FINAL GENERIC ENVIRONMENTAL IMPACT STATEMENT

for the

WILLETS POINT DEVELOPMENT PLAN

September 2008

CEQR No.: 07DME014Q



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APPENDIX A

URBAN RENEWAL PLAN TEXT

NYC
Department of
Housing Preservation
& Development

OFFICE OF DEVELOPMENT

WILLETS POINT

QUEENS COMMUNITY DISTRICT NO. 7

URBAN RENEWAL PROJECT

URBAN RENEWAL PLAN

APRIL 2008

THE CITY OF NEW YORK
DEPARTMENT OF HOUSING PRESERVATION AND DEVELOPMENT

URBAN RENEWAL PLAN

WILLETS POINT

URBAN RENEWAL AREA

Queens

Community District No. 7

April 2008

HISTORY OF PRIOR APPROVALS

Original

City Planning Commission: _____, 20__
City Council: _____, 20__ (Cal. No. __)
Mayor: _____, 20__ (Cal. No. __)

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A: URBAN RENEWAL AREA

1. LEGAL AUTHORITY

The City of New York ("City") has designated the Willets Point Urban Renewal Area ("Area") as an urban renewal area pursuant to §504 of Article 15 ("Urban Renewal Law") of the General Municipal Law. The Department of Housing Preservation and Development ("HPD") represents the City in carrying out the provisions of the Urban Renewal Law pursuant to §502(5) of the Urban Renewal Law and §1802(6)(e) of the Charter.

2. AREA

The properties indicated on Map 1 and listed in Exhibit A ("Acquisition Parcels") have been or will be acquired by the City for redevelopment pursuant to this Willets Point Urban Renewal Plan ("Plan"). These Acquisition Parcels comprise the entire Area and, as such, are the only properties to be redeveloped pursuant to this Plan.

3. BOUNDARY

The Area is located in Community District No. 7 in the borough of Queens and is generally bounded by (i) Northern Boulevard on the north, (ii) the Van Wyck Expressway and the western boundary of Block 1833, Lot 1 (the property owned by the Metropolitan Transit Authority) on the east, (iii) Roosevelt Avenue on the south, and (iv) 126th Street on the west. The perimeter described in Exhibit B and shown on Map 1 ("Project Boundary") encompasses all of the Acquisition Parcels which comprise the Area, but may also encompass other properties which are not part of the Area. The Acquisition Parcels, and not the Project Boundary, define the Area.

4. OTHER PROPERTIES

Any properties located within the Project Boundary which are not listed in Exhibit A ("Exempt Parcels") will not be acquired by the City for redevelopment pursuant to this Plan. Notwithstanding the fact that they are located within the Project Boundary, Exempt Parcels are not part of the Area and are not subject to the controls of this Plan, even if they are or become City-owned.

5. ELIGIBILITY

The Area is eligible for designation as an urban renewal area pursuant to the Urban Renewal Law. The following insanitary and substandard conditions adversely affect the quality of life in the Area and its immediate vicinity:

a. Abandoned, vacant, substandard, underutilized, and/or obsolete buildings and structures characterized by physical deterioration, high levels of code violations, defective construction, outmoded design, lack of proper sanitary facilities, and/or inadequate fire or safety protection.

b. Abandoned, vacant, underutilized, substandard, and/or insanitary, lots.

c. Hazardous or detrimental industrial uses.

d. Significant and extensive environmental contamination.

e. Illegal uses and conversions.

f. Poorly or improperly designed street patterns and intersections.

g. Lack of suitable off street parking.

h. Unsuitable topography, subsoil, or other physical conditions.

i. Deteriorated, substandard and inadequate infrastructure, including storm sewers, sanitary sewers and streets.

B: URBAN RENEWAL PLAN

1. LEGAL AUTHORITY

The City has established this Plan for the redevelopment of the Area pursuant to §505 of the Urban Renewal Law.

2. STATEMENT OF COMPLIANCE

In accordance with §502(7) of the Urban Renewal Law, this Plan states the following information:

a. Proposed Land Uses

See Section C.

b. Proposed Land Acquisition, Demolition, And Removal Of Structures

See Section D.

c. Proposed Acquisition Of Air Rights And Concomitant Easements Or Other Rights Of User Necessary For The Use And Development Of Such Air Rights

None.

d. Proposed Methods Or Techniques Of Urban Renewal

See Section D.

e. Proposed Public, Semi-Public, Private, Or Community Facilities Or Utilities

See Section C.

f. Proposed New Codes And Ordinances And Amendments To Existing Codes And Ordinances As Are Required Or Necessary To Effectuate The Plan

See Section E.

g. Proposed Program Of Code Enforcement

Properties will be required to comply with applicable United States ("Federal"), State of New York ("State"), and City laws, codes, ordinances, and regulations (collectively, "Laws").

h. Proposed Time Schedule For Effectuation Of Plan

Project Activity	Estimated Commencement Date	Estimated Completion Date
Land Acquisition	January 2009	October 2009
Relocation of Site Occupants	October 2009	October 2010
Demolition and Site Clearance	July 2009	May 2011
Site Preparation (Including Installation of Site Improvements)	May 2011	May 2012
Land Disposition	January 2009	October 2010
Project Completion		December 2017

3. OBJECTIVES

This Plan seeks to:

a. Redevelop the Area in a comprehensive manner, removing blight and maximizing appropriate land use.

b. Remove or rehabilitate substandard and insanitary structures.

c. Remove impediments to land assemblage and orderly development.

d. Strengthen the tax base of the City by encouraging development and employment opportunities in the Area.

e. Provide new housing of high quality and/or rehabilitated housing of upgraded quality.

f. Provide appropriate community facilities, parks and recreational uses, retail shopping, public parking, and private parking.

g. Provide a stable environment within the Area which will not be a blighting influence on surrounding neighborhoods.

4. DESIGN OBJECTIVES

It is the intent of this Plan that, to the extent deemed feasible by HPD, the Area should be developed in a manner compatible with or beneficial to the surrounding community.

C: CONTROLS ON REDEVELOPMENT

1. ZONING

The controls of this Plan will be concurrent with, and will not preempt or supersede, the controls of the Zoning Resolution of the City, as amended ("Zoning Resolution"). The controls of the Zoning Resolution will apply to all Acquisition Parcels at all times to the extent permitted by Law. The controls of this Plan will commence to apply to any Acquisition Parcel upon acquisition by the City or at such later date as may be specified in this Plan. Thereafter, if there is any conflict between the controls imposed by the Zoning Resolution and the controls imposed by this Plan, the more restrictive of the two will govern.

2. PROPOSED USES

Map 2 indicates the permitted use of each Acquisition Parcel following disposition by the City to a redeveloper. Each use indicated in Map 2 will have the meaning set forth in this Section C.2.

a. Commercial

Commercial, residential, institutional, community facility, public open space, private street, and other uses will be permitted in accordance with the Zoning Resolution, including, but not limited to, the requirements of the Zoning Resolution pertaining to the Special Willets Point District.

3. SUPPLEMENTARY CONTROLS

a. Building Bulk

(1) Total floor area, as such term is defined in the Zoning Resolution ("Floor Area"), will not exceed 8,940,000 square feet.

(2) Residential Floor Area will not exceed 5,850,000 square feet.

(3) Commercial Floor Area will not exceed 3,160,000 square feet.

(4) In addition to the aggregate Floor Area limits set forth in Section C.3.a(1), Section C.3.a(2), and Section C.3.a(3), each individual building will comply with the Floor Area, height, and setback requirements of the Zoning Resolution, including, but not limited to, the requirements of the Zoning Resolution pertaining to the Special Willets Point District.

b. School

A public school containing not less than 650 seats will be constructed in the Area to meet the needs of the new residential population. The design of the school will be subject to review and approval by the School Construction Authority and the Department of Education.

c. Open Space

Not less than 8 acres of publicly accessible open space will be created in accordance with the requirements of the Zoning Resolution pertaining to the Special Willets Point District.

d. Parking

Parking requirements will be as required by the Zoning Resolution, including, but not limited to, the requirements of the Zoning Resolution pertaining to the Special Willets Point District.

e. Utilities

(1) Any existing overhead telecommunications, electrical, and cable network lines in the Area will be removed and relocated underground and all new or additional telecommunications, electrical, and cable network lines will be placed underground, unless HPD determines that such placement underground is either unnecessary or infeasible.

(2) Sewers, water lines, street lighting, and electrical and gas services will be installed as required. Water supply, sanitary sewers, and storm sewers will be provided in accordance with the requirements of the City's Department of Environmental Protection.

D: PROPOSED METHODS AND TECHNIQUES OF URBAN RENEWAL

1. ACQUISITION

a. Method Of Acquisition

Acquisition Parcels may be acquired by any means permitted by applicable Laws. Regardless of the method of acquisition, every Acquisition Parcel acquired by the City will be subject to the controls of, and developed in accordance with, this Plan.

b. Properties Acquired or to be Acquired

The Acquisition Parcels have been or will be acquired by the City. The Acquisition Parcels, if any, that the City acquired with Federal assistance are identified in Exhibit A. All other Acquisition Parcels have been or are intended to be acquired with City funds, without Federal assistance.

2. RELOCATION

There is a feasible method for the relocation of families and individuals displaced from the Area into decent, safe, and sanitary dwellings, which are or will be provided in the Area or in other areas not generally less desirable in regard to public utilities and public and commercial facilities, at rents or prices within the financial means of such families or individuals, and reasonably accessible to their places of employment. HPD will relocate residential and commercial site occupants, if any, in compliance with all applicable Federal, State, and City Laws.

3. DEMOLITION AND/OR REHABILITATION

The structures on properties acquired in accordance with this Plan will either be demolished and cleared for new construction or retained for rehabilitation.

4. LAND DISPOSITION

Properties acquired will be disposed of for redevelopment in accordance with this Plan.

E: RELATED ACTIONS

1. ZONING MAP AMENDMENTS

The zoning of the Area will be as set forth in the Zoning Resolution. Zoning Map Amendments may be necessary in order to implement this Plan, but any proposed amendments set forth in this Section E.1 will have no force or effect until they are approved and become effective pursuant to the applicable provisions of the Charter. The proposed Zoning Map Amendments are a change in the zoning of the Area from M3-1 and R3-2 to C4-4 and the creation of the Special Willets Point District for the Area.

2. STREET MODIFICATIONS

It may be necessary to map, demap, or modify streets within and/or adjacent to the Area in order to implement this Plan, but any proposed street modifications set forth in this Section E.2 will have no force or effect until they are approved and become effective pursuant to the applicable provisions of the Charter. The proposed street modifications are the demapping of all existing public streets within the Area.

F: REDEVELOPER OBLIGATIONS

1. RECORDABLE AGREEMENTS

The instruments by which the City disposes of any Acquisition Parcel or part thereof to a redeveloper will be recorded in the Office of the City Register and will contain covenants running with the land which (i) incorporate this Plan by reference, (ii) require compliance with the terms and restrictions set forth in this Plan, and (iii) require compliance with Section F.4. An amendment to this Plan which becomes effective after the date of disposition of an Acquisition Parcel to a redeveloper will not apply to the real property comprising such Acquisition Parcel unless, following the effective date of such amendment, the City and the owner of such real property execute a written agreement, approved as to form by the Corporation Counsel, providing that such amendment shall thereafter apply to such real property.

2. LAND USE RESTRICTION

Each redeveloper will be required to devote the land solely to the uses specified as permitted uses in this Plan and to comply with all other terms and restrictions set forth in this Plan.

3. TIMELY PERFORMANCE

Each redeveloper will be required to expeditiously apply for all required governmental approvals and to begin and complete the redevelopment and construction of the improvements mandated by this Plan and agreed upon in the disposition instruments within a reasonable time.

4. NON-DISCRIMINATION

Each redeveloper, its successors and assigns of the land conveyed or any part thereof, and any lessee of the land conveyed or any part thereof (i) will not enter into any agreement, lease, conveyance, or other instrument which restricts the sale, lease, or occupancy of such land or any part thereof upon the basis of race, color, national origin, ancestry, alienage status, religion, creed, age, sex, marital status, sexual orientation, or disability, and (ii) will comply with all applicable Federal, State, and City laws in effect from time to time prohibiting discrimination or segregation by reason of race, color, national origin, ancestry, alienage status, religion, creed, age, sex, marital status, sexual orientation, or disability in the sale, lease, or occupancy of the property.

5. DESIGN REVIEW

HPD may require any redeveloper to (i) submit site plans, landscape plans, architectural drawings, outline specifications, schedules of materials and finishes, and/or final working drawings, in sufficient detail to permit determination of compliance with the controls of this Plan, for HPD approval, in consultation with the New York City Economic Development Corporation ("EDC") and the Department of City Planning ("DCP"), prior to commencement of construction, and (ii) submit any material change to such documents thereafter proposed for approval by HPD, in consultation with EDC and DCP, prior to commencement of construction of such change.

6. RESTRICTION ON TRANSFER PRIOR TO COMPLETION

No redeveloper will be permitted to sell, lease, or otherwise transfer land at any time prior to completion of the redevelopment thereof without prior written consent of HPD, except as set forth in the disposition instruments.

7. COOPERATION WITH HPD

Each redeveloper will be required to expeditiously submit all documents required by HPD for the approval and processing of the redevelopment project.

8. COOPERATION WITH OTHER CITY AGENCIES

Each redeveloper will be required to cooperate fully with the appropriate City agencies in realizing the specific objectives of this Plan.

9. CERTIFICATE OF COMPLETION

Each redeveloper will be required to provide HPD with current revised drawings as required by HPD, including, but not limited to, descriptions reflecting substantial changes during construction. HPD will use these drawings and descriptions, together with materials submitted prior to commencement of construction, for final determination of compliance and issuance of a Certificate of Completion in accordance with the terms of the disposition instruments.

G: MODIFICATION OF PLAN

1. AMENDMENTS

The City may amend this Plan at any time pursuant to §505 of the Urban Renewal Law and §197-c and §197-d of the Charter and may amend the designation of the Area at any time pursuant to §504 of the Urban Renewal Law.

2. MINOR CHANGES

HPD, with the concurrence of the City Planning Commission ("CPC"), may authorize minor changes of the terms of these restrictions which conform with the intent and purpose of this Plan.

3. MERGERS AND SUBDIVISIONS

The development sites in the Area may be merged and/or subdivided where HPD determines in writing that (i) the site plan complies with the intent and provisions of this Plan, and (ii) the unused portion of the subdivided development site, if any, is marketable and developable in accordance with this Plan and with all applicable Federal, State, and City Laws. The merger and/or subdivision of a development site will not require review or approval by CPC, but HPD will file the Plan, as modified to indicate such merger and/or subdivision, with DCP for information purposes.

H: DURATION OF PLAN

This Plan will remain in effect for a period of forty (40) years from the date of the original approval of this Plan, until _____, except as provided in Section G.

EXHIBIT A

PROPERTIES ACQUIRED AND TO BE ACQUIRED

Block	Lot(s)*	Land Use
1820	1, 6, 9, 18, 34, 108	Commercial
1821	1, 6, 16, 25, 27	Commercial
1822	1, 5, 7, 17, 21, 23, 28, 33, 55, 58	Commercial
1823	1, 3, 5, 7, 12, 14, 19, 20, 21, 23, 26, 28, 33, 40, 44, 47, 52, 55, 58, 59, 60	Commercial
1824	1, 12, 19, 21, 26, 28, 33, 38, 40, 45, 53	Commercial
1825	1, 19, 21, 25, 28, 30, 37, 46, 48, 53, 55, 58	Commercial
1826	1, 5, 14, 18, 20, 31, 35	Commercial
1827	1	Commercial
1828	1, 4, 8, 11, 13, 17, 21, 23, 29, 34, 37, 39	Commercial
1829	19, 21, 40, 71	Commercial
1830	1, 9, 10, 21	Commercial
1831	1, 10, 35	Commercial
1832	1, 10	Commercial
1833	P/o 1,103, 111, 117, 120, 141, 143, 151, 155, 158, 165, 166, 168, 170, 172, 177, 179, 180, 186, 188, 192, 197, 199, 201, 203, 212, 215, 230, 300, 425	Commercial

All mapped and/or built streets within the Project Boundary.

*** Tax lot numbers are as they appeared on the Tax Map of the City of New York designated Tax Map 2004(c) by the Department of City Planning.**

EXHIBIT B

PROJECT BOUNDARY DESCRIPTION

Lying within the Borough of Queens in the City of New York;

BEGINNING at the corner formed by the intersection of the northerly line of Roosevelt Avenue with the southeasterly line of Willets Point Boulevard;

Running thence westwardly, along a prolongation of the northerly line of Roosevelt Avenue which is coincident with the prolongation of the southerly line of Tax Lot 117 in Queens Tax Block 1833 for 16.39 feet, more or less, to a point;

Thence northwardly, at a right angle to the previous course, for 102.45 feet, more or less, along a prolongation of the westerly line of Tax Lot 1 in Queens Tax Block 1827 which is coincident with the easterly line of 126th Street, to the corner formed by the intersection of the easterly line of 126th Street with the northwesterly line of Willets Point Boulevard;

Thence northwardly along the easterly line of 126th Street 147.55 feet to the southerly line of 39th Avenue;

Thence northwardly, across 39th Avenue, to the corner formed by the intersection of the easterly line of 126th Street with the northerly line of 39th Avenue;

Thence northwardly, along the easterly line of 126th Street for 250 feet to the southerly line of 38th Avenue;

Thence northwardly, across 38th Avenue, to the corner formed by the intersection of the easterly line of 126th Street with the northerly line of 38th Avenue;

Thence northwardly, along the easterly line of 126th Street for 250 feet to the southerly line of 37th Avenue;

Thence northwardly, across 37th Avenue to the corner formed by the intersection of the easterly line of 126th Street with the northerly line of 37th Avenue;

Thence northwardly, along the easterly line of 126th Street for 200 feet to the southerly line of 36th Avenue;

Thence northwardly, across 36th Avenue to the corner formed by the intersection of the easterly line of 126th Street with the northerly line of 36th Avenue;

Thence northwardly, along the easterly line of 126th Street for 200 feet to the southerly line of 35th Avenue,

Thence northwardly, across 35th Avenue to the corner formed by the intersection of the easterly line of 126th Street with the northerly line of 35th avenue;

Thence northwardly, along the easterly line of 126th Street for 200 feet to the southerly line of 34th Avenue;

Thence northwardly, across 34th Avenue, to the corner formed by the intersection of the easterly line of 126th Street with the northerly line of 34th Avenue;

Thence northwardly, along the easterly line of 126th Street for 230.78 feet to the southerly line of Northern Boulevard;

Thence eastwardly along the southerly line of Northern Boulevard for 400.44 feet to the westerly line of 126th Place;

Thence eastwardly across 126th Place to the corner formed by the intersection of the easterly line of 126th Place with the southerly line of Northern Boulevard;

Thence eastwardly, along the southerly line of Northern Boulevard for 211.66 feet to the westerly line of 127th Street;

Thence eastwardly, across 127th Street to the corner formed by the intersection of the easterly line of 127th Street with the southerly line of Northern Boulevard

Thence eastwardly, along the southerly line of Northern Boulevard for 205.94 feet to the westerly line of 127th Place;

Thence eastwardly, across 127th Place to the corner formed by the intersection of the easterly line of 127th Place with the southerly line of Northern Boulevard;

Thence eastwardly, along the southerly line of Northern Boulevard for 209.95 feet to a point on the southerly line of Northern Boulevard where the dividing line between Tax Lots 21 and 40 in Tax Block 1829 intersect the southerly line of Northern Boulevard;

Thence continuing eastwardly, along the southerly line of Northern Boulevard which is coincident with the northerly line of Tax Lot 40 in Tax Block 1829 for 73.41 feet to a point on the southerly line of Northern Boulevard;

Thence continuing eastwardly on a curve to the right with a radius of 1554.96 feet, a central angle of 20° 21' 17", and an arc length of 552.41 feet (the chord of said curve having a bearing of North 86° 47' 28" East for 549.51 feet) to its extended intersection with the prolongation northerly of the westerly line of Tax Lot 245 in Tax Block 1833;

Thence southwardly from the previous course on a curve to the right with a radius of 1601.00 feet, a central angle of 07° 02' 44", and an arc length of 196.87 feet (the chord of said curve having a bearing of South 25° 39' 54" East for 196.75 feet) to the northwesterly corner of Tax Lot 245 in Tax Block 1833;

Thence southerly, along the westerly line of Tax Lot 245, which is coincident with the easterly line of Tax Lots 215 and 230 in Tax Block 1833, for 393.32 feet, more or less, to the northerly line of Tax Lot 1 in Tax Block 1833;

Thence westwardly, along part of the northerly line of Tax Lot 1 in Tax Block 1833 for 127.2 feet, more or less, to a point on the northerly line of Tax Lot 1 where it is intersected by the prolongation northeasterly of the southeasterly line of Tax Lot 300 in Tax Block 1833;

Thence southwestwardly, along the prolongation of the southeasterly line of Tax Lot 300 in Tax Block 1833 for 81.63 feet, more or less, to the northeasterly corner of Tax Lot 300;

Thence southwestwardly along the southeasterly lines of Tax Lots 300, 155, 120 and 103 for 1756.88 feet to the northerly line Roosevelt Avenue;

Thence westwardly, along the northerly line of Roosevelt Avenue for 398.39 feet to the point or place of BEGINNING, the aforesaid distances being more or less.

APPENDIX B

SPECIAL DISTRICT TEXT

Special Willets Point District

Matter underlined is new, to be added;
Matter within # # is defined in Section 12-10;
Matter in ~~strikeout~~ is old, to be deleted;
* * * indicates where unchanged text appears in the Zoning Resolution

* * *

11-12
Establishment of Districts

In order to carry out the purposes and provisions of this Resolution, the following districts are hereby established:

* * *

Establishment of the Special West Chelsea District

In order to carry out the special purposes of this Resolution as set forth in Article IX, Chapter 8, the #Special West Chelsea District# is hereby established.

Establishment of the Special Willets Point District

In order to carry out the special purposes of this Resolution as set forth in Article XII, Chapter 4, the #Special Willets Point District# is hereby established.

* * *

12-10
DEFINITIONS

* * *

Special West Chelsea District

* * *

Special Willets Point District

The "Special Willets Point District" is a Special Purpose District designated by the letters "WP" in which special regulations set forth in Article XII, Chapter 4, apply. The #Special Willets Point District# appears on the #zoning maps# superimposed on other districts and its regulations supplement or supersede those of the districts on which it is superimposed.

Story

* * *

14-44
Special Zoning Districts Where Certain Sidewalk Cafes are Permitted

#Enclosed# or #unenclosed sidewalk cafes# shall be permitted, as indicated, in the following special zoning districts, where allowed by the underlying zoning. #Small sidewalk cafes#, however, may be located on #streets# or portions of #streets# within special zoning districts pursuant to the provisions of Section 14-43 (Locations Where Only Small Sidewalk Cafes Are Permitted).

* * *

Queens	#Enclosed Sidewalk Cafe#	#Unenclosed Sidewalk Cafe#
Downtown Jamaica District	No	Yes
Special Willets Point District	Yes	Yes

* * *

All text is new; it is not underlined

Article XII - Special Purpose Districts
Chapter 4
Special Willets Point District

124-00
GENERAL PURPOSES

The "Special Willets Point District" established in this Resolution is designed to promote and protect public health, safety and general welfare. These general goals include, among others, the following specific purposes:

(a) to transform Willets Point into a diverse and sustainable community that enhances connections to its surroundings through a unique combination of uses;

(b) to create a retail and entertainment destination that catalyzes future growth and strengthens Flushing's role as a nexus of economic, social and cultural activity;

(c) to encourage a mix of uses that complement sporting venues within Flushing Meadows – Corona Park;

(d) to maximize utilization of mass transit, reducing the automobile dependency of the redevelopment;

(e) to create a livable community combining housing, retail and other uses throughout the district;

(f) to create a walkable, urban streetscape environment with publicly accessible parks and open spaces for pedestrians;

(g) to encourage the pedestrian orientation of ground floor uses;

(h) to build upon the diversity of Queens as well as the proximity of regional transportation facilities, including the Van Wyck and Whitestone expressways, LaGuardia and JFK Airports and the Long Island Railroad;

(i) to provide flexibility of architectural design within limits established to assure adequate access of light and air to the street, and thus to encourage more attractive and economic building forms; and

(j) to promote the most desirable use of land and building development in accordance with the District Plan and Urban Renewal Plan for Willets Point and thus improve the value of land and buildings and thereby improve the City's tax revenues.

124-01
General Provisions

The provisions of this Chapter shall apply to all #developments#, #enlargements#, #extensions#,

alterations and changes of #use# within the #Special Willets Point District#. The regulations of all other Chapters of this Resolution are applicable, except as superseded, supplemented or modified by the provisions of this Chapter. In the event of a conflict between the provisions of this Chapter and other regulations of this Resolution, the provisions of this Chapter shall control.

124-02
Definitions

Connector street

A "connector street" shall be a way intended for general public use located and designed in accordance with requirements set forth in Section 124-31 (Standards for Streets and Blocks), inclusive.

Eastern perimeter street

The "eastern perimeter street" shall be a way intended for general public use located and designed in accordance with requirements set forth in Section 124-31 (Standards for Streets and Blocks), inclusive.

Primary retail street

The "primary retail street" shall be a way intended for general public use located and designed in accordance with requirements set forth in Section 124-31 (Standards for Streets and Blocks) , inclusive.

Residential street

A "residential street" shall be a way intended for general public use located and designed in accordance with requirements set forth in Section 124-31 (Standards for Streets and Blocks) , inclusive.

Retail street

A "retail street" shall be a way intended for general public use located and designed in accordance with requirements set forth in Section 124-31 (Standards for Streets and Blocks) , inclusive.

Service street

A "service street" shall be a way intended for general public use located and designed in accordance with requirements set forth in Section 124-31 (Standards for Streets and Blocks) , inclusive.

124-021
Modification of "Street"

For the purposes of establishing #blocks# and applying the #use#, #signage#, #street# tree, height and setback, #court#, publicly accessible open space regulations and curb cut regulations of this Chapter, #connector streets#, the #eastern perimeter street#, the #primary retail street#, #residential streets#, #retail streets# and #service streets# shall be considered #streets#, and their boundaries shall be treated as #street lines#.

124-03
District Plan and Maps

District Maps are located within Appendix A of this Chapter and are hereby incorporated and made part of this Resolution. They are incorporated for the purpose of specifying locations where special regulations and requirements set forth in the text of this Chapter apply.

The District Plan includes the following five maps:

Map 1 - District Plan

Map 2 - Mandatory Intersections

Map 3 - Location Requirements

Map 4 - Height Limits

Map 5 - Locations of Tower Walls without Setbacks

124-04
Applicability of District Regulations

124-041
Applicability of Chapter 1 of Article I

Within the #Special Willets Point District#, Section 11-15 (Environmental Requirements) shall apply, except that prior to issuing a building permit for any #development#, or for an #enlargement#, #extension# or a change of #use#, on a tax lot or #zoning lot# that has an (E) designation(s) for hazardous material contamination, noise or air quality, the Department of Buildings shall be furnished with a report from the Department of Environmental Protection of the City of New York stating:

(a) in the case of an (E) designation for hazardous material contamination, that environmental requirements related to the (E) designation have been met for that lot; or

(b) in the case of an (E) designation for noise or air quality, that the plans and drawings for such #development# or #enlargement# will result in compliance with the environmental requirements related to the (E) designation.

124-042
Applicability of Chapter 3 of Article VII

The following special permit by the Board of Standards and Appeals shall not be applicable:

Section 73-16 (Public Transit, Railroad or Electric Utility Substations) shall not apply to electrical utility substations. In lieu thereof, such #uses# shall be allowed within the #Special Willets Point District# upon authorization of the City Planning Commission, pursuant to Section 124-16 (Authorization for Electrical Utility Substations)

124-043
Applicability of Chapter 4 of Article VII

The following special permit by the City Planning Commission shall not be applicable:

Section 74-61 (Public Transit, Railroad or Electric Utility Substations) shall not apply to electrical utility substations. In lieu thereof, such #uses# shall be allowed within the #Special Willets Point District# upon authorization of the City Planning Commission, pursuant to Section 124-16 (Authorization for Electrical Utility Substations)

124-05
Certification for Large Developments

The requirements of this Section shall apply to #zoning lots# of at least 200,000 square feet of #lot area#, containing #developments# or #enlargements# resulting in at least 100,000 square feet of #floor area# on such #zoning lots#.

No building permit shall be issued until the Chairperson of the City Planning Commission certifies to the Department of Buildings that such #developments# or #enlargements# comply with the provisions of this Section.

A set of drawings of sufficient scope and detail shall be submitted showing that:

(a) all #streets# and private streets within or abutting the proposed #development# or #enlargement# comply with the provisions of Section 124-31 (Standards for Streets and Blocks), inclusive;

(b) all #streets# and private streets within or abutting the proposed #development# or #enlargement# are constructed to grades acceptable to the Commissioner of Buildings and the Commissioner of Transportation;

(c) all publicly accessible open areas within or abutting the proposed #development# or #enlargement# comply with the provisions of Section 124-40 (PUBLICLY ACCESSIBLE OPEN SPACE REQUIREMENTS), inclusive; and

(d) for any portion of the #Special Willets Point District# not within the proposed #development# or #enlargement# and for which a certification pursuant to this Section has not been obtained, plans shall be submitted showing that the #development# or #enlargement# that is the subject of this certification will not preclude such portions of the #Special Willets Point District# from complying with the provisions of Section 124-31 and 124-40 under future certifications pursuant to this Section.

The Chairperson may allow for phased #development# upon certification to the Commissioner of Buildings that a plan has been submitted that provides for the completion of any private streets and publicly accessible open spaces that are integral to the #development# of a #building# or #buildings# within each phase.

The Chairperson shall modify the provisions of Section 124-31 (Standards for Streets and Blocks), inclusive, to the minimum extent necessary in the event that the Fire Department determines in writing that such modifications are required under law or regulation governing adequate fire access.

All required private streets and publicly accessible open areas, once certified in accordance with the provisions of this Section, shall be duly recorded in the form of a signed declaration of restrictions, including a maintenance and operation agreement, indexed against the property, binding the owners, successors and assigns to provide such private streets and publicly accessible open areas and public access thereto in accordance with the plans certified by the Chairperson of the City Planning Commission. Such declaration or maintenance and operation agreement shall require that a bond be posted that would ensure that the private streets and public access areas are maintained in accordance with the declaration or maintenance and operation agreement and are closed only at authorized times. The filing of such declaration in the Borough Office of the Register of the City of New York shall be a precondition for the issuance of a building permit.

In addition, the private streets and publicly accessible open areas integral to the #development# or #enlargement# of a #building# or #buildings# shall be recorded on the certificate of occupancy for such #building# or #buildings# by the Department of Buildings and shall be a condition of issuance of such certificate of occupancy.

124-10
SPECIAL USE REGULATIONS

The #use# regulations of the underlying district are modified as set forth in this Section, inclusive.

124-11
Regulation of Residential Uses

124-111
Location of residential use within buildings

The provisions of Section 32-422 (Location of floors occupied by non-residential uses) shall be modified to permit #residential uses# on the same #story# as a non-#residential use# provided no access exists between such #uses# at any level containing #residences# and provided any non-#residential uses# are not located directly over any #residential uses#. However, such non-#residential uses# may be located over a #residential use# by authorization of the City Planning Commission upon a finding that sufficient separation of #residential uses# from non-#residential uses# exists within the #building#.

124-112
Residential entrances on residential streets

Each ground floor #dwelling unit# on a #residential street# shall be directly accessible from such #residential street#. No more than one entrance to a #residential street# shall be required for any one ground floor #dwelling unit#.

124-12
Regulation of Commercial Uses in Area B

(a) Within Area B, #commercial# and special permit #uses# shall be limited to those #uses# permitted in a C1-4 District and physical culture or health establishments pursuant to Section 73-36, provided that #commercial uses# shall be located no more than 100 feet from a #connector street#, 34th Avenue, Willets Point Boulevard or Area A.

(b) Within Area B, #uses# permitted in the underlying district shall be permitted within an area east and south of Willets Point Boulevard and contiguous with Area A, provided that such area shall be limited to 115,000 square feet in land area.

124-13
Uses Permitted As-of-Right

The following special permits shall not apply. In lieu thereof, such uses shall be permitted as-of-right as described below:

Section 74-41 (Arenas, Auditoriums, Stadiums or Trade Expositions) shall not apply for trade expositions with a capacity in excess of 2,500 persons provided that the facility has a #floor area# of no more than 400,000 square feet.

(Section 73-482 (In Commercial or Manufacturing Districts) shall not apply for group

parking facilities exceeding 225 spaces, provided such facilities comply with the regulations set forth in Section 124-50 (OFF-STREET PARKING REGULATIONS), inclusive.

In #buildings# with frontage on 126th Street, the following special permits shall not apply. In lieu thereof, such uses shall be permitted as-of-right:

Section 73-244 (In C2, C3, C4*, C6-4**, M1-5A, M1-5B, M1-5M and M1-6M Districts and the Special Tribeca Mixed Use District) shall not apply for eating and drinking establishments with a capacity of more than 200 persons, which shall be permitted as-of-right within 100 feet of a #Residence District# boundary.

Section 73-36 (Physical Culture or Health Establishments)

Section 74-46 (Indoor Interactive Entertainment Facilities)

Sections 73-35 (Amusement Arcades) and 74-47 (Amusement Arcades)

124-14
Retail Continuity

The following regulations shall apply within Area A to all portions of #buildings# with frontage on 126th Street, the #primary retail street#, the #retail streets#, #connector streets#, and, in the event that a utility easement is retained on the #block# bounded by Roosevelt Avenue and 126th Street, along the frontage of the publicly accessible open space required by paragraph (d) of Section 124-42.

(a) Ground floor #uses#

#Uses# located on the ground floor level or within five feet of #base flood elevation# shall be limited to #commercial uses# permitted by the underlying district, but not including #uses# listed in Use Groups 6B, 6E, 8C, 8D, 9B, 10B or 12D. A building's frontage shall be allocated exclusively to such #uses#, except for lobby space or entryways, parking where permitted pursuant to Section 124-50, inclusive, and vehicular access where permitted pursuant to Section 124-53 (Curb Cut restrictions). Such #uses# shall have a minimum depth of 50 feet measured from any #street wall# facing 126th Street, the #primary retail street# or #connector streets#.

In no event shall the length of such frontage occupied by lobby space or entryways exceed, in total, 40 feet or 25 percent of the building's frontage, whichever is less, except that the width of a lobby need not be less than 20 feet.

(b) Maximum length of establishments facing 126th Street and the #primary retail street#

The length of ground floor frontage occupied by any establishment shall not exceed 110 feet along 126th Street and 65 feet along the #primary retail street#. Such maximum lengths shall apply within 50 feet of any #street wall# facing 126th Street and the #primary retail street#. However, the provisions of this paragraph, (b), shall not apply within 300 feet of Northern Boulevard.

(c) Access

Access to each ground floor establishment shall be provided directly from a #street#.

(d) Transparency

For any new #development# or #enlargement#, each ground floor #street wall# shall be glazed with materials which may include show windows, glazed transoms or glazed portions of doors. Such glazed area shall occupy at least 70 percent of the area of each such ground floor #street wall#, measured to a height of 10 feet above the level of the adjoining sidewalk or public access area. Not less than 50 percent of such glazed area shall be glazed with transparent materials and up to 20 percent of such area may be glazed with translucent materials.

However, in locations where such ground floor #street wall# above the level of the adjoining sidewalk or public access area is below #base flood elevation#, the required glazed area shall occupy an area measured from #base flood elevation# to a height 10 feet above #base flood elevation#.

124-15
Modification of Sign Regulations

The height of all #signs# shall be measured from #base flood elevation#. The underlying #sign# regulations shall apply, except as set forth in this Section.

(a) Within Area A, the #sign# regulations of a C4 District shall apply, except for #street walls# facing Roosevelt Avenue, Northern Boulevard and 126th Street.

(b) Within Area B, the #sign# regulations of a C1 District shall apply, except that within the area described in paragraph (b) of Section 124-12, the sign regulations of a C4 district shall apply.

(c) Within Area A, for #street walls# facing Roosevelt Avenue or Northern Boulevard, the #sign# regulations of a C4 District shall apply, except that #signs# shall be limited to 85 feet in height.

(d) For #street walls# facing 126th Street to a height of 35 feet, the #sign# regulations of a C4 District shall apply, provided that the maximum projection of any #sign# from the

exterior wall of a #building# shall be four feet, and the transparency requirements of paragraph (d) of Section 124-14 are met.

(e) For #street walls# facing 126th Street above 35 feet in height, all #signs#, including #advertising signs#, #illuminated signs# and #flashing signs# shall be permitted without limitation on #surface area#, provided that:

(1) no such #signs# are higher than 85 feet; and

(2) the maximum projection of any #sign# from the exterior wall of a #building# shall be four feet, except that projections not exceeding six feet are permitted, provided that such projections beyond four feet shall comprise not more than 20 percent of the #surface area# of all such #signs# on the establishment;

(f) Within 150 feet of the neighborhood park required pursuant to Section 124-40 paragraph (b), #flashing signs# whose message is visible from such park shall not be permitted.

(g) The provisions of Section 32-67 (Special Provisions Applying Along District Boundaries) shall not apply in the #Special Willets Point District#.

124-16
Authorization for Electrical Utility Substations

The City Planning Commission may authorize electrical utility substations in the #Special Willets Point District# in order to serve the needs of the Special District, and the regulations thereof shall be modified as necessary to accommodate the operational needs of the substation, upon authorization of the City Planning Commission, provided the Commission finds that:

(a) the architectural and landscaping treatment of such #use# will blend harmoniously with the abutting area to the extent reasonably permitted by the operational needs of the substation; and

(b) if the site proposed for such #use# is within Area A, that there are difficulties in locating such #use# within Area B.

The City Planning Commission may, consistent with cost-effective operations and capital planning, and the operational needs of the substation, prescribe appropriate conditions and safeguards on matters necessary to effectuate the provisions of paragraph (a) of this Section which are not regulated by other applicable codes, laws, rules or regulations. The applicant shall provide the Department of City Planning with a general description of such codes, laws, rules or regulations and a certification that the proposed substation shall comply therewith.

124-17

Special Permit for Cogeneration Power Plant

The Board of Standards and Appeals may permit a combined heat and power cogeneration plant not to exceed 100,000 square feet in #floor area#, provided that:

(a) the power plant is designed to maximize both electric and thermal cogeneration system efficiency to the greatest extent feasible;

(b) a detailed energy analysis is submitted to the Board demonstrating that the system as designed will operate with maximum efficiency and perform more effectively than a traditional, power-purchased-from-grid, system; and

(c) the power plant is designed primarily to serve the Special Willets Point District.

In addition, the Board shall refer such application to the Department of Environmental Protection for a report to ensure that the power plant is designed to maximize cogeneration efficiency to the greatest extent feasible and that the system as designed will operate with maximum efficiency and perform more effectively than a traditional, power-purchased-from-grid system.

The Board may prescribe appropriate conditions or safeguards to minimize adverse effects on the character of the surrounding area including safety devices, emissions limits, and the concealment of such use with building enclosures, landscaping, buffer zones or other methods.

124-18
Special Permit for Wastewater Treatment Plant

The Board of Standards and Appeals may permit an enclosed membrane bio-reactor wastewater treatment plant not to exceed 100,000 square feet in #floor area# on a site not to exceed 40,000 square feet in area, provided that the following findings are made:

(a) that in all cases the proposed plant promotes and protects the public health, safety and general welfare;

(b) the proposed plant will be adequate for anticipated #development# in the area to be served;

(c) the proposed plant is designed primarily to serve the Willets Point District;

(d) the site for such #use# is so located as to minimize the adverse effects on the integrity of existing and future development, and to minimize the interruption of the continuity of retail frontage;

(e) the architectural and landscaping treatment of such #use# will blend harmoniously with the rest of the area; and

(f) that such #use# will conform to the performance standards applicable to M1 Districts.

In addition, the Board shall refer such application to the Department of Health and the Department of Environmental Protection for a report to ensure that the site-specific design of the enclosed, membrane bio-reactor waste water treatment plant meets all city and state health and effluent standards.

The Board may prescribe appropriate conditions or safeguards to minimize adverse effects on the character of the surrounding area including requirements for soundproofing, safety devices, and the concealment of such #use# with building enclosures, landscaping, buffer zones or other methods.

124-19
Location and Other Requirements for Specific Uses

124-191
Convention center

A trade exposition center, hereinafter referred to as a convention center, is permitted in the #Special Willets Point District# only in accordance with this Section and shall be located on a #connector street#. A convention center may only be located in the area as depicted on Map 3 (Location Requirements), being entirely within 650 feet of Northern Boulevard.

Furthermore, a convention center may not be located within 200 feet of 126th Street, and any portion of a convention center located between 200 feet and 450 feet of 126th Street shall be limited to no more than 50,000 square feet of #floor area#.

Section 124-14 (Retail Continuity) shall not be applicable to a convention center. In lieu thereof, the transparency requirements of this Section shall apply to the #street wall# of the convention center facing a #connector street#. Such #street wall# shall be glazed with materials which may include show windows, glazed transoms or glazed portions of doors. Such glazed area shall occupy at least 50 percent of the area of such #street wall#, measured to a height of 15 feet above the level of the adjoining sidewalk or public access area. Not less than 40 percent of such area shall be glazed with transparent materials.

The main entrance(s) of such convention center shall be on a #connector street#.

124-192
Location of theaters

Theaters comprising over 10,000 square feet in #floor area# shall be located entirely within 600 feet of the intersection of Roosevelt Avenue and 126th Street.

124-193
Location of office uses in towers

Use Group 6B office #uses# located on any #story# entirely above 120 feet in height shall be located entirely within 600 feet of the intersection of Roosevelt Avenue and 126th Street.

124-20
BULK REGULATIONS

In the #Special Willets Point District#, bulk regulations shall be as set forth in this Section, inclusive.

124-21
Floor Area Regulations

#Zoning lots# containing less than 200,000 square feet of #lot area# shall not exceed a #floor area ratio# of 2.0.

#Zoning lots# containing at least 200,000 square feet of #lot area# shall have a maximum #floor area ratio# as follows:

(a) Within Area A:

(1) #Zoning lots# of at least 28 acres of #lot area# shall have a maximum #commercial floor area ratio# of 2.0 and a maximum total #floor area ratio# of 4.6.

(2) For #zoning lots# less than 28 acres:

(i) North of the centerline of 34th Avenue, now or formerly, the maximum #commercial floor area ratio# shall be 2.0 and the maximum total #floor area ratio# shall be 3.4.

(ii) South of the centerline of 34th Avenue, now or formerly, the maximum #commercial floor area ratio# shall be 2.0 and the maximum total #floor area ratio# shall be 5.0.

(b) Within Area B:

(1) #Zoning lots# of at least 33 acres of #lot area# shall have a maximum #commercial floor area ratio# of 2.0 and a maximum total #floor area ratio# of 2.25.

(2) For #zoning lots# less than 33 acres:

(i) North of the centerline of 34th Avenue, now or formerly, the #floor area ratio# shall not exceed 2.0.

(ii) South of the centerline of 34th Avenue, now or formerly, and north and west of the centerline of Willets Point Boulevard, now or formerly, the maximum #commercial floor area ratio# shall be 2.0 and the maximum total #floor area ratio# shall be 3.0.

(iii) South and east of the centerline of Willets Point Boulevard, now or formerly, the maximum #commercial floor area ratio# shall be 2.0 and the maximum total #floor area ratio# shall be 4.0.

124-22
Height and Setback Regulations

The height and setback regulations of this Section shall apply throughout the #Special Willets Point District#, except that #developments# or #enlargements# that result in less than 100,000 square feet of #floor area# on #zoning lots# of less than 200,000 square feet shall be limited to the height and setback regulations of an R6B District. The height of all #buildings or other structures# shall be measured from the level of the adjoining sidewalk or other publicly accessible open area. For the purposes of this Section, 34th Avenue and Willets Point Boulevard shall be considered to be #connector streets#, 127th Street shall be considered to be a #residential street#, and the public access areas, if provided pursuant to paragraph (d) of Section 124-42 (Types and Standards of Publicly Accessible Open Space), shall be considered a non-#residential street#.

(a) Street Wall Location and Base Heights

(1) Except along 126th Street, Northern Boulevard and #residential streets#, at least 70 percent of the #aggregate width of street walls# shall be located within eight feet of the #street line# or public access area and shall extend without setback to at least a minimum base height of 60 feet or the height of the building, whichever is less, The maximum height of a #building or other structure# before setback shall be 85 feet. However, the minimum base height of a convention center shall be 40 feet or the height of the #building#, whichever is less.

(2) Along 126th Street, at least 80 percent of the #aggregate width of street walls# shall be located within 60 feet of the #street line# of 126th Street and shall extend to at least a minimum base height of 60 feet, or the height of the #building#, whichever is less. The maximum height of a #building or other structure# before setback shall be 85 feet. However, for #buildings# directly opposite Citifield Stadium, a setback lower than 60 feet shall be permitted provided that:

(i) for #buildings# greater than 85 feet in height, an additional setback is provided between a height of 60 and 85 feet; and

(ii) eating and drinking establishments with outdoor seating on terraces overlooking 126th Street are provided or physical culture or health establishments utilize the outdoor area on the second #story#. Such terraces shall be located on the roof level of the ground floor level of the #building#, at a height not lower than 20 feet or higher than 30 feet above the level of the sidewalk fronting the 126th #street wall# of the #building#, and shall have a minimum depth of 15 feet.

(3) Along #residential streets#, at least 70 percent of the #aggregate width of street walls# shall be located within eight feet of the #street line# or public access area and shall extend without setback to at least a minimum base height of 40 feet or the height of the building, whichever is less, The maximum height of a #building or other structure# before setback shall be 85 feet. Where #street walls# facing #residential streets# contain ground floor #dwelling units#, such #street walls# shall be set back at least four feet from the #street line#. The #building# may project into the required setback area provided that:

(i) any such projection does not exceed 20 feet in width;

(ii) any such projection does not exceed 25 feet in height;

(iii) the aggregate width of all such projections at the level of any #story# shall not exceed 50 percent of the width of the #street wall# of the #building#; and

(iv) all such projections are at least 10 feet apart.

(4) Along Northern Boulvard, no portion of a #street wall# shall be located closer to Northern Boulevard than eight feet. At least 70 percent of the #aggregate width of street walls# shall be located between eight and 15 feet of the Northern Boulevard #street line# and shall extend without setback to at least a minimum base height of 60 feet or the height of the #building#, whichever is less, The maximum height of a #building or other structure# before setback shall be 85 feet.

(5) Wherever an open area is provided between the #street wall# of a #building# and the #streetline#, such area shall be planted, except at entrances to and exits from the #building#, and except where non-#residential uses# are provided at the ground floor level of the #building#.

(b) Required setbacks and maximum building height

Except as provided in paragraph (c)(6) of this Section, setbacks are required for all portions of #buildings# that exceed a height of 85 feet. Such setbacks shall be provided at a height not lower than 60 feet. The depth of the required setback shall be at least 10 feet measured from any required #street wall# fronting on a #wide street#, and at least 15 feet from any required #street wall# fronting on a #narrow street#. Where portions of #buildings# that exceed a height of 85 feet are not located above a required #street wall#, such portions shall be set back at least ten feet from a #wide street line# and at least 15 feet from a #narrow street line#. However, dormers may penetrate a height of 85 feet in accordance with the provisions of paragraph (c) of Section 23-621 (Permitted obstructions in certain districts). Within the area shown on Map 4 as limited to 232 feet above mean sea level, no portion of a #building# shall exceed a height of 120 feet except in accordance with the tower provisions of paragraph (c) of this Section.

(c) Towers

Within the area shown on Map 4 as limited to 232 feet above mean sea level, any #story# of a #building# located above a height of 120 feet shall comply with the provisions of this paragraph, (c). Such portions of a #building# are hereinafter referred to as "towers."

(1) Maximum tower size

Each #residential story# of a tower located entirely above a height of 120 feet shall not exceed a gross area of 11,000 square feet.

(2) Maximum tower length

The maximum length of any #residential story# located entirely above a height of 120 feet shall not exceed 170 feet. Such length shall be measured by inscribing within a rectangle the outermost walls of the tower at the level of each #story# entirely above a height of 120 feet. No side of such rectangle shall exceed a length of 170 feet.

(3) Orientation

The length of any #residential story# located entirely above a height of 120 feet shall be at least 1.5 times its width and oriented so that the long side of such tower faces within 25 degrees of geographical south. Such length shall be measured by inscribing within a rectangle the outermost walls of the tower at the level of each #story# entirely above a height of 120 feet. The orientation provisions of this paragraph, (3), need not apply if at least 75 percent of all towers in the #Special Willets Point District# for which building permits have been issued comply with such provisions.

(4) Uppermost #story#

The uppermost #story# that contains #residential floor area# within a tower must provide a setback so that such #story# covers not more than 85 percent and not less than 50 percent of the gross area of the #story# immediately below.

(5) Distance between towers

The minimum distance between all towers shall be 60 feet.

(6) Tower walls without setbacks

To permit a #building# to rise from grade to a tower portion without setback, the setback provisions of paragraph (b) of this Section shall not apply to any portion of a #building# located within the tower wall location areas shown on Map 5, provided that this exception from paragraph (b) of this Section shall not apply to more than one tower for each #block#.

(d) Maximum total height

The maximum height of any #building or other structure# shall be as depicted on Map 4 (Height Limits). The height limits established in Map 4 include reference points for two airport referenced imaginary surfaces, as defined in Section 61-30, that are continuous planes, and one area with a maximum height limitation of 232 feet above mean sea level. The coordinates of the points are as follows:

Point 1	73°50'42.9"W	40°45'38.1"N
Point 2	73°50'36.8"W	40°45'45.6"N
Point 3	73°50'26.6"W	40°45'39.3"N
Point 4	73°50'33.6"W	40°45'30.7"N

The height limits hereby established supersede the height limits described in Article VI, Chapter 1 (SPECIAL REGULATIONS APPLYING AROUND MAJOR AIRPORTS). Application may be made to the Board of Standards and Appeals pursuant to Section 73-66 (Height Regulations around Airports) for a permit to construct a #building or other structure# in excess of what is permitted pursuant to this paragraph, (d), provided that such application is also referred to the Port Authority of New York and New Jersey.

124-30
MANDATORY IMPROVEMENTS

124-31
Standards for Streets and Blocks

#Developments# or #enlargements# that result in a total of at least 100,000 square feet of #floor area# on #zoning lots# of at least 200,000 square feet, shall front upon #streets# that comply with the requirements of this Section, inclusive.

124-311
Maximum length of blocks

The maximum length of a #block# shall be 450 feet, except that:

(a) where a #block# includes a convention center, such length shall be unlimited;

(b) where a #block# bounds the intersection of 126th Street and Northern Boulevard, such length shall be limited to 675 feet;

(c) where a #block# bounds the intersection of 126th Street and Roosevelt Avenue, such length shall be limited to 575 feet; and

(d) #blocks# or portions of #blocks# east of a line 600 feet east of and parallel to126th Street and west of a line 1,350 feet east of and parallel to 126th Street shall have a maximum distance between intersections on a #connector street# of 218 feet, except where a #block# includes a convention center or the minimum two-acre park required pursuant to Section 124-40 (PUBLICLY ACCESSIBLE OPEN SPACE REQUIREMENTS). Where public pedestrian access between a #connector street# and another #street# on the same #block# is located no less than 218 feet from both intersections on a #connector street# through provision of open space pursuant to Section 124-40, inclusive, such #block# or a portion of a #block# east of a line 600 feet east of and parallel to126th Street and west of a line 1,350 feet east of and parallel to 126th Street may have a maximum distance between intersections on a #connector street# that does not exceed 400 feet, provided that there is only one such #block# in the Special District.

124-312
New streets

The provisions of this Section shall apply to all private streets constructed after (effective date of amendment):

(a) #Primary retail street#

One #primary retail street# shall be provided parallel to, or generally parallel to, 126th Street, and comply with the following requirements:

(1) The western boundary of such #street# shall be not less than 220 feet and not more than 320 feet from 126th Street.

(2) Such #street# shall intersect two #retail streets# and two #connector streets#.

(3) The width of such #street# shall be a minimum of 70 feet and a maximum of 80 feet, comprised of:

(i) two 15 foot wide sidewalks on the outer edge of the #street#;

(ii) two nine foot wide strips adjacent to the inner edge of the sidewalks that can be used as either parking lanes or a landscaped amenity that may include seating and walkways;

(iii) two travel lanes in the center of the #street# totaling 22 feet in width; and

(iv) one optional eight to 10 foot wide median located on the centerline of the #street# between the two travel lanes provided that the #street# width shall not exceed 72 feet without such median.

(b) #Connector streets#

Two #connector streets# shall be provided as follows:

(1) One #connector street# shall intersect 126th Street opposite 34th Avenue within the area shown on Map 2.

(2) One #connector street# shall intersect 126th Street opposite the south side of Citifield Stadium within the area shown on Map 2.

(3) Both #connector streets# shall intersect with the #primary retail street# and with each other at a point east of the #primary retail street#.

(4) The width of each #connector street# shall be at least 75 feet and no more than 86 feet, comprised of:

(i) two 15 foot wide sidewalks, one on each outer edge;

(ii) two nine foot wide strips adjacent to the inner edge of the sidewalks that can be used as either parking lanes or a landscaped amenity that may include seating and walkways; and

(iii) at least two travel lanes and not more than three travel lanes totaling at least 22 feet and not more than 33 feet in width, and one bike lane at least five feet wide.

However, where portions of such #streets# accommodate a change of grade, the sidewalk area shall be permitted to be divided into two sidewalks, one 10 feet wide adjacent to the #building# and one five feet wide adjacent to and at the level

of the travel lanes and/or parking areas. Street trees shall not be required until such time that the travel lanes are raised to the level of the 10 foot wide sidewalk.

(5) Where a convention center fronts upon a #connector street#, the requirements set forth in this paragraph, (b), shall be modified to eliminate the nine foot wide strip and, in lieu thereof, require a 12 foot wide drop off lane that, in the aggregate, shall not exceed 300 feet.

(c) #Retail streets#

A minimum of two and maximum of three #retail streets# shall be provided as follows:

(1) One #retail street# shall intersect 126th Street opposite the entrance to Citifield stadium, within the area shown on Map 2;

(2) One #retail street# shall intersect 126th Street opposite the north side of Citifield Stadium within the area shown on Map 2;

(3) Two #retail streets# shall intersect with the #primary retail street#;

(4) The width of each #retail street# shall be no more than 68 feet wide, comprised of:

(i) two 13 foot wide sidewalks, one on each outer edge;

(ii) two ten foot wide strips adjacent to the inner edge of the sidewalks that can be used as a landscaped pedestrian amenity that may include seating and walkways; and

(iii) two travel lanes totaling at least 22 feet in width.

(d) #Eastern perimeter street#

One #eastern perimeter street# shall be provided as follows:

(1) The eastern boundary of such #street# shall be within 20 feet of the eastern boundary of the #Special Willets Point District#, extending between Roosevelt Avenue and a #connector street#;

(2) The width of such #street# shall be at least 62 feet and no more than 75 feet, comprised of:

(i) a 13 foot wide sidewalk along its western boundary and a sidewalk at least five feet wide along its eastern boundary;

(ii) two eight foot wide strips adjacent to the inner edge of the sidewalks that can be used as either a parking lane or as a landscaped pedestrian amenity that may include seating and walkways; and

(iii) at least two and no more than three travel lanes totaling at least 20 feet and not more than 33 feet in width.

(e) #Residential street#

All #streets#, other than those listed in paragraphs (a) through (d) of this Section, that have one or more ground floor #dwelling units# fronting on the #street# shall be considered #residential streets#, except where such #street# is designated a #service street# pursuant to paragraph (f) of this Section. #Residential streets# shall be provided as follows:

(1) A #residential street# shall be a minimum of 62 feet wide and a maximum of 64 feet wide, comprised of:

(i) two 13 foot wide sidewalks, one on each outer edge;

(ii) two eight foot wide strips adjacent to the inner edge of the sidewalks that can be used as either a parking lane or as a landscaped pedestrian amenity that may include seating and walkways; and

(iii) two travel lanes totaling between 20 and 22 feet in width.

However, where portions of such #streets# accommodate a change of grade, the sidewalk area shall be permitted to be divided into two sidewalks, one eight feet wide adjacent to the #building# and one five feet wide adjacent to and at the level of the travel lanes and/or parking areas. Street trees shall not be required until such time that the travel lanes are raised to the level of the eight foot wide sidewalk.

However, where a 13-foot wide sidewalk is directly adjacent to publicly accessible open space, such sidewalk may be reduced to 10 feet in width.

(f) #Service street#

All newly constructed #streets#, other than those listed in paragraphs (a) through (e) of this Section, shall be improved as a #service street#. A minimum of 50 percent of the #uses# located on the ground floor level or within five feet of #base flood elevation# fronting a #service street# shall contain non-#residential uses#. #Service streets# shall be provided as follows:

(1) A #service street# may only be located as one of the #streets# bounding:

(i) a #block# that bounds the intersection of 126th Street and Northern Boulevard; and

(ii) a #block# that bounds the intersection of 126th Street and Roosevelt Avenue.

(2) A #service street# shall be a minimum of 62 feet wide and a maximum of 64 feet wide, comprised of:

(i) Two 13 foot wide sidewalks, one on each outer edge;

(ii) two eight foot wide strips adjacent to the inner edge of the sidewalks that can be used as either a parking lane or as a landscaped pedestrian amenity that may include seating and walkways; and

(iii) two travel lanes totaling between 20 and 22 feet in width.

However, where portions of such #streets# accommodate a change of grade, the sidewalk area shall be permitted to be divided into two sidewalks, one eight feet wide adjacent to the #building# and one five feet wide adjacent to and at the level of the travel lanes and/or parking areas. Street trees shall not be required until such time that the travel lanes are raised to the level of the eight foot wide sidewalk.

124-32
Street Tree Planting

All new #developments# or #enlargements# shall provide and maintain trees of not less than three-inch caliper at the time of planting in the sidewalk adjacent to the #building# on the side of the sidewalk closest to the travel lane. All such trees shall be provided for the entire length of the frontage of the #building#, for every 25 feet of such frontage, except where curb cuts or utilities make such planting infeasible. Species shall be selected, installed and maintained in accordance with specifications established by the Department of Parks and Recreation. However, street trees need not be provided where such trees may interfere with truck movements in the loading area for a convention center.

124-33
Mandatory Sidewalk Widening

In the event that 34th Avenue remains a mapped street, all #developments# or #enlargements# on 34th Avenue shall provide a sidewalk widening of no less than 13 feet in width. No obstructions shall be permitted from the lowest level to the sky except for those permitted pursuant to Section 37-53, paragraph(f)(3). When one end of the sidewalk widening abuts an existing building, the special design treatment specified in Section 37-53, paragraph (f)(5) shall be required.

124-34
Roof Design Requirements

Any roof of a facility containing off-street parking spaces, not otherwise covered by a #building#, which is larger than 400 square feet shall be landscaped. Up to five percent of such roof area may be used for mechanical equipment, provided that such mechanical equipment is fully enclosed, except that openings in such enclosure shall be permitted only to the extent necessary for ventilation and exhaust, and that it is screened from view by a fence which is at least 75 percent opaque or by at least three feet of dense planting. Up to 25 percent of such roof area may be accessible solely from an adjacent #dwelling unit# and the remaining roof area shall be accessible for the recreational use of the occupants of the building in which it is located. Hard surfaced areas shall not cover more than 50 percent of such roof area.

124-40
PUBLICLY ACCESSIBLE OPEN SPACE REQUIREMENTS

Publicly accessible open spaces shall be provided as specified in this Section, inclusive. In the event of a conflict between the provisions of this Section, inclusive, and any underlying regulation, the provisions of this Section shall govern.

124-41
Amount of Publicly Accessible Open Space

Publicly accessible open space within the #Special Willets Point District# shall total not less than eight acres. Such required amounts shall be open to the sky and shall not include any sidewalks required pursuant to this Section or sidewalk widenings pursuant to Section 124-33.

For #developments# or #enlargements# that result in a total of at least 100,000 square feet of #floor area# on #zoning lots# of at least 200,000 square feet, the following amount of publicly accessible open space shall be provided for each 1,000 square feet of #floor area#:

Within Area A: 30 square feet
Within Area B: 50 square feet.

Such publicly accessible open space may be transferred from the #zoning lot# containing the #development# or #enlargement# to any other #zoning lot# in the #Special Willets Point District# provided that such publicly accessible open space meets the requirements of Section 124-42, inclusive.

124-42
Types and Standards of Publicly Accessible Open Space

The following types and standards of publicly accessible open space shall apply:

(a) Park

At least one park not less than two acres in area shall be provided. Such park shall be bounded on all sides by #streets# or a #school#, and at least one of the #streets# bounding the park shall be a #connector street#. No portion of such park shall be closer than 200 feet from the boundaries of the #Special Willets Point District#. Up to five percent of the area of such outdoor park may be covered by a #building or other structure#. A minimum of twenty-five percent of such park shall be for active recreational uses, and a minimum of twenty-five percent shall be planted.

(b) 126th Street

The provisions of this paragraph, (b), shall apply along the western boundary of #blocks# bounding 126th Street:

(1) A sidewalk with a minimum width of 15 feet shall be located adjacent to the curb, and have an elevation not higher than one foot above the level of the road bed.

(2) A pedestrian amenity area at least 20 feet wide and no more than 35 feet wide shall be located between such sidewalk and the #street wall# of any #building# fronting upon 126th Street. Pedestrian circulation space at least five feet wide shall be provided within such area within 1.5 feet of the #ground floor elevation# of such #street walls# to allow pedestrian movement in a direction parallel with the #street# and connecting with sidewalks of #streets# intersecting 126th Street;

(3) On each such #block# there shall be a minimum of two ramps connecting the sidewalk along 126th Street and the pedestrian circulation space. In addition, stairways shall be provided linking the sidewalk and pedestrian circulation space so that each establishment on the #block# with entrances facing 126th Street is readily accessible by such stairs or ramps; and

(4) All publicly accessible open spaces shall comply with the provisions of Sections 37-725 (Steps), 37-726 (Permitted obstructions), 37-728 (Standards of accessibility for persons with disabilities), 37-73 (Kiosks and Open Air Cafes) and 37-74 (Amenities) except for the following modifications:

(i) Section 37-73, paragraph (b) shall be modified to permit open air cafes to be at a different elevation from adjoining public access areas and from adjoining sidewalks.

(ii) Section 37-73, paragraphs (c)(4) and (d) shall not apply to the certification of open air cafes in the Special District, and the filing of plans for open air cafes in the Borough Office of the City Register shall not be required.

(iii) For publicly accessible open space on the western boundary of #blocks# facing Citifield Stadium, Section 37-73, paragraph (b) shall be modified to limit the aggregate area of open air cafes to no more than 50 percent of the public access area, and to allow open air cafes to occupy up to 75 percent of #street# frontage.

(iv) In Section 37-741, the requirement for a minimum of one linear foot of required seating for every two linear feet of #street# frontage within 15 feet of the #street line# shall not apply.

(v) For public access areas on the western boundary of #blocks# facing Citifield Stadium, Section 37-741 shall be modified so that seating for open air cafes may count toward the seating requirement, in the category of movable seating, provided that 25 percent of the linear seating capacity is provided through other seating types.

(vi) For publicly accessible open space not on the western boundary of #blocks# facing Citifield Stadium, Section 37-742 shall be modified to require planters, planting beds and accessible lawns at a rate of 200 square feet for every 1,000 square feet of publicly accessible open space.

(vii) Section 37-747 (Public space signage) shall not apply; in lieu thereof, paragraph (i) (Hours of Access) of this Section shall apply.

(c) Roosevelt Avenue

Along the south side of #blocks# bounding Roosevelt Avenue, the following provisions shall apply:

(1) A bike lane with a minimum width of five feet shall be located no more than 16 feet from the curb line;

(2) A pedestrian amenity area at least 20 feet in width and not more than 45 feet in width shall be provided between the bike lane and the #street wall# of a #building#; and

(3) Within the pedestrian amenity area, there shall be a sidewalk with a minimum width of 13 feet, generally parallel to Roosevelt Avenue, linking the sidewalk along 126th Street to either a sidewalk along the #eastern perimeter street#, if built, or the sidewalk leading to the Roosevelt Avenue Bridge.

(4) A minimum of 50 percent of the pedestrian amenity area shall be planted.

(d) #Block# at Roosevelt Avenue and 126th Street

In the event that a utility easement is retained on the #block# bounded by Roosevelt Avenue and 126th Street, the following improvements shall be provided:

(1) An entry plaza of at least 7,000 square feet shall be provided adjacent to the intersection of 126th Street and Roosevelt Avenue, as follows:

(i) the plaza shall include no less than 60 feet and no more than 80 feet of frontage along 126th Street;

(ii) each #use# or establishment with frontage on the plaza shall include at least one entrance to such plaza;

(iii) at least two amenities shall be provided from among those listed in Section 37-748, except that a kiosk that provides information instead of food service shall also be permitted; and

(iv) the area of such plaza does not overlap with the requirements of paragraph (c) of this Section for Roosevelt Avenue.

(2) A central plaza of at least 20,000 square feet shall be provided as follows:

(i) the plaza shall have at least 100 feet of frontage on a #connector street#;

(ii) the prolongation of the centerline of the #primary retail street# shall intersect with such plaza; and

(iii) such plaza shall meet the pedestrian amenity standards of paragraph (b)(4) of this Section for 126th Street.

(iv) a minimum of 15 percent of such plaza shall be planted.

(3) A pedestrian corridor area shall be provided linking the entry plaza required pursuant to paragraph (d)(1) of this Section and the central plaza required pursuant to paragraph (d)(2) of this Section, as follows:

(i) such corridor shall be at least 60 feet in width and include, within such width, a 40 foot utility easement;

(ii) such corridor shall be at least 150 feet in length;

(iii) each #use# or establishment with frontage on such corridor shall include at least one entrance to such corridor; and

(iv) each side of such corridor area shall be planted with street trees of not less than three-inch caliper at the time of planting for the entire length of such

corridor, at a rate of one tree for every 25 feet of the length of each side of such corridor.

(e) Northern Boulevard

Along the north side of #blocks# bounding Northern Boulevard, the following provisions shall apply:

(1) A sidewalk with a minimum width of 13 feet shall be located adjacent to the curb and have an elevation not higher than one foot above the road bed of Northern Boulevard;

(2) An open area at least eight feet wide and no more than 15 feet wide shall be located between the sidewalk and the #street wall# of a #building#, except that such area need not be provided where such areas may interfere with truck movements in the loading area for a convention center located on any such #block#;

(3) A minimum of 70 percent of such open area shall be planted.

(f) #Eastern perimeter street#

Along the #eastern perimeter street# between the required sidewalk and the eastern boundary of the #Special Willets Point District#, an open area with a minimum depth of eight feet and a maximum depth of 15 feet shall be provided. At least 70 percent of such open area shall be planted.

(g) Convention center

If a convention center is provided, a pedestrian amenity area shall be required between the #street line# and the #street wall# of the convention center. The pedestrian amenity area shall have a depth of at least 10 feet and not more than 22 feet and shall meet the standards of paragraph (b)(4) of this Section for 126th Street.

(h) Standards for additional areas

If the amount of public access areas required pursuant to paragraphs (a) through (g) of this Section does not total eight acres, the difference shall be provided in the form of one or more public access areas located not closer than 100 feet to the boundary of the #Special Willets Point District#.

(i) Hours of Access

All publicly accessible open space shall be accessible to the public from sunrise to one hour after sunset. Entry plaques for public access areas over one-half acre in size shall be provided as described in paragraph (a) of Section 37-751.

124-50
OFF-STREET PARKING REGULATIONS

Off-street parking shall be provided for all required parking spaces and loading as specified by the underlying district, except as modified by the special regulations of this Section, inclusive.

124-51
Use and Location of Parking Facilities

The provisions of this Section shall apply to all off-street parking spaces within the #Special Willets Point District#.

Floor space used for parking shall be exempt from the definition of #floor area#.

Parking facilities with over 225 parking spaces shall provide adequate reservoir space at the vehicular entrances to accommodate either ten automobiles or five percent of the total parking spaces provided in such facility, whichever amount is greater, but in no event shall such reservoir space be required for more than 50 automobiles.

(a) All off-street parking spaces shall be located within facilities that, except for entrances and exits:

(1) are located entirely below the level of any #street# or publicly accessible open area upon which such facility, or portion thereof, fronts; or

(2) are located in a #cellar# no more than four feet above grade within Area B, provided that the #street wall# is set back at least four feet from the #street line# except for projections permitted pursuant to Section 124-22, paragraph (a)(3) and planted areas are provided pursuant to Section 124-22, paragraph (a)(5) and further provided that 50 percent of such #street wall# with adjacent parking spaces consists of opaque materials; or

(3) are located, at every level above-grade, behind #commercial#, #community facility# or #residential floor area# at least 25 feet from any #street wall# or public access area; or

(4) are located above-grade and adjacent to a #street wall# or public access area, provided that any non-horizontal parking deck structures are not visible from the exterior of the #building# in elevation view and opaque materials are located in the exterior building wall between the bottom of the floor of each parking deck and no less than three feet above such deck and a total of at least 50 percent of such #street wall# with adjacent parking spaces consists of opaque materials. A parking structure so screened shall be permitted only in the following locations:

(i) Except within #blocks# that bound the intersection of 126th Street and Northern Boulevard or 126th Street and Roosevelt Avenue, a parking facility may be located adjacent to a #street wall# facing 126th Street above a height of 35 feet and limited to a height of 85 feet, provided that no less than 60 percent and no more than 70 percent of the surface area of the portion of such #street wall# with adjacent parking spaces consists of one or more of the following: #signs#, graphic or sculptural art, or living plant material. At least 25 feet of #commercial#, #community facility# or #residential floor area# shall separate such parking spaces from any other adjacent #street#;

(ii) A parking facility may be located adjacent to a #street wall# limited to a height of 85 feet on a #block# that bounds the intersection of 126th Street and Northern Boulevard provided that such #street wall# is on Northern Boulevard and is more than 100 feet from 126th Street, and provided that no less than 60 percent and no more than 70 percent of the surface area of the portion of such #street wall# with adjacent parking spaces consists of one or more of the following: #signs#, graphic or sculptural art, or living plant material. At least 25 feet of #commercial#, #community facility# or #residential floor area# shall separate such parking spaces from adjacent #residential#, #connector#, or #primary retail streets#;

(iii) A parking facility not on a #block# that bounds the intersection of 126th Street and Northern Boulevard may be located adjacent to a #street wall# limited to a height of 40 feet facing Northern Boulevard, provided that such #street wall# with adjacent parking spaces is on Northern Boulevard and is more than 100 feet from 126th Street. At least 25 feet of #commercial#, #community facility# or #residential floor area# shall separate such parking spaces from any other adjacent #street#;

(iv) A parking facility may be located adjacent to a #street wall# on a #block# that bounds the intersection of 126th Street and Roosevelt Avenue, provided that such #street wall# with adjacent parking spaces is more than 100 feet from 126th Street, Roosevelt Avenue and at least 25 feet from any #connector street#;

(v) A parking facility may be located adjacent to a #street wall# limited to a height of 40 feet facing the eastern boundary of the #Special Willets Point District#, within 200 feet of such eastern boundary, so that such parking facility is not visible from a #connector street#. At least 25 feet of #commercial#, #community facility# or #residential floor area# shall separate such parking spaces from adjacent #residential# and #connector streets#.

(vi) A parking facility may be located adjacent to a #street wall# where such #street wall# is on a #service street#, provided that at least 25 feet of #commercial#, #community facility# or #residential floor area# shall separate such parking spaces from adjacent #residential#, #connector#, #retail# or #primary retail streets#;

(b) All parking facilities with parking spaces adjacent to an exterior building wall that is not a #street wall# shall provide screening of such exterior wall so that any non-horizontal parking deck structures are not visible from the exterior of the #building# in elevation view and opaque materials are located in the exterior building wall between the bottom of the floor of each parking deck and no less than three feet above such deck and a total of at least 50 percent of such exterior building wall with adjacent parking spaces consists of opaque materials.

(c) All parking facilities shall not be open to the sky, and all parking facilities shall have a roof that meets the design requirements of Section 124-34.

(d) All #accessory# off-street parking spaces may be made available for public use. However, any such space shall be made available to the occupant of a #residence# to which it is #accessory# within 30 days after written request therefore is made to the landlord. Furthermore, if #accessory# and public parking spaces are provided on the same #block#, all such spaces shall be located within the same parking facility.

(e) Notwithstanding the provisions of Section 36-46 (Restrictions on Use of Accessory Off-Street Parking Spaces), a maximum of five percent of required #accessory residential# off-street parking spaces may be made available as car share spaces. Fractions equal to or greater than one-half resulting from this calculation shall be considered to be one space. These spaces shall be for motor vehicles available for rental on an hourly basis. Car share spaces shall be located at unstaffed, self-service locations (except if located within a facility that includes attended parking spaces), shall not be associated with any #commercial use# on the #zoning lot# or any #sign# on the exterior of the #building#, and the vehicles shall generally be available for pick-up 24 hours per day. Car share spaces in accordance with the provisions of this paragraph, (e), shall not be considered #commercial uses# and shall be exempt from the definition of #floor area#. The number of proposed care share spaces and the number of #accessory residential# off-street parking spaces on the #zoning lot# shall be submitted to the Department of Buildings and the Department of City Planning.

(f) All #accessory# off-street parking spaces may be provided within parking facilities in #buildings# other than the same #building# as the #uses# to which they are #accessory#, provided that:

(1) the off-street parking space within such facility is counted only once in meeting the parking requirements for a specific #building#; and

(2) such parking facilities are located within the #Special Willets Point District#; or

(3) such parking facilities are located within distances specified by Sections 36-421 (Maximum distance from zoning lot) and 36-43 (Off-site spaces for Commercial or Community Facility Uses), as applicable.

124-52
Loading Restrictions

Loading areas shall not be permitted within 75 feet of 126th Street or within 50 feet of the #primary retail street#. Loading areas for a convention center #use# shall not be permitted within 100 feet of a #connector street#.

124-53
Curb Cut Restrictions

No driveway curb cuts for parking facilities or loading berths shall be permitted along 126th Street, the #primary retail street#, the #connector streets#, across from public open space of two or more acres, and within 50 feet of the intersection of any #streets#, , except for a convention center or a #transient hotel# with a minimum of 50,000 square feet of #floor area#, and except that the City Planning Commission may authorize curb cuts, provided the Commission finds that such curb cuts are needed, do not unduly inhibit surface traffic or pedestrian flow and do not impair the essential character of the surrounding area.

Where permitted, the maximum aggregate width of curb cuts on any frontage shall be limited to 24 feet for #residential streets# and 60 feet for all other #streets#, except that the maximum shall be 100 feet for #blocks# that bound the intersection of 126th Street and Northern Boulevard or 126th Street and Roosevelt Avenue and for #blocks# that contain a #transient hotel# with a minimum of 50,000 square feet of #floor area#. For a convention center, the maximum aggregate width of curb cuts on any frontage shall be limited to 100 feet, except that curb cuts shall be unlimited when located directly adjacent to the loading area of the convention center. All curb cuts shall be achieved with minimal reduction to the grade of the sidewalk over which they pass.

124-54
Indoor Bicycle Parking

Within the #Special Willets Point District#, a designated area for #accessory# bicycle parking shall be provided for all #developments# or #enlargements#. Such designated area shall be enclosed, accessible and secure, and excluded from the definition of #floor area#. #Accessory# facilities, such as lockers, showers and circulation space shall also be excluded from the definition of #floor area#.

(a) For #residential buildings# with ten or more #dwelling units#, one bicycle parking space shall be provided for every two #dwelling units#, up to a maximum of 200 bicycle parking spaces.

(b) For #developments# or #enlargements# with at least 10,000 square feet of Use Group 6B office #use#, one bicycle parking space shall be provided for every 5,000 square feet of such office #use#, up to a maximum of 200 bicycle parking spaces.

(c) For #developments# or #enlargements# with at least 10,000 square feet of Use Group 6A or 6C retail #use#, one bicycle parking space shall be provided for every 10,000 square feet of such #use#, up to a maximum of 100 bicycle parking spaces.

124-60
SPECIAL PERMIT TO MODIFY USE OR BULK REGULATIONS

For any #development#, #enlargement#, alteration or change of #use# within the #Special Willets Point District#, the City Planning Commission may permit modification of the #use# or #bulk# regulations, except #floor area ratio# provisions, provided the Commission shall find that such:

(a) modification will aid in achieving the general purposes and intent of the Special District;

(b) #use# modification will encourage a lively pedestrian environment along the street, or is necessary for, and the only practicable way to achieve the programmatic requirements of the #development#;

(c) #bulk# modifications will enhance the distribution of #bulk# within the Special District;

(d) #bulk# modifications will permit adequate access of light and air to surrounding streets; and

(e) #development# or #enlargement# will relate harmoniously to the character of the surrounding area.

The Commission may prescribe appropriate conditions and safeguards to minimize adverse effects on the character of the surrounding area.

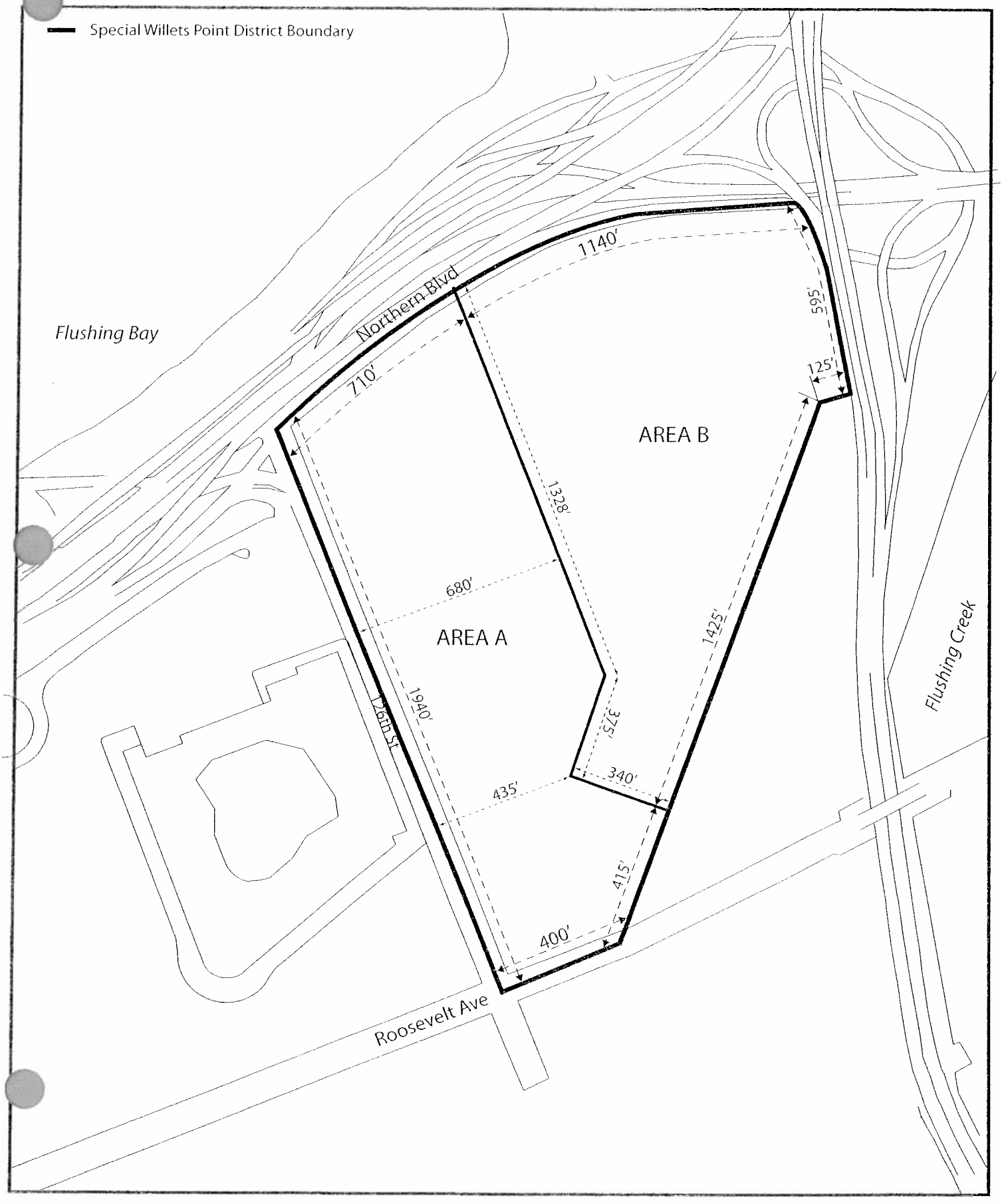
Appendix A
Special Willets Point District

Map 1 - Special Willets Point District
Map 2 - Mandatory Intersections
Map 3 - Location Requirements for Convention Center, Cinema and Office Tower
Map 4 - Height Limits

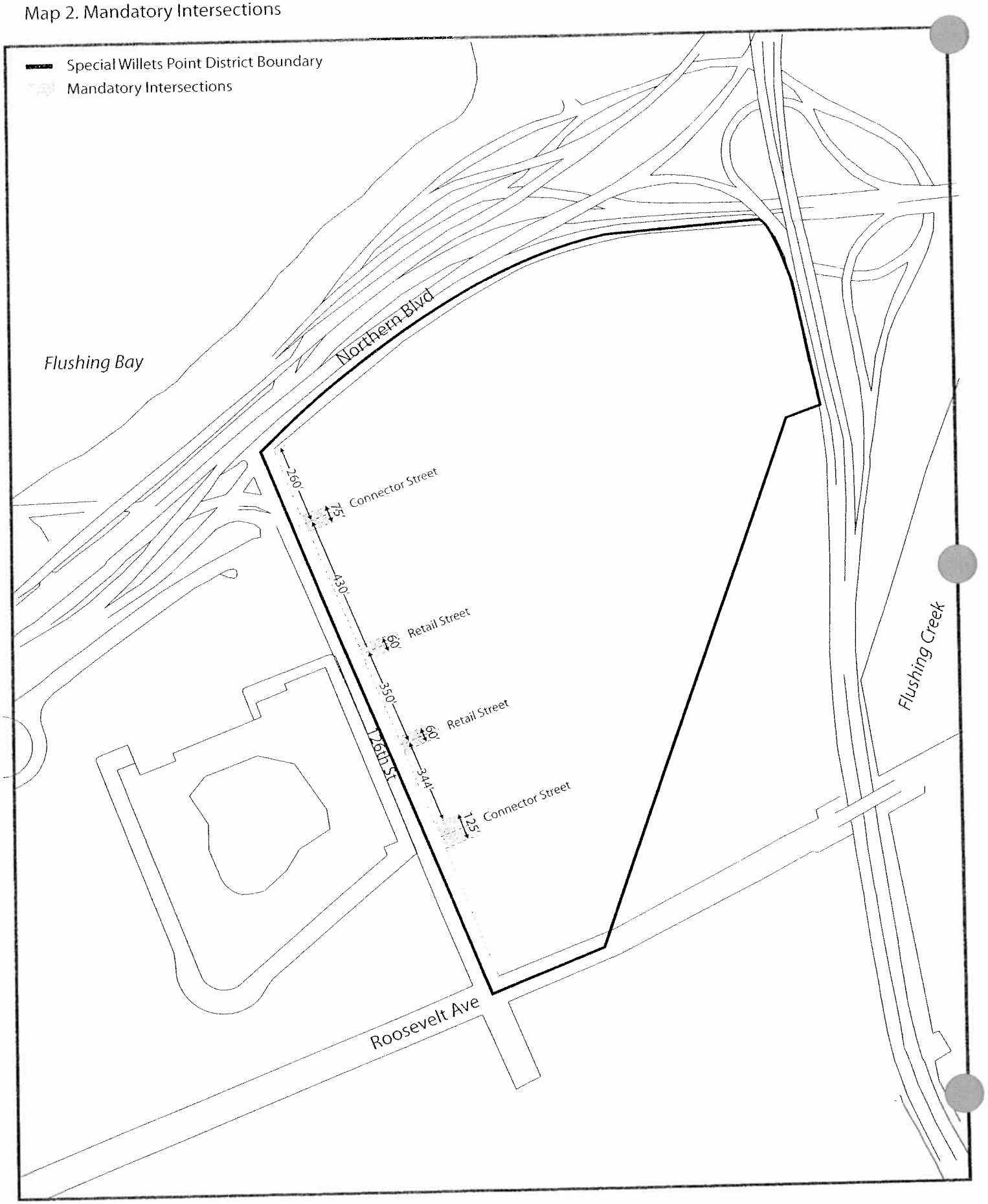
Map 5 - Locations of Tower Walls without Setbacks

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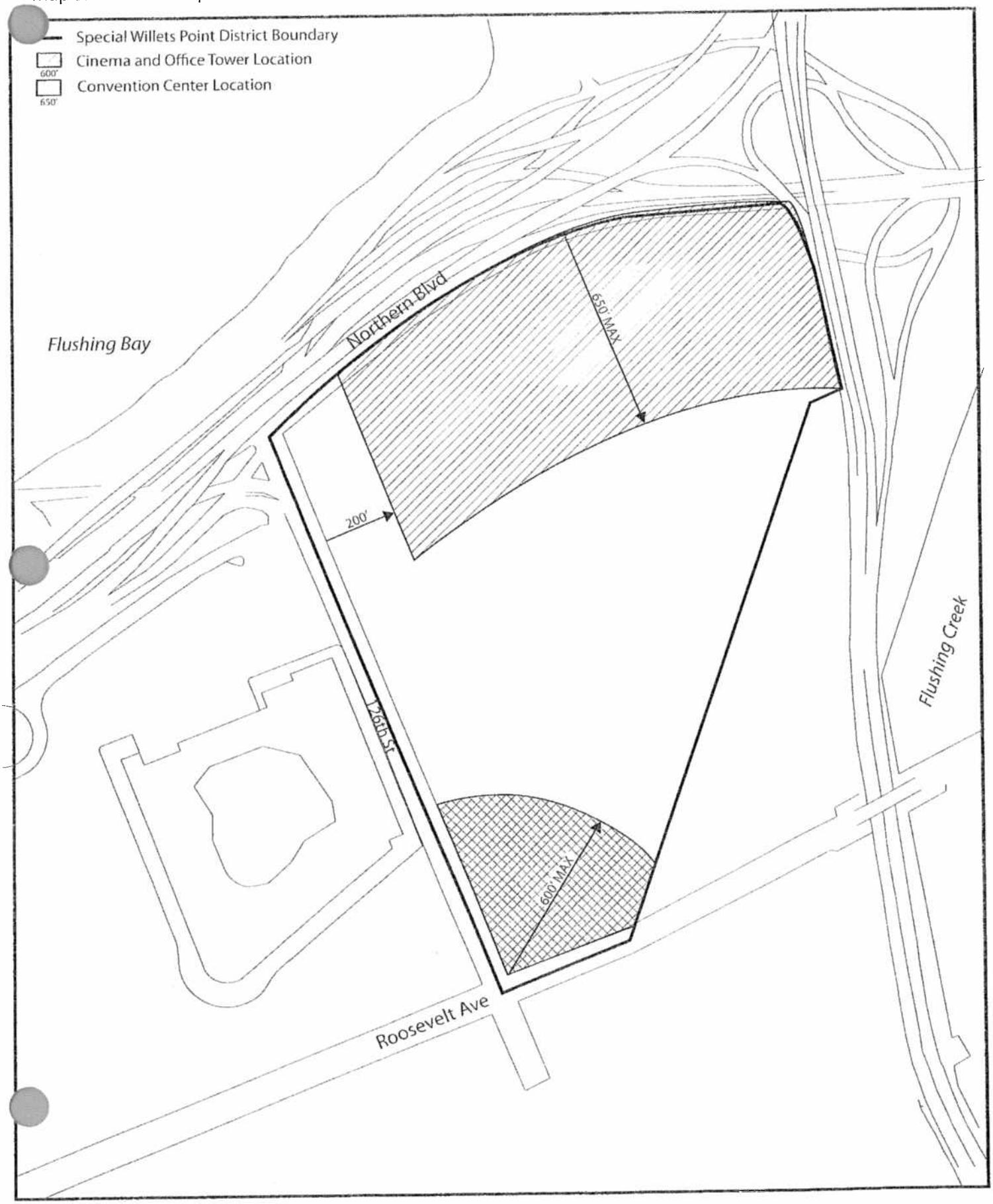
Special Willets Point District
Map 1. District Plan



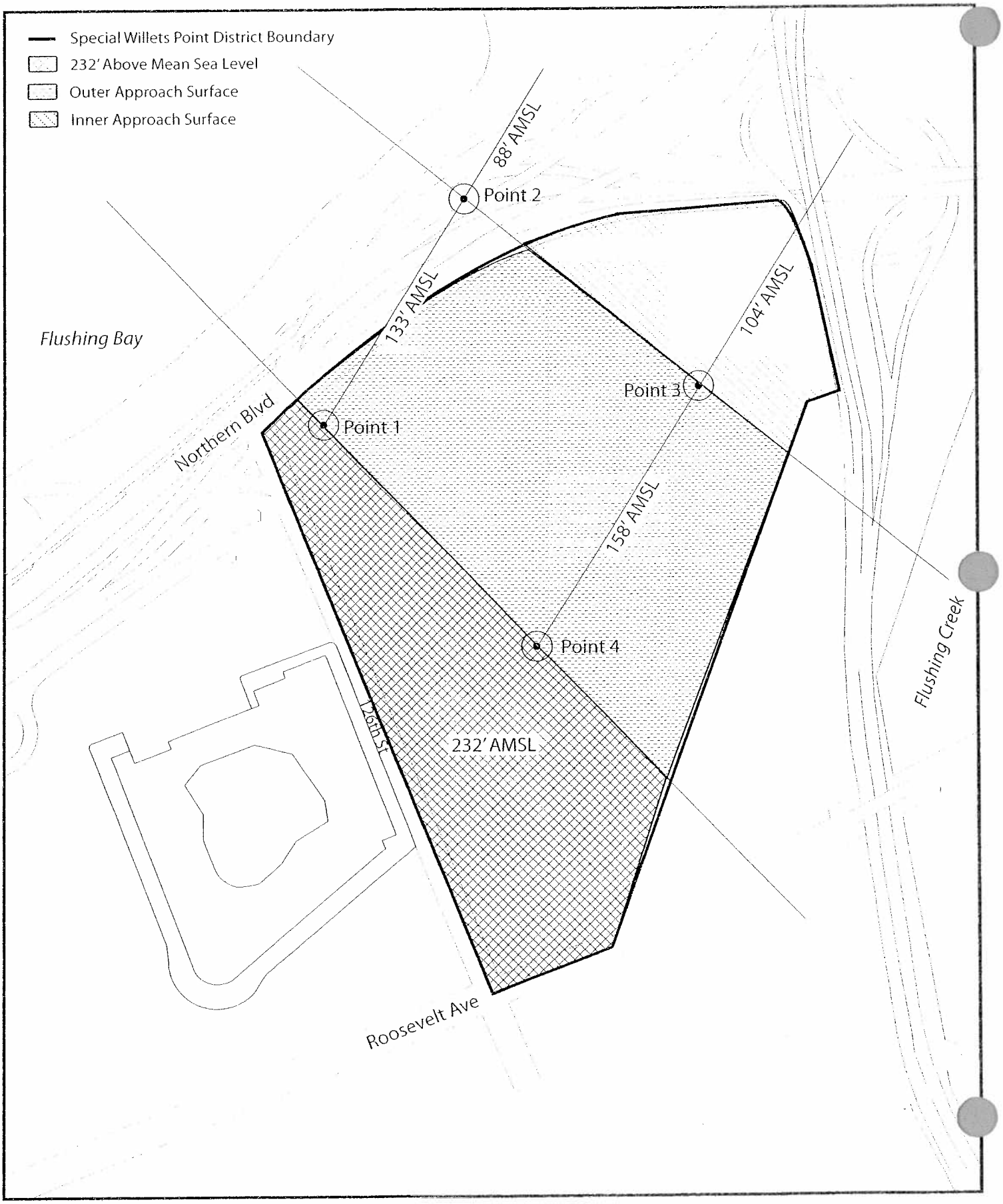
Special Willets Point District
Map 2. Mandatory Intersections



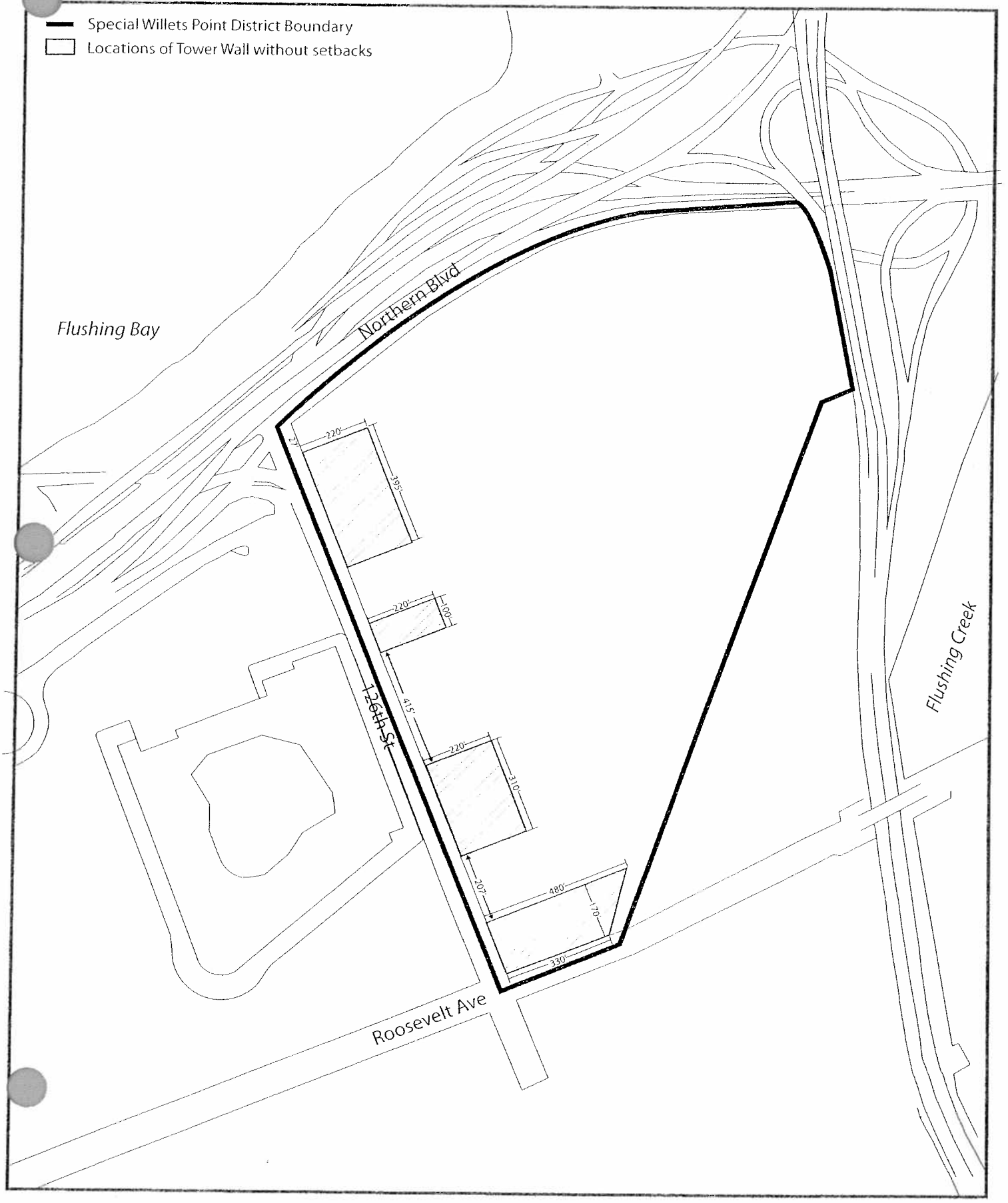
Special Willets Point District
Map 3. Location Requirements



Special Willets Point District
Map 4. Height Limits



Special Willets Point District
Map 5. Locations of Tower Walls without Setbacks



APPENDIX C

HISTORIC RESOURCES CORRESPONDENCE

APPENDIX C.1

ARCHAEOLOGY CORRESPONDENCE

THE CITY OF NEW YORK LANDMARKS PRESERVATION COMMISSION
1 Centre St., 9N, New York, NY 10007 (212) 669-7700

ENVIRONMENTAL REVIEW

DME /07DME014Q — 02/02/07
PROJECT NUMBER — DATE RECEIVED

PROJECT WILLETS PT. DEV. PLAN

[X] No architectural significance

[X] No archaeological significance

[ ] Designated New York City Landmark or Within Designated Historic District

[ ] Listed on National Register of Historic Places

[ ] Appears to be eligible for National Register Listing and/or New York City Landmark Designation

[ ] May be archaeologically significant; requesting additional materials

COMMENTS The LPC is in receipt of the draft EAS and draft scope of work for EIS (SEIS) dated 2/2/07. Based on these documents and the block/lot list provided by EDC, no architectural or archaeological resources have been identified on the project site or in the project study area. This information should be disclosed in the EAS and SEIS.

Gina Santucci — 02/07/07
SIGNATURE — DATE

AKRF

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tel: 212 696-0670
fax: 212 213-3191
www.akrf.com

July 19, 2007

Mr. Douglas Mackey
Historic Preservation Program Analyst – Archaeology
New York State Office of Parks, Recreation and Historic Preservation
Bureau of Historic Preservation
Peebles Island, P.O. Box 189
Waterford, NY 12188-0189

Re: **Proposed Willets Point Development, Queens County**

Dear Doug:

We are seeking to initiate consultation with your office regarding archaeological resources for the above referenced project in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966. The proposed Willets Point Development would redevelop the Willets Point peninsula.

The proposed plan calls for the redevelopment of an approximately 61-acre area generally bounded to the east by the Van Wyck Expressway and an undeveloped lot owned by the Metropolitan Transportation Authority (MTA), to the south by Roosevelt Avenue, to the west by 126th Street, and to the north by Northern Boulevard. The proposed redevelopment would remove all the existing buildings on the site and would include new mixed-use development including residential, retail, hotel, entertainment, commercial office, cultural, community facility, open space, and parking. In addition, the proposed redevelopment plan includes a new connection between the Van Wyck Expressway and the development area.

The project requires review and the preparation of a Generic Environmental Impact Statement (GEIS) under City Environmental Quality Review (CEQR). As the proposed project involves modifications to the Van Wyck Expressway, an interstate highway, which would be reviewed by FHWA, it requires review under the National Environmental Policy Act of 1969 and Section 106.

The Office of the Deputy Mayor for Economic Development and Rebuilding will serve as lead agency, working in collaboration with the New York City Economic Development Corporation (EDC) and the New York City Department of City Planning.

EDC submitted a request for a preliminary archaeological determination of the project site to the New York City Landmarks Preservation Commission (LPC) on February 2, 2007. In a letter dated February 7, 2007 LPC indicated they have no archaeological concerns for the project site (see attached letter). The following materials are here enclosed for your review:

- A description of the proposed project, including a short history of the site, and accompanying graphics including a block and lot map and an aerial map of the development area;
- A composite of the relevant 2007 Sanborn maps showing the boundaries of the Willets Point Development District;
- Historic Sanborn maps from 1931 and 1934-1951.

Thank you for your assistance in this matter. Please do not hesitate to contact me if you have any questions or require further information at (646) 388-9812.

Sincerely,

AKRF, INC.

Carey Jones
Historian

cc: Virginia Bartos, OPRHP
Asma Syed, Empire Development Corporation
Heldi Rubinstein, New York City Law Department
Ed Applebome, AKRF, Inc.
Britt Page, AKRF, Inc.

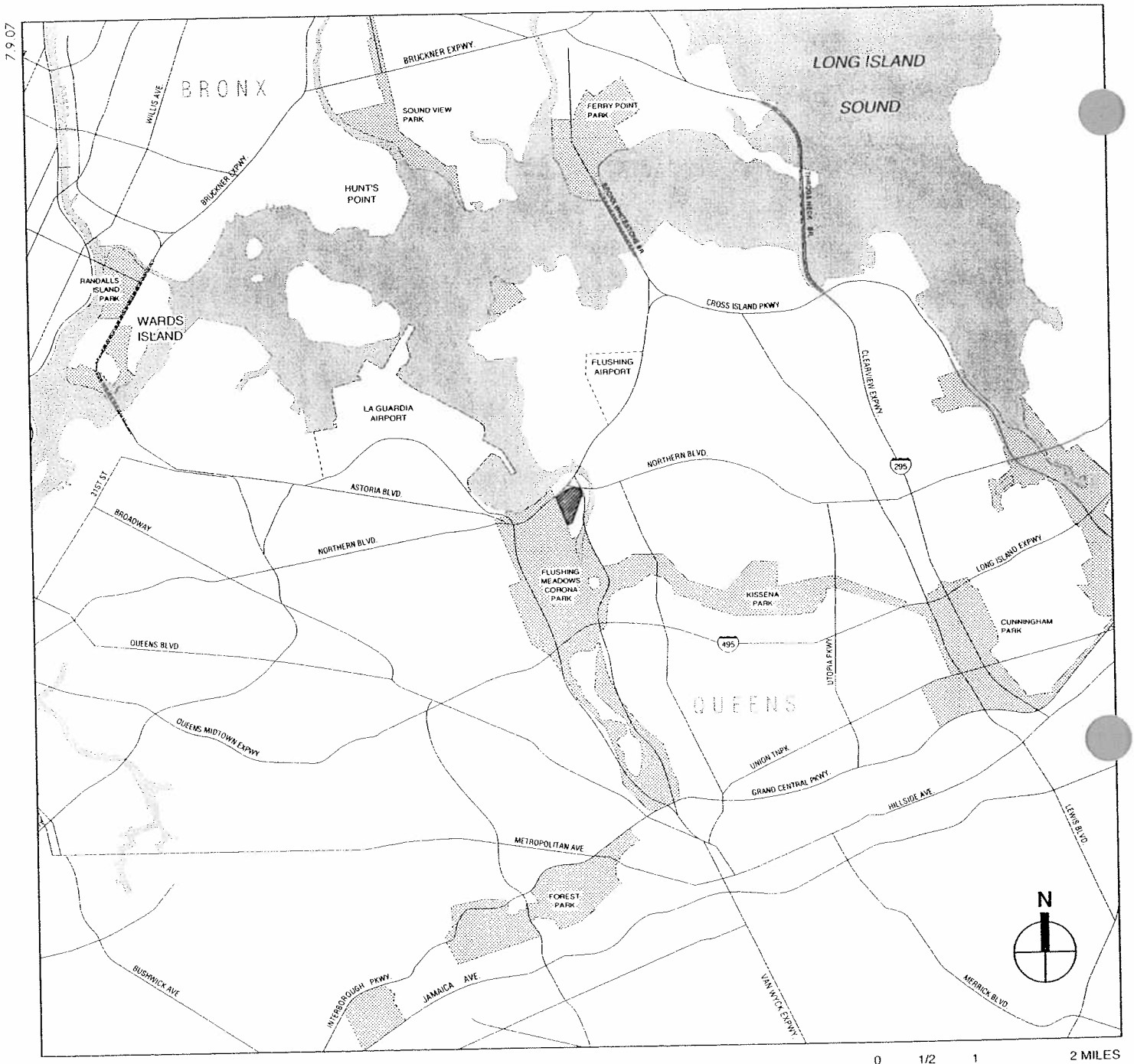


Figure 1
Project Location

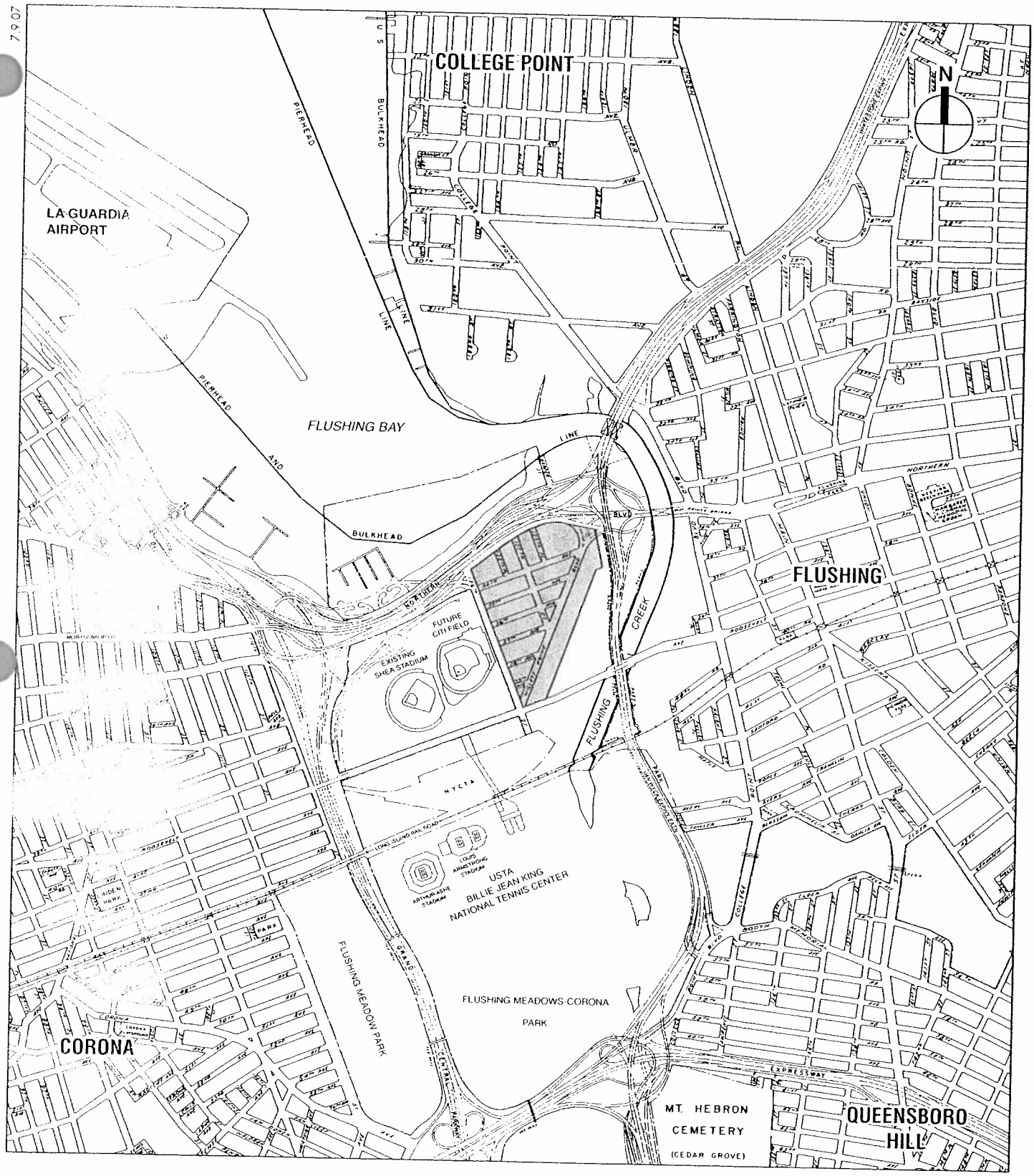


Figure 2
Development District Site

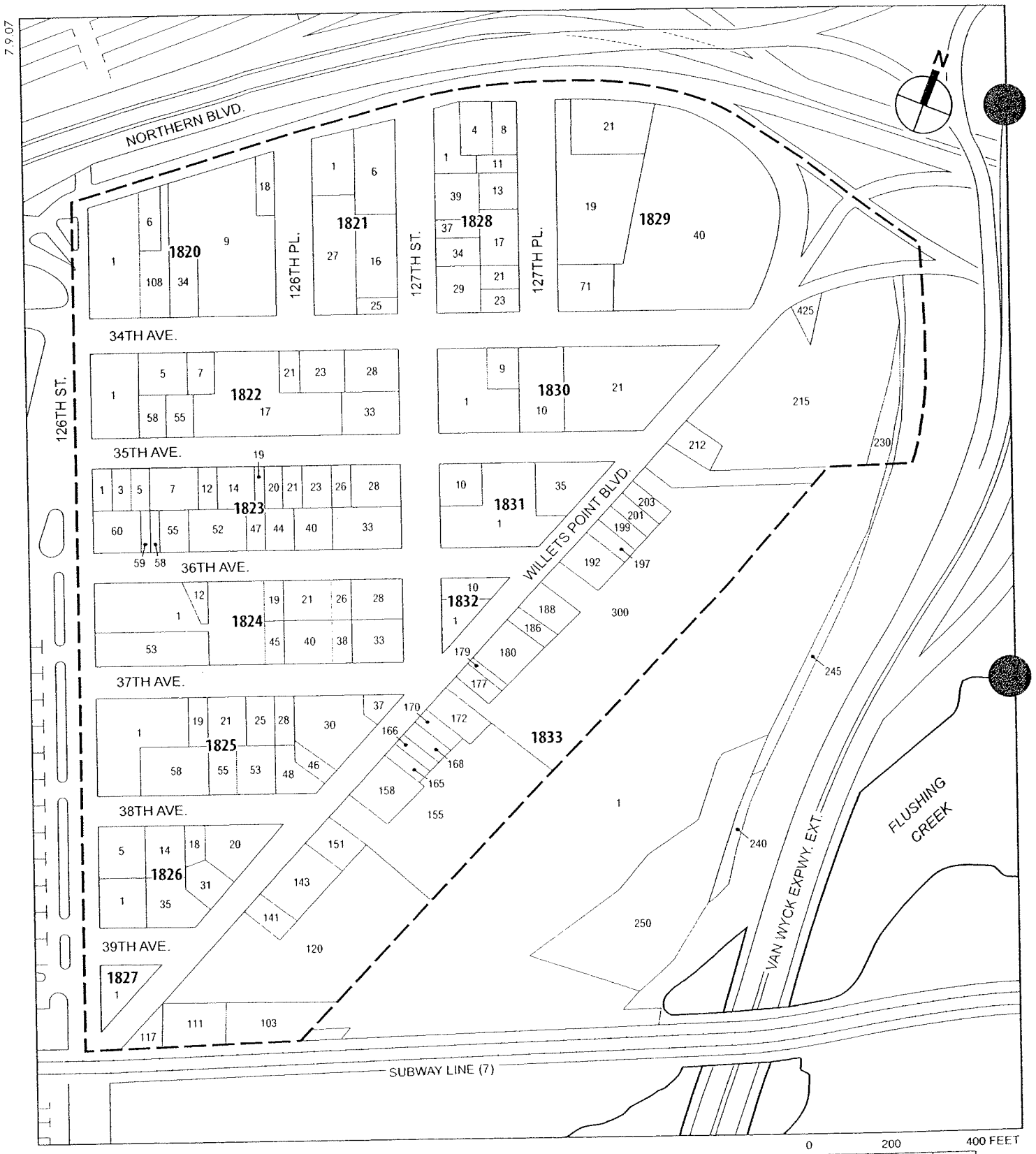


Figure 3
Block and Lot Map

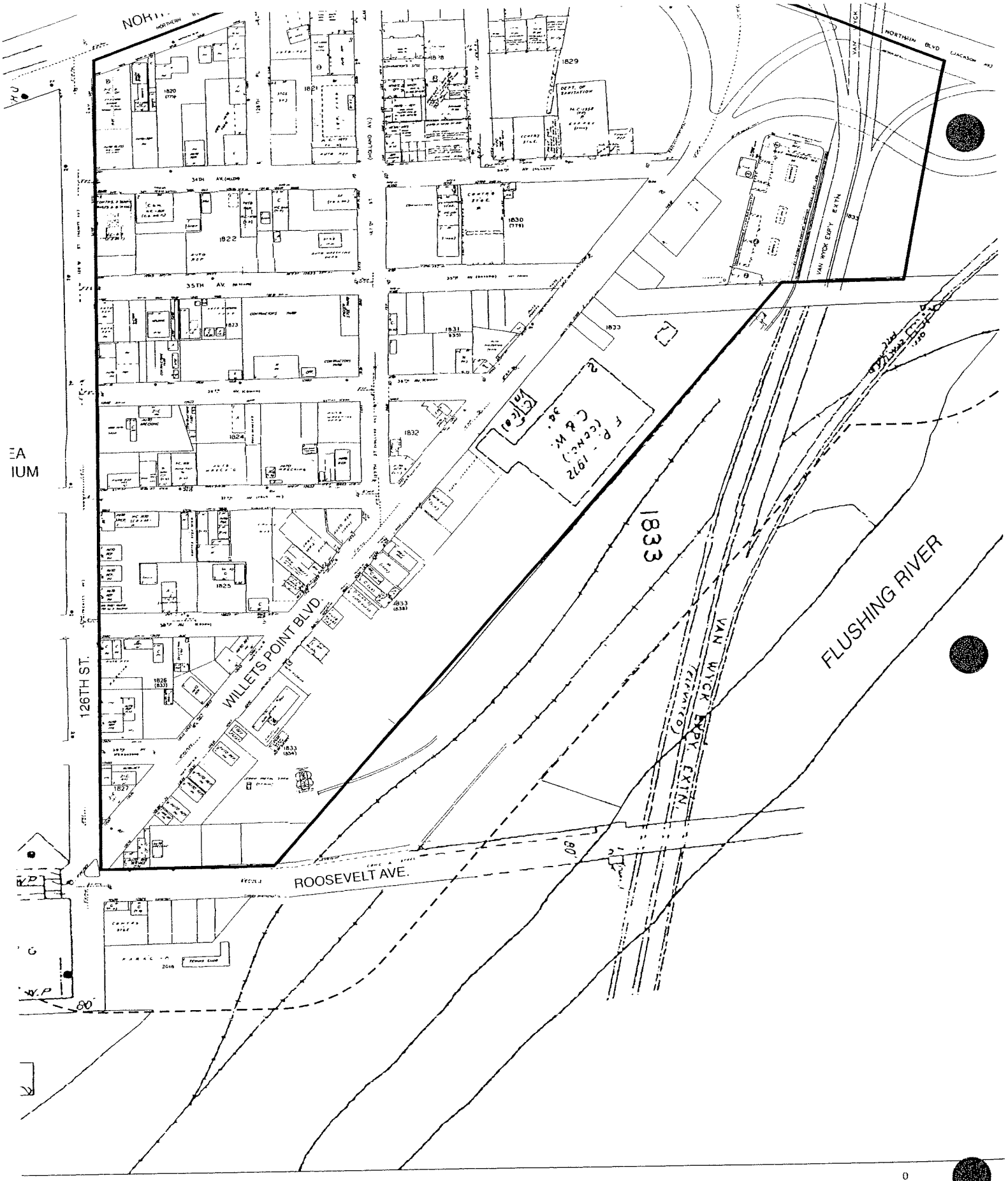
7.9.07



Willets Point Development District Boundary

0 400 800 FEET
SCALE

Figure 4
Aerial View



oint Development District

otential Effect (400-Foot Perimeter)

7.18.07



0 400 FEET

SCALE

Figure 6

Sanborn Map, 1931

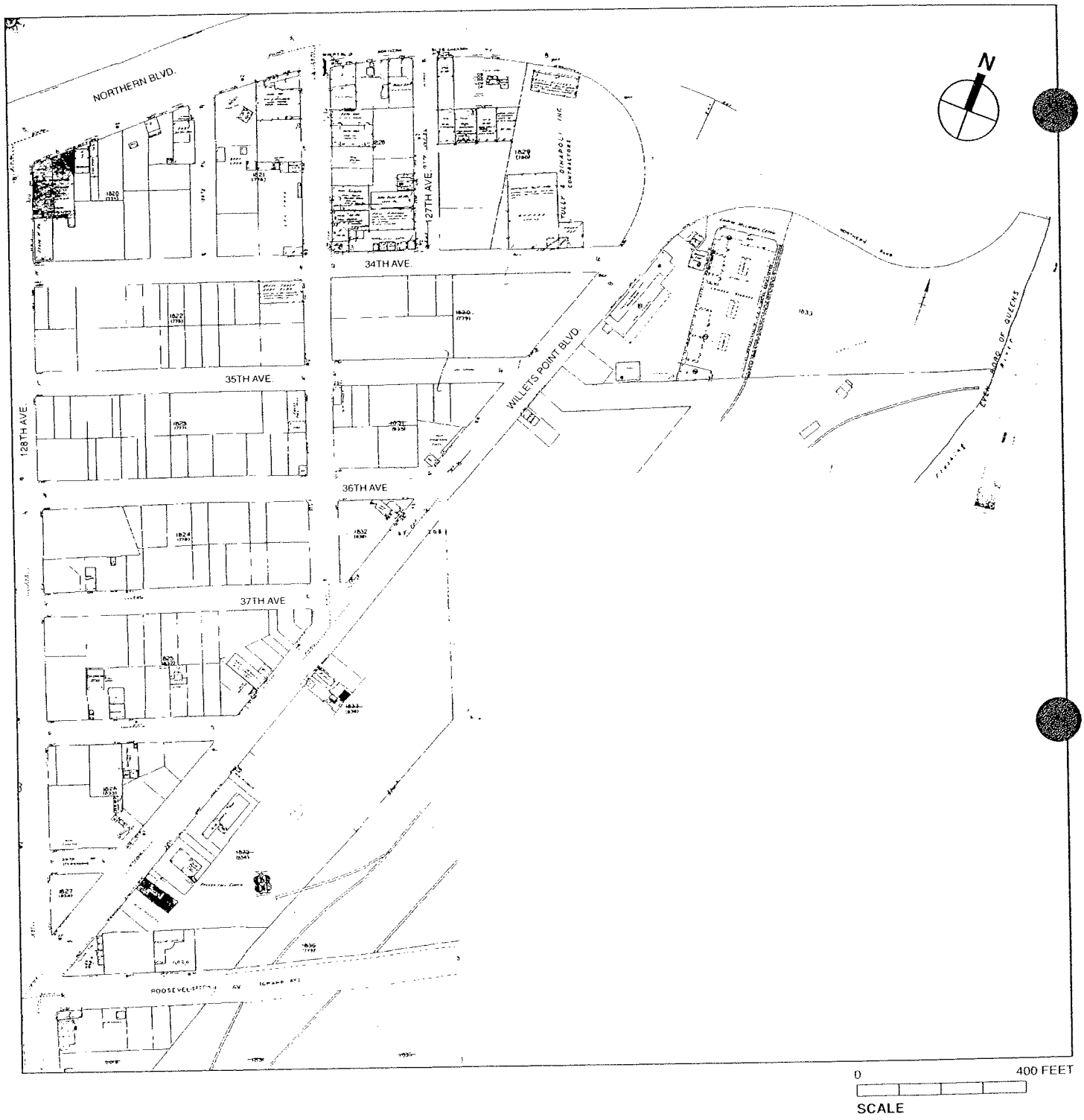


Figure 7
Sanborn Map, 1938-1950

Eliot Spitzer
Governor

Carol Ash
Commissioner

New York State Office of Parks,
Recreation and Historic Preservation

Historic Preservation Field Services • Peebles Island, PO Box 189, Waterford, New York 12188-0189
518-237-8643
www.nysparks.com

September 6, 2007

Carey Jones
Historian
AKRF
440 Park Avenue South, 7th floor
New York, NY 10016

Re: CEQR
Willets Point Development
Queens County
07PR04413

Thank you for requesting the comments of the New York State Office of Parks, Recreation and Historic Preservation for the proposed Willets Point Development in Queens. We have reviewed the submitted information in accordance with Section 14.09 of the New York State Parks, Recreation and Historic Preservation Act of 1980.

Based upon our review we offer the following comments:

1. Virginia Bartos of our National Register Unit requests additional information regarding the Empire Millworks Building. Her Request for Additional Information is attached for your use.
2. Douglas Mackey of our Archeology Unit requests a Phase IA Survey. His Archeology Comments are attached for your use.

Thank you for your request. If you have any questions, I can be reached at (518) 237-8643, ext. 3282. Please refer to the Project Review (PR) number in any future correspondences regarding this project.

Sincerely,

Beth A. Cumming AIC
Historic Preservation Specialist – Technical Unit
e-mail: Beth.cumming@oprhp.state.ny.us

enc: Request for Additional Information
Archeology Comments

REQUEST FOR ADDITIONAL INFORMATION BUILDINGS/STRUCTURES/DISTRICTS

PROJECT NUMBER 07PR04413

(Willets Point Development/61 Acre site/Adjacent to Citifield Site/Flushing Meado ws Corona/QUEENS)

In order for us to complete our evaluation of the historic signification of all buildings/structures/districts within or adjacent to your project area we will need the following additional information

- ☐ Full project description showing area of potential effect.
- ☐ Clear, original photographs of buildings/structures 50 years or older.
  - ☐ within or ☐ immediately adjacent to the project area
  - *** key all photographs to a site map*
- ☐ Clear, original photographs of the surroundings looking out from the project site in all direction, *keyed to a site map.*
- ☐ Date of construction.
- ☐ Brief history of property.
- ☑ Clear, original photographs of the following:
  - Empire Millworks Building (Interior)
- ☐ Other:

Please provide only the additional information checked above. If you have any question concerning this request for additional information, please call Virginia Bartos at 518 237-8643. ext 3256

PLEASE BE SURE TO REFER TO THE PROJECT NUMBER NOTED ABOVE WHEN RESPONDING TO THIS REQUEST

New York State Office of Parks,
Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189
518-237-8643
www.nysparks.com

Eliot Spitzer
Governor

Carol Ash
Commissioner

ARCHEOLOGY COMMENTS

07PR04413

Based on reported resources, there is an archeological site in or adjacent to your project area. Therefore the Office of Parks, Recreation and Historic Preservation (OPRHP) recommends that a Phase 1A archeological survey is warranted. SHPO is aware that portions of the project have been subjected to substantial ground disturbance in the past. However, recent experience in similar areas throughout the state, has revealed that substantial and significant archeological deposits remain intact between the disturbed areas, often below existing street surfaces and structures. To better assess the level of ground disturbance at this property a detailed Phase **IA Survey** is required at this time.

A Phase 1 survey is designed to determine the presence or absence of archeological sites or other cultural resources in the project's area of potential effect. The Phase 1 survey is divided into two progressive units of study including a Phase 1A sensitivity assessment and initial project area field inspection, and a Phase 1B subsurface testing program for the project area. The OPRHP can provide standards for conducting cultural resource investigations upon request. Cultural resource surveys and survey reports that meet these standards will be accepted and approved by the OPRHP.

Our office does not conduct cultural resources surveys. A 36 CFR 61 qualified archeologist should be retained to conduct the Phase 1 survey. Many archeological consulting firms advertise their availability in the yellow pages. The services of qualified archeologists can also be obtained by contacting local, regional, or statewide professional archeological organizations. Phase 1 surveys can be expected to vary in cost per mile of right-of-way or by the number of acres impacted. We encourage you to contact a number of consulting firms and compare examples of each firm's work to obtain the best product.

Documentation of ground disturbance should include a description of the disturbance with confirming evidence. Confirmation can include current photographs and/or older photographs of the project area, which illustrate the disturbance (approximately keyed to a project area map), past maps or site plans that accurately record previous disturbances, or current soil borings that verify past disruptions to the land.

If you have any questions concerning archeology, please call Doug Mackey at (518) 237-8643 ext. 3291.

AKRF

Environmental and Planning Consultants

440 Park Avenue South, 7th Floor
New York, New York 10016
tel: 212-696-0670
fax: 212-213-3191

www.akrf.com

Memorandum

To:	Doug Mackey, New York State Office of Parks, Recreation and Historic Preservation, Archaeology Division
From:	Carey L. Jones, AKRF Inc.
Subject:	Willets Point Map Review, 07PR04413
Date:	October 8, 2007
cc:	Alicia Moore, AKRF

As per your request, enclosed is a copy of historic and current maps of the project site as well as a short description of the maps including a discussion of the potential for precontact and historic period resources to remain on the site.

Please contact me with any questions at (646)388-9812.

INTRODUCTION

This memo and attached maps evaluate the potential for the Willets Point Development District (District) to contain precontact and historic period resources. The District is an approximately 61-acre site located near Flushing, Queens. The site is located on a peninsula and is generally bounded to the east by the Van Wyck Expressway and an undeveloped lot owned by the Metropolitan Transportation Authority (MTA), to the south by Roosevelt Avenue, to the west by 126th Street, and to the north by Northern Boulevard (see Figure 1). The site is currently developed with a number of low-scale metal, concrete and brick structures. The proposed redevelopment plan would remove all of the existing structures on the site and replace them with a mixed-use residential, retail and entertainment development. At the request of the New York State Office of Parks, Recreation and Historic Preservation a review of previously conducted archaeological research, sensitivity models, and historic maps was undertaken to determine the potential for archaeological resources to be present on the site.

PRECONTACT HISTORY

The District is located on a peninsula situated between two bodies of water: Flushing Bay to the north and Flushing Creek to the east. As depicted on the 1891 Bien and Vermule atlas, the District was originally a vast tidal marshland, though a small elevated hummock was situated near the northwestern corner (see Figure 2). The Bien and Vermule map indicates that this elevated area rose steeply to a maximum height of approximately 46 feet above sea level. The U.S. Coastal Survey from 1844 and the USGS map dated 1891 both indicate the site was bordered to the east and west by dry land (see Figures 3 and 4).

In general, Native American habitation sites are most often located in coastal areas with access to marine resources, near fresh water sources and areas of high elevation. Because of the varied resources provided by the marshes as well as nearby Flushing Creek and Flushing Bay, the District would have been ideal for the exploitation of natural resources by Native Americans. However, the District was not likely the location of permanent Native American habitation site and the original topographical setting of the project site suggests that any temporary camp site locations would have been situated upon the elevated hummock, rather than in the marshy areas surrounding it.

Further indication of the presence of Native American use of the District is indicated by the number of precontact archaeological sites which have been previously identified within one mile of the project site. These sites are summarized in Table 1, below. An unnamed Native American camp site was identified immediately west of the project site. Grumet's 1981 map of Native American sites in New York City also suggests that a habitation site was located within the boundaries of the District while three others were located on the opposite side of Flushing Creek. That map also indicates that a Native American trail ran through the center of the project site. Further, predictive models on file at the Landmarks Preservation Commission suggest that the entire project site is highly sensitive for precontact archaeological resources.

Table 1
Previously Identified Precontact Sites

Site Name	Relevant Site Numbers	Approximate Distance from APE	Site Type	Other References
Grantville Site	Boesch: 30 NYOPRHP: A081-01-0133 Bolton: 53	.35-1 mile	Archaeic and Woodland habitation site	Smith (1950)
Unnamed	Boesch: 40	.5-.8 miles	Camp site	Solecki (1941)
Unnamed	Boesch: 41 NYSM: 4540	1 mile	Camp site with burials	Solecki (1941)
Graham Court	Boesch: 47 NYSM: 519 or 719	.7 miles	Habitation site with burials	
Unnamed	Boesch: 60 NYSM: 4545	.2-.3 miles	Camp site with traces of occupation	Parker (1922), Solecki (1941)
Unnamed	Boesch: 61 NYSM: 4544	.1 miles	Camp site	Parker (1922), Kearns and Kirkorian (1985)
Small site in area of Sanford	Boesch: 75	.3 miles	Site destroyed by construction of Van Wyck Expressway	Solecki (n.d., 1941)

Sources: Boesch 1994, Bolton 1922 and 1975, Historical Perspectives, Inc, 2001.

A previous archaeological assessment titled *Stage 1A Archaeological Assessment: Shea Stadium Redevelopment; Flushing Meadows-Corona Park; Block 1787, Queens, New York; CEQR No. 02DPR001Q* completed by Historical Perspectives, Inc. (HPI) in 2001 determined that "it is highly unlikely that [precontact or historic period archaeological resources] exist" on the Shea Stadium project site, located immediately west of the Willets Point project site, because soil borings and surface elevations show that the natural topography of the site was not conducive to Native American habitation sites (HPI 2001: 17). Because the two adjacent sites were situated on the same tract of marshland and therefore shared a similar history, it is likely that this applies to the Willets Point project site as well. However, the District site would have been more appealing to the Native Americans because of the elevated hummock situated within its boundaries.

Despite the likelihood that Native Americans used the hummock area for resource exploitation or as a temporary campsite location, it is unlikely that any archaeological resources associated with either would have survived undisturbed on the site. Current topographic maps of the area (see Figure 5) show that the maximum elevation of the project site is 10 feet above sea level, indicating that the elevated hummock once located in the northwest portion of the project site has been substantially graded and therefore, any precontact archaeological resources associated with that area would most likely have been disturbed and/or or destroyed. Furthermore, the construction of roads and large elevated transportation structures in the area of the hummock would have also disturbed archaeological resources dating to the precontact period which might have been located there.

HISTORIC PERIOD

Europeans began to establish settlements in the Flushing area of Queens in the mid-17th century and by 1666, no Native Americans remained in the area (HPI 2001). As indicated by the 1844 Coastal Survey, the project site remained undeveloped through the mid-19th century (see Figure 3). A road in the vicinity of today's Northern Boulevard crossed through the project area by that time, but no structures were in the area. As indicated by a USGS map published in 1891, at least five structures were erected in the Willets Point area during the late 19th century (Figure 4). As indicated by Wolverton's 1891 map, two of these

structures were located on the hummock and were associated with the Harry Hill Hotel, (Figure 6). The remaining structures were located in the marshy areas to the east along the road that later became Northern Boulevard. These areas were identified by Wolverton as part of the Higgins and Sands estates.

Around 1900, the city leased a large portion of the marshland stretching from the mouth of the Flushing River to present day Forest Hills, to a Brooklyn ash removal company and granted them the right to dump incineration ashes into the tidal marshland. Historical sources estimate that approximately 50 million cubic yards of ash were dumped into the swampland between 1906 and 1932. The dumping left the area with a layer of ash 30 feet thick on average, with mountains of ash rising up to 90 feet.

No structures are shown in the vicinity on a 1902 Sanborn map (see Figure 7) or on 1903 or 1908 Belcher-Hyde atlases of the area. However, a 1915 Sanborn map, depicts a single dwelling with two associated outbuildings situated within the block bounded by modern Northern Boulevard, then known as Jackson Avenue, and modern 126th Place, 24th Avenue, and 126th Street, none of which had yet been constructed in the area, although they had been planned out (see Figure 8). This structure may also appear as a one and a half story wooden structure on the 1909 Bromley and 1915 Belcher-Hyde atlases, although the building's orientation and footprint are slightly different and only one outbuilding, shown to be a barn or shed, is depicted. The main structure, identified as a "Dwelling," is small, measuring just 25 feet by 15 feet, with an extension that measures approximately 10 feet by 10 feet. This small dwelling and its even smaller outbuildings had been removed by 1927, when a Belcher-Hyde atlas shows that the entire project area had been lotted out, but only 3 small structures had been constructed within the project area. A 1931 Sanborn map shows that several commercial buildings, many involved in the burgeoning automobile industry, had been erected on the south side of Northern Boulevard. Except for the automotive-related structures, the area had still not been developed by the time the Sanborn maps were updated in 1950, although many additional industrial buildings had been erected elsewhere throughout the project area.

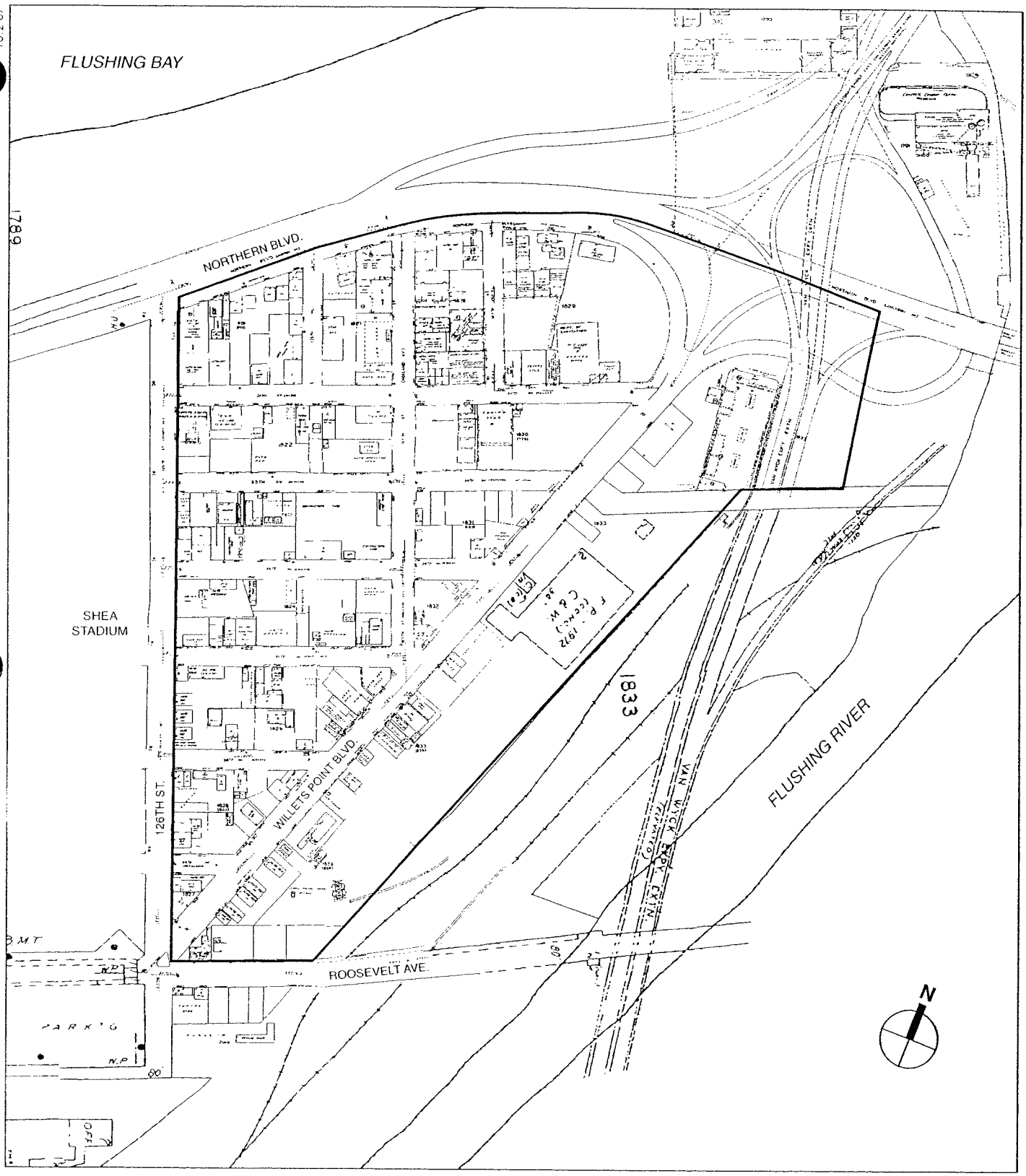
In the first decades of the 20th century, nearby villages and towns began to expand as a result of the increased accessibility provided by the addition of new roads and railroad lines. By the early 1930s, political opposition to the use of the Willets Point area as a dumping ground began to mount. In response to this opposition, the city cancelled its contract with the ash removal company in 1934. Shortly after, in preparation for New York's first World's Fair in 1939, the ash hills were leveled, the Grand Central Parkway was constructed, and the World's Fair complex was built. Despite the development of the surrounding areas, Willets Point never became an integral part of the overall World's Fair complex. Early 20th century topographic maps of Queens which are formally dated 1911, but contain notes dating to 1920 and 1931 and were likely updated at those times (see Figure 9) show that the majority of the project site was at an elevation of approximately 5 to 10 feet, although a small hilly area remained between Northern Boulevard and 34th Street, in the former area of the hillock. The elevated area does not rise above 15 feet, however, significantly less than the 46 feet seen on late-19th century topographic maps. It is not clear if the hummock was graded before or after the construction of the small dwelling situated within the northwestern portion of the project area during the 1910s and 20s. This elevated area is no longer seen on topographic maps, which suggest that the entire project area is level at approximately 10 feet above sea level.

The enormous construction effort required for the World's Fair, combined with the excellent road and rail access at Willets Point, may have been the main reason why contractors, heavy manufacturers, and equipment rental businesses were among the first to settle at Willets Point. USGS maps from 1947 and 1955 and an aerial photograph from 1954 indicate that it was not until the end of the 1940s that Willets Point started to take on its present character, with a mix of auto-related uses operating out of small structures and lots. As a result of suburban development which swept through the region after World War II as well as the construction of Shea Stadium immediately west of the project site in the 1960s, automobile traffic was greatly increased, making Willets Point an ideal location for the many auto-related repair and service businesses which are located there today.

CONCLUSION

Based on the documentary evidence described above, it does not appear that the Willets Point Development District is sensitive for the recovery of precontact period archaeological resources.

As depicted on various historic maps, several structures may have been located within the project area in the last half of the 19th century, although their exact location is unclear. Only one known dwelling was situated within the project site, a small structure built some time around 1909 and demolished before 1927. The exact date of the grading of the former hummock area is unknown, and therefore, it is unclear if the dwelling constructed there around 1909 was built on the hummock or the leveled terrain. Regardless, the structure's late date of construction and short period of use severely limits its research potential. The remainder of the site has experienced disturbance as a result of ash dumping, the construction of large roads and elevated transportation structures, and extensive grading which took place in the first half of the 20th century. In addition, the extensive tracts of marshland that once occupied the project site have since been filled in, causing the current topography of Willets Point to be drastically different from that seen at the turn of the 20th century. Therefore, it is not likely that the project site is sensitive for the recovery of historic period archaeological resources.



Willets Point Development District (Area of Potential Effect)

0 200 500 FEET
SCALE

Figure 1
Current Sanborn Map

10.1.07

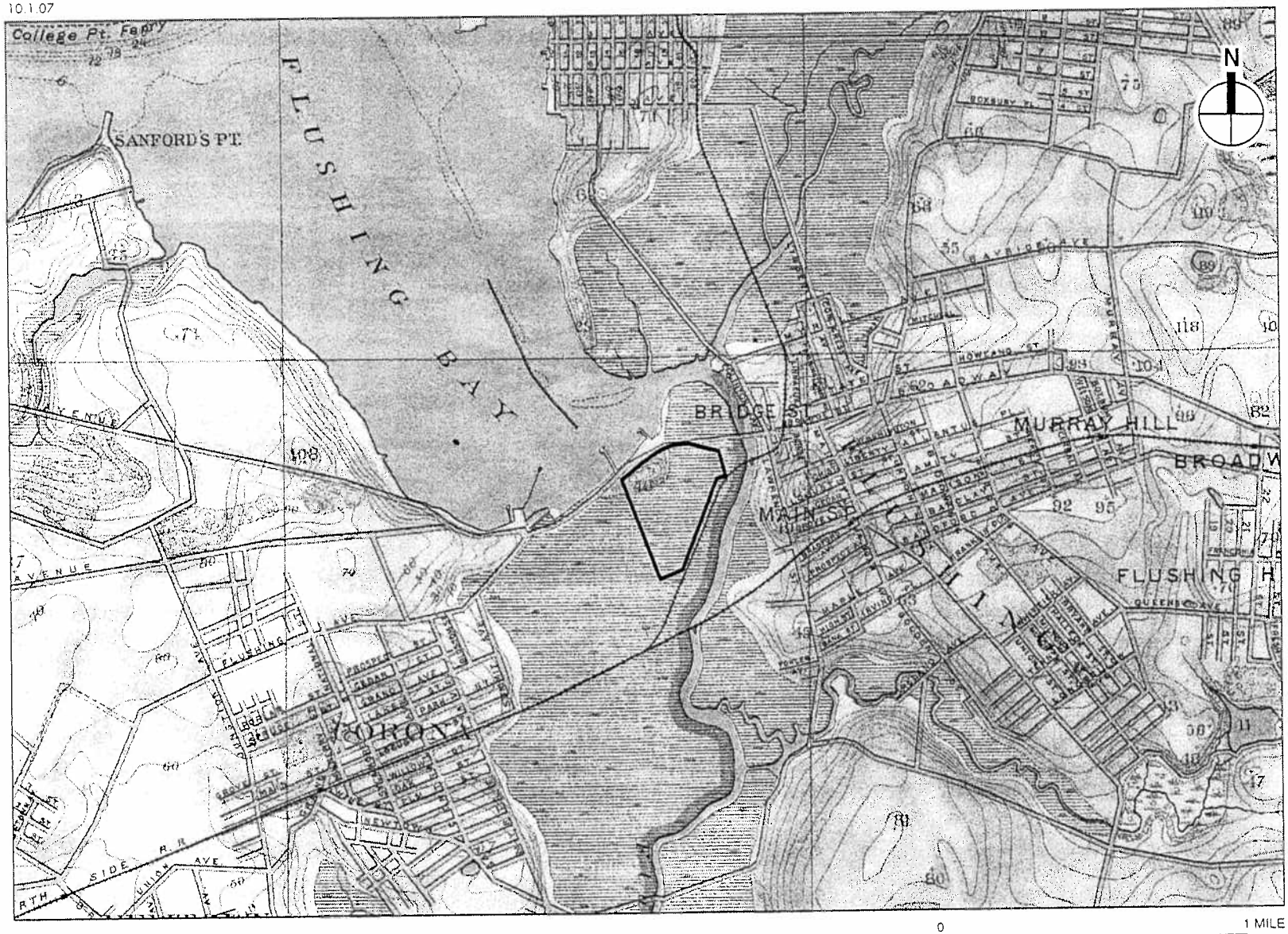


Figure 2

City and County of New York

J. Bien and C. Verm[illegible], 1891

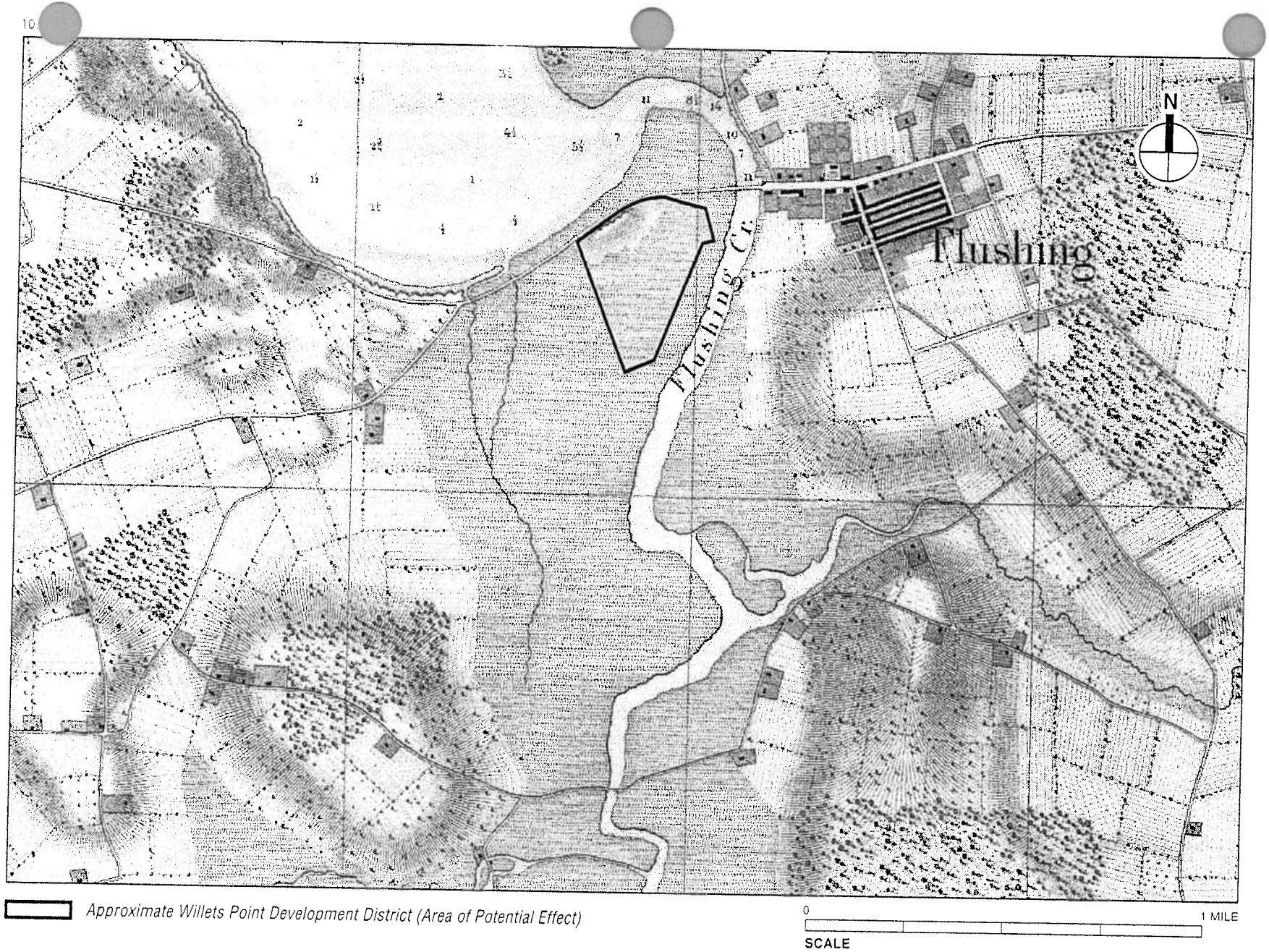


Figure 3

Map of New-York Bay and Harbor and the Environs

U.S. Coast Survey, 1844

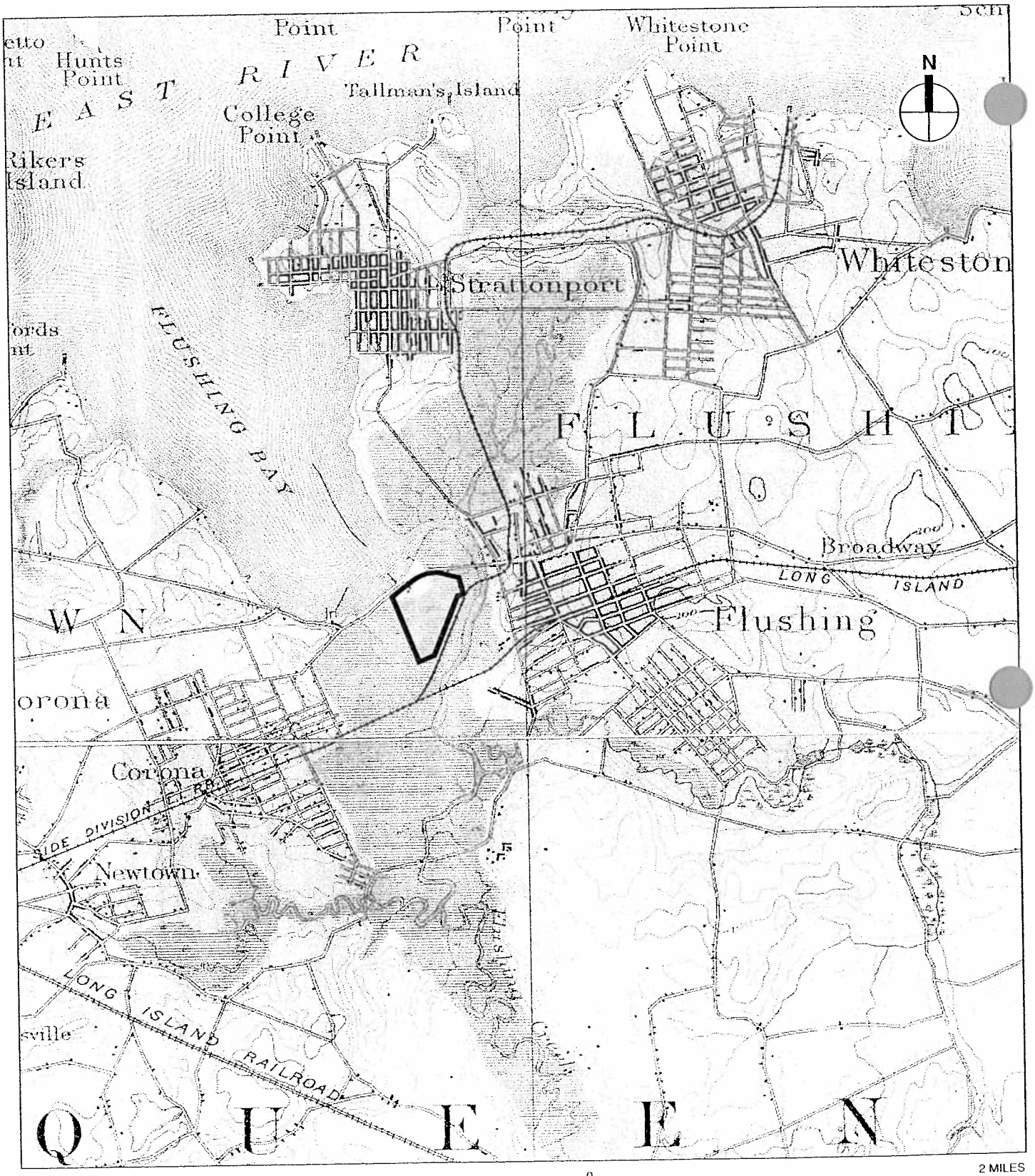


Figure 4
USGS Map,
Harlem Quadrangle, 1891

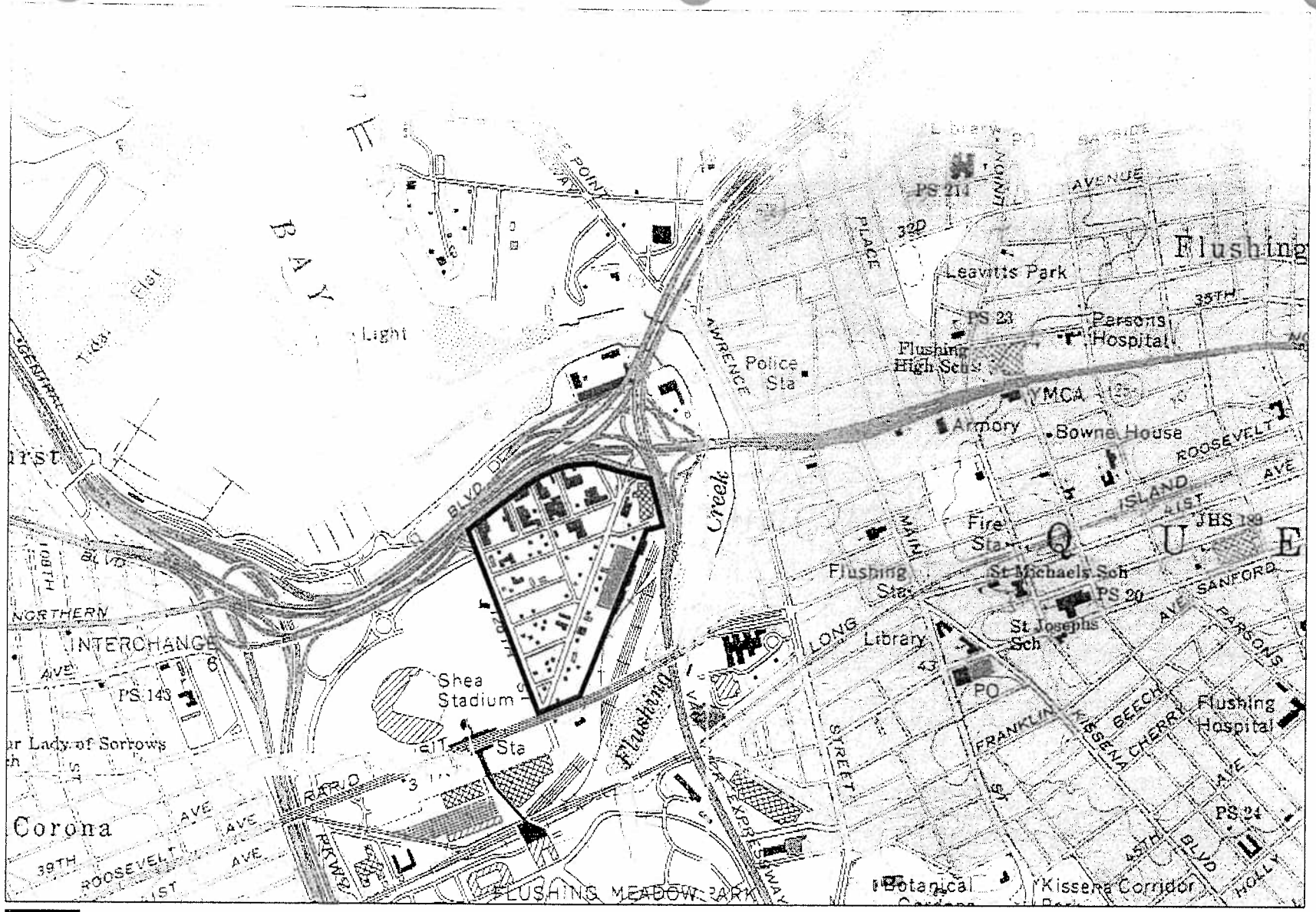


Figure 5

Current USGS Map, Flushing Quadrangle

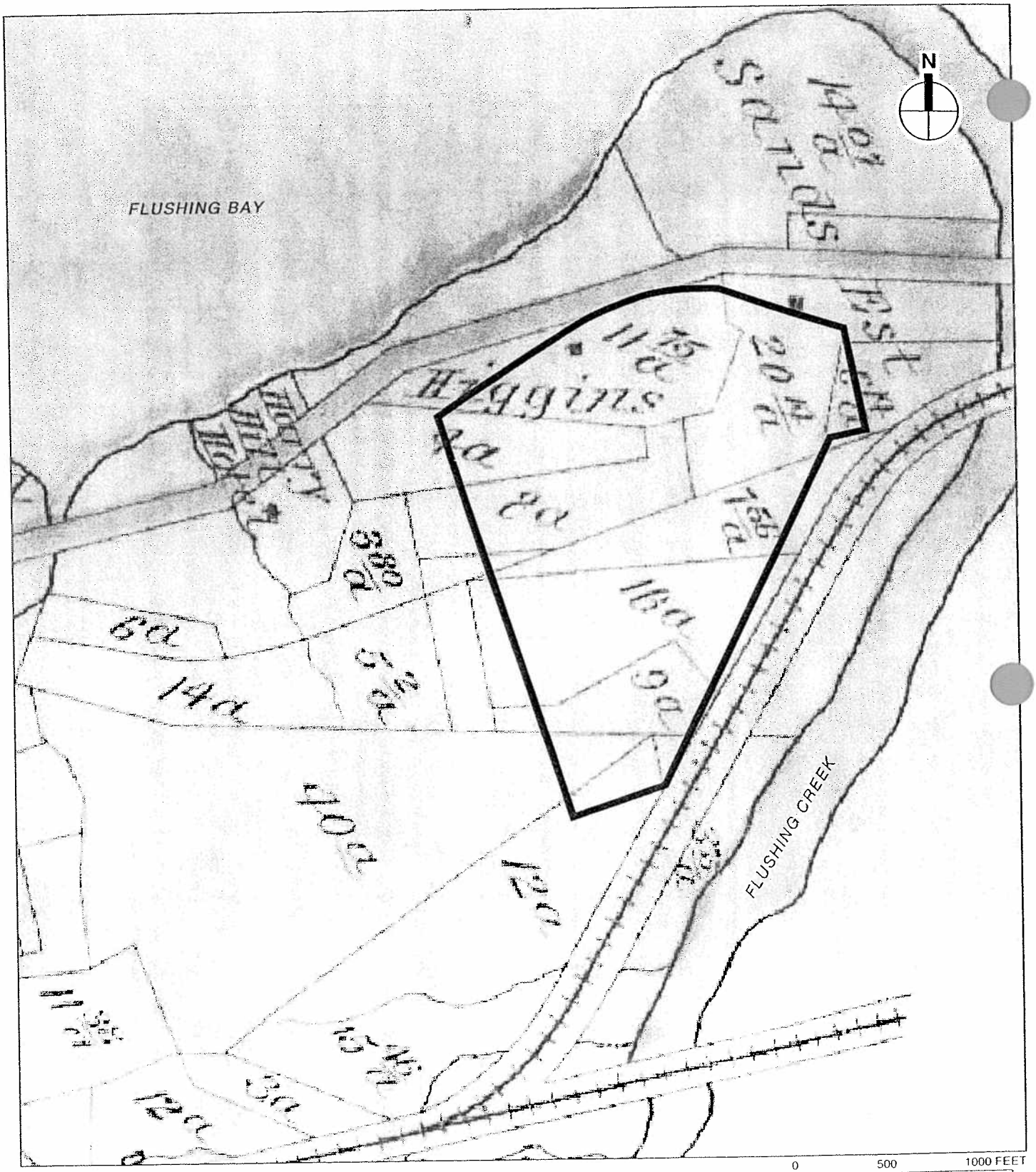


Figure 6

Atlas of Queens County
C. Wolverton, 1891

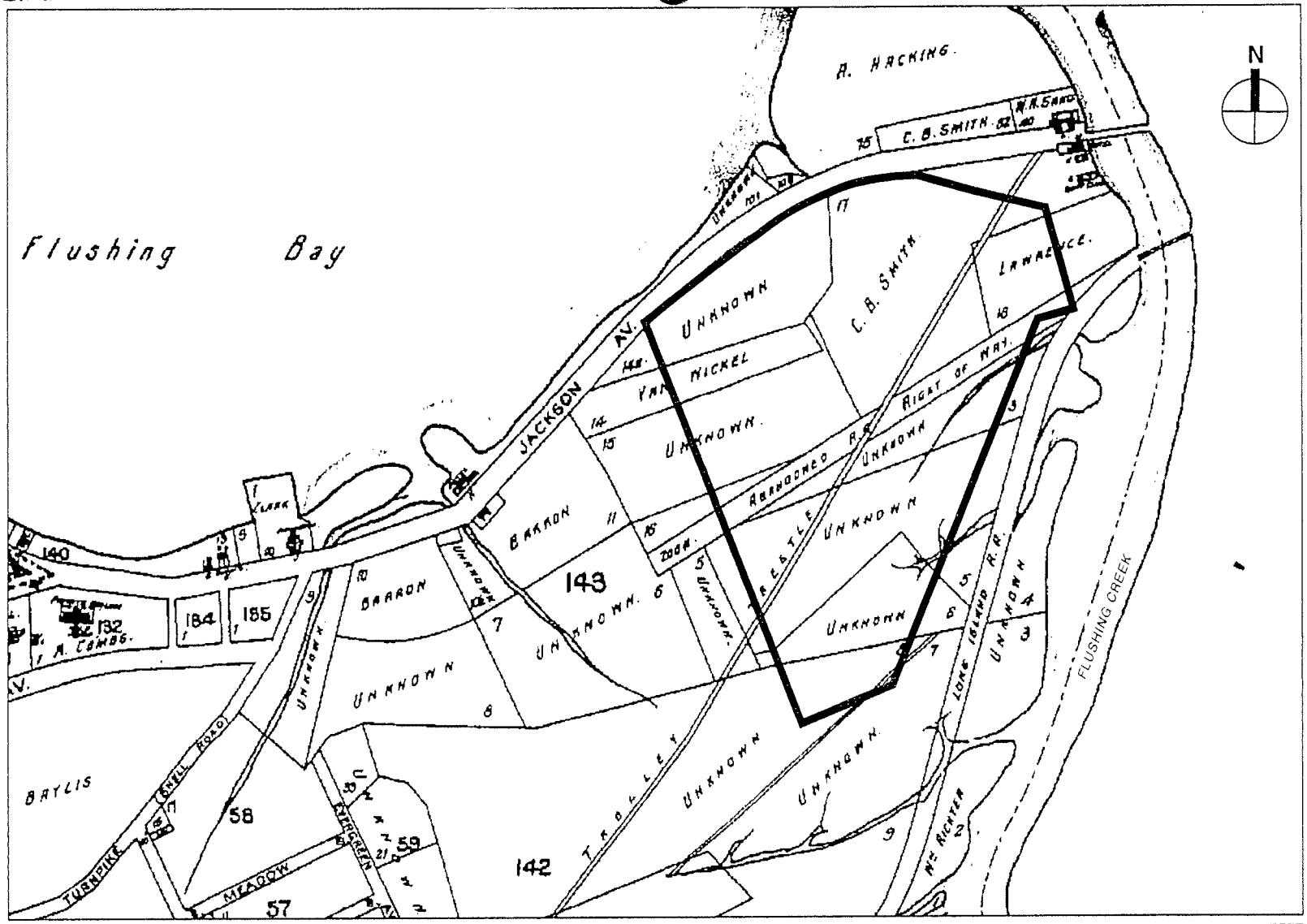


Figure 7

Sanborn Insurance Map, 1902

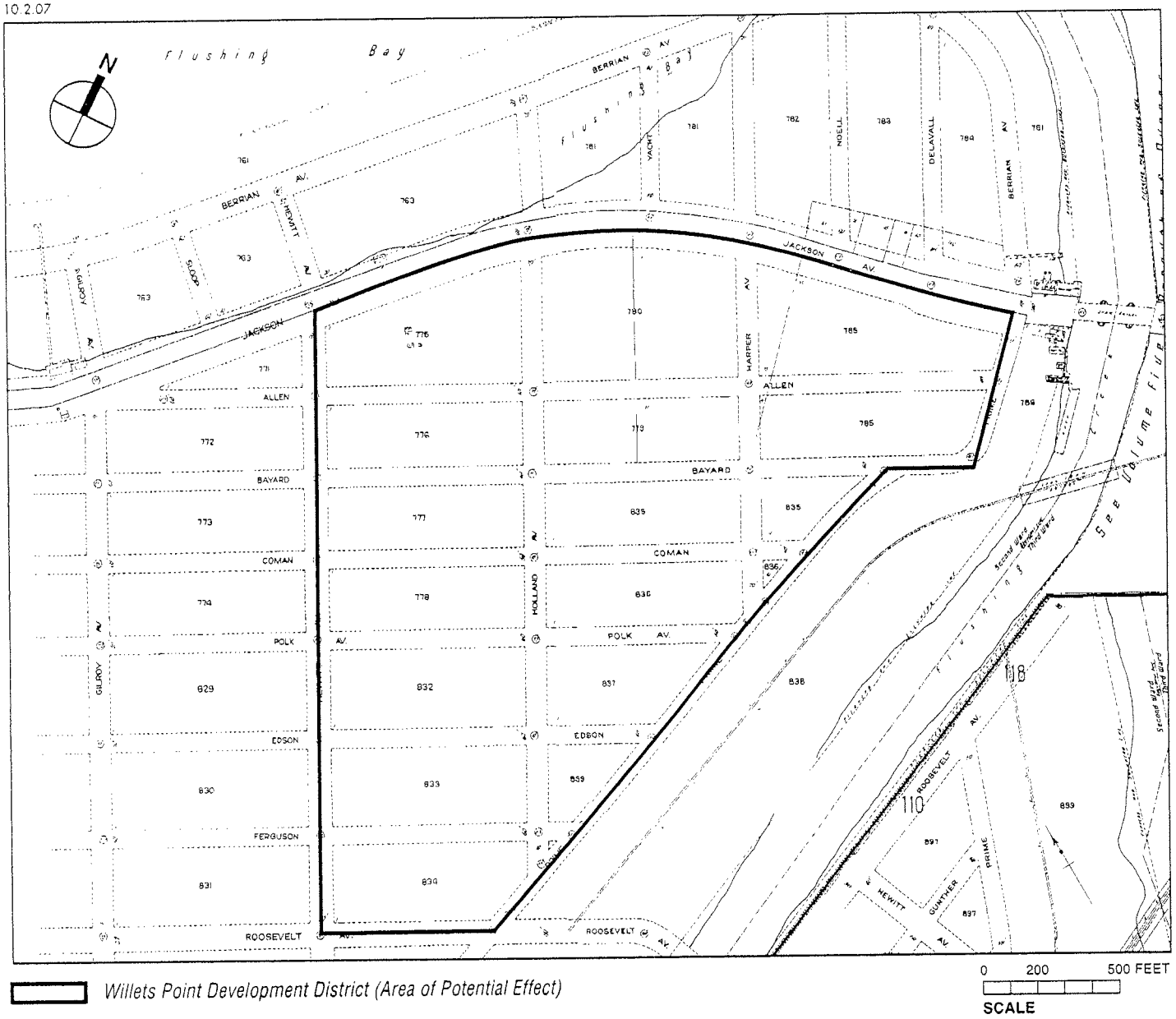


Figure 8

Sanborn Insurance Map, 1915

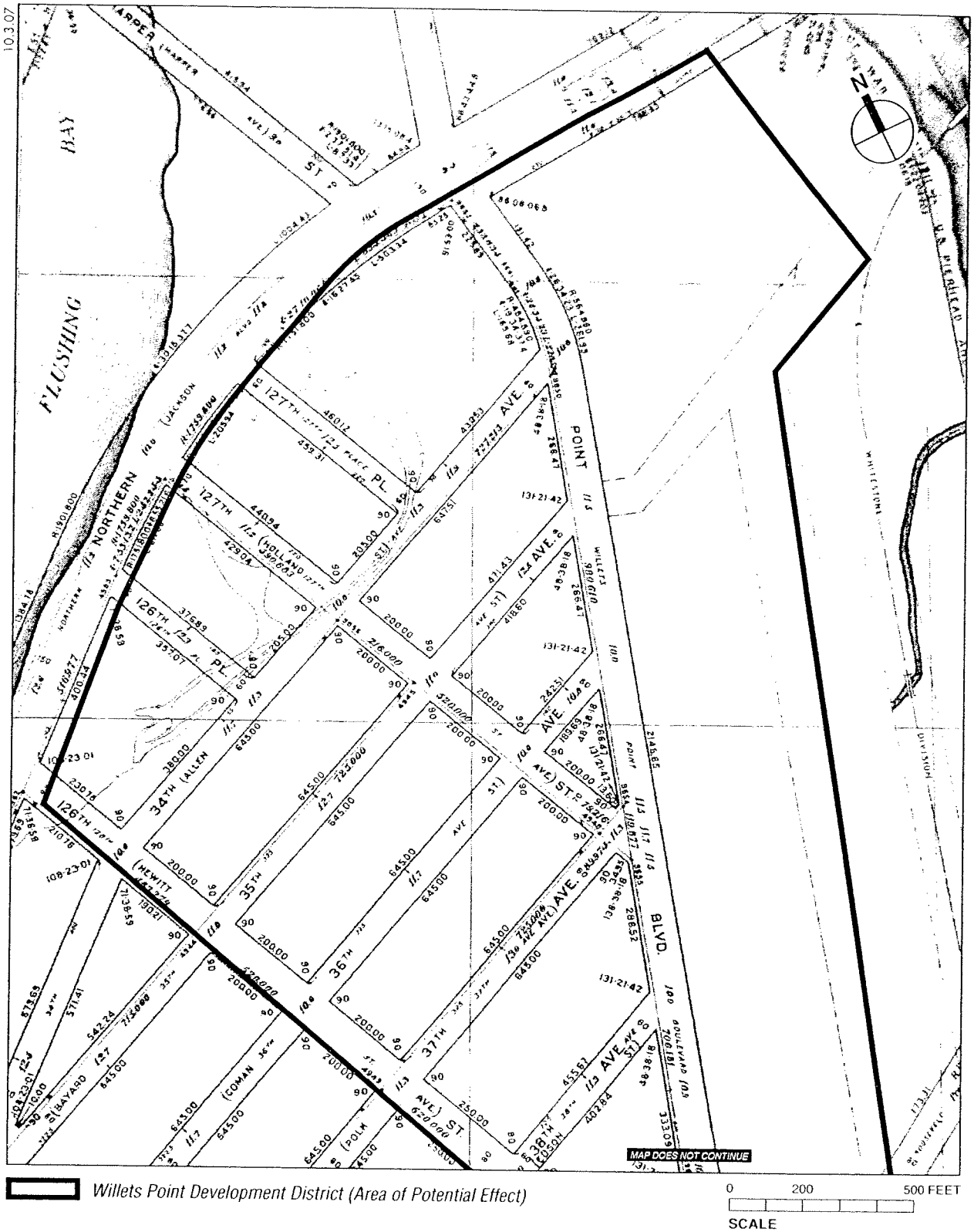


Figure 9

Final Maps of the Borough of Queens,

1911-1931

Eliot Spitzer
Governor
Carol Ash
Commissioner

New York State Office of Parks,
Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189
518-237-8643
www.nysparks.com

November 19, 2007

Carey Jones
Historian
AKRF
440 Park Avenue South, 7th floor
New York, NY 10016

Re: CEQR
Willets Pointe Development
Queens County
07PR04413

Dear Ms. Jones,

Thank your for requesting the comments of the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) with regard to the potential for this project to affect significant historical/cultural resources. OPRHP has reviewed the Phase 1 Archaeological report prepared and submitted for this project. Based on our review of that report, the OPRHP has no further archaeological concerns regarding this project.

Please note that if state and or federal permits are necessary, the project will need to be reviewed in accordance with Section 14.09 of the State Historic Preservation Act or Section 106 of the National Historic Preservation Act. While archaeological issues with the site have been addressed, please continue to consult with our technical review staff regarding architectural resources.

Please contact me at extension 3291, or by e-mail at douglas.mackey@oprhp.state.ny.us, if you have any questions regarding these comments.

