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### DEPARTMENT OF HIGHWAYS.

#### Report for the Year 1899.

CITY OF NEW YORK,  
DEPARTMENT OF HIGHWAYS—COMMISSIONER'S OFFICE,  
Nos. 13 TO 21 PARK ROW, BOROUGH OF MANHATTAN,  
March 8, 1900.

Hon. ROBERT A. VAN WYCK, Mayor.

DEAR SIR:—In accordance with the provisions of section 524, subdivision 6, of the Charter of The City of New York, I submit the following report of the business of the Department of Highways for the year 1899.

#### BOROUGH OF MANHATTAN.

During the year 6 contracts for paving and repaving streets, 13 contracts for regulating and grading works, 13 contracts for flagging sidewalks and 2 contracts for crosswalks were entered into, while 21 paving and repaving contracts and 11 regulating and grading contracts were completed.

Satisfactory progress has been made in the construction of the Riverside Drive Viaduct. The erection of the steel superstructure has been begun, and it is estimated that the viaduct will be completed by June 1, 1900.

The work of cleaning and painting the One Hundred and Fifty-fifth street viaduct has been thoroughly and efficiently executed, the steel superstructure being now in excellent condition.

Most of the contracts for regulating and grading streets which were entered into by the old Department of Public Works prior to January 1, 1898, have been either completed or accepted, or practically completed but not accepted in consequence of the failure of contractors to fully comply with the specifications. This class of work has been chiefly confined to streets in the vicinity of Kingsbridge and Fort Washington, where the conformation of the ground is exceedingly rough and irregular, necessitating deep cuts and fills.

A cement laboratory has been established in this Department, and tests are carefully made of all cement delivered on any work.

A chemical laboratory is also being organized to make analysis of various asphalts and asphaltic cements, with the object of making complete tests of all materials actually used in the construction of asphalt pavements.

Eight hundred and twenty-five notices were served on owners, lessees or occupants of houses and lots to repair their sidewalks, and 1,700 permits have been applied for and issued to make such repairs. A marked improvement is noticeable in the condition of the sidewalks of the city and property-owners are manifesting a disposition to keep their sidewalks in good repair.

The Engineer's report gives an exhaustive account of all the work performed under his direction during the year, and illustrations of the more important works, in their various stages of construction, will be found interesting and instructive.

The permits issued by the Bureau of Street Openings, Paving and Repaving during the year number 1,758, being 147 for constructing vaults, 242 for repairing vaults, 52 for placing guy posts, 658 for tar bottles on streets, 655 for boilers and engines on streets and 34 for repairs to pavements at the expense of applicants.

The repair force took up and relaid 323,741 square yards of pavement, and made numerous other small repairs to defective pavements at various locations.

There were laid during the year 4.91 miles of new pavements, as follows: Asphalt blocks, 1.17 miles; asphalt, 2.45 miles; macadam, 0.59 mile, and granite, 0.70 mile.

There were issued during the year 16,906 permits to make openings to repair all mains, other than Croton water-mains and main sewers, and to make and repair house-service connections for water, sewage, gas, electricity and steam, and 1,058 notices were sent to corporations and others to repair defective pavements where openings had been made by them.

The lengths of subways, gas and water pipes, etc., were as follows: Fire-alarm subway, 2,140 linear feet; subway and other electrical ducts, 32.81 miles; gas-mains, 4.56 miles; gas-mains overhead, 8.56 miles; steam-main laid, 400 linear feet; water-pipe laid, 50 feet; salt-water pipe laid, 250 linear feet.

Number of inspections made to ascertain the condition of the pavement over openings made, 60,247.

There are in the Borough of Manhattan, 21.60 miles of macadamized and gravel roads, and 33.26 miles of unpaved or dirt roadways. The work of repairing and maintaining these roads comprises the filling of washouts, the resurfacing of defective sections of roadways, the repaving of gutters to carry off surface water, the resetting of curbs and the relaying of flagging, the scraping and relaying of the macadamized and gravel roads and the systematic sprinkling thereof to keep them in good condition as well as to prevent dust.

The large amount of building on Lenox avenue, Seventh avenue, St. Nicholas avenue, and in the vicinity thereof, was the means of subjecting these roadways to heavy trucking, which caused many defects in the surfaces of the roads and necessitated additional work to maintain them in good condition.

By the work of changing the motive power of the railroad on the Western Boulevard considerable damage was done to park plots, and much skill and labor were required to restore them to their former condition.

The report of the Superintendent of Incumbrances shows that during the year 3,834 complaints of obstructions were received; that 652 removals of obstructions were made; that 3,383 loads of dirt, stone and rubbish were carried off the public streets; that 348 dead and dangerous trees, posts and stumps were removed; that 5,017 permits to place building material on streets were issued; also 891 permits to cross sidewalks; 469 permits to erect temporary sheds over sidewalks; ten permits to cut and trim trees and 106 notices to repair defective vault covers.

#### BOROUGH OF THE BRONX.

At the beginning of the year 1899 work was in progress under 36 contracts for improvements in this borough. Six new contracts were entered into during the year, and 29 regulating and grading contracts; 4 paving contracts, 2 contracts for bridges and 3 miscellaneous contracts

were completed, leaving 24 still in force. Under these contracts 14.5 miles of streets were regulated and graded, and new pavements were laid as follows: Specification granite, 0.17 mile; sheet asphalt, 0.90 mile, and macadam, 13.36 miles.

The viaducts over the New York Central Railroad at Walton, Gerard and River avenues and over the New York and Putnam Railroad at Fort Independence street have been finished. By these viaducts, valuable connections are established between points greatly in need of communication.

The Brook Avenue beam tunnel at the crossing of the Port Morris Branch Railroad has also been completed, thus opening up that thoroughfare to public travel. As a result of this improvement, extensive building operations are now in progress.

The construction of the Melrose Avenue Viaduct, connecting that avenue with Webster avenue at One Hundred and Sixty-fifth street, is proceeding satisfactorily, and the foundations, abutments and approaches will soon be completed.

Work under the contract for the One Hundred and Fifty-third Street Viaduct has been suspended during the winter, but will be resumed early in the spring and pushed forward as rapidly as possible.

#### BOROUGH OF BROOKLYN.

During the year new pavements were laid as follows: Asphalt, 2.83 miles; granite, 1.73 miles; macadam, 5.40 miles.

Preliminary estimates were prepared for 429 improvements, aggregating \$3,453,355, and 21,392 permits were issued for various classes of work.

In view of the fact that the value to the public of a good pavement increases greatly with its length, the selection of streets to be repaved from the bond issue of \$700,000 has been made, as far as practicable, with the view of closing short breaks in existing smooth pavements; also, with the object of making extensions of and connections between pavements already laid, so that the lines of smooth pavements shall penetrate every part of the borough.

Some of the streets with cobble-stone pavements have been repaved with granite, the work being done by City employees and paid for from the appropriation for maintenance. The results so far attained by this method have been very satisfactory.

#### BOROUGH OF QUEENS.

Paved and macadamized streets in the Borough of Queens are in fairly good condition, the damage caused by the heavy rainstorms in the early part of the year having been thoroughly repaired. Among the important improvements accomplished during the year may be mentioned the resurfacing of Thomson avenue, from Jackson avenue to the old Long Island City line with macadam. This improvement forms the connecting link of a system of important roadways extending in one unbroken line over the finest roads in the borough from Thirty-fourth Street Ferry to a point fully fifty miles in the interior of Long Island.

The laying of bicycle strips on both sides of Borden avenue, Jackson avenue and Thomson avenue, from the Thirty-fourth Street Ferry to the old Long Island City line, connecting at that point with the fine macadam roads leading to all parts of the borough, is another improvement which has given great satisfaction to the public.

At the close of the year there were practically completed all the public works contracted for in 1897 by the several town and village authorities of Queens County, the question of the legality of the contracts and of the bond issues to pay for the improvements having been satisfactorily disposed of.

In the report of the Deputy Commissioner, attention is called to the urgent necessity of completing, as soon as possible, the maps that are being made of the different wards in the Borough of Queens, in order to facilitate the legal opening of various streets upon which improvements are desired by owners of abutting property, who make numerous requests to this Department that cannot be complied with.

There are about 285 miles of unpaved streets and roads in the Borough of Queens. The expense of repairing the numerous washouts caused by rainstorms is very heavy and the employment of a large force is necessary. A large saving will be effected by having these streets and roads permanently improved, for which the cost of maintenance will be comparatively small.

During the year the length of paved streets has been increased by 13.35 miles, and the mileage of unpaved streets, which was 28.470 in 1898, has been correspondingly reduced.

#### BOROUGH OF RICHMOND.

The roads, streets and avenues of the borough are in excellent condition, notwithstanding that, with the inadequate appropriation allowed for "Labor, Maintenance and Supplies," 1899, the Department has been unable, by means of surfacing and light general repairs, to put the roadways in such a condition that they will not require additional repairs for a long time to come.

The Deputy Commissioner of Highways calls attention to the fact that substantial highway improvements on a large scale will for some years be practically impossible, because the value of the property upon which the assessments for these public works would have to be levied is small compared with the cost of the improvements. For this reason the property-owners are anxious to avoid assuming obligations for public improvements, and it is suggested that many needed improvements might be effected without hardship to the owners of the abutting property by arranging in some way for the payment of assessments in small annual amounts, extending over a period of ten years.

Some of the steep hill streets in the borough have macadam centres sixteen feet wide, earth wings seven feet wide and cobble gutters three feet wide. It would be well to pave the earth wings with stone blocks, to which little or no damage would be done by heavy floods of storm water, which make deep ruts and dangerous washouts in earth roadways.

The very heavy storms during August did more damage to hillside streets than had ever been witnessed in the memory of the oldest inhabitants. The numerous washouts in these roadways were repaired as promptly and effectively as possible.

During the year a large number of cobble dish gutters have been relaid by the Department. These were in wretched condition, making driving from street to street very difficult. The wings of the outlying macadam roads have been scraped by machine instead of by hand, the machine doing very satisfactory work at decreased cost.

The mileage of paved streets in the borough has been increased by 27.45 miles of macadam pavement, of which there is now in the borough 170.71 miles.

For information in detail regarding the business of this Department in all the boroughs, I refer you to the following documents accompanying this report:

Document "A"—Trial Balance of Accounts for all boroughs and statement of moneys received and deposited with the City Chamberlain.

Document "B"—Report of Cashier, Borough of Manhattan.

Document "C"—Report of the Engineer, Borough of Manhattan.

Document "D"—Report of the Superintendent of Street Openings, Paving and Repaving, Borough of Manhattan.

Document "E"—Report of the Engineer of Subsurface Construction, Borough of Manhattan.

Document "F"—Report of the Superintendent of Streets and Roads, Borough of Manhattan.

Document "G"—Report of the Superintendent of Incumbrances, Borough of Manhattan.

Document "H"—Report of the Deputy Commissioner, Borough of The Bronx.

Document "I"—Report of the Deputy Commissioner, Borough of Brooklyn.

Document "J"—Report of the Deputy Commissioner, Borough of Queens.

Document "K"—Report of the Deputy Commissioner, Borough of Richmond.

Very respectfully,

JAMES P. KEATING, Commissioner of Highways.



## DOCUMENT "A."

Annual Statement, Showing Title of Appropriations; Appropriations and Transfers of 1898; Requisitions to December 31, 1899; Balances on December 31, 1899; Appropriations and Transfers of 1899; Requisitions to December 31, 1899; Balances on December 31, 1899; Memoranda of Requisitions on Liabilities prior to 1898, during 1899; Statement Showing Title of Special and Trust Accounts with Requisitions during 1899; also Statement of Money Received during 1899 and Deposited with the City Chamberlain.

TITLE OF APPROPRIATIONS.	APPROPRIATIONS AND TRANSFERS, OF 1898.	REQUISITIONS TO DECEMBER 31, 1899.	BALANCES ON DECEMBER 31, 1899.	APPROPRIATIONS AND TRANSFERS OF 1899.	REQUISITIONS TO DECEMBER 31, 1899.	BALANCES ON DECEMBER 31, 1899.
<i>Borough of Manhattan.</i>						
Boring Examinations for Grading Contracts.....	\$1,000 00	\$130 03	\$167 03	\$0,000 00	\$0 27	\$1,197 24
Boulevards, Roads and Avenues, Maintenance of.....	132,356 00	(13,145 64	000 00	138,450 00	147,654 95	10,885 05
Contingencies.....	10,000 00	.....	.....	5,000 00	2,404 74	795 26
Flagging Sidewalks and Fencing Vacant Lots in front of City Property.....	5,000 00	2,759 87	840 23	5,000 00	543 08	1,456 92
One Hundred and Fifty-fifth Street Viaduct—Maintenance and Repairs.....	49,120 00	17,824 48	14,700 37	4,000 00	1,067 73	934 27
Removing Obstructions in Streets and Avenues.....	.....	.....	.....	15,000 00	15,697 97	3,308 83
Roads, Streets and Avenues—Maintenance of and Sprinkling.....	14,053 15	14,053 74	11 41	10,000 00	20,430 86	549 14
Maintenance of Eighth Avenue Pavement.....	.....	.....	.....	10,000 00	14,100 00	4,800 00
Repairs and Renewal of Pavements and Regrading.....	370,130 34	168,103 08	17,032 48	410,000 00	377,843 98	12,156 02
Repaying Streets and Avenues.....	147,661 31	68,634 91	69,634 40	280,000 00	2,653 97	277,346 03
Salaries—General Administration.....	.....	.....	.....	24,600 00	15,999 84	8,600 16
" Administration.....	.....	.....	.....	25,000 00	10,000 00	4,900 00
" Boulevards, Roads and Avenues, Maintenance of.....	.....	.....	.....	9,050 00	5,655 56	394 44
" Removing Obstructions in Streets and Avenues.....	.....	.....	.....	14,500 00	14,137 86	362 14
" Repairs and Renewal of Pavements and Regrading.....	16,160 00	16,167 24	117 56	22,500 00	18,722 31	3,777 69
" Repaving Streets and Avenues.....	.....	.....	.....	50,000 00	30,137 77	19,862 23
Total.....	\$716,393 39	\$659,074 29	\$76,313 50	\$4,074,980 00	\$791,024 84	\$320,017 51
<i>Borough of The Bronx.</i>						
Salaries.....	.....	.....	.....	\$13,297 00	\$13,597 71	\$4,000 29
Contingencies.....	\$750 00	\$734 84	344 16	5,000 00	450 39	569 61
Labor, Maintenance and Supplies.....	478,714 00	478,071 90	460 04	514,000 00	513,340 00	45,079 00
Preliminary Surveying.....	80,000 00	75,304 78	47 86	10,240 00	47,794 49	116 51
Rock Soundings.....	5,662 73	5,662 61	04	16,973 00	16,973 00	494 00
Standard Bench Marks.....	.....	.....	.....	3,870 00	4,864 23	8 77
Preparing Site for Inland Fountain.....	5,000 00	4,358 04	641 96	.....	.....	.....
Removing Incumbrances.....	.....	.....	.....	6,440 00	9,251 08	888 08
Maintenance of Viaducts and Bridges.....	4,803 03	5,800 07	5,000 98	13,000 00	9,943 35	5,056 65
Total.....	\$513,013 70	\$510,076 30	\$9,137 44	\$513,845 00	\$584,599 83	\$18,741 38
<i>Borough of Brooklyn.</i>						
Salaries.....	.....	.....	.....	\$66,836 00	\$65,578 16	\$1,257 84
Labor, Maintenance and Supplies.....	\$421,077 00	\$413,443 75	\$8,463 25	470,750 00	470,690 70	10,102 30
Contingencies.....	.....	.....	.....	1,200 00	1,127 30	72 70
Total.....	\$421,077 00	\$413,443 75	\$8,463 25	\$470,750 00	\$470,690 70	\$10,102 30
<i>Borough of Queens.</i>						
Salaries.....	.....	.....	.....	\$10,300 00	\$9,855 01	\$444 99
Labor, Maintenance and Supplies.....	\$120,000 00	\$120,704 18	\$695 82	207,200 00	169,000 00	1,201 40
Maintenance of Viaducts and Bridges.....	.....	.....	.....	4,000 00	3,188 01	811 99
Laying Asphalt Slabs from Thirty-fourth to Ninety-second Street, Queens.....	22,000 00	13,873 35	8,126 65	.....	.....	.....
Total.....	\$142,000 00	\$135,477 53	\$8,822 47	\$211,500 00	\$182,043 02	\$29,456 98
<i>Borough of Richmond.</i>						
Salaries.....	\$13,858 73	\$13,436 96	\$421 77	\$15,286 87	\$15,100 73	\$186 14
Labor, Maintenance and Supplies.....	14,000 00	14,000 50	400 46	15,000 00	14,413 16	586 84
Maintenance of Viaducts and Bridges.....	1,000 00	997 00	300 00	.....	.....	.....
Total.....	\$28,858 73	\$28,434 46	\$822 23	\$30,286 87	\$29,513 89	\$772 98
Grand total.....	\$1,775,375 42	\$1,607,587 54	\$24,253 78	\$2,525,000 00	\$2,941,858 30	\$516,412 37

## Borough of Manhattan—Memoranda of Requisitions on Liabilities Prior to 1898, during 1899.

TITLE OF APPROPRIATIONS.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	TOTAL.
Repairs and Renewal of Pavements and Regrading.....	.....	.....	\$51 47	.....	.....	\$5,379 85	\$168 72	\$5,540 04
Repaying Streets and Avenues.....	\$344 00	\$285 96	400 00	\$3,994 64	\$1,568 79	.....	977 05	9,489 34
Street Improvements for Surveying, Monumenting, etc.....	.....	.....	.....	.....	.....	.....	960 00	960 00
Total.....	\$344 00	\$285 96	\$451 47	\$3,994 64	\$1,568 79	\$5,379 85	\$2,105 77	\$11,324 55

## Statement Showing Title of Special and Trust Accounts, with Amount of Requisitions Drawn during 1899.

TITLE OF SPECIAL AND TRUST ACCOUNTS.	AMOUNT OF REQUISITIONS, 1899.	TOTAL.
<i>Borough of Manhattan.</i>		
Restoring and Repaving—Special Fund.....	\$120,468 61	.....
Street Improvement Fund.....	138,054 95	.....
Riverside Drive Viaduct Extension.....	130,984 81	.....
Repaying, chapter 305, Laws of 1886.....	25,752 49	.....
Repaying, chapter 31, Laws of 1890.....	27,843 97	.....
Repaying, chapter 473, Laws of 1895.....	14,647 90	.....
Repaying, chapter 87, Laws of 1897.....	55,758 54	.....
Total.....	\$758,409 87	.....
<i>Borough of The Bronx.</i>		
Restoring and Repaving—Special Fund.....	\$5,013 31	.....
Street Improvement Fund.....	194,604 61	.....
Repaying, chapter 147, Laws of 1886.....	14,808 80	.....
Repaying, chapter 31, Laws of 1897.....	13,907 35	.....
Bridge over New York and Harlem Railroad at One Hundred and Fifty-third Street.....	5,734 43	.....
Bridge crossing Gerard avenue, etc., chapter 425, Laws of 1897.....	39,064 74	.....
Brook Avenue Steel Beam Structure over Port Morris Branch Railroad, etc., chapter 616, Laws of 1896.....	25,907 19	.....
Melrose Avenue Viaduct over New York and Harlem Railroad, chapter 616, Laws of 1897.....	11,903 74	.....
Construction of Rose Hill Place, chapter 624, Laws of 1898.....	10,000 00	.....
Total.....	\$250,038 47	.....



TITLE OF SPECIAL AND TRUST ACCOUNTS.	AMOUNT OF RECEIPTS, 1899.	TOTAL.
<i>Borough of Brooklyn.</i>		
Restoring and Repaving—Special Fund	\$49,498 79	
Local Improvement Fund, chapter 77, Laws of 1896	71,415 11	
Assessment Fund, chapter 283, Laws of 1888	191,134 87	
Assessment Fund, chapter 825, Laws of 1888	376 00	
Eighth Ward Improvement Fund, chapter 355, Laws of 1899	90,798 94	
Twenty-sixth Ward Street Improvement Fund, chapter 330, Laws of 1899	5,186 68	
Common Lands Fund, chapter 472, Laws of 1897	12,488 38	
Wallabout Fund, chapter 329, Laws of 1897	24,340 82	
Repairing Streets, 1897	1,653 32	
Street Improvement Fund	750 00	
		\$398,076 21
<i>Borough of Queens.</i>		
Restoring and Repaving—Special Fund	\$1,031 28	
Richmond Hill Sidewalk Improvement Fund	699 90	
Newtown Road Improvement Fund	116,387 61	
Bayville and Douglass Road Improvement Fund	99,308 06	
Jamaica Street Improvement Fund	18,228 95	
College Point Street and Park Improvement Fund	44,782 58	
Newtown Burial Permit Fund	5,842 87	
		220,978 27
<i>Borough of Richmond.</i>		
Restoring and Repaving—Special Fund	\$796 42	
County Road Fund	101,013 74	
Northfield Road Fund	2,281 02	
Westfield Road Fund	6,364 12	
Middletown Road Fund	99,947 50	
Tottenville Road Fund	9 10	
Southfield Boulevard and Road Fund	111,066 12	
		322,419 31
Grand Total		\$6,618,896 73

STATEMENT OF MONEYS RECEIVED BY THE DEPARTMENT OF HIGHWAYS AND DEPOSITED WITH THE CITY CHAMBERLAIN DURING YEAR 1899.

<i>Borough of Manhattan.</i>		
Restoring and Repaving—Special Fund	\$116,350 75	
Vaults	144,397 34	
Sheds	2,345 00	
Redemptions	619 50	
Auction sales	604 25	
Steam-roller	391 50	
Work and material	120 50	
General—From Corporations	200 00	
		\$267,941 74
<i>Borough of The Bronx.</i>		
Restoring and Repaving—Special Fund	\$7,514 11	
Vaults	1,027 17	
Sheds	5 00	
Steam-roller	210 00	
Work and material	95 22	
Auction sales	15,939 28	
Redemptions	44 50	
		24,865 98
<i>Borough of Brooklyn.</i>		
Restoring and Repaving—Special Fund	\$48,922 21	
Vaults	1,404 57	
Redemptions	13 50	
Auction sales	115 42	
General—From Corporations	600 00	
		51,145 70
<i>Borough of Queens.</i>		
Restoring and Repaving—Special Fund	5,765 00	
		5,765 00
<i>Borough of Richmond.</i>		
Restoring and Repaving—Special Fund	\$1 63	
Work and material	13 00	
Steam-roller	60 00	
		74 63
Total amount		\$349,793 05

DOCUMENT "B."

DEPARTMENT OF HIGHWAYS,  
BUREAU OF STREET OPENINGS, PAVING AND REPAVING,  
No. 21 PARK ROW,  
NEW YORK, December 31, 1899.

Hon. JAMES P. KEATING, Commissioner of Highways:

SIR—The following is a statement of all money received for year ending December 27, 1899.

	SPECIAL.	GENERAL.	TOTAL.
Borough of Manhattan	\$119,350 75	\$148,890 90	\$267,941 74
Borough of The Bronx	7,544 11	17,321 87	24,865 98
Borough of Brooklyn	48,922 21	2,223 49	51,145 70
Borough of Queens	5,765 00		5,765 00
Borough of Richmond	1 63	73 00	74 63
Total	\$181,583 71	\$168,209 33	\$349,793 05

Respectfully,

ALBERT C. WIEGAND, Cashier.

DOCUMENT "C."

DEPARTMENT OF HIGHWAYS—OFFICE OF CHIEF ENGINEER,  
No. 21 PARK ROW,  
NEW YORK, January 8, 1900.

Hon. JAMES E. KEATING, Commissioner of Highways:

SIR—In accordance with your instructions, I beg to submit herewith my report for the office of the Chief Engineer for the year ending December 31, 1899, together with a statement of the amount of work done and the expenditures and balances of appropriations.

During the year the majority of contracts for regulating, grading, etc., which were let under the former Department of Public Works, previous to January 1, 1898, have been either wholly completed and accepted, or practically completed but pending acceptance, due to failure of contractor to carry out properly the requirements of the specifications, or to other causes of delay for which the Department is not responsible.

This work has been almost entirely confined to the vicinity of Kingsbridge and Fort Washington, where the topographical features are exceedingly rough and irregular, necessitating deep cuts and fills. This region is rapidly coming into demand for dwellings, and the building of the electric conduit road on Kingsbridge road, which is now apparently soon to be gone ahead with, will tend to rapidly increase the development of this section of the borough.

REGULATING AND GRADING CONTRACTS.

Completed or Pending Acceptance.

Cooper street, from Academy to Isham street—Completed and accepted.  
Kingsbridge avenue, from Terrace View avenue to Van Cortlandt place—Completed, pending acceptance.

Edgcombe avenue, from One Hundred and Fifty-fifth street to east side of Amsterdam avenue, opposite One Hundred and Seventy-fifth street—Completed, pending acceptance.  
Sherman avenue, from Tenth avenue to Kingsbridge road—Completed and accepted.

Ninth avenue, from Two Hundred and First street to Kingsbridge road—Completed and accepted.

One Hundred and Thirty-ninth street, from Seventh to Fifth avenue—Completed, and pending acceptance.

One Hundred and Fortieth street, from Seventh avenue to Harlem river—Completed, and pending acceptance.

One Hundred and Seventy-eighth street, from Amsterdam avenue to Kingsbridge road—Completed, pending acceptance.

Nagle avenue, from Kingsbridge road to Tenth avenue (except between Kingsbridge road and Dyckman street)—Completed and accepted.

Unfinished.

Academy street, from Seaman avenue to Harlem river—This work was a contract involving a large amount of filling. It has been practically completed for nearly a year, but cannot be accepted owing to claim to sinkage made by contractor, and which question has not yet been decided, owing to legal complications.

Emerson street, from Seaman avenue to Amsterdam avenue—Almost completed, delay due to refusal of contractor to replace, in accordance with specifications, improper filling put in work in 1897.

One Hundred and Eighty-first street, Kingsbridge road to Boulevard Lafayette—This is a large contract, the work being mainly excavation, and will not be completed before February, 1900. Work progressing satisfactorily. Amounts of work during the year are:

10,000 cubic yards earth excavated,  
5,600 cubic yards rock excavated.

NEW CONTRACTS FOR REGULATING, GRADING, ETC.

Let During the Year and Now in Progress or Completed.

Fifty-first street, West, re-regulating, repaving, etc., from Eleventh to Twelfth avenue—Work progressing satisfactorily. No estimate of quantities yet due contractor.

Wadsworth avenue, from One Hundred and Seventy-third street to Eleventh avenue—Contract let, but work not yet ordered on.

VIADUCTS—CONSTRUCTION OR REPAIRS.

Extension of Riverside Drive Viaduct—Work has progressed very favorably during the year in spite of the severe winter weather, having late into the spring. The general progress of the work is well shown by illustrations accompanying this report and made from photographs taken during the year. The erection of the steel superstructure has been commenced, and the viaduct should be completed and thrown open to the public by the first of June, 1900.

The following is amount of work done on this contract during the year:

Filling, 10,300 cubic yards	\$513 00
Excavation, 37,939 cubic yards	18,979 50
Face masonry, 4,373 cubic yards	41,543 50
Rubble masonry, 13,100 cubic yards	45,850 00
Concrete, 9,235 cubic yards	55,422 00
Granite, 25,910.5 cubic feet	31,821 00
Voussoirs, 765 cubic feet	765 00
Parapet, 59 linear feet	354 00
Piles, 2,188	13,128 00
Steel, 1,200 pounds	27 00
Granite cap-stones, 6	360 00
Brick, 262,287	7,999 75
Total	\$236,764 75

One Hundred and Fifty-fifth Street Viaduct—Contract for the cleaning and painting of viaduct was let February 28, 1899, and completed August 21, 1899. The work was thoroughly and efficiently done and steel superstructure of viaduct is now in excellent condition.

FLAGGING, REFLAGGING, CURBING AND RECURBING.

Contracts Completed.

The following contracts for flagging, etc., have been completed and accepted during the year 1899, and the quantities of work done are as follows:

North side of Ninety-first street, between Amsterdam avenue and the Boulevard—  
5 linear feet old curb reset.  
938.8 square feet new flagging furnished and laid.  
305.6 square feet old flagging relaid.

Northeast corner of Thirty-seventh street and Seventh avenue—  
6.5 linear feet new curb furnished and set.  
296 square feet new flagging furnished and laid.  
518.8 square feet old flagging relaid.

North side of One Hundred and Fifty-eighth street, between Amsterdam avenue and the Boulevard—  
49.6 linear feet new curb furnished and set.  
135.7 linear feet old curb to reset.  
636 square feet new flagging furnished and laid.  
2,058 square feet old flagging relaid.

North side of One Hundred and Forty-second street, commencing 200 feet east of Eighth avenue and extending east 100 feet—  
8.2 linear feet new curb furnished and set.  
90.4 linear feet old curb reset.  
586.4 square feet new flagging furnished and laid.  
214 square feet old flagging relaid.

South side of One Hundred and Thirty-eighth street and Boulevard, and southwest corner of One Hundred and Thirty-eighth street and Boulevard—  
5.4 linear feet new curb furnished and set.  
22.7 linear feet old curb reset.  
147.6 square feet new flagging furnished and laid.  
22.4 square feet old flagging relaid.  
405 square feet new bridge stone furnished and laid.

Southwest corner of Boulevard and One Hundred and Eighth street—  
6.5 linear feet new curb furnished and set.  
1,753.2 square feet new flagging furnished and laid.  
518.4 square feet old flagging relaid.



North side of Ninety-second street, commencing 275 feet east of First avenue and extending 125 feet—

361.0 square feet new flagging furnished and laid.

663.3 square feet old flagging relaid.

East side of Third avenue, between Ninety-eighth and Ninety-ninth streets—

411.9 square feet new flagging furnished and laid.

518.2 square feet old flagging relaid.

#### Contracts Completed, but not Accepted.

North side of Twenty-second street, from No. 521 to Eleventh avenue—

20 linear feet new curb furnished and set.

40 linear feet old curb to reset.

1,270 square feet new flagging to furnish and lay.

300 square feet old flagging to relaid.

South side of West Twenty-second street, Nos. 530 to 548—

960 square feet new flagging to furnish and lay.

610 square feet old flagging to relaid.

South side of One Hundred and Sixty-second street, between Kingsbridge road and Broadway—

10 linear feet new curb to furnish and set.

10 linear feet old curb to reset.

1,210 square feet new flagging to furnish and lay.

1,020 square feet old flagging to relaid.

East side of Broadway, from One Hundred and Sixty-first to One Hundred and Sixty-second street—

1,840 square feet new flagging to furnish and lay.

130 square feet old flagging to relaid.

#### Contracts in Progress, but Pending Acceptance.

Seventh avenue, from Greenwich avenue to Central Park, South, amount of work done as per

Surveyor's return to December 31, 1899—

12,800 linear feet new curb furnished and set.

430 linear feet old curb reset.

113,000 square feet new flagging furnished and laid.

60,500 square feet old flagging relaid.

This is a large contract; the work is progressing satisfactorily and will be completed.

Eighth avenue, from Third to Fifty-ninth street, west side Central Park, West, to One Hundred and Tenth street and Eighth avenue, from One Hundred and Tenth street to Harlem street—

8,550 linear feet new curb furnished and set.

7,000 linear feet old curb addressed to grade.

230,000 square feet new flagging furnished and laid.

142,000 square feet old flagging relaid.

The work in this contract has been completed, but not accepted.

#### Contracts Entered into, but not yet Commenced.

Opposite Nos. 216 and 218 East Ninety-eighth street—

15 linear feet new curb to be furnished and set.

15 linear feet old curb to be reset.

570 square feet new flagging to furnish and lay.

30 square feet old flagging to relaid.

South side of Sixty-third street, west of Tenth avenue—

150 linear feet new curb to be furnished and set.

20 linear feet old curb to be reset.

2,050 square feet new flagging to furnish and lay.

1,200 square feet old flagging to relaid.

East side of St. Nicholas avenue, between One Hundred and Thirteenth and One Hundred and Fourteenth streets—

10 linear feet new curb to be furnished and set.

10 linear feet old curb to reset.

2,170 square feet new flagging to furnish and lay.

50 square feet old flagging to relaid.

No. 381 Brunson street (in front of)—

10 linear feet new curb to furnish and set.

10 linear feet old curb to reset.

280 square feet new flagging to furnish and lay.

40 square feet old flagging to relaid.

North side West Twenty-fourth street, from No. 519 to Eleventh avenue—

20 linear feet new curb to furnish and set.

10 linear feet old curb to reset.

3,250 square feet new flagging to furnish and lay.

420 square feet old flagging to relaid.

West Twenty-fourth street, from No. 512 to Eleventh avenue—

20 linear feet new curb to furnish and set.

30 linear feet old curb to reset.

2,300 square feet new flagging to furnish and lay.

610 square feet old flagging to relaid.

One Hundred and Twenty-ninth street, from Twelfth avenue to Hudson River Railroad tracks—

100 linear feet new curb to furnish and set.

110 linear feet old curb to reset.

1,750 square feet new flagging to furnish and lay.

West Twenty-first street, from No. 509 to Eleventh avenue—

2,350 square feet new flagging to furnish and lay.

40 square feet old flagging to relaid.

North side of Ninety-seventh street, West End avenue to Riverside Drive—

600 square feet new flagging to furnish and lay.

2,000 square feet old flagging to relaid.

60 linear feet new curb to furnish and set.

150 linear feet old curb to reset.

#### Contracts Suspended.

South side One Hundred and Thirty-fourth street, between Lenox and Seventh avenues—

50 linear feet new curb to furnish and set.

10 linear feet old curb to reset.

1,450 square feet new flagging to furnish and lay.

150 square feet old flagging to relaid.

From No. 246 West Eighteenth street, westerly a distance 75 feet—

5 linear feet new curb to furnish and set.

15 linear feet old curb to reset.

504 square feet new flagging to furnish and lay.

115 square feet old flagging to relaid.

#### Contracts Completed for Crosswalks.

Southerly line of One Hundred and Forty-sixth street and Boulevard, and northerly line of One

Hundred and Forty-fifth street and Boulevard—

400 square feet new bridge stones furnished and laid.

North side One Hundred and Twenty-fourth street and Columbus avenue—

252 square feet new bridge stones furnished and laid.

#### ENGINEERING SUPERVISION.

During the year, engineering supervision, including the making of estimates, chemical analyses and cement tests, has been carried out over the following contracts as enumerated in detail in the report of the Superintendent of Street Openings, Paving and Repaving:

#### REGULATING AND REPAVING WITH SHEET ASPHALT.

Nineteenth street, from Eighth to Ninth avenue.

Seventieth street, from Central Park, West, to Columbus avenue.

Forty-third street, from Eighth avenue to Ninth avenue.

Astor place and Eighth street, from Broadway to Fourth avenue.

Prince street, from Wooster street to West Broadway, and Wooster street, from Prince street to 200 feet south.

Wall street, from Broadway to Broad and Nassau streets.

Pell street, from Bowery to Mott street.

Oliver street, from Madison street to Cherry street.

Forty-ninth street, from Ninth to Tenth avenue.

Nineteenth street, from Fourth to Fifth avenue.

Seventy-second street, from Fifth to Madison avenue.

Eighty-ninth street, from Madison avenue to Park avenue.

Broadway, from Forty-seventh street to Fifty-eighth street.

Sixth avenue, from Thirteenth to Twenty-third street.

#### REGULATING AND PAVING WITH ASPHALT BLOCK ON CONCRETE FOUNDATION.

Macomb's Dam road, from Eighth avenue to Central Bridge.

One Hundred and Eighty-third street, from Kingsbridge road to Amsterdam avenue.

One Hundred and Forty-eighth street, from Seventh avenue to Eighth avenue.

One Hundred and Forty-seventh street, from Seventh avenue to Eighth avenue.

One Hundred and Sixty-second street, from Kingsbridge road to Eleventh avenue.

One Hundred and Thirty-eighth street, from Seventh avenue to Eighth avenue.

Edgemoor avenue, from One Hundred and Forty-fifth street to One Hundred and Fiftieth street.

#### REGULATING AND PAVING WITH GRANITE.

John street, from Pearl street to Broadway.

Fifty-first street, from Eleventh avenue to Twelfth avenue.

Forty-ninth street, from Eleventh avenue to Twelfth avenue.

#### REGULATING AND PAVING WITH MACADAM PAVEMENT.

Boulevard Lafayette, from Kingsbridge road to Eleventh avenue.

Dyckman street, from Kingsbridge road to Speedway.

#### CEMENT AND CHEMICAL LABORATORY.

A cement laboratory has been established in the Department and tests are carefully made on all cement delivered on any work, such tests including long periods as well as the ordinary twenty-four-hour and seven-day test and briquettes being made with sand mixtures as well as neat.

During the year the following number of briquettes have been broken:

24-hour test neat.....	678
7-day test neat.....	654
7-day test with sand.....	492
28-day test neat and with sand.....	528

Total..... 2,352

A chemical laboratory is also nearly completed for the special study of analyses and investigations of various asphalts and asphaltic cements, in order that a complete set of tests may be made of all materials actually used in the construction of asphalt pavements in all of the boroughs, to determine if they are in accordance with the requirements of the specifications, with the accepted samples and with the best engineering practice.

The engineering force during the year has been engaged in making estimates of cost and assessed valuation for new street-improvement work proposed under resolution of the Local Board, as well as estimates for repaving streets, in accordance with resolutions and inquiries from the Board of Public Improvements.

One field party has been employed a large portion of the time in establishing street grades in connection with the change in motive power of the various street railroads in the borough.

Surveys and form of contracts, specifications and assessment lists have been prepared in accordance with resolutions passed by the Board of Public Improvements authorizing contracts for flagging and fencing vacant lots.

During the past year 825 notices have been served on owners, lessees or occupants of houses and lots ordering them to repair their sidewalks, and 1,790 permits have been issued upon application to repair sidewalks. The past two years have shown a marked improvement in the condition of the sidewalks of the city, and an increased willingness on the part of property-owners to put them in good repair. Seven hundred and ninety-seven permits have been issued during 1899 to contractors and builders for the taking up of flagging for the purpose of crossing sidewalks with horses and carts for excavating or filling-in of lots in connection with building operations.

Numerous applications have been made, both orally and in writing, for the readjusting of street numbers and alignment of new numbers in the northerly section of the city, where building operations have been going on quite extensively, this office having charge of the numbering and renumbering of streets and avenues, in accordance with the ordinances of the City and provisions of the Greater New York Charter, in the boroughs of Manhattan and The Bronx.

The clerical force of the bureau has, in addition to transmitting regular payments and routine work, been kept busy in connection with making extra copies of contracts and specifications to be given to bidders, in accordance with advertisement, of all work let by the Department in any of the boroughs of Greater New York.

Summary in Office of Surveys, Estimates, Reports, etc., Made in Office of Chief Engineer during the Year 1899.

CLASS OF WORK.	TOTAL FOR YEAR.	
	No.	Estimated Cost.
<i>Accurate Surveys, Maps, Estimates and Reports.</i>		
Grading and repaving with asphalt.....	49	\$1,161,062 00
" " granite.....	3	16,400 00
" " asphalt block.....	3	20,250 00
Regulating, grading, etc.....	7	91,000 00
" " paving with asphalt.....	6	1,070 00
" " asphalt block.....	6	71,057 00
" " granite.....	1	5,000 00
Flagging and relaying sidewalks.....	62	51,140 00
Laying crosswalks, etc.....	5	900 00
Fencing vacant lots.....	7	970 00
Total.....	148	\$2,445,350 00
<i>Estimates and Reports for Local Board and Board of Public Improvements, exclusive of Report for which Surveys were Made.</i>		
Grading and repaving with asphalt.....	116	\$1,547,757 00
" " granite.....	4	35,000 00
Regulating and paving with asphalt.....	3	79,000 00
" " asphalt block.....	13	218,000 00
" " granite.....	4	35,000 00
Total.....	140	\$2,855,757 00

For more detailed statements as to the work done by this bureau during the year, and general information, I would refer to the accompanying tables.

Respectfully,

ANDREW E. FOYE, Acting Chief Engineer.

#### LIST OF TABLES ACCOMPANYING REPORT OF CHIEF ENGINEER OF HIGHWAYS.

Table I.—Annual statement of amount of work done during 1899.

" II.—Amount of vouchers drawn during the year 1899.

" III.—Work completed during the year 1899.

" IV.—Showing mileage of pavements in the Borough of Manhattan, from January 1, 1895, to January 1, 1900.

" V.—List of unpaved streets, Borough of Manhattan.

" VI.—List of unpaved streets opened but not regulated and graded, Borough of Manhattan.

" VII.—Statement showing works under contract in office of Chief Engineer, on the 31st day of December, 1899.



TABLE I.  
Annual Statement of Amount of Work Done during 1899.

NATURE OF WORK.	FIRST QUARTER.	SECOND QUARTER.	THIRD QUARTER.	FOURTH QUARTER.	TOTALS.
Earth excavated, cubic yards.....	45,916	6,223	6,732	16,931	53,852
Rock excavated, cubic yards.....	9,990	2,238	2,000	1,988	7,099
Filling furnished, cubic yards.....	80,000	89,470	92,000	94,950	356,420
Curbstones set, linear feet.....	3,400	9,137	14,400	17,975	44,912
Curbstones reset, linear feet.....	.....	750	550	941	2,241
Flagging laid, square feet.....	41,000	56,913	77,000	134,498	309,411
Flagging relaid, square feet.....	18,000	35,000	61,000	55,000	169,000
Masonry wall built, cubic yards.....	4,010	1,390	.....	551	6,001
Piles furnished.....	343	846	.....	.....	1,189
Concrete laid, cubic yards.....	.....	5,736	4,401	4,471	14,608
Dressed granite furnished and laid, cubic yards.....	.....	1,000	6,000	14,117	21,117
Cut granite furnished and laid, cubic yards.....	.....	911	.....	.....	911
Rubble backing furnished and laid, cubic yards.....	.....	1,407	7,187	1,306	9,899
Face masonry laid, cubic yards.....	.....	348	1,346	1,029	2,723
Veneers, cubic yards.....	.....	311	534	.....	845
Steel furnished, pounds.....	.....	1,000	.....	200	1,200
Brick furnished and laid.....	.....	74,300	230,000	.....	304,300
Granite cap furnished and laid.....	.....	3	.....	1	4
Cutest built, linear feet.....	.....	.....	.....	688	688
Parapet wall built, cubic yards.....	.....	.....	.....	39	39
Bridgestone furnished and laid, square feet.....	.....	.....	.....	7,161	7,161

TABLE II.  
Amount of Vouchers Drawn During the Year 1899.

	FIRST QUARTER.	SECOND QUARTER.	THIRD QUARTER.	FOURTH QUARTER.	TOTALS.
Street Improvement Fund.....	\$24,314 43	\$32,775 48	\$24,937 15	\$67,078 00	\$149,105 06
Flagging sidewalks and fencing vacant lots in front of city property, 1899.....	.....	.....	179 08	1,035 40	1,214 48
Flagging sidewalks and fencing vacant lots in front of city property, 1898.....	.....	1,034 43	.....	.....	1,034 43
Boring examinations for grading contracts, 1899.....	415 72	319 00	.....	.....	734 72
Boring examinations for grading contracts, 1898.....	163 40	.....	.....	.....	163 40
One Hundred and Fifty-fifth street viaduct, maintenance and repairs, 1899.....	384 77	6,379 30	6,081 05	70 00	12,915 12
Regrading streets and avenues, 1899.....	454 78	.....	.....	.....	454 78
Regrading streets and avenues, 1898.....	981 00	.....	.....	.....	981 00
Extension Riverside drive.....	12,914 24	51,848 32	71,471 34	67,002 76	203,236 66
Street improvements for surveying, etc., 1897.....	440 00	.....	.....	500 00	940 00
Contingencies.....	71 13	90 00	.....	140 00	301 13
Repairs and renewals of pavements, 1899.....	180 00	.....	.....	.....	180 00
Total.....	\$39,814 48	\$107,009 05	\$103,621 06	\$137,825 55	\$388,250 14

TABLE III.  
Work Completed During the Year 1899.

Regulating, grading, curbing and flagging—	
One Hundred and Eightieth street, Amsterdam avenue to Kingsbridge road.....	\$16,071 02
Cooper street, Academy street to Isham street.....	17,486 06
Sherman avenue, Tenth avenue to Kingsbridge road.....	49,066 93
Nagle avenue, Kingsbridge road to Tenth avenue, etc.....	23,223 50
Flagging, curbing, etc.—	
North side One Hundred and Forty-second street, east of Eighth avenue, etc.....	217 27
Northeast corner One Hundred and Thirty-seventh street and Seventh avenue.....	126 11
North side Ninety-first street, Amsterdam avenue to Boulevard.....	172 23
North side Ninety-second street, east of First avenue.....	187 14
East side of Third avenue, Ninety-eighth to Ninety-ninth streets.....	159 80
Southwest corner One Hundred and Eighth street and Boulevard.....	496 58
Thirty-fourth street, East river to North river.....	24,882 87
One Hundred and Fifty-eighth street, Amsterdam avenue to Boulevard.....	493 40
Laying crosswalks and sidewalks—	
One Hundred and Twenty-fourth street and Columbus avenue.....	228 50
One Hundred and Forty-fifth and One Hundred and Forty-sixth streets and Boulevard.....	390 43
Boulevard and One Hundred and Thirty-eighth street.....	374 53
Total.....	\$132,676 17

TABLE IV.

Table showing Mileage of Pavements in the Borough of Manhattan from January 1, 1895, to January 1, 1900.

	Unpaved Granite.	Square Granite.	Olding Traps.	Indian Traps.	Shore Asphalt.	Black Asphalt.	Cobble.	Kutti Wood.	Macadam.
January 1, 1895.....	188.85	30.21	39.44	18.50	52.34	.....	.93	.08	21.38
January 1, 1896.....	176.01	30.18	37.46	24.08	85.38	6.30	.38	.08	20.62
January 1, 1897.....	164.31	27.70	31.74	43.82	91.33	1.23	.26	.08	18.96
January 1, 1898.....	220.47	13.22	41.81	24.45	123.10	5.68	.10	.08	19.94
January 1, 1899.....	253.21	9.53	41.38	20.48	141.60	7.73	1.10	.08	16.94
January 1, 1900.....	258.44	9.53	41.30	27.96	144.45	8.20	2.10	.08	19.52

TABLE V.

List of Unpaved Streets, Borough of Manhattan.

	Length, feet.
Forty-first street, from Eleventh avenue to Hudson river.....	808
Fifty-sixth street, from Eleventh to Twelfth avenue.....	808
Sixty-fifth street, from Eleventh avenue to New York Central Railroad.....	325

	Length, feet.
Sixty-sixth street, from Eleventh avenue to New York Central Railroad.....	305
One Hundred and Eleventh street, from Riverside drive to Amsterdam avenue.....	1,218
One Hundred and Sixteenth street, from Amsterdam to Morningside avenue.....	466
One Hundred and Nineteenth street, from Amsterdam to Morningside avenue.....	466
One Hundred and Twentieth street, from Boulevard to Riverside drive.....	424
One Hundred and Twenty-third street, from Boulevard to Amsterdam avenue.....	797
One Hundred and Twenty-fourth street, from Boulevard to Amsterdam avenue.....	797
One Hundred and Thirty-second street, from Boulevard to New York Central tracks.....	887
One Hundred and Thirtieth street, from St. Nicholas Terrace to Convent avenue.....	518
One Hundred and Fiftieth street, from Edgecombe to St. Nicholas avenue.....	320
One Hundred and Sixtieth street, from St. Nicholas to Edgecombe avenue.....	400
One Hundred and Sixty-fifth street, from Eleventh avenue to Boulevard Lafayette.....	1,157
Hamilton Terrace, from One Hundred and Fortieth street to Convent avenue.....	1,090
Two Hundred and Tenth street, from Harlem river to Tenth avenue.....	906
Two Hundred and Ninth street, from Harlem river to Tenth avenue.....	711
Two Hundred and Eighth street, from Ninth to Tenth avenue.....	524
Two Hundred and Seventh street, from Harlem river to Tenth avenue.....	976
Two Hundred and Third street, from Harlem river to Tenth avenue.....	856
Fort Washington Ridge road.....	14,173 2
Hawthorne street, from Seaman to Tenth avenue.....	2,200
Hyatt street.....	200
Isham street, from Tenth avenue to Kingsbridge road.....	900
Jacobus place.....	300
Jansen avenue.....	1,100
Kingsbridge avenue.....	1,300
Kingsbridge road, from One Hundred and Ninetieth street to Spuyten Dayville creek.....	9,100
Leyden street, from Tennyson place to Terrace View avenue.....	325
Muscoota street, from Kingsbridge road to 410 feet east.....	410
Nagle avenue, from Kingsbridge road to Dyckman street.....	1,030
Ninth avenue, from Two Hundred and First street to Kingsbridge road.....	5,387
Park avenue, from One Hundred and Thirtieth to One Hundred and Thirty-fifth street.....	1,300
Post avenue, from Dyckman street to Tenth avenue.....	1,800
Sherman avenue, from Kingsbridge road to Tenth avenue.....	3,650
St. Nicholas Terrace, from One Hundred and Twenty-seventh street to Convent avenue and One Hundred and Fortieth street.....	1,300
Terrace View avenue, from Kingsbridge road to Kingsbridge road.....	1,150
Tenth avenue, from Academy street to Kingsbridge road.....	4,250
Van Corlear place, from Wicker place to Kingsbridge avenue.....	1,250
Wadsworth avenue, from Kingsbridge road to Eleventh avenue.....	5,400
Wicker place, from Jansen to Kingsbridge avenues.....	400
Cooper street, from Academy to Isham street.....	1,550
One Hundred and Forty-eighth street, from Eleventh avenue to New York Central tracks.....	558
One Hundred and Forty-eighth street, from Seventh to Bradhurst avenue.....	1,150
One Hundred and Forty-seventh street, from Seventh avenue to Harlem river.....	1,054
One Hundred and Forty-sixth street, from Lenox avenue to Harlem river.....	630
One Hundred and Forty-fifth street, from Sixth avenue to Harlem river.....	658
One Hundred and Forty-fourth street, from Seventh avenue to Harlem river.....	775
One Hundred and Forty-third street, from Boulevard to New York Central tracks.....	945
One Hundred and Forty-second street, from Seventh avenue to Harlem river.....	918
One Hundred and Fortieth street, from Hamilton place to Twelfth avenue.....	1,072
One Hundred and Fortieth street, from Convent to Tenth avenue.....	1,107
One Hundred and Thirty-ninth street, from Seventh avenue to Harlem river.....	374
One Hundred and Thirty-eighth street, from Convent avenue to 425 feet west of the Boulevard.....	2,180
One Hundred and Thirty-eighth street, from Lenox avenue to Harlem river.....	425
One Hundred and Thirty-seventh street, from Tenth to St. Nicholas avenue.....	1,470
One Hundred and Thirty-sixth street, from Amsterdam to Convent avenue.....	1,091
One Hundred and Thirty-fifth street, from Amsterdam to Convent avenue.....	374
One Hundred and Thirty-fourth street, from Madison to Fourth avenue.....	350
One Hundred and Thirty-third street, from Amsterdam to Convent avenue.....	424
One Hundred and Thirty-second street, from Old Broadway to Boulevard.....	321
One Hundred and Twenty-eighth street, from Convent to St. Nicholas avenue.....	272
One Hundred and Twenty-seventh street, from Amsterdam avenue to Boulevard.....	374
One Hundred and Twenty-sixth street, from Amsterdam avenue to Boulevard.....	325
One Hundred and Twenty-fifth street, from Morningside to Boulevard.....	1,214
One Hundred and Twentieth street, from Morningside to Amsterdam avenue.....	442
One Hundred and Eighteenth street, from Morningside to Amsterdam avenue.....	475
One Hundred and Sixteenth street, from Boulevard to Riverside.....	517
One Hundred and Fifteenth street, from Morningside to Amsterdam avenue.....	482
One Hundred and Fourteenth street, from St. Nicholas to Seventh avenue.....	102
One Hundred and Thirteenth street, from Seventh to Lenox avenue.....	680
One Hundred and Twelfth street, from Riverside drive to Boulevard.....	440
One Hundred and Eleventh street, from Manhattan to Columbus avenue.....	176
One Hundred and Eighth street, from Second avenue to East river.....	1,315
Ninety-ninth street, from Riverside Drive to West End avenue.....	890
Ninety-eighth street, east intersection of Park avenue.....	30
Ninety-fourth street, from Boulevard to Amsterdam avenue.....	350
Ninety-second street, from Boulevard to Amsterdam avenue.....	350
Seventy-seventh street, from Avenue A to Avenue B.....	659
Sixty-ninth street, from Avenue A to East river.....	640
Sixty-eighth street, from Avenue A to East river.....	600
Sixtieth street, from West End avenue to 250 feet west.....	250
Fifty-ninth street, from Avenue A to East river.....	163
Fifty-eighth street, from Avenue A to East river.....	180
Fifty-third street, from Eleventh avenue to Hudson river.....	830
Academy street, from Seaman to Exterior street.....	2,095
Ashley street, from Kingsbridge road to 125 feet east.....	125
Bradhurst avenue, from One Hundred and Fiftieth to One Hundred and Fifty-fifth street.....	1,300
Convent avenue, from One Hundred and Forty-first to One Hundred and Forty-fifth street.....	1,020
Edgecombe avenue, from One Hundred and Forty-fifth to One Hundred and Fifty-fifth street.....	2,060
Emerson street, from Seaman to Tenth avenue.....	1,800
F street, from Inwood street to Bolton road.....	300
Two Hundred and Second street, from Tenth avenue to Harlem river.....	816
Two Hundred and First street, from Academy street to Harlem river.....	702
One Hundred and Ninetieth street, from Tenth to Eleventh avenue.....	708
One Hundred and Eighty-ninth street, from Tenth to Wadsworth avenue.....	1,092
One Hundred and Eighty-eighth street, from Tenth to Wadsworth avenue.....	1,092
One Hundred and Eighty-seventh street, from Tenth to Wadsworth avenue.....	1,092
One Hundred and Eighty-sixth street, from Eleventh avenue to Kingsbridge road.....	500
One Hundred and Eighty-fifth street, from Eleventh avenue to Boulevard Lafayette.....	2,050
One Hundred and Eighty-fourth street, from Tenth avenue to Kingsbridge road.....	1,504
One Hundred and Eighty-third street, from Tenth avenue to Kingsbridge road.....	1,607
One Hundred and Eighty-second street, from Eleventh avenue to Kingsbridge road.....	495
One Hundred and Eighty-first street, from Eleventh avenue to Kingsbridge road.....	334
One Hundred and Eighty-thirtieth street, from Tenth avenue to Kingsbridge road.....	1,093
One Hundred and Eighty-ninth street, from Tenth to Edgecombe avenue.....	337
One Hundred and Eighty-eighth street, from Tenth to Edgecombe avenue.....	502
One Hundred and Eighty-seventh street, from Tenth to St. Nicholas avenue, and St. Nicholas to Edgecombe avenue.....	948
One Hundred and Eighty-sixth street, from Eleventh avenue to New York Central and Hudson River Railroad.....	1,035
One Hundred and Eighty-fifth street, from Eighth avenue to McComb's Dam road.....	557
One Hundred and Eighty-fourth street, from Seventh to Bradhurst avenue.....	450
One Hundred and Eighty-third street, from Boulevard to New York Central and Hudson River Railroad.....	802
One Hundred and Eighty-second street, from Bradhurst avenue to Harlem river.....	1,376
One Hundred and Eighty-first street, from Bradhurst avenue to Harlem river.....	1,501
One Hundred and Eightieth street, from Bradhurst avenue to Harlem river.....	1,601
One Hundred and Seventy-ninth street, from Bradhurst avenue to Harlem river.....	1,685
One Hundred and Seventy-eighth street, from Boulevard to New York Central and Hudson River Railroad.....	622
Edgecombe road, from One Hundred and Fifty-fifth street to Amsterdam avenue.....	2,770

142,921.2 feet = 27.07 miles.

142,921.2



TABLE VI

*List of Unpaved Streets Opened but not Regulated and Graded, Berong, of Mookatam.*

	Length, feet.
Two Hundred and Sixth street, from Harlem river to Ninth avenue .....	500
Two Hundred and Fifth street, from Tenth avenue to United States Channel line.....	880
Two Hundred and Fourth street, from Tenth avenue to United States Channel line....	850
One Hundred and Seventy-first street, from Tenth avenue to Kingsbridge road.....	970
One Hundred and Sixty-seventh street, from Tenth to Edgecombe avenue.....	500
One Hundred and Sixty-fifth street, from Boulevard Lafayette to New York Central Railroad tracks.....	608
One Hundred and Fifty-third street, from Eleventh avenue to New York Central tracks.	980
One Hundred and Fifty-first street, from Eleventh avenue to North river.....	815
One Hundred and Forty-eighth street, from Harlem river to Seventh avenue.....	951
One Hundred and Thirty-eighth street, from Convent to Tenth avenue.....	375

	Length, Feet.
One Hundred and Thirty-seventh street, from Boulevard to Hudson river . . . . .	792
One Hundred and Thirty-third street, from Amsterdam to Convent avenue . . . . .	225
Ninety-eighth street, from First avenue to Harlem river . . . . .	213
Ninety-seventh street, from First avenue to Harlem river (a slip) . . . . .	315
Sixty-fifth street, from Avenue A to East river . . . . .	544
Sixty-third street, from West End avenue to Riverside drive . . . . .	835
Sixty-second street, from West End avenue to Riverside drive . . . . .	835
Sixty-first street, from West End avenue to Riverside drive . . . . .	835
Sixtieth street, from Avenue A to East river . . . . .	150
Fiftieth street, from Eleventh avenue to Hudson river . . . . .	913

13,434 feet — 2.54 miles.

Statement showing Works under Contract in Office of Chief Engineer on the 31st day of December, 1899.

LOCATION OF WORK.	CONTRACTOR.	SURVEYOR.	INSPECTOR.	CONTRACT TIME.	ESTIMATED COST.	AMOUNT.			REMARKS.
						Earned.	Retained.	Paid.	
<i>Regulating and Grading, Curbing and Flagging.</i>						Days.			
Wadsworth avenue, One Hundred and Seventy-third street to Eleventh avenue.	John C. Rodgers	E. C. Smith		300	\$8,050 40				Work not commenced.
Edgercombe avenue, One Hundred and Fifty-fifth street, east side, to Amsterdam avenue.	Warren Schaff Company	R. L. Waters	Fay and Pratt	300	97,743 24	\$80,435 30	\$40,806 65	\$69,348 85	Completed but not accepted.
Emerson street, Seaman to Amsterdam avenue.	William E. Dean, Jr.	L. F. Olney	Patrick Byrne	175	21,547 74	19,450 00	5,775 00	13,675 00	Work nearly completed.
Kingsbridge avenue, Terrace View avenue to Van Cortlandt place.	William J. Rodgers	Fred. Reinert	Joe. N. Tuomey	50	3,343 26				Completed but not accepted.
Ninth avenue, Two Hundred and First street to Kingsbridge road.	D. W. Moran	F. E. Towle	Henry Scriber	50	15,597 35	10,081 79	3,977 77	9,004 02	" "
Fifty-first street, from Eleventh to Twelfth avenues.	Barth Hues	George A. Wheeler	Joe. N. Tuomey	30	15,548 74				
Eighty-fourth street, East End avenue to East river.	Owen Martin	"	B. E. Hansen	30	4,307 25				Work in progress.
One Hundred and Thirty-ninth street, Seventh to Fifth avenues.	T. J. McLaughlin	F. Kinney	Henry Scriber	100	7,744 31	5,750 00	2,000 00	4,750 00	Completed but not accepted.
One Hundred and Fortieth street, Seventh avenue to Harlem river.	"	George A. Wheeler	P. H. Kinney	100	9,117 79	5,575 00	1,794 00	4,779 00	" "
One Hundred and Seventy-eighth street, Amsterdam avenue to Kingsbridge road.	"	"	"	200	15,818 58	10,740 00	3,900 00	7,840 00	Completed, pending acceptance.
One Hundred and Eighty-fifth street, Kingsbridge road to Boulevard Lafayette.	Fineman & Smith	"	D. O'Connor	200	17,447 75	14,725 00	5,917 50	13,807 50	Work in progress.
<i>Flagging and Reflagging, Curbing and Re-curbings.</i>									
Eighth avenue, Thirtieth street to Hudson street.	Fickler & Seib	George A. Wheeler	Joe. D. Van Buren	50	25,477 48	15,670 30	10,073 85	18,005 05	
Seventh avenue, St. Nicholas avenue to Central Park, South.	Francis Shurten	"	Bannett and Pratt	75	22,517 70	25,780 30	10,144 15	78,046 35	
Ninety-eighth street, opposite Nos. 211 and 212.	Joe. M. Sheshan			4	403 00				Work not commenced.
Sixty-third street, south side, west of Tenth avenue.	B. O'Rourke			40	357 00				"
St. Nicholas avenue, east side, between One Hundred and Thirtieth and One Hundred and Forty-fifth streets.	"			12	540 05				"
One Hundred and Thirty-fourth street, south side, between Lenox and Seventh avenues.	"			10	107 75				Work suspended.
Eighteenth street, West, from No. 547 seventy-fifth street west.	"			1	100 00				"
Twenty-second street, West, from No. 530 to Eleventh avenue.	Joe. M. Sheshan		John Lawrence	7	370 70				Completed but not accepted.
Twenty-second street, West, south side, Nos. 530 to 548.	"		P. H. Kinney	2	101 50				" "
Brown street, No. 120.	"			2	90 30				Work not commenced.
One Hundred and Sixty-second street, bet. con. Kingsbridge road and Broadway.	B. O'Rourke		John Lawrence	5	418 30				Completed but not accepted.
Broadway, east side, between One Hundred and Sixty-third and One Hundred and Sixty-second streets.	"		"	5	473 00				" "
Twenty-fourth street, West, No. 510 to Eleventh avenue.	"			12	870 70				Work not commenced.
Twenty-fourth street, West, No. 510 to Eleventh avenue.	Joe. M. Sheshan			10	680 30				"
One Hundred and Twenty-ninth street, north side, Twelfth avenue to New York Central Railroad tracks.	"			2	610 30				"
Twenty-first street, West, No. 510 to North river.	F. G. Liddy			12	597 00				"
<i>Wharves—Section No. 1.</i>									
Extension of Riverside Drive.	O'Brien, Sheshan & McBeck	F. Smart-Williams	Stone and Tay.	400	570,000 00	322,400 75	18,360 38	294,041 23	Work in progress.
<b>TOTALS.</b>					<b>\$921,964 91</b>	<b>\$315,418 17</b>	<b>\$124,517 56</b>	<b>\$451,881 15</b>	

DOCUMENT "D."

DEPARTMENT OF HIGHWAYS,  
BUREAU OF STREET OPENINGS, PAVING AND REPAIRING,  
NO. 21 PARK ROW,  
NEW YORK, January 9, 1900.

HON. JAMES P. KEATING, Commissioner of Highways.

Six.—Following is an account of the principal transactions of the Bureau of Street Openings, Paving and Repaving during the year ending December 31, 1864:

RECEIPTS	
For constructing vaults.....	\$144,307 34
For work and materials.....	219 50
Total.....	\$144,526 74

All of the above amount has been deposited with the Cashier of the Department of Highways:

EXPENDITURES.		
"Repairs and Renewal of Pavements and Regrading,"	1891	853 37
"	"	
"	1896	4,389 84
"	1898	15,511 81
"	1899	392,169 08
"	Salaries	14,901 88
"Repaving Streets and Avenues,"	1889	344 08
"	1890	80 00
"	1891	602 37
"	1892	5,694 08
"	1893	1,548 95
"	1897	977 67
"	1898	54,747 71
"	1899	35,194 08
"	Salaries	21,151 99
"Repaving," chapter 346, Laws of 1889,	1889	10,128 97
"	1890	13,634 00
"	1891	13,668 11
" chapter 351, Laws of 1892,	1892	9,567 00
"	1893	18,226 10
" chapter 475, Laws of 1895,	1896	13,490 28
"	1898	1,139 00
" chapter 87, Laws of 1897,	1897	55,140 51
"	1898	30,309 00
"Maintenance of Eighth Avenue Pavement,"		19,200 00
"Street Improvement Fund"		\$115,612 42
"		3,587 54

" Resurfacing and Repaving—Special Fund ".....	\$108,497 16
" One Hundred and Fifty-fifth Street Viaduct—Maintenance and Repairs ".....	1,774 63
" Contingencies ".....	12 03
" Salaries—Inspectors of Paving ".....	283 75
" Judgment Fund ".....	16 50
<b>Total</b> .....	<b>\$971,668 80</b>

Total	\$971,668 80
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PERMITS ISSUED.

For vaults.....	147
For repairing vaults.....	147
For placing guy posts.....	53
For kettles on streets.....	658
For boilers and engines on streets.....	655
For repairs to pavement at expense of applicant.....	34
<b>Total.....</b>	<b>1,788</b>

## REPAIRS AND RENEWAL OF PAVEMENTS AND REGRADING.

The force employed on repairs to street pavements averaged as follows :

	MECHANICS.	LAURESS.	HOGS AND CATTLE.	TEAMS.
January.....	310	309	63	4
February.....	397	394	59	4
March.....	300	395	61	4
April.....	307	397	81	4
May.....	317	310	77	4
June.....	313	317	82	4
July.....	317	347	83	4
August.....	324	372	86	4
September.....	331	369	86	4
October.....	338	362	87	4
November.....	343	381	91	4
December.....	346	386	92	4

The work done by this force consisted of taking up and relaying 323,741 square yards of pavement.



NEW PAVEMENTS.

Contracts for the construction of new pavements have been completed and accepted in the following-named streets:

LOCATION.	SQUARE YARDS.	LINEAR FEET.
<i>Street Improvement Fund—Asphalt Blocks.</i>		
One Hundredth street, from First to Second avenue.....	8,400	664.70
One Hundredth street, from Lexington to Park avenue.....	1,127.10	474.30
One Hundred and Sixty-sixth street, from Edgemoor to Amsterdam avenue.....	1,592.09	417.35
One Hundred and Seventy-fifth street, from Amsterdam to Eleventh avenue.....	5,778	813.38
Boulevard Lafayette, from Eleventh avenue to north side of One Hundred and Fifty-eighth street (intersection One Hundred and Fifty-eighth street).....	385.40	51
One Hundred and Forty-eighth street, from Seventh to Eighth avenue.....	4,709.17	812.73
One Hundred and Thirty-eighth street, from Seventh to Lenox avenue.....	2,720	300
One Hundred and Eighty-third street, from Kingsbridge road to Amsterdam avenue.....	6,747.98	1,437
One Hundred and Forty-seventh street, from Seventh to Eighth avenue.....	1,790.63	813
Total.....	24,094.37	6,243.46
Length in miles, 1.17.		
<i>Macadam.</i>		
Boulevard Lafayette, from Eleventh avenue to Boulevard in north side of One Hundred and Fifty-eighth street.....	1,503	511
Dyckman street, from Kingsbridge road to Speedway.....	17,985	1,689
Total.....	19,548	3,193
Length in miles, .99.		
<i>Granite.</i>		
One Hundred and First street, from First avenue to East river.....	2,800.70	662
Length in miles, .15.		
<i>Street Improvement Fund, Chapter 100—Granite.</i>		
Sixth street, from Lewis street to 300 feet east.....	1,614.07	487.05
Length in miles, .09.		

REPAVING STREETS AND AVENUES.

LOCATION.	SQUARE YARDS.	LINEAR FEET.
<i>Asphalt.</i>		
Wall street, from Broadway to Nassau and Broad streets.....	777.74	314.40
Nineteenth street, from Eighth to Ninth avenue.....	9,754.10	830
Prince street, from Wooster street to West Broadway.....	715.10	487
Wooster street, from Prince street to one foot south.....	618.10	451
Nineteenth street, from Fourth to Fifth avenue.....	4,935.7	870
Eighty-ninth street, from Park to Madison avenue.....	2,380.53	445
Twenty-fourth street, from First avenue to Avenue A.....	2,432.84	515
Sixth avenue, from Thirtieth to Twenty-third street.....	14,150	1,604.4
Sixth avenue, from Lewis street to 300 feet east.....	139.3	32.0
Total.....	24,067.46	6,265.4
Length in miles, 1.18.		
<i>Granite.</i>		
Fifty-seventh street, from Eleventh avenue to 261 feet west.....	804.7	275
Forty-ninth street, from Eleventh to Twelfth avenue.....	2,759.6	812
John street, from Broadway to Pearl street.....	3,359.8	1,524
Total.....	6,924.1	2,611
Length in miles, .49.		
<i>Repaving, Chapter 87, Law of 1897—Asphalt.</i>		
Lewis street, from Houston to Eighth street.....	9,971.05	1,131.7
Seventeenth street, from Central Park, West, to Columbus avenue.....	2,715.08	814.2
Forty-third street, from Eighth to Ninth avenue.....	2,743.8	833.3
Pell street, from Bowery to Motz street.....	765.48	445.6
Oliver street, from Cherry to Madison street.....	1,451.28	679.1
Broadway, from Forty-seventh street to Forty-eighth street.....	15,209.8	2,977.9
Total.....	25,606.79	6,814.8
Length in miles, 1.27.		

Accompanying is the report of the Engineer of Subsurface Construction.

Respectfully,

JACOB C. WUND, Superintendent.

DOCUMENT "E."

THE CITY OF NEW YORK—DEPARTMENT OF HIGHWAYS,  
OFFICE OF SUBSURFACE CONSTRUCTION,  
PARK ROW BUILDING,  
MANHATTAN, January 5, 1900.

MR. JACOB C. WUND, Superintendent of Street Opening, Paving and Repaving:

SIR—I beg to submit my report of the work done in this office during the year ending December 30, 1899.

The construction of conduit electric or under-electric street railways has been as follows:

THIRD AVENUE RAILROAD COMPANY.

This company commenced the work of changing its railway tracks, so as to provide for the use of electricity as a motive power instead of cable on its main division, from the Post-office through Park row, the Bowery and Third avenue to the Harlem river, about the first of November, 1898. The construction on this division is virtually finished with the exception of some special work which is still to go in and repaving in connection with it. Electric cars have been running regularly since October 23.

The general plan of the construction was as follows: The ducts for carrying the electrical cables to supply power were first laid on the outside of the water rails. The vaults used for the cable pulleys were utilized for cleaning out and electrical pits, and the remaining pulley vaults will be filled in and paved over. The old tram rails were taken up and replaced by new ones of

the New York pattern. The granite pavement on concrete has been restored outside of the tracks and between the tracks but not in the tracks—that is, between the rails of the tracks. It was found impossible to maintain the pavement against the peculiarly shaped slot rail, which was used in the cable road construction, and it was hoped that the slot rail would therefore be removed when the reconstruction was undertaken. Instead, however, of removing the slot rail, a method of laying asphalt pavement was suggested and adopted, so that the whole of this division, in the tracks, is paved with what is known as "iron-clad" asphalt, a cast-iron network frame being placed on the concrete and bearing near the top of the slot rail. The asphalt is then put in in the usual manner on top of this iron frame and up to the proper surface. In order to provide some elasticity in the roadbed, a plate spring was used between the rail and its yoke bearing.

The work on the One Hundred and Twenty-fifth Street Division, extending from the Harlem river across One Hundred and Twenty-fifth and Manhattan streets to the Hudson river, for the purpose of changing the motive power from cable to under-electric, was commenced about the middle of March, and the electric cars were put in regular service on the 28th of September. On this line the old cable road was entirely removed, so that the reconstruction was virtually the building of a new railway.

The general design of this construction is as follows: The yokes are made up of an I-beam on which are bolted two castings which carry the tram and slot rails and form a bearing for the conduit plates. The tram rails are laid on cross-ties in order to provide elasticity. The slot rails have a perpendicular web, as they should, and it is easy to maintain the pavement against them. The concrete foundation under the yokes is continuous, the concrete being brought up around the conduit plates and six inches of pavement foundation concrete is laid between the tracks, in the tracks and outside of the tracks to cover the ducts for the feeder cables. On this division the space between the tracks, in the tracks and two feet outside on both sides is paved with granite blocks and the joints are filled with paving pitch and gravel. Between this pavement and the curbs on both sides, throughout the whole division, the pavement was taken up and relaid in sand, the entire cost falling on the railway company. This was necessary on account of the change of grade of the tracks made for the purpose of improving the street surface and drainage.

The Upper Amsterdam Avenue Division, extending from Manhattan street to One Hundred and Ninety-fourth street, was opened for reconstruction for the purpose of changing the motive power from cable to under-electric about the middle of June, and the work is now under way.

The work on this division is similar to that on the One Hundred and Twenty-fifth Street Division, the old cable road being entirely removed and the electric railway being an entirely new construction. The opportunity has been taken for realigning and improving the tracks. It is necessary throughout the greater portion of this division to spread the tracks wide apart in order that they shall not be placed over either the 48-inch water-mains, of which there are six on the lower part of the division, or over the brick aqueduct which is on the upper part of the division. The distance between the centres of tracks, therefore, varies from 17 feet on each side and over the brick aqueduct, which extends throughout the greater part of the division, to 28 feet over and adjacent to the 48-inch mains. The work on this division will require the relaying of the pavement from curb to curb throughout the greater part of its length. The pavement between the tracks and in the tracks and over the electric feeder ducts is granite laid on a concrete foundation.

FOURTY-SECOND STREET, MANHATTANVILLE AND ST. NICHOLAS AVENUE RAILWAY COMPANY.

The work of reconstructing the Amsterdam Avenue Line, extending from Seventy-second street to Manhattan street, was commenced about the first of January, and about 2,640 linear feet of double track under electric railway were completed up to April 13, 1899, when the Commission ordered the work entirely suspended and the pavement restored to its original condition. This action was taken because of the passage of the bill forbidding the operation of electric cars on four tracks on Amsterdam avenue by the Legislature and the granting of injunctions by the courts and pending a final legal decision. In obedience to that order the railway company restored the avenue to its original condition, as far as possible, without removing the new tracks connecting the horse-car tracks with such new under-electric tracks as were completed. It has run horse cars on this route since that date.

Upper Broadway Division, extending from Fifty-ninth street to Manhattan street—The work of removing the old horse-car line and building a new under-electric line on this division was commenced about the middle of April and the line was opened for the regular running of electric cars December 10.

The general construction is similar to that on One Hundred and Twenty-fifth street and on upper Amsterdam avenue. The old cobble-stone pavement in the tracks has been replaced with asphalt to match the asphalt pavement between the rails and the curbs. This gives upper Broadway, which is a park street, a finished and very handsome appearance. The work on this division was carried on in a neat and systematic manner, the Department being particularly free from complaints of inconvenience from residents along the line or other persons using the street.

On this division, between Sixty-fifth and Seventy-first streets, what is known as the "duplex construction" was built. It is that part of the line over which both the Metropolitan and the Third Avenue railroad companies have the legal right to run, and the tracks are constructed so that the cars of both companies run on the same tram-rails, but each company has a separate conduit in the track in which its own electric conductors are placed. This part of the division was constructed by the Metropolitan company, and the tracks are owned by them. The "duplex" tracks below Sixty-fifth street were built by the Third Avenue Railroad Company.

Lower Broadway Division, extending from Forty-fifth street to Fifty-ninth street—The work on this division was commenced about the middle of November, 1898, and was completed about the 1st of July, as far as the actual track work was concerned. Subsequent to this the City repaved Broadway, from Forty-seventh to Fifty-eighth street, with asphalt between the tracks and the curbs, and at the same time the railway company completed the asphalt pavement in the tracks and between the tracks. This part of Broadway is now in perfect condition.

Lower Amsterdam Avenue Division, between Fifty-ninth and Seventy-first streets—The work on this division was commenced about the 1st of July, and is just completed.

The general construction of the tracks is similar to the tracks on One Hundred and Twenty-fifth street. The pavement between the tracks and in the tracks and two feet outside on both sides, over the electric feeder-ducts, is granite on concrete, with paving pitch and gravel joints. The pavement between that and the curbs is granite on sand, all of which on this division was relaid by the railway company.

Forty-second Street Division, extending from East river to Hudson river—This work was commenced about the middle of June and is still in progress. When completed the street will be repaved from curb to curb by the street railway company with granite on concrete with paving pitch and gravel joints. The opportunity has been taken to improve the grades on this division to a great extent. The section between Madison and Lexington avenues will be duplex construction, and between Park and Lexington avenues both the Metropolitan Street Railway Company and the Third Avenue Railroad Company will each have a side track to be utilized for a car-stand in front of the Grand Central Station.

METROPOLITAN STREET RAILWAY COMPANY.

During the year this company has laid electric feeder ducts on the greater part of Broadway and Seventh avenue, between Bowling Green and Fifty-ninth street, preparatory to reconstruction, for the purpose of changing the motive power from cable to under-electric. The pavement which was restored over these electric ducts has been allowed to some extent to be put back temporarily, as it will have to be removed again when the reconstruction is commenced for the actual change of motive power. In order to accomplish this the present tram rails will have to be removed and new ones of the approved New York section will be substituted. The rest of the reconstruction will be somewhat similar to that which was performed on Third avenue. After the new rails are placed the granite pavement will be restored on a concrete foundation with paving pitch and gravel joints in a first-class and permanent manner.

At One Hundred and Thirty-fifth street, between Madison and Eighth avenues, the company has laid ducts for electric feeder cables. The company has leased this line from the Union Railway Company, and has obtained a permit from this Department to reconstruct it so that it may be operated by the under-electric system, but it has not yet signified its intention of commencing the work.

On First avenue, between Fifty-ninth and One Hundred and Sixteenth streets, electric feeder ducts have been laid; and on Duane street, between Centre street and West Broadway, they are now being laid.

