CHAPTER 7 ENVIRONMENTAL REVIEW: NORTH SHORE CONVERTED MTS

7.1 Introduction

The results of the environmental analyses of the North Shore Converted MTS are presented in the following sections:

7.2 Land Use, Zoning, and Public Policy
7.3 Socioeconomic Conditions
7.4 Community Facilities and Services
7.5 Open Space
7.6 Cultural Resources
7.7 Urban Design, Visual Resources, and Shadows
7.8 Neighborhood Character
7.9 Natural Resources
7.10 Hazardous Materials
7.11 Water Quality
7.12 Waterfront Revitalization Program
7.13 Infrastructure, Solid Waste and Sanitation Services, and Energy
7.14 Traffic, Parking, Transit, and Pedestrians
7.15 Air Quality
7.16 Odor
7.17 Noise
7.18 Commercial Waste to the North Shore Converted MTS

Section 2.2.4 provides a summary description of the site and important characteristics of the facility design. A detailed discussion of the methodologies that were applied in conducting each analysis is provided in Chapter 3. Supplemental information on the site or the study area is provided in the following sections when appropriate to the analysis.

7.2 Land Use, Zoning, and Public Policy

7.2.1 Existing Conditions

7.2.1.1 Definition of Study Areas

The primary study area for the land use, zoning, and public policy analyses is defined as the area within ¼-mile of the site (see Figure 7.2-1). The secondary study area is defined as the area between ¼-mile and ½-mile of the site (see Figure 7.2-2). Section 3.4 describes the methodology employed in these analyses, and Section 2.2.4 provides information on existing land uses and operations on the site.

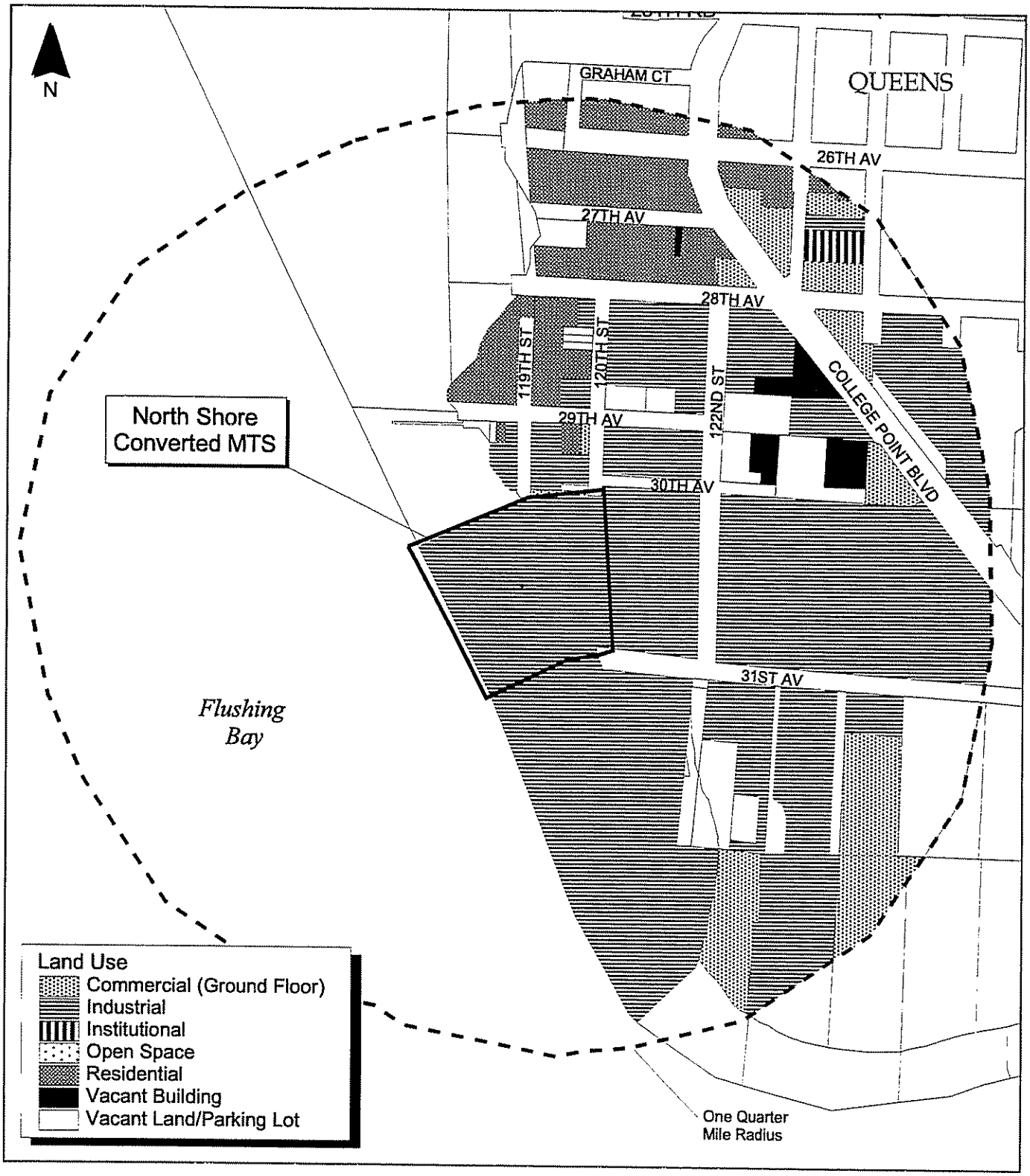
7.2.1.2 Land Use Patterns

7.2.1.2.1 General Context

The site is set on the southeast side of Flushing Bay within the mixed-use College Point peninsula and across from LaGuardia Airport. Commercial offices, manufacturing uses, warehouse storage facilities and automotive uses are the predominant land uses in the immediate vicinity south, east and northeast of the site, while residential uses are located further to the north of the site.

7.2.1.2.2 Land Uses in the Primary Study Area

The western half of the primary study area is part of Flushing Bay, while the eastern half contains a variety of land uses, mostly industrial. Industrial and manufacturing uses and their associated offices, warehouses/storage facilities and parking areas are concentrated to the south and east of the site. Commercial establishments are found throughout the primary study area, with a large number of automobile parts and service shops lining both sides of College Point Boulevard between approximately 27th and 28th Avenues and around 119th and 120th Streets, north of the site. East of and adjacent to the site is the DSNY Queens CD 7 garage, and, north of the garage, Vassilaros Coffee Roasting Company. A large Consolidated Edison facility is located on the block due east of the site and the CD garage, with storage and parking on the western end,



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning
This figure illustrates predominant land uses by lot in the primary study area.

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Figure 7.2-1 Land Use in the Primary Study Area
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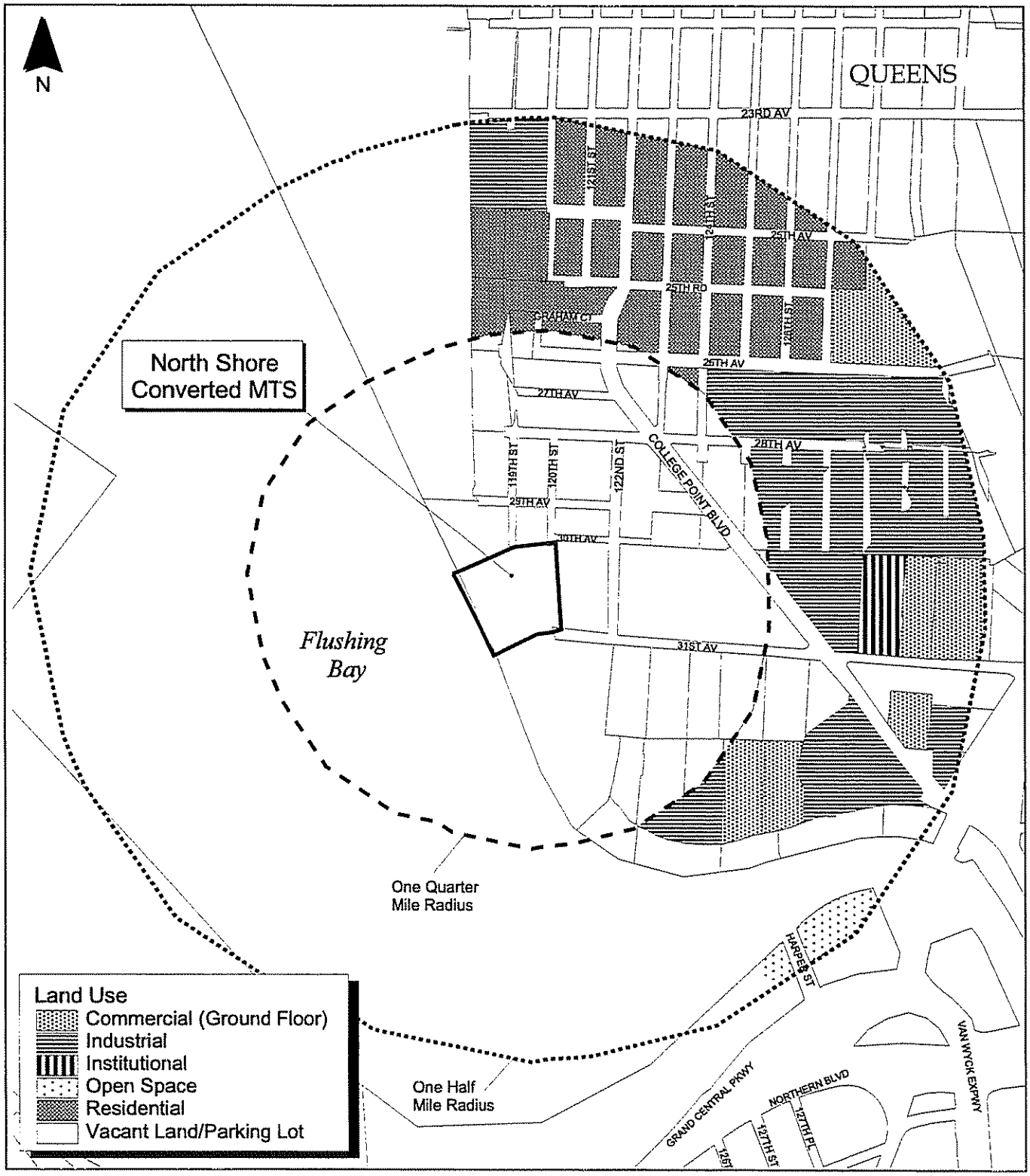

Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning
This figure illustrates generalized land uses in the secondary study area

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Figure 7.2-2 Land Use in the Secondary Study Area

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closest to the site. Residential uses are located north of the site from 29th Avenue to 28th Avenue west of 120th Street and north of 28th Avenue, where it is almost entirely residential between College Point Boulevard and the bay. The residential area contains single-family detached housing, two-family housing and some late 20th-century row housing. Nursing home facilities built between 1955 and 1971 are located on the western ends of the three blocks between 25th Avenue and 27th Avenue.

South of and adjacent to the site is the Ferrara Brothers Building Materials Company on 31st Avenue. Behind their offices is the materials storage and truck loading area. Several of the mapped streets in the area are not open to the public, but instead serve the concrete and asphalt companies located there. A Home Depot store has been recently constructed east of Ferrara Brothers near College Point Boulevard, introducing large-scale retail activity to the area.

A portion of the College Point Industrial Park to the east of the site lies in the primary study area. The park begins at College Point Boulevard and extends eastward and southward from about 26th Avenue to about 31st Avenue. Warehouses, busing facilities and storage/parking areas are located within that portion of the park within the study area, while the remainder of the park features such prominent businesses as The New York Times printing facility.

7.2.1.2.3 Land Uses in the Secondary Study Area

The northern portion of the secondary study area is almost exclusively residential, with the exception of major industrial uses in the area between 120th Street and the shore. Enterprises uses such as Sunrise Oil and an active boat yard and parking are found there. The northern residential portion of the study area east of 119th Street contains more multi-family apartment housing than in the residential areas nearer to the site. Machine shops and small manufacturers are scattered throughout. Public School No. 29, built in 1928, is located just outside the study area, on the south side of 23rd Avenue between 125th and 126th Streets. As mentioned, a new Home Depot is situated west of College Point Boulevard, south of 31st Avenue. Except for the Full Gospel New York Church at 130-30 31st Avenue, industrial uses, including the City's impound lot south of 28th Avenue, characterize most of the remaining secondary study area east of College Point Boulevard. Large manufacturers, such as The New York Times printing facility, are located to the east on the perimeter of the secondary study area.

Southeast of the site, the secondary study area consists of large privately owned lots of industrial waterfront and warehouses, as well as the former Metropolis nightclub at the southern end of Street. Most of these properties are accessible only via private drives. The secondary study area also includes the southern shore of Flushing Bay, where the City Bureau of Highways' Queens asphalt plant is located, as is the Flushing Meadows Corona Park, which extends south of the bay. The study area extends westward across the bay to include a small portion of the eastern edge of LaGuardia Airport.

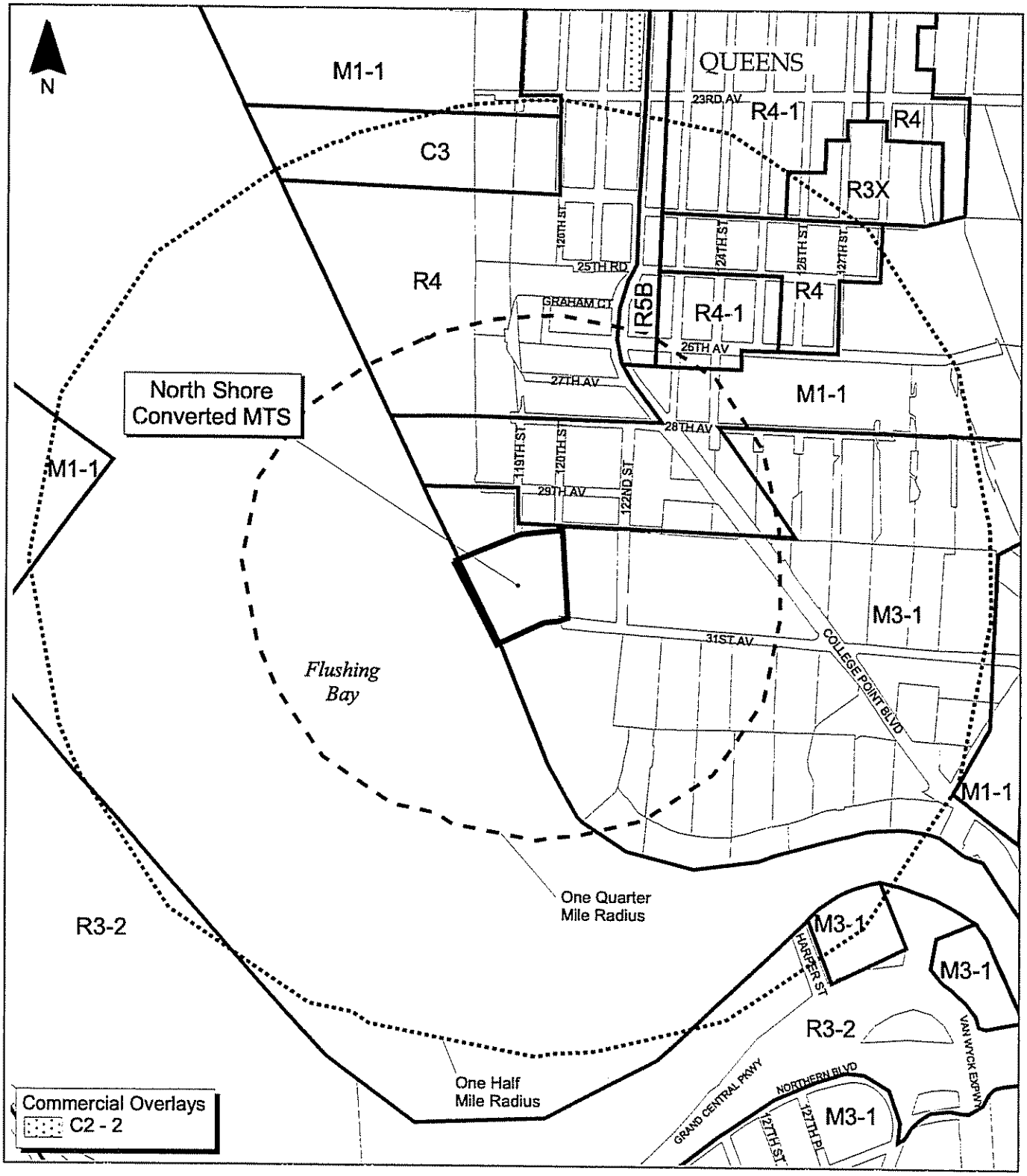
7.2.1.3 Zoning On and Near the Site

7.2.1.3.1 Zoning Within the Primary Study Area

The site is in an M3-1 zoning district that extends north to about 30th Avenue, west and south to the bay, and east beyond College Point Boulevard. (See Figure 7.2-3 and Table 3.4-1: Zoning District Characteristics.) Bordering the M3-1 zone to the north is an M1-1 zone that extends from the bay to beyond the eastern edge of the secondary study area. North of this M1-1 zoning district are portions of larger R4, R5B and R4-1 zoning districts.

7.2.1.3.2 Zoning Within the Secondary Study Area

The secondary study area is primarily zoned M3-1 east and southeast of the site. North and northeast of the site, the secondary study area is primarily zoned for residential uses, buffered by an M1-1 zone that cuts diagonally through the study area. The C3 zone at the northern edge of the study area encompasses the commercial waterfront between 23rd and 25th Avenues and 120th Street.



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

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Figure 7.2-3 Zoning

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7.2.1.4 Plans and Policies

The FY 2004 CDNS for CD 7 does not provide physical planning recommendations that may be relevant specifically to the site or the primary and secondary study areas.

NYCDCP's Comprehensive Waterfront Plan for Reach 10 (Flushing Bay to Nassau County) recommends that "street-end" access to the waterfront that is compatible with industrial uses be provided at several points along the College Point industrial waterfront. Other recommendations pertaining to the study area include a recommendation to rezone a 2.5-acre vacant M1 site between 25th and 23rd Avenues to C3 to permit such water-dependent uses as a marina and restaurant or residential development. (See Section 7.5 for details on NYCDPR park plans and Section 7.12 for a review of consistency with the Waterfront Revitalization Program.)

7.2.2 Future No-Build Conditions

It is reasonable to anticipate that the Future No-Build Conditions in the primary and secondary study areas generally will resemble the Existing Conditions. The site will remain DSNY property, the existing MTS will remain standing and the associated DSNY salt storage and garage facilities will continue to be fully operational.

7.2.3 Potential Impacts with the North Shore Converted MTS

7.2.3.1 Land Use and Zoning

The North Shore Converted MTS would include containerization functions and would replace the existing, non-operating MTS. The North Shore Converted MTS would not be a substantial new use, however, since it would be a reactivation of former waste handling activities at the site. It would be unlikely to encourage or discourage similar development or other typical development in the area and would be unlikely to affect the residential area to the north. Because the general area is zoned for industrial uses, the North Shore Converted MTS would not likely affect surrounding zoning patterns.

7.2.3.2 Consistency with Public Plans and Policies

There are no recommendations or objectives stated in relevant plans and policies that specifically relate to the site, study area or the North Shore Converted MTS, so the new facility would be consistent with public plans and policies.

7.3 Socioeconomic Conditions

7.3.1 Existing Conditions

7.3.1.1 Definition of the Study Areas

Two study areas were used for the analysis of socioeconomic conditions: (1) a demographic study area based roughly on census tracts within ¼-mile of the site; and (2) a study area related to economic activity that generally covers a larger area that extends ½-mile from the site. (Refer to Section 3.5 for a more detailed description of study area delineation.) In this case, the demographic study area is comprised of Census Tract 907 (see Figure 7.3-1). Queens Census Tract 907 extends east from Flushing Bay in Queens to the Whitestone Expressway, as far south as approximately 32nd Avenue and as far north as approximately 20th Avenue. For comparison purposes, both 1990 and 2000 Census data were also gathered at the borough and City levels. The study area used for the assessment of potential impacts on economic conditions extends as far north as approximately 23rd Avenue and as far east as approximately the intersection of the Whitestone Expressway and College Point Avenue.

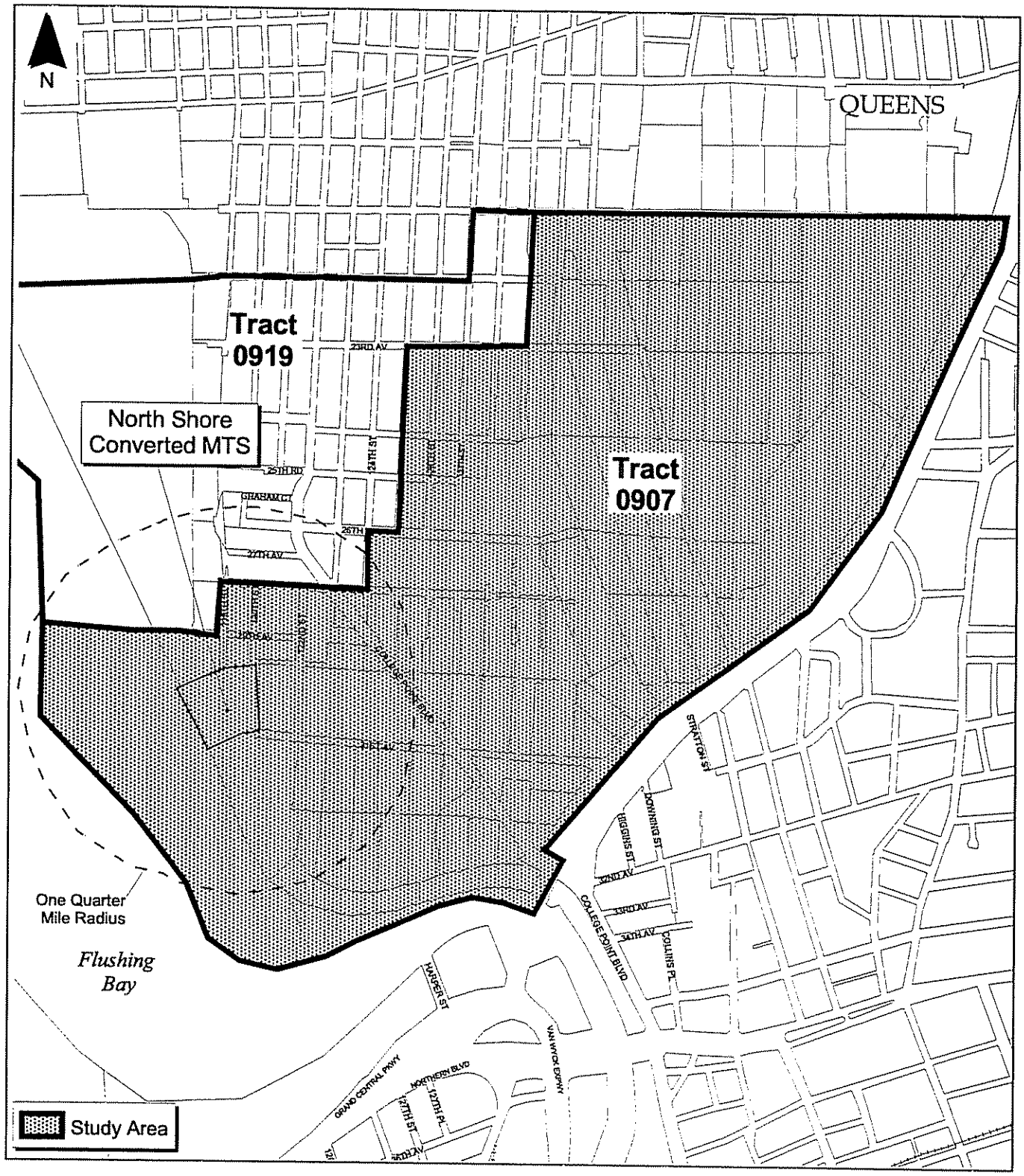
Detailed socioeconomic information referred to in the text but not presented in table form may be found in Appendix B.

7.3.1.2 Demographic Characteristics

7.3.1.2.1 Population

The total 2000 study area population was 1,243 persons (see Table 7.3-1). In terms of total population growth from 1990 to 2000, the study area experienced a smaller percentage increase (7%) than did the borough during the same period (14%), but its population grew almost as rapidly as the City's as a whole (9%).

The age-sex distribution was approximately the same as the population distribution of the borough and the City. The study area contained approximately the same percentage of children and teenagers as the borough or City; approximately 26% of the study area population was under the age of 20, compared to 25% for Queens and 27% for the City.



Site delineations and study area boundaries are approximate
Base Map Source: New York City Department of City Planning

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Figure 7.3-1 Census Tracts

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7.3.1.2.5 Housing

The housing stock of the study area is considerably newer than the borough and City. About half of the housing units (49%) in the study area were constructed between 1960 and 1980 and the remainder were largely built before 1960, while the majority of housing units in both Queens (71%) and the City (67%) were built before 1960. As of 2000, there were 448 housing units in the study area with a vacancy rate of about 1%, lower than the borough (4%) and the City (6%). In contrast to these two larger areas, the study area was occupied by a considerably higher percentage of owners than renters. Only 38% of the housing units were renter-occupied, in contrast to the borough (55%) and the City (66%).

The 2000 median value of housing units in the study area ($235,800) was greater than in Queens ($212,600) or the City ($211,900). The study area's median monthly rent ($784) was slightly higher than in the borough ($775) or the City ($705). The turnover in the study area (32%) from 1995 until 2000 was lower than that of the borough (42%) or the City (43%).

From 1990 to 2000, a total of 31 housing units were added in the study area, representing a 7% increase, slightly less than the borough (9%) and equivalent to the City (also 7%).

7.3.1.2.6 Education

Among people aged three and older, there was a slightly lower rate of school enrollment (21%) than in either the borough (27%) or the City (29%). Of those enrolled in school within the study area in 2000, 71% were enrolled in elementary school or high school and 25% were enrolled in college or beyond. In Queens, 61% were enrolled in elementary school or high school and 28% in college or beyond, while 62% of the City's enrolled population was in elementary or high school and 27% in college or beyond.

The number of persons enrolled in school from 1990 to 2000 within the study area remained relatively the same, in contrast to the 25% increase in Queens and the 18% increase in the City.

The study area had a lower educational attainment level than either the borough or the City. While half of the study area population aged 25 and over had some college degree compared to Queens (47%) and the City (48%), a smaller percentage of study area residents graduated college

(13%) compared to the borough (24%) and the City (27%). Similarly, the study area had a slightly higher percentage of people with only high school diplomas (29%) compared to the borough (28%) and the City (24%).

Despite the lower educational levels, from 1990 to 2000 the study area witnessed rising levels of educational attainment. The number of college graduates increased 48%; the same trend was evident in the borough and the City, which experienced increases of 32% and 29%, respectively.

7.3.1.2.7 Income and Poverty

In 2000, the median household income and median family income ($45,956) for the study area were the same. They were only a little different than the reported numbers in Queens ($42,439 and $48,608, respectively), while greater than those of the City ($38,293 and $41,887, respectively). Forty-four percent of households in the study area had incomes of $50,000 and above, compared with 43% in the borough and 40% in the City.

Within the study area, the percentage of families living below the poverty level (12%) was the same as that of Queens but less than that of the City (19%). The percentage of families living below the poverty level with children under the age of 18 (17%) was the same for Queens and considerably less than the City (26%).

A smaller percentage of persons in the study area under the age of 18 were living below the poverty level in 2000 (18%) than in Queens (19%) or the City (30%). The 2000 Census also reported that about 9% of persons 65 years or older were living below the poverty level in the study area, less than Queens (13%) and half the proportion of the City (18%).

From 1990 to 2000, the total number of people living below the poverty level in the study area increased dramatically, from 5 to 155, while the borough of Queens experienced an increase of 53%, more than twice that of the City (21%).

7.3.1.3 Economic Conditions

The study area contains a mix of offices, automotive repair shops, light industrial uses and some warehouse storage facilities. Industrial uses include a Consolidated Edison facility, the Ferrara Brothers Building Materials Company, Sunrise Oil and other manufacturing uses. Nearby commercial enterprises are primarily associated with automobile parts and service.

A portion of the 578-acre College Point Industrial Park is located within ½-mile of the site. It currently houses active warehouses, light industry, bus facilities, storage/parking areas and Consolidated Edison facilities between College Point Boulevard and Linden Place.

7.3.2 Future No-Build Conditions

7.3.2.1 Demographic Characteristics

Regional projections indicate that the population of Queens CD 7 will remain about the same as current conditions.[2]

7.3.2.2 Economic Conditions

No significant changes to socioeconomic conditions within the study area are expected. Stable industrial and commercial uses are expected to continue to shape the character of the area around the site. The NYCEDC will continue to market sites within the College Point Industrial Park, although no significant new construction is expected to occur within the study area.

The near-term economic health of industrial areas such as the study area may be supported by recently established City programs available through the IDA. These programs, such as the Industrial Incentive Program and the Small Industry Incentive Program, provide businesses with tax incentives for capital renovation and expansion projects. However, no significant changes are anticipated through 2006.

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[2] Based on New York Metropolitan Transportation Council, Population and Employment Forecasts, approved 7-17-03.

Regional projections indicate that employment in Queens CD 7 will remain about 11% of the borough total.[3]

7.3.3 Potential Impacts with the North Shore Converted MTS

The North Shore Converted MTS represents the reactivation of solid waste transfer operations with added containerization operations. No significant direct or indirect impacts are anticipated related to socioeconomic conditions.

7.3.3.1 Residential Impacts

No residential uses would be displaced or indirectly affected as a result of the North Shore Converted MTS, and land use and neighborhood character analyses predict no adverse impacts.

7.3.3.2 Direct Business and Institutional Impacts

The North Shore Converted MTS would not result in direct displacement of any businesses or institutional uses.

7.3.3.3 Indirect Business and Institutional Impacts

The businesses adjacent to and near the site are industrial, automotive, office or storage-related uses that would not be significantly affected by the North Shore Converted MTS.

7.3.3.4 Employment Impacts

The North Shore Converted MTS is expected to generate a total of approximately 85 jobs, including supervisors, equipment operators, mechanics, laborers and clerical personnel. In addition to the direct positive employment impacts, the new workers would generate a minor amount of indirect economic benefits through local spending.

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[3] Based on New York Metropolitan Transportation Council, Population and Employment Forecasts, approved 7-17-03.

7.4 Community Facilities and Services

7.4.1 Existing Conditions

7.4.1.1 Definition of the Study Areas

The primary study area is defined as the area within ¼-mile of the site. The secondary study area is defined as the area between ¼- and ½-mile from the site.

7.4.1.2 Summary of Community Facilities and Services

Consistent with the industrial nature of the primary and secondary study areas, very few community facilities are present. Community facilities within and serving the area are listed in Table 7.4-1 and locations are shown on Figure 7.4-1.

7.4.2 Future No-Build Conditions

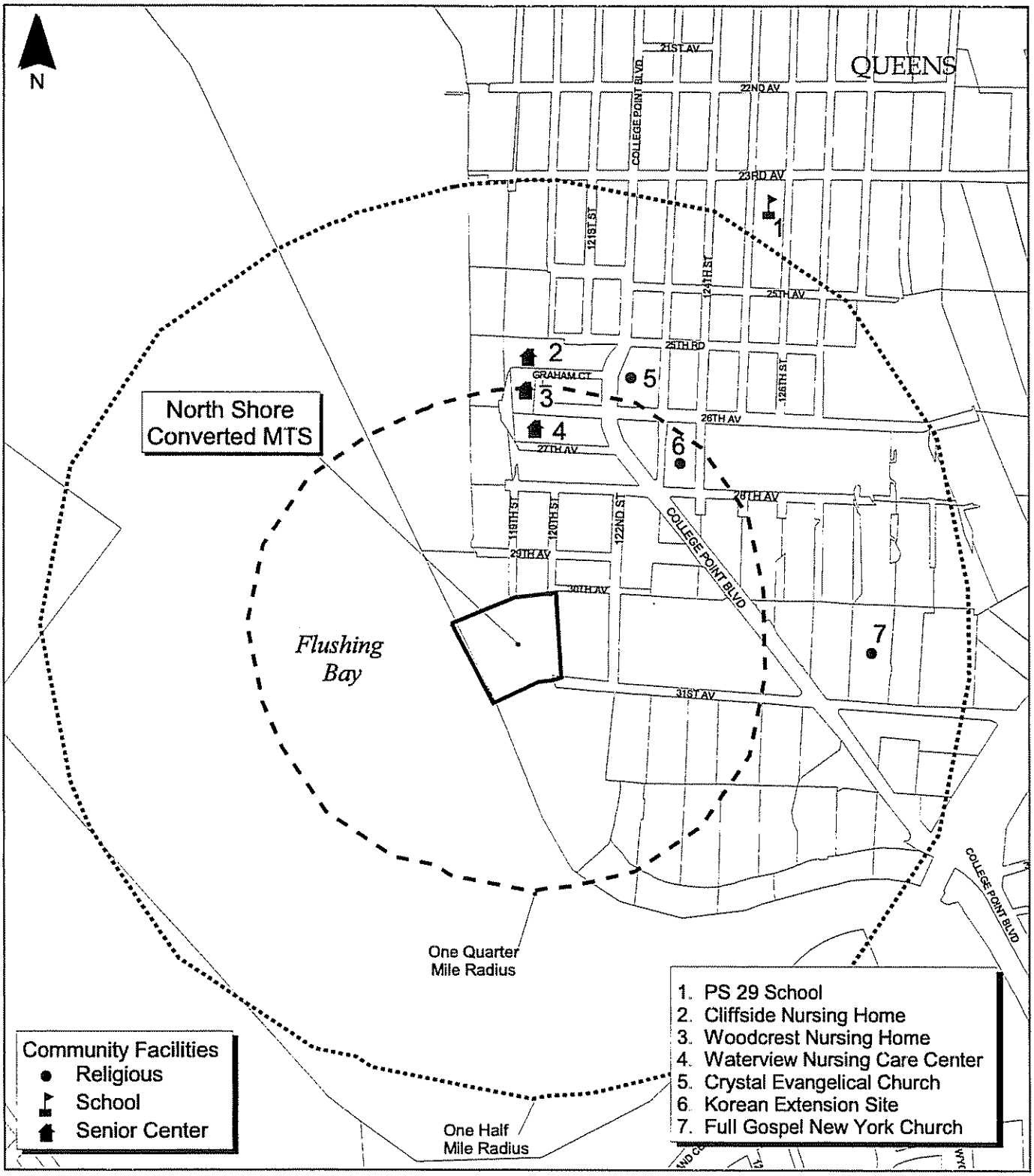
There are no known changes planned for the community facilities and services within the primary and secondary study areas by the Future No-Build year. Therefore, anticipated Future No-Build Conditions are expected to be fundamentally the same as Existing Conditions regarding availability of facilities and services and their capacity or adequacy of delivery.

7.4.3 Potential Impacts with the North Shore Converted MTS

The North Shore Converted MTS would not create any significant new demand on services and community facilities. No significant adverse impacts to service delivery are expected. The FDNY states that it would have no problem supporting the North Shore Converted MTS (Appendix A).

Table 7.4-1
Community Facilities and Services

Name	Address
Within the Primary Study Area	
Senior Centers	
Waterview Nursing Care Center	119-15 27th Avenue
Woodcrest Nursing Home	119-09 26th Avenue
Religious and Cultural Institutions	
Korean Extension Site	2625 123rd Street
Within the Secondary Study Area	
Senior Centers	
Cliffside Nursing Home	119-19 Graham Court
Religious and Cultural Institutions	
Crystal Evangelical Church	2567 College Point Boulevard
Full Gospel New York Church	130-30 31st Avenue
Outside the Secondary Study Area	
Hospitals	
Booth Memorial Medical Center	56-45 Main Street
Flushing Hospital Medical Center	45th Avenue and Parsons Boulevard
Flushing Hospital – North Division	35-06 Parsons Boulevard
Police	
109th Precinct	37-05 Union Street
Fire	
1st Engine Company – Engine Company 297 and 1st Ladder Company – Ladder Company 130	119-11 14th Road
2nd Engine Company – Engine Company 295 and 2nd Ladder Company – Ladder Company 144	12-49 149th Street
Schools	
P.S. 29	125-10 23rd Avenue



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning
Note: Fire stations, police stations, and hospitals outside the secondary study area may not be shown on the figure.

Figure 7.4-1 Community Facilities and Services

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7.5 Open Space

7.5.1 Existing Conditions

7.5.1.1 Definition of the Study Area

The study area for open space is defined as being the area within a ½-mile radius of the site.