Sincerely

Douglas P. Mackey
Historic Preservation Program Analyst
Archaeology

An Equal Opportunity/Affirmative Action Agency

printed on recycled paper

THE CITY OF NEW YORK LANDMARKS PRESERVATION COMMISSION
1 Centre Street, 9N, New York, NY 10007 (212) 669-7700 www.nyc.gov/landmarks

ENVIRONMENTAL REVIEW

DEPUTY MAYOR FINANCE/ECO DEV/07DME014Q 9/2/2008

Project number **Date received**

Project: WILLETS POINT

Properties with no Architectural or archaeological significance:

ROOSEVELT AVENUE, BBL 4020181500

9/3/2008

SIGNATURE DATE

Gina Santucci

7367_FSO_DNP_09032008.doc

THE CITY OF NEW YORK LANDMARKS PRESERVATION COMMISSION
1 Centre Street, 9N, New York, NY 10007 (212) 669-7700 www.nyc.gov/landmarks

ENVIRONMENTAL REVIEW

DEPUTY MAYOR FINANCE/ECO DEV/LA-CEQR-Q 9/4/2008

Project number **Date received**

Project: WILLETS POINT

Properties with no archaeological significance:

130 STREET, BBL 4042060100
23 AVENUE, BBL 4042070001
58-26 47 STREET, BBL 4026010025

9/4/2008

SIGNATURE DATE

Gina Santucci

24979_FSO_DNP_09042008.doc

THE CITY OF NEW YORK LANDMARKS PRESERVATION COMMISSION
1 Centre Street, 9N, New York, NY 10007 (212) 669-7700 www.nyc.gov/landmarks

ENVIRONMENTAL REVIEW

DEPUTY MAYOR FINANCE/ECO DEV/07DME014Q 9/10/2008

Project number **Date received**

Project: WILLETS POINT

Properties with no archaeological significance:

122-02 28 AVENUE, BBL 4043170001
28 AVENUE, BBL 4043170020

9/10/2008

SIGNATURE DATE

Gina Santucci

7367_FSO_GS_09102008.doc

APPENDIX C.2

ARCHITECTURAL CORRESPONDENCE

THE CITY OF NEW YORK LANDMARKS PRESERVATION COMMISSION
1 Centre St., 9N, New York, NY 10007 (212) 669-7700

ENVIRONMENTAL REVIEW

DME /07DME014Q — 02/02/07
PROJECT NUMBER — DATE RECEIVED

PROJECT WILLETS PT. DEV. PLAN

[X] No architectural significance

[X] No archaeological significance

[ ] Designated New York City Landmark or Within Designated Historic District

[ ] Listed on National Register of Historic Places

[ ] Appears to be eligible for National Register Listing and/or New York City Landmark Designation

[ ] May be archaeologically significant; requesting additional materials

COMMENTS The LPC is in receipt of the draft EAS and draft scope of work for EIS (SEIS) dated 2/2/07. Based on these documents and the block/lot list provided by EDC, no architectural or archaeological resources have been identified on the project site or in the project study area. This information should be disclosed in the EAS and SEIS.

Gina Santucci — 02/07/07
SIGNATURE — DATE

THE CITY OF NEW YORK LANDMARKS PRESERVATION COMMISSION
1 Centre St., 9N, New York, NY 10007 (212) 669-7700

ENVIRONMENTAL REVIEW

DME /07DME014Q 06/19/07
PROJECT NUMBER DATE RECEIVED

PROJECT WILLETS PT. DEV. PLAN

[X] No architectural significance

[X] No archaeological significance

[ ] Designated New York City Landmark or Within Designated Historic District

[ ] Listed on National Register of Historic Places

[ ] Appears to be eligible for National Register Listing and/or New York City La Designation

[ ] May be archaeologically significant; requesting additional materials

COMMENTS The LPC is in receipt of information regarding the Empire Millwork Co. building, at 128-50 Willets Pt. Blvd. The property does not appear eligible for LPC or S/NR listing.

Gina Santucci 07/03/07
SIGNATURE DATE

AKRF

440 Park Avenue South, 7th Fl
New York, NY 10016
tel: 212 696-0670
fax: 212 213-3191
www.akrf.com

July 19, 2007

Ms. Virginia Bartos
Historic Preservation Specialist
New York State Office of Parks, Recreation and Historic Preservation
Bureau of Historic Preservation
Peebles Island, P.O. Box 189
Waterford, NY 12188-0189

Re: **Proposed Willets Point Development, Queens County**

Dear Virginia:

We are seeking to initiate consultation with your office regarding architectural resources for the above referenced project in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966. The proposed Willets Point Development would redevelop the Willets Point peninsula.

The proposed plan calls for the redevelopment of an approximately 61-acre area generally bounded to the east by the Van Wyck Expressway and an undeveloped lot owned by the Metropolitan Transportation Authority (MTA), to the south by Roosevelt Avenue, to the west by 126th Street, and to the north by Northern Boulevard. The proposed redevelopment would remove all the existing buildings on the site and would include new mixed-use development including residential, retail, hotel, entertainment, commercial office, cultural, community facility, open space, and parking. In addition, the proposed redevelopment plan includes a new connection between the Van Wyck Expressway and the development area.

The project requires review and the preparation of a Generic Environmental Impact Statement (GEIS) under City Environmental Quality Review (CEQR). As the proposed project involves modifications to the Van Wyck Expressway, an interstate highway, which would be reviewed by FHWA, it requires review under the National Environmental Policy Act of 1969 and Section 106.

The Office of the Deputy Mayor for Economic Development and Rebuilding will serve as lead agency, working in collaboration with the New York City Economic Development Corporation (EDC) and the New York City Department of City Planning.

There are no State and National Register listed or eligible properties located on the project site. However, we are seeking your determination of eligibility for one property, the former Empire Millworks Corporation Building, which is located on the project site and would be demolished as part of the proposed project. LPC has already determined the property does not appear eligible for designation as a New York City Landmark or for State and National Register listing (see attached letter).

We also are enclosing our scope of work for the historic resources analysis and are seeking your concurrence with the Area of Potential Effect (APE) for architectural resources. A separate letter will be sent to Douglas Mackey regarding archaeological resources.

Enclosed please find the following materials for your review:

- A description of the proposed project, including a short history of the site, and accompanying graphics including a block and lot map and an aerial map of the development area;

- Scope of Work for the historic resources analysis, including APE map;
- Historic Resource Inventory Form ("Blue Form") for the former Empire Millworks Building. This includes an architectural description, historic narrative, photographs of the property and a map showing the location of the structure.

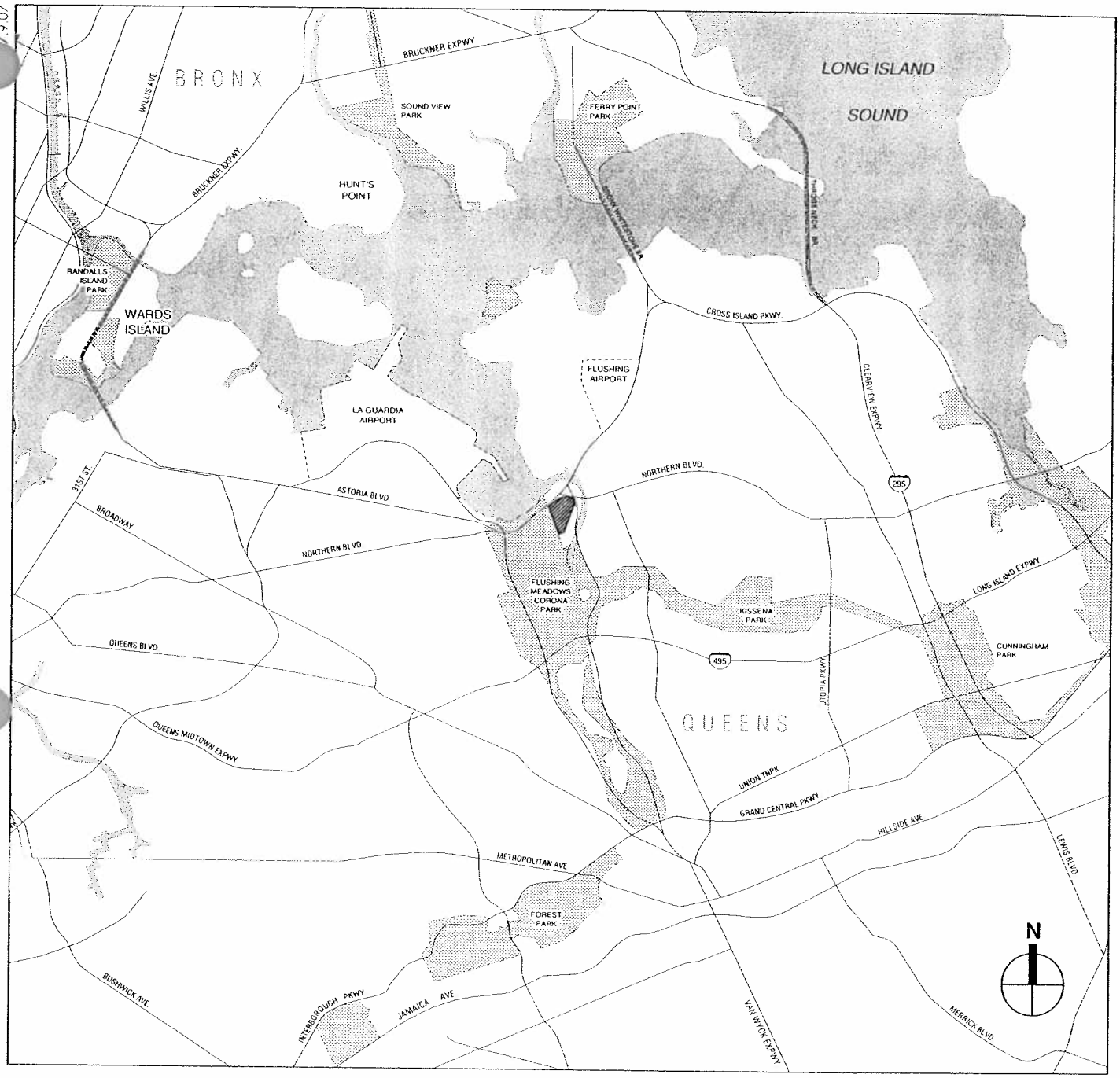
Thank you for your assistance in this matter. Please do not hesitate to contact me if you have any questions or require further information at (646) 388-9812.

Sincerely,

AKRF, INC.

Carey Jones
Historian

cc: Douglas Mackey, OPRHP
Asma Syed, New York City Economic State Development Corporation
Asima Jansveld, New York City Economic State Development Corporation
Heidi Rubinstein, New York City Law Department
Ed Applebome, AKRF, Inc.
Britt Page, AKRF, Inc.

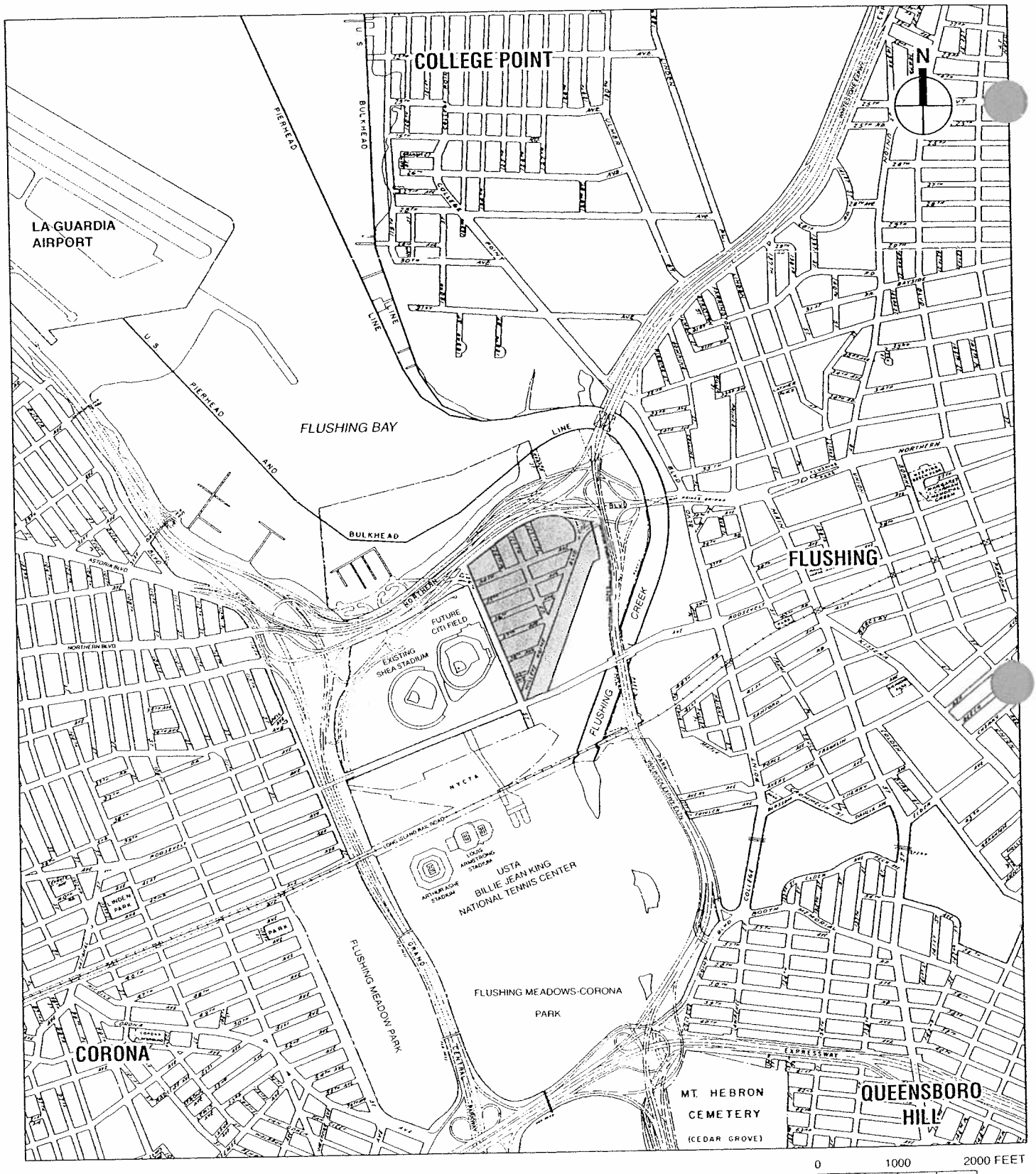


Willets Point Development District

0 1/2 1 2 MILES
SCALE

Figure 1
Project Location

7.9.07



Willets Point Development District

Figure 2
Development District Site

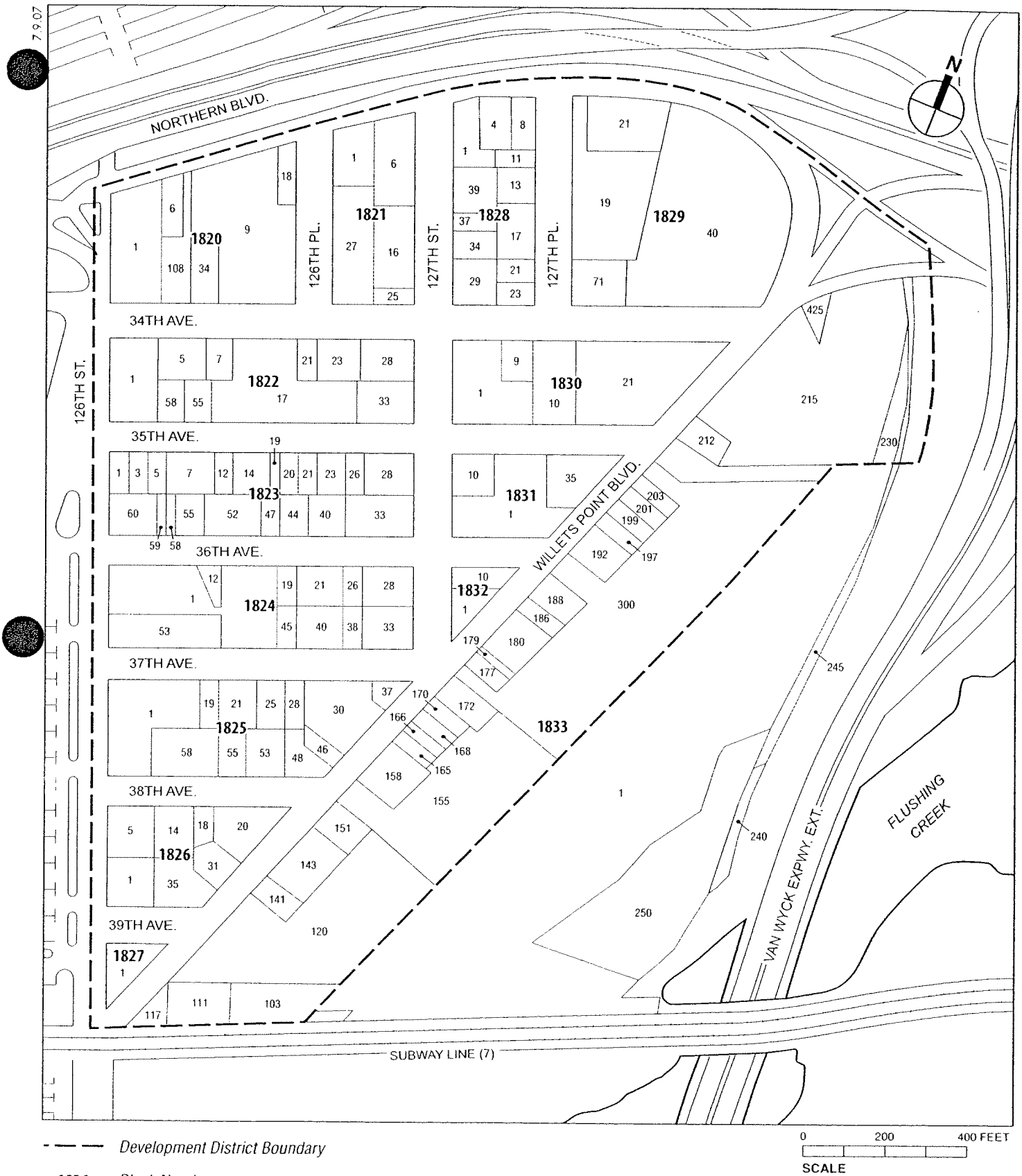


Figure 3
Block and Lot Map

7.9.07



Willets Point Development District Boundary

0 400 800 FEET

SCALE

Figure 4
Aerial View

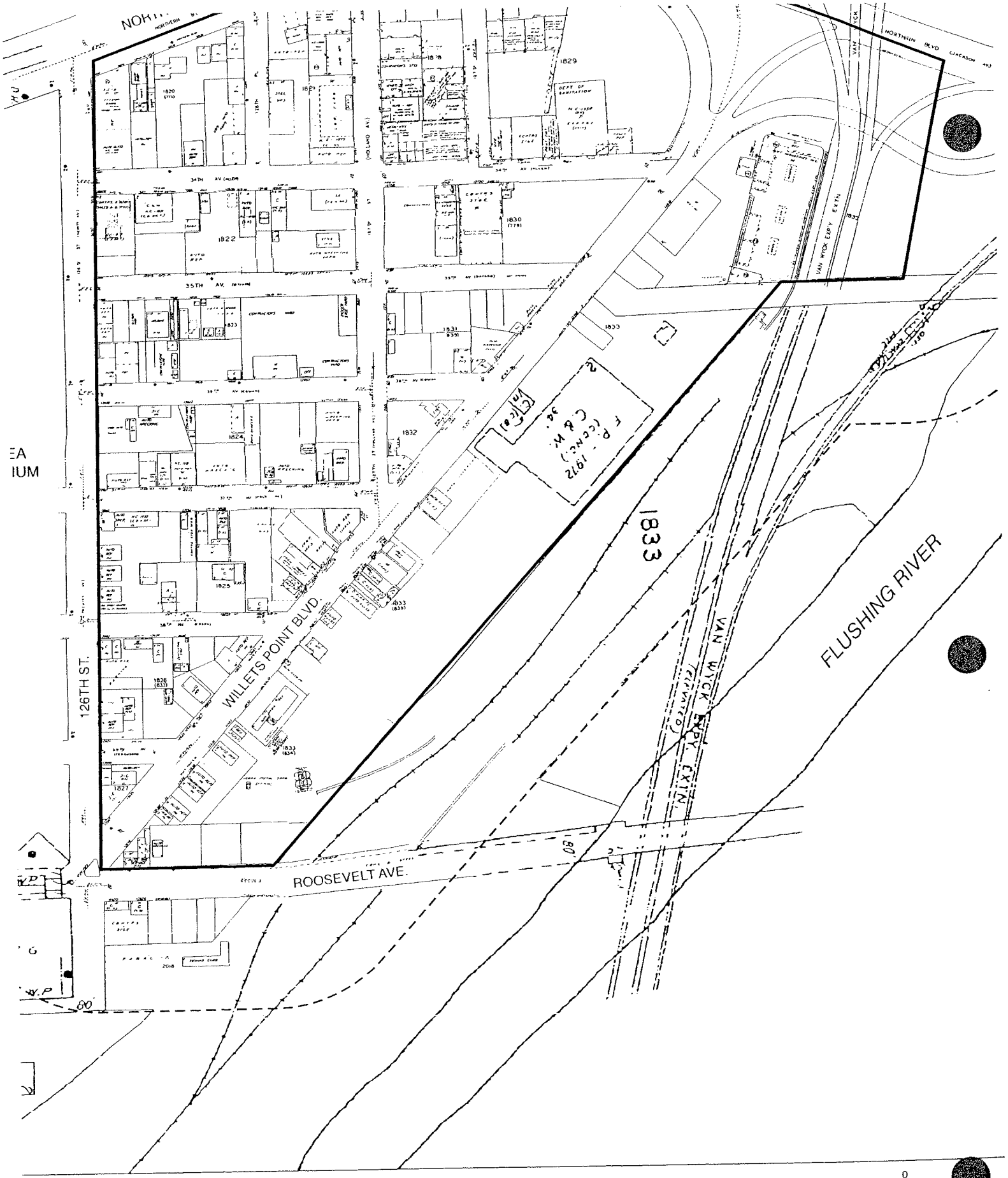
SCOPE OF WORK

The GEIS for the Willets Point Redevelopment Plan will be prepared pursuant to New York City Environmental Quality Review (CEQR) and the *CEQR Technical Manual.* The environmental review provides a means for decision-makers to systematically consider environmental effects along with other aspects of project planning and design, to evaluate reasonable alternatives, and to identify, and mitigate where practicable, any significant adverse environmental impacts. The Office of the Deputy Mayor for Economic Development and Rebuilding will act as the lead agency for CEQR review.

HISTORIC RESOURCES

This section of the GEIS will assess the potential of the proposed actions to affect any historic architectural and archaeological resources, either directly through construction activities or indirectly by altering the context in which the resources are located. In comments dated February 7, 2007, the New York City Landmarks Preservation Commission (LPC) indicated that no archaeological resources and architectural resources have been identified on the project site or within 400 feet of the project site. Therefore, this section will be limited to identifying whether there are any properties that may appear to meet eligibility criteria for listing on the State/National Registers of Historic Places or for designation as New York City Landmarks ("potential architectural resources") that have not yet been identified in the study area, as set for the *CEQR Technical Manual.* Tasks within this section are as follows:

- Define the study area for identifying if there are any potential architectural resources. This includes the area where direct physical impacts may occur and also accounts for a larger area where potential contextual effects may occur. The study area will be defined during the analysis, but typically includes the project site (in this case, the District) and extends 400 feet from the perimeter of the project site boundary (see Figure 5).
- Based on visits to the District and study area by an architectural historian, survey standing structures in the study area to identify any properties that appear to meet eligibility criteria for NYCL designation or listing on the State and/or National Registers. Prepare a map if any such resources are identified.
- Assess the effects of planned development projects expected to be built by the project's build year in the future without the proposed project on any potential architectural resources.
- Assess the project's impacts on any designated or potential architectural resources, including contextual impacts as well as any direct physical impacts.
- Where appropriate, develop mitigation measures to avoid and/or reduce any adverse effects on any potential architectural resources in consultation with LPC.



oint Development District

otential Effect (400-Foot Perimeter)

HISTORIC RESOURCE INVENTORY FORM

NYS OFFICE OF PARKS, RECREATION
& HISTORIC PRESERVATION
P.O. BOX 189, WATERFORD, NY 12188
(518) 237-8643

NEW YORK STATE
Bernadette Castro
Commissioner

OFFICE USE ONLY
USN:

IDENTIFICATION

Property name (if any) Former Empire Millworks Corporation Building

Address or Street Location 128-50 Willets Point Boulevard

County Queens Town/City New York Village/Hamlet: _____

Owner Fodera Enterprises Address 129-02 Northern Bouldevard, Corona, NY 11368

Original use Woodwork factory and office Current use Storage warehouse and offices

Architect/Builder, if known Sugarman & Berger, Stanford D. Rossin and Arthur Hamberger Date of construction, if known 1938

DESCRIPTION

Materials -- please check those materials that are visible

Exterior Walls:	☐ wood clapboard	☐ wood shingle	☐ vertical boards	☐ plywood	
	☐ stone	☒ brick	☐ poured concrete	☐ concrete block	
	☐ vinyl siding	☐ aluminum siding	☐ cement-asbestos	☐ other: _____	
Roof:	☐ asphalt, shingle	☐ asphalt, roll	☐ wood shingle	☐ metal	☐ slate
Foundation:	☐ stone	☐ brick	☒ poured concrete	☐ concrete block	

Other materials and their location: _____

Alterations, if known: _____ Date: _____

Condition: ☐ excellent ☒ good ☐ fair ☐ deteriorated

Photos

Provide several clear, original photographs of the property proposed for nomination. Submitted views should represent the property as a whole. For buildings or structures, this includes exterior and interior views, general setting, outbuildings and landscape features. Color prints are acceptable for initial submissions.

Please staple one photograph providing a complete view of the structure or property to the front of this sheet. Additional views should be submitted in a separate envelope or stapled to a continuation sheet.

Maps

Attach a printed or drawn locational map indicating the location of the property in relationship to streets, intersections or other widely recognized features so that the property can be accurately positioned. Show a north arrow. Include a scale or estimate distances where possible.

Prepared by: Carey L. Jones address AKRF, Inc 440 Park Avenue South, 7th Floor, NY, NY 10016

Telephone: 646.388.9812 email cjones@akrf.com Date July 9, 2007

(See Reverse)

PLEASE PROVIDE THE FOLLOWING INFORMATION

IF YOU ARE PREPARING A NATIONAL REGISTER NOMINATION, PLEASE REFER TO THE ATTACHED INSTRUCTIONS

Narrative Description of Property: Briefly describe the property and its setting. Include a verbal description of the location (e.g., north side of NY 17, west of Jones Road); a general description of the building, structure or feature including such items as architectural style (if known), number of stories, type and shape of roof (flat, gabled, mansard, shed or other), materials and landscape features. Identify and describe any associated buildings, structures or features on the property, such as garages, silos, privies, pools, gravesites. Identify any known exterior and interior alterations such as additions, replacement windows, aluminum or vinyl siding or changes in plan. Include dates of construction and alteration, if known. Attach additional sheets as needed.

The former Empire Millwork Corporation Building is located at 128 50 Willets Point Boulevard, near the intersection of Willets Point Boulevard and the entrance ramp to Northern Boulevard. The building, built prior to the Van Wyck Expressway and facing the Flushing Bay, has a large, landscaped lawn in front. It was constructed in 1938 from plans by Sugarman & Berger, Stanford D. Rossin and Arthur Hamberger. Hamburger, an industrial engineer, was president of Wheeler Engineering Company, which built the building. The building was constructed for the D. Ginsberg and Sons Company, a millwork company which was started in 1921 by Hyman Ginsberg. The company later became The Empire Millwork Company and then The Empire National Company.

The two-story, Georgian Revival style building has a symmetrical red-brick façade with flanking bays which terminate with gently curving sections. The front section was originally used as an office space for the company and the exterior wood ornament is a reflection of millwork business. The central bay projects slightly and features a center doorway topped with arched transom windows and a broken pediment. Above the door is a large Palladian window with a circular clock under the central arch. The central bay is topped with a large front gable with a wood denticulated cornice and cornice returns. Small, octagon-shaped windows decorate either side of the central entryway.

The flanking sections are five bays wide. Each bay has arched wood windows with tracery on the first level and 6-over-6 double hung wood windows on the upper level. A dentinculated cornice line runs the length of the bays. Both bays end with curved sections; these sections have large 12-over-12 double hung windows separated by double-height wood pilasters. The side bays have small, double-hung and octagon-shaped windows. A short parapet runs the along the flaking bays and sides.
The remainder of the building is a two-story warehouse structure which extends back approximately 300 feet. It has large, factory-style, multi-pane glass windows.

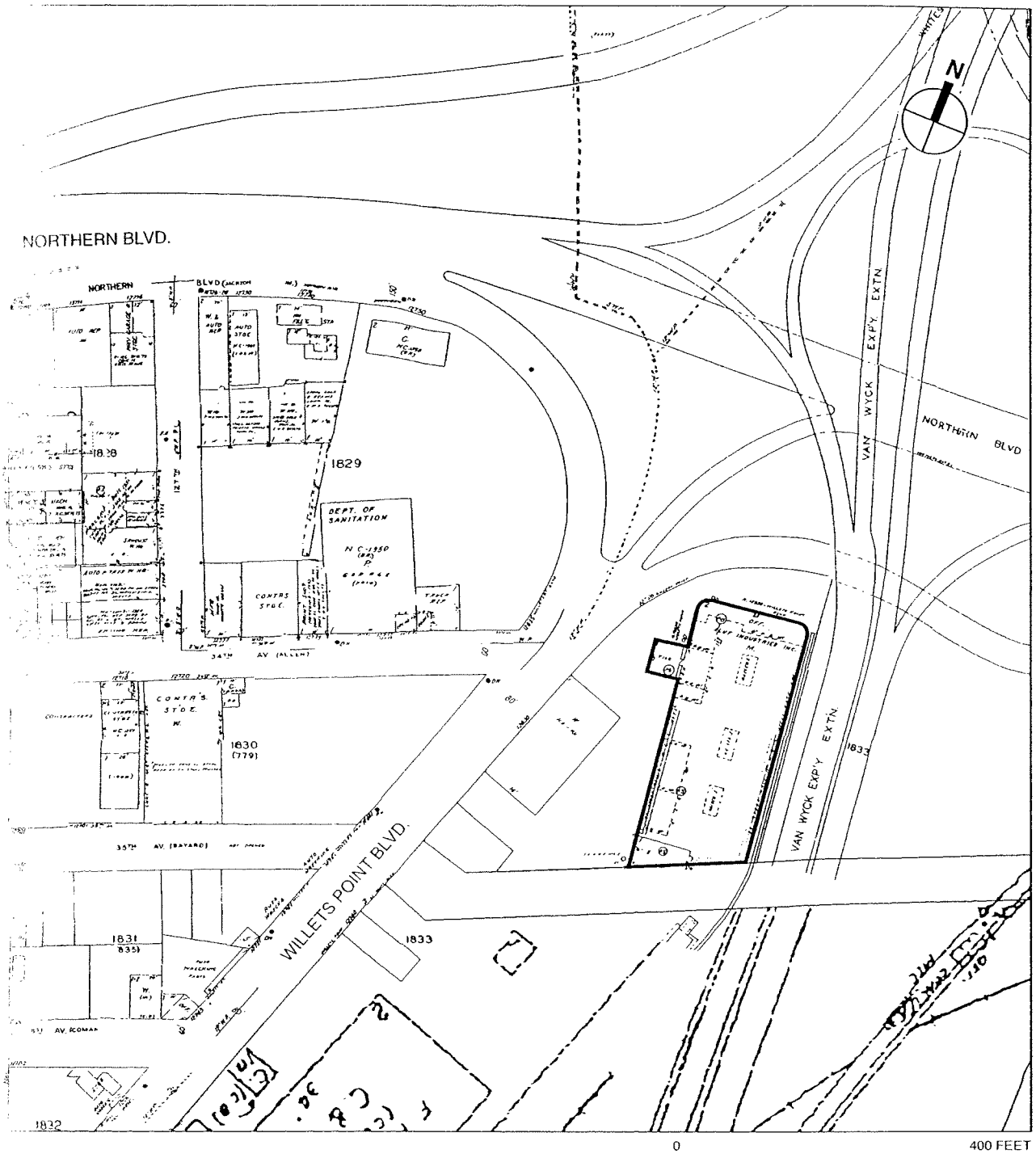
Narrative Description of Significance: Briefly describe those characteristics by which this property may be considered historically significant. Significance may include, but is not limited to, a structure being an intact representative of an architectural or engineering type or style (e.g., Gothic Revival style cottage, Pratt through-truss bridge); association with historic events or broad patterns of local, state or national history (e.g., a cotton mill from a period of growth in local industry, a seaside cottage representing a locale's history as a resort community, a structure associated with activities of the "underground railroad."); or by association with persons or organizations significant at a local, state or national level. Simply put, why is this property important to you and the community. Attach additional sheets as needed.

The former Empire Millworks Corporation Building is a relatively intact example of a combined office and industrial building. The building was designed by a collaboration of architects including the firm of Sugarman & Berger and Stanford D. Rossin. Arthur Hamburger was the industrial engineer. Hamburger was president of Wheeler Engineering Company, the builders of the building.

In 1926 Henry Sugarman started the firm of Sugarman & Berger. The firm is credited with designing the New Yorker Hotel, which is listed on the State and National Registers, and the Navarre/Garment Center Building. The firm is also credited with designing the Mayfair Hotel in Philadelphia and the Long Beach (L.I.) Hospital as well as several buildings in Europe and Central America. With the firm Helme, Corbett & Harrison, Sugarman & Berger designed the Master Building, a New York City Landmark also listed on the State and National Registers.

In 1938 the Queens Chamber of Commerce gave the former Empire Millworks Building honorable mention in the industrial buildings category during its annual buildings awards.

7.18.07

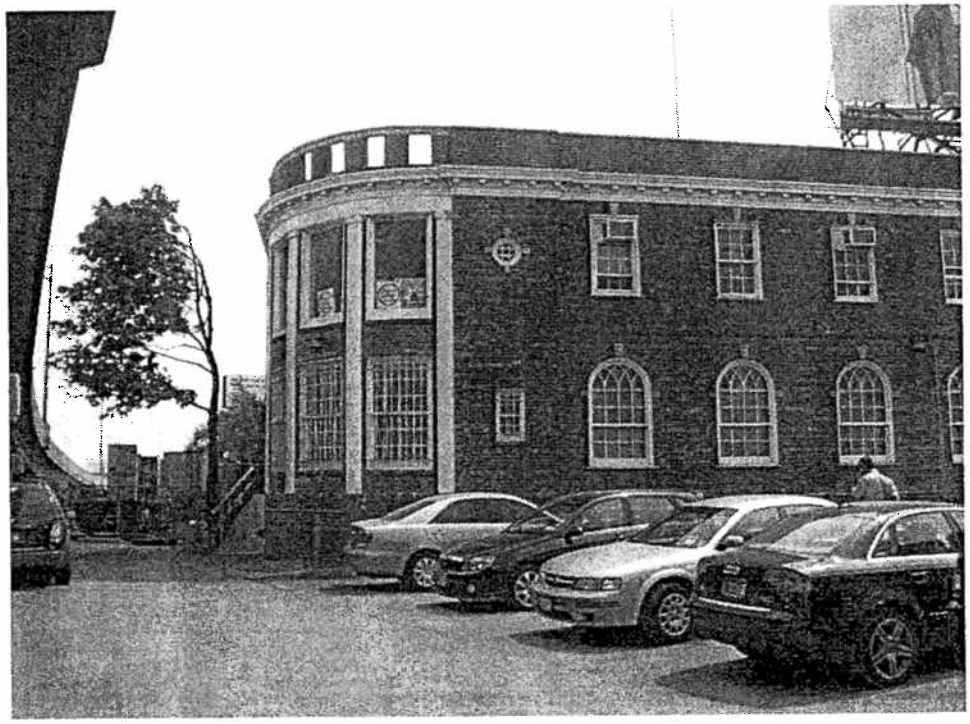


Former Empire Millworks Building

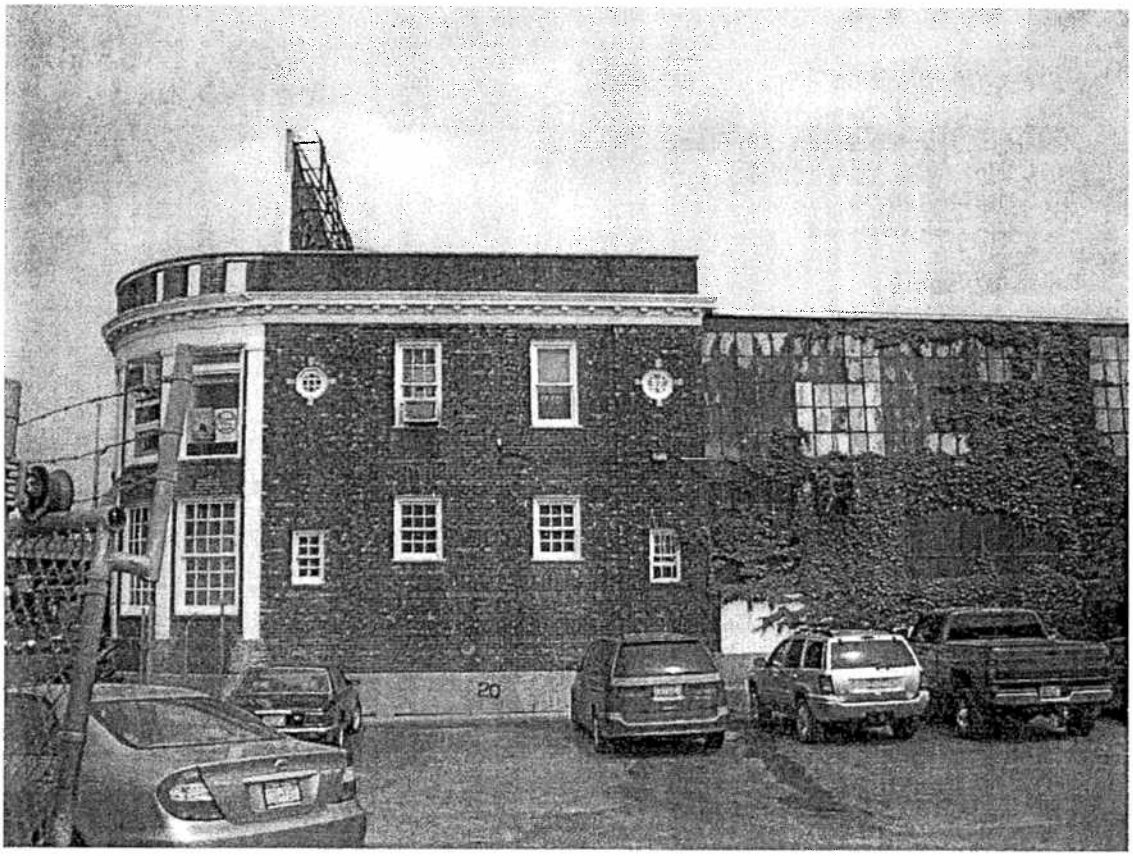
Location Map



Front Façade – Office Area



Side Façade – Office Area



Side Façade including warehouse section

AKRF

Environmental and Planning Consultants

440 Park Avenue South, 7th Floor
New York, New York 10016
tel: 212-696-0670
fax: 212-213-3191

www.akrf.com

Memorandum

To:	Virginia Bartos, Office of Parks, Recreation and Historic Preservation
From:	Carey L. Jones, AKRF
Subject:	Empire Millworks Building, Interior Photographs
Date:	September 17, 2007
cc:	Alicia Moore, AKRF Asma Syed, NYC Economic Development Corporation

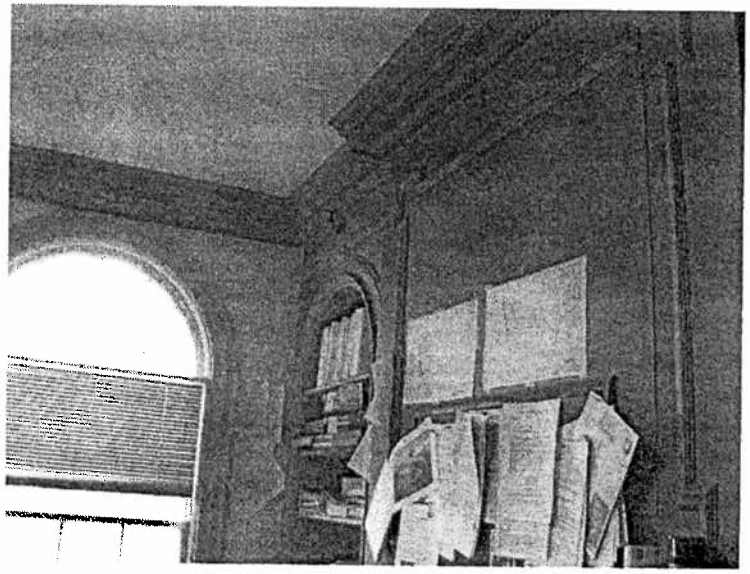
In response to your request dated September 6, 2007 interior photographs of the former Empire Millworks Building, located at 128-50 Willets Point Boulevard, are enclosed.

The building is separated into two distinct areas: the front office area and the warehouse area which extends from the rear of the office area. The entire building is two stories in height; however, the office area has two levels while the warehouse area is one-story with a mezzanine level.

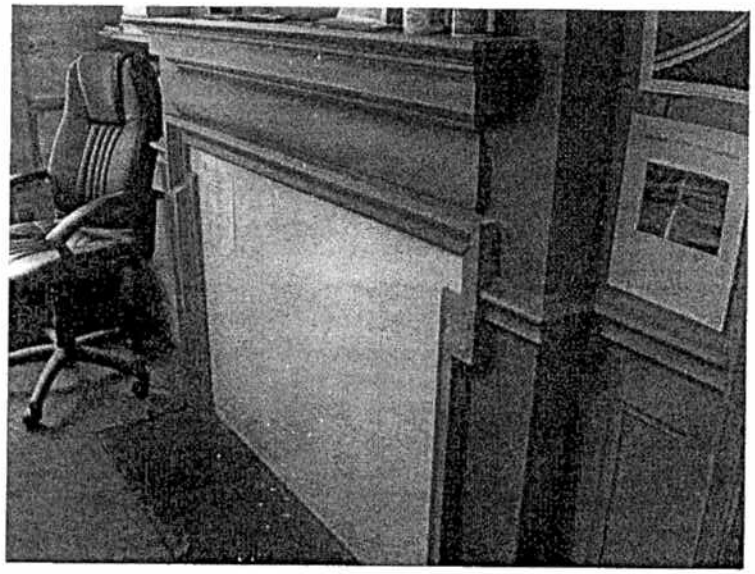
The office areas retain original details including molding, built-in bookcases, fireplaces and hardware such as doorknobs and door plates (see Photographs 1-4). The staircase between the two floors has a turned-wood railing and banisters (see Photograph 5). Conference rooms exist on both floors and retain original wood moldings and chair rails (see Photograph 6). Drop ceilings, new light fixtures and partitions have been installed in some of the office spaces; the owners indicated the original moldings remain intact (see Photographs 7 and 8).

There were no indications of original wood-working machinery in the warehouse area. Narrow, metal supports are evenly placed throughout and the majority of the windows are multi-light factory-style windows (see Photograph 9). The mezzanine stairs appear to be wood (see Photograph 10). The ceiling of the warehouse area is constructed of long, narrow wood beams possibly milled on-site (See Photograph 11).

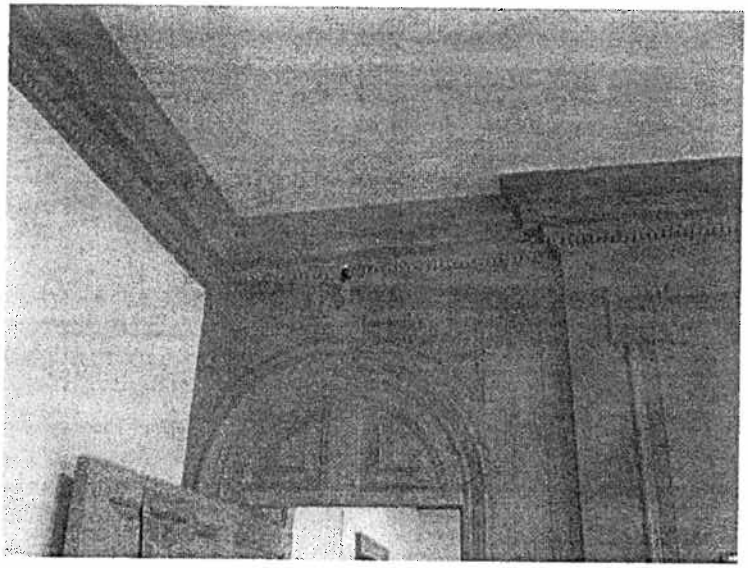
Please contact me with any further questions.



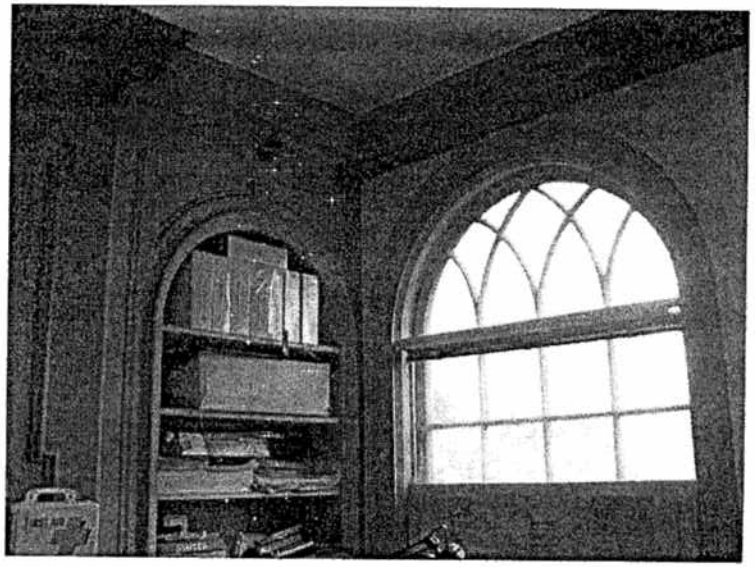
1) Office window and fireplace mantle.



2) Fireplace detail.



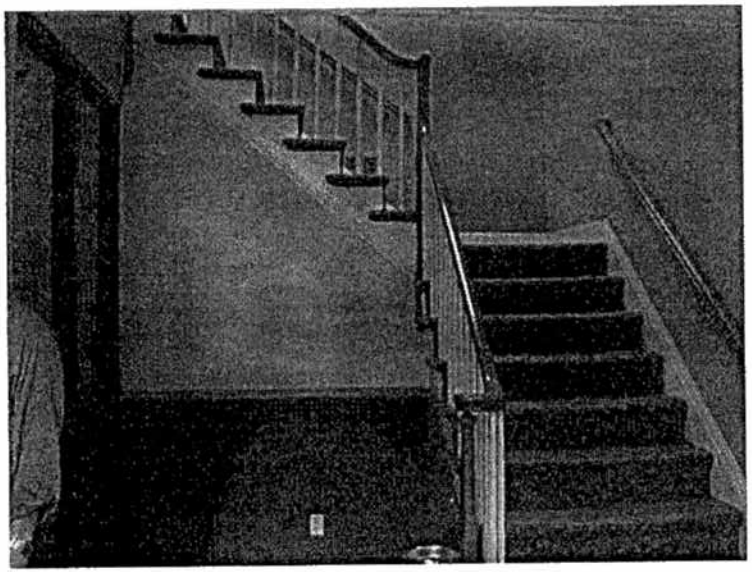
3) Door and ceiling moldings.



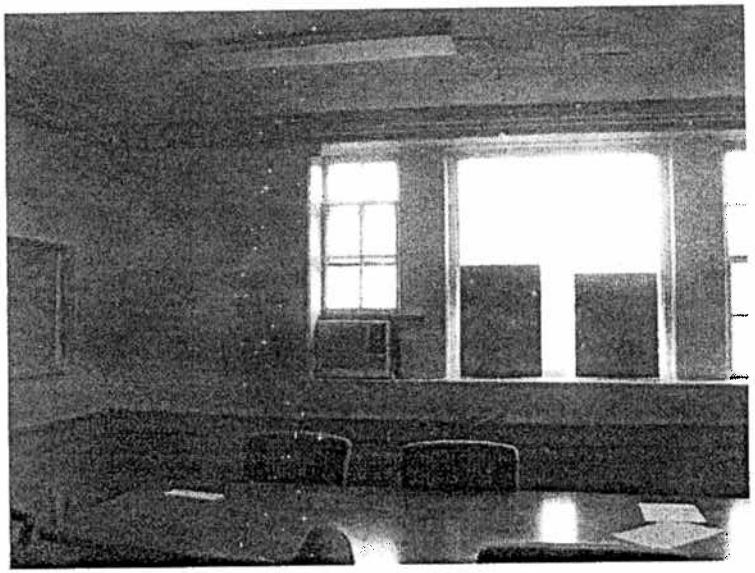
4) Window and built-in bookcase.

Empire Millworks

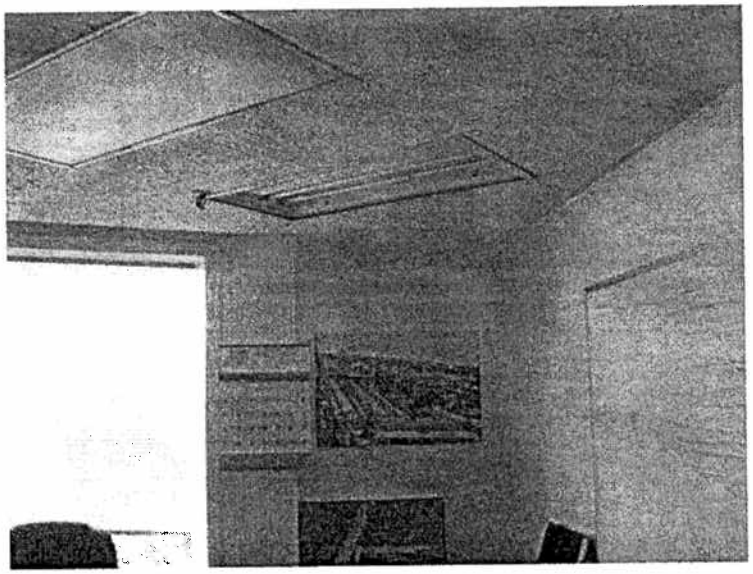
Interior Photographs



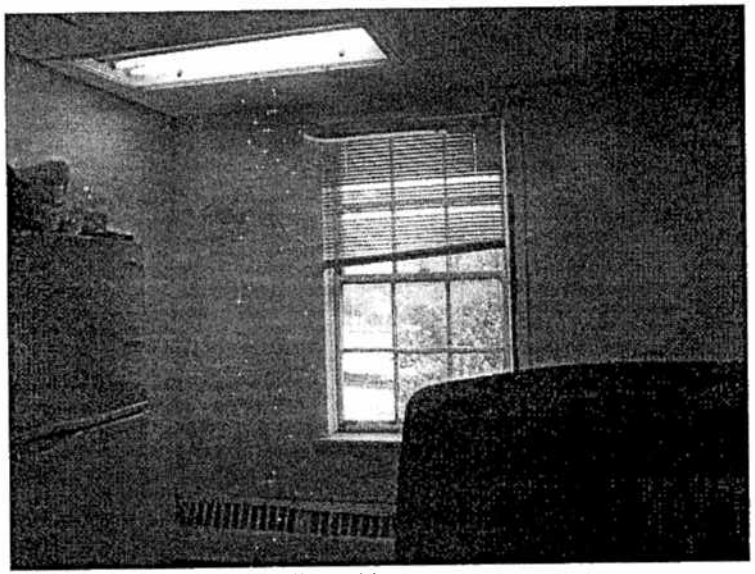
5) Entryway staircase.



6) Conference room.



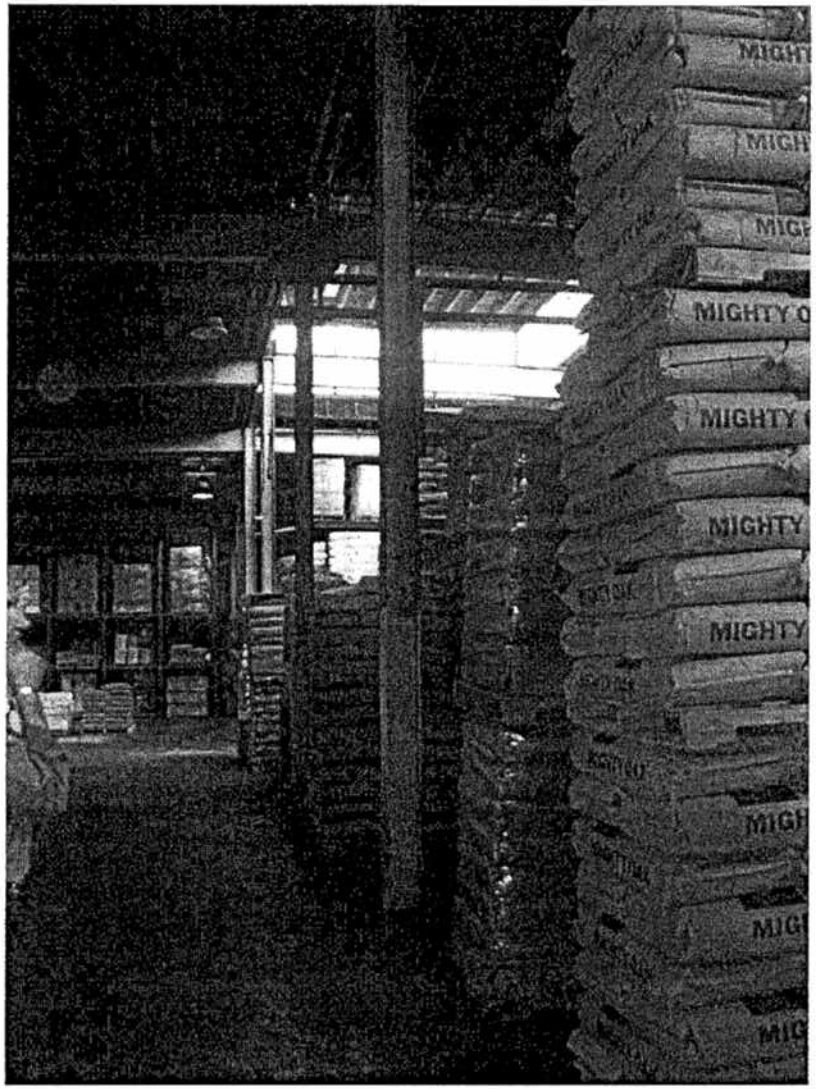
7) Drop ceiling.



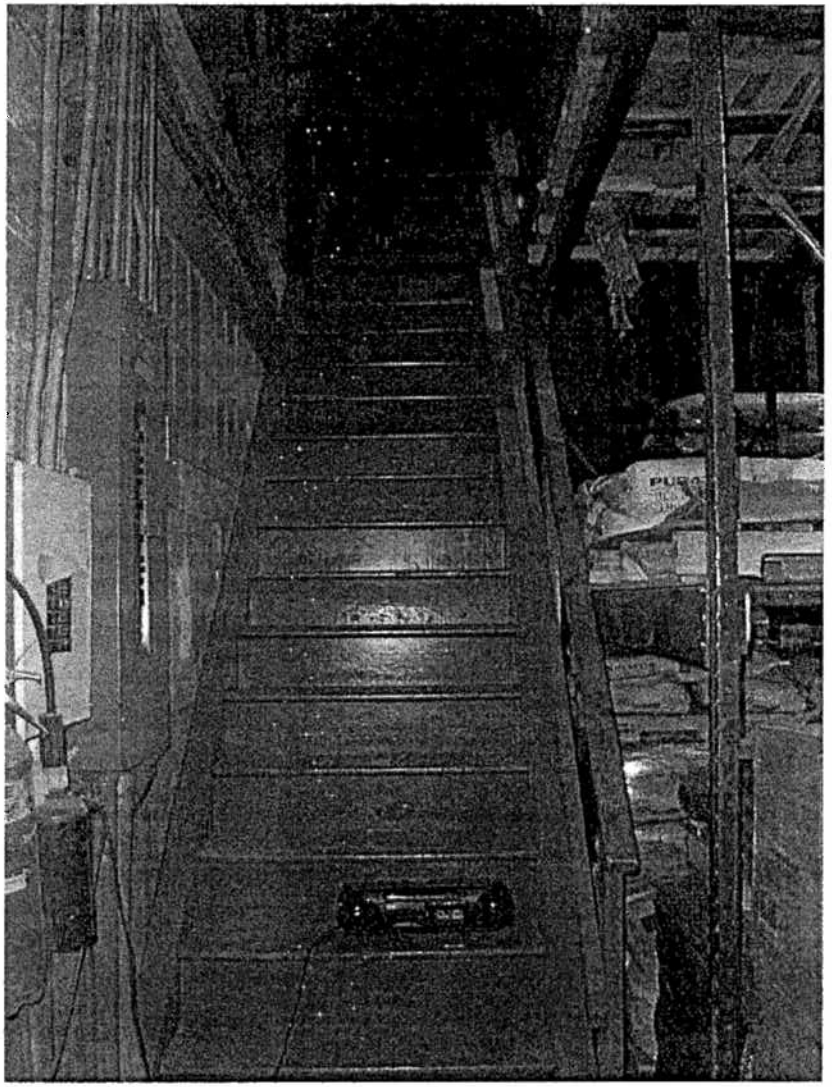
8) Drop ceiling and wall partitions.

Empire Millworks

Interior Photographs



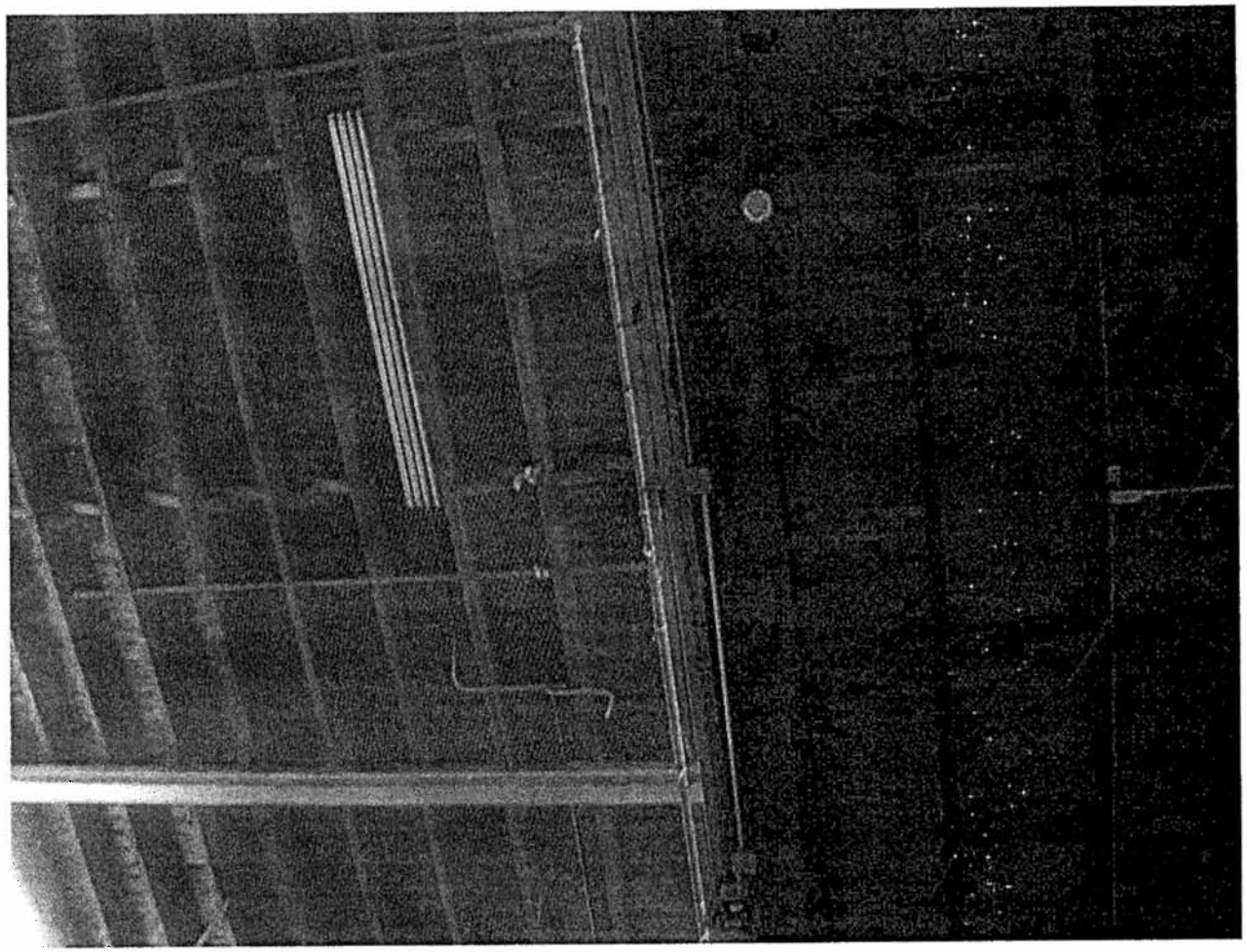
9) Warehouse area.



10) Warehouse area – staircase to mezzanine level.

Empire Millworks

Interior Photographs



11) Warehouse area – ceilings.

Eliot Spitzer
Governor

Carol Ash
Commissioner

New York State Office of Parks,
Recreation and Historic Preservation

Historic Preservation Field Services • Peebles Island, PO Box 189, Waterford, New York 12188-0189
518-237-8643
www.nysparks.com

October 15, 2007

Carey Jones
Historian
AKRF
440 Park Avenue South, 7th floor
New York, NY 10016

Re: CEQR
Willet: Pointe Development
Queens County
07PR04413

Thank you for requesting the comments of the New York State Office of Parks, Recreation and Historic Preservation for the proposed Willets Point Development in Queens. We have reviewed the submitted information in accordance with Section 14.09 of the New York State Parks, Recreation and Historic Preservation Act of 1980.

Based upon our review of the submitted information, we offer the following comments/recommendations:
1. Our National Register Unit notes that the Empire Millworks located at 128-50 Willets Point Blvd is eligible for listing on the State and National Registers of Historic Places. Our Resource Evaluation is attached for your use.
2. We note that the proposed plans indicate that this building would be demolished for the proposed project. Under the provisions of Section 14.09, demolition of a National Register eligible building would constitute an Adverse Impact. It is OPRHP's recommendation that a through exploration of alternative sites, treatments and/or plans be undertaken to determine if there are any prudent and feasible alternatives to demolition. This analysis should be undertaken by the lead agency and submitted to our office for review and comment.

Thank you for your request. If you have any questions, I can be reached at (518) 237-8643, ext. 3282. Please refer to the Project Review (PR) number in any future correspondences regarding this project.

Sincerely,

Beth A. Cumming BAC
Historic Preservation Specialist – Technical Unit
e-mail: Beth.Cumming@oprhp.state.ny.us

enc: Resource Evaluation

Historic Preservation Field Services Bureau
Resource Evaluation

DATE: September 25, 2007 **STAFF:** Virginia L. Bartos

PROPERTY: Empire Millworks **MCD:** Queens

ADDRESS: 128-50 Willets Point Blvd **COUNTY:** Queens

PROJECT REF: 07PR04413 **USN:** 08101.011207

I. ☐ Property is individually listed on SR/NR:
name of listing:

☐ Property is a contributing component of a SR/NR district:
name of district:

II. ☒ Property meets eligibility criteria.
☐ Property contributes to a district which appears to meet eligibility criteria.
Pre SRB: ☒ **Post SRB:** ☐ SRB date:

Criteria for Inclusion in the National Register:

A. ☒ Associated with events that have made a significant contribution to the broad patterns of our history;

B. ☐ Associated with the lives of persons significant in our past;

C. ☒ Embodies the distinctive characteristics of a type, period or method of construction; or represents the work of a master; or possesses high artistic values; or represents a significant and distinguishable entity whose components may lack individual distinction;

D. ☐ Have yielded, or may be likely to yield information important in prehistory or history.

III. ☐ Property does not meet eligibility criteria.

STATEMENT OF SIGNIFICANCE:

Based on the information submitted, it is the opinion of the State Historic Preservation Office the former Empire Millworks Corporation Building in the borough of Queens is historically and architecturally significant as an early twentieth century commercial and industrial building. See the attached Historic Building Inventory form for further information.

Eliot Spitzer
Governor

Carol Ash
Commissioner

New York State Office of Parks,
Recreation and Historic Preservation

Historic Preservation Field Services • Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

www.nysparks.com

February 8, 2008

Asma Syed
New York City Economic Development Corporation
110 William Street
New York, NY 10038

Re: CEQR
Willets Pointe Development
Queens County
07PR04413

Dear Ms. Syed:

Thank you for requesting the comments of the New York State Office of Parks, Recreation and Historic Preservation for the proposed Willets Point Development in Queens. We have reviewed the submitted information in accordance with Section 14.09 of the New York State Parks, Recreation and Historic Preservation Act of 1980.

Based upon our review of the Draft Historic Resources chapter, we concur that the area is not sensitive for archeological resources and that the former Empire Millwork Building is eligible for listing on the State and National Registers of Historic Places. We further concur that demolition of the Empire Millwork Building would constitute a significant Adverse Impact to this architectural resource. However, we cannot concur that all alternatives to demolition have been explored. Under the provisions of Section 14.09 a through exploration of alterative sites, treatments and/or plans must be undertaken to determine if there are any prudent and feasible alternatives to demolition. In this case, it appears that the historic building is on the edge of the proposed redevelop, near the MTA parcel. This location suggests that it may be possible to resolve the flood plane concerns with the new development grading and retain the historic building. Our office would like to see this scenario included in the alternatives analysis. In addition, we cannot agree to mitigation measures until alternatives to demolition have been considered.

Thank you for your request and we look forward to continued consultation on this project. If you have any questions, I can be reached at (518) 237-8643, ext. 3282. Please refer to the Project Review (PR) number in any future correspondences regarding this project.

Sincerely,

Beth A. Cumming
Historic Preservation Specialist – Technical Unit
e-mail: Beth.cumming@oprhp.state.ny.us

An Equal Opportunity Employer/Affirmative Action Agency

Eliot Spitzer
Governor

Carol Ash
Commissioner

New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Services • Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

www.nysparks.com

May 30, 2008

Asma Syed
New York City Economic Development Corporation
110 William Street
New York, NY 10038

Re: CEQR
Willets Pointe Development
Queens County
07PR04413

Dear Ms. Syed:

Thank you for requesting the comments of the New York State Office of Parks, Recreation and Historic Preservation for the proposed Willets Point Development in Queens. We have reviewed the submitted information in accordance with Section 14.09 of the New York State Parks, Recreation and Historic Preservation Act of 1980.

Based upon our review of the Draft Generic Environmental Impact Statement (DEIS) dated April 2008, we note that the demolition of the Empire Millwork Building would constitute an Adverse Impact to this historic resource. At this time, we cannot concur that all alternatives to demolition have been explored. Under the provisions of Section 14.09, a through exploration of alternative sites, treatments and/or plans must be undertaken to determine if there are any prudent and feasible alternatives to demolition.

Thank you for your request and we look forward to continued consultation on this project. If you have any questions, I can be reached at (518) 237-8643, ext. 3282. Please refer to the Project Review (PR) number in any future correspondences regarding this project.

Sincerely,

Beth A. Cumming
Historic Preservation Specialist – Technical Unit
e-mail: Beth.cumming@oprhp.state.ny.us

An Equal Opportunity Employer/Affirmative Action Agency

APPENDIX D

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM

CONSISTENCY ASSESSMENT FORMS

For Internal Use Only:	WRP no.
Date Received:	DOS no.

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed action subject to CEQR, ULURP, or other Local, State or Federal Agency Discretionary Actions that are situated within New York City's designated Coastal Zone Boundary must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)*. The WRP was adopted as a 197-a Plan by the Council of the City of New York on October 13, 1999, and approved in coordination with local, state and Federal laws and regulations, including the State's Coastal Management Program (Executive Law, Article 42) and the Federal Coastal Zone Management Act of 1972 (P.L. 92-583). As a result of these approvals, state and federal discretionary actions within the city's coastal zone must be consistent to the maximum extent practicable with the WRP policies and the city must be given the opportunity to comment on all state and federal projects within its coastal zone.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, other State Agency or the New York City Department of City Planning in its review of the applicant's certification of consistency.

A. APPLICANT

1. Name: **Office of the Deputy Mayor for Economic Development**

Address: **235 Broadway, 14th Floor**

3. Telephone: **(212) 788-9956** Fax: **(212) 788-2941**

E-mail Address: **rkulikowski@cityhall.nyc.gov**

4. Project site owner: **Of the District's approximately 61.4 acres, approximately 16.4 acres are publicly owned and approximately 45.0 acres are privately owned land.**

B. PROPOSED ACTIVITY

1. Brief description of activity: **See Chapter 1, "Project Description."**

2. Purpose of activity: **See Chapter 1, "Project Description."**

3. Location of activity: **Willets Point Peninsula** Borough: **Queens**

Street Address or Site Description: **The area proposed for redevelopment is an approximately 61.4-acre area generally bounded to the east by the Van Wyck Expressway and an undeveloped lot owned by the Metropolitan Transportation Authority (MTA), to the south by Roosevelt Avenue, to the west by 126th Street, and to the north by Northern Boulevard. The District is not located on a waterfront.**

Proposed Activity Cont'd

4. If a federal or state permit or license was issued or is required for the proposed activity, identify the permit type(s), the authorizing agency and provide the application or permit number(s), if known:

   N/A

5. Is federal or state funding being used to finance the project? If so, please identify the funding source(s).

   None anticipated at this time.

		Yes	No
6.	Will the proposed project result in any large physical change to a site within the coastal area that will require the preparation of an environmental impact statement?		
	If yes, identify Lead Agency: **Office of the Deputy Mayor for Economic Development**	X	

7. Identify **City** discretionary actions, such as **zoning amendment or adoption of an urban renewal plan**, required for the proposed project.

   See Chapter 1, "Project Description."

C. COASTAL ASSESSMENT

The following questions represent, in a broad sense, the policy of the WRP. The number in the parentheses after each question indicated the policy or policies that are the focus of the question. A detailed explanation of the Waterfront Revitalization Program and its policies are contained in the publication the *New York City Waterfront Revitalization Program.*

Check either "Yes" or "No" for each of the following questions. Once the checklist is completed, assess how the proposed project affects the policy or standards indicated in "( )" after each question with a Yes response. Explain how the action is consistent with the goals of the policy or standard.

Location Questions:		**Yes**	**No**
1.	Is the project site on the waterfront or at the water's edge?		X
2.	Does the proposed project require a waterfront site?		X
3.	Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land underwater, or coastal waters?		X

Policy Questions:		**Yes**	**No**
	The following questions represent, in a broad sense, the policies of the WRP. Numbers in parentheses after each questions indicate the policy or policies addressed by the question. The new Waterfront Revitalization Program offers detailed explanations of the policies, including criteria for consistency determinations.		
	Check either "Yes" or "No" for each of the following questions. For all "yes" responses, provide an attachment assessing the effects of the proposed activity on the relevant policies or standards. Explain how the action would be consistent with the goals of those policies and standards.		
4.	Will the proposed project result in revitalization or redevelopment of a deteriorated or under- used waterfront site? (1)		X
5.	Is the project site appropriate for residential or commercial redevelopment? (1.1)	X	
6.	Will the action result in a change in scale or character of a neighborhood? (1.2)	X	
7.	Will the proposed activity require provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (1.3)	X	

Policy Questions cont'd:		Yes	No
8.	Is the action located in one of the designated Significant Maritime and Industrial Areas (SMIA): South Bronx, Newtown Creek, Brooklyn Navy Yard, Red Hook, Sunset Park, or Staten Island? (2)		X
9.	Are there any waterfront structures, such as piers, docks, bulkheads or wharves, located on the project sites? (2)		X
10.	Would the action involve the siting or construction of a facility essential to the generation or transmission of energy, or a natural gas facility, or would it develop new energy resources? (2.1)		X
11.	Does the action involve the siting of a working waterfront use outside of a SMIA? (2.2)		X
12.	Does the proposed project involve infrastructure improvement, such as construction or repair of piers, docks, or bulkheads? (2.3, 3.2)		X
13.	Would the action involve mining, dredging, or dredge disposal, or placement of dredged or fill materials in coastal waters? (2.3, 3.1, 4, 5.3, 6.3)		X
14.	Would the action be located in a commercial or recreational boating center, such as City Island, Sheepshead Bay or Great Kills or an area devoted to water-dependent transportation? (3)		X
15.	Would the proposed project have an adverse effect upon the land or water uses within a commercial or recreation boating center or water-dependent transportation center? (3.1)		X
16.	Would the proposed project create any conflicts between commercial and recreational boating? (3.2)		X
17.	Does the proposed project involve any boating activity that would have an impact on the aquatic environment or surrounding land and water uses? (3.3)		X
18.	Is the action located in one of the designated Special Natural Waterfront Areas (SNWA): Long Island Sound-East River, Jamaica Bay, or Northwest Staten Island? (4 and 9.2)		X
19.	Is the project site in or adjacent to a Significant Coastal Fish and Wildlife Habitats? (4.1)		X
20.	Is the site located within or adjacent to a Recognized Ecological Complex: South Shore of Staten Island or Riverdale Natural Area District? (4.1and 9.2)		X
21.	Would the action involve any activity in or near a tidal or freshwater wetland? (4.2)		X
22.	Does the project site contain a rare ecological community or would the proposed project affect a vulnerable plant, fish, or wildlife species? (4.3)		X
23.	Would the action have any effects on commercial or recreational use of fish resources? (4.4)		X
24.	Would the proposed project in any way affect the water quality classification of nearby waters or be unable to be consistent with that classification? (5)		X
25.	Would the action result in any direct or indirect discharges, including toxins, hazardous substances, or other pollutants, effluent, or waste, into any waterbody? (5.1)		X
26.	Would the action result in the draining of stormwater runoff or sewer overflows into coastal waters? (5.1)	X	
27.	Will any activity associated with the project generate nonpoint source pollution? (5.2)		X

Policy Questions cont'd:		Yes	No
28.	Would the action cause violations of the National or State air quality standards? (5.2)		X
29.	Would the action result in significant amounts of acid rain precursors (nitrates and sulfates)? (5.2C)		X
30.	Will the project involve the excavation or placing of fill in or near navigable waters, marshes, estuaries, tidal marshes or other wetlands? (5.3)		X
31.	Would the proposed action have any effects on surface or ground water supplies? (5.4)		X
32.	Would the action result in any activities within a Federally designated flood hazard area or State designated erosion hazards area? (6)		X
33.	Would the action result in any construction activities that would lead to erosion? (6)		X
34.	Would the action involve construction or reconstruction of flood or erosion control structure? (6.1)		X
35.	Would the action involve any new or increased activity on or near any beach, dune, barrier island, or bluff? (6.1)		X
36.	Does the proposed project involve use of public funds for flood prevention or erosion control? (6.2)	X	
37.	Would the proposed project affect a non-renewable source of sand? (6.3)		X
38.	Would the action result in shipping, handling, or storing of solid wastes; hazardous materials, or other pollutants? (7)		X
39.	Would the action affect any sites that have been used as landfills? (7.1)		X
40.	Would the action result in development of a site that may contain contamination or has a history of underground fuel tanks, oil spills, or other form or petroleum product use or storage? (7.2)	X	
41.	Will the proposed activity result in any transport, storage, treatment, or disposal of solid wastes or hazardous materials, or the siting of a solid or hazardous waste facility? (7.3)		X
42.	Would the action result in a reduction of existing or required access to or along coastal waters, public access areas, or public parks or open spaces? (8)		X
43.	Will the proposed project affect or be located in, on, or adjacent to any federal, state, or city park or other land in public ownership protected for open space preservation? (8)		X
44.	Would the action result in the provision of open space without the provision for its maintenance? (8.1)		X
45.	Would the action result in any development along the shoreline but NOT include new water enhanced or water dependent recreational space? (8.2)		X
46.	Will the proposed project impede visual access to coastal lands, waters and open space? (8.3)		X
47.	Does the proposed project involve publically owned or acquired land that could accommodate waterfront open space or recreation? (8.4)		X
48.	Does the project site involve lands or waters held in public trust by the state or city? (8.5)	X	

Policy Questions cont'd:	Yes	No
49. Would the action affect natural or built resources that contribute to the scenic quality of a coastal area? (9)		X
50. Does the site currently include elements that degrade the area's scenic quality or block views to the water? (9.1)		X
51. Would the proposed action have a significant adverse impact on historic, archeological, or cultural resources? (10)	X	
52. Will the proposed activity affect or be located in, on, or adjacent to an historic resource listed on the National or State Register of Historic Places, or designated as a landmark by the City of New York? (10)		X

D. CERTIFICATION

The applicant must certify that the proposed activity is consistent with New York City's Waterfront Revitalization Program, pursuant to the New York State Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If the certification can be made, complete this section.

"The proposed activity complies with New York State's Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent Name: **Linh Do, AKRF, Inc.**

Address: **440 Park Avenue South, New York, NY 10016**

Telephone **(646) 388-9723**

Applicant/Agent Signature: Date: 4/16/08

[redacted]nternal Use Only:	WRP no.
Date Received:	DOS no.

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP, or other local, state or federal discretionary review procedures, and that are within New York City's designated coastal zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program* (WRP). The WRP was adopted as a 197-a Plan by the Council of the City of New York on October 13, 1999, and approved by the New York State Department of State with the concurrence of the United States Department of Commerce pursuant to applicable state and federal law, including the Waterfront Revitalization of Coastal Areas and Inland Waterways Act. As a result of these approvals, state and federal discretionary actions within the city's coastal zone must be consistent to the maximum extent practicable with the WRP policies and the city must be given the opportunity to comment on all state and federal projects within its coastal zone.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, other state agencies or the New York City Department of City Planning in their review of the applicant's certification of consistency.

A. APPLICANT

1. Name: **New York City Economic Development Corporation**
2. Address: **110 William Street**
   New York NY 10038
3. Telephone: **(212) 312-3703** Fax: **(212) 312-3989** E-mail: **hadasko@nycedc.com**
4. [redacted]Project Site Owner: **The City of New York**

B. PROPOSED ACTIVITY

1. Brief description of activity:
   The proposed activity would include relocating two businesses to a site at 130th Street and 23rd Avenue in College Point, Queens. Currently, the site is vacant. It is expected that this City-owned site (Block 4206, Lot 100 and a portion of Block 4207, Lot 1) would be shared between two relocated businesses. The businesses that would relocate to the approximately 45,000-square-foot site include an industrial recycling, wholesale and distribution operation, and an auto-related use.
2. Purpose of activity: **The two businesses are currently located in Willets Point, and if the proposed Willets Point Redevelopment Plan is approved and moves forward, the project would require the relocation of the businesses. The City-owned property at 130th Street and 23rd Avenue has been identified as a potential relocation site.**
3. Location of Activity (street address/borough or site description):
   130th Street and 23rd Avenue in College Point, Queens (Block 4206, Lot 100 and a portion of Block 4207, Lot 1)
4. If a federal or state permit or license was issued or is required for the proposed activity, identify the permit type(s), the authorizing agency and provide the application or permit number(s), if known:
   There is no specific permit information at this time. A small area (estimated to be less than 4,000 square feet) on the eastern portion of the relocation site is part of a larger mapped freshwater wetland. In the event that development occurs in the mapped wetland or adjacent area, a permit will be needed from NYSDEC and potentially the US Army Corps of Engineers.
5. Is federal or state funding being used to finance the project? If so, please identify the funding source(s).
   No federal or state funding is being used to finance the project.
6. Will the proposed project result in any large physical change to a site within the coastal area that will require the preparation of an environmental impact statement?
   Yes _____ No X If yes, identify Lead Agency:

[redacted]Identify **city** discretionary actions, such as a zoning amendment or adoption of an urban renewal plan, required for the proposed project.
Disposition of City-owned land and approval of the business terms pursuant to Section 384(b)(4) of the New York City Charter

C. COASTAL ASSESSMENT

Location Questions:	Yes	No
1. Is the project site on the waterfront or at the water's edge?		X
2. Does the proposed project require a waterfront use?		X
3. Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land underwater, or coastal waters?		X

Policy Questions	Yes	No

The following questions represent, in a broad sense, the policies of the WRP. Numbers in parentheses after each question indicate the policy or policies addressed by the question. The new Waterfront Revitalization Program offers detailed explanations of the policies, including criteria for consistency determinations.

Check either "Yes" or "No" for each of the following questions. For all "yes" responses, provide an attachment assessing the effects of the proposed activity on the relevant policies or standards. Explain how the action would be consistent with the goals of those policies and standards.

4. Will the proposed project result in revitalization or redevelopment of a deteriorated or under-used waterfront site? (1)		X
5. Is the project site appropriate for residential or commercial development? (1.1)		X
6. Will the action result in a change in scale or character of a neighborhood? (1.2)		X
7. Will the proposed activity require provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (1.3)		X
8. Is the action located in one of the designated Significant Marine and Industrial Areas (SMIA): South Bronx, Newtown Creek, Brooklyn Navy Yard, Red Hook, Sunset Park, or Staten Island? (2)		X
9. Are there any waterfront structures, such as piers, docks, bulkheads or wharves, located on the project sites? (2)		X
10. Would the action involve the siting or construction of a facility essential to the generation or transmission of energy, or a natural gas facility, or would it develop new energy resources? (2.1)		X
11. Does the action involve the siting of a working waterfront use outside of a SMIA? (2.2)		X
12. Does the proposed project involve infrastructure improvement, such as construction or repair of piers, docks, or bulkheads? (2.3, 3.2)		X

Policy Questions cont'd	Yes	No
13. Would the action involve mining, dredging, or dredge disposal, or placement of dredged or fill materials in coastal waters? (2.3, 3.1, 4, 5.3, 6.3)		X
14. Would the action be located in a commercial or recreational boating center, such as City Island, Sheepshead Bay or Great Kills or an area devoted to water-dependent transportation? (3)		X
15. Would the proposed project have an adverse effect upon the land or water uses within a commercial or recreation boating center or water-dependent transportation center? (3.1)		X
16. Would the proposed project create any conflicts between commercial and recreational boating? (3.2)		X
17. Does the proposed project involve any boating activity that would have an impact on the aquatic environment or surrounding land and water uses? (3.3)		X
18. Is the action located in one of the designated Special Natural Waterfront Areas (SNWA): Long Island Sound-East River, Jamaica Bay, or Northwest Staten Island? (4 and 9.2)		X
19. Is the project site in or adjacent to a Significant Coastal Fish and Wildlife Habitat? (4.1)		X
20. Is the site located within or adjacent to a Recognized Ecological Complex: South Shore of Staten Island or Riverdale Natural Area District? (4.1 and 9.2)		X
21. Would the action involve any activity in or near a tidal or freshwater wetland? (4.2)	X	
22. Does the project site contain a rare ecological community or would the proposed project affect a vulnerable plant, fish, or wildlife species? (4.3)		X
23. Would the action have any effects on commercial or recreational use of fish resources? (4.4)		X
24. Would the proposed project in any way affect the water quality classification of nearby waters or be unable to be consistent with that classification? (5)		X
25. Would the action result in any direct or indirect discharges, including toxins, hazardous substances, or other pollutants, effluent, or waste, into any waterbody? (5.1)		X
26. Would the action result in the draining of stormwater runoff or sewer overflows into coastal waters? (5.1)		X
27. Will any activity associated with the project generate nonpoint source pollution? (5.2)		X
28. Would the action cause violations of the National or State air quality standards? (5.2)		X
29. Would the action result in significant amounts of acid rain precursors (nitrates and sulfates)? (5.2C)		X
30. Will the project involve the excavation or placing of fill in or near navigable waters, marshes, estuaries, tidal marshes or other wetlands?	X	
31. Would the proposed action have any effects on surface or ground water supplies? (5.4)		X
32. Would the action result in any activities within a Federally designated flood hazard area or State designated erosion hazards area? (6)		X
33. Would the action result in any construction activities that would lead to erosion? (6)		X

Policy Questions cont'd	Yes	No
34. Would the action involve construction or reconstruction of flood or erosion control structure? (6.1)		X
35. Would the action involve any new or increased activity on or near any beach, dune, barrier island, or bluff? (6.1)		X
36. Does the proposed project involve use of public funds for flood prevention or erosion control? (6.2)		X
37. Would the proposed project affect a non-renewable source of sand? (6.3)		X
38. Would the action result in shipping, handling, or storing of solid wastes; hazardous materials, or other pollutants? (7)		X
39. Would the action affect any sites that have been used as landfills? (7.1)		X
40. Would the action result in development of a site that may contain contamination or has history of underground fuel tanks, oil spills, or other form of petroleum use or storage? (7.2)		X
41. Will the proposed activity result in any transport, storage, treatment, or disposal of solid wastes or hazardous materials, or the siting of a solid or hazardous waste facility? (7.3)		X
42. Would the action result in a reduction of existing or required access to or along coastal waters, public access areas, or public parks or open spaces? (8)		X
43. Will the proposed project affect or be located in, on, or adjacent to any federal, state, or city park or other land in public ownership protected for open space preservation? (8)		X
44. Would the action result in the provision of open space without the provision for its maintenance? (8.1)		X
45. Would the action result in any development along the shoreline but NOT include new water-enhanced or water-dependent recreational space? (8.2)		X
46. Will the proposed project impede visual access to coastal lands, waters and open space? (8.3)		X
47. Does the proposed project involve publicly owned or acquired land that could accommodate waterfront open space or recreation? (8.4)		X
48. Does the project site involve lands or waters held in public trust by the state or city? (8.5)		X
49. Would the action affect natural or built resources that contribute to the scenic quality of a coastal area? (9)		X
50. Does the site currently include elements that degrade the area's scenic quality or block views to the water? (9.1)		X
51. Would the proposed action have a significant adverse impact on historic, archaeological, or cultural resources? (10)		X
52. Will the proposed activity affect or be located in, on, or adjacent to an historic resource listed on the National or State Register of Historic Places, or designated as a landmark by the City of New York? (10)		X

D. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's Waterfront Revitalization Program, pursuant to the New York State Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If the certification can be made, complete this section.

"The proposed activity complies with New York State's Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent Name: **New York City Economic Development Corporation, Hardy Adasko, Senior Vice President**

Address: **110 William Street**
New York, NY 10038

Telephone **(212) 312-3703**

Applicant/Agent Signature: H Hardy Adasko

Date 9/12/08

Policy 4.2: Protect and restore tidal and freshwater wetlands.

A small area (estimated to be less than 4,000 square feet) on the eastern portion of the relocation site is part of a larger mapped freshwater wetland. A final site plan for the new buildings has not been completed. In the event that development occurs in the mapped wetland or adjacent area, a permit will be needed from NYSDEC and potentially the US Army Corps of Engineers. Such permitting process would involve a separate environmental review. If any wetland filling should occur, mitigation would be provided in the former Flushing Airport area as part of the Flushing Airport Wetlands Restoration Project. Therefore, the proposed relocation is consistent with this policy.

Internal Use Only:	WRP no.
Date Received:	DOS no.

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP, or other local, state or federal discretionary review procedures, and that are within New York City's designated coastal zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program* (WRP). The WRP was adopted as a 197-a Plan by the Council of the City of New York on October 13, 1999, and approved by the New York State Department of State with the concurrence of the United States Department of Commerce pursuant to applicable state and federal law, including the Waterfront Revitalization of Coastal Areas and Inland Waterways Act. As a result of these approvals, state and federal discretionary actions within the city's coastal zone must be consistent to the maximum extent practicable with the WRP policies and the city must be given the opportunity to comment on all state and federal projects within its coastal zone.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, other state agencies or the New York City Department of City Planning in their review of the applicant's certification of consistency.

A. APPLICANT

1. Name: **New York City Economic Development Corporation**
2. Address: **110 William Street**
   New York NY 10038
3. Telephone: **(212) 312-3703** Fax: **(212) 312-3989** E-mail: **hadasko@nycedc.com**
4. Project Site Owner: **The City of New York**

B. PROPOSED ACTIVITY

1. Brief description of activity:
   The proposed activity would include relocating one business to a site at 122nd Street and 29th Avenue in College Point, Queens. Currently, there is an asphalt manufacturing plant on the site that is expected to move and consolidate with the rest of that company's operations on a neighboring property. It is expected that this 45,750 square foot City –owned site (Block 4317, Lots 1 and 20) would be occupied by a wholesaler and dealer in used auto parts. To accommodate the relocated business, it is expected that an approximately 8,000 square foot one-story building would be constructed to house office space and another structure built for parts storage. Access to the site would likely be provided from 29th Avenue.
2. Purpose of activity: **The business is currently located in Willets Point, and if the proposed Willets Point Redevelopment Plan is approved and moves forward, the project would require the relocation of the business. The City-owned property at 122nd Street and 29th Avenue has been identified as a potential relocation site.**
3. Location of Activity (street address/borough or site description):
   122nd Street and 29th Avenue in College Point, Queens (Block 4317, Lots 1 and 2)
4. If a federal or state permit or license was issued or is required for the proposed activity, identify the permit type(s), the authorizing agency and provide the application or permit number(s), if known:
   There is no specific permit information at this time.
5. Is federal or state funding being used to finance the project? If so, please identify the funding source(s).
   No federal or state funding is being used to finance the project.
6. Will the proposed project result in any large physical change to a site within the coastal area that will require the preparation of an environmental impact statement?
   Yes _____ No X If yes, identify Lead Agency:
7. Identify **city** discretionary actions, such as a zoning amendment or adoption of an urban renewal plan, required for the proposed project.
   Disposition of City-owned land and approval of the business terms pursuant to Section 384(b)(4) of the New York City Charter.

C. COASTAL ASSESSMENT

Location Questions:	Yes	No
1. Is the project site on the waterfront or at the water's edge?		X
2. Does the proposed project require a waterfront use?		X
3. Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land underwater, or coastal waters?		X

Policy Questions	Yes	No

The following questions represent, in a broad sense, the policies of the WRP. Numbers in parentheses after each question indicate the policy or policies addressed by the question. The new Waterfront Revitalization Program offers detailed explanations of the policies, including criteria for consistency determinations.

Check either "Yes" or "No" for each of the following questions. For all "yes" responses, provide an attachment assessing the effects of the proposed activity on the relevant policies or standards. Explain how the action would be consistent with the goals of those policies and standards.

	Yes	No
4. Will the proposed project result in revitalization or redevelopment of a deteriorated or under-used waterfront site? (1)		X
5. Is the project site appropriate for residential or commercial development? (1.1)		X
6. Will the action result in a change in scale or character of a neighborhood? (1.2)		X
7. Will the proposed activity require provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (1.3)		X
8. Is the action located in one of the designated Significant Marine and Industrial Areas (SMIA): South Bronx, Newtown Creek, Brooklyn Navy Yard, Red Hook, Sunset Park, or Staten Island? (2)		X
9. Are there any waterfront structures, such as piers, docks, bulkheads or wharves, located on the project sites? (2)		X
10. Would the action involve the siting or construction of a facility essential to the generation or transmission of energy, or a natural gas facility, or would it develop new energy resources? (2.1)		X
11. Does the action involve the siting of a working waterfront use outside of a SMIA? (2.2)		X
12. Does the proposed project involve infrastructure improvement, such as construction or repair of piers, docks, or bulkheads? (2.3, 3.2)		X

Policy Questions cont'd	Yes	No
13. Would the action involve mining, dredging, or dredge disposal, or placement of dredged or fill materials in coastal waters? (2.3, 3.1, 4, 5.3, 6.3)		X
14. Would the action be located in a commercial or recreational boating center, such as City Island, Sheepshead Bay or Great Kills or an area devoted to water-dependent transportation? (3)		X
15. Would the proposed project have an adverse effect upon the land or water uses within a commercial or recreation boating center or water-dependent transportation center? (3.1)		X
16. Would the proposed project create any conflicts between commercial and recreational boating? (3.2)		X
17. Does the proposed project involve any boating activity that would have an impact on the aquatic environment or surrounding land and water uses? (3.3)		X
18. Is the action located in one of the designated Special Natural Waterfront Areas (SNWA): Long Island Sound-East River, Jamaica Bay, or Northwest Staten Island? (4 and 9.2)		X
19. Is the project site in or adjacent to a Significant Coastal Fish and Wildlife Habitat? (4.1)		X
20. Is the site located within or adjacent to a Recognized Ecological Complex: South Shore of Staten Island or Riverdale Natural Area District? (4.1 and 9.2)		X
21. Would the action involve any activity in or near a tidal or freshwater wetland? (4.2)		X
22. Does the project site contain a rare ecological community or would the proposed project affect a vulnerable plant, fish, or wildlife species? (4.3)		X
23. Would the action have any effects on commercial or recreational use of fish resources? (4.4)		X
24. Would the proposed project in any way affect the water quality classification of nearby waters or be unable to be consistent with that classification? (5)		X
25. Would the action result in any direct or indirect discharges, including toxins, hazardous substances, or other pollutants, effluent, or waste, into any waterbody? (5.1)		X
26. Would the action result in the draining of stormwater runoff or sewer overflows into coastal waters? (5.1)		X
27. Will any activity associated with the project generate nonpoint source pollution? (5.2)		X
28. Would the action cause violations of the National or State air quality standards? (5.2)		X
29. Would the action result in significant amounts of acid rain precursors (nitrates and sulfates)? (5.2C)		X
30. Will the project involve the excavation or placing of fill in or near navigable waters, marshes, estuaries, tidal marshes or other wetlands?		X
31. Would the proposed action have any effects on surface or ground water supplies? (5.4)		X
32. Would the action result in any activities within a Federally designated flood hazard area or State designated erosion hazards area? (6)		X
33. Would the action result in any construction activities that would lead to erosion? (6)		X

Policy Questions cont'd	Yes	No
34. Would the action involve construction or reconstruction of flood or erosion control structure? (6.1)		X
35. Would the action involve any new or increased activity on or near any beach, dune, barrier island, or bluff? (6.1)		X
36. Does the proposed project involve use of public funds for flood prevention or erosion control? (6.2)		X
37. Would the proposed project affect a non-renewable source of sand? (6.3)		X
38. Would the action result in shipping, handling, or storing of solid wastes; hazardous materials, or other pollutants? (7)		X
39. Would the action affect any sites that have been used as landfills? (7.1)		X
40. Would the action result in development of a site that may contain contamination or has history of underground fuel tanks, oil spills, or other form of petroleum use or storage? (7.2)	X	
41. Will the proposed activity result in any transport, storage, treatment, or disposal of solid wastes or hazardous materials, or the siting of a solid or hazardous waste facility? (7.3)		X
42. Would the action result in a reduction of existing or required access to or along coastal waters, public access areas, or public parks or open spaces? (8)		X
43. Will the proposed project affect or be located in, on, or adjacent to any federal, state, or city park or other land in public ownership protected for open space preservation? (8)		X
44. Would the action result in the provision of open space without the provision for its maintenance? (8.1)		X
45. Would the action result in any development along the shoreline but NOT include new water-enhanced or water-dependent recreational space? (8.2)		X
46. Will the proposed project impede visual access to coastal lands, waters and open space? (8.3)		X
47. Does the proposed project involve publicly owned or acquired land that could accommodate waterfront open space or recreation? (8.4)		X
48. Does the project site involve lands or waters held in public trust by the state or city? (8.5)		X
49. Would the action affect natural or built resources that contribute to the scenic quality of a coastal area? (9)		X
50. Does the site currently include elements that degrade the area's scenic quality or block views to the water? (9.1)		X
51. Would the proposed action have a significant adverse impact on historic, archaeological, or cultural resources? (10)		X
52. Will the proposed activity affect or be located in, on, or adjacent to an historic resource listed on the National or State Register of Historic Places, or designated as a landmark by the City of New York? (10)		X

D. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's Waterfront Revitalization Program, pursuant to the New York State Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If the certification can be made, complete this section.

"The proposed activity complies with New York State's Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent Name: **New York City Economic Development Corporation, Hardy Adasko, Senior Vice President**

Address: **110 William Street**
New York, NY 10038

Telephone **(212) 312-3703**

Applicant/Agent Signature: H Hardy Adasko

Date 9/12/08

Policy 7.2: Prevent and remediate discharge of petroleum products.

Environmental conditions at the project site were evaluated in a 1998 Phase I Environmental Site Assessment (ESA) and an Investigation Summary Report dated January 2005. Past uses of the property included carting operations and automotive maintenance activities. Several petroleum aboveground and underground storage tanks were present, and diesel, gasoline, lubricants, hydraulic oils, and solvents were commonly used on-site.

As part of its contract to sell the relocation site and/or as part of deed restrictions on the property, the City will include language that identifies measures to be undertaken prior to construction on the site. Work would be conducted in accordance with a RAP approved by DEP and, if applicable, DEC, and would include a HASP. The HASP would detail measures to reduce the potential for exposure (e.g., dust control) and measures to identify and manage known contamination and unexpectedly encountered contamination. With these measures in place, it is expected that there would not be any significant adverse impacts from hazardous materials. Therefore, the relocation would be consistent with this policy.

APPENDIX E

TRAFFIC VOLUME NETWORKS

Appendix E: Traffic Volume Networks

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2017 No Build Volumes

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2017 Build Increment Volumes

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2017 Build Volumes

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Figure E-27 Game Day – Weekend Arrival Peak Hour
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Grand Central Parkway
Astoria Blvd.
Northern Blvd.
34th Ave.
34th Avenue
Roosevelt Ave.
108th St.
111th St.
114th St.
126th St.
Grand Central Pkwy.
L.I.R.R.
Shea Stadium
U.S.T.A.
Willets Point Blvd.
College Point Blvd.
Van Wyck Expwy.
Prince St.
Main St.
Union St.
Parsons Blvd.
41st Ave.
Sanford Ave.
Kissena Blvd.
Northern Blvd. WB
Northern Blvd. EB
College Point Blvd.
Main St.
Astoria Blvd.
GCP WB
WSE Ramp to GCP
Ramp to GCP
GCP EB
GCP SB Ramp to WSE
WSE SB
Astoria Blvd. WB
Astoria Blvd. EB
Northern Blvd. WB
Northern Blvd. EB
WSE NB
GCP Exit to Nthrn Blvd
Ramp
34th Ave.
126th St.
Northern Blvd. WB
Northern Blvd. EB
SB WSE/WB Nthrn Blvd. Ramp
EB Nthrn Blvd. Ramp
Willets Point Blvd.
Van Wyck Expwy.
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Eng-Wong, Taub & Associates
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FIGURE E - 1
2006 EXISTING VOLUMES
NON GAME DAY - WEEKDAY AM PEAK HOUR (7:45 AM - 8:45 AM)
WILLETS POINT DEVELOPMENT EIS

Grand Central Parkway
Astoria Blvd.
Northern Blvd.
34th Avenue
34th Ave.
Willets Point Blvd.
126th St.
College Point Blvd.
Prince St.
Main St.
Union St.
Parsons Blvd.
Roosevelt Ave.
41st Ave.
Sanford Ave.
Kissena Blvd.
Van Wyck Expwy.
L.I.R.R.
Shea Stadium
U.S.T.A.
108th St.
111th St.
114th St.
Grand Central Pkwy.
College Point Blvd.
Northern Blvd. WB
Northern Blvd. EB
Astoria Blvd
WSE Ramp to GCP
GCP WB
GCP EB
Ramp to GCP
GCP SB Ramp to WSE
WSE SB
Astoria Blvd. WB
Northern Blvd. WB
Astoria Blvd. EB
WSE NB
GCP Exit to Whtn Blvd
Ramp
34th Ave
126th St.
Northern Blvd. WB
Northern Blvd. EB
EB Whtn Blvd. Ramp
SB WSE/WB N'thrn. Blvd. Ramp
Willets Point Blvd.
Van Wyck Expwy.
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FIGURE E - 2
2006 EXISTING VOLUMES
NON GAME DAY - WEEKDAY MIDDAY PEAK HOUR (1:00 PM - 2:00 PM)
WILLETS POINT DEVELOPMENT EIS

Grand Central Parkway
Astoria Blvd.
Northern Blvd.
34th Ave.
108th St.
111th St.
114th St.
Roosevelt Ave.
Grand Central Pkwy.
L.I.R.R.
U.S.T.A.
Shea Stadium
34th Avenue
126th St.
Willets Point Blvd.
Van Wyck Expwy.
College Point Blvd.
Prince St.
Main St.
Union St.
Parsons Blvd.
Roosevelt Ave.
41st Ave.
Sanford Ave.
Kissena Blvd.
Northern Blvd. WB
Northern Blvd. EB
Astoria Blvd
WSE SB
WSE NB
WSE Ramp to GCP
GCP WB
GCP EB
Ramp to GCP
GCP EB Ramp to WSE
Astoria Blvd WB
Astoria Blvd EB
Northern Blvd. WB
Northern Blvd. EB
Ramp
GCP Exit to Nthrn Blvd
126th St.
34th Ave
114th St.
EB Nthrn Blvd. Ramp
SB WSE/WB Nthrn Blvd. Ramp
Willets Point Blvd.
Van Wyck Expwy.
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FIGURE E - 3
2006 EXISTING VOLUMES
NON GAME DAY - WEEKDAY PM PEAK HOUR (5:15 PM - 6:15 PM)
WILLETS POINT DEVELOPMENT EIS

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FIGURE E - 4
2006 EXISTING VOLUMES
NON GAME DAY - SATURDAY MIDDAY PEAK HOUR (1:00 PM - 2:00 PM)
WILLETS POINT DEVELOPMENT EIS

Grand Central Parkway
Astoria Blvd.
Northern Blvd.
34th Ave.
114th St.
111th St.
108th St.
Roosevelt Ave.
Grand Central Pkwy.
L.I.R.R.
U.S.T.A.
Shea Stadium
34th Avenue
Willets Point Blvd.
126th St.
Van Wyck Expwy.
College Point Blvd.
Prince St.
Main St.
Union St.
Parsons Blvd.
Roosevelt Ave.
41st Ave.
Sanford Ave.
Kissena Blvd.
Northern Blvd. WB
Northern Blvd. EB
Ramp
WSE Ramp to GCP
GCP WB
Ramp to GCP
GCP EB
GCP SB Ramp to WSE
WSE SB
WSE NB
Astoria Blvd WB
Astoria Blvd EB
GCP East to Ntbn Blvd
SB WSE/WB Ntbn Blvd Ramp
EB Ntbn Blvd Ramp
Willets Point Blvd
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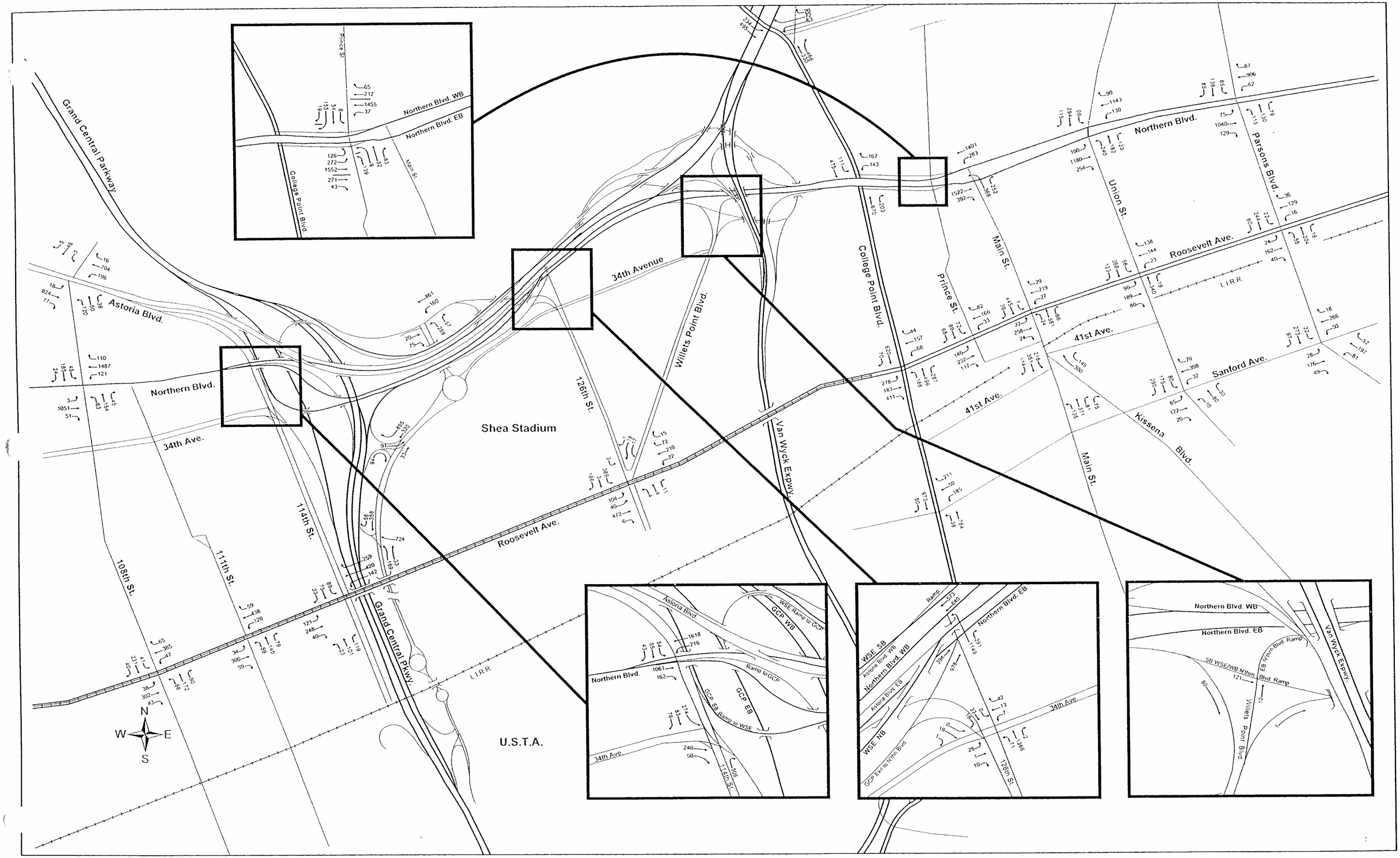
FIGURE E - 5
2006 EXISTING VOLUMES
GAME DAY - WEEKDAY ARRIVAL PEAK HOUR (6:00 PM - 7:00 PM)
WILLETS POINT DEVELOPMENT EIS

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Grand Central Parkway
Astoria Blvd.
Northern Blvd.
34th Ave.
34th Avenue
Willets Point Blvd.
126th St.
Shea Stadium
College Point Blvd.
Prince St.
Main St.
Union St.
Parsons Blvd.
Roosevelt Ave.
L.I.R.R.
41st Ave.
Sanford Ave.
Kissena Blvd.
Van Wyck Expwy.
114th St.
111th St.
108th St.
Grand Central Pkwy.
U.S.T.A.
Northern Blvd. WB
Northern Blvd. EB
College Point Blvd.
Main St.
Astoria Blvd
WSE Ramp to GCP
GCP WB
Ramp to GCP
GCP SB
Ramp to WSE
GCP EB
WSE SB
Astoria Blvd. WB
Northern Blvd. WB
Astoria Blvd. EB
Northern Blvd. EB
WSE NB
GCP Exit to Nthrn Blvd
Ramp
34th Ave.
128th St.
Northern Blvd. WB
Northern Blvd. EB
EB Nthrn Blvd. Ramp
SB WSE/WB Nthrn Blvd. Ramp
Willets Point Blvd.
Van Wyck Expwy.
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Eng-Wong, Taub & Associates
Traffic and Transportation Consultants

FIGURE E - 6
2006 EXISTING VOLUMES
GAME DAY - WEEKEND ARRIVAL PEAK HOUR (12:00 PM - 1:00 PM)
WILLETS POINT DEVELOPMENT EIS

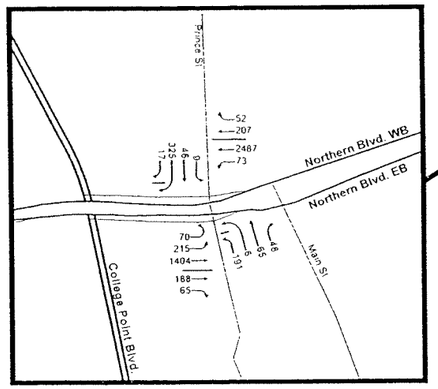


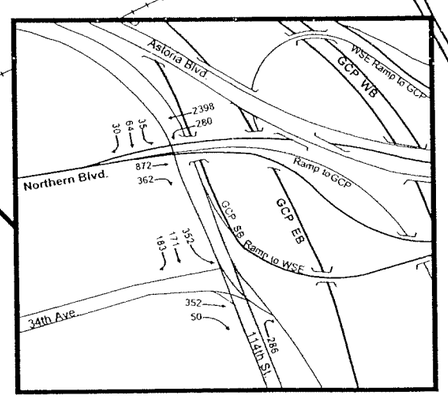
Eng-Wong, Taub & Associates

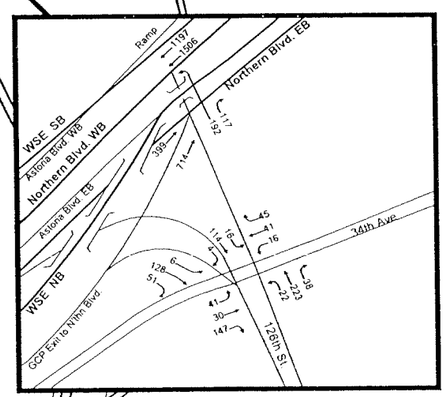
Traffic and Transportation Consultants

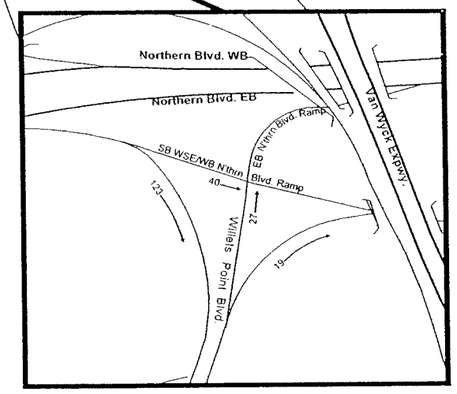
FIGURE E - 7
2006 EXISTING VOLUMES
GAME DAY - WEEKEND DEPARTURE PEAK HOUR (3:45 PM - 4:45 PM)
WILLETS POINT DEVELOPMENT EIS

Grand Central Parkway
Astoria Blvd.
Northern Blvd.
34th Avenue
Willets Point Blvd.
College Point Blvd.
Prince St.
Main St.
Union St.
Parsons Blvd.
Roosevelt Ave.
41st Ave.
Sanford Ave.
Kissena Blvd.
126th St.
Van Wyck Expwy.
Citi Field
34th Ave.
114th St.
111th St.
106th St.
Grand Central Pkwy.
L.I.R.R.
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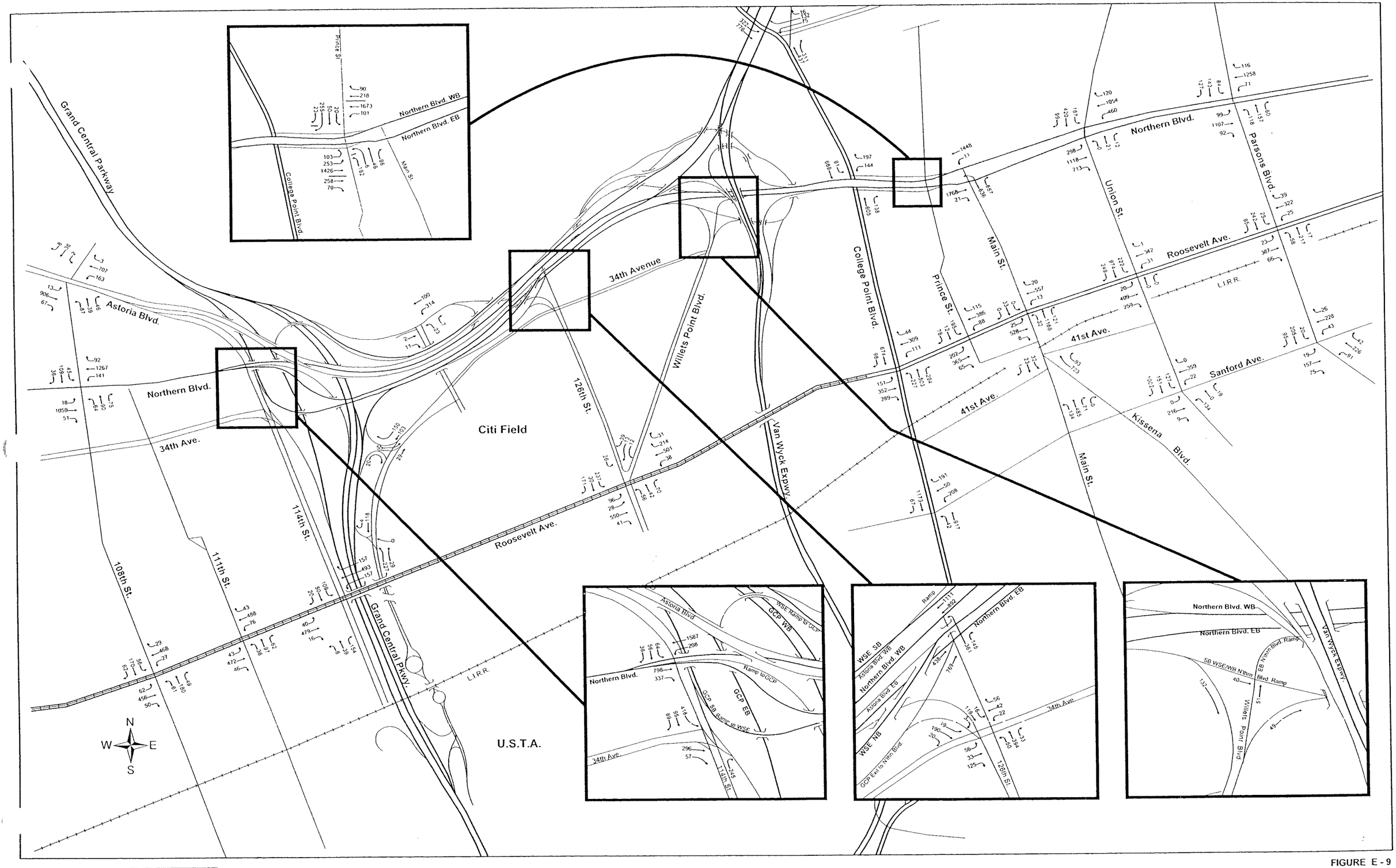






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FIGURE E - 8
2017 NO BUILD VOLUMES
NON GAME DAY - WEEKDAY AM PEAK HOUR (7:45 AM - 8:45 AM)
WILLETS POINT DEVELOPMENT FGEIS

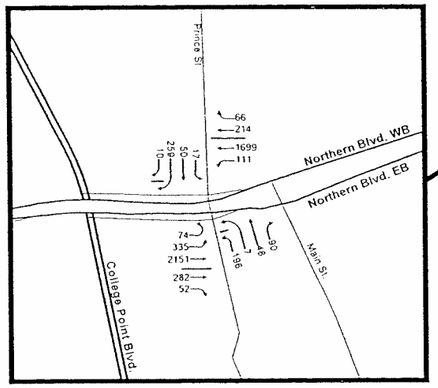


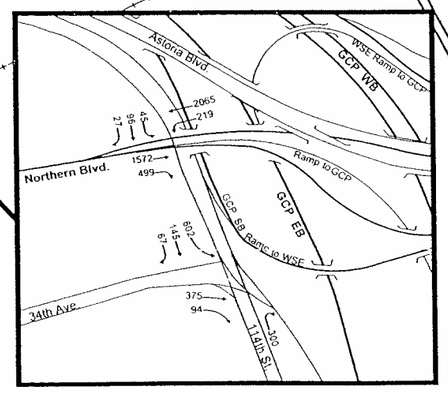
Eng-Wong, Taub & Associates

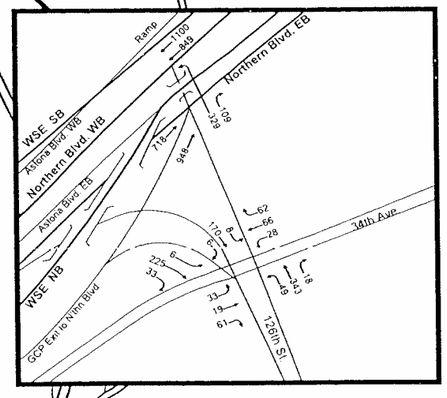
Traffic and Transportation Consultants

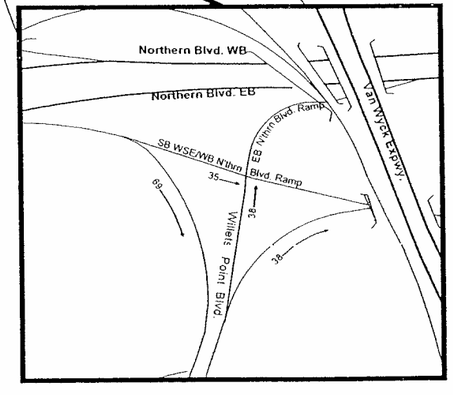
FIGURE E - 9
2017 NO BUILD VOLUMES
NON GAME DAY - WEEKDAY MIDDAY PEAK HOUR (1:00 PM - 2:00 PM)
WILLETS POINT DEVELOPMENT FGEIS

Grand Central Parkway
Astoria Blvd.
Northern Blvd.
34th Ave.
Roosevelt Ave.
108th St.
111th St.
114th St.
126th St.
Willets Point Blvd.
College Point Blvd.
Prince St.
Main St.
Union St.
Parsons Blvd.
Van Wyck Expwy.
41st Ave.
Sanford Ave.
Kissena Blvd.
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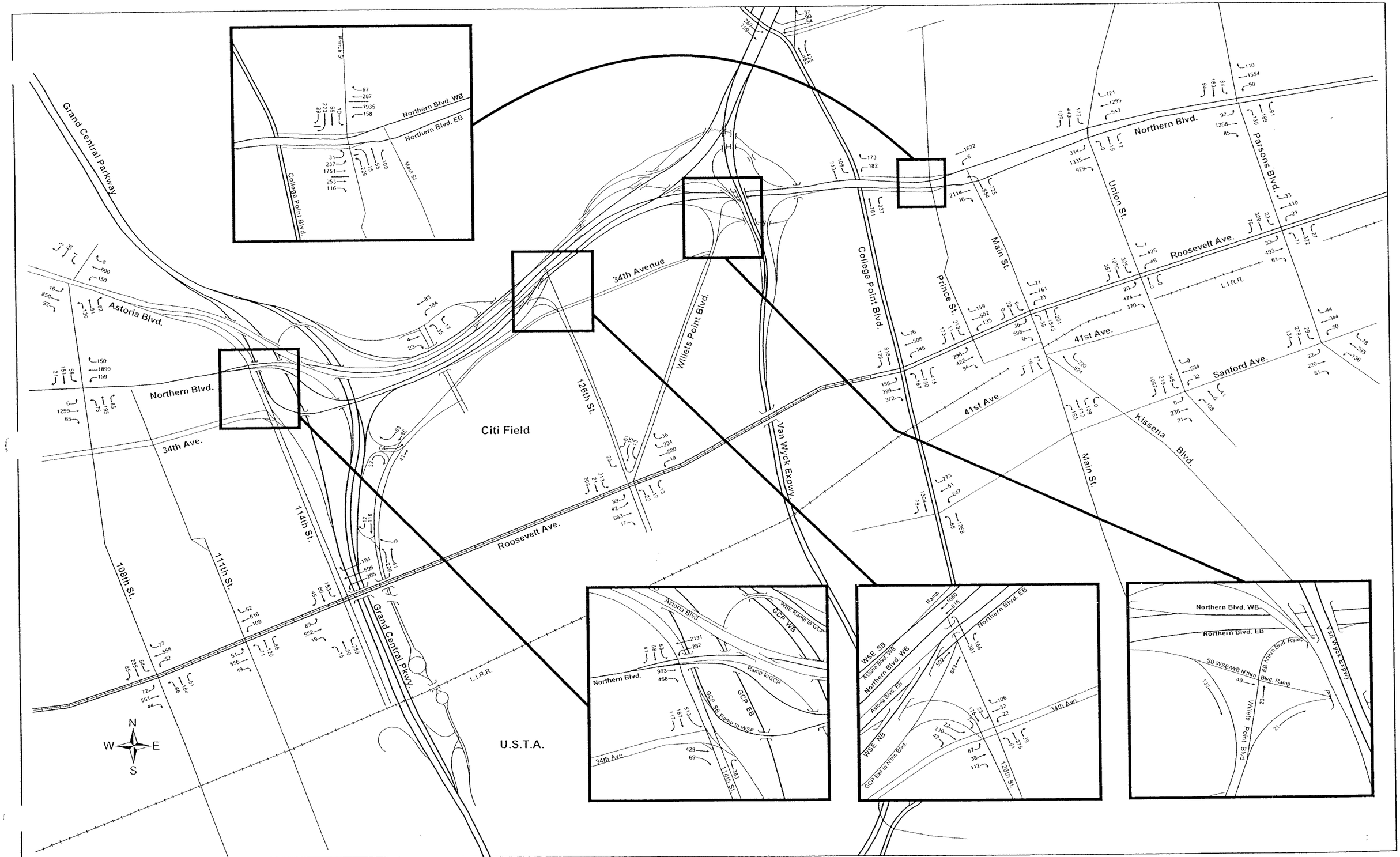






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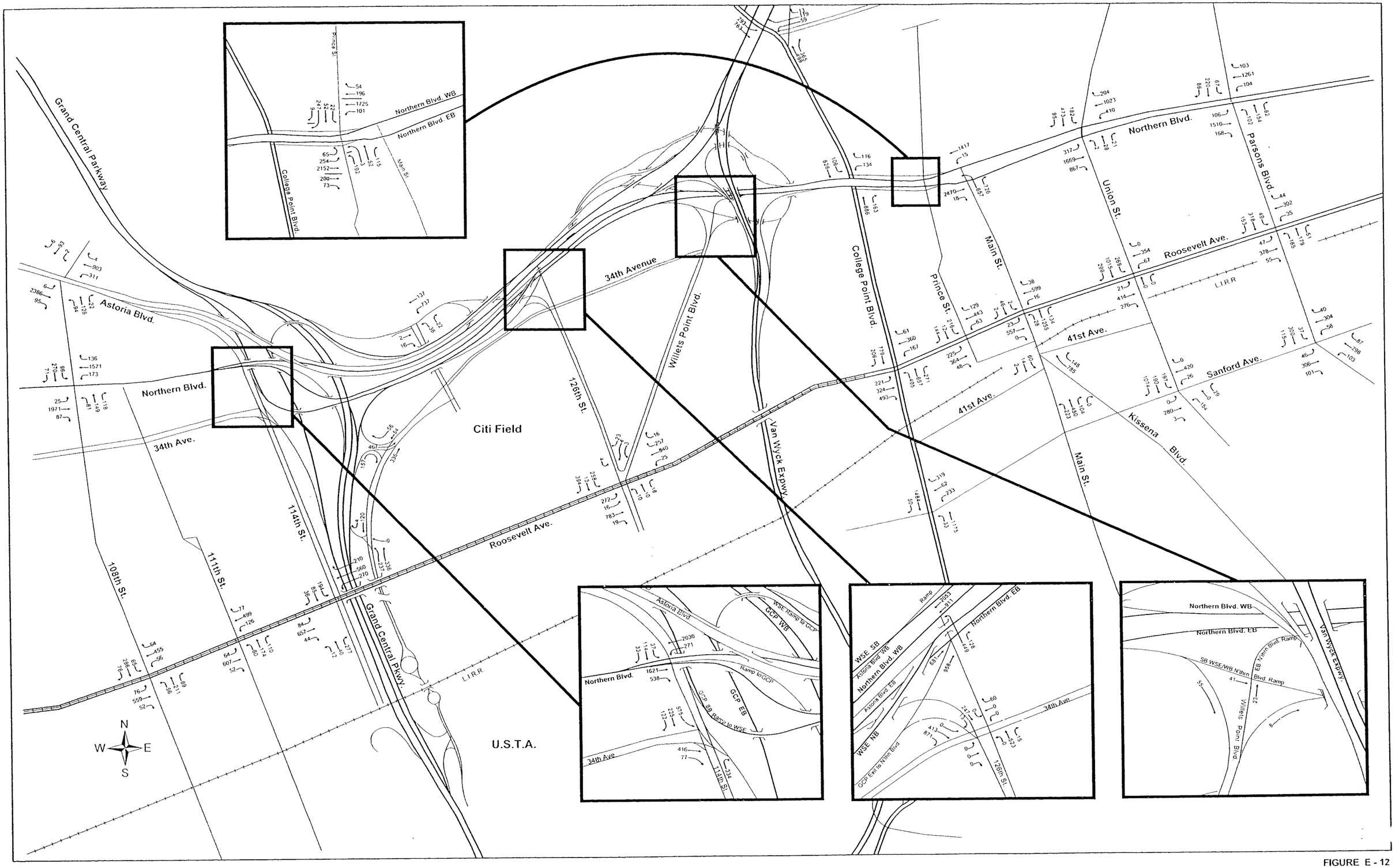
FIGURE E - 10
2017 NO BUILD VOLUMES
NON GAME DAY - WEEKDAY PM PEAK HOUR (5:15 PM - 6:15 PM)
WILLETS POINT DEVELOPMENT FGEIS



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FIGURE E - 11
2017 NO BUILD VOLUMES
NON GAME DAY - SATURDAY MIDDAY PEAK HOUR (1:00 PM - 2:00 PM)
WILLETS POINT DEVELOPMENT FGEIS



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FIGURE E - 12
2017 NO BUILD VOLUMES
GAME DAY - WEEKDAY ARRIVAL PEAK HOUR (6:00 PM - 7:00 PM)
WILLETS POINT DEVELOPMENT FGEIS

Grand Central Parkway
Astoria Blvd.
Northern Blvd.
34th Ave.
108th St.
111th St.
114th St.
126th St.
Roosevelt Ave.
Grand Central Pkwy.
L.I.R.R.
U.S.T.A.
Citi Field
34th Avenue
Willets Point Blvd.
College Point Blvd.
Van Wyck Expwy.
Prince St.
Main St.
Union St.
Parsons Blvd.
41st Ave.
Sanford Ave.
Kissena Blvd.
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Northern Blvd. EB
College Point Blvd.
Main St.
Astoria Blvd
WSE Ramp to GCP
GCP WB
Ramp to GCP
GCP EB
GCP SB Ramp to WSE
WSE SB
Astoria Blvd WB
Astoria Blvd EB
WSE NB
GCP Exit to Nthrn Blvd
Ramp
Northern Blvd. EB
34th Ave
126th St.
Northern Blvd. WB
Northern Blvd. EB
SB WSE/WB Nthrn Blvd. Ramp
EB Nthrn Blvd. Ramp
Willets Point Blvd.
Van Wyck Expwy.

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FIGURE E - 13
2017 NO BUILD VOLUMES
GAME DAY - WEEKEND ARRIVAL PEAK HOUR (12:00 PM - 1:00 PM)
WILLETS POINT DEVELOPMENT FGEIS

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FIGURE E - 14
2017 NO BUILD VOLUMES
GAME DAY - WEEKEND DEPARTURE PEAK HOUR (3:45 PM - 4:45 PM)
WILLETS POINT DEVELOPMENT FGEIS

Grand Central Parkway
Astoria Blvd.
Northern Blvd.
34th Ave.
108th St.
111th St.
114th St.
Roosevelt Ave.
Grand Central Pkwy.
L.I.R.R.
U.S.T.A.
Citi Field
34th Avenue
Willets Point Blvd.
126th St.
College Point Blvd.
Van Wyck Expwy.
Prince St.
Main St.
Union St.
Parsons Blvd.
41st Ave.
Sanford Ave.
Kissena Blvd.
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Northern Blvd. WB
Northern Blvd. EB
College Point Blvd.
Main St.

Astoria Blvd.
WSE Ramp to GCP
GCP WB
Northern Blvd.
Ramp to GCP
GCP SB Ramp to WSE
GCP EB
34th Ave.
114th St.

WSE SB
Astoria Blvd. WB
Northern Blvd. WB
Astoria Blvd. EB
WSE NB
GCP Exit to Nthn Blvd
Ramp
Northern Blvd. EB
34th Ave
126th St.

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FIGURE E - 15
2017 BUILD INCREMENT VOLUMES
NON GAME DAY - WEEKDAY AM PEAK HOUR (7:45 AM - 8:45 AM)
WILLETS POINT DEVELOPMENT FGEIS

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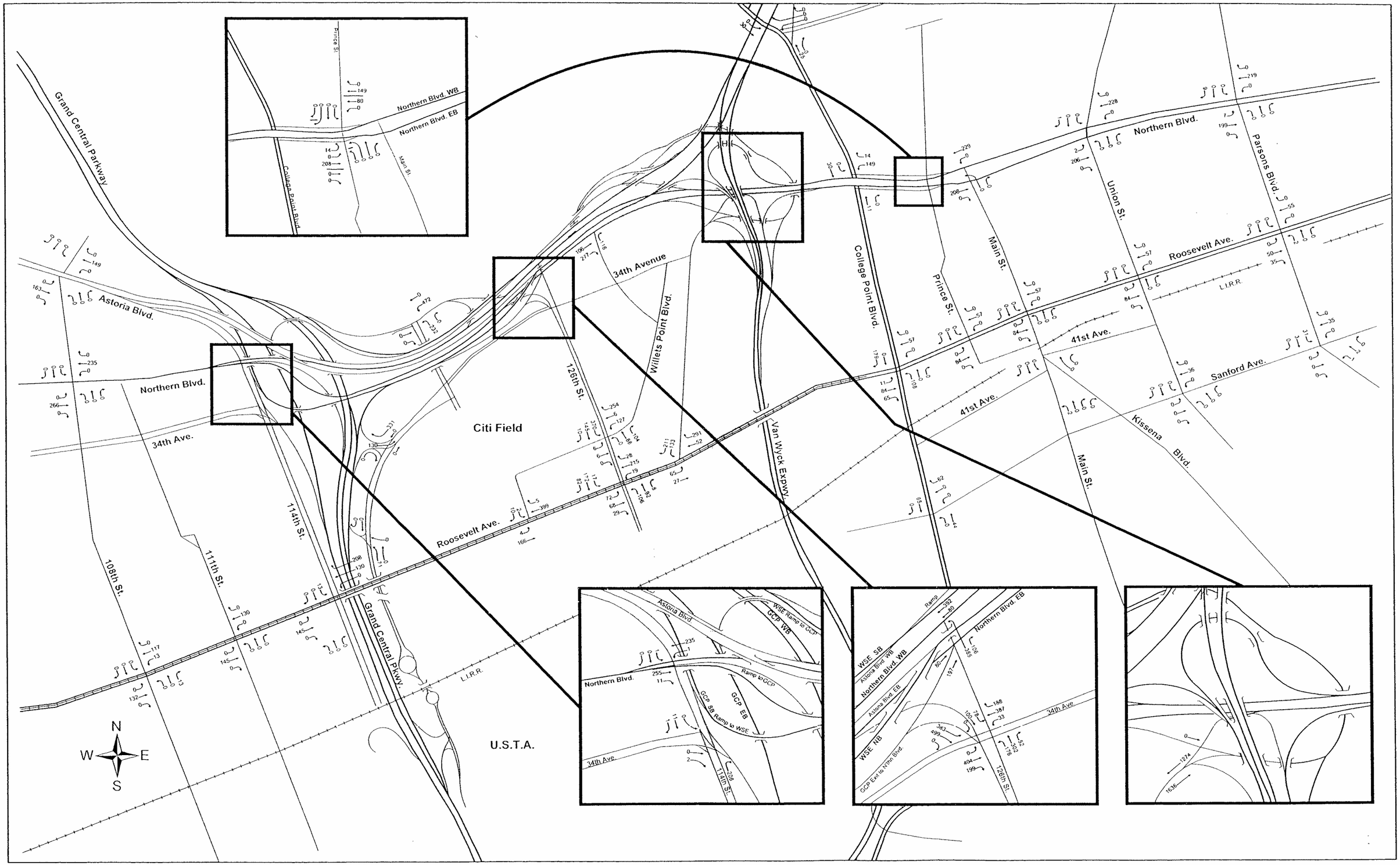
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FIGURE E - 16
2017 BUILD INCREMENT VOLUMES
NON GAME DAY - WEEKDAY MIDDAY PEAK HOUR (1:00 PM - 2:00 PM)
WILLETS POINT DEVELOPMENT FGEIS

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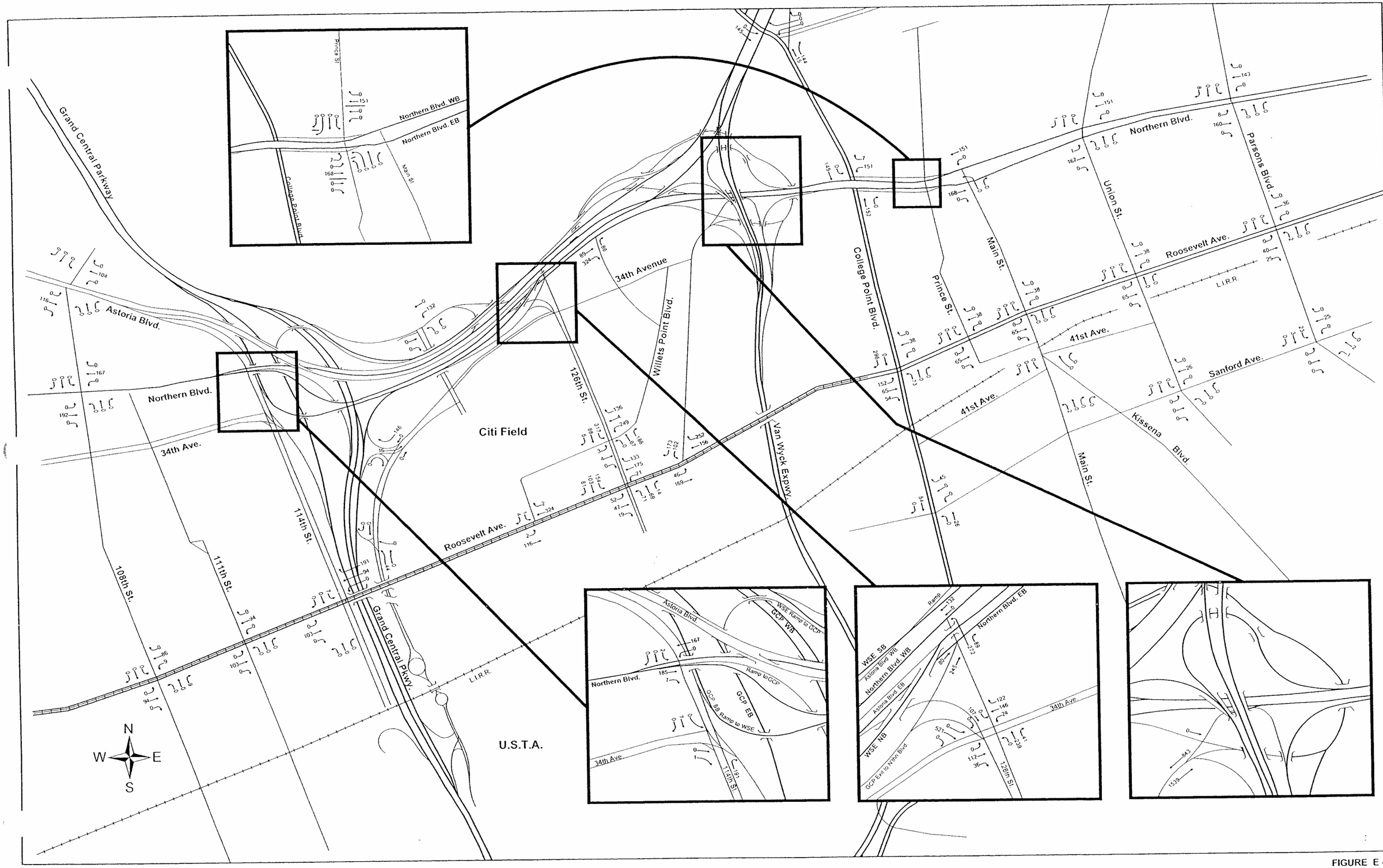
FIGURE E - 17
2017 BUILD INCREMENT VOLUMES
NON GAME DAY - WEEKDAY PM PEAK HOUR (5:15 PM - 6:15 PM)
WILLETS POINT DEVELOPMENT FGEIS



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Traffic and Transportation Consultants

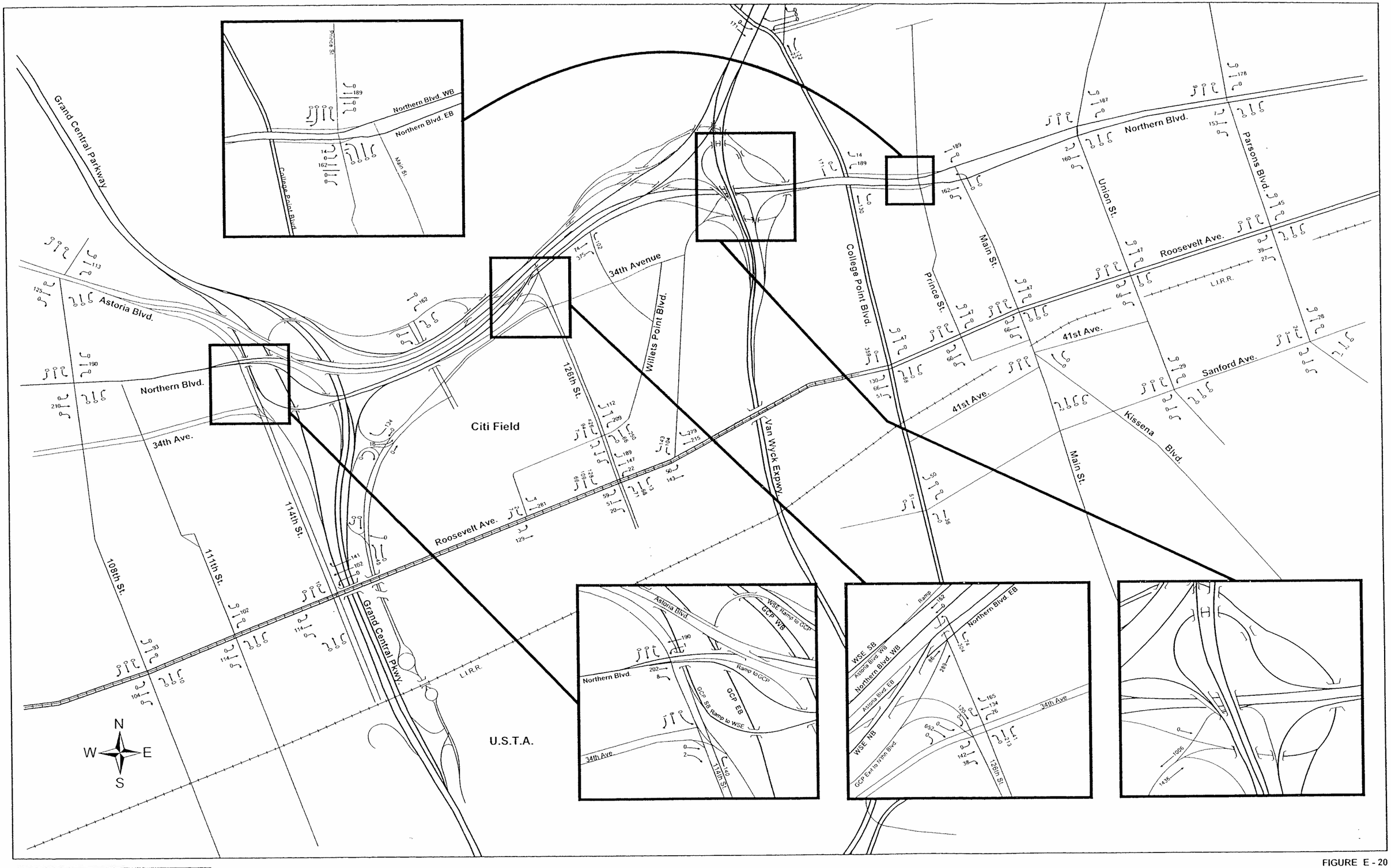
FIGURE E - 18
2017 BUILD INCREMENT VOLUMES
NON GAME DAY - SATURDAY MIDDAY PEAK HOUR (1:00 PM - 2:00 PM)
WILLETS POINT DEVELOPMENT FGEIS



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Traffic and Transportation Consultants

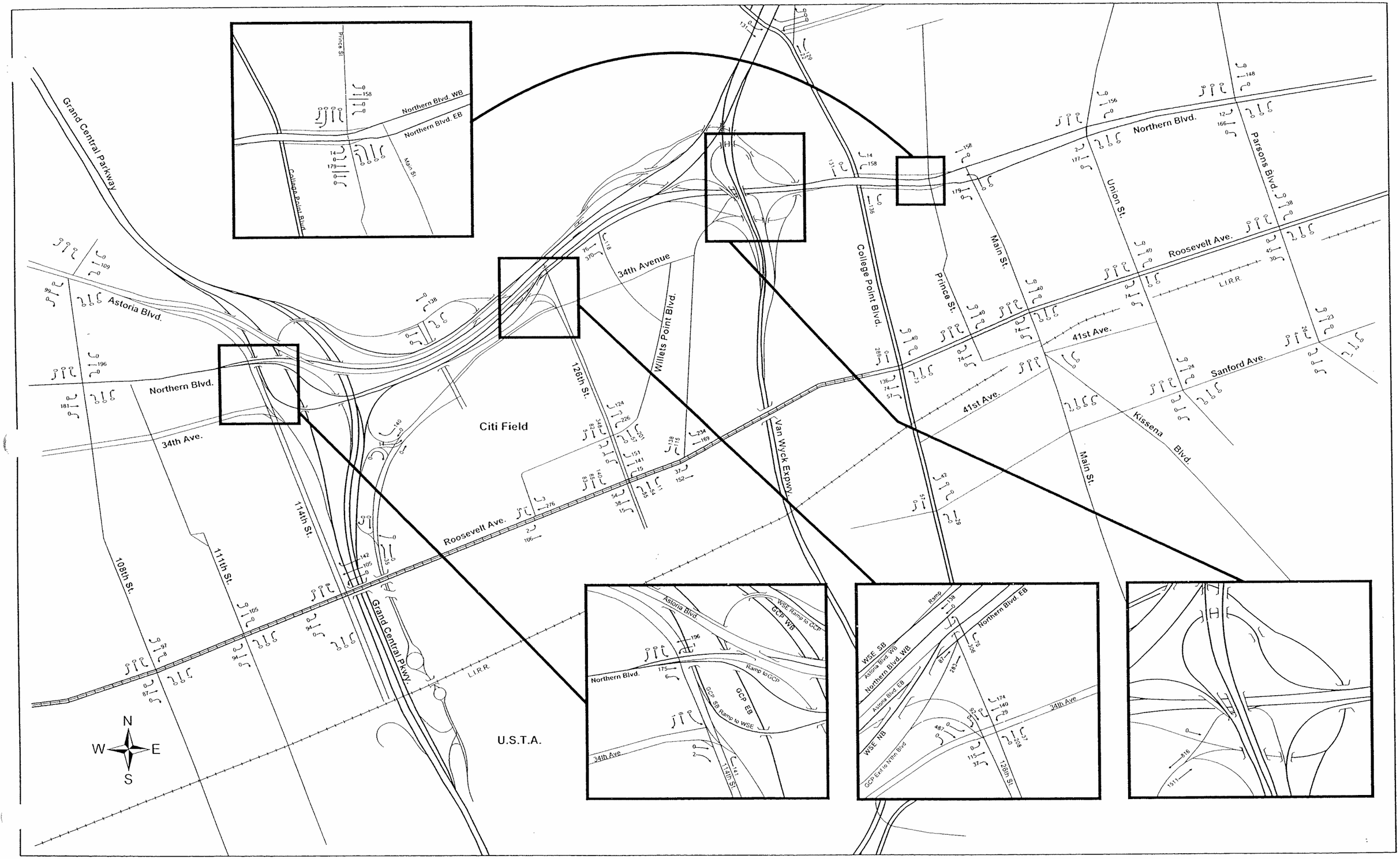
FIGURE E - 19
2017 BUILD INCREMENT VOLUMES
GAME DAY - WEEKDAY ARRIVAL PEAK HOUR (6:00 PM - 7:00 PM)
WILLETS POINT DEVELOPMENT FGEIS



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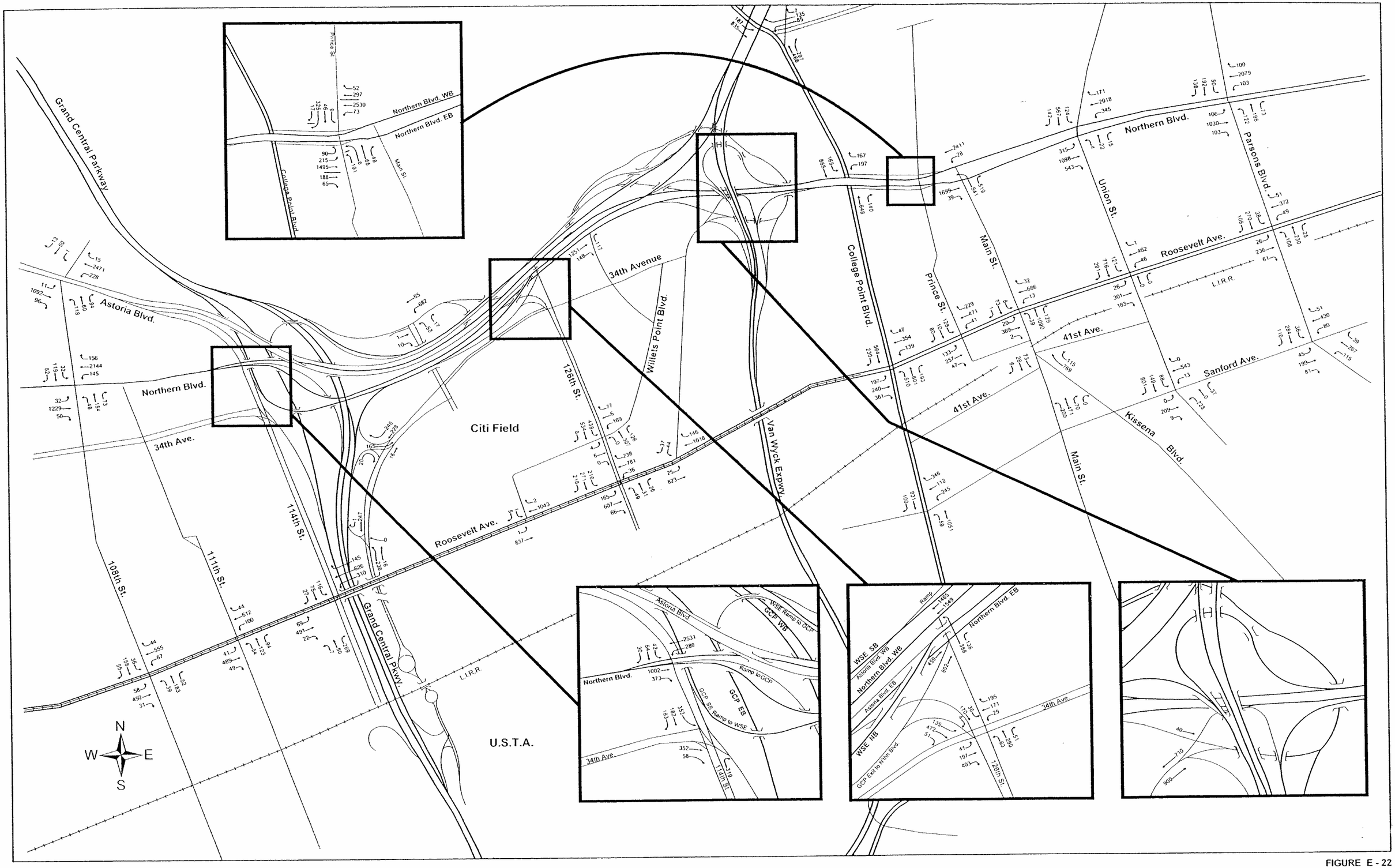
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FIGURE E - 20
2017 BUILD INCREMENT VOLUMES
GAME DAY - WEEKEND ARRIVAL PEAK HOUR (12:00 PM - 1:00 PM)
WILLETS POINT DEVELOPMENT FGEIS



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FIGURE E - 21
2017 BUILD INCREMENT VOLUMES
GAME DAY - WEEKEND DEPARTURE PEAK HOUR (3:45 PM - 4:45 PM)
WILLETS POINT DEVELOPMENT FGEIS



Eng-Wong, Taub & Associates

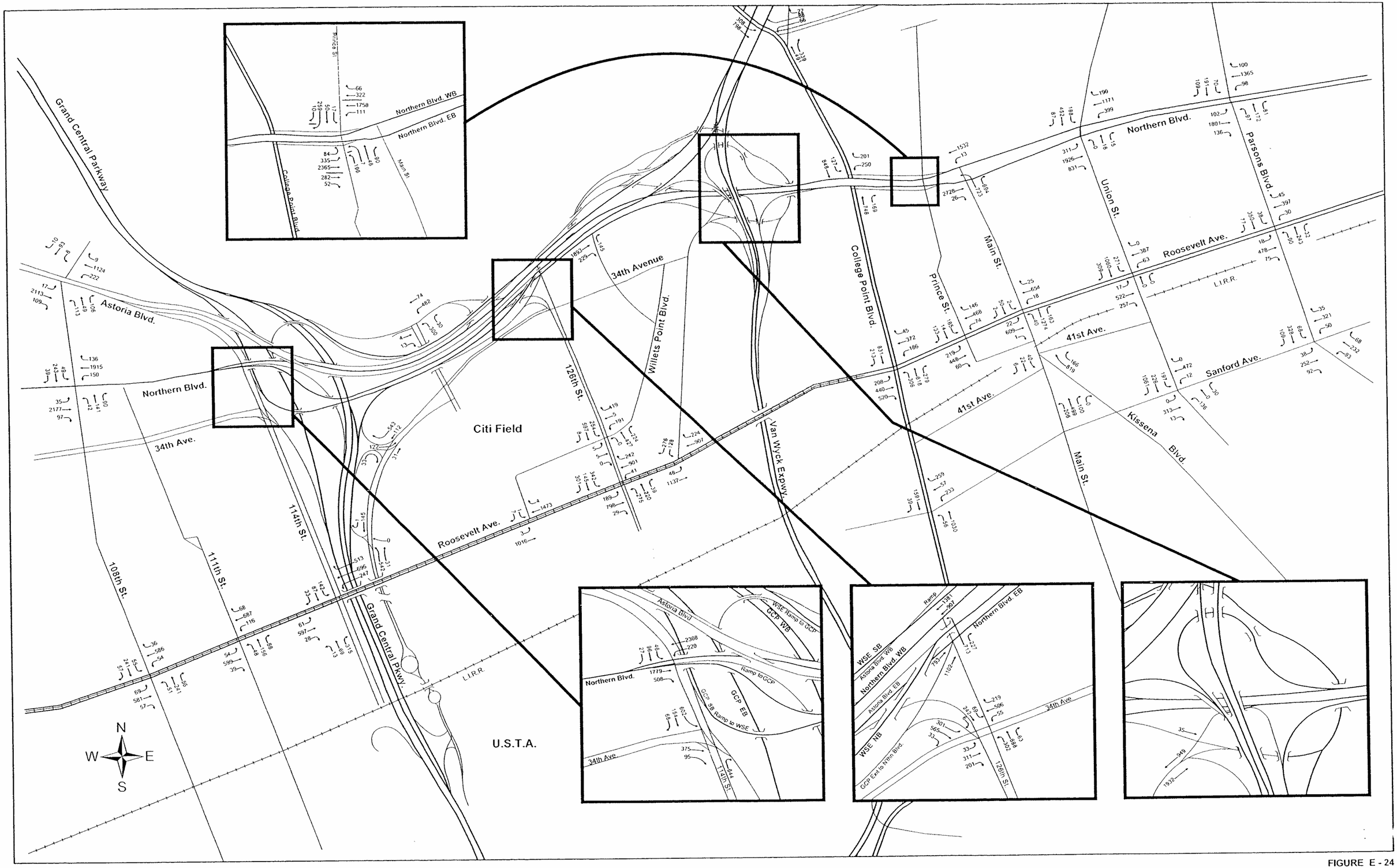
Traffic and Transportation Consultants

FIGURE E - 22
2017 BUILD VOLUMES
NON GAME DAY - WEEKDAY AM PEAK HOUR (7:45 AM - 8:45 AM)
WILLETS POINT DEVELOPMENT FGEIS

Grand Central Parkway
Astoria Blvd.
Northern Blvd.
34th Ave.
108th St.
111th St.
114th St.
Roosevelt Ave.
Grand Central Pkwy.
L.I.R.R.
U.S.T.A.
Citi Field
126th St.
Willets Point Blvd.
34th Avenue
College Point Blvd.
Van Wyck Expwy.
Prince St.
Main St.
Union St.
Parsons Blvd.
41st Ave.
Sanford Ave.
Kissena Blvd.
Northern Blvd. WB
Northern Blvd. EB
College Point Blvd.
Main St.
Astoria Blvd
WSE Ramp to GCP
GCP WB
Ramp to GCP
GCP EB
GCP SB Ramp to WSE
Northern Blvd.
34th Ave
114th St.
Ramp
Northern Blvd. EB
WSE SB
Astoria Blvd. WB
Northern Blvd. WB
Astoria Blvd. EB
WSE NB
GCP Exit to Ninth Blvd
34th Ave
126th St.
N
W
E
S

FIGURE E - 23
2017 BUILD VOLUMES
NON GAME DAY - WEEKDAY MIDDAY PEAK HOUR (1:00 PM - 2:00 PM)
WILLETS POINT DEVELOPMENT FGEIS

Eng-Wong, Taub & Associates
Traffic and Transportation Consultants



Eng-Wong, Taub & Associates

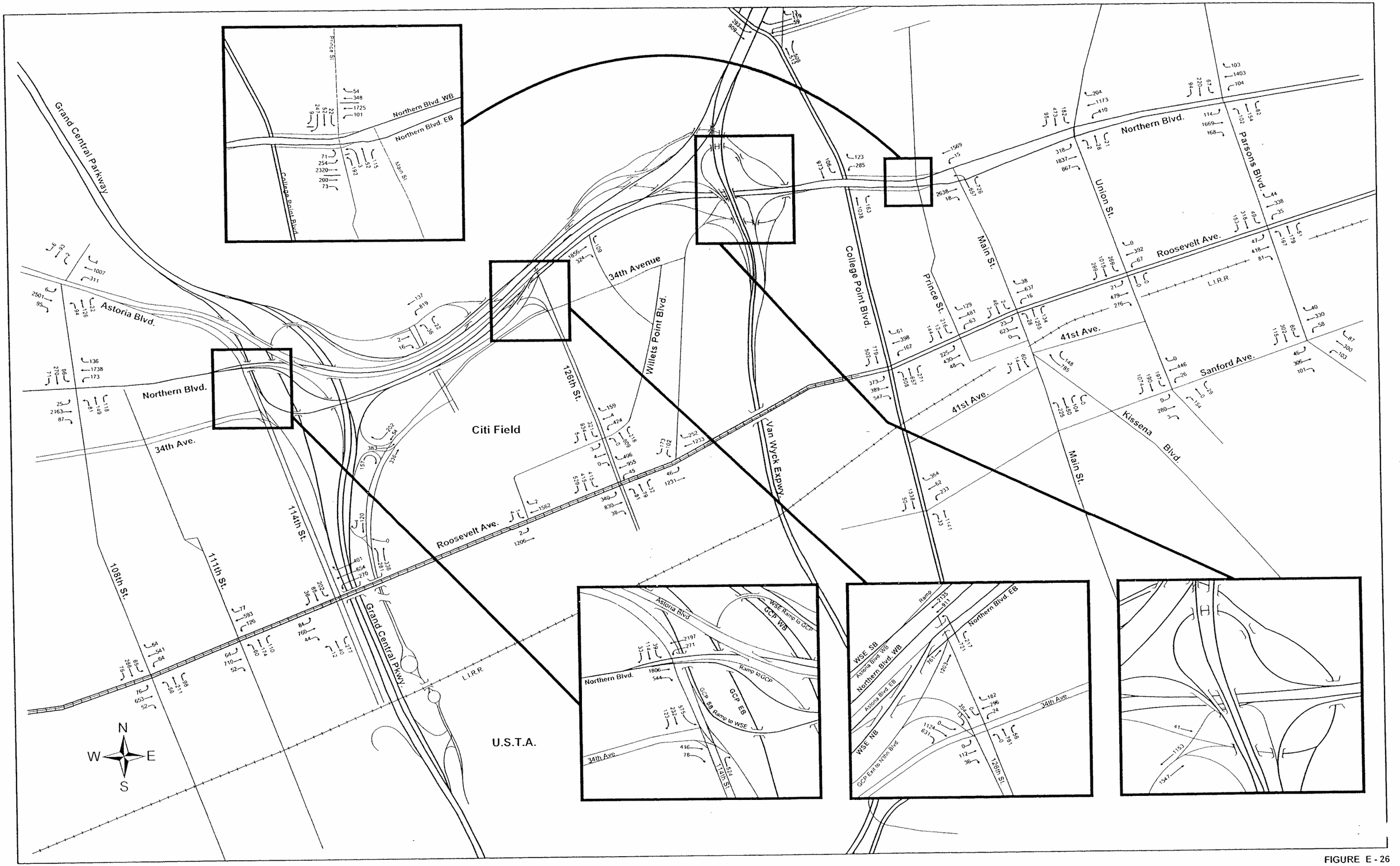
Traffic and Transportation Consultants

FIGURE E - 24
2017 BUILD VOLUMES
NON GAME DAY - WEEKDAY PM PEAK HOUR (5:15 PM - 6:15 PM)
WILLETS POINT DEVELOPMENT FGEIS

Grand Central Parkway
Astoria Blvd.
Northern Blvd.
34th Ave.
Citi Field
34th Avenue
Willets Point Blvd.
126th St.
College Point Blvd.
Van Wyck Expwy.
Prince St.
Main St.
Union St.
Parsons Blvd.
Roosevelt Ave.
41st Ave.
Sanford Ave.
Kissena Blvd.
LIRR
114th St.
111th St.
108th St.
Grand Central Pkwy.
U.S.T.A.
Northern Blvd. WB
Northern Blvd. EB
College Point Blvd.
Main St.
Astoria Blvd
WSE Ramp to GCP
GCP WB
Ramp to GCP
GCP EB
GCP SB Ramp to WSE
WSE SB
Astoria Blvd. WB
Northern Blvd. WB
Astoria Blvd. EB
Northern Blvd. EB
WSE NB
GCP Exit to Willets Blvd
126th St.
114th St.
N
W
E
S

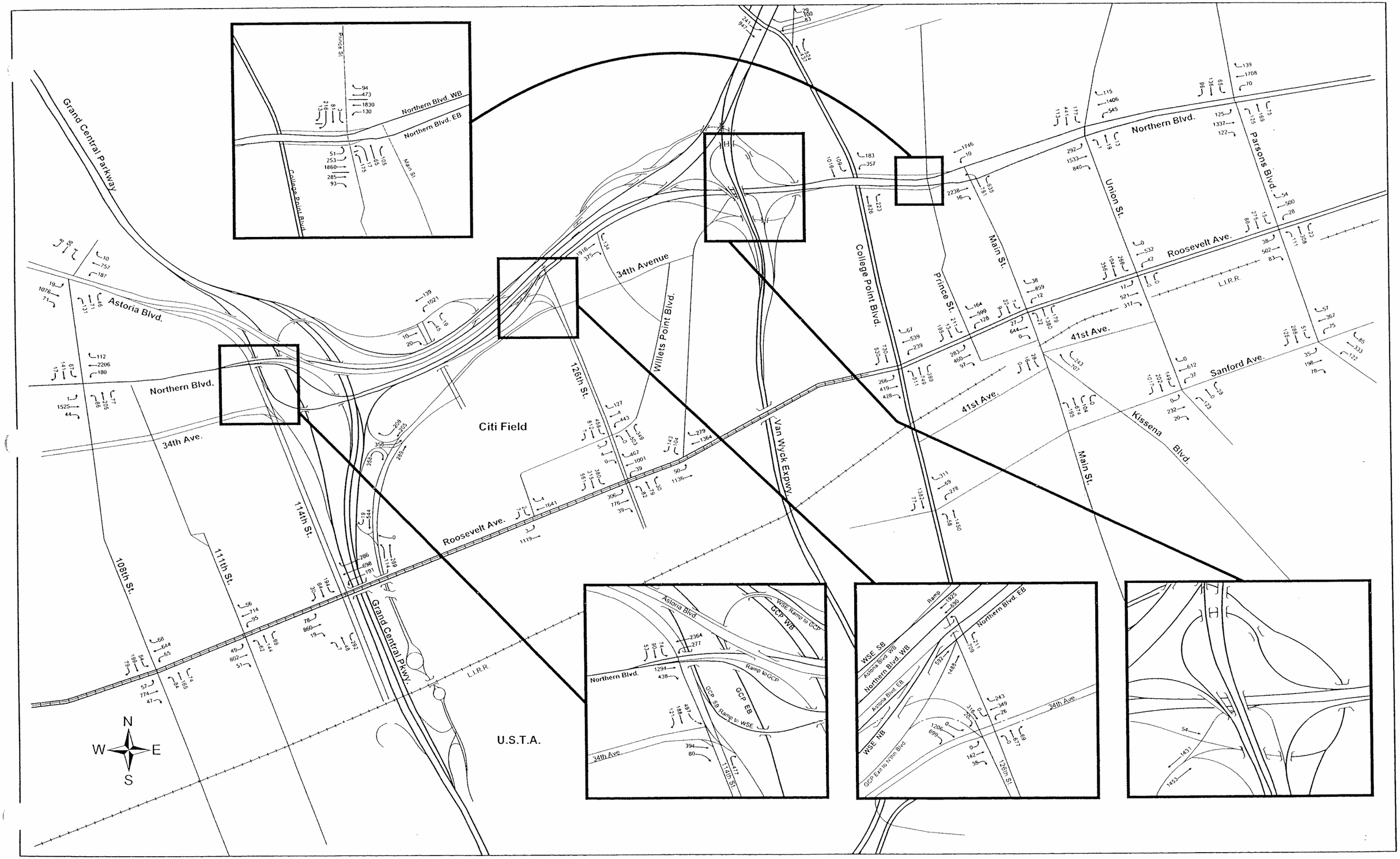
Eng-Wong, Taub & Associates
Traffic and Transportation Consultants

FIGURE E - 25
2017 BUILD VOLUMES
NON GAME DAY - SATURDAY MIDDAY PEAK HOUR (1:00 PM - 2:00 PM)
WILLETS POINT DEVELOPMENT FGEIS



Eng-Wong, Taub & Associates
Traffic and Transportation Consultants

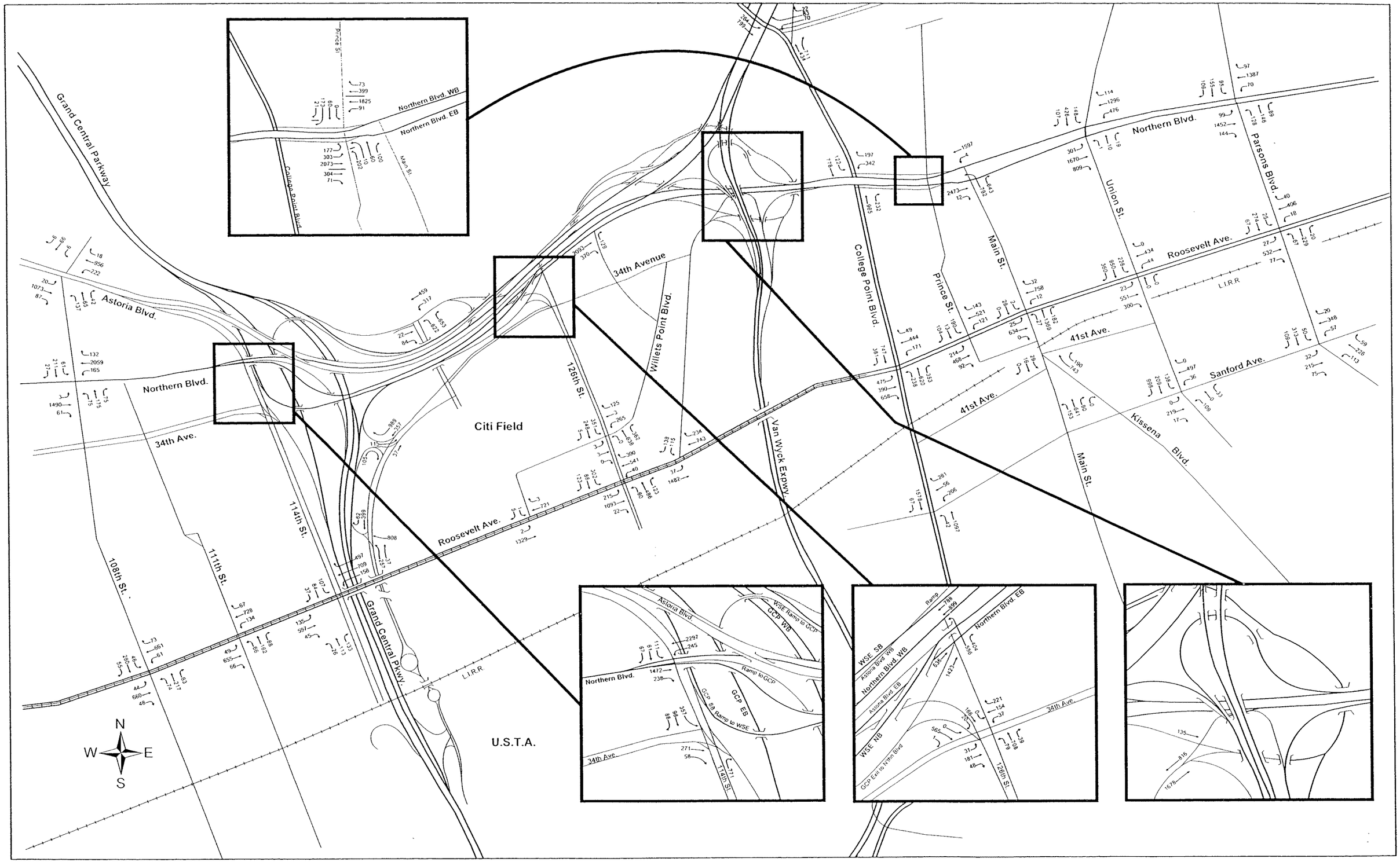
FIGURE E - 26
2017 BUILD VOLUMES
GAME DAY - WEEKDAY ARRIVAL PEAK HOUR (6:00 PM - 7:00 PM)
WILLETS POINT DEVELOPMENT FGEIS



Eng-Wong, Taub & Associates

Traffic and Transportation Consultants

FIGURE E - 27
2017 BUILD VOLUMES
GAME DAY - WEEKEND ARRIVAL PEAK HOUR (12:00 PM - 1:00 PM)
WILLETS POINT DEVELOPMENT FGEIS



Eng-Wong, Taub & Associates

Traffic and Transportation Consultants

FIGURE E - 28
2017 BUILD VOLUMES
GAME DAY - WEEKEND DEPARTURES PEAK HOUR (3:45 PM - 4:45 PM)
WILLETS POINT DEVELOPMENT FGEIS