This company has built, or is now building, the following sections of track over which both it and the Third Avenue Railroad Company have a right to run and where duplex construction is being placed: Seventh avenue, between Forty-second and Forty-fifth streets; First avenue, between Thirty-fourth and Forty-second streets; Tenth avenue, between Forty-second and Fifty-ninth streets, and Forty-second street, from Park to Lexington avenue.

This company is also at work extending the Madison and Fourth avenue line from the Brooklyn Bridge down Park row to Broadway.

It has obtained a permit from this Department to reconstruct the Columbus avenue line, between Sixty-fourth and One Hundred and Tenth streets, for the purpose of changing the motive power from cable to under-electric, but has not yet signified its intention of commencing the work.

NOISELESS COVERS.

Both the railway companies and the subway companies are still delinquent in the placing of noiseless covers in the manhole frames and boxes which are used in asphalt pavements.

I would recommend that the Commission refuse to issue any more permits to these companies until they have complied with the condition requiring noiseless covers which has been in every permit issued from this office since July 1, 1897.



## RECORD OF PAVEMENT OPENINGS.

All complaints from citizens about openings which have been made in the pavements of streets are referred to this office and, in order to place the responsibility at once, it is necessary that a complete record of every opening made in the pavements of this borough should be kept. In order to do this it will be necessary that the Department of Water Supply and the Department of Sewers send weekly a detailed report of all the openings made by each of them. As it is at present, without these weekly reports, considerable delay is necessitated by the transmission of the complaint to one or the other of these departments, and frequently to both, before the responsibility can be placed.

It is therefore recommended to the Commissioner that he request the heads of the departments mentioned to furnish these reports.

The Charter gives the Commissioner absolute authority over the maintenance of all pavements, and no pavement can be legally opened for any purpose whatever until a permit is first had from the Department of Highways.

Having this authority, and being responsible for the condition of the pavements, I would recommend to the Commissioner that he forbid either of the before-mentioned departments to open the pavement of any street without first obtaining a permit from this Department. In that case the permits can be issued just as they are to private corporations and no record of openings will then be complete. It would, of course, be advisable to issue emergency permits to each department, so that they could be used in cases of accident.

Following you will find the usual statement concerning permits. This statement is with reference to Manhattan Borough only unless otherwise indicated.

Respectfully,

WISNER B. MARTIN, Engineer.

## ORDINARY PERMITS.

Openings made to repair all mains other than Croton water-mains and main sewers, and to make and repair house service connections for water, sewage, gas, electricity, steam, etc. 16,906  
Notices sent from this office to corporations and others to repair defective pavements where openings have been made by them 1,058  
Defective pavements repaired in compliance with the above notices. 371

## OPENINGS MADE UNDER EMERGENCY PERMITS.

Consolidated Gas Company. 316  
New Amsterdam Gas Company. 4  
Mutual Gas-Light Company. 7  
Standard Gas-Light Company. 8  
Edison Electric Illuminating Company. 275  
Total. 520

## Summary.

Total feet of fire-alarm subway laid. 2,140  
Total miles of subway and other electrical ducts laid. 32.81  
Total miles of gas-main laid. 4.35  
Total miles of gas-main overhauled. 8.56  
Total feet of steam-main laid. 450  
Total feet of water-pipe laid. 10  
Total feet of salt-water main laid. 250  
Total feet of single track laid by New York Central and Hudson River Railroad Company. 200  
Number of inspections made as to the condition of pavement laid over openings. 60,247

## Permits Issued for Laying Gas-Mains.

No. of Permits	DATE OF PERMIT.	LOCATION.	COMPANY.
362	Apr. 20	Avenue D, east side, from south side of Sixteenth street to south side of Twelfth street.	Consolidated Gas Company.
363	" 20	Fifteenth street, south side, from 100 feet east of Avenue C to west side of Avenue D.	"
364	" 20	Eleventh street, east side, from north side of Duane to north side of Great Jones street.	"
365	May 18	Eleventh street, west side, from Great Jones street to Duane street.	"
366	" 20	One Hundred and Eleventh street, north side, from Amsterdam street to Broadway.	"
367	" 20	One Hundred and Eleventh street, north side, from Morningside Avenue to Amsterdam street.	"
368	Apr. 20	Fifteenth street, north side, from Avenue C to 100 feet west.	"
369	" 20	Avenue C, west side, from Fifteenth to Sixteenth street.	"
370	Sept. 3	Twenty-first street, south side, from 100 feet west of Avenue A to 100 feet east of Avenue A.	"
371	May 18	Abolition avenue, west side, from One Hundred and Sixty-eighth to One Hundred and Sixty-ninth street.	"
372	Sept. 24	One Hundred and Thirty-ninth street, north side, from west side of Convent avenue to east side of Amsterdam street.	"
373	Apr. 20	One Hundred and Sixteenth street, north side, from Morningside Avenue to Broadway.	"
374	Nov. 14	One Hundred and Thirty-ninth street, north side, from 12 feet north to north corner of Lenox Avenue in Harlem.	"
375	" 20	One Hundred and Thirty-ninth street, north side, from Lenox to Seventh Avenue.	"
376	Mar. 17	Fifth Avenue, east side, from south side of One Hundred and Seventeenth street to south side of One Hundred and Twentieth street.	Standard Gas-Light Company.
377	" 27	One Hundred and Nineteenth street, south side, across Park Avenue.	"
378	Apr. 3	One Hundred and Eighteenth street, south side, from west side of Fifth Avenue to east side of Lenox Avenue.	"
379	" 3	West End Avenue, west side, from south side of One Hundred and Eighth street to north side of One Hundred and Fifth street.	"
380	" 5	One Hundred and First street, south side, from Central Park, West, to Manhattan Avenue.	"
381	" 20	One Hundred and Twenty-fifth street, south side, from west side of Manhattan street to west side of Boulevard.	"
382	" 5	Madison Avenue, west side, from north side of One Hundred and Sixteenth to south side of One Hundred and Twentieth street.	"
383	" 3	One Hundred and Fifteenth street, south side, from west side of Lenox Avenue to east side of St. Nicholas Avenue.	"
384	" 25	Thirty-third street, south side, from west side of Sixth Avenue to east side of Seventh Avenue.	"
385	" 25	Ninety-second street, south side, from west side of Amsterdam Avenue to east side of West End Avenue.	"
386	" 24	Eighty-ninth street, south side, from west side of Amsterdam Avenue to west side of West End Avenue.	"
387	May 10	Ninety-ninth street, south side, from east side of Amsterdam Avenue to east side of Broadway.	"
388	Apr. 20	One Hundred and Thirtieth street, south side, from east side of St. Nicholas Avenue to east side of Seventh Avenue.	"
389	Mar. 27	One Hundred and Sixteenth street, north side, from 100 feet east of east corner of Seventh Avenue to 100 feet west of west corner of Lenox Avenue.	New Amsterdam Gas Company.
390	" 20	Sullivan Street, east side, from 100 feet south of north corner of Canal Street to 100 feet north of south corner of Canal Street.	"
391	" 20	Boulevard, west side, from 100 feet north of south corner of Sixth Street to 100 feet south of south corner of Sixth Street.	"
392	" 20	Sixteenth street, south side, from 100 feet east of west corner of Boulevard to 100 feet west of west corner of Boulevard.	"
393	Apr. 5	Amsterdam Avenue, west side, from north side of One Hundred and Sixth street to 100 feet north.	"
394	" 24	Merger street, west side, from West Third Street to 100 feet north.	"
395	May 5	Nineteenth street, south side, from east side of Sixth Avenue to 100 feet east of east corner of Sixth Avenue.	"
396	" 10	Thirty-fifth street, south side, from 100 feet west of east corner of Sixth Avenue to 100 feet east of east corner of Sixth Avenue.	"
397	" 15	Ninety-ninth street, south side, from 100 feet west of west corner of Amsterdam Avenue to 100 feet west of west corner of Amsterdam Avenue.	"
398	" 10	Ninety-ninth street, south side, from west side of Amsterdam Avenue to Broadway.	"

No. of Permits	DATE OF PERMIT.	LOCATION.	COMPANY.
21	1899, May 20	Orchard street, west side, from 100 feet north of south corner of Rivington street to 100 feet north of north corner of Rivington street.	New Amsterdam Gas Company.
22	June 9	Eighty-fourth street, south side, from 100 feet west of east corner of Avenue A to west corner of East End Avenue.	"
23	" 13	One Hundred and Seventeenth street, south side, from west side of Lexington Avenue to east side of Park Avenue.	"
24	" 15	Lexington Avenue, west side, from south side of One Hundred and Sixteenth street to 100 feet north of south corner of One Hundred and Seventeenth street.	"
25	" 22	One Hundred and Seventeenth street, south side, from west side of Lexington Avenue to 100 feet east of west corner of Third Avenue.	"
26	" 27	St. Nicholas Avenue, east side, from south side of One Hundred and Twenty-fifth street to 100 feet north of south corner of One Hundred and Twenty-seventh street.	"
27	Oct. 24	Fortieth street, south side, from east corner of First Avenue to 100 feet west of west corner of Second Avenue.	"
28	" 24	First Avenue, east side, from south corner of Fortieth street to north corner of Forty-first street.	"
29	" 18	Forty-first street, south side, from east side of First Avenue to 100 feet east.	"
301	Apr. 3	Grand street, north side, from West Broadway to Sullivan Street.	New York Mutual Gas Company.
302	" 20	Grand street, south side, from West Broadway to Sullivan Street.	"

## Permits Issued for Laying New Subways.

No. of Permits	DATE OF PERMIT.	LOCATION.	COMPANY.
460	1898, Sept. 22	Twenty-eighth street, north side, from west side of Third Avenue to east side of Lexington Avenue.	Consolidated Telegraph and Electrical Subway Company.
461	1899, Apr. 7	One Hundred and Seventeenth street, south side, from east side of Morningside Avenue to west side of Manhattan Avenue.	Consolidated Telegraph and Electrical Subway Company.
462	" 10	Rivington street, south side, from east side of Forsyth street to east side of Eldridge street.	Consolidated Telegraph and Electrical Subway Company.
463	" 10	One Hundred and Ninth street, south side, from east side of Boulevard to east side of Amsterdam Avenue.	Consolidated Telegraph and Electrical Subway Company.
464	" 24	Fifty-seventh street, south side, from east side of Park Avenue to east side of Lexington Avenue.	Consolidated Telegraph and Electrical Subway Company.
465	" 24	Sixth Avenue, from southwest to northeast corner of Sixteenth street.	Consolidated Telegraph and Electrical Subway Company.
466	" 24	Eleventh Avenue, east side, from south side of Forty-second street to north side of Forty-second street.	Consolidated Telegraph and Electrical Subway Company.
467	" 24	Tenth Avenue, east side, from south side of Forty-second street to north side of Forty-second street.	Consolidated Telegraph and Electrical Subway Company.
468	" 24	One Hundred and Twentieth street, south side, from west side of Third Avenue to west side of Second Avenue.	Consolidated Telegraph and Electrical Subway Company.
469	" 24	One Hundred and First street, north side, from east side of West End Avenue to Riverside Drive.	Consolidated Telegraph and Electrical Subway Company.
470	" 24	Boulevard, west side, from north side of One Hundred and Second street to north side of One Hundred and Third street.	Consolidated Telegraph and Electrical Subway Company.
471	May 27	One Hundred and Tenth street, north side, from west side of Lenox Avenue to east side of Seventh Avenue.	Consolidated Telegraph and Electrical Subway Company.
472	" 25	One Hundred and Eleventh street, north side, from across Seventh Avenue.	Consolidated Telegraph and Electrical Subway Company.
473	" 25	Seventh Avenue, east side, from north side of One Hundred and Tenth street to north side of One Hundred and Eleventh street.	Consolidated Telegraph and Electrical Subway Company.
474	June 5	Delancey street, south side, from east side of Chryse street to north side of Norfolk street.	Consolidated Telegraph and Electrical Subway Company.
475	" 10	Delancey street, north side, from east side of Clinton street to east side of Pitt street.	Consolidated Telegraph and Electrical Subway Company.
476	" 10	Pitt street, east side, from north side of Delancey street to south side of Rivington street.	Consolidated Telegraph and Electrical Subway Company.
477	" 10	Clinton street, east side, from south side of Rivington street to south side of Delancey street.	Consolidated Telegraph and Electrical Subway Company.
478	" 10	Rivington street, south side, from west side of Suffolk street to east side of Clinton street.	Consolidated Telegraph and Electrical Subway Company.
479	" 14	One Hundred and Fourteenth street, south side, from east side of Seventh Avenue to east side of St. Nicholas Avenue.	Consolidated Telegraph and Electrical Subway Company.
480	" 14	Seventh Avenue, east side, from north side of One Hundred and Eleventh street to north side of One Hundred and Fourteenth street.	Consolidated Telegraph and Electrical Subway Company.
481	" 17	Ludlow street, west side, from north side of Grand street to south side of Broome street.	Consolidated Telegraph and Electrical Subway Company.
482	" 16	Hester street, north side, from east side of Allen street to west side of Forsyth street.	Consolidated Telegraph and Electrical Subway Company.
483	" 27	St. Nicholas Avenue, east side, from north side of One Hundred and Thirtieth street to south side of One Hundred and Fourteenth street.	Consolidated Telegraph and Electrical Subway Company.
484	" 24	One Hundred and Eleventh street, north side, from west side of Seventh Avenue to east side of Eighth Avenue.	Consolidated Telegraph and Electrical Subway Company.
485	July 3	First street, south side, from east side of Bowery to west side of Second Avenue.	Consolidated Telegraph and Electrical Subway Company.
486	Apr. 24	Central Park, West, west side, from south side of Ninety-second street to south side of Ninety-fifth street.	Consolidated Telegraph and Electrical Subway Company.
487	July 3	East Houston street, north side, from east side of Avenue A to west side of Avenue B.	Consolidated Telegraph and Electrical Subway Company.
488	" 3	Central Park, West, west side, from north side of Eighty-ninth street to north side of Ninety-first street.	Consolidated Telegraph and Electrical Subway Company.
489	" 3	Central Park, West, west side, from north side of Ninety-fifth street to south side of Ninety-ninth street.	Consolidated Telegraph and Electrical Subway Company.
490	" 5	Eighty-ninth street, north side, from west side of West End Avenue to east side of Riverside Drive.	Consolidated Telegraph and Electrical Subway Company.
491	June 24	One Hundred and Tenth street, south side, from east side of Broadway to west side of Amsterdam Avenue.	Consolidated Telegraph and Electrical Subway Company.
492	July 3	St. Nicholas Avenue, east side, from north side of One Hundred and Nineteenth street to south side of One Hundred and Twentieth street.	Consolidated Telegraph and Electrical Subway Company.
493	" 3	One Hundred and Nineteenth street, north side, from west side of Seventh Avenue to east side of St. Nicholas Avenue.	Consolidated Telegraph and Electrical Subway Company.
494	" 3	Broadway, west side, from south side of Ninety-seventh street to One Hundred and Second street.	Consolidated Telegraph and Electrical Subway Company.
495	" 10	Ninety-sixth street, south side, from west side of Second Avenue to east side of Third Avenue.	Consolidated Telegraph and Electrical Subway Company.
496	" 10	Elm street, west side, from No. 100 Elm street to south side of Spring street.	Consolidated Telegraph and Electrical Subway Company.
497	" 17	Sixth Avenue, west side, from south side of Fortieth street to south side of Forty-second street.	Consolidated Telegraph and Electrical Subway Company.
498	" 17	Fortieth street, south side, from No. 125 West Fortieth street to north side of Sixth Avenue.	Consolidated Telegraph and Electrical Subway Company.
499	" 2	Broadway, east side, from north side of Ninety-ninth street to south side of Ninety-seventh street.	Consolidated Telegraph and Electrical Subway Company.
500	" 3	Amsterdam Avenue, east side, from north side of One Hundred and Thirtieth street to north side of One Hundred and Eighteenth street.	Consolidated Telegraph and Electrical Subway Company.
501	" 17	Fifty-third street, south side, from west side of Third Avenue to west side of Sixth Avenue.	Consolidated Telegraph and Electrical Subway Company.
502	" 3	One Hundred and Thirtieth street, north side, from west side of Broadway to east side of Amsterdam Avenue.	Consolidated Telegraph and Electrical Subway Company.
503	" 3	Broadway, west side, from west side of One Hundred and Tenth street to north side of One Hundred and Thirtieth street.	Consolidated Telegraph and Electrical Subway Company.
504	" 17	Duane street, south side, from No. 35 Duane street to west side Park Row.	Consolidated Telegraph and Electrical Subway Company.
505	" 27	Central Park, West, west side, from north side of Ninety-first street to south side of Ninety-second street.	Consolidated Telegraph and Electrical Subway Company.
506	" 3	One Hundred and Tenth street, north side, from east side of Broadway to west side of Amsterdam Avenue.	Consolidated Telegraph and Electrical Subway Company.
507	" 17	Eighty-ninth street, south side, from east side to west side of Amsterdam Avenue.	Consolidated Telegraph and Electrical Subway Company.
508	" 10	Amsterdam Avenue, east side, from north to south side of One Hundred and Ninth street.	Consolidated Telegraph and Electrical Subway Company.
509	" 6	One Hundred and Ninth street, south side, from east to west side of Amsterdam Avenue.	Consolidated Telegraph and Electrical Subway Company.
510	" 3	One Hundred and Thirtieth street, south side, from west side of Broadway to east side of Riverside Drive.	Consolidated Telegraph and Electrical Subway Company.
511	" 6	One Hundred and Eighteenth street, north side, from east side of Amsterdam Avenue to west side of Morningside Avenue.	Consolidated Telegraph and Electrical Subway Company.
512	" 27	Fifth Avenue, west side, from south side of One Hundred and Twenty-ninth street to south side of One Hundred and Thirtieth street.	Consolidated Telegraph and Electrical Subway Company.
513	Mar. 26	Fifth Avenue, west side, from north side of One Hundred and Twenty-ninth street to south side of One Hundred and Thirtieth street.	Consolidated Telegraph and Electrical Subway Company.



No. of Permit.	DATE OF PERMIT.	LOCATION.	COMPANY.	No. of Permit.	DATE OF PERMIT.	LOCATION.	COMPANY.
314	1899.			385	1899.		
315	Jan. 27	One Hundred and Fourteenth street, east side, from Amsterdam to Morningside avenue.	Consolidated Telegraph and Electrical Subway Company.	386	Aug. 21	One Hundred and Second street, south side, from east side of Columbus avenue to west side of Central Park, West.	Consolidated Telegraph and Electrical Subway Company.
316	July 27	Amsterdam avenue, north to south side of Eighty-seventh street and east to west side of Amsterdam avenue.	Consolidated Telegraph and Electrical Subway Company.	387	Nov. 13	Sixty-second street, south side, from east side of Columbus avenue to west side of Broadway.	Consolidated Telegraph and Electrical Subway Company.
317	" 29	Broadway, west side, from north side of Eighty-third street to north side of Eighty-fifth street.	Consolidated Telegraph and Electrical Subway Company.	388	Aug. 27	One Hundred and Second street, south side, from east side of Columbus avenue to east side of Amsterdam avenue.	Consolidated Telegraph and Electrical Subway Company.
318	" 3	Eighty-fifth street, north side, from Broadway to Amsterdam avenue.	Consolidated Telegraph and Electrical Subway Company.	389	Sept. 1	Greenwich street, west side, from south side of Jane street to south side of Greenwich street.	Consolidated Telegraph and Electrical Subway Company.
319	" 6	Broadway, west side, from north side of Eighty-fifth street to north side of Eighty-seventh street.	Consolidated Telegraph and Electrical Subway Company.	390	Aug. 18	Horatio street, south side, from west side of Greenwich street to Greenwich avenue.	Consolidated Telegraph and Electrical Subway Company.
320	" 12	Eighty-seventh street, north side, east and west side of West End avenue.	Consolidated Telegraph and Electrical Subway Company.	391	Oct. 18	Ninth avenue, west side, from south side of One Hundred and Sixty-fifth street to north side of One Hundred and Twenty-first street.	Consolidated Telegraph and Electrical Subway Company.
321	" 17	One Hundred and Eighth street, from Central Park, West, to Manhattan avenue, north side.	Consolidated Telegraph and Electrical Subway Company.	392	Aug. 31	Eighty-first street, north side, from west side of Columbus avenue to east side of Amsterdam avenue.	Consolidated Telegraph and Electrical Subway Company.
322	" 17	Ninety-eighth street, from south side of Broadway to east side of West End avenue.	Consolidated Telegraph and Electrical Subway Company.	393	Nov. 13	Eighty-fourth street, north side, crossing Broadway.	Consolidated Telegraph and Electrical Subway Company.
323	" 17	Twelfth street, north side, from west side of Third avenue to east side of Broadway.	Consolidated Telegraph and Electrical Subway Company.	394	Aug. 31	Ninety-seventh street, north side, from west side of Broadway to east side of West End avenue.	Consolidated Telegraph and Electrical Subway Company.
324	" 29	Seventh avenue, east side, from north side of One Hundred and Thirty-seventh street to north side of One Hundred and Forty-first street.	Consolidated Telegraph and Electrical Subway Company.	395	Apr. 14	Ninth avenue, west side, from south side of Thirty-fourth street to north side of Thirty-sixth street.	Consolidated Telegraph and Electrical Subway Company.
325	" 29	One Hundred and Thirty-seventh street, north side, between east and west sides of Seventh avenue.	Consolidated Telegraph and Electrical Subway Company.	396	Aug. 25	Twenty-eighth street, south side, from east to west side of Fourth avenue.	Consolidated Telegraph and Electrical Subway Company.
326	" 31	One Hundred and Forty-first street, north side, from east side of Seventh avenue to west side of Amsterdam avenue.	Consolidated Telegraph and Electrical Subway Company.	397	" 20	Suffolk street, west side, from southwest corner of Grand street to northwest corner of Hester street.	Consolidated Telegraph and Electrical Subway Company.
327	" 31	Amsterdam avenue, west side, from north side of One Hundred and Thirty-eighth street to south side of One Hundred and Fifty-third street.	Consolidated Telegraph and Electrical Subway Company.	398	Oct. 16	West End avenue, west side, from south side of Eighty-eighth street to north side of Ninety-eighth street.	Consolidated Telegraph and Electrical Subway Company.
328	" 31	Broadway, west side, from south side of Seventy-fifth street to south side of Seventy-sixth street.	Consolidated Telegraph and Electrical Subway Company.	399	" 18	Eight avenue, west side, from south side of Horatio street to south side of Thirteenth street.	Consolidated Telegraph and Electrical Subway Company.
329	" 31	Seventy-sixth street, south side, from east to west side of Broadway.	Consolidated Telegraph and Electrical Subway Company.	400	Sept. 1	Fourth street, south side, across Eighth avenue.	Consolidated Telegraph and Electrical Subway Company.
330	" 31	Ninety-first street, south side, from east side of Third avenue to east side of Park avenue.	Consolidated Telegraph and Electrical Subway Company.	401	Nov. 28	Lemois avenue, east side, from north side of One Hundred and Thirtieth street to south side of One Hundred and Sixty-sixth street.	Consolidated Telegraph and Electrical Subway Company.
331	" 3	One Hundredth street, west side, from Broadway to west side of Amsterdam avenue.	Consolidated Telegraph and Electrical Subway Company.	402	Oct. 18	Seventh avenue, west side, from north side of One Hundred and Thirtieth street to north side of One Hundred and Forty-fourth street.	Consolidated Telegraph and Electrical Subway Company.
332	Aug. 24	Ninety-sixth street, south side, from west side of Second avenue to west side of First avenue.	Consolidated Telegraph and Electrical Subway Company.	403	Dec. 1	Thirty-sixth street, south side, from east side of Eleventh avenue to east side of Twelfth avenue.	Consolidated Telegraph and Electrical Subway Company.
333	" 15	Broadway, west side, from south side of One Hundred and Eighty-third street to south side of One Hundred and Ninth street.	Consolidated Telegraph and Electrical Subway Company.	404	" 1	Eleventh avenue, east side, from south side of Thirty-fourth street to south side of Thirty-sixth street.	Consolidated Telegraph and Electrical Subway Company.
334	July 6	Broadway, west side, from south side of One Hundred and Eighth street to south side of One Hundred and Ninth street.	Consolidated Telegraph and Electrical Subway Company.	405	Sept. 1	West End avenue, west side, from north side of Ninety-first street to north side of Ninety-third street.	Consolidated Telegraph and Electrical Subway Company.
335	Aug. 20	Madison avenue, east side, from north side of Eighty-third street to south side of Ninety-third street.	Consolidated Telegraph and Electrical Subway Company.	406	" 1	Greenwich street, south side, from east side of West street to west side of Greenwich street.	Consolidated Telegraph and Electrical Subway Company.
336	" 29	Eighty-third street, north side, from east side of Madison avenue to No. 123 East Eighty-third street.	Consolidated Telegraph and Electrical Subway Company.	407	Nov. 13	Broadway, west side, from north side of Seventy-fourth street to south side of Seventy-fifth street.	Consolidated Telegraph and Electrical Subway Company.
337	July 31	One Hundred and Twenty-fourth street, north side, from west side of Broadway to west side of St. Nicholas avenue.	Consolidated Telegraph and Electrical Subway Company.	408	" 13	Broadway, east side, from north side of Ninety-ninth street to north side of One Hundredth street.	Consolidated Telegraph and Electrical Subway Company.
338	" 31	St. Nicholas avenue, west side, from north side of One Hundred and Twenty-fourth street to north side of One Hundred and Twenty-fifth street.	Consolidated Telegraph and Electrical Subway Company.	409	" 13	Ninety-first street, north side, from west side of West End avenue to east side of Riverside drive.	Consolidated Telegraph and Electrical Subway Company.
339	" 27	Broadway, west side, from north side of One Hundred and Thirtieth street to north side of One Hundred and Twenty-fourth street.	Consolidated Telegraph and Electrical Subway Company.	410	" 13	Ninety-first street, south side, from east side of Madison avenue to east side of Park avenue.	Consolidated Telegraph and Electrical Subway Company.
340	" 31	One Hundred and Forty-fifth street, south side, from east side of Amsterdam avenue to west side of Amsterdam avenue.	Consolidated Telegraph and Electrical Subway Company.	411	Dec. 15	Columbus avenue, west side, from north side of One Hundred and Twenty-fourth street to south side of Hancock place.	Consolidated Telegraph and Electrical Subway Company.
341	" 31	St. Nicholas avenue, west side, from south side of One Hundred and Forty-fifth street to south side of One Hundred and Fifty-third street.	Consolidated Telegraph and Electrical Subway Company.	412	" 18	Hancock place, south side, from south side of One Hundred and Twenty-fifth street to west side of Columbus avenue.	Consolidated Telegraph and Electrical Subway Company.
342	" 31	St. Nicholas avenue, east side, from south side of One Hundred and Forty-fifth street to south side of One Hundred and Fifty-third street.	Consolidated Telegraph and Electrical Subway Company.	413	" 22	Ninety-fourth street, north side, from east side of Columbus avenue to west side of Central Park, West.	Consolidated Telegraph and Electrical Subway Company.
343	Aug. 15	Central Park, West, west side, from south side of Seventy-ninth street to south side of Seventy-first street.	Consolidated Telegraph and Electrical Subway Company.	414	" 22	Eighty-first street, north side, from west side of West End avenue to west side of Broadway.	Consolidated Telegraph and Electrical Subway Company.
344	" 15	Amsterdam avenue, east side, from south side of Seventy-ninth street to north side of One Hundred and Fourth street.	Consolidated Telegraph and Electrical Subway Company.	415	Nov. 28	One Hundred and Twenty-fifth street, north side, from east side of Lexington avenue to west side of Third avenue.	Consolidated Telegraph and Electrical Subway Company.
345	July 27	Amsterdam avenue, east side, from south side of Seventy-ninth street to south side of Seventy-eighth street.	Consolidated Telegraph and Electrical Subway Company.	416	Dec. 15	One Hundred and Twenty-sixth street, north side, from east side of Lexington avenue to east side of Park avenue.	Consolidated Telegraph and Electrical Subway Company.
346	Aug. 15	Amsterdam avenue, east side, from north side of Seventy-second street to south side of Seventy-eighth street.	Consolidated Telegraph and Electrical Subway Company.	417	Sept. 1	Christopher street, south side, from east side of Greenwich street to west side of Hudson street.	Consolidated Telegraph and Electrical Subway Company.
347	July 20	One Hundred and Forty-ninth street, south side, from west side of Broadway to east side of St. Nicholas avenue.	Consolidated Telegraph and Electrical Subway Company.	418	Dec. 19	Ninety-fifth street, north side, from east side of Columbus avenue to west side of Central Park, West.	Consolidated Telegraph and Electrical Subway Company.
348	" 21	Hamilton place, west side, from north side of One Hundred and Forty-first street to south side of One Hundred and Forty-fourth street.	Consolidated Telegraph and Electrical Subway Company.	419	July 3	Central Park, West, west side, from north side of Ninety-fifth street to south side of Ninety-ninth street.	Consolidated Telegraph and Electrical Subway Company.
349	" 31	Broadway, west side, from north side of One Hundred and Forty-fifth street to south side of One Hundred and Forty-sixth street.	Consolidated Telegraph and Electrical Subway Company.	420	Dec. 15	Lemois avenue, west side, from north side of One Hundred and Twenty-fifth street to north side of One Hundred and Twenty-sixth street.	Consolidated Telegraph and Electrical Subway Company.
350	" 6	Ninety-fifth street, north side, from west side of Broadway to east side of Riverside drive.	Consolidated Telegraph and Electrical Subway Company.	421	" 29	One Hundred and Fifth street, north side, from east side of Third avenue to east side of Park avenue.	Consolidated Telegraph and Electrical Subway Company.
351	" 13	West End avenue, east side, from north side of Ninety-ninth street to south side of One Hundredth street.	Consolidated Telegraph and Electrical Subway Company.	422	" 31	One Hundred and Seventh street, south side, from east side of Broadway to west side of Amsterdam avenue.	Consolidated Telegraph and Electrical Subway Company.
352	Aug. 31	Central Park, West, west side, from north side of Ninety-seventh street to south side of Ninety-ninth street.	Consolidated Telegraph and Electrical Subway Company.	423	" 28	Seventy-ninth street, north side, from east side of Amsterdam avenue to east side of Broadway.	Consolidated Telegraph and Electrical Subway Company.
353	" 31	Lexington avenue, west side, from south side of Ninety-first street to south side of Ninety-second street.	Consolidated Telegraph and Electrical Subway Company.	424	Apr. 3	Seventh avenue, east side, from north side of Greenwich avenue to north side of Fourteenth street.	Empire City Subway Company (Limited).
354	July 3	Ninety-ninth street, north side, from west side of Broadway to east side of West End avenue.	Consolidated Telegraph and Electrical Subway Company.	425	" 6	Gold street, east side, from north side of John street to south side of Fulton street.	Empire City Subway Company (Limited).
355	" 31	Tenth avenue, west side, from south side of Fourteenth street to south side of Thirty-fourth street.	Consolidated Telegraph and Electrical Subway Company.	426	" 10	John street, north side, from east side of Pearl street to west side of William street.	Empire City Subway Company (Limited).
356	" 31	Twelfth avenue, east side, from south side of Fourteenth street to south side of Thirty-fourth street.	Consolidated Telegraph and Electrical Subway Company.	427	" 11	Pearl street, south side, from east side of Park row to east side of William street.	Empire City Subway Company (Limited).
357	" 6	One Hundred and Sixteenth street, north side, from west side of Seventh avenue to west side of Third avenue.	Consolidated Telegraph and Electrical Subway Company.	428	" 11	William street, from south side of Pearl street to south side of Duane street.	Empire City Subway Company (Limited).
358	" 27	One Hundred and Fifteenth street, south side, from east side of Lexington avenue to west side of Third avenue.	Consolidated Telegraph and Electrical Subway Company.	429	" 14	Ninth avenue, east side, from north side of Fifty-sixth street to south side of Fifty-eighth street.	Empire City Subway Company (Limited).
359	Sept. 28	Twenty-seventh street, north side, from No. 40 West Twenty-seventh street to west side of Broadway.	Consolidated Telegraph and Electrical Subway Company.	430	Mar. 26	Madison avenue, east side, from south side of Seventy-ninth street to north side of Eighty-second street.	Empire City Subway Company (Limited).
360	July 31	Thirteenth street, north side, from west side of Greenwich avenue to west side of Seventh avenue.	Consolidated Telegraph and Electrical Subway Company.	431	May 14	Slack street, west side, from south side of Eighteenth street to south side of Twenty-third street.	Empire City Subway Company (Limited).
361	Aug. 15	Sixty-fourth street, south side, crossing Columbus avenue.	Consolidated Telegraph and Electrical Subway Company.	432	Apr. 28	Amsterdam avenue, west side, from south side of Ninety-ninth street to south side of Eighty-ninth street.	Empire City Subway Company (Limited).
362	" 28	One Hundred and Sixteenth street, south side, from west side of Seventh avenue to west side of Eighth avenue.	Consolidated Telegraph and Electrical Subway Company.	433	Mar. 30	Amsterdam avenue, west side, from south side of Ninety-ninth street to south side of Eighty-ninth street.	Empire City Subway Company (Limited).
363	Sept. 7	Eighty-fifth street, north side, from east side of Fifth avenue to west side of Third avenue.	Consolidated Telegraph and Electrical Subway Company.	434	Apr. 14	Seventy-ninth street, north side, from East side of Lexington avenue to west side of Park avenue.	Empire City Subway Company (Limited).
364	" 7	Eighty-sixth street, north side, from east side of Amsterdam avenue to west side of Central Park, West.	Consolidated Telegraph and Electrical Subway Company.	435	" 20	Elm street, west side, from north side of Frank street to north side of Walker street.	Empire City Subway Company (Limited).
365	Aug. 21	One Hundred and Thirty-sixth street, south side, from west side of Seventh avenue to east side of Eighth avenue.	Consolidated Telegraph and Electrical Subway Company.	436	May 16	Hudson street, west side, from south side of Horatio street to south side of Gansevoort street.	Empire City Subway Company (Limited).
366	" 31	One Hundred and Twenty-fourth street, south side, from west side of Seventh avenue to west side of Eighth avenue.	Consolidated Telegraph and Electrical Subway Company.	437	" 15	Prince street, south side, from West side of Wooster street to east side of West Broadway.	Empire City Subway Company (Limited).
367	" 31	Seventh avenue, west side, from north side of One Hundred and Twenty-first street to north side of One Hundred and Twenty-second street.	Consolidated Telegraph and Electrical Subway Company.	438	" 19	State street, east side, from south side of Bridge street to north side of Pearl street.	Empire City Subway Company (Limited).
368	" 31	One Hundred and Twenty-first street, south side, from west side of Third avenue to east side of Madison avenue.	Consolidated Telegraph and Electrical Subway Company.	439	" 19	Greenwich street, west side, from north side of Chambers street to south side of Rensselaer street.	Empire City Subway Company (Limited).
369	Oct. 14	Fourth street, south side, from west side of Broadway to No. 123 West Fourth street.	Consolidated Telegraph and Electrical Subway Company.	440	" 23	Avenue C, east side, from south side of Tenth street to north side of Twelfth street.	Empire City Subway Company (Limited).
370	July 31	One Hundred and Twenty-ninth street, north side, from west side of Fifth avenue to east side of Eighth avenue.	Consolidated Telegraph and Electrical Subway Company.	441	" 23	Sixth avenue, east side, from south side of Nineteenth street to south side of Twenty-third street.	Empire City Subway Company (Limited).
371	Sept. 28	Amsterdam avenue, across at north side of Seventy-ninth street.	Consolidated Telegraph and Electrical Subway Company.	442	" 28	Seventh avenue, west side, from north side of Thirty-third street to south side of Thirty-fourth street.	Empire City Subway Company (Limited).
372	July 27	Sixty-third street, south side, from west side of Second avenue to west side of Third avenue.	Consolidated Telegraph and Electrical Subway Company.	443	" 28	Washington street, west side, from north side of Bakery place to north side of Morris street.	Empire City Subway Company (Limited).
373	" 3	Eighteenth street, north side, from west side of Broadway to east side of Broadway.	Consolidated Telegraph and Electrical Subway Company.	444	" 30	Tenth avenue, west side, from south side of Eighteenth street to north side of Twenty-third street.	Empire City Subway Company (Limited).
374	" 3	Broadway, west side, from north side of Eighty-third street to south side of Eighty-first street.	Consolidated Telegraph and Electrical Subway Company.	445	June 3	Greenwich street, west side, from south side of West Twelfth street to north side of Jane street.	Empire City Subway Company (Limited).
375	Oct. 16	Seventy-second street, crossing Columbus avenue.	Consolidated Telegraph and Electrical Subway Company.	446	" 9	Washington street, north side, from south side of Vestry street to south side of Duane street.	Empire City Subway Company (Limited).
376	" 25	Thirty-eighth street, south side, from east side of Tenth avenue to east side of Eleventh avenue.	Consolidated Telegraph and Electrical Subway Company.	447	" 13	Twenty-seventh street, north side, from east side of Fourth avenue to west side of Madison avenue.	Empire City Subway Company (Limited).
377	Aug. 13	Seventy-first street, south side, from east side of Columbus avenue to west side of Central Park, West.	Consolidated Telegraph and Electrical Subway Company.	448	Mar. 26	First avenue, east side, from north side of Thirty-second street to south side of Thirty-fifth street.	Empire City Subway Company (Limited).
378	" 31	Madison avenue, east side, from south side of One Hundred and Sixteenth street to north side of One Hundred and Twenty-fifth street.	Consolidated Telegraph and Electrical Subway Company.	449	" 26	West End avenue, west side, from south side of One Hundred and Twelfth street to south side of One Hundred and Seventh street.	Empire City Subway Company (Limited).
379	" 31	Ninety-third street, south side, from east side of Amsterdam avenue to west side of Broadway.	Consolidated Telegraph and Electrical Subway Company.	450	May 8	First avenue, east side, from south side of Thirty-fifth street to north side of Thirty-eighth street.	Empire City Subway Company (Limited).
380	Oct. 18	Broadway, west side, from south side of Ninety-third street to north side of Ninety-fifth street.	Consolidated Telegraph and Electrical Subway Company.	451	Mar. 26	Manhattan avenue, east side, from north side of One Hundred and Fifteenth street to north side of One Hundred and Twenty-fourth street.	Empire City Subway Company (Limited).
381	" 28	West End avenue, west side, from north to south side of Seventy-second street.	Consolidated Telegraph and Electrical Subway Company.	452	July 12	Forty-ninth street, north side, from east side of Seventh avenue to east side of Broadway.	Empire City Subway Company (Limited).
382	Sept. 1	West End avenue, north side, from north side of Seventy-second street to south side of Eighty-eighth street.	Consolidated Telegraph and Electrical Subway Company.	453	June 24	Fifth avenue, west side, from south side of One Hundred and Twenty-fifth street to south side of One Hundred and Twenty-sixth street.	Empire City Subway Company (Limited).
383	Aug. 14	Eighty-fourth street, north side, between east side of Amsterdam avenue and No. 123 West Eighty-fourth street.	Consolidated Telegraph and Electrical Subway Company.	454	Mar. 26	Seventh avenue, east side, from north side of Fifty-first street to north side of Fifty-third street.	Empire City Subway Company (Limited).
384	July 31	Amsterdam avenue, east side, from north side of One Hundred and Forty-first street to south side of One Hundred and Fifty-third street.	Consolidated Telegraph and Electrical Subway Company.	455	July 24	Sixth street, south side, from east side of Lexington avenue to west side of Park avenue.	Empire City Subway Company (Limited).
				456	Mar. 26	Third avenue, west side, from south side of One Hundred and Sixty-fourth street to south side of One Hundred and Seventy-seventh street.	Empire City Subway Company (Limited).
				457	Aug. 4	West street, east side, from south side of West Twelfth street to north side of Gansevoort street.	Empire City Subway Company (Limited).
				458	" 5	Gansevoort street, from Lawton avenue to West street.	Empire City Subway Company (Limited).



No. of Permit.	DATE OF PERMIT.	LOCATION.	COMPANY.
35	Aug. 1	Lawton avenue, west side, from Gloucester to Blenheim street.	Empire City Subway Company (Limited).
37	July 20	Park avenue, east side, from south side of Thirty-seventh street to north side of Forty-first street.	Empire City Subway Company (Limited).
38	" 22	Rever street, north side, from west side of Washington street to east side of Twenty-third street.	Empire City Subway Company (Limited).
39	Aug. 1	Oliver street, north side of Lawton avenue to West Tenth street.	Empire City Subway Company (Limited).
40	" 1	Little West Twelfth street, north side, from west side of Tenth street to west side of Washington street.	Empire City Subway Company (Limited).
41	" 5	Tenth avenue, west side, from Blenheim to Thirteenth street, and east side of Twelfth to Thirteenth street.	Empire City Subway Company (Limited).
42	" 5	Washington street, from Little West Twelfth to Fourteenth street, east and west side.	Empire City Subway Company (Limited).
43	" 5	Fourth street, south side, from Washington to Hudson street.	Empire City Subway Company (Limited).
44	" 5	Hudson street, west side, from south side of Gansevoort street to intersection of Ninth avenue and Fourteenth street, and east side of Hudson street, between Thirteenth and Fourteenth street.	Empire City Subway Company (Limited).
45	Mar. 16	One Hundred and Seventy-seventh street (Front avenue), south side, from west side of Third street to east side of Webster avenue.	Empire City Subway Company (Limited).
46	Aug. 29	Greenwich street, west side, from north side of Morris street to north side of Regent street.	Empire City Subway Company (Limited).
47	" 29	First street, west side, from south side of Grand street to No. 10 Elm street.	Empire City Subway Company (Limited).
48	Sept. 14	Bowling street, north side, from west side of Madison street to west side of Elm street.	Empire City Subway Company (Limited).
49	" 14	Martin street, north side, from east side of Washington street to west side of Hudson street.	Empire City Subway Company (Limited).
50	" 14	Canal street, north side, from east side of Greenwich street to east side of Washington street.	Empire City Subway Company (Limited).
51	Oct. 13	Bowling street, east side, from north side of Forty-second street to south side of Forty-fifth street.	Empire City Subway Company (Limited).
52	Nov. 22	Park avenue, west side, from north side of Seventy-seventh street to south side of Seventy-ninth street.	Empire City Subway Company (Limited).
53	" 22	Canal street, north side, from east side of Broadway to west side of Duane avenue.	Empire City Subway Company (Limited).
54	" 17	Chatham street, south side, from west side of Washington street to east side of Greenwich street.	Empire City Subway Company (Limited).

## Permits Issued to the New York Steam Company.

No. of Permit.	DATE OF PERMIT.	LOCATION.	PURPOSE.
55	Oct. 1	Liberty street, from intersection of Greenwich street to Washington street, and Washington street, from Liberty street north to No. 120 Washington street.	Laying steam main.
56	" 18	Cedar street, 2 feet south of north corner, from No. 48 Cedar street to No. 87 Cedar street.	"

## Permits Issued to the Fire Department.

No. of Permit.	DATE OF PERMIT.	LOCATION.	PURPOSE.
57	Mar. 2	Duane street, south side, from Bowery to Eagle street.	Laying fire-alarm railway.
58	Jan. 23	Cadogan street, north side, from west side of First street to school across on west side of Pearl street.	"

## Permits Issued to the Metropolitan Street Railway Company.

No. of Permit.	DATE OF PERMIT.	LOCATION.	PURPOSE.
59	Feb. 1	Eleventh avenue, from Twenty-third to Twenty-fourth street.	Constructing electric trolley, underground current; general permit.
60	" 21	Eleventh avenue, from Twenty-third to Twenty-fourth street.	Sectional permit.
61	Mar. 4	Thirtieth avenue, from Twenty-third to Twenty-fourth street.	Relubricating curves and switches.
62	" 4	Amsterdam avenue and One Hundred and Twenty-fifth street.	Laying curves and switches.
63	" 16	Greenwich street, near Battery place.	Laying cross-over.
64	" 24	West Broadway, northward and northeast corner Barclay street.	Cutting off corners of sidewalk.
65	" 28	Eleventh avenue, between Twenty-third and Twenty-fourth street.	Constructing an iron track.
66	" 29	Sixth avenue, west side, between Thirty-fourth and Thirty-fifth street.	To lay down rails of first from curb.
67	Apr. 18	One Hundred and Sixty-ninth street, from Madison to First street.	Laying additional feeder ducts.
68	May 1	Eleventh avenue, between Twenty-third and Twenty-fourth street.	Laying temporary side tracks.
69	" 11	Lawson avenue, from a point about midway between One Hundred and Twenty-ninth and One Hundred and Thirtieth street to One Hundred and Thirty-first street.	Extending west track and laying a viaduct.
70	" 14	One Hundred and Sixty-ninth street and Lewis avenue.	Making repairs.
71	" 18	One Hundred and Thirty-fifth street between Madison and Eighth avenue.	Laying 2 1/2 feeder ducts.
72	June 9	First avenue, at foot of One Hundred and Forty-fifth street, from Lewis avenue to a point half-way between Lewis and Seventh avenue.	Installing additional feeder ducts.
73	" 10	Fulton street, between Broadway and Church street.	Realigning and reconstructing ground track.
74	" 16	First avenue, between Fifty-ninth street and Harlem river.	Laying ducts for electric feeders.
75	" 16	Eighty-ninth street, between Second avenue and Avenue A.	Laying ducts for electric feeders.
76	May 20	Bowling street, between Warren and Twenty-ninth street.	Laying feeder ducts.
77	July 20	Ninth avenue, between Eighteenth and Twenty-third street.	Laying temporary side tracks.
78	Aug. 2	Ninety-fifth street, east of First avenue.	Repairing to-lack water main.
79	" 11	Fourth avenue, intersection of Fourteenth street.	Laying double connecting tracks.
80	Sept. 11	Seventh avenue, from Forty-second to Forty-fifth street.	Changing motive power.
81	" 21	First avenue, between Thirty-fourth and Fifty-ninth street; also Tenth avenue, between Thirty-fourth and Fifty-ninth street.	Changing motive power.
82	" 25	First avenue, between Thirty-fourth and Forty-second street.	Sectional permit.
83	" 28	Washington street, intersection of Chambers street.	Laying temporary connecting track.
84	" 28	Washington street, intersection of Duane street.	Laying temporary track.
85	" 30	Greenwich street, intersection of Duane street.	Laying temporary track.
86	" 30	Seventh avenue, from Forty-second to Forty-fifth street.	Sectional permit.
87	Oct. 2	Tenth avenue, from Forty-second to Fifty-ninth street.	Sectional permit.
88	" 2	Columbus avenue, between Fifty-fourth and Eighty-fifth street.	Changing motive power.
89	" 27	Front street, between Whitehall and Broad streets.	Laying feeder ducts.
90	" 27	Bowling place and Bowling Green, between Whitehall and Greenwich street.	Laying feeder ducts.
91	Nov. 1	Eighty-fifth street, 65 and 120 feet west of Madison street.	Constructing a crossover as per plan filed in this office.
92	" 20	Fifty-ninth street, between First and Second avenue.	Installing additional electric ducts as per plan filed in this office.
93	" 21	Duane street, between West Broadway and Centre street.	Laying electric feeder ducts as per plan on file in this office.

No. of Permit.	DATE OF PERMIT.	LOCATION.	PURPOSE.
75	Dec. 11	Park avenue and Centre street, between Chambers and Ann street.	Sectional permit.
76	" 11	Eleventh avenue, 20 feet south of Twenty-third street to 15 feet south of Twenty-third street.	Constructing crossover, as per plan filed in this office.
77	" 11	First avenue, intersection of Eighty-ninth street.	Constructing connecting curve.
80	" 24	One Hundred and Thirty-fifth street, from Madison to Eighth avenue.	Changing motive power from over-electric to under-electric.
81	" 26	Forty-second street, from Park to Lexington avenue.	Changing motive power from horses to under-electric system.
82	Spec. Jan. 2	" " " "	Sectional permit.

## Permits Issued to the Third Avenue Railroad Company.

No. of Permit.	DATE OF PERMIT.	LOCATION.	PURPOSE.
94	1899, Mar. 2	Bowery, west side, from Sixth to Grand street.	Sectional permit.
95	" 2	Bowery, east side, from Sixth to Fourth street, and west side, from Fourth and Fifth to Houston street, also east side, from Houston to Grand street.	"
96	" 14	One Hundred and Twenty-fifth street, from Sixth avenue to the Harlem river, north and south side.	"
97	" 28	One Hundred and Twenty-fifth street, from Lewis avenue to Manhattan street; Manhattan street, from One Hundred and Twenty-fifth to One Hundred and Thirtieth street, north and south side.	"
98	Apr. 12	Bowery and Park Row, from Grand street to Brooklyn Bridge.	"
99	Mar. 13	One Hundred and Twenty-fifth and Manhattan street, from North to Harlem river.	Laying temporary side track.
100	Apr. 24	Park Row, from Brooklyn Bridge to Ann street.	Sectional permit.
101	June 20	Amsterdam avenue, from Manhattan to One Hundred and Ninety-fourth street.	"
102	" 28	Amsterdam avenue, from Manhattan to One Hundred and Ninety-fourth street.	Laying temporary side track.
103	July 2	Third avenue, from One Hundred and Twenty-fifth street to Harlem river.	Sectional permit.

## Permit Issued to the Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company.

No. of Permit.	DATE OF PERMIT.	LOCATION.	PURPOSE.
104	1899, April 17	Broadway, from Grand Circle to Sixty-fifth street, and from Seventy-first to Eighty-sixth street.	Sectional permit.
105	" 21	Broadway, east and west side, from Grand Circle to Sixty-fifth street.	Laying temporary side-tracks.
106	May 2	Broadway, east and west side, from Eighty-sixth to One Hundred and Twenty-fifth street.	Sectional permit.
107	June 10	Forty-second street, from the Hudson river to the East river.	"
108	" 26	Amsterdam avenue, from Broadway, near Seventy-first street, to Fifty-ninth street.	"
109	" 26	Amsterdam avenue, from Broadway, near Seventy-first street, to Fifty-ninth street.	Laying temporary side-tracks.
110	July 21	Forty-second street, from the Hudson river to the East river.	"
111	" 29	Broadway, from Sixty-fifth to Seventy-second street.	Sectional permit.
112	" 29	Broadway, from Sixty-fifth to Seventy-second street.	Laying temporary side-tracks.
113	" 27	First avenue, between Thirty-fourth and Forty-second street.	"
114	" 27	First avenue, between Thirty-fourth and Forty-second street.	Sectional permit.
115	" 27	Seventh avenue, between Forty-second and Forty-fifth street.	"
116	" 27	Seventh avenue, between Forty-second and Forty-fifth street.	Laying temporary side-tracks.
117	Dec. 8	Eighty-ninth street, between Amsterdam avenue and Riverside Drive.	Sectional permit.

## Permits Issued to the Brooklyn Heights Railroad Company.

No. of Permit.	DATE OF PERMIT.	LOCATION.	PURPOSE.
<b>Borough of Brooklyn.</b>			
118	1899, June 2	Fulton street, intersection of Jamaica street.	Laying double-track curves and crossings.
119	" 2	Avenue C, at intersection with Brooklyn and Brighton Beach Railroad.	Laying double-connecting curves and crossings.
120	" 19	Bergen street, at intersection of Brooklyn and Brighton Beach Railroad.	Rebuilding crossing and laying single connecting curves and crossings.
121	" 26	Church avenue, intersection of Coney road.	Laying double connecting track.
122	" 26	Flint avenue, intersection of Bergen avenue.	"
123	" 26	Church street, intersection of Gravesend avenue.	Laying double connecting curves.
124	" 26	Rogers avenue, intersection of Malbone street.	Laying a double connecting curve.
125	Aug. 17	Sart avenue, between West Eighth street and 200 feet north.	Constructing connecting tracks, between the Sea View Elevated road and Nassau road.
126	" 27	West end, between Hart avenue and New York and Coney Island Railroad.	Laying a "Y" track.
127	" 27	West Thirty-fifth street, between Sart avenue and New York and Coney Island Railroad.	Constructing double connecting tracks.
128	Nov. 3	Utica avenue, from Carroll street to Avenue N.	Constructing a double-track street railway operated by over-electric system.
129	Dec. 11	Broadway, just east of Long Island Railroad at East New York.	Erecting elevated railroad columns.
<b>Borough of Queens.</b>			
130	Sept. 13	Fresh Pond road, from Lisker Cemetery Railroad to Jamaica avenue.	Constructing double-track electric street railway.

## Miscellaneous Permits.

No. of Permit.	DATE OF PERMIT.	LOCATION.	TO WHOM ISSUED.
<b>Borough of Manhattan.</b>			
131	1899, Mar. 9	Park avenue and One Hundred and Fourth street.	New York Central and Hudson River Railroad Company.
132	May 15	Thirtieth avenue, between Twenty-third and Twenty-fifth street.	American Air Power Company.
133	June 12	Eleventh avenue, from Twenty-ninth to Twenty-ninth street.	New York Central and Hudson River Railroad Company.
134	" 14	One Hundred and Seventy-ninth street, No. 110, West, and across the street.	Liquid Carbonic Acid Manufacturing Company.
135	" 26	Shard street, from No. 27 to 30.	E. H. & Co.
136	" 26	Third avenue, at One Hundred and Seventy-seventh street, opposite 405 Third avenue.	Manhattan Railway Company.
137	Aug. 27	From southern end of existing tracks in Sharp street to the building No. 27 to 33 Sharp street.	E. H. & Co.
138	Sept. 2	Elm street, from Leonard street to 100 feet south from southeast corner of Elm and Leonard street to south-east corner.	New York Life Insurance Company.



DATE OF PERMIT.	LOCATION.	To Whom Issued.
Sept. 18	Southwest corner of Columbus avenue and Sixty-fifth street.	Manhattan Railway Company.
Oct. 12	Southwest corner of Columbus avenue and One Hundred and Fourth street.	"
Oct. 2	Washington street, between Fulton and Cortlandt streets.	Dry Dock, East Broadway and Battery Railroad Company.
Oct. 18	West street, intersection of Cortlandt street.	Dry Dock, East Broadway and Battery Railroad Company.
Oct. 28	Washington street, intersection of Chambers street.	Dry Dock, East Broadway and Battery Railroad Company.
Nov. 13	West street, just south of Gansevoort street, and Gansevoort street, from West street about 300 feet to No. 39 West Washington Market.	Adams & Co.
Nov. 29	North Moore street, between Washington and West streets.	Dry Dock, East Broadway and Battery Railroad Company.
Dec. 12	Tenth avenue, 100 feet north and south of the intersection of Twenty-sixth street.	New York Central and Hudson River Railroad Company.
<i>Borough of The Bronx.</i>		
May 10	Webster avenue, from Two Hundred and First street to One hundred and One avenue, from Webster avenue to White Plains road, except over Bronx Bridge.	Union Railway Company, general permit.
Oct. 5	Ackerly street, intersection of railroad in Kingsbridge.	New York Central and Hudson River Railroad Company.
Dec. 1	Westchester avenue, from Southern Boulevard to Unionport road, except across Bronx River Bridge.	Union Railway Company.
<i>Borough of Brooklyn.</i>		
Mar. 30	Court street, northeast and southeast corner of Atlantic avenue.	Brooklyn Heights Railroad Company.
Oct. 30	Douglas street, southeast corner of Nassau avenue.	"
Oct. 30	Vanderbilt avenue, northeast corner of Fulton street.	"
Oct. 30	Kingston avenue, southeast corner of Bergen street.	"
Apr. 6	Kingston avenue, northwest corner of Douglas street.	"
Oct. 6	Nassau avenue, east side, between President and Carroll streets.	"
Oct. 11	Rockaway avenue, northeast corner of Fulton street.	"
Oct. 11	Flatbush avenue, northwest corner of Avenue F.	"
Oct. 11	Third avenue, southwest corner of Atlantic avenue.	"
Oct. 11	New Utrecht avenue, intersection of Sun Beach road.	"
Oct. 11	Vanderbilt avenue, northwest corner of Greene avenue.	"
Oct. 11	Fulton avenue, southeast corner of Van Avenue.	"
Oct. 11	Vernon avenue, northwest corner of Clevelend.	"
Oct. 11	Flatbush avenue, intersection of Atlantic avenue.	"
Oct. 11	Court square, intersection of Fulton street.	"
May 2	Ninth avenue and Twentieth street.	"
Oct. 11	Flatbush avenue and Malbone street.	"
Nov. 15	West Fifth street and Sheepshead Bay road at Van Siclen.	Coney Island and Brooklyn Railroad Company.
<i>Borough of Queens.</i>		
June 2	Upon the Long Island Railroad right-of-way, between Far Rockaway and Rockaway Park.	New York and Rockaway Beach Railroad Company.
May 27	Mont avenue, from Sheepshead Boulevard to St. James street and St. James street, from Mont to Corona avenue; Corona avenue, from St. James street to the Turnpike, then on Turnpike, with single track only, from Corona avenue to south street; South street, from Turnpike to east side and thereof; also, South street, from Turnpike to Central avenue; Central avenue, with single track only, from South street to 100 feet north of Mont avenue; also, Clark street, from Central avenue to the Turnpike, and Lockwood street, from Central avenue to the Turnpike.	Queens Electric Railway Company—Far Rockaway.
June 22	In Flushing, from the present tracks in Sanford avenue at Bowne avenue; Bowne avenue, from Sanford to Forest avenue; Forest avenue, from Bowne to Parsons avenue; Parsons avenue, from Forest to Francis avenue; Francis avenue (which is private property), from Parsons avenue to Twenty-second street; Twenty-second street, from Francis avenue (private property) to Queens avenue; Queens avenue, from Twenty-second street to Fresh Meadow road; Fresh Meadow road, from Queens avenue to the boundary line of the former Village of Flushing.	New York and North Shore Railway Company.
Aug. 1	In Rockaway Village, beginning at the intersection of Central avenue and Mont avenue, along Clark avenue to Turnpike; also the Turnpike, to high water on Rockaway Bay; also intersection of Clark avenue and Central avenue; along Central avenue to Lockwood avenue, and along Lockwood avenue to the Turnpike.	Queens Electric Railway—Far Rockaway.
Nov. 9	At Jamaica, connecting with the present tracks at Washington and Fulton streets; North Washington street, from Fulton to Grove street; Grove street, from North Washington street to about midway between Flushing avenue and Bay street; northerly on private property parallel to Bay street, across Shelton, Willet and Hillside avenues, and on private property northerly about 600 feet; then northerly on private property across Flushing avenue.	New York and North Shore Railway Company.
<i>Borough of Richmond.</i>		
May 5	Broadway, Tottenville, across between Fisher and Church streets.	Atlantic Terra Cotta Company.
Oct. 22	New York avenue, near Fingerboard road, Fort Wadsworth.	Staten Island Electric Railroad Company.
Oct. 26	Richmond road at Concord.	Staten Island Midland Railroad Company.
Oct. 26	Jewett avenue, in front of old car barn at Walnut street, near Maple avenue, Prohibition Park.	Staten Island Midland Railroad Company.
Nov. 6	Richmond terrace, in front of its car barn at a point 1,400 feet west of South avenue, near Holland avenue, Howland Hook.	Staten Island Electric Railroad Company.
Nov. 9	Richmond turnpike, between Jewett avenue and Elm place, Carlisle Corner.	Staten Island Midland Railroad Company.
Nov. 9	Jewett avenue, just south of Belmont street, near Richmond terrace, Fort Richmond.	Staten Island Midland Railroad Company.

DOCUMENT "F."

DEPARTMENT OF HIGHWAYS—BUREAU OF STREETS AND ROADS,  
BOROUGH OF MANHATTAN, No. 21 PARK ROW,  
NEW YORK, January 15, 1900.

Hon. JAMES P. KEATING, Commissioner of Highways:

DEAR SIR—I respectfully submit the following statement of the financial condition of the Bureau, accompanied with an accounting of the work done and the materials used during the year ending December 31, 1899:

The operations of this Bureau consist of the maintenance of 21.60 miles of gravel and macadamized roads and 33.26 miles of dirt roads in the Borough of Manhattan. This includes the regulating and grading of roadways, repairing the gutters where necessary to insure proper drainage; also resetting curb and flagging.

An examination of these reports will show that a great amount of work of this Bureau cannot well be tabulated, yet calls for a considerable expenditure on the part of the City, such as the sprinkling, scraping and rolling of the macadam and gravel roadways. This work, particularly on Lenox, Seventh and St. Nicholas avenues, is very important, as only a constant and careful attention to these details will keep these roadways in good condition in consequence of the large amount of heavy trucking due to the building operations along these avenues.

I would also call your attention to the large number of washouts on both paved and unpaved streets, particularly the Boulevard Lafayette, on which street alone 227 trackloads of stone and

earth have been used during the past quarter in making necessary repairs. All of this material has been obtained without cost to the City; also, numbers of crosswalks of a temporary nature have been constructed across unpaved roadways at the most important crossings, of steamed ashes, making a very economical and efficient crossing.

During the past year the change of motive power on the Western Boulevard spoiled the appearance of a number of the parkway plots, necessitating a great amount of labor and skill to restore them to their former condition. This work is now well under way and will be finished during the spring.

Respectfully,

JOHN SIMPSON, Superintendent Streets and Roads.

The following is a statement of the work performed and materials used on boulevards, roads and avenues, maintenance of; and roads, streets and avenues, maintenance of and sprinkling, during the year 1899:

Macadam roadway regulated and graded, square yards	7,915
Macadam roadway repaired, square yards	94,900
Gravel roadway repaired, square yards	2,601
Dirt roadway regulated and graded, square yards	79,110
Sidewalks regulated and graded, square yards	2,100
Gutters regulated and graded, square yards	4,510
Roadway cleaned, miles	4,709
Gutters cleaned, miles	5,562
Crosswalks cleaned, miles	3,925
Gutters cleaned of snow and ice, miles	191
Crosswalks cleaned of snow and ice, miles	728
Sidewalks cleaned of snow and ice, miles	43
Boulevard parkway paths cleaned, miles	14
Scraping roadway, hours	782
Sprinkling roadway, hours	31,118
Rolling, hours	1,175
Plowing snow and ice from gutters and sidewalks, hours	237
Stone hauled and used, loads	3,253
Broken stone hauled and used, loads	4,049
Stone screenings hauled and used, loads	1,992
Gravel hauled and used, loads	2,910
Gravel screenings hauled and used, loads	2,543
Earth hauled and used, loads	5,902
Asks hauled and used, loads	389
Refuse removed, loads	12,810
Snow and ice removed, loads	3,027
Washouts filled, loads	1,500
Basins cleaned, loads	61
Hydrants cleaned of snow, loads	40
Trees pruned, loads	222
Crosswalks made of ashes, square yards	613
Roadway covered with gravel screenings, square yards	35,360
Crosswalks relaid, linear feet	180
Curb reset, linear feet	1,347
Drain laid, linear feet	26
Drain cleaned, linear feet	62
Gutters built, linear feet	850
Boulevard parkway paths resurfaced and repaired, square yards	41,443
Sand hauled and used, loads	28
Paving stones hauled and used, loads	1
Flagging relaid, square feet	4,925
Sod laid, square feet	20,000
Shrubs and plants placed in Boulevard parkway plots, square feet	3,100

The following is a Summary of the work performed at the Bureau Repair Shop:

Monitors repaired	45	Hose put on crooks	41
Monitors painted	44	Connection irons made	11
Monitors lashed	17	Kings made	12
Monitors packed	30	Springs made	10
Monitor made	1	Hammers made	6
Road-roller made	1	Rammers repaired	2
Road-rollers repaired	4	Rammer handles made	29
Road rollers painted	10	Gross cutters made	3
Road scrapers made	2	Chisels made	0
Road scrapers repaired	6	Chisels sharpened	13
Road scraper painted	1	Shovels made	15
Hand carts made	2	Swivel bars made	4
Hand carts repaired	5	Journal boxes for rollers made	2
Hand cart painted	1	Bands put on monitors	5
Snow plows made	2	Front levers for monitors made	10
Snow plows repaired	11	King pin made	1
Snow plows painted	10	Wheels made	2
Signs made	178	Screw bands made	12
Signs painted	185	Sets brass couplings put on hose	10
Tires made	5	Sets brass couplings repaired	16
Tires set	12	Sets water valves made	3
Pole chains made	10	Spring blocks for monitors made	4
Staples made	6	Inside connections for monitors made	1
Bells made	20	Monitor bridges made	1
Levers made	3	Axle wrenches made	2
Braces made	4	Stone hammers sharpened	2
Bridge irons made	6	Hangers made	4
Clips made	48	Axles set	2
Hydrant wrenches made	8	Sets whiffletrees made	14
Blow-off wrenches made	65	Sets whiffletrees repaired	11
Hand roller made	1	Set whiffletrees painted	1
Road-roller axles made	3	Bands put on hubs	8
Bars sharpened	10	Rock wedges made	6
Hose crank collars made	25	Rock wedges sharpened	9
Rubber washers cut out	320	Hooks for scrapers made	204
Roller pins made	8	Sledgehammer handles made	10
Monitor poles made	9	Picks sharpened	20
Pole plates made	8	Saws sharpened	5

THE FOLLOWING IS A STATEMENT OF THE VARIOUS APPROPRIATIONS UNDER CHARGE OF THE BUREAU OF STREETS AND ROADS.

Amount appropriated for the year 1899	\$139,150 00
By transfer from "Salaries, Administration, Repairing Streets and Avenues"	19,000 00
Total appropriation	\$158,150 00
Amount expended first quarter	\$36,773 20
" second quarter	42,927 72
" third quarter	50,176 30
" fourth quarter, estimated	38,072 78
	157,950 00

Estimated balance January 1, 1900

\$200 00

Money Received during the Year, all of which were Deposited with the City Chamberlain.

Amount received the first quarter	\$204 50
" second quarter	21 00
" third quarter	119 00
" fourth quarter	50 00

Total received for the year 1899

\$394 50

Amount appropriated for the year 1899—"Roads, Streets and Avenues, Improvement and Maintenance of, and Sprinkling"

Amount expended first quarter	\$5,422 87
" second quarter	8,963 75
" third quarter	8,553 50
" fourth quarter, estimated	16,956 74
	39,896 86

Estimated Balance January 1, 1900

\$103 14



Amount appropriated for the year 1899—"Boulevards, Roads and Avenues, Maintenance of—Salaries," 1899.....	\$6,250 00
Amount expended first quarter.....	\$1,312 47
"    second quarter.....	1,312 47
"    third quarter.....	1,481 18
"    fourth quarter.....	1,551 47
	<u>\$5,658 59</u>
Balance January 1, 1900.....	\$591 41

## DOCUMENT "G."

DEPARTMENT OF HIGHWAYS—BUREAU OF INCUMBRANCES,  
No. 21 PARK ROW,  
NEW YORK, January 6, 1900.

Hon. JAMES P. KEATING, Commissioner of Highways:

DEAR SIR—I submit herewith the following report of the operations of this Bureau for the year 1899:

Total number of	
Complaints of obstructions received was.....	3,814
Removals of obstructions to Corporation yards.....	652
Removals of dirt, stone and rubbish, loads.....	2,383
Removals of dead and dangerous trees, posts, etc.....	848
Number of building material permits issued.....	5,017
Number of permits issued to cross sidewalks.....	891
Number of permits issued to erect temporary sheds.....	469
Number of permits issued to cut and trim trees.....	10
Number of notices served to repair defective vault covers.....	106

Salary Account Appropriation.....	\$14,500 00
Expended up to December 31, 1899.....	14,337 86

Balance.....	\$162 14
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Appropriation for "Removing Obstructions and Incumbrances from Streets and Avenues".....	\$15,000 00
Expended up to December 31, 1899.....	14,919 45

Balance.....	\$80 55
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## Money Received.

From owners of seized articles.....	\$619 50
From auction sale of unclaimed articles—	
May 29, 1899.....	\$430 78
November 13, 1899.....	173 47
	<u>604 25</u>
For permits for temporary sheds.....	2,345 00
	<u>\$3,568 75</u>

All of which was duly paid over to City Chamberlain.

Respectfully,

F. J. SULLIVAN, Superintendent of Incumbrances.

## DOCUMENT "H."

CITY OF NEW YORK—DEPARTMENT OF HIGHWAYS,  
BOROUGH OF THE BRONX, DEPUTY COMMISSIONER'S OFFICE,  
THIRD AVENUE AND ONE HUNDRED AND SEVENTY-SEVEN STREET,  
NEW YORK, March 5, 1900.

Hon. JAMES P. KEATING, Commissioner of Highways, New York City:

DEAR SIR—I beg to report, as follows, the work done under my jurisdiction in the Borough of The Bronx during the year 1899:

Contracts in force January 1, 1899.....	56
Contracts executed during 1899.....	6
Contracts completed during 1899.....	38
Contracts in force December 31, 1899.....	24

Under the regulating and grading contracts the principal items of work done during the year are as follows:

Earth excavation, cubic yards.....	187,480 8
Rock excavation, cubic yards.....	193,173 4
Piling, cubic yards.....	744,291 1
New curbstones, linear feet.....	179,007 2
New flagging, square feet.....	704,350 2
New bridge stone, square feet.....	90,133 0
Dry rubble masonry, cubic yards.....	25,597 5
Rubble masonry in mortar, cubic yards.....	9,459 8

The length of streets regulated and graded and accepted during the year is 14.5 miles.

Under the regulating and paving contracts the items are as follows for the year:

Sheet asphalt, square yards.....	19,819 5
Granite block, square yards.....	6,507 0
Brick, square yards.....	1,423 5

On the viaducts and bridge contracts, 1,119.7 cubic yards of first and second-class masonry, 1,658.8 cubic yards of concrete, 76,738 pounds of steel and iron were furnished and erected in place.

In the Engineering Bureau the work done has been pushed as rapidly as possible, and with the following general results:

The work accomplished is of good quality and compares favorably with any of its kind. 189 seventy per cent. payments, 29 payments on acceptance, 33 retained amounts payments, 10 five per cent. and ten per cent. retained amounts payments, 34 assessment lists completed, 12 plans completed, 34 field books completed, 157 preliminary surveys made, 97 scores of broken stone and screenings measured, 361 standard bench marks established.

The following résumé of the principal item of work done by the Maintenance Bureau shows that the highways in the borough have received due attention, and the macadam roads have been placed in as good a condition as the available resources for this purpose have permitted.

## Class of Work.

New macadam laid, square yards.....	80,398
Repairs to macadam, square yards.....	101,952
Macadam resurfaced, square yards.....	25,245
Roadways remacadamized, square yards.....	90,810

Total of macadamizing work as above, square yards.....	297,201
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Macadam roadways scraped and cleaned, square yards.....	1,233,853
Trap-block pavement repaired, square yards.....	12,074
Granite-block pavement repaired, square yards.....	37,666
Granite-block pavement on concrete foundation, square yards.....	2,638
Trap-blocked paved gutters repaved, square yards.....	1,064
Cobble-stone pavement (new), square yards.....	1,278
Cobble-stone paved gutters repaved, square yards.....	408

Total paving and repaving as above, square yards.....	54,588
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Earth roadways repaired and surfaced, square yards.....	1,687,296
Earth roadways repaired with native stone, square yards.....	51,789
Gutters cleaned and formed, linear feet.....	2,705,133
Sidewalks other than contract work repaired and surfaced with ashes and screenings, square feet.....	1,373,340
Sidewalks planked, laid and repaired, square feet.....	51,111
Crosswalks constructed with ashes and broken stone, square feet.....	7,527
Crosswalks relaid and repaired, square feet.....	120,667
Crosswalks cleaned on macadam and unpaved streets, square feet.....	18,025,771
Retaining walls built and rebuilt, cubic yards.....	2,054
Bridges replanked, square feet.....	38,344
Bridges repaired, square feet.....	2,954
Bridges cleaned, square feet.....	459,938

## The Materials Used in the Maintenance and Repair of the Highways are as follows:

Broken trap-rock and screenings, broken limestone and screenings, cubic yards.....	47,339
Native stone, cubic yards.....	33,890
Earth filling, cubic yards.....	69,529
Sand, cubic yards.....	5,352
Ashes, cubic yards.....	4,882

## Trees.

Pruned when necessary.....	1,224
Dead trees cut down and removed.....	201

The shop work will show that due attention was given the ruling stock of the Department, as well as repairs to various tools.

The principal thoroughfares of the borough have been sprinkled to the extent of 90 miles when required.

## Revenue Received from Permits.

Permits issued, all kinds.....	7,499
Cash received for restoring pavement.....	\$7,490 11
Cash received for various permits.....	1,113 49

Total cash received.....	\$8,603 60
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## Incumbrances.

Permits issued, all kinds.....	1,165
Cash received for redemption of seized and removed articles.....	\$49 50

## Summary of Expenditures for the Year 1899.

Salaries office of Deputy Commissioner, contingencies, labor, maintenance and supplies, preliminary surveys, etc., rock soundings, standard bench marks, removing incumbrances, repairing and maintaining bridges (account of 1898), maintenance of viaducts and bridges, and preparing site for Lorain fountain.....	\$620,711 01
On account "Restoring and Repaving," Special Fund, Bronx.....	5,213 31
On account "Street Improvement Fund" (assessments on property benefited).....	818,610 10
On account of repaving roads, streets and avenues (Bronx).....	19,818 80
On account paving Jerome avenue (chapter 31, Laws 1897).....	31,601 74
On account steel beam structure over New York and Harlem Railroad, Brook avenue and One Hundred and Fifty-seventh street (chapter 616, Laws 1896).....	23,601 09
On account bridges crossing New York Central and Hudson River Railroad at Gerard, Walton, River avenues, etc. (chapter 645, Laws 1897).....	39,864 74
On account bridge over New York and Harlem Railroad at One Hundred and Fifty-third street (chapter 650, Laws 1897).....	1,174 23
On account viaduct over New York and Harlem Railroad, connecting Melrose avenue, from One Hundred and Sixty-third to One Hundred and Sixty-fifth street (chapter 680, Laws 1897).....	12,015 14
On account construction Rose Hill place (chapter 624, Laws 1896).....	10,083 96

Total.....	\$1,392,194 12
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There are in the borough 12.77 miles of single track railroad, of which .81 miles were laid in 1899; 25.95 miles of double track railroad, of which 1.12 miles were laid in 1899, and 1.23 miles changed from single track in 1899; also 3.4 miles of electric subway, of which 1.81 miles were laid in 1899.

Miles of Streets Paved during the Quarter, and Total Mileage of Paved Streets in the Borough of The Bronx, December 31, 1899.

	During Year.	TOTAL MILEAGE.
With specification granite.....	1.74	11.009
With specification trap.....	.....	2.401
With Belgian.....	.....	.270
With sheet asphalt.....	.90	5.294
With macadam.....	4.61	91.60
By maintenance.....	8.72	
By resurfacing.....		
With brick.....	.....	2.075

## Summary of Street Mileage.

	Miles.
Total length of paved streets exclusive of macadam.....	51.316
Total length of paved streets with macadam.....	93.60
Total length of earth roadway.....	191.19

Grand total.....	336.106
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I transmit herewith detailed reports of the Chief Engineer, Borough of The Bronx, General Superintendent of Maintenance, and the Bookkeeper.

Respectfully,

JAS. H. MALONEY,  
Deputy Commissioner of Highways, Borough of The Bronx.

Hon. JAMES H. MALONEY, Deputy Commissioner of Highways, Borough of The Bronx:

SIR—I have the honor to submit the following report of the transactions of the Maintenance Bureau of the Department of Highways, Borough of The Bronx, for the year ending December 31, 1899.

