Firestone Tire & Rubber Co.	48 34	157236	153	The Macmillan Co.	20 00
157709	9-25-14	Municipal Garage	6 42	157237	39345	L. E. Knott Apparatus.....	22 89
157710	11-5-14	John Cassidy Sons.....	7 50	157238	39329	Scientific Equipment Co....	55 65
157711	9-26-14	Hull, Grippen & Co.....	5 26	157239	112	Underwood & Underwood..	60
157712	10-2-14	E. T. Joyce	3 50	157240	38516	A. G. Spalding & Bros.....	8 00
157713	10-28-14	Manhattan Electrical Supply Co.	2 70	157241	38658	The Combination Rubber Co.	21 00
157714	11-6-14	Nason Mfg. Co.	18 42	157242	38512	Schoverling, Daly & Gales..	265 25
157715	11-4-14	W. R. Ostrander & Co.....	1 80	157243	146	Scott, Foresman & Co.....	29 80
157716	10-24-14	D. B. Pershall & Son.....	10 68	157244	39299	F. C. Stechert Co., Inc.....	1 96
157717	11-22-14	Vought & Williams	5 32	157245	125	Chas. E. Merrill Co.....	4 80
157718	7-29-14	J. B. Greenhut Co.....	497 70	157246	168	Isaac Pitman & Sons.....	4 20
157719	7-20-14	Lippman & Co.....	104 74	157247	38485	Fredk. Pearce Co.	66
157720	6-11-14	W. R. Ostrander & Co.....	357 18	157248	38522	H. T. Dakin	38
157721	8-20-14	Royal Eastern Electrical Supply Co.	16 39	157249	38451	Dieges & Clust	61 00
157722	8-22-14	M. H. Treadwell Co., Inc....	18 00	157250	38872	Atkinson, Mentzer & Co....	16 80
157723	8-4-14	Wm. Dauphin	10 50	157251	126	Allyn & Bacon	23 92
157724	9-30-14	G. Haussler & Bro.....	225 05	157252	38853	Allyn & Bacon	26 88
157725	10-31-14	Hull, Grippen & Co.....	7 63	157253	649	Hinds, Noble & Eldredge...	4 40
157726	10-31-14	J. & J. Marcus	1 35	157254	663	D. C. Heath & Co.....	25 80
157727	9-30-14	M. Reidy	21 25	157255	152	Ginn & Co.	52 08
157728	11-13-14	Singer Sewing Machine Co.	13 75	157256	158	D. S. Heath & Co.....	65 60
157729	11-6-14	The Smith Worthington Co.	3 00	157257	39324	Parex Mfg. Co.	88 84
157730	10-31-14	Excelsior Stables Co.....	60 00	157258	650	Longmans, Green & Co.....	56 00
		District Attorney, Kings County.		157259	38453	Dehance Mfg. Co.....	42 12
157875		John J. O'Brien	\$28 00	157260	38844	Ginn & Co.	24 00
157876		Dudley J. Fagan	29 50	157261	142	Henry Holt & Co.....	4 80
157877		Ralph Roberts	12 40	157262	642	American Book Co.	76 80
157878	11-30-14	Stevenson & Marsters	60	157263	40455	N. Y. Tel. Co.....	8 25
157879	11-30-14	Urquhart & Fox Co., Inc....	3 35	157264	40455	N. Y. Tel. Co.....	60 58
157880	12-1-14	H. A. Farnell & Co.....	75	157265	40455	N. Y. Tel. Co.....	22 08
157881	11-23-14	Wm. S. Doyle	5 00	157266	40455	N. Y. Tel. Co.....	24 30
157882		John J. O'Brien	5 00	157267	647	The Macmillan Co.....	68 00
157883	11-30-14	Great Bear Spring Co.....	3 00	157274	38461	Geo. W. Millar & Co.....	233 80
157884	12-1-14	The Peerless Towel Supply Co.	11 65	157275	38483	Binney & Smith Co.....	37 50
157885	12-2-14	Ralph E. Hemstreet	30 05	157276	386	Milton Bradley Co.....	40
157886	12-1-14	Irving A. O'Hara	6 45	157277	38444	F. W. Devoe & C. T. Raynolds Co.	1,376 70
		Board of Elections.		157278	38436	Owen M. Dawson.....	62 40
157862	12-2-14	M. B. Brown Ptg. & Bdg. Co.	\$4,958 15	157279	927	Rand, McNally Co.....	60 00
157863	10-31-14	G. W. Bromley & Co.....	15 00	157280	156	Newson & Co.....	13 48
157864		Manhattan Storage & Warehouse Co.	16 75	157281	644	Newson & Co.....	72
157865		Standard Storage & Warehouse Co.	600 00	157282	38448	The J. W. Pratt Co.....	39 00
157866	11-30-14	August Mietz	400 00	157283	656	Isaac Pitman & Sons.....	60 00
157867		Eagle Warehouse & Storage Co.	450 00	157284	39344	Ward's Natural Science Establishment	27 51
157868		P. Belford & Son	337 50	157285	38917	Syndicate Trading Co.....	6 10
157869	12-4-14	I. Weissberger & Son.....	48 00	157286	38488	Parker P. Simmons Co., Inc.	475 31
157870	12-2-14	M. B. Brown Ptg. & Bdg. Co.	475 25	157287	791	Parker P. Simmons Co., Inc.	19 20
157871	12-2-14	M. B. Brown Ptg. & Bdg. Co.	957 50	157288	4	Parker P. Simmons Co., Inc.	36 44
157872	11-30-14	Clynta Water Co.....	4 50	157289	38656	Schiffelin & Co.....	217 75
157873	12-2-14	M. B. Brown Ptg. & Bdg. Co.	75 00	157290	646	Chas. Scribner's Sons.....	20 00
157874	12-1-14	P. Belford & Son	189 00	157291	175	Thompson, Brown Co.....	3 00
		Department of Education.		157292	38477	Seabury & Johnson.....	403 50
157195	9-30-14	J. D. Johnson Co.....	\$6 40	157293	38851	Longmans, Green & Co.....	27 20
157196	9-30-14	Thomas F. McEnaney	41 75	157294	38442	F. S. Banks & Co.....	15 08
157197	10-7-14	F. J. McCaragher	60 39	157295	39345	L. E. Knott Apparatus Co.	5 77
157198	7-22-14	The J. L. Mott Iron Works..	5 43	157296	134	Berlin Photographic Co....	31 15
157199	9-22-14	John Mulstein Co.....	13 45	157297	40027	Remington Typewriter Co..	50 00
157200	9-29-14	The Kenney Specialty Co.....	13 40	157298	38514	Cavanagh Bros. & Co.....	154 50
157201	10-14-14	James I. Kelly	49 97	157299	173	Braun, Clement & Co.....	18 75
157202	10-14-14	C. W. Keenan	3 75	157300	5-31-14	N. Y. Telephone Co.....	51 80
157203	10-12-14	Albert J. Kelting	47 86	157301	5-31-14	N. Y. Telephone Co.....	48 41
157204	9-25-14	D. J. Carey	39 11	157302	10-5-14	W. R. Ostrander & Co.....	3 60
157205	10-5-14	Edward J. Belford	30 53	157303	10-11-14	Philp & Paul	21 28
157206	9-30-14	W. & G. Sheehan	4 63	157304	7-29-14	Otis Elevator Co.....	72 44
157207	9-15-14	John W. Sands	56 20	157305	10-14-14	Moss & Kendall	36 12
157208	9-24-14	The Peck Bros. & Co.....	28 80	157306	10-5-14	Thos. F. Maher.....	33 35
157209	10-22-14	O. W. Nordstrom	48 50	157307	10-15-14	Julius Haas' Sons.....	30 35
157210	9-16-14	Alfred Billingham	26 79	157308	9-22-14	Michael Fogarty, Inc.....	23 70
157211	10-2-14	William Ward	59 87	157309	10-19-14	John F. Ferguson.....	20 60
157212	10-15-14	August Wille, Jr.	9 40	157310	10-20-14	James J. Fay	24 08
157213	7-29-14	The C. E. Squire Co.....	35 81	157311	9-28-14	Ernst Co.	21 60
157214	10-13-14	Powers & Vanderpool.....	31 05	157312	10-15-14	Barshop Bros.	9 89
157215	10-3-14	Monohan Bros.	100 00	157313	9-11-14	Jos. F. Egan	7 22
157216	10-7-14	Edward Kelly Est.	8 00	157314	10-6-14	Charles Schultz	3 51
157217	8-31-14	Crane Co.	51	157315	10-5-14	A. Pearson's Sons	19 40
157219	38520	Geo. T. Montgomery	91	157316	10-13-14	Schoverling, Daly & Gales..	13 00
157220	39457	New York Talking Machine Co.	2 25	157317	10-6-14	Anso Co.	28 34
157221	10-14-14	A. G. Spalding & Bros.....	6 00	157318	8-22-14	E. J. Burghart	40 00
157222	9-7-14	Gerry & Murray	3 87	157319	9-28-14	The Safety Fire Extinguisher Co.	1 00
157223	38523	John T. Stanley	3 40	157320	10-16-14	Hypolit Pfund	7 10
157224	38485	Fredk. Pearce Co.....	66	157321	6-26-14	Keuffel & Esser	45 25
		Fredk. Pearce Co.....	53	157322	4-30-14	F. N. Du Bois & Co.....	77 26
		Fredk. Pearce Co.....	24	157323	5-22-14	Manhattan Electrical Supply Co.	63 24
157225	173	Braun, Clement & Co.....	61 60	157324	10-1-14	A. & W., Sing Sing Prison..	189 75
157226	38441	Wm. H. Sidway	143 66	157325	10-1-14	A. & W., Sing Sing Prison..	39 60
		Wm. H. Sidway	14 60	157326	10-16-14	Talens & Son	16 50
157227	38851	Longmans, Green & Co.....	10 08	157327	9-10-14	M. P. Johnstone Paper Co..	38 00
		Longmans, Green & Co.....	150 00	157328	9-28-14	U. S. Needle Co.....	70 20
				157329	10-21-14	Dept. of Correction.....	7 73
				157330	9-22-14	Robertson Canry	58 00
				157331	9-17-14	S. P. Krajci	30 00

Invoice Finance Date Vouch- or Con- er No. tract Number.	Name of Payee.	Amount.	Invoice Finance Date Vouch- or Con- er No. tract Number.	Name of Payee.	Amount.	Invoice Finance Date Vouch- or Con- er No. tract Number.	Name of Payee.	Amount.
157332	9-10-14 D. Chaykin	80 00	157649	7-14-14 M. Inkelas	40 00	157576	Henry Roth	43 53
157333	10-3-14 Thomas King	20 00	157650	10-13-14 Louis Frey & Co.	45 50	157577	Russek & Klinger Realty	
157334	10-16-14 H. Fortenbach	6 00	157651	10-9-14 Lazare & Kaplan Iron			Co.	3 44
157335	10-14-14 James I. Newman	35 37		Works	70 00	157578	August Lieb	2 70
157336	10-3-14 Geo. J. Flushing, Sr.	60 25	157652	10-8-14 Reischmann Co.	22 00	157579	Hedwig Glass	67 30
157337	9-14-14 Paul E. Taylor	65 00	157653	10-22-14 J. H. Boozer	1 60	157580	Emil Utard	23 87
157338	3-27-14 Walter J. Best, Jr.	140 00	157654	6-10-14 Revolute Machine Co.	2 72	157581	Mary E. McGinnis	4 15
157339	10-10-14 Hanson & Kalmus	5 45	157655	9-28-14 The Safety Fire Extinguish-		157582	Kaufmann Schiff	13 29
157340	10-16-14 Henry Pearl & Sons Co.	3 20		er Co.	16 00	157583	H. D. Wiswell	1 09
157341	9-18-14 J. Kurzlan	5 60	157656	10-14-14 Rees & Stindt Machine		157584	Peter Albana, care of Chas.	
157342	10-12-14 L. E. Atherton	49 50		Works	18 00		N. Baechler	294 73
157343	9-29-14 F. J. Kloes	29 66	157657	10-15-14 C. M. O'Connor	51 00	Department of Docks and Ferries.		
157344	9-29-14 John Egan	18 00	157658	10-17-14 Fisher Bros.	7 55	157796	11-30-14 John Boyle & Co.	\$8 44
157345	10-15-14 Julius Haas' Sons	4 19	157659	10-10-14 Michael Fogarty, Inc.	113 00	157797	11-30-14 A. P. W. Paper Co.	145 00
157346	9-1-14 Hammacher, Schlemmer &		157660	10-8-14 John F. Ferguson	32 00	157798	11-14-14 L. Katzenstein & Co.	39 60
	Co.	75	157661	10-21-14 Isaac Brenner	22 00	157799	11-1-14 Lunkenheimer Co.	30 00
157347	9-30-14 J. Friedman	34 55	157662	9-24-14 John Byrns	19 00	157800	11-9-14 John Lucas & Co.	25 00
157348	9-29-14 Julius Haas' Sons	42 56	157663	9-23-14 Michael Fisher	20 00	157801	7-16-14 Yale & Towne Mfg. Co.	7 11
157349	9-18-14 Reid's Express	40 50	157664	9-21-14 Godfrey, Keeler Co.	64 00	157802	11-6-14 Robins Dry Dock & Repair	
157350	9-28-14 E. F. Bertram	15 25	157665	10-13-14 Gaites, Peace & Co.	38 00		Co.	925 00
157351	10-17-14 J. Friedman	21 50	157666	10-15-14 John H. Goetschins	31 00	157803	11-23-14 James Shewan & Sons	398 00
157352	9-23-14 J. Friedman	17 40	157667	10-20-14 Max Inkelas	15 00	157806	10-31-14 N. Y. Tel. Co.	10 74
157353	10-7-14 S. Zacharkow	14 79	157668	10-6-14 Hopkins & Co.	114 00	157807	10-31-14 N. Y. Tel. Co.	6 86
157354	10-5-14 Hermannsen & Co.	2 50	157669	10-10-14 Wm. McDermott	65 00	157808	11-30-14 Brooklyn & Manhattan	
157355	10-10-14 Malone & Nicholson	17 82	157670	10-15-14 Geo. Kessler	140 00		Ferry Co.	11,000 00
157356	10-9-14 Schoverling, Daly & Gales	5 00	157671	9-29-14 W. G. Hawthorne	590 00	157781	38332 Waverly Storage Co.	920 16
157357	9-28-14 W. R. Ostrander & Co.	2 74	157672	10-14-14 Ernest W. Newman	120 00	157782	39252 N. Y. Tel. Co.	141 06
157358	10-21-14 Wm. H. Ellis	2 25	157673	10-21-14 A. Silberberg	34 00	157783	38333 Moran Towing & Transpor-	
157359	9-2-14 E. Leipner	44 50	157674	10-23-14 Robert Simpson	15 70		tation	147 83
157360	9-25-14 Louis Imersheim	36 50	157675	6-9-14 Duncan Stewart	80 00	157784	38264 Geo. Koburger	294 52
157361	9-4-14 Hanson & Kalmus	85 00	157676	10-2-14 Geo. Morley	13 30	157785	38271 Jas. McGuire	299 70
157362	9-28-14 H. Hanig	72 00	157677	10-5-14 International Recording Co.	85	157786	38263 P. H. Nannery	176 99
157363	9-12-14 Heywood Bros. & Wakefield		157678	10-2-14 Emil F. Bertram	3 00	157787	11-18-14 James F. McCarthy	260 00
	Co.	581 75	157679	10-21-14 Wm. Strang	24 00	157788	11-20-14 Fromment & Co.	99 00
157364	8-31-14 L. E. Atherton	266 00	157680	10-21-14 G. B. Berger	2 00	157789	8-25-14 Chas. Meads & Co.	50 00
157365	10-2-14 J. D. Ausenberg	12 70	157681	9-30-14 J. Friedman	43 23	157790	11-21-14 Lignum Chemical Works	30 00
157366	10-2-14 L. E. Atherton	19 00	157682	10-7-14 Hermannsen & Co.	12 20	157791	11-4-14 Jones Packing Co.	22 50
157367	9-4-14 S. Rovinsky	589 00	157683	10-5-14 S. Zacharkow	19 90	157792	10-19-14 Knickerbocker Supply Co.	219 15
157368	9-2-14 S. Rovinsky	578 00	157684	10-8-14 J. F. Valois	1 25	157793	11-30-14 Barrett Mfg. Co.	73 00
157369	10-3-14 Vacuum Carpet Cleaner Co.	75 40	157685	10-10-14 Karl Heinrich	10 00	157794	11-9-14 Northwestern Elec. Co.	24 89
157370	9-24-14 J. Weiss	24 85	157686	10-1-14 The N. Y. Ass'n for the		157795	11-25-14 J. K. Larkin & Co.	10 20
157371	8-20-14 J. Friedman	261 00		Blind	9 75	Fire Department.		
157372	10-2-14 H. Gordon	16 00	157687	11-1-14 Goetz & Co.	38 50	157118	38335 Rudolph Reimer, Jr.	\$187 72
157373	10-6-14 Bklyn. Window Shade Co.	12 79	157688	7-15-14 Goetz & Co.	20 25	157119	39031 Wm. Brennan	64 30
157374	10-8-14 J. D. Ausenberg	19 50	157689	7-15-14 Goetz & Co.	17 25	157120	39406 Summers Supply Co.	136 40
157375	9-4-14 S. Rovinsky	398 00	157690	10-9-14 The Manhattan Supply Co.	165 60	157121	39610 Fiske Bros. Refining Co.	8 91
157376	9-25-14 A. Itzkowitz	6 90	157691	10-16-14 Chas. P. Rogers	3 75	157122	39610 Fiske Bros. Refining Co.	69 48
157377	10-6-14 S. Kapner, assignee of P.		157692	10-13-14 Heywood Bros. & Wake-		157123	38338 Standard Oil Co. of N. Y.	156 22
	Simberg	25 30		field	9 25	157124	38338 Standard Oil Co. of N. Y.	21 29
157378	10-2-14 L. E. Atherton	22 00	157693	9-29-14 Max Klausner	17 00	157125	38807 Combination Rubber Mfg.	
157379	9-12-14 H. Gordon	39 00	157694	9-29-14 Max Klausner	34 00		Co.	715 00
157380	2-2-14 Lawson Piano Co.	3 50	157746	10-17-14 W. H. Temple	83 00	157126	39835 Alfred Chatwin Supply Co.	95 87
157381	9-22-14 J. F. Valois	2 50	157747	10-19-14 Louis Guerr	20 00		Alfred Chatwin Supply Co.	142 00
157382	9-26-14 W. M. Kimball Co.	18 80	157748	9-22-14 Wm. Gaffney	90 00		Alfred Chatwin Supply Co.	246 56
157383	9-26-14 W. M. Kimball Co.	75 00	157749	9-30-14 A. D. Evertsen Co.	48 00	Department of Health.		
157384	7-15-14 Goetz & Co.	1 25	157750	10-15-14 John A. O'Brien	45 00	157827	38612 Knickerbocker Ice Co.	\$5 55
157385	3-15-14 Goetz & Co.	9 50	157751	9-6-14 A. Berengarten	174 00	157828	40649 Frank T. Simmons	108 48
157386	10-10-14 Lockwood & Almquist, Inc.	24 50	157752	7-23-14 Jas. I. Newman	111 00	157829	40648 Louis S. Gimbel	349 08
157387	7-15-14 Goetz & Co.	21 25	157753	9-29-14 Morris Cohen	349 00	157830	39506 P. F. Kenny Co.	1,777 50
157388	7-15-14 Goetz & Co.	5 00	157754	10-19-14 Geo. F. Bason	234 00	157831	38213 M. J. O'Brien	1,701 28
157389	7-15-14 Goetz & Co.	11 25	157755	O. W. Nordstrom	494 50	157832	12-3-14 Dr. J. S. Billings	500 00
157390	10-9-14 Doncourt Construction Co.	6 25	157756	10-21-14 Lester W. Miller	20 00	157833	11-21-14 Burton & Davis	3 63
157391	10-20-14 American Ornamental Iron		157757	9-21-14 Geo. H. Waters Co.	38 00	157834	11-7-14 Power's Accounting Machine	
	Works	51 15	157758	10-10-14 C. H. Mills	47 00		Co.	10 75
157392	10-17-14 John Zixherman	12 30	157759	10-20-14 Otto Metz	48 75	157835	8-28-14 The N. Y. Federation of	
157393	10-19-14 W. H. Temple	41 75	157760	10-19-14 Wm. H. Ellis	591 00		Churches	30 00
157394	9-26-14 Louis Messer	16 37	157761	10-9-14 Department of Correction	204 00	157836	11-21-14 H. T. Jarrett	15 00
157395	9-24-14 Paul Euell, Inc.	11 09	Department of Finance.			157837	4-28-14 Merck & Co.	3 12
157396	10-20-14 H. Tasoff	10 65	157380	Guaranty Trust Co. of New	\$25,000 00	157838	11-5-14 The Harral Soap Co.	4 80
157397	10-5-14 T. J. Tuomey Co.	32 32		York		157839	11-20-14 Bausch & Lomb Optical Co.	7 80
157398	10-20-14 Joseph Spingler	14 85	157396	Patterson, Teele & Dennis	134 30	157840	11-25-14 Sanborn Map Co.	20 00
157399	10-19-14 Robertson & Coury	63 00	157397	9-30-14 N. Y. Tel. Co.	146 14	157841	11-9-14 A. & W. Auburn Prison	18 10
157400	10-9-14 William Rabe	13 93	157398	7-31-14 New York Tel. Co.	132 06	157842	11-20-14 James O. Oliver & Co.	5 00
157401	10-16-14 H. Pfund	22 60	157399	39263 N. Y. Tel. Co.	1,515 75	157843	9-14-14 N. Y. Window Shade Co.	8 25
157402	10-9-14 Henry Pearl & Sons	39 42	157400	The Bronx Democrat	187 50	157844	11-25-14 Manhattan Supply Co.	18 20
157403	9-28-14 Robert Simpson Steam Boil-		157401	The Bronx Record and		157845	11-19-14 J. B. Cohen & Co.	11 30
	er Works	13 60		Times	187 50	157846	11-19-14 Michael Paulini	3 00
157404	9-23-14 New Britain Machine Co.	210 92	157402	Ward Trucking Co. et al.	500 00	157847	11-10-14 The Ohman Map Co.	22 50
157405	9-18-14 Wm. E. Mason	161 00	157403	Geo. W. Collins	50 00	157848	11-25-14 Frank Tourist Co.	262 30
157406	8-17-14 The Geo. Haiss Mfg. Co.		157404	H. Valentine Wildman	150 00	Public Recreation Commission.		
	Inc.	38 00	157405	Wm. Steinach	100 00	157446	40601 Henry B. Herts	\$477 00
157407	9-9-14 H. Pfund	61 00	157406	Chas. K. Offield et al.	4,161 47	Bronx Parkway Commission.		
157408	10-7-14 The Sullivan Co.	25 00	157407	Wm. J. McGuire	100 00	157127	Westchester Lighting Co.	\$1 50
157409	8-4-14 Philip Mostow	15 00	157408	Edgar S. Follwell	100 00	157128	10-22-14 Wm. Greenless	135 00
157410	9-29-14 W. G. Hawthorne	608 00	157409	Arvine E. Monzingo	7 74	157129	10-27-14 Colonial Garage Co.	4 85
157411	9-22-14 Keuffel & Esser Co.	250 56	157410	Ralph S. Denham	19 50	157130	11-1-14 Cornell Bros.	3 50
157412	7-7-14 Lorenzo & Byrns	122 75	157411	Thomas Rice	32 09	157131	11-11-14 Barrett Mfg. Co.	4 66
157413	8-3-14 T. F. Long	70 00	157412	Curtis & Blaisdell Co.	248 55	157132	9-30-14 Scarsdale Supply Co.	3 96
157414	9-24-14 A. E. Keller	51 00	157413	Dora Frank, as Assignee of		157133	10-28-14 W. E. & W. I. Brown	15 00
157415	10-14-14 Lignum Carpenter Works	6 00	157414	John B. Devlin	110 00	157134	10-2-14 Diebold Safe & Lock Co.	130 00
157416	10-14-14 Lignum Carpenter Works	29 00	157415	Phil. Wenbel	1 25	157135	11-10-14 B. G. Pratt Co.	15 00
157417	9-10-14 M. D. Lundin	72 00	157416	Fredk. Heise	8 00	157136	11-10-14 Goldsmith Bros.	40 06
157418	10-19-14 Jandous Electric Equipment		157417	Jean Gellert	15 00	157137	10-22-14 N. Y. Telephone Co.	8 45
	Co.	139 00	157418	Delia Duller	15 00	157138	10-31-14 N. Y. Telephone Co.	30 97
157419	10-16-14 Alex. Burgess	105 00	157419	Lura Sawyer	104 82	157139	11-19-14 Paul Chapman	75 00
157420	10-15-14 Chas. E. Dowdall, Inc.	75 00	157420	Michele Palladino	19 54	157140	12-1-14 I. H. Smith, Register	5 00
157421	9-30-14 Jos. F. Egan	203 00	157421	Henry Kiesel	5 15	157141	A. N. Roson	25 44
157422	9-29-14 W. G. Hawthorne	96 00	157422	Greater New York Home		157142	F. H. Gross	36 19
157423	10-6-14 Julius Haas' Sons	81 00		Co.	96 08	157143	11-23-14 Chas. G. Willoughby	24 58
157424	9-29-14 W. G. Hawthorne	88 00	157423	John J. Simmons	12 06	157144	11-1-14 Carroll M. Guest	6 06
157425	5-11-14 Thos. McKeown	53 00	157424	Jamaica Estates	23 98	157145	11-2-14 The Broun, Green Co.	14 00
157426	8-31-14 Thos. McKeown	26 00	157425	Edward Sherman	5 55	157146	11-9-14 Remington Typewriter Co.	8 00
157427	10-12-14 The Pittsburgh Plate Glass		157426	Fifth Ave. Bank and Mort-		157147	10-31-14 H. K. Brewer & Co.	5 05
	Co.	40 00	157427	gage Co.	13 50	157148	10-24-14 N. Y. Frame & Picture Co.	2 65
157428	9-19-14 Wm. Spence	29 00	157428	Jos. H. Parr	13 13	157149	11-12-14 Baker, Voorhis & Co.	122 40
157429	9-5-14 Morris Koplowitz	51 00	157429	Mary Hefner	19 30	157150	11-23-14 John Meehan & Co.	3 00
157430	10-5-14 Moreland & Gibson	42 00	157430	Eva H. Berry, Assignee of		157151	11-1-14 E. F. Keller	33 75
157431	7-22-14 Barshop Bros.	84 00		Jos. I. Berry	1,489 76	157152	10-23-14 E. G. Soltmann	4 44
157432	9-8-14 Jas. P. Rice	123 00	157431	Queens Beach Co.	37 67	157153	11-19-14 N. Y. Law Journal	7 00
157433	10-3-14 Max Inkelas	60 00	15					

Invoice Finance Date Vouch- or Con- er No. tract Number.	Name of Payee.	Amount.	Invoice Finance Date Vouch- or Con- er No. tract Number.	Name of Payee.	Amount.	Invoice Finance Date Vouch- or Con- er No. tract Number.	Name of Payee.	Amount.
157164	10-31-14 Theron Agor	64 29	President, Borough of Queens.			157508	11-13-14 New York Commercial.....	33 60
157165	10-21-14 William Stanwood Phillips.	47 50	157824	Wm. A. Prendergast.....	49 14	157509	11-13-14 New York Herald Co.....	33 60
157166	11-2-14 Fowler & Sellars Co.....	21 26	157825	Wm. A. Prendergast.....	149 04	157510	11-13-14 New York Press Co., Ltd..	33 60
Department of Parks, Borough of Brooklyn.			157826	Jas. H. Johnson.....	13 56	157511	11-13-14 The New York Times.....	37 80
157935	10-20-14 Henry Romeike, Inc.	\$10 00	President of the Borough of Richmond.			157512	11-13-14 New York Tribune	33 60
157936	7-7-14 Chas. Frommeyer	18 30	157804	37118 John E. Donovan.....	783 35	157513	11-13-14 New Yorker Staats Zeitung	33 60
157937	11-2-14 Herman Erwish	9 00	157805	40141 Ganford Co., Inc.....	27 69	157514	11-13-14 The Standard Union	13 44
157938	9-16-14 T. A. Driscoll	9 00	157809	9-30-14 Storberg's Public Market..	42 40	157515	11-13-14 Sun Printing & Pub. Assn.	33 60
157939	6-5-14 Harry Voletsky	184 50	157810	9-30-14 Wheeler News Co.....	7 66	157516	The World	29 40
157940	9-14-14 Leo Ludins	16 50	157811	10-31-14 The Monon Supply Co., Inc	56 36	157517	Sprague & Henwood, Inc..	3,773 25
157941	5-18-14 Chas. J. Donin	17 10	157812	10-31-14 Platt & Washburn Refining	12 00	157518	Queens Plaza Court, Inc..	687 00
157942	10-22-14 William C. Batsche	18 60	157813	9-30-14 Castleton Motor Car Co....	4 70	157519	11-21-14 August Belmont & Co.....	180 00
157943	10-8-14 W. J. Corcoran	37 60	157814	9-30-14 Interboro Auto Repair &		157520	10-31-14 The Bklyn. Union Gas Co..	1 88
157944	11-11-14 Henry J. Samuels	9 00	157815	10-23-14 W. E. Sheehan	1 50	157521	11-1-14 Central Garage	33 16
157945	11-9-14 Empire City Roofing Co....	9 00	157816	9-30-14 M. J. Halloran	10 00	157522	11-1-14 Elli-Calkins Garage Co....	32 72
157946	6-8-14 Sigmund Spiro	24 00	157817	9-30-14 George L. Merrill	10 00	157523	11-18-14 Thomas Martin	20 00
Department of Parks, Boroughs of Manhattan and Richmond.			157818	10-16-14 J. A. Snyder & Bro.....	24 00	157524	10-31-14 Municipal Garage	199 04
157381	40636 Frank J. Lennon Co.....	\$499 45	157819	10-16-14 Joseph Johnson's Sons....	318 00	157525	11-16-14 Plaza Improvement Co.....	95 00
157382	40464 Alfred J. Fleming	3,341 36	157820	10-16-14 Joseph Johnson's Sons....	218 00	157526	Postal Tel. Cable Co.....	6 69
157383	39224 East River Mill & Lumber		157821	10-31-14 Joseph Johnson's Sons....	104 88	157527	1-20-14 Queens Plaza Court, Inc..	1,233 00
	Co.	376 50	157822	10-23-14 George Merrill	10 00	157528	Cornelius V. V. Powers....	149 92
157384	33058 Tower Const. Co.	500 00	157823	10-23-14 Summers Supply Co.....	65 00	157529	11-3-14 H. U. Singhi	100 00
157385	40120 Dunbar Cont. Co.	1,955 06	Public Service Commission.			157530	11-1-14 So. Bklyn. Savings & Loan	
157386	39459 The P. F. Kenny Co.....	25,919 19	157470	8-14-14 Law Printing Co.....	9,973 42	157531	10-31-14 Wadsworth Garage, Inc....	53 89
157387	34995 J. J. Foley Plumbing and		157471	10-31-14 Abraham & Straus.....	19 33	157532	7-2-14 The Western Union Tel. Co.	44 22
	Heating Co.	100 00	157472	10-29-14 Baron Printing Co.....	118 00	157533	William Vincent Astor	23,750 00
157388	35779 Wm. C. Duggan	100 00	157473	10-17-14 C. C. Bohn Electric Co....	112 98	Department of Public Charities.		
157389	40151 McKim, Mead & White....	1,050 10	157474	11-16-14 Brooklyn Daily Times.....	4 00	157267	12-4-14 J. F. Ryan, Bookkeeper, Mu-	
Department of Parks, Borough of The Bronx.			157475	11-12-14 E. J. Brooks & Co.....	30 00	157268	nicipal Building	245 00
157933	35561 McKim, Mead & White....	\$811 94	157476	11-13-14 Buff & Buff Mfg. Co.....	177 76	157269	11-27-14 Angus P. Thorne	156 08
157934	39077 The Marble Arch Co.....	18,030 64	157477	11-7-14 Burns Bros.	13 80	157270	11-10-14 Wm. J. Doherty.....	300 00
Police Department.			157478	9-24-14 C. S. Busse	763 80	157271	12-1-14 W. H. Conley, Metropolitan	
157218	Police Pension Fund, Arthur		157479	9-24-14 C. S. Busse	763 80	157272	Hospital	20 00
	Woods, Comr., Treas. and		157480	10-26-14 Edw. Carroll, Jr.....	104 04	157273	J. D. Flick, Superintendent.	10 00
	Trustee	\$0 08	157481	11-24-14 The Carter's Ink Co.....	14 00	157274	F. E. Bauer, Superintendent.	104 73
President of the Borough of Brooklyn.			157482	10-30-14 Detroit Cadillac Motor Car		Register, Bronx County.		
157888	11-21-14 Remington Typewriter Co..	\$1 85	157483	9-17-14 F. W. Devoe & C. T. Ray-	6 20	157167	12-1-14 Adams, Flanigan Co.....	113 00
157889	11-28-14 Christensen & Boesen.....	29 50	157484	10-31-14 F. W. Devoe & C. T. Ray-	6 15	157168	12-3-14 Garvey Bros.	58 30
157890	11-20-14 Henry Haywood	62 52	157485	11-5-14 Edison Elec. Illum. Co. of	15 14	157169	12-1-14 Gramatan Spring Water Co.	8 40
157891	11-12-14 John Hynes Granite Works	45 00	157486	4-6-14 The Gen'l Fireproofing Co..	760 98	157170	12-2-14 Geo. Kuhn	21 13
157892	11-12-14 E. George & Co.....	27 00	157487	11-4-14 I. & S. Glock	9 45	157171	11-30-14 Edward Polak	19 86
157893	11-20-14 Geo. W. Plaut	5 70	157488	7-31-14 Great Bear Spring Co.....	85 50	157172	11-30-14 Fred M. Schildwachter....	10 00
157894	11-4-14 Elihu K. Baynon	26 50	157489	11-9-14 David L. Herman, Inc.....	302 82	157173	11-30-14 Yale Towel Supply Co.....	7 00
157895	11-4-14 Union League Stables	27 50	157490	11-2-14 Elbert Latham	79 37	157174	11-28-14 Cobb, Macey, Dohme, Inc..	119 00
157896	11-4-14 W. T. Allen	27 50	157491	11-24-14 Manhattan Elec. Supply Co.	25 91	157175	11-28-14 Crown Ribbon & Carbon	
157897	11-4-14 P. H. Powers & Son.....	27 50	157492	7-9-14 John Meehan & Co.....	103 20	157176	11-19-14 Mfg. Co.	54 00
157898	11-4-14 D. A. Maher	32 00	157493	10-1-14 N. Y. Blue Print Paper Co.	1,646 57	157177	Watson Mfg. Co.....	45 20
157899	11-4-14 A. Walker & Son.....	5 50	157494	10-1-14 The Peerless Blue Print Co.	62 11	157913	12-1-14 Jacob Kuhlman.....	173 74
157900	11-4-14 L. E. Parr	2 50	157495	10-29-14 Tower Bros. Staty. Co.....	1,021 73	157914	12-1-14 Chas. Sowa	30 25
157901	11-4-14 Thos. F. Reid	14 50	157496	9-29-14 Underwood Typewriter Co.,		157915	12-1-14 Adams, Flanigan Co.....	191 95
157902	11-20-14 Van Brunt Tandy	4 50	157497	11-13-14 The Brooklyn Citizen.....	13 44	157916	11-19-14 G. Robitzek & Bro.....	19 95
157903	11-16-14 The Texas Co.	9 66	157498	11-13-14 The Brooklyn Daily Eagle..	13 12	157917	11-30-14 Ward Baking Co.....	62 00
157904	9-9-14 Pure Oil Co.	60 00	157499	11-14-14 Brooklyn Daily Times.....	13 44	157918	Edward J. Martin.....	7 00
157905	11-16-14 The Texas Co.	14 28	157500	11-1-14 Dow, Jones & Co.....	25 20	157919	J. J. Hanratty	8 25
157906	11-25-14 C. W. Keenan	5 20	157501	11-13-14 The Evening Post.....	33 60	157920	J. H. Droge	7 21
157907	11-27-14 J. C. Wemple Co.....	6 00	157502	11-18-14 Financial America	25 20	157921	Fred M. Schildwachter	7 82
157908	11-24-14 V. Linn & Son.....	5 00	157503	11-14-14 The Globe and Commercial		157922	11-20-14 M. Silbermann & Co.....	125 00
157909	11-19-14 P. H. Gill & Sons Forge		157504	11-13-14 The Journal of Commerce	33 60	157923	11-30-14 Daniel Mangan	100 00
	and Mach. Works	73 00	157505	11-17-14 The Mail & Express Co....	33 60	157924	12-1-14 Adams, Flanigan Co.....	21 31
157910	4-9-14 Cranford Co.	44 40	157506	11-13-14 Morning Telegraph Co.....	33 60	157925	12-1-14 Gramatan Spring Water Co.	3 60
157911	4-19-14 Cranford Co.	20 00	157507	New York American.....	42 00	157926	11-14-14 Emil Fleischl & Son.....	29 90
157912	10-31-14 U. S. Wood Preserving Co..	170 10				157927	11-30-14 Sheffield Farms, S. D. Co..	4 50
157929	10-22-14 L. Neuwerth	11 00				157928	11-25-14 Conron Bros. Co.....	38 73
157930	36999 Frank J. Gallagher	1,332 50				Department of Street Cleaning.		
157931	40203 Topeka Paving Co., Inc....	3,728 78				157410	J. T. Fetherston.....	275 69
	Topeka Paving Co., Inc....	2,842 02				157411	J. T. Fetherston	991 60
157932	39746 The Sicilian Asphalt Paving					157412	J. T. Fetherston	2,006 67
	Co.	16,213 50				Department of Taxes and Assessments.		
						157887	E. M. Morgan.....	25 00

DEPARTMENT OF BRIDGES.

REPORT FOR QUARTER ENDED JUNE 30, 1914.

During the past quarter, the usual thorough and systematic inspection of the forty-five bridges and their approaches, and the necessary repairs and replacements thereto have been made.

In this period, the principal work, other than that of maintenance, was the Brooklyn Bridge Subway Connection, the improvement of Manhattan and Brooklyn Plazas to the Manhattan Bridge, the upper deck equipment of the easterly tracks of this bridge, the strengthening of the end and main spans of the Williamsburg Bridge; also the additional platforms at the Bedford Avenue Station, and the New Esplanade on this structure.

Seventy-eight men have been the daily average force engaged on the Brooklyn Bridge subway, and ninety-four per cent. of this contract is complete. A point was reached which necessitated the closing of the north roadway to vehicular traffic on May 25th. Trolley car and elevated traffic was maintained as usual, there being no interference with this service other than the operating of a shuttle service over one line, only, on the Bridge, from Monday night until Friday night, both inclusive, beginning Tuesday, June 2nd, between the hours of 9.30 p. m. and 5 a. m., which was done for the purpose of permitting the Contractor to make the necessary excavation, plastering and waterproofing required for the lowering of the tracks from Franklin Square, west.

The contract for the improvement of the Manhattan Plaza (Manhattan Bridge) shows about fifty-two per cent. of the work complete. Excavation on this contract is practically finished except for a small section of exterior wall along Canal Street, and some drains, duct lines, etc., on the plaza. About eighty-three per cent. of the total concrete work is now in place, all such work for subway being finished, and similar work for the colonnades and arch completed as far as granite is set. The material for the elevated structure, from the portal of the subway to the abutment at station 5+90, is fabricated and is awaiting shipment, subject to call. This area is now occupied by a temporary timber roadway, five hundred feet long, which was built to divert vehicular traffic from the bridge roadway at abutment, over the subway cut to Chrystie Street and Canal Street. The work of constructing this temporary roadway was begun on May 14th, and the roadway opened on May 25th. Owing to the non-delivery of the granite, little progress has been made on the exterior walls. On the arch and colonnades, the east colonnade is further advanced, it being in place up to the last section of columns or pilasters. The arch piers are in place to the first floor level, while but a small part of the west colonnade has been advanced. In all, there is about twenty per cent. of this granite set.

The contract for the improvement of the Brooklyn Plaza shows about fifty-one per cent. complete. Ninety-five per cent. of the excavation work has been done and there remains about forty-five hundred cubic yards of fill to be placed, or graded into place, on west plaza. About eighty per cent. of the cement sidewalks on the Flatbush Avenue extension completed the quarter, and seventy-five per cent. granite pavement, between the car tracks and the easterly curb is finished. The concrete work on the easterly plaza is nearly completed, and but two thousand cubic yards remain to be done on the westerly plaza. The granite work on the east exterior wall

is complete, except for a small number of the balusters near Sands Street end of wall. The walls along the roadway, east and west sides, are complete. About sixty per cent. of the east pylon and fifty per cent. of the curved wall back of pylon, are set.

The contract for the upper deck equipment was awarded to the Vulcan Rail and Construction Co. during this quarter, work starting on same (officially) April 20th. All rails from abutment to abutment, except expansion rails, have been delivered. Approximately thirty-five per cent. of the work is lined and surfaced.

The strengthening of the end spans of the Williamsburg Bridge was completed June 24th, 1914. The most important part of this work, the enlarging and replacing of the pins at the ends of the stiffening trusses, was successfully accomplished.

The strengthening of the main span of this bridge, top chords, was completed June 2nd. The bottom chords shows south truss, sixty-seven per cent. and north truss, ten per cent. complete. Work is seventy-five per cent. complete.

Williamsburg Bridge Esplanade—Towards the end of this quarter the esplanade at the Manhattan end of the promenade was extended as far as Ridge Street, by covering the space over the Elevated tracks between the north and south footwalks with timber flooring. In order to carry a load of one hundred and fifty pounds per square foot, so that concrete slab construction might, at any time, be substituted for timber flooring, the transverse bracing girders spanning the opening were removed and replaced with plate girders, which, in turn, were connected with stringers. On this esplanade a wood shelter and bandstand with a canvas roof have been erected, covering an area of twenty feet in width and two hundred and twenty feet in length, and with a seating capacity for five hundred persons. This esplanade fills a needed want for the most congested section, as regards population, in our City. It provides one of the best public amusement and recreation centers in the city, exceeding in area five of the City's recreation piers. This extension of the esplanade has been performed by departmental labor at a cost approximating three thousand dollars (\$3,000).

The contract for erecting the additional outside platforms at the Bedford Avenue Station, shows eighty-eight per cent. complete. This station, when completed, should prove a boon to not only the travelling public who have occasion to transfer on week days at this point, but to the manufacturing interests of the Eastern District, requiring additional facilities of this kind for those who desire to pay a visit to their establishments.

Queensboro Bridge—The Snare & Triest Co., Rapid Transit Railroad Contractor, has removed the bridge structure from Ely Avenue to Crescent Street, Long Island City, and the work of excavation, pile driving and concreting from column footings, is progressing. During the quarter, the Bradley Contracting Co. has done considerable surfacing and grading between Vernon and Ely Avenues, but no other work on its contract with this Department. Various studies of the proposed changes of structure and connection with transit lines were made during this period, for the new subway and elevated lines.

Harlem River, Manhattan and Bronx Bridges—One of the principal parts of the work performed in this quarter was the repainting of the Washington Bridge. Materials were collected and scaffolds erected on this bridge and a force, consisting of sixty painters, was put to work on May 15th, painting the structure. Work has proceeded smoothly without any loss or maiming of limb to any of the force, and is almost complete. The new office building, adjacent to the Madison Avenue Bridge

approach, exterior walls and concrete cornice, were completed, as also the pilasters and borders of the windows.

The Municipal Building.

The Thompson-Starrett Company substantially completed the work to be done under the original contract for the interior finish, and began work under the modified agreement dated April 23d, 1914.

The installation of the elevators by Robert Wetherill & Co. was completed, except for certain work which has been deferred awaiting the completion of the tower.

Abraham & Straus advanced its work under the contract for setting window shades to eighty-four per cent. completed.

Lighting fixtures were installed under the contract with the Edward Schroeder Lamp Works, sixty per cent. of the work being completed.

On April 4th, a contract was entered into with Bernard Brindze & Company for painting the interior of the Municipal Building. Work was begun and advanced to twenty-six per cent. complete.

The Art Metal Construction Company began work under the contract for furnishing and installing railings, screens and counters.

A contract was entered into with the Vulcan Rail & Construction Company for window guard rails on exterior windows at the twenty-second and twenty-third floors.

Financial Report.

Appropriations from Tax Levy.

Appropriations, 1913, unexpended balance, April 1, 1914.....	\$41,763 06
Appropriations, 1914, unexpended balance, April 1, 1914.....	682,324 02

Total	\$724,087 08
Expenditures for 3 months ended June 30, 1914.....	206,269 00

Unexpended balance, June 30, 1914.....	\$517,818 08
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Outstanding obligations for contracts, open market orders issued, etc., June 30, 1914.....	43,114 19
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Unencumbered balance, June 30, 1914.....	\$474,703 89
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Special Revenue Bond Fund (Municipal Garage, Maintenance and Supplies).

Unexpended balance, April 1, 1914.....	\$9,757 67
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Receipts for material, labor, etc., for 3 months ended June 30, 1914....	6,306 53
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Total	\$16,064 20
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Expenditures for 3 months ending June 30, 1914.....	7,300 74
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Unexpended balance, June 30, 1914.....	\$8,763 46
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Outstanding obligations for contracts and open market orders issued, June 30, 1914.....	3,820 81
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Unencumbered balance, June 30, 1914.....	\$4,942 65
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Outstanding accounts receivable due to Municipal Garage for work done to June 30, 1914.....	\$8,209 57
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Corporate Stock Funds.

Unexpended balance, April 1, 1914.....	\$3,848,095 22
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Authorizations during 3 months ended June 30, 1914.....	50,994 50
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Total	\$3,899,089 72
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Authorizations rescinded during 3 months ended June 30, 1914.....	\$27,000 00
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Expenditures for 3 months ending June 30, 1914.....	751,241 76
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Unexpended balance, June 30, 1914.....	\$3,120,847 96
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Outstanding obligations for contracts, open market orders issued, etc., June 30, 1914.....	2,273,186 27
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Unencumbered balance, June 30, 1914.....	\$847,661 69
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Special and Trust Funds (Brooklyn and Williamsburg Bridges).

Unexpended balance, April 1, 1914.....	\$97,598 27
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Receipts of revenues from tolls, rents, etc., for 3 months ended June 30, 1914.....	102,436 75
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Total	\$200,035 02
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Expenditures for 3 months ended June 30, 1914.....	107,659 19
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Unexpended balance, June 30, 1914.....	\$92,375 83
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Miscellaneous Collections (Bridges Over Harlem River, Etc.)

Receipts of revenues from rents, privileges, etc., for 3 months ended June 30, 1914.....	\$1,945 76
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RAILROAD TOLLS.

Brooklyn Bridge.

Trolley Car Service—

The total number of trips made from April 1 to June 30, 1914, was..	332,057
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Total number of trips for same quarter in 1913.....	353,900
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Showing a decrease of.....	21,843
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The total number of tolls collected from April 1 to June 30, 1914, was	\$16,209 80
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Total number of tolls collected during same quarter in 1913.....	17,931 80
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Showing a decrease of.....	\$1,722 00
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Elevated Car Service—

The total number of trips made from April 1 to June 30, 1914, was..	352,731
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Total number of trips for same quarter in 1913.....	358,823
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Showing a decrease of.....	6,192
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The total number of tolls collected from April 1 to June 30, 1914, was	\$37,898 20
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Total number of tolls collected during same quarter in 1913.....	38,134 10
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Showing a decrease of.....	\$235 90
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The total number of tolls collected for trolley car and elevated car service, from April 1 to June 30, 1914, was.....	\$54,108 00
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Total number of tolls collected during same quarter in 1913.....	56,065 90
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Showing a decrease of.....	\$1,957 90
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Williamsburg Bridge.

Trolley Car Service—

The total number of trips made from April 1 to June 30, 1914, Brooklyn lines, was	266,921
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The total number of trips made from April 1 to June 30, 1914, Manhattan lines, was.....	138,339
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Total	405,260
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Total number of trips for same quarter in 1913, Brooklyn lines.....	271,779
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Total number of trips for same quarter in 1913, Manhattan lines....	139,435
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Total	411,214
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Showing a decrease for Brooklyn lines.....	4,858
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Showing a decrease for Manhattan lines.....	1,096
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Showing a total decrease.....	5,954
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The total number of tolls collected from April 1 to June 30, 1914, was	\$19,590 10
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Total number of tolls collected during same quarter in 1913.....	20,583 85
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Showing a decrease of.....	\$993 75
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Elevated Car Service—

The total number of trips made from April 1 to June 30, 1914, was..	134,524
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Total number of trips for same quarter in 1913.....	91,309
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Showing an increase of.....	43,215
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*No Elevated Railroad Tolls paid since August, 1913.

Total number of tolls collected during same quarter in 1913.....	\$8,718 10
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The total number of tolls collected for Trolley Car Service* from April 1 to June 30, 1914, was.....	\$19,590 10
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Total number of tolls collected during same quarter in 1913.....	29,301 95
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Showing a decrease of.....	\$9,711 85
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Queensboro Bridge.

Trolley Car Service—

The total number of trips made from April 1 to June 30, 1914, Manhattan and Queens Traction Corporation lines, was.....	33,297 1/2
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Total number of trips for same quarter in 1913.....	27,342 1/2
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Showing an increase of.....	5,955
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The total number of trips made from April 1 to June 30, 1914, New York & Queens County Railway Co. lines, was.....	91,746
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Total number of trips made for same quarter in 1913.....	86,900
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Showing an increase of.....	4,846
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The total number of trips made from April 1 to June 30, 1914, Third Avenue Bridge Co., was.....	22,590
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Total number of trips for same quarter in 1913.....	22,590
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Total number of trips, April 1 to June 30, 1914, all lines.....	147,633 1/2
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Total number of trips for same quarter in 1913, all lines.....	136,832 1/2
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Showing an increase of.....	8,801
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Manhattan Bridge.

Trolley Car Service—

The total number of trips made from April 1 to June 30, 1914, Manhattan Bridge Three Cent line, was.....	29,241
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Total number of trips for same quarter in 1913.....	30,439
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Showing a decrease of.....	1,198
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The total number of trips made from April 1 to June 30, 1914, The Brooklyn and North River R. R. line, was.....	27,220
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Total number of trips for same quarter in 1913.....	*35,499
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Showing a decrease of.....	8,279
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Total number of trips, April 1 to June 30, 1914, all lines.....	56,461
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Total number of trips for same quarter in 1913, all lines.....	65,938
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Showing a decrease of.....	9,477
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The revenues for tolls from cars crossing the Queensboro and Manhattan Bridges are certified monthly to the Department of Finance for collection.

*Operated by Third Avenue R. R. Co., to December 11, 1913, under permit issued by the Commissioner of Bridges. Franchise became effective December 11, 1913.

F. J. H. KRACKE, Commissioner of Bridges.

LAW DEPARTMENT.

The following schedules form a brief extract of the transactions of the office of the Corporation Counsel for the week ending November 7, 1914, as required by section 1546 of the Greater New York Charter:

Note—The City of New York or the Mayor, Aldermen and Commonalty of The City of New York is defendant, unless otherwise mentioned.

SCHEDULE "A."

Suits and Special Proceedings Instituted.