7.5.1.2 Summary of Open Space in the Study Area

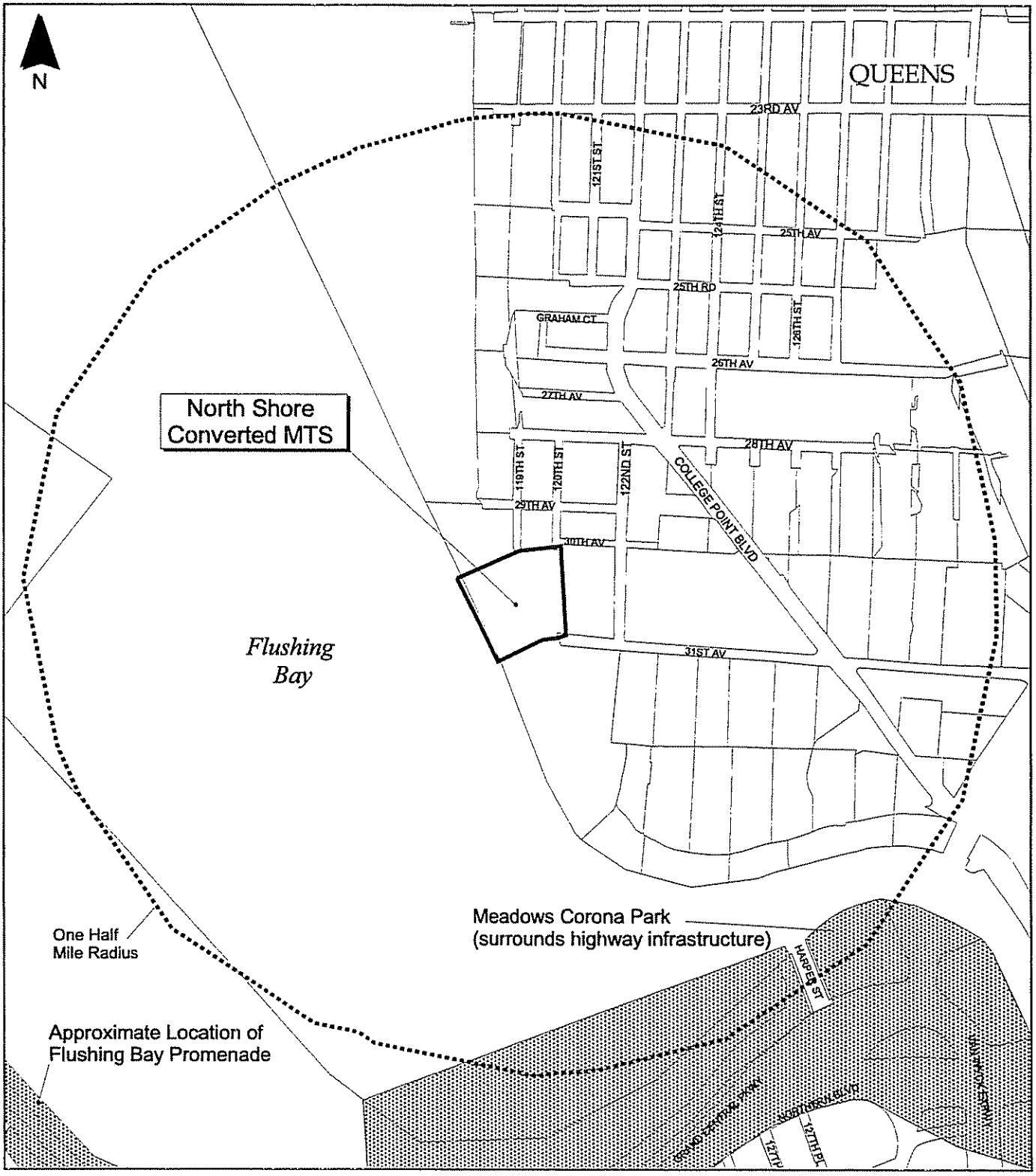
A small portion of Flushing Meadows Corona Park, a large regional open space resource, is located within the study area (Table 7.5-1 and Figure 7.5-1.)

Table 7.5-1
Public Parks and Open Spaces

Name	Address	Acreage
Flushing Meadows Corona Park	Flushing Meadows Corona Park, north of Grand Central Parkway	1,258

7.5.2 Future No-Build Conditions

The various park improvements planned for Flushing Meadows Corona Park will be located outside the study area. The improvements planned or under construction include a pool and ice skating facilities, statue, playground and three soccer fields. The only portion of the park that would likely afford views of the site is the Flushing Bay Promenade, which is along the Southern shore of Flushing Bay.



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

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Figure 7.5-1 Open Space/Parkland

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7.5.3 Potential Impacts with the North Shore Converted MTS

The North Shore Converted MTS would have no effect on any open space resources within the study area. It would neither physically change or eliminate any open space or reduce its utilization or aesthetic value, nor introduce a substantial new user population that would create or exacerbate over-utilization of open space resources. In particular, the North Shore Converted MTS would not affect views from the Flushing Bay Promenade because its appearance and placement would be similar to those of the existing MTS.

7.6 Cultural Resources

7.6.1 Existing Conditions

7.6.1.1 Definition of the Study Area

The cultural resources study area is defined as the area within ½-mile of the site.

7.6.1.2 Development History of the Area

Flushing Bay and its creek form the western boundary of College Point, which had practically been an island until much of the marshland was filled in the 19th century. The College Point neighborhood was established in 1854 by Conrad Poppenhausen, owner of a hard-rubber factory, to accommodate his workers. Streets, houses, businesses and schools were developed under Poppenhausen's guidance. The area grew rapidly in the 1880s and 1890s, attracting a largely German population. Breweries, silk mills and paint works were established. Beer halls and amusement parks, especially Point View Island, made the area popular for outings, steamboat excursions and political clubs. The resorts declined during the Prohibition era and were replaced eventually by aircraft and aviation parts factories built by Sikorsky Aircraft, the LWF Company and the EDO Corporation to support the nearby LaGuardia Airport. LaGuardia Airport, located on the south side of Flushing Bay, opened in 1939 as the first viable commercial airport serving the City.

7.6.1.3 Cultural Resources on the Site

There are no elements of architectural or archaeological significance on the site.

7.6.1.4 Historic Resources Within the Study Area

There are no state, national or local historic districts or individually designated properties within the study area.

7.6.2 Future No-Build Conditions

There are no elements of potential historic significance slated for review. Because of the nature of architectural and archaeological resources, and the fact that there is no reason to anticipate the designation of such resources in this area in the near future, anticipated Future No-Build Conditions are assumed to be the same as Existing Conditions.

7.6.3 Potential Impacts with the North Shore Converted MTS

The North Shore Converted MTS would have no effect on any known cultural resources. Based upon its review, SHPO has stated that the North Shore Converted MTS would have no impact upon cultural resources in, or be eligible for inclusion in, the State and National Registers of Historic Places. The LPC has stated that the site contains no architectural or archaeological significance (see Appendix A).

7.7 Urban Design, Visual Resources, and Shadows

7.7.1 Existing Conditions

7.7.1.1 Definition of the Study Area

The urban design and visual quality study area is the same as the neighborhood character study area (see Figure 7.8-1). The site has been developed in a manner consistent with adjacent properties and the overall study area. It is a non-sensitive industrial area in terms of urban design and visual quality assessment. There are no sensitive view corridors, publicly accessible open areas or points of waterfront access that might be affected by development of the North Shore Converted MTS.

7.7.1.2 Description of the Site

Much of the space on the site and in the surrounding area is devoted to parking for employees and for storage of trucks and other vehicles associated with the existing uses (see Figure 7.7-1). A curved ramp extending from 31st Street leads to the existing MTS (see Figure 7.7-2). The design of the existing MTS is typical of similar facilities with a height of approximately 50 feet and a shell constructed of prefabricated steel. There are lights mounted on the exterior walls of the facility and light poles throughout the site.

In addition to the existing MTS building, there is the foundation of a former salt shed, within which salt is still stored in the northern portion of the site and that still contains salt piles. The base walls are constructed of unpainted, prefabricated concrete panels.

The shoreline near the existing MTS is overgrown with scrub and grasses and a few trees next to the access ramp. Otherwise, the site is entirely paved and has no vegetative landscaping.

7.7.1.3 Urban Design and Visual Resources of the Study Area

The area surrounding the site is characterized by mid- to late-20th-century brick and prefabricated concrete or steel industrial buildings, which generally do not exceed two stories in height and are generally not built to the lot lines. The block forms, large lots and street patterns

Figure 7.7-1 : View of MTS from 31st Avenue.

Figure 7.7-2 : View from the site at 31st Avenue, with salt piles and parking area visible over the ramp.

Figure 7.7-1 and 7.7-2
Urban Design and Visual Quality
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are suited to truck circulation with certain streets fully dedicated to truck use. Alteration of fairly large lots to suit industry needs has kept the development pattern of the area suitable for manufacturing.

Although there are some properties within the area that are undeveloped, all property appears to be utilized. Un-built areas, for example, tend to serve as parking areas for trucks and equipment associated with the industrial uses. There is no recreational open space. There are no undisturbed natural features in the area and the lack of landscaping reflects the purely functionalist fashion in which the area has developed.

DSNY's Queen CD 7 garage, which contains administrative offices, is adjacent to the eastern side of the site. The southern portion of the building, the administrative section, is two stories tall and the remainder of the building, extending north and facing the shore, is one story tall and has eight garage bays. A one-story portion of the building with five garage bays extends east from the administrative section and faces south. The building is unpainted and is faced in textured, prefabricated concrete and blocks views of the existing MTS from 31st Avenue, approaching the site from the east. A view corridor exists from the Consolidated Edison building on 31st Avenue and 125th Street to the site, but since it is in a purely industrial area, it is not considered sensitive (see Figure 7.7-3).

Flushing Bay developed as a working waterfront, but non-water-dependent industries are inland around the site. The Consolidated Edison building at 125th Street and 31st Avenue (east of the site) is 10 stories tall and has exterior walls that are mostly glass. Various one-story, mid-20th century manufacturing and garage-type buildings are visible to the north of the site. Beyond these buildings are semi-detached, two-story white clapboard houses with chimneys in a repeating facade pattern.

Ferrara Brothers Building Materials Company has offices and materials storage and loading facilities on the property adjacent to the southern edge of the site (see Figure 7.7-4). The office building on 31st Avenue is a two-story building faced in brick and dark steel siding. The areas used for storing and loading building materials, such as sand and mixes, are behind (south of) the offices. The loading facilities are painted orange, like the trucks used in the operation, and are clearly industrial in nature.

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Figure 7.7-3 : View north from the site at 31st Avenue.

Figure 7.7-4 : Ferrara Brothers Building Materials Corporation viewed from 31st Avenue, facing south.

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7.7.2 Future No-Build Conditions

There are no plans for the site or surrounding environs; therefore, the anticipated Future No-Build Conditions are fundamentally the same as Existing Conditions. The site will remain DSNY property, the existing MTS will remain standing and the DSNY salt pile storage and garage facility will continue to be utilized.

7.7.3 Potential Impacts with the North Shore Converted MTS

The North Shore Converted MTS would not significantly affect the urban design or visual quality of the site or study area. Because it would be constructed on a site that is already arranged to handle waste transfer operations, no impacts on urban design of the area would result. Likewise, the North Shore Converted MTS would be similar in appearance to the existing MTS. With it and the associated barges being set amid DSNY and other industrial uses, the North Shore Converted MTS would result in no impact to visual quality.

According to the 2001 CEQR Technical Manual, an impact area should be drawn around the site to encompass the maximum project shadow in order to determine if any sensitive resources nearby might be affected, and consequently, if a full shadow impact assessment were warranted. (This shadow impact area is calculated by multiplying the height of the proposed structure by 4.3 to estimate its longest possible shadow.)

A survey was conducted within this 430-foot area and found that there were no parks, publicly accessible open spaces, historic resources or important natural features; therefore, no assessment of shadows was deemed necessary and no shadow impact is expected as a result of the proposed project.

7.8 Neighborhood Character

7.8.1 Existing Conditions

7.8.1.1 Definition of the Study Area

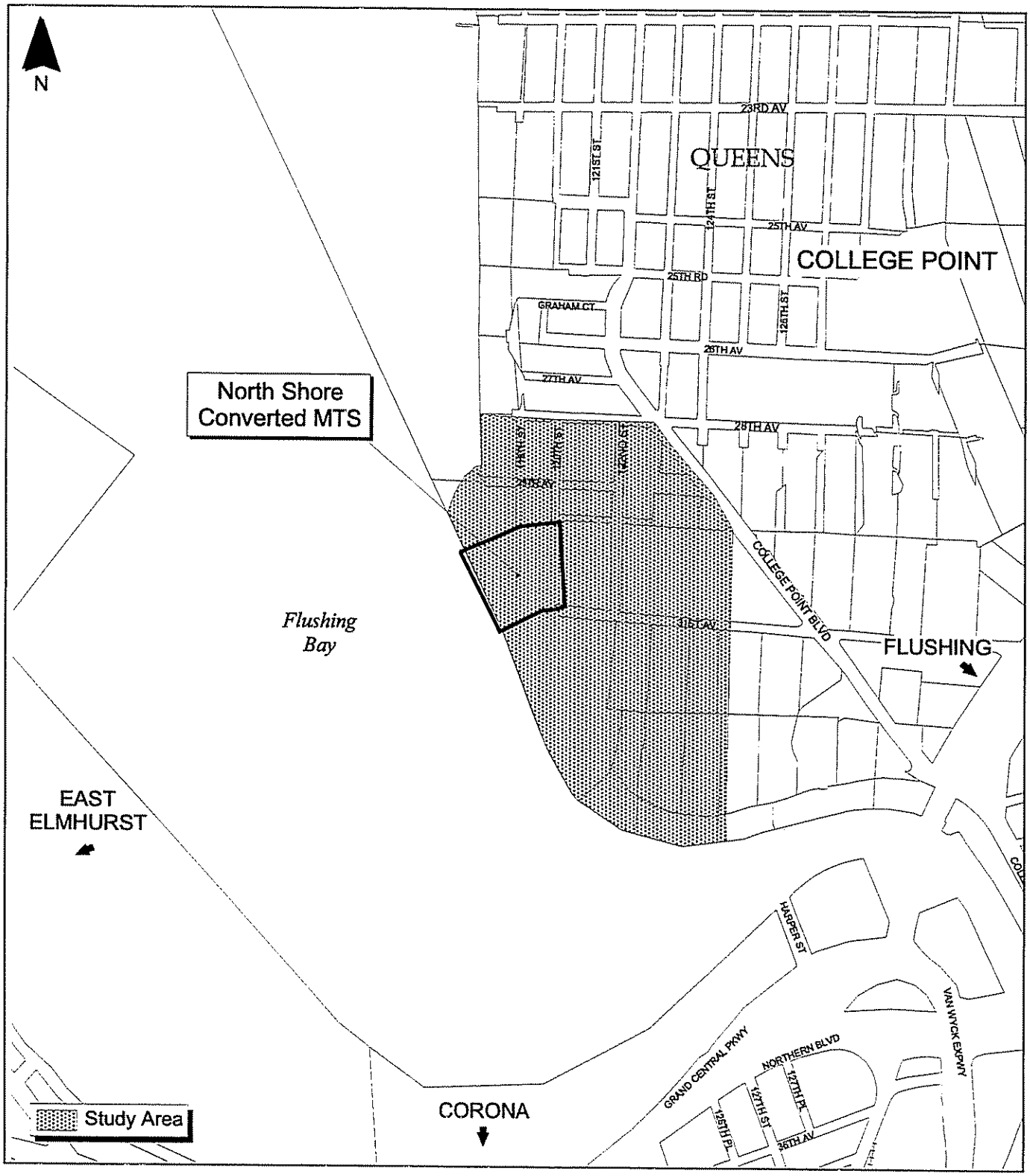
The site is located on the industrial portion of the Flushing Bay waterfront in the College Point neighborhood. The neighborhood character study area is defined by physical landscape elements that distinctly mark the edge of a specific neighborhood, visually insulate the site and study area or physically obstruct pedestrian and vehicular access to it from outlying areas. In this case, the study area is defined by predominantly industrial activities and related visual quality.

The triangular study area is bounded by 28th Avenue to the north, College Point Boulevard to the northeast, and, to the east, the continuation of 124th Street extending south to the shoreline (see Figure 7.8-1).

7.8.1.2 Description of Neighborhood Character

Industrial uses, such as the existing MTS and concrete production facilities, characterize most of the land use pattern in the neighborhood study area, with warehouses and vacant lots and vacant buildings in the northern portion. There is, however, a distinctly residential area north of 29th Avenue between 120th Street and the shore, which is a continuation of the residential development pattern that characterizes the area north of the study area. These residential uses are buffered from the site itself by small-lot manufacturing uses and automotive repair shops on the blocks north of and adjacent to the site, similar to the uses that line 120th Street. Located amid the industrial uses south of the Ferrara Brothers Building Materials Company is the former Metropolis nightclub, which is near the waterfront.

The site and the other industrial uses in the study area are destination points and there is limited through-access for automobiles. In fact, several mapped roads exclusively serve private industrial uses. There is through-access for automobiles and pedestrians between the residential northern portion of the study area and the site, but it appears that when it was in operation, the site had been accessed exclusively by DSNY employees in automobiles and collection trucks.



Site delineations are approximate
Base Map Source: New York City Department of City Planning

500 0 500 Feet

HDR URBITRAN EEA Cambridge Environmental Inc HYDROQUAL DD

Figure 7.8-1 Neighborhood Location

North Shore Converted MTS

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The residential character of the northern portion of the study area is most similar to the neighborhood north of the study area, both in type of land use and in visual quality. These two residential blocks are divided into small lots with trees and residential landscapes. They are generally well maintained and are not congruent with the overall industrial character of the rest of the study area.

The visual quality in the remainder of the study area is generally not aesthetically pleasing, but it is consistent with the industrial nature of the area. There are no community facilities or public open spaces within the neighborhood character study area. Additionally, while the houses and industrial uses along the shore have waterfront access, there is no public waterfront access in the study area and there are no views that would be considered visually sensitive. While the residences north of the site and the entrance to the offices of the Ferrara Brothers property south of the site are landscaped, there are no particularly sensitive elements of overall landscape design within the study area.

7.8.2 Future No-Build Conditions

There are no known plans for development of the site or the study area that would potentially lead to changes in neighborhood character. The Future No-Build Conditions are, therefore, expected to be the same as Existing Conditions.

7.8.3 Potential Impacts with the North Shore Converted MTS

No change to the industrial neighborhood character would be expected with the reactivation of the site to handle waste transfer activities. The fairly isolated neighborhood, characterized by industrial uses, including the DSNY garage (and related activities) that would continue under Future No-Build Conditions, would not be noticeably affected by the construction and operation of the North Shore Converted MTS.

7.9 Natural Resources

7.9.1 Existing Conditions

Existing Conditions include stressed aquatic and terrestrial communities typical of this area of Queens. Conditions associated with the presence of natural resources, including water resources and endangered species and habitats, were investigated within the defined study area to identify potential impacts that might arise from implementation of the North Shore Converted MTS.

7.9.1.1 Definition of Study Area

The study area includes the site and the waterfront section that is bounded by Flushing Bay to the west (see Figure 2.2.4-1). The upland sections of the study area are occupied with a salt storage shed and a parking area. This part of the study area and surrounding neighborhood ~~are~~ is completely developed, and, therefore, ~~have~~ has very limited terrestrial natural resources. Such resources that do exist will be discussed in following sections. Because Future Build Conditions would include dredging of bottom sediments and construction of a new MTS, a description of aquatic communities is included.

7.9.1.2 Geology

Boring data from the City of New York Public Works drawing titled Record of Borings, made at the Proposed Site for the North Shore Marine Loading Station, dated November 18, 1952, indicates that the following geologic strata were encountered within or immediately adjacent to the footprint of the proposed structure.

In the land-based borings, an uncontrolled fill stratum was encountered near the surface and ranged in thickness from 2 to 5 feet below ground surface. The uncontrolled fill consisted of silt with miscellaneous aggregate including deleterious materials. Very soft, dark gray to black organic soil was encountered in the borings within Flushing Bay. This organic soil stratum contained shells and thin sand and clay lenses and ranged in thickness from 2 feet at the shoreline to 32 feet under the footprint of proposed structure. All borings terminated in a dense to very

dense, silty sand to silty sand with gravel stratum. This layer was found immediately beneath the fill on land and beneath the organic soil in the water borings. Although the borings did not fully penetrate the silty sand stratum, the stratum was penetrated 18 to 47 feet.

Surface sediment collected from the site in 2003 was composed of 97.5% silt and clay, 2.2% sand and 0.4% gravel, with approximately 63,417 mg/kg TOC.[4] Sediment was found to be somewhat degraded due to contaminants in the sample material. The three metals found in the highest concentrations were lead (166.67 mg/kg), chromium (110.17 mg/kg) and barium (98.83 mg/Kg).

Historically, the banks of Flushing Bay were comprised of extensive intertidal marshes covering more than 100 acres. The sediments under and around the site are silty muds, while extensive filling and hardening of the upland areas has taken place and the geology has little, if any, resemblance to its former state.

7.9.1.3 Floodplains

The existing MTS and salt shed are within the 100-year coastal floodplain (see Figure 7.9-1). Flushing Bay is the only surface water body on or adjacent to the study area. Other than Flushing Bay, a NYSDEC-designated littoral zone, no other wetlands are in the study area (see Figure 7.9-2).

7.9.1.4 Ecosystems

Flushing Bay is a shallow, highly impacted water body that has been greatly altered by human activities over the past century. Almost the entire shoreline is hardened and the hydrodynamics of Flushing Bay have been changed by the creation of LaGuardia Airport, which led to extensive filling and placement of jetties and groins.

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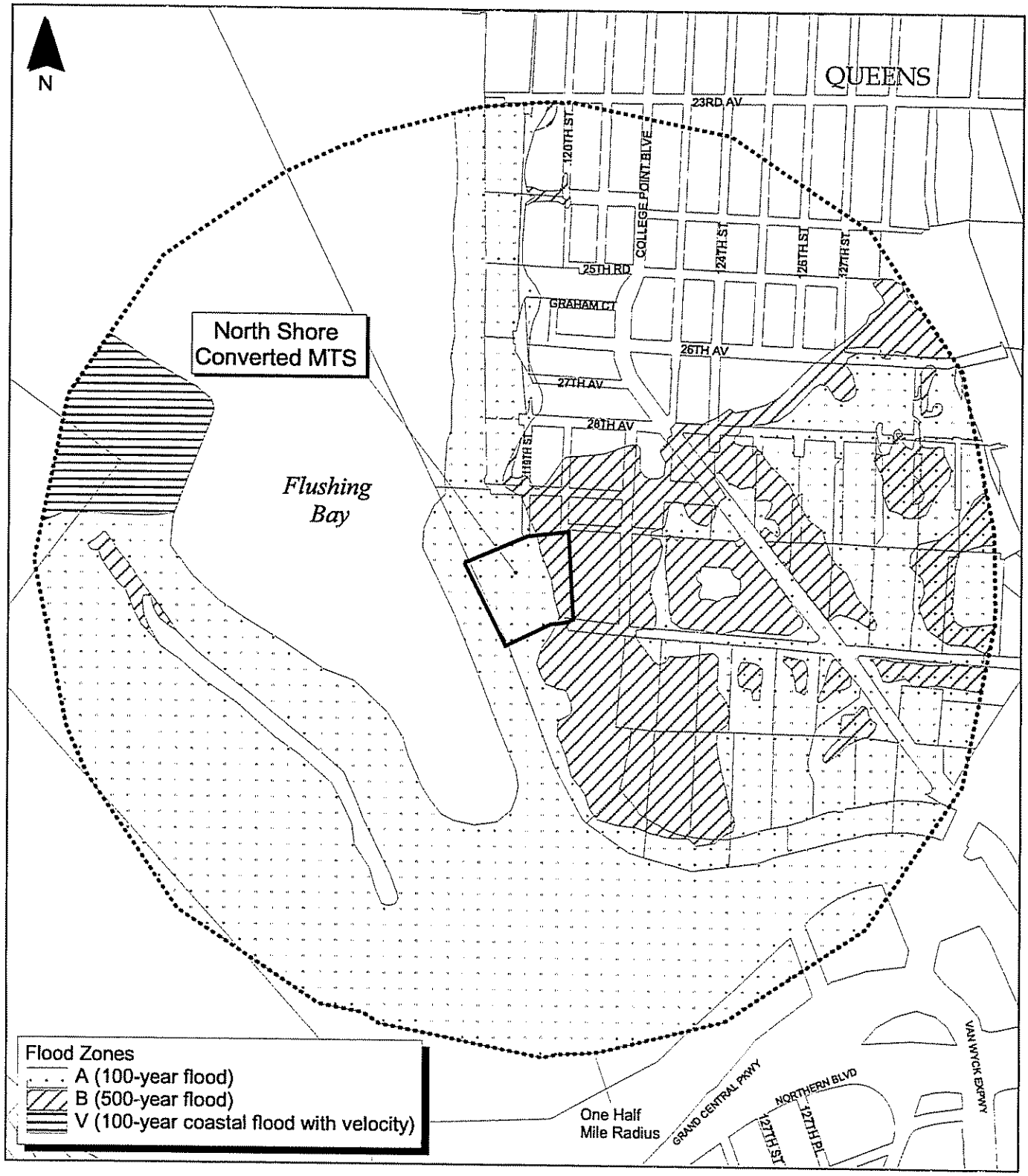
[4] New York City Department of Sanitation, March 2004. Marine Biological Studies of the Marine Transfer Stations Operated by the New York City Department of Sanitation.



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

500 0 500 Feet

HDR Hydroqual URBITRAN DD EEA Cambridge Environmental Inc

Figure 7.9-1 Floodplains

North Shore Converted MTS

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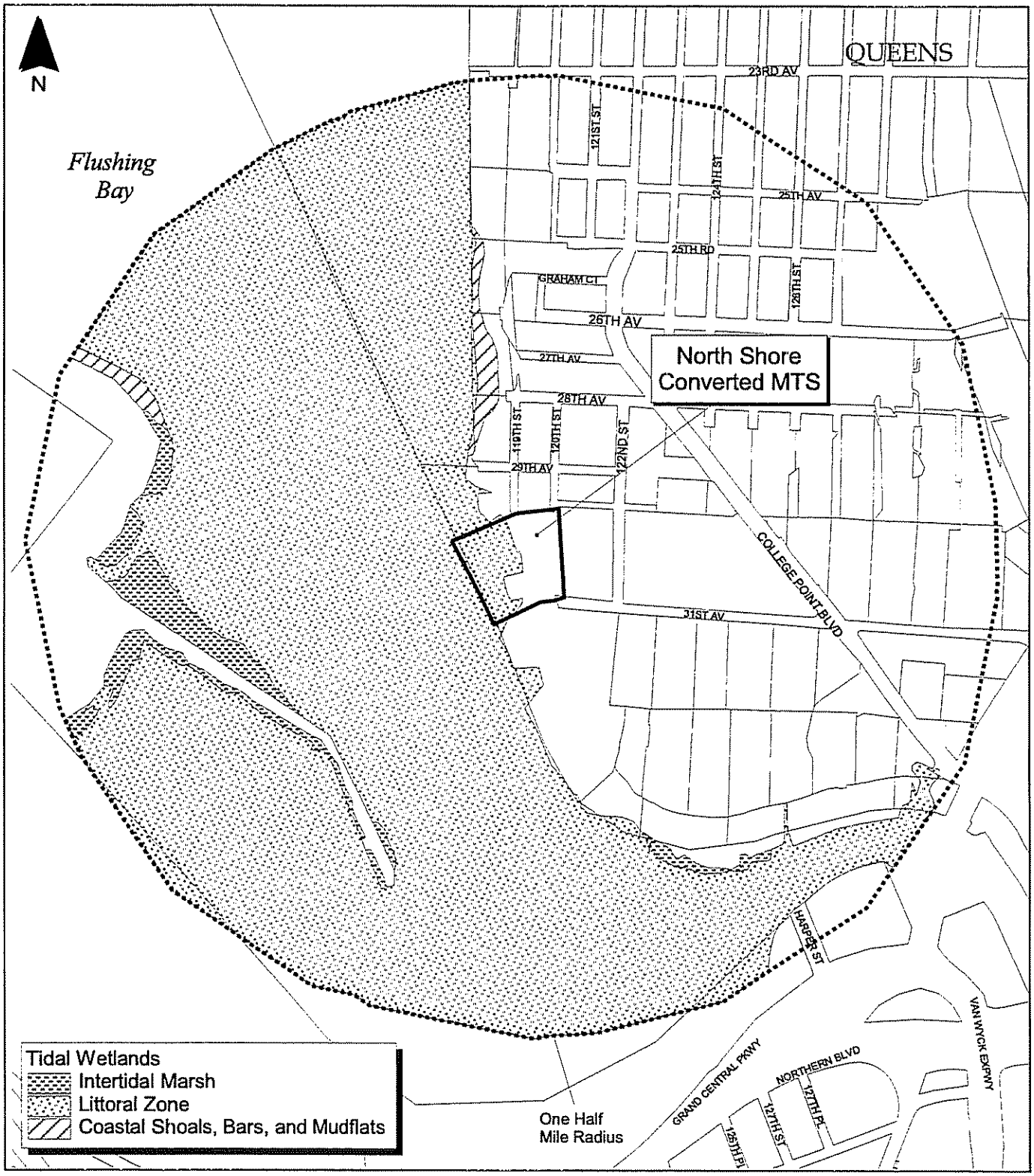

Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

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HDR URBITRAN EEA Cambridge Environmental Inc HydroQual DD

Figure 7.9-2 Wetlands

North Shore Converted MTS

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Much of the upland area on and around the site consists of fill material placed over an intertidal marsh. The original marsh was extensive, covering more than 100 acres that reached as far north as 20th Avenue. The existing MTS was built on pilings over the water with a short causeway that connects it with the shore.

At present, there is little vegetation of significance on the site because most of the surface is covered by buildings, roadways or other hard surfaces. ~~Vegetative cover on the site, which was confined to the shoreline near the existing MTS, was too sparse to be mapped. There were two small patches of *Spartina* sp. and a small fringe of this species along the shoreline, but the cover was very sparse. Various opportunistic plant species are present on the site.~~ Vegetative cover on the site was limited to the shoreline near the existing MTS. Several isolated patches of intertidal maresh vegetation consisting of smooth cordgrass (*Spartina alterniflora*) were present off the southeastern corner of the MTS, as well as to the north of the MTS ramp. One patch of high marsh, consisting of common reed (*Phragmites australis*) was also noted immediately south of the ramp. The tidal wetlands fringing Flushing Bay were delineated and surveyed on April 21, 2004, and the individual patches of wetland vegetation were identified and mapped in February 2005. The stem density within these isolated tidal wetland patches was noted as sparse. Various opportunistic plant species are present on the upland portion of the site, including mugwort (*Artemesia vulgaris*), Queen Anne's lace (*Daucus carota*), poor-man's pepper (*Lepidium virginicum*) and seaside goldenrod (*Solidago semper virens*). Saplings of tree-of-heaven (*Ailanthus altissima*) were observed in the vicinity of the ramp to the existing MTS.

The sediment under and around the existing MTS are silty muds, typical of the soft depositional types found in quiescent areas in Flushing Bay. Flushing Creek contains a large CSO that contributes substantial organic loading to lower Flushing Bay waters. The bay itself is known for highly enriched sediments that contribute to odor problems during warm weather.

A field program that took place in 2003 was designed to fully characterize the marine biological resources of the study area. The program includes monthly sampling for finfish eggs and larvae and water quality, and quarterly sampling for adult finfish, benthic invertebrates and sessile colonizing organisms. Results of the program will be discussed in the following paragraphs.

A total of 126 adult finfish, representing eight species were collected in 2003.[5] The most abundant species were Atlantic silverside (*Menidia menidia*) and Atlantic herring (*Clupea harengus*). Two adult species with EFH listing were collected at the North Shore Converted MTS: Atlantic herring and winter flounder (*Pleuronectes americanus*). The most abundant finfish eggs collected at this facility were cunner (*Tautogolabrus adspersus*) and Atlantic menhaden (*Brevoortia tyrannus*). The most abundant finfish larvae were herring spp. (*Clupea* spp.), Atlantic menhaden, anchovy spp. (*Anchoa* spp.), winter flounder and goby spp. (*Gobiosoma* spp.). A Shannon-Weaver Index[6] indicated that finfish larvae was most diverse at the North Shore Converted MTS.

The most abundant megainvertebrate species collected at the North Shore Converted MTS were sevenspine bay shrimp (*Crangon septemspinosa*) and grass shrimp (*Palaeomonetes vulgaris*). The dominant benthic invertebrates collected were pollution tolerant worms: *Streblospio benedicti*, Oligochaeta and *Haploscoloplos* sp. *S. benedicti* was by far the most abundant, having approximately 15,500 individuals per square meter of sediment. The most abundant epibenthic colonizers collected from the North Shore Converted MTS were *Corophium insidiosum* (amphipod), *Microdeutopus* sp. (amphipod), *Balanus* sp. (barnacle), *Polydora* sp. (polychaete worm), and hydrozoa, mud and algal film.

NYSDEC Breeding Bird Atlas records list the horned lark (*Eremophila alpestris*) as a species with a probable breeding status near the study area. The state legal status of the horned lark is Protected-Special Concern, which includes those species that are not yet recognized as endangered or threatened but for which documented concern exists for their continued welfare in New York, and that are federally-protected wild birds. The peregrine falcon (*Falco peregrinus*), a federally-listed endangered species, was not listed as present for this site in the recent response from the USF&WS.

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[5] Ibid.

[6] The Shannon-Weaver Index is a measure of community diversity. If an individual of the community is selected at random, the index gives a measure of the uncertainty that the selected individual will be of a particular species. The higher the index, the more diverse the community.

7.9.2 Future No-Build Conditions

If the North Shore Converted MTS were not to be built, the study area would remain as is. The limited aquatic and terrestrial natural resources would remain and the study area would continue to be an ecologically unproductive and stressed urban area.

7.9.3 Potential Impacts with the North Shore Converted MTS

7.9.3.1 Geology

The geology of the study area would not be changed other than by the removal of dredge material to accommodate the barges and tugboats. The dredging activity would remove layers of sediments deposited over time and further alter the submarine ecological features of the study area, but would not result in any significant impact.

7.9.3.2 Floodplains

Implementation of the North Shore Converted MTS would have no effect on the elevation of the site. It would be constructed within the 100-year floodplain, and would not include any provisions for raising any portions of the site over this level.

7.9.3.3 Ecosystems

The North Shore Converted MTS would be a pile-supported structure and would result in a net gain of ~~46,402~~ 46,159 square feet ~~of structure~~ over the water. During the demolition of the existing MTS, the upper organic silts lying beneath the structure that was above water would be disturbed to some degree, resulting in re-suspension of the sediment. However, the amount of re-suspended sediment is expected to be low, and the impacts, if any, highly localized. Turbidity and short-term, lowered dissolved oxygen are possible, but not measurable, against the normal background fluctuations. Construction would involve installing piles for the foundation supports and dredging to accommodate the deeper draft of the coastal barges. The benthic and finfish community would be temporarily disrupted during this phase of the project. It can be anticipated

that the benthic invertebrates would recolonize the area within 6 to 12 months and that finfish would return to the area immediately following completion of the construction.[7] Given the relatively small size of the project, minimal overall impact to the benthic community is expected at the North Shore Converted MTS. The removal of the existing platform will also remove the existing epibenthic community; however, the new expanded platform will result in more surface area for epibenthic communities to colonize the site. This would positively affect the epibenthic communities at the North Shore Converted MTS.

The pile-driving and dredging activity during the construction will cause adult finfish to avoid the site. Fish in the herring family are most sensitive to the suspended sediment and noise from construction; flatfish (flounders) are least sensitive. Herring catch was much higher at the North Shore Converted MTS than flounder catch, so it can be assumed that this site will experience herring avoidance during construction activities. Finfish eggs and larvae are more sensitive to suspended sediment and those that settle to the harbor floor may be smothered by sediment. Swift currents may sweep eggs and larvae past the construction site, but the short exposure time should not significantly harm the ichthyoplankton. In addition, larvae will be able to swim away from the impacted environments.

Operational impacts will last the entire lifespan of the facility. The major impact is the footprint of the pier over water. The proposed plan for the North Shore Converted MTS is for an increase in ~~46,402~~ 46,159 square feet of pier. This will result in increased shading that will block sunlight and hinder primary production. The enlarged platform, however, will not adversely impact the ichthyoplankton, benthic, epibenthic or adult finfish communities. A field study conducted on the Hudson River reported no statistical difference in benthic populations in interpier and underpier areas in New York Harbor waters.[8] Epibenthic communities will have a larger surface area to colonize, and finfish should return to the area with the return of food sources.

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[7] U.S. Army Corps of Engineers, 1999. The New York District's Biological Monitoring Program for the Atlantic Coast of New Jersey, Asbury Park to Manasquan Section Beach Erosion Control Project, Draft. Phase II-III. During Construction and 1st Year Post-Construction Studies.

[8] Hudson River Center Site Aquatic Environmental Study Final Report, 1988. Prepared for New York City Public Development Corp. by EEA, Inc.

Experts have differing opinions regarding the effects of shading on finfish. Studies conducted by EEA in the late 1980s showed similar finfish communities in the interpier and underpier environments in a large-scale program on the East River. There were, however, slight differences in the dominant finfish in the populations. Studies by Able *et al.* showed caged juvenile winter flounder (*Pseudopleuronectes americanus*) to have depressed feeding on the benthos beneath piers as compared to feeding activity alongside and between piers.[9] Able's studies are controversial, however, because the fish were caged, and this may impact the results of the study. Some fish are even known to associate with submerged structures, as it provides shelter and surfaces for food to grow. While the field tests appear to be contradictory, there is no doubt that finfish inhabit at least the interface of platforms. However, because the increase in shading over water is very small, there are not expected to be significant deleterious results. There is a possibility of a slight shift in the finfish community with the addition of over-water pier coverage; however, because finfish are transient, this shift may be hard to measure.

The North Shore Converted MTS would not have any significant impact on the few areas of vegetation present on the site. ~~Vegetation observed on the site were invasive weed species that are not rare, endangered or particularly important from an ecological perspective. The sparse *Spartina* sp. patches are not expected to be negatively impacted.~~Vegetation observed on the upland portions of the site consisted of various non-native and "invasive weed species."~~.~~ There would be a slight loss of wetland vegetation from the site. It was estimated that a total of approximately 0.051 acres or 2,237.8 square feet of tidal wetland vegetation situated off the southeast corner of the site would be lost or replaced by deep water pockets of unvegetated littoral zone as a result of the N~~n~~orth Shore Converted MTS and/or the proposed dredging. This includes approximately 224 square feet of high marsh covered by the invasive common reed, and approximately 2,015 square feet of sparsely vegetated intertidal marsh patches covered by smooth cordgrass. This loss would be mitigated by additional plantings of intertidal march and high marsh vegetation to the north of the MTS ramp or off-site. Preliminary site investigations indicate that limited suitable habitat exists to the north of the on-site stone pier; however,

[9] Duffy-Anderson, J.T. & Able, K.W., 2001. "An Assessment of the Feeding Success of Young-of-the-Year Winter Flounder (*Pseudopleuronectes americanus*) Near a Municipal Pier in the Hudson River Estuary, U.S.A."

wetland mitigation plans would be developed and finalized in accordance with guidance received from the NYSDEC. The relatively small (totaling 178 square feet), isolated intertidal marsh patches located to the north of the existing ramp will not be directly impacted by project construction, and are not likely to be indirectly impacted due to shading from the new facility because of their distance from the proposed limit of construction.