NATURE OF WORK.	JANUARY 1 TO MARCH 31.	APRIL 1 TO JUNE 30.	JULY 1 TO SEPT. 30.	OCTOBER 1 TO DEC. 31.	TOTAL.
New macadam laid, square yards.....	.....	4,383	35,232	50,283	89,898
Resurfacing, square yards.....	.....	17,071	24,472	48,328	109,871
Repaving, square yards.....	.....	12,156	12,089	.....	24,245
Repairs to old macadam.....	36,479	33,346	19,000	18,113	106,938
Macadam scraped and cleaned.....	18,896	38,531	31,508	44,026	132,961
Trap-block pavement repaired, square yards.....	144	2,751	5,910	5,379	14,184



NATURE OF WORK.	JANUARY 1 TO MARCH 31.	APRIL 1 TO JUNE 30.	JULY 1 TO SEPT. 30.	OCTOBER 1 TO DEC. 31.	TOTAL.
Granite-block pavement repaired, square yards.....	1,890	13,317	19,250	10,400	37,666
Granite-block pavement on concrete, square yards.....	.....	457	1,180	467	2,638
Trap-block paved gutters repaired.....	51	601	408	4	1,064
Cobble-stone paved gutters (new).....	.....	43	1,137	78	1,258
Native-stone paved gutters (new).....	.....	.....	.....	468	468
Earth roads repaired and surfaced, square yards.....	11,335	780,601	550,725	494,635	1,687,196
Earth roads repaired with native stone, square yards.....	.....	10,854	17,044	26,971	54,869
Gutters cleaned and formed, linear feet.....	109,103	921,441	885,539	850,250	2,766,333
Curbstones reset, linear feet.....	400	5,179	4,487	1,880	8,886
Curbstones formed with native stone, linear feet.....	.....	.....	3,549	5,467	9,016
Flagged sidewalks relaid and repaired, square feet.....	5,384	84,510	3,881	9,664	47,379
Earth sidewalks formed and repaired, square feet.....	11,148	479,147	263,137	234,750	814,382
Earth sidewalks surfaced with ashes, square feet.....	13,387	80,300	141,161	268,761	483,709
Earth sidewalks surfaced with screenings, square feet.....	.....	.....	2,700	27,370	29,070
Plank sidewalks laid (new), linear feet.....	5,040	6,573	8,790	24,028	44,431
Plank sidewalks repaired, linear feet.....	.....	1,883	513	277	6,686
Bluestone crosswalks relaid and repaired, square feet.....	5,306	11,023	54,511	27,450	100,667
Bluestone crosswalks laid (new), square feet.....	100	.....	96	380	576
Crosswalks constructed with ashes and broken stone, square feet.....	5,332	.....	.....	5,195	7,527
Crosswalks cleaned on macadam and unpaved streets, square feet.....	423,384	2,407,385	7,091,666	7,839,316	18,095,711
Retaining-walls built (new), cubic yards.....	7	89	18	616	730
Retaining-walls rebuilt, cubic yards.....	498	399	647	976	2,520
Rock blasted and removed, cubic yards.....	.....	20	40	.....	60
Guard rails erected (new), linear feet.....	400	3,316	6,959	16,916	27,591
Guard rails repaired, linear feet.....	136	810	5,061	221	5,138
Dead and dangerous trees cut and removed.....	3	47	101	50	201
Trees pruned (pruning from trees properly disposed of).....	.....	159	544	531	1,234
Weeds, grass, leaves, etc., cut from roadways and removed, loads.....	.....	727	4,632	5,058	10,417
Trap-rock stone, 1½ size, cubic yards.....	771	3,084	17,885	9,857	31,807
Trap-rock screenings, cubic yards.....	123	651	1,711	4,871	7,356
Limestone, 1½ size, cubic yards.....	447	874	127	50	1,498
Limestone screenings, cubic yards.....	66	218	301	7	612
Earth filling, cubic yards.....	2,139	20,709	21,334	25,350	69,532
Native stone, cubic yards.....	1,058	7,860	11,891	18,160	39,969
Sand, cubic yards.....	414	1,467	1,335	1,936	5,152
Ashes, cubic yards.....	489	741	1,449	8,203	11,882
Bridges replanked, cubic yards.....	1,794	5,011	14,663	16,876	38,344
Bridges repaired, cubic yards.....	26	1,510	486	131	2,153
Bridges cleaned, cubic yards.....	189,938	98,000	98,000	234,000	459,938
Shop work—For detailed report see Quarterly Reports.....	.....	.....	.....	.....	.....
New macadam laid, miles.....	.....	0.30	2.33	2.02	4.65
Roads resurfaced, miles.....	.....	1.83	2.70	1.22	5.75
<b>Revenue.</b>					
For restoring pavement.....	\$4,336 80	\$2,447 53	\$1,867 11	\$1,638 01	\$10,290 45
For various permits.....	200 32	283 36	345 00	344 51	1,173 19
	\$4,537 12	\$2,730 89	\$2,212 11	\$1,982 52	\$11,462 64
Permits issued, number.....	1,400	9,416	1,233	1,250	7,499
<b>Incumbrances.</b>					
Cash received for redemption material and interest.....	.....	\$15 00	\$21 25	\$3 25	\$40 50
Permits issued.....	.....	236	331	293	1,113

Ninety miles of macadam road were sprinkled when necessary.  
All of which is respectfully submitted.

(Signed) CHARLES H. GRAHAM, General Superintendent of Maintenance,  
Acting Superintendent of Incumbrances, Borough of The Bronx.

CITY OF NEW YORK,  
DEPARTMENT OF HIGHWAYS—DEPUTY COMMISSIONER'S OFFICE,  
BOROUGH OF THE BRONX,  
THIRD AVENUE AND ONE HUNDRED AND SEVENTY-SEVENTH STREET,  
NEW YORK, January 8, 1900.

Hon. JAMES H. MALONEY, Deputy Commissioner of Highways, Borough of The Bronx:

DEAR SIR—In accordance with instructions of the Commissioner of Highways transmitted to you, I have the honor to submit the following report of the expenditures for the year ending December 31, 1899:

Salaries; Office of Deputy Commissioner; Contingencies; Labor, Maintenance and Supplies; Preliminary Surveys, etc.; Rock Soundings; Standard Bench Marks; Removing Incumbrances; Repairing and Maintaining Bridges (account of 1898); Maintenance of Viaducts and Bridges, and Preparing Site for Lorelei Fountain.

On account "Restoring and Rejuvenating—Special Fund" (Bronx)..... \$600,711 01

On account "Street Improvement Fund" (assessment on property benefited)..... 5,213 31

On account "Repaving Roads, Streets and Avenues" (Bronx)..... 818,610 10

On account "Paving Jerome Avenue" (chapter 31, Laws of 1897)..... 19,818 80

On account "Steel Beam Structure over New York and Harlem Railroad, Brook Avenue and One Hundred and Fifty-seventh Street" (chapter 616, Laws of 1896)..... 41,601 74

On account "Bridges Crossing New York Central and Hudson River Railroad, at Gerard, Walton, River Avenue, etc." (chapter 645, Laws of 1897)..... 23,001 09

On account "Bridge over New York and Harlem Railroad, at One Hundred and Fifty-third Street" (chapter 650, Laws of 1897)..... 39,064 74

On account "Viaduct over New York and Harlem Railroad, connecting Melrose Avenue, from One Hundred and Sixty-third Street to One Hundred and Sixty-fifth Street" (chapter 680, Laws of 1897)..... 1,174 23

On account "Construction Rose Hill Place" (chapter 624, Laws of 1896)..... 12,015 14

On account "Construction Rose Hill Place" (chapter 624, Laws of 1896)..... 10,081 96

Total..... \$1,592,194 12

DETAILED STATEMENT OF EXPENDITURES.  
For which Vouchers were Drawn by the Commissioner of Highways, Borough of The Bronx, during the Year ending December 31, 1899.

	FIRST QUARTER.	SECOND QUARTER.	THIRD QUARTER.	FOURTH QUARTER.	TOTAL.
<b>"Salaries—Office of Deputy Commissioner"—</b>					
Salaries of Deputy Commissioner, Chief Clerk and Private Secretary, (1898).....	\$5,139 96	\$5,264 90	\$5,377 85	\$5,514 95	\$21,297 76
Salaries of Deputy Commissioner, Chief Clerk and Private Secretary, (1899).....	\$5,139 96	\$5,264 90	\$5,377 85	\$5,514 95	\$21,297 76
<b>"Contingencies"—</b>					
Rubber stamps, account of 1898.....	\$1 15	.....	.....	.....	.....
Books, account 1898.....	37 48	.....	.....	.....	.....
Repairs to vans.....	18 00	.....	.....	.....	.....
Telephone service.....	.....	\$83 38	\$115 41	\$111 43	.....
Reports from Albany.....	.....	24 99	.....	.....	.....
Rubber stamps.....	.....	3 25	5 50	.....	.....
Printing pay-rolls.....	.....	.....	96 50	.....	.....
Pay envelopes.....	.....	.....	1 50	.....	.....
Books.....	.....	.....	.....	5 90	.....
	\$26 55	\$212 53	\$218 63	\$117 33	484 04
<b>"Labor, Maintenance and Supplies"—</b>					
<i>Account of 1898.</i>					
Pay-roll Engineers, Draughtsmen, etc.....	\$61 18	.....	.....	.....	.....
Limestone, trap rock, etc.....	17,088 56	.....	.....	.....	.....
Harness and supplies.....	56 82	.....	.....	.....	.....
Roofing cement.....	21 20	.....	.....	.....	.....
Clipping horses.....	28 50	.....	.....	.....	.....
Water for sprinklers.....	27 43	.....	.....	.....	.....
Traveling expenses.....	198 70	.....	.....	.....	.....
Veterinary services.....	74 10	.....	.....	.....	.....
Rubber boots.....	43 95	.....	.....	.....	.....
Horseshoeing, sharpening tools.....	359 43	.....	.....	.....	.....
Carriages and repairs.....	739 80	.....	.....	.....	.....
Hay, oats, etc.....	154 99	.....	.....	.....	.....
Rentals.....	276 00	.....	.....	.....	.....
Hardware.....	637 70	.....	.....	.....	.....
Lumber.....	93 94	.....	.....	.....	.....
Insurance maps.....	256 50	.....	.....	.....	.....
Coal.....	1,417 50	.....	.....	.....	.....
Paints and oils.....	231 63	.....	.....	.....	.....
<i>Account of 1899.</i>					
Pay-roll Laborers, Foreman, etc.....	44,901 79	\$199,099 04	\$147 56 43	\$116,374 33	.....
Pay-roll Central Superintendent, General Inspectors, Clerks, etc.....	6,664 95	6,664 95	5,079 46	7,274 95	.....
Lumber.....	240 00	346 66	10 04	.....	.....
Traveling expenses.....	254 19	374 91	330 31	371 07	.....
Leather, harness, repairs, etc.....	10 80	42 50	135 90	96 51	.....
Repairs to carriages, etc.....	18 90	184 03	370 06	39 75	.....
Hardware supplies.....	16 93	361 23	869 01	231 56	.....
Sent springs, road machine (1898).....	.....	2 50	.....	.....	.....
Badges for employees (1898).....	.....	430 83	.....	.....	.....
Pay-roll Engineers, etc.....	.....	125 11	405 38	638 38	.....
Use of tools.....	.....	36 00	86 90	.....	.....
Oil, turpentine, etc.....	.....	72 58	72 65	94 95	.....
Veterinary services.....	.....	120 70	60 68	35 38	.....
Horseshoeing.....	.....	272 50	265 25	160 51	.....
Drawing inks.....	.....	2 34	.....	.....	.....
Rentals.....	.....	54 00	54 00	294 00	.....
Block filling.....	.....	78 60	.....	.....	.....
Hose and couplings.....	.....	184 30	419 27	.....	.....
Cement.....	.....	25 00	33 75	.....	.....
Pasturage for horses.....	.....	80 00	.....	.....	.....
Coal.....	.....	47 30	598 75	.....	.....
Hay, oats, etc.....	.....	549 54	481 54	103 48	.....
Stationery (notices, etc.).....	.....	35 19	.....	.....	.....
Sand and gravel.....	.....	318 25	.....	.....	.....
Mowing maps.....	.....	1 75	.....	.....	.....
Pumps, etc.....	.....	45 90	.....	.....	.....
Horses (purchasing of).....	.....	200 00	400 00	.....	.....
Water for sprinklers.....	.....	378 33	370 38	706 16	.....
Brooms.....	.....	40 50	.....	.....	.....
Pay-roll Foreman (General Superintendent's toll).....	.....	.....	19 90	77 44	.....
Stone, screenings, gravel, etc.....	.....	17,346 05	18,779 80	.....	.....
Ashes.....	.....	611 00	774 11	.....	.....
Sheet-iron carts (contract).....	.....	1,540 00	.....	.....	.....
Books.....	.....	25 50	.....	.....	.....
Use of miller.....	.....	.....	210 00	.....	.....
Clipping horses.....	.....	.....	47 40	.....	.....
Correction to maps.....	.....	.....	50 00	.....	.....



	FIRST QUARTER.	SECOND QUARTER.	THIRD QUARTER.	FOURTH QUARTER.	TOTAL.		FIRST QUARTER.	SECOND QUARTER.	THIRD QUARTER.	FOURTH QUARTER.	TOTAL.
<b>"Labor, Maintenance and Supplies"—</b>						<b>"Maintenance of Viaducts and Bridges"—</b>					
Grate iron.....	.....	.....	.....	\$24.00	.....	Pay-roll Laborers, etc.....	\$985.18	\$1,315.50	\$4,004.10	\$6,684.75	.....
Crosswalk stones.....	.....	.....	.....	502.00	.....	Lumber.....	.....	977.30	477.34	.....	.....
Photograph materials.....	.....	.....	.....	5.45	.....	Paints, etc.....	.....	.....	343.50	.....	.....
	\$71,192.87	\$120,780.05	\$178,854.71	\$71,775.44	\$342,603.16	Hardware.....	.....	.....	.....	473.78	.....
<b>"Preliminary Surveys, etc."—</b>						Repairs (Barber Asphalt Company).....	.....	.....	.....	195.35	.....
<i>Account of 1898.</i>							\$985.18	\$1,339.72	\$4,558.96	\$6,581.86	\$3,915.70
Pay-roll Engineers, etc.....	\$6,664.80	.....	.....	.....	.....	<b>"Preparing Site for Lorain Fountain"—</b>					
Stakes.....	485.00	.....	.....	.....	.....	Pay-roll Engineers, etc.....	\$16.50	235.18	\$49.00	\$43.10	.....
Flasher lamps.....	8.00	.....	.....	.....	.....	Pay-roll Inspectors.....	.....	80.00	21.94	.....	.....
Cement tests.....	287.50	.....	.....	.....	.....	Paid contractor.....	.....	.....	.....	1,009.10	.....
Roller for typewriter.....	11.00	.....	.....	.....	.....		\$16.50	\$216.18	\$103.74	\$4,431.54	4,431.54
Steel tapes, measuring cloth, etc.....	346.75	.....	.....	.....	.....						\$20,711.01
Transit, level and repairs.....	901.00	.....	.....	.....	.....	<b>"Restoring and Repairing—Special Fund, Brook"—</b>					
Traveling expenses.....	252.00	.....	.....	.....	.....	Pay-roll repairs.....	\$204.79	\$1,772.47	\$1,616.18	\$6,612.89	5,273.21
Lumber drills, etc.....	154.08	.....	.....	.....	.....						
Camera tripod, etc.....	58.38	.....	.....	.....	.....	<b>"Street Improvement Fund"—</b>					
Talcum.....	20.00	.....	.....	.....	.....	Pay-roll Engineers, etc.....	\$7,380.79	\$7,719.76	\$7,771.58	\$1,071.08	.....
Safe.....	.....	\$300.00	.....	.....	.....	Pay-roll Inspectors.....	10,647.00	19,147.78	11,981.31	14,711.15	.....
Books, etc.....	.....	45.85	.....	.....	.....	Pay-roll General Superintendent Foreman.....	18.38	30.35	71.40	44.58	.....
Copies of record.....	.....	.....	112.71	.....	.....	Paid contractors.....	97,332.34	200,348.21	233,507.72	213,594.74	.....
Repairing rods, targets, etc.....	.....	.....	74.25	.....	.....		\$110,364.31	\$299,555.04	\$259,459.01	\$133,781.59	\$18,410.10
Testing machine, etc.....	.....	.....	.....	\$659.78	.....						
<i>Account of 1899.</i>						<b>"Repaving Roads, Streets and Avenues—Brook"—</b>					
Pay-roll Engineers, etc.....	5,950.45	5,598.43	5,433.40	5,079.85	.....		\$617.90	\$900.00	\$17,086.96	\$441.89	16,016.80
Pay-roll Laborers.....	691.81	1,171.80	522.00	.....	.....	<b>"Paving Jerome Avenue," chapter 35, Laws 1897—</b>					
Pay-roll General Superintendent (Foreman).....	175.50	174.25	90.85	88.50	.....	From Van Cortlandt avenue to City line.....	\$7,892.15	.....	87.41	\$7,100.18	.....
Barrow and repairs to same.....	7.24	4.75	.....	91.45	.....	From Macomb's Dam bridge to One Hundred and Sixty-second street.....	.....	\$290.94	2,650.48	.....	.....
Lumber.....	39.39	.....	.....	.....	.....	From One Hundred and Sixty-second street to Tremont avenue.....	.....	10,236.31	1,016.48	749.91	.....
Traveling expenses.....	303.65	479.60	494.59	100.81	.....	From Tremont avenue to Van Cortlandt street.....	.....	.....	7.41	7,881.89	.....
Kalemine brushes.....	7.44	.....	.....	.....	.....						
Stationery.....	.....	41.71	.....	.....	.....		\$7,892.15	\$11,017.41	\$9,381.63	\$11,400.33	41,691.74
Rods, targets, etc.....	.....	88.00	.....	.....	.....	<b>"Steel Beam Structure over New York and Harlem Railroad, Brook Avenue and One Hundred and Fifty-seventh Street," chapter 616, Laws 1897—</b>					
Blue-print paper.....	.....	33.00	.....	.....	.....	Pay-roll Engineers, etc.....	\$127.42	\$128.80	\$66.14	\$80.94	.....
Binding assessment lists.....	.....	35.00	.....	.....	.....	Pay-roll Inspectors.....	.....	387.00	90.00	.....	.....
Copies of record.....	.....	.....	6.00	.....	.....	Paid contractors.....	.....	.....	22,999.80	.....	.....
Stakes.....	.....	.....	160.00	.....	.....		\$127.42	\$585.80	\$13,100.93	\$80.94	23,904.09
Repairs to tapes, etc.....	.....	.....	4.75	.....	.....	<b>"Bridges crossing New York Central and Hudson River Railroad at Gerard, Walton and River Avenues, etc.," chapter 645, Laws 1897—</b>					
Glass.....	.....	.....	2.45	.....	.....	Pay-roll Engineers, etc.....	\$869.18	\$425.50	\$114.44	.....	.....
Mousing maps.....	.....	.....	19.00	12.80	.....	Pay-roll Inspectors.....	375.60	381.00	.....	.....	.....
Rubber-press and stamps.....	.....	.....	8.00	.....	.....	Paid contractors.....	2,571.90	7,147.40	16,099.32	.....	.....
Repairs to wagons.....	.....	.....	18.00	.....	.....		\$4,817.08	\$7,897.90	\$6,513.78	.....	39,064.74
House cleaning.....	.....	.....	2.50	.....	.....						
	\$11,619.61	\$6,183.87	\$6,896.50	\$4,168.74	33,659.40	<b>"Bridge over New York and Harlem Railroad at One Hundred and Fifty-third Street," chapter 620, Laws 1897—</b>					
<b>"Rock Soundings"—</b>						Pay-roll Engineers, etc.....	\$56.71	\$66.50	\$93.03	\$901.91	.....
<i>Account of 1898.</i>						Pay-roll Inspectors.....	.....	.....	139.00	231.00	.....
Pay-roll Engineers, etc.....	\$450.07	\$499.03	.....	.....	.....		\$60.77	\$66.50	\$487.03	\$533.93	1,174.21
<i>Account of 1899.</i>											
Pay-roll Engineers, etc.....	\$44.20	1,086.50	\$1,164.53	\$1,870.27	.....	<b>"Viaduct over New York and Harlem Railroad connecting Melrose Avenue from One Hundred and Sixty-third to One Hundred and Sixty-fifth Street," chapter 616, Laws 1897—</b>					
Pay-roll Laborers, etc.....	1,081.75	614.21	1,210.02	.....	.....	Pay-roll Engineers, etc.....	\$147.80	.....	\$514.31	\$593.46	.....
Pay-roll General Superintendent (Foreman).....	89.73	.....	.....	100.00	.....	Pay-roll Inspectors.....	.....	.....	310.00	177.00	.....
Pay-roll General Superintendent.....	.....	52.80	69.03	.....	.....	Paid contractors.....	.....	.....	1,099.25	7,148.50	.....
Traveling expenses.....	.....	.....	.....	127.34	.....	Paid Consulting Engineer.....	.....	.....	97.50	130.85	.....
	\$6,685.73	\$4,852.64	\$2,673.18	\$7,034.35	11,990.10		\$147.80	.....	\$6,256.72	\$8,877.04	14,115.14
<b>"Standard Bench Marks"—</b>						<b>"Construction of Rose Hill Place," (chapter 624, Laws 1896.)</b>					
<i>Account of 1898.</i>							.....	\$243.06	\$250.41	\$6,414.55	10,013.56
Pay-roll Engineers, etc.....	\$244.00	.....	.....	.....	.....	Grand total.....	.....	.....	.....	.....	\$1,827,194.18
<i>Account of 1899.</i>						<b>"Cash retained from Maintenance Bureau for various permits, etc. (for details see General Superintendent's report)....."</b>					
Pay-roll Engineers, etc.....	2,110.81	\$1,191.20	\$711.84	\$779.63	.....		\$1,737.18	\$2,670.59	\$4,443.36	\$1,086.67	.....
Pay-roll General Superintendent (Foreman).....	58.75	.....	.....	.....	.....	Proceeds of auction sale.....	178.30	13,481.26	1,074.72	813.00	.....
	\$2,169.56	\$1,191.20	\$711.84	\$779.63	5,662.23	From Bureau of Incumbrances—Shed permits, etc. removing boiler, etc.....	.....	15.00	.....	.....	.....
<b>"Removing Incumbrances"—</b>						For use of steam roller.....	.....	30.00	156.00	94.00	.....
Pay-roll.....	\$526.87	\$2,310.77	\$760.73	\$2,376.80	.....	For material used.....	.....	.....	0.00	.....	.....
Expenses moving boiler to yard.....	.....	10.00	.....	.....	.....		\$1,915.48	\$16,177.15	\$4,493.66	\$1,235.67	\$24,821.96
Books.....	.....	145.26	.....	.....	.....	<b>"Repairing and Maintaining Bridges"—</b>					
Supplies.....	.....	48.55	.....	.....	.....	<i>Account of 1898.</i>					
Lumber.....	.....	191.90	.....	.....	.....	Lumber.....	.....	\$447.00	.....	.....	.....
Rental (yard).....	.....	.....	100.00	100.00	.....						
Paints, etc.....	.....	.....	22.10	.....	.....						
Rubber stamps.....	.....	.....	7.00	.....	.....						
	\$526.87	\$2,449.47	\$893.83	\$2,476.80	5,752.97						
<b>"Repairing and Maintaining Bridges"—</b>											
<i>Account of 1898.</i>											
Lumber.....	.....	\$447.00	.....	.....	.....						

Respectfully,  
CHAS. McCaffrey, Clerk.



JANUARY 7, 1900.

Hon. JAMES H. MALINRY, Deputy Commissioner of Highways:

DEAR SIR:—In accordance with the usual custom, I beg to submit a report of the work done under the direction of this Bureau during the year 1899.

At the beginning of the year there were some 56 contracts of all kinds in force, while during the year 6 new contracts were executed, and 38 were completed, leaving 24 contracts in force at the end of the year. Many of the completed works are very important improvements and a large frontage is thereby opened up to development.

The completed regulating and grading contracts represented 14.46 miles of new thoroughfares. The viaducts over the New York Central Railroad at Walton avenue, Gerard avenue and River avenue and over the New York and Putnam Railroad at Fort Independence street have been completed, and they make very useful connections between points greatly in need of communication.

The completion of the Brook Avenue Beam Tunnel at the crossing of the Port Morris Branch Railroad has opened up this thoroughfare and supplied a long-standing need. This avenue was graded in 1890, but no provision was made for crossing the Port Morris Branch Railroad and this part of the avenue was therefore impassable since that time.

Since the completion of the tunnel and the opening up of communication, extensive building improvements have followed rapidly.

The work on the Melrose Avenue Viaduct connecting Melrose avenue with Webster avenue, at One Hundred and Sixty-fifth street, has progressed as well as could be expected after the long delay attending the acquiring of title to land necessary therefor. The foundations, abutments and approaches will be completed early in 1900.

The One Hundred and Fifty-third Street Viaduct contract has been suspended during the winter, but the work will proceed early in the spring and be pushed as rapidly as possible.

The preparation of the foundations and site of the Lorelei Fountain was completed in November, so far as the funds available would permit.

Some further embellishment of the grounds is desirable however, in order to make more effective what has already been accomplished.

The work completed and accepted during the year is of good quality and compares favorably with any work of its kind heretofore accomplished in this section.

The engineering force has been actively engaged during the year in looking after the contracts in force, and making preliminary surveys, estimates and plans for improvements proposed in resolutions of the Local Board.

The preliminary surveys for the regulating, etc., of the Grand Boulevard and Concourse have been pushed as rapidly as possible, and I hope to be in a position to submit complete plans and estimates for contracts as soon as the resolution approved by the Board of Public Improvements has been adopted.

The following detailed and summarized statements will show the results accomplished during the year in detail.

On the contracts in force the following amounts have been certified for payment during the year 1899:—

70 per cent. payments.....	\$445,385 62
95 per cent. payments.....	9,447 75
Payments on acceptance.....	276,510 46
Payments on completion.....	71,799 57
Retained amount payments (on guarantee).....	14,580 08
Payments on Commissioner's order.....	1,794 84

Total..... \$819,519 22

It will be noticed by reference to the financial statement that the general variation between the estimated cost and the actual cost of the completed contracts is very slight. The average variation on those works is less two per cent.

Photographs of some of the structures which have been completed or are now in progress, and of other work of interest in the borough, are transmitted herewith.

Respectfully,

JOSIAH A. BRIGGS, Chief Engineer, Borough of The Bronx.

Two Hundred and Thirty-third street, from Jerome avenue to Bronx river, regulating, grading, etc.—

16,810 cubic yards earth excavation.  
3,700 cubic yards rock excavation.  
6,000 cubic yards filling.  
20 cubic yards dry rubble masonry.  
In progress.

Webster avenue, from Moshulu parkway to the city line, completing, regulating, grading, etc.—

10,500 cubic yards earth excavation.  
8,100 cubic yards rock excavation.  
43,000 cubic yards filling.  
13,600 linear feet new curbstone.  
46,000 square feet new flagging.  
3,320 square feet bridge stone.  
350 cubic yards dry rubble masonry.  
3,700 cubic yards cement rubble masonry.  
1,448 linear feet coping.  
470 linear feet vitrified pipe.  
In progress.

Nasipier avenue, from Two Hundred and Thirty-third street to Mount Vernon avenue, etc., regulating, grading, etc.—

5,200 cubic yards earth excavation.  
12,910 cubic yards rock excavation.  
42,500 cubic yards filling.  
25,630 linear feet new curbstone.  
145,900 square feet new flagging.  
12,700 square feet bridge stone.  
266 cubic yards dry rubble masonry.  
30,320 linear feet paved gutters.  
4,470 linear feet vitrified pipe in concrete.  
951 linear feet brick drains, 3 feet 9 inches and 4 feet 9 inches diameter.  
2,474 linear feet brick drains, 3 feet 3 inches and 2 feet 6 inches diameter.  
25 manholes.  
26 receiving-basins.  
13,200 linear feet of lumber.  
In progress.

Crotola avenue, from Boston road to Southern Boulevard, regulating, grading, etc.—

1,500 cubic yards earth excavation.  
12,800 cubic yards rock excavation.  
28,100 cubic yards filling.  
1,400 linear feet new curbstone.  
15,000 square feet new flagging.  
5,080 square feet bridge stone.  
In progress.

Marion avenue, from One Hundred and Eighty-fourth street to Moshulu parkway, regulating, grading, etc.—

1,573.9 cubic yards earth excavation.  
1,241.8 cubic yards rock excavation.  
1,450 cubic yards filling.  
4,487.7 linear feet new curbstone.  
26,890.8 square feet new flagging.  
3,449.2 square feet old flagging.  
4,031.2 square feet bridge stone.  
58.3 cubic yards dry rubble masonry.  
Completed.

Tremont avenue, from New York and Harlem Railroad to Jerome avenue, regulating, grading, etc.—

370 cubic yards earth excavation.  
210.8 cubic yards rock.  
7,878.5 cubic yards filling.  
1,289.3 linear feet new curbstone.  
5,157.2 square feet new flagging.  
2,673.2 square feet bridge stone.  
51.2 cubic yards dry rubble masonry.  
1,268 linear feet fencing.  
In progress.

Bathgate avenue, from Wendover avenue to One Hundred and Eighty-eighth street, regulating, grading, etc.—

2,159.2 cubic yards earth excavation.  
7,120.7 cubic yards rock.  
3,991.7 cubic yards filling.  
9,997.6 linear feet new curbstone.  
86.9 linear feet old curbstone.

Bathgate avenue, from Wendover avenue to One Hundred and Eighty-eighth street, regulating, grading, etc.—

49,413.6 square feet new flagging.  
359.6 square feet old flagging.  
2,203.6 square feet bridge stone.  
Completed.

Arthur avenue, from Tremont to Pelham avenue, regulating, grading, etc.—

4,350 cubic yards earth excavation.  
1,550 cubic yards rock.  
26,000 cubic yards filling.  
9,500 linear feet new curbstone.  
37,000 square feet new flagging.  
5,000 square feet bridge stone.  
475 cubic yards dry rubble masonry.  
1,500 linear feet fencing.  
80 linear feet vitrified pipe.  
In progress.

Anthony avenue, from Clay avenue to the Concourse, regulating, grading, etc.—

15,000 cubic yards earth excavation.  
12,350 cubic yards rock.  
9,400 cubic yards filling.  
5,550 linear feet new curbstone.  
18,100 square feet new flagging.  
3,920 square feet bridge stone.  
350 cubic yards masonry.  
2,000 linear feet paved gutters.  
In progress.

Valentine avenue, Burnside avenue to Kingsbridge road, regulating, grading, etc.—

16,700 cubic yards earth excavation.  
7,000 cubic yards rock excavation.  
34,000 cubic yards filling.  
9,900 linear feet new curbstone.  
39,000 square feet new flagging.  
3,750 square feet bridge stone.  
1,625 cubic yards dry rubble masonry.  
2,000 linear feet fencing.  
Completed.

One Hundred and Eighty-seventh street, Park avenue to Southern Boulevard, regulating, grading, etc.—

1,100 cubic yards earth excavation.  
3,450 cubic yards rock excavation.  
9,900 cubic yards filling.  
1,500 linear feet new curbstone.  
600 square feet new flagging.  
280 cubic yards dry rubble masonry.  
In progress.

One Hundred and Seventy-second street, Southern Boulevard to Bronx river, regulating, grading, etc.—

564.8 cubic yards earth excavation.  
139 cubic yards rock excavation.  
1,276 cubic yards filling.  
3,457.4 linear feet new curbstone.  
13,020 square feet new flagging.  
2,948.8 square feet bridge stone.  
974.3 linear feet fencing.  
Completed.

One Hundred and Seventy-third street, Southern Boulevard to West Farms road, regulating, grading, etc.—

1,813.5 cubic yards earth excavation.  
375.1 cubic yards rock excavation.  
2,933.5 cubic yards filling.  
3,071.5 linear feet new curbstone.  
11,460.8 square feet new flagging.  
2,464 square feet bridge stone.  
Completed.

Siebbins avenue, Dawson street to Boston road, regulating, grading, etc.—

2,185.8 cubic yards earth excavation.  
766 cubic yards rock excavation.  
11,928.1 cubic yards filling.  
7,774.1 linear feet new curbstone.  
43,331.6 square feet new flagging.  
2,274.4 square feet bridge stone.  
42 cubic yards dry rubble masonry.  
2,887 linear feet fencing.  
Completed.

Longwood avenue, Southern Boulevard to Tiffany street, regulating, grading, etc.—

1,000 cubic yards filling.  
In progress.

Fox street (Simpson street), Westchester avenue to Freeman street, regulating, grading, etc.—

41.6 cubic yards earth excavation.  
536.3 cubic yards rock excavation.  
2986.5 cubic yards filling.  
3,841.8 linear feet new curbstone.  
15,760.7 square feet new flagging.  
Completed.

Tiffany street, Intervale avenue to East river, regulating, grading, etc.—

750 cubic yards earth excavation.  
19,700 cubic yards rock excavation.  
50,000 cubic yards filling.  
330 cubic yards dry rubble masonry.  
24,000 feet B. M. lumber.  
11,200 linear feet piling.  
In progress.

Wilkins place, Southern Boulevard to Boston road, regulating, grading, etc.—

15,947.9 cubic yards filling.  
3,243.4 linear feet new curbstone.  
12,619.6 square feet new flagging.  
1,830 square feet bridge stone.  
2,276.4 linear feet fencing.  
Completed.

Westchester avenue, from Southern Boulevard to Bronx river, regulating, grading, etc.—

2,100 cubic yards earth excavation.  
700 cubic yards rock excavation.  
17,050 cubic yards filling.  
1,050 cubic yards dry rubble masonry.  
In progress.

One Hundred and Sixty-third street, Third avenue to Westchester avenue, regulating, grading, etc.—

1,324.9 cubic yards earth excavation.  
426 cubic yards rock excavation.  
1,908.8 cubic yards filling.  
2,507.1 linear feet new curbstone.  
52.2 linear feet old curbstone.  
10,954.8 square feet new flagging.  
112 square feet old flagging.  
982.4 square feet bridge stone.  
225.7 cubic yards dry rubble masonry.  
55.2 square yards granite paving.  
Completed.

Barretto street (Fox street), One Hundred and Sixty-fifth street to Intervale avenue, regulating, grading and asphalt paving—

7.5 cubic yards earth excavation.  
9.5 cubic yards rock excavation.  
2.7 cubic yards filling.  
18.2 linear feet new curbstone.  
8.7 square feet new flagging.  
18.9 cubic yards dry rubble masonry.  
3.2 linear feet fencing.  
6,395.7 square yards asphalt paving.  
Completed.



- Home street, Boston road to Intervale avenue, paving.  
850.8 square yards granite paving.  
Completed.
- Cheever place, Mott avenue to Gerard avenue, regulating, grading, etc.—  
2,157.5 cubic yards earth excavation.  
7,811.6 cubic yards rock excavation.  
1,858 cubic yards filling.  
941.5 linear feet new curbstones.  
3,715.3 square feet new flagging.  
448 square feet bridge stone.  
85.9 cubic yards dry rubble masonry.  
90.4 linear feet new fencing.  
Completed.
- One Hundred and Sixty-seventh street, Sheridan avenue to New York and Harlem Railroad, regulating, grading, etc.—  
29,775 cubic yards filling.  
5,179 linear feet new curbstones.  
19,351 square feet new flagging.  
5,019 square feet bridge stone.  
163 cubic yards dry rubble masonry.  
Completed.
- Morris avenue, New York and Harlem Railroad to Concourse, regulating, grading, etc.—  
1,490 cubic yards earth excavation.  
10 cubic yards rock excavation.  
30,830 cubic yards filling.  
405 linear feet new curbstones.  
2,390 square feet new flagging.  
1,660 square feet bridge stone.  
240 cubic yards dry rubble masonry.  
350 linear feet fencing.  
200 feet B. M. lumber.  
In progress.
- One Hundred and Fifty-first street, Mott avenue to Exterior street, regulating, grading, etc.—  
18,000 cubic yards filling.  
4,000 linear feet new curbstones.  
16,000 square feet new flagging.  
2,170 square feet bridge stone.  
2,000 linear feet fencing.  
76 linear feet vitrified pipe.  
In progress.
- One Hundred and Seventieth street, Franklin avenue to Boston road, regulating, grading, etc.—  
35 cubic yards earth excavation.  
24 cubic yards rock excavation.  
41 cubic yards filling.  
1,541 linear feet new curbstones.  
6,424 square feet new flagging.  
59 cubic yards dry rubble masonry.  
Completed.
- Walton avenue, One Hundred and Thirty-eighth to One Hundred and Fiftieth street, regulating, grading, etc.—  
14,277 cubic yards earth excavation.  
13,551 cubic yards rock.  
4,512 cubic yards filling.  
4,289 linear feet new curbstones.  
16,650 square feet new flagging.  
1,083 square feet new bridge stone.  
1,750 linear feet paved gutters.  
Completed.
- Mott avenue, Park avenue to One Hundred and Sixty-first street, regulating, grading, etc.—  
14,219 cubic yards of earth excavation.  
2,879 cubic yards rock excavation.  
8,253 cubic yards filling.  
9,707 linear feet new curbstones.  
494 linear feet old curbstones.  
39,838 square feet new flagging.  
670 square feet old flagging.  
6,063 square feet old bridge stone.  
889 cubic yards dry rubble masonry.  
Completed.
- Sheridan avenue, One Hundred and Fifty-third to One Hundred and Sixty-first street, regulating, grading, etc.—  
700 cubic yards earth excavation.  
90 cubic yards rock excavation.  
58,000 cubic yards filling.  
13,650 cubic yards dry rubble masonry.  
In progress.
- Lorelei Fountain, foundation, etc.—  
1,316 cubic yards earth excavation.  
2,076 cubic yards rock excavation.  
964 cubic yards filling.  
6.3 cubic yards brick masonry.  
109 cubic yards concrete.  
165 cubic feet bluestone steps.  
920 square yards gravel walks.  
4,527 square feet siding.  
452.4 linear feet galvanized pipe.  
144.5 linear feet iron railing.  
Completed.
- Tremont avenue, Jerome avenue to Aqueduct avenue, regulating, grading, etc.—  
900 cubic yards earth excavation.  
120 cubic yards rock excavation.  
11,100 cubic yards filling.  
2,300 linear feet new curbstones.  
8,000 square feet new flagging.  
600 square feet bridge stone.  
1,795 cubic yards dry rubble masonry.  
90 linear feet vitrified pipe.  
In progress.
- Boscobel avenue, Jerome avenue to Washington Bridge, regulating, grading, etc.—  
356.8 cubic yards earth excavation.  
30.2 cubic yards rock excavation.  
10,360.4 cubic yards filling.  
5,774.7 linear feet new curb.  
22,942.7 square feet new flagging.  
5,392.4 square feet bridge stone.  
240.6 cubic yards dry rubble masonry.  
2,377.7 linear feet fencing.  
5,446.4 linear feet paved gutters.  
Completed.
- Kappock street, from Spuyten Duyvil Parkway to Johnson avenue, regulating, grading, etc.—  
300 cubic yards earth excavation.  
1,500 cubic yards rock excavation.  
500 cubic yards filling.  
2,250 linear feet new curbstones.  
7,800 square feet new flagging.  
2,000 linear feet paved gutters.  
In progress.
- One Hundred and Sixty-ninth street, from Jerome avenue to Concourse, regulating, grading, etc.—  
35.5 cubic yards earth excavation.  
82.5 cubic yards rock excavation.  
1,268.2 cubic yards filling.  
181.3 linear feet new curbstones.  
209.8 linear feet old curbstones.  
6,489.3 square feet new flagging.  
998.1 square feet old flagging.  
2,175 square feet bridge stone.  
13 cubic yards dry rubble masonry.  
Completed.
- One Hundred and Sixty-ninth street, Jerome avenue to Boscobel avenue, regulating, grading, etc.—  
1,070.7 cubic yards earth excavation.  
15,815.1 cubic yards filling.
- One Hundred and Sixty-ninth street, Jerome avenue to Boscobel avenue, regulating, grading, etc.—  
891.1 linear feet new curbstones.  
3,547.9 square feet new flagging.  
910.8 square feet bridge stone.  
99.5 cubic yards dry rubble masonry.  
Completed.
- Inwood avenue, Cromwell avenue to Featherbed lane, regulating, grading, etc.—  
18,700 cubic yards filling.  
In progress.
- Ogden avenue, Jerome avenue to Washington Bridge, regulating, grading, etc.—  
1,609.3 cubic yards earth excavation.  
4,910.4 cubic yards rock excavation.  
5,542.5 cubic yards filling.  
7,310.6 linear feet new curb.  
134 linear feet old curbstones.  
30,700 square feet new flagging.  
282 square feet old flagging.  
3,602 square feet bridge stone.  
1,291.7 linear feet fencing.  
7,770 linear feet paved gutters.  
3 receiving-basins.  
Completed.
- Aqueduct avenue, Lind avenue to Kingsbridge road, regulating, grading, etc.—  
45,500 cubic yards earth excavation.  
35,000 cubic yards rock excavation.  
82,000 cubic yards filling.  
550 linear feet new curbstones.  
2,200 square feet new flagging.  
2,000 cubic yards dry rubble masonry.  
5,200 cubic yards cement rubble masonry.  
In progress.
- Prospect avenue, Westchester avenue to Crotona Park, South, regulating, grading, etc.—  
750 cubic yards earth excavation.  
1,990 cubic yards rock excavation.  
6,200 cubic yards filling.  
1,297 linear feet new curbstones.  
7,489 square feet new flagging.  
1,100 square feet bridge stone.  
In progress.
- Trinity avenue, Westchester avenue to One Hundred and Sixty-first street, regulating, grading, etc.—  
1,800 cubic yards earth excavation.  
10,500 cubic yards rock excavation.  
200 cubic yards filling.  
3,200 linear feet new curbstones.  
4,503 square feet new flagging.  
430 square feet bridge stone.  
In progress.
- Rogers place, Dawson street to One Hundred and Sixty-fifth street, regulating, grading, etc.—  
1,764.3 cubic yards earth excavation.  
800.1 cubic yards rock excavation.  
5,692.8 cubic yards filling.  
2,936.6 linear feet new curbstones.  
44.4 linear feet old curbstones.  
11,578.5 square feet new flagging.  
345.6 square feet old flagging.  
1,118.8 square feet new bridge stone.  
4.6 cubic yards dry rubble masonry.  
115 linear feet fencing.  
Completed.
- Southern Boulevard, One Hundred and Thirty-eighth street to Hunt's Point road, regulating, grading, etc.—  
15,580 cubic yards filling.  
In progress.
- Robbins avenue, Southern Boulevard to St. Mary's Park, regulating, grading, etc.—  
3,400 cubic yards earth excavation.  
3,900 cubic yards rock excavation.  
4,400 cubic yards filling.  
In progress.
- Union avenue, Southern Boulevard to Westchester avenue, asphalt paving—  
5,350 linear feet old curbstones.  
2,710.6 square yards asphalt pavement.  
Completed.
- St. Mary's street, etc. (private permit), regulating, grading, etc.—  
600 cubic yards earth excavation.  
600 cubic yards rock excavation.  
11,000 cubic yards filling.  
Completed.
- Brown place, East One Hundred and Thirty-second street to East One Hundred and Thirty-eighth street, regulating, grading, etc.—  
3443.4 cubic yards earth excavation.  
10,790 cubic yards rock excavation.  
1,704 cubic yards filling.  
1,622.1 linear feet new curbstones.  
6,227.6 square feet new flagging.  
Completed.
- Norwood avenue, Woodlawn road to Two Hundred and Seventh street, Maria L. Travers Estate, regulating, grading, etc.—  
1,012 cubic yards earth excavation.  
482 cubic yards filling.  
906 linear feet new curbstones.  
91.57 square feet new flagging.  
955 square feet bridge stone.  
98 cubic yards dry rubble masonry.  
942 linear feet fencing.  
1,398 linear feet paved gutters.  
Completed.
- Construction of Rose Hill place—  
597.3 cubic yards filling.  
180.3 linear feet new curbstones.  
54 linear feet old curbstones.  
84 square feet new flagging.  
52.5 cubic yards dry rubble masonry.  
10.3 cubic yards first and second-class masonry.  
241 linear feet vitrified pipe.  
1,441.7 square yards asphalt pavement.  
1,423.5 square yards brick pavement.  
30,700 square feet siding (C. O.).  
6 cast-iron gratings.  
Completed.
- Clinton avenue, Crotona Park, North, to One Hundred and Eighty-second street, regulating, grading, etc.—  
978.7 cubic yards earth excavation.  
439.1 cubic yards rock excavation.  
2,309.9 cubic yards filling.  
1,511 linear feet new curbstones.  
7,695.2 square feet new flagging.  
949.2 square feet bridge stone.  
6 cubic yards dry rubble masonry.  
1,191.5 linear feet fencing.  
48 linear feet vitrified pipe.  
396 feet B. M. lumber.  
Completed.
- Fordham road, One Hundred and Eighty-ninth street to Jerome avenue (private permit), regulating, grading, etc.—  
2,528.7 cubic yards earth excavation.  
276.3 cubic yards rock excavation.  
256.9 cubic yards filling.  
844 linear feet new curbstones.  
3,255.2 square feet new flagging.  
456.8 square feet bridge stone.  
Completed.



Spring place, Third avenue to Boston road, regulating, grading, etc.—  
 1,123.7 cubic yards earth excavation.  
 1,339.2 cubic yards rock excavation.  
 2,145.5 cubic yards filling.  
 1,071.5 linear feet new curbstone.  
 4,573 square feet new flagging.  
 250.2 cubic yards dry rubble masonry.  
 Completed.

River avenue, One Hundred and Forty-ninth street to Jerome avenue, regulating, grading, etc.—  
 2,350 cubic yards earth excavation.  
 61,850 cubic yards filling.  
 2,500 linear feet new curbstone.  
 4,480 square feet new flagging.  
 In progress.

One Hundred and Fortieth street, Third avenue to Brook avenue, asphalt repaving—  
 3,182.2 linear feet new curbstone.  
 6,849.7 square yards asphalt pavement.  
 Completed.

Crotone Park, South Fulton avenue, to Prospect avenue, regulating, grading, etc.—  
 201 cubic yards earth excavation.  
 427.6 cubic yards rock excavation.  
 7,093.2 cubic yards filling.  
 2,224.5 linear feet new curbstone.  
 9,162.8 square feet new flagging.  
 688.4 square feet bridge stone.  
 45.9 linear feet fencing.  
 Completed.

One Hundred and Thirty-seventh street, Brook avenue to Southern Boulevard, regulating, grading, etc.—  
 684.5 cubic yards earth excavation.  
 537 cubic yards rock excavation.  
 207.9 cubic yards filling.  
 743.1 linear feet new curbstone.  
 8,862.6 square feet new flagging.  
 544 square feet bridge stone.  
 Completed.

Macy place, Prospect avenue to Hewitt place (private permit), regulating, grading, etc.—  
 591.9 linear feet curbstone.  
 44.6 linear feet old curbstone.  
 473.2 square feet new flagging.  
 26.4 square feet old flagging.  
 120 square feet bridge stone.  
 Completed.

Spencer place, One Hundred and Forty-fourth street to One Hundred and Fiftieth street, regulating, grading, etc.—  
 128.5 cubic yards earth excavation.  
 578.5 cubic yards rock excavation.  
 4,735.4 cubic yards filling.  
 2,046.3 linear feet new curbstone.  
 8,162.3 square feet new flagging.  
 3.1 cubic yards dry rubble masonry.  
 738.9 linear feet fencing.  
 Completed.

One Hundred and Fifty-sixth street Beam Tunnel over Port Morris Branch, asphalt paving (C. O.)—  
 145 linear feet new curbstone.  
 12 square feet new flagging.  
 265 square yards asphalt pavement.  
 10 square yards granite pavement.  
 Completed.

One Hundred and Thirty-eighth street, Railroad avenue to Mott avenue, granite pavement (C. O.)—  
 787 square yards granite pavement.  
 Completed.

Gerard, Walton and River avenues, etc., bridges—  
 698 cubic yards earth excavation.  
 15.3 cubic yards rock excavation.  
 2,926.3 cubic yards filling.  
 372 linear feet new curbstone.  
 1,638.8 square feet new flagging.  
 559.8 cubic yards cement rubble masonry.  
 507 cubic yards first and second class masonry.  
 45 cubic yards concrete.  
 689.8 square yards asphalt pavement.  
 7,446.3 pounds iron and steel.  
 700 linear feet iron railing.  
 16 lamp posts.  
 Completed.

BRIDGES.

Brook avenue steel-beam structure—  
 2,717 cubic yards filling.  
 1,429.4 linear feet new curbstone.  
 1,430 square feet bridge stone.  
 2,37 cubic yards first and second class masonry.  
 1.46 cubic yards brick masonry.  
 6.8 cubic yards concrete.  
 0.9 cubic yards foundation.  
 1,167 square yards paving.  
 4,804 square yards granite paving.  
 2,275 pounds of iron and steel.  
 2,448 square yards waterproofing.  
 19 linear feet iron railing.  
 Completed.

Melrose Avenue Viaduct—  
 600 cubic yards first and second class masonry.  
 1,500 cubic yards concrete.  
 3,000 cubic yards foundation excavation.  
 In progress.

SUMMARIZED STATEMENT OF WORK DONE DURING THE YEAR 1899.

187,480.8 cubic yards earth excavation.  
 193,171.2 cubic yards rock excavation.  
 744,291.1 cubic yards filling.  
 179,007.2 linear feet new curbstone.  
 6,469.9 linear feet old curbstone.  
 764,356.2 square feet new flagging.  
 6,242.9 square feet old flagging.  
 90,133 square feet new bridge stone.  
 25,597.5 cubic yards dry rubble masonry.  
 9,459.8 cubic yards rubble masonry in mortar.  
 1,119.7 cubic yards first and second class masonry.  
 8 cubic yards brick masonry.  
 1,658.8 cubic yards concrete.  
 3,000.9 cubic yards foundation excavation.  
 1,448 linear feet coping.  
 20,052 linear feet fencing.  
 50,684.4 linear feet paved gutters.  
 965 linear feet vitrified pipe.  
 2,470 linear feet vitrified pipe in concrete.  
 951 linear feet brick drain 3 feet 9 inches, 4 feet, 4 feet 9 inches in diameter.  
 2,474 linear feet brick drain 2 feet 6 inches, 2 feet 9 inches, 3 feet, 3 feet 3 inches in diameter.  
 19,819.5 square yards asphalt pavement.  
 1,423.5 square yards brick pavement.  
 6,507 square yards granite pavement.  
 25 manholes.  
 29 receiving basins.  
 37,796 square feet B. M. lumber.  
 11,200 linear feet piling.  
 76,738 pounds iron and steel.  
 2,448 square yards waterproofing.

165 cubic yards fine sized bluestone steps.  
 920 square yards gravel walks.  
 35,227 square feet sodding.  
 452.4 linear feet galvanized iron pipe.  
 863.5 linear feet iron railing.  
 6 cast-iron gratings.  
 16 lamp posts.  
 33 final payments.  
 189 seventy per cent. payments.  
 29 payments on acceptance.  
 10 five per cent. and ten per cent. retained amount payments.  
 159 surveys (preliminary).  
 361 standard bench marks established.  
 16 final examinations.  
 97 sewers measured.  
 34 assessment lists completed; lots, 3,017; frontage linear feet, 223,082.1.  
 10 assessment lists in progress.  
 32 records completed.  
 94 field books completed.  
 12 plans completed.  
 27 plans in progress.  
 142 tracings completed.

REGULATING AND GRADING CONTRACTS COMPLETED, 1899.

	Linear Feet.
One Hundred and Sixty-ninth street, from Jerome avenue to Concourse.....	1,040
One Hundred and Sixty-third street, from Third to Westchester avenue.....	2,538.7
Rogers place, from Dawson to One Hundred and Sixty-fifth street.....	1,544
Narwood avenue, from Woodlawn road to Two Hundred and Seventh street.....	6,833.52
One Hundred and Seventieth street, from Franklin avenue to Boston road.....	909.69
One Hundred and Sixty-ninth street, from Jerome to Roscoe avenue.....	450
Ogden avenue, from Jerome avenue to Washington Bridge.....	4,270
Marion avenue, from One Hundred and Eighty-fourth street to Mosholu parkway....	4,643.5
Tremont avenue, from New York and Harlem Railroad to Jerome avenue.....	2,437
Clinton avenue, from Crotone Park, North, to One Hundred and Eighty-second street..	3,517
Bathgate avenue, from Wandover avenue to One Hundred and Eighty-eighth street...	7,107.5
Spring place, from Third avenue to Boston road.....	549
Wilkins place, from Boston road to Southern Boulevard.....	1,678.9
One Hundred and Thirty-seventh street, from Brook avenue to Southern Boulevard...	1,868.9
Crotone Park, South, from Fulton to Prospect avenue.....	1,136.6
Valentine avenue, from Barnside avenue to One Hundred and Ninety-second street...	5,179
Rose Hill place.....	.....
One Hundred and Seventy-second street, from Southern Boulevard to Bronx river....	1,768
One Hundred and Seventy-third street, from Southern Boulevard to West Farms road..	1,538
Fox street, from Westchester avenue to Freeman street.....	1,912
Stebbins avenue, from Dawson street to Boston road.....	5,608
Cheever place, from Mott to Gerard avenue.....	470
Fordham road, from One Hundred and Eighty-ninth street to Jerome avenue (private permit).....	488
Macy place, from Prospect avenue to Hewitt place (private permit).....	345.2
Walton avenue, from One Hundred and Thirty-eighth to One Hundred and Fiftieth street.....	2,227.6
Mott avenue, from Park avenue to One Hundred and Sixty-first street.....	5,619.03
Lorelei Fountain.....	.....
Roscoe avenue, from Jerome avenue to Washington Bridge.....	3,180
Spencer place, from One Hundred and Forty-fourth to One Hundred and Fiftieth street	1,036.9
Brown place, from One Hundred and Thirty-second to One Hundred and Thirty-eighth street.....	800
Barretto street, from One Hundred and Sixty-fifth street to Intervale avenue.....	1,927.9
One Hundred and Sixty-seventh street, from New York and Harlem Railroad to Sheridan avenue.....	2,543
One Hundred and Eighty-first street, from Sedgwick to Aqueduct avenue (private permit).....	1,200

Total length of streets regulated and graded during the year 1899, not including streets partially completed.....

76,364.341 Miles, 14.40

One contract (Barretto street, from One Hundred and Sixty-fifth street to Intervale avenue) is for regulating, grading and paving, and is included in both grading and paving lists.  
 33 regulating, etc., contracts completed.  
 4 paving contracts completed.  
 2 bridge contracts completed.

SUMMARY.

Contracts in Force January 1, 1899.

Regulating, grading, etc.....	49
*Regulating, paving, etc.....	3
Viaducts or bridges.....	4
Miscellaneous (C. O.).....	50

Contracts Executed During 1899.

(Regulating, grading, etc.....	2
*Regulating, paving, etc.....	1
Miscellaneous (C. O.).....	3
	6

Contracts Completed During 1899.

(Regulating, grading, etc.....	29
*Regulating, paving, etc.....	4
Viaducts or bridges.....	2
Miscellaneous (C. O.).....	3
	38

Contracts Still in Force December 31, 1899.

Regulating, grading, etc.....	22
Regulating, paving, etc.....	0
Viaducts or bridges.....	2
	24

\* Includes one contract for regulating, grading and paving, not included in regulating and grading.  
 † Includes one contract for foundation, etc., for Lorelei Fountain.

PAVING, 1899.

Work Done under Contract, etc., Year ending December 31, 1899.

TITLE OF WORK.	KINDS.	LAIN YARDS.	LINEAR FEET.
Home street, from Boston road to Intervale avenue.....	Gravels.....	3,200.8	245
One Hundred and Sixty-third street, from Third to Westchester avenue.....	".....	53.2	.....
Brook Avenue Beam Tunnel.....	".....	4,804	931
One Hundred and Thirty-eighth street, from Railroad to Mott avenue.....	".....	797	.....
One Hundred and Fortieth street, from Third to Brook avenue.....	Asphalt.....	6,849.7	2,034.9
Union avenue, from Southern Boulevard to Westchester avenue.....	".....	2,710.6	763
Walton, Gerard, River Avenues, etc., Bridges.....	".....	683.2	103.1
Barretto (Fox) street, from One Hundred and Sixty-fifth street to Intervale avenue.....	".....	6,309.7	1,907.6
One Hundred and Fifty-sixth street, over the Port Morris Branch Railroad.....	".....	485	35.1
Add to granite pavement.....	.....	8,947	940
Added from trap pavement.....	.....	6,449.7	2,034.9
Add to asphalt pavement.....	.....	27,000.8	4,782

\* The yardage on One Hundred and Thirty-eighth street included as granite, but no length allowed.



Total Mileage December 31, 1899.

Miles.

Gravel	33.009
Trap	7.921
Asphalt	9.291
Brick	1.075
<b>Total</b>	<b>51.316</b>

SQUARE YARDS OF PAVEMENT LAID AND RELAID AND NET INCREASE OR DECREASE FROM 1895.

Trap Block.

YEAR.	LAID OR JANUARY 1.	LAID DURING THE YEAR.	REPAVED.	INCREASE.	DECREASE.	REMARKS.
1895	317,563	13,857	26,512	.....	26,512	Third avenue relaid with granite.
1896	284,794	3,860	26,000	.....	26,000	With avenue relaid with asphalt.
1897	261,320	14,872	2,284	.....	.....	Melrose avenue intersection relaid with granite.
1898	208,972	.....	75,972	.....	25,972	Asphalt on block pavement.
1899	181,724	.....	.....	.....	23,024	Gerard avenue (private property) asphalt on blocks.
1900	155,244	.....	.....	.....	26,480	One Hundred and Forty-third street, asphalt.
1901	128,769	.....	.....	.....	.....	

Granite Block.

YEAR.	LAID OR JANUARY 1.	LAID DURING THE YEAR.	REPAVED.	INCREASE.	DECREASE.	REMARKS.
1895	237,847	244,700	.....	244,700	.....	
1896	237,847	207,800	.....	207,800	.....	
1897	461,754	272,070	7,700	272,070	.....	Melrose avenue intersection relaid on concrete.
1898	621,964	231,000	47,984	231,000	.....	Asphalt on blocks and in cycle strip.
1899	285,272	40,000	5,800	34,200	.....	St. Ann's avenue strip.
1900	726,804	5,800	.....	5,800	.....	Holmes street, One Hundred and Thirty-ninth street (temporary).
1901	730,320	.....	.....	.....	.....	

Asphalt and Brick.

YEAR.	LAID OR JANUARY 1.	LAID DURING THE YEAR.	REPAVED.	INCREASE.	DECREASE.	REMARKS.
1895	24,000	24,000	.....	24,000	.....	(No other square).
1896	24,000	24,000	.....	24,000	.....	
1897	24,000	24,000	.....	24,000	.....	
1898	24,000	24,000	.....	24,000	.....	
1899	24,000	24,000	.....	24,000	.....	
1900	24,000	24,000	.....	24,000	.....	

PAVEMENT CONTRACTED FOR AND LAID EACH YEAR AND TOTAL EXTENT OF PAVED STREETS AT END OF YEAR IN BOROUGH OF THE BRONX.

YEARS.	TRAP BLOCK.		GRANITE.		ASPHALT.		BRICK.		TOTAL PAVED.	
	Square Yards.	Miles.	Square Yards.	Miles.	Square Yards.	Miles.	Square Yards.	Miles.	Miles Each Year.	Miles at End of Year.
1895	30,194.0	1.0	.....	.....	.....	.....	.....	.....	1.0	1.0
1896	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.0
1897	16,083.0	0.49	.....	.....	.....	.....	.....	.....	0.49	1.49
1898	45,960.0	1.04	.....	.....	.....	.....	.....	.....	1.04	2.53
1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1900	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1901	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1902	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1905	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1906	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1907	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1908	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1909	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1910	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1911	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1912	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1913	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1914	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1915	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1916	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1917	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1918	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1919	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1920	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1921	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1922	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1923	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1924	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1925	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1926	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1927	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1928	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1929	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1930	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1931	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1932	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1933	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1934	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1935	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1936	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1937	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1938	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1939	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1940	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1941	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1942	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1943	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1944	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1945	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1946	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1947	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1948	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1949	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53
1950	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53

OFFICE OF THE CHIEF ENGINEER, DEPARTMENT OF HIGHWAYS, BOROUGH OF THE BRONX.

Financial Statement of Contracts under Construction on which Payments have been Earned during the Year ending December 31, 1899.

TITLE OF WORK.	ESTIMATED COST.	TOTAL AMOUNT EARNED.	TOTAL AMOUNT RETAINED.	TOTAL AMOUNT CONTINUED.	AMOUNT EARNED DURING YEAR.	AMOUNT CONTINUED DURING YEAR.	REMARKS.
Tremont avenue, regulating, grading, etc., from Jerome to Adelphi street.	\$42,242.30	\$19,052.30	\$5,717.93	\$13,334.37	\$6,747.50	\$6,747.50	75 per cent., No. 1.
River avenue, regulating, grading, etc., from One Hundred and Forty-eighth street to Jerome avenue.	\$8,933.00	\$4,544.00	\$1,447.30	\$3,096.70	\$1,447.30	\$1,447.30	" No. 2.
One Hundred and Seventy-third street, regulating, grading, etc., from Southern Boulevard to West End street.	\$3,443.00	\$2,500.00	\$877.00	\$1,623.00	\$1,623.00	\$1,623.00	" No. 3.
Prospect avenue, regulating, grading, etc., from Westchester avenue to Crotona Park, South.	\$7,000.00	\$3,190.00	\$1,044.18	\$2,145.82	\$1,044.18	\$1,044.18	" No. 4.
One Hundred and Seventy-second street, regulating, grading, etc., from Southern Boulevard to Bronx river.	\$3,443.00	\$2,500.00	\$877.00	\$1,623.00	\$1,623.00	\$1,623.00	" No. 5.
Kipp's street, regulating, grading, etc., from Strayton Dwyer parkway to Johnson avenue.	\$9,413.30	\$10,000.00	\$2,191.81	\$13,188.19	\$2,191.81	\$2,191.81	" No. 6.
Siddons avenue, regulating, grading, etc., from Dawson street to Boston road.	\$10,000.00	\$5,000.00	\$1,666.67	\$3,333.33	\$1,666.67	\$1,666.67	" No. 7.
Broadway (Crotona avenue), regulating, grading, etc., from Boston road to Southern Boulevard.	\$5,240.00	\$3,844.00	\$1,281.33	\$2,562.67	\$1,281.33	\$1,281.33	" No. 8.
Fox (Simpson) street, regulating, grading, etc., from Westchester avenue to Freeman street.	\$4,500.00	\$2,250.00	\$750.00	\$1,500.00	\$750.00	\$750.00	" No. 9.
Crotona Park, South, regulating, grading, etc., from Fulton to Prospect avenue.	\$4,420.75	\$2,210.38	\$736.78	\$1,473.60	\$736.78	\$736.78	" No. 10.
Timberline avenue, regulating, grading, etc., from Westchester avenue to One Hundred and Sixty-first street.	\$6,180.00	\$2,700.00	\$900.00	\$1,800.00	\$900.00	\$900.00	" No. 11.
One Hundred and Seventy-third street, regulating, grading, etc., from Franklin avenue to Boston road.	\$7,470.00	\$3,735.00	\$1,245.00	\$2,490.00	\$1,245.00	\$1,245.00	" No. 12.
Tiffany street, regulating, grading, etc., from Intervale avenue to Elm street.	\$40,375.00	\$19,175.00	\$6,391.67	\$12,783.33	\$6,391.67	\$6,391.67	" No. 13.
Morris avenue, regulating, grading, etc., from New York and Harlem Railroad to Grand Boulevard and Crotona.	\$19,783.00	\$9,891.50	\$3,297.17	\$6,594.33	\$3,297.17	\$3,297.17	" No. 14.
Anthony avenue, regulating, grading, etc., from Clay avenue to Grand Boulevard and Crotona.	\$7,312.00	\$3,656.00	\$1,218.67	\$2,437.33	\$1,218.67	\$1,218.67	" No. 15.
Inwood avenue, regulating, grading, etc., from Crotona Park to East End street.	\$7,464.00	\$3,732.00	\$1,244.00	\$2,488.00	\$1,244.00	\$1,244.00	" No. 16.
Walton avenue, regulating, grading, etc., from One Hundred and Thirty-eighth street to One Hundred and Forty-eighth street.	\$4,075.00	\$2,037.50	\$678.75	\$1,358.75	\$678.75	\$678.75	" No. 17.
Wilcox street, regulating, grading, etc., from Southern Boulevard to Bronx road.	\$3,475.00	\$1,737.50	\$578.75	\$1,158.75	\$578.75	\$578.75	" No. 18.
Napier avenue, regulating, grading, etc., from Two Hundred and Thirty-third street to East Chester avenue to Morris avenue, etc.	\$26,775.00	\$13,387.50	\$4,462.50	\$8,925.00	\$4,462.50	\$4,462.50	" No. 19.
Westchester avenue, regulating, grading, etc., from Southern Boulevard to Bronx river.	\$7,342.00	\$3,671.00	\$1,223.67	\$2,447.33	\$1,223.67	\$1,223.67	" No. 20.
Aqueduct avenue, regulating, grading, etc., from Lind avenue to Kingsbridge road.	\$13,918.00	\$6,959.00	\$2,319.67	\$4,639.33	\$2,319.67	\$2,319.67	" No. 21.
One Hundred and Fifty-first street, regulating, grading, etc., from Main avenue to Exterior street.	\$3,246.00	\$1,623.00	\$541.00	\$1,082.00	\$541.00	\$541.00	" No. 22.
Valentine avenue, regulating, grading, etc., from Barnard avenue to Kingsbridge road.	\$4,474.00	\$2,237.00	\$745.67	\$1,491.33	\$745.67	\$745.67	" No. 23.
Arthur avenue, regulating, grading, etc., from One Hundred and Seventy-seventh street to Tremont avenue to Fulton avenue.	\$5,507.00	\$2,753.50	\$917.83	\$1,835.67	\$917.83	\$917.83	" No. 24.
Southern Boulevard, regulating, grading, etc., from One Hundred and Thirty-eighth street to Hunt's Point road.	\$5,450.00	\$2,725.00	\$908.33	\$1,816.67	\$908.33	\$908.33	" No. 25.
Chester place, regulating, grading, etc., from Main avenue to Gerard avenue.	\$4,700.00	\$2,350.00	\$783.33	\$1,566.67	\$783.33	\$783.33	" No. 26.
Sheridan avenue, regulating, grading, etc., from One Hundred and Fifty-third street to One Hundred and Sixty-first street.	\$4,091.70	\$2,045.85	\$681.95	\$1,363.90	\$681.95	\$681.95	" No. 27.
One Hundred and Fifty-seventh street, regulating, grading, etc., from Park avenue to Southern Boulevard.	\$5,431.42	\$2,715.71	\$905.24	\$1,810.47	\$905.24	\$905.24	" No. 28.
Webster avenue, completing, regulating, grading, etc., from Mulford Parkway to city line.	\$8,807.00	\$4,403.50	\$1,467.83	\$2,935.67	\$1,467.83	\$1,467.83	" No. 29.
Two Hundred and Thirty-third street, completing, regulating, grading, etc., from Jerome avenue to Bronx river.	\$2,022.00	\$1,011.00	\$337.00	\$674.00	\$337.00	\$337.00	" No. 30.
<b>Total amount of 75 per cent. payments.</b>	<b>\$2,745,730.00</b>	<b>\$1,372,865.00</b>	<b>\$457,455.00</b>	<b>\$914,810.00</b>	<b>\$457,455.00</b>	<b>\$457,455.00</b>	
Melrose Avenue Viaduct over New York and Harlem Railroad.	\$161,081.00	\$80,540.50	\$26,846.83	\$53,693.67	\$26,846.83	\$26,846.83	75 per cent., No. 31.
<b>Total amount of 75 per cent. payments.</b>	<b>\$161,081.00</b>	<b>\$80,540.50</b>	<b>\$26,846.83</b>	<b>\$53,693.67</b>	<b>\$26,846.83</b>	<b>\$26,846.83</b>	
	Estimated Cost.	Actual Cost.					
Booth street, regulating, grading, etc., from Jerome avenue to Washington Bridge.	\$41,193.00	\$40,443.70	\$749.30	\$749.30	\$749.30	\$749.30	1 Under 6 months' repairs.
Tremont avenue, regulating, grading, etc., from New York and Harlem Railroad to Jerome avenue.	\$2,675.00	\$2,675.00	\$69.00	\$69.00	\$69.00	\$69.00	1 Under 6 months' repairs.
Crotona avenue, regulating, grading, etc., from Crotona Park, North, to East One Hundred and Eighty-second street.	\$1,584.00	\$1,584.00	\$39.00	\$39.00	\$39.00	\$39.00	1 Under 6 months' repairs.
Brook avenue, steel beam structure crossing Port Morris Branch Railroad at One Hundred and Fifty-seventh street.	\$4,070.00	\$4,070.00	\$101.75	\$101.75	\$101.75	\$101.75	1 Under 6 months' repairs.
One Hundred and Thirty-seventh street, regulating, grading, etc., from Brook avenue to Southern Boulevard.	\$7,390.00	\$7,390.00	\$184.75	\$184.75	\$184.75	\$184.75	1 Under 6 months' repairs.

\* Excess inspection.

† Those who include 75 per cent. payments made during year.



TITLE OF WORK.	ESTIMATED COST.	ACTUAL COST.	TOTAL AMOUNT RETAINED.	TOTAL AMOUNT CERTIFIED.	AMOUNT PAID DURING THE YEAR.	AMOUNT CERTIFIED DURING THE YEAR.	REMARKS.
Norwood avenue (Marx L. Travers estate), regulating, grading, etc., from Windlawn road to Two Hundred and Seventh street, etc.	\$43,666 00	Diff. less than 1 per cent. \$43,646 96	\$1,800 00 4,701 38	\$1,084 38	\$1,000 00	\$1,000 00	Under 6 months' repairs.
Baggate avenue, regulating, grading, etc., from Woodover avenue to One Hundred and Eighty-eighth street.	47,116 30	48,144 06 2 per cent. increase.	8,776 88	46,369 18	16,381 08	18,281 08	Under 6 months' repairs.
Rose Hill place, construction of.	9,684 65	12,311 70 25 per cent. increase.	376 84	733 00 12,379 80	9,339 80	9,339 80	Under 6 months' repairs.
General River and Walton avenues, etc., bridges over New York Central and Hudson River Railroad and New York and Putnam Railroad.	82,618 30	91,226 44 10 per cent. increase.	4,675 30	48,830 19	36,759 69	36,759 69	Under 5 years' repairs.
Roger place, regulating, grading, etc., from Dawson street to One Hundred and Sixty-fifth street.	10,874 40	10,689 69 2 per cent. decrease.	380 00	10,309 67	7,702 47	7,702 47	Under 6 months' repairs.
Marion avenue, regulating, grading, etc., from One Hundred and Eighty-fourth street to Mosholu Parkway.	41,336 30	43,588 08 5 per cent. increase.	1,250 88	42,427 20	18,509 60	18,509 60	Under 6 months' repairs.
One Hundred and Sixty-ninth street, regulating, grading, etc., from Jerome avenue to Boscobel avenue.	6,813 30	6,903 30 1 per cent. increase.	89 00	6,795 86	5,190 86	5,190 86	Under 6 months' repairs.
Ogden avenue, regulating, grading, etc., from Jerome avenue to Washington bridge.	30,696 30	37,117 18 21 per cent. increase.	1,067 50	36,053 68	21,704 23	21,704 23	Under 6 months' repairs.
Union avenue, paving asphalt, from Southern Boulevard to Westchester avenue.	28,400 00	28,400 00	8,539 48	19,860 50	5,217 90	5,217 90	Under 5 years' repairs.
Brown place, regulating, grading, etc., from One Hundred and Thirty-second street to One Hundred and Thirty-eighth street.	15,680 00	16,077 71 25 per cent. increase.	397 00	15,677 71	14,477 71	14,477 71	Under 6 months' repairs.
Mott avenue, regulating, grading, etc., from Park avenue to One Hundred and Sixty-first street.	38,459 70	31,013 77 17 per cent. decrease.	7,445 76	30,968 01	10,897 01	10,897 01	Under 6 months' repairs.
Spring place, regulating, grading, etc., from Third avenue to Boston road.	5,108 00	6,048 91 18 per cent. increase.	940 91	4,107 10	4,107 10	4,107 10	Under 6 months' repairs.
Lorelei Fountain, preparing site for, at One Hundred and Sixty-first street and Mott avenue.	3,717 00	4,107 10 10 per cent. increase.	390 10	4,107 10	4,107 10	4,107 10	Under 6 months' repairs.
One Hundred and Fourtieth street, regulating and repaving with asphalt, from Third avenue to Brook avenue.	22,372 20	22,340 35	5,702 18	16,638 02	16,638 02	16,638 02	Under 10 years' repairs.
Total amount of payment on acceptance.	\$548,080 26	5 per cent. increase \$575,384 34	\$27,304 08	\$507,031 26	\$266,310 40	\$266,310 40	
Approximate Variations from Estimated Cost Shown in Percentages.							
Plimpton avenue, regulating, grading, etc., from Orchard street to Boscobel avenue.	\$17,514 20	\$16,717 61 4 per cent.—		\$16,927 61		\$16,927 61	Complete.
Lind avenue, regulating, grading, etc., from Wolf street to Aqueduct avenue.	18,402 80	17,361 11 5 per cent.—		17,361 11		446 69	"
St. Joseph street, regulating, grading, etc., from Robbins avenue to Whitlock avenue.	22,094 00	21,390 14 3 per cent.—		21,390 14		703 86	"
One Hundred and Thirty-sixth street, regulating, grading, etc., from Brook avenue to Southern Boulevard.	5,078 61	5,038 01 1 per cent.—		5,038 01		40 60	"
One Hundred and Eightieth street, regulating, grading, etc., from Third avenue to Webster avenue.	3,441 25	3,382 17 1 per cent.—		3,382 17		59 08	"
Marble avenue, regulating, grading, etc., from Jerome avenue to Featherbed lane.	25,982 01	25,702 91 1 per cent.—		25,702 91		279 10	"
Ogden avenue, regulating, grading, etc., from Jerome avenue to One Hundred and Sixty-fourth street.	20,613 00	20,305 82 1 per cent.—		20,305 82		307 18	"
Hume street, regulating, grading, etc., from Intervale avenue to Westchester avenue.	18,981 05	18,003 04 5 per cent.—		18,003 04		978 01	"
Eagle avenue, regulating, paving, etc., from One Hundred and Forty-ninth street to One Hundred and Sixty-third street.	16,712 60	16,750 21 0 per cent.—		16,750 21		37 61	"
One Hundred and Sixty-seventh street, regulating, grading, etc., from Sheridan avenue to New York and Harlem Railroad.	28,735 40	29,094 09 1 per cent.—		29,094 09		358 69	Complete.
Loring place, regulating, grading, etc., from East One Hundred and Eighty-first street (University place) to Fordham road.	10,850 00	11,972 26 10 per cent.—		11,972 26		272 26	Complete.
Jerome avenue (Section 2), regulating and paving with macadam, from One Hundred and Sixty-second street to Tremont avenue.	47,723 00	48,130 01 1 per cent.—		48,130 01		4,407 01	"
Jerome avenue (Section 3), regulating and paving with macadam, from Tremont avenue to Van Cortlandt avenue.	62,450 00	60,785 81 2 per cent.—		60,785 81		7,664 19	"
East One Hundred and Sixty-eighth street, regulating, paving, etc., from Franklin avenue to Boston road.	1,803 20	1,830 75 1 per cent.—		1,830 75		27 55	"
Crotona Park, North, regulating, grading, etc., from Arthur avenue to East One Hundred and Seventy-fifth street.	24,070 00	23,236 83 3 per cent.—		23,236 83		833 17	"
Hume street, regulating, paving, etc., from Boston road to Intervale avenue.	11,750 00	11,248 20 4 per cent.—		11,248 20		5,001 80	Complete.
Gerard avenue, regulating, paving, etc., from Chester place to One Hundred and Fiftieth street.	9,191 80	9,070 48 1 per cent.—		9,070 48		1,121 32	Complete.
La Follade avenue, regulating, grading, etc., from Tremont avenue to Quarry road.	13,041 00	12,819 63 1 per cent.—		12,819 63		221 37	Complete.
East One Hundred and Thirty-eighth street, regulating, grading, etc., at a point 450 feet west of Alexander avenue to easterly side of Mott Haven Canal, westerly side of Mott Haven Canal to Harlem river.	8,358 43	9,861 70 18 per cent.—		9,861 70		1,503 27	"
Clinton avenue, regulating, grading, etc., from One Hundred and Sixty-ninth street to Crotona Park, South.	10,309 00	10,454 42 1 per cent.—		10,454 42		145 42	"
Brown place, regulating, paving, etc., from Southern Boulevard to One Hundred and Thirty-fifth street.	3,019 00	3,166 93 5 per cent.—		3,166 93		147 93	"
One Hundred and Sixty-ninth street (Arcularius place), regulating, grading, etc., from Jerome avenue to Grand Boulevard and Concourse.	5,305 95	5,011 10 5 per cent.—		5,011 10		2,947 85	Complete.
One Hundred and Seventy-third street, regulating, paving, etc., from Third avenue to Vanderbilt avenue, East.	4,791 60	4,791 60		4,791 60		4,791 60	Complete.
One Hundred and Fifty-eighth street, regulating, grading, etc., from River avenue to Walton avenue.	1,839 60	1,803 48 2 per cent.—		1,803 48		36 12	"
Jerome avenue (Section 4), regulating, paving, etc., from Van Cortlandt avenue to city line.	17,730 00	15,160 30 12 per cent.—		15,160 30		2,569 70	"
Orchard street, regulating, grading, etc., from Ogden avenue to Marble avenue.	4,080 00	3,018 87 26 per cent.—		3,018 87		1,061 13	"
One Hundred and Fifty-ninth street, regulating, grading, etc., from Walton avenue to Sheridan avenue.	9,582 70	8,246 34 13 per cent.—		8,246 34		1,336 36	"
One Hundred and Sixty-seventh street, regulating, grading, etc., from Third avenue to Franklin avenue.	5,224 30	4,901 33 6 per cent.—		4,901 33		322 97	"
One Hundred and Sixty-third street, regulating, grading, etc., from Third avenue to Westchester avenue.	27,118 00	27,118 00		27,118 00		27,118 00	Complete.
Total amount of completed payments.	\$177,181 39	\$178,113 62	Diff. less than 1 per cent.	\$178,113 62	\$177,181 39	\$177,181 39	
Webster avenue, paving (brick), from Kingsbridge road to Southern Boulevard.	\$14,697 00	\$16,010 41 9 per cent.—		\$16,010 41		\$16,010 41	Under 5 years' guarantee, 5 per cent. payment, No. 2.
One Hundred and Forty-fourth street, paving with asphalt, from Brook avenue to St. Ann's avenue.	\$8,366 00	\$8,396 33 0 per cent.—		\$8,396 33		\$8,396 33	Under 5 years' guarantee, 5 per cent. payment, No. 3.
Westchester avenue, repaving with asphalt, from Third to Prospect avenue.	\$9,844 20	\$12,720 00 29 per cent.—		\$12,720 00		\$12,720 00	Under 5 years' guarantee, 5 per cent. payment, No. 2.
One Hundred and Thirty-eighth street, repaving with asphalt, from Third to Willis avenue.	\$7,080 00	\$8,218 28 16 per cent.—		\$8,218 28		\$8,218 28	Under 5 years' guarantee, 5 per cent. payment, No. 2.
One Hundred and Thirty-sixth street, regulating and paving with asphalt, from Willis avenue to Brown place.	\$9,177 40	\$8,107 10 11 per cent.—		\$8,107 10		\$8,107 10	Under 5 years' guarantee, 5 per cent. payment, No. 2.
St. Ann's avenue, regulating, paving with asphalt, from Southern Boulevard to One Hundred and Thirty-eighth street.	\$18,004 20	\$16,433 73 8 per cent.—		\$16,433 73		\$16,433 73	Under 5 years' guarantee, 5 per cent. payment, No. 2.
Jerome avenue (Section 1), regulating and paving, from Macomb's Dam Bridge to One Hundred and Sixty-second street.	\$6,832 00	\$6,514 34 4 per cent.—		\$6,514 34		\$6,514 34	Under 5 years' guarantee, 5 per cent. payment, No. 1.
Boston road, repaving, from Third avenue to One Hundred and Sixty-fifth street.	\$3,312 50	\$3,112 65 6 per cent.—		\$3,112 65		\$3,112 65	Under 5 years' guarantee, 5 per cent. payment, No. 1.
One Hundred and Thirty-seventh street, paving with asphalt, from Lincoln to Alexander avenue.	\$5,109 50	\$5,112 00 0 per cent.—		\$5,112 00		\$5,112 00	Under 5 years' guarantee, 5 per cent. payment, No. 1.
Union avenue, paving with asphalt, from Westchester avenue to Boston road.	\$7,365 50	\$7,455 15 1 per cent.—		\$7,455 15		\$7,455 15	Under 5 years' guarantee, 5 per cent. payment, No. 1.
Total amount of 5 and 10 per cent. payments.	\$200,290 00	\$185,601 00	\$14,689 00	\$185,601 00		\$185,601 00	
One Hundred and Thirty-eighth street, paving, from easterly crosswalk of Railroad avenue to easterly crosswalk of Mott avenue.	\$999 49	\$999 49		\$999 49		\$999 49	Complete (C. O.).
Beam tunnel, asphalt surface, over F. M. R. of the N. Y. and H. R. R. at One Hundred and Fifty-ninth street.	793 35	793 35		793 35		793 35	"
Total amount of C. O.	\$1,794 84	\$1,794 84		\$1,794 84		\$1,794 84	

\* Excess inspection.