Court.	Register and Folio.	When Commenced.	Title.	Nature of Action.
Supreme...104	1	Nov. 2, 1914	Beber, Charles, and ano., etc., vs. The City of New York et al.	To restrain interference with market under Queensboro Bridge.
Mun., B'n.104	2	Nov. 2, 1914	Apfel, David, infant, by guardian, etc., vs. Dockswell, Isidore, vs. The City of New York et al.	Personal injuries, fall, obstruction on walk, Lincoln Terrace Park, \$500. Personal injuries, run over by automobile belonging to Park Dept., Pelham Parkway, \$500.
Supreme...104	4	Nov. 2, 1914	Fedris, John M.	Personal injuries, knocked down by automobile of defendant, Broadway and 42nd St., \$5,000.
Co., K. Co.104	5	Nov. 2, 1914	Allen, Margaret, vs. Joseph Little et al.	Action in partition to divide premises, Stockholm St. and Knickerbocker Av.
Sup., Q. Co.104	6	Nov. 4, 1914	White, Charles F. (ex rel.), vs. William A. Prendergast and ano.	Mandamus to compel drawing of and payment of warrant for printing Court Calendars for Queens Co.
Municipal...104	7	Nov. 4, 1914	Schuler, Issie, infant, by guardian, etc., vs. Lemant, Lena, vs. Arthur Woods, etc., et al.	Personal injuries, struck by ash can in hands of Street Cleaning employee, 119 Forsyth St., \$500.
Supreme...104	8	Nov. 4, 1914	Lemant, Lena, vs. Arthur Woods, etc., et al.	To restrain interference with premises 43 W. 92d St.
Supreme...104	9	Nov. 4, 1914	Greenwich Savings Bank vs. Elizabeth Seaman et al.	To foreclose mortgage.
Sup., K. Co.104	9	Nov. 4, 1914	Slutsky, Nathan I., vs. Mary Mitchell et al.	To foreclose tax lien.
Supreme...104	10	Nov. 4, 1914	Eisig, Monash, vs. Israel Jacobson et al.	To foreclose mortgage.
State Board of Education	11	Nov. 4, 1914	Peixotto, Bridget, vs. Board of Education.	To review resolution adopted Oct. 8, 1913.
Sup., B'n. Co.104	12	Nov. 5, 1914	Taylor, Kate M. (Matter of)	For order dispensing with lost mortgage.
Supreme...104	13	Nov. 5, 1914	Murphy, John J. (Matter of)	For order to set aside certain garnishee executions.
Supreme...104	14	Nov. 5, 1914	North-Eastern Construction Co.	Balance on contract, etc., construction of asphalt plant, 90th St. and Av. A, \$11,052.20.
Sup., B'n. Co.104	15	Nov. 5, 1914	Van Riper, Sarah E., vs. William J. Cornell et al.	To foreclose mortgage.
Sup., B'n. Co.104	15	Nov. 5, 1914	Probst, Arthur F., vs. James J. Cahill et al.	To foreclose mortgage.
Sup., B'n. Co.104	16	Nov. 5, 1914	Kipp, Lillian	Personal injuries, fall, condition of sidewalk, City Island Bridge, \$2,000.
Supreme...104	17	Nov. 5, 1914	Bottsford-Dickinson Co. vs. City of New York (No. 1)	Summons only served.

Court.	Register and Folio.	When Commenced.	Title.	Nature of Action.
Supreme...	104 18	Nov. 5, 1914	Botsford-Dickinson Co. vs. City of New York and ano. (No. 2)....	Summons only served.
Supreme...	104 19	Nov. 5, 1914	Redding, William E.	Personal injuries, fall, snow and ice, 277 Bleeker St., \$20,000.
Supreme...	104 20	Nov. 6, 1914	Hedenkamp, Henry H. (ex rel.), vs. William A. Prendergast and ano.	Mandamus to compel payment of salary, etc.
Municipal...	104 21	Nov. 6, 1914	City of New York vs. Rafink Construction Co.	To recover cost of removing building material, 166th St. and Park Av., \$61.87.
Supreme...	104 22	Nov. 6, 1914	Beck, Christian, vs. City of New York and ano.	Personal injuries, thrown from motor truck, condition of street, Bklyn. end of Manhattan Bridge, \$10,000.
Co., K. Co.	104 23	Nov. 6, 1914	Schlesinger, Joseph, vs. Mary Newbeck et al.	To foreclose mortgage.
Supreme...	104 24	Nov. 6, 1914	Buckley, William J. (ex rel.), vs. William A. Prendergast and ano.	Mandamus to compel payment of salary, etc.
Supreme...	104 25	Nov. 6, 1914	Eastman Flooring Co. S. L., vs. Charles Wille et al.	To foreclose lien.
Supreme...	104 26	Nov. 6, 1914	Morgera, Filomena	Personal injuries, fall, snow and ice, 22-24 Lewis St., \$5,000.
Sup., W. Co.	104 27	Nov. 6, 1914	McGurn, Lizzie	Personal injuries, struck by falling limb of tree, 175 S. 4th St., Bk., \$5,000.
Supreme...	104 28	Nov. 6, 1914	Spector, Pearl	Personal injuries, fall, condition of sidewalk, Ave. A and 11th St., \$5,000.
Sup., K. Co.	104 29	Nov. 6, 1914	Breed, Peter	Personal injuries, fall, condition of sidewalk, Central and DeKalb Av., \$25,000.
Supreme...	104 30	Nov. 6, 1914	Dimock & Fink Co. vs. City of New York et al.	To foreclose lien.
Supreme...	104 31	Nov. 6, 1914	LeBlanc, Walter R.	Summons only served.
Supreme...	104 32	Nov. 6, 1914	Carroll, Joseph F.	Summons only served.
Supreme...	104 33	Nov. 6, 1914	McGrath, Terrence T.	Summons only served.
Supreme...	104 34	Nov. 6, 1914	O'Neill, Frederick C.	Summons only served.
Sup., K. Co.	104 35	Nov. 6, 1914	Connor, David, infant, by guardian, etc.	Personal injuries, run over by automobile of Dept. of Water Supply, Warren St. and 3rd Av., Bk., \$10,000.
Supreme...	104 36	Nov. 6, 1914	Public Service Commission (Matter of)....	To acquire property at Broadway, Morris and Greenwich Sts., for rapid transit purposes.
Supreme...	104 39	Nov. 6, 1914	Hopper Co., Thomas T., vs. John B. Malatesta et al. (No. 1)....	To foreclose lien.
Supreme...	104 40	Nov. 6, 1914	Hopper Co., Thomas T., vs. John B. Malatesta et al. (No. 2)....	To foreclose lien.
Municipal...	104 41	Nov. 7, 1914	Lake, Mary	Personal injuries, fall, excavation, 308 W. 14th St., \$500.
Supreme...	104 41	Nov. 7, 1914	Daly, Josephine E.	For order dispensing with lost mortgage.

SCHEDULE "B."

Judgments, Orders and Decrees Entered.

Philip Engelberg—Entered judgment dismissing complaint by default and for \$107.85 costs in favor of defendant.

City of New York vs. Louis Turtel—Entered order discontinuing action with costs to defendant to date.

Benjamin Blumenthal et al.—Entered order discontinuing action without costs.

Della Meehan—Entered judgment dismissing complaint by default and for \$107.85 costs in favor of defendant.

Peo. ex rel. Henry B. Vaughn vs. L. Purdy et al.—Entered order discontinuing proceeding without costs.

In re John C. Wait—Order entered determining lien on judgment in Ryan vs. City of N. Y. and fixing same at \$30,000.

Patrick Ryan—Entered order denying motion to set aside direction of verdict on certain items.

Clara Tonnesson, adm'x—Entered Appellate Division order dismissing plaintiff's appeal, with \$10 costs to defendant.

Peo. ex rel. James Wilkinson vs. E. V. Frothingham; Peo. ex rel. Maurice Goldstein vs. J. J. Murphy—Entered Appellate Division orders dismissing relators' appeals, with \$10 costs to defendants.

Peo. ex rel. Karoly B. Horvay vs. Bd. of Education—Entered Appellate Division order reversing order granting alternative writ of mandamus, and denying motion for same, with \$10 costs.

Peo. ex rel. Home Bureau vs. G. H. Bell—Entered Appellate Division order affirming order denying motion for stay of proceedings.

Peo. ex rel. Thomas F. Farrell vs. W. Williams—Entered Appellate Division order affirming order denying motion for mandamus.

Peo. ex rel. Robert MacNish vs. R. Waldo; Waldorf-Astoria Hotel Co. vs. W. J. Gaynor et al.—Entered Court of Appeals orders denying motions for reargument, with \$10 costs to defendants.

Shenk Realty & Construction Co. vs. A. Woods et al.—Entered order denying motion for injunction pendente lite, with \$10 costs to defendants.

Peo. ex rel. Claude F. Curtis vs. H. Moskowitz et al.—Entered order denying motion for peremptory writ of mandamus.

George M. Fletcher—Filed findings of fact and conclusions of law of Manning, J. Entered judgment in favor of defendant dismissing complaint upon the merits, and for \$138.06 costs.

John P. Butler, assignee; Fenella Burrell—Entered Appellate Division orders affirming judgments in favor of defendant.

Peo. ex rel. Stephen A. Nethercott vs. R. Waldo; Peo. ex rel. Eugene P. Lenahan vs. M. Grifenhagen—Entered Appellate Division orders dismissing writs of certiorari, with \$50 costs and disbursements to defendants.

Peo. ex rel. Joseph G. Robin vs. P. Hayes—Entered order on remittitur from Court of Appeals dismissing relator's appeal without costs.

Rachel Kaplan—Entered order denying motion to set aside verdict in favor of plaintiff.

Patrick J. Boylan; Bridget McCaffrey, adm'x—Entered orders directing plaintiffs to serve bills of particulars within five days.

Bridget McCaffrey, adm'x—Entered order denying motion to strike out defendant's answer.

Judgments Were Entered in Favor of the Plaintiffs in the Following Actions:

Date.	Name.	Register and Folio.	Amount.
1914.			
Oct. 20	Bendit, Hyman, infant	103 305	\$66 50
Oct. 29	Eisenberg, Tillie, infant	95 303	1,457 33
Oct. 31	Ryan, Patrick	96 527	4,866 07
Nov. 6	Fox, Henry E.	97 371	308 16

SCHEDULE "C."

Record of Court Work.

People ex rel. Ida Von Claussen vs. Warden of City Prison—Motion to restrain transfer of relator to Matteawan Asylum, argued at Appellate Division; decision reserved; G. H. Cowie for the City. "Motion denied and stay vacated."

People ex rel. Andrew Pape vs. Board of Education—Argued at Appellate Division; decision reserved; C. McIntyre for the City.

New York Consolidated Railroad Co.—Argued at Appellate Division; decision reserved; C. L. Barber for the City.

People ex rel. John F. Schmadeke vs. L. Purdy et al.; People ex rel. Abro J. Newton Co. vs. Same; People ex rel. John C. Morton and another vs. Same; People ex rel. Audley Clark Co. vs. Same—Argued at Appellate Division; decision reserved; E. Fay for the City.

Jacob Sternberg vs. W. S. O'Hara—Motion to dismiss defendant's appeal, submitted at Appellate Term; decision reserved; G. M. Curtis, Jr., for the City. "Motion denied on condition that return be filed before November 26."

People ex rel. John Hessian vs. T. A. Bingham—Motion to set aside order dismissing proceeding, argued before Davis, J., and denied; L. N. Futter for the City.

Shenk Realty and Construction Co. vs. A. Woods et al.—Motion for injunction

pendente lite, argued before Davis, J. Decision reserved; G. P. Nicholson for the City. "Motion denied."

People ex rel. George S. Frey vs. J. C. Cropsey; People ex rel. John Walsh vs. Same—Motions to dismiss proceedings for lack of prosecution, argued before Davis, J., and denied; L. N. Futter for the City.

City of New York vs. U. S. Fidelity and Guaranty Co. (Nos. 1 and 2)—Demurrer to complaint, argued before Guy, J. Decision reserved; J. A. Stover for the City. "Demurrer overruled with leave to answer on payment of costs."

Isidor Schnirer—Complaint dismissed by default before Weil, J., in Municipal Court; P. N. Harrison for the City.

Charles Peterson—Reference proceeded and adjourned; J. F. Collins for the City.

Isidore Tolchinsky, administrator—Submitted at Appellate Division; decision reserved; C. J. Nehrba for the City.

People ex rel. Walter F. Delmour vs. W. A. Prendergast—Motion for peremptory writ of mandamus argued before Davis, J., and granted; G. H. Cowie for the City.

In re Mortimer C. Baldwin; In re Elkan Kahn; In re Fannie Pick—Motions for orders directing Register to discharge mortgage submitted to Davis, J.; decision reserved; G. H. Cowie for the City.

People ex rel. Percy Davison vs. W. Williams; People ex rel. William Caesar vs. F. J. H. Kracke—Motions to resettle orders denying motions for mandamus submitted to Lehman, J.; decision reserved; E. S. Benedict for the City.

Fanny Robin—Tried before Cohalan, J., and a jury; complaint dismissed; J. W. Goff, Jr., for the City.

Edwin Mandeville vs. City of New York et al.—Motion for reargument of demurrer to complaint argued before Fawcett, J.; decision reserved; J. J. Mead for the City.

Joseph O. Hammit vs. W. J. Gaynor et al.—Argued at Appellate Division; decision reserved; E. C. Kindelberger for the City.

People ex rel. Edward C. Wolfe vs. R. Waldo—Argued at Appellate Division; decision reserved; L. N. Futter for the City.

People ex rel. William Cohen vs. R. Waldo—Submitted at Appellate Division; decision reserved; L. N. Futter for the City.

People ex rel. Samuel D. Hirschfeld vs. Board of Education—Motion for peremptory writ of mandamus argued before Davis, J.; decision reserved; C. McIntyre for the City.

People ex rel. John P. Reynolds, Jr., vs. W. Williams—Demurrer to alternative writ of mandamus argued before Benedict, J.; decision reserved; E. S. Benedict for the City. "Demurrer sustained with leave to amend writ on payment of costs."

Charles Peterson—Reference proceeded and adjourned; J. F. Collins for the City.

People ex rel. Daniel Greenwald vs. W. A. Prendergast—Submitted at Appellate Division; decision reserved; T. Farley for the City.

People ex rel. Hugh M. Edwards vs. R. Waldo; People ex rel. John T. Ryan vs. D. I. McKay—Motions to dismiss writs of certiorari for failure to file briefs submitted at Appellate Division; decision reserved; L. N. Futter for the City.

Rapid Transit (Mott Ave. and 138th St)—Motion to direct City of New York to furnish A. J. Rivers with three copies of evidence taken before Commissioners submitted at Appellate Division; decision reserved; H. W. Mayo for the City.

People ex rel. Samuel Geller vs. R. Waldo—Motion to dismiss writ of certiorari for lack of prosecution argued before Davis, J., and granted; D. F. Dennehy for the City.

Herman Cadieu vs. A. Woods et al.—Motion for injunction pendente lite submitted to Davis, J.; decision reserved; G. P. Nicholson for the City.

Amanda Renault vs. City of New York et al.—Motion for order awarding full bill of costs to City of New York argued before Lehman, J., decision reserved; T. G. Price for the City.

People ex rel. New York Central & Hudson River Railroad Co. vs. L. Purdy et al. (1914)—Tried before Bijur, J.; decision reserved; A. B. Scoville for the City.

Samuel Lowenstein—Tried before Erlanger, J., and a jury; verdict for defendant; J. W. Goff, Jr., for the City.

Solomon Schitzbank—Tried before Lauer, J., in Municipal Court; discontinued after trial; S. Hoffman for the City.

Hearings Before Commissioners of Estimate in Condemnation Proceedings.

Rapid Transit (Park Ave., 41st to 42nd Sts.), 1 hearing; C. D. Olendorf for the City.

Rapid Transit (Walton Ave.), 3 hearings; Rapid Transit (42nd St. and 1st Ave); Rapid Transit (Mott Ave. and Exterior St.); Rapid Transit (Nostrand Ave. and Eastern Parkway); Rapid Transit (Mott Ave. and 138th St.); 1 hearing each; H. W. Mayo for the City.

Rapid Transit (84th to 86th Sts., New Utrecht Ave.), 1 hearing; L. C. White for the City.

Rapid Transit (Joralemon St.), 1 hearing; E. J. Kenney, Jr., for the City.

SCHEDULE "D."

Contracts, etc., Drafted, Examined and Approved as to Form.

Department.	Contracts Approved as to Form.	Contracts Examined and Returned for Revision.	Advertisements Approved as to Form.
Borough Presidents	18	..	2
Board of Education	2	..	1
Department of Correction	3	..	..
Public Service Commission	2	..	..
Bellevue and Allied Hospitals	1	..	1
County Clerk	1	..	1
Board of City Record	1	1	..
Dock Department	1	..	1
Police Department	1	..	1
Armory Board	1	..	1
Department of Charities	1	..	1
Park Department	1	..	..
Total	33	1	9

Bonds Approved.	Finance Department	1
Finance Department	2	..
Leases Approved.	Total	2
Board of Education	1	..
Agreements Approved.	Board of Water Supply	1

SCHEDULE "E."

Opinions Rendered to the Various Departments.

Department.	Number of Opinions Rendered.	Department.	Number of Opinions Rendered.
Finance Department	23	Municipal Civil Service Commission	1
Borough Presidents	8	Street Cleaning Department	1
Police Department	2	Mayor	1
Board of Water Supply	2	Dock Department	1
Board of Estimate and Apportionment	2	Commissioners of Accounts	1
Department of Charities	2	Department of Water Supply, Gas and Electricity	1
Commissioner of Licenses	2	Total	49
Fire Department	1		
Department of Bridges	1		

FRANK L. POLK, Corporation Counsel.

Department of Public Charities.

Report for Week Ended November 28, 1914:
Appointments — Hospital Helpers: Ackert, Fred., \$180. Housekeeper: Andrews, Villa E., \$600. Hospital Helpers: Barry, Henry, \$180; Baum, David, \$240; Beattie, William F., \$240; Borden, Warren, \$240; Brassell, Michael, \$240; Brennan, Stella, \$240; Burke, Thomas, \$180; Cahill, Thomas E., \$240; Christenberry, Walter, \$240; Clarke, James, \$180; Cole-

man, Delia, \$180; Colwell, Julia, \$180; Curley, Michael, \$180; Cusick, John, \$180; Daly, James, \$180; Daly, Peter, \$180; Daly, William D., \$240; Doolan, Martin, \$240; Dowd, Edward, \$240; Doyle, John, \$180. Cook (Head): Duke, Charles F., \$900. Hospital Helpers: Ericson, Carl, \$180; Farnam, James, \$180; Farrell, John, \$180; George, Ruth V., \$240; Golden, James, \$240; Gorman, James, \$240; Goulding, Michael, \$240; Gristie, Minnie, \$240; Henderson, Edward J., \$180; Henry, William, \$180; Hertel, Ida, \$240; Hickey, Edward, \$240; Hind, Emily, \$240; Johnson, Andrew, \$180; Kelly, Annie, \$240; Lawlor, Harry F., \$480. Teacher: Lytle, Edna G., \$720. Hospital Helpers: Meurer, Annie, \$280; Monroe, Florence, \$240; Moriarty, John, \$180; Morton, Harry J., \$180; Mulhall, Fintan, \$240; Muller, Charles, \$180; McConnell, Thomas, \$180; McDonald, John, \$240; McKeon, Annie, \$180; Plunkett, John, \$240; Rathgen, Charles, \$240; Read, Emma A., \$480; Kiemuller, Edward, \$180; Saunders, Katie, \$180; Sexton, Mollie, \$240; Sherlock, Thomas F., \$180; Smith, Annie, \$240; Sullivan, Frances, \$240; Sullivan, John, \$180; Van Sicklin, Mary, \$180; Wagner, Lillian, \$240; Walsh, Madeine C., \$600; Weisman, Edward, \$240; Wilmott, James A., \$240; Winichky, Alice, \$240; Winters, Frederick, \$240; Womack, Arthur, \$240; Ziegler, Charles M., \$180.

Resignations—Cook (Head): Busse, Paul, \$900. Attendant: Carlus, Winifred, \$360. Hospital Helpers: Elliott, John G., \$240; Greener, Edward, \$180; Hackett, Martin, \$240; Jackson, Eran, \$240; Kelly, Robert, \$180; Kennedy, Elizabeth, \$240; Moreland, Gilbert, \$240; O'Connor, John H., \$240; Prason, Walter J., \$240; Ryan, Arthur H., \$240; Sparks, Bertha, \$480.

Dropped—Hospital Helper: Burton, George, \$180. Licensed Engineer: Conn, James, \$4.50 per diem. Hospital Helpers: Connelly, Nora, \$240; Cudmore, Margaret, \$240; Holmes, Margaret, \$180; Kavanaugh, May M., \$480. Clerk: Kelly, Elizabeth G., \$600. Hospital Helpers: King, James, \$240; Lauerwalde, Peter, \$240. Clerk: Lawlor, Harry F., \$600. Hospital Helpers: Leonard, Kate, \$240; Martin, Rose, \$180; McIlvaney, James, \$300; McNamara, William, \$240; O'Connell, Mary, \$240; Peter, Hans, \$240; Quincoppy, Joseph, \$240. Clerk: Reardon, Irene V., \$600. Hospital Helper: Rickaby, Emelie, \$240. Carpenter: Roane, Bert, \$5 per diem. Hospital Helpers: Sexton, Mollie, \$240; Tooke, William, \$240; Tosley, William, \$240; Vesterby, Charles L., \$180; Winters, Frederick, \$240; Wolff, Frank, \$240; Wrenn, Beatrice, \$240; Ziegler, Charles M., \$180.

Promotions—Hospital Helpers: Dempsey, John, \$120 to \$300; Ferris, Edward, \$300 to \$360; Harvey, Charles, \$240 to \$480; Johnson, Mary, \$144 to \$240; Miller, Anne, \$240 to \$480; McConnell, Alex, \$120 to \$300; Nostrand, Eric, \$180 to \$240; O'Connell, John, \$180 to \$240. Pupil Nurses: Reddy, Catherine, \$144 to \$180; Rousseau, Corinne N., \$144 to \$180; Smith, Theresa M., \$144 to \$180.

Transfers—Hospital Helper: Larson, John G., \$240.

Title Changed—Hospital Helper to Attendant: Ferris, Edward, \$360.

Services Ceased—Purchasing Agent: Bernstein, Samuel, \$1,800.

Propositions Accepted—James Shewan & Sons, foot 26th St., Brooklyn, repairs and painting of steamer "Hart's Island," \$844.

J. McKEE BORDEN, Secretary.

Fire Department.

Abstract of Transactions from November 9th to November 14th, 1914.

NOVEMBER 9.

Dropped from Rolls (Transferred)—To take effect 5 p. m., November 9th: Janitor Maurice J. Wilkinson, Bureau of Fire Prevention, Manhattan, Bronx and Richmond; Stoker Henry Loughran, and Elevator Attendants Patrick H. Moran and Walter C. Donohue, Headquarters (Buildings and Grounds), Manhattan, they having been transferred to the Department of Education.

Dropped from Rolls (Reduction of Force)—Watchman John J. Malley,

Bureau of Repairs and Supplies, Division of Apparatus, Manhattan, Bronx and Richmond, and Thomas Dooley, same Bureau and Division, Brooklyn and Queens; Charles Vanderburgh and Abraham F. Hazen, Bureau of Fire Prevention, Division of Inspection, Manhattan, Bronx and Richmond; Laborer Patrick Smith, Headquarters (Buildings and Grounds).

Transferred and Compensation Designated—Watchman William F. Gillen, Headquarters (Building and Grounds) to Bureau of Repairs and Supplies, Division of Apparatus, Boroughs of Brooklyn and Queens, in the same capacity, at the rate of \$912.50 per annum.

Extension of Time Granted—To Alfred Chatwin Supply Company, until September 18, 1914, on contract dated June 1, 1914, for furnishing and delivering supplies for Division of Buildings.

Payrolls Audited—Payrolls for the first half of November, 1914, aggregating \$294,913.51, duly audited, were this day forwarded to the Department of Finance.

NOVEMBER 10.

Appointed—To take effect 8 a. m., November 11, 1914: Frank A. Anderson, as Lineman, Bureau of Fire Alarm Telegraph, Manhattan, at rate of \$1,000 per annum. To take effect 8 a. m., November 13, 1914: Joseph P. Ryan, as Lineman, Bureau of Fire Alarm Telegraph, Brooklyn and Queens, at rate of \$1,000 per annum.

Extension of Time Granted—To East River Mill and Lumber Company, until October 27, 1914, on contract dated May 25, 1914, for furnishing and delivering supplies for Division of Buildings.

Bills Audited—Open market orders, \$1,129.60; miscellaneous, \$97.06.

NOVEMBER 11.

Reappointed—To take effect 8 a. m., November 20, 1914: William V. Quigley (originally appointed September 1, 1913, and who resigned November 20, 1913), as ununiformed Fireman, at rate of \$1,000 per annum, with assignment to Engine Company 203.

Charge Dismissed—(Tried November 6, 1914, before Deputy Fire Commissioner W. Holden Weeks): Fireman James J. Fitzgerald, Engine Company No. 159, for reckless driving.

NOVEMBER 12.

Bills Audited—Contracts, \$4,773.80, \$8,411.18, \$4,529.06.

NOVEMBER 13.

Trials—The following penalties were imposed and other action taken as result of trials held before the Fire Commissioner November 12th: Fireman John F. Reilly No. 2, Engine Company No. 9, for absence without leave (2 charges); on first charge, all recreation leaves under Section 154, Rules and Regulations, to be withheld for 31 days from November 14th; on second charge, sentence suspended. Fireman Ralph B. Ness, Hook and Ladder Co. No. 20, for absence without leave; all recreation leaves under Section 154, Rules and Regulations, to be withheld for 14 days from 8 a. m., November 14th.

Transferred—Stoker Roger Nixon, Headquarters (Buildings and Grounds), to Bureau of Fire Extinguishment, Engine Company No. 51, at his present compensation of \$3 per diem.

NOVEMBER 14.

Extension of Time Granted—To Alfred Chatwin Supply Company, until October 24, 1914, on contract dated June 5, 1914, for furnishing and delivering supplies for the Bureau of Fire Alarm Telegraph.

ROBERT ADAMSON, Fire Commissioner.

Borough of Manhattan.

Bureau of Buildings.

Report for week ended November 21, 1914:

Plans filed for new buildings, 4; estimated cost of new buildings, \$1,100,000; plans filed for alterations, 69; estimated cost of alterations, \$271,336; buildings reported as unsafe, 46; other violations of law reported, 238; unsafe building notices issued, 107; violation notices issued, 511; violation cases forwarded for prosecution, 4.

TENEMENT HOUSE DEPARTMENT.

REPORT FOR THE QUARTER ENDED SEPTEMBER 30, 1914.

	Man-hattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	New York City.
Tenements.						
Old Law.....	35,905	4,841	35,398	1,927	415	78,486
New Law.....	5,052	4,822	11,027	3,179	23	24,103
Total.....	40,957	9,663	46,425	5,106	438	102,589
<i>During the Same Quarter of 1913.</i>						
Old Law.....	36,245	4,855	35,614	1,893	380	78,987
New Law.....	4,906	4,551	10,537	2,899	18	22,911
Total.....	41,151	9,406	46,151	4,792	398	101,898

	Man-hattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	New York City.
Apartment in Tenements.						
Old Law.....	394,056	32,849	166,165	8,284	1,596	602,950
New Law.....	136,464	84,867	87,150	15,587	140	324,208
Total.....	530,520	117,716	253,315	23,871	1,736	927,158
<i>September 30, 1913.</i>						
Old Law.....	396,326	32,918	166,943	8,157	1,460	605,804
New Law.....	131,232	78,387	80,304	13,541	106	303,570
Total.....	527,558	111,305	247,247	21,698	1,566	909,374
Repair Slips Filed.						
Repair slips.....	145	35	65	9	10	264
Tenements.....	145	36	65	9	10	265
Estimated cost.....	\$22,189	\$1,841	\$7,995	\$135	\$331	\$32,491
<i>During the Same Quarter of 1913.</i>						
Repair slips.....	157	51	91	8	4	311
Tenements.....	157	54	92	8	4	315
Estimated cost.....	\$22,733	\$6,910	\$2,188	\$315	\$15	\$32,161
Tenements with Violations (Buildings Illegally Occupied as Tenements Included).						
Tenements with violations, July 1, 1914.....	22,474	2,613	23,428	1,251	431	50,197
Filed.....	929	188	2,135	789	21	4,062
Dismissed and cancelled.....	2,963	452	2,673	125	39	5,252
Tenements with violations, September 30, 1914.....	20,440	2,349	22,890	1,915	413	48,007
<i>During the Same Quarter of 1913.</i>						
Tenements with violations, July 1, 1913.....	18,333	3,214	17,900	1,578	363	41,388
Filed.....	2,092	625	691	54	17	3,479
Dismissed and cancelled.....	2,078	436	3,142	248	23	5,927
Tenements with violations, September 30, 1913.....	18,347	3,403	15,449	1,384	357	38,940
Old Law Tenements with Structural Violations.						
Tenements with structural violations pending July 1st, 1914.....	6,405	274	10,744	746	313	18,482
New cases.....	17	18	43	5	9	92
Defects remedied.....	1,231	22	367	35	29	1,684
Removed from Tenement class.....	23	..	43	3	7	76
Pending September 30, 1914.....	5,168	270	10,377	713	286	16,814
<i>During the Same Quarter of 1913.</i>						
Tenements with structural violations pending July 1st, 1913.....	6,266	441	14,183	1,135	237	22,262
New cases.....	946	11	536	35	12	1,540
Defects remedied.....	606	78	1,937	210	19	2,850
Removed from Tenement class.....	12	..	85	17	6	120
Pending September 30, 1913.....	6,594	374	12,697	943	224	20,832
Violations (New Building).						
Pending July 1, 1914.....	49	110	370	64	..	593
Filed.....	190	259	367	70	3	889
Dismissed.....	158	251	164	26	..	599
Cancelled.....	16	..	195	20	..	231
Pending September 30, 1914.....	65	118	278	88	3	652
<i>During the Same Quarter of 1913.</i>						
Pending July 1, 1913.....	48	330	878	147	3	1,406
Filed.....	284	553	234	80	2	1,153
Dismissed.....	214	638	381	62	..	1,295
Cancelled.....	19	12	98	20	..	149
Pending September 30, 1913.....	99	233	633	145	5	1,115
Dark Rooms and School Sinks.						
Rooms on inadequate shaft.....	..	45	360	33	5	443
Rooms with inadequate opening to adjoining room.....	1,428	12	2,162	249	69	3,920
Rooms opening on covered shaft.....	5,177	..	188	218	30	5,613
Rooms without windows.....	1,924	46	2,182	653	40	4,845
*School sinks or privies.....	18	..	24	123	9	174
<i>September 30, 1913.</i>						
Rooms on inadequate shaft.....	..	62	5,052	342	13	5,469
Rooms with inadequate opening to adjoining room.....	2,328	47	20,875	2,658	107	26,015
Rooms opening on covered shaft.....	7,079	105	18,479	718	31	26,412
Rooms without windows.....	3,156	87	13,437	1,656	92	18,428
*School sinks or privies.....	28	..	51	267	29	375
Nature of Work Accomplished.						
Accumulation of filth removed.....	1,266	33	222	11	3	1,535
Ashes and garbage receptacles provided.....	112	13	49	..	4	178
Ceilings repaired, replastered, white-washed and cleaned.....	4,153	44	512	10	32	4,751
Miscellaneous cleaning.....	15	..	..	..	..	15
Cellars cleaned; floors repaired and cleaned.....	3,238	76	482	11	15	3,822
Chimneys cleaned, provided; repaired	324	1	34	7	..	366
Drains provided, repaired; removed.	253	6	146	2	2	409
Building disinfected.....	12	..	27	1	..	40
Fire escapes and other fire protection provided and repaired.....	24,366	73	2,635	78	71	27,223
Encumbrances and obstructions removed.....	293	15	48	..	1	357
Houses provided with fire-escapes.....	33	1	80	8	6	128
Fireproofing.....	326	2	76	9	5	418
Floors cleaned.....	2,592	16	112	3	3	2,726
Janitor provided.....	5	..	..	..	..	5
Hall lighting, day glass panels and skylights provided.....	1,956	22	180	7	28	2,193
Hall lighting, night.....	646	..	117	9	4	776
Leaders and gutters provided, repaired.....	717	7	467	4	8	1,203
Oilcloth and carpet cleaned and repaired.....	5,508	38	209	7	2	5,764
Unclean paper removed.....	731	1	191	3	9	935
Plumbing fixtures replaced, repaired, provided.....	2,471	67	665	11	9	3,223
Plumbing pipes, repaired; replaced..	2,122	52	1,619	23	6	3,822
Paving and grading.....	624	23	93	..	..	740
Privies cleaned, repaired.....	..	..	1	2	..	3
Privies, removed.....	..	..	3	2	..	5
Repairs to building.....	3,461	97	635	16	22	4,231
Roofs repaired, cleaned.....	1,030	11	194	2	..	1,237
School sinks removed.....	4	..	1	..	..	5
Shafts and courts painted; access provided.....	2,432	43	258	16	1	2,756
Unlawful use of premises.....	415	24	109	2	..	550
Walls cleaned, whitewashed, repaired, replastered.....	4,667	37	685	13	33	5,435
Water closets cleaned, replaced, repaired.....	10,083	235	3,366	38	17	13,739
Water closets provided.....	49	..	22	..	..	71
Water supply provided, repaired....	452	1	116	4	2	575

*Note—There remains no school sink on tenement property in Greater New York except where the house is vacant, where the school sink structure has been removed, but not all the requirements of the Law have been met, or where the fixture cannot be removed at present owing to lack of proper sewer connection.

	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	New York City.
Woodwork cleaned.....	394	....	171	....	....	565
Interior rooms, windows provided and enlarged.....	1,642	71	1,015	49	23	2,800
Cesspools removed and provided.....	....	....	1	4	....	5
Totals.....	76,392	1,009	14,541	352	306	92,600
During the same Quarter of 1913.						
Totals.....	74,451	2,716	40,918	2,013	347	120,445
Plans (Alteration) Filed.						
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	New York City.
Plans.....	329	76	258	24	18	705
Tenements.....	368	82	279	24	19	772
Estimated cost.....	\$253,708	\$39,037	\$108,595	\$15,715	\$3,492	\$420,547
During the Same Quarter of 1913.						
Plans.....	505	100	202	17	10	834
Tenements.....	571	118	214	17	10	930
Estimated cost.....	\$421,856	\$36,516	\$98,240	\$6,050	\$2,005	\$564,667
Plans (New Building) Filed.						
Plans.....	41	35	109	27	1	213
Tenements.....	51	61	164	41	1	318
Apartments.....	1,993	1,421	2,426	465	6	6,311
Rooms.....	9,697	5,624	9,562	2,014	28	26,925
Estimated cost.....	\$9,017,000	\$2,853,000	\$3,657,000	\$706,700	\$15,000	\$16,248,700
During the Same Quarter of 1913.						
Plans.....	18	16	65	39	3	141
Tenements.....	27	28	94	70	4	223
Apartments.....	1,075	1,366	1,236	547	39	4,263
Rooms.....	5,085	5,109	5,088	2,451	194	17,927
Estimated cost.....	\$5,797,000	\$1,202,000	\$2,117,500	\$760,000	\$99,000	\$9,975,500
New Law Tenements Erected.						
Buildings.....	47	64	170	66	..	347
Apartments.....	1,775	1,577	2,286	471	..	6,109
Rooms.....	9,515	6,111	9,376	2,143	..	27,145
Estimated cost.....	\$10,860,000	\$2,946,000	\$3,763,500	\$670,400	..	\$18,239,900
During the Same Quarter of 1913.						
Buildings.....	62	142	249	85	2	540
Apartments.....	2,493	2,886	2,631	538	12	8,560
Rooms.....	12,728	11,856	11,003	2,279	65	37,931
Estimated cost.....	\$15,065,000	\$6,130,351	\$4,387,000	\$694,000	\$21,500	\$26,297,851

MUNICIPAL CIVIL SERVICE COMMISSION.

Minutes of Meeting of the Municipal Civil Service Commission of New York, Held Wednesday, October 7, 1914, at 10.30 o'Clock A. M.

Present—Dr. Henry Moskowitz, President, and Commissioners Darwin R. James, Jr., and Alexander Keogh. The President presided.

The minutes of the meetings held September 23, September 28 and September 30, 1914, were approved.

The following resolutions were adopted after a hearing of each of the candidates named therein:

Resolved, That the disqualifications appearing against the following named candidates on the eligible list of Hospital Clerk be and the same hereby is removed:

Harry Einstoss, 778 Trinity Avenue, New York City.

William Budner, 272 Rivington Street, New York City.

Resolved, That the name of Elias H. Ebin, of 321 East 12th Street, New York City, be and the same hereby is removed from the eligible list of Finger Print Expert.

Resolved, That the request of Herman E. Goldschmidt, of 150 Nassau Street, New York City, that his name be restored to the eligible list of Accountant, Fifth Grade, be and the same hereby is granted.

Harry Olsen, a candidate in the non-competitive examination for provisional appointment to the position of Disinfecter in the Department of Health under the provisions of clause 3 of Rule XII, and Otto Ritter, a candidate on the eligible list of Driver, Department of Street Cleaning, having failed to appear, as directed, the Secretary was instructed to summon them to appear at the next meeting of the Commission.

Alfred J. Talley, attorney at law, appeared and requested that the Commission reconsider its action in denying the appeal of Dennis T. Kennedy, a candidate in the examination for promotion to Sergeant of Police, and that the Commission order the rating of his report paper, which rating had been withheld for the reason that the candidate had been "Disqualified for communicating." The matter was laid over pending a report from the Chief Examiner in the matter.

Upon the recommendation of the Committee on Transfers, the following transfers were approved:

Albert Okun, Clerk, at \$900 per annum, from the Board of Water Supply to the Department of Water Supply, Gas and Electricity.

Francis M. Sheehan, Clerk at \$300 per annum, from the Tenement House Department to the Department of Finance.

John Ryan from the position of Aqueduct Patrolman at \$1,050 per annum in the Board of Water Supply to that of Prison Keeper at \$800 per annum in the Department of Correction.

Catherine C. Lawler, Stenographer and Typewriter, from the Tenement House Department at \$900 per annum to the office of the President of the Borough of Manhattan at \$1,050 per annum.

David T. Ronayne, from the position of Inspector of Sewer Construction at \$493 per day to that of Inspector of Sewers and Basins at \$1,200 per annum in the office of the President of the Borough of Brooklyn.

John J. Kennedy from the position of Chief Inspector, Bureau of Fire Prevention, Fire Department, to that of Sanitary Inspector, at \$1,200 per annum, in the Department of Health. (Rule XIV, Clause 3.)

Frederick Ascher, from the position of Elevatorman at \$900 per annum, to that of Laborer at \$2.50 per day, in the office of the President of the Borough of Brooklyn (Demotion).

William J. Keegan, from the position of Elevatorman at \$900 per annum, to that of Laborer at \$2.50 per day, in the office of the President of the Borough of Brooklyn (Demotion).

James Quigley, from the position of Elevatorman at \$900 per annum, to that of Laborer at \$2.50 per day, in the office of the President of the Borough of Brooklyn (Demotion).

George W. Swift, from the position of Driver to that of Sweeper in the Department of Street Cleaning.

James F. Cotter, from the position of Bridge Painter to that of Laborer at \$2.50 per day in the Department of Bridges (demotion).

Frank Devlin, Laborer, at \$2.50 per day, from the Department of Parks, Borough of Queens, to the office of the President of the Borough of Queens.

Nicholas Ballue, from the position of Sweeper to that of Driver in the Department of Street Cleaning.

Donato Cassieri, from the position of Driver to that of Sweeper in the Department of Street Cleaning.

Michael Mullaly, from the position of Elevatorman at \$900 per annum to that of Cleaner at \$600 per annum in the Department of Education (demotion).

The following Laborers at \$2.50 per day from the Department of Parks, Borough of Brooklyn, to the Department of Street Cleaning: John Feeney, Genaro Iorio, Frank O'Dowd, Samuel Baer, Joseph Jafulka.

William Lamb, Driver, from the Department of Street Cleaning to the Bureau of Street Cleaning, office of the President of the Borough of Richmond.

Upon the recommendation of the Committee on Transfers, the following transfers were disapproved:

Luka Jolis from the position of Painter-Decorator to that of Painter in the office of the President of the Borough of Manhattan, owing to the existence of a preferred list for the latter position.

Dwight H. Crowell from the position of Junior Mechanical Draftsman at \$900 per annum in the Department of Water Supply, Gas and Electricity, to that of Draftsman (Mechanical) at \$1,050 per annum in the Department of Street Cleaning, such transfer constituting a promotion.

William H. Englebrecht from the position of Inspector of Sewer Construction at \$4 per day to that of Inspector of Public Works at \$1,200 per annum in the office of the President of the Borough of Manhattan, the positions not being similar within the meaning of clause 1 of Rule XIV.

C. K. Michaels from the position of Inspector in the Board of Water Supply to that of Examining Inspector at \$1,500 per annum in the Department of Finance, the positions not being similar within the meaning of clause 1 of Rule XIV.

Upon the recommendation of the Committee on Reinstatements, the following reinstatements were approved in accordance with Rule XIII:

Thomas S. Regan, as Clerk, at \$600 per annum in the Department of Finance.

Benjamin J. Wiessner, as Clerk at \$480 per annum in the Department of Health.

Marie Grund, as Bacteriologist, in the Department of Health.

Susan K. Ziegler, as Nurse, in the Department of Health.

Anna Kaplan, as Nurse, in the Department of Health.

Upon the recommendation of the Committee on Reinstatements, the reinstatement of John Albano, as Driver, in the Department of Street Cleaning, was approved under Rule XIX.

Upon the recommendation of the Committee on Reinstatements, the reinstatement of John J. Kennedy as Chief Inspector, Bureau of Fire Prevention, Fire Department, as of May 20, 1914, was approved under the provisions of Section 1543-b of the Greater New York Charter.

Upon the recommendation of the Committee on Reinstatements, the reinstatement of Michael A. Byrne as Laborer, in the Department of Health was disapproved, owing to the existence of a preferred list for that position.

Upon the recommendation of the Committee on Transfers, the proposed transfer of Albert C. Helm from the position of Typewriting Copyist, Third Grade, in the Department of Education to that of Clerk, Third Grade, in that department was disapproved, there being a preferred list for the latter position.

Upon the recommendation of the Committee on Reinstatements, the proposed reinstatement of Alexander Dolphin in the position of Stationary Engineer in the Department of Health was disapproved, there being a preferred list for the position.

Upon the recommendation of the Committee on Appeals, the appeals of the following named candidates in the examinations specified for a re-rating of their papers were denied: James Cullen, Clerk, Fourth Grade (promotion); Thomas Wall, Inspector of Plumbing.

Upon the recommendation of the Committee on Special and Temporary Appointments, the employment of the following named persons was approved in accordance with the requests of the several departments on the dates specified.

CLAUSE 1 OF RULE XII.

October 3, 1914—Charles R. Aikman, Jr., Benjamin Markofsky and Harry L. Hirscher, as Clerks, at \$600 per annum, in the office of the Mayor's Commission on Pensions for an additional period of three months.

September 30, 1914—Joseph Fleming and Mary L. Morstatt as Attendants in the office of the President of the Borough of Brooklyn for an additional period of one month.

October 3, 1914—William E. Skillman, as Gymnasium Instructor in the Public Recreation Commission for an additional period of three days.

CLAUSE 3 OF RULE XII.

September 28, 1914—The following named persons as Adding and Billing Machine Operators in the Department of Finance for temporary work: Emma Cassidy, Edith Nordan, Loretta Tiernan, Louis A. Dames, Irene Moran, Gertrude Maloney, Harriet Shipman, Edythe Rosenan, Aaron B. Fletcher, Alfred Schwartz, George F. Kelly, Thomas Torrocco, Dorothy Fitzpatrick, Madeline Percy, Florence C. Zeibe, William S. Tiefenbach, Frank J. Otto, Bessie Williams, Ella Roche, R. H. Taylor, Leon S. Harvey, Samuel J. Uresse, Sylvester T. Johnston, William J. Faist, Nan Donnelly, B. Robinson, Charlotte Wanamaker, William Lesser, Alice M. Danaher, Maud Greeley, Joseph F. O'Brien, Mrs. Lillian Scharf, Earl D. Dorion, Elsie Sanford, Murray M. Heitell, Millard Gardner, Anna Bades, Marion L. Beyer, B. Sylvester, W. E. Taylor, Marie Kendall, Charles E. Lemken, Charlotte A. Deyo, Helen Schwartz, Edna Greer, Ellen V. Kelly, Sadie Eagan, Charles Becker, Jack Schwartzman, Ruth Devery, F. A. Bendernagel, Rose Smith, Minnie Kahn, Margarer Kelly, Emma Jaeger, L. Corliss, Ethel Lehn, Katherine Power, Frank Vollkommar, Joseph A. Morris, Ethel V. Hart, Charles Daley, Philip Hotaling, I. E. Brown, Martha Katz.

CLAUSES 3 AND 4 OF RULE XII.

September 30, 1914—Irwin T. Darlington, 215 West 23d Street, Manhattan, as Chemist, at \$1,200 per annum in the Department of Health.

September 24, 1914—Thomas J. Flood, 1329 Rogers Avenue, Brooklyn, as Inspector of Meters and Water Consumption in the Department of Water Supply, Gas and Electricity.

CLAUSE 4 OF RULE XII.

September 23, 1914—William Kusnick, as Prison Keeper in the Department of Correction for a period of thirty days from September 22, 1914.

September 23, 1914—John Ryan, as Prison Keeper, at \$800 per annum, in the Department of Correction for a period of fifteen days from September 24, 1914.

September 30, 1914—William O'Connor, as Prison Keeper, at \$800 per annum in the Department of Correction for a period of fifteen days from October 1, 1914.

September 30, 1914—Doris Cabassa, as Stenographer and Typewriter in the Department of Education for a second period of fifteen days.

October 1, 1914—Vera Childs and Margaret M. Dale as Telephone Switchboard Operators in the Department of Education for a period of fifteen days.

October 2, 1914—Frank Weinstein, 100 Carroll Place, Winfield, L. I., as Tabulating Machine Operator (Hollerith), in the Department of Education for a period of fifteen days.

September 29 and October 1, 1914—Ninety-seven Typewriting Clerks for a period of thirty days in the Board of Elections.

September 23, 1914—May Loftus as Typewriter Accountant in the Department of Finance for the period from September 22 to October 2, 1914.

October 3, 1914—Mrs. Kihlgren as Investigator of Foods for a second period of fifteen days, and Mary Colgan as Typewriting Copyist, at \$10 per week, for a period of fifteen days in the office of the Mayor's Committee on Food Supply.

September 29, 1914—The following named persons as Monitors in the Municipal Civil Service Commission in connection with the examination for Clerk, Second Grade: R. A. Wormser, Irene McArdle, Ruth E. Campbell, William H. Woodruff, Gustave Schlottman, Don R. Weller, William Cloud, H. L. Filer, F. W. Demuth, Paul W. Garrett, Carl W. Meyer, Hugh W. Robertson, George Miller, R. M. Leveridge, K. C. Bates, E. R. Doyle, Velma Gray, H. R. Chadwick, C. P. Capshaw, L. E. Lashman, D. S. Kennedy, R. L. Rusk, E. E. Vann, Morris Wolf, B. Weinerman, Palmer Douglass, Mabel H. Pearson, F. P. Barker, Bertha Frank, Benson R. Frost, Chester P. Davis, Gilbert I. Stodola, F. H. Merrill, H. J. Capshon, E. Salwen, R. Rideout, O. E. Landers, Alice A. Conran, W. D. Cavert, Guy E. Snavey, Walter G. Frey, Jr., S. C. Barnes, F. D. Schnacke, N. C. Smith, Ina MacGregor, N. J. Gifford, Harvey Rothberg, J. B. Vernon, C. T. Murchison, E. L. Wallace, E. J. O'Mara, S. L. Gilmore, J. A. Vaughan, J. C. Morrison, Elsie L. Bonsall, H. N. Cohen, Royal Neufeld, Ben H. Evans, J. C. Jones, D. A. Wilson, Ed. J. Pryor, George W. Young, F. H. Lindsay, A. Marcus, Alice C. Kelly, L. M. Townsend.

September 25, 1914—Daniel S. Thomas as Steam Roller Engineer, at \$4.75 per day, in the office of the President of the Borough of Manhattan, for a period of fifteen days.

September 22, 1914—Henry Wilkins, as Inspector of Repairs and Supplies, at \$1,650 per annum, in the Department of Public Charities for a second period of fifteen days.

September 24, 1914—Patrick J. Donohue, Norman A. Ray, Edward B. Gilhooley, William A. Grouse and Christopher Cummings, as Inspectors of Meters and Water Consumption for the period from September 23 to 26, 1914, in the Department of Water Supply, Gas and Electricity.

CLAUSE 8 OF RULE XII.

October 1, 1914—Frank S. Martin to make an examination and report on the condition and value of certain ferryboats owned by the Department of Docks and Ferries.

CLAUSE 11 OF RULE XIX.

September 29, 1914—Matthew Breen, as Oiler, at \$3 per day, in the Department of Public Charities, from September 1 to September 7, 1914.

October 2, 1914—Frank W. Read, as Elevatorman in Hunter College of The City of New York, from September 14, pending selection from list certified October 3, 1914.

Upon the recommendation of the Committee on Special and Temporary Appointments, the Secretary was instructed to attach a special certificate to the payrolls of the following persons setting forth the facts contained in communications from the several departments on the dates specified:

September 28, 1914—Theodore E. Siegel, 851 Greene Avenue, Brooklyn, as Temporary Clerk in the Department of Finance for the period from September 15 to September 30, 1914, his employment under the provisions of Clause 1 of Rule XII, having ceased on September 15, 1914.

September 30, 1914—The following persons as Stationary Engineers in the Department of Water Supply, Gas and Electricity until October 15, 1914, in view of the difficulty experienced in securing temporary appointees from the eligible list: Fred Ashley, John R. Camp, Julius Berger, Henry Minch, John J. Brady, John J. Fielding, John Cavanaugh, Charles E. Wickman.

Upon the recommendation of the Committee on Special and Temporary Appointments, the request of the Department of Water Supply, Gas and Electricity for authority to employ the following named persons as Inspectors of Meters and Water Consumption under the provisions of Clause 3 of Rule XII, was denied, they having failed to appear for examination or failed to qualify in the non-competitive examination held for that position: Patrick J. Donohue, Edward B. Gilhooly, Norman A. Ray, William A. Grouse, Christopher Cummings.

The action of the Committee on Provisional Appointments in directing that the following named persons be marked "Qualified" for appointment under clause 3 of Rule XII, as specified below, in accordance with recommendations of the Examiner in Charge of the Bureau of Investigation, in reports on the dates set forth, was approved:

September 30, 1914—Theodore Human, Jr., and John J. Vander Leeuw, as Topographical Draftsmen in the Board of Estimate and Apportionment.

September 30, 1914—Charles Knoerzer and Emil Johnson, as Automobile Engine-men in the Department of Parks, Borough of The Bronx; Michael Brannigan, as Automobile Engineer in the office of the President of the Borough of The Bronx; Frederick A. Patterson, as Automobile Engineer in the Department of Parks, Borough of Queens; George H. Kress, as Automobile Engineer in the office of the President of the Borough of Richmond; and Leonhard Welsing, as Automobile Engineer in the Department of Parks, Borough of Brooklyn.

October 3, 1914—Charles Lee, as Automobile Engineer, in the Department of Parks, Borough of Brooklyn.

October 1, 1914—Louis Davidson, Irving A. Huie and Joseph C. Collyer, as Topographical Draftsmen in the office of the President of the Borough of Manhattan; and Franz Muller, Mario Lorini, Edward M. Law, Johan F. P. Hesper, John A. Allen and Charles A. Schabernak, as Topographical Draftsmen in the Board of Estimate and Apportionment.