APPENDIX F

TRANSIT AND PEDESTRIANS

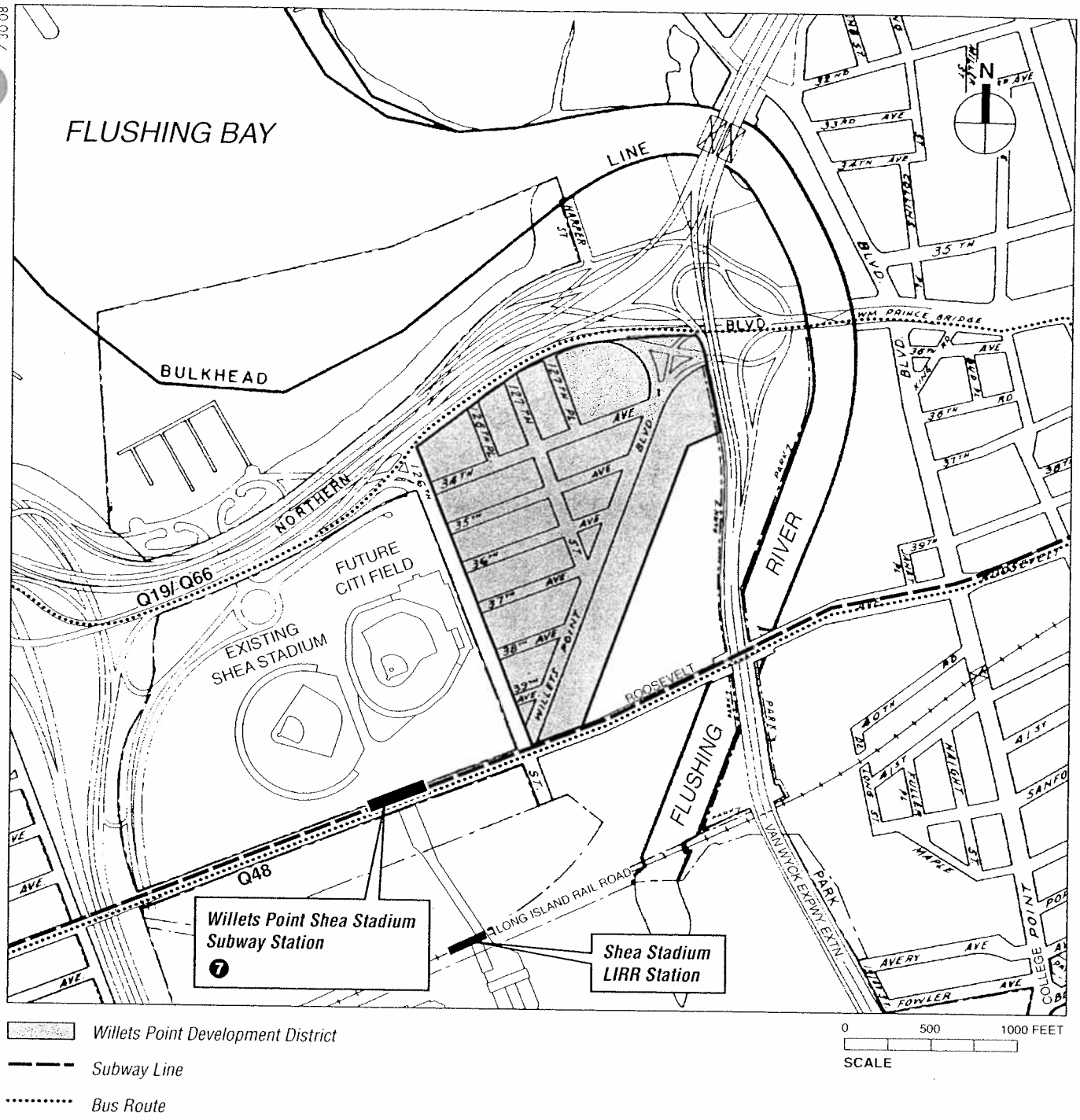
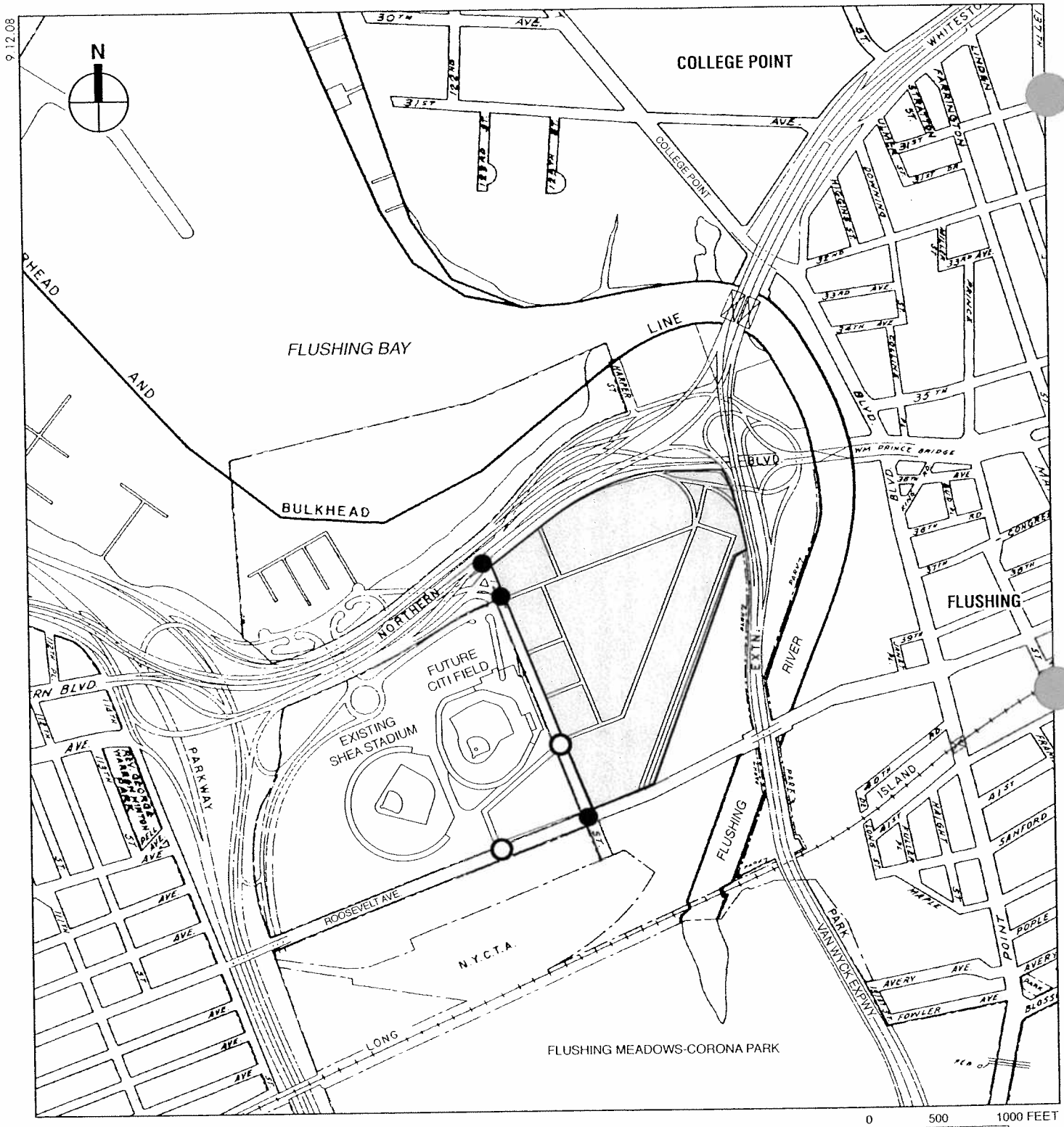


Figure F-1
Subway and Bus Routes



Willets Point Development District

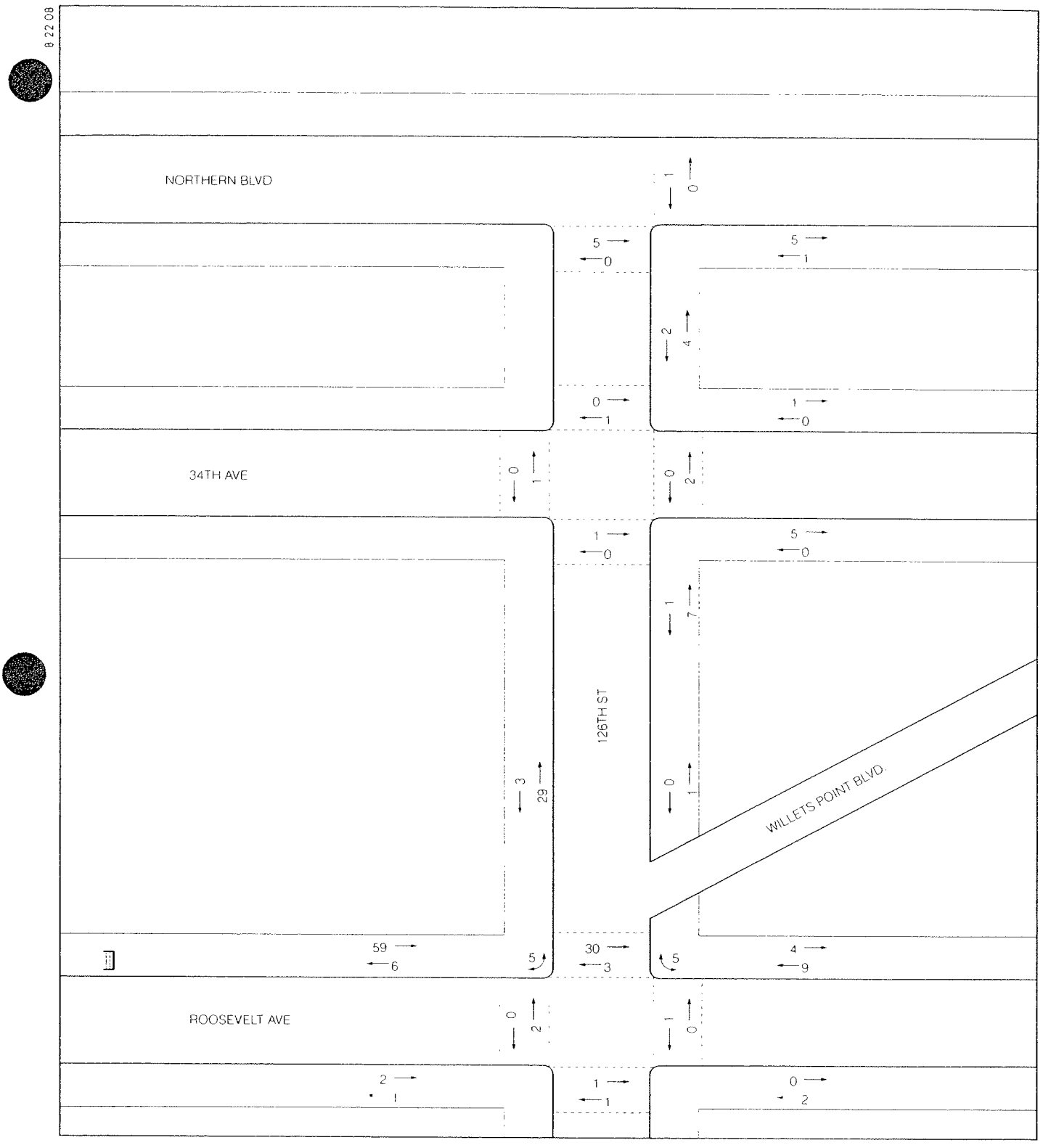
Study Area Intersection Analyzed

Intersection Added as Part of Proposed Plan

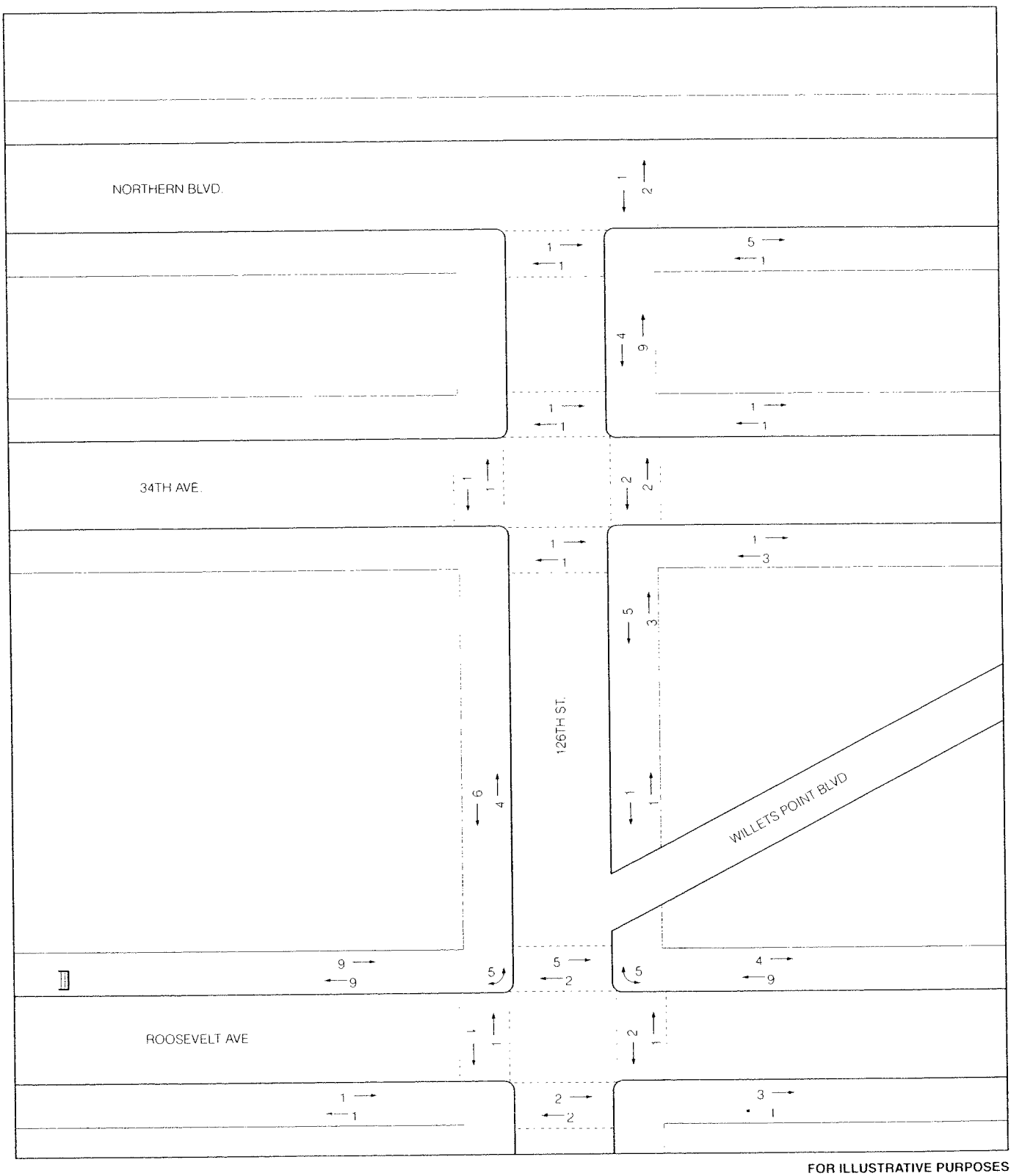
This figure has been updated since the DGEIS

Figure F-2

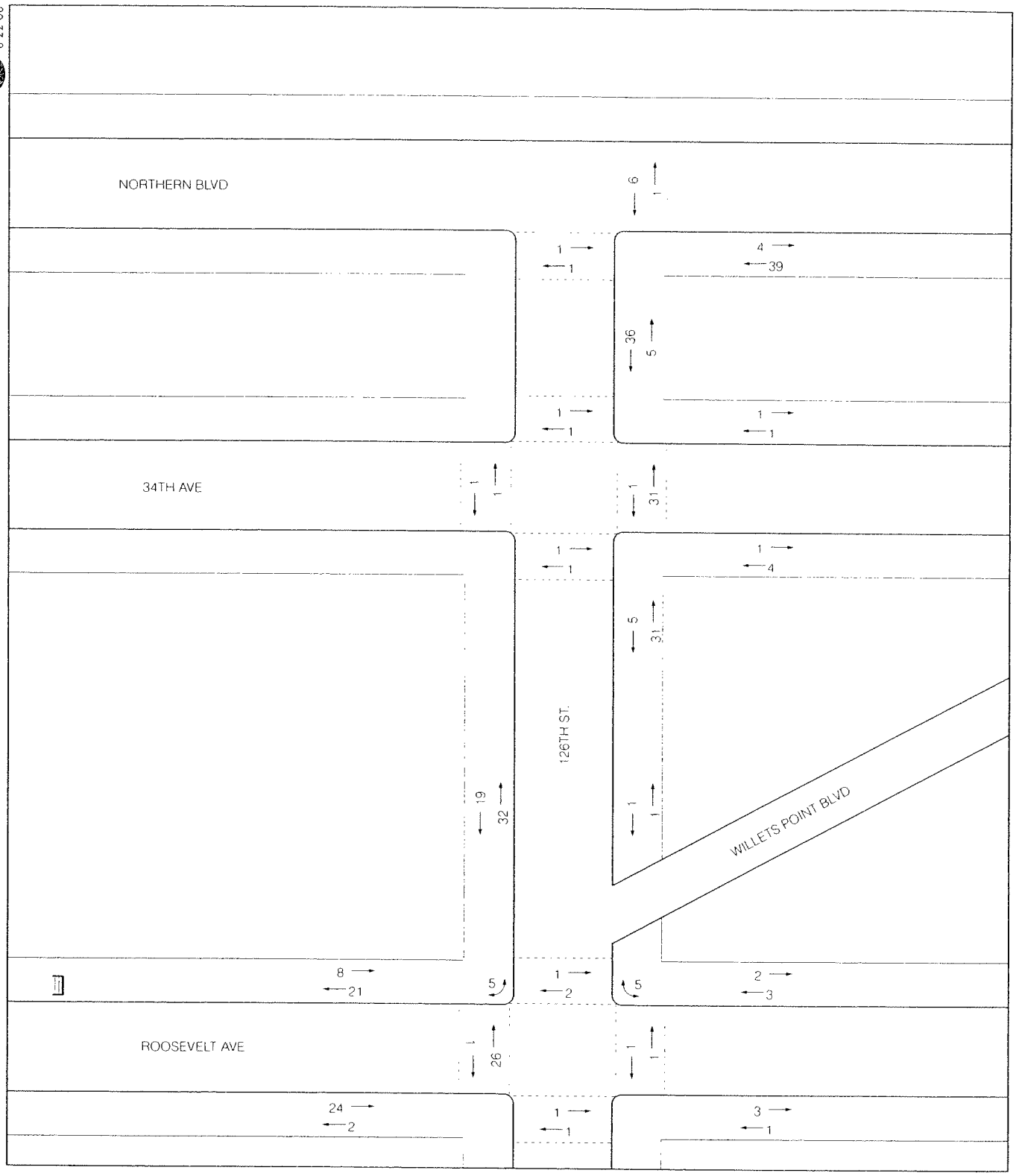
Pedestrian Study Area



2007 Existing Pedestrian Volumes
AM Peak 15-Minutes
Figure F-3



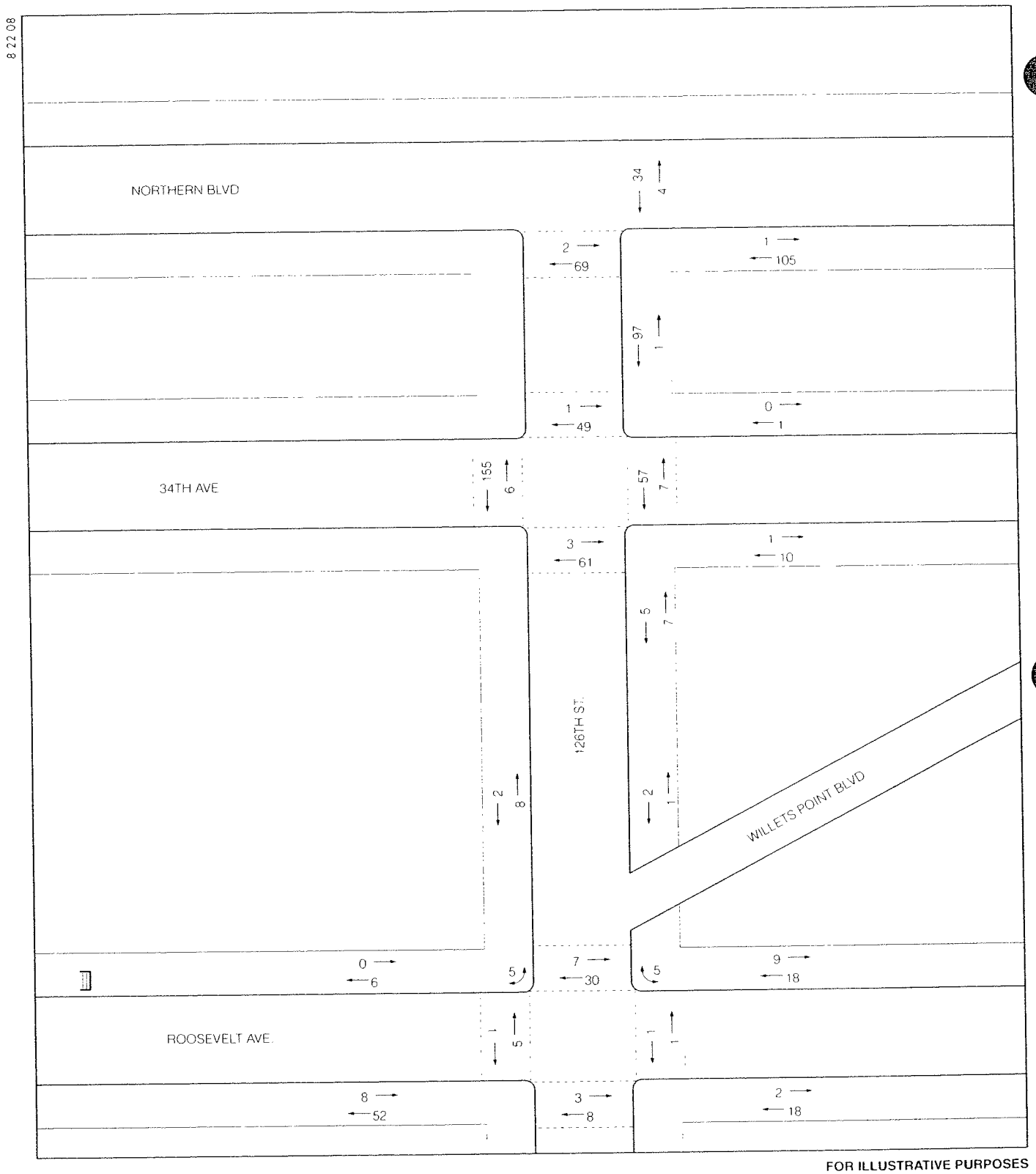
2007 Existing Pedestrian Volumes
Midday Peak 15-Minutes
Figure F-4



FOR ILLUSTRATIVE PURPOSES

2007 Existing Pedestrian Volumes
PM Peak 15-Minutes

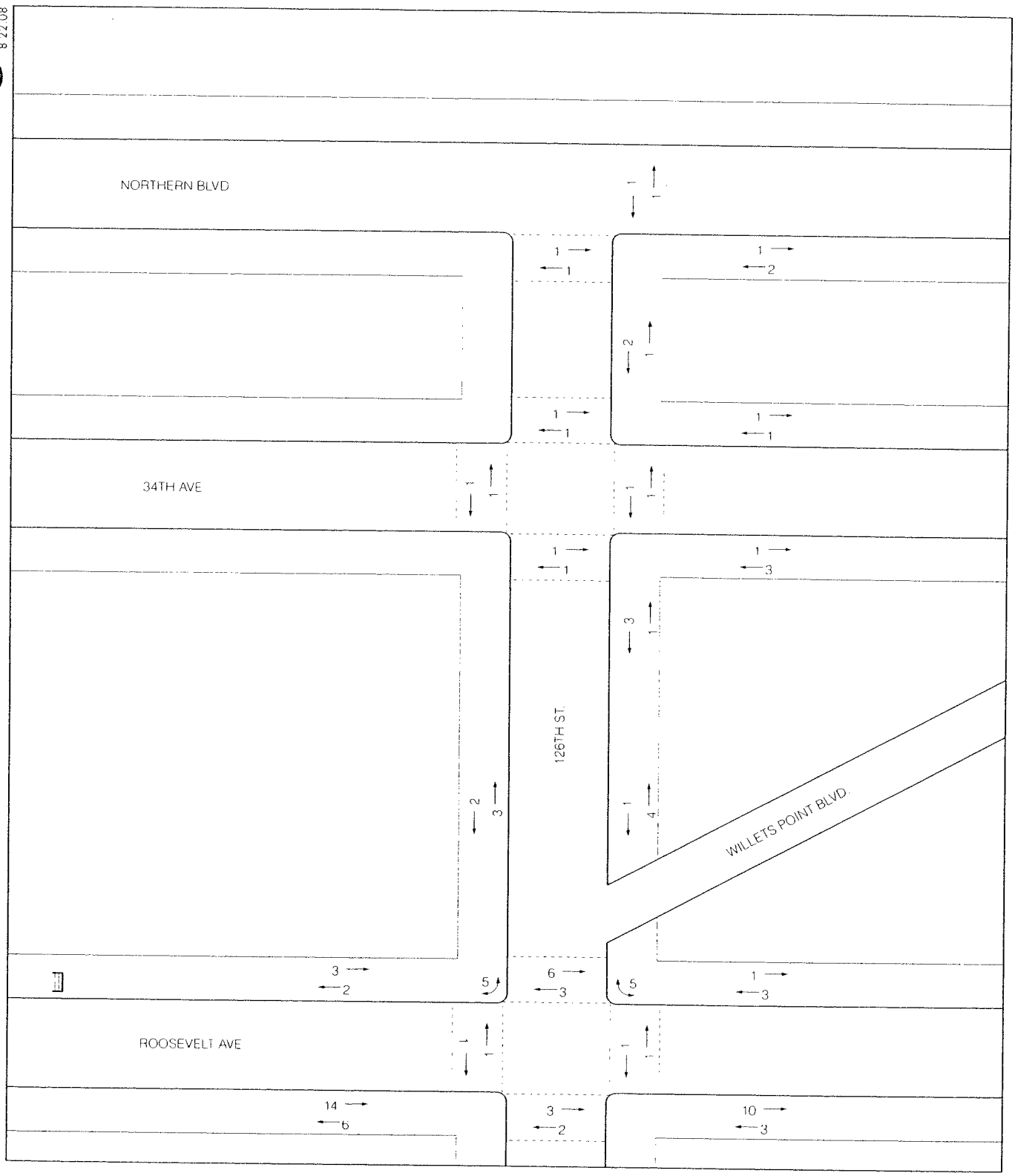
Figure F-5



FOR ILLUSTRATIVE PURPOSES

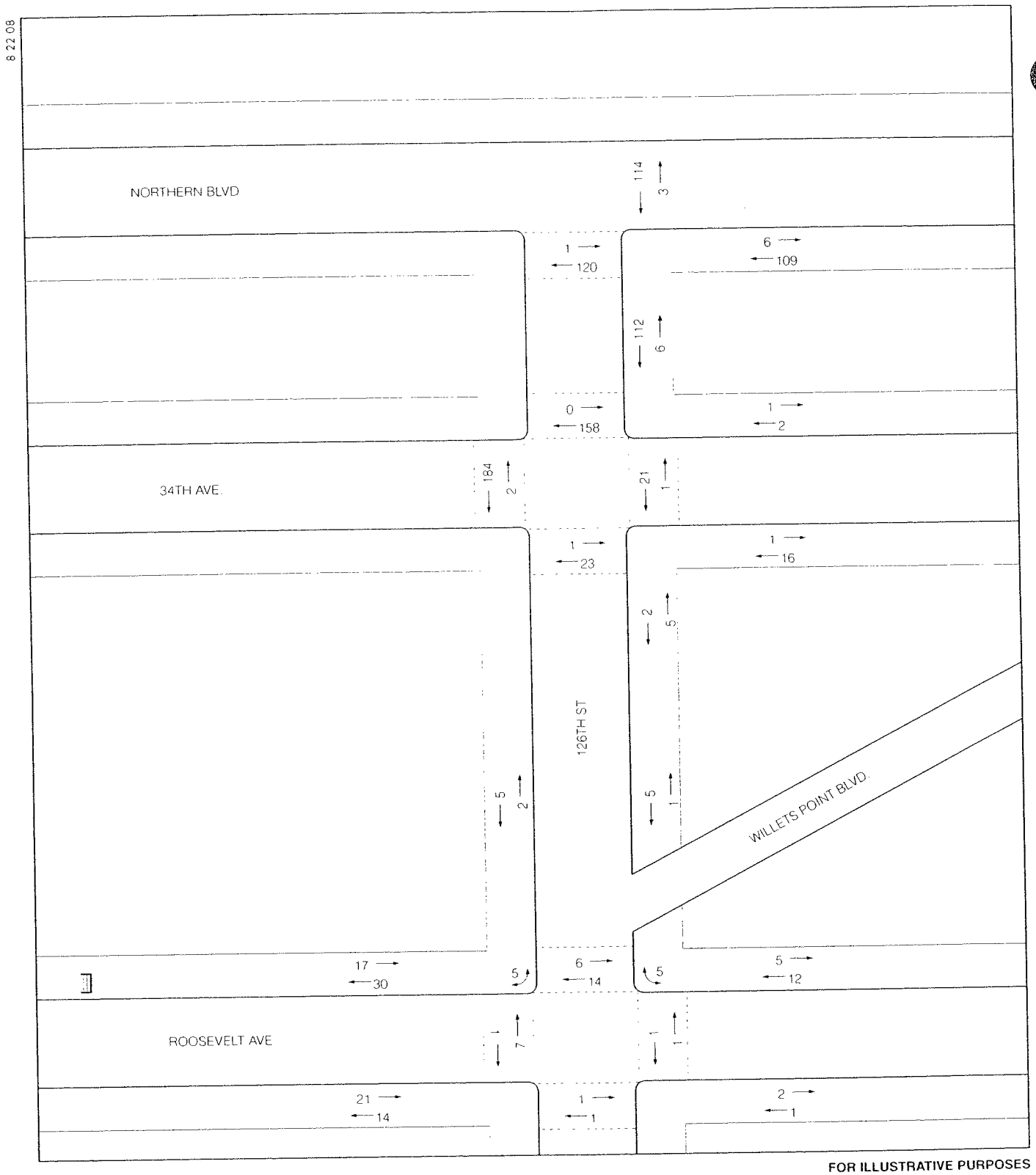
2007 Existing Pedestrian Volumes
PM Pre-game Peak 15-Minutes
Figure F-6

8.22.08

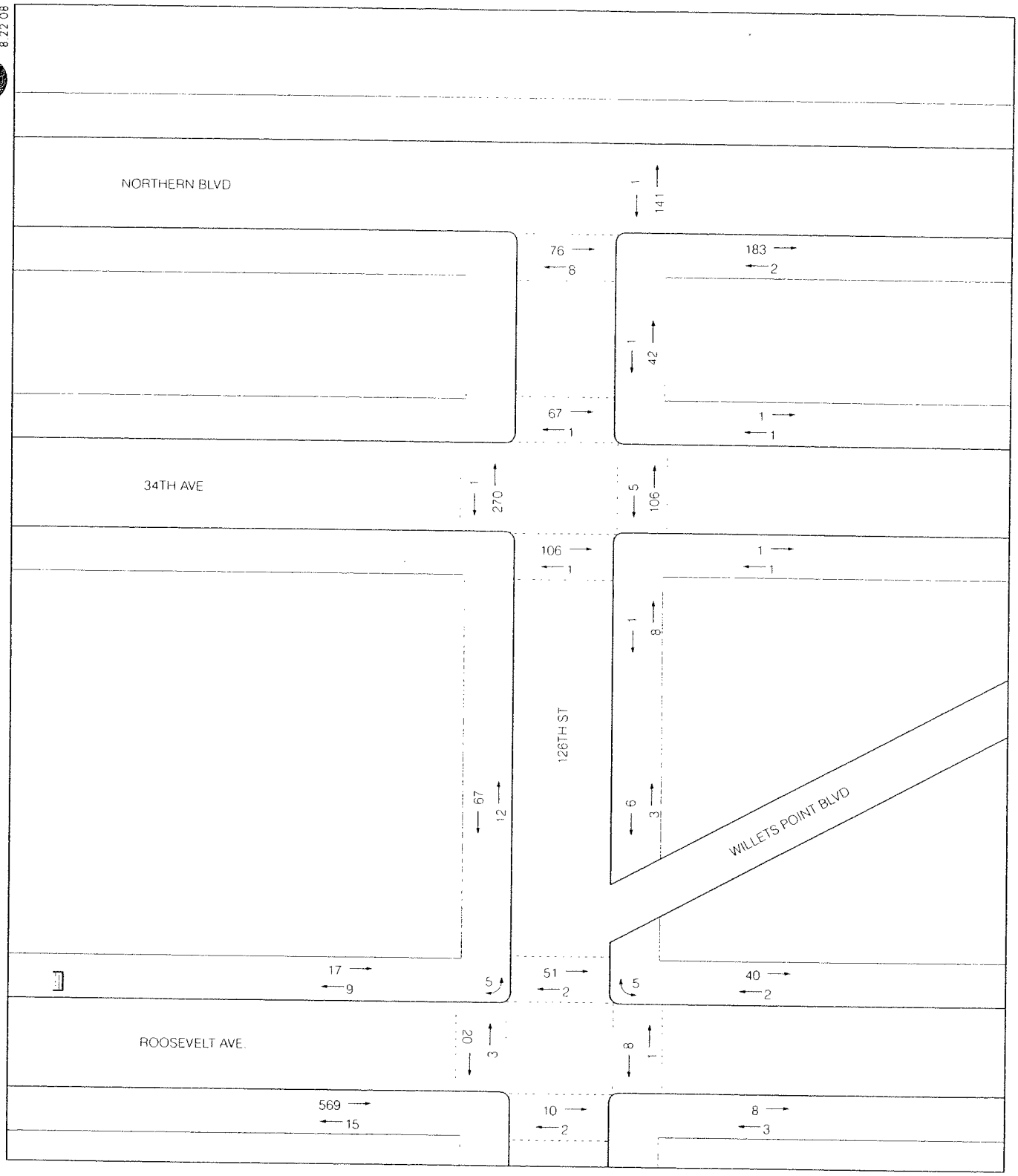


FOR ILLUSTRATIVE PURPOSES

2007 Existing Pedestrian Volumes
SAT MD Peak 15-Minutes
Figure F-7



2007 Existing Pedestrian Volumes
SAT Pre-game Peak 15-Minutes
Figure F-8

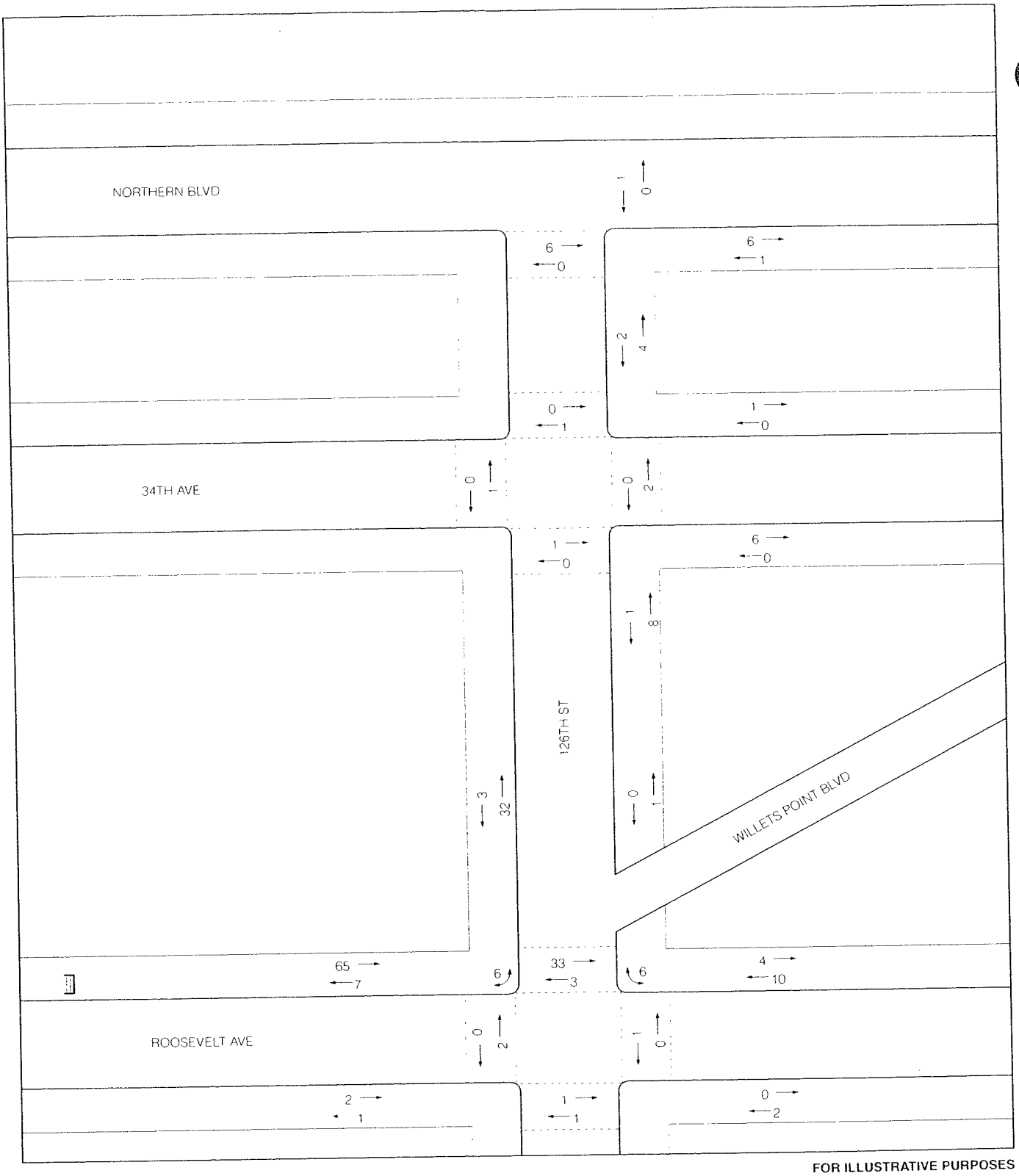


FOR ILLUSTRATIVE PURPOSES

2007 Existing Pedestrian Volumes
SAT Post Game Peak 15-Minutes

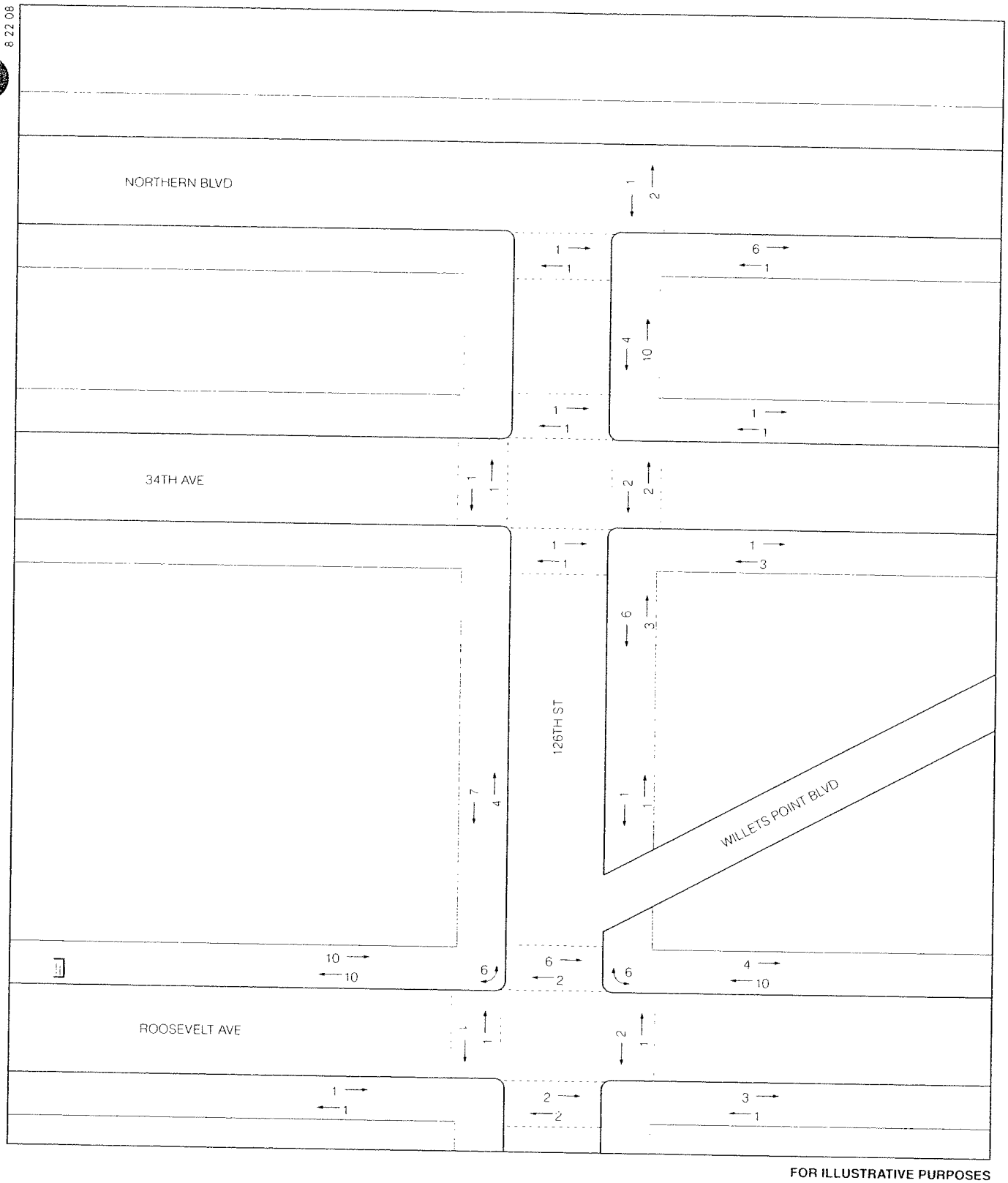
Figure F-9

8.22.08



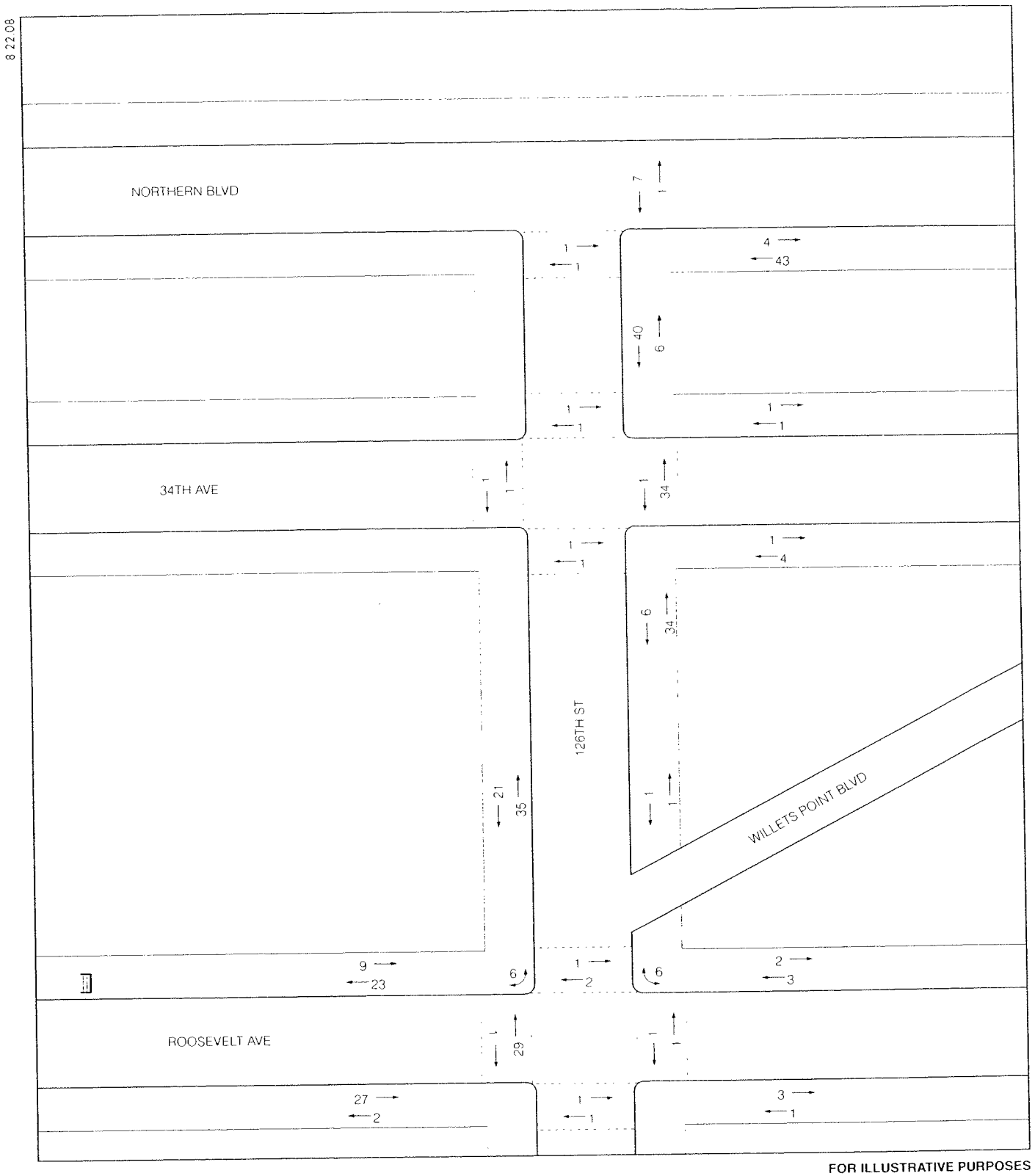
FOR ILLUSTRATIVE PURPOSES

2017 No Build Pedestrian Volumes
AM Peak 15-Minutes
Figure F-10



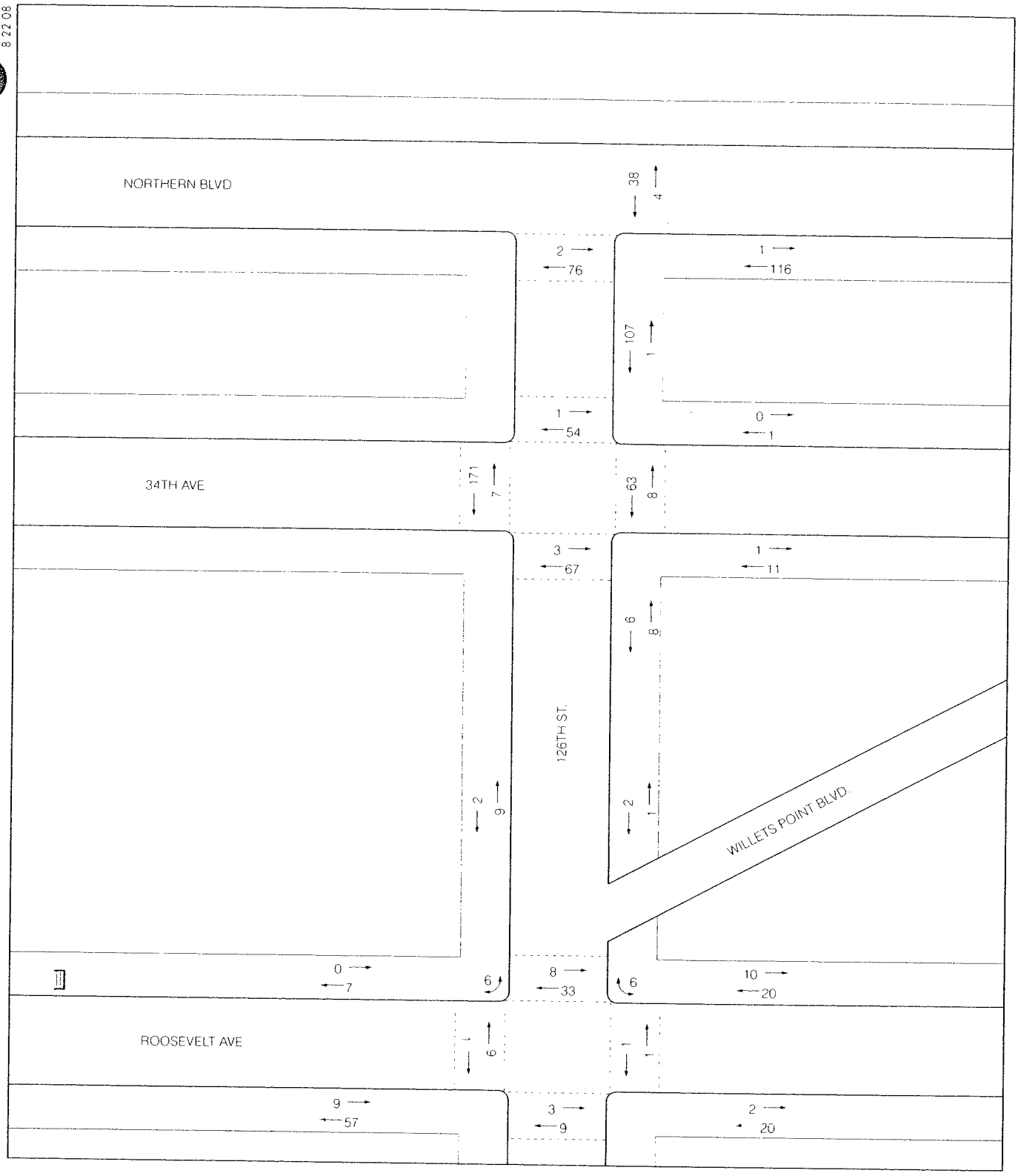
FOR ILLUSTRATIVE PURPOSES

2017 No Build Pedestrian Volumes
Midday Peak 15-Minutes
Figure F-11



FOR ILLUSTRATIVE PURPOSES

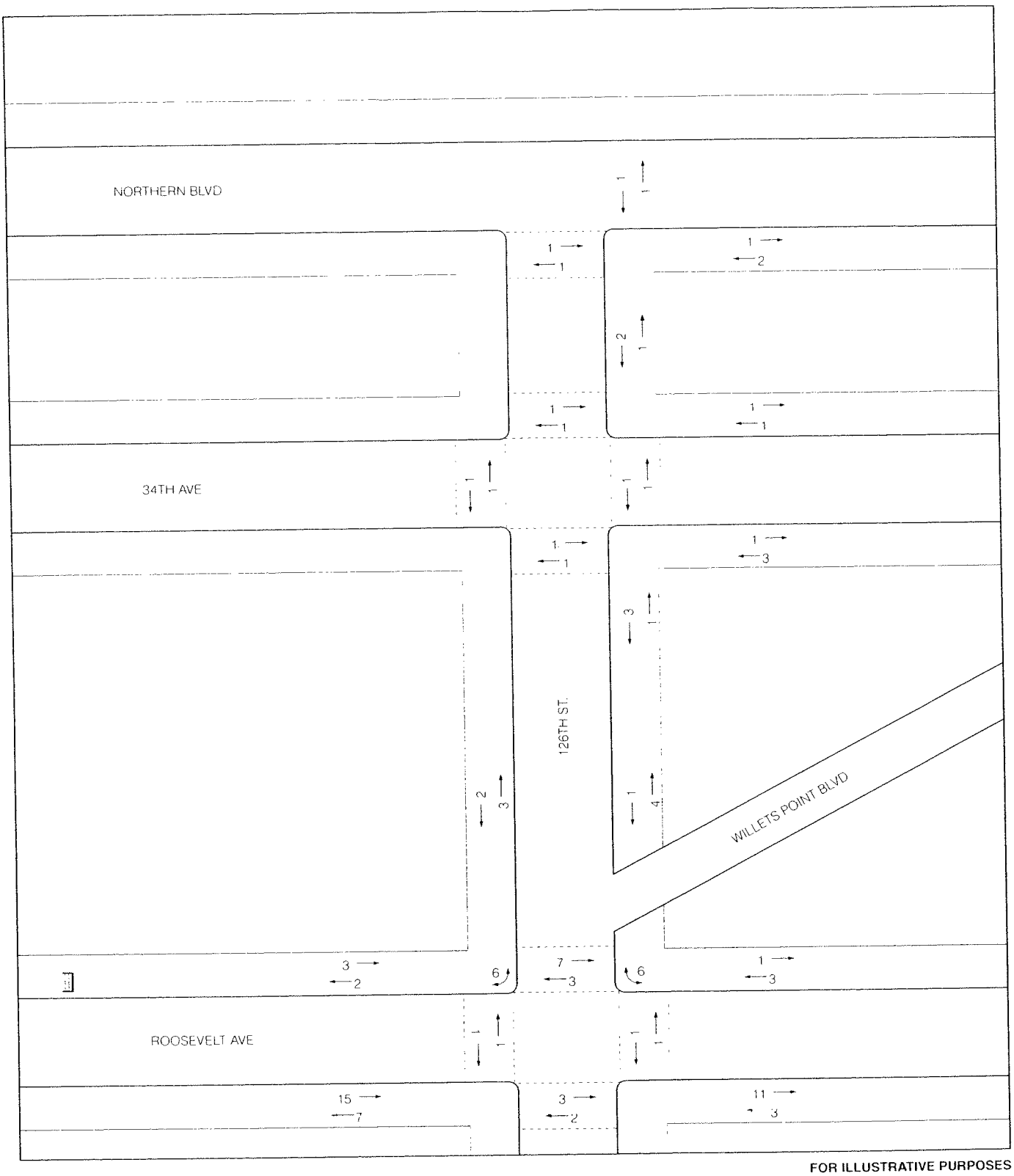
2017 No Build Pedestrian Volumes
PM Peak 15-Minutes
Figure F-12



FOR ILLUSTRATIVE PURPOSES

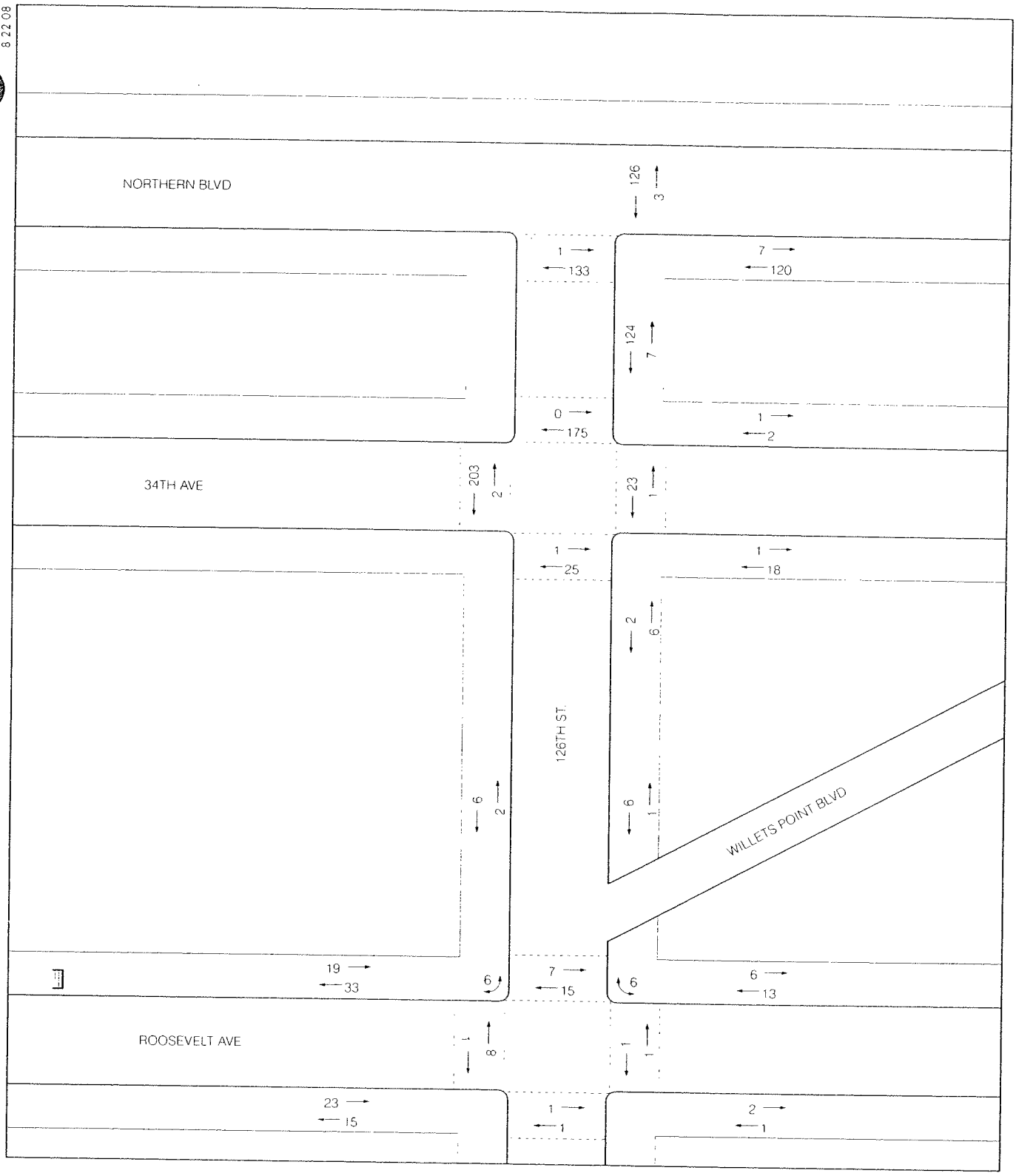
2017 No Build Pedestrian Volumes
PM Pre-game Peak 15-Minutes
Figure F-13

8.22.08



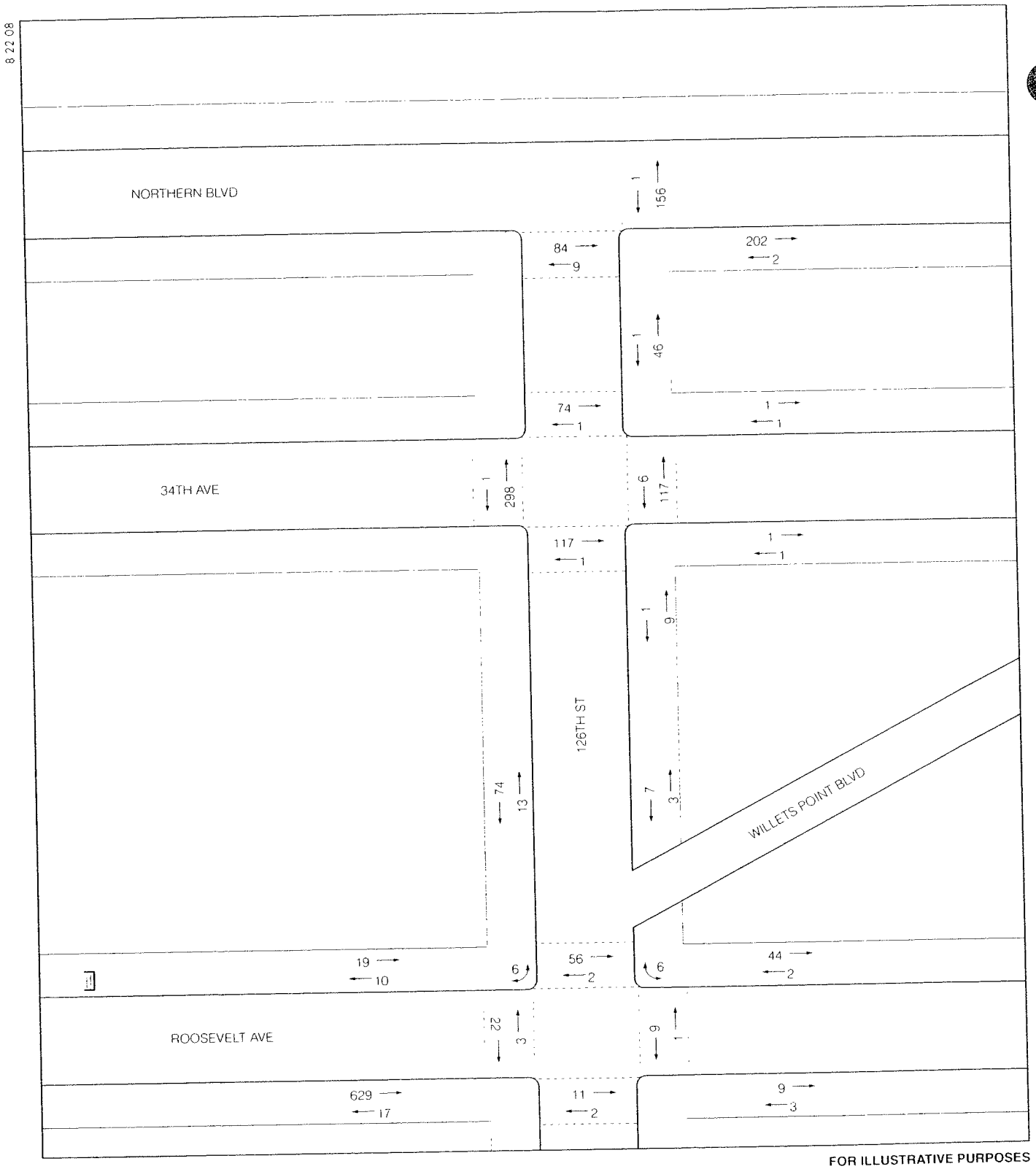
FOR ILLUSTRATIVE PURPOSES

2017 No Build Pedestrian Volumes
SAT MD Peak 15-Minutes
Figure F-14

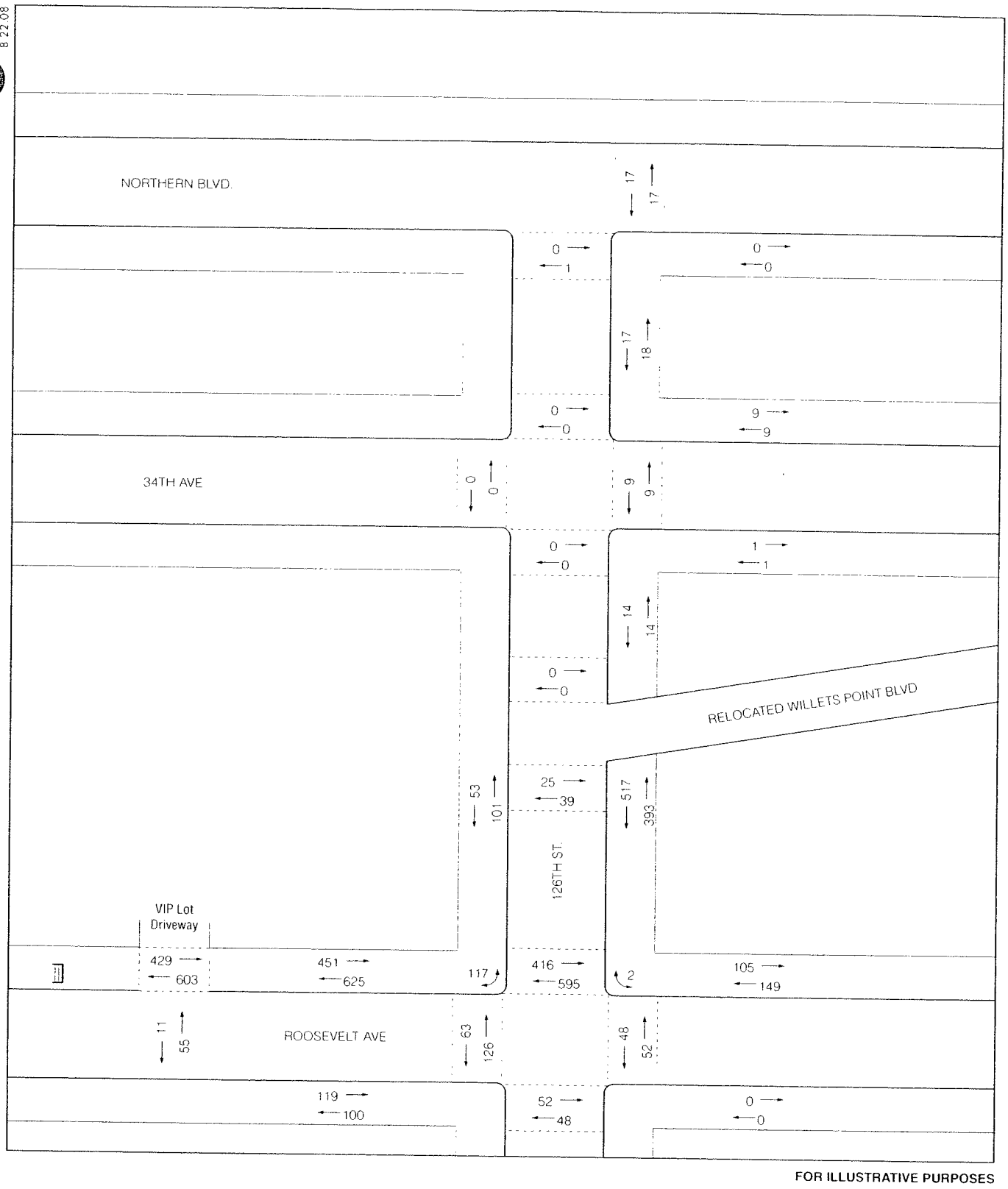


FOR ILLUSTRATIVE PURPOSES

2017 No Build Pedestrian Volumes
SAT Pre-game Peak 15-Minutes
Figure F-15



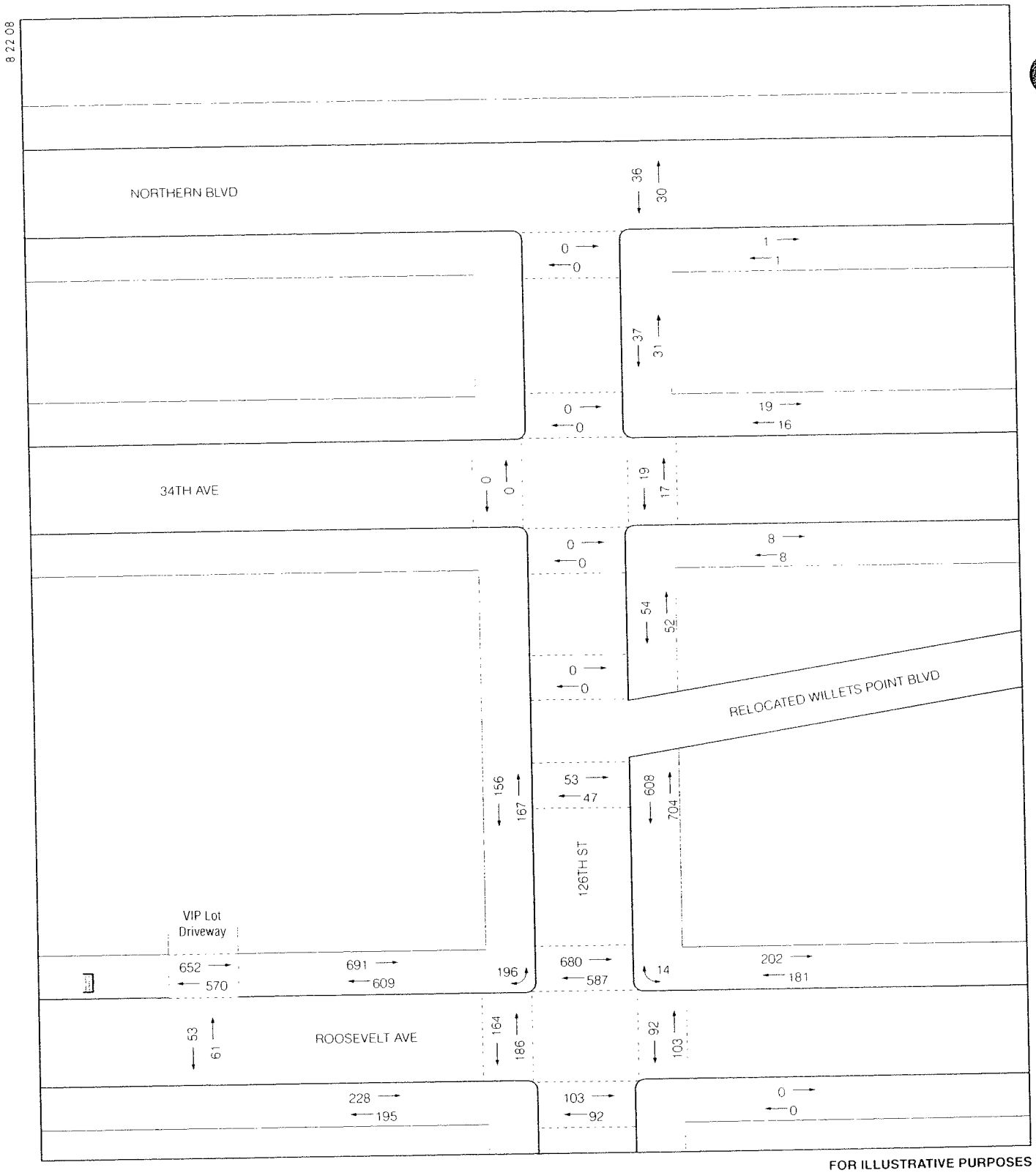
2017 No Build Pedestrian Volumes
SAT Post Game Peak 15-Minutes
Figure F-16



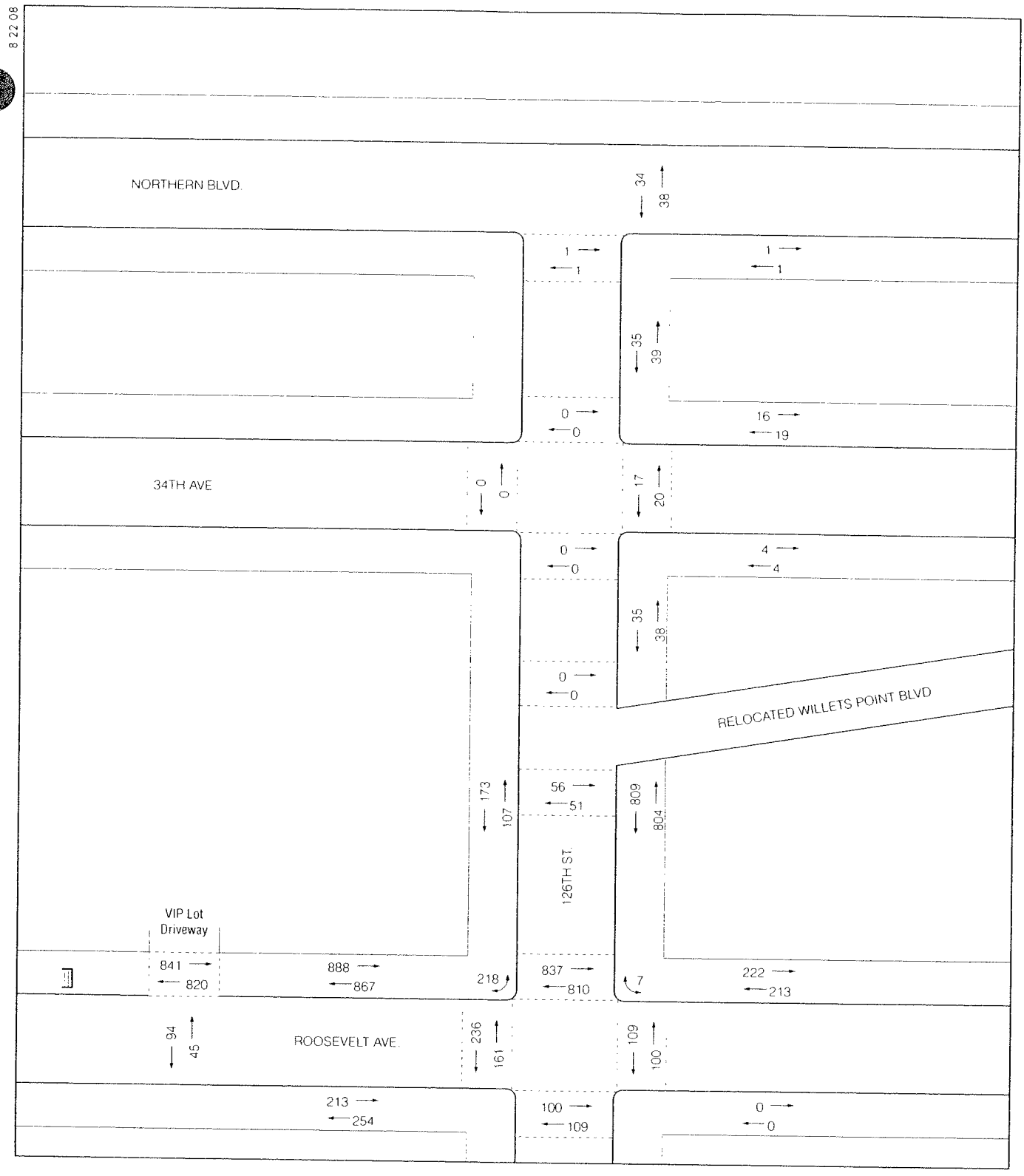
FOR ILLUSTRATIVE PURPOSES

2017 Project-Generated Pedestrian Volumes
AM Peak 15-Minutes

Figure F-17

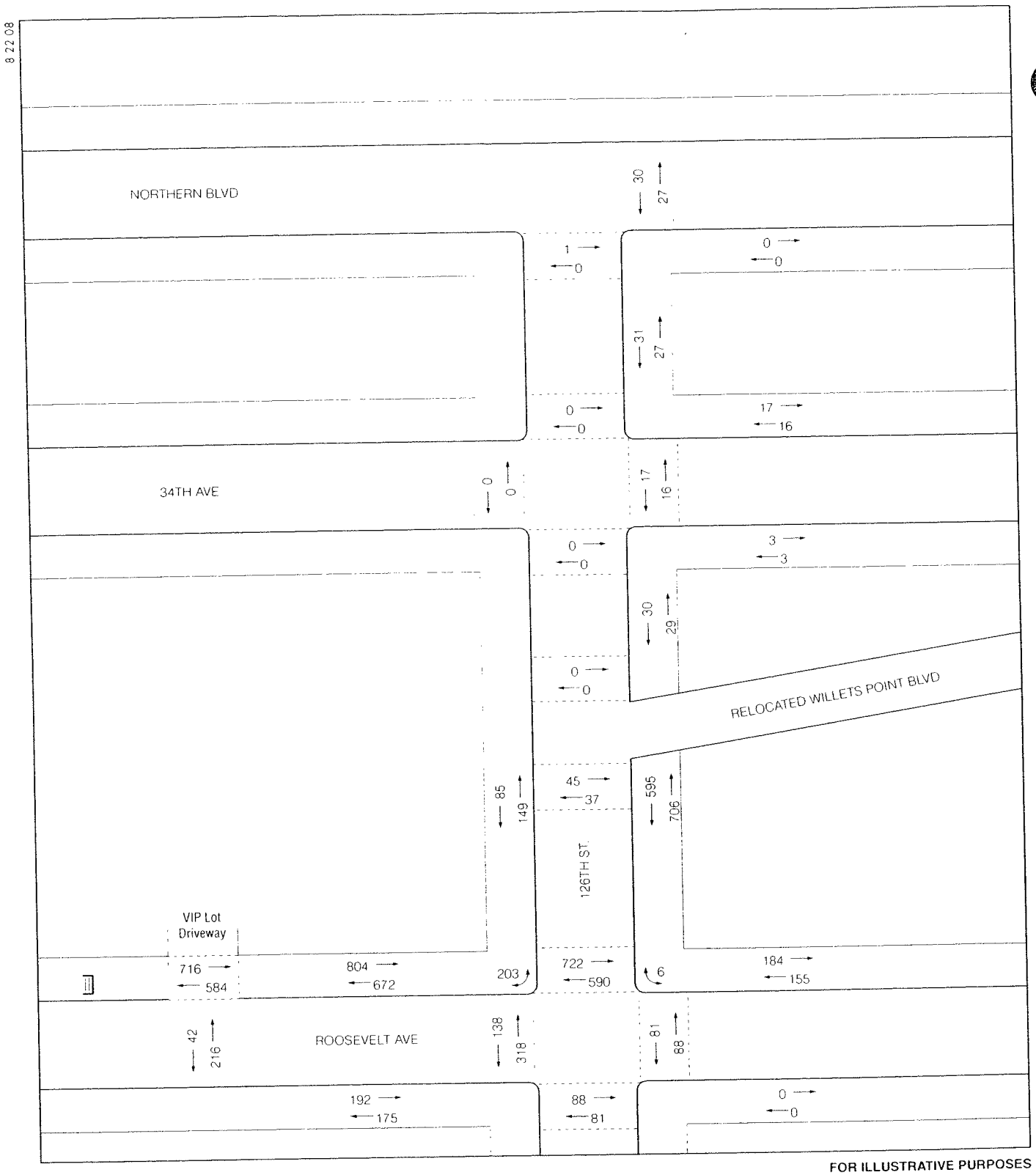


2017 Project-Generated Pedestrian Volumes
Midday Peak 15-Minutes
Figure F-18

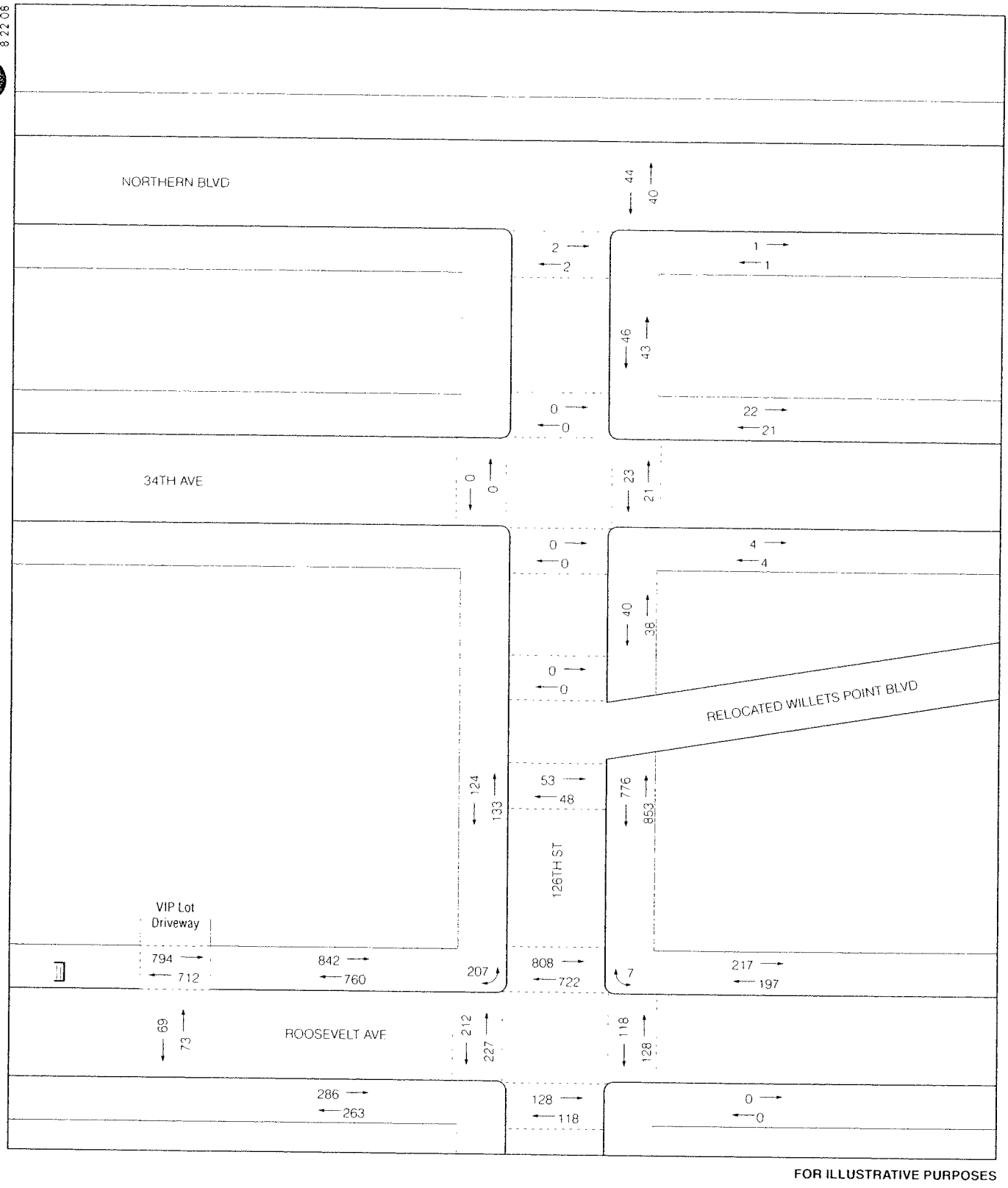


FOR ILLUSTRATIVE PURPOSES

2017 Project-Generated Pedestrian Volumes
PM Peak 15-Minutes
Figure F-19



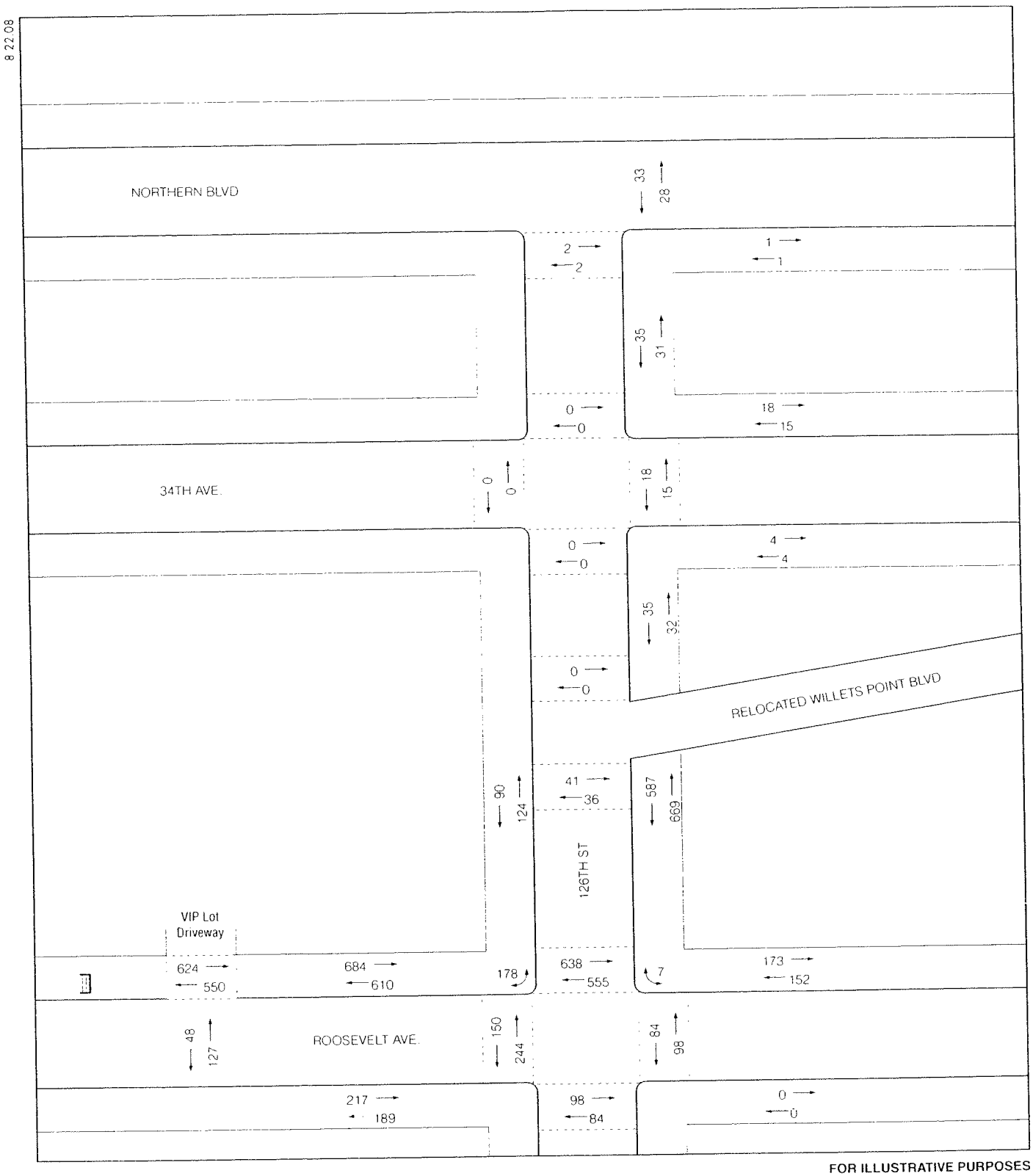
2017 Project-Generated Pedestrian Volumes
PM Pre-game Peak 15-Minutes
Figure F-20



FOR ILLUSTRATIVE PURPOSES

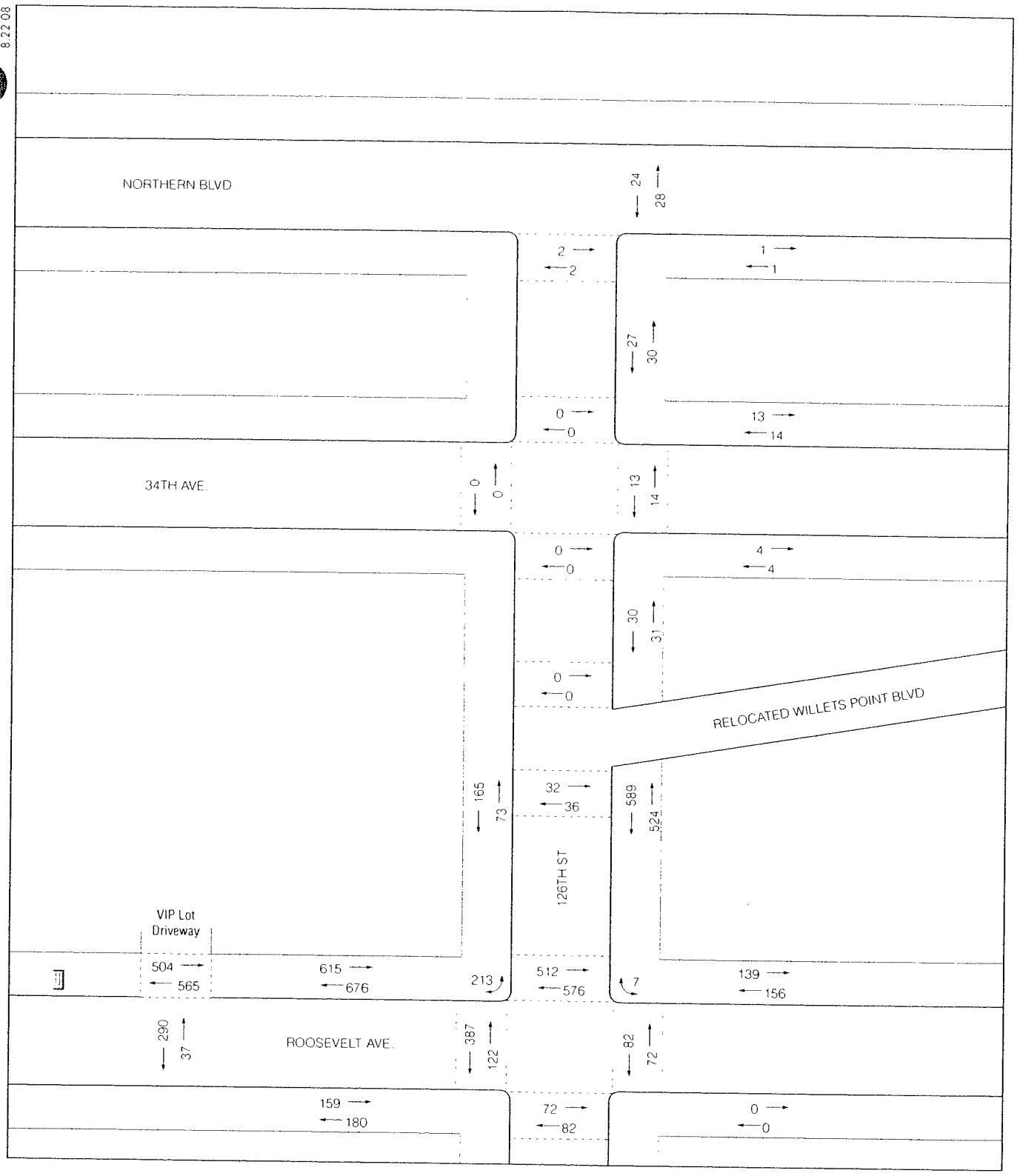
2017 Project-Generated Pedestrian Volumes
SAT MD Peak 15-Minutes

Figure F-21



FOR ILLUSTRATIVE PURPOSES

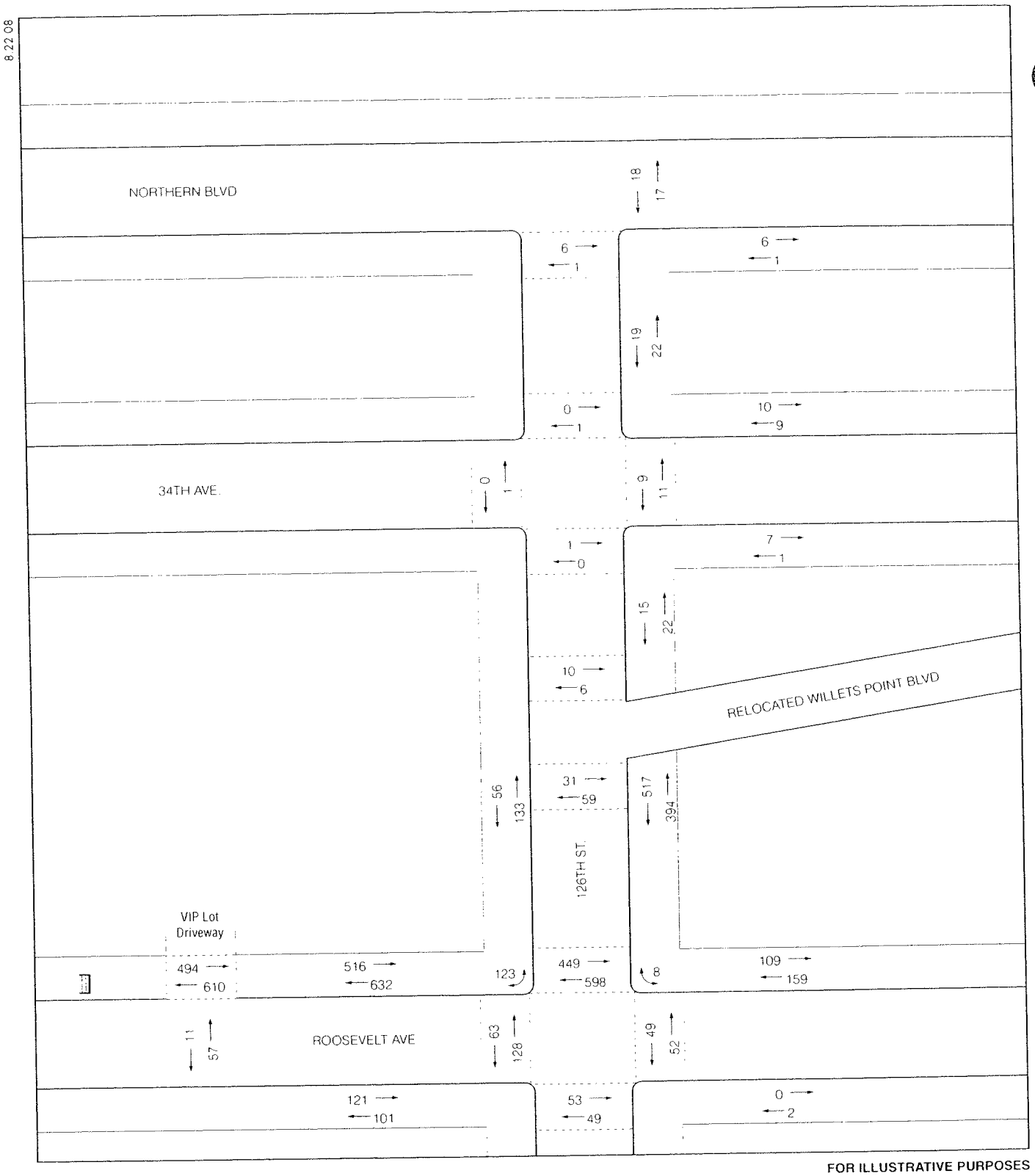
2017 Project-Generated Pedestrian Volumes
SAT Pre-game Peak 15-Minutes
Figure F-22



FOR ILLUSTRATIVE PURPOSES

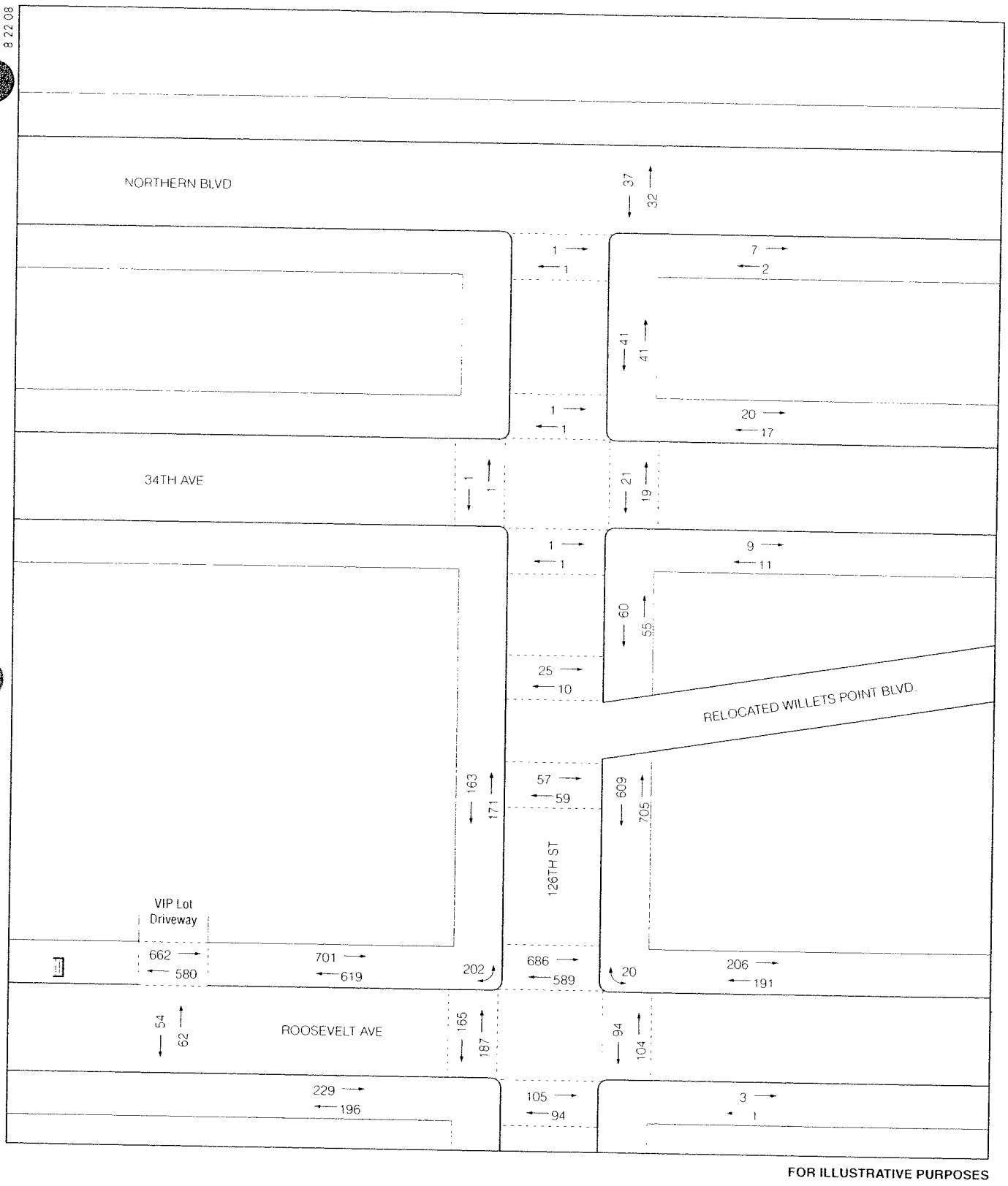
2017 Project-Generated Pedestrian Volumes
SAT Post Game Peak 15-Minutes

Figure F-23



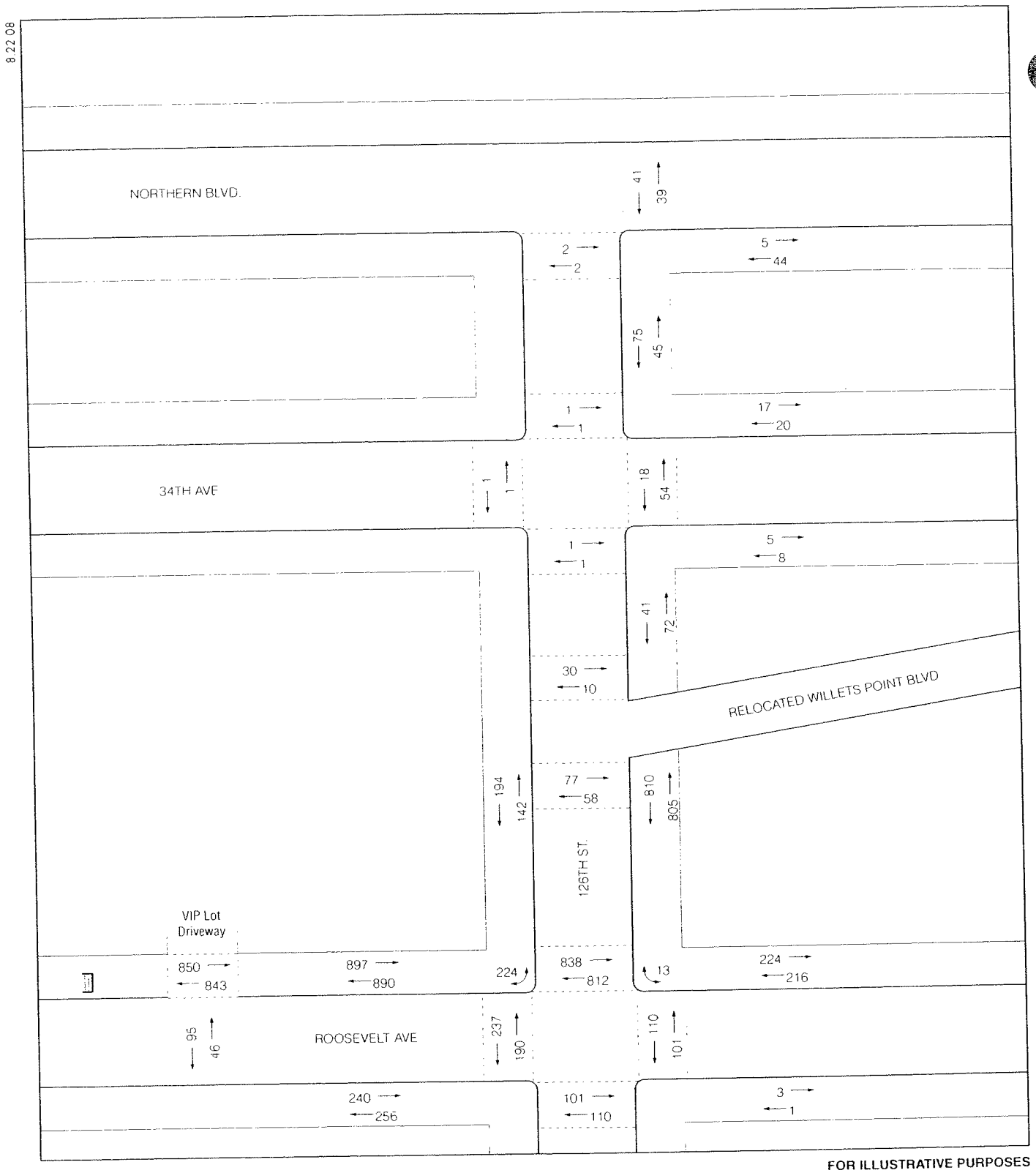
FOR ILLUSTRATIVE PURPOSES

2017 Build Pedestrian Volumes
AM Peak 15-Minutes
Figure F-24



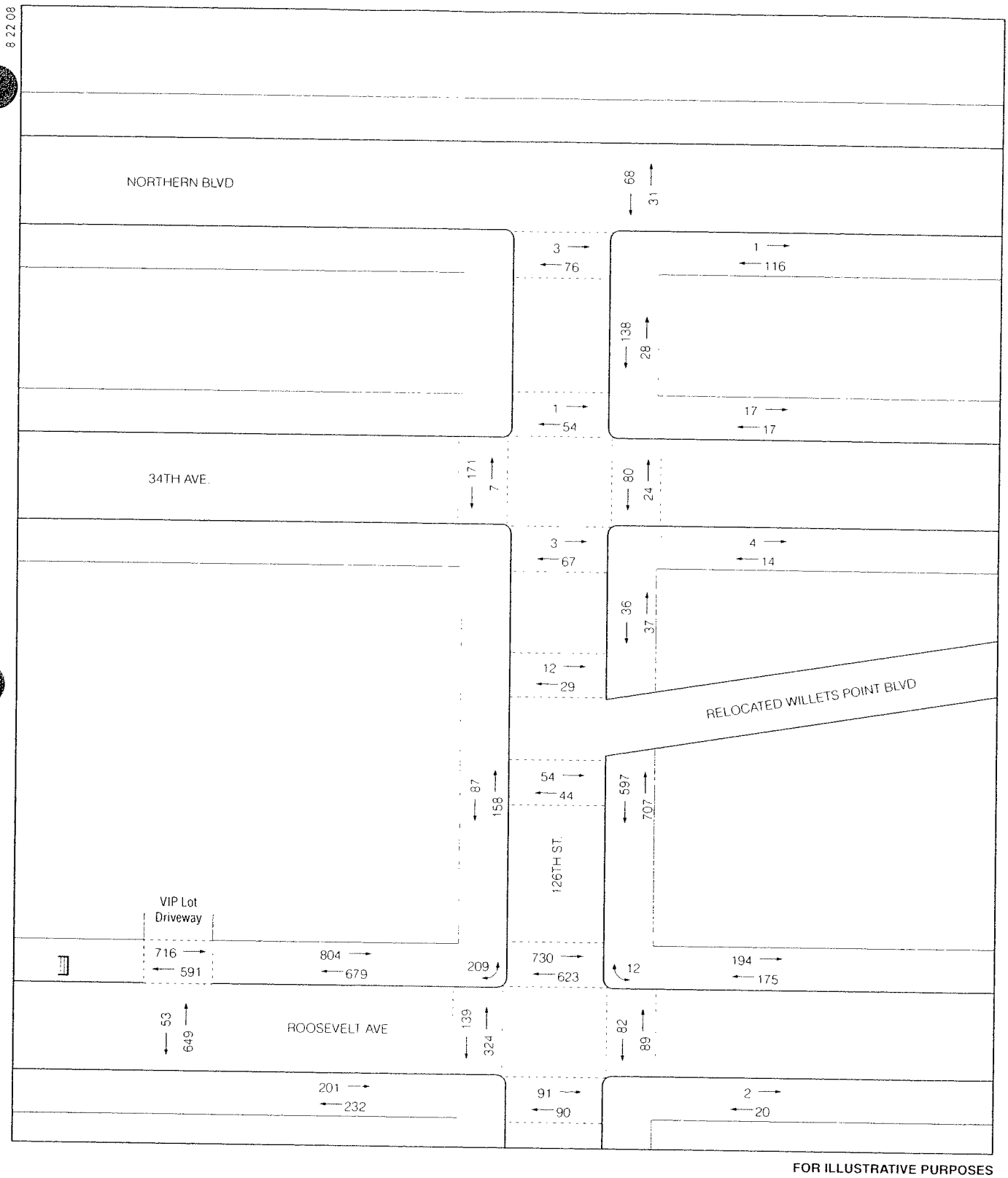
FOR ILLUSTRATIVE PURPOSES

2017 Build Pedestrian Volumes
Midday Peak 15-Minutes
Figure F-25



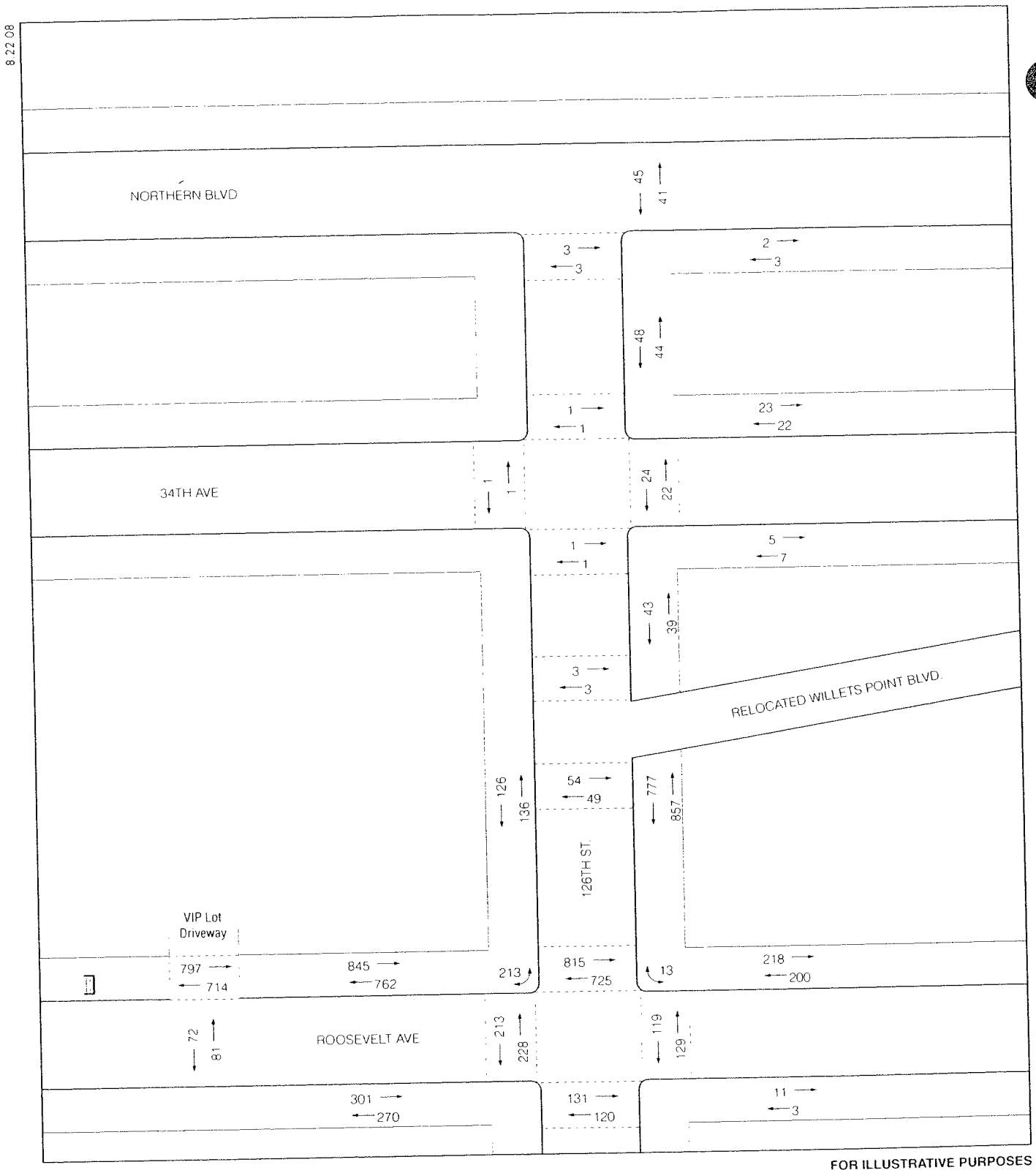
FOR ILLUSTRATIVE PURPOSES

2017 Build Pedestrian Volumes
PM Peak 15-Minutes
Figure F-26

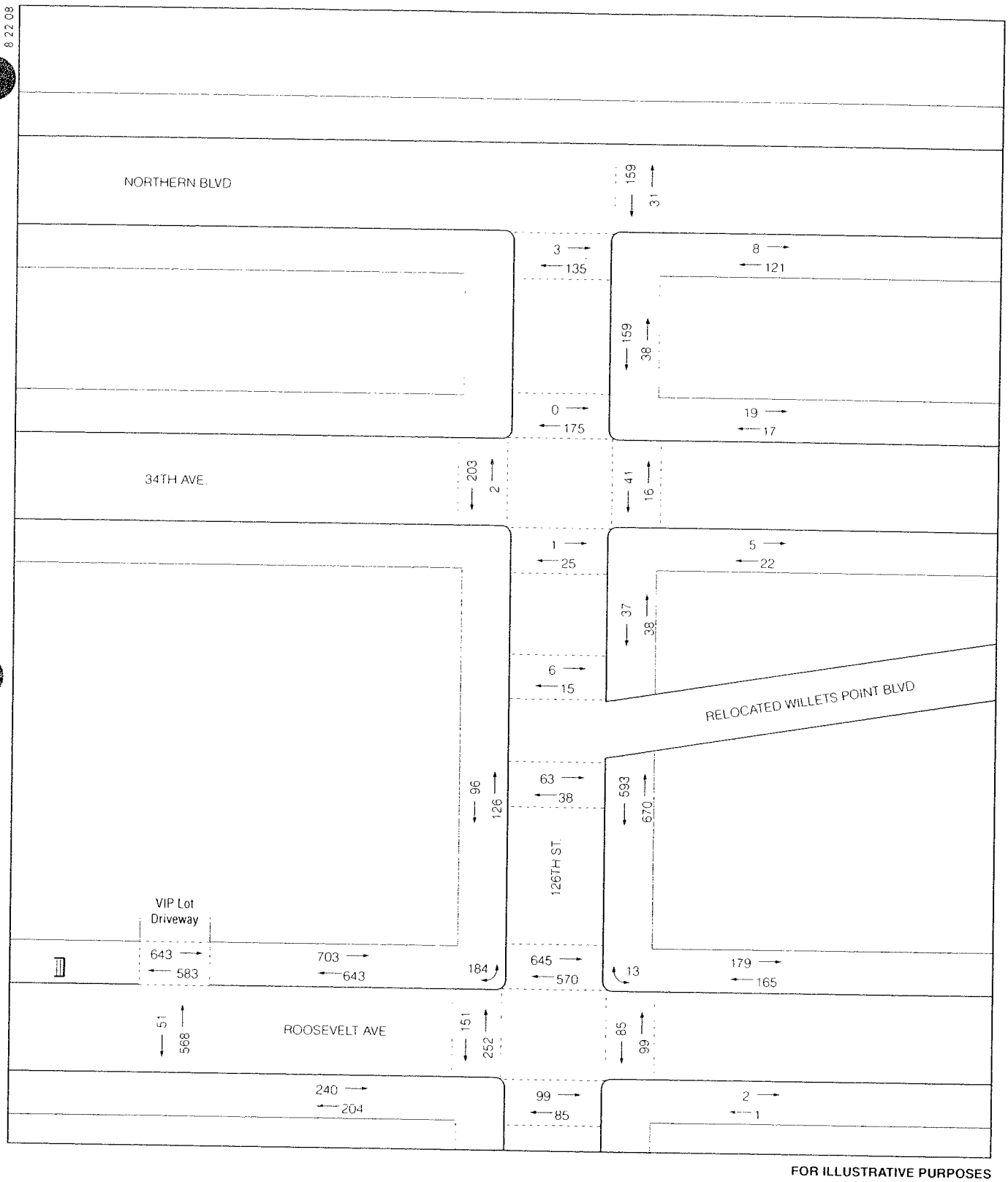


FOR ILLUSTRATIVE PURPOSES

2017 Build Pedestrian Volumes
PM Pre-game Peak 15-Minutes
Figure F-27



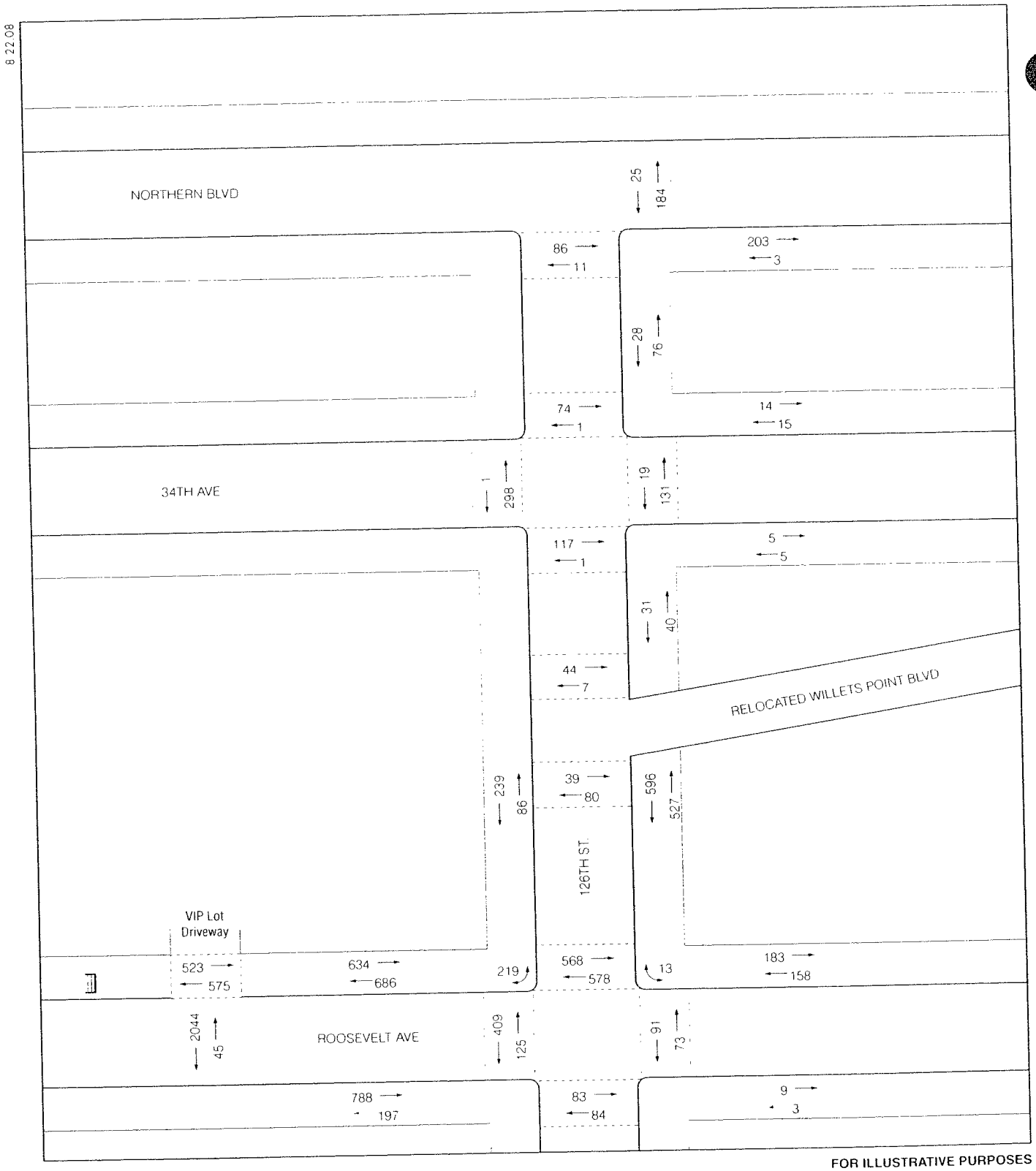
2017 Build Pedestrian Volumes
SAT MD Peak 15-Minutes
Figure F-28



FOR ILLUSTRATIVE PURPOSES

2017 Build Pedestrian Volumes
SAT Pre-game Peak 15-Minutes

Figure F-29



2017 Build Pedestrian Volumes
SAT Post Game Peak 15-Minutes
Figure F-30

APPENDIX G

NOISE

Appendix G: Noise

Table G-1
Noise Analysis Results

Site	Day	Time Period	Measured Existing	TNM Existing	FTA Manual, Subway	Adjustment Factor	TNM NB	Actual NB	Actual NB Increase	TNM Build	Actual Build	Actual Build Increase	TNM Mit	Actual Mit	Actual Mit Increase
1	Non-Game	AM	82.9	69.1	81.4	1.2	70.8	83.0	0.1	69.6	82.9	-0.1	N/A	N/A	N/A
		MD	81.4	68.4	79.5	1.6	69.0	81.4	0.0	68.9	81.4	0.0	N/A	N/A	N/A
		PM	85.5	69.5	80.7	4.5	70.1	85.5	0.0	70.3	85.6	0.1	N/A	N/A	N/A
		SMD	82.8	68.5	0.0	14.3	67.4	82.7	-0.1	68.8	82.8	0.1	N/A	N/A	N/A
	Game	PrG	85.8	68.4	0.0	17.4	68.5	85.8	0.0	68.5	85.8	0.0	N/A	N/A	N/A
		SPrG	83.9	67.6	80.7	3.0	67.3	83.9	0.0	67.9	83.9	0.0	N/A	N/A	N/A
		SPoG	83.3	68.4	80.7	2.3	68.7	83.3	0.0	69.6	83.4	0.1	N/A	N/A	N/A
2	Non-Game	AM	67.3	68.5	N/A	-1.2	69.1	67.9	0.6	69.3	68.1	0.2	N/A	N/A	N/A
		MD	66.6	69.2	N/A	-2.6	71.1	68.5	1.9	71.1	68.5	0.0	N/A	N/A	N/A
		PM	66.8	70.3	N/A	-3.5	71.4	67.9	1.1	70.4	66.9	-1.0	N/A	N/A	N/A
		SMD	64.3	66.6	N/A	-2.3	68.6	66.3	2.0	69.5	67.2	0.9	N/A	N/A	N/A
	Game	PrG	77.4	69.2	N/A	8.2	67.3	75.5	-1.9	66.8	75.0	-0.5	N/A	N/A	N/A
		SPrG	67.0	69.0	N/A	-2.0	70.3	68.3	1.3	67.2	65.2	-3.1	N/A	N/A	N/A
		SPoG	64.9	68.5	N/A	-3.6	67.4	63.8	-1.1	66.6	63.0	-0.8	N/A	N/A	N/A
3	Non-Game	AM	69.3	67.0	N/A	2.3	67.5	69.8	0.5	68.8	71.1	1.3	69.0	71.3	1.5
		MD	70.5	66.6	N/A	3.9	67.0	70.9	0.4	68.9	72.8	1.9	68.9	72.8	1.9
		PM	71.9	63.9	N/A	8.0	64.4	72.4	0.5	65.9	73.9	1.5	66.2	74.2	1.8
		SMD	68.4	60.7	N/A	7.7	61.0	68.7	0.3	64.5	72.2	3.5	64.7	72.4	3.7
	Game	PrG	71.1	65.0	N/A	6.1	65.8	71.9	0.8	66.1	72.2	0.3	66.1	72.2	0.3
		SPrG	68.6	66.1	N/A	2.5	66.9	69.4	0.8	67.1	69.6	0.2	67.1	69.6	0.2
		SPoG	68.6	65.4	N/A	3.2	64.6	67.8	-0.8	65.1	68.3	0.5	65.8	69.0	1.2

Table G-2
Rail Noise at Site 1

Time	Distance	SEL	Cars	Speed	Volume	Adjust	Contribution
AM	22.36068	82	11	35	47	4	81.4
MD	22.36068	82	11	35	30	4	79.5
PM	22.36068	82	11	35	40	4	80.7
SMD	22.36068	82	11	35	20	4	77.7
PrG	22.36068	82	11	35	40	4	80.7
SPrG	22.36068	82	11	35	40	4	80.7
SPoG	22.36068	82	11	35	40	4	80.7

Table G-3
L_{10} Values

Site	Day	Time Period	Measured Existing	Max Ex	Actual NB Increase	NB	Max NB	Actual Build Increase	B	Max B
1	Non-Game	AM	86.2	90.5	0.1	86.3	90.6	-0.1	86.2	90.9
		MD	83.4		0.1	83.5		0.0	83.5	
		PM	90.5		0.1	90.6		0.0	90.6	
		SMD	85.7		-0.6	85.1		0.7	85.8	
	Game	PrG	90.4		-0.2	90.2		0.7	90.9	
		SPrG	88.0		0.0	88.0		0.0	88.0	
		SPoG	86.1		0.0	86.1		0.0	86.1	
2	Non-Game	AM	69.9	80.5	0.5	70.4	78.0	0.3	70.7	79.0
		MD	69.6		2.1	71.7		0.7	72.4	
		PM	69.8		0.1	69.9		-0.9	69.0	
		SMD	66.0		2.7	68.7		0.0	68.7	
	Game	PrG	80.5		-2.5	78.0		1.0	79.0	
		SPrG	69.8		-1.8	68.0		-0.5	67.5	
		SPoG	67.4		-0.8	66.6		-0.7	65.9	
3	Non-Game	AM	70.8	73.3	0.5	71.3	73.7	1.3	72.6	7[illegible]
		MD	72.2		0.4	72.6		1.9	74.5	
		PM	73.3		0.3	73.6		1.7	75.3	
		SMD	69.5		0.3	69.8		3.5	73.3	
	Game	PrG	72.9		0.8	73.7		0.3	74.0	
		SPrG	69.9		0.8	70.7		0.2	70.9	
		SPoG	70.4		-0.8	69.6		0.5	70.1	
6	Non-Game	AM	72.1	73.4	0.0	72.1	73.4	0.8	71.3	71.3
		MD	70.7		0.0	70.7		1.6	70.0	
		PM	73.4		0.0	73.4		1.2	70.6	

As described in Chapter 20, "Noise," a number of locations within the district would require noise attenuation in order to avoid impacts from ambient noise. In order to avoid these impacts, an (E) designation would be mapped on these sites.

There are three levels of required noise attenuation depending upon the ambient noise levels: 30 dBA, 32 dBA, and 37 dBA. The text for the (E) designation for sites requiring 30 dBA is as follows:

> **"In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed window condition with a minimum of 30 dBA window/wall attenuation on all façades in order to maintain an interior noise level of 45 dBA. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning sleeves or HUD approved fans."**

For sites requiring 32 dBA noise attenuation, the following (E) designation noise text would apply:

> **"In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed window condition with a minimum of 32 dBA window/wall attenuation on all façades in order to maintain an interior noise level of 45 dBA. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning."**

For facades requiring 37 dBA noise attenuation, the following (E) designation noise text would apply:

> **"In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed window condition with a minimum of 37 dBA window/wall attenuation in order to maintain an interior noise level of 45 dBA. To achieve 37 dBA of building attenuation, special design features that go beyond the normal double-glazed windows are necessary and may include using specially designed windows (i.e., windows with small sizes, windows with air gaps, windows with thicker glazing, etc.), and additional building attenuation. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning."**

With the attenuation measures specified above, the proposed plan would not result in any significant adverse noise impacts, and would meet CEQR guidelines. The (E) designations for these sites affected by ambient noise are presented in Table G-4.

Table G-4
Noise Attenuation (E) Designations

Block	Lot	Governing Noise Site	Minimum Required Attenuation
1820	1	4,5	37
1820	6	4	37
1820	9	6,4	30, 37 on North façade
1820	18	4	37
1820	34	6	30
1820	108	6,4	30, 37 on North façade
1821	1	4	37
1821	6	4	37
1821	16	6	30
1821	25	6	30
1821	27	6	30
1821	35	6	30
1822	1	5	37
1822	5	6	30
1822	7	6	30
1822	17	6	30
1822	21	6	30
1822	23	6	30
1822	28	6	30
1822	33	6	30
1822	55	6	30
1822	58	6	30
1823	1	5	37
1823	3	6	30

Table G-4 (cont'd)
Noise Attenuation (E) Designations

Block	Lot	Governing Noise Site	Minimum Required Attenuation
1823	5	6	30
1823	7	6	30
1823	12	6	30
1823	14	6	30
1823	19	6	30
1823	20	6	30
1823	21	6	30
1823	23	6	30
1823	26	6	30
1823	28	6	30
1823	33	6	30
1823	40	6	30
1823	44	6	30
1823	47	6	30
1823	52	6	30
1823	55	6	30
1823	58	6	30
1823	59	6	30
1823	60	5	37
1824	1	6,5	30, 37 on east façade
1824	12	6	30
1824	19	6	30
1824	21	6	30
1824	26	6	30
1824	28	6	30
1824	33	6	30
1824	38	6	30
1824	40	6	30
1824	45	6	30
1824	53	5	37
1825	1	5	37
1825	19	6	30
1825	21	6	30
1825	25	6	30
1825	28	6	30
1825	30	6	30
1825	37	6	30
1825	46	6	30
1825	48	6	30
1825	53	6	30
1825	55	6	30
1825	58	6	30
1826	1	5	37
1826	5	5	37
1826	14	6	30
1826	18	6	30
1826	20	7,6	37, 30 on north façade
1826	31	7	37
1826	35	7	37
1827	1	7	37
1828	1	4	37
1828	4	4	37
1828	8	4	37
1828	11	6	30
1828	13	6	30
1828	17	6	30

Table G-4 (cont'd)
Noise Attenuation (E) Designations

Block	Lot	Governing Noise Site	Minimum Required Attenuation
1828	21	6	30
1828	23	6	30
1828	29	6	30
1828	34	6	30
1828	37	6	30
1828	39	6	30
1829	19	6,4	30, 37 on North façade
1829	21	4	37
1829	40	6	30
1829	71	6	30
1830	9	6	30
1830	10	6	30
1830	21	6	30
1831	1	6	30
1831	10	6	30
1831	35	6	30
1832	1	6	30
1832	10	6	30
1833	103	7	37
1833	111	7	37
1833	117	7	37
1833	120	6	30
1833	141	6	30
1833	143	6	30
1833	151	6	30
1833	155	6	30
1833	158	6	30
1833	165	6	30
1833	166	6	30
1833	168	6	30
1833	170	6	30
1833	172	6	30
1833	177	6	30
1833	179	6	30
1833	180	6	30
1833	186	6	30
1833	188	6	30
1833	192	6	30
1833	197	6	30
1833	199	6	30
1833	201	6	30
1833	203	6	30
1833	212	6	30
1833	215	6	30
1833	230	6	30
1833	300	6	30
1833	425	6	30
1833	1	6,7	30, 37 on South façade

Notes: †Attenuation values shown assume a residential use; commercial uses would require 5 dBA less attenuation.

APPENDIX H

CONSTRUCTION TRAFFIC

Construction Traffic Temporal and Directional Distribution

	Worker						Truck					
	Regular Shift			Extended Shift			Regular Shift			Extended Shift		
	Temporal	IN	OUT	Temporal	IN	OUT	Temporal	IN	OUT	Temporal	IN	OUT
6:00 AM - 7:00 AM	**80%**	**100%**	**0%**	**80%**	**100%**	**0%**	**25%**	**100%**	**100%**	**20%**	**100%**	**100%**
7:00 AM - 8:00 AM	20%	100%	0%	20%	100%	0%	10%	100%	100%	10%	100%	100%
8:00 AM - 9:00 AM	0%	100%	0%	0%	100%	0%	10%	100%	100%	10%	100%	100%
9:00 AM - 10:00 AM	0%	100%	0%	0%	100%	0%	10%	100%	100%	10%	100%	100%
10:00 AM - 11:00 AM	0%	50%	50%	0%	50%	50%	10%	100%	100%	10%	100%	100%
11:00 AM - 12:00 PM	0%	50%	50%	0%	50%	50%	10%	100%	100%	10%	100%	100%
12:00 PM - 1:00 PM	0%	50%	50%	0%	50%	50%	10%	100%	100%	10%	100%	100%
1:00 PM - 2:00 PM	0%	50%	50%	0%	50%	50%	10%	100%	100%	5%	100%	100%
2:00 PM - 3:00 PM	10%	0%	100%	0%	0%	100%	5%	100%	100%	5%	100%	100%
3:00 PM - 4:00 PM	**80%**	**0%**	**100%**	**0%**	**0%**	**100%**	**0%**	**100%**	**100%**	**5%**	**100%**	**100%**
4:00 PM - 5:00 PM	10%	0%	100%	10%	0%	100%	0%	100%	100%	5%	100%	100%
5:00 PM - 6:00 PM	**0%**	**0%**	**100%**	**80%**	**0%**	**100%**	**0%**	**100%**	**100%**	**0%**	**100%**	**100%**
6:00 PM - 7:00 PM	0%	0%	100%	10%	0%	100%	0%	100%	100%	0%	100%	100%
	200%			200%			100%			100%		

Construction Vehicle Trip Projection (PCEs)

		2009				2010				2011				2012				2013				2014				2015				2016				2017			
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
6:00 AM - 7:00 AM	IN	174	225	225	176	144	172	211	211	195	327	415	694	929	1259	1099	1557	959	1482	863	729	173	360	538	850	773	980	628	696	688	1037	854	784	192	192	192	192
	OUT	28	30	30	30	22	26	28	28	36	72	74	134	150	212	174	278	144	228	108	96	40	80	100	132	104	128	92	112	104	136	100	90	22	22	22	22
	IN + OUT	**202**	**255**	**255**	**206**	**166**	**198**	**239**	**239**	**231**	**399**	**489**	**828**	**1079**	**1471**	**1273**	**1835**	**1103**	**1710**	**971**	**825**	**213**	**440**	**638**	**982**	**877**	**1108**	**720**	**808**	**792**	**1173**	**954**	**874**	**214**	**214**	**214**	**214**
7:00 AM - 8:00 AM	IN	49	61	61	49	40	47	58	58	53	94	117	198	261	354	305	441	266	413	237	201	52	106	151	237	213	269	174	196	192	283	233	214	54	54	54	54
	OUT	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	12	12	12	12
	IN + OUT	61	73	73	61	50	57	70	70	67	124	149	256	327	446	379	563	328	513	285	243	70	142	193	295	259	325	214	246	238	341	277	254	66	66	66	66
8:00 AM - 9:00 AM	IN	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	12	12	12	12
	OUT	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	12	12	12	12
	IN + OUT	24	24	24	24	20	20	24	24	28	60	64	116	132	184	148	244	124	200	96	84	36	72	84	116	92	112	80	100	92	116	88	80	24	24	24	24
9:00 AM - 10:00 AM	IN	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	12	12	12	12
	OUT	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	12	12	12	12
	IN + OUT	24	24	24	24	20	20	24	24	28	60	64	116	132	184	148	244	124	200	96	84	36	72	84	116	92	112	80	100	92	116	88	80	24	24	24	24
10:00 AM - 11:00 AM	IN	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	12	12	12	12
	OUT	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	12	12	12	12
	IN + OUT	24	24	24	24	20	20	24	24	28	60	64	116	132	184	148	244	124	200	96	84	36	72	84	116	92	112	80	100	92	116	88	80	24	24	24	24
11:00 AM - 12:00 PM	IN	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	12	12	12	12
	OUT	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	12	12	12	12
	IN + OUT	24	24	24	24	20	20	24	24	28	60	64	116	132	184	148	244	124	200	96	84	36	72	84	116	92	112	80	100	92	116	88	80	24	24	24	24
12:00 PM - 1:00 PM	IN	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	12	12	12	12
	OUT	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	12	12	12	12
	IN + OUT	24	24	24	24	20	20	24	24	28	60	64	116	132	184	148	244	124	200	96	84	36	72	84	116	92	112	80	100	92	116	88	80	24	24	24	24
1:00 PM - 2:00 PM	IN	12	12	12	12	10	10	12	12	12	24	28	46	54	72	60	94	48	76	36	32	16	28	34	46	36	42	32	38	34	46	34	30	8	8	8	8
	OUT	12	12	12	12	10	10	12	12	12	24	28	46	54	72	60	94	48	76	36	32	16	28	34	46	36	42	32	38	34	46	34	30	8	8	8	8
	IN + OUT	24	24	24	24	20	20	24	24	24	48	56	92	108	144	120	188	96	152	72	64	32	56	68	92	72	84	64	76	68	92	68	60	16	16	16	16
2:00 PM - 3:00 PM	IN	6	6	6	6	4	6	6	6	6	14	16	30	34	46	38	60	32	50	22	20	8	16	22	28	22	28	20	24	22	30	22	20	4	4	4	4
	OUT	24	30	30	24	19	24	29	29	25	39	47	74	94	122	109	150	92	135	76	62	22	39	56	80	73	85	59	64	62	91	72	64	15	15	15	15
	IN + OUT	30	36	36	30	23	30	35	35	31	53	63	104	128	168	147	210	124	185	98	82	30	55	78	108	95	113	79	88	84	121	94	84	19	19	19	19
3:00 PM - 4:00 PM	IN	0	0	0	0	0	0	0	0	0	4	6	12	14	20	14	26	14	24	10	10	2	6	8	12	8	12	8	10	10	14	10	10	2	2	2	2
	OUT	146	195	195	146	122	146	183	183	149	201	252	363	496	629	584	747	491	706	442	345	116	186	282	426	412	467	320	331	331	501	409	364	87	87	87	87
	IN + OUT	**146**	**195**	**195**	**146**	**122**	**146**	**183**	**183**	**149**	**205**	**258**	**375**	**510**	**649**	**598**	**773**	**505**	**730**	**452**	**355**	**118**	**192**	**290**	**438**	**420**	**479**	**328**	**341**	**341**	**515**	**419**	**374**	**89**	**89**	**89**	**89**
4:00 PM - 5:00 PM	IN	0	0	0	0	0	0	0	0	0	4	6	12	14	20	14	26	14	24	10	10	2	6	8	12	8	12	8	10	10	14	10	10	2	2	2	2
	OUT	18	24	24	18	15	18	23	23	20	36	49	82	111	151	129	186	116	181	104	89	18	41	63	102	92	119	75	83	83	127	104	96	24	24	24	24
	IN + OUT	18	24	24	18	15	18	23	23	20	40	55	94	125	171	143	212	130	205	114	99	20	47	71	114	100	131	83	93	93	141	114	106	26	26	26	26
5:00 PM - 6:00 PM	IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OUT	0	0	0	0	0	0	0	0	10	58	95	209	297	438	355	558	338	572	323	298	19	100	164	304	265	397	224	263	263	414	355	340	85	85	85	85
	IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**58**	**95**	**209**	**297**	**438**	**355**	**558**	**338**	**572**	**323**	**298**	**19**	**100**	**164**	**304**	**265**	**397**	**224**	**263**	**263**	**414**	**355**	**340**	**85**	**85**	**85**	**85**
6:00 PM - 7:00 PM	IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OUT	0	0	0	0	0	0	0	0	1	7	12	26	37	55	44	70	42	72	40	37	2	12	21	38	33	50	28	33	33	52	44	42	11	11	11	11
	IN + OUT	0	0	0	0	0	0	0	0	1	7	12	26	37	55	44	70	42	72	40	37	2	12	21	38	33	50	28	33	33	52	44	42	11	11	11	11

Construction Worker Auto Trip Projection

		2009				2010				2011				2012				2013				2014				2015				2016				2017			
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
6:00 AM - 7:00 AM	IN	146	195	195	146	122	146	183	183	159	255	341	560	779	1047	925	1279	815	1254	755	633	133	280	438	718	669	852	536	584	584	901	754	694	170	170	170	170
	OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IN + OUT	**146**	**195**	**195**	**146**	**122**	**146**	**183**	**183**	**159**	**255**	**341**	**560**	**779**	**1047**	**925**	**1279**	**815**	**1254**	**755**	**633**	**133**	**280**	**438**	**718**	**669**	**852**	**536**	**584**	**584**	**901**	**754**	**694**	**170**	**170**	**170**	**170**
7:00 AM - 8:00 AM	IN	37	49	49	37	30	37	46	46	39	64	85	140	195	262	231	319	204	313	189	159	34	70	109	179	167	213	134	146	146	225	189	174	42	42	42	42
	OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IN + OUT	**37**	**49**	**49**	**37**	**30**	**37**	**46**	**46**	**39**	**64**	**85**	**140**	**195**	**262**	**231**	**319**	**204**	**313**	**189**	**159**	**34**	**70**	**109**	**179**	**167**	**213**	**134**	**146**	**146**	**225**	**189**	**174**	**42**	**42**	**42**	**42**
8:00 AM - 9:00 AM	IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
9:00 AM - 10:00 AM	IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
10:00 AM - 11:00 AM	IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
11:00 AM - 12:00 PM	IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
12:00 PM - 1:00 PM	IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1:00 PM - 2:00 PM	IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2:00 PM - 3:00 PM	IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OUT	18	24	24	18	15	18	23	23	19	25	31	44	60	76	71	90	60	85	54	42	14	23	34	52	51	57	39	40	40	61	50	44	11	11	11	11
	IN + OUT	**18**	**24**	**24**	**18**	**15**	**18**	**23**	**23**	**19**	**25**	**31**	**44**	**60**	**76**	**71**	**90**	**60**	**85**	**54**	**42**	**14**	**23**	**34**	**52**	**51**	**57**	**39**	**40**	**40**	**61**	**50**	**44**	**11**	**11**	**11**	**11**
3:00 PM - 4:00 PM	IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OUT	146	195	195	146	122	146	183	183	149	197	246	351	482	609	570	721	477	682	432	335	114	180	274	414	404	455	312	321	321	487	399	354	85	85	85	85
	IN + OUT	**146**	**195**	**195**	**146**	**122**	**146**	**183**	**183**	**149**	**197**	**246**	**351**	**482**	**609**	**570**	**721**	**477**	**682**	**432**	**335**	**114**	**180**	**274**	**414**	**404**	**455**	**312**	**321**	**321**	**487**	**399**	**354**	**85**	**85**	**85**	**85**
4:00 PM - 5:00 PM	IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OUT	18	24	24	18	15	18	23	23	20	32	43	70	97	131	115	160	102	157	94	79	16	35	55	90	84	107	67	73	73	113	94	86	22	22	22	22
	IN + OUT	**18**	**24**	**24**	**18**	**15**	**18**	**23**	**23**	**20**	**32**	**43**	**70**	**97**	**131**	**115**	**160**	**102**	**157**	**94**	**79**	**16**	**35**	**55**	**90**	**84**	**107**	**67**	**73**	**73**	**113**	**94**	**86**	**22**	**22**	**22**	**22**
5:00 PM - 6:00 PM	IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OUT	0	0	0	0	0	0	0	0	10	58	95	209	297	438	355	558	338	572	323	298	19	100	164	304	265	397	224	263	263	414	355	340	85	85	85	85
	IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**58**	**95**	**209**	**297**	**438**	**355**	**558**	**338**	**572**	**323**	**298**	**19**	**100**	**164**	**304**	**265**	**397**	**224**	**263**	**263**	**414**	**355**	**340**	**85**	**85**	**85**	**85**
6:00 PM - 7:00 PM	IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OUT	0	0	0	0	0	0	0	0	1	7	12	26	37	55	44	70	42	72	40	37	2	12	21	38	33	50	28	33	33	52	44	42	11	11	11	11
	IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**	**12**	**26**	**37**	**55**	**44**	**70**	**42**	**72**	**40**	**37**	**2**	**12**	**21**	**38**	**33**	**50**	**28**	**33**	**33**	**52**	**44**	**42**	**11**	**11**	**11**	**11**

Construction Truck Trip Projection

		2009				2010				2011				2012				2013				2014				2015				2016				2017			
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
6:00 AM - 7:00 AM	IN	14	15	15	15	11	13	14	14	18	36	37	67	75	106	87	139	72	114	54	48	20	40	50	66	52	64	46	56	52	68	50	45	45	11	11	11
	OUT	14	15	15	15	11	13	14	14	18	36	37	67	75	106	87	139	72	114	54	48	20	40	50	66	52	64	46	56	52	68	50	45	45	11	11	11
	IN + OUT	**28**	**30**	**30**	**30**	**22**	**26**	**28**	**28**	**36**	**72**	**74**	**134**	**150**	**212**	**174**	**278**	**144**	**228**	**108**	**96**	**40**	**80**	**100**	**132**	**104**	**128**	**92**	**112**	**104**	**136**	**100**	**90**	**90**	**22**	**22**	**22**
7:00 AM - 8:00 AM	IN	6	6	6	6	5	5	6	6	7	15	16	29	33	46	37	61	31	50	24	21	9	18	21	29	23	28	20	25	23	29	22	20	20	6	6	6
	OUT	6	6	6	6	5	5	6	6	7	15	16	29	33	46	37	61	31	50	24	21	9	18	21	29	23	28	20	25	23	29	22	20	20	6	6	6
	IN + OUT	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	40	12	12	12
8:00 AM - 9:00 AM	IN	6	6	6	6	5	5	6	6	7	15	16	29	33	46	37	61	31	50	24	21	9	18	21	29	23	28	20	25	23	29	22	20	20	6	6	6
	OUT	6	6	6	6	5	5	6	6	7	15	16	29	33	46	37	61	31	50	24	21	9	18	21	29	23	28	20	25	23	29	22	20	20	6	6	6
	IN + OUT	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	40	12	12	12
9:00 AM - 10:00 AM	IN	6	6	6	6	5	5	6	6	7	15	16	29	33	46	37	61	31	50	24	21	9	18	21	29	23	28	20	25	23	29	22	20	20	6	6	6
	OUT	6	6	6	6	5	5	6	6	7	15	16	29	33	46	37	61	31	50	24	21	9	18	21	29	23	28	20	25	23	29	22	20	20	6	6	6
	IN + OUT	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	40	12	12	12
10:00 AM - 11:00 AM	IN	6	6	6	6	5	5	6	6	7	15	16	29	33	46	37	61	31	50	24	21	9	18	21	29	23	28	20	25	23	29	22	20	20	6	6	6
	OUT	6	6	6	6	5	5	6	6	7	15	16	29	33	46	37	61	31	50	24	21	9	18	21	29	23	28	20	25	23	29	22	20	20	6	6	6
	IN + OUT	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	40	12	12	12
11:00 AM - 12:00 PM	IN	6	6	6	6	5	5	6	6	7	15	16	29	33	46	37	61	31	50	24	21	9	18	21	29	23	28	20	25	23	29	22	20	20	6	6	6
	OUT	6	6	6	6	5	5	6	6	7	15	16	29	33	46	37	61	31	50	24	21	9	18	21	29	23	28	20	25	23	29	22	20	20	6	6	6
	IN + OUT	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	40	12	12	12
12:00 PM - 1:00 PM	IN	6	6	6	6	5	5	6	6	7	15	16	29	33	46	37	61	31	50	24	21	9	18	21	29	23	28	20	25	23	29	22	20	20	6	6	6
	OUT	6	6	6	6	5	5	6	6	7	15	16	29	33	46	37	61	31	50	24	21	9	18	21	29	23	28	20	25	23	29	22	20	20	6	6	6
	IN + OUT	12	12	12	12	10	10	12	12	14	30	32	58	66	92	74	122	62	100	48	42	18	36	42	58	46	56	40	50	46	58	44	40	40	12	12	12
1:00 PM - 2:00 PM	IN	6	6	6	6	5	5	6	6	6	12	14	23	27	36	30	47	24	38	18	16	8	14	17	23	18	21	16	19	17	23	17	15	15	4	4	4
	OUT	6	6	6	6	5	5	6	6	6	12	14	23	27	36	30	47	24	38	18	16	8	14	17	23	18	21	16	19	17	23	17	15	15	4	4	4
	IN + OUT	12	12	12	12	10	10	12	12	12	24	28	46	54	72	60	94	48	76	36	32	16	28	34	46	36	42	32	38	34	46	34	30	30	8	8	8
2:00 PM - 3:00 PM	IN	3	3	3	3	2	3	3	3	3	7	8	15	17	23	19	30	16	25	11	10	4	8	11	14	11	14	10	12	11	15	11	10	10	2	2	2
	OUT	3	3	3	3	2	3	3	3	3	7	8	15	17	23	19	30	16	25	11	10	4	8	11	14	11	14	10	12	11	15	11	10	10	2	2	2
	IN + OUT	6	6	6	6	4	6	6	6	6	14	16	30	34	46	38	60	32	50	22	20	8	16	22	28	22	28	20	24	22	30	22	20	20	4	4	4
3:00 PM - 4:00 PM	IN	0	0	0	0	0	0	0	0	0	2	3	6	7	10	7	13	7	12	5	5	1	3	4	6	4	6	4	5	5	7	5	5	5	1	1	1
	OUT	0	0	0	0	0	0	0	0	0	2	3	6	7	10	7	13	7	12	5	5	1	3	4	6	4	6	4	5	5	7	5	5	5	1	1	1
	IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**6**	**12**	**14**	**20**	**14**	**26**	**14**	**24**	**10**	**10**	**2**	**6**	**8**	**12**	**8**	**12**	**8**	**10**	**10**	**14**	**10**	**10**	**10**	**2**	**2**	**2**
4:00 PM - 5:00 PM	IN	0	0	0	0	0	0	0	0	0	2	3	6	7	10	7	13	7	12	5	5	1	3	4	6	4	6	4	5	5	7	5	5	5	1	1	1
	OUT	0	0	0	0	0	0	0	0	0	2	3	6	7	10	7	13	7	12	5	5	1	3	4	6	4	6	4	5	5	7	5	5	5	1	1	1
	IN + OUT	0	0	0	0	0	0	0	0	0	4	6	12	14	20	14	26	14	24	10	10	2	6	8	12	8	12	8	10	10	14	10	10	10	2	2	2
5:00 PM - 6:00 PM	IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
6:00 PM - 7:00 PM	IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IN + OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Construction Worker Auto Trip Projection: Regular Shift

	Regular Shift		2009				2010				2011				2012				2013				2014				2015				2016				2017			
	Temporal	Worker	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
6:00 AM - 7:00 AM	80%	IN 100%	146	195	195	146	122	146	183	183	149	197	246	351	482	609	570	721	477	682	432	335	114	180	274	414	404	455	312	321	321	487	399	354	85	85	85	85
		OUT 0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT	**146**	**195**	**195**	**146**	**122**	**146**	**183**	**183**	**149**	**197**	**246**	**351**	**482**	**609**	**570**	**721**	**477**	**682**	**432**	**335**	**114**	**180**	**274**	**414**	**404**	**455**	**312**	**321**	**321**	**487**	**399**	**354**	**85**	**85**	**85**	**85**
7:00 AM - 8:00 AM	20%	IN 100%	37	49	49	37	30	37	46	46	37	49	61	88	121	152	142	180	119	170	108	84	29	45	68	103	101	114	78	80	80	122	100	89	21	21	21	21
		OUT 0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT	37	49	49	37	30	37	46	46	37	49	61	88	121	152	142	180	119	170	108	84	29	45	68	103	101	114	78	80	80	122	100	89	21	21	21	21
8:00 AM - 9:00 AM	0%	IN 100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM - 10:00 AM	0%	IN 100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM - 11:00 AM	0%	IN 50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM - 12:00 PM	0%	IN 50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 1:00 PM	0%	IN 50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM - 2:00 PM	0%	IN 50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM - 3:00 PM	10%	IN 0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 100%	18	24	24	18	15	18	23	23	19	25	31	44	60	76	71	90	60	85	54	42	14	23	34	52	51	57	39	40	40	61	50	44	11	11	11	11
		IN + OUT	18	24	24	18	15	18	23	23	19	25	31	44	60	76	71	90	60	85	54	42	14	23	34	52	51	57	39	40	40	61	50	44	11	11	11	11
3:00 PM - 4:00 PM	80%	IN 0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 100%	146	195	195	146	122	146	183	183	149	197	246	351	482	609	570	721	477	682	432	335	114	180	274	414	404	455	312	321	321	487	399	354	85	85	85	85
		IN + OUT	**146**	**195**	**195**	**146**	**122**	**146**	**183**	**183**	**149**	**197**	**246**	**351**	**482**	**609**	**570**	**721**	**477**	**682**	**432**	**335**	**114**	**180**	**274**	**414**	**404**	**455**	**312**	**321**	**321**	**487**	**399**	**354**	**85**	**85**	**85**	**85**
4:00 PM - 5:00 PM	10%	IN 0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 100%	18	24	24	18	15	18	23	23	19	25	31	44	60	76	71	90	60	85	54	42	14	23	34	52	51	57	39	40	40	61	50	44	11	11	11	11
		IN + OUT	18	24	24	18	15	18	23	23	19	25	31	44	60	76	71	90	60	85	54	42	14	23	34	52	51	57	39	40	40	61	50	44	11	11	11	11
5:00 PM - 6:00 PM	0%	IN 0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM - 7:00 PM	0%	IN 0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Construction Worker Auto Trip Projection: Extended Shift

		Extended Shift		2009				2010				2011				2012				2013				2014				2015				2016				2017			
	Temporal	Worker		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
				0	0	0	0	0	0	0	0	20	120	195	430	610	900	730	1145	695	1175	663	613	40	205	338	625	545	815	460	540	540	850	730	698	175	175	175	175
6:00 AM - 7:00 AM	80%	IN 100%		0	0	0	0	0	0	0	0	10	58	95	209	297	438	355	558	338	572	323	298	19	100	164	304	265	397	224	263	263	414	355	340	85	85	85	85
		OUT 0%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**58**	**95**	**209**	**297**	**438**	**355**	**558**	**338**	**572**	**323**	**298**	**19**	**100**	**164**	**304**	**265**	**397**	**224**	**263**	**263**	**414**	**355**	**340**	**85**	**85**	**85**	**85**
7:00 AM - 8:00 AM	20%	IN 100%		0	0	0	0	0	0	0	0	2	15	24	52	74	110	89	139	85	143	81	75	5	25	41	76	66	99	56	66	66	103	89	85	21	21	21	21
		OUT 0%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**15**	**24**	**52**	**74**	**110**	**89**	**139**	**85**	**143**	**81**	**75**	**5**	**25**	**41**	**76**	**66**	**99**	**56**	**66**	**66**	**103**	**89**	**85**	**21**	**21**	**21**	**21**
8:00 AM - 9:00 AM	0%	IN 100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 0%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
9:00 AM - 10:00 AM	0%	IN 100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 0%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
10:00 AM - 11:00 AM	0%	IN 50%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 50%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
11:00 AM - 12:00 PM	0%	IN 50%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 50%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
12:00 PM - 1:00 PM	0%	IN 50%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 50%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1:00 PM - 2:00 PM	0%	IN 50%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 50%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2:00 PM - 3:00 PM	0%	IN 0%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
3:00 PM - 4:00 PM	0%	IN 0%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:00 PM - 5:00 PM	10%	IN 0%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 100%		0	0	0	0	0	0	0	0	1	7	12	26	37	55	44	70	42	72	40	37	2	12	21	38	33	50	28	33	33	52	44	42	11	11	11	11
		IN + OUT		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**	**12**	**26**	**37**	**55**	**44**	**70**	**42**	**72**	**40**	**37**	**2**	**12**	**21**	**38**	**33**	**50**	**28**	**33**	**33**	**52**	**44**	**42**	**11**	**11**	**11**	**11**
5:00 PM - 6:00 PM	80%	IN 0%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
6:00 PM - 7:00 PM	10%	IN 0%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		OUT 100%		0	0	0	0	0	0	0	0	1	7	12	26	37	55	44	70	42	72	40	37	2	12	21	38	33	50	28	33	33	52	44	42	11	11	11	11
		IN + OUT		0	0	0	0	0	0	0	0	1	7	12	26	37	55	44	70	42	72	40	37	2	12	21	38	33	50	28	33	33	52	44	42	11	11	11	11

Construction Truck Trip Projection: Regular Shift

	Regular Shift		2009				2010				2011				2012				2013				2014				2015				2016				2017			
	Temporal	Truck	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
			55	60	60	60	45	50	55	55	62	102	108	172	196	262	233	338	170	262	130	108	69	108	131	166	136	152	119	141	122	163	116	103	25	25	25	25
6:00 AM - 7:00 AM	25%	IN 100%	14	15	15	15	11	13	14	14	16	26	27	43	49	66	58	85	43	66	32	27	17	27	33	42	34	38	30	35	31	41	29	26	6	6	6	6
		OUT 100%	14	15	15	15	11	13	14	14	16	26	27	43	49	66	58	85	43	66	32	27	17	27	33	42	34	38	30	35	31	41	29	26	6	6	6	6
		IN + OUT	**28**	**30**	**30**	**30**	**22**	**26**	**28**	**28**	**32**	**52**	**54**	**86**	**98**	**132**	**116**	**170**	**86**	**132**	**64**	**54**	**34**	**54**	**66**	**84**	**68**	**76**	**60**	**70**	**62**	**82**	**58**	**52**	**12**	**12**	**12**	**12**
7:00 AM - 8:00 AM	10%	IN 100%	6	6	6	6	5	5	6	6	6	10	11	17	20	26	23	34	17	26	13	11	7	11	13	17	14	15	12	14	12	16	12	10	3	3	3	3
		OUT 100%	6	6	6	6	5	5	6	6	6	10	11	17	20	26	23	34	17	26	13	11	7	11	13	17	14	15	12	14	12	16	12	10	3	3	3	3
		IN + OUT	12	12	12	12	10	10	12	12	12	20	22	34	40	52	46	68	34	52	26	22	14	22	26	34	28	30	24	28	24	32	24	20	6	6	6	6
8:00 AM - 9:00 AM	10%	IN 100%	6	6	6	6	5	5	6	6	6	10	11	17	20	26	23	34	17	26	13	11	7	11	13	17	14	15	12	14	12	16	12	10	3	3	3	3
		OUT 100%	6	6	6	6	5	5	6	6	6	10	11	17	20	26	23	34	17	26	13	11	7	11	13	17	14	15	12	14	12	16	12	10	3	3	3	3
		IN + OUT	12	12	12	12	10	10	12	12	12	20	22	34	40	52	46	68	34	52	26	22	14	22	26	34	28	30	24	28	24	32	24	20	6	6	6	6
9:00 AM - 10:00 AM	10%	IN 100%	6	6	6	6	5	5	6	6	6	10	11	17	20	26	23	34	17	26	13	11	7	11	13	17	14	15	12	14	12	16	12	10	3	3	3	3
		OUT 100%	6	6	6	6	5	5	6	6	6	10	11	17	20	26	23	34	17	26	13	11	7	11	13	17	14	15	12	14	12	16	12	10	3	3	3	3
		IN + OUT	12	12	12	12	10	10	12	12	12	20	22	34	40	52	46	68	34	52	26	22	14	22	26	34	28	30	24	28	24	32	24	20	6	6	6	6
10:00 AM - 11:00 AM	10%	IN 100%	6	6	6	6	5	5	6	6	6	10	11	17	20	26	23	34	17	26	13	11	7	11	13	17	14	15	12	14	12	16	12	10	3	3	3	3
		OUT 100%	6	6	6	6	5	5	6	6	6	10	11	17	20	26	23	34	17	26	13	11	7	11	13	17	14	15	12	14	12	16	12	10	3	3	3	3
		IN + OUT	12	12	12	12	10	10	12	12	12	20	22	34	40	52	46	68	34	52	26	22	14	22	26	34	28	30	24	28	24	32	24	20	6	6	6	6
11:00 AM - 12:00 PM	10%	IN 100%	6	6	6	6	5	5	6	6	6	10	11	17	20	26	23	34	17	26	13	11	7	11	13	17	14	15	12	14	12	16	12	10	3	3	3	3
		OUT 100%	6	6	6	6	5	5	6	6	6	10	11	17	20	26	23	34	17	26	13	11	7	11	13	17	14	15	12	14	12	16	12	10	3	3	3	3
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		OUT 100%	6	6	6	6	5	5	6	6	6	10	11	17	20	26	23	34	17	26	13	11	7	11	13	17	14	15	12	14	12	16	12	10	3	3	3	3
		IN + OUT	12	12	12	12	10	10	12	12	12	20	22	34	40	52	46	68	34	52	26	22	14	22	26	34	28	30	24	28	24	32	24	20	6	6	6	6
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		OUT 100%	3	3	3	3	2	3	3	3	3	5	5	9	10	13	12	17	9	13	6	5	3	5	7	8	6	8	6	7	6	8	6	5	1	1	1	1
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4:00 PM - 5:00 PM	0%	IN 100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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		OUT 100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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		OUT 100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IN + OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Construction Truck Trip Projection: Extended Shift

	Extended Shift		2009				2010				2011				2012				2013				2014				2015				2016				2017			
	Temporal	Truck	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
			0	0	0	0	0	0	0	0	8	48	52	118	132	201	145	270	143	241	108	103	16	67	84	119	89	128	79	107	106	135	104	97	25	25	25	25
6:00 AM - 7:00 AM	20%	IN 100%	0	0	0	0	0	0	0	0	2	10	10	24	26	40	29	54	29	48	22	21	3	13	17	24	18	26	16	21	21	27	21	19	5	5	5	5
		OUT 100%	0	0	0	0	0	0	0	0	2	10	10	24	26	40	29	54	29	48	22	21	3	13	17	24	18	26	16	21	21	27	21	19	5	5	5	5
		IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**20**	**20**	**48**	**52**	**80**	**58**	**108**	**58**	**96**	**44**	**42**	**6**	**26**	**34**	**48**	**36**	**52**	**32**	**42**	**42**	**54**	**42**	**38**	**10**	**10**	**10**	**10**
7:00 AM - 8:00 AM	10%	IN 100%	0	0	0	0	0	0	0	0	1	5	5	12	13	20	14	27	14	24	11	10	2	7	8	12	9	13	8	11	11	13	10	10	3	3	3	3
		OUT 100%	0	0	0	0	0	0	0	0	1	5	5	12	13	20	14	27	14	24	11	10	2	7	8	12	9	13	8	11	11	13	10	10	3	3	3	3
		IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**	**10**	**24**	**26**	**40**	**28**	**54**	**28**	**48**	**22**	**20**	**4**	**14**	**16**	**24**	**18**	**26**	**16**	**22**	**22**	**26**	**20**	**20**	**6**	**6**	**6**	**6**
8:00 AM - 9:00 AM	10%	IN 100%	0	0	0	0	0	0	0	0	1	5	5	12	13	20	14	27	14	24	11	10	2	7	8	12	9	13	8	11	11	13	10	10	3	3	3	3
		OUT 100%	0	0	0	0	0	0	0	0	1	5	5	12	13	20	14	27	14	24	11	10	2	7	8	12	9	13	8	11	11	13	10	10	3	3	3	3
		IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**	**10**	**24**	**26**	**40**	**28**	**54**	**28**	**48**	**24**	**20**	**4**	**14**	**16**	**24**	**18**	**26**	**16**	**22**	**22**	**26**	**20**	**20**	**6**	**6**	**6**	**6**
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		OUT 100%	0	0	0	0	0	0	0	0	1	5	5	12	13	20	14	27	14	24	11	10	2	7	8	12	9	13	8	11	11	13	10	10	3	3	3	3
		IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**	**10**	**24**	**26**	**40**	**28**	**54**	**28**	**48**	**24**	**20**	**4**	**14**	**16**	**24**	**18**	**26**	**16**	**22**	**22**	**26**	**20**	**20**	**6**	**6**	**6**	**6**
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		OUT 100%	0	0	0	0	0	0	0	0	1	5	5	12	13	20	14	27	14	24	11	10	2	7	8	12	9	13	8	11	11	13	10	10	3	3	3	3
		IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**	**10**	**24**	**26**	**40**	**28**	**54**	**28**	**48**	**24**	**20**	**4**	**14**	**16**	**24**	**18**	**26**	**16**	**22**	**22**	**26**	**20**	**20**	**6**	**6**	**6**	**6**
11:00 AM - 12:00 PM	10%	IN 100%	0	0	0	0	0	0	0	0	1	5	5	12	13	20	14	27	14	24	11	10	2	7	8	12	9	13	8	11	11	13	10	10	3	3	3	3
		OUT 100%	0	0	0	0	0	0	0	0	2	10	10	24	26	40	28	54	28	48	22	20	4	14	16	24	18	26	16	22	22	26	20	20	6	6	6	6
		IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**	**10**	**24**	**26**	**40**	**28**	**54**	**28**	**48**	**24**	**20**	**4**	**14**	**16**	**24**	**18**	**26**	**16**	**22**	**22**	**26**	**20**	**20**	**6**	**6**	**6**	**6**
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		OUT 100%	0	0	0	0	0	0	0	0	1	5	5	12	13	20	14	27	14	24	11	10	2	7	8	12	9	13	8	11	11	13	10	10	3	3	3	3
		IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**	**10**	**24**	**26**	**40**	**28**	**54**	**28**	**48**	**24**	**20**	**4**	**14**	**16**	**24**	**18**	**26**	**16**	**22**	**22**	**26**	**20**	**20**	**6**	**6**	**6**	**6**
1:00 PM - 2:00 PM	5%	IN 100%	0	0	0	0	0	0	0	0	0	2	3	6	7	10	7	13	7	12	5	5	1	3	4	6	4	6	4	5	5	7	5	5	1	1	1	1
		OUT 100%	0	0	0	0	0	0	0	0	0	2	3	6	7	10	7	13	7	12	5	5	1	3	4	6	4	6	4	5	5	7	5	5	1	1	1	1
		IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**6**	**12**	**14**	**20**	**14**	**26**	**14**	**24**	**10**	**10**	**2**	**6**	**8**	**12**	**8**	**12**	**8**	**10**	**10**	**14**	**10**	**10**	**2**	**2**	**2**	**2**
2:00 PM - 3:00 PM	5%	IN 100%	0	0	0	0	0	0	0	0	0	2	3	6	7	10	7	13	7	12	5	5	1	3	4	6	4	6	4	5	5	7	5	5	1	1	1	1
		OUT 100%	0	0	0	0	0	0	0	0	0	2	3	6	7	10	7	13	7	12	5	5	1	3	4	6	4	6	4	5	5	7	5	5	1	1	1	1
		IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**6**	**12**	**14**	**20**	**14**	**26**	**14**	**24**	**10**	**10**	**2**	**6**	**8**	**12**	**8**	**12**	**8**	**10**	**10**	**14**	**10**	**10**	**2**	**2**	**2**	**2**
3:00 PM - 4:00 PM	5%	IN 100%	0	0	0	0	0	0	0	0	0	2	3	6	7	10	7	13	7	12	5	5	1	3	4	6	4	6	4	5	5	7	5	5	1	1	1	1
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4:00 PM - 5:00 PM	5%	IN 100%	0	0	0	0	0	0	0	0	0	2	3	6	7	10	7	13	7	12	5	5	1	3	4	6	4	6	4	5	5	7	5	5	1	1	1	1
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		IN + OUT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
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APPENDIX I

MUNICIPAL SERVICES ALTERNATIVE REPORT

Prepared by:
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Pearl River, New York 10965

I. EXECUTIVE SUMMARY

The Municipal Services Alternative (MSA) would involve the construction of new water mains and separate storm and sanitary sewers in the District. This report addresses the feasibility of, and cost to implement, this alternative. Current street elevations, general and area-specific geotechnical conditions and overall District conditions were used in preparing this assessment.

The analysis assumes that existing water mains would be replaced because their age exceeds New York City Department of Environmental Protection (NYCDEP) requirements. However, the 72" distribution main located in Willets Point Boulevard would remain in place and would be tapped within the District for domestic and fire use. New storm and sanitary sewers would also be installed.

NYCDEP requires that storm and sanitary sewers front each development lot and that they be installed at existing legal grades. Legal grades are elevations recorded on the City Map, filed in the Borough President's Office, Topographical Bureau. These grades are set by each borough as a design control and follow the natural contours of the land, to ensure that sewers drain by gravity toward their ultimate discharge point. Within the District, legal grades range from 0.5 feet to 3.0 feet higher than existing street grades. Therefore, in order to install sewers to legal grades, fill material would need to be added over a large portion of the District roadways so that the newly installed sewer system would be hydraulically adequate. The addition of fill would leave some properties in the District at a lower elevation than adjacent roadways. All sewers would be designed and constructed on piles. Based on the need to elevate portions of the roadways up to 3.0 feet above the current elevation, some properties may not be able to connect to gravity storm sewers without some form of engineered pumping system; DEP would require such sites to meet DEP pretreatment standards by installation of treatment devices as oil-water separators. It is possible that due to space limitations, such pumping and treatment may be infeasible to construct and operate.

The storm sewer flow to the stormwater outfalls at 126th Street and 127th Street would need to meet New York State Department of Environmental Conservation (NYSDEC) water quality design discharge criteria. Stormwater contaminated from the automotive and industrial uses in the District has historically been detained in large depressions and potholes in the streets after rainfall events and has infiltrated on-site despite the presence of the existing storm sewer collection system. An upgrade of the storm sewer system would capture and efficiently convey flow to Flushing Bay; therefore, additional water quality treatment devices prior to the point of discharge would be required to treat this contaminated or potentially contaminated stormwater in order to avoid violating the NYSDEC discharge criteria. Water quality devices, such as oil-water separators and detention basins, would have large footprints in order to accommodate the flow and would most likely be located in the parking lot on New York City Department of Parks and Recreation property near Flushing Bay, outside of the property limits of the District and just upstream of each outfall into Flushing Bay. In the event that a District-wide system would not be installed, individual properties would be required to ensure discharges would not violate the NYSDEC criteria, which would necessitate individual water quality design systems at each property hookup. The engineering and installation of many of these would pose engineering and financial challenges to site owners because of lack of adequate space to accommodate such systems.

Because of capacity limitations of the current system, the sanitary sewer flow in the District could not discharge by gravity to a Water Pollution Control Plant (WPCP); therefore, a new sanitary sewage pump station would be required to pump the collected flow via a force main to the nearest discharge point in the gravity sewer system. The pump station would most likely be located in the southern area of the District on a development lot purchased from private land owners. The sanitary force main route would be directed across Corona Park to connect to the nearest system en route to the Bowery Bay WPCP.

Industrial development lots that maintain scrap metal, auto body repair, demolition, or open refuse handling within the District, and discharge industrial wastewater to the new sanitary system, would have to retrofit pre-treatment devices on each lot, depending on the particular use, to discharge to the sanitary sewer. Many development parcels in the District are small and built-out to the overall footprint of the lot, making the construction of these individual treatment devices very expensive for permit compliance.

The MSA, while theoretically feasible, presents numerous design challenges, with the most serious being the problems associated with the grade changes that would result from raising street elevations to install new sanitary and storm sewers without making concomitant changes to the existing lots. In addition, finding sufficient property for stormwater treatment, and in some cases sanitary treatment, devices in an existing developed area would also present serious challenges. The overall cost, as set forth below, for the infrastructure improvements described herein would be approximately $190 million.

II. INTRODUCTION

The District is generally bounded by the Van Wyck Expressway and an undeveloped lot owned by the Metropolitan Transportation Authority (MTA) to the east, by Roosevelt Avenue to the south, by 126th Street to the west, and by Northern Boulevard to the north. The area is currently developed at a moderate density for industrial uses and is, in large part, covered by impervious surfaces. During scoping for the Draft Environmental Impact Statement (DGEIS) for the Willets Point Development Plan, members of the public suggested an alternative to the Plan that would allow for the continued operation of existing businesses. Under this alternative, the City would provide new public infrastructure, including streets and utility lines, to serve the District. For purposes of the following analysis, this alternative will be referred to as the Municipal Services Alternative ("MSA").

Under the MSA, the City would supply new infrastructure to the District, including new streets and sidewalks, sanitary sewer and storm sewers, water supply, and a new pump station for sanitary flow. Citi Field, upon completion in 2009, will direct its sanitary sewage to the 37th Avenue Pump Station outside the District, and will direct storm flow from Citi Field to the existing sewer in 126th Street within the District. The current 37th Avenue sewage pump station does not have sufficient capacity to accommodate additional sanitary sewage from the District under the MSA. The capacity of the pump station is exceeded in terms of wet weather flow, and no additional dry weather flow can be added. Therefore, a new pump station and force main within the District would be necessary to transmit sanitary flow to the existing 96-inch-diameter sewer in 108th Street or to another gravity sewer that flows to the Bowery Bay Water Pollution Control Plant (WPCP).

Under the MSA, the District streets would not be elevated to the 100-year flood elevation because to do so would be infeasible given that the grades of existing developed lots would remain at the current elevations. However, the New York City Department of City Planning (NYCDCP), NYCDEP, and the New York City Department of Transportation (NYCDOT) require the storm sewers and streets to be raised to the legal grade. This would also be necessary for the storm sewers to function hydraulically. Current legal grades would require streets to be raised within the District, creating differences in elevation between the new streets and existing lots. In addition, the outfalls to which the storm sewers drain are not properly sized and, therefore, they would require reconstruction.

While the construction of new storm sewers and reconstruction of the outfalls would decrease the frequency and severity of flooding in the District, there would still be a potential for flooding during storm conditions because much of the District would remain below the 100-year flood plain, though the flooding across the overall District streets would likely be less severe than under current conditions due to the improved stormwater conveyance system. Flooding on individual properties, could, as a result of the elevation of the roadbeds, be more severe than current conditions, and in those cases would require an engineered solution for each site. The current NYSDEC petroleum spills database indicates that a significant number of reported spills included oil or petroleum floating on standing water in the streets within the District. If the storm sewer system functioned properly, discharges of floating oil or petroleum could be discharged directly to Flushing Bay.

To avoid adverse water quality impacts, pretreatment of stormwater discharged within the District would be required to meet NYSDEC water quality criteria. The location for pretreatment facilities would be between the point of collection and the point of discharge either on parkland, within the NYSDOT right-of-way, or within the District. The most likely location for the pretreatment facilities would be in the parking lot on New York City Department of Parks and Recreation property near Flushing Bay, outside of the property limits of the District. If no common facility was put in place, based on the current quality of water that is generated during storm events and the industrial and auto-related uses within the District, individual stormwater treatment systems could be required on many industrial or commercial properties, Such individual treatment systems could pose significant engineering and financial challenges to area businesses given the lack of available space on many lots to accommodate such systems.

While the MSA would permit the continued industrial use of the District, some businesses may require temporary relocation to allow for construction of streets and utilities. For other businesses, access would be restricted for at least the duration of construction of streets, sidewalks and utilities.