† Includes C. O. of \$975.

‡ These also include 70 per cent. payments made during year.

§ Special repairs.

§ Increase, special payment, \$27,300 — Decrease.

+ Increase.

§ Includes 70 per cent. payments, payments on acceptance and repaved amounts.



## RECAPITULATION.

TITLE OF WORK.	TOTAL ESTIMATED COST.	TOTAL AMOUNT EXPENDED.	TOTAL AMOUNT RETAINED.	TOTAL AMOUNT CERTIFIED.	AMOUNT EXPENDED DURING YEAR ENDING DECEMBER 31, 1899.	AMOUNT CERTIFIED DURING YEAR ENDING DECEMBER 31, 1899.
Total amount of 70 per cent. payments.....	\$1,645,270 80	\$1,146,730 80	\$327,449 81	\$755,321 87	\$676,265 17	\$415,281 82
Total amount of 25 per cent. payments.....	251,051 30	12,115 00	1,007 95	9,447 75	11,175 00	9,447 75
Total amount of payments on acceptances.....	547,080 05	550,054 04	22,410 82	507,643 22	976,370 40	270,810 48
Total amount of completed payments.....	478,142 00	471,222 02	.....	471,222 02	44,757 44	74,750 37
Total amount of payments on retained amounts.....	150,098 80	145,000 00	31,030 85	155,030 15	.....	14,580 98
Total amount of Commissioner orders.....	1,794 84	1,794 84	1,794 84	1,794 84	1,794 84	1,794 84
Grand total.....	\$3,015,190 99	\$2,354,007 28	\$405,240 97	\$1,050,680 10	\$697,430 91	\$495,114 91

## DOCUMENT "A.1."

DEPARTMENT OF HIGHWAYS—BOROUGH OF BROOKLYN,  
MUNICIPAL BUILDING, January 17, 1900.

Hon. JAMES P. KEATING, Commissioner of Highways, City of New York.

DEAR SIR:—Herewith I beg to hand you the annual report of the Department of Highways, in the Borough of Brooklyn, for the year ending December 31, 1899, in which the work of the Department for the year is fully covered; much that is contemplated for the ensuing year is also necessarily touched upon.

The following is a recapitulation of construction work done under the jurisdiction of this Department during the past year:

	MILES.	SQUARE YARDS.
Asphalt pavement laid.....	4.83	38,000
Gravel.....	4.75	41,000
Macadam laid.....	5.00	100,000
Regulating and grading.....	5.00	.....
Cement sidewalks laid.....	.....	1,136,793
Bluestone flagging laid.....	.....	257,014

During the year 410 preliminary estimates for improvements have been made, aggregating \$1,455,335.50; 31,392 permits for various work have been issued; 874 notices to change house numbers have been sent out; 2,494 complaints have been received and reported upon.

The recommendations and resolutions that have been passed by the Local Boards and the Municipal Assembly for improvements are in the aggregate \$3,000,000, and it is well-nigh impossible to satisfy the innumerable requests made by the property owners and residents upon the Department. No doubt a great many of such petitioners will be disappointed when the announcement is made by the Department of Highways of the streets to be improved under the present bond issue of \$700,000; but at the same time a commencement had to be made, and it is thought advisable to pave the intersections of streets already partly paved with asphalt, so as in, if possible, have continuous thoroughfares of improved pavements. With the one exception of Bedford avenue, it might be said that there is not one street in this borough paved with an improved pavement that can be called a continuous thoroughfare.

It should be taken into consideration that after the expenditure of the present bond issue the mileage of cobble streets will be considerably reduced, and in anticipation of the new bond issue for repaving, other recommendations of the Local Boards and the Municipal Assembly could be taken up with the desire to improve the condition of the streets of our borough.

In making out the list of streets to be repaved, the following general principles have been borne in mind:

First—The value of a good pavement to the public increases greatly with its length. Therefore short breaks in existing smooth pavement should be closed, and the new pavements should consist of extensions of and connections between those already laid.

Second—Lines of smooth pavement should penetrate every part of the borough, so that it will be possible to reach every section without leaving such pavements.

Third—No two or more parallel streets in the same vicinity should be repaved until a complete system, as above outlined, shall have been provided, unless required to remedy unsanitary conditions.

Fourth—No smooth pavements should be laid unless they connect directly with such pavements already laid, except as noted in the next paragraph.

Fifth—Smooth, noiseless pavements should be laid as soon as possible in front of all hospitals, schools and churches.

The laying of an asphalt pavement on a single block is strictly a "local improvement," and a "local improvement" cannot justly be made at the expense of the general public. When, therefore, residents of a single block ask for such an improvement for their own special comfort and convenience, I think they should be willing to pay one-half the expense of such work.

The policy of the Department has been to repave some of the cobble streets with granite, the work being done by City employees and paid for out of the Maintenance Account; that plan has been followed with very satisfactory results during the past year. Unfortunately, however, the small amount allowed by the Board of Estimate to this borough department will not permit us to continue along this line during the year 1900.

I would call to your attention the need of discouraging, as much as possible, the laying of macadam pavements in this borough. Such pavements are in no way permanent in their character and the cost to the City for maintenance makes them ultimately more expensive than if a substantial pavement had been laid originally. In many instances property owners petition that macadam pavement be laid because the work can be done more cheaply; this is particularly true when the improvement is an original one. The assessment borne by the property owners is light, and when the street is repaved the work is done at the expense of the city at large. It would seem but just that where macadam is laid it should not be considered in the light of "paving," and when a more substantial improved pavement is laid, that the property owners should bear the expense of same as in the case of an original improvement.

During the past year this Department directed the railroad company when relaying its tracks on Court street (during the repaving of said street) to do away with the wooden ties and substitute therefor the modern concrete beams, and the result was very satisfactory, as was stated in a previous quarterly report. It would appear that if the railroad companies were obliged in the future to relay their tracks in the most approved and modern manner, the pavement would remain in good condition for a much longer period.

The matter of asphalt maintenance contracts is an important one, and I would again urge the necessity for prompt action in relation thereto.

Much work is done in this Borough in the outlying wards, under private contracts, on streets which have not been legally opened and therefore are not under the supervision of this Department.

For information in detail concerning the working of this Department during the past year, I refer you to report of Engineer and tables appended thereto, herewith submitted.

Respectfully,

THOS. R. FARRELL, Deputy Commissioner of Highways.

DEPARTMENT OF HIGHWAYS,  
BOROUGH OF BROOKLYN, CITY OF NEW YORK,  
ENGINEER'S OFFICE, January 15, 1900.

Hon. THOMAS R. FARRELL, Deputy Commissioner of Highways:

SIR:—In making the second annual report of the engineering work of the Department of Highways in the Borough of Brooklyn, it must again be a report of plans and recommendations for the future rather than a record of what has been accomplished during the year just closed. The net results of the construction work of the year may be summarized, as follows:

	MILES.	SQUARE YARDS.
Asphalt pavement laid.....	4.83	38,000
Gravel.....	4.75	41,000
Macadam laid.....	5.00	100,000
Regulating and grading.....	5.00	.....
Cement sidewalks laid.....	.....	1,136,793
Bluestone flagging laid.....	.....	257,014

This work is described in detail in the accompanying tables. All of the pavement laid was in the carrying out of improvements authorized by the Common Council or the Commissioner of City Works of the City of Brooklyn, except the paving of four blocks in the Eighth Ward, and this was done under the provisions of the Eighth Ward Improvement Law, chapter 305 of the Laws of 1889, and the acts amendatory thereof, although the streets to be improved were selected by this Department.

Eight contracts for flagging sidewalks, involving seventeen different improvements, have been initiated and completed in accordance with the present Charter. There still remain to be carried out the improvements inaugurated by the City of Brooklyn, in accordance with the Twenty-sixth Ward Improvement Act, chapter 310 of the Laws of 1892, and described in Table No. 13, while there were several improvements authorized by the Brooklyn Common Council, and for which assessments have been laid, and are a lien upon the property, and a portion of which have been collected. The streets affected are the following:

Hundred street, from Irving to Wyckoff avenue—Grading and paving with cobblestones; \$2,575.81, or 86 per cent. of the estimated cost collected.

Regent place, from Flatbush to Ocean avenue—One assessment for grading and curbing, upon which \$1,799.22, or 90 per cent. of the estimated cost, has been collected, and another assessment for paving with asphalt, upon which \$500.80, or 13 per cent., has been paid in.

Bay Eleventh street, from Eighty-sixth street to Crosey avenue—Grading and macadamizing; \$3,770.80, or 24 per cent. of estimated cost collected.

Somers street, from Stone avenue to Broadway—Grading and paving with trap blocks. No collections, but assessment of \$3,000 is a lien against the property.

In none of these cases has a contract been made, and attention has several times been called to the injustice of collecting this money, or allowing the assessments to stand as a lien upon the property, while the owners have not received the slightest benefit.

The recommendation is renewed that all of these proceedings be rescinded, and the money collected be refunded.

The machinery of the new Charter has begun to move and a number of improvements have already been authorized, the surveys for some of them have been made, and specifications and contracts will be prepared early in the year, so that active work may be commenced in the spring.

The people of Brooklyn are beginning to realize that street improvements are not so difficult to obtain under our present law, if they will only decide upon what they want and petition for it.

It is very gratifying to note the character of the improvements which are now asked for, as shown by Table No. 8. It will be seen that a large proportion of the contracts authorized are for asphalt pavement, and we may feel assured that Brooklyn has placed the days of cobblestone behind her, and that only modern pavements will hereafter be laid. Yet a number of the petitions submitted to the Local Boards have asked for macadam, but in nearly all cases the reports submitted by this Department have advised the substitution of asphalt or brick for residence streets, or that the street be simply graded, curbed and guttered at present, and the laying of a permanent pavement be deferred for a time, and these recommendations have usually been acted upon.

I am convinced that this Department should endeavor to restrict as much as possible the laying of macadam, which is the most expensive of all street surfaces to maintain. In my judgment it cannot be called a pavement at all, and the City would be justified in declining to bear any portion of the expense of substituting a permanent pavement for it on the ground that such an improvement would not be a repavement within the meaning of section 948 of the Charter, a macadamized street never having been paved. Property-owners ask for it because it is cheap, and believing that all renewals and repavement are to be done at the expense of the City at large, no portion of the cost of which can be charged to them, they naturally wish to unload as much of the expense as possible upon the general public. Nearly all of our people who have asphalt pavement on their streets at present paid either all or half of the cost of substituting it for the first pavement, the entire expense of which they had also paid. Is it fair or just, then, to permit new streets to be improved in a cheap and temporary manner, and tax those who have already paid for their own pavement to give them something better in the near future? "No," we are told, "our streets are public property, and the general public benefits by the improvement as much and often more than we do." This may be true, but the problem before us is a very practical and a very serious one. At the close of the year 1898 there were in the greater city 1,668 miles of paved or improved streets, of which 703 miles were macadamized, and of which macadam 53 per cent. was in the Borough of Queens.

If macadamized roads were to be classed as paved streets the substitution of permanent pavements for all this macadam would, under the present law, have to be done by the City, without any assistance from the abutting property-owners. This would be so serious a burden that it is doubtful if we could ever expect to have a well paved city. The average life of an asphalt or brick pavement is not more than twenty years, and probably less. If, then, the entire mileage noted were of improved pavements their renewal, to say nothing of their maintenance, would require the laying of from 80 to 85 miles of modern pavements, at an expense of about \$3,500,000 every year, but this is entirely distinct from and in addition to the millions required to convert our poor and worn-out stone pavements into modern ones. With this enormous annual expenditure absolutely necessary it does not seem reasonable or practicable that the City should also be compelled to convert cheap and short-lived pavements into permanent ones, without any assistance from the owners of the property directly benefited. The Local Improvement Law in force in Brooklyn before consolidation recognized this and imposed one-half of the expense of substituting an improved pavement for an old stone pavement upon the abutting owners. This plan worked satisfactorily and excellent progress was made under it up to the time of consolidation, and I cannot but think it was unfortunate that it was not incorporated into the new Charter.

But if all repaving is hereafter to be paid for by the city at large, this Department should, in my judgment, insist that the street improvements paid for by the property-owners should be as substantial and permanent as possible.

There are certain conditions under which this Department can consistently recommend that streets be macadamized. In order to reach an undeveloped section of the borough, or to connect centres of suburban population before sewers, water and gas pipes have been laid, macadam would be not only a justifiable but a wise selection. It should be laid over the central portion of the road only for a width of 15 to 20 feet, and on such gravelly soil as is almost invariably found in this borough it is unnecessary to provide paved gutters.

I submit a view of Kings Highway which was improved in the manner recommended with very satisfactory results, and one of Eighteenth avenue, where the entire width of the roadway was improved, stone gutters being laid so that the surface water cannot get away, although there are no sewers for its accumulation. Such improvements, since they benefit an entire section, could properly be assessed upon a considerable area, but in no case should they, in my opinion, relieve the abutting property from assessment for a permanent pavement.

Although the cost of properly maintaining macadamized roads, which maintenance must



include sprinkling during at least seven months of the year, is greater than that of caring for any kind of paved street, such macadam as we now have should be kept in thoroughly good condition, but its extension should be carefully restricted. If property-owners do not feel that they can afford to pay for an expensive pavement all at once, they can readily divide the expense by regulating and grading, curbing and guttering the streets, and defer the laying of the permanent pavement for a couple of years. The curb thus set, if protected by gutters, would not have to be disturbed, and if the gutters are paved with vitrified brick, this material could be successfully used in connection with an asphalt pavement, or could form a part of a new brick pavement with very little loss of material. This is a method of improvement which should be encouraged as much as possible, and would be still more desirable if it included flagging or the laying of cement walks.

It will sometimes happen that property-owners will not petition for street improvements which are very desirable for the convenience of a neighborhood or essential to its good sanitary condition. In such cases it seems that proceedings should be instituted upon the recommendation of this Department without waiting for petitions from property-owners. Of such a character are the recommendations recently made for paving with asphalt the streets of the section of the Twenty-sixth Ward known as Brownsville.

#### WORK CONTEMPLATED IN 1900.

There is every indication that a large amount of work will be done during the coming year. The original improvements authorized have been already referred to, and are shown by table No. 8. The only contracts for repaving yet made are two for laying new asphalt pavement on Bedford avenue, one from Heyward street to DeKalb avenue, and the other from Quincy street to Atlantic avenue. The expense of this work is to be paid out of the appropriation for Labor, Maintenance and Supplies for 1899, and not from the bond issue of \$700,000 authorized for repaving. The expenditure of \$60,000 for this purpose is certainly justifiable. Bedford avenue was one of the first streets in this Borough to be resurfaced with tar concrete, which was laid over the old cobblestones, and successive pavements have been superimposed upon this until the street surface has become badly distorted, the gutters have almost been eliminated, while the mass of bituminous matter forming the roadway varies from three or four to in some places ten or twelve inches in thickness. It is impossible to keep such a pavement in good surface, and the only remedy is to take up the old pavement, substituting a new one laid on a cement concrete foundation.

While the old pavement on Bedford avenue has been kept in quite good condition during the past year, it very soon falls into bad repair when work on it is suspended, as will be seen by the two views submitted, one taken on September 15, 1899, and the other on January 5, 1900. The annual cost of the repairs on this street have reached such a figure that repaving is the most economical course to pursue.

The sum of \$700,000 has been apportioned to this Borough for repaving, and a number of contracts will be made by the time that work can be begun in the spring.

While most of the requests for repaving ask for asphalt, a certain proportion of the work done should be with granite blocks. If the traffic on any street is heavy enough to require granite, such pavement should be laid in the most substantial manner on a concrete foundation. No other kind of stone pavement can be kept in good surface, or satisfactorily restored when opened.

Brick pavement is sometimes asked for in residential streets, and our experience has shown that such pavements are very satisfactory. They should be laid instead of asphalt on grades of over four per cent., but the success of the pavement depends upon the excellence of the foundation, and no attempt should be made to reduce its cost by economizing in this part of the work.

The most difficult pavements to maintain are those on streets occupied by surface railroad tracks, and the character of track construction should keep pace with the improvements in our pavements. The Charter gives the Commissioner of Highways guidance and control of "the laying or relaying of surface railroad tracks in any public street or road, of the form of rail used, or character of foundation, and the method of construction."

It is proper, therefore, that this Department should insist upon the most substantial and modern track construction. In relaying the tracks on Court street, between Jerusalem street and Atlantic avenue, the Brooklyn Heights Railroad Company adopted at my request the system of concrete beam construction, dispensing entirely with wooden cross-ties. The easterly track was built in this way, but the time required for the work was so long, and as it was being done at a time when the traffic was heaviest, the westerly track was relaid in the old manner, on wooden cross-ties resting upon the earth. The difference in the pavement between the two tracks is very noticeable. That along the westerly track has already required repairs, while where the wooden ties were omitted the pavement is in perfect condition. The time has certainly come to insist that all future track laying or relaying be done in a more permanent manner. A section of the construction recommended is herewith submitted, together with views of the Court street work during construction, and after completion.

The contracts for repairing and maintaining the asphalt pavements in this Borough expired on August 23. There has always been a very unfortunate delay in renewing these contracts, and the pavements have gone for months without repairs of any kind. Hoping to avoid this delay new contracts were prepared early in July, so that the pavements should not again suffer from neglect, as they had been maintained in an unusually thorough manner during the summer. Ordinances authorizing the contracts were not passed, however, by the Municipal Assembly, and it was finally decided by the Corporation Council that they were not necessary, but it was not until December 21 that bids were finally received. The result of this delay was that the work could scarcely be commenced before spring, the pavements had already fallen into bad repair, and the contract, nominally for one year's maintenance, would cover repairs for about twenty months, including two winters, as it would be impossible for the contractors to have these streets in condition for acceptance in mid-winter. The prices bid were apparently very high, but they were rendered so by the circumstances above mentioned, and the bids were all rejected, and new proposals are being asked. Our present system of repairing asphalt pavements is expensive and unsatisfactory. Attention was called in the last annual report to the advantages of the plan followed in the District of Columbia, where the amount of material used is paid for by the cubic foot. The adoption of this method is again recommended, and at the next letting specifications will be submitted for such a contract. The unnecessarily high cost of such repairs, due to the method followed in the past, is apt to be used as an argument in favor of the incorporation of a provision for a long term of maintenance in the paving contracts, thus avoiding the necessity of making contracts for repairs at frequent intervals. This would be, in my judgment, an expensive remedy, and at the present time an unwise policy. There is every reason why, after two years of inactivity, we should repave during the coming year as many streets as possible. If ten or fifteen years of maintenance are called for in our repaving contracts the area of pavement which can be laid will be materially reduced. This, however, would be a wise policy if the total cost at the end of fifteen years would be less, but circumstances justify the opinion that the reverse would be the case. Estimates of the cost of maintaining asphalt pavements after they have reached the age of five years must necessarily be based upon such cost in the past—that is, upon the repairs required on our pavements which are now six years or more old. Only 21 per cent. of our pavements are of such an age, and they were laid when contractors were less expert than they are at present, while on account of their limited extent they were subject to a traffic far more concentrated, and, consequently, more severe than will be those which are laid in the future. As the traffic becomes more evenly distributed the wear upon the pavements will grow less. It must also be borne in mind that the character of the traffic is rapidly undergoing a material change. The more general use of rubber tires and rubber shoes for horses will have a very beneficial effect upon asphalt pavements, while within the next ten or fifteen years it is probable that motor vehicles will to a very appreciable extent displace those drawn by horses.

The forces most injuriously affecting asphalt pavements will thus be largely done away with. Why should the City not take advantage of these changing conditions, instead of giving them to contractors whose solvency, or even whose existence for a period of ten or fifteen years is by no means assured, nor is that of the individuals or surety companies who assume to be responsible for them? Improved methods will doubtless be adopted in the making of repairs to asphalt pavements, as they have been in constructing them, and the City should be in a position to profit by these as well as by the more favorable conditions which will certainly prevail.

Another change which has been proposed is the use of Portland, instead of natural cement in the preparation of the base for all pavements, the object being to obtain a harder and stronger foundation before the laying of the binder and wearing surface. This would again increase the cost at least 25 cents a square yard, reducing the area which can be laid for a given sum. Will there be a corresponding improvement in the results? The object of the concrete is to provide an unyielding foundation for the pavement. To incur an unnecessary expense in doing so is as reprehensible from an engineering standpoint as to provide one which is not sufficiently strong. It is well known that a foundation of broken stone on a firm bed of earth will answer this purpose perfectly if the stones are so firmly held in position that they cannot move. The object of the mortar, then, is to keep the stones from moving.

It is difficult to conceive of any load which can be placed upon a pavement which will make any impression upon an underlying foundation of natural cement concrete resting upon solid earth, and extending entirely across the street. The object is not to obtain a foundation which at the expiration of a week will have an impression made upon it by a track loaded with several tons of binder or asphalt, but to supply an uniform surface capable of sustaining the pavement with the traffic which may come upon it, not only during its natural life, but during that of other pavements which will replace it for an indefinite period. It is a well established fact that good natural cement concrete increases in strength for years, and eventually approximates the strength of that made from Portland cement. I do not know of a single instance in this Borough where

the foundation of an asphalt pavement has failed unless there has been a considerable settlement of the earth beneath it, in which case the use of Portland cement would not have prevented the failure.

Along and between railroad tracks, or where for special reasons a quick result is desired, Portland cement can be used to advantage; but under ordinary circumstances, where a week or more can intervene between the completion of the concrete and the laying of the wearing surface, its use under the conditions prevailing in this Borough seems extravagant and wasteful.

An examination of Tables 4 and 6 will show that a large proportion of the street improvements carried out during the year have been by private contract under the inspection of this Department. A number of other streets have been improved without inspection, and without the knowledge and consent of any city officer. These, of course, have been streets which have never been legally opened, and over which the Department has no control. The work done under our inspection has been in accordance with the standard specifications, and has been carried out in a thorough manner.

Numerous enterprises for the development of suburban property have been lately inaugurated, and the owners, wishing to place it upon the market as quickly as possible, have resorted to this method of improvement by private contract. Their objects in many cases have been purely speculative, and the work has been done in the most economical manner possible. While this has resulted in furnishing cheap suburban homes for many people, the promoters have no permanent interest in the property, and care very little whether the surface improvements have any lasting value or not.

The purchasers are led to believe that they have paved streets, and are to be free from future assessments for local improvements, and that this Department will accept and care for them as paved streets. There is no record of any kind in this office to show that such streets have been improved at the expense of the abutting owners, and I do not think this Department should so recognize them.

Some of the improvements made by private contract have been on an extensive scale, and have been carried out in a very substantial manner. I refer to those at Prospect Park South by Mr. Dean Alvord, at Kensington Park by the Morris Building Company, and on President street and New York and Brooklyn avenues by the Eastern Parkway Company.

I submit two views of the first-named section taken from the corner of Beverly road and East Fifteenth street—one in March and the other in November, which will admirably illustrate what individual enterprise and good taste can do in developing suburban property. All of the streets in this tract are to be similarly improved. Before the asphalt pavement was laid, water, sewer and gas connections for each plot were carried to the building line, so that the pavement need not be disturbed, and on the remaining streets subways are to be laid for electric wires.

It would be a great advantage if this policy could be enforced in connection with all of our new pavements, but the problem is a very difficult one where the character of the buildings to be erected and the size of the plots are not determined in advance.

The amount of cement sidewalk laid during the year has been greater than ever before, aggregating over one million square feet. Cement concrete seems to be superseding bluestone flagging for sidewalks, and when well laid they are very durable and satisfactory. There is a tendency, however, to do the work as cheaply as possible and many of the contractors now engaged in the business are inexperienced, unskilled and irresponsible.

As shown by Table 15, the work has been done under a large number of permits; most of it is done very quickly, and it is impossible on work so scattered to insure satisfactory results by any method of inspection if the contractors are disposed to use unsuitable material or do careless work.

These sidewalks, when poorly laid, are almost worthless, and are designed simply to last long enough to dispose of the property in front of which they are placed. Some method should, in my judgment, be adopted to prevent such inferior work. All contractors to whom permits are issued to lay cement walks might be required to keep on deposit in this Department the sum of \$500, to enable the City to take up and replace any walks which prove unsatisfactory.

A still better and more effective remedy would be for the Department to take all this work into its own hands, making contracts with the lowest responsible bidder to lay all cement walks during the season. The Borough could be divided into several districts, and separate contracts made for each district, with a responsible contractor doing business therein. Whenever any property-owner wished to lay a cement walk in front of his premises he could file his application with this Department, and the work would be ordered done at once by the contractor for that district.

The result of such a plan would be to greatly improve the quality of the work, and at the same time reduce the cost of first-class work. This plan has been followed for several years in the City of Washington with very satisfactory results, the contract price being very low, and the property owners much preferring to have the work done under the public contract than by special permit. The plan proposed above may be crude, but some change is necessary to check the abuses which have been made of the privilege accorded to all applicants to lay such walks upon application.

The inadequacy to the needs of the Department of the appropriation for Labor, Maintenance and Supplies for the present year will render it impossible to do more than continue to patch up our cobblestone streets and care for our macadamized and unimproved roads. It will be impossible to replace much old stone pavement with granite by day's labor, as we have very few granite blocks on hand, and have no money to buy them. Little impression can, therefore, be made upon our 237 miles of wretched cobblestone, except by such repaving as may be done through the issue of bonds. Such work has been at a standstill since consolidation, and the \$700,000 allotted to this Borough may be taken to represent the work of the last two years. Not less than \$1,000,000 in addition to this should be allowed us in order to accomplish even a small portion of the repaving which is pressingly needed.

Tables 16 to 21, inclusive, together with the report of the chemist, which is herewith submitted, will indicate the work done in the laboratory during the year. This work is of the greatest importance, and the expenditure required to establish and maintain the laboratory has long since justified itself. You will notice that quite a large number of the cements and asphalts examined were from other Boroughs. The table showing the areas of the different wards of the Borough is repeated from the report of the Department of City Works for 1896, as it contains valuable information. A diagram is submitted showing graphically the actual and relative mileage of the different kinds of pavement in the Borough. It will be seen from this that the amount of cobblestone is still greater than that of all other pavements combined, but not including macadam. The lines representing other pavements will, however, cross and rise above the line of cobblestone this year.

Your attention is called to the other tables accompanying this report, which will indicate the work of the Department during the past year.

Respectfully submitted,

N. P. LEWIS, Engineer of Highways.

CITY OF NEW YORK—BOROUGH OF BROOKLYN,  
DEPARTMENT OF HIGHWAYS—LABORATORY,  
MUNICIPAL BUILDING, January 12, 1900.

Mr. N. P. LEWIS, Engineer of Highways, Borough of Brooklyn:

DEAR SIR—I submit herewith the results of analyses and tests of materials made in this office during the year 1899. In addition to the results enumerated in Tables XVI—XX, inclusive, 28 miscellaneous samples and 48 samples of materials for repaving work have been examined. Experiments to determine the effect of freezing on concrete, the effect of illuminating gas on asphalt, and the effect of water on asphalt have been carried on, and the results will be embodied in a special report.

The most important investigation of the year has been directed toward securing accurate data for comparing the physical properties of asphalts and asphaltic cements. The determination of the naphtha-soluble content of asphalts and bitumens is not of itself indicative of valuable physical properties. This fact has been recognized by many and has formed the basis of numerous discussions as to the value of the so-called "Petroleum" determination. We have found that if the Petroleum determination is considered in connection with accurate physical tests, it becomes a reliable index of the value of the asphalt. The "cuttle test" is one of the most important for the comparison of asphaltic cements. We have found the following method to be convenient and accurate:

A quantity of the sample of refined asphalt sufficient to give twenty grams of pure bitumen is extracted with chloroform. The bulk of the solvent is removed from the solution by distillation—the last portion being removed by heating the extracted matter in a flat-bottom dish at 212 degrees Fahrenheit for 8 hours, the temperature being raised to 300 degrees Fahrenheit for 10 minutes at the end of the operation. The flux intended to be used with the sample is then added in sufficient amount to the pure bitumen to give an asphaltic cement of the required (standard degree of penetration) consistency. This is done by use of the Bowen Penetration Machine. The asphaltic cement thus made is poured while hot into glass tubes two and one-half inches in length and five-sixteenths of an inch in internal diameter, the tubes having been previously cut in half, the edges ground true to plane and cemented together with a thin film of plaster of Paris. The tubes thus prepared are closed at one end with a cylindrical cork before pouring the cement. The plaster of Paris joint being easily broken by a slight side pressure, there is in each case a uniform cross-section of pure bitumen, and the weight of each tube being the same, a uniform force acting on it. These tubes after cooling are kept at a temperature of 80 degrees Fahrenheit for one hour. The tubes are then clamped in a vertical position, and in each case the lower tube is separated from the upper a distance of exactly one quarter of an inch. The lower tube is then



allowed to draw apart from the upper under its own weight, thus pulling the cement out into a long string, the cross-section decreasing as the length increases. The distance between the two tubes at the time of rupture is noted. The results on standard brands of asphalt are shown in Table XX. Other cross-sections and other standards of consistency may be used; but each test being conducted under exactly similar conditions, the results will be comparable.

Respectfully,

W. H. BROADHURST, Chemist.

LIST OF TABLES ACCOMPANYING REPORT OF ENGINEER OF HIGHWAYS, BOROUGH OF BROOKLYN.

- I.—Area and mileage of different pavements.
- II.—Mileage and percentage of different pavements, 1880 to 1899, inclusive.
- III.—Area of the Borough of Brooklyn by Wards.
- IV.—Asphalt pavements laid during 1899.
- V.—Stone pavements laid during 1899.

- VI.—Macadamizing and grading done during 1899.
- VII.—Improvements in progress and under contract on December 31, 1899.
- VIII.—Street improvements authorized by the Municipal Assembly.
- IX.—Work done by repair gangs.
- X.—Macadamized streets sprinkled.
- XI.—Work done by corporations.
- XII.—Openings made in asphalt and brick pavements.
- XIII.—Bluestone flagging laid under inspection of Department.
- XIV.—Cement sidewalks laid under inspection of Department.
- XV.—Tests of hydraulic cements.
- XVI.—Analyses of refined asphalts, etc.
- XVII.—Analyses of asphalt pavements.
- XVIII.—Analyses of paving brick and limestones.
- XIX.—Relative ductility of asphaltic cements.
- XX.—Estimates made for local improvements.
- XXI.—Miscellaneous work.

TABLE I.

Showing Area, Lengths and Percentages of the Various Kinds of Pavement in the Borough of Brooklyn, New York, January 1, 1900.

Ward.	LENGTH IN FEET.							AREA IN SQUARE YARDS.						
	Asphalt.	Granite.	Cobble.	Belgian.	Macadam.	Brick.	Total.	Asphalt.	Granite.	Cobble.	Belgian.	Macadam.	Brick.	Total.
First.....	55,294	14,832	7,416	5,788	.....	.....	83,330	64,925	42,777	20,186	17,651	.....	.....	145,539
Second.....	13,872	13,874	7,254	824	.....	208	35,732	48,385	24,317	3,117	.....	820	.....	76,639
Third.....	22,744	14,292	12,210	.....	.....	971	48,017	34,860	64,920	37,913	.....	.....	8,884	146,477
Fourth.....	.....	21,480	16,864	.....	.....	.....	38,344	.....	65,077	33,937	.....	.....	.....	99,014
Fifth.....	.....	7,362	44,776	.....	.....	.....	52,138	.....	16,012	62,365	.....	.....	.....	78,377
Sixth.....	7,368	19,815	33,114	7,670	.....	.....	68,977	22,151	74,455	107,837	29,414	.....	.....	233,457
Seventh.....	21,221	14,165	23,954	1,543	.....	.....	60,883	91,007	91,698	128,099	4,983	.....	.....	315,787
Eighth.....	.....	19,716	106,069	25,861	.....	.....	151,646	.....	159,479	375,330	18,234	.....	.....	644,123
Ninth.....	26,166	33,847	33,268	5,919	3,109	1,399	102,708	102,701	156,265	121,999	19,070	20,667	8,261	469,942
Tenth.....	7,199	25,499	34,706	6,182	.....	.....	67,596	3,394	89,700	215,734	25,534	.....	.....	434,472
Eleventh.....	1,815	10,120	26,171	1,100	.....	.....	39,206	8,859	68,448	93,780	5,951	.....	.....	176,038
Twelfth.....	.....	102,088	57,800	.....	.....	.....	160,888	.....	106,921	280,937	.....	.....	.....	441,818
Thirteenth.....	6,868	18,051	30,807	.....	.....	.....	55,726	19,411	70,199	100,662	.....	.....	.....	186,288
Fourteenth.....	9,931	35,148	19,214	4,913	.....	.....	69,116	9,950	131,916	65,682	16,661	.....	.....	223,215
Fifteenth.....	4,193	13,381	38,000	655	.....	911	57,141	14,801	39,922	129,808	5,057	.....	3,802	210,671
Sixteenth.....	5,839	16,174	16,735	1,725	.....	.....	33,473	20,944	63,507	123,074	8,050	.....	.....	215,575
Seventeenth.....	7,669	15,729	20,121	4,189	.....	3,760	46,469	32,910	145,798	184,518	29,780	.....	11,134	397,102
Eighteenth.....	5,379	29,179	29,470	8,090	.....	.....	72,118	2,164	86,038	135,178	20,547	.....	.....	233,873
Nineteenth.....	17,840	18,116	35,724	8,475	.....	.....	80,155	11,511	112,388	135,840	9,056	.....	.....	348,597
Twentieth.....	18,008	26,421	31,073	993	.....	.....	76,495	68,219	108,707	197,009	1,692	.....	.....	377,617
Twenty-first.....	12,191	18,331	75,818	.....	.....	.....	106,340	44,930	75,654	294,810	.....	.....	.....	426,194
Twenty-second.....	14,753	24,573	55,530	35,504	.....	.....	130,360	126,184	117,602	220,864	129,602	.....	.....	694,252
Twenty-third.....	14,099	20,275	76,921	632	128	718	92,772	99,888	60,175	266,767	2,463	2,152	3,169	513,794
Twenty-fourth.....	10,066	6,451	10,261	25,167	17,254	610	69,811	116,029	24,327	185,914	78,890	69,328	1,016	378,988
Twenty-fifth.....	14,450	18,609	69,469	4,863	2,760	.....	99,742	21,457	84,472	116,670	10,210	960	.....	217,672
Twenty-sixth.....	23,738	20,601	15,359	18,472	17,395	7,714	84,379	79,359	109,842	47,680	147,883	37,471	49,360	361,956
Twenty-seventh.....	1,811	16,267	40,575	7,026	.....	612	66,291	5,072	71,176	105,883	44,309	.....	9,040	266,600
Twenty-eighth.....	6,187	25,064	100,264	5,092	.....	836	137,443	27,615	90,494	371,616	17,019	.....	3,001	508,575
Twenty-ninth.....	18,118	.....	.....	.....	39,406	2,066	57,590	34,811	.....	.....	.....	105,974	10,367	261,350
Thirtieth.....	140	.....	.....	13,160	209,416	.....	222,576	2,500	.....	.....	42,774	287,533	.....	712,823
Thirty-first.....	2,012	20,000	.....	.....	226,830	.....	230,842	15,400	63,467	.....	.....	448,944	.....	587,811
Thirty-second.....	.....	.....	.....	.....	3,600	.....	3,600	.....	.....	.....	.....	6,000	.....	9,600
Lower list.....	573,121	605,430	1,251,008	239,359	414,877	19,981	2,293,645	1,350,073	2,460,839	4,033,355	833,600	1,488,680	25,627	10,579,613
Miles.....	68.82	114.62	236.35	45.33	76.57	3.74	547.97	.....	.....	.....	.....	.....	.....	.....
Percentage of pavements.....	12.313	20.516	41.344	8.771	14.130	0.689	100.00	.....	.....	.....	.....	.....	.....	.....

TABLE II.

Showing Mileage and Percentage of the Various Pavements in the City and Borough of Brooklyn from January 1, 1880, to January 1, 1900.

Year.	ASPHALT.		GRANITE.		COBBLE.		BELGIAN.		MACADAM.		WOOD.		TOTAL.
	Miles.	Per cent.	Miles.	Per cent.	Miles.	Per cent.	Miles.	Per cent.	Miles.	Per cent.	Miles.	Per cent.	
January 1, 1880.....	7.429	0.13	16.630	4.98	290.908	87.25	17.400	5.10	0.798	0.23	1.020	0.30	335.735
" 1, 1881.....	7.030	0.08	17.000	5.06	292.458	88.12	17.900	5.11	0.798	0.21	0.700	0.21	335.405
" 1, 1882.....	6.699	1.97	17.430	5.14	295.546	87.17	17.290	5.09	1.398	0.43	0.700	0.21	339.063
" 1, 1883.....	7.379	0.17	19.130	5.66	294.348	86.62	17.450	5.07	1.388	0.47	.....	.....	339.791
" 1, 1884.....	7.379	0.26	19.130	5.63	295.728	86.66	17.230	5.06	1.688	0.49	.....	.....	341.065
" 1, 1885.....	7.879	0.24	19.480	5.58	299.071	86.76	17.730	5.94	1.688	0.48	.....	.....	344.075
" 1, 1886.....	6.439	1.80	22.000	6.35	299.608	86.12	17.360	5.00	1.688	0.48	.....	.....	347.015
" 1, 1887.....	6.439	1.80	24.410	6.37	304.308	85.65	17.360	4.87	2.816	0.77	.....	.....	355.375
" 1, 1888.....	6.439	1.75	27.070	7.49	307.871	85.16	17.360	4.80	2.816	0.76	.....	.....	361.908
" 1, 1889.....	10.397	2.81	31.382	9.64	304.865	80.72	23.009	6.09	2.816	0.74	.....	.....	377.189
" 1, 1890.....	10.847	2.82	32.222	10.06	289.211	74.77	25.632	6.63	2.816	0.73	.....	.....	386.778
" 1, 1891.....	11.676	2.97	74.425	28.38	279.045	79.61	27.480	6.92	2.816	0.69	.....	.....	396.312
" 1, 1892.....	12.169	2.97	81.341	30.07	280.543	69.08	29.022	7.21	2.816	0.67	.....	.....	406.185
" 1, 1893.....	13.049	3.10	88.794	31.06	279.003	66.22	27.606	8.91	2.816	0.67	.....	.....	422.504
" 1, 1894.....	14.078	3.25	91.009	30.68	284.136	65.48	44.831	9.64	2.816	0.64	.....	.....	433.910
" 1, 1895.....	18.845	3.80	98.890	30.34	284.321	58.40	42.127	8.67	41.896	8.69	Brick.	.....	446.169
" 1, 1896.....	27.570	5.11	109.131	31.90	269.102	51.00	42.831	8.59	40.406	9.01	0.301	0.07	498.161
" 1, 1897.....	31.260	7.42	120.553	27.43	261.400	40.80	44.463	5.64	38.891	11.44	2.105	0.23	524.661
" 1, 1898.....	51.090	12.73	111.165	21.71	141.784	26.10	44.151	8.46	32.823	11.99	2.440	0.47	574.155
" 1, 1899.....	65.99	12.265	110.37	20.964	127.96	24.791	45.11	8.418	70.32	13.469	3.78	0.701	528.43
" 1, 1900.....	68.82	12.559	114.62	20.916	121.65	21.994	47.11	8.273	78.27	14.120	3.76	0.689	547.97

\* Includes 0.13 miles alkali trip.



TABLE III.  
Showing the Area of the Different Wards of the Borough of Brooklyn.

WARD NO.	BLOCK AREA.	STREET AREA.	PARK AREA.	CEMETERY AREA.	CANAL AREA.	MISCELLANEOUS.	TOTAL AREA OF ACRES.
First.....	159.2	66.9	0.8	.....	.....	.....	226.9
Second.....	66.8	30.9	.....	.....	.....	.....	97.7
Third.....	108.6	54.6	.....	.....	.....	.....	163.2
Fourth.....	71.1	40.0	.....	.....	.....	.....	111.1
Fifth.....	81.8	35.6	.....	.....	.....	.....	117.4
Sixth.....	208.9	202.0	.....	.....	.....	.....	410.9
Seventh.....	312.7	246.8	.....	.....	.....	.....	559.5
Eighth.....	929.1	430.2	15.6	468.1	.....	.....	1,843.0
Ninth.....	358.6	195.1	91.7*	.....	.....	.....	645.4
Tenth.....	215.9	94.7	1.0	.....	5.2	.....	316.8
Eleventh.....	113.7	68.9	28.7	.....	.....	59.3 Navy Yard.....	210.6
Twelfth.....	412.4	161.1	5.1	.....	2.5	40.8 Atlantic Basin.....	681.3
Thirteenth.....	152.2	77.6	.....	.....	.....	.....	229.8
Fourteenth.....	186.7	95.9	.....	.....	.....	.....	282.6
Fifteenth.....	159.7	85.1	.....	.....	.....	.....	244.8
Sixteenth.....	157.3	87.1	.....	.....	.....	.....	244.4
Seventeenth.....	583.3	233.9	0.1	.....	7.0	.....	824.3
Eighteenth.....	268.6	271.7	0.9	.....	25.8	.....	567.0
Nineteenth.....	213.2	131.8	0.04	.....	4.3	27.3 Wallabout Market; 17.2 U.S. Hospital.....	355.54
Twentieth.....	210.1	116.1	14.9	.....	.....	26.8 Navy Yard; 28.6 Wallabout Market.....	369.5
Twenty-first.....	274.4	138.8	.....	.....	.....	.....	413.2
Twenty-second.....	181.9	282.7	482.8	.....	27.2	.....	1,764.6
Twenty-third.....	488.9	139.1	7.3	.....	.....	.....	735.0
Twenty-fourth.....	790.7	286.7	19.1	.....	.....	.....	1,095.5
Twenty-fifth.....	167.2	197.4	2.9	.....	.....	.....	367.5
Twenty-sixth.....	2,143.6	1,153.4	27.3	.....	47.0	16.9 Reservoir Lands.....	3,390.2
Twenty-seventh.....	261.3	188.4	10.8	.....	.....	.....	460.5
Twenty-eighth.....	516.3	267.5	0.8	111.8	.....	.....	895.4
Twenty-ninth.....	2,439.7	1,269.3	.....	54.9	.....	36.8.....	3,800.9
Thirtieth.....	1,320.0	1,589.7	346.0	120.0	.....	109.5 Fort Hamilton.....	3,375.2
Thirty-first.....	4,172.3	1,999.0	.....	.....	280.2	.....	6,451.5
Thirty-second.....	3,565.1	1,825.1	.....	.....	89.1	.....	5,479.3
Acres.....	26,147.8	13,073.8	1,010.74	660.1	373.4	403.9.....	38,977.24
Square Miles.....	38.126	18.863	1.640	1.030	0.582	0.639.....	60.903

\* Includes East Side Lands. † Does not include marsh land nor islands in Jamaica Bay which belong in this ward.

TABLE IV.  
Statement Showing Amount of Asphalt Pavement Laid during the Year ending December 31, 1899.

STREET.	AUTHORITY.	CHARACTER.	FOUNDATION.	THICKNESS.		REPLACES WHAT.	PAVEMENT, SQUARE YARDS.	PRICE PER SQUARE YARD, INCLUDING FOUNDATION.	CURB, LINEAR FEET.		EXCAVATION, CUBIC YARDS.	EMBANKMENT, CUBIC YARDS.	LENGTH, LINEAR FEET.	WIDTH OF ROADWAY.	INSPECTION.		TOTAL COST.	WHEN COMMENCED.	WHEN FINISHED.	CONTRACTOR.
				Under.	Wearing Surface.				New.	Old.					Amount.	Per Cent.				
Albion road, between Brighton Beach tracks and East Fourteenth street.....	Private.....	Alcatraz.	6-in. Concrete	1	2	New...	2,169	.....	9,188	.....	.....	.....	613	30	.....	.....	.....	.....	Nov. 20	Brooklyn Alcatraz Asphalt Company.
Brooklyn avenue, between Eastern Parkway and President street.....	".....	"	"	1	2	"	2,197	.....	.....	.....	.....	.....	354	34	1,177	.....	.....	1899 May 15	June 21	Brooklyn Alcatraz Asphalt Company.
Butler street, between Albany and Troy avenues.....	Chap. 583, Laws 1888	Bermudes	"	1	2	"	2,711	81.62	1,162	.....	35	1,380	784	34	\$12.00	1.8	\$6,670.35	Nov. 2	" 8	Eastern Bermudes Asphalt Paving Company.
Butler street, between New York and Brooklyn avenues.....	Chap. 583, Laws 1888	Alcatraz.	"	1	2	"	2,791	2.07	1,465	.....	8.0	.....	721	34	100.00	1.3	7,159.28	Nov. 10	Dec. 29	Brooklyn Alcatraz Asphalt Company.
Degraw street, between Nostrand and New York avenues.....	Private.....	Trinidad.	"	1	2	Cobbles.	2,710	.....	.....	.....	.....	.....	717	34	.....	.....	.....	Aug. 24	Sept. 8	Cranford & Co.
Douglas street, between Nostrand and New York avenues (south side).....	".....	"	"	1	2	New...	766	.....	.....	.....	.....	.....	730	34	.....	.....	.....	Sept. 27	Oct. 11	"
East Fifth street, between Beverly road and Church avenue.....	".....	Alcatraz.	"	1	2	"	1,691	.....	.....	.....	.....	.....	1,693	30	.....	.....	.....	.....	May 6	Brooklyn Alcatraz Asphalt Company.
Avenue F, between Ocean Parkway and Gravesend avenue.....	".....	Tyroland.	"	1	2	"	6,631	.....	.....	.....	.....	.....	1,373	41	.....	.....	.....	.....	Oct. 10	Cranford & Co.
Flatbush avenue, intersection of Ocean avenue.....	Chap. 771, Laws 1896	"	"	1	2	Cobbles.	1,791	1.77	224	92	.....	.....	312	112	48.00	1.5	3,372.45	June 6	June 29	"
Fourteenth street, between Fourth and Sixth avenues.....	Chap. 771, Laws 1896	Alcatraz.	"	1	2	"	1,048	1.53	2,409	307	.....	.....	1,480	30	104.00	1.5	9,928.18	May 3	" 15	Brooklyn Alcatraz Asphalt Company.
New York avenue, between Eastern Parkway and President street.....	Private.....	"	"	1	2	New...	2,215	.....	.....	.....	.....	.....	556	34	.....	.....	.....	Nov. 8	" 1	Brooklyn Alcatraz Asphalt Company.
Pacific street, between Schenectady and Utica avenues.....	Chap. 583, Laws 1888	Bermudes	"	1	2	"	2,739	2.17	1,456	.....	519	.....	729	34	60.00	0.8	7,743.50	May 13	June 19	Eastern Bermudes Asphalt Paving Company.
Park place, between Brooklyn and Albany avenues.....	Chap. 583, Laws 1888	Trinidad.	"	1	2	"	7,084	1.60	2,554	484	.....	.....	1,100	42	95.00	0.7	74,084.25	" 9	" 19	Cranford & Co.
President street, between Court and Clinton streets.....	Chap. 774, Laws 1896	Alcatraz.	"	1	2	Cobbles.	1,791	1.80	1,092	39	.....	.....	543	30	60.00	1.5	4,394.90	April 27	" 5	Brooklyn Alcatraz Asphalt Company.
President street, between Brooklyn and Kingston avenues.....	Private.....	"	"	1	2	New...	3,549	.....	.....	.....	.....	.....	730	42	.....	.....	.....	May 21	" 27	Brooklyn Alcatraz Asphalt Company.
President street, between New York and Brooklyn avenues.....	".....	"	"	1	2	"	3,669	.....	.....	.....	.....	.....	767	42	.....	.....	.....	Nov. 16	" 1	Brooklyn Alcatraz Asphalt Company.
Prospect place, between Brooklyn and Kingston avenues.....	Chap. 583, Laws 1888	Trinidad.	"	1	2	"	2,744	1.83	1,192	313	152	1,084	731	38	92.00	1.3	6,936.55	May 18 1898	June 13	Cranford & Co.
South Elliott place, between Hanson place and Atlantic avenue.....	Chap. 771, Laws 1896	Alcatraz.	"	1	2	Cobbles.	2,616	1.80	1,243	159	.....	.....	693	34	116.00	1.9	6,103.70	Nov. 15	May 20	Brooklyn Alcatraz Asphalt Company.
Total.....	.....	.....	.....	.....	.....	.....	38,063	.....	.....	.....	.....	.....	14,060	.....	.....	.....	167,700.26	.....	.....	.....

\* Park in centre of roadway as fast wide. † Does not include cost of work done by private contract. ‡ Not yet accepted.

TABLE V.  
Statement Showing Amount of Stone Pavement Laid During the Year ending December 31, 1899.

STREET.	AUTHORITY.	CHARACTER.	FOUNDATION.	FILLING IN JOINTS.	REPLACES WHAT.	PAVEMENT, SQUARE YARDS.	PRICE PER SQUARE YARD, INCLUDING FOUNDATION.	CURB, LINEAR FEET.		EXCAVATION, CUBIC YARDS.	EMBANKMENT, CUBIC YARDS.	LENGTH, LINEAR FEET.	WIDTH OF ROADWAY.	INSPECTION.		TOTAL COST.	WHEN COMMENCED.	WHEN FINISHED.	CONTRACTOR.
								New.	Old.					Amount.	Per Cent.				
Ash street, between Oakland street and Manhattan avenue.....	See Note.....	Granite..	Sand.....	Stnd.....	Cobbles.	2,407	.....	.....	.....	.....	.....	680	30	.....	.....	.....	.....	.....	Repair 1899.
Chase avenue, between Flushing avenue and Bedford.....	Chap. 529, Laws 1897	"	6-inch concrete.	.....	New...	17,536	\$4.78	1,155	.....	9,908	.....	1,748	33 1/2	\$380.00	1	\$1,170.71	1899 Apr. 29	1899 Aug. 10	E. J. McKeever & Bro.



STREET.	AUTHORITY.	CHARACTER.	FOUNDATION.	FILLING TO JOINTS.	REPLACES WHAT.	PAVEMENT.	PRICE PER SQUARE YARD, INCLUDING FOUNDATION.	CUBIC FEET.		EXCAVATION, CUBIC YARDS.	REINFORCEMENT, CUBIC YARDS.	LENGTH, LINEAR FEET.	WIDTH OF ROADWAY.	INSTRUCTION.		TOTAL COST.	WHEN COMPLETED.	WHEN FINISHED.	CONTRACTOR.
								NEW.	OLD.					AMOUNT.	PER CEN.				
Court street, between Joralemon street and Atlantic avenue....	Chap. 371, Laws 1898	Granite	6-inch concrete.	Tar and gravel.	Granite	4,111	\$7.25	1,470	187	...	...	1,042	31	\$591.00	12	\$12,447.30	1899, July 24	Nov. 17	A. B. Donovan.
Fleming avenue, between Flushing avenue and 1st street north of Lenox street....	Chap. 389, Laws 1897	"	6-inch concrete.	Tar and gravel.	New	2,471	2.75	1,000	...	2,742	...	493	45	75.00	1 1/2	7,027.28	Apr. 29	Aug. 10	E. J. McKee & Bro.
Knickerbocker avenue, between Palmers street and Putnam street....	Chap. 383, Laws 1898	"	Sand	Sand	"	5,039	1.40	1,437	...	1,613	207	781	24	470.00	1 1/2	2,765.71	June 13	Sept. 26	Pinkelwald & Leitch.
Lenox street, between Clinton and Washington avenues....	Chap. 389, Laws 1897	"	6-inch concrete.	Tar and gravel.	"	2,008	2.75	1,000	...	1,150	...	335	30	80.00	9 1/2	10,511.81	Apr. 20	Aug. 10	E. J. McKee & Bro.
Oakland street, between Ash and Clay streets....	Sec. Note...	"	Sand	Sand	Octagon	1,457	...	...	...	...	...	300	30	...	...	...	...	...	Repair gangs.
Prospect place, between Underhill and Grand avenues....	"	"	"	"	"	1,000	...	...	...	...	...	800	24	...	...	...	...	...	"
Forty-fourth street, between Second and Third avenues....	6th Ward Imp. Act	"	"	"	New	1,480	1.50	1,404	...	2,020	...	787	30	110.00	1 1/2	5,458.25	Aug. 18	Oct. 23	Desmond Bros.
Forty-sixth street, between Second and Third avenues....	6th Ward Imp. Act	"	"	"	"	1,485	1.50	1,454	...	950	...	787	30	50.00	1 1/2	2,079.72	Sept. 18	Dec. 1	"
Forty-seventh street, between Second and Third avenues....	6th Ward Imp. Act	"	"	"	"	1,501	1.40 1/2	1,444	...	1,000	...	751	30	63.00	1 1/2	3,494.22	Oct. 3	Nov. 24	Engene Leutliop.
Fifty-seventh street, between Second and Third avenues....	6th Ward Imp. Act	"	"	"	"	1,490	1.40 1/2	1,338	...	1,180	...	740	30	110.00	1 1/2	5,370.79	1898, Dec. 9	Dec. 29	"
Sixtyth street, between Third and Fourth avenues....	Chap. 383, Laws 1898	Oblique trap	"	"	"	3,295	1.35	1,443	...	44,380	...	703	44	160.00	1 1/2	9,488.35	1898, Dec. 9	May 6	Desmond Bros.
Total.....						44,638										\$106,060.10			

NOTE.—Repaired by days' labor, paid for out of appropriation for "Labor, Maintenance and Supplies."

TABLE VI.  
Statement Showing Streets Graded and Macadamized during the Year ending December 31, 1899.

STREET.	AUTHORITY.	THICK- NESS.	FOUNDATION.	SQUARE YARDS BRICKS OR GUTTERS.	PAYMENT, SQUARE YARDS.	Price per Square Yard including Founda- tion.	CUBIC LIDWAL FEET.		Excavation, Yards.	Reinforcement, Cubic Yards.	Length.	Width of Roadway.	INSTRUCTION.		TOTAL COST.	When Com- pleted.	When Fin- ished.	CONTRACTOR.	
							New.	Old.					Amount.	Per Cent.					
Avenue B, between Flushing avenue and Canal Parkway	Chap. 383 Laws 1898	1000	Sand	1,000	10,000	10.00	1,100	...	2,753	...	1,244	44	\$121.00	1 1/2	\$12,771.20	1899, Apr. 26	1899, Aug. 6	Hann & Phillips.	
Avenue C, between Flushing avenue and Canal Parkway	Chap. 383 Laws 1898	9	"	1,677	9,945	75	5,070	...	3,041	1,011	1,413	44	297.00	2 1/2	16,731.85	1898, Oct. 31	1899, Sept. 18	First Tack.	
Baker street, between Troy avenue and Schoenewald avenue	Chap. 383 Laws 1898	...	...	...	Grading	...	...	...	7,200	...	30	770	14	24.00	1 1/2	1,719.00	1897, Dec. 9	...	Thomas E. Francis.
East Second street, between 1st and 2nd streets north of Avenue F and Eighteenth avenue	Private	2	Sand	...	...	...	...	...	...	...	800	32	...	...	...	...	...	...	
East Third street, between 1st and 2nd streets north of Avenue F and Eighteenth avenue	"	2	"	...	...	...	...	...	...	...	875	32	...	...	...	...	...	...	
East Fourth street, between 1st and 2nd streets north of Avenue F and Eighteenth avenue	"	3	"	...	...	...	...	...	...	...	730	32	...	...	...	...	...	...	
East Fifth street, between 1st and 2nd streets north of Avenue F and Eighteenth avenue	"	8	"	...	...	...	...	...	...	...	700	32	...	...	...	...	...	...	
Eighty-fourth street, between Fourth and Seventh avenues	Chap. 383 Laws 1898	0	"	...	...	...	...	...	10,000	11,350	1,474	30	972.00	2 1/2	4,793.14	1899, Sept. 5	Dec. 4	Borough Construction Company.	
Fourth avenue, between Duane street and Shore road	Park De- partment	0	Tobacco	...	...	...	...	...	...	...	900	34	...	...	...	...	...	...	
Fort Hamilton avenue, be- tween Seventy-sixth street and Shore road	Park De- partment	0	Sand	...	...	...	...	...	...	...	6,300	40	...	...	...	...	...	...	
Green avenue, between Fort Hamilton avenue and Ave- nue F	Chap. 383 Laws 1898	1	"	...	...	...	...	...	1,015	...	7,070	30	720.00	1 1/2	28,845.46	Apr. 12	Dec. 2	Hann & Phillips.	
Green avenue, between Ave- nue F and Avenue G	"	8	"	...	...	...	...	...	...	...	874	70	...	...	...	...	...	Private.	
Green avenue, between Ave- nue K and Avenue M	"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Park place, between Troy avenue and Schoenewald avenue	Chap. 383 Laws 1898	...	...	...	Grading	...	...	...	1,191	710	770	34	24.00	1 1/2	4,444.00	1898, Dec. 9	...	Frankley & Rooney.	
Shore road, between Third and Fort Hamilton ave- nues	Park De- partment	0	Tobacco	...	...	...	...	...	...	...	1,000	44	...	...	...	...	...	...	
West Seventy-sixth street, be- tween Canal and Surf ave- nues	Chap. 383 Laws 1898	...	...	...	Grading	...	...	...	797	10,145	4,004	32	252.00	1 1/2	7,852.00	Nov. 17	Nov. 10	Timothy E. Desmond.	
Total					12,007				2,242	...	...	...			117,064.25				

TABLE VII.  
Showing Streets upon which Work not in Progress and Contracts in Force December 31, 1899.

STREET.	KIND OF IMPROVEMENT.	TOTAL AMOUNT OF PAYMENT.	GRADING COMPLETED.		CONTRACTOR.
			Excavation.	Reinforcement.	
Berriman street, from Atlantic avenue to New Lots road....	Belgian (in progress)	12,560	...	...	Nassau Construction Company.
Bodford avenue, from Heyward street to De Kalb avenue....	Asphalt	17,840	...	...	Cranford & Co.
Bodford avenue, from Quincy street to Atlantic avenue....	"	21,605	...	...	"
Fifty-seventh street, from Fort to Second avenue....	"	5,130	...	...	Brooklyn Alcatraz Asphalt Company.
Lugar street, from Atlantic avenue to New Lots road....	Belgian (in progress)	12,504	5,000	4,000	William J. Plant.
Richmond street, from Jamaica avenue to Fulton street....	Asphalt	6,359	...	...	Eastern Bermuda Asphalt Paving Company.
Sakman street, from Eastern parkway to Lenox avenue....	Belgian	5,060	...	...	Nassau Construction Company.
Snedeker avenue, from Liberty to Duane avenue....	Belgian (in progress)	9,950	...	...	Newman & Co.
St. Nicholas avenue, from Hart street to Flushing avenue....	"	18,770	...	...	Norton & Gorman.
Sutter avenue, from Rockaway to Alabama avenue....	Asphalt	12,980	...	...	Cranford & Co.
Utica avenue, from Twenty-fourth street to Thirty-second street....	Macadam (in progress)	5,400	...	...	John F. Mullin.
Vermont street, from Jamaica avenue to Eastern parkway....	Asphalt	7,000	...	...	Eastern Bermuda Asphalt Paving Company.

TABLE VIII.  
Showing Street Improvements Authorized by the Municipal Assembly during 1899, in Accordance with the Greater New York Charter.

STREET.	LINE.	CHARACTER OF IMPROVEMENT.	KIND OF PAVEMENT.	DATE OF APPROVAL OF ORDINANCE.	ESTIMATED COST.
Centre street....	Hamilton avenue to Clinton street	Grading and paving	Granite	Jan. 5, 1890	\$4,300.00
Cropper street....	Hamilton avenue to County line	"	Asphalt	Dec. 14, 1899	11,200.00
Avenue D....	Ocean parkway to County line	"	Macadam	" 11, "	9,000.00
DeSales place....	Brooklyn avenue to Evergreen Cemetery	"	Asphalt	Jan. 5, 1890	5,800.00
East street....	Arlington to Atlantic avenue	"	"	" 12, "	20,000.00
Fifty-fourth street....	Seventh to Fort Hamilton avenue	Grading	None	Dec. 4, 1899	11,700.00
Georgia avenue....	Liberty to Glenmore avenue	Grading and paving	Granite	" 14, "	6,000.00
Granite street....	Brooklyn to Evergreen avenue	"	"	" 4, "	6,400.00
Grant street....	Flushing avenue to Nostrand avenue	"	Asphalt	Oct. 5, "	18,100.00
Masker avenue....	Kingland avenue to Menlo Avenue bridge	"	Granite	" 24, "	40,000.00
Newkirk avenue....	Flushing avenue to East Twenty-sixth street	"	Asphalt	" 5, "	7,700.00
Nichols avenue....	Jamaica avenue to Atlantic avenue	"	"	Dec. 21, "	45,600.00
Prescott place....	Atlantic avenue to Herkimer street	Grading	None	Oct. 24, "	9,400.00
Second avenue....	Thirty-ninth to Fifty-eighth street	Paving	Asphalt	" 24, "	37,000.00
"	Fifty-ninth to Sixty-fifth street	Grading and paving	"	Dec. 4, "	16,000.00
Schenck avenue....	Atlantic to Livonia avenue	"	Terrace	" 29, "	40,600.00
St. Nicholas street....	Livonia avenue to New Lots road	"	Asphalt	" 29, "	40,600.00
St. Nicholas street....	Myrtle to Hamilton avenue	"	Granite	" 12, "	1,400.00
Vernon avenue....	Flushing avenue to Rogers avenue	"	Asphalt	Oct. 5, "	23,000.00
Watkins street....	East New York avenue to New Lots road	"	"	Dec. 25, "	75,600.00
Total.....					\$44,300.00



TABLE IX.

Showing Work of Repair Gangs during the Year 1899.

Number of openings repaved.....	7,534
Number of holes repaired on complaint.....	2,058
Stone pavement relaid, square yards.....	231,543
Brick pavement relaid, square yards.....	283
Macadam repaired, square yards.....	21,126
Macadam resurfaced with screenings, square yards.....	24,512
Dirt roads repaired, miles.....	35.7
Sand used, cubic yards.....	5,930
Cobble-stone used, cubic yards.....	3,581
Curb-stone set and reset, linear feet.....	28,379
Bridging set and reset, square feet.....	10,777
Granite blocks used.....	226,240
Granite blocks purchased and delivered.....	286,240
Cobble-stone purchased and delivered, cubic yards.....	4,388
Sand purchased and delivered, cubic yards.....	8,205
Vitrified brick purchased and delivered.....	863,532
Amount expended in purchasing and repairing tools.....	\$1,294 50

TABLE X.

Showing Macadamized Streets Sprinkled in 1899.

	Length in Miles.
Crosey and Harway avenues, from Fourteenth to Coney Island avenue.....	2.478
Eighteenth avenue, from Ocean parkway to Crosey avenue.....	2.804
Eightieth street, from Eighteenth to Twenty-second avenue, and from Twenty-third to Stillwell avenue.....	0.672
*Eighty-sixth street, from Bay Ridge parkway to Fifth avenue.....	1.022
*Fourth avenue, from Sixtieth street to Fifth avenue.....	3.710
Kings Highway, from Twenty-second to Ocean avenue.....	1.923
Neptune and Emmons avenues, from Ocean parkway to Hig Point creek.....	1.681
*Ocean avenue, from Bay to Emmons avenue.....	4.664
Second avenue, from Sixty-fifth street to Bay Ridge parkway.....	1.802
Seventy-ninth street, from Bay Ridge parkway to Eighteenth avenue.....	2.561
Sixtieth street, from Fourth to Twenty-second avenue.....	2.670
Beverly road, from Flatbush avenue to Ocean parkway.....	0.829
Winthrop street, from Flatbush to Rogers avenue.....	0.347
Total miles.....	27.769
Total number of days.....	1,599
Total cost of sprinkling.....	\$9,594 00

\*Extra width of roadway—length counted double.

TABLE XI.

Showing Work Done by Railroad, Gas and Electrical Companies during the Year 1899.

BY RAILROAD COMPANIES.

	MILEAGE OF SYSTEM, SINGLE TRACK.	NEW SINGLE TRACK LAID, MILES.	SINGLE TRACK RELAI, MILES.	PAVEMENT RELAI, SQUARE YARDS.	NEW CONNECTING CURVES OR TURN-OUTS LAID.	SINGLE TRACK REMOVED, MILES.
Brooklyn Heights Railroad Company.....	*155.50	1.34	37.26	910,643	16	.26
Coney Island and Brooklyn Railroad Company.....	31.26	.....	2.80	20,000	2	.....
Van Brunt Street and Erie Basin Railroad Company.....	21.18	.....	.....	.....	.....	.....

\*63.44 miles elevated structure included.

BY ELECTRIC COMPANIES.

	TOTAL CONDUIT IN SYSTEM, MILES IN STREET.	TOTAL CONDUIT IN SYSTEM, MILES OF SINGLE CONDUCTOR.	TOTAL PAIR LINES IN SYSTEM, MILES OF STUBBY.	OVERHEAD CONDUCTOR IN SYSTEM, MILES SINGLE CONNECTION.	CONDUIT LAID IN 1899, MILES.	PAVEMENT RELAI, SQUARE YARDS.
Edison Electric Illuminating Company.....	75.72	234.10	241.86	6,115	7.33	11,000
New York and New Jersey Telephone Company.....	57.0	21,347.10	200.0	6,605.0	0.0	13,620
Flatbush Gas and Illuminating Company.....	8.0	20.0	39.0	94.00	.....	.....
Amsterdam Electric Light, Heat and Power Company.....	13.0	13.0	.....	.....	.....	.....

† Approximately.

BY GAS COMPANIES.

	1½-INCH.	2-INCH.	3-INCH.	4-INCH.	6-INCH.	8-INCH.	10-INCH.	12-INCH.	16-INCH.	20-INCH.	24-INCH.	30-INCH.	TOTAL.
Brooklyn Union Gas Company—													
Total mileage of mains in system.....	.73	1.6	79.99	116.02	194.29	57.67	26.35	59.99	16.47	17.97	1.06	.0	735.57
"    laid in 1899.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.47
"    removed in 1899.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	39.08
Square yards of pavement relaid.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90,900.0
Kings County Gas and Illuminating Company—													
Total mileage of mains in system.....	.....	.....	2.51	65.03	44.18	8.40	.....	5.88	1.93	.....	.....	.....	122.26
"    laid in 1899.....	.....	.....	.....	2.42	1.84	.....	.....	.....	.....	.....	.....	.....	3.22
Square yards pavement relaid.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	164.0
Flatbush Gas and Illuminating Company—													
Total mileage of mains in system.....	.....	.....	10.75	11.35	5.46	1.40	1.42	1.94	.....	.....	.....	.....	28.39
"    laid in 1899.....	.....	.....	.....	2.05	1.80	.7	.....	.....	.....	.....	.....	.....	6.17
"    removed in 1899.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	129
Square yards pavement relaid.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	560.0
Brooklyn Borough Gas Company—													
Total mileage of mains in system.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
"    laid in 1899.....	.....	.....	.....	4.94	1.42	6.79	.....	.....	.....	.....	.....	.....	14.48

TABLE XII.

Showing Openings Made in Asphalt and Brick Pavements during 1899.

	IN ASPHALT.	IN BRICK.
For water connections and repairs.....	143	4
For sewer connections and repairs.....	158	1
By gas companies.....	128	8
By electric-light companies.....	26	1
By telephone companies.....	12	1
By railroad companies.....	14	.....
To reset curbs.....	1	.....
For derrick guys.....	1	.....
	954	15

Table Showing the Flagging Laid by Public and Private Contracts by Wards.

WARDS.	PERMITS, PUBLIC.	PERMITS, PRIVATE.	AMOUNT SQUARE FEET, PRIVATE.	AMOUNT SQUARE FEET, PUBLIC.
First.....	.....	.....	.....	.....
Second.....	.....	4	125	.....
Third.....	.....	2	330	.....
Fourth.....	.....	.....	.....	.....
Fifth.....	.....	1	100	.....
Sixth.....	.....	6	9,190	.....
Seventh.....	.....	2	3,289	.....
Eighth.....	.....	8	76,523	7,005
Ninth.....	.....	3	4,784	1,500
Tenth.....	.....	7	8,608	.....
Eleventh.....	.....	9	989	.....
Twelfth.....	.....	2	2,080	.....
Thirteenth.....	.....	5	1,800	.....
Fourteenth.....	.....	1	1,600	.....
Fifteenth.....	.....	16	6,400	.....
Sixteenth.....	.....	8	2,581	.....
Seventeenth.....	.....	16	3,280	.....
Eighteenth.....	.....	10	4,078	.....

TABLE XIII.

Table Showing Amount of Flagging Laid, Driveways Paved and Notices to Flag Sidewalks Served during the Year 1899.

Total amount of flagging laid, private contract.....	240,445
"    public contract.....	16,569
Total number of permits issued, private.....	486
"    public.....	21
"    relay flagging.....	1,809
"    pave driveways.....	176
Total number of notices served on property-owners and agents.....	258



WARD.	PERMITS, PUBLIC.	PERMITS, PRIVATE.	AMOUNT, SQUARE FEET, PRIVATE.	AMOUNT, SQUARE FEET, PUBLIC.
Nineteenth.....	1	5	1,417	.....
Twentieth.....	.....	9	6,142	.....
Twenty-first.....	.....	9	6,978	.....
Twenty-second.....	2	10	19,491	8,540
Twenty-third.....	.....	15	5,337	.....
Twenty-fourth.....	.....	16	5,411	.....
Twenty-fifth.....	2	23	8,884	2,887
Twenty-sixth.....	3	25	18,257	910
Twenty-seventh.....	.....	27	20,648	.....
Twenty-eighth.....	5	27	18,198	4,558
Twenty-ninth.....	.....	24	18,480	.....
Thirtieth.....	.....	6	7,430	.....
Thirty-first.....	.....	1	15,300	.....
Thirty-second.....	.....	.....	.....	.....
Total.....	.....	.....	240,485	25,569
Total.....	.....	.....	257,054	.....

TABLE XIV.	
Statement Showing Concrete Sidewalk Laid During the Year 1899.	
Total number of permits issued.....	828
Total number of permits work completed.....	807
Total number of permits canceled.....	4
Total number of permits partly done.....	3
Total number of permits not begun.....	15

Number of Square Feet of Concrete Sidewalks by Wards.

WARD.	AMOUNT.	WARD.	AMOUNT.
First.....	11,155	Seventeenth.....	12,450
Second.....	6,856	Eighteenth.....	17,000
Third.....	10,600	Nineteenth.....	8,350
Fourth.....	1,156	Twentieth.....	11,500
Fifth.....	1,250	Twenty-first.....	16,000
Sixth.....	18,080	Twenty-second.....	48,200
Seventh.....	15,784	Twenty-third.....	59,225
Eighth.....	119,480	Twenty-fourth.....	47,714
Ninth.....	28,940	Twenty-fifth.....	27,706
Tenth.....	47,250	Twenty-sixth.....	59,416
Eleventh.....	3,960	Twenty-seventh.....	19,200
Twelfth.....	13,800	Twenty-eighth.....	60,125
Thirteenth.....	7,200	(a) Twenty-ninth.....	495,708
Fourteenth.....	6,150	Thirtieth.....	24,740
Fifteenth.....	15,050	Thirty-first.....	23,100
Sixteenth.....	8,300	Total.....	1,136,793

(a) Includes 106,086 square feet laid under the contract for improving Ocean avenue, from Fort Hamilton avenue to Avenue F.

TABLE XV.  
Showing Tests of Hydraulic Cements Made during 1899.

DATE RECEIVED.	LOCATION OF CONTRACT.	BOROUGH.	BRAND.	TENSILE STRENGTH—POUNDS PER SQUARE INCH. (Averages of Four Specimens.)								
				AGE.					STANDARD QUARTS, 3 PARTS 1 CEMENT, 2 PARTS.			
				Per Cent Water Used.	1 Day.	2 Days.	28 Days.	3 Months.	Per Cent Water Used.	7 Days.	28 Days.	3 Months.
Mar. 11, 1899	Riverside Viaduct Extension.....	Manhattan.....	Giant.....	22	130	445	.....	.....	.....	.....	.....	.....
" 24, "	Wallabout Basin and Clinton avenue.....	Brooklyn.....	".....	24	159	410	456	548	.....	.....	.....	.....
" 27, "	".....	".....	".....	22	115	472	508	593	.....	.....	.....	.....
" 27, "	".....	".....	".....	20	199	459	417	586	.....	.....	.....	.....
" 29, "	".....	".....	".....	22	171	428	.....	.....	.....	.....	.....	.....
" 28, "	Riverside Viaduct Extension.....	Manhattan.....	".....	22	137	430	.....	.....	.....	.....	.....	.....
Apr. 4, "	Wallabout Basin and Clinton avenue.....	Brooklyn.....	".....	22	178	479	.....	.....	.....	.....	.....	.....
" 5, "	".....	".....	".....	22	202	455	.....	.....	.....	.....	.....	.....
" 5, "	".....	".....	".....	20	145	484	.....	.....	.....	.....	.....	.....
" 5, "	".....	".....	".....	22	181	539	.....	.....	.....	.....	.....	.....
" 7, "	".....	".....	".....	20	178	508	.....	.....	.....	.....	.....	.....
Mar. 25, "	Court street, between Jerusalem street and Atlantic avenue.....	".....	Gladi.....	21.2	109	287	310	405	.....	.....	.....	.....
Apr. 10, "	One Hundred and Forty-seventh and One Hundred and Forty-eighth streets, between Seventh and Eighth avenues.....	Manhattan.....	Beach's Rosendale.....	15	85	136	.....	.....	.....	.....	.....	.....
" 10, "	One Hundred and Forty-seventh and One Hundred and Forty-eighth streets, between Seventh and Eighth avenues.....	".....	".....	16.4	89	134	.....	.....	.....	.....	.....	.....
" 6, "	Riverside Viaduct Extension.....	".....	Giant.....	23	100	514	319	8	.....	.....	.....	.....
" 6, "	".....	".....	".....	23	88	449	8	8	.....	.....	.....	.....
" 12, "	".....	".....	".....	27	167	490	.....	.....	.....	.....	.....	.....
" 12, "	".....	".....	".....	27	165	522	.....	.....	.....	.....	.....	.....
" 12, "	".....	".....	".....	28	197	515	.....	.....	.....	.....	.....	.....
" 12, "	".....	".....	".....	28	149	974	.....	.....	.....	.....	.....	.....
" 12, "	".....	".....	".....	28	140	990	.....	.....	.....	.....	.....	.....
" 18, "	Ocean avenue, between Fort Hamilton avenue and Avenue F.....	Brooklyn.....	Alpha.....	16	149	668	.....	.....	7	272	305	.....
" 18, "	Ocean avenue, between Fort Hamilton avenue and Avenue F.....	".....	".....	17	159	970	.....	.....	.....	.....	.....	.....
" 19, "	Ocean avenue, between Fort Hamilton avenue and Avenue F.....	".....	".....	18	166	707	889	890	.....	.....	.....	.....
" 20, "	Ocean avenue, between Fort Hamilton avenue and Avenue F.....	".....	".....	17	140	524	.....	.....	7	279	.....	.....
" 20, "	Ocean avenue, between Fort Hamilton avenue and Avenue F.....	".....	".....	17	191	555	.....	.....	.....	.....	.....	.....
" 20, "	Ocean avenue, between Fort Hamilton avenue and Avenue F.....	".....	Giant.....	21	168	390	.....	.....	.....	.....	.....	.....
" 21, "	Riverside Viaduct Extension.....	Manhattan.....	".....	21	156	495	.....	.....	.....	.....	.....	.....
" 21, "	".....	".....	".....	22	151	978	.....	.....	.....	.....	.....	.....
" 20, "	Ocean avenue, between Fort Hamilton avenue and Avenue F.....	Brooklyn.....	Norton's Rosendale.....	16	69	94	157	499	.....	.....	.....	.....
" 20, "	South Elliott place, between Atlantic avenue and Hanson place.....	".....	Commercial Rosendale.....	15	58	112	.....	.....	.....	.....	.....	.....
" 25, "	South Elliott place, between Atlantic avenue and Hanson place.....	".....	".....	27.5	54	141	943	360	.....	.....	.....	.....
" 25, "	South Elliott place, between Atlantic avenue and Hanson place.....	".....	".....	27	52	139	.....	.....	.....	.....	.....	.....
" 25, "	South Elliott place, between Atlantic avenue and Hanson place.....	".....	".....	26	54	129	.....	.....	.....	.....	.....	.....
" 26, "	Riverside Viaduct Extension.....	Manhattan.....	Giant.....	22	201	396	.....	.....	.....	.....	.....	.....
" 26, "	".....	".....	".....	22	192	379	.....	.....	.....	.....	.....	.....
" 26, "	".....	".....	".....	21	106	365	.....	.....	.....	.....	.....	.....
" 26, "	".....	".....	".....	21	97	372	.....	.....	.....	.....	.....	.....
" 27, "	Bulwer street, between Albany and Troy avenues.....	Brooklyn.....	Commercial Rosendale.....	26.2	52	139	.....	.....	.....	.....	.....	.....
" 27, "	".....	".....	".....	27	36	166	.....	.....	.....	.....	.....	.....
" 27, "	".....	".....	".....	26	44	249	.....	.....	.....	.....	.....	.....
" 28, "	One Hundred and Forty-seventh street, between Seventh and Eighth avenues.....	Manhattan.....	Beach's Rosendale.....	26	134	167	265	308	.....	.....	.....	.....
" 28, "	Riverside Viaduct Extension.....	".....	Giant.....	22	179	473	.....	.....	.....	.....	.....	.....
" 28, "	".....	".....	".....	22	140	408	.....	.....	.....	.....	.....	.....
" 28, "	".....	".....	".....	22	156	369	.....	.....	.....	.....	.....	.....
" 28, "	".....	".....	".....	24	150	361	.....	.....	.....	.....	.....	.....
" 28, "	President street, between Court and Clinton streets.....	Brooklyn.....	Commercial Rosendale.....	26	65	132	257	377	.....	.....	.....	.....
May 1, "	One Hundred and Thirty-sixth street and Riverside Viaduct.....	Manhattan.....	Giant.....	22	218	396	.....	.....	.....	.....	.....	.....