The horned lark, a species of special concern, is listed by the NYSDEC as having probable breeding status in the area surrounding the site. However, this bird is only found in open areas with bare ground or short grass.[10] This bird, therefore, would not be found breeding on or using the site and any plans for the site would not impact the bird.

Estuaries, Vol. 24, No. 3, p. 430-440.

[10] Andrle, R.F. & Carroll, J.R., eds., 1988. "The Atlas of Breeding Birds in New York State." Cornell University Press, Ithaca.

7.10 Hazardous Materials

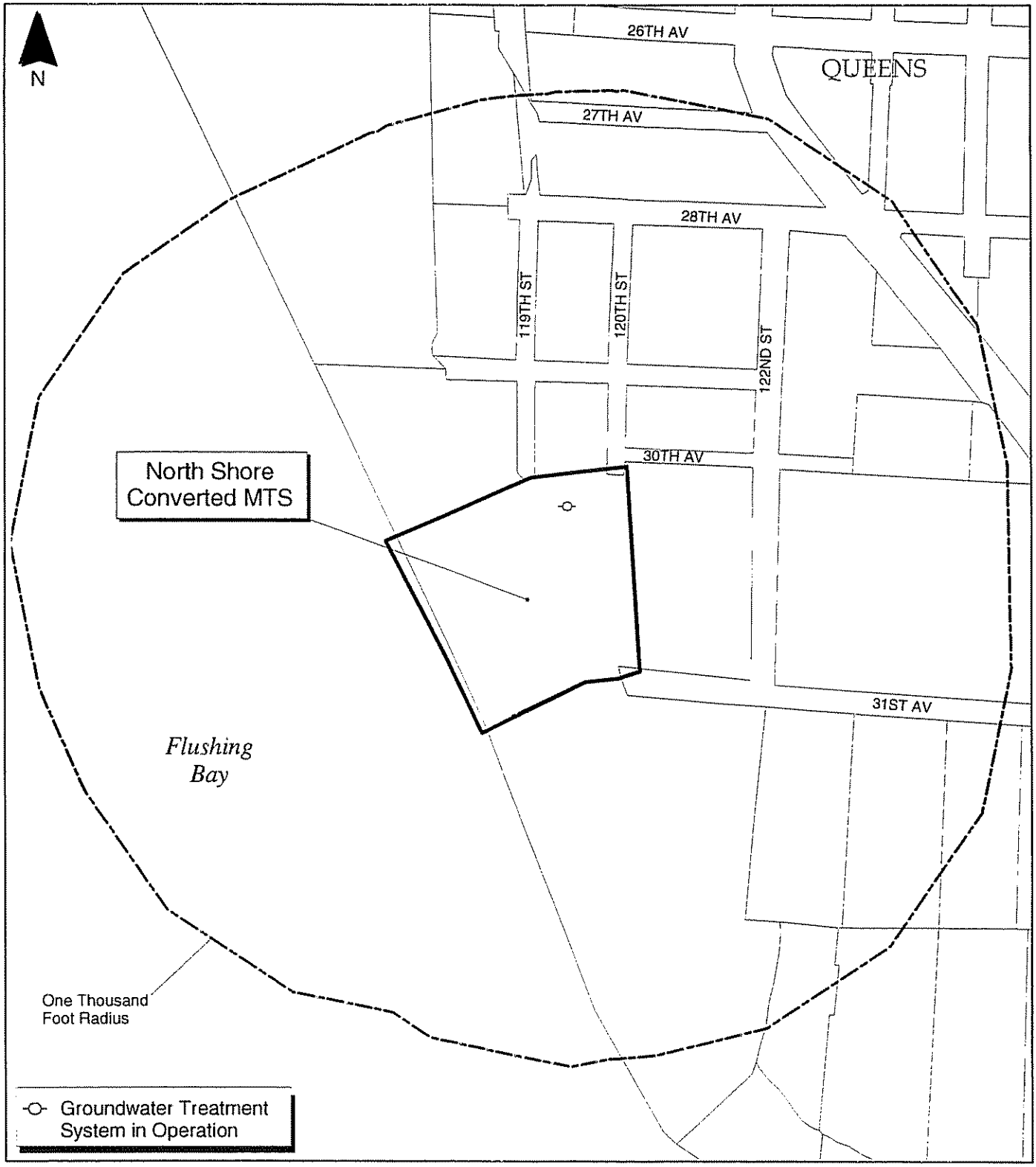
7.10.1 Existing Conditions

Existing Conditions associated with the presence of hazardous materials in soil, groundwater and building components/equipment were investigated within the defined study area. The Hazardous Materials Assessment was performed in accordance with the guidelines for a preliminary assessment presented in the 2001 CEQR Technical Manual and is consistent with the requirements for a Phase I ESA established by the ASTM (ASTM E-1527). The assessment was performed in April 1999 and updated in February 2003. It included a historical land use review, regulatory agency database review, reconnaissance of the study area and surrounding area, and surface and subsurface drainage evaluation.

The historical land use review included an assessment of Sanborn fire insurance maps for the study area, if available, and a Freedom of Information Law request to the FDNY for UST records. Standard federal and state environmental databases were assessed for records of sites within the study area that had evidence of hazardous waste activity or spills. A written request to NYCDEP was made to solicit records pertaining to hazardous or toxic materials activities within the study area. A pedestrian reconnaissance of accessible interior and exterior areas within the study area was conducted, most recently in February 2003. During the reconnaissance, visual evidence was sought of hazardous materials handling or storage, including the presence of tanks, drums, transformers and unusual stains and odors. Topographic maps, visual observations and readily available geologic information sources were reviewed if off-site potential sources of contamination were identified.

7.10.1.1 Definition of Study Area

The study area includes the site and neighboring properties within a 1,000-foot radius (see Figure 7.10-1).



Site delineations and study area boundaries are approximate
Base Map Source: New York City Department of City Planning

200 0 200 Feet

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Figure 7.10-1 Hazardous Material Sites

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7.10.1.2 Delineation of Area of Concern

After review of the applicable databases and an on-site inspection, there is only one area of concern of note. During the reconnaissance of the study area, there was an apparent groundwater remedial system in the parking lot that serves the adjacent DSNY garage. The parking lot would be incorporated into the North Shore Converted MTS. The remedial system was operational in February 2003 and was likely associated with NYSDEC Spill No. 9508111, when, according to regulatory database information, the discovery in 1995 of free petroleum product beneath the DSNY garage led to the installation of a ground water recovery system. As of November 2001, the recovery system was not working effectively and NYSDEC asked for improvement or another approach.

7.10.2 Future No-Build Conditions

The existing MTS would remain standing as is, and operation of the ground water recovery system would continue. The system would require modification or improvement to meet the operational guidelines established by NYSDEC.

7.10.3 Potential Impacts with the North Shore Converted MTS

Implementation of the North Shore Converted MTS may interfere with the ground water recovery system. If so, the system would require modification to retain or improve its operational capability.

In the event that contaminated soils are encountered during construction, the soil would be excavated and disposed of in a manner that is consistent with the levels of contamination as specified in New York State regulations. The necessary and appropriate health and safety measures would be employed during construction to mitigate and minimize any exposure risk to workers or the general public related to the possible subsurface contamination.

7.11 Water Quality

7.11.1 Existing Conditions

7.11.1.1 Definition of the Study Area

The water quality study area encompasses Flushing Bay and the East River, and includes discharges from CSOs and point sources within ½-mile of the site.

7.11.1.2 Water Quality

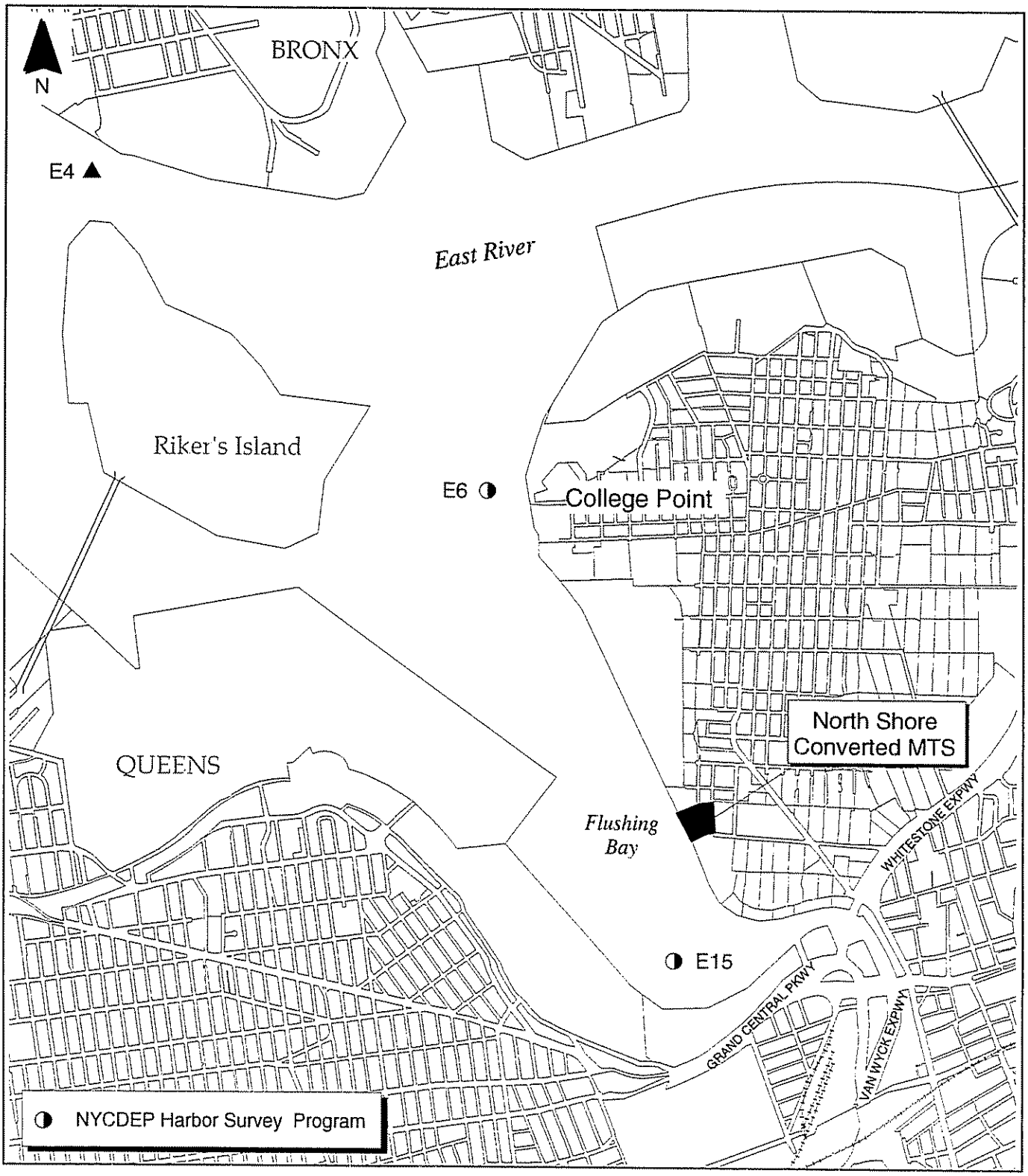
The water quality data for the following monitoring stations, shown in Figure 7.11-1, are generally representative of water quality conditions in the study area:

- NYCDEP Harbor Survey Program – Stations E-6 off of College Point in the East River and E-15 in Flushing Bay; and
- Battelle's 1991 Metals Survey – Stations E-4T and E-4B[11] in the East River off of Hunts Point.

These data, along with NYSDEC's water quality standards and guidance values, are presented in Table 7.11-1. These standards and guidance values for the waters in the vicinity of the site correspond to "Class I," which indicates waters suitable for secondary contact recreation (i.e., fishing and boating).

As shown in Table 7.11-1, the data indicate that, on average, NYSDEC standards and guidance values are met. For NYCDEP Harbor Survey Station E-6, however, the minimum surface and bottom dissolved oxygen between June 1, 2003 and September 30, 2003 did not meet the water quality standards for dissolved oxygen. In addition, the mercury concentration for Battelle Stations E-4T and E-4B did not conform to the water quality standard for mercury.

[11] Stations E-4T and E-4B are located at the same longitude and latitude. Station E-4T is located at the surface of the East River. Station E-4B is located at the bottom of the East River.



Site delineations are approximate
Base Map Source: New York City Department of City Planning

1000 0 1000 Feet

HDR URBITRAN EEA Cambridge Environmental Inc HydroQual PB

Figure 7.11-1 Ambient Water Quality Stations

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Table 7.11-1
Existing Water Quality Conditions and Standards
North Shore Converted MTS Study Area

Average Concentrations						
Parameter	**Units**	**Station E-6[1]**	**Station E-15[2]**	**Station E-4T[3]**	**Station E-4B[4]**	**NYS Class I Standards**
Dissolved Oxygen (surface/minimum)	mg/L	6.7 [5]/3.2 [6]	7.3 [7]/4.1 [8]	-------	-------	4.0
Dissolved Oxygen (bottom/minimum)	mg/L	6.6 [9]/3.1 [6]	6.3 [7]/4.1 [8]	-------	-------	4.0
BOD (surface)	mg/L	3.1 [10]	3.4 [10]	-------	-------	-------
BOD (bottom)	mg/L	3.3 [10]	3.4 [10]	-------	-------	-------
Total Coliform (surface)	MPN/100 ml	1,171 [11]	8,458 [11]	-------	-------	10,000
Total Coliform (bottom)	MPN/100 ml	1003 [11]	5,034 [11]	-------	-------	10,000
Fecal Coliform (top)	MF	56.7	156	-------	-------	2,000
Fecal Coliform (bottom)	MF	96 [12]	489 [12]	-------	-------	2,000
Total Suspended Solids (surface)	mg/L	10	7	-------	-------	-------
Total Suspended Solids (bottom)	mg/L	16	7	-------	-------	-------
NH_3-N	mg/L	0.524	0.444	-------	-------	-------
(NO_3 + NO_2)	mg/L	0.364	0.273	-------	-------	-------
Total Phosphorous	mg/L	0.195 [13]	0.379 [13]	-------	-------	-------
Dissolved PO_4	mg/L	-------	-------	-------	-------	-------
Chlorophyll-a	µg/L	3.1	20.8	-------	-------	-------
Arsenic	µg/L	-------	-------	-------	-------	36 [14,15]
Cadmium	µg/L	-------	-------	0.07 [14]	0.06 [14]	7.7 [14,15]
Chromium	µg/L	-------	-------	-------	-------	-------
Copper	µg/L	-------	-------	1.83 [16]	1.83 [16]	5.6 [15,16]
Lead	µg/L	-------	-------	0.20 [14]	0.19 [14]	8.0 [14,15]
Mercury	µg/L	-------	-------	0.0028 [14]	0.0029 [14]	0.0026 [14,15]
Nickel	µg/L	-------	-------	1.50 [14]	1.46 [14]	8.2 [14,15]
Silver	µg/L	-------	-------	0.0083 [14]	0.0078 [14]	-------
Zinc	µg/L	-------	-------	5.32 [14]	5.11 [14]	66 [14,15]
Cyanide	µg/L	-------	-------	-------	-------	1.0 [15]

Notes:

(1) Average concentrations for 2003 NYCDEP Harbor Survey Station E-6, located off College Point in the East River.

(2) Average concentrations for 2000 NYCDEP Harbor Survey Station E-15, located at Flushing Bay.

(3) Average concentrations for 1991 Battelle Ambient Survey Station E-4T, located off Hunts Point on the surface of the East River.

(4) Average concentrations for 1991 Battelle Ambient Survey Station E-4B, located off Hunts Point on the bottom of the East River.

(5) Represents average between January and December 2003.

(6) Minimum between June 1, 2003 and September 30, 2003.

(7) Represents average between May and September 2000.

(8) Minimum between June 1, 2000 and September 30, 2000.

(9) Represents average between January and December 2003.

(10) Latest available data 1997.

(11) Latest available data 1996.

(12) Latest available data 1999.

(13) Latest available data 1998.

(14) Guidance values and data are for dissolved metals.

(15) NYSDEC Guidance Value (NYSDEC TOGS 1.1.1, June 1998, errata sheet January 1999 and addendum April 2000).

Notes for Table 7.1-1 (continued)
(16) Site-specific chronic and acute criteria for dissolved copper in New York/New Jersey Harbor
BOD = biochemical oxygen demand
NH_3-N = ammonia
NO_3 = nitrate; NO_2 = nitrite
PO_4 = phosphate
mg/L = milligrams per liter
MPN/100 ml = most probable number per 100 milliliters
MF = membrane filter
µg/L = micrograms per liter

7.11.1.3 Permitted Discharges

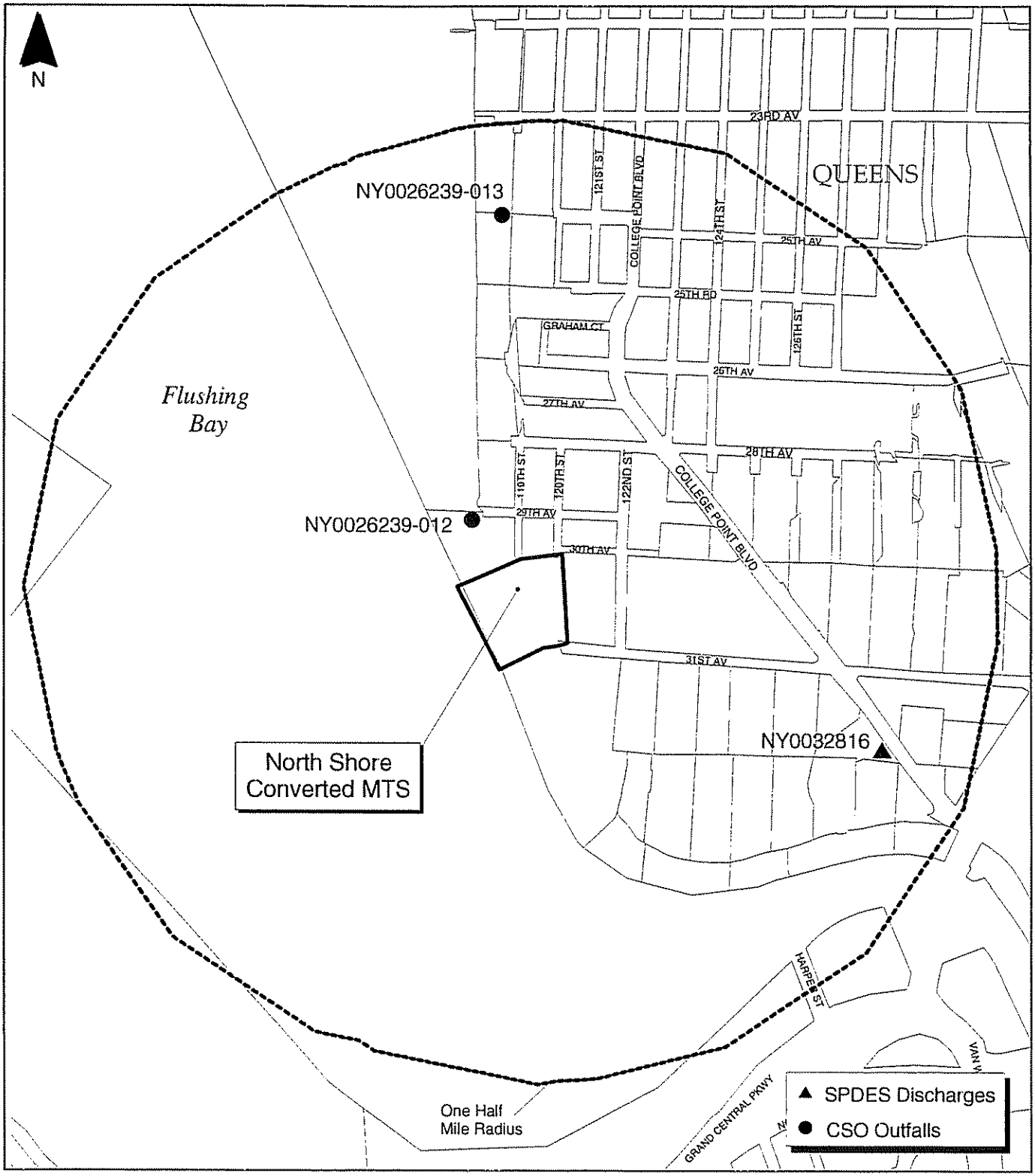
A review of the most recently available NYSDEC and USEPA databases indicated that there are three permitted discharges in the vicinity of the site. Those within a ½-mile radius are listed in Table 7.11-2 and shown in Figure 7.11-2. They consist of two CSOs and one industrial site, all of which are permitted by the NYSDEC.

Table 7.11-2
Existing Permitted Discharges
North Shore Converted MTS Study Area

Combined Sewer Overflow(CSOs)			
Outfall Location/WPCP	**Permit Number**	**County**	**Receiving Water Body**
29th Avenue/Tallman Island	NY0026239-012	Queens	Flushing Bay
25th Avenue/Tallman Island	NY0026239-013	Queens	Flushing Bay
Point Sources			
Company Name	**Permit Number**	**County**	**Receiving Water Body**
Lefferts Oil Terminal, Inc.	NY0032816	Queens	Flushing Creek

7.11.1.4 Existing Pollutant Loads and Stormwater Runoff

Using available databases on stormwater pollutant concentrations and local precipitation data, estimates of stormwater pollutant loadings were calculated. The existing paved areas were assumed to be completely impervious, and the existing unpaved areas were assumed to have 100% storage and/or infiltration. A runoff flow of 0.514 cfs was calculated using the impervious site area (8.56 acres), an average rainfall intensity of 0.06 inches/hour and a runoff coefficient set equal to 1. The resulting stormwater loads, shown in Table 7.11-3, represent the existing loads at the site.



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

500 0 500 Feet

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Figure 7.11-2 Permitted Outfalls and CSO Locations North Shore Converted MTS

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Table 7.11-3
Estimated Existing Pollutant Loads and Runoff Flows
North Shore Converted MTS Study Area

Pollutant	Concentration	Pollutant Loading (lbs/day)
Fecal Coliform MPN/100 ml	34,000	94,186[1]
BOD mg/L	11	31
Heavy Metals		
Copper µg/L	35	0.097
Lead µg/L	28	0.078
Zinc µg/L	154	0.427
Total Impervious Area (acre) = 8.56		Runoff Coefficient (C) = 1.00
Average Rainfall Intensity per Storm (inches/hour) = 0.06[2]		Runoff Flow (cfs) = 0.514

Notes:
(1) Coliform loads are not shown in lbs/day. Loading comparable to MPN/100 ml.
(2) Based on Central Park Rain Data (1969-2002); The National Climatic Data Center.

7.11.2 Future No-Build Conditions

Water quality would be expected to remain the same or improve. Water quality improvements would be due to ongoing water quality improvement programs, such as the NYCDEP CSO Abatement Program, which will reduce untreated discharges to receiving waterways; nitrogen removal activities, which will reduce nitrogen loads from City WPCPs; and other programs. Stormwater loads from the existing site would not be expected to change, so no significant water quality impacts would be expected.

7.11.3 Potential Impacts with the North Shore Converted MTS

With the development and operation of the North Shore Converted MTS, conditions would be similar to Future No-Build Conditions. All solid waste processing would occur within structures on the site. All process wastewater from waste handling operations in the facility, such as washdown water, would be routed to an on-site pretreatment system (e.g., oil/water separation). After treatment, the process wastewater would be discharged to the municipal sewer system and, ultimately, to the Tallman Island WPCP, where it would be treated prior to discharge to the East River and, therefore, would not adversely affect water quality.

Stormwater loads and impervious area, shown in Table 7.11-4, would be expected to increase above Existing Conditions. According to the 208 Model, however, the increased loads would have no significant impact on water quality in the adjacent surface waters.

The North Shore Converted MTS may also require dredging activities to construct the waterfront structures and improve existing water depths in the immediate vicinity of the site. All dredging activities would be conducted in compliance with applicable federal, state and local regulations, and required permits would be acquired prior to any proposed dredging activities. Applicable and appropriate measures (e.g., closed clamshell buckets, silt curtains, etc.) would be implemented during any and all dredging activities to minimize and/or eliminate any short-term impacts to local water quality. Short-term impacts could include an increase in turbidity during active dredging operations; however, dredging would not result in any significant adverse long-term impacts.

Table 7.11-4
Impervious Area and Estimated Pollutant Loads
North Shore Converted MTS

			Estimated Pollutant Loadings/Incremental Change[1]				
Conditions	Total Impervious Area (acres)	Change in Impervious Area (acres)	Fecal Coliform[2]	BOD (lbs/day)	Copper (lbs/day)	Lead (lbs/day)	Zinc (lbs/day)
Existing Conditions	8.56	0.0	94,186/NA	31/NA	0.097/NA	0.078/NA	0.427/NA
Future Build Conditions	9.45	0.89	103,932/9,746	34/3	0.107/0.010	0.086/0.008	0.471/0.044

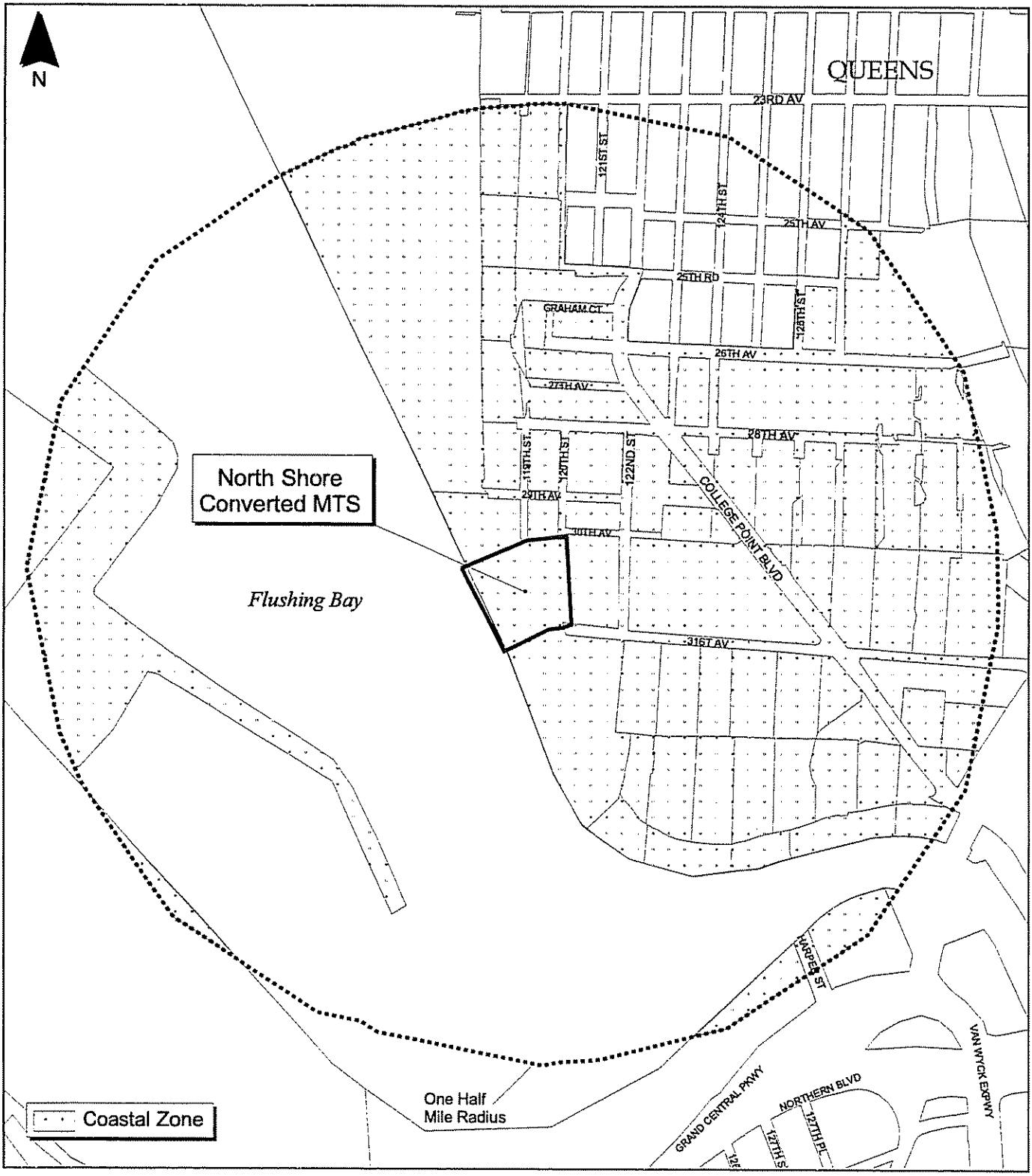
Notes:
(1) Incremental change refers to the difference in pollutant loading between the Existing Conditions and Future Build Conditions.
(2) Coliform loads are not shown in lbs/day. Loading comparable to MPN/100 ml.
NA = Not Applicable

7.12 Waterfront Revitalization Program

7.12.1 Introduction

The Federal Coastal Zone Management Act of 1972 established coastal zone management programs to preserve, protect, develop and restore the coastal zone of the U.S. Due to its proximity to the waterfront of Flushing Bay, the North Shore Converted MTS would be within the City's coastal zone boundary (see Figure 7.12-1). According to "The New Waterfront Revitalization Program," the North Shore Converted MTS would be classified as a water-dependent, industrial use. It would be located within Reach 10 Queens North Shore as indicated within the "New York City Comprehensive Waterfront Plan - Reclaiming the City's Edge" and the "Plan for the Queens Waterfront." It is not currently located within an NYCDCP-designated SNWA or SMIA. The North Shore Converted MTS is subject to review under the 10 primary policies and the 32 subpolicies identified within "The New Waterfront Revitalization Program" that address the waterfront's important natural, recreational, industrial, commercial, ecological, cultural, aesthetic and energy resources.

The North Shore Converted MTS was reviewed to determine its general consistency with each of these policies and subpolicies. This review identified several subpolicies that were not applicable. These included subpolicies 1.1, 1.2, 2.1, 3.1, 4.4, 6.2, 6.3, 8.1, 8.5, 9.2 and 10.2. All policies and subpolicies, including those identified as not applicable, are listed in Table 3.14.1. In instances where a component of the North Shore Converted MTS required clarification or was inconsistent with a specific policy or subpolicy, further discussion is provided below. A description of waste handling operations that would occur at the North Shore Converted MTS is provided in Section 2.2.4.



Site delineations are approximate.
Base Map Source: New York City Department of City Planning

500 0 500 Feet

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Figure 7.12-1 Coastal Zone Boundary

North Shore Converted MTS

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7.12.2 Consistency Assessment

Policy 1: Support and facilitate commercial and residential redevelopment in areas well-suited to such development.

1.3 Encourage redevelopment in the coastal area where public facilities and infrastructure are adequate or will be developed.

A review of available information indicates that there are sufficient public services and facilities to support the new North Shore Converted MTS. As part of the North Shore Converted MTS, connections from the new facility to existing utilities in the vicinity (e.g., sewer and electrical connections, etc.) would be established.

Policy 2: Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.

2.2 Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas.

The existing North Shore MTS is not currently located within a designated SMIA. Its development would involve the demolition of the existing MTS and the construction of a new MTS at and north of the existing MTS site. The positioning of the proposed Converted MTS would allow for barge access and would minimize the amount of dredging that needs to be done at the site. In addition, there is a required design slope needed for the access ramp in order for trucks to access the site. The North Shore Converted MTS would involve the conversion of the existing facility from a truck-to-barge waste transfer station into a TCB MTS station that would transport DSNY-managed Waste to remote out-of-City disposal facilities by marine transport.

The demolition and subsequent site redevelopment, as described in Section 2.2.4, would help to restore and revitalize industrial waterfront property and would be compatible with existing and neighboring heavy industrial and maritime uses. Waterfront development would be comprised of four primary components: (1) an enclosed over-water processing building which would include a tipping floor, loading floor and pier level; (2) an elevated access ramp to the processing building; (3) a gantry crane, outside of the processing building; and (4) a ~~rehabilitated bulkhead and~~ new fendering system. A gantry crane would be used in the loading and unloading of DSNY barges at the facility. The North Shore Converted MTS would be consistent with existing land uses in the vicinity of its site and with the "Plan for the Queens Waterfront," which recommends the continued industrial use of the area. Although it would not encourage or facilitate the siting of any additional water-dependent uses, the North Shore Converted MTS would represent an expansion and revitalization of an existing water-dependent use and would be compatible with surrounding uses. The North Shore Converted MTS would, therefore, be consistent with this subpolicy.

2.3 *Provide infrastructure improvements necessary to support working waterfront uses.*

The North Shore Converted MTS would involve the demolition of the existing MTS structure and the subsequent development of a new MTS at the site. The North Shore Converted MTS would allow for the truck delivery of waste to the facility where waste would be placed in sealed containers, loaded onto DSNY barges and transported to out-of-City disposal facilities.

Waterfront development would be comprised of four primary components: (1) an enclosed over-water processing building which would include a tipping floor, loading floor and pier level; (2) an elevated access ramp to the processing building; (3) an outdoor gantry crane; and (4) a ~~rehabilitated bulkhead and~~ new

fendering system. A gantry crane would be used in the loading and unloading of DSNY barges at the facility. The pilings that support the existing MTS would be removed as part of the demolition activities and new pilings would be installed. In addition, the North Shore Converted MTS would require dredging to construct the new pier structure and improve existing water depths at and in the immediate vicinity of the site to allow for the unimpeded operations of barges and tugboats once the North Shore Converted MTS became operational. All required dredging would be conducted in compliance with applicable federal, state and local regulations and required permits would be acquired prior to any dredging activities.

Policy 3: Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation centers.

3.2 Minimize conflicts between recreational, commercial, and ocean-going freight vessels.

Development of the North Shore Converted MTS would involve the revitalization of an existing waterfront use and would not interfere with any maritime industrial, commercial or recreational vessel activities in the vicinity of its site. Activities within Flushing Bay resulting from the North Shore Converted MTS would be limited to barge loading along the pier level and the periodic swapping of loaded barges. Approximately ~~four or five~~three barges would be filled on a daily basis at the North Shore Converted MTS. These swapping activities would be in close proximity to the new MTS structure and comparable in nature to previous barge activities at the existing MTS; therefore, no adverse impacts upon other uses within the water body would be anticipated. The North Shore Converted MTS would, therefore, be consistent with this subpolicy.

3.3 *Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.*

The existing MTS managed solid waste through a truck-to-barge system where loose waste was placed in open barges. The North Shore Converted MTS would be a TCB MTS where waste would be transferred into containers that would be sealed and placed onto flat deck barges that would transport DSNY-managed Waste to out-of-City disposal locations and, therefore, would be protective of the aquatic environment and surrounding land and water uses. All solid waste handling would occur within an enclosed processing building. All waste would be placed in sealed containers before leaving the building for loading on barges.

Building ventilation would be maintained under negative pressure, which would maintain dust inside the enclosed processing building. Additional dust, odor and vector control systems would also be used to minimize impacts to the surrounding environment. Litter control methods, such as routine sweeping and washing of the tipping floor, would be implemented to minimize or eliminate the potential for litter entering surface waters. All process wastewaters generated on site (e.g., washdown waters, etc.) would be treated prior to their discharge to the municipal sewer system. In addition, on-site storage of petroleum products and hazardous materials related to the operation of the North Shore Converted MTS would be done in accordance with applicable federal, state and local regulations. The North Shore Converted MTS would be protective of the surrounding environment and, therefore, consistent with this subpolicy.

Policy 4: Protect and restore the quality and function of ecological systems within the New York City coastal area.

4.1 *Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas, Recognized Ecological Complexes, and Significant Coastal Fish and Wildlife Habitats.*

Based upon a review of SNWAs, as described in "The New Waterfront Revitalization Program," as well as Recognized Ecological Complexes and SCFWH information, the North Shore Converted MTS is not within a designated area. The North Shore Converted MTS would represent an expansion in size of a previous use and would not be anticipated to result in any long-term impacts to natural resources in the vicinity of this site. The North Shore Converted MTS would, therefore, be consistent with this subpolicy.

4.2 Protect and restore tidal and freshwater wetlands.

A review of NYSDEC tidal and freshwater wetland maps was conducted to determine the presence of wetlands within the site. As noted in Section 7.9.1, the North Shore Converted MTS would be located within Flushing Bay, a NYSDEC-designated littoral zone. In addition, a wetland delineation was performed on February 4, 2005, and indicated the presence of intertidal and high marsh areas consisting of *Spartina alterniflora* and *Phragmites australis* respectively. No freshwater wetlands exist on the site. The North Shore Converted MTS would involve the demolition of the existing MTS structure and development of a new MTS at and in the vicinity of the existing facility. These activities and anticipated dredging would result in limited, short-term ~~impact~~ effects upon ~~to~~ these tidal wetlands.

Dredging activities associated with the development of the North Shore Converted MTS are not anticipated to have significant ~~impacts~~ effects on wetlands in the vicinity of the site, primarily due to previous and ongoing activities and previous dredging that has historically occurred at the existing MTS. ~~Mitigation for potential~~Potential ~~impacts~~ effects upon wetlands would be ~~proposed~~ addressed during the environmental review and permitting of the North Shore Converted MTS. ~~This mitigation, if required,~~ DSNY in coordination with NYSDEC and other involved agencies would determine the appropriate measures to address potential ~~impacts~~ effects that may occur due to the North Shore Converted MTS and would effectively restore these wetlands and their associated value. The North Shore Converted MTS would, therefore, be consistent with this subpolicy.

4.3 *Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.*

The NYSDEC Breeding Bird Atlas identified the horned lark (*Eremophila alpestris*), a designated species of Special Concern, as having probable breeding status in the area surrounding the site. However, as discussed in Section 7.9.3, this bird is only found in open areas with bare ground or short grass; therefore, the over-water North Shore Converted MTS would not be anticipated to interfere with this species.