III. CONCEPTUAL LAYOUT OF A NEW STORM SEWER SYSTEM

EXISTING CONDITIONS

Stormwater runoff is flowing surface water generated by rainfall. Stormwater runoff volume is dependent upon the type of land cover and slope. The Rational Method was used to calculate the amount of stormwater runoff generated within the District.

Stormwater runoff generated in the District is currently discharged into Flushing Bay via two 60-inch reinforced concrete outfalls; one in 126th Street and another one in 127th Street. The outfall in 126th Street

extends from the intersection of 126th Street and Northern Boulevard, under Northern Boulevard and an existing parking area, and terminates with a concrete headwall at Flushing Bay. The outfall in 127th Street extends from the intersection of 127th Street and Northern Boulevard, under Northern Boulevard and an existing parking area, and also terminates with a concrete headwall at Flushing Bay. Figure 1 shows the 127th Street outfall, which is similar in construction to the 126th Street outfall.

According to the latest as-built drawings available at the local NYCDEP office, the existing storm sewer system was constructed circa 1937 during the time just before the first World's Fair. These storm sewers (18" diameter and larger) are constructed of reinforced concrete pipe (RCP), and spur sewers (15" diameter and smaller) are constructed of extra strong vitrified clay pipe (ESVP).

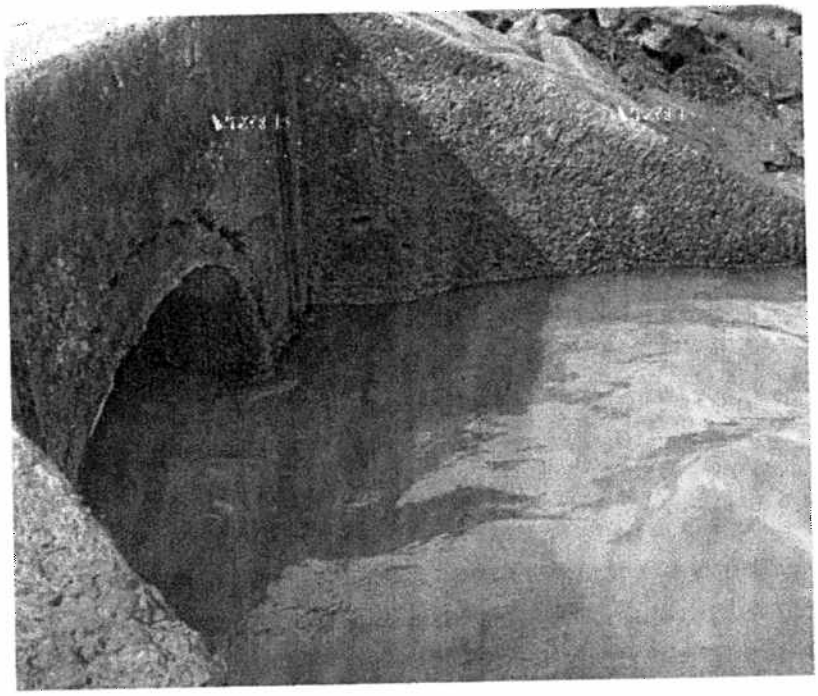


FIGURE 1: 127TH STREET OUTFALL CONCRETE HEADWALL

The District lacks an adequate storm sewer system due to the lack of infrastructure and improper grading of the site. At many intersections, the existing grading creates low points without outlets or catch basins. There is a lack of infrastructure at these low points preventing proper drainage to convey the stormwater to the appropriate outfall. A portion of the District is below elevations that allow gravity flow of stormwater runoff toward an outfall. Exhibit "D" highlights the area for which a storm sewer system could not be designed while maintaining existing elevations.

Because the District does not have an adequate storm sewer system, much of the runoff discharges as overland flow and creates standing water in low elevation areas, causing streets to flood during storm events. Furthermore, runoff from the many business facilities in the area is neither controlled nor treated prior to entering storm drains that convey this stormwater to the outfalls. Figure 2 shows flooding near the intersection of Willets Point Boulevard and 38th Avenue after a recent rainfall event due to the flat topography and lack of adequate drainage.

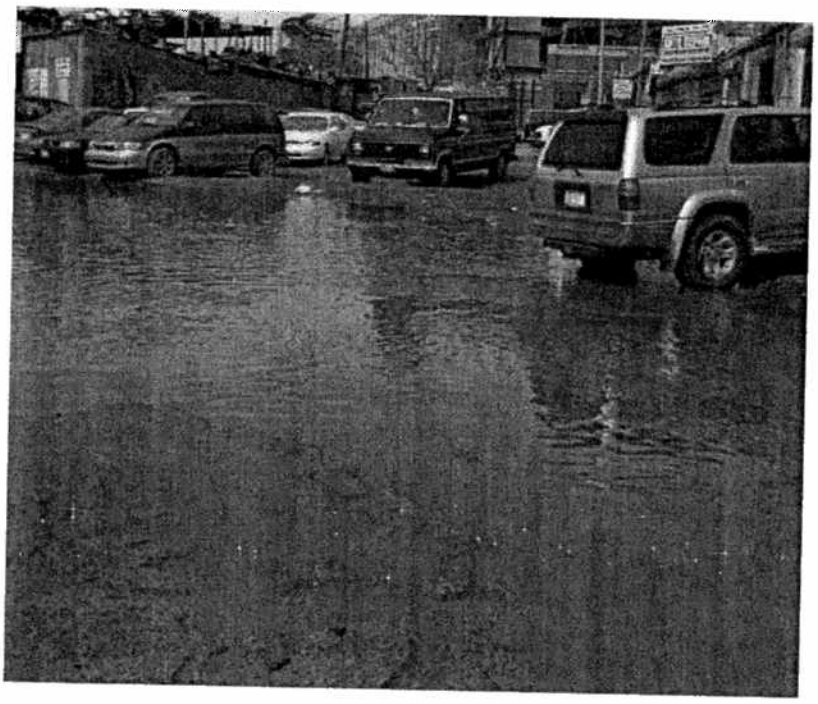


FIGURE 2: EXISTING FLOOD CONDITIONS AT INTERSECTION OF WILLETS POINT BOULEVARD AND 38TH AVENUE

CONCEPTUAL LAYOUT

Under the MSA, separate storm and sanitary sewer systems would be installed and maintained, in accordance with the City's goals to reduce combined sewer overflow (CSO) events. For this conceptual layout, the existing infrastructure was maintained to the maximum extent possible to reduce disturbance to the District. However, some existing storm pipes would need to be replaced based on capacity analysis requirements and configuration of proposed storm sewers.

The current storm sewer system is insufficiently sized to accommodate the runoff that is currently being generated. To eliminate this deficiency, a new storm sewer system, including new piping and infrastructure such as manholes and catch basins to accommodate the stormwater that is beyond the capacity of the existing system, would be installed.

Exhibit "A" shows the conceptual plan and layout for both the new and existing storm sewer systems. This new system was schematically configured to meet NYCDEP storm flow calculation requirements. The system layout is consistent with the NYCDEP's requirement for providing a storm sewer to front every development lot. Each sewer in the District was analyzed for adequate capacity in comparison to the calculated flows from tributary areas for each length of sewer between manholes. The hydraulic calculations for stormwater flow are included in Appendix A.

The conceptual layout endeavors to maintain as much existing infrastructure as possible, including the two existing 60 inch diameter outfalls and any adjacent storm sewers to the maximum extent possible. Calculations were performed that correspond to the new layout. The following NYCDEP criteria, were used to lay out and then analyze existing and new storm sewers within the District:

- 3.0 fps (feet per second) minimum velocity for pipes flowing full
- 18 foot maximum depth to the invert of the pipe
- 10% maximum slope of pipe
- 3.5 feet absolute minimum cover to the outer top of pipe for all proposed pipes
- 12" minimum pipe diameter
- 5-year storm frequency (intensity of 5.95 inches/hour)

Tailwater elevation refers to the elevation of the surface water at the point of discharge. The tailwater elevation at both outfalls, or the high water mark, was verified in the field to be at the crown of the existing outfall pipes. This tailwater elevation was used in the hydraulic analysis of the existing 60-inch outfalls to Flushing Bay. A Hydraulic Grade Line (HGL) was produced for each sewer using these elevations and the actual stormwater flows generated from the District; these are included in Appendix B. The HGL is a measure of flow energy coinciding with the water surface elevation at any point along the sewer. For sewers flowing under pressure conditions, the HGL is the level to which water would rise in a vertical tube (open to atmospheric pressure) at any point along the pipe. As shown in Appendix B, when the HGL is above the crown of the sewer, this indicates that a pressure flow condition exists. According to this analysis, with the conceptual storm sewer layout for the MSA, the existing stormwater flow from the District, combined with the existing tail water elevation of Flushing Bay at each outfall would not cause the runoff in the systems to surcharge above the elevation of catch basin grates and manhole castings, and therefore would not cause flooding in the street.

An additional 14.3 cfs (cubic feet per second) of stormwater flow would be added to the new storm sewers in 126th Street from the adjacent Citi Field development, based on that project's site connection proposals. (Design drawings prepared by HOK Sports Facilities Architects, P.C. (HOK) and DMJM+Harris show four separate connection points to the existing 126th Street sewer.) Individually, 2.63 cfs will be discharged to a manhole near 39th Avenue, 5.96 cfs will be discharged between 36th and 37th Avenue, 3.02 cfs will be discharged to a manhole near 35th Avenue, and 2.69 cfs will be discharged to a 36" sewer that connects to a manhole located at the intersection of 126th Street and 34th Avenue. These stormwater flow values were accounted for in the MSA storm sewer layout.

Connections and sewer inverts (bottom inside elevation of the pipe) provided by HOK from the Citi Field development site would need to be field verified for as-built conditions before reconstruction of the infrastructure located in 126th Street commences. From the inverts provided by HOK, it appears that the connections and schematic layout from the Willets Point Development would be compatible with the existing 126th Street outfall.

Since Flushing Bay is a NYSDEC regulated water body, stormwater would have to be pretreated prior to discharge and pretreatment measures would be subject to NYCDEP review and approval. Since the design of a pretreatment facility is dependent on site grades and sewer system elevations, the most likely location for a site pretreatment facility would probably be before the point of discharge on parkland and in a parking lot adjacent to Flushing Bay. The pretreatment facility would capture sediments, oils, grease,

trash and debris. Based on preliminary flow calculations, this unit would need to be approximately 500 to 600 square feet (sf) in area to a depth of 25 to 30 feet below grade and would probably contain several pumps. This facility would also require regular maintenance and periodic inspection after major rainfall events and clean out when the collection sump is 75% full. If a central pretreatment facility was not constructed, then individual lot owners would have to install systems on their individual lots, which might pose financial and design challenges due to inadequate space to accommodate such systems.

DESIGN SUMMARY

The following is an approximate summary of the proposed storm system, including total length of existing pipe and replaced pipe within the system.

Size (in)	Total Length (ft)	Total Length of Existing Pipe to Remain (ft)	Total Length of New or Replaced Pipe (ft)
10	63	39	24
12	4,601	817	3,784
15	1,926	40	1,886
18	2,518	0	2,518
20	164	55	109
24	1,893	344	1,549
30	253	0	253
36	254	0	254
42	651	0	651
48	879	727	152
54	858	743	115
60	1,389	1,271	118

The following is a summary of the structures designed for the system, including manholes and catch basins:

Structure Type	Quantity
Existing Manholes/Catch Basins to Remain	39
New/Replaced Manholes/Catch Basins	154

EXISTING OUTFALL RECONSTRUCTION

The proposed storm sewer system considers reuse of the two existing 60 inch diameter stormwater outfalls. However, based on the MSA layout and site conditions, the three pipe sections upstream of the outfall located in 126th Street have insufficient capacity to handle the stormwater flows that would drain to them. In order to reuse the remainder of the main storm sewer in 126th Street, these three sections

would need to be upgraded, replaced, or adjusted to convey the stormwater flow to Flushing Bay. These options include upgrading the pipe diameter to a larger size, replacing the circular pipe with a reinforced concrete box culvert, or adjusting the inverts of the circular pipes to allow greater capacity within the pipes. The following is a summary of adjustments that would be required for the outfall in 126th Street for these options:

	Length of Pipe to be Replaced	Diameter of Existing Pipe	Dimensions of Replacement Pipe	Approximate Adjustments to Existing Inverts
Continue Use of A Circular Pipe System	235 ft.	60"	72" Dia.	3"
	260 ft.	60"	66" Dia.	
	260 ft.	48"	54" Dia.	
Replace Existing System with Reinforced Concrete Box Culvert	495 ft.	60"	4 ft. x 7 ft.	6"
	260 ft.	54"	60" Dia.	
	260 ft.	48"	54" Dia.	
Retain Current 60" Pipe Diameter Configuration	260 ft.	48"	54" Dia.	6" (multiple sections)

The outfall located on 127th Street is also hydraulically inadequate for the projected flow from the new system due to existing slope and capacity conditions. The four most downstream sections of this pipe would require similar replacement options to reuse the remaining infrastructure in 127th Street and the following table lists the adjustments that would be required for the outfall in 127th Street for these options:

	Length of Pipe to be Replaced	Diameter of Existing Pipe	Dimensions of Replacement Pipe	Approximate Adjustments to Existing Inverts
Continue Use of A Circular Pipe System	200 ft.	60"	72" Dia.	4"
	350 ft.	60"	66" Dia.	
	260 ft.	48"	54" Dia.	
Replace Existing System with Reinforced	315 ft.	60"	4 ft. x 8 ft.	6"

Concrete Box Culvert	233 ft.	60"	4 ft. x 7 ft.	
Retain Current 60" Pipe Diameter Configuration	NA	NA	NA.	6" (multiple sections)

In all three options, the 126th and 127th outfall reconstructions would cause significant disturbance and disruption to 126th and 127th Streets, Northern Boulevard, and the surrounding parking areas located near Flushing Bay. In addition, the majority of pipe in 127th Street would need to be reconstructed with new invert elevations to allow for the current flow requirements.

NEW OUTFALL CONSTRUCTION

One option investigated in lieu of reconstruction of the pipe sections in 126th and 127th Streets is to construct an additional outfall in 127th Place. This outfall would drain to Flushing Bay, similar to the existing outfalls located on 126th and 127th Streets and is the only option to construct a new sewer on City property to Flushing Bay. Constructing this outfall would alleviate demand on the existing outfall on 127th Street and would drain approximately 5 acres from the site. The area tributary to the 127th Street outfall is shown in Exhibit "G."

Even with the construction of a new 127th Place outfall, the existing outfalls in 126th and 127th Streets are not hydraulically adequate and would require partial reconstruction. Three pipe sections (instead of four) would need to be replaced with the additional outfall in place. The new outfall would need to extend from the District on 127th Place, across Northern Boulevard, the adjacent parking area, and terminate at Flushing Bay. This option appears to be neither practicable nor the most cost effective to resolve the drainage issues within the District for the following reasons:

- Construction of the additional outfall would still require alterations to the existing outfalls in 126th and 127th Streets.
- An additional outfall in 126th Place or 127th Place without reconstruction of the entire existing system would only capture small tributary areas. These small drainage areas would not reduce the drainage to 126th or 127th Street by enough volume to make the additional outfall sufficiently beneficial to justify its cost.
- The area to the north of the District (property along Northern Boulevard) is topographically the highest on the site. Collection of drainage areas from the south of the District would be very difficult via a gravity system and require very deep manholes and sewers.

Accordingly, if the MSA were to be implemented, the existing outfall reconstruction option, in lieu of the new outfall and partial existing outfall reconstruction, would be the recommended approach.

IV. CONCEPTUAL LAYOUT OF A NEW SANITARY SEWER SYSTEM

EXISTING CONDITIONS

Most of the sanitary sewer systems within New York City are combined sewer systems, which carry both sanitary sewage from buildings and stormwater collected in catch basins and storm drains. However, some areas of the City, primarily in Queens and Staten Island, have separate systems for sanitary sewage and stormwater. In addition, small areas of Staten Island, Brooklyn, and Queens, including the District, use septic systems to dispose of sanitary sewage. As noted previously, in order to minimize CSO discharges, a separate system would be constructed under the MSA.

The District is located within the service area of the Bowery Bay Water Pollution Control Plant (WPCP), which is located on the East River in Astoria, Queens. Currently, the Willets Point area is not connected to the New York City sanitary sewer system and relies entirely on septic systems as the means of sewage treatment. The nearest connection to the City sewer infrastructure from the District is at the existing below-grade 37th Avenue Pump Station, located approximately 4,000 feet southeast of the District. The existing 37th Avenue pump station does not have sufficient capacity to take additional flow during wet weather conditions. Accordingly, a new pump station would be required to convey the sanitary sewage flow from the Willets Point area to the Bowery Bay WPCP.

CONCEPTUAL LAYOUT

The MSA would include the development of sanitary sewer infrastructure in the area, thereby eliminating the need for septic systems on private development lots. Wastewater from development lots within the District would be conveyed to a new sanitary sewage pump station, which would most likely be constructed within the District. The sanitary sewage pump station would be designed and constructed to NYCDEP and NYSDEC standards. A new force main would be constructed to convey sanitary flow from the new sanitary sewage pump station within the District to the existing 96-inch diameter City sewer in 108th Street, which flows to the Bowery Bay WPCP.

Exhibit "B" shows the conceptual layout for a new sanitary sewer system. This system also follows the Rational Method. The pipe capacity and time of concentration calculations have been included in Appendix C.

The conceptual layout is based on topography, creating a single low point for efficient collection within the District for sanitary flow. As shown on Exhibit "B", this low point is located near the intersection of 39th Avenue and Willets Point Boulevard (Manhole Label #S1-1). This location was chosen based on existing District terrain, minimum depth of cover, and velocity requirements as set forth in the criteria mentioned above. Each sewer throughout the District was analyzed for adequate capacity using the tributary areas for each section of pipe.

For the MSA, the majority of the District flow would be collected into the sewer system and directed by gravity to the low point and pump station location mentioned above. For this layout, the following criteria was used to schematically prepare the new sanitary sewer conveyance system:

- 3.0 feet per second minimum velocity for pipes flowing full

- 18 foot maximum depth to the invert of the pipe
- 10% maximum slope of pipe
- 8.5 feet absolute minimum cover to the outer top of pipe for all proposed pipes
- 10" minimum pipe diameter

One possible location for the new sanitary pump station would be on or near existing Block 1826, Lot 35 in the southern section of the District which is at a lower elevation and allows for the maximum coverage area for a gravity sanitary sewer line. This conceptual location for the pump station also provides adequate clearance between sanitary and storm sewers, allowing the sanitary lines to run lower than the storm sewer and avoid conflicts throughout the site. A sanitary forcemain would then carry flow from the new pump station to the existing 96-inch-diameter City sewer in 108th Street or another point of discharge tributary to the Bowery Bay WPCP. This area is privately owned and contains a number of businesses, as described below.

DESIGN SUMMARY

The following is an approximate summary of the pipe layout for the proposed sanitary sewer system:

Size (in)	Total Length of New Pipe (ft)
10	9,193
12	431

The following is a summary of the structures designed for the system, including manholes and catch basins:

Structure Type	Quantity
New Manholes	54

NEW SANITARY SEWAGE PUMP STATION

The conceptual layout for the construction of a new pump station in the District locates the pump station within development block 1826. Figure 3 shows an aerial view of the pump station vicinity. The proposed pump station would require an approximate final footprint of 4,800 sf (60 ft x 80 ft building footprint). The following table is a summary of the block and lots located within development block 1826. Not all of these parcels would be affected by the construction of the pump station; however, since the exact location of the station has not yet been determined they were included for reference. The affected businesses could be permanently displaced due to the construction and continued operation of the pump station.

Lot	Address	Owner	Land Use	Lot Size	Building Footprint
1826, Lot 1	38-15 126th Street	NK Properties	Auto related businesses	12,500 sq ft	1,800 sq ft

1826, Lots 5 & 14	38-05 & 38-14 126th Street	Stadium Storage	10 different Auto Related businesses and a large junkyard	Lot 5 – 12,500 sq ft Lot 14 – 10,000 sq ft	Lot 5 – 3,800 sq ft Lot 14 – 900 sq ft
1826, Lot 18	126-20 38th Avenue	Serrone Vincent	Auto Glass & Salvage Inc.	3,667 sq ft	800 sq ft Quonset building
1826, Lot 20	126-61 38th Avenue	JY Utica Corp	5 Auto repair businesses	15,110 sq ft	2,700 sq ft
1826, Lot 31	126-45 Willets Point Blvd.	Willets Storage, LLC	Muffler, Tire and Auto Body shops	7,080 sq ft	6,314 sq ft
1826, Lot 35	126-25 Willets Point Blvd	Willets Storage, LLC	Deli, and 4 or 5 Auto related businesses	12,625 sq ft	12,600 sq ft



FIGURE 3: AERIAL VIEW OF APPROXIMATE PUMP STATION LOCATION

V. CONCEPTUAL ANALYSIS OF DISTRICT GRADING

LEGAL GRADE AND TOPOGRAPHIC SURVEY COMPARISON

Legal grades are elevations recorded on the City Map, filed in the Borough President's Office, Topographical Bureau. These grades are set by each borough as a design control and follow the natural contours of the land. Legal grades for the project study area have been compared with the existing street topography as shown on surveys of the area. Legal grades were converted from the City of New York City Planning Commission Office of Technical Controls map showing a change in the street system, dated May 24, 1967. The legal grades presented in the 1967 map were shown in Queens Datum, which is 2.725 feet above the U.S.C. & G. Datum at Sandy Hook. These elevations were converted to NAVD88 vertical datum to compare with the existing survey elevations, which are also in the NAVD88 vertical datum. Queens Datum is approximately 1.635 feet above NAVD88.

Legal grades in the northern section of the District are similar in comparison to the existing survey, ranging in differences from 0.0 feet to 0.8 feet as shown on Exhibit "C". However, comparisons of the southern section of the District (areas near the intersections of Willets Point Boulevard and 38th or 39th Avenues), reveal substantial differences. The legal grades for the southern section (approximately 16 acres or 25% of the entire site) range from 1.8 feet to 2.5 feet higher than the existing topography.

LEGAL GRADES AND DRAINAGE ISSUES

For this analysis, both the sanitary and storm systems were originally conceptualized using the existing site topography. The sanitary system could completely be constructed without building to the legal grade elevations. However, the storm sewer system could not be completely designed using the current existing elevations due to NYCDEP pipe cover and hydraulic requirements. These requirements include minimum velocity, maximum depth, minimum cover, and minimum pipe slope as discussed in the conceptual layout sections above. Exhibit "D" highlights the area for which a storm sewer system could not be designed while maintaining existing elevations. The southern section of the District would be too low in elevation to drain by gravity if the sewer remained at existing elevations instead of legal grades, and thus storm sewers would not function in that portion of the District. Raising the streets to legal grades would have an impact on local businesses, buildings and driveways. Constructing the roads to the legal grades would require raising the majority of the streets in the entire District, resulting in roads that are approximately 6 inches to 3 feet higher than the surrounding buildings and properties. Thus, the storm sewers would effectively only convey runoff from the streets in these areas and not the properties located at lower elevations adjacent to those streets. Exhibit "H" shows the individual lots that would not be able to drain properly if the roads were constructed to legal grade elevations. These lots would be one foot or more below the street elevation and would not drain on the surface by gravity to the street. This condition created by the construction of streets to a higher elevation would force development lot owners to design individual stormwater systems that could incorporate pumping of stormwater where gravity drainage could not be maintained. Each of these lot owners would become responsible for a site connection to the stormwater system that could involve installing and maintaining a stormwater detention system designed to treat stormwater prior to its entry into the public stormwater system. Such individual systems could pose a financial and engineering challenge to individual lot owners. Some parcels may not have adequate

space or be properly oriented to accommodate the necessary stormwater treatment systems. The following is a summary of negative impacts that would result from raising the streets to legal grade elevations unless pumps were installed on the lots adjacent to the elevated streets:

- Ponding of water on development lots that are lower than the street grade
- Driveway and access issues to development lots

In addition, as a result of NYCDEP industrial pretreatment requirements, zoning and land use, each lot may also require individual water quality pretreatment units, such as an oil/water separator, before connecting to the sanitary sewer system.

VI. ENVIRONMENTAL PERMITTING

In order to comply with current NYSDEC stormwater pretreatment permit requirements pursuant to Article 17, Title 8 of the Environmental Conservation Law and 6 NYCRR Parts 750-757, it is assumed that water quality features (pretreatment facilities) would need to be constructed before the discharge point of each outfall in 126th Street and 127th Street. This assumption is reasonable, based upon the current prevalence of automotive and industrial uses in the Willets Point area and the numerous petroleum spills reported in the NYSDEC Spill Database as floating petroleum on ponded water. It is anticipated that the construction of new streets and storm sewers would not prevent future discharges of petroleum and other chemicals from the industrial businesses within the District. Indeed, it is reasonable to assume that a properly constructed street and storm sewer system, while improving collection of runoff, may more readily direct future contaminant discharges directly to the bay. Thus, stormwater water quality features, similar to the separation unit mentioned above, would be needed to treat stormwater before it is discharged into Flushing Bay.

The current NYSDEC classification for Flushing Bay is Class I, for which the cited best usages are secondary contact recreation and fishing. Water leaving the District would be required to meet or exceed the standards for this waterbody class. The following is a summary of acceptable NYSDEC requirements for a Class I waterbody:

Parameter	Class I Standard
pH	The normal range shall not be extended by more than one-tenth (0.1) of a pH unit.
Dissolved Oxygen (DO)	Shall not be less than 4.0 mg/L at any time.
Total Coliforms (number per 100 ml)	The monthly geometric mean, from a minimum of five examinations, shall not exceed 10,000
Fecal Coliforms (number per 100 ml)	The monthly geometric mean, from a minimum of five examinations, shall not exceed 2,000.

Pretreatment devices like a separation unit mentioned above, could help improve water quality to an acceptable level before discharge.

VII. WATER SUPPLY

The replacement of the water supply and service connections within the District would also be included as part of the MSA. The majority of existing water mains were installed between 1946 and 1951 and are adequate for the existing development and use. These sections would be replaced both due to the age as required by NYCDEP (50 years) and the fact that each street will be excavated, filled, and have significant new storm and sanitary utilities installed within them. Existing water mains located in areas where the street is being reconstructed would also require replacement according to NYCDEP requirements. The existing 72" water distribution main (constructed on piles in 1972) that is located in Willets Point Boulevard would remain in place and will be tapped within the District for domestic and fire use.

Approximately 13,500 linear feet of new ductile iron pipe (DIP) would be required and approximately 45 new fire hydrants would be installed under the MSA. It is assumed that all pipes for this conceptual layout would not need piles but would be constructed on concrete cradle and would require at least four feet of cover over the top of the pipe. Design, excavation and installation would be coordinated concurrently with the storm and sanitary sewer systems, and private utilities such as gas and electric. Water main layout and design would be subject to NYCDEP and New York City Fire Department (FDNY) review and approval.

VIII. PRIVATE UTILITIES

To the maximum extent possible, the proposed sanitary and storm sewer lines have been designed to provide minimum disturbance to the existing businesses located within the District and to existing public and private utilities. The shaded areas shown on Exhibit "E" highlight some conflicts with existing utilities and the proposed sanitary or storm pipe lines. These areas represent the most congested areas according to the existing utility survey and are located at various locations throughout the site. Some of these areas include the intersections of 127th Place and 34th Avenue, 127th Street and 34th Avenue and approximately 570 linear feet of Willets Point Boulevard between 37th Avenue and 39th Avenue. Subsurface private utility replacement would be required in these areas.

A typical cross section shown in Exhibit "F" shows the placement of a new sanitary sewer line, in relation to the existing storm sewer, gas, water, and electric in Willets Point Boulevard. At this location, it appears that from a constructability standpoint, that a new sanitary sewer line could feasibly be constructed in relation to the existing utilities. A full construction analysis would be required to provide a safe and effective installation method.

All overhead utilities that are in areas along streets that would be raised in elevation would require replacement. This includes electric power and telecommunication lines.

IX. HAZARDOUS AND CONTAMINATED WASTE

Based on the results of Phase II testing, it is anticipated that the materials encountered during trenching and excavation activities necessary to install sanitary and storm sewers in the District would consist primarily of historic fill. The fill was placed in the District during the initial filling of the swamp. It is composed of incinerated ash, coal and garbage. This material is expected to be inconsistent in nature and

may be unacceptable for use as backfill material. Any material deemed unsuitable for backfill would have to be handled as Regulated Solid Waste in accordance with the NYCRR Part 360 Solid Waste Regulations. Much of the incinerated material may be classified as Industrial Waste. Disposal of material classified as Industrial Waste would require sampling of the material and proper disposal at a regulated Solid Waste Facility.

The removal of the existing catch basins is also anticipated to generate excess soils impacted by historic discharges to the existing storm system. This material may also require sampling and proper disposal at a regulated Solid Waste Facility. Given the shallow depth to groundwater (approximately 5 ft below existing grade), there would be a significant effort and therefore a significant cost involved in dewatering construction excavations for the pump station and utilities that extend into the water table. This effort could include large excavations, sheeting or shoring construction and design, and continuous pumping operations. Groundwater is likely to contain significant particulate content as a result of the ash fill as well as the potential for contaminants that are likely to exist on many of the sites. The contaminants could include petroleum and automotive chemicals in dissolved and free phase. This water would require pretreatment prior to discharge to either the NYC sanitary sewer system or Flushing Bay.

Given that trenching would be required in nearly all streets, it is highly likely that individual areas of contaminated groundwater from these sites would be encountered, and systems would need to be in place in order to treat this contaminated groundwater when encountered.

X. ENGINEER'S OPINION OF PROBABLE COST

An Engineer's Opinion of Probable Cost includes anticipated costs for the completion of the MSA using assumptions made to establish those costs. The estimate included Storm Water, Sanitary Sewer, Streetwork, Water, Electric, Telecom, Gas, Demolition, Remediation and Site Fill. These costs pertain to the MSA layout and are not Final design costs. It was also assumed that all streets would remain as public streets in their current configuration. The associated costs to acquire property outside of the District for the pretreatment facilities for water quality purposes for the sanitary sewage pump station have not been included. A brief description of the breakdown of each item is described below. The Engineer's Opinion of Probable Cost has been included as Exhibit "I."

1. Storm Water – This item includes onsite concept design sewers, installation and pile supports, disposal of excavated historic fill materials, and the replacement of 730 feet of the 126th Street outfall sewer and 320 feet of the 127th Street outfall sewer. ($80,000,000)

2. Sanitary Sewer – This item includes onsite piping, installation and pile support, as well as disposal of excavated historic fill material and the construction of an onsite sanitary pump station. Conceptual design was not completed for the new sanitary sewage pump station. ($57,500,000)

3. Streetwork – This item includes the paving of all currently mapped streets within the District. Street luminares, light poles, sidewalks, curbs, trees, and signs were also included. ($14,300,000)

4. Water – This item includes onsite piping, and installation, as well as disposal of excavated historic fill materials. This also included the tapping of existing distribution lines currently located within the District. ($13,600,000)

5. Electric – This item includes medium voltage distribution cabling and cutovers, as well as disposal of excavated historic fill materials. ($6,000,000)
6. Telecom – There is no cost associated with telecom installation for this analysis as it is assumed it will be installed by private utilities. ($0)
7. Gas – This item includes distribution piping, installation, and disposal of excavated historic fill materials. ($5,600,000)
8. Demolition – This item includes the demolition of the existing roadways and the shutoff of existing utilities. ($5,000,000)
9. Remediation – This item includes the removal of the existing catch basins, as well as sampling and disposal of impacted soils. ($1,700,000)
10. Site Fill – This item includes the importation and spreading of fill required to bring the District street elevations to legal grade. ($3,500,000)

XI. PROJECT SCHEDULE

The following is a summary of the anticipated staging and overall project schedule. The total project length is estimated to be approximately 5 years with overlapping Stages of construction (see Appendix D for the detailed project schedule).

- Stage 1 – Preconstruction (6 months)
  - Mobilization
  - Maintenance and Protection of Traffic
    - Setup barriers, construction signs, routing
  - Erosion and Sediment Control
    - Install silt fence
    - Install stabilized construction entrances

- Stage 2 – Sanitary Sewage Pump Station (36 months)
    - Clear site
    - Demolition
    - Excavation, foundation and building
    - Mechanical work
    - Finish construction of station
    - Start up of Sewage Pump Station
    - Connect new sanitary sewer system to the new station

- Stage 3 – Storm Sewer Construction (60 months)

- Construction will begin on downstream end of 126th Street outfall
  - Trench and sheet areas for pipe replacement in nearby parking area
  - Complete pipe installation from outfall up to Northern Boulevard
  - Lane closures on Northern Boulevard
  - Trench and sheet partial lanes across Northern Boulevard for pipe replacement
  - Connect and replace pipe from outfall across Northern Boulevard up to site
  - Trench and construct tributary lines to the 126th outfall on 34th through 39th Avenues
  - Fill as required to bring street to legal grade
- Construction will continue on downstream end of 127th outfall
  - Trench and sheet area for pipe replacement in nearby parking area
  - Complete pipe installation from outfall up to Northern Boulevard
  - Lane closures on Northern Boulevard
  - Trench and sheet partial lanes across Northern Boulevard for pipe replacement
  - Connect and replace pipe from outfall across Northern Boulevard up to site
  - Trench and construct tributary lines to the 126th outfall on 34th through 39th Avenues

- Stage 4 - Sanitary Sewer Construction (36 months)
  - During trenching for storm sewers, construct sanitary sewers simultaneously if possible
  - If sanitary sewers cannot be constructed at same time of the storm sewers, lane closures to trench and sheet for sanitary sewer installation
  - Trench and sheet area for main pipe installation
  - Construct house/business connections and tie into main line

- Stage 5 – Water Main Construction (36 months)
  - Trench and sheet areas for water main installation
  - Fill as required to bring street to legal grade

- Stage 6 – Private Utility Construction (30 months)
  - Trench and sheet areas for utility installation
  - Fill as required to bring street to legal grade

- Stage 7 – Street and Sidewalk Construction (30 months)
  - Fill as required to bring street to legal grade
  - Repave and restore pavement in parking area and Northern boulevard

- Check final grades, adjust with fill and level
- Construct subbase and base of road
- Construct sidewalks and other road improvements
- Final pavement

- Stage 8 - Finish Landscaping (4 months)
  - Topsoil as required
  - Mulch and seed
  - Plant required trees
  - Finish landscaping (stone walls or signs required)

MSA Appendix A

STORM SYSTEM DESIGN AND CAPACITY ANALYSIS

Line	Manhole #	New Pipe? Enter "y"	Up-stream? Enter "y"	Down-stream? Enter "y"	Rim Elev. (ft)	Upper Inv. Elev. (ft)	Lower Inv. Elev. (ft)	Between Manholes														
								Cover (ft) upper	Cover (ft) lower	Fall to next (ft)	Length to next (ft)	Slope to next (ft)	Shape enter	Dimensions downstream				Area (ft^2)	Inner Top Upper (ft)	Inner Top Lower (ft)	Velocity (ft/s)	Capacity (cfs)	Time in pipe (s)
STORM A																						
NEW	A-9		y		7.00	3.40	3.40	2.35	2.35	0.10	50.10	0.0020	circ	diameter=	15			1.2272	4.65	4.65	2.0407	2.8684	24.5508
NEW	A-8				8.00	3.30	3.30	1.20	1.20	0.10	111.67	0.0009	circ	diameter=	42			9.6211	6.80	6.80	2.7247	30.0267	40.9844
	A-7				8.00	3.20	3.20	0.80	0.80	0.40	309.50	0.0013	circ	diameter=	48			12.5664	7.20	7.20	3.5797	51.5246	86.4610
NEW	A-6				9.00	2.80	2.80	2.20	2.20	0.30	157.50	0.0019	circ	diameter=	48			12.5664	6.80	6.80	4.3457	62.5511	36.2426
	A-5A				9.00	2.50	2.50	2.50	2.50	0.20	152.30	0.0013	circ	diameter=	48			12.5664	6.50	6.50	3.6083	51.9373	42.2079
	A-5				9.40	2.30	2.30	3.10	3.10	0.50	260.00	0.0019	circ	diameter=	48			12.5664	6.30	6.30	4.3666	62.8511	59.5435
	A-4				9.50	1.80	1.80	3.20	3.20	0.80	260.00	0.0031	circ	diameter=	54			15.9043	6.30	6.30	5.9768	108.8805	43.5013
	A-3				9.60	1.00	1.00	4.10	4.10	0.90	260.00	0.0035	circ	diameter=	54			15.9043	5.50	5.50	6.3394	115.4852	41.0134
	A-2				9.93	0.10	0.10	4.83	4.83	0.30	260.00	0.0012	circ	diameter=	60			19.6350	5.10	5.10	3.9278	88.3361	66.1955
	A-1				9.00	-0.20	-0.20	4.20	4.20	0.10	117.00	0.0009	circ	diameter=	60			19.6350	4.80	4.80	3.3805	76.0276	34.6105
	A-1B				9.00	-0.30	-0.30	4.30	4.30	0.20	118.00	0.0017	circ	diameter=	60			19.6350	4.70	4.70	4.7604	107.0627	24.7878
	A-1A			y	9.00	-0.50	-0.50	4.50	4.50	0	0.00	0	circ	diameter=	60			19.6350	4.50	4.50	0	0	0
STORM A-5A																						
NEW	A-5B		y		9.00	2.60	2.60	5.40	5.40	2.20	53.22	0.0413	circ	diameter=	12			0.7854	3.60	3.60	7.9971	7.1943	6.6549
NEW	A-5A			y	9.00	2.50	2.50	5.50	5.50	0	0.00	0	circ	diameter=	12			0.7854	3.50	3.50	0	0	0
STORM A-7A																						
NEW	A-7A6		y		10.30	5.30	5.30	3.50	3.50	0.10	26.11	0.0038	circ	diameter=	18			1.7671	6.80	6.80	3.1940	6.4651	8.1746
NEW	A-7A5				10.30	5.20	5.20	3.60	3.60	0.40	116.31	0.0034	circ	diameter=	18			1.7671	6.70	6.70	3.0267	6.1263	38.4285
NEW	A-7A4				10.10	4.80	4.80	3.80	3.80	0.20	20.70	0.0097	circ	diameter=	18			1.7671	6.30	6.30	5.0731	10.2685	4.0804
NEW	A-7A3				10.10	4.60	4.60	3.50	3.50	0.30	97.80	0.0031	circ	diameter=	24			3.1416	6.60	6.60	3.4661	12.4726	28.2161
NEW	A-7A2				10.10	4.30	4.30	3.80	3.80	0.55	104.11	0.0053	circ	diameter=	24			3.1416	6.30	6.30	4.5487	16.3682	22.8879
NEW	A-7A1				10.10	3.75	3.75	4.35	4.35	0.15	20.06	0.0075	circ	diameter=	24			3.1416	5.75	5.75	5.4117	19.4735	3.7068
NEW	A-7A				10.10	3.60	3.60	4.50	4.50	0.40	67.98	0.0059	circ	diameter=	24			3.1416	5.60	5.60	4.8005	17.2744	14.1609
	A-7			y	8.00	3.20	3.20	0.80	0.80	0	0.00	0	circ	diameter=	48			12.5664	7.20	7.20	0	0	0
STORM A-7B																						
NEW	A-7B		y		10.10	4.80	4.80	4.30	4.30	0.45	24.47	0.0184	circ	diameter=	12			0.7854	5.80	5.80	5.3340	4.7985	4.5876
NEW	A-7A2			y	10.10	4.35	4.35	3.75	3.75	0	0.00	0	circ	diameter=	24			3.1416	6.35	6.35	0	0	0
STORM A-7C																						
NEW	A-7C		y		10.80	6.00	6.00	3.55	3.55	1.20	201.76	0.0059	circ	diameter=	15			1.2272	7.25	7.25	3.5226	4.9515	57.2758
NEW	A-7A4			y	10.10	4.80	4.80	3.80	3.80	0	0.00	0	circ	diameter=	18			1.7671	6.30	6.30	0	0	0
STORM A-NB																						
NEW	A-NB5		y		13.00	8.00	8.00	3.75	3.75	0.20	30.29	0.0066	circ	diameter=	15			1.2272	9.25	9.25	3.7116	5.2171	8.1610
NEW	A-NB4				13.00	7.80	7.80	3.95	3.95	0.30	22.81	0.0132	circ	diameter=	15			1.2272	9.05	9.05	5.2383	7.3631	4.3545
NEW	A-NB3				13.00	7.50	7.50	4.25	4.25	1.50	208.83	0.0072	circ	diameter=	15			1.2272	8.75	8.75	3.8711	5.4414	53.9453
NEW	A-NB2				13.00	6.00	6.00	5.75	5.75	3.00	201.94	0.0149	circ	diameter=	15			1.2272	7.25	7.25	5.5672	7.8255	36.2729
NEW	A-NB1				12.30	3.00	3.00	8.05	8.05	3.20	54.78	0.0584	circ	diameter=	15			1.2272	4.25	4.25	11.0396	15.5177	4.9621
	A-1			y	9.00	-0.20	-0.20	4.20	4.20	0	0.00	0	circ	diameter=	60			19.6350	4.80	4.80	0	0	0
STORM B																						
NEW	B-6		y		13.80	9.30	9.30	3.50	3.50	1.00	141.32	0.0071	circ	diameter=	12			0.7854	10.30	10.30	3.3087	2.9765	42.7115
NEW	B-5				12.80	8.30	8.30	3.50	3.50	0.40	57.26	0.0070	circ	diameter=	12			0.7854	9.30	9.30	3.2875	2.9575	17.4175
NEW	B-4				12.50	7.90	7.90	3.60	3.60	0.90	149.43	0.0060	circ	diameter=	12			0.7854	8.90	8.90	3.0526	2.7461	48.9525
NEW	B-3				11.90	7.00	7.00	3.65	3.65	1.60	192.13	0.0083	circ	diameter=	15			1.2272	8.25	8.25	4.1682	5.8590	46.0938
REPLACE	B-2				10.25	5.40	5.40	3.60	3.60	1.50	22.00	0.0682	circ	diameter=	15			1.2272	6.65	6.65	11.9268	16.7648	1.8446
	B-1				10.15	3.90	3.20	4.58	5.28	0.90	55.00	0.0164	circ	diameter=	20			2.1817	5.57	4.87	7.0850	17.7048	7.7629
	A-2			y	9.93	2.30	2.30	5.96	5.96	0	0.00	0	circ	diameter=	20			2.1817	3.97	3.97	0	0	0
STORM C																						
NEW	C-3		y		12.50	8.00	8.00	3.50	3.50	0.90	149.14	0.0060	circ	diameter=	12			0.7854	9.00	9.00	3.0555	2.7488	48.8100
NEW	C-2				11.90	7.10	7.10	3.55	3.55	0.90	191.88	0.0047	circ	diameter=	15			1.2272	8.35	8.35	3.1282	4.3971	61.3385
REPLACE	C-1				9.74	6.20	6.20	2.29	2.29	1.30	23.00	0.0565	circ	diameter=	15			1.2272	7.45	7.45	10.8592	15.2641	2.1180
REPLACE	B-1			y	10.15	4.90	4.90	4.00	4.00	0	0.00	0	circ	diameter=	15			1.2272	6.15	6.15	0	0	0
STORM D																						
NEW	D-5A		y		11.80	7.30	7.30	3.50	3.50	0.25	16.10	0.0155	circ	diameter=	12			0.7854	8.30	8.30	4.9014	4.4093	3.2848
NEW	D-5				11.80	7.05	7.05	3.50	3.50	0.55	117.79	0.0047	circ	diameter=	15			1.2272	8.30	8.30	3.1212	4.3872	37.7390
NEW	D-4				11.80	6.50	6.50	3.80	3.80	1.20	200.03	0.0060	circ	diameter=	18			1.7671	8.00	8.00	3.9975	8.0914	50.0392
NEW	D-3				10.90	5.30	5.30	3.60	3.60	0.70	112.36	0.0062	circ	diameter=	24			3.1416	7.30	7.30	4.9396	17.7749	22.7467
REPLACE	D-2				10.16	4.60	4.60	3.56	3.56	0.20	23.40	0.0085	circ	diameter=	24			3.1416	6.60	6.60	5.7857	20.8196	4.0444
REPLACE	D-1				10.33	4.40	4.40	3.93	3.93	3.40	53.66	0.0634	circ	diameter=	24			3.1416	6.40	6.40	15.7531	56.6864	3.4063
	A-3			y	9.60	1.00	1.00	6.93	6.93	0	0.00	0	circ	diameter=	20			2.1817	2.67	2.67	0	0	0
STORM D-A																						
NEW	D-4A		y		11.80	6.70	6.70	4.10	4.10	0.20	17.32	0.0115	circ	diameter=	12			0.7854	7.70	7.70	4.2267	3.8024	4.0978

Line	Manhole #	New Pipe? Enter "y"	Up-stream? Enter "y"	Down-stream? Enter "y"	Rim Elev. (ft)	Upper Inv. Elev. (ft)	Lower Inv. Elev. (ft)	Between Manholes																
								Cover (ft) upper	Cover (ft) lower	Fall to next (ft)	Length to next (ft)	Slope to next (ft)	Shape enter	Dimensions downstream					Area (ft^2)	Inner Top Upper (ft)	Inner Top Lower (ft)	Velocity (ft/s)	Capacity (cfs)	Time in pipe (s)
NEW	D-4			y	11.80	6.50	6.50	4.30	4.30	0	200.03	0	circ	diameter=	12				0.7854	7.50	7.50	0	0	0
STORM D-A																								
NEW	D-3A		y		10.90	5.70	5.70	4.20	4.20	0.20	19.08	0.0105	circ	diameter=	12				0.7854	6.70	6.70	4.0270	3.6228	4.7380
NEW	D-3			y	10.90	5.50	5.50	4.40	4.40	0	112.36	0	circ	diameter=	12				0.7854	6.50	6.50	0	0	0
STORM E																								
	E-1		y		10.40	6.00	6.00	3.40	3.40	0.60	24.00	0.0250	circ	diameter=	12				0.7854	7.00	7.00	6.2191	5.5948	3.8591
	D-1			y	10.33	5.40	3.30	3.93	6.03	0	0.00	0	circ	diameter=	12				0.7854	6.40	4.30	0	0	0
STORM F																								
NEW	F-4A		y		11.50	6.50	6.50	4.00	4.00	0.20	20.84	0.0096	circ	diameter=	12				0.7854	7.50	7.50	3.8532	3.4664	5.4084
NEW	F-4				11.50	6.30	6.30	4.20	4.20	0.70	109.15	0.0064	circ	diameter=	12				0.7854	7.30	7.30	3.1499	2.8337	34.6518
NEW	F-3				11.50	5.60	5.60	4.65	4.65	1.30	199.91	0.0065	circ	diameter=	15				1.2272	6.85	6.85	3.6834	5.1775	54.2737
REPLACE	F-2				9.66	4.30	4.30	3.86	3.86	0.20	22.57	0.0089	circ	diameter=	18				1.7671	5.80	5.80	4.8584	9.8339	4.6456
REPLACE	F-1				9.93	4.10	3.30	4.16	4.96	1.50	54.64	0.0275	circ	diameter=	20				2.1817	5.77	4.97	9.1768	22.9319	5.9542
	A-4			y	9.50	1.80	1.80	6.03	6.03	0	0.00	0	circ	diameter=	20				2.1817	3.47	3.47	0	0	0
STORM F-A																								
NEW	F-3A		y		11.50	6.00	6.00	4.50	4.50	0.20	22.35	0.0089	circ	diameter=	12				0.7854	7.00	7.00	3.7208	3.3473	6.0068
NEW	F-3			Y	11.50	5.80	5.80	4.70	4.70	0	22.00	0	circ	diameter=	12				0.7854	6.80	6.80	0	0	0
STORM G																								
REPLACE	G-1		y		9.40	5.40	5.40	2.50	2.50	0.10	22.00	0.0045	circ	diameter=	18				1.7671	6.90	6.90	3.4796	7.0431	6.3225
	F-1			y	9.93	5.30	3.30	3.13	5.13	0	0.00	0	circ	diameter=	18				1.7671	6.80	4.80	0	0	0
STORM H																								
NEW	H-4A		y		10.30	5.80	5.80	3.50	3.50	0.20	24.37	0.0082	circ	diameter=	12				0.7854	6.80	6.80	3.5633	3.2055	6.8392
NEW	H-4				10.30	5.60	5.60	3.45	3.45	1.00	165.78	0.0060	circ	diameter=	15				1.2272	6.85	6.85	3.5475	4.9865	46.7313
NEW	H-3				10.10	4.60	4.60	4.00	4.00	1.10	185.18	0.0059	circ	diameter=	18				1.7671	6.10	6.10	3.9778	8.0515	46.5536
REPLACE	H-2				9.41	3.50	3.50	4.41	4.41	0.30	22.26	0.0135	circ	diameter=	18				1.7671	5.00	5.00	5.9889	12.1222	3.7202
REPLACE	H-1				9.87	3.20	3.20	5.00	5.00	0.90	54.31	0.0166	circ	diameter=	20				2.1817	4.87	4.87	7.1299	17.8169	7.6173
	A-5			y	9.40	2.30	2.30	5.43	5.43	0	0.00	0	circ	diameter=	20				2.1817	3.97	3.97	0	0	0
STORM H-A																								
NEW	H-3A		y		11.50	6.00	6.00	4.50	4.50	0.20	22.35	0.0089	circ	diameter=	12				0.7854	7.00	7.00	3.7208	3.3473	6.0068
NEW	H-3			y	11.50	5.80	5.80	4.70	4.70	0	22.00	0	circ	diameter=	12				0.7854	6.80	6.80	0	0	0
STORM I																								
	I-1		y		9.17	7.20	7.20	0.97	0.97	3.10	23.00	0.1348	circ	diameter=	12				0.7854	8.20	8.20	14.4403	12.9907	1.5928
	H-1			y	9.87	4.10	2.90	4.77	5.97	0	0.00	0	circ	diameter=	12				0.7854	5.10	3.90	0	0	0
STORM J																								
NEW	J-7		y		10.40	5.90	5.90	3.50	3.50	0.35	58.60	0.0060	circ	diameter=	12				0.7854	6.90	6.90	3.0398	2.7346	19.2775
NEW	J-6				10.80	5.55	5.55	4.00	4.00	0.15	19.43	0.0077	circ	diameter=	15				1.2272	6.80	6.80	4.0133	5.6412	4.8414
NEW	J-5				10.80	5.40	5.40	3.90	3.90	1.20	184.52	0.0065	circ	diameter=	18				1.7671	6.90	6.90	4.1621	8.4246	44.3336
NEW	J-4				11.80	4.20	4.20	6.10	6.10	0.40	63.04	0.0063	circ	diameter=	18				1.7671	5.70	5.70	4.1112	8.3215	15.3339
NEW	J-3				11.60	3.80	3.80	5.80	5.80	0.70	159.61	0.0044	circ	diameter=	24				3.1416	5.80	5.80	4.1445	14.9136	38.5115
REPLACE	J-2				9.03	3.10	3.10	3.43	3.43	0.10	22.50	0.0044	circ	diameter=	30				4.9087	5.60	5.60	4.8449	27.2410	4.6440
REPLACE	J-1				9.30	3.00	3.00	3.80	3.80	0.20	53.77	0.0037	circ	diameter=	30				4.9087	5.50	5.50	4.4321	24.9200	12.1325
	A-6			y	9.00	2.80	2.80	3.70	3.70	0	0.00	0	circ	diameter=	30				4.9087	5.30	5.30	0	0	0
STORM J-4A																								
NEW	J-4A		y		11.80	4.50	4.50	6.30	6.30	0.30	19.92	0.0151	circ	diameter=	12				0.7854	5.50	5.50	4.8270	4.3424	4.1268
NEW	J-4			y	11.80	4.20	4.20	6.60	6.60	0	0.00	0	circ	diameter=	12				0.7854	5.20	5.20	0	0	0
STORM J-3A																							0.0000	
NEW	J-3A		y		11.60	4.20	4.20	6.40	6.40	0.40	20.07	0.0199	circ	diameter=	12				0.7854	5.20	5.20	5.5529	4.9954	3.6144
NEW	J-3			y	11.60	3.80	3.80	6.55	6.55	0	0.00	0	circ	diameter=	15				1.2272	5.05	5.05	0	0	0
STORM K																								
	K-1		y		8.89	7.10	7.10	0.79	0.79	2.90	22.00	0.1318	circ	diameter=	12				0.7854	8.10	8.10	14.2807	12.8470	1.5405
	J-1			y	9.30	4.20	3.20	4.10	5.10	0	0.00	0	circ	diameter=	12				0.7854	5.20	4.20	0	0	0
STORM L																								
	L-1		y		8.26	5.00	5.00	2.26	2.26	0.30	33.00	0.0091	circ	diameter=	12				0.7854	6.00	6.00	3.7503	3.3738	8.7993
	J-1			y	9.30	4.70	3.20	3.60	5.10	0	0.00	0	circ	diameter=	12				0.7854	5.70	4.20	0	0	0
STORM M																								
	M-3		y		9.91	4.30	4.30	3.61	3.61	0.70	116.00	0.0060	circ	diameter=	24				3.1416	6.30	6.30	4.8615	17.4938	23.8609
	M-2				11.12	3.60	3.60	5.52	5.52	0.90	228.00	0.0039	circ	diameter=	24				3.1416	5.60	5.60	3.9319	14.1488	57.9869
	M-1			y	10.76	2.70	2.70	6.06	6.06	0	0.00	0	circ	diameter=	24				3.1416	4.70	4.70	0	0	0
STORM M-1A																								
NEW	M-1A		y		10.90	3.00	3.00	6.90	6.90	0.30	20.01	0.0150	circ	diameter=	12				0.7854	4.00	4.00	4.8161	4.3326	4.1548
	M-1			y	10.76	2.70	2.70	6.06	6.06	0	0.00	0	circ	diameter=	24				3.1416	4.70	4.70	0	0	0

Line	Manhole #	New Pipe? Enter "y"	Up-stream? Enter "y"	Down-stream? Enter "y"	Rim Elev. (ft)	Upper Inv. Elev. (ft)	Lower Inv. Elev. (ft)	Between Manholes														
								Cover (ft) upper	Cover (ft) lower	Fall to next (ft)	Length to next (ft)	Slope to next (ft)	Shape enter	Dimensions downstream				Area (ft^2)	Inner Top Upper (ft)	Inner Top Lower (ft)	Velocity (ft/s)	Capacity (cfs)	Time in pipe (s)
STORM M-3A																						
NEW	M-3A2		y		12.80	6.80	6.80	5.00	5.00	0.30	35.00	0.0086	circ	diameter=	12			0.7854	7.80	7.80	3.6416	3.2760	9.6113
NEW	M-3A1				12.80	6.50	6.50	5.30	5.30	1.50	182.97	0.0082	circ	diameter=	12			0.7854	7.50	7.50	3.5614	3.2038	51.3764
NEW	M-3A				10.00	5.00	5.00	3.75	3.75	0.70	39.42	0.0178	circ	diameter=	15			1.2272	6.25	6.25	6.0867	8.5557	6.4764
	M-3			y	9.91	4.30	4.30	4.36	4.36	0	0.00	0	circ	diameter=	15			1.2272	5.55	5.55	0	0	0
STORM M-3B																						
NEW	M-3B		y		10.90	5.90	5.90	4.00	4.00	1.60	58.93	0.0272	circ	diameter=	12			0.7854	6.90	6.90	6.4812	5.8305	9.0925
	M-3			y	9.91	4.30	4.30	4.61	4.61	0	0.00	0	circ	diameter=	12			0.7854	5.30	5.30	0	0	0
STORM N																						
	N-1		y		9.39	6.60	6.60	1.79	1.79	1.10	37.00	0.0297	circ	diameter=	12			0.7854	7.60	7.60	6.7820	6.1011	5.4556
	M-3			y	9.91	5.50	4.30	3.41	4.61	0	0.00	0	circ	diameter=	12			0.7854	6.50	5.30	0	0	0
STORM O																						
NEW	O-2		y		11.34	8.00	8.00	2.34	2.34	1.70	186.05	0.0091	circ	diameter=	12			0.7854	9.00	9.00	3.7598	3.3824	49.4834
NEW	O-1				9.57	6.30	6.30	2.27	2.27	0.40	24.00	0.0167	circ	diameter=	12			0.7854	7.30	7.30	5.0779	4.5681	4.7264
	M-3			y	9.91	5.90	4.30	3.01	4.61	0	0.00	0	circ	diameter=	12			0.7854	6.90	5.30	0	0	0
STORM P																						
REPLACE	P-7		y		8.83	5.30	5.30	2.03	2.03	0.30	87.00	0.0034	circ	diameter=	18			1.7671	6.80	6.80	3.0307	6.1345	28.7062
REPLACE	P-6				9.04	5.00	5.00	2.54	2.54	0.20	78.00	0.0026	circ	diameter=	18			1.7671	6.50	6.50	2.6134	5.2899	29.8459
REPLACE	P-5				9.17	5.20	5.20	1.97	1.97	0.50	89.00	0.0056	circ	diameter=	24			3.1416	7.20	7.20	4.6907	16.8793	18.9736
REPLACE	P-4				9.50	4.70	4.70	2.80	2.80	0.60	91.00	0.0066	circ	diameter=	24			3.1416	6.70	6.70	5.0817	18.2860	17.9075
REPLACE	P-3				9.10	4.10	4.10	3.00	3.00	0.70	115.00	0.0061	circ	diameter=	24			3.1416	6.10	6.10	4.8826	17.5697	23.5530
REPLACE	P-2				9.23	3.40	3.40	3.83	3.83	1.20	118.00	0.0102	circ	diameter=	24			3.1416	5.40	5.40	6.3110	22.7098	18.6974
REPLACE	P-1				10.20	2.20	2.20	6.00	6.00	0.90	117.00	0.0077	circ	diameter=	24			3.1416	4.20	4.20	5.4868	19.7512	21.3160
	M-1			y	10.76	1.30	1.30	7.46	7.46	0	0.00	0	circ	diameter=	24			3.1416	3.30	3.30	0	0	0
STORM P-5A																						
NEW	P-5A		y		9.10	5.30	5.30	2.80	2.80	0.10	7.71	0.0130	circ	diameter=	12			0.7854	6.30	6.30	4.4795	4.0298	1.7212
	P-5			y	9.17	5.20	5.20	2.72	2.72	0	0.00	0	circ	diameter=	15			1.2272	6.45	6.45	0	0	0
STORM P-5B																						
NEW	P-5B		y		9.10	5.30	5.30	2.80	2.80	0.10	17.14	0.0058	circ	diameter=	12			0.7854	6.30	6.30	3.0044	2.7028	5.7050
	P-5			y	9.17	5.20	5.20	2.72	2.72	0	0.00	0	circ	diameter=	15			1.2272	6.45	6.45	0	0	0
STORM P-2A																						
NEW	P-2A		y		9.20	4.00	4.00	4.20	4.20	0.40	14.03	0.0285	circ	diameter=	12			0.7854	5.00	5.00	6.6414	5.9747	2.1125
	P-2			y	9.23	3.60	3.60	3.88	3.88	0	0.00	0	circ	diameter=	21			2.4053	5.35	5.35	0	0	0
STORM P-2B																						
NEW	P-2B		y		9.00	4.00	4.00	4.00	4.00	0.40	15.39	0.0260	circ	diameter=	12			0.7854	5.00	5.00	6.3412	5.7046	2.4270
	P-2			y	9.23	3.60	3.60	3.88	3.88	0	0.00	0	circ	diameter=	21			2.4053	5.35	5.35	0	0	0
STORM Q																						
	Q-1		y		7.92	5.50	5.50	1.42	1.42	0.20	23.22	0.0086	circ	diameter=	12			0.7854	6.50	6.50	3.6504	3.2840	6.3609
	P-7			y	8.83	5.70	5.40	2.13	2.43	0	0.00	0	circ	diameter=	12			0.7854	6.70	6.40	0	0	0
STORM R																						
	R-1		y		8.18	4.90	4.90	2.28	2.28	0.50	25.87	0.0193	circ	diameter=	12			0.7854	5.90	5.90	5.4682	4.9193	4.7310
	P-7			y	8.83	5.40	5.30	2.43	2.53	0	0.00	0	circ	diameter=	12			0.7854	6.40	6.30	0	0	0
STORM S																						
	S-2		y		7.46	6.00	6.00	0.63	0.63	0.50	39.00	0.0128	circ	diameter=	10			0.5454	6.83	6.83	3.9415	2.4624	9.8947
	S-1				7.39	5.50	5.50	0.89	0.89	0.50	33.00	0.0152	circ	diameter=	12			0.7854	6.50	6.50	4.8416	4.3555	6.8159
	P-3			y	9.10	5.00	4.30	3.10	3.80	0	0.00	0	circ	diameter=	12			0.7854	6.00	5.30	0	0	0
STORM T																						
	T-1		y		9.00	4.70	4.70	3.30	3.30	0.40	35.00	0.0114	circ	diameter=	12			0.7854	5.70	5.70	4.2049	3.7828	8.3236
	P-3			y	9.10	4.30	4.10	3.80	4.00	0	0.00	0	circ	diameter=	12			0.7854	5.30	5.10	0	0	0
STORM U																						
REPLACE	M-1		y		10.76	3.00	3.00	4.26	4.26	0.50	92.99	0.0054	circ	diameter=	42			9.6211	6.50	6.50	6.6766	73.5772	13.9278
NEW	U-12				11.90	2.50	2.50	5.90	5.90	0.50	84.54	0.0059	circ	diameter=	42			9.6211	6.00	6.00	7.0023	77.1667	12.0732
NEW	U-11				12.50	2.00	2.00	7.00	7.00	0.90	318.94	0.0028	circ	diameter=	42			9.6211	5.50	5.50	4.8367	53.3019	65.9411
NEW	U-10				11.50	1.10	1.10	6.90	6.90	0.20	42.85	0.0047	circ	diameter=	42			9.6211	4.60	4.60	6.2205	68.5513	6.8885
	U-9				11.00	0.90	0.90	5.60	5.60	0.80	223.46	0.0036	circ	diameter=	54			15.9043	5.40	5.40	6.4470	117.4457	34.6610
NEW	U-8				12.30	0.10	0.10	7.70	7.70	0.30	38.25	0.0078	circ	diameter=	54			15.9043	4.60	4.60	9.5424	173.8348	4.0084
	U-7				13.23	-0.20	-0.20	8.43	8.43	0.66	113.64	0.0058	circ	diameter=	60			19.6350	4.80	4.80	8.8121	198.1850	12.8960
	U-6				13.76	-0.86	-0.86	9.64	9.64	0.22	118.92	0.0018	circ	diameter=	60			19.6350	4.14	4.14	4.9734	111.8532	23.9111
	U-5				14.00	-1.08	-1.08	10.08	10.08	0.17	114.86	0.0015	circ	diameter=	60			19.6350	3.92	3.92	4.4485	100.0471	25.8201
REPLACE	U-4				13.34	-1.25	-1.25	9.59	9.59	0.35	118.41	0.0030	circ	diameter=	60			19.6350	3.75	3.75	6.2865	141.3853	18.8355
	U-3				11.69	-1.60	-1.60	8.29	8.29	0.20	114.82	0.0017	circ	diameter=	60			19.6350	3.40	3.40	4.8259	108.5352	23.7925

Line	Manhole #	New Pipe? Enter "y"	Up-stream? Enter "y"	Down-stream? Enter "y"	Rim Elev. (ft)	Upper Inv. Elev. (ft)	Lower Inv. Elev. (ft)	Between Manholes													
								Cover (ft) upper	Cover (ft) lower	Fall to next (ft)	Length to next (ft)	Slope to next (ft)	Shape enter	Dimensions downstream			Area (ft^2)	Inner Top Upper (ft)	Inner Top Lower (ft)	Velocity (ft/s)	Capacity (cfs)	Time in pipe (s)
	U-2				11.58	-1.80	-1.80	8.38	8.38	0.20	200.00	0.0010	circ	diameter=	60		19.6350	3.20	3.20	3.6565	82.2365	54.6965
	U-1			y	9.00	-2.00	-2.00	6.00	6.00	0	0.00	0	circ	diameter=	60		19.6350	3.00	3.00	0	0	0
STORM U-12A																					
NEW	U-12A2		y		11.30	6.30	6.30	4.00	4.00	1.30	163.81	0.0079	circ	diameter=	12		0.7854	7.30	7.30	3.5040	3.1522	46.7496
NEW	U-12A1				10.90	5.00	5.00	4.90	4.90	1.00	85.33	0.0117	circ	diameter=	12		0.7854	6.00	6.00	4.2580	3.8306	20.0397
NEW	U-12A				13.00	4.00	4.00	8.00	8.00	1.50	27.31	0.0549	circ	diameter=	12		0.7854	5.00	5.00	9.2182	8.2928	2.9626
NEW	U-12			y	11.90	2.50	2.50	8.40	8.40	0	0.00	0	circ	diameter=	12		0.7854	3.50	3.50	0	0	0
STORM U-12B																					
NEW	U-12B		y		11.00	3.00	3.00	7.00	7.00	0.50	30.09	0.0166	circ	diameter=	12		0.7854	4.00	4.00	5.0703	4.5613	5.9345
NEW	U-12			y	11.90	2.50	2.50	8.40	8.40	0	0.00	0	circ	diameter=	12		0.7854	3.50	3.50	0	0	0
STORM U-11A																					
NEW	U-11A		y		12.50	3.00	3.00	8.50	8.50	1.00	27.13	0.0369	circ	diameter=	12		0.7854	4.00	4.00	7.5515	6.7934	3.5926
NEW	U-11			y	12.50	2.00	2.00	9.50	9.50	0	0.00	0	circ	diameter=	12		0.7854	3.00	3.00	0	0	0
STORM U-10A																					
NEW	U-10A1		y		13.00	7.00	7.00	5.00	5.00	4.00	187.25	0.0214	circ	diameter=	12		0.7854	8.00	8.00	5.7488	5.1717	32.5718
NEW	U-10A				11.50	3.00	3.00	7.50	7.50	1.90	29.77	0.0638	circ	diameter=	12		0.7854	4.00	4.00	9.9368	8.9393	2.9959
NEW	U-10			y	11.50	1.10	1.10	9.40	9.40	0	0.00	0	circ	diameter=	12		0.7854	2.10	2.10	0	0	0
STORM U-10B																				0.0000	
NEW	U-10B		y		11.90	6.50	6.50	4.40	4.40	1.50	27.23	0.0551	circ	diameter=	12		0.7854	7.50	7.50	9.2317	8.3049	2.9496
NEW	U-10			y	11.50	5.00	1.10	5.50	9.40	0	0.00	0	circ	diameter=	12		0.7854	6.00	2.10	0	0	0
STORM U-9A																					
NEW	U-9A2		y		11.10	6.10	6.10	4.00	4.00	0.10	14.84	0.0067	circ	diameter=	12		0.7854	7.10	7.10	3.2288	2.9047	4.5961
NEW	U-9A1				11.10	6.00	6.00	4.10	4.10	2.00	117.29	0.0171	circ	diameter=	12		0.7854	7.00	7.00	5.1362	4.6206	22.8358
NEW	U-9A				11.00	4.00	4.00	6.00	6.00	3.10	44.56	0.0696	circ	diameter=	12		0.7854	5.00	5.00	10.3745	9.3330	4.2951
	U-9			y	11.00	0.90	0.90	6.60	6.60	0	0.00	0	circ	diameter=	42		9.6211	4.40	4.40	0	0	0
STORM U-9B																					
NEW	U-9B		y		11.00	6.00	6.00	4.00	4.00	0.50	44.05	0.0114	circ	diameter=	12		0.7854	7.00	7.00	4.1906	3.7699	10.5117
NEW	U-9A			y	11.00	5.50	4.00	4.50	6.00	0	0.00	0	circ	diameter=	12		0.7854	6.50	5.00	0	0	0
STORM U-9C																					
NEW	U-9C		y		11.00	6.00	6.00	4.00	4.00	0.50	17.51	0.0286	circ	diameter=	12		0.7854	7.00	7.00	6.6466	5.9794	2.6344
NEW	U-9A			y	11.00	5.50	4.00	4.50	6.00	0	0.00	0	circ	diameter=	12		0.7854	6.50	5.00	0	0	0
STORM U-9D																					
NEW	U-9D9		y		10.50	6.00	6.00	3.50	3.50	0.50	21.89	0.0228	circ	diameter=	12		0.7854	7.00	7.00	5.9446	5.3478	3.6823
NEW	U-9D8				10.50	5.50	5.50	3.50	3.50	0.70	78.94	0.0089	circ	diameter=	18		1.7671	7.00	7.00	4.8601	9.8374	16.2426
NEW	U-9D7				10.30	4.80	4.80	3.50	3.50	1.10	200.07	0.0055	circ	diameter=	24		3.1416	6.80	6.80	4.6404	16.6982	43.1147
NEW	U-9D6				9.20	3.70	3.70	3.50	3.50	0.10	42.10	0.0024	circ	diameter=	24		3.1416	5.70	5.70	3.0501	10.9755	13.8030
NEW	U-9D5				9.10	3.60	3.60	3.50	3.50	0.15	51.00	0.0029	circ	diameter=	24		3.1416	5.60	5.60	3.3940	12.2131	15.0265
NEW	U-9D4				9.10	3.45	3.45	3.65	3.65	0.55	86.82	0.0063	circ	diameter=	24		3.1416	5.45	5.45	4.9811	17.9240	17.4300
NEW	U-9D3				9.00	2.90	2.90	3.60	3.60	0.50	143.38	0.0035	circ	diameter=	30		4.9087	5.40	5.40	4.2916	24.1299	33.4093
NEW	U-9D2				10.00	2.40	2.40	5.10	5.10	0.40	33.58	0.0119	circ	diameter=	30		4.9087	4.90	4.90	7.9318	44.5968	4.2336
NEW	U-9D1				10.00	2.00	2.00	5.00	5.00	0.85	200.42	0.0042	circ	diameter=	36		7.0686	5.00	5.00	5.3477	43.2979	37.4775
NEW	U-9D				11.00	1.15	1.15	6.85	6.85	0.25	53.15	0.0047	circ	diameter=	36		7.0686	4.15	4.15	5.6318	45.5981	9.4374
	U-9			y	11.00	0.90	0.90	5.60	5.60	0	0.00	0	circ	diameter=	54		15.9043	5.40	5.40	0	0	0
STORM U-9E																					
NEW	U-9E		y		9.00	4.00	4.00	4.00	4.00	0.90	22.31	0.0403	circ	diameter=	12		0.7854	5.00	5.00	7.9001	7.1070	2.8240
NEW	U-9D3			y	9.00	3.10	3.10	3.40	3.40	0	0.00	0	circ	diameter=	30		4.9087	5.60	5.60	0	0	0
STORM U-9F																					
NEW	U-9F		y		10.80	3.00	3.00	6.80	6.80	0.55	25.43	0.0216	circ	diameter=	12		0.7854	4.00	4.00	5.7845	5.2038	4.3962
NEW	U-9D1			y	10.00	2.45	2.45	4.55	4.55	0	0.00	0	circ	diameter=	36		7.0686	5.45	5.45	0	0	0
STORM U-9G																					
NEW	U-9G		y		11.00	6.00	6.00	4.00	4.00	1.00	21.87	0.0457	circ	diameter=	12		0.7854	7.00	7.00	8.4108	7.5664	2.6002
NEW	U-9D			y	11.00	5.00	1.25	3.00	6.75	0	0.00	0	circ	diameter=	36		7.0686	8.00	4.25	0	0	0
STORM U-9H																					
NEW	U-9H2		y		11.50	6.50	6.50	4.00	4.00	0.15	20.30	0.0074	circ	diameter=	12		0.7854	7.50	7.50	3.3811	3.0417	6.0040
NEW	U-9H1				11.50	6.35	6.35	4.15	4.15	1.35	132.95	0.0102	circ	diameter=	12		0.7854	7.35	7.35	3.9635	3.5656	33.5432
NEW	U-9H				10.80	5.00	5.00	4.30	4.30	2.55	194.37	0.0131	circ	diameter=	18		1.7671	6.50	6.50	5.9115	11.9656	32.8800
NEW	U-9D1			y	10.00	2.45	2.45	4.55	4.55	0	0.00	0	circ	diameter=	36		7.0686	5.45	5.45	0	0	0
STORM U-9I																					
NEW	U-9I		y		10.80	5.50	5.50	4.30	4.30	0.50	19.48	0.0257	circ	diameter=	12		0.7854	6.50	6.50	6.3016	5.6690	3.0913
NEW	U-9H			y	10.80	5.00	5.00	4.80	4.80	0	0.00	0	circ	diameter=	12		0.7854	6.00	6.00	0	0	0
STORM U-9J																					

Line	Manhole #	New Pipe? Enter "y"	Up-stream? Enter "y"	Down-stream? Enter "y"	Rim Elev. (ft)	Upper Inv. Elev. (ft)	Lower Inv. Elev. (ft)	Between Manholes													
								Cover (ft) upper	Cover (ft) lower	Fall to next (ft)	Length to next (ft)	Slope to next (ft)	Shape enter	Dimensions downstream			Area (ft^2)	Inner Top Upper (ft)	Inner Top Lower (ft)	Velocity (ft/s)	Capacity (cfs)	Time in pipe (s)
NEW	U-9J2		y		10.50	5.75	5.75	3.75	3.75	0.25	23.22	0.0108	circ	diameter=	12		0.7854	6.75	6.75	4.0813	3.6716	5.6893
NEW	U-9J1				10.50	5.50	5.50	4.00	4.00	2.00	161.29	0.0124	circ	diameter=	12		0.7854	6.50	6.50	4.3800	3.9403	36.8244
NEW	U-9J				9.00	3.50	4.00	4.00	3.50	0.55	100.45	0.0055	circ	diameter=	18		1.7671	5.00	5.50	3.8190	7.7301	26.3028
NEW	U-9D4			y	9.00	3.45	3.45	3.45	4.05	0	0.00	0	circ	diameter=	18		1.7671	4.95	4.95	0	0	0
STORM U-9K																						
NEW	U-9K		y		9.00	4.60	4.60	3.40	3.40	0.10	19.57	0.0051	circ	diameter=	12		0.7854	5.60	5.60	2.8117	2.5294	6.9603
NEW	U-9J			y	9.00	4.50	4.50	3.50	3.50	0	0.00	0	circ	diameter=	12		0.7854	5.50	5.50	0	0	0
STORM U-9L																						
NEW	U-9L		y		10.30	5.30	5.30	4.00	4.00	0.50	24.52	0.0204	circ	diameter=	12		0.7854	6.30	6.30	5.6168	5.0529	4.3655
NEW	U-9D7			y	10.30	4.80	4.80	4.50	4.50	0	0.00	0	circ	diameter=	12		0.7854	5.80	5.80	0	0	0
STORM U-8A																						
NEW	U-8A5		y		13.80	8.80	8.80	4.00	4.00	0.90	128.54	0.0070	circ	diameter=	12		0.7854	9.80	9.80	3.2913	2.9609	39.0549
NEW	U-8A4				12.90	7.90	7.90	4.00	4.00	0.20	28.20	0.0071	circ	diameter=	12		0.7854	8.90	8.90	3.3125	2.9799	8.5133
NEW	U-8A3				12.90	7.70	7.70	4.20	4.20	1.70	199.84	0.0085	circ	diameter=	12		0.7854	8.70	8.70	3.6278	3.2636	55.0856
NEW	U-8A2				13.80	6.00	6.00	6.30	6.30	1.00	34.33	0.0291	circ	diameter=	18		1.7671	7.50	7.50	8.8086	17.8296	3.8973
NEW	U-8A1				13.00	5.00	5.00	6.50	6.50	1.00	29.83	0.0335	circ	diameter=	18		1.7671	6.50	6.50	9.4496	19.1272	3.1567
NEW	U-8A				12.00	4.00	4.00	6.50	6.50	1.00	23.50	0.0426	circ	diameter=	18		1.7671	5.50	5.50	10.6465	21.5498	2.2073
NEW	U-8			y	12.30	3.00	0.10	4.80	7.70	0	38.25	0	circ	diameter=	54		15.9043	7.50	4.60	0	0	0
STORM U-8B																						
NEW	U-8B		y		13.50	6.50	6.50	6.00	6.00	0.50	30.51	0.0164	circ	diameter=	12		0.7854	7.50	7.50	5.0353	4.5298	6.0592
NEW	U-8A2			y	13.80	6.00	6.00	6.80	6.80	0	0.00	0	circ	diameter=	12		0.7854	7.00	7.00	0	0	0
STORM U-8C																						
NEW	U-8C		y		12.90	7.90	7.90	4.00	4.00	0.20	29.22	0.0068	circ	diameter=	12		0.7854	8.90	8.90	3.2541	2.9274	8.9793
NEW	U-8A3			y	12.90	7.70	7.70	4.20	4.20	0	0.00	0	circ	diameter=	12		0.7854	8.70	8.70	0	0	0
STORM U-8D																						
NEW	U-8D1		y		11.00	6.00	6.00	4.00	4.00	2.00	188.78	0.0106	circ	diameter=	12		0.7854	7.00	7.00	4.0485	3.6421	46.6292
NEW	U-8D				12.10	4.00	4.00	7.10	7.10	1.00	20.91	0.0478	circ	diameter=	12		0.7854	5.00	5.00	8.6017	7.7382	2.4309
NEW	U-8			y	12.30	3.00	0.10	4.80	7.70	0	38.25	0	circ	diameter=	54		15.9043	7.50	4.60	0	0	0
STORM U-8E																						
NEW	U-8E		y		12.90	7.00	7.00	4.90	4.90	1.00	25.63	0.0390	circ	diameter=	12		0.7854	8.00	8.00	7.7694	6.9894	3.2988
NEW	U-8D			y	12.10	6.00	4.00	5.10	7.10	0	0.00	0	circ	diameter=	12		0.7854	7.00	5.00	0	0	0
STORM U-5A																						
NEW	U-5A		y		14.00	6.00	6.00	7.00	7.00	1.00	12.58	0.0795	circ	diameter=	12		0.7854	7.00	7.00	11.0897	9.9764	1.1344
	U-5			y	14.00	5.00	-1.08	4.00	10.08	0	0.00	0	circ	diameter=	60		19.6350	10.00	3.92	0	0	0
STORM U-5B																						
NEW	U-5B		y		14.00	6.00	6.00	7.00	7.00	1.00	21.79	0.0459	circ	diameter=	12		0.7854	7.00	7.00	8.4262	7.5803	2.5860
	U-5			y	14.00	5.00	-1.08	4.00	10.08	0	0.00	0	circ	diameter=	60		19.6350	10.00	3.92	0	0	0
STORM U-3A																					0.0000	
NEW	U-3A		y		11.61	5.00	5.00	5.61	5.61	0.50	16.13	0.0310	circ	diameter=	12		0.7854	6.00	6.00	6.9251	6.2299	2.3292
	U-3			y	11.69	4.50	-1.60	2.19	8.29	0	0.00	0	circ	diameter=	60		19.6350	9.50	3.40	0	0	0
STORM U-3B																						
NEW	U-3B5		y		13.00	8.00	8.00	4.00	4.00	1.00	163.00	0.0061	circ	diameter=	12		0.7854	9.00	9.00	3.0808	2.7715	52.9079
NEW	U-3B4				14.00	7.00	7.00	5.75	5.75	1.00	157.23	0.0064	circ	diameter=	15		1.2272	8.25	8.25	3.6427	5.1203	43.1631
NEW	U-3B3				13.00	6.00	6.00	5.75	5.75	0.20	26.49	0.0076	circ	diameter=	15		1.2272	7.25	7.25	3.9688	5.5788	6.6745
NEW	U-3B2				13.00	5.80	5.80	5.70	5.70	0.60	98.83	0.0061	circ	diameter=	18		1.7671	7.30	7.30	4.0214	8.1397	24.5763
NEW	U-3B1				12.00	5.20	5.20	5.30	5.30	1.20	144.40	0.0083	circ	diameter=	18		1.7671	6.70	6.70	4.7049	9.5232	30.6915
NEW	U-3B				11.50	4.00	4.00	6.00	6.00	1.00	22.44	0.0446	circ	diameter=	18		1.7671	5.50	5.50	10.8951	22.0530	2.0596
	U-3			y	11.69	3.00	-1.60	3.69	8.29	0	0.00	0	circ	diameter=	60		19.6350	8.00	3.40	0	0	0
STORM V																						
NEW	V-6		y		12.90	8.40	8.40	3.50	3.50	0.25	34.85	0.0072	circ	diameter=	12		0.7854	9.40	9.40	3.3314	2.9970	10.4610
NEW	V-5				12.90	8.15	8.15	3.25	3.25	1.15	194.82	0.0059	circ	diameter=	18		1.7671	9.65	9.65	3.9653	8.0262	49.1314
NEW	V-4				13.10	7.00	7.00	4.60	4.60	0.10	14.52	0.0069	circ	diameter=	18		1.7671	8.50	8.50	4.2831	8.6695	3.3901
REPLACE	V-3				13.08	6.90	6.90	4.68	4.68	0.60	35.84	0.0167	circ	diameter=	18		1.7671	8.40	8.40	6.6778	13.5167	5.3670
REPLACE	V-2				13.32	6.30	6.30	5.02	5.02	1.30	41.70	0.0312	circ	diameter=	24		3.1416	8.30	8.30	11.0498	39.7620	3.7738
REPLACE	V-1				13.47	5.00	5.00	6.47	6.47	5.20	227.81	0.0228	circ	diameter=	24		3.1416	7.00	7.00	9.4551	34.0236	24.0939
	U-7			y	13.23	-0.20	-0.20	8.43	8.43	0	0.00	0	circ	diameter=	60		19.6350	4.80	4.80	0	0	0
STORM V-1A																						
NEW	V-1A		y		13.50	7.00	7.00	5.50	5.50	1.00	19.44	0.0514	circ	diameter=	12		0.7854	8.00	8.00	8.9210	8.0254	2.1791
REPLACE	V-1			y	13.47	6.00	6.00	5.97	5.97	0	0.00	0	circ	diameter=	18		1.7671	7.50	7.50	0	0	0
STORM W																						
REPLACE	W-1		y		12.66	7.50	7.50	4.16	4.16	0.60	23.21	0.0259	circ	diameter=	12		0.7854	8.50	8.50	6.3241	5.6892	3.6701

Line	Manhole #	New Pipe? Enter "y"	Up-stream? Enter "y"	Down-stream? Enter "y"	Rim Elev. (ft)	Upper Inv. Elev. (ft)	Lower Inv. Elev. (ft)	Between Manholes													
								Cover (ft) upper	Cover (ft) lower	Fall to next (ft)	Length to next (ft)	Slope to next (ft)	Shape enter	Dimensions downstream				Area (ft^2)	Inner Top Upper (ft)	Inner Top Lower (ft)	Velocity (ft/s)	Capacity (cfs)	Time in pipe (s)
REPLACE	V-3			y	13.08	6.90	6.90	5.18	5.18	0	0.00	0	circ	diameter=	12			0.7854	7.90	7.90	0	0	0
STORM X																							
NEW	X-5		y		14.00	9.00	9.00	4.00	4.00	0.20	26.98	0.0074	circ	diameter=	12			0.7854	10.00	10.00	3.3865	3.0466	7.9669
NEW	X-4				14.00	8.80	8.80	4.20	4.20	0.80	138.06	0.0058	circ	diameter=	12			0.7854	9.80	9.80	2.9941	2.6936	46.1101
NEW	X-3				13.80	8.00	8.00	4.30	4.30	1.20	194.25	0.0062	circ	diameter=	18			1.7671	9.50	9.50	4.0565	8.2109	47.8861
REPLACE	X-2				12.97	6.80	6.80	4.67	4.67	0.15	16.63	0.0090	circ	diameter=	18			1.7671	8.30	8.30	4.9016	9.9215	3.3927
REPLACE	X-1				13.34	6.65	6.65	5.19	5.19	0.35	37.38	0.0094	circ	diameter=	18			1.7671	8.15	8.15	4.9941	10.1086	7.4848
REPLACE	V-2			y	13.32	6.30	6.30	5.52	5.52	0	0.00	0	circ	diameter=	18			1.7671	7.80	7.80	0	0	0
STORM X-3A																							
NEW	X-3A		y		13.80	8.80	8.80	4.00	4.00	0.80	27.16	0.0295	circ	diameter=	12			0.7854	9.80	9.80	6.7506	6.0729	4.0234
NEW	X-3			y	13.80	8.00	8.00	4.80	4.80	0	0.00	0	circ	diameter=	12			0.7854	9.00	9.00	0	0	0
STORM Y																							
REPLACE	Y-1		y		13.06	7.00	7.00	5.06	5.06	1.00	21.94	0.0456	circ	diameter=	12			0.7854	8.00	8.00	8.3974	7.5543	2.6127
REPLACE	V-1			y	13.34	6.00	6.00	6.34	6.34	0	0.00	0	circ	diameter=	12			0.7854	7.00	7.00	0	0	0
STORM Z																							
REPLACE	Z-2		y		12.48	7.50	7.50	4.15	4.15	0.50	24.00	0.0208	circ	diameter=	10			0.5454	8.33	8.33	5.0245	3.1389	4.7766
REPLACE	Z-1				12.85	7.00	7.00	4.85	4.85	1.00	37.00	0.0270	circ	diameter=	12			0.7854	8.00	8.00	6.4664	5.8172	5.7219
	U-7			y	13.23	6.00	-0.20	2.23	8.43	0	113.64	0	circ	diameter=	60			19.6350	11.00	4.80	0	0	0

Storm Sewer Lines			New Pipe	First In Line	Area Values (sq ft)	Area Values (acres) (A)	Cum. Area (acres)	Runoff Coefficients (C)	Time in Area (min)	Cum. Time Pipe (min)	Time of Conc. (min)	Runoff val. (R) (in/hr)	Cum. Actual Storm Flow (cfs) (Based on Cum. Area)	Cum. Allowable Queens Storm Flow (Q = 0.5x4.8xA) (cfs)	Lines	Manhole	Cap Flow from Manhole (cfs)	Time from Manhole (s)	Time from Manhole (min)	Cum. Time from Manhole (min)
STORM A		A-9	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM A	A-9	2.87	24.55	0.41	0.00
STORM A	A-9	A-8	0	0	15,350.00	0.35	0.35	0.85	6	0.41	6.41	5.95	1.78	0.85	STORM A	A-8	30.03	40.98	0.68	0.41
STORM A	A-8	A-7	0	0	4,348.00	0.10	0.45	0.85	6	1.09	7.50	5.95	2.29	1.09	STORM A	A-7	51.52	86.46	1.44	1.09
STORM A	A-7	A-6	0	0	11,478.00	0.26	3.72	0.85	6	2.53	10.03	5.95	21.47	8.94	STORM A	A-6	62.55	36.24	0.60	2.53
STORM A	A-6	A-5A	0	0	5,711.00	0.13	6.85	0.85	6	3.14	13.17	5.95	37.25	16.43	STORM A	A-5A	51.94	42.21	0.70	3.14
STORM A	A-5A	A-5	0	0	5,411.00	0.12	7.34	0.85	6	3.84	17.01	5.95	39.73	17.61	STORM A	A-5	62.85	59.54	0.99	3.84
STORM A	A-5	A-4	0	0	16,740.00	0.38	12.46	0.85	6	4.83	21.85	5.95	71.61	29.90	STORM A	A-4	108.88	43.50	0.73	4.83
STORM A	A-4	A-3	0	0	16,897.00	0.39	14.91	0.85	6	5.56	27.40	5.95	83.99	35.78	STORM A	A-3	115.49	41.01	0.68	5.56
STORM A	A-3	A-2	0	0	17,249.00	0.40	18.24	0.85	6	6.24	33.65	5.95	103.88	43.79	STORM A	A-2	88.34	66.20	1.10	6.24
STORM A	A-2	A-1	0	0	17,427.00	0.40	20.16	0.85	6	7.35	40.99	5.95	116.27	48.39	STORM A	A-1	76.03	34.61	0.58	7.35
STORM A	A-1	A-1B	0	0	0.00	0.00	22.12	0.85	6	7.92	48.91	5.95	126.17	53.08	STORM A	A-1B	107.06	24.79	0.41	7.92
STORM A	A-1B	A-1A	0	0	0.00	0.00	22.12	0.85	6	8.33	57.25	5.95	126.17	53.08	STORM A	A-1A	0	0	0.00	8.33
STORM A-7A		A-7A6	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM A-7A	A-7A5	6.13	38.43	0.64	0.00
STORM A-7A	A-7A6	A-7A5	0	0	17,832.00	0.41	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM A-7A	A-7A5	6.13	38.43	0.64	0.00
STORM A-7A	A-7A5	A-7A4	0	0	27,695.00	0.64	0.64	0.85	6	0.64	6.00	5.95	3.22	1.53	STORM A-7A	A-7A4	10.27	4.08	0.07	0.64
STORM A-7A	A-7A4	A-7A3	0	0	17,308.00	0.40	1.99	0.85	6	0.71	6.64	5.95	10.08	4.79	STORM A-7A	A-7A3	12.47	28.22	0.47	0.71
STORM A-7A	A-7A3	A-7A2	0	0	16,267.00	0.37	2.37	0.85	6	1.18	7.35	5.95	11.97	5.68	STORM A-7A	A-7A2	16.37	22.89	0.38	1.18
STORM A-7A	A-7A2	A-7A1	0	0	10,904.00	0.25	2.70	0.85	6	1.56	8.53	5.95	13.67	6.48	STORM A-7A	A-7A1	19.47	3.71	0.06	1.56
STORM A-7A	A-7A1	A-7A	0	0	10,397.00	0.24	2.94	0.85	6	1.62	10.09	5.95	14.87	7.06	STORM A-7A	A-7A	17.27	14.16	0.24	1.62
STORM A-7A	A-7A	A-7	0	0	2,954.00	0.07	3.01	0.85	6	1.86	11.71	5.95	15.22	7.22	STORM A-7A	A-7	51.52	86.46	1.44	1.86
STORM A-7B		A-7B	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM A-7B	A-7B	4.80	4.59	0.08	0.00
STORM A-7B	A-7B	A-7A2	0	0	3,677.00	0.08	0.08	0.85	6	0.08	6.08	5.95	0.43	0.20	STORM A-7B	A-7A2	16.37	22.89	0.38	0.08
STORM A-7C		A-7C	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM A-7C	A-7C	4.95	57.28	0.95	0.00
STORM A-7C	A-7C	A-7A4	0	0	41,847.00	0.96	0.96	0.85	6	0.95	6.95	5.95	4.86	2.31	STORM A-7C	A-7A4	10.27	4.08	0.07	0.95
STORM A-NB		A-NB5	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM A-NB	A-NB5	5.22	8.16	0.14	0.00
STORM A-NB	A-NB5	A-NB4	0	0	27,424.00	0.63	0.63	0.85	6	0.14	6.14	5.95	3.18	1.51	STORM A-NB	A-NB4	7.36	4.35	0.07	0.14
STORM A-NB	A-NB4	A-NB3	0	0	11,315.00	0.26	0.89	0.85	6	0.21	6.21	5.95	4.50	2.13	STORM A-NB	A-NB3	5.44	53.95	0.90	0.21
STORM A-NB	A-NB3	A-NB2	0	0	3,179.00	0.07	0.96	0.85	6	1.11	7.11	5.95	4.87	2.31	STORM A-NB	A-NB2	7.83	36.27	0.60	1.11
STORM A-NB	A-NB2	A-NB1	0	0	20,488.00	0.47	1.43	0.85	6	1.71	7.71	5.95	7.25	3.44	STORM A-NB	A-NB1	15.52	4.96	0.08	1.71
STORM A-NB	A-NB1	A-1	0	0	22,824.00	0.52	1.96	0.85	6	1.79	7.79	5.95	9.90	4.70	STORM A-NB	A-1	76.03	34.61	0.58	1.79
STORM A-5B		A-5B	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM A-5B	A-5B	7.19	6.65	0.11	0.00
STORM A-5B	A-5B	A-5A	0	0	15,955.00	0.37	0.37	0.85	6	0.11	6.11	5.95	1.85	0.88	STORM A-5B	A-5A	51.94	42.21	0.70	0.11
STORM B		B-6	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM B	B-6	2.98	42.71	0.71	0.00
STORM B	B-6	B-5	0	0	10,425.00	0.24	0.24	0.85	6	0.71	6.71	5.95	1.21	0.57	STORM B	B-5	2.96	17.42	0.29	0.71
STORM B	B-5	B-4	0	0	5,377.00	0.12	0.36	0.85	6	1.00	7.71	5.95	1.83	0.87	STORM B	B-4	2.75	48.95	0.82	1.00
STORM B	B-4	B-3	0	0	5,047.00	0.12	0.48	0.85	6	1.82	9.53	5.95	2.42	1.15	STORM B	B-3	5.86	46.09	0.77	1.82
STORM B	B-3	B-2	0	0	19,179.00	0.44	0.92	0.85	6	2.59	12.12	5.95	4.65	2.21	STORM B	B-2	16.76	1.84	0.03	2.59
STORM B	B-2	B-1	0	0	26,106.00	0.60	1.52	0.85	6	2.62	14.74	5.95	7.68	3.64	STORM B	B-1	17.70	7.76	0.13	2.62
STORM B	B-1	A-2	0	0	0.00	0.00	1.52	0.85	6	2.75	17.48	5.95	7.68	3.64	STORM B	A-2	88.34	66.20	1.10	2.75
STORM C		C-3	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM C	C-3	2.75	48.81	0.81	0.00
STORM C	C-3	C-2	0	0	13,938.00	0.32	0.32	0.85	6	0.81	6.81	5.95	1.62	0.77	STORM C	C-2	4.40	61.34	1.02	0.81
STORM C	C-2	C-1	0	0	18,433.00	0.42	0.74	0.85	6	1.84	8.65	5.95	3.76	1.78	STORM C	C-1	15.26	2.12	0.04	1.84
STORM B	C-1	B-2	0	0	25,886.00	0.59	1.34	0.85	6	1.87	10.52	5.95	6.76	3.21	STORM B	B-2	16.76	1.84	0.03	1.87
STORM D		D-5A	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM D	D-5A	4.41	3.28	0.05	0.00
STORM D	D-5A	D-5	0	0	13,404.00	0.31	0.31	0.85	6	0.05	6.05	5.95	1.56	0.74	STORM D	D-5	4.39	37.74	0.63	0.05
STORM D	D-5	D-4	0	0	14,136.00	0.32	0.63	0.85	6	0.68	6.74	5.95	3.20	1.52	STORM D	D-4	8.09	50.04	0.83	0.68

Storm Sewer Lines			New Pipe	First in Line	Area Values (sq ft)	Area Values (acres) (A)	Cum. Area (acres)	Runoff Coefficients (C)	Time in Area (min)	Cum. Time Pipe (min)	Time of Conc. (min)	Runoff val. (R) (in/hr)	Cum. Actual Storm Flow (cfs) (Based on Cum. Area)	Cum. Allowable Queens Storm Flow (Q = 0.5x4.8xA) (cfs)	Lines	Manhole	Cap Flow from Manhole (cfs)	Time from Manhole (s)	Time from Manhole (min)	Cum. Time from Manhole (min)
STORM D	D-4	D-3	0	0	8,141.00	0.19	1.00	0.85	6	1.52	8.26	5.95	5.05	2.40	STORM D	D-3	17.77	22.75	0.38	1.52
STORM D	D-3	D-2	0	0	26,283.00	0.60	2.19	0.85	6	1.90	10.15	5.95	11.10	5.27	STORM D	D-2	20.82	4.04	0.07	1.90
STORM D	D-2	D-1	0	0	16,215.00	0.37	2.57	0.85	6	1.96	12.12	5.95	12.98	6.16	STORM D	D-1	56.69	3.41	0.06	1.96
STORM D	D-1	A-3	0	0	0.00	0.00	2.94	0.85	6	2.02	14.14	5.95	14.87	7.06	STORM D	A-3	115.49	41.01	0.68	2.02
STORM D-A		D-4A	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM D	D-4A	3.80	4.10	0.07	0.00
STORM D-A	D-4A	D-4	0	0	7,814.00	0.18	0.18	0.85	6	0.07	6.07	5.95	0.91	0.43	STORM D	D-4	8.09	50.04	0.83	0.07
STORM D-A		D-3A	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM D	D-3A	3.62	4.74	0.08	0.00
STORM D-A	D-3A	D-3	0	0	25,790.00	0.59	0.59	0.85	6	0.08	6.08	5.95	2.99	1.42	STORM D	D-3	17.77	22.75	0.38	0.08
STORM E		E-1	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM E	E-1	5.59	3.86	0.06	0.00
STORM E	E-1	D-1	0	0	16,281.00	0.37	0.37	0.85	6	0.06	6.06	5.95	1.89	0.90	STORM E	D-1	56.69	3.41	0.06	0.06
STORM F		F-4A	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM F	F-4A	3.47	5.41	0.09	0.00
STORM F	F-4A	F-4	0	0	9,339.00	0.21	0.21	0.85	6	0.09	6.09	5.95	1.08	0.51	STORM F	F-4	2.83	34.65	0.58	0.09
STORM F	F-4	F-3	0	0	9,664.00	0.22	0.44	0.85	6	0.67	6.67	5.95	2.21	1.05	STORM F	F-3	5.18	54.27	0.90	0.67
STORM F	F-3	F-2	0	0	8,712.00	0.20	0.84	0.85	6	1.57	7.57	5.95	4.23	2.01	STORM F	F-2	9.83	4.65	0.08	1.57
STORM F	F-2	F-1	0	0	26,685.00	0.61	1.45	0.85	6	1.65	7.65	5.95	7.33	3.48	STORM F	F-1	22.93	5.95	0.10	1.65
STORM F	F-1	A-4	0	0	0.00	0.00	2.06	0.85	6	1.75	7.75	5.95	10.42	4.94	STORM F	A-4	108.88	43.50	0.73	1.75
STORM F-A		F-3A	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM D	D-3A	3.62	4.74	0.08	0.00
STORM F-A	F-3A	F-3	0	0	8,734.00	0.20	0.20	0.85	6	0.08	6.08	5.95	1.01	0.48	STORM D	D-3	17.77	22.75	0.38	0.08
STORM G		G-1	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM G	G-1	7.04	6.32	0.11	0.00
STORM G	G-1	F-1	0	0	26,593.00	0.61	0.61	0.85	6	0.11	6.11	4.98	2.59	1.47	STORM G	F-1	22.93	5.95	0.10	0.11
STORM H		H-4A	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM H	H-4A	3.21	6.84	0.11	0.00
STORM H	H-4A	H-4	0	0	12,285.00	0.28	0.28	0.85	6	0.11	6.11	5.95	1.43	0.68	STORM H	H-4	4.99	46.73	0.78	0.11
STORM H	H-4	H-3	0	0	12,368.00	0.28	0.57	0.85	6	0.89	7.01	5.95	2.86	1.36	STORM H	H-3	8.05	46.55	0.78	0.89
STORM H	H-3	H-2	0	0	13,491.00	0.31	1.18	0.85	6	1.67	8.68	5.95	5.98	2.84	STORM H	H-2	12.12	3.72	0.06	1.67
STORM H	H-2	H-1	0	0	25,253.00	0.58	1.76	0.85	6	1.73	10.41	5.95	8.92	4.23	STORM H	H-1	17.82	7.62	0.13	1.73
STORM H	H-1	A-5	0	0	0.00	0.00	4.74	0.85	6	1.86	12.26	5.95	23.97	11.38	STORM H	A-5	62.85	59.54	0.99	1.86
STORM H-A		H-3A	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM D	H-3A	3.35	6.01	0.10	0.00
STORM H-A	H-3A	H-3	0	0	13,397.00	0.31	0.31	0.85	6	0.10	6.10	5.95	1.56	0.74	STORM D	H-3	8.05	46.55	0.78	0.10
STORM I		I-1	0	y	0.00	0.00	2.45	0.85	6	0.00	6.00	5.95	12.41	5.89	STORM I	I-1	12.99	1.59	0.03	0.00
STORM I	I-1	H-1	0	0	22,780.00	0.52	2.98	0.85	6	0.03	6.03	5.95	15.06	7.15	STORM I	H-1	17.82	7.62	0.13	0.03
STORM J		J-7	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM J	J-7	2.73	19.28	0.32	0.00
STORM J	J-7	J-6	0	0	21,124.00	0.48	0.48	0.85	6	0.00	6.00	5.95	2.45	1.16	STORM J	J-6	5.64	4.84	0.08	0.00
STORM J	J-6	J-5	0	0	8,181.00	0.19	0.67	0.85	6	0.00	6.00	5.95	3.40	1.61	STORM J	J-5	8.42	44.33	0.74	0.00
STORM J	J-5	J-4	0	0	19,661.00	0.45	1.12	0.85	6	0.00	6.00	5.95	5.69	2.70	STORM J	J-4	8.32	15.33	0.26	0.00
STORM J	J-4	J-3	0	0	10,582.00	0.24	1.57	0.85	6	0.26	6.26	5.95	7.95	3.77	STORM J	J-3	14.91	38.51	0.64	0.26
STORM J	J-3	J-2	0	0	13,579.00	0.31	2.19	0.85	6	0.90	7.15	5.95	11.10	5.27	STORM J	J-2	27.24	4.64	0.08	0.90
STORM J	J-2	J-1	0	0	11,346.00	0.26	2.45	0.85	6	0.97	8.13	5.95	12.41	5.89	STORM J	J-1	24.92	12.13	0.20	0.97
STORM J	J-1	A-6	0	0	0.00	0.00	2.99	0.85	6	1.18	9.30	5.95	15.12	7.18	STORM J	A-6	62.55	36.24	0.60	1.18
STORM J-4A		J-4A	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM J-4A	J-4A	4.34	4.13	0.07	0.00
STORM J-4A	J-4A	J-4	0	0	8,883.00	0.20	0.20	0.85	6	0.07	6.00	5.95	1.03	0.49	STORM J-4A	J-4	8.32	15.33	0.26	0.07
STORM J-3A		J-3A	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM J-3A	J-3A	5.00	3.61	0.06	0.00
STORM J-3A	J-3A	J-3	0	0	13,551.00	0.31	0.31	0.85	6	0.06	6.00	5.95	1.57	0.75	STORM J-3A	J-3	14.91	38.51	0.64	0.06

Storm Sewer Lines			New Pipe	First in Line	Area Values (sq ft)	Area Values (acres) (A)	Cum. Area (acres)	Runoff Coefficients (C)	Time in Area (min)	Cum. Time Pipe (min)	Time of Conc. (min)	Runoff val. (R) (in/hr)	Cum. Actual Storm Flow (cfs) (Based on Cum. Area)	Cum. Allowable Queens Storm Flow (Q = 0.5x4.8xA) (cfs)	Lines	Manhole	Cap Flow from Manhole (cfs)	Time from Manhole (s)	Time from Manhole (min)	Cum. Time from Manhole (min)
TORM K		K-1	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM K	K-1	12.85	1.54	0.03	0.00
TORM K	K-1	J-1	0	0	9,393.00	0.22	0.22	0.85	6	0.03	6.00	5.95	1.09	0.52	STORM K	J-1	24.92	12.13	0.20	0.03
TORM L		L-1	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM L	L-1	3.37	8.80	0.15	0.00
TORM L	L-1	J-1	0	0	13,941.00	0.32	0.32	0.85	6	0.15	6.00	5.95	1.62	0.77	STORM L	J-1	24.92	12.13	0.20	0.15
TORM M		M-3	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM M	M-3	17.49	23.86	0.40	0.00
TORM M	M-3	M-2	0	0	0.00	0.00	1.93	0.85	6	0.40	6.00	5.95	9.77	4.64	STORM M	M-2	14.15	57.99	0.97	0.40
TORM M	M-2	M-1	0	0	0.00	0.00	1.93	0.85	6	1.36	6.40	5.95	9.77	4.64	STORM M	M-1	0	0	0.00	1.36
TORM M		M-1A	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM M-1A	M-1A	4.33	4.15	0.07	0.00
TORM M	M-1A	M-1	0	0	18,526.00	0.43	0.43	0.85	6	0.07	6.00	5.95	2.15	1.02	STORM M-1A	M-1	0	0	0.00	0.07
TORM M		M-3A2	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM M-3A	M-3A2	3.28	9.61	0.16	0.00
TORM M	M-3A2	M-3A1	0	0	4,577.00	0.11	0.11	0.85	6	0.16	6.00	5.95	0.53	0.25	STORM M-3A	M-3A1	3.20	51.38	0.86	0.16
TORM M	M-3A1	M-3A	0	0	5,867.00	0.13	0.24	0.85	6	1.02	6.16	5.95	1.21	0.58	STORM M-3A	M-3A	8.56	6.48	0.11	1.02
TORM M	M-3A	M-3	0	y	23,504.00	0.54	0.98	0.85	6	1.12	7.18	5.95	4.95	2.35	STORM M-3A	M-3	17.49	23.86	0.40	1.12
TORM M		M-3B	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM M-3B	M-3B	5.83	9.09	0.15	0.00
TORM M	M-3B	M-3	0	y	8,716.00	0.20	0.20	0.85	6	0.15	6.00	5.95	1.01	0.48	STORM M-3B	M-3	17.49	23.86	0.40	0.15
TORM N		N-1	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM N	N-1	6.10	5.46	0.09	0.00
TORM N	N-1	M-3	0	y	5,628.00	0.13	0.13	0.85	6	0.09	6.09	5.95	0.65	0.31	STORM N	M-3	17.49	23.86	0.40	0.09
TORM O		O-2	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM O	O-2	3.38	49.48	0.82	0.00
TORM O	O-2	O-1	0	0	25,143.00	0.58	0.58	0.85	6	0.82	6.82	5.95	2.92	1.39	STORM O	O-1	4.57	4.73	0.08	0.82
TORM O	O-1	M-3	0	y	10,740.00	0.25	0.82	0.85	6	0.90	6.90	5.95	4.17	1.98	STORM O	M-3	17.49	23.86	0.40	0.90
TORM P		P-7	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM P	P-7	6.13	28.71	0.48	0.00
TORM P	P-7	P-6	0	0	0.00	0.00	0.77	0.85	6	0.48	6.48	5.95	3.89	1.85	STORM P	P-6	5.29	29.85	0.50	0.48
TORM P	P-6	P-5	0	0	0.00	0.00	0.77	0.85	6	0.98	6.98	5.95	3.89	1.85	STORM P	P-5	16.88	18.97	0.32	0.98
TORM P	P-5	P-4	0	0	0.00	0.00	1.62	0.85	6	1.29	7.29	5.95	8.20	3.89	STORM P	P-4	18.29	17.91	0.30	1.29
TORM P	P-4	P-3	0	0	0.00	0.00	1.62	0.85	6	1.59	7.59	5.95	8.20	3.89	STORM P	P-3	17.57	23.55	0.39	1.59
TORM P	P-3	P-2	0	0	0.00	0.00	2.75	0.85	6	1.98	7.98	5.95	13.92	6.61	STORM P	P-2	22.71	18.70	0.31	1.98
TORM P	P-2	P-1	0	0	0.00	0.00	3.77	0.85	6	2.29	8.29	5.95	19.05	9.04	STORM P	P-1	19.75	21.32	0.36	2.29
TORM P	P-1	M-1	0	0	0.00	0.00	3.77	0.85	6	2.65	8.65	5.95	19.05	9.04	STORM P	M-1	0	0	0.00	2.65
ORM P-5A		P-5A	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM P-5A	P-5A	4.03	1.72	0.03	0.00
ORM P-5A	P-5A	P-5	0	0	24,965.00	0.57	0.57	0.85	6	0.03	6.03	5.95	2.90	1.38	STORM P-5A	P-5	16.88	18.97	0.32	0.03
ORM P-5B		P-5B	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM P-5B	P-5B	2.70	5.70	0.10	0.00
ORM P-5B	P-5B	P-5	0	0	12,114.00	0.28	0.28	0.85	6	0.10	6.10	5.95	1.41	0.67	STORM P-5B	P-5	16.88	18.97	0.32	0.10
ORM P-2A		P-2A	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM P-2A	P-2A	5.97	2.11	0.04	0.00
ORM P-2A	P-2A	P-2	0	0	33,321.00	0.76	0.76	0.85	6	0.04	6.04	5.95	3.87	1.84	STORM P-2A	P-2	22.71	18.70	0.31	0.04
ORM P-2B		P-2B	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM P-2B	P-2B	5.70	2.43	0.04	0.00
ORM P-2B	P-2B	P-2	0	0	10,889.00	0.25	0.25	0.85	6	0.04	6.04	5.95	1.26	0.60	STORM P-2B	P-2	22.71	18.70	0.31	0.04
TORM Q		Q-1	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM Q	Q-1	3.28	6.36	0.11	0.00
TORM Q	Q-1	P-7	0	y	9,886.00	0.23	0.23	0.85	6	0.11	6.11	5.95	1.15	0.54	STORM Q	P-7	6.13	28.71	0.48	0.11
TORM R		R-1	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM R	R-1	4.92	4.73	0.08	0.00
TORM R	R-1	P-7	0	y	23,651.00	0.54	0.54	0.85	6	0.08	6.08	5.95	2.75	1.30	STORM R	P-7	6.13	28.71	0.48	0.08

Storm Sewer Lines			New Pipe	First In Line	Area Values (sq ft)	Area Values (acres) (A)	Cum. Area (acres)	Runoff Coefficients (C)	Time In Area (min)	Cum. Time Pipe (min)	Time of Conc. (min)	Runoff val. (R) (In/hr)	Cum. Actual Storm Flow (cfs) (Based on Cum. Area)	Cum. Allowable Queens Storm Flow (Q = 0.5x4.8xA) (cfs)	Lines	Manhole	Cap Flow from Manhole (cfs)	Time from Manhole (s)	Time from Manhole (min)	Cum. Time from Manhole (min)
STORM S		S-2	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM S	S-2	2.46	9.89	0.16	0.00
STORM S	S-2	S-1	0	0	18,717.00	0.43	0.43	0.85	6	0.16	6.16	5.95	2.17	1.03	STORM S	S-1	4.36	6.82	0.11	0.16
STORM S	S-1	P-3	0	0	13,679.00	0.31	0.74	0.85	6	0.28	6.28	5.95	3.76	1.78	STORM S	P-3	17.57	23.55	0.39	0.28
STORM T		T-1	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM T	T-1	3.78	8.32	0.14	0.00
STORM T	T-1	P-3	0	0	16,878.00	0.39	0.39	0.85	6	0.14	6.14	5.95	1.96	0.93	STORM T	P-3	17.57	23.55	0.39	0.14
STORM U		M-1	0	0	0.00	0.00	0.00	0.85	6	6.83	12.83	5.95	0.00	0.00	STORM U	M-1	0	0	0.00	6.83
STORM U	M-1	U-12	0	0	0.00	0.00	6.12	0.85	6	7.03	13.03	5.95	30.98	14.70	STORM U	U-12	77.17	12.07	0.20	7.03
STORM U	U-12	U-11	0	0	0.00	0.00	7.19	0.85	6	7.23	13.23	5.95	36.38	17.27	STORM U	U-11	53.30	65.94	1.10	7.23
STORM U	U-11	U-10	0	0	0.00	0.00	7.55	0.85	6	8.33	14.33	5.95	38.20	18.13	STORM U	U-10	68.55	6.89	0.11	8.33
STORM U	U-10	U-9	0	0	0.00	0.00	9.01	0.85	6	8.45	14.45	5.95	45.57	21.63	STORM U	U-9	117.45	34.66	0.58	8.45
STORM U	U-9	U-8	0	0	0.00	0.00	17.23	0.85	6	9.03	15.03	5.95	87.12	41.34	STORM U	U-8	173.83	4.01	0.07	9.03
STORM U	U-8	U-7	0	0	0.00	0.00	19.99	0.85	6	9.09	15.09	5.95	101.08	47.97	STORM U	U-7	198.18	12.90	0.21	9.09
STORM U	U-7	U-6	0	0	0.00	0.00	24.22	0.85	6	9.09	15.09	5.95	122.51	58.14	STORM U	U-6	111.85	23.91	0.40	9.09
STORM U	U-6	U-5	0	0	0.00	0.00	24.22	0.85	6	9.09	15.09	5.95	122.51	58.14	STORM U	U-5	100.05	25.82	0.43	9.09
STORM U	U-5	U-4	0	0	0.00	0.00	24.64	0.85	6	9.31	15.31	5.95	124.64	59.15	STORM U	U-4	141.39	18.84	0.31	9.31
STORM U	U-4	U-3	0	0	0.00	0.00	24.64	0.85	6	9.31	15.31	5.95	124.64	59.15	STORM U	U-3	108.54	23.79	0.40	9.31
STORM U	U-3	U-2	0	0	0.00	0.00	27.16	0.85	6	9.49	15.49	5.95	137.37	65.19	STORM U	U-2	82.24	54.70	0.91	9.49
STORM U	U-2	U-1	0	0	0.00	0.00	27.16	0.85	6	9.52	15.52	5.95	137.37	65.19	STORM U	U-1	0	0	0.00	9.52
TORM U-12A		U-12A2	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-12A	U-12A2	3.15	46.75	0.78	0.00
TORM U-12A	U-12A2	U-12A1	0	0	7,286.00	0.17	0.17	0.85	6	0.00	6.00	5.95	0.85	0.40	STORM U-12A	U-12A1	3.83	20.04	0.33	0.00
TORM U-12A	U-12A1	U-12A	0	0	14,807.00	0.34	0.51	0.85	6	0.00	6.00	5.95	2.57	1.22	STORM U-12A	U-12A	8.29	2.96	0.05	0.00
TORM U-12A	U-12A	U-12	0	0	14,223.00	0.33	0.83	0.85	6	0.05	6.05	5.95	4.22	2.00	STORM U-12A	U-12	77.17	12.07	0.20	0.05
TORM U-12B		U-12B	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-12B	U-12B	4.56	5.93	0.10	0.00
TORM U-12B	U-12B	U-12	0	0	10,252.00	0.24	0.24	0.85	6	0.10	6.10	5.95	1.19	0.56	STORM U-12B	U-12	77.17	12.07	0.20	0.10
TORM U-11A		U-11A	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-11A	U-11A	6.79	3.59	0.06	0.00
TORM U-11A	U-11A	U-11	0	0	15,650.00	0.36	0.36	0.85	6	0.06	6.06	5.95	1.82	0.86	STORM U-11A	U-11	53.30	65.94	1.10	0.06
TORM U-10A		U-10A1	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-10A1	U-10A1	5.17	32.57	0.54	0.00
TORM U-10A	U-10A1	U-10A	0	0	15,102.00	0.35	0.35	0.85	6	0.54	6.54	5.95	1.75	0.83	STORM U-10A	U-10A	8.94	3.00	0.05	0.54
TORM U-10A	U-10A	U-10	0	0	24,144.00	0.55	0.90	0.85	6	0.59	7.14	5.95	4.56	2.16	STORM U-10	U-10	68.55	6.89	0.11	0.59
TORM U-10B		U-10B	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-10B	U-10B	8.30	2.95	0.05	0.00
TORM U-10B	U-10B	U-10	0	0	24,259.00	0.56	0.56	0.85	6	0.05	6.05	5.95	2.82	1.34	STORM U-10B	U-10	68.55	6.89	0.11	0.05
STORM U-9A		U-9A2	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-9A	U-9A2	2.90	4.60	0.08	0.00
STORM U-9A	U-9A2	U-9A1	0	0	6,505.00	0.15	0.15	0.85	6	0.08	6.08	5.95	0.76	0.36	STORM U-9A	U-9A1	4.62	22.84	0.38	0.08
STORM U-9A	U-9A1	U-9A	0	0	6,955.00	0.16	0.31	0.85	6	0.46	6.53	5.95	1.56	0.74	STORM U-9A	U-9A	9.33	4.30	0.07	0.46
STORM U-9A	U-9A	U-9	0	0	13,811.00	0.32	1.14	0.85	6	0.53	7.06	5.95	5.77	2.74	STORM U-9A	U-9	117.45	34.66	0.58	0.53
STORM U-9B		U-9B	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-9B	U-9B	3.77	10.51	0.18	0.00
STORM U-9B	U-9B	U-9A	0	0	11,600.00	0.27	0.27	0.85	6	0.18	6.18	5.95	1.35	0.64	STORM U-9B	U-9A	9.33	4.30	0.07	0.18
STORM U-9C		U-9C	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-9C	U-9C	5.98	2.63	0.04	0.00
STORM U-9C	U-9C	U-9A	0	0	10,851.00	0.25	0.25	0.85	6	0.04	6.04	5.95	1.26	0.60	STORM U-9C	U-9A	9.33	4.30	0.07	0.04
STORM U-9D		U-9D9	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-9D	U-9D9	5.35	3.68	0.06	0.00
STORM U-9D	U-9D9	U-9D8	0	0	12,606.00	0.29	0.29	0.85	6	0.06	6.06	5.95	1.46	0.69	STORM U-9D	U-9D8	9.84	16.24	0.27	0.06

Storm Sewer Lines			New Pipe	First in Line	Area Values (sq ft)	Area Values (acres) (A)	Cum. Area (acres)	Runoff Coefficients (C)	Time In Area (min)	Cum. Time Pipe (min)	Time of Conc. (min)	Runoff val. (R) (in/hr)	Cum. Actual Storm Flow (cfs) (Based on Cum. Area)	Cum. Allowable Queens Storm Flow (Q = 0.5x4.8xA) (cfs)	Lines	Manhole	Cap Flow from Manhole (cfs)	Time from Manhole (s)	Time from Manhole (min)	Cum. Time from Manhole (min)
TORM U-9D	U-9D8	U-9D7	0	0	12,186.00	0.28	0.57	0.85	6	0.33	6.39	5.95	2.88	1.37	STORM U-9D	U-9D7	16.70	43.11	0.72	0.33
TORM U-9D	U-9D7	U-9D6	0	0	29,438.00	0.68	1.64	0.85	6	1.05	7.44	5.95	8.29	3.93	STORM U-9D	U-9D6	10.98	13.80	0.23	1.05
TORM U-9D	U-9D6	U-9D5	0	0	14,931.00	0.34	1.98	0.85	6	0.00	6.00	5.95	10.02	4.75	STORM U-9D	U-9D5	12.21	15.03	0.25	0.00
TORM U-9D	U-9D5	U-9D4	0	0	11,424.00	0.26	2.24	0.85	6	0.25	6.25	5.95	11.35	5.38	STORM U-9D	U-9D4	17.92	17.43	0.29	0.25
TORM U-9D	U-9D4	U-9D3	0	0	0.00	0.00	3.36	0.85	6	0.54	6.79	5.95	16.97	8.05	STORM U-9D	U-9D3	24.13	33.41	0.56	0.54
TORM U-9D	U-9D3	U-9D2	0	0	19,598.00	0.45	4.29	0.85	6	1.10	7.89	5.95	21.72	10.31	STORM U-9D	U-9D2	44.60	4.23	0.07	1.10
TORM U-9D	U-9D2	U-9D1	0	0	18,418.00	0.42	4.72	0.85	6	1.17	9.06	5.95	23.86	11.32	STORM U-9D	U-9D1	43.30	37.48	0.62	1.17
TORM U-9D	U-9D1	U-9D	0	0	26,623.00	0.61	6.75	0.85	6	1.79	10.85	5.95	34.16	16.21	STORM U-9D	U-9D	45.60	9.44	0.16	1.79
TORM U-9D	U-9D	U-9	0	0	6,736.00	0.15	7.07	0.85	6	1.95	12.80	5.95	35.77	16.98	STORM U-9D	U-9	117.45	34.66	0.58	1.95
TORM U-9E		U-9E	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-9E	U-9E	7.11	2.82	0.05	0.00
TORM U-9E	U-9E	U-9D3	0	0	21,294.00	0.49	0.49	0.85	6	0.05	6.05	5.95	2.47	1.17	STORM U-9E	U-9D3	24.13	33.41	0.56	0.05
TORM U-9F		U-9F	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-9F	U-9F	5.20	4.40	0.07	0.00
TORM U-9F	U-9F	U-9D1	0	0	19,451.00	0.45	0.45	0.85	6	0.07	6.07	5.95	2.26	1.07	STORM U-9F	U-9D1	43.30	37.48	0.62	0.07
TORM U-9G		U-9G	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-9G	U-9G	7.57	2.60	0.04	0.00
TORM U-9G	U-9G	U-9D	0	0	7,152.00	0.16	0.16	0.85	6	0.04	6.04	5.95	0.83	0.39	STORM U-9G	U-9D	45.60	9.44	0.16	0.04
TORM U-9H		U-9H2	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-9H	U-9H2	3.04	6.00	0.10	0.00
TORM U-9H	U-9H2	U-9H1	0	0	9,511.00	0.22	0.22	0.85	6	0.10	6.10	5.95	1.10	0.52	STORM U-9H	U-9H1	3.57	33.54	0.56	0.10
TORM U-9H	U-9H1	U-9H	0	0	9,789.00	0.22	0.44	0.85	6	0.66	6.76	5.95	2.24	1.06	STORM U-9H	U-9H	11.97	32.88	0.55	0.66
TORM U-9H	U-9H	U-9D1	0	0	11,986.00	0.28	0.98	0.85	6	1.21	7.97	5.95	4.95	2.35	STORM U-9H	U-9D1	43.30	37.48	0.62	1.21
TORM U-9I		U-9I	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-9I	U-9I	5.67	3.09	0.05	0.00
TORM U-9I	U-9I	U-9H	0	0	11,366.00	0.26	0.26	0.85	6	0.05	6.05	5.95	1.32	0.63	STORM U-9I	U-9H	11.97	32.88	0.55	0.05
TORM U-9J		U-9J2	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-9J	U-9J2	3.67	5.69	0.09	0.00
TORM U-9J	U-9J2	U-9J1	0	0	8,281.00	0.19	0.19	0.85	6	0.09	6.09	5.95	0.96	0.46	STORM U-9J	U-9J1	3.94	36.82	0.61	0.09
TORM U-9J	U-9J1	U-9J	0	0	8,304.00	0.19	0.38	0.85	6	0.71	6.80	5.95	1.93	0.91	STORM U-9J	U-9J	7.73	26.30	0.44	0.71
TORM U-9J	U-9J	U-9D4	0	0	17,629.00	0.40	1.11	0.85	6	1.15	7.95	5.95	5.63	2.67	STORM U-9J	U-9D4	17.92	17.43	0.29	1.15
TORM U-9K		U-9K	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-9K	U-9K	2.53	6.96	0.12	0.00
TORM U-9K	U-9K	U-9J	0	0	14,249.00	0.33	0.33	0.85	6	0.12	6.12	5.95	1.65	0.79	STORM U-9K	U-9J	7.73	26.30	0.44	0.12
TORM U-9L		U-9L	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-9L	U-9L	5.05	4.37	0.07	0.00
TORM U-9L	U-9L	U-9D7	0	0	17,141.00	0.39	0.39	0.85	6	0.07	6.07	5.95	1.99	0.94	STORM U-9L	U-9D7	16.70	43.11	0.72	0.07
TORM U-8A		U-8A5	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-8A	U-8A5	2.96	39.05	0.65	0.00
TORM U-8A	U-8A5	U-8A4	0	0	10,169.00	0.23	0.23	0.85	6	0.65	6.65	5.95	1.18	0.56	STORM U-8A	U-8A4	2.98	8.51	0.14	0.65
TORM U-8A	U-8A4	U-8A3	0	0	6,829.00	0.16	0.39	0.85	6	0.79	7.44	5.95	1.97	0.94	STORM U-8A	U-8A3	3.26	55.09	0.92	0.79
TORM U-8A	U-8A3	U-8A2	0	0	2,782.00	0.06	0.59	0.85	6	1.71	9.15	5.95	2.96	1.40	STORM U-8A	U-8A2	17.83	3.90	0.06	1.71
TORM U-8A	U-8A2	U-8A1	0	0	15,474.00	0.36	1.42	0.85	6	1.78	10.93	5.95	7.18	3.41	STORM U-8A	U-8A1	19.13	3.16	0.05	1.78
TORM U-8A	U-8A1	U-8A	0	0	16,880.00	0.39	1.81	0.85	6	1.83	12.76	5.95	9.14	4.34	STORM U-8A	U-8A	21.55	2.21	0.04	1.83
TORM U-8A	U-8A	U-8	0	0	3,268.00	0.08	1.88	0.85	6	1.87	14.62	5.95	9.52	4.52	STORM U-8A	U-8	173.83	4.01	0.07	1.87
TORM U-8B		U-8B	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-8B	U-8B	4.53	6.06	0.10	0.00
TORM U-8B	U-8B	U-8A2	0	0	20,859.00	0.48	0.48	0.85	6	0.10	6.10	5.95	2.42	1.15	STORM U-8B	U-8A2	17.83	3.90	0.06	0.10
TORM U-8C		U-8C	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-8C	U-8C	2.93	8.98	0.15	0.00
TORM U-8C	U-8C	U-8A3	0	0	5,712.00	0.13	0.13	0.85	6	0.15	6.15	5.95	0.66	0.31	STORM U-8C	U-8A3	3.26	55.09	0.92	0.15
TORM U-8D		U-8D1	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-8D	U-8D1	3.64	46.63	0.78	0.00
TORM U-8D	U-8D1	U-8D	0	0	16,401.00	0.38	0.38	0.85	6	0.78	6.78	5.95	1.90	0.90	STORM U-8D	U-8D	7.74	2.43	0.04	0.78

Storm Sewer Lines			New Pipe	First In Line	Area Values (sq ft)	Area Values (acres) (A)	Cum. Area (acres)	Runoff Coefficients (C)	Time in Area (min)	Cum. Time Pipe (min)	Time of Conc. (min)	Runoff val. (R) (in/hr)	Cum. Actual Storm Flow (cfs) (Based on Cum. Area)	Cum. Allowable Queens Storm Flow (Q = 0.5x4.8xA) (cfs)	Lines	Manhole	Cap Flow from Manhole (cfs)	Time from Manhole (s)	Time from Manhole (min)	Cum. Time from Manhole (min)
STORM U-8D	U-8D	U-8	0	0	2,970.00	0.07	0.88	0.85	6	0.82	7.59	5.95	4.44	2.11	STORM U-8D	U-8	173.83	4.01	0.07	0.82
STORM U-8B		U-8E	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-8B	U-8B	4.53	6.06	0.10	0.00
STORM U-8B	U-8E	U-8D	0	0	18,873.00	0.43	0.43	0.85	6	0.10	6.10	5.95	2.19	1.04	STORM U-8B	U-8A2	17.83	3.90	0.06	0.10
STORM U-5A		U-5A	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-5A	U-5A	9.98	1.13	0.02	0.00
STORM U-5A	U-5A	U-5	0	0	10,131.00	0.23	0.23	0.85	6	0.02	6.02	5.95	1.18	0.56	STORM U-5A	U-5	100.05	25.82	0.43	0.02
STORM U-5B		U-5B	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-5B	U-5B	7.58	2.59	0.04	0.00
STORM U-5B	U-5B	U-5	0	0	8,154.00	0.19	0.19	0.85	6	0.04	6.04	5.95	0.95	0.45	STORM U-5B	U-5	100.05	25.82	0.43	0.04
STORM U-3A		U-3A	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-3A	U-3A	6.23	2.33	0.04	0.00
STORM U-3A	U-3A	U-3	0	0	25,822.00	0.59	0.59	0.85	6	0.04	6.04	5.95	3.00	1.42	STORM U-3A	U-3	108.54	23.79	0.40	0.04
STORM U-3B		U-3B5	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM U-3B	U-3B5	2.77	52.91	0.88	0.00
STORM U-3B	U-3B5	U-3B4	0	0	13,667.00	0.31	0.31	0.85	6	0.88	6.00	5.95	1.59	0.75	STORM U-3B	U-3B4	5.12	43.16	0.72	0.88
STORM U-3B	U-3B4	U-3B3	0	0	14,094.00	0.32	0.64	0.85	6	1.60	6.88	5.95	3.22	1.53	STORM U-3B	U-3B3	5.58	6.67	0.11	1.60
STORM U-3B	U-3B3	U-3B2	0	0	12,868.00	0.30	0.93	0.85	6	1.71	8.48	5.95	4.72	2.24	STORM U-3B	U-3B2	8.14	24.58	0.41	1.71
STORM U-3B	U-3B2	U-3B1	0	0	7,691.00	0.18	1.11	0.85	6	2.12	10.20	5.95	5.61	2.66	STORM U-3B	U-3B1	9.52	30.69	0.51	2.12
STORM U-3B	U-3B1	U-3B	0	0	8,437.00	0.19	1.30	0.85	6	2.63	12.32	5.95	6.59	3.13	STORM U-3B	U-3B	22.05	2.06	0.03	2.63
STORM U-3B	U-3B	U-3	0	0	27,049.00	0.62	1.92	0.85	6	2.67	14.99	5.95	9.73	4.62	STORM U-3B	U-3	108.54	23.79	0.40	2.67
STORM V		V-6	0	y	0.00	0.00	0.00	0.85	6	0.21	6.00	5.95	0.00	0.00	STORM V	V-6	3.00	10.46	0.17	0.21
STORM V	V-6	V-5	0	0	17,750.00	0.41	0.41	0.85	6	0.26	6.21	5.95	2.06	0.98	STORM V	V-5	8.03	49.13	0.82	0.26
STORM V	V-5	V-4	0	0	19,500.00	0.45	0.86	0.85	6	0.00	6.47	5.95	4.32	2.05	STORM V	V-4	8.67	3.39	0.06	0.00
STORM V	V-4	V-3	0	0	20,074.00	0.46	1.32	0.85	6	0.06	6.47	5.95	6.66	3.16	STORM V	V-3	13.52	5.37	0.09	0.06
STORM V	V-3	V-2	0	0	0.00	0.00	1.65	0.85	6	0.15	6.53	5.95	8.32	3.95	STORM V	V-2	39.76	3.77	0.06	0.15
STORM V	V-2	V-1	0	0	0.00	0.00	3.22	0.85	6	0.21	6.68	5.95	16.31	7.74	STORM V	V-1	34.02	24.09	0.40	0.21
STORM V	V-1	U-7	0	0	0.00	0.00	3.39	0.85	6	0.26	6.90	5.95	17.16	8.14	STORM V	U-7	198.18	12.90	0.21	0.26
STORM V		V-1A	0	y	0.00	0.00	0.00	0.85	6	0.00	0.00	5.95	0.00	0.00	STORM V-1A	V-1A	8.03	2.18	0.04	0.00
STORM V	V-1A	V-1	0	0	5,581.00	0.13	0.13	0.85	6	0.08	0.00	5.95	0.65	0.31	STORM V-1A	V-1	34.02	24.09	0.40	0.08
STORM W		W-1	0	y	0.00	0.00	0.00	0.85	6	0.06	6.00	5.95	0.00	0.00	STORM W	W-1	5.69	3.67	0.06	0.06
STORM W	W-1	V-3	0	0	14,334.00	0.33	0.33	0.85	6	0.06	6.06	5.95	1.66	0.79	STORM W	W-1	5.69	3.67	0.06	0.06
STORM X		X-5	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM X	X-5	3.05	7.97	0.13	0.00
STORM X	X-5	X-4	0	0	10,224.00	0.23	0.23	0.85	6	0.13	6.13	5.95	1.19	0.56	STORM X	X-4	2.69	46.11	0.77	0.13
STORM X	X-4	X-3	0	0	11,489.00	0.26	0.50	0.85	6	0.90	7.03	5.95	2.52	1.20	STORM X	X-3	8.21	47.89	0.80	0.90
STORM X	X-3	X-2	0	0	17,144.00	0.39	1.26	0.85	6	1.70	8.73	5.95	6.35	3.01	STORM X	X-2	9.92	3.39	0.06	1.70
STORM X	X-2	X-1	0	0	14,101.00	0.32	1.58	0.85	6	1.76	10.49	5.95	7.99	3.79	STORM X	X-1	10.11	7.48	0.12	1.76
STORM X	X-1	V-2	0	0	0.00	0.00	1.58	0.85	6	1.88	12.37	5.95	7.99	3.79	STORM X	V-2	39.76	3.77	0.06	1.88
STORM X-3A		X-3A	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM X-3A	X-3A	6.07	4.02	0.07	0.00
STORM X-3A	X-3A	X-3	0	0	15,859.00	0.36	0.36	0.85	6	0.07	6.07	5.95	1.84	0.87	STORM X-3A	X-3	8.21	47.89	0.80	0.07
STORM Y		Y-1	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM Y	Y-1	7.55	2.61	0.04	0.00
STORM Y	Y-1	V-1	0	0	1,723.00	0.04	0.04	0.85	6	0.04	6.04	5.95	0.20	0.09	STORM Y	V-1	34.02	24.09	0.40	0.04
STORM Z		Z-2	0	y	0.00	0.00	0.00	0.85	6	0.00	6.00	5.95	0.00	0.00	STORM Z	Z-2	3.14	4.78	0.08	0.00
STORM Z	Z-2	Z-1	0	0	17,515.00	0.40	0.40	0.85	6	0.08	6.08	5.95	2.03	0.97	STORM Z	Z-1	5.82	5.72	0.10	0.08
STORM Z	Z-1	U-7	0	0	19,344.00	0.44	0.85	0.85	6	0.17	6.25	5.95	4.28	2.03	STORM Z	U-7	198.18	12.90	0.21	0.17

MSA Appendix B

12th AND 127th STREET OUTFALLS TAILWATER ANALYSIS

Hydraulic Grade Line Computations

Line	Size	Q	Downstream								Len	Upstream								Check		JL coeff	Minor loss
			Invert elev	HGL elev	Depth	Area	Vel	Vel head	EGL elev	Sf		Invert elev	HGL elev	Depth	Area	Vel	Vel head	EGL elev	Sf	Ave Sf	Enrgy loss		
	(in)	(cfs)	(ft)	(ft)	(ft)	(sqft)	(ft/s)	(ft)	(ft)	(%)	(ft)	(ft)	(ft)	(ft)	(sqft)	(ft/s)	(ft)	(ft)	(%)	(%)	(ft)	(K)	(ft)
1	60	126.2	-0.50	4.50	5.00	19.63	6.43	0.64	5.14	0.235	117.99	-0.30	4.78	5.00	19.63	6.43	0.64	5.42	0.235	0.235	0.277	0.15	0.10
2	60	126.2	-0.30	4.87	5.00	19.63	6.43	0.64	5.52	0.235	117.00	-0.20	5.15	5.00	19.63	6.43	0.64	5.79	0.235	0.235	0.275	0.15	0.10
3	60	116.3	-0.20	5.24	5.00	19.63	5.92	0.55	5.79	0.199	258.39	0.10	5.76	5.00	19.63	5.92	0.55	6.30	0.199	0.199	0.515	0.15	0.08
4	54	103.9	0.10	5.84	4.50	15.90	6.53	0.66	6.51	0.279	259.79	1.00	6.57	4.50	15.90	6.53	0.66	7.23	0.279	0.279	0.725	0.15	0.10
5	54	83.99	1.00	6.67	4.50	15.90	5.28	0.43	7.10	0.182	260.12	1.80	7.14	4.50	15.90	5.28	0.43	7.57	0.182	0.182	0.475	0.15	0.07
6	48	71.61	1.80	7.21	4.00	12.56	5.70	0.51	7.71	0.249	259.73	2.30	7.85	4.00	12.57	5.70	0.50	8.36	0.249	0.249	0.646	0.15	0.08
7	48	39.73	2.30	7.93	4.00	12.56	3.16	0.16	8.08	0.077	152.30	2.50	8.04	4.00	12.57	3.16	0.16	8.20	0.077	0.077	0.117	0.15	0.02
8	48	37.25	2.50	8.07	4.00	12.56	2.96	0.14	8.20	0.067	157.50	2.80	8.17	4.00	12.57	2.96	0.14	8.31	0.067	0.067	0.106	0.15	0.02
9	48	21.47	2.80	8.19	4.00	12.56	1.71	0.05	8.24	0.022	309.50	3.20	8.26	4.00	12.57	1.71	0.05	8.31	0.022	0.022	0.069	0.15	0.01
10	42	2.29	3.20	8.27	3.50	9.62	0.24	0.00	8.27	0.001	111.67	3.30	8.27	3.50	9.62	0.24	0.00	8.27	0.001	0.001	0.001	1.00	0.00
11	15	1.78	3.30	8.27	1.25	1.23	1.45	0.03	8.30	0.076	50.06	3.40	8.31	1.25	1.23	1.45	0.03	8.34	0.076	0.076	0.038	1.00	0.03

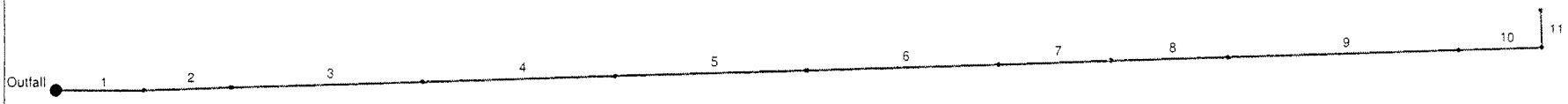
Project File: Willets Point 126th Outfall.stm | Number of lines: 11 | Run Date: 08-06-2008

; c = cir e = ellip b = box

Storm Sewer Inventory Report

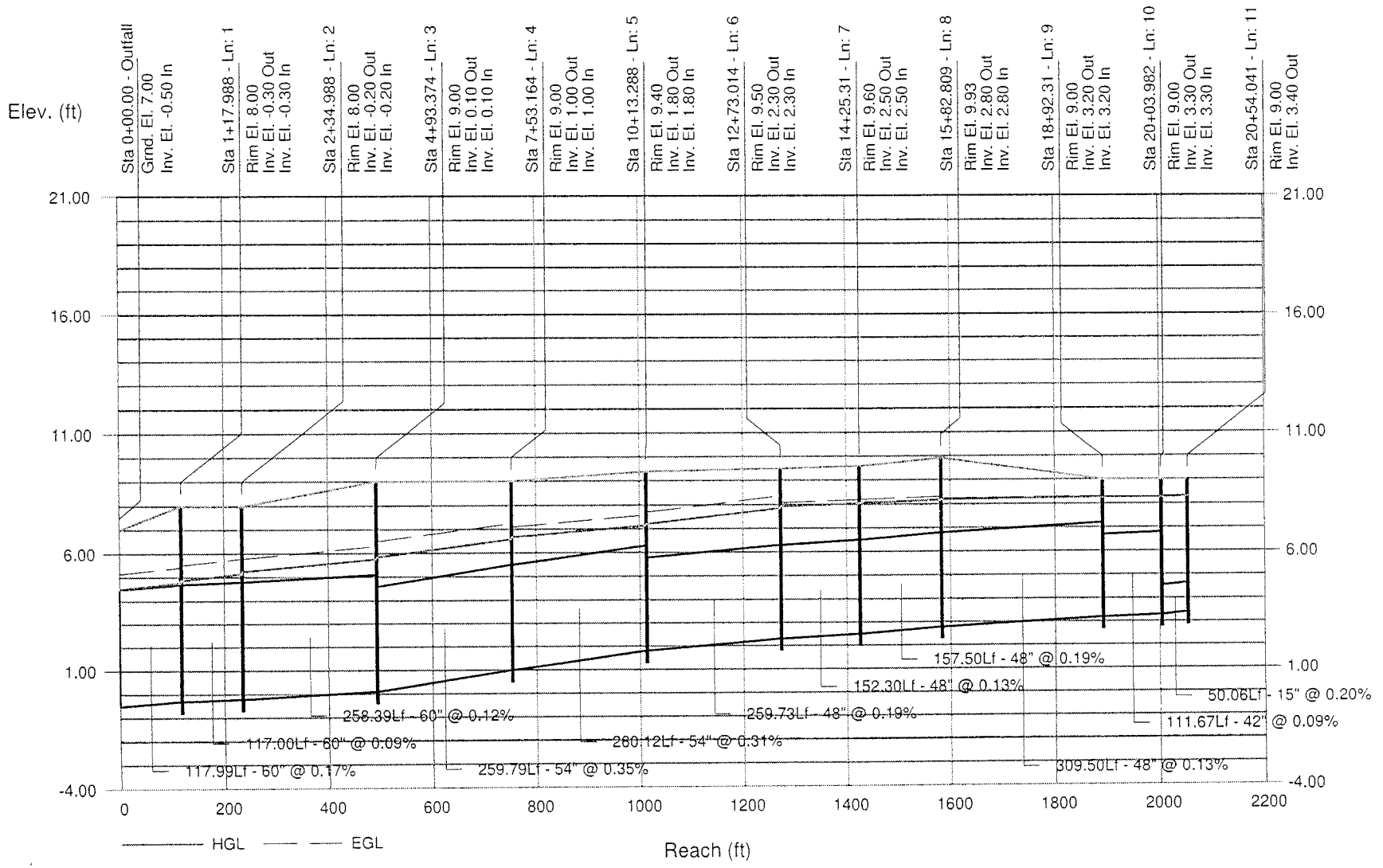
Line No.	Alignment				Flow Data				Physical Data								Line ID
	Dnstr line No.	Line length (ft)	Defl angle (deg)	Junc type	Known Q (cfs)	Drng area (ac)	Runoff coeff (C)	Inlet time (min)	Invert El Dn (ft)	Line slope (%)	Invert El Up (ft)	Line size (in)	Line shape	N value (n)	J-loss coeff (K)	Inlet/ Rim El (ft)	
1	End	117.99	0.00	MH	0.00	0.00	0.00	0.0	-0.50	0.17	-0.30	60	Cir	0.013	0.15	8.00	
2	1	117.00	-1.91	MH	9.90	0.00	0.00	0.0	-0.30	0.09	-0.20	60	Cir	0.013	0.15	8.00	
3	2	258.39	0.00	MH	12.39	0.00	0.00	0.0	-0.20	0.12	0.10	60	Cir	0.013	0.15	9.00	
4	3	259.79	0.00	MH	19.89	0.00	0.00	0.0	0.10	0.35	1.00	54	Cir	0.013	0.15	9.00	
5	4	260.12	0.00	MH	12.38	0.00	0.00	0.0	1.00	0.31	1.80	54	Cir	0.013	0.15	9.40	
6	5	259.73	0.00	MH	31.88	0.00	0.00	0.0	1.80	0.19	2.30	48	Cir	0.013	0.15	9.50	
7	6	152.30	-0.18	MH	2.48	0.00	0.00	0.0	2.30	0.13	2.50	48	Cir	0.013	0.15	9.60	
8	7	157.50	0.36	MH	15.78	0.00	0.00	0.0	2.50	0.19	2.80	48	Cir	0.013	0.15	9.93	
9	8	309.50	-0.18	MH	19.18	0.00	0.00	0.0	2.80	0.13	3.20	48	Cir	0.013	0.15	9.00	
10	9	111.67	0.00	MH	0.51	0.00	0.00	0.0	3.20	0.09	3.30	42	Cir	0.013	1.00	9.00	
11	10	50.06	-90.00	MH	1.78	0.00	0.00	0.0	3.30	0.20	3.40	15	Cir	0.013	1.00	9.00	

Project File: Willets Point 126th Outfall.stm | Number of lines: 11 | Date: 08-06-2008



Project File: Willets Point 126th Outfall.stm	Number of lines: 11	Date: 08-06-2008

Storm Sewer Profile



Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line slope (%)	HGL down (ft)	HGL up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns line No.	Junction Type
1		126.2	60	Cir	117.99	-0.50	-0.30	0.170	4.50*	4.78*	0.10	4.87	End	Manhole
2		126.2	60	Cir	117.00	-0.30	-0.20	0.085	4.87*	5.15*	0.10	5.24	1	Manhole
3		116.3	60	Cir	258.39	-0.20	0.10	0.116	5.24*	5.76*	0.08	5.84	2	Manhole
4		103.9	54	Cir	259.79	0.10	1.00	0.346	5.84*	6.57*	0.10	6.67	3	Manhole
5		83.99	54	Cir	260.12	1.00	1.80	0.308	6.67*	7.14*	0.07	7.21	4	Manhole
6		71.61	48	Cir	259.73	1.80	2.30	0.193	7.21*	7.85*	0.08	7.93	5	Manhole
7		39.73	48	Cir	152.30	2.30	2.50	0.131	7.93*	8.04*	0.02	8.07	6	Manhole
8		37.25	48	Cir	157.50	2.50	2.80	0.190	8.07*	8.17*	0.02	8.19	7	Manhole
9		21.47	48	Cir	309.50	2.80	3.20	0.129	8.19*	8.26*	0.01	8.27	8	Manhole
10		2.29	42	Cir	111.67	3.20	3.30	0.090	8.27*	8.27*	0.00	8.27	9	Manhole
11		1.78	15	Cir	50.06	3.30	3.40	0.200	8.27*	8.31*	0.03	8.34	10	Manhole

Project File: Willets Point 126th Outfall.stm | Number of lines: 11 | Run Date: 08-06-2008

NOTES: Return period = 5 Yrs. ; *Surcharged (HGL above crown).

Storm Sewer Inventory Report

Line No.	Alignment				Flow Data				Physical Data								Line ID
	Dnstr line No.	Line length (ft)	Defl angle (deg)	Junc type	Known Q (cfs)	Drng area (ac)	Runoff coeff (C)	Inlet time (min)	Invert El Dn (ft)	Line slope (%)	Invert El Up (ft)	Line size (in)	Line shape	N value (n)	J-loss coeff (K)	Inlet/ Rim El (ft)	
1	End	61.50	-11.08	MH	0.00	0.00	0.00	0.0	-2.00	0.33	-1.80	60	Cir	0.013	0.15	11.58	
2	1	114.82	0.00	MH	12.73	0.00	0.00	0.0	-1.80	0.17	-1.60	60	Cir	0.013	0.23	11.69	
3	2	118.41	10.98	MH	0.00	0.00	0.00	0.0	-1.60	0.30	-1.25	60	Cir	0.013	0.15	13.34	
4	3	114.87	0.00	MH	2.13	0.00	0.00	0.0	-1.25	0.15	-1.08	60	Cir	0.013	0.15	14.00	
5	4	118.92	0.00	MH	0.00	0.00	0.00	0.0	-1.08	0.18	-0.86	60	Cir	0.013	0.16	13.78	
6	5	113.64	-7.45	MH	13.44	0.00	0.00	0.0	-0.86	0.58	-0.20	60	Cir	0.013	0.15	13.23	
7	6	37.96	0.85	MH	13.96	0.00	0.00	0.0	-0.20	0.79	0.10	54	Cir	0.013	0.15	12.30	
8	7	223.46	-0.69	MH	41.55	0.00	0.00	0.0	0.10	0.36	0.90	54	Cir	0.013	1.00	11.00	
9	8	42.85	-89.88	MH	7.37	0.00	0.00	0.0	0.90	0.47	1.10	42	Cir	0.013	0.15	11.50	
10	9	318.94	0.00	MH	1.82	0.00	0.00	0.0	1.10	0.28	2.00	42	Cir	0.013	0.15	12.50	
11	10	84.54	0.00	MH	5.40	0.00	0.00	0.0	2.00	0.59	2.50	42	Cir	0.013	0.15	11.90	
12	11	92.99	0.00	MH	30.98	0.00	0.00	0.0	2.50	0.54	3.00	42	Cir	0.013	1.00	10.76	

Hydraulic Grade Line Computations

Line	Size	Q	Downstream								Len	Upstream								Check		JL coeff	Minor loss
			Invert elev	HGL elev	Depth	Area	Vel	Vel head	EGL elev	Sf		Invert elev	HGL elev	Depth	Area	Vel	Vel head	EGL elev	Sf	Ave Sf	Enrgy loss		
	(in)	(cfs)	(ft)	(ft)	(ft)	(sqft)	(ft/s)	(ft)	(ft)	(%)	(ft)	(ft)	(ft)	(ft)	(sqft)	(ft/s)	(ft)	(ft)	(%)	(%)	(ft)	(K)	(ft)
1	60	129.4	-2.00	3.00	5.00	19.63	6.59	0.68	3.68	0.247	61.50	-1.80	3.14	4.94	19.60	6.60	0.68	3.82	0.226	0.237	0.145	0.15	0.10
2	60	129.4	-1.80	3.25	5.00	19.63	6.59	0.68	3.92	0.247	114.82	-1.60	3.53	5.00	19.63	6.59	0.68	4.20	0.247	0.247	0.283	0.23	0.16
3	60	116.7	-1.60	3.68	5.00	19.63	5.94	0.55	4.23	0.201	118.41	-1.25	3.92	5.00	19.63	5.94	0.55	4.47	0.201	0.201	0.238	0.15	0.08
4	60	116.7	-1.25	4.00	5.00	19.63	5.94	0.55	4.55	0.201	114.87	-1.08	4.23	5.00	19.63	5.94	0.55	4.78	0.201	0.201	0.230	0.15	0.08
5	60	114.5	-1.08	4.32	5.00	19.63	5.83	0.53	4.85	0.193	118.92	-0.86	4.55	5.00	19.63	5.83	0.53	5.08	0.193	0.193	0.230	0.16	0.08
6	60	114.5	-0.86	4.63	5.00	19.63	5.83	0.53	5.16	0.193	113.64	-0.20	4.85	5.00	19.63	5.83	0.53	5.38	0.193	0.193	0.220	0.15	0.08
7	54	101.1	-0.20	4.93	4.50	15.90	6.36	0.63	5.56	0.264	37.96	0.10	5.03	4.50	15.90	6.36	0.63	5.66	0.264	0.264	0.100	0.15	0.09
8	54	87.12	0.10	5.13	4.50	15.90	5.48	0.47	5.59	0.196	223.46	0.90	5.56	4.50	15.90	5.48	0.47	6.03	0.196	0.196	0.439	1.00	0.47
9	42	45.57	0.90	6.03	3.50	9.62	4.74	0.35	6.38	0.205	42.85	1.10	6.12	3.50	9.62	4.74	0.35	6.47	0.205	0.205	0.088	0.15	0.05
10	42	38.20	1.10	6.17	3.50	9.62	3.97	0.25	6.42	0.144	318.94	2.00	6.63	3.50	9.62	3.97	0.25	6.88	0.144	0.144	0.460	0.15	0.04
11	42	36.38	2.00	6.67	3.50	9.62	3.78	0.22	6.89	0.131	84.54	2.50	6.78	3.50	9.62	3.78	0.22	7.00	0.131	0.131	0.111	0.15	0.03
12	42	30.98	2.50	6.81	3.50	9.62	3.22	0.16	6.97	0.095	92.99	3.00	6.90	3.50	9.62	3.22	0.16	7.06	0.095	0.095	0.088	1.00	0.16

Project File: Willets Point 127th Outfall.stm | Number of lines: 12 | Run Date: 08-06-2008

; c = cir e = ellip b = box

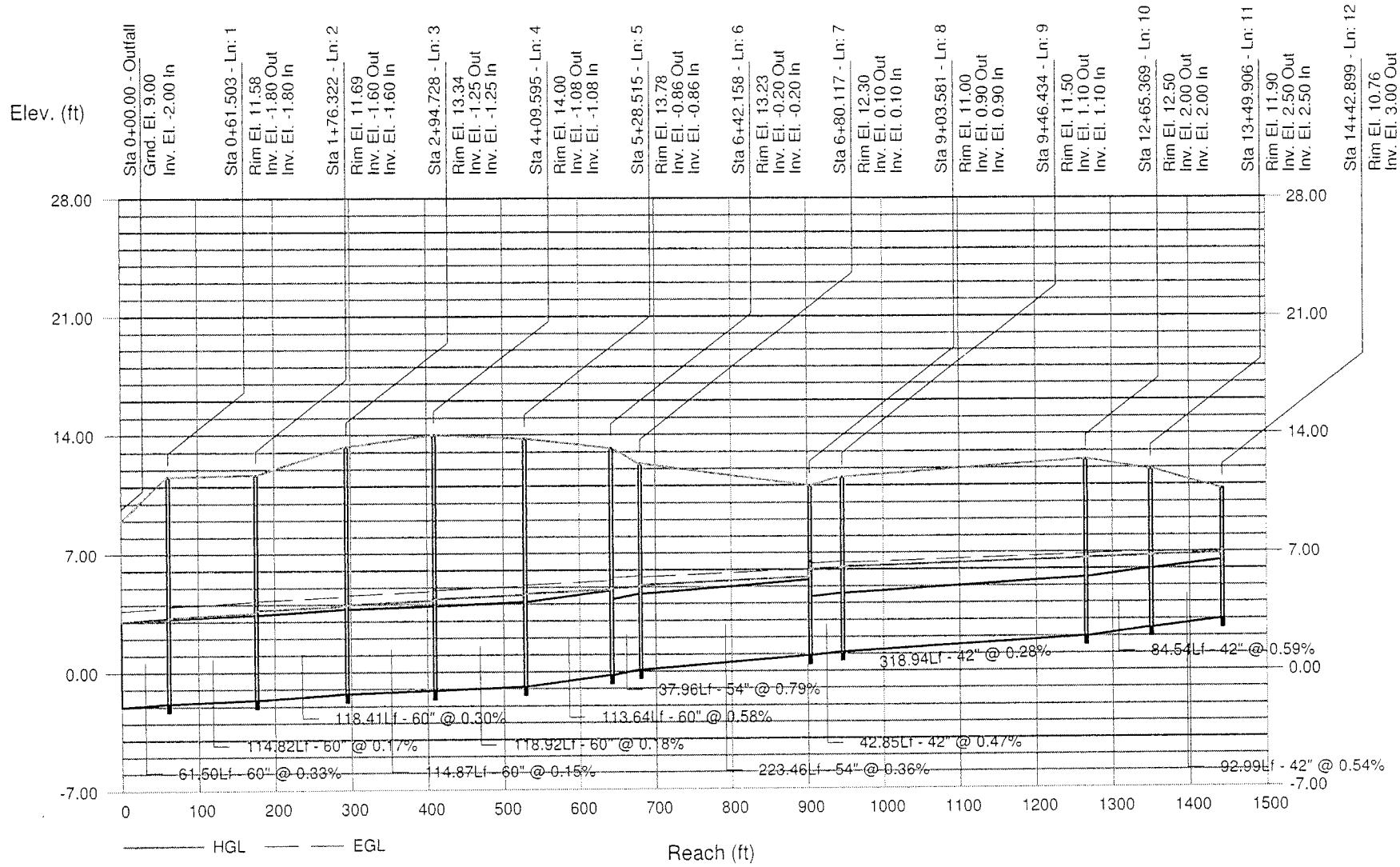
Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line slope (%)	HGL down (ft)	HGL up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns line No.	Junction Type
1		129.4	60	Cir	61.50	-2.00	-1.80	0.325	3.00	3.14	0.10	3.25	End	Manhole
2		129.4	60	Cir	114.82	-1.80	-1.60	0.174	3.25*	3.53*	0.16	3.68	1	Manhole
3		116.7	60	Cir	118.41	-1.60	-1.25	0.296	3.68*	3.92*	0.08	4.00	2	Manhole
4		116.7	60	Cir	114.87	-1.25	-1.08	0.148	4.00*	4.23*	0.08	4.32	3	Manhole
5		114.5	60	Cir	118.92	-1.08	-0.86	0.185	4.32*	4.55*	0.08	4.63	4	Manhole
6		114.5	60	Cir	113.64	-0.86	-0.20	0.581	4.63*	4.85*	0.08	4.93	5	Manhole
7		101.1	54	Cir	37.96	-0.20	0.10	0.790	4.93*	5.03*	0.09	5.13	6	Manhole
8		87.12	54	Cir	223.46	0.10	0.90	0.358	5.13*	5.56*	0.47	6.03	7	Manhole
9		45.57	42	Cir	42.85	0.90	1.10	0.467	6.03*	6.12*	0.05	6.17	8	Manhole
10		38.20	42	Cir	318.94	1.10	2.00	0.282	6.17*	6.63*	0.04	6.67	9	Manhole
11		36.38	42	Cir	84.54	2.00	2.50	0.591	6.67*	6.78*	0.03	6.81	10	Manhole
12		30.98	42	Cir	92.99	2.50	3.00	0.538	6.81*	6.90*	0.16	7.06	11	Manhole

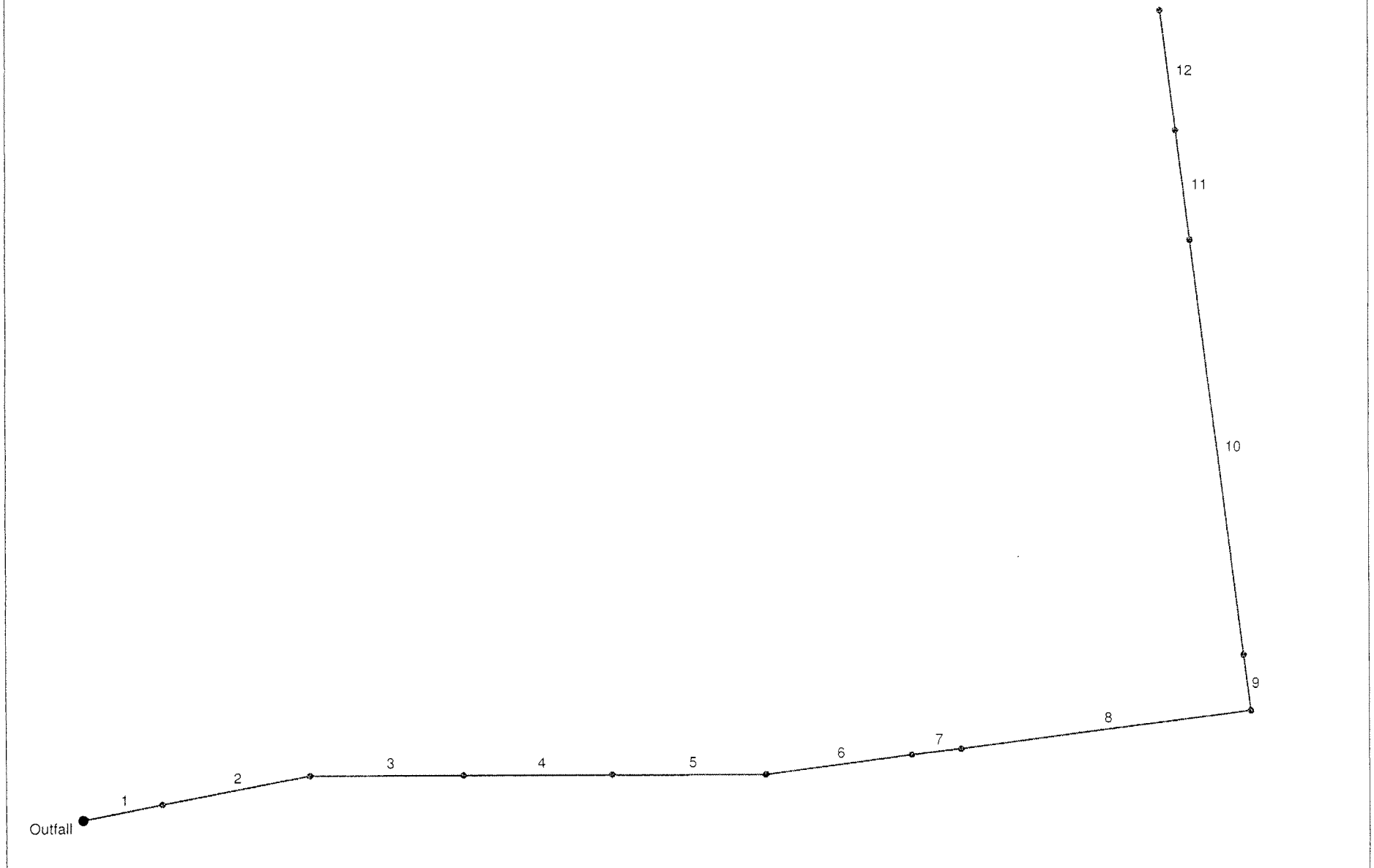
Project File: Willets Point 127th Outfall.stm | Number of lines: 12 | Run Date: 08-06-2008

NOTES: Return period = 5 Yrs. ; *Surcharged (HGL above crown).