October 2, 1914—John J. Callahan, as Topographical Draftsman in the office of the President of the Borough of Manhattan.

October 1, 1914—Philip B. Montgomery, as Assistant Engineer in the Board of Water Supply.

October 1, 1914—Bailey M. Coffenberg, as Inspector, Board of Water Supply.

October 2, 1914—Walter L. Sears, as Superintendent, Public Employment Bureau, Department of Licenses.

October 1, 1914—Milton S. Salisbury, as Rodman, Board of Water Supply.

September 30, 1914—Barney Sedran, Raymond O. Parker, Henry A. Smith, George Z. Harman and Charles Malay, as Gymnasium Attendants in the Department of Parks, Borough of Brooklyn.

October 1, 1914—William C. Hecht, Jr., as Junior Topographical Draftsman in the office of the President of the Borough of Manhattan.

October 1, 1914—Helen T. Hannifin, as Matron in the Department of Correction.

October 1, 1914—Mary O'Leary, as Attendant in the office of the President of the Borough of Manhattan.

The action of the Committee on Provisional Appointments in directing that the papers of the following named persons be filed, as recommended by the Examiner in Charge of the Bureau of Investigation, under the dates specified, was approved:

October 1, 1914—John A. Voscamp and Magnus P. Holtz, candidates for provisional appointment as Topographical Draftsmen in the Board of Estimate and Apportionment.

October 1, 1914—Edward L. McDonald, a candidate for provisional appointment as Automobile Engineer in the Department of Parks, Borough of Brooklyn.

October 3, 1914—Agnes T. McCormack Darrow, a candidate for provisional appointment as Nurse in the Department of Health.

October 1, 1914—Joseph M. Sexton, a candidate for provisional appointment as Rodman, Board of Water Supply.

October 3, 1914—William Louis Will, a candidate for provisional appointment as Pilot, Department of Public Charities.

The following reports were presented from the Examiner in Charge of the Bureau of Investigation:

Report dated September 30, recommending that Irving J. Engelhardt be marked "Qualified" on the eligible list of Draftsman, Grade C.

Report dated October 5, recommending that Herman A. Hansmann, Thomas L. Fletcher, William J. Carter and George H. Sproston be marked "Qualified" on the eligible list of Telephone Operator (Male), Grade 1.

Report dated October 3, recommending that the eligible list of Attendant, Female (Permanent Service) (Temporary or Seasonal Service); be promulgated, that the first twenty-four candidates thereon be marked "Qualified" and that certification of the name of Mary Frazier, the 25th candidate on the list, be withheld.

Report dated October 5, recommending that John F. Strause be summoned before the Commission to show cause why his name should not be removed from the eligible list of Assistant Fire Marshal.

Report dated October 5, recommending that Allen E. Churchill be summoned before the Commission to show cause why his name should not be removed from the eligible list of Photographer.

The recommendations were adopted.

A report dated October 3 was presented from the Examiner in Charge of the Bureau of Investigation relative to his investigation of licenses held by the candidates in the examination for promotion to Marine Engineer, Department of Docks and Ferries. The report was ordered filed.

After consideration of a report dated September 18, from the Chief Examiner, the eligible list for promotion to the position of Quartermaster, Grade 2, Department of Docks and Ferries, was promulgated.

After consideration of a report dated September 23, from the Chief Examiner, the eligible list for promotion to Pilot, Fire Department, was promulgated.

After consideration of reports (2) from the Chief Examiner dated October 1, the following promotion eligible lists were promulgated: Marine Engineer, Department of Docks and Ferries; Topographical Draftsman, Grade D, Board of Estimate and Apportionment.

After consideration of a report dated October 3, from the Chief Examiner, the eligible list for promotion to Second Grade Messenger in the Bureau of Buildings, Borough of Manhattan, was promulgated.

A report dated October 5 was presented from the Secretary to the Advisory Board, forwarding a report of Mr. Leonhard Felix Fuld, Assistant Chief Examiner, dated September 16, in which was recommended the adoption of computing tables for use in the Compiling and Computing Bureau. The report was referred to the Advisory Board.

A report dated October 2 was presented from Miss M. B. Upshaw, Assistant Chief Examiner, recommending that the eligible list of Engineering Chemist be certified, in response to a requisition from the Commissioner of Public Works, Borough of Manhattan, dated September 22, for an eligible list from which to appoint one Assistant Chemist in the Bureau of Highways at \$1,350 per annum. The recommendation was adopted.

Reports (2) dated October 5 were presented from the Secretary to the Advisory Board submitting the following forms of advertisement for the examinations specified:

"Farm Instructor, Department of Correction—The subjects and weights of the examination are: Experience, 3; Duties, 5; Oral, 2. 70% is required on experience; 70% is required on duties; 70% general average is required.

"Applications for this examination must be filed on a special blank, Form C. * * * Candidates receiving less than 70% on the Experience paper will not be summoned for the physical examination. Candidates failing to pass the physical examination will not be summoned for the written examination.

"A physical qualifying examination will be held. Age limits are 21 to 40 years. * * * Candidates must present evidence of experience as a teacher in an ordinary school and in practical agricultural work, or work in an agricultural school with experience in the handling of boys and men." * * *

"Morgue Keeper—The subjects and weights of the examination are: Duties, 5; Experience, 5. 70% is required on the Duties paper and 70% on the entire examination.

"A physical qualifying examination will be held. Those failing to pass the physical examination will not be summoned for the mental. The time and place of holding the physical examination will be announced later.

"The duties of Morgue Keeper are the care and distribution of dead bodies, the cleaning of the morgue, the preservation of the records and the preparation and submission of a weekly report.

"Minimum age, 21 years."

The forms of advertisement were approved.

A report dated October 6 was presented from the Secretary to the Advisory Board submitting a form of advertisement for the examination for Pilot, reading substantially as follows:

"* * * When filing their applications candidates will be required to produce their United States licenses. A physical examination, with special reference to eyesight, will form a portion of the test. Applications for this examination must be filed on a special blank, Form C. * * * Candidates failing to receive 70% on the experience paper will not be summoned for the physical examination. Candidates failing to pass the physical examination will not be summoned for the written examination. In order to be successful in the mental examination candidates must know the location of the shallows, rocks and reefs, currents and other dangers to navigation in New York Harbor.

"The subjects and weights are as follows: Experience, 8; Duties, 2.

"A passing mark of 70% is required on the Duties paper."

"Minimum age, 21 years."

The form of advertisement was approved.

A report dated October 5 was presented from the Secretary to the Advisory Board recommending that the order for the examination for Inspector, Board of Water Supply, Grade 2, for assignment outside the City of New York, be amended to read "Inspector, Board of Water Supply, for both city assignment and outside city assignment." The recommendation was adopted.

A report dated September 26 was presented from the First Assistant Chief Examiner relative to Michael T. Comerford, a candidate for promotion to the position of Foreman in the Department of Street Cleaning, who was rejected in the physical examination for that position. The Secretary was instructed to summon the candidate for the mental examination, the placing of his name upon the promotion list, however, in the event of his passing the mental examination, to be conditional upon his qualifying in a physical examination.

A report dated October 1 was presented from the First Assistant Chief Examiner relative to a complaint of Sergeant William D. Dunham (forwarded by the Mayor) against the conduct of the examination for promotion to Lieutenant, Police Department. The Secretary was instructed to communicate the substance of the report to the Mayor.

A report dated September 29 was presented from the First Assistant Chief Examiner forwarding a communication dated September 19 from the Comptroller to the effect that he had promoted Vincent C. McLaughlin, an Examiner at \$1,050 per annum, to a salary of \$1,200 per annum, under the provisions of clauses 3 and 4 of Rule XII. The assignment of the said employee to the higher grade was authorized and the Secretary was instructed to proceed with an examination for promotion to Third Grade Examiner in the Auditing Bureau, Inspection Division of the Department of Finance, to be open to all Second Grade Examiners in the bureau eligible under clause 8a of Rule XV.

The following reports were presented from the First Assistant Chief Examiner:

Report dated October 1 transmitting the request of the Secretary to the Commissioner of Public Works, Borough of Manhattan, that the order for the examination for promotion to Foreman Mason in his department be cancelled, and recommending that the request be granted.

Report dated October 1 recommending that the Commission grant the request of the Department of Health, under date of September 30, that an examination be ordered for promotion to Second Grade Hospital Clerk to fill an actual vacancy in that position, the examination to be open to all First Grade Hospital Clerks eligible under clause 8a of Rule XV.

Report dated September 29 transmitting the request of the Commissioner of Accounts that an examination be ordered for promotion to Third Grade Accountant in his office and recommending that he be instructed to renew his request at the time set apart for the receipt of requests for promotion examinations in the Clerical Service.

Report dated September 29 transmitting the request of the Secretary of the Board of Estimate and Apportionment, under date of September 28, for an examination for promotion to Second Grade Clerk in the Bureau of Franchises, and recommending that he be instructed to renew his request at the time set apart for the receipt of requests for promotion examinations in the Clerical Service.

Report dated October 1 recommending that an examination be ordered for promotion to the position of Clerk, Second Grade, in the Department of Health, in accordance with the request of the Department dated September 29, the examination to be open to all First Grade Clerks eligible under clause 8a of Rule XV.

Report dated September 29 recommending that the Superintendent of Buildings, Borough of Manhattan, be instructed to renew his request for an examination for promotion to Assistant Engineer, Grade E, at the time set apart for the receipt of requests for promotion examinations in the Engineering Service.

Report dated September 29 recommending that the eligible list for promotion to Deputy Assistant Corporation Counsel in the Bureau of Street Openings of the Law Department be divided into separate lists for the Boroughs of Manhattan, Brooklyn and Queens, in accordance with the plan of organization of the Law Department and the request of the Assistant Corporation Counsel in Charge of the Bureau of Street Openings dated September 24, 1914.

Report dated September 29 recommending that the order for a promotion examination for the position of Foreman Bricklayer, Grade 3, in the office of the Commissioner of Public Works, Borough of Manhattan, be cancelled and that the provisional assignment of John C. Heney and Daniel P. O'Connell to that position also be cancelled, they having refused to file applications for the promotion examination.

The recommendations were adopted.

A report dated October 1 was presented from the First Assistant Chief Examiner transmitting the request of the Commissioner of Parks, Borough of Brooklyn, under date of September 29, for a ruling as to whether or not the Commission could legally certify a promotion list for Assistant Engineer, Grade D, during the existence of a preferred list for the same position. The Secretary was instructed to state that, under the conditions set forth in the communication of the Commissioner of Parks, the Commission was of the opinion that it was without power to certify the promotion list.

The following reports were presented from Mr. Leonhard Felix Fuld, Assistant Chief Examiner:

Report (K-275) dated September 30, transmitting the complaint of Frank H. Brown of 723 East 136th Street, New York City, to the effect that persons who did not hold the title of Deckhand were performing the duties of that position, and stating that his investigation of the complaint had disclosed the fact that the following-named employees were performing duties inappropriate to their titles and recommending that Dr. Wilson, the Superintendent of Hospitals of the Department of Health be requested to confer with the Secretary of the Commission with a view to correcting the violations: John Sweeney, Laborer; Thomas O'Connell, Laborer; Cornelius Carboy, Marine Fireman; Andrew Andrews, Laborer; Joseph Walter, Boatman; David Miller, Orderly; Henry Remsbecker, Boatman; John Eisle, Boatman; Harry Force, Boatman.

Report (F-687) dated October 1, recommending that an open competitive examination be ordered for the position of Interpreter (Lithuanian, Polish and Russian) and that each candidate be required to qualify in each of these three language.

Report (N-8) dated October 1, stating that the report of the City Chamberlain upon the efficiency and punctuality of his employees for the second quarter of 1914 had not been prepared in accordance with the provisions of clause 22 of Rule XV, as amended, and recommending that the Chamberlain be informed that the Board of Review of the Municipal Civil Service Commission would pass upon the efficiency report and requested to designate a member of his Board of Promotions to act as the third member of the Board of Review.

Report (K-258) dated October 5, relative to the complaint of the Secretary of the Municipal Ferries Council against the alleged irregular assignment of John A. McCormick, a Ticket Chopper, to duties inappropriate to his title, and recommending that the complainant be informed that investigation of his complaint had disclosed no violation of the Civil Service Law.

The recommendations were approved.

A report (K-276) dated September 30, was presented from Mr. Leonhard Felix Fuld, Assistant Chief Examiner, transmitting the complaint of certain deckhands in the Department of Health against the alleged assignment of Laborers, Orderlies and Firemen to perform the duties of Deckhand, and recommending that the report be filed as the matter was treated of in another report (K-275). The recommendation was adopted.

A report, dated October 1, was presented from Mr. Leonhard Felix Fuld, Assistant Chief Examiner, transmitting a statement of the departments which had submitted efficiency reports for the second quarter of 1914 and of the departments which had not submitted such reports. The report was ordered filed.

The action of the Secretary in addressing the following communication to the Clerk in Charge of the Compiling Bureau on October 5, 1914, was approved:

"It has been reported to the Commission that an error was made in the cases of two candidates for Topographical Draughtsman in the Board of Estimate and Apportionment, Messrs. H. S. Geist and P. Holtz. It appears that Mr. Geist had been notified that he failed to pass, when, in reality, he passed; while Mr. Holtz really failed in the examination.

"Please take the necessary steps to correct these errors."

A report dated October 5 was presented from the Secretary of the Commission, stating that, through error on the part of the Commission, one Mary Mitchell, of 1075 Tiffany Street, New York City, had been deprived of all opportunity of appointment from the eligible list of Cleaner which had terminated June 30, 1914, and submitting a memorandum containing all the facts in the case, and recommending, therefore, that a public hearing be advertised on the adoption of a special resolution placing the said person first on the eligible list of Cleaner established July 1, 1914, subject to approval by the Mayor and the State Civil Service Commission. The Secretary was instructed to confer with the Corporation Counsel in the matter.

A report, dated October 5, was presented from the Secretary of the Commission, stating that it had been shown in the investigation of the Municipal Civil Service Commission by the State Civil Service Commission that Clyde B. Rose and Florence Rowland, Hospital Helpers in the Department of Public Charities, were performing duties inappropriate to their titles, and recommending that the Commissioner of Public Charities be notified that the present assignment of said persons was illegal and must be terminated forthwith. The recommendation was adopted.

A report dated October 2 was presented from the Secretary of the Commission, stating that the request of the State Civil Service Commission that promulgation of the eligible list of Draughtsman, Grade C, be withheld had been overlooked and that the eligible list had been promulgated on September 28, 1914, and requesting instructions as to whether certification should or should not be withheld in view of the request of the State Civil Service Commission. It was ordered that certification be withheld.

A report, dated October 1, was presented from Mr. Jeremiah A. Sheehan, Examiner, submitting a statement of oral examinations conducted by him during the month of September. The report was ordered filed.

After consideration of a report from Dr. Joseph A. Kene, Medical Examiner, relative to his re-examination of John Paletta, a candidate for the position of Elevatorman, the Secretary was instructed to mark the candidate "Qualified" on the eligible list for that position.

After consideration of a report dated September 25, from Mr. M. C. Ihlseng, Engineering Examiner, the Commission granted the request of the Commission on Pensions for authority to change the titles of Abraham Lazinski, Ernest Smith and Charles Baumgarten from Structural Steel Draughtsman to Draughtsman under the provisions of clause 5 of Rule VI.

A report dated October 3 was presented from the Chief Clerk forwarding a bill of Dr. Alvah H. Doty, for services in preparing questions for the examination for Director, Bureau of Infectious Diseases, Department of Health, in the amount of \$50. The bill was approved under clause 8 of Rule XII.

A report dated September 29 was presented from Dr. Henry P. de Forest, Medical Examiner, submitting recommendations relative to physical standards for the Prison Service. The Commission ruled that the minimum age limit for Keeper remain at twenty-one years and adopted the following standards:

1. For the position of Keeper, the same standard should be required as for Patrolman and Fireman.
2. For the position of Head Keeper, the test to be modified slightly to correspond with the promotion to Sergeant in the Police Department or to Engineer of Steamer in the Fire Department.
3. For the position of Warden, the same examination as is given for Captain or Inspector in the Police or Fire Department.
4. The height requirement for Keeper to be reduced to 5 feet, 6½ inches.
5. That the physical tests correspond exactly with those of Fireman and Patrolman with the exception of the test of climbing ladders which could properly be omitted.

The Secretary was instructed to note on the records the following reassignments to duty in accordance with communications from the various departments under the dates specified:

September 29, 1914—Austin P. O'Neill, Keeper in the Department of Correction.
October 2, 1914—Michael White, Bridge Tender in the Department of Bridges.
October 3, 1914—Dr. Benjamin T. Terry, Director of Laboratories at the Kings County Hospital, Department of Public Charities.

October 1, 1914—Matthew McKenney and Wilson C. Hall, Stationary Engineers in the office of the President of the Borough of Brooklyn.

October 1, 1914—William F. Kenna, Transitman in the office of the President of the Borough of Brooklyn.

September 30, 1914—Allen Walker, Blacksmith's Helper in the Department of Parks, Borough of The Bronx.

September 29, 1914—Herman Almroth, Park Laborer in the Department of Parks, Borough of The Bronx.

October 3, 1914—Nicholas Arace, Laborer in the Department of Water Supply, Gas and Electricity.

September 24, 1914—Gertrude Franks, Stenographer and Typewriter in the Department of Water Supply, Gas and Electricity.

September 23, 1914—Harry Russo, John Kennedy, Louis Praino and Luigi Cassato, Drivers in the Department of Street Cleaning, and Lorenzo Pisano, Sweeper in that Department.

September 30, 1914—Guiseppe Logioriore and James McInerney, Sweepers in the Department of Street Cleaning.

October 2, 1914—Salvatore Albanese, Sweeper in the Department of Street Cleaning.

October 2, 1914—Max Hirsch, Sweeper in the Department of Street Cleaning.

October 2, 1914—Michael Rose, Marine Stoker in the Department of Docks and Ferries.

October 2, 1914—John Ducey and Francis Duffy, Laborers in the Department of Docks and Ferries.

October 1, 1914—Lewis A. Vollert, Oiler in the Department of Docks and Ferries.

October 3, 1914—John E. McIntyre and Dennis E. Long, Laborers in the Department of Docks and Ferries.

September 30, 1914—John S. Mahon, Tinsmith in the Department of Docks and Ferries.

September 29, 1914—John Green, Dockbuilder in the Department of Docks and Ferries.

October 5, 1914—William R. Wall, Laborer in the Department of Docks and Ferries.

October 5, 1914—Patrick Larkin, Watchman in the Department of Docks and Ferries.

October 5, 1914—Joseph O'Brien, Storekeeper's Helper in the Department of Docks and Ferries.

A communication dated October 2 was presented from the Acting Chief Clerk of the Board of City Magistrates, First Division, requesting authority to continue the services of the following named persons serving as Finger Print Experts under Clause 3 of Rule XII, pending appointments from the eligible list for that position. The request was granted.

A communication dated September 24 was presented from the Police Commissioner stating that in accordance with Chapter 424 of the Laws of 1914 he had transferred the following named persons from the Police Force of the Board of Water Supply to the position of Patrolman (of the grade indicated) in his department: Robert F. Connolly, Fourth Grade; Francis A. Murray, Third Grade; Leander W. Watson, Third Grade; Humphrey J. Murphy, Second Grade. The Secretary was instructed to note the transfers on the records.

A communication dated September 30 was presented from the Police Commissioner, stating that in accordance with Chapter 424 of the Laws of 1914 he had transferred Luie C. McMahon, a member of the Police Force of the Board of Water Supply, to the position of Patrolman of the Second Grade in his department. The Secretary was instructed to note the fact on the records.

The Commission considered a communication dated September 26 from the Department of Docks and Ferries, stating that in accordance with an opinion of the Corporation Counsel dated September 24, 1914, the dismissal of Dennis J. Shea from the Position of Machinist's Helper had been rescinded, also a communication dated October 1, requesting approval of the demotion of the said Shea from the position of Machinist's Helper at \$3 per day to that of Laborer, at \$2.50 per day, and stating that the said employee had consented to the demotion. The Secretary was instructed to note on the records the rescission of the dismissal of the said employee and his demotion from the position of Machinist's Helper to that of Laborer.

A communication dated September 30 was presented from the Secretary of the Department of Public Charities requesting approval of the payroll of Edward J. Murphy as Mason Plasterer from August 1 to September 26, 1914. The request was denied.

Upon the request of the Corporation Counsel in a communication dated September 30, the following resolution was adopted:

Resolved, That under subdivision 6 of Rule 12 of the rules of the Municipal Civil Service Commission this Commission exempts from competitive examination Louis C. White, an attorney and counsellor at law, residing at No. 127 West 82d Street, Borough of Manhattan, New York City, to be employed from time to time during the year 1914 by the Corporation Counsel to represent him in matters connected with the acquiring of title to property for rapid transit purposes.

A communication dated September 14 was presented from the Commissioner of Correction stating that pursuant to the provisions of Section 1543b of the Greater New York Charter Francis Kelly had been reinstated in the position of Keeper effective as of July 16, 1914, but that his assignment to duty was effective as of September 6, 1914, for the reason that there was no budgetary allowance against which his salary could be charged for the interim, and that pending the revision of the salary schedule which would become effective October 1, 1914, it would be necessary to fix Mr. Kelly's salary at the rate of \$1,200 per annum from September 6 to September 30, after which his salary would be at the rate of \$900 per annum. The Secretary was instructed to request an opinion from the Corporation Counsel as to whether Section 1543b of the Charter permitted the head of a department to reinstate an employee where there was no actual vacancy to which he could be assigned or no budgetary allowance from which his salary could be obtained, and as to whether or not the Commission should certify the payroll of the said employee for the period from September 6 to September 30.

A communication dated October 1 was presented from the Deputy Commissioner of the Department of Water Supply, Gas and Electricity, stating that Frank P. Torney and William R. Massie, Stationary Engineers, had been assigned to duties strictly in accord with the title of their positions. The Secretary was instructed to record the fact in the minutes of the Commission.

A communication dated October 3 was presented from the Secretary of the Department of Public Charities stating that his notice of the resignation of David Robinson, temporary Bookkeeper, effective August 31, 1914, was in error and that the resignation took effect September 3, 1914. The Secretary was instructed to amend the records accordingly.

A communication dated October 2 was presented from the Secretary of the Department of Taxes and Assessments, designating the following named persons as a Board of Promotions for his department: Edward F. Condon, Assistant Chief Deputy of Real Estate; Robert Miller, Deputy Tax Commissioner; Joseph B. Weed, Chief Clerk, Bureau of Corporations; Edward F. Barrett, Assistant to Commissioner; Valentine J. Hahn, Assistant to Commissioner.

The designation was approved.

A communication dated September 29 was presented from the Secretary of the Department of Health, requesting that his notice of the termination of the services of Lillian A. Schalow, as Nurse, be amended to show that such services terminated July 12, 1914, instead of July 11, 1914. The Secretary was instructed to amend the records accordingly.

A communication dated September 29 was presented from the Secretary of the Department of Health notifying the Commission of the change of name, through marriage, of a Nurse in his department, from Coraly Baker to Mrs. B. Booth. The Secretary was instructed to amend the records accordingly.

The Commission approved the action of the Secretary on October 3 in certifying to the President of the Borough of Brooklyn and the President of the Borough of Queens the eligible list of Inspector of Public Works, Grade 2, as an appropriate list from which to fill vacancies in the position of Inspector of Sewer Construction held by employees serving under clause 3 of Rule XII and approved his action in certifying twenty-three names in each instance, the names in excess of the number prescribed by the rules having been certified to anticipate declinations.

A memorandum dated October 1 was presented from the Payroll Bureau to the effect that John McMonigle and Felix O'Neil, who had been excepted from examination to serve as Life Savers at the Municipal Bath at Coney Island for a period of one hundred and twenty days at \$3 per day, had served one hundred and twenty-nine days. On motion, it was

Resolved, That the resolution of the Municipal Civil Service Commission adopted May 28, 1914, excepting from examination under clause 6 of Rule XII, Messrs. John McMonigle, Felix O'Neil, Elting Salisbury and Arthur F. Merwede to be employed as Life Savers at the Municipal Bath at Coney Island (office of the President of the Borough of Brooklyn) for a period of one hundred and twenty days be and the same hereby is amended in so far as it applies to Messrs. McMonigle and O'Neil and the term of service in their cases be and the same hereby is fixed at one hundred and twenty-nine days.

A communication dated September 23 was presented from the Comptroller stating that Florence M. Janvrin, a Clerk (Card Indexer), Grade 2, had been promoted to the position of Clerk, Grade 3, at \$1,200 per annum under the provisions of clause 23 of Rule XV. The promotion was approved.

The following reports of departmental Boards of Examiners for Positions in the Non-Competitive Class were approved upon the recommendation of the Chief Examiner: Department of Public Charities, September 26; Bellevue and Allied Hospitals, September 22, 23, 26; Department of Education (New York Parental School), September 30; Department of Education (Brooklyn Truant School), September 30; Department of Correction, September 29; Board of Inebriety, September 18.

In the absence of a representative of the State Civil Service Commission the various matters falling within the provisions of clause 6 of Rule XII of the rules of the Municipal Civil Service Commission which were laid over at the previous meeting of the Commission were again laid over, also the following requests:

Request of the Commissioner of Accounts for authority to appoint the following named persons under clause 6 of Rule XII: Frederic R. Leach as Efficiency Engineer; William Jacobus as Scrap Metallurgist and Salvage Expert.

Request of the Commissioner of Accounts for authority to increase the compensation fixed in the cases of Louis Ortnier, Fuel Expert and Efficiency Engineer, and James J. Pearson, Expert Investigator, serving in his department under clause 6 of Rule XII.

Request of the Department of Public Charities for authority to appoint the following named persons as Examiners of Charitable Institutions under the provisions of clause 6 of Rule XII: Francis M. Gorman, Joseph B. Walton, Matilda White, Marion E. Lee, Elizabeth H. Woodward, Emma H. Phinney.

The requests of the following named candidates in the examinations specified for permission to amend their statements as to date of birth where in error were granted: Jerome C. Sewell, Clerk, First Grade; Kathryn E. McCormack, Typewriting Copyist.

The requests of the following named candidates for restoration to the eligible lists specified were granted, their failure to reply to notices regarding appointment or their declarations of appointment having been explained to the satisfaction of the Commission: John J. F. Doyle, Inspector of Repairs and Supplies, Grade 3; John J. Mulhall, Inspector of Sewer Construction; Ida Kanofitch, Stenographer and Typewriter, 2nd Grade, and Typewriting Copyist, 2nd Grade; Emanuel Berger, Clerk, 2nd Grade, for temporary work; Joseph C. Taylor, Typewriter Accountant, 3rd Grade, for temporary work; John A. Smith, Transitman, Grade C (preferred); Joseph Flaumenbaum, Laborer (Manhattan); Hugh A. Quinn, Fireman, Fire Department; Benjamin Rapaport, Clerk, Second Grade, for temporary work; Charles A. Raehse, Inspector of Pipes and Castings; Carrie M. Hartt, Typewriting Copyist and Dictaphone Operator (preferred); Maxwell Kaufman, Mechanical Draftsman, Grade C (preferred); Charles S. Higgins, Clerk, Second Grade; Marie Magner, Stenographer and Typewriter, for temporary work; R. J. Dougherty, Transitman and Computer, Grade C; Michael Naughton, Jr., Inspector of Supplies and Repairs; William F. Eicholz, Attendant, for temporary work.

The declarations of appointment of the following named candidates on the eligible lists specified, on account of illness, impracticability of leaving other employment, etc., were approved: John S. Butler, Inspector of Public Works; Peter F. Perret, Inspector of Public Works; Annie Derry, Attendant; Margaret E. Fischen, Nurse; Elizabeth Henry, Nurse; Elizabeth M. Conrad, Nurse; Felix E. Tallon, Inspector of Public Works; Karl F. Muller, Janitor Engineer.

The Commission considered a communication dated September 23, 1914, from Robert E. Crockett, a candidate on the preferred list of Rodman, Grade B, addressed to James F. Sanborn of the Board of Water Supply, stating that he would not accept transfer outside of the city of New York. The Secretary was instructed to note the fact on the records.

A communication dated September 25 was presented from Algernon B. Comins of 30 Hill Street, West New Brighton, N. Y., with further reference to his declaration of appointment from the eligible list of Lay Sanitary and Tenement House Inspector. The Secretary was instructed to record the candidate on the list as ineligible for further certification.

A communication dated October 3 was presented from Abraham N. Fauer of 130 Dryden Road, Ithaca, N. Y., requesting that certification of his name from the eligible list of Stenographer and Typewriter (Preferred) be withheld until further notice from him. The request was granted.

The request of Albert W. Reinert of 117 Vernon Avenue, Brooklyn, N. Y., that his name be removed from the list of Clerk, Second Grade, was granted.

The request of Joseph L. Kennedy of 52 Prospect Place, New York City, that certification of his name from the eligible list of Attendant be withheld until further notice from him was granted.

After consideration of a memorandum dated October 2 from the Certification Clerk to the effect that William C. O'Donnell of West Hurley, N. Y., a candidate on the preferred list of Caretaker, had failed to furnish a doctor's certificate in connection with his declaration of appointment from that list on account of illness, the Secretary was instructed to record the candidate as ineligible for further certification.

The Secretary was instructed to summon Andrew Dear of 3416 Third Avenue, New York City, before the Commission to show cause why certification of his name to the President of the Borough of Manhattan from the eligible list of Elevatorman should not be revoked and his name removed from the eligible list for that position, it appearing that he had been under the minimum age of twenty-one years at the time of filing his application.

The Secretary was instructed to summon the following named persons before the Commission in connection with their requests that their names be removed from the list of persons disqualified for employment in the City service: William G. Moir, 3136 Broadway, New York City; Edmond J. Fitzpatrick, 252 West 15th Street, New York City.

After consideration of a communication dated October 2 from the Commissioner of the Department of Street Cleaning, the Commission denied the request of Gateño Stile, under date of September 24, that his name be removed from the list of persons disqualified for employment in the City service.

The request of Louis Jacobson for a rehearing in connection with the removal of his name from the non-competitive eligible list of Tabulating Machine Operator (Hollerith) was denied.

After consideration of a communication dated October 3, 1914, from the Secretary of the Department of Water Supply, Gas and Electricity, the Commission granted the request of Bernard Toner that his name be removed from the list of persons disqualified for employment in the City service.

A communication dated September 25 and signed by Charles C. Clifton and eleven other official Stenographers of the Municipal Court of the City of New York was presented, requesting that the coming examination for Court Stenographer, 4th and 5th Grades, be held on some Saturday, in order to enable them to participate therein. The Secretary was instructed to arrange the date of the examination accordingly.

A communication dated September 8 was presented from Benjamin R. Rand, a candidate on the eligible list of Structural Steel Draftsman, transmitting a court order authorizing his change of name from Benjamin Ruzin to Benjamin Ruzin Rand. The Secretary was instructed to note the change of name on the records.

Matters Not Upon the Calendar Considered by Unanimous Consent.

A report dated October 6 was presented from the Chief Examiner submitting a statement of examinations held during the month of September, 1914. The report was ordered filed.

Upon the recommendation of the Chief Examiner in a report dated October 3, it was

Resolved, That Eugene S. Lucas, of 121 Amersford Place, Brooklyn, N. Y., be and he hereby is appointed an expert examiner in the office of the Municipal Civil Service Commission in connection with the examination for Interpreter (Hungarian), under the provisions of Clause 8 of Rule XII of the rules of the Municipal Civil Service Commission.

Upon the recommendation of Miss M. B. Upshaw, Assistant Chief Examiner, in a report dated October 7, it was

Resolved, That Lewis G. Cole, M. D., of 103 Park Avenue, New York City, be and he hereby is appointed an expert examiner in the office of the Municipal Civil Service Commission in connection with the examination for Photographer (X-ray) under the provisions of clause 8 of Rule XII of the rules of the Municipal Civil Service Commission.

Upon the recommendation of the Secretary to the Advisory Board in a report dated October 5, the Secretary was instructed to arrange a non-competitive examination to qualify Anna C. Philips for employment as Inspector, Department of Public Charities, under the provisions of clause 3 of Rule XII and, on motion, it was

Resolved, That the Secretary be and he hereby is instructed to proceed with an open competitive examination under the provisions of clause 6 of Rule VI for the position of Inspector, Department of Public Charities, that being a position requiring qualifications of an unusual character and one to which no classified title is applicable.

Reports (2) dated October 6 were presented from the Secretary to the Advisory Board submitting the following forms of advertisement for the examinations specified: "Chemist—Food and Drugs." * * * The subjects and weights of the examination are as follows: Technical, 6; experience, 4; 75 per cent. is required on the technical paper and 70 per cent. on all. Candidates must have received the degree of Bachelor of Science or its equivalent, or present a certificate from some technical institution of recognized standing showing that they have pursued for two years a course of study therein tending to qualify them for the position sought. Some credit will be given for ability to consult scientific journals in French and German.

The technical paper will be divided into a paper in general chemistry and a special paper in the chemistry of foods and drugs.

A physical examination will be held.

Applications for this examination must be filed on a special blank, Form C. Experience blanks will be issued with the applications and must be filed with the Commission at the time of filing applications. The experience will then be rated. Candidates receiving less than 70 per cent. on the experience paper will not be summoned for the physical examination. Candidates failing to pass the physical examina-

tion will not be summoned for the written examination. * * * Minimum age, 21 years.

* * * Superintendent, Municipal Lodging House—Duties: It is the duty of the Superintendent of the Municipal Lodging House:

1st: To enforce such standards and regulations for the government of employees and the treatment of lodgers as shall be prescribed by the Commissioner of Charities and to recommend modifications therein;

2d: To devise and effectuate means for the economical management of the entire institution, with special reference to the control over materials, supplies and stores;

3d: To effectuate means for inquiry into the circumstances of applicants and for their proper classification with a view to disposition or treatment;

4th: To enforce such rules for the conduct of lodgers as shall be prescribed by the Commissioner of Charities, and to recommend changes therein;

5th: To make efficient disposition of the labor of the lodgers in the Lodging House itself and in other institutions of the City.

6th: To recommend such final disposition of all lodgers as will insure, to as great an extent as possible, their rehabilitation and a prevention of their recurrence as public dependents.

Requirements: Candidates must present evidence of experience in institutional management, or the management of industrial organizations, or in the handling of the destitute for charitable agencies. Additional credit may be given for experience in employment work, or in other work involving an intimate knowledge of the local employment situation. Candidates should have a thorough familiarity with the business and administrative methods involved in the duties above described; with the public and private charitable agencies of the city and with related State institutions and the law and practice governing their conduct and relations; and with current methods in charities administration.

* * * The minimum age is twenty-five years; maximum, fifty years.

Character of Examination: The examination will consist of four tests, known as Experience, Physical, Duties and Oral, to be held in the order named. Candidates who fail in any test will not be admitted to the ensuing tests. Seventy per cent. will be required for passing in the Experience, Duties and Oral tests. The experience paper will be written on a blank which will be issued with the application blank, and must be filed together with the application.

The weights of the several tests will be: Experience, 4; Duties, 4; Oral, 2.

* * * Certification will be made from the list established as the result of this examination also for the position of Deputy Superintendent, at a compensation of \$1,200 per annum, with maintenance.

* * * The forms of advertisement were approved.

A report dated October 7 was presented from the Secretary to the Advisory Board submitting a form of advertisement for the examination for Engineer Inspector, Architectural, Grades C and D:

* * * The subjects and weights of the examination are: Technical, including report, 5; Experience, 3; Mathematics, 2. Seventy-five per cent. is required on the Technical; 70 per cent. on Experience and 70 per cent. on all.

Applications for this examination must be filed on a special blank, Form C. * * * Candidates receiving less than 70 per cent. in experience will not be summoned for the physical examination. Candidates failing in the physical examination will not be summoned for the mental test.

The duties of Engineer Inspector include the examination of the structural conditions of buildings during repair and erection; the test of foundations; the verification of interior dimensions; and the ability to check loads on and weights of beams, columns, etc.

Candidates will be required to show an experience of at least five years as architect, engineer or inspector of buildings. Graduates of technical institutions will receive a suitable credit allowance on the required time. Candidates will be required to show an intimate knowledge of engineering fundamentals of construction; the practice of the Bureau of Buildings; the structural requirements of the Building Code; and elementary calculations of loads on beams, columns and struts. A test of ability to read plans will also be made.

Candidates for Grade D will be tested more specifically on municipal requirements as to foundations, fireproofing, floor loads and factory inspection. A problem will also be given from working drawings.

* * * Minimum age, 25 years.

* * * The form of advertisement was approved.

A report dated October 6 was presented from the Secretary to the Advisory Board submitting an amended form of advertisement for the examination for Secretary to the Committee on Markets, Board of Estimate and Apportionment, setting forth the last paragraph of the advertisement as follows:

"Candidates must submit evidence of experience in making investigations and reports on matters of civic importance, such as the investigation and reports of the Mayor's Market Commission, December, 1913, the report of the Committee on Terminal Improvement, June 6, 1913, Board of Estimate and Apportionment and the Commissioner of Docks, on the organization of a Municipal Freight Terminal; extended experience in the management of markets, or extended experience in the purchase, sale and handling of food stuffs."

The form of advertisement, as amended, was approved.

A report dated October 7 was presented from the Secretary to the Advisory Board, transmitting the request of the Acting General Medical Superintendent of Bellevue and Allied Hospitals under date of September 19, that the maximum allowance for Female Cooks in the Non-Competitive Class be increased to \$840 per annum, with maintenance, and recommending that the compensation for female cooks be fixed at the same amount as in the case of male cooks, viz.: \$900 per annum, with maintenance. The Secretary was instructed to advertise a public hearing in the matter.

A report (E-70) dated October 6 was presented from Mr. Leonhard Felix Fuld, Assistant Chief Examiner, with reference to the duties performed by Confidential Inspectors in the Department of Public Charities. The report was ordered filed.

A report dated October 6 was presented from the Chief Examiner, transmitting the request of the Commissioner of Correction, dated October 2, that the Commission establish the position of Prison Guard, and that the examination advertised for Prison Keeper be held for Prison Guard. The Chief Examiner stated that the Commission could not hold an examination for a position which had not been established by the Board of Estimate and Apportionment and, further, that the advertisement for Prison Keeper had passed the Commission, and it seemed too late to recall it. The report was approved.

A report dated October 6 was presented from the Examiner in Charge of the Bureau of Investigation recommending that Nathan Harris and Vincent J. Loughran be marked "Qualified" on the eligible list of Junior Chemist (Asphalt), and that certification of the name of Isaac Drogin be withheld. The recommendations were adopted.

A report dated October 6 was presented from the Examiner in Charge of the Bureau of Investigation recommending that the Commission discontinue the use of the term "Not Qualified" placed, upon the promulgation of an eligible list, after the name of any candidate who had admitted an arrest when filing his application or who had been dismissed from the City Service, and that the term be used only after deliberation by the Commission upon the candidate's case. The recommendation was adopted.

A report dated October 5 was presented from Mr. M. C. Ihseng, Engineering Examiner, recommending that the title "Inspector of Sewers and Basins" be included in the Competitive Class, Part IV, Group 1. The Secretary was instructed to advertise a public hearing in the matter.

A communication dated October 6 was presented from the Secretary of the Department of Health, requesting that Michael A. Byrne, of 104 Osgood Street, Stapleton, S. I., who had failed in a non-competitive examination for Automobile Engineman under the provisions of Clause 3 of Rule XII, had not made a complete statement of his actual experience, and requesting that he be permitted to file another statement of experience. After consideration of the matter, on motion, it was

Resolved, That the requirement of the Municipal Civil Service Rules to the effect that "No person who has entered any examination for appointment to a competitive position and failed therein or who has withdrawn therefrom, shall be admitted

within nine months from the date of such examination to a new examination for the same position," be and the same hereby is waived in so far as it applies to the non-competitive examination for Automobile Engineman in the Department of Health, and the Secretary is hereby instructed to summon Michael A. Byrne, of 104 Osgood Street, New York City, for such non-competitive examination.

A communication dated October 5 was presented from the Executive Secretary of the Board of Inebriety requesting approval of a bill in favor of Mrs. Ethel Kelly in the amount of \$50, covering salary for two weeks' vacation due her daughter, Miss Rose M. Kelly, deceased. The bill was approved.

A communication dated October 5 was presented from the Fire Commissioner, stating that he did not desire the Commission to hold the examination for Deputy Chief Inspector, Bureau of Fire Prevention. On motion, it was

Resolved, That the action of the Municipal Civil Service Commission in ordering an open competitive examination for the position of Deputy Chief Inspector, Bureau of Fire Prevention, be and the same hereby is rescinded.

A communication dated October 5 was presented from the President of the Borough of Richmond, notifying the Commission of the reassignment to duty of Thomas Turner, a Hostler. The Secretary was instructed to note the reassignment on the records.

The action of the Secretary on October 6 in notifying the President of the Borough of Richmond that the Commission was without power to approve the reassignment to duty of Bradley T. Weed, a Foreman, was approved. It appeared that on August 17 the Commission had been notified of the suspension of the said employee for lack of work; that on August 27 it had been notified that the original notice was in error, as it was not the intention of the President of the Borough of Richmond to suspend the said employee, and the records of the Commission had been amended accordingly; and that on September 29 a communication had been received from the President of the Borough of Richmond requesting approval of the reassignment of the said employee "who was suspended on August 15," from which it would appear that he had been actually suspended on August 15, and could only be reinstated through regular certification from the preferred list.

The following certifications in response to requisitions from the several departments under the dates specified for lists from which to make one or more appointments were approved, the names in excess of the number prescribed by the rules having been certified to anticipate declinations on account of salary, location, etc.:

October 2, 1914—Six names to the Department of Education from the eligible list of Clerk, First Grade.

October 3, 1914—Twenty-five names to the Department of Education from the eligible list of First Grade Clerk.

September 28, 1914—Ten names to the Board of Estimate and Apportionment from the eligible list of Stenographer and Typewriter (Male), Second Grade.

September 29, 1914—Twenty names to the Department of Health from the eligible list of Nurse.

October 2, 1914—The eligible list of Clerk, Card Indexer, Second and Third Grades (two names), and 16 names from the eligible list of Typewriting Copyist, Female, Second Grade, to the Board of Estimate and Apportionment.

October 2, 1914—Fifteen names to the Department of Parks, Boroughs of Manhattan and Richmond, from the preferred list of Attendant, for temporary service.

October 2, 1914—Eight names to the Commissioner of Public Works, Borough of Manhattan, from the eligible list of Stenographer and Typewriter (Male), Third Grade.

September 30, 1914—Fifteen names to the Department of Public Charities from the eligible list of Stenographer and Typewriter (Female), Second Grade.

September 29, 1914—Five names to the Department of Education from the eligible list of Physician for the Examination of Mentally Defective Children, Third Grade.

October 1, 1914—Six names to the Department of Health from the eligible list of Clerk, First Grade.

October 1, 1914—Six names to the Department of Health from the eligible list of Clerk, First Grade.

September 29, 1914—Six names to the Board of Education from the eligible list of Clerk, First Grade.

September 29, 1914—Six names to the Department of Parks, Boroughs of Manhattan and Richmond, from the eligible list of Horseshoer (Fireman).

October 1, 1914—The preferred list of Clerk, Fifth Grade (three names) and one name from the preferred list of Temporary Clerk to the Department of Licenses.

The action of the Secretary on October 1, 1914, in certifying the eligible list of Stenographer and Typewriter (Female), Second Grade, to the Department of Parks, Borough of Brooklyn, as an appropriate list from which to appoint a Clerk, Second Grade (with knowledge of Stenography and Typewriting), was approved.

The action of the Secretary on October 3d in certifying six names from the preferred lists of Clerk, for temporary appointment, to the Comptroller, in addition to the names certified to him on September 30, was approved, the additional names having been certified for the reason that the names on the original certification had also been certified to the Department of Water Supply, Gas and Electricity.

The request of Joseph Stern, of 46 Bristol Street, Brooklyn, N. Y., that his name be restored to the eligible list of Stenographer and Typewriter, for temporary appointment, was granted, it appearing that his resignation from a temporary position in the Board of Water Supply had been without fault or delinquency.

The request of Martin Bernhardt, of 31 Curtis Place, New Brighton, S. I., that his name be restored to the eligible list of Assistant Engineer, Grade D (Preferred), was granted, his declination of appointment to that position having previously been approved by the Commission.

A communication dated October 3 was presented from Dr. William F. Cunningham, stating that he would not receive his license to practice medicine for about two weeks, and requesting that he be permitted to file an application for the position of Coroner's Physician. The request was denied for lack of power.

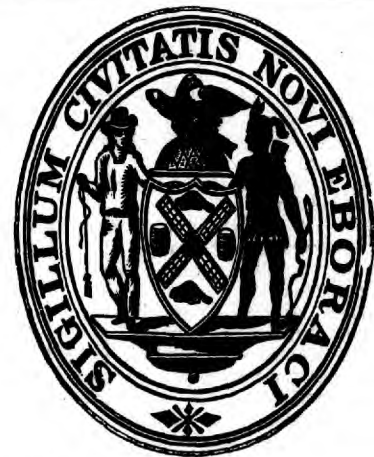
The following declinations of appointment from the eligible lists specified on account of absence from city, impracticability of leaving other positions, etc., were approved: Frances H. Meyer, Nurse; Elizabeth F. Kehoe, Clerk, Second Grade (promotion); Department of Health; Margaret A. Traynor, Clerk, Second Grade (promotion); Department of Health; Patrick Rooney, Licensed Fireman, Preferred, Borough of Richmond.

The declinations of appointment of the following persons to the position of Nurse in the Bureau of Infectious Diseases, Department of Health, were approved, and their requests that their names be retained upon the eligible list of Nurse for appointment to positions in the Bureau of Child Hygiene were granted: Sarah A. Bryant, Annie M. Lyons, Cora Kinney, Cecilia Silverquist, Emily M. Smith, E. M. Conrad.

The Secretary was instructed to summon Eugene M. Ryan, of 1086 Herkimer Street, Brooklyn, N. Y., before the Commission, in connection with the removal of his name from the eligible list of Fireman.

The Commission then adjourned, to meet Wednesday, October 14, 1914, at 10:30 o'clock A. M.

ROBT. W. BELCHER, Secretary.



Changes in Departments, Etc.

BOROUGH OF MANHATTAN.
Bureau of Buildings.

Services Ceased—Alexander H. Mc-

Phee, Inspector of Masonry and Carpentry, at \$1,500 per year, December 7.

DEPARTMENT OF PARKS.

Bronx.

Appointed—Sylvester Searing, 356 12th Street, Brooklyn, Bricklayer (temporary), at \$6 per diem, December 4.

Discharge Rescinded—Giovanni Baratta, 725 East 212th Street, Climber and Pruner.

COMMISSIONERS OF ACCOUNTS.

Title Changed—Charles Kandel, from Efficiency Engineer at \$100 per month, to Efficiency Examiner at \$125 per month, December 1.

OFFICIAL DIRECTORY.

Unless otherwise stated, the Public Offices of the City are open for business from 9 a. m. to 5 p. m.; Saturday, 9 a. m. to 12 noon.

CITY OFFICES.

MAYOR'S OFFICE.

City Hall, Telephone, 8020 Cortlandt.
John Purroy Mitchel, Mayor.
Theodore Rousseau, Secretary.
Bertram de N. Cruger, Executive Secretary.
Bureau of Weights and Measures.
City Hall, Telephone, 4334 Cortlandt.
Joseph Hartigan, Commissioner.

COMMISSIONERS OF ACCOUNTS.

Municipal Building, Telephone, 4315 Worth.
Leonard M. Wallstein, Commissioner of Accounts.

BOARD OF ALDERMEN.

Clerk's Office, Municipal Building, 2nd floor.
10 a. m. to 4 p. m. Saturday, to 12 m. Telephone, 4430 Worth.
P. J. Scully, City Clerk.
President of the Board of Aldermen.
City Hall, Telephone, 6770 Cortlandt.
George McAneny, President.

BOARD OF AMBULANCE SERVICE.

300 Mulberry st. Telephone, 3100.
Spring. Administration Office—7586 Spring.

ARMORY BOARD.

Hall of Records, 9 a. m. to 4 p. m.; Saturday, to 12 m. Telephone, 3900 Worth.
C. D. Rhinehart, Secretary.

ART COMMISSION.

City Hall, Telephone, 1197 Cortlandt.
John Quincy Adams, Assistant Secretary.

BOARD OF ASSESSORS.

Municipal Building, 8th floor. Telephone, 29 Worth.

Alfred P. W. Seaman, Chairman.
St. George B. Tucker, Secretary.

BELLEVEUE AND ALLIED HOSPITALS.
26th st. and 1st ave. Telephone, 4400 Madison square.

Dr. John W. Brannan, President.
J. K. Paulding, Secretary.

DEPARTMENT OF BRIDGES.
Municipal Building, 18th floor. Telephone, 380 Worth.

F. J. H. Kracké, Commissioner.

BUREAU OF THE CHAMBERLAIN.
Municipal Building, 8th floor. Telephone, 4270 Worth.

Henry Bruere, Chamberlain.

CITY CLERK AND CLERK OF THE BOARD OF ALDERMEN.
Municipal Building, 2nd floor. 10 a. m. to 4 p. m.; Saturday, to 12 m. Telephone, 4430 Worth.

P. J. Scully, City Clerk.

BOARD OF CITY RECORD.
Supervisor's office, Municipal Building, 8th floor. Distributing Division, 96 Reade st. Telephone, 3490 Worth.

David Ferguson, Supervisor.

DEPARTMENT OF CORRECTION.
Municipal Building, 24th floor. Telephone, 1610 Worth.

Katharine B. Davis, Commissioner.

DEPARTMENT OF DOCKS AND FERRIES.
Pier "A," N. R. Telephone, 300 Rector.

R. A. C. Smith, Commissioner.

DEPARTMENT OF EDUCATION.
Board of Education.

Park ave. and 59th st. Telephone, 5580 Plaza.

Stated meetings of the Board are held at 4 p. m. on the first Monday in February, the second Wednesday in July, and the second and fourth Wednesdays in every month, except July and August.

Thomas W. Churchill, President.
A. Emerson Palmer, Secretary.

BOARD OF ELECTIONS.
General office and office of the Borough of Manhattan, Municipal Building, 18th floor. Telephone, 1307 Worth.

Moses M. McKee, Secretary.

Other Borough Offices.
The Bronx.

368 E. 148th st. Telephone, 336 Melrose.

Brooklyn.

435-445 Fulton st. Telephone, 693 Main.

Queens.

64 Jackson ave., Long Island City. Telephone, 3375 Hunters Point.

Richmond.

Borough Hall, New Brighton, S. I. Telephone, 1000 Tompkinsville.

All offices open from 9 a. m. to 4 p. m. Saturday, to 12 m.

BOARD OF ESTIMATE AND APPOINTMENT.

Municipal Building, 13th floor. Telephone, 4560 Worth.

Joseph Haag, Secretary.

Bureau of Records and Minutes.
Municipal Building, 13th floor. Telephone, 4560 Worth.

Joseph Haag, Secretary.

Office of the Chief Engineer.
Municipal Building, 13th floor. Telephone, 4560 Worth.

Nelson P. Lewis, Chief Engineer.

Bureau of Public Improvements.
Municipal Building, 13th floor. Telephone, 4560 Worth.

Nelson P. Lewis, Chief Engineer.

Bureau of Franchises.
Municipal Building, 13th floor. Telephone, 4563 Worth.

Harry P. Nichols, Chief Engineer.

Bureau of Contract Supervision.
Municipal Building, 13th floor. Telephone, 4560 Worth.