The pilings that support the existing MTS would be removed as part of the demolition, and new pilings would be installed to support the North Shore Converted MTS. In addition, dredging would be required to construct the pier structure for the North Shore Converted MTS and to improve existing water depths at and in the immediate vicinity of the site to allow for unimpeded operations of barges and tugboats once it became operational. As stated in Section 7.9.3, modifications to the site would pose little, if any, adverse ecological impacts or loss of habitat to rare or endangered species due to the disturbed nature of the site. Sanitary and process wastewaters would be routed to on-site treatment systems and would then be discharged to the municipal sewer system. Stormwater runoff from the North Shore Converted MTS and the storage of any petroleum products would be conducted in accordance with applicable federal, state and local regulations. Further, the North Shore Converted MTS would not introduce hazardous wastes or other pollutants into the environment that could adversely impact fish and wildlife resources within the coastal area.

Policy 5: Protect and improve water quality in the New York City coastal area.

5.1 Manage direct or indirect discharges to waterbodies.

The North Shore Converted MTS would be developed in accordance with applicable federal, state and local regulations. Consistent with this subpolicy, sanitary and process wastewaters (e.g. floor washdown waters, etc.) would be conveyed to an on-site treatment system, which would consist of oil/water separators, etc., discharging eventually to the municipal sewer system. In addition, the slope of the tipping floor would prevent the build-up of free liquids by directing all liquids to drains. Stormwater runoff from the North Shore Converted MTS would be managed in accordance with all applicable federal, state and local regulations.

In addition, the majority of activity associated with the North Shore Converted MTS would be conducted within an enclosed processing building. Only sealed, air- and watertight containers would be transferred to barges outside of the processing building by gantry cranes installed at the pier level. Inside the facility, several measures would be taken to minimize the potential for environmental degradation as a result of the facility. Building ventilation would be maintained under negative pressure, which would keep dust inside the enclosed processing building. Litter control methods such as routine sweeping and washing of the tipping floor would be implemented to minimize or eliminate the potential for litter entering surface waters. The North Shore Converted MTS would be consistent with this subpolicy.

5.2 Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.

BMPs would be used to the extent possible during all phases of construction, including demolition of the existing MTS structure and operation of the North Shore Converted MTS, in order to minimize any nonpoint discharges. The MTS

would comply with federal, state and local requirements concerning the management of stormwater runoff and erosion. All handling and containerization of solid waste would be conducted within an enclosed processing building. During construction, non-structural (such as silt curtains) and, if necessary, structural, measures would be used to minimize nonpoint source pollution.

5.3 *Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.*

As part of the North Shore Converted MTS, the pilings that support the existing MTS would be removed and new pilings would be installed to support the new building. In addition, dredging would be required to construct the pier structure for the North Shore Converted MTS and to improve existing water depths at and in the immediate vicinity of the site to allow for the unimpeded operation of barges and tugboats. Any dredging done as part of the construction of the new MTS would result in temporary impacts and would be conducted in a manner to minimize siltation and erosion and other short-term impacts to water quality. All dredged materials would be disposed of at a permitted upland facility in accordance with applicable federal, state and local regulations. Non-structural (such as silt curtains) and, if necessary, structural, measures would be employed to minimize siltation and potential adverse impacts to tidal wetlands in the vicinity. Therefore, the North Shore Converted MTS would be consistent with this subpolicy.

5.4 *Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.*

The North Shore Converted MTS would have no impact on the quality or quantity of surface or ground waters. Sanitary and process wastewaters (e.g. floor washdown waters, etc.) would be conveyed to an on-site treatment system and

would then discharge to the municipal sewer system. Stormwater runoff from the North Shore Converted MTS would be managed in accordance with all applicable federal, state and local regulations. No surface or ground waters in the vicinity of the site constitute a primary or sole source of water supply. The North Shore Converted MTS would be consistent with this policy.

Policy 6: Minimize loss of life, structures and natural resources caused by flooding and erosion.

6.1 Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the condition and use of the property to be protected and the surrounding area.

According to a review of the FEMA National Flood Insurance Program maps, the site is located entirely within the 100-year floodplain boundary (Zone A). As part of the North Shore Converted MTS, the existing MTS would be demolished and a new MTS constructed at and north of the site. The pilings that support the existing MTS would be removed as part of the demolition and new pilings would be installed to support the new building. To the extent practicable, non-structural (such as silt curtains) and, if necessary, structural, measures would be used to minimize impacts due to flooding and erosion during the demolition of the existing MTS and subsequent construction of the new, expanded processing building. Construction of the new North Shore Converted MTS would not affect the potential for flooding or erosion. All structures would comply with applicable building code requirements.

Policy 7: Minimize environmental degradation from solid waste and hazardous substances.

7.1 Manage solid waste material, hazardous wastes, toxic pollutants, and substances hazardous to the environment to protect public health, control pollution and prevent degradation of coastal ecosystems.

The North Shore Converted MTS would not involve the storage, treatment or disposal of hazardous waste, but would facilitate the management and processing of solid waste through a TCB system and marine transport to out-of-City disposal sites. Unless emergencies close the facility, solid waste would generally be containerized within 24 hours of tipping. All solid waste handling operations would be conducted in accordance with NYSDEC Part 360 regulations (6 NYCRR Parts 360-1 and 360-11) for solid waste transfer stations, which would be incorporated by reference into the permit to construct and operate the North Shore Converted MTS. The majority of North Shore Converted MTS activities would occur within an enclosed processing building. Radiation detection equipment would be located at the facility, and contingency plans would be in place in the event of unauthorized waste and/or other situations that could disrupt the operation of the facility. Only sealed, air- and watertight containers would be used outside of the facility.

On-site storage of petroleum or hazardous materials related to the operation of the North Shore Converted MTS would be minimal and all storage would be in accordance with applicable federal, state and local regulations. The North Shore Converted MTS would be operated in a manner to ensure that there would be no impact to ground and surface water supplies, significant fish and wildlife habitats, recreational areas and scenic resources.

7.2 *Prevent and remediate discharge of petroleum products.*

See response to Subpolicy 7.1.

7.3 *Transport solid waste and hazardous substances and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.*

See response to Subpolicy 7.1.

Policy 8: Provide public access to and along New York City's coastal waters.

8.1 Preserve, protect and maintain existing physical, visual and recreational access to the waterfront.

Due to the existing, heavy industrial uses at and in the immediate vicinity of the North Shore Converted MTS, public access would not be compatible with the principal use of the site. Therefore, this subpolicy is not applicable.

8.2 Incorporate public access into new public and private development where compatible with proposed land use and coastal location.

The North Shore Converted MTS would be a stand-alone, water-dependent, industrial facility fronting Flushing Bay. Public access would not be compatible with the North Shore Converted MTS; however, its development would not preclude any future development of public access at other locations along the Flushing Bay waterfront.

8.3 Provide visual access to coastal lands, waters and open space where physically practical.

Development of a new North Shore Converted MTS site would represent an expansion of an existing waterfront use that is currently inactive and would not impair visual access to coastal lands, waters or open space. Also see response to Subpolicy 9.1.

8.4 Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.

Only one significant, mapped park, Flushing Meadows-Corona Park, was identified approximately ½-mile south of the site. The North Shore Converted MTS, however, would have no effect on this or any other open space resource within the study area. Therefore, it would be consistent with this subpolicy.

Policy 9: Protect scenic resources that contribute to the visual quality of the New York City coastal area.

9.1 Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.

The new MTS structure would have no significant impact on the site, the urban design or visual quality of the surrounding area or the existing (non-sensitive) view corridors, as noted in Section 7.7.3. Based on the information presented in that section, the North Shore Converted MTS would be consistent with this subpolicy.

9.2 Protect scenic values associated with natural resources.

The North Shore Converted MTS would involve the expansion of an existing use and would pose no impact to scenic values associated with natural resources. Therefore, this subpolicy is not applicable.

Policy 10: Protect, preserve and enhance resources significant to the historical, archaeological, and cultural legacy of the New York City coastal area.

10.1 Retain and preserve designated historic resources and enhance resources significant to the coastal culture of New York City.

The North Shore Converted MTS will have no effect on any cultural resources on or near the site, as noted in Section 7.6.3. Based on the information presented in that section, the North Shore Converted MTS would be consistent with this subpolicy.

10.2 Protect and preserve archaeological resources and artifacts.

No archaeologically significant resources are located at the site or in the study area. This subpolicy is, therefore, not applicable.

7.13 Infrastructure, Solid Waste and Sanitation Services, and Energy

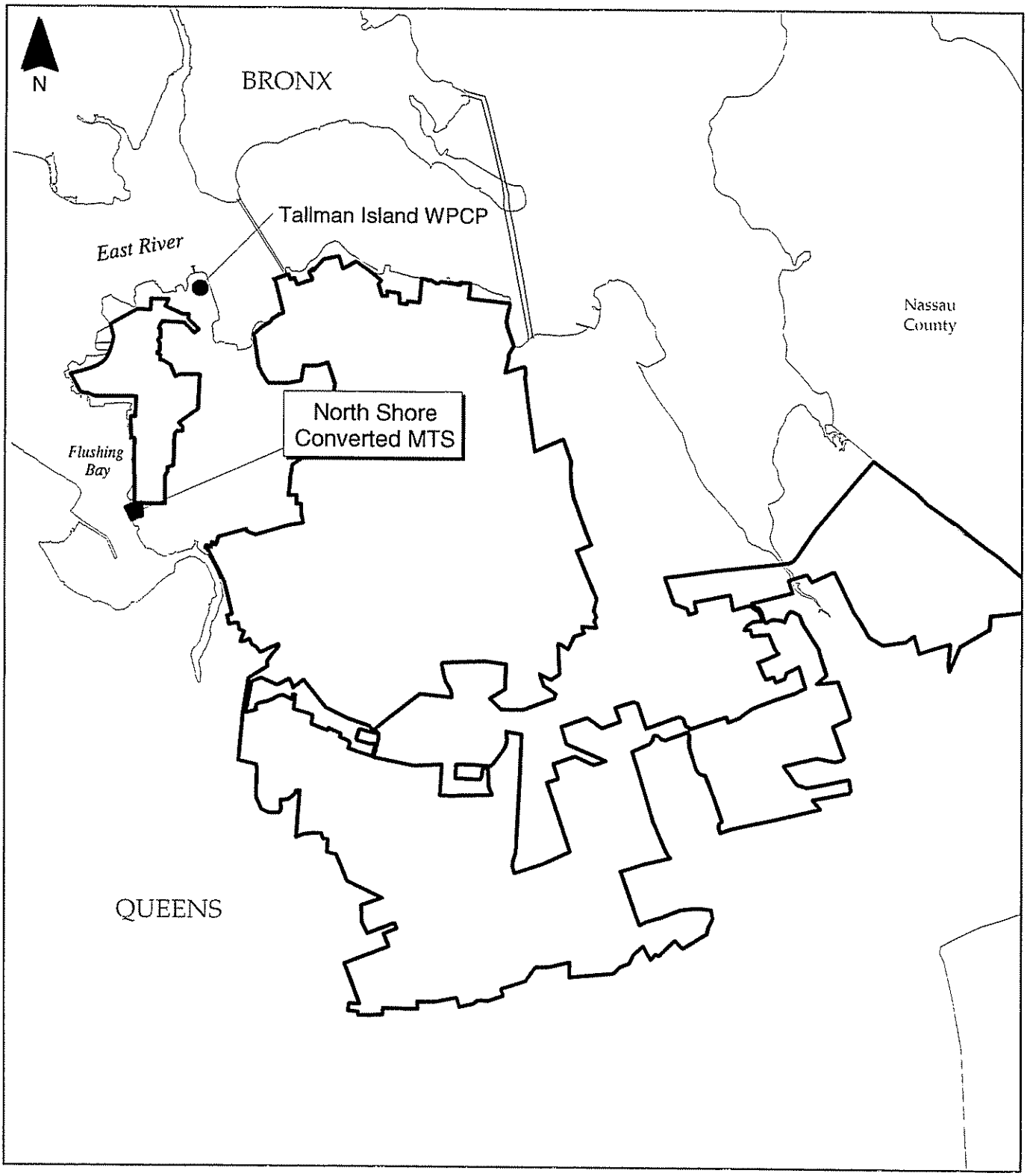
7.13.1 Existing Conditions

7.13.1.1 Water Supply

Water is supplied to the North Shore MTS from the Delaware and Catskill reservoir systems through the City's municipal water distribution system. An off-site 8-inch-diameter pipe along 122nd Street north of 30th Avenue provides potable water to the facility for both process and sanitary requirements. Water pressure throughout the City system is generally maintained at about 20 psi, which is the minimum pressure acceptable for uninterrupted service (2001 CEQR Technical Manual).

7.13.1.2 Sanitary Sewage and Stormwater

A review of NYCDEP I&I maps showed that the site is served by the Tallman Island WPCP, which serves portions of Queens. The WPCP drainage area is illustrated in Figure 7.13-1. From July 2002 through June 2003, the WPCP treated an average of 54 mgd of wastewater under dry weather flow conditions and an average flow of 58 mgd, which includes the sanitary and stormwater flows received by the WPCP during wet weather (Table 7.13-1). The maximum dry weather flow during this period was 58 mgd during September 2002 and June 2003 and the maximum average flow was 65 mgd during June 2003. Effluent from the plant is discharged into the East River, and is regulated by the NYSDEC under the SPDES. The current SPDES permit limit for flow to the Tallman Island WPCP is 80 mgd. It is estimated that current on-site employee water usage at the MTS is about 75 gpd. This estimate is based on three security employees (one guard per shift, three shifts per day) using 25 gallons per person per day (2001 CEQR Technical Manual). As the facility is currently not accepting waste, no other potable water is used and no operational staff are currently assigned to the site.



Site delineations are approximate

3000 0 3000 Feet

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Figure 7.13-1 Existing WPCP Drainage Area

North Shore Converted MTS

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Table 7.13-1
Average Monthly Dry Weather and Average Flows
Tallman Island WPCP
Fiscal Year 2003

Month	Dry Weather Flow (mgd)	Average Monthly Flow[1](1) (mgd)
July 2002	47	47
August	49	52
September	58	63
October	55	62
November	56	63
December	54	57
January 2003	52	55
February	54	58
March	56	60
April	52	56
May	51	55
June	58	65
Average Effluent	**54**	**58**

Notes:
(1) Average flow includes the sanitary and stormwater flows received by the plant during wet weather.

Wastewaters generated at the existing North Shore MTS are currently routed to a 12-inch sanitary sewer line flowing from west to east along 29th Avenue. Stormwater runoff flows into a 24-inch storm sewer line running from 31st Avenue to College Point Boulevard. Wastewater is discharged to the municipal sewer system from the site via a pump station on 122nd Street.

7.13.1.3 Solid Waste

Based on solid waste generation information from the 2001 CEQR Technical Manual, it was estimated that each employee at the existing MTS produces approximately nine pounds of solid waste per week for a facility total of 27 pounds per week (approximately four pounds per day). The solid waste is collected by DSNY personnel and is transported by truck to an appropriately licensed solid waste management facility.

7.13.1.4 Energy

Based on a review of applicable utility service plans, Consolidated Edison of New York supplies electricity to the facility via lines running along 31st Avenue. The existing North Shore MTS utilizes a negligible amount of energy due to the low staffing levels providing only security for the facility. There is currently no gas supplied directly to the facility.

7.13.2 Future No-Build Conditions

The existing North Shore MTS would continue to not accept waste. Potable water use, process and sanitary wastewater generation, solid waste generation and energy use would remain at or near the Existing Conditions levels for security employees. Wastewater flows to the Tallman Island WPCP would continue to increase and would be projected to be 58.9 mgd by 2006.

7.13.3 Potential Impacts with the North Shore Converted MTS

7.13.3.1 Water Supply

The North Shore Converted MTS would have a total of up to 60 employees working three shifts per day. They would require approximately 1,500 gallons of potable water per day plus an additional 1,800 gpd for truck and tipping floor washdown and dust control. The combined total usage of 3,300 gpd of potable water would represent an increase of 3,225 gpd above current consumption levels.

The North Shore Converted MTS would have no impact on the existing system's ability to supply water reliably. According to NYCDEP, the water pressure in the distribution lines in the area is about 45 psi. Under worst-case conditions, the increased usage would not have significant impacts on water pressure in the system.

7.13.3.2 *Sanitary Sewage*

Based on the estimated water usage of 3,300 gpd for the North Shore Converted MTS, the small quantities of wastewater sent to the Tallman Island WPCP would not significantly impact the sewage flow rate or the ability of the Tallman Island WPCP to meet its SPDES permit limits. The projected wastewater flows at the WPCP would be anticipated to be approximately 58.9 mgd in 2006, which would be well below the permitted capacity of 70 mgd. In addition, the new wastewater flows due to the Proposed Action would not result in a significant increase in combined sewer overflows (CSO).

7.13.3.3 *Solid Waste*

Solid waste transfer station facility use is not cited under the solid waste generation rates provided in the 2001 CEQR Technical Manual, so rates for a commercial office building (1.3 lbs/day per employee) were used as a basis for a conservative estimate of waste generation. For an estimated 60 facility employees, 468 pounds of solid waste would be generated per week (78 lbs/day) and would represent an incremental increase of approximately 444 pounds per week (74 lbs/day) above current waste generation levels. This volume would be managed at the North Shore Converted MTS and would not significantly impact the system.

7.13.3.4 *Energy*

The North Shore Converted MTS would require an additional 5.51E+10 BTU/year of electricity to operate the facility. Natural gas heating would be used with an estimated demand of 1.34E+08 BTU/year.

Consolidated Edison has been notified of the power requirements of the North Shore Converted MTS and has stated that all demands generated by the facility could be met without any impact on the power requirements of the surrounding community and without the need for additional power generation capacity.

Consolidated Edison was also notified of the natural gas requirements of the North Shore Converted MTS and has stated that the facility could be supplied with natural gas with no adverse impact on the utility.

7.14 Traffic, Parking, Transit, and Pedestrians

7.14.1 Introduction

The North Shore Converted MTS would receive waste from DSNY and other agency collection vehicles. Therefore, pursuant to CEQR guidelines, a traffic analysis was performed on the projected net increase in collection vehicles in the study area (which is defined below) and on other site-generated traffic. (See Section 3.16 for a discussion of CEQR analysis thresholds.)

7.14-2 Existing Conditions

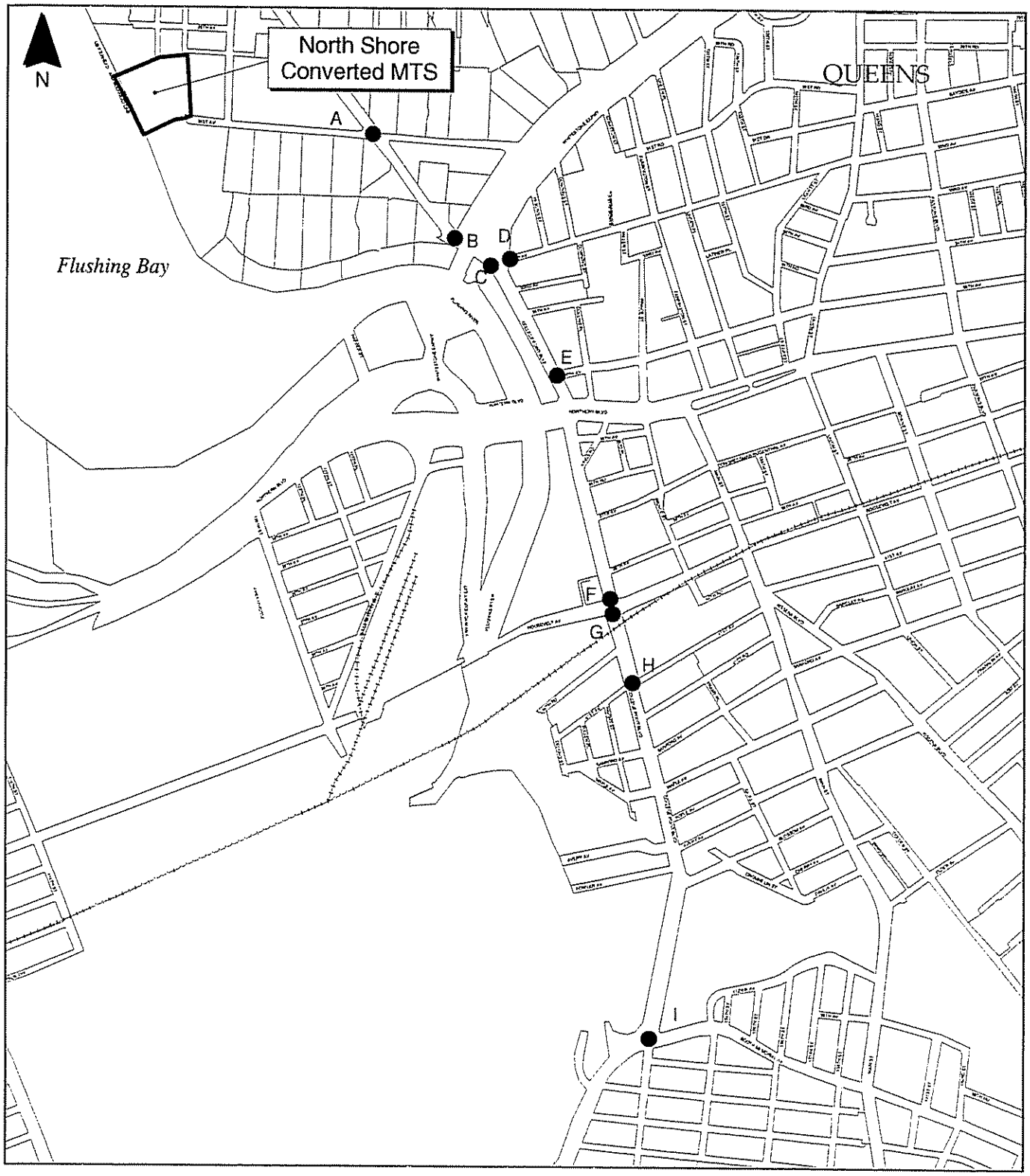
7.14.2.1 Definition of Study Area

The traffic analysis study area is broad, covering portions of the College Point, Flushing and Queensboro Hill sections of Queens. It includes the corridor along College Point Boulevard that is bounded by 31st Avenue on the north and Booth Memorial Avenue on the south. Commercial, industrial and residential areas are included in the traffic study area. There are no CEQR-defined areas of concern located within the study area. Figure 7.14-1 shows the locations of the intersections selected for analysis (locations A through I). Intersections analyzed were selected using the procedures defined in Section 3.16.

The analysis of collection vehicle routing to the site included highway access points more than ½-mile away in conjunction with local truck routes. Section 7.14.2.2 further discusses the specific routes used by DSNY and other agency collection vehicles to access the North Shore Converted MTS.

7.14.2.2 Surface Network

Two major highways service the traffic analysis study area — the predominantly east-west LIE and the predominantly north-south Van Wyck Expressway. College Point Boulevard and the Whitestone Expressway Service Roads are local truck routes that provide access from the south and east of the site. A map showing all major truck routes and local truck routes in Queens is provided in Section 3.16 (see Figure 3.16-5).



Site delineations are approximate
Base Map Source: New York City Department of City Planning

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Figure 7.14-1 Traffic Analysis Study Area
North Shore Converted MTS

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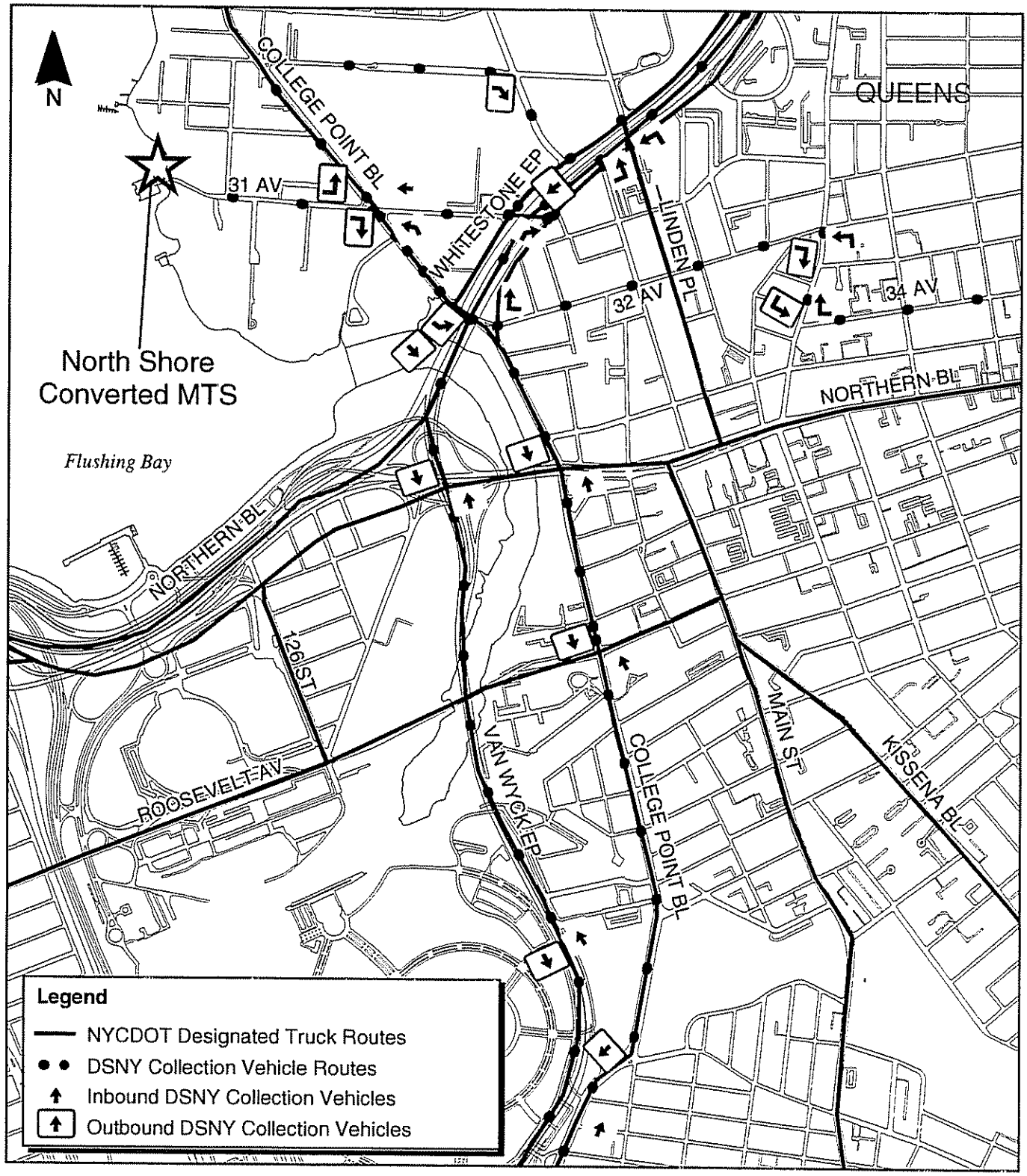
31st Avenue, 32nd Avenue, 35th Avenue and 41st Avenue generally serve as collector roads for local traffic and provide access for local and industrial traffic to and from the arterial of College Point Boulevard. College Point Boulevard provides access to and from the LIE. The Whitestone Expressway Service Roads are arterials that provide access to and from the Whitestone Expressway. Roosevelt Avenue and Booth Memorial Avenue are east-west arterials that cross College Point Boulevard.

Most DSNY and other agency collection vehicles making deliveries to the North Shore MTS use either the Van Wyck Expressway or LIE to travel toward the North Shore Converted MTS. These vehicles exit the Van Wyck Expressway or LIE onto College Point Boulevard and proceed north towards the facility. Vehicles from one CD travel north on the Van Wyck Expressway to the Linden Place exit. These vehicles exit onto the Whitestone Expressway Service Road (northbound) and turn northwest on Linden Place. From Linden Place, the vehicles turn onto the Whitestone Expressway Service Road (southbound) and then turn west on 31st Avenue. Although this exit is located closer to the facility, the NYCDOT has requested that limited traffic be routed through the intersection of Linden Place and the Whitestone Expressway Service Roads due to exiting congestion at this intersection. All vehicles traveling to and from the North Shore Converted MTS converge at the intersection of 31st Avenue and College Point Boulevard. Inbound vehicles travel west along 31st Avenue to the facility. Figure 7.14-2 depicts NYCDOT designated truck routes near the facility and the future DSNY and other agency collection vehicle routes to the facility.

Exiting DSNY and other agency collection vehicles return east along 31st Avenue and turn south onto College Point Boulevard to return to the Van Wyck Expressway or LIE, except for the vehicles that use the Linden Place exit. These vehicles turn north onto College Point Boulevard, east on 28th Avenue south onto Ulmer Street. From Ulmer Street, the vehicles turn onto the Whitestone Expressway Service Road (southbound) and enter onto the Van Wyck Expressway.



Site delineations are approximate
Base Map Source: New York City Department of Information Technology & Telecommunications

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Figure 7.14-2 DSNY Collection Vehicle Routes
North Shore Converted MTS

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7.14.2.3 Existing Traffic Operations

The nine intersections listed below were identified for analysis because they are the most likely to be impacted from an increase in DSNY and other agency collection vehicle traffic to the North Shore Converted MTS. All of them are on major arterials and/ or collection vehicle routes. Diagrams of these intersections are included in technical backup submitted to NYCDOT.

- College Point Boulevard and 31st Avenue – Signalized Intersection (see Figure 7.14-1 – location A)
- College Point Boulevard and Whitestone Expressway Service Road (Westbound) – Signalized Intersection (see Figure 7.14-1 – location B)
- College Point Boulevard and 32nd Avenue – Signalized Intersection (see Figure 7.14-1 – location C)
- Whitestone Expressway Service Road (Eastbound) and 32nd Avenue – Signalized Intersection (see Figure 7.14-1 – location D)
- College Point Boulevard and 35th Avenue – Signalized Intersection (see Figure 7.14-1 – location E)
- College Point Boulevard and Roosevelt Avenue (Westbound) – Signalized Intersection (see Figure 7.14-1 – location F)
- College Point Boulevard and Roosevelt Avenue (Eastbound) – Signalized Intersection (see Figure 7.14-1 – location G)
- College Point Boulevard and 41st Avenue – Signalized Intersection (see Figure 7.14-1 – location H)
- College Point Boulevard and Booth Memorial Avenue – Signalized Intersection (see Figure 7.14-1 – location I)

31st Avenue, 32nd Avenue, 35th Avenue and 41st Avenue generally serve as collector roads for local traffic and provide access for local and industrial traffic to and from the arterial of College Point Boulevard. College Point Boulevard provides access to and from the LIE. The Whitestone Expressway Service Roads are arterials that provide access to and from the Whitestone Expressway. Roosevelt Avenue and Booth Memorial Avenue are east-west arterials that cross College Point Boulevard.

A traffic data collection program that consisted of manual turning movement counts with vehicle classifications and ATR counts was undertaken to define existing weekday traffic operations (see Section 3.16 for a discussion on traffic data collection). Manual turning movement counts were conducted between November 14, 2002 and November 21, 2002, while ATR counts were conducted between November 18, 2002 and November 24, 2002. Figures 7.14-3, 7.14-4 and 7.14-5 depict the existing traffic volumes for AM, Facility, and PM peaks at the intersections analyzed. The AM peak generally occurred between 7:30 a.m. and 8:30 a.m., the Facility peak between 10:00 a.m. and 11:00 a.m., and the PM peak between 4:30 p.m. and 5:30 p.m. Table 7.14-1 presents the v/c ratio, delay and LOS for the nine intersections during the AM, Facility, and PM peaks.

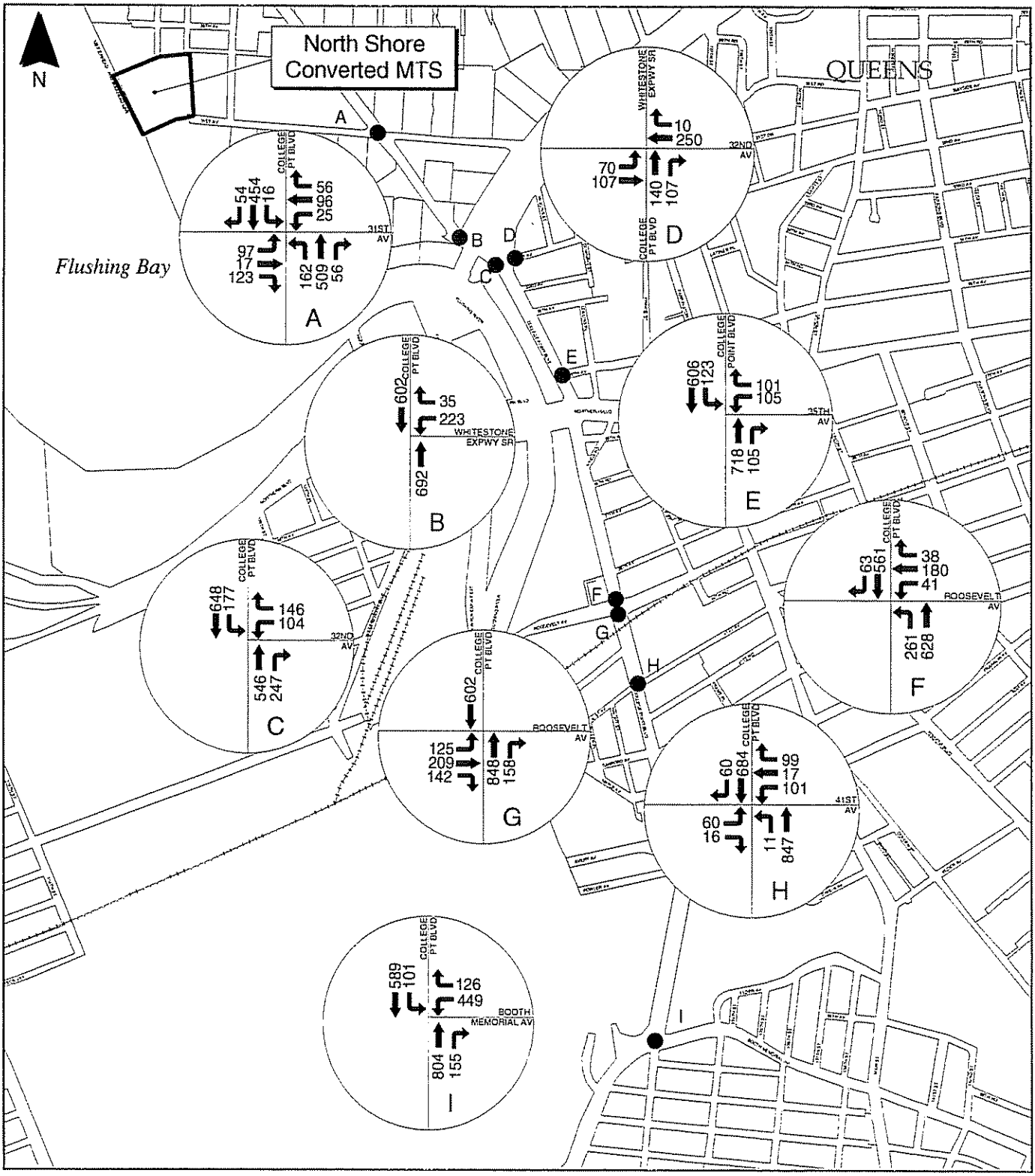
Existing truck traffic through most of the intersections was relatively high. The percentages of trucks increases steadily during the morning hours, remains between 20% and 35% during midday hours, then decreases to 10% or lower during the PM peak hours.

7.14.2.3.1 LOS at Signalized Intersections

Table 7.14-1 shows that the existing signalized intersections generally operated at an overall LOS of B or C with the following exceptions. The lane group with the least favorable LOS was the southbound defacto left movement at the intersection of College Point Boulevard and Booth Memorial Avenue. During the PM peak hour, this movement operated at LOS E with a delay of 61.9 seconds. Several other lane groups at various intersections operated at a LOS of D during various peak hours.

7.14.2.3.2 LOS at Unsignalized Intersections

No unsignalized intersections were analyzed.