\* \* Checked and disintegrated.



DATE RECEIVED.	LOCATION OF CONTRACT.	BOROUGH.	BRAND.	TENSILE STRENGTH—POUNDS PER SQUARE INCH. [Average of Four Briquettes.]									
				HEAT.					STANDARD QUANTITIES: 2 PARTS 1 CEMENT, 1 PART.				
				Per Cent. Water Used.	1 Day.	7 Days.	28 Days.	3 Months.	Per Cent. Water Used.	7 Days.	28 Days.	3 Months.	
May 1, 1899	One Hundred and Thirty-eighth street, between Sixth and Seventh avenues.	Manhattan	Union Rosendale	28	111	136	144	144	22.5	111	136	144	144
" 1, "	Ocean avenue, between Fort Hamilton avenue and Avenue F.	Brooklyn	Alpha	18	435	784	144	144	22.5	111	136	144	144
" 1, "	Ocean avenue, between Fort Hamilton avenue and Avenue F.	"	"	18	315	749	144	144	22.5	111	136	144	144
" 3, "	Riverside Viaduct Extension.	Manhattan	Giant	23	179	372	144	144	22.5	111	136	144	144
" 3, "	One Hundred and Thirty-eighth street, between Sixth and Seventh avenues.	"	Union Rosendale	28.5	97	187	144	144	22.5	111	136	144	144
" 3, "	One Hundred and Thirty-eighth street, between Sixth and Seventh avenues.	"	"	28	120	180	144	144	22.5	111	136	144	144
" 5, "	Riverside Viaduct Extension.	"	Giant	28	121	284	144	144	22.5	111	136	144	144
" 4, "	"	"	"	22	86	452	144	144	22.5	111	136	144	144
" 4, "	"	"	"	22	125	409	144	144	22.5	111	136	144	144
" 5, "	Park place, between Brooklyn and Albany avenues.	Brooklyn	Commercial Rosendale	27.5	54	108	144	144	22.5	111	136	144	144
" 5, "	Park place, between Brooklyn and Albany avenues.	"	"	27.5	50	117	223	144	22.5	111	136	144	144
" 4, "	Wallabout Basin and Clinton avenue.	"	Giant	21.5	205	429	144	144	22.5	111	136	144	144
" 5, "	(Sample submitted).	"	New York	26	74	109	144	144	22.5	111	136	144	144
" 8, "	Riverside Viaduct Extension.	Manhattan	Giant	22	123	377	144	144	22.5	111	136	144	144
" 8, "	One Hundred and Eighty-third street, between Amsterdam avenue and Kingsbridge road.	The Bronx	Beach's Rosendale	26	91	111	144	144	22.5	111	136	144	144
" 9, "	Prospect place, between Brooklyn and Kingston avenues.	Brooklyn	Norton's Rosendale	26.5	93	101	144	144	22.5	111	136	144	144
" 9, "	Prospect place, between Brooklyn and Kingston avenues.	"	"	26.5	67	104	144	144	22.5	111	136	144	144
" 8, "	Wallabout Basin and Clinton avenue.	"	Giant	22	100	437	144	144	22.5	111	136	144	144
" 8, "	"	"	"	22	178	430	144	144	22.5	111	136	144	144
" 8, "	"	"	"	22	164	443	144	144	22.5	111	136	144	144
" 10, "	President street, between Court and Clinton streets.	"	Commercial Rosendale	27.5	22	124	144	144	22.5	111	136	144	144
" 9, "	Fulton street, corner of Vanderbilt avenue.	"	Victor	20	127	575	144	144	22.5	111	136	144	144
" 10, "	One Hundred and Eighty-third street, between Amsterdam avenue and Kingsbridge road.	The Bronx	Beach's Rosendale	26	95	144	144	144	22.5	111	136	144	144
" 10, "	One Hundred and Eighty-third street, between Sixth and Seventh avenues.	Manhattan	Union Rosendale	28	135	217	144	144	22.5	111	136	144	144
" 10, "	Riverside Viaduct Extension.	"	Giant	22.5	99	450	144	144	22.5	111	136	144	144
" 5, "	Reid avenue, corner of Macos street.	Brooklyn	Sunrise Special	18	22	243	344	499	22.5	111	136	144	144
" 13, "	Oliver street, between Madison and Cherry streets.	Manhattan	Vulcanite	18	220	996	973	144	22.5	111	136	144	144
" 13, "	Astor place, between Broadway and Fourth avenue.	"	Atlas	16	421	712	884	144	22.5	111	136	144	144
" 13, "	Riverside Viaduct Extension.	"	Giant	22	81	451	144	144	22.5	111	136	144	144
" 15, "	One Hundred and Eighty-third street, between Amsterdam avenue and Kingsbridge road.	The Bronx	Beach's Rosendale	26	110	123	144	144	22.5	111	136	144	144
" 17, "	Pacific street, between Schenectady and Utica avenues.	Brooklyn	Commercial Rosendale	22	50	122	280	144	22.5	111	136	144	144
" 17, "	Pacific street, between Schenectady and Utica avenues.	"	"	25	67	160	144	144	22.5	111	136	144	144
" 18, "	Riverside Viaduct Extension.	Manhattan	Giant	22	101	477	144	144	22.5	111	136	144	144
" 18, "	Prospect place, between Brooklyn and Kingston avenues.	Brooklyn	Norton's Rosendale	26	88	116	144	144	22.5	111	136	144	144
" 18, "	(Sample submitted).	Manhattan	Commercial Rosendale	26	58	112	144	144	22.5	111	136	144	144
" 19, "	Fourteenth street, between Fifth and Sixth avenues.	Brooklyn	"	27.5	48	131	144	144	22.5	111	136	144	144
" 19, "	Fourteenth street, between Fifth and Sixth avenues.	"	"	27	47	120	144	144	22.5	111	136	144	144
" 20, "	Riverside Viaduct Extension.	Manhattan	Giant	22	117	425	144	144	22.5	111	136	144	144
" 20, "	One Hundred and Eighty-third street, between Amsterdam avenue and Kingsbridge road.	The Bronx	Beach's Rosendale	26	112	131	144	144	22.5	111	136	144	144
" 24, "	Wallabout Basin and Clinton avenue.	Brooklyn	Giant	21.5	132	379	144	144	22.5	111	136	144	144
" 24, "	Riverside Viaduct Extension.	Manhattan	"	22	104	372	144	144	22.5	111	136	144	144
" 24, "	One Hundred and Eighty-third street, between Amsterdam avenue and Kingsbridge road.	The Bronx	Beach's Rosendale	26	103	140	144	144	22.5	111	136	144	144
" 24, "	Park place, between Kingston and Albany avenues.	Brooklyn	Commercial Rosendale	27	51	142	144	144	22.5	111	136	144	144
" 24, "	Park place, between Kingston and Albany avenues.	"	"	27	49	143	144	144	22.5	111	136	144	144
" 24, "	Wallabout Basin and Clinton avenue.	"	Giant	21	122	345	144	144	22.5	111	136	144	144
" 25, "	Riverside Viaduct Extension.	Manhattan	"	22.5	119	397	144	144	22.5	111	136	144	144
" 26, "	Pacific street, between Utica and Schenectady avenues.	Brooklyn	Commercial Rosendale	25	39	156	144	144	22.5	111	136	144	144
" 29, "	Riverside Viaduct Extension.	Manhattan	Giant	22	124	389	144	144	22.5	111	136	144	144
June 4, "	"	"	"	21.5	154	442	144	144	22.5	111	136	144	144
" 7, "	"	"	"	22	91	306	144	144	22.5	111	136	144	144
" 1, "	Wallabout Basin and Clinton avenue.	Brooklyn	"	21	38	111	144	144	22.5	111	136	144	144
" 1, "	"	"	"	21	39	175	144	144	22.5	111	136	144	144
" 1, "	"	"	"	21	46	140	144	144	22.5	111	136	144	144
" 1, "	"	"	"	20	51	285	144	144	22.5	111	136	144	144
" 1, "	"	"	"	20	53	322	144	144	22.5	111	136	144	144
" 2, "	Ocean avenue and Avenue C.	"	Lehigh	20	309	784	144	144	22.5	111	136	144	144
" 17, "	Flushing Avenue Conduit.	"	Star	19	432	822	144	144	22.5	111	136	144	144
Aug. 23, "	Court street, between Jerusalem street and Atlantic avenue.	"	Commercial Rosendale	25	27	89	144	144	22.5	111	136	144	144
" 24, "	Degraw street, between Nostrand and New York avenues.	"	"	27.5	54	114	144	144	22.5	111	136	144	144
Sept. 28, "	Court street, between Jerusalem street and Atlantic avenue.	"	"	27	57	151	144	144	22.5	111	136	144	144
Oct. 17, "	Court street, between Jerusalem street and Atlantic avenue.	"	"	27	54	75	144	144	22.5	111	136	144	144
" 19, "	Court street, between Jerusalem street and Atlantic avenue.	"	"	20	26	82	144	144	22.5	111	136	144	144
" 19, "	Court street, between Jerusalem street and Atlantic avenue.	"	"	22	21	80	144	144	22.5	111	136	144	144
" 20, "	Court street, between Jerusalem street and Atlantic avenue.	"	Hoffman	27.5	50	112	144	144	22.5	111	136	144	144
Sept. 13, "	Court street, between Jerusalem street and Atlantic avenue.	"	Commercial Rosendale	24	45	127	144	144	22.5	111	136	144	144
" 5, "	Bergen street, corner of Albany avenue (sidewalk).	"	White Bear	21	70	228	144	144	22.5	111	136	144	144
Oct. 23, "	Court street, between Jerusalem street and Atlantic avenue.	"	Hoffman	28	61	125	144	144	22.5	111	136	144	144
" 24, "	Court street, between Jerusalem street and Atlantic avenue.	"	"	27.5	79	102	144	144	22.5	111	136	144	144
Nov. 20, "	Twenty-first street, between Sixth and Seventh avenues.	"	Stettiner	28	291	654	144	144	22.5	111	136	144	144
" 20, "	(Sample submitted).	"	Lehigh	18	204	707	144	144	22.5	111	136	144	144
" 20, "	"	"	Federal	20	51	497	144	144	22.5	111	136	144	144
" 20, "	"	"	Commercial Rosendale	24	44	116	144	144	22.5	111	136	144	144
" 20, "	Buier street, between New York and Brooklyn avenues.	"	Lehigh	17	290	730	144	144	22.5	111	136	144	144



TABLE XVI.  
Showing Analyses of Refined Asphalts, Asphaltic Cements, etc.

SAMPLE NUMBER.	DESCRIPTION OF SAMPLE.	CONTRACTOR.	Matter Soluble in Petroleum Ether, 90° F.	Matter Soluble in Carbon Disulfide.	Matter Soluble in Chloroform.	Organic Matter, Non-soluble.	Mineral Matter.	Insoluble Matter.	Per Cent. of Total Matter Soluble in Petroleum Ether.	Matter Volatile at 250° F.	Matter Volatile at 350° F. in 8 Hours.	Matter Volatile at 450° F. in 8 Hours.	Flash Test.	Fire Test.	Specific Gravity.
L-434	Crude asphalt (submitted).		45.40	58.15	16.34	22.40	...	77.90	31.98	...	...	...	...	...	...
L-434	" (dry basis).		46.80	60.08	16.78	23.74	...	77.90	...	...	...	...	...	...	...
L-434	(Refined).		47.30	61.11	15.03	23.61	...	77.40	...	...	...	...	...	...	...
L-438	Glance pitch (submitted).		31.12	31.08	2.80	26.14	...	47.34	...	...	...	...	...	...	...
L-439	Petroleum residuum oil.	Sicilian Asphalt Paving Company.	...	...	...	...	...	Trace.	...	...	...	440° F.	310° F.	27° B.	...
L-440	Refined liquid asphalt.	Atlantic Alcatraz Asphalt Paving Company.	...	39.63	...	...	...	37	...	...	...	1.70	...	...	...
L-441	Refined Trinidad asphalt.	Frain-Bambrick Company.	...	38.73	...	...	...	47.37	...	...	...	...	...	...	...
L-443	Refined liquid asphalt.	Asphalt Construction Company.	...	39.37	...	...	...	48	...	...	30.00	24.10	...	...	...
L-445	Refined Trinidad Lake asphalt.	Warren-Scharf Asphalt Paving Company.	...	36.30	8.40	35.30	...	...	...	...	...	...	...	...	...
L-447	"	Barber Asphalt Paving Company.	...	34.91	9.43	36.53	...	...	...	...	...	...	...	...	...
L-448	"	Sicilian Asphalt Paving Company.	...	34.50	8.98	36.42	...	...	...	...	...	...	...	...	...
L-450	Asphaltic cement.	Usable Asphalt Company.	...	38.45	0.13	38.39	...	...	...	...	...	...	...	...	...
L-453	Coal tar paving composition, No. 4.	E. J. McKeever.	...	61.34	...	...	...	35.40	...	...	...	...	...	...	1.309
L-456	"	New York Asphalt Works.	...	72.90	...	...	...	27.30	...	...	...	...	...	...	1.084
L-457	"	"	...	73.16	...	...	...	26.83	...	...	...	...	...	...	1.111
L-458	Ember cement (asphalt and coal tar).	Atlantic Alcatraz Asphalt Paving Company.	...	26.22	...	...	...	33.12	...	...	...	...	...	...	...
L-459	Asphaltic cement.	Hanover Paving Company.	...	38.93	...	...	...	39.02	...	...	...	...	...	...	...

TABLE XVII.  
Showing Analyses of Asphalt Pavements Made during 1899.

SAMPLE NO.	LOCATION OF CONTRACT.	BORROW.	DESCRIPTION OF SAMPLE.	CONTRACTOR.	DATE RECEIVED.	Matter soluble in Carbon Disulfide, per cent.	Insoluble matter, per cent.	PERCENTAGE RETAINED BY SIEVES (INDIVIDUAL MATTER).									
								10-Mesh.	20-Mesh.	40-Mesh.	60-Mesh.	80-Mesh.	100-Mesh.	150-Mesh.	200-Mesh.	250-Mesh.	Finer.
460	Garage avenue, between Broadway and Bushwick avenue.	Brooklyn.	Top course.	Cranford Company.	1899 Mar. 8	9.70	90.30	5.06	73.50	27.54	10.02	7.28	7.44	2.84	8.54	...	...
461	One Hundred and Eighth street.	Manhattan.	Asphalt paving block.	"	" 30	5.32	94.68	16.95	14.12	7.12	3.59	1.87	1.02	5.43	17.37	...	...
462	"	"	"	"	" 31	5.19	94.81	14.47	13.39	6.73	3.78	1.79	1.37	6.33	19.05	...	...
463	Dean street, between Nerine street and Fourth avenue.	Brooklyn.	Top course.	Cranford Company.	May 3	9.44	90.56	8.41	83.39	27.80	10.80	6.80	6.78	2.73	9.01	...	...
464	Montgomery place, between Eighth and Ninth avenues.	"	"	Brooklyn Alcatraz Asphalt Company.	" 4	10.13	89.87	12	3.30	73.50	20.00	11.63	11.38	3.52	11.83	...	...
465	South Elliott place, between Atlantic avenue and Hanson place.	"	"	"	" 12	9.84	90.16	10	11.11	28.03	6.44	6.59	6.75	10.57	...	...	...
466	South Elliott place, between Atlantic avenue and Hanson place.	"	"	"	" 12	9.64	90.36	10	7.03	27.83	10.61	7.44	6.16	6.47	13.66	...	...
467	President street, between Court and Smith streets.	"	"	"	" 12	10.00	89.00	13	7.38	23.84	10.73	9.00	10.61	11.70	8.61	...	...
468	Sterling place.	"	"	Eastern Bermudez Asphalt Company.	June 3	8.91	91.09	...	...	...	...	...	...	...	...	...	...
469	"	"	"	"	" 3	9.29	90.71	...	...	...	...	...	...	...	...	...	...
470	Prospect place, between Brooklyn and Kingsway avenues.	"	"	Cranford Company.	" 4	8.41	91.59	3.47	13.15	10.05	10.33	6.63	6.93	4.46	10.09	...	...
471	Park place, between Albany and Kingsway avenues.	"	"	"	" 10	9.22	90.78	...	...	...	...	...	...	...	...	...	...
472	"	"	"	"	" 14	8.35	91.65	3.13	13.41	10.34	14.00	6.63	7.44	4.00	9.84	...	...
473	Fruitworth street, between Fourth and Fifth avenues.	"	"	Atlantic Alcatraz Company.	" 14	9.04	90.96	1.04	10.30	27.80	10.40	5.30	5.04	4.09	10.30	...	...
474	Pacific street, between Union and Schenck avenues.	"	"	Eastern Bermudez Asphalt Company.	" 11	8.70	91.30	3.30	13.39	10.11	17.15	6.43	7.14	3.69	11.80	...	...
475	Pacific street, between Union and Schenck avenues.	"	"	"	" 10	9.40	90.60	...	...	...	...	...	...	...	...	...	...
476	Prospect place, between Brooklyn and Kingsway avenues.	"	"	Cranford Company.	" 8	9.50	90.50	4.59	14.60	28.91	24.30	6.90	6.74	4.70	10.19	...	...
477	Reid avenue and Mason street (intersection).	"	"	Brooklyn Alcatraz Asphalt Company.	May 6	9.32	90.68	...	...	...	...	...	...	...	...	...	...
478	Ocean and Flatbush avenues (intersection).	"	"	Cranford Company.	" 13	9.48	90.52	9.38	14.36	26.60	20.78	5.68	6.78	4.04	10.38	...	...
479	"	"	"	"	" 15	8.73	91.27	9.47	14.75	23.95	20.36	6.20	6.30	4.14	10.34	...	...
480	Brooklyn avenue and Eastern parkway.	"	"	"	June 27	9.18	90.82	...	...	...	...	...	...	...	...	...	...
481	Borers place and Fulton street.	"	"	Brooklyn Alcatraz Asphalt Company.	" 10	10.37	89.63	4.1	6.04	33.40	29.50	8.91	11.96	8.40	9.79	...	...
482	Douglas street, between Nassau and New York avenues.	"	"	Cranford Company.	Oct. 13	9.58	90.42	9.78	7.44	21.31	25.58	8.60	11.30	10.50	12.39	...	...
483	Albion road and Fifth street.	"	"	Brooklyn Alcatraz Asphalt Company.	Nov. 1	9.80	90.20	1.30	13.09	20.05	25.19	7.19	7.70	6.30	11.73	...	...
484	Dalton street and Brooklyn avenue.	"	"	"	Dec. 28	10.78	89.22	4.00	5.79	14.46	24.05	11.70	15.37	11.74	13.89	...	...
L-477	(Sample submitted).	Manhattan.	Top course (rock asphalt).	"	Apr. 5	8.30	91.70	...	...	...	...	...	...	...	...	...	...
L-478	"	"	Top course (rock asphalt).	"	" 5	8.39	91.61	...	...	...	...	...	...	...	...	...	...
L-479	West One Hundred and Forty-seventh street.	"	Asphalt paving block.	"	" 2	5.28	94.72	16.83	13.45	9.03	5.07	4.45	3.80	6.47	10.65	...	...
L-480	West One Hundred and Forty-eighth street.	"	"	"	" 2	5.15	94.85	10.63	13.36	7.70	5.43	1.70	2.87	3.00	11.11	...	...
L-481	One Hundred and Second street and Third avenue.	"	Top course.	Warren-Scharf Company.	" 11	9.20	90.80	...	...	...	...	...	...	...	...	...	...
L-482	One Hundred and Eighty-third street, between Amsterdam avenue and Kingsbridge road.	"	Asphalt paving block.	Hanover Paving Company.	May 12	5.27	94.73	39.04	14.43	5.63	4.73	5.53	7.11	6.60	17.00	...	...
L-483	One Hundred and Eighty-third street, between Amsterdam avenue and Kingsbridge road.	"	"	"	" 12	5.09	94.91	44.76	14.40	7.85	4.18	6.80	1.30	3.48	10.00	...	...
L-484	One Hundred and Eighty-third street, between Amsterdam avenue and Kingsbridge road.	"	"	Atlantic Alcatraz Company.	" 12	5.34	94.66	37.13	13.91	8.24	4.80	6.65	4.17	7.00	12.00	...	...
L-485	One Hundred and Eighty-third street, between Lenox and Seventh avenues.	"	"	Frain-Bambrick Company.	" 18	5.46	94.54	43.41	14.05	7.81	3.90	3.08	3.17	3.50	17.77	...	...
L-486	Seventy-second street, between Fifth and Madison avenues.	"	Binder.	"	" 17	5.66	94.34	50.00	13.04	7.31	5.14	1.91	4.48	4.97	6.15	...	...
L-487	Seventy-second street, between Fifth and Madison avenues.	"	"	"	" 17	5.84	94.16	73.33	10.40	1.06	7.88	1.09	1.30	1.40	5.33	...	...
L-488	Seventy-second street, between Fifth and Madison avenues.	"	"	"	" 17	4.66	95.34	72.88	7.77	1.70	7.87	.99	1.33	1.37	4.97	...	...
L-489	Seventy-second street, between Fifth and Madison avenues.	"	"	"	" 17	5.48	94.52	64.48	10.30	5.33	1.90	1.10	1.79	1.80	6.14	...	...
L-490	(Sample submitted).	Brooklyn.	Top course.	Eastern Bermudez Asphalt Company.	June 2	8.92	91.08	...	...	...	...	...	...	...	...	...	...
L-491	"	"	"	"	" 2	8.83	91.17	...	...	...	...	...	...	...	...	...	...
L-492	"	"	"	"	" 3	7.98	92.02	...	...	...	...	...	...	...	...	...	...
L-493	"	"	"	"	" 3	7.71	92.29	...	...	...	...	...	...	...	...	...	...
L-494	Nineteenth street, between Fourth and Fifth avenues.	Manhattan.	Binder.	"	" 0	3.37	96.63	91.77	1.80	1.06	.63	.27	.40	.60	3.48	...	...
L-495	Pell street, between Bowery and Mont street.	"	Top course.	"	" 0	2.20	97.80	...	...	...	...	...	...	...	...	...	...
L-496	"	"	Binder.	"	" 0	4.81	95.19	78.07	10.00	3.79	3.88	.90	1.19	1.00	5.43	...	...
L-497	(Sample submitted).	Brooklyn.	Top course.	Eastern Bermudez Asphalt Company.	" 0	9.10	90.90	...	...	...	...	...	...	...	...	...	...
L-498	"	"	"	"	" 0	9.70	90.30	...	...	...	...	...	...	...	...	...	...
L-499	"	"	"	"	" 10	3.88	96.12	...	...	...	...	...	...	...	...	...	...
L-500	Borden avenue, between Jackson and Thompson avenues.	Queens.	Rock asphalt.	N. Y. M. W.	" 0	27.05	72.95	...	...	...	...	...	...	...	...	...	...
L-501	Exford avenue, between Jackson and Thompson avenues.	"	Binder.	"	" 0	3.84	96.16	59.83	4.55	.13	.15	.15	.15	.15	2.06	...	...



Sample No.	LOCATION OF CONTRACT.	BOROUGH.	DESCRIPTION OF SAMPLE.	CONTRACTOR.	Date Received.	Matter soluble in Carbon Bisulphide, Per cent.	Insoluble matter, Per cent.	PERCENTAGES RETAINED BY SIEVES (INSOLUBLE MATTER).								Fines.
								10-Mesh.	20-Mesh.	40-Mesh.	60-Mesh.	80-Mesh.	100-Mesh.	200-Mesh.	300-Mesh.	
L-396	Oliver street, between Cherry and Madison streets.	Manhattan.	Top course.		1899, June 12	9.09	80.91	100	100	100	100	100	100	100	100	0
L-398	"	"	Binder.		" 12	4.41	95.59	100	100	100	100	100	100	100	100	0
L-397	Borden and Jackson avenues.	Queens.	Rock asphalt.	N. V. M. W.	" 13	60.03	39.97	100	100	100	100	100	100	100	100	0
L-398	"	"	Binder.	"	" 13	5.11	94.89	100	100	100	100	100	100	100	100	0
L-400	"	"	"	"	" 17	4.71	95.29	100	100	100	100	100	100	100	100	0
L-407	Prince street, between Wooster street and West Broadway.	Manhattan.	Top course.		" 26	10.33	89.67	100	100	100	100	100	100	100	100	0
L-407	Prince street, between Wooster street and West Broadway.	"	Binder.		" 26	10.19	89.81	100	100	100	100	100	100	100	100	0
L-408	Forty-third street, between Eighth and Ninth avenues.	"	Top course.		" 26	0.07	99.93	100	100	100	100	100	100	100	100	0
L-408	Forty-third street, between Eighth and Ninth avenues.	"	Binder.		" 26	3.40	96.60	100	100	100	100	100	100	100	100	0
L-409	Nineteenth street, between Eighth and Ninth avenues.	"	Top course.		" 26	8.90	91.10	100	100	100	100	100	100	100	100	0
L-409	Nineteenth street, between Eighth and Ninth avenues.	"	Binder.		" 26	5.00	94.94	100	100	100	100	100	100	100	100	0
L-412	Borden and Jackson avenues.	Queens.	"		" 27	3.82	96.18	100	100	100	100	100	100	100	100	0
L-413	"	"	"		" 27	3.50	96.50	100	100	100	100	100	100	100	100	0
L-413	"	"	Rock asphalt.		" 27	10.05	89.95	100	100	100	100	100	100	100	100	0
L-414	"	"	"		July 1	10.05	89.95	100	100	100	100	100	100	100	100	0
L-415	One Hundred and Fortieth street, between Third and Brook avenues.	The Bronx.	Top course.		" 10	0.20	99.80	100	100	100	100	100	100	100	100	0
L-415	Seventy-second street, between Fifth and Madison avenues.	Manhattan.	"		" 10	0.28	99.72	100	100	100	100	100	100	100	100	0
L-417	Aster place and Eighth street, between Broadway and Fourth avenue.	"	Binder.		" 13	3.14	96.86	100	100	100	100	100	100	100	100	0
L-420	Borden and Jackson avenues.	Queens.	Top course.		" 27	0.93	99.07	100	100	100	100	100	100	100	100	0
L-421	"	"	Binder.		" 27	3.40	96.60	100	100	100	100	100	100	100	100	0
L-417	(Sample submitted)	Manhattan.	Top course.	Grady Company	Sept. 15	12.20	87.80	100	100	100	100	100	100	100	100	0
L-471	Twenty-fourth street, between Second and Madison avenues.	"	Asphalt block.		Nov. 2	5.92	94.08	100	100	100	100	100	100	100	100	0
L-472	Edgewood avenue, between One Hundred and Forty-fifth and One Hundred and Forty-seventh streets.	The Bronx.	"		" 2	5.92	94.08	100	100	100	100	100	100	100	100	0
L-473	Macomb's Dam road, between Eighteenth avenue and Central bridge.	"	"		" 9	0.28	99.72	100	100	100	100	100	100	100	100	0
L-474	Albion road and Fifteenth street.	Brooklyn.	Top course.	Brooklyn Asphalt Company	" 12	10.91	89.09	100	100	100	100	100	100	100	100	0
L-475	Become street and East Eighty-fourth street.	Manhattan.	"		Dec. 2	11.73	88.27	100	100	100	100	100	100	100	100	0

TABLE XVIII.

Showing Analysis of Paving Bricks, Limestones, etc.

Sample No.	Description of Sample.	Silica.	Alumina and Iron.	Lime.	Magnesia.	Alkalies, etc.	Loss on Ignition.	Carbon Dioxide.
481	Galesburg paving (unburned) brick.	61.34	25.42	1.23	2.08	8.86	3.75	0.00
482	Reconstituted, dry burnt.	65.05	26.97	1.19	2.21	5.11	0.00	0.00
483	Galesburg paving brick, vitrified.	64.70	28.49	1.01	2.08	3.94	0.00	0.00
484	Tomlinson Cove limestone.	52.12	19.74	17.59	0.00	0.00	42.70	0.00
485	Clinton Point limestone.	52.12	19.74	17.59	0.00	0.00	42.70	0.00
486	Tomlinson Cove limestone.	52.12	19.74	17.59	0.00	0.00	42.70	0.00

TABLE XIX.

Showing Relative Ductility of Pure Asphaltic Cements.

Sample No.	Composition of Cement.	Penetration at 30° F.	Relative Ductility (Length) at 80° F.	Relative Ductility (Length) at 90° F.
1	Pure Trinidad bitumen and petroleum residuum.	40 degrees.	1/2 inch.	1/4 inch.
2	Pure Bermudez bitumen and petroleum residuum.	40 "	1 1/4 inches.	2 1/2 inches.
3	Pure Alcatraz bitumen and Alcatraz maltha.	40 "	2 1/4 "	4 1/2 "
4	Pure Trinidad bitumen and Alcatraz maltha.	40 "	2 1/4 "	4 1/4 "
5	A commercial paving matrix, 90 per cent. bitumen.	40 "	1/2 inch.	0.00
6	Pure Alcatraz asphalt (soft).	30 "	4 1/4 inches.	0.00
7	Unbleached (refined), and Alcatraz maltha.	30 "	1 1/4 "	0.00
8	Pure Trinidad bitumen and petroleum residuum.	25 "	1/2 inch.	0.00
9	Pure Bermudez bitumen and petroleum residuum.	25 "	1 inch.	0.00
10	Pure Alcatraz bitumen and Alcatraz maltha.	35 "	4 1/4 "	0.00
11	Pure Bakersfield bitumen and Bakersfield maltha.	35 "	2 1/4 "	0.00

TABLE XX.

Summary of Preliminary Estimates made during the Year 1899.

CLASS OF WORK.	TOTAL FOR YEAR.	
	No.	Estimated Cost.
Grading and paving with asphalt.	30	\$471,400.00
Grading and paving with granite blocks.	8	84,300.00
Grading and paving with trap blocks.	5	91,000.00
Grading and paving with macadam.	8	75,840.00
Grading and paving with brick.	2	30,280.00
Regulating and grading.	10	121,200.00
Repaving with asphalt.	119	1,827,920.00
Repaving with granite.	27	643,300.00
Repaving with brick.	2	14,700.00
Flagging and relaying sidewalks.	168	80,957.00
Laying curbs and walks.	3	4,820.00
Fencing vacant lots.	32	5,722.00
Grading lots.	19	45,160.00
<b>Total.</b>	<b>429</b>	<b>\$3,451,355.00</b>

TABLE XXI.

Miscellaneous Work Done during 1899.

Permits issued to tap water pipes.	2,278
" to repair water connections.	3,902
" for sewer connections.	2,408
" for sewer connection repairs.	822
" for building material.	1,324
" to build vaults.	178
" for special purposes.	9,591
" to erect awnings.	129
" to cross sidewalks.	610
Notices served to change house numbers.	874
Citizens complaints received and reported on.	1,329
Police complaints received and reported on.	1,104

## DOCUMENT "J."

DEPARTMENT OF HIGHWAYS—DEPUTY COMMISSIONER'S OFFICE,  
BOROUGH BUILDING, BOROUGH OF QUEENS,  
NEW YORK, January 5, 1900.

Hon. JAMES P. KEATING, Commissioner of Highways, Borough of Manhattan:

DEAR SIR—As per your instructions, I herewith respectfully submit a report of the transactions and operations of the Department of Highways, Borough of Queens, for the year ending December 31, 1899.

The various improved streets and highways throughout the borough are in fairly good condition, the damage caused by the severe storms of the early part of the year having been thoroughly remedied.

The work of systematically sprinkling, sanding and cleaning the three hundred and seventy-five (375) miles of macadam roads and streets has been properly prosecuted, with evidently great satisfaction to our people, as evidenced by the almost total absence of complaints.

The repairing of the fifty (50) miles of granite, trap-rock and brick pavement has kept the pavers of the Department busy, and as a result the paved streets are at this time in fairly good condition for travel.

A very important matter in connection with road building in this borough during the past year has been the resurfacing of Thomson avenue, with macadam along, from Jackson avenue to the old Long Island City line—a distance of seven thousand seven hundred (7,700) feet in length, and a width of twenty-two (22) feet. This improvement completes a system of communication extending in one unbroken line over the finest roads in the country, from Thirty-fourth Street Ferry to a point fully fifty (50) miles in the interior of Long Island.

It is a source of much gratification to this Department to know that this improvement is thoroughly appreciated by the public, judging from the many complimentary notices in the public press, as well as by the expressions of approval of our people, as to the thorough manner in which the work has been performed.

Another improvement that has given satisfaction and pleasure to thousand of bicycle riders is the completion of the bicycle strips on both sides of Borden avenue, Jackson avenue and Thomson avenue, from the Thirty-fourth Street Ferry to the old Long Island City line, and there connecting with the fine macadam roads leading to all parts of the borough.

The various unfinished contracts executed in 1897 by the several town and village authorities of Queens County, several of which this Department was unable to proceed with because of the delay occasioned by the question of the legality of the contracts, as well as the legality of the bond issues to pay for the improvements, have all been favorably passed upon the past year and work on all of them proceeded with, and at this time are all practically completed.

A full detailed report of same will be found on another page under the head of Engineer's Report.

In our last yearly report I called attention to the fact that we were daily importuned by citizens and taxpayers to have certain improvements and repairs made upon various streets throughout this borough, and in many cases we found upon investigation that the streets had never been legally opened or title conveyed to the former towns or villages, or to the present City of New York; and as we are restrained, upon the advice of the Corporation Counsel, from expending any money upon streets that have never been legally deeded to the City, it is a constant annoyance to us to be compelled to refuse these many petitions.

I understand that the Topographical Bureau have completed the new maps for the First and Second Wards of the Borough of Queens, and have submitted them to the Board of Public Improvements for approval and adoption. I would suggest that if you can in any way hurry forward the approval and adoption of these two maps, and the completion of the maps for the other three wards of the borough, that you kindly do so with as little delay as possible, so that steps may be taken to legally open and take possession of the various thoroughfares, that when the application of the property-owners and citizens are received we may be in a position to rectify and remedy the many complaints.

Various streets and road improvements are certainly badly needed, and when the property-owners find out how they can be secured there will doubtless be many demands for them. In this connection I might add that there are about two hundred and eighty-five (285) miles of unpaved streets and roads in this borough, and the many requests made upon us to look after and care for the numerous washouts caused by rain storms, keeps a large force of men employed, and is a constant and heavy drain upon our appropriation without accomplishing any permanent improvements; therefore, the sooner the official maps are completed and adopted, and the petitions for improvements favorably acted upon, and permanent improvements made, the sooner this drain upon our funds will cease.



*Total Mileage of each Kind of Pavement in the Borough of Queens, together with an Estimate of the Number of Miles of Unpaved Streets on December 31, 1899, as Compared with the Previous Year, 1898 :*

	1898.	1900.
With specification (miles).....	Miles. 27.48	Miles. 29.94
a. Belgian flag.....	6.43	6.64
b. Sheet asphalt.....	3.00	3.00
c. Surfaced brick.....	14.39	14.30
d. Cobble stones.....	.30	.30
e. Macadam.....	373.36	403.54
f. Pocketful gravel.....	13.66	13.68
Total number of miles of paved streets.....	437.13	457.70
Estimated number of miles of unpaved streets.....	264.70	274.35
Total number of miles of streets in the town.....	701.83	732.05

*Summary of Work Done by the Maintenance Department for the Year ending December 31, 1899*

<b>Paved streets—</b>	
Trap-rock pavement repaired, square yards.....	4.05
Granite-block pavement repaired, square yards.....	7.82
Cobble pavement repaired (gutters), square yards.....	3.45
<b>Macadam streets—</b>	
Macadam roads and streets mended, square yards.....	1,024.26
Macadam pavement scraped and cleaned, square yards.....	1,391.08
Macadam streets resurfaced and repaired, square yards.....	2,982.00
<b>Unpaved roads and streets—</b>	
Dirt roadway scraped, crowned and surfaced, square yards.....	488.67
Dirt streets graded, square yards.....	79.91
<b>Miscellaneous—</b>	
Cobble gutters repaved on dirt streets, square yards.....	697.00
Cobble gutters repaved on macadam streets, square yards.....	841.00
Curbing reset, linear feet.....	2,533.00
Gutters cleaned, linear feet.....	505.29
Crosswalks relaid, linear feet.....	4,725.00
Rail fence built on roadside as protection to vehicles, linear feet.....	8,431.00
Chestnut rails used.....	202.00
Chestnut posts used.....	100.00
Wooden culverts built to drain highways.....	9.00
Wooden and stone culverts repaired.....	9.00
Brick gutters repaved, square yards.....	500.00
Cobble curb set (new), linear feet.....	2,055.00

The following kinds and quantities of materials have been handled and properly disposed of, as required for the work hereinbefore mentioned:

Screenings used, loads.....	2.94
Broken stone, loads.....	7.82
Peekskill gravel used, loads.....	4.03
Sand used, loads.....	11.79
Worn out material hauled away, loads.....	17.80
Gravel and loam used in repaving and grading, loads.....	27.00
Asph. barrel and gravel, loads.....	.48

The total number and various kinds of permits issued during the year ending December 31, 1900, were as follows :

Permits to open streets to tap water pipes .....	636
" " repair water connections .....	316
" " make sewer connections .....	295
" " repair sewer connections .....	93
Permits to place building material on streets .....	98
Special permits .....	1,108
Permits to erect awnings .....	2
Permits for railway construction and repairs .....	4
Permits to cross sidewalks .....	1

Total number of permits issued for the year.....	2,697
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The amount of money received by this Department for permits issued for restoring street openings, for water and sewer connections, etc., from January 1, 1899, to December 31, 1899, was as follows:

Sewer and water connections and repairs to same	\$5,227.00
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Herewith I hand you the yearly report of the accountant of this Department, which will give you a complete statement of the appropriations allowed this Department for the year 1899, showing the expenditures and balances on hand, December 31, 1899, together with a report of the condition of the various bond accounts left as legacy to this Department after consolidation by the several towns and villages incorporated in this borough as a part of the Greater New York.

Before concluding this report I desire to take the opportunity of thanking you for the prompt attention and wise guidance you have always extended to this Department, and in conclusion I invite your consideration of the detailed report that follows.

All of which is respectfully submitted,

Very truly yours,

JOHN P. MADDEN,

Deputy Commissioner of Highways, Borough of Queens.

By JULIE VON MUEHLHAUS, Attorney.

DEPARTMENT OF HIGHWAYS—DEPUTY COMMISSIONER'S OFFICE,  
BOROUGH BUILDING, BOROUGH OF QUEENS,  
NEW YORK, January 2, 1900.

Hon. JOHN P. MADDEN, Deputy Commissioner of Highways, Borough of Queens:

DEAR SIR—In accordance with instructions received by you from the Commissioner of Highways, I have the honor to submit the following report, showing the condition of all accounts of whatever nature and the expenditures during the year ending December 31, 1899:

Appropriation, 1899—	
"Salaries" .....	\$10,300 00
Disbursements during the year 1899 .....	9,855 00
Balance .....	\$444 97

The above balance is available for transference to the credit of the General Fund for the reduction of taxation, there being no outstanding liability against the same.

Appropriation, 1899—

Labor, Maintenance and Supplies.....	\$175,000 00
September 15, to transfer from "Maintenance of Viaducts and Bridges," 1899, to "Labor, Maintenance and Supplies," 1899, as per resolution of the Board of Estimate and Apportionment, dated September 15, 1899.....	5,000 00
October 30, to transfer "Labor, Maintenance and Supplies," Borough of The Bronx, to "Labor, Maintenance and Supplies," Queens.....	12,000 00
October 30, to transfer from "One Hundred and Fifty-fifth Street Viaduct, Maintenance and Repairs," Borough of Manhattan.....	8,000 00

This balance, \$1,685.81, will be required to pay the outstanding orders, etc.

Appropriation 1500—

"Maintenance of Viaducts and Bridges" .....	\$10,000 00
Disbursements, transfers, etc., during the year 1899 .....	9,980 31
Outstanding orders .....	\$19 69
Balance .....	10 00
Balance .....	\$1 69

This balance of \$3.69 is available for transference to the credit of the General Fund for the reduction of taxation.

DETAILED STATEMENT OF EXPENDITURES.

For which Vouchers, Pay-rolls, &c., were Transmitted by the Deputy Commissioner of Highways, Borough of Queens, to the Comptroller, during the Year ending December 31, 1880.

	FIRST QUARTER.	SECOND QUARTER.	THIRD QUARTER.	FOURTH QUARTER.	TOTAL.
<b>"Salaries," \$300—</b>					
Salaries of Deputy Commissioner, Chief Clerk, Bookkeepers, etc.....	\$4,537 50	\$4,637 50	\$4,753 03	\$5,423 00	\$19,351 03
<b>"Labor, Maintenance and Supplies," \$100—</b>					
Weekly pay-roll, Laborers, Foremen, Teams, etc.....	\$28,178 01	\$27,449 54	\$26,858 54	\$18,990 77	\$103,586 86
Monthly pay-roll, Engineers, Inspectors, etc.....	3,512 56	3,475 02	3,397 40	3,037 47	13,422 45
Car-fares, hack hire, postage, stamps, stationery, etc.....	31 20	457 93	478 04	1,037 44	1,904 59
Sharpening and repairing tools.....	48 71	200 04	260 05	430 11	738 91
Use and care of horses, wagons, harness, etc.....	375 00	630 00	600 00	1,270 00	2,875 00
Lumber.....	15 74	61 28	101 31	6 00	284 33
Repairs to surveying instruments.....	75 00	—	—	5 00	80 00
Supplies, Engineering Department.....	—	\$74 50	141 03	19 50	335 03
Coal and wood.....	—	80 70	403 35	400 00	884 05
Hardware, oil, waste, picks, shovels, etc.....	—	604 90	460 97	107 18	1,573 05
Repairs to steam roller.....	—	90 00	91 50	2 00	183 50
Supplies for use of steam roller.....	4 00	100 00	—	—	104 00
Stake.....	—	4,940 00	3,530 75	—	8,470 75
Trap-rock and screenings.....	—	—	4,700 40	6,600 20	11,300 60
Vegetable grease.....	—	—	4,300 00	—	4,300 00
Iron and riveted pipe.....	—	—	0 30	—	0 30
Harvesting.....	—	70 30	7 10	—	77 40
Rubber stamps.....	10 80	90 30	4 10	7 05	112 25
Maps.....	11 00	10 00	10 50	—	31 50
Repairs to and repainting wagons.....	—	—	11 10	11 00	22 10
Repairs to harness.....	1 70	—	6 30	—	8 00
Blumson bridging.....	78 00	—	—	—	78 00
Blumson curbing.....	19 50	—	—	—	19 50
Rental of telephone and toll service.....	—	117 48	—	100 40	217 88
Time locks, pencil locks, stationary, etc.....	—	25 00	—	60 15	85 15
Rental of 2 road outfitlines.....	—	63 75	177 00	100 00	340 75
Hire of rags, detrick, spurs, etc.....	—	345 40	—	—	345 40
Planting, Corporation Yard.....	—	0 50	—	—	0 50
Rental steam rollers.....	—	—	2,500 00	700 00	3,200 00
Three (3) new horse rollers.....	—	—	700 00	—	700 00
Removal of 3 new horse rollers.....	—	—	50 00	—	50 00
Supplies for typewriting machines.....	—	—	—	0 00	0 00
Tool-bags.....	—	—	125 00	—	125 00
2 cast-iron gratings.....	—	—	—	34 00	34 00
Brick and cement.....	—	—	—	11 25	11 25
Horse blankets.....	—	—	—	10 50	10 50
Rental of trailer freight cars.....	—	—	—	5 00	5 00
<b>Total.....</b>	<b>\$40,000 00</b>	<b>\$39,889 39</b>	<b>\$77,137 03</b>	<b>\$114,380 00</b>	<b>\$162,406 42</b>

<sup>44</sup> Maintenance of Viaducts and Bridges," also—

Weekly pay-rolls, laborers, etc.	\$256 00	\$54 75	\$54 00	\$786 00	\$4,164 75
Monthly pay-rolls, inspectors		300 00	124 20		424 20
Lumber	64 34	8 50	44 85	197 55	315 24
Hardware, nails, etc.	4 30		35 75	3 00	43 05
Repairs to Thomson Avenue Bridge		160 00	149 00		309 00
Cement			5 00	5 00	10 00
Car-hire			47 30	9 45	56 75
By transfer to "Labor, Maintenance and Supplies," 1899, as per resolution of the Board of Estimate and Apportionment, dated September 15, 1899			6,080 50		6,080 50
Rebuilding north and south abutments of the Ireland Mills Bridge				1,270 00	1,270 00
Total	\$695 34	\$463 33	\$5,700 10	\$9,171 55	\$8,980 24

*Statement Showing Amount of Unexpended Balance of Bond Issues*

turned over by the various authorized authorities to the Comptroller of the City of New York on the advent of consolidation, work on which, in many cases, was instituted prior to consolidation and finished or otherwise carried on under the direction of the Department of Highways, Borough of Queens. The amount disbursed by said Department, and the balance remaining to the credit of the various bond issues on December, 31, 1899:

Amount turned over to the Comptroller of The City of New York.....	\$208,943	38
Disbursements from November 30, 1868, to and inclusive of		

December 31, 1899	
Engineers' Certificates.....	\$146,090 22
Pay-rolls Engineering Corps.....	3,775 45
Pay-rolls Inspectors.....	5,495 00

Balanço.....	132.976 71
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This amount, namely, \$52,976.71, is necessary to complete the contract and pay all retained percentages.



Village of Jamaica Street Improvement Fund (chapter 507, section 1, Laws of 1897)— Amount turned over to the Comptroller of The City of New York by the Village Treasurer.....	\$35,191 35
Disbursements from October 31, 1898, to and inclusive of December 31, 1899 : Engineers' certificates.....	\$14,312 65
Pay-roll Engineering Corps.....	908 04
Pay-roll Inspectors.....	380 47
Balance.....	15,621 16
Balance.....	\$19,569 19

This amount, \$19,569.19, is required to complete the contract.

Village of Flushing Street Opening and Improvement Fund (chapter 504, Laws 1887, amended by chapter 371, Laws 1890)— Amount turned over to the Comptroller of The City of New York.....	\$33,754 78
Disbursements during the year 1898—Engineers' certificates.....	23,471 93
Balance.....	\$10,282 85

Contract completed, the above balance is available either for transference to the credit of the General Fund or possibly a new contract could be entered into for expending this balance for the purpose raised. I would respectfully suggest that this matter be submitted to the Corporation Council for an opinion as to the legality of such a proceeding.

Village of Bayside and Douglaston Street Improvement Fund (chapter 686, sections 69 and 70, Laws of 1892)— Amount turned over to the Comptroller.....	\$30,454 24
Disbursements from October 31, 1898, to and inclusive of December 31, 1899 : Engineers' certificates.....	\$29,308 06
Pay-roll Engineering Corps.....	251 94
Pay-roll Inspectors.....	166 66
Balance.....	29,726 66
Balance.....	\$727 58

Contract Completed.

Village of Richmond Hill Sidewalk Improvement Fund (title 4, chapter 291, section 4, Laws of 1870)— Amount turned over to the Comptroller of The City of New York.....	\$71,726 38
Disbursements from August 29, 1898, to and inclusive of December 31, 1899 : Engineers' certificates.....	\$5,817 64
Pay-roll Engineering Corps.....	808 17
Pay-roll Inspectors.....	166 67
Balance.....	6,792 68
Balance.....	\$64,933 70

Contract in litigation; this balance, \$64,933.70, will be required to complete the same.

College Point Street and Park Improvement Fund (chapter 504, Laws of 1887, amended by chapter 371, Laws of 1890)— Amount turned over to the Comptroller of The City of New York.....	\$45,564 30
Disbursements from April 30, 1899, to and inclusive of December 31, 1899 : Engineers' certificates.....	\$42,183 58
Pay-roll Engineering Corps.....	1,805 60
Pay-roll Inspectors.....	3,165 50
Balance.....	44,854 68
Balance.....	\$709 62

Contract completed; for detail, see Chief Engineer's report.

Village of Rockaway Beach Street Improvement Fund— Amount turned over to the Comptroller of The City of New York.....	\$6,720 12
Disbursements during the year 1898—Engineers' certificates.....	4,554 70
Balance.....	\$2,165 42

Contract completed; would respectfully suggest that this matter be placed by you before the Corporation Council as to the legality of entering into a new contract for the purpose of expending the above balance.

Village of Arverne-by-the-Sea Street Improvement Fund— Amount turned over to the Comptroller of The City of New York.....	\$26,019 75
Disbursements during the year 1898—Engineers' certificates.....	18,989 04
Balance.....	\$7,030 71

Laying Asphalt Strips from Thirty-fourth and Ninety-second Street Ferries (chapter 378, Laws of 1897)— Appropriation, 1898.....	\$22,000 00
Disbursements from June 30, 1899, to and inclusive of December 31, 1899 : Engineers' certificates.....	\$12,810 10
Pay-roll Engineering Corps.....	364 86
Pay-roll Inspectors.....	698 17
Balance.....	13,873 13
Balance.....	\$8,126 78

Retained percentage for maintenance, etc., \$5,490.05, payable on November 29, 1900, and November 29, 1901, is still a debit against the above balance.	
Borough of Queens, Town of Newtown, Repairs and Maintenance of Highways, Burial Permit Fund— Amount turned over to the Comptroller of The City of New York.....	\$8,623 11
Disbursements during the year 1899—Engineers' certificates.....	6,082 09
Balance.....	\$1,941 02

Retained percentage of \$160.78, payable May 17, 1900, is a debit against the above balance.

Respectfully submitted,

WILLIAM L. MURRAY,  
Accountant, Department of Highways, Borough of Queens.

DEPARTMENT OF HIGHWAYS—ENGINEER'S OFFICE,  
BOROUGH BUILDING, BOROUGH OF QUEENS,  
NEW YORK, January 3, 1900.

Hon. JOHN P. MADDEN, Deputy Commissioner of Highways, Borough of Queens:

DEAR SIR—In accordance with the usual custom, I beg to submit herewith my report of work done by the Engineering Department of the Department of Highways, Borough of Queens, for the year ending December 31, 1899.

During the past year this Department had under way the following seven contracts, namely :  
Town of Newtown Road Improvement Bond Fund—Contractor, William Booth.  
Town of Newtown Road Improvement Bond Fund—Contractor, D. C. Booker, Jr.  
Town of Newtown Road Improvement Bond Fund—Contractor, Frank J. Gallagher.  
College Point Street and Park Improvement Fund—Contractors, T. F. Touhy & Co.  
Village of Bayside and Douglaston Street Improvement—Contractors, Thomas F. Byrnes & Co.

Burial Permit Fund (Grand street, Newtown)—Contractor, William Kelly.

Bicycle Strips from Thirty-fourth Street Ferry—Contractor, Hugh T. Boorman.

At the close of the past year all the above contracts have been finished with the exception of Cypress and Juniper avenues and Stanhope street, which are included in the Town of Newtown Road Improvement Bond Fund, mentioned above.

Under these contracts the principal items of work done during the year are as follows :

Earth excavation, cubic yards.....	45,466
Earth embankment, cubic yards.....	39,556.81
Macadam pavement laid, square yards.....	107,187.18
Granite-block pavement laid, square yards.....	35,808.53
Belgian trap pavement laid, square yards.....	2,850.34
Cobble-stone pavement laid (gutters), square yards.....	4,402.03
Asphalt pavement laid (bicycle strips), square yards.....	8,166.41
Concrete for bicycle strips, cubic yards.....	692.48
Relaying block pavement for bicycle strips, square yards.....	3,180.90
Resurfacing macadam roads, square yards.....	20,423.19

I herewith submit (see Schedule A) an itemized statement showing the different kinds of improvements done on each of the roads and streets so improved.

I also herewith submit (see Schedule B) a financial statement of the certificates issued by me for payments on contracts under construction or completed during the year 1899.

During the past year 13.45 miles of improved streets were added to our mileage of paved streets, and at this time the following statement shows the total mileage of each kind of pavement compared with 1898, together with an estimate of the number of miles of improved streets and roads in the borough.

	1898.	1899.
Miles.....	Miles.....	
With specification granite.....	26.87	29.73
" Belgian trap road.....	0.84	0.84
" sheet asphalt.....	3.00	1.00
" variegated brick.....	14.00	14.20
" cobble stone.....	0.71	0.00
" macadam.....	370.19	381.34
" Peckskill gravel.....	15.88	15.68
Total number of miles of paved streets.....	427.38	450.79
Estimated number of miles of improved streets.....	481.70	491.23
Total number of miles of streets in the borough.....	720.05	720.05

Respectfully submitted,

JULIUS VON HUNERBEIN,  
Engineer, Department of Highways, Borough of Queens.

SCHEDULE "A."

TITLE OF WORK.	EARTH EXCAVATION, CUBIC YARDS.	EARTH EMBANKMENT, CUBIC YARDS.	NEW MACADAM, SQUARE YARDS.	RESURFACING MACADAM, SQUARE YARDS.	GRANITE BLOCK PAVING, SQUARE YARDS.	BELGIAN BLOCK PAVING, SQUARE YARDS.	ASPHALT PAVING, SQUARE YARDS.	COBBLE-STONE PAVING, SQUARE YARDS.	IRON PIPE, FEET.	CONCRETE, CUBIC YARDS.	BRICK BIL- LARD BLOCKS, SQUARE YARDS.
College Point—Streets and Park Improvement.....	4,000.00	4,080.32	42,312.52	20,423.19	.....	4,850.31	.....	2,520.00	.....	.....	.....
Trains Meadow road.....	3,900.00	2,711.18	930.26	.....	.....	.....	.....	3,290.70	29,460.00	.....	.....
Asiatic.....	1,362.00	1,207.00	4,652.60	.....	.....	.....	.....	881.50	2,057.00	.....	.....
Asphalt strips.....	.....	.....	.....	.....	.....	.....	8,166.41	.....	.....	692.48	3,180.90
Juniper Swamp.....	6,032.00	2,948.00	7,681.23	.....	.....	.....	.....	.....	.....	.....	.....
Grand street.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wyckoff avenue.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bette avenue.....	785.00	6,760.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grand avenue.....	2,185.00	2,339.00	4,035.33	.....	.....	.....	.....	.....	.....	.....	.....
North Hempstead.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Court street.....	3,305.00	4,478.00	10,022.00	.....	.....	.....	.....	.....	.....	.....	.....
Fisk avenue.....	2,000.00	4,700.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Manhasset avenue.....	6,005.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Greenpoint avenue.....	2,810.00	665.00	4,491.66	.....	.....	.....	.....	.....	.....	.....	.....
Stanhope street.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cypress avenue.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Malden line.....	704.00	1,314.00	4,406.00	.....	.....	.....	.....	.....	.....	.....	.....
Furman avenue.....	834.00	400.00	2,079.00	.....	.....	.....	.....	.....	.....	.....	.....
Old Bank School road.....	2,004.00	4,015.00	5,780.96	.....	.....	.....	.....	.....	.....	.....	.....
Wardside avenue.....	2,507.00	1,536.00	4,429.55	.....	.....	.....	.....	.....	.....	.....	.....
Columbia avenue.....	24.87	1,976.00	2,025.33	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	45,466.87	39,556.81	107,187.93	20,423.19	35,808.53	4,850.31	8,166.41	4,402.03	145,150.00	692.48	3,180.90



## SCHEDULE "B."

TITLE OF WORK.	ESTIMATED COST.	AMOUNT RECEIVED.	AMOUNT REFUND.	AMOUNT OBTAINED.	AMOUNT PAID FOR IN 1899.	AMOUNT PAID FOR IN 1900.
<b>Bond Issue.</b>						
Improvement of Streets and Parks in College Point.....	\$4,000.00	\$3,000.00	\$1,475.75	\$4,475.75	\$4,475.75	.....
Asphalt surface.....	18,745.40	12,860.00	5,990.00	24,735.40	24,735.40	.....
<b>Improvement Highways in the Town of New Brighton.</b>						
Trout's Meadow road.....	25,000.00	2,500.00	.....	22,500.00	22,500.00	22,500.00
Ames and Old Brook Road.....	10,000.00	10,000.00	.....	10,000.00	10,000.00	.....
Juniper Road.....	10,000.00	1,000.00	.....	9,000.00	9,000.00	9,000.00
Grand Street.....	.....	25,000.00	100.00	25,100.00	25,100.00	25,100.00
Wyckoff Avenue.....	4,000.00	4,000.00	.....	4,000.00	4,000.00	.....
18th Avenue.....	10,000.00	10,000.00	.....	10,000.00	10,000.00	10,000.00
Grand Avenue.....	4,000.00	4,000.00	.....	4,000.00	4,000.00	.....
North Hempstead Road.....	10,000.00	10,000.00	.....	10,000.00	10,000.00	10,000.00
Coast Street.....	10,000.00	10,000.00	.....	10,000.00	10,000.00	10,000.00
Park Avenue.....	4,000.00	4,000.00	.....	4,000.00	4,000.00	4,000.00
Marguerite Avenue.....	10,000.00	10,000.00	.....	10,000.00	10,000.00	10,000.00
Greenport Avenue.....	4,000.00	4,000.00	.....	4,000.00	4,000.00	4,000.00
Staten Island Avenue.....	10,000.00	10,000.00	.....	10,000.00	10,000.00	10,000.00
Upper Avenue.....	10,000.00	10,000.00	.....	10,000.00	10,000.00	10,000.00
Madison Road.....	10,000.00	10,000.00	.....	10,000.00	10,000.00	10,000.00
Forest Avenue.....	10,000.00	10,000.00	.....	10,000.00	10,000.00	10,000.00
Westview Avenue.....	10,000.00	10,000.00	.....	10,000.00	10,000.00	10,000.00
Columbia Avenue.....	10,000.00	10,000.00	.....	10,000.00	10,000.00	10,000.00
Fuller Road.....	10,000.00	10,000.00	.....	10,000.00	10,000.00	10,000.00

## DOCUMENT "K."

OFFICE OF THE DEPUTY COMMISSIONER AND CHIEF ENGINEER OF HIGHWAYS  
OF THE CITY OF NEW YORK FOR THE BOROUGH OF RICHMOND,  
NEW BRITAIN, S. I., December 30, 1899.

Hon. JAMES V. KEATING, Commissioner of Highways, Nos. 13 to 21 Park Row, New York City.

DEAR SIR:—In compliance with your requirement that an annual report of the workings of the Department in this borough be furnished for your better information, I herewith respectfully submit the same.

Generally speaking, the operations of the Department during the past year have been more effective and attended with less labor and delay than was true of the departmental results of the year 1898; this from the fact that the laborious experience incident to the organization of the new government characterizing the former year became the safe and plain precedent for the transactions of the closing year.

It is with pleasure that I inform you that the roads, streets and avenues of this borough are at this in excellent condition, and the only drawback to complete personal satisfaction in the matter is caused by the fact that, in consequence of the meagre appropriation allowed for "Labor, Maintenance and Supplies," during 1899, the Department has been unable by means of surfacing and light general repairs to guarantee the long-time utility of thousands of square yards of additional macadam pavement.

Now can hope for this yardage of road surface be found in the appropriation set aside for the year 1900. A brief consideration of the following facts will at least suggest that liberal transfers to this fund will be absolutely necessary for the proper conduct of the Department during the year, and the safeguarding of the moneys invested in our road system. The Department in this borough, for the year 1898, for "Labor, Maintenance and Supplies," was allowed \$74,600, including transfers. The amount allowed for the year 1899 was \$66,500, including transfers. The amount allowed for the year 1900 was \$100,000. During the year 1898, 27 miles of new macadam roads were added to the mileage to be maintained in the year 1899. During the year 1899, 27 miles of new roads were completed and added to the mileage to be maintained during the year 1900. The Board of Estimate and Apportionment allowed \$22,300 more for the year 1899 than they did for the year 1898, evidently for the reason that 27 miles of new roads were added to the amount to be maintained, but though the same number of miles were completed in the year 1899, and will have to be maintained during the year 1900 by this Department, the Board of Estimate and Apportionment added only \$1,900 to the amount allowed for the year 1899 to make up the allowance for the year 1900. This amount seems to be out of all proportion to the work to be done, and in addition to this during the year 1899, under an opinion of the Corporation Counsel, the time of Laborers, which had formerly been ten hours for a working day in this borough, was decreased under the law to eight hours, also in the later part of the year the wages of the Laborers in this Department were increased from \$1.50 per day to \$2 per day. This item alone we estimate as a difference of about \$20,000 against our account, and unless liberal transfers are made to the fund of "Labor, Maintenance and Supplies," during the present year, a number of roads in this borough, which have been constructed at a cost of about \$100,000 a mile, will, owing to lack of funds, deteriorate to such an extent that it may be necessary to entirely reconstruct them at a greatly increased cost to the City. The amount allowed this fund for the year 1900 is \$80,000 less than asked for, though each item was named, and a careful, conservative estimate was made. I also beg to state, in this borough, the water being supplied by private water companies, this Department is obliged to purchase the water for sprinkling purposes. The approximate yardage of macadam in this borough is 1,605,000, covering about 171 miles of road. A fair expense for maintaining this class of macadam, including cleaning, sprinkling and repairs, is 11 cents per square yard, which figure has been obtained by actual work, amounting to \$176,500; adding to this about \$1,510 for the care of about 112 miles of dirt roads, and supplies, which is an extremely small amount, we have the sum of \$178,010, which was the amount asked for by this Department for "Labor, Maintenance and Supplies," though arrived at in an entirely different manner as itemized in said estimate.

Taking advantage of the opportunity presented by the present annual report, I ask permission to briefly call your attention to some matters of departmental importance, the solution of which will greatly aid in the securing of a successful administration of your work in this borough.

First, an investigation should be made as to whether or no the County of Richmond should not enjoy some share of the appropriation annually made by the State of New York for the part payment of road improvement in the various counties of the State which raise moneys for road improvements. In connection with this you will recall the fact that there is still a substantial fund (proceeds of the sale of bonds for the improvement of Southfield Town roads) at the disposal of the Department, but which is insufficient to improve all of the roads named in the Southfield resolution. If, therefore, a portion of the State appropriation could be secured (the county at the time of raising the money having been a rural county) our people would secure some compensation in the shape of State benefit for the ever-present and heavy State burden to which we are subjected.

I would also invite your earnest attention to the fact that the operations of the Department in this borough, so far as they relate to new construction, will be materially reduced during the early part of the coming season; this from the fact that the large funds heretofore at our disposal for the construction of county, town and village roads will have been expended and the contracts completed, thereby throwing out of employment many skilled and valuable men, together with the attendant complement of local mechanics, laborers, etc. This, however, can be avoided to a considerable extent by the adoption of a liberal policy with reference to this borough by the Board of Public Improvements in the matter of so arranging the outlining of the map of this locality as to give speedy answer to the petitions of our citizens for permission to proceed with thousand of dollars' worth of assessment work in this borough which has been duly authorized by the Local Board and favorably reported on by your Department.

Substantial highway improvements on a large scale in this borough will for some years to come be practically impossible; this from the fact that while the cost of like improvements are practically the same in all boroughs of the city, the relative value of the property and hence the owners' equity in this borough is small by comparison with the cost of improvements, therefore it

is but natural that they should avoid assuming obligations of this sort unless absolutely forced to the expenditure, a hardship which I know you desire to avoid forcing upon them unless unavoidable. A solution of this difficulty would be to enjoy the privilege of having assessments for certain classes of work spread over a period of years—that is, permitting the assessment to be paid in annual payments, say for ten years, and the improvement paid for, when completed, from the proceeds of bonds for which the borough will be directly responsible. Any help you might give in securing this privilege would result in a material gain for this borough.

In connection with the sprinkling of our streets: An important section of the borough is devoid of water-mains, and in my annual estimate for 1900 I requested that an allowance be made for wind-mill pumps, which could be erected at a cost of \$350 apiece at convenient locations, and would save the long haul which is now necessary. This item was disallowed by the Board of Estimate and Apportionment. Also, I recommended that a steam roller be purchased for the use of this department, as we had great difficulty during the past year in hiring steam rollers, and are obliged to pay at the rate of \$13 per day for the use of each one. This item was also disallowed, but I urge that a strenuous effort be made next Fall to obtain an appropriation for this purpose from the Board of Estimate and Apportionment. Some of our hill streets have macadam centre 16 feet wide, earth wings 7 feet wide and cobble gutters 3 feet wide. I would recommend that these wings to the macadam be repaved with stone blocks to carry the extraordinary amount of storm-water which does such great damage during heavy storms. I believe that vitrified brick pavement on certain of our streets would be of advantage as being appropriate for suburban city traffic. This pavement has given satisfaction in this climate in small cities where the travel is like our own. I mention this in connection with the issue of bonds for repavement for last year, which has not yet been contracted for, and recommend that brick pavements be given a trial in this borough as well as asphalt and stone block. The balance of the roads to be constructed under the bond issues of the various towns will be completed in the early part of the coming year.

There are about two hundred small bridges in this borough which it is necessary to keep in repair. In the latter part of the year 1898, the Board of Estimate and Apportionment transferred \$1,000 to this Department for the purpose of maintaining said bridges. All of the bridges under our jurisdiction were placed in good condition at that time, and during the past year practically no repairs have been found necessary on them, which probably will be true of the present year, but an opinion of the Corporation Counsel holds that the roadway of bridges over railroads must be maintained by this Department, and as there are a number of such bridges in this borough, in addition to those mentioned above, I recommend that in the estimate to be made for the expenses for this Department next Fall that a request be made for an appropriation for the purpose of "Maintaining and Repairing Bridges." It frequently occurs that the authority of our Inspectors, Foremen and Laborers is questioned by individuals, owing to the lack of identification. I recommend that suitable badges be obtained for these men, which will also assist all the employees of the Department in identifying each other.

The remarkable series of storms during August accomplished damage on our hillside streets to an extent which has never been witnessed before in the memory of the oldest inhabitants. Repairs were prosecuted on these streets with promptitude, though with the force at my command it took two weeks' time to repair these damages. In my last annual report I drew your attention to the lack of a proper ordinance for the removal of snow from sidewalks, and requesting that an effort be made to have a proper ordinance passed by the Municipal Assembly for this borough. I understood that an ordinance covering this subject has been prepared by the Commissioner of Street Cleaning, but, if I am correct, the Municipal Assembly has not yet passed the same, and, therefore, we are in the same deplorable condition as formerly, though the lack of snow during the first part of this winter has been remarkable. During the year a large number of cobble dish gutters have been relaid by this Department, which formerly were in wretched condition, making driving from street to street frequently a difficult matter, and the wings of the outlying macadam roads have been scraped by machine instead of by hand, doing very satisfactory work at a largely decreased cost.

In closing I invite your attention to the more detailed report which follows:

## ANNUAL REPORT.

During the year 1899 the following amount of work has been done in the regulating, grading and paving with macadam pavement of the following contracts in the Borough of Richmond:

Contractor's Register No.	ROAD.	LINBAU PAVT.	MACADAM, SQUARE YARDS.	EXPENSES IN CASH, YARDS.
<b>Greely Roads.</b>				
17811	Trout Hill road, etc., Contract No. 45.....	50,375	18,129	24,334
17812	Ocean terrace and serpentine road, Contract No. 46.....	5,800	12,080	30,000
17813	Rose avenue, etc., Contract No. 48.....	3,711	6,335	8,293
17817	New Deep lane, Contract No. 47.....	7,499	12,253	4,350
17844	Fresh Kill road, Contract No. 28.....	6,490	8,100	2,060
17851	Burgher avenue, Contract No. 30.....	8,890	3,802	1,549
17852	Tonghins avenue, Contract No. 30.....	400	710	.....
17853	Lafayette avenue, etc., Contract No. 31.....	80	840	.....
17854	Main street, etc., Contract No. 32.....	800	315	516
17856	Western and Washington avenues, Contract No. 33.....	6,440	13,472.3	6,631
17859	Old Stone road, Contract No. 34.....	733	2,100	1,800
<b>Middleton Roads.</b>				
17912	Little Elbow road, Contract No. 5.....	3,465	9,711	.....
17960	Hillside avenue, etc., Contract No. 8.....	8,600	12,346	.....
17964	Little Trout Hill road, etc., Contract No. 4.....	5,350	7,520	.....
17973	Bradley avenue, etc., Contract No. 8.....	7,182	16,779	.....
17980	Prospect terrace, Contract No. 3.....	6,619	8,090	.....
17983	McKoon street, etc., Contract No. 1.....	6,619	13,500	3,000
<b>Northfield Roads.</b>				
17774	Union avenue, Contract No. 3.....	8,603	9,450	.....
<b>Westfield Roads.</b>				
17879	Journeyc avenue, Contract No. 6.....	9,867	17,541	.....
<b>Southfield Roads.</b>				
17847	Simmons avenue, etc., Contract No. 1.....	6,300	15,754	2,391
17870	Maple avenue, etc., Contract No. 2.....	10,935.5	18,818	.....
17880	Guyon avenue, Contract No. 4.....	6,300.0	5,174	.....
17886	Parkinson avenue, etc., Contract No. 5.....	6,561.5	10,307	.....
1801	Maryland avenue, Contract No. 10.....	8,078	6,834	.....
17863	Cliff street, etc., Contract No. 8.....	3,040	3,849	.....
17864	Washington avenue, Contract No. 9.....	6,674	6,750	.....
17865	Sea avenue, etc., Contract No. 6.....	7,000	2,552	.....
17866	Sea View avenue, Contract No. 7.....	45	80	.....
<b>Southfield Roadwork.</b>				
17878	Section A.....	17,075.7	11,080	.....



*Trial Balance and Statement as per Ledger, Department of Highways, Borough of Richmond, for the Year ending December 31, 1899.*

TITLE OF APPROPRIATION.	SALARIES.	LABOR, MAINTENANCE AND SUPPLIES.
Appropriation for 1899.....	\$17,886 87	\$86,900 00
Total amount of vouchers certified to Comptroller to date.....	15,959 73	83,208 36
Balance of appropriation, month ending December 31.....	1,926 94	8,691 64
Amount of appropriation to date.....	17,886 87	91,900 00
One-twelfth of appropriation.....	1,490 55	8,075 00
You have certified to Comptroller during current month.....	1,288 20	866 55
".....	".....	1,885 00
".....	".....	25 00
".....	".....	225 35
".....	".....	231 40
".....	".....	78 00
".....	".....	108 55
".....	".....	227 10
".....	".....	183 95
".....	".....	31 25
".....	".....	8 29
".....	".....	661 75
".....	".....	511 50
".....	".....	38 01
".....	".....	39 50
".....	".....	57 00
".....	".....	302 75
".....	".....	520 36
Total.....		\$5,380 84

\* Appropriation.

† Transfer.

NOTE.—The sum of \$4,000 has been transferred from "Salaries" to "Labor, Maintenance and Supplies," in addition to the transfer of \$5,000 from "Interest on Bonds" to "Labor, Maintenance and Supplies."

Amount of contracts outstanding.....\$6,828 40

*Miles of Streets Paved during the Year.*

	Miles.
With specification granite.....	None.
With square granite.....	None.
With specification trap.....	None.
With Belgian trap.....	None.
With street asphalt.....	None.
With block asphalt.....	None.
With wood.....	None.
With macadam.....	27.45
With cobble.....	None.
With brick.....	None.
With gravel.....	None.
Total.....	27.45

*Total Mileage of each Kind of Pavement.*

	Miles.
With specification granite.....	.18
With square granite.....	None.
With specification trap.....	.03
With Belgian trap.....	.07
With street asphalt.....	None.
With block asphalt.....	None.
With wood.....	None.
With macadam.....	170.71
With cobble.....	None.
With brick.....	None.
With gravel.....	None.
Total.....	170.99

*Public Monies Received during the Year 1899.*

	Amount of Cash received for Deposit.
For restoring and repaving pavement—	
Water connections, openings.....	\$187 00
Sewer connections, openings.....	230 00
General Account.....	1,260 00
To be refunded when streets are properly restored.....	\$1,677 00
Deposit to Special Fund.....	5 23
Total.....	\$1,682 23
Total amount refunded for the year ending December 31, 1899.....	\$1,373 00

*Permits Issued.*

Permits to open streets, to lay water pipes.....	345
Permits to open streets, to repair water connections.....	834
Permits to open streets, to make sewer connections.....	274
Permits to open streets, to repair sewer connections.....	61
Permits to place building material on streets.....	168
Permits, special, to lay and repair flagging, curb and gutters, gas service pipes, etc.....	1,345
Total.....	3,027

*Repairs to Pavement.*

Square yards of macadam pavement repaired.....	129,146.5
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*Statement of Laboring Force Employed in the Department of Highways during the Year 1899.*

Repairing and renewal of pavements, roads and avenues—	
Laborers, hours.....	187,751.5
Carts, hours.....	12,005.5
Teams, hours.....	8,521.5
Steam roller, hours.....	3,344.5
Sprinklers, hours.....	34,743.5
Mechanics, hours.....	488

Bridgestone (new) laid, 923.08 square feet—Cost of material, 40 cents, \$369.23; cost of labor, per square foot, 10 cents, \$92.30; total cost, \$461.53.

Bridgestone (old) relaid, 3,192 square feet—Cost of labor, per square foot, 6 cents; total cost, \$191.52.

	MILEAGE.	AREA, SQUARE YARDS.	NEW MATERIAL, CUBIC YARDS.	HOURS, CONIC YARDS.	TOTAL COST.	COST PER SQUARE YARD.
General repairs.....	11.35	25,515	4,395	1,819	\$20,720 33	\$0.815
Light general repairs and surfacing.....	.....	17,190	60	58	487 45	0.0281
Patching.....	.....	15,096.5	288.87	88.10	3,953 98	0.2659

NOTE.—255 miles, 1,336 square yards of general repairs not completed.

Surfacing—246,844 square yards; cost, \$2,201.88; average cost, .009 per square yard. Surface patching—9,337 square yards surfaced (with screenings) at a cost of \$0.013 per square yard; total cost, \$123.76.

Block pavement relaid—88 square yards, at \$0.204 per square yard; total cost, \$25.80.

Block pavement laid—4 square yards, at \$0.75 per square yard; total cost, \$2.92.

8,271 1/2 feet, B. M., of lumber laid in repairing bridges, at a cost of \$53.71 per thousand feet B. M. This includes supervision, labor and material. Total cost, \$444.28.

39.61 miles of snow removed, at a cost of \$28.27 per mile. This includes the cleaning of all crosswalks, cleaning of sidewalks left uncleaned by property-owners, which is charged against the property, and the cutting of a passageway through deep drifts on country roads. Total cost, \$1,119.78.

50.64 miles of dirt roads crowned, scraped, rolled, ditched and stone removed at a cost per mile of \$97.72. This includes cost of building retaining-walls where necessary to support fills on washed-out roadways; total cost, \$4,948.94.

Expended for cleaning culverts and repairing washouts, \$4,012.27.

Cobble gutter—Relaid 2,825.33 square yards, at \$0.243 per square yard; total, \$693.97.

Section cleaning—1,423.20 miles of streets, roads and avenues cleaned at a cost of \$23.05 per mile; total cost, \$32,810.41.

Curb—808.05 linear feet relaid at a cost of \$0.05 per square foot; total, \$45.47.

Expended for miscellaneous purposes, viz.: Pumpers, Drivers, Painters, removing loose stone, trees and limbs of trees, repairing wings, opening ditches, grading, patrolling, etc., \$6,293.61.