Storm Sewer Profile



Hydraflow Storm Sewers Extension for AutoCAD® Civil 3D® 2008 Plan



Project File: Willets Point 127th Outfall.stm	Number of lines: 12	Date: 08-06-2008

MSA Appendix C

SANITARY SYSTEM DESIGN AND CAPACITY ANALYSIS

Line	Manhole #	New Pipe? Enter "y"	Up-stream? Enter "y"	Down-stream? Enter "y"	Rim Elev. (ft)	Upper Inv. Elev. (ft)	Lower Inv. Elev. (ft)	Between Manholes: Cover (ft) upper	Cover (ft) lower	Fall to next (ft)	Length to next (ft)	Slope to next (ft)	Shape enter	Dimensions downstream		Area (ft^2)	Inner Top Upper (ft)	Inner Top Lower (ft)	Velocity (ft/s)	Capacity (cfs)	Time in pipe (s)
S1	S1-9	y	y		12.30	2.30	2.30	9.17	9.17	1.55	200.00	0.0078	circ	diameter=	10	0.5454	3.13	3.13	3.0645	1.9145	65.2634
S1	S1-8	y			10.80	0.75	0.75	9.22	9.22	1.30	238.83	0.0054	circ	diameter=	10	0.5454	1.58	1.58	2.5682	1.6045	92.9934
S1	S1-7	y			10.30	-0.55	-0.55	10.02	10.02	1.95	262.08	0.0074	circ	diameter=	10	0.5454	0.28	0.28	3.0027	1.8759	87.2819
S1	S1-6	y			10.10	-2.50	-2.50	11.77	11.77	1.95	259.81	0.0075	circ	diameter=	10	0.5454	-1.67	-1.67	3.0158	1.8840	86.1504
S1	S1-5	y			9.90	-4.45	-4.45	13.52	13.52	1.80	239.28	0.0075	circ	diameter=	10	0.5454	-3.62	-3.62	3.0192	1.8862	79.2527
S1	S1-4	y			9.20	-6.25	-6.25	14.62	14.62	1.50	200.00	0.0075	circ	diameter=	10	0.5454	-5.42	-5.42	3.0147	1.8834	66.3422
S1	S1-3	y			8.90	-7.75	-7.75	15.82	15.82	1.25	167.97	0.0074	circ	diameter=	10	0.5454	-6.92	-6.92	3.0030	1.8760	55.9350
S1	S1-2	y			8.20	-9.00	-9.00	16.37	16.37	1.50	200.00	0.0075	circ	diameter=	10	0.5454	-8.17	-8.17	3.0147	1.8834	66.3422
S1	S1-1	y		y	7.50	-10.50	-10.50	17.17	17.17	0.00	0.00	0	circ	diameter=	10	0.5454	-9.67	-9.67	0	0	0
S2	S2-10	y			10.80	1.00	1.00	8.97	8.97	1.20	228.49	0.0053	circ	diameter=	10	0.5454	1.83	1.83	2.5227	1.5760	90.5734
S2	S2-9	y			10.90	-0.20	-0.20	10.27	10.27	1.05	200.00	0.0053	circ	diameter=	10	0.5454	0.63	0.63	2.5223	1.5757	79.2941
S2	S2-8	y			9.90	-1.25	-1.25	10.32	10.32	1.05	200.00	0.0053	circ	diameter=	10	0.5454	-0.42	-0.42	2.5223	1.5757	79.2941
S2	S2-7	y			9.10	-2.30	-2.30	10.57	10.57	1.10	200.00	0.0055	circ	diameter=	10	0.5454	-1.47	-1.47	2.5816	1.6128	77.4710
S2	S2-6	y			9.10	-3.40	-3.40	11.67	11.67	1.05	200.00	0.0053	circ	diameter=	10	0.5454	-2.57	-2.57	2.5223	1.5757	79.2941
S2	S2-5	y			9.10	-4.45	-4.45	12.72	12.72	1.50	200.00	0.0075	circ	diameter=	10	0.5454	-3.62	-3.62	3.0147	1.8834	66.3422
S2	S2-4	y			8.70	-5.95	-5.95	13.82	13.82	1.50	200.00	0.0075	circ	diameter=	10	0.5454	-5.12	-5.12	3.0147	1.8834	66.3422
S2	S2-3	y			8.10	-7.45	-7.28	14.55	14.38	1.67	200.00	0.0083	circ	diameter=	12	0.7854	-6.45	-6.28	3.5942	3.2334	55.6450
S2	S2-2	y			8.30	-8.95	-8.95	16.25	16.25	1.35	200.00	0.0068	circ	diameter=	12	0.7854	-7.95	-7.95	3.2316	2.9071	61.8896
S2	S2-1	y			7.50	-10.30	-10.30	16.80	16.80	0.20	30.96	0.0065	circ	diameter=	12	0.7854	-9.30	-9.30	3.1614	2.8440	9.7932
S2	S1-1	y		y	7.50	-10.50	-10.50	17.00	17.00	0.00	0.00	0	circ	diameter=	12	0.7854	-9.50	-9.50	0	0	0
S3	S3-3	y	y		11.30	1.50	1.50	8.97	8.97	1.50	200.00	0.0075	circ	diameter=	10	0.5454	2.33	2.33	3.0147	1.8834	66.3422
S3	S3-2	y			11.00	0.00	0.00	10.17	10.17	1.50	200.00	0.0075	circ	diameter=	10	0.5454	0.83	0.83	3.0147	1.8834	66.3422
S3	S3-1	y			10.40	-1.50	-1.50	11.07	11.07	0.60	75.00	0.0080	circ	diameter=	10	0.5454	-0.67	-0.67	3.1135	1.9451	24.0883
S3	S1-6	y		y	10.30	-2.10	-2.10	11.57	11.57	0.00	0.00	0	circ	diameter=	10	0.5454	-1.27	-1.27	0	0	0
S4	S4-2	y	y		11.30	0.45	0.45	10.02	10.02	1.15	150.00	0.0077	circ	diameter=	10	0.5454	1.28	1.28	3.0480	1.9042	49.2129
S4	S4-1	y			11.10	-0.70	-0.70	10.97	10.97	1.50	200.00	0.0075	circ	diameter=	10	0.5454	0.13	0.13	3.0147	1.8834	66.3422
S4	S1-5	y		y	10.10	-2.20	-2.20	11.47	11.47	0.00	0.00	0	circ	diameter=	10	0.5454	-1.37	-1.37	0	0	0
S5	S5-2	y	y		10.30	-0.55	-0.55	10.02	10.02	1.55	200.00	0.0078	circ	diameter=	10	0.5454	0.28	0.28	3.0645	1.9145	65.2634
S5	S5-1	y			9.80	-2.10	-2.10	11.07	11.07	1.30	173.71	0.0075	circ	diameter=	10	0.5454	-1.27	-1.27	3.0114	1.8813	57.6841
S5	S1-4	y		y	9.90	-3.40	-3.40	12.47	12.47	0.00	0.00	0	circ	diameter=	10	0.5454	-2.57	-2.57	0	0	0
S6	S6-3	y	y		8.90	-0.50	-0.50	8.57	8.57	1.50	200.00	0.0075	circ	diameter=	10	0.5454	0.33	0.33	3.0147	1.8834	66.3422
S6	S6-2	y			8.70	-2.00	-2.00	9.87	9.87	1.50	200.00	0.0075	circ	diameter=	10	0.5454	-1.17	-1.17	3.0147	1.8834	66.3422
S6	S6-1	y			8.30	-3.50	-3.50	10.97	10.97	0.50	37.18	0.0134	circ	diameter=	10	0.5454	-2.67	-2.67	4.0368	2.5219	9.2102
S6	S2-3	y		y	8.10	-4.00	-4.00	11.27	11.27	0.00	0.00	0	circ	diameter=	10	0.5454	-3.17	-3.17	0	0	0
S7	S7-1	y	y		7.80	-3.10	-3.10	10.07	10.07	1.50	200.00	0.0075	circ	diameter=	10	0.5454	-2.27	-2.27	3.0147	1.8834	66.3422
S7	S2-1	y		y	7.50	-4.60	-4.60	11.27	11.27	0.00	0.00	0	circ	diameter=	10	0.5454	-3.77	-3.77	0	0	0
S8	S8-4	y	y		11.20	1.20	1.20	9.17	9.17	1.60	200.00	0.0080	circ	diameter=	10	0.5454	2.03	2.03	3.1135	1.9451	64.2356
S8	S8-3	y			11.10	-0.40	-0.40	10.67	10.67	1.80	258.32	0.0070	circ	diameter=	10	0.5454	0.43	0.43	2.9058	1.8153	88.8979
S8	S8-2	y			10.00	-2.20	-2.20	11.37	11.37	2.00	259.10	0.0077	circ	diameter=	10	0.5454	-1.37	-1.37	3.0584	1.9107	84.7182
S8	S8-1	y			9.10	-4.20	-4.20	12.47	12.47	0.25	32.97	0.0076	circ	diameter=	10	0.5454	-3.37	-3.37	3.0312	1.8937	10.8767
S8	S2-5	y		y	9.10	-4.45	-4.45	12.72	12.72	0.00	0.00	0	circ	diameter=	10	0.5454	-3.62	-3.62	0	0	0
S9	S9-2	y	y		11.30	1.75	1.75	8.72	8.72	1.50	200.00	0.0075	circ	diameter=	10	0.5454	2.58	2.58	3.0147	1.8834	66.3422
S9	S9-1	y			10.40	0.25	0.25	9.32	9.32	1.00	140.34	0.0071	circ	diameter=	10	0.5454	1.08	1.08	2.9385	1.8357	47.7598
S9	S8-2	y		y	10.00	-0.75	-0.75	9.92	9.92	0.00	0.00	0	circ	diameter=	10	0.5454	0.08	0.08	0	0	0
S10	S10-1	y	y		10.20	-0.75	-0.75	10.12	10.12	2.25	299.23	0.0075	circ	diameter=	10	0.5454	0.08	0.08	3.0185	1.8858	99.1305
S10	S8-1	y		y	9.10	-3.00	-3.00	11.27	11.27	0.00	0.00	0	circ	diameter=	10	0.5454	-2.17	-2.17	0	0	0
S11	S11-3	y	y		12.90	3.55	3.55	8.52	8.52	1.35	202.73	0.0067	circ	diameter=	10	0.5454	4.38	4.38	2.8406	1.7746	71.3676
S11	S11-2	y			13.90	2.20	2.20	10.87	10.87	1.30	200.00	0.0065	circ	diameter=	10	0.5454	3.03	3.03	2.8065	1.7533	71.2630
S11	S11-1	y			12.80	0.90	0.90	11.07	11.07	1.30	250.00	0.0052	circ	diameter=	10	0.5454	1.73	1.73	2.5102	1.5682	99.5930
S11	S8-3	y		y	11.10	-0.40	-0.40	10.67	10.67	0.00	0.00	0	circ	diameter=	10	0.5454	0.43	0.43	0	0	0
S12	S12-4	y	y		13.85	4.50	4.50	8.52	8.52	1.30	220.00	0.0059	circ	diameter=	10	0.5454	5.33	5.33	2.6759	1.6717	82.2154
S12	S12-3	y			13.00	3.20	3.20	8.97	8.97	0.45	74.34	0.0061	circ	diameter=	10	0.5454	4.03	4.03	2.7083	1.6920	27.4485
S12	S12-2	y			12.90	2.75	2.75	9.32	9.32	1.15	165.00	0.0070	circ	diameter=	10	0.5454	3.58	3.58	2.9061	1.8155	56.7764

S12	S12-1	y			13.00	1.60	1.60	10.57	10.57	0.70	94.26	0.0074	circ	diameter=	10			0.5454	2.43	2.43	2.9998	1.8741	31.4219
S12	S11-1	y		y	12.80	0.90	0.90	11.07	11.07	0.00	0.00	0	circ	diameter=	10			0.5454	1.73	1.73	0	0	0
S13	S13-2	y	y		12.90	3.55	3.55	8.52	8.52	1.05	200.00	0.0053	circ	diameter=	10			0.5454	4.38	4.38	2.5223	1.5757	79.2941
S13	S13-1	y			12.00	2.50	2.50	8.67	8.67	1.75	245.22	0.0071	circ	diameter=	10			0.5454	3.33	3.33	2.9407	1.8371	83.3884
S13	S1-8	y		y	10.80	0.75	0.75	9.22	9.22	0.00	0.00	0	circ	diameter=	10			0.5454	1.58	1.58	0	0	0
S14	S14-3	y	y		13.00	3.65	3.65	8.52	8.52	1.35	213.28	0.0063	circ	diameter=	10			0.5454	4.48	4.48	2.7695	1.7302	77.0103
S14	S14-2	y			13.00	2.30	2.30	9.87	9.87	1.20	231.60	0.0052	circ	diameter=	10			0.5454	3.13	3.13	2.5057	1.5654	92.4289
S14	S14-1	y			13.00	1.10	1.10	11.07	11.07	0.20	38.24	0.0052	circ	diameter=	10			0.5454	1.93	1.93	2.5175	1.5727	15.1898
S14	S11-1	y		y	12.80	0.90	0.90	11.07	11.07	0.00	0.00	0	circ	diameter=	10			0.5454	1.73	1.73	0	0	0
S15	S15-3	y	y		14.00	4.65	4.65	8.52	8.52	0.65	120.00	0.0054	circ	diameter=	10			0.5454	5.48	5.48	2.5620	1.6005	46.8388
S15	S15-2	y			14.00	4.00	4.00	9.17	9.17	1.05	200.00	0.0053	circ	diameter=	10			0.5454	4.83	4.83	2.5223	1.5757	79.2941
S15	S15-1	y			13.50	2.95	2.95	9.72	9.72	0.65	129.20	0.0050	circ	diameter=	10			0.5454	3.78	3.78	2.4691	1.5425	52.3272
S15	S14-2	y		y	13.00	2.30	2.30	9.87	9.87	0.00	0.00	0	circ	diameter=	10			0.5454	3.13	3.13	0	0	0
S16	S16-2	y	y		12.80	3.45	3.45	8.52	8.52	2.05	152.55	0.0134	circ	diameter=	10			0.5454	4.28	4.28	4.0353	2.5210	37.8035
S16	S16-1	y			11.00	1.40	1.40	8.77	8.77	0.40	34.13	0.0117	circ	diameter=	10			0.5454	2.23	2.23	3.7685	2.3543	9.0566
S16	S2-10	y		y	10.80	1.00	1.00	8.97	8.97	0.00	0.00	0	circ	diameter=	10			0.5454	1.83	1.83	0	0	0

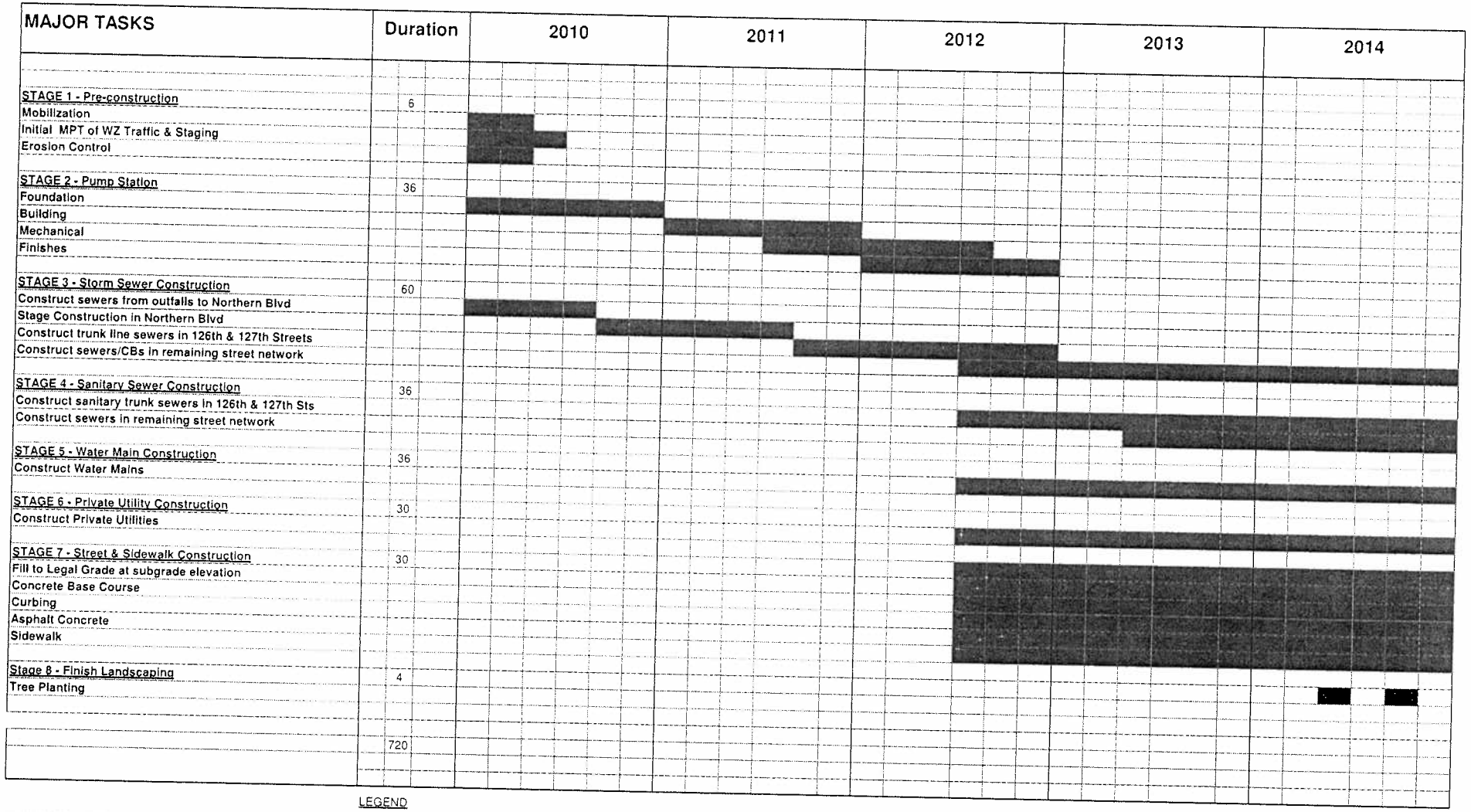
Areas	Sewer Lines			New Pipe	First in Line	Area Values (sq ft)	Area Values (acres)	Cum. Area Val (acres)	Runoff Coefficients	Time in Area (min)	Cum. Time Pipe (min)	Time of Conc. (min)	Runoff val. (in/hr)	Zoning	Density (flow/acre)	Average Flow (cfs)	Peak Value	Peak Sani. Flow (fcs)	Cum. Peak Sani (cfs)	Lines	Manhole	Cap Flow from Manhole (cfs)	Time from Manhole (s)	Time from Manhole (min)	Cum. Time from Manhole (min)
	S1		S1-9	y	y	0.00	0.00	0.00	0.85	6	1.09	6.00	5.95	M3-1	20000	0.0000	2	0.0000	0.0000	S1	S1-9	1.9145	65.2634	1.0877	0.0000
1	S1	S1-9	S1-8	y	0	44,544.00	1.02	1.02	0.85	6	1.55	7.09	5.66	M3-1	20000	0.0316	2	0.0633	0.0633	S1	S1-8	1.6045	92.9934	1.5499	1.0877
2	S1	S1-8	S1-7	y	0	25,915.00	0.59	3.62	0.85	6	1.45	8.54	5.29	M3-1	20000	0.0184	2	0.0368	0.2242	S1	S1-7	1.8759	87.2819	1.4547	2.6376
3	S1	S1-7	S1-6	y	0	29,546.00	0.68	6.85	0.85	6	1.44	10.09	4.98	M3-1	20000	0.0210	2	0.0420	0.4239	S1	S1-6	1.8840	86.1504	1.4358	4.0923
4	S1	S1-6	S1-5	y	0	29,426.00	0.68	9.28	0.85	6	1.32	11.53	4.71	M3-1	20000	0.0209	2	0.0418	0.5746	S1	S1-5	1.8862	79.2527	1.3209	5.5282
5	S1	S1-5	S1-4	y	0	33,177.00	0.76	12.15	0.85	6	1.11	12.85	4.49	M3-1	20000	0.0236	2	0.0471	0.7520	S1	S1-4	1.8834	66.3422	1.1057	6.8490
6	S1	S1-4	S1-3	y	0	23,362.00	0.54	12.69	0.85	6	0.93	13.95	4.32	M3-1	20000	0.0166	2	0.0332	0.7852	S1	S1-3	1.8760	55.9350	0.9322	7.9547
7	S1	S1-3	S1-2	y	0	23,504.00	0.54	13.23	0.85	6	1.11	14.89	4.18	M3-1	20000	0.0167	2	0.0334	0.8186	S1	S1-2	1.8834	66.3422	1.1057	8.8870
8	S1	S1-2	S1-1	y	0	25,731.00	0.59	13.82	0.85	6	0.00	15.99	4.03	M3-1	20000	0.0183	2	0.0366	0.8551	S1	S1-1	0	0	0.0000	9.9927
	S2		S2-10	y	0	0.00	0.00	0.00	0.85	6	1.51	6.00	5.95	M3-1	20000	0.0000	2	0.0000	0.0000	S2	S2-10	1.5760	90.5734	1.5096	0.0000
9	S2	S2-10	S2-9	y	0	177,303.00	4.07	6.00	0.85	6	1.32	7.51	5.55	M3-1	20000	0.1260	2	0.2519	0.3711	S2	S2-9	1.5757	79.2941	1.3216	1.5096
10	S2	S2-9	S2-8	y	0	139,411.00	3.20	9.20	0.85	6	1.32	8.83	5.25	M3-1	20000	0.0990	2	0.1981	0.5692	S2	S2-8	1.5757	79.2941	1.3216	2.8311
11	S2	S2-8	S2-7	y	0	111,004.00	2.55	11.74	0.85	6	1.29	10.15	4.97	M3-1	20000	0.0789	2	0.1577	0.7269	S2	S2-7	1.6128	77.4710	1.2912	4.1527
12	S2	S2-7	S2-6	y	0	91,115.00	2.09	13.84	0.85	6	1.32	11.44	4.73	M3-1	20000	0.0647	2	0.1295	0.8564	S2	S2-6	1.5757	79.2941	1.3216	5.4439
13	S2	S2-6	S2-5	y	0	79,539.00	1.83	15.66	0.85	6	1.11	12.77	4.50	M3-1	20000	0.0565	2	0.1130	0.9694	S2	S2-5	1.8834	66.3422	1.1057	6.7654
14	S2	S2-5	S2-4	y	0	82,952.00	1.90	24.17	0.85	6	1.11	13.87	4.33	M3-1	20000	0.0589	2	0.1179	1.4960	S2	S2-4	1.8834	66.3422	1.1057	7.8712
15	S2	S2-4	S2-3	y	0	86,259.00	1.98	26.15	0.85	6	0.93	14.98	4.17	M3-1	20000	0.0613	2	0.1226	1.6185	S2	S2-3	3.2334	55.6450	0.9274	8.9769
16	S2	S2-3	S2-2	y	0	82,525.00	1.89	30.27	0.85	6	1.03	15.90	4.04	M3-1	20000	0.0586	2	0.1173	1.8735	S2	S2-2	2.9071	61.8896	1.0315	9.9043
17	S2	S2-2	S2-1	y	0	85,439.00	1.96	32.23	0.85	6	0.16	16.94	3.91	M3-1	20000	0.0607	2	0.1214	1.9949	S2	S2-1	2.8440	9.7932	0.1632	10.9358
18	S2	S2-1	S1-1	y	0	35,611.00	0.82	34.87	0.85	6	0.00	17.10	3.89	M3-1	20000	0.0253	2	0.0506	2.1565	S2	S1-1	0	0	0.0000	11.0990
	S3		S3-3	y	y	0.00	0.00	0.00	0.85	6	1.11	6.00	5.95	M3-1	20000	0.0000	2	0.0000	0.0000	S3	S3-3	1.8834	66.3422	1.1057	0.0000
20	S3	S3-3	S3-2	y	0	60,104.00	1.38	1.38	0.85	6	1.11	7.11	5.65	M3-1	20000	0.0427	2	0.0854	0.0854	S3	S3-2	1.8834	66.3422	1.1057	1.1057
21	S3	S3-2	S3-1	y	0	46,954.00	1.08	2.46	0.85	6	0.40	8.21	5.39	M3-1	20000	0.0334	2	0.0667	0.1521	S3	S3-1	1.9451	24.0883	0.4015	2.2114
22	S3	S3-1	S1-7	y	0	3,956.00	0.09	2.55	0.85	6	1.45	8.61	5.29	M3-1	20000	0.0028	2	0.0056	0.1577	S3	S1-7	1.8759	87.2819	1.4547	2.6129
	S4		S4-2	y	y	0.00	0.00	0.00	0.85	6	0.82	6.00	5.95	M3-1	20000	0.0000	2	0.0000	0.0000	S4	S4-2	1.9042	49.2129	0.8202	0.0000
23	S4	S4-2	S4-1	y	0	45,177.00	1.04	1.04	0.85	6	1.11	6.82	5.73	M3-1	20000	0.0321	2	0.0642	0.0642	S4	S4-1	1.8834	66.3422	1.1057	0.8202
24	S4	S4-1	S1-6	y	0	31,471.00	0.72	1.76	0.85	6	1.44	7.93	5.45	M3-1	20000	0.0224	2	0.0447	0.1089	S4	S1-6	1.8840	86.1504	1.4358	1.9259
	S5		S5-2	y	y	0.00	0.00	0.00	0.85	6	1.09	6.00	5.95	M3-1	20000	0.0000	2	0.0000	0.0000	S5	S5-2	1.9145	65.2634	1.0877	0.0000
25	S5	S5-2	S5-1	y	0	66,113.00	1.52	1.52	0.85	6	0.96	7.09	5.66	M3-1	20000	0.0470	2	0.0939	0.0939	S5	S5-1	1.8813	57.6841	0.9614	1.0877
26	S5	S5-1	S1-5	y	0	25,518.00	0.59	2.10	0.85	6	1.32	8.05	5.42	M3-1	20000	0.0181	2	0.0363	0.1302	S5	S1-5	1.8862	79.2527	1.3209	2.0491
	S6		S6-3	y	y	0.00	0.00	0.00	0.85	6	1.11	6.00	5.95	M3-1	20000	0.0000	2	0.0000	0.0000	S6	S6-3	1.8834	66.3422	1.1057	0.0000
27	S6	S6-3	S6-2	y	0	49,502.00	1.14	1.14	0.85	6	1.11	7.11	5.65	M3-1	20000	0.0352	2	0.0703	0.0703	S6	S6-2	1.8834	66.3422	1.1057	1.1057
28	S6	S6-2	S6-1	y	0	44,340.00	1.02	2.15	0.85	6	0.15	8.21	5.39	M3-1	20000	0.0315	2	0.0630	0.1333	S6	S6-1	2.5219	9.2102	0.1535	2.2114
29	S6	S6-1	S2-3	y	0	3,099.00	0.07	2.23	0.85	6	0.93	8.36	5.35	M3-1	20000	0.0022	2	0.0044	0.1377	S6	S2-3	3.2334	55.6450	0.9274	2.3649
	S7		S7-1	y	y	0.00	0.00	0.00	0.85	6	1.11	6.00	5.95	M3-1	20000	0.0000	2	0.0000	0.0000	S7	S7-1	1.8834	66.3422	1.1057	0.0000
19	S7	S7-1	S2-1	y	0	79,477.00	1.82	1.82	0.85	6	0.16	7.11	5.65	M3-1	20000	0.0565	2	0.1129	0.1129	S7	S2-1	2.8440	9.7932	0.1632	1.1057
	S8		S8-4	y	y	0.00	0.00	0.00	0.85	6	1.07	6.00	5.95	M3-1	20000	0.0000	2	0.0000	0.0000	S8	S8-4	1.9451	64.2356	1.0706	0.0000
30	S8	S8-4	S8-3	y	0	42,041.00	0.97	0.97	0.85	6	1.48	7.07	5.66	M3-1	20000	0.0299	2	0.0597	0.0597	S8	S8-3	1.8153	88.8979	1.4816	1.0706
32	S8	S8-3	S8-2	y	0	64,050.00	1.47	2.44	0.85	6	1.41	8.55	5.31	M3-1	20000	0.0455	2	0.0910	0.1507	S8	S8-2	1.9107	84.7182	1.4120	2.5522
33	S8	S8-2	S8-1	y	0	35,711.00	0.82	5.01	0.85	6	0.18	9.96	5.01	M3-1	20000	0.0254	2	0.0507	0.3099	S8	S8-1	1.8937	10.8767	0.1813	3.9642
34	S8	S8-1	S2-5	y	0	1,473.00	0.03	6.60	0.85	6	1.11	10.15	4.97	M3-1	20000	0.0010	2	0.0021	0.4087	S8	S2-5	1.8834	66.3422	1.1057	4.1455
	S9		S9-2	y	y	0.00	0.00	0.00	0.85	6	1.11	6.00	5.95	M3-1	20000	0.0000	2	0.0000	0.0000	S9	S9-2	1.8834	66.3422	1.1057	0.0000
35	S9	S9-2	S9-1	y	0	58,096.00	1.33	1.33	0.85	6	0.80	7.11	5.65	M3-1	20000	0.0413	2	0.0825	0.0825	S9	S9-1	1.8357	47.7598	0.7960	1.1057
36	S9	S9-1	S8-2	y	0	18,227.00	0.42	1.75	0.85	6	1.41	7.90	5.46	M3-1	20000	0.0129	2	0.0259	0.1084	S9	S8-2	1.9107	84.7182	1.4120	1.9017
	S10		S10-1	y	y	0.00	0.00	0.00	0.85	6	1.65	6.00	5.95	M3-1	20000	0.0000	2	0.0000	0.0000	S10	S10-1	1.8858	99.1305	1.6522	0.0000
37	S10	S10-1	S8-1	y	0	68,058.00	1.56	1.56	0.85	6	0.18	7.65	5.52	M3-1	20000	0.0484	2	0.0967	0.0967	S10	S8-1	1.8937	10.8767	0.1813	1.6522
	S11		S11-3	y	y	0.00	0.00	0.00	0.85	6	1.19	6.00	5.95	M3-1	20000	0.0000	2	0.0000	0.0000	S11	S11-3	1.7746	71.3676	1.1895	0.0000
38	S11	S11-3	S11-2	y	0	79,664.00	1.83	1.83	0.85	6	1.19	7.19	5.63	M3-1	20000	0.0566	2	0.1132	0.1132	S11	S11-2	1.7533	71.2630	1.1877	1.1895
39	S11	S11-2	S11-1	y	0	33,667.00	0.77	2.60	0.85	6	1.66	8.38	5.35	M3-1	20000	0.0239	2	0.0478	0.1610	S11	S11-1	1.5682	99.5930	1.6599	2.3772
31	S11	S11-1	S8-3	y	0	51,453.00	1.18	14.18	0.85	6	1.48	10.04	4.99	M3-1	20000	0.0366	2	0.0731	0.8773	S11	S8-3	1.8153	88.8979	1.4816	4.0371
	S12		S12-4	y	y	0.00	0.00	0.00	0.85	6	1.37	6.00	5.95	M3-1	20000	0.0000	2	0.0000	0.0000	S12	S12-4	1.6717	82.2154	1.3703	0.0000
40	S12	S12-4	S12-3	y	0	117,618.00	2.70	2.70	0.85	6	0.46	7.37	5.59	M3-1	20000	0.0836	2	0.1671	0.1671	S12	S12-3	1.6920	27.4485	0.4575	1.3703
41	S12	S12-3	S12-2	y	0	2,571.00	0.06	2.76	0.85	6	0.95	7.83	5.48	M3-1	20000	0.0018	2	0.0037	0.1708	S12	S12-2	1.8155	56.7764	0.9463	1.8277
42	S12	S12-2	S12-1	y	0	34,351.00	0.79	3.55	0.85	6	0.52	8.77	5.26	M3-1	20000	0.0244	2	0.0488	0.2196	S12	S12-1	1.8741	31.4219	0.5237	2.7740
43	S12	S12-1	S11-1	y	0	6,670.00	0.15	3.70	0.85	6	1.66	9.30	5.14	M3-1	20000	0.0047	2	0.0095	0.2291	S12	S11-1	1.5682	99.5930	1.6599	3.2977
	S13		S13-2	y	y	0.00	0.00	0.00	0.85	6	1.32	6.00	5.95	M3-1	20000	0.0000	2	0.0000	0.0000	S13	S13-2	1.5757	79.2941	1.3216	0.0000
44	S13	S13-2	S13-1	y	0	41,450.00	0.95	0.95	0.85	6	1.39	7.32	5.60	M3-1	20000	0.0294	2	0.0589	0.0589	S13	S13-1	1.8371	83.3884	1.3898	1.3216
45	S13	S13-1	S1-8	y	0	45,871.00	1.05	2.00	0.85	6	1.55	8.71	5.27	M3-1	20000	0.0326	2	0.0652	0.1241	S13	S1-8	1.6045	92.9934	1.5499	2.7114
	S14		S14-3	y	y	0.00	0.00	0.00	0.85	6	1.28	6.00	5.95	M3-1	20000	0.0000	2	0.0000	0.0000	S14	S14-3	1.7302	77.0103	1.2835	0.0000
46	S14	S14-3	S14-2	y	0	52,347.00	1.20	1.20	0.85	6	1.54	7.28	5.61	M3-1	20000	0.0372	2	0.0744	0.0744	S14	S14-2	1.5654	92.4289	1.5405	1.2835
47	S14	S14-2	S14-1	y	0	43,564.00	1.00	6.66	0.85	6	0.25	8.82	5.25	M3-1	20000	0.0309	2	0.0619	0.4119	S14	S14-1	1.5727	15.1896	0.2532	2.8240
48	S14	S14-1	S11-1	y	0	1,571.00	0.04	6.69	0.85	6	1.66	9.08	5.19	M3-1	20000	0.0011	2	0.0022	0.4141	S14	S11-1	1.5682	99.5930	1.6599	3.0772
	S15		S15-3	y	y	0.00	0.00	0.00	0.85	6	0.78	6.00	5.95	M3-1	20000	0.0000	2	0.0000	0.0000	S15	S15-3	1.6005	46.8388	0.7806	0.0000

49	S15	S15-3	S15-2	y	0	99,632.00	2.29	2.29	0.85	6	1.32	6.78	5.74	M3-1	20000	0.0708	2	0.1416	0.1416		S15	S15-2	1.5757	79.2941	1.3216	0.7806
50	S15	S15-2	S15-1	y	0	82,805.00	1.90	4.19	0.85	6	0.87	8.10	5.41	M3-1	20000	0.0588	2	0.1177	0.2592		S15	S15-1	1.5425	52.3272	0.8721	2.1022
51	S15	S15-1	S14-2	y	0	11,554.00	0.27	4.45	0.85	6	1.54	9.97	5.21	M3-1	20000	0.0082	2	0.0164	0.2756		S15	S14-2	1.5654	92.4289	1.5405	2.9743
	S16		S16-2	y	y	0.00	0.00	0.00	0.85	6	0.63	6.00	5.95	M3-1	20000	0.0000	2	0.0000	0.0000		S16	S16-2	2.5210	37.8035	0.6301	0.0000
52	S16	S16-2	S16-1	y	0	82,566.00	1.90	1.90	0.85	6	0.15	6.63	5.78	M3-1	20000	0.0587	2	0.1173	0.1173		S16	S16-1	2.3543	9.0566	0.1509	0.6301
53	S16	S16-1	S2-10	y	0	1,304.00	0.03	1.93	0.85	6	1.51	6.78	5.74	M3-1	20000	0.0009	2	0.0019	0.1192		S16	S2-10	1.5760	90.5734	1.5096	0.7810

MSA Appendix D

PROJECT SCHEDULE

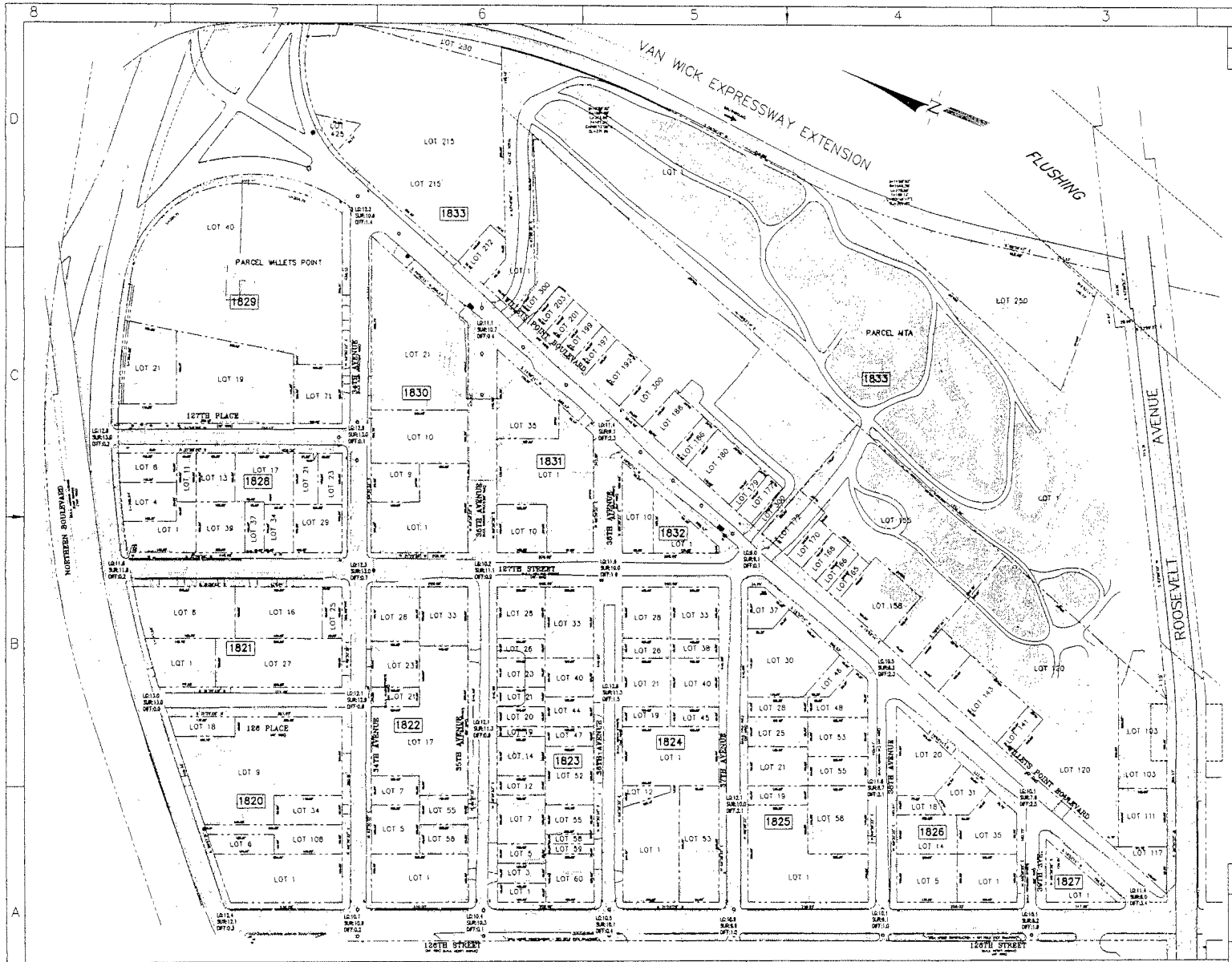
WILLETS POINT
MSA PROJECT SCHEDULE
pg 1 of 1



EXHIBITS


VAN WICK EXPRESSWAY EXTENSION
FLUSHING
AVENUE
ROOSEVELT
NORTHERN BOULEVARD
PARCEL WILLETS POINT
PARCEL MTA
127TH PLACE
126 PLACE
126TH STREET
LOT 230
LOT 215
LOT 40
LOT 250
LOT 1
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SHEET NO OF
PLAN NO
CITY OF NEW YORK
ECONOMIC DEVELOPMENT CORPORATION
PROPOSED STORM SEWER SYSTEM
WILLETS POINT
EXHIBIT A
SHEET 1 OF 8
CONTRACT NO
IN CHARGE
DESIGNED BY
DRAWN BY
CHECKED BY
Scale: 100' 0 100' 200'


VAN WICK EXPRESSWAY EXTENSION
FLUSHING
ROOSEVELT AVENUE
PARCEL WILLETS POINT
PARCEL MTA
LOT 215
LOT 230
LOT 250
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1833
127TH PLACE
128 PLACE
126TH STREET
127TH STREET
128TH STREET
35TH AVENUE
34TH AVENUE
36TH AVENUE
37TH AVENUE
LOD BOULEVARD
WILLETS POINT BOULEVARD
PUMP STATION LOCATION
AREA 1 44,544 SF
AREA 2 25,915 SF
AREA 3 29,946 SF
AREA 4 29,426 SF
AREA 5 33,177 SF
AREA 6 23,804 SF
AREA 7 46,954 SF
AREA 8 25,518 SF
AREA 9 177,303 SF
AREA 10 139,411 SF
AREA 11 111,004 SF
AREA 12 1,938 SF
AREA 13 81,115 SF
AREA 14 82,952 SF
AREA 15 86,259 SF
AREA 16 82,525 SF
AREA 17 83,439 SF
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AREA 22 42,041 SF
AREA 23 45,177 SF
AREA 24 66,113 SF
AREA 25 66,113 SF
AREA 26 25,518 SF
AREA 27 3,093 SF
AREA 28 44,346 SF
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AREA 30 42,041 SF
AREA 31 64,050 SF
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AREA 42 34,351 SF
AREA 43 8,370 SF
AREA 44 41,450 SF
AREA 45 45,871 SF
AREA 46 52,347 SF
AREA 47 43,564 SF
AREA 48 11,554 SF
AREA 49 99,632 SF
AREA 50 82,805 SF
AREA 51 11,554 SF
AREA 52 82,566 SF
AREA 53 1,304 SF
N
Scale: 100' 0 100' 200'
IN CHARGE
DESIGNED BY
DRAWN BY
CHECKED BY
SHEET NO. OF
PLAN NO. OF
CITY OF NEW YORK
ECONOMIC DEVELOPMENT CORPORATION
PROPOSED SANITARY SEWER SYSTEM
WILLETS POINT
EXHIBIT B
SHEET 2 OF 8
CONTRACT NO



SHEET NO. OF	PLAN NO. OF

NOTES

1 VERTICAL DATUM NAVD88 (FEET)

2 LEGAL GRADES HAVE BEEN CONVERTED FROM QUEENS BOROUGH DATUM TO NAVD88 (FEET) FOR COMPARISON

Scale: 100' 0 100' 200'

IN CHARGE _____ DESIGNED BY _____

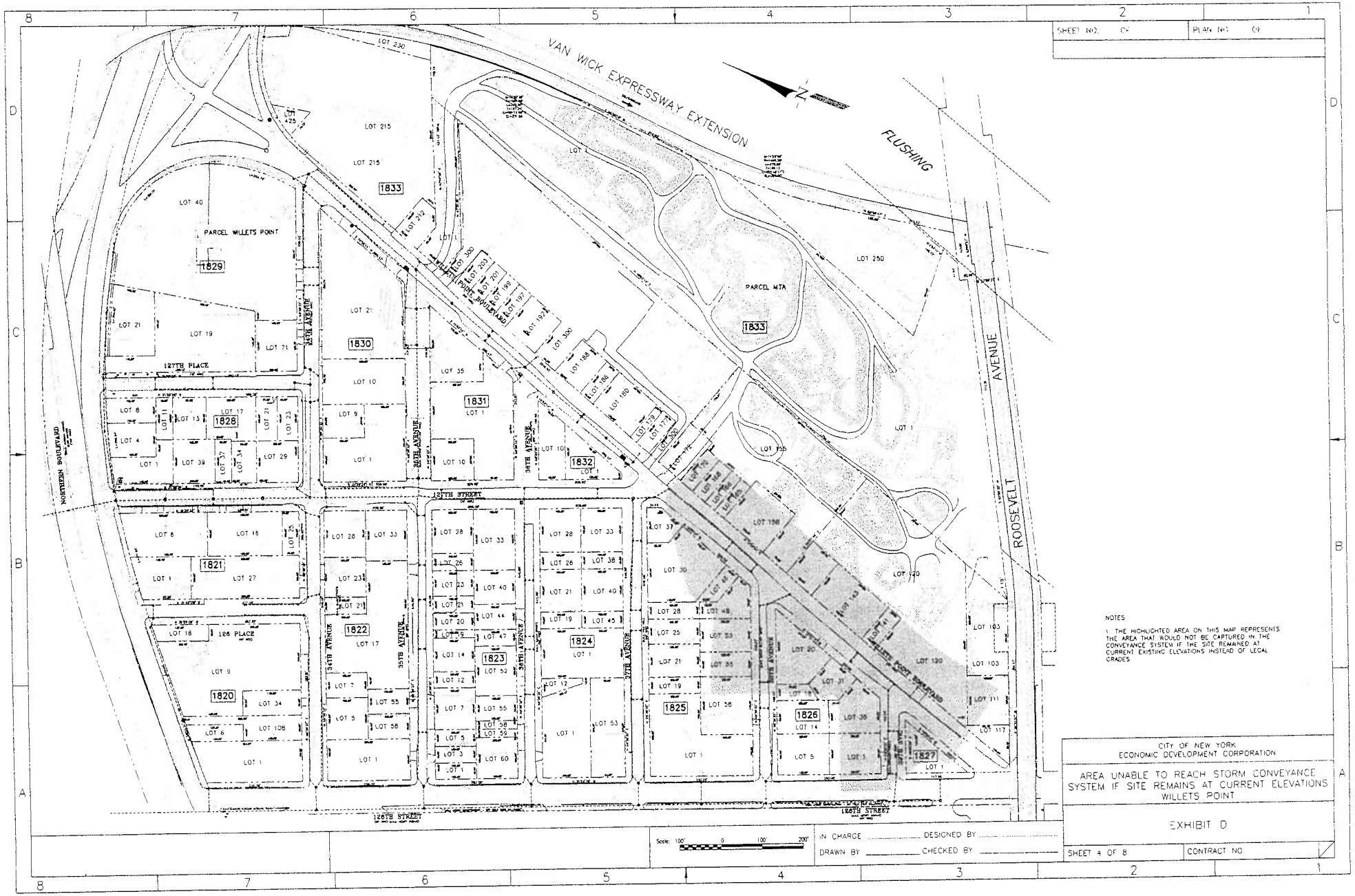
DRAWN BY _____ CHECKED BY _____

CITY OF NEW YORK
ECONOMIC DEVELOPMENT CORPORATION

LEGAL GRADE AND SURVEY COMPARISON WILLETS POINT

EXHIBIT C

SHEET 3 OF 8	CONTRACT NO



NOTES

1. THE HIGHLIGHTED AREA ON THIS MAP REPRESENTS THE AREA THAT WOULD NOT BE CAPTURED IN THE CONVEYANCE SYSTEM IF THE SITE REMAINED AT CURRENT EXISTING ELEVATIONS INSTEAD OF LEGAL GRADES

CITY OF NEW YORK
ECONOMIC DEVELOPMENT CORPORATION

AREA UNABLE TO REACH STORM CONVEYANCE SYSTEM IF SITE REMAINS AT CURRENT ELEVATIONS
WILLETS POINT

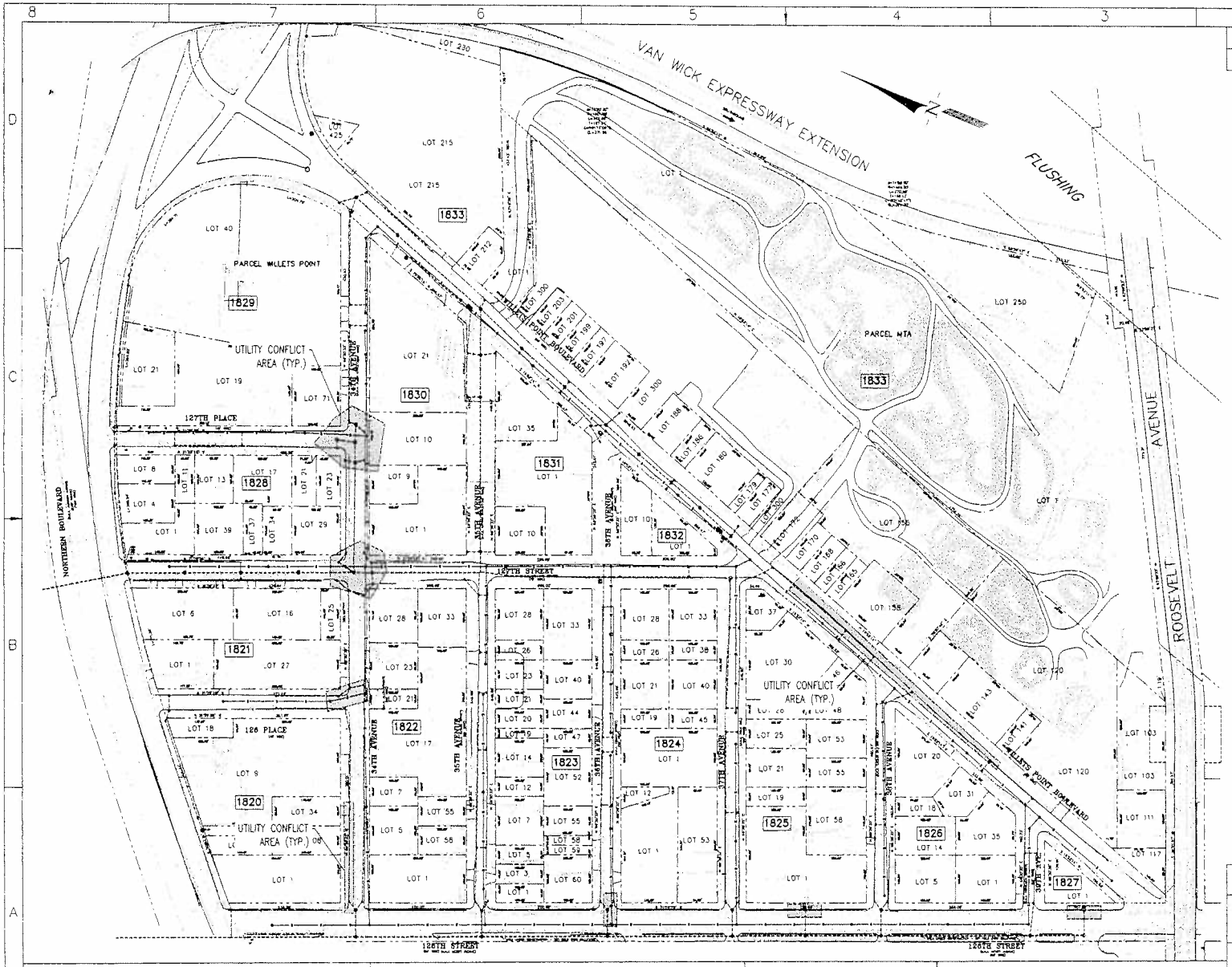
EXHIBIT D

SHEET 4 OF 8 | CONTRACT NO

Scale: 100' 0 100' 200'

IN CHARGE ..... DESIGNED BY .....

DRAWN BY ..... CHECKED BY .....



NOTES:

1. VERTICAL DATUM NAVD88 (FEET)

2. LEGAL GRADES HAVE BEEN CONVERTED FROM QUEENS BOROUGH DATUM TO NAVD88 (FEET) FOR COMPARISON

Scale: 100' 0 100' 200'

IN CHARGE _____ DESIGNED BY _____

DRAWN BY _____ CHECKED BY _____

SHEET NO. OF | PLAN NO. OF

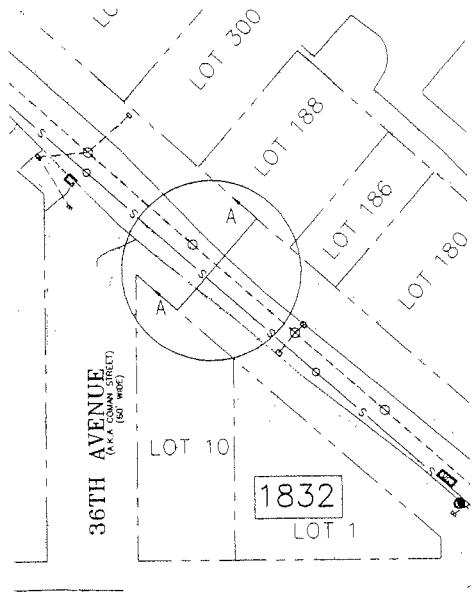
CITY OF NEW YORK
ECONOMIC DEVELOPMENT CORPORATION

PUBLIC AND PRIVATE UTILITY CONFLICTS WILLETS POINT

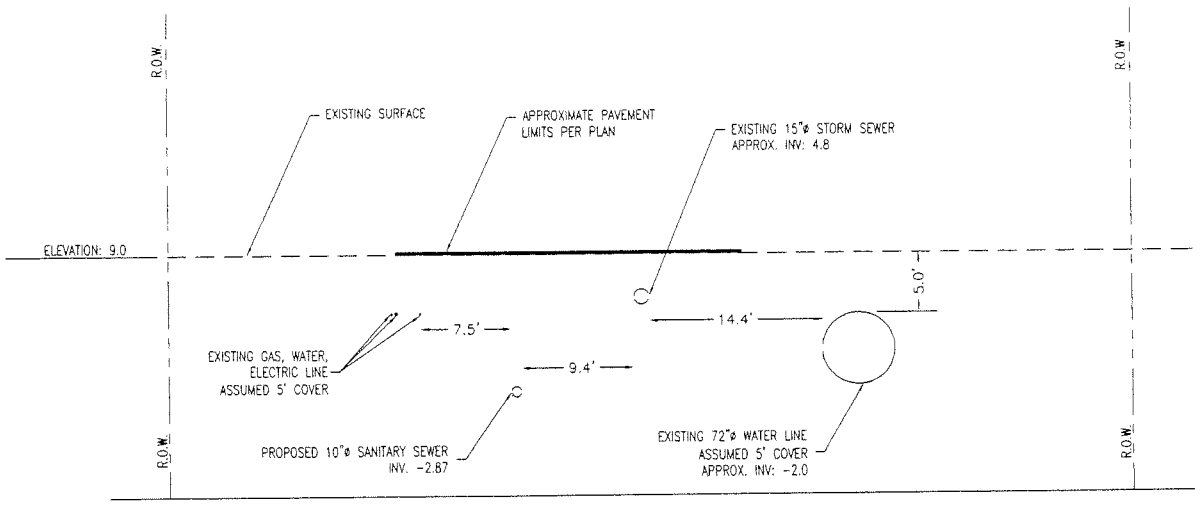
EXHIBIT E

SHEET 5 OF 8 | CONTRACT NO

SHEET NO. OF	PLAN NO. OF



SECTION A–A
PLAN VIEW
SCALE: 1" = 40'



CROSS SECTION A–A
SCALE: 1" = 5'

CITY OF NEW YORK
ECONOMIC DEVELOPMENT CORPORATION

TYPICAL CROSS SECTION
WILLETS POINT

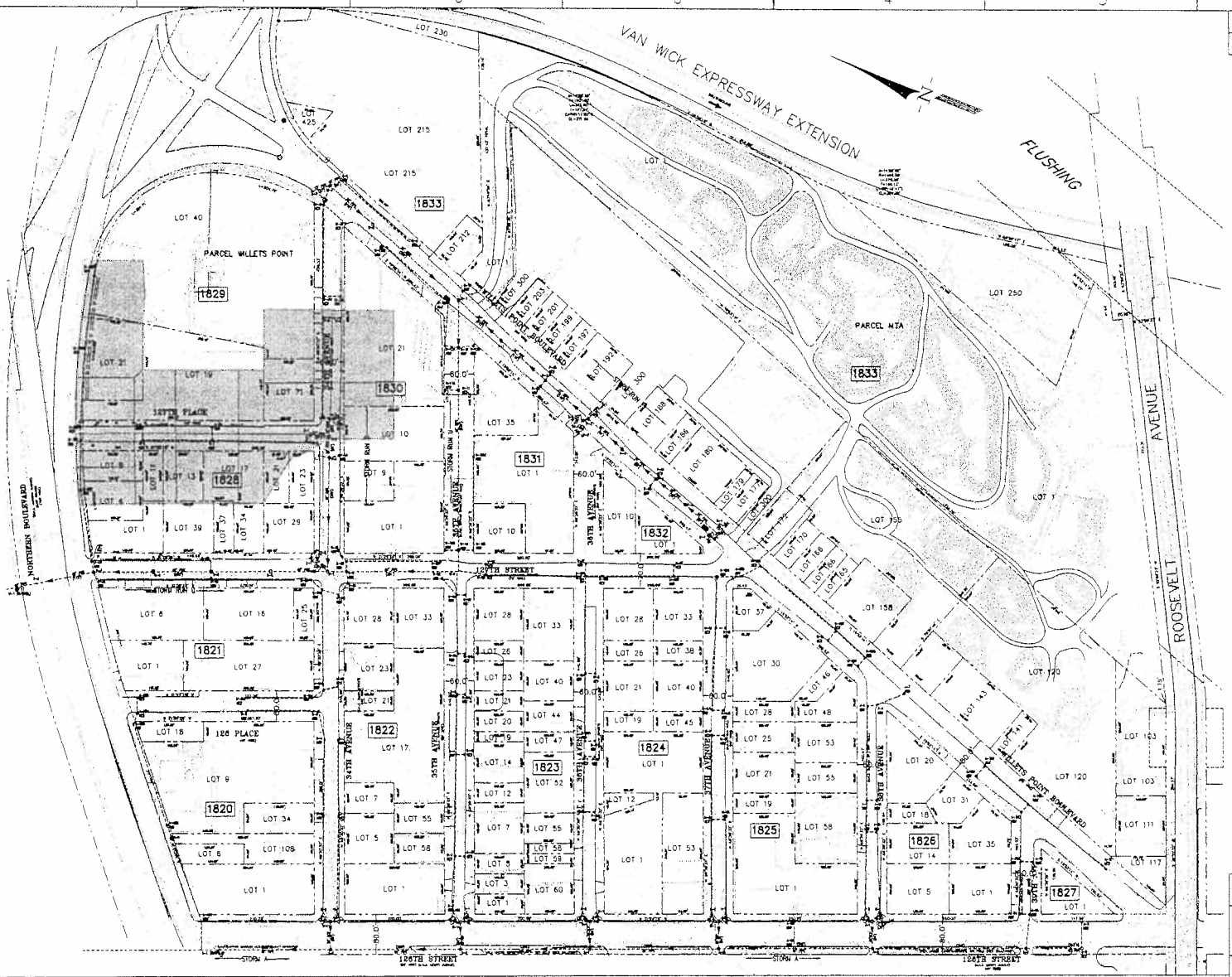
EXHIBIT F

Scale: 100' 0 100' 200'

IN CHARGE _____ DESIGNED BY _____

DRAWN BY _____ CHECKED BY _____

SHEET 6 OF 8 | CONTRACT NO



NOTES:

1. THE HIGHLIGHTED AREA ON THIS MAP REPRESENTS THE DRAINAGE AREA CAPTURED IF A NEW OUTFALL WAS CONSTRUCTED ON 127TH PLACE

CITY OF NEW YORK
ECONOMIC DEVELOPMENT CORPORATION

POSSIBLE NEW OUTFALL DRAINAGE AREA WILLETS POINT

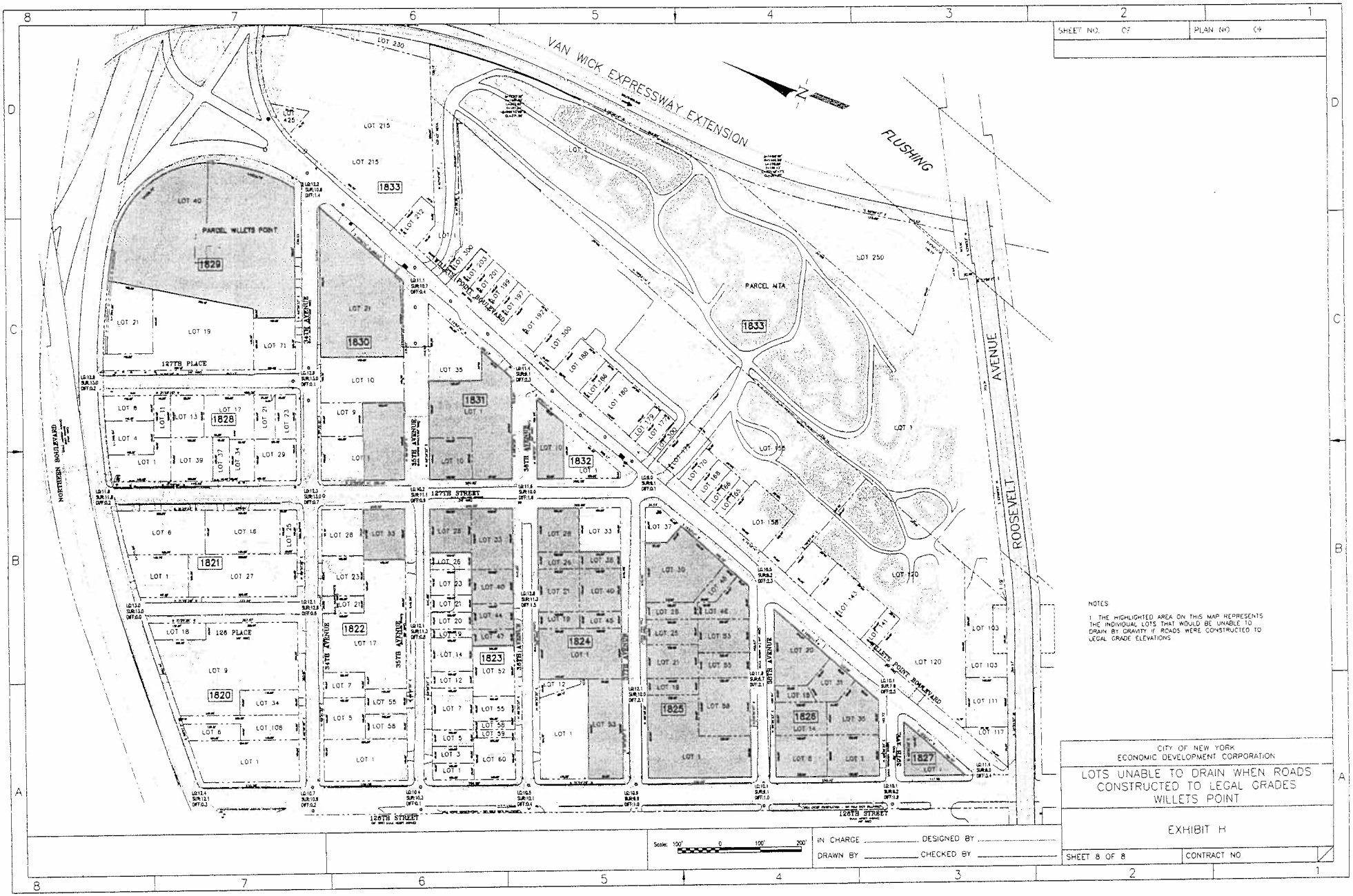
EXHIBIT G

SHEET 7 OF 8 | CONTRACT NO

Scale: 100' 0 100 200'

IN CHARGE ..... DESIGNED BY .....

DRAWN BY ..... CHECKED BY .....



SHEET NO. OF | PLAN NO. OF

NOTES

1. THE HIGHLIGHTED AREA ON THIS MAP REPRESENTS THE INDIVIDUAL LOTS THAT WOULD BE UNABLE TO DRAIN BY GRAVITY IF ROADS WERE CONSTRUCTED TO LEGAL GRADE ELEVATIONS

CITY OF NEW YORK
ECONOMIC DEVELOPMENT CORPORATION

LOTS UNABLE TO DRAIN WHEN ROADS CONSTRUCTED TO LEGAL GRADES
WILLETS POINT

EXHIBIT H

Scale: 100' 0 100' 200'

IN CHARGE _____ DESIGNED BY _____

DRAWN BY _____ CHECKED BY _____

SHEET 8 OF 8 | CONTRACT NO.

Willets Point Infrastructure Opinion of Probable Cost - Municipal Services Alternative, August 22, 2008 - Exhibit "I"

In this estimate all roads remain in their current configuration and are public streets.

General Assumptions:

- All estimates are in 2008 dollars, construction costs have not been escalated for this estimate
- Construction costs associated with the development of individual parcels have not been included in this estimate.
- All roads have been filled to a resulting elevation equal to the legal grades currently on record with NYCDEP
- Estimated costs represent environmental cleanup in accordance with all current regulations
- Estimated costs represent the installation of underground utilities, and street construction
- Costs for dewatering have not been included in this estimate however it may be necessary in some phases of construction due to shallow groundwater
- All construction will be built to NYC standards
- All utility estimates were based on an average size pipes, generic appurtenances and estimated lengths and depths, unless otherwise noted.
- Electrical estimates were based on generic distribution systems
- All infrastructure costs include materials and installation unless otherwise noted
- The following items including but not limited to; NYCDEP Discharge Permits, NYSDEC Wetland permits, USACE Waterfront Permitting, NYCDOS FMO Permit, NYSDEC SWPPP, NYSDEC Point Source Discharge Permit, Air Particulate Permit or any testing, reporting, labor, equipment and documentation required for these efforts are not included; timing for these efforts needs to be evaluated
- The estimate assumes that the project continues unabated, and on schedule
- No costs are included for coordination with structure erection, dewatering, archeological discovery or property purchase.
- There are also no costs associated with staged construction and coordination related to DOT, Con Edison, Phone/cable company/ Gas distribution system, the MTA, NYSDEC or NYSDEP.
- Subtotal values for items are rounded to the next $100,000
- There are no O&M costs associated with this effort as all streets are public.

Definitions:

Construction Cost (CC): Trade cost only. Does not include general conditions or overhead and profit
Design Cost: Assumes 10% of CC
CM/REI: Construction Manager/Resident Engineer. Assumes 10% of CC
General Conditions: Assumes 10% of CC. (This probably will need to be adjusted to include overhead and profit)
Contingency: Assumes 30% of CC unless otherwise noted.
Subtotal: Total cost of each major item i.e. Storm water, Roadwork, Electric, etc.
Sustainability Initiative: Identifies opportunities where including "green" infrastructure items should be investigated
Remediation: Clean up of environmental contamination required by city state of federal regulation of law and/or to be in compliance with existing State cleanup programs
Engineering Controls: Environmental mitigation methods used to remove potential for exposure to any existing or suspected contaminants (In compliance with existing State guidelines)

Item #	Item	Item Description	Detailed Assumptions	Units	Quantity	Lump Sum/ Unit Price	Construction Cost	Design Cost	CM/REI	General Conditions	Contingency	Subtotal
1	**Storm water**											
	1a) Onsite storm water system	i) 10in dia pipe	total length 63 ft assumes use of 39 ft of existing and replacement of 24 ft	linear foot	24	$107.35	$2,576	$258	$258	$258	$773	$4,123
		ii) 12in dia pipe	total length 4601 ft assumes use of 817 ft of existing and replacement of 3784 ft	linear foot	3,784	$120.95	$457,693	$45,769	$45,769	$45,769	$137,308	$732,309
		iii) 15in dia pipe	total length 1926 ft assumes use of 40 ft of existing and replacement of 1886 ft	linear foot	1,886	$143.93	$271,474	$27,147	$27,147	$27,147	$81,442	$434,356
		iv) Piles	Cost for 16 in pile supports have been assumed for all piping less than 16inches (Zone one assumed at 55%, Zone 2 at 45% = 88ft/pile)	pile footage	125,275	$70.00	$8,769,222	$876,922	$876,922	$876,922	$2,630,767	$14,030,755
		v) 18in dia pipe	total length 2518 ft assumes use of 0 ft of existing and replacement of 2518 ft	linear foot	2,518	$171.28	$431,245	$43,125	$43,125	$43,125	$129,374	$689,993
		vi) 20in dia pipe	total length 164 ft assumes use of 55 ft of existing and replacement of 109 ft	linear foot	109	$192.97	$21,024	$2,102	$2,102	$2,102	$6,307	$33,639
		vii) 21 in dia pipe	total length 0 ft assumes use of 0 ft of existing and replacement of 0 ft	linear foot	0	$205.19	$0	$0	$0	$0	$0	$0
		viii) 24 in dia pipe	total length 1893 ft assumes use of 344 ft of existing and replacement of 1549 ft	linear foot	1,549	$244.18	$378,227	$37,823	$37,823	$37,823	$113,468	$605,164
		ix) Piles	Cost for 24 in pile supports have been assumed for all piping between 16 and 24 inches (Zone one assumed at 55%, Zone 2 at 45% = 88ft/pile)	pile footage	91,865	$70.00	$6,430,578	$643,058	$643,058	$643,058	$1,929,173	$10,288,925
		x) 30 in dia pipe	total length 253 ft assumes use of 0 ft of existing and replacement of 253 ft	linear foot	253	$336.96	$85,329	$8,533	$8,533	$8,533	$25,599	$136,527
		xi) 36 in dia pipe	total length 254 ft assumes use of 0 ft of existing and replacement of 254 ft	linear foot	254	$465.00	$117,910	$11,791	$11,791	$11,791	$35,373	$188,656
		xii) Piles	Cost for 36 in pile supports have been assumed for all piping between 24 and 36 inches (Zone one assumed at 55%, Zone 2 at 45% = 88ft/pile)	pile footage	12,934	$70.00	$905,353	$90,535	$90,535	$90,535	$271,606	$1,448,565
		xiii) 42 in dia pipe	total length 879 ft assumes use of 727 ft of existing and replacement of 152 ft	linear foot	651	$641.69	$417,734	$41,773	$41,773	$41,773	$125,320	$668,374
		xiv) 48 in dia pipe	total length 858 ft assumes use of 743 ft of existing and replacement of 115 ft	linear foot	152	$885.53	$134,866	$13,487	$13,487	$13,487	$40,460	$215,786
		xv) 54 in dia pipe	total length 1389 ft assumes use of 1271 ft of existing and replacement of 118 ft	linear foot	115	$1,222.02	$140,227	$14,023	$14,023	$14,023	$42,068	$224,363
		xvi) 60 in dia pipe	Cost for 36 in pile supports have been assumed for all piping between 24 and 36 inches (Zone one assumed at 55%, Zone 2 at 45% = 88ft/pile)	linear foot	118	$1,686.38	$199,884	$19,968	$19,968	$19,968	$59,905	$319,495
		xvii) Piles	Assumes 123 new manholes and replacement of 31 existing	pile footage	40,131	$70.00	$2,809,194	$280,919	$280,919	$280,919	$842,758	$4,494,711
		xviii) Manholes	assumes that material removed/displaced during pipe installation with have to be disposed of in accordance with all applicable NYS regulations	manhole	154	$4,025.00	$619,850	$61,985	$61,985	$61,985	$185,955	$991,760
		xiii) Disposal of material displaced during excavation	There has been no detention analysis for this effort as it is usually a private responsibility and would not be located in public streets or rights of way.	tons	11,811	$125.00	$1,476,385	$147,638	$147,638	$147,638	$442,915	$2,362,215
		xx) Detention		linear foot	0	$280.00	$0	$0	$0	$0	$0	$0
	1b)Offsite storm outfalls 126th Street and 127th Street	i)Demo 60" Pipe for Replacement	Demo approximately 1,050 feet of 60" existing pipe	linear foot	1050	$200.00	$210,000	$21,000	$21,000	$21,000	$63,000	$336,000
		ii) Replace 60" Pipe with 4' x 7' Concrete Box Section	Replace approximately 730 feet of 60" existing pipe with 4' x 7' concrete box sections	linear foot	730	$3,000.00	$2,190,000	$219,000	$219,000	$219,000	$657,000	$3,504,000
		iii) Replace 60" Pipe with 4' x 8' Concrete Box Section	Replace approximately 320 feet of 60" existing pipe with 4' x 8' concrete box sections	linear foot	320	$3,200.00	$1,024,000	$102,400	$102,400	$102,400	$307,200	$1,638,400
		iv) Pile Supports	Assumes the same pile support as the 60in pipe	pile footage	40,656	$70.00	$2,845,920	$284,592	$284,592	$284,592	$853,776	$4,553,473
	1c) Offsite storm water quality treatment devices	i) Treatment unit	Assumes no property acquisition costs	lump sum	2	$10,000,000.00	$20,000,000	$2,000,000	$2,000,000	$2,000,000	$6,000,000	$32,000,000
2	**Sanitary Sewer**		It is assumed that the current DEP treatment plant has the capacity to, and will accept the additional flow and that the current CSO configuration is adequate and will still meet the permit requirements.									$57,500,000
	2a)New Sanitary Sewage Pump Station	i) Pump Station Design Assumptions	Approximately 2.8 MGD of sanitary flow only will travel by gravity sewer to a new pump station located within the WP district. The station footprint is 30 feet x 30 feet and the depth below grade is assumed to be 20 feet. The pump station is was assumed to located toward the middle of the WP District. The station will be designed to handle potential future flow from the area north of the WP District along Flushing Bay. This scheme was chosen because NYCDEP stated that the existing pump station at 114th Street cannot take any addition sanitary flow. A 50% contingency has been added to this item due to complexity of design and alternative scenario analysis. $500,000 has been added for foundation costs. $125,000 was added for the increase in material disposal costs. Assumes no property acquisition costs.	lump sum	1	$8,925,000.00	$8,925,000	$892,500	$892,500	$1,874,250	$4,462,500	$17,048,750
	2b)Offsite connection from WP District pump station to 108th or Ditmars	i) 12" DIP Force main	All sanitary flow from the WP District Pump station to a discharge pressure relief manhole in either 108th Street or Ditmars Boulevard will be by force main along property owned or controlled by NYC. Assume sewer installation by trenching. $500,000 added for the import and export of soils with the increase in fuel costs	linear foot	5,000	$825.00	$4,625,000	$462,500	$462,500	$971,250	$1,387,500	$7,908,750
		ii) Installation under the Grand Central Parkway	Install/micro tunnel a 24-inch sleeve line under the Grand Central Parkway	linear foot	400	$1,500.00	$600,000	$60,000	$60,000	$126,000	$180,000	$1,026,000
		iii) Disposal of material displaced during excavation	assumes that material removed/displaced during pipe installation with have to be disposed of in accordance with all applicable NYS regulations	tons	6,417	$125.00	$802,083	$80,208	$80,208	$80,208	$240,625	$1,283,333
	2c)Onsite sanitary sewer system	i) 10 in dia pipe		linear foot	9,193	$223.66	$2,056,075	$205,608	$205,608	$431,776	$616,823	$3,515,886
		ii) 12 in dia pipe		linear foot	431	$264.19	$113,855	$11,386	$11,386	$23,910	$34,157	$194,693
		iii) Manholes		manhole	54	$4,025.00	$217,350	$21,735	$21,735	$45,644	$65,205	$371,669
		iv) Piles	Cost for 16 in pile supports have been assumed for all piping less than 16inches (Zone one assumed at 55%, Zone 2 at 45% = 88ft/pile)	Pile Footage	211,724	$70.00	$14,820,683	$1,482,068	$1,482,068	$1,482,068	$4,446,205	$23,713,092
		v) Disposal of material displaced during excavation	assumes that material removed/displaced during pipe installation with have to be disposed of in accordance with all applicable NYS regulations	tons	11,976	$125.00	$1,497,039	$149,704	$149,704	$149,704	$449,112	$2,395,262
3	**Road Work**											
	3a)Road Construction	i) Paving material including DOT sub-base and grading	The estimate includes a NYCDOT engineered pavement that will be necessary in order to accommodate site settling. These costs are based on existing supply and current petroleum costs. The street width has been estimated to be approximately 60ft.									$14,300,000
	3b)Street lighting	i) Lights and light poles	Light spacing assumed to be 1 light every 150 feet.	square foot	727,610	$6.50	$4,729,465	$472,947	$472,947	$472,947	$1,418,840	$7,567,144
	3c)Sidewalks and curbs	i) Concrete Sidewalk	Assumes all sidewalks and curbs will have to be replaced to their current state of disrepair and that they will be 10ft wide	light pole	75	$7,875.00	$587,685	$58,769	$58,769	$58,769	$176,306	$940,298
		ii) Steel faced concrete curb	Assumes all sidewalks and curbs will have to be replaced to their current state of disrepair	square foot	223,880	$8.00	$1,791,040	$179,104	$179,104	$179,104	$537,312	$2,865,664
	3d)Street Trees and Tree Pits	i) Trees	A tree will be planted every 20 linear feet of street.	linear foot	22,388	$55.00	$1,231,340	$123,134	$123,134	$123,134	$369,402	$1,970,144
		ii) Tree pit pavers	It is assumed 3 square yards of tree pit pavers will be used for each tree	tree	560	$790.00	$442,163	$44,216	$44,216	$44,216	$132,649	$707,461
	3e)Signage	i) Willets Point signage	Each intersection is assumed to have 5 signs and 20 on-site intersections were counted, in addition a sign every 100 linear feet a street will be installed.	square yard	1,679	$55.00	$92,351	$9,235	$9,235	$9,235	$27,705	$147,761
				sign	223	$250.00	$55,673	$5,567	$5,567	$5,567	$16,702	$89,076
4	**Water**		No piles will be assumed to be needed for the 20" piping. It is assumed that the 72" distribution pipe will remain in Willets Point Blvd, and will be tapped for service. Costs assume mechanical joints for all pipe. All pipe will have approximately 4 ft of cover. $20 linear foot added for shoring excavations. General conditions for this section have been increased to 21% (10% plant & 10% overhead)									$13,600,000
	4a)Domestic water mains	i) 20" DIP	Prices include building connections. Water demand was based on assumed rates for sewage consumption for each building type. For this cost estimate a mean water pipe diameter of 20-inch was assumed.	linear foot	13,496	$513.00	$6,923,397	$692,340	$692,340	$1,453,913	$2,077,019	$11,839,000
		ii) Tap	Cost to tap the 72" line for domestic and fire use in the district.	lump sum	1	$150,000.00	$150,000	$15,000	$15,000	$15,000	$45,000	$240,000
		iii) Disposal of material displaced during excavation	assumes that material removed/displaced during pipe installation with have to be disposed of in accordance with all applicable NYS regulations	tons	7,198	$125.00	$899,727	$89,973	$89,973	$89,973	$269,918	$1,439,565

Willets Point Infrastructure Opinion of Probable Cost - Municipal Services Alternative, August 22, 2008 - Exhibit "I"

In this estimate all roads remain in their current configuration and are public streets.

General Assumptions:

- All estimates are in 2008 dollars, construction costs have not been escalated for this estimate
- Construction costs associated with the development of individual parcels have not been included in this estimate.
- All roads have been filled to a resulting elevation equal to the legal grades currently on record with NYCDEP.
- Estimated costs represent environmental cleanup in accordance with all current regulations
- Estimated costs represent the installation of underground utilities, and street construction
- Costs for dewatering have not been included in this estimate however it may be necessary in some phases of construction due to shallow groundwater
- All construction will be built to NYC standards
- All utility estimates were based on an average size pipes, generic appurtenances and estimated lengths and depths, unless otherwise noted.
- Electrical estimates were based on generic distribution systems
- All infrastructure costs include materials and installation unless otherwise noted
- The following items including but not limited to; NYCDEP Discharge Permits, NYSDEC Wetland permits, USACE Waterfront Permitting, NYCDOS FMO Permit, NYSDEC SWPPP, NYSDEC Point Source Discharge Permit, Air Particulate Permit or any testing, reporting, labor, equipment and documentation required for these efforts are not included; timing for these efforts needs to be evaluated
- The estimate assumes that the project continues unabated, and on schedule
- No costs are included for coordination with structure erection, dewatering, archeological discovery or property purchase.
- There are also no costs associated with staged construction and coordination related to DOT, Con Edison, Phone/cable company/ Gas distribution system, the MTA, NYSDEC or NYSDEP.
- Subtotal values for items are rounded to the next $100,000
- There are no O&M costs associated with this effort as all streets are public.

Definitions:

Construction Cost (CC): Trade cost only. Does not include general conditions or overhead and profit
Design Cost: Assumes 10% of CC
CM/REI: Construction Manager/Resident Engineer. Assumes 10% of CC
General Conditions: Assumes 10% of CC. (This probably will need to be adjusted to include overhead and profit)
Contingency: Assumes 30% of CC unless otherwise noted.
Subtotal: Total cost of each major item i.e. Storm water, Roadwork, Electric, etc.
Sustainability Initiative: Identifies opportunities where including "green" infrastructure items should be investigated
Remediation: Clean up of environmental contamination required by city state of federal regulation of law and/or to be in compliance with existing State cleanup programs
Engineering Controls: Environmental mitigation methods used to remove potential for exposure to any existing or suspected contaminants (In compliance with existing State guidelines)

Item #	Item	Item Description	Detailed Assumptions	Units	Quantity	Lump Sum/ Unit Price	Construction Cost	Design Cost	CM/REI	General Conditions	Contingency	Subtotal
5	Electric		All infrastructure will be built to ConEd specifications and it is assumed that there will be no pile support needed for electrical cables and feeders. These Costs do not include the relocation of the electrical feeders currently located in 34th Ave. and Willets Point Blvd. or the relocation of the exting 5 transformers located in parcel A-20.									$6,000,000
	5a) Electric utility and distribution system.	i) Medium voltage distribution cabling.	Includes Medium voltage dist cabling in order to move the lines underground	linear foot	33,582	$65.00	$2,692,800	$269,280	$269,280	$269,280	$807,840	$4,308,480
		ii) Cutover	Assumes 160 man-hours per cutover and assumes 2 cutovers will have to take place to run new distribution cabling underground	cutover	2	$32,000.00	$64,000					
		iii) Disposal of material displaced during excavation	assumes that material removed/displaced during pipe installation with have to be disposed of in accordance with all applicable NYS regulations	tons	7,960	$125.00	$995,022	$99,502	$99,502	$99,502	$298,507	$1,592,036
6	Telecom											$0
	6a) Telephone System		All infrastructure will be provided by others	linear foot		$0.00	$0	$0	$0	$0	$0	$0
	6b)Cable/broadband system		All infrastructure will be provided by others	linear foot		$0.00	$0	$0	$0	$0	$0	$0
7	Gas		Gas line installations are assumed to be incompliance with standard ConEd requirements									$5,600,000
	7a)Onsite 6"gas distribution network	i) Pipes and valves		lump sum	1	$500,000.00	$500,000	$50,000	$50,000	$50,000	$150,000	$800,000
		ii) Trenching and bedding		lump sum	1	$900,000.00	$900,000	$90,000	$90,000	$90,000	$270,000	$1,440,000
		iii) Labor		lump sum	1	$1,300,000.00	$1,300,000	$130,000	$130,000	$130,000	$390,000	$2,080,000
		iv) Engineering and management		lump sum	1	$300,000.00	$300,000	$30,000	$30,000	$30,000	$90,000	$480,000
		v) Disposal of material displaced during excavation	assumes that material removed/displaced during pipe installation with have to be disposed of in accordance with all applicable NYS regulations	tons	3,980	$125.00	$497,511	$49,751	$49,751	$49,751	$149,253	$796,018
8	Demolition		Existing Conditions based on NYCDOF, RPAD 2005 business information provided by the NYCEDC									$5,000,000
	8a) Roadway removal	i) Pavement removal	Existing average road width is 65ft. Only pavement removal is included in this cost no soil removal. Estimated costs for sidewalk removal are less than or equivalent to road removal and have been incorporated into this cost.	square foot	727,610	$3.00	$2,182,830	$0	$109,142	$218,283	$654,849	$3,165,104
		ii) Structure/utility removal (light posts etc.)	There are minimal above ground utilities currently in the area. Lump sum includes approximately 75 street lights and $25,000 for various other structures/surface utilities.	lump sum	1	$100,000.00	$100,000	$0	$10,000	$10,000	$30,000	$150,000
		iii) Curb removal	Assumes that 75% of the existing area roads have curbs	linear foot	16,791	$4.00	$67,164	$0	$6,716	$6,716	$20,149	$100,746
	8b)Utility shut-off	i) Shutting off and abandoning all existing utilities	Shut off of utilities parcel wide. This cost does not account for the shut off and transfer of trunk and distribution lines (electric feeders, 24" gas main or 72" water line). 500,000 has been added for the removal and disposal of the existing storm sewer lines	lump sum	1	$1,000,000.00	$1,000,000	$0	$100,000	$100,000	$300,000	$1,500,000
												$1,700,000
9	Remediation		Cleanup costs based on phase II recommended strategy.									
	9a) Catch Basin Removal	i) Removal of catch basin and associated contaminated soil	Removal of 30 catch basins 15 with associated contamination	day	15	$2,000.00	$30,000	$3,000	$3,000	$3,000	$9,000	$48,000
		ii) Material Sampling	Disposal samples require 1 per 500 tons with an addition 6 end point samples per building	sample	915	$750.00	$685,913	$68,591	$68,591	$68,591	$205,774	$1,097,460
		iii) Material Removal	Removal of 50cyds per dry well is required. 50% of the material will be classified hazardous and 50% will be classified petroleum contaminated. Removal includes sanitary septic tanks and floor drains. (numbers have changed to include the increase in disposal cost)	tons	1,275	$225.25	$287,194	$28,719	$28,719	$28,719	$86,158	$459,510
												$3,500,000
10	Site Fill											
	10a)Standard Fill (density of approximately 125pcf)	i) Fill for roadways	Assumes standard fill in order to bring the site back to the legal grades identified by NYCDEP. This does not include fill to correct for any drainage problems created on private parcels due to filling in the ROWs.	cubic yards	30,000	$30.00	$900,000	$90,000	$90,000	$90,000	$270,000	$1,440,000
		ii) Spreading and compacting		cubic yards	30,000	$5.00	$150,000	$15,000	$15,000	$15,000	$45,000	$240,000
		iii) Replacement Fill	Includes the fill displaced during remediation and utility installation and demolition	cubic yards	31,636	$30.00	$949,071	$94,907	$94,907	$94,907	$284,721	$1,518,514
		iii) Spreading/ compacting		cubic yards	31,636	$5.00	$158,179	$15,818	$15,818	$15,818	$47,454	$253,086
												$187,200,000
	Construction Subtotal											

$190,000,000
Total Project Cost

APPENDIX J

LEED-ND PROJECT CHECKLIST

LEED for Neighborhood Development Pilot
Draft Project Checklist

Project Name: _____

Project City: _____ Project State: _____

***Note**: Registration for the LEED for Neighborhood Development Pilot Program is closed; registration for the fully launched program is planned to open in late 2009, pending USGBC member ballot approval.

Yes	?	No		
			Project Totals (Pre-Certification Estimates)	106 Points
			Certified: 40-49 points **Silver**: 50-59 points **Gold**: 60-79 points **Platinum**: 80-106 points	

Yes	?	No			
			Smart Location & Linkage		30 Points
Yes			Prereq 1	**Smart Location**	Required
Yes			Prereq 2	**Proximity to Water and Wastewater Infrastructure**	Required
Yes			Prereq 3	**Imperiled Species and Ecological Communities**	Required
Yes			Prereq 4	**Wetland and Water Body Conservation**	Required
Yes			Prereq 5	**Farmland Conservation**	Required
Yes			Prereq 6	**Floodplain Avoidance**	Required
			Credit 1	**Brownfield Redevelopment**	2
			Credit 2	**High Priority Brownfields Redevelopment**	1
			Credit 3	**Preferred Location**	10
			Credit 4	**Reduced Automobile Dependence**	8
			Credit 5	**Bicycle Network**	1
			Credit 6	**Housing and Jobs Proximity**	3
			Credit 7	**School Proximity**	1
			Credit 8	**Steep Slope Protection**	1
			Credit 9	**Site Design for Habitat or Wetlands Conservation**	1
			Credit 10	**Restoration of Habitat or Wetlands**	1
			Credit 11	**Conservation Management of Habitat or Wetlands**	1

LEED for Neighborhood Development Pilot
Draft Project Checklist

Yes	?	No	Neighborhood Pattern & Design	39 Points

Yes			Prereq 1	**Open Community**	Required
Yes			Prereq 2	**Compact Development**	Required
			Credit 1	**Compact Development**	7
			Credit 2	**Diversity of Uses**	4
			Credit 3	**Diversity of Housing Types**	3
			Credit 4	**Affordable Rental Housing**	2
			Credit 5	**Affordable For-Sale Housing**	2
			Credit 6	**Reduced Parking Footprint**	2
			Credit 7	**Walkable Streets**	8
			Credit 8	**Street Network**	2
			Credit 9	**Transit Facilities**	1
			Credit 10	**Transportation Demand Management**	2
			Credit 11	**Access to Surrounding Vicinity**	1
			Credit 12	**Access to Public Spaces**	1
			Credit 13	**Access to Active Public Spaces**	1
			Credit 14	**Universal Accessibility**	1
			Credit 15	**Community Outreach and Involvement**	1
			Credit 16	**Local Food Production**	1

LEED for Neighborhood Development Pilot
Draft Project Checklist

Yes	?	No			
			Green Construction & Technology		**31 Points**
Yes			Prereq 1	**Construction Activity Pollution Prevention**	Required
			Credit 1	**LEED Certified Green Buildings**	3
			Credit 2	**Energy Efficiency in Buildings**	3
			Credit 3	**Reduced Water Use**	3
			Credit 4	**Building Reuse and Adaptive Reuse**	2
			Credit 5	**Reuse of Historic Buildings**	1
			Credit 6	**Minimize Site Disturbance through Site Design**	1
			Credit 7	**Minimize Site Disturbance during Construction**	1
			Credit 8	**Contaminant Reduction in Brownfields Remediation**	1
			Credit 9	**Stormwater Management**	5
			Credit 10	**Heat Island Reduction**	1
			Credit 11	**Solar Orientation**	1
			Credit 12	**On-Site Energy Generation**	1
			Credit 13	**On-Site Renewable Energy Sources**	1
			Credit 14	**District Heating & Cooling**	1
			Credit 15	**Infrastructure Energy Efficiency**	1
			Credit 16	**Wastewater Management**	1
			Credit 17	**Recycled Content for Infrastructure**	1
			Credit 18	**Construction Waste Management**	1
			Credit 19	**Comprehensive Waste Management**	1
			Credit 20	**Light Pollution Reduction**	1

Yes	?	No			
			Innovation & Design Process		**5 Points**
			Credit 1.1	**Innovation in Design:** Provide Specific Title	1
			Credit 1.2	**Innovation in Design:** Provide Specific Title	1
			Credit 1.3	**Innovation in Design:** Provide Specific Title	1
			Credit 1.4	**Innovation in Design:** Provide Specific Title	1
			Credit 1.5	**Innovation in Design:** Provide Specific Title	1
			Credit 2	**LEED® Accredited Professional**	1

APPENDIX K

PUBLIC COMMENTS ON THE DGEIS

APPENDIX K.1

TRANSCRIPT OF THE NEW YORK CITY PLANNING COMMISSION PUBLIC HEARING ON THE WILLETS POINT DGEIS, AUGUST 13, 2008

THE CITY OF NEW YORK

CITY PLANNING COMMISSION

----------x

ULURP PUBLIC HEARING

RE: WILLETS POINT DEVELOPMENT PLAN

Nos. 10, 11, 12, 13, 14 & 15

----------x

New York University

School of Law

Vanderbilt Hall

Tishman Auditorium

40 Washington Square

South

New York, New York

August 13, 2008

3:36 p.m.

B e f o r e:

AMANDA M. BURDEN,

The Chair

APPEARANCES:

New York City Department of

City Planning Commissioners in attendance:

- Amanda M. Burden, The Chair
- Kenneth J. Knuckles, Vice Chairman
- Angela M. Battaglia
- Irwin G. Cantor
- Angela R. Cavaluzzi
- Alfred C. Cerullo
- Betty Y. Chen
- Maria M. Del Toro
- Richard W. Eaddy
- Nathan Leventhal
- Shirley A. McRae
- Karen A. Phillips
- Yvette V. Gruel, Calendar Officer
- Other City Planning staff

ALSO PRESENT:

- The Public
- The Press
- The Media

Marc Russo

Reporter

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PROCEEDINGS

THE CHAIR: Madame Secretary,
00:00:00 can you call the next item.
00:00:03 MS. YVETTE GRUEL: Borough of
00:00:07 Queens -- Borough of Queens, calendar nos. 10-15.
00:00:08 Calendar No. 10 CD 7 C 080221 MMQ.
Calendar No. 11 C 080381 ZMQ.
Calendar No. 12 N 080382 ZRQ;
Calendar No. 13 N 080383 HGQ;
Calendar No. 14 C 080384 HUQ;
Calendar No. 15 C 080385 HDQ;
A public hearing in the matter of
00:00:43 applications for amendments to the City Map, the
zoning map, amendment of the zoning resolution and
00:00:50 for the designation and the disposition of property
for the Willets Point Urban Renewal Plan for the
Willets Point Urban Renewal area.
Notice: A public hearing is also
being held by the Office of the Deputy Mayor for
Economic Development, in conjunction with the above
ULURP hearings, to receive comments related to a
Draft Environmental Impact Statement.
00:01:07 This hearing is being held

pursuant to the State Environment Quality Review
00:01:14 and the City Environment Quality Review.
00:01:16 THE CHAIR: I can't see the
Secretary, but I think she's finished.
MS. YVETTE GRUEL: Yes.
THE CHAIR: The first speaker on
this item is the Borough President of Queens, Helen
00:01:45 Marshall.
00:01:45 QUEENS BOR. PRES. MARSHALL: It's
00:01:49 a pleasure again, to once again be present to give
00:01:49 you my comments on the Willets Point Development
00:01:53 project.
00:01:54 As you know, for the record I am
Borough President Helen Marshall, the Borough
President of Queens.
Willets Point is at the heart of
many of the best things in Queens:
The U.S. National Tennis Center;
Home of the Mets and the fabulous
Citi Field, which is rising out of the ground
beautifully;
Flushing Meadows-Corona Park and
its many recreational facilities and cultural
institutions;

It is flanked by the vibrant
communities of Corona, East Elmhurst and Downtown
Flushing;
Easy access to both New York
City's airports; and
As readily accessible for mass
transit and also a transportation network serving
the region.
Since 1957, when I came to Queens,
I have seen Willets Point become increasingly
blighted and unsightly. Even till today I can walk
there. And everyday when I go home from work I pass
by. Okay?
The numbers and types of jobs
provided there are limited.
Due to the origins and historic
uses of the area, there are serious physical and
environmental limitations on the potential for
higher and better uses that would be expected in an
area so strategically well located.
There is no doubt that the
existing businesses and people who work there
provide valuable services and goods. However,
these activities are no longer compatible or

appropriate to the progress of the community, cultural institutions and recreational facilities that have grown up around Willets Point since its day as an isolated "valley of ashes."

In fact, right across Roosevelt Avenue, Muss is building fantastic, both residential development and large stores. All around Willets Point development is going on.

The Willets Point Development Plan is a product of many years of planning. This proposal evolved from an extensive and inclusive multiyear process of numerous sessions and town hall meetings. The result was the Downtown Flushing Development framework which identified Willets Point as the crucial and strategic connector between Corona and Flushing and East Elmhurst, where I live.

The plan proposes comprehensive and environmental remediation of the area -- I think that the environment is one of our greatest concerns. And I have read the report. It's not good -- new regional economic activity with a greater number of quality employment opportunities, complementary retail and services. And, of course,

new opportunities to simply enjoy more leisure activities; new green and open spaces and an enhanced waterfront.

My predecessor was able to get a beautiful new promenade along Flushing Bay. And when you look -- when you're on the promenade, you look into Willets Point.

In two weeks the eyes of the world will be on the USTA Open at the nearby National Tennis Center.

Last year the U.S. Open drew 700,000 fans. We make more money from the U.S. Open in those two weeks than we do between Shea and Yankee Stadium together.

In April of 2009 the gates of Citi Field and the Jackie Robinson Rotunda will open for the millions of Mets fan who faithfully support their team.

The recently opened swimming pool will become an even more popular spot when the adjoining skating rink is open.

Both of them are Olympic size.

The soon-to-be-expanded Queens Museum will draw new visitors to the area and a

wall of science and world-class science center are all part of the many such resources surrounding Willets Point.

The redevelopment of Willets Point will become a active 24-hour, year-around neighborhood with new residents bringing long-term economic benefits to queens, New York City and the entire region.

These applications would change the zoning, create a Willets Point Special District, designate an urban renewal area, create an urban renewal plan.

These actions have a very specific vision and framework for an active and sustainable future, very different from what is there today if it were to be left alone.

The language of the zoning regulation, special district and urban renewal plan are very specific to the point --

(Bell rings.)

QUEENS BORO. PRES. MARSHALL: Do you mind if I finish?

00:06:05 THE CHAIR: Only you.

00:06:07 Definitely.

00:06:08 QUEENS BOR. PRES. MARSHALL: Thank you.

00:06:10 I'm representing a lot of input.

00:06:11 THE CHAIR: I know you are so

00:06:13 I'll make a special exception.

00:06:13 QUEENS BOR. PRES. MARSHALL: Thank

00:06:14 you very much.

00:06:17 A plan -- district plan, urban

00:06:18 renewal plan which are specific to the point.

And important features include:

Expanding the size and layouts of blocks and streets;

The uses of allowed -- to be allowed;

00:06:28 Location of buildings on the blocks;

Maximum building heights and setback requirements;

Layout and qualities -- qualities of the extensive required open spaces;

00:06:28 Location and design of the street;

And continued City agencies and supervision are all identified.

As Chair of the Willets Point

Advisory Committee, I convened months of meetings and planning sessions with all the local stakeholders, elected officials, community board, property owners, civic and business organizations, the Mayor's Office, and several City agencies and have helped shaped the Willets Point Development Plan.

These meetings and planning sessions must continue, well after the review process, until the plan is fully implemented.

After reviewing the application, participation in numerous meetings, careful consideration of all written material submitted to me and listening to all the speakers at my public hearings, I recommend approval of this application with the following fifteen conditions to address the substantial issues that must be raised.

This is a complicated project.

The Willets Point Advisory Committee, comprised of the Queens Borough President, local officials, elected officials, representatives of Community Board #3, 4 and 7, and other community leaders, should be continued for the duration of this project, including during the

developer selection process and construction, implementation and all other phases of Willets Point development.

EDC must continue in its good faith efforts with the property owners to come to a fair and equitable agreement with the purchase of their land in the Willets Point project area and exhaust every means of negotiation before considering the use of eminent domain.

They deserve it.

EDC must make every effort to help tenant businesses relocate and reestablish themselves as ongoing entities.

EDC must make every effort to contact and help the current Willets Point workers with enhancement of their employment skills, find new employment and provide career counseling and other supportive services to assure that they are not adversely impacted by a new development at Willets Point.

La Guardia Community College has been selected to work with all those tenant workers and they're right actually on site. And they will do that so that the workers don't have to travel to

get out. And they do need help.

The entire Willets Point Development Project must proceed comprehensively and not be phased in.

For the first five years of the development process, beginning with the selection of a developer, $500,000 per year should be dedicated to capacity building that will allow local M/WBE's as minority and women-owned and local businesses to respond to Request for Proposals to provide any goods or services that would arise during and after construction is complete.

On the western side, Willets Point, the residential community is a Black and Latino community. On the eastern side it's an Asian community. And we have many very capable businesses and workers that could work here. And so they definitely need to be helped and to make sure they're represented.

00:06:49 THE CHAIR: So Madame Borough President, if you could kind of condense the closing because I know there's lots -- as you can see in the audience, there are lots of people who'd 00:09:37 like to speak pro and con.

00:09:37 QUEENS BOR. PRES. MARSHALL: A convention center with an adjoining hotel. It's actually really -- a convention center with an 00:09:48 adjoining hotel must be included to help any RFP 00:09:48 proposals that -- that this is a request by our Chamber of Commerce to advance economic development to allow them to have trade shows so that they can bring in new business for the Borough and for our City.

To increase affordability and development, there should be fifty percent market rate, thirty percent moderate income and twenty percent affordable.

And I believe that many of the groups that are really, you know, fighting for affordable housing, I think that that would meet their requirement. But I do think that the housing and income level of people is something that has to be considered, very definitely.

00:10:30 EDC and the Parks Department must develop additional green space on the Flushing River and extend the Flushing Bay promenade to the Department of Transportation facility. This would enable a direct route from the promenade into

Flushing.

A retail and commercial mix in the Willets Point -- and recreation district should be complementary to the neighboring commercial centers in both Downtown Flushing and Corona and East Elmhurst.

An initial $5 million Traffic Infrastructure Mitigation plan should be established and increased if necessary. The City should monitor potential impacts of area traffic and Infrastructure related to development and implement appropriate mitigation measures in a timely manner.

I'm just going to skip over.

00:11:12 In closing, --

00:11:12 THE CHAIR: If you could just

00:11:16 give your concluding remarks, that would be great.

00:11:16 QUEENS BOR. PRES. MARSHALL: Okay.

00:11:17 In closing -- in closing, the

00:11:20 Willets Point project is about the future, a future that will employ nearly 18,000 people during construction, and more than 5,300 people when complete. A future that includes new residences, fans, the U.S. Open so on and so forth.

I'll skip over that.

Willets Point is a major development project in Queens and for all of New York City. If allowed to become the sustainable, beautiful place to visit, shop, live and work at, that we have planned, then everyone wins, the workers, the residents, the visitors and also all the local businesses will have great new places to carry on their business.

00:11:55 Thank you very much.

00:11:56 THE CHAIR: Madame Borough President, thank you so much.

00:11:57 Let me just see if there are any

00:11:59 questions for you from the Planning Commission.

00:12:01 (No response.)

00:12:01 THE CHAIR: There are not. But

00:12:03 we are pleased to see you testify on two projects today.

00:12:05 Thank you so much.

00:12:12 The next speaker is Madelyn Wils; Who will be followed by Kevin McCarthy; and

Then Jonathan Gouveia.

And I just want to tell the

audience that traditionally we have a half an hour of speakers in favor and then we switch to speakers in opposition. And we are at the speakers in favor part of the testimony right now.

00:12:33 MS. MADELYN WILS: Hello again.

Willets Point is an important location at the crossroads of Queens. It has great public transit and highway access, is minutes from our two airports and is located between two vibrant communities.

Willets Point is also surrounded by great recreational cultural and entertainment venues. However, the entire 62-acre site suffers from historic and ongoing environmental contamination.

The site was a coal ash dump, or as the Great Gatsby called it, "the Valley of Ashes." On top of that is the problem of ongoing petroleum and contaminants continually being spilled or dumped on a regular basis.

The site is regularly flooded and suffers from inadequate infrastructure. There is no sanitary sewer at all. The site has a poorly functioning storm sewer, high water table and is

within the hundred-year floodplain.

These constraints make parcel-by-parcel development virtually impossible. Willets Point needs a large-scale environmental cleanup. The entire site must be raised two to six feet.

And you will hear testimony from our consultant why it is not feasible to install storm water infrastructure without raising the site by at least a few feet.

Major investment and on and off-site Infrastructure is needed. Yet even with these constraints it is clear that the redevelopment of Willets Point would be a great benefit to the City as a whole and especially to Queens.

The City's plan was born out of a community board -- a community-based planning effort, started in 2002, when the former Deputy Mayor created the Downtown Flushing Task Force to create a series of recommendations for the Flushing area.

During that process it became very clear from the electeds, business people and

residents, that in order for the area to grow the City had to do something about Willets Point. Since this task force issued its recommendations in 2004, the City has done an enormous amount of work to create a viable plan based on the community vision.

The development plan includes mixed income housing, community space, K through 8 public school, eight acres of open space, a mid-sized convention center, hotel, office and retail space.

The development plan also includes twenty percent of units for affordable housing. We've been listening carefully to the community board, Queens Borough President Marshall, and Council Member Monserrate, as well as other groups, about increasing that number.

We will do everything we can to address the affordability issue. But we ask everyone to be aware of the importance of balancing all of the priorities of this plan so that it remains viable and buildable.

You will be hearing from many speakers today, including those who will address

our approach to the needs of the business, property owners, tenants and workers who are at Willets Point today. We take this issue very seriously and are prepared to go to great lengths to address their needs understanding this is a critical component to any redevelopment.

As we've stated publicly many times over, we are fully committed to negotiating private acquisition and relocation deals with any and all property owners willing to work with us, willing being the operative word.

To this end, we are pleased to have our first four deals in hand.

Having said that, the City has an obligation to its taxpayers to not make gifts of public funds. We've encouraged businesses to get their own appraisals and we are prepared to make fair and sensible deals based on fair market value of the property.

00:16:07 THE CHAIR: Madelyn, you are not the Borough President so you have three minutes.

(Laughter.)

MS. MADELYN WILLS: Okay.

00:16:12 Eighteen thousand construction

00:16:13 jobs, 5,300 permanent jobs.

We recognize this is a complicated

00:16:20 project. We believe strongly that in this

00:16:21 redevelopment that the rewards are worth the risks.

00:16:24 Thank you very much.

00:16:25 THE CHAIR: Thank you very much.

00:16:26 Let me see if there are any

00:16:27 questions for you before you leave the podium.

00:16:30 Angela Battaglia.

00:16:30 COMM. BATTAGLIA: With regard to

00:16:35 the existing businesses, you mentioned already that

00:16:38 there are four owners that you've already arranged relocation.

MS. MADELYN WILS: Yes.

COMM. BATTAGLIA: I'm not too sure how many workers that represents. But I know

00:16:50 in total there are 260 business, many of which are renters.

I also understand from the discussion the other day, that the City can only negotiate with the property owner, the owner of the business. So I just wanted to ask you, if this is within your purview, to discuss how you can help all of the workers or all of the businesses that

are renting, to relocate and establish other venues to retain their workers.

You talked about all the jobs it

00:17:22 will create but let's talk about all the jobs that

00:17:26 are there and how we protect them.

00:17:26 MS. MADELYN WILLS: Yes.

Well, we've had extensive outreach. And we will get into this. Jonathan Gpuveia, my colleague, will get into this extensively.

But I will say that we also have just selected a company that will help these businesses relocate and he will get into the details much more finer.

00:17:45 COMM. BATTAGLIA: Thank you.

00:17:45 THE CHAIR: Any other questions

00:17:47 from the Commission for Madelyn Wils?

00:17:49 (No response.)

00:17:49 THE CHAIR: Okay. Madelyn,

00:17:50 thank you very much.

00:17:51 MS. MADELYN WILLS: Thank you.

00:17:52 THE CHAIR: As is our custom,

00:17:55 any elected officials are given the courtesy of speaking first. And I've been just notified that

00:18:05 New York State Senator Toby Ann Stavisky is here to testify.

00:18:19 SENATOR STAVISKY: Thank you and thank you for your patience.

There's been a reference to the Valley of Ashes. Willets Point is cited in one of all time classics of American literature, the Great Gatsby.

00:18:41 And F. Scott Fitzgerald - let me read this - calls Willets Point a valley of ashes...bounded on one side by a small foul river...a fantastic farm where ashes grow like wheat into ridges and hills and grotesque gardens.

00:19:00 And I'm here today to say let's change it.

00:19:05 I'm going to leave my testimony. I'm going to be very brief.

00:19:07 But towards the end of session we passed Brownfields legislation. And I was very proud to speak on the floor in favor of the brownfield legislation because it's as though it were tailor-made for Willets Point.

Willets Point is an environmental nightmare, as you know.

I'm going to skip over much of this. But let me just say that whether you're watching the U.S. Open Tennis matches, and it's a major, major revenue producer for New York City and New York State, or whether you enjoy walking in Flushing Meadows Park or eating in restaurants in Flushing, in my district, or in Corona, Queens has so much to offer.

And there's no reason why Willets Point shouldn't become one more reason to be proud of our home. Hopefully in the future when they talk about the valley of ashes, instead they talk about the Phoenix bird as it rises from the ashes. Because that's what Willets Point has the potential to be. It is a -- to me, the economy is the major issue today and everything else sort of pales compared to the economy.

And Willets Point has the -- is going to be the opportunity to be almost an economic engine for New York City and indeed the State.

We need to diversify our base. We can't rely so heavily on Wall Street. You know, one dollar in five in New York State revenue comes from

Wall Street. And we've got to have the public/private partnership to develop Willets Point, to take care of the existing businesses and yet at the same time benefit the community.

So I thank you for your patience.

And I just want to add one other -- I don't if you saw the story in Sunday's New York Times. A very interesting story where two young people left Shea Stadium and wandered into the Willets Point.

And they're quoted as saying, we were looking at each other and hoping we'd get out alive. It certainly wasn't something I want to experience again.

These are two Mets fans who have taken it upon themselves to be almost a citizen voice for the improvement of Willets Point.

We want to make sure that the businesses are taken care of and at the same time that the community at large can benefit for the opportunity that Willets Point offers.

00:21:51 So I thank you all very much.

00:21:51 THE CHAIR: Thank you, Senator. Thank you for coming.

The next speaker is Kevin McCarthy;

Who will be followed by Jonathan Gouveia; and

00:22:10 Then Lisa Bova Hiatt.

00:22:10 MR. KEVIN MCCARTHY: Good afternoon.

I'm Kevin McCarthy from HDR Engineering.

I want to present an overview of the hazardous materials and infrastructure segments of this project.

The following is a brief list of existing conditions, the studies performed and the findings of those.

The entire district is located on a former ash landfill. As a result, the majority of the site has settled below the 100 year FEMA floodplain and established levels below grade.

The current storm sewer elevation does not allow proper drainage resulting in runoff from automotive and manufacturing businesses that contain petroleum and chemicals documented by New York State DEC swimmers.

The current storm system has no ability to pretreat this contaminated water prior to discharge into the Bay and no sanitary or industrial sewer connection exists. The result is the discharge from all over the 200 businesses to leach fields, pits, brown surfaces, with no real treatment.

The following assessments and investigations have been performed on the project so far.

A district-wide, phase 1 assessment was performed to identify known and potential environmental conditions that would need to be addressed during any future work.

A phase 2 investigation was completed to confirm the general conditions of the shallow fill and brown water. And an elevation survey was completed of the roadways.

This was done to determine the amount of fill that would be necessary to raise the site to the one hundred year floodplain. It was also used to establish difference between the current site elevation and the legal grades established forty years ago.

After the survey was completed, elevations and routes for a new storm sewer and sanitary sewer were evaluated including a video inspection of existing outfalls.

Finally, a geotechnical investigation has been performed to evaluate the feasibility of possible foundations and determine the sediment weights of the fill.

The following issues exist replacing infrastructure without the full district development.

In order to place fill and raise streets high enough for a storm sewer to function, a wall will be made essentially around numerous properties limiting access and causing flooding of all those parcels. Storm water pretreatment systems cannot be installed in the roadways so any new storm sewer will direct all of the pollutants from the site directly to Flushing Bay.

Remediation can take many years and even decades, as no requirements for completion can be imposed by the City and the State even under the Brownfields Cleanup program.

Advantages of a full district

development, including filling all the roadways to the 100-year flood elevation will allow each site to be brought to that elevation at one time.

Environmental remediation can be performed all at once rather than one site at a time and can be coordinated with the development and managed and reviewed by the City.

The detention of sustainable storm sewer options can be incorporated into the overall development to meet the most stringent DEC outfall criteria. And a new sanitary pump station can be designed, properly sized and located, to match the large-scale development preventing the future upgrade required as a result of individual site development.

Thank you.

THE CHAIR: Let me see if there are any questions for you.

Irwin Cantor.

COMM. CANTOR: Mr. McCarthy, if I understood you correctly, you were saying in order to put in the system, the street sewer system, you would have to bring a new street up to the new grade which is above the hundred-year flood

level.

And if you did that with the existing businesses remaining, you'd have a Tik-Tak-Toe situation of high streets and low existing buildings?

MR. KEVIN MCCARTHY: Correct.

In fact, what we evaluated was the legal grade, first which is lower than the 100-year floodplain. And in many areas in Willets Point right now it's below basically legal grades. And you would have add two and half, about two and a half to three feet of fill in the southern end of Willets Point, which would essentially raise the roads up two and a half feet above the -- above the entrances of those facilities.

COMM. CANTOR: So all of those facilities are all legal grade currently, or a great number of them are?

MR. KEVIN MCCARTHY: Correct.

Most of the sites are at, I'll call it street grade, the curb and street grade. Then you've got -- that's just a few inches above the existing roadway. But you'd then be two and a half feet -- those sites would be about two and

half feet below the road. And you'd have no way to get storm sewer or storm water, when it rained, out of their proprieties into the elevated storm drain just because -- just basically because of the hydraulic --

00:26:46 COMM. CANTOR: So if and when you put in a sewer system, as certain arguments existed, leave us alone, put in the sewer system, you're saying if you were to put in the sewer, by its very nature, even if you went up to legal grade, not storm grade, not 100-year storm, even if you only went up to legal grade, you're saying the

00:27:11 street would still be higher than the business

00:27:12 enterprises adjacent to it?

00:27:13 MR. KEVIN MCCARTHY: Correct.

00:27:14 And, in fact, --

00:27:15 COMM. CANTOR: So they would be

00:27:16 in their own individual valleys?

00:27:17 MR. KEVIN MCCARTHY: There would be a valley.

And we looked at the existing

00:27:21 grades of the streets now just to see if you could

00:27:24 do it without bringing it to existing grade, and

00:27:26 that southern end of Willets Point does not

00:27:29 hydraulically work. You can't -- you can't drain.

00:27:31 You can't get the water from the edge out to the Bay without raising that legal grade which is about

00:27:36 two and half feet. So that's exactly we're saying.

00:27:37 COMM. CANTOR: Thank you.

00:27:38 THE CHAIR: Are there any other

00:27:40 questions for Mr. McCarthy?

00:27:42 (No response.)

00:27:43 THE CHAIR: Thank you very much

00:27:46 for your testimony.

00:27:46 The next speaker, as I said, is Jonathan Gouveia;

Then Lisa Bova Hiatt;

00:27:57 Then Dr. Gail Mellon.

00:27:57 MR. JONATHAN GOUVEIA: Thank you.

00:27:58 Good afternoon.

My name Jonathan Gouveia.

As Madelyn Wils stated earlier, I'm here to talk briefly about EDC's efforts around business relocation and tenant assistance.

You should have all received, in your packets, detailed information on our outreach strategy.

And just one point of

clarification, Gail DeNello (phonetic) of La Guardia Community College will discuss our strategy of assisting approximately 1,700 workers at Willets Point.

In regard to the relocation effort, EDC's primary goal is to work one-on-one with any interested Willets Point business or land owner, to negotiate the relocation or acquisition deals that meet their specific needs and allow them to grow and continue making contributions to our economy.

EDC knows that the businesses at Willets Point are important contributor to our economy and provide valuable goods and services to the City and the surrounding region. And we want to protect that.

EDC began meeting with businesses and land owners just over a year ago. In that time, EDC and its representatives have worked -- have worked hard to make contact with each of the approximate twenty owner occupants, 225 tenant businesses and 55 landlords. All tolled, we have held over 500 meetings, phone calls and e-mails.

We have written letters to

businesses and land owners encouraging them to contact us about entering into negotiations with us.

The most recent letter was sent last week.

Our outreach consultants from Howard Stein-Hudson have met with every business that was willing to talk. We're pleased to say that approximately 95 percent of businesses took advantage of this opportunity. And we hope that those who have not will soon be willing to contact us.

As a result of a comprehensive outreach strategy, we have made numerous offers and are currently engaged in active negotiations to several business owners and land lowers.

We've been discussing, and as Madelyn pointed out earlier, that in all of our relocation and acquisition deals, the City intends to pay fair market value for land, building and fixtures, the value of which will be determined by appraisal.

In the case of relocation, we will provide relocation benefits that includes, but are

not limited to, moving expenses, storage cost and other limited expenses.

We've announced four completed deals within the last two months. These deals, and those we are currently working on, provide clear evidence that EDC is committed to reaching as many negotiated settlements as possible.

We expect to make several more announcements within the coming weeks and months.

While we're pleased with our progress to date, we fully acknowledge that in a handful of cases, reaching a completed deal has been more challenging. Some businesses need large parcels of land. Others need site-specific or use-specific permits. And in some cases there have been some businesses that have simply refused to look at our potential relocation sites.

Regardless of the challenges presented by a small handful of businesses, we are committed to finding appropriately sized and zoned properties, working with relevant public agencies, to secure appropriate permits and we will continue to show all business owners potential relocation sites.

In short, we are open and willing to talk to any interested business or land owner about reaching a settlement at any time.

In addition to the owner occupant businesses and land owners, Willets Point is compromised of roughly 225 tenant businesses.

Our efforts to talk to tenant businesses began in February 2008 when we set up a mobile outreach office in Willets Point to have one-on-one sessions with the tenant businesses and gather information about their operations.

And we recently, as Madelyn noted, selected a relocation expert that will begin outreach later this summer and kickoff negotiation and site investigations with tenants later following ULURP approval, should we get it.

In closing, I would reiterate that EDC is happy with its progress, but knows that there is more work to be done. We fully expect momentum to continue to build --

00:31:41 THE CHAIR: You have to conclude.

00:31:43 MR. JONATHAN GOUVEIA: Okay. -- with more and more businesses and land owners

engaging us in negotiations.

THE CHAIR: Thanks very much.

Let me see if there are any questions.

Yes, Karen Phillips.

00:31:53 COMM. PHILLIPS: You mentioned
00:31:55 the work that you're doing on the 225 tenant
00:31:57 businesses. Are the majority of those tenant
00:32:00 businesses in auto-related uses?

And my other question is, if there
00:32:07 was any effort to identify sites and perhaps --
00:32:12 because I know we do have the industrial parks that
00:32:17 were set in the industrial strategy that the Mayor
put together a couple of years ago. But in a way
00:32:24 of creating a kind of auto-related kind of center
00:32:30 where they could relocate. Because some of them
00:32:33 are -- benefit from co-location.

MR. JONATHAN GOUVEIA: Right.

COMM. PHILLIPS: Is that something
00:32:39 that's been looked at all in terms of the areas
00:32:42 that have been set aside for industrial areas?

00:32:44 MR. JONATHAN GOUVEIA: As I mentioned, we haven't gotten into in-depth discussion with the tenants. We've hired or we're

in the process of hiring a tenant relocation specialist. So this sort of ongoing conversation about what their business -- where they want to be located, whether they want to co-locate, will come -- will come -- will become apparent through that process, which we'll begin later or towards the end of the summer or early fall.

In preliminary conversations that we've had, not all businesses want that. So what we really try to do is place business where they think it makes the most sense for them. We're certainly
00:33:23 open to looking at what works for the businesses.

00:33:23 COMM. PHILLIPS: Okay.

00:33:25 THE CHAIR: Yes. Irwin Cantor.

00:33:27 COMM. CANTOR: But to further
00:33:30 the other question, which I think was a great
00:33:34 question, we created new areas for the fish market.
00:33:40 We created a new area for the grocery market. So
00:33:44 conceptually, would it not be an easier, if I may,
00:33:48 to find an area where these auto-related
00:33:54 organizations can go to?

00:33:55 You know and we know businesses
00:33:59 tend congregate. They feed off each other, --
00:34:01 MR. JONATHAN GOUVEIA: Right.

COMM. CANTOR: -- whether it be the fish, whether it be the wholesale grocery, whether it be the Diamond District.

And your answer did not seem to be positive. It was kind of, we'll see what develops.

And I would follow Commissioner Phillips and encourage you guys to try and find an area that can accommodate a large number of these businesses who may wish to continue to feed off each other.

MR. JONATHAN GOUVEIA: I didn't mean to suggest that we'll see what develops. What we want to do is really understand what the businesses want and need. But, again, your points are duly noted.

Thank you.

THE CHAIR: Yes. Angela.

COMM. CAVALUZZI: I do want to chime in that I think the idea of moving all the businesses to one location or finding a suitable location for many of them would be probably the way to go.

What type of assistance would they be given? Would they be given relocation

assistance? Would they be given startup money to configure their new space?

MR. JONATHAN GOUVEIA: The specific benefits packages was laid out in the City Rules and there's an exhaustive list. But it would be some moving expenses, storage expenses, other sort of setup costs, pretty reasonable costs that would be covered.

COMM. CAVALUZZI: Thank you.

THE CHAIR: If you could send that to the commission, I think we would be interested in it.

Are there any other questions from the Commissioners?

(No response.)

MR. JONATHAN GOUVEIA: I think some of the details actually are in the package. But we can provide you with more.

THE CHAIR: I think you could probably just send it to us.

MR. JONATHAN GOUVEIA: Okay. All right.

THE CHAIR: Thanks very much. The next speaker is Lisa Bova

Hiatt.

MS. LISA BOVA HIATT: Good afternoon.

My name is Lisa Bova Hiatt. And I'm the Deputy Chief in the Office of the Corporation Counsel.

My primary responsibility is overseeing the acquisition of property by eminent domain for the City of New York.

I'm here to briefly to discuss the eminent domain process.

I'd like to start by saying that despite what some people may think, the use of eminent domain is rarely a government's first choice. And it's used judiciously and thoughtfully by the City of New York to further its public projects and always in accordance with the rules and procedures set forth in the Eminent Domain Procedure Law.

As in virtually every public project undertaken by the City of New York, we're committed to negotiating with the property owners or the property owners of Willets Point before moving ahead with the acquisition of property by

eminent domain.

With respect to the eminent domain process, as you're painfully aware, unfortunately the acquisition of property by the City of New York, whether by negotiated purchase or by eminent domain, must first meet the ULURP. And assuming that the City receives the requisite approvals after ULURP is complete, the City plans to hold a hearing under the Eminent domain Procedure Law.

The purpose of the Eminent Domain Procedure Law hearing is to inform the public and review the public use to be served by the proposed public project and the impact on the environment and the residents of the locality where such project is going to be constructed.

At the EDPL, evidence is presented that: Explains and demonstrates the public use;

Benefit and purpose presented or to be served by the public project;

The impact of the project on the environment; and

The residents of the locality where the project will be constructed;

The proposed location or alternate

location of the project; and

The reason for the selection of the proposed location that has been designated for the project.

Within ninety days after the conclusion of the hearing, the City will make its determinations and findings concerning the proposed project.

After the determinations and findings are issued, the City will continue to use its best efforts to negotiate with private property owners to acquire their property by negotiated acquisition in lieu of eminent domain.

If negotiated acquisitions cannot be reached, the City will commence an action to acquire the property for the Willets Point Project by eminent domain and follow the procedures set forth in the Eminent Domain Procedure Law.

After the City has acquired title to the property, it plans to assist the owners and businesses in relocation, as Jonathan, my colleague, has explained.

After -- moving onto probably the most important component for both the businesses

and the property owners is the idea of compensation.

An owner of property acquired by eminent domain is entitled to just compensation and the sale of just compensation by an appraisal prepared by an independent appraiser. And the City authorizes 100 percent of the advanced payment or 100 percent of the appraised value.

Any property owner who feels that --

00:39:12 THE CHAIR: You are going to have to conclude.

00:39:13 I want to remind everybody that the three-minute limit is it. And you have to pace yourself accordingly because you're going to find yourself, as Lisa has, right in the middle of her

00:39:25 explanation.

00:39:25 MS. LISA BOVA HIATT: On my last sentence.

THE CHAIR: One sentence.

00:39:26 MS. LISA BOVA HIATT: An owner who believes that the City's payment for their property does not constitute just compensation may file a claim for additional compensation and then

00:39:33 it will be adjudicated in the courts.

00:39:34 THE CHAIR: Okay. There may be

00:39:36 questions for you.

00:39:37 Any questions from the

00:39:38 Commissioners?

00:39:41 Yes, Karen Phillips.

00:39:41 COMM. PHILLIPS: I believe Ms.

00:39:45 Wils commented that they're asking the owners to do

00:39:50 their own appraisal. Is that the normal process or

00:39:53 is it more after you negotiate that the City does

00:39:59 the appraisal or orders the appraisal, but

00:40:03 generally an owner comes to you with the appraisal

00:40:06 that they've gotten --

00:40:08 MS. LISA BOVA HIATT: Exactly. I

00:40:11 think it's hard for an owner to get a clear

00:40:11 understanding of what their property is worth without having an appraisal done.

00:40:16 And in a situation where a property is acquired by eminent domain, in order -- when an owner files a claim for additional compensation, the next step is the exchange of appraisals.

And once they see the City's position the way the property is valued and the

City sees their position the way the property is valued, either a settlement can be reached or we need to look to the court for intervention.

00:40:46 THE CHAIR: Yes. Irwin.

00:40:46 COMM. CANTOR: I would ask this

00:40:48 question: We haven't been told clearly yet whether this is a phased acquisition. I'm under the

00:40:57 impression that it's going to be one site. It's not going to be -- it's not going to be rehabilitated in the sequence.

00:41:06 So if it's a one-site taking, how

00:41:07 the Department goes into condemnation or let's -- goes into condemnation assuming, of course, that

00:41:10 you haven't been able to close with these individual groups, would you be taking it over a period of time or would the intent be the taking, if you will, to be a quick as possible?

00:41:30 MS. LISA BOVA HIATT: I don't

00:41:31 think a determination has been made whether or not

00:41:33 the acquisitions will be phased. I can tell you

00:41:40 from my experience with large-scale projects like

00:41:40 Hudson Yards or the 42nd Street redevelopment, that they've always been phased acquisitions just because it's easier in terms of vetting appraisals.

00:41:49 And that doesn't necessarily mean that the
00:41:49 development is not going to move forward as one
00:42:00 project, but the takings might be phased.
COMM. CANTOR: But while these
-- while these owners are not being taken, they
00:42:07 have certain constraints on themselves with regard
00:42:09 to the disposition of the site of another party
00:42:14 could be impossible; getting loans from a bank
00:42:16 would be problematic; improving their property, if
they so desire, is difficult.
00:42:24 Aren't they sort of in limbo?
00:42:24 MS. LISA BOVA HIATT: Well,
00:42:25 actually, if you look at the 42nd Street project as
an example, the takings on 42nd Street occurred
over a ten-year period. And during that period, the
properties within the project, that had not been
acquired by eminent domain, were freely bought and
sold, leased, mortgaged. And there was nothing to
stop private property owners from exercising their
rights as owners until the City, or in that case,
00:42:59 the State, moved into take their property.
00:42:59 THE CHAIR: Okay. Nat Leventhal.
00:43:01 COMM. LEVENTHAL: Thank you.
00:43:01 Just to clarify. If negotiations

00:43:04 fail and we go to eminent domain and they get just
00:43:07 compensation for property, that compensation is
00:43:10 based on the fair value of the property as it is in
00:43:15 the conditions that it exists in. And how does the
00:43:20 kind of environmental problems that exist in this
00:43:23 area, how would that effect what would be awarded
00:43:26 under eminent domain?
00:43:26 MS. LISA BOVA HIATT: Well, just
00:43:27 compensation is generally determined at the highest
and best use of the property under the current
zoning as of the date of the taking.
In New York State, within a
condemnation proceeding at the moment, the state of
the law is that we can't look at environmental
conditions, although a separate action can be
commenced against the property owner to offset or
to recover remediation costs.
00:43:57 COMM. LEVENTHAL: So while you
00:44:00 can't take environmental conditions into account in
determining compensation, you know, in a sense you
00:44:07 are by the process you just described.
07 MS. LISA BOVA HIATT: Well, you
could.
COMM. LEVENTHAL: You could.

Okay. Thank you.
00:44:08 MS. LISA BOVA HIATT: Exactly.
00:44:10 THE CHAIR: Are there any other
questions for Lisa Bova Hiatt?
(No response.)
00:44:12 THE CHAIR: Lisa, thank you very
00:44:14 much.
00:44:14 MS. LISA BOVA HIATT: Thank you.
00:44:17 THE CHAIR: It's now time
actually to switch to speakers in opposition and
half an half, half hour.
And the first speaker in
opposition will be Richard Lee.
And let me read a few names so you
can get ready:
After Richard Lee will be Michael
Gerrard;
Then Bernard Adler;
And then Michael O'Rouke; and
Then Kevin Loyst.
Richard Lee.
MR. RICHARD LEE: Hi.
Good afternoon.
My name is Richard Lee. I am the

Advocacy Associate for Asian Americans for
Equality.
And we are a founding member of
the Queens for Affordable Housing Coalition.
First I'd like to thank the City
Planning Commission for giving us the opportunity
to express our concern with the Willets Point
Development Plan.
Queens is really amidst an
affordable housing crisis. Currently, Flushing is
the most populated community in the entire City
with 250,000 households.
The No. 1 most overcrowded
community right now is the town right next to it,
Corona/Elmhurst.
And No. 2 most overcrowded
community right now is Jackson Heights which is
kind of right next to it.
And the third most overcrowded is
Sunnyside/Woodside which includes the Hunters Point
south development.
And so we have two huge
developments being built on both sides, Hunters
Point south and Willets Point, which is going to

combine for about 10,500 units of housing. But the problem is a lot of these households can't afford them because nearly forty percent of the households earn less than $35,000 which excludes them from even the affordable allocations of these two development.

So what we're really asking is that the City Planning Commission really take into consideration the Borough President and the community board's recommendations and build upon that so that the -- so that you can recommend an affordable housing plan that really includes more affordable housing on both of these sites and one that really reflects the public and includes the income rates of these -- the demographics of these communities are included.

00:46:20 Thank you.

00:46:22 THE CHAIR: Just to be clear, you're not opposed to the plan, you're just looking for deeper affordability?

00:46:26 MR. RICHARD LEE: Well, I have to say that we're opposed to this current plan simply because it doesn't include the affordable housing components that we really feel need to be included.

00:46:35 THE CHAIR: Okay. But that's your main objection?

00:46:37 MR. RICHARD LEE: Yes.

00:46:38 THE CHAIR: Let me see if there are any questions for you.

00:46:40 (No response.)

00:46:41 THE CHAIR: There are not.

00:46:41 Thank you for being here.

00:46:41 MR. RICHARD LEE: Thank you.

00:46:43 THE CHAIR: Michael Gerrard;

00:46:44 Then Bernard Adler.

00:47:01 MR. MICHAEL GERRARD: Madame Chair, and members of the Commission, my name is Michael Gerrard.

00:47:05 I am environmental counsel to the 00:47:08 Willets Point Industry and Realty Association.

This project has at least four fatal flaws under the environmental laws.

00:47:15 First, the project assumes a new interchange with the Van Wyck Expressway. Since 00:47:23 that's part of I-678, it requires the approval of the Federal and State highway agencies and the 00:47:30 completion of the Federal EIS process.

00:47:31 State DOT's guidelines allow new

interchanges only if they will not have a significant adverse impact on the safety and operation of the freeway. But the project will have a catastrophic effect on the Van Wyck.

The EIS admits a staggering number of unmitigated traffic conditions. The left exits and short sightlines are safety hazards.

Our traffic experts, Bernard Adler and Michael O'Rourke will expand on these issues.

Thus, the City is heading towards a lengthy process under the National Environmental Policy Act and it may well culminate in a denial of the interchange. If that happens, that would in turn invalidate the entire traffic analysis.

The second fatal flaw is that the EIS shows that the interchanges requires the demolition of a state and federal-eligible historic property.

That triggers the lengthy process under Section 106 of the National Historic Preservation Act, which hasn't begun, and it 00:48:35 violates the Section 4 (f) requirements of the 00:48:37 Department of Transportation Act.

00:48:39 Third, the City says that parts of

the site are heavily contaminated. As our hydrogeologic expert, Kevin Phillips will explain, these areas are linked to an aquifer that is pumped as part of the New York City water system.

The fill that will be brought in to bring the site up to the desired grade will press down and squeeze the pollutants into the aquifer. The EIS ignores this effect which violates the Federal Safe Drinking Water Act.

Fourth, the EIS admits that the existing storm water outfalls are too small, but it omits the State DEC permitting process to build new outfalls.

We will have a lot more to say in our written comments.

Our work here has been impeded by the City's stonewalling on our Freedom of Information Law requests. The City has failed for many months to provide much of the requested information.

We reserve all rights on this and all of the other issues, including eminent domain, which others will address.

In closing, the 9.4 million square

feet involved here really requires a multi-billion dollar reworking of the roadway system. Otherwise, the area will become a potential honking nightmare for people trying to get a hospital, to a flight, to a game, for the hundreds of thousands of through drivers.

All of this will come out in the federal and state application process for the Van Wyck ramps.

I'm almost done.

And the result is likely to be denied. It would be both unlawful and irresponsible for the City to start condemnation without the interchange approvals.

We hope that the City will reject the project. But even if approved, everything should be contingent on the ramp approvals and on solving the other fatal flaws.

00:50:24 THE CHAIR: Thank you, Michael.

00:50:24 Let me see if there are questions

00:50:25 for you from the Commission.

00:50:28 (No response.)

00:50:28 THE CHAIR: There are not. But

00:50:30 if you would leave your testimony, I think we'd

00:50:33 very much like to read it.

00:50:33 MR. MICHAEL GERRARD: I'll leave multiple copies.

Thank you.

THE CHAIR: Thanks very much.

Bernard Adler; and

00:50:46 Then Michael O'Rourke.

00:50:46 MR. BERNARD ADLER: Good afternoon, Chair Burden, honorable members of the Commission.

My name is Bernard Alder. I am a registered professional engineer in the State of New York having practiced traffic engineering and transportation planning for over forty years.

I'm the former Commissioner of Traffic for the City of White Plains, New York.

I'd like to focus today on two issues, and that is the inoperability of the proposed roadway surface system and the poor emergency response time within Willets Point.

All the information has been taken from the DGEIS. And based on that information, I

00:51:23 have never seen this level of unmitigated impact in

00:51:28 over -- in the forty years I have been practicing.

00:51:31 This an unprecedented overload of

00:51:35 the local roadway system.

00:51:36 Of the 29 intersections studied,

00:51:40 there are significant impacts at between 19 and 23

00:51:45 intersections and that does not include a gameday

00:51:50 at Shea Stadium or future Citi Field.

00:51:53 As other examples, in the morning peak hour there is severe congestion, with delays

00:52:02 in excess of two minutes, more than three times the

00:52:03 delay without the project at eight intersections

00:52:07 within the area.

00:52:09 In the evening commute there are

00:52:12 the same delays at eleven intersections.

00:52:17 In addition, there are nine

00:52:19 intersections where there is no mitigation during

00:52:24 either of the peak hours.

00:52:25 With respect to the emergency

00:52:27 response, information from the Office of Management

00:52:30 Analysis and Planning of the New York City Fire

00:52:34 Department, indicates that it takes one minute

00:52:36 longer to get a response in Willets Point than in

00:52:40 the Borough of Queens and anywhere else in the City

00:52:43 of New York.

00:52:45 There is nine million square feet

00:52:47 that's being developed and the EIS does not even

00:52:52 address this. In fact, the National Fire

00:52:56 Protection Association recommends a maximum

00:53:00 response time of four minutes for a nonstructural

00:53:03 fire. In Willets Point it's over two-and-a-half minutes longer and over one-and-a-half minutes longer than anyplace else in Queens.

For a structural fire its two minutes longer and one minute longer than anyplace

00:53:18 else in Queens.

00:53:19 And, again, for emergency medical

00:53:22 services it's over two minutes longer. And, again,

00:53:28 one minute longer than anyplace else in Queens.

00:53:29 In summary, the DGEIS clearly

00:53:36 shows that the residents will not be comfortably

00:53:36 able to get to and from work;

00:53:39 Businesses will not be able to timely receive shipments or customers;

Travelers will not be able to reach the airports in a timely manner; and

Emergency vehicles will not be

00:53:52 able to respond in a timely manner.

00:53:52 This degradation creates an

00:53:55 unprecedented daily transportation overload.

00:54:00 Thank you.
00:54:00 THE CHAIR: Thank you very much for your testimony.
Let me see if there are questions for you.
00:54:03 (No response.)
00:54:04 THE CHAIR: There are not.
Thank you so much.
The next speaker is Michael O'Rourke;
Who will be followed by Kevin, I think, Loyst;
00:54:14 Then Dan Scully; and
00:54:15 Then Ned Feinstein.
00:54:19 Michael O'Rourke.
00:54:19 MR. MICHAEL O'ROURKE: Thank you.
00:54:20 Good afternoon, Ms. Burden, and
00:54:22 members of the City Planning Commission.
My name is Michael O'Rourke. I am a Senior Associate with Adler Consulting.
I'm a licensed professional engineer in the State of New York with over thirty years of experience in both public and private practice.

Like Mr. Adler, I am a past President of the Metropolitan section of the Institute of Transportation Engineers.
I am also a member of the Transportation Research Board that served on the Unsignalized Intersection Subcommittee of the Highway Capacity Committee.
And I will be discussing the impacts on the highway network and ramps.
The DGEIS indicates that there would be significant impacts on the highway network resulting in much slower speed and bumper-to-bumper congestion.
On the Van Wyck Expressway, when people are going to work in the morning, northbound traffic speeds will be cut from -- in half from forty miles an hours to twenty-one miles.
During the midday, the speeds would be cut even more from 36 miles an hour to eleven miles an hours.
People coming home from work in the evening, the speeds would be cut from 39 miles an hour to 18 miles an hour.
On Saturdays, the traffic speeds

on the northbound direction would be cut from 41 miles an hour to thirteen miles an hour.
The impacts to the northbound Van Wyck are not unique. Extremely slow speeds and heavy congestion are also expected along the southbound Van Wyck, the southbound Whitestone and both directions of the Grand Central Parkway.
The traffic on the ramps will become intolerable as well. Speeds of less than two miles an hour are predicted for the ramps from westbound Northern Boulevard to the southbound Van Wyck Expressway for most of the day.
By comparison, without the project, predicted speeds of approximately 29 miles an hour.
Single-digit ramp speeds are also projected for other highway ramps in the vicinity.
The congestion caused by these extremely low speeds will kill the spillback both onto the highway network and the local streets which we have already heard will be a great deal of the load.
These impacts would occur despite the improvements that the City has proposed. And as

mentioned earlier, the Federal Highway Administration and the New York State Department of Transportation has a role in improving these proposed improvements. It's worth nothing what they have to say about them.
On the Federal side the answer is simple, nothing, simply because they have not been involved in this project even though it must approve any changes done to the Federal Highway system.
NYSDOT, on the other hand, appears to already have considerable concerns about the geometry and the capacity of the proposed ramps because these ramps have to be squeezed into the existing Van Wyck-Whitestone-Northern Boulevard interchange area.
NYSDOT is also worried about some significant queue spillback that the cars on the ramps would back up onto the Van Wyck Expressway mainline itself. They're also worried about inadequate sight distance for the proposed ramp.
Finally, there is a potential safety issue since the ramp at the exit ramp that it proposed would be a left-hand exit. And as

everyone knows, left-hand exits are generally a bad idea.

The American Association of State Highway and Transportation officials has stated quote, left-hand entrances and exits are contrary to the concept of driver expectancy when intermixed with right-hand entrances and exists. Therefore, extreme care should be exercised to avoid left-hand entrances and exits in the design of the interchange.

In sum, would we expect traffic speeds cut in half. Unsafe ramps would be created and there's a potential for backups and increased accidents.

00:57:39 Thank you very much.

00:57:39 THE CHAIR: Thank you.

Wait one second and let me see if there are questions for you.

(No response.)

THE CHAIR: There are not.

Thanks so much.

MR. MICHAEL O'ROURKE: Thank you.

THE CHAIR: Kevin Loyst. Kevin Loyst, I think, if I'm reading it right.

And then Dan Scully; and

Then Dan Feinstein.

00:57:46 MR. KEVIN PHILLIPS: Thank you, Madame Chairperson and Commissioners.

My name is Kevin Phillips. I'm here to speak on behalf of Kevin Loyst, who's a colleague.

I'm a --

THE CHAIR: I'm sorry. The name I had here is Kevin Loyst.

MR. KEVIN PHILLIPS: Loyst.

THE CHAIR: Did you just say Kevin Phillips?

MR. KEVIN PHILLIPS: Yes. I'm Kevin Phillips. I'm here to speak -- Kevin Loyst had to leave.

THE CHAIR: Oh! Then you have to sign up on your own. It's just a rule. So you'll have to sign up. You can't substitute for somebody else. So if you just sign on your own, we will definitely be calling you.

00:58:35 MR. KEVIN PHILLIPS: At a later

00:58:36 time?

THE CHAIR: Excuse me?

MR. KEVIN PHILLIPS: At a later time?

THE CHAIR: I'm sorry. Just sign up on a new card. You have to sign up for yourself.

00:58:42 You can't substitute for somebody else. Okay?

00:58:42 MR. KEVIN PHILLIPS: Okay.

THE CHAIR: And so Kevin Loyst had to leave. So we will definitely call you later.

00:58:54 Dan Scully; and

00:58:54 Then Dan Feinstein.

00:58:59 MR. DANIEL SCULLY: My name is Dan Scully. I'm Vice President of Tully Environmental, Inc.

Tully has had its main office and ancillary facilities up in Willets Point for over sixty years.

We employ a union workforce of over 1200.

I'm here today to oppose EDC's plan to redevelop Willets Point. Not only does this project have a severe impact on the businesses that are currently thriving in Willets Point, the plan itself is riddled with shortcomings that to date have not been addressed by the EDC and is

based on pure speculation from the administration.

To add insult to injury, the City is justifying its use of eminent domain by claiming Willets Point is blighted and continually parading around the worst pictures it could possibly find of the area. But Willets Point is not blighted, it's neglected. It's neglected by New York City and it has been for over thirty years.

There's been no street repair. There's a dilapidated storm sewer system and there are no sanitary sewers provided to us.

The City doesn't even provide snow removal in the winter.

Yet but in its own studies, the City determined that Willets Point would be a thriving industrial park were it only to get these services that we've been looking for for so long.

Now the City has decided to fix the problem it has created. They will remove all of the existing businesses and install the infrastructure that we've been denied in favor of a new developer. However, the plan that is before the Planning commission today is little more than a concept, and a poor concept at that.

They have no answers for the many problems that plague this proposal but give the Commission assurances that they will work them out after the approval. That is why the EDC has attempted to short-circuit the ULURP process.

The ULURP process is designed to give the community and the City Council input over land use in the City. It's a means to get commitments from a developer and to set guidelines for the project.

To do this, a final plan, not concept, should be presented to the Commission. But the EDC has decided that it will negotiate with a developer and it will have final approval of what will be built in Willets Point.

Unfortunately the EDC's record speaks for itself. It has a long list of failed projects, including several in Flushing.

The community board and the Borough President have, in fact, given their approvals to this proposal. However, those proposals come with heavy conditions that must be met by the EDC. And so far they've not been able to do so with any kind of conviction.

Our greatest fear is that the EDC will be successful in destroying the thriving industrial area only to fall short of its goals. There are many facts that support this fear, including a slowing economy and an Environmental Impact Statement that clearly shows the devastating impacts this development will have on Flushing for years to come.

The EDC should not be allowed to proceed with this development until it has chosen a developer and can prove to the City Council and the community that this is a viable project and it will be accountable for it. Until that time, the City should be helping the business of Willets Point by providing the services we have lacked for decades. We have been growing and vibrant in spite of the City. Imagine what we could do if the City would give us a little bit of help.

01:02:11 Thank you.

01:02:12 THE CHAIR: Thank you.

01:02:13 Irwin Cantor has a question for you, as does Nat Leventhal.

01:02:18 COMM. CANTOR: Mr. Scully, you

01:02:20 heard Kevin McCarthy earlier say that if he were to

01:02:25 put in infrastructure, the street grades would be higher than the adjacent properties.

01:02:34 Taking that at face value, what

01:02:39 would your response be in terms of, or what would

01:02:43 you be doing with these properties if you're down

01:02:44 in a valley and immediately adjacent to a

01:02:45 Tik-Tac-Toe road system?

01:02:49 MR. DANIEL SCULLY: I'm glad you asked that question because it's something I wanted to address but ran out of time.

Tully Construction does a lot of sewer work throughout the City. And, you know, the EDC has two very self-serving facts that it's paraded around.

The No. 1 thing is this idea that it's a contaminated area that cannot be remediated unless all those businesses are removed.

And the second is that it's in the 100-year floodplain.

Now, La Guardia Airport, most of Downtown College Point, and in fact, the World Financial Center are also located in that same 100-year floodplain.

And what I heard Mr. McCarthy say

was, only the south end of the property are where those conditions existed and that most of those -- most of the buildings are actually at the proper grade. The idea that you have to bring up the entire site by two feet is really just not -- is not good science.

01:03:42 COMM. CANTOR: Well, to begin

01:03:43 with, the World Trade Center is below the

01:03:48 floodplain. And so my understanding, having worked

01:03:50 down there, provisions are taken at the entrances

01:03:56 to various buildings to assure that the buildings

01:03:57 are not flooded, if indeed the floodplain -- the

01:04:02 water level reaches flood level.

01:04:04 So I won't argue with you about

01:04:07 what the level is. But certainly if it's below the floodplain, it would have to be accommodated. New construction would have to accommodate the floodplain level. I think that's a federal law.

01:04:20 It's not a local law.

01:04:21 MR. DANIEL SCULLY: Well, what I heard Mr. McCarthy say was that the sewers, the storm sewers, you need to build some kind of a retention tank. And the fact that they don't own enough property at Willets Point, they couldn't

build that retention tank. And, you know, I would suggest that that property could be found within Willets Point and that certain properties could be purchased at fair value. And there are provisions that could be made.

01:04:47 COMM. CANTOR: Do you have any
01:04:48 idea, because I do not, as to the size of the
01:04:50 retention tank and how many acres it would require?
01:04:53 MR. DANIEL SCULLY: I do not. And
01:04:55 I don't think that the EDC does either.
01:04:57 COMM. CANTOR: Okay.

THE CHAIR: Nat Leventhal has a
01:05:00 question for you.
01:05:00 COMM. LEVENTHAL: Thank you,
01:05:02 Madame Chair.

Thank you for your testimony. I
01:05:03 certainly got the message.
01:05:04 (Applause.)
01:05:06 COMM. LEVENTHAL: I've been
01:05:07 wondering, have you been contacted by the EDC in
01:05:08 terms of negotiations?
01:05:11 MR. DANIEL SCULLY: Yes, we have.
01:05:11 COMM. LEVENTHAL: And have those
01:05:12 discussions been ongoing or how would you
01:05:14

01:05:17 characterize them? I'm just curious.
01:05:17 MR. DANIEL SCULLY: Well, they've
been ongoing but not fruitful.

One of the problems with our particular business is that we do have two facilities that have New York State and New York City permits associated with them. And, you know, I think not only are our facilities at transfer stations -- we have the largest fill material transfer station in the City. And we also handled nine hundred tons of curbside solid waste for the City of New York in our solid waste transfer station.

01:05:47 But, you know, the fact that
01:05:48 you're going to try to relocate the automotive industry, which already has a black eye on itself. And, you know, people -- the NIMBYism that's going to occur when you try to relocate those types of facilities to another area, which presumably a lot of those other areas already have their own facilities to handle this type of thing.

But I think there's a big public outcry because one of the current facilities that was relocated was going to be put up in College

Point. And I know that councilman Tony Avella came out very vocally against it, as did the community
01:06:30 -- members of the community board, Community Board
01:06:30 #7 when were having hearings at that point.
01:06:32 COMM. LEVENTHAL: Thank you.
01:06:33 THE CHAIR: Yes. Karen.
01:06:35 COMM. PHILLIPS: Mr. Scully, you
01:06:37 mentioned -- could you just tell us how many -- we
01:06:42 had a map that showed parcels that I think your
01:06:44 company controls.
01:06:47 And in so doing, if there was a
01:06:49 negotiation for you to relocate your industry, do
01:06:53 you have areas that could accommodate -- and, of course, particularly that you mentioned the permits
01:06:58 -- that would allow the kind of business that you
01:07:03 would have to locate in those areas? I know there are other areas that are waster transfer areas, maybe not in that borough.

But for the number of acres or the areas that it seems, is there a feasible place that you know that could accommodate your current activities?

01:07:22 MR. DANIEL SCULLY: Well, we've
01:07:25 suggested some areas. I mean it's very important

01:07:25 for our business, and I know it's very important for a lot of the other businesses in our group that we remain in Northern Queens. You know, our particular facility being a solid waste transfer facility, I know the Borough of Brooklyn does not want another solid waste transfer facility down there. And they're fighting tooth and nail to get rid of those that are already there. They feel that they've been overburdened.

01:07:52 But, you know, our transfer
01:07:53 station is one of the few in Northern Queens. And, you know, it services -- it provides a valuable service up there. And it's in the perfect location exactly where it is. Because we don't have to pass any neighborhoods to get to the highways. We go straight out to the Whitestone Expressway and that's why it was sited in this particular area.

So we have looked at other areas. We've been in contact with EDC. We've been in discussion with them. But, you know, the fact is this is a huge lift for the EDC, any way you want to look at it, whether we want to cooperate with them or we're not. I mean it's been intimated that we don't cooperate. But that's really not the case.

We've not been dealt on an open and honest basis with the EDC. And that's a general statement from our group.

You know, Tully, for its part, has, I believe been very -- has engaged many good negotiations with the EDC and honestly tried to work with them. The problem is there's just no place for us to go.

01:08:53 COMM. PHILLIPS: Just for clarification. Your customer base is based in Queens or is accessible to the Whitestone; is that right? Or is it Manhattan based and you use the highways?

01:09:05 MR. DANIEL SCULLY: Well, we have two facilities there.

Our transfer station is dedicated solely to DOS. We provide the disposal of 900 tons of curbside collection. We're solely the DOS everyday.

Our other operation is a fill material transfer station. We bring in clean fill from excavations. We handle over a million yards of clean fill there every year.

And if they take this facility and

basically make it vanish, because we haven't found a suitable location to replace it, where is all that fill going to do? That's a major impact on the construction industry in New York City.

We have -- for that facility, that's strictly a commercial facility. We service Queens but we also service Manhattan, a lot of heavy construction jobs throughout the City and Brooklyn.

01:09:55 COMM. PHILLIPS: Thank you.

01:09:56 THE CHAIR: Any other questions?

Irwin.

01:09:57 COMM. CANTOR: Yes.

01:09:58 Where do you dispose of the fill?

01:10:00 MR. DANIEL SCULLY: Well, we actually recycle it and it's made into a useful road base. And a lot of that --

COMM. CANTOR: So you're not stockpiling a million yards a year. You're turning it over.

01:10:09

MR. DANIEL SCULLY: That's correct.

01:10:10 COMM. CANTOR: Which would --

01:10:13 MR. DANIEL SCULLY: We're really

01:10:13 stockpiling --

01:10:13 COMM. CANTOR: Which conceivably

01:10:17 -- that's clean fill.

01:10:17 MR. DANIEL SCULLY: Clean fill,

01:10:17 right.

01:10:17 COMM. CANTOR: So conceivably

01:10:20 that aspect of it could be relocated.

01:10:20 MR. DANIEL SCULLY: If we can find

01:10:25 a suitable location, we're willing to discuss that

01:10:25 with the City.

01:10:26 COMM. CANTOR: Yeah, because I'm kind of confused.

Earlier you said you've been in not fruitful conversations. Have you as yet done an appraisal on your own side to determine the

01:10:39 value of your parcels?

01:10:39 MR. DANIEL SCULLY: Yes, we have.

01:10:41 COMM. CANTOR: You have.

01:10:42 MR. DANIEL SCULLY: We put a

01:10:43 proposal into the City.

01:10:44 COMM. CANTOR: So therefore, if

01:10:48 the numbers were right, you could relocate.

01:10:52 MR. DANIEL SCULLY: Well,

actually were told by Deputy Mayor Lieber, who was the head of EDC at that time, that he felt he could not relocate our transfer stations and that he

01:11:04 would rather buy them. And at that point --

01:11:04 COMM. CANTOR: If he bought

01:11:05 them, is he going to use them?

01:11:05 MR. DANIEL SCULLY: I don't know

01:11:09 what he's going to do, if he's going to redevelop

01:11:09 them.

01:11:12 COMM. CANTOR: Okay. I'll pass.

01:11:13 (Laughter.)

01:11:15 THE CHAIR: Okay. Any other

01:11:17 questions from the Commission?

01:11:17 (No response.)

THE CHAIR: Thanks very much.

The next -- oops, you know what, I think it's time to switch to speakers in favor to be fair here. It is. It is. Time for speakers in favor.

The first is Susan Beck;

Dr. Gale Mellon, Mellow, I can't read it exactly;

And then Neil Kittredge; and

Then Asema Yasveld.

Okay.
So Dr. Mellon.
(No response.)
01:11:18 THE CHAIR: So the next speaker is --
A VOICE: Inaudible.
01:12:03 THE CHAIR: What's that?
01:12:16 A VOICE: Someone else is speaking for her.
01:12:21 THE CHAIR: Fine.
01:12:21 Is Neil Kittredge here? Neil Kittredge.
Asima.
01:12:24 Oh, there goes Neil.
01:12:24 MR. NEIL KITTREDGE: Seth Borenstein will be here later to speak about the workforce issues.
So thank you very much for your time.
01:12:33 I'm here to talk about the urban
01:12:35 design vision and special zoning district guidelines for the site.
I am a partner of urban design and planning with Beyer Blinder Belle Architects. We

01:12:43 have been working for approximately a year and a half very closely with EDC and the Department of City Planning on the vision for the future redevelopment of Willets Point.
One of the main planning principles of this is to reconnect long divided
01:13:00 areas of Queens to join Flushing-Corona, Flushing Meadows-Corona Park with the Flushing Bay waterfront through the means of this development and the way it's designed. And also the way in which the master plan anticipates future further abilities to connect these areas through bicycle and pedestrian paths and greenways and through anticipating the possible development of some of the adjacent sites to the 62 acres with the way the
01:13:27 plan is laid out as seen here.
01:13:30 The second major thing that we need to do here and achieve is to create a walkable
01:13:36 urban street-oriented neighborhood, a real New York City neighborhood. And in this isolated location surrounded by elevated highways and rail lines, that could be difficult. There isn't a neighborhood context to really relate to and draw upon. We need to kind of create this site.

And you can see that there are there major access points at the three points of the Iron Triangle. And we want the layout to encourage transit orientation for this development to really allow pedestrians to walk to and from the LIRR and No. 7 subway as much as possible and reduce the car dependency of this project which is the most sustainable solution.
The large retail component that this site has has great regional highway access. A big risk of this site is that this could become kind of a suburban shopping mall that is not -- car related activities. It's not sort of a walkable, mixed use community. And that could dominate the design.
So it's very important with this project as to integrate the retail component, which is very large, and the entertainment component, the destination, with an urban neighborhood that also has open space, residential and community facilities and a mix of uses and feels like a real neighborhood.
And then the last element that really needs to be integrated with this design is

Citi Field. Citi Field is a building with a very strong urban presence right across the street on 126th and the project really needs to engage that.
Willets Point redevelopment needs to be self-sustaining. It needs to be a great neighborhood in and of itself and a great destination that attracts people on non-gamedays. But on gamedays these major investments really need to work together even more than the sum of the parts. And so this design is oriented around achieving that goal.
And to do that, the retail component of the project is oriented north to south, in a north-south direction along 126th Street, hugging the stadium as much as possible and connecting, putting a public connection up to the waterfront from the transit hub to Flushing Meadows Park, leaving room for a residential neighborhood adjacent -- that will feel like a real community.
01:15:39 THE CHAIR: Can you conclude,
01:15:40 please.
01:15:41 MR. NEIL KITTREDGE: Thank yo
01:15:42 THE CHAIR: Did you want to
01:15:44 conclude with that?

MR. NEIL KITTREDGE: No. I mean that's --

THE CHAIR: That's it. Three minutes is three minutes.

Why don't I see if there are questions for you. And there is one.

Nat Leventhal.

COMM. LEVENTHAL: Thank you, Madame Chair.

I'm not sure if this question is properly addressed to you, but if not, I hope somebody else can address it. And that would be the purpose and the location of the convention center.

MR. NEIL KITTREDGE: Yes.

The convention center and basically the retail, as I said, is along 126th. The residential is to the east. The convention center is to the north.

One of the aspects of the site is there are very strict and unusual for New York, FAA height guidelines for planes landing at La Guardia, runways that are just to the north. That just reduces the height in this town to the lowest point in the northern edge. So the convention center

works very well within that framework allowing more height and more air space for taller residential and mixed use buildings to the south.

COMM. LEVENTHAL: Okay. I understand that and that's why you're locating it on the northern part of the site.

On the other hand, you heard our review session on Monday that it's close to a half-mile away from the No. 7 subway stop; is that correct?

MR. NEIL KITTREDGE: It is. Which is a ten-minute walk and which could be difficult for some people. And a convention center with an associated hotel, we think, could very easily run a jitney back and forth to the subway and drop people through the retail complex.

And what that does is that also allows the mixed use and residential to be closer to the subway, which has more frequency of pedestrians using transit and might be overall more beneficial.

COMM. LEVENTHAL: Okay. We can engage on that. I understand. I appreciate that. Thanks.

MR. NEIL KITTREDGE: Sure.

THE CHAIR: Thanks.

Other questions from the Commission for Neil?

(No response.)

THE CHAIR: Thank you for being here.

MR. NEIL KITTREDGE: Thank you.

THE CHAIR: The next speaker is Asima Jansveld;

Who will be followed by -- let me read a few names:

Asima;

Radhika Patel; and

Holly Leicht; and

Claire Schulman.

Asima.

MS. ASIMA JANSVELD: Good afternoon.

My name is Asima Jansveld. I'm from the EDC.

And I'd like to present an overview of the traffic analysis that was done for the proposed plan, as well as some of the

non-vehicular connections that we have been working on.

Through the environmental review process, we have performed an extensive trip generation analysis for the proposed redevelopment.

The Build analysis looks at the year 2017 - the projected completion date for the proposed project.

The results show that Saturday from 1 to 2 p.m. on a non-gameday is the peak hour as it generates the highest vehicular volumes.

Conditions in 2017 do include impacted intersections, as mentioned previously, over what you see today in part due to the Willets Point Project and in part due to the other background projects that are scheduled to be developed by that time in the area.

We worked very closely with the City DOT to generate mitigation measures where feasible.

While we were able to mitigate several impacted intersections, there are some that will remain unmitigated.

It is important to note that since

we are conducting a very conservative traffic analysis in a maximum development scenario, we are really looking at a true Worst Case Scenario. We have therefore, established a Future Conditions Monitoring Program once the project has been built out.

The developer would be responsible for hiring a professional traffic consultant to do real time monitoring of all impacted intersections.

The monitoring will help identify any potential new mitigation measures that may then be feasible based on real life conditions.

All results of the monitoring program must be reviewed with DOT and the developer would be responsible for executing any newly proposed mitigation.

In order to ensure funds for any future proposed mitigation, as per the community board's request, the EDC has agreed to require the developer to establish an Infrastructure and Traffic Mitigation Fund, with an initial escrow deposit of $5 million. This would be for any unforeseen traffic or Infrastructure mitigation impacts.

The project also includes new on and off ramps to the Van Wyck Expressway on the northeast corner, as noted on this diagram here, to help keep as much traffic on the highway network.

I also want you to know that these ramps are fully funded in next year's City capital budget.

We recognize that this is an ambitious project and it will have an effect on vehicular traffic in the area. However, we are committed to continuing to work with the developer, future developer and DOT, as the project moves forward, to ensure that we do all that we can to mitigate the effects on the existing community and road network.

We've also been working closely with City Planning to look at innovative parking strategies. For instance, we're very excited about the idea of car sharing. In New York City this is through a Zip Car program.

It's been showed that a shared care that is available can replace seven to ten private cars especially in a place like New York City where many people only drive their cars on

weekends or for short trips.

In addition, we feel strongly that non-vehicular modes of transportation can be encouraged in the area.

We also see this as a critical part of reconnecting Willets Point to the surrounding communities.

As you can see on this diagram to the right, we have been working on a comprehensive scheme of new pedestrian bicycle connections.

I am happy to take any questions.

THE CHAIR: Did you want to conclude at all or you're okay?

MS. ASIMA JANSVELD: I'm okay.

THE CHAIR: Thanks.

There is a question. Nat Leventhal.

COMM. LEVENTHAL: Thank you.

Very quickly. Were you in the room when we heard testimony --

MS. ASIMA JANSVELD: Yes.

COMM. LEVENTHAL: -- from the other side that because of the location of this project, vis-a-vis the Federal Interstate Highway,

that certain environmental studies should have been made but were not done or can you respond to that or clarify that for us?

MS. ASIMA JANSVELD: Sure, sure. Uh-huh.

Over the last year we have been working with the State DOT on putting together an Access Modification Report which is the State and Federal requirement for any new modifications to a highway system which are the ramps.

I would like to note that the preliminary designs have all been vetted with State DOT, that with the ones that we were analyzing through the approval process, it is a longer approval process than CEQR. So it will take another year or so to compete. But it is an integral part of our project.

COMM. LEVENTHAL: Thank you.

COMM. CANTOR: Madame Chair.

THE CHAIR: Yes. Irwin Cantor.

COMM. CANTOR: Did I understand you to say that the peak was on a Saturday?

MS. ASIMA JANSVELD: Yes, because of the retail component of the project.

COMM. CANTOR: Because of the retail component.

MS. ASIMA JANSVELD: Yes.

COMM. CANTOR: And the residential component is not going to load up the Van Wyck or the Whitestone Expressway during the week during --

MS. ASIMA JANSVELD: No. It's actually the retail component that would have the most significant --

COMM. CANTOR: Okay. Following that along, you've indicated that you've asked that money be put aside for remediation in the event it's necessary.

MS. ASIMA JANSVELD: Yes.

COMM. CANTOR: And that studies would be done after occupancy.

MS. ASIMA JANSVELD: Not remediation for a traffic --

COMM. CANTOR: Mitigation. I'm sorry. Mitigation, excuse me. Wrong word.

Does this mitigation require taking of the land or making more land available?

MS. ASIMA JANSVELD: No. This is

purely anything that is unforeseen. We've disclosed a certain amount of mitigation through the environmental review process. This would all be required as part of the development as it goes forward.

The community board had a concern that there may be unforeseen impacts of traffic once the project is up and running. And also, as we work with DOT, since we did look at a very conservative traffic analysis, in real life there be might lesser impacts than we're actually able to mitigate to a better extent than we could disclose here.

COMM. CANTOR: But implicit in what your answer to me is, is that the mitigation that you're anticipating is quote, nominal relative to the overall picture. Because if it were major mitigation, how would that be constructed, how would that be responded to?

MS. ASIMA JANSVELD: Well, as I mentioned, the ramps, which I think is a major traffic improvement, are fully funded already as part of the project.

The other -- I can't predict what

kind of mitigation we might come through with in the future. But you're right. They would be more in the tune of lane widenings, you know, what you could do with --

COMM. CANTOR: And with those lane widenings, does right-of-way exist to do that?

MS. ASIMA JANSVELD: I wouldn't be able to answer that at this time because I don't -- it depends on where the proposals would be made.

COMM. CANTOR: So I'm hearing that at the end of the day, you're taking your traffic studies today, doing the best job you can in terms of projection, in terms of population flow, vehicle flow, the additional ramps you're speaking to on the Van Wyck, and expecting that by and large you'd solve the problem.

However, you will do studies after the development is built out and as if and where events occur, you'll respond to them, assuming that your basic approach was pretty good, because if it were not pretty good, there could be an issue?

MS. ASIMA JANSVELD: That's -- we just want to make sure we cover our bases basically. I mean we've done as much as we can at

this point. We want to make sure that we do a check of that in the future once the project is up and running and we see if there are other opportunities based on what the situation is --

COMM. CANTOR: I guess my concern is, if you didn't estimate it reasonably correctly, you'd have to need some land and I'm wondering where that land would come from.

MS. ASIMA JANSVELD: I don't think we anticipate needing land for that.

And one thing I should also note that in our traffic analysis, besides Willets Point 2017, we accounted for ninety other build projects in the area as well as a one percent background growth. For every year there is an eleven percent background growth.

So it is extremely conservative in the amount of traffic, vehicular traffic that we'll be looking at in the future. So we do think that we've taken a very careful look at it.

COMM. CANTOR: Thank you.

THE CHAIR: Yes. Richard Eaddy.

COMM. EADDY: Just two quick questions.

01:25:37 One, I thought I understood you to say that peak traffic you expect to be on a Saturday on a non-gameday; is that correct? What about gameday, would there not be more traffic?

01:25:48 MS. ASIMA JANSVELD: This is a question we've discussed many times.

We're looking at the traffic generated by the Willets Point project itself. So that -- the retail -- the peak of Willets Point traffic generated is on a Saturday non-gameday. Of course, we did an analysis on gamedays as well, pregame and post-game.

COMM. EADDY: Right.

MS. ASIMA JANSVELD: And part of it has to do with people who might be going to the retail, might be changing their driving patterns if they know it's a gameday. But it's because it's looking at the traffic generated by the Willets

01:26:19 Point project.

01:26:19 COMM. EADDY: By this project.

01:26:21 The second question I had, had to do with the Van Wyck. And I thought I heard

01:26:26 earlier that there's a federal process to the ramps

01:26:29 and so forth.

And is the State -- how does that

01:26:32 -- how does your work with the State then get to

01:26:36 the federal approvals that are required?

01:26:37 MS. ASIMA JANSVELD: Sure.

01:26:37 We actually have our Van Wyck

01:26:42 consultants who will be speaking later for any

01:26:43 specific questions.

01:26:44 But basically the State DOT serves

01:26:46 as our conduit for federal approvals as well. Also

01:26:51 our SEQRA analysis serves as the basis for any

01:26:52 future analysis that is needed for those ramps. And that's how it works. The state DOT helps us with

01:27:00 the coordination with the Feds.

01:27:00 COMM. EADDY: Okay. Thank you.

01:27:02 THE CHAIR: Any other questions

01:27:04 for Asema?

01:27:05 (No response.)

01:27:05 THE CHAIR: Thanks very much.

The next speaker is Radhika Patel; and

Then Holly Leicht; and

Then Claire Shulman.

01:27:08 MS. RADHIKA PATEL: Good afternoon. Good afternoon.

My name is Radhika Patel. I'm from EDC and I'm going to speak about sustainability for the proposed Willets Point Development Plan.

The proposed -- sorry. The proposed redevelopment in Willets Point is an

01:27:31 unique opportunity to transform an area of New York that has suffered from environmental degradation and a lack of necessary infrastructure, into a vibrant, mixed use development that will result in a greener, more sustainable area.

The redevelopment of Willets Point would further the stated goals of the City's long-range sustainability program, PlaNYC 2030, by cleaning up contaminated land, creating new affordable housing, and providing new open space and recreational opportunities.

EDC is committed to sustainable development at Willets Point.

In an effort to meet this goal, the U.S. Green Building Council has selected Willets Point to become the lead for neighborhood development pilot project. LEED-ND, which stands for Leadership and Energy and Environmental Design, is a national standard for neighborhood design that

uses a rating system to certify new developments that integrate principles of smart growth, new urbanism and green building.

LEED-ND offers certification to a development based on four areas:

Smart location and linkage;

Neighborhood pattern and design;

Green construction and technology;

And innovation and the design process.

There are four levels of certification, certification: Silver, gold and platinum.

EDC is committed to -- has committed to LEED certification and will encourage the developer to exceed that minimum.

In addition, EDC has retained the services of consultants to undertake comprehensive sustainability planning for the proposed Willets Point Development site.

Our sustainability consultants focused on:

Suitable site planning;

Energy efficiency, and carbon

reduction;

Power generation strategies;

Renewable energy alternatives;

Sustainable strategies for storm water; and

Waste water treatment and innovative parking strategies.

From their recommendations, we commenced the process of determining initiatives that would be a part of a comprehensive sustainable strategy for the proposed Willets Point redevelopment.

The first piece of this strategy includes those initiatives that may be mandated by zoning through the dunning (sic) special district test such as solar orientation of buildings and indoor bicycle parking.

The second part of the strategy is the creation of a sustainable guidelines package that would be included as part of a developer RFP.

Some of the sustainable program initiatives that we are investigating and would like to encourage in the RFP are:

The LEED for new construction;

Certification for buildings in Willets Point, for all buildings in Willets Point;

Energy and water conservation efficiencies above and beyond current standards;

On-site storm water bio-detention;

Innovative waste water treatment strategies, including treating and reusing grey water on site;

Alternative parking strategies such as automated parking;

The use of recycled nontoxic and local construction materials;

Salvaging and recycling construction material from the site;

The use of native plants throughout the site;

Planting building roofs; and

Car share programs.

These are just a few of the myriad of sustainable initiative we are considering and are coordinating with City agencies to include as part of the developer RFP.

Thee guidelines will provide instructions to the developer and help to ensure

that the proposed development at Willets Point meets and hopefully exceeds the national standards for sustainability.

01:30:43 THE CHAIR: Thanks very much.

01:30:43 Are there questions from the Commission?

01:30:46 (No response.)

01:30:46 THE CHAIR: The next speaker is

01:30:47 Holly Leicht. Holly.

MS. HOLLY LEICHT: Good afternoon.

My name is Holly Leicht. I'm Deputy Commissioner for Development at the Department of Housing Preservation and Development.

I just briefly want to talk about the housing component of the Willets Point plan.

As we said earlier, the plan will include 5,500 housing units of which a minimum of twenty percent we're committed to do affordabie.

The affordable will be a mix, mixed income, some low-income up, to moderate income. And for a total of 1,100 affordable units.

The definition of low and moderate, we're assuming this will start at about fifty percent of HUD income limits and go up to

about 130 percent. So in terms of dollars and cents, that's for an income for a family of four making about $38,400 going up to a family of four making $99,000.

We know and we've heard quite a bit from the community that there's an interest in family housing here. And our programs, our funding programs, require at least fifty percent of the units be two and three-bedroom. So we do believe that there will be definitely that need for a family housing.

We've also heard and are continuing to explore an interest in senior housing. We hope that can figure out a way to put a senior component in as well, although we haven't committed yet to that. But we are looking at it.

We've had ongoing discussions with the Queens for Affordable Housing advocates as well as ACORN. And as part of that, as I said, we've heard about senior housing.

We've also heard from the community that there's an interest in home ownership. So we are also looking at that, to have a component of that.

And there's also an interest in looking at more than twenty percent. And that's an interest that we absolutely share.

So what we are looking at now is what's the financial feasibility, something, of course, you've heard all day, looking at the financial feasibility of being able to do more than twenty percent.

There's a lot of challenges that you've heard about the competing priorities of doing a sustainable project, traffic improvements and other issues, a convention center. And there's obviously also significant costs here to make it buildable for residential, including the infrastructure and possible remediation.

So as those costs are being figured out, that's going to help us get a better, a firmer grasp on how much above twenty percent we can go, if at all. But we are optimistic.

The other thing that obviously needs to be considered is the availability of subsidies and bond cap. Everyone is, I'm sure familiar with the fact that there is legislation that passed that's going to allow New York State to

get some more bond cap. But it is still -- there is still much, much more demand for bond cap than there is availability. And this is obviously a huge project that would command a lot of subsidy.

And so we have to make sure before we make a definite commitment to more than twenty percent, that the cap or subsidy and bond cap is there.

So that analysis is all ongoing right now.

We will obviously balance all of these and try to do as much affordable housing as possible. There are preferences that are built into our affordable housing programs. And this is something we've discussed quite a bit with community leaders, a fifty percent community preference through other programs. And that can be split among community boards.

01:34:15 01:34:16 THE CHAIR: Holly, when will -- obviously the affordability will be built into an RFP. That would be the mechanism for the affordability.

When will the decision be -- we

01:34:24 have to come to a decision soon.

01:34:24 MS. HOLLY LEICHT: Yes.

01:34:25 THE CHAIR: And when will that be as to what the affordability levels will be, which affordability will be included in the RFP and

01:34:39 what will be the City's commitment to that?

01:34:39 MS. HOLLY LEICHT: We are looking at finishing the analysis in the next couple of months. And so certainly before the ULURP approval is complete, there will be -- that analysis will be

01:34:51 completed and we'll be ready to --

01:34:51 THE CHAIR: It's got to be

01:34:52 before we vote. We have to have some indication of

01:34:56 what the affordability will be before the

01:34:57 Commission votes.

01:34:59 MS. HOLLY LEICHT: Okay.

01:35:01 THE CHAIR: I think I speak for

01:35:02 all who are here.

01:35:04 Angela Battaglia.

01:35:05 COMM. BATTAGLIA: Thank you,

01:35:08 Madame Chair.

You certainly do speak for all of us here when it comes to the affordable housing component.

I just want to say, Holly, that

this certainly sounds a lot better to me than our discussion on Hunters Point in terms of the levels of affordability and the willingness to look at senior housing and home ownership.

And I just want to say to you that I urge you, at looking at the information that you're going to get to our Chair and the Commission, that you attempt to target as many lower income households in the 50 to 130 range as you do upper level households. Because that's

01:35:42 really important to us as well.

01:35:42 MS. HOLLY LEICHT: Absolutely.

01:35:43 COMM. BATTAGLIA: Thank you.

01:35:44 THE CHAIR: Any other questions for Holly Light?

01:35:46 (No response.)

01:35:47 THE CHAIR: Holly, thank you.

01:35:48 Thank you for being here.

01:35:48 MS. HOLLY LEICHT: Thank you.

THE CHAIR: The next speaker is Claire Shulman;

Who will be followed by Peter

01:36:08 Ward.

01:36:08 MS. CLAIRE SHULMAN: Good evening.

01:36:09 It's good afternoon.

01:36:14 I want to thank the City Planning Commission and the Chair, Amanda Burden, for this opportunity to share my views on Willets Point.

I'm Claire Shulman. I am President 01:36:24 of the Flushing/Willets Point/Corona Local 01:36:24 Development Corporation.

We were formed to work with the City to advance this project. And we've been in business for about a year.

Urban renewal -- I have a longer statement. I have abbreviated it because of the three minutes. But there is --

THE CHAIR: In your former life you might have had more time.

(Laughter.)

MS. CLAIRE SHULMAN: There's another statement that's been filed.

Anyway, urban renewal, in this case, is about more than economic development, it's about cleaning up one of the most contaminated areas in the region and turning it into New York City's first green neighborhood.

The environmental benefits of this

project to our City and to the families in the 01:36:55 surrounding neighborhoods is undeniable.

01:36:55 We can all agree that we need to clean up Willets Point and the Flushing River and the Flushing Bay.

This area has been polluted and contaminated since its use as a coal ash dump and made worse through years because of illegal dumping and improper housekeeping.

If we don't clean the contaminated soil, any efforts to clean up the polluted waterways surrounding this area will be for naught.

The redevelopment of Willets Point comes at a critical time for our City's economy. The creation of New York City's new great neighborhood will keep our economy moving, and we have to act now.

The economic benefits of this project are clear.

Situated at the heart of so many cultural institutions and recreational facilities, in close proximity to mass transit and to our airports, Willets Point right now is the epitome of an unrealized potential.

Redevelopment of this area will create close to 20,000 construction jobs and more than 6,000 permanent jobs.

We will create a center of commerce that serves both communities of Flushing and Corona and added desperately needed convention center space as well as a large hotel. And now is the time to make Queens a destination for business and commerce.

Many of our members are here today and they will speak to this issue.

The last aspect of this project I want to discuss is housing. At a time when families face a dire shortage of housing, the redevelopment of Willets Point will create 5,500 units of housing in area that currently has none.

As it stands, subject to negotiation --

Last paragraph.

01:39:20 THE CHAIR: You need to just wind down.

MS. CLAIRE SHULMAN: Having had the privilege of serving in a Borough-wide post for many years, I can tell you that rarely has one plan

encompassed so much hope for the future for our economy, for our environment and for those seeking an affordable place to live.

This plan must go forward.

For those reasons and many more, I hope you will strongly consider adding your voices to the people supporting this project.

01:39:59 Thank you.

01:39:59 THE CHAIR: Thank you.

01:40:01 It's really nice to see you, Claire.

01:40:02 Let me just see if there are any 01:40:03 questions for you.

01:40:04 (No response.)

01:40:04 THE CHAIR: There are not. But 01:40:06 it's a pleasure. Thanks.

01:40:06 MS. CLAIRE SHULMAN: Thank you.

01:40:17 THE CHAIR: Thanks.

Peter Ward; and

Then will switch to speakers in opposition, again, beginning with Dan Feinstein; and

Then Jean Mizoni.

01:40:21 Is Peter Ward here? Yes.

01:40:33 MR. PETER WARD: Good afternoon, Madame Chair, Commissioners.

Thank you for having me here this afternoon.

My name is Peter Ward and I'm the President of the New York Hotel and Motel Trades Council.

We're a union representing 30,000 hotel workers in New York City.

Our support for the Willets Point redevelopment stems not just from the City's commitment to ensuring that the future hospitality jobs there are quality union jobs, but from the fact that over 1,000 of our members live in the Flushing and Corona neighborhoods that will be most affected by the redevelopment.

Willets Point has become an historic opportunity to:

Reinvent an important but neglected neighborhood;

To create a model green community; and

To establish a haven for working class people with good jobs in the neighborhoods

where they live.

I commend Mayor Bloomberg and affordable housing advocates for engaging in a constructive dialogue to create more low and middle income housing in one of the most -- which is one of the most pressing needs working class people face in New York City.

I strongly believe that the City is committed to a significant proportion of affordable housing at Willets Point.

I applaud the administration and EDC in making an unprecedented effort to handle property acquisitions and business relocations in a fair and responsible way.

Property acquisition and the use of eminent domain are very complicated and in no case is everyone going to be satisfied with what happens.

Given the extraordinary and holistic effort the City is making to accommodate the landowners, businesses and workers at Willets Point, this will be resolved in the best way possible for all stakeholders involved.

Willets Point is important for

preserving quality jobs Citywide.

Hotel workers have fought for generations to change low-wage, exploitative work into stable, middle class occupation.

Nonunion hotel companies are threatening that.

By guaranteeing to support workers' rights and redevelop Willets Point, Mayor Bloomberg is taking a stand to prevent a Citywide race to the bottom.

The administration is working to make this project an opportunity to change the way development happens in New York:

Cleaning up the environment and pioneering green building on a comprehensive neighborhood scale;

Providing good jobs and opportunity in the neighborhoods working people live in; and

Taking care of the people and businesses that are displaced in the process.

The City's plan to clean up and revitalize Willets Point is just the kind of bold an innovative economic development project our City

needs more of.

And I respectfully request that the City Planning Commission approve the Willets Point redevelopment. And we look forward to working with the administration, City Council and all stakeholders to bring this critical and precedent-setting project to fruition.

Thank you.

THE CHAIR: Thanks very much.

Any questions for Peter Ward?

01:43:59 (No response.)

01:44:00 THE CHAIR: Thanks very much.

We have time for actually one more speaker in favor and then we'll switch to speakers in opposition.

Ed Malloy; and

01:44:07 Then Dan Feinstein

01:44:07 MR. EDWARD MALLOY: Thank you, Madame Chair and members of the Commission.

My name is Edward J. Malloy, President of the New York City Building Construction and Trades Council, representing 125,000 members.

I'd like to shift gears a little

bit and share with you job opportunities, including the junior apprenticeship programs, especially program initiatives, for construction skills and other trades to realize their goal, master a skill and achieve independence, have access to a career in the building construction trades union that solidifies New Yorks' middle class as strengthening our City's economy and its diverse communities.