Site delineations are approximate
Base Map Source: New York City Department of City Planning

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Figure 7.14-3 Existing Traffic Volumes - AM Peak

North Shore Converted MTS

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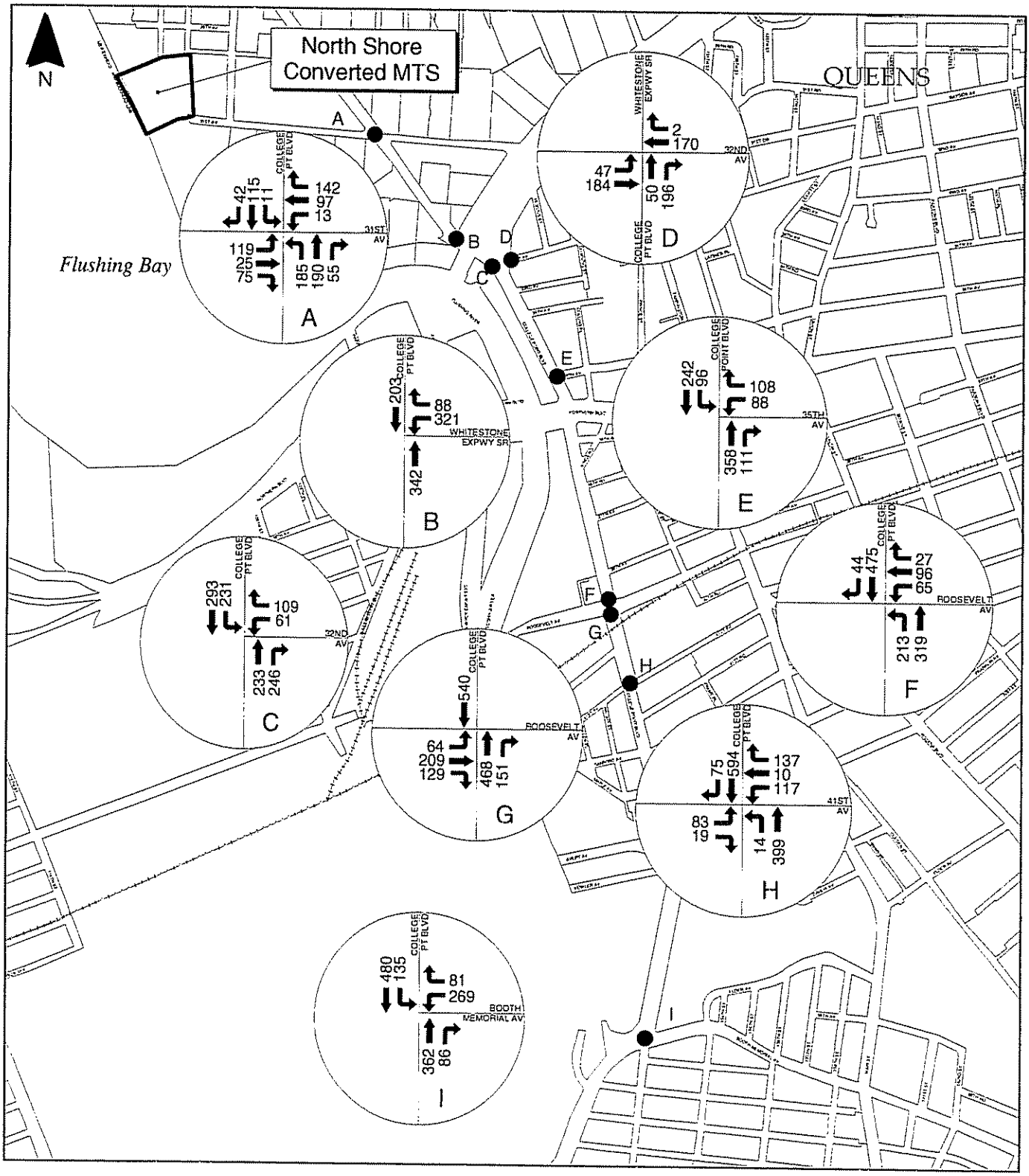

Site delineations are approximate
Base Map Source: New York City Department of City Planning

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Figure 7.14-4 Existing Traffic Volumes
Facility Peak
North Shore Converted MTS

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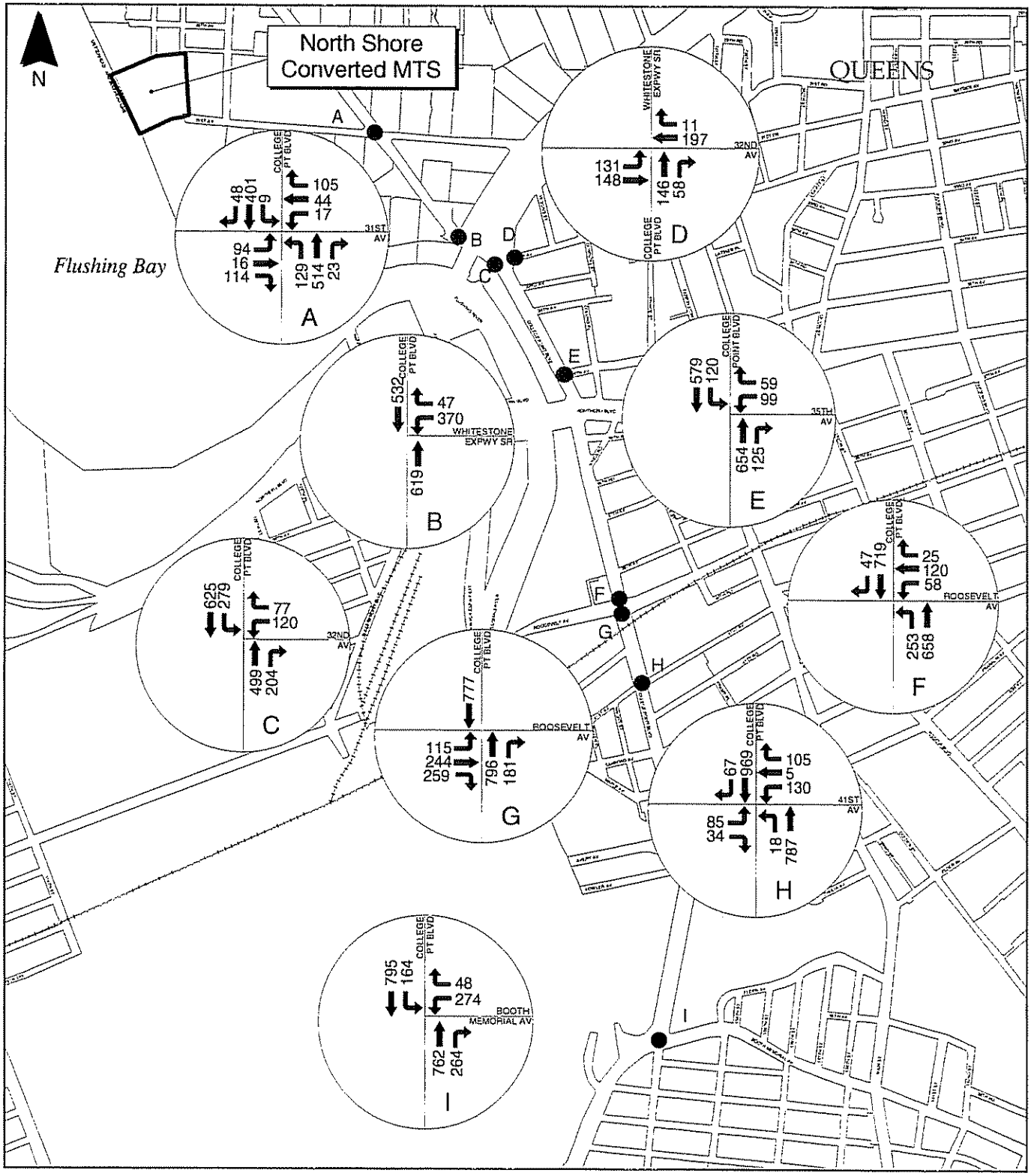

Site delineations are approximate
Base Map Source: New York City Department of City Planning

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Figure 7.14-5 Existing Traffic Volumes - PM Peak

North Shore Converted MTS

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Table 7.14-1
HCM Analysis[(1)]— Existing Conditions
North Shore Converted MTS

Intersection & Lane Group	AM Peak Hour (7:30 a.m. – 8:30 a.m.)			Facility Peak Hour (10:00 a.m. – 11:00 a.m.)			PM Peak Hour (4:30 p.m. – 5:30 p.m.)		
	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
College Point & 31st Avenue (signalized)									
EB LTR	0.52	31.6	C	-	-	-	0.43	29.4	C
EB DFL	-	-	-	0.63	41.2	D	-	-	-
EB TR	-	-	-	0.29	27.9	C	-	-	-
WB LTR	0.37	28.2	C	0.44	29.3	C	0.29	27.1	C
NB L	0.46	12.2	B	0.39	10.3	B	0.31	9.8	A
NB TR	0.30	8.8	A	0.16	7.8	A	0.27	8.5	A
SB L	0.06	13.4	B	0.03	12.9	B	0.04	13.1	B
SB TR	0.32	16.0	B	0.14	13.7	B	0.33	15.5	B
OVERALL		17.2	B		20.0	C		16.2	B
College Point and Whitestone Expressway Service Road – North (signalized)									
WB L	0.46	18.4	B	0.59	20.9	C	0.67	22.9	C
WB LR	0.07	13.8	B	0.36	17.0	B	0.09	14.1	B
NB T	0.43	9.8	A	0.26	8.5	A	0.39	9.4	A
SB T	0.39	9.5	A	0.14	7.8	A	0.36	9.2	A
OVERALL		11.1	B		13.5	B		12.5	B
College Point and 32nd Avenue (signalized)									
WB LR	0.47	18.2	B	0.35	16.5	B	0.35	16.5	B
NB TR	0.85	28.5	C	0.62	20.5	C	0.74	22.8	C
SB L	0.41	18.5	B	0.48	15.9	B	0.60	22.4	C
SB T	0.44	9.3	A	0.22	7.5	A	0.44	9.2	A
OVERALL		19.5	B		15.8	B		17.1	B
Whitestone Expressway Service Road – South and 32nd Avenue (signalized)									
EB DFL	0.19	6.8	A	-	-	-	0.26	7.0	A
EB T	0.26	1.8	A	-	-	-	0.22	1.5	A
EB LT	-	-	-	0.20	1.1	A	-	-	-
WB TR	0.64	23.3	C	0.39	17.5	B	0.48	19.0	B
NB TR	0.57	20.9	C	0.53	20.3	C	0.40	17.9	B
OVERALL		17.1	B		12.5	B		12.9	B
College Point and 35th Avenue (signalized)									
WB LR	0.46	19.0	B	0.59	22.5	C	0.39	17.6	B
NB TR	0.57	11.5	B	0.39	9.6	A	0.50	10.6	B
SB LT	0.82	19.9	B	0.39	10.0 -	A	0.78	17.6	B
OVERALL		15.9	B		12.5	B		14.5	B
College Point and Roosevelt Avenue - Westbound (signalized)									
WB LTR	0.25	22.6	C	0.20	22.0	C	0.21	22.1	C
NB L	0.54	26.5	C	0.43	22.0	C	0.48	25.9	C
NB T	0.46	13.1	B	0.25	11.0	B	0.41	12.5	B
SB TR	0.86	43.8	D	0.76	38.5	D	0.95	54.5	D
OVERALL		27.0	C		26.1	C		32.6	C

Table 7.14-1 (continued)
HCM Analysis[(1)]— Existing Conditions
North Shore Converted MTS

Intersection & Lane Group	AM Peak Hour (7:30 a.m. – 8:30 a.m.)			Facility Peak Hour (10:00 a.m. – 11:00 a.m.)			PM Peak Hour (4:30 p.m. – 5:30 p.m.)		
	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
College Point and Roosevelt Avenue - Eastbound (signalized)									
EB LTR	0.37	16.0	B	0.32	15.5	B	0.49	17.6	B
NB TR	0.60	22.2	C	0.40	19.4	B	0.55	21.3	C
SB T	0.52	21.6	C	0.48	20.9	C	0.63	23.4	C
OVERALL		20.5	C		18.8	B		20.9	C
College Point and 41st Avenue (signalized)									
EB LR	0.37	28.1	C	0.60	37.2	D	0.51	32.1	C
WB LTR	0.66	35.3	D	0.85	49.6	D	0.69	36.3	D
NB L	0.07	8.8	A	0.17	9.9	A	0.16	10.5	B
NB T	0.53	12.7	B	0.30	10.2	B	0.47	11.9	B
SB TR	0.41	11.1	B	0.40	11.0	B	0.52	12.3	B
OVERALL		15.6	B		20.5	C		16.2	B
College Point and Booth Memorial Avenue (signalized)									
WB L	0.77	36.7	D	0.51	27.1	C	0.54	27.6	C
WB LR	0.42	25.3	C	0.29	23.1	C	0.22	22.2	C
NB TR	0.47	13.5	B	0.24	11.2	B	0.45	13.3	B
SB DFL	0.67	32.1	C	0.40	14.9	B	0.93	61.9	E
SB T	0.37	12.5	B	0.32	12.0	B	0.45	13.3	B
OVERALL		19.3	B		15.8	B		19.6	B

Notes:

(1) HCM output is included in technical backup submitted to the NYCDOT.

DFL = defacto left
LTR = left, through and right movements
NB = northbound
SB = southbound
EB = eastbound
WB = westbound
LT = left through movement
L = left movement
TR = through right movement
T = through movement
LR = left right movement

7.14.2.4 Existing DSNY-Related Traffic

Under Queens' interim export, Tully Environmental, a commercial vendor located close to the North Shore Converted MTS, accepts waste originating from CDs in Queens. Queens CDs delivering to Tully Environmental are QN7, QN12 and E-Z Pack loads from QN2, QN7 and QN14. Additionally, duel bin school trucks, basket trucks, SHBLK, street dirt, lot clearing (LC) and other City department (OCD) loads from all Queens CDs are delivered to Tully Environmental. Existing DSNY-related traffic in the traffic study area is located on College Point Boulevard, 35th Street and Roosevelt Avenue.

7.14.2.5 Public Transportation

Public transportation in the study area consists predominantly of bus trips. The Q48 runs east-west along Roosevelt Avenue and the Q58 and Q65 run north-south along College Point Boulevard. Bus stops are located at some of the study area intersections analyzed, and scheduled stops occur at various times during the day.

7.14.2.6 Pedestrian Activity

Light pedestrian activity occurs along College Point Boulevard in the center section of the study area where restaurants and commercial and residential areas produce and attract pedestrians throughout the day. During several field visits, pedestrian activity was minimal and it is not expected to affect the capacity analysis significantly.

7.14.3 Future No-Build Conditions

7.14.3.1 Traffic Conditions

Future No-Build traffic volumes were determined by applying a growth rate of 1% per year to existing traffic volumes in accordance with the 2001 CEQR Technical Manual. Additional traffic generated in the Future No-Build year (2006) generally amounted to less than 100 vehicles per intersection. There are no new developments planned in the study area that would affect Future No-Build traffic volumes in the study area.

Figures 7.14-6, 7.14-7 and 7.14-8 depict the Future No-Build traffic volumes for AM, Facility, and PM peaks at the intersections analyzed. Table 7.14-2 (Future No-Build Conditions) shows the Future No-Build v/c ratio, delay and LOS for the studied intersections. Overall, signalized intersections experienced relatively small increases in delay (less than five seconds) and are projected to remain at their Existing Condition LOS, with the following exceptions:

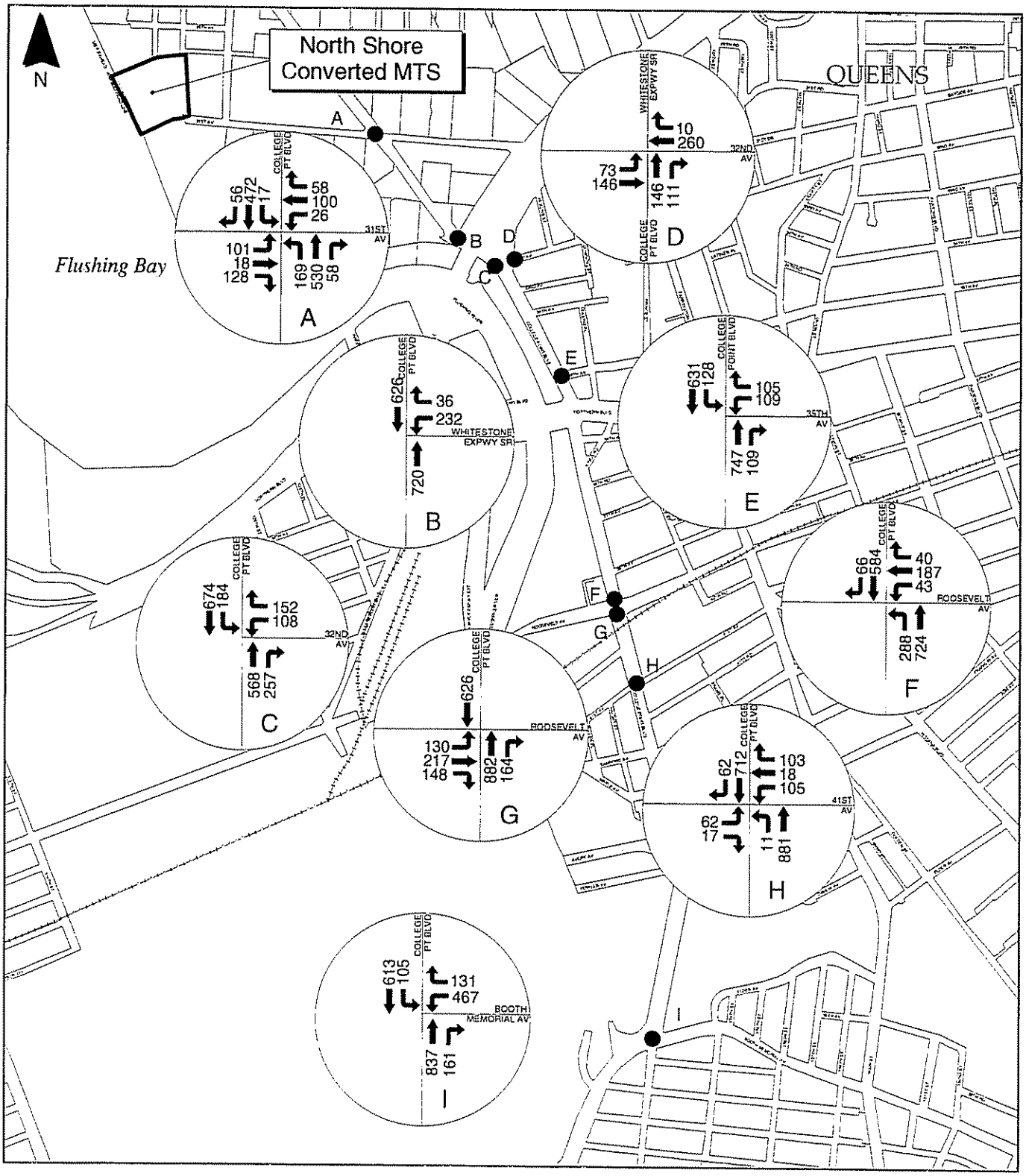
- During the AM peak hour, the overall LOS of the College Point Boulevard and 32nd Avenue intersection and the College Point Boulevard and Booth Memorial Avenue intersection deteriorated from B to C.
- During the PM peak hour, the overall LOS of the College Point Boulevard and Roosevelt Avenue (Westbound) intersection deteriorated from C to D.

7.14.3.2 Public Transportation

Future No-Build Conditions are expected to remain the same as Existing Conditions.

7.14.3.3 Pedestrian Activity

Future No-Build Conditions are expected to remain the same as Existing Conditions.



Site delineations are approximate
Base Map Source: New York City Department of City Planning

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Figure 7.14-6 Future No-Build Traffic Volumes
AM Peak
North Shore Converted MTS

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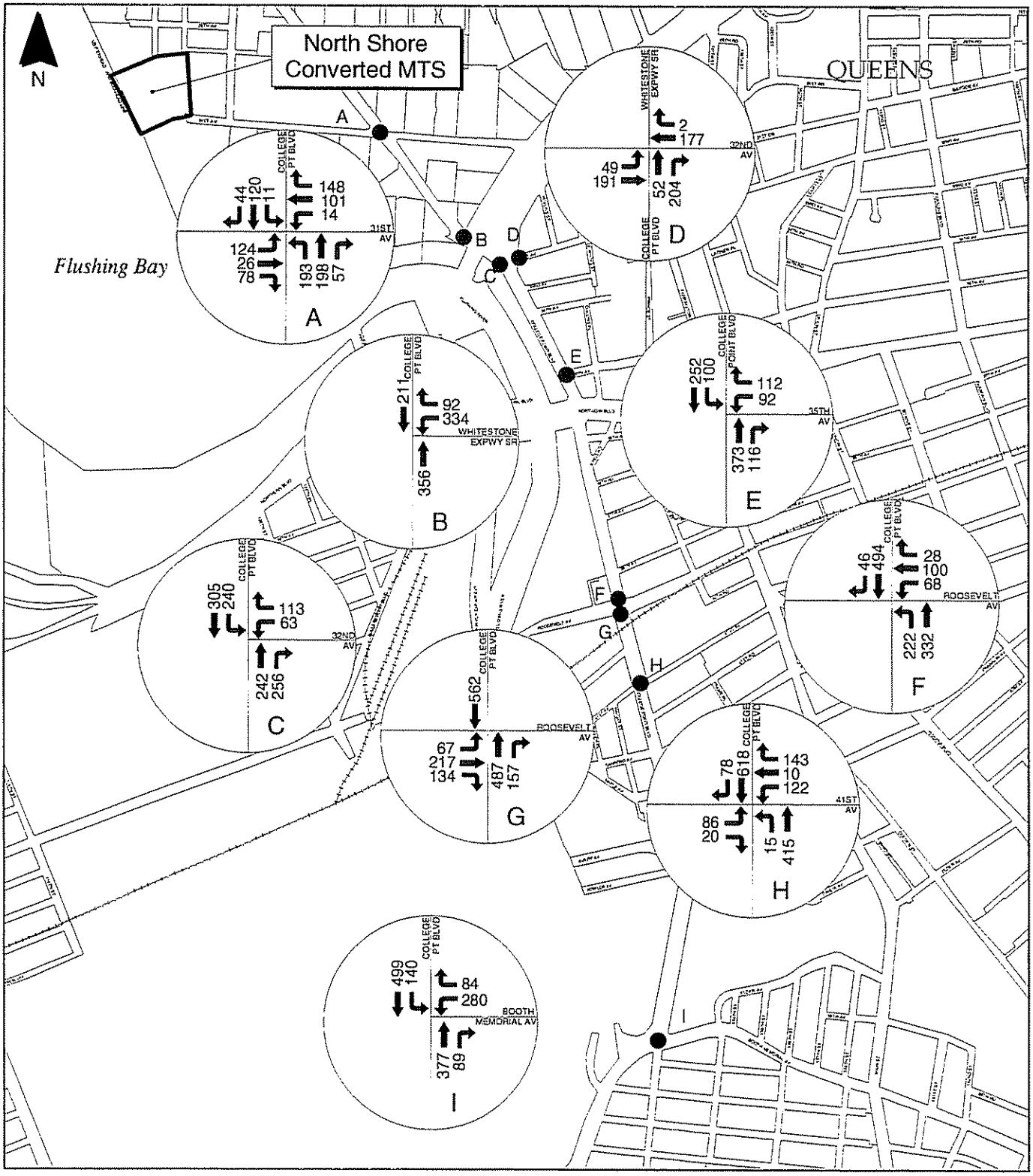

Site delineations are approximate
Base Map Source: New York City Department of City Planning

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Figure 7.14-7 Future No-Build Traffic Volumes Facility Peak North Shore Converted MTS

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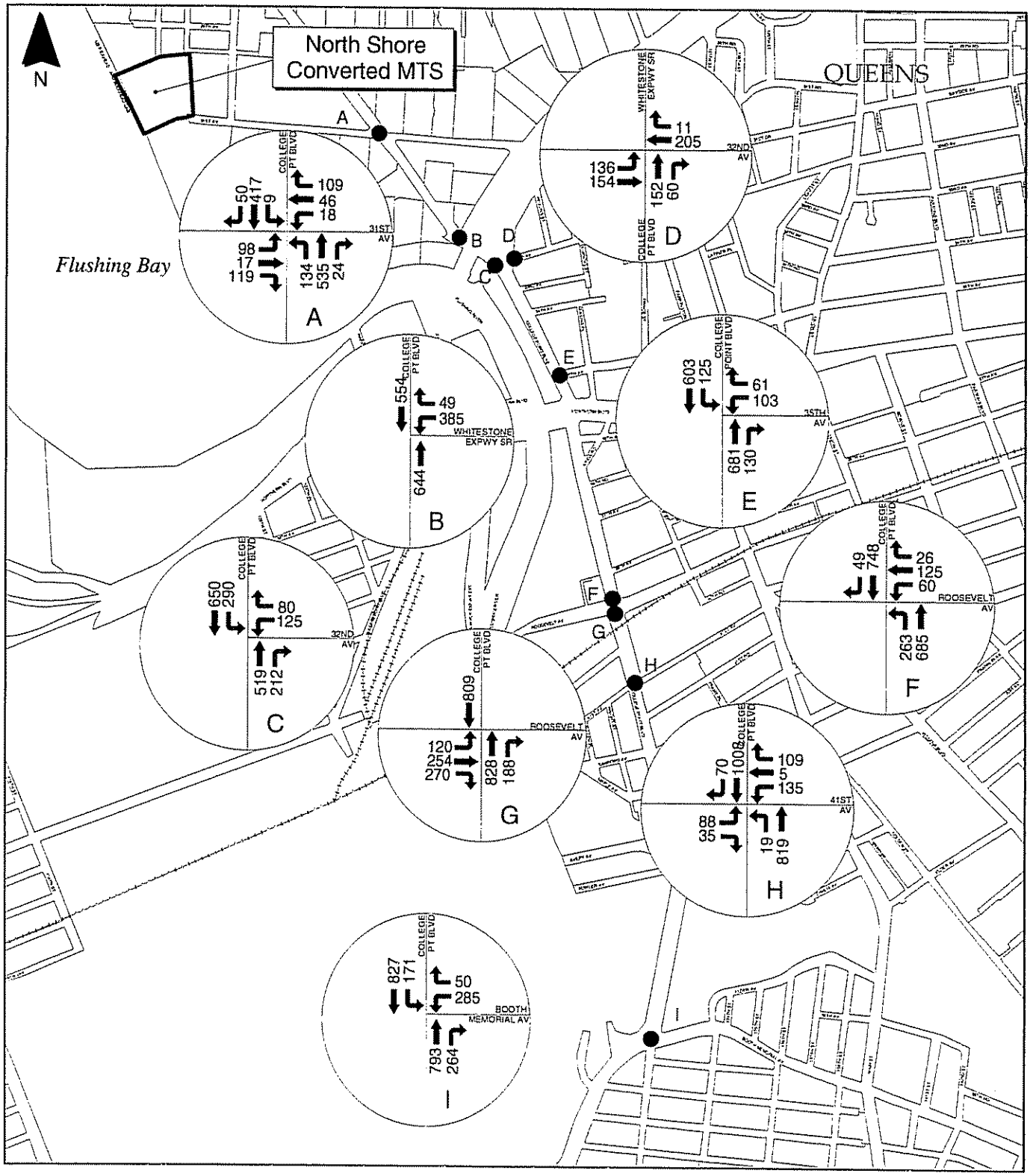

Site delineations are approximate
Base Map Source: New York City Department of City Planning

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Figure 7.14-8 Future No-Build Traffic Volumes PM Peak North Shore Converted MTS

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Table 7.14-2
HCM Analysis[1]— Future No-Build Conditions
North Shore Converted MTS

Intersection & Lane Group	AM Peak Hour (7:30 a.m. – 8:30 a.m.)			Facility Peak Hour (10:00 a.m. – 11:00 a.m.)			PM Peak Hour (4:30 p.m. – 5:30 p.m.)		
	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
College Point & 31st Avenue (signalized)									
EB LTR	0.55	32.2	C	-	-	-	0.45	29.8	C
EB DFL	-	-	-	0.67	44.5	D	-	-	-
EB TR	-	-	-	0.31	28.1	C	-	-	-
WB LTR	0.38	28.4	C	0.47	29.7	C	0.30	27.3	C
NB L	0.49	12.9	B	0.41	10.6	B	0.33	10.1	B
NB TR	0.31	8.9	A	0.17	7.3	A	0.28	8.6	A
SB L	0.07	13.4	B	0.03	13.0	B	0.04	13.1	B
SB TR	0.38	16.2	B	0.15	13.8	B	0.34	15.7	B
OVERALL		17.4	B		20.6	C		16.4	B
College Point and Whitestone Expressway Service Road – North (signalized)									
WB L	0.48	18.8	B	0.61	21.6	C	0.69	23.8	C
WB LR	0.07	13.9	B	0.38	17.3	B	0.10	14.1	B
NB T	0.45	10.0+	B	0.27	8.6	A	0.40	9.5	A
SB T	0.41	9.6	A	0.15	7.8	A	0.38	9.3	A
OVERALL		11.3	B		13.8	B		12.8	B
College Point and 32nd Avenue (signalized)									
WB LR	0.49	18.5	B	0.36	16.6	B	0.37	16.7	B
NB TR	0.89	31.4	C	0.64	21.0	C	0.76	23.6	C
SB L	0.43	19.1	B	0.51	16.9	B	0.62	23.2	C
SB T	0.46	9.4	A	0.23	7.6	A	0.46	9.3	A
OVERALL		20.9	C		16.2	B		17.6	B
Whitestone Expressway Service Road – South and 32nd Avenue (signalized)									
EB DFL	0.20	7.0	A	-	-	-	0.28	7.2	A
EB T	0.27	1.9	A	-	-	-	0.23	1.5	A
EB LT	-	-	-	0.21	1.1	A	-	-	-
WB TR	0.66	24.2	C	0.40	17.7	B	0.50	19.4	B
NB TR	0.59	21.4	C	0.55	20.9	C	0.42	18.0	B
OVERALL		17.6	B		12.8	B		13.1	B
College Point and 35th Avenue (signalized)									
WB LR	0.48	19.4	B	0.61	23.2	C	0.40	17.8	B
NB TR	0.60	11.9	B	0.40	9.8	A	0.52	10.8	B
SB LT	0.88	24.1	C	0.41	10.2	B	0.83	20.4	C
OVERALL		17.9	B		12.8	B		15.8	B
College Point and Roosevelt Avenue - Westbound (signalized)									
WB LTR	0.26	22.7	C	0.21	22.1	C	0.22	22.2	C
NB L	0.56	27.3	C	0.45	23.0	C	0.50	26.5	C
NB T	0.48	13.4	B	0.26	11.1	B	0.42	12.6	B
SB TR	0.90	47.2	D	0.80	40.0	D	0.99	62.7	E
OVERALL		28.4	C		26.9	C		36.1	D

Table 7.14-2 (continued)
HCM Analysis[(1)]— Future No-Build Conditions
North Shore Converted MTS

Intersection & Lane Group	AM Peak Hour (7:30 a.m. – 8:30 a.m.)			Facility Peak Hour (10:00 a.m. – 11:00 a.m.)			PM Peak Hour (4:30 p.m. – 5:30 p.m.)		
	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
College Point and Roosevelt Avenue - Eastbound (signalized)									
EB LTR	0.39	16.2	B	0.33	15.6	B	0.51	17.9	B
NB TR	0.62	22.6	C	0.41	19.6	B	0.57	21.7	C
SB T	0.55	21.9	C	0.50	21.7	C	0.65	24.0	C
OVERALL		20.9	C		19.1	B		21.3	C
College Point and 41st Avenue (signalized)									
EB LR	0.39	28.8	C	0.63	38.6	D	0.54	33.1	C
WB LTR	0.69	36.6	D	0.88	52.5	D	0.72	37.8	D
NB L	0.08	8.9	A	0.19	10.2	B	0.18	11.0	B
NB T	0.55	13.0	B	0.31	10.3	B	0.49	12.2	B
SB TR	0.42	11.2	B	0.41	11.2	B	0.54	12.6	B
OVERALL		16.0	B		21.3	C		16.7	B
College Point and Booth Memorial Avenue (signalized)									
WB L	0.81	38.7	D	0.53	27.5	C	0.56	28.1	C
WB LR	0.44	25.7	C	0.20	23.2	C	0.24	22.3	C
NB TR	0.49	13.7	B	0.25	11.3	B	0.47	13.4	B
SB DFL	0.73	38.9	D	0.42	15.3	B	1.01	85.1	F
SB T	0.39	12.7	B	0.33	12.1	B	0.47	13.6	B
OVERALL		19.3	B		15.8	B		19.6	B

Notes:
(1) HCM output is included in technical backup submitted to the NYCDOT.
DFL = defacto left
LTR = left, through and right movements
NB = northbound
SB = southbound
EB = eastbound
WB = westbound
LT = left through movement
L = left movement
TR = through right movement
T = through movement
LR = left right movement

7.14.4 Potential Impacts with the North Shore Converted MTS

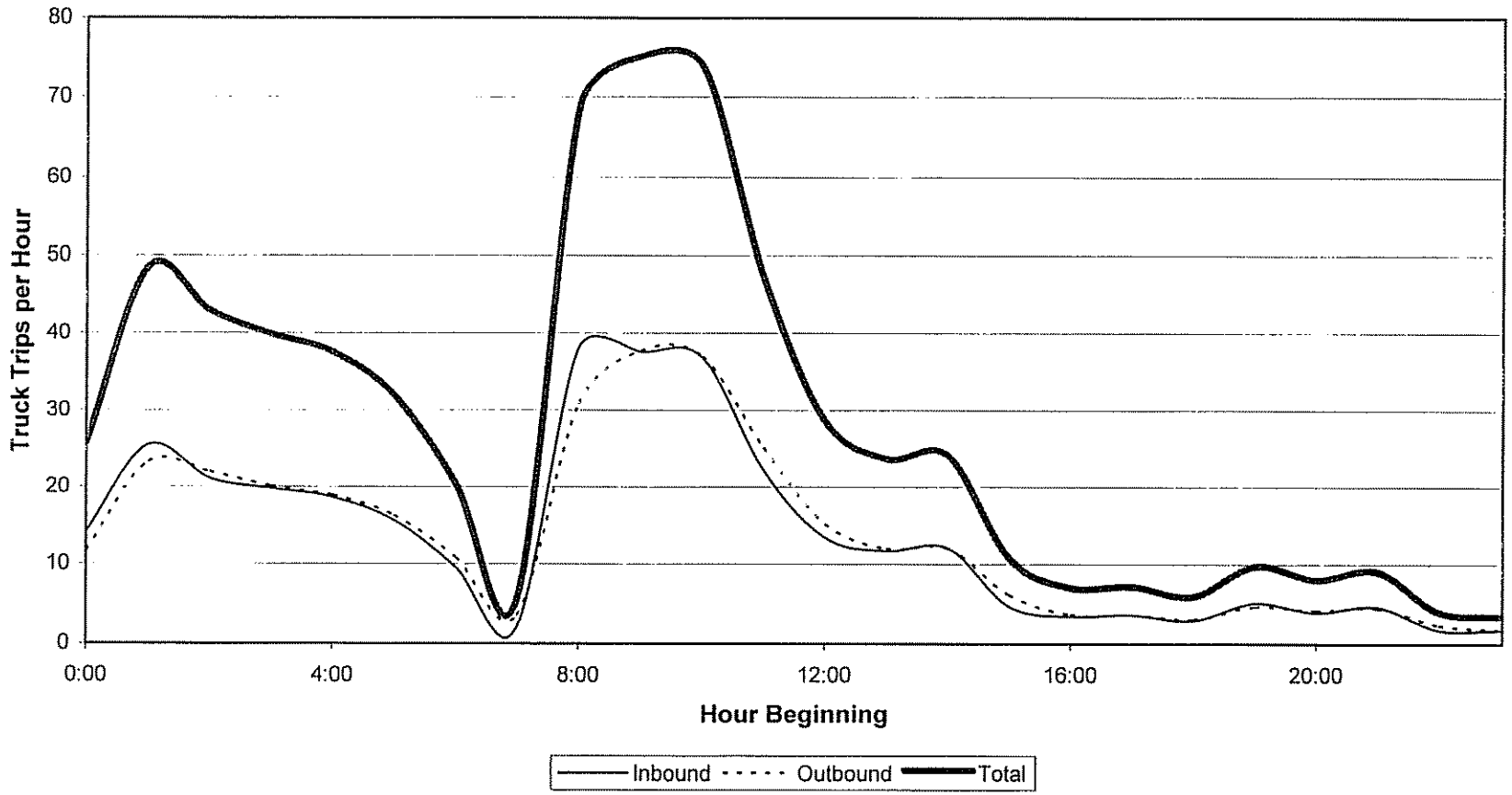
The North Shore Converted MTS would receive waste from nine CDs in Queens — QN 7 through QN 15. Additionally, the waste collected from Queens AFF and SHBLK operations would be delivered to the North Shore Converted MTS. Potential traffic impacts may result from the increase in DSNY and other agency collection vehicle trips to and from the site during all peak hours. Additionally, employee trips to and from the site may result in traffic impacts during the AM peak hour.

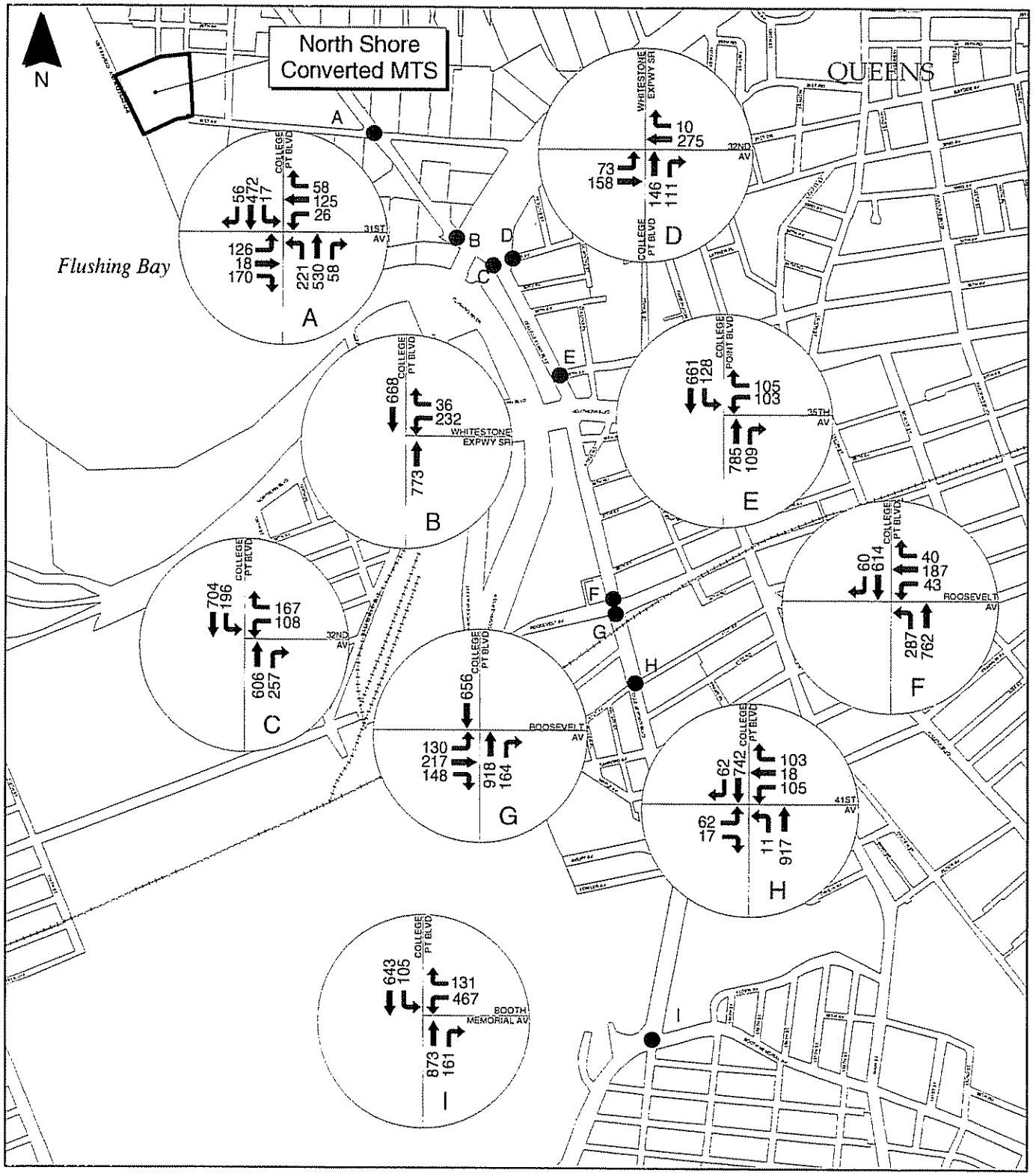
7.14.4.1 2006 Future Build Traffic Conditions

The 2006 Future Build Traffic Conditions assume that the North Shore Converted MTS would generate 329 net inbound collection vehicles per average peak day. As per NYCDOT Title 34, truck trips to and from the site are restricted to travel along local truck routes directly to the site of the intersection closest to the site if the streets adjacent to the site are not designated truck routes. The proposed collection vehicle truck routes for the North Shore Converted MTS are shown in Figure 7.14-2.