*Statement of Repairs and Renewals to Sidewalks, Curb and Gutters without Cost to this Department during the Year 1899.*

Sidewalk, linear feet.....	27,460
Curb, linear feet.....	18,746
Gutter, linear feet.....	13,374

*Statement of Expenditures against Richmond County, Westfield, Northfield, Middletown, Southfield, and Village of Totterville Road Bond Accounts, for the Year ending December 31, 1899.*

Richmond County Road Bond Account—	
Payments on contracts.....	\$88,464 10
Salaries.....	4,473 60
Pay-rolls of Inspectors.....	7,555 52
Expense account.....	713 58
Bills.....	439 00
Pay-rolls of Laborers.....	184 00
Total.....	\$101,829 80

Northfield Road Bond Account—	
Payments on contracts.....	\$4,761 06
Salaries.....	12 51
Pay-rolls of Inspectors.....	159 40
Expense accounts.....	22 05
Bills.....	.....
Total.....	\$4,955 02

Westfield Road Bond Account—	
Payments on contracts.....	\$15,446 68
Salaries.....	391 95
Pay-rolls of Inspectors.....	791 35
Expense account.....	142 75
Bills.....	.....
Total.....	\$16,772 73

Middletown Road Bond Account—	
Payments on contracts.....	\$86,475 59
Salaries.....	1,580 96
Pay-rolls of Inspectors.....	2,735 80
Expense account.....	90 00
Bills.....	.....
Total.....	\$90,881 35

Southfield Road Bond Account—	
Payments on contracts.....	\$57,443 55
Salaries.....	5,013 15
Pay-rolls of Inspectors.....	2,565 85
Expense account.....	364 80
Bills.....	478 78
Total.....	65,866 19

Southfield Boulevard Bond Account—	
Payments on contracts.....	\$44,427 60
Salaries.....	1,496 08
Pay-rolls of Inspectors.....	1,046 15
Expense account.....	83 40
Bills.....	306 88
Total.....	\$47,360 11

Two contracts were executed by the Commissioner of Highways, 1 being for stone and screenings to be delivered on streets north of Richmond turnpike, in the Borough of Richmond. This contract was executed on July 3, 1899, to Frank Bennett, the quantity being:

1/2-inch broken stone, cubic yards.....	1,444
Screenings, cubic yards.....	550
Total cubic yards.....	2,000

The entire 2,000 yards was delivered and used in repairs and renewals of macadam pavement. The other contract being for stone and screenings to be delivered on streets south of Richmond turnpike, in the Borough of Richmond, was executed July 8, 1899, to Brown & Flemming, the quantity being:

1 1/2-inch broken stone, cubic yards.....	4,300
Screenings, cubic yards.....	1,800
Total cubic yards.....	6,000

This contract was reduced 25 per cent., and the following amounts have been delivered: Amount delivered, 4,500 cubic yards, scow measurement. Amount used in repairs and renewals to macadam pavement, 4,166.35 cubic yards. Total unused and stored, 333.65 cubic yards. All of which is respectfully submitted.

HENRY P. MORRISON, Deputy Commissioner and Chief Engineer.



## DEPARTMENT OF DOCKS AND FERRIES.

At a regular meeting of the Board of Docks, held Friday, April 20, 1900, at 2 o'clock p. m.

Present—The full Board.

The minutes of the meeting held April 12, 1900, were approved.

The communication from the Corporation Counsel, transmitting approved form of lease of Pier 1, Wallabout Basin, Borough of Brooklyn, to the Consolidated Ice Company, was tabled.

The communication from the Engineer-in-Chief, recommending that the new Pier at the foot of Pike slip, East river, be shielded when completed, was tabled for one week.

The communication from the Board of Armory Commissioners, requesting a lease of the premises between Forty-third and Forty-fourth streets, Brooklyn, was again tabled for one month.

The communication from the President, recommending that the Comptroller be requested to issue the balance of the Additional Dock Bonds, amounting to \$2,324,705.46, as authorized by the Commissioners of the Sinking Fund July 13, 1899, in accordance with the provisions of chapter 246 of the Laws of 1896, as amended by chapter 608 of the Laws of 1897, was taken from the table and said recommendation adopted.

The communication from the Baltimore and Ohio Railroad Company, requesting that the resolution adopted February 2, 1900, granting permission for the construction of a pier and double-deck freight shed at St. George, Staten Island, be amended by eliminating therefrom the condition that the outer end of the pier shall remain only during the pleasure of the Board, and also the clause relative to the value of said pier and shed, in the event of the acquisition of the property by the City, was referred to the Corporation Counsel for advice as to what action this Board should take in the matter.

The following communications were referred to the Treasurer:

From Frederick Schäfer—Requesting a renewal of the permit to maintain boat-house at the foot of One Hundred and Fifty-third street, North river, at a reduced rental.

From the Central Vermont Railway Company—Requesting a lease of the new pier to be constructed on the side of Pier, old 36, East river, together with the half bulkheads adjoining, for a term of ten years, with the privilege of a renewal term, and offering therefor an annual rental of \$20,000 for the first term, and an advance of five per cent. per annum for the second term.

From John N. Briggs—Requesting a ten years' lease of the bulkhead between the new piers now being constructed at the foot of Rutgers and Pike streets, East river, with the privilege of erecting an ice-bridge, scales, weigh office, etc., thereat.

From Mary Parker Lawless—Requesting a reduction in the rental charged for the float at the foot of West Twelfth street, Coney Island creek.

The following permit was granted, to continue during the pleasure of the Board:

William A. Hall, to maintain a swimming-bath in front of the Battery wall, compensation therefor to be fixed by the Treasurer.

The following permits were granted, to continue during the pleasure of the Board, the work to be done under the supervision of the Engineer-in-Chief:

New York and College Point Ferry Company, to make necessary repairs to the ferry-racks and bridges at the foot of East Ninety-ninth street during the ensuing six months, the work to be kept within existing lines, and at least 24 hours' notice to be given the Engineer-in-Chief before the commencement of any such repairs.

John Hochstetler, to maintain a float stage at the side of his pier at Midland Beach, Staten Island, and to construct an overhang and gangway thereat, the work to be done in accordance with plans submitted as amended.

The following permits were granted, the work to be done under the supervision of the Engineer-in-Chief:

Empire City Subway Company, Limited, to construct a subsidiary connection to Pier 13, North river, for the Edison Electric Illuminating Company; all pavement to be taken up and relaid by the force of this Department at the cost and expense of the permittee.

J. M. Ceballos & Co., to dredge in the slip on the north side of Pier 10, East river.

Lawrence, Son & Gerrish, to replant the surface of the bulkhead at the foot of Cherry street, East river.

Morse Iron Works and Dry Dock Company, to improve its water-front between Fifty-sixth and Fifty-seventh streets, Brooklyn, in accordance with plans to be first submitted to and approved by the Engineer-in-Chief.

Brooklyn Yacht Club, to repair its pier at the foot of Bay Thirty-third street, Bensonhurst, Brooklyn, the work to be kept within existing lines.

F. J. W. Burch, to construct extensions to the salt-storage warehouse between Gowanus canal and Smith street, about 300 feet north of Hamilton avenue, Brooklyn, the work to be done in accordance with plans submitted as amended.

Mechanics Bank of Brooklyn, to repair the bulkhead and platform at the foot of Ninth street, Gowanus canal, Brooklyn, the work to be kept within existing lines.

Atlantic Yacht Club, to repair and strengthen its breakwater at Sea Gate, Coney Island, the work to be kept within existing lines.

J. B. King & Co., to dredge at their dock at New Brighton, Borough of Richmond.

American Dock and Trust Company, to dredge in the slips between Piers 2 and 3, at the American Docks, Tompkinsville, Staten Island.

John Hales, to construct a crib-dock at his property at Eltingville, Staten Island, about 1,500 feet southwest of Seaside avenue, the work to be done in accordance with plans submitted as amended.

The following communications were ordered on file:

From the Comptroller—

1st. Advising that his certificate has been indorsed upon Contract No. 678, for building Pier, new 5, at the foot of Coenties slip, East river, and that the same is now a valid contract.

2d. In relation to the substitution of sureties on Contract No. 679.

On motion, the following resolution was adopted:

Resolved, That permission be and hereby is granted for the substitution of the Fidelity and Deposit Company of Maryland and the United States Fidelity and Guaranty Company, as sureties, in the place of Matthew Baird and James Baird, on the estimate of William J. Baird, contractor, for furnishing granite stones for bulkhead or river wall, under Contract No. 679.

From the Corporation Counsel—

1st. Transmitting approved form of renewal lease to J. H. & J. M. Corwell of the bulkhead between Piers, new 56 and 57, North river. Commissioners authorized to execute same.

2d. Transmitting approved form of renewal lease to Laurent H. Lane of Pier, new 57, North river. Commissioners authorized to execute the same.

3d. Advising that he has requested the Municipal Assembly to repeal the resolution of the Common Council of the former City of Brooklyn, granting permission to James Mulholland to maintain a refreshment stand on the recreation pier at the foot of North Second street, Borough of Brooklyn, and suggesting that no action be taken by this Board in relation thereto, pending such repeal.

4th. Requesting that regulation be drawn in favor of the Lawyers' Title Insurance Company for the sum of \$249.35, for searches in connection with the acquisition of the wharfage rights appertaining to the 92 feet 6 inches of bulkhead on the westerly side of West street, next southerly to the southerly side of Perry street, the title to which is now vested in the City. Chief Clerk directed to draw the necessary requisition therefor.

5th. Transmitting form of general lease to be used in the sale of leases of wharf property at public auction. Secretary directed to have printed five hundred copies of said form of lease.

6th. Advising that the proceedings for the acquisition of the screw-dock property, between Market and Pike slips, East river, are being pushed with due diligence.

7th. Advising that the question of compelling the New York Central and Hudson River Railroad Company to provide a crossing over its tracks at the foot of One Hundred and Thirty-second street, North river, should be referred to the Commissioner of Highways with the suggestion that he request the Corporation Counsel to take the necessary steps to compel the company to maintain a grade crossing thereat. Secretary directed to transmit a copy of the communication to the Commissioner of Highways with the request that he comply therewith.

From the Department of Street Cleaning—Submitting plans for the construction of the proposed dump on the inner end of the southerly side of the Pier at the foot of East Thirty-eighth street. Plans approved as amended.

From the Department of Public Buildings, Lighting and Supplies—Requesting that berths be assigned for the free floating bath, in the Borough of Brooklyn, at the south side of the Pier foot of North Second street, at the north side of the Pier foot of Noble street, and between Forty-third and Forty-fourth streets, about 700 feet outshore. Application granted and the Engineer-in-Chief directed to prepare berths therefor.

From the Commissioners of the Land Office—Transmitting notices of applications made by Susan Housman and Theobald Englehardt and Joseph Wagner for grants of land under water.

On motion the following resolutions were adopted:

Resolved, That the Secretary be and hereby is directed to notify the Commissioners of the Land Office that this Department has examined into the application of Susan Housman and others, dated January 9, 1900, for a grant of land under water of the Kill Von Kull, in the Third Ward, Borough of Richmond, and finds that the granting of same will conflict with the rights of the City under the provisions of chapter 378 of the Laws of 1897, and will be otherwise injurious to the public interests of The City of New York, and that therefore this Board protests against the granting of said application.

Resolved, That the Secretary be and hereby is directed to notify the Commissioners of the Land Office that this Department has examined into the application of Theobald Englehardt and

Joseph Wagner, dated February 7, 1900, for a grant of land under water, west of Hayside place, Jamaica Bay, Kewaway Beach, Borough of Queens, and finds that the granting of same will conflict with the rights of the City under the provisions of chapter 378 of the Laws of 1897, and will be otherwise injurious to the public interests of The City of New York, and that therefore this Board protests against the granting of said application.

From the Association of Master Plumbers of The City of New York—Advising that a resolution has been adopted by said association to the effect that no member thereof shall estimate on, or accept a contract for plumbing work on any municipal building otherwise than directly from the department having control of such building.

From the Bridgeport Steamboat Company—Requesting a lease of Pier, old 40, East river, with adjoining bulkheads, with the privilege of erecting sheds thereon. Application denied, as it is the intention of the Department to proceed with the improvement of the property at said locality.

From the American Ice Company—Requesting permission to erect and maintain an ice-bridge, scales, tally-house and engine-house on the bulkhead between Twenty-fourth and Twenty-fifth streets, North river. Application denied.

From Mrs. J. M. Lamadrid—Requesting permission to maintain a St. Andrew's coffee-stand at the Battery landing. Application denied, the landing being at present overcrowded.

From the New Amsterdam Gas Company—Stating that it does not desire a renewal permit to use and occupy the bulkheads at the foot of Fortieth and Forty-first streets, East river. Secretary directed to notify the Dock Master to collect wharfage thereat.

From Charles Mulford—Requesting permission to remain in occupancy of the half bulkhead northerly of Pier, new 21, North river.

On motion the following resolution was adopted:

Resolved, That permission be and hereby is granted Charles Mulford to use and occupy, during the pleasure of the Board, the southerly half of the bulkhead between Piers, new 21 and 22, North river, about eighty-two and one-half feet, with reservation for public bath thereat, commencing May 1, 1900, compensation to be charged therefor at the rate of two thousand dollars per annum, payable quarterly in advance to the Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises, dated April 25, 1898, between The City of New York, acting by the Board of Docks, as party of the first part, and Charles Mulford, as party of the second part.

From Richard J. Foster—Requesting permission to remain in occupancy of the half bulkhead south of Pier, new 42, North river.

On motion, the following resolution was adopted:

Resolved, That permission be and hereby is granted Richard J. Foster to use and occupy, during the pleasure of the Board, the northerly half of the bulkhead between Piers, new 41 and new 42, North river, about ninety-four feet, commencing May 1, 1900, compensation to be charged therefor at the rate of two thousand and fifty dollars per annum, payable quarterly in advance to the Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises, dated April 25, 1898, between The City of New York, acting by the Board of Docks, as party of the first part, and Richard J. Foster, as party of the second part.

From William J. McGirr—Requesting permission to remain in occupancy of the Pier at the foot of West Sixteenth street, North river.

On motion, the following resolution was adopted:

Resolved, That permission be and hereby is granted William J. McGirr to use and occupy, during the pleasure of the Board, the Pier at the foot of West Sixteenth street, North river, commencing May 1, 1900, compensation to be charged therefor at the rate of two thousand four hundred dollars per annum, payable quarterly in advance to the Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises, dated April 25, 1898, between The City of New York, acting by the Board of Docks, as party of the first part, and William J. McGirr as party of the second part.

From Stokes & Thedford—Requesting permission to remain in occupancy of the bulkhead, between Piers, new 59 and 60, North river.

On motion, the following resolution was adopted:

Resolved, That permission be and hereby is granted Stokes & Thedford to use and occupy, during the pleasure of the Board, the bulkhead, between Piers, new 59 and 60, North river, commencing May 1, 1900, compensation to be charged therefor at the rate of two thousand two hundred dollars per annum, payable quarterly in advance to the Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises, dated April 25, 1898, between The City of New York, acting by the Board of Docks, as party of the first part, and Stokes & Thedford as parties of the second part.

From George Grossman—Requesting permission to remain in occupancy of the bulkhead between One Hundred and Thirty-first and One Hundred and Thirty-second streets, North river.

On motion, the following resolution was adopted:

Resolved, That permission be and hereby is granted George Grossman to use and occupy, during the pleasure of the Board, the bulkhead extending from the northerly side of the Pier foot of West One Hundred and Thirty-first street to the southerly side of the Pier foot of West One Hundred and Thirty-second street, on the North river, commencing May 1, 1900, compensation to be charged therefor at the rate of one thousand and one hundred dollars per annum, payable quarterly in advance to the Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises dated August 26, 1898, between The City of New York, acting by the Board of Docks, as party of the first part, and George Grossman as party of the second part.

Baltimore and Ohio Railroad Company—Requesting permission to remain in occupancy of the Pier at the foot of East Thirty-seventh street, East river.

On motion, the following resolution was adopted:

Resolved, That permission be and hereby is granted the Baltimore & Ohio Railroad Company to use and occupy, during the pleasure of the Board, the Pier at the foot of Thirty-seventh street, East river, commencing May 1, 1900, compensation to be charged therefor at the rate of two thousand dollars per annum, payable quarterly in advance to the Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises dated April 25, 1898, between The City of New York, acting by the Board of Docks, as party of the first part, and the Baltimore and Ohio Railroad Company as party of the second part.

From the Lehigh Valley Railroad Company—Requesting permission to remain in occupancy of the bulkheads at the foot of East Forty-third and East Forty-fourth streets, East river.

On motion, the following resolutions were adopted:

Resolved, That permission be and hereby is granted the Lehigh Valley Railroad Company to use and occupy, during the pleasure of the Board, the bulkhead at the foot of East Forty-third street, East river, commencing May 1, 1900, compensation to be charged therefor at the rate of four hundred dollars per annum, payable quarterly in advance to the Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises dated April 25, 1898, between The City of New York, acting by the Board of Docks, as party of the first part, and the Lehigh Valley Railroad Company as party of the second part.

Resolved, That permission be and hereby is granted the Lehigh Valley Railroad Company to use and occupy, during the pleasure of the Board, the bulkhead at the foot of East Forty-fourth street, East river, commencing May 1, 1900, compensation to be charged therefor at the rate of eight hundred dollars per annum, payable quarterly in advance to the Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises dated April 25, 1898, between The City of New York, acting by the Board of Docks, as party of the first part, and the Lehigh Valley Railroad Company as party of the second part.

From Schwarzschild & Sulzberger Company—Requesting permission to remain in occupancy of the bulkhead at the foot of East Forty-fifth street.

On motion the following resolution was adopted:

Resolved, That permission be and hereby is granted the Schwarzschild & Sulzberger Company to use and occupy, during the pleasure of the Board, the bulkhead at the foot of Forty-fifth street, East river, commencing May 1, 1900, compensation to be charged therefor at the rate of four hundred dollars per annum, payable quarterly in advance to the Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises, dated April 25, 1898, between The City of New York, acting by the Board of Docks, as party of the first part, and Schwarzschild & Sulzberger Company as party of the second part.

From the American Maltng Company—Requesting permission to remain in occupancy of the bulkheads at the foot of East Forty-eighth and East Sixty-third streets.

On motion, the following resolutions were adopted:

Resolved, That permission be and hereby is granted the American Maltng Company to use and occupy, during the pleasure of the Board, the bulkhead at the foot of Forty-eighth street, East river, commencing May 1, 1900, compensation to be charged therefor at the rate of four hundred and seventy-five dollars per annum, payable quarterly in advance to the Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises, dated April 25, 1898, between The City of New York, acting by the Board of Docks, as party of the first part, and the American Maltng Company as party of the second part.

Resolved, That permission be and hereby is granted the American Maltng Company to use and occupy, during the pleasure of the Board, the bulkhead at the foot of East Sixty-third street, East river, about sixty-five feet, commencing May 1, 1900, compensation to be charged therefor at the rate of seven hundred and fifty dollars per annum, payable quarterly in advance to the



Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises dated April 25, 1898, between The City of New York, acting by the Board of Docks, as party of the first part, and Neidlinger & Sons as party of the second part.

From the Farmers' Feed Company—Requesting permission to remain in occupancy of the platform and land under water in front of the southerly half of the bulkhead between Sixty-second and Sixty-third streets, East river.

On motion, the following resolution was adopted:

Resolved, That permission be and hereby is granted the Farmers' Feed Company to use and occupy, during the pleasure of the Board, the filled-in land easterly of the original high-water mark in front of the southerly half of the bulkhead between East Sixty-second and East Sixty-third streets, together with land under water and platform in front of same, about two thousand and ten square feet of platform, commencing May 1, 1900, compensation to be charged therefor at the rate of six hundred dollars per annum, payable quarterly in advance to the Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises dated April 25, 1898, between The City of New York, acting by the Board of Docks, as party of the first part, and the Farmers' Feed Company as party of the second part.

From Nathaniel Wise—Requesting permission to remain in occupancy of the bulkhead between Seventy-ninth and Eightieth streets, East river.

On motion, the following resolution was adopted:

Resolved, That permission be and hereby is granted Nathaniel Wise to use and occupy, during the pleasure of the Board, the bulkhead between East Seventy-ninth and East Eightieth streets, East river, commencing May 1, 1900, compensation to be charged therefor at the rate of seven hundred and fifty dollars per annum, payable quarterly in advance to the Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises dated April 25, 1898, between The City of New York, acting by the Board of Docks, as party of the first part, and Nathaniel Wise as party of the second part.

From Albert H. Hastorf, requesting permission to remain in occupancy of the dumping-board on the bulkhead between Ninety-fourth and Ninety-fifth streets, East river.

On motion, the following resolution was adopted:

Resolved, That permission be and hereby is granted Albert H. Hastorf to use and occupy, during the pleasure of the Board, the bulkhead between East Ninety-fourth and East Ninety-fifth streets, East river, with the privilege of maintaining a dumping-board thereat, commencing May 1, 1900, compensation to be charged therefor at the rate of two thousand two hundred and fifty dollars per annum, payable quarterly in advance to the Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises dated April 25, 1898, between The City of New York, acting by the Board of Docks, as party of the first part, and Albert H. Hastorf as party of the second part.

From William M. Montgomery—Requesting permission to remain in occupancy of the Pier at the foot of East One Hundred and Nineteenth street.

On motion, the following resolution was adopted:

Resolved, That permission be and hereby is granted William M. Montgomery to use and occupy, during the pleasure of the Board, the Pier at the foot of East One Hundred and Nineteenth street, Harlem river, with the privilege of maintaining an ice bridge thereon, commencing May 1, 1900, compensation to be charged therefor at the rate of one thousand one hundred and twenty-five dollars per annum, payable quarterly in advance to the Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises dated April 19, 1897, between the Mayor, Aldermen and Commonalty of The City of New York, acting by the Board of Docks, as party of the first part, and William M. Montgomery as party of the second part.

From Watson H. Bowne, requesting permission to remain in occupancy of the dock at the foot of Main street, Westchester, Westchester creek.

On motion, the following resolution was adopted:

Resolved, That permission be and hereby is granted Watson H. Bowne to use and occupy, during the pleasure of the Board, the Town Dock at Westchester, Westchester creek, commencing May 1, 1900, compensation to be charged therefor at the rate of one hundred and fifty dollars per annum, payable quarterly in advance to the Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises dated April 25, 1898, between The City of New York, acting by the Board of Docks, as party of the first part, and Watson H. Bowne as party of the second part.

From the Pennsylvania Railroad Company—Requesting that the extension to Pier, new 29, North river, be planked and made available for use; together with communication from A. Van Santvoord and Harvey P. Farrington, lessees of the southerly half of said pier, consenting to such planking provided that same is done subject to their consent.

On motion, the following resolution was unanimously adopted:

Resolved, That the Engineer-in-Chief be and is hereby directed to plank over the extension to Pier, new 29, North river, provided that the lessees of said pier shall file an agreement to pay as compensation therefor an additional five per cent per annum on the cost of doing said work; and provided further that the lessees of said pier and the sureties on said lease shall file in this Department a written agreement that their obligations under the provisions of said lease shall in no manner be affected or impaired by reason of the said extension to said pier.

From the Morris and Cumings Dredging Company—Requesting an extension of time on Contract No. 652.

On motion, the following resolution was adopted:

Resolved, That the time for the completion of the work of dredging at the Rutgers street section, on the East river, under Contract No. 652, Morris & Cumings Dredging Company, contractor, be and hereby is extended to and including June 15, 1900, the written consent of the sureties having been filed in this Department.

From the President—

1st. Recommending that the Corporation Counsel be requested to apply for commissions to condemn the half interests of the private owners in Piers, old 18, 19, 20, 23, 24, 26, 32 and 33, East river.

On motion, the recommendation of the President was approved and the Engineer-in-Chief directed to prepare maps of the piers, to be used in the proceedings for the acquisition thereof, and the following resolution adopted:

Resolved, That the Corporation Counsel be and hereby is requested to institute proceedings for the condemnation of the interests of private owners on Piers, old 18, old 19, old 20, old 23, old 24, old 26, old 32, and old 33, East river, in accordance with section 824 of the Greater New York Charter.

2d. Recommending that an offer be made for the half interest of private owners in Pier 54, East river.

On motion, by the affirmative votes of Commissioners Cram and Murphy, Commissioner Meyer voting in the negative, the following preamble and resolutions were adopted:

Whereas, By section 822 of chapter 378 of the Laws of 1897, the Board of Docks of The City of New York is authorized to acquire in the name and for the benefit of the Corporation of The City of New York, wharf property in said city, and all rights, terms and easements and privileges pertaining thereto, subject to the approval of the Commissioners of the Sinking Fund, and agree with the owners of any such property, rights, terms, easements or privileges, upon a price for the same; and in case of failure to agree upon a price, to initiate legal proceedings to acquire the same for the improvement of the water-front of said city; and

Whereas, The Board of Docks is desirous of acquiring, in the name and for the benefit of The City of New York, the following described premises, to wit:

All the right, title and interest not now owned by The City of New York in and to the wharfage rights, terms, easements and privileges appurtenant to the Pier at the foot of Jackson street, known as Pier, old 54, East river; and

Whereas, It appears that Maurice D. Barry is the owner in fee simple, with all its hereditaments, of the property above described, including the rights therein and wharfage rights;

Resolved, That this Board offers to purchase the above-described premises, with all its hereditaments, and to pay for a good and sufficient title thereto, free from all incumbrances, the sum of thirty-three thousand (\$33,000) dollars, subject to the approval of the Commissioners of the Sinking Fund.

Resolved, That a copy of these preamble and resolutions be served upon Maurice D. Barry, and that he be and hereby is requested within ten days from receipt thereof, to notify this Board in writing, whether he will sell the said rights and interests as aforesaid, to The City of New York for the price above mentioned, and in the event that he shall fail to notify this Board of his willingness to so convey the respective rights and interests as aforesaid, it shall be deemed that no price can be agreed upon for the purchase of said property between the owner thereof and this Department.

From the Treasurer—

1st. Recommending that the application of the Union Ice Company for a lease of the bulkhead between Piers, new 54 and 55, North river, be denied. Recommendation adopted.

2d. Recommending that the applications of the New York, New Haven and Hartford Railroad Company and of Murray & Company for a lease of the Pier foot of Rutgers street, East river, be denied. Recommendation adopted.

3d. Recommending that the application of A. G. Foster, for permission to berth the steamer "Angler" at the Pier foot of East Twenty-fourth street, be denied. Recommendation adopted.

4th. Recommending that the application of Clinton Stephens for permission to place and maintain a boat at the foot of One Hundred and Twenty-eighth street, Harlem river, be denied. Recommendation adopted.

5th. Recommending that the compensation to be charged the Old Dominion Steamship Company for the use of the extension to Pier, new 26, North river, be fixed at the rate of \$2,200 per annum, commencing May 1, 1900.

On motion, the following resolution was adopted:

Resolved, That the resolution adopted June 9, 1899, be amended so as to provide that the compensation to be charged the Old Dominion Steamship Company for the use of the extension to Pier, new 26, North river, be fixed at the rate of two thousand two hundred dollars per annum, commencing May 1, 1900, payable quarterly in advance to the Treasurer.

6th. Recommending that the application of John A. McCarthy for a five years' renewal lease of Pier 60, East river, with adjoining bulkhead, be denied, but that permission be granted said McCarthy to use and occupy the premises during the pleasure of the Board.

On motion, the following resolution was adopted:

Resolved, That permission be and hereby is granted John A. McCarthy to use and occupy, during the pleasure of the Board, Pier, old 60, and bulkhead between Pier, old 60 and 61, about two hundred feet, with the privilege of maintaining a dumping-board on the southerly side of Pier, old 60, East river, commencing May 1, 1900, compensation to be charged therefor at the rate of one thousand eight hundred dollars per annum, payable quarterly in advance to the Treasurer. It being understood and agreed that this permit is subject to all the terms, covenants and conditions of the indenture of lease of said premises dated April 19, 1897, between the Mayor, Aldermen and Commonalty of The City of New York, acting by the Board of Docks, as party of the first part, and John A. McCarthy as party of the second part.

From the Dock Superintendent—

1st. Report for the week ending April 14, 1900.

2d. Recommending that the permits granted the Syracuse and New York Canal Line and the Erie Railroad Company to maintain derricks on the westerly side of Pier, new 5, East river, be revoked, as the Department is about to proceed with the improvement of the water-front thereat. Recommendation adopted.

From the Engineer-in-Chief—

1st. Report for the week ending April 14, 1900.

2d. Reporting the commencement of the work of furnishing piles under Contract No. 674, April 7, 1900.

3d. Recommending that the lessees be directed to make necessary repairs to the fender system in front of the bulkheads north and south of Pier, new 22, North river, and to the oak sheathing on the sides of Piers, new 27, 28 and 29, North river. Recommendation adopted.

4th. Recommending that the Department of Highways be requested to repair the pavement on South street, south of Pier 3, East river, in front of the United States Quartermaster's storehouse thereat. Recommendation adopted.

5th. Recommending that a fence be placed across the inner end of the Pier at the foot of East Ninety-ninth street, as requested by the Fire Department. Recommendation adopted.

6th. Recommending that necessary repairs be made by the force of this Department to the sheathing on the pier foot of West Twentieth and West Forty-seventh streets, to the pavement along the bulkhead between Seventy-seventh and Eighty-first streets, North river, and to the fence at the end of the filling in the rear of the bulkhead wall at the East Ninety-first street section on the East river. Recommendation adopted.

7th. Report on Secretary's Order No. 19989, submitting maps of Piers, old 36, old 45 and old 49, East river, and of the bulkheads north of Jefferson street and between Clinton and Montgomery streets, East river. Secretary directed to transmit same to the Corporation Counsel.

The Treasurer, Commissioner Murphy, submitted his report of receipts for the week ending April 20, 1900, amounting to \$17,528.69, which was received and ordered to be spread in full on the minutes, as follows:

DATE.	FROM WHOM.	FOR WHAT.	AMOUNT.
1900.			
Apr. 14	H. A. Peck & Co.	1 mos. rent, inner end N. side Pier 54, E. R.	\$115 00
" 17	John A. Booker	" " "dump board on bhd. bet. 1st and 2nd sts. E. R.	50 00
" 18	Manhattan State Hospital	" " Pier 60, E. 16th st. N. R.	573 00
" 18	Consolidated Gas Co.	" " bhd. bet. 98th and 99th sts., E. R.	245 00
" 18	N. Y. N. H. & H. R. R. Co.	" " 1, 6, 9, p.m. bet. Piers, old 45 and new 26, E. R.	433 50
" 18	"	" " 10, 11, p.m. E. of Pier 50, E. R.	397 50
" 18	Providence & Stonington S. S. Co.	" " Pier, new 26, N. R.	4,797 50
" 18	Providence & Stonington S. S. Co.	" " bhd. N. and S. of Pier, new 36, N. R.	1,146 00
" 19	Shawley & Ryan	" " bhd. and 1, 6, 9, Pier at Delancey st., E. R.	125 00
" 18	N. Y. N. H. & H. R. R. Co.	Cost repairing Pier 45, E. R., damaged by transfer bargeboat No. 1.	60 75
" 18	Pennsylvania R. R. Co.	" " pile-driver No. 1, damaged by ferry-boat John S. Dancy.	80 50
" 17	G. E. Plunkitt	Filling-in privilege at Perry st., N. R.	9,400 00
" 17	John F. Golligan & Co.	" " Garmenter at section N. R.	1,000 00
" 17	Dockmaster	Wharfage, Manhattan, April, 1900.	909 65
" 17	"	" " Brooklyn, " "	45 28
" 18	Collectors	" " Manhattan, December, 1899.	41 50
" 19	"	" " Brooklyn, " "	42 50
" 19	"	" " Manhattan, January, 1900.	4 00
" 19	"	" " February, " "	145 50
" 19	"	" " Brooklyn, " "	3 00
" 19	"	" " Manhattan, March, 1900.	1,039 45
" 19	"	" " Brooklyn, " "	63 04
		Date deposited, April 26, 1900.	\$17,528 69

Respectfully submitted,

CHARLES F. MURPHY, Treasurer.

The Auditing Committee submitted a report of eleven bills or claims, amounting to \$42,864.06, which had been approved and audited. The report was ordered to be spread in full on the minutes, as follows:

Audit No.	Names.	Acquired Property.	Amount.	Total.
18564.	Norman L. Coe, services as photographer		\$42 00	
18565.	John J. Prince, services and expenses as Clerk		309 00	
18566.	William J. Fawcett, services and expenses as Messenger		100 00	
				\$451 00

#### Wharfage Basin Construction.

18567.	Bernard Rolf, Estimate No. 2, Contract No. 669.	\$23,818 00
18568.	H. L. Spearin, Estimate No. 4 and Final Contract No. 661.	7,720 83
18569.	Fox Bros. & Co., dock spikes, etc.	901 43
18570.	Naughton & Co., white oak piles.	1,530 00
18571.	Charles J. O'Neil, towing.	959 50
18572.	David F. Dubie, agent, cocoa mats.	84 50
18573.	The New York and New Jersey Telephone Company, telephone and toll service.	58 50
		35,133 72

#### General Repairs.

18574.	Atlantic Dredging Company, Estimate No. 3, Contract No. 665.	7,778 74
		\$42,864 06

Respectfully submitted,

J. SERGEANT CRAM, Auditing  
CHARLES F. MURPHY, Committee.



The action of the Secretary in transmitting the same, with requisitions for the amount, to the Finance Department for payment approved.

The following requisitions were passed:

Register No.	For What.	Estimated Cost.
17281.	Spruce pole poles	\$300 00
17282.	Norway iron.	362 50
17283.	Sashes, etc.	90 00
17284.	Services of tugs, per hour.	4 75
17285.	Cleaning, painting, etc., tugs.	366 00
17286.	Towing, per hour.	4 75
17287.	Granite	8,184 00
Requisition No.		
301 Z.	Services of horse, cart and driver.	210 00

On motion, the Engineer-in-Chief was directed to repaint the tug "Richard Croker," the superstructure to be painted white.

The Secretary reported that the pay-roll for the General Repairs and Construction Force for the week ending April 13, 1900, amounting to \$13,811.40, had been approved, audited and transmitted to the Department of Finance for payment.

The Board went into executive session at 2.50 P. M.

The following communications were ordered on file:

From the Municipal Civil Service Commission:

1st. Advising that John T. O'Brien successfully passed the examination for promotion to the position of Third Grade Messenger on February 2, 1900, and that such promotion will therefore commence from that date.

2d. Advising that all persons discharged through lack of work are entitled to reappointment in the order of their original appointment.

From the Secretary—Recommending the discharge of certain employees who have not appeared on the pay-roll of the Department at any time during the past year.

On motion, the following resolution was adopted:

Resolved, That the following-named persons be and they are hereby discharged from the service of the Department, their names not having appeared on the pay-roll at any time within the past year:

Thomas Byrnes, Laborer.  
Timothy Callaghan, Dock Builder.  
George A. Hamber, Blacksmith's Helper.  
George T. Higgins, Laborer.  
Timothy Keenan, Scudder.  
Patrick Kelly, Dock Builder.  
John Loughton, Dock Builder.  
James McLann, Laborer.  
James McEneaney, Dock Builder.  
Thomas McLaughlin, Laborer.  
James McNamara, Blacksmith's Helper.  
Francesco Priori, Laborer.  
George A. Shevlin, Engineman.  
James Smith, Laborer.  
Charles Smith, Blacksmith's Helper.  
Patrick Sheridan, Laborer.

On motion, the title of Nathan Steere was changed from Dock Builder to Foreman Laborer, of James Garvin, from Blacksmith's Helper to Laborer, and of Max Boehm, from Foreman Laborer to Laborer.

On motion, A. J. Fairweather was promoted from Dock Builder to Painter, subject to the consent of the Municipal Civil Service Commission.

On motion, the Board adjourned.

WILLIAM H. BURKE, Secretary.

## DEPARTMENT OF BUILDINGS.

DEPARTMENT OF BUILDINGS OF THE CITY OF NEW YORK,  
No. 220 FOURTH AVENUE,  
NEW YORK, May 15, 1900.  
OPERATIONS FOR THE WEEK ENDING MAY 12, 1900.

	MANHATTAN AND THE BRONX.	BROOKLYN.	QUEENS AND RICHMOND.	TOTAL.
Plans filed for new buildings.	60	52	15	127
Estimated cost.	\$1,583,395	\$350,070	\$37,705	\$1,971,170
Plans filed for alterations.	88	48	29	165
Estimated cost.	\$495,395	\$133,813	\$4,945	\$634,153
Buildings reported as unsafe.	79	31	.....	110
Buildings reported for additional means of escape.	3	10	.....	13
Other violations of law reported.	120	114	.....	234
Unsafe building notices issued.	128	31	.....	159
Fire-escape notices issued.	3	10	.....	13
Violation notices issued.	344	184	.....	528
Unsafe building cases forwarded for prosecution.	8	9	.....	17
Fire-escape cases forwarded for prosecution.	82	1	.....	83
Violation cases forwarded for prosecution.	195	35	.....	230
Iron and steel inspections made.	4,553	273	.....	4,826
Complaints lodged with the Department.	140	11	.....	151
Elevator inspections made.	.....	59	.....	59
Plans filed for plumbing.	.....	.....	21	21
Estimated cost.	.....	.....	\$7,374	\$7,374

A. J. JOHNSON, Secretary, Board of Building.

## DEPARTMENT OF PUBLIC CHARITIES.

### BOROUGH OF RICHMOND.

REPORT OF TRANSACTIONS FOR THE WEEK ENDING MAY 15, 1900.

DEPARTMENT OF PUBLIC CHARITIES—BOROUGH OF RICHMOND,  
COMMISSIONER'S OFFICE, STAPLETON,  
NEW YORK, May 16, 1900.

Report of the Superintendent of Almshouse, labor, census, Hospital, etc., and report of the Superintendent of Out-door Poor, approved and placed on file.

Approved weekly requisitions for Almshouse.

May 11, 1900.

Approved the following bill for care and maintenance of dependent children, amounting to \$3,111 43

—and transmitted same to Comptroller.

May 15.

Approved the following bills and transmitted same to Comptroller:

House of Mercy, Inwood.	\$108 50
St. Joseph's Institute for Improved Instruction of Deaf Mutes.	81 37
Nursery and Child's Hospital.	133 91

The following is the report for the week ending May 15, 1900:

Dependent child discharged.	1
Committed to Almshouse.	5
Discharged from Almshouse.	4
Burial permits.	2
Ambulance calls.	6
Body received at Morgue.	1
Body unidentified and interred in Potter's Field.	1
Orders for abandonment warrants.	3

JAMES FEENEY, Commissioner.

## DEPARTMENT OF PUBLIC BUILDINGS, LIGHTING AND SUPPLIES.

CITY OF NEW YORK,  
DEPARTMENT OF PUBLIC BUILDINGS, LIGHTING AND SUPPLIES,  
COMMISSIONER'S OFFICE, No. 21 PARK ROW,  
April 27, 1900.

In accordance with section 1546, chapter 378, Laws of 1897, the Department of Public Buildings, Lighting and Supplies makes the following report of its transactions for the week ending April 21, 1900:

### PUBLIC LAMPS.

During the week 15 new lamps were erected and 15 lighted; 10 lamps were discontinued and 1 relighted; 14 lamp-posts were removed, 4 reset and 1 straightened; 4 columns were refitted and 10 relighted; 1 stand pipe was refitted.

### ELECTRICAL WIRING, INSPECTIONS, ETC.

262 certificates were issued for interior wiring; 228 permits were issued for outside electrical work, 1,320 inspections were made and 5,700 feet of overhead wires were removed.

### CHANGE IN FORCE.

Borough of Manhattan.

Reinstatement—4 Bath Attendants, male.

Borough of Queens.

Removals—1 Mechanic.

### REQUISITIONS ON COMPTROLLER.

The total amount of requisitions drawn on the Comptroller by this Department during the week is \$202,559.64.

HENRY S. KEARNY, Commissioner.

## APPROVED PAPERS.

No. 389.

Resolved, That permission be and the same is hereby given to Louis Halprin to place and keep a stand for the sale of newspapers and periodicals under the stairs of the elevated railroad at the northwest corner of Eighty-fourth street and Third avenue, in the Borough of Manhattan, provided the said stand be erected in conformity with the provisions of chapter 718 of the Laws of 1896, and subject to the conditions of an ordinance to regulate the placing of stands under the stairs of the elevated railroads, the work to be done at his own expense, under the direction of the Commissioner of Highways; such permission to continue only during the pleasure of the Municipal Assembly.

Adopted by the Board of Aldermen, April 17, 1900.

Adopted by the Council, April 24, 1900.

Received from his Honor the Mayor, May 8, 1900, without his approval or disapproval thereof; therefore, as provided in section 40 of the Greater New York Charter, the same took effect as if he had approved it.

No. 390.

Resolved, That permission be and the same is hereby given to Andrew Bria to erect, place and keep a storm-door in front of the premises No. 83 New Chambers street, in the Borough of Manhattan, provided said storm-door shall be erected so as to conform in all respects with the provisions of the ordinance in such case made and provided, the work to be done at his own expense, under the direction of the Commissioner of Highways; such permission to continue only during the pleasure of the Municipal Assembly.

Adopted by the Board of Aldermen, April 17, 1900.

Adopted by the Council, April 24, 1900.

Received from his Honor the Mayor, May 8, 1900, without his approval or disapproval thereof; therefore, as provided in section 40 of the Greater New York Charter, the same took effect as if he had approved it.

### BOROUGH OF MANHATTAN.

OFFICE PRESIDENT OF THE BOROUGH OF MANHATTAN,  
NEW YORK, May 17, 1900.

NOTICE IS HEREBY GIVEN, IN ACCORDANCE with section 400 of the Charter of The City of New York, that a communication from the Department of Highways, calling attention to the defective condition of the sidewalk at the southeast corner of West End avenue and Ninety-first street, has been filed in this office and is now ready for public inspection, and that a meeting of the Local Board of the Nineteenth District for Local Improvements will be held in the Borough Office, City Hall, on the 17th day of May, 1900, at 10 A. M., at which meeting said communication will be submitted to the Board.

JAMES J. COOGAN,

L. E. KIDDER, Secretary.

### DEPARTMENT OF PARKS.

THE CITY OF NEW YORK,  
DEPARTMENT OF PARKS,  
OFFICE OF COMMISSIONER FOR THE  
BOROUGH OF THE BRONX,  
ZUBROSKI MANSION, CLAREMONT PARK,  
May 16, 1900.

Supervisor of the City Record:

DEAR SIR—Pursuant to section 1546, chapter 378, Laws of 1897, I hereby notify you, for publication in the CITY RECORD, of the following changes in the working force of this Department:

#### Reinstated.

Peter Haber, Laborer.

James Quinlan, Laborer.

#### Compensation Fixed.

Wm. P. Hennessy, Topographical Draughtsman, at \$1,500 per annum.

Respectfully yours,

AUGUST MOEBUS,

Commissioner of Parks, Borough of The Bronx.

THE CITY OF NEW YORK,  
DEPARTMENT OF PARKS,  
BOROUGH OF MANHATTAN AND RICHMOND,  
THE ARSENAL, CENTRAL PARK,  
May 16, 1900.

Supervisor of the City Record:

SIR—I beg to report the following action taken in connection with employees of this Department, boroughs of Manhattan and Richmond:

#### Appointed.

Bridget Cusack, No. 355 East One Hundred and Fourteenth street, Cleaner, at \$15 per month.

Simon McNally, No. 248 East Seventy-fourth street, with team.

John Mangin, One Hundred and Thirtieth street and Amsterdam avenue, with team.

#### Designated Laborer.

John J. Martin, Fireman.

Designated Typewriter, at present salary.

Robert S. Sutcliffe.

#### Discharged.

James Guinny, with team.

Respectfully,

WILLIS HOLLY,

Secretary, Park Board.

### OFFICIAL DIRECTORY.

STATEMENT OF THE HOURS DURING which the Public Offices in the City are open for business, and at which the Courts regularly open and adjourn, as well as of the places where such offices are kept and such Courts are held; together with the heads of Departments and Courts:

#### EXECUTIVE DEPARTMENT.

##### Mayor's Office.

No. 4 City Hall, 9 A. M. to 4 P. M.; Saturdays, 9 A. M. to 12 M.

ROBERT A. VAN WYCK, Mayor.

ALEXANDER M. LOWERY, Private Secretary.

##### Bureau of Licenses.

9 A. M. to 4 P. M.; Saturdays, 9 A. M. to 12 M.

DAVID J. ROSEN, Chief of Bureau.

Principal Office, Room 1, City Hall. GEORGE W. BROWN, Jr., Deputy Chief in Boroughs of Manhattan and The Bronx.

Head Office, Room 12, Borough Hall, Brooklyn.

WILLIAM H. JOHNSON, Deputy Chief in Borough of Brooklyn.

Branch Office, "Richmond Building," New Brighton, S. I.; WILLIAM H. MCCABE, Deputy Chief in Borough of Richmond.

Branch Office, "Hackett Building," Long Island City; PETER FLANAGAN, Deputy Chief in Borough of Queens.

#### THE CITY RECORD OFFICE.

And Bureau of Printing, Stationery and Blank Books.

No. 4 City Hall, 9 A. M. to 4 P. M., Saturday, 9 A. M. to 12 M.

WILLIAM A. BUTLER, Supervisor; SOLON BARRICK, Deputy Supervisor; THOMAS C. COWELL, Deputy Supervisor and Accountant.



## COMMISSIONERS OF THE SINKING FUND

The Mayor, Chairman; RICH B. COLES, Comptroller; PATRICK KERNAN, Chamberlain; RICHARD GUERRELL, President of the Council; and ROBERT MUM, Chairman, Finance Committee, Board of Aldermen, Members. RICHARD J. LITVY, Secretary. Office of Secretary, Room No. 11, Stewart Building.

## BOARD OF ESTIMATE AND APPORTIONMENT

The Mayor, Chairman; THOMAS L. FEITHEN (President), Department of Taxes and Assessments, Secretary; the COMPTROLLER, PRESIDENT OF THE COUNCIL, and the CORPORATION COUNSEL, Members; CHARLES V. ADAMS, Clerk. Office of Clerk, Department of Taxes and Assessments, Room 11, Stewart Building, 9 A. M. to 4 P. M.; Saturdays, 10 A. M. to 12 M.

## BOARD OF ARMY COMMISSIONERS

The Mayor, ROBERT A. VAN WYCK, Chairman; THE PRESIDENT OF THE DEPARTMENT OF TAXES AND ASSESSMENTS, THOMAS L. FEITHEN, Secretary; THE COMMISSIONERS OF PUBLIC BUILDING, LIGHTING AND SUPPLIES, HENRY B. KRAVITZ, Brigadier-General JAMES McLENNAN and Brigadier-General McCORMY BUTT, Commissioners. Address THOMAS L. FEITHEN, Secretary, Stewart Building. Office hours, 9 A. M. to 4 P. M.; Saturdays, 9 A. M. to 12 M.

## MUNICIPAL ASSEMBLY.

## THE COUNCIL.

ROBERT GUERRELL, President of the Council; F. J. SCULLY, City Clerk. Clerk's office open from 10 A. M. to 4 P. M.; Saturdays, 10 A. M. to 12 M.

## BOARD OF ALDERMEN.

THOMAS F. WOODS, President. MICHAEL F. BLANK, Clerk.

## BOROUGH PRESIDENTS.

## Borough of Manhattan.

Office of the President of the Borough of Manhattan, Nos. 10, 11 and 12 City Hall. 9 A. M. to 4 P. M.; Saturdays, 9 A. M. to 12 M. JAMES J. COUGAN, President. IRA EDGAR RIVER, Secretary.

## Borough of The Bronx.

Office of the President of the Borough of The Bronx, corner Third Avenue and One Hundred and Seventy-seventh Street. 9 A. M. to 4 P. M.; Saturdays, 9 A. M. to 12 M. LOUIS F. HAFNER, President.

## Borough of Brooklyn.

President's Office, No. 11 Borough Hall. 9 A. M. to 4 P. M.; Saturdays, 9 A. M. to 12 M. EDWARD M. GEOR, President.

## Borough of Queens.

FREDERICK ROWLEY, President. Office, Long Island City, 9 A. M. to 4 P. M.; Saturdays, from 9 A. M. to 12 M.

## Borough of Richmond.

GEORGE CROWWELL, President. Office of the President, First National Bank Building, New Brighton; 9 A. M. to 4 P. M.; Saturdays, 9 A. M. to 12 M.

## COMMISSIONERS OF ACCOUNTS.

Rooms 114 and 115 Stewart Building, 9 A. M. to 4 P. M. JOHN C. HANLEY and EDWARD OWEN, Commissioners.

## PUBLIC ADMINISTRATOR.

No. 170 Nassau Street, 9 A. M. to 4 P. M. WILLIAM M. HORN, Public Administrator.

## PUBLIC ADMINISTRATOR, KINGS COUNTY.

No. 185 Montague Street, Brooklyn, 9 A. M. to 4 P. M., except Saturdays in June, July and August, 9 A. M. to 12 M. WM. B. DAVENPORT, Public Administrator.

## AQUEDUCT COMMISSIONERS.

Room 307 Stewart Building, 5th floor, 9 A. M. to 4 P. M. JOHN J. RYAN, MAURICE J. POWERS, WILLIAM H. TEN RYCK, JOHN P. WINDOLPH and THE MAYOR and COMPTROLLER, Commissioners; HARRY W. WALKER, Secretary; WILLIAM R. HILL, Chief Engineer.

## DEPARTMENT OF FINANCE.

Stewart Building, Chambers Street and Broadway, 9 A. M. to 4 P. M. RICH B. COLES, Comptroller. MICHAEL T. DALY, EDGAR J. LITVY, Deputy Comptrollers.

**Auditing Bureau.**  
JOHN F. GOUGHAN, Auditor of Accounts.  
E. L. W. SCHULTZ, Auditor of Accounts.  
E. J. HESTMAN, Auditor of Accounts.  
MORIS OPPENHEIMER, Auditor of Accounts.  
WILLIAM MCKEON, Auditor of Accounts.  
DANIEL H. PHILLIPS, Auditor of Accounts.  
EDWARD J. CORRELL, Auditor of Accounts.  
FRANCIS R. CLARK, Auditor of Accounts.  
WALTER H. HOLT, Auditor of Accounts.  
WILLIAM J. LYONS, Auditor of Accounts.  
JAMES F. MCKINNEY, Auditor of Accounts.  
PHILIP J. MCKINNEY, Auditor of Accounts.  
JEREMIAH T. MANTON, Auditor of Accounts.

**Bureau for the Collection of Assessments and Arrears.**

EDWARD GILSON, Collector of Assessments and Arrears.  
JOHN KILKRENE, Deputy Collector of Assessments and Arrears, Borough of Manhattan.  
JAMES E. STAMFORD, Deputy Collector of Assessments and Arrears, Borough of The Bronx.  
MICHAEL O'KEEFE, Deputy Collector of Assessments and Arrears, Borough of Brooklyn.  
JOHN F. ROGERS, Deputy Collector of Assessments and Arrears, Borough of Queens.  
GEORGE BLAND, Deputy Collector of Assessments and Arrears, Borough of Richmond.

**Bureau for the Collection of Taxes.**

DAVID E. AUSTIN, Receiver of Taxes.  
JOHN J. McDONOUGH, Deputy Receiver of Taxes, Borough of Manhattan.  
JOHN B. UNDERHILL, Deputy Receiver of Taxes, Borough of The Bronx.  
JAMES B. BRUCK, Deputy Receiver of Taxes, Borough of Brooklyn.  
FREDERICK W. BLANCHARD, Deputy Receiver of Taxes, Borough of Queens.  
MATTHEW S. TULVY, Deputy Receiver of Taxes, Borough of Richmond.

**Bureau for the Collection of City Revenue and of Markets.**

DAVID O'BRIEN, Collector of City Revenue and Superintendent of Markets.  
ALEXANDER MEADIN, Clerk of Markets.

**Bureau of the City Chamberlains.**

PATRICK KERNAN, City Chamberlain.  
JOHN H. CAMPBELL, Deputy Chamberlain.

**Office of the City Paymaster.**

No. 61 Chambers Street and No. 61 Reade Street.  
JOHN H. THURMAN, City Paymaster.

## BOARD OF PUBLIC IMPROVEMENTS.

Nos. 13 to 21 Park Row, 10th floor, 9 A. M. to 4 P. M. Saturdays, 9 A. M. to 12 M.  
MADISON F. HOLMAN, President.  
JOHN H. MOORE, Secretary.

## Department of Highways.

Nos. 13 to 21 Park Row, 9 A. M. to 4 P. M.  
JAMES P. KEATING, Commissioner of Highways.  
WILLIAM N. SHANNON, Deputy for Manhattan.  
THOMAS R. FARRELL, Deputy for Brooklyn.  
JAMES H. MALONE, Deputy for Bronx.  
JOHN P. MADDEN, Deputy for Queens.  
HENRY P. MORRISON, Deputy and Chief Engineer for Richmond. Office, "Richmond Building," corner Richmond Terrace and York Avenue, New Brighton, S. I.

## Department of Sewers.

Nos. 13 to 21 Park Row, 9 A. M. to 4 P. M.  
JAMES KANE, Commissioner of Sewers.  
MATTHEW F. DONOHUE, Deputy for Manhattan.  
THOMAS J. BYRNE, Deputy for Bronx. Office, Third Avenue and One Hundred and Seventy-seventh Street.  
WILLIAM BRENNAN, Deputy for Brooklyn. Office, Municipal Building, Room 42.  
MATTHEW J. GOLDNER, Deputy Commissioner of Sewers, Borough of Queens. Office, Hackett Building, Long Island City.  
HENRY P. MORRISON, Deputy Commissioner and Chief Engineer of Sewers, Borough of Richmond. Office, "Richmond Building," corner Richmond Terrace and York Avenue, New Brighton, S. I.

## Department of Bridges.

Nos. 13 to 21 Park Row, 9 A. M. to 4 P. M.; Saturdays, 9 A. M. to 12 M.  
JOHN L. SMITH, Commissioner.  
THOMAS H. YORK, Deputy.  
SAMUEL R. FROSTICO, Chief Engineer.  
MATTHEW H. MOORE, Deputy for Bronx.  
HARRY BLANK, Deputy for Brooklyn.  
JOHN E. BACKUS, Deputy for Queens.

## Department of Water Supply.

Nos. 13 to 21 Park Row. Office hours, 9 A. M. to 4 P. M.  
WILLIAM DALTON, Commissioner of Water Supply.  
JAMES H. HANLIN, Deputy Commissioner, Borough of Manhattan.  
GEORGE W. BIRSEALL, Chief Engineer.  
W. G. BYRNE, Water Registrar.  
JAMES MOFFETT, Deputy Commissioner, Borough of Brooklyn, Municipal Building, Brooklyn.  
LAWRENCE GREENBERG, Deputy Commissioner, Borough of Queens, Long Island City.  
THOMAS J. MULLIN, Deputy Commissioner, Borough of The Bronx, Customs Park Building.  
HENRY P. MORRISON, Deputy Commissioner, Borough of Richmond. Office, "Richmond Building," corner Richmond Terrace and York Avenue, New Brighton, S. I.

## Department of Street Cleaning.

Nos. 13 to 21 Park Row, 9 A. M. to 4 P. M.  
PERCIVAL E. NAGLE, Commissioner.  
F. M. GIBSON, Deputy Commissioner for Borough of Manhattan.  
PATRICK H. QUINN, Deputy Commissioner for Borough of Brooklyn, Room 37 Municipal Building.  
JAMES L. LEBERT, Deputy Commissioner for Borough of The Bronx, No. 65 East One Hundred and Fifty-second Street.  
JOHN P. MADDEN, Deputy Commissioner for Borough of Queens, Municipal Building, Long Island City.

**Department of Buildings, Lighting and Supplies.**

Nos. 13 to 21 Park Row, 9 A. M. to 4 P. M.  
HENRY S. KRAVITZ, Commissioner of Public Buildings, Lighting and Supplies.  
PETER J. DOOLING, Deputy Commissioner for Manhattan.  
GEO. E. BEST, Deputy Commissioner for The Bronx.  
JAMES J. KIRWIN, Deputy Commissioner for Brooklyn.  
JOHN FOWLER, Deputy Commissioner for Queens.  
EDWARD I. MILLER, Deputy Commissioner for Richmond.

## LAW DEPARTMENT.

## Office of Corporation Counsel.

Stewart Building, 3d and 4th floors, 9 A. M. to 4 P. M.; Saturdays, 9 A. M. to 12 M.  
JOHN WALSH, Corporation Counsel.  
THORODOR CONNOLLY, W. W. LADD, JR., CHARLES BLANDY, GEORGE HILL, Associates.  
WILLIAM J. CARR, Assistant Corporation Counsel for Brooklyn.

**Bureau for Collection of Arrears of Personal Taxes.**

Stewart Building, Broadway and Chambers Street, 9 A. M. to 4 P. M.

JAMES C. SPENCER, Assistant Corporation Counsel.

**Bureau for the Recovery of Penalties.**

Nos. 110 and 112 Nassau Street.

ADRIAN T. KERNAN, Assistant Corporation Counsel.

**Bureau of Street Openings.**

Nos. 50 and 52 West Broadway.

JOHN P. DUNE, Assistant to Corporation Counsel.

## POLICE DEPARTMENT.

## Central Office.

No. 300 Mulberry Street, 9 A. M. to 4 P. M.  
BERNARD J. YORK, President of the Board; JOHN B. SEXTON, JACOB BESS, HENRY X. ABELL, Commissioners.

## Bureau of Elections.

9 A. M. to 4 P. M.; Saturdays, 9 A. M. to 12 M.  
General Bureau of Elections, Borough of Manhattan—No. 300 Mulberry Street. T. S. BOWENBROOK, Superintendent; WILLIAM FLANNERY, Chief Clerk.  
Branch Bureau, Borough of Brooklyn—No. 26 Smith Street. GEORGE ROSSALL, Chief; JOHN K. NEAL, Chief Clerk.

Branch Bureau, Borough of The Bronx—One Hundred and Thirty-eighth Street and Most Avenue. CORNELIUS A. BRUNER, Jr., Chief.

Branch Bureau, Borough of Queens—Police Station, Astoria. JAMES E. KORMAN, Chief.

Branch Bureau, Borough of Richmond—Staten Island Savings Bank Building, Stapleton, S. I. CHARLES A. JONES, Chief.

## DEPARTMENT OF PUBLIC CHARITIES.

## Central Office.

Foot of East Twenty-sixth Street, 9 A. M. to 4 P. M.  
JOHN W. KILLER, President of the Board; Commissioners for Manhattan and Bronx.

THOMAS S. BRENNAN, Deputy Commissioner.

AROLAN SMITH, Jr., Commissioner for Brooklyn and Queens, Nos. 120 and 122 Livingston Street, Brooklyn.

EDWARD GILSON, Deputy Commissioner.

JAMES FERRY, Commissioner for Richmond.

Plans and Specifications, Contracts, Proposals and Estimates for Work and Materials for Building, Repairs and Supplies, Bills and Accounts, 9 A. M. to 4 P. M., Saturdays, 10 M.

Out-door Poor Department. Office hours, 8:30 A. M. to 4:30 P. M.

Department for Care of Destitute Children, No. 66 Third Avenue, 8:30 A. M. to 4:30 P. M.

## DEPARTMENT OF CORRECTION.

## Central Office.

No. 148 East Twelfth Street. Office hours from 9 A. M. to 4 P. M.; Saturdays 10 A. M. to 12 M.

FRANCIS J. LITVY, Commissioner.

N. O. FARMER, Deputy Commissioner.

JOHN MORRISON GRAY, Deputy Commissioner for Boroughs of Brooklyn and Queens.

## FIRE DEPARTMENT.

Office hours for all, except where otherwise noted from 9 A. M. to 4 P. M.; Saturdays, 10 M.

## Headquarters.

Nos. 117 and 119 East Sixty-seventh Street.  
JOHN J. SCANNELL, Fire Commissioner.  
JAMES H. TULLY, Deputy Commissioner, Boroughs of Brooklyn and Queens.  
AUGUSTUS T. DOCHARTY, Secretary.  
EDWARD F. CROKER, Chief of Department, and in Charge of Fire-Alarm Telegraph.  
JAMES DALY, Deputy Chief, in Charge of Boroughs of Brooklyn and Queens.  
GEORGE E. MURRAY, Inspector of Combustibles.  
PETER SMITH, Fire Marshal, Boroughs of Manhattan, The Bronx and Richmond.  
ALONZO BRYMAN, Fire Marshal, Boroughs of Brooklyn and Queens.  
Central Office open at all hours.  
Committee to examine persons who handle explosives meets Thursday of each week, at 2 o'clock P. M.

## DEPARTMENT OF DOCKS AND FERRIES.

## Pier "A," N. R., Battery Place.

J. SKRAGHT CHAM, President; CHARLES F. MURPHY, Treasurer; PETER V. MEYER, Commissioners.  
WILLIAM H. BURKE, Secretary.  
Office hours, 9 A. M. to 4 P. M.; Saturdays, 10 M.

## DEPARTMENT OF HEALTH.

Southwest corner of Fifty-fifth Street and Sixth Avenue, 9 A. M. to 4 P. M.  
Burial Permit and Contagious Disease Offices always open.

MICHAEL C. MURPHY, President, and WILLIAM T. JENKINS, M. D., JOHN B. CONNY, M. D., THE PRESIDENT OF THE POLICE BOARD, ex-officio, and the HEALTH OFFICERS OF THE PORT, ex-officio, Commissioners.  
CASPAR GOLDENBERG, Secretary pro tem.

CHARLES V. ROBERTS, M. D., Sanitary Superintendent.

FREDERICK H. DILLINGHAM, M. D., Assistant Sanitary Superintendent, Borough of Manhattan.

GEORGE MONAHAN, M. D., Assistant Sanitary Superintendent, Borough of The Bronx.

ROBERT A. BLACK, M. D., Assistant Sanitary Superintendent, Borough of Brooklyn.

OSCAR L. LISK, M. D., Assistant Sanitary Superintendent, Borough of Queens.

JOHN L. FRANK, M. D., Assistant Sanitary Superintendent, Borough of Richmond.

## DEPARTMENT OF PARKS.

GEORGE C. CLAUSEN, President, Park Board, Commissioner in Manhattan and Richmond.  
WILLIS HOLLY, Secretary, Park Board.

Offices, Arsenal, Central Park.

GEORGE V. BROWNE, Commissioner in Brooklyn and Queens.

Offices, City Hall, Brooklyn, and Litchfield Mansion, Prospect Park.

AUGUST MORRIS, Commissioner in Borough of The Bronx.

Offices, Zborowski Mansion, Claremont Park.

Office hours, 9 A. M. to 4 P. M.; Saturdays, 10 M.

## Act Commissioners.

SAMUEL P. AVERY, DANIEL C. FRESC, Commissioners.

## DEPARTMENT OF BUILDINGS.

Main Office, No. 280 Fourth Avenue, Borough of Manhattan. Office hours, 9 A. M. to 4 P. M.; Saturdays, 9 A. M. to 12 M.

THOMAS J. BEADY, President of the Board of Buildings and Commissioner for the Boroughs of Manhattan and The Bronx.

JOHN GULFOVICH, Commissioner for the Borough of Brooklyn.

DANIEL CAMPBELL, Commissioner for the Boroughs of Queens and Richmond.

A. J. JOHNSON, Secretary.

Office of the Department for the Boroughs of Manhattan and The Bronx, No. 280 Fourth Avenue, Borough of Manhattan.

Office of the Department for the Borough of Brooklyn, Borough Hall, Borough of Brooklyn.

Office of the Department for the Boroughs of Queens and Richmond, Richmond Hall, New Brighton, Staten Island, Borough of Richmond. Branch office, Room 1, second floor, Town Hall, Jamaica, Long Island, Borough of Queens.

## DEPARTMENT OF TAXES AND ASSESSMENTS.

Stewart Building, 9 A. M. to 4 P. M.; Saturdays, 10 M.  
THOMAS L. FEITHEN, President of the Board; EDWARD C. SHERREY, ARTHUR C. SALMON, THOMAS J. PATTERSON, FREDERICK LEVY, Commissioners; HENRY BRILLINGER, Chief Clerk.

## BUREAU OF MUNICIPAL STATISTICS.

Nos. 13 to 21 Park Row, Room 1011. Office hours from 9 A. M. to 4 P. M.; Saturdays, from 9 A. M. to 12 M.

JOHN T. NAGLE, M. D., Chief of Bureau.

Municipal Statistical Commission; FREDERICK W. GRUBB, LL. D., ANTONIO RASINER, RICHARD T. WILSON, JR., KENNETH HARTLEY, J. EDWARD JETTER, THOMAS GILKREAN.

**MUNICIPAL CIVIL SERVICE COMMISSION.**

Criminal Court Building, Centre Street, between Franklin and White Streets, 9 A. M. to 4 P. M.  
CHARLES H. KNOX, President, ALEXANDER T. MASON and WILLIAM N. DYKMAN, Commissioners.  
LEE PHILLIPS, Secretary.

## BOARD OF ASSESSORS.

Office, No. 320 Broadway, 9 A. M. to 4 P. M.  
EDWARD MCCUE, President; EDWARD CARILL, THOMAS A. WILSON, PATRICK M. HARTLEY and JOHN H. MEYERSON, Board of Assessors, WILLIAM H. JASPER, Secretary. THOMAS J. SHELLEY, Chief Clerk.

## DEPARTMENT OF EDUCATION.

## Board of Education.

Park Avenue and Fifty-ninth Street, Borough of Manhattan, 9 A. M. to 5 P. M.; Saturdays, 9 A. M. to 12 M.  
JOSEPH J. LITTLE, President; A. EDWARD PALMER, Secretary.

**School Board for the Boroughs of Manhattan and The Bronx.**

Park Avenue and Fifty-ninth Street, Borough of Manhattan.

JOSEPH J. LITTLE, President; WILLIAM J. ELLIS, Secretary.

**School Board for the Borough of Brooklyn.**

No. 134 Livingston Street, Brooklyn. Office hours, 9 A. M. to 5 P. M.; Saturdays, 9 A. M. to 12 M.

CHARLES E. ROBERTSON, President; GEORGE G. BROWN, Secretary.

**School Board for the Borough of Queens.**

Flushing, Long Island.

PATRICK J. WHITE, President; JOSEPH H. FRYPATRICK, Secretary.

**School Board for the Borough of Richmond.**

Savings Bank Building, Stapleton, Staten Island.

WILLIAM J. COLE, President; FRANKLIN C. VITT, Secretary.

## SHERIFF'S OFFICE.

Stewart Building, 9 A. M. to 4 P. M.  
WILLIAM F. GRIEL, Sheriff; HENRY P. MULVANY, Under Sheriff.

## SHERIFF'S OFFICE, KINGS COUNTY.

County Court-house, Brooklyn.  
WILLIAM WALTON, Sheriff; JAMES BUNNE, Under Sheriff.  
9 A. M. to 4 P. M.; Saturdays, 10 M.

## SHERIFF'S OFFICE, QUEENS COUNTY.

County Court-house, Long Island City, 9 A. M. to 4 P. M.  
WILLIAM CAR HARRIS, Sheriff; WILLIAM MATHIAS, Under Sheriff.

## SHERIFF'S OFFICE, RICHMOND COUNTY.

County Court-house, Richmond, S. I., 9 A. M. to 4 P. M.

## AUGUSTUS ACKER, Sheriff.

## REGISTER'S OFFICE.

East side City Hall Park. Office hours from 9 A. M. to 4 P. M.; Saturdays, 9 A. M. to 12 M. During the months of July and August the hours are from 9 A. M. to 2 P. M.

ISAAC FROMME, Register; JOHN VON OLICH, Deputy Register.

## REGISTER, KINGS COUNTY.

Hall of Records. Office hours, 9 A. M. to 4 P. M., excepting months of July and August, then from 9 A. M. to 2 P. M., provided for by statute.

JAMES R. HOWE, Register.

WARREN C. TREWHA, Deputy Register.

## COMMISSIONER OF JURORS.

Room 127 Stewart Building, Chambers Street and Broadway, 9 A. M. to 4 P. M.

CHARLES WALSH, Commissioner; JAMES E. CONNER, Deputy Commissioner.

## SPECIAL COMMISSIONER OF JURORS.

No. 111 Fifth Avenue, 9 A. M. to 4 P. M.  
H. W. ORAY, Commissioner.

FREDERICK J. STEPHAN, Assistant Commissioner.

## COMMISSIONER OF JURORS, KINGS COUNTY.

County Court-house.  
WILLIAM A. FERRY, Commissioner.

## SPECIAL COMMISSIONER OF JURORS, KINGS COUNTY.

No. 375 Fulton Street.

EDWARD J. DOOLAY, Commissioner.

## COMMISSIONER OF JURORS, QUEENS COUNTY.

Office hours, 10 A. M. to 4 P. M.; Saturdays, 10 A. M. to 12 M.

EDWARD J. KRAUER, Commissioner.

H. HESTER MOORE, Assistant Commissioner.

## COMMISSIONER OF JURORS, RICHMOND COUNTY.

CHARLES J. KOLLMAN, Commissioner.  
WILLIAM J. DOWLING, Deputy Commissioner.  
Office open from 9 A. M. until 4 P. M.; Saturdays, from 9 A. M. to 12 M.

## NEW YORK COUNTY JAIL.

No. 70 Ludlow Street, 9 A. M. to 10 P. M., daily.  
WILLIAM F. GRIEL, Sheriff.  
PATRICK H. PICKETT, Warden.

## KINGS COUNTY JAIL.

Raymond Street, between Woughlight Street and Enkath Street, Brooklyn, New York.  
WILLIAM WALTON, Sheriff; JACOBUS BENNIS, Warden.



## COBONERS.

Borough of Manhattan.

Office, New Criminal Court Building. Open at all times of day and night.  
 EDWARD L. FREDERICK, JACOB E. BARTON, EDWARD W. HART, ANTONIO TOCCA.

Borough of The Bronx.

No. 26 East One Hundred and Sixty-sixth street. Open from 9 A. M. to 12 midnight.  
 ARTHUR McLEWIS, THOMAS M. LYONS.

Borough of Brooklyn.

Office, Room 17, Borough Hall. Open all times of day and night, except between the hours of 12 M. and 1 P. M., on Sundays and holidays.  
 ARTHUR J. BUNN, GEORGE W. DELAF.

Borough of Queens.

Office, Borough Hall, Fulton street, Jamaica, L. I.  
 PHILIP T. GORDON, LEONARD RUFF, JR., and SAMUEL S. GUY, JR.  
 CHARLES J. SCHREIBER, Clerk.

Borough of Richmond.

No. 45 New York avenue, Richmond. Open for the transaction of business all hours of the day and night.  
 JOHN SCAFF, GEORGE C. TRAMER.

**CHANGE OF GRADE DAMAGE COMMISSION, TWENTY-THIRD AND TWENTY-FOURTH WARD.**  
 Room 38, Schermerhorn Building, No. 95 Broadway. Meetings, Mondays, Wednesdays and Fridays, at 3 P. M.  
 WILLIAM E. SHILLINGS, Chairman; CHARLES A. JACKSON, OSCAR S. BARRY, Commissioners.  
 LAURENCE McLEWIS, Clerk.

## SURROGATES COURT.

New County Court-house. Court open from 9 A. M. to 4 P. M., except Saturdays, when it closes at 12 M.  
 FRANK T. FETTERBERG, ALICE C. THOMAS, Surrogates; WILLIAM V. LARRY, Chief Clerk.

## CITY MAGISTRATES COURTS.

Courts open from 9 A. M. until 4 P. M.  
**City Magistrate—HENRY A. BRACK, ROBERT C. CONNELL, LEONARD E. CRANE, JOSEPH M. DRUGEL, CHARLES A. FLAMMER, LORENZ ZELFER, CHARLES W. MEADE, JOHN G. MITCHELL, JEROME PAUL, JOHN B. MAYO, EDWARD HOGAN, WILLIAM H. OLMSTEAD.**  
**First District—Criminal Court Building.**  
**Second District—Jefferson Market.**  
**Third District—No. 64 Essex street.**  
**Fourth District—Fifty-seventh street, near Lexington avenue.**  
**Fifth District—One Hundred and Twenty-first street, southeastern corner of Sylvan place.**  
**Sixth District—One Hundred and Fifty-eighth street and Third avenue.**  
**Seventh District—Fifty-fourth street, west of Eighth avenue.**

Second Division.

Borough of Brooklyn.

**First District—No. 318 Adams street. JACOB BURMAN, Magistrate.**  
**Second District—Court and Butler streets. HENRY BARTON, Magistrate.**  
**Third District—Myrtle and Vanderbilt avenues. CHARLES E. TALE, Magistrate.**  
**Fourth District—No. 2 and 3 Lee avenue. WILLIAM KRAMER, Magistrate.**  
**Fifth District—Ewen and Powers streets. ARTHUR LARSON, Magistrate.**  
**Sixth District—Gates and Reid avenues. LEWIS R. WORTH, Magistrate.**  
**Seventh District—No. 31 Grant street, Flatbush. ALFRED E. STOKES, Magistrate.**  
**Eighth District—Court Island—ALBERT VAN BUNT, VOUCHER, JR., Magistrate.**

Borough of Queens.

**First District—Nos. 31 and 33 Jackson avenue, Long Island City. MATTHEW J. SMITH, Magistrate.**  
**Second District—Flushing, Long Island. LOUIS J. CONNOR, Magistrate.**  
**Third District—Far Rockaway, Long Island. KENNETH J. HEALY, Magistrate.**

Borough of Richmond.

**First District—New Brighton, Staten Island. JOHN COOK, Magistrate.**  
**Second District—Scripston, Staten Island. NATHANIEL MARCH, Magistrate.**  
 Secretary to the Board, JACOB J. CHAPMAN, Myrtle and Vanderbilt avenues, Borough of Brooklyn.

## KINGS COUNTY SURROGATE'S COURT.

Hall of Records, Brooklyn.  
 GEORGE E. WALDO, Surrogate.  
 MICHAEL F. McGOVERN, Chief Clerk.  
 Court open from 9 A. M. to 4 P. M. Office hours, 9 A. M. to 4 P. M.

## COUNTY JUDGE AND SURROGATE.

County Office Building, Richmond, S. I.  
 STEPHEN D. STEVENS, County Judge.

## KINGS COUNTY TREASURER.

County House, Room 14.  
 JOHN W. KIMBALL, Treasurer; THOMAS F. FARRELL, Deputy Treasurer.

## THE COMMISSIONER OF RECORDS, KINGS COUNTY.

Room 1, Hall of Records. Office hours, 9 A. M. to 4 P. M.  
 GEORGE E. WALDO, Commissioner.  
 FRANK M. TUNNICLIFFE, Deputy Commissioner.  
 THOMAS D. MONTGOMERY, Superintendent.  
 JOSEPH H. GRUBBS, Secretary.

## EXAMINING BOARD OF PLUMBERS.

Rooms 14, 15 and 16 Nos. 129 to 131 Church street.  
 President, JOHN RICHMOND; Secretary, JAMES B. McGOVERN; Treasurer, EDWARD HALEY, HORACE LOUNGE, P. J. ANDERSON, ex-officio.  
 Office open during business hours every day in the year, except legal holidays. Examinations are held on Monday, Wednesday and Friday after 4 P. M.

## SUPREME COURT.

County Court-house, 1030 A. M. to 4 P. M.  
 Special Term, Part I, Room No. 10.  
 Clerk's Office, Part I, Room No. 13.  
 Special Term, Part II, Room No. 13.  
 Clerk's Office, Part II, Room No. 13.  
 Special Term, Part III, Room No. 13.  
 Clerk's Office, Part III, Room No. 13.  
 Special Term, Part IV, Room No. 13.  
 Clerk's Office, Part IV, Room No. 13.  
 Special Term, Part V, Room No. 13.  
 Clerk's Office, Part V, Room No. 13.  
 Special Term, Part VI, Room No. 13.  
 Clerk's Office, Part VI, Room No. 13.  
 Special Term, Part VII, Room No. 13.  
 Clerk's Office, Part VII, Room No. 13.  
 Special Term, Part VIII, Room No. 13.  
 Clerk's Office, Part VIII, Room No. 13.  
 Special Term, Part IX, Room No. 13.  
 Clerk's Office, Part IX, Room No. 13.  
 Special Term, Part X, Room No. 13.  
 Clerk's Office, Part X, Room No. 13.  
 Special Term, Part XI, Room No. 13.  
 Clerk's Office, Part XI, Room No. 13.  
 Special Term, Part XII, Room No. 13.  
 Clerk's Office, Part XII, Room No. 13.  
 Appellate Term, Room No. 13.  
 Clerk's Office, Appellate Term, Room No. 13.  
 Naturalization Bureau, Room No. 13.  
 Assignment Bureau, Room No. 13.  
 JACOBUS—GEORGE C. BARTON, ABRAHAM R. LAWRENCE, CHARLES H. TRINER, CHARLES F. McLEWIS, FRANCIS RUFF, JAMES FREDERICK, MILAN BRACK.

DAVID LEVENSCHITZ, LEONARD A. GRIGORICH, HENRY BISCHOFF, JR., JOHN J. FREDERICK, GEORGE P. ANDERSON, P. HENRY DUNN, DAVID McADAM, HENRY E. BRIDGEMAN, HENRY A. GUNDELBERG, FRANCIS M. SCOTT, JAMES A. O'GORMAN, WILLIAM SCHMER, Clerk.

## CRIMINAL DIVISION, SUPREME COURT.

New Criminal Court Building, Centre street. Court open at 10:30 o'clock A. M.  
 EDWARD K. CARROLL, Clerk. Hours from 10 A. M. to 4 P. M.