Eighty-seven percent of the referrals placed by construction skills in junior apprenticeship programs are African-Americans, Hispanic, and Asians. And perhaps more important, 83 percent of the referrals placed by construction skills in union apprenticeship programs remain actively employed in the trades with many now working as journeypersons.

This record meets our efforts and moves us beyond equal opportunity to achieve proven, successful career outcomes.

We're proud to say that some of the participating projects in construction skills have been: Ground Zero, Yankee Stadium, Citi Field, Atlantic Yards, the Bronx Terminal Market, and the future Columbia University project.

And this October we will indenture our one-thousandth apprentice for construction skills. We hope that Willets Point will add the opportunities for our young New Yorkers and a great career in the buildings construction trades.

Thank you very much.

THE CHAIR: Thanks very much for testimony.

Are there any questions?

(No response.)

(Applause.)

THE CHAIR: Now we are indeed going to switch to speakers in opposition.

The first is Dan Feinstein; then

G. Lisoni;

Then Dan Corace, Corais maybe;

Then Blass Olivares.

MR. DAN FEINSTEIN: Madame Speaker, thank you very much, Commissioners.

My name is Dan Feinstein.

I'm the President of Feinstein Ironworks. We are a 77-year-old structural steel fabricating company in New York City. We employ approximately 150 people. And none of the people

that work for our company are entry-level or minimum wage. They're all benefited and highly trained employees.

I was going to come up today and speak to you about the many things we've heard today. And I think the one thing I'd like to touch on first is the misrepresentation of what Willets Point really is.

Willets Point is not a haven for the automotive industry. As a matter of fact, more than fifty percent of the land that's occupied by Willets Point is occupied by companies that are not related to the automotive industry.

We have the largest manufacturer of Indian food products in New York, is in Willets Point. We have the largest structural steel fabricator in the City of New York.

We fabricate over 13,000 tons a year and we're in Willets Point.

You have one of the largest infrastructure contractors, in Tully Construction, is in Willets Point.

The largest distributor of sewer pipes, sewer pipes. We don't have a sanitary sewer

system, but the largest distributor of sewer pipes is in Willets Point.

Now, I can go on and on and on, but these are not automotive-related businesses, although the City would have you believe that everyone down there is a chop shop. They have to, otherwise how can they convince you to steal the land.

I'm not going to comment, because I'm not an environmental expert, on why the elevation of the property has to be raised two to six feet. But I'll tell you that the feeding roads, Northern Boulevard and Roosevelt Avenue and 126th Street, are not being raised at all. And yet our property and our streets and our elevation of our buildings are set to the same level or slightly higher than the street level.

So I find it interesting that they have to raise it two to six feet in the interior streets - somebody used the word checkerboard - but all the feeding streets are not being changed.

I can go on and on and on and talk about that. But what I'd really like to spend the last few minutes speaking about is, this plan makes

no sense.

Twenty years ago, 1991 or greater than twenty years ago, almost twenty years ago, the then Borough President, Claire Shulman, sat with myself and my father and some other people at Willets Point. And we said, you need to fix the area. We go to work everyday and we don't like it. You need to put the streets in. You need to put the sanitary sewers in. You must do something.

So in 1991 the then Borough President commissioned a study that the City did to determine what was the best use for Willets Point. Their study determined that it should be an industrial area.

And their study said put the roads in, put the sanitary sewers in, put a working storm sewer in there and the area will clean up and flourish all on its own. It's an island. It's isolated.

We have trucks coming into our facility 24 hours a day, as do many of the other businesses. We don't distribute to residential neighborhoods because we're near none.

In the City of New York -- I mean

someone said prior that we need to get independent from Wall Street. We're independent from Wall Street. We're manufacturing jobs, the very jobs that the City is trying -- it says they want to keep they're trying to get rid of them.

And just to close, I wasn't going to come up and speak today because I said it really doesn't make a difference. The Mayor wants this piece of property in the worst way. And you know what, it's not his. It's ours. And if property rights is not enough for this Commission to say wait a minute, the plan makes no sense because you don't own any of the land. We own it all. It's not like the City owns 47 acres and they're trying to get three. They own none. We --

01:49:54 Thank you very much.

01:49:54 THE CHAIR: Thank you.

There are questions for you.

Yes, Angela Battaglia has a question.

01:50:00 COMM. BATTAGLIA: Did you or were you willing to enter into negotiations with the City for the possible relocation of your business and the sale of your property?

01:50:12 MR. DAN FEINSTEIN: A year and a

01:50:14 half to two years ago we -- we contacted EDC through the Office of Constantople. And we said, we're hearing all of these things that's going on in Willets Point, but you haven't come and spoken to us. So we'd like to come and see you.

So we went and spoke with the then President of EDC, now deputy Mayor, Bob Lieber. And we said, what's going to happen to us? And he said, you know what, we're going to send you a form. You fill out the form of your business, how many square feet, how employees, what do you need and where do you need to be.

It took us four to five months to get the form. When we finally got the form, we filled it out. We sent it. Several months later we went to EDC and we had a meeting. And they prepared a book of properties. It looks like something prepared by a real estate company.

And they showed us properties in the Bronx they don't own, privately-owned properties. And I said, well, we don't need you for this. We can go to a real estate broker and find privately-owned properties. But we said, we

need to be in Northern Queens. We're out of business if we're not in Northern Queens.

That was a year and a half ago or two years.

We, our company, has been asking for a relocation site-specific plan. We want to be in Northern Queens. We'll be losing our employees if were not. We'd lose most of our client base, our trucking economies will go and we'll be, of course, out of business. We don't have it yet. It's a year and a half later.

We meet a week and half ago and said we're willing to talk but it has to be substantive. Just don't come and speak to us so you can fill out a checklist on a piece of paper and it says we spoke to you twelve times. If you don't offer us something, what are we talking about? So come and show us something. Show us where we can go. Don't show us a $38 million, privately-owned piece of property in the Bronx. Show us something where we told you on the form that we need to be.

And Deputy Mayor Lieber said it very well last week. And he was quoted in the newspapers. He said, you know, there's a good

chance a lot of businesses just won't survive. I don't understand why the City of New York, which is in deep financial trouble right now, and it doesn't seem like it's going to get better any time soon. Private owners cannot get funding for mega projects, mega projects. The tenants are all falling off from the wayside. How can they justify killing almost 2,000 jobs?

We pay real estate taxes. We pay every kind of tax. We get no service. How in the world do you justify that? You put a $400 million line item in the budget and they can't buy milk for after school kids and senior citizens. I don't understand. It makes no sense.

So to answer the question, I'm sorry I went around in circles, you know, we told them all along we'd be willing to sit down and talk but it really has to be substantive. It just can't be well, we have five properties that are privately owned in the Bronx.

THE CHAIR: Do you have a question?

01:52:40 COMM. KNUCKLES: Yes.

01:52:40 How many people do you employ?

01:52:42 MR. DAN FEINSTEIN: Almost 150.

01:52:47 COMM. KNUCKLES: Almost a hundred and?

01:52:47 MR. DAN FEINSTEIN: Fifty. Almost 150.

01:52:50 THE CHAIR: Are there any other questions from the Commission?

01:52:50 COMM. CANTOR: Yes, please.

THE CHAIR: Yes. Irwin.

COMM. CANTOR: Yes.

01:52:50 Mr. Feinstein, you said that all of your people are well-trained people. And all the comments you made in terms of relocation, the one about potentially losing people, sounds somewhat persuasive.

By the way, you're a very persuasive speaker.

If you -- you don't have to be in Queens to service the construction industry with the facilities -- with the services that you provide. And while you may still be the largest iron shop in the City of New York, that's only because every other iron shop has left the City of New York.

01:53:25 So --

01:53:25 MR. DAN FEINSTEIN: And doesn't that say everything.

01:53:32 COMM. CANTOR: Yes.

MR. DAN FEINSTEIN: So you have a company that --

I'm sorry, Mr. Cantor.

COMM. CANTOR: I don't want you to leave. I don't want you to leave. Okay?

But putting it in perspective, where I'm going is, it would appear to me that if a parcel were available outside Northeastern Queens, it could be a viable parcel to you, yes? No?

01:53:48 MR. DAN FEINSTEIN: Perhaps yes and perhaps not.

01:53:55 COMM. CANTOR: Thank you. Fair enough.

01:53:56 THE CHAIR: Any other questions from the commission?

01:53:57 (No response.)

01:54:00 THE CHAIR: Thanks very much.

01:54:02 MR. DAN FEINSTEIN: Thank you very much.

01:54:05 THE CHAIR: Thank you for

coming.

Gale Lisoni, G Lisoni. G. Lisoni.

01:54:17 But otherwise that's just a G. Lisoni.

01:54:17 (No response.)

01:54:17 THE CHAIR: Okay. Dan Corace.

01:54:22 Forgive me if I mispronounced it. Dan Corace.

01:54:22 (No response.)

01:54:22 THE CHAIR: Blass Olivares.

A VOICE: I'm here.

01:54:30 THE CHAIR: Okay. And he'll be followed by Arturo Olaya.

01:54:56 Mr. Olivarez.

01:54:56 MR. BLASS OLIVAREZ: Hello, everybody.

My name is Blass Olivares. I working for sixteen year in the Willets Point. I

01:55:02 working very hard. I working Sunday to Sunday,

01:55:06 twelve hour a day. But my story is for everybody.

01:55:11 They fix -- the City never fix the hole. The City

01:55:18 every time give a hard time. Never give a chance.

01:55:22 We want to keep our young because

01:55:25 that's the future of my family. I have five kid.

01:55:29 They study and never take one penny for the City.

01:55:33 I working very hard.

I tell the City Planning Commission, put your hand on your heart. Don't destroy my family. Don't destroy the future of my son because we keep the job. We find other location in another place. But I say it's very hard here explain this situation because want to get the job. We want to working very hard.

Please, give us chance. Give opportunity for the poor people. Don't destroy our young. Please, put your hand on your heart.

Thank you so much.

THE CHAIR: Thank you very much.

Arturo Olaya.

MR. ARTURO OLAYA: Yes, thanks. I'm Arturo Olaya.

Thanks for giving me the opportunity to talk.

I'm the President of the Willets Point Defense Committee of Small Businesses and Workers.

We been in Willets Point suffering for many years. And you can see one of the tenants, Blass, that's been there without no heat and his place and he get very hard arthritis.

That's why he get sick.

And I want to read something.

We are the victims of this mega project. And we are come to this first public hearing to claim for justice.

It is sad to know that the scarcity of precious land, which will made victims out of the workers in the small businesses in Willets Point, is the outcome big business lobbying to State and City officials. It is this lobbying that has not enabled us to have sewage, sidewalks, rain drainage, heat, paved streets, garbage collection or snow removal.

The Mayor's Office in New York have the objective of illegally starving Willets Point of all the essential basic resources to ease the process of displacement with the goal of ultimately redeveloping the Iron Triangle and giving profit to the big corporation.

This mega project will not only take possession of the land, but at the same time it will brutally do it at the lowest price possible. It is for this reason that this plan will not include any economic compensation or relocation

of the businesses.

This mega project is a violation of human and labor rights. The City of New York is exercising their authority to commit wrongful seizure of land.

This topic is one that has been around for centuries. And it is common that the United Nations has established a series of norms, recommendations and international laws to protect the victims of wrongful seizures.

We would like to publicly denounce that over 1500 immigrants, predominately of Latino descent, will suffer due to the forceful displacement that will take place in Willets Point. Over 60 acres of the land in Willets Point will be used to benefit the private sector industries.

This development plan is founded around the systematic violation of our basic human rights which will evict us from our sources and it will toss us into the streets empty handed.

The founders of the development plan are argue us. And it has been determined that we do not have any legal rights, according to the City laws which do not recognize or assume

responsibility for the workers and the renters of small business.

We beg you to do not approve this project until the City give us a contract and show us a serious contract for the relocation and compensation for the workers.

Thank you.

(Applause.)

THE CHAIR: Thank you very much.

Karen Phillips.

COMM. PHILLIPS: You and your friend own a business that is located now in this area and is automotive use.

MR. ARTURO OLAYA: Yes, we do.

COMM. PHILLIPS: Okay. And you rent from someone else?

MR. ARTURO OLAYA: Yes. We rent. The City is always saying that it's illegal for them to give us a relocation -- to talk to us about relocation or to give us now a plan or show us land for a new relocation. They consider it illegal, but they not consider illegal treating us like they treating us. They just have a protest outside that

say, cleanup Willets Point. They talk like we are garbage. But they know, they show the picture that what they produce in years and years of negligent.

And we hope that you do not approve this project until they give us a relocation signed and compensation for the work.

02:00:52 02:00:55 02:00:55 02:00:56 02:00:57 02:01:00 02:01:00

COMM. PHILLIPS: Thank you.

THE CHAIR: What's the name of your company?

MR. ARTURO OLAYA: Arturo Auto Trade Shop.

THE CHAIR: Okay. Thank you very much for testifying.

MR. ARTURO OLAYA: Thank you.

I just wanted to leave this document for you that have more information.

THE CHAIR: Yes. If you give it to our staff there, she will take care of it.

Thank you so much.

Now, again in opposition. I'll read a few names:

Forgive my pronunciation. I think it's Yarin Rosenthal; if that could be right.

Then Randy LaFargue; and

Then Joseph Ardizonne;

Okay. And then Elena Conte.

So Mr. Rosenthal.

02:01:49

MR. YARIN ROSENTHAL: Thank you.

My name is Yarin Rosenthal. I am

02:01:52 02:01:54

one of the property and business owners in the Willets Point area.

With your permission, I would like to read a report from one of our engineers that had to leave. It's, I think important. And if you'll bear with me.

The report was prepared by Kevin Loyst. He's a licensed professional engineer with degrees in environment engineering.

He has sixteen years of environmental engineering experience. He was retained by the Willets Point Industry and Realty Association.

Mr. Loyst prepared a -- performed a review of the Draft Generic Environmental Impact Statement. And he reviewed all the documents. And he was focusing on the hazardous material impact to surface and groundwater resources.

A written summary of this will

also be handed in.

The DI -- the DGEIS states that the site has a history of contamination and shows a hydraulic connection to the Brooklyn Queens aquifers, and active or potentially active wells.

In the opinion of Mr. Loyst, the proposed development will compress the soils underlying the site and squeeze the contamination into the aquifer.

The amount of soils necessary to elevate the site of the footprint (sic) will cause significant infrastructure problems.

He comments that the City has not undertaken any studies necessary to evaluate the impact of the squeezing of the soil.

The DGEIS and the associated documents state that the site has a history of contamination. If so, this is significant because the site lies above a sole source aquifer which is used for water supply by New York City.

Indeed, according to the documents, on which the DGEIS is based, there is a direct pathway from Willets Point to existing New York City DEP water supply wells in Queens, as well

as proposed wells in the Brooklyn Aquifer Study.

This study is seeking ways to utilize the Brooklyn Queens aquifer during droughts and other water emergencies.

The development will squeeze contamination out of the soil below the site.

If the plan is to add up to six feet of fill to raise the grade above the hundred year floodplain, the City -- and if the City has underestimated the amount of fill necessary to do so, it will require much more fill.

The soils beneath Willets Point are old, saturated marshlands that are compressed. When the fill is place on these old marshlands, it will squeeze water from them just like squeezing water from a sponge.

If there is any contamination in the water, it will be injected into the aquifer when the marshlands are compressed instead of seeping out over many years.

The contamination could then travel along the pathway shown in the DGEIS documents and contaminate the aquifer.

I guess his point is that this

particular issue is not adequately addressed in the DGEIS.

Thank you very much.

THE CHAIR: Let me see if there is anybody who has a question for you on the Commission.

Yes. Karen Phillips does.

COMM. PHILLIPS: You said that you're an owner and do you operate a business now or --

MR. YARIN ROSENTHAL: Yes, I do.

COMM. PHILLIPS: -- or do you rent? You operate a business.

MR. YARIN ROSENTHAL: I occupy and operate a business.

COMM. PHILLIPS: And in the automotive industry and how many employees?

MR. YARIN ROSENTHAL: The name of my company is Parts Authority. We're in the automotive parts business. We're in the new parts business. We supply -- one of the reasons this area is very important to us is we supply parts to the airport, La Guardia Airport and many City agencies, many State agencies.

And obviously the location there is quick access to Manhattan, the Bronx and many areas.

COMM. PHILLIPS: How many employees?

MR. YARIN ROSENTHAL: I'm sorry. 85 employees in that location. Five hundred overall, altogether.

THE CHAIR: Any other questions?

(No response.)

THE CHAIR: Thank you very much for being here to testify.

The next speaker is Randy LaFargue; and

After him Joseph Ardizzone.

MR. RANDY LAFARGUE: Thank you very much.

Good evening, ladies and gentlemen, Madame Chair, Commissioners.

My name is Randy J. LaFargue. And I'm here on behalf of Public Advocate Betsy Gotbaum who asked me to come by and read a statement from here.

Because obviously no one wants

Willets Point to remain as it is today with potholed streets resembling dirt trails, no sewers and frequent flooding.

We all want what is best for both the surrounding community and for the City as a whole. We all want viable jobs, affordable housing and more schools and the opportunity for economic growth.

All of this can be realized in Willets Point but only if everyone involved has a voice in the process.

The Economic Development Corporation should open up the RFP process and share information with all affected parties.

For the surrounding community to not know who will be responsible for the implementation of this project, despite their repeated attempts to work with the EDC in order to gain this information, is simply unacceptable.

Given that Willets Point is a large area, ideal for both business and residential development due to the confluence of major roadways and the fact many of the existing businesses in the Iron Triangle has been in that same location for

decades, despite the lack of basic City services, the City's lack of an informed and all-encompassing plan should signal a return of sorts back to the drawing board for a sensible compromise, and not a headlong rush into the approval process.

The current Willets Point Development plan is large in both vision and scope but this plan has flaws which must be addressed.

Therefore, it makes sense to bring all the stakeholders together, give adequate time for all concerns to be voiced and then make an informed decision on how to best move forward.

Thank you very much.

THE CHAIR: Thank you for your statement on behalf of the Public Advocate. We appreciate it. Thanks.

THE CHAIR: Joseph Ardizzone.

And then I'll just read a couple of names:

And then Elena Conte; and Susanna Schadler.

MR. JOSEPH ARDIZONNE: Okay. name is Joseph Ardizzone of 126-96 Willets Point Boulevard, Corona, New York.

I want to say something that's a little funny but it's okay.

He conquered people by beating the drums of protecting them. While searching out his enemies he conquered many countries. Don't let him conquer you, the City, State or country.

Many generations of children to come cannot pay the debt that is being added to their futures for the City, State and Federal Government.

To take property from a person and sell it to a developer is an abuse of eminent domain.

Willets Point is in Community Board #4. Was the decision made by the Community Board #7 Flushing -- in Flushing? If it's not a crime, it is wrong. There aren't any plans at Community Board #7. They never had a definite place for where any building was to be put.

At one point it was described as an artist's rendering by a member of EDC.

Where are you putting the Sky Train from Kennedy, was a question that was asked. What Sky Train? The one that was funded. There was

nothing shown.

Where is the sewage treatment plant? How are you getting sewage there? No answer. Don't know.

Where is the bulkhead going to be put when dredging out the human waste from Flushing Creek? The odor makes your eyes tear in the summer. No answer.

What are you going to do about the exhaust from the planes as they take off over the new development?

How are you gong to protect the development? No answer.

The roads are to capacity. Now adding more traffic by new development. It is impossible.

New developers will be 25 years plus tax-free. Who's going to pay for their services? They're going to need services, the surrounding areas. We're overwhelmed now.

A large number of businesses can only function in a M3-1 zone. There are none.

The schooling that was set forth for the workers in the area, the design was

structured to fail. Many of the people down there are emotionally, physically and mentally handicapped. They have a lot of barriers such as language. Very artistic. Very good at their trade.

When they go down for a job interview, how are they going to pass a job interview? They aren't. They need to do a lot different.

THE CHAIR: Could you conclude your remarks, please.

MR. JOSEPH ARDIZONNE: Excuse me?

THE CHAIR: Could you just --

MR. JOSEPH ARDIZONNE: I can speed it up.

This presentation is designed to fail, bring more money to the City of New York. EDC is to develop City-owned property for the good of the people not the developers.

EDC wants to set a legal terminology called precedence, the right to take private property and sell it to a developer at more profit.

Let the owners sell their --

THE CHAIR: You have to --

MR. JOSEPH ARDIZONNE: Let the owners sell their own property.

Free enterprise made this country a great nation.

Vote against the project.

Thank you.

THE CHAIR: Thank you very much.

Let me see if there are any questions for you.

(No response.)

THE CHAIR: There are not. Thank you for being here.

THE CHAIR: Elena Conte. Elena Conte.

(No response.)

THE CHAIR: Susanna Schadler.

(No response.)

THE CHAIR: Susanna Schadler.

(No response.)

THE CHAIR: Reverend Monsignor Thomas Healy.

(No response.)

THE CHAIR: No. He did speak.

Now I have, Ms. Secretary, I think it's Ruben Ribas. Ruben Ribas.

(No response.)

THE CHAIR: Okay. Val Holder.

(No response.)

THE CHAIR: Jack Bono.

(No response.)

THE CHAIR: Charalambos Georgio.

(No response.)

THE CHAIR: Okay.

Raul Rothblatt.

(No response.)

THE CHAIR: Marilyn Mays.

(No response.)

THE CHAIR: Okay. Now we're -- I'm sorry. Ms. Mays.

Your name is?

MS. MARILYN MAYS: My name is Marilyn Maze.

THE CHAIR: Okay.

MS. MARILYN MAYS: I'm here on behalf of ACORN.

THE CHAIR: Speak closer to the mike so he can hear you.

MS. MARILYN MAYS: I'm here basically for two issues, affordable housing.

I live at a complex which is considered affordable housing right now and we're under siege.

And to sit here to listen for -- I've been here for a couple of hours. For people to say that twenty percent of affordable housing is acceptable and to have an income rate of $38,000 or more. I'm a single parent. Both of my daughters are in school. It's insane. It makes no sense.

To see workers displaced with no jobs. To have -- to go nowhere and to tell me that affordable housing exists in New York City when we see every single year the amount of affordable housing that vanishes from HPD, from rent stabilized units, rent controlled units.

I mean where are we expected to go? Luxury condos are nice for the rich. But when you're poor and you're struggling, where do we fit in?

I've lived in this City all of my life. I have been proud to be a New Yorker. But this is ridiculous. We're being forced out of our

own City. We help build this City. We helped create it. My mother was a nurse here for 42 years. Now I'm being basically told that we don't fit in to the City. I'm being told that we don't fit into Queens.

I've been fighting for three and a half years to protect seniors to keep their affordable housing. So for people to tell me that there is affordable housings plans in progress or within place, it just doesn't make sense. Because I've lived in Queens all of my life and I don't see it.

There's a seven to eight year waiting list for senior housing so let alone affordable housing for young adults or parents like myself. Where do we go? Who helps us?

And I've come to you. You've been the Borough President. But you've done nothing for affordable housing in Queens period. It makes no sense. It is true. And I've lived there all of my life and I'm not going to leave without a fight.

Thank you.

THE CHAIR: Thank you very much.

We'll switch now to speakers in favor.

The first is Kathy Wylde;

Who will be followed Nicolas Ronderos; and

Then Mr. Pennisi. I can't read the first name, Albert.

MS. KATHRYN WYLDE: Thank you.

I'm Kathy Wylde, President of Partnership for New York City.

Thanks for the opportunity to be here with all of you today.

The Partnership represents the City's international business community and largest employers. We have a significant record of investment in Queens.

We worked with the City on the transformation of the South Jamaica Urban Renewal area, which in many ways the story there reminds me very much of some of the conversations here today. That was an area that was -- that was full of crime ridden problems and junkyards. It was a blight an an important part of Queens.

It has become a thriving

residential neighborhood that's provided the basis for continued private investment in Downtown Jamaica and the reclamation of the entire area.

And I think it's been an important resource to the borough. I think it's a model of the kind of results that can be had in terms of the Willets Point area, which has long been a source of blight in the center of Queens and that represents an opportunity for a major new asset for that borough and for the City as a whole in terms of the plans that are proposed there.

02:18:24 I wanted today to take just a minute to address two issues that have arisen, in 02:18:32 part, in the media but have been brought up in the 02:18:32 testimony today by those who are concerned about 02:18:36 the process.

02:18:38 The first is the issue of eminent domain.

Having been for almost forty years myself in the urban development business, community development business, affordable housing development business, we would be nowhere in this City if we did not have and apply sensibly the power of eminent domain to assemble sites.

Private owners of sites often don't even act in their interest when they're considering a sale. And I think it needs to be clear that the sale of property in an eminent domain action is at market values.

There is no way that the City can proceed with its development activity and there's no way we would be as strong a vibrant urban center that we are today if we did not have eminent domain.

It is applied specifically in situations like this. And I've heard people -- the second issue I want to address is the issue of having a private developer in place for this action.

The fact that a private developer is not in place, that this is an action that is being taking pursuant to City policy and very importantly, the Economic Development Corporation, the Local Development Corporation that has been set up with civic groups from Queens to lead this effort and to take responsibility for as -- with EDC as the surrogate developer in this process.

We did hundreds of ULURP actions

under the Housing Partnership with that exact same model where we had a plan and a program. And we went forward because this was driven by public interest and not by the ideas and interest of an individual developer.

I think that makes this a far stronger project and I think it's a big plus for this project, not the negative that's been portrayed.

02:20:22 Thank you.

02:20:22 THE CHAIR: Thank you, Kathryn.

02:20:25 Let me see if there are any 02:20:25 questions for you.

Yes. Angela Battaglia has a question.

02:20:28 COMM. BATTAGLIA: Thank you.

02:20:30 MS. KATHRYN WYLDE: It's nice to 02:20:30 see you, Angela.

02:20:30 COMM. BATTAGLIA: This may not be your role, but I still would like to ask you what, if anything, you can do, or your organization or if you could perhaps help shed some light on how we help the more than one thousand workers that are there.

I don't think any of us can deny that the action will result in just an absolutely delightful development that is needed in the City of New York. But there are a lot of workers on the site now.

Could your organization do anything to help those workers? Do you have any 02:21:03 ideas?

02:21:03 MS. KATHRYN WYLDE: Well, I think 02:21:06 -- I guess it has to come to a point where there's 02:21:07 a cooperative spirit and I think after -- I think 02:21:12 it will help. As the decision-making process moves along, I think it will be easier to mobilize because as long as people are -- as long as the constituents of the site are trying to obstruct its development rather than to figure out how do we constructively find a solution to both the workers and the relocation of businesses.

We are absolutely prepared to help. We have -- for those businesses that are on the books and prepared to go forward, we have an investment fund. We have a network of financial institutions that are prepared to help. And we're happy to do that.

We work with EDC on projects all the time.

In terms of the placement of workers, again, I think it's the relocation of businesses and the ability to work with a, there's a network of workforce development groups in the City that are strong.

And I think having in place the LDC -- and I've met with the leadership in the LDC a couple of times and expressed our willingness to cooperate with them on helping them move forward.

I think that's an important resource that can play an important role here that maybe EDC can't play in terms of helping at a more grassroots level with the community, something that you have a lot of experience with. So we're happy to be helpful.

02:22:28 THE CHAIR: And Karen Phillips has a question for you as well.

02:22:29 COMM. PHILLIPS: Ms. Wylde, I believe you said you had two points and you got to the end. And I just wanted to --

02:22:36 MS. KATHRYN WYLDE: No. The second was the issue of ULURP and running through the

project without a designated private developer in hand, that we did that many times at the Housing Partnership. It worked. It was a system that people respected. In fact, they felt it was valuable to have the public interest rather than individual private interest driving the development decisions.

02:22:58 02:22:58 COMM. PHILLIPS: And just the other is, in terms of the convention center here, 02:23:02 how do you think that helps the City with the 02:23:03 relocation plan that includes the convention center 02:23:06 at this site?

02:23:10 02:23:10 MS. KATHRYN WYLDE: Well, we've been big proponents, really going back to the Group 02:23:13 of 35 Report that Chuck Schuler did, on really focusing on creating supplemental business districts and centers of economic activity and have, in fact, looked at this and see this as an important center of the two airports in Queens and an opportunity to establish a convention and conference center there.

I think it's a very good idea and one that really reinforces, again, the diversification of our economy on a geographic

basis.

02:23:43 COMM. PHILLIPS: Thank you.

02:23:44 THE CHAIR: Any other questions?

02:23:51 (No response.)

02:23:51 THE CHAIR: Kathy, thank you for 02:23:59 being here.

02:23:59 MS. KATHRYN WYLDE: Thank you.

THE CHAIR: The next speaker is Nicolas Ronderas;

To be followed by Albert Pennisi;

And then Heather Beaudoin.

02:24:00 MR. NICOLAS RONDEROS: Good afternoon.

My name is Nicolas Ronderos and I'm a Senior Planner for Regional Plan Association.

The stakes in this project are high.

The proposed plan would displace an estimated 260 businesses and 1,700 employees engaged in auto repair, construction and other uses in a City that is seeing its industrial sector increasingly squeezed.

The City would also invest substantial public funds in new infrastructure to

support the project. However, for a number of reasons, it is time for the redevelopment of Willets Point to move forward and Regional Plan Association supports this project.

First, redevelopment will bring a wide range of economic and community benefits. The City expects the redeveloped site to generate approximately $2 billion in economic activity and an increase of around 5,000 jobs, in addition to nearly 6,000 units of needed housing, community facilities, and eight acres of open space.

It will also connect the nearby thriving residential neighborhoods of Flushing, Corona and Queensboro Hill with the largely commercial and industrial College Point area, and integrate a number of Queens attractions, including the new City Field, Flushing Meadows-Corona Park and the National Tennis Center.

The proposed neighborhood has also qualified as a "green neighborhood" by the U.S. Green Building Council.

However, there is another aspect to Willets Point that requires wholesale redevelopment. The district's long history of

industrial use, informal business practices and lack of basic infrastructure has left a legacy of hazardous contamination.

Without clearing the site and starting over, not only will we be left with an area that is underperforming in its economic potential, also we will be shirking our responsibility to protect public health and the urban environment.

This does not mean that the plan proposed by the City cannot be improved. A leading issue is the number of housing units that will be affordable to low and moderate income households.

Pedestrian access to the waterfront and to adjoining neighborhoods, a desire of local communities, has not be solved. Relocating displaced industrial jobs must be done as completely and effectively as possible.

The feasibility and benefits of a convention center on the site is an unresolved issue. City resources, and the dollars that can be generated by redevelopment of the site, are too scarce to meet all of these needs so trade-offs needs to be made.

However, the important point is to move the process forward and take advantage of this opportunity to make Willets Point a model of both economic and environmental sustainability.

Thank you.

THE CHAIR: Thank you, Nicolas. Nice to see you.

Are there any questions from the Commission?

02:26:46 (No response.)

02:26:46 THE CHAIR: Please leave your testimony. We look forward to reading it.

Albert Pennisi; and

Then Heather Beaudoin; and

02:26:52 Then Joseph Farber.

02:26:52 MR. ALBERT PENNISI: Good evening, Madame Chairperson and members of the City Planning Commission.

My name is Albert Pennisi. I am the President of the Queens Chamber of Commerce.

The Queens Chamber of Commerce's No. 1 priority has been to bring a convention, exhibit center, along with an adjacent hotel, to Queens County.

The proposed redevelopment of Willets Point will allow for this vision to become a reality.

New York City now has no alternative to the Javits Center, which is presently beyond the economic reach of smaller conventions.

Willets Point is one of the last pieces of land of sixty-plus acres available for development in Queens. And its development will promote economic growth, serve the market's need for convention and exhibit centers that is larger than the current Queens hotels can provide.

The overall plan for Willets Point should serve the needs of the Queens business community and the City of New York.

A convention and exhibit center would provide Queens County and the City of New York tremendous benefits by hosting large trade shows, consumer shows, cultural events and visitors from the City of New York and nearby cities in the United States. And yes, even Europe.

This location is ideal in that it borders on major highways, mass transit, is one

mile from La Guardia Airport, ten miles from JFK Airport, and a two-hour flight from many major cities in the United States.

A convention and exhibit center must be supported by a hotel on site. The hotel would accommodate New York City and visiting guests from outside the region. And a hotel is critical to supporting convention and exhibit center.

This is an extremely important financial benefit to the City of New York and Queens County certainly in these economic times.

Development at Willets Point, as you heard many times today, would create 20,000 construction jobs and 6,000 permanent jobs that we certainly need in this region, and generate, I'm told, about $5 billion over thirty years.

We do however, recognize that this development must be pursued with an awareness that businesses currently operate at this location.

The Economic Development Corporation must find relocation, financial and technical assistance, to ensure the shortest possible and least disruptive business relocations.

New York City has selected La

Guardia College to work with displaced workers.

We applaud the statements of Mayor Bloomberg, Queens Borough Present Helen Marshall, regarding the creation of a dedicated Business Relocation and Workforce Assistance plan for the businesses currently located in the area. This relocation effort must be intensified by the Economic Development Corporation to succeed.

The Queens Chamber of Commerce looks forward to playing a continued role in this process and in assisting in any way we can.

We are pleased that we began as the Queens Chamber of Commerce with a feasibility study concerning Willets Point, which has now grown into a master plan.

I urge you, on behalf of the Queens Chamber of Commerce and the businesses of the County of Queens and the City of New York, to vote in favor of the development of Willets Point.

02:30:19 Thank you for your time.

02:30:20 THE CHAIR: Thank you very much

02:30:21 for your testimony.

02:30:22 Any questions?

02:30:25 (No response.)

02:30:25 THE CHAIR: No. Thank you for being here.

Heather Beaudoin, if I pronounced it right; and

Joseph Farber; and

Then Timothy Marshall.

02:30:35 MS. HEATHER BEAUDOIN: Good evening.

Thank you, Chair Burden, and Commissioners for your time today.

My name is Heath Beaudoin. It's very close.

I'm here on behalf of the New York City Central Labor Council, the umbrella organization for the City's labor unions representing 1.2 million workers.

We're urging the City Planning Commission to vote yes on the Willets Point Redevelopment plan.

The CLC applauds the historic agreements made with the City to enact broad labor standards on this project.

After months of negotiations, EDC recently came to agreement with the New York City

Central Labor Council to include language in the plan's RFPs to require the selected developer and contractors to pay prevailing and living wages, hire workers from state certified apprentice programs, encourage expanded and enhanced retail uses and discourage suburban models of big-box stores.

The Willets Point redevelopment will become a major engine for economic growth for Willets Point and neighboring communities creating thousands of construction and permanent local jobs and business opportunities.

This plan will include thousands of housing units serving a mix of incomes and demographics, new retail and entertainment facilities, new high quality hotel, New York City's first outer borough convention center, office space, open space, parks and playgrounds and a new public school.

A strong economy needs a strong, healthy workforce. These agreements protect workers' futures as we build the City's future.

As the City continues to experience this incredible building boom, those

working in and out of the buildings will be protected by these fair labor standards. By labor standards we mean meaningful training and career opportunities, good jobs defined by living wages, prevailing wages for all retail, building service and construction jobs.

These agreements will serve as a template for all City development projects.

And I thank you for your time.

(Applause.)

02:32:31 THE CHAIR: Thank you for coming.

The next speaker is Joseph Farber; and

Then Tim Marshall.

MR. JOSEPH FARBER: Good evening.

My name is Joseph Farber.

I am the Chairman of the Board of Directors of the Willets Point-Corona Local Development Corporation.

After sitting here for three

02:32:56 hours, it's difficult to see how I could even be clever or innovative in what I have to say here.

But what I would like to do is use

a couple of minutes just to thank you for the courtesy, the respect and the attention that you showed to all the speakers that have spoken to this point in the day. I commend you on that and thank you from all of us that are here.

02:33:15 Our development corporation is
02:33:16 organized and looking forward at the development of the Willets Point and Corona areas as an integral part of the overall development of Flushing and Corona.

The 66 acres comprising Willets Point offers a once-and-a-lifetime opportunity to take an under-used, abused and misused parcel of land and convert it to an environmentally sound, community-oriented and economically-viable site that will create hundreds of thousands of square feet of public space, a school for community children, affordable housing, and an aesthetic design that replaces an eyesore.

We recognize that to accomplish this goal there may be a necessity and a need to move businesses to other locations. That is unfortunate but it would be more unfortunate for present and future generations to ignore a

continued assault on the environment with the potential for disaster that will effect more people.

What we propose and what we ask this committee to endorse is land use not land abuse; public space, not polluted lots; jobs and not junk; affordable housing, not automotive chop shops. And in the end, most of all, progress, not continued pollution.

02:34:30 Thank you.
02:34:35 THE CHAIR: Thank you.

A question for you from Commissioner Phillips and Commissioner Battaglia.

02:34:35 Commissioner Phillips.
02:34:35 COMM. PHILLIPS: Okay. I just -- thank you, Madame Chair.

02:34:41 How long has your LDC been in
02:34:44 existence and are you a business owner within the
02:34:47 area?

02:34:47 MR. JOSEPH FARBER: Our LDC is in existence for little over a year. And I'm an attorney practicing in Queens County.

02:34:54 COMM. PHILLIPS: Thank you.
02:34:54 THE CHAIR: And Commissioner

Battaglia has a question.

02:34:56 COMM. BATTAGLIA: I believe more
02:34:59 than one speaker today had mentioned that it would
02:34:59 be really helpful in perhaps the role of the local LDC to help the businesses that are being displaced.

Would that be you and what will
02:35:08 you be doing to help them?
02:35:08 MS. JOSEPH FARBER: I'd be more than happy to help. But you couldn't have a better person than we have in the President and Chief Executive Officer and the former Borough President of Queens, Claire Shulman.

And I know she's offered her services and we offered the services of our entire organization for all parties in the interest of moving this thing along to a happy conclusion. Because this is in the interest of all the citizens in the City of New York. Not just us, not just Corona, not just Flushing and not just the businesses that are there at the time.

02:35:36 Absolutely.
02:35:37 COMM. BATTAGLIA: I certainly do
02:35:38 trust our former Borough President, Claire Shulman,

02:35:40 so thank you.
02:35:41 MS. JOSEPH FARBER: Thank you
02:35:41 again.
02:35:41 THE CHAIR: Okay. Thanks very much.

Tim Marshall;

Who will be followed by Kendall Riveria;

Then Gene Kelty; then.

02:35:42 Chuck Apelian.
02:35:53 MR. TIMOTHY MARSHALL: Good
02:35:56 afternoon.
02:35:57 My name is Timothy Marshall. And
02:35:59 I'm President of the Jamaica Business Resource
02:36:01 Center established in 1995 by the Whitehouse Office of Management and Budget to be a national model for small business development, which has been
02:36:12 replicated in sixteen markets throughout the United
02:36:13 States.

02:36:14 We're very pleased to be here to
02:36:16 support our Borough President and the excellent
02:36:19 work she has done in partnership with the Willets Point M/WBE and the EEO Advisory Committees.

02:36:30 As we all know, New York has been

experiencing one of the greatest construction booms in our city's history. And even with this significant building activity, we often see businesses and workers being brought in from surrounding communities and even states, while local residents often remain jobless.

However, recently we have seen a significant shift in our nation's states and cities economy. And for those of us on the front lines of advocating for minorities and women, we find that it is during very difficult times economically, it is a usual trend that minorities and women are even more marginalized and disenfranchised from participation in economic development opportunities, often times right in their own backyard.

And that old harangue, if-I-can-find-one-that's-qualified syndrome, often gets kicked in as an excuse.

As a member of the New York City M/WBE Advisory Board, the Mayor's Commission on Construction Opportunity, and the Borough President's Advisory Board, the Jamaica Business Resource Center is committed to working with the

Borough President and other major leaders and stakeholders to help assure that viable and positive economic development initiatives and opportunities are supported and that minorities and women are provided tangible, measurable and meaningful access to both business and job opportunities because the very future of our communities is at stake.

Therefore, in conclusion, we stand ready to do all we can to help assure that the opportunities before us, which are pregnant with possibilities for our community, are fully realized. And we encourage the City to stand behind the full implementation of the MWBE plan throughout -- throughout this development.

Thank you for this opportunity to present today.

THE CHAIR: Thank you very much.

Camille Rivera; and

Then Gene Kelty;

Then Chuck Apelian;

Then Dan Hendricks;

And then Joel Miele.

MS. CAMILLE RIVERA: Hi. Good evening.

I'd first like to thank the Department of City Planning for the opportunity to speak to you today.

My name is Camille Rivera and I'm the Assistant Political Director for Local 32 BJSEIU.

Local 32 BJ represents 100,000 members all across six states and 55,000 in New York City.

I want to first express, on behalf of our 55,000 members of New York City, our strong support for the Willets Point project.

Our members live where they work. We have hundreds of members that live in the Flushing and Willets Point section of Queens and thousands of them that live in the Borough of Queens.

And while we understand that there's still much to discuss and much to negotiate, we know that the City of New York is committed to providing true affordable housing for the community, as well as placement programs for

the needs of the building -- of the owners of many business in that area.

The City has already done right by the community by providing the opportunity for good jobs in Willets Point. We have a precedent-setting agreement that will pay building service workers prevailing wages and good jobs.

Our President, Mike Fishman's motto is that the first poverty program, antipoverty program is the unions and labor. And we truly believe that that program is happening here. And the community that will be affected by this project will be affected by getting the jobs that they truly need.

So I want to express our support. We thank the Department of City Planning for the opportunity to express our support here and we look forward to this project becoming a reality.

Thank you.

(Applause.)

THE CHAIR: Thank you very much.

Gene Kelty.

MR. GENE KELTY: Good evening, Madame Chair, Commissioners.

My name is Gene Kelty and I'm Chairman of Community Board #7, Queens.

I'm here to present testimony before you regarding the Willets Point development.

On June 30, 2008, the community board had a public hearing regarding this issue. The meeting went on way into the night where a presentation was conducted by the Economic Development Corporation, question and answer period with the full board members and comments from the general public.

By the early morning hours of 12:30 a.m., the Chairperson of the Committee presented his committee report with the following motions that were made.

And I have to tell you, it's been going for over a year that we've been having meetings. Within the last two months we had seven back-to-back to get it down as fast as possible to move the project along.

The -- it was to approve the Willets Point redevelopment as presented with the following stipulation. And the first two are mandatory.

First, postpone the disposition of property the City acquires at Willets Point until a final plan and a developer are chosen to allow Community Board #7 and the Queens Borough Board input and final approval.

2, the mitigation funds are extremely small compared to the billions needed to complete the project.

Community board #7 insists a mitigation fund equal to ten percent of the development costs be established excluding land acquisition costs.

3, the parking requirements for residential units should be increased to 100 percent.

4, the 850 seats from the K-8 public school should be provided on site and included in the Urban Renewal Plan.

5, Community Board #7 does not approve the use of eminent domain for this redevelopment but realizes it's a component of the Urban Renewal Plan.

6, Community Board #7 insists the New York City Economic Development diligently

exhaust every method of negotiation and not abuse the method of priority acquisition -- of property acquisitions and issue advance notice with supporting documentation to the community board prior to any action of eminent domain.

New York City Economic Development Department should keep their promise of unconditional efforts for business relocations, worker relocations and job retraining.

8, the affordable housing component should be increased to a minimum of thirty percent. Income eligibility requirements should be less than $45,000 per year.

9, half of the housing component must be designed -- housing component should designated for senior affordable housing.

10, as per HPD regulations, half of the affordable housing components will be allocated to residents of Community Board #7. The remaining half should be allocated to the Community Boards #3 and 4, Queens, which are located directly adjacent to the Willets Point redevelopment.

11, the overall site must conform to the LEED-ND standards.

After the above motion was made and seconded, a friendly motion was made and was accepted.

The redevelopment of Willets Point workforce should include the following priorities:

Displaced Willets Point workers;

Women and minority businesses;

Queens local businesses; and

The use of union labor.

The motion was read again with the addition of a friendly motions and a vote was taken.

Twenty-one board members voted in approval.

Fifteen board members voted in opposition.

Two board members abstained for conflict of interest.

And one of the other things we should state on this is that we would like to see the site done in phases as completed.

And I just would like to thank you for letting me present to you today.

Thank you.

02:44:34 THE CHAIR: Thank you and thank you for coming to testify.

02:44:37 Let me see if there are any questions for you.

(No response.)

02:44:38 THE CHAIR: No. But it's good to see you.

02:44:39 MR. GENE KELTY: Thank you.

02:44:39 THE CHAIR: Chuck Apelian; and

02:44:40 Then to be followed by Dan Hendrick;

Then Joel Miele; and

Then Jim Conway.

MR. CHUCK APELIAN: Madame Chair, Commissioners.

I'm Chuck Apelian. I'm the Vice Chair of Community Board #7. I also serve as the Land Use Chair and this was my subcommittee that we held the hearings on.

Gene just read the report of what we did. I just wanted to go into detail on a couple of particulars and why we picked the project and what we did.

The issue of eminent domain was a

very sensitive one to the board. And we spent a lot of time and discussion on it. And we realized that without the eminent domain being there, these negotiations would probably never end. People would just be going on and on and on and asking for more and more and more.

And we realized that that would be ultimately something that could help, you know, bring us to closure. But at the same token we were clear that we wanted the City to be, take every means possible to negotiate something reasonable with the owners.

If it wasn't for the fact of eminent domain, probably the Board would have been a much more unified vote as far as the approval.

But the two issues also I'd like to talk about was the conveyance issue and mitigation fund.

Those are two reasons why the board ultimately voted on approval was the fact that we want to have the ability to have -- when the final developer and final plan is presented, the ability to go back and make final comments.

Most of what we centered on about

is the fact is that there are issues that are open. This isn't a final plan. We couldn't give final approval.

So we ask that the State mechanism be given, as done with the Borough Board, right now. When EDC comes with land conveyance or if there's a land sale that can go back to the community board for input, it goes back to the Borough Board for final approval. We think that would be a great way for the electeds and the community to have a final comment.

The mitigation fund was something that was born in the community board. And we didn't ask just for five million. That was something the City gave us. But we said that there are big, big problems. You've heard about some of these today. And we don't know what the problems are. And we're not psychics. We're not paid to be.

So we just said, put ten percent aside. And that's not unreasonable when you're building a project. A ten percent contingency on any project is normal in business, in the business sense. And we want the City to put more money into it.

The seniors is a key thing also. We came up with a half affordable housing for seniors. That's also a very, very economical way to get the affordable housing component.

As you know, Federal funding will meet dollars put into that so that doesn't have to be something a developer has to come into and the need is there for senior housing.

We didn't discuss this much, but I want to bring it up.

This site must be remediated as one complete site. Somewhere along the line when the Draft RFP became -- I mean the ULURP finally came out, it came out there was a possibility that the site will be developed in stages. Whether it gets developed in stages or not isn't the key.

What's really the key and our concern is that this gets remediated as one site. We can't go and cherry-pick spots here and there and expect that this site will remain clean. It has to be completely disassembled, completely taken over and completely remediated as one site.

Finally, what I want to say is the last thing that really gave us an opportunity to

vote in favor of this was the letter of commitment that we got from the Deputy Mayor, Robert Lieber. I don't know if you have a copy of that that was given to Board. If not, we'll get that to you.

But we asked for memorialization of the eleven stips that came before us and the City did make those stipulations.

Also realizing that the community board, we're not the final venue, we realize that a lot of things will continue to go, the Borough President, the City Planning Commission and ultimately into the Council.

Thank you.

02:48:29 THE CHAIR: Thank you, Chuck.

Are there any questions for Chuck Apelian?

Yes. Angela Battaglia and then

02:48:33 Fred Cerullo.

02:48:33 COMM. BATTAGLIA: Yes, Chuck.

When I read the recommendation of the Board, you did say that you attached a letter from Lieber. And I didn't get a copy of it. It wasn't in our package.

So if you could get another --

MR. CHUCK APELIAN: We'll make sure --

COMM. BATTAGLIA: -- copy to us, I'd like to see that.

Thank you so much.

MR. CHUCK APELIAN: We'll make sure that it's there tomorrow. Absolutely.

02:48:45 You.

02:48:46 THE CHAIR: Fred, did you have a question?

02:48:49 COMM. CERULLO: Just a

02:48:53 clarification regarding the affordable housing

02:48:54 recommendation that was made by the Board.

02:48:56 One-half of the affordable housing

02:49:02 units, if I'm correct, is already allocated as

02:49:11 proposed, to residents of Community Board #7.

02:49:11 MR. CHUCK APELIAN: Correct.

02:49:11 COMM. CERULLO: It was the

02:49:14 recommendation of the Board to then allocate half

02:49:15 of the -- half to the residents of 3 and 4.

02:49:19 MR. CHUCK APELIAN: Three and 4, right.

02:49:21 COMM. CERULLO: So a hundred percent of all of the -- under that proposal and

recommendation, all of the affordable units would

02:49:30 go only to residents from Community Boards #3, #4

02:49:31 and #7, of which half of them, if I link it to

02:49:38 another recommendation made, would be for seniors.

02:49:38 MR. CHUCK APELIAN: A lot of

02:49:40 halves, but yes.

02:49:40 COMM. CERULLO: Yes. And

02:49:41 seniors from #3, #4 and #7?

02:49:43 MR. CHUCK APELIAN: Correct. However, we were told it's illegal. Our recommendation would violate the Fair Housing Law.

02:49:49 COMM. CERULLO: Okay. But thank

02:49:50 you.

02:49:52 (Laughter.)

MR. CHUCK APELIAN: We were trying to just be fair to the neighborhood community board. We were trying to be inclusive to our neighbors and that's what came about. And then we were told by HPD that it violated Fair Housing.

So it has to be one-half can go to the neighborhood community boards: #3, #4, #7. The other half has to be open to all people.

Within that half, though we're still asking for half of senior housing because

it's a need. And also, like I said, there's funding in place which makes is more economical and feasible.

02:50:20 COMM. CERULLO: Understood. Thank

02:50:21 you very much.

02:50:21 THE CHAIR: Are there any other

02:50:23 questions for Mr. Apelian?

02:50:23 (No response.)

02:50:23 THE CHAIR: Nice to see you.

02:50:25 MR. CHUCK APELIAN: Thank you,

02:50:25 everybody.

02:50:27 THE CHAIR: Thanks.

Dan Hendrick and

Then Joel Miele; and

02:50:47 Then Jim Conway.

02:50:47 MR. DAN HENDRICK: Good evening.

My name is Dan Hendrick and I'm here representing the New York League of Conservation Voters.

And I'd like to thank you all for having this hearing and staying all day.

A number of folks had spoken about the environmental issues at this site. I would just like to add an additional independent imprimatur to

everything and explain why we support this proposal as well.

First is really the visual blight.

For a very long time the Iron Triangle has been a real eyesore. And despite its proximity to Downtown Flushing and to Corona, it's a virtual no-go zone for anyone in that community. And it's also an area where people are really clamoring for open space and recreational opportunities. I know a couple of people have been kayaking on the Flushing Creek and the Flushing River. And the current use of Willets Point means that the waterfront is really off limits.

Second, as we know that Willets Point is a huge brownfield site that really should have been cleaned up years ago. We all know about the lack of sewers. More troubling is the widespread contamination from petroleum and automotive fluids and a number of other issues.

All of those things are made worse by the high water table in the area.

Third and finally, and I think this is really the most exciting facet for us, is that we really believe that the proposal for

Willets Point reflects a truly 21st century way to think about urban planning.

The site is close to the No. 7 train. So it epitomizes smart growth because people don't have the take the train -- can take the train to work instead of driving all over the place.

It's closer to highways so if people do need to drive, they can come in and out quickly.

We are very excited about the green building and alternative energy aspects of this plan.

And, you know, we really feel that we can work out the details about affordable housing and relocating the workers and businesses. And we do believe strongly that it's possible that the Iron Triangle really has the potential to become the Green Triangle and a world-class model for good design and sustainability.

02:52:53 Thank you.

THE CHAIR: Thank you.

Yes, Irwin Cantor has a question.

02:52:55 COMM. CANTOR: A question

02:52:58 regarding the environmental.

02:53:01 We heard a few of the opponents for this plan say that putting on fill is going to squish the water table down. Isn't putting on fill just going to have the fill absorb the water that's

02:53:16 there?

02:53:16 MR. DAN HENDRICK: Over the long -- yeah, there would be some short-term kind of settling. But over the longer term the water table would --

COMM. CANTOR: Yes. But as you're

02:53:21 placing fill, that fill is going to take in water.

02:53:21 MR. DAN HENDRICK: Right. It will

02:53:25 just simply sort of balance it.

02:53:25 COMM. CANTOR: I can't picture a

02:53:28 layer of water getting squished down.

02:53:29 MR. DAN HENDRICK: Right.

02:53:29 I mean one thing to consider is that I know that the water sources were mentioned in the Draft Environment -- I mean some of the testimony I heard earlier. I don't believe there are any treatment water mills really proximate to this site there. So it would be significant. You have to migrate the water very significantly to actually get to a drinking water source.

02:53:47 COMM. CANTOR: Thank you.

02:53:48 MR. DAN HENDRICK: Thank you.

02:53:48 THE CHAIR: Thanks very much.

02:53:50 Joel Miele; then

Jim Conway;

Then Dan Wempa, I think.

Then Sandra Wilkin.

02:59:35 MR. JOEL MIELE: Good evening.

02:59:35 It's good to be back. This brings back all the memories of going on into the night.

(Laughter.)

MR. JOEL MIELE: I don't envy you. But it's good to see you again.

My name is Joel Miele. I'm the First Vice President of the Flushing-Willets Point/Corona LDC.

Two years ago local public officials and community volunteers sought a unified force to achieve a solution to the problems now of Willets Point redevelopment. And the Flushing Willets Point Corona Local Development Corporation was formed.

The LDC was needed for two primary reasons: To bring together the community leaders

from the community whose name it bears, and to seek a solution to Willets Point's environmental and Infrastructure problems.

With input, which began last year, and which continues to date, the LDC has galvanized the three communities to reach out to the Mayor for his administration's assistance and leadership to replace this blight which separates the communities of Flushing and Corona, by virtue of ghetto, with a vital economic development plan.

The Mayor and his staff have responded to the plan which accomplishes that goal.

The Mayor's plan provides for the equitable relocation of the businesses in the Willets Point area so it will not cause Queens to lose business nor employment opportunities for the labor force which now exists.

And a mix of new uses including residential and commercial development which will form a middle corridor between Corona and Flushing which will seamlessly transition travelers through the three communities.

The plan has the support of the three communities, the Local Development

Corporation and the Borough President.

The hope and expectation is that the City Planning Commission will see the need and accept the proposed solution.

The Willets Point area has for fifty years or more, been the stepchild area of Queens County with no one speaking for it and no one caring. It's long past time for that solution and situation to be resolved.

Thank you.

03:01:16 THE CHAIR: Thanks, Joel. Really nice to see you.

There's a question from Irwin.

03:01:25 COMM. CANTOR: Commissioner, Commissioner, Commissioner.

MR. JOEL MIELE: Yes,

03:01:28 Commissioner.

03:01:28 COMM. CANTOR: Joel, the gentleman from Tully --

MR. JOEL MIELE: Yes.

COMM. CANTOR: -- was referencing retention tanks as options.

MR. JOEL MIELE: Yes.

COMM. CANTOR: That I had asked

him what kind of acreage would the retention tanks take.

Would you be able to answer that?

MR. JOEL MIELE: Not that specifically, but I think generally I can answer it.

The bottom line is that there is only a certain capacity to the storm sewer system in the County of Queens. It's designed to withstand it obviously.

In order to make sure that 100 year storm or a twenty year storm or a ten-year storm is treated, you build a retention tank, as has been done in Flushing by the way. And the intent of that is to hold as much of the storm drainage as possible and then to meter it out into the system so that it can be handled properly and rather than taking a large, untreated splurge of water.

The size of it is really I don't think is important. Because the important thing is, is there space to put it and the answer to that is yes. It's a matter of whatever size it is. Because you can put it under a park, as the one in Flushing

has done.

There's an enormous community park on top of the tank. As long as the tank is below grade it doesn't matter what the issue is. You don't want it under a building. But there's going to be plenty of open space in the plan that's been developed that will permit a retention tank to go in there.

I know that DEP has looked at it preliminarily and I know that they believe that there's adequate space for it and they don't have any qualms about it.

COMM. CANTOR: Thank you.

MR. JOEL MIELE: Any other questions?

THE CHAIR: Any other questions for Joel?

(No response.)

THE CHAIR: Just always good to see you.

MR. JOEL MIELE: Good to see you to.

Goodnight. I'm going home.

(Laughter.)

THE CHAIR: Jim Conway.
Then Dan Wempa;
Then Sandra Wilkin.
MR. JIM CONWAY: Good evening, Madame Chair, Commissioners.
My name is Jim Conway. I am that Mets fan that was quoted in the New York Times article last Sunday showing my disappointment that New Yorkers cannot reciprocate the same hospitality to Chicago baseball fans.
Thirty years ago there was a famous Queens-based television show called All In the Family. One of the characters -- one of the characters was very negative and the son-in-law had a vision. Each week we listened to the cacophony of insults hurled at the son in law.
Unfortunately today in Washington Square Park, our Queens residents were stopped while they tried to show their freedom of speech.
Today we need to build -- redevelop Willets Point. We need -- we need to have a vision. We need to move forward. We need to build it so this way when Queens residents and when baseball fans from out of town come to Willets

Point, they should come to watch a tennis game. And the areas around Shea Stadium, around Citi Park will be useful and not wasteful.
Please support the Willets Point redevelopment.
Thank you.
THE CHAIR: Thank you for coming.
*applause.)
THE CHAIR: The next speaker is Dan, I think it's Wempa, something close to that; and
Then Sandra Wilkin; then
Jane Thompson; then.
Michael Meyer.
MS. DAN WEMPA: Chair Burden, Commissioners, good evening.
I am Dan Wempa. I am representing the New York Hall of Science, one of the largest cultural institution.
We are located in Flushing Meadows Corona Park. We are immediately adjacent to the site.
And as an institution in Flushing

Meadow, we're one of four institution, the Queens Museum of Art, the Queens Theatre in the Park and the Queens Botanical Garden, being the others, that have all either just completed or are in the midst of major capital improvements.
Our institutions together are bringing in millions of people every years.
And one of the biggest hurdles we face is that we can get people into Queens for a day. We can get them to a ballgame. We might get them to a museum and afterwards it's over. And you might be able to get them to Flushing for a great meal. But you can't get them to stay because there's no "there" there.
And the convention center piece of this project really is the linchpin, the thing that we've been looking at for so many years.
Two thousand to 5,000 registered conventions are not an option right now for New York which means the Association of Science and technology Centers, the New York Association of Museums, they're never coming to New York because they just do not have an option.
The proposed convention center and

hotel that's part of this program, this project we're considering today, will bring that. And our institutions, like I said, include the Mets, the USTA, the new Flushing pool. And we are talking about billions of dollars of public and private money trying to build a destination, trying to turn Queens into a cultural center, another cultural center in New York. And this project is the best opportunity we've had for that. And the cultural community of Queens is very much in favor of it.
03 03:55 Thank you for your attention.
03 03:58 THE CHAIR: Thank you.
Any questions?
(No response.)
THE CHAIR: The next speaker is Sandra Wilkin;
Then Jane Thompson;
Then Michael Meyer:
MS. SANDRA WILKIN: Good afternoon, Chairperson Burden and members of the Commission.
I am Sandra Wilkin, President of the Women Builders Council.
Women Builders Council is a

leading organization in advocating for expanded opportunities for women in the construction and building fields.

I ask that the Commission approve the proposal to redevelop Willets Point.

This plan will serve as a major economic shot in the arm for New York City. The benefits are numerous.

The project will provide for nearly 6,000 good-paying construction jobs.

It will result in the creation of hundreds of permanent jobs in its retail sector, in the new hotel and convention space and on-site services.

This will be good paying employment opportunities for residents of New York City and particularly Queens.

The plan includes important job retraining opportunities as well. Desperately needed affordable housing will be provided at Willets Point.

The Women Builders Council is particular pleased by the inclusion of new employment for women and minorities in its

construction.

For the first time the Economic Development Corporation has included an aggressive component to include women and minority business enterprises in a major economic development project.

Borough President Helen Marshall and Deputy Mayor Robert Lieber, have organized the W/MBE task force that has developed a comprehensive package of measures to include W/MBE's in every phase of the project's development.

WBC is pleased to have played a prominent role in those deliberations.

The result of the work of the Borough President and the Deputy Mayor and that of the task force, has been most impressive. The plan breaks new grounds in transparency and accountability. It includes very significant goals for W/MBE participation which the administration will pursue.

The Women Builders Council believes that improving opportunities for W/MBES will result in a strengthened City economy for years to come and that Willets Point will open up

for business for women and minority enterprises.

WBC enthusiastically urges your passage of this plan. It will be good for New York City and good for Queens.

THE CHAIR: Thank you. Nice to you see.

MS. SANDRA WILKIN: Nice to see you.

THE CHAIR: Any questions?

(No response.)

THE CHAIR: Okay.

The next speaker is Jane Thompson; and

Then Michael Meyer; and

Then Austin McCann.

Is Jane Thompson still here?

(No response.)

THE CHAIR: Michael Meyer.

MR. MICHAEL MEYER: Good evening.

My name is Michael Meyer. I'm the President of TDC Development.

We are major developers and land owners in Flushing. Our project at the Municipal Parking Lot in Downtown Flushing, that we were

redeveloping with our partners, the Rockefeller Development Group, is the other major project that arose from Mayor Bloomberg's Downtown Flushing Redevelopment Framework which was created with the input of community stakeholders and urban planning professionals.

So we are local players and we very well understand the community dynamics. And we understand that Willets Point is absolutely critical in achieving the framework vision.

Without the Willets Point project, the new Citi Field and the emerging downtown Flushing will be stunted and will never achieve its true potential.

With the Willets Point project as the framework recognized, a vibrant, mixed use community will attract business activity and will be the critical link between Citi Field to the west and Downtown Flushing to the east.

Queens will finally gain its true commercial center.

With a project that will clearly generate so much benefit in the form of jobs, taxes and environmental cleanup, I ask that the

Commission, when considering the many emotional issues involved in such a large urban undertaking, not succumb to scare tactics or respond to myths that suggest -- respond to myths that suggest that land owners will be victims of a land grab by the City or that hundreds of currently unprotected workers will go without City assistance.

We have an historic opportunity to improve our City in a major way. It's been decades since an administration has had the will and vision to undertake such an ambitious project in this critical area.

No project of this scale and ambition can be accomplished without displacement. But the efforts by the City to work with business owners, retrain workers and not reflexively rely on eminent domain, demonstrates the commitment of the City to mitigate that displacement and to achieve the project in the most responsible manner.

To do nothing is not acceptable to the greatest City in the world and would be a lasting shame.

So thank you.

THE CHAIR: Thank you.

Austin McCann.

(No response.)

03:07:11 THE CHAIR: Bill Solecki.

03:07:11 (No response.)

03:07:13 THE CHAIR: Carina Molnar.

03:07:13 (No response.)

03:07:18 THE CHAIR: Alan Weinstein.

After Mr. Weinstein;

Howard Hsu;

And then Jack Kittle.

03:07:29 MR. ALAN WEINSTEIN: Trying to

03:07:29 sit for six hours here.

03:07:30 COMM. CANTOR: But you have a

03:07:35 softer seat.

(Laughter.)

03:07:37 MR. ALAN WEINSTEIN: Yes.

03:07:37 There's no use in being redundant. And most of what you have been hearing in favor of has really been enunciated and let me go before the bell lady gets me.

My name is Alan Weinstein. I am the President of the American Institute of Architects. Queens Chapter.

Cleaning the environment is of the

utmost importance for our future. A clean environment is the legacy we will leave for our children. That is why we were excited to hear about the rezoning and redevelopment proposal for Willets Point section of Queens.

The international gateway to the greatest City in the world, New York City is, in fact, here in Queens. Both New York City airports are located here.

We, at the Queens IU are excited about the new rezoning. And even more excited about the potential of creating architectural statements that will propel forward the Borough of Queens to the forefront of sustainable design and that the proposal serves as an example of other communities, not to mention, of course, the thousands of jobs that it will create, the much needed housing to assist in the elimination of illegal housing that exists, and the increased commercial opportunities.

This is a site that can revitalize the essence of Queens to serve as the shining example of what we can do to be environmentally conscious and stand next to our architecturally

older sister across the East River.

Although there still remains much work to do and agreements to be made that is above and beyond ourselves as architects, we applaud the efforts of all those that worked so hard to make this proposal a reality.

Solely for the purposes of architect design and sustainability, we are pleased to endorse the Willets Point redevelopment project and urge you to consider it.

Thank you for your time.

03:09:05 THE CHAIR: Thank you. Thank you for staying and thank you for your testimony.

The next speaker is Howard Hsu. Mr. Hsu.

03:09:10 (No response.)

03:09:10 THE CHAIR: Jack Kittle.

03:09:19 (No response.)

03:09:20 THE CHAIR: Eddy Burgess.

(No response.)

THE CHAIR: Spencer Ferdinand.

03:09:28 (No response.)

03:09:29 THE CHAIR: Mike McGuire.

Mr. McGuire will be followed by

Vincent Riso; and

Ofenke Lebarty.

MR. MIKE MCGUIRE: Good evening.

My name is Michael McGuire. I am the Director of Mason Tenders' District Council Political Action Committee, representing 15,000 members of the Laborers' International Union, North America in New York City.

The Willets Point area of Queens is ripe for development. It is in a prime location that is surrounded by growth including Downtown Flushing, the new home of the New York Mets, Citi Field.

Unfortunately, Willets Point is a true blighted area.

In the early 20th, century Willets Point was a dump where thousands of tons of garbage were burned each year. After that, it housed a variety of industries that had a severe detrimental effect on the area for many years.

There has been a history of open petroleum spills and illegal dumping of hazardous materials and unidentified chemicals.

The fact that the area has no

sanitary sewers to carry toxins away, including human waste concentrated in area cesspools, means that this contamination mostly remains in the area to this day. I say mostly because some of the contamination does get moved. The area's high water table means that these poisons seep into the ground water and get carried down the Flushing River and out into Flushing Bay.

Of the approximately 250 business in Willets Point, roughly 90 percent are auto related.

In this environment, even the most responsible business owners cannot help having some spills of oil, gasoline, transmission fluids and other carcinogenic materials.

If businesses of this type remain in the area, the land can never be reclaimed to the point where it's safe for human occupation.

Further, these auto-related businesses, two-thirds of which are working out of rented spaces, have a history of paying depressed wages, averaging less than sixty percent of the New York City average wage for workers in that industry.

As well as eliminating an extremely toxic and dangerous area, reclamation and redevelopment of Willets Point will create a vibrant, mixed use community.

Along with more than a million square feet of retail and entertainment space, the plan calls for a convention center and a 700-hundred room hotel, 5500 units of mixed income housing, a half million square feet of office space and a large amount of community space, open spaces, and public squares.

The economic impact of these improvements is massive. Permanent jobs will increase five to six-fold following the approximately 20,000 construction jobs that will be created.

This will result in more than $1.5 billion in additional tax revenues for the City over the 30-year period commencing when the project is completed.

The Mason Tenders' District Council prides itself in working with communities and pledges to aggressively participate in any local hiring plan that is agreed upon with the

building trades.

Additionally, we will support the use of green building techniques to conserve energy, manage storm water and to ensure high performance structures are constructed in Willets Point.

It is our belief that while there are hardships for some of the businesses that the City will relocate from Willets Point, for the overall good of the community, and New York City as a whole, the Willets Point development project is a winning plan.

Cleanup of a toxic, blighted site, the building of more than 5,000 units of housing, and the creation of some 20,000 construction jobs and the conversion of 1,000 current permanent jobs to 6,000 future permanent jobs and more than $50 million in additional revenue for the City every year, no one with the best interest of the community at heart could make the argument that this plan is not the best thing for Willets Point.

Thank you.

03:12:57 (Applause.)

03:12:57 THE CHAIR: Thank you. Thank you

very much.

Let's see. You're Mike McGuire, right?

Vincent Riso.

(No response.)

THE CHAIR: Okenfe Lebarty.

A VOICE: He's still here. He said -- his stuff is still there.

THE CHAIR: Okay.

J.W. Victor.

(No response.)

THE CHAIR: Linh Do. Linh Do. Babu Veeregowda, Veeregowda.

THE CHAIR: I'm sorry.

Ms. Do. Hi. How are you?

MS. LINH DO: Good evening, Chair Burden and Commissioners.

My name is Linh Do. I'm a Senior Vice President at AKRF. We are one of the principal preparers of the Draft GEIS.

I am here with -- I guess you had heard HDR previously address the issues related to --

THE CHAIR: If you would talk a

little closer to the microphone, that would be great.

MS. LINH DO: Okay.

You heard earlier today HDR address the issues the infrastructure and hazardous materials. And Eng-Wong Taub, who will follow me in speaking order, can also address the traffic issues.

Rather than give you my testimony, because you've been here a long time, I would just be available to try to answer any questions you may have.

THE CHAIR: Are there any questions for Ms. Do? She's from AKRF.

(No response.)

THE CHAIR: No. But thanks for staying.

MS. LINH DO: Thank you.

THE CHAIR: Babu Veeregowda.

MR. BABU VEEREGOWDA: Hi. Good evening.

My name is Babu Veeregowda, Senior Vice President at Eng-Wong Taub and Associates.

I'm also a traffic engineer

responsible for performing all the traffic engineering analysis and disclosing all the findings as you read in the book.

If you have any questions, I'd be happy to answer them.

THE CHAIR: Okay. Obviously Mr. Veeregowda is with Eng-Wong Taub.

Are there any questions from the Commission?

(No response.)

THE CHAIR: There are not, but thanks for staying to answer any questions.

MR. BABU VEEREGOWDA: Thank you.

THE CHAIR: Jason Stern. Jason Stern.

(No response.)

THE CHAIR: Okay. Maria DeLucia.

(No response.)

THE CHAIR: Tom McKnight.

MR. TOM MCKNIGHT: Thank you, Chair.

Good evening, everyone, again.

Thank you for your patience as the

testimonies continue.

But you saved me to kind of play cleanup in the city's presentation and to provide some clarifications and some additional points that we thought were worth pointing out to the Commission.

First of all, I do want to reinforce what my colleague Jonathan talked about in terms of business assistance.

The City has endeavored and is underway with a very significant business assistance program aimed at relocation for owner-occupant businesses, acquisition for land or property owners, assistance for tenant businesses, and as you'll hopefully hear in the next speaker or two, a very ambitious workforce assistance program that will be run by La Guardia Community College.

So it is a very comprehensive program. We don't want the Commission leaving the room thinking that this hasn't been thought through. And it's being implemented in a very careful way.

Secondly, that early on there was a discussion of co-location of tenant businesses.

03:16:50 I think that there are some challenges with that. But I want to reinforce that if that's something that we can achieve, we're completely open to trying to achieve that.

Some of the tenant businesses have issues related to capacity, to financials, to having existing lease documents. Given those constraints, if we can make collocation work, we will.

03:17:17 Additionally on tenant business assistance, we talked about bringing on the expertise necessary to help with relocation of tenants. The outreach we've done to date has been providing information about the project, about the timeline, about the assistance that would be offered in the future.

Today we're not permitted under law to provide relocation assistance for tenant businesses because it gets in between of a tenant/landlord contract.

Finally, on owner occupant businesses, I think you've heard from a business earlier saying that the City hasn't been helping. And I want to reinforce here that there are

specific businesses, unfortunately it's their decision, we respect that decision, who are unwilling to work with the City. And I want, again, the Commission to get the understanding that the City has made an effort to reach out and work with and provide relocation assistance to any business that is interested in doing so and we'll continue to do that going forward.

In terms of infrastructure, there was reference to a 1991 study commissioned to look at conditions in Willets Point.

We want to reinforce that that was an economic analysis. It was not an environmental analysis, an engineering analysis. In the seventeen years that have past since then, we've reached a very -- a much more comprehensive understanding of the challenges, the limitations and the necessary investments and the work that has to happen here in order to create new development.

And then lastly, I hope from the testimony from Chair Kelty and Land Use Chair Apelian, that there has been a very, very thorough discussion with the community.

We are attempting to achieve all

the priorities, to the extent we can, that the community board is seeking.

03:19:18 So if you have any other
03:19:18 additional questions, I'd be happy to try to answer
03:19:20 them.

03:19:20 THE CHAIR: Tom is indeed the project manager for this very ambitious endeavor and so any questions that you have, Tom is the person to ask.

03:19:29 Angela.

03:19:29 COMM. BATTAGLIA: I'm very glad
03:19:33 you either stayed or came back.

03:19:34 MR. TOM MCKNIGHT: I stayed.

03:19:35 COMM. BATTAGLIA: It's really good to have you here, Mr. McKnight.

03:19:37 I really -- the one point I didn't
03:19:41 understand that you said, and maybe it's just my confusion, is that you will do whatever you can to provide tenant assistance, but yet you can't step in between --

MR. TOM MCKNIGHT: Well, it's just that it's really a timing issue.

COMM. BATTAGLIA: You said today, you emphasized -- that's right. Today. So when can

03:19:54 you?

03:19:54 MR. TOM MCKNIGHT: Assuming we're successful in the ULURP process, that's when we can
03:20:01 do it.

03:20:01 COMM. BATTAGLIA: And that will
03:20:09 be made clear to these businesses that if, in fact,
03:20:10 this is voted in and we are successful, that those
03:20:14 services will become available to them.

03:20:14 MR. TOM MCKNIGHT: That's correct.

03:20:15 COMM. BATTAGLIA: Thank you.
03:20:16 Thanks for that clarification.

03:20:16 MR. TOM MCKNIGHT: Sure.

03:20:19 THE CHAIR: I think there's another question.

03:20:25 Fred.

03:20:25 COMM. CERULLO: You know what,
03:20:26 it's -- it may be the same question. But I think
03:20:27 some of your conversation was silent. And I just want to fill in the blanks because you both understood what you were talking about.

(Laughter.)

COMM. CERULLO: There was
03:20:36 testimony earlier. And I think the language that

and the construction will be so much more if we would do it early on.

So a child care center in addition to the senior housing is something that we would really urge you guys, the Commissioners to consider.

03:28:00 Thank you very much.

03:28:01 THE CHAIR: Thank you, Mr. Wang. We appreciate it.

03:28:04 Peter Magnani;

03:28:08 To be followed Sandra Wilkin.

03:28:19 MR. PETER MAGNANI: Madame Chairperson, members of the Commission, good to see familiar faces here.

I'm a member of the Corona-Willets Point Flushing LDC Committee.

03:28:33 Most of my testimony regarding the

03:28:34 plan has been already been voiced. I'd just like to

03:28:41 emphasize one thing, one portion of the plan that includes the convention and exhibit center.

I think this is a very important facility to be built, along with the rest of the plan.

One statistic: If Queens was a

separate City, it would the fourth largest City in the nation after New York City, Los Angeles and Chicago. And I think a City of our size deserves a convention plan.

Being part of the -- Chair of the Planning Committee of the Local Development Corporation, we have developed a vision statement that we think will help knit together the two adjacent communities to Willets Point.

Now we feel that the planning for these -- these links should be emphasized and implemented along with the development of Willets Point.

This will create a whole that is greater than its parts. And we plan to present this vision statement and plan to try and access federal funds to help implement these issues, these projects.

One point we have is the waterfront property on the east side of the Flushing River should be developed into a mixed use residential development with retail waterfront uses along the promenade that extend from Northern Boulevard to a development south of Roosevelt

Avenue and to eventually create a new pedestrian biking link to Flushing Meadow-Corona Park.

If you look at a map, you can see that link is very readily accessible, just south of ULUR Muss development, mixed use development.

The existing Flushing Bay promenade, serving East Elmhurst and Corona now, should be positively linked to the Willets Point development and not just stop at the DOT vehicular maintenance facility on the Flushing Bay. This will encourage residents from these neighborhoods to walk and to bike to Willets Point.

We are trying to create a sustainable development here with a lack of emphasis on car driving and an emphasis on walking and biking. And I think this would be a very important link that would encourage people to come to the new Willets Point development on bike or pedestrian paths.

College Point Boulevard is the gateway to Flushing Meadow Park in Flushing and should be rehabilitated with a pedestrian scale and amenities, as well as serving vehicular access.

If you look at the map, College

Point Boulevard is a main, primary -- could be a main primary access to Flushing Point -- Flushing Meadow-Corona Park.

I'll just add one more project that we're pushing.

A new pedestrian bridge between Flushing and Willets Point should be built in order to further integrate these two communities.

I think Mike Meyer spoke about Willets Point being an integral part of the Flushing plan. And I think it's very -- Willets Point is very inaccessible now from Flushing and I think would help knit the two entities together and create a link that - Ponti Vecchio would be very nice, between Flushing and Willets Point to encourage the linkage and spending your money in Flushing as well as Willets Point.

03:32:13 THE CHAIR: Thank you, Peter. Nice to see you.

MR. PETER MAGNANI: Nice to see you.

THE CHAIR: Any questions for Peter Magnani?

03:32:17 (No response.)

03:32:17 THE CHAIR: Nice to see you and thanks for coming and testifying.

03:32:25 Our next speaker is Sandra Wickin.

(No response.)

THE CHAIR: Seth Bornstein.

03:32:30 MR. SETH BORNSTEIN: Thank you.

I'm Seth Bornstein. I'm the Assistant Dean for Economic Development at La Guardia Community College.

Thank you very much, Chair and Commissioners for staying this late and hearing all of the areas of expertise.

It's been talked about, the last few hours, about workforce development. La Guardia Community College was designated the agency to work with the people who work down in Willets Point with jobs and retaining those who would lose their jobs and would be dislocated. And it's something which is key to the college's mission.

La Guardia Community College's adult education program has a long history of providing services to immigrants, young people and people who were incarcerated before, people with serious issues finding jobs.

We are the place they go to help find jobs and raise their level and their career. So we're absolutely excited and delighted to be part of this project.

Just a simple -- I know I have three minutes but just a simple program synopsis.

Project managers are being hired and currently there is a position open. We're looking to designate somebody to run this project entirely on its own as part of the College. But there will be a point-person at the College who will run it with divisions in the College that work with people in this situation.

We have our Center for Education and Training, our Workforce Employment Center, which are all resources to help people find jobs and train them.

The program -- it's going to be difficult because it's not one size fits all. We realize that there are many different issues of people that work in Willets Point now: English as a second language, job skills, cultural skills, language skills. So we would assist with people that work there.

We will do outreach carefully and with a lot of sensitivity of the cultural language issues there. We hope to use our on-site bus, Training on Wheels, which goes out there. We hope to find a space on the site into the office. And we want to work with people to find them jobs, give them training, find them jobs and follow through so the jobs are successful.

The mission of the City University has always been to raise people from the lower class to middle class. And this project really is our legacy, I think, in helping people change their lives to be better.

And it's the first time, to my knowledge, that EDC is doing some kind of program where in addition to developing, they're still giving it to people that work there. And we're very pleased to be a part of that project.

It's going to be difficult but we're looking forward to working with people.

I know Commissioner Battaglia asked Kathy Wylde about this. And we work with agencies like Kathy Wylde and the unions to make sure that training is appropriate and give people

jobs so they become better citizens in the City.

THE CHAIR: Thank you very much. Thank you for being here and thank you for testifying.

The next speaker is Okenfe Lebarty, if I pronounced that correctly.

MR. OKENFE LEBARTY: Good evening.

My name is Okenfe Aigbe Lebarty. And I am the Government and Community Relations Manager at New Yorkers for Parks, the only independent watchdog for all the City's parks, beaches and playgrounds.

For nearly a hundred years, New Yorkers for Parks has worked to ensure greener, safer and cleaner parks for all new Yorkers.

We are here today to applaud the administration's efforts to increase parks and open space in Queens, through the Willets Point redevelopment, by about eight acres of open space.

We support the plan to have maintenance of the open space covered by the developers, since maintenance funds are very difficult to obtain, especially in light of the

current fiscal situation facing the City's economy.

We understand the City is currently in the early stage of the community review process of the plan. We hope that as the process moves along, the administration will provide a more detailed plan on some lingering questions such as the total acreage devoted to the open space?

Will the proposed -- will the proposed green roof be public or privately accessible?

What is the shade impact on the courtyard?

And what are the design standards for the implementation of the open space?

We look forward to working with all the stakeholders and the City to ensure that every park is green, clean and safe today and in the year 2030.

Thank you.

THE CHAIR: Thank you very much. Thank you for being here.

THE CHAIR: The next speaker is Eddy Burgess; and

Then Myra Herce.

MR. EDDIE BURGESS: Hi. Good evening.

My name is Eddie Burgess. I'm speaking on behalf of the Environmental Defense Fund.

Thank you for the opportunity to testify here today.

First of all, you've all heard how Willets Point has had a long history of environmental degradation and neglect.

The Environmental Defense Fund is pleased that City is considering a plan to clean up the contamination in the area and restore these crucial waterways as well.

And the Environmental Defense Fund is also pleased that the City's considering green sustainable design of the buildings which, of course, are crucial to our City's future.

And if any plan moves through, we must retain the City's commitments to these goals.

What I want to focus on today is thinking about how this plan fits in with sustainable transportation.

We're very happy to hear about the plans and goals to increase pedestrian areas and open spaces. With gas on its way to $5 a gallon, it's critical to offer residents alternatives to driving.

Furthermore, New York City's not far behind LA for being some of the worst -- having some of the worst smog in the country. And adding more traffic from a project -- as the project progress, it could worsen it so you can't let Willets Point become a car-dominated community.

The City must think creatively to think of ways where we can lessen our car dependence by providing cheaper, cleaner transportation options.

For example, you open up the nearby Long Island Railroad stop not just on gamedays but on other days as well, or work with the MTA to add bus routes that serves the communities' needs once we find out where people need to go to work.

And the car share programs are very encouraging, that have been talked about before and to reduce the need for car ownership.

Finally, Environmental Defense Fund would not like any increase in the parking spaces planned. We know that people have to get to work. But if residents are given mass transit options, they might choose to leave their car at home.

Big projects like Willets Point, like the Columbia University expansion, are opportunities for us to move away from car-dependent communities to more mass transit-oriented developments.

So in sum, there may be some questions about what gets built and how. But we support a plan that includes green building, restoration of the contaminated areas and sustainable public transportation.

Thank you.

THE CHAIR: Thank you very much. Thank you for coming to speak.

The next speaker is Myra Herce, if I pronounced that right.

MS. MRYA HERCE: Yes. Hello.

THE CHAIR: Hi.

MS. MYRA HERCE: How do you do,

Madame Chairperson, and Commissioners, and former Board #7 member.

COMM. CANTOR: Hello.

MS. MYRA HERCE: Yes, hi. I was Chair of the Board when we both were on the board together.

This kind -- Willets Point goes back actually to 1983. In 1983 I set up a long-range planning committee with a chairperson by the name of Wellington Chen. The name may be familiar to some of you. Outstanding young board member.

And we all sat down. It was a, what if we had money for the City of New York, what would we want done for Flushing to make Flushing the very best in the City of New York?

I'll tell you what. Willets Point was one of the items top on the list. We wanted the linkage with Corona and Flushing. We wanted the Muni Lot 1 done, and I hope to God we get it done with Mike Meyers. And we wanted the RKO Keith site redeveloped which hopefully will be on the horizon.

But as to Willets Point, that for us had one of the greatest potentials. And why?

Because we also wanted, not at that time, later on as the years passed, we thought about conventions. The Javits Center was not the only place in the world and it wasn't the best site in the world for many shows.

We had in Flushing an enormously talented Asian community. You would not believe the high quality art. That would be an ideal place. I worked at an art convention at the Javits Center. It's not the same.

We want something more cozy. We want to unite our communities. We have such a rich culture in Flushing that Willets Point would be the ideal site to have all these linkages with all our various outstanding communities and creative people.

And I'm hot on Flushing and I'm hot on Willets Point. And I know that that is what we need, economics for Flushing and the environmental cleanup. That is a complaint we get all the time about the No. 7 line. Are you going to do anything about the perfume there? That is what we are told.

And people who want to invest say,

how does this great City allow such a disaster to be there? I have no answers but I hope I have an answer in the future.

We're looking forward to your support and we hope it's going to be terrific and you all can come out to Flushing and enjoy our wonderful food and our wonderful art shows. Please.

Thank you.

(Applause.)

THE CHAIR: Thank you so much.

Is there anyone who hasn't spoken on this item who would like to do so?

Let me remind --

VOICES: There is one.

THE CHAIR: Without my glasses, I can't see.

So come up and speak and then you can fill out a speaker card afterwards.

MR. FRED FU: Thank you, Chairman, Commissioners.

My name is Fred Fru, F-r-e-d, f-u.

I'm the former President of Flushing Chinese Business Association in 2002 and '04.

I just go back to some history.

In 1965, President Johnson pass a bill from Washington called the Immigrant Bill, allowing more immigrant people to reunite in this country. About ten years, later mid 1970, they had Spanish people living in Central Queens, a lot of Asian people in Queens, mostly in Flushing.

So I was the President of Flushing Chinese Business Association in 2000. We have 300 members in Flushing Downtown from middle 70s up to now. So it's 30 years. So for 30 years Flushing is the same size. It's not bigger. The street is not expanded and the land is still the same land.

But the population, at least from census year 2000, at least a 30 percent increase. If anybody passing by there, the Flushing, the Downtown, as Mrya said, it's booming. Many people and it's noisy and a lot of traffic, very busy. Why? It's because too many people.

Thirty percent increase and the land is not enough.

And the people need increases not only to Flushing and Corona and Willets Point, it's all of the areas is squeezed. So we are looking

for where is the land, to increase the land use.

That's the reason why five years ago, the year 2003, January we have a meeting, Flushing Downtown, Flushing Town Hall, come the leaders, officer and the City Planning and Queens Borough Office, together to make a plan for the talk about what's the future for Flushing and the waterfront.

Then we have idea. We say, why we put here the Willets Point together. Because if you want to solve the problem of the Flushing, of the waterfront, you must put the Willets Point together.

I in favor for this plan because that's the only way to make the Flushing and Corona people have better life quality.

Thank you.

THE CHAIR: Thank you very much.

(Applause.)

THE CHAIR: Is there anyone else who would like to speak who hasn't done so?

(No response.)

THE CHAIR: Let me say that the record will remain open for ten days to receive

written comments on the Draft Environmental Impact Statement.

Let me also take this opportunity to thank each of the City Planning Commissioners. You're extraordinary and dedicated and attentive, and as always, incredibly intelligent questions.

I also want to thank all of the City Planning staff that have managed this hearing so well. You've done an excellent, exquisite job.

And I want to thank everyone here, EDC, and anybody who participated in making this hearing so calm, successful and important to the City.

With that, this meeting is adjourned.

Thank you so much.

(Applause.)

(At 7:11 p.m., the Willets Point Hearing was concluded.)

CERTIFICATION

STATE OF NEW YORK)
SS.
COUNTY OF NEW YORK)

I, MARC RUSSO, a Shorthand (Stenotype) Reporter and Notary Public within and for the State of New York, do hereby certify that the foregoing pages 1 through 247 taken at the time and place aforesaid, is a true and correct transcription of my shorthand notes.

IN WITNESS WHEREOF, I have hereunto set my name this 19th day of August, 2008.

_____

MARC RUSSO

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APPENDIX K.2

WRITTEN COMMENTS RECEIVED ON THE WILLETS POINT DGEIS

Commenter #1

Improving Access to City Services



Betsy Gotbaum
Public Advocate
for the
City of New York

The Public Advocate is the city official responsible for improving access to city services. Whether the problem is a child not getting necessary educational services, a senior having trouble getting assistance to pay rent, or a resident whose neighborhood is threatened by reckless development, my office is here to help.

And by helping with your individual problem, we are also improving access to services for all New Yorkers.

Ombudsman Services Hotline
212-669-7250

Senior Action Line
212-669-7670

General Contact
212-669-7200

ombudsman@
pubadvocate.nyc.gov

www.PubAdvocate.nyc.gov

Public Advocate Betsy Gotbaum on Willets Point Development: Compromise is Necessary

"No one wants Willets Point to remain as it is today, with potholed streets resembling dirt trails, no sewers and frequent flooding. We all want what is best for both the surrounding community and for the city as a whole. We all want viable jobs, affordable housing, more schools and the opportunity for economic growth. All of this can be realized in Willets Point, but only if everyone involved has a voice in the process.

The Economic Development Corporation should open up the RFP process and share information with all affected parties. For the surrounding community to not know who will be responsible for the implementation of this project – despite their repeated attempts to work with the EDC in order to gain this information – is simply unacceptable.

Given that Willets Point is such a large area, ideal for both business and residential development due to the confluence of major roadways, and the fact that many of the existing businesses in the Iron Triangle have been in that same location for decades (despite the lack of basic city services), the city's lack of an informed and all-encompassing plan should signal a return of sorts back to the drawing board for a sensible compromise, and not a headlong rush into the approval process.

The current Willets Point Development Plan is large in both vision and scope, but this plan has deep flaws which must be addressed. Therefore it makes sense to bring all the stakeholders together, give adequate time for all concerns to be voiced, and then make an informed decision on how to best move forward."

Contact: Gia Storms
(212) 669-4813; (917) 626-6757

Commenter #2

HELEN M. MARSHALL
PRESIDENT

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CITY OF NEW YORK
OFFICE OF THE
PRESIDENT OF THE BOROUGH OF QUEENS
120-55 QUEENS BOULEVARD
KEW GARDENS, NEW YORK 11424-1015

QUEENS BOROUGH PRESIDENT HELEN MARSHALL TESTIMONY TO CITY PLANNING COMMISSION ON WILLETS POINT AUGUST 13, 2008

GOOD AFTERNOON, I AM QUEENS BOROUGH PRESIDENT HELEN MARSHALL.

WILLETS POINT IS AT THE HEART OF MANY OF THE BEST THINGS IN QUEENS:

- ✓ THE U.S. NATIONAL TENNIS CENTER
- ✓ HOME OF THE METS
- ✓ FLUSHING MEADOWS CORONA PARK AND ITS MANY RECREATIONAL FACILITIES AND CULTURAL INSTITUTIONS
- ✓ IT IS FLANKED BY THE VIBRANT COMMUNITIES CORONA, EAST ELMHURST AND DOWNTOWN FLUSHING
- ✓ EASY ACCESS TO BOTH OF NEW YORK CITY'S AIRPORTS
- ✓ AND IS READILY ACCESSIBLE BY MASS TRANSIT AND THE TRANSPORTATION NETWORK SERVING THE REGION.

SINCE 1957, WHEN I CAME TO QUEENS, I HAVE SEEN WILLETS POINT BECOME INCREASINGLY BLIGHTED AND UNSIGHTLY. THE NUMBERS AND TYPES OF JOBS PROVIDED THERE ARE LIMITED.

DUE TO THE ORIGINS AND HISTORIC USES OF THE AREA, THERE ARE SERIOUS PHYSICAL AND ENVIRONMENTAL LIMITATIONS ON THE POTENTIAL FOR HIGHER AND BETTER USES THAT WOULD BE EXPECTED OF AN AREA SO STRATEGICALLY WELL LOCATED.

THERE IS NO DOUBT THAT THE EXISTING BUSINESSES AND PEOPLE WHO WORK THERE PROVIDE VALUABLE SERVICES AND GOODS. HOWEVER, THESE ACTIVITIES ARE NO LONGER COMPATIBLE OR APPROPRIATE TO THE PROGRESS OF THE COMMUNITIES, CULTURAL INSTITUTIONS AND RECREATIONAL FACILITIES THAT HAVE GROWN AROUND WILLETS POINT SINCE ITS DAYS AS AN ISOLATED "VALLEY OF ASHES".

THE WILLETS POINT DEVELOPMENT PLAN IS THE PRODUCT OF MANY YEARS OF PLANNING. THIS PROPOSAL EVOLVED FROM AN EXTENSIVE AND INCLUSIVE MULTIYEAR PROCESS OF NUMEROUS SESSIONS AND TOWN HALL MEETINGS. THE RESULT WAS THE DOWNTOWN FLUSHING DEVELOPMENT FRAMEWORK WHICH IDENTIFIED WILLETS POINT AS THE CRITICAL AND STRATEGIC CONNECTOR BETWEEN CORONA AND FLUSHING.+

EAST ECONOMIST Needs Done

THE PLAN PROPOSES COMPREHENSIVE ENVIRONMENTAL REMEDIATION OF THE AREA, NEW REGIONAL ECONOMIC ACTIVITY WITH A GREATER NUMBER OF QUALITY EMPLOYMENT OPPORTUNITIES, COMPLEMENTARY RETAIL AND SERVICES. AND OF COURSE, NEW OPPORTUNITIES TO SIMPLY ENJOY MORE

LEISURELY ACITIVITIES ON THE NEW GREEN OPEN SPACES AND ENHANCED WATERFRONT.

IN TWO WEEKS, THE EYES OF THE WORLD WILL BE ON THE USTA U.S. OPEN AT THE NEARBY NATIONAL TENNIS CENTER. LAST YEAR THE U.S. OPEN DREW 700,000 FANS. IN APRIL 2009, THE GATES OF CITIFIELD AND JACKIE ROBINSON ROTOUNDA WILL OPEN FOR THE MILLONS OF METS FANS WHO FAITHFULLY SUPPORT THEIR TEAM. THE RECENTLY OPENED SWIMMING POOL WILL BECOME AN EVEN MORE POPULAR SPOT WHEN THE ADJOINING SKATING RINK IS OPENED. THE SOON TO BE EXPANDED QUEENS MUSEUM WILL DRAW NEW VISITORS TO THE AREA AND THE HALL OF SCIENCE, A WORLD CLASS SCIENCE CENTER, ARE ALL PART OF THE MANY SUCH RESOURCES SURROUNDING WILLETS POINT.

THE REDEVELOPED WILLETS POINT WILL BECOME AN ACTIVE 24-HOUR, YEAR ROUND NEIGHBORHOOD WITH NEW RESIDENTS BRINGING LONG TERM ECONOMIC BENEFITS TO QUEENS, NEW YORK CITY AND THE ENTIRE REGION.

THESE APPLICATIONS WOULD:

- ✓ CHANGE THE ZONING
- ✓ CREATE A WILLETS POINT SPECIAL DISTRICT
- ✓ DESIGNATE AN URBAN RENEWAL AREA
- ✓ CREATE AN URBAN RENEWAL PLAN

THESE ACTIONS SET A VERY SPECIFIC VISION AND FRAMEWORK FOR AN ACTIVE AND SUSTAINABLE FUTURE VERY DIFFERENT FROM WHAT IT IS TODAY OR WOULD BE IF LEFT ALONE.

THE LANGUAGE OF THE ZONING REGULATIONS, SPECIAL DISTRICT AND URBAN RENEWAL PLAN ARE VERY SPECIFIC TO THE POINT THAT IMPORTANT FEATURES INCLUDING STANDARDS FOR THE SIZES AND LAYOUT OF BLOCKS AND STREETS, THE USES TO BE ALLOWED, LOCATION OF BUILDINGS ON THE BLOCKS, MAXIMUM BUILDING HEIGHTS AND SETBACK REQUIREMENTS, LAYOUT AND QUALITIES OF THE EXTENSIVE REQUIRED OPEN SPACES, LOCATION AND DESIGN OF THE STREETS, AND CONTINUED CITY AGENCIES SUPERVISION ARE ALL IDENTIFIED.

AS CHAIR OF THE WILLETS POINT ADVISORY COMMITTEE, I CONVENED ~~YEARS~~ MONTHS OF MEETINGS AND PLANNING SESSIONS WITH ALL OF THE LOCAL STAKEHOLDERS - ELECTED OFFICIALS, COMMUNITY BOARDS, PROPERTY OWNERS, CIVIC AND BUSINESS ORGANIZATIONS, THE MAYOR'S OFFICE AND SEVERAL CITY AGENCIES THAT HAVE HELPED SHAPE THE WILLETS POINT DEVELOPMENT PLAN. THESE MEETINGS AND PLANNING SESSIONS MUST CONTINUE WELL AFTER THE REVIEW PROCESS UNTIL THE PLAN IS FULLY IMPLEMENTED.

AFTER REVIEWING THE APPLICATION, PARTICIPATION IN NUMEROUS MEETINGS, CAREFUL CONSIDERATION OF ALL WRITTEN MATERIALS SUBMITTED TO ME, AND LISTENING TO ALL OF THE SPEAKERS AT MY PUBLIC HEARING, I RECOMMEND APPROVAL OF THIS APPLICATION WITH THE FOLLOWING FIFTEEN (15) CONDITIONS TO ADDRESS THE SUBSTANTIVE ISSUES THAT HAVE BEEN RAISED:

- THE WILLETS POINT ADVISORY COMMITTEE COMPRISED OF THE QUEENS BOROUGH PRESIDENT, LOCAL ELECTED OFFICIALS, REPRESENTATIVES FROM COMMUNITY BOARDS 3, 4 AND 7, AND OTHER COMMUNITY LEADERS SHOULD BE CONTINUED FOR THE DURATION OF THE PROJECT, INCLUDING DURING DEVELOPER SELECTION, CONSTRUCTION, IMPLEMENTATION AND ALL OTHER PHASES OF WILLETS POINT DEVELOPMENT;
- EDC MUST CONTINUE ITS GOOD FAITH EFFORTS WITH THE PROPERTY OWNERS TO COME TO A FAIR AND EQUITABLE AGREEMENT FOR THE PURCHASE OF THEIR LAND IN THE WILLETS POINT PROJECT AREA AND EXHAUST EVERY MEANS OF NEGOTIATIONS BEFORE CONSIDERING THE USE OF EMINENT DOMAIN.;
- EDC MUST MAKE EVERY EFFORT TO HELP TENANT BUSINESSES RELOCATE AND REESTABLISH THEMSELVES AS ONGOING ENTITIES;
- EDC MUST MAKE EVERY EFFORT TO CONTACT AND HELP

THE CURRENT WILLETS POINT WORKERS WITH ENHANCEMENT OF THEIR EMPLOYMENT SKILLS, FINDING NEW EMPLOYMENT, AND PROVIDE CAREER COUNSELING AND OTHER SUPPORTIVE SERVICES TO ASSURE THAT THEY ARE NOT ADVERSELY IMPACTED BY NEW DEVELOPMENT AT WILLETS POINT; Lehman Col. College Los Angeles selected to work with Queens

- EDC, AND UPON SELECTION OF THE DEVELOPER, MUST PROVIDE PROJECT UPDATES TO THE WILLETS POINT ADVISORY COMMITTEE ON THE PROGRESS OF THE PROJECT ON A QUARTERLY BASIS; plus + Trump actually on site

- THE ENTIRE WILLETS POINT DEVELOPMENT PROJECT MUST PROCEED COMPREHENSIVELY AND MUST NOT BE PHASED;

- FOR THE FIRST FIVE YEARS OF THE DEVELOPMENT PROCESS, BEGINNING WITH SELECTION OF A DEVELOPER, $500,000 PER YEAR SHOULD BE DEDICATED TO CAPACITY BUILDING THAT WOULD ALLOW LOCAL MWBES TO RESPOND TO REQUESTS FOR PROPOSALS TO PROVIDE ANY GOODS OR SERVICES THAT WILL ARISE DURING AND AFTER CONSTRUCTION IS COMPLETED; AND FOR AN ONGOING OUTREACH EFFORT THAT WILL INFORM AND PROMOTE OPPORTUNITIES AVAILABLE TO THE COMMUNITY AND MWBE FIRMS FOR THE PROVISION OF GOODS AND SERVICES FOR THE PROJECT;

- A CONVENTION CENTER WITH AN ADJOINING HOTEL MUST BE INCLUDED IN ANY RFP RESPONSES TO BE ELGIBLE FOR

CONSIDERATION;

- TO ADDRESS THE DIRE NEED FOR HOUSING THE DEVELOPMENT SHOULD INCLUDE A SUBSTANTIAL OPPORTUNITY FOR HOME OWNERSHIP. POSSIBLY, CO-OPS THAT WOULD ADD STABILITY TO THE NEW WILLETS POINT COMMUNITY;
- TO INCREASE AFFORDABILITY THE DEVELOPMENT SHOULD BE FIFTY PERCENT MARKET RATE, 30 PERCENT MODERATE INCOME AND 20 PERCENT AFFORDABLE.;
- CITY PLANNING AND EDC MUST WORK TO DEVELOP DIRECT CONNECTIONS BETWEEN WILLET POINT, DOWNTOWN FLUSHING, CORONA AND EAST ELMHURST.;
- EDC AND THE PARKS DEPARTMENT MUST DEVELOP ADDITIONAL GREEN SPACE ON THE FLUSHING RIVER AND EXTEND THE FLUSHING BAY PROMENADE TO THE DEPARTMENT OF TRANSPORTATION FACILITY,
- THE RETAIL AND COMMERCIAL MIX IN THE WILLETS POINT DISTRICT SHOULD BE COMPLEMENTARY TO THE NEIGHBORING COMMERCIAL CENTERS IN DOWNTOWN FLUSHING AND CORONA;
- AN INITIAL $5 MILLION TRAFFIC AND INFRASTRUCTURE MITIGATION FUND SHOULD BE ESTABLISHED AND INCREASED IF NECESSARY. THE CITY SHOULD MONITOR THE POTENTIAL IMPACTS ON AREA TRAFFIC AND

INFRASTRUCTURE RELATED TO THE DEVELOPMENT AND IMPLEMENT APPROPRIATE MITIGATION MEASURES IN A TIMELY MANNER;

- THE DEVELOPMENT SHOULD BE ENVIRONMENTALLY SUSTAINABLE AND CONFORM TO THE HIGHEST LEED-NEIGHBORHOOD STANDARDS POSSIBLE.

AFTER I SUBMITTED MY RECOMMENDATION, DEPUTY MAYOR ROBERT C. LIEBER AND I ANNOUNCED MWBE, LOCAL BUSINESS AND WORKFORCE GOALS FOR THE PROJECT AND A $2.5 MILLION FUND THAT WILL ASSURE THAT MINORITY, WOMEN OWNED BUSINESES, LOCAL LABOR AND BUSINESSES WILL HAVE OPPORTUNITIES TO FULLY PARTICIPATE IN THE ECONOMIC ACTIVITY THAT WILL BE GENERATED AT WILLETS POINT. THE FUNDING WILL HELP THESE FIRMS WITH CAPACITY BUILDING AND A VENDOR/PROCUREMENT MATCHING PROGRAM THAT WILL ENABLE THEM TO RESPOND TO ALL PROJECT RELATED CONTRACTING OPPORTUNITIES.

IN CLOSING, THE WILLETS POINT PROJECT IS ABOUT THE FUTURE - A FUTURE THAT WILL EMPLOY NEARLY 18,000 PEOPLE DURING CONSTRUCTION AND MORE THAN 5,300 PEOPLE WHEN COMPLETED. A FUTURE THAT INCLUDES NEW RESIDENTS, FANS OF THE U.S. OPEN AND METS WHO WILL WANT TO COME EARLY OR STAY AFTERWARDS FOR A BITE TO EAT OR TO SHOP, VISIT TRADE SHOWS OR CULTURAL EVENTS AT THE NEW CONVENTION

CENTER OR THE NEARBY CULTURAL INSTITUTIONS.

Willets Point is surrounded by major projects

WILLETS POINT IS A MAJOR DEVELOPMENT PROJECT FOR QUEENS AND ALL OF NEW YORK CITY. IF ALLOWED TO BECOME THE SUSTAINABLE, BEAUTIFUL PLACE TO VISIT, SHOP, LIVE AND WORK AT - THAT WE HAVE PLANNED, THEN EVERYONE WINS - THE WORKERS, NEW RESIDENTS, VISITORS AND SURROUNDING COMMUNITIES..

THIS WILL ONLY HAPPEN, IF THIS PROJECT IS APPROVED WITH THE CONDITIONS I'VE OUTLINED ASSURING THAT ALL OF NEW YORK WILL HAVE A CHANCE TO PARTICPATE IN THE NEW FUTURE OF WILLETS POINT.

THANK YOU FOR YOUR CONSIDERATION.

Commenter #3

THE ASSEMBLY
STATE OF NEW YORK
ALBANY

NETTIE MAYERSOHN
Assemblywoman 27TH District

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COMMITTEES
Health
Labor

Willets Point Redevelopment Testimony
City Planning Commission
Wednesday, August 13, 2008

As the Assemblywoman representing Willets Point, I want to encourage the city planning commission to support this long overdue development of Willets Point. The creation of this Urban Renewal Area is a much appreciated signal of the City's commitment to improving the "Iron Triangle". This mixed use plan improves the environmental conditions in the area, creates much needed affordable and market rate housing, and expands the Flushing Meadow Park destination. For too long, this valued area has been a source of grief to the surrounding communities.

The negative impact on the environment has been substantial. The junk yards, garbage and stagnant water have made willets point one of the most undesirable locations in the Borough. The proximity to the waterfront and Flushing Meadows Corona Park only exacerbates the very serious negative environmental impacts.

I think it is important to the entire area and the borough that we work to revitalize this location. We have an opportunity to turn this blight on our environment and community into a development, which provides jobs for area residents and enhances the neighboring recreational and cultural facilities. The Willets Point Urban Renewal Area presents an opportunity to make significant improvements in a long underutilized area. These improvements will not only create a significant windfall for the City, it has the potential to positively impact on the lives of thousands of Queens residents.

This development plan provides 5,500 new units of housing, with 1,100 set aside for affordable housing, new retail, recreational and school space and creates 20,000 new construction jobs and 6,100 permanent jobs in the retail, convention and hotel portions of the plan. Compare that to the mess we have now, and I think the benefits are obvious.

I congratulate the city on their agreement with the unions, ensuring reasonable wage and benefit standards for all jobs created, thereby enabling working families to remain in our communities and not force them to flee to the more affordable suburbs. In addition, I applaud the city's commitment to ensuring that 20% of total dollar value of construction contracts will be awarded to minority owned firms; 5% to Women owned companies and 25% reserved for queens based companies.

I believe that if the overall plan is examined in the context of the surrounding Flushing, College Point and Corona communities, the benefits of this project will be enormous.

I am therefore hopeful that this redevelopment will move forward quickly. But let me say this, we are also mindful of the existing businesses in the Willets Point community. These businesses should be treated fairly, and the City must do everything possible to ensure their relocation in as smooth and painless a transition as possible. I am much encouraged by the creation of a dedicated Business Relocation and Workforce Assistance Plan for the area businesses, and I commend EDC and the Department of Small Business Services for all that they have done so far to assist these businesses. I am sure they will continue to work with the business community to get them relocated.

I look forward to continuing to work with Mayor Bloomberg, Borough President Marshall, EDC and former Borough President Shulman to ensure that this very, very important project is successful.

Thank You.

HIRAM MONSERRATE
COUNCIL MEMBER, 21ST DISTRICT

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THE COUNCIL
OF
THE CITY OF NEW YORK

CHAIR
VETERANS COMMITTEE

BLACK, LATINO & ASIAN CAUCUS

COMMITTEES
FIRE & CRIMINAL JUSTICE SERVICES
PUBLIC SAFETY
STATE & FEDERAL LEGISLATION
CIVIL RIGHTS

August 12, 2008

Commissioner Amanda M. Burden
NYC Department of City Planning
22 Reade Street
New York, New York 10007-1216

Dear Commissioner Burden:

We write to share with you our absolute opposition to the current Willets Point Development Plan.

The project that comes before the Department of City Planning on August 13th is far from the best our city can offer for a long-term plan that will affect hundreds of thousands of residents for decades to come. Unfortunately, this is a product of a flawed process that has continuously ignored the requests of the community in pursuit of a top-down planning process that sets a dangerous precedent for large-scale development projects citywide.

Since the first community meetings of the Flushing redevelopment process, when community residents expressed a desire to include the Iron Triangle in any long-term development plans, the details of this plan have been determined not by residents, but by the Economic Development Corporation.

This state of affairs is not for a lack of community feedback. On the contrary, the community has been outspoken in its attempts to work with the EDC to resolve what it considers to be gaping holes in the plan. First and foremost, despite a two year, two-tiered RFP process to determine a developer, the community has yet to be informed of who will be responsible for the project's implementation. Additionally, the community has unified around an agenda calling for a plan that takes eminent domain off the table in all acquisition negotiations, a guarantee that fifty percent of new housing created will be affordable, a comprehensive relocation and compensation plan for current small business owners and employees and a community benefits agreements that includes a congestion mitigation plan.

Despite these community outcrys for a proactive, rather than reactionary, role in the planning process, the EDC has refused to provide details in regards to community concerns. This lack of communication has resulted in deep opposition within the community. Residents, community leaders, affordable housing advocates, and current business owners and employees have unified around their similar demand for - quite simply -- more information.

This trajectory is documented in the plan's first step in the ULURP process. The vote in the representative community board (CB 7) was held after five hours of intense debate and passed by a slim margin – but only after Deputy Mayor Lieber wrote that he would address the Board's concerns, which mirror those mentioned above. However, to date these assurances have yet to turn into answers. Rather, the ULURP calendar goes forward and the community's requests continue to fall on deaf ears.

As members of the City Council, we are deeply disappointed that the process thus far has, in effect, negated previous efforts to create a standard for community engagement in city development projects. Simply put, we will not allow the Willets Point model to become a precedent for future development projects in the city.

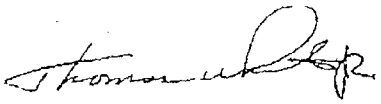
We recognize that the Administration has made a significant improvement to this project by committing that any new jobs created at the site will be quality jobs. However, as of today there are no commitments that either existing workers or residents of the surrounding neighborhoods are slated to receive any priority or set-asides for the permanent jobs created as a result of redevelopment.

Before this project proceeds to a doomed fate in the City Council, we strongly urge the Administration to come to the table and work with us to address and resolve the issues of the Willet Point community. We strongly believe that inclusive planning procedures and economic development can be mutually beneficial to the city as a whole and the surrounding communities, rather than exclusive. We look forward to working with you to make this ideal a reality.

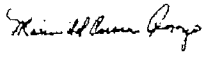
Sincerely,

Hiram Monserrate
Council Member District 21

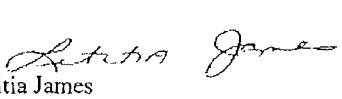
Tony Avella
Council Member District 19



Thomas White
Council Member District 28



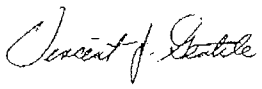
Maria del Carmen Arroyo
Council Member District 17



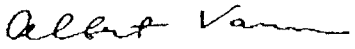
Letitia James
Council Member District 35



Darlene Mealy
Council Member District 41



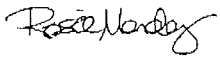
Vincent J. Gentile
Council Member District 43



Albert Vann
Council Member District 36



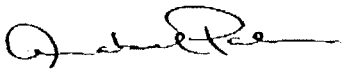
James Gennaro
Council Member District 24



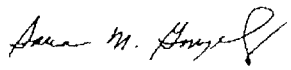
Rosie Mendez
Council Member District 2



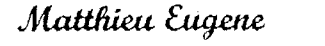
James Sanders, Jr
Council Member District 31



Annabel Palma
Council Member District 18



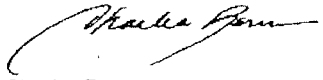
Sara M. Gonzalez
Council Member District 38



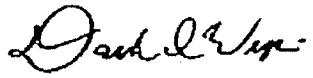
Mathieu Eugene
Council Member District 40



Diana Reyna
Council Member District 34



Charles Barron
Council Member District 42



David Weprin
Council Member District 23



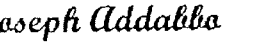
Miguel Martinez
Council Member District 10



Gale Brewer
Council Member District 6



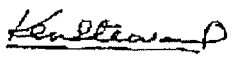
Robert Jackson
Council Member District 7



Joseph Addabbo
Council Member District 32



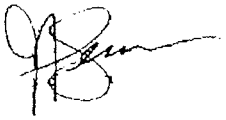
Larry Seabrook
Council Member District 12



Kendall Stewart
Council Member District 45

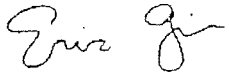


Inez E. Dickens
Majority Whip
Council Member District 9

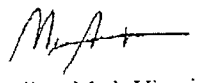


Alan Gerson
Council Member District 1

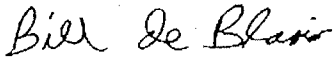
Leroy G. Comrie
Council Member District 27



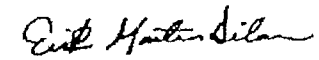
Eric N. Gioia
Council Member District 26



Melissa Mark-Viverito
Council Member District 8



Bill deBlasio
Council Member District 39



Erik Martin-Dilan
Council Member District 37



Helen Foster
Council Member District 16

David Yassky
Council Member District 33

Commenter #5

THE SENATE
STATE OF NEW YORK
ALBANY 12247

TOBY ANN STAVISKY
Senator, 16th District
ASSISTANT MINORITY WHIP

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COMMITTEE ON HIGHER EDUCATION
RANKING MINORITY MEMBER

COMMITTEES
EDUCATION
FINANCE
CIVIL SERVICE & PENSIONS
TRANSPORTATION
AGING
TOURISM, RECREATION
& SPORTS DEVELOPMENT

Willets Point is cited in one of the all time classics of American literature, *The Great Gatsby*. In it, F. Scott Fitzgerald calls Willets Point a valley of ashes...bounded on one side by a small foul river...a fantastic farm where ashes grow like wheat into ridges and hills and grotesque gardens." Despite being a center for various types of businesses, unpaved streets and lack of sewers have led Mayor Bloomberg to call Willets Point a symbol for urban blight. These transformations, though remarkable, have environmentally compromised the area. While surrounding neighborhoods have flourished and prospered, Willets Point has been the antithesis of progress, inhibiting its own potential growth. The area suffers from an array of pollution that threatens and plagues the area, including petroleum, paint contamination, cleaning solvents, and automobile liquids that have [illegible]eated and altered the environment including the waterfront. Moreover, the businesses do not have access to the city's sewer and storm systems and flooding is common due to the area's location on a flood plain, creating a public health risk. The pothole-filled streets, the lack of sidewalks, and the derelict cars that are scattered throughout have transformed the region into the very definition of urban blight.

The current redevelopment plans for Willets Point will renovate this neglected region into a vibrant area, utilizing the latest energy efficient technologies. The proposal will provide approximately 5,500 mixed-income housing units, 500,000 square feet of office, space a two-acre park, and 6,100 permanent jobs. Labor unions have been supportive of plans to redevelop the area, seeing it as a positive step for permanent workers in the city. Local government officials and community leaders are working hard to ensure that the transition of both local residents and displaced Willets Point workers run smoothly, providing strong programs that will benefit all. Plans are being put in motion to raise the standards and opportunities for workers in the service and construction industries. The intense thought and the innovative initiatives going into the redevelopment of Willets Point is historic and will change the city's future.

Willets Points' accessibility and its unlimited potential will guarantee its success, providing billions in revenue for the city, vastly enhancing the standard of living for New York residents who work in the area, and add much-needed parks and open spaces that will be available to all New Yorkers. These sustainability plans will also establish Queens as a borough ready to support a green community in the city, instilling in its residents an added source of pride.

Whether watching the US Tennis Open in the fall, enjoying a walk in Flushing Meadows Park, or eating at restaurants in Flushing and Corona, Queens has so much to offer. There is no reason why Willets Point shouldn't become one more reason for us to be proud of our borough. Hopefully when someone writes about the area again, they will not call it a valley of ashes, but instead, a Phoenix, the bird which rose from the ashes to begin life again.

Community Board 7

Borough of Queens

Bay Terrace, College Point, Beechhurst, Flushing,
Malba, Queensborough Hill and Whitestone

The City of New York

133-32 41ST ROAD • 3RD FLOOR • FLUSHING, NY 11355
(718) 359-2800
Fax: (718) 463-3891

Helen Marshall
Borough President

Karen Koslowitz
Deputy Borough President/Community Boards

Eugene T. Kelty, Jr.
Chairperson

Marilyn Bitterman
District Manager

Commenter #6

August 13, 2008

Testimony Before the City Planning Commission
On
Willets Point Redevelopment

Good afternoon members of the City Planning Commission, my name is Gene Kelty and I am the Chairperson of Community Board # 7—Queens. I am here to present testimony before you regarding the Willets Point Redevelopment. On June 30, 2008, the Community Board had a public hearing regarding this issue. The meeting went on way into the night, where a presentation was conducted by the Economic Development Corporation, question and answer period with the full Board members, and comments made by the general public.

By the early morning hour of 12:30 A.M., the Chairperson of the Committee, presented his committee report and the following motion was made:
TO APPROVE THE WILLETS POINT REDEVELOPMENT AS PRESENTED WITH THE FOLLOWING STIPULATIONS (THE FIRST TWO ARE MANDATORY):

1. Postpone disposition of property the city acquires at Willets Pont until a final plan and a developer are chosen to allow CB# 7 and the Queens Borough Board input and final approval.
2. The mitigation fund is extremely small compared to the billions needed to complete this project. CB# 7 insists a mitigation fund equal to 10% o the development costs is established, excluding land acquisition costs.
3. The parking requirement for the residential units should be increased to 100%

4. The 850 seat K-8 public school must be provided on-site and included in the Urban Renewal Plan.
5. CB# 7 does not approve use of Eminent Domain for this redevelopment, but realizes it is a component of the Urban Renewal Plan.
6. CB# 7 insists that the NYC Economic Development Corporation diligently exhaust every means of negotiation and not abuse the method of property acquisition and issued advance notice with supporting documentation to CB# 7 prior to any action of Eminent Domain.
7. NYC Economic Development Corporation must keep their promise of unconditional effort for Business Relocation, Worker Relocation and Job Retraining.
8. The Affordable Housing component should be increased to a minimum of 30%. Income eligibility requirements should be less than $ 45,000 per year.
9. Half of this component must be designated for Senior Affordable Housing.
10. As per H P D regulations, half of the Affordable Housing component will be allocated to residents of Community Board # 7 Queens. The remaining half should be allocated to residents of Community Board # 3 & 4—Queens, which are located directly adjacent to the Willets Pont Redevelopment.
11. The overall site must conform to LEED-ND Certification standards.

After the above motion was made and second, a friendly motion was made and accepted which stated:

THE REDEVELOPMENT OF WILLETS PONT WORKFORCE SHALL INCLUDE THE FOLLOWING PRIORITIES:

1. Displaced Willets Point Workers
2. Women and Minority Businesses
3. Queens Local Businesses, and
4. Union Labor

The Motion was re read again with the addition of the friendly motion and a vote was taken:

21 Board Members voted to Approve

15 Board Members voted in Opposition

2 Board Members Abstain for Conflict of Interest.

It should be noted that there was extensive discussion on this item. Approximately 12 committee meeting were conducted over the year with 7 being in the last 2 months. I would like to make sure that the members of the City Planning Commission understand that the Community Board voted IN FAVOR OF THIS PROJECT WITH 12 CONDITIONS. Furthermore, in the early stages of our meeting and through out, it was UNDERSTOOD AND STATED THAT **NO BUSINESS FROM THE WILLETS POINT AREA WOULD BE RELOCATED IN THE COLLEGE POINT AREA.**

Respectfully

Eugene T. Kelty --Chair

ACORN Testimony in Opposition to the Willets Point Plan
August 13, 2008

Commissioner Burden, Members of the Planning Commission, New York City Council members, and my fellow ACORN members and Queens residents;

My name is Marilyn Mayo, and I am speaking on behalf of NY ACORN members throughout this city. We're here today to ask you to do the right thing.

EDC's plan will destroy the livelihood of many of the workers and small businesses of Willets Point with NO GUARANTEE of meaningful relocation or adequate compensation for the nearly 1700 workers and their families. The workers count on those jobs to support their families, raise their children and keep a roof over their heads. They have spent years winning their salaries with sweat under very difficult working conditions. They have the skills and knowledge but the most important thing is that they support their families.

EDC's plan is an insult

~~And~~ Along with displacing so many ~~people~~ workers, this plan affords NO Guarantees that there will be a real benefit to the people who live in the community. Even the meager 20% of so-called 'affordable housing' that EDC mentions, just mentions, is NOT GUARANTEED and won't be affordable to our members, the Willets workers or to most of the residents of Queens.

What we WANT, ACORN members in Queens and throughout the city is 1) a guarantee of compensation and relocation for the workers of Willets and 2) a significant percentage of affordable housing that is affordable

to families making less than $25,000 a year as well as families making less than $45,000 a year.

It is the height of arrogance for the Bloomberg Administration to push ahead with this woefully inadequate plan after the community and the City Council have stood up against it, and called for major changes. The EDC plan does not ***guarantee*** one single unit of housing affordable to the average Queens family. Workers and small business people would get virtually no protection under the plan as well, despite being shut down by the ***plan***.

We risk setting a dangerous precedent by ignoring the rights of these workers, and failing to use redevelopment as a tool to increase **desperately needed affordable** housing in this community. It's time for the City to come to the table to work out a new plan that is much more beneficial for all.

The only responsible thing for this Commission to do is to vote against this plan and send a very strong message to the Mayor and EDC that they need to start listening to the community TODAY!

What do we want?

Affordable Housing

When do we want it

NOW

What do we want?

Justice for the workers

When do we want it?

NOW!

Marilyn Mays
202-02 109th Ave.
Hollis, NY 11423

Asian Americans for Equality
133-04 39th Avenue • Flushing, NY 11354
Tel: (718) 961-0888 • Fax: (212) 961-0988 • www.AAFE.org

City Planning Commission Public Hearing
on Willets Point Development Proposal
Wednesday August 13, 2008

Good Afternoon. My name is Richard Lee and I am the Advocacy Associate for Asian Americans for Equality (AAFE), a founding member of the Queens for Affordable Housing Coalition. I would like to thank the City Planning Commission for giving us the opportunity to express our concern with the EDC's proposal to develop Willets Point.

Queens is amidst an affordable housing crisis, especially in the communities of Flushing, Corona, Elmhurst, Jackson Heights and Woodside. A report by the NYU Furman Center stated that the most populous community in the city is Flushing, while the first, second and third most overcrowded communities are Corona/Elmhurst, Jackson Heights and Woodside/Sunnyside, respectively. This is troubling considering that out of the 51,977 low- and moderate- income housing units funded by the city in 2007, only 2,248 of these were in Queens, which equates to less than 5% of the housing slated to be built. While the EDC claims to be allocating affordable housing, the development plans units only for households making greater than $55,000 a year (for a household of four). 35% of Queens' residents earn less than $35,000 a year; in the surrounding communities, this percentage is much higher. The community needs real affordable housing and the Willets Point plan is a unique opportunity for Queens to receive a fair share of the City's affordable housing stock.

Community Board 7 has taken a major step in its recommendation of providing at least 30% of the total planned units for families earning less than $45,000 a year. We are asking that the City Planning Commission take into consideration the Community Board's recommendation, and build upon that to ensure that:

- At least 1/3 of the planned units be dedicated to families earning less than $25,000
- At least 1/3 of the planned units be dedicated to low-moderate and middle income families
- That these units remain permanently affordable
- And that the businesses and workers receive fair compensation and relocation

Established in 1974, AAFE is a non-profit community-based development and empowerment organization. AAFE serves thousands of seniors, low-income and working individuals and families each year, offering an array of programs that encompass the organization's comprehensive approach to community development. One area we are able to readily demonstrate our commitment to create stronger communities is through the area of affordable housing. For years, AAFE has been a vocal advocate for the creation and preservation of affordable housing, which we have turned into action by creating and preserving over 600 units of affordable housing in New York City.

1 New York City Independent Budget Office "Supplement to "The

Commenter #11

The Institute for Sustainable Cities
City University of New York

CUNY The City University of New York
HUNTER The City University of New York

Statement read by Carina Molnar | Outreach Coordinator
CUNY Institute for Sustainable Cities
~~Community Board 7~~ Public Hearing
City Planning Commission

The Institute supports the concept of making Willets Point a model sustainable community. We feel that lessons learned in this real life laboratory could and should be translated to other neighborhoods of the city that are attempting to lighten their environmental impacts. For much of the past century Willets Point has been associated with environmental problems - stretching back to the `valley of ashes' and more recently, the petroleum contamination in surrounding water ways.

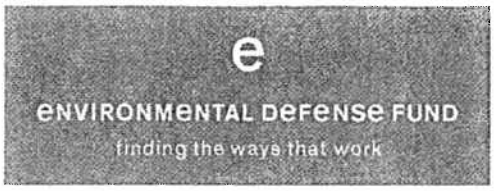
Officials with the City of New York have proposed a bold plan for the community. But of course, as with any change, there is potential for hardship. CISC acknowledges that the plan will cause the relocation of many businesses and jobs and that the resolution of these burdens must be resolved fairly and equitably. We truly hope there are opportunities to include these workers in the developing green economy.

But CISC's primary focus lays in trying to define pathways through which cities - in their shape, organization, and spirit - can function as solutions for environmental burdens and urban sustainability. We feel that the Willets Point proposal presents an opportunity to combine urban and environmental resilience. The plan once implemented would help remediate some of the pollutant runoff now going into the greater Flushing Bay and Creek watershed and the raising of the surface would make the area less vulnerable to current flooding and future heightened risk associated with climate change and sea level rise.

Most importantly though, sustainable design that seriously considers and integrates sustainability into the everyday experience of people is very much needed. The Willets Point plan moves the question of sustainable design and practice beyond the building and into the neighborhood.

The plan as it stands is not perfect - such plans never are - but we at CISC feel that this is an opportunity to bring together a tremendous amount of innovative thought and cutting edge understanding of sustainable community design. We at CISC are excited to see the plan enter into public debate and eventually move forward.

T (212) 650 - 3456 | F (212) 396 - 6137 | cunysustainablecities.org | info@cunysustainablecities.org
CUNY HUNTER COLLEGE | 695 PARK AVENUE | EAST BUILDING SUITE 1215 | NEW YORK, NY 10065



Statement of Environmental Defense Fund
before New York City Planning Commission
13 August 2008

Willets Point is a site of great environmental degradation and neglect. Environmental Defense Fund is pleased that the current plan for Willets Point calls for a thorough clean-up of the highly contaminated lands that are the result of years of neglect. The Willets Point cleanup will directly benefit the Flushing River and Flushing Bay, further restoring New York's waterways. Additionally, we are pleased with the City's commitment to promote green building and sustainable design practices in the plan's implementation. No matter what plan is developed for Willets Point, we strongly urge the City to ensure that these commitments are fulfilled.

This plan represents an exciting opportunity to develop an urban, sustainable community from the ground up. It is appropriate that the plan emphasizes open space and pedestrian friendliness. And at a time when the price of gasoline is headed toward $5 per gallon, new developments must offer residents alternatives to driving. To that avail, it is critical that Willets Point does not become another car-dominated community. The New York City region has the dirtiest air in the nation after Los Angles. Adding more vehicles on the road will only worsen the problem.

The Willets Point Environmental Impact Statement predicts a significant increase in automobile traffic surrounding the development. The City must think creatively about how Willets Point can mitigate that traffic burden by becoming a less car-dependent community. This could mean creating easy mass transit access by making sure the MTA opens up the nearby LIRR stop not just on game days, or working with the MTA to add inter- and intra-borough bus lines, depending on where it is people in Willets Point are actually working. If the City can determine where it is residents are working, it would be possible to determine where improved transit options would allow more residents to switch from car to transit. The City has begun to develop a car-sharing program for Willets Point. Programs like these have the potential to greatly reduce the number of cars per person in Willets Point. Generally, 1 shared car can replace between 7 and 10 privately owned cars. Car-sharing programs, such as Zip-Car, offer a cheaper alternative to driving for those who need a car only infrequently or only on weekends. We call on the city to make sure Willets Point has desirable mass transit options for its residents.

In order to discourage the use of cars and encourage mass transit use, Environmental Defense Fund would not like to see any increases in the number of planned parking spaces within the Willets Point development. We realize the number of parking spots has

been reduced from the original plan. We fully understand that at the end of the day, residents have to get to work. But if Willets Point residents were to be given desirable mass transit options, they may choose to leave their cars at home.

Finally, and most importantly, it is essential to ensure there is a complete clean up of the contaminated land in Willets Point and that there is minimal runoff into the nearby waterways. While there are still questions about what exactly gets built at Willets Point, we are supportive of any plan that includes green building, waterway protection, brownfield cleanup, and public transportation options tailored to the community. Thank you for your time this afternoon.

Flushing Willets Point Corona LDC

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Email: ab@fwcldc.org

EXECUTIVE BOARD
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EX-OFFICIO
Helen Marshall
John Liu

Remarks By Claire Shulman

August 13, 2008 City Planning Commission Hearing on Willets Point

Good Afternoon. I would like to thank the City Planning Commission and the Chair, Amanda Burden, for this opportunity to share my views on the Willets Point redevelopment. I am Claire Shulman, president of the Flushing/Willets Point/Corona Local Development Corporation.

For those of us who have represented New Yorkers who live outside Manhattan, we know that our boroughs are hit hardest during times of fiscal crisis. But thanks to a great deal of hard work over many years, Queens stands ready to serve as a catalyst for job growth and urban renewal not just for our borough, but for all of New York.

Urban renewal in this case is about more than economic development – it's about cleaning up one of the most contaminated areas in the region and turning it into New York City's first green neighborhood. The environmental benefit of this project – to our City and to the families in the surrounding neighborhoods – is undeniable.

We can all agree that we need to clean up Willets Point and the Flushing River and Bay. This project will revitalize the Flushing Waterfront and create a place where families can enjoy open space and recreation in what is now a blighted and polluted area.

In order to adequately clean up the site, we need to clean down into the soil beneath Willets Point. This area has been polluted and contaminated since its use as a coal ash dump – and made worse through years of illegal dumping and improper housekeeping. If we don't clean down to the contaminated soil, any efforts to clean up the polluted waterways will be for naught.

We will clean up the contaminated site, but that is just the start. Willets Point will be a model of environmentally sustainable development. The creation of open space, parks, trees, a bicycle/pedestrian connection to Flushing Bay – will have a direct and profound impact on the daily lives of the people living in and around the area. This will be an enormous accomplishment and set a standard for others to follow throughout the city.

The redevelopment of Willets Point comes at a critical time for our City's economy. This creation of New York City's next great neighborhood will help keep our economy moving – but we have to act **now**.

The economic benefits of this project are clear. Situated at the heart of so many cultural institutions and recreational facilities, in close proximity to mass transit and our airports, Willets Point right now is the epitome of unrealized potential. Redevelopment of this area will create close to 20,000 construction jobs and more than 6,000 permanent jobs in a wide array of sectors.

The development will connect Corona and Downtown Flushing – vibrant and otherwise thriving communities whose growth has been stifled by the blighted area currently dividing them. We will create a center of commerce that links these two communities while adding desperately needed convention space

as well as a large hotel. **Now** is the time to make Queens a destination for business and commerce.

The last aspect of the project I want to discuss is housing. At a time when families face a dire shortage of housing, redevelopment of Willets Point will create 5,500 units of housing in an area that currently has ZERO. As it stands, subject to negotiation, these 5,500 units will contain a healthy percentage of units that will be affordable. The need for these units is especially acute in both the bustling communities of Flushing and Corona.

Having had the privilege of serving in a borough wide post for many years I can tell you that rarely has one plan encompassed so much hope for our future. And lest we forget, the Economic Development Corp. has worked hard not only to describe the project but to assist the businesses and workers in Willets Point to relocate and prosper. I commend the city for its efforts and for all their hard work.

For our economy, for our environment and for those seeking an affordable place to live this plan must go forward. For those reasons and many more I hope you will all strongly consider adding your voices to those people supporting this project. Thank you.

New York City
Habitat
for Humanity®

Testimony of Habitat for Humanity – New York City
to the New York City Planning Commission

August 13th, 2008

Testimony respectfully submitted by:
Jonathan Furlong
Habitat for Humanity – New York City

Introduction

Thank you for the opportunity to testify today. My name is Jonathan Furlong, and I am the Community Relations Associate at Habitat for Humanity - New York City. Habitat-NYC is a proud member of Queens for Affordable Housing, which is a coalition of community-based organizations that was formed to ensure that new residential development in the borough creates housing that is truly affordable to a diverse mix of Queens residents.

As an affordable housing developer and advocate, Habitat for Humanity – New York City urges the City to make two-thirds of the housing units included in the Willets Point development in Community Board 7 affordable to working families in Queens, with special focus on affordability for the residents with greatest needs.

Habitat-NYC was founded in 1984 as an independent affiliate of Habitat for Humanity International, and we build affordable housing in all five boroughs. Our homes are built with the "sweat equity" of our family partner homeowners, who work side-by-side with volunteers.

In addition to building homes, Habitat–NYC is a leading advocate for affordable housing, with the goal of ensuring that every New Yorker has a decent, affordable home. We work to achieve this by creating a social movement to end the housing crisis plaguing New York City and by calling on elected officials to make affordable housing a priority. We were an instrumental voice in the fight for Inclusionary Zoning along the Brooklyn waterfront. Today, we are urging you to create the same kind of affordable housing opportunities at Hunters Point South.

The Need for Affordable Housing in Queens

The need for more affordable housing in the Borough of Queens is tremendous. Between 1990 and 2000, Queens experienced the largest population growth of any other borough, with its total population increasing 14.2%. Over the next 20

years, the Borough of Queens is expected to absorb the largest share of growth in the New York metropolitan region— making the housing shortage even more acute.

As the borough has grown, real incomes have fallen, while rents have skyrocketed:

- **In 2006 the median monthly rent in Queens was $983, the second highest out of all the boroughs[1].**
- **Queens registered the second highest increase in the percentage of residents spending 50 percent of their income – a 27.4 percent increase from 1999 to 2006.**

The housing market in Queens is booming today: More than 16,000 new housing units were built between 1994 and 2003, and more than 5,000 units received residential building permits in 2004 alone. In 2006, Queens had the second highest number of housing starts in any borough, at 7,792.[2] The communities of Ridgewood and Maspeth experienced a 500% increase in housing starts from 2003 to 2005, Astoria 300% and Flushing, Woodside and Jackson Heights 200%.

Unfortunately, very little of this new development includes affordable units. The vast majority of new development in Queens is market-rate and luxury housing.

Just across the Flushing River, the Muss Development Organization is building 1,110 condos priced at $400,000 to $1.2 million, and the sales price for new condos in Flushing starts at $650 per square foot. These prices are far beyond the price existing residents can afford. The proposed development at Willets Point represents a tremendous opportunity for the creation of affordable units, where very little has existed previously.

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[1] The Furman Center, State of New York City's Housing and Neighborhoods, 2007.

[2] The Furman Center, State of New York City's Housing and Neighborhoods, 2007.

Recommendations

The city is proposing to create 5,500 new residential units at Willets Point, but it **must be affordable to residents of the surrounding neighborhoods.** If an agreement is reached to redevelop the 61 acres of land, we would like the city to utilize a tiered approach that genuinely serves very low-income families. Any housing that is created should be accessible to immigrants and also include a dedicated senior housing component. We recommend that:

- **At least one third of the units should be affordable to very low-income families**—households earning less than $25,000 a year.
- **At least one-third of the units should be affordable to low-, moderate- and middle-income families,** using multiple income tiers to insure affordability at a range of incomes.
- **Most of the units should be affordable to residents of the surrounding neighborhoods, at a range of low-, moderate- and middle-incomes**. As a model, we point to a current EDC development on East 125th Street in East Harlem, where roughly one-third of the units are middle-income, one-third are moderate-income and one-third are low-income.
- **The affordable housing units created should be affordable in perpetuity.** This will prevent the crisis of expiring affordable units that exists in many programs.

Thank you for the opportunity to testify today.

Commenter #17

MASON TENDERS' DISTRICT COUNCIL
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Statement of Michael J. McGuire
City Planning Commission Meeting
Re: Willets Point Development Plan Project
August 13, 2008

Good afternoon. My name is Michael McGuire and I am the Director of the Mason Tenders' District Council Political Action Committee. The Mason Tenders' District Council is made up of more than 15,000 members in six local unions in the Eastern Region of the Laborers' International Union. Two of these locals are made up of laborers in the construction industry in New York City. Construction and General Building Laborers' Local 79 and Asbestos, Lead and Hazardous Waste Laborers' Local 78 represent some eleven thousand men and women working within the five boroughs as building construction laborers, mason tenders, demolition workers and asbestos and hazardous material abatement laborers.

The Willets Point area of Queens is ripe for development. It is in a prime location that is surrounded by growth, including downtown Flushing and the new home of the New York Mets, Citi Field. Unfortunately, Willets Point is just the opposite. I mean no offense to the businesses that are located there, but the history and condition of Willets Point render it a true blighted area. In the early 20th century, Willets Point was a dump where thousands of tons of garbage were burned each year. After that, it housed a variety of industries that had a severe detrimental effect on the area for many years. There has been a history of open petroleum spills and illegal dumping of hazardous

materials and unidentified chemicals. The fact that the area has no sanitary sewers to carry toxins away (including human waste concentrated in area cesspools) means that this contamination mostly remains in the area to this day. I say mostly because some of the contamination does get moved: the area's high water table means that these poisons seep into the groundwater and get carried down the Flushing River and out into Flushing Bay.

There has also been a widespread history of building code and environmental violations that make the area a haven for criminal activity. The area has historically been a mix of legitimate auto shops and illegal chop shops coexisting throughout Willet Point's sixty acres. Of the approximately 250 businesses in Willets Point, roughly 90% are auto related. In this environment, even the most responsible business owner cannot help having some spills of oil, gasoline, transmission fluids and other carcinogenic materials. If businesses of this type remain in the area, the land can never be reclaimed to the point where it's safe for human occupation. Further, these auto related businesses, two-thirds of which are working out of rented spaces, have a history of paying depressed wages, less than 60% of the New York City average for workers in this industry.

As well as eliminating an extremely toxic and dangerous area, reclamation and redevelopment of Willets Point will create a vibrant, mixed-use community. The Willets Point Development Plan leverages the area's close proximity to the airports (particularly LaGuardia airport), Citi Field, the United States Tennis Association, and Flushing Meadows Park to create a new regional tourist destination. Further, the Plan will create housing designed to serve a mix of incomes and demographics, the very building blocks of a solid neighborhood.

Along with more than a million square feet of retail and entertainment space, the plan calls for a convention center and a 700 hundred room hotel, 5,500 units of mixed-income housing, a half million square feet of office space, and a large amount of

community space, [illegible]paces and public squares. The economic impact of these improvements is m[illegible]. Permanent jobs will increase five to sixfold, following the approximately 20,0[illegible]struction jobs that will be created. This will result in more than $1.5 billion in additi[illegible] revenues for the City over the thirty year period commencing when the project is [illegible]ed.

Local 79 and [illegible]e Mason Tenders' District Council prides itself in working with communities and p[illegible]dges to aggressively participate in any local hiring plan that is agreed upon with the building trades. Additionally, we support the use of green building techniques to conse[illegible]ve energy, manage storm water and to ensure high performance structures are constr[illegible]cted in Willets Point.

It is our belief, that, while a hardship on some of the businesses that the City will relocate from Willets Point, for the overall good of the community and New York City as a whole, the Willet[illegible] Point Development Project is a winning plan. Clean up of a toxic, blighted site; the b[illegible]lding of more than 5,000 units of housing; the creation of some 20,000 construction jobs and the conversion of 1,000 current permanent jobs into 6,000 future permanent j[illegible]obs; and more than fifty million dollars in additional revenue for the City every year. No[illegible]one with the best interests of the community at heart could make the argument that this p[illegible]lan is not the best thing for Willets Point. Thank you.

Respectfully submitted,

Michael J. McGuire

August 13, 2008

The Municipal Art Society of New York

MASNYC

Commenter #18

Willets Point Development Plan
Draft Environmental Impact Statement
August 13, 2008

The Municipal Art Society of New York is a private, non-profit membership organization whose mission is to promote a more livable city. Since 1893, the Society has worked to advocate excellence in urban design and planning, contemporary architecture, historic preservation and public art. The Municipal Art Society, having submitted scoping comments on May 14, 2007 offers the following testimony to the Department of City Planning on the Willets Point Development Plan.

We may all agree that Willets Point is in need of reinvestment given the substandard infrastructure conditions that currently exist on this sixty-one acre site; however, *how* and *to what* end this area should be redeveloped are key issues. The Municipal Art Society questions the New York City Economic Development Corporation's development plans on two points: first, with respect to the proposed change in land-use, has the dramatic transformation from manufacturing to a mixed-use residential/commercial development concept received the careful, thorough examination it deserves? And second, with respect to the EDC's proposed ownership model, given the current economic climate doesn't structuring the plan around a single developer risk long delays at the cost of promised public benefits ?

Equally important is the issue of declaring the site an Urban Renewal area, allowing the use of eminent domain. In this circumstance, MAS believes the redevelopment plan must meet such additional criteria for citizen participation and allocation of city resources as articulated in the urban renewal principles presented in this testimony.

The Willets Point Development plan currently in the ULURP process requires the following three actions:

1) Designation of the site as an Urban Renewal area, defining acquisition and disposition of properties.
2) Demapping of all public streets on the 61 acre site.
3) Zoning changes from M3-1 and R3-2 to a C4-4 district

Land-use: Is Willets Point ripe for residential development?
The Willets Point Development plan is being hailed as both an opportunity to create a "dynamic sustainable community" (DGEIS 3-2) and a "transit-oriented development that would leverage the District's superior transit and highway infrastructure" (DGEIS 6).

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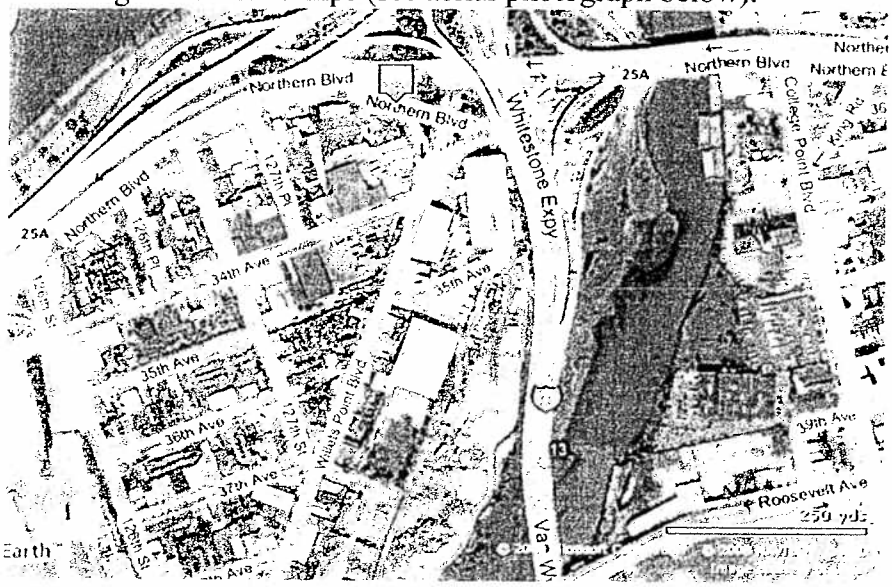
Although the concept of mixed-use districts characterized by pedestrian friendly, activated streetscapes is a laudable goal that the MAS generally supports, we question whether the Willets Point site is appropriately suited for this type of development. Furthermore, the Willets Point site has been slated as a LEED Neighborhood Development (LEED-ND) Pilot Project and while the sustainability criteria under LEED-ND focus on transit infrastructure and green building as well as innovative technological solutions for energy efficiency, these goals often eclipse the imperative to also achieve social and economic sustainability. The City has not seriously considered alternate development scenarios for land use and, as the following discussion will illustrate, it is not clear that Willets Point is at all suitable for residential living.

The site abuts an undeveloped MTA site, which according to the DGEIS will remain undeveloped even with the proposed redevelopment (DGEIS 3-28) and is most probably slated by MTA as an expansion site for the Corona Yards.[1] As a result, as currently proposed, residential development, which is to comprise approximately 62% of the proposed allowable square footage to be developed on the site, would either be built along side major highways, an unsightly undeveloped industrial site, or railyards. Thus, in addition to the potential public health hazards due to the site's location and contamination, its lack of connectivity to surrounding neighborhoods will isolate potential residents of the development.

Additionally, the commercial and convention center aspects to the development are unlikely to fulfill the intention of transit-oriented development and sustainable development as potential visitors to the commercial areas are more likely to drive there than take public transit. While most of the site may technically be within a 10 minute walk to the subway lines, in reality the site is located such that it facilitates automobile access. The DEIS acknowledges that the proposed plan will generate significant vehicular traffic increases. Unlike the "existing lower-density uses currently within the Willets Point Development District..., the Willets Point Development Plan is expected to be a significant traffic generator on both the highways surrounding the District—including the Grand Central Parkway, the Van Wyck Expressway, and the Whitestone Expressway—and the local street network" (DGEIS 17-2). Given the emissions and noise pollution to which residents would be exposed, due to increased vehicular traffic; the site's condition and the plan's impacts will negate the goals of creating a residential, pedestrian friendly streetscape and sustainable neighborhood. The bleak assessment regarding traffic and parking begs the question: what makes this a sustainable and transit-oriented neighborhood development plan?

[1] NYC EDC (2004) Request for Expression of Interest: Development of Willets Point Queens.

The aforementioned major highways create a boundary around the site, and would effectively hem in this new neighborhood and interrupt pedestrian access to the waterfront. Northern Boulevard, running along the Western side of the site counts multiple lanes of moving traffic on elevated roads with lanes of traffic below. The White Stone / Van Wyck Express Ways, which converge with Northern Boulevard at the Northern tip of the site, also consist of multiple lanes of elevated thru-way traffic, not including on and off ramps (see aerial photograph below).



Highway underpasses present formidable psychological barriers to successful pedestrian pathways and highway noise notably reduces the quality life of nearby residents with particularly detrimental effects on children.[2] The DEIS has already acknowledged that "noise may interfere with human activities, such as sleep, speech communication, and tasks requiring concentration or coordination. It may also cause annoyance, hearing damage, and other physiological problems" (DEIS 20-2). In the case of Willets Point, current measures of noise levels are fairly high to begin with and with the proposed project according the DEIS would have to be "attenuated" (DEIS 20-13). Moreover "[t]he noise levels and the impacts predicted exclude noise from aircraft operations at LaGuardia Airport, which is adjacent to the District" (DEIS 23-14). As a result, the livability analysis is flawed and does not adequately address whether existing noise-level conditions should preclude outright residential and particularly school uses on the site. Furthermore the analysis only takes into consideration the incremental change in noise pollution due to the plan and does not assess whether the existing conditions are appropriate for residential living and schooling. The question is: how will the current site conditions that cannot be altered impact adults and children mentally and physically?

[2] http://www.theatlantic.com/issues/97aug/langdon.htm

Land Use: Transit-oriented Industrial Development and Sustainability:
The city has been marketing the Willets Point Development plan as a "sustainable" neighborhood development; but, what do we mean by "sustainability"? While technically the plan might certify under LEED-ND, the sustainability criteria associated with this program do not fully address the socio-economic costs associated with the wholesale removal of viable businesses and potential industry clusters; nor does it adequately respond to long-term economic sustainability plans for the city as a whole.

Since the City has only a sustainability framework and not a comprehensive long-term plan, it is hard to weigh the impact of any given individual rezoning action and the consequent redevelopment of particular areas, such as Willets Point. PlaNYC does not offer a long-term vision for economic development and the development of new industries, yet the City continues to propose the removal of manufacturing zones from its land-use map. The City's plans for Willets Point, among others, raises crucial questions regarding the long-term costs to the City of removing these sites that have potential to host new industries, especially green industries. Since environmental testing has been limited thus far, the full extent of environmental contamination is not known. Some parcels may be more contaminated than others, thereby raising the price of remediation. Rather than supporting or catalyzing redevelopment through public sector investment in infrastructure, the proposed plan facilitates the erasure of an industrial land-base at a time when New York City is rapidly losing areas for manufacturing and industrial firms to locate and expand. Other cities, such as Los Angeles and Chicago are grappling with precisely this issue and initiatives closer to home in the Bronx and Brooklyn should be models of how we plan for a sustainable future that aligns sustainability concerns with real opportunities for economic and industrial growth. This means, however, having a comprehensive land-use plan that understands and incorporates the changing needs of new industries and related firms.

Given its adjacency to other industrial sites, its relative proximity to the College Point industrial park, and its accessibility to major transportation routes as well as the airport, the site may be more appropriate for strategic investment in industrial uses. Access to the Van Wyck is invaluable to manufacturers, especially those with a regional customer base. Prospective industrial developers may have been wary of assembling properties in the area due to the lack of infrastructural investment by the City. The City should, therefore, seriously and thoroughly examine the Municipal Services alternative the EDC has proposed in the EIS for its potential to catalyze industrial reinvestment in the area. Furthermore, the site holds the potential for increasing freight transport via barges. The Maritime study released by EDC in 2007 recognizes barge traffic as crucial to long-term sustainability: "one standard dry barge, which carries garbage, sand, and gravel, can carry

the equivalent of 60 trucks."3 The DEIS states that barging activity at College Point is poised to increase in the future as the "converted North Shore MTS, in the College Point Section of Queens, to the east of the proposed Plan becomes operational in 2011." How does this increase affect other potential recreational uses in the area? Does Willets Point represent an opportunity to increase water-born and intermodal freight transportation?

Ownership: The *One-Developer Model* has not proven effective

The Willets Point Development and Urban Renewal plans have been ill conceived.

- The City should invest in infrastructure and site preparation
- The City should incorporate a multiple-developer model with clear public oversight

In reserving the City's action to rezone the area, acquire and assemble the land -- currently under private ownership -- and subsequently transfer the responsibility and financial burden for brownfield remediation, major site preparation, and infrastructure work to the potential developer, major community benefits, such as significant affordable housing, for example, may be cost-prohibitive and unrealizable.

The Willets Point development plan, which relies on a single developer for site preparation as well as build-out, is a redevelopment model that has not proven to be successful, as demonstrated by the Atlantic Yards and Hudson Yards projects. By eschewing the public sector's responsibility to prepare the site and provide the public infrastructure necessary for redevelopment, the City is running the risk that the development at Willets Point, as at Atlantic Yards, will stall indefinitely. At the same time, if the City acquires control over the entire site – if necessary through the use of eminent domain – local property owners will have relinquished their stake in the area. This creates the possibility that the site will remain vacant and/or underutilized for years to come.

Battery Park City and Queens West, on the other hand, illustrate that a phased development process where multiple developers are granted development rights and where the project is overseen by a specially designated public authority may be a more effective model. Battery Park City has also demonstrated that such a model provides additional long-term revenue benefits to the City of New York by capturing funds that can be dedicated to affordable housing.

Will the development result in significant affordable housing?

As the proposal is currently structured, the City is taking on responsibility only for the acquisition of land from private property owners and for infrastructure improvements

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[3] Maritime Support Services Location Study

outside of the district, while any future developer will be responsible for remediation and site preparation. Since the City is seeking to designate Willets Point as an Urban Renewal area in order to be able to acquire private properties on the site through eminent domain, affordable housing must make up a significant portion of new development on the site should the land-use change be approved. Incentive FAR bonuses are not adequate, however, as they do not guarantee construction of affordable housing on the site. The cost of environmental remediation is unpredictable since Phase I and II testing "was conducted from public-rights-of-way, along street and sidewalk areas" only, and "permission was not obtained for access to the privately owned sites" (DGEIS, 12-5). If costs for remediation exceed what is predicted for the site, affordable housing will likely be the first casualty of a modified plan. Should the rezoning be approved before a final RFP for a single developer is selected, a defined amount of affordable housing, responding to the needs of the surrounding neighborhoods, should be guaranteed for the site; this should be included in the zoning text as *mandatory* inclusionary housing tailored to the specific needs of the surrounding Queens neighborhoods. The City should position itself as the broker of potential construction subsidies for the development, in return for the guarantee of their construction. The public should be advised as to whether market analysis data exists that supports the plan and the feasibility of creating a significant proportion of affordable housing.

Urban Renewal

Underwriting the redevelopment of Willets Point is an urban renewal plan; as such, the plan should establish a nexus between the proposed redevelopment actions and the public benefits to be derived from the plan. MAS believes that the Urban Renewal Plan should meet the following principles:

Principle: constructive outreach to and participation of all major stakeholders must serve as the foundation of the proposed plan

The Willets Point plan seems to have been the outgrowth of a planning process primarily focused on the downtown Flushing area. The city appears to have failed to involve on-site business owners and property owners, whose livelihoods will be most directly affected by the proposed plans, in a deliberative process. These stakeholders would include not only the owners of the affected parcels but the operators/leasees of businesses as well. If eminent domain is used, the relocation process of current businesses would be best served by a detailed disposition of the businesses on site and their needs for space. Melrose Commons in the Bronx – also a LEED-ND pilot project – may serve as a model here; in this more inclusive process, property owners were approached on a lot by lot basis to determine who wanted to sell and leave and who wanted to stay with the urban renewal plan being built around them.

Principle: the plan represents a strategic use of city resources
The city has already set aside close to 395 million dollars to support the redevelopment of Willets Point; and as part of this plan the city will be using public monies to either buy out the owners or to pay fair market value via eminent domain. The question is whether the resources invested in the acquisition of properties and proposed infrastructure improvements outside of the district represent the best use of public monies when site preparation and site infrastructure improvement cost are to be borne by the developer of the site. The recent experience at Atlantic Yards serves as a cautionary note to the strategy of developer constructed infrastructure, as their decision making is tied more to capital market fluctuations, compared to the public sector.

Principle: the plan supports long-term planning for sustainability, including social and economic sustainability.
A widely accepted definition of sustainability identifies the Triple Bottom Line as a measuring tool to assess sustainability, which means developments should "perform to not just a single financial bottom line, but the simultaneous pursuit of economic prosperity, environmental quality and social equity - Profit, Planet & People."[4] PlaNYC 2030 effectively sets guidelines to move our city in the direction of sustainable and "greener" development by focusing on our environment, our green spaces as well as housing, infrastructure and transportation needs; yet, the city lacks a comprehensive plan of how it intends to grow industries and create employment opportunities that give New Yorker's the chance to gain skills and build assets as well as long-term security.

The Willets Point plan fails to address long-term economic sustainability. At the same time, the city's industrial areas, such as the Brooklyn Navy Yard and even College Point just across from Willets Point, have very low vacancy rates, indicating a pressing need for adequate space for industrial firms; therefore, the city should carefully examine a development scenario that invests in and promotes industrial growth. *(See above)*

Principle: the plan benefits existing affected community stakeholders
As the city seeks to catalyze development in areas previously subjected to disinvestment by the city and the private sector, the needs of and costs to the local stakeholders must be carefully weighed against the projected public benefits.

In the case of Willets Point, the needs of the local property and business owners and workers as well as stakeholders in the two neighborhoods adjacent to the site must be carefully considered as the city seeks to declare an Urban Renewal area. The proposed benefits for the existing communities must be guaranteed by binding agreements and delivered according to an agreed upon, reasonable and predictable timeline. In particular,

[4] http://www.epaw.co.uk/homegloss.html

current business owners, land owners and employees must be fairly treated not only to compensate for current losses but to ensure their future economic situation and growth. Employees should be placed in comparable employment in order to secure their families' survival and future. Seriously examining green industries as potential growth engines for NYC' employment base should be a priority when making land-use decisions, and support for such industries should be considered a strategic investment in the City's work force building crucial human capital.[5]

Principle: the urban design as well as design of open spaces and parks promotes a public, open feeling and ensures public access.
New Yorker's deserve quality urban design and architecture as well as public open spaces akin to parks or public plazas that are not susceptible to privatization.

As part of the proposed actions in the Willets Point redevelopment plan, the NYC EDC is asking the Planning Commission to demap public streets and acquire private properties to be developed by a single developer; thus, it is imperative that safeguards are included to ensure that the development maintains an open feel, is truly accessible to the public and welcoming to residents from surrounding neighborhoods. As our analysis illustrates, MAS has serious doubts that this is possible given the current site conditions, the proposed demapping of all of the streets and redevelopment under a one-developer ownership model.

Principle: the plan includes a governance structure to ensure stakeholder participation in the monitoring of the development and design review process.
Given the lengthy timeline for the Willets Point redevelopment and, consequently, the likelihood that any plan will change over time, a governance structure that gives relevant stakeholders oversight over the planning as well as monitoring process must be established – such as a local development corporation with broad representation.

[5] New York Industrial Retention Network and Industrial & Technology Assistance Corporation. Manufacturing Green: Producing a Sustainable NYC, June 2006.

The Municipal Art Society of New York

MAS

Comments on the
Willets Point Development Plan
Draft Generic Environmental Impact Statement
August 25, 2008

GENERAL COMMENTS

The Municipal Art Society of New York is a private, non-profit membership organization whose mission is to fight for intelligent urban planning and preservation through education, dialogue and advocacy. The Municipal Art Society, having submitted scoping comments on May 14, 2007 and testimony to the Department of City Planning on August 13, 2008 offers the following comments on the DGEIS with the intention of identifying where the document is insufficient or incomplete in describing the scope of the FEIS for the project, the methodology for studying the project, and its impacts.

The Willets Point Development plan currently in the ULURP process requires the following three actions:

- Designation of the site as an Urban Renewal area, defining acquisition and disposition of properties.
- Demapping of all public streets on the 61 acre site.
- Zoning changes from M3-1 and R3-2 to a C4-4 district

MAS agrees with the New York City Economic Development Corporation that Willets Point is in need of reinvestment given the substandard infrastructure conditions that currently exist on this sixty-one acre site; however, *how* and *to what* end this area should be redeveloped are key issues. Given its adjacency to other industrial sites, its relative proximity to the College Point industrial park and its accessibility to major transportation routes as well as the airport, the site may be more appropriate for strategic investment in industrial uses. Furthermore the plan does not seem to address the socio-economic costs associated with the wholesale removal of viable businesses and potential industry clusters; nor does it adequately incorporate long-term economic sustainability for the city as a whole. In addition, given the economic climate it is risky to structure the plan around a single developer model. Finally, in declaring the site an Urban Renewal area and allowing the use of eminent domain, the plan must meet additional criteria for citizen participation and allocation of city resources as articulated in the urban renewal principles presented below.

The Principles that MAS Believes Should Guide this Project

In light of the use of eminent domain, the current economic climate and concerns about local sustainability, the following principles ought to guide this project.

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1. **MAS Principle: The project should be based on a plan that considers the input of community stakeholders.**

   Willets Point Plan: The Willets Point plan seems to have been the outgrowth of a planning process primarily focused on the downtown Flushing area. The city has not adequately involved business owners and property owners in a convincingly deliberative process to bring on board those stakeholders whose livelihoods will be most directly affected by the proposed plans. This would include not only the owners of the affected parcels but the operators/lessees of businesses as well. If eminent domain is to be used, the relocation process of current businesses would be best served by a detailed disposition of the businesses on site and their needs for space. Another Urban Renewal Area project, Melrose Commons, may serve as a model here; property owners there were approached on a lot by lot basis to determine who wanted to sell and leave and who wanted to stay with the urban renewal plan being built around this more inclusive process.

2. **Principle: The plan should represent a strategic use of city resources.**

   Willets Point Plan: The City has set aside close to $389 million dollars (City of New York Executive Budget Fiscal Year 2009) for the Willets Point Development Plan to either buy out the owners or to pay fair market value via eminent domain as well as for infrastructure investments adjacent to the district. The question is whether the resources invested in the acquisition of properties and proposed infrastructure improvements represent the best use of public monies when site preparation and site infrastructure improvement costs are to be borne by the developer of the site. Leaving the site preparation and infrastructure investment on the site to one developer could cause serious delay in the completion of the project. The recent experience at Atlantic Yards serves as a cautionary note to the strategy of single developer model.

3. **Principle: Long-term planning for sustainability should include social and economic concerns as well as environmental issues.** A widely accepted definition of sustainability identifies the Triple Bottom Line as a measuring tool to assess sustainability, which means developments should "perform to not just a single financial bottom line, but the simultaneous pursuit of economic prosperity, environmental quality and social equity - Profit, Planet & People."[1] PlaNYC 2030 effectively sets guidelines to move our city in the direction of sustainable and "greener" development by focusing on our environment, our green spaces as well as housing, infrastructure and transportation needs; yet, the city lacks a comprehensive plan of how it intends to grow industries and create employment opportunities that give New Yorker's the chance to

[1] http://www.epaw.co.uk/homegloss.html

gain skills and build assets as well as long-term security.

Willets Point Plan: The plan fails to address long-term economic sustainability. Rather than supporting or catalyzing redevelopment through public sector investment in infrastructure, the proposed plan facilitates the erasure of an industrial land-base at a time when New York City is rapidly losing areas for manufacturing and industrial firms to locate and expand. At the same time, the city's industrial areas, such as the Brooklyn Navy Yard and even College Point just across from Willets Point, have very low vacancy rates, indicating a pressing need for adequate space for industrial firms; therefore, the city should carefully examine a development scenario that invests in and promotes industrial growth.

4. **Principle: The proposed benefits to stakeholders and the public should be enforceable.** As the city seeks to catalyze development in areas previously subjected to disinvestment by the city and the private sector, the needs of and costs to the local stakeholders must be carefully weighed against the projected public benefits.

   Willets Point Plan: In declaring an Urban Renewal at Willets Point, it is critical to incorporate into the plan the needs of the local property and business owners and workers as well as stakeholders in the two neighborhoods adjacent to the site. Moving forward, the proposed benefits for the existing communities must be guaranteed by binding agreements and delivered according to an agreed-upon, reasonable and predictable timeline. In particular, current business owners, land owners and employees must be fairly treated not only to compensate for current losses but to ensure their future economic situation and growth. Employees should be placed in comparable employment in order to secure their families' survival and future.

5. **Principle: If the plan moves forward, urban design, parks and open spaces should promote a public, open feeling and ensure public access.** New Yorker's deserve quality urban design and architecture as well as public open spaces akin to parks or public plazas that are not susceptible to privatization.

   Willets Point Plan: As part of the proposed actions in the Willets Point redevelopment plans, the NYC EDC is asking the Planning Commission to demap public streets and acquire private properties to be developed by a single developer; thus, it is imperative that safeguards are included to ensure that the development maintains an open feel, and public spaces be truly accessible to the public and welcoming to residents from surrounding neighborhoods.

6. **Principle: The plan should provide for continued input and monitoring from the public and stakeholders as the project progresses and potentially changes over**

time.

Willets Point Plan: Given the long-time horizon for the Willets Point redevelopment and, consequently, the likelihood that any plan will change over time, a governance structure that gives relevant stakeholders oversight over the planning as well as a monitoring process must be established. The group, which could be a local development corporation, must have broad representation.

COMMENTS REGARDING THE DRAFT GENERAL ENVIRONMENTAL IMPACT STATEMENT

MAS submits these comments on the DGEIS with the intention of identifying clear concerns about the New York City Economic Development Corporation's development plans for Willets Point and to ensure that alternatives to the proposed plan are thoroughly examined and published so that the public can understand the different potential development scenarios for this site and their impact on sustainability, economic development potential and job growth.

CHAPTER 1 - PROJECT DESCRIPTION

Site Conditions: The FEIS should delineate how the site conditions came about, given the long history of disinvestment in the area's infrastructure. Given this history and the site's potential designation as an Urban Renewal area, the FEIS has to clearly spell out and quantify the public benefits derived from the proposed action and secure a timeline for when these benefits will be delivered. The FEIS should furthermore, thoroughly examine alternative development scenarios, such as the municipal services alternative and an eco-industrial park alternative.

Project Purpose and Need: The Willets Point site has been slated as a LEED Neighborhood Pilot Project and is being hailed as an opportunity to create a "dynamic sustainable community" (DGEIS 3-2) and "transit-oriented development that would leverage the District's superior transit and highway infrastructure" (DGEIS 6). Although the concept of mixed-use districts characterized by pedestrian friendly, activated streetscapes is a laudable goal the MAS generally supports, we do question whether the Willets Point site is appropriately suited for this type of development.

The site is bounded by major highways that would effectively hem in this new neighborhood and at the same time interrupt pedestrian access to the waterfront. Northern Boulevard, running along the Western side of the site counts multiple lanes of moving traffic on elevated roads with lanes of traffic below. The White Stone / Van Wyck Express Ways, which converge with Northern Boulevard at the Northern tip of the site, also consists of multiple lanes of elevated traffic, not including on and off ramps. Highway underpasses present formidable psychological barriers interrupting pedestrian pathways, and highway noise notably reduces the

quality life of nearby residents with particularly detrimental effects on children.[2]

The site also abuts an undeveloped MTA site, which according to the DGEIS will remain undeveloped even with the proposed actions (DGEIS 3-28) and is most probably slated by MTA as an expansion site for the Corona Yards.[3] Consequently, as currently proposed, residential development, which is to comprise approximately 62% of the proposed allowable square footage to be developed on the site, would either be built along side major highways or an unsightly undeveloped industrial site. Thus, notwithstanding the potential public health hazards due to the site's location and contamination, its lack of connectivity to surrounding neighborhoods will isolate potential residents of the development.

Additionally, the development is not likely to fulfill the intention of transit-oriented and sustainable development model as potential visitors to the commercial areas are more likely to drive there than take public transit. Furthermore, the DGEIS states that the proposed plan will generate significant vehicular traffic increases. Unlike the "existing lower-density uses currently within the Willets Point Development District..., the Willets Point Development Plan is expected to be a significant traffic generator on both the highways surrounding the District—including the Grand Central Parkway, the Van Wyck Expressway, and the Whitestone Expressway—and the local street network" (DGEIS 17-2). The bleak assessment regarding traffic and parking begs the question: what makes this a sustainable and transit-oriented neighborhood development plan?

Consequently, the FEIS should include the following:

1. A full description of what the LEED-ND designation will entail with the potential point categories on which the site development is slated to receive most of its points. This means a specific breakdown of the measures needed to achieve the different LEED-ND designations should follow in an appendix, with possible points achieved given various potential design requirements. This appendix should also include various scenarios of the different levels of the LEED-ND designation that are possible for the site to achieve (Silver, Gold, and Platinum). (1-14).
2. A full description of how the Willets Point development plan will ensure that the project will meet transit-oriented development (TOD) criteria, given that the DGEIS already acknowledges that the proposed plan will have significant adverse impacts with regard to automobile traffic patterns and congestion.
    a. How will the city ensure that the proposed plan is linked to adequate public transit options?
    b. What are the specific measures the plan introduces to reduce parking?

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[2] http://www.theatlantic.com/issues/97aug/langdon.htm

[3] NYC EDC (2004) Request for Expression of Interest: Development of Willets Point Queens.

c. How does the City propose to link bicycle and pedestrian paths to larger networks to encourage alternate transport?

CHAPTER 2 – PROCEDURAL AND ANALYTICAL FRAMEWORK

Proposed Plan: One Developer versus Multiple Developers

The city's actions are limited to the rezoning of the area and the acquisition and assemblage of land, which is currently under private ownership. That shifts the responsibility and financial burden for brownfield remediation, major site preparation and infrastructure work to the potential developer. Our concern is that major community benefits, such as significant affordable housing, for example, may be cost-prohibitive and unrealizable. Furthermore, since extensive environmental testing has not yet been completed on the site, some parcels may have more environmental contamination than others, thereby raising the cost of remediation.

The Willets Point Development Plan, which relies on a single developer for site preparation as well as build-out, is a redevelopment model that has not proven to be successful, as demonstrated by the Atlantic Yards. By eschewing the public sector's responsibility to prepare the site and provide the public infrastructure necessary for redevelopment, the city is running the risk that the development at Willets Point, as has happened in Atlantic Yards, might stall. At the same time, since the City is working toward acquiring control over the entire site, if necessary through the use of eminent domain, local property owners will have relinquished their stake in the area. This creates the possibility that the site will remain vacant and/or underutilized for years to come.

Therefore, the FEIS must study the scenarios:

1. The FEIS must present a thorough analysis of the financial feasibility of such a single developer model.
2. The FEIS must present in detail an alternate model that would require disposition of properties to multiple owners and multiple developers.
3. The FEIS should examine any potential revenue streams that a phased model might bring the city (e.g. Battery Park City which has capturing funds that can be dedicated to affordable housing.)

Analysis of Proposed Uses and Development Scenarios

According to the DGEIS, "The maximum development envelope anticipated under the proposed Plan includes up to 8.94 million gross square feet (g.s.f.) of new buildings, which would include residential, retail, office space, a hotel and convention center, as well community facilities and open space" (2-1).

The FEIS should include the following:

1. Conduct and release a feasibility analysis of each of the proposed combination of uses.
2. Examine and make public the projected costs of the environmental remediation required for the site, site preparation, including infrastructure costs and the costs to raise the site out of the 100 year flood zone as well as the proposed sources of funding, including subsidy and incentive packages.

Since the proposed actions include an urban renewal plan, it is crucial to disclose the costs to be borne by the public to redevelop Willets Point. Additionally, the public should be given reasonable assurances that the public benefits will be reaped with in a predictable time-frame. The current state of the real estate market and the financing problems at the Atlantic Yards site serve as an indication that the public benefits derived from this project may not be off-set by the potential costs.[4]

CHAPTER 3 - LAND USE, ZONING, AND PUBLIC POLICY

Public Policy

Downtown Flushing Development Framework (DGEIS 3-19): MAS appreciates that the proposed plan for Willets Point is in some ways an outgrowth of the Downtown Flushing Development Framework, initiated by the New York City Economic Development Corporation (NYCEDC) and DCP.