Tilden Adamson, Director.

Bureau of Standards.
Salaries and Grades Division and Supplies Division, Municipal Building, 13th floor. Telephone, 4560 Worth.

Standard Testing Laboratory, 125 Worth st. Telephone, 3088 Franklin.

George L. Tirrell, Director.

BOARD OF EXAMINERS.
Municipal Building, 20th floor, 9 a. m. to 4 p. m. Saturday, to 12 m. Telephone, 3280 Worth.

Board meets every Tuesday at 2 p. m.

Edward W. Barton, Clerk.

DEPARTMENT OF FINANCE.
Municipal Building, 5th floor. Telephone, 1200 Worth.

Shepard A. Morgan, Secretary to the Department, 5th floor.

William A. Prendergast, Comptroller.

Deputy Comptrollers, 7th floor. Alexander Brough, Edmund D. Fisher, Charles S. Hervey, Hubert L. Smith.

Receiver of Taxes.
Manhattan—Municipal Building, 2nd floor. Telephone, 1200 Worth.

Bronx—177th st. and Arthur ave. Telephone, 140 Tremont.

DEPARTMENT OF HEALTH.

Centre and Walker sts., Manhattan. Telephone, 6280 Franklin.

Bureau of Burial Permits and Contagious Disease offices always open.

Bronx, 3731 Third ave. Brooklyn, Flatbush ave., Willoughby and Fleet sts. Queens, 372 Fulton st., Jamaica. Richmond, 514 Bay st., Stapleton.

S. S. Goldwater, Commissioner.

Eugene W. Scheffer, Secretary.

BOARD OF INEBRIETY.
300 Mulberry st. Telephone, 7116 Spring.

Board meets first Wednesday in each month at 3 o'clock.

Charles Samson, Secretary.

LAW DEPARTMENT.
Office of Corporation Counsel.

Main office, Municipal Building, 16th floor. Telephone, 4600 Worth.

Frank L. Polk, Corporation Counsel.

Brooklyn office, 153 Pierrepont st. Telephone, 2948 Main.

Bureau of Street Openings.
Main office, Municipal Building, 15th floor. Telephone, 1380 Worth.

Brooklyn office, 166 Montagu st. Telephone, 5916 Main.

Queens office, Municipal Building, Long Island City. Telephone, 3886 Hunters Point.

Bureau for the Recovery of Penalties.
Municipal Building, 15th floor. Telephone, 3460 Worth.

Bureau for the Collection of Arrears of Personal Taxes.
Municipal Building, 17th floor. Telephone, 4585 Worth.

Tenement House Bureau and Bureau of Buildings.
Municipal Building, 15th floor. Telephone, 1620 Worth.

DEPARTMENT OF LICENSES.
Main Office, 49 Lafayette st. Telephone, 4490 Franklin.

George H. Bell, Commissioner.

Centre St. Office—57-59 Centre st. Telephone, 2030 Worth.

Julian Rosenthal, Deputy Commissioner.

Brooklyn—Borough Hall. Telephone, 1497 Main.

Queens—Borough Hall, Long Island City. Telephone, 5400 Hunters Point.

Richmond, Borough Hall, New Brighton. Telephone, 1000 Tompkinsville.

Division of Licensed Vehicles—517-519 W. 57th st. Telephone, 6387 Columbus.

Municipal Employment Bureau—27 Lafayette st. Telephone, 3870 Worth.

MUNICIPAL CIVIL SERVICE COMMISSION.
Municipal Building, 14th floor. Telephone, 1580 Worth.

Henry Moskowitz, President.

Robert W. Belcher, Secretary.

MUNICIPAL REFERENCE LIBRARY.
Municipal Building, 5th floor. Telephone, 1072 Worth.

9 a. m. to 5 p. m.; Saturday, to 1 p. m.

DEPARTMENT OF PARKS.
Municipal Building, 10th floor. Telephone, 4850 Worth.

Cabot Ward, Commissioner, Manhattan and Richmond.

Borough of Brooklyn.

Litchfield Mansion, Prospect Park, Brooklyn. Telephone, 2300 South.

Raymond V. Ingersoll, Commissioner.

Borough of The Bronx.

Zbrowski Mansion, Claremont Park. Telephone, 2640 Tremont.

Thomas W. Whittle, Commissioner.

Borough of Queens.

The Overlook, Forest Park, Richmond Hill, L. I. Telephone, 2300 Richmond Hill.

John E. Weier, Commissioner.

PARK BOARD.
Municipal Building, 10th floor. Telephone, 4850 Worth.

Cabot Ward, President. Louis W. Fehr, Secretary.

BOARD OF PAROLE OF THE NEW YORK CITY REFORMATORY OF MISDEMEANANTS.

Municipal Building, 24th floor. Telephone, 1610 Worth.

Thomas R. Minnick, Secretary.

EXAMINING BOARD OF PLUMBERS.
Municipal Building, 8th floor. Telephone, 1800 Worth.

J. A. Glendinning, Clerk.

POLICE DEPARTMENT.
240 Centre st. Telephone, 3100 Spring.

Arthur Woods, Commissioner.

DEPARTMENT OF PUBLIC CHARITIES.
Principal office, Municipal Building, 10th floor. Telephone, 4440 Worth.

Brooklyn and Queens, 327 Schermerhorn st., Brooklyn. Telephone, 2977 Main.

Bureau of Dependent Adults, Pier, foot of East 26th st. Telephone, 7400 Madison Square.

The Children's Bureau, 124 East 50th st. Telephone, 7400 Madison Square.

Borough of Richmond, Borough Hall, St. George S. I. Telephone, 100 Tompkinsville.

John A. Kingsbury, Commissioner.

PUBLIC RECREATION COMMISSION.
Municipal Building, 8th floor. Telephone, 1471 Worth.

Meeting every second Tuesday at 2:30 p. m.

Cyril H. Jones, Acting Secretary.

PUBLIC SERVICE COMMISSION.
154 Nassau st., Manhattan. 8 a. m. to 11 p. m. every day, including holidays and Sundays.

Telephone, 4150 Beekman.

Edward E. McCall, Chairman.

Travis H. Whitney, Secretary.

BOARD OF REVISION OF ASSESSMENTS.
Municipal Building, 7th floor. Telephone, 1200 Worth.

John Korb, Chief Clerk.

COMMISSIONERS OF SINKING FUND.
Office of Secretary, Municipal Building, 7th floor. Telephone, 1200 Worth.

John Korb, Secretary.

DEPARTMENT OF STREET CLEANING.
Municipal Building, 12th floor. Telephone, 4240 Worth.

John T. Fetherston, Commissioner.

DEPARTMENT OF TAXES AND ASSESSMENTS.
Municipal Building, 9th floor. 9 a. m. to 4 p. m.; Saturday, to 12 m. Telephone, 1800 Worth.

Lawson Purdy, President.

C. Rockland Tyng, Secretary.

TENEMENT HOUSE DEPARTMENT.
Manhattan and Richmond office, Municipal Building, 19th floor. Telephone, 1526 Worth.

Brooklyn and Queens office, 503 Fulton st., Brooklyn. Telephone, 3825 Main.

Bronx office, 391 East 149th st. Telephone, 107 Melrose.

John J. Murphy, Commissioner.

BOARD OF WATER SUPPLY.
Municipal Building, 22d floor. Telephone, 3150 Worth.

Charles Strauss, President.

W. Bruce Cobb, Secretary.

DEPARTMENT OF WATER SUPPLY, GAS AND ELECTRICITY.
Municipal Building, 23d, 24th and 25th floors. Telephones: Manhattan, 4320 Worth; Brooklyn, 3980 Main; Queens, 3441 Hunters Point; Richmond, 840 Tompkinsville; Bronx, 3400 Tremont.

Brooklyn, Municipal Building, Brooklyn. Bronx, Tremont and Arthur ave. Queens, Municipal Building, Long Island City. Richmond, Municipal Building, St. George.

William Williams, Commissioner.

BOROUGH OFFICES.

BOROUGH OF THE BRONX.
President's office, 3d ave. and 177th st. Telephone, 2680 Tremont.
Douglas Mathewson, President.

BOROUGH OF BROOKLYN.
President's office, Borough Hall. Telephone, 3960 Main.
Lewis H. Pounds, President.

BOROUGH OF MANHATTAN.
President's office, 17th floor, Municipal Bldg. Commissioner of Public Works, 21st floor, Municipal Building.
Assistant Commissioner of Public Works, 20th floor, Municipal Building.
Bureau of Highways, 21st floor, Municipal Building.
Bureau of Public Buildings and Offices, 20th floor, Municipal Building.
Bureau of Sewers, 21st floor, Municipal Bldg.
Bureau of Buildings, 20th floor, Municipal Building.
Telephone, 4227 Worth.
Marcus M. Marks, President.

BOROUGH OF QUEENS.
President's office, Borough Hall, Long Island City, 9 a. m. to 4 p. m.; Saturday, to 12 m. Telephone, 5400 Hunters Point.
Bureau of Public Buildings and Offices, Town Hall, Flushing, L. I. Telephone, 1740 Flushing.
Maurice E. Connolly, President.

BOROUGH OF RICHMOND.
President's office, New Brighton, Staten Island, 9 a. m. to 4 p. m.; Saturday, to 12 m. Telephone, 1000 Tompkinsville.
Charles J. McCormack, President.

CORONERS.
Manhattan, 70 Lafayette st. Open at all hours of the day and night. Telephone, 5052 Franklin.
Bronx, Arthur and Tremont aves. Telephone, 1250 Tremont. 8 a. m. to midnight, every day.
Brooklyn, 236 Duffield st. Telephone, 4004 Main. Open at all hours of the day and night.
Queens, Town Hall, Jamaica, L. I., 9 a. m. to 10 p. m.; Sundays and holidays, 9 a. m. to 12 m.
Richmond, 175 Second st., New Brighton. Open at all hours of the day and night.

COUNTY OFFICES.

Unless otherwise stated, the County offices are open for business from 9 a. m. to 4 p. m.; Saturday, 9 a. m. to 12 noon.

NEW YORK COUNTY.

COUNTY CLERK.
County Court House, Telephone, 5388 Cortlandt.
William F. Schneider, County Clerk.
9 a. m. to 2 p. m. during July and August.

DISTRICT ATTORNEY.
Criminal Courts Building, 9 a. m. to 5.15 p. m.; Saturday, to 12 m. Telephone, 2304 Franklin.
Charles S. Whitman, District Attorney.

COMMISSIONER OF JUDICIAL.
280 Broadway. Telephone, 241 Worth.
Thomas Allison, Commissioner.

PUBLIC ADMINISTRATOR.
119 Nassau st. Telephone, 6376 Cortlandt.
William M. Hoes, Public Administrator.

COMMISSIONER OF RECORDS.
Hall of Records, Telephone, 3900 Worth.
John F. Cowan, Commissioner.

REGISTER.
Hall of Records, Telephone, 3900 Worth.
9 a. m. to 2 p. m. during July and August.
John J. Hopper, Register.

SHERIFF.
299 Broadway. Telephone, 4984 Worth.
New York County Jail, 70 Ludlow st.
Max S. Grifenhagen, Sheriff.

SUBROGATE.
Hall of Records, Telephone, 3900 Worth.
John P. Cahalan; Robert Ludlow Fowler, Surrogates.
John F. Curry, Commissioner of Records.

KINGS COUNTY.

COUNTY CLERK.
Hall of Records, Brooklyn. Telephone, 4930 Main.
Charles S. Devoy, County Clerk.

COUNTY COURT.
County Court House, Brooklyn. Court opens at 10 a. m. daily and sits until business is completed. Part I, Room No. 23; Part II, Room No. 10; Part III, Room No. 14; Part IV, Room No. 1, Court House. Clerk's office, Rooms 17, 18, 19 and 22; open daily from 9 a. m. to 4 p. m.; Saturday, to 12 m. Telephone, 4154 Main.

DISTRICT ATTORNEY.
66 Court st., Brooklyn. 9 a. m. to 5.30 p. m.; Saturday, to 1 p. m. Telephone, 2954 Main.
James C. Cropper, District Attorney.

COMMISSIONER OF JUDICIAL.
381 Fulton st., Brooklyn. Telephone, 1454 Main.
Thomas R. Farrell, Commissioner.

PUBLIC ADMINISTRATOR.
44 Court st., Brooklyn. Telephone, 2840 Main.
Frank W. Kelly, Public Administrator.

COMMISSIONER OF RECORDS.
Hall of Records, Brooklyn. Telephone, 6988 Main.
Edmund O'Connor, Commissioner.

REGISTER.
Hall of Records, Brooklyn. Telephone, 2830 Main.
Edward T. O'Loughlin, Register.

SHERIFF.
46-50 Court st., Brooklyn. Telephone, 6845 Main.
Lewis M. Swasey, Sheriff.

SUBROGATE.
Hall of Records, Brooklyn. Court opens at 10 a. m. Telephone, 3954 Main.
Herbert T. Ketcham, Surrogate.
John H. McCooey, Chief Clerk.

BRONX COUNTY.

COUNTY CLERK.
161st st. and 3d ave. Telephone, 9266 Melrose.
James Vincent Ganly, County Clerk.

COUNTY JUDGE.
161st st. and 3d ave. Telephone, 7907 Melrose.
Louis D. Gibbs, County Judge.

DISTRICT ATTORNEY.
161st st. and 3d ave. Telephone, 9200 Melrose.
Francis Martin, District Attorney.

COMMISSIONER OF JUDICIAL.
1932 Arthur ave. Telephone, 3700 Tremont.
John A. Mason, Commissioner.

PUBLIC ADMINISTRATOR.
2808 3d ave. Telephone, 9816 Melrose. 9 a. m. to 5 p. m., Saturday to 12 m.
Ernest E. L. Hammer, Public Administrator.

REGISTER.
1932 Arthur ave. Telephone, 6694 Tremont.
Edward Polak, Register.

SHERIFF.
1932 Arthur ave. Telephone, 6600 Tremont.
James F. O'Brien, Sheriff.

SURROGATE.
161st st. and 3d ave.
George M. S. Schulz, Surrogate.

QUEENS COUNTY.

COUNTY CLERK.
364 Fulton st., Jamaica. Telephone, 151 Jamaica.
Leonard Rouff, County Clerk.

COUNTY COURT.
County Court House, Long Island City. Telephone, 596 Hunters Point.
Court opens at 10 a. m. Trial Terms begin first Monday of each month, except July, August and September, and on Friday of each week.

Clerk's office opens 9 a. m. to 5 p. m.; Saturdays to 12.30 p. m. Telephone, 551 Jamaica.
Burt Jay Humphrey, County Judge.

DISTRICT ATTORNEY.
County Court House, Long Island City, 9 a. m. to 5 p. m.; Saturday, to 12 m.
County Judge's office always open at 336 Fulton st., Jamaica. Telephone, 3871 Hunters Point.

Matthew J. Smith, District Attorney.
COMMISSIONER OF JUDICIAL.
County Court House, Long Island City. Telephone, 9631 Hunters Point.

Thorndyke C. McKenney, Commissioner.
PUBLIC ADMINISTRATOR.
302 Fulton st., Jamaica.

Randolph White, Public Administrator.
SHERIFF.
County Court House, Long Island City. Telephone, 3766 Hunters Point.

George Emmer, Sheriff.
SURROGATE.
364 Fulton st., Jamaica. Telephone, 397 Jamaica.

Daniel Noble, Surrogate.

RICHMOND COUNTY.

COUNTY CLERK.
County Office Building, Richmond. Telephone, 28 New Dorp.
C. Livingston Bostwick, County Clerk.

COUNTY JUDGE AND SUBROGATE.
Trial Terms, with Grand and Trial Jury, Second Monday of March, First Monday of October. Trial Terms, with Trial Jury only, First Monday of May, First Monday of December.

Special Terms, without Jury, Wednesday of each week, except the last week of July, the month of August and the first week of September.

Surrogate's Court.
Monday and Tuesday of each week at the Borough Hall, St. George, and on Wednesday at the Surrogate's Court, at Richmond, except during the session of the County Court. There will be no Surrogate's Court during the month of August.

Surrogate's Court and Office, Richmond, S. I. Surrogate's Chambers, Borough Hall, St. George. J. Harry Tiernan, County Judge and Surrogate.

DISTRICT ATTORNEY.
Borough Hall, St. George. Telephone, 50 Tompkinsville, 9 a. m. to 5 p. m.; Saturday, to 12 m.

Albert C. Fach, District Attorney.
COMMISSIONER OF JUDICIAL.
Village Hall, Stapleton. Telephone, 81 Tompkinsville.

Edward I. Miller, Commissioner.
PUBLIC ADMINISTRATOR.
Port Richmond, Telephone, 704 West Brighton.

William T. Holt, Public Administrator.
SHERIFF.
County Court House, Richmond. Telephone, 120 New Dorp.

Joseph F. O'Grady, Sheriff.

THE COURTS.

CITY COURT OF THE CITY OF NEW YORK.
City Hall Park. Special Term Chambers held from 10 a. m. to 4 p. m. Clerk's office open from 9 a. m. to 4 p. m. Telephone, 122 Cortlandt.

Thomas F. Smith, Clerk.
CITY MAGISTRATES' COURT.
First Division.

First District—Criminal Court Building.
Second District—125 Sixth ave.
Third District—2d ave. and 1st st.

Fourth District—151 E. 57th st.
Fifth District—121st st. and Sylvan place.
Sixth District—162d st. and Washington ave.

Seventh District—314 W. 54th st.
Eighth District—1014 E. 181st st., The Bronx.
Ninth District (Night Court for Females)—125 6th ave.

Tenth District (Night Court for Males)—151 E. 57th st.
Eleventh District (Domestic Relations)—151 E. 57th st.

Thirteenth District (Domestic Relations)—1014 E. 181st st., The Bronx.
Office of Chief Clerk, 300 Mulberry st. Telephone, 6213 Spring.

Office of the Chief Probation Officer, 300 Mulberry st. Telephone, 8713 Spring.

Second Division.
Borough of Brooklyn.

Office of Chief Magistrate, 44 Court st. Telephone, 7411 Main.

First District—318 Adams st.
Second District—Court and Butler st.

Fifth District—249 Manhattan ave.
Sixth District—495 Gates ave.

Seventh District—31 Snider ave., Flatbush.
Eighth District—W. 8th st., Coney Island.
Ninth District—5th ave. and 29th st.

Tenth District—133 New Jersey ave.
Domestic Relations—Myrtle and Vanderbilt aves.

William F. Delaney, Chief Clerk.
Borough of Queens.

First District—St. Mary's Lyceum, L. I. City.
Second District—Town Hall, Flushing, L. I.

Third District—Central ave., Far Rockaway.
Fourth District—Town Hall, Jamaica, L. I.

Borough of Richmond.
First District—Lafayette ave., New Brighton.
Second District—Village Hall, Stapleton.

All courts open daily from 9 a. m. to 4 p. m., except on Saturdays, Sundays and legal holidays, when only morning sessions are held.

COURT OF GENERAL SESSIONS.
Criminal Court Building. Court opens at 10.30 a. m. Clerk's office open from 9 a. m. to 4 p. m., and on Saturdays until 12 m.

Edward R. Carroll, Clerk.
MUNICIPAL COURTS.
The Clerks' offices are open from 9 a. m. to 4 p. m.; Saturday, to 12 noon.

Borough of Manhattan.
First District—34-60 Lafayette st. Additional Part is held at southwest corner of 6th ave. and 10th st. Telephone, 6030 Franklin.

Second District—264-266 Madison st. Telephone, 4300 Orchard.
Third District—314 W. 54th st. Telephone, 5450 Columbus.

Fourth District—Parts I and II, 207 E. 32d st. Telephone, 4358 Murray Hill.
Fifth District—Broadway and 96th st. Telephone, 4006 Riverside.

Sixth District—155 E. 88th st.
Seventh District—70 Manhattan st.
Eighth District—121st st. and Sylvan place. Telephone, 3950 Harlem.

Ninth District—Madison ave. and 59th st. Parts I and II. Telephone, 3873 Plaza.

Borough of The Bronx.
First District—Town Hall, 1400 Williamsbridge road, Westchester. Trial of causes, Tuesday and Friday of each week. Telephone, 457 Westchester.

Second District—Washington ave. and 162d st. Telephone, 3043 Melrose.

Borough of Brooklyn.
First District—State and Court sta. Parts I and II. Telephone, 7091 Main.

Second District—495 Gates ave. Telephone, 504 Bedford.

Third District—6 Lee ave. Telephone, 955 Williamsburg.

Fourth District—14 Howard ave. Telephone, 3907 Sunset.

Fifth District—5220 Third ave. Telephone, 6166 Main.

Sixth District—236 Duffield st. Telephone, 6166 Main.

Seventh District—31 Pennsylvania ave. 8.45 a. m. to 4 p. m.; Saturday, 9 a. m. to 12 m. Telephone, 904 East New York.

Borough of Queens.
First District—115 5th st., Long Island City. Telephone, 1420 Hunters Point.

Second District—Broadway and Court st., Elmhurst. Telephone, 87 Newtown.

Third District—1908 Myrtle ave., Glendale. Telephone, 2352 Bushwick.

Fourth District—Town Hall, Jamaica. Telephone, 1654 Jamaica.

Borough of Richmond.
First District—Lafayette ave. and 2d st., New Brighton. Clerk's office open from 8.45 a. m. to 4 p. m. Telephone, 503 Tompkinsville.

Second District—Former Edgewater Village Hall, Stapleton. Clerk's office open from 8.45 a. m. to 4 p. m. Telephone, 313 Tompkinsville.

COURT OF SPECIAL SESSIONS.
Court opens at 10 a. m.

Part I, Criminal Court Building, Manhattan. Telephone, 3983 Franklin.

Part II, 171 Atlantic ave., Brooklyn. Telephone, Main 4280.

Part III, Town Hall, Jamaica. Held on Tuesday of each week. Telephone, 2620 Jamaica.

Part IV, Borough Hall, St. George. Held on Wednesday of each week. Telephone, 324 Tompkinsville.

Part V, 161st and 3d ave., Bronx. Held on Thursday of each week. Telephone, 9088 Melrose.

Frank W. Smith, Chief Clerk.
Children's Court.
New York County—66 3d ave. Telephone, 1832 Stuyvesant.

Dennis A. Lambert, Clerk.
Bronx County—355 E. 137th st. Court held on Wednesday and Friday of each week. Telephone, 9092 Melrose.

Michael Murray, Clerk.
Kings County—102 Court st. Telephone, 627 Main.

Joseph W. Duffy, Clerk.
Queens County—19 Flushing ave., Jamaica. Court held on Monday and Thursday of each week. Telephone, 2624 Jamaica.

Sydney Ollendorf, Clerk.
Richmond County—Corn Exchange Bank Building, St. George. Court held on Tuesday of each week. Telephone, 324 Tompkinsville.

William J. Brown, Clerk.
SUPREME COURT—APPELLATE DIVISION.
First Judicial Department.

Madison ave., corner 25th st. Court open from 2 p. m. until 6 p. m. Friday, Motion Day, Court opens at 10.30 a. m. Motions called at 10 a. m. Orders called at 10.30 a. m. Telephone, 3340 Madison Square.

Alfred Wagstaff, Clerk.
Second Judicial Department.
Borough Hall, Brooklyn. Court meets from 2 p. m. to 5 p. m., excepting that on Fridays Court opens at 10 o'clock a. m. Clerk's office open 9 a. m. Telephone, 1392 Main.

John B. Byrne, Clerk.
SUPREME COURT—APPELLATE TERM.
503 Fulton st., Brooklyn. Court meets 10 a. m. Clerk's office opens 9 a. m. Telephone, 7452 Main.

Joseph H. DeBraga, Clerk.
SUPREME COURT—CRIMINAL DIVISION.
Criminal Court Building. Court opens at 10.30 a. m. Clerk's office open from 9 a. m. to 4 p. m.; Saturday, to 12 m. Telephone, 6064 Franklin.

William Schneider, Clerk.
SUPREME COURT—FIRST DEPARTMENT.
County Court House. Court open from 10.15 a. m. to 4 p. m. Telephone, 4580 Cortlandt.

SUPREME COURT—SECOND DEPARTMENT.
Kings County.

Jorammon and Fulton sts., Brooklyn. Clerk's office hours, 9 a. m. to 5 p. m. Seven jury trial parts. Special Term for trials. Special Term for motions. Special Term (ex-parte business). Court opens at 10 a. m. Naturalization Bureau, Hall of Records, Brooklyn. Telephone, 5460 Main.

James F. McGee, General Clerk.
Queens County.
County Court House, L. I. City. Court opens at 10 a. m. Trial and Special Term for motions and ex-parte business each month except July, August and September, in Part I. Trial Term, Part II, January, February, March, April, May and December. Special Term for trials, January, April, June and November. Naturalization, first Friday in each Term.

Clerk's office open 9 a. m. to 5 p. m.; Saturday, to 12.30 p. m. Telephone, 3896 Hunters Point.

Thomas B. Seaman, Special Deputy Clerk in charge.
Richmond County.
Trial Term held at County Court House, Richmond. Special Term for trials held at Court room, Borough Hall, St. George. Special Term for motions held at Court House, Borough Hall, St. George.

C. Livingston Bostwick, Clerk.

BOARD OF ELECTIONS.

Proposals.

OFFICE OF THE BOARD OF ELECTIONS OF THE CITY OF NEW YORK, MUNICIPAL BUILDING, BOROUGH OF MANHATTAN.

SEALED BIDS OR ESTIMATES WILL BE received by the Board of Elections of The City of New York until 12 M., on

MONDAY, DECEMBER 14, 1914.

FOR FURNISHING AND DELIVERING COPIES OF THE LISTS OF ENROLLED VOTERS OF THE YEAR 1914, IN THE ASSEMBLY DISTRICTS IN THE BOROUGH OF MANHATTAN, THE BRONX, BROOKLYN, QUEENS AND RICHMOND.

The time for the delivery of the said lists and the performance of the contract shall be ten (10) calendar days after the delivery of the last copy to the contractor.

The amount of security required is fifty (50) per cent. of the total amount for which the contract is awarded.

The bids will be compared and the contract awarded in a lump or aggregate sum.

Blank forms and other information may be obtained at the office of the Board of Elections, Municipal Building.

Dated, New York, December 2, 1914.

MORRIS M. MCKEE, JAMES KANE, JACOB A. LIVINGSTON, Commissioners of Elections.

S. HOWARD COHEN, Chief Clerk. d3,14
See General Instructions to Bidders on last page, last column, of the "City Record."

BOARD MEETINGS.

Board of Aldermen.
The Board of Aldermen meets in the Aldermanic Chamber, City Hall, every Tuesday, at 1.30 o'clock p. m.
P. J. SCULLY, City Clerk and Clerk to the Board of Aldermen.

Board of Estimate and Apportionment.
The Board of Estimate and Apportionment meets in the Old Council Chamber (Room 16), City Hall, every Friday, at 10.30 o'clock a. m.
JOSEPH HAAG, Secretary.

Commissioners of Sinking Fund.
The Commissioners of the Sinking Fund meet in the Meeting Room (Room 16), City Hall, on Wednesday, at 11 a. m., at call of the Mayor.
JOHN KORB, JR., Secretary.

Board of Revision of Assessments.
The Board of Revision of Assessments meets in the Meeting Room (Room 16), City Hall, every Thursday, at 10.30 a. m., upon notice of the Chief Clerk. JOHN KORB, JR., Chief Clerk.

Board of City Record.
The Board of City Record meets in the City Hall at call of the Mayor.
DAVID FERGUSON, Supervisor, Secretary.

DEPARTMENT OF HEALTH.

Amendments to Sanitary Code.

AT A MEETING OF THE BOARD OF Health of the Department of Health, held November 24, 1914, the following resolution was adopted:

Resolved, That Section 182 of the Sanitary Code be and the same is hereby amended so as to read as follows:

Section 182. No opium, morphine, chloral, or cannabis indica, or any other substance giving a physiological reaction similar to that of opium; or any salts, alkaloids, or derivatives, of any of the said drugs or substances; or any preparation, compound, or mixture, containing any of the said drugs or substances or their salts, alkaloids, or derivatives; shall be sold at retail or given away in the City of New York except upon the written prescription of a duly licensed physician, veterinarian, or dentist.

The foregoing provisions shall not, however, apply to preparations, compounds, or mixtures, containing any of the aforesaid drugs or substances or their salts, alkaloids, or derivatives, prepared for external use only, in the form of liniments, ointments, oleates, or plasters.

A true copy.

EUGENE W. SCHEFFER, Secretary. d5,12

BOROUGH OF QUEENS.

Proposals.

OFFICE OF THE PRESIDENT OF THE BOROUGH OF QUEENS, THIRD FLOOR OF THE BOROUGH HALL, FIFTH STREET AND JACKSON AVENUE, LONG ISLAND CITY, BOROUGH OF QUEENS, CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the President of the Borough of Queens at the above office until 11 o'clock a. m. on

THURSDAY, DECEMBER 10, 1914.

NO. 1. FOR REGULATING, GRADING AND CURBING (TOGETHER WITH ALL WORK INCIDENTAL THERETO) IN LIBERTY AVENUE, FROM WALKER AVENUE TO OCEAN AVENUE, FOURTH WARD.

The time allowed for doing and completing the above work will be Seventy-five (75) working days.

The amount of security required will be Four Thousand (\$4,000) Dollars.

The Engineer's estimate of the quantities is as follows:

13,000 Cu. Yds. of Earth Excavation,
10 Cu. Yds. of Rock Excavation,
1,800 Lin. Ft. of Cement Curb with Steel Nosing and one (1) year's maintenance.

100 Lin. Ft. of 12" Vitrified Drain Pipe, in place.
100 Lin. Ft. of 12" Cast Iron Pipe, in place.

800 Sq. Yds. of Asphaltic Concrete Pavement to be replaced, not to be bid for.

NO. 2. FOR REPAIRING THE ROADWAY AND CONSTRUCTING PILE AND TIMBER BULKHEADS, TOGETHER WITH ALL WORK INCIDENTAL THERETO, IN THE ROCKAWAY TURNPIKE, FROM NEW YORK AVENUE TO HOOK CREEK, FOURTH WARD.

The time allowed for doing and completing the above work will be Ninety (90) working days.

The amount of security required will be Six thousand dollars (\$6,000).

OFFICE OF THE PRESIDENT OF THE BOROUGH OF QUEENS, THIRD FLOOR OF THE BOROUGH HALL, 5TH STREET AND JACKSON AVENUE, LONG ISLAND CITY, BOROUGH OF QUEENS, CITY OF NEW YORK. SEALED BIDS OR ESTIMATES WILL BE RECEIVED BY THE PRESIDENT OF THE BOROUGH OF QUEENS AT THE ABOVE OFFICE UNTIL 11:00 A. M. ON

THURSDAY, DECEMBER 10, 1914.
NO. 1: FOR CONSTRUCTING A SEWER AND APPURTENANCES IN FOREST AVENUE FROM MYRTLE AVENUE TO HALECK AVENUE, SECOND WARD OF THE BOROUGH OF QUEENS.

The Engineer's estimate of the quantities is as follows:
165 Lin. Ft. of 12-inch Vitrified salt-glazed pipe sewer.
2 Manholes, Complete.
108 Linear Feet of 6-inch Vitrified salt-glazed pipe for House Connection Drains.
9 Spurs on 12-inch Vitrified salt-glazed pipe sewer.
1,000 Feet B. M. Timber for bracing and sheet piling.
The time allowed for completing the above work will be ten (10) working days.
The amount of security required will be Three Hundred (\$300.00) Dollars.

NO. 2: FOR CONSTRUCTING A SEWER AND APPURTENANCES IN BEAUFORT AVENUE FROM BRIGGS AVENUE TO LEFFERTS AVENUE, FOURTH WARD OF THE BOROUGH OF QUEENS.
The Engineer's estimate of the quantities is as follows:
380 Linear Feet of 12-inch Vitrified salt-glazed pipe sewer.
4 Manholes, Complete.
21 Spurs on 12-inch Vitrified salt-glazed pipe sewer.
208 Linear Feet of 6-inch Vitrified salt-glazed pipe for House Connection Drains.

The time allowed for completing the above work will be twenty (20) working days.
The amount of security required will be Six Hundred (\$600.00) Dollars.

NO. 3: FOR CONSTRUCTING A SEWER AND APPURTENANCES IN WILBUR AVENUE FROM WILLIAM STREET TO ELY AVENUE, FIRST WARD OF THE BOROUGH OF QUEENS.
The Engineer's estimate of the quantities is as follows:
193 Linear Feet of 12-inch Vitrified salt-glazed pipe sewer.
2 Manholes, Complete.
7 Spurs on 12-inch Vitrified salt-glazed pipe sewer.
112 Lin. Ft. of 6-inch Vitrified salt-glazed pipe for House connection drains.

1,000 Feet B. M. Timber for bracing and sheet piling.
The time allowed for completing the above work will be twenty (20) working days.
The amount of security required will be Two Hundred and Fifty (\$250.00) Dollars.

NO. 4: FOR CONSTRUCTING A SEWER AND APPURTENANCES IN BIRCH STREET FROM JAMAICA AVENUE TO HILLSIDE AVENUE, FOURTH WARD OF THE BOROUGH OF QUEENS.

The Engineer's estimate of the quantities is as follows:
532 Lin. Ft. of 12-inch Vitrified salt-glazed pipe sewer.
5 Manholes, Complete.
1 Single receiving basin, Complete.
25 Lin. Ft. of 12-inch Vitrified salt-glazed pipe for basin connections.
19 Spurs on 12-inch Vitrified salt-glazed pipe sewer.
304 Lin. Ft. of 6-inch Vitrified salt-glazed pipe for House Connection Drains.

The time allowed for completing the above work will be thirty (30) working days.
The amount of security required will be Nine Hundred (\$900.00) Dollars.

NO. 5: FOR CONSTRUCTING RECEIVING BASINS AND APPURTENANCES ON THE EASTERLY AND WESTERLY SIDES OF PURVIS STREET AND THOMSON AVENUE, FIRST WARD OF THE BOROUGH OF QUEENS.

The Engineer's estimate of the quantities is as follows:
2 Single receiving basins, Complete.
40 Lin. Ft. of 12-inch Vitrified salt-glazed pipe for basin connections.
The time allowed for completing the above work will be ten (10) working days.

The amount of security required will be One Hundred and Twenty-five (\$125.00) Dollars.
NO. 6: FOR CONSTRUCTING A RECEIVING BASIN AND APPURTENANCES ON THE WESTERLY CORNER OF TWELFTH AVENUE AND NEWTOWN ROAD, FIRST WARD OF THE BOROUGH OF QUEENS.

The Engineer's estimate of the quantities is as follows:
1 Single receiving basin, Complete.
16 Lin. Ft. of 12-inch Vitrified salt-glazed pipe for basin connections.
The time required for completing the above work will be six (6) working days.

The amount of security required will be Ninety (\$90.00) Dollars.
NO. 7: FOR CONSTRUCTING RECEIVING BASINS AND APPURTENANCES ON WOOLSEY AVENUE, ON NORTHERLY AND EASTERLY CORNERS OF SEVENTH AVE., ON THE NORTHERLY AND EASTERLY CORNERS OF SIXTH AVENUE, AND ON THE EASTERLY CORNER OF PARK PLACE, FIRST WARD OF THE BOROUGH OF QUEENS.

The Engineer's estimate of the quantities is as follows:
5 Single receiving basins, Complete.
175 Lin. Ft. 12-inch Vitrified salt-glazed pipe for basin connections.

The time required for completing the above work will be fifteen (15) working days.
The amount of security required will be Five Hundred (\$500.00) Dollars.

NO. 8: FOR RECONSTRUCTING AND REPAIRING SIPHON AND APPURTENANCES UNDER BROADWAY, ELMHURST L. I. (KNOWN AS HORSE BROOK SIPHON), SECOND WARD OF THE BOROUGH OF QUEENS.

The Engineer's estimate of the quantities is as follows:
204 Lin. Ft. 16-inch cast iron pipe (Weight, 114 Lbs. per Foot), furnished and laid.
90 Cu. Yds. excavation, earth, mud, etc. (including pumping).

17 Cu. Yds. excavation, rock and masonry.
2 Reinforced concrete siphon chambers, including manholes and wing walls complete.
135 Lin. Ft. reinforced concrete invert.
60 Lin. Ft. of brick siphon to be pointed.

12 Cu. Yds. extra concrete, Class "A," in place, exclusive of concrete shown on plan.
500 Lbs. extra reinforcing steel, in place, exclusive of reinforcing steel shown on plan.
1,000 Brick, furnished and laid.
100 Lin. Ft. of earth channel approaches to be graded.

The time required for completing the above work will be thirty (30) working days.
The amount of security required will be One Thousand (\$1,000.00) Dollars.

The bidder must state the price of each item or article contained in the specifications herein contained, or hereinafter annexed, per square yard, per linear foot, or other unit of measure, by which the bids will be tested. The exten-

sions must be footed up, as the bids will be read from a total. Bids will be compared and the contract awarded at a lump or aggregate sum. Blank forms may be obtained and the plans or drawings may be seen at the office of the President of the Borough of Queens.

Dated: November 30th, 1914.
MAURICE E. CONNOLLY, President.
n30,d10

See General Instructions to Bidders on last page, last column, of the "City Record."

COLLEGE OF THE CITY OF NEW YORK.

Proposals.

THE COLLEGE OF THE CITY OF NEW YORK, 139TH ST. AND CONVENT AVE., BOROUGH OF MANHATTAN, THE CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE RECEIVED BY THE BOARD OF TRUSTEES OF THE CURATOR OF THE COLLEGE OF THE CITY OF NEW YORK AT THE ABOVE ADDRESS IN ROOM 114, MAIN BUILDING, UNTIL 2 P. M. ON

WEDNESDAY, DECEMBER 16, 1914, FOR PRINTING.

The time for the performance of the contract is sixty (60) calendar days, except where noted in the specification, after the endorsement of the certificate of the Comptroller upon the executed contract.

The amount of security shall be thirty per cent. (30%) of the amount of the contract, except as otherwise provided in the specifications. Bids will be received on any or all classes. The bids will be compared and the awards made, if made, by classes.

A copy of the contract and specifications, bid sheet and envelope in which to inclose the bid may be obtained upon application therefor at the office of the Curator of the College, Room 114, Main Building, The College of the City of New York, 139th st. and Convent ave., Borough of Manhattan, The City of New York.

A duplicate copy of the bid must be submitted at the same time for the Finance Department. CHARLES E. LYDECKER, Chairman of the Board of Trustees; JAMES W. HYDE, Secretary of the Board of Trustees; BERNARD M. BARUCH, FREDERICK P. BELLAMY, WM. HENRY CORBITT, LEE KOHNS, WILLIAM F. MCCOMBS, MOSES J. STROOCK, CHARLES H. TUTTLE, THOMAS W. CHURCHILL, Board of Trustees and Committee on Buildings.

R. V. DAVIS, Curator.
Dated Borough of Manhattan, December 4th, 1914. d5,16

See General Instructions to Bidders on last page, last column, of the "City Record."

THE COLLEGE OF THE CITY OF NEW YORK, 139TH ST. AND CONVENT AVE., BOROUGH OF MANHATTAN, THE CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE RECEIVED BY THE BOARD OF TRUSTEES OF THE CURATOR OF THE COLLEGE OF THE CITY OF NEW YORK AT THE ABOVE ADDRESS IN ROOM 114, MAIN BUILDING, UNTIL 2 P. M. ON

WEDNESDAY, DECEMBER 16, 1914, FOR FURNISHING AND DELIVERING SUPPLIES AS FOLLOWS:

CLASS 10—CHEMICALS.
CLASS 1—CHEMICAL APPARATUS.

The time allowed for the delivery of the supplies herein scheduled and for the performance of the contract is 180 calendar days for importations and 60 calendar days for domestic supplies after the endorsement of the certificate of the Comptroller upon the executed contract.

The amount of security shall be thirty per cent. (30%) of the amount of the contract, except as otherwise provided in the specifications. Bids will be received on any or all items per pound, dozen, gross or other unit of measurement by which the bids will be tested. The bids will be compared and the awards made, if made, by items.

Bidders must submit their bids or estimates upon the blank form prepared by the Board of Trustees. A copy of this form with an envelope in which to enclose the bid, together with a copy of the contract and specifications, in the form approved by the Corporation Counsel, may be obtained upon application therefor at the office of the Curator, Room 114, Main Building, The College of the City of New York, 139th st. and Convent ave., Borough of Manhattan.

A duplicate copy of the bid must be submitted at the same time for the Finance Department. CHARLES E. LYDECKER, Chairman of the Board of Trustees; JAMES W. HYDE, Secretary of the Board of Trustees; BERNARD M. BARUCH, FREDERICK P. BELLAMY, WM. HENRY CORBITT, LEE KOHNS, WILLIAM F. MCCOMBS, MOSES J. STROOCK, CHARLES H. TUTTLE, THOMAS W. CHURCHILL, Board of Trustees and Committee on Buildings.

R. V. DAVIS, Curator.
Dated Borough of Manhattan, December 4th, 1914. d5,16

See General Instructions to Bidders on last page, last column, of the "City Record."

DEPARTMENT OF FINANCE.

Sureties on Contracts.

UNTIL FURTHER NOTICE SURETY COMPANIES will be accepted as sufficient upon the following contracts to the amounts named: Supplies of Any Description, Including Gas and Electricity.

One company on a bond up to \$50,000. When such company is authorized to write that amount as per letter of Comptroller to the surety companies, dated January 1, 1914.

Construction.
One company on a bond up to \$25,000. Including regulating, grading, paving, sewers, maintenance, dredging, construction of parks, parkways, docks, buildings, bridges, tunnels, aqueducts, repairs, heating, ventilating, plumbing, etc., etc.

When such company is authorized to write that amount as per letter of Comptroller to the surety companies dated January 1, 1914.

Asphalt, Asphalt Block and Wood Block Pavements.
Two companies will be required on any and every bond up to amount authorized by letter of Comptroller to the surety companies, dated January 1, 1914.

January 1, 1914.
WILLIAM A. PRENDERGAST, Comptroller.

Confirmation of Assessments.

NOTICE TO PROPERTY OWNERS.

IN PURSUANCE OF SECTION 1018 OF THE Greater New York Charter, the Comptroller of the City of New York hereby gives public notice to all persons, owners of property, affected by the following assessments for LOCAL IMPROVEMENTS IN THE BOROUGH OF BROOKLYN:

NINTH WARD, SECTION 4: TWENTY-SIXTH WARD, SECTIONS 12 AND 14; TWENTY-NINTH WARD, SECTION 16, AND THIRTIETH WARD, SECTION 17.
SIDEWALKS ON WILLIAMS AVENUE, between New Lots road and Louisiana avenue; ST. JOHN'S PLACE, north side, between Underhill and Washington avenues; FORTY-SIXTH STREET between Thirtieth and

Fourteenth avenues; PROSPECT AVENUE, north side, between Eleventh avenue and Terrace place; FIFTY-SIXTH STREET, south side, between New Utrecht and Fourteenth avenues. Area of assessment: Both sides of Williams avenue between New Lots road and Louisiana avenue; Lots 60 and 67, Block 1173; both sides of Forty-sixth street between Thirtieth and Fourteenth avenues; northerly side of Prospect avenue between Eleventh avenue and Terrace place; and Lot 49, in Block 5691.

EIGHTEENTH WARD, SECTION 10.
JACKSON STREET—PAVING, north side, from Old Wood Point road to point about 50 feet east: Both sides of Jackson street from Old Wood Point road to Kingsland avenue, and to the extent of half the block at the intersecting streets.

DIVISION PLACE—SEWER, between Kingsland and Debevoise avenues. Area of assessment: Blocks Nos. 2840 and 2849.

TWENTY-SIXTH WARD, SECTION 12.
LIVONIA AVENUE—PAVING, between Hinsdale and Snediker avenues. Area of assessment: Both sides of Livonia avenue between Hinsdale and Snediker avenues, and to the extent of half the block at the intersecting avenues.

TWENTY-SIXTH WARD, SECTION 13.
WARWICK STREET—PAVING, between Sutter and Livonia avenues. Area of assessment: Both sides of Warwick street between Sutter and Livonia avenues, and to the extent of half the block at the intersecting avenues.

DUMONT AVENUE—PAVING, between Warwick street and Ashford street. Area of assessment: Both sides of Dumont avenue from Warwick to Ashford streets, and to the extent of half the block at the intersecting streets.

ELBERT LANE—PAVING, between Liberty and Pitkin avenues. Area of assessment: Both sides of Elbert Lane from Liberty to Pitkin avenues, and to the extent of half the block at the intersecting avenues.

TWENTY-NINTH WARD, SECTION 15.
EAST THIRTY-FOURTH STREET—PAVING, between Church and Linden avenues. Area of assessment: Both sides of East Thirty-fourth street from Church to Linden avenues, and to the extent of half the block at the intersecting and terminating avenues.

TWENTY-NINTH WARD, SECTION 15.
NEW YORK AVENUE—PAVING, between Tilden and Snyder avenues. Area of assessment: Both sides of New York Avenue between Tilden and Snyder avenues, and to the extent of half the block at the intersecting avenues.

TWENTY-NINTH WARD, SECTION 16.
EAST SECOND STREET—PAVING, from Fort Hamilton avenue to Beverley road. Both sides of East Second street from Fort Hamilton avenue to Beverley road, and to the extent of half the block at the intersecting streets and avenues.

EAST TWENTY-NINTH STREET—PAVING, from Clarendon road to Canarsie Lane. Area of assessment: Both sides of East Twenty-ninth street from Canarsie lane to Clarendon road, and to the extent of half the block at the intersecting streets.

THIRTIETH WARD, SECTION 17.
SIXTY-SEVENTH STREET—PAVING, between Eleventh and Thirteenth avenues. Area of assessment: Both sides of Sixty-seventh street from Eleventh to Thirteenth avenues, and to the extent of half the block at the intersecting avenues.

THIRTIETH WARD, SECTIONS 17 AND 19.
BAY RIDGE AVENUE—PAVING, between New Utrecht and Seventeenth avenues. Area of assessment: Both sides of Bay Ridge avenue from New Utrecht to Seventeenth avenues, and to the extent of half the block at the intersecting avenues.

THIRTIETH WARD, SECTION 19.
SEVENTY-FOURTH STREET—PAVING, between Eleventh and Thirteenth avenues. Area of assessment: Both sides of Seventy-fourth street from Eleventh to Thirteenth avenues, and to the extent of half the block at the intersecting avenues.

SEVENTY-FIFTH STREET—PAVING, between Eleventh and Thirteenth avenues. Area of assessment: Both sides of Seventy-fifth street from Eleventh to Thirteenth avenues, and to the extent of half the block at the intersecting and terminating avenues.

THIRTY-FIRST WARD, SECTION 20.
EAST TWELFTH STREET—PAVING, from Kings Highway to Avenue O. Area of assessment: Both sides of East Twelfth street from Kings Highway to Avenue O, and to the extent of half the block at the intersecting avenues.

EAST FOURTEENTH STREET—PAVING, from Avenue O to Avenue N. Area of assessment: Both sides of East Fourteenth street from Avenue O to Avenue N, and to the extent of half the block at the intersecting and terminating avenues.

EAST FOURTEENTH STREET—PAVING, from Avenue O to Kings Highway. Area of assessment: Both sides of East Fourteenth street from Avenue O to Kings Highway and to the extent of half the block at the intersecting streets.

EAST NINETEENTH STREET—REGULATING, GRADING, CURBING AND FLAGGING, from Avenue N to Avenue O. Area of assessment: Both sides of East Nineteenth street from Avenue N to Avenue O, and to the extent of half the block at the intersecting avenues.

EAST EIGHTEENTH STREET—PAVING, from Avenue N to Avenue O. Area of assessment: Both sides of East Eighteenth street from Avenue N to Avenue O, and to the extent of half the block at the intersecting avenues.

THIRTY-FIRST WARD, SECTION 21.
TWENTY-FOURTH AVENUE—REGULATING, GRADING, CURBING AND FLAGGING, between Stillwell Avenue and Eighty-sixth street, and to the extent of half the block at the intersecting streets.

That the same were confirmed by the Board of Assessors on December 1, 1914, and entered on December 1, 1914, in the Record of Titles of Assessments, kept in the Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents, and unless the amount assessed for benefit on any person or property shall be paid within sixty days after the date of said entry of the assessment, interest will be collected thereon, as provided by section 1019 of the Greater New York Charter.

Said section provides, in part, "If any such assessment shall remain unpaid for the period of sixty days after the date of entry thereof in the said Record of Titles of Assessments, it shall be the duty of the officer authorized to collect and receive the amount of such assessment, to charge, collect and receive interest thereon at the rate of seven per centum per annum, to be calculated to the date of payment, from the date when such assessment became a lien, as provided by section 159 of this act."

Section 159 of this act provides: "An assessment shall become a lien upon the real estate affected thereby ten days after its entry in the said record."

The above assessments are payable to the Collector of Assessments and Arrears at the Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents, in the Officer Building, 503 Fulton Street, Borough of Brooklyn, between the hours of 9 a. m. and 2 p. m., and on Saturdays from 9 a. m. to 12 m., and all payments made thereon on or before January 29, 1915, will be exempt from interest as above provided, and after that date will be subject to a charge of interest at the rate of seven per centum per annum from the date when such assessments became liens to the date of payment.

WILLIAM A. PRENDERGAST, Comptroller.
City of New York, Department of Finance, Comptroller's Office, November 30, 1914. d5,16

NOTICE OF ASSESSMENTS FOR OPENING STREETS AND PARKS.

IN PURSUANCE OF SECTION 1005 OF THE Greater New York Charter, the Comptroller of the City of New York hereby gives public notice of the confirmation by the Supreme Court and the entering in the Bureau for the Collection of Assessments and Arrears of the assessment for OPENING AND ACQUIRING TITLE to the following named Street and Avenue in the Borough of Brooklyn:

TWENTY-SIXTH AND THIRTY-SECOND WARDS, SECTION 12.
THATFORD AVENUE—OPENING, from Riverdale Avenue to Stanley Avenue, and OSBORNE STREET—OPENING, from Riverdale Avenue to Vienna Avenue. Confirmed October 14, 1914; entered November 25, 1914. Area of Assessment includes all those lands, tenements and hereditaments and premises situate and being in the Borough of Brooklyn, in the City of New York, which, taken together, are bounded and described as follows, viz.:

BEGINNING at a point on a line midway between Rockaway avenue and Thatford avenue, distant 100 feet northerly from the northerly line of Riverdale avenue, and running thence eastwardly and parallel with Riverdale avenue

the rate of seven per centum per annum from the date when such assessments became liens to the date of payment.

WILLIAM A. PRENDERGAST, Comptroller.
City of New York, Department of Finance, Comptroller's Office, December 1, 1914. d7,17

NOTICE TO PROPERTY OWNERS.

IN PURSUANCE OF SECTION 1018 OF THE Greater New York Charter, the Comptroller of the City of New York hereby gives public notice to all persons, owners of property, affected by the following assessment for LOCAL IMPROVEMENTS IN THE BOROUGH OF QUEENS:

FIRST WARD.
WASHINGTON AVENUE AND SEVENTH AVENUE—RECEIVING BASIN at the north-west corner. Area of assessment affects property in Block No. 143.

That the same was confirmed by the Board of Assessors on December 1, 1914, and entered December 1, 1914, in the Record of Titles of Assessments, kept in the Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents, and unless the amount assessed for benefit on any person or property shall be paid within sixty days after the date of said entry of the assessment, interest will be collected thereon, as provided by section 1019 of the Greater New York Charter.