## APPELLATE DIVISION, SUPREME COURT.

Court-house, Madison avenue, corner Twenty-fifth street. Court open at 1 P. M.  
 CHARLES H. VAN BUNT, Presiding Justice; CHRISTOPHER R. McLAUGHLIN, EDWARD PATTERSON, MURRAY J. O'BRIEN, GEORGE L. INGRAM, WILLIAM HUNTER, EDWARD W. HATTON, Justices; ALFRED WADSWORTH, Clerk; WILLIAM LAMB, JR., Deputy Clerk.

## COUNTY COURT, KINGS COUNTY.

County Court-house, Brooklyn, Rooms 10, 11, 12 and 13. Court open at 9 A. M., daily, and also until business is completed. Part I, Room No. 10. Part II, Room No. 11. Court-house, Clerk's Office, Room 22 and 27, open daily from 9 A. M. to 4 P. M.; Saturdays, 12 M. to 2 P. M.  
 JEROME ARTHUR and WM. B. HUBB, JR., County Judges.  
 CHARLES Y. VAN BUNT, Chief Clerk.

## QUEENS COUNTY COURT.

County Court-house, Long Island City.  
 County Court open at 9:30 A. M.; adjourns at 4 P. M.  
 County Judge's office always open at Flushing, N. Y.  
 HARRISON S. MOORE, County Judge.

## CITY COURT OF THE CITY OF NEW YORK.

No. 34 Chambers street, Brown-stone Building, City Hall Park, from 10 A. M. to 4 P. M.  
 General Term.  
 Trial Term, Part I.  
 Part II.  
 Part III.  
 Part IV.  
 Special Term Chambers will be held 10 A. M. to 4 P. M.  
 Clerk's Office, from 9 A. M. to 4 P. M.  
 JAMES M. FLETCHER, Chief Justice; JOHN H. McCARTHY, LEWIS J. CONLAN, JOHN P. SCHENCK, EDWARD F. O'DWYER and THOMAS F. HARCALL, Justices.  
 THOMAS F. SCHERER, Clerk.

## COURT OF GENERAL SESSIONS.

Held in the building for Criminal Courts, Centre Elm, White and Franklin streets. Court opens at 10:30 o'clock.  
 RUFUS B. CONYER, City Judge; JOHN W. COVEY, Recorder; JOSEPH E. NEWBORN, MARTIN F. McLEWIS and WARREN W. FOSTER, Judges of the Court of General Sessions. EDWARD R. CARROLL, Clerk.  
 Clerk's office open from 9 A. M. to 4 P. M.

## COURT OF SPECIAL SESSIONS.

Building for Criminal Courts, Centre street, between Franklin and White streets, Borough of Manhattan. Court opens at 10 A. M.  
**First Division—ELDER R. HINDALE, WILLIAM TRAVES, JACOBUS, EDWARD A. JACOB, JOHN B. McKEE, WILLIAM C. HOGGINS, WILLIAM M. FALCON, Clerk; JOSEPH H. JONES, Deputy Clerk.**  
 Clerk's office open from 9 A. M. to 4 P. M.  
**Second Division—Borough Hall, Brooklyn. Mondays, Wednesdays and Fridays, at 10 o'clock; Town Hall, Jamaica, Borough of Queens, Tuesdays, at 10 o'clock; Town Hall, New Brighton, Borough of Richmond, Thursdays, at 10 o'clock.**  
**Justice—JOHN CUNNINGHAM, HOWARD J. FORD, PATRICK KEADY, JOHN FLEMING, THOMAS W. FLETCHER, JOHN L. KENNEDY, Clerk; CHARLES F. WOLF, Deputy Clerk.**  
 Clerk's office, Borough Hall, Borough of Brooklyn, open from 9 A. M. to 4 P. M.

## MUNICIPAL COURTS.

Borough of Manhattan.

**First District—Third, Fifth and Eighth Wards, and all that part of the First Ward lying west of Broadway and Whitehall street, including Governor's Island, Bedloe's Island, Ellis Island and the Outer Islands. New Court-house, No. 121 Prince street, corner of Wooster street.**  
 DANIEL E. FIRM, Justice. FRANK L. BACON, Clerk.  
 Clerk's office open from 9 A. M. to 4 P. M.

**Second District—Second, Fourth, Sixth and Fourteenth Wards, and all that portion of the First Ward lying south and east of Broadway and Whitehall street. Court-house, corner of Grand and Centre streets.**  
 HENRY BOLTON, Justice. FRANCIS MANGIN, Clerk.  
 Clerk's office open from 9 A. M. to 4 P. M.  
 Court open daily at 10 A. M., and remains open until daily business is disposed of and close of the daily business, except on Sundays and legal holidays.

**Third District—Ninth and Fifteenth Wards. Court-room, southeast corner Sixth avenue and West Tenth street. Court open daily (Sundays and legal holidays excepted) from 9 A. M. to 4 P. M.**  
 WM. F. MOORE, Justice. DANIEL WILLIAMS, Clerk.

**Fourth District—Tenth and Seventeenth Wards. Court-room, No. 30 First street, corner Second avenue. Court open 9 A. M. daily, and remains open to close of business.**  
 GEORGE F. ROSEN, Justice. JOHN E. LYONS, Clerk.

**Fifth District—Seventh, Eleventh and Thirteenth Wards. Court-room, No. 134 Clinton street.**  
 BENJAMIN HOFFMAN, Justice. THOMAS FITZPATRICK, Clerk.

**Sixth District—Eighteenth and Twenty-first Wards. Court-room, northwest corner Twenty-third street and Second avenue. Court open 9 A. M. daily, and continues open to close of business.**  
 DANIEL F. MARTIN, Justice. ABRAHAM BLOOMER, Clerk.

**Seventh District—Nineteenth Ward. Court-room, No. 151 East Fifty-seventh street. Court opens every morning at 9 o'clock (except Sundays and legal holidays), and continues open to close of business.**  
 HERMAN JONES, Justice. PATRICK McDAVITT, Clerk.

**Eighth District—State and Twentieth Wards. Court-room, northwest corner of Twenty-third street and Eighth avenue. Court opens at 10 A. M. and continues open to close of business.**  
 Clerk's office open from 9 A. M. to 4 P. M. each Court day.

**Ninth District—Twelfth Ward, except that portion thereof which lies west of the centre line of Lenox or Sixth avenue, and of the Harlem river north of the terminus of Lenox avenue. Court-room, No. 170 East One Hundred and Twenty-first street, southeast corner of Sylvan place. Court opens every morning at 9 o'clock (except Sundays and legal holidays), and continues open to close of business.**  
 JOSEPH H. STINGER, Justice. THOMAS CORTMAN, Clerk.

**Tenth District—Twenty-second Ward, and all that portion of the Twelfth Ward which is bounded on the north by the centre line of One Hundred and Tenth street, on the south by the centre line of Eighty-fifth street, on the east by the centre line of Sixth avenue,**

and on the west by the North river. Court-room, No. 214 West Fifty-fourth street. Court opens daily (Sundays and legal holidays excepted) from 9 A. M. to 4 P. M.

THOMAS E. MURRAY, Justice. HUGH GRADY, Clerk.

**Eleventh District—That portion of the Twelfth Ward which lies north of the centre line of West One Hundred and Tenth street and west of the centre line of Lenox or Sixth avenue, and of the Harlem river north of the terminus of Lenox or Sixth avenue. Court-room, corner of One Hundred and Twenty-sixth street and Columbia avenue. Court opens daily (Sundays and legal holidays excepted) from 9 A. M. to 4 P. M.**

FRANCIS J. WICKERTON, Justice. ADOLPH N. DIMARIST, Clerk.

Borough of The Bronx.

**First District—All that part of the Twenty-fourth Ward which was lately annexed to the City and County of New York by chapter 223 of the Laws of 1895, comprising all of the late Town of Westchester and part of the Towns of Eastchester and Pelham, including the Villages of Wakefield and Williamsbridge. Court-room, Town Hall, Main street, Westchester Village. Court opens daily (Sundays and legal holidays excepted) from 9 A. M. to 4 P. M. Trial of causes are Tuesday and Friday of each week.**

WILLIAM W. FENFIELD, Justice. JOHN N. STEWART, Clerk.

**Second District—Twenty-third and Twenty-fourth Wards. Court-room, corner of Third avenue and One Hundred and Fifty-eighth street. Office hours from 9 A. M. to 4 P. M. Court open at 10 A. M.**  
 JOHN M. TINSLEY, Justice. HOWARD SPEAR, Clerk.

Borough of Brooklyn.

**First District—Comprising First, Second, Third, Fourth, Fifth, Sixth, Tenth and Twelfth Wards of the Borough of Brooklyn. Court-house, northwest corner State and Court streets.**

JOHN J. WALSH, Justice. EDWARD MORAN, Clerk.

**Second District—Seventh, Eighth, Ninth, Eleventh, Twelfth, Twenty-first, Twenty-second and Twenty-third Wards. Court-room located at No. 794 Broadway, Brooklyn.**

GERARD D. VAN WARY, Justice. WILLIAM H. ALLEN, Clerk.

Clerk's office open from 9 A. M. to 4 P. M.

**Third District—Includes the Thirteenth, Fourteenth, Fifteenth, Sixteenth, Seventeenth, Eighteenth and Nineteenth Wards. Court-house, Nos. 6 and 8 Leavenworth, Brooklyn.**

WILLIAM J. LYONS, Justice. JOHN W. CARTER, Clerk.

Clerk's office open from 9 A. M. until 4 P. M. Court opens at 10 o'clock.

**Fourth District—Twenty-fourth, Twenty-fifth, Twenty-sixth, Twenty-seventh and Twenty-eighth Wards. Court-room, No. 14 Howard avenue.**

THOMAS H. WILLIAMS, Justice. HERMAN GOULDING, Clerk; JAMES P. SHERIDAN, Assistant Clerk.

Clerk's office open from 9 A. M. to 4 P. M.

**Fifth District—Twenty-ninth, Thirtieth, Thirty-first and Thirty-second Wards. Court-room on Bath avenue and Bay Twenty-second street, Bath Beach.**

CONRADUS FERGUSON, Justice. JEREMIAH J. O'LEARY, Clerk.

Clerk's office open from 9 A. M. to 4 P. M.

Borough of Queens.

**First District—First Ward (all of Long Island City, formerly comprising five Wards). Court-room Queens County Court-house (located temporarily).**

THOMAS C. KENNEDY, Justice. THOMAS F. KENNEDY, Clerk.

Clerk's office open from 9 A. M. to 4 P. M. each week day. Court held each day, except Saturday.

**Second District—Second and Third Wards, which include the territory of the late Towns of Newtown and Flushing. Court-room in Court-house of late Town of Newtown, corner of Broadway and Court street, Elmhurst, New York. P. O. address, Elmhurst, New York.**

WILLIAM RABQUE, Jr., Justice. HENRY WALTER, Jr., Clerk.

Clerk's office open from 9 A. M. to 4 P. M.

**Third District—James F. McLAUGHLIN, Justice; GEORGE W. DAVIS, Clerk.**

Court-house, Town Hall, Jamaica.

Clerk's office open from 9 A. M. to 4 P. M. Court held on Mondays, Wednesdays and Fridays, at 10 A. M.

Borough of Richmond.

**First District—First and Third Wards (Towns of Castleton and Northfield). Court-room, former Village Hall, Lafayette avenue and Second street, New Brighton.**

JOHN J. KENNY, Justice. FRANCIS F. LEMAN, Clerk.

Clerk's office open from 9 A. M. to 4 P. M. Court held each day, except Saturday, from 10 A. M.

**Second District—Second, Fourth and Fifth Wards (Towns of Middlefield, Southfield and Westfield). Court-room, former Edgewater Village Hall, Stapleton.**

GEORGE W. STACE, Justice. PETER TIERMAN, Clerk.

Clerk's office open from 9 A. M. to 4 P. M. Court held each day from 10 A. M., and continues until close of business.

## COMMISSIONERS OF THE SINKING FUND.

COMMISSIONERS OF THE SINKING FUND OF THE CITY OF NEW YORK.

TO CONTRACTORS.

PROPOSALS FOR FURNISHING MATERIALS AND PERFORMING WORK IN THE FURNISHING, EQUIPMENT, ETC., OF A HOSPITAL BUILDING ON GOVERNOR'S ISLAND, BETWEEN FRONT AND WATER STREETS, IN NEW YORK CITY, PURSUANT TO CHAPTER 104, LAWS OF 1894, AS AMENDED BY CHAPTER 300, LAWS OF 1895.

SEALD ESTIMATES FOR THE ABOVE work, indicated with the above title, also with the name of the person or persons making the same, and the date of presentation, will be received at the office of the Mayor, City Hall, in the City of New York, until

TUESDAY, JUNE 5, 1900,

at 12 o'clock M., at which place and hour the bids will be publicly opened by and in the presence of the Commissioners of the Sinking Fund, or a majority of them, and read, and the award of the contract, if awarded, will be made to the lowest bidder, with adequate security, as soon thereafter as practicable. The person or persons to whom the contract may be awarded will be required to attend at the office of the Department of Public Buildings, Lighting and Supplies, with the contract offered by him or them, and execute the contract within five days from the date of the service of a notice to that effect.

N. B.—Presentation will not be given for the withdrawal of any bid or estimate. No bid will be accepted from or contract awarded to any person who is in arrears to the Corporation upon debt or contract, or who is a defaulter, as surety or otherwise, upon any obligation to the Corporation.

Bids will be received only for the whole in gross, but the bids will not include the items to be furnished by State Prison Department, as designated on the margin of the specifications.

Bidders are required to state in their estimates, under each item, their names and places of residence, the names of all persons interested with them therein, and if no other person be so interested they shall distinctly state the fact; also that it is made without any connection with any other person making any bid or estimate for the same purpose, and that it is in all respects fair and without collusion or

fraud, and also that no member of the Municipal Assembly, head of a Department, Chief of a Bureau, Deputy thereof or Clerk therein or other officer of the Corporation is directly or indirectly interested therein or in the supplies or work to which it relates, or in any portion of the profits thereof. Where more than one person is interested it is requisite that the verification be made and subscribed by all the parties interested.

Each estimate shall be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the estimate they will, upon its being so awarded, become bound as his sureties for its faithful performance; and that if he shall omit or refuse to execute the same they will pay to the Corporation any difference between the sum to which he would be entitled upon completion and that which the Corporation may be obliged to pay to the person to whom the contract shall be awarded at any subsequent time, the amount in each case to be calculated upon the estimated amount of the work by which the bids are tested. The consent above mentioned shall be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of the contract and stated in the proposals, over and above all his debts of every nature, and over and above his liabilities as surety, surety and otherwise; and that he has offered himself as a surety in good faith, and with an intention to execute the bond required by law. The adequacy and sufficiency of the security offered will be subject to the approval of the Comptroller after the award is made and prior to the signing of the contract.

For the nature and extent of the work to be done bidders are referred to the specifications and the plans and drawings therein mentioned, which can be seen at the office of John R. Thomas, No. 110 Broadway, said specifications, plans and drawings form part of these proposals.

The entire work is to be completed within THREE MONTHS after the date of the signing of this contract. The damages to be paid by the contractor for each day that the contract may be unfulfilled after the time specified for the completion thereof shall have expired, by a clause in the contract, fixed and liquidated at TWENTY-FIVE DOLLARS per day.

Bidders must state in writing, and also in figures, a price for the whole work complete, which price is to cover the furnishing of all necessary materials and labor and the performance of all the work set forth in the specifications and form of agreement hereto annexed.

No estimate will be received or considered unless accompanied by either 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 to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be included in the sealed proposals containing the estimate, but must be handed to the officer or clerk who has charge of the estimate box; and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall refuse or neglect within five days after notice that the contract has been awarded to him to execute the same, the amount of the deposit made by him shall be forfeited and retained by the City of New York as liquidated damages for such neglect or refusal; but if he shall execute the contract and give the proper security within the time aforesaid the amount at his disposal shall be returned to him.

The amount of security required is TWENTY THOUSAND DOLLARS as hereinafore specified. The right is reserved by the Commissioners to reject all bids if they shall deem it for the interest of the Corporation so to do.

Blank forms of estimates, and further information, if required, can be obtained on application at the office of the Architect, No. 125 Broadway, and at Room 4 in the Comptroller's office, No. 110 Broadway, New York City.

NEW YORK, May 17, 1900.

ROBERT A. VAN WYCK, Mayor;  
 BIRD S. COLER, Comptroller;  
 PATRICK KEENAN, Chamberlain;  
 RANDOLPH GUGGENHEIMER, President of the Council;  
 ROBERT MUH, Chairman Committee on Finance,  
 Board of Aldermen;  
 Commissioners of the Sinking Fund.

## BOROUGH OF RICHMOND.

OFFICE OF PRESIDENT OF BOROUGH OF RICHMOND,  
 NEW BRITAIN, N. Y., May 15, 1900.

NOTICE IS HEREBY GIVEN IN ACCORDANCE with section 400 of the Charter of the City of New York, that a petition, signed by residents of the First District for Local Improvements, for the extension of St. Mary's avenue, in the Fourth Ward of the Borough of Richmond, to the Fingerboard road in said ward, has been presented to me, and it is in this office for inspection, and that a meeting of the Local Board will be held in the Borough Office, in the First National Bank Building, at St. George, Borough of Richmond, on the 15th day of May, 1900, at 10 o'clock in the forenoon, at which meeting said petition will be submitted to said Board.

GEORGE CROMWELL, President.

ALBERT E. HADLOCK, Secretary.

## MUNICIPAL CIVIL SERVICE COMMISSION.

MUNICIPAL CIVIL SERVICE COMMISSION OF THE CITY OF NEW YORK.

CENTER, KIM, FRANKLIN and WHITE STREETS,  
 NEW YORK, May 10, 1900.

PUBLIC NOTICE IS HEREBY GIVEN THAT open competitive examinations will be held at the office of this Commission for the following positions, upon the dates specified:

SATURDAY, MAY 19, 9 30 A. M., ASSISTANT ENGINEERS (CIVIL), RAPID TRANSIT COMMISSION.

The salaries will be, for Grade A, \$1,500; Grade B, \$1,200; Grade C, \$1,000 per year.

All who pass this examination will be eligible for appointment to Grade A, and will be notified.

A second examination will be held at a later date, at which those who have passed this examination may appear, if they desire, and be examined for either Grade B or Grade C, but not for both.

Candidates will be examined on May 14 and 15 in technical knowledge, experience, mathematics and writing a report. The later examination will be purely technical. No notice to appear for this examination will be issued on any application filed after Saturday, May 12, 1900, at 10 o'clock.

Monday, May 21, 10 A. M., RECREATION PIER ATTENDANTS (FEMALES). Subjects of examination: Reading, arithmetic, duties and experience. No notice to appear for this examination will be issued on any application filed after Monday, May 7, 1900.

Tuesday, May 22, 10 A. M., RECREATION PIER ATTENDANTS (MALES). Subjects of examination: Reading, arithmetic, duties and experience. No notice to appear for this examination will be issued on any application filed after Monday, May 7, 1900.







Each bid or estimate shall contain and state the name and place of residence of each of the persons making the same, the names of all persons interested with him or them therein, and if no other person be so interested it shall distinctly state that fact; 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 Municipal Assembly, head of a department, chief of a bureau, deputy thereof, or clerk therein, or other officer of the Corporation, is directly or indirectly interested therein, or in the supplies or work 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 therein are in all respects true. Where more than one person is interested it is requisite that the verification be made and subscribed by all the parties interested.

Each bid or estimate shall be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the estimate, they will, on its being so awarded, become bound as his sureties for its faithful performance, and that if he shall omit or refuse to execute the same, they will pay to the Corporation any difference between the sum to which he would be entitled on its completion and that which the Corporation may be obliged to pay to the person or persons to whom the contract may be awarded at any subsequent letting, the amount in each case to be calculated upon the estimated amount of the work by which the bids are tested. The consent above mentioned shall be accompanied by the oath or affirmation, in writing, of each of the persons signing the same that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of this contract, over and above all his debts of every nature and over and above his liabilities as bail, surety or otherwise, and that he has offered himself as a surety in good faith and with the intention to execute the bond required by section 27 of chapter 8 of the Revised Ordinances of the City of New York. If the contract shall be awarded to the person or persons for whom he consents to become surety, the adequacy and sufficiency of the security offered to be approved by the Comptroller of the City of New York.

No bid or estimate will be received or considered unless accompanied by either 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 to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be included in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the estimate box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall refuse or neglect, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and retained by The City of New York as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

N. B.—The prices must be written in the estimate and also stated in figures, and all estimates will be considered as informal which do not contain bids for all items for which bids are hereinafter called, or which contain bids for items for which bids are not hereinafter called for. Permission will not be given for the withdrawal of any bid or estimate. No bid will be accepted from, or contract awarded to, any person who is in arrears to the Corporation upon debt or contract, or who is a defaulter, as surety or otherwise, upon any obligation to the Corporation.

The Park Board reserves the right to reject any or all the bids received in response to this advertisement if it should deem it for the interest of the City so to do. Blank forms for proposals for the contracts can be had at the office of the Park Board, Arsenal, Central Park, and at Prospect park, Brooklyn.

GEORGE C. CLAUSEN,  
GEORGE V. BROWER,  
AUGUST MORRIS,  
Commissioners of Parks of The City of New York.

DEPARTMENT OF PARKS,  
ARSENAL, CENTRAL PARK,  
BURROUGHS OF MANHATTAN, CITY OF NEW YORK,  
MAY 5, 1900.

TO CONTRACTORS.

SEALED BIDS OR ESTIMATES, WITH THE title of the work and the name of the bidder or bidders interested thereon, will be received by the Park Board, at its office, Arsenal Building, Sixty-fourth street and Fifth avenue, Central Park, New York City, until 11 o'clock A. M. of

FRIDAY, MAY 18, 1900,  
for the following work to be done and materials to be furnished in the Borough of Brooklyn:

No. 1. FOR REGULATING, GRADING, CURBING, GUTTERING AND PAVING WITH MACADAM PAVEMENT THE BAY RIDGE PARKWAY, from Fourth avenue to the present Shore drive.

No. 2. FOR CONSTRUCTING TWO STONE ARCHWAYS UNDER SECOND AND THIRD AVENUES.

No. 3. FOR FURNISHING AND DELIVERING 2,000 CUBIC YARDS OF LOAM, TO BE DELIVERED ON OCEAN PARKWAY, between Twenty-second avenue and Kings Highway.

Specifications and plans of the above may be seen at the Litchfield Mansion, Prospect Park, Borough of Brooklyn.

THE CONTRACTS MUST BE BID FOR SEPARATELY. BIDDERS MUST NAME A PRICE FOR EACH AND EVERY ITEM INCLUDED IN THE SPECIFICATIONS UPON WHICH THESE BIDS ARE BASED, AND ALSO STATE THE TOTAL AMOUNT OF THEIR BIDS.

Bidders must satisfy themselves by personal examination and by such other means as they may prefer as to the nature and extent of the materials, and shall not at any time after the submission of an estimate disavow or complain of such statement, nor assert that there was any misunderstanding in regard to the materials to be furnished.

Each bid or estimate shall contain and state the name and place of residence of each of the persons making the same, the names of all persons interested with him or them therein, and if no other person be so interested it shall distinctly state that fact; 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 Municipal Assembly, head of a department, chief of a bureau, deputy thereof, or clerk therein, or other officer of the Corporation, is directly or indirectly interested therein, or in the supplies or work 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 therein are in all respects true. Where more than one person is interested it is requisite that the verification be made and subscribed by all the parties interested.

Each bid or estimate shall be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the estimate, they will, on its being so awarded, become bound as his sureties for its faithful performance, and that if he shall omit or refuse to execute the same, they will pay to the Corporation any difference between the sum to which he would be entitled on its completion and that which the Corporation may be obliged to pay to the person or persons to whom the contract may be awarded at any subsequent letting; the amount in each case to be calculated upon the estimated amount of the work by which the bids are tested.

refuse to execute the same, they will pay to the Corporation any difference between the sum to which he would be entitled on its completion and that which the Corporation may be obliged to pay to the person or persons to whom the contract may be awarded at any subsequent letting, the amount in each case to be calculated upon the estimated amount of the work by which the bids are tested. The consent above mentioned shall be accompanied by the oath or affirmation, in writing, of each of the persons signing the same that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of this contract, over and above all his debts of every nature, and over and above his liabilities as bail, surety or otherwise, and that he has offered himself as a surety in good faith and with the intention to execute the bond required by section 27 of chapter 8 of the Revised Ordinances of the City of New York. If the contract shall be awarded to the person or persons for whom he consents to become surety, the adequacy and sufficiency of the security offered to be approved by the Comptroller of the City of New York.

No bid or estimate will be received or considered unless accompanied by either 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 to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be included in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the estimate box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall refuse or neglect, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and retained by The City of New York as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

N. B.—The prices must be written in the estimate and also stated in figures, and all estimates will be considered as informal which do not contain bids for all items for which bids are hereinafter called, or which contain bids for items for which bids are not hereinafter called for. Permission will not be given for the withdrawal of any bid or estimate. No bid will be accepted from, or contract awarded to, any person who is in arrears to the Corporation upon debt or contract, or who is a defaulter, as surety or otherwise, upon any obligation to the Corporation.

The Park Board reserves the right to reject any or all the bids received in response to this advertisement if it should deem it for the interest of the City so to do. Blank forms for proposals for the contracts can be had at the office of the Park Board, Arsenal, Central Park, and at Prospect park, Brooklyn.

GEORGE C. CLAUSEN,  
GEORGE V. BROWER,  
AUGUST MORRIS,  
Commissioners of Parks of The City of New York.

DEPARTMENT OF STREET CLEANING.

SALE OF UNREDEEMED INCUMBRANCES.

DEPARTMENT OF STREET CLEANING OF THE CITY OF NEW YORK,  
MAIN OFFICE, No. 25 PARK ROW,  
BURROUGHS OF MANHATTAN.

PUBLIC NOTICE.

NOTICE IS HEREBY GIVEN THAT, PURSUANT to section 542 of the Greater New York Charter, and under the authority of a final order issued on the 11th day of May, 1900, out of the Municipal Court of The City of New York, for the Second Judicial District, Borough of Manhattan, by a Justice sitting therein, I will, on

FRIDAY, THE 18th DAY OF MAY, 1900,

at 10:30 A. M., in Yard No. 1 of the Department of Street Cleaning, in West Fifty-sixth street, between Eleventh and Twelfth avenues, in the Borough of Manhattan, City of New York, sell trucks, carts, wagons, push-carts, boxes and other movable things.

PERCIVAL E. NAGLE,  
Commissioner of Street Cleaning.

PERSONS HAVING BULKHEADS TO FILL, in the vicinity of New York Bay, can procure material for that purpose—ashes, street sweepings, etc., such as is collected by the Department of Street Cleaning—free of charge, by applying to the Commissioner of Street Cleaning, Nos. 25 to 27 Park row Borough of Manhattan.

PERCIVAL E. NAGLE,  
Commissioner of Street Cleaning.

DEPARTMENT OF SEWERS.

DEPARTMENT OF SEWERS—COMMISSIONER'S OFFICE,  
Nos. 25 to 27 PARK ROW,  
New York, May 18, 1900.

TO CONTRACTORS.

BIDS OR ESTIMATES, ENCLOSED IN A sealed envelope, with the title of the work and the name of the bidder interested thereon, will be received at this office until

WEDNESDAY, MAY 23, 1900,

at 12 o'clock M., at which hour they will be publicly opened by the head of the Department and read.

For the following work in the

Borough of THE Bronx.

No. 1. SEWER AND APPURTENANCES IN BELMONT STREET, from Morris avenue to the Grand Boulevard and Concourse.

No. 2. SEWER AND APPURTENANCES IN BELMONT PLACE, between Hoffman street and summit street of Hoffman street.

Each bid or estimate shall contain and state the name and place of residence of each of the persons making the same, the names of all persons interested with him or them therein, and if no other person be so interested it shall distinctly state that fact; 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 Municipal Assembly, head of a department, chief of a bureau, deputy thereof, or clerk therein, or other officer of the Corporation, is directly or indirectly interested therein, or in the supplies or work to which it relates, or in any portion of the profits thereof.

Each estimate must be verified by the oath, in writing, of the party making the same, that the several matters therein stated are true, and must be accompanied by the consent in writing, of two householders or freeholders in the City of New York, to the effect that if the contract is awarded to the person making the estimate, they will, upon its being so awarded, become bound as his sureties for its faithful performance, and that if he shall omit or refuse to execute the same, they will pay to the Corporation any difference between the sum to which he would be entitled on its completion and that which the Corporation may be obliged to pay to the person or persons to whom the contract may be awarded at any subsequent letting; the amount in each case to be calculated upon the estimated amount of the work by which the bids are tested.

The consent last above mentioned must be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of the contract, over and above all his debts of every nature, and over and above his liabilities as bail, surety, or otherwise, and that he has offered himself as surety in good faith, with the intention to execute the bond required by law.

No estimate will be considered unless accompanied by either 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 to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be included in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the estimate box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall refuse or neglect, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and retained by The City of New York as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

THE COMMISSIONER OF SEWERS RESERVES THE RIGHT TO REJECT ALL BIDS RECEIVED, IF HE DEEMS IT FOR THE BEST INTERESTS OF THE CITY.

Blank forms of bids or estimates, the proper envelopes in which to inclose the same, and any further information desired, can be obtained at the office of the Deputy Commissioner of Sewers, Third avenue and One Hundred and Seventy-seventh street, Borough of The Bronx.

JAS. KANE,  
Commissioner of Sewers.

AQUEDUCT COMMISSION.

PUBLIC AUCTION.

FRIDAY, MAY 18, 1900.

SALE WILL BEGIN AT FORD'S STATION AT 10 O'CLOCK A. M.

Sale to Continue Until Property is All Sold

THE AQUEDUCT COMMISSIONERS OF THE City of New York will sell at public auction, under the direction of Peter F. Meyer & Co., Auctioneers, on the premises, the following described buildings now standing within the purchase line of the New Croton Reservoir:

Parcel No. FORMER OWNER. DESCRIPTION. Minimum Price.

519 Est. D. W. Slawson House, 100 00  
Lider mill, machinery, etc. 100 00  
Barn, 30 feet by 30 feet 30 00  
Barn, 12 feet by 24 feet 15 00  
Barn, 12 feet by 30 feet 15 00  
Ice-house. 25 00

527 Joseph Beaudier. House. 25 00  
Barn, 45 feet by 35 feet 50 00  
Barn, 30 feet by 30 feet 40 00  
Barn, 20 feet by 24 feet 30 00  
Barn, 15 feet by 24 feet 25 00

528 M. C. Tied. House. 100 00  
Barn. 30 00  
Shed. 5 00  
House, tenant. 10 00  
Barn, commercial. 25 00  
House. 10 00

530 Robert F. White. Barn. 125 00  
531 Edward O'Connor. House. 150 00  
532 M. Reynolds. House. 20 00  
533 W. H. Gardner. House. 150 00  
534 Oscar Morsch. Shop. 20 00  
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Architect, Louis H. Voss, No. 1 and 1/2 DeKalb avenue, Brooklyn, who will give all necessary information in regard to the work.

Blank forms of bids or estimates and of proposed contracts and specifications and further information in regard to the work aforesaid can also be obtained at the office of the Commissioner aforesaid.

J. W. KELLER,  
A. SIMS, JR.,  
JAMES FEENEY,  
Commissioners of Public Charities.

New York, May 15, 1900.

DEPARTMENT OF PUBLIC CHARITIES,  
BROUHOUS OF MANHATTAN AND THE BROOK,  
FOOT OF EAST TWENTY-SIXTH STREET,  
NEW YORK, May 7, 1900.

#### PROPOSALS FOR BIDS OR ESTIMATES FOR DRY GOODS, ETC., FOR THE YEAR 1900.

BROUHOUS OF MANHATTAN AND THE BROOK.

**SEALED BIDS OR ESTIMATES FOR FURNISHING THE ABOVE-MENTIONED SUPPLIES, IN conformity with samples and specifications, will be received at the Central Office of this Department, foot of East Twenty-sixth street, until 12 o'clock noon.**

**MONDAY, MAY 21, 1900.**

All goods to be delivered in installments as may be required during the year 1900 free of expense.

No empty packages are to be returned to bidders or contractors except as herein specified, and none will be paid for by the Department.

The person or persons making any bid or estimate shall furnish the same in a sealed envelope, indorsed "Bid or Estimate for Dry Goods, etc." with his or their name or names and the date of presentation, to the head of said Department, at the said office, on or before the day and hour above named, at which time and place the bids or estimates received will be publicly opened by the President of said Department, or his duly authorized agent, and read.

The Board of Public Charities reserves the right to reject all bids or estimates if deemed to be for the public interest.

No bid or estimate will be accepted from or contract awarded to any person who is in arrears to the Corporation upon debt or contract, or who is a defaulter, as surety or otherwise, upon any obligation to the Corporation.

The award of the contract will be made as soon as practicable after the opening of the bids.

Delivery will be required to be made from time to time and in such quantities as may be directed by the said Commissioners.

Any bidder for this contract must be known to be engaged in and well prepared for the business, and must have satisfactory testimonials on that effect, and the person or persons to whom the contract may be awarded will be required to give security for the performance of the contract, by his or their bond, with two sufficient sureties, each in the amount of One Thousand (\$1,000) Dollars.

Each bid or estimate shall contain and state the name and place of residence of each of the persons making the same, the names of all persons interested with him or them therein, and if an other person be so interested it shall distinctly state that fact, also that it is made without any collusion or fraud, and that no member of the Municipal Assembly, head of a department, chief of a bureau, deputy thereof or clerk therein, or other officer of the Corporation, is directly or indirectly interested therein, 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 therein are in all respects true. When more than one person is interested, it is requisite that the verification be made and subscribed by all the parties interested.

Each bid or estimate shall be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the estimate, they will, on its being so awarded, become bound as sureties for its faithful performance, and that if he shall omit or refuse to execute the same, they will pay to the Corporation any difference between the sum to which he would be entitled on its completion and that which the Corporation may be obliged to pay to the person or persons to whom the contract may be awarded or any subsequent letting, the amount in such case to be calculated upon the estimated amount of the work by which the bids are stated. The consent above-mentioned shall be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of the contract over and above his liabilities as bail, surety or otherwise, and that he has offered himself as a surety in good faith and with the intention to execute the bond required by the Revised Ordinances if the contract shall be awarded to the person or persons for whom he assumes to become surety. The adequacy and sufficiency of the security offered to be approved by the Comptroller of the City of New York.

No bid or estimate will be considered unless accompanied by either a certified check upon one of the National or State Banks of the City of New York, drawn to the order of the Comptroller, or money to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be included in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the estimate box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall refuse or neglect, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and retained by the City of New York as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

Should the person or persons to whom the contract may be awarded neglect or refuse to accept the contract within five days after written notice that the same has been awarded to him or their bid or proposal, or if he or they accept but do not execute the contract and give the proper security, he or they shall be considered as having abandoned it, and as in default to the Corporation, and the contract will be readvertised and relet, as provided by law.

Bidders are cautioned to examine the plans and specifications for particulars of the work, etc., required before making their estimates, and are cautioned against referring to any specifications other than those furnished by the Department. Such references are cause for rejecting bids when they are written, and will in no case govern the action of the Department officers in passing upon tenders.

Bidders must state the price of each article per pound, dozen, gallon, yard, etc., by which the bids will be tested. The extensions must be made and joined up, as the bids will be read from the total footing and awarded made to the lowest bidder on each item or class.

All estimates not conforming to these requirements may be considered as informal.

Bidders will write out the amount of their estimate in addition to inserting the same in figures.

Payment will be made by a requisition on the Comptroller in accordance with the terms of the contract, or from time to time, as the Commissioners may determine.

Blank forms of bid or estimate, the proper envelopes in which to inclose the same, the specifications and agreement approved as to form by the Corporation Counsel, and any further information desired can be obtained at the office of the General Bookkeeper and Auditor, foot of East Twenty-sixth street.

JOHN W. KELLER, President,  
ADOLPH SIMS, JR., Commissioner,  
JAMES FEENEY, Commissioner,  
Department of Public Charities.

DEPARTMENT OF PUBLIC CHARITIES,  
BROUHOUS OF MANHATTAN AND THE BROOK,  
FOOT OF EAST TWENTY-SIXTH STREET,  
NEW YORK, April 21, 1900.

#### PROPOSALS FOR BIDS OR ESTIMATES FOR THE MATERIALS AND WORK REQUIRED FOR THE ALTERATIONS TO THE MEN'S DORMITORY ON RANDALL'S ISLAND.

**BIDS OR ESTIMATES FOR THE ABOVE-MENTIONED WORK, IN conformity with plans and specifications, will be received at the office of the Department of Public Charities, foot of East Twenty-sixth street, in the City of New York, until 12 o'clock noon.**

**MONDAY, MAY 21, 1900.**

The person or persons making any bid or estimate shall furnish the same in a sealed envelope, indorsed "Bid or Estimate for the Materials and Work required for the Alterations to the Men's Dormitory on Randall's Island," with his or their name or names and the date of presentation, to the head of said Department, at the said office, on or before the day and hour above named, at which time and place the bids or estimates received will be publicly opened by the President of said Department, or his duly authorized agent, and read.

The Board of Public Charities reserves the right to reject all bids or estimates if deemed to be for the public interest.

No bid or estimate will be accepted from or contract awarded to any person who is in arrears to the Corporation upon debt or contract, or who is a defaulter, as surety or otherwise, upon any obligation to the Corporation.

The award of the contract will be made as soon as practicable after the opening of the bids.

Any bidder for this contract must be known to be engaged in and well prepared for the business, and must have satisfactory testimonials to that effect, and the person or persons to whom the contract may be awarded will be required to give security for the performance of the contract, by his or their bond, with two sufficient sureties, each in the amount of One Thousand (\$1,000) Dollars.

Each bid or estimate shall contain and state the name and place of residence of each of the persons making the same, the names of all persons interested with him or them therein, and if an other person be so interested it shall distinctly state that fact; also that it is made without any collusion 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 Municipal Assembly, head of a department, chief of a bureau, deputy thereof or clerk therein, or other officer of the Corporation, is directly or indirectly interested therein, 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 therein are in all respects true. When more than one person is interested, it is requisite that the verification be made and subscribed by all the parties interested.

Each bid or estimate shall be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the estimate, they will, on its being so awarded, become bound as his sureties for its faithful performance, and that if he shall omit or refuse to execute the same, they will pay to the Corporation any difference between the sum to which he would be entitled on its completion and that which the Corporation may be obliged to pay to the person or persons to whom the contract may be awarded or any subsequent letting, the amount in such case to be calculated upon the estimated amount of the work by which the bids are stated. The consent above-mentioned shall be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of the contract over and above his liabilities as bail, surety or otherwise, and that he has offered himself as a surety in good faith and with the intention to execute the bond required by the Revised Ordinances if the contract shall be awarded to the person or persons for whom he assumes to become surety. The adequacy and sufficiency of the security offered to be approved by the Comptroller of the City of New York.

No bid or estimate will be considered unless accompanied by either a certified check upon one of the National or State Banks of the City of New York, drawn to the order of the Comptroller, or money to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be included in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the estimate box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall refuse or neglect, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and retained by the City of New York as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

Should the person or persons to whom the contract may be awarded neglect or refuse to accept the contract within five days after written notice that the same has been awarded to him or their bid or proposal, or if he or they accept but do not execute the contract and give the proper security, he or they shall be considered as having abandoned it, and as in default to the Corporation, and the contract will be readvertised and relet, as provided by law.

Bidders are cautioned to examine the plans and specifications for particulars of the work, etc., required before making their estimates, and are cautioned against referring to any specifications other than those furnished by the Department. Such references are cause for rejecting bids when they are written, and will in no case govern the action of the Department officers in passing upon tenders.

Bidders must state the amount of their estimate in addition to inserting the same in figures.

Payment will be made by a requisition on the Comptroller in accordance with the terms of the contract.

Blank forms of bids or estimates, the proper envelopes in which to inclose the same, the specifications and agreement approved as to form by the Corporation Counsel, and any further information desired, can be obtained at the office of the Department of Public Charities, and bidders are cautioned to examine each and all of its provisions carefully, as the Board of Public Charities will insist upon its absolute enforcement in every particular.

JOHN W. KELLER, President,  
ADOLPH SIMS, JR., Commissioner,  
JAMES FEENEY, Commissioner,  
Department of Public Charities.

DEPARTMENT OF PUBLIC CHARITIES,  
BROUHOUS OF MANHATTAN AND THE BROOK,  
FOOT OF EAST TWENTY-SIXTH STREET,  
NEW YORK, May 7, 1900.

#### PROPOSALS FOR BIDS OR ESTIMATES FOR THE MATERIALS AND WORK REQUIRED FOR REPAIRS TO AMBULANCE NO. 5, AND REPAIRS TO TRANSFER WAGON FOR OUT-DOOR POOR DEPARTMENT.

**BIDS OR ESTIMATES FOR THE ABOVE-MENTIONED WORK, IN conformity with plans and specifications, will be received at the office of the Department of Public Charities, foot of East Twenty-sixth street, in the City of New York, until 12 o'clock noon.**

**MONDAY, MAY 21, 1900.**

The person or persons making any bid or estimate shall furnish the same in a sealed envelope, indorsed "Bid or Estimate for the Materials and Work required for Repairs to Ambulance No. 5, and Repairs to Transfer Wagon for Out-Door Poor Department," with his or their name or names, and the date of presentation, to the head of said Department, at the said office, on or before the day and hour above named, at which time and place the bids or estimates received will be publicly opened by the President of said Department, or his duly authorized agent, and read.

The Board of Public Charities reserves the right to reject all bids or estimates if deemed to be for the public interest.

No bid or estimate will be accepted from or contract awarded to any person who is in arrears to the Corporation upon debt or contract, or who is a defaulter, as surety or otherwise, upon any obligation to the Corporation.

The award of the contract will be made as soon as practicable after the opening of the bids.

Any bidder for this contract must be known to be engaged in and well prepared for the business, and must have satisfactory testimonials to that effect, and the person or persons to whom the contract may be awarded will be required to give security for the performance of the contract, by his or their bond, with two sufficient sureties, each in the amount of Four Hundred (\$400) Dollars.

Each bid or estimate shall contain and state the name and place of residence of each of the persons making the same, the names of all persons interested with him or them therein, and if an other person be so interested it shall distinctly state that fact; also that it is made without any collusion 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 Municipal Assembly, head of a department, chief of a bureau, deputy thereof or clerk therein, or other officer of the Corporation, is directly or indirectly interested therein, 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 therein are in all respects true. When more than one person is interested, it is requisite that the verification be made and subscribed by all the parties interested.

Each bid or estimate shall be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the estimate, they will, on its being so awarded, become bound as his sureties for its faithful performance, and that if he shall omit or refuse to execute the same, they will pay to the Corporation any difference between the sum to which he would be entitled on its completion and that which the Corporation may be obliged to pay to the person or persons to whom the contract may be awarded or any subsequent letting, the amount in such case to be calculated upon the estimated amount of the work by which the bids are stated. The consent above-mentioned shall be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of the contract over and above his liabilities as bail, surety or otherwise, and that he has offered himself as a surety in good faith, and with the intention to execute the bond required by the Revised Ordinances if the contract shall be awarded to the person or persons for whom he assumes to become surety. The adequacy and sufficiency of the security offered to be approved by the Comptroller of the City of New York.

No bid or estimate will be considered unless accompanied by either a certified check upon one of the National or State Banks of the City of New York, drawn to the order of the Comptroller, or money to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be included in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the estimate box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall refuse or neglect, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and retained by the City of New York as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

Should the person or persons to whom the contract may be awarded neglect or refuse to accept the contract within five days after written notice that the same has been awarded to him or their bid or proposal, or if he or they accept but do not execute the contract and give the proper security, he or they shall be considered as having abandoned it, and as in default to the Corporation, and the contract will be readvertised and relet as provided by law.

Bidders are cautioned to examine the plans and specifications for particulars of the work, etc., required before making their estimates, and are cautioned against referring to any specifications other than those furnished by the Department. Such references are cause for rejecting bids when they are written, and will in no case govern the action of the Department officers in passing upon tenders.

Bidders must state the amount of their estimate in addition to inserting the same in figures.

Payment will be made by a requisition on the Comptroller in accordance with the terms of the contract.

Blank forms of bid or estimate, the proper envelopes in which to inclose the same, the specifications and agreement approved as to form by the Corporation Counsel, and any further information desired can be obtained at the office of the General Bookkeeper and Auditor, foot of East Twenty-sixth street.

JOHN W. KELLER, President,  
ADOLPH SIMS, JR., Commissioner,  
JAMES FEENEY, Commissioner,  
Department of Public Charities.

DEPARTMENT OF PUBLIC CHARITIES,  
BROUHOUS OF MANHATTAN AND THE BROOK,  
FOOT OF EAST TWENTY-SIXTH STREET,  
NEW YORK, May 7, 1900.

#### PROPOSALS FOR BIDS OR ESTIMATES FOR LIST OF HOSPITAL SUPPLIES, NO. 1, AND LIST OF REPAIRS, NO. 2, FOR THE DEPARTMENT OF PUBLIC CHARITIES OF THE CITY OF NEW YORK, BROUHOUS OF MANHATTAN AND THE BROOK.

**BIDS OR ESTIMATES FOR THE ABOVE-MENTIONED HOSPITAL SUPPLIES will be received at**

the Central Office of this Department, foot of East Twenty-sixth street, until 12 o'clock noon.

**MONDAY, MAY 21, 1900.**

at which time they will be publicly opened and read.

The person or persons making any bid or estimate shall furnish the same in a sealed envelope, indorsed "Proposal for Hospital Supplies," with his or their name or names, and address, which should also be written on the page of the specifications designated therefor, and the date of presentation, to the head of said Department, at the said office, on or before the day and hour above named, at which time and place the bids or estimates received will be publicly opened by the President, or his duly authorized agent, of said Department and read.

Bidders must state the price of each article per pound, dozen, gallon, yard, etc., by which the bids will be tested. The extensions must be made and joined up, as the bids will be read from the total footing and awarded made to the lowest bidder on each item, or group of items.

All estimates not conforming to these requirements may be considered as informal. If two or more bids are alike, the Department reserves the right to select the article or articles among the bidders, or to make the award to any one of them. Bidders are not compelled to furnish more than ten per cent. of any article in excess of the mentioned amount. But if they are willing, and the Department deems it advantageous, further purchases of the respective articles may be made, at the contract price, during the balance of the year.

The Department reserves the right to take more or less, or none at all, of any of the articles according as the demand therefor may be.

All bids must be based upon the descriptions furnished or samples exhibited by this Department, and not on samples furnished by the bidder.

Samples will be on exhibition at the General Drug Department on the grounds of Bellevue Hospital, East Twenty-sixth street, during office hours, from Thursday, May 27, until the bids are opened.

#### SPECIFICATIONS.

**NOTE—All quantities to be "more or less."**

#### 1. SUPPLIES.

**Class 1—Drugs and Sundries.**  
N. B.—Bids to be considered, must be made on every line and state in this class.

- |       |   |
|-------|---|
| 2070. | 1 pound Ammonium Iodide, 1 lb. b.   |
| 2071. | 10 pounds Ammonium Sulphate C. P.   |
| 2072. | 10 pounds Benzoin, 5 lb. orig. p.   |
| 2073. | 50 ounces Citronellum, 1 oz. orig. p.   |
| 2074. | 10 pounds E. Extract Camphora,  |
| 2075. | 10 pounds E. Extract Digitalis,   |
| 2076. | 10 ounces Eucalypti, 1 oz. orig. b.   |
| 2077. | 100 pounds Potassium Iodide, 1 lb. b.   |
| 2078. | 10 pounds Sodium Iodide, 1 lb. b.   |
| 2079. | 10 ounces Stramonium Iodide, 1 oz. v.   |
| 2080. | 10 pounds Stramonium Sulphate, 1 lb. b.   |
| 2081. | 10 ounces Supravital Gland, dasker, Armour,   |
| 2082. | 10 ounces Thyroid Gland, dasker, Armour,  |
| 2083. | 1 gross each, Baines Paper, Shilling, 1 sample,   |
| 2084. | No. 12 (3 1/2 inches by 1 1/2 inches by 1 inch); No. 12 (3 inches by 1 1/2 inches by 1 inch). |
| 2085. | 1 dozen Brushes, Paste, Adams, "All Grey," No. 7.   |
| 2086. | 1 dozen Brushes, Paste, Adams (1904), No. 141.  |
| 2087. | 10-100 Filters, White, Paste-Dumas, "32."   |
| 2088. | 10-100 Filters, White, Paste-Dumas, "40."   |
| 2089. | 10-100 Filters, White, Paste-Dumas, "40."   |
| 2090. | 10-100 Filters, White, Paste-Dumas, "40."   |
| 2091. | 10-100 Filters, White, Paste-Dumas, "40."   |
| 2092. | 10-100 Filters, White, Paste-Dumas, "40."   |
| 2093. | 10-100 Filters, White, Paste-Dumas, "40."   |
| 2094. | 10-100 Filters, White, Paste-Dumas, "40."   |
| 2095. | 10-100 Filters, White, Paste-Dumas, "40."   |
| 2096. | 10-100 Filters, White, Paste-Dumas, "40."   |
| 2097. | 10-100 Filters, White, Paste-Dumas, "40."   |
| 2098. | 10-100 Filters, White, Paste-Dumas, "40."   |
| 2099. | 10-100 Filters, White, Paste-Dumas, "40."   |
| 2100. | 10-100 Filters, White, Paste-Dumas, "40."   |

**Class 2—Chemical Apparatus.**  
N. B.—Bids to be considered, must be made on every line and state in this class.

- |       |   |
|-------|---|
| 2101. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2102. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2103. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2104. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2105. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2106. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2107. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2108. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2109. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2110. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2111. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2112. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2113. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2114. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2115. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2116. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2117. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2118. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2119. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2120. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2121. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2122. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2123. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2124. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2125. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2126. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2127. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2128. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2129. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2130. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2131. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2132. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2133. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2134. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2135. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2136. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2137. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2138. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2139. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2140. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2141. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2142. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2143. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2144. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2145. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2146. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2147. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2148. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2149. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2150. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2151. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2152. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2153. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2154. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2155. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2156. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2157. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2158. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2159. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2160. | 10-100 Filters, White, Paste-Dumas, "40." |

**Class 3—Miscellaneous.**  
N. B.—Bids to be considered, must be made on every line and state in this class.

- |       |   |
|-------|---|
| 2161. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2162. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2163. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2164. | 10-100 Filters, White, Paste-Dumas, "40." |
| 2165. | 10-100 Filters,                           |



2180. 2 Uterine Dress, Figs., Cor's special.  
2181. 1 dozen Mousers, Figs., Cor's.  
Class B—Surgical Supplies, General.

N. B.—In this class, each line will be awarded to the lowest bidder, without reference to other lines.

2182. 4 Balins, glass, 3 1/2 inches wide, 1 sample.  
2183. 1 dozen Bougies, Rectal, S. R., Wales'.  
2184. 1 dozen Catheters, Eustachian, h. v.  
2185. 2 Catheters, return flow, lam., plat.  
2186. 1 Clamp, Scrotal, Henry's.  
2187. 6 Curettes, Munde's, best, blunt or sharp.  
2188. 6 Curettes, Thomas', best, blunt or sharp.  
2189. 1 Depressor, Tongue, Turk's.  
2190. 1 Dilator, Ellinger's, special, like sample.  
2191. 2 sets Drills, Brainard's (5 in set), with eyes at point.

2192. 6 dozen Forceps, Artery, Halstead's, curved (Koch, No. 488).

2193. 1 Forceps, Bone-cut, (Reynold, 108-109).

2194. 1 Forceps, Buller, special, see sample.

2195. 1 Forceps, Fixation, Noyes'.

2196. 1 Forceps, Hemorrhoidal, special, see sample.

2197. 2 Forceps, Hysterectomy, Doyen's (Koch, No. 489).

2198. 4 Knives, Canaliculus, Noyes', probe p. flexible shank.

2199. 4 Knives, Cataract, Noyes' or Knapp's.

2200. 3 Needle Holders, Abney's, F.

2201. 1 dozen Nipple Postures, Phenix, No. 3.

2202. 1 dozen Nipple Postures, Phenix, No. 4.

2203. 4 Retractors, Faraboud, double end (Koch, No. 490).

2204. 1 set Scissors, Wire-cutting, Smith's.

2205. 10-500 Silver Scalp, heavy (J. Marshall & Co.).

2206. 10-500 Silver Scalp, extra heavy (J. Marshall & Co.).

2207. 1 set Sounds, Urethra, steel, best, p. 28 E, to 4-1/2.

2208. 4 Syringes, Hypod., 60-80 min. (Reynold, p. 72).

2209. 4 Syringes, Cost. Nares, h. r. (Ray, 55-56).

2210. 1 set Trocars, Anatomic, Soutley's, in case.

2211. 1 set Trocars, Anatomic, Soutley's, in case.

2212. 1 lot Surgical and Clinical Instruments, as per special list.

2213. 1 lot Medical Batteries and Ceiling Fan, as per special list.

2214. 1 lot Operating Room Furniture, as per special list.

2215. 1 lot Sterilizers, as per special list.

2216. 1 lot Galvanotomies, Com., as per special list.

2217. 1 set Awnings (1 large and 7 small), to be repaired, renovated, completed and set up where directed.

2218. 1 Laboratory Table, to be refitted.

2219. 1 lot of Shelves, Cases and Fliers in General Drug Department to be repaired and extended. Materials for this work:

300 running feet Yellow Pine Flooring, tongue and groove, 4 inches by 3 1/2 inches, pieces about 10 feet long.

75 boards White Wood, free from all defects, dressed both sides, all to be about 16 feet long and 10 inches wide 7 thickness as follows: 24 boards, 1-inch; 24 boards, 1 1/2-inch; 12 boards, 3/4-inch; 12 boards, 5/8-inch.

Note—The articles to be repaired under lines 2210 and 2211 can be seen by the bidders at the General Drug Department, during business hours, from May 10 to until the time of opening of the bids. The articles under lines 2212 and 2213 must be examined at the institutions at which they are located. Information regarding the above, as well as all other reports, can be obtained at the General Drug Department, where the Special Lists and Specifications may also be obtained.

The articles, supplies, goods, wares and merchandise are to be delivered, free of expense, at the General Drug Department on the grounds of Bellevue Hospital, East Twenty-sixth street, east of First avenue, and are to be delivered in such quantities and at such times as may be required.

The quality of the Hospital Supplies must conform in every respect to the specifications and samples, and bidders are cautioned to examine both specifications and samples of the articles required before making their estimates.

THE BOARD OF PUBLIC CHARITIES RESERVES THE RIGHT TO REJECT ALL BIDS OR ESTIMATES IF DEEMED TO BE FOR THE PUBLIC INTEREST.

No bid or estimate will be accepted from or contract awarded to any person who is in arrears to the Corporation upon debt or contract, or who is a defaulter, as surety or otherwise, upon any obligation to the Corporation.

The award of the contract will be made as soon as practicable after the opening of the bids.

Delivery will be required to be made from time to time, and in such quantities as may be directed by the said Commissioners, or be provided for by the specifications.

Any bidder for this contract must be known to be engaged in and well prepared for the business and must have satisfactory testimonials to that effect, and the person or persons to whom the contract may be awarded will be required to give security for the performance of the contract by his or their bond, with two sufficient sureties, each in the amount of fifty (50) per cent. of the bid for each article.

Each bid or estimate shall contain and state the name and place of residence of each of the persons making the same, the names of all persons interested with him or them 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 Municipal Assembly, Head of a Department, Chief of a Bureau, Deputy thereof or Clerk therein, or other officer of the Corporation, is directly or indirectly interested therein, or in the supplies or work 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 therein are in all respects true. Where more than one person is interested, it is requisite that the verification be made and subscribed by all the parties interested.

Each bid or estimate shall be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the estimate, they will, on its being so awarded, become bound as his sureties for his faithful performance, and that if he shall omit or refuse to execute the same, they will pay to the Corporation any difference between the sum to which he would be entitled on its completion and that which the Corporation may be obliged to pay to the person or persons to whom the contract may be awarded at any subsequent letting, the amount in each case to be calculated upon the estimated amount of the supplies by which the bids are tested. The consent above mentioned shall be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of this contract, over and above all his debts of every nature, and never and above his liabilities as bail, surety or otherwise, and that he has offered himself as a surety in good faith, and with the intention to execute the bond required by the Revised Ordinances, if the contract shall be awarded to the person or persons for whom he consents to become surety. The adequacy and sufficiency of the security offered to be approved by the Comptroller of the City of New York.

No bid or estimate will be considered unless accompanied by either 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 to the amount of

five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be included in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the estimate-box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall refuse to neglect, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and be retained by The City of New York as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

Should the person or persons to whom the contract may be awarded neglect or refuse to accept the contract within five days after written notice that the same has been awarded to him or their bid or proposal, or if he or they accept but do not execute the contract and give the proper security, he or they shall be considered as having abandoned it and as in default to the Corporation, and the contract will be re-advertised and sold, as provided by law.

Payment will be made by a regulation on the Comptroller in accordance with the terms of the contract, or from time to time, as the Commissioners may determine.

Blank forms of bid or estimate, the proper envelopes in which to inclose the same, the specifications and agreement approved as to form by the Corporation Counsel, and any other information desired can be obtained at the office of the General Bookkeeper and Auditor, last East Twenty-sixth street.

JOHN W. KELLER, Commissioner,  
ADOLPH SIMIS, Jr., Commissioner,  
JAMES FELNY, Commissioner,  
Department of Public Charities.

DEPARTMENT OF EDUCATION.

VAN TASSELL & KEARNEY, AUCTIONEERS,  
on behalf of the Board of Education, will offer for sale at public auction, at their sales stables, Nos. 130 and 132 East Thirtieth street, Borough of Manhattan,

FRIDAY, JUNE 1,  
at 10 o'clock noon, the following property belonging to the Board of Education:

One Yearling Bay Colt.

A. E. PALMER,  
Secretary.

SEALED PROPOSALS WILL BE RECEIVED AT

the office of the Board of Education, Park avenue and Fifty-ninth street, Borough of Manhattan, until

THURSDAY, MAY 31, 1900,

at 4 p. m., for supplying, for use in the schools in the Boroughs of Brooklyn, Queens and Richmond, books for School Libraries, for the year ending December 31, 1900.

Each contractor will be required to furnish two responsible sureties for the faithful performance of his contract.

A list of the articles required, with the conditions upon which the bids will be received, may be obtained by applying to the Superintendent of School Supplies, Park avenue and Fifty-ninth street.

Each proposal must be addressed to the Committee on Supplies, and indorsed "Proposal for Libraries."

The Committee reserves the right to reject any bid if deemed for the public interest.

Dated New York, May 17, 1900.

THADDEUS MORIARTY,  
JOHN GRIFFIN, M.D.,  
JOSEPH J. KETTEL,  
WALDO H. RICHARDSON, M.D.,  
PATRICK J. WHITE,  
Committee on Supplies.

SEALED PROPOSALS WILL BE RECEIVED

by the Committee on Buildings of the Board of Education of The City of New York, at the Hall of the Board, southwest corner of Park avenue and Fifty-ninth street, Borough of Manhattan, until 4 o'clock p. m.

MONDAY, MAY 28, 1900,

for Improving Sanitary Condition of Public Schools 4, 11, 24, 28, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99, 101, 103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 123, 125, 127, 129, 131, 133, 135, 137, 139, 141, 143, 145, 147, 149, 151, 153, 155, 157, 159, 161, 163, 165, 167, 169, 171, 173, 175, 177, 179, 181, 183, 185, 187, 189, 191, 193, 195, 197, 199, 201, 203, 205, 207, 209, 211, 213, 215, 217, 219, 221, 223, 225, 227, 229, 231, 233, 235, 237, 239, 241, 243, 245, 247, 249, 251, 253, 255, 257, 259, 261, 263, 265, 267, 269, 271, 273, 275, 277, 279, 281, 283, 285, 287, 289, 291, 293, 295, 297, 299, 301, 303, 305, 307, 309, 311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 339, 341, 343, 345, 347, 349, 351, 353, 355, 357, 359, 361, 363, 365, 367, 369, 371, 373, 375, 377, 379, 381, 383, 385, 387, 389, 391, 393, 395, 397, 399, 401, 403, 405, 407, 409, 411, 413, 415, 417, 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819, 821, 823, 825, 827, 829, 831, 833, 835, 837, 839, 841, 843, 845, 847, 849, 851, 853, 855, 857, 859, 861, 863, 865, 867, 869, 871, 873, 875, 877, 879, 881, 883, 885, 887, 889, 891, 893, 895, 897, 899, 901, 903, 905, 907, 909, 911, 913, 915, 917, 919, 921, 923, 925, 927, 929, 931, 933, 935, 937, 939, 941, 943, 945, 947, 949, 951, 953, 955, 957, 959, 961, 963, 965, 967, 969, 971, 973, 975, 977, 979, 981, 983, 985, 987, 989, 991, 993, 995, 997, 999, 1001, 1003, 1005, 1007, 1009, 1011, 1013, 1015, 1017, 1019, 1021, 1023, 1025, 1027, 1029, 1031, 1033, 1035, 1037, 1039, 1041, 1043, 1045, 1047, 1049, 1051, 1053, 1055, 1057, 1059, 1061, 1063, 1065, 1067, 1069, 1071, 1073, 1075, 1077, 1079, 1081, 1083, 1085, 1087, 1089, 1091, 1093, 1095, 1097, 1099, 1101, 1103, 1105, 1107, 1109, 1111, 1113, 1115, 1117, 1119, 1121, 1123, 1125, 1127, 1129, 1131, 1133, 1135, 1137, 1139, 1141, 1143, 1145, 1147, 1149, 1151, 1153, 1155, 1157, 1159, 1161, 1163, 1165, 1167, 1169, 1171, 1173, 1175, 1177, 1179, 1181, 1183, 1185, 1187, 1189, 1191, 1193, 1195, 1197, 1199, 1201, 1203, 1205, 1207, 1209, 1211, 1213, 1215, 1217, 1219, 1221, 1223, 1225, 1227, 1229, 1231, 1233, 1235, 1237, 1239, 1241, 1243, 1245, 1247, 1249, 1251, 1253, 1255, 1257, 1259, 1261, 1263, 1265, 1267, 1269, 1271, 1273, 1275, 1277, 1279, 1281, 1283, 1285, 1287, 1289, 1291, 1293, 1295, 1297, 1299, 1301, 1303, 1305, 1307, 1309, 1311, 1313, 1315, 1317, 1319, 1321, 1323, 1325, 1327, 1329, 1331, 1333, 1335, 1337, 1339, 1341, 1343, 1345, 1347, 1349, 1351, 1353, 1355, 1357, 1359, 1361, 1363, 1365, 1367, 1369, 1371, 1373, 1375, 1377, 1379, 1381, 1383, 1385, 1387, 1389, 1391, 1393, 1395, 1397, 1399, 1401, 1403, 1405, 1407, 1409, 1411, 1413, 1415, 1417, 1419, 1421, 1423, 1425, 1427, 1429, 1431, 1433, 1435, 1437, 1439, 1441, 1443, 1445, 1447, 1449, 1451, 1453, 1455, 1457, 1459, 1461, 1463, 1465, 1467, 1469, 1471, 1473, 1475, 1477, 1479, 1481, 1483, 1485, 1487, 1489, 1491, 1493, 1495, 1497, 1499, 1501, 1503, 1505, 1507, 1509, 1511, 1513, 1515, 1517, 1519, 1521, 1523, 1525, 1527, 1529, 1531, 1533, 1535, 1537, 1539, 1541, 1543, 1545, 1547, 1549, 1551, 1553, 1555, 1557, 1559, 1561, 1563, 1565, 1567, 1569, 1571, 1573, 1575, 1577, 1579, 1581, 1583, 1585, 1587, 1589, 1591, 1593, 1595, 1597, 1599, 1601, 1603, 1605, 1607, 1609, 1611, 1613, 1615, 1617, 1619, 1621, 1623, 1625, 1627, 1629, 1631, 1633, 1635, 1637, 1639, 1641, 1643, 1645, 1647, 1649, 1651, 1653, 1655, 1657, 1659, 1661, 1663, 1665, 1667, 1669, 1671, 1673, 1675, 1677, 1679, 1681, 1683, 1685, 1687, 1689, 1691, 1693, 1695, 1697, 1699, 1701, 1703, 1705, 1707, 1709, 1711, 1713, 1715, 1717, 1719, 1721, 1723, 1725, 1727, 1729, 1731, 1733, 1735, 1737, 1739, 1741, 1743, 1745, 1747, 1749, 1751, 1753, 1755, 1757, 1759, 1761, 1763, 1765, 1767, 1769, 1771, 1773, 1775, 1777, 1779, 1781, 1783, 1785, 1787, 1789, 1791, 1793, 1795, 1797, 1799, 1801, 1803, 1805, 1807, 1809, 1811, 1813, 1815, 1817, 1819, 1821, 1823, 1825, 1827, 1829, 1831, 1833, 1835, 1837, 1839, 1841, 1843, 1845, 1847, 1849, 1851, 1853, 1855, 1857, 1859, 1861, 1863, 1865, 1867, 1869, 1871, 1873, 1875, 1877, 1879, 1881, 1883, 1885, 1887, 1889, 1891, 1893, 1895, 1897, 1899, 1901, 1903, 1905, 1907, 1909, 1911, 1913, 1915, 1917, 1919, 1921, 1923, 1925, 1927, 1929, 1931, 1933, 1935, 1937, 1939, 1941, 1943, 1945, 1947, 1949, 1951, 1953, 1955, 1957, 1959, 1961, 1963, 1965, 1967, 1969, 1971, 1973, 1975, 1977, 1979, 1981, 1983, 1985, 1987, 1989, 1991, 1993, 1995, 1997, 1999, 2001, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2019, 2021, 2023, 2025, 2027, 2029, 2031, 2033, 2035, 2037, 2039, 2041, 2043, 2045, 2047, 2049, 2051, 2053, 2055, 2057, 2059, 2061, 2063, 2065, 2067, 2069, 2071, 2073, 2075, 2077, 2079, 2081, 2083, 2085, 2087, 2089, 2091, 2093, 2095, 2097, 2099, 2101, 2103, 2105, 2107, 2109, 2111, 2113, 2115, 2117, 2119, 2121, 2123, 2125, 2127, 2129, 2131, 2133, 2135, 2137, 2139, 2141, 2143, 2145, 2147, 2149, 2151, 2153, 2155, 2157, 2159, 2161, 2163, 2165, 2167, 2169, 2171, 2173, 2175, 2177, 2179, 2181, 2183, 2185, 2187, 2189, 2191, 2193, 2195, 2197, 2199, 2201, 2203, 2205, 2207, 2209, 2211, 2213, 2215, 2217, 2219, 2221, 2223, 2225, 2227, 2229, 2231, 2233, 2235, 2237, 2239, 2241, 2243, 2245, 2247, 2249, 2251, 2253, 2255, 2257, 2259, 2261, 2263, 2265, 2267, 2269, 2271, 2273, 2275, 2277, 2279, 2281, 2283, 2285, 2287, 2289, 2291, 2293, 2295, 2297, 2299, 2301, 2303, 2305, 2307, 2309, 2311, 2313, 2315, 2317, 2319, 2321, 2323, 2325, 2327, 2329, 2331, 2333, 2335, 2337, 2339, 2341, 2343, 2345, 2347, 2349, 2351, 2353, 2355, 2357, 2359, 2361, 2363, 2365, 2367, 2369, 2371, 2373, 2375, 2377, 2379, 2381, 2383, 2385, 2387, 2389, 2391, 2393, 2395, 2397, 2399, 2401, 2403, 2405, 2407, 2409, 2411, 2413, 2415, 2417, 2419, 2421, 2423, 2425, 2427, 2429, 2431, 2433, 2435, 2437, 2439, 2441, 2443, 2445, 2447, 2449, 2451, 2453, 2455, 2457, 2459, 2461, 2463, 2465, 2467, 2469, 2471, 2473, 2475, 2477, 2479, 2481, 2483, 2485, 2487, 2489, 2491, 2493, 2495, 2497, 2499, 2501, 2503, 2505, 2507, 2509, 2511, 2513, 2515, 2517, 2519, 2521



them 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 Municipal Assembly, head of a department, chief of a bureau, deputy thereof or clerk therein, or other officer of the Corporation, is directly or indirectly interested therein, or in the supplies or work to which it relates, or in any portion of the profits thereof. The estimate must be verified by the oath, in writing, of the party or parties making the estimate, that the several matters stated therein are in all respects true. Where more than one person is interested, it is requisite that the verification be made and subscribed by all the parties interested.

Each bid or estimate shall be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the estimate, they will, upon its being so awarded, become bound as his sureties for its faithful performance, and that if he shall omit or refuse to execute the same, they will pay to the Corporation any difference between the sum to which he would be entitled upon its completion and that which the Corporation may be obliged to pay to the person or persons to whom the contract may be awarded at any subsequent letting, the amount in each case to be calculated upon the estimated amount of the work by which the bids are tested. The consent above mentioned shall be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of this contract and herein stated, over and above all his debts of every nature, and over and above his liabilities as bail, surety and otherwise, and that he has offered himself as a surety in good faith and with the intention to execute the bond required by law. The adequacy and sufficiency of the security offered will be subject to approval by the Comptroller of the City of New York after the award is made and prior to the signing of the contract.

Should the person or persons in whom the contract may be awarded neglect or refuse to accept the contract within five days after written notice that the same has been awarded to his or their bid or proposal, and that the adequacy and sufficiency of the security offered has been approved by the Comptroller, or if he or they accept but do not execute the contract and give the proper security, he or they shall be considered as having abandoned it and as in default to the Corporation, and the contract will be readvertised and relet, as provided by law.

No estimate will be received or considered unless accompanied by either 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 to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be included in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the estimate box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall refuse or neglect, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and be retained by the City of New York as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

Bidders are informed that no deviation from the specifications will be allowed unless a written permission shall previously have been obtained from the Police Board.

Blank forms for bids or estimates and envelope for the same and of proposed contract and specifications, approved by the Corporation Council, may be obtained by application to the undersigned at his office in the Central Department.

By order of the Board.  
WILLIAM H. KIPP,  
Chief Clerk.  
Dated New York, May 18, 1900.

POLICE DEPARTMENT OF THE CITY OF NEW YORK,  
No. 301 MULBERRY STREET.

### TO CONTRACTORS. PROPOSALS FOR ESTIMATES.

**SEALED ESTIMATES FOR SUPPLYING THE** Police Department with Two Thousand Six Hundred Tons of Anthracite Coal, viz: One thousand five hundred and forty tons of Egg size and two hundred and sixty tons of Nut size in the Borough of Brooklyn, and three hundred and sixty tons of Egg size and ten tons of Nut size in the Borough of Queens, will be received at the Central Office of the Department of Police, in the City of New York, until 2 o'clock P. M. of

**FRIDAY, THE 25th DAY OF MAY, 1900.**

The person or persons making an estimate shall furnish the same in a sealed envelope, indorsed "Estimates for Furnishing Coal for Station-houses, etc., in the Boroughs of Brooklyn and Queens," and with his or their name or names, and the date of presentation, to the head of said Department, at the said office, on or before the day and hour above named, at which time and place the estimates received will be publicly opened by the head of said Department and read.

The coal is to be free burning, of the first quality of either of the kinds known and named as follows:

"Scranton," by the Delaware, Lackawanna and Western Railroad Company.  
"Lackawanna," by the Delaware and Hudson Canal Company.  
"Pittston," by the Pennsylvania Coal Company.  
"Wilkesbarre," by the Lehigh and Wilkesbarre Coal Company.

"Jersey," by the New York, Susquehanna and Western Railroad Company.  
Bidders will state the kind of anthracite coal they propose to furnish by giving the name of its mine or other business appellation.

The attention of bidders is called to the following provisions of the contract: "And it is hereby expressly agreed by and between the parties to this contract that the said party of the second part may and it is hereby authorized to increase or diminish the amounts of coal required to be furnished hereby by an amount not to exceed ten per cent, without any other compensation to the said party of the first part than the prices per ton herein agreed upon to be paid for the amount actually furnished under this agreement."

Bidders will state a price per ton of two thousand two hundred and forty pounds for the coal to be delivered. The price must be written in the bid and stated in figures. Permission will not be given for the withdrawal of any bid or estimate, and the right is expressly reserved by the head of said Department to reject any or all bids which may be deemed prejudicial to the public interests.

No estimates will be accepted from or a contract awarded to any person who is in arrears to the Corporation upon debt or contract, or who is a defaulter, as surety or otherwise, upon any obligation to the Corporation.

The coal is to be delivered within one year from the date of the execution and delivery of the contract, in such quantities and at such times and places in the Boroughs of Brooklyn and Queens as the Inspector of Repairs and Supplies of the Police Department may direct.

The person or persons to whom the contract may be

awarded will be required to give security for the performance of the contract in the manner prescribed by law in the sum of Ten Thousand Dollars.

Each estimate shall contain and state the name and place of residence of each of the persons making the same; the names of all persons interested with him or them 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 Municipal Assembly, head of a department, chief of a bureau, deputy thereof or clerk therein, or other officer of the Corporation, is directly or indirectly interested therein, or in the supplies or work to which it relates, or in any portion of the profits thereof. The estimate must be verified by the oath, in writing, of the party or parties making the estimate, that the several matters stated therein are in all respects true. Where more than one person is interested, it is requisite that the verification be made and subscribed by all the parties interested.

Each bid or estimate shall be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the estimate, they will, upon its being so awarded, become bound as his sureties for its faithful performance; and that if he shall omit or refuse to execute the same, they will pay to the Corporation any difference between the sum to which he would be entitled upon its completion, and that which the Corporation may be obliged to pay to the person or persons to whom the contract may be awarded at any subsequent letting; the amount, in each case, to be calculated upon the estimated amount of the work by which the bids are tested. The consent above mentioned shall be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of this contract and herein stated, over and above all his debts of every nature, and over and above his liabilities as bail, surety and otherwise, and that he has offered himself as a surety in good faith, and with the intention to execute the bond required by law. The adequacy and sufficiency of the security offered will be subject to approval by the Comptroller of the City of New York after the award is made and prior to the signing of the contract.

Should the person or persons to whom the contract may be awarded neglect or refuse to accept the contract within five days after written notice that the same has been awarded to his or their bid or proposal, and that the adequacy and sufficiency of the security offered has been approved by the Comptroller, or if he or they accept but do not execute the contract and give the proper security, he or they shall be considered as having abandoned it and as in default to the Corporation, and the contract will be readvertised and relet, as provided by law.

No estimate will be received or considered unless accompanied by either 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 to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be included in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the estimate box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall refuse or neglect, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and be retained by the City of New York as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

Blank forms for estimates may be obtained by application to the undersigned at his office in the Central Department.

By order of the Board.  
WILLIAM H. KIPP,  
Chief Clerk.  
New York, May 18, 1900.

POLICE DEPARTMENT OF THE CITY OF NEW YORK,  
No. 301 MULBERRY STREET.

### TO CONTRACTORS. PROPOSALS FOR ESTIMATES.

**SEALED ESTIMATES FOR SUPPLYING THE** Police Department with Two Thousand Six Hundred Tons of Anthracite Coal, viz: Two thousand five hundred and forty tons of Egg size and Two hundred and sixty tons of Nut size, for the Boroughs of Manhattan and the Bronx, and One Hundred and Fifty Tons of Egg-size for the Borough of Richmond, will be received at the Central Office of the Department of Police, in the City of New York, until 2 o'clock P. M. of

**FRIDAY, THE 25th DAY OF MAY, 1900.**

The person or persons making an estimate shall furnish the same in a sealed envelope, indorsed "Estimates for Furnishing Coal for Station-houses, etc., in the Boroughs of Manhattan, The Bronx and Richmond," and with his or their name or names, and the date of presentation, to the head of said Department, at the said office, on or before the day and hour above named, at which time and place the estimates received will be publicly opened by the head of said Department and read.

The coal is to be free burning, of the first quality of either of the kinds known and named as follows:

"Scranton," by the Delaware, Lackawanna and Western Railroad Company.  
"Lackawanna," by the Delaware and Hudson Canal Company.  
"Pittston," by the Pennsylvania Coal Company.  
"Wilkesbarre," by the Lehigh and Wilkesbarre Coal Company.

"Jersey," by the New York, Susquehanna and Western Railroad Company.  
Bidders will state the kind of anthracite coal they propose to furnish by giving the name of its mine or other business appellation.

The attention of bidders is called to the following provisions of the contract: "And it is hereby expressly agreed by and between the parties to this contract that the said party of the second part may, and it is hereby authorized to increase or diminish the amounts of coal required to be furnished hereby, by an amount not to exceed ten per cent, without any other compensation to the said party of the first part, than the prices per ton herein agreed upon to be paid for the amount actually furnished under this agreement."

Bidders will state a price per ton of two thousand two hundred and forty pounds for the coal to be delivered. The price must be written in the bid and stated in figures. Permission will not be given for the withdrawal of any bid or estimate, and the right is expressly reserved by the head of said Department to reject any or all bids which may be deemed prejudicial to the public interests.

No estimates will be accepted from or a contract awarded to any person who is in arrears to the Corporation upon debt or contract, or who is a defaulter, as surety or otherwise, upon any obligation to the Corporation.

The coal is to be delivered within one year from the date of the execution and delivery of the contract, in such quantities and at such times and places in the Boroughs of Manhattan, The Bronx and Richmond as the Inspector of Repairs and Supplies of the Police Department may direct.