Figure 7.14-9 presents the average peak day temporal distribution of collection vehicles for the North Shore Converted MTS. Section 3.16 provides a detailed explanation of DSNY collection and delivery operational shifts (priority, non-priority and relay). As shown, the number of collection vehicles generated by the North Shore Converted MTS is expected to vary between approximately 1 to 25 truck trips per hour in the late evening/early morning, 10 to 38 truck trips per hour in the mid-morning/early afternoon, and 1 to 5 truck trips per hour in the late afternoon /early evening. The peak hourly number of collection vehicle truck trips (38) occurs at approximately 10:00 a.m. Figures 7.14-10, 7.14-11 and 7.14-12 depict the Future Build traffic volumes for AM, Facility, and PM peaks at the intersections analyzed. Figures 7.14-1~~1~~3, 7.14-14 and 7.14-15 depict the net future traffic volumes added to the Future No-Build Conditions to generate Future Build Conditions for AM, Facility, and PM peaks at the intersections analyzed.

Figure 7.14-9
Truck Trips per Hour
North Shore Converted MTS





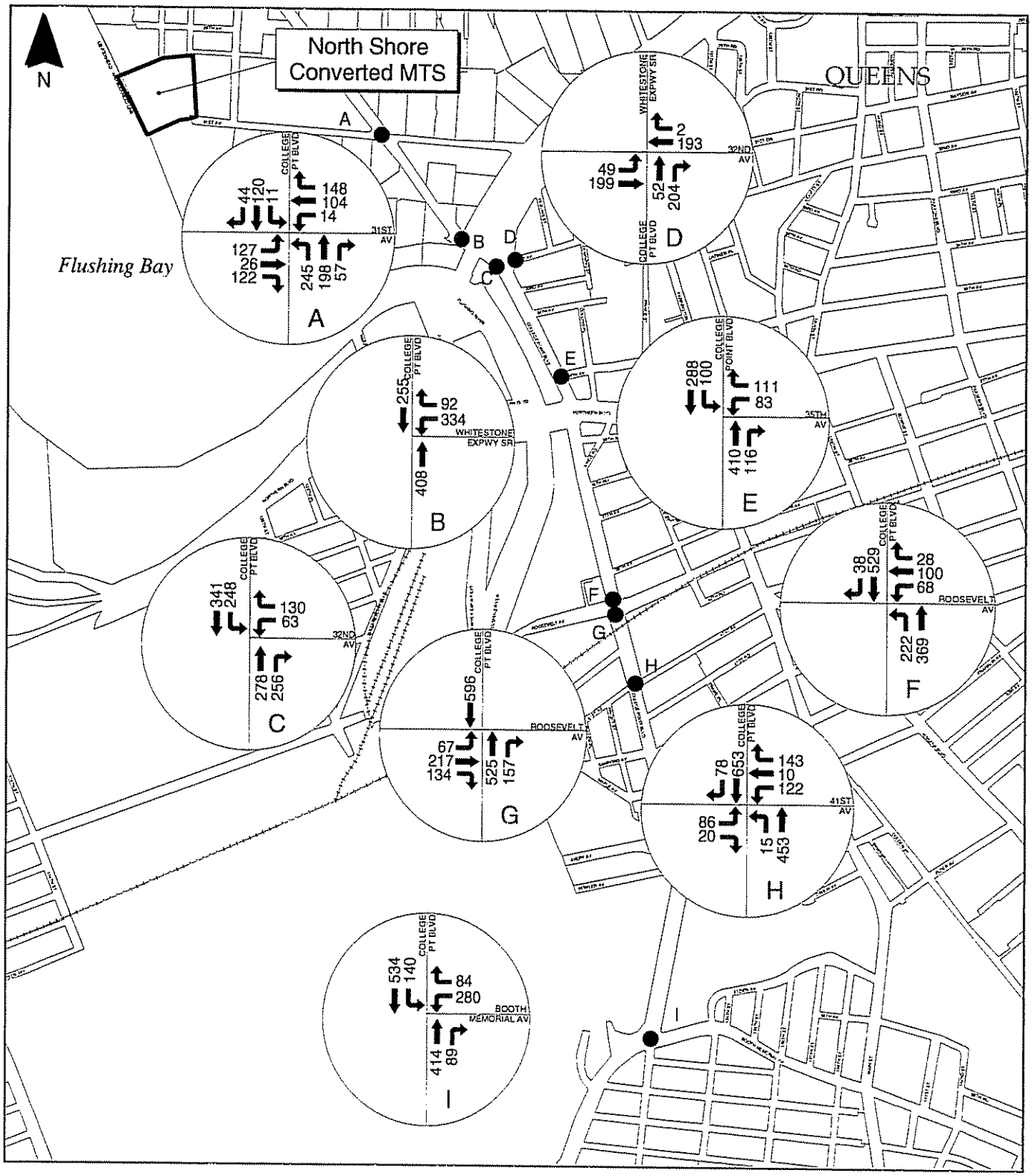
Site delineations are approximate
Base Map Source: New York City Department of City Planning

500 0 500 Feet

HDR | HydroGeoLogic | URBITRAN | PB | EEA Cambridge Environmental Inc

Figure 7.14-10 2006 Future Build Traffic Volumes
AM Peak
North Shore Converted MTS

CITY OF NEW YORK
DEPARTMENT OF SANITATION



Site delineations are approximate
Base Map Source: New York City Department of City Planning

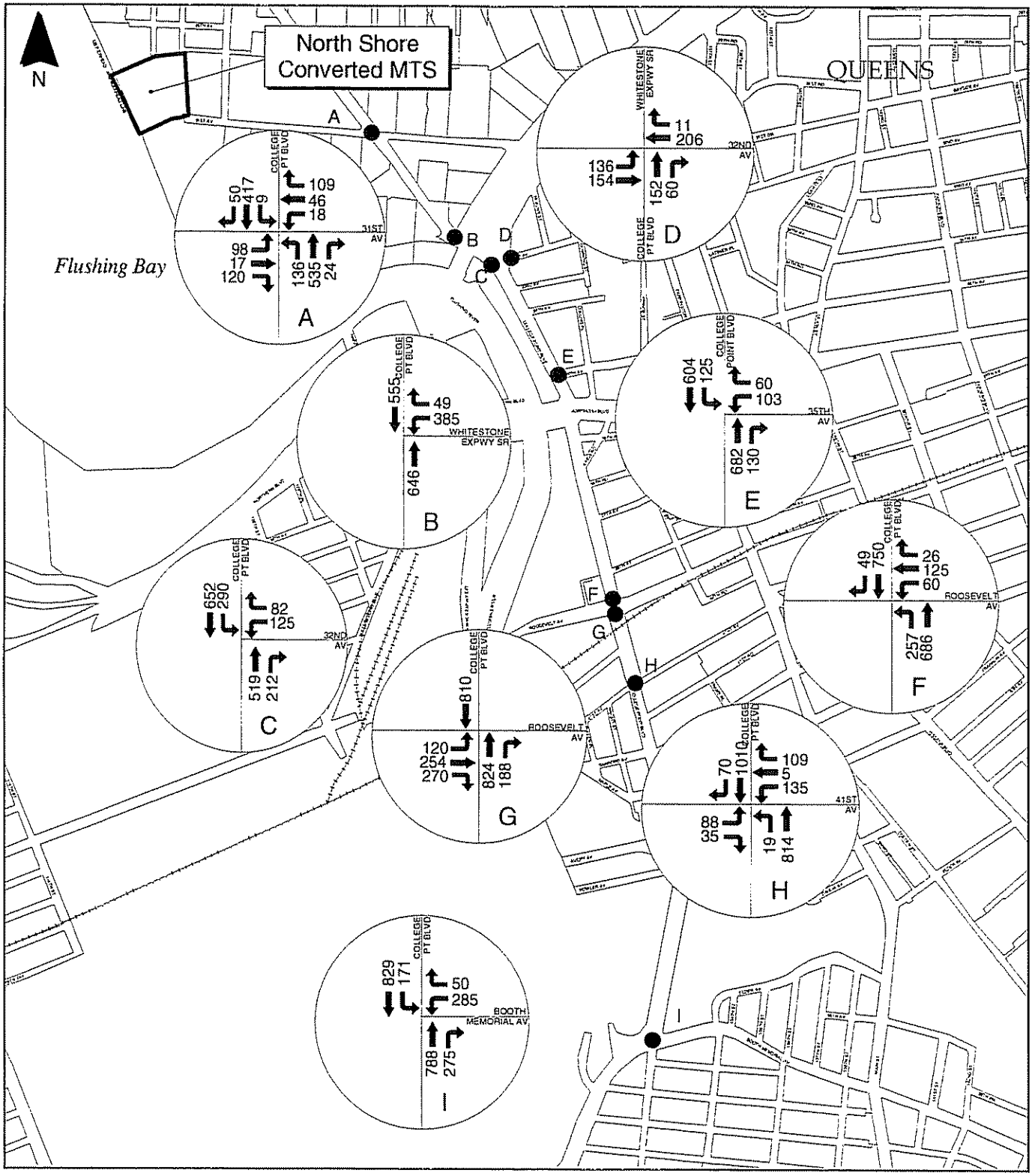
500 0 500 Feet

HDR URBITRAN EEA Cambridge Environmental Inc

Figure 7.14-11 2006 Future Build Traffic Volumes Facility Peak North Shore Converted MTS

CITY OF NEW YORK
DEPARTMENT OF SANITATION

THE CITY OF NEW YORK DEPARTMENT of SANITATION



Site delineations are approximate
Base Map Source: New York City Department of City Planning

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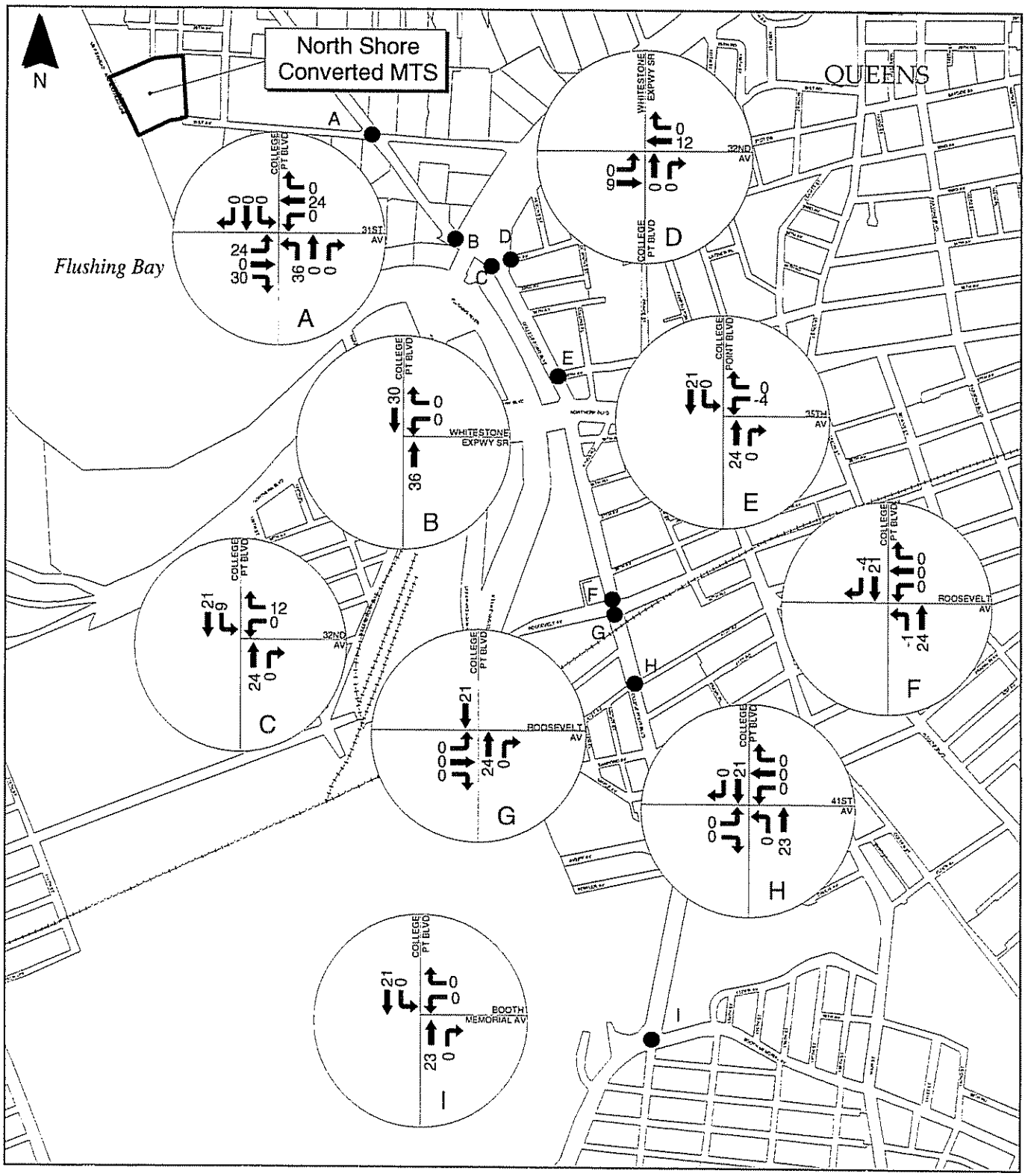
HDR URBITRAN EEA Hydroqual DD Cambridge Environmental Inc

Figure 7.14-12 2006 Future Build Traffic Volumes
PM Peak
North Shore Converted MTS

CITY OF NEW YORK
DEPARTMENT OF SANITATION

THE CITY OF NEW YORK DEPARTMENT OF SANITATION



Site delineations are approximate.
Base Map Source: New York City Department of City Planning

500 0 500 Feet

HDR | HydroQual | URBITRAN | DD | EEA Cambridge Environmental Inc

Figure 7.14-13 2006 Net Traffic - AM Peak

North Shore Converted MTS

CITY OF NEW YORK
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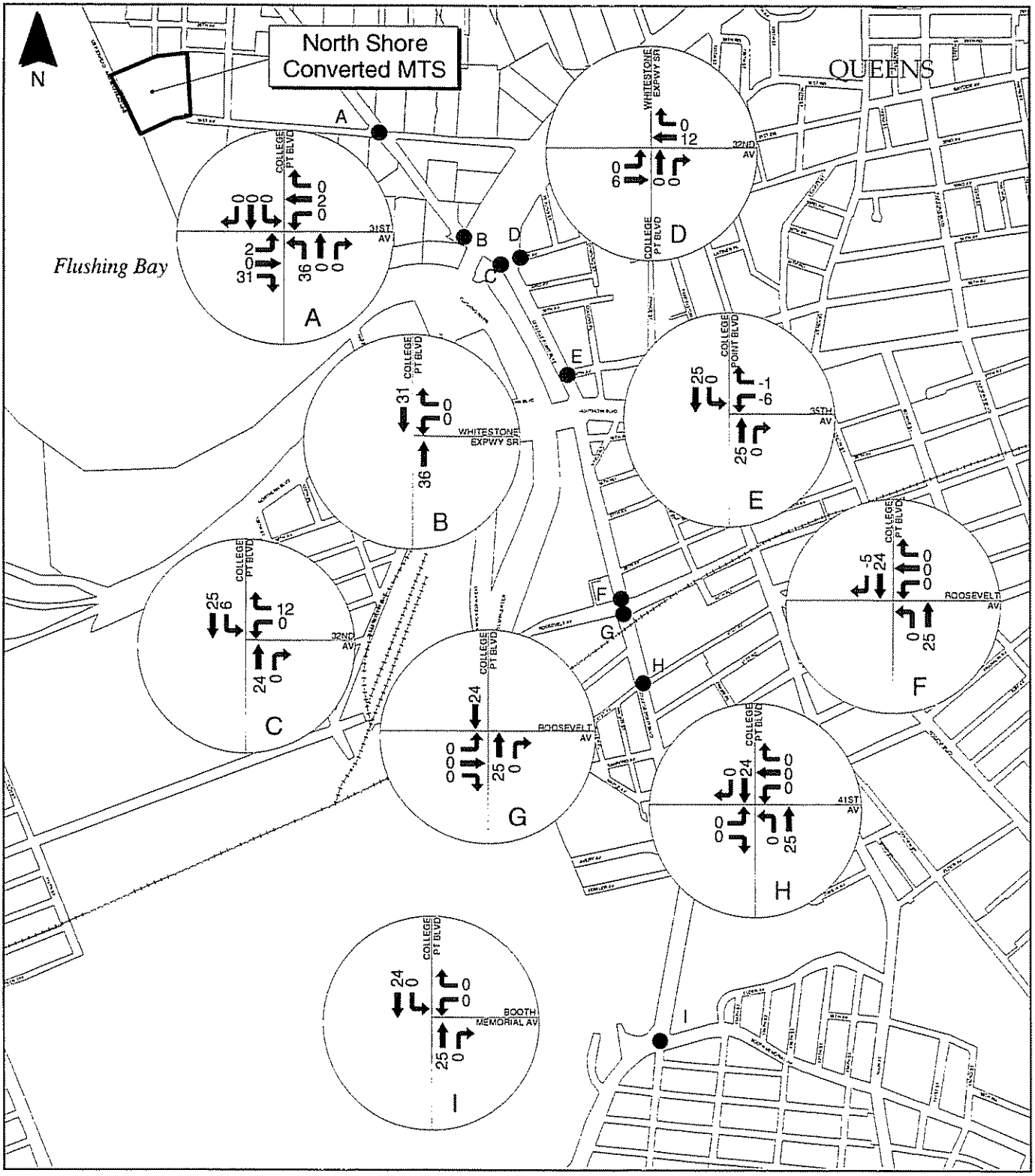

Site delineations are approximate
Base Map Source: New York City Department of City Planning

500 0 500 Feet

HDR Hydroqual URBITRAN DD EEA Cambridge Environmental Inc

Figure 7.14-14 2006 Net Traffic - Facility Peak

North Shore Converted MTS

CITY OF NEW YORK
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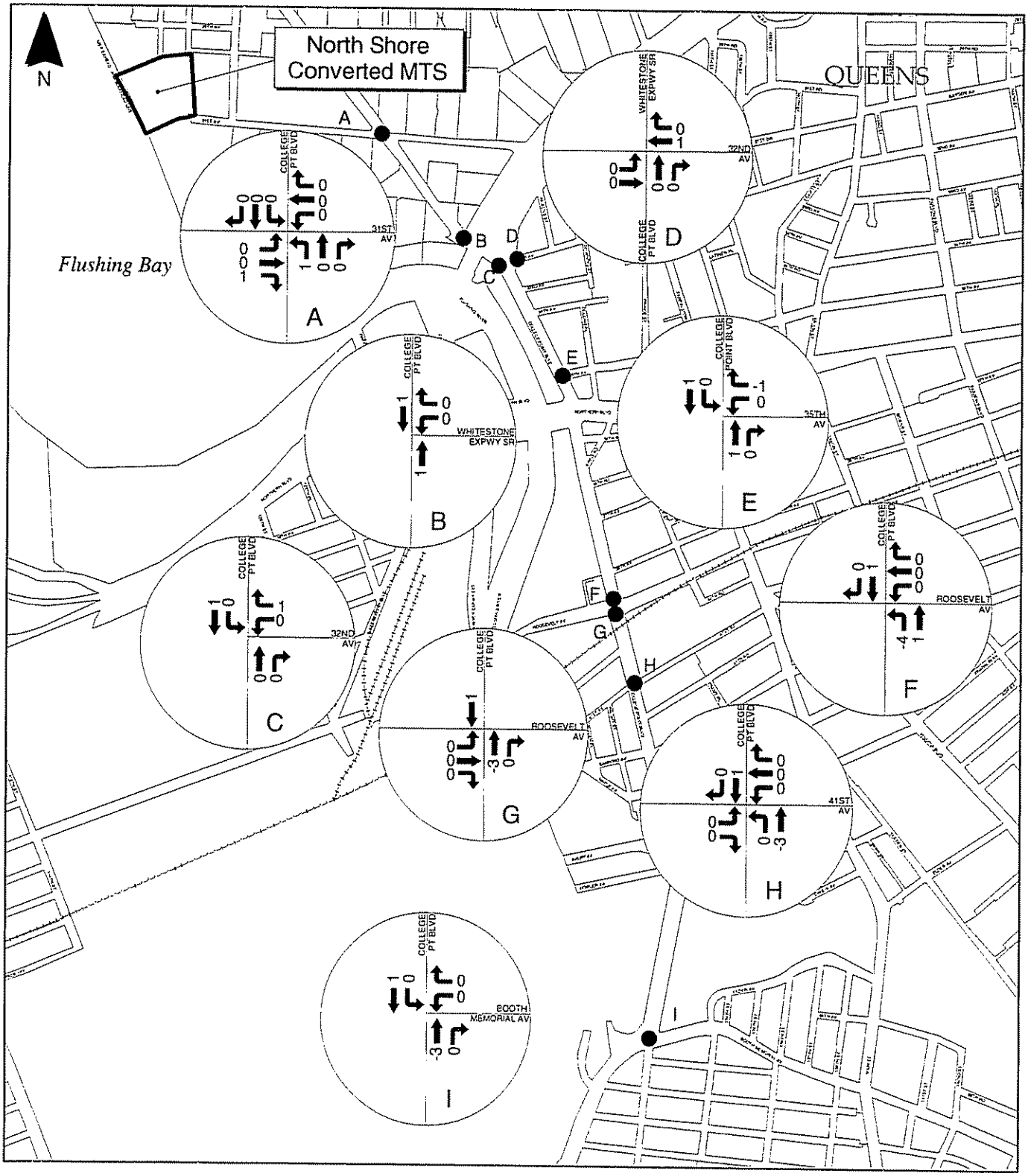


Site delineations are approximate
Base Map Source: New York City Department of City Planning

500 0 500 Feet

HDR HydroQual URBITRAN DD EEA Cambridge Environmental Inc

Figure 7.14-15 2006 Net Traffic - PM Peak

North Shore Converted MTS

CITY OF NEW YORK
DEPARTMENT OF SANITATION

THE CITY OF NEW YORK DEPARTMENT OF SANITATION

Employee trips generated as a result of the North Shore Converted MTS are expected to be about 44 per shift (22 coming in and 22 leaving). Employee shifts are projected to run from 8:00 a.m. to 4:00 p.m., 4:00 p.m. to 12:00 a.m., and 12:00 a.m. to 8:00 a.m. Therefore, during shift changes, employees would arrive about ½-hour before the start of a shift and leave about ½-hour after the end of a shift. With these projections, employee trips are expected between 7:30 a.m. and 8:30 a.m., 3:30 p.m. and 4:30 p.m., and 11:30 p.m. and 12:30 a.m.

Because only the AM peak (7:30 a.m. – 8:30 a.m.) coincided with a projected employee shift change (7:30 a.m. to 8:30 a.m.), employee trips both to and from the North Shore Converted MTS during the shift change (44) were considered as part of the net increase in site-generated traffic. Figures 7.14-10, 7.14-11 and 7.14-12 show the intersections analyzed with the net increase in site-generated traffic added to the Future No-Build traffic levels. Figures 7.14-13, 7.14-14 and 7.14-15 show the intersections analyzed with only the net increase in site-generated traffic. Traffic volumes indicated by a dash (-) are the result of changing the disposal location from the existing commercial vendor facilities to the North Shore Converted MTS. These projected net increases were routed through the intersections for each of the three peak hours. The highest net increase in trucks in the ingress or egress direction was 38. The highest net increase at any one intersection was 76 trucks. Both of these net increases occurred at the intersection of College Point Boulevard and 31st Avenue.

The need for Saturday analysis was considered. However, a traffic analysis was not performed on the projected net increases on Saturday truck trips because the total net increase in collection vehicles delivering waste on Saturdays would be approximately 86% of the inbound loads delivered during a typical average peak day. Additionally, traffic data indicated that the weekend background traffic volumes were approximately 64% of weekday traffic volumes. Table 7.14-3 illustrates the decrease in weekday background traffic and the decrease in DSNY and other agency collection vehicle traffic on the weekend. No analysis was performed for Sunday because the North Shore Converted MTS would not operate on Sundays. It was, therefore, judged that peak weekday analysis would represent the overall worst-case conditions.

Table 7.14-3
Weekday and Weekend Traffic
North Shore Converted MTS

DSNY and Other Agency Collection Vehicle Traffic		Background Traffic NB and SB on College Point Boulevard [1]	
Average Peak Day Trucks/Day	Saturday Trucks/Day	Weekday Average Vehicles/Day	Weekend Average Vehicles/Day
329	282	20,661	13,306

Note:
[1] NB and SB traffic data collected from ATR counts taken on College Point Boulevard between 31st Avenue and Whitestone Expressway Service Road from September 11 to 16, 2003.

Table 7.14-4 shows the 2006 Future Build v/c ratio, delay time and LOS for the intersections analyzed during the AM, Facility, and PM peak times associated with the North Shore Converted MTS. Over an average peak day, the intersections should not experience an extended increase in delay. The two intersections that may experience potentially significant impacts are discussed in Section 7.14.4.2 and summarized in Table 7.14-5.

7.14.4.2 Impacts and Mitigation

Two of the nine intersections may experience impacts great enough to be considered significant during only one of the peak times analyzed; however, 2001 CEQR Technical Manual guidelines require mitigation for significant impacts regardless of the duration, as discussed in Section 3.16. The potential impacts identified and the mitigation measures analyzed are presented below; their effectiveness is summarized in Table 7.14-5.

College Point Boulevard/31st Avenue – During the AM peak hour, a potential impact was identified on the eastbound left-turn/through/right turn lane group when the delay increased from 32.2 seconds to 37.8 seconds (LOS C deteriorated to LOS D). An increase in green time of one second for the eastbound and westbound approaches should eliminate this unacceptable increase in delay. This mitigation measure would subtract one second from the northbound and southbound approach green time. The southbound approach delay would increase by less than one second, the northbound approach delay would increase less than four seconds and the westbound approach delay would decrease by less than one second, compared to Future No-Build Conditions. This mitigation should not generate any adverse impacts on other lane groups during other time periods.

Table 7.14-4
HCM Analysis[1] 2006 Future Build Conditions
North Shore Converted MTS

Intersection & Lane Group	AM Peak Hour (7:30 a.m. – 8:30 a.m.)			Facility Peak Hour (10:00 a.m. – 11:00 a.m.)			PM Peak Hour (4:30 p.m. – 5:30 p.m.)		
	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
College Point & 31st Avenue (signalized)									
EB LTR	0.71	37.8	D	-	-	-	0.46	29.8	C
EB DFL	-	-	-	0.69	45.8	D	-	-	-
EB TR	-	-	-	0.44	30.8	C	-	-	-
WB LTR	0.43	29.2	C	0.47	29.8	C	0.30	27.3	C
NB L	0.64	21.7	C	0.52	14.3	B	0.33	10.1	B
NB TR	0.31	8.9	A	0.17	7.8	A	0.28	8.6	A
SB L	0.07	13.4	B	0.03	13.0	B	0.04	13.1	B
SB TR	0.38	16.2	B	0.15	13.8	B	0.34	15.7	B
OVERALL		20.2	C		21.7	C		16.4	B
College Point and Whitestone Expressway Service Road – North (signalized)									
WB L	0.48	18.8	B	0.61	21.6	C	0.69	23.8	C
WB LR	0.07	13.9	B	0.38	17.3	B	0.10	14.1	B
NB T	0.48	10.4	B	0.31	8.9	A	0.40	9.5	A
SB T	0.43	9.9	A	0.18	8.0	A	0.38	9.4	A
OVERALL		11.5	B		13.5	B		12.8	B
College Point and 32nd Avenue (signalized)									
WB LR	0.52	19.1	B	0.39	17.1	B	0.37	16.7	B
NB TR	0.93	35.8	D	0.69	22.2	C	0.76	23.6	C
SB L	0.46	19.9	B	0.54	18.5	B	0.62	23.2	C
SB T	0.48	9.6	A	0.26	7.8	A	0.46	9.3	A
OVERALL		22.9	C		17.0	B		17.6	B
Whitestone Expressway Service Road – South and 32nd Avenue (signalized)									
EB DFL	0.21	7.1	A	-	-	-	0.28	7.2	A
EB T	0.30	2.2	A	-	-	-	0.23	1.5	A
EB LT	-	-	-	0.22	1.1	A	-	-	-
WB TR	0.70	25.6	C	0.44	18.3	B	0.50	19.4	B
NB TR	0.59	21.4	C	0.55	20.9	C	0.42	18.0	B
OVERALL		18.1	B		12.9	B		13.1	B
College Point and 35th Avenue (signalized)									
WB LR	0.47	19.2	B	0.59	22.4	C	0.40	17.8	B
NB TR	0.62	12.3	B	0.43	10.1	B	0.52	10.8	B
SB LT	0.92	29.3	C	0.46	10.7	B	0.83	20.5	C
OVERALL		20.2	C		12.7	B		15.9	B
College Point and Roosevelt Avenue - Westbound (signalized)									
WB LTR	0.26	22.7	C	0.21	22.1	C	0.22	22.2	C
NB L	0.55	27.2	C	0.46	23.6	C	0.49	26.2	C
NB T	0.50	13.7	B	0.29	11.4	B	0.43	12.7	B
SB TR	0.92	50.6	D	0.83	41.9	D	1.00	63.3	E
OVERALL		29.6	C		27.7	C		36.4	D

Table 7.14-4 (continued)
HCM Analysis[1] 2006 Future Build Conditions
North Shore Converted MTS

Intersection & Lane Group	AM Peak Hour (7:30 a.m. – 8:30 a.m.)			Facility Peak Hour (10:00 a.m. – 11:00 a.m.)			PM Peak Hour (4:30 p.m. – 5:30 p.m.)		
	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
College Point and Roosevelt Avenue - Eastbound (signalized)									
EB LTR	0.39	16.2	B	0.33	15.6	B	0.51	17.9	B
NB TR	0.64	23.0	C	0.44	19.9	C	0.57	21.6	C
SB T	0.57	22.4	C	0.53	21.7	C	0.65	24.0	C
OVERALL		21.2	C		19.4	C		21.3	C
College Point and 41st Avenue (signalized)									
EB LR	0.39	28.8	C	0.63	38.6	D	0.54	33.1	C
WB LTR	0.69	36.6	D	0.88	52.5	D	0.72	37.8	D
NB L	0.08	8.9	A	0.19	10.4	B	0.18	11.0	B
NB T	0.57	13.4	B	0.34	10.6	B	0.49	12.1	B
SB TR	0.44	11.4	B	0.43	11.4	B	0.54	12.6	B
OVERALL		16.1	B		21.0	C		16.7	B
College Point and Booth Memorial Avenue (signalized)									
WB L	0.80	38.1	D	0.53	27.5	C	0.56	28.1	C
WB LR	0.45	26.1	C	0.30	23.2	C	0.24	22.3	C
NB TR	0.51	13.9	B	0.27	11.5	B	0.47	13.5	B
SB DFL	0.78	45.1	D	0.44	15.8	B	1.02	87.9	F
SB T	0.41	12.9	B	0.35	12.3	B	0.47	13.6	B
OVERALL		20.3	C		16.0	B		22.0	C

Notes:

[1] HCM output is included in technical backup submitted to the NYCDOT

DFL = defacto left

LTR = left, through and right movements

NB = northbound

SB = southbound

EB = eastbound

WB = westbound

LT = left through movement

L = left movement

TR = through right movement

T = through movement

LR = left right movement

Table 7.14-5
HCM Analysis[1] 2006 Future Build Conditions with Mitigation
North Shore Converted MTS

Intersection & Lane Group	2006 Future No-Build			2006 Future Build			2006 Future Build after Mitigation		
	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
College Point & 31st Avenue (signalized) – AM Peak									
EB LTR	0.55	32.2	C	0.71	37.8	D	0.68	35.7	D
WB LTR	0.38	28.4	C	0.43	29.2	C	0.41	28.1	C
NB L	0.49	12.9	B	0.64	21.7	C	0.66	23.2	C
NB TR	0.31	8.9	A	0.31	8.9	A	0.32	9.4	A
SB L	0.07	13.4	B	0.07	13.4	B	0.07	14.0	B
SB TR	0.38	16.2	B	0.38	16.2	B	0.39	16.9	B
OVERALL		17.4	B		20.2	C		20.2	C
College Point and Booth Memorial Avenue (signalized) – AM Peak									
WB L	0.81	38.7	D	0.80	38.1	D	0.82	41.0	D
WB LR	0.44	25.7	C	0.45	26.1	C	0.47	27.1	C
NB TR	0.49	13.7	B	0.51	11.9	B	0.50	13.3	B
SB DFL	0.73	38.9	D	0.78	45.1	D	0.76	41.2	D
SB T	0.39	12.7	B	0.41	12.9	B	0.40	12.3	B
OVERALL		20.1	C		20.3	C		20.3	C

Notes:
(1) HCM output is included in technical backup submitted to the NYCDOT.
LTR = left, through and right movements
DFL = defacto left
NB = northbound
SB = southbound
EB = eastbound
WB = westbound
L = left movement
TR = through right movement
T = through movement
LR = left right movement

College Point Boulevard/Booth Memorial Avenue – During the AM peak hour, a potential impact was identified on the southbound defacto left lane group (LOS D) when the delay increased from 38.9 seconds to 45.1 seconds. An increase in the green time of one second for the southbound and northbound approaches should eliminate the delay increase. This mitigation measure decreases the westbound approach green time by one second. The westbound approach delay time would increase by approximately one second and the northbound and southbound approach delay times would decrease by less than one second compared to Future No-Build Conditions. This mitigation should not generate any adverse impacts on other lane groups during other time periods.

In addition to the two intersections that may experience impacts, the 31st Avenue and site entrance/exit intersection may also require low-cost and easily implemented mitigation. Even though traffic operations at this intersection should not affect traffic significantly along 31st Avenue, some improvements near the intersection would need to be considered, such as restricting parking along 31st Avenue within the vicinity of the intersection to improve site distance at the site entrance/exit. In addition, a stop sign at the site exit would be beneficial. This mitigation should not generate any adverse impacts on other lane groups during any time periods.

Overall, the mitigation measures suggested would greatly enhance the intersection performance by reducing delays to LOSs similar to those under the Future No-Build Condition.

7.14.4.3 Public Transportation

Future Build Conditions are expected to remain the same as Future No-Build Conditions.

7.14.4.4 Pedestrian Activity

Future Build Conditions are expected to remain the same as Future No-Build Conditions.

7.15 Air Quality

7.15.1 Definition of the Study Areas

The study area for the on-site air quality analysis for criteria pollutants (except $PM_{2.5}$) is defined as the area within 500 meters (0.3 miles) of the property line in all directions. The study area for the on-site analysis for $PM_{2.5}$ is defined as the area within 500 meters from the highest impact location of the North Shore Converted MTS. The study area for the off-site air quality analysis is defined as the area or intersections listed in Section 7.15.4.2.

7.15.2 Existing Conditions

Applicable air quality data collected at the monitoring station(s) nearest to the study area are shown in Table 7.15-1. These data were compiled by NYSDEC for the latest calendar year for which applicable data are currently available. The monitored levels do not exceed national and state ambient air quality standards.

Table 7.15-1
Representative Ambient Air Quality Data
North Shore Converted MTS

Pollutant	Monitor	Averaging Time	Value	NAAQS
CO[1]	Queens College – 14439 Gravett Road	8-Hour	2,998 $\mu g/m^3$	10,000 $\mu g/m^3$
		1-Hour	15,345 $\mu g/m^3$	40,000 $\mu g/m^3$
NO_2	College Point Post Office	Annual	56 $\mu g/m^3$	100 $\mu g/m^3$
PM_{10}[2]	Greenpoint	Annual	23 $\mu g/m^3$	50 $\mu g/m^3$
		24-Hour	51 $\mu g/m^3$	150 $\mu g/m^3$
SO_2[1]	Queens College – 14439 Gravett Road	3-Hour	134 $\mu g/m^3$	1,300 $\mu g/m^3$
		24-Hour	103 $\mu g/m^3$	365 $\mu g/m^3$
		Annual	18 $\mu g/m^3$	80 $\mu g/m^3$

Note:
Source: NYCDEP, April 2003 and USEPA Air data – Monitor Values Report (http://oaspub.epa.gov/airdata)
[1] Values are the highest pollutant levels recorded during the 2003 calendar year.
[2] Values are the highest pollutant levels recorded during the 1999 calendar year.

7.15.3 Future No-Build Conditions

The primarily commercial/industrial nature of the study area is not expected to change by the Future No-Build 2006 analysis year. As such, no changes to air quality levels are anticipated, and Future No-Build air quality conditions are assumed to be the same as Existing Conditions for all pollutants except CO. CO concentrations are expected to be lowered by increasingly stringent, federally-mandated vehicular emission controls, although any effect may be offset by increases in regional traffic volumes.

7.15.4 Potential Impacts with the North Shore Converted MTS

7.15.4.1 On-Site Analysis

7.15.4.1.1 Sources Considered in the Analysis

The sources of emissions and the number of each type of source that are anticipated to be in operation during the peak hour and under daily average conditions are provided in Table 7.15-2. Figure 7.15-1 shows the locations of these sources within the site.