Said section provides, in part, "If any such assessment shall remain unpaid for the period of sixty days after the date of entry thereof in the said Record of Titles of Assessments, it shall be the duty of the officer authorized to collect and receive the amount of such assessment, to charge, collect and receive interest thereon at the rate of seven per centum per annum, to be calculated to the date of payment, from the date when such assessment became a lien, as provided by section 159 of this act."

Section 159 of this act provides: "An assessment shall become a lien upon the real estate affected thereby ten days after its entry in the said record."

The above assessment is payable to the Collector of Assessments and Arrears at the Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents, in the Municipal Building, Court House square, Long Island City, Borough of Queens, between the hours of 9 a. m. and 2 p. m., and on Saturdays from 9 a. m. to 12 m., and all payments made thereon on or before January 30, 1915, will be exempt from interest, as above provided, and after that date will be subject to a charge of interest at the rate of seven per centum per annum from the date when such assessment became a lien to the date of payment.

WILLIAM A. PRENDERGAST, Comptroller.
City of New York, Department of Finance, Comptroller's Office, December 1, 1914. d7,17

NOTICE OF ASSESSMENTS FOR STREET AND PARK OPENINGS.

IN PURSUANCE OF SECTION 1005 OF THE Greater New York Charter, the Comptroller of the City of New York hereby gives public notice of the confirmation by the Supreme Court and the entering in the Bureau for the Collection of Assessments and Arrears of the assessment for OPENING AND ACQUIRING TITLE to the following named avenue in the BOROUGH OF BROOKLYN:

TWENTY-SIXTH WARD, SECTION 13.
SHEPHERD AVENUE—OPENING, between Fulton Street and Atlantic Avenue. Confirmed November 11th, 1914. Entered November 30th, 1914. Area of assessment includes all those lands, tenements and hereditaments and premises situate and being in the Borough of Brooklyn in the City of New York, which, taken together, are bounded and described as follows, viz.:

Bounded on the north by a line distant 100 feet northerly from and parallel with the northerly line of Fulton street, the said distance being measured at right angles to Fulton Street; on the east by a line midway between Shepherd avenue and Dresden street; on the south by the northerly line of Atlantic avenue, and on the west by a line midway between Shepherd avenue and Essex street.

The above entitled assessment was entered on the day herebefore given in the Record of Titles of Assessments, kept in the Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents, and unless the amount assessed for benefit on any person or property shall be paid within sixty days after the date of said entry of the assessments, interest will be collected thereon, as provided by section 1006 of the Greater New York Charter.

Said section provides, in part, "If any such assessment shall remain unpaid for the period of sixty days after the date of entry thereof in the said Record of Titles of Assessments, it shall be the duty of the officer authorized to collect and receive the amount of such assessment, to charge, collect and receive interest thereon at the rate of seven per centum per annum, to be calculated to the date of payment, from the date when such assessment became a lien, as provided by section 159 of this act."

Section 159 of this act provides: "An assessment shall become a lien upon the real estate affected thereby ten days after its entry in the said record."

The above assessments are payable to the Collector of Assessments and Arrears at the Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents, in the Officer Building, 503 Fulton Street, Borough of Brooklyn, between the hours of 9 a. m. and 2 p. m., and on Saturdays from 9 a. m. to 12 m., and all payments made thereon on or before January 29, 1915, will be exempt from interest as above provided, and after that date will be subject to a charge of interest at the rate of seven per centum per annum from the date when such assessments became liens to the date of payment.

WILLIAM A. PRENDERGAST, Comptroller.
City of New York, Department of Finance, Comptroller's Office, November 30, 1914. d5,16

NOTICE OF ASSESSMENTS FOR OPENING STREETS AND PARKS.

IN PURSUANCE OF SECTION 1005 OF THE Greater New York Charter, the Comptroller of the City of New York hereby gives public notice of the confirmation by the Supreme Court and the entering in the Bureau for the Collection of Assessments and Arrears of the assessment for OPENING AND ACQUIRING TITLE to the following named Street and Avenue in the Borough of Brooklyn:

TWENTY-SIXTH AND THIRTY-SECOND WARDS, SECTION 12.
THATFORD AVENUE—OPENING, from Riverdale Avenue to Stanley Avenue, and OSBORNE STREET—OPENING, from Riverdale Avenue to Vienna Avenue. Confirmed October 14, 1914; entered November 25, 1914. Area of Assessment includes all those lands, tenements and hereditaments and premises situate and being in the Borough of Brooklyn, in the City of New York, which, taken together, are bounded and described as follows, viz.:

BEGINNING at a point on a line midway between Rockaway avenue and Thatford avenue, distant 100 feet northerly from the northerly line of Riverdale avenue, and running thence eastwardly and parallel with Riverdale avenue

to the intersection with a line midway between Osborne street and Watkins street; thence southwardly along the said line midway between Osborne street and Watkins street to a point distant 100 feet southwardly from the southerly line of Vienna avenue; thence westwardly and parallel with Vienna avenue to the intersection with a line midway between Thatford avenue and Osborne street; thence southwardly along the said line midway between Thatford avenue and Osborne street to a point distant 100 feet southwardly from the southerly line of Stanley avenue; thence westwardly and parallel with Stanley avenue to the intersection with a line midway between Rockaway avenue and Thatford avenue; thence northwardly along the said line midway between Rockaway avenue and Thatford avenue to the point or place of BEGINNING.

THIRTY AND THIRTY-FIRST WARDS, SECTIONS 19, 20, 21.

EIGHTY-FIRST STREET—OPENING, from Fourteenth avenue to Stillwell avenue, excepting the lands occupied by the tracks of the Brooklyn, Bath and West End Railroad. Confirmed August 7, 1914; entered November 25, 1914. Area of Assessment includes all those lands, tenements and hereditaments and premises situate and being in the Borough of Brooklyn, in the City of New York, which, taken together, are bounded and described as follows, viz.: BEGINNING at a point on a line midway between Eightieth street and Eighty-first street, distant 100 feet northwesterly from the northwesterly line of Fourteenth avenue, and running thence south-easterly along the said line midway between Eightieth street and Eighty-first street to the intersection with the westerly line of Stillwell avenue; thence eastwardly at right angles to Stillwell avenue a distance of 200 feet; thence southwardly and parallel with Stillwell avenue to the intersection with a line at right angles to Stillwell avenue, and passing through a point on its easterly side where it is intersected by the prolongation of a line midway between Eighty-first street and Eighty-second street; thence westwardly along the said line at right angles to Stillwell avenue to its easterly side; thence northwesterly along the said line to the intersection with a line parallel with Fourteenth avenue, and passing through the point of beginning; thence northeastwardly and parallel with Fourteenth avenue to the point or place of BEGINNING.

That the same were entered on the date herebefore given in the Record of Titles of Assessments, kept in the Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents, and unless the amount assessed for benefit on any person or property shall be paid within sixty days after the date of said entry of the assessments, interest will be collected thereon, as provided by section 1019 of the Greater New York Charter.

Said section provides, in part, "If any such assessment shall remain unpaid for the period of sixty days after the date of entry thereof in the said Record of Titles of Assessments, it shall be the duty of the officer authorized to collect and receive the amount of such assessment, to charge, collect and receive interest thereon at the rate of seven per centum per annum, to be calculated to the date of payment, from the date when such assessment became a lien, as provided by section 159 of this act."

Section 159 of this act provides: "An assessment shall become a lien upon the real estate affected thereby ten days after its entry in the said record."

The above assessments are payable to the Collector of Assessments and Arrears at the Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents, in the Offerman Building, 503 Fulton Street, Borough of Brooklyn, between the hours of 9 a. m. and 2 p. m., and on Saturdays from 9 a. m. to 12 m., and all payments made thereon on or before January 25, 1915, will be exempt from interest as above provided, and after that date will be subject to a charge of interest at the rate of seven per centum per annum from the date when such assessments became liens to the date of payment.

WILLIAM A. PRENDERGAST, Comptroller, City of New York, Department of Finance, Comptroller's Office, November 25, 1914. n30,d10

NOTICE TO PROPERTY OWNERS.

IN PURSUANCE OF SECTION 1018 OF THE Greater New York Charter the Comptroller of the City of New York hereby gives public notice to all persons, owners of property, affected by the following assessments for **LOCAL IMPROVEMENTS** in the Borough of Queens:

WILLOW STREET—PAVING, from Main street to Hoyt avenue. Area of assessment: Both sides of Willow street from Franklin street to Main street and to the extent of half the block at the intersecting streets.

That the same were confirmed by the Board of Assessors on November 24, 1914, and entered November 24, 1914, in the Record of Titles of Assessments, kept in the Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents, in the Offerman Building, No. 503 Fulton Street, Borough of Brooklyn, between the hours of 9 a. m. and 2 p. m., and on Saturdays from 9 a. m. to 12 m., and all payments made thereon on or before January 25, 1915, will be exempt from interest, as above provided, and after that date will be subject to a charge of interest at the rate of seven per centum per annum from the date when such assessments became a lien, as provided by section 1019 of the Greater New York Charter.

Said section provides, in part, "If any such assessment shall remain unpaid for the period of sixty days after the date of entry thereof in the said Record of Titles of Assessments, it shall be the duty of the officer authorized to collect and receive the amount of such assessment, to charge, collect and receive interest thereon at the rate of seven per centum per annum, to be calculated to the date of payment, from the date when such assessment became a lien, as provided by section 159 of this act."

Section 159 of this act provides: "An assessment shall become a lien upon the real estate affected thereby ten days after its entry in the said record."

The above assessment is payable to the Collector of Assessments and Arrears at the Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents, in the Municipal Building, Court House Square, Long Island City, Borough of Queens, between the hours of 9 a. m. and 2 p. m., and on Saturdays from 9 a. m. to 12 m., and all payments made thereon on or before January 25, 1915, will be exempt from interest, as above provided, and after that date will be subject to a charge of interest at the rate of seven per centum per annum from the date when such assessment became a lien to the date of payment.

WM. A. PRENDERGAST, Comptroller, City of New York, Department of Finance, Comptroller's Office, November 24, 1914. n30,d10

NOTICE TO PROPERTY OWNERS.

IN PURSUANCE OF SECTION 1018 OF THE Greater New York Charter the Comptroller of the City of New York hereby gives public notice to all persons, owners of property, affected by the following assessments for **LOCAL IMPROVEMENTS** in the **BOROUGH OF BROOKLYN**:

TWENTY-SIXTH WARD, SECTION 12.

SEWER in TAPSCOTT STREET, east roadway, from Blake avenue southerly about 200 feet; **SEWER in HOWARD AVENUE**, west roadway, from Blake avenue northerly about 220 feet; **SEWER BASINS on TAPSCOTT STREET**, northeast corner of Dumont avenue and northerly and easterly corners of East Ninety-eighth street, and **EXTENSIONS** of the house connection drains in HOWARD AVENUE from Sutter avenue to Blake avenue, and in TAPSCOTT STREET from Blake avenue to East Ninety-eighth street. Area of assessment affects adjacent property, including Blocks Nos. 3533, 3534, 3550 and 3565.

ROCKAWAY AVENUE—PAVING, between Riverdale and Lott avenues. Area of assessment: Both sides of Rockaway avenue from Riverdale to Lott avenues, and to the extent of half the block at the intersecting avenues.

THIRTY-NINTH WARD, SECTION 16.
THIRD STREET—PAVING, from Eighteenth avenue to Foster avenue. Area of assessment: Both sides of Third street from Eighteenth to Foster avenues, and to the extent of half the block at the intersecting avenues.

SEWER in CATON AVENUE between Ocean Parkway and East Fifth street, and **OUTLET in ALBEMARLE ROAD** between Ocean Park way and East Fifth street. Area of assessment affects property in the adjacent blocks, Nos. 5284, 5285, 5286, 5287, 5319, 5320, 5321, 5322, 5328, 5329 and 5338.

FORTY-FIRST STREET—PAVING between Fourteenth and Fifteenth avenues. Area of assessment: Both sides of Forty-first street from Fourteenth to Fifteenth avenues, and to the extent of half the block at the intersecting avenues.

THIRTIETH WARD, SECTION 17.
SIXTY-THIRD STREET—PAVING AND CURBING, between Twentieth and Twenty-first avenues. Area of assessment: Both sides of Sixty-third street from Twentieth to Twenty-first avenues, and to the extent of half the block at the intersecting avenues.

THIRTIETH WARD, SECTION 19.
SEWER in SEVENTY-FIRST STREET, between Fifteenth and New Utrecht avenues, and in **NEW UTRECHT AVENUE**, west side, between Seventieth and Seventy-second streets. Area of assessment affects property in Blocks Nos. 6169 and 6180.

SEWERS in SEVENTEENTH AVENUE from Eightieth street to Eighty-second street and from Eighty-third to Eighty-fourth streets; in **EIGHTIETH STREET** between Sixteenth and Seventeenth avenues; and in **EIGHTY-FIRST STREET** between Fifteenth and Seventeenth avenues. Area of assessment affects property in Blocks Nos. 6281, 6282, 6283, 6293, 6294, 6295, 6312 and 6313.

SEVENTEENTH AVENUE—REGULATING, GRADING, CURBING AND FLAGGING, between Seventy-ninth street and Eighty-fourth street. Area of assessment: Both sides of Seventeenth avenue from Seventy-ninth to Eighty-fourth streets and to the extent of half the block at the intersecting streets.

THIRTY-FIRST WARD, SECTION 21.
WEST TWENTY-EIGHTH STREET—PAVING, between Surf and Mermaid avenues. Area of assessment: Both sides of West Twenty-eighth street from Surf to Mermaid avenues, and to the extent of half the block at the intersecting avenues.

THIRTY-SECOND WARD, SECTION 23.
HUBBARD PLACE—SEWER BASINS at the west and south corners of East Fortieth street. Area of assessment affects property in Blocks Nos. 7809 and 7811.

That the same were confirmed by the Board of Assessors on November 24, 1914, and entered on November 24, 1914, in the Record of Titles of Assessments, kept in the Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents, in the Offerman Building, No. 503 Fulton Street, Borough of Brooklyn, between the hours of 9 a. m. and 2 p. m., and on Saturdays from 9 a. m. to 12 m., and all payments made thereon on or before January 25, 1915, will be exempt from interest, as above provided, and after that date will be subject to a charge of interest at the rate of seven per centum per annum from the date when such assessments became a lien, as provided by section 159 of this act.

Section 159 of this act provides: "An assessment shall become a lien upon the real estate affected thereby ten days after its entry in the said record."

The above assessments are payable to the Collector of Assessments and Arrears at the Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents, in the Offerman Building, No. 503 Fulton Street, Borough of Brooklyn, between the hours of 9 a. m. and 2 p. m., and on Saturdays from 9 a. m. to 12 m., and all payments made thereon on or before January 25, 1915, will be exempt from interest, as above provided, and after that date will be subject to a charge of interest at the rate of seven per centum per annum from the date when such assessments became a lien to the date of payment.

WILLIAM A. PRENDERGAST, Comptroller, City of New York, Department of Finance, Comptroller's Office, November 24, 1914. n30,d10

Corporation Sales of Buildings.

CORPORATION SALE OF BUILDINGS AND APPURTENANCES THERETO ON CITY REAL ESTATE BY SEALED BIDS.

AT THE REQUEST OF THE PRESIDENT of the Borough of Brooklyn, public notice is hereby given that the Commissioners of the Sinking Fund, by virtue of the powers vested in them by law, will offer for sale by sealed bids certain buildings, etc., standing upon property owned by The City of New York, formerly used for Municipal purposes in the

Borough of Brooklyn.

BEING the Municipal Building and appurtenances thereto in the Borough of Brooklyn, which is more particularly described on a certain map on file in the office of the Collector of City Revenue, Department of Finance, Room 368, Municipal Building, Borough of Manhattan.

PURSUANT to a resolution of the Commissioners of the Sinking Fund, adopted at a meeting held June 10, 1914, the sale by sealed bids of the above described buildings and appurtenances thereto will be held by direction of the Comptroller on

FRIDAY, DECEMBER 18, 1914,

at 11.00 A. M., in lots and parcels and in manner and form as follows:

PARCEL NO. 1. The Municipal Building and appurtenances thereto, excepting boilers Nos. 1 and No. 2, in the Borough of Brooklyn.

The boilers Nos. 1 and No. 2 are to be protected by the purchaser of the building during its demolition by heavy planking in such a manner as to preserve them from injury of any kind and said planking is to be removed when the building has been completely raised.

The purchaser will be required to place a heavy covered way over the alley-way in the rear of the building to allow free access for horses and wagons to the adjoining lot. He will also be required to build a heavily constructed covered way in front of the building for the protection of the public and to remove all materials by means of skates.

When the work of removal is completed the purchaser of the building will be required to erect a closed wooden fence 6 feet high surrounding the lot, front, rear and sides, and to paint the outer side of said fence with at least two coats of white paint.

Sealed bids (blank forms of which may be obtained upon application) will be received by the Comptroller at the office of the Collector of City Revenue, Room 368, Municipal Building, Borough of Manhattan, until 11.00 a. m. on the 18th day of Dec., 1914, and then publicly opened for the sale for removal of the above-described buildings and appurtenances thereto, and the award will be made to the highest bidder within twenty-four hours, or as soon as possible thereafter.

Each parcel must be bid for separately and will be sold in its entirety, as described in above advertisement.

Each and every bid must be accompanied by a deposit of cash or certified check in a sum equal to 25 per cent. of the amount of the bid, except that a minimum deposit of \$50 will be required with all bids, and that a deposit of \$500 will be sufficient to entitle bidders to bid on any or all of the buildings.

Deposits of unsuccessful bidders will be returned within twenty-four hours after successful bidders have paid purchase price in full and given security, and those of successful bidders may be forfeited to The City of New York by the Comptroller upon the failure of the successful bidder to further comply with the requirements of the terms and conditions of the sale as set forth hereinafter.

Successful bidders will be required to pay the purchase money and deposit the required security within twenty-four hours of the receipt of notification of the acceptance of their bids.

The Comptroller reserves the right to reject any and all bids and to waive any defects or informalities in any bid should it be deemed in the interest of The City of New York to do so.

All bids must state clearly (1) the number or description of the building or buildings bid for, (2) the amount of the bid, (3) the full name and address of the bidder.

All bids must be enclosed in properly sealed envelopes, marked "Proposals to be opened December 18, 1914," and must be delivered, or mailed in time for their delivery, prior to 11 a. m. of that date to the "Collector of City Revenue, Room 368, Municipal Building, New York City," from whom any further particulars regarding the buildings to be disposed of may be obtained.

THE BUILDINGS WILL BE SOLD FOR IMMEDIATE REMOVAL ONLY, SUBJECT TO THE TERMS AND CONDITIONS PRINTED ON THE LAST PAGE OF THIS ISSUE OF THE "CITY RECORD."

WM. A. PRENDERGAST, Comptroller, City of New York, Department of Finance, Comptroller's Office, November 30, 1914. d2,18

Interest on City Bonds and Stock.

THE INTEREST DUE JANUARY 1, 1915, ON registered bonds and stock of The City of New York, and of former corporations now included therein, will be paid on January 2, 1915, by the Comptroller at his office (Room 853) in the Municipal Building, Centre and Chambers sts., in the Borough of Manhattan.

The interest due January 1, 1915, on the coupon bonds of the late City of Brooklyn will be paid on January 2, 1915, by the Nassau National Bank of Brooklyn, 26 Court st., in the Borough of Brooklyn.

The interest due on January 1, 1915, on coupon bonds of former corporations now included in The City of New York, except the late City of Brooklyn and the former County of Queens, will be paid on January 2, 1915, at the office of the Guaranty Trust Co. of New York, 140 Broadway, Borough of Manhattan.

The coupons that are payable on January 1, 1914, for interest on bonds issued by the former County of Queens will be paid on January 2, 1915, at the Queens County Bank, Branch of the Corn Exchange Bank, Borden ave. and Front st., Long Island City.

The books for the transfer of bonds and stock on which interest is due on January 1, 1915, will be closed from December 15, 1914, to January 2, 1915.

WM. A. PRENDERGAST, Comptroller, City of New York, Department of Finance, Comptroller's Office, December 2, 1914. d4,j1

Sales of Tax Liens.

NOTICE OF CONTINUANCE OF BROOKLYN TAX SALE.

THE SALE OF THE LIENS FOR UNPAID taxes, assessments and water rents for the Borough of Brooklyn as to liens remaining unsold at the termination of the sale of July 15th, September 9th, October 7th and November 4th and December 2, 1914, has been continued to

Wednesday, January 13, 1915,

at 2:30 p. m., pursuant to Section 1028 of the Greater New York Charter, and will be continued at that time in Room 2, in basement of the Borough Hall, Brooklyn, N. Y.

Dated, December 2, 1914.
DANIEL MOYNAHAN, Collector of Assessments and Arrears. d8,j13

NOTICE OF CONTINUATION OF BROOKLYN TAX SALE.

Sections 1 to 13, inclusive.

THE SALE OF THE LIENS FOR UNPAID taxes, assessments and water rents for the Borough of Brooklyn as to liens remaining unsold at the termination of the sale of October 15th, November 5th, December 3rd, 1913, and January 7th, February 11th, March 18th, April 22nd, May 27th, June 24th, July 15th, September 9th, October 7th, November 4th and December 2nd, 1914, has been continued to

Wednesday, January 13, 1915,

at 2:30 p. m., pursuant to Section 1028 of the Greater New York Charter, and will be continued at that time in Room 2, in basement of the Borough Hall, Brooklyn, N. Y.

Dated, December 2, 1914.
DANIEL MOYNAHAN, Collector of Assessments and Arrears. d8,j13

NOTICE OF CONTINUATION OF THE QUEENS TAX SALE.

THE SALE OF THE LIENS FOR UNPAID taxes, assessments and water rents for the Borough of Queens, as to liens remaining unsold at the termination of the sale of October 27th, 1914, has been continued to

TUESDAY, DECEMBER 8, 1914,

at 10 o'clock A. M., pursuant to section 1028 of the Greater New York Charter, and will be continued at that time on the third floor of the Municipal Building, Court House Square, Long

Island City, Borough of Queens, City of New York.

Dated October 27th, 1914.
DANIEL MOYNAHAN, Collector of Assessments and Arrears. o29,d8

BOROUGH OF MANHATTAN.

Proposals.

OFFICE OF THE PRESIDENT OF THE BOROUGH OF MANHATTAN, MUNICIPAL BUILDING, THE CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the President of the Borough of Manhattan at the offices, Commissioner of Public Works, Room 2034, Municipal Building, until 2 o'clock p. m., on

THURSDAY, DECEMBER 17, 1914.
NO. 1. FURNISHING AND DELIVERING ELEVEN (11) TRAILERS.

The time allowed for the complete delivery of eleven trailers will be sixty (60) consecutive calendar days.

The amount of security required for the performance of the contract shall be thirty (30) per cent. of the total amount for which the contract is awarded. The deposit required shall be in an amount of not less than one and one-half (1½) per cent. of the total amount of the bid.

The bidder will state the price of each item or article contained in the specifications or schedules herein contained or hereto annexed, per foot, yard or other unit of measure or articles, by which the bids will be tested. The extensions must be made and footed up.

Blank forms and specifications may be had at the office of the Commissioner of Public Works, Bureau of Highways, Room 2124, Municipal Building, Borough of Manhattan.

MARCUS M. MARKS, President. d7,17

Dec. 7th, 1914.
See General Instructions to Bidders on last page, last column, of the "City Record."

OFFICE OF THE PRESIDENT OF THE BOROUGH OF MANHATTAN, MUNICIPAL BUILDING, THE CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the President of the Borough of Manhattan at the offices, Commissioner of Public Works, Room 2034, Municipal Building, until 2 o'clock p. m., on

MONDAY, DECEMBER 14, 1914.
NO. 1. FURNISHING AND DELIVERING SIX (6) MOTOR TRACTORS.

The time allowed for the delivery of six motor tractors will be thirty (30) consecutive calendar days.

The amount of security required for the performance of the contract shall be thirty (30) per cent. of the total amount for which the contract is awarded. The deposit required shall be in an amount of not less than one and one-half (1½) per cent. of the total amount of the bid.

The bidder will state the price of each item or article contained in the specifications or schedules herein contained or hereto annexed, per foot, yard or other unit of measure or articles, by which the bids will be tested. The extensions must be made and footed up.

Blank forms and specifications may be had at the office of the Commissioner of Public Works, Bureau of Highways, Room 2124, Municipal Building, Borough of Manhattan.

MARCUS M. MARKS, President. d3,14

Dec. 3d, 1914.
See General Instructions to Bidders on last page, last column, of the "City Record."

OFFICE OF THE PRESIDENT OF THE BOROUGH OF MANHATTAN, MUNICIPAL BUILDING, THE CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the President of the Borough of Manhattan at the offices, Commissioner of Public Works, Room 2034, Municipal Building, until 2 o'clock p. m., on

MONDAY, DECEMBER 14, 1914.
NO. 1. FURNISHING AND DELIVERING NINE (9) TRAILERS.

The time allowed for the complete delivery of nine trailers will be forty-five (45) consecutive calendar days.

The amount of security required for the performance of the contract shall be thirty (30) per cent. of the total amount for which the contract is awarded. The deposit required shall be in an amount of not less than one and one-half (1½) per cent. of the total amount of the bid.

The bidder will state the price of each item or article contained in the specifications or schedules herein contained or hereto annexed, per foot, yard or other unit of measure or articles, by which the bids will be tested. The extensions must be made and footed up.

Blank forms and specifications may be had at the office of the Commissioner of Public Works, Bureau of Highways, Room 2124, Municipal Building, Borough of Manhattan.

MARCUS M. MARKS, President. d3,14

Dec. 1st, 1914.
See General Instructions to Bidders on last page, last column, of the "City Record."

BOARD OF ESTIMATE AND APPORTIONMENT.

Notices of Public Hearings.

PUBLIC IMPROVEMENT MATTERS.

NOTICE IS HEREBY GIVEN THAT AT THE meeting of the Board of Estimate and Apportionment held on December 4, 1914, the Board continued until December 11, 1914, the hearing in the matter of changing the map or plan of The City of New York by changing the lines and grades of Maine Avenue from DuBois Avenue to Manor Road, and of Greenleaf Avenue from Maine Avenue to College Avenue, in the Borough of Richmond, City of New York, which proposed change is more particularly shown upon a map or plan bearing the signature of the President of the Borough, and dated May 29, 1914.

The hearing will be held in Room 16, City Hall, Borough of Manhattan, City of New York, on Friday, December 11, 1914, at 10:30 o'clock a. m.

Dated December 7, 1914.
JOSEPH HAAG, Secretary, Municipal Building. Telephone, 4560 Worth. d7,11

NOTICE IS HEREBY GIVEN THAT AT THE meeting of the Board of Estimate and Apportionment held on December 4, 1914, the Board continued until December 18, 1914, the hearing in the matter of changing the map or plan of The City of New York by changing the grades of the street system within the territory bounded by Glenwood Road, East 98th Street, Flatlands Avenue and Remsen Avenue; by establishing the lines and grades of Conklin Avenue from Rockaway Parkway to East 100th Street; and by changing the lines of Rockaway Parkway between Flatlands Avenue and Glenwood Road, in the Borough of Brooklyn, City of New York, which proposed change is more particularly shown upon a map or plan bearing the signature of the Commissioner of Public Works of the Borough, and dated April 23, 1914.

The hearing will be held in Room 16, City

Hall, Borough of Manhattan, City of New York, on Friday, December 18, 1914, at 10:30 o'clock a. m.

Dated December 7, 1914.
JOSEPH HAAG, Secretary, Municipal Building. Telephone, 4560 Worth. d5,18

NOTICE IS HEREBY GIVEN THAT THE Board of Estimate and Apportionment of The City of New York, deeming it for the public interest so to do, proposes to change the map or plan of The City of New York so as to change the grades of the street system within the territory bounded by Randall Avenue, Revere Avenue, Eastern Boulevard and Edison Avenue, Borough of The Bronx, and that a meeting of said Board will be held in the Old Council Chamber, City Hall, Borough of Manhattan, City of New York, on December 18, 1914, at 10:30 o'clock A. M., at which such proposed change will be considered by said Board; all of which is more particularly set forth and described in the following resolutions adopted by the Board on November 20, 1914, notice of the adoption of which is hereby given, viz.:

Resolved, That the Board of Estimate and Apportionment of The City of New York, in pursuance of the provisions of Section 442 of the Greater New York Charter as amended, deeming it for the public interest so to do, proposes to change the map or plan of The City of New York by changing the grades of the street system within the territory bounded by Randall Avenue, Revere Avenue, Eastern Boulevard and Edison Avenue, in the Borough of The Bronx, City of New York, which proposed change is more particularly shown upon a map or plan bearing the signature of the President of the Borough, and dated February 10, 1914.

Resolved, That this Board consider the proposed change at a meeting of the Board, to be held in the City Hall, Borough of Manhattan, City of New York, on the 18th day of December, 1914, at 10:30 o'clock A. M.

Resolved, That the Secretary of this Board cause these resolutions, and a notice to all persons affected thereby that the proposed change will be considered at a meeting of the Board to be held at the aforesaid time and place, to be published in the City Record for ten days continuously, Sundays and legal holidays excepted, prior to the 18th day of December, 1914.

Dated December 5, 1914.
JOSEPH HAAG, Secretary, Municipal Building. Telephone, 4560 Worth. d5,16

NOTICE IS HEREBY GIVEN THAT THE Board of Estimate and Apportionment of The City of New York, deeming it for the public interest so to do, proposes to change the map or plan of The City of New York so as to change the lines of Rhineland Avenue between White Plains Road and Matthews Avenue; to discontinue Sagamore Street between Hunt Avenue and Bear Swamp Road; and to adjust the grades of the intersecting streets affected thereby, Borough of The Bronx, and that a meeting of said Board will be held in the Old Council Chamber, City Hall, Borough of Manhattan, City of New York, on December 18, 1914, at 10:30 o'clock A. M., at which such proposed change will be considered by said Board; all of which is more particularly set forth and described in the following resolutions adopted by the Board on November 20, 1914, notice of the adoption of which is hereby given, viz.:

Resolved, That the Board of Estimate and Apportionment of The City of New York, in pursuance of the provisions of Section 442 of the Greater New York Charter as amended, deeming it for the public interest so to do, proposes to change the map or plan of The City of New York by changing the lines of Rhineland Avenue between White Plains Road and Matthews Avenue; by discontinuing Sagamore Street between Hunt Avenue and Bear Swamp Road; and by adjusting the grades of the intersecting streets affected thereby in the Borough of The Bronx, City of New York, which proposed change is more particularly shown upon a map or plan bearing the signature of the President of the Borough, and dated October 31, 1914.

Resolved, That this Board consider the proposed change at a meeting of the Board, to be held in the City Hall, Borough of Manhattan, City of New York, on the 18th day of December, 1914, at 10:30 o'clock A. M.

Resolved, That the Secretary of this Board cause these resolutions, and a notice to all persons affected thereby that the proposed change will be considered at a meeting of the Board to be held at the aforesaid time and place, to be published in the City Record for ten days continuously, Sundays and legal holidays excepted, prior to the 18th day of December, 1914.

Dated December 5, 1914.

JOSEPH HAAG, Secretary, Municipal Building. Telephone, 4560 Worth. d5,16

NOTICE IS HEREBY GIVEN THAT THE Board of Estimate and Apportionment of The City of New York, deeming it for the public interest so to do, proposes to change the map or plan of The City of New York so as to change the grades of Southern Boulevard between Willis Avenue and Brown Place, between St. Ann's Avenue and East 138th Street and of the intersecting streets affected thereby, Borough of The Bronx, and that a meeting of said Board will be held in the Old Council Chamber, City Hall, Borough of Manhattan, City of New York, on December 18, 1914, at 10:30 o'clock A. M., at which such proposed change will be considered by said Board; all of which is more particularly set forth and described in the following resolutions adopted by the Board on November 20, 1914, notice of the adoption of which is hereby given, viz.:

Resolved, That the Board of Estimate and Apportionment of The City of New York, in pursuance of the provisions of Section 442 of the Greater New York Charter as amended, deeming it for the public interest so to do, proposes to change the map or plan of The City of New York by changing the grades of Southern Boulevard between Willis Avenue and Brown Place, between St. Ann's Avenue and East 138th Street and of the intersecting streets affected thereby in the Borough of The Bronx, City of New York, which proposed change is more particularly shown upon a map or plan bearing the signature of the Secretary of the Board of Estimate and Apportionment and dated July 17, 1913.

Resolved, That this Board consider the proposed change at a meeting of the Board, to be held in the City Hall, Borough of Manhattan, City of New York, on the 18th day of December, 1914, at 10:30 o'clock A. M.

Resolved, That the Secretary of this Board cause these resolutions, and a notice to all persons affected thereby that the proposed change will be considered at a meeting of the Board to be held at the aforesaid time and place, to be published in the City Record for ten days continuously, Sundays and legal holidays excepted, prior to the 18th day of December, 1914.

Dated December 5, 1914.
JOSEPH HAAG, Secretary, Municipal Building. Telephone, 4560 Worth. d5,16

NOTICE IS HEREBY GIVEN THAT THE Board of Estimate and Apportionment of The City of New York, deeming it for the public interest so to do, proposes to change the map or plan of The City of New York so as to change the lines of the street system within the territory bounded approximately by the Borough Line, the Evergreen Branch of the Long Island

Railroad and the Manhattan Beach Division of the Long Island Railroad (amendment to Section 31 of the Final Maps), Borough of Queens, and that a meeting of said Board will be held in the Old Council Chamber, City Hall, Borough of Manhattan, City of New York, on December 18, 1914, at 10:30 o'clock A. M., at which such proposed change will be considered by said Board; all of which is more particularly set forth and described in the following resolutions adopted by the Board on November 20, 1914, notice of the adoption of which is hereby given, viz.:

Resolved, That the Board of Estimate and Apportionment of The City of New York, in pursuance of the provisions of Section 442 of the Greater New York Charter as amended, deeming it for the public interest so to do, proposes to change the map or plan of The City of New York by changing the lines of the street system within the territory bounded approximately by the Borough Line, the Evergreen Branch of the Long Island Railroad and the Manhattan Beach Division of the Long Island Railroad (amendment to Section 31 of the Final Maps), in the Borough of Queens, City of New York, which proposed change is more particularly shown upon a map or plan bearing the signature of the President of the Borough, and dated February 10, 1914.

Resolved, That this Board consider the proposed change at a meeting of the Board, to be held in the City Hall, Borough of Manhattan, City of New York, on the 18th day of December, 1914, at 10:30 o'clock A. M.

Resolved, That the Secretary of this Board cause these resolutions, and a notice to all persons affected thereby that the proposed change will be considered at a meeting of the Board to be held at the aforesaid time and place, to be published in the City Record for ten days continuously, Sundays and legal holidays excepted, prior to the 18th day of December, 1914.

Dated December 5, 1914.
JOSEPH HAAG, Secretary, Municipal Building. Telephone, 4560 Worth. d5,16

NOTICE IS HEREBY GIVEN THAT THE Board of Estimate and Apportionment of The City of New York, deeming it for the public interest so to do, proposes to change the map or plan of The City of New York so as to change the grades of Ziegler Avenue between State Street and Jackson Avenue, Borough of Queens, and that a meeting of said Board will be held in the Old Council Chamber, City Hall, Borough of Manhattan, City of New York, on December 18, 1914, at 10:30 o'clock A. M., at which such proposed change will be considered by said Board; all of which is more particularly set forth and described in the following resolutions adopted by the Board on November 20, 1914, notice of the adoption of which is hereby given, viz.:

Resolved, That the Board of Estimate and Apportionment of The City of New York, in pursuance of the provisions of Section 442 of the Greater New York Charter as amended, deeming it for the public interest so to do, proposes to change the map or plan of The City of New York by changing the grades of Ziegler Avenue between State Street and Jackson Avenue, in the Borough of Queens, City of New York, which proposed change is more particularly shown upon a map or plan bearing the signature of the President of the Borough, and dated April 9th, 1913.

Resolved, That this Board consider the proposed change at a meeting of the Board, to be held in the City Hall, Borough of Manhattan, City of New York, on the 18th day of December, 1914, at 10:30 o'clock A. M.

Resolved, That the Secretary of this Board cause these resolutions, and a notice to all persons affected thereby that the proposed change will be considered at a meeting of the Board to be held at the aforesaid time and place, to be published in the City Record for ten days continuously, Sundays and legal holidays excepted, prior to the 18th day of December, 1914.

Dated December 5, 1914.
JOSEPH HAAG, Secretary, Municipal Building. Telephone, 4560 Worth. d5,16

NOTICE IS HEREBY GIVEN THAT THE Board of Estimate and Apportionment of The City of New York, deeming it for the public interest so to do, proposes to change the map or plan of The City of New York so as to establish the lines and grades of the street system within the territory designated as Section 115 of the Final Maps, Borough of Queens, and that a meeting of said Board will be held in the Old Council Chamber, City Hall, Borough of Manhattan, City of New York, on December 18, 1914, at 10:30 o'clock A. M., at which such proposed change will be considered by said Board; all of which is more particularly set forth and described in the following resolutions adopted by the Board on November 20, 1914, notice of the adoption of which is hereby given, viz.:

Resolved, That the Board of Estimate and Apportionment of The City of New York, in pursuance of the provisions of Section 442 of the Greater New York Charter as amended, deeming it for the public interest so to do, proposes to change the map or plan of The City of New York by establishing the lines and grades of the street system within the territory designated as Section 115 of the final maps, bounded approximately by North Conduit Avenue, Boyd Avenue, Stanley Avenue, Oswego Street, Workman Avenue, Niagara Street, Corbin Avenue, Kennebec Street, Fairfield Avenue, Iroquois Street, Vandalia Avenue, Sapphire Street, Fairfield Avenue and the Borough Line, in the Borough of Queens, City of New York, which proposed change is more particularly shown upon a map or plan bearing the signature of the President of the Borough, and dated April 30, 1914.

Resolved, That this Board consider the proposed change at a meeting of the Board, to be held in the City Hall, Borough of Manhattan, City of New York, on the 18th day of December, 1914, at 10:30 o'clock A. M.

Resolved, That the Secretary of this Board cause these resolutions, and a notice to all persons affected thereby that the proposed change will be considered at a meeting of the Board to be held at the aforesaid time and place, to be published in the City Record for ten days continuously, Sundays and legal holidays excepted, prior to the 18th day of December, 1914.

Dated December 5, 1914.
JOSEPH HAAG, Secretary, Municipal Building. Telephone, 4560 Worth. d5,16

NOTICE IS HEREBY GIVEN THAT AT THE meeting of the Board of Estimate and Apportionment held on November 20, 1914, the following resolutions were adopted:

Whereas, the Board of Estimate and Apportionment of The City of New York is considering the advisability of amending the proceeding authorized under resolutions adopted by said Board on December 30, 1909, and December 15, 1910, for acquiring title to Union Street from New York Avenue to Rochester Avenue, and from Ralph Avenue to East New York Avenue, Borough of Brooklyn, so as to relate to Union Street from New York Avenue to Kingston Avenue; from Albany Avenue to Rochester Avenue, and from Ralph Avenue to East New York Avenue; and to the northerly half of the street from Albany Avenue to a point distant 100 feet westerly therefrom.

Resolved, That the Board of Estimate and Apportionment, in pursuance of the provisions of the Greater New York Charter as amended

hereby gives notice that the following are the proposed areas of assessment for benefit in this proposed amended proceeding:

1. Bounded on the north by a line always midway between Union Street and Eastern Parkway and by the prolongation of the said line; on the east by a line distant 100 feet easterly from and parallel with the easterly line of Rochester Avenue, the said distance being measured at right angles to Rochester Avenue; on the south by a line always midway between Union Street and President Street and by the prolongation of the said line; and on the west by the easterly line of New York Avenue.

2. Beginning at a point on the northwesterly line of East New York Avenue where it is intersected by the prolongation of a line distant 100 feet northerly from and parallel with the northerly line of Union Street, the said distance being measured at right angles to Union Street, and running thence southwesterly along a line parallel with Tapscott Street to a point distant 100 feet southeasterly from the southeasterly line of East New York Avenue, the said distance being measured at right angles to East New York Avenue; thence southwesterly and parallel with East New York Avenue to the intersection with the prolongation of a line distant 260 feet southerly from and parallel with the northerly line of Union Street, the said distance being measured at right angles to Union Street; thence westwardly along the said line parallel with Union Street and along the prolongations of the said line to the intersection with a line distant 100 feet westerly from and parallel with the westerly line of Ralph Avenue as this street is laid out between East New York Avenue and Eastern Parkway, the said distance being measured at right angles to Ralph Avenue; thence northwardly along the said line parallel with Ralph Avenue to the intersection with a line parallel with Union Street and passing through the point of beginning; thence eastwardly along the said line parallel with Union Street to the point of place of beginning.

Resolved, That this Board consider the proposed areas of assessment at a meeting of the Board to be held in The City of New York, Borough of Manhattan, in the City Hall, on the 18th day of December, 1914, at 10:30 a. m., and that at the same time and place a public hearing thereon will then and there be had.

Resolved, That the Secretary of this Board cause these resolutions and a notice to all persons affected thereby to be published in the City Record and the Corporation Newspapers for ten days prior to the 18th day of December, 1914.

Dated December 5, 1914.
JOSEPH HAAG, Secretary, Municipal Building. Telephone, 4560 Worth. d5,16

NOTICE IS HEREBY GIVEN THAT AT THE meeting of the Board of Estimate and Apportionment held on November 20, 1914, the following resolution was adopted:

Whereas, the Board of Estimate and Apportionment of The City of New York is considering the advisability of changing the lines and grades of the street system within the territory bounded approximately by Riverside Avenue, Unity Street, 120th Street, Lurting Street, Flushing River, Jackson Avenue, Lawrence Street, Amity Street, Delong Street, Sanford Avenue, Flushing River and Rodman Street, in the Borough of Queens, City of New York, as shown upon a tentative plan bearing the signature of the President of the Borough, and dated August 27, 1914.

Resolved, That this Board will give an informal hearing in the matter at a meeting of the Board to be held in the City Hall, Borough of Manhattan, City of New York, on the 18th day of December, 1914, at 10:30 o'clock in the forenoon.

Dated December 5, 1914.
JOSEPH HAAG, Secretary, Municipal Building. Telephone, 4560 Worth. d5,16

NOTICE IS HEREBY GIVEN THAT AT THE meeting of the Board of Estimate and Apportionment held on November 20, 1914, the following resolutions were adopted:

Whereas, under resolutions adopted by the Board of Estimate and Apportionment on December 12, 1912, and November 6, 1913, a proceeding was authorized for acquiring title to Post Road (West 246th Street and Newton Avenue) from the prolongation of the northerly line of the second unnamed street north of West 242nd Street to West 253rd Street; West 246th Street from Post Road to Cayuga Avenue; West 251st Street from Broadway to Post Road; the unnamed street opposite West 246th Street from Broadway to Post Road; Tibbett Avenue from West 246th Street to West 252nd Street; West 250th Street from Post Road to Tibbett Avenue; and West 252nd Street from Broadway to Tibbett Avenue, Borough of The Bronx; and

Whereas, the Board is considering the advisability of amending the foregoing proceeding so as to conform to a map or plan adopted by the Board of Estimate and Apportionment November 6, 1914, and approved by the Mayor November 13, 1914, under which the width of Post Road south of its junction with West 246th Street is decreased from 80 feet to 60 feet, and the alignment of West 246th Street at its intersection with Post Road is modified; the proposed amended proceeding providing for the acquisition of title to West 250th Street, West 251st Street, West 252nd Street and Tibbett Avenue between the limits contemplated under the resolution of November 6, 1913; but to West 246th Street from Cayuga Avenue to Broadway, and to Post Road from Corlear Avenue to West 253rd Street as they are now laid out upon the map or plan of the City of New York.

Resolved, That the Board of Estimate and Apportionment, in pursuance of the provisions of the Greater New York Charter, as amended, hereby gives notice that the following is the proposed amended district of assessment for benefit in this proposed amended proceeding:

Beginning at a point on a line distant 100 feet easterly from and parallel with the easterly line of Post Road (Newton Avenue), the said distance being measured at right angles to Post Road (Newton Avenue), distance 100 feet northerly from the northerly line of West 253rd Street, and running thence southwardly along the said line parallel with Post Road (Newton Avenue) to the intersection with a line bisecting the angle formed by the intersection of the prolongations of the easterly line of Post Road (Newton Avenue), and the westerly line of Broadway; as these streets are laid out where they meet West 252nd Street on the north; thence southwardly along the said bisecting line to the intersection with a line bisecting the angle formed by the intersection of the prolongations of the northerly line of West 252nd Street and the southerly line of West 253rd Street as these streets are laid out where they meet Broadway; thence eastwardly along the said bisecting line to a point distant 100 feet easterly from the easterly line of Broadway, the said distance being measured at right angles to Broadway; thence southwardly and always distant 100 feet easterly from and parallel with the easterly line of Broadway to the intersection with the prolongation of a line distant 850 feet southerly from and parallel with the southerly line of West 246th Street, as this street is laid out between Broadway and Post Road, the said distance being measured along the line of Broadway; thence westwardly along the said line parallel with West 246th Street and along the prolongations of the said line to the intersection

with a line distant 600 feet westerly from and parallel with the westerly line of Broadway as this street is laid out where it meets West 242nd Street on the north, the said distance being measured at right angles to Broadway; thence northwardly along the said line parallel with Broadway to a point distant 100 feet southerly from the southerly line of West 246th Street, the said distance being measured at right angles to West 246th Street; thence deflecting 90 degrees to the left and running westwardly to the intersection with a line distant 100 feet westerly from and parallel with the tangent to the westerly line of Tibbett Avenue at the first point of curvature north of West 246th Street, the said distance being measured at right angles to the said tangent; thence northwardly along the said line parallel with the said tangent to the line of Tibbett Avenue to the intersection with the radial line passing through the first point of curvature in the line of Tibbett Avenue North of West 246th Street; thence northwardly and always distant 100 feet westerly from and parallel with the westerly lines of Tibbett Avenue, West 252nd Street and Post Road (Newton Avenue), to the intersection with a line parallel with West 253rd Street, as this street is laid out where it meets Broadway, and passing through the point of beginning; thence eastwardly along the said line parallel with West 253rd Street to the point of place of beginning.

Resolved, that this Board consider the proposed amended district of assessment at a meeting of the Board to be held in the City of New York, Borough of Manhattan, in the City Hall, on the 18th day of December, 1914, at 10:30 o'clock a. m., and that at the same time and place a public hearing thereon will then and there be had.

Resolved, that the Secretary of this Board cause these resolutions and a notice to all persons affected thereby to be published in the City Record for ten days prior to the 18th day of December, 1914.

Dated December 5, 1914.
JOSEPH HAAG, Secretary, Municipal Building. Telephone, 4560 Worth. d5,16

NOTICE IS HEREBY GIVEN THAT AT THE meeting of the Board of Estimate and Apportionment held on November 20, 1914, the following resolutions were adopted:

Whereas, under resolutions adopted by the Board of Estimate and Apportionment on December 14, 1911, and May 2, 1912, a proceeding was authorized for acquiring title to West 244th Street from its intersection with Spuyten Duyvil Parkway and Fieldston Road to Waldo Avenue; Waldo Avenue from West 244th Street to West 242nd Street; West 242nd Street from Waldo Avenue to Broadway; Corlear Avenue from West 242nd Street to West 246th Street; West 246th Street from its intersection with West 242nd Street and Broadway to the prolongation of the northerly line of the second unnamed street north of West 242nd Street; First Unnamed Street north of West 242nd Street from Broadway to West 246th Street; Second unnamed street north of West 242nd Street from Broadway to West 246th Street; together with the Public Park bounded by Corlear Avenue, West 246th Street and West 242nd Street; the Public Park bounded by Broadway, West 246th Street and the first unnamed street north of West 242nd Street; and the Public Park bounded by the first unnamed street north of West 242nd Street, West 246th Street, the second unnamed street north of West 242nd Street and Broadway; and

Whereas, the Board is considering the advisability of amending the foregoing proceeding so as to conform to a map or plan adopted by the Board of Estimate and Apportionment November 6, 1914, and approved by the Mayor November 13, 1914, under which the first and second unnamed streets north of West 242nd Street, and the three public parks are discontinued; the proposed amended proceeding providing for the acquisition of title to West 244th Street, Waldo Avenue and West 242nd Street between the limits contemplated under the resolution of May 2, 1912, and to Corlear Avenue from West 242nd Street to its junction with Broadway and Post Road.

Resolved, that the Board of Estimate and Apportionment, in pursuance of the provisions of the Greater New York Charter, as amended, hereby gives notice that the following is the proposed modified district of assessment for benefit in this proposed amended proceeding:

Beginning at a point on a line midway between Netherland Avenue and Riverdale Avenue, where it is intersected by the prolongation of a line distant 100 feet northerly from and parallel with the northerly line of West 246th Street, as this street is laid out between Riverdale Avenue and Delafield Avenue, the said distance being measured at right angles to West 246th Street, and running thence eastwardly along the said line parallel with West 246th Street and along the prolongations of the said line to the intersection with the prolongation of a line distant 100 feet northerly from and parallel with the northerly line of West 246th Street, as this street is laid out between Broadway and Post Road, the said distance being measured at right angles to West 246th Street; thence eastwardly along the said line parallel with West 246th Street and along the prolongations of the said line to a point distant 300 feet easterly from the easterly line of Broadway, the said distance being measured at right angles to Broadway; thence southwardly and always distant 300 feet easterly from and parallel with the easterly line of Broadway to the intersection with a line distant 100 feet northerly from and parallel with the northerly line of Van Cortlandt Park South, the said distance being measured at right angles to Van Cortlandt Park South; thence westwardly and always distant 100 feet northerly from and parallel with the northerly lines of Van Cortlandt Park South and of West 240th Street, and the prolongations thereof, to a point distant 100 feet westerly from the westerly line of Spuyten Duyvil Road, the said distance being measured at right angles to Spuyten Duyvil Road; thence southwardly and always distant 100 feet westerly from and parallel with the westerly line of Spuyten Duyvil Road to the intersection with the prolongation of a line distant 100 feet southerly from and parallel with the southerly line of West 238th Street, as this street is laid out between Riverdale Avenue and Waldo Avenue, the said distance being measured at right angles to West 238th Street; thence westwardly along the said line parallel with West 238th Street and along the prolongations of the said line to the intersection with a line distant 100 feet westerly from and parallel with the westerly line of Riverdale Avenue, as this street adjoins West 238th Street as laid out immediately west of Riverdale Avenue, the said distance being measured at right angles to Riverdale Avenue; thence northwardly along the said line parallel with Riverdale Avenue and along the prolongation of the said line to the intersection with the prolongation of a line midway between Riverdale Avenue and Netherland Avenue, as these streets are laid out northerly from West 245th Street; thence northwardly along the said line midway between Riverdale Avenue and Netherland Avenue and along the prolongation of the said line to the point of place of beginning.

Resolved, that this Board consider the proposed modified district of assessment at a meeting of the Board to be held in the City of New York, Borough of Manhattan, in the City Hall, on the 18th day of December, 1914, at 10:30

o'clock a. m., and that at the same time and place a public hearing thereon will then and there be had.

Resolved, that the Secretary of this Board cause these resolutions and a notice to all persons affected thereby to be published in the City Record for ten days prior to the 18th day of December, 1914.