While it is important to work to create connections between Flushing and Willets Point, the city does not adequately address connections to Corona. Willets Point is physically separated from Downtown Flushing by major infrastructural and utility sites, creating a substantial barrier between Flushing and Willets Point. Connections to Corona, however, are not as visually or structurally impeded, yet the planning process seems to have sidestepped Corona stakeholders.

1. The FEIS should also describe the process through which stakeholders (i.e. property owners, tenant businesses and workers) within the District were included in the planning process and demonstrate how their needs were incorporated into the final plan.
2. The FEIS should delineate a process and governance structure to ensure continued participation of affected stakeholders throughout the planning, development and monitoring of the development.

Furthermore, the Willets Point Plan, rather than enhance some of the goals expressed in the Downtown Flushing Framework, seems to undermine them. The FEIS should make explicit the ways in which the Willets Point plan will be connected to Downtown Flushing.

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[4] "Slow Economy Likely to Stall Atlantic Yards" *The New York Times. Accessed 7/14/08* http://www.nytimes.com/2008/03/21/nyregion/21yards.html?scp=4&sq=atlantic+yards&st=nyt

1. What investments are being made to ensure the sense of pedestrian connectivity between the areas?
2. What are other specific design proposals, besides a potential pedestrian bridge, to integrate the two sides of the Flushing River across the MTA site?
3. What have studies shown in terms of the use of pedestrian bridges spanning highways? Do people actually cross these bridges? Do they provide the required sense of connectivity the plan champions, creating an integrating factor?
4. How does the plan propose to "optimize use of the existing highway, public transit, and parking infrastructure to minimize local traffic impacts" (DGEIS 3-20), given that the DGEIS already acknowledges the adverse impact the proposed actions will have on traffic patterns and congestion?

PlanNYC 2030 (3-20)
MAS lauds the Mayor's efforts to move New York City toward achieving long-term sustainability. As such, the FEIS should conduct a full review of the proposed actions and weigh them against the goals set out in the Mayor's PlaNYC 2030. However, since PlaNYC, fails to adequately lay out a plan for the diversification of the City's employment sectors, and since the City does not have a comprehensive land-use plan, a complete assessment of the Willets Point redevelopment plans must also address the economic imperative to preserve and provide good jobs with decent wages and benefits for New Yorkers in potential industrial growth sectors.

Land Use Compatibility (3-28)
The DGEIS states the following: "The proposed Plan would not be consistent with the industrial uses currently located along the waterfront to the north and east of the District. However, these uses are separated from the District by the Whitestone Expressway and Northern Boulevard, as well as the Flushing River, and therefore would not result in significant adverse land use impacts on the proposed uses. The proposed uses would also not interfere with the active industrial waterfront uses—including barge operations—in the Flushing River and Flushing Bay" (DGEIS 3-29).

<u>How can the Willets Point site be both isolated from existing industrial uses in the College Point area and connected to retail and residential developments in Flushing when similar infrastructure (highways and industrial uses, such as the MTA, separate the site from both areas?</u>

1. The FEIS needs to address this inconsistency in the analysis. What urban design solutions will effectively integrate The Willets Point site and the Flushing area? How does the proposed plan effectively overcome the major infrastructure and land use barriers that challenge the proposed plan's intended goal of creating a pedestrian friendly, sustainable urban neighborhood? (See Socioeconomic and Alternatives sections)
2. The FEIS should study the effective linkages that may tie the site into the surrounding industrial areas.

3. The FEIS should examine whether maintaining and investing in Willets Point as an industrial economic driver is feasible.
4. The FEIS should include a sector analysis of growth potential industries for the City's economy, their infrastructure requirements, and the potential economic growth this might generate for the City. (College Point, may serve as a point of reference).

Other Land Use Issues:

Transit-oriented Industrial Development and Sustainability:

The city has been marketing the Willets Point Development plan as a "sustainable" neighborhood development; but, what do we mean by "sustainability"? While technically the plan might certify as a Sustainable Development project under the LEED Neighborhood Pilot Project designation, the sustainability criteria associated with this program does not seem to address the socio-economic costs associated with the wholesale removal of viable businesses and potential industry clusters; nor does it adequately incorporate long-term economic sustainability for the city as a whole. The city is increasingly foregoing the opportunity to promote truly sustainable neighborhood development through urban revitalization/renewal that incorporates the long-term goal of economic and social sustainability.

Since the city does not have a comprehensive plan, it is hard to weigh the impact of any given individual rezoning action and the consequent redevelopment of particular areas, such as Willets Point, against a comprehensively conceived plan for the city. PlaNYC, for example, does not offer a long-term vision for economic development and the development of new industries. Yet, in continuing to propose the removal of manufacturing zones from the city's land-use map, the city's plans for Willets Point, among others, raise crucial questions regarding the long-term costs to the City if we continue to remove potential sites for new industries, and potentially green industries, in New York City. Other cities, such as Los Angeles and Chicago are grappling with precisely this issue and initiatives closer to home in the Bronx and Brooklyn should be models of how we plan for a sustainable future that directs sustainability concerns into realizing opportunities for economic and industrial growth. This means, however, having a comprehensive land-use plan that understands and incorporates the changing needs of new industries and related firms.

Given its adjacency to other industrial sites, its relative proximity to the College Point industrial park and its accessibility to major transportation routes as well as the airport, the site may be more appropriate for strategic investment in industrial uses. Access to the Van Wyck is invaluable to manufacturers, especially those with a regional customer base. Potential industrial developers may have been wary of assembling properties in the area due to the lack of infrastructural investment by the city.

Furthermore, the site holds the potential for increasing freight transport via barges. The *Maritime Support Services Location Study* released by EDC in 2008 recognizes barge traffic as crucial to long-term sustainability, "one standard dry barge, which carries garbage, sand, and gravel, can carry the equivalent of 60 trucks."5 The DGEIS states that barging activity at College Point is poised to increase in the future as the "converted North Shore MTS, in the College Point Section of Queens, to the east of the proposed Plan becomes operational in 2011." Does Willets Point represent an opportunity to increase water-borne and intermodal freight transportation?

1. The FEIS should spell out in detail the potential for creating a manufacturing or industrial zone in the Willets Point area, taking into account superior access to transportation and freight transport routes.
2. The FEIS should assess the synergies that might exist or that could be developed between the Willets Point site, College Point and adjacent industrial activities.
    a. The FEIS should compare potential jobs created under an industrial/manufacturing scenario with the proposed plan in terms of median wages, benefits, and career paths, skill acquisition and upward mobility.
    b. The FEIS should spell out the cost for site preparation and infrastructure improvement for this scenario in a format that facilitates comparison to the proposed plan.
    c. The FEIS should disclose the cost to the public under the two scenarios – the proposed plan and the proposed municipal services option as well as an eco-industrial park alternative.

Residential Uses?

The DGEIS already acknowledges that the "residential and community facility uses proposed for the District would not be compatible with the industrial activities permitted on the adjacent Metropolitan Transportation Authority (MTA) property. However, the placement of high-density mixed-use or residential districts next to heavy manufacturing districts is not uncommon in the City, and would not result in a significant adverse impact" (3-2).

Therefore the FEIS should include the following:

1. A detailed analysis of whether residential and school uses close to a heavy industrial area and adjacent to major highways as well as an airport are recommendable. The analysis should not just be based on the incremental change measures due to the proposed plan but an assessment whether existing noise and air pollution at the site, including impacts of the airport, are suitable for residential and school uses.
2. Disclosure on possible future uses of the MTA site.

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[5] Maritime Support Services Location Study

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Energy

"The Special District would allow the development of a power plant and an electrical utility substation within the District, provided they would primarily serve the District." (3-26). This is a significant piece of infrastructure that must be studied in the FEIS in detail, including:

1. What are the potential sites for the power plant?
    a. What is its potential size?
    b. What are the potential landscaping treatments that will be used to screen the site?
    c. How will it affect the final design of the site?
    d. What impact will it have in terms of noise and air quality?

Furthermore, in line with the energy guidelines set out in PlanNYC 2030 and sustainability goals the FEIS should examine the following:

1. What is the potential for co-generation on the site as well as other potential sources of power, such as solar and wind?
    a. Does the inclusion of these sources have the potential to reduce the overall footprint of the power plant needed for the site?

Parking

EDC states that "In order to promote the redevelopment of Willets Point consistent with the goals and objectives of the Plan and to eliminate unnecessary rigidities that would prevent the achievement of the best possible site plan, the proposed Special District would waive certain C4-4 district requirements and CPC and New York City Board of Standards and Appeals (BSA) special permits" (Chapter 3, 3-31 – Land Use). Yet, Community Board 7 has asked the City to require that the parking ratio be 1:1 (100% of the parking needs of the residents covered). We applaud the city in proposing the lower ratio, which would fulfill one of the criteria that defines transit oriented development.

1. EDC must ensure that the stricter residential parking requirements are not off-set by additional provision of parking for the potential commercial enterprises located at the site.

CHAPTER 4 – SOCIOECONOMIC CONDITIONS

Additional research must go into the analysis of the businesses in Willets Point. The following recommendations revolve around the potential for the businesses currently there, as well as the potential for other businesses and industries or uses to occupy the existing zoning if the city brings adequate municipal services to the site.

Direct Business and Institutional Displacement

The FEIS should substantiate the claim that the businesses in Willets Point were determined not to be of substantial economic value to the region or City (DGEIS 4-3). The House of Spices is just one example of a unique business with a local, regional, and national market.

1. The FEIS should substantiate the claim that the displaced businesses hold no significant economic value for the city by disclosing a thorough analysis of businesses that are to be displaced and their economic contribution to the city as well as their position in the market and their intra as well as inter-industry business relationships.

Effect on Specific Industries: Automotive Cluster:
The DGEIS states that "with 3,642 auto-related businesses within New York City, auto-related goods and services are available elsewhere. Therefore, the potential displacement of these uses from the District would not jeopardize the viability of any industries that rely on those services" (DGEIS 4-5).

Citing the fact that 3,642 auto related businesses are available throughout the rest of the city is inadequate analysis, given that this cluster is located in an isolated site and not scattered along commercial corridors nor immediately adjacent to residential neighborhoods. Additionally, the factors that are cited as making the site "optimal" for transit-oriented development also make it optimal for auto-related businesses. The DGEIS provides and inadequate analysis of determining the possible advantages represented by maintaining auto-related industry as a cluster. The DGEIS should seriously engage the question of the dispersion of these business into other NYC neighborhoods.

1. The FEIS should substantiate the claim that the Willets Point cluster is not unique and that other auto-related businesses in the city are a suitable substitute for consumers of auto repair services that use Willets Point.
2. The FEIS should thoroughly examine the impact of breaking up the auto-related businesses cluster at Willets Point.
    a. What is the cluster's market? Is it a localized market or does it serve a regional market because of the clustering effect?
    b. What is the cluster's combined economic impact?
    c. The FEIS should examine the impact on other communities where these businesses might relocate should these businesses be dispersed into other New York neighborhoods' commercial strips that are likely to be on the receiving end of dislocated auto repair businesses.
    d. The FEIS should weigh the above analysis against the impact of maintaining an auto repair cluster in a district isolated from residential areas.
    e. The FEIS should study the effect of the dispersion of these businesses on the ability of local and regional consumers to secure the array of interrelated auto services offered in Willets Point. What will be the cost be to consumers locally and within the region?

3. The FEIS should include a feasibility study of a potential "green" auto repair cluster; given the skills of the current workforce in the repair of older automobiles, the area could

become a center of green retrofit for these automobiles.[6]

4. The DGEIS states that there would be no net loss from the displacement of the auto related businesses, given the availability of commercial space (CITE). EDC should analyze the customer base of these businesses to more explicitly investigate this hypothesis.

Economic and Fiscal Benefit and Public Costs

1. The FEIS must construct a comparative table of the median annual income of employees on the site resulting from the current and projected economic activities on the site.
2. The FEIS must spell out the break-down of jobs that are projected to be created as a result of the plan by full-time and part-time, managerial, professional and low-skilled retail and customer service positions, and attach average wages to each categories in order understand the distribution of income across different categories.
3. The FEIS must include a clear feasibility study, given the current downturn in the market.
4. The FEIS must delineate the costs to the public projected over a reasonable number of years should the current activity be erased and no developer be capable of remediating the environmental issues and developing the site.
5. The FEIS should include a clearly delineated fiscal impact analysis.

Residential Study Area Definition

EDC must expand the study area for indirect residential displacement into a greater portion of the Corona neighborhood. The ¾ -mile perimeter distance proscribed by the CEQR technical manual does not take into account the impact of the plan on the residential base and commercial activity in the Corona neighborhood across the Grand Central Parkway. The ¾-mile definition here includes Shea Stadium and its surrounding parking lot – hardly an area that will affect potential residential displacement. Given the large potential investment by the City in the Willets Point area, it is reasonable to believe that the project will have more of an affect on the part of the Corona neighborhood closest to the project, regardless of distance. There is a "threshold" sense at the edge of the neighborhood where Corona abuts the Grand Central Parkway - meaning that the activity therein is limited by the infrastructure at this edge. Distance would be inconsequential, as the project would offer residential amenities and opportunities not available in the Corona neighborhood. This is particularly relevant to the potential residential uses at the site, as these units would become available in large amounts, a portion of which will be affordable.

1. MAS therefore recommends that the perimeter of the study area definition be expanded 3/4-mile west from 114th Street.
2. As such, by expanding the study area, MAS also recommends expanding the "Indirect

[6] "Willets Point: A Defense" *Gotham Gazette., April 2006.* Accessed 7/14/08: http://www.gothamgazette.com/article/landuse/20060410/12/1815

Residential Displacement" study to include the place of residence of the workers in Willets Point. Three quarters of the workers in Willets Point live in Queens and many of them probably make the Corona/Elmhurst area their place of residence.[7]

CHAPTER 5 – COMMUNITY FACILITIES

EDC must research a rigorous environmental remediation program if a school is to be sited in Willets Point. The level of contaminants that may exist on the site warrant the most sophisticated analysis available to not only protect the young children who will be attending the school (the needs analysis recommend an elementary school). That the building be built as per the NYCSCA Green Guide's specifications is a great start, but the underlying environmental issues must be resolved before construction can begin.

CHAPTER 6 - OPEN SPACE

EDC must decide the management structure of the proposed public space and park.

1. Will this park be managed by the developer or by the Department of Parks and Recreation? If the developer will manage the park, what guarantees will exist to ensure that the public has access to all of the amenities of the park?
2. EDC must mandate ground level retail at the park's edge in order to guarantee activity and make the park lively (6-3).
3. Since the site is some distance away from the two transit connections (the 7 train and the LIRR) the chosen developer or the city should create a provision for the installation of bike racks at either of these stations. Further, plans to develop designated pathways to either of these stations should also be created concurrent with plans for the development.

CHAPTER 9 - URBAN DESIGN AND VISUAL RESOURCES

The park space proposed in Scheme A is not large enough to absorb the impact of being surrounded by major roads and would not serve as a viable public space. Activation of the park with accessory uses makes the edges of the park permeable and therefore more inviting.

1. The FEIS should study the impact of a larger park.

The width of the streets would not achieve the goal of creating a pedestrian oriented development. (DGEIS *Street width between CitiField and Willets Point Figure 9-24 - Entertainment and Commercial Center - Elevation)*

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[7] Angotti, Tom. "WILLETS POINT LAND USE STUDY", April 1006. Accessed 7/14/08. http://maxweber.hunter.cuny.edu/urban/resources/reports/willetspoint.pdf

2. The FEIS should study narrower streets.

Given the residential character of the site, car traffic should be minimized as much as possible on this street, with diversions of parking traffic to garages and the parking lots that surround the stadium and the site.

3. The FEIS should study moving the convention center towards the Northern Blvd. /Van Wyck interchange.

CHAPTER 12 - HAZARDOUS MATERIALS

The Phase II is not sufficient to determine the extent of the pollution on the site. Until environmental testing can be done on each of the sites, it is impossible to know the extent of contamination. Further, since this environmental remediation will be the responsibility of the potential developer, unexpected environmental remediation could increase projected costs. These increased costs may force the developer to cut costs in other ways. These may include a lower standard of design, less environmental sensitive materials or processes, or the reduction of affordable housing on the site. Due to the potential heavy contamination on the site, EDC must do further studies as to the extent of the potential pollution on the site, as well as develop a reasonable worst-case development scenario (RWCDS) given a high potential cost of remediation.

This RWCDS should also include impacts to the level of affordable housing as well as other public amenities due to the increase cost of remediation (parks, convention center, unionized employment, construction jobs, etc.) promised to the community as part of the benefits availed to the public at-large and the community.

CHAPTER 13 - WATERFRONT

The site plan as presented does not advance Policy 1.2 of the New York City Waterfront Revitalization Program (13-3). This is no fault of the designers of the site plan - the site is simply ringed by major highways that do not allow access to the waterfront. It should be noted that the site achieves the goals of Policy 1.2 by simply being within the "waterfront zone". The program for the site does not provide any access to the waterfront in any shape or fashion and is not of the same tenor of other waterfront projects in New York.

1. EDC should study various scenarios which will allow for legitimate waterfront access. A design charrette, with the specific charge of integrating the neighborhood with the waterfront given the constraints of the site, would be ideal. These constraints include the physical and perceptual barriers presented by a major interstate highway and the prevention of access to the waterfront.

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CHAPTERS 14 - INFRASTRUCTURE

Much like the comments in the General Comments and Chapter 12, to what extent are the projections of infrastructure-cost borne by a single developer realistic, given various and unknown levels of environmental contamination? Chapter 12 showed a lack of extensive testing on the site and relies on data from tests in public areas.

1. Is EDC properly considering the factor of costly environmental remediation costs in negotiation for the provision of infrastructure by the developer?

CHAPTERS 17 - TRAFFIC AND PARKING

The FEIS must revisit the trip generation statistics used in the DGEIS; the stats used in the FEIS should be more significantly based around transit. The current transit capture rate of 15% is not based around any travel-behavior changing transit infrastructure, such as an exit at the Willets Point #7 train platform, or the provision of a bike share program that would allow residents to get back and forth from the LIRR train stop. Further, if the development were truly transit oriented, it would provide less parking for the commercial areas, based on accepted square footage/parking ratios. While one of the draws of the site is its location near major highways, making it a regional destination, the development would be truly sustainable if it also generated trips via transit not only due to the presence of the residential component but also in relation to the proposed commercial development.

1. Therefore, a study of the transit trip generation rates should be included in the FEIS with recommendations as to amendments to the design to maximize the number of transit users of the site (residential or commercial). This would extend the definition of transit-orientation to the regional retail destinations in the development.

Further, the Willets Point development is a pilot project for the LEED-ND program. Yet unlike the other two projects in New York City (Columbia University and Melrose Commons), Willets is not directly adjacent to, or enmeshed within, a public transportation station.

1. EDC must be more aggressive in planning transportation routes to/from the 7 train and the LIRR. This initiative should include a neighborhood bike and pedestrian plan, as well as the installation of infrastructure that will support and encourage these modes, such as bike racks and separated lanes for bicycle travel, and pavement markings and car free zones for pedestrian traffic.
2. EDC must make public the study that shows the site's potential for generating a population that will create consistent and commuter-based LIRR service, in contrast to the current, baseball game-based schedule. This study shows that the future population of the area will have the potential of being served by regularized LIRR service.

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In line with making the development as transit oriented as possible - in addition to minimizing the extensive paving that surrounds the district - the parking strategies for the district should also attempt to utilize the existing parking infrastructure as much as possible. The parking plan should also include the use of the parking lots for CitiField when it is not in use. "The projected parking demand is anticipated to be satisfied entirely within the District and is not expected to affect other nearby CitiField, commuter, municipal, and other public on-street or off-street parking areas." (17-21, DGEIS).

1. Parking and massing for large retail should take into account current parking opportunities in municipal lots, such as the ones used for game days. Amenities to encourage walkability from these lots to the site should be added to these lots so as to affectively make them "multi-use" - i.e., parking for games as well as for shopping at the stores in the site.

In addition, one of the sources used for the transportation analysis, *Motor Trucks in the Metropolis* (Wilbur Smith Associates, 1969, 17-40), is seemingly out of date and needs to be defended given changes in lifestyle and services since the publication of this book.

1. Does this source account for the current trends in online commerce that relies on truck transportation for the delivery of packages and other uses, such as Fresh Direct? Since the job mix at the site is primarily retail and event based, what will the delivery areas (curb cuts and receiving areas) look like for these businesses?

CHAPTERS 18 – TRANSIT AND PEDESTRIANS

The transportation components of this project, "Transit and Pedestrians" and "Traffic and Parking" should not be separated into two different chapters, given the "transit-orientation" emphasis of the project. The interplay between these two modes of transportation should be analyzed in tandem, with justifications for the balance (threshold limit of parking needed for commercial/retail viability vs. other uses of space) to be struck between the two. This is not currently mandated by CEQR, yet should be done in order to explain how the site is transit-oriented and to make the project a potential "model" project, placing New York at the cutting edge for this type of development.

CHAPTER 19 - AIR POLLUTION

Background Concentrations

The site chosen for background contamination, the Queens College campus, is insufficient due to the unique traffic confluence at the Willets Point site. Willets Point is at the intersection of two

major highways that are *heavily* trafficked. Moreover, air pollution is particularly worse at congestion levels compared to traffic that is free flowing[8]. Game day and other major event days will create high levels of congestion on these roads, especially with the construction of a new exit off the Van Wyck.

1. The FEIS should include a potential point source pollution monitor placed near this location (Willets Point Blvd and 34th Ave) in order to properly assess air quality impacts. This background measurement should then be considered in tandem with the potential traffic impacts of the site and the LOS service designations of "E" or worse. This is because the locations selected for Modeled Existing and Future 8-Hour Average CO Concentrations (2006 [19-18] and 2017[19-19], respectively) are insufficient in regards to the prediction of pollutants.

2. A consideration of the air pollutant impacts due to the sites proximity to LaGuardia Airport should also be done. Airport traffic at one of the busiest airports in the nation is already at an all time high, and is projected to increase. An existing and future conditions analysis for this source of air pollution is reasonable given future conditions, as well as airplanes being major sources of PM2.5 pollution.

CHAPTER 20 – NOISE

Additional building attenuation costs (the highest building attenuation, 40 dBA) should also be considered a requirement across the board for residential buildings irrespective of the market segment served, If the expected costs of sound mitigation are high, protections from market volatility for the provision of affordable housing and infrastructure should be put in place in order for all of the units (including the construction of the school) to have the same protection from potential sound issues.

1. The FEIS should provide a cost analysis of the highest attenuation possible for the proposed residential units.
2. EDC should consider the ability of a developer to successfully market the potential residential units given the proximity of the airport and the potential for noise. Is there potential for the units not being sold at a reasonable price point, given the proximity to the airport?
3. The impacts of airport noise (20-12) must be considered given the proximity to the airport. The justification given for exclusion is not adequate.

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[8] "Value Pricing Helps Reduce Congestion", Berg, John T. and Young, Felicia B. Accessed 7/17/08. http://www.tfhrc.gov/pubrds/marapr99/pricing.htm

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CHAPTER 22 - PUBLIC HEALTH

The public health methodology proposed (22-2) does not include the possible source of traffic as a source of the cause of asthma. Research has shown that proximity to major roads is a potential cause of higher rates of asthma.[9] A possible basis of comparison of asthma rates could be generated around roads with the same levels of traffic as Northern Boulevard and I-678.

Given that the Van Wyck is a major commercial route, the effects of pollutants from diesel engines not involved in the project (i.e. from the proximate highways and streets) must also be considered.The study sites for PM (particulate matter) are away from major traffic and airport influences and are therefore questionable sources for this information. The use of the Bronx Botanical Gardens (22-5) is particularly questionable, given its abundance of old-growth CO-fixing trees. It is understood that these study sites are more for regional air quality analysis.

1. The FEIS should include a more rigorous study of the effects of the air pollution on public health, given the proximity to two major sources of pollution (abundant vehicle and airport traffic). This study should be done with the inclusion of a different air quality monitoring station than in chapter 19. This study should also consider cumulative impacts of these point sources of pollution on livability.

Further, the remark regarding the potential of the effects of exhaust is not substantive. "The relationships between diesel exhaust and asthma have been studied experimentally and epidemiologically with inconclusive results" (22-9)

1. The FEIS must give further justification for dismissing this relationship, including sources and research that shows evidence to the contrary. This is warranted, given the site's overwhelming similarities (proximity to major highways) with other areas of the city that have experienced increased asthma rates.
2. As stated in the critique of Chapter 19, a more rigorous analysis and placement of air quality monitors must be done before it is acknowledged that the background (existing) air pollutants level can be accepted (22-11)
3. And, as stated in the critique of Chapter 20, a more rigorous analysis of airport noise must be done before it is accepted that the impact of LaGuardia will not create any public health issues (22-11).

CHAPTER 24 - ALTERNATIVES

Municipal Services Alternative

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[9] A Study Links Trucks' Exhaust to Bronx Schoolchildren's Asthma", October 29, 2006. *The New York Times.* Accessed 8/12/08. http://www.nytimes.com/2006/10/29/nyregion/29asthma.html?pagewanted=all

This improvement in municipal services could lead landlords to remove current tenants for higher and better uses that are allowed under the current zoning. These improvements could allow for more family friendly sorts of uses, such as "commercial tourism", such as a brewery. Most importantly, however, the provision of services would allow the market to lead development in the area and may lead to more creative uses other than that proscribed by the current plan.

1. The FEIS's analysis of how the proposed service enhancements would allow for an improvement in the real estate market in the discrete area of Willets Point must be completed and compared to the benefits of the investment projected for the proposed plan. This boost to market would allow for higher building assessments via more investment by landlords as to attract higher rents or better tenants.

Creative uses of the site would be further hindered under the "preferred single developer" model, as the uses for the site would not be led by the market but rather the financial requirements of this preferred developer (see General Comments). While a single developer is still open to the proclivities of the market, they are much more restrained in the creativity they can demonstrate, given financial risk assessment models by banks that dictate returns on per sq. ft of construction. These financial requirements lead to uniform spaces for predictable "credit" tenants that have a more nationwide stature. While these spaces do create many jobs, the financial return of these businesses is merely second hand - through increased assessments of real property and sales taxes, while the real revenue generated by these businesses moves elsewhere.

1. In line with request #1, a cost benefit analysis must be done to show that the proposed plan will provide the most benefits for the amount of city investment, compared to the provision of municipal services.
2. The FEIS should also provide an analysis for other creative uses of the site, including the creation of a unique "eco-industrial park" that could be an incubator for green manufacturing uses. This is in line with the site's current use as a center of automobile repair, which extends the life of older automobiles. (See Land-use and Socio-economic Chapter sections for direction)
3. The FEIS should conduct an analysis of possible growth industries that could be located at Willets Point given the sites current zoning. (See Land-use and Socio-economic Chapter sections for direction)

The City has already created incentive for a more creative use of Willets Point by helping to finance the construction of CitiField. By providing basic services to the district, the city can realize a more predictable cash flow from the predictable costs of investment in upgrading infrastructure.

1. The FEIS must present in detail an alternate model that would require disposition of properties to multiple owners and multiple developers.
2. The FEIS should also analyze the feasibility of the site's use as a waterborne transportation facility, given the use of barging across from the site in College Point.

CHAPTER 25 - UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

As described in the critique of Chapter 19 and 22, The FEIS should have more rigorous modeling of existing conditions at different points in the discussion of "unmitigable traffic impacts".

Chapter 27 - Irreversible and Irretrievable Commitment of Resources

As mentioned in the critique of Chapter 3, the chapter does not mention the irreversible change of zoning from industrial to residential/commercial. The land and the power to change the zoning is a commitment of resources and should be discussed in relation to the land use impacts described in Chapter 3. The site's rezoning should be placed in the larger context for the citywide initiative to rezone former manufacturing areas and the vision that City Planning has for the area.

Commenter #19

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NEW YORK BUILDING CONGRESS

VIA OVERNIGHT MAIL

August 19, 2008

OFFICE OF THE CHAIRPERSON
AUG 21 2008

Ms. Amanda Burden, Chair
New York City Planning Commission
Calendar Information Office
22 Reade Street, Room 2E
New York, NY 10007-1216

Re: Willets Point Rezoning and Redevelopment

Dear Chair Burden and Commissioners:

On behalf of the New York Building Congress, the City's largest and most diverse coalition serving the common interests of the design, construction and real estate industry and involving 1,500 members from 400 constituent organizations, please accept this letter in lieu of testimony at the August 13 City Planning Commission public hearing on the Willets Point Redevelopment Plan.

Over the past seven years, the Building Congress has applauded the Bloomberg Administration for its extensive master planning and rezoning efforts, including its commitment to transit-oriented development and collaboration with communities and New York City agencies to revitalize neighborhoods and stimulate economic activity in each of the five boroughs. The Building Congress has supported this strategic plan by endorsing comprehensive - sometimes controversial - rezoning initiatives undertaken by the City, including those for Jamaica, Queens, Greenpoint-Williamsburg, Brooklyn, and the 125th Street corridor in Manhattan, all of which have secured City Council approval.

Though it has its share of challenges, the Willets Point Redevelopment Plan likewise presents a holistic approach to improving economic conditions and the quality of life for New Yorkers. As the Building Congress stated in a May 2, 2007 letter to the New York City Economic Development Corporation on the proposed scope of work for the Willets Point Development Plan Draft Environmental Impact Statement, conceptually, the plan holds significant promise for advancing the Bloomberg Administration's PlaNYC 2030 initiative to address New York's projected growth rate and long-term future. For example, among the strategies for accommodating New York's extensive housing needs, PlaNYC acknowledges the City's fixed land supply and stresses the importance of using space more efficiently. The Willets Point Redevelopment Plan would heed that call by making efficient use of space through the remediation of a 60-acre brownfield and the transformation of a largely underutilized area into a vibrant, mixed-use community that includes up to 5,500 units of housing, a substantial portion of which will be affordable. This transformation will be especially dramatic given the designation of Willets Point as a LEED-ND pilot project by the

United States Green Building Council, based on the City's commitment to create an environmentally-friendly neighborhood and protect the surrounding waterways.

With its proximity to mass transit, major arterial highways and airports, the Willets Point District is well-situated for supporting residential, retail, commercial and cultural development, and its potential for economic growth is further enhanced by nearby attractions like the new Mets ballpark, the USTA Tennis Center and Downtown Flushing. The plan will unlock that potential, creating more than 5,300 permanent jobs and 18,000 construction jobs and generating $25 billion in economic activity and $1.3 billion in benefits to the City over 30 years. The enormous value of proceeding with the Willets Point Redevelopment Plan is clear.

However, our May 2 letter also expressed concern about approximately 250 businesses that would be displaced by the proposed project. We raised particular concern about the construction and other viable companies that would be forced to relocate or close their businesses and the effect these scenarios would have on the local economy and construction costs in New York City, which are already rising by one percent a month. Those concerns remain largely undiminished, though we are mindful that some progress has been made by the City in its negotiations with a few of the affected businesses over the past year.

The Building Congress urges the City to continue to work collaboratively with the community and other interested parties in developing commercially reasonable solutions to care for those businesses that would be impacted by the project. We are hopeful that this plan can move forward without costly and time-consuming litigation that could prevent this exciting vision for Willets Point from being realized.

Sincerely,

Richard T. Anderson
President

cc (By U.S. Mail): The Honorable Melinda Katz, Chair, Land Use Committee, New York City Council
Mr. Robert C. Lieber, Deputy Mayor, Economic Development
The Honorable Helen Marshall, Queens Borough President
The Honorable Hiram Monserrate, New York City Council
The Honorable Christine C. Quinn, Speaker, New York City Council
Members of the New York City Council Land Use Committee

Commenter #21

Testimony to the City Planning Commission

Re: Willets Point Redevelopment Plan

The New York City Central Labor Council
Wednesday, August 13, 2008

The NYC Central Labor Council, the umbrella organization for the City's labor unions representing 1.2 million workers, urges the City Planning Commission to vote yes on the Willets Point Redevelopment Plan. The CLC applauds the historic agreements made with the City to enact broad labor standard agreements on this project. After months of negotiations, the New York City Economic Development Corporation recently came to an agreement with the New York City Central Labor Council to include language in the plan's Request for Proposals to require the selected developer and contractors to pay prevailing and living wages, hire workers from state-certified apprentice programs, encourage expanded and enhanced retail uses, and discourage suburban models of big-box stores. The agreements ensure that workers and families in all communities can participate in and benefit from the City's economic growth and prosperity.

The Willets Point Redevelopment will become a major engine for economic growth for Willets Point and neighboring communities, creating thousands of construction and permanent local jobs and business opportunities. The redevelopment plan will include thousands of housing units serving a mix of incomes and demographics, new retail and entertainment facilities, a new, high-quality hotel, New York City's first outer borough convention center, office space, open space, parks, and playgrounds and a new public school.

A strong economy needs a strong, healthy workforce. These agreements protect workers' futures as we build the City's future. As the City continues to experience this incredible building boom, those working in and out of the buildings will be protected by these fair labor standards. By labor standards we mean meaningful training and career opportunities, good jobs defined by livable wages, prevailing wages for all retail, building service and construction jobs. These agreements will serve as a template for all city development projects.

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Testimony to City Planning Commission Regarding Willets Point
Dan Wempa, Vice President of Government Affairs, New York Hall of Science
August 13, 2008
Tishman Auditorium
40 Washington Square South

Good afternoon, Commissioner Burden and members of the Committee. I am Dan Wempa, Vice President of Government of Affairs for the New York Hall of Science. I am here to speak to the importance of the Willets Point redevelopment, particularly the proposed conference center, hotel, and supporting amenities this project will bring to northern Queens. This has the potential to dramatically transform the cultural life of our Borough.

It will entice people to come to Queens and contribute their discretionary time and money to the benefit of our Borough. Furthermore, the redevelopment of Willets Point will add to the resurgence already underway in Flushing Meadows Corona Park. All of the Park's cultural institutions are making dramatic improvements to our facilities and developing new opportunities to engage with our audiences. The Hall of Science, Queens Botanical Garden, Queens Theatre in the Park, and Queens Museum of Art have all recently completed—or will soon complete—major capital improvements. Our audiences are soaring and along with the Mets and USTA expansions, and the new Flushing Meadows Pool & Rink, we are building a destination in northern Queens.

Together, these projects represent billions of dollars of investment—both public and private—providing services to millions of people each year. More importantly, these projects are an investment in the future of Queens, branding our borough as a destination for cultural tourism.

These exciting projects are occurring alongside the commercial and residential developments that are reinvigorating Flushing, Corona, and all of northern Queens. Forty-three residential developments are either planned or already in construction, and a

redeveloped Willets Point will unify northern Queens as a focal point for tourism and recreation.

To give just one example of the potential we envision for this redevelopment: in July, more than 100,000 people came to Flushing Meadows for two Billy Joel concerts. They came from all over our region and beyond. They bought tickets, food and souvenirs. Then they got in their cars, or caught their trains, and left. If we provide people with an opportunity, they will come to Queens and contribute to our culture and our economy. And if we build a hotel and convention center at Willets Point—if we strengthen Queens as a world-class recreation and exposition venue—more people will come more often and they will stay longer to see more of what we have to offer.

More importantly, an influx of tourism means more economic development, more investment in cultural institutions and more benefits for Queens.

The project will create a vibrant corridor between downtown Flushing, our expansive Park, and the rest of northern Queens. In supporting this redevelopment, we echo the concerns of Queens Borough President Helen Marshall and urge the City to work with the current property owners, to assist businesses with relocation, and to stand behind its commitment to provide job training to those workers displaced by the project. We trust that the City will live up to its obligations and look forward to seeing the Willets Point redevelopment move forward, creating a new destination for residents of Queens, the City, and tourists from beyond the five boroughs.

Talking points for Willets Point public hearing

My name is Peter Ward and I am the President of the New York Hotel and Motel Trades Council. We are the union representing 30,000 hotel workers in New York City.

- Our support for the Willets Point redevelopment stems not just from the City's commitment to ensuring that the future hospitality jobs there are quality, union jobs – but from the fact that over 1,000 of our members live in Flushing and Corona, the neighborhoods that will be most affected by the redevelopment.

Willets Point has become an historic opportunity:

- reinvesting in an important but neglected neighborhood;
- creating a model green community; and
- establishing a haven for working-class people with good jobs in the neighborhoods where they live.

Applaud Bloomberg and affordable housing advocates for engaging in a constructive dialogue.

- Creating more low- and middle-income housing is one of the most pressing needs working class people face in New York City.
- I strongly believe the City is committed to a significant proportion of affordable housing at willets Point, .

I applaud the administration and EDC in making an unprecedented effort to handle property acquisitions and business relocations in a fair and responsible way.

- Property acquisition and the use of eminent domain are very complicated, and in no case is everyone going to be satisfied with what happens.
- Given the extraordinary and holistic effort the City is making to accommodate the landowners, businesses and workers at Willets Point, this will be resolved in the best way possible for all stakeholders involved.

Willets Point is important for preserving quality jobs city-wide:

- Hotel workers have fought for generations to change low-wage, exploitative work into a stable, middle-class occupation.
- Non-union hotel companies are threatening that.
- By guaranteeing to support workers' rights at a redeveloped Willets Point, Mayor Bloomberg is taking a stand to prevent a city-wide race to the bottom.

The administration is working to make this project an opportunity to change the way development happens in New York:

- Cleaning up the environment and pioneering green building on a comprehensive, neighborhood scale;
- Providing good jobs and opportunity in the neighborhoods working people live in; and

I applaud the administration and EDC in making an unprecedented effort to handle property acquisitions and business relocations in a fair and responsible way.

- Property acquisition and the use of eminent domain are very complicated, and in no case is everyone going to be satisfied with what happens.
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The administration is working to make this project an opportunity to change the way development happens in New York:

- Cleaning up the environment and pioneering green building on a comprehensive, neighborhood scale;
- Providing good jobs and opportunity in the neighborhoods working people live in; and

- Taking care of the people and businesses that are displaced in the process.

The city's plan to clean up and revitalize Willets Point is just the kind of bold and innovative economic development project our city needs more of.

I respectfully request that the City Planning Commission approve the Willets Point Redevelopment, and look forward to working with the administration, City Council and all of the stakeholders to bring this critical and precedent-setting project to fruition.

NEW YORKERS FOR PARKS

Queens Community Board 7
Hearing on Willets Point Development
June 30, 2008

New Yorkers for Parks Testimony

My name is Okenfe Aigbe Lebarty and I am the Government and Community Relations Manager at New Yorkers for Parks - the only independent watchdog for all the City's parks, beaches and playgrounds. For nearly 100 years, New Yorkers for Parks has worked to ensure greener, safer, cleaner parks for all New Yorkers.

Thank you for holding this important hearing on the Willets Point Redevelopment. Willets Point, also known as the Iron Triangle, a 13-block area located near the Flushing and Corona neighborhoods in Queens consisting largely of auto repair shops, junkyards, and other industrial and small businesses[1]

We are here today to applaud the administrations efforts to increase parks and open space in Queens through the Willets Point Redevelopment by about eight acres of open space. We support their plan to have maintenance of the open space covered by the developers, since maintenance funds are very difficult to obtain especially in light of the current fiscal situation facing the City's economy.

We understand the city is currently in the early stage of community review process of the plan, we hope that as the process moves along, the Administration will provide a more detailed plan on some lingering questions, such as the total acreage devoted to open space, will the proposed

[1] PlaNYC planning information portal: http://www.plannyc.org/QN-07

Green Roof be public or privately assessible? What is the shade impact on the courtyard? And what are the design standards for the implementation of the open space?

We look forward to working with all the stake holders and the City to ensure that every park is green, clean and safe today and in the year 2030. Thank you.

One Battery Park Plaza New York, NY 10004-1479
T 212 493 7400 **F** 212 344 3344 www.partnershipfornyc.org

Commenter #26

Partnership for New York City

TESTIMONY SUBMITTED TO THE NEW YORK CITY
CITY PLANNING COMMISSION PUBLIC HEARING

WILLETS POINT REZONING

WEDNESDAY, AUGUST 13, 2008

KATHRYN WYLDE
PRESIDENT & CEO

PARTNERSHIP FOR NEW YORK CITY

Thank you for the opportunity to submit testimony on the rezoning and redevelopment of Willets Point.

The Partnership for New York City represents the city's international business leadership and its largest private sector employers. The Partnership works together with government, labor and the non-profit sector to promote economic growth and job creation in New York.

The Partnership has a significant record of investment in Queens as a result of housing programs that we sponsored in the 1980s and early 1990s. In particular, we were active in transforming South Jamaica from a crime-ridden network of junkyards and other substandard uses into a thriving residential neighborhood. Through the decades, it was always clear that Willets Point was a significant source of blight and an important opportunity for redevelopment and renewal. We congratulate the Bloomberg Administration for committing the resources required to transform this long-neglected area in the heart of Queens into a borough asset.

The plan under consideration will stimulate significant private investment, as well as commercial and residential development activity. We endorse the plan to establish this area as a regional destination, including one million square feet of retail space and 500,000 square feet of office space, a hotel, and a convention center. The potential for bringing tourists, conventions, meetings and trade shows to Queens builds on the presence of two international airports and promises to contribute to the city's tax revenues and job base.

›mprehensive program to address the needs of businesses and workers currently in the area anned through the creation of a Local Development Corporation (LDC). The LDC will help ease the area's transition by providing assistance for businesses and workforce development for employees.

New York's next great neighborhood is also poised to make history as our city's first "green" community. The project has been accepted by the U.S. Green Building Council as a LEED-ND Pilot project. Major infrastructure improvements, such as a new sewer system, street network, and subway station access, will transform an area mostly known for its illegal dumping and constant flooding into a safe, clean neighborhood with new parks and playgrounds.

Two issues have been raised in the course of discussion of Willets Point that I want to address. The first is the use of eminent domain powers to assemble sites. The ability of government to take control of land in the public interest has been absolutely essential for the renewal and growth of our city. The Housing Partnership participated with government in development activities that were absolutely essential for neighborhood revitalization and were only possible because the city was able to clear title and assemble land through condemnation or the threat of condemnation. Private owners are not always rational—in other words, they will not always act in their own best financial interests, let alone the public interest. Willets Point represents a responsible and necessary application of eminent domain.

The second is the matter of how and when project developers will be selected. The Willets Point LDC and the City's Economic Development Corporation are effectively the surrogate developers of this site. This has been a common practice—one that the Housing Partnership and HPD employed on hundreds of ULURP actions—for moving forward with complex projects that were driven by the public and community interest, not by any individual private developer. In my view, the City Council should be engaged in making land use decisions that circumscribe how a property can be developed and what public benefits may be conferred on any developer selected for a project. With due respect, I do not think it is the job of the Council Members to negotiate the financial and detailed design terms of deals with individual developers. With the Willets Point LDC in place, I think the community interests are well protected in this project and that the selection of one or more developers will be handled responsibly.

At a time when the city economy is facing serious challenges, Willets Point redevelopment promises to provide an important economic stimulus. We urge the Planning Commission to approve this rezoning without reservation.

A comprehensive program to address the needs of businesses and workers currently in the area is planned through the creation of a Local Development Corporation (LDC). The LDC will help ease the area's transition by providing assistance for businesses and workforce development for employees.

New York's next great neighborhood is also poised to make history as our city's first "green" community. The project has been accepted by the U.S. Green Building Council as a LEED-ND Pilot project. Major infrastructure improvements, such as a new sewer system, street network, and subway station access, will transform an area mostly known for its illegal dumping and constant flooding into a safe, clean neighborhood with new parks and playgrounds.

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At a time when the city economy is facing serious challenges, Willets Point redevelopment promises to provide an important economic stimulus. We urge the Planning Commission to approve this rezoning without reservation.

Commenter #27

Queens Chamber of Commerce

TESTIMONY BEFORE THE NEW YORK CITY PLANNING COMMISSION

THE RE-ZONING AND RE-DEVELOPMENT OF WILLETS POINT

SUBMITTED BY:
JACK FRIEDMAN
EXECUTIVE VICE PRESIDENT
QUEENS CHAMBER OF COMMERCE

AUGUST 13, 2008

Commissioner Burden and Members of the New York City Planning Commission. My name is Jack Friedman and I am the Executive Vice President of the Queens Chamber of Commerce. For 97 years, the Queens Chamber has strived to increase economic development opportunities, support workforce and job growth opportunities and in general support projects favorable to commerce in the Borough. The re-zoning and re-development of Willets Point is a plan that will accomplish all three.

I first want to recognize the importance of the existing businesses at Willets Point, some who have been there for generations. These are not unreasonable people. Many are Queens Chamber of Commerce members. They are hard working families who have worked under adverse conditions to keep their businesses alive. I must re-enforce my opinion that the City must negotiate in good faith with these property owners. The City needs to be responsive to their needs and treat them fairly.

I would like to thank John Young and his team of planners from the Queens Planning office. John's insight and understanding of how re-zoning this 60+ acres of land in the heart of Queens has been instrumental in getting us to where we are in the process today. I have had the pleasure to work with John on many initiatives in the past and Willets Point is just the latest evidence of John's knowledge, concern and understanding necessary in a difficult and complex re-zoning process.

Three things stand out for the Queens Chamber of Commerce and myself as we discuss this plan. First, is an opportunity for a first-class Convention Center. Second is an opportunity for new temporary and permanent jobs. And lastly, an opportunity to create incremental trade and tax revenue in an area that is a blight on the community.

A First-class convention center is tremendously important to the borough. Currently, out-of-state visitors arrive at a Queen's airport, take a cab into Manhattan and spend nothing in our borough. Further, local businesses from Queens and the tri-state area have no alternative venues to the Javits Center that is both too large and too expensive to accommodate their conference, exhibition or trade show needs.

There are many projects being developed from around Queens that offer employment to thousands of workers on both a temporary and permanent basis. Many of these jobs are good Union jobs or jobs that pay prevailing wage. Through agreements, many of these jobs at Willets Point will be reserved for women, minority and Queens-based businesses. New York City and its residents need these jobs, especially in a tough economy.

By anyone's account, Willets Point is in disrepair. Rather than wasting time to point fingers of blame as to how that condition was allowed to develop, we need to stay focused on the unique economic development opportunities this area allows. No one benefits from working in an area so polluted and so run down, that a car can't even drive down the street. Its not good for the business owners, its not good for the workers, its not good for anybody.

The Queens Chamber of Commerce and I strongly support the re-zoning and re-development of Willets Point. We sincerely believe it is one of the most important initiative and opportunity the Queens business community has ever seen. We will continue to work with the Borough President, Claire Shulman and the Flushing, Corona Willets Point LDC and with EDC, making sure they fulfill their obligations to the multiple stakeholders involved. I urge you to support this application. In doing so, you are breathing life into an area that has enormous potential.

Testimony by Albert Pennisi, Esq.
President
Queens Chamber of Commerce

Willets Point Redevelopment

Good afternoon Chairperson BURDEN and members of the City Planning Commission. Thank you for the opportunity to testify before you today.

The Queens Chamber of Commerce's number one priority has been to bring a Convention, Exhibit Center and Hotel to Queens County. The proposed redevelopment of Willets Point would allow for this vision to become a reality.

Willets Point is one of the last pieces of land of sixty plus acres, available for development in Queens and its development will promote economic growth, serve the markets need for a convention and exhibition center that is larger than Queens' hotels can currently provide. The overall plan for Willets Point should serve the needs of the Queens' business community and the City of New York.

A Convention and Exhibit Center would provide Queens County and the City of New York tremendous benefits, by hosting large tradeshows, consumer shows, cultural events and visitors from the City of New York and nearby cities in the United States.

This location borders on major highways, mass transit, is one mile from LaGuardia Airport, ten miles from JFK Airport and a two hour flight from most major cities.

The Convention and Exhibit Center must be supported by a premier hotel, on-site. The hotel would accommodate New York City and visiting guests from outside the region. A hotel is critical to the support of the Convention and Exhibit Center on-site.

This is an extremely important financial benefit to the business of Queens and the City of New York in these economic times.

Development at Willets Point is projected to create: 20,000 constructions jobs, 6,000 permanent jobs and generate over $5 billion dollars over 30 years.

We do, however, recognize that this redevelopment must be pursued with an awareness that businesses currently operate at this location. The Economic Development Corporation must provide relocation, financial and technical assistance to ensure the shortest possible and least disruptive business relocations. New York City has selected LaGuardia College to work with displaced workers.

We applaud statements by Mayor Bloomberg and Queens Borough President Helen Marshall regarding the creation of a dedicated Business Relocation and Workforce Assistance Plans for the businesses currently located in the area. This relocation effort must be intensified by the Economic Development Corporation.

The Queens Chamber of Commerce looks forward to playing a continued role in this process and assisting in any way that we can. We are pleased that what began as a Queens Chamber of Commerce feasibility study has now grown to a point where there is a Master Plan and requests for proposals that includes our hotel and conference and exhibit center concept.

I urge you on behalf of the Queens Chamber of Commerce to vote in favor of the development of Willets Point.

Thank you again for your time today.

Commenter #28

REBNY®
REAL ESTATE BOARD OF NEW YORK

TESTIMONY OF THE REAL ESTATE BOARD OF NEW YORK INC BEFORE THE NEW YORK CITY PLANNING COMMISSION CONCERNING THE WILLETS POINT DEVELOPMENT PLAN

August 13, 2008

The Real Estate Board of New York, Inc. is a broadly based trade association of more than 12,000 owners, developers, brokers and real estate professionals active throughout New York City. REBNY supports the redevelopment of Willets Point. As part of a land use strategy for all of the Flushing area, this plan envisions high quality mixed use development, improved connections with adjacent regional destinations and enhancements to public open space, streetscapes and transportation. We commend the City for taking a comprehensive look at Downtown Flushing, the waterfront area and Willets Point. Willets Point is transit-accessible via the Long Island Railroad and the #7 subway line and therefore is a good place from a planning perspective to put new development.

The Willets Point Development Plan will address a number of environmental factors and will lead to an improvement in those factors. Through redevelopment, longstanding environmental problems such as contamination on the land, lack of sewer connections and poor stormwater management can be addressed. Furthermore the new development will have the opportunity to incorporate the most up-to-date sustainable design practices.

There are two areas that must be examined during this review. Attention should be paid to auto access from Roosevelt Avenue and Northern Boulevard to ensure that there will be efficient traffic flow at the site. We also recommend that the City assess the areas of the city that are zoned for the light industrial and auto-related uses to ensure that adequate space exists for these uses as well.

The borough of Queens has been growing in population and is projected to continue that growth in the coming years. Between 2000 and 2030, the Queens population is expected to increase by 15%. Given the lack of available land, we need to look for new places to build the substantial number of new units that we need to offer housing options for everyone. Under the proposed rezoning, it is projected that 5500 new dwelling units could be constructed over 10 years in Willets Point and this is very important toward reaching the City's housing goals.

The new development would have tremendous economic impact by creating construction jobs, new permanent jobs and additional tax revenue for the City. We support the redevelopment of Willets Point because its overall impact will be positive for the City. Thank you.

Regional Plan Association NJ CT NY

Statement for the Willets Point Rezoning City Planning Commission Hearing
by
L. Nicolas Ronderos, Senior Planner, Regional Plan Association
August 13, 2008

Good afternoon. My name is Nicolas Ronderos and I'm a Senior Planner for Regional Plan Association, a private, nonprofit research and planning organization serving the greater New York metropolitan region.

The stakes in this project are high. The proposed plan would displace an estimated 260 businesses and 1,700 employees engaged in auto repair, construction and other uses in a city that is seeing its industrial sector increasingly squeezed. The City would also invest substantial public funds in new infrastructure to support the project. However, for a number of reasons, it is time for the redevelopment of Willets Point to move forward, and Regional Plan Association supports this project.

First, redevelopment will bring a wide range of economic and community benefits. The City expects the redeveloped site to generate approximately $2 billion in economic activity and an increase of around 5,000 jobs, in addition to nearly 6,000 units of needed housing, community facilities and 8 acres of open space. It will also connect the nearby thriving residential neighborhoods of Flushing, Corona and Queensboro Hill with the largely commercial and industrial College Point area and integrate a number of Queens attractions, including the new Citi Field, Flushing Meadows-Corona Park and the National Tennis Center. The proposed neighborhood has also qualified as a "green neighborhood" by the U.S. Green Building Council.

However, if it were only a question of replacing these largely industrial jobs with higher value activities, then it would be questionable whether there was sufficient justification for the use of eminent domain that goes with this kind of large-scale urban redevelopment. Instead, it would be preferable to redevelop the site incrementally, ideally in a way that retains some of the original businesses.

However, there is another aspect to Willets Point that requires wholesale redevelopment. The District's long history of industrial use, informal business practices and lack of basic infrastructure – including poor road and sidewalk conditions, chronic flooding and limited storm and sanitary sewer infrastructure – has left a legacy of hazardous contamination. PCBs, heavy metals, and pesticides leach into Flushing Bay and impair air quality for workers and nearby residents. In order to remediate the area and prevent future pollution, contaminated soil will have to be removed or covered with clean fill. Storm sewers need to be installed. Without clearing the site and starting over, not only will we be left with an area that is underperforming in its economic potential, but also we will be shirking our responsibility to protect public health and the urban environment.

This does not mean the plan proposed by the City cannot be improved. There are a host of potential benefits that should be maximized. A leading issue is the number of housing units that will be affordable to low and moderate-income households. Pedestrian access to the waterfront and to adjoining neighborhoods, a desire of local communities, has not been solved. Relocating displaced industrial jobs must be done as completely and effectively as possible. The feasibility and benefits of a convention center on the site is an unresolved issue. City resources, and the dollars that can be generated by redevelopment of the site, are too scarce to meet all of these needs, so trade-offs need to be made. However, the important point is to move the process forward and take advantage of this opportunity to make Willets Point a model of both economic and environmental sustainability.

Thank you for the opportunity to testify at this public hearing.

RWDSU
Retail, Wholesale and Department Store Union

Stuart Appelbaum, *President*
Jack C. Wurm, Jr., *Secretary-Treasurer*

Commenter #30

Testimony before the New York City Planning Commission

Retail, Wholesale and Department Store Union
Jane Thompson, Political Director
August 13, 2008

Good afternoon. Thank you Amanda Burden, Chair of the New York City Planning Commission and all of its members for the opportunity to testify today on the Willets Point Redevelopment Plan. My name is Jane Thompson, Political Director of the Retail, Wholesale and Department Store Union (RWDSU). I am here on behalf of our President, Stuart Appelbaum and the 45,000 men and women we represent in the New York City area. Our members work in retail, grocery stores and drug stores in the five boroughs.

Retail has replaced manufacturing as the job of entry for workers in New York. One out of every five workers is a retail worker. Too many retail jobs provide low wages and little, if any, benefits like health care. As a result, all too often retail workers do not earn enough to provide a decent standard of living for themselves and their families. Economic development that results in permanent jobs that keep people in poverty accomplishes nothing. In fact, economic development like that causes more harm than good - hurting communities and lowering standards. That is why we are so pleased that the administration is taking another approach at Willets Point.

30 E. 29th Street, New York, NY 10016 • 212-684-5300 • fax 212-779-2809 • www.rwdsu.org
Affiliated with United Food and Commercial Workers

In the Willets Point plan, the retail worker's needs and concerns are being factored into a major investment economic development project. Through agreements reached with the City, ıge will be included in the Willets Point RFP that encourages commercial and retail uses to ł and enhance the current mix of retail offerings in the area.

As a result of the agreements, the RFP will also include language to discourage suburban model big box stores that typically pay low wages and offer no health benefits. And the RFP will include language that favors developers that maximize the number of permanent jobs that meet the City's living wage and health benefits standards.

These agreements are a giant step forward for our retail work force.

We will work enthusiastically with the community and the administration to ensure that the development at Willets Point supports policies that require higher standards, raises opportunities, builds communities, and encourage businesses to invest in their workforce. The end game cannot be economic development in itself - but rather development that truly benefits workers and their communities. And we believe that Willets Point will be that kind of development. We encourage you to vote in favor of the project.

Commenter #31



OFFICE OF THE
CHAIRPERSON
AUG 19 2008
18324

13 August 2008

Amanda Burden
Chair
City Planning Commission
22 Reade Street-Room 2W
New York, New York 10007

Re: Willets Point Redevelopment – Public Testimony

The New York Chapter of the U.S. Green Building Council (USGBC New York) is proud to support the sustainable redevelopment of the Willets Point neighborhood.

The mission of USGBC New York is to advance buildings and communities that are environmentally responsible, profitable, and healthy places to live and work. Our parent organization, the US Green Building Council developed and manages the LEED green building rating system, including the LEED for Neighborhood Development (LEED-ND) standard, which has been the driving force behind the surge in green buildings. Our membership includes many of the country's foremost architects and engineers, the city's most highly regarded developers, builders, and product manufacturers and many other citizens concerned with the future of New York City and it's environs.

If you live in New York and care about the environment, you should care about buildings and where they are located. Buildings account for 79% of this city's greenhouse gas emissions, 95% of its electricity use and 85% of its water use. Whether you are concerned with climate change, loss of biodiversity, air pollution or protecting our watershed, in New York it comes down to how and where we construct our buildings. The LEED-ND standard promotes the development of walkable, public-transit oriented neighborhoods located on infill, or previously developed, sites. In addition the standard mandates the mitigation of pollution caused by construction activity and encourages the construction of more efficient, healthier buildings.

Per capita vehicle-miles traveled continues to rise dramatically both around the country and here in the New York City region. More time in cars means worse air pollution, more greenhouse gas emissions and less physical activity. We spend time in automobiles that would be better spent fostering vibrant, healthy communities. The LEED-ND standard encourages the

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www.usgbcny.org
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One Bowling Green, Suite 419
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212.514.9380

development of dense, mixed use communities not reliant on automobiles for basic transportation needs. And the buildings that comprise that neighborhood will typically use less energy, less water and provide a healthier indoor environment.

The New York City Economic Development Corporation has committed to a LEED for Neighborhood Development Certified project at Willets Point. This commitment ensures that the Willets Point redevelopment will be a compact, open community of diverse uses with significant public transportation options. As a result the proposed community will be far healthier, have a much lower environmental impact and will be more likely to foster a vibrant, walkable neighborhood.

USGBC New York is proud to support the forward thinking, sustainable redevelopment of the Willets Point neighborhood.

Yetsuh Frank AIA, LEED AP
Director, Programs & Policy
USGBC New York

The Willets Point Defense Committee of small businesses and workers.

They are the true victims of this mega project, and they have come to this first public hearing to claim justice.

Introduction

It is sad to know that the scarcity of valuable precious land which will make victims out of the workers and small businesses in Willets Point is the outcome of big businesses lobbying to state and city officials. It is this lobbying that has not enabled us to have sewage, sidewalks, rain drainage, heat, paved streets, garbage collection or snow removal. The Mayor's office in New York has the objective of illegally starving Willets Point of all the essential basic resources to ease in the process of displacement with the goal of ultimately redeveloping the Iron triangle and giving profit to big corporations.

This mega project will not only take possession of the land, but at the same time it will brutally do it at the lowest price possible. It is for this reason that this plan will not include any economic compensation or relocation of the businesses.

This Megaproject is a violation of our fundamental human and labor rights.

The City of New York is exercising their authority to commit a wrongful seizure of land. This topic is one that has been around for centuries. It is so common that The United Nations has established a series of norms, recommendations and international laws to protect the victims of wrongful seizures. We would like to publicly denounce that over 1,500 immigrants, predominantly of Latino descent will suffer due to the forceful displacement that will take place in Willets Point. Over 60 acres of land in Willets Point will be used to benefit private sector industries.

This Development plan is founded around the systematic violation of our basic human rights, which will evict us from our sources of income and it will toss us into the streets empty handed. The founders of the Development plan argue against us and it has been determined that we do not have any legal rights, according to the City laws which do not recognize or assume responsibility for the workers and or renters of small businesses.

This social Holocaust makes victims of 225 shops with over 1,500 workers and heads of households. These victims will be out of work and left without a source of income along with their families in the middle of an economic crisis which has rattled the country. Eventually this massive job loss will trickle down to the local economy, as the victims will not have funds to pay for their rent or purchase the household necessities.

This faulty plan to which we are the victims of, currently has the support of 29 NYC Council members and they are headed by the representative from our district the Honorable Hiram Monserrate. The Council members co-signed a letter of opposition which was drafted, and in it, it included the social injustice which they opposed and are willing to vote against if needed, until the issues of proper compensation or relocation are resolved.

We respectfully ask this commission to investigate our inquiries regarding the systematic violations of our fundamental human and laboring rights. We hope that you as a board have the social sensibility to repair this social injustice against the small businesses and workers from the Iron Triangle.

JUSTICE FOR WILLETS POINT

U.N. Guiding Principles on Internal Displacement 1

United Nations
Guiding Principles on Internal Displacement

INTRODUCTION: SCOPE AND PURPOSE

1. These Guiding Principles address the specific needs of internally displaced persons worldwide. They identify rights and guarantees relevant to the protection of persons from forced displacement and to their protection and assistance during displacement as well as during return or resettlement and reintegration.
2. For the purposes of these Principles, internally displaced persons are persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border.
3. These Principles reflect and are consistent with international human rights law and international humanitarian law. They provide guidance to:
(a) The Representative of the Secretary-General on internally displaced persons in carrying out his mandate;
(b) States when faced with the phenomenon of internal displacement;
(c) All other authorities, groups and persons in their relations with internally displaced persons; and
(d) Intergovernmental and non-governmental organizations when addressing internal
displacement.
4. These Guiding Principles should be disseminated and applied as widely as possible.

SECTION I - GENERAL PRINCIPLES

Principle 1

1. Internally displaced persons shall enjoy, in full equality, the same rights and freedoms under international and domestic law as do other persons in their country. They shall not be discriminated against in the enjoyment of any rights and freedoms on the ground that they are internally displaced.
2. These Principles are without prejudice to individual criminal responsibility under international law, in particular relating to genocide, crimes against humanity and war crimes.

Principle 2

1. These Principles shall be observed by all authorities, groups and persons irrespective of their legal status and applied without any adverse distinction. The observance of these Principles shall not affect the legal status of any authorities, groups or persons involved.
2. These Principles shall not be interpreted as restricting, modifying or impairing the provisions of any international human rights or international humanitarian law instrument or rights granted to persons under domestic law. In particular, these Principles are without prejudice to the right to seek and enjoy asylum in other countries.

Principle 3

1. National authorities have the primary duty and responsibility to provide protection and humanitarian assistance to internally displaced persons within their jurisdiction.
2. Internally displaced persons have the right to request and to receive protection and humanitarian assistance from these authorities. They shall not be persecuted or punished for making such a request.

Principle 4

1. These Principles shall be applied without discrimination of any kind, such as race, color, sex,
language, religion or belief, political or other opinion, national, ethnic or social origin, legal or social status, age, disability, property, birth, or on any other similar criteria.

2. Certain internally displaced persons, such as children, especially unaccompanied minors, expectant mothers, mothers with young children, female heads of household, persons with disabilities and elderly persons, shall be entitled to protection and assistance required by their condition and to treatment which takes into account their special needs.

U.N. Guiding Principles on Internal Displacement 3

SECTION II - PRINCIPLES RELATING TO PROTECTION FROM DISPLACEMENT

Principle 5

All authorities and international actors shall respect and ensure respect for their obligations under international law, including human rights and humanitarian law, in all circumstances, so as to prevent and avoid conditions that might lead to displacement of persons.

Principle 6

1. Every human being shall have the right to be protected against being arbitrarily displaced from his or her home or place of habitual residence.

2. The prohibition of arbitrary displacement includes displacement:

(a) When it is based on policies of apartheid, "ethnic cleansing" or similar practices aimed at/or resulting in altering the ethnic, religious or racial composition of the affected population;

(b) In situations of armed conflict, unless the security of the civilians involved or imperative military reasons so demand;

(c) In cases of large-scale development projects, which are not justified by compelling and overriding public interests;

(d) In cases of disasters, unless the safety and health of those affected requires their evacuation; and

(e) When it is used as a collective punishment.

3. Displacement shall last no longer than required by the circumstances.

Principle 7

Risks and Rights:
The Causes, Consequences, and Challenges of Development-Induced Displacement

by

W. Courtland Robinson

Urban Development and Transportation Infrastructure

With urban growth rates exceeding 6 percent annually, according to UN figures, by the year 2025 more than two billion people will be living in large cities of more than one million inhabitants. As Michael Cernea has noted, "In cities such as Sao Paolo, Lagos, Douala, Rabat, Shanghai, or Mexico City, massive investments in infrastructure for transportation, re-housing, sanitation and other services are needed, and will be increasingly needed, for improving living standards and economic expansion. Such urban investment will inevitably entail further land acquisition and involuntary displacement."[78] Urban development and infrastructure projects already are a principal cause of development-induced displacement worldwide and the trend is likely to accelerate. From 1980 to 1986, for example, World Bank-assisted projects in transportation, water and urban development accounted for 33 percent of all projects involving involuntary resettlement in Africa; from 1987 to 1995, the proportion grew to 57 percent.[79]

Examples of involuntary displacement due to urban development and infrastructure projects from around the world include the following:

- In ***Madagascar***, a World Bank-funded urban development project displaced a total of 2,341 households in urban areas and resettled them in Antanarivo Plain. A follow-up study found that only three of the households settled at the intended permanent settlement sites and concluded that "a substantial proportion of the displaced households have been made worse off by resettlement."[80]
- In ***Brazil***, police used tear gas, rubber bullets and nightsticks on May 19, 2000 to evict an estimated 2,000 squatters from homes that they had occupied for 17 years in Sao Paolo. None were given relocation assistance following the eviction.[81]
- In the ***Dominican Republic***, between 1986 and 1992, at the height of the nation's urban renewal campaign, about 30,000 families in Santo Domingo were evicted from their homes. Though the numbers have decreased, evictions continue. "The most unprotected group in the Dominican Republic continues to be Haitians or Dominicans of Haitian descent, particularly women."[82]
- In ***Burma (Myanmar)***, the State Peace and Development Council has carried out numerous evictions of "squatters" in the name of urban development and beautification. According to US State Department reports, between 1988 and 1994, an estimated 500,000 residents of Rangoon were removed from their homes—often to break up anti-government strongholds in the city—and relocated to satellite



Development-induced displacement: internal affair or international human rights issue?

by Bjorn Pettersson

If the exact number of conflict-induced IDPs is unclear (most observers agree there are 20-25 million), the number of those displaced by development projects is even harder to estimate.

Extensive research findings presented by the World Commission on Dams have shown that between 40 and 80 million people have been forced to leave their homes as a result of the construction of large hydroelectric dams alone.[1]

In 1994 the government of India admitted that 10 million people displaced by dams, mines, deforestation and other development projects were still 'awaiting rehabilitation', a figure regarded as very conservative by most independent researchers. In China the government has admitted that 7 million development-induced IDPs lived in 'extreme poverty' in 1989.[2]

Narmada protesters outside Congress Party headquarters, Mumbai, Sept 2004.

When the lives of so many people are being disrupted, why is there such deafening silence surrounding development-induced IDPs? During the last decade the UN has gradually paid more attention to conflict-induced displacement, belatedly recognising that IDPs are just as vulnerable as refugees and by far outnumber those who have fled across a border. What is now required to direct the international community's attention to the development- induced displaced? Will they remain silent victims of government and corporate neglect? This article draws attention to forced displacement as a violation of human rights, looking both at how development at projects cause displacement and the widespread neglect of displaced populations in need of resettlement and restitution of livelihoods.

The UN Guiding Principles and development-induced displacement

Francis Deng, the UN Secretary General's Special Representative on

IDPs, has been instrumental in drawing international attention to the plight of conflict-induced IDPs. His work has contributed to the improvement of government and UN responses to conflict-induced IDPs. The set of international norms - the UN Guiding Principles on Internal Displacement - developed by him and his legal team may not be international binding law but are based on international human rights and humanitarian law.

In order to see what scope there is for the Principles to be used to address the plight of development-induced displaced persons, we need first to determine if the Guiding Principles actually apply to development-induced IDPs. A quick reading of the definition of a displaced person in the Guiding Principles shows this is not immediately apparent. It states that:

"Internally displaced persons are persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border."

However, the expression "in particular" before the listing of the causes indicates that the list is not exhaustive. Francis Deng and Roberta Cohen have argued that the construction of hydroelectric dams could be considered a "human-made disaster" and therefore that those displaced fall within the definition in the Guiding Principles.[3]

The case for arguing that development-induced displacement is clearly covered by the Principles is bolstered by Principle 6.2(c) which reads:

"The prohibition of arbitrary displacement includes displacement: [...] (c) In cases of large-scale development projects, which are not justified by compelling and overriding public interests [...]"

But what is meant by the ambiguous concept of "compelling and overriding public interests"? Who has authority to adjudicate that "compelling and overriding public interest" can justify forcing people off their lands?

Walter Kalin, one of the drafters of the Guiding Principles, has suggested that "development-related displacement is permissible only when compelling and overriding public interests justify this measure, that is, when the requirements of necessity and proportionality are met".[4] For an interpretation of the last concepts, the "requirements of necessity and proportionality", Kalin refers to the World Bank's Operational Directive 4.30 on Involuntary Resettlement[5] and the OECD's Guidelines for Aid Agencies on Involuntary Displacement and Resettlement in Development Projects.

Why is the UN so hesitant to address the issue?

However, though these guidelines provide excellent guidance to governments, aid agencies and lenders on involuntary resettlement and rehabilitation of populations displaced by development projects, they do not shed further light on the issue of "necessity and proportionality". These concepts are therefore left to be worked out by those who should apply the Guiding Principles: governments, non-state actors, UN agencies and the Representative of the Secretary General himself.

Deconstructing the language of development-induced displacement

Because "overriding public interest" and "necessity and proportionality" determine whether forced displacement of a population as a consequence of an infrastructure project is a human rights violation or a legitimate development project, it is important to reflect on these words. We need to continue challenging the assumptions behind the words used to justify large-scale forced displacement.

Who is "the public"? If we accept that international human rights are universal in scope it follows that the "public" is the whole population in a given area and not only the economic and political elite. To take the example of India (where more than 80% of rural households have no electricity) one could argue that expanding the electricity supply network in rural areas would be more "necessary" than producing more electricity for a mostly urban elite.[6] This argument is backed by the World Commission on Dams' conclusion that large dams "produce benefits that accrue to groups other than those who bear the social and environ-mental costs".[7]

Could "proportionality" be made more quantifiable? In the case of a hydroelectric project the authorities could determine a "justifiable" number of households-to-be displaced per projected megawatt produced. Of course, such a cynical method of determining proportionality assumes that the electricity produced will benefit the population equally - clearly not the case where a small minority enjoy access to electricity.

If the displaced are not properly resettled and their capacity to earn a living is not restored to them, it becomes irrelevant if the project forcing them off their land is of an "overriding public interest". It is still the reality that their rights have still been violated.

UN lack of interest in development-induced displacement

It has been left to NGOs, the media and academics to probe the government-inflicted human rights abuses related to development-induced displacement and to highlight the plight of millions of IDPs forced off their land. If, as we have seen, the Guiding Principles and binding international human rights law[8] prohibit forced displacement (conflict- or development-induced) not justified by overriding public interest, why is the UN so hesitant to address the issue? How can the international community justify, for example, the fact that in Georgia UNHCR has for the past decade attended to the needs of 272,000 relatively well-off conflict-induced IDPs while at least 21 million development-induced displaced in India are not even an issue to UNHCR (or to any other UN agency)?

Governments naturally fight harder to maintain the concept of national sovereignty when the perpetrator of displacement is the state itself. Governments are generally more likely

settlements outside the city.[83] An earlier report from the UN Center for Human Settlements (UN-Habitat) estimated that between 1989 and 1990, about 1.5 million people nationwide had been relocated, half of them from the four cities of Rangoon, Mandalay, Bago and Taunggyi. This "massive social engineering exercise" involved 4 percent of the entire population and 16 percent of Burma's urban population.[84]

- In ***India***, in 1998, demolition squads from the Brihanmumbai Municipal Corporation evicted 167,000 people in Mumbai (Bombay) without providing resettlement assistance. In March 2000, around 5,000 slum dwellers were moved outside Delhi to a resettlement site. However, many residents could not afford the travel fare to their work, and promised schools and health clinics were never built.[85]
- In the ***Philippines***, the Urban Poor Associates (UPA), a local NGO, estimated that 165,000 families had been evicted nationwide in 1999. In Metro Manila, UPA reported that 6,059 people had been forcibly evicted in 2000, of whom only 1,342 families had received relocation assistance. Most of the evictions were related to government infrastructure projects.[86]

- In Phnom Penh, ***Cambodia***, in November 1999, municipal authorities evicted approximately 600 ethnic Vietnamese residents from a floating village on the Bassac River, charging that they were illegal residents. Outside Phnom Penh, soldiers bulldozed the homes and fields of 100 subsistence farmers so that a local general could build a casino in the area.[87]
- In Dhaka, ***Bangladesh*** from May 1999, 100,000 people (20,000 households) in 44 settlements lost their homes and belongings during a forced eviction that occurred without any prior written warning. A majority of those evicted were single mothers with children, many working in the city's 2,000 garment factories located around the city center.[88]
- In ***Greece***, in August 1998, Greek authorities expelled approximately 3,000 Roma (also known as Gypsies) from Evosmos, a Roma community for 30 years, without providing relocation assistance.[89]

to allow the international community access to displaced populations when the majority of IDPs have been displaced by non-state actors as in Colombia or Angola. When, however, the state is heavily involved (as in Burma, China or Russia), access is very limited. This lack of access is, to some extent, now being challenged by the UN in situations where the victims are displaced by conflict. We are yet to see similar UN pressure when displacement occurs as a result of development projects.

national sovereignty ... human rights responsibilities

The reason for this indifference is to be found in the UN's interpretation of: i) a legitimate development project of overriding public interest, protected from international interference by the concept of national sovereignty, and ii) a human rights violation of concern to the international community. In the case of India, are we not clearly looking at the latter? Interpreting the displacement of millions of people in terms of national sovereignty, the UN has not addressed the issue with the government of India or, for that matter, with any other government.

Is it not time to more energetically pursue UN Secretary General Kofi Annan's idea that national sovereignty comes with certain human rights responsibilities towards the citizen of a truly sovereign country?[9] The argument made by the US Committee for Refugees in relation to conflict-induced displacement in India is just as valid in relation to development IDP: "India cannot, however, fail to take steps to protect and assist the displaced, prevent others from doing so, and yet reject the international community's humanitarian interest in the fate of those affected."[10]

UN human rights mechanisms and development-induced violations

If UN agencies are not yet convinced that development-induced displacement often amounts to a human rights violation, they should at least use existing human rights mechanisms to require governments to provide information on the fate of development-induced IDPs. Some of the largest and most neglected development-induced IDP populations are found in countries which are State Parties to important UN human rights conventions. As part of the periodic reporting and review process of the implementation of these conventions, the UN should solicit country-specific information on forced displacement. The Committee on Economic, Social and Cultural Rights has included such requests in their reporting guidelines issued to states but has received very little information on forced evictions. Furthermore, in order to assess the conditions under which these persons are resettled (if at all), the fulfillment of these citizens' economic, social and cultural rights after displacement should also be analysed.

Article 12 of the UN International Covenant on Civil and Political Rights (ICCPR) covers the right to liberty of movement and freedom to choose one's residence and the UN Human Rights Committee is monitoring its implementation. The Indian government had to present its next periodic report under the ICCPR before the end of 2001 and should be encouraged to address the issue of those who have had their right to freedom of movement violated through forced displacement. The Committee should also request that NGOs, in accordance with common practice, submit information on this specific subject.

India is also a State Party to the Convention on the Elimination of Racial Discrimination. It should thus be asked to explain to the Committee on the Elimination of Racial Discrimination why 40-50% of the development-induced population is made up of ***adivasi*** tribal people when ***adivasis*** only comprise 8% of the Indian population.[11]

China, which became a State Party to the UN International Covenant on Economic, Social and Cultural Rights this year, will similarly have to report on the status of these rights and should be encouraged to address the situation of forced evictions and development-induced IDPs. As with the ICCPR, it is common practice that national and international NGOs inform the members of the Committee on Economic, Social and Cultural Rights on issues of particular importance for the fulfillment of these rights. It would therefore be appropriate for the Committee to solicit and analyse reports from both the government and from NGOs on the consequences of large-scale development projects in China.

If these rights are being violated in the context of internal displacement, it would be useful for the Committee members in their analysis and review procedures to make use not just of the relevant articles of Covenants but also the UN Guiding Principles on Internal Displacement.

The increased attention to human rights violations stemming from development-induced displacement does not have to be limited to these three conventions. All six of the UN's treaty-monitoring bodies could be used to gain a better understanding of the phenomenon.[12] Monitoring mechanisms not linked to specific human rights conventions (UN working groups, special representatives and special rapporteurs) should similarly be encouraged to address the issue.

The Secretary General's Representative on Internal Displacement should play a key role in addressing and clarifying the difference between a development project of "overriding public interest" which properly resettles the displaced and a forced displacement which violates international human rights. Such guidance would be well received by the international community, currently confused by the fact that the UN Guiding Principles cover development-induced displacement but the activities of the Representative do not.

Given his current workload and the very limited resources at his disposal, it would not be realistic to ask the Representative to address country-specific situations of development-induced displacement. However, he could play a very important role in drawing the attention of the Working Group of the UN Inter-Agency Standing Committee to the plight of development-induced IDPs. This would enable appropriate member agencies of the IASC to explore ways of including development-induced IDPs as beneficiaries of protection and assistance activities.

In Cambodia, Land Seizures Push Thousands of the Poor Into Homelessness

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FROM THE AUTHOR OF FIGHT CLUB

By SETH MYDANS
Published: July 27, 2008

ANDONG, Cambodia — When the monsoon rain pours through Mao Sein's torn thatch roof, she pulls a straw sleeping mat over herself and her three small children and waits until it stops.

Enlarge This Image



Robert James Elliott for The International Herald Tribune

A boy checked his feet as he walked through waste and trash in a slum for displaced people on the outskirts of Phnom Penh.

She and her children sit on a low table as floodwater rises, bringing with it the sewage that runs along the mud paths outside their shack.

Ms. Mao Sein, 34, was resettled by the government here in an empty field two years ago, when the police raided the squatters' colony where she lived in Phnom Penh, the capital, 12 miles away.

She is a widow and a scavenger. The area where she lives has no clean water or electricity, no paved roads or permanent buildings. But there is land to live on, and that has drawn scores of new homeless families to settle here, squatting among the squatters.

With its shacks and its sewage, Andong looks very much like the refugee camps that were home to those who were forced from their homes by the brutal Communist Khmer Rouge three decades ago.

Like tens of thousands of people around the country, those living here are victims of what experts say has become the most serious human rights abuse in the country: land seizures that lead to evictions and homelessness.

"Expropriation of the land of Cambodia's poor is reaching a disastrous level," Basil Fernando, executive director of the Asian Human Rights Commission in Hong Kong, a private monitoring group, said in December. "The courts are politicized and corrupt, and impunity for human rights violators remains the norm."

With the economy on the rise, land is being seized for logging, agriculture, mining, tourism and fisheries, and in Phnom Penh, soaring land prices have touched off what one official called a frenzy of land grabs by the rich and powerful. The seizures can be violent, including late-night raids by the police and military. Sometimes, shanty neighborhoods burn down, apparently victims of arson.

"They came at 2 a.m.," said Ku Srey, 37, who was evicted with Ms. Mao Sein and most of their neighbors in June 2006.

"They were vicious," Ms. Ku Srey said of the police and soldiers who evicted her.

"They had electric batons" — and she imitated the sound made by the devices: "chk-chk-chk-chk." She said, "They pushed us into trucks, they threw all our stuff into trucks and they brought us here."

In a report in February, Amnesty International estimated that 150,000 people around the country were now at risk of forcible eviction as a result of land disputes, land seizures and new development projects.

These include 4,000 families who live around a lake in the center of Phnom Penh, Boeung Kak Lake, which is the city's main catchment for monsoon rains and is being filled in for upscale development.

"If these communities are forced to move, it would be the most large-scale displacement of Cambodians since the times of the Khmer Rouge," said Brittis Edman, a researcher with Amnesty International, which is based in London.

That, in a way, would bring history full circle.

Like other ailments of society — political and social violence, poverty and a culture of impunity for those with power — the land issues have roots in Cambodia's tormented past of slaughter, civil war and social disruptions.

The brutal rule of the Khmer Rouge, during which 1.7 million people are estimated to have died, began in 1975 with an evacuation of Phnom Penh, forcing millions of people into the countryside and emptying the city. It ended in 1979 when the Khmer Rouge was driven from power by a Vietnamese invasion, sending hundreds of thousands of refugees into Thailand.

Many of the refugees returned in the 1990s, joining a rootless population displaced by the Khmer Rouge and the decade of civil war that followed in the 1980s. Many ended their journeys in Phnom Penh, creating huge colonies of squatters.

Now, many of these people are being forced to move again, from Phnom Penh and from around the country, victims of the latest scourge of the poor: national prosperity.

Whichever way the winds of history blow, some people here say, life only gets worse for the poor. If it is not "pakdivat," revolution, that is buffeting the poor, they say, it is "akdivat," development.

The Cambodian economy has at last started to grow, at an estimated 9 percent last year. And Phnom Penh is starting to transform itself with modern buildings, modest malls and plans for skyscrapers. It is one of the last Asian capitals to begin to pave over its past.

From 1993 to 1999, Amnesty International said in its report in February, the government granted commercial development rights for about one-third of the country's most productive land for commercial development to private companies.

In Phnom Penh from 1998 through 2003, the city government forced 11,000 families from their homes, the World Bank said in a statement quoted by Amnesty International.

Since then, the human rights group said, evictions have reportedly displaced at least 30,000 more families.

"One thing that is important to note is that the government is not only failing to protect the population, but we are also seeing that it is complicit in many of the forced evictions," Ms. Edman, of Amnesty International, said.

The government responded to the group's report through a statement issued by its embassy in London.

"Just to point out that Cambodia is not Zimbabwe," the statement read. "Your researcher should also spend more time to examine cases of land and housing rights violations in this country, if she dares."

Here in Andong, the people have adapted as best they can.

Little by little, they have made their dwellings home, some of them decorating their shacks with small flower pots. A few have gathered enough money to buy concrete and bricks to pave their floors and reinforce their walls.

But this home, like the ones they have known in the past, may only be temporary. The outskirts of Phnom Penh are only a few miles away. As the city continues to expand, aid workers say, the people here will probably be forced to move again.

Statement of Michael B. Gerrard
Arnold & Porter LLP
Concerning Draft Generic Environmental Impact Statement
Willets Point Development Plan

August 13, 2008

My name is Michael Gerrard. I am environmental counsel to the Willets Point Industry and Realty Association.

This project has at least four fatal flaws under the environmental laws.

First, the project assumes a new interchange with the Van Wyck Expressway, part of I-678. This requires approval of the federal and state highway agencies and completion of the federal EIS process. State DOT's guidelines allow new interchanges only if they will not have "a significant adverse impact on the safety and operation of the freeway." But the project will have a catastrophic effect on the Van Wyck. The EIS admits a staggering number of unmitigated traffic conditions. The left exits and short sightlines are safety hazards. Our traffic experts Bernard Adler and Michael O'Rourke will expand on this. Thus the City is heading toward a lengthy process under the National Environmental Policy Act that may well culminate in a denial for the interchange. That would in turn invalidate the entire traffic analysis.

The *second* fatal flaw is that the EIS shows that the interchange requires the demolition of a state and federal eligible historic property. This triggers the lengthy process under Section 106 of the National Historic Preservation Act, and violates federal Section 4(f) of the federal Department of Transportation Act.

Third, the City says parts of the site are heavily contaminated. As our hydrogeological expert Kevin Loyst will explain, these areas are linked to an aquifer that is pumped as part of the New York City water system. The fill that will be brought in to build up the grade will press

down and squeeze the pollutants into the aquifer. The EIS ignores this effect, which violates the federal Safe Drinking Water Act.

Fourth, the EIS admits that the existing stormwater outfalls are too small, but it omits the State DEC permitting process to build another outfall.

We will have a lot more to say in our written comments. Our work here has been impeded by the City's stonewalling on our Freedom of Information Law requests. They have failed for many months to produce the requested information. We reserve all our rights on this and all other issues, including eminent domain, which others will address today.

In closing, the 9.4 million square feet involved here really requires a multi-billion-dollar reworking of the roadway system. Otherwise the area will become a perpetual honking nightmare for people trying to get to a hospital, to a flight or to a game, and for hundreds of thousands of through drivers.

All this will come out in the application process for the Van Wyck interchange, and the result is likely to be denial. It would be both unlawful and irresponsible for the City to start condemnation without the interchange approvals. We hope the City will reject this project, but even if approved, everything should be contingent on the interchange approvals and on solving the other fatal flaws.

Good afternoon Ms. Burden and members of the City Planning Commission.

My name is Bernard Adler. I am President of Adler Consulting, a consulting engineering firm which focuses on traffic engineering and transportation planning. I am a licensed Professional Engineer in New York with over 40 years of professional experience and am the former Commissioner of Traffic for the City of White Plains. I am also the Past President of the Metropolitan Section of the Institute of Transportation Engineers, the premier organization of transportation professionals, and served on the International Board of Direction. I have also taught transportation professionals as a past Adjunct Professor of Civil Engineering at Manhattan College where I focused on Transportation Planning.

Although I have prepared written comments which address all the facets of our review of the Transportation Section of the DGEIS, I would like to focus today on two critical safety issues:

1. Inoperability of the proposed surface roadway system.
2. Poor Emergency Response times within the Willets Point area.

Michael O'Rourke, also a member of Adler Consulting, will discuss the highway network and ramps.

Analysis of Traffic Operating Conditions

Intersections - The DGEIS indicates that the proposed development would cause severe congestion at most of the intersections studied, and much of this congestion could not be mitigated. I have never seen this level of unmitigated impact in over 40 years of practice as a traffic engineer. It would be an

unprecedented overload for the local road system.
Of the 29 signalized and unsignalized intersections analyzed, significant impacts are anticipated at between 19 intersections and 23 intersections on days that do not include a Mets home game. On days when the Mets would play in the new CitiField, 24 of the 29 intersections analyzed would experience significant impacts.

What does this mean? Severe congestion and very long delays, well in excess of two minutes and more than triple the delays without the project. For example, when people are going to work in the morning, the following intersections would have failed operating conditions:

- Northern Boulevard at 114th Street;
- 126th Street/GCP Ramp at 34th Avenue;
- 114th Street at Roosevelt Avenue;
- Prince Street at Roosevelt Avenue;
- Main Street at Roosevelt Avenue;
- Main Street at Kissena Boulevard;
- Union Street at Sanford Avenue; and
- College Point Boulevard at Northern Boulevard Service Road.

When people are coming home, even more intersections would operate at Level of Service F. In addition to the intersections I just mentioned, these would include:

- Union Street at Northern Boulevard;
- 126th Street at Roosevelt Avenue; and
- Union Street at Roosevelt Avenue.

Furthermore, there are nine intersections where the impacts of the Development would be unmitigated during any peak hour analyzed (both game day and non-game day scenarios). They include:

- Northern Boulevard at 126th Street
- Northern Boulevard at Prince Street
- 34th Avenue at 126th Street
- Roosevelt Avenue at 114th Street
- Roosevelt Avenue at 126th Street
- Roosevelt Avenue at College Point Boulevard
- Roosevelt Avenue at Prince Street
- Roosevelt Avenue at Main Street
- New Willets Point Boulevard at 126th Street

Emergency Response Times - Currently, the project Site is occupied by low-density businesses and only a single resident. Nonetheless, it takes the NYC Fire Department more than one minute longer to respond to fire or medical emergencies in the Willets Point area than it does in other neighborhoods in Queens, according to information provided by their Office of Management Analysis and Planning.

This is a matter of significant concern, since the proposed development will make the roadways impassable while creating 5,500 dwellings, 700 hotel rooms and a school that may need emergency services.

The DGEIS did not look at this matter at all.
If it had, it would have found that:

- The current response time for a non-structural fire in the Willets Point area is six (6) minutes and 21 seconds. According to the National Fire Protection Association (NFPA), the recommended maximum response time is four (4) minutes, and the average response time for the entire Borough is five (5) minutes and 18 seconds.

- The current response time for a unit to respond to a structural fire in the Willets Point area is five (5) minutes and 52 seconds. The recommended maximum response time is four (4) minutes, and the average response time for the entire Borough is four (4) minutes and 58 seconds.

- The current response time for an Emergency Medical Services (EMS) Unit to respond to a medical emergency in the Willets Point area is six (6) minutes and 16 seconds. The NFPA recommends a maximum response time of four (4) minutes and the current response time for the entire Borough is four (4) minutes and 42 seconds.

Summary

In summary, the DGEIS clearly shows that residents will not be able to drive to and from work, businesses will not be able to receive shipments or customers, travelers will not be able to reach airports or simply drive through, and emergency vehicles will not be able to respond in a timely manner.

In my view, based on more than 40 years as a transportation professional, this degradation of the road and highway system would create an unprecedented daily transportation overload.

Good afternoon Ms. Burden and members of the City Planning Commission.

My name is Michael O'Rourke. I am a Senior Associate with Adler Consulting. I am a licensed Professional Engineer in New York with over 30 years of professional experience in both public and private practice. Like Mr. Adler, I am a Past President of the Metropolitan Section of the Institute of Transportation Engineers. I am also a member of the Transportation Research Board and serve on the Unsignalized Intersection subcommittee of the Highway Capacity Committee.

I will discuss the impacts on the highway network and ramps.

Highways & Ramps

Significant impacts will also occur on the highway network, resulting in much slower speeds and bumper-to-bumper congestion. I have not seen this level of unmitigated impact in my years of practice as a traffic engineer.

On the Van Wyck Expressway, when people are going to work in the morning, northbound traffic speeds would be cut in half from 40 mph to 21 mph. During midday, speeds would be cut even more, from 36 mph to 11 mph. When people are coming home from work, speeds would be cut from 39 mph to 18 mph.

These impacts are not just limited to weekdays. On Saturday, traffic speeds in the northbound direction would be cut from 41 mph to 13 mph.

The impacts to the northbound Van Wyck Expressway are not unique. Extremely slow speeds and heavy congestion are also expected for the southbound Van Wyck Expressway, the southbound Whitestone Expressway and both directions of the Grand Central Parkway. Furthermore, it is not just the highways themselves where traffic will become intolerable. Traffic on the ramps will become intolerable as well. Speeds of less than two mph are predicted for the ramp from the westbound Northern Boulevard to the southbound Van Wyck Expressway for most of the day. By comparison, without the project the predicted speeds are approximately 29 mph.

I will spare you the details, but single-digit ramp speeds are also predicted for the other highway ramps in the vicinity.

The congestion caused by these extremely low speeds will spill back onto the highway network and the local streets which, as I previously stated, already will be overloaded.

Proposed Ramp Improvements - The adverse impacts that I just described will occur despite the ramp improvements that the City has proposed. The Federal Highway Administration and New York State Department of Transportation also have a role in approving these proposed improvements, and it is worth looking at what they think about these improvements.

On the federal side, the answer is simple. The Federal Highway Administration has no thoughts about the ramps at all, since it has not been involved in this project even though it must approve any changes in access to the Interstate Highway.

On the state side, based on information that we received from Freedom of Information requests, NYSDOT appears to have considerable concerns about the geometry and capacity of the proposed ramps. You see, these ramps would have to be squeezed into an area that already contains the existing Van Wyck Exp./Whitestone Exp./Northern Blvd. Interchange.

NYSDOT is worried that the proposed ramp may not be able to accommodate the anticipated traffic volumes, and that there would be a significant "queue spillback." This means that cars on the exit ramp would back up onto the Van Wyck. Furthermore, because of the contortions necessary to fit the ramps into the available space, NYSDOT also is worried that there would be inadequate sight distance on the ramps.

Finally, over and above the queuing and sight-distance issues, there is a potential safety issue with the proposed exit ramp. This new ramp would be a left-side exit from the existing ramp system. As everyone knows, left-hand exits are a bad idea. For example, the American Association of State Highway and Transportation Officials has stated that "Left-hand entrances and exits are contrary to the concept of driver expectancy when intermixed with right-hand entrances and exits. Therefore, extreme care should be exercised to avoid left-hand entrances and exits in the design of interchanges."

In sum, I cannot overemphasize how severe the effects of the proposed project will be. Traffic speeds will be cut in half, and unsafe off-ramps will be created that would cause backups and increase the accident potential.

WILLETS POINT DEVELOPMENT PLAN – DGEIS REVIEW AND COMMENTS

Good afternoon. My name is Kevin Loyst. I am the Department Manager for the Environmental Department of FPM Group, Ltd. I am a licensed professional engineer with a bachelor and master's degree in environmental engineering, and I have sixteen years of environmental engineering experience. I am here on behalf of my clients Willets Point Industry and Realty Association.

FPM has performed a review of the Draft Generic Environmental Impact Statement (DGEIS) and associated documents for the Willets Point Development Plan focusing on hazardous material impacts to surface and groundwater resources. We have prepared a written summary of our review which we will submit, but today I would like to make the following points:

First, the DGEIS and/or documentation states that the site has a history of contamination and shows a hydraulic connection to the Brooklyn Queens aquifers (sole source) and active or potentially active wells.

Second, the proposed development will compress the soils underlying the site and squeeze the contamination into the aquifer.

Third, the amount of soils necessary to elevate the site out of the floodplain will cause significant infrastructure problems.

Finally, the City has not undertaken the studies necessary to evaluate any of these impacts.

The Site Is Situated Above a Sole-Source Aquifer

The DGEIS and associated documents state that the site has a history of contamination. If so, this is significant because the site lies above a sole source aquifer which is used for water supply by NYC. Indeed, according to the documents on which the DGEIS is based, there is a direct pathway from Willets Point to existing NYCDEP water supply wells in Queens, as well as

proposed wells as part of the Brooklyn Queens Aquifer Study. This study is seeking ways to utilize the Brooklyn Queens Aquifer during droughts and other water emergencies.

The Redevelopment Will Squeeze Contamination Out of the Soils Below the Site

The redevelopment plan proposes adding up to 6' of fill to the site to raise the grade above the 100-year floodplain. If the City has underestimated the amount of fill necessary to do this, it will require that much more fill. The soils beneath Willets Point are old, saturated marshlands that are compressible. When the fill is placed on these old marshlands, it will squeeze water from them just like squeezing water from a sponge. If there is any contamination in the water, it will be injected into the aquifer when the marshlands are compressed instead of seeping out over many years.

This contamination could then travel along the pathway shown in the DGEIS documents to the DEP water supply wells and into the Brooklyn Queens Aquifer. It also could travel to the nearby Flushing River and Flushing Bay.

The Fill Will Impact Current and Future Subsurface Facilities and Infrastructure

It is likely that the site will require ~~ten to sixteen feet of~~ substantial additional fill to raise it out of the floodplain. The addition of this fill and the resulting differential settlement will impact current and future subsurface utilities and underground storage tanks and structures. The fill will settle unevenly, potentially causing leaks from known and unknown underground tanks and gas, oil and sewer lines, causing further soil and groundwater contamination.

None of These Impacts Are Studied in the DGEIS

The DGEIS considers none of these impacts. Before the City is allowed to place even six feet of fill on the site, much less the ten-to-sixteen feet of fill that actually will be required, it should take a hard look at the impacts of this fill.

ARNOLD & PORTER LLP

Willets Point Development Plan:

Comments of the Willets Point Industry and Realty Association

August 25, 2008

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August 25, 2008

Asma Syed, Planner
NYC Economic Development Corporation
110 William Street
New York, NY 10038

Re: Comments -- Willets Point Development Plan
Draft Generic Environmental Impact Statement

Dear Ms. Syed:

This letter provides the comments of the Willets Point Industry and Realty Association ("WPIRA") on the Draft Generic Environmental Impact Statement ("DGEIS") prepared by the Office of the Deputy Mayor for Economic Development ("Lead Agency") for the Willets Point Development Plan ("Proposed Project") for the Willets Point area of Flushing, Queens.

WPIRA's comments incorporate by reference the comments set forth in the four letters attached hereto. These letters include analyses of traffic and transportation, by Adler Consulting, Transportation Planning & Traffic Engineering, PLLC ("Adler Consulting," Exhibit A); climate change, by Svante Scientific, Inc. ("Svante Scientific," Exhibit B); and hazardous materials, by FPM Group Ltd. ("FPM," Exhibit C); as well as WPIRA's earlier comments on the Draft Scope of Work, many of which went unaddressed in the DGEIS (Exhibit D).

I. INTRODUCTION

The most striking feature of the DGEIS is its unabashed acknowledgement that the Proposed Project will cause traffic impacts so severe that, during peak hours, speeds on the Van Wyck Expressway will be cut by more than half, local access ramps will become parking lots and delays will increase significantly at between 66% and 83% of the intersections studied. During the August 13, 2008 public hearing, Bernard Adler, a leading New York traffic engineer and president of Adler Consulting, captured well the magnitude of the traffic impacts when he stated that "I have never seen this level of unmitigated impact in over 40 years of practice as a traffic engineer."

We note that the magnitude of these traffic impacts will be fully explored during the Federal Highway Administration ("FHWA") and New York State Department of Transportation ("NYSDOT") approval processes for the proposed interchanges. As a result these approvals will surely be denied, so it would be both unconscionable and unlawful for the City to start condemnation before completing the FHWA and NYSDOT

processes. We hope the City will reject this project, but even if approved, the institution of any eminent domain proceedings should be contingent on, at minimum, receiving FHWA and NYSDOT approvals.

The traffic impacts are not the only flaws in the DGEIS that should cause the City to reject this project. Two other significant environmental impacts are those of climate change and surcharge of the local aquifer with the hazardous substances that the DGEIS alleges are present in the Willets Point soils and groundwater. It is notable that the DGEIS failed to consider these impacts at all, even though both were specifically identified in comments on the draft Scope of Work.

In addition, the DGEIS failed to adequately evaluate the regulatory requirements for the project, particularly the New York State Department of Environmental Conservation ("DEC") requirements for constructing sewage outfalls, the National Environmental Policy Act ("NEPA") requirements for approvals by the FHWA, the federal Department of Transportation Act requirements for actions affecting historic structures, the NYSDOT requirements for highway access modifications, and the violation of the regulatory requirements applicable to the selection of the Lead Agency.

The DGEIS failed in numerous other regards as well, and in the remainder of this letter and attached exhibits we discuss these and the other failures of the DGEIS.

II. SPECIFIC COMMENTS

A. The City Has Withheld Information By Failing To Respond To FOIL Requests

WPIRA, through its counsel, has sent numerous Freedom of Information Law ("FOIL") and Freedom of Information Act ("FOIA") requests to various City, State and Federal agencies. The City agencies have failed to respond to these in a timely manner, thereby withholding information from WPIRA. Accordingly, WPIRA has not yet had a full and fair opportunity to review information relevant to the Proposed Project.

For example, the Lead Agency has provided a small number of documents but claims that it has not yet completed its records review in response to WPIRA's FOIL request dated February 15, 2008, more than six months ago. The Economic Development Corporation only recently provided a partial response to WPIRA's request dated June 24, 2008,[1] and is still reviewing its files. The Metropolitan Transportation Authority has acknowledged WPIRA's FOIL request dated June 5, 2008, but only to advise WPIRA that its file review will not be complete until September 11, 2008. The Department of

[1] WPIRA's original request dated February 15, 2008, apparently was not delivered to the Economic Development Corporation, even though the request was addressed exactly as stated on the Economic Development Corporation's web site.

City Planning likewise has acknowledged WPIRA's FOIL request dated June 5, 2008, but has provided no further response. A copy of the FOIL correspondence is attached hereto as Exhibit E. We reserve our right to supplement these comments to reflect subsequent responses to our FOIL and FOIA requests.

B. The DGEIS Fails To Address The Necessary State And Federal Approvals And Procedures

It is notable that the DGEIS failed to identify so many key state and federal regulatory requirements, including the NEPA process, the section 4(f) process for historic places, the NYSDEC permitting requirements for outfalls, the NYSDOT guidelines for access modifications and the State Environmental Quality Review Act ("SEQRA") requirement that the Lead Agency have jurisdiction over at least one project approval.

1. The DGEIS Fails To Address Federal Approvals Under NEPA

The Proposed Project requires a new interchange with the Van Wyck Expressway, which carries I-678 and thus is part of the federal interstate highway system financed by state and federal fuel taxes and tolls. Ever since it was established by the National Interstate and Defense Highways Act of 1956, the system has been a matter of profound federal interest. As the DGEIS acknowledges (p. S-5), this interchange will require approval not only by NYSDOT but also by the FHWA. This federal review is mandated by 23 U.S.C. § 111(a) and 40 C.F.R. § 148(b)(10). FHWA approval is highly doubtful, especially in view of the FHWA policy that approval of new access points to the existing Interstate System should meet the requirement that "[t]he proposed access point does not have a significant adverse impact on the safety and operation of the Interstate facility based on an analysis of current and future traffic." 63 *Fed. Reg.* 7045, 7046 (Feb. 11, 1998). The DGEIS admits that the proposed Van Wyck access points would utterly ruin the operation of the Van Wyck and impair its safety, and therefore they cannot be approved.

FHWA will have to prepare its own assessment of the environmental impacts of the Proposed Project under the National Environmental Policy Act. *See West v. Department of Transportation*, 206 F.3d 920, 926 (9th Cir. 2000) (FHWA approval of access and exit points to an interstate highway is subject to NEPA). A proposed adverse impact on an element of the National Interstate and Defense Highway System such as that proposed here surely requires a federal EIS under NEPA. The DGEIS, prepared under SEQRA, does not address this requirement, nor its important timing implications.

For actions that are subject to NEPA, actions that could have an adverse environmental impact are prohibited before the NEPA process has been completed. 40 C.F.R. § 1502.1(a)(1). NEPA is concerned with the "human environment," which it defines broadly. 40 C.F.R. §§ 1500.2, 1508.8, 1508.14. The institution of eminent domain proceedings would have an adverse impact on the human environment of Willets Point by forcing the closure of several businesses that are significant sources of employment,

that provide important services, and that as a practical matter cannot be relocated. Thus any and all condemnation actions should await completion of the NEPA process for the Van Wyck ramps.

2. The DGEIS Fails To Address The Procedures For Evaluating Impacts On Historic Property

The DGEIS states that a building at the site is eligible for listing on the State and National Registers of Historic Places. The DGEIS also states that this building would be demolished as part of the Proposed Project. It is apparent from the maps in the DGEIS that this demolition is necessary for the construction of the new ramps on and off the Van Wyck Expressway which, as noted above, will require the approval of both the NYSDOT and FHWA.

Consequently, the demolition of the historic building presents serious implications under section 4(f) of the Department of Transportation Act. The FHWA will have to demonstrate, among other things, that alternatives to the demolition of the building are not feasible and prudent because of unique problems such as extraordinary costs, environmental impacts or community disruption.

In addition, the demolition will trigger the consultation process under section 106 of the National Historic Preservation Act, in which the FHWA affords the Advisory Council on Historic Preservation and other agencies, organizations and individuals an opportunity to comment on the demolition of the historic building. This process has not begun and can be very time-consuming.

The noise impact of the project on the World's Fair Marina Park (DGEIS pp. S-31, 20-1) also has section 4(f) consequences. The DGEIS should have discussed both the section 4(f) and the section 106 processes, but it discussed neither.

3. The DGEIS Fails To Address State Requirements For Obtaining Approval Of The Proposed Interchange

The proposed Van Wyck Expressway interchange will require not only federal approval, but State approval as well. The State has specific guidance for obtaining this approval as set forth in Appendix 8 to NYSDOT's *Project Development Manual* (*"PDM"*).[2] The DGEIS fails to explain how the proposed ramps will comply with the *PDM*.

For example, the *PDM* requires that NYSDOT document the environmental acceptability of any new or modified access ramps by showing that:

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[2] NEW YORK STATE DEPARTMENT OF TRANSPORTATION, *Appendix 8, Freeway Access Modification Procedures, in* THE PROJECT DEVELOPMENT MANUAL, *available at* https://www.nysdot.gov/portal/page/portal/divisions/engineering/design/dqab/dqab-repository/pdmapp8.pdf

> the network of crossroads and parallel roads in the traffic study area can satisfactorily accommodate design year demand traffic volumes induced by the proposed modification. The concept "satisfactorily accommodate design-year demand traffic volumes" is defined as not having a significant adverse impact on the safety and operation of the freeway.

(*PDM*, App. 8 at 8-16.) The relevant page of the PDM is attached as Exhibit F.

As the DGEIS makes clear, there is no doubt that the Proposed Project will have "a significant adverse impact on the safety and operation" of the Van Wyck Expressway. During the AM peak hour, northbound traffic will slow to 21 miles per hour, a reduction from an expected 40 mph if the Proposed Project is not built. During midday traffic will be even worse, slowing to 10.8 mph from an expected 36 mph. Traffic will remain bad through the PM peak hour, slowing to 17.6 mph from an expected 39 mph. Traffic will be bad on the ramps as well, slowing from an expected 29 mph to less than 2 mph (!). *See*, e.g., DGEIS p. 17-74. Accordingly, it is hard to see how the Proposed Project possibly could comply with this requirement of the *PDM*.

There are numerous other *PDM* requirements with which the Proposed Project fails to comply, including special geometries (the Proposed Project does not provide for all movements, *see PDM*, App. 8 at 8-15 (*see* Exhibit F)); safety considerations (the Proposed Project will require access from the left lane, *see PDM*, App. 8 at 8-16 (*see* Exhibit F)); and traffic considerations (the Proposed Project will devastate the regional traffic network, *id.*). The DGEIS fails to address any of these requirements.

We also note that the American Association of State Highway and Transportation Officials' 2005 document *A Policy on Design Standards: Interstate System* states (at page 1) that "[e]ach section of interstate highway shall be designed to safely and efficiently accommodate the volumes of passenger vehicles, buses, trucks - including tractor-trailer and semi-trailer combinations, and corresponding military equipment estimated for the design year." The proposed ramps to and from the Van Wyck would violate this policy.

Unlike the City, the NYSDOT has been forthcoming in its responses to our FOIL requests. These responses reveal that NYSDOT -- in contrast to the EDC, which presented a rather rosy picture at the City Planning Commission's hearing on the DGEIS -- appears quite uncomfortable with all of the proposed interchange configurations, and is far from signing off on any of them. Portions of NYSDOT's responses are attached hereto at Exhibit A (*see* Exhibit 3 to the letter from Adler Consulting). Our FOIA requests further reveal that the FHWA has not been involved at all.

The existing highway system cannot accommodate the traffic from 9.4 million square feet of development. Simply bolting new on- and off-ramps onto the Van Wyck is no solution, as proven by the horrendous delays projected by the DGEIS traffic analysis. In preparation for the 1964 World's Fair and the opening the same year of Shea Stadium,

new highway segments were built and what is now the Willets Point-Shea Stadium subway station was created. The current project requires no less of a radical reconfiguration of the transportation network there. (DGEIS p. 18-24 shows that the project will also cause severe congestion on the stairways of the subway station.) The DGEIS reveals that the City is severely shortchanging the transportation upgrades that are essential for a development of this magnitude, thus imposing massive costs on motorists in the form of delays that, upon completion of the development, they will find intolerable, leading inevitably to demands for highway upgrades. But those upgrades will be far more expensive after the Willets Point area has been redeveloped and its land rendered much more valuable. The needed highway upgrades would cost hundreds of millions, or billions, of dollars, and accounting for them (as the DGEIS fails to do) would fundamentally change the overall economics of this project and probably reverse the cost-benefit ratio. The costs of these inevitable highway upgrades should be built into the financial structure of the current project; anything else amounts to a massive subsidy of the developers.

4. The DGEIS Fails To Address The Permits Necessary To Construct Outfalls

The DGEIS admits that the existing stormwater outfalls "are insufficiently sized to accommodate the runoff being generated, resulting in uncontrolled and untreated runoff and street flooding during storm events." (DGEIS at S-26) The DGEIS mentions in passing (p. 14-15) that a new stormwater outfall may be needed, but it fails to address the requirement for a NYSDEC permit under the State Pollutant Discharge Elimination System to construct the outfall, together with the applicable standards, procedures and time delays.

5. The DGEIS Fails To Address The Federal Safe Drinking Water Act

As discussed in the FPM Report (Exhibit C), the Willets Point area is hydraulically connected to the Brooklyn-Queens Aquifer, which is part of the Long Island Aquifer, a federally-designated Sole Source Aquifer under §1424(e) of the Safe Drinking Water Act. The Freeway Access Modification Report that NYSDOT will have to submit to the FHWA must, according to NYSDOT's guidance manual, be guided by the FHWA's Technical Advisory T6640.8A.[3]

[3] NEW YORK STATE DEPARTMENT OF TRANSPORTATION, *Appendix 7, Groundwater Resources, Aquifers, and Reservoirs in* THE PROJECT DEVELOPMENT MANUAL 7-4, § 4.4.7, attached hereto as Exhibit G, *available at* https://www.nysdot.gov/portal/page/portal/divisions/engineering/design/dqab/dqab-repository/456D1D6117462024E0430A3DFC032024.

Technical Advisory T6640.8A[4] states that where an area has been designated as a principal or sole-source aquifer under SDWA §1424(e), the EPA must furnish information on whether any of the alternatives of a proposed project will affect the aquifer or any of the critical aquifer protection areas within the affected sole-source aquifer. If there are no impacts, the SDWA inquiry is complete. However, if the aquifer will be affected, the design must ensure, to the satisfaction of the EPA, that it will not contaminate the aquifer and that the EPA's concerns have been resolved.[5]

The FPM Report discusses the peril that the fill associated with the project will squeeze contaminants (alleged by the City to be present) into the Sole Source Aquifer, which is part of New York City's drinking water supply (through the wells formerly operated by the Jamaica Water Company and now operated by the New York City Department of Environmental Protection). This issue requires careful analysis in the GEIS and in the Freeway Access Modification Report. In fact, in our scoping comments we called for an analysis of how the proposed fill would surcharge the underlying areas. The City's Response to Comments (Comment 78, p. A-24) indicated that this issue would be discussed in the DGEIS chapter on construction impacts, but it was not.

6. The Office Of The Deputy Mayor Is Not A Proper Lead Agency

Under SEQRA, the Lead Agency must be an agency "that has jurisdiction by law to fund, approve or directly undertake an action." 6 N.Y.C.R.R. § 617.2(s). *See Coca-Cola Bottling Co. v. New York City Board of Estimate*, 74 N.Y.2d 601, 541 N.Y.S.2d 984 (1989). The Office of the Deputy Mayor has no jurisdiction to do any of these things. Consequently, the Office of the Deputy Mayor cannot be Lead Agency for the action.

C. The DGEIS Fails To Provide An Adequate Analysis Of The Municipal Services Alternative

The Municipal Services Alternative is presented in the DGEIS as a way to allow the continuation of industrial uses in the area. The DGEIS should state that Municipal Services Alternative will materially improve the socioeconomic conditions and neighborhood character of Willets Point, and remove the indicia of urban blight that the Lead Agency has alleged may be present. The DGEIS also should state that the storm water and sewage services can be provided using pumps regardless of the elevation of the streets, and without razing and regrading the site. Furthermore, the DGEIS should state

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[4] UNITED STATES DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION, TECHNICAL ADVISORY T6640.8A, GUIDANCE FOR PREPARING AND PROCESSING ENVIRONMENTAL AND SECTION 4(F) DOCUMENTS, attached hereto as Exhibit H, *available at* http://www.fhwa.dot.gov/legsregs/directives/techadvs/t664008a.htm.

[5] PROJECT DEVELOPMENT MANUAL, *see supra* n. 3 and Exhibit G, *citing* 40 C.F.R. part 149.

this alternative's effect on property values and hence on property tax revenues, as well as its effect on the economic benefits and revenues of the existing businesses (reported in an August 17, 2008 article in Crain's New York Business as exceeding $1 billion annually).

D. The DGEIS Fails To Address The Impacts Of Placing Fill In Willets Point

The DGEIS indicates that the site will be raised above the FEMA 100-year floodplain level. The April 2008 draft of the Willets Point Develoment District Neighborhood Conditions Study ("Blight Study"), prepared for the New York City Department of Housing Preservation and Development, indicates (at page C-82) that one of the greatest barriers to redevelopment of the area is that much of the land is below that floodplain level. As pointed out by Svante Scientific and FPM in the reports attached hereto as Exhibits B and C, respectively, it will take an enormous amount of fill to raise the project area above even the current 100-year flood plain, much less the flood plain expected within the Proposed Project lifetime. The DGEIS does not even estimate the quantities of this fill, much less where the fill will come from, how its cleanliness will be assured, the safety, environmental and energy impacts of the tens of thousands of truck trips required to haul the fill to Willets Point, the impacts of excavating the fill, and the impacts of the compression that the fill will both undergo and cause.

E. The DGEIS Fails To Address The Impacts Of Climate Change

Mayor Bloomberg has repeatedly, and correctly, warned that New York City faces serious consequences from sea level rise and other consequences of climate change. His "PlaNYC" discusses this in some detail.[6] A recent City report reaffirms that New York City faces serious consequences from sea level rise and extreme weather events as a result of climate change.[7] Nonetheless, the Lead Agency has expressly refused to address the impacts of climate change, though we requested such a discussion in our scoping comments. The Lead Agency's explanation for this refusal is that climate change impacts "are City-wide issues and are not addressed through CEQR on a project-specific level." (Final Scope of Work Att. A, Resp. to Cmt. 74 at A-23.) This explanation explains nothing, however, since the Lead Agency cannot sensibly ignore prudent mitigation measures at Willets Point simply because similar measures may be necessary elsewhere.

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6 The City of New York, Mayor Michael R. Bloomberg, *PlaNYC: A Greener, Greater New York* (April 22, 2007), pages 130-141, *available at* http://www.nyc.gov/html/planyc2030/html/downloads/the-plan.shtml. The cited pages are attached hereto as Exhibit I.

7 New York City Department of Environmental Protection, Climate Change Program, *Assessment and Action Plan: A Report Based on the Ongoing Work of the DEP Climate Change Task Force, Report 1* (May 2008), pp. 23-27, *http://www.nyc.gov/html/dep/pdf/climate/climate_complete.pdf*. The cited pages are attached hereto as Exhibit J.

The Lead Agency also implies that, even if measures to address climate change might be necessary (and they are), the Lead Agency is taking these measures: "it should be noted that one of the proposed Plan's program components includes the raising of the existing grade throughout the District to conform to flood plain requirements." (*Id.*)

Raising the existing grade is helpful as a precaution to address climate change only if the grade is raised enough to be effective. And raising the grade six feet manifestly is not enough. As Svante Scientific points out in Exhibit B, by 2050, the grade will have to be raised at least ten feet (and not the proposed six feet) in order to avoid the 100-year flood plain. The City has failed to address this or any other aspect of climate change.

III. CLOSING

In closing, the Proposed Project requires a major reworking of the roadway system, a hard look at how to cope with climate change and a reasoned evaluation of the impacts of raising the grade by ten feet or more. Otherwise, the area will be vulnerable to storms and sea level rise, will threaten local water supplies and will become a perpetual honking nightmare for people trying to get to a hospital, a fire, a flight or a game, or simply from one side of Queens to the other.

We respectfully submit that it is highly unlikely that the Proposed Project will ever secure the State and federal approvals necessary to proceed, and that it is time for the City to reject the Proposed Project and cut its losses. In the event that the City should decide (unwisely) to push forward, however, we reiterate that it would be unconscionable and unlawful for the City to start condemnation -- destroying, as a practical matter, the Willets Point businesses and their more than $1 billion in annual revenues -- before securing all the needed State and Federal approvals.

Thank you for your attention to these comments.

Sincerely,

Michael B. Gerrard
Nelson D. Johnson

Enclosures

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August 22, 2008

Asma Syed, Plannner
NYC Economic Development Corporation
110 William Street
New York, NY 10038

Re: Willets Point Redevelopment DGEIS
Willets Point, Queens, New York

Dear Ms. Syed:

Adler Consulting has reviewed the transportation section of the Draft Generic Environmental Impact Statement (DGEIS) for the proposed Willets Point Development Plan in the Willets Point area of Queens, New York. Based on our review of the DGEIS, it is our professional opinion that, due to basic underlying errors and omissions, the conclusions of the transportation section are erroneous and incomplete and could not be used in making any decision upon the subject Application. We further conclude that the Project, as proposed, will do irreparable harm to the well-being and safety of the general public and, therefore, should be denied.

A. BACKGROUND OF THE REVIEWER

Adler Consulting focuses on the fields of traffic engineering and transportation planning. The firm provides these services to a range of clients in both the public and private sectors. Mr. Bernard Adler, P.E., the president of our firm, has over 40 years of traffic engineering experience, is the former Commissioner of Traffic for the City of White Plains and is a Fellow of the Institute of Transportation Engineers. Mr.

Michael P. O'Rourke, P.E., PTOE, a senior associate with the firm, has over 30 years of traffic engineering experience. Statements of Mr. Adler's and Mr. O'Rourke's qualifications are attached hereto as Exhibit 1.

B. INTRODUCTION

The Willets Point Development District is located adjacent to Shea Stadium and is generally bounded by 126th Street, Roosevelt Avenue, the Van Wyck Expressway and Northern Boulevard. The Willets Point Development District is proposed to include approximately 9,000,000 square feet (sf) of overall development with 5,500 dwelling units, 500,000 sf of office space, 1,550,000 sf of 'destination retail' (to include a 2,700 seat movie theater), 150,000 sf of local retail, a 700-room hotel, a 400,000 sf convention facility, 150,000 sf of community facilities and a public school with up to 850 seats. If a Convention Center is not included in the Development District, a larger residential component, to include a 900-seat school, would be developed. The DGEIS anticipates that approximately 6,090 vehicles would be generated during a weekday PM Peak Hour on day when the New York Mets do not have a home game.

While the DGEIS suggests that the Project generates the greatest number during the peak Saturday Highway Hour, a function of the heavy retail component, a very significant number of trips are anticipated to be generated during the morning and afternoon commute time frames and during which time significant congestion is indicated to result as a function of the proposed development.

C. INADEQUACY OF THE DEIS

Lack of Support Documentation - It is important to note that the transportation component of the DGEIS, as provided to the public, is not transparent because it does not provide the technical analyses upon which the transportation section of the DGEIS is based.

The subject DGEIS, provided for review by the public, did not include the worksheets for the intersection capacity analyses nor the capacity analysis of the highways and ramps from which the data and statements in the DEIS were compiled. A Freedom of Information Law (FOIL) request has been filed with the City for these analyses but, as of yet, these data have not been provided. Therefore, it is not

possible to confirm whether the intersection capacity analyses or the highway roadway capacity analyses appropriately accounted for the effect of a significant increase in population and traffic, parking, buses, queuing and pedestrians on traffic operating conditions at the individual intersections and the highway network.

D. INDICATION OF AN OVERLY AMBITIOUS PROJECT

Based on information contained in the DGEIS, the following factors clearly indicate that the Project will lead to excessive congestion without sufficient mitigation to improve the surface roadway system and the highway system.

1. Low Travel Speeds - The Scope-of-Services for the DGEIS states that travel speed and delay time runs were to be performed for portions of Northern Boulevard, Roosevelt Avenue and 126th Street and along the Grand Central Parkway and the Van Wyck Expressway. No travel time information is contained in the Traffic and Parking Section of the DGEIS. While the summary information discussed for the highway sections does indicate travel speeds, it appears that these data are the output of the CORSIM modeling effort and not based on time and delay studies, which consist of actual data collected.

Travel time and delay runs were conducted for the portion of the Van Wyck Expressway in the immediate vicinity of the proposed Willets Point Development by the Port Authority of New York and New Jersey in 1987 as part of the JFK 2000 Data Collection Study. Travel time and delay data were collected on Friday night, August 28th, and on Sunday afternoon, August 30th. The data indicated that the average speed along the Van Wyck Expressway between the Whitestone Expressway and the Long Island Expressway were approximately 33 miles per hour (mph) or Level-of-Service E conditions and that the highway was operating at capacity. Simultaneous observations performed by Skycomp Corporation on Sunday afternoon, August 30th, indicated that there was a vehicle queue along the northbound Van Wyck Expressway of approximately six (6) miles in length. There is no comparable data collected for this application even though the Scope required its collection.

2. Excessive Emergency Response Times - Currently, the project Site is predominantly occupied by auto-related repair business with few residents. It is proposed to remove the existing businesses and offices and construct approximately 9,000,000 square feet of mixed-use development. As part of the Project, approximately 5,500 dwelling units and 700 hotel rooms would be constructed. Assuming an average occupancy of 1.5 people per dwelling unit, it is anticipated that there would be a resident population of approximately 8,300 people in the re-developed Willets Point District. The daytime population would include office workers, shoppers, convention attendees and up to 900 school children and their teachers.

The National Fire Protection Association (NFPA) was established in 1896. Its mission is to reduce the burden of fire and other hazards on the quality of life by providing codes and standards for the operation of fire departments. The NFPA has more than 81,000 members and has developed and published more than 300 codes and standards to minimize the effects of fire and other risks.

The NFPA has prepared Standard 1710: Standard For the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments. The current Standard 1710 was published in 2004.

Section 5.2.4.1.1 of Standard 1710 states: "The fire department's fire suppression resources shall be deployed to provide for the arrival of an engine company within a 4-minute response time...." Information provided by the Office of Management Analysis and Planning for the New York City Fire Department, and attached hereto as Exhibit 2, indicates that the current response time for a unit to respond to a non-structural fire in the Willets Point area is six (6) minutes and 21 seconds which is 63 seconds more than the average response time for the entire Borough of Queens at five (5) minutes and 18 seconds. For a structural fire, the current response time for a unit to respond in the Willets Point area is five (5) minutes and 52 seconds which is approximately 60 seconds longer than the average response time for the Borough of Queens of four (4) minutes and 58 seconds.

It takes even longer to provide an emergency medical services response in Queens. Fire Department statistics indicate that the current response time for an Emergency Medical Services (EMS) Unit to respond to a medical emergency in the Willets Point area is six (6) minutes and 16 seconds, which is 94 seconds longer than the average

current response time for a unit to respond to a medical emergency for the Borough of Queens of four (4) minutes and 42 seconds. These average response times do not meet the requirements of Section 5.3.3.4.2 of Standard 1710 which states: "The fire department's EMS for providing first responder with AED *[automatic external defibrillator]* shall be deployed to provide for the arrival of a first responder with AED company within a 4-minute response time to 90 percent of the incidents as established in Chapter 4."

In sum, not only are the average response times of the FDNY to either fire or medical emergencies in Queens approximately 120 seconds more than the response time contained in the NFPA Standard, it also takes between 60 seconds to 90 seconds longer to respond to fire or medical emergencies in the Willets Point area than it does in Queens generally. If developed as currently proposed, the Willets Point District will add almost 9,000,000 square feet of mixed residential, office and retail development, which will generally lengthen the Willets Point and other local response times even further. It is also expected that between 850 and 900 school children would attend the school proposed for the neighborhood. Thus, both the need for emergency services and the City's inability to provide them will markedly worsen as a consequence of the proposed development. That a detailed analysis of the future need for emergency services was not performed, and indeed was dismissed as not required, is a major omission.

3. Poor Traffic Operating Conditions - Surface Roadway System - The results of the capacity analyses performed for the DGEIS indicate that most of the intersections studied would experience significant impacts due to the development of the area. Of the 29 signalized and unsignalized intersections analyzed, significant impacts are anticipated at between 19 intersections and 23 intersections on a day that does not include a Mets home game. On a day when the Mets would play in the new CitiField, 24 of the 29 intersections analyzed would experience significant impacts.

Severe congestion and very long delays are expected at many of the intersections analyzed due to the amount of traffic generated by the development. In many cases, intersection delays well in excess of 120 seconds are expected. In the AM Peak Hour, these include the following eight intersections:

- Northern Boulevard at 114th Street will fail with delays greater than two minutes;
- 126th Street/GCP Ramp at 34th Avenue will fail with delays greater than two minutes;
- 114th Street at Roosevelt Avenue will fail with delays greater than two minutes;
- Prince Street at Roosevelt Avenue will fail;
- Main Street at Roosevelt Avenue will fail with delays greater than two minutes;
- Main Street at Kissena Boulevard will fail with delays greater than two minutes;
- Union Street at Sanford Avenue will fail; and,
- College Point Boulevard at Northern Boulevard Service Road will fail with delays greater than two minutes.

For the PM Peak Hour on a non-game day, an even greater number of intersections, a total of eleven, are expected to experience delays in excess of 120 seconds, considerable congestion and queues including:

- Northern Boulevard at 114th Street will fail with delays greater than two minutes;
- Union Street at Northern Boulevard will fail with delays greater than two minutes;
- 126th Street/GCP Ramp at 34th Avenue will fail with delays greater than two minutes;
- 114th Street at Roosevelt Avenue will fail with delays greater than two minutes;
- 126th Street at Roosevelt Avenue will fail with delays greater than two minutes;
- Prince Street at Roosevelt Avenue will fail with delays greater than two minutes;
- Main Street at Roosevelt Avenue will fail with delays greater than two minutes;
- Main Street at Roosevelt Avenue will fail with delays greater than two minutes;
- Union Street at Roosevelt Avenue will fail with delays greater than two minutes;
- Union Street at Sanford Avenue will fail; and,
- College Point Boulevard at Northern Boulevard Service Road will fail.

Even where the capacity analysis is discussed in the DGEIS, the full impact of the proposed development cannot be truly assessed. The Highway Capacity Software used for the analysis generates a value for the intersection delay. However when an intersection reaches a level of severe congestion, as encountered at many of the intersections in the study area, the analysis displays a value of 120+ seconds. It does not display the actual calculated delay value. To be able to assess the true change in the delay value from the No-Build condition to the Build Condition, and therefore understand the extent of the impacts, it is necessary that the actual delay values be calculated and reported. The actual delay values can be calculated using the formulae contained in the Highway Capacity Manual and a spreadsheet program. In the Willets Point area, with so many intersections already calculated to have delay values over 120 seconds, it is imperative that this extra step be taken so that the true traffic impacts of the development can be assessed.

The analysis of the proposed mitigation measures indicates that no attempt was made to take a "hard look" at any and all of the available measures that could be used to mitigate the traffic impacts of the development. None of the mitigation measures include the construction of additional travel lanes on any intersection approaches. Slightly under one-half (45 percent) of the intersections analyzed for a non-game day condition would not be mitigated. Almost half, up to 48 percent, of the intersections analyzed for game-day conditions would remain unmitigated. Leaving half of the intersections in the study area unmitigated is completely unprecedented. In this case, since the existing facilities will be removed and the DGEIS states that the grade for the District is to be raised by as much as six feet, providing the opportunity to construct the appropriate number of through and turn lanes needed to accommodate the anticipated traffic volumes, the decision to attempt to mitigate using only low-cost operational changes is a serious omission. It must be noted that the opportunity to mitigate is available, since, as noted on Page S-1 of the Executive Summary "...up to six feet of fill are required to raise the grade of the District so that it is out of the Federal Emergency Management Agency (FEMA) 100-year floodplain." Despite the 'clean slate' that would be provided by the changes in grade for the District, the City has chosen not to construct the appropriate number of roadway lanes necessary to mitigate the impacts of the project and the approximately 6,090 vehicles that would be generated during a non-game-day weekday PM Peak Hour but has instead chosen to leave unmitigated traffic impacts throughout the development and surrounding area.

Because the mitigation measures utilized for this study do not include the construction of additional travel lanes to accommodate the traffic that would be generated, but instead are limited to minimal operational changes such as adjusting the traffic signal timing or phasing at some intersections, the DGEIS indicates that there are nine intersections where the impacts from this project would be unmitigated during any of the seven peak hours analyzed (both game day and non-game day scenarios). They include:

- Northern Boulevard at 126th Street;
- Northern Boulevard at Prince Street;
- 34th Avenue at 126th Street;
- Roosevelt Avenue at 114th Street;
- Roosevelt Avenue at 126th Street;
- Roosevelt Avenue at College Point Boulevard;
- Roosevelt Avenue at Prince Street;
- Roosevelt Avenue at Main Street; and,
- New Willets Point Boulevard at 126th Street.

It is particularly noted that the four of the intersections cited above are located along 126th Street, the major north-south street in the proposed District, and is adjacent to the new Citi Field.

At the Public Hearing of the New York City Planning Commission for this project on August 13, 2008, a representative of the New York City Economic Development Corporation indicated that there had been "mitigation (*of the intersections studied*) where feasible." This is not the case. The mitigation measures that were included and evaluated as part of this study included operational changes to the traffic signal system, changes in parking restrictions, turn restrictions and the installation of traffic signals at one intersection. The construction of additional travel lanes were not considered as possible mitigation measures to accommodate the more than 6,000 additional vehicles that would be generated in the PM Peak Hour.

The representative of the New York City Economic Development Corporation also stated that the traffic operations of the development would be monitored in "real time" and that there would be a fund of $5,000,000 established to be used for additional measures to mitigate. In view of the magnitude of the expected traffic impacts, no meaningful mitigation could be accomplished with this fund.

In addition, if there is to be additional mitigation of the numerous traffic impacts, that mitigation must be identified and evaluated now as part of the CEQR process. The only mitigation that would be feasible to accommodate the 6,000 new vehicles that will be generated in the peak hour will require the construction of additional travel lanes at intersections throughout the study area. Constructing these additional travel lanes at the beginning of the development process, when the land is available is the logical approach. It does not make sense to construct the development with the inadequate number of lanes provided at each intersection and, after monitoring continually deteriorating traffic operations until some unspecified future date, then attempt to acquire land that has recently been built upon and propose to demolish that property to finally construct the number of travel lanes that would be needed to accommodate the projected traffic volumes.

Placing a budget for mitigation following a monitoring program does not ensure effectiveness of the mitigation. Most importantly, the CEQR process demands that these evaluations must be performed before the project is in place, not afterwards.

4. Poor Traffic Operating Conditions - Highways & Ramps - Significant impacts will also occur on the highway network, resulting in much slower speeds and considerable bumper-to-bumper congestion conditions.

Level-of-Service "F" conditions will occur on the Van Wyck Expressway. On the northbound Expressway, traffic will slow to 21 miles per hour in the AM Peak Hour, a reduction in speed from 40 mph in the No-Build condition. During the midday period, speeds are expected to sink to 10.8 mph from 36 mph in the No-Build condition and in the PM Peak Hour would be reduced to 17.6 mph from 39 mph in the No-Build condition (a 55 percent reduction in calculated speeds). On Saturday, traffic in the northbound direction will travel at 13.4 mph as compared to a speed of 41 mph in the No-Build condition. Extremely slow speeds and heavy congestion are also expected on both directions of the Grand Central Parkway, the southbound Van Wyck Expressway and the southbound Whitestone Expressway.

The ramps connecting the various highway facilities will also suffer from bumper-to-bumper congestion. Single digit speeds of less than two mph are expected on the ramp from the westbound Northern Boulevard to the southbound Van Wyck Expressway for most of the day. In the midday peak hour a speed of 1.9 mph is expected, for the PM Peak Hour a speed of 1.4 mph is anticipated, and in the Saturday midday hour a speed of 1.6 mph is expected; these speeds represent a

significant reduction from the No-Build conditions where speeds of approximately 29 mph were calculated for the three time periods. Single-digit ramp speeds are expected on the ramp from the northbound Whitestone Expressway to the southbound Van Wyck Expressway in the PM peak Hour (2.8 mph from a No-Build speed of 32 mph) and the Saturday midday hour (5.0 mph speed from a No-Build speed of 34 mph), on the ramp from the eastbound Astoria Boulevard/Grand Central Parkway to northbound Whitestone Expressway/eastbound Northern Boulevard in the PM Peak Hour (a reduction to 7.0 mph from a No-Build condition speed of 36.2 mph) and on the ramp from southbound Whitestone expressway to westbound Northern Boulevard in the weekday midday hour (6.6 mph from a No-Build speed of 27.9 mph) and the Saturday midday hour a speed of 7.3 mph reduced from a speed of 27.8 mph in the No-Build condition). The congestion caused by these extremely low speeds will spill back onto the already overloaded highway network and the local streets.

5. Questionable Ability to Construct the Ramp Improvements - The DGEIS includes a proposal to construct a new exit ramp from the northbound Van Wyck Expressway to an intersection in the project site as well as a new ramp from the same intersection on Northern Blvd. onto the southbound Van Wyck Expressway.

From a procedural perspective, changes in access to the Interstate Highway System (the Van Wyck Expressway is part of the Interstate Highway System and designated as I-678) require the preparation of an Access Modification Report (AMR) by NYSDOT and the participation of and approval by the Federal Highway Administration. Information obtained from NYSDOT under the Freedom of Information Law indicates that there are considerable concerns whether the proposed ramp could accommodate the anticipated traffic volumes or whether there would be a significant queue spillback that would have an impact on the existing ramp system and the mainline of the Van Wyck Expressway. (See the spreadsheet attached hereto as Exhibit 3.) Given that the ramp would be "fit in" the area already containing the existing Van Wyck Exp./Whitestone Exp./Northern Blvd. Interchange, NYSDOT also has concerns as to whether adequate sight distance on the new ramp could be provided.

Operationally, a significant problem with the exit ramp from the northbound Van Wyck Expressway is that it is proposed as a left-hand exit ramp from an existing ramp complex that already includes right-hand exits onto both eastbound and westbound Northern Boulevard. Left-hand exit ramps are a bad idea.

The American Association of State Highway and Transportation Officials (AASHTO) is an association representing highway and transportation departments in the United States. Its primary goal is to foster the development, operation and maintenance of an integrated national transportation system. For more than 50 years, AASHTO has developed and continually updated recommended procedures for the engineering and design of streets and highways. The most recent update to the design procedures was published in 2004.

In Chapter 10 (Grade Separations and Interchanges) of A Policy on Geometric Design of Streets and Highways , AASHTO states: "Left-hand entrances and exits are contrary to the concept of driver expectancy when intermixed with right-hand entrances and exits. Therefore, extreme care should be exercised to avoid left-hand entrances and exits in the design of interchanges." AASHTO goes on to state that "Left-side ramp terminals break up the uniformity of interchange patterns and generally create uncertain operation on through roadways." Left-hand exit ramps are not expected by drivers, which can lead to confusion, delays and the increased potential for accidents.

NYSDOT agrees that left-hand exit ramps are a bad idea. In an e-mail from Peter King, Director of Program Planning and Management for the NYC Regional office of the New York State Department of Transportation, and dated, May 25, 2007, NYSDOT summarizes, in the spreadsheet attached hereto as Exhibit 3, all of the comments that NYSDOT has made to evaluate the proposed ramp improvements prior to a formal submission of comments to the EDC. The spreadsheet notes, as the first item of concern, that all of the proposed exit ramp alternatives require a left-hand exit ramp. Additional comments contained in the spreadsheet also note that "excessive turbulence" is possible on the existing exit ramp, that there would be "too many sign structures" and that there is also a "potential for queue backup on the mainline Van Wyck Expressway and Northern Boulevard."

It is also significant that the FHWA has not been involved in the review process of this proposed major change to the access from an Interstate Highway. At the Public Hearing held on August 13, 2008, a representative from the New York City Economic Development Corporation (EDC) indicated that they are using NYSDOT as a conduit for consultation with FHWA. The EDC representative also indicated that NYSDOT is currently preparing an Access Modifications Report (AMR) but that it will take at least one more year before the AMR will be ready to be submitted for review by FHWA.

Discussions with FHWA engineers located in the New York Division Office, in Albany, indicate that the review of the AMR, once it is submitted by NYSDOT, may also require input from the engineers at FHWA Headquarters in Washington, D. C. which may entail a considerable length of time.

While it was announced at the Public Hearing that the City currently has set aside a total of $50,000,000 to construct the proposed ramps to and from the Van Wyck Expressway, it is clear that the necessary plans and environmental studies (the AMR) will not be submitted to the FHWA until the end of 2009 and that a positive decision from FHWA will be some time after that, if at all.

Given the issues that were raised by NYSDOT concerning the proposed new ramp access and the uncertainty of the amount of time that will be needed for the review of the AMR by FHWA, there should be an extensive analysis of just how over 6,000 new peak vehicles would be able to enter or exit the district if the proposed ramps are not approved and cannot be constructed. Information contained in the Appendix of the DGEIS indicates approximately 2,800 vehicles would use the proposed new ramps to enter or exit the development in the PM Peak Hour. This represents just under one-half (46 percent) of the total site-generated traffic that is expected in the PM Peak Hour. If these ramps are not constructed, the traffic from the development would be forced to use the already overloaded local street network for access to the highway system at other portals.

Lastly, indications are that New York City plans to fund the proposed ramp construction activity for $50,000,000 using only City funding sources and not by including this budget cost within the Transportation Improvement Program (TIP). This results in a startling lack of transparency concerning budgetary issues and required consultations with the Federal Highway Administration.

E. Impact on Pedestrian and Vehicular Safety

The DGEIS contains a summary table with accident data obtained from the New York State Department of Transportation for 26 intersections for the period between July 1, 2004 and June 30, 2007. The analysis highlights three intersections which are high-accident locations for pedestrian and bicycle accidents and includes a discussion of measures, such as turn prohibitions, installing high-visibility crosswalks or constructing 'bulbouts' to mitigate pedestrian related accidents. However, there is no

identification of any intersections that are high accident locations for vehicular accidents, nor is any analysis provided. In the three-year period analyzed, there were a total of 52 reportable accidents at the intersection of 126th Street and Northern Boulevard, which is a major access/egress location for the Willets Point District. There were also 34 accidents at the intersection of Prince Street with Northern Boulevard, 30 reportable accidents at the intersection of Main Street and 25 accidents at the intersection of College Point Boulevard and Roosevelt Avenue in the three-year study period. There was a non-pedestrian related fatal accident at the intersection of 108th Street at Astoria Boulevard and another fatal accident, at the intersection of Prince Street and Northern Boulevard. The circumstances of either of the fatal accidents are not discussed in the DGEIS, therefore, there is also no discussion of mitigation.

The DGEIS indicates that the proposed development will generate a total of approximately 21,000 new person trips in the PM Peak Hour, with about 3,700 of these new trips involving walking only and about 4,400 new person trips to or from the subway system. There will also be approximately 6,100 new vehicles on the roadway system within the development in the PM Peak Hour. While it is generally not anticipated that the accident rates in terms of accidents per vehicle miles traveled (VMT) would increase, there will be an increase in both vehicular and pedestrian volumes, including the number of school children. Accordingly, there will also be a concurrent increase in the opportunities for vehicular and pedestrian conflicts in the study area and, therefore, a significant increase in the number and severity of the accidents in the area should be anticipated. The safety analysis in the DGEIS should acknowledge the increase in the accident potential and identify the corridors in the development where mitigation measures may be required.

F. IRREPARABLE HARM TO THE PUBLIC

Despite the obvious inadequacies of the DGEIS, a review of the proposed plan clearly indicates that, as proposed, there will be a substantial increase in pedestrian and vehicular traffic volumes. The increase in volumes will lead to increased conflicts and raise the number of accidents in the vicinity. The increase in pedestrian activities will include approximately 850 school children as well as visitors to the hotel and convention center.

The New York State Department of Transportation (NYSDOT) also clearly feels that the proposed construction of the new exit ramp from the northbound Van Wyck Expressway represents a potential safety hazard. NYSDOT communications contain multiple comments and concerns that the proposed ramp will not have adequate sight distance. (See the spreadsheet attached hereto as Exhibit 3.) The Department is also concerned that the ramp may not have sufficient capacity to accommodate the potential traffic volumes which will lead to a significant queue spillback of traffic onto the northbound mainline of the Van Wyck Expressway, leading to more and severe accidents.

Information disclosed at the Public Hearing on August 13, 2008 indicated that the FHWA has not been involved in the required Access Modification Report process and may not receive the report from NYSDOT for at least another year. The analysis in the DGEIS assumes that the ramps will be constructed. If, however, neither NYSDOT nor FHWA approve the construction of the ramps, over 2,800 vehicles would use the already overcrowded local street network to find alternative routes to the Van Wyck Expressway, the Whitestone Expressway and other parts of the highway network, again leading to a significant increase in roadway accidents.

G. CONCLUSIONS

Based on our review of the DGEIS, it is the considered professional opinion of **Adler Consulting** that, due to basic underlying errors and omissions, the conclusions of the transportation section are erroneous and incomplete and could not be used in making any decision upon the subject Application. It is also important to note that there is a complete lack of transparency of the transportation component of the DGEIS since it does not provide the technical analyses upon which the results and conclusions of the DGEIS are based.

Because the measures that were allowed to be considered to mitigate the traffic impacts did not include construction of additional through or turn lanes at critical intersections, multiple locations would experience significant impacts and nine intersections would remain unmitigated for all Build scenarios. It is the considered professional opinion of Adler Consulting that the Project, as proposed, will do irreparable harm to the well being and safety of the general public and, therefore, should be denied.

Sincerely,
Adler Consulting,
Transportation Planning & Traffic Engineering, PLLC

Bernard Adler, P.E.
President
New York State Professional Engineer No. 048373

Michael P. O'Rourke, P.E., PTOE
Senior Associate
New York State Professional Engineer No. 061375

(enclosures)

EXHIBIT 1

Bernard Adler, P. E., President

Professional Registration:

Professional Engineer
- New York
- New Jersey
- Connecticut

Education:

Stevens Inst. of Technology	- Mgmt. Sciences, Postgraduate Courses	
Long Island University	- MS, Management Engineering	1970
Polytechnic Inst. of Bklyn.	- MSEE, Electrical Engineering	1966
City College of New York	- BEE, Electrical Engineering	1962

Teaching:

Adjunct Assistant Professor of Civil Engineering, Manhattan College, Bronx, New York, 1982, 1983.

Professional Experience:

Principal, Adler Consulting, White Plains, NY, 1991 to present. Mr. Adler is responsible for the all the quality control as well as client and government liaison facets of the Firm's operation. The Firm provides professional services in the areas of Transportation Planning and Traffic Engineering. **Adler Consulting** is currently providing traffic engineering services for the County of Westchester in the optimization of over 100 signals in Mount Vernon, NY. Efforts include traffic volume data collection and the creation of timing patterns for the AM and PM Peak Highway Hours, inventory of control equipment at each signalized intersection under study, creation of a SYNCHRO network, and analyses.

Commissioner of Traffic, The City of White Plains, N.Y., 1979-1987. During a period of major redevelopment, Mr. Adler: Managed the design, installation, maintenance and operation of all traffic control devices for the control of pedestrian and vehicular traffic, including signs, signals and pavement markings; Coordinated with other planning agencies of the City for traffic and transportation needs of the present and future; and, Advised the Mayor, Common Council and other agencies of the government as to the City's traffic requirements regarding the welfare of the public with respect to traffic.

From 1987 to 1991 Mr. Adler served as **Senior Vice President, Raymond Keyes Associates, Inc., Tarrytown, N.Y.** and from 1975 to 1978 he was **Manager of Intermodal Planning for the Tri-State Regional Planning Commission, New York, NY.**

Professional Organizations:

Fellow	Institute of Transportation Engineers (ITE)
Member	National Society of Professional Engineers
Member	Transportation Research Board:
	Motorists Services Committee, A3B05, 1970-1988
	Advisory Panel on "Urban Pedestrian Traffic Control" (17-11)
Member	The Institute of Electrical and Electronics Engineers, Inc.

ITE - METROPOLITAN SECTION OF NEW YORK & NEW JERSEY

Director	1986, 1987
President	1985
Vice President	1984
Secretary/Treasurer	1983
Chairman	Equal Opportunity Program Committee, 1977
Chairman	School Coordination Committee, 1976

ITE - INTERNATIONAL

Member	Board of Direction, 1986-1989
General Chairman	57th Annual Meeting, New York City, August 1987
Chairman	Annual Meeting Committee, 1988, 1989
Member	Philanthropic Steering and Advisory Committee, 1990/91
Member	1992 Nominations Committee
Member	Annual Meeting Committee, 1987
Member	Budget Committee, 1989
Member	International Districts (7 & 8) Committee, 1987
Member	Transportation Achievement Award Committee, 1986
Chairman	Systems Planning Division, Department 6, 1985
Assistant Chairman	1979-1980
Editor	CCSAG Newsletter, Volume 2, Number 4, December 1979

ITE - DISTRICT ONE

Chairman	Annual Meetings Committee, 1984
Chairman	1983 Annual Meeting
Chairman	Career Guidance Committee, 1981
Chairman	Technical Committee, 1978-1979

References

Kevin Roseman: Traffic Engineer, County of Westchester, White Plains, NY (914) 995-4084
Garo Garabedian, Traffic Engineer, Town of Greenwich, Greenwich, CT (203) 622-7760

Michael P. O'Rourke, P. E., P.T.O.E., Senior Associate

Professional Registration:

Professional Engineer	New York, New Jersey
Professional Traffic Operations Engineer	Trans. Prof. Certification Board, Inc.

Education:

Manhattan College	B.E. (Civil Engineering)	May, 1976
Polytechnic University	M.S. (Transportation Plng & Trfc Engg)	May, 1977

Professional Experience:

Senior Associate, Adler Consulting, White Plains, NY, 2000 to present. Mr. O'Rourke is responsible for evaluation of traffic, parking and transportation impact analyses and mitigating measures associated with property/corridor development; design of impact mitigating measures; evaluation and deployment of ITS technology; and, administration within the Firm.

Associate, Eng-Wong,Taub & Associates, New York, NY, 1989 to 2000. Mr. O'Rourke supervised a team of engineers in performing: Environmental Impact Assessments; Transportation Planning Studies; Highway Design; and, Traffic Impact Studies. Some of Mr. O'Rourke's key assignments included:

Traffic Engineering "Call-In" Services for the Port Authority of New York & New Jersey; Newark Airport Landside Vehicular Traffic Surveys (1995, 1996, 1997, 1998 & 1999); Northern State Parkway Reconstruction; Routes 119 & 9A Highway Design Study; Cross Bronx Expressway Rehabilitation Study; Major Deegan Expressway Accident Analyses; Bronx and Northern Manhattan Arterials Study; White Plains Comprehensive Plan Update; Metro-North Commuter Railroad Parking Planning Services; Metro-North Commuter Railroad Strike Contingency Planning; Manhattan East Side Transit Alternatives Study; Hunters Point Waterfront Development Project EIS; Long Island City Local Network and Regional Access Transportation Study; Port Newark Signing Program - Stages I and II.

Principal Engineer, The RBA Group, Morristown, NJ,, 1987-1989. Some of the projects in which Mr. O'Rourke was involved included: Newark Airport 2000 Data Collection Program; JFK 2000 Data Collection Program - Traffic and Travel Time Data Collection and Videotape Traffic Monitoring; Site Impact Traffic Evaluation -- IMTT-Bayonne; Review of

a Traffic Impact Statement for West Amwell Township; Site Impact Evaluation, Cranford Shopping Development; Washington Mews Planned Adult Citizen Community, Gloucester County, NJ; Mount Laurel Township Traffic Engineering;

Senior Engineer, Storch Associates, Westbury, NY, 1985-1987.

Engineer, Edwards & Kelcey, Livingston, NJ & New York, NY, 1980-1985.

Transportation Planner, Capital District Transportation Committee (CDTC), Albany, NY, 1977-1980.

Publications:

Co-authored "Status of Unsignalized Intersection Capacity Research in the United States", published in March 1988, at the International Workshop "Intersections Without Traffic Signals" in Bochum, West Germany.

Professional Organizations:

Fellow — Institute of Transportation Engineers (ITE)
President — Met Section, 1995
Chairman — District One, 2000

Member — American Society of Civil Engineers (ASCE)
Transportation Group Executive Committee, New York-New Jersey Section

Member — Transportation Research Board
Committee A3A10 Highway Capacity and Quality of Service (Unsignalized Intersections Subcommittee and User Liaison Subcommittee)

References

Kevin Roseman: Traffic Engineer, County of Westchester, White Plains, NY (914) 995-4084

Thomas Soyk, P.E., Commissioner of Traffic, City of White Plains, NY (914) 422-1315

EXHIBIT 2

WILLETS POINT RESPONSE TIME - JAN 2006 TO JUNE 2008

	Major Category Grp Desc		
	Medical Emergencies	NonStructural Fires	Structural Fires
Willets Pt. (Jan '06 to Jun '08)			
INCIDENTS USED IN STATS	141	74	5
RESPONSE TIME	6:16	6:21	5:52
Queens (CY2007)			
INCIDENTS USED IN STATS	32,901	4,083	4,922
RESPONSE TIME	4:42	5:18	4:58

EXHIBIT 3

Qualitative Evaluation of the Alternatives

Willets Point Development District EIS

Evaluation Criteria	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Left Hand Exit Ramp to Northern Blvd	Left hand Exit on the Ramp Roadway	Left hand Exit on the Ramp Roadway	Left hand Exit on the Ramp Roadway	Left hand Exit on the Ramp Roadway	No
Excessive Weaving / Turbulence on Ramps	Excessive Turbulence in the two Lane Section of the Roadway on the Existing Exit Ramp from VWE NB. Potential for Ramp blockage on the existing ramp to Northern Blvd due to queue spill back from the existing signalized intersection of Willets Point and Northern Blvd Ramp. There could be an issue with a nonestandard weave on the EB VWE E Mets are proposing an exit ramp to Roosevelt Ave. at this location.	Too many signs structures will be required to align the vehicles properly on the Ramps. If the ramp to Northern Blvd is backed up the access to Willets point may also be affected. There could be an issue with a nonestandard weave on the 82 VWE E Mets are proposing an exit ramp to Roosevelt Ave. at this location.	Too many signs structures will be required to align the vehicles properly on the Ramps. If the ramp to Northern Blvd is backed up the access to Willets point may also be affected.	Too many signs structures will be required to align the vehicles properly on the Ramps. If the ramp to Northern Blvd is backed up the access to Willets point may also be affected There could be an issue with a nonestandard weave on the EB VWE E Mets are proposing an exit ramp to Roosevelt Ave. at this location.	No
At grade point of Conflict	Several movements traffic movements converge at the at grade signalized intersection of Northern Blvd and Willets Point Blvd. Potential for queue backup on the mainline VWE and Northern Blvd.	Several movements traffic movements converge at the at grade signalized intersection of Northern Blvd and Willets Point Blvd. Potential for queue backup on the mainline VWE and Northern Blvd.	Several movements traffic movements converge at the at grade signalized intersection of Northern Blvd and Willets Point Blvd. Potential for queue backup on the mainline VWE and Northern Blvd.	Several movements traffic movements converge at the at grade signalized intersection of Northern Blvd and Willets Point Blvd. Potential for queue backup on the mainline VWE and Northern Blvd.	Yes
Eliminate Access to Grand Central Parkway	Existing local access to Grand Central parkway will be maintained in conjunction the new exit ramp from VWE	Maintains the existing access via new roadway	Maintains the existing access via existing roadway	Maintains the access	no
Eliminate Existing Access to Northern Blvd.	N/A	Eliminates the existing local access to Northern Blvd to accommodate the new off ramp from VWE NB	Eliminates the existing local access to Northern Blvd to accommodate the new off ramp from VWE NB	Maintains the access	No
Potential Work in Park Property	Potential Impact to Park's Property. Work within the ROW does not appear to significant	Potential Impact to Park's Property. Work within the ROW does not appear to significant	Potential Impact to Park's Property. Work within the ROW appear to be significant	Potential Impact to Park's Property. Work within the ROW appear to be significant	Probably
Vertical Profiles	Needs to be developed to ensure scheme can be accommodated. But does not appear to be too difficult to accommodate	Needs to be developed to ensure scheme can be accommodated. May affect the ramps of the existing VWE viaduct	Needs to be developed to ensure scheme can be accommodated. May affect the ramps of the existing VWE viaduct	May not be an issue. However some of the ramp radii may be substandard to meet the profiles	Not significant
Substandard Features	N/A	May have substandard features due to highly contaminted area under the existing viaduct	May have several substandard features due to highly contaminted area under the existing viaduct. Also the relocated ramp of the WB Northern Blvd may be substandard	Some ramp radii but less than the others	
Integration with surrounding Projects	The Alternative does not induces significant new traffic patterns because due to the elimination of local access to DOT Coordination may be required but not extremely critical	The Alternative does not induces significant new traffic patterns besides due to the elimination of local access to Northern Blvd. Coordination may be required but not extremely critical	The Alternative induces significant new traffic patterns besides due to the elimination of local access to Northern Blvd. Coordination may be required	Does not affect the existing traffic patterns significantly. Not too critical	No
Requires Signficant New Structures	No. Except for the new on ramp from the development, the alternatives does not require new structures	Yes compared to Alternative I but less than others	Yes compared to Alternative I but less than others	Most amount of new Structures	No
Impact to the roadway with access to the Asphalt plant	N/O	N/O	Yes	No	No
Introduces more VMT (Vehicles Miles Traveled for Existing traffic)	Yes due to elimination of the local access	Yes due to elimination of the local access	Yes due to elimination of local access and also due to the U-Turn for access to VWE SB	No	Yes
RAMP ISSUES			Alternative III has a merge of 2 ramps (at the top of the diagram) from the northbound VWE and westbound Northern Blvd. This merge appears to take place in close proximity to a driveway of an asphalt plant. Also, one of these ramps appears to redundantly connect westbound Northern Blvd. to the ramp to westbound Northern Blvd.	It should be noted that significant ramp width will be required for this alternate to accommodate two-way traffic, standard shoulders or wider to accomodate oversized trucks on ramp curves.	
EXISTING CONDITION					The BAB exit from the Whitestone Expwy currently experiences severe congestion and back ups onto mainline on game days. The problem would be exacerbated with the introduction of a signalized intersection at the ramp terminus, even despite the added ramp storage length. Also, ramp geometry would be a concern, especially during off peak periods, with 90 degree left turn at ramp terminus at 126th Street.

Notes

This evaluation is strictly based on a qualitative basis without the knowledge or information about traffic volumes
No comments are made regarding potential impacts to air, noise or Parkland. However the elimination of conflict point will address the air quality but may introduce more noise impacts
Each alternative has impacts associated due to introduction of new traffic patterns which were not discussed here.
Introduction of New Ramp Roadways from a State highway system must be evaluated on a regional scale due to potential latent demands
Vertical and Horizontal profiles have to be developed to determine if the alternative can be studied further

Svante Scientific, Inc. ◆ P.O. Box 250197, New York, New York 10025

PROJECTED FLOOD VULNERABILITY DUE TO CLIMATE CHANGE CIRCA THE YEARS 2050 AND 2090 FOR THE WILLETS POINT AREA, QUEENS, NEW YORK

Prepared by:

Linda Sohl, Ph.D.
Mark Chandler, Ph.D.

Prepared for:

Arnold & Porter, LLP
399 Park Avenue
New York, NY 10022-4690

August 21, 2008

Acknowledgments:

Jessica Haller and Ken Mankoff also contributed to this report.

Executive Summary

In order for the planned Willets Point Development District to be eligible for coverage under the National Flood Insurance Program, the City of New York requires that all new construction be built at an elevation that exceeds the current 100-year flood level as determined by the FEMA Flood Insurance Study (FIS) for the City of New York (2007). For the Willets Point tidal floodplain, the project sponsor estimates that an increase in elevation to approximately 14 feet above stillwater height (FEMA, 2007) is required. However, taking into account the possible impacts of future climate change on global sea level rise / local stillwater height, the estimated 100-year flood levels (and thus the minimum required elevation increase) for the Willets Point area are substantially greater, ranging from approximately 18 feet by the 2050s up to 24 feet for the 2090s. The generally understood impacts of global warming on sea level rise include contributions from thermal expansion of the oceans, melting of mountain (alpine) glaciers, and melting or other forms of mass loss from large-scale continental ice sheets. Other future flood hazards that are less certain, but which would increase storm surge heights further come from East Coast winter storms (nor'easters) and hurricanes, which some evidence already suggests could become more powerful as the Atlantic Ocean continues to warm.

This report outlines the analysis performed to reach these conclusions, summarized in Section 5.

1. Introduction

The City of New York plans to redevelop the Willets Point area of northern Queens County in order to create the 61-acre Willets Point Development District. The redevelopment would involve the conversion of industrial and commercial property to a mixed-use community through removal of the property from the current owners under eminent domain.

In order for the Willets Point Development District to be eligible for coverage under the National Flood Insurance Program, the City of New York currently requires that all new construction be built at an elevation that exceeds the 100-year flood level as determined by the current FEMA Flood Insurance Study (FIS) (2007). For the Willets Point area, which is on a tidal floodplain, the project sponsor estimates that this would require filling in the planned redevelopment area to an elevation of approximately 14 feet above the National Geodetic Vertical Datum of 1929 (stillwater height) (FEMA, 2007). At this time, FEMA determines the elevation of the 100-year flood level through an established methodology that does not include any projections of the possible impacts of future climate change, leaving open the possibility that the planned new local elevation of 14 feet above stillwater height will be inadequate to protect the Willets Point Development District from 100-year flood events in the coming decades.

At the request of our client, Arnold & Porter LLP, we have produced preliminary projections of the 100-year flood level for the 205s and 2090s in order to take into account the effects of global climate change, which is forecast to include an increase in global mean sea level. At a minimum, this increase in global mean sea level would be expected to raise both the stillwater height and the elevation of the 100-year flood level in the Willets Point area, as well as increase the impacts of storm surges produced by East Coast winter storms (nor'easters) and hurricanes.

2. The Willets Point Project Area and the FEMA Flood Insurance Study

The Willets Point project area is a broad, triangular-shaped district extending into the southern end of Flushing Bay in Queens, bordered in part by Flushing Creek and Flushing Meadows wetlands to the east and south (see Figure 1). Much of the area slated for redevelopment is a tidal floodplain, which means that the principal source of flooding in the area comes from storms such as hurricanes and East Coast winter storms (nor'easters), rather than as a result of overflow from Flushing Creek. Since the project area lies within a "drowned valley" that has been filling in with sediment only over the past several thousand years, the general elevation of the Willets Point area is quite low – less than 10 feet above the stillwater height – and the depth to the top of the water table is correspondingly very shallow.

The current 100-year flood level identified for Willets Point in the Flood Insurance Study (FIS), and on the Flood Insurance Rate Maps (FIRMs), is approximately 13 feet in elevation; the 500-year flood level lies at approximately 15 feet (FEMA, 2007) (see Figure 2). These flood levels are the product of separate hydrologic and hydraulic analyses of the impacts of fluvial (river) flooding, coastal flooding by hurricanes, coastal flooding by East Coast winter storms (nor'easters), and wave height analysis, all combined in a probabilistic sense for the original FIS for the City of New York, completed in 1983. The analyses were documented in a series of

reports prepared between 1979 and 1983 by the engineering firm Camp, Dresser and McKee (now called CDM; see FEMA, 2007 for a summary). Although the FIS has been updated in part several times since 1983, the only update impacting the Willets Point area is the latest revision (2007), for which the FEMA-designated 100-year and 500-year flood levels were re-delineated onto higher resolution topographic and base maps (at 1:1,200 scale, with 2-foot pixel resolution from photography dated 2004) provided by the New York City Department of Information Technology and Telecommunications (NYC DOITT).

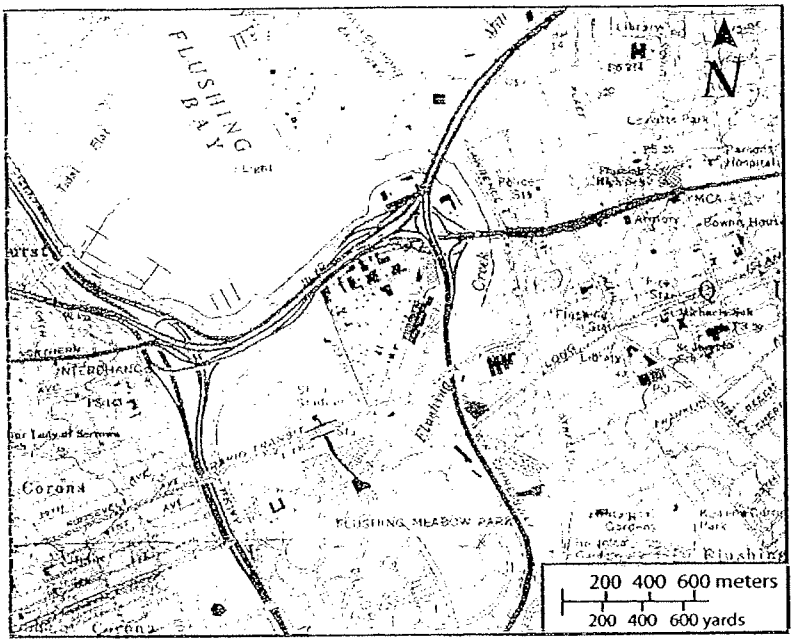
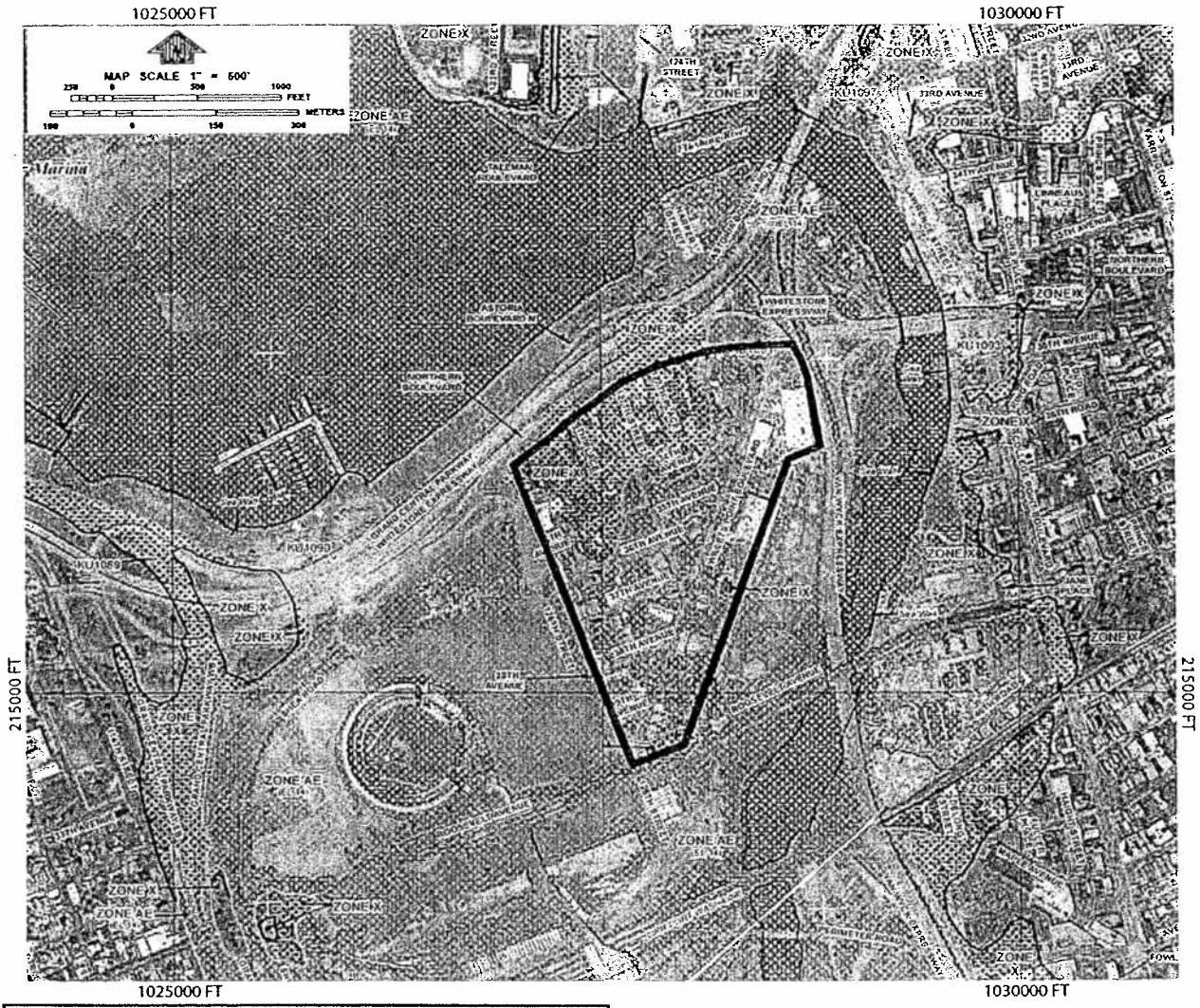


Figure 1. The planned Willets Point Development District is shown here shaded in green. Topographic base map is taken from the U.S. Geological Survey's Flushing, N.Y. 7.5' Quadrangle Map (scale 1:24,000); contour interval is 10 feet.

While the transfer of the flood level information to a higher resolution base map may provide some improvement in the community's understanding of possible flood risks, it is important to note that the 100-year and 500-year flood levels at Willets Point have not actually been reassessed by FEMA since 1983. The flood levels therefore do not reflect the results of newer, improved computer models simulating floods and storms surges, nor do they take into account more recent climatological information or projections of future climate change. Other, more recent assessments of various aspects of flood risk to the Willets Point area are available, and are discussed briefly below. However, since the National Flood Insurance Program relies up the information specified in the FEMA FIS, the general flood hazard being used as a guideline for the minimum elevation of new construction at Willet Point is likely an underestimate that will prevent the community from maintaining NFIP eligibility in the coming decades.

3. Projected Impacts of Global Climate Change on Flood Potential at Willets Point

The issue of global climate change may seem far removed from the immediate concerns of coastal flooding in the Willets Point area, especially since the primary emphasis in the popular media has been on increases in global average temperature, and large regional swings in precipitation patterns (e.g., the second occurrence of a "500-year flood" event in the midwestern states during the past 15 years, or extended drought in the southwestern U.S.). However, a



DETAILS FROM FEMA FLOOD INSURANCE RATE MAP (FIRM) LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Area AE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE AE — Base Flood Elevations determined.

OTHER FLOOD AREAS

ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood

OTHER AREAS

ZONE X — Areas determined to be outside the 0.2% annual chance floodplain.

1% annual chance floodplain boundary

0.2% annual chance floodplain boundary

(EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*
*Referenced to the National Geodetic Vertical Datum of 1929

600000 FT — 5000-foot grid ticks: New York State Plane coordinate system, Long Island zone (FIPSZONE3104), Lambert Conformal Conic projection

Figure 2. Flood levels in the Willets Point area. The Willets Point project area is outlined in black. Image is compiled from FEMA FIRMs 3604970113F and 3604970114F (2007).

Shown here are the current FEMA boundaries for the 100-year flood level, or 1% annual chance floodplain (Zone AE, in light aqua stippling) and the 500-year flood level, or 0.2% annual chance floodplain (Zone X, in black stippling).

globally warmer world does bring with it a phenomenon that manifests locally on all shorelines – specifically, an increase in mean sea level, or stillwater height.

Contributing factors to global sea level rise (SLR) as a result of an increasingly warm climate include:

1. *Thermal expansion of seawater* - The most certain least uncertain of these factors for future climate projections is the phenomenon of thermal expansion. The principle is straightforward and is drawn from basic physics: when the temperature of a given amount of water is increased, the water becomes less dense, so that the same amount of water now takes up more space. Contributions to SLR from thermal expansion as measured over the past decade (1993-2003) have been on the order of 1.6 +/- 0.5 mm per year (IPCC, 2007).

2. *Melting of mountain glaciers and ice caps* - While this phenomenon has been widely observed over the past decade, with mountain glaciers in North America, South America, Africa, Europe, and Asia rapidly retreating, the overall volume of water contained is these glaciers is not large by comparison with the major ice sheets of Greenland and Antarctica. Measured contributions to SLR over the past decade (1993-2003) are roughly half that of thermal expansion, on the order of 0.8 +/- 0.2 mm per year (IPCC, 2007); future projections suggest no contribution greater than ~5 mm by the year 2100 (Raper and Braithwaite, 2006).

3. *Melting and mass loss from large-scale continental ice sheets* - The contribution to SLR from the melting of the Greenland Ice Sheet and/or West Antarctic Ice Sheet over the course of this century could be considerable, although estimates of the rate at which these large ice sheets might decay are poorly constrained. The uncertainty lies in the poor state of scientific data regarding the behavior of ice sheet flow under extreme warming conditions; with incomplete knowledge of how quickly the margins of ice sheet may collapse, it is difficult to assess the potential contribution to mean sea level rise. Measurements of ice mass loss from the Greenland Ice Sheet between 1997-2003 (Alley et al., 2005) were equivalent to just 0.21 mm/year increase in sea level rise from that source. Estimates from a variety of models range from 24-108 cm (Gornitz et al., 2002) and 12 cm/century (Wild et al., 2003). Paleoclimate studies of two previous global warmings, however, show alarming loss of ice sheet mass (on the order of meters) under conditions that were no warmer than the best estimates of what global temperatures will be like by 2050.

The Fourth Assessment Report of the U.N. Intergovernmental Panel on Climate Change (IPCC) (2007) relies largely on thermal expansion for its projections of sea level rise by the year 2100, with estimates ranging from 30 to 80 cm (~1.0 to 2.6 ft). The IPCC explicitly did not wish to include other potential contributions to sea level change in their estimate, in an effort to raise the level of certainty of the overall assessment. However, the SLR estimates are, as a result, widely considered in the scientific community to be absolute minimum values (Hansen, 2007; Rahmstorf et al., 2007).