The person or persons to whom the contract may be

awarded will be required to give security for the performance of the contract in the manner prescribed by law in the sum of Ten Thousand Dollars.

Each estimate shall contain and state the name and place of residence of each of the persons making the same; the names of all persons interested with him or them 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 Municipal Assembly, head of a department, chief of a bureau, deputy thereof or clerk therein, or other officer of the Corporation, is directly or indirectly interested therein, or in the supplies or work to which it relates, or in any portion of the profits thereof. The estimate must be verified by the oath, in writing, of the party or parties making the estimate, that the several matters stated therein are in all respects true. Where more than one person is interested, it is requisite that the verification be made and subscribed by all the parties interested.

Each bid or estimate shall be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the estimate, they will, upon its being so awarded, become bound as his sureties for its faithful performance, and that if he shall omit or refuse to execute the same, they will pay to the Corporation any difference between the sum to which he would be entitled upon its completion and that which the Corporation may be obliged to pay to the person or persons to whom the contract may be awarded at any subsequent letting, the amount in each case to be calculated upon the estimated amount of the work by which the bids are tested. The consent above mentioned shall be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of this contract and herein stated, over and above all his debts of every nature, and over and above his liabilities as bail, surety and otherwise, and that he has offered himself as a surety in good faith and with the intention to execute the bond required by law. The adequacy and sufficiency of the security offered will be subject to approval by the Comptroller of the City of New York after the award is made and prior to the signing of the contract.

Should the person or persons to whom the contract may be awarded neglect or refuse to accept the contract within five days after written notice that the same has been awarded to his or their bid or proposal, and that the adequacy and sufficiency of the security offered has been approved by the Comptroller, or if he or they accept but do not execute the contract and give the proper security, he or they shall be considered as having abandoned it and as in default to the Corporation, and the contract will be readvertised and relet, as provided by law.

No estimate will be received or considered unless accompanied by either 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 to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be included in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the estimate box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall refuse or neglect, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and be retained by the City of New York as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

Blank forms for estimates may be obtained by application to the undersigned at his office in the Central Department.

By order of the Board.  
WILLIAM H. KIPP,  
Chief Clerk.  
New York, May 18, 1900.

POLICE DEPARTMENT—CITY OF NEW YORK, 1899.

**OWNERS WANTED BY THE PROPERTY** Clerk of the Police Department of the City of New York, No. 301 Mulberry Street, Room 569, for the following property, now in his custody, without claims: Boots, shoes, iron, lead, male and female clothing, hats, shoes, wine, blankets, diamonds, canned goods, hangers, etc.; also small amount money taken from prisoners and found by Patrolmen of this Department.

ANDREW J. LALOR,  
Property Clerk.

POLICE DEPARTMENT—CITY OF NEW YORK, 1899.

**OWNERS WANTED BY THE DEPUTY PROPERTY** Clerk of the Police Department of the City of New York—Office, Municipal Building, Borough of Brooklyn—for the following property now in his custody without claims: Boots, shoes, iron, lead, male and female clothing, hats, shoes, wine, blankets, diamonds, canned goods, hangers, etc.; also small amount money taken from prisoners and found by Patrolmen of this Department.

CHARLES D. SLATCHFORD,  
Deputy Property Clerk.

### BOARD OF PUBLIC IMPROVEMENTS.

BOARD OF PUBLIC IMPROVEMENTS,  
No. 19 AND 21 PARK ROW,  
BOROUGH OF MANHATTAN.

**NOTICE IS HEREBY GIVEN THAT THE** Board of Public Improvements of the City of New York, desiring it for the public interest so to do, proposes to alter the map or plan of the City of New York by changing the grades in Twelfth Avenue, between Sixty-fourth and Sixty-fifth streets, in the Thirtieth Ward, Borough of Brooklyn, City of New York, and that a meeting of the said Board will be held in the office of the said Board at No. 19 and 21 Park Row, Borough of Manhattan, on the 23rd day of May, 1900, at 2 o'clock P. M., at which such proposed change of grade will be considered by said Board; all of which is more particularly set forth and described in the following resolutions adopted by said Board on the 31st day of May, 1900, notice of the adoption of which is hereby given, viz:

Resolved, That the Board of Public Improvements of the City of New York, in pursuance of the provisions of section 436 of chapter 378, Laws of 1899, desiring it for the public interest so to do, proposes to alter the map or plan of the City of New York by laying out West One Hundred and Seventy-sixth street, from Kingsbridge road to Eleventh Avenue, in the Borough of Manhattan, City of New York, and that a meeting of the said Board will be held in the office of the said Board at No. 19 and 21 Park Row, Borough of Manhattan, on the 23rd day of May, 1900, at 2 o'clock P. M., at which such proposed change of grade will be considered by said Board; all of which is more particularly set forth and described in the following resolutions adopted by said Board on the 31st day of May, 1900, notice of the adoption of which is hereby given, viz:

(a) **West One Hundred and Seventy-sixth Street.** Beginning at the southwest corner of West One Hundred and Seventy-sixth street and Eleventh Avenue, distant 2,985 feet northerly from the southwest corner of Eleventh Avenue and West One Hundred and Seventy-fifth street:

1st. Thence westerly and parallel to the northern house-line of West One Hundred and Seventy-fifth street along the southern house-line of West One Hundred and Seventy-sixth street to its intersection with the eastern house-line of Kingsbridge road:

2d. Thence northerly and parallel to the northern house-line of West One Hundred and Seventy-sixth street to 60 feet from and parallel to the previous course.

(b) **West One Hundred and Seventy-sixth Street.** Beginning at the southwest corner of West One Hundred and Seventy-sixth street and Eleventh Avenue, distant 2,985 feet northerly from the southwest corner of Eleventh Avenue and West One Hundred and Seventy-fifth street:

1st. Thence westerly and parallel to the northern house-line of West One Hundred and Seventy-fifth street along the southern house-line of West One Hundred and Seventy-sixth street to its intersection with the eastern house-line of Kingsbridge road:

2d. Thence northerly and parallel to the northern house-line of West One Hundred and Seventy-sixth street to 60 feet from and parallel to the previous course.

Resolved, That this Board consider the proposed change of grades of the above-named streets at a meeting of this Board to be held in the office of this Board, on the 23rd day of May, 1900, at 2 o'clock P. M.

Resolved, That the Secretary of this Board cause these resolutions, and a notice to all persons affected thereby, that the proposed change of grades of the above-named streets will be considered at a meeting of this 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 23rd day of May, 1900.

JOHN H. MOONEY,  
Secretary.

Dated New York, May 4, 1900.

4th. Thence southwesterly to the intersection of Sixty-second street, the elevation to be 70.0 feet above mean high-water datum.

5th. Thence southwesterly to the intersection of Sixty-third street, the elevation to be 70.0 feet above mean high-water datum.

6th. Thence southwesterly to the intersection of Sixty-fourth street, the elevation to be 70.0 feet above mean high-water datum, as heretofore.

7th. Thence southwesterly to the intersection of Sixty-fifth street, the elevation to be 70.0 feet above mean high-water datum, as heretofore.

All elevations refer to mean high-water datum as established by the Department of Highways, Borough of Brooklyn.

Resolved, That this Board consider the proposed change of grades of the above-named streets at a meeting of this Board to be held in the office of this Board on the 23rd day of May, 1900, at 2 o'clock P. M.

Resolved, That the Secretary of this Board cause these resolutions, and a notice to all persons affected thereby, that the proposed change of grades of the above-named streets will be considered at a meeting of this 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 23rd day of May, 1900.

Dated New York, May 15, 1900.

JOHN H. MOONEY,  
Secretary.

BOARD OF PUBLIC IMPROVEMENTS,  
No. 19 AND 21 PARK ROW,  
BOROUGH OF MANHATTAN.

**NOTICE IS HEREBY GIVEN THAT THE** Board of Public Improvements of the City of New York, desiring it for the public interest so to do, proposes to alter the map or plan of the City of New York by changing the grades of Bailey Avenue, between Harlem River terrace and Kingsbridge road, in the Borough of the Bronx, City of New York, and that a meeting of the said Board will be held in the office of the said Board at No. 19 and 21 Park Row, Borough of Manhattan, on the 23rd day of May, 1900, at 2 o'clock P. M., at which such proposed change of grade will be considered by said Board; all of which is more particularly set forth and described in the following resolutions, adopted by said Board on the 31st day of May, 1900, notice of the adoption of which is hereby given, viz:

Resolved, That the Board of Public Improvements of the City of New York, in pursuance of the provisions of section 436 of chapter 378, Laws of 1899, desiring it for the public interest so to do, proposes to alter the map or plan of the City of New York by changing the grades of Bailey Avenue, between Harlem River terrace and Kingsbridge road, in the Borough of the Bronx, City of New York, more particularly described as follows:

Beginning at a point distant 344.31 feet northerly from the first tangent point south of East One Hundred and Ninety-sixth street, the elevation to be 31.0 feet above mean high-water datum as heretofore:

1st. Thence northerly for 124.79 feet, the grade to be 31.0 feet above mean high-water datum:

2d. Thence westerly to the southwestern tangent point to Bailey Avenue at Kingsbridge road, the elevation to be 31.2 feet above mean high-water datum:

3d. Thence grade 22.0 feet in East One Hundred and Ninety-sixth street, on the eastern side of the New York Central and Hudson River Railroad, Putnam Division, to Kingsbridge road.

All elevations refer to mean high-water datum as established in the Borough of the Bronx.

Resolved, That this Board consider the proposed change of grades of the above-named avenue at a meeting of this Board to be held in the office of this Board on the 23rd day of May, 1900, at 2 o'clock P. M.

Resolved, That the Secretary of this Board cause these resolutions, and a notice to all persons affected thereby, that the proposed change of grades of the above-named avenue will be considered at a meeting of this 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 23rd day of May, 1900.

Dated New York, May 4, 1900.

JOHN H. MOONEY,  
Secretary.

BOARD OF PUBLIC IMPROVEMENTS,  
No. 19 AND 21 PARK ROW,  
BOROUGH OF MANHATTAN.

**NOTICE IS HEREBY GIVEN THAT THE** Board of Public Improvements of the City of New York, desiring it for the public interest so to do, proposes to alter the map or plan of the City of New York by laying out West One Hundred and Seventy-sixth street, from Kingsbridge road to Eleventh Avenue, in the Borough of Manhattan, City of New York, and that a meeting of the said Board will be held in the office of the said Board at No. 19 and 21 Park Row, Borough of Manhattan, on the 23rd day of May, 1900, at 2 o'clock P. M., at which such proposed change of grade will be considered by said Board; all of which is more particularly set forth and described in the following resolutions adopted by said Board on the 31st day of May, 1900, notice of the adoption of which is hereby given, viz:

Resolved, That the Board of Public Improvements of the City of New York, in pursuance of the provisions of section 436 of chapter 378, Laws of 1899, desiring it for the public interest so to do, proposes to alter the map or plan of the City of New York by laying out West One Hundred and Seventy-sixth street, from Kingsbridge road to Eleventh Avenue, in the Borough of Manhattan, City of New York, more particularly described as follows:

(a) **West One Hundred and Seventy-sixth Street.** Beginning at the southwest corner of West One Hundred and Seventy-sixth street and Eleventh Avenue, distant 2,985 feet northerly from the southwest corner of Eleventh Avenue and West One Hundred and Seventy-fifth street:

1st. Thence westerly and parallel to the northern house-line of West One Hundred and Seventy-fifth street along the southern house-line of West One Hundred and Seventy-sixth street to its intersection with the eastern house-line of Kingsbridge road:

2d. Thence northerly and parallel to the northern house-line of West One Hundred and Seventy-sixth street to 60 feet from and parallel to the previous course.

(b) **West One Hundred and Seventy-sixth Street.** Beginning at the southwest corner of West One Hundred and Seventy-sixth street and Eleventh Avenue, distant 2,985 feet northerly from the southwest corner of Eleventh Avenue and West One Hundred and Seventy-fifth street:

1st. Thence westerly and parallel to the northern house-line of West One Hundred and Seventy-fifth street along the southern house-line of West One Hundred and Seventy-sixth street to its intersection with the eastern house-line of Kingsbridge road:

2d. Thence northerly and parallel to the northern house-line of West One Hundred and Seventy-sixth street to 60 feet from and parallel to the previous course.

Resolved, That this Board consider the proposed change of grades of the above-named streets at a meeting of this Board to be held in the office of this Board, on the 23rd day of May, 1900, at 2 o'clock P. M.

Resolved, That the Secretary of this Board cause these resolutions, and a notice to all persons affected thereby, that the proposed change of grades of the above-named streets will be considered at a meeting of this 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 23rd day of May, 1900.

Dated New York, May 4, 1900.

JOHN H. MOONEY,  
Secretary.

BOARD OF PUBLIC IMPROVEMENTS,  
No. 19 AND 21 PARK ROW,  
BOROUGH OF MANHATTAN.

**NOTICE IS HEREBY GIVEN THAT THE** Board of Public Improvements of the City of New York, desiring it for the public interest so to do, proposes to alter the map or plan of the City of New York by changing the grades in Twelfth Avenue, between Sixty-fourth and Sixty-fifth streets, in the Thirtieth Ward, Borough of Brooklyn, City of New York, and that a meeting of the said Board will be held in the office of the said Board at No. 19 and 21 Park Row, Borough of Manhattan, on the 23rd day of May, 1900, at 2 o'clock P. M., at which such proposed change of grade will be considered by said Board; all of which is more particularly set forth and described in the following resolutions adopted by said Board on the 31st day of May, 1900, notice of the adoption of which is hereby given, viz:

Resolved, That the Board of Public Improvements of the City of New York, in pursuance of the provisions of section 436 of chapter 378, Laws of 1899, desiring it for the public interest so to do, proposes to alter the map or plan of the City of New York by changing the grades in Twelfth Avenue, between Sixty-fourth and Sixty-fifth streets, in the Thirtieth Ward, Borough of Brooklyn, City of New York, more particularly described as follows:

Beginning at the intersection of Twelfth Avenue and Sixty-first street, the elevation to be 31.0 feet above mean high-water datum, as heretofore:

1st. Thence southwesterly to the intersection of Sixty-first street, the elevation to be 31.0 feet above mean high-water datum:

2d. Thence southwesterly to the intersection of the Long Island Railroad, the elevation to be 36.3 feet above mean high-water datum:

3d. Thence southwesterly to the intersection of the southwestern property line of the New York and New South Railroad, the elevation to be 39.2 feet above mean high-water datum.

Resolved, That this Board consider the proposed change of grades of the above-named streets at a meeting of this Board to be held in the office of this Board, on the 23rd day of May, 1900, at 2 o'clock P. M.

Resolved, That the Secretary of this Board cause these resolutions, and a notice to all persons affected thereby, that the proposed change of grades of the above-named streets will be considered at a meeting of this 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 23rd day of May, 1900.

Dated New York, May 4, 1900.

JOHN H. MOONEY,  
Secretary.



# CHANGE OF GRADE DAMAGE COMMISSION, TWENTY-THIRD AND TWENTY-FOURTH WARDS.

PURSUANT TO THE PROVISIONS OF CHAPTER 127 of the Laws of 1897, entitled "An act providing for ascertaining and paying the amount of damages to lands and buildings suffered by reason of changes of grade of streets or avenues, made pursuant to the chapter 127 of the Laws of 1897, providing for the depression of railroad tracks in the Twenty-third and Twenty-fourth Wards, in The City of New York, or 'otherwise,' and the acts amendatory thereof and supplemental thereto, notice is hereby given that public meetings of the Commissioners appointed pursuant to said acts, will be held at Room 58, Schermerhorn Building, No. 95 Broadway, in The City of New York, on Monday, Wednesday and Friday of each week at 2 o'clock p. m., until further notice.

Dated New York, January 1, 1900.  
WILLIAM E. STILLINGS,  
CHARLES A. JACKSON,  
OSCAR S. BAILEY,  
Commissioners.

LAMONT McLOUGHLIN,  
Clerk.

## SUPREME COURT.

### FIRST DEPARTMENT.

In the matter of the application of The Mayor, Aldermen and Commonalty 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 purpose of opening and extending ANDREWS AVENUE (although not yet named by proper authority), from East One Hundred and Eighty-first street (formerly University avenue), to Fifth Avenue, as the same has been heretofore laid out and designated as a first-class street or road, in the Twenty-fourth Ward of 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, First Department, at a Special Term thereof, Part I, to be held at the County Court-house, in the Borough of Manhattan, in The City of New York, on the 18th day of June, 1900, 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 New York, there to remain for and during the space of ten days, as required by the provisions of section 999 of title 4 of chapter 27 of the Laws of 1897.

Dated Borough of Manhattan, New York, May 11, 1900.

CHARLES H. RUSSELL,  
JOSEPH E. McMAHON,  
JOSEPH KAUFMANN,  
Commissioners.

JOHN P. DUFFY,  
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 and premises required for the opening and extending of DEWEY AVENUE (although not yet named by proper authority), from Jackson Avenue to Ditmars Avenue, in the First Ward, Borough of Queens, of The City of New York.

NOTICE IS HEREBY GIVEN THAT WE, THE undersigned, were appointed by an order of the Supreme Court, Second Department, bearing date the 23rd day of March, 1900, and duly entered in the office of the Clerk of the County of Queens, at his office in Jamaica, in the Borough of Queens, City of New York, on the 18th day of April, 1900, a copy of which order was duly filed for indexing in the office of the Clerk of the County of Queens, Commissioners of Estimate and Assessment, for the purpose of making a just and equitable estimate and assessment of the loss and damage, if any, or of the benefit and advantage, if any, as the case may be, to the respective owners, lessors, parties and persons respectively entitled unto or interested in the lands, tenements, hereditaments and premises required for the purpose by and in consequence of opening the above-mentioned street or avenue, the same being particularly set forth and described in the petition of The City of New York, and also in the notice of the application for the said order thereto attached, filed herein in the office of the Clerk of the County of Queens on the 18th day of April, 1900; and a just and equitable estimate and assessment of the value of the benefit and advantage of said street or avenue so to be opened or laid out and formed, to the respective owners, lessors, parties and persons respectively entitled unto or interested in the said respective lands, tenements, hereditaments and premises not required for the purpose of opening, laying out and forming the same, but benefited thereby, and of ascertaining and defining the extent and boundaries of the respective tracts or parcels of land to be taken or to be assessed therefor, and of performing the trusts and duties required of us by chapter 17, title 4 of the Greater New York Charter, and the acts or parts of acts supplementary thereto or amendatory thereof.

All parties and persons interested in the real estate taken or to be taken for the purpose of opening the said street or avenue, or affected thereby, and having any claim or demand on account thereof, are hereby required to present the same, duly verified, to us, the undersigned Commissioners of Estimate and Assessment, at our office, ninth floor, Nos. 90 and 92 West Broadway, Borough of Manhattan, in The City of New York, with such affidavits or other proofs as the said owners or claimants may desire, within twenty days after the date of this notice.

And we, the said Commissioners, will be in attendance at our said office on the 15th day of June, 1900, at 2 o'clock in the afternoon of that day, to hear the said parties and persons in relation thereto. And at such time and place, and at such further or other time and place as we may appoint, we will hear such owners in relation thereto and examine the proofs of such claimants or claimants, or such additional proofs and allegations as may then be offered by such owner, or on behalf of The City of New York.

Dated Borough of Manhattan, New York City, May 18, 1900.

PATRICK J. MARA,  
THEO. DIESTEL,  
W. A. WYNN,  
Commissioners.

JOHN P. DUFFY,  
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 and premises required for the opening and extending of POMEROY STREET (although not yet named by proper authority), from Jackson Avenue to Ditmars Avenue, in the First Ward, Borough of Queens, of The City of New York.

NOTICE IS HEREBY GIVEN THAT WE, THE undersigned, were appointed by an order of the Supreme Court, Second Department, bearing date the 23rd day of March, 1900, and duly entered in the

office of the Clerk of the County of Queens, at his office in Jamaica, in the Borough of Queens, City of New York, on the 18th day of April, 1900, a copy of which order was duly filed for indexing in the office of the Clerk of the County of Queens, Commissioners of Estimate and Assessment, for the purpose of making a just and equitable estimate and assessment of the loss and damage, if any, or of the benefit and advantage, if any, as the case may be, to the respective owners, lessors, parties and persons respectively entitled unto or interested in the lands, tenements, hereditaments and premises required for the purpose by and in consequence of opening the above-mentioned street or avenue, the same being particularly set forth and described in the petition of The City of New York, and also in the notice of the application for the said order thereto attached, filed herein in the office of the Clerk of the County of Queens, on the 18th day of April, 1900; and a just and equitable estimate and assessment of the value of the benefit and advantage of said street or avenue so to be opened or laid out and formed, to the respective owners, lessors, parties and persons respectively entitled unto or interested in the said respective lands, tenements, hereditaments and premises not required for the purpose of opening, laying out and forming the same, but benefited thereby, and of ascertaining and defining the extent and boundaries of the respective tracts or parcels of land to be taken or to be assessed therefor, and of performing the trusts and duties required of us by chapter 17, title 4 of the Greater New York Charter, and the acts or parts of acts supplementary thereto or amendatory thereof.

All parties and persons interested in the real estate taken or to be taken for the purpose of opening the said street or avenue, or affected thereby, and having any claim or demand on account thereof, are hereby required to present the same, duly verified, to us, the undersigned Commissioners of Estimate and Assessment, at our office, ninth floor, Nos. 90 and 92 West Broadway, Borough of Manhattan, in The City of New York, with such affidavits or other proofs as the said owners or claimants may desire, within twenty days after the date of this notice.

And we, the said Commissioners, will be in attendance at our said office on the 15th day of June, 1900, at 2 o'clock in the forenoon of that day, to hear the said parties and persons in relation thereto. And at such time and place, and at such further or other time and place as we may appoint, we will hear such owners in relation thereto and examine the proofs of such claimants or claimants, or such additional proofs and allegations as may then be offered by such owner, or on behalf of The City of New York.

Dated Borough of Manhattan, New York City, May 18, 1900.

PATRICK McARDLE,  
JOSEPH MAHONEY,  
NICHOLAS GROSKINSKY,  
Commissioners.

JOHN P. DUFFY,  
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 and premises required for the opening and extending of LOCKWOOD STREET (although not yet named by proper authority), from Payson Avenue to Grand Avenue, in the First Ward, Borough of Queens, of The City of New York.

NOTICE IS HEREBY GIVEN THAT WE, THE undersigned, were appointed by an order of the Supreme Court, Second Department, bearing date the 23rd day of March, 1900, and duly entered in the office of the Clerk of the County of Queens, at his office in Jamaica, in the Borough of Queens, City of New York, on the 18th day of April, 1900, a copy of which order was duly filed for indexing in the office of the Clerk of the County of Queens, Commissioners of Estimate and Assessment, for the purpose of making a just and equitable estimate and assessment of the loss and damage, if any, or of the benefit and advantage, if any, as the case may be, to the respective owners, lessors, parties and persons respectively entitled unto or interested in the lands, tenements, hereditaments and premises required for the purpose by and in consequence of opening the above-mentioned street or avenue, the same being particularly set forth and described in the petition of The City of New York, and also in the notice of the application for the said order thereto attached, filed herein in the office of the Clerk of the County of Queens on the 18th day of April, 1900; and a just and equitable estimate and assessment of the value of the benefit and advantage of said street or avenue so to be opened or laid out and formed, to the respective owners, lessors, parties and persons respectively entitled unto or interested in the said respective lands, tenements, hereditaments and premises not required for the purpose of opening, laying out and forming the same, but benefited thereby, and of ascertaining and defining the extent and boundaries of the respective tracts or parcels of land to be taken or to be assessed therefor, and of performing the trusts and duties required of us by chapter 17, title 4 of the Greater New York Charter, and the acts or parts of acts supplementary thereto or amendatory thereof.

All parties and persons interested in the real estate taken or to be taken for the purpose of opening the said street or avenue, or affected thereby, and having any claim or demand on account thereof, are hereby required to present the same, duly verified, to us, the undersigned Commissioners of Estimate and Assessment, at our office, ninth floor, Nos. 90 and 92 West Broadway, Borough of Manhattan, in The City of New York, with such affidavits or other proofs as the said owners or claimants may desire, within twenty days after the date of this notice.

And we, the said Commissioners, will be in attendance at our said office on the 15th day of June, 1900, at 2 o'clock in the forenoon of that day, to hear the said parties and persons in relation thereto. And at such time and place, and at such further or other time and place as we may appoint, we will hear such owners in relation thereto and examine the proofs of such claimants or claimants, or such additional proofs and allegations as may then be offered by such owner, or on behalf of The City of New York.

Dated Borough of Manhattan, New York City, May 18, 1900.

WILLIAM GIBSON,  
DAVID HETHERINGTON,  
LUKE A. KEENAN,  
Commissioners.

JOHN P. DUFFY,  
Clerk.

### FIRST DEPARTMENT.

In the matter of the application of The Mayor, Aldermen and Commonalty 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 purpose of opening and extending of PULASKI PLACE (although not yet named by proper authority), bounded by East One Hundred and Sixty-fifth street, Hall place and Rogers place, as the same has been heretofore laid out and designated as a first-class street or road, in the Twenty-third Ward of The City of New York.

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 estimate of assessment for benefit, and that of 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, Nos. 90 and 92 West Broadway, in the Borough of Manhattan, in The City of New York, on or before the 31st day of May, 1900, 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 1st day of June, 1900, at 3:30 o'clock p. m.

Second.—That the abstract of our said assessment, together with our benefit maps, and also all the affidavits, estimates, proofs and other documents used by us in making our report, have been deposited in the Bureau of Street Openings of the Law Department of The City of New York, Nos. 90 and 92 West Broadway, in the Borough of Manhattan, in said city, there to remain until the 15th day of June, 1900.

Third.—That pursuant to the notice heretofore given, when we filed our estimate of damage the limits of our assessment for benefit include all those lands, tenements and hereditaments and premises situated, lying 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 formed by the intersection of the northwesterly side of Dawson street with the middle line of the block, between Stebbins Avenue and Rogers place; running thence northerly along said middle line of the block to its intersection with the easterly prolongation of that part of the middle line of the block, between East One Hundred and Sixty-fifth street and East One Hundred and Sixty-sixth street, lying westwardly from Stebbins Avenue; thence westerly along said easterly prolongation and middle line of the block to the easterly side of Forest Avenue; thence northerly along said easterly side of Forest Avenue to its intersection with the middle line of the block, between East One Hundred and Sixty-fifth street and East One Hundred and Sixty-sixth street; thence easterly along said middle line of the block and its prolongation easterly to its intersection with a line drawn parallel to the westerly side of Hall place and distant 100 feet westerly therefrom; thence northerly along said parallel line to the southerly side of East One Hundred and Sixty-seventh street; thence northerly on a straight line to the intersection of the northwesterly side of East One Hundred and Sixty-seventh street with the middle line of the block between Intervale Avenue and Stebbins Avenue; thence northerly along said middle line of the block and its prolongation northwesterly to the southerly side of East One Hundred and Sixty-sixth street; thence southerly along said southerly side of East One Hundred and Sixty-sixth street to its intersection with the northwesterly prolongation of a line drawn parallel to the southerly side of Intervale Avenue and distant 100 feet southerly therefrom; thence southerly along said northwesterly prolongation and parallel line to the northerly side of East One Hundred and Sixty-sixth street; thence westerly along said northerly side of East One Hundred and Sixty-sixth street to its intersection with the northerly prolongation of a line drawn parallel to the westerly side of Hall place and distant 100 feet easterly therefrom; thence southerly along said northerly prolongation and parallel line to its intersection with a line drawn parallel to the northerly side of East One Hundred and Sixty-fifth street and distant 100 feet northerly therefrom; thence westerly along said parallel line to the middle line of the block between Intervale Avenue and Rogers place; thence southerly along said middle line of the block to the northwesterly side of Dawson street; thence southerly along said northwesterly side of Dawson street to the point or place of beginning; as such streets are shown upon the final maps and plans of The City of New York, excepting from said area all streets, avenues and roads, or portions thereof heretofore legally opened, as such area is shown upon our benefit maps deposited as aforesaid.

Fourth.—That our last partial and separate report herein will be presented 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 15th day of June, 1900, at the opening of the Court on that day, and that two and there, or as soon thereafter as counsel can be heard thereon, a motion will be made that the said report be confirmed.

Dated Borough of Manhattan, New York City, April 24, 1900.

FRANK McDERMOTT,  
EDWARD S. KAUFMAN,  
Commissioners.

JOHN P. DUFFY,  
Clerk.

### FIRST DEPARTMENT.

In the matter of the application of the Council to the Corporation, for and in behalf of The Mayor, Aldermen and Commonalty of The City of New York, relative to the estimate of the loss and damage and to the assessment of the benefit and advantage resulting from the closing of the KINGSBRIDGE ROAD, between One Hundred and Thirty-seventh street and One Hundred and Forty-ninth street (except where said road has been retained or title thereto has been legally acquired for street purposes), in the Twelfth Ward of 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, First Department, at a Special Term thereof, Part I, to be held at the County Court-house, in the Borough of Manhattan, in The City of New York, on the 22nd day of May, 1900, 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 New York, there to remain for and during the space of ten days, as required by the provisions of chapter 127 of the Laws of 1897 and other acts of the Legislature pertaining thereto.

Dated Borough of Manhattan, New York, May 1, 1900.

WILLIAM B. ELLISON,  
ROBERT McCARTHY,  
ROBT. E. DEYO,  
Commissioners.

JOHN P. DUFFY,  
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 and premises required for the opening and extending of HULST STREET AVENUE (although not yet named by proper authority), from Greenpoint Avenue to Jackson Avenue, in the First Ward, Borough of Queens, of The City of New York.

NOTICE IS HEREBY GIVEN THAT WE, THE undersigned, were appointed by an order of the Supreme Court, Second Department, bearing date the 23rd day of March, 1900, and duly entered in the

office of the Clerk of the County of Queens, at his office in Jamaica, in the Borough of Queens, City of New York, on the 18th day of April, 1900, a copy of which order was duly filed for indexing in the office of the Clerk of the County of Queens, Commissioners of Estimate and Assessment, for the purpose of making a just and equitable estimate and assessment of the loss and damage, if any, or of the benefit and advantage, if any, as the case may be, to the respective owners, lessors, parties and persons respectively entitled unto or interested in the lands, tenements, hereditaments and premises required for the purpose by and in consequence of opening the above-mentioned street or avenue, the same being particularly set forth and described in the petition of The City of New York, and also in the notice of the application for the said order thereto attached, filed herein in the office of the Clerk of the County of Queens on the 18th day of April, 1900; and a just and equitable estimate and assessment of the value of the benefit and advantage of said street or avenue so to be opened or laid out and formed, to the respective owners, lessors, parties and persons respectively entitled unto or interested in the said respective lands, tenements, hereditaments and premises not required for the purpose of opening, laying out and forming the same, but benefited thereby, and of ascertaining and defining the extent and boundaries of the respective tracts or parcels of land to be taken or to be assessed therefor, and of performing the trusts and duties required of us by chapter 17, title 4 of the Greater New York Charter, and the acts or parts of acts supplementary thereto or amendatory thereof.

All parties and persons interested in the real estate taken or to be taken for the purpose of opening the said street or avenue, or affected thereby, and having any claim or demand on account thereof, are hereby required to present the same, duly verified, to us, the undersigned Commissioners of Estimate and Assessment, at our office, ninth floor, Nos. 90 and 92 West Broadway, Borough of Manhattan, in The City of New York, with such affidavits or other proofs as the said owners or claimants may desire, within twenty days after the date of this notice.

And we, the said Commissioners, will be in attendance at our said office on the 15th day of June, 1900, at 10:30 o'clock in the forenoon of that day, to hear the said parties and persons in relation thereto. And at such time and place, and at such further or other time and place as we may appoint, we will hear such owners in relation thereto and examine the proofs of such claimants or claimants, or such additional proofs and allegations as may then be offered by such owner, or on behalf of The City of New York.

Dated Borough of Manhattan, New York City, May 8, 1900.

JOHN ALLEN,  
J. GILSON BRADING,  
C. J. DILLON,  
Commissioners.

JOHN P. DUFFY,  
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, to JUMEL PLACE (although not yet named by proper authority), from West One Hundred and Sixty-seventh street to Edgewood Avenue, in the Twelfth Ward, Borough of Manhattan, City of New York.

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, First Department, at a Special Term of said Court, to be held at Part III, thereof, in the County Court-house, in the Borough of Manhattan, in The City of New York, on Friday, the 18th day of May, 1900, at the opening of the Court on that day, or as soon thereafter as counsel can be heard thereon, for the appointment of Commissioners of Estimate and Assessment in the above-entitled matter. The nature and extent of the improvement hereby intended is the acquisition of title by The City of New York, for the use of the public, to all the lands and premises, with the buildings thereon and the appurtenances thereto belonging, required for the opening of a certain street or avenue known as Jumel place, from West One Hundred and Sixty-seventh street to Edgewood Avenue, in the Twelfth Ward, Borough of Manhattan, City of New York, being the following-described lots, pieces or parcels of land, viz.:

Beginning at a point in the westerly line of One Hundred and Sixty-seventh street distant 33.65 feet south from the westerly line of Amsterdam Avenue; 1st. Thence northerly and parallel to Amsterdam Avenue for 66.30 feet to Edgewood Avenue; 2d. Thence southerly along said line for 18.30 feet to 3d. Thence southerly and parallel to Amsterdam Avenue for 66.30 feet to One Hundred and Sixty-seventh street; 4th. Thence northerly along said line for 75.29 feet to point or place of beginning.

Jumel place is shown on map entitled "Plan and Profile, showing Edgewood road, between One Hundred and Fifty-seventh street and Tenth Avenue, in The City of New York, as altered, established and classified by the Commissioner of Public Parks, in pursuance of the provisions of chapter 127 of the Laws of 1897 and chapter 426 of the Laws of 1899, dated October 24, 1899."

Filed in the office of the Register of the County of New York, Secretary of State of the State of New York, and Commissioners of the Department of Public Parks of The City of New York on or about March 12, 1897, and is also shown on map of the extension of Jumel place, from its present terminus to the westerly line of Edgewood Avenue, filed in the office of the Department of Public Works of The City of New York, Corporation Council of The City of New York, Register of the County of New York, Department of Public Parks of The City of New York and Secretary of State of the State of New York, on or about the 15th day of September, 1893.

The land to be taken for Jumel place is located in Block 1112 of Section 8 of the Land Map of The City of New York.

Dated New York, May 7, 1900.  
JOHN WHALSH,  
Corporation Council,  
No. 4 Tryon Road,  
Borough of Manhattan,  
City of New York.

### 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, to WEST ONE HUNDRED AND FORTY-FOURTH STREET (although not yet named by proper authority), from Hamilton Terrace to Convent Avenue, in the Twelfth Ward, Borough of Manhattan, City of New York.

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, First Department, at a Special Term of said Court, to be held at Part III, thereof, in the County Court-house, in the Borough of Manhattan, in The City of New York, on Friday, the 18th day of May, 1900, at the opening of the Court on that day, or as soon thereafter as counsel can be heard thereon, for the appointment of Commissioners of Estimate and Assessment in the above-entitled matter. The nature and extent of the improvement hereby intended is the acquisition of title by The City of New York, for the use of the public, to all the lands and premises, with the buildings thereon and the appurtenances thereto belonging, required for the opening of a certain street or avenue known as West One Hundred and Forty-fourth street, from Hamilton



streets in Convent avenue, in the Twelfth Ward, Borough of Manhattan, City of New York, being the following-described lots, pieces or parcels of land, viz.:

Beginning at a point in the westerly line of Convent avenue distant 710 feet 6 inches northerly from the westerly line of West One Hundred and Forty-first street:

1st. Thence easterly and parallel with said street for 200 feet;

2d. Thence northerly and parallel to Convent avenue for 100 feet;

3d. Thence westerly and parallel to West One Hundred and Forty-first street for 200 feet to Convent avenue;

4th. Thence southerly for 50 feet to the point or place of beginning.

And is shown on map entitled "Map and Profile of the New Streets, the Extension of West One Hundred and Forty-first street, for a distance of 900 feet easterly from Convent avenue; and the new street to be known as Hamilton terrace, from West One Hundred and Forty-first street for a distance of 770 feet 6 inches northerly, said street being parallel to and distant 200 feet easterly from Convent avenue, in the Twelfth Ward, Borough of Manhattan, City of New York," filed in the office of the Corporation Counsel of the City of New York and the office of the Board of Public Improvements of the City of New York on or about September 20, 1899.

The land to be taken for West One Hundred and Forty-first street is located in Block 250 of Section 7 of the Land Map of the City of New York.

Dated New York, May 7, 1900.

JOHN WHALEN,

Corporation Counsel,  
No. 2 Tryon Row,  
Borough of Manhattan,  
City of New York.

#### 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, to SULLIVAN STREET (although not yet named by proper authority), from West Third street in West Fourth street, in the Fifth Ward, Borough of Manhattan, City of New York.

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, First Department, at a Special Term of said Court, to be held at Part III, thereof, in the County Court-house, in the Borough of Manhattan, in the City of New York, on Friday, the 18th day of May, 1900, at the opening of the Court on that day, or as soon thereafter as counsel can be heard thereon, for the appointment of Commissioners of Estimate and Assessment in the above-entitled matter. The nature and extent of the improvement hereby intended is the acquisition of title by The City of New York, for the use of the public, to all the lands and premises, with the buildings thereon and the appurtenances thereto belonging, required for the opening of a certain street or avenue, known as Sullivan street, from West Third street in West Fourth street, in the Fifth Ward, Borough of Manhattan, City of New York, being the following-described lots, pieces or parcels of land, viz.:

Beginning at a point in the northerly line of West Third street distant 200 feet easterly from the easterly line of Macdonald street:

1st. Thence northerly and parallel to said street to the southerly line of West Fourth street for 200 feet;

2d. Thence easterly and along said line for 50 feet;

3d. Thence southerly and parallel to Macdonald street to southerly line of West Third street for 200 feet;

4th. Thence westerly along said line for 50 feet to the point or place of beginning.

And is shown on map entitled "Map and Profile of the New Street, the extension of Sullivan street, from West Third to West Fourth street, in the Fifth Ward, Borough of Manhattan, City of New York," filed in the office of the Corporation Counsel of the City of New York and in the office of the Board of Public Improvements of the City of New York on or about the 15th day of January, 1900.

The land to be taken for Sullivan street is located in Block 141, Section 2 of the Land Map of the City of New York.

Dated New York, May 7, 1900.

JOHN WHALEN,

Corporation Counsel,  
No. 2 Tryon Row,  
Borough of Manhattan,  
City of New York.

#### 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, to HAMILTON TERRACE, although not yet named by proper authority, from West One Hundred and Forty-first street in West One Hundred and Forty-fourth street, in the Twelfth Ward, Borough of Manhattan, City of New York.

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, First Department, at a Special Term of said Court, to be held at Part III, thereof, in the County Court-house, in the Borough of Manhattan, in the City of New York, on Friday, the 18th day of May, 1900, at the opening of the Court on that day, or as soon thereafter as counsel can be heard thereon, for the appointment of Commissioners of Estimate and Assessment in the above-entitled matter. The nature and extent of the improvement hereby intended is the acquisition of title by The City of New York, for the use of the public, to all the lands and premises, with the buildings thereon, and the appurtenances thereto belonging, required for the opening of a certain street or avenue known as Hamilton terrace, from West One Hundred and Forty-first street in West One Hundred and Forty-fourth street, in the Twelfth Ward, Borough of Manhattan, City of New York, being the following-described lots, pieces or parcels of land, viz.:

Beginning at a point in the northerly line of West One Hundred and Forty-first street distant 200 feet easterly from the easterly line of Convent avenue:

1st. Thence northerly and parallel with said avenue for 770 feet 6 inches;

2d. Thence westerly and parallel to One Hundred and Forty-first street for 100 feet;

3d. Thence southerly and parallel to Convent avenue for 770 feet 6 inches;

4th. Thence westerly for 50 feet to the point or place of beginning.

Shows on map entitled "Map and Profile of the New Streets, the extension of West One Hundred and Forty-first street, for a distance of 900 feet easterly from Convent avenue, and the new street to be known as Hamilton terrace, from West One Hundred and Forty-first street for a distance of 770 feet 6 inches northerly, said street being parallel to and distant 200 feet easterly from Convent avenue, in the Twelfth Ward, Borough of Manhattan, City of New York," filed in the office of the Corporation Counsel of the City of New York and the Board of Public Improvements of the City of New York on or about September 20, 1899.

The land to be taken for Hamilton terrace is located in Block 250 of Section 7 of the Land Map of the City of New York.

Dated New York, May 7, 1900.

JOHN WHALEN,

Corporation Counsel,  
No. 2 Tryon Row,  
Borough of Manhattan,  
City of New York.

#### 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, to the lands, tenements and hereditaments required for the purpose of opening WALTON STREET (East One Hundred and Ninety-ninth street) (although not yet named by proper authority), from Webster avenue to Marlon avenue, as the same has been heretofore laid out and designated as a first-class street or road in the Twenty-fourth Ward of 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 up to and including the 30th day of November, 1899, will be presented for taxation to one of the Justices of the Supreme Court of the State of New York, First Department, at a Special Term thereof, Part I, to be held at the County Court-house, in the Borough of Manhattan, in the City of New York, on the 21st day of May, 1900, 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 New York, there to remain for and during the space of ten days, as required by the provisions of section 99 of title 4 of chapter 17, of chapter 37 of the Laws of 1897.

Dated Borough of Manhattan, New York, December 10, 1899.

FREDERICA TANSER,  
CORNELIUS DONOVAN,  
HENRY REYNARD,  
Commissioners.

JOHN P. DUNN,  
Clerk.

#### SECOND DEPARTMENT.

In the matter of the application of The City of New York, relative to acquiring title to the lands, tenements and hereditaments required for the purpose of opening EAST THIRTY-SECOND STREET, from Church avenue to Avenue C, in the Twenty-ninth Ward, in the Borough of Brooklyn, The City of New York.

NOTICE IS HEREBY GIVEN THAT WE, THE undersigned, were appointed by an order of the Supreme Court, Second Department, bearing date the 30th day of March, 1900, and duly entered in the office of the Clerk of the County of Queens, at his office in Jamaica, in the Borough of Queens, City of New York, on the 18th day of April, 1900, a copy of which order was duly filed for indexing in the office of the Clerk of the County of Queens, Commissioners of Estimate and Assessment, for the purpose of making a just and equitable estimate and assessment of the loss and damage, if any, or of the benefit and advantage, if any, as the case may be, to the respective owners, lessors, parties or persons respectively entitled unto or interested in the lands, tenements, hereditaments and premises required for the purpose by and in consequence of opening the above-mentioned street or avenue, the same being particularly set forth and described in the petition of The City of New York, and also in the notice of the application for the said order thereto attached, filed herein in the office of the Clerk of the County of Queens, on the 18th day of September, 1899; and a just and equitable estimate and assessment of the value of the benefit and advantage of said street or avenue so to be opened or laid out and formed, to the respective owners, lessors, parties and persons respectively entitled to or interested in the said respective lands, tenements, hereditaments and premises not required for the purpose of opening, laying out and forming the same, but benefited thereby, and of ascertaining and defining the extent and boundaries of the respective tracts or parcels of land to be taken or to be assessed thereby, and of performing the trusts and duties required of us by law.

All parties and persons interested in the real estate taken or to be taken for the purpose of opening the said street or avenue, or affected thereby, and having any claim or demand on account thereof, are hereby required to present the same, duly verified, to us, the undersigned Commissioners of Estimate and Assessment, at our office, in the office of the Law Department, Room 20, Borough Hall, in the Borough of Brooklyn, City of New York, with such affidavits or other proofs as the said owners or claimants may desire, within twenty days after the date of this notice.

And we, the said Commissioners, will be in attendance at our said office on the 6th day of June, 1900, at 12 o'clock in the afternoon of that day, to hear the said parties and persons in relation thereto; and at such time and place, and at such further or other time and place as we may appoint, we will hear such owners in relation thereto and examine the proofs of such claimant or claimants, or such additional proofs and allegations as may then be offered by such owner, or on behalf of The City of New York.

Dated Borough of Brooklyn, City of New York, May 16, 1900.

THOMAS F. SMITH,  
JOHN W. CARPENTER,  
SEWARD SHANAHAN,  
Commissioners.

AL E. FENNELL,  
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 and premises required for the opening and extending of ACADEMY STREET (although not yet named by proper authority), from Hunter avenue to Grand avenue, in the First Ward, Borough of Queens, of The City of New York.

NOTICE IS HEREBY GIVEN THAT WE, THE undersigned, were appointed by an order of the Supreme Court, Second Department, bearing date the 30th day of March, 1900, and duly entered in the office of the Clerk of the County of Queens, at his office in Jamaica, in the Borough of Queens, City of New York, on the 18th day of April, 1900, a copy of which order was duly filed for indexing in the office of the Clerk of the County of Queens, Commissioners of Estimate and Assessment, for the purpose of making a just and equitable estimate and assessment of the loss and damage, if any, or of the benefit and advantage, if any, as the case may be, to the respective owners, lessors, parties and persons respectively entitled unto or interested in the lands, tenements, hereditaments and premises required for the purpose by and in consequence of opening the above-mentioned street or avenue, the same being particularly set forth and described in the petition of The City of New York, and also in the notice of the application for the said order thereto attached, filed herein in the office of the Clerk of the County of Queens, on the 18th day of April, 1900; and a just and equitable estimate and assessment of the value of the benefit and advantage of said street or avenue so to be opened or laid out and formed, to the respective owners, lessors, parties and persons respectively entitled to or interested in the said respective lands, tenements, hereditaments and premises not required for the purpose of opening, laying out and forming the same, but benefited thereby, and of ascertaining and defining the extent and boundaries of the respective tracts or parcels of land to be taken or to be assessed thereby, and of performing the trusts and duties required of us by chapter 17, title 4 of the Greater New York Charter, and the acts or parts of acts supplementary thereto or amendatory thereof.

All parties and persons interested in the real estate taken or to be taken for the purpose of opening the said street or avenue, or affected thereby, and having any claim or demand on account thereof, are hereby required to present the same, duly verified, to us, the undersigned Commissioners of Estimate and Assessment, at our office, ninth floor, Nos. 54 and 56 West Broadway, Borough of Manhattan, in The City of New York, with such affidavits or other proofs as the said owners or claimants may desire, within twenty days after the date of this notice.

And we, the said Commissioners, will be in attendance at our said office on the 18th day of June, 1900, at 11 o'clock in the forenoon of that day, to hear

the said parties and persons in relation thereto. And at such time and place, and at such further or other time and place as we may appoint, we will hear such owners in relation thereto and examine the proofs of such claimant or claimants, or such additional proofs and allegations as may then be offered by such owner, or on behalf of The City of New York.

Dated Borough of Queens, City of New York, May 17, 1900.

WALTER C. FOSTER,  
WILLIAM E. STEWART,  
W. J. WOODHILL,  
Commissioners.

JOHN P. DUNN,  
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 and premises required for the opening and extending of POTTER AVENUE (although not yet named by proper authority), from East river to Chauncey street, and from Rapelle avenue to Flushing avenue, in the First Ward, Borough of Queens, of The City of New York.

NOTICE IS HEREBY GIVEN THAT WE, THE undersigned, were appointed by an order of the Supreme Court, Second Department, bearing date the 30th day of March, 1900, and duly entered in the office of the Clerk of the County of Queens, at his office in Jamaica, in the Borough of Queens, City of New York, on the 18th day of April, 1900, a copy of which order was duly filed for indexing in the office of the Clerk of the County of Queens, Commissioners of Estimate and Assessment, for the purpose of making a just and equitable estimate and assessment of the loss and damage, if any, or of the benefit and advantage, if any, as the case may be, to the respective owners, lessors, parties and persons respectively entitled unto or interested in the lands, tenements, hereditaments and premises required for the purpose by and in consequence of opening the above-mentioned street or avenue, the same being particularly set forth and described in the petition of The City of New York, and also in the notice of the application for the said order thereto attached, filed herein in the office of the Clerk of the County of Queens, on the 18th day of April, 1900; and a just and equitable estimate and assessment of the value of the benefit and advantage of said street or avenue so to be opened or laid out and formed, to the respective owners, lessors, parties and persons respectively entitled to or interested in the said respective lands, tenements, hereditaments and premises not required for the purpose of opening, laying out and forming the same, but benefited thereby, and of ascertaining and defining the extent and boundaries of the respective tracts or parcels of land to be taken or to be assessed thereby, and of performing the trusts and duties required of us by chapter 17, title 4 of the Greater New York Charter, and the acts or parts of acts supplementary thereto or amendatory thereof.

All parties and persons interested in the real estate taken or to be taken for the purpose of opening the said street or avenue, or affected thereby, and having any claim or demand on account thereof, are hereby required to present the same, duly verified, to us, the undersigned Commissioners of Estimate and Assessment, at our office, ninth floor, Nos. 54 and 56 West Broadway, Borough of Manhattan, in The City of New York, with such affidavits or other proofs as the said owners or claimants may desire, within twenty days after the date of this notice.

And we, the said Commissioners, will be in attendance at our said office on the 18th day of June, 1900, at 11 o'clock in the forenoon of that day, to hear the said parties and persons in relation thereto. And at such time and place, and at such further or other time and place as we may appoint, we will hear such owners in relation thereto and examine the proofs of such claimant or claimants, or such additional proofs and allegations as may then be offered by such owner, or on behalf of The City of New York.

Dated Borough of Queens, City of New York, May 17, 1900.

W. J. FOSTER,  
WM. SMITH,  
WILLIAM E. STEWART,  
Commissioners.

JOHN P. DUNN,  
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 and premises required for the opening and extending of JAMAICA AVENUE (although not yet named by proper authority), from Old Brewery Bay road to East river, in the First Ward, Borough of Queens, of The City of New York.

NOTICE IS HEREBY GIVEN THAT WE, THE undersigned, were appointed by an order of the Supreme Court, Second Department, bearing date the 30th day of March, 1900, and duly entered in the office of the Clerk of the County of Queens, at his office in Jamaica, in the Borough of Queens, City of New York, on the 18th day of April, 1900, a copy of which order was duly filed for indexing in the office of the Clerk of the County of Queens, Commissioners of Estimate and Assessment, for the purpose of making a just and equitable estimate and assessment of the loss and damage, if any, or of the benefit and advantage, if any, as the case may be, to the respective owners, lessors, parties and persons respectively entitled unto or interested in the lands, tenements, hereditaments and premises required for the purpose by and in consequence of opening the above-mentioned street or avenue, the same being particularly set forth and described in the petition of The City of New York, and also in the notice of the application for the said order thereto attached, filed herein in the office of the Clerk of the County of Queens, on the 18th day of April, 1900; and a just and equitable estimate and assessment of the value of the benefit and advantage of said street or avenue so to be opened or laid out and formed, to the respective owners, lessors, parties and persons respectively entitled to or interested in the said respective lands, tenements, hereditaments and premises not required for the purpose of opening, laying out and forming the same, but benefited thereby, and of ascertaining and defining the extent and boundaries of the respective tracts or parcels of land to be taken or to be assessed thereby, and of performing the trusts and duties required of us by chapter 17, title 4 of the Greater New York Charter, and the acts or parts of acts supplementary thereto or amendatory thereof.

All parties and persons interested in the real estate taken or to be taken for the purpose of opening the said street or avenue, or affected thereby, and having any claim or demand on account thereof, are hereby required to present the same, duly verified, to us, the undersigned Commissioners of Estimate and Assessment, at our office, ninth floor, Nos. 54 and 56 West Broadway, Borough of Manhattan, in The City of New York, with such affidavits or other proofs as the said owners or claimants may desire, within twenty days after the date of this notice.

And we, the said Commissioners, will be in attendance at our said office on the 18th day of June, 1900, at 11 o'clock in the forenoon of that day, to hear

the said parties and persons in relation thereto. And at such time and place, and at such further or other time and place as we may appoint, we will hear such owners in relation thereto and examine the proofs of such claimant or claimants, or such additional proofs and allegations as may then be offered by such owner, or on behalf of The City of New York.

Dated Borough of Queens, City of New York, May 17, 1900.

WILLIAM E. STEWART,  
JAMES WHITE,  
H. W. SHARKEY,  
Commissioners.

JOHN P. DUNN,  
Clerk.

#### FIRST DEPARTMENT.

In the matter of the application of The Mayor, Aldermen and Commonalty 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 purpose of opening EAST ONE HUNDRED AND SIXTY-THIRD STREET (although not yet named by property authority), from Third avenue to Westchester avenue, as the same has been heretofore laid out and designated as a first-class street or road in the Twenty-third Ward of 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, First Department, at a Special Term thereof, Part I, to be held at the County Court-house, in the Borough of Manhattan, in the City of New York, on the 5th day of June, 1900, 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 New York, there to remain for and during the space of ten days, as required by the provisions of section 99 of title 4 of chapter 17 of chapter 37 of the Laws of 1897.

Dated Borough of Manhattan, New York, April 28, 1900.

CHARLES I. GUY,  
EDWARD F. FARRELL,  
EDWARD G. WHITNEY,  
Commissioners.

JOHN P. DUNN,  
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 and premises required for the opening and extending of WEBSTER AVENUE (although not yet named by proper authority), from East river to Jackson avenue, in the First Ward, Borough of Queens, of the City of New York.

NOTICE IS HEREBY GIVEN THAT WE, THE undersigned, were appointed by an order of the Supreme Court, Second Department, bearing date the 30th day of March, 1900, and duly entered in the office of the Clerk of the County of Queens, at his office in Jamaica, in the Borough of Queens, City of New York, on the 18th day of April, 1900, a copy of which order was duly filed for indexing in the office of the Clerk of the County of Queens, Commissioners of Estimate and Assessment, for the purpose of making a just and equitable estimate and assessment of the loss and damage, if any, or of the benefit and advantage, if any, as the case may be, to the respective owners, lessors, parties and persons respectively entitled unto or interested in the lands, tenements, hereditaments and premises required for the purpose by and in consequence of opening the above-mentioned street or avenue, the same being particularly set forth and described in the petition of The City of New York, and also in the notice of the application for the said order thereto attached, filed herein in the office of the Clerk of the County of Queens, on the 18th day of April, 1900; and a just and equitable estimate and assessment of the value of the benefit and advantage of said street or avenue so to be opened or laid out and formed, to the respective owners, lessors, parties and persons respectively entitled to or interested in the said respective lands, tenements, hereditaments and premises not required for the purpose of opening, laying out and forming the same, but benefited thereby, and of ascertaining and defining the extent and boundaries of the respective tracts or parcels of land to be taken or to be assessed thereby, and of performing the trusts and duties required of us by chapter 17, title 4 of the Greater New York Charter, and the acts or parts of acts supplementary thereto or amendatory thereof.

All parties and persons interested in the real estate taken or to be taken for the purpose of opening the said street or avenue, or affected thereby, and having any claim or demand on account thereof, are hereby required to present the same, duly verified, to us, the undersigned Commissioners of Estimate and Assessment, at our office, ninth floor, Nos. 54 and 56 West Broadway, Borough of Manhattan, in The City of New York, with such affidavits or other proofs as the said owners or claimants may desire, within twenty days after the date of this notice.

And we, the said Commissioners, will be in attendance at our said office on the 18th day of June, 1900, at 11 o'clock in the forenoon of that day, to hear the said parties and persons in relation thereto. And at such time and place, and at such further or other time and place as we may appoint, we will hear such owners in relation thereto and examine the proofs of such claimant or claimants, or such additional proofs and allegations as may then be offered by such owner or on behalf of The City of New York.

Dated Borough of Queens, City of New York, May 17, 1900.

GEO. H. SMITH,  
F. J. HANNIGAN,  
W. L. WOODHILL,  
Commissioners.

JOHN P. DUNN,  
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 and premises required for the opening and extending of BLACKWELL STREET (although not yet named by proper authority), from Broadway to Woolsey avenue, in the First Ward, Borough of Queens, of The City of New York.

NOTICE IS HEREBY GIVEN THAT WE, THE undersigned, were appointed by an order of the Supreme Court, Second Department, bearing date the 30th day of March, 1900, and duly entered in the office of the Clerk of the County of Queens, at his office in Jamaica, in the Borough of Queens, City of New York, on the 18th day of April, 1900, a copy of which order was duly filed for indexing in the office of the Clerk of the County of Queens, Commissioners of Estimate and Assessment, for the purpose of making a just and equitable estimate and assessment of the loss and damage, if any, or of the benefit and advantage, if any, as the case may be, to the respective owners, lessors, parties and persons respectively entitled unto or interested in the lands, tenements, hereditaments and premises required for the purpose by and in consequence of opening the above-mentioned street or avenue, the same being particularly set forth and



described in the petition of The City of New York, and also in the notice of the application for the said order thereto attached, filed herein in the office of the Clerk of the County of Queens, on the 13th day of April, 1900; and a just and equitable estimate and assessment of the value of the benefit and advantage of said street or avenue so to be opened or laid out and formed, in the respective owners, lessors, parties and persons respectively entitled to or interested in the said respective lands, tenements, hereditaments and premises not required for the purpose of opening, laying out and forming the same, but benefited thereby, and of ascertaining and defining the extent and boundaries of the respective tracts or parcels of land to be taken or to be assessed therefor, and of performing the trusts and duties required of us by chapter 17, title 4 of the Greater New York Charter, and the acts or parts of acts supplementary thereto or amendatory thereof.

All parties and persons interested in the real estate taken or to be taken for the purpose of opening the said street or avenue, or affected thereby, and having any claim or demand on account thereof, are hereby required to present the same, duly verified, to us, the undersigned Commissioners of Estimate and Assessment, at our office, ninth floor, Nos. 90 and 92 West Broadway, Borough of Manhattan, in the City of New York, with such affidavits or other proofs as the said owners or claimants may desire, within twenty days after the date of this notice.

And we, the said Commissioners, will be in attendance at our said office on the 13th day of June, 1900, at 11 o'clock in the forenoon of that day, to hear the said parties and persons in relation thereto. And at such time and place, and at such further or other time and place as we may appoint, we will hear such owners or claimants or persons, and examine the proofs of such claimant or claimants, or such additional proofs and allegations as may then be offered by such owner, or on behalf of The City of New York.

Dated BUREAU OF STREET OPENINGS, LAW DEPARTMENT, BOROUGH OF MANHATTAN, NEW YORK CITY, May 17, 1900.

WALTER C. FOSTER,  
JULIUS BLECKWIEN,  
RICHARD COOK,  
Commissioners.

JOHN P. DUNE,  
Clerk.

#### FIRST DEPARTMENT.

In the matter of the application of The Mayor, Aldermen and Community 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 purpose of opening EAST ONE HUNDRED AND SIXTY-SECOND STREET (although not yet named by proper authority), from the Concourse to Sheridan Avenue, and from Sherman Avenue to Morris Avenue, as the same has been heretofore laid out and designated as a first class street or road, in the Twenty-third Ward of The City of New York.

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 estimate of assessment for benefit, 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, Nos. 90 and 92 West Broadway, in the Borough of Manhattan, in the City of New York, on or before the 5th day of June, 1900, 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 6th day of June, 1900, at 11 o'clock, A.M.

Second—That the abstract of our said assessment, together with our benefit maps, and also all the affidavits, estimates, proofs and other documents used by us in making our report, have been deposited in the Bureau of Street Openings in the Law Department of The City of New York, Nos. 90 and 92 West Broadway, in the Borough of Manhattan, in said city, there to remain until the 10th day of June, 1900.

Third—That, pursuant to the notice heretofore given when we filed our estimate of damage, the limits of our assessment for benefit include all those lands, tenements and hereditaments and premises situated, lying 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 formed by the intersection of the middle line of the block between Sherman Avenue and Sheridan Avenue, with the northerly side of East One Hundred and Sixty-first Street; thence thence northwesterly along said northerly side of East One Hundred and Sixty-first Street to the southeasterly side of the Grand Boulevard and Concourse; thence northerly along said southeasterly side of the Grand Boulevard and Concourse to the southeasterly side of East One Hundred and Sixty-third Street; thence southeasterly along said southeasterly side of East One Hundred and Sixty-third Street to the middle line of the block between Sheridan Avenue and Sherman Avenue; thence southeasterly along said middle line of the block to its intersection with the northwesterly prolongation of a line drawn parallel to the northerly side of East One Hundred and Sixty-second Street and distant 100 feet northwesterly therefrom; thence southeasterly along said northerly side of East One Hundred and Sixty-second Street and distant 100 feet northwesterly therefrom; thence southeasterly along said southeasterly prolongation and parallel line, and its prolongation northwesterly to the middle line of the block between Sherman Avenue and Sheridan Avenue; thence southeasterly along said middle line of the block to the point or place of beginning, as such streets are shown upon the Final Maps and Profiles of the Twenty-third and Twenty-fourth Wards of The City of New York, excepting from said area all streets, avenues and roads or portions thereof heretofore legally opened as such area is shown upon our benefit maps deposited as aforesaid.

Fourth—That our last partial and separate report hereto will be presented 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 1st day of June, 1900, at the opening of the Court on that day, and that then and there, or as soon thereafter as counsel can be heard thereon, a motion will be made that the said report be confirmed.

Dated BUREAU OF STREET OPENINGS, LAW DEPARTMENT, BOROUGH OF MANHATTAN, NEW YORK CITY, May 17, 1900.

ELLIS E. WARING, Chairman,  
JAMES E. MAHON,  
T. J. CARLETON, Jr.,  
Commissioners.

JOHN P. DUNE,  
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 and premises required for the opening and extending of BLACKWELL STREET (although not yet named by proper authority), from Broadway to Canal Avenue, in the First Ward, Borough of Queens, of The City of New York.

NOTICE IS HEREBY GIVEN THAT WE, THE undersigned, were appointed by an order of the Supreme Court, Second Department, bearing date the 30th day of March, 1900, and duly entered in the office of the Clerk of the County of Queens, at his office in Jamaica, in the Borough of Queens, City of New York, on the 13th day of April, 1900, a copy of which order was duly filed for indexing in the office of the Clerk of the County of Queens, Commissioners of Estimate and Assessment, for the purpose of making a just and equitable estimate and assessment of the loss and damage, if any, or of the benefit and advantage, if any, as the case may be, to the respective owners, lessors, parties and persons respectively entitled to or interested in the lands, tenements, hereditaments and premises required for the purpose by and in consequence of opening the above-mentioned street or avenue, the same being particularly set forth and described in the petition of The City of New York, and also in the notice of the application for the said order thereto attached, filed herein in the office of the Clerk of the County of Queens, on the 13th day of April, 1900; and a just and equitable estimate and assessment of the value of the benefit and advantage of said street or avenue so to be opened or laid out and formed, to the respective owners, lessors, parties and persons respectively entitled to or interested in the said respective lands, tenements, hereditaments and premises not required for the purpose of opening, laying out and forming the same, but benefited thereby, and of ascertaining and defining the extent and boundaries of the respective tracts or parcels of land to be taken or to be assessed therefor, and of performing the trusts and duties required of us by chapter 17, title 4 of the Greater New York Charter, and the acts or parts of acts supplementary thereto or amendatory thereof.

All parties and persons interested in the real estate taken or to be taken for the purpose of opening the said street or avenue, or affected thereby, and having any claim or demand on account thereof, are hereby required to present the same, duly verified, to us, the undersigned Commissioners of Estimate and Assessment, at our office, ninth floor, Nos. 90 and 92 West Broadway, Borough of Manhattan, in The City of New York, with such affidavits or other proofs as the said owners or claimants may desire, within twenty days after the date of this notice.

And we, the said Commissioners, will be in attendance at our said office on the 13th day of June, 1900, at 11 o'clock in the forenoon of that day, to hear the said parties and persons in relation thereto, and at such time and place, and at such further or other time and place as we may appoint, we will hear such owners or claimants or persons, and examine the proofs of such claimant or claimants, or such additional proofs and allegations as may then be offered by such owner, or on behalf of The City of New York.

Dated BUREAU OF STREET OPENINGS, LAW DEPARTMENT, BOROUGH OF MANHATTAN, NEW YORK CITY, May 16, 1900.

SAMUEL GRONNEN,  
PATRICK J. CONNOLLY,  
AUGUST SIMAM,  
Commissioners.

JOHN P. DUNE,  
Clerk.

#### FIRST DEPARTMENT.

In the matter of the application of The Mayor, Aldermen and Community 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 purpose of opening TRIMPEY AVENUE (although not yet named by proper authority), from Westchester Avenue to East One Hundred and Sixty-sixth Street, as the same has been heretofore laid out and designated as a first class street or road in the Twenty-third Ward of 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, First Department, at a Special Term thereof, Part I., to be held at the County Court-house, in the Borough of Manhattan, in The City of New York, on the 13th day of May, 1900, 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 New York, there to remain for and during the space of ten days, as required by the provisions of section 90 of title 4 of chapter 17, of the Laws of 1897.

Dated BUREAU OF STREET OPENINGS, LAW DEPARTMENT, BOROUGH OF MANHATTAN, NEW YORK CITY, May 16, 1900.

WILBER MCBRIDE,  
LORENZO S. PALMER,  
PETER F. RAFFERTY,  
Commissioners.

JOHN P. DUNE,  
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 and premises required for the opening and extending of CAMELIA STREET (although not yet named by proper authority), from Crescent Avenue to Boulevard, in the First Ward, Borough of Queens, of The City of New York.

NOTICE IS HEREBY GIVEN THAT WE, THE undersigned, were appointed by an order of the Supreme Court, Second Department, bearing date the 30th day of March, 1900, and duly entered in the office of the Clerk of the County of Queens, at his office in Jamaica, in the Borough of Queens, City of New York, on the 13th day of April, 1900, a copy of which order was duly filed for indexing in the office of the Clerk of the County of Queens, Commissioners of Estimate and Assessment, for the purpose of making a just and equitable estimate and assessment of the loss and damage, if any, or of the benefit and advantage, if any, as the case may be, to the respective owners, lessors, parties and persons respectively entitled to or interested in the lands, tenements, hereditaments and premises required for the purpose by and in consequence of opening the above-mentioned street or avenue, the same being particularly set forth and described in the petition of The City of New York, and also in the notice of the application for the said order thereto attached, filed herein in the office of the Clerk of the County of Queens, on the 13th day of April, 1900; and a just and equitable estimate and assessment of the value of the benefit and advantage of said street or avenue so to be opened or laid out and formed, to the respective owners, lessors, parties and persons respectively entitled to or interested in the said respective lands, tenements, hereditaments and premises not required for the purpose of opening, laying out and forming the same, but benefited thereby, and of ascertaining and defining the extent and boundaries of the respective tracts or parcels of land to be taken or to be assessed therefor, and of performing the trusts and duties required of us by chapter 17, title 4 of the Greater New York Charter, and the acts or parts of acts supplementary thereto or amendatory thereof.

All parties and persons interested in the real estate taken or to be taken for the purpose of opening the said street or avenue, or affected thereby, and having any claim or demand on account thereof, are hereby required to present the same, duly verified, to us, the undersigned Commissioners of Estimate and Assessment, at our office, ninth floor, Nos. 90 and 92 West Broadway, Borough of Manhattan, in The City of New York, with such affidavits or other proofs as the said owners or claimants may desire, within twenty days after the date of this notice.

And we, the said Commissioners, will be in attendance at our said office on the 13th day of June, 1900, at 11 o'clock in the forenoon of that day, to hear the said parties and persons in relation thereto. And at such time and place, and at such further or other time and place as we may appoint, we will hear such owners or claimants or persons, and examine the proofs of such claimant or claimants, or such additional proofs and allegations as may then be offered by such owner, or on behalf of The City of New York.

Dated BUREAU OF STREET OPENINGS, LAW DEPARTMENT, BOROUGH OF MANHATTAN, NEW YORK CITY, May 16, 1900.

BENJAMIN LYNAM,  
C. E. DILLON,  
A. D. HOUGH,  
Commissioners.

JOHN P. DUNE,  
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 and premises required for the opening and extending of LATHROP STREET (Third Avenue), (although not yet named by proper authority), from Newtown Avenue to Broadway, in the First Ward, Borough of Queens, of The City of New York.

NOTICE IS HEREBY GIVEN THAT WE, THE undersigned, were appointed by an order of the Supreme Court, Second Department, bearing date the 30th day of March, 1900, and duly entered in the office of the Clerk of the County of Queens, at his office in Jamaica, in the Borough of Queens, City of New York, on the 13th day of April, 1900, a copy of which order was duly filed for indexing in the office of the Clerk of the County of Queens, Commissioners of Estimate and Assessment, for the purpose of making a just and equitable estimate and assessment of the loss and damage, if any, or of the benefit and advantage, if any, as the case may be, to the respective owners, lessors, parties and persons respectively entitled to or interested in the lands, tenements, hereditaments and premises required for the purpose by and in consequence of opening the above-mentioned street or avenue, the same being particularly set forth and described in the petition of The City of New York, and also in the notice of the application for the said order thereto attached, filed herein in the office of the Clerk of the County of Queens, on the 13th day of April, 1900; and a just and equitable estimate and assessment of the value of the benefit and advantage of said street or avenue so to be opened or laid out and formed, to the respective owners, lessors, parties and persons respectively entitled to or interested in the said respective lands, tenements, hereditaments and premises not required for the purpose of opening, laying out and forming the same, but benefited thereby, and of ascertaining and defining the extent and boundaries of the respective tracts or parcels of land to be taken or to be assessed therefor, and of performing the trusts and duties required of us by chapter 17, title 4 of the Greater New York Charter, and the acts or parts of acts supplementary thereto or amendatory thereof.

All parties and persons interested in the real estate taken or to be taken for the purpose of opening the said street or avenue, or affected thereby, and having any claim or demand on account thereof, are hereby required to present the same, duly verified, to us, the undersigned Commissioners of Estimate and Assessment, at our office, ninth floor, Nos. 90 and 92 West Broadway, Borough of Manhattan, in The City of New York, with such affidavits or other proofs as the said owners or claimants may desire, within twenty days after the date of this notice.

And we, the said Commissioners, will be in attendance at our said office on the 13th day of June, 1900, at 11 o'clock in the forenoon of that day, to hear the said parties and persons in relation thereto. And at such time and place, and at such further or other time and place as we may appoint, we will hear such owners or claimants or persons, and examine the proofs of such claimant or claimants, or such additional proofs and allegations as may then be offered by such owner, or on behalf of The City of New York.

Dated BUREAU OF STREET OPENINGS, LAW DEPARTMENT, BOROUGH OF MANHATTAN, NEW YORK CITY, May 16, 1900.

THEODORE H. BURDEN,  
THOS. McDERMOTT,  
JOHN R. WOODILL,  
Commissioners.

JOHN P. DUNE,  
Clerk.

#### FIRST DEPARTMENT.

In the matter of the application of The Mayor, Aldermen and Community of The City of New York, relative to acquiring title, wherever the same has not been heretofore acquired, to all the real estate not owned by The Mayor, Aldermen and Community of The City of New York, or any right, title or interest therein not extinguishable by public authority, mentioned and described in the first section of an act entitled "An Act to provide for an addition to Riverside Park, in the City of New York," being chapter 327 of the Laws of 1897.

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, First Department, at a Special Term thereof, Part I., to be held at the County Court-house, in the Borough of Manhattan, in The City of New York, on the 23d day of May, 1900, 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 New York, there to remain for and during the space of ten days, as required by law.

Dated BUREAU OF STREET OPENINGS, LAW DEPARTMENT, BOROUGH OF MANHATTAN, NEW YORK CITY, April 25, 1900.

ALEXANDER T. MASON,  
SAMUEL SANDERS,  
HENRY L. NELSON,  
Commissioners.

JOHN P. DUNE,  
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, to ANDREWS AVENUE (although not yet named by proper authority), from East One Hundred and Eightieth Street to the south line of the New York University property, in the Twenty-fourth Ward, Borough of The Bronx, City of New York.

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, First Department, at a Special Term of said Court, to be held at Part III, thereof, in the County Court-house, in the Borough of Manhattan, in The City of New York, on Friday, the 25th day of May, 1900, at the opening of the Court on that day, or as soon thereafter as counsel can be heard thereon, for the appointment of Commissioners of Estimate and Assessment in the above-entitled matter. The nature and extent of the improvement hereby intended is the acquisition of title by The City of New York, for the use of the public, to all the lands and premises, with the buildings thereon and the appurtenances thereto belonging, required for the opening of a certain street or avenue known as Andrews Avenue, from East One Hundred and Eightieth Street to the

south line of the New York University property, in the Twenty-fourth Ward, Borough of The Bronx, City of New York, being the following-described lots, pieces or parcels of land, viz:

Beginning at a point in the northern line of East One Hundred and Eightieth Street (the same as laid down on the map or plan of section 16 of the Final Maps of the Twenty-third and Twenty-fourth Wards of the Borough of The Bronx, City of New York), distant 100 feet westerly from the intersection of said line with the western line of Aqueduct Avenue:

1st. Thence westerly along the northern line of East One Hundred and Eightieth Street for 75 feet.

2d. Thence northerly deflecting 95 degrees 11 minutes to the right for 371.45 feet to the south line of the New York University property.

3d. Thence westerly deflecting 84 degrees 25 minutes 28 seconds to the right for 60.53 feet along last-mentioned line.

4th. Thence southerly for 378.88 feet to the point of beginning.

Andrews Avenue is designated as a street of the first class and is shown on "map laying out and extending Andrews Avenue, from East One Hundred and Eightieth Street to the south line of the New York University, and laying out Wingard Place, from East One Hundred and Eightieth Street to the south line of the New York University, in the Borough of The Bronx, City of New York," filed in the office of the Register of the City and County of New York, in the office of the Corporation Counsel of The City of New York and in the office of the President of the Board of Public Improvements of The City of New York on or about September 20, 1899.

The land to be taken for Andrews Avenue lies in Blocks 3256 and 3255 of section 11 of the Land Map of The City of New York.

Dated New York, May 14, 1900.

JOHN WHALEN,

Corporation Counsel,  
No. 2 Tryon Row,  
Borough of Manhattan,  
New York City.

#### SECOND DEPARTMENT.

In the matter of the application of The City of New York, relative to acquiring title to the lands, tenements and hereditaments required for the purpose of opening GARDNER AVENUE, from Johnson Avenue to Flushing Avenue, in the Eighteenth Ward, in the Borough of Brooklyn, The City of New York.

NOTICE IS HEREBY GIVEN THAT WE, THE undersigned, were appointed by an order of the Supreme Court, bearing date the 19th day of February, 1900, Commissioners of Estimate and Assessment, for the purpose of making a just and equitable estimate and assessment of the loss and damage, if any, or of the benefit and advantage, if any, as the case may be, to the respective owners, lessors, parties and persons respectively entitled to or interested in the lands, tenements, hereditaments and premises required for the purpose by and in consequence of opening the above-mentioned street or avenue, the same being particularly set forth and described in the petition of The City of New York, and also in the notice of the application for the said order thereto attached, and filed herein in the office of the Clerk of the County of Kings, on the 19th day of February, 1900; and a just and equitable estimate and assessment of the value of the benefit and advantage of said street or avenue so to be opened or laid out and formed, to the respective owners, lessors, parties and persons respectively entitled to or interested in the said respective lands, tenements, hereditaments and premises not required for the purpose of opening, laying out and forming the same, but benefited thereby, and of ascertaining and defining the extent and boundaries of the respective tracts or parcels of land to be taken or to be assessed therefor, and of performing the trusts and duties required of us by law.

All parties and persons interested in the real estate taken or to be taken for the purpose of opening the said street or avenue, or affected thereby, and having any claim or demand on account thereof, are hereby required to present the same, duly verified, to us, the undersigned Commissioners of Estimate and Assessment, at our office in the office of the Law Department, Room 20, Borough Hall, Borough of Brooklyn, City of New York, with such affidavits or other proofs as the said owners or claimants may desire, within twenty days after the date of this notice.

And we, the said Commissioners, will be in attendance at our said office on the 6th day of June, 1900, at 11 o'clock in the forenoon of that day, to hear the said parties and persons in relation thereto. And at such time and place, and at such further or other time and place as we may appoint, we will hear such owners or claimants or persons, and examine the proofs of such claimant or claimants, or such additional proofs and allegations as may then be offered by such owner, or on behalf of The City of New York.

Dated BUREAU OF BROOKLYN, CITY OF NEW YORK, May 20, 1900.

ANDREW T. VAN THUN, JR.,  
JAMES P. FARRELL,  
ALBERT J. BUTTLING,  
Commissioners.

M. E. FINNIGAN,  
Clerk.

#### FIRST DEPARTMENT.

In the matter of the application of The Mayor, Aldermen and Community 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 purpose of opening MUTT AVENUE (although not yet named by proper authority), from Railroad Avenue, East to East One Hundred and Sixty-first Street, as the same has been heretofore laid out and designated as a first-class street or road, in the Twenty-third Ward of The City of New York.

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 estimate of assessment for benefit 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, Nos. 90 and 92 West Broadway, in the Borough of Manhattan, in The City of New York, on or before the 5th day of May, 1900, 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 28th day of May, 1900, at 11 o'clock A.M.

Second—That the abstract of our said assessment, together with our benefit maps, and also all the affidavits, estimates, proofs and other documents used by us in making our report, have been deposited in the Bureau of Street Openings of the Law Department of The City of New York, Nos. 90 and 92 West Broadway, in the Borough of Manhattan, in said city, there to remain until the 10th day of June, 1900.

Third—That pursuant to the notice heretofore given when we filed our estimate of damage the limits of our assessment for benefit include all those lands, tenements and hereditaments and premises situated, lying 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 formed by the intersection of a line drawn parallel to the northwesterly side of Third Avenue and distant 100 feet northwesterly therefrom with a line drawn parallel to the southeasterly side of East One Hundred and Thirty-fifth Street and distant 100 feet southwesterly



WILLIAM A. BUTLER,  
Superintendent.