Dated December 5, 1914.
JOSEPH HAAG, Secretary, Municipal Building. Telephone, 4560 Worth. d5,16

NOTICE IS HEREBY GIVEN THAT AT THE meeting of the Board of Estimate and Apportionment held on November 20, 1914, the following resolutions were adopted:

Whereas, The Board of Estimate and Apportionment of The City of New York is considering the advisability of instituting proceedings to acquire title to the lands and premises required for the opening and extending of Herschell Street from Westchester Avenue to Munn Avenue (Wellington Avenue), in the Borough of The Bronx, City of New York; and

Whereas, The Board of Estimate and Apportionment is authorized and required at the time of the adoption of the resolution directing the institution of proceedings to acquire title to the lands required for the foregoing improvement to fix and determine upon an area or areas of assessment for benefit for said proceedings;

Resolved, That the Board of Estimate and Apportionment, in pursuance of the provisions of Section 980 of the Greater New York Charter, as amended, hereby gives notice that the following is the proposed area of assessment for benefit in these proceedings:

Beginning at a point on the southeasterly line of Westchester Avenue, where it is intersected by a line bisecting the angle formed by the intersection of the prolongations of the northeasterly line of Herschell Street and the westerly line of Seabury Avenue, as these streets are laid out between Westchester Avenue and Halsey Street, and running thence southeasterly along the said bisecting line to the intersection with a line distant 100 feet northeasterly from and parallel with the northeasterly line of Herschell Street, the said distance being measured at right angles to Herschell Street; thence southeasterly along the said line parallel with Herschell Street to the intersection with the westerly line of Seabury Avenue; thence eastwardly at right angles to Seabury Avenue to a point distant 100 feet easterly from its easterly side; thence southwardly and parallel with Seabury Avenue to a point distant 100 feet southerly from the southerly line of Munn Avenue; thence westwardly and parallel with Munn Avenue to the intersection with a line at right angles to Munn Avenue and passing through a point on its southerly side, where it is intersected by a line distant 100 feet southwesterly from and parallel with the southerly line of Herschell Street, the said distance being measured at right angles to Herschell Street; thence northwardly along the said line at right angles to Munn Avenue to the intersection with its southerly side; thence northwardly along the said line parallel with Herschell Street to the intersection with the southeasterly line of Halsey Street; thence westwardly in a straight line to a point on the northwesterly line of Herschell Street, where it is intersected by a line bisecting the angle formed by the intersection of the prolongations of the northeasterly line of Zerega Avenue and the southeasterly line of Herschell Street, as these streets are laid out between Westchester Avenue and Butler Place; thence northwardly along the said bisecting line to the intersection with a line distant 100 feet northwesterly from and parallel with the northwesterly line of Westchester Avenue, the said distance being measured at right angles to Westchester Avenue; thence northwardly along the said line parallel with Westchester Avenue to the intersection with a line at right angles to Westchester Avenue and passing through the point of beginning; thence southwardly along the said line at right angles to Westchester Avenue to the point or place of beginning.

Resolved, That this Board consider the proposed area of assessment at a meeting of the Board to be held in The City of New York, Borough of Manhattan, in the City Hall, on the 18th day of December, 1914, at 10:30 a. m., and that at the same time and place a public hearing thereon will then and there be had.

Resolved, that the Secretary of this Board cause these resolutions and a notice to all persons affected thereby to be published in the City Record for ten days prior to the 18th day of December, 1914.

Dated December 5, 1914.
JOSEPH HAAG, Secretary, Municipal Building. Telephone, 4560 Worth. d5,16

NOTICE IS HEREBY GIVEN THAT AT THE meeting of the Board of Estimate and Apportionment held on November 20, 1914, the following resolutions were adopted:

Whereas, The Board of Estimate and Apportionment of The City of New York is considering the advisability of instituting proceedings to acquire title to the lands and premises required for the opening and extending of Fisk Avenue from Queens Boulevard to Broadway, in the Borough of Queens, City of New York; and

Whereas, The Board of Estimate and Apportionment is authorized and required at the time of the adoption of the resolution directing the institution of proceedings to acquire title to the lands required for the foregoing improvement to fix and determine upon an area or areas of assessment for benefit for said proceedings;

Resolved, That the Board of Estimate and Apportionment, in pursuance of the provisions of Section 980 of the Greater New York Charter, as amended, hereby gives notice that the following is the proposed area of assessment for benefit in these proceedings:

Beginning at a point on a line distant 100 feet northeasterly from and parallel with the northeasterly line of Broadway, the said distance being measured at right angles to Broadway, where it is intersected by the prolongation of a line midway between Rowan Avenue and Hicks Place, and running thence southeasterly along the said line parallel with Broadway to the intersection with the prolongation of a line distant 100 feet northeasterly from and parallel with the northeasterly line of Lenox Avenue, as this street is laid out where it adjoins Polk Avenue on the south, the said distance being measured at right angles to Lenox Avenue; thence southwardly along the said line parallel with Lenox Avenue and along the prolongations of the said line to the intersection with the prolongation of a line distant 100 feet easterly from and parallel with the easterly line of Worthington Avenue, as this street is laid out between Fairbanks Avenue and Woodside Avenue, the said distance being measured at right angles to Worthington Avenue; thence southwardly along the said line parallel with Worthington Avenue and along the prolongations of the said line to the intersection with the southerly line of Woodside Avenue; thence southwardly and parallel with Fisk Avenue and its prolongation, as this street is laid out between Woodside Avenue and Sinclair Avenue to a point distant 100 feet southerly from the southerly line of Queens Boulevard, the said distance being measured at right angles to Queens Boulevard; thence westwardly and always distant 100 feet southerly from and parallel with the southerly line of Queens Boulevard to the intersection with the prolongation of a line distant 100 feet westerly from and parallel with the westerly line of Lee Avenue, as this street is

laid out between Queens Boulevard and Sinclair Avenue, the said distance being measured at right angles to Lee Avenue; thence northwardly along the said line parallel with Lee Avenue and along the prolongation of the said line to the intersection with the prolongation of a line midway between Lee Avenue and Burrough Place, as these streets are laid out between Fairbanks Avenue and Woodside Avenue; thence northwardly along the said line midway between Lee Avenue and Burrough Place and along the prolongations of the said line to the intersection with a line midway between Rowan Avenue and Hicks Place; thence northwardly along the said line midway between Rowan Avenue and Hicks Place and along the prolongation of the said line to the point or place of beginning.

Resolved, That this Board consider the proposed area of assessment at a meeting of the Board to be held in The City of New York, Borough of Manhattan, in the City Hall, on the 18th day of December, 1914, at 10:30 a. m., and that at the same time and place a public hearing thereon will then and there be had.

Resolved, that the Secretary of this Board cause these resolutions and a notice to all persons affected thereby to be published in the City Record for ten days prior to the 18th day of December, 1914.

Dated December 5, 1914.
JOSEPH HAAG, Secretary, Municipal Building. Telephone, 4560 Worth. d5,16

NOTICE IS HEREBY GIVEN THAT AT THE meeting of the Board of Estimate and Apportionment held on November 20, 1914, the following resolutions were adopted:

Whereas, The Board of Estimate and Apportionment of The City of New York is considering the advisability of amending the proceeding authorized by said Board on May 1, 1913, for acquiring title to St. James Street from Maurice Avenue to Broadway, and Corona Avenue from Queens, so as to conform to a map or plan adopted by the Board of Estimate and Apportionment November 6, 1914, under which a slight change is effected in the alignment originally provided for each of these streets at Broadway, and the width of Corona Avenue is decreased from 80 feet to 70 feet; the proposed amended proceeding providing for the acquisition of title to each of the foregoing streets, between the limits named, as they are now laid out upon the map or plan of the City of New York.

Resolved, that the Board of Estimate and Apportionment, in pursuance of the provisions of the Greater New York Charter, as amended, hereby gives notice that the following is the proposed district of assessment for benefit in this proposed amended proceeding:

Beginning at a point on the southeasterly line of Corona Avenue, where it is intersected by a line distant 100 feet westerly from and parallel with the westerly line of Gerry Avenue as this street is laid out where it adjoins Corona Avenue, the said distance being measured at right angles to Gerry Avenue, and running thence southwardly along the said line parallel with Gerry Avenue and along the prolongation of the said line to the intersection with a line bisecting the angle formed by the intersection of the prolongations of the centre lines of Maurice Avenue and of Horton Street, as these streets are laid out where they adjoin respectively Broadway and Justice Street on the east; thence southwardly along the said bisecting line to the intersection with a line bisecting the angle formed by the intersection of the prolongations of the southerly line of Maurice Avenue and the northerly line of Queens Boulevard, as these streets are laid out between Reeder Place and Van Loon Place; thence westwardly along the said bisecting line to the intersection with a line distant 100 feet southerly from and parallel with the southerly line of Maurice Avenue as this street is laid out at Goldsmith Place, the said distance being measured at right angles to Maurice Avenue; thence westwardly along the said line parallel with Maurice Avenue and along the prolongation of the said line to the intersection with a line at right angles to Maurice Avenue and passing through a point on the northerly line of Queens Boulevard, where it is intersected by the prolongation of a line midway between Dongan Street and St. James Street, as these streets are laid out at Foyer Street; thence northwardly along the said line at right angles to Maurice Avenue to the intersection with the northerly line of Queens Boulevard; thence northwardly along the said line midway between Dongan Street and St. James Street and along the prolongations of the said line to the intersection with a line distant 100 feet northeasterly from and parallel with the northeasterly line of Broadway, the said distance being measured at right angles to Broadway; thence southwardly along the said line midway between Dongan Street and St. James Street as these streets are laid out between Broadway and Roach Place; thence northwardly along the said line midway between Dongan Street and St. James Street to the intersection with a line parallel with Roach Place, and passing through the point of beginning; thence southwardly along the said line parallel with Roach Place to the point or place of beginning.

Resolved, that this Board consider the proposed district of assessment at a meeting of the Board to be held in The City of New York, Borough of Manhattan, in the City Hall, on the 18th day of December, 1914, at 10:30 o'clock a. m., and that at the same time and place a public hearing thereon will then and there be had.

Resolved, that the Secretary of this Board cause these resolutions and a notice to all persons affected thereby to be published in the City Record for ten days prior to the 18th day of December, 1914.

Dated December 5, 1914.
JOSEPH HAAG, Secretary, Municipal Building. Telephone, 4560 Worth. d5,16

NOTICE IS HEREBY GIVEN THAT AT THE meeting of the Board of Estimate and Apportionment held on November 20, 1914, the following resolutions were adopted:

Whereas, The Board of Estimate and Apportionment of The City of New York is considering the advisability of modifying the district of assessment fixed in the proceeding authorized by said Board for acquiring title to a sewer easement in Kissel Avenue and in Brighton Boulevard from Castleton Avenue to Richmond Terrace, and along the prolongation of Brighton Boulevard from Richmond Terrace to the Bulkhead Line, Borough of Richmond, which authorization was granted under resolutions adopted by the Board on January 9, 1913, and July 30, 1914.

Resolved, that the Board of Estimate and Apportionment, in pursuance of the provisions of the Greater New York Charter, as amended, hereby gives notice that the following is the proposed modified district of assessment for benefit in this proceeding:

Beginning at a point on the southerly bulkhead line of Kill Van Kull where it is intersected by the prolongation of a line distant 100 feet easterly from and parallel with the easterly line of Brighton Boulevard, as this street is laid out where it adjoins Richmond Terrace, the said distance being measured at right angles to Brighton Boulevard, and running thence southwardly along the said line parallel with Brighton Boulevard and along the prolongations of the said line to a point distant 100 feet northerly from the northerly line of Henderson Avenue, the said distance being measured at right angles to Henderson Avenue; thence eastwardly and always distant 100 feet northerly from and parallel

with the northerly line of Henderson Avenue to the intersection with a line passing through a point on the northerly line of Henderson Avenue distant 280 feet easterly from its intersection with the easterly line of Kissel Avenue, as this street is laid out north of Henderson Avenue, the said distance being measured along the line of Henderson Avenue, and a point on the southerly line of Castleton Avenue distant 270 feet easterly from its intersection with the easterly line of Kissel Avenue, as this street meets Castleton Avenue on the south, the said distance being measured along the line of Castleton Avenue; thence southwardly along the course last described to a point distant 100 feet northerly from the northerly line of Castleton Avenue, the said distance being measured at right angles to Castleton Avenue; thence eastwardly and always distant 100 feet northerly from and parallel with the northerly line of Castleton Avenue to the intersection with the prolongation of a line distant 100 feet easterly from and parallel with the easterly line of Havenwood Road, the said distance being measured at right angles to Havenwood Road; thence southwardly along the said line parallel with Havenwood Road and along the prolongation of the said line to the intersection with a line distant 100 feet northerly from and parallel with the northerly line of Frelinghuysen Road, as this street adjoins Haven Esplanade on the west, the said distance being measured at right angles to Frelinghuysen Road; thence eastwardly along the said line parallel with Frelinghuysen Road and along the prolongation of the said line to the intersection with the centre line of Haven Esplanade; thence southwardly along the centre line of Haven Esplanade to the intersection with the southerly line of Barrett Boulevard; thence westwardly along the southerly line of Barrett Boulevard and of Brighton Avenue to the intersection with the easterly line of Greenwood Avenue; thence southwardly along the easterly line of Greenwood Avenue a distance of 591.59 feet; thence westwardly at right angles to Greenwood Avenue to the intersection with the easterly line of University Place; thence southwardly along the easterly line of University Place to the intersection with the southerly line of Laurel Avenue; thence westwardly along the southerly line of Laurel Avenue to the intersection with the easterly line of Lakewood Road; thence southwardly along the easterly line of Lakewood Road and the prolongation thereof, a distance of 760 feet; thence westwardly at right angles to Lakewood Road a distance of 350 feet; thence southwardly in a straight line to a point on the easterly line of Bard Avenue distant 2,360 feet southerly from the southerly line of Forest Avenue, the said distance being measured along the line of Bard Avenue; thence westwardly at right angles to Bard Avenue to a point distant 100 feet westerly from its westerly side; thence northwardly and always distant 100 feet westerly from and parallel with the westerly line of Bard Avenue to a point distant 100 feet northerly from the northerly line of Forest Avenue, the said distance being measured at right angles to Forest Avenue; thence eastwardly and always distant 100 feet northerly from and parallel with the northerly line of Forest Avenue to the intersection with a line distant 100 feet westerly from and parallel with the westerly line of Hoyt Avenue, as this street is laid out between Forest Avenue and Prospect Avenue, the said distance being measured at right angles to Hoyt Avenue; thence northwardly along the said line parallel with Hoyt Avenue and along the prolongation of the said line to a point distant 100 feet northerly from the northerly line of Castleton Avenue, the said distance being measured at right angles to Castleton Avenue; thence eastwardly and always distant 100 feet northerly from and parallel with the northerly line of Castleton Avenue to a point distant 320 feet easterly from the easterly line of Bard Avenue, the said distance being measured at right angles to Bard Avenue; thence northwardly and always distant 320 feet easterly from and parallel with the easterly line of Bard Avenue to the intersection with the centre line of Henderson Avenue; thence eastwardly along the centre line of Henderson Avenue to the intersection with the prolongation of a line distant 100 feet westerly from and parallel with the westerly line of Kissel Avenue, as this street is laid out north of Henderson Avenue, the said distance being measured at right angles to Kissel Avenue; thence northwardly along the said line parallel with Kissel Avenue and along the prolongation of the said line to a point distant 350 feet northerly from the northerly line of Henderson Avenue, the said distance being measured at right angles to Henderson Avenue; thence westwardly at right angles to Kissel Avenue to a point distant 160 feet easterly from the easterly line of Bard Avenue, the said distance being measured at right angles to Bard Avenue; thence northwardly and always distant 160 feet easterly from and parallel with the easterly line of Bard Avenue and the prolongation thereof to the intersection with the southerly bulkhead line of Kill Van Kull; thence eastwardly along the said bulkhead line to the point or place of beginning.

(The lines of the streets hereinbefore referred to which have not been incorporated upon the City Map are intended to be those as in use and as commonly recognized.)

Resolved, that this Board consider the proposed modified district of assessment at a meeting of the Board to be held in The City of New York, Borough of Manhattan, in the City Hall, on the 18th day of December, 1914, at 10:30 o'clock a. m., and that at the same time and place a public hearing thereon will then and there be had.

Resolved, that the Secretary of this Board cause these resolutions and a notice to all persons affected thereby to be published in the City Record for ten days prior to the 18th day of December, 1914.

Dated December 5, 1914.
JOSEPH HAAG, Secretary, Municipal Building. Telephone, 4560 Worth. d5,16

Notice of Public Hearing.

FRANCHISE MATTERS.

PUBLIC NOTICE IS HEREBY GIVEN, PURSUANT to law, that at a meeting of the Board of Estimate and Apportionment, held November 25, 1914, the following petition was received:

TO THE BOARD OF ESTIMATE AND APPOINTMENT OF THE CITY OF NEW YORK:

The MANHATTAN BRIDGE THREE CENT LINE by this petition respectfully prays that its contract with The City of New York, bearing date the 10th day of July, 1912, as amended by contract dated December 2nd, 1913, whereby the said Manhattan Bridge Three Cent Line is granted the right and privilege to construct and operate a street surface railroad upon certain routes in the Boroughs of Manhattan and Brooklyn, City of New York, be amended as follows:

I. By withdrawing and abrogating the right and privilege by said contract to petitioner granted to construct, maintain and operate a street surface railroad in the Marginal way, West, Desbrosses, Vestry, Washington, Greenwich and Canal Streets in the Borough of Manhattan, and in Fulton Street, Rockwell Place, Flatbush, Fourth, Atlantic and Third Avenues and Livingston, Hoyt and Bridge Streets in the Borough of Brooklyn.

II. By permitting petitioner to use overhead electric power on the Manhattan Bridge, its plazas and approaches.

III. By providing for the installation of appropriate terminal loops and other terminal facilities by the City to be used by petitioner without expense to it.

Dated, November 19th, 1914.

MANHATTAN BRIDGE THREE CENT LINE. By Frederick W. Rowe, President.

(Seal.)

State of New York, County of Kings, ss.:

On the 19th day of November, 1914, before me personally came FREDERICK W. ROWE, to me known, who, being by me duly sworn, did depose and say that he resides in the Borough of Brooklyn, City of New York; that he is the president of MANHATTAN BRIDGE THREE CENT LINE, the corporation described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

CHARLES E. GRAU, Commissioner of Deeds for City of N. Y. Residing in New York Co. Certificates filed N. Y. Co. Clerk's Office and Register's of N. Y. and Kings Cos.

—and the following resolutions were thereupon adopted:

Whereas, the foregoing petition from the Manhattan Bridge Three Cent Line dated November 19, 1914, was presented to the Board of Estimate and Apportionment at a meeting held November 25, 1914.

Resolved, that in pursuance of law this Board sets Friday, the Eighteenth day of December, 1914, at 10:30 o'clock in the forenoon and Room 16 in the City Hall, Borough of Manhattan, as the time and place when and where such petition shall be first considered, and a public hearing be had thereon, at which citizens shall be entitled to appear and be heard; and be it further

Resolved, that the petition and these resolutions shall be published for at least twice in two daily newspaper in the City of New York, to be designated by the Mayor, and for at least ten (10) days in the City Record immediately prior to such date of public hearing. The expense of such publication to be borne by the petitioner.

JAMES D. McGANN, Assistant Secretary, Room 1307, Municipal Building, Centre and Chambers Streets, Borough of Manhattan. Telephone, 4560 Worth.

New York, November 25, 1914. d7,18

PUBLIC NOTICE IS HEREBY GIVEN THAT

he public hearing, in accordance with the provisions of Sections 525 and 527 of the Greater New York Charter, of all persons interested, in order that this Board may determine whether, in its opinion, the electrical conductors in White Plains Road between Gun Hill Road and 242nd Street, and in Gun Hill Road between Webster Avenue and the Boston Post Road, shall be placed underground, which hearing was, by resolution adopted July 30, 1914, fixed for September 21, 1914, and was continued from time to time until Wednesday, November 25, 1914, was continued until Friday, December 18, 1914, at 10:30 o'clock A. M., in Room 16, City Hall, Borough of Manhattan, at which time and place all persons interested will be afforded an opportunity to appear and be heard.

JAMES D. McGANN, Assistant Secretary, Room 1307, Municipal Building, Centre and Chambers Streets, Borough of Manhattan. Telephone, 4560 Worth.

Dated, New York, November 25, 1914. n28,d18

PUBLIC NOTICE IS HEREBY GIVEN THAT

at a meeting of the Board of Estimate and Apportionment held this day the public hearing on the form of contract for the grant of a franchise to The Yonkers Electric Light and Power Company; the Westchester Lighting Company; The New York Edison Company and The United Electric Light and Power Company, to construct, maintain and operate conductors, conduits, poles and towers for the operation of one line of poles and towers, and to install and maintain wires, cables and other conductors upon the route described in the contract, over the Catskill Aqueduct Lands and other lands acquired for water supply purposes, between the northerly boundary line of the City and the boundary line between the Counties of Westchester and Putnam, acquired or purchased by the City, pursuant to law, subject to the limitation set forth in the contract, which was, by resolution duly adopted, fixed for July 2, 1914, when it was continued until July 30, 1914, when it was continued until August 27, 1914, when it was continued until September 21, 1914, when it was continued until October 16, 1914, when it was continued until November 13, 1914, was continued until Friday, December 11, 1914, at 10:30 o'clock A. M., in Room 16, City Hall, Borough of Manhattan, when and where all citizens interested will have an opportunity to appear and be heard.

JAMES D. McGANN, Assistant Secretary, Room 1307, Municipal Building, Centre and Chambers Streets, Borough of Manhattan. Telephone, 4560 Worth.

Dated, New York, November 13, 1914. n16,d11

MUNICIPAL CIVIL SERVICE COMMISSION.

Hearings on Proposed Amendments to Classifications.

MUNICIPAL CIVIL SERVICE COMMISSION, NEW YORK CITY, December 7, 1914.

PUBLIC NOTICE IS HEREBY GIVEN OF the following proposed amendment to the Civil Service Classification: By striking from the Non-Competitive Class, under the Heading "Positions in the Department of Correction, at compensations not exceeding the amounts set forth below" the titles,

Apothecary, \$900 per annum, without maintenance.

Deckhand, \$720 per annum, without maintenance. A PUBLIC HEARING WILL BE ALLOWED, in accordance with Rule III, at the request of any interested persons, at the Commission's offices in the Municipal Building, Room 1443, on

WEDNESDAY, DECEMBER 9, 1914,

at 10 A. M.

d7,9 ROBERT W. BELCHER, Secretary.

Hearing on Application to Suspend Rules.

MUNICIPAL CIVIL SERVICE COMMISSION, NEW YORK CITY, Dec. 7, 1914.

PUBLIC NOTICE IS HEREBY GIVEN THAT a public hearing will be allowed at the offices of the Municipal Civil Service Commission in the Municipal Building, Room 1443, on

WEDNESDAY, DECEMBER 9, 1914,

at 10 A. M., in connection with the application of the Board of Inebriety that the provisions of the Civil Service Rules requiring competition be suspended in the case of Dr. Charles F. Stokes and his appointment as Medical Director in that department, at a salary of \$6,000 per annum, approved under Rule XII, clause 5.

d7,9 ROBERT W. BELCHER, Secretary.

Notices of Examinations.

MUNICIPAL CIVIL SERVICE COMMISSION, NEW YORK CITY, MUNICIPAL BUILDING, MANHATTAN, December 8, 1914.

PUBLIC NOTICE IS HEREBY GIVEN THAT applications will be received from

TUESDAY, DECEMBER 8, 1914, TO TUESDAY, DECEMBER 22, 1914,
for the position of**RODMAN, GRADE B.**

No applications delivered at the office of the Commission, by mail or otherwise, after 4 P. M., TUESDAY, DECEMBER 22, 1914, will be accepted. Application blanks will be mailed upon request, provided a self-addressed stamped envelope or sufficient postage is enclosed to cover the mailing. The Commission will not guarantee the delivery of the same. Applications forwarded by mail upon which full postage is not prepaid will not be accepted.

Applicants must be citizens of the United States and residents of the State of New York.

The subjects and weights of the examination are: Technical, 5; 75% required; Experience, 3; 70% required; Mathematics, 2. 70% required on the entire examination.

Duties: The duties of the position are to act as an assistant to instrument men, operating transit, level, plane table and occasionally heliograph, to handle the several rods in use, to make measurements and in the office to assist in computing quantities and occasionally making profiles and maps. Rodmen may also be used in making inspections of the less important features of construction work, such as earth work, concrete mixing, etc.

Requirements: Candidates must have had either technical education equivalent to two years in an engineering course in an institution of high standing or one year of practical experience in engineering or construction work that would properly fit them for the position. Candidates must be familiar with the use of various rods and surveying instruments, the making of accurate measurements in the field and plotting of same in the office, the computation of quantities and preparation of notes and records of Engineering work.

Applications for this examination must be filed on a special blank, Form C. Experience blanks will be issued with the applications and must be forwarded to the Commission with applications. The Experience will then be rated. Candidates receiving less than 70% on the Experience paper will not be summoned for the physical examination. Those who pass the physical examination will be summoned for the technical examination.

The age limits are 18 to 40 years on the closing date for receipt of application. Salary, \$900 to \$1,200 per annum.

d8,22 R. W. BELCHER, Secretary.

MUNICIPAL CIVIL SERVICE COMMISSION, NEW YORK, MUNICIPAL BUILDING, MANHATTAN, December 4, 1914.

PUBLIC NOTICE IS HEREBY GIVEN THAT applications will be received from
FRIDAY, DECEMBER 4, 1914, TO FRIDAY, DECEMBER 18, 1914,

for the position of

ASSOCIATE EFFICIENCY ENGINEER.

No applications delivered at the office of the Commission, by mail or otherwise, after 4 P. M., FRIDAY, DECEMBER 18, 1914, will be accepted. Application blanks will be mailed upon request, provided a self-addressed stamped envelope or sufficient postage is enclosed to cover the mailing. The Commission will not guarantee the delivery of the same. Applications forwarded by mail upon which full postage is not prepaid will not be accepted.

Applicants must be citizens of the United States and residents of the State of New York.

The subjects and weights of the examination are: Experience, 5; 70% required. Mental Test, 5; 70% required.

Duties: The duties of this position include: 1—Analysis of the functions and work of municipal departments; 2—Determination and introduction therein of improvements in organization, methods and procedure based upon fundamental principles of scientific management; 3—Design and installation of improved directional, statistical and cost accounting forms, and the preparation of estimates and reports.

Requirements: Candidates must present satisfactory evidence of: a—At least two years spent in study in an approved school of engineering; b—At least two years' experience in direct or managerial charge of labor forces on construction or repair work.

Applications for this examination must be filed on a special blank, Form C, with insert. Experience blanks will be issued with the applications and must be forwarded to the Commission with applications. The Experience will then be rated. Candidates receiving less than 70% on the Experience paper will not be summoned for the physical examination. Those who pass the physical examination will be summoned for the mental examination at a time to be specified later.

The minimum age is 21 years. There is one vacancy. Salary, \$2,400 per annum.

d4,18 R. W. BELCHER, Secretary.

MUNICIPAL CIVIL SERVICE COMMISSION, NEW YORK, MUNICIPAL BUILDING, MANHATTAN, December 3, 1914.

PUBLIC NOTICE IS HEREBY GIVEN THAT applications will be received from

THURSDAY, DECEMBER 3, 1914, TO THURSDAY, DECEMBER 17, 1914,

for the position of

LABORATORY ASSISTANT, MALE AND FEMALE.

No applications delivered at the office of the Commission, by mail or otherwise, after 4 P. M., THURSDAY, DECEMBER 17, 1914, will be accepted. Application blanks will be mailed upon request, but the Commission will not guarantee the delivery of the same. Application blanks forwarded by mail upon which postage is not fully prepaid will not be accepted.

Applicants must be citizens of the United States and residents of the State of New York.

The subjects and weights of the examination are: Duties, 7; 70% required. Experience, 3. 70% required on all.

Candidates should have some acquaintance with the routine work of the laboratories. A number of questions will be put which must be answered by all candidates. In addition candidates will be required to answer questions referring to one of the following:

Chemical Laboratory, Research Laboratory (Bact. Laboratories), Diagnosis Laboratory (Bact. Laboratories), Vaccine Laboratory (Bact. Laboratories).

Applications for this examination must be filed on a special blank, Form B. Experience blanks will be issued with the applications and must be filed with the Commission at the time of filing applications.

A physical examination will precede the mental. The minimum age is 18 years. The usual salary is \$600 per annum. Vacancies occur frequently in the Department of Health.

d3,17 R. W. BELCHER, Secretary.

MUNICIPAL CIVIL SERVICE COMMISSION, NEW YORK, MUNICIPAL BUILDING, MANHATTAN, December 1, 1914.

PUBLIC NOTICE IS HEREBY GIVEN THAT applications will be received from

TUESDAY, DECEMBER 1, 1914, TO TUESDAY, DECEMBER 15, 1914,

for the position of

TEMPORARY CLERK.

No application delivered at the office of the Commission by mail or otherwise after 4 P. M., TUESDAY, DECEMBER 15, 1914, will be accepted.

Application blanks will be mailed upon request provided a self-addressed stamped envelope or proper postage accompanies the request, but the Commission will not guarantee the delivery of blanks. Applications forwarded by mail upon which the postage is not fully prepaid will not be accepted.

The minimum age is 21 years. Applicants must be citizens of the United States and residents of the State of New York.

The subjects and weights of the examination are as follows: Letter, 2; Handwriting, 3; Arithmetic, 5. An average of 70% is required on both Arithmetic and Handwriting.

A physical examination will be held and those who fail to qualify will not be summoned for the mental test.

This examination is held in order to supply temporary clerks in the Department of Finance, the Bureau of Elections, and in the office of the Registrar of Water Rates for work in connection with the collection of taxes, the preparation of election rolls and the reception of water rates, etc.

The compensation varies, but is usually at the rate of \$3.00 per day when employed. The services are temporary, usually from two weeks to one month. No permanent appointment can be made from this list, nor can employment in any one department exceed a period of six months. The date of the examination will be announced later.

d1,15 R. W. BELCHER, Secretary.

MUNICIPAL CIVIL SERVICE COMMISSION, NEW YORK, MUNICIPAL BUILDING, MANHATTAN, November 30, 1914.

PUBLIC NOTICE IS HEREBY GIVEN THAT applications will be received from

MONDAY, NOVEMBER 30, 1914, TO MONDAY, DECEMBER 14, 1914,

for the position of

INTERPRETER, RUSSIAN, POLISH AND LITHUANIAN.

No applications delivered at the office of the Commission, by mail or otherwise, after 4 P. M., MONDAY, DECEMBER 14, 1914, will be accepted. Application blanks will be mailed upon request, provided a self-addressed stamped envelope or sufficient postage is enclosed to cover the mailing. The Commission will not guarantee the delivery of same. Applications forwarded by mail upon which full postage is not prepaid will not be accepted.

Applicants must be citizens of the United States and residents of the State of New York.

The subjects and weights of the examination are as follows: 1. Russian, 3 (A—Written test, 1.5; 70% required; B—Oral test, 1.5; 70% required); 2. Polish, 3 (A—Written test, 1.5; 70% required; B—Oral test, 1.5; 70% required); 3. Lithuanian, 3 (A—Written test, 1.5; 70% required; B—Oral test, 1.5; 70% required); 4. Letter, 3; 70% required.

A physical examination will be held. Those who fail to pass the physical examination will not be admitted to the Mental Examination. Candidates who receive less than 70% in any test of the examination will not be summoned for the subsequent tests.

An eligible list will be prepared for each Borough of the City. Applicants must be residents of the Borough for which application is made at the time it is made, and their names will not be transferred to any other Borough list.

For the purpose of certification to the City Court and to the Magistrates' Courts of the First Division the eligible lists for the Boroughs of Manhattan and The Bronx will be merged. For the purpose of certification to the Court of Special Sessions, the eligible list for the five Boroughs will be merged.

For the purpose of certification to the Magistrates' Courts of the Second Division, the eligible list for the Boroughs of Brooklyn, Queens and Richmond will be merged.

For the purpose of certification to the Municipal Courts, the eligible list in the Borough for which the vacancy exists will be certified. The minimum age is 21 years. The salary is \$1,200 to \$1,500 per annum. The character of each applicant will be subjected to a searching inquiry by the Bureau of Investigation.

n30,d14 R. W. BELCHER, Secretary.

MUNICIPAL CIVIL SERVICE COMMISSION, NEW YORK, MUNICIPAL BUILDING, MANHATTAN, Nov. 6, 1914.

Amended Notice.

PUBLIC NOTICE IS HEREBY GIVEN THAT applications will be received from
FRIDAY, NOVEMBER 27, 1914, TO FRIDAY, DECEMBER 11, 1914,

for the position of

SUPERVISING INSPECTOR, PUBLIC BUILDINGS AND OFFICES, GE. 6.

No applications delivered at the office of the Commission by mail or otherwise, after 4 P. M., FRIDAY, DECEMBER 11, 1914, will be accepted.

Application blanks will be mailed upon request provided a self-addressed stamped envelope, or four cents in postage stamps, accompany the request, but the Commission will not guarantee the delivery of the same. Applications forwarded by mail upon which postage is not fully prepaid will not be accepted.

Applicants must be citizens of the United States and residents of the State of New York.

The duties of the position comprise the charge of personnel employed in the Public Buildings and Offices within the Bureau of the Borough President of Manhattan. The Supervising Inspector has immediate control over the employees in baths, comfort station, court houses, municipal buildings, etc., who are engaged in cleaning or operating the plans or are employed as repairmen. He has the responsibility for the proper conduct and efficiency of engineers, attendants, mechanics, and other squads of employees of both sexes. He examines into complaints of tenants of buildings, visitors, as to conditions or attendance. He maintains daily record of work done, inspections made, repairs, and attendance on all utilities. He must be a good judge of labor and have had the necessary experience in handling men that will ensure an ability to meet the needs of the service and the character of the work accomplished.

Subjects and weights: Experience, 5; duties, including report, 5. 75 per cent. on duties, 70 per cent. on experience and 70 per cent. required on all. To meet the above requirements, it is essential that the candidate shall show a continued employment in large building or buildings for at least five years as Superintendent of the same in charge of employees of the general character mentioned above or the equivalent.

Applications for this examination must be filed on a special blank, Form C. Experience blanks will be issued with the applications and must be filed with the Commission at the time of filing applications. The Experience will then be rated. Candidates failing to receive 70 per cent. on the Experience paper will not be summoned for the physical examination. Candidates failing to pass the physical examination will not be summoned for the mental test.

The candidates will be tested on their knowl-

edge of the equipment of public buildings, tools, appliances, and materials used in cleaning and operating the same. They will be required to submit a bill of materials and estimates of labor required for known conditions in one of the buildings. They will also be called upon to write a report upon some phase of their prospective duties.

One vacancy exists in the office of the Borough President of Manhattan. Salary, \$3,000 per annum. Minimum age, 21.

n28,d11 R. W. BELCHER, Secretary.

MUNICIPAL CIVIL SERVICE COMMISSION, NEW YORK, MUNICIPAL BUILDING, MANHATTAN, Nov. 27, 1914.

PUBLIC NOTICE IS HEREBY GIVEN THAT applications will be received from

FRIDAY, NOVEMBER 27, 1914, TO FRIDAY, DECEMBER 11, 1914,

for the position of

FOREMAN ASPHALT WORKER.

No applications delivered at the office of the Commission, by mail or otherwise, after 4 P. M., FRIDAY, DECEMBER 11, 1914, will be accepted.

Application blanks will be mailed upon request provided a self-addressed stamped envelope, or proper postage, is enclosed with the request, but the Commission will not guarantee the delivery of the same. Applications forwarded by mail upon which postage is not fully prepaid will not be accepted.

Applicants must be citizens of the United States and residents of the State of New York. The subjects and weights are: Experience, 5; Duties, 5. 70% required on Duties and 70% on all.

Applications for this examination must be filed on a special blank, Form B. Experience blanks will be issued with the applications and must be filed with the Commission at the time of filing applications. The Experience will then be rated.

Those not passing 70% will not be notified for a physical examination. Those who pass the physical examination will be summoned for a mental examination at a time to be specified later.

The duties of the Foreman Asphalt Worker include assignment to the Manhattan or Brooklyn Municipal Asphalt Repair plant to take charge of a gang working inside the plant or outside on surfacing. He will have responsibility for tools, the work of the roller and all men assigned to his gang. He may be engaged upon mixing gangs or laying gangs as occasion requires.

Candidates must show continuous experience for at least five years at mixing or laying of asphalt in new or repair work, either in the capacity of Foreman or Steam Roller Engineman; or they have served upon public works as an inspector for five years with at least one additional year exclusively devoted to asphalt making, testing or laying. Bakers or tamers who have occasionally directed men must show other experience in pavement work equal to the requirement as above. Candidates will be tested on their ability to compute weights and volumes of carts or piles; how to locate a repair spot for report and later identification; the preparation of time sheets; daily reports of work done; how to cut and repair defects; the treatment of asphalt; the proper temperatures; time of rolling; direction of rolling; general supervision of men and the care of tools, supplies and materials.

There are seven vacancies in the office of the Borough President of Manhattan at the Municipal Asphalt Repair Plant. Appointments may also be made from this list to positions of like grade at the plant in Brooklyn.

Minimum age, 21 years. Salary, \$4.50 per day.

n27,d11 R. W. BELCHER, Secretary.

MUNICIPAL CIVIL SERVICE COMMISSION, NEW YORK, MUNICIPAL BUILDING, MANHATTAN, Nov. 25, 1914.

PUBLIC NOTICE IS HEREBY GIVEN THAT applications will be received from

WEDNESDAY, NOVEMBER 25, 1914, TO THURSDAY, DECEMBER 10, 1914,

for the position of

CIVIL SERVICE EXAMINER, MALE AND FEMALE.

No applications delivered at the office of the Commission, by mail or otherwise, after 4 P. M., THURSDAY, DECEMBER 10, 1914, will be accepted. Application blanks will be mailed upon request provided a self-addressed stamped envelope or sufficient postage is enclosed to cover the mailing. The Commission will not guarantee the delivery of the same. Applications forwarded by mail upon which sufficient postage is not prepaid will not be accepted.

Applicants must be citizens of the United States and residents of the State of New York. The subjects and weights of the examination are: Duties, 5; 70% required; Experience, 3; Oral in duties, 2; 70% required. 70% on the total written examination required.

Candidates should have had training and experience to qualify them for the following

Duties.
1—The preparation of questions for examinations;
2—The rating of examination papers;
3—Field work and investigations in City departments to determine the exact nature of the duties of positions in the Competitive Class, preliminary to preparing and rating examinations. Applications for this examination must be filed on a special blank, Form C. Experience blanks will be issued with the applications and must be forwarded to the Commission with applications. Those who pass the physical examination will be summoned for the mental examination. Those who pass the written examinations will be summoned for the oral examination.

The minimum age is 21 years. Salary—one vacancy at \$2,400 per annum; one at \$2,100 per annum; and Per Diem vacancies at \$10.

n25,d10 R. W. BELCHER, Secretary.

BOROUGH OF BROOKLYN.**Proposals.**

OFFICE OF THE PRESIDENT OF THE BOROUGH OF BROOKLYN, ROOM NO. 2, BOROUGH HALL, BOROUGH OF BROOKLYN, THE CITY OF NEW YORK. SEALED BIDS OR ESTIMATES WILL BE received by the President, Borough of Brooklyn, at the above office until 11 o'clock A. M., on FRIDAY, DECEMBER 11, 1914.

NO. 1. FOR FURNISHING ALL THE LABOR AND MATERIAL REQUIRED FOR RECONSTRUCTING SEWERS IN AVENUE V BETWEEN WEST 7TH AND WEST 8TH STREETS.

The Engineer's preliminary estimate of the quantities is as follows:

55 linear feet of 108 inch storm water sewer, reconstructed complete, including all incidentals and appurtenances; per linear foot, \$33.00.....	\$1,815.00
65 linear feet of 42 inch sanitary sewer, reconstructed complete, including all incidentals and appurtenances; per linear foot, \$5.00.....	325.00
200 feet, Board Measure, of foundation planking, laid in place complete, including all incidentals and appurtenances; per thousand feet, Board Measure, \$30.00.....	6.00
Total	\$2,146.00

The time allowed for the completion of the

work and full performance of the contract will be Thirty (30) working days.

The amount of security required will be One Thousand Dollars (\$1,000.00).

NO. 2. FOR FURNISHING ALL THE LABOR AND MATERIAL REQUIRED FOR RECONSTRUCTING SEWER IN 14TH AVENUE, BETWEEN 61ST AND 62ND STREETS.

The Engineer's preliminary estimate of the quantities is as follows:

92 linear feet of 36 inch cast iron pipe sewer, laid complete, including all incidentals and appurtenances; per linear foot, \$17.25.....	\$1,587.00
One (1) manhole complete, with iron head and cover, including all incidentals and appurtenances; per manhole, \$160.00.....	160.00
Total	\$1,747.00

The time allowed for the completion of the work and full performance of the contract will be Thirty (30) working days.

The amount of security required will be Eight Hundred and Fifty Dollars (\$850.00).

The foregoing Engineer's preliminary estimates of the total cost for the completed work are to be taken as the 100 per cent. basis and test for bidding. Proposals shall each state a single percentage of such 100 per cent. (such as 95 per cent., 100 per cent. or 105 per cent.) for which all materials and work called for in the proposed contract and the notices to bidders are to be furnished to the City. Such percentage as bid for this contract shall apply to all unit items specified in the Engineer's preliminary estimate to an amount necessary to complete the work described in the contract.

Blank forms and further information may be obtained and the plans and drawings may be seen at the office of the Bureau of Sewers, 215 Montague St., Borough of Brooklyn.

n30,d11 L. H. POUNDS, President.

See General Instructions to Bidders on last page, last column, of the "City Record."

OFFICE OF THE PRESIDENT OF THE BOROUGH OF BROOKLYN, ROOM NO. 2, BOROUGH HALL, BOROUGH OF BROOKLYN, THE CITY OF NEW YORK. SEALED BIDS OR ESTIMATES WILL BE received by the President, Borough of Brooklyn, at the above office until 11 o'clock A. M., on

FRIDAY, DECEMBER 11, 1914.

NO. 1. FOR DREDGING WALLABOUT CANAL FROM A POINT 150 FEET NORTH OF HEWES STREET TO A POINT 800 FEET NORTH OF HEWES STREET.

The Engineer's preliminary estimate of the quantities is as follows:

4,500 cubic yards, scow measurement.

The time allowed for the completion of the work and full performance of the contract will be Thirty (30) calendar days.

The amount of security required will be Three Hundred Dollars (\$300.00).

The bidder will state the price of each item or article contained in the specifications or schedule herein contained or hereto annexed per cubic yard (scow measurement) or other unit of measure, by which the bids will be tested.

Bids will be compared and the contract awarded at a lump or aggregate sum for the contract.

Blank forms and further information may be obtained and the plans and drawings may be seen at the office of the Bureau of Sewers, the Borough of Brooklyn, No. 215 Montague Street, Brooklyn.

n30,d11 L. H. POUNDS, President.

Dated, Nov. 27, 1914.

See General Instructions to Bidders on last page, last column, of the "City Record."

OFFICE OF THE PRESIDENT OF THE BOROUGH OF BROOKLYN, ROOM NO. 2, BOROUGH HALL, BOROUGH OF BROOKLYN, THE CITY OF NEW YORK. SEALED BIDS OR ESTIMATES WILL BE received by the President of the Borough of Brooklyn at the above office until eleven (11) o'clock A. M., on

WEDNESDAY, DECEMBER 9, 1914.

FOR FURNISHING AND INSTALLING THE MECHANICAL EQUIPMENT OF PUMPING STATION AT GREENPOINT AVENUE AND JEWELL ST., SECTION NO. 2. STORM WATER AND SANITARY SEWERS IN NORTH HENRY STREET FROM CALVER STREET TO GREENPOINT AVENUE, AND OUTLET SANITARY SEWERS WITH ACCOMPANYING STORM SEWERS IN GREENPOINT AVENUE FROM NORTH HENRY STREET TO JEWELL STREET, TOGETHER WITH A PUMPING STATION, PUMP WELL AND APPURTENANCES, AT THE INTERSECTION OF GREENPOINT AVENUE AND JEWELL STREET.

The work to be done and the materials to be supplied are as follows:

Furnishing and delivering all labor and material and installing complete with all accessories, appliances and appurtenances two (2) direct connected motor driven vertical shaft type 8-inch centrifugal pumps, their driving motors, automatic electrical control apparatus, ventilating fan and motor, all switchboards, wiring for light and power, ladders, piping, valves and fittings in the pump chamber; screens, gratings, sluice-gate and platforms in the wet-well; and tearing down and re-erecting a manhole over the wet-well, also supplying a new manhole head and two covers cast from patterns furnished by the City.

The bidders will be required to guarantee the efficiency of the pumps and motors and the suitability of the outfit for the expected service.

The time allowed for the completion of the work and the full performance of the contract is sixty-five (65) working days.

The amount of security required is Two Thousand Two Hundred Dollars (\$2,200.00).

The bidder will be required to deposit a certified check or sum of money equal to five per centum (5%) of the amount of bond required.

The bids will be compared, and the contract will be awarded at a lump or aggregate sum for the contract.

Blank forms and further information may be obtained, and the plans and specifications may be seen at the office of the Bureau of Sewers, the Borough of Brooklyn, 215 Montague Street, Borough of Brooklyn.

n13,d9 L. H. POUNDS, President.

Dated, Nov. 10, 1914.

See General Instructions to Bidders on last page, last column, of the "City Record."

PUBLIC SERVICE COMMISSION.**Notices of Hearing on Form of Contract.**

NOTICE IS HEREBY GIVEN THAT A PUBLIC hearing will be held at the office of the Public Service Commission for the First District at 154 Nassau Street, Borough of Manhattan, New York City, on the 22nd day of December, 1914, at 12:15 o'clock P. M., upon the proposed terms and conditions of the contracts for doing the work and supplying the materials for "Station Finish" at all stations upon the elevated railroad sections of the Dual Subway System, namely:

Sections Nos. 1 and 2 of Route No. 16, the Jerome Avenue Rapid Transit Railroad; Section No. 2 of Routes Nos. 19 and 22, a portion of the Southern Boulevard and Westchester Rapid Transit Railroad; Sections Nos. 1 and 2 of Route No. 18, the

White Plains Road extension of the Lenox Avenue Branch of the existing subway;

Sections Nos. 1, 2 and 3 of Routes Nos. 36 and 37, the Astoria and Corona lines of Rapid Transit Railroad;

Route No. 50, a portion of the Steinway Tunnel extension in Queens Borough;

Route No. 31, the Livonia Avenue extension of the Eastern Parkway Rapid Transit Railroad;

Section No. 2 of Route No. 39, the New Utrecht Avenue, etc., portion of the Fourth Avenue Rapid Transit Railroad extension in Brooklyn;

Sections Nos. 1 and 2 of Route No. 49, the Gravesend Avenue, etc., portion of the Fourth Avenue Rapid Transit Railroad extension in Brooklyn.

Copies of the draft of said proposed contract containing the Invitation to Contractors, the schedules of the materials to be furnished and the description of the work to be done may be obtained at the office of the said Public Service Commission for one dollar each.

Dated, New York, December 1, 1914.

PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT, By EDWARD E. McCALL, Chairman.

TRAVIS H. WHITNEY, Secretary. d3,22

Proposals.

INVITATION TO CONTRACTORS.

Part of the Broadway-Fourth Avenue Rapid Transit Railroad.

The Public Service Commission for the First District (hereinafter called the "Commission"), acting for and on behalf of The City of New York (hereinafter called the "City"), invites proposals to construct Section No. 4 of Routes Nos. 4 & 36, a part of the Broadway-Fourth Avenue Rapid Transit Railroad.

The points within the City between which the said part is to run and the route or routes to be followed are briefly as follows:

SECTION NO. 4. Beginning at a point under Seventh Avenue near the southerly building line of West 51st Street, thence extending northerly under Seventh Avenue to a point about eighty-five (85) feet south of the southerly building line of West 59th Street; thence curving northeasterly under Seventh Avenue, West 59th Street and Central Park to a point about seventy-nine (79) feet east of the easterly building line of Seventh Avenue extended and about one hundred and thirty-seven (137) feet north of the south building line of West 59th Street, and including a spur curving northwesterly under Seventh Avenue, West 59th Street and Central Park to a point about twenty-two (22) feet west of the westerly building line of Seventh Avenue extended and one hundred and eighty-seven (187) feet north of the south building line of West 59th Street.

The general plan of construction calls for a subsurface railroad having two, four and six tracks.

The Contractor will not be required to provide or lay tracks, ties or ballast nor to do station finish work.

The work under the contract will include the care and support of buildings, vaults, sewers, pipes, railroads and other surface, subsurface and overhead structures, the maintenance of traffic and the restoration of pavements and other surfaces.

The method of construction will be partly by tunneling and partly by trench excavation under cover, unless otherwise permitted by the Commission.

The Contractor will be required to prosecute the work of construction from working shafts located at the points specified in the contract.

Bidders must examine the form of contract and the specifications and contract drawings, must visit the location of the work and inform themselves of the conditions along the line of the work and make their own estimates of the facilities and difficulties attending the execution of the work.

A fuller description of the work and other requirements, provisions, details and specifications are given in the form of contract and in the contract drawings therein referred to. Copies of the form of contract, bond and contractor's proposal and of the contract drawings may be inspected and purchased at the office of the Commission, No. 154 Nassau Street, Borough of Manhattan, New York City. The form of contract, bond and contractor's proposal and the contract drawings are to be deemed a part of this invitation.

Partial payments to the Contractor will be made monthly as the work proceeds, as provided in the contract.

The Contractor must complete the work within twenty-five (25) months from the delivery of the contract.

At the time of the delivery of the contract the Contractor must furnish security to the City by depositing a bond, cash or securities, in the sum of two hundred thousand dollars (\$200,000). As further security fifteen (15) per centum of the amounts certified from time to time to be due to the Contractor will be deducted until the amounts so deducted and retained shall equal ten (10) per centum of the total estimated amount to be paid to the Contractor under the contract. Thereafter there shall be so deducted and retained for such purpose ten (10) per centum of the amounts certified from time to time to be due to the Contractor.

Sealed bids or proposals will be received at the office of the Commission at No. 154 Nassau Street, Borough of Manhattan, City of New York, until the 11th day of December, 1914, at twelve o'clock (12.00) o'clock p. m., at which time and place, or at a later date to be fixed by the Commission, the proposals will be publicly opened.

Proposals must be in the form prescribed by the Commission.

A statement, based upon the estimate of the Chief Engineer of the Commission, of the quantities of the various classes of the work and of the nature and extent as near as practicable of the work is to be found in the schedule in the form of contractor's proposal. The quantities given in such schedule are approximate only, being given as a basis for the uniform comparison of bids, and no claim is to be made against the City on account of any excess or deficiency, absolute or relative, in the same except as provided in the specifications and form of contract.

Every proposal must when submitted be enclosed in a sealed envelope endorsed "Proposal for Constructing Part of Rapid Transit Railroad—Routes Nos. 4 & 36, Section No. 4," and must be delivered to the Commission or its Secretary; and in the presence of the person submitting the proposal, it will be deposited in a sealed box in which all proposals will be deposited. No proposal will be received unless accompanied by a separate certified check for twenty thousand dollars (\$20,000) payable to the order of the Comptroller of the City and drawn upon a national or state bank or trust company satisfactory to the Commission and having its principal office in New York City. Such check must not be enclosed in the envelope containing the proposal.

The Unit Prices must not be improperly balanced, and any bid which the Commission considers detrimental to the City's interests may be rejected.

No proposal, after it shall have been deposited with the Commission, will be allowed to be withdrawn for any reason whatever.

The award of the contract will be made by the Commission as soon as practicable after the opening of the proposals.

Deposits made by bidders whose proposals are not accepted will be returned within three (3) days after the contract is executed and delivered and its provisions in respect of the bond or deposit are complied with, unless all proposals shall be rejected, in which event such deposits will be returned within three (3) days after such rejection. The deposit of the successful bidder will be returned when the contract is executed and delivered and its provisions in respect of the bond or deposit are complied with.