Projections based on past observations (Alley et al., 2005) and model results (e.g., Wild et al., 2003; Horton et al., 2008) generally assume that ice sheet behavior in Greenland and/or West Antarctica will remain "stable," with no non-linear changes in the rate of ice sheet melting.

Many researchers agree however that if that assumption of no acceleration in the rate of ice sheet melt proves false, global SLR could increase quite rapidly. As a guide, Lenton et al. (2008) point out that the IPCC's projection of a 2-3°C increase in global average temperature is similar to conditions during the Last Interglacial, a period of climate amelioration during the last ice age (circa 115,000 – 130,000 years ago) when global mean sea level was several meters higher than at present. Lenton et al. therefore suggest that a contribution of up to 3 meters (9.8 ft) of SLR from both the Greenland Ice Sheet and the West Antarctic Ice Sheet under these temperatures over the course of this century is not unreasonable. Even larger values of sea level rise, up to 25 meters, are observed at similar temperature ranges during older time periods (~3 million years ago), but these are thought to represent longer response times than a single century.

4. Current Estimates for Storm Surge Vulnerability at Willets Point

In assessing the impacts of future climate change on the flood hazard at Willets Point, a compounding factor is the potential for greater storm surge heights from more powerful cyclonic storms such as hurricanes and nor'easters. The flood contribution from these storms is *in addition to* any increase in stillwater height via the mechanisms described above, and thus deserves very serious consideration as part of the development planning process (see, e.g., Nicholls, 2002; Wu et al., 2002; Kleinosky et al., 2007).

The angular shape of the New York Bight region (which includes, but is not limited to the City of New York, New York Harbor, and the western end of Long Island Sound) plays an important role in the determining the impacts of hurricanes and nor'easters, but that role is dependent in large part on the path of the storm. Since wind strength is highest on the right side of a counterclockwise-rotating cyclone in the North Atlantic basin (Donnelly and Webb, 2004), a storm that passes to the east of New York City results in a weaker wind field over the city, and the direction of the winds tends to push water away from the coast. However, a storm passing just west of New York City brings the full force of its winds to bear in driving water into New York Harbor and up the Hudson and East Rivers, resulting in major coastal flooding.

Though the North Shore of Long Island might at first blush be thought to be more protected from cyclone-driven seas, a storm path that hugged the coastline just west of New York City would also result in some of the cyclone's strongest winds funneling the waters of Long Island Sound westward into the narrower confines between Queens County to the south and Bronx County to the north, creating an enhanced coastal flooding response. Flushing Bay, at the far western end of Long Island Sound, could thus be expected to see significant storm surge heights with extensive damage from flooding (MNYHTS, 1995; MTA Task Force, 2007).

a. Hurricanes

In a 1995 report by the U.S. Army Corps of Engineers, FEMA, the National Weather Service, and the NY/NJ/CT State Emergency Management offices (MNYHTS, 1995), the NOAA SLOSH (Sea, Lake and Overland Surges from Hurricanes) computer model was used to project the maximum storm surge heights anticipated for hurricanes ranging from 1 through 4 on the Saffir-Simpson Hurricane Intensity Scale. The SLOSH model, which is run by the National Hurricane

Center to predict storm surges for active storms, can also be used to estimate maximum storm surge heights resulting from historical or hypothetical hurricanes by taking into account several storm characteristics: atmospheric pressure at the center of the storm (an indicator of storm strength), the size of the hurricane, its forward speed, the path of the storm, and hurricane wind speed and direction. These maximum surge heights are considered accurate within +/- 20%, as the actual storm surge will depend on the timing of storm passage with respect to astronomical tides. For example, storm surges would be enhanced by a storm's arrival at high tide, and lessened if their arrival is at low tide.

Table 1. Hurricane storm surge projections for Willets Point, Queens, New York (based on MNYHTS, 1995)

Saffir-Simpson Hurricane Scale	Storm Surge Peak Heights Projected by SLOSH	Range of Peak Storm Surge Heights
Category 1 (74-95 mph)	6.3 ft	5.0 to 7.6 ft
Category 2 (96-110 mph)	11.4 ft	9.1 to 13.7 ft
Category 3 (111-130 mph)	18.3 ft	14.6 to 22.0 ft
Category 4 (131-155 mph)	23.0 ft	18.4 to 27.6 ft

The ranges of projected storm surge heights for Category 3 and 4 hurricanes already exceed the current 100-year flood level at Willets Point of approximately 13 feet, and the proposed new elevation for the redeveloped Willets Point area of approximately 14 feet.

What events of this magnitude have occurred in the past?

Since 1900, there have been nine hurricanes with significant impacts on the New York City metropolitan area, of which four reached Category 3 status. Only one of these, the Great Hurricane of 1938 (the "Long Island Express"/New England Storm), was still a Category 3 storm as it crossed Long Island, some 40 miles east the New York City. The other Category 3 storms (Hurricane Carol, 1954; Hurricane Donna, 1960, and Hurricane Gloria, 1985) had already begun to weaken, or had moved further eastward when their effects were felt in the NYC area. As a result, Carol, Donna and Gloria produced significant wind and flood damage owing to strong gusts and heavy rains, but with limited storm surge impacts (generally under 7 feet, although a surge of 11 feet was recorded for Donna at the Battery in lower Manhattan) (Blake et al., 2007; MTA Task Force, 2007).

Prior to 1900, there are historical records of major storms striking the New York City. While the extensive damage described was suggestive of larger storms, it is difficult to evaluate quantitatively, and from available records, what the individual storms may have been like in terms of intensity. To address this issue Scileppi and Donnelly (2007) used the sedimentary record of storm deposits swept over and behind the barrier islands of Long Island's South Shore (e.g., Long Beach Island) to reconstruct a history of the most severe hurricanes and winter storms to have struck western Long Island. The data they recovered highlighted a total of seven hurricanes and 15 winter storms between the years 1693-1996, with just four hurricanes (1693,

1788, 1821, and 1893) reaching Category 2 or higher on the Saffir-Simpson scale of hurricane intensity, and exceeding an estimated minimum 8 to 10 feet (2.5 to 3 meters) of storm surge. These estimates are constrained by the current elevation of the barrier islands, which is assumed not to have changed significantly over time. The authors of this study do point out, however, that the sites examined may be somewhat insensitive with respect to the full magnitude of older hurricane events, in part due to the migration and changes in shape of the barrier islands through erosion. Such changes in position and shape of the islands can influence the extent to which storm deposits are distributed and preserved, and accordingly our perception of the magnitude of past storms.

b. East Coast Winter Storms (Nor'easters)

While hurricanes have the potential to drive higher storm surges, they tend to move swiftly along their paths, so their surges are short-lived. In contrast, major winter storms, though less intense at their centers, are much larger in scale, and are slower-moving systems that typically produce storm surges persisting over several days, thereby increasing their potential for damage (Hill, 2008).

Given the focus of the MNYHTS (1995) report on hurricanes, projected maximum storm surge heights for major winter storms (commonly known as nor'easters) were not calculated, though they have the potential to cause similar amounts of damage. These storm events have achieved wind gusts of as much as 90 miles per hour I the New York region and even greater wind speeds in more southerly (warmer) states. This would place them in the same range as Category 1-2 hurricanes with respect to anticipated storm surge heights (Scileppi and Donnelly, 2007; MTA Task Force, 2007; see also Table 1). The March 1993 "storm of the century" had a central pressure that reached a low of 960 mb, similar to a Category 2 or 3 hurricane. Overall the frequency and strength of nor'easters has increased during the past 50 years (MTA Task Force, 2007). Climate change, particularly warming ocean temperatures, could accelerate this trend; if the result is further intensification of nor'easters, then the storm surge and flooding impact of these events could increase markedly. Given that they are the most common type of severe storm to effect the New York City metropolitan region, further analysis of the future impact of nor'easters is warranted.

5. Implications of Global Sea Level Rise and Storm Frequency on the 100-Year Flood Level and Storm Surge Heights at Willets Point

In their analysis of climate change impacts on the New York Metropolitan area, Gornitz et al. (2002) used global climate model results to suggest that 100-year flood events could increase in height from the current ~3 meters (9.8 ft) to as much as 3.8 meters (12.5 ft) by the 2050s and up to 4.2 meters (13.8 ft) in the 2090s. To arrive at these estimates, they look at a two-decade average of the effects of thermal expansion in global warming computer simulations projecting climate impacts out to the year 2100. (For the 2050s, they averaged the simulation years 2040-2059; for the 2090s, they averaged the years 2070-2099). Note, however, that these projected 100-year flood levels did not include any contribution from ice sheet melt to SLR (Gornitz et al.,

2002), so they must be considered minimum estimates for any expected increase in 100-year flood height.

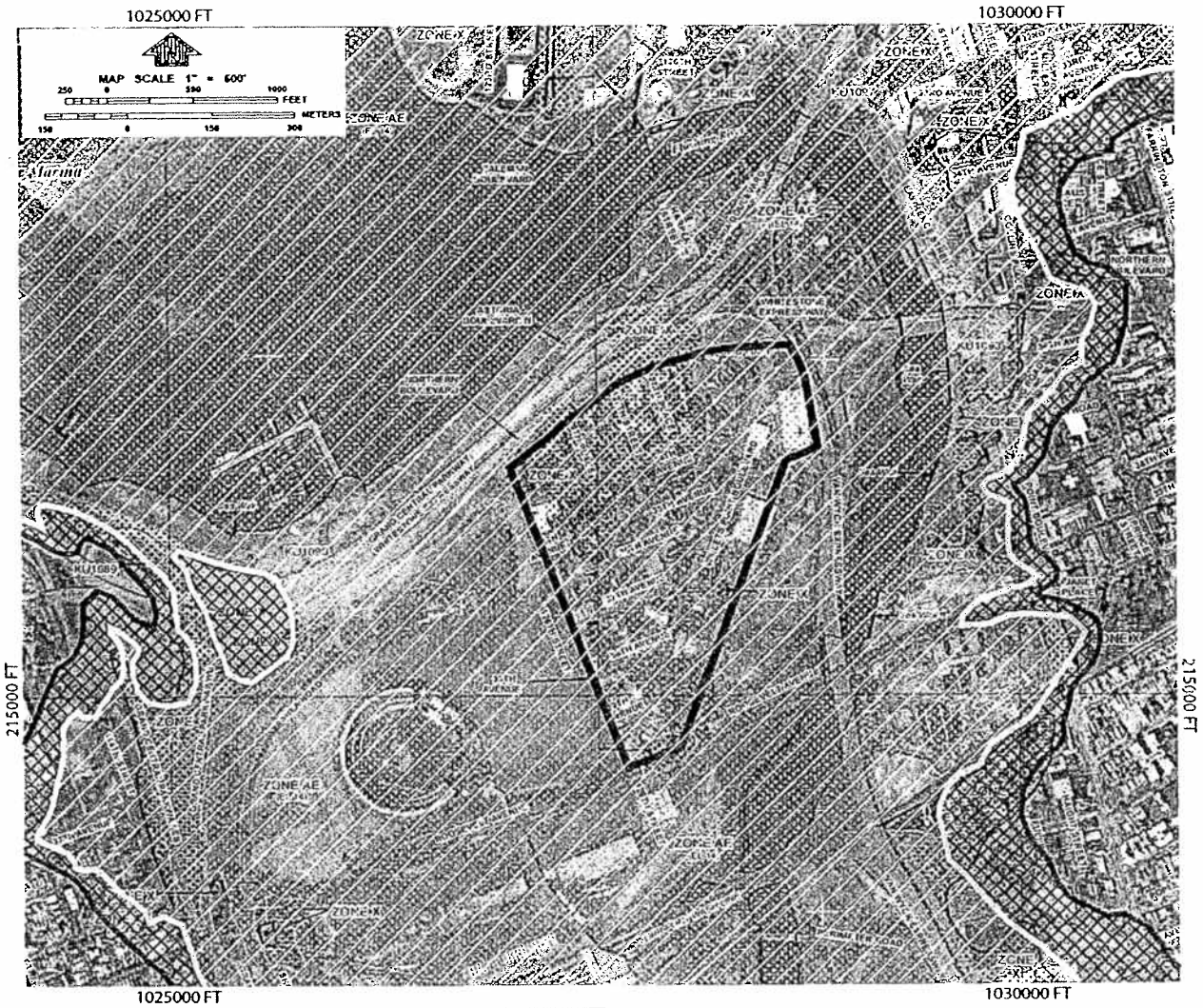
Studies over the past few years have shown an accelerating pace of ice sheet melting in both Greenland and Antarctic, aided in part by new data from NASA's Gravity Recovery and Climate Experiment (GRACE) and by climate modeling studies (e.g., Overpeck et al., 2006; Velicogna and Wahr, 2006; Joughin et al., 2008). Based on these and similar studies, it appears reasonable that ice sheet melting rates could accelerate, increasing sea level by perhaps as much as 4-5 feet by 2050, and as much as 8-10 feet by 2090, as per Lenton et al. (2008). If we include the contribution of ice sheet melting along with and the 100-year flood level for Willets Point could easily reach 18 ft in the 2050s, and as much as 24 ft by the 2090s. It follows that the planned Willets Point Development District would need to be elevated to a minimum of 18 feet above stillwater height in order to remain eligible for the NFIP over the next few decades.

To arrive at a more comprehensive assessment of how the planned Willets Point Development District might be impacted by future climate change, we need to take into account all the factors that could contribute to flood risk. If we consider the maximum reasonable SLR as determined by Global Climate Model simulations (MTA Task Force, 2007), in conjunction with the upper range of expected storm surge heights at Willets Point (MNYHTS, 1995) and plausible estimates for the contribution of Greenland and West Antarctic ice melt to SLR (Lenton et al., 2008), we find that by the year 2100, the storm surge heights of even Category 1 hurricanes (and nor'easters similar in strength) exceed the current 100-year flood level at Willets Point of ~13 feet by a significant amount (see Table 2; Figures 3 and 4). Considering the additional potential for increasing storm intensity, approximating category 2-3 hurricane force storms, these levels could climb even higher.

Table 2. Estimated increase in projected storm surge heights for Willets Point, Queens, New York circa 2050 (2090) in the future

Saffir-Simpson Hurricane Scale	Range of Peak Storm Surge Heights from SLOSH*	Sea Level Rise Via Thermal Expansion†	Sea Level Rise via Ice Sheet Melting ‡	Total Estimated Increase in Range of Storm Surge Height
Category 1 (74-95 mph)	5.0 - 7.6 ft	0.9 ft (1.6 ft)	4.9 ft (9.8 ft)	10.8 – 13.4 ft (16.4 – 19.0 ft)
Category 2 (96-110 mph)	9.1 - 13.7 ft	0.9 ft (1.6 ft)	4.9 ft (9.8 ft)	14.9 – 19.5 ft (20.5 – 25.1 ft)
Category 3 (111-130 mph)	14.6 - 22.0 ft	0.9 ft (1.6 ft)	4.9 ft (9.8 ft)	20.4 – 27.8 ft (26.0 – 33.4 ft)
Category 4 (131-155 mph)	18.4 - 27.6 ft	0.9 ft (1.6 ft)	4.9 ft (9.8 ft)	24.2 – 33.4 ft (29.8 – 39.0 ft)

* Ranges as given in Table 1.
† Sea level rise determined relative to 2000-2009 via the GISS GCM for 2050's (2080's) (MTA Task Force, 2007, Appendix 2).
‡ Based on estimates of Greenland Ice Sheet and West Antarctic Ice Sheet possible losses with a 2-3°C global average temperature increase by the year 2100 (Lenton et al., 2008).



DETAILS FROM FEMA FLOOD INSURANCE RATE MAP (FIRM) LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Area AE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE AE Base Flood Elevations determined.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

1% annual chance floodplain boundary

0.2% annual chance floodplain boundary

(EL 987) Base Flood Elevation value where uniform within zone; elevation in feet*
*Referenced to the National Geodetic Vertical Datum of 1929

600000 FT 5000-foot grid ticks: New York State Plane coordinate system, Long Island zone (FIPSZONE3104), Lambert Conformal Conic projection

Explanation (This Study)

Area subject to 100-year flood event circa 2050 (this study)

Additional area subject to 100-year flood event circa 2090 (this study)

Figure 3. Flood levels in the Willets Point area. The Willets Point project area is outlined in black. Image is compiled from FEMA FIRMs 3604970113F and 3604970114F (2007).

In addition to the current FEMA boundaries for the 100-year and 500-year flood levels (1% and 0.2% annual chance floodplains; see also Figure 2), the projected 100-year flood levels for 2050 and 2090 are shown by the yellow hatching and blue cross-hatching, respectively. Projected flood levels take into account estimates of sea level rise as a result of global climate change. Boundaries shown are approximate.

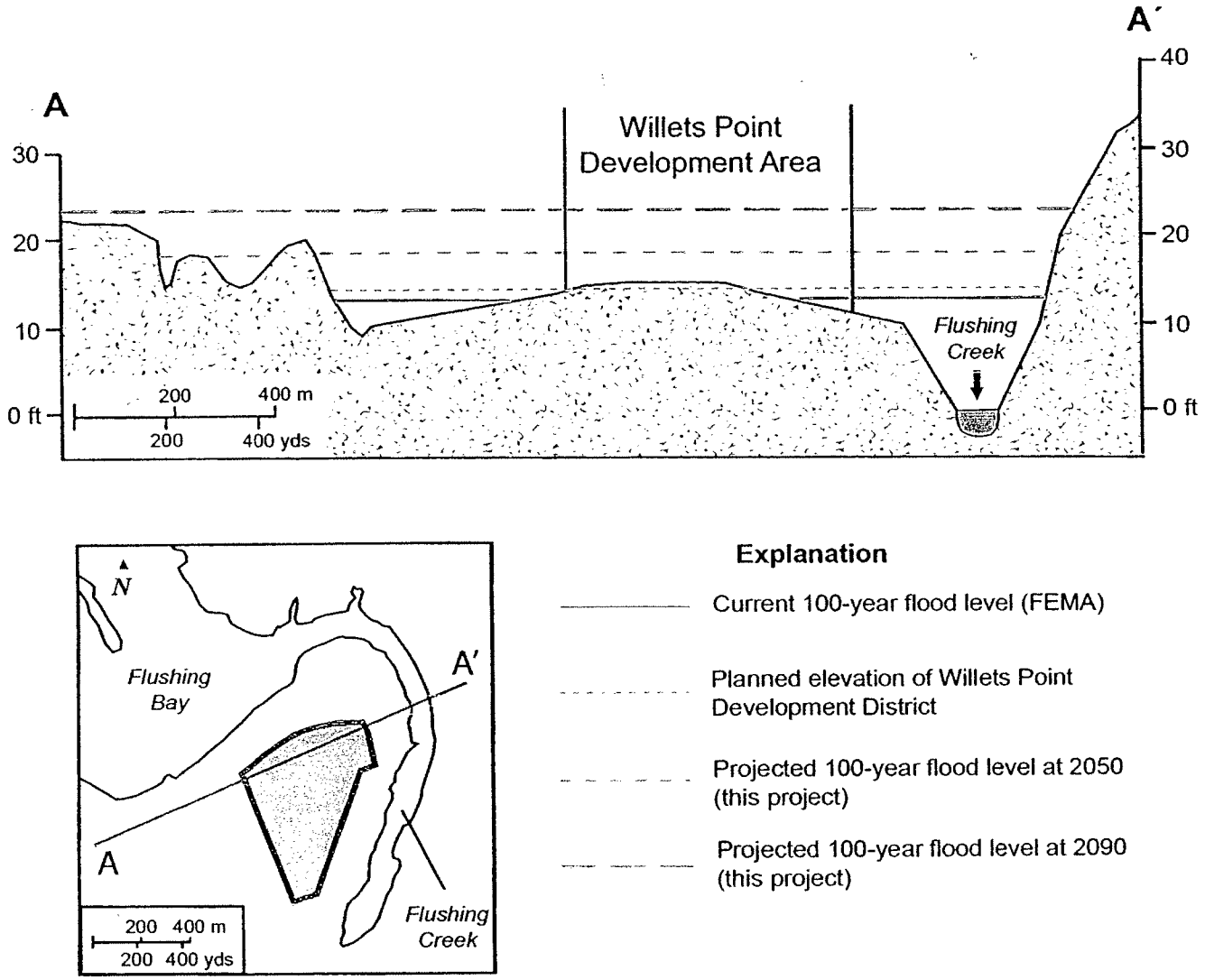


Figure 4. Schematic cross-section A - A′ of the elevation across Willets Point and the surrounding area, showing the relative heights of the current 100-year flood level, the planned new elevation of the Willets Point Development District, and the projected 100-year flood levels for the years 2050 and 2090 from this study. The location of the cross-section with respect to the Willets Point Development District (shaded gray) is shown on the inset map. Elevation is exaggerated 2X for clarity.

Note that even though part of the Willets Point Development District is at an elevation above the current 100-year flood level defined by FEMA, the entire district lies below the projected 100-year flood level for the year 2050.

A correlative issue is of course the question of what frequency we can expect such major storm events to strike the New York City metropolitan area over the next century. Projecting future changes in hurricane or extratropical cyclone intensity is difficult, because any such projections have to be able to include some element of predicting storm paths that could impact New York specifically, and not just the North Atlantic ocean basin in general. In their analysis of future sea level rise impacts on New York City, Gornitz et al. (2002) utilized Global Climate Model simulations of various future climate warming scenarios to assess changes in 100-year flood event levels and frequency of occurrence. They suggest that the recurrence time for 3-meter flood events, currently the average height of a 100-year event, will recur once every 19 years by the 2050s, and by the 2090s, once every four years on average for the most extreme projections of sea level rise associated with a Global Climate Model simulation (their CCGG scenario; Gornitz et al., 2002).

The frequency of hurricane events in a warmer world continues to be the source of considerable general debate. Some researchers have argued that increased warmth in the surface ocean, as a direct result of global warming, would fuel more and/or more frequent hurricanes in the North Atlantic ocean basin (e.g., Gray et al., 2008). Such projections have been based largely on statistical relationships between historical storms and sea surface temperatures in the tropical Atlantic ocean (e.g., Mann and Emanuel, 2006). In contrast, Knutson et al. (2008) have argued that a global average temperature increase would drive changes in the upper level winds of the troposphere, producing increased wind shearing at altitude that would effectively "behead" cyclonic storms before they had a chance to grow to significant size, despite the warmth of the surface ocean. These authors admit, however, that their model for hurricane formation is insufficient to handle the simulation the most intense hurricanes, nor the strong dependence of those most intense storms on warmer sea surface temperatures. It is thus quite possible that if hurricanes manage to survive having their tops sheared by strong upper level winds, they would be more likely to become more powerful storms (perhaps Category 3 or higher) with storm surge heights well in excess of the planned elevation increase of Willets Point to 14 feet above the current stillwater height.

6. Summary and Recommendations for Revisions to the 100-Year Flood Level at Willets Point

The current 100-year flood level in the Willets Point area, as marked on FEMA Flood Insurance Rate Maps and described in the City of New York FIS (FEMA, 2007), is based upon a previous generation of computer models and some outdated information, and likely represents an underestimate of that elevation. It therefore follows that the project sponsors' estimate of an increase to the 14-foot elevation mark is also an underestimate, especially considered in the light of the range of possible changes introduced also by global climate change in the stillwater elevation and storm frequency. Based on our review of the literature, we suggest that a minimum base elevation of approximately 18 to 24 ft above the current stillwater height is advisable to adequately protect the planned Willets Point Development District from 100-year flood events over the coming decades.

We note, however, that even the more recent SLOSH analyses of the flood hazard at Willets Point (MNYHTS, 1995) we incorporated into our minimum elevation estimates are based in part on climatological data that do not capture the currently changing local climate trends. The IPCC climate scenarios (2007) used to drive the Global Climate Model estimates of sea level rise will themselves soon be outdated, as the current rate of atmospheric CO_2 increase is now exceeding even the "business as usual" scenario (A1F1) that assumed no reduction in greenhouse gas emissions (Raupach et al., 2007). We recommend that a reanalysis of the flood hazard at Willets Point be undertaken, using a current generation state-of-the-art Global Climate Model in combination with a downscaled regional climate model, such as WRF, which can in turn be used to provide input for a coastal flood model like ADCIRC. Reanalysis can also factor in the most up-to-date climatological data with projected sea level increases and coastal flooding models to produce a more accurate portrait of the flood risk at Willets Point.

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Linda Sohl, Ph.D.

LINDA E. SOHL, Ph.D.

Svante Scientific, Inc., P.O. Box 250197, New York, New York 10025
Tel.: (914) 649-0763 / FAX: (800) 441-7002 / E-mail: lsohl@svantescientific.com

Expertise in combining geology and climate science to understand the nature of past and future climate change and environmental impacts.

PROFESSIONAL AND RESEARCH EXPERIENCE

***Svante Scientific, Inc.**, New York, New York.* This private sector initiative seeks to deliver customized climate projections, datasets and analyses to the public and private sectors as an aid in planning mitigation and adaptation responses to future climate change.

Director of Client Development / Climate Scientist, 2008-present

- Identify possible climate-related vulnerabilities and opportunities for clients.
- Assess specific client needs and determine the appropriate data/model strategies for further exploration.
- Conduct data/model comparisons to validate computer climate simulations.
- Evaluate climate simulation results for broader environmental impacts on both natural and human-influenced systems.

***Center for Climate Systems Research, Columbia University,** and **NASA/Goddard Institute for Space Studies**, New York.* This center has the objective of providing an enhanced understanding of the Earth's climate sensitivity and variability, as well as the various mechanisms that control them.

Associate Research Scientist, 2005-present

- Investigate the mechanisms driving extreme warm and cold climates in Earth history, as well as periods of rapid climate transition.
- Validate numerical climate model output through the use of both geological field data and computer climate simulations.

***La Porta & Associates, LLC**, Warwick, New York.* This consulting firm provides geological and archaeological expertise for cultural resource management investigations.

Geologist / Project Manager, 1997-2005

- Reconstructed historic and prehistoric landscapes through the characterization of soil profiles and past signs of human occupation.
- Mapped and analyzed prehistoric mining impacts on the environment.
- Co-author and/or editor on over 40 geoarchaeological reports for cultural resource management surveys conducted in the northeastern United States.

***Matthew Bender & Company**, New York, New York.*

Writing Associate, 1989-1993 (Copy Editor, 1988-1989)

- Provided editorial support for publications on business law, labor law and intellectual property; researched federal regulations and case law to ensure that publications remained current.

ACADEMIC APPOINTMENTS

2007-	Lecturer, Department of Earth and Environmental Science, Columbia University, New York (Undergraduate classes taught: The Climate System [Fall 2007]; Frontiers of Science [Spring/Fall 2008])
2003-2005	Adjunct Associate Research Scientist, Lamont-Doherty Earth Observatory of Columbia University, Palisades, New York
2000-2003	Postdoctoral Research Scientist, Lamont-Doherty Earth Observatory of Columbia University, Palisades, New York
1997	Sedimentologist, Ocean Drilling Program Leg 174A: Continuing the New Jersey Mid-Atlantic Sea-Level Transect.
1993-1999	Graduate Research Associate, Lamont-Doherty Earth Observatory of Columbia University, Palisades, New York

PROFESSIONAL / ACADEMIC ACTIVITIES

2007-	Team Leader, NASA New York City Research Initiative. The NYCRI provides high school / undergraduate students and high school teachers the opportunity to participate in a scientist's active research project. Supervised two teams in conducting climate change research projects, which in turn have supported the development of research proposals and educational materials.
2005-	Science and Content Editor, The Educational Global Climate Modeling Cooperative Project at Columbia University (The EdGCM Project). The EdGCM project makes global climate modeling accessible to students, teachers, and undergraduate professors through user-friendly software, educational materials, professional development workshops, and on-site training. Created software manuals and associated web content.
2002-	Member, Volunteer Language Editor Program, American Geophysical Union. This program provides free editorial assistance to non-native English speakers seeking to publish in scientific journals published by the American Geophysical Union.

EDUCATION

2000	Ph.D. in Earth & Environmental Science, Lamont-Doherty Earth Observatory of Columbia University, Palisades, New York (M.A. 1995, M.Phil. 1999)
1993	B.A. in Geology, Hunter College of the City University of New York
1987	B.A. in Communications, Fordham University, Bronx, New York

Mark Chandler, Ph.D.

MARK A. CHANDLER, Ph.D.

Svante Scientific, Inc., P.O. Box 250197, New York, New York 10025
Tel.: (608) 445-0166 / FAX: (800) 441-7002 / E-mail: mchandler@svantescientific.com

Over 20 years of experience in climate science and the use of global climate modeling to understand past and future impacts of climate change.

CURRENT PROFESSIONAL AND ACADEMIC POSITIONS

***Svante Scientific, Inc.**, New York, New York.* This private sector initiative seeks to deliver customized climate projections, datasets and analyses to the public and private sectors as an aid in planning mitigation and adaptation responses to future climate change.

President / Principal Climate Scientist

- Direct in-house research and development projects.
- Identify possible climate-related vulnerabilities and opportunities for clients.
- Design and implement custom climate model simulations.
- Provide quality assurance for climate model output and analysis.

***Center for Climate Systems Research (CCSR) at Columbia University**, New York.* This center is designed to improve the collaboration between Columbia University researchers and climate research facilities at NASA'S Goddard Institute for Space Studies, with the objective of providing an enhanced understanding of the Earth's climate sensitivity and variability, as well as the various mechanisms that control them.

Principal Investigator / Associate Research Scientist

- Co-founded CCSR in 1992 by securing a cooperative agreement with NASA.
- Hold joint appointment with NASA Goddard Institute for Space Studies (GISS).
- Provide oversight for over 30 scientists, students, and programmers and an annual budget of approximately $3.7 million/year.
- Managed over $15 million in grants from NASA, the National Science Foundation and other sources to support CCSR research investigating the impacts of past and future climate change since 1992.

***The Educational Global Climate Modeling (EdGCM) Cooperative Project at Columbia University**, New York.* The EdGCM project is a software development / NASA technology transfer venture aimed at improving the general public's access to complex computer simulations for climate change impact assessments. Since its first release to the public in January 2005, EdGCM has gained over 40,000 users on 7 continents.

Project Director / Founder

- Designed and supervised the development of an easy-to-use graphical user interface for a NASA global climate model.
- Created partnerships with instructors at both the high school and university levels to design laboratory exercises and full-semester courses using EdGCM.
- Leader of over 50 professional development workshops on EdGCM use for educators.

OTHER ACADEMIC APPOINTMENTS

2005- Honorary Faculty Fellow, University of Wisconsin, Department of Atmospheric, Oceanic, and Space Sciences (also 1995-2000)

1993-1995 Adjunct Associate Research Scientist, Lamont-Doherty Earth Observatory of Columbia University, Palisades, New York

1991-1994 Postdoctoral Fellow, NOAA & University Corporation for Atmospheric Research (UCAR), Boulder, Colorado

1987-1992 Graduate Research Assistant, Lamont-Doherty Earth Observatory of Columbia University, Palisades, New York

1984-1987 Graduate Research Assistant and Teaching Assistant, Department of Geological Sciences, University of Texas at Austin

PROFESSIONAL ACTIVITIES

Contributing Author, IPCC Fourth Assessment Report, *Working Group I Report "The Physical Science Basis,"* Chapter 6, "Palaeoclimate" (2007)

Steering Committee member, National Research Council Panel on Deep-Time Geologic Records for Understanding Climate Change (2007-)

Steering Committee member, National Science Foundation Geosystems Initiative (2002-)

PUBLICATIONS AND PRESENTATIONS

Sole or co-author on over 30 peer-reviewed publications, and presenter of hundreds of talks on issues related to climate change. Representative examples include:

Chandler, M. (1995). "Global Warming." In S. Schneider, ed., *Encyclopedia of Climate and Weather.* Oxford, Oxford University Press.

Chandler, M.A. (2007). EdGCM: Providing access to climate simulation capabilities for educators, students and the general public. Geological Society of America Annual Meeting, Abstracts with Programs, vol. 39(6), p. 254.

Chandler, M.A., J. Haller, K. Mankoff, A. McKeon, and L.E. Sohl (2008). Acting on inevitable climate change: How should scientists participate? Geological Society of America Annual Meeting, Abstracts with Programs.

Hansen, J., M. Sato, R. Ruedy, L. Nazarenko, A. Lacis, G.A. Schmidt, G. Russell, I. Aleinov, M. Bauer, S. Bauer, N. Bell, B. Cairns, V. Canuto, **M. Chandler,** Y. Cheng, et al. (2005). Efficacy of climate forcings. *Journal of Geophysical Research, 110*(D18), 104, doi:10.1029/2005JD005776.

Soreghan, G.S., T.J. Bralower, **M.A. Chandler**, J. Kiehl, M. Lyle, T.W. Lyons, C.G. Maples, I.P. Montañez, and B.L., Otto-Bliesner (2005). *GeoSystems: Probing Earth's Deep-Time Climate & Linked Systems.* Report of a workshop sponsored by the National Science Foundation (NSF), September 9-11, 2004, Arlington, VA, 35 p.

EDUCATION

Undergraduate Institution	*Major*	*Degree/Year*
University of Wisconsin-Madison	geology & geophysics	B.S. 1983
Graduate Institutions	*Major*	*Degree/Year*
University of Texas-Austin	geology	M.S. 1986
Columbia University, New York	earth & atmospheric sciences	Ph.D. 1992

FPM group _____ Engineering and Environmental Science

FPM Group, Ltd.
FPM Engineering Group, P.C.
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August 22, 2008

Asma Syed, Planner
NYC Economic Development Corporation
110 William Street
New York, NY 10038

Re: Willets Point Development Plan

Dear Ms. Syed:

FPM Group (FPM), on behalf of our client Willets Point Industry and Realty Association, has performed a review of the April 2008 Draft Generic Environmental Impact Statement (DGEIS) and associated documents for the Willets Point Development Plan focusing on hazardous material impacts to surface and groundwater resources. Statements of our qualifications are enclosed with this letter.

We have several concerns with the DGEIS, some of which were already pointed out in our August 13, 2008 oral statement. Enclosed herewith is our written statement which reiterates these points as well as additional concerns with the DGEIS.

Additional Site Characterization Required

The DGEIS and/or supporting documentation state that the site has a long history of contamination, including the site being used as an ashfill, violations for illegal dumping of vehicle fluids, and observations of discolored soils and pooled automotive fluids. Sampling undertaken as part of the Phase II ESA shows only minor contamination is present. Indeed sampling did not identify any petroleum contamination in soils even though the Phase II identified multiple discharge violations recorded in 2001 in the District and found unregistered UST's and additional UST's in the District whose whereabouts remain unknown. Therefore the only conclusion that can be drawn from the sampling data collected is that it is not representative of the site. Past practices of the site suggest that large areas of contamination were "missed" in the Phase II. Perhaps this was due to the bias nature of the sampling network which included only sampling locations under sidewalks and streets. Selecting only impervious areas is unlikely to show contamination and renders these locations unrepresentative of the District. Consider the statement in the Phase II ESA " ...given the history of uses within the district other potential contamination is expected to be widespread". By its own admission, the DGEIS does not describe the environmental conditions representative of the area and therefore the project should not be allowed to continue without a complete characterization of the site.

The Phase II ESA states it "was only a **limited preliminary** subsurface investigation". We believe that additional deeper sampling needs to be performed across the entire site to fully characterize the vertical and horizontal extent of contamination in areas of concern in soil and groundwater to assess its associated impacts. Note: sampling in historical areas of concern is likely to result in more contamination, but a representative site characterization needs to be

performed to confirm this. Contaminants such as dense non aqueous phase liquids (DNAPLs) (e.g., chlorinated solvents) need to be targeted as they sink and contaminate the groundwater column as they migrate downward. They can also collect on a low permeable/confining layers (e.g., clay) and follow the slope of the confining layers regardless of the groundwater flow direction to other areas and through confining layers through preferential pathways. In addition to determining the vertical extent of contamination, the deep borings on the site need to characterize the geology beneath the site (e.g., thickness of clay layer) and methane levels. The vertical sampling at the site needs to recognize this and characterize the vertical column of soil and ground water for the full length of compressible soils since these soils have the potential of releasing pore water when fill is placed on this site.

Groundwater contamination will result in impacts to water supply, surface water bodies and aquatic resources, worker exposure and the environment during construction, as well as dictating appropriate remedial measures and costs (e.g., removal, in-situ treatment, capping etc).

Groundwater Impacts

The site lies above a sole source aquifer which is used for water supply by NYC. As shown in Figure 1, DEP maintains a number of active and inactive pumping wells for water supply in Queens. As shown in Figure 3-3 of the Phase II ESA for the DGEIS (attached), there is a hydraulic connection to the Brooklyn Queens aquifers (i.e., Glacial, Magothy, and Lloyd) and active or potentially active existing NYCDEP water supply wells (formerly Jamaica Water Supply Company) in Queens which utilize them. Additional water supply wells are also being proposed/implemented as part of the Brooklyn Queens Aquifer Study which is seeking ways to utilize the Brooklyn Queens Aquifer during droughts and other water emergencies. The March 1999 Feasibility Study for Use of the Brooklyn/Queens Aquifer as an Additional Potable Water Supply details three (3) groundwater pumping scenarios utilizing the network of 53 existing NYCDEP wells and new proposed wells in Queens/Brooklyn. Scenario 1 involves the withdrawal of groundwater at a rate of 100 million gallons per day (mgd) over a 10 month period utilizing existing wells and 15 new wells. Scenario 2 involves the withdrawal of groundwater at a rate of 150 million gallons per day (mgd) over a 6 month period utilizing existing wells and 40 new wells. Scenario 3 involves the withdrawal of groundwater at a rate of 225 million gallons per day (mgd) over a 4 month period utilizing existing wells and 75 new wells. If significant contamination is present as discussed in the Phase II ESA and indentified through additional sampling, this contamination could negatively impact the aquifers and these water supply wells which utilize them. These impacts need to be fully evaluated in the DGEIS.

In addition, the redevelopment plan proposes adding up to 6' of fill to raise the grade above the present 100-year floodplain. The redevelopment plan does not specify how much fill will be necessary to accomplish this, but if the entire site (61.4 acres) is covered with 6' of fill, the fill would amount to approximately 16 million cubic feet (600,000 cubic yards). This enormous amount of fill would require nearly 20,000 truck trips even if large-capacity trucks are used.

The actual amount of fill would exceed these estimates, however. Additional fill would be needed to compensate for compaction both of the fill itself and the underlying non-homogeneous highly compressible soils. Additional fill also would be needed to take proper account of sea level rise, as discussed in the accompanying report by Svante Scientific. Nowhere does the DGEIS discuss the amounts of fill needed or the impacts of excavating and transporting it.

More importantly, nowhere does the DGEIS discuss the environmental impacts of placing this fill on the site. Even if one assumes that the amount of fill is only 600,000 cubic yards, the weight of this fill will likely range from approximately 800,000 to 960,000 tons depending on the type

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and density of the fill used (100 – 120 pounds /cubic foot). Additional fill as required for consolidation and sea level rise will add even more weight. This weight will cause the subsurface compressible layers under the site to consolidate, squeezing contamination from the subsurface soil and groundwater into the surrounding portions of the aquifer. The contamination can then possibly travel to and impact local DEP water supply wells. This is a critical omission in the DGEIS.

Surface Water Impacts

If significant contamination is present, surface waters and associated aquatic resources can be impacted from the proposed development. In addition to traveling to DEP water supply wells, soil and groundwater contamination squeezed out from the consolidated soils can also migrate to the nearby Flushing River and Flushing Bay affecting aquatic resources. The water quality as well as habitat for aquatic species could be compromised. The affects of this contamination and potential impacts on tidal marshes, wetland habitat, fish, and benthic resources is not evaluated in the DGEIS and is a critical omission.

Construction Impacts

If significant chemical contamination is present, impacts to worker health and safety during construction as well as engineering/institutional controls for mitigating contaminant exposure to occupants of the new buildings need to be further evaluated in the DGEIS. Another concern for worker exposure and building occupancy is high methane levels. As stated in the DGEIS, "methane levels were significantly elevated with levels in soil gas above the 5 percent lower explosive limit (LEL) in half of the locations sampled." Additional sampling for methane across the entire site needs to be performed to determine resultant impacts and what health and safety measures need to be employed during construction and engineering controls employed post-construction.

Remedial Measure and Cost Impacts

The DGEIS generally discusses that the proposed plan would include remedial strategies such as removal and/or capping of remedial soils. If significant contamination is present in the soils, significant soil removal or other treatment options would be required which should be provided in the DGEIS. In addition, if significant groundwater contamination is identified, groundwater treatment would be required to prevent contaminant migration which will greatly impact project costs. This needs to be further evaluated in the DGEIS.

Infrastructure Impacts

As previously discussed, at least 6' of fill and likely more will be required to raise the site out of the present 100 year floodplain. The addition of this fill and the resulting differential settlement and potential lateral movement will impact current and future subsurface utilities (e.g., gas, sanitary sewer, storm sewer, electric, and oil lines), underground storage tanks, parking lots and structures in the area. This fill will settle unevenly causing utilities and surrounding pavements to settle independently of one another and buildings, potentially causing leaks from known and unknown underground tanks and gas, oil and sewer lines and further soil and groundwater contamination. An engineering analysis of differential settlement on utility lines and the buildings themselves needs to be performed. Questions such as how fast will the fill settle as well as how much it will settle needs to be studied and discussed in the DGEIS. This is a critical omission and is not even recognized as an impact in the DGEIS.

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Soil Erosion and Stormwater Impacts

As fill is added initially and likely in the future, impacts to the surrounding area from site soil erosion need to be assessed. In particular, sediment transport to nearby water bodies and appropriate mitigation measures need to be further discussed in the DGEIS.

Stormwater controls and associated site grading need to be fully addressed in the DGEIS especially considering the site elevations and grades will change with likely uneven settlement and compression of the subsurface. Note: the site does not necessarily have to be raised in order to have workable storm and sanitary sewers [i.e., workable storm and sanitary systems can involve the use of a pumping station(s)].

Very truly yours,



Kevin F. Loyst, P.E.
Senior Environmental Engineer
Department Manager



Kevin J. Phillips, P.E., Ph.D.
Principal
FPM Group

KJP:kfl
Attachment

cc: Mike Gerrard, Esq.
Nelson Johnson, Esq.

S:\Willets Point Industry & Realty Asmt\Engl\WrittenStatement.doc

Figure 1

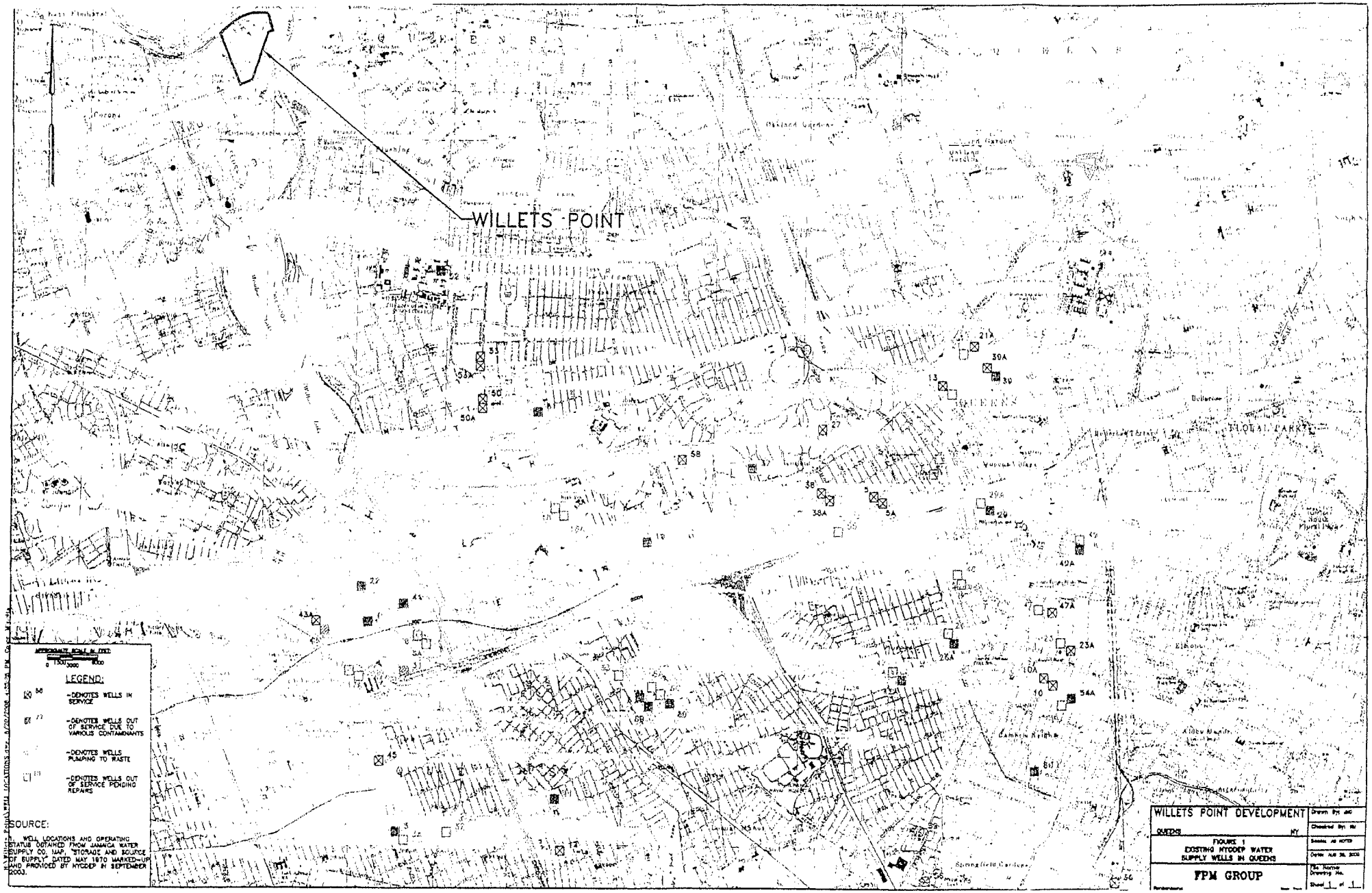
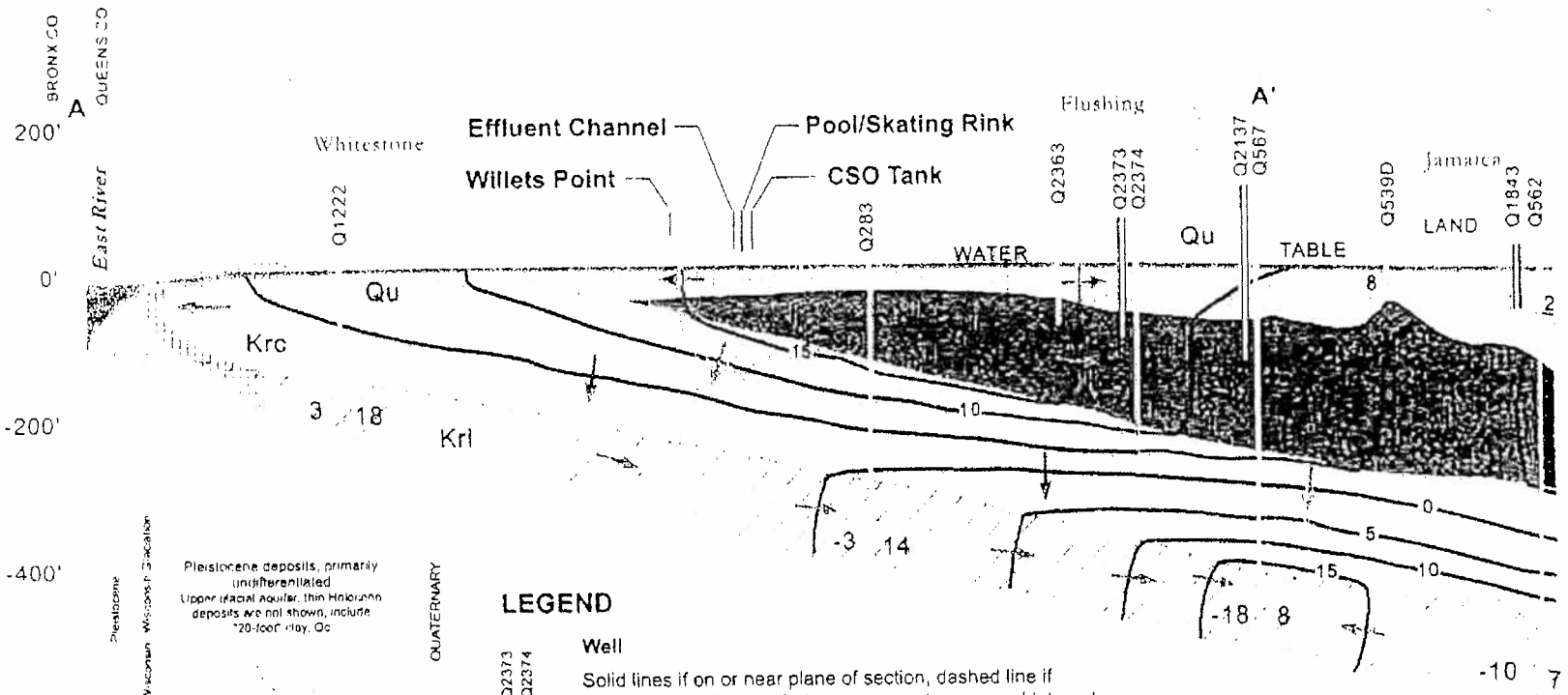

WILLETS POINT
LEGEND:
-DENOTES WELLS IN SERVICE
-DENOTES WELLS OUT OF SERVICE DUE TO VARIOUS CONTAMINANTS
-DENOTES WELLS PUMPING TO WASTE
-DENOTES WELLS OUT OF SERVICE PENDING REPAIRS
SOURCE:
1. WELL LOCATIONS AND OPERATING STATUS OBTAINED FROM JAMAICA WATER SUPPLY CO. MAP, "STORAGE AND SOURCE OF SUPPLY" DATED MAY 1970 MARKED-UP AND PROVIDED BY NYCDEP IN SEPTEMBER 2003.
WILLETS POINT DEVELOPMENT
QUEENS NY
FIGURE 1
EXISTING NYCDEP WATER SUPPLY WELLS IN QUEENS
FPM GROUP

Figure 3-3



LEGEND

Well

Solid lines if on or near plane of section, dashed line if projected; lined part at bottom represents screened interval. Number at top is local well number. Number at left of screen symbol is groundwater head at screen, in feet above or below(-) mean sea level; number at right is chloride content of water, in milligrams per liter, at screen.

Q2373
Q2374
12

12 11

Line of equal potential in groundwater body.

Number is head, in feet above or below (-) mean sea level; arrow indicates direction of groundwater movement, mainly in plane of section

Inferred direction of groundwater movement in area not showing equal potential lines

Pleistocene deposits, primarily undifferentiated
Upper glacial aquifer, thin Holocene deposits are not shown, include "20-foot" clay, Qc

Pleistocene — Pre-Wisconsin, Wisconsin & Recent — QUATERNARY

Gardiners Clay

Magothy Formation-Matawan Group Divided
Magothy aquifer

Upper Cretaceous — Raritan Formation — CRETACEOUS

Clay Member

Lloyd Sand Member
Lloyd Aquifer

PRE-CAMBRIAN?

Bedrock

Source: Soren, J. 1971. Groundwater and Geohydraulic Conditions in Queens County, Long Island, New York. United States Geological Survey Water Supply Paper 2001-A.

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HDR EMS
Hennegson, Durham & Richardson Architecture and Engineering, P.C.
in association with HDR Engineering, Inc
One Blue Hill Plaza
Pearl River, NY 10965

Regional Geologic Cross Section

WILLETS POINT • ENVIRONMENTAL SITE ASSESSMENT

Figure 3-3

Kevin J. Phillips, P.E., Ph.D.

Dr. Kevin J. Phillips, P.E.

FPM group



Dr. Phillips has over 30 years of experience in geohydrology and environmental engineering, involving such activities as RCRA Hazardous Waste Audits, design and treatment, ground and surface water quality analysis, water quality modeling, environmental impact assessment, 201 facilities planning, 208 area-wide wastewater management, 303e basin planning, industrial waste surveys, industrial waste treatment, and teaching four graduate courses at Polytechnic Institute of New York and two courses at SUNY at Stony Brook.

Functional Role	Title	Years of Experience
Principal/Project Manager	Principal	30+

Personal Data

Education

Ph.D./1978/Environmental Engineering, PINY
E.E./1973/Water Resources, MIT
M.S./1972/Hydrodynamics, MIT
B.C.E./1970/Civil Engineering, CCNY

Registration and Certifications

Professional Engineer NY, NJ, PA, CT, MD, MA, AL, GA, TX
OSHA - approved 40 hour Health and Safety Training Course
OSHA - approved 8 hour Health and Safety Refresher
Certified - Subsurface Underground Storage Tanks, NJ
Past Diplomat of the American Academy of Environmental Engineers

Publications

Dr. Phillips has published over 15 articles in professional journals ranging from "Least Cost Optimization in Area Wide Wastewater Management Using Mixed Integer Programming" to "Design Factors for a Seepage Treatment Facility" and Dr. Phillips latest publication, "Handbook of Complex Environmental Remediation Problems", McGraw Hill, "Chapter One "Groundwater".

Technical Seminars

Water Well Hydraulics; Dewatering Technology; Groundwater Pollution Modeling Course; Water Quantity Management for Long Island Today and Tomorrow; Corrective Action for Containing and Controlling Groundwater Contamination; Eleventh Annual Research Symposium on Land Disposal; Second Annual Environmental Expo for Business & Industry; Hazardous Waste Disposal Management; Underground Storage Tank Management; Tunnel/Underground Construction; Aquifer Remediation Using In Situ Bioreclamation; Introduction to Groundwater Geochemistry; Region II Environmental Regulation Conference; Sixth Annual Summer Institute in Risk Management in Environmental Health & Protection; ECRA Triggers and Transactions; ECRA Process; Sampling and Cleanup Plans; Haz Mat International `88; HELP's Modeling Workshop; Pollution Insurance Coverage and Environmental Claims Management; Industrial Hygiene Practice Course; Haz Mat International `90; Municipal Solid Waste Landfills - Design, Operation and Management; Aquifer Reclamation and Source Control; Asbestos Inspector; MODFLOW for Simulation of Ground Water Flow and Advective Transport; Implementing the 1990 Clean Air Act - EPA Speaks; Defense Cleanup Contracting Opportunities; Avoiding the Most Common Mistakes Under RCRA and RCRA Land Disposal Restrictions - Step-By-Step Compliance; HEC-RAS – Hydrologic Engineering Center – River Analysis System; AF Environmental Restoration Training. The Municipal Art Society of New York, Panelist, Climate Change in NYC: Designing and Building for What's to Come (6-11-07).

Detailed Experience

Air Resources

- **Title V** - Air Permit for Uniflex. Heat sealing operations for polyethylene sheets into plastic bags, gravure printing, catalytic incineration.
- **Title V** – Air Permit for Poly-Pak. Emissions inventory for entire industry.
- **Title V and Air Pollution Remediation** for NTU circuits. Various mass ballace calculation and installation of air remediation technology at this major printed board manufacturer in NY.
- **Title V and Air Pollution Compliance Monitoring at MicroContacts**, a printed circuit board manufacturer in NY.
- **Title V and numerous Air Pollution Compliance and Mass Ballace Calculations** for a multinational firm in five locations throughout the United States and Canada.
- **Title V Air Permitting** at the Brooklyn VA Medical Center. The scope of work involved four boilers and three internal combustion engines.
- **Title V Air Permitting** at McGuire AFB. This project combined the new design of boilers 2, 3, and 4 and the Title V permit associated with the design.

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Geohydrology and Hydrology Studies

- Hundreds of geohydrology and hydrology studies for the NYCT as their consultant hydrologist from 1982 to 2004.
- Surface Water Impacts to Long Island Sound from Pesticide Spraying
- Stormwater Analysis for Flood Determination for Town of Greenburgh
- Stormwater Analysis for Town of Huntington
- Stormwater Analysis for Culvert Analysis/Design Town of Babylon
- Hillside Avenue Flooding Analysis for NYCT
- Hydrologic and Inflowtrometer Studies of Kingsbridge Bus Depot NYCT
- Stormwater Analysis Archer Avenue Subway Flooding
- Long Island Areawide Wastewater Management Study; Non Point Source Analysis
- Long Island Nationwide Urban Runoff Study
- AFCEE - PIC of UST Investigation, Plattsburgh, NY
- AFCEE - PIC of Basewide Hydrology Study, Barksdale AFB, LA
- AFCEE - PIC of RCRA Facility Investigation Study, Barksdale AFB, LA
- AFCEE - Water Tower Study, Barksdale AFB, LA
- Savannah River Hydrological and Seismological Investigation, Savannah River, Georgia
- Physical Modeling, Groundwater Contaminant Transport, Long Island
- Mathematical Modeling Groundwater, Long Island Nassau/Suffolk Areawide Wastewater Management "208" Study
- Consultant Hydrologist #1, Water Supply Study - NYC Transit Authority
- Groundwater Investigation of Landfill Impacts of Groundwater Quality
- Jamaica Yard Stabilization Project, NYCTA
- NYC Transit Authority - Two Year Consultant Hydrologist
- Groundwater Investigation of the Oceanside & Merrick Landfills, New York
- Army Corps of Engineers (NE Water Supply Study)
- Upzoning the Payson Whitney Estate
- MEK Spill/Aquifer Restoration, Hicksville, NY
- TCE and DCE Aquifer Investigation, Metex Corp.
- Environmental Audit and Site Evaluation, Metex Corporation
- ECRA Parts 1 and 2 Submission, Metex Corp.
- Legal Defense of Upzoning, Village of Lake Success
- Geohydrological Investigation for Sports Complex in Flushing, UDC
- Geohydrologic Investigation, Hub Truck Rental, Farmingdale
- Geohydrology, Jerry Spiegel Associates
- Geohydrology, Air National Guard
- Geohydrologic Investigation, Automatic Connectors, Inc.
- Consultant Hydrologist #3 NYC Transit Authority
- T.V. City, The Trump Organization
- Water Resource Impact, Central Islip, Parr Develop.
- RCRA Tank (UST), Shorewood Packaging Corporation, Farmingdale
- Site Contamination Investigation, Anorad, Hauppauge, New York
- Environmental Investigation and Proposed Cleanup Plan, Shorewood Packaging Corp.
- Water Supply Survey, Metex Corporation
- 360 Permit Closure/Inactive Hazardous Waste Site Investigation, Phase II, Montauk Landfill, Town of East Hampton
- Uniondale Private Landfill, Phase II, Uniondale Realty Associates, New York
- Phase II Soil and Groundwater Screening Investigation, NYC Transit Authority
- Phase I and II Site Contamination Investigation, Anorad Corp., Hauppauge, New York
- Phase I and II Geohydrologic Investigation, Automatic Connectors, Inc., Hauppauge

Hazardous Wastes/RCRA Audits

- Hazardous Waste Recycling Center
- Genzale Plating Company
- Petroleum Tank Cleaners
- Irwin Measuring Tool Company
- Metex Corporation, 206 Talmadge Road, NJ
- Westbury Refining Corporation
- Mill-Max Manufacturing Corporation
- Metex Corporation, 970 New Durham, New Jersey
- Air, Water and RCRA Audit, L.T. Heat Treating, Inc.
- Hazardous Materials and Wastes Analysis and Design of Hazardous Storage Building, LORAL
- Waste Stream Evaluation, Shorewood Packaging Corporation, New York
- RCRA Seminar, Shorewood Packaging Corporation, New York
- Industrial Waste Underground Storage Tank Abandonment, New York
- Isopropyl Alcohol Underground Storage Tank Removal, Shorewood Packaging Corp.

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- Facility Compliance Audit, Shorewood Packaging Transport, Virginia
- Rag Recycling Center, Shorewood Packaging Corporation, New York
- RCRA Audit, Shorewood Packaging Corp., Georgia
- Lyons Ventures, Inc., Herzog Law Firm, New York
- Hazardous Survey, Nardy Pontiac Honda, New York
- Investigate 30 UST & 4 Aboveground Tanks, Remove & Design Replacement - Air National Guard
- Dorne & Morgolin Multimedia Audit
- Amsterdam Color Works, New York Multimedia Audit
- L.T. Heat Treatment, New York Multimedia Audit
- Hemingway Printing Co., Connecticut
- TSD Closure Plan, Shorewood Packaging Corp., Georgia
- TSD Closure Plan, Irwin Measuring Tool Corp., NY

Environmental Audits

- Riverhead Shopping Center, Realco
- American Cancer Society
- Metex Corporation
- Westbury Refining Corporation
- Environmental Audit, Mill-Max Mfg Corporation
- Environmental Site Audit, Mill-Max Manufacturing Corporation
- Panel Realty/Philips International
- Hub Truck Rental, Farmingdale
- Realco at Uniondale, Long Beach, Merrick, Riverhead, NY, Columbus, GA, and Lafayette, IN
- Pierpoint-on-the-Hudson
- Delta Realty, Haverstraw, New York
- Parr Development, Tech Park Site
- Parr Development, 58.2 Acre Parcel for Residential Development
- Asbestos Survey at Buildings Located at Central Islip Parr Development
- N. Racanelli Associates, Holtsville
- Trump Organization
- Goldstein & Rubinton
- Gus Schad
- Polimeni Enterprises, Bohemia
- Neil Buick Corporation, Port Jefferson Station
- N. Racanelli Associates, Smithtown
- Phase I, Webster & Sheffield
- Phase I, Parr Development Company, Yaphank
- Rosenman & Colin
- Crosstown Syndicate, TGI Friday's, Huntington, New York
- Cibro Group, Phase I and II, Environmental Site Assessment
- Cibro Group, Environmental Assessment

Superfund

- Remedial Investigation and Feasibility Study for SJ&J, NY
- Remedial Investigation for Grucci Site. NY
- Syosset Landfill - Soil and Groundwater Sampling, Syosset, New York
- Sheridan Industrial Waste Oil - Construction of Gas Strippers, NY
- Investigation of Groundwater Quality, NTU Circuits, NY
- Denton Avenue Landfill - Sampling & Analysis of Septage Lagoons, NY
- Montauk Landfill, Geohydrologic Investigation, Town of East Hampton, NY
- Town of Mamakating, Town Landfill, Geohydrologic Investigation, NY
- Garvies Point Landfill, Old Stone Development Corporation, NY
- Environmental Engineering/ Geohydrology, Genzale Printing, Franklin Square, New York, NY
- Phase II Environmental, Strober Realty, Brooklyn, New York
- Phase II Study, Uniondale Shopping Center, NY
- Tres Bon Cleaners, NY
- IWI Industries, NY
- Arkwin Industries, NY
- Cardweli Condencer Industries, NY
- Broadcast Cleaners (VCP Site), NY
- Harder Tree Service, NY
- East River Plaza (Brownfields Site), NY
- Win Holt (VCP Site), NY

Industrial Wastewater Treatment Design

- Geometric Circuits, Inc.
- NTU Circuits, Inc.
- Heartland Industrial Park
- Sixty Minute Photo
- Mill-Max Manufacturing Company
- Irwin Measuring Tool Company
- Shorewood Wastewater Treatment Plant

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- **Industrial Waste Surveys**
  - USEPA Effluent Guidelines - Explosive Industry
  - USEPA Effluent Guidelines - Photo Processing Industry
  - USEPA Effluent Guidelines - Hospitals
  - Nassau-Suffolk 208 - Long Island Regional Planning Board
  - Major Waste Oil Reprocessing Plant, Brookhaven, New York

- **Landfills**
  - Town of East Hampton - Montauk Landfill
  - Town of East Hampton- Springs-Fireplace Road Landfill
  - Town of Mamakating
  - The Trump Organization
  - Envirofil, Inc., Macomb, Illinois
  - Parr Development Company
  - Parsons/Wittermore, Oceanside Landfill
  - Long Island Ashfill Study
  - Uniondale Realty Associates
  - Parsons/Wittermore, Merrick Landfill
  - Nassau County Department of Health, Denton Ave.
  - Nassau County Department of Health, Syosset
  - Town of Babylon, Babylon Landfill
  - Envirofil, Inc., Harland, Michigan
  - Envirofil, Inc., Kelly Run Sanitation, Inc., Elizabeth, Pennsylvania

- **Federal Government Environmental Experience**

Program Manager on a 2.0 Million dollar IDIQ contract for the NY District Army Corps of Engineers for environmental, cultural, and biological studies. Thirty one Task Orders were accomplished over a 2 year period. Typical Task Orders are as follows:

- HTRW – South River, NJ
- Archaeological data recovery – revolutionary war resources. Stony Lonesome. II US Military Academy, West Point, NY
- Asbury Park to Manasquan, NJ, Beach Erosion Control project – Biological Resource Assessment
- HTRW NY Harbor
- SPCC Fort Hamilton & Fort Totten, NY
- Vegetative mapping of barrier islands, Fire Island, NY using infrared photography
- EIS – Deepening of the Arthur Kill/Howland Hook Navigation Channel

Program Manager on a $2.5 million dollar IDIQ contract for the Northeastern District of the FAA covering environmental services at airports throughout the Northeast United States. Forty Task Orders were accomplished over a nine year period. Typical Task Orders are as follows:

- Environmental Assessments and Environmental Due Diligence Audits for six automated flight service stations (AFSS) at six different airports in Pennsylvania, New Jersey, Virginia, New York and West Virginia.
- Noise impact analysis of new runway at Teterboro Airport, NJ using FAA noise model.
- Ten environmental assessment and environmental due diligence reports for MALSR facilities.
- Fifteen asbestos investigation studies for various buildings in New York and New Jersey airports.
- Five soil gas and sub-surface soil analyzing (Phase II).
- Environmental due diligence studies at nine potential sites for screening for Air Traffic Control Center in Virginia and southern Maryland.

Program Manager on a $25 million preliminary assessment, site investigating RI/FS, RCRA FA/FI, and remedial design (Title I and II) for the Air Force Center for Environmental Excellence (AFCEE). Thirty-nine Task Orders were accomplished totaling $17 million at the following bases: Griffiss (NY), Plattsburgh (NY), Roslyn (NY), Barksdale (LA), Carswell (TX), Randolph (TX), Lackland (TX), Scott (KY), McCord (WA), Fairchild (WA), Edwards (CA) and Cavalier (ID).

All of the services of these projects were in the Installation Restoration Program (IRP) or The Compliance Program.

Program Manager GSA Environmental Schedule Contract. Managed $2 million worth of contracts and completed ten Task Orders. Examples include:

- Sampling for Anthrax bacteria at IRS Beckley Finance Control Center in Andover, MA – IRS
- Plum Island Animal Disease Center demolition, recycling and waste removal project – Dept. of Homeland Security.
- Evaluation and implementation of the BEAL Laboratory at Edwards AFB.

Program Manager for an eight-year $1.1 billion contract with the Air Force Center for Environmental Excellence (AFCEE) for environmental restoration, conservation, planning, compliance and pollution prevention. In addition, it includes traditional A&E services for design and construction of military family housing and MilCon.

To date, twenty-eight Task Orders have been issued at the following bases: Edwards (CA), Tinker (OK), Myrtle Beach (SC), Griffiss (NY), Barksdale (LA), Lackland (TX),

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tus (OK), Fairchild (WA), Plattsburgh (NY), Nellis (NV) and Los Angeles (CA).

Program Manager for the US Army Corps of Engineers Kansas City District. Ten million dollar IDIQ contract for miscellaneous military and civil hazardous waster clean-up projects and related work assigned to USEPA Region II and VII.

To date, 25 delivery orders and modifications have been accomplished. A large portion of this contract was used by the OMAHA Corps to support projects at Nellis AFB. The rest of the contract is being used at Griffiss to support their long-term monitoring program.

Program Manager for The Air Force Center for Environmental Excellence (AFCEE) Worldwide Environmental Restoration and Construction Contract (WERC). This is a $4 billion, eight-year contract for environmental remediation and traditional construction, especially design build.

Presently six Task Orders are in various stages of development at the following bases: Edwards (CA), Nellis (NV) and Tinker (OK).

Kevin F. Loyst, P.E.

Kevin F. Loyst, P.E.

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Mr. Loyst has over 15 years of experience in environmental and civil engineering involving areas such as regulation compliance/permitting, environmental impact analysis, solid waste management, site investigations, remediation, hydrology, design, and feasibility studies.

Functional Role	Title	Years of Experience
Environmental/Civil Engineer	Department Manager - Environmental Engineering	19

Personal Data

Education

M.S/1997/Environmental Engineering-
Brooklyn Polytechnic University
B.S/1989/Interdisciplinary Engineering & Management-
Clarkson University
B.S./1988/Civil and Environmental Engineering-
Clarkson University

Registration and Certifications

Licensed Professional Engineer in State of New York
OSHA - approved 40 hour Health and Safety Training
course and 8 hour refresher training
Asbestos Project Designer
OSHA 8-hr HAZWOPER Supervisor

Societies/Associations

Chi Epsilon - National Civil Engineering Honor Society
American Society of Civil Engineers

Employment History

1992 to Present	FPM Group
1989-1992	Westinghouse Electric Corp.

Technical Seminars

Hazardous Waste/RCRA, Emergency Planning & Community Right-To-Know (EPCRA), Environmental Impact Analysis/NEPA/EIS/EA, Air/CAA, Stormwater, Soil Erosion & Sediment Control, Soil Remediation, Asbestos Abatement

Detailed Experience

Regulation Compliance/Permitting

- Client List: Governmental –US Postal Service, US Army Corps of Engineers, US Air Force, Veterans Administration, NYS Office of General Services (NYSOGS), NYS Parks, NYS Corrections, NYS Department of Transportation; Private/Industrial-numerous.
- Quarterly and semi-annual monitoring and reporting in accordance with NYSDEC Part 360 regulations for several landfills in Long Island.
- Environmental compliance audits covering the Clean Air Act (CAA), Resource Conservation and Recovery Act (RCRA), Clean Water Act (CWA), Emergency Planning and Community Right to Know Act (EPCRA), and local regulations involving areas such as hazardous material storage.
- Air permitting and associated reporting including Title V and 76-19-3 air permits; new source review; seasonal variance applications; BACT analysis; emission statements; annual and semi-annual compliance certifications; Air Guide 1 and Screen 2 modeling; Air Facility Registrations; air quality assessments; emission reduction credits, and stack testing.
- Performed RCRA compliance activities involving waste stream characterizations; waste minimization; pollution prevention; manifest tracking; preparation of quarterly, annual, and bi-annual reports; and training.
- Prepared hazardous waste closure plans in accordance with 6NYCRR 373-3 and implemented closure of hazardous waste management areas in accordance with 6NYCRR 373-3.7(c).
- Expert witness testimony for hazardous waste disposal matters.
- Performed EPCRA/Sara Title III audits, reporting and investigated administrative complaints.
- Suffolk County Department of Health Services (SCDHS) Article 12 and Nassau County Department of Health (NCDOH) Article 11 Toxic and Hazardous Material Storage Facility Permits.
- Prepared, reviewed, and certified numerous Spill Prevention Control and Countermeasure Plans (SPCCPs) in accordance with 40 CFR Part 112.

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- UST compliance inspections in accordance with NYSDEC - Petroleum Bulk Storage (PBS) and Chemical Bulk Storage (CBS) regulations; SCDHS Article 12; NCDOH Article 11; and National Fire Protection Agency (NFPA) codes.
- NYS Department of Environmental Conservation (NYSDEC) State Pollution Discharge Elimination System (SPDES) permits for industrial and stormwater discharges.
- Baseline and semi-annual monitoring, BMR and SMR reporting, and sampling for wastewater discharges for compliance with NYCDEP and SCDPW requirements.
- Performed health and safety monitoring at investigation and remediation sites during intrusive activities. Monitoring included calibration and operation of photoionization detector (PID) and flame-ionization detector (FID) for organic vapors and combustible gas indicator (CGI) for methane. Compared results to applicable action levels and took preventative/protective measures as necessary.
- Site Specific Health and Safety Plans (HASPs).
- Sound level studies to determine compliance with local noise ordinances.

Environmental Impact Analysis

- Client List: Governmental-Federal Aviation Administration, US Army, US Army Corps of Engineers, US Department of Agriculture (USDA)
- Environmental Assessments for Federal Aviation Administration (FAA) navigational aid projects at numerous airports in the northeast region in accordance with the National Environmental Policy Act (NEPA) and FAA order 1050.1D Policies and Procedures for Considering Environmental Impacts. Airport projects included Instrument Landing Systems (ILS), Approach Lighting Systems, Remote Transmitters, Doppler Equipment, Air Traffic Control Towers and Air Route Traffic Control Centers. Airports and support areas included Teterboro, Richmond Intl, Baltimore Washington Intl, Syracuse-Hancock Intl, Newark Intl, Stewart, Philadelphia Intl, LaGuardia, and Leesburgh.
- Environmental assessments for the Army and Air Force Exchange Service (AAFES) at bases in Oahu, HI in accordance with NEPA, AR-200 Environmental Effects of Army Actions and DOD Directive 6050.1 Environmental Effects in the US of DOD Actions. Projects included capital improvement projects at Schofield Barracks, Helemano Military Reservation, Aliamanu Military Reservation, and Bellows Air Force Base.
- Coastal/Biological Monitoring Program components for the US Army Corps of Engineers (USACE), New York District Beach Erosion Control Projects including intertidal ichthyoplankton studies, intertidal offshore finfish studies, nearshore and offshore benthic sampling, water quality analysis, and creel census.
- Cultural resource projects for USACE and FAA in the northeast region including cultural resource surveys; cultural resource assessments; underwater archeology surveys; and recordations.
- Wetland Delineations and Biological Surveys (Grassland Birds) in support of FAA EAs at Teterboro Airport.
- Historic Preservation Plan for Plum Island NY and Historic Structure Report for Plum Island Light Station, Plum Island Animal Disease Center, NY.
- Environmental Scoping Document and presentation agenda for the District's Atlantic Coast of Long Island Fire Island Inlet to Montauk Point, NY Storm Damage Reduction Reformation Study.
- Preliminary Environmental Assessment (PEA) Reconnaissance Studies for USACE Flood Control and Shore Protection Projects in South River Raritan River Basin, NJ and Cliffwood Beach, NJ.
- Environmental assessment and architectural and historical study for a USMA historical building/site at West Point, NY.
- Draft Supplemental Environmental Impact Statement (EIS) Limited Reevaluation Study for the Deepening of the Arthur Kill/Howland Hook Navigation Channel in NY/NJ.

Solid Waste Management

- Client List: Governmental- USDA, NYSOGS,; Municipalities – Town of Riverhead
- Performed site reconnaissance, surveying, identification, and enumeration activities to develop plans, specifications, and environmental permitting for NYSOGS for processing waste tire materials into beneficial shred material to be used by the New York State Department of Transportation (NYSDOT) in road construction projects. Following the development of plans and specifications, FPM assisted NYSOGS with bidding phase services including contractor award and construction/ remediation/restoration/ oversight. In total approx. 4 million tires were recycled at four sites across New York State.

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- Removal, recycling, and disposal of over 10,000 cy of construction and demolition debris at various waste management areas on Plum Island, NY involving plans, specifications, cost estimating, and construction oversight for USDA.
- Estimated the remaining volume and footprint for the Youngs Avenue Landfill, Riverhead, NY which currently was in a full scale reclamation mode. Prepared and implemented a boring and excavation plan involving numerous deep borings and shallow test pits and used topographic surveys/landfill maps to estimate footprint boundaries and landfill volume. Based on the results, approximately 2m cy were estimated to be remaining or approximately four to five times the estimated amount. Riverhead Town then put the reclamation project on hold while it evaluated other options including capping. Assisted the Town with capping estimates, feasibility study for reclaiming and capping a reduced landfill and engineering reviews for a full Part 360 landfill cap design.

Site Investigations

- Client List: Governmental-US Army Corps of Engineers, NYS Office of General Services, NYS Dept. of Corrections, Internal Revenue Service; Municipalities-Town of East Hampton; Private-numerous
- ASTM Phase I Environmental Assessments for property transactions in Suffolk, Nassau, and the five boroughs of New York.
- Sampling and Analysis Plans for Phase II investigations in Long Island and NYC.
- Groundwater, soil, and air sampling at numerous sites on LI and NYC for landfill closures, remedial investigations, and petroleum spills.
- Petroleum Spill Investigations (gasoline, diesel, No. 2 and 6 fuel oil) and associated closure work for tanks and other types of discharges in the metropolitan and upstate NY regions.
- Hazardous, Toxic, and Radioactive Waste (HTRW) Preliminary Assessments in NY and NJ.
- Polychlorinated Biphenyl (PCB) basewide (3500 acres) evaluation of electrical equipment at Griffiss Air Force Base.
- Anthrax sampling for several IRS mail sorting facilities.

Remediation

- Client List: Governmental-US Air Force, NYSOGS; Private/Industrial-Star Corrugated Box Co., Shorewood Packaging, Metex Corp.
- Remediation of lead contaminated soil at four water tower sites at Barksdale Air Force Base, LA via excavation/disposal. Feasibility studies, work plans, Health and Safety Plans, Closure Reports, and No Further Response Action Planned Memorandums were prepared in conjunction with the remediation.
- In-site soil remediation of VOCs through vapor extraction and soil aeration techniques at LI and NJ contaminated sites.
- Removal of contaminated soil associated with petroleum spills and tank issues at LI, NYC, and upstate facilities.
- Identification, characterization, and removal of hazardous material and hazardous waste at industrial facilities and psychiatric centers in LI and NYC.

Hydrology

- Client List: Governmental-New York City Transit, Palisades Interstate Park Commission; Municipalities-Town of Greenburgh; Private-Sweezy's, various town residents.
- Hydrologist consultant to New York City Transit (NYCT) involving numerous drainage studies and investigation of mitigation measures for stormwater and groundwater issues at bus depots, train yards, and subway stations.
- Performed dye-testing studies at several NYCT facilities in NYC, Grand Central Terminal, and La Salle Military Academy to identify discharges and remedies.
- Hydrologist consultant to Town of Greenburgh involving the review of EIS documents, Stormwater Management Plans, Soil Erosion and Sediment Control Plans, drainage calculations, and modeling for proposed development projects on sites up to 300 acres.
- Provided expert witness testimony on flooding cases involving residences and municipalities in Long Island and Westchester County.
- Runoff calculations, drainage alternatives, and best management practices for site development projects in Long Island, NY City, and Westchester County.

- Evaluation of porous pavement installations at several NYCT bus terminals.
- Evaluation of existing surface and subsurface disposal systems at NYCT facilities and Long Island commercial residential properties.
- Water resources impact analysis for Ramapo Energy Limited Partnership DEIS.
- Evaluation and rehabilitation of groundwater well dewatering pumping systems via downhole camera videotaping, riser swab cleaning high velocity jetting, pump test analysis, specific capacity testing, and pump redesign.

Design

- Client List: Governmental-FAA, NYCT, NYSOGS, USCG, NYS Parks, USPS; Municipalities-Riverhead Central School District, East Hampton Airport; Private-Net Properties, TGI Fridays, Arkay Packaging, Kiss Nails, Orlandi, Grucci Fireworks.
- Hazardous material storage area design for industrial and governmental facilities in accordance with Suffolk County and Nassau County regulations and containment provisions (e.g., containment buildings, bermed epoxy coated storage areas).
- Conventional subsurface sewage disposal system and reduced pressure zone device designs and construction management services for numerous governmental, municipal, and private facilities.
- Soil erosion and sediment control plans and certifications for FAA airport navigational aid projects.
- New track and field athletic complex at USCG Academy, New London, CT involving NCAA regulation 8-lane track with synthetic type running service, separate event throwing areas, NCAA regulation soccer field inside the track and all necessary elements for typical collegiate facilities (lighting, grandstand, scoreboard, etc.) Critical design aspects included managing infiltration and surface water runoff for discharge into Thames River and environmental permitting (SWPPP and coastal zone consistency determination).
- Porous pavement designs for NYCT bus depots.
- Plans and specifications for asbestos abatement projects for elementary schools in LI.
- Asbestos abatement specification reviews for FAA facility rehabilitations.

Feasibility Studies

- Client List: Governmental-NYCT; Private-Chugai Boyecki, Net Properties.
- Study to prevent the potential migration of a PCB oil pool/contaminated aqueous plume and peat layer settlement due to dewatering activities at Sunnyside Yard, Queens.
- Investigated disposal alternatives for permanent subway dewatering activities in Brooklyn and Manhattan, NY
- Site Planning studies for property consolidations and expansion of shopping centers in LI. Site development potential was evaluated in accordance with local ordinances/codes.

Quality Control

- As Department Manager and Project Manager, performs QC on environmental compliance tasks including review of data, designs, and report of Task Leaders.

ARNOLD & PORTER LLP

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399 Park Avenue
New York, NY 10022-4690

May 14, 2007

Ms. Asma Syed, Planner
New York City Economic Development Corp.
110 William Street
New York, New York 10038

Re: Scoping Comments -- Willets Point Development Plan

Dear Ms. Syed:

This letter provides the comments of the Willets Point Industry and Realty Association ("Association") on the Generic Environmental Impact Statement Draft Scope of Work ("Draft Scope") prepared by the Office of the Mayor for Economic Development and Rebuilding ("Lead Agency") for the Generic Environmental Impact Statement ("GEIS") for the Willets Point Development Plan ("Proposed Project") that the City of New York proposes to have constructed in the Willets Point area of Flushing, Queens.

The Association's members are Bono Sawdust, Crown Container, Feinstein Iron Works, Fodera Foods, House of Spices, Sambucci Brothers, Parts Authority, QC Iron Works, T. Mina Supply, Tully Construction, and Tully Environmental. These companies all operate businesses that would be displaced or destroyed by the Proposed Project.

On April 27, 2007, after a meeting with Deputy Mayor Daniel Doctoroff, EDC Vice President William E. Walsh, and other key staff from EDC, the Association sent the attached letter to Mr. Walsh requesting pertinent documentation on the Proposed Project so that it could comment more completely on the Draft Scope. This documentation has not been provided. Nor has the meeting requested in that letter been scheduled. Notwithstanding the City's failure to provide the requested information, we are providing these comments, but they are necessarily incomplete, and we reserve the right to supplement them should this information be provided.

In brief, the Draft Scope fails to tailor the GEIS to the unique character of Willets Point and its industries. For example, the Draft Scope liberally reiterates the substandard conditions that may exist in some parts of Willets Point, but neglects the most important cause of these conditions -- the City's unlawful failure to provide Willets Point with the services to which it is entitled, and which virtually all City neighborhoods receive.

The Draft Scope also fails to inquire into the unique needs of the businesses at Willets Point, and the likelihood that the Proposed Project will cause many to disappear

forever. As a result, the Draft Scope fails to inquire into the impacts of this disappearance on their workers and on the City as a whole.

The Draft Scope fails to adequately consider the environmental consequences of the Proposed Project. Willets Point is at special risk from two well-established consequences of global warming -- rising sea levels and increased severity and frequency of storms. Willets Point also presents potential risks for residential uses because of its long industrial history.

Finally, the nature of the proposed action has not been fully enough conceptualized to allow adequate environmental review. The nature of the intended development, the way that contamination will be addressed, the effect of the lack of sanitary sewers, and other such issues have not been sufficiently described.

In the remainder of this letter, we discuss these concerns in more detail. For convenience, the discussion is organized in the same manner as the Draft Scope.

Proposed Project

The description of the Proposed Project proclaims that it will incorporate "green technologies." In order to evaluate the energy, water and other impacts of the Proposed Project, it is necessary to understand exactly what these green technologies might be. Accordingly, the GEIS should specify in detail degree to which green technologies will be used. For example, the GEIS should specify which level of the green building rating system established by the Leadership in Energy and Environmental Design ("LEED") that the buildings will be required to meet. The GEIS should also specify the strategies and technologies that the buildings will use to meet this rating system.

The GEIS should discuss the nature and proposed solutions for the formidable engineering challenges that would confront the project. These include construction on the artificially-created land, with questionable structural integrity; how construction will affect the North Boulevard and Van Wyck Expressway structures; and how subsurface parking facilities will be provided, in view of the groundwater condition and the necessity of capping contaminated land.

Task 4. Socioeconomic Conditions

The Draft Scope correctly identifies socioeconomic conditions as an area that will require detailed investigation. It treats these conditions in a generic manner, however, rather than tailoring them to the unique characteristics of Willets Point. The GEIS should provide greater specificity about the locational needs, conditions without the Proposed Action and impacts of displacement in order to adequately address socioeconomic conditions.

I. DIRECT BUSINESS DISPLACEMENT

A. Locational Needs

The analysis of locational needs must include both the synergies of the businesses to be relocated as well as the likelihood that they will be able to obtain the necessary environmental permits. We are aware of several specific examples in Willets Point, and there likely are many more.

Two of these examples are Tully Environmental, Inc. and Crown Container, which are entities with permits under 6 N.Y.C.R.R. part 360 to operate transfer stations for solid waste. In the event that the Proposed Project goes forward, the properties of these companies will be taken and they will be evicted. If Tully Environmental and Crown Container try to relocate, they will need new Part 360 and City permits, which they would be highly unlikely to obtain in or around the City, especially in view of the City's new, highly restrictive regulations on transfer stations.

If Tully Environmental cannot relocate in Northern Queens and Crown Container cannot relocate in the appropriate location within the City, it would have significant consequences for these companies and for the City. For example, Tully Environmental currently is carrying out a $35 million contract with the New York City Department of Sanitation to haul and dispose of 900 tons per day of solid waste from Queens.

Bono Sawdust Supply Company, Inc. is located in a custom-designed 12,000 square foot free-span facility. The unique 22 to 25 foot ceilings are necessary to meet the operational and storage needs, including the custom-designed blower, dust filtration house and dust collection receptacle that are built into and part of the building structure. This system runs the complete span externally and internally of the manufacturing plant, and is non-movable. These exceptional specifications are not found in commercial buildings throughout the city. Bono Sawdust also rents 12,000 square feet in the Willets Point area from the MTA for storage trailers and containers. The company manufactures over 1,000,000 lbs. of industrial absorbents and sweeping compounds annually. It relies upon the close proximity to all major arteries and roadways leading to JFK and LaGuardia Airports, all five boroughs, Long Island, upstate New York, New Jersey and Connecticut. The company holds specialized, non-transferable permits from the City Fire Department and Department of Environmental Protection.

House of Spices employs 100 people at its Willets Point facility and is an essential link in a supply chain for eight other warehouses that employ another 200 people. The facility relies on its proximity to Queens neighborhoods that are the source of much of its business, and to the freeways that make the site an ideal distribution hub.

The operation of the above businesses requires M3-1 zoning. Willets Point is one of the last M3-1 zones left in the city of New York, adding to the difficulty or impossibility of relocating. Further difficulties arise from the extensive infrastructure and fixtures in the industrial buildings, and the long-term leases under which many of them operate, containing conditions that will be difficult or impossible to replicate elsewhere.

Another example is the group of businesses involved in auto repair, parts and salvage. These businesses were recently surveyed by Professor Tom Angotti and his colleagues at Hunter College.[1] The results of this study should be reviewed in detail and incorporated in the GEIS as applicable.

The largest category of auto-related businesses is general auto repair, but there are many specialized businesses as well that concentrate on "parts, body work, glass, tires, mufflers, salvage and sales."[2] Professor Agnotti described these businesses as follows:

> The overall picture is that of a large and diverse network of businesses with a wide range of specializations . . .The relations among the operators of auto-related businesses are often cooperative and mutually supportive, and they form a network that strengthens the attractiveness of the area as a specialized district.[3]

In summary, the auto-related businesses "both compete and cooperate with one another," and they are successful in part because they are concentrated in a single neighborhood convenient to their customers.[4] If these businesses are relocated and dispersed, there is no reason to expect them to survive.

There likely are many more examples of businesses with unique locational needs, and the GEIS should review these needs.

B. Conditions Without the Proposed Action

The Draft Scope requires the assessment of "conditions in the study area in the future without the proposed action."[5] Among these conditions should be proper sanitary

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1 Tom Angotti and Steven Romalewski, *Willets Point Land Use Study* (Hunter College Center for Community Planning & Development, Apr. 2006) ("Willets Point Study") available at http://www.wpira.com/Willets%20Point%20Land%20Use%20Study.pdf.

2 *Willets Point Study* at 8.

3 *Willets Point Study* at 8.

4 *Willets Point Study* at 2.

5 Draft Scope at 14.

and storm sewers, street repair and police services. It is legally, economically and socially intolerable for this situation of malign neglect to continue, and the GEIS should not assume that it will.

It has been known for many years that the lack of City services has stifled development at Willets Point,[6] and Professor Angotti's recent study confirms this. When people there were asked about the disadvantages of Willets Point, "almost all respondents (88%) placed the lack of city services at the top of the list."[7]

Accordingly, the GEIS should assess conditions without the Proposed Project where the City has complied with its obligation to provide adequate services. These services should include not only infrastructure, but also community support services such as those identified in Professor Angotti's study -- public-private planning partnerships, community-based enterprise development, pollution prevention, best management practices, strategies to maximize the benefits of concentration, job training, performance improvement plans and strategies for expanding manufacturing.[8]

C. Impacts of Displacement

The effects of displacing the Willets Point businesses will be several fold. First, as noted above, displacing the businesses will be tantamount to destroying them, since many may not be able to relocate at all. The direct and indirect losses of jobs and tax revenues should be quantified.

Second, the City will lose the services that the businesses provide, at least some of which are vital to other sectors in the City. For example, The House of Spices (India), Inc., is the largest distributor of Indian foods in the United States. Tully Environmental, Inc. and Crown Container operate solid waste transfer stations, permits and sites for which are, as a practical matter, no longer available in the City. The auto-related businesses provide essential, low-cost services for the millions of City automobiles. Each of these services could be lost to the City forever. To the extent that the auto-related businesses do disperse to other neighborhoods, the opportunity will be lost for a concentrated program of providing training and facilities for pollution prevention. If Bono Sawdust, established 1933, and American Sawdust Company are unable to remain at Willets Point or re-locate to a location in North-East Queens, there will be adverse effects on the wood product manufacturers and waste industry throughout the city. Bono and American Sawdust are the only companies in New York changing this by-product

6 Urbitran Assoc., *Willets Point Planning Study* at 4 (Oct. 1991).

7 *Willets Point Study* at 9.

8 *Willets Point Study* at 11-13.

into absorbents and sawdust to specification for various industries, and manufacturing sweeping compound. Without these two businesses, this by-product will become waste. In turn, it will become a tremendous waste cost detrimental to the survival of all wood product manufacturers located in the tri-state area. This also will add over 12,000,000 pounds of waste for the City of New York to dispose of annually.

Third, the City will lose entry-level jobs that it desperately needs. Willets Point provides employment opportunities for new entrants to the work force, all of which would be lost in the event the businesses cannot relocate.

The GEIS should consider each of these impacts.

II. ADVERSE EFFECTS ON SPECIFIC INDUSTRIES

The Draft Scope already requires a detailed analysis of adverse effects on the automotive industry; the GEIS should also require a detailed analysis of adverse effects on waste management (Tully Environmental, Inc., Crown Container) and distribution (The House of Spices (India), Inc., House of Fedora, T. Mina Supply).

III. ECONOMIC IMPACT ANALYSIS

The economic impact analysis required by the Draft Scope uses an inappropriate benchmark for comparison. The Draft Scope currently specifies that the GEIS must "compare the estimated economic and fiscal benefits of the RWCDS to the benefits generated by the uses that are currently present in the District." The current economic benefits from Willets Point are stifled, however, because the City has failed to provide the services to which Willets Point is entitled by law. Accordingly, the economic impact analysis should evaluate not only the economic benefits from the uses currently present, but also the benefits of an industrial community with all of the required City services.

The economic impact analysis should also evaluate the net economic benefits of the Proposed Project, not just its benefits in isolation. That is, many of the purported economic benefits are simply wealth redistribution, not wealth creation.

For example, the Draft Scope envisions New York Mets fans spending a portion of their entertainment budget in Willets Point. Economic studies have shown, however, that baseball fans are likely to have the same entertainment budget regardless of whether they spend it near a baseball stadium or on other forms of entertainment. Similarly, if there are hotels and stores in Willets Point, travelers and shoppers may visit them, but if there are not, then travelers and shoppers would visit hotels and stores elsewhere in the City.

In comparison, an industrial area with adequate services would provide a unique location for workers, retailers and wholesalers that will be lost forever if the proposed

project goes forward. Willets Point is not the only area in Queens where one can put a shopping center, hotel or office building, but it is the only area where one can put the businesses that are there now. Accordingly, the economic impact analysis should look at net economic benefits to the city, and not just the benefits to the Proposed Project and its developer.

Finally, the economic impact analysis should evaluate the disparate impact that the Proposed Project would have on low-income and minority persons. In the event that the current Willets Point businesses are evicted en masse, the employees of those businesses would lose their opportunity to earn a living and feed their families. New entrants into the work force also would lose an opportunity for entry-level work. The economic impact analysis must determine whether these lost opportunities will disproportionately affect low-income persons and minorities.

Task 11. Natural Resources

The inquiry into natural resource impacts should be broader than that presented in the Draft Scope in at least two respects. First, the GEIS should anticipate future climate changes in order to determine the impacts of the Proposed Project and the necessary mitigation measures, particularly in areas below flood level. Second, the GEIS should evaluate each of the factors necessary in order to construct a project in or adjacent to tidal wetlands.

A. Climate Change

The Draft Scope currently notes that the Proposed Project lies "within the 100-year floodplain."[9] Unfortunately, the 100-year flood plain has become a misnomer. The Federal Emergency Management Agency last undertook major revisions to its flood maps in 1983, and the data it used were older still.[10] Because of global warming and sea-level rise, the "100-year flood plain" is expected to become the "40-year flood plain" in a little more than a decade, and the "20-year flood plain" by year 2050. As sea temperatures increase, so will the strength and frequency of northeasters and hurricanes. Unless the GEIS considers these future climate changes, its review of natural resource impacts will be of historical interest only.

Accordingly, the GEIS should evaluate and require the implementation measures identified in New York City's *PlaNYC*, namely:

---

9 Draft Scope at 20.

10 City of New York, *PlaNYC, A Greener Greater New York* at 139 (April 22, 2007) ("*PlaNYC*"), *available at* http://www.nyc.gov/html/planyc2030/html/plan/download.shtml.

1. Update the expected frequency and severity of storm events, and evaluate their impacts on the Proposed Project;

2. Complete a community planning toolkit and site-specific climate adaptation plan; and

3. Evaluate mitigation measures to address inadequacies in the building code (e.g., the building code only requires windows to withstand gusts of 110 miles per hour, but a category 3 hurricane can produce winds of 111 to 130 miles per hour[11]).

B. Tidal Wetlands Construction

The GEIS should analyze whether the Proposed Project meets the criteria for construction in a tidal wetlands and/or adjacent area. The criteria for a tidal wetlands permit are set forth in 6 N.Y.C.R.R. part 661, which specifies that any construction in a tidal wetlands must:

> (i) be compatible with the preservation and protection of tidal wetlands and to prevent their despoliation and destruction;
>
> (ii) not have an undue adverse impact on the present or potential value of the affected tidal wetland area or adjoining or nearby tidal wetland areas for marine food production, wildlife habitat, flood and hurricane and storm control, cleansing ecosystems, absorption of silt and organic material, recreation, education, research, or open space and aesthetic appreciation, taking into account the social and economic benefits which may be derived from the proposed activity;
>
> (iii) be compatible with the public health and welfare;
>
> (iv) be reasonable and necessary, taking into account such factors as reasonable alternatives to the proposed regulated activity and the degree to which the activity requires water access or is water dependent;

[11] *PlaNYC* at 133.

(v) comply with the development restrictions contained in 6 N.Y.C.R.R. § 661.6;

(vi) comply with the use guidelines contained in 6 N.Y.C.R.R. § 661.5; and

(vii) in the case of a formerly connected tidal wetland, be consistent with the possible future restoration of any portion of the tidal wetland adjoining or surrounding the project site to its original condition.

The Draft Scope should require the evaluation of each of these factors.

Task 12. Hazardous Materials

As stated in the Draft Scope, petroleum and other contaminants are present in the soils and groundwater at Willets Point. These contaminants must be adequately addressed and mitigated in order to ensure that they pose no risk to those who will live in the 5,500 residential units planned for the Proposed Project. It is not clear, however, that these contaminants have been investigated well enough to understand what mitigation measures may be necessary, or to otherwise assess their impacts. Of greater concern, it appears that additional investigation may not take place until after the project design is complete and construction begun, when it will be too late to implement appropriate mitigation strategies (e.g., sub-slab vapor extraction systems or competent vapor barriers). The proposed mitigation of placing a 4-6 foot capping layer over the entire site may present a cure that is worse than the disease. Willets Point is constructed over a high water table area. This proposed fill could inadvertently surcharge the underlying areas and severely impact surrounding areas such as the new Citifield, adjacent roadways and waterways.

Accordingly, adequate environmental investigations should be performed as part of the GEIS, and these investigations should be used to evaluate the impacts of the proposed project and the necessary mitigation. The investigations must be sufficient to provide a basis for the remedial work, and therefore they must contain the detail and information required by a remedial investigation pursuant to the federal Comprehensive Environmental Response, Compensation and Liability Act. This approach is similar to the one adopted for the New York State Brownfield cleanup program, where SEQRA review is not performed until after the remedial investigation is complete and the final remedy has been proposed.[12]

[12] N.Y.S. Department of Environmental Conservation, *Draft Brownfield Program Cleanup Guide* at 43-44 (May 2004), *available at* http://www.dec.ny.gov/docs/remediation_hudson_pdf/DraftBCPguide.pdf.

Making the area suitable for residential use may require the excavation and removal of massive quantities of contaminated soil, and its transport to distant disposal facilities. These operations pose significant health and safety risks to workers, truck drivers, and motorists on the roads over which the soil is hauled. A number of studies have shown that the health and safety costs of such operations often exceed the health and safety benefits of removing the waste. The risks posted by the massive excavation, removal and hauling of this contaminated material should be quantified in the GEIS. The GEIS should also look at the alternative method of existing businesses remediating their own sites after the installation of sewers.

Task 18. Noise

The Draft Scope (p. 31) states, "Per CEQR requirements, noise from aircraft operations would be excluded from all measurements." The source of this statement is unclear. It conflicts with the December 2005 Phase II study by HDR/LMS and sponsored by the EDC which accurately states on page 35 paragraph 3 that he noise from the airport must be assessed. In fact, the CEQR Technical Manual, §123.2, says the opposite of the Draft Scope -- it describes how noise analysis should be done "where the receptor is close to an airport and in the flight path." That precisely describes Willets Point, which is extremely close to LaGuardia Airport and in the flight path. The noise analysis in the GEIS should fully characterize the airport-related noise at the site; should describe the effect of that noise on a planned residential development; and should describe how, to what extent, and at what cost that noise could be mitigated.

Task 22. Alternatives

The Draft Scope indicates that the GEIS will analyze "a No Build alternative, which describes the conditions that would exist if the proposed actions were not implemented." The No Build alternative should be analyzed in two variations:

1) No Build/Continued Neglect -- a continuation of the current situation, where the City goes on neglecting the area and failing to provide required services; and

2) No Build/Standard Services/No Condemnation -- the City provides sewers, street paving, and the other infrastructure and services that virtually every other neighborhood in the City has long received; and the City does not take property by eminent domain. This alternative represents the preference of most or all of the current occupants of Willets Points, and would provide the analytical basis for understanding what would occur if normal real estate forces were allowed to work in this area. As explained in the discussion of Task 4(I)(B) above, it long has been known that the City's unlawful failure to provide sanitary sewers, storm sewers and street repair has prevented Willets Point from reaching its potential. SEQRA requires, and we demand, an analysis under which the lead agency takes its thumb off the scale and allows the readers of the

GEIS to understand what would happen were the government to treat this neighborhood like the rest of New York City, without the double abuse of withheld services and condemnation.

The No Build/Standard Services/No Condemnation alternative should include, as a mitigation measure, the provision of training and facilities for pollution prevention for the neighborhood's many auto repair establishments.

This proposed alternative has several similarities to the Minimum Intervention scheme in the 1991 planning study for Willets Point (pages 43-46).

Procedural issues

The scoping hearing on May 1 did not comply with SEQRA/CEQR procedures because many members of the public were barred from entering. The Association requests that the hearing be reopened to allow all persons who wish to attend to do so, and to allow comments based on the information that the Association has requested but not yet received. The Association also believes that the City Council as the ultimate decision-maker on this project, should be the lead agency.

The Willets Point Industry and Realty Association respectfully submits that, in order to take a hard look at the impacts from the Proposed Project, the Project should be more precisely described, and at the very least the GEIS should include the analysis outlined above.

Sincerely,

Michael B. Gerrard
Nelson D. Johnson

Enclosure

WILLETS POINT INDUSTRY AND REALTY ASSOCIATION
127-50 Northern Blvd. Flushing, NY 11368
718-446-7000 Ext 297
718-458-5199 Fax
dscully@tullyenvironmental.com

April 27, 2007

Mr. William E. Walsh
New York City Economic Development Corp.
Vice President
Real Estate Development
110 William Street
New York, NY 10038

RE: Willets Point Development

Dear Mr. Walsh,

I am writing to express our appreciation for the time and consideration given our group by Deputy Mayor Doctoroff as well as you and your staff. We believe that this could be the impetus to a mutually beneficial outcome for the future vision of Willets Point.

As you are aware, the members of the Willets Point Industry and Realty Association have felt purposely isolated by the City in this process due to a lack of communication by the EDC and the failure to provide any information concerning relocation or compensation. The Deputy Mayor expressed his regret over the City's mistake for not including the property owners earlier in this process and vowed to make up time. In an effort to avoid future miscommunications, we thought that it would be a benefit to both parties to recap the discussions held and the next steps to be taken.

The Association strongly believes that the results of the EDC's 1991 Study are still valid today. The basic conclusion of that study is that the once the area was provided with desperately needed infrastructure, sanitary sewers and streets, Willets Point would thrive as a valuable M-3 zone and provide an excellent source of jobs. Regardless, the main discussion centered on the City's desire to develop Willets Point into a mixed use community. To this end, the City has taken four years to study the area, including the creation of a Willets Point Task Force, issuance of an RFEI for market feedback from potential developers and an issuance of a second request for market feedback in the form of an RFP. The Association expressed its concerns about the ability of the City to proceed with development due to the existing limitations of the site; high ground water, cost of remediation, lack of infrastructure, property acquisition costs, relocation of existing businesses, interference from air traffic, among the other inherent issues that must be considered.

WILLETS POINT INDUSTRY AND REALTY ASSOCIATION

According to Deputy Mayor Doctoroff, the City has expended millions of dollars to sponsor in-depth studies, based on market feedback, to explore the feasibility of such a development; traffic, noise, environmental remediation, utility requirements among others. The results of these efforts has led the City to the conclusion that Willets Point can be developed to include such mixed uses as a convention center, 5,500 units of housing, 1.7 million sf of retail outlets, an elementary school, a 700 room hotel, 500,000 sf of office space and a bridge to Flushing. As further affirmation that the City wants to operate with an open book, Mr. Doctoroff proposed that the studies be made available to the members of the Association.

Mr. Doctoroff also recognized the need for the City to sit down with the property owners of Willets Point in the immediate future to discuss relocation possibilities and evaluate the land acquisition costs. He also stated that the City was prepared to be very generous in their dealings with the property owners and that we could be assured we would be more than justly compensated. The Association indicated that there are some businesses that cannot be relocated due to the complexity of their facilities of the regulated nature of their businesses. As possible alternatives to relocation, Mr. Doctoroff suggested that those landowners could be compensated for the value of their business. And while not desirable, the City would consider a carve-out of a part of the region for those businesses that could not be moved.

The members of WPIRA believe that this meeting was constructive in that open communication is always preferable to a battle in the courts. However, as we indicated during the meeting, due to the advancement of the City's plans to date, the Association has no alternative than to continue to pursue actions in its best interest even while we continue discussions with the City. There are certain milestones that will be quickly upon us that we as property owners cannot allow to pass without comment pending an amicable settlement with the City. Our actions should not be interpreted as an unwillingness to sit down and discuss options with the City, but as necessary for the preservation of our rights as we move through this process.

In order to move this process along, the Deputy Mayor recommended the following actions as the first steps. The EDC will set up a meeting within the next two weeks between WPIRA and the City's consultants to review the area studies that have been completed. In light of the upcoming scoping meeting and the deadline for comments of May 14th, we request that the studies addressing the following issues be made available by May 7th so that WPIRA may comment on the scope of the DEIS in a timely manner:

- Infrastructure requirements for the proposed development
- Proposed remediation and cost analysis
- Traffic studies and proposed traffic plans
- Economic impact and job creation
- Parking Requirements
- Property Acquisition and Relocation
- Any additional engineering studies the EDC believes would be helpful

WILLETS POINT INDUSTRY AND REALTY ASSOCIATION

The second step that must be taken is to provide a schedule for discussions between the EDC and the property owners to determine the needs of the existing businesses and begin evaluation of property costs. We would like the EDC to prepare some dates and recommended methods for proceeding with these discussions. We believe that these discussions would be best if conducted separately with each owner.

Once again, the efforts on the part of the City to reach out to our Association are appreciated and we look forward to moving towards a mutually beneficial conclusion in the matter.

Sincerely,
Willets Point Industry and Realty Association

Daniel T. Scully

FOIL Correspondence:

New York City Department of City Planning

ARNOLD & PORTER LLP

Nelson D. Johnson, Ph.D.
Nelson.Johnson@aporter.com
212.715.1038
212.715.1399 Fax
399 Park Avenue
New York, NY 10022-4690

June 5, 2008

Public Records Officer
New York City Department of City Planning
22 Reade Street
Second Floor, West
New York, NY 10007-1216

Re: **Freedom of Information Law Request**

Dear Public Records Officer:

This is a request for records (as defined below) pursuant to the New York State Freedom of Information Law, Public Officers Law Article 6 § 84 *et seq.*, seeking the production of records related to the United States Tennis Association ("USTA") National Tennis Center Project of the early 1990s, located in Flushing.

Specifically, I request records within the possession of the New York City Department of City Planning relating to geotechnical data from the USTA National Tennis Center site, including, without limitation, boring logs and cross-sections.

For purposes of this information request, I am using the term "records" to include any information kept, held, filed, produced or reproduced, by, with, or for the agency, in any physical form whatsoever including, without limitation, reports, statements, examinations, memoranda, opinions, folders, files, books, manuals, pamphlets, forms, papers, designs, drawings, maps, photos, letters, e-mails, notes, microfilms, computer tapes or discs, rules, regulations, or codes. I request that where records are held electronically, they be produced in a widely used electronic format, if practicable.

If you should determine that any documents responsive to this request are exempt from disclosure, please furnish me with any reasonably-severable portions thereof, and provide me with an explanation of the basis of the exemption. Also please inform me of the avenues for appeal from any denial of any portion of this request.

You are hereby authorized in advance to incur up to $500 in photocopying and search costs. If the cost will exceed that amount, or if you have any other questions regarding this request for information, please contact me by telephone at (212) 715-1038.

CITY PLANNING COMMISSION
CITY OF NEW YORK

OFFICE OF THE CHAIR

June 17, 2008

Mr. Nelson D. Johnson
Arnold & Porter LLP
399 Park Avenue
New York, NY 10022-4690

As Records Access Officer for the Department of City Planning (DCP), I acknowledge receipt of your request.

Please be advised that a response to your request will require me to collect agency files from offices that are separate from mine and search for and review records for their responsiveness to your request.

Pursuant to Subdivision 3 of Section 89 of the Freedom of Information Law and Section 5 (d) of the Uniform Rules and Regulations for All City Agencies Pertaining to the Administration of the Freedom of Information Law, a determination of whether your request will be granted in whole or in part shall be made within thirty (30) business days. This amount of time is necessary due to the large volume of records that could be responsive to your request, the need to search for and retrieve potentially responsive material from DCP's archives, and the review of any responsive records, including electronic correspondence, to determine whether they may be exempt from disclosure pursuant to FOIL. You will be advised of such determination as soon as it has been made.

Enclosed is a copy of this agency's procedures concerning Freedom of Information requests.

Sincerely,

Wendy Niles

Wendy Niles
212-720-3208

Amanda M. Burden, FAICP, Chair
22 Reade Street, New York, NY 10007-1216
(212) 720-3200 FAX (212) 720-3219
nyc.gov/planning

DEPARTMENT OF CITY PLANNING
CITY OF NEW YORK

OFFICE OF THE COUNSEL

Amanda M. Burden, AICP, Director
Department of City Planning

WRITER'S DIRECT DIAL
(212) 720-

DAVID KARNOVSKY, Counsel
JULIE M. LUBIN, Deputy Counsel

GLENN E. FRIEDMAN
ALISON R. MCCABE
WESLEY O'BRIEN

PROCEDURE FOR THE PUBLIC INSPECTION OF RECORDS PURSUANT TO THE FREEDOM OF INFORMATION LAW

1. **Request for Information:** Any request to inspect or copy records kept or held by the Department of City Planning shall be made in writing and addressed to the records access officer. The request should reasonably describe the record or records sought and should, whenever possible, supply information regarding dates, file designations or other information which will enable the records access officer to identify the records sought.

2. **Records Access Officer:** The records access officer for the Department of City Planning is:

Wendy Niles
Dept. of City Planning
22 Reade Street, Room 2W
New York, New York 10007
Telephone: (212) 720-3208

3. **Hours and Location for Inspection of Records:** Upon written notification by the records access officer that records are being provided in response to a request, such records may be obtained and inspected from 9:00 a.m. to 5:00 p.m. at the office of the records access officer, unless the records access officer designates a more specific time or location. In no case may records be removed from agency premises.

4. **Fees:** Except when a different fee is otherwise prescribed by law, a fee of $.25 per page or part thereof will be charged for photocopy of a record up to 9" x 14" in size. Actual cost will be charged if photocopying or reproduction is required out of agency, or if reproduction of any other size record is sought. Where the records access officer determines that the fee chargeable under this section will exceed $25.00, an advance deposit for 25% of the anticipated fee, or $25.00 whichever is greater, may be required. Where a requesting party has previously failed to pay a fee under this section, payment of past due fees and advance deposit of the full amount of the anticipated fee may be required prior to photocopying of the requested records.

DEPARTMENT OF CITY PLANNING
CITY OF NEW YORK

OFFICE OF THE COUNSEL

Amanda M. Burden, AICP, Director
Department of City Planning

DAVID KARNOVSKY, Counsel
JULIE M. LUBIN, Deputy Counsel

GLENN E. FRIEDMAN
ALISON R. MCCABE
WESLEY O'BRIEN

WRITER'S DIRECT DIAL
(212) 720-

PROCEDURE FOR THE PUBLIC INSPECTION OF RECORDS PURSUANT TO THE FREEDOM OF INFORMATION LAW

5. **Appeal:** When a request for access has been denied in writing in whole or in part by the records access officer, the requesting party may appeal the decision to the appeal officer within 30 days of the denial. An appeal shall be in writing, addressed to the appeal officer, and shall include the date of the request, the date of the denial, the records which were requested, and the name and address of the requesting party.

6. **Appeals Officer:** The appeals officer for the Department of City Planning is:

David Karnovsky, Counsel to the Department
22 Reade Street, Room 2N
New York, New York 10007
Telephone: (212) 720-3400

FOIL Correspondence:

Metropolitan Transportation Authority - New York City Transit

ARNOLD & PORTER LLP

Nelson D. Johnson, Ph.D.
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399 Park Avenue
New York, NY 10022-4690

June 5, 2008

Denise Fraser
Deputy Exec. Asst. General Counsel/Freedom of Information Officer
Metropolitan Transportation Authority New York City Transit
130 Livingston Plaza, 12th Floor
Brooklyn, NY 11201

Re: **Freedom of Information Law Request**

Dear Ms. Fraser:

This is a request for records (as defined below) pursuant to the New York State Freedom of Information Law, Public Officers Law Article 6 § 84 *et seq.*, seeking the production of records related to property owned by the Metropolitan Transportation Authority ("MTA") that is known as the Flushing Train Barn and is located south of Shea Stadium and south of Roosevelt Avenue in Flushing, Queens.

Specifically, I request all records within the possession of the MTA concerning geotechnical data related to this property, including, without limitation, cross-sections and boring logs.

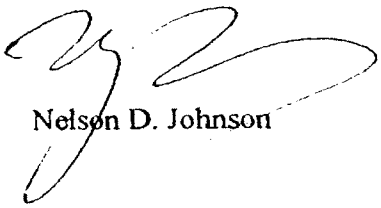
For purposes of this information request, I am using the term "records" to include any information kept, held, filed, produced or reproduced, by, with, or for the agency, in any physical form whatsoever including, without limitation, reports, statements, examinations, memoranda, opinions, folders, files, books, manuals, pamphlets, forms, papers, designs, drawings, maps, photos, letters, e-mails, notes, microfilms, computer tapes or discs, rules, regulations, or codes. I request that where records are held electronically, they be produced in a widely used electronic format, if practicable.

If you should determine that any documents responsive to this request are exempt from disclosure, please furnish me with any reasonably-severable portions thereof, and provide me with an explanation of the basis of the exemption. Also please inform me of the avenues for appeal from any denial of any portion of this request.

You are hereby authorized in advance to incur up to $500 in photocopying and search costs. If the cost will exceed that amount, or if you have any other questions regarding this request for information, please contact me by telephone at (212) 715-1038.

Thank you for your attention to this matter.

Sincerely,



Nelson D. Johnson

130 Livingston Street
Brooklyn, NY 11201

Howard H. Roberts, Jr.
President

New York City Transit

June 12, 2008

Nelson D. Johnson, PH. D.
Arnold & Porter LLP
399 Park Avenue

New York, NY 10022

Re: Freedom of Information Law
Request No. 13475

Dear Mr. Johnson:

This is to acknowledge receipt of your Freedom of Information Law request, wherein you request a copy of the April, 2004 Final Geotechnical Design Report for Design/Construction of the New Corona Maintenance Shop and Car Washer, "A" Division (IRT), including attachments.

Your request has been forwarded to the appropriate department(s) for research.

Please be advised that the NYCT FOIL Unit receives a high volume of requests ranging from a simple request for one document that can be readily located to complex requests for multiple documents, such as records relating to a construction project. Typically, the FOIL Unit requests documents from other departments, which then must locate the documents and forward them for review by the FOIL Unit to determine if they are disclosable under the law. As a result, the time and effort required to complete a response can vary significantly. NYCT endeavors to complete each request in a time period that is reasonable under the circumstances. A few examples of the types of requests and estimated times for responses are:

A.) Requests for accident reports, Payment and/or Performance Bonds for a particular contract, Board Minutes or other records that can be identified and located by going to one source - one to three months.

B.) Requests requiring research to determine the type of records that may be responsive - six to eight months.

C.) Multiple or voluminous requests seeking to obtain records pertaining to contracts - six months to one year.

We believe that your request falls into the category that usually takes 3 Months to complete. We would expect that our response should be completed by 9/11/2008

We will notify you if we cannot provide you with responsive records within the aforementioned time.

If you are able to narrow or further specify the records you seek, it may permit the FOIL Unit to complete the process in a shorter time period. Please use the above number when corresponding to advise us of this more narrow request.

The fee for this serivce is $.25 per page of material provided. NYCT will advise you of the cost as soon as responsive documents are made available to us. Upon receipt of a check or money order to cover the costs of the documents, we will forward those records that are disclosable.

Should it become necessary to inquire further regarding this request, please refer to the above Freedom of Information request number in your correspondence.

Sincerely,

Gail Rogers
Deputy Foil Officer

FOIL Correspondence:

New York City Economic Development Corporation

ARNOLD & PORTER LLP

Nelson D. Johnson, Ph.D.
Nelson.Johnson@aporter.com

212.715.1038
212.715.1399 Fax

399 Park Avenue
New York, NY 10022-4690

February 15, 2008

VIA OVERNIGHT COURIER

Judith Capolongo
Records Access Officer
110 William Street
New York, New York 10038

Re: Freedom of Information Law Request
Economic Development Corporation

Dear Ms. Capolongo:

This is a request for records (as defined below) pursuant to the New York State Freedom of Information Law, Public Officers Law Article 6 § 84 *et seq.*, seeking the production of records related to the area in Flushing, Queens bounded by Northern Boulevard to the north, 126th Street and Shea Stadium to the west, Roosevelt Avenue to the south and the Flushing River to the east (such area shall be "Willets Point").

Specifically, I request all records created after January 1, 1990, within the possession of the Economic Development Corporation concerning the following topics with respect to Willets Point:

1. environmental conditions at Willets Point including, without limitation, the presence of hazardous waste, petroleum release, air emissions, water discharges, any other spills or contamination, flooding and geology;
2. the Willets Point Development Plan;
3. the potential redevelopment of the Willets Point property, whether or not related to the Willets Point Development Plan;
4. the acquisition of property at Willets Point, whether by eminent domain or otherwise;
5. the value and/or valuation of the Willets Point property;
6. the relocation of existing workers and businesses in the event that they are displaced by development;
7. correspondence with potential developers of Willets Point;

8. the draft and final Environmental Impact Statements (DEIS and FEIS), and related materials, prepared in the early 1990s for the proposed "Sportsplex" project;

9. correspondence with persons and businesses requesting assistance with the construction, repair, reconstruction and replacement of streets, roads, signals or signs; and

10. correspondence with persons and businesses submitting comments regarding the development and/or redevelopment of Willets Point.

For purposes of this information request, I am using the term "records" to include any information kept, held, filed, produced or reproduced, by, with, or for the agency, in any physical form whatsoever including, without limitation, reports, statements, examinations, memoranda, opinions, folders, files, books, manuals, pamphlets, forms, papers, designs, drawings, maps, photos, letters, e-mails, notes, microfilms, computer tapes or discs, rules, regulations, or codes. I request that where records are held electronically, they be produced in a widely used electronic format, if practicable.

If you should determine that any documents responsive to this request are exempt from disclosure, please furnish me with any reasonably-severable portions thereof, and provide me with an explanation of the basis for the exemption. Also please inform me of the avenues for appeal from any denial of any portion of this request.

You are hereby authorized in advance to incur up to $200 in photocopying and search costs. If the cost will exceed that amount, or if you have any other questions regarding this request for information, please contact me by telephone at (212) 715-1038.

Thank you for your attention to this matter.

Sincerely,

Nelson D. Johnson

ARNOLD & PORTER LLP

Nelson D. Johnson, Ph.D.
Nelson.Johnson@aporter.com

212.715.1038
212.715.1399 Fax

399 Park Avenue
New York, NY 10022-4690

June 24, 2008

BY OVERNIGHT DELIVERY

Judith Capolongo
Records Access Officer
Economic Development Corporation
110 Williams Street
New York, NY 10038

Re: Freedom of Information Law Request

Dear Ms. Capolongo:

I am writing to follow up on our Freedom of Information Law Request, dated February 15, 2008, regarding Willets Point. Specifically, our request asked for records created after January 1, 1990 within the possession of the Economic Development Corporation regarding several topics, including environmental conditions at Willets Point, the potential redevelopment and valuation of the Willets Point property, and the draft and final Environmental Impact Statements (DEIS and FEIS) and related materials prepared for the proposed "Sportsplex" project. A copy of that request is enclosed.

Public Officers Law, Article 6, § 89(3)(a) states that an entity must respond to a written FOIL request within five business days. This response must make the records available, deny the request, or acknowledge the receipt of the request and provide an approximate date when the request will be granted or denied. We have received no response to date.

In view of the time that has elapsed since my FOIL request, I request that you immediately provide me with the information required by section 89(3) including, without limitation, the date upon which the documents will be made available. If you have any questions, please contact me at (212) 715-1038.

Thank you for your prompt attention to this matter.

Sincerely,

Nelson D. Johnson

Enclosure

366597_2.DOC

New York City
Economic Development
Corporation

110 William Street
New York, NY 10038
Tel: 212.312.3963
Fax: 212.618.5738

www.nycedc.com

June 26, 2008

Nelson D. Johnson, Ph.D.
Arnold & Porter LLP
399 Park Avenue
New York, NY 10022-4690

RE: Freedom of Information Law Request

Dear Dr. Johnson:

This letter will acknowledge receipt of your letter dated June 24, 2008 (the "June Letter"), addressed to Economic Development Corporation ("NYCEDC"), pursuant to the Freedom of Information Law ("FOIL"), Article 6 of the Public Officers Law, in follow-up to a FOIL request you attempted to make by letter dated February 15, 2008 (the "February Letter"), for copies of various records created after January 1, 1990 pertaining to the area in Flushing, Queens bounded by Northern Boulevard to the north, 126th Street and Shea Stadium to the west, Roosevelt Avenue to the south and the Flushing River to the east (such area referred to as "Willets Point"). The June Letter was received by the undersigned on June 25, 2008.

Please be advised that NYCEDC did not receive the February Letter. Upon receipt of the June Letter, NYCEDC confirmed with FedEx that your package (the "February FedEx") containing the February Letter could not be delivered to NYCEDC, as only our address, and not our company name or floor, was written on the airbill (a copy of such airbill was attached to the June Letter and is also attached hereto). FedEx further confirmed that they could not reach NYCEDC to find out where the February FedEx should be delivered because the phone number written on the airbill was not NYCEDC's. FedEx also confirmed that the February FedEx was never delivered to NYCEDC and was shipped back to your office at 399 Park Avenue on February 25, 2008. As such, NYCEDC is treating your June Letter as a new request.

NYCEDC is currently searching its files for records responsive to your request and will notify you regarding the availability of these records within 20 business days from the date of this letter.

On the basis of applicable statutory authority, NYCEDC reserves the right to deny access to any items exempt from disclosure under FOIL.

Sincerely,

Judith Capolongo
Records Access Officer

Attachment

New York City
Economic Development
Corporation

110 William Street
New York, NY 10038
Tel: 212.312.3963
Fax: 212.618.5738

www.nycedc.com

July 28, 2008

Nelson D. Johnson, Ph.D.
Arnold & Porter LLP
399 Park Avenue
New York, NY 10022-4690

RE: Freedom of Information Law Request

Dear Dr. Johnson:

This letter is in further response to your letter dated June 24, 2008 (the "June Letter"), addressed to New York City Economic Development Corporation ("NYCEDC"), pursuant to the Freedom of Information Law ("FOIL"), Article 6 of the Public Officers Law, for copies of various records created after January 1, 1990 pertaining to the area in Flushing, Queens, referred to as Willets Point. In Ms. Capolongo's June 26, 2008 initial FOIL response letter she indicated NYCEDC would search its files for records responsive to your request and would notify you regarding the availability of these records within 20 business days. Accordingly, NYCEDC is now responding on the results of its search.

NYCEDC has diligently searched its files for records responsive to your request and has located records which are currently undergoing evaluation to determine both their responsiveness and whether they should properly be withheld or disclosed under FOIL. Subject to the exemptions available under FOIL, NYCEDC is prepared to begin making responsive documents available to you on or about August 8, 2008. Please be advised your request is quite voluminous and if you can more specifically identify or narrow the scope of what you are seeking it would help NYCEDC in our ability to respond in a more timely and comprehensive manner.

Sincerely,

David Shelley
Paralegal

O:\FOIL\Requestor\Johnson 2008-06-25\20 day.doc

New York City
Economic Development
Corporation

110 William Street
New York, NY 10038
Tel: 212.312.3963
Fax: 212 618.5738

www.nycedc.com

August 8, 2008

Nelson D. Johnson, Ph.D.
Arnold & Porter LLP
399 Park Avenue
New York, NY 10022-4690

RE: Freedom of Information Law Request

Dear Dr. Johnson:

This letter is in further response to your letter dated June 24, 2008 (the "June Letter"), addressed to New York City Economic Development Corporation ("NYCEDC"), pursuant to the Freedom of Information Law ("FOIL"), Article 6 of the Public Officers Law, for copies of various records created after January 1, 1990 pertaining to the area in Flushing, Queens, referred to as Willets Point

NYCEDC has diligently searched its files for records responsive to your request and has located records, which subject to the exemptions existing under FOIL, are available for delivery to you upon receipt of a check for copy fees in the amount of $90.50 (362 pages at 25 cents per page). Due to the voluminous nature of the documents you requested, additional responsive documents will be offered to you as they become available.

Sincerely,

David Shelley
Paralegal

FOIL Correspondence:

Deputy Mayor for Economic Development and Rebuilding

ARNOLD & PORTER LLP

Nelson D. Johnson, Ph.D.
Nelson.Johnson@aporter.com

212.715.1038
212.715.1399 Fax

399 Park Avenue
New York, NY 10022-4690

February 15, 2008

VIA OVERNIGHT COURIER

Robert C. Lieber
Deputy Mayor for Economic Development and Rebuilding
City Hall, City of New York
New York, NY 10007

Re: Freedom of Information Law Request

Dear Mr. Lieber:

This is a request for records (as defined below) pursuant to the New York State Freedom of Information Law, Public Officers Law Article 6 § 84 *et seq.*, seeking the production of records related to the area in Flushing, Queens bounded by Northern Boulevard to the north, 126th Street and Shea Stadium to the west, Roosevelt Avenue to the south and the Flushing River to the east (such area shall be "Willets Point").

Specifically, I request all records created after January 1, 1998, within the possession of the Office of the Deputy Mayor for Economic Development and Rebuilding concerning the following topics with respect to Willets Point:

1. environmental conditions at Willets Point including, without limitation, the presence of hazardous waste, petroleum release, air emissions, water discharges, any other spills or contamination, flooding and geology;
2. the Willets Point Development Plan;
3. the potential redevelopment of the Willets Point property, whether or not related to the Willets Point Development Plan;
4. the acquisition of property at Willets Point, whether by eminent domain or otherwise;
5. the value and/or valuation of the Willets Point property;
6. the relocation of existing workers and businesses in the event that they are displaced by development;
7. correspondence with potential developers of Willets Point;

8. the draft and final Environmental Impact Statements (DEIS and FEIS), and related materials, prepared in the early 1990s for the proposed "Sportsplex" project;

9. correspondence with persons and businesses requesting assistance with the construction, repair, reconstruction and replacement of streets, roads, signals and signs; and

10. correspondence with persons and businesses submitting comments regarding the development and/or redevelopment of Willets Point.

the provision of services at Willets Point, including but not limited to street and sidewalk repair; storm sewer repair, sanitary sewer installation, fire hydrant installation, trash removal, and police protection.

For purposes of this information request, I am using the term "records" to include any information kept, held, filed, produced or reproduced, by, with, or for the agency, in any physical form whatsoever including, without limitation, reports, statements, examinations, memoranda, opinions, folders, files, books, manuals, pamphlets, forms, papers, designs, drawings, maps, photos, letters, e-mails, notes, microfilms, computer tapes or discs, rules, regulations, or codes. I request that where records are held electronically, they be produced in a widely used electronic format, if practicable.

If you should determine that any documents responsive to this request are exempt from disclosure, please furnish me with any reasonably-severable portions thereof, and provide me with an explanation of the basis for the exemption. Also please inform me of the avenues for appeal from any denial of any portion of this request.

You are hereby authorized in advance to incur up to $200 in photocopying and search costs. If the cost will exceed that amount, or if you have any other questions regarding this request for information, please contact me by telephone at (212) 715-1038.

Thank you for your attention to this matter.

Sincerely,

Nelson D. Johnson

THE CITY OF NEW YORK
OFFICE OF THE MAYOR
NEW YORK, N.Y. 10007

ANTHONY W. CROWELL
COUNSELOR TO THE MAYOR

March 3, 2008

Mr. Nelson Johnson
Arnold & Porter, LLP
399 Park Avenue
New York, NY 10022

Dear Mr. Johnson:

I write to acknowledge receipt of your Freedom of Information Law [(FOIL) Public Officers Law, Section 84 et seq.] request dated January 15, 2008 and referred to me on January 21, 2008 by Deputy Mayor Lieber for: "all records created after January 1, 1998, within the possession of the Office of the Deputy Mayor for Economic Development and Rebuilding concerning the following topics with respect to Willets Point:

- Environmental conditions at Willets Point including, without limitation, the presence of hazardous waste, petroleum release, air emissions, water discharges, any other spills or contamination, flooding and geology;
- The Willets Point Development Plan
- The potential redevelopment of the Willets Point property, whether or not related to the Willets Point Development Plan;
- The acquisition of property at Willets point property, whether by eminent domain or otherwise;
- The value and/or valuation of the Willets Point property;
- The relocation of existing workers and businesses in the event that they are displaced by development;
- Correspondence with potential developers of Willets Point;
- The draft and final Environmental Impact Statements (DEIS and FEIS), and related materials, prepared in the early 1990s for the proposed "sportsplex" project;
- Correspondence with persons and businesses requesting assistance with the construction, repair, reconstruction, and replacement of streets, roads signals and signs; and
- Correspondence with persons and businesses submitting comments regarding the development and/or redevelopment of Willets Point."

I am currently reviewing your request and expect to respond within twenty days or less informing you of the status of your request.

Sincerely,

Anthony Crowell

THE CITY OF NEW YORK
OFFICE OF THE MAYOR
NEW YORK, N.Y. 10007

ANTHONY W. CROWELL
COUNSELOR TO THE MAYOR

April 14, 2008

Mr. Nelson Johnson
Arnold & Porter, LLP
399 Park Avenue
New York, NY 10022

Dear Mr. Johnson:

I write to inform you of our progress in responding to your Freedom of Information Law request for documents related to the Willets Point Development Plan.

I am continuing to review your request and expect to respond within 20 days to update you on our progress.

Sincerely,

Anthony Crowell

THE CITY OF NEW YORK
OFFICE OF THE MAYOR
NEW YORK, N.Y. 10007

ANTHONY W. CROWELL
COUNSELOR TO THE MAYOR

June 17, 2008

Mr. Nelson Johnson
Arnold & Porter, LLP
399 Park Avenue
New York, NY 10022

Dear Mr. Johnson:

I write to inform you of our progress in responding to your Freedom of Information Law request, dated February 15, 2008 for documents related to the Willets Point Development Plan.

Attached are documents that we have found to be responsive to your request. Please note that certain comments have been redacted pursuant to NY Public Officers Law § 87 (2)(g), which exempts non-final inter- or intra- agency communications.

Also, please be aware that due to the extent of your request, our search for responsive records has yielded a large number of emails and other documents. We are continuing to review these emails and documents to determine whether or not they are responsive to your request and if they can be released under FOIL.

Sincerely,

Anthony Crowell

THE CITY OF NEW YORK
OFFICE OF THE MAYOR
NEW YORK, N.Y. 10007

ANTHONY W. CROWELL
COUNSELOR TO THE MAYOR

July 17, 2008

Mr. Nelson Johnson
Arnold & Porter, LLP
399 Park Avenue
New York, NY 10022

Dear Mr. Johnson:

I write to inform you of our progress in responding to your Freedom of Information Law request, dated February 15, 2008 for documents related to the Willets Point Development Plan.

As I stated in my previous letter, our search for responsive records has yielded a large number of emails and other documents. We are continuing to review these emails and documents to determine whether or not they are responsive to your request and if they can be released under FOIL.

Sincerely,

Anthony Crowell

Appendix 8 -

Interstate & Other Freeway

Access Control & Modifications

b. Corridor or Area Level Needs - Discuss corridor level needs.

c. Transportation Plans - New/expanded development and transportation improvements must be coordinated. The intent is to require consistency between transportation planning and land use planning in the area of proposed change, including endorsement of the proposed land uses by appropriate authorities.

The relationship of the current proposal to adopted municipal, county, and urban area land use and transportation plans should be clearly explained. If the current proposal is an addition to currently adopted land use and transportation plans, the impacts of the proposal on those plans should be clearly explained. Prior to final approval, all requests must be consistent with the municipal and/or statewide transportation plan, applicable provisions of 23 CFR 450, and the transportation conformity requirements of 40 CFR parts 51 and 93.

III ALTERNATIVES

Refer to sections of the Design Approval Document wherever possible to reduce repetition. Add additional information as required below or as needed due to different study area.

A. Design Criteria

1. Standards - Refer to AASHTO's "A Policy on Design Standards - Interstate System," 1991, AASHTO's "A Policy on Geometric Design for Highways and Streets," 1994 and NYSDOT HDM Chapters 2 & 6.

2. Critical Design Elements - Refer to Section III.A of the Design Approval Document. Design Criteria must be provided for the freeway, ramps and cross streets to be modified by the access modification. Note that access control is a critical design element for the main line and ramps since both shall have full control of access. For the cross road, refer to HDM Section 6.04.09 for the control of access limits, which extend beyond the ramp terminal.

3. Other Controlling Parameters

   a. Interchange Spacing - Interchange spacing is measured from gore area to gore area since the actual crossroads may not be located near the physical entrance to the freeway. Interchanges should be 1.5 km apart in urban areas and 4.5 km apart in rural areas. The interchange spacing guidelines are based on AASHTO's "A Policy on Design Standards - Interstate System," 1991. These values should be considered as good guidance and followed to the maximum extent possible.

   b. Connection - Must connect to public roads.

c. Configuration - All interchanges should provide for all movements. Less than "full interchanges" for special purpose access for transit vehicles, for HOV's, or into park and ride lots may be considered on a case-by-case basis.

d. Design Vehicle - See HDM Section 5.8.1.

e. LOS (For non-Interstate System access modifications)

B Alternatives - All reasonable alternative for design options, location, and transportation system management options (such as ramp metering, mass transit, and HOV facilities) should be considered and provided for if currently justified, or provisions included for accommodating such facilities if a future need is identified.

C Feasible Alternative

1. Description - Reference or include a plan of the access modification. The plan should include pavement markings, dimensioned lane and shoulder widths, and alignment data.

2. Engineering Considerations

a. Special Geometrics - Non-standard features must be justified based on HDM Chapter 2, Section 2.8 and approved in accordance with the TEA-21 Matrix in the Introduction of this manual. Refer to Section III.C.2.a of the DAD.

i Spacing - Interchanges that violate the spacing parameters may be acceptable based on further analysis. For example, the construction of a collector distributor road that violates the interchange spacing parameters may actually reduce collision rates and congestion on the freeway. However, more detailed design information may be needed to ensure that traffic operations with the modified access will be acceptable. For example, guide signing plans through a series of closely spaced interchanges may be necessary to demonstrate that positive guidance and sign spacing issues can be resolved.

ii. Connection - Access points must be connected to a public road. Direct access from a freeway to a private driveway will not be permitted.

iii. Interchange Configuration - Except in the most extreme circumstances, all interchanges should provide for all movements. When initial construction of a partial interchange can be clearly justified, commitments for completion of the full interchange must be made prior to the initial construction. Purchase of right-of-way for the full interchange at the time of purchase for the initial partial interchange stage should be considered.

b. Safety Considerations - The safety implications of the access modification must be determined by comparing the existing accident rates with the anticipated accident rates of the access modification.

c. Traffic Considerations - Access modifications must be justified based on regional traffic needs and not only to solve local system needs or problems. Additionally, the freeway should not become part of the local traffic circulation system. However, special purpose access for high occupancy vehicles, for transit vehicles, or into park and ride lots may be decided on a case by case basis.

This section should demonstrate by analysis that the network of crossroads and parallel roads in the traffic study area can satisfactorily accommodate design-year demand traffic volumes induced by the proposed modification. The concept "satisfactorily accommodate design-year demand traffic volumes" is defined as not having a significant adverse impact on the safety and operation of the freeway.

The analysis may be based on comparison of highway segment and intersection volume/capacity ratio performance measures provided by traffic simulation models.

Note that a benefit-cost analysis is not required. However, it has application to show that the proposal is cost effective and minor adverse traffic operations impacts at some network locations are a tolerable consequence of substantial benefits to freeway corridor highway users. Benefit-cost analysis is a valuable input to the decision making process. However, it is not the sole or even a major determinant when considering access modifications or the selection of a particular geometric design configuration for the access modification. Benefit-cost analysis is not a method applicable to justification for single or isolated ramps and partial versus full interchanges.

Use of a calibrated computer assisted traffic simulation model, such as TMODEL or TRANPLAN, is suggested as an effective and efficient means of evaluating the travel pattern impacts of network modifications. Use of selected link origin-destination matrices for freeway entrance and exit ramps to show use by non-local traffic is encouraged.

In urban areas with many relatively closely spaced interchanges and recurring freeway congestion, operational analysis may include microscopic traffic performance simulation using computer software such as Traf-Netsim or CORSIM. Contact the Data Analysis and Forecasting Bureau, Planning and Strategy Division, for additional information on transportation modeling.

d. Traffic Control Devices - Reference a preliminary signing plan and ITS measures, as appropriate.

G

PROJECT DEVELOPMENT MANUAL

Appendix 7

Scoping & Design Approval Documents

February, 2008

02/05/08 (incorporates ESB comments)

4.4.7 Groundwater Resources, Aquifers, and Reservoirs

- Subsections

  This section may contain the following subsections:

  Aquifers
  Drinking Water Supply Wells (Public and Private) and Reservoirs

- Regulatory Framework and Guidance:

  6 NYCRR 602 - NYSDEC Long Island Well Permit
  NYSDEP regulations relative to watersheds
  NYSDOT/NYCDEP Memorandum of Understanding
  ECL Article 17, Title 3
  6 NYCRR Part 703 Standards
  Section 1424(e) of the Safe Drinking Water Act
  40 CFR 149
  Executive Order 12372

- Interagency Coordination:

  Document any consultation or coordination with outside agencies (meetings, site visits, major submissions and correspondence, permits, needs, consultation, etc.)

NYSDOH	Health standards
Local Officials	review of special groundwater areas
Local Officials	consultation involving wells, wellheads, reservoirs, etc.
NYCDEP	review of NYC reservoirs, watersheds
EPA	1424(e) review and approval

- Cross-reference:

DAD	Toler Analysis (Appendix –)
4.4.2	Surface Waterbodies and Watercourses/Airport & Airway Improvement
4.4.8	Stormwater Management
4.6	Construction Effects
4.7	Indirect (Secondary) Effects
4.8	Cumulative Effects

  Appendices - Stakeholders and Public Input

- FHWA guidance from Technical Advisory T6640.8A

  Where an area designated as principal or sole-source aquifer under Section 1424(e) of the Safe Drinking Water Act may be impacted by a proposed project, early coordination with EPA will assist in identifying potential impacts. The EPA will furnish information on whether any of the alternatives affect the aquifer. This coordination should also identify any potential impacts to the critical aquifer protection area (CAPA), if designated, within affected sole-source aquifers. If none of the alternatives affect the aquifer, the requirements of the Safe Drinking Water Act are satisfied. If an alternative is selected which affects the aquifer, a design must be developed to assure, to the satisfaction of EPA, that it will not contaminate the aquifer (40 CFR 149). The draft EIS should document coordination with EPA and identify its position on the impacts of the various alternatives. The final EIS should show that EPA's concerns on the preferred alternative have been resolved.

Wellhead protection areas were authorized by the 1986 Amendments to the Safe Drinking Water Act. Each State will develop State wellhead protection plans with final approval by EPA. When a proposed project encroaches on a wellhead protection area, the draft EIS should identify the area, the potential impact of each alternative and proposed mitigation measures. Coordination with the State agency responsible for the protection plan will aid in identifying the areas, impacts and mitigation. If the preferred alternative impacts these areas, the final EIS should document that it complies with the approved State wellhead protection plan.

Aquifers

- Topics may include, but are not limited to:

  State Primary and Principle Aquifer Areas
  Federal Sole Source Aquifer Areas
  Special Groundwater Protection Area (SGPA) in Nassau/Suffolk Counties
  Geology of the aquifer area
  Aquifer description and location
  Effects (impacts) assessment
  Qualitative assessment of groundwater quality and flow, water table elevations, etc.
  Impacts of project runoff on water quality
  Toxic Analysis
  Vehicle pollutant analysis for as an feasible alternatives
  Health issues
  Documentation of EPA review and approval

- Primary aquifers in New York state are shown on the NYSDEC web site: http://www.dec.ny.gov/lands/36164.html

- An overview of Principal and Primary aquifers in New York state is shown on the NYSDEC web site: http://www.dec.ny.gov/lands/36115.html

- Maps of NYS Sole Source and Primary Aquifers are also included in Chapter 4.4 of the *NYSDOT Environmental Procedures Manual*

- Maps of unconsolidated aquifers in upstate New York are available on the USGS web site:
  Finger Lakes sheet - WRI 87-4122: http://pubs.er.usgs.gov/usgspubs/wri/wri874122
  Lower Hudson sheet -WRI 87-4274: http://pubs.er.usgs.gov/usgspubs/wri/wri874274
  Hudson-Mohawk sheet - WRI 87-4275: http://pubs.er.usgs.gov/usgspubs/wri/wri874275
  Adirondack sheet - WRI 87-4276: http://pubs.er.usgs.gov/usgspubs/wri/wri874276
  Niagara sheet - WRI 88-4076: http://pubs.er.usgs.gov/usgspubs/wri/wri884076

- NYSDOT staff can view GIS files showing aquifers:
  P:\GIS\Environmental\region1\Water_ecology\Water\Aquifer

- EPA designated Sole Source Aquifers are identified on the EPA website:
  http://www.epa.gov/region02/water/aquifer/

[Use for projects NOT located in a State aquifer area]
NYSDEC aquifer GIS data files have been reviewed and it has been determined that the proposed project is not located in an identified Primary Water Supply or Principal Aquifer Area. No further investigation for NYSDEC designated aquifers is required.

[Use for projects within a State aquifer area]
NYSDEC aquifer GIS data files have been reviewed and it has been determined that the proposed project is located in the Niskayuna state jurisdictional primary aquifer. This project will take measures in design and construction to avoid, minimize or mitigate any possible adverse impacts to the aquifer. These measures are intended to minimize contamination from highway runoff and construction activities. Project activities will comply with the applicable standards in 6 NYCRR Part 703.

[Use for projects with federal aid that are NOT located within a Federal Sole Source Aquifer Area]
A review of the EPA-designated Sole Source Aquifer Areas Federal Register Notices, Maps, and Fact Sheets indicates that the project is not located in a Sole Source Aquifer Project Review Area. No federal review and/or approvals are required pursuant to Section 1424(e) of the Safe Drinking Water Act.

[Use for projects with federal aid that are within a Federal Sole Source Aquifer Area, and does NOT require FHWA or EPA review]
A review of the EPA-designated Sole Source Aquifer Areas Federal Register Notices, Maps and Fact Sheets, the proposed project is located within the Sole Source Aquifer Boundary of the -- Aquifer. Coordination with EPA and preparation of a Groundwater Assessment Report is not required, since the project scope consists of work that does not require a Federal Sole Source Aquifer Section 1424(e) review by FHWA and EPA, pursuant to Executive Order 12372.

[Use for projects with federal aid that are within a Federal Sole Source Aquifer Area, and require FHWA or EPA review]

- A project in a Sole Source Aquifer area requires Section 1424(e) review by FHWA and EPA, pursuant to Executive Order 12372, if it involves:
  1. Construction of additional through-traffic lanes (this does not include turning lanes), interchanges, or ramps on existing roadways,
  2. Construction of a two or more lane highway on new alignment;
  3. Construction of rest areas with on-site sewage disposal facilities, or,
  4. Other projects which, in the opinion of FHWA, may effect on the water quality of the aquifer to the extent that the goal outlined above (protection of Sole Source Aquifer drinking water supplies) would not be achieved

- Guidelines for the preparation of a Groundwater Assessment Report are available in Attachment 4.4.C of the *NYSDOT Environmental Procedures Manual*.

- Documentation of USEPA Section 1424(e) review, if required, must be provided in the DAD before it can be approved

A review of the EPA-designated Sole Source Aquifer Areas Federal Register Notices, Maps, and Fact Sheets illustrates the project is located in the -- Aquifer Project Review Area. The proposed project requires Federal Sole Source Aquifer Section 1424(e) review by FHWA and EPA, pursuant to Executive Order 12372 due to the nature of the project activities. Discuss consultation and coordination with EPA A Groundwater Assessment Report has been prepared and is included in Appendix --

---

Drinking Water Supply Wells (Public and Private Wells) and Reservoirs

- Topics may include, but are not limited to the following:

  NYS Dept of Health Atlas of Community Water System Sources
  NYSDEC GIS data file records
  Municipal drinking water wells
  Reservoirs
  Effects (impacts) assessment
  Take Analysis
  Wellhead influence zones
  Health issues

- If there are wells, wellheads, reservoirs, etc. within the area of potential effect and they will be affected, discuss coordination with the municipality served. Discuss if measures need to be taken to ensure protection. Refer to the Environmental Procedure Manual for details.

[Use for projects with NO wells, wellheads, reservoirs, etc. within the project's area of potential effect]
There are no municipal drinking water wells, wellhead influence zones, or reservoirs within or near the project area, according to the *NYS Atlas of Community Water System Sources*, dated 1982, issued by the NYS Department of Health

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[Use for projects located within a wellhead influence zone, near reservoirs, etc.]

- Generally, highway construction materials and activities which are prohibited within Wellhead Zone of Influence include:
  1. Disposal or storage of construction and demolition debris;
  2. Petroleum or hazardous materials storage;
  3. Fertilizer, herbicide or insecticide storage;
  4. Deicing compounds or salt storage;
  5. Disposal of waste water; and
  6. Mining or extraction of soils, sands and gravels except within the highway right-of-way.

The -- reservoir is located partially within the project's area of potential effect. The reservoir serves the Town(s) of --, and municipal officials have been consulted. Include and reference any documentation in Appendix --.

During the design phase, measures to avoid, minimize or mitigate adverse impacts to the Sole Source Aquifer will be identified. Best Management Practices (BMPs) to protect the aquifer will be employed, including Erosion and Sediment Control, Stormwater Management and Construction Chemical Storage and Handling.

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TECHNICAL ADVISORY

GUIDANCE FOR PREPARING AND PROCESSING ENVIRONMENTAL AND SECTION 4(F) DOCUMENTS

T 6640.8A
October 30, 1987

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1. PURPOSE. To provide guidance to Federal Highway Administration (FHWA) field offices and to project applicants on the preparation and processing of environmental and Section 4(f) documents.

2. CANCELLATION. Technical Advisory T 6640.8, "Guidance Material for the Preparation of Environmental Documents," dated February 24, 1982, is canceled effective on November 27, 1987.

3. APPLICABILITY

   a. This material is not regulatory. It has been developed to provide guidance for uniformity and consistency in the format, content, and processing of the various environmental studies and documents pursuant to the National Environmental Policy Act (NEPA), 23 U.S.C.109(h) and 23 U.S.C. 138 (Section 4(f) of the DOT Act) and the reporting requirements of 23 U.S.C. 128.

   b. The guidance is limited to the format, content and processing of NEPA and Section 4(f) studies and documents. It should be used in combination with a knowledge and understanding of the Council on Environmental Quality (CEQ) Regulations for Implementing NEPA (40 CFR 1500-1508), FHWA's Environmental Impact and Related Procedures (23 CFR 771) and other environmental statutes and orders (see Appendix A).

   c. This guidance should not be used until November 27, 1987, the effective date of the 1987 revisions to 23 CFR 771.

Ali F. Sevin
Director, Office of
Environmental Policy

GUIDANCE FOR PREPARING AND PROCESSING ENVIRONMENTAL AND SECTION 4(F) DOCUMENTS

Background

An earlier edition of this advisory (dated February 24, 1982) placed major emphasis on environmental impact statements (EISs) and provided limited guidance on environmental assessments (EAs) and other environmental studies needed for a categorical exclusion (CE) determination or a finding of no significant impact (FONSI). The revised guidance gives expanded coverage to CE determinations, EAs, FONSIs, EISs, supplemental EISs, reevaluations, and Section 4(f) evaluations. This material is not regulatory. It does, however, provide for uniformity and consistency in the documentation of CEs and the development of environmental and Section 4(f) documents.

the preferred alternative would result in violations of the 1 or 8-hour CO standards, an effort should be made to develop reasonable mitigation measures through early coordination between FHWA, EPA, and appropriate State and local highway and air quality agencies. The final EIS should discuss the proposed mitigation measures and include evidence of the coordination.

9. Noise Impacts

The draft EIS should contain a summary of the noise analysis including the following for each alternative under detailed study:

(a) A brief description of noise sensitive areas (residences, businesses, schools,parks, etc.), including information on the number and types of activities which may be affected. This should include developed lands and undeveloped lands for which development is planned, designed, and programmed.

(b) The extent of the impact (in decibels) at each sensitive area. This includes a comparison of the predicted noise levels with both the FHWA noise abatement criteria and the existing noise levels. (Traffic noise impacts occur when the predicted traffic noise levels approach or exceed the noise abatement criteria or when they substantially exceed the existing noise levels). Where there is a substantial increase in noise levels, the HA should identify the criterion used for defining "substantial increase." Use of a table for this comparison is recommended for clarity.

(c) Noise abatement measures which have been considered for each impacted area and those measures that are reasonable and feasible and that would "likely" be incorporated into the proposed project. Estimated costs, decibel reductions and height and length of barriers should be shown for all abatement measures.

Where it is desirable to qualify the term "likely," the following statement or similar wording would be appropriate. "Based on the studies completed to date, the State intends to install noise abatement measures in the form of a barrier at (location(s)). These preliminary indications of likely abatement measures are based upon preliminary design for a barrier of _____ high and _____ long and a cost of $_____ that will reduce the noise level by _____ dBA for _____ residences (businesses, schools, parks, etc.). (Where there is more than one barrier, provide information for each one.) If during final design these conditions substantially change, the abatement measures might not be provided. A final decision onthe installation of abatement measure(s) will be made upon completion of the project design and the public involvement process."

(d) Noise impacts for which no prudent solution is reasonably available and the reasons why.

10. Water Quality Impacts

The draft EIS should include summaries of analyses and consultations with the State and/or local agency responsible for water quality. Coordination with the EPA under the Federal Clean Water Act may also provide assistance in this area. The discussion should include sufficient information to describe the ambient conditions of streams and water bodies which are likely to be impacted and identify the potential impacts of each alternative and proposed mitigation measures. Under normal circumstances, existing data may be used to describe ambient conditions. The inclusion of water quality data spanning several years is encouraged to reflect trends.

The draft EIS should also identify any locations where roadway runoff or other nonpoint source pollution may have an adverse impact on sensitive water resources such as water supply reservoirs, ground water recharge areas, and high quality streams. The 1981 FHWA

research report entitled "Constituents of Highway Runoff," the 1985 report entitled "Management Practices for Mitigation of Highway Stormwater Runoff Pollution," and the 1987 report entitled "Effects of Highway Runoff on Receiving Waters" contain procedures for estimating pollutant loading from highway runoff and would be helpful in determining the level of potential impacts and appropriate mitigative measures. The draft EIS should identify the potential impacts of each alternative and proposed mitigation measures.

Where an area designated as principal or sole-source aquifer under Section 1424(e) of the Safe Drinking Water Act may be impacted by a proposed project, early coordination with EPA will assist in identifying potential impacts. The EPA will furnish information on whether any of the alternatives affect the aquifer. This coordination should also identify any potential impacts to the critical aquifer protection area (CAPA), if designated, within affected sole-source aquifers. If none of thealternatives affect the aquifer, the requirements of the Safe Drinking Water Act are satisfied. If an alternative is selected which affects the aquifer, a design must be developed to assure, to the satisfaction of EPA, that it will not contaminate the aquifer (40 CFR 149). The draft EIS should document coordination with EPA and identify its position on the impacts of the various alternatives. The final EIS should show that EPA's concerns on the preferred alternative have been resolved.

Wellhead protection areas were authorized by the 1986 Amendments to the Safe Drinking Water Act. Each State will develop State wellhead protection plans with final approval by EPA. When a proposed project encroaches on a wellhead protection area, the draft EIS should identify the area, the potential impact of each alternative and proposed mitigation measures. Coordination with the State agency responsible for the protection plan will aid in identifying the areas, impacts and mitigation. If the preferred alternative impacts these areas, the final EIS should document that it complies with the approved State wellhead protection plan.

11. Permits

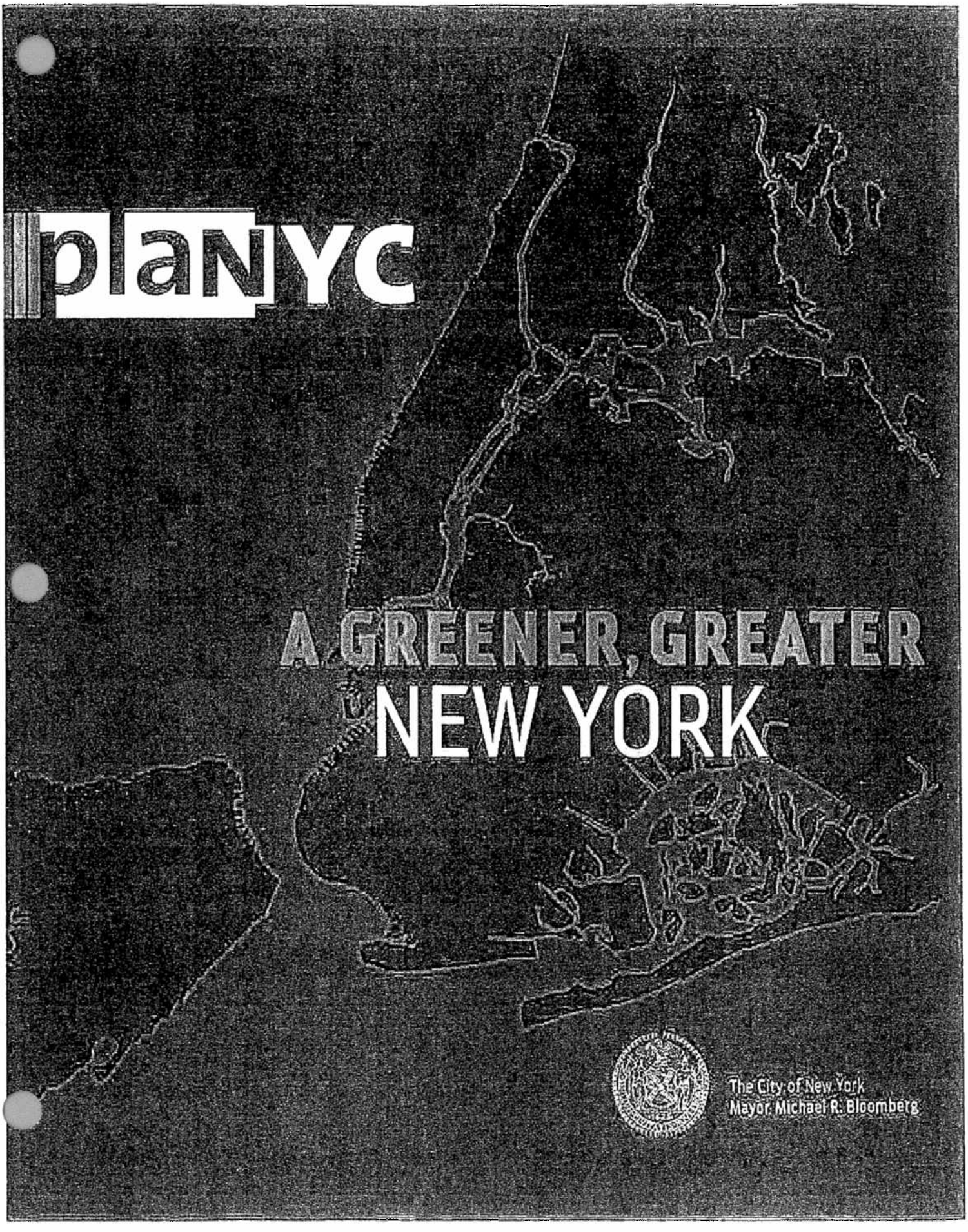
If a facility such as a safety rest area is proposed and it will have a point source discharge, a Section 402 permit will be required for point source discharge (40 CFR 122). The draft EIS should discuss potential adverse impacts resulting from such proposed facilities and identify proposed mitigation measures. The need for a Section 402 permit and Section 401 water quality certification should be identified in the draft EIS.

For proposed actions requiring a Section 404 or Section 10 (Corps of Engineers) permit, the draft EIS should identify by alternative the general location of each dredge or fill activity, discuss the potential adverse impacts, identify proposed mitigation measures (if not addressed elsewhere in the draft EIS), and include evidence of coordination with the Corps of Engineers (in accordance with the U.S. DOT/Corps of Engineers Memorandum of Agreement) and appropriate Federal, State and local resource agencies, and State and local water quality agencies. Where the preferred alternative requires an individual Section 404 or Section 10 permit, the final EIS should identify for eachpermit activity the approximate quantities of dredge or fill material, general construction grades and proposed mitigation measures.

For proposed actions requiring Section 9 (U.S. Coast Guard bridge) permits, the draft EIS should identify by alternative the location of the permit activity, potential impacts to navigation and the environment (if not addressed elsewhere in the document), proposed mitigation measures and evidence coordination with the U.S. Coast Guard (in accordance with the FHWA/U.S. Coast Guard Memorandum of Understanding). Where the preferred alternative requires a Section 9 permit, the final EIS should identify for each permit activity the proposed horizontal and vertical navigational clearances and include an exhibit showing the various dimensions.

For all permit activities the final EIS should include evidence that every reasonable effort has been made to resolve the issues raised by other agencies regarding the permit activities. If important issues remain unresolved, the final EIS must identify those issues, the positions of

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planYC
A GREENER, GREATER
NEW YORK
The City of New York
Mayor Michael R. Bloomberg

One challenge eclipses them all: climate change. We have already started to experience warmer, more unpredictable weather and rising sea levels. But greater changes are ahead. By the end of the century, temperatures across the globe could rise by as much as eight degrees Fahrenheit. In New York, scientists project that 40 to 89 days annually could have 90 degree heat—or hotter. And as a coastal city, we are vulnerable to the most dramatic effects of global warming: rising sea levels and intensifying storms.

We have a special stake in this discussion—but also a unique ability to help shape a solution.

The sheer scale of our city means that New York emits nearly 0.25% of the world's total greenhouse gases; becoming more efficient will have a tangible impact.

But these efforts will build on the strength of the city itself. Our density, reliance on mass transit, and smaller, stacked living spaces mean that New Yorkers produce a fraction of the greenhouse gases compared to the average American. That means growing New York is, itself, a climate change strategy.

Since establishing a model of multi-culturalism and tolerance more than 400 years ago, pioneering the infrastructure networks that enabled modern life, and embodying an ideal of possibility and aspiration, New York has always been the most eloquent argument about why cities matter. Now is our opportunity to define the role of cities in the 21st century—and lead the fight against global warming.

Climate Change



Climate Change

Reduce global warming emissions by more than 30%

Climate Change



East River Park, Manhattan

Reduce global warming emissions by more than 30%

This Plan is an attempt to sustain our city's success and our momentum forward; to sustain what we love about New York and want to pass on.

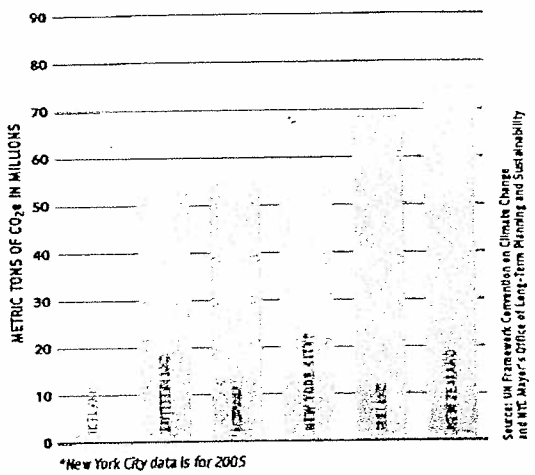
In it we have sought to solve a series of distinct challenges; how to generate enough housing in a way that doesn't simply accommodate population growth, but helps shape the city we want to become; how to balance that need against the open space that every neighborhood deserves, while our supply of land remains limited. We have proposed a plan to unleash the most dramatic expansion of our transit system in over half a century and shift people out of their cars; outlined strategies to secure the reliability of the energy and water networks underpinning our city and plans to empower every community through cleaner air, land, and waterways.

These efforts will require substantial investments—but each will provide an even greater return. Improving our energy infrastructure and lowering demand will reduce our energy costs by billions of dollars over the next decade. Protecting our watershed will avoid a multi-billion-dollar investment in new water filtration plants. Improving transit and reducing congestion will cut down the $13 billion cost to our economy from traffic delays. And the action required to execute these initiatives—constructing new transit lines, retrofitting old buildings, deploying new technology—will create thousands of well-paying jobs.

Each solution serves multiple ends; transit-oriented development can help address our need for housing and reduce traffic congestion; modernizing our energy supply system can reduce air pollution; greening our open spaces can protect the quality of the water in our harbor.

But collectively these initiatives all address our greatest challenge: **climate change.**

Greenhouse Gas Emissions
2004



*New York City data is for 2005

Scientists have now proven that human activities are increasing the concentration of greenhouse gases in the earth's atmosphere—and these gases are raising global temperatures. The warming of the earth is causing longer heat waves, rising sea levels, and more violent storms. *(See chart above: Greenhouse Gas Emissions)*

Average temperatures across the world could soar eight degrees Fahrenheit by the end of the century. But the problem isn't only global—we are already feeling the effects in our city.

In Lower Manhattan, the water at the Battery has risen more than a foot during the last century; as a result, what's called a "hundred-year flood" is actually likely to occur every 80 years. In the future, such floods could become twice or even four times as frequent. Violent storms could threaten our homes and we are not yet prepared: a Category 3 hurricane can produce winds of 111 to 130 miles per hour, but our current building code only requires windows to withstand gusts of 110 miles an hour. As a coastal city, New York is especially vulnerable to all of these forces.

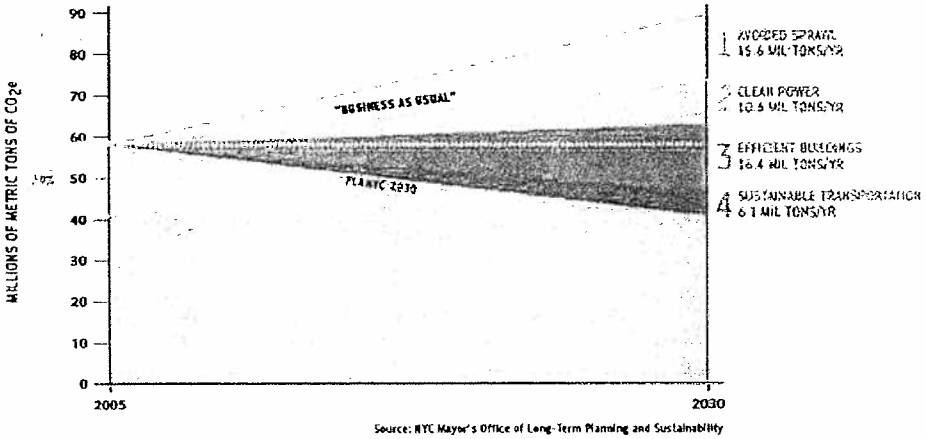
And without action the impacts will continue to intensify. In New York, we could experience days hotter than 90 degrees between 11% and 24% of the year. The heat would drive up energy consumption for cooling, making the problem worse, threatening the health of all New Yorkers—especially the elderly—and even increase the number of disease-bearing insects who emerge in warmer, wetter weather.

There are things that can be done now: We can amend the building code, work to protect our infrastructure—we could even consider a storm surge barrier across the Narrows. But the massive changes that scientists predict under extreme scenarios would still place much of the city underwater—and beyond the reach of any protective measures.

No city can change these forces alone, but collective effort can. And New York can help lead the way. *(See chart on following page: Greenhouse Gas Reduction Strategy)*

r plan to reduce greenhouse gas emissions

Projected Impacts of Our Greenhouse Gas Reduction Strategies



Source: NYC Mayor's Office of Long-Term Planning and Sustainability

The result will be an annual reduction of 33.6 million metric tons—and an additional 15.6 million metric tons avoided by accommodating 900,000 people in New York City

1 AVOIDED SPRAWL

Attract 900,000 new residents by 2030 to achieve an avoided 15.6 million metric tons

- Create sustainable, affordable housing
- Provide parks near all New Yorkers
- Expand and improve mass transit
- Reclaim contaminated land
- Open our waterways for recreation
- Ensure a reliable water and energy supply
- Plant trees to create a healthier and more beautiful public realm

2 CLEAN POWER

Improve New York City's electricity supply to save 10.6 million metric tons

- Replace inefficient power plants with state-of-the-art technology
- Expand Clean Distributed Generation
- Promote renewable power

3 EFFICIENT BUILDINGS

Reduce energy consumption in buildings by 16.4 million metric tons

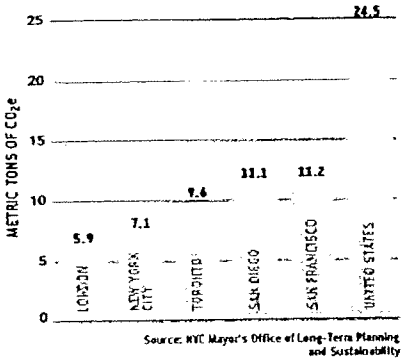
- Improve the efficiency of existing buildings
- Require efficient new buildings
- Increase the efficiency of appliances
- Green the city's building and energy codes
- Increase energy awareness through education and training

4 SUSTAINABLE TRANSPORTATION

Enhance New York City's transportation system to save 6.1 million metric tons

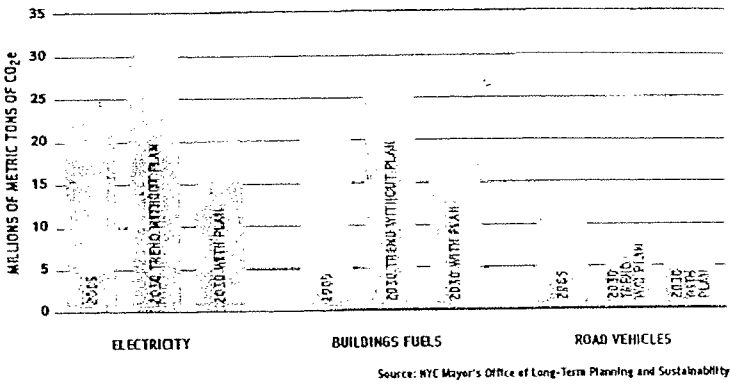
- Reduce vehicle use by improving public transit
- Improve the efficiency of private vehicles, taxis, and black cars
- Decrease CO_2 intensity of fuels

Greenhouse Gas Emissions Per Capita



Source: NYC Mayor's Office of Long-Term Planning and Sustainability

Projected Emissions and Targeted Reductions



Source: NYC Mayor's Office of Long-Term Planning and Sustainability

Our Plan

There is no silver bullet to deal with climate change. Greenhouse gas emissions are caused by a variety of sources; there are millions of cars, boilers, and light bulbs contributing to our emissions. By necessity, any solution must be multi-faceted as well.

As a result, our strategy to help stem climate change is the sum of all of the initiatives in this plan.

In our **transportation** plan, we described shifting people from their cars onto an expanded mass transit system because our economy will stall if we can't clear the roads. But a transit trip also uses far less energy than an auto trip, producing less carbon dioxide.

In our **energy** plan, we proposed investing in repowered or new power plants, because they will cost less to operate and improve our air quality. But these new plants will also burn far less fossil fuel and release fewer greenhouse gases.

In our **open space, air quality, and water quality** plans, we committed to planting more trees to cool our sidewalks and beautify our neighborhoods; these efforts, too, will reduce greenhouse gas emissions, because trees—especially within the concrete landscape of a city street—cool the air and sequester carbon dioxide.

PLANYC will reduce our city's greenhouse gas emissions by 30% simply by extending and enhancing the inherent strength of New York City itself.

Cities can make the difference.
Cities have always been incubators of ideas, gathering together concentrations of diverse people to produce genuine innovation. But today they matter more urgently than ever before—because of climate change.

Although the word "environment" may not evoke the dense buildings and sidewalks of cities, these very qualities make urban centers the most sustainable places on earth.

Among American cities, New York is the most environmentally efficient. Per capita, New Yorkers produce less than a third of the CO_2e generated by the average American. *(See chart above: Greenhouse Gas Emissions Per Capita)*

This efficiency results from our city's fundamental design. Dense neighborhoods provide stores and services within walking distance, enabling us to run many errands on foot or by bicycle. An extensive public transportation system allows the majority of commuters to travel by mass transit.

We tend to inhabit smaller spaces than our suburban counterparts, with fewer lights and appliances, and less area to heat and cool. Many of these apartments share walls, reducing the need for heat even more. With many buildings dating from prior to World War II, and thus constructed before the era of cheap energy, many of the city's older buildings have natural daylight and ventilation built into their design.

And as New York attracts more residents, it reduces the burden that population places on the global environment in the form of sprawl, which consumes land, energy, and water at a truly gluttonous pace.

On average, each New Yorker generates 7.1 metric tons of CO_2e, compared to 24.5 metric tons from an average American lifestyle. That means that making the city a more appealing place to live—through affordable housing, easily accessible parks, or cleaner air and waterways—radically reduces environmental impacts.

And by investing in the maintenance of the infrastructure that supports urban life—the water system, the roadways, the subways, and our power grid—we ensure that this efficient lifestyle can continue to be sustained for generations.

If New York can absorb 900,000 more people by 2030, it will avoid future increases in global warming emissions by 15.6 million metric tons per year, simply by giving more people the option to settle in our city.

In spite of our inherent efficiency, we can do better. And we must.
Instead we are doing worse. From 2000 to 2005, New York's greenhouse gas emissions increased almost 5%. Almost half of this growth can be traced to the rising energy consumption of every New Yorker in the form of cell phones