7.15.4.1.2 Results of the Criteria Pollutant Analysis

The highest estimated criteria pollutant concentrations at any of the receptor locations considered are presented in Table 7.15-3. These values are below the national and state ambient air quality standards for the appropriate averaging time periods. In addition, the highest estimated changes in 24-hour and annual $PM_{2.5}$ concentrations from project-generated vehicles at any of the receptor locations considered, which are also presented in Table 7.15-3, are below the STVs. The North Shore Converted MTS would not, therefore, significantly impact air quality in the area.

Table 7.15-2
Emission Sources Considered for On-Site Air Quality Analysis[1]
North Shore Converted MTS

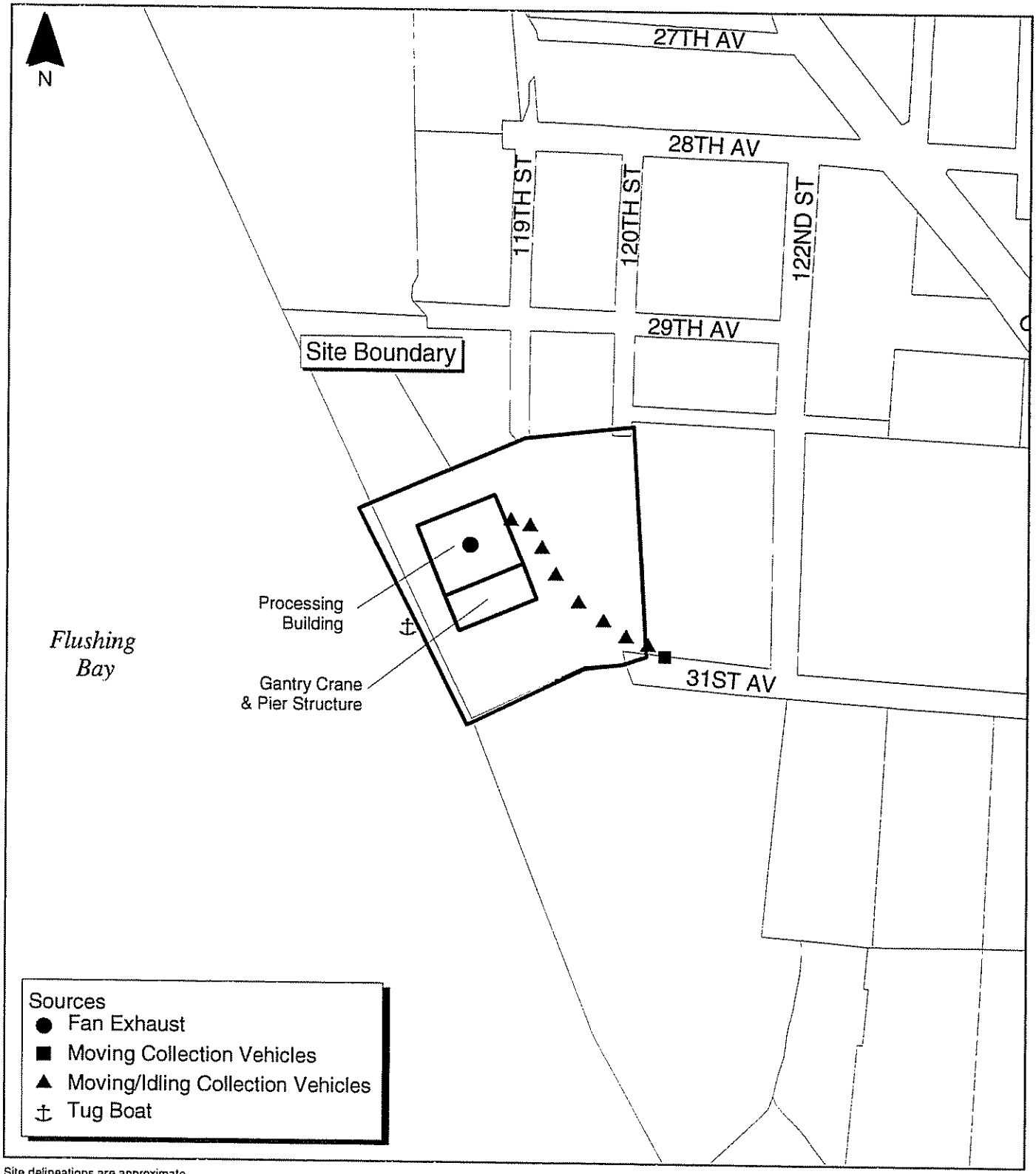
Type of Emission Source	Maximum Number of Sources Operated During a Single Hour[2]	Number of Sources Operated During 24-hour and Annual Average Hour
Within Processing Building		
Wheel Loaders	2	1
Mini Loaders	1	1
Tamping Cranes	1	1
Mini-Sweepers	1	1
Vacuum Sweepers	1	1
Moving/Queuing Collection Vehicles	46	18
Space Heaters	6	4
Boiler	1	1
Outside Processing Building		
Moving Collection Vehicles	46	18
Queuing Collection Vehicles[3]	21 in, 1 out	3 in, 1 out
Oceangoing Tugboats	1	1

Notes:

(1) Emission factors used and emission rates estimated for each of these sources are included in technical backup ~~provided to the NYCDEP~~to be provided upon request.

(2) This is based on design capacity of the Converted MTS, not analyzed truck arrival rates.

(3) Peak 8-hour and 3-hour average number of queuing collection vehicles outside building is 6. Theoretically, the 3-hour value should be no less than one-third of the peak 1-hour value (one third of 21), but for this analysis, the 3-hour and 8-hour values are more realistic estimates of actual peak queuing activity, while the 1-hour peak is simply a conservative assumption based on the maximum available physical queuing space on the entrance road/ramp.



Site delineations are approximate
Base Map Source: New York City Department of City Planning
Note: These are modeled source locations used in the on-site air quality analysis and do not represent individual collection vehicles

Figure 7.15-1 On-Site Air Quality Analysis

North Shore Converted MTS

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Table 7.15-3
Highest Estimated Concentrations of the Criteria Pollutants from On-Site Emissions
North Shore Converted MTS

Pollutant	Averaging Time Period	Maximum Impacts from On-Site Emission Sources [1]	Background Pollutant Concentrations [2]	Highest Estimated On-Site Pollutant Concentrations	NAAQS[3]	STV[4]
Carbon Monoxide (CO), $\mu g/m^3$	1-hour[6]	~~568~~859	~~3,779~~3,781	~~4,347~~4,640	40,000	NA
	8-hour[6]	~~125~~127	~~2,634~~2,635	~~2,759~~2,762	10,000	NA
Nitrogen Dioxide (NO_2), $\mu g/m^3$	Annual	45	56	~~60~~61	100	NA
Particulate Matter (PM_{10}), $\mu g/m^3$	24-hour[7]	~~21~~26	~~57~~90	~~78~~116	150	NA
	Annual	~~3~~4	~~23~~20	~~26~~24	50	NA
Particulate Matter ($PM_{2.5}$), $\mu g/m^3$	24-hour	~~2~~1.9	NA	NA	NA	5
	Annual Neighborhood Average	~~0.020~~0.021[5]	NA	NA	NA	0.1
Sulfur Dioxide (SO_2), $\mu g/m^3$	3-hour[6]	36	186	222	1,300	NA
	24-hour[6]	3	107	110	365	NA
	Annual	0.3	18	18	80	NA

Notes:

(1) The highest estimated pollutant concentrations found at any of the off-site receptor locations.

(2) Background concentrations were obtained from the NYCDEP ~~in April 2003~~ memorandum dated February 18, 2005.

(3) NAAQS = National Ambient Air Quality Standard.

(4) Screening threshold value (STV) established by the NYCDEP and NYSDEC.

(5) Average $PM_{2.5}$ concentration over 1 km x 1 km "neighborhood-scale" receptor grid.

(6) The standards for these averaging periods allow one exceedance per year, so the use of the overall maximum concentration provides a very conservative comparison with standards.

(7) The 24-hour PM_{10} NAAQS is based on a 99th percentile concentration, which means that the high, 4th high concentration is appropriate for comparison with the standard. Therefore, the use of the overall highest concentration in this comparison is ~~quite~~ very conservative.

NA = Not Applicable

7.15.4.1.3 Results of the Toxic Pollutant Analysis

The results of the toxic pollutant analysis are summarized in Table 7.15-4. The highest estimated non-carcinogenic toxic air pollutant impacts are below the short-term (acute) and long-term (chronic) hazard index thresholds specified in New York State's Air Guide 1. In addition, the highest estimated carcinogenic impacts are less than the one-in-a-million threshold level that is defined by NYSDEC as being significant. As such, the potential impacts of the toxic pollutant emissions from the on-site operations of the North Shore Converted MTS are not considered to be significant.

7.15.4.2 Off-Site Analysis

7.15.4.2.1 Pollutants Considered and Analyses Conducted

Locations potentially affected by DSNY and other agency collection vehicles were identified using 2001 CEQR Technical Manual guidelines that are outlined in Section 3.17. Following these guidelines, the following detailed mobile source analyses were conducted for the applicable (i.e., worst-case) time periods:

- An analysis of the intersections of College Point Boulevard at 31st Avenue, College Point Boulevard at Booth Memorial Avenue, and College Point Boulevard at 32nd Avenue and Whitestone Expressway Service Road, to determine whether North Shore Converted MTS-generated traffic has the potential to cause exceedances of NYCDEP's 8-hour CO de minimus value or a violation of the 8-hour NAAQS;
- An analysis of the intersections of College Point Boulevard at 31st Avenue, College Point Boulevard at Booth Memorial Avenue, and College Point Boulevard at 32nd Avenue and Whitestone Expressway Service Road, to determine whether North Shore Converted MTS-generated traffic has the potential to cause exceedances of NYCDEP's and NYSDEC's 24-hour and annual $PM_{2.5}$ STVs; and
- An analysis of the intersections of College Point Boulevard at 31st Avenue, College Point Boulevard at Booth Memorial Avenue, and College Point Boulevard at 32nd Avenue and Whitestone Expressway Service Road, to determine whether North Shore Converted MTS-generated traffic has the potential to cause exceedances of the 24-hour and annual PM_{10} NAAQS.

The roadway intersections selected for the mobile source analysis are shown in Figure 7.15-2.

Table 7.15-4
Highest Estimated Non-Cancer Hazard Index and Cancer Risk of Toxic Air Pollutants from On-Site Emissions
North Shore Converted MTS

No.	Toxic Air Pollutants	Acute Non-Cancer Risk			Chronic Non-Cancer Risk			Cancer Risk		
		Highest Estimated Short-Term (1-hr) Pollutant Conc.[1] ($\mu g/m^3$)	Short-Term (1-hr) Guideline Conc. (SGCs) [2] ($\mu g/m^3$)	Acute Non-Cancer Hazard Index[3]	Highest Estimated Long-Term (Annual) Pollutant Conc.[4] ($\mu g/m^3$)	Long-Term (Annual) Guideline Conc. (AGCs) [5] ($\mu g/m^3$)	Chronic Non-Cancer Hazard Index [6]	Highest Estimated Long-Term (Annual) Pollutant Conc. [4] ($\mu g/m^3$)	Unit Risk Factors [7] ($\mu g/m^3$)	Max. Cancer Risk [8,9]
Carcinogenic Pollutants										
1	Benzene	2.76E-01	1.30E+03	2.12E-04	1.64E-03	1.30E-01	1.26E-02	1.64E-03	8.30E-06	1.36E-08
2	Formaldehyde	3.49E-01	3.00E+01	1.16E-02	2.07E-03	6.00E-02	3.46E-02	2.07E-03	1.30E-05	2.70E-08
3	1,3 Butadiene	1.16E-02	-	-	6.87E-05	3.60E-03	1.91E-02	6.87E-05	2.80E-04	1.92E-08
4	Acetaldehyde	2.27E-01	4.50E+03	5.05E-05	1.35E-03	4.50E-01	3.00E-03	1.35E-03	2.20E-06	2.97E-09
5	Benzo(a)pyrene	5.57E-05	-	-	3.31E-07	2.00E-03	1.65E-04	3.31E-07	1.70E-03	5.62E-10
Non-Carcinogenic Pollutants [10]										
6	Propylene	7.64E-01	-	-	4.54E-03	3.00E+03	1.51E-06	4.54E-03	NA	NA
7	Acrolein	2.74E-02	1.90E-01	1.44E-01	1.63E-04	2.00E-02	8.13E-03	1.63E-04	NA	NA
8	Toluene	1.21E-01	3.70E+04	3.27E-06	7.19E-04	4.00E+02	1.80E-06	7.19E-04	NA	NA
9	Xylenes	8.44E-02	4.30E+03	1.96E-05	5.01E-04	7.00E+02	7.16E-07	5.01E-04	NA	NA
10	Anthracene	5.54E-04	-	-	3.29E-06	2.00E-02	1.64E-04	3.29E-06	NA	NA
11	Benzo(a)anthracene	4.97E-04	-	-	2.95E-06	2.00E-02	1.48E-04	2.95E-06	NA	NA
12	Chrysene	1.05E-04	-	-	6.21E-07	2.00E-02	3.10E-05	6.21E-07	NA	NA
13	Naphthalene	2.51E-02	7.90E+03	3.18E-06	1.49E-04	3.00E+00	4.97E-05	1.49E-04	NA	NA
14	Pyrene	1.42E-03	-	-	8.40E-06	2.00E-02	4.20E-04	8.40E-06	NA	NA
15	Phenanthrene	8.70E-03	-	-	5.17E-05	2.00E-02	2.58E-03	5.17E-05	NA	NA
16	Dibenz(a,h)anthracene	1.73E-04	-	-	1.03E-06	2.00E-02	5.13E-05	1.03E-06	NA	NA
		Total Estimated Acute Non-Cancer Hazard Index		**1.56E-01**	**Total Estimated Chronic Non-Cancer Hazard Index**		**8.10E-02**	**Total Estimated Combined Cancer Risk**		**6.34E-08**
		Acute Non-Cancer Hazard Index Threshold [11]		**1.0E+00**	**Chronic Non-Cancer Hazard Index Threshold [11]**		**1.0E+00**	**Cancer Risk Threshold [11]**		**1.0E-06**

Notes to Table 7.15-4:

(1) Estimated by multiplying the total 1-hour HCs concentration by the ratio of the emission factor for that pollutant to the emission factor of the total HCs.

(2) Short-term (1-hour) guideline concentrations (SGC) established by NYSDEC.

(3) Estimated by dividing the maximum 1-hr concentrations of each pollutant by the SGC value of that pollutant and summing up the resulting values to obtain hazard index for all of the pollutants combined.

(4) Estimated by multiplying the total annual HCs concentration by ratio of the emission factor for that pollutant to the emission factor of the total HCs.

(5) Long-term (annual) guideline concentrations (AGC) established by NYSDEC.

(6) Estimated by dividing the maximum annual concentration of each of the individual pollutants by the AGC value of that pollutant and summing up the resulting values to obtain hazard index for all of the pollutants combined.

(7) Unit risk factors established by USEPA and other governmental agencies for the inhalation of carcinogenic air pollutants.

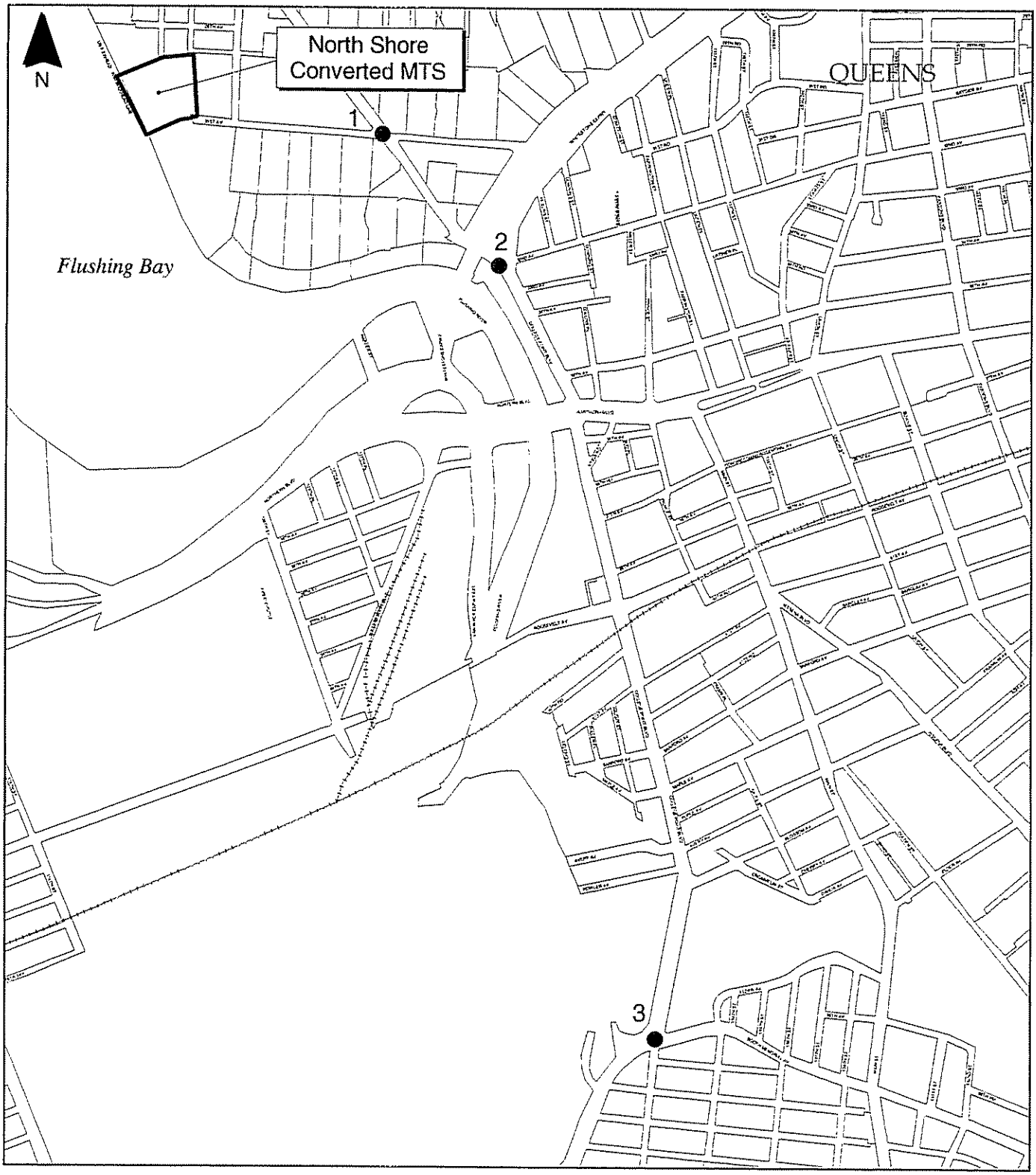
(8) The maximum cancer risk of each of the individual pollutants was estimated by multiplying the estimated annual concentration of each pollutant by its unit risk factor.

(9) The total incremental cancer risk from all of the pollutants combined was estimated by summing the maximum cancer risk of each of the individual pollutants.

(10) Some of the pollutants included in the group of non-carcinogenic pollutants, such as anthracene, benzo(a)anthracene and chrysene, may also have carcinogenic effects. As these pollutants do not have established unit risk factors, they were evaluated using the hazard index approach for non-carcinogens.

(11) Hazard index and cancer risk thresholds based on NYSDEC "Guidelines for the Control of Toxic Ambient Air Contaminants" dated November 12, 1997. Estimated values below these threshold limits are considered to be insignificant impacts.

NA = Not Applicable



Site delineations are approximate
Base Map Source: New York City Department of City Planning

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Figure 7.15-2 Off-Site Air Quality Intersections Studied North Shore Converted MTS

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7.15.4.2.2 Results of the Off-Site Analysis

Applicable pollutant concentrations estimated near each selected intersection, which are shown in Table 7.15-5, are all within (less than) the applicable state and federal ambient air quality standards, STVs (for $PM_{2.5}$) and/or de minimus impact values (for CO). A Tier II analysis of the intersections at College Point Boulevard at 31st Avenue was necessary to determine the off-site annual impacts for $PM_{2.5}$. The results of this Tier II analysis are within the applicable annual STVs for $PM_{2.5}$. The off-site operations of the North Shore Converted MTS are not, therefore, considered to be significant.

Table 7.15-5
Estimated Pollutant Concentration Near Selected Roadway Intersections
North Shore Converted MTS

Air Quality Receptor Site	CO	PM_{10}		24-hr $PM_{2.5}$ Impacts			Max Annual Neighborhood $PM_{2.5}$ Impacts		
	8-hr CO Conc.[1] ppm (NAAQS: 9 ppm)	24-hr PM_{10} Conc.[1] $\mu g/m^3$ (NAAQS: 150 $\mu g/m^3$)	Annual PM_{10} Conc.[1] $\mu g/m^3$ (NAAQS: 50 $\mu g/m^3$)	Impacts from On-Site Emission Sources[2] $\mu g/m^3$ (STV: 5 $\mu g/m^3$)	Impacts from Off-Site Emission Sources[3] $\mu g/m^3$ (STV: 5 $\mu g/m^3$)	Total Combined Impacts from On- and Off-Site Emission Sources $\mu g/m^3$ (STV: 5 $\mu g/m^3$)	Impacts from On-Site Emission Sources[2] $\mu g/m^3$ (STV: 0.1 $\mu g/m^3$)	Impacts from Off-Site Emission Sources[4] $\mu g/m^3$ (STV: 0.1 $\mu g/m^3$)	Total Combined Impacts from On- and Off-Site Emission Sources $\mu g/m^3$ (STV: 0.1 $\mu g/m^3$)
College Point Boulevard & 31st Avenue									
Existing Conditions	4.14	9587	3935						
Future No-Build Conditions	4.28	9488	3835						
Future Build Conditions	4.48	9691	3936						
Future Build Incremental				0.310.17	0.684[5]	0.710.85	0.0340.010	0.04030[5]	0.0640.050
College Point Boulevard & Booth Memorial Avenue									
Existing Conditions	4.85.1	111100	4148						
Future No-Build Conditions	4.84.5	108102	4245						
Future Build Conditions	4.84.5	108102	4246						
Future Build Incremental				0.050.028	0.460.4	0.450.49	0.0010.002	0.0470.05[5]	0.0510.049
College Point Boulevard, 32nd Avenue & Whitestone Expressway Service Road									
Existing Conditions	65.0	11396	4539						
Future No-Build Conditions	6.14.9	10997	4439						
Future Build Conditions	6.14.9	11098	4440						
Future Build Incremental				0.180.089	0.59	0.68	0.0030.007	0.0705[5]	0.0530.077

Notes for Table 7.15-5:

(1) CO and PM_{10} concentrations are the maximum concentrations estimated using the AM, Facility, and PM peak traffic information plus background concentration (8-hr CO = 2.75 ppm; 24-hr PM_{10} = 57 $\mu g/m^3$; Annual PM_{10} = 23 $\mu g/m^3$).

(2) The maximum incremental concentrations of the on-site emissions at the intersection considered.

(3) The $PM_{2.5}$ concentrations are the maximum modeled incremental $PM_{2.5}$ impacts (due to project-induced [or Future Build] traffic only) estimated by taking the difference between the maximum $PM_{2.5}$ concentrations for the Future No-Build and Future Build scenarios at any receptor three meters from the edge of the roadways using AM, Facility, or PM peak traffic conditions.

(4) The $PM_{2.5}$ concentrations are the maximum modeled incremental $PM_{2.5}$ impacts (due to project-induced [or Future Build] traffic only) estimated by taking the difference between the maximum $PM_{2.5}$ concentrations for the Future No-Build and Future Build scenarios at any receptor 15 meters from the edge of the roadways using AM, Facility, or PM peak traffic conditions.

(5) Results determined by performing a TIER II analysis and averaging concentrations over the entire receptor network.

ppm = parts per million

$\mu g/m^3$ = microgram per cubic meter

7.16 Odor

7.16.1 Existing Conditions

The existing MTS is not in operation, and there are no existing sources of odor at the site. The study area is within 500 meters (0.3 miles) from the facility boundary. The locations for sensitive receptors in this analysis are the same as those used in the noise analysis. The nearest sensitive receptor is a residential house on 29th Avenue west of 119th Street, approximately ~~280~~ 301 feet from the site boundary.

7.16.2 Future No-Build Conditions

No additional odor-producing sources are currently anticipated in the vicinity of the North Shore Converted MTS. Thus, Existing Conditions are assumed to be representative of Future No-Build Conditions.

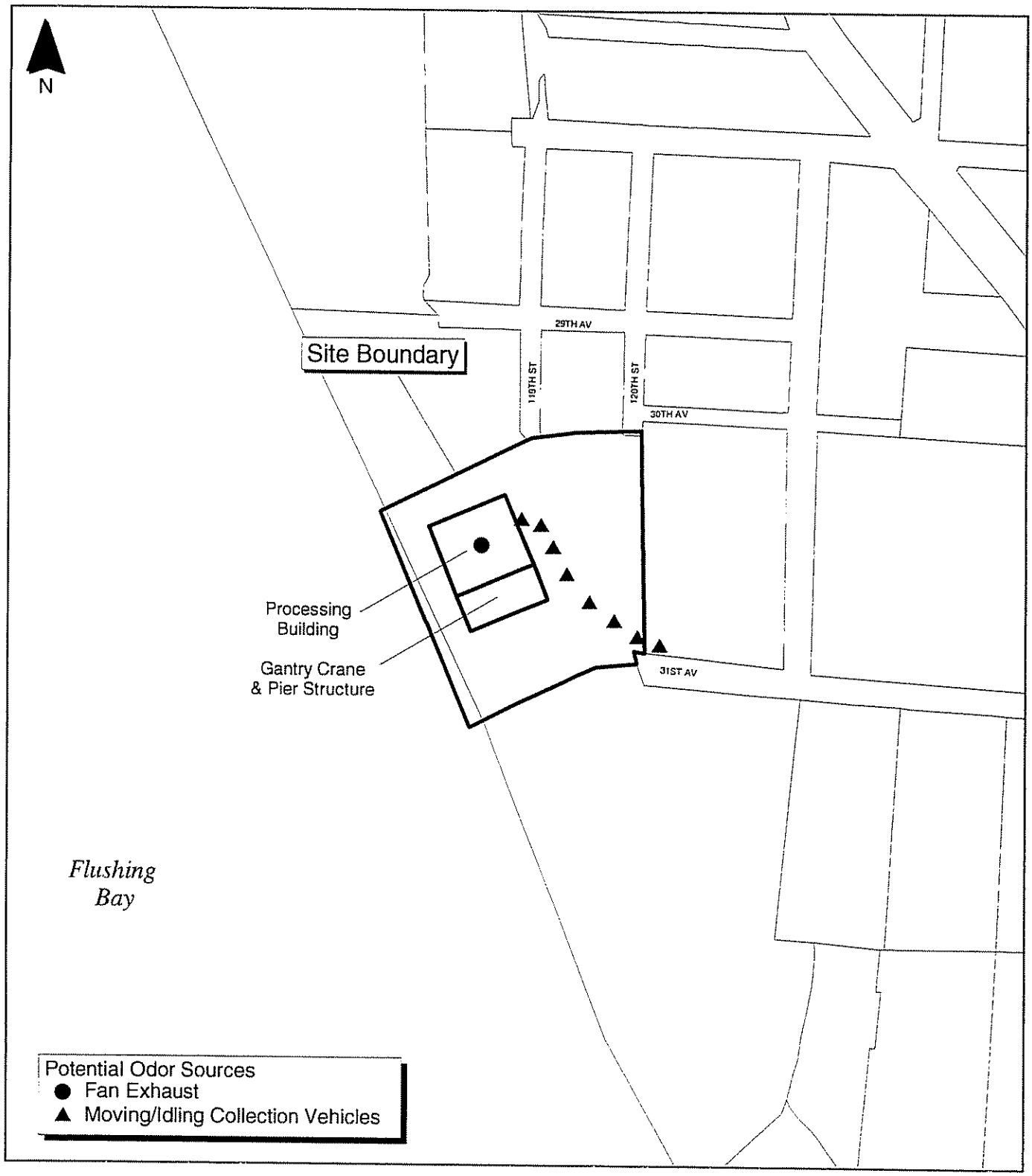
7.16.3 Potential Impacts with the North Shore Converted MTS

7.16.3.1 Odor Source Types and Locations Considered in the Analysis

The anticipated number and types of odor sources that would be associated with waste processing operations at peak design capacity at the North Shore Converted MTS are provided in Table 7.16-1. Figure 7.16-1 shows the locations of these sources within the site.

Table 7.16-1
Odor Sources Included in Odor Analysis
North Shore Converted MTS

Type of Emission Source	Number of Sources Operated During Peak Design Capacity
Exhaust Fans from Processing Building	1
Moving and Idling Collection Vehicles	22



Site delineations are approximate
Base Map Source: New York City Department of City Planning

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Figure 7.16-1 Potential Odor Sources

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An odor control system (e.g., scrubber, neutralizing agent misting system injected into the exhaust duct work system, etc.) would be included in the design to control odorous emissions from the processing building. Odor control systems can remove between 90% and 99% of odorous compounds. For purposes of modeling odor dispersion, a 90% reduction of odorous emissions was conservatively assumed for the North Shore Converted MTS.

7.16.3.2 Results of the Odor Analysis

The highest estimated odor concentrations at any of the receptor sites considered and the concentrations at the closest sensitive receptor are presented in Table 7.16-2. The predicted OU values at sensitive receptor locations are compared to an OU of 5, which represents the level of odor impact that would begin to be detected by an average observer. The highest predicted OU associated with the North Shore Converted MTS at any nearby sensitive receptor is less than 1, so odors from the North Shore Converted MTS would not be detectable by off-site sensitive receptors and the facility would comply with NYSDEC requirements for effective odor control. Therefore, no significant adverse impacts from odors on receptors are expected to occur as a result of this facility.

Table 7.16-2
Highest Predicted Odor Concentration(s) from On-Site Sources
North Shore Converted MTS

Parameter	Resulting Odor Unit[1]
Estimated Detectable Concentration	5.0
Highest Result	~~0.42~~0.47
Type of Receptor	Discrete Receptor
Location of Receptor	Over Water
Closest Sensitive Receptor Result[2]	~~0.06~~0.086
Type of Receptor	Residential House
Distance to Receptor[2]	280 Feet

Notes:

(1) Odor Unit is defined as concentration that an average person in a laboratory setting could just barely detect.

(2) Sensitive receptors in this analysis are the same as sensitive receptors in the noise analysis.

7.17 Noise

The noise analysis addresses on-site and off-site sources of noise emissions from North Shore Converted MTS-related solid waste management activities. It is based on Section R of the 2001 CEQR Technical Manual for both on-site and off-site sources, and, for on-site sources only, the Performance Standards of the New York City Zoning Code for Manufacturing Districts and the Current New York City Noise Code. Section 3.19 provides a general discussion of the relevant regulatory standards and methodologies used in this analysis.

7.17.1 Existing Conditions

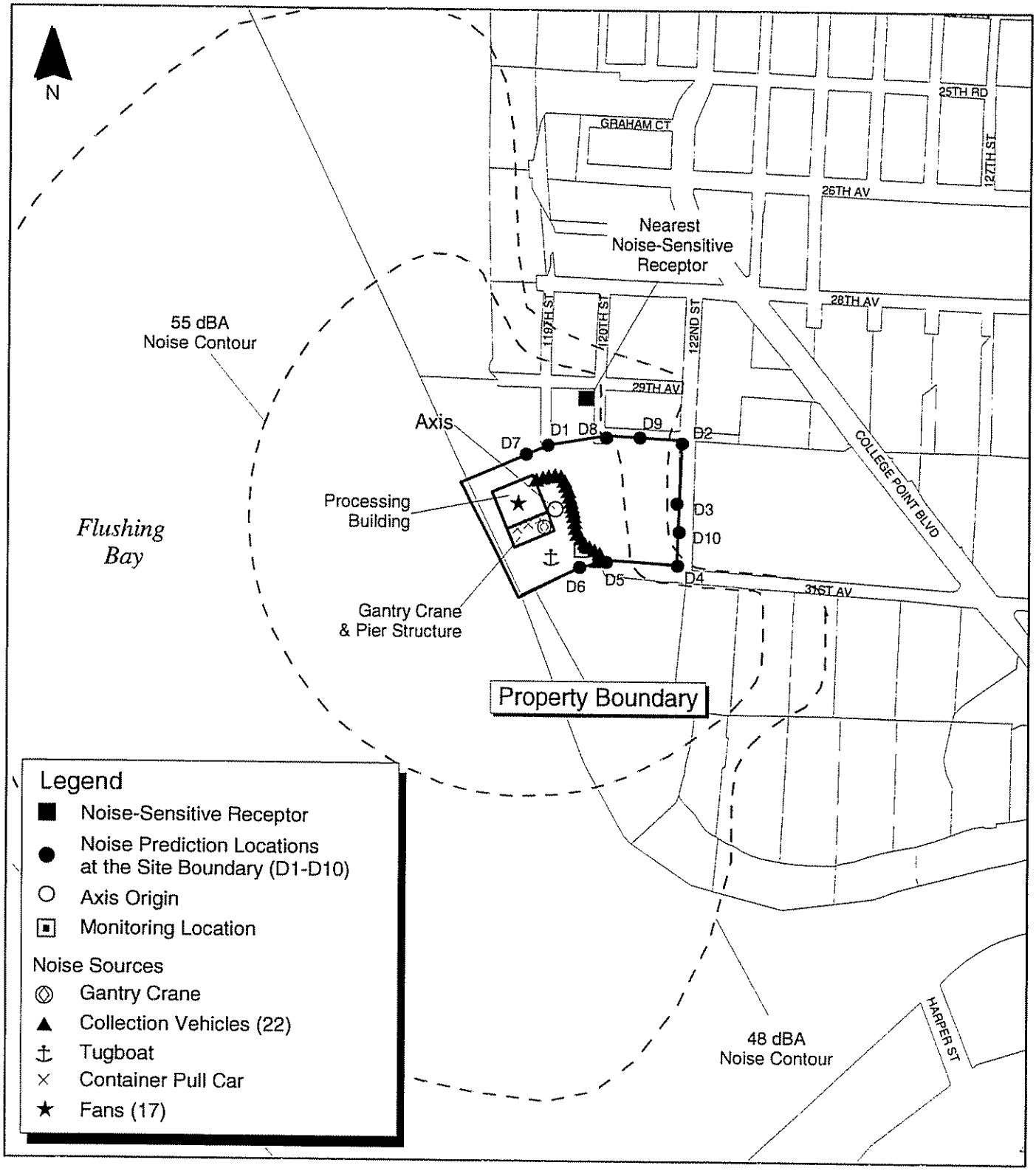
7.17.1.1 Introduction

Figure 7.17-1 shows the location of the North Shore Converted MTS, the surrounding area and the points that represent the property boundary (D1, etc.) for all noise analyses. The nearest noise-sensitive receptor is a residential house on 29th Avenue west of 119th Street, approximately 92 meters (301 feet) from the North Shore Converted MTS property line. Additional residential areas exist immediately west and north of these residences.

7.17.1.2 On-Site Noise Levels

Existing on-site noise levels consist of noise created by the activities and events on and immediately surrounding the site. Existing noise levels were monitored hourly for a 24-hour period at the property line closest to the nearest noise-sensitive receptor. Noise monitoring data recorded hourly included $L_{eq(1)}$, L_{min} and L_{max},[12] and the statistical metrics of L_{10}, L_{50} and L_{90}.[13] Table 7.17-1 presents monitored noise levels. As shown, the quietest hour at the monitoring location occurred between 11:00 p.m. and 12:00 a.m. and had an $L_{eq(1)}$ of 57.0 dBA on January 9, 2003. Activities and events that contribute to the on-site noise levels are as follows:

[12] Terms $L_{eq(1)}$, L_{min} and L_{max} are defined in Section 3.19.2.
[13] Terms L_{10}, L_{50} and L_{90} are defined in Section 3.19.2.



Site delineations are approximate
Base Map Source: New York City Department of City Planning

500 0 500 Feet

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Figure 7.17-1 Noise Sources and Receptors

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Table 7.17-1
Existing Hourly (Monitored) Noise Levels On Site[1]
North Shore Converted MTS

Time of Measurement	$L_{eq(1)}$ (dBA)	L_{90} (dBA)	L_{50} (dBA)	L_{10} (dBA)	L_{min} (dBA)	L_{max} (dBA)
3:00-4:00 p.m.	68.7	62.6	65.5	70.9	59.7	85.1
4:00-5:00 p.m.	69.6	62.6	68.0	71.8	57.8	86.0
5:00-6:00 p.m.	67.2	61.2	65.5	69.0	57.4	81.6
6:00-7:00 p.m.	67.9	62.2	65.8	69.7	59.6	85.2
7:00-8:00 p.m.	67.3	62.4	65.5	69.0	60.1	85.3
8:00-9:00 p.m.	67.7	63.3	66.3	69.9	60.3	83.2
9:00-10:00 p.m.	65.5	60.1	64.0	67.6	56.5	78.7
10:00-11:00 p.m.	68.1	55.7	60.0	65.6	54.0	98.8
11:00 p.m. -12:00 a.m.	57.0	54.2	55.5	57.7	53.4	73.4
12:00-1:00 a.m.	59.9	53.4	55.8	63.0	51.8	74.3
1:00-2:00 a.m.	65.6	53.2	59.8	65.8	51.0	95.4
2:00-3:00 a.m.	68.5	59.3	61.3	68.1	56.9	98.0
3:00-4:00 a.m.	58.3	52.6	55.5	59.7	50.4	79.6
4:00-5:00 a.m.	57.8	52.2	55.6	60.7	48.9	73.1
5:00-6:00 a.m.	62.0	55.5	59.5	62.3	52.2	90.7
6:00-7:00 a.m.	67.3	62.5	65.0	68.7	59.7	88.0
7:00-8:00 a.m.	69.0	62.6	66.6	70.9	59.3	85.3
8:00-9:00 a.m.	67.5	63.5	66.2	69.3	60.7	80.9
9:00-10:00 a.m.	70.3	65.1	68.1	72.3	61.4	87.9
10:00-11:00 a.m.	71.1	63.2	67.7	74.7	60.4	87.5
11:00 a.m.-12:00 p.m.	68.9	60.2	64.5	73.0	57.2	84.0
12:00-1:00 p.m.	66.4	59.3	62.9	69.9	55.4	81.7
1:00-2:00 p.m.	66.0	58.2	62.4	69.4	54.5	79.8
2:00-3:00 p.m.	65.8	57.7	61.2	69.5	54.8	85.8

Note:
(1) The 24-hour background noise levels were measured at the site boundary nearest to the closest noise-sensitive receptor to identify the quietest background hour.