The right to reject any and all bids is reserved.

New York November 17, 1914.

PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT, By EDWARD E. McCALL, Chairman.

TRAVIS H. WHITNEY, Secretary. n18,d11

ARMORY BOARD.

Proposals.

OFFICE OF THE ARMORY BOARD, HALL OF RECORDS, MANHATTAN.

SEALED BIDS OR ESTIMATES WILL BE received at the office of the Mayor, City Hall, at 2.30 o'clock P. M.

WEDNESDAY, DECEMBER 16, 1914.

ITEM NO. 1: ELECTRICAL EQUIPMENT, 1ST BATTALION, NAVAL MILITIA ARMORY, FOOT OF 97TH STREET, MANHATTAN.

Time allowed for the completion of the work, Forty (40) working days. Security required, \$1,000. Deposit required, \$50.

ITEM NO. 2: HEATING AND VENTILATING WORK, NEW 8TH ARTILLERY DISTRICT ARMORY, JEROME AVENUE AND KINGSBRIDGE ROAD, BOROUGH OF THE BRONX.

Time allowed for the completion of the work, 100 consecutive working days. Security required, \$12,500. Deposit required, \$500.

ITEM NO. 3: WATERPROOFING, 13TH COAST DEFENSE COMMAND, JEFFERSON AND SUMNER AVENUE, BOROUGH OF BROOKLYN.

Time allowed for the completion of the work, Forty-five consecutive working days. Security required, \$2,000. Deposit required, \$100.

ITEM NO. 4: PLUMBING WORK, 12TH REGIMENT ARMORY, 62ND STREET AND COLUMBUS AVENUE, MANHATTAN.

Time allowed for doing the work, Thirty consecutive working days. Security required, \$1,000. Deposit required, \$50.

ITEM NO. 5: ELECTRIC WIRING, NEW 8TH COAST DEFENSE COMMAND, JEROME AVENUE AND KINGSBRIDGE ROAD, BOROUGH OF THE BRONX.

Time allowed for the completion of the work, 100 consecutive working days. Security required, \$5,500. Deposit required, \$275.

A separate proposal shall be submitted for each item.

Blank forms and further information may be obtained at the office of The Armory Board, Hall of Records, Manhattan.

THE ARMORY BOARD—JOHN PURROY MITCHEL, Mayor; WILLIAM A. PRENDERGAST, Comptroller; GEORGE MCANENY, Pres't, Board of Aldermen; GEORGE R. DYER, Brig. Gen. 1st Brig.; JOHN C. EDDY, Brig. Gen. 2nd Brig.; R. P. FORSHEW, Commodore, Naval Militia, N. Y.; LAWSON PURDY, Pres't Dept. of Taxes and Assessments.

Dec. 2, 1914. d2,16

See General Instructions to Bidders on last page, last column, of the "City Record."

DEPARTMENT OF EDUCATION.

Proposals.

DEPARTMENT OF EDUCATION, CORNER OF PARK AVENUE AND 59TH STREET, BOROUGH OF MANHATTAN, CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Superintendent of School Supplies at the above office of the Department of Education until three o'clock P. M., on

MONDAY, DECEMBER 14, 1914.

Borough of Queens.
NO. 1:—FOR OPERA CHAIRS FOR PUBLIC SCHOOL 85, ON DEBEVOISE AVENUE, NEAR WOOLSEY AVENUE, LONG ISLAND CITY, BOROUGH OF QUEENS.

The time allowed to complete the whole work will be sixty (60) working days, as provided in the contract.

The amount of security required is Six Hundred (\$600) Dollars.

Various Boroughs.
NO. 2:—FOR INSTALLING FORCED DRAFT APPARATUS IN PUBLIC SCHOOLS 95 AND 100, WASHINGTON IRVING HIGH SCHOOL DEWITT CLINTON HIGH SCHOOL, AND HIGH SCHOOL OF COMMERCE, BOROUGH OF MANHATTAN, AND IN PUBLIC SCHOOLS 19, 64, 165, 167 AND 168, AND EASTERN DISTRICT HIGH SCHOOL, BOROUGH OF BROOKLYN.

The time allowed to complete the whole work on each school will be sixty (60) working days, as provided in the contract.

The amount of security required is as follows:
P. S. 95, Man., \$500.00; P. S. 100, Man., \$500.00; W. I. H. S., Man., \$300.00; D. W. C. H. S., Man., \$300.00; I. S. C. P. S. 64, Bklyn., \$700.00; P. S. 19, Bklyn., \$800.00; P. S. 64, Bklyn., \$700.00; P. S. 165, Bklyn., \$700.00; P. S. 167, Bklyn., \$700.00; P. S. 168, Bklyn., \$700.00; E. D. H. S., Bklyn., \$500.00.

The deposit accompanying bid on each school shall be five per centum of the amount of security.

A separate proposal must be submitted for each school and award will be made thereon.

On No. 1, the bids will be compared and the contract will be awarded in a lump sum to the lowest bidder.

On No. 2, the bidders must state the price of each item, by which the bids will be tested.

Blank forms, plans and specifications may be obtained or seen at the office of the Superintendent, at Estimating Room, 9th floor, Hall of the Board of Education, Park Avenue and 59th Street, Borough of Manhattan, and also at Branch Office, No. 69 Broadway, Flushing, Borough of Queens.

C. B. J. SNYDER, Superintendent of School Buildings.

Dated, December 2, 1914. d2,14

See General Instructions to Bidders on last page, last column, of the "City Record."

DEPARTMENT OF EDUCATION, CORNER OF PARK AVENUE AND 59TH ST., BOROUGH OF MANHATTAN, CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Superintendent of School Supplies at the above office of the Department of Education until 11 A. M., on

MONDAY, DECEMBER 14, 1914.

FOR FURNISHING AND DELIVERING PORTABLE WAGON AND AUTO SCALES TO THE BOARD OF EDUCATION, THE CITY OF NEW YORK.

The time for the delivery of the articles, ma-

terials and supplies and the performance of the contract is ninety (90) consecutive working days.

The amount of security required is thirty (30%) per cent. of the amount of the bid or estimate.

The bidder will state the price of each item or article contained in the specifications or schedules herein contained or hereto annexed, by which the bids will be tested. Award will be made to the lowest bidder.

Delivery will be required to be made at the time and in the manner and in such quantities as may be directed.

Blank forms and further information may be obtained at the office of the Superintendent of School Supplies, Board of Education, the Borough of Manhattan, southwest corner of Park Ave. and 59th St.

PATRICK JONES, Superintendent of School Supplies.

Dated, December 2, 1914. d2,14

See General Instructions to Bidders on last page, last column, of the "City Record."

DEPARTMENT OF EDUCATION, CORNER OF PARK AVENUE AND 59TH ST., BOROUGH OF MANHATTAN, CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Superintendent of School Supplies at the above office of the Department of Education, until 11 A. M. on

FRIDAY, DECEMBER 11, 1914.

FOR PACKING, CARRYING, LOADING, CARTING, DELIVERING, TRANSFERRING, RETRANSFERRING, RETURNING, ETC., SCHOOL SUPPLIES TO THE SCHOOLS, PLAYGROUNDS, RECREATION CENTRES, DEPOSITORIES, ETC., OF THE CITY OF NEW YORK, IN THE BOROUGH OF MANHATTAN, THE BRONX, BROOKLYN, QUEENS AND RICHMOND.

The value of the supplies to be delivered will be about \$1,600,000.

Supplies are to be delivered in baskets and packages to all schools in the City of New York, located in the Boroughs of Manhattan, The Bronx, Brooklyn, Queens and Richmond, at the time and in the manner and in such quantities as may be required.

All supplies must be delivered to the floors and rooms of the various school buildings, must be unpacked and assorted so that Principals and representatives may check same intelligently and itemized receipt presented the day of delivery, if possible, but not later than 9 A. M. on the day following.

Contractor will be required, when supplies are to be transferred from one school to another, to pack supplies in said school, transfer same and unpack them at the school or schools where they are delivered.

The time for the completion and performance of the contract is from January 1, 1915, to December 31, 1915, inclusive. The amount of the security required is: For entire contract, Fifteen Thousand Dollars (\$15,000); for extra trucks or auto trucks, Two Hundred and Fifty Dollars (\$250) for each item.

The bidder will write out the amount of his bid, in addition to inserting the same in figures.

Award of contract will be made to the lowest bidder on each item who proves to the satisfaction of the Committee on Supplies that he can do the work.

Bids must be submitted in duplicate, each in a separate envelope.

Blank forms and further information may be obtained in the office of the Superintendent of School Supplies, Board of Education, corner of Park Ave. and 59th St., Borough of Manhattan. PATRICK JONES, Superintendent of School Supplies.

Dated, November 30, 1914. n30,d11

See General Instructions to Bidders on last page, last column, of the "City Record."

DEPARTMENT OF EDUCATION, PARK AVENUE AND 59TH ST., BOROUGH OF MANHATTAN, CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Superintendent of School Supplies at the above office of the Department of Education until 11 A. M., on

FRIDAY, DECEMBER 11, 1914.

FOR FURNISHING AND DELIVERING SUPPLIES FOR USE IN THE TRUANT SCHOOLS OF THE CITY OF NEW YORK, IN THE BOROUGH OF MANHATTAN, BROOKLYN AND QUEENS, AND ICE FOR OFFICES AND HIGH SCHOOLS.

The time for the delivery of the articles, materials and supplies and the performance of the contract is by or before December 31, 1915.

The amount of security required is thirty (30%) per cent. of the amount of the contract.

The bidder will state the price of each item or article contained in the specifications and schedules herein contained or hereto annexed, per item, pound, dozen, gallon, yard, or other unit of measure, by which the bids will be tested.

Award will be made to the lowest bidder on each item.

Delivery will be required to be made at the time and in the manner and in such quantities as may be directed.

Bids must be submitted in duplicate, each in a separate envelope.

Blank forms and further information may be obtained at the office of the Superintendent of School Supplies, Department of Education, Borough of Manhattan, southwest corner of Park Ave. and 59th St.

PATRICK JONES, Superintendent of School Supplies.

Dated, November 30, 1914. n30,d11

See General Instructions to Bidders on last page, last column, of the "City Record."

BOARD OF CITY RECORD.

Proposals.

SEALED BIDS OR ESTIMATES WILL BE received at the office of the Supervisor of the City Record, Room 812, Municipal Building, in The City of New York, until 11 o'clock a. m., on

WEDNESDAY, DECEMBER 16, 1914.

FOR SUPPLYING PRINTED, LITHOGRAPHED OR BLANK BOOKS, DOCKETS, LIBERS, BINDING COVERS, BINDING, ETC., FOR THE USE OF THE COURTS AND THE DEPARTMENTS AND THE BUREAUS OF THE GOVERNMENT OF THE CITY OF NEW YORK DURING THE YEAR 1915.

The delivery shall be fully and entirely performed within one hundred and fifty (150) calendar days after the execution of the contract. The Supervisor, however, may require delivery at an earlier date of any item or items on this contract by notice to the contractor, whereupon the item or items called for must be delivered not later than thirty days after said notice.

The amount of security shall be twenty-five (25) per cent. of the amount of the bid.

The bidder must state the item price for each item and the total price of each Department, Bureau or Court schedule. The bids will be tested and the award made by the schedule.

Bidders will write out the total amount of their estimates in addition to inserting the same in figures.

The said Board reserves the right to reject all bids or estimates if it deems it to be for the interest of the City so to do.

Delivery will be required to be made at the Distributing Division of the City Record at 96

and 98 Reade st., from time to time, and in such quantities as may be directed by the Supervisor of the City Record.

For particulars as to the quantity and quality of the supplies or the nature and extent of the work, reference must be made to the specifications, to be had at the office of the Supervisor and on file in the office of the Comptroller.

JOHN PURROY MITCHEL, Mayor; FRANK L. POLK, Corporation Counsel; WM. A. PRENDERGAST, Comptroller; Board of City Record.

The City of New York, December 2, 1914. d4,16

See General Instructions to Bidders on last page, last column, of the "City Record."

SEALED BIDS OR ESTIMATES WILL BE received at the office of the Supervisor of the City Record, Room 812, Municipal Building, in The City of New York, until 11 o'clock a. m., on

WEDNESDAY, DECEMBER 9, 1914.

FOR SUPPLYING PRINTED, LITHOGRAPHED OR STAMPED FORMS, PAMPHLETS, PRINTED BLANKS, PRINTED CARDS, TAGS, TICKETS, ETC., AND STATIONERY, INCLUDING LETTER AND WRITING PAPER AND ENVELOPES, WITH PRINTED HEADINGS OR INDOORSEMENTS, ETC., FOR THE USE OF THE COURTS AND THE DEPARTMENTS AND BUREAUS OF THE GOVERNMENT OF THE CITY OF NEW YORK DURING THE YEAR 1915.

The delivery shall be fully and entirely performed within one hundred and fifty (150) calendar days after the execution of the contract. The amount of security shall be thirty (30) per cent. of the amount of the bid.

The bidder must state the price for each item and the total price of each schedule. The bids will be tested and the award will be made to the bidder whose bid is the lowest for each schedule.

Bidders will write out the total amount of their estimates, in addition to inserting the same in figures.

Delivery will be required to be made at the Distributing Division of the City Record, 96

and 98 Reade st., from time to time, and in such quantities as may be directed by the Supervisor of the City Record.

Bidders are requested to make their bids or estimates upon the blank form prepared by the Board of City Record, a copy of which, with the proper envelope in which to inclose the bid, together with a copy of the contract, including the specifications, in the form approved by the Corporation Counsel, can be obtained upon application therefor at the office of the City Record, where further information can be obtained.

JOHN PURROY MITCHEL, Mayor; FRANK L. POLK, Corporation Counsel; WILLIAM A. PRENDERGAST, Comptroller; Board of City Record.

New York, November 13th, 1914. n13,d9

See General Instructions to Bidders on last page, last column, of the "City Record."

BOARD OF ASSESSORS.

Completion of Assessments.

PUBLIC NOTICE IS HEREBY GIVEN TO the owner or owners of all houses and lots, improved and unimproved lands affected thereby, that the following proposed assessments have been completed and are lodged in the office of the Board of Assessors for examination by all persons interested, viz.:

Borough of The Bronx.
4450. Sewer and appurtenances in East 172nd Street between Seabury Place and Boston Road. Affecting Block Nos. 2966 and 2967.

Borough of Queens.
4382. Constructing a temporary catch basin at the southeast corner of Jamaica Avenue and Walker Avenue (1 Place) and connecting same with the existing catch basin at the northwest corner of Jamaica and Manor Avenues and also with 400 feet of loose jointed blind drain in Walker Avenue from Jamaica Avenue southerly. Affecting Block Nos. 33 to 44 and 80 to 84, Fourth Ward.

Borough of Brooklyn.
4194. Regulating, grading, curbing and flagging 61st Street between 12th and Fort Hamilton Avenues. Together with a list of awards for damages caused by a change of grade.
4308. Paving 54th Street between 13th and 15th Avenues.

4353. Regulating, grading, curbing and flagging East 22nd Street from Avenue M to Kings Highway.

4459. Paving Lewis Place from Coney Island Avenue to Stratford Road.

The area of assessment in the above mentioned lists extends to within half the block at the intersecting and terminating streets and avenues.

All persons whose interests are affected by the above named proposed assessments, and who are opposed to the same or either of them, are requested to present their objections, in writing, to the Secretary of the Board of Assessors, Room 809, Municipal Building, New York, on or before Tuesday, January 5, 1915, at 10 a. m., at which time and place the said objections will be heard and testimony received in reference thereto.

ALFRED P. W. SEAMAN, WM. C. ORMOND, JACOB J. LESSER, Board of Assessors. ST. GEORGE B. TUCKER, Secretary, Room 809, Municipal Building, City of New York, Borough of Manhattan.

December 5, 1914. d5,16

PUBLIC NOTICE IS HEREBY GIVEN TO the owner or owners of all houses and lots, improved and unimproved lands affected thereby, that the following proposed assessments have been completed and are lodged in the office of the Board of Assessors for examination by all persons interested, viz.:

Borough of Manhattan.
4410. Alteration and improvement to sewer in Avenue D from Fifth Street to Eighth Street. Affecting Block Nos. 360, 363, 375, 376 and 377.
4413. Sewer in 191st Street between Audubon and St. Nicholas Avenues. Affecting Block No. 2161.

4422. Basin on the northwest corner of 123rd Street and Morningside Avenue. Affecting Block No. 1964.

4423. Basins on the south side of Waverly Place—one at about the westerly house line of Sixth Avenue and another about 350 feet westerly therefrom. Affecting Block No. 592.

4436. Reconstruction of sewer in 111th Street between Manhattan and Eighth Avenues. Affecting Block No. 1846.

4437. Sewers and appurtenances in the Service Street forming the widening of Riverside Drive on its easterly side between 158th and 160th Streets, and in 160th Street between Riverside Drive and Fort Washington Avenue. Affecting Block No. 2136.

Borough of Queens.
4147. Regulating, grading, curbing, flagging, paving, etc., Fresh Pond Road from Myrtle Avenue to Woodbine Street, Second Ward. Affecting Block Nos. 25

De Kalb and Myrtle Avenues, Second Ward. Together with a list of awards for damages caused by a change of grade.

Borough of The Bronx.
4427. Paving and curbing Hoe Avenue from East 167th Street to West Farms Road.

Borough of Brooklyn.
4358. Regulating, grading, curbing and flagging 20th Avenue between West Street and 53rd Street.

4361. Paving Crown Street between Nostrand and New York Avenues.

4401. Paving Crown Street between Bedford and Rogers Avenues.

4402. Paving 86th Street between 16th and 18th Avenues.

4403. Regulating, grading, curbing and flagging Montgomery Street between Kingston and Albany Avenues.

4406. Curbing and flagging 82nd Street between 21st and Stillwell Avenues.

4407. Regulating, grading, curbing and flagging Herzl (Ames) Street between Livonia and Riverdale Avenues.

4408. Regulating, grading, curbing and flagging Pine Street between Atlantic Avenue and Fulton Street.

4430. Regulating, grading, curbing and flagging Canarsie Lane between Nostrand and New York Avenues.

4431. Regulating, grading, curbing and flagging Williams Avenue between Louisiana and Hegeman Avenues.

The area of assessment in the above mentioned lists extends to within half the block at the intersecting and terminating streets and avenues.

4317. Sewer in Canarsie Lane from Nostrand Avenue to East 31st Street. Affecting Block No. 4930.

All persons whose interests are affected by the above named proposed assessments, and who are opposed to the same or either of them, are requested to present their objections, in writing, to the Secretary of the Board of Assessors, Room 809, Municipal Building, New York, on or before December 29, 1914, at 10 a. m., at which time and place the said objections will be heard and testimony received in reference thereto.

ALFRED P. W. SEAMAN, WM. C. ORMOND, JACOB J. LESSER, Board of Assessors.
St. George B. Tucker, Secretary, Room 809, Municipal Building, City of New York, Borough of Manhattan.
November 28, 1914. n28,d9

Notice to Present Claims for Damages.

PUBLIC NOTICE IS HEREBY GIVEN TO all persons claiming to have been injured by a change of grade in the regulating and grading of the following named streets to present their claims, in writing, to the Secretary of the Board of Assessors, Room 809, Municipal Building, on or before December 10, 1914, at 10 o'clock a. m. Claimants are requested to make their claims for damages upon the blank form prepared by the Board of Assessors, copies of which may be obtained upon application at the above office.

Borough of The Bronx.

4452. East 141st Street from Park Avenue to Rider Avenue.

4453. East 190th Street from Jerome Avenue to Creston Avenue.

4454. Unionport Road from Morris Park Avenue to Walker Avenue.

Borough of Queens.

4460. Andrews (Helen) Street from Metropolitan Avenue to Zeidler Street, Second Ward.

4461. Edsall Avenue from Anthon Avenue to Onderdonk Avenue, Second Ward.

4462. Fairview Avenue from Forest Avenue to Woodbine Street, Second Ward.

4463. Vandewater Avenue from Second Avenue to Sixth Avenue, First Ward.

4464. Woodward Avenue from the Brooklyn Rapid Transit Railroad Crossing to Calappa (Elm) Avenue, Second Ward.

4465. Guion Avenue from Jamaica Avenue to Fulton Street, Fourth Ward.

4466. Nugget Place (Dakota Avenue) from Fulton (Eighth) Street to Rockaway Boulevard, Fourth Ward.

4467. Weil Place from Flushing Avenue to North Washington Place, First Ward.

ALFRED P. W. SEAMAN, WM. C. ORMOND, JACOB J. LESSER, Board of Assessors.
St. George B. Tucker, Secretary, Room 809, Municipal Building, City of New York, Borough of Manhattan.
November 28, 1914. n28,d9

DEPARTMENT OF PUBLIC CHARITIES.

Proposals.

MAIN OFFICE OF THE DEPARTMENT OF PUBLIC CHARITIES, MUNICIPAL BUILDING, ROOM 1091, THE CITY OF NEW YORK.
SEALED BIDS OR ESTIMATES WILL BE received by the Department of Public Charities at the above office until 2.30 o'clock p. m., on

WEDNESDAY, DECEMBER 16, 1914.
FOR FURNISHING ALL THE LABOR AND MATERIALS REQUIRED FOR THE GENERAL WORK NECESSARY FOR THE ALTERATION AND EQUIPMENT OF A NEW SERVING ROOM AND FOR ENLARGING THE DELIVERY TOILET AND BATH ROOMS IN CUMBERLAND STREET HOSPITAL, BOROUGH OF BROOKLYN, THE CITY OF NEW YORK.

The time allowed for the completion of the work and full performance of the contract is sixty (60) consecutive working days.
The security required will be Nine Hundred Dollars (\$900).

Certified check or cash in the sum of Forty-five Dollars (\$45) must accompany bid.

The bidder will state one aggregate price for the whole work described and specified, as the contract is entire for a complete job.

Blank forms and further information may be obtained at the office of the Contract Clerk of the Department, Room 1034, Municipal Building, The City of New York, where plans and specifications may be seen.

JOHN A. KINGSBURY, Commissioner.

Dated December 5, 1914. d4,16

See General Instructions to Bidders on last page, last column, of the "City Record."

MAIN OFFICE OF THE DEPARTMENT OF PUBLIC CHARITIES, MUNICIPAL BUILDING, ROOM 1091, THE CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Department of Public Charities at the above office until 2.30 o'clock p. m. on

MONDAY, DECEMBER 14, 1914.

FOR FURNISHING AND DELIVERING MILK.

The time for the performance of the contract is during the year 1914.

No bond will be required with the bid, as heretofore, but will be required upon awarding of the contract in an amount equal to thirty (30) per cent. of the contract.

No bid will be considered unless it is accompanied by a deposit, which shall be in the form of money, or a certified check upon one of the State or National banks of the City of New York, drawn to the order of the Comptroller, or corporate stock or certificates of indebtedness of any nature issued by The City of New York and approved by the Comptroller as of equal value to the security required. Such deposit

shall be in an amount not less than one and one-half (1½) per cent. of the total amount of the bid.

The bidder will state the price per quart, or other designated unit, by which the bids will be tested. The extensions must be made and footed up, as the bids will be read from the total and awards made to the lowest bidder on each line or item, as stated in the specifications.

Bids must be submitted in duplicate, each in a separate envelope. No bid will be accepted unless this provision is complied with.

Blank forms and further information may be obtained at the office of the Contract Clerk of the Department, Room 1034, New Municipal Building, Borough of Manhattan.

JOHN A. KINGSBURY, Commissioner.

Dated December 3, 1914. d3,14

See General Instructions to Bidders on last page, last column, of the "City Record."

MAIN OFFICE OF THE DEPARTMENT OF PUBLIC CHARITIES, MUNICIPAL BUILDING, ROOM 1091, THE CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Department of Public Charities at the above office until 2.30 o'clock p. m. on

FRIDAY, DECEMBER 11, 1914.

FOR FURNISHING AND DELIVERING MEAT, POULTRY, BUTTER, EGGS, COFFEE, BACON AND OATS.

The time for the performance of the contract is during the year 1914.

No bond will be required with the bid, as heretofore, but will be required upon awarding of the contract in an amount equal to thirty (30) per cent. of the contract.

No bid will be considered unless it is accompanied by a deposit, which shall be in the form of money, or a certified check upon one of the State or National banks of the City of New York, drawn to the order of the Comptroller, or corporate stock or certificates of indebtedness of any nature issued by The City of New York and approved by the Comptroller as of equal value to the security required. Such deposit

shall be in an amount not less than one and one-half (1½) per cent. of the total amount of the bid.

The bidder will state the price per pound, or other designated unit, by which the bids will be tested. The extensions must be made and footed up, as the bids will be read from the total and awards made to the lowest bidder on each line or item, as stated in the specifications.

Bids must be submitted in duplicate, each in a separate envelope. No bid will be accepted unless this provision is complied with.

Blank forms and further information may be obtained at the office of the Contract Clerk of the Department, Room 1034, New Municipal Building, Borough of Manhattan.

JOHN A. KINGSBURY, Commissioner.

Dated December 1, 1914. d1,11

See General Instructions to Bidders on last page, last column, of the "City Record."

BOARD OF WATER SUPPLY.

Proposals.

SEALED BIDS WILL BE RECEIVED BY the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 A. M. on

TUESDAY, DECEMBER 8, 1914.

FOR CONTRACT AF FOR PRINTING.

An approximate statement of the quantities of the various classes of work and further information are given in the Information for Bidders, forming part of the contract. At the above place and time the bids will be publicly opened and read.

The award of the contract, if awarded, will be made by the Board as soon thereafter as practicable. The Board reserves the right to reject any and all bids.

A bond in the sum of thirty-five per cent. (35%) of the total amount of the contract will be required for the faithful performance of the contract.

No bid will be received and deposited unless accompanied by a certified check upon a National or State Bank, drawn to the order of the Comptroller of the City of New York to the amount of five hundred dollars (\$500).

The contract will terminate on the completion of all editions under way December 31, 1916.

Pamphlets containing information for bidders, forms of proposal, contract, specifications, etc., can be obtained at the above address, at the office of the Secretary, upon application in person or by mail, by depositing the sum of five dollars (\$5) in cash or its equivalent for each pamphlet. This deposit will be refunded upon the return of the pamphlet in acceptable condition within thirty days from the date on which bids are to be opened.

For further particulars apply to the office of the Principal Assistant Engineer at the above address.

CHARLES STRAUSS, President; CHARLES N. CHADWICK, JOHN F. GALVIN, Commissioners of the Board of Water Supply.

W. BRUCE COBB, Secretary. n19,d8

NOTE: See general instructions to bidders on last page, last column, of the City Record, so far as applicable hereto and not otherwise provided for.

POLICE DEPARTMENT.

Auction Sale of Condemned Property.

POLICE DEPARTMENT, CITY OF NEW YORK, December 1st, 1914.

PUBLIC NOTICE IS HEREBY GIVEN THAT the One Hundred and Sixty-eighth Public Auction Sale, consisting of Condemned Police Department property (as follows: Bedsteads, Bed ends, etc.; Clocks; Tools; Motorcycles; Motorcycle fittings; Motorcycle shoes; Auto shoes; Inner tubes; Chandeliers and gas fixtures; Filing cases; Desks, Letter Presses; Harness; Skid chains; Auto horns; Carpet sweepers; Stoves; Gongs; Lamps; Bicycle tires; Window shades; Auto body; Patrol Wagons, etc.) will be held at the Property Clerk's Store room, Ave. D and East 2nd Street, on

THURSDAY, DECEMBER 17, 1914,

at 10:00 A. M.

Note: Patrol wagons can be seen at the Brighton Beach Race Track.

Terms—Strictly cash. No checks accepted. Property not warranted. Property must be removed at once.

ARTHUR WOODS, Police Commissioner. d5,17

OWNERS WANTED FOR UNCLAIMED PROPERTY.

POLICE DEPARTMENT, CITY OF NEW YORK.

OWNERS WANTED BY THE PROPERTY Clerk of the Police Department of the City of New York, No. 240 Centre st., for the following property now in custody, without claimants: Boats, rope, iron, lead, male and female clothing, boots, shoes, wine, blankets, diamonds, canned goods, liquors, etc.; also small amount of money taken from prisoners and found by Patrolmen of this Department.

ARTHUR WOODS, Police Commissioner.

POLICE DEPARTMENT OF CITY OF NEW YORK, BOROUGH OF BROOKLYN.

OWNERS WANTED BY THE PROPERTY Clerk of the Police Department of the City

of New York—Office, No. 72 Poplar st., Borough of Brooklyn—for the following property, now in custody, without claimants: Boats, rope, iron, lead, male and female clothing, boots, shoes, wine, blankets, diamonds, canned goods, liquors, etc.; also small amount of money taken from prisoners and found by Patrolmen of this Department.

ARTHUR WOODS, Police Commissioner.

DEPARTMENT OF PARKS.

Proposals.

OFFICE OF THE DEPARTMENT OF PARKS, MUNICIPAL BUILDING, BOROUGH OF MANHATTAN, CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Park Board at the above office of the Department of Parks until 3 o'clock p. m., on

THURSDAY, DECEMBER 17, 1914.

Boroughs of Manhattan and Richmond.

FOR ALL LABOR AND MATERIALS REQUIRED FOR THE ALTERATION OF THE STORAGE SHEDS IN THE 97TH ST. STORAGE YARD, IN CENTRAL PARK, FOR STABLE PURPOSES, BOR. OF MANHATTAN.

The time allowed for the completion of the contract is fifty (50) calendar days.

The amount of security required is Two thousand dollars (\$2,000.00).

The bids will be compared and the contract awarded at a lump or aggregate sum.

Blank forms and other information may be obtained at the office of the Department of Parks, Room 1092, Municipal Bldg., Centre and Chambers St., Bor. of Manhattan, said City.

CABOT WARD, President; THOS. W. WHITTLE, RAYMOND V. INGERSOLL, JOHN E. WEIER, Park Commissioners.

d5,17

See General Instructions to Bidders on last page, last column, of the "City Record."

OFFICE OF THE DEPARTMENT OF PARKS, MUNICIPAL BUILDING, BOROUGH OF MANHATTAN, CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Park Board at the above office of the Department of Parks until 3 o'clock p. m., on

THURSDAY, DECEMBER 17, 1914.

Boroughs of Manhattan and Richmond.

FOR ALL LABOR AND MATERIALS REQUIRED FOR THE EXTENSION OF THE SUMP PIT AT THE EAST HALF OF THE STORAGE YARD, 97TH ST., IN CENTRAL PARK.

The time allowed for the completion of the contract is fifty (50) calendar days.

The amount of security required is five hundred dollars (\$500).

The bids will be compared and the contract awarded at a lump or aggregate sum.

Blank forms and other information may be obtained at the office of the Department of Parks, Room 1092, Municipal Bldg., Centre and Chambers St., Bor. of Manhattan, N. Y. City.

CABOT WARD, President; THOS. W. WHITTLE, RAYMOND V. INGERSOLL, JOHN E. WEIER, Park Commissioners.

d5,17

See General Instructions to Bidders on last page, last column, of the "City Record."

OFFICE OF THE DEPARTMENT OF PARKS, MUNICIPAL BUILDING, BOROUGH OF MANHATTAN, CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Park Board at the above office of the Department of Parks until 3 o'clock p. m., on

THURSDAY, DECEMBER 10, 1914.

Borough of The Bronx.

FOR FURNISHING ALL THE LABOR AND MATERIALS FOR MAKING REPAIRS TO THE COLONIAL MANSION IN VAN CORTLANDT PARK, IN THE BOROUGH OF THE BRONX, IN THE CITY OF NEW YORK.

The time allowed for the completion of the contract is sixty (60) calendar days.

The amount of security required is One thousand dollars (\$1,000.00).

The bids will be compared and the contract awarded at a lump or aggregate sum.

Blank forms and other information may be obtained at the office of the Department of Parks, Zborowski Mansion, Claremont Park, Borough of The Bronx.

CABOT WARD, President; THOS. W. WHITTLE, RAYMOND V. INGERSOLL, JOHN E. WEIER, Park Commissioners.

n28,d10

See General Instructions to Bidders on last page, last column, of the "City Record."

FIRE DEPARTMENT.

Proposals.

HEADQUARTERS OF THE FIRE DEPARTMENT OF THE CITY OF NEW YORK, ELEVENTH FLOOR, MUNICIPAL BUILDING, BOROUGH OF MANHATTAN, THE CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Fire Commissioner at the above office until 10.30 o'clock A. M., on

TUESDAY, DECEMBER 15, 1914.

NO. 1—FOR FURNISHING ALL THE LABOR AND MATERIALS REQUIRED FOR INSTALLING GASOLINE STORAGE SYSTEMS IN THE QUARTERS OF ENGINE COMPANIES 1, 5, 11, 15, 17, 21, 25 AND HOOK AND LADDER COMPANIES 3, 4, 7, 9, 11, 21.

The time for the completion of the work and the full performance of the contract is Forty (40) days.

The amount of security required is Fifty per cent. (50%) of the amount of the bid or estimate.

Blank forms and further information may be obtained and the plans and drawings may be seen at the office of the Fire Department, eleventh floor, Municipal Building Manhattan.

ROBERT ADAMSON, Fire Commissioner.

d4,15

See General Instructions to Bidders on last page, last column, of the "City Record."

HEADQUARTERS OF THE FIRE DEPARTMENT OF THE CITY OF NEW YORK, ELEVENTH FLOOR, MUNICIPAL BUILDING, BOROUGH OF MANHATTAN, THE CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Fire Commissioner at the above office until 10.30 o'clock A. M., on

MONDAY, DECEMBER 14, 1914.

NO. 1—FOR FURNISHING AND DELIVERING TWENTY (20) MOTOR DRIVEN HOSE WAGONS.

The time for the delivery of the articles, materials and supplies and the performance of the contract is one hundred and twenty (120) days.

The amount of security required is Fifty per cent. (50%) of the amount of the bid or estimate.

The bidder will state the price of each item or article contained in the specifications or schedules herein contained or hereto annexed, per wagon or other unit of measure, by which the bids will be tested. The extension must be made and footed up, as the bids will be read from the total. The bids will be compared and the contract awarded at a lump or aggregate sum.

Bids for supplies must be submitted in duplicate.

Delivery will be required to be made at the time and in the matter and in such quantities as may be directed.

Blank forms and further information may be obtained and the plans and drawings may be seen at the office of the Fire Department, eleventh floor, Municipal Building, Manhattan.

ROBERT ADAMSON, Fire Commissioner. d2,14

See General Instructions to Bidders on last page, last column, of the "City Record."

HEADQUARTERS OF THE FIRE DEPARTMENT OF THE CITY OF NEW YORK, ELEVENTH FLOOR, MUNICIPAL BUILDING, BOROUGH OF MANHATTAN, THE CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Fire Commissioner at the above office until 10.30 o'clock A. M., on

MONDAY, DECEMBER 14, 1914.

NO. 1—FOR FURNISHING AND DELIVERING WIRE, CABLE, DRAWING MATERIALS AND OTHER SUPPLIES FOR THE FIRE ALARM TELEGRAPH BUREAU.

The time for the delivery of the articles, materials and supplies and the performance of the contract is One Hundred (100) days.

The amount of security required is Thirty per cent. (30%) of the amount of the bid or estimate.

The bidder will state the price of each item or article contained in the specifications or schedules herein contained or hereto annexed, per pound, ton, dozen, gallon, yard or other unit of measure, by which the bids will be tested. The extension must be made and footed up, as the bids will be read from the total and awards made to the lowest bidder on each class, except "Miscellaneous," for which the awards will be by items.

Bids for supplies must be submitted in duplicate.

Delivery will be required to be made at the time and in the matter and in such quantities as may be directed.

Blank forms and further information may be obtained and the plans and drawings may be seen at the office of the Fire Department, eleventh floor, Municipal Building, Manhattan.

ROBERT ADAMSON, Fire Commissioner. d2,14

See General Instructions to Bidders on last page, last column, of the "City Record."

HEADQUARTERS OF THE FIRE DEPARTMENT OF THE CITY OF NEW YORK, ELEVENTH FLOOR, MUNICIPAL BUILDING, BOROUGH OF MANHATTAN, THE CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Fire Commissioner at the above office until 10.30 o'clock A. M., on

TUESDAY, DECEMBER 8, 1914.

NO. 1—FOR FURNISHING AND DELIVERING ONE HUNDRED AND TEN THOUSAND (110,000) GALLONS OF MOTOR GASOLINE.

The time for the delivery of the articles, materials and supplies and the performance of the contract is by or before December 31, 1915.

The amount of security required is Thirty per cent. (30%) of the amount of the bid or estimate.

The bidder will state the price of each item or article contained in the specifications or schedules herein contained or hereto annexed, per gallon or other unit of measure, by which the bids will be tested. The extension must be made and footed up, as the bids will be read from the total. The bids will be compared and the contract awarded at a lump or aggregate sum.

Bids for supplies must be submitted in duplicate.

Delivery will be required to be made at the time and in the manner and in such quantities as may be directed.

Blank forms and further information may be obtained at the office of the Fire Department, eleventh floor, Municipal Building, Manhattan.

ROBERT ADAMSON, Fire Commissioner. n25,d8

See General Instructions to Bidders on last page, last column, of the "City Record."

The time allowed for the completion of the contract is on or before December 31, 1914.

The amount of security required for the performance of the contract shall be thirty (30) per cent. of the total amount for which the contract is awarded.

NO. 4. FOR FURNISHING AND DELIVERING GRITS.
The Engineer's estimate of the work is as follows:

2,500 Cubic Yards Grits.

The time allowed for the completion of the contract is on or before December 31st, 1914.

The amount of security required for the performance of the contract shall be thirty (30) per cent. of the total amount for which the contract is awarded.

Blank forms can be obtained upon application therefor, the plans and specifications may be seen and other information obtained at said office.

DOUGLAS MATHEWSON, President.
n27,d9

See General Instructions to Bidders on last page, last column, of the "City Record."

DEPARTMENT OF CORRECTION.

Proposals.

DEPARTMENT OF CORRECTION, MUNICIPAL BUILDING, CENTRE AND CHAMBERS STS., BOROUGH OF MANHATTAN, THE CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Commissioner of Correction at the above office until 11 o'clock a. m., on

WEDNESDAY, DECEMBER 16, 1914.

FURNISHING AND DELIVERING 400 BARRELS FLOUR NO. 1.

The time for the delivery of the articles, materials and supplies and the performance of the contract is by or before December 31, 1914.

The amount of security required is thirty (30) per cent. of the amount of the bid or estimate.

The bidder will state the price for each item or article contained in the specifications or schedules herein contained or hereto annexed, per pound, ton, dozen, gallon, yard or other unit of measure, by which the bids will be tested. The extensions must be made and footed up, as the bids will be read from the totals and awards made to the lowest bidder on this item.

Bids must be submitted in duplicate, each in a separate envelope. No bid will be accepted unless this provision is complied with.

Delivery will be required to be made at the time and in the manner and in such quantities as may be directed.

Blank forms and further information may be obtained at the office of the Department of Correction, the Borough of Manhattan, Municipal Building, New York City.

KATHARINE BEMENT DAVIS, Commissioner.
November 2, 1914. d5,16

See General Instructions to Bidders on last page, last column, of the "City Record."

DEPARTMENT OF CORRECTION, MUNICIPAL BUILDING, CENTRE AND CHAMBERS STS., BOROUGH OF MANHATTAN, THE CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Commissioner of Correction at the above office until 11 o'clock a. m., on

THURSDAY, DECEMBER 17, 1914.

FURNISHING AND DELIVERING 1,300 LBS. GREY MULE HAIR 5" TO 15" OR GREY HORSE HAIR 9" TO 14", 300 LBS. PALMYRA.

The time for the delivery of the articles, materials and supplies and the performance of the contract is by or before December 31, 1914.

The amount of security required is thirty (30) per cent. of the amount of the bid or estimate.

The bidder will state the price for each item or article contained in the specifications or schedules herein contained or hereto annexed, per pound, ton, dozen, gallon, yard or other unit of measure, by which the bids will be tested. The extensions must be made and footed up, as the bids will be read from the totals and awards made to the lowest bidder on each item.

Bids must be submitted in duplicate, each in a separate envelope. No bid will be accepted unless this provision is complied with.

Delivery will be required to be made at the time and in the manner and in such quantities as may be directed.

Blank forms and further information may be obtained at the office of the Department of Correction, the Borough of Manhattan, Municipal Building, New York City.

KATHARINE BEMENT DAVIS, Commissioner.
Dec. 5, 1914. d5,17

See General Instructions to Bidders on last page, last column, of the "City Record."

DEPARTMENT OF CORRECTION, MUNICIPAL BUILDING, CENTRE AND CHAMBERS STS., BOROUGH OF MANHATTAN, THE CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Commissioner of Correction at the above office until 11 o'clock a. m., on

TUESDAY, DECEMBER 8, 1914.

FURNISHING AND DELIVERING 2,500 BARRELS OF CEMENT.

The time for the completion of the contract is by or before June 30, 1915.

The amount of security required is thirty (30) per cent. of the amount of the bid or estimate.

The bidder will state the price for each item or article contained in the specifications or schedules herein contained or hereto annexed, per pound, ton, dozen, gallon, yard or other unit of measure, by which the bids will be tested. The extensions must be made and footed up, as the bids will be read from the totals and awards made to the lowest bidder on this item.

Bids must be submitted in duplicate, each in a separate envelope. No bid will be accepted unless this provision is complied with.

Delivery will be required to be made at the time and in the manner and in such quantities as stated in the specification.

Blank forms and further information may be obtained at the office of the Department of Correction, the Borough of Manhattan, Municipal Building, New York City.

KATHARINE BEMENT DAVIS, Commissioner.
November 27, 1914. n27,d8

See General Instructions to Bidders on last page, last column, of the "City Record."

DEPARTMENT OF STREET CLEANING.

Proposals.

MAIN OFFICE OF THE DEPARTMENT OF STREET CLEANING, ROOM 1244, MUNICIPAL BUILDING, BOROUGH OF MANHATTAN, THE CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Commissioner of Street Cleaning at the above office until 12 o'clock noon, on

WEDNESDAY, DECEMBER 16, 1914.

FOR THE HORSE MANURE, STRAW, STABLE WASTE AND REFUSE WHICH ACCUMULATE AT THE FOLLOWING NAMED STABLES OF THE DEPARTMENT OF STREET CLEANING, IN THE BOROUGH OF MANHATTAN, NEW YORK CITY, DURING THE PERIOD BEGINNING JANUARY 1, 1915, AND ENDING DECEMBER 31, 1915, INCLUSIVE.

Stable "A," 17th Street and Avenue C; approximate number of horses, 187.

Stable "B," 614 West 52nd Street; approximate number of horses, 110.

Stable "C," 625 West 130th Street; approximate number of horses, 118.

Stable "D," 505 East 116th Street; approximate number of horses, 98.

Stable "E," 408 West 15th Street; approximate number of horses, 115.

Stable "F," 525 East 80th Street; approximate number of horses, 97.

Stable "G," 44 Hamilton Street; approximate number of horses, 125.

Stable "H," 426 East 48th Street; approximate number of horses, 89.

Stable "I," 221 West 77th Street; approximate number of horses, 121.

Stable "J," 7274 Horatio Street; approximate number of horses, 79.

Stable "K," 349-353 Rivington Street; approximate number of horses, 131.

Stable "L," 2491 Amsterdam Avenue; approximate number of horses, 69.

The horse manure, straw, stable waste and refuse is to be removed by the successful bidder at his own cost and expense on each and every day, excepting Sundays and legal holidays, before 12 o'clock noon.

The agreements, if awarded, will be awarded for each stable, separately, and the bidder must state the amount which he offers for each stable, separately.

The agreements, if awarded, will be awarded to the bidder, or bidders, offering the highest amount, per horse, per year, for each of the horses kept at the said stables during the period January 1, 1915, to December 31, 1915, inclusive.

Payment is to be made at the end of each and every month, during the term of the contract, for the average number of horses kept at each of the said stables, during each month, at a rate per year for each horse; the average number to be determined by adding the number of horses kept at each of said stables, on each and every day during the month, and dividing the total number so kept by the number of calendar days in each month.

The amount of the bond required will be Five Hundred Dollars (\$500) for each stable for which a bid is submitted.

The amount of security to be deposited with the bid shall be not less than 3% nor more than 5% of the aggregate amount of the bonds.

The Department of Street Cleaning reserves the right to change the location of any of the above mentioned stables at any time.

Blank forms of "Proposals" for bids or estimates, copies of the contract in the form approved by the Corporation Counsel, and forms of bids or estimates may be obtained on application at the Main Office of the Department of Street Cleaning, 12th floor South, Municipal Building, Borough of Manhattan. Bids on any other forms will not be considered.

J. T. FETHERSTON, Commissioner.
Dated December 2, 1914. d5,16

See General Instructions to Bidders on last page, last column, of the "City Record."

WEDNESDAY, DECEMBER 16, 1914.
FOR THE HORSE MANURE, STRAW, STABLE WASTE AND REFUSE WHICH ACCUMULATE AT THE FOLLOWING NAMED STABLES OF THE DEPARTMENT OF STREET CLEANING, IN THE BOROUGH OF MANHATTAN, NEW YORK CITY, DURING THE PERIOD BEGINNING JANUARY 1, 1915, AND ENDING DECEMBER 31, 1915, INCLUSIVE.

Stable "A," 17th Street and Avenue C; approximate number of horses, 187.

Stable "B," 614 West 52nd Street; approximate number of horses, 110.

Stable "C," 625 West 130th Street; approximate number of horses, 118.

Stable "D," 505 East 116th Street; approximate number of horses, 98.

Stable "E," 408 West 15th Street; approximate number of horses, 115.

Stable "F," 525 East 80th Street; approximate number of horses, 97.

Stable "G," 44 Hamilton Street; approximate number of horses, 125.

Stable "H," 426 East 48th Street; approximate number of horses, 89.

Stable "I," 221 West 77th Street; approximate number of horses, 121.

Stable "J," 7274 Horatio Street; approximate number of horses, 79.

Stable "K," 349-353 Rivington Street; approximate number of horses, 131.

Stable "L," 2491 Amsterdam Avenue; approximate number of horses, 69.

The horse manure, straw, stable waste and refuse is to be removed by the successful bidder at his own cost and expense on each and every day, excepting Sundays and legal holidays, before 12 o'clock noon.

The agreements, if awarded, will be awarded for each stable, separately, and the bidder must state the amount which he offers for each stable, separately.

The agreements, if awarded, will be awarded to the bidder, or bidders, offering the highest amount, per horse, per year, for each of the horses kept at the said stables during the period January 1, 1915, to December 31, 1915, inclusive.

Payment is to be made at the end of each and every month, during the term of the contract, for the average number of horses kept at each of the said stables, during each month, at a rate per year for each horse; the average number to be determined by adding the number of horses kept at each of said stables, on each and every day during the month, and dividing the total number so kept by the number of calendar days in each month.

The amount of the bond required will be Five Hundred Dollars (\$500) for each stable for which a bid is submitted.

The amount of security to be deposited with the bid shall be not less than 3% nor more than 5% of the aggregate amount of the bonds.

The Department of Street Cleaning reserves the right to change the location of any of the above mentioned stables at any time.

Blank forms of "Proposals" for bids or estimates, copies of the contract in the form approved by the Corporation Counsel, and forms of bids or estimates may be obtained on application at the Main Office of the Department of Street Cleaning, 12th floor South, Municipal Building, Borough of Manhattan. Bids on any other forms will not be considered.

J. T. FETHERSTON, Commissioner.
Dated December 2, 1914. d5,16

See General Instructions to Bidders on last page, last column, of the "City Record."

MAIN OFFICE OF THE DEPARTMENT OF STREET CLEANING, ROOM 1244, MUNICIPAL BUILDING, BOROUGH OF MANHATTAN, THE CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Commissioner of Street Cleaning at the above office until 12 o'clock noon on

FRIDAY, DECEMBER 11, 1914.

Borough of Manhattan (Zone 1).

FOR FURNISHING AND DELIVERING FORAGE—210,000 LBS. OF HAY.

The time allowed for the delivery of materials and supplies and the performance of the contract is on or before December 30, 1914.

The amount of security required is 30% of the amount of the bid.

Bids must be submitted in duplicate in separate envelopes.

The bidder will state the price per hundred pounds, by which the bids will be tested. The extensions must be made and footed up, as the bids will be read from the total, and awards made to the lowest bidder on the total.

Delivery will be required to be made at the time and in the manner and in such quantities as may be directed.

Blank forms and further information may be obtained at the office of the Department of Street Cleaning, the Borough of Manhattan, Room 1244, Municipal Building.

J. T. FETHERSTON, Commissioner.
Dated November 27, 1914. d1,11

See General Instructions to Bidders on last page, last column, of the "City Record."

DEPARTMENT OF BRIDGES.

Auction Sale.

DEPARTMENT OF BRIDGES, MUNICIPAL BUILDING, CHAMBERS STREET, MANHATTAN, NEW YORK CITY.

THE COMMISSIONER OF BRIDGES WILL sell at public auction, at the Madison Avenue Bridge Yard, 138th Street and Madison Avenue, Manhattan, on

TUESDAY, DECEMBER 15, 1914,

at 11 o'clock A. M.

ITEM 1—1 WAGON TOP, COLLAPSIBLE.

ITEM 2—ABOUT 213 FT. LEAD COVERED CABLE, SINGLE CONDUCTOR NO. 0—SOLID (OLD).

ITEM 3—ABOUT 160 FT. LEAD COVERED CABLE, SINGLE CONDUCTOR NO. 6—STRANDED (OLD).

ITEM 4—ABOUT 140 FT. SUBMARINE CABLE, SINGLE CONDUCTOR 2-0 STRANDED (OLD).

ITEM 5—ABOUT 40 OLD BARRELS (MACHINE OIL AND GRAPHITE PAINT BARRELS).

ITEM 6—ABOUT 104 FT. 3/4" OLD WROUGHT IRON PIPE.

ITEM 7—ABOUT 210 FT. 2" OLD WROUGHT IRON PIPE.

ITEM 8—ABOUT 806 FT. 3" OLD WROUGHT IRON PIPE.

ITEM 9—ABOUT 102 FT. 4" OLD WROUGHT IRON PIPE.

ITEM 10—ABOUT 90 FT. 1 1/2" OLD GALVANIZED IRON PIPE.

ITEM 11—ABOUT 60 FT. 2" OLD GALVANIZED IRON PIPE.

ITEM 12—ABOUT 20 TONS SCRAP IRON, CASTINGS, ETC.

ITEM 13—ABOUT 125 LBS. OLD MANILA ROPE.

ITEM 14—1 OLD CANVAS HOSE.

ITEM 15—1 OLD WATER COOLER.

TERMS OF SALE.

The Auctioneer's fees shall be paid by the successful bidder at the time of the sale, and the whole of the purchase price bid shall be paid

by the successful bidder on or before the delivery of the material and the purchaser must remove from the premises all of the materials purchased within twenty days from the date of the sale.

To secure the removal as above specified, the purchaser shall be required to make, at the time of the sale, a cash deposit of twenty-five per cent. of the price bid.

Where material is sold by the ton, 2,000 lbs. shall constitute a ton, and the material shall be weighed at the expense of the successful bidder.

All the above material will be sold by the item or lot, except Item 12, which will be sold subject to exact weight at price bid per ton.

The Commissioner reserves the right to resell any of the material not removed by the purchaser within the twenty days specified.

Full information may be obtained at the office of the Department of Bridges, Municipal Building, Manhattan.

The material to be sold may be seen at the place above specified.

F. J. H. KRACKE, Commissioner of Bridges.
JACQUES COHEN, Auctioneer. d4,15

The security required will be Twenty-five Hundred Dollars (\$2,500).

The bidder will state the price per unit of each item of work or supplies contained in the specifications or schedules, by which the bids will be tested. The bids will be compared and award made to the lowest formal bidder on each contract.

Bidders are requested to make bids or estimates upon the blank form prepared by the Department, a copy of which, with the proper envelope in which to enclose the bid, together with a copy of the contract, including the specifications, in the form approved by the Corporation Counsel, can be obtained upon application therefor at the office of the Department, Room 2351, Municipal Building, Borough of Manhattan, where any further information desired may be obtained.

WILLIAM WILLIAMS, Commissioner.
Dated, Nov. 27, 1914. n30,d11

See General Instructions to Bidders on last page, last column, of the "City Record."

BOROUGH OF RICHMOND.

Proposals.

OFFICE OF THE PRESIDENT OF THE BOROUGH OF RICHMOND, BOROUGH HALL, ST. GEORGE, NEW BRITAIN, N. Y. CITY.

SEALED BIDS OR ESTIMATES WILL BE received by the President of the Borough of Richmond at the above office until 12 o'clock M., on

TUESDAY, DECEMBER 22, 1914.

Borough of Richmond.

NO. 1. FOR THE GENERAL CONSTRUCTION OF AN ADDITIONAL COUNTY COURT HOUSE IN THE COUNTY OF RICHMOND, JAY STREET, DEKALB STREET AND STUYVESANT PLACE, ST. GEORGE, BOROUGH OF RICHMOND, NEW YORK CITY—CONTRACT NO. 2.

The time allowed for doing and completing the above work will be twenty (20) calendar months.

The amount of security required will be One Hundred and Eighty Thousand Dollars (\$180,000).

The contracts must be bid for separately, and the bids will be compared and the contract awarded at a lump or aggregate sum for each contract.

Bidders are requested to make their bids or estimates upon the blank form prepared by the President, a copy of which, with the proper envelope in which to enclose the bid and a copy of the contract can be obtained upon application therefor at the office of the Assistant Commissioner. The plans may be seen and other information obtained at the office of the Architects, Carrere & Hastings, 225 5th Ave., New York City.

CHARLES J. McCORMACK, President.
The City of New York, Nov. 27, 1914. d1,22

See General Instructions to Bidders on last page, last column, of the "City Record."

OFFICE OF THE PRESIDENT OF THE BOROUGH OF RICHMOND, BOROUGH HALL, ST. GEORGE, NEW BRITAIN, N. Y. CITY.

SEALED BIDS OR ESTIMATES WILL BE received by the President of the Borough of Richmond at the above office until 12 o'clock M., on

TUESDAY, DECEMBER 8, 1914.

NO. 1. FOR REGULATING AND REPAVING WITH ASPHALT BLOCK ON A CONCRETE FOUNDATION THE ROADWAYS OF ST. MARV'S AVENUE FROM NEW YORK AVENUE TO TOMPKINS AVENUE, AND THIRD STREET FROM LAFAYETTE AVENUE TO ITS EASTERLY TERMINUS, TOGETHER WITH ALL WORK INCIDENTAL THEREOF.

The Engineer's estimate of the quantity and quality of the material, and the nature and extent, as near as possible, of the work required, is as follows:

5,700 square yards of asphalt block pavement, including mortar bed, with five (5) years maintenance.

900 cubic yards of concrete foundation.

150 linear feet of old curbstone, redressed, re-jointed and reset.

20 linear feet of new 4" x 16" bluestone curbstone, furnished and set.

700 square feet of old sidewalk, relaid.

The time for the completion of the work and the full performance of the contract is forty (40) days.

The amount of security required is Fifty-six Hundred Dollars (\$5,600.00).

The contracts must be bid for separately, and the bids will be compared and the contract awarded at a lump or aggregate sum for each contract.

Bidders are requested to make their bids or estimates upon the blank form prepared by the President, a copy of which, with the proper envelope in which to enclose the bid, can be obtained upon application therefor at the office of the Assistant Commissioner. The plans and the contract, including the specifications, in the form approved by the Corporation Counsel, may be seen and other information obtained at the office of the Assistant Commissioner of the Borough of Richmond, Borough Hall, St. George, S. I. CHARLES J. McCORMACK, President.
The City of New York, Nov. 23, 1914. n27,d8

See General Instructions to Bidders on last page, last column, of the "City Record."

DEPARTMENT OF WATER SUPPLY, GAS AND ELECTRICITY.

Proposals.

DEPARTMENT OF WATER SUPPLY, GAS AND ELECTRICITY, ROOM 2351, MUNICIPAL BUILDING, BOROUGH OF MANHATTAN, CITY OF NEW YORK.

SEALED BIDS OR ESTIMATES WILL BE received by the Commissioner of Water Supply, Gas and Electricity at the above office until 2 p. m., on

FRIDAY, DECEMBER 11, 1914.

Borough of Brooklyn.

(1) FOR REMOVING THE PRESENT FOUNDATION AND ERECTING A NEW FOUNDATION UNDER THE WATER ENDS OF NO. 1 WORTHINGTON 20 MG TRIPLE EXPANSION PUMPING ENGINE AT THE RIDGEWOOD NORTH SIDE PUMPING STATION.

The time allowed for doing and completing the entire work will be seventy-five (75) consecutive working days.

The security required will be Two Thousand Dollars (\$2,000).

(2) FOR REMOVING TWO (2) BOILERS AND THEIR APPURTENANCES FROM THE MILBURN PUMPING STATION, TRANSPORTING AND RE-ERECTING ONE (1) IN THE WOODHAVEN PUMPING STATION AND ONE (1) IN

way between Theriot avenue and Taylor avenue as these streets are laid out between Guerlain street and West Farms road; thence southwardly along a line always midway between Theriot avenue and Taylor avenue, and along the prolongations of the said line to a point distant 100 feet southerly from the southerly line of Westchester avenue, the said distance being measured at right angles to Westchester avenue; thence westwardly and parallel with Westchester avenue to the intersection with a line midway between Taylor avenue and Beach avenue; thence southwardly along the said line midway between Taylor avenue and Beach avenue to a point distant 100 feet southerly from the southerly line of Gleason avenue; thence westwardly and parallel with Gleason avenue to the point or place of beginning.

Fourth.—That the abstracts of said supplemental and amended estimate of damage and of said supplemental and amended assessment for benefit, together with the damage and benefit maps, and also all the affidavits, estimates, proofs and other documents used by the Commissioners of Estimate and by the Commissioner of Assessment in making the same, have been deposited in the Bureau of Street Openings in the Law Department of The City of New York, Room 1529, 15th Floor, Municipal Building, Chambers and Centre streets, in the Borough of Manhattan, in said City, there to remain until the 26th day of December, 1914.

Fifth.—That, provided there be no objections filed to either of said supplemental and amended abstracts, the reports as to awards and as to assessments for benefit herein will be presented for confirmation to the Supreme Court of the State of New York, First Department, at a Special Term thereof, Part III, to be held in the County Court House in the Borough of Manhattan, in The City of New York, on the 25th day of February, 1915, at the opening of the Court on that day.

Sixth.—In case, however, objections are filed to the foregoing abstracts of estimate and assessment, or to either of them the motion to confirm the reports as to awards and as to assessments shall stand adjourned to the date to be hereafter specified in the notice provided in such cases to be given in relation to filing the final reports, pursuant to Sections 981 and 984 of the Greater New York Charter, as amended by Chapter 658 of the Laws of 1906.

Dated, New York, November 30th, 1914.
SEYMOUR MORK, EDWARD A. BAUER,
WM. H. ZELTNER, Commissioners of Estimate;
SEYMOUR MORK, Commissioner of Assessment.

JOEL J. SQUIER, Clerk.

FIRST DEPARTMENT.

In the Matter of the Application of The City of New York, relative to acquiring title, wherever the same has not been heretofore acquired for the same purpose in fee, to the lands and premises required for the opening and extending of LANE AVENUE, between Westchester Avenue and the West Farms Road, with the PUBLIC PLACE, bounded by Lane Avenue, West Farms Road and Westchester Avenue, and of WESTCHESTER AVENUE, between Main Street and West Farms Road and the Eastern Boulevard at Pelham Bay Park, in the 24th Ward, Borough of The Bronx, City of New York.

NOTICE IS HEREBY GIVEN TO ALL PERSONS interested in the above entitled proceeding, and to the owner or owners, occupant or occupants of all houses and lots and improved and unimproved lands affected thereby, and to all others whom it may concern, to-wit:

First.—That the undersigned, Commissioners of Estimate, have completed their supplemental and amended estimate of damage and that all persons interested in this proceeding, or in any of the lands, tenements and hereditaments and premises affected thereby, having any objection thereto, do file their said objections in writing, duly verified, with him at his office, Room 1557, 15th Floor, Municipal Building, Chambers and Centre Streets, Borough of Manhattan, in The City of New York, on or before the 14th day of December, 1914, and that the said Commissioners will hear parties so objecting, and for that purpose will be in attendance at their said office on the 16th day of December, 1914, at 2 o'clock P. M.

Second.—That the undersigned, Commissioner of Assessment, has completed his estimate of benefit and that all persons interested in this proceeding, or in any of the lands, tenements and hereditaments and premises affected thereby, having any objection thereto, do file their said objections in writing, duly verified, with him at his office, Room 1557, 15th Floor, Municipal Building, Chambers and Centre Streets, in the Borough of Manhattan, in The City of New York, on or before the 14th day of December, 1914, and that the said Commissioner will hear parties so objecting, and for that purpose will be in attendance at his said office on the 17th day of December, 1914, at 2 o'clock P. M.

Third.—That the Commissioner of Assessment has assessed any or all such lands, tenements and hereditaments and premises as are within the area of assessment fixed and prescribed as the amended area of assessment for benefit by the Board of Estimate and Apportionment on the 7th day of May, 1909, and that the said area of assessment includes all those lands, tenements and hereditaments and premises situate and being in the Borough of The Bronx, in The City of New York, which, taken together, are bounded and described as follows, viz.:

Beginning at a point on a line midway between Parker street and Zerega avenue, where it is intersected by the prolongation of a line midway between Frisby avenue and Glebe avenue, as these streets are laid out northeasterly along the said line midway between Frisby avenue and Glebe avenue, and along the prolongation of the said line to the intersection with a line midway between Overing street and Benson avenue; thence northwardly along the said line midway between Overing street and Benson avenue to a point distant 100 feet southeasterly from the southeasterly line of St. Raymond avenue; thence northeasterly and always distant 100 feet southeasterly from the southeasterly line of St. Raymond avenue and the prolongation thereof to the intersection with a line midway between Brockett avenue and Halperin avenue; thence northwardly along the said line midway between Brockett avenue and Halperin avenue to a point distant 100 feet northeasterly from the northeasterly line of Blondell avenue; thence southwardly and always distant 100 feet northeasterly from the northeasterly line of Blondell avenue to a point distant 600 feet northwardly from the northeasterly line of Westchester avenue, the said distance being measured at right angles to the line of Westchester

avenue; thence northeasterly, northwardly and northeasterly and always distant 600 feet northwardly, westerly and northwardly from the northwardly, westerly and northwardly lines of Westchester avenue and the prolongation thereof to a point distant 600 feet easterly from the westerly line of Pelham Bay park, the said distance being measured at right angles to the line of Pelham Bay park; thence southwardly along a line parallel with the westerly line of Pelham Bay park as laid out immediately northwest of Westchester avenue, and along the prolongation of the said line to the intersection with the prolongation of the northwardly line of Morris Park avenue as laid out east of Westchester avenue; thence southwardly along the said prolongation of the northwardly line of Morris Park avenue to a point distant 250 feet easterly from the westerly line of Pelham Bay park, said distance being measured at right angles to the line of Pelham Bay park; thence southwardly and always distant 250 feet easterly from the westerly line of Pelham Bay park to the intersection with the prolongation of a line midway between Buhrer avenue and Roberts avenue, as these streets are laid out adjoining the Eastern boulevard; thence southwardly along the said line midway between Buhrer avenue and Roberts avenue and along the prolongation of the said line, to the intersection with a line midway between Jarvis avenue and Mahan avenue; thence southwardly along the said line midway between Jarvis avenue and Mahan avenue to a point distant 100 feet southeasterly from the southeasterly line of Roberts avenue; thence southwardly along a line parallel with Roberts avenue as laid out between Crosby avenue and the Eastern boulevard, and along the prolongation of the said line, to a point distant 600 feet southeasterly from the southeasterly line of Westchester avenue, the said distance being measured at right angles to the line of Westchester avenue; thence southwardly and always distant 600 feet southeasterly from the southeasterly line of Westchester avenue to the intersection with the prolongation of a line midway between Parker street and Zerega avenue, as these streets are laid out adjoining Westchester avenue; thence northwardly along the said line midway between Parker street and Zerega avenue, and along the prolongation of the said line to the point or place of beginning.

Fourth.—That the abstracts of said supplemental and amended estimate of damage and of said assessment for benefit, together with the damage and benefit maps, and also all the affidavits, estimates, proofs and other documents used by the Commissioners of Estimate and by the Commissioner of Assessment in making the same, have been deposited in the Bureau of Street Openings in the Law Department of The City of New York, Room 1529, 15th Floor, Municipal Building, Chambers and Centre streets, in the Borough of Manhattan, in said City, there to remain until the 14th day of December, 1914.

Fifth.—That, provided there be no objections filed to either of said abstracts, the reports as to awards and as to assessments for benefit herein will be presented for confirmation to the Supreme Court of the State of New York, First Department, at a Special Term thereof, Part III, to be held in the County Court House in the Borough of Manhattan, in The City of New York, on the 18th day of February, 1915, at the opening of the Court on that day.

Sixth.—In case, however, objections are filed to the foregoing abstracts of estimate and assessment, or to either of them the motion to confirm the reports as to awards and as to assessments shall stand adjourned to the date to be hereafter specified in the notice provided in such cases to be given in relation to filing the final reports, pursuant to Sections 981 and 984 of the Greater New York Charter, as amended by Chapter 658 of the Laws of 1906.

Dated, New York, November 18th, 1914.
FLOYD M. LORD, JOHN J. MACKIN, ED.
WARD D. DOWLING, Commissioners of Estimate;
EDWARD D. DOWLING, Commissioner of Assessment.

JOEL J. SQUIER, Clerk.

SUPREME COURT—SECOND DEPARTMENT.

Application to Amend Proceedings.

SECOND DEPARTMENT.

In the Matter of the Application of The City of New York, relative to amending its application heretofore made to the Matter of the Application of The City of New York, relative to acquiring title, wherever the same has not been heretofore acquired for the same purpose to the lands, tenements and hereditaments required for an easement for sewer purposes in a parcel of land having a width ranging from 20 to 50 feet located in KISSEL AVENUE and Brighton Boulevard (Kissel Avenue) extended, between Castleton Avenue and the Pier and Bulkhead Line, in the First Ward, Borough of Richmond, The City of New York, which land is shown on a map bearing the signature of the President of the Borough, dated July 3, 1912, and adopted by the Board of Estimate and Apportionment on December 12, 1912, so as to provide for the acquisition of the easement rights contemplated in Kissel Avenue and in Brighton Boulevard, from Henderson Avenue to Richmond Terrace, and along the prolongation of Brighton Boulevard from Richmond Terrace to the Bulkhead Line; and also the easement rights in the area included in a map adopted by the Board of Estimate and Apportionment on July 2, 1914, entitled "Map showing lands in which it is necessary to acquire an easement for the purpose of a sewer in Kissel Avenue from Henderson Avenue to Castleton Avenue, in the First Ward, Borough of Richmond, signed by the President of the Borough and dated May 18, 1914."

PURSUANT TO THE STATUTES IN SUCH cases made and provided, notice is hereby given that an application will be made to the Supreme Court of the State of New York, Second Department, at a Special Term of said Court, to be held for the hearing of motions, in the County Court House, in the Borough of Brooklyn, in The City of New York, on the 14th day of December, 1914, at the opening of Court on that day or as soon thereafter as counsel can be heard thereon, for an order amending the proceeding entitled "In the Matter of the Application of The City of New York, relative to acquiring title, wherever the same has not been heretofore acquired for the same purpose, to the lands, tenements and hereditaments required for an easement for sewer purposes in a parcel of land having a width ranging from 20 to 50 feet, located in Kissel Avenue and Brighton Boulevard (Kissel Avenue) extended, between Castleton Avenue and the Pier and Bulkhead Line, in the First Ward, Borough of Richmond, The City of New York, which land is shown on a map bearing the signature of the President of the Borough, dated July 3, 1912, and adopted by the Board of Estimate and Apportionment on December 12, 1912," and the

petition and order appointing Commissioners of Estimate and Assessment in said proceeding heretofore duly entered and filed in the office of the Clerk of the County of Richmond on July 24, 1913, so as to provide for the acquisition of the easement rights contemplated in Kissel Avenue and in Brighton Boulevard from Henderson Avenue to Richmond Terrace, and along the prolongation of Brighton Boulevard from Richmond Terrace to the Bulkhead Line; and also the easement rights in the area included in a map adopted by the Board of Estimate and Apportionment on July 2, 1914, entitled "Map showing lands in which it is necessary to acquire an easement for the purpose of a sewer in Kissel Avenue from Henderson Avenue to Castleton Avenue, in the First Ward, Borough of Richmond, signed by the President of the Borough and dated May 18, 1914."

Technical description of lands in which it is necessary to acquire an easement for the purpose of a sewer in Kissel Avenue, from Henderson Avenue to Castleton Avenue, which is affected by the amendment.

Beginning on the southerly line of Henderson Avenue 36.67 feet westerly from the southeast corner of Henderson Avenue and Kissel Avenue as shown on the map or plan of The City of New York. Thence southerly deflecting 99° 31' 49" to the right from the southerly line of Henderson Avenue as it extends eastward 352.88 feet. Thence southerly deflecting 1° 4' 27" to the left 1,152.04 feet to the northerly line of Castleton Avenue. Thence deflecting 100° 14' 47" to the right along the northerly line of Castleton Avenue 5.08 feet to an angle point in the northerly line of Castleton Avenue. Thence westerly deflecting to the left 2° 45' 36" along the northerly line of Castleton Avenue 5.04 feet. Thence northerly parallel to course two and 10 feet westerly therefrom 1,150.57 feet. Thence northerly parallel to course one and 10 feet distant therefrom 352.85 feet to the southerly line of Henderson Avenue. Thence easterly deflecting 89° 17' 27" to the right along the southerly line of Henderson Avenue 10.00 feet to the point of beginning.

Lands in which it is necessary to acquire an easement for the purpose of a sewer in Kissel Avenue, from Henderson Avenue to Castleton Avenue, to which the above description conforms is shown on a map or plan entitled "Map showing lands in which it is necessary to acquire an easement for the purpose of a sewer in Kissel Avenue, from Henderson Avenue to Castleton Avenue, in the First Ward, Borough of Richmond," signed by the President of the Borough and dated May 18, 1914, approved by the Board of Estimate and Apportionment on July 2, 1914, and filed in the office of the Corporation Counsel of The City of New York on October 17, 1914, and in the office of the President of the Borough of Richmond and in the office of the Clerk of the County of Richmond on or about the same date.

The Board of Estimate and Apportionment on the 30th day of July, 1914, duly fixed and determined that the area of assessment for benefit in this amended proceeding be fixed and determined to be as follows:

Beginning at a point on the southerly bulkhead line of Kill Van Kull where it is intersected by the prolongation of a line distant 100 feet easterly from and parallel with the easterly line of Brighton Boulevard, as this street is laid out where it adjoins Richmond Terrace, the said distance being measured at right angles to Brighton Boulevard, and running thence southwardly along the said line parallel with Brighton Boulevard and along the prolongation of the said line to a point opposite the junction of Kissel Avenue and Brighton Boulevard; thence easterly at right angles to the course last described to the intersection with a line passing through a point on the northerly line of Henderson Avenue distant 280 feet easterly from its intersection with the easterly line of Kissel Avenue, as this street is laid out north of Henderson Avenue, the said distance being measured along the line of Henderson Avenue, and a point on the southerly line of Castleton Avenue distant 270 feet easterly from its intersection with the easterly line of Kissel Avenue, as this street meets Castleton Avenue on the south, the said distance being measured along the line of Castleton Avenue; thence southwardly along the course last described to a point distant 100 feet northerly from the northerly line of Castleton Avenue, the said distance being measured at right angles to Castleton Avenue; thence easterly and always distant 100 feet northerly from and parallel with the northerly line of Castleton Avenue to the intersection with the prolongation of a line distant 100 feet easterly from and parallel with the easterly line of Havenwood Road, the said distance being measured at right angles to Havenwood Road; thence southwardly along the said line parallel with Havenwood Road and along the prolongation of the said line to the intersection with a line distant 100 feet northerly from and parallel with the northerly line of Frelinghuysen Road, as this street adjoins Haven Esplanade on the west, the said distance being measured at right angles to Frelinghuysen Road; thence easterly along the said line parallel with Frelinghuysen Road and along the prolongation of the said line to the intersection with the centre line of Haven Esplanade; thence southwardly along the centre line of Haven Esplanade to the intersection with the southerly line of Barrett Boulevard; thence westwardly along the southerly lines of Barrett Boulevard and of Brighton Avenue to the intersection with the easterly line of Greenwood Avenue; thence southwardly along the easterly line of Greenwood Avenue, a distance of 591.9 feet; thence westwardly at right angles to Greenwood Avenue to the intersection with the easterly line of University Place; thence southwardly along the easterly line of University Place to the intersection with the southerly line of Laurel Avenue; thence westwardly along the southerly line of Laurel Avenue to the intersection with the easterly line of Lakewood Road; thence southwardly along the easterly line of Lakewood Road and the prolongation thereof, a distance of 760 feet; thence westwardly at right angles to Lakewood Road, a distance of 350 feet; thence southwardly in a straight line to a point on the easterly line of Bard Avenue distant 2,360 feet southerly from the southerly line of Forest Avenue, the said distance being measured along the line of Bard Avenue; thence westwardly at right angles to Bard Avenue to a point distant 100 feet westerly from its westerly side; thence northwardly and always distant 100 feet westerly from and parallel with the westerly line of Bard Avenue to a point distant 100 feet northerly from the northerly line of Castleton Avenue, the said distance being measured at right angles to Castleton Avenue; thence easterly and always distant 100 feet northerly from and parallel with the northerly line of Castleton Avenue to a point distant 320 feet easterly from the easterly line of Bard Avenue, the said distance being measured at right angles to Bard Avenue; thence northwardly and always distant 320 feet easterly from and parallel with the easterly line of Bard Avenue to the intersection with the centre line of Henderson Avenue; thence easterly along the centre line of Henderson Avenue to the intersection with the prolongation of a line distant 100 feet westerly from and parallel with the westerly line of Kissel Avenue, as this street is laid out north of Henderson Avenue, the said distance being measured at right angles to Kissel Avenue; thence northwardly along the said line parallel with Kissel Avenue and along the pro-

longation of the said line to a point distant 350 feet northerly from the northerly line of Henderson Avenue, the said distance being measured at right angles to Henderson Avenue; thence westwardly at right angles to Kissel Avenue to a point distant 160 feet easterly from the easterly line of Bard Avenue, the said distance being measured at right angles to Bard Avenue; thence northwardly and always distant 160 feet easterly from and parallel with the easterly line of Bard Avenue and the prolongation thereof to the intersection with the southerly bulkhead line of Kill Van Kull; thence easterly along the said bulkhead line to the point or place of beginning.

Dated, New York, December 2nd, 1914.
FRANK L. POLK, Corporation Counsel,
Municipal Building, Borough of Manhattan, City of New York.

Filing Preliminary Abstracts.

SECOND DEPARTMENT.

In the Matter of the Application of The City of New York, relative to acquiring title, wherever the same has not been heretofore acquired for the same purpose in fee, to the lands, tenements and hereditaments required for the opening and extending of THE PUBLIC PLACE bounded by Meeker Avenue, Monitor Street and Engert Avenue, in the 17th Ward, Borough of Brooklyn, The City of New York.

NOTICE IS HEREBY GIVEN TO ALL PERSONS interested in the above entitled proceeding, and to the owner or owners, occupant or occupants of all houses and lots and improved and unimproved lands affected thereby, and to all others whom it may concern, to-wit:

First.—That the undersigned, Commissioners of Estimate, have completed their estimate of damage, and that all persons interested in this proceeding, or in any of the lands, tenements and hereditaments and premises affected thereby, having any objection thereto, do file their said objections in writing, duly verified, with them at their office, No. 166 Montague Street, in the Borough of Brooklyn, in The City of New York, on or before the 17th day of December, 1914, and that the said Commissioners will hear parties so objecting, and for that purpose will be in attendance at their said office on the 21st day of December, 1914, at 3:30 o'clock P. M.

Second.—That the undersigned, Commissioner of Assessment, has completed his estimate of benefit and that all persons interested in this proceeding, or in any of the lands, tenements and hereditaments and premises affected thereby, having any objection thereto, do file their said objections in writing, duly verified, with him at his office, No. 166 Montague Street, in the Borough of Brooklyn, in The City of New York, on or before the 17th day of December, 1914, and that the said Commissioner will hear parties so objecting, and for that purpose will be in attendance at his said office on the 22nd day of December, 1914, at 3:30 o'clock P. M.

Third.—That the Commissioner of Assessment has assessed any or all of such lands, tenements and hereditaments and premises as are within the area of assessment fixed and prescribed as the area of assessment for benefit by the Board of Estimate and Apportionment on the 18th day of April, 1912, and that the said area of assessment includes all those lands, tenements and hereditaments and premises situate and being in the Borough of Brooklyn, in The City of New York, which, taken together, are bounded and described as follows, viz.:

Bounded on the north by a line distant 100 feet northerly from and parallel with the northerly line of Engert Avenue and by the prolongation of the said line, the said distance being measured at right angles to Engert Avenue; on the east by the centre line of Kingsland Avenue; on the south by a line distant 100 feet southwardly from and parallel with the southerly line of Meeker Avenue, the said distance being measured at right angles to Meeker Avenue; and on the west by a line midway between Monitor Street and North Henry Street.

Fourth.—That the abstracts of said estimate of damage and of said assessment for benefit, together with the damage and benefit maps, and also all the affidavits, estimates, proofs and other documents used by the Commissioners of Estimate and by the Commissioner of Assessment in making the same, have been deposited in the Bureau of Street Openings in the Law Department of The City of New York, No. 166 Montague Street, in the Borough of Brooklyn, in said City, there to remain until the 28th day of December, 1914.

Fifth.—That, provided there be no objections filed to either of said abstracts, the reports as to awards and as to assessments for benefit herein will be presented for confirmation to the Supreme Court of the State of New York, Second Department, at a Special Term thereof, to be held in the County Court House in the Borough of Brooklyn, in The City of New York, on the 28th day of January, 1915, at the opening of the Court on that day.

Sixth.—In case, however, objections are filed to the foregoing abstracts of estimate and assessment, or to either of them, the motion to confirm the reports as to awards and as to assessments shall stand adjourned to the date to be hereafter specified in the notice provided in such cases to be given in relation to filing the final reports, pursuant to Sections 981 and 984 of the Greater New York Charter, as amended by Chapter 658 of the Laws of 1906.

Dated, New York, November 28th, 1914.
CLARENCE W. DONOVAN, THOS.
O'NEILL, DANIEL M. HURLEY, Commissioners of Estimate; CLARENCE W. DONOVAN, Commissioner of Assessment.

MELVILLE J. FRANCE, Clerk.

SECOND DEPARTMENT.

In the Matter of the Application of The City of New York, relative to acquiring title, wherever the same has not been heretofore acquired, to the lands, tenements and hereditaments required for the opening and extending of CASSEL AVENUE, (although not yet named by proper authority), from Washington Avenue to Jay Avenue, in the Second Ward, Borough of Queens, City of New York, as amended by an order of the Supreme Court, Second Department, dated the 30th day of September, 1910, and entered in the office of the Clerk of the County of New York on the 4th day of October, 1910, so as to conform to the lines of said street, as shown upon Section 2 of the final maps of the Borough of Queens, as adopted by the Board of Estimate and Apportionment on the 19th day of June, 1908, and approved by the Mayor on the 5th day of August, 1908, and as shown upon Section 17 of the final maps of the Borough of Queens, as adopted by the Board of Estimate and Apportionment on the 26th day of June, 1908, and approved by the Mayor on the 5th day of August, 1908, and as further amended and corrected by an order of the Supreme Court, Second Department, dated the 2nd day of October, 1913, and entered in the office of the Clerk of the County of Queens on the 7th day of October, 1913, so as to relate to Cassel Avenue, from Hobson (Washington) Avenue to Old Berlin Avenue and from Broad Street to Jay Avenue.

The land to be excluded from this proceeding is more particularly shown upon a map attached to the aforesaid order.

WE, THE UNDERSIGNED, COMMISSIONERS OF Estimate and Assessment in the above-entitled matter, hereby give notice to all persons interested in this proceeding, and to the owner or owners, occupant or occupants of all houses and lots and improved and unimproved lands affected thereby, and to all others whom it may concern, to wit:

First—That we have completed our supplemental and amended estimate and assessment, and that all persons interested in this proceeding, or in any of the lands, tenements and hereditaments and premises affected thereby, and having objections thereto, do present their said objections in writing, duly verified, to us at our office, in the Municipal Building, Court House Square, Long Island City, Borough of Queens, in the City of New York, on or before the 15th day of December, 1914, and that we, the said Commissioners, will hear parties so objecting, and for that purpose will be in attendance at our said office on the 17th day of December, 1914, at 2:30 o'clock P. M.

Second—That the abstracts of our said supplemental and amended estimate and assessment, together with our affidavits, estimates, proofs and other documents used by us in making the same, have been deposited in the Bureau of Street Openings in the Law Department of The City of New York, in the Municipal Building, Court House Square, Long Island City, in the Borough of Queens, in said City, there to remain until the 17th day of December, 1914.

Third—That the limits of our assessment for benefit as amended include all those lands, tenements and hereditaments and premises situated, lying and being in the Borough of Queens, in the City of New York, which, taken together, are bounded and described as follows, viz.:

AREA NO. 1: Beginning at a point formed by the intersection of the center line of the block between Cassel Avenue and Halle Avenue with a line 100 feet easterly of the easterly line of Old Berlin Avenue; running thence westerly along the center line of the blocks between Cassel Avenue and Halle Avenue to an intersection with a line 100 feet easterly of the easterly line of Montgomery Avenue; running thence southerly parallel with Montgomery Avenue to an intersection with the northerly line of Hull Avenue; running thence westerly along the northerly line of Hull Avenue and prolongation of same to a point distant 100 feet from and measured perpendicularly to the westerly line of Hobson Avenue; running thence northerly parallel with Hobson Avenue to the southerly line of Joy Avenue; running thence easterly along the southerly line of Joy Avenue to a point 100 feet easterly from the easterly line of Montgomery Avenue; running thence southerly parallel with Montgomery Avenue to a point distant 100 feet northerly from the northerly line of Cassel Avenue; running thence easterly along the center line of the blocks between Cassel Avenue and Columbine Avenue to an intersection with a line 100 feet easterly from and parallel with the easterly line of Old Berlin Avenue; and running thence southerly to the point or place of beginning.

AREA NO. 2: Beginning at a point on the center line of the block between Cassel Avenue and Halle Avenue, where the same is intersected by a line 100 feet westerly from and parallel with the westerly line of Broad Street; thence running northerly along said line to an intersection of the same with a line midway between Cassel Avenue and Columbine Avenue; running thence easterly along the center line of the blocks between Cassel Avenue and Columbine Avenue to an intersection with the northwesterly line of Jay Avenue; running thence along a line perpendicular to Jay Avenue to a point distant 100 feet from the southeasterly side of Jay Avenue; running thence southwesterly along a line 100 feet from and parallel with the southeasterly line of Jay Avenue to an intersection with a line perpendicular to Jay Avenue which intersects the westerly line of Willow Avenue at a point midway between Halle Avenue and Cassel Avenue; running thence northwesterly along said mentioned perpendicular line of Jay Avenue to the westerly line of Willow Avenue; and running thence along the center line of the blocks between Cassel Avenue and Halle Avenue to the point or place of beginning.

Fourth—That, providing there be no objections filed to either of said supplemental and amended abstracts, our final report herein will be presented for confirmation to the Supreme Court of the State of New York, Second Department, at a Special Term thereof, for the hearing of motions, to be held in the County Court House in the Borough of Brooklyn, in the City of New York, on the 22nd day of January, 1915, at the opening of the Court on that day.

Fifth—In case, however, objections are filed to either of said supplemental and amended abstracts of estimate and assessment, the notice of motion to confirm our final report herein will stand adjourned to the date to be hereafter specified, and of which notice will be given to all those who have theretofore appeared in this proceeding, as well as by publication in the CITY RECORD, pursuant to Sections 981 and 984 of the Greater New York Charter, as amended by Chapter 658 of the Laws of 1906.

Dated, New York, November 20th, 1914.
MORRIS L. STRAUSS, Chairman; JACOB N. IMANDT, EUGENE N. L. YOUNG, Commissioners.

WALTER C. SHEPPARD, Clerk. n25,412

SECOND DEPARTMENT.

In the matter of the application of The City of New York, relative to acquiring title, wherever the same has not been heretofore acquired for the same purpose in fee, to the lands, tenements and hereditaments required for the opening and extending of WEST 28TH STREET, from Neptune Avenue to Surf Avenue; WEST 29TH STREET, from Neptune Avenue to Surf Avenue; WEST 30TH STREET, from Neptune Avenue to the mean high water line of the Atlantic Ocean; WEST 31ST STREET, from Neptune Avenue to Surf Avenue, excluding in each case the right-of-way of the New York and Coney Island Railroad, in the 31st Ward, Borough of Brooklyn, The City of New York.

NOTICE IS HEREBY GIVEN TO ALL PERSONS interested in the above-entitled proceeding, and to the owner or owners, occupant or occupants, of all houses and lots and improved and unimproved lands affected thereby, and to all others whom it may concern, to wit:

First—That the undersigned, Commissioners of Estimate, have completed their estimate of damage, and that all persons interested in this proceeding, or in any of the lands, tenements and hereditaments and premises affected thereby, having any objection thereto, do file their said objections in writing, duly verified, with them at their office, No. 166 Montague Street, in the Borough of Brooklyn, in the City of New York, on or before the 10th day of December, 1914, and that the said Commissioners will hear parties so objecting, and for that purpose will be in attendance at their said office on the 11th day of December, 1914, at 11 o'clock A. M.

Second—That the undersigned, Commissioner of Assessment, has completed his estimate of benefit and that all persons interested in this proceeding, or in any of the lands, tenements and hereditaments and premises affected thereby, having any objection

thereto, do file their said objections in writing, duly verified, with him at his office, No. 166 Montague Street, in the Borough of Brooklyn, in the City of New York, on or before the 10th day of December, 1914, and that the said Commissioner will hear parties so objecting, and for that purpose will be in attendance at his said office on the 15th day of December, 1914, at 11 o'clock A. M.

Third—That the Commissioner of Assessments has assessed any or all of such lands, tenements and hereditaments and premises as are within the area of assessment fixed and prescribed as the area of assessment for benefit by the Board of Estimate and Apportionment on the 20th day of April, 1911, and that the said area of assessment includes all those lands, tenements and hereditaments and premises situated, lying and being in the Borough of Brooklyn, in the City of New York, which, taken together, are bounded and described as follows, viz.:

BEGINNING at a point on a line midway between West 27th street and West 28th street distant 100 feet northerly from the northerly line of Neptune Avenue, and running thence southwardly along the said line midway between West 27th street and West 28th street, and along the prolongation of the said line to a point distant 100 feet southerly from the southerly line of Surf Avenue, the said distance being measured at right angles to Surf Avenue; thence westwardly and always distant 100 feet southerly from and parallel with the southerly line of Surf Avenue to the intersection with a line midway between West 28th street and West 30th street; thence southwardly along the said line midway between West 28th street and West 30th street to the intersection with the mean high water line of the Atlantic Ocean; thence westwardly along the said mean high water line to the intersection with a line midway between West 30th street and West 32d street; thence northwardly along the said line midway between West 30th street and West 32d street to a point distant 100 feet southerly from the southerly line of Surf Avenue, the said distance being measured at right angles to Surf Avenue; thence westwardly and always distant 100 feet southerly from and parallel with the southerly line of Surf Avenue to the intersection with the prolongation of a line midway between West 31st street and West 32d street; thence northwardly along the said line midway between West 31st street and West 32d street and along the prolongation of the said line to a point distant 100 feet northerly from the northerly line of Neptune Avenue; thence eastwardly and parallel with Neptune Avenue to the point or place of beginning.

Fourth—That the abstracts of said estimate of damage and of said assessment for benefit, together with the damage and benefit maps, and also all the affidavits, estimates, proofs and other documents used by the Commissioners of Estimate and by the Commissioner of Assessment in making the same, have been deposited in the Bureau of Street Openings in the Law Department of The City of New York, No. 166 Montague Street, in the Borough of Brooklyn, in said City, there to remain until the 21st day of December, 1914.

Fifth—That, provided there be no objections filed to either of said abstracts, the reports as to awards and as to assessments for benefit herein will be presented for confirmation to the Supreme Court of the State of New York, Second Department, at a Special Term thereof, to be held in the County Court House, in the Borough of Brooklyn, in the City of New York, on the 15th day of January, 1915, at the opening of the Court on that day.

Sixth—In case, however, objections are filed to the foregoing abstracts of estimate and assessment, or to either of them, the motion to confirm the reports as to awards and as to assessments shall stand adjourned to the date to be hereafter specified in the notice provided in such cases to be given in relation to filing the final reports, pursuant to Sections 981 and 984 of the Greater New York Charter, as amended by Chapter 658 of the Laws of 1906.

Dated, New York, November 20th, 1914.
HENRY P. VELTE, J. CORNELL SCHENCK, SOLON BARBANEL, Commissioners of Estimate; J. CORNELL SCHENCK, Commissioner of Assessment.

MELVILLE J. FRANCE, Clerk. n20,48

Filing Bill of Costs.

SECOND DEPARTMENT.

In the Matter of the Application of The City of New York, relative to acquiring title in fee wherever the same has not been heretofore acquired, to the lands, tenements and hereditaments required for the opening and extending of RIVERDALE AVENUE, from East 98th Street to Amboy Street, from Osborn Street to Hinsdale Street, from Georgia Avenue to Pennsylvania Avenue, from Wyona Street to New Lots Avenue; NEWPORT AVENUE, from East 98th Street to Georgia Avenue; NEW LOTS AVENUE, from Hegman Avenue to Dumont Avenue; LOTT AVENUE, from East 98th Street to New Lots Avenue; LIVONIA AVENUE, from East 98th Street to Hopkinson Avenue, in the 26th and 32d Wards, Borough of Brooklyn, The City of New York.

NOTICE IS HEREBY GIVEN THAT THE supplemental and additional bill of costs, charges and expenses incurred by reason of the proceedings in the above-entitled matter will be presented for taxation to one of the Justices of the Supreme Court of the State of New York, Second Department, at a Special Term thereof, to be held at the County Court House in the Borough of Brooklyn, in the City of New York, on the 22d day of December, 1914, at 10:00 o'clock in the forenoon of that day, or as soon thereafter as Counsel can be heard thereon; and that the said bill of costs, charges and expenses has been deposited in the office of the Clerk of the County of Kings, there to remain for and during the space of ten days, as required by law.

Dated, New York, December 8th, 1914.
JOHN F. COFFIN, ARNON L. SQUIERS, MATTHEW V. O'MALLEY, Commissioners of Estimate; ARNON L. SQUIERS, Commissioner of Assessment.

MELVILLE J. FRANCE, Clerk. d8,18

SECOND DEPARTMENT.

In the Matter of the Application of The City of New York, relative to acquiring title in fee wherever the same has not been heretofore acquired, to the lands, tenements and hereditaments required for the opening and extending of WEST 19TH STREET, from Neptune Avenue to Surf Avenue; and WEST 20TH STREET, from Neptune Avenue to Surf Avenue, excepting in each case the right-of-way of the New York and Coney Island Railroad, in the 31st Ward, Borough of Brooklyn, The City of New York.

NOTICE IS HEREBY GIVEN THAT THE bill of costs, charges and expenses incurred by reason of the proceedings in the above-entitled matter will be presented for taxation to one of the Justices of the Supreme Court of the State of New York, Second Department, at a Special Term thereof, to be held at the County Court House in the Borough of Brooklyn, in the City of New York, on the 17th day of December, 1914, at 10:00 o'clock in the forenoon of that day, or as soon thereafter as Counsel can be heard thereon; and that the said bill of costs, charges and expenses has been deposited in the office of the Clerk of the County of Kings, there to remain for and during the space of ten days, as required by law.

noon of that day, or as soon thereafter as Counsel can be heard thereon; and that the said bill of costs, charges and expenses has been deposited in the office of the Clerk of the County of Kings, there to remain for and during the space of ten days, as required by law.

Dated, New York, December 4th, 1914.
JNO. F. COFFIN, MIRABEAU C. TOWNS, DANIEL MCLEARY, Commissioners of Estimate; JNO. F. COFFIN, Commissioner of Assessment.

MELVILLE J. FRANCE, Clerk. d4,15

SECOND DEPARTMENT.

In the Matter of the Application of The City of New York, relative to acquiring title wherever the same has not been heretofore acquired for the same purpose in fee, to the lands, tenements and hereditaments required for the opening and extending of YOUNG STREET, from Hunters Point Avenue to Review Avenue, in the 1st Ward, Borough of Queens, City of New York.

NOTICE IS HEREBY GIVEN THAT THE bill of costs, charges and expenses incurred by reason of the proceedings in the above-entitled matter will be presented for taxation to one of the Justices of the Supreme Court of the State of New York, Second Department, at a Trial Term thereof, Part I, to be held at the Queens County Court House, Long Island City, in the Borough of Queens, in the City of New York, on the 18th day of December, 1914, at 10:30 o'clock in the forenoon of that day, or as soon thereafter as Counsel can be heard thereon; and that the said bill of costs, charges and expenses has been deposited in the office of the Clerk of the County of Queens, there to remain for and during the space of ten days, as required by law.

Dated, New York, December 4th, 1914.
R. W. KELLOGG, FREDERICK W. DUNTON, J. H. LEONARD, Commissioners of Estimate; R. W. KELLOGG, Commissioner of Assessment.

WALTER C. SHEPPARD, Clerk. d4,15

SECOND DEPARTMENT.

In the Matter of the Application of The City of New York, relative to acquiring title in fee wherever the same has not been heretofore acquired, to the lands, tenements and hereditaments required for the opening and extending of BELMONT AVENUE, from Pennsylvania Avenue to Wyona Street, and from Elderts Lane to the Old City Line, in the 26th Ward, Borough of Brooklyn, The City of New York.

NOTICE IS HEREBY GIVEN THAT THE bill of costs, charges and expenses incurred by reason of the proceedings in the above-entitled matter will be presented for taxation to one of the Justices of the Supreme Court of the State of New York, Second Department, at a Special Term thereof, to be held at the County Court House in the Borough of Brooklyn, in the City of New York, on the 11th day of December, 1914, at 10:00 o'clock in the forenoon of that day, or as soon thereafter as Counsel can be heard thereon; and that the said bill of costs, charges and expenses has been deposited in the office of the Clerk of the County of Kings, there to remain for and during the space of ten days, as required by law.

Dated, November 28th, 1914.
WILLIAM M. RUSSELL, WALTER J. MCGILL, JOHN J. KILCOURSE, Commissioners of Estimate; WILLIAM M. RUSSELL, Commissioner of Assessment.

MELVILLE J. FRANCE, Clerk. n28,49

NOTICE TO BIDDERS AT SALES OF OLD BUILDINGS, ETC.

TERMS AND CONDITIONS UNDER WHICH BUILDINGS, ETC., WILL BE SOLD FOR REMOVAL FROM CITY PROPERTY.

THE BUILDINGS AND APPURTENANCES thereto will be sold to the highest bidder, who must pay cash or certified check, drawn to the order of the Comptroller of The City of New York, and must also give a certified check or cash for half the amount of the purchase price as security for the faithful performance of the terms and conditions of the sale. Where the amount of the purchase price does not equal or exceed the sum of \$50, the sum of \$50 shall be the amount of the security to be deposited. This security may at any time after the expiration of the contract period be applied by the City to the cost of completing any of the work required under the contract, but unfinished at the expiration of the contract period.

The purchaser shall not lease, occupy, cause or permit the building or buildings, etc., purchased by him to be used or occupied for any purpose other than that of their speedy removal, nor shall he collect any rental or other revenue for the use of either the land or the buildings, etc., situated thereon. The breach of either or any of these conditions shall forthwith void the sale and cause immediate forfeiture of the purchase money and the security deposited for the faithful performance of the conditions of the sale. The placing therein or permitting the occupancy of any such building by any tenant free, for rent or otherwise, excepting the necessary watchmen or the workmen engaged in the actual demolition thereof, shall of itself be a breach of the above conditions of sale.

The sale will be as of the condition of the property on date of delivery thereof to the purchaser. The City of New York will not be responsible for any change or loss which may occur in the condition of the buildings, or their appurtenances between the time of the sale thereof and the time of delivering possession to the purchaser, after being properly vacated of all tenants. The sale and delivery to purchaser will be made as nearly together as the circumstances of vacating the structures of their tenants will permit.

All the material of the buildings, sheds, walks, structures and cellars of whatsoever nature, with their exterior and interior fixtures, appurtenances and foundations of all kinds, except the exterior walls of the buildings and their foundations and the sidewalks and curb in front of said buildings, extending within the described area shall be torn down and removed from the premises. None of the dirt, debris or waste resulting from demolition shall be allowed to remain on the premises, except old mortar or plaster only, which may be left, but not higher at any point than two feet below the curb opposite that point. The exterior walls and their foundations shall be taken down only to a plane whose elevation shall be the level of the curb in front of the building. Where there is no curb the elevation of the surrounding ground shall be considered curb level. All wells, cesspools, sinks, etc., existing on the property must be filled to the level of the surrounding ground with clean earth.

The purchaser at the sale shall also withdraw and remove all abandoned water taps and old service mains, and in place thereof cause to be inserted a brass plug in the main water pipe in the street, in compliance with the rules and regulations of the Department of Water Supply, Gas and Electricity, and furnish the Department of Finance with a certificate from the Department of Water Supply, Gas and Electricity that this has been performed.

The purchaser at the sale shall also remove all house sewer connections to the main sewer in

the street and the openings of the main sewer in street shall be properly closed in compliance with the directions of the Bureau of Sewers in the Borough in which the buildings are situated, and furnish the Department of Finance with a certificate from the Bureau of Sewers that the work has been properly performed.

The permit for all opening in the street to be obtained by and at the expense of the purchaser of the building.

Failure to remove said buildings, appurtenances, or any part thereof, within thirty days from the day of possession will work forfeiture of ownership of such buildings, appurtenances, or portion as shall then be left standing, together with all moneys paid by said purchaser on account thereof at the time of the sale, and the bidder's assent to the above conditions being understood to be implied by the act of bidding, and The City of New York will, without notice to the purchaser, cause the same to be removed, and the cost and expense thereof charged against the security above mentioned.

The work of removal must be carried on in every respect in a thorough and workmanlike manner, and must be completed within thirty days from the day of possession, and the successful bidder will provide and furnish all materials of labor and machinery necessary thereto, and will place proper and sufficient guards and fences and warning signs by day and night for the prevention of accidents, and will indemnify and save harmless The City of New York, its officers, agents and servants, and each of them, against any and all suits and actions, claims and demands of every name and description brought against it, them or any of them, and against and from all damage and costs to which it, they or any of them be put by reason of injury to the person or property of another, resulting from negligence or carelessness in the performance of the work, or in guarding the same, or from any improper or defective materials or machinery, implements or appliances used in the removal of said buildings.

Where party walls are found to exist between buildings purchased by different bidders, the materials of said party walls shall be understood to be equally divided between the separate purchasers.

Party walls and fences, when existing against adjacent property not sold, shall not be taken down. All furrings, plaster, chimneys, projecting brick, etc., on the faces of such party walls are to be taken down and removed. The walls shall be made permanently self-supporting, beam-holes, etc., bricked up, and the wall pointed and made to exclude wind and rain and present a clean exterior. The roofs and adjacent buildings shall be properly flashed and painted and made watertight where they have been disturbed by the operations of the Contractor.

The Comptroller of The City of New York reserves the right on the day of sale to withdraw from sale any of the buildings, parts of buildings and machinery included therein, or to reject any and all bids; and it is further

Resolved, That, while the said sale is held under the supervision of the Commissioners of the Sinking Fund, the Comptroller is authorized to cause the sale to be advertised and to direct the sale thereof as financial officer of the City.

PROPOSALS FOR BIDS AND ESTIMATES FOR THE CITY OF NEW YORK.

NOTICE TO CONTRACTORS.

GENERAL INSTRUCTIONS TO BIDDERS.

The person or persons making a bid or estimate for any services, work, materials or supplies for The City of New York, or for any of its departments, bureaus or offices, shall furnish the same in a sealed envelope, indorsed with the title of the supplies, materials, work or services for which the bid or estimate is made, with his or their name or names and the date of presentation to the President or Board or to the head of the Department at his or its office, on or before the date and hour named in the advertisement for the same, at which time and place the estimates received will be publicly opened by the President or Board or head of said Department and read, and the award of the contract made according to law as soon thereafter as practicable.

Each bid or estimate shall contain the name and place of residence of the person making the same, and names of all persons interested with him therein, and, if no other person be so interested, it shall distinctly state that fact; also, that it is made without any connection with any other person making an estimate for the same purpose, and is in all respects fair and without collusion or fraud, and that no member of the Board of Aldermen, head of a department, chief of a bureau, deputy thereof, or clerk thereof, or other officer of The City of New York, shall be or become interested, directly or indirectly, as contracting party, partner, stockholder, surety or otherwise in or in the performance of the contract, or in the supplies, work or business to which it relates, or in any portion of the profits thereof. The bid or estimate must be verified by the oath, in writing, of the party or parties making the estimate that the several matters stated herein are in all respects true.

No bid or estimate will be considered unless, as a condition precedent to the reception or consideration of any proposal, it be accompanied by a certified check upon one of the State or National banks of The City of New York, drawn to the order of the Comptroller, or money or corporate stock or certificates of indebtedness of any nature issued by The City of New York, which the Comptroller shall approve as of equal value with the security required in the advertisement to the amount of not less than three nor more than five per centum of the amount of the bond required, as provided in section 420 of the Greater New York Charter.

The amount shall be as specified in the proposals or instructions to bidders and shall not be in excess of 5 per cent.

The certified check or money should not be inclosed in the envelope containing the bid or estimate, but should be either inclosed in a separate envelope addressed to the head of the Department, President or Board, or submitted personally upon the presentation of the bid or estimate.

For particulars as to the quantity and quality of the supplies, or the nature and extent of the work, reference must be made to the specifications, schedules, plans, etc., on file in the said office of the President, Board or Department.

No bid shall be accepted from or contract awarded to any person who is in arrears to The City of New York upon debt or contract, or who is a defaulter, as surety or otherwise, upon any obligation to the City.

The contract must be bid for separately. The right is reserved in each case to reject all bids or estimates if it is deemed to be for the interest of the City so to do.

Bidders will write out the amount of their bids or estimates in addition to inserting the same in figures.

Bidders are requested to make their bids or estimates upon the blank forms prepared and furnished by the City, a copy of which, with the proper envelope in which to inclose the bid, together with a copy of the contract, including the specifications, in the form approved by the Corporation Counsel, can be obtained upon application thereto at the office of the Department for which the work is to be done. Plans and drawings of construction work may also be seen there.