- Airplanes, including jets, that arrive and depart from LaGuardia Airport regularly;
- A DSNY salt shed that is used during the winter; and
- An active DSNY garage that is used regularly.

7.17.1.3 Off-Site Noise Levels

Existing off-site noise sources consist of the noise from existing traffic and other background noise. A screening analysis was conducted to determine if noise monitoring would be required along the North Shore Converted MTS-related truck routes due to an increase in traffic caused by DSNY and other agency collection vehicles. As a result of this screening, which is described in Section 3.19.5.2, an off-site noise analysis was required and, therefore, off-site noise monitoring was conducted. Table 7.17-2 presents monitored noise levels near noise-sensitive receptors during the hour expected to receive the largest change in noise levels (when the difference between traffic noise levels and background noise levels is greatest) based on first-level screening.

Table 7.17-2
Existing Noise Levels (Leq) at the Nearest Noise-Sensitive Receptor for Off-Site Analysis
North Shore Converted MTS

Roadway ID	Existing Noise Levels During Quietest Hour (dBA)[1]
College Point Boulevard North of Roosevelt Avenue [2]	64.9
College Point Boulevard South of Sanford Avenue [3]	66.0

Notes:
(1) A 1-hour noise level reading was measured at the closest noise-sensitive receptor during the hour expected to receive the largest change in noise levels (when the difference between traffic noise levels and background noise levels is greatest).
(2) The existing noise level was measured on August 13, 2003 between 2:00 a.m. and 3:00 a.m.
(3) The existing noise level was measured on August 12, 2003 between 3:00 a.m. and 4:00 a.m.

7.17.2 Future No-Build Conditions

7.17.2.1 On-Site Noise Levels

No appreciable changes in on-site noise levels are anticipated by 2006; therefore, Future No-Build conditions are expected to be the same as Existing Conditions.

7.17.2.2 Off-Site Noise Levels

Off-site noise levels for the Future No-Build Conditions in 2006 were calculated using the annual growth rates for traffic volume provided in Section O: Traffic of the 2001 CEQR Technical Manual. Table 7.17-3 presents the existing traffic volume and the Future No-Build traffic volume for the hour expected to receive the largest change in noise levels (when the difference between traffic noise levels and background noise levels is greatest) during the daytime (if any) and nighttime for locations where there is a possible impact based on the first-level screening.

Table 7.17-3
Off-Site Noise Traffic Volume
North Shore Converted MTS

Location	Hour Beginning	Existing Traffic Volume [1] (Vehicles / Hour)	Future No-Build Traffic Volume [2] (Vehicles / Hour)
College Point Boulevard North of Roosevelt Avenue	3:00 a.m.	111	116
College Point Boulevard North of Roosevelt Avenue	9:00 a.m.	1265	1317
College Point Boulevard South of Sanford Avenue	3:00 a.m.	144	150
College Point Boulevard South of Sanford Avenue	9:00 a.m.	1378	1434
College Point Boulevard between 58th and 57th Avenues	3:00 a.m.	299	311

Notes:
[1] Existing Traffic Volumes are based on ATR data.
[2] Future No-Build Traffic Volumes are based on CEQR Annual Traffic Growth Rates.

7.17.3 Potential Impacts with the North Shore Converted MTS

7.17.3.1 On-Site Noise Levels

Equipment assumed to be operating at the North Shore Converted MTS and its reference noise levels used in the CEQR and Current Noise Code analysis are shown in Table 7.17-4. The number and types of equipment assumed for this analysis were based on the North Shore Converted MTS's peak design capacity. As described in Section 3.19, an analysis was performed to determine if the number and type of trucks queuing on the ramp that was analyzed in the DEIS is more conservative than the greatest number of DSNY and Commercial Waste trucks expected to be queuing on the ramp based on the number of trucks that might be routed to the facility. The DEIS analysis was based on DSNY trucks queuing along the entire length of the ramp. For the North Shore Converted MTS, the analysis of the greatest number of DSNY and Commercial Waste trucks that will be expected to be queuing on the ramp (based on the number of trucks routed to the facility) is more conservative. Therefore, the results presented for the on-site analysis in this FEIS are based on the greatest number of DSNY and Commercial Waste trucks that are expected to be queuing on the ramp.

Spectral noise levels used in the Performance Standards analysis are shown in Table 7.17-5. The number and types of equipment assumed for this analysis were based on the North Shore Converted MTS's peak design capacity. Shown earlier, Figure 7.17-1 indicates the North Shore Converted MTS layout, the locations of the points along its boundary where overall noise predictions were calculated and the predicted 55 dBA contour line.

Table 7.17-4
Equipment Modeled in the Noise Analysis and Reference Noise Levels (L_{eq})
North Shore Converted MTS

Equipment Name (quantity) [1]	Reference Sound Pressure Noise Level at 50 feet (dBA) [2]
Indoor	
Tip Floor Wheel Loaders type CAT 966G (2)	80.6
Mini-Loader type CAT 908 (1)	69.3
Tamping Cranes type CAT 325 (1)	81
Spreader Crane/Hoist (1)	70
Skid Steer Loader (Bobcat S300) (1)	76
Vacuum Sweeper (1)	64.3
Exhaust Fans (17)	74 [3]
Moving/Queuing DSNY Collection Vehicles (7)	79
Outdoor	
Container Shuttle Cars (3)	45
Gantry Cranes (1) [4]	67
Harbor Tug Boat (1) [5]	69
Exhaust Fans (17)	76 [3]
Inbound Moving/Queuing DSNY Collection Vehicles (see Table 7.17-4(a))	67
Inbound Moving/Queuing Commercial Waste Collection Vehicles (see Table 7.17-4(a))	71.3
Outbound Moving/Queuing Collection Vehicle (1)	67 or 71.3 [6]

Notes:

(1) Instantaneous maximum number of pieces of equipment on site at any given time

(2) Noise level representative of each piece of equipment.

(3) Noise level representative of a total of 17 exhaust fans.

(4) Noise level will be specified for gantry crane in DSNY's plans and specification for construction of the Converted MTS's.

(5) Noise level will be specified for the harbor tug boat in DSNY's plans and specification for construction of the Converted MTS's.

(6) For each hour, the type of truck assumed to be queuing on the outbound scale varied depending on the type of trucks entering the facility. If both DSNY and Commercial Waste trucks enter the facility, the outbound truck was assumed to be a Commercial Waste truck, to be conservative. However, if only DSNY trucks enter the facility, the outbound truck was assumed to be a DSNY truck. Similarly, if only Commercial Waste trucks enter the facility, the outbound truck was assumed to be a Commercial Waste truck. If a Commercial Waste truck was assumed, 71.3 dBA was used as a noise level. If a DSNY truck was assumed, 67 dBA was used as a noise level.

Table 7.1.7-4 (a)
Collection Vehicle Volumes in the
Refined CEQR Noise Analysis of a Residential House Noise-Sensitive Receptor
North Shore Converted MTS

Hour Beginning	DSNY Collection Vehicles		Commercial Waste Collection Vehicles	
	Number of Trucks Entering Facility	Number of Trucks Queuing Outside - Inbound (1)	Number of Trucks Entering Facility	Number of Trucks Queuing Outside - Inbound (1)
12:00 AM	15	8	1	1
1:00 AM	20	13	0	0
2:00 AM	10	3	0	0
3:00 AM	14	7	0	0
4:00 AM	13	6	0	0
5:00 AM	16	9	0	0
6:00 AM	10	3	4	4
7:00 AM	2	0	0	0
8:00 AM	39	32	0	0
9:00 AM	38	31	0	0
10:00 AM	37	30	0	0
11:00 AM	23	16	0	0
12:00 PM	14	7	0	0
1:00 PM	12	5	0	0
2:00 PM	13	6	0	0
3:00 PM	5	0	0	0
4:00 PM	4	0	0	0
5:00 PM	16	9	0	0
6:00 PM	14	7	0	0
7:00 PM	13	6	0	0
8:00 PM	4	0	29	26
9:00 PM	5	0	26	24
10:00 PM	2	0	25	20
11:00 PM	2	0	10	5

Notes:

1. Assumes first 7 collection vehicles to arrive are DSNY collection vehicles immediately entering building.

Table 7.17-5
Equipment Modeled in the Noise Analysis and Spectral Noise Levels (L_{max})
North Shore Converted MTS

Equipment Name (quantity) [1,2]	Reference Sound Pressure Noise Level at 50 feet (dB) [3]							
	Frequency (Hz)							
	63	125	250	500	1K	2K	4K	8K
Indoor								
Tip Floor Wheel Loaders type CAT 966G (2)	78	77	75	76	77	74	68	60
Mini-Loader type CAT 908 (1)	78	77	75	76	77	74	68	60
Tamping Cranes type CAT 325 (1)	95	90	85	85	81	78	73	64
Spreader Crane/Hoist (1)	77	78	77	71	74	71	69	57
Skid Steer Loader (Bobcat S300) (1)	71	74	69	74	71	68	64	56
Vacuum Sweeper (1)	71	74	69	74	71	68	64	56
Exhaust Fans (17) [4]	70	72	74	74	70	67	62	57
Outdoor								
Container Shuttle Cars (3)	31	30	47	44	36	35	42	46
Gantry Cranes (1) [5]	78	81	78	71	66	60	55	55
Exhaust Fans (17) [4]	70	72	74	74	70	67	62	57

Notes:

(1) Instantaneous maximum number of pieces of equipment on site at any given time.

(2) Trucks and tugboats are not included in the Performance Standard analysis because they are transportation facilities.

(3) Noise level representative of each piece of equipment.

(4) Noise level representative of total of 17 exhaust fans.

(5) Noise level will be specified for the gantry crane in DSNY's plans and specification for construction of the Converted MTSs.

Hz = Hertz

K = Thousand

7.17.3.2 CEQR Analysis

A screening analysis was conducted to determine if a detailed noise analysis would be required for the on-site operations at the North Shore Converted MTS. Noise levels from indoor and outdoor sources were combined to determine the location of the 55 dBA contour line. The 55 dBA contour line is 104 meters (340 feet) from the property line in the direction of the nearest noise-sensitive receptor, which is 92 meters (301 feet) from the site boundary. The 55 dBA contour line was selected as a limit for the study area because 55 dBA (i.e., the point off site where noises generated on-site attenuate to 55 dBA) is considered an acceptable noise level in an urban environment. Section 3.19.5.1 discusses this concept in greater detail. The results of the

screening analysis show that noise-sensitive receptors are located within the 55 dBA contour line (see Figure 7.17-1); therefore, an on-site noise analysis, including noise monitoring at the nearest noise-sensitive receptor, was required to determine if an impact is predicted under Section R of the 2001 CEQR Technical Manual.

Noise monitoring was conducted at the noise-sensitive receptor during the quietest hour based on monitoring data provided in Table 7.17-1 above. A detailed noise analysis was performed to calculate the ~~Table 7.17-6 below identifies the existing background noise level during the quietest hour. The table shows the distance from the North Shore Converted MTS to the noise-sensitive receptor, the monitored existing background noise level at the noise-sensitive receptor,~~ North Shore Converted MTS-related predicted noise levels at the noise-sensitive receptor, and the predicted noise levels with both North Shore Converted MTS noise and background noise combined. ~~The table also provides the~~ The difference between this combined noise level and the existing noise level at the noise-sensitive receptor. ~~This difference~~ represents the predicted incremental change in noise level from the North Shore Converted MTS. ~~Because this incremental change is not greater than the CEQR threshold of 3 dBA at the nearest noise-sensitive receptor, there is no predicted impact that would be caused by the North Shore Converted MTS on-site operations.~~ According to CEQR, an increase of 3 dBA or more at nighttime is considered an impact. In addition, if the daytime background noise level is 62 dBA or more, an increase of 3 dBA or more is considered an impact. Because this incremental change is greater than the CEQR threshold of 3 dBA at the nearest noise-sensitive receptor for the quietest nighttime hour, there is a predicted impact that would be caused by the North Shore Converted MTS on-site operations based on this conservative analysis.

On-site queuing collection vehicles were further analyzed to refine the calculated noise levels from the North Shore Converted MTS facility truck ramp on the noise sensitive receptors. Individual, position-specific utilization factors were assigned to each inbound collection vehicle position on the inbound side of the ramp, and to one collection vehicle position on the outbound scale based on the processing time at the North Shore Converted MTS. The utilization factor for each truck was calculated on a 24-hour basis, for each hour, based on the actual number of inbound collection vehicles. The assumption was made that each inbound truck would be queuing on-site for approximately two minutes before proceeding one truck length further up the

ramp towards the facility. The actual number of DSNY and Commercial collection vehicles used in the hourly analysis is shown in Table 7.17-4(a). A restriction on the number of relayed DSNY collection vehicles delivering waste between 1:00 a.m. and 5:00 a.m.; and commercial waste hauling vehicles at certain hours between 8:00 p.m. and 8:00 a.m. will mitigate predicted on-site impacts at nearby noise sensitive receptors.

Table 7.17-6 below shows the results of the CEQR analysis with a refined hourly analysis at the Residential House. An analysis could not be performed for the hours of 7:00 a.m. to 5:00 p.m. due to construction activities adjacent to the noise-sensitive receptor. The Table includes the existing noise level at the noise-sensitive receptor, the North Shore Converted MTS-related noise levels and the combined noise level. The table also provides the difference between this combined noise level and the existing noise level at the sensitive receptor. This difference represents the predicted incremental change in noise level from the North Shore Converted MTS. Because this incremental change is less than the CEQR threshold of 3 dBA during nighttime hours, or during daytime hours when the daytime background noise level is greater than 62 dBA, there is no predicted impact that would be caused by the North Shore Converted MTS on-site operations.

7.17.3.3 Performance Standards for Zoning Code Analysis

Overall noise predictions were calculated at the locations of the points along the North Shore Converted MTS boundary (D1, etc.) to determine the total noise level for each octave band from indoor and outdoor sources, not including DSNY and other agency collection vehicles and tugboats, in accordance with the New York City Zoning Code Performance Standards for Manufacturing Districts (assuming ~~tugboats~~ both are transportation facilities) (see Table 7.17-7). Based on this analysis, no exceedances to the Performance Standards are predicted.

Table 7.17-6
CEQR Analysis
Existing and Predicted Noise Levels (L_{eq}) at the Residential House Noise-Sensitive Receptor
North Shore Converted MTS

Hour Beginning[1]	Existing Noise Levels During Quietest Hour (dBA) [2]	Predicted Facility Noise Level at Noise-Sensitive Receptor (dBA) [3]	Combined Facility and Background Noise Level at the Noise-Sensitive Receptor (dBA)	Increase over Existing Noise Level (dBA)	Impact (yes or no) [4]
12:00 AM	52.3	51.8	55.1	2.8	No
1:00 AM	53	52.7	55.9	2.9	No
2:00 AM	48.1	47.6	50.9	2.8	No
3:00 AM	50.1	49.8	52.9	2.8	No
4:00 AM	49.7	49.2	52.5	2.8	No
5:00 AM	51.8	50.8	54.4	2.6	No
6:00 AM	62.2	52.1	62.6	0.4	No
5:00 PM	62.3	50.8	62.6	0.3	No
6:00 PM	63.5	49.8	63.7	0.2	No
7:00 PM	60.7	49.2	61.0	0.3	No
8:00 PM	61	60.8	63.9	2.9	No
9:00 PM	60.9	60.3	63.6	2.7	No
10:00 PM	59.4	59.1	62.3	2.9	No
11:00 PM	55.5	50.8	56.8	1.3	No

Notes:

(1) Existing noise levels could not be measured between 7:00a.m. and 5:00 p.m. due to construction activities adjacent to the noise-sensitive receptor.

(2) Twenty-minute noise level readings measured at the residential house receptor on March 14-15, 2005.

(3) Predicted noise level calculations at the noise-sensitive receptor include on-site and off-site shielding from structures including a louver fence.

(4) According to CEQR, an increase over 65 dBA at daytime is considered an impact. However, if the existing noise level at the receptor during the daytime is 62 dBA or greater or if the analysis is for a nighttime hour, an increase over 3 dBA would be considered an impact. The impact analysis compares the loudest noise emissions from daily operations at the North Shore Converted MTS with the quietest background noise levels that occur during facility operation.

Table 7.17-7
Zoning Code Analysis
Predicted Spectral Noise Levels (L_{max}) at the Property Boundary
North Shore Converted MTS[(1)]

Manufacturing District Regulations (M3)								
Frequency (Hz)	**63**	**125**	**250**	**500**	**1K**	**2K**	**4K**	**8K**
M3 Threshold	**79**	**74**	**69**	**63**	**57**	**52**	**48**	**45**
Total Lp dB: D1	67.5	62.5	55.2	51.5	46.5	42.3	35.6	29.2
Total Lp dB: D2	53.8	50.6	45.5	40.0	34.6	28.9	20.3	14.1
Total Lp dB: D3	49.6	46.5	41.6	36.0	30.7	25.1	17.2	12.5
Total Lp dB: D4	59.2	56.5	51.7	46.1	40.7	35.0	26.6	20.6
Total Lp dB: D5	62.8	60.2	55.5	49.9	44.7	39.3	32.1	27.7
Total Lp dB: D6	67.5	64.9	60.2	54.3	49.2	43.9	37.7	35.0
Total Lp dB: D7	69.4	64.0	54.9	50.3	44.5	39.6	33.0	27.2
Total Lp dB: D8	59.7	56.1	51.3	47.8	43.2	38.9	31.7	24.9
Total Lp dB: D9	60.3	55.6	48.4	42.9	37.1	31.3	22.9	16.8
Total Lp dB: D10	54.5	51.6	46.8	41.1	35.8	30.1	21.8	16.2

Notes:
Hz = Hertz
Lp = Sound pressure level
dB = Decibel
K = Thousand
(1) D1 through D10 are the points on the North Shore Converted MTS boundary that are used in all noise analyses.

7.17.3.4 NYC Noise Code Analysis – Current

Overall noise predictions were calculated at the locations of the points (D1, etc.) representative of the North Shore Converted MTS boundary to determine the total L_{eq} from all indoor and outdoor sources for comparison to the current Noise Code. The overall noise predictions were based on the refined queuing analysis as well as a louver fence that will be placed on the truck ramp. The louver fence will be approximately 9 feet in height and will be constructed on top of a 3-foot high concrete base, for a total height of 12 feet. The louver fence will provide a noise reduction of approximately 7dBA for receptors adjacent to the property boundary. ~~This is~~Results are shown in Table 7.17-8. Based on this analysis, the total L_{eq} does not exceed the current Noise Code Standard of 70 dBA at the property boundary.

Table 7.17-8
Current Noise Code Analysis
North Shore Converted MTS

Location at Plant Boundary[1]	Total Leq Contribution at Plant Boundary (dBA)
D1	~~68.6~~65.3
D2	~~58.7~~59.9
D3	~~57.3~~59.2
D4	~~65.2~~66.2
D5	69.8
D6	65.3
D7	65.8
D8	65.9
D9	61.9
D10	61.3

Notes:
[1] D1 through D10 are points on the North Shore Converted MTS boundary that are used in all noise analysis.

7.17.3.5 Off-Site Noise Levels

A screening analysis was conducted to determine if a detailed off-site noise analysis including noise monitoring would be required along the truck routes serving the North Shore Converted MTS. The assumed DSNY and other agency collection vehicle routes are provided in Section 14 of this chapter. As a result of this screening, which is described in Section 3.19.5.2, an off-site noise analysis was required. Results of the second-level screening for the hour expected to receive the largest change in noise levels (when the difference between traffic noise levels and background noise levels is greatest) during the daytime (if any) and nighttime are provided in Table 7.17-9.

Because the screening results presented above showed that the PCEs would double on a roadway due to DSNY and other agency collection vehicles ~~coming~~ traveling to or ~~going~~ departing from the North Shore Converted MTS, a detailed off-site noise analysis was performed at that roadway using TNM for the hour expected to receive the largest change in noise levels (when the difference between traffic noise levels and background noise levels is greatest) during the daytime (if any) and nighttime. Figure 7.17-2 depicts the locations of the roadway where detailed off-site noise analysis was performed.

Table 7.17-9
Off-Site Noise Screening Results
North Shore Converted MTS

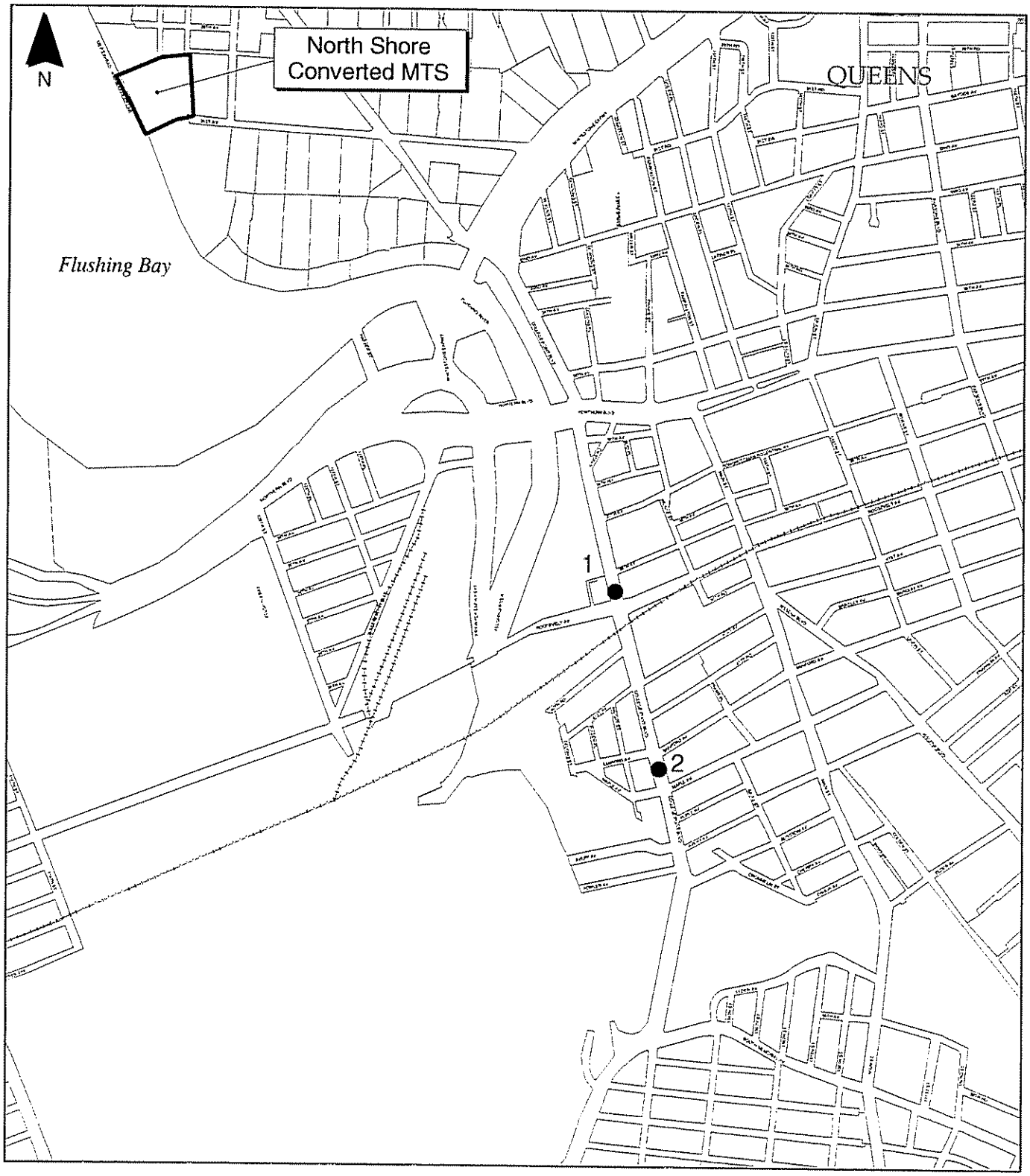
Location	Hour Beginning	Future No-Build PCEs[1]	Collection Vehicles	Employee Vehicles	Total Net DSNY Collection Vehicle PCEs[1]	Future Build PCEs[1][2]	Possible Impact[3]
College Point Boulevard North of Roosevelt Avenue	3:00 a.m.	305	26	0	1,222	1,527	Yes
College Point Boulevard North of Roosevelt Avenue	9:00 a.m.	4,078	43	0	2,021	6,099	No
College Point Boulevard South of Sanford Avenue	3:00 a.m.	220	26	0	1,222	1,442	Yes
College Point Boulevard South of Sanford Avenue	9:00 a.m.	5,049	46	0	2,162	7,211	No
College Point Boulevard between 58th and 57th Avenues	3:00 a.m.	2,075	26	0	1,222	3,298	No

Notes:

(1) Total PCEs are rounded to the nearest whole number.

(2) Future Build PCEs include North Shore Converted MTS-related collection vehicles and employee vehicles. Per CEQR, collection vehicles are converted to PCEs using a factor of 47, and employee vehicles are converted to PCEs using a factor of 1.

(3) There is a possible impact if the Future Build PCEs are double the Future No-Build PCEs or more.



Site delineations are approximate
Base Map Source: New York City Department of City Planning

500 0 500 Feet

HDR URBITRAN EEA HydroQual DE Cambridge Environmental Inc

Figure 7.17-2 Mobile Noise Analysis Intersections Analyzed North Shore Converted MTS

CITY OF NEW YORK
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THE CITY OF NEW YORK DEPARTMENT OF SANITATION

TNM results for locations/hours that resulted in an impact based on second-level screening are presented in Appendix E of this FDEIS. Because the incremental noise-level change, which is calculated by obtaining the difference between the TNM-predicted Future Build noise level and the TNM-predicted Future No-Build noise level, is greater than the CEQR threshold of 3 dBA at the nearest noise-sensitive receptor, an impact at these roadways would be caused by the North Shore Converted MTS-related collection and employee vehicles.

To determine if these TNM-predicted impacts were accurate, site-specific truck simulations were conducted at the noise sensitive receptors. The truck simulation analysis provides a more realistic determination of DSNY and other agency collection vehicle noise impacts based on the proposed number of DSNY and other agency collection vehicles expected to travel through the roadways analyzed during the nighttime hours. Truck simulations were conducted with DSNY collection vehicles, as described in Section 3.19.7.2, for each roadway and hour that the first-level screening analysis resulted in a possible impact. For this procedure, two sets of noise measurements were taken – one with and one without DSNY trucks – by routing a set number of DSNY trucks during the affected nighttime hours past the noise-sensitive receptor. Tables 7.17-10 and 7.17-11 contain the results of the site-specific DSNY collection vehicle simulations, which show a possible impact at College Point Boulevard, north of Roosevelt, during the hours of 1:00 a.m. to 3:00 a.m., and at College Point Boulevard, south of Sanford Avenue, during the hours of 3:00 a.m. to 5:00 a.m.

A comparison of the simulation results for the hours resulting in an impact and the TNM results for these hours for the same traffic conditions and background noise levels estimated from recordings during the simulations is provided in Appendix E of this FDEIS. Based on this comparison, it is determined that TNM over-predicted the incremental change. The over-prediction can be attributed to the default assigned noise level for each type of vehicle, which appears to be greater than the actual noise levels that would be emitted by the North Shore Converted MTS-related collection vehicles.

Table 7.17-10
Off-Site Noise Analysis Truck Simulation
College Point Boulevard – North of Roosevelt Avenue
North Shore Converted MTS

Hour Beginning	Existing Background Noise Level[1] (L_{eq}) (Estimated) (dBA)	Collection Vehicles	Truck Simulation[2] Noise Level (L_{eq}) for Existing Traffic plus Collection Vehicles (dBA)	Impact (Noise Level Difference) (dBA)
12:00 a.m.	65.5	11	67.5	No (2)
1:00 a.m.	65.7	31	69.3	Yes (3.6)
2:00 a.m.	64.9	22	68.0	Yes (3.1)
3:00 a.m.	67.0	26	69.4	No (2.4)
4:00 a.m.	67.7	24	69.5	No (1.8)
5:00 a.m.	68.2	21	69.6	No (1.4)

Notes:
(1) Existing background noise levels were estimated from noise monitoring performed during the simulations.
(2) Simulations performed on August 13, 2003.

Table 7.17-11
Off-Site Noise Analysis Truck Simulation
College Point Boulevard – South of Sanford Avenue
North Shore Converted MTS

Hour Beginning	Existing Background Noise Level[1] (L_{eq}) (Estimated) (dBA)	Collection Vehicles	Truck Simulation[2] Noise Level (L_{eq}) for Existing Traffic plus Collection Vehicles (dBA)	Impact (Noise Level Difference) (dBA)
1:00 a.m.	69.9	31	72.2	No (2.3)
2:00 a.m.	71.0	22	72.3	No (1.3)
3:00 a.m.	66.0	26	69.9	Yes (3.9)
4:00 a.m.	67.3	24	70.5	Yes (3.2)
5:00 a.m.	70.8	21	71.9	No (1.1)

Notes:

(1) Existing background noise levels were estimated from noise monitoring performed during the simulations.

(2) Simulations performed on August 12, 2003.

Because both TNM and the site-specific truck simulations predict an impact at a noise-sensitive receptor from 1:00 a.m. to 3:00 a.m. for the College Point Boulevard – North of Roosevelt Avenue location, and from 3:00 a.m. to 5:00 a.m. for the College Point Boulevard – South of Sanford Avenue location, adjustments were made to the truck routes to the North Shore Converted MTS. During these hours, ~~North Shore Converted MTS related~~DSNY collection vehicles en route to the North Shore Converted MTS from Queens CD 9 would be routed further on the Van Wyck Expressway to Exit 14, Linden Place, rather than the originally proposed route of the Van Wyck Expressway or LIE to College Point Boulevard, thus avoiding the locations predicted to have an impact. However, during these hours, ~~North Shore Converted MTS related~~DSNY collection vehicles leaving the MTS would continue to be routed along College Point Boulevard to either the LIE or Van Wyck Expressway.

Both locations were re-analyzed with the truck adjustments during these hours using the site-specific truck acoustic energy per hour as described in Section 3.19.7.2 to confirm that off-site noise impacts would not be caused by the reduced number of collection vehicles at these locations. Based on these results, with the re-routed ~~North Shore Converted MTS related~~DSNY collection vehicles, there is no predicted impact that would be caused by the ~~North Shore Converted MTS~~DSNY collection vehicles en route to and from the facility. Tables 7.17-12 and 7.17-13 show the results of this analysis.

7.17.3.6 Combined On-Site and Off-Site Noise Levels

On- and off-site noise analyses were performed for the North Shore Converted MTS, however the potential impacts of these analyses did not affect the same noise-sensitive receptor~~s~~. Therefore, a combined noise analysis was not performed.

Table 7.17-12
Off-Site Noise Analysis using Truck Simulation Data and Adjusted Collection Vehicles
College Point Boulevard – North of Roosevelt Avenue
North Shore Converted MTS

Hour	Existing Background Noise Level[1] (L_{eq}) (Estimated) (dBA)	Adjusted Collection Vehicles based on Linden Exit	Calculated[2] Noise Level (L_{eq}) for Existing Traffic plus Adjusted Collection Vehicles (dBA)	Impact (Noise Level Difference) (dBA)
1:00 a.m.	65.7	14	67.7	No (2.0)
2:00 a.m.	64.9	8	66.3	No (1.4)
3:00 a.m.	67.0	12	68.3	No (1.3)
4:00 a.m.	67.7	11	68.6	No (0.9)

Notes:
(1) Existing background noise levels were estimated from noise monitoring performed during the simulations.
(2) Noise levels for existing traffic plus adjusted collection vehicles were calculated utilizing the per truck acoustic energy determined from the truck simulation data for this location.

Table 7.17-13
Off-Site Noise Analysis using Truck Simulation Data and Adjusted Collection Vehicles
College Point Boulevard – South of Sanford Avenue
North Shore Converted MTS

Hour	Existing Background Noise Level[1] (L_{eq}) (Estimated) (dBA)	Adjusted Collection Vehicles based on Linden Exit	Calculated[2] Noise Level (L_{eq}) for Existing Traffic plus Adjusted Collection Vehicles (dBA)	Impact (Noise Level Difference) (dBA)
1:00 a.m.	69.9	14	71.1	No (1.2)
2:00 a.m.	71.0	8	71.5	No (0.5)
3:00 a.m.	66.0	12	68.2	No (2.2)
4:00 a.m.	67.3	11	69.1	No (1.8)

Notes:
(1) Existing background noise levels were estimated from noise monitoring performed during the simulations.
(2) Noise levels for existing traffic plus adjusted collection vehicles were calculated utilizing the per truck acoustic energy determined from the truck simulation data for this location.

7.18 Commercial Waste to the North Shore Converted MTS

7.18.1 Existing Conditions

No commercial waste is delivered to the North Shore MTS site under Existing Conditions. Commercial waste generated in Queens is delivered to privately owned and operated transfer stations in the City, or taken directly out of the City to remote disposal locations.

7.18.2 Future No-Build Conditions

Under Future No-Build Conditions, no commercial waste would be delivered to the North Shore Converted MTS; therefore, Future No-Build Conditions are the same as Existing Conditions.

7.18.3 Potential Impacts of Sending Commercial Waste to the North Shore Converted MTS

The complete analysis of potential impacts of sending commercial waste to the Converted MTSs is presented in Volume III of the March 2004 Commercial Waste Management Study, which is included as Appendix D to this FDEIS.

7.18.3.1 On-Site Air Quality, Odor and Noise

Under Future Build Conditions, the North Shore Converted MTS was evaluated for on-site air quality, odor and noise impacts at its maximum design capacity of approximately 4,290 tpd (see Sections 7.15, 7.16 and 7.17). Results showed no unmitigatible adverse on-site air quality, odor or noise impacts. Although the peak hourly arrival rates of collection vehicles are not sustained over a 24-hour period, the analysis of on-site impacts conservatively modeled these peak hour conditions to predict the potential for on-site noise and odor impacts, and air quality impacts for short-term (1-hour, 3-hour, 8-hour and 24-hour) averaging periods. Because the analysis of short-term averaging periods was based on facility operations at the design capacity, no additional evaluation of on-site noise was required.

An evaluation of potential on-site air quality impacts for pollutants compared to annual average standards was modeled assuming commercial waste was processed at the Converted MTS. Based on these analyses, the potential processing of these quantities of the City's commercial putrescible waste would not cause any significantly adverse air quality impacts attributable to on-site operations. Likewise, odors from on-site operations of the Converted MTS with the addition of commercial waste at levels discussed in the Commercial Waste Management Study were also analyzed and results showed no unmitigatible significant adverse odor impacts.

See Appendix D for the revised tables to the Commercial Waste Management Study that contain the results of the on-site air quality and odor analyses.

7.18.3.2 Off-Site Traffic, Air Quality and Noise

Potential off-site traffic, air quality and noise impacts of deliveries of DSNY-managed Waste to the North Shore Converted MTS were evaluated in Sections 7.14, 7.15 and 7.17 based on temporal distributions of DSNY and other agency collection vehicles identified in Section 7.14.

The greatest number of DSNY and other agency collection vehicles analyzed for traffic impacts during all three periods (AM, midday and PM peak hours) was 39 (inbound trip ends) per hour, which occurred during the AM peak. These 39 DSNY and other agency collection vehicles are also more than the 26 peak hour DSNY and other agency collection vehicle and commercial waste hauling vehicle inbound trip ends that can be processed per hour at the North Shore Converted MTS during the 8:00 p.m. to 8:00 a.m. shift. In addition, the intersection LOS is lower (i.e., poorer) and the background volumes of traffic are higher during the AM peak than the 8:00 p.m. to 8:00 a.m. hours, so the AM peak analysis represents worst-case conditions. As reported above, there were no unmitigatible significant adverse environmental impacts from the 39 DSNY and other collection agency vehicle trip ends at the North Shore Converted MTS. Therefore, the addition of the 26 DSNY and other agency collection vehicles and commercial waste hauling vehicle inbound trip ends at the North Shore Converted MTS per hour during the 8:00 p.m. to 8:00 a.m. shift — during a period with a better LOS and lower background traffic volumes — would also have no unmitigatible significant adverse traffic impacts.

Likewise, the 39 inbound DSNY and other agency collection vehicles analyzed for off-site air quality impacts during the AM peak hour was the highest number of collection vehicles analyzed for all three periods (AM, midday and PM peak hours). For off-site air quality modeling, a Tier I analysis assumed conservatively that the 39 inbound DSNY and other agency collection vehicles would travel through the analyzed intersections each hour over a 24-hour period. Results showed there would be no unmitigatible significant adverse environmental impacts at several analyzed intersections. Consequently, because the 26 inbound DSNY and other agency collection vehicles and commercial waste hauling vehicles that can travel through these intersections per hour during the 8:00 p.m. to 8:00 a.m. shift would be fewer than the number of such vehicles analyzed for the AM peak over a 24-hour period, there would be no significant adverse off-site air quality impacts.

For the intersection of College Point Boulevard and 31st Avenue, a Tier II analysis was required. The estimated actual hourly distribution over 24 hours included the estimated 26 inbound DSNY and other agency collection vehicles and commercial waste hauling vehicles that could potentially be processed at the North Shore Converted MTS, and no unmitigatible significant adverse environmental impacts were identified.

Evaluating the potential for off-site noise impacts required the use of a second-level noise screening analysis. The results of this analysis indicate that the potential number of commercial waste hauling vehicles that could be routed to the North Shore Converted MTS during various hours within the 8:00 p.m. to 8:00 a.m. period must be limited to less than the available excess capacity to avoid causing potential impacts at noise-sensitive receptors on the approach routes these vehicles would take to the Converted MTS. The amount of available capacity that can be used to process commercial waste during the hours of 8:00 p.m. to 8:00 a.m., without causing any significant adverse noise impacts, is 1,000 tons (or 95 commercial waste hauling vehicles, assuming an average of 11 tons per truck) over this 12-hour period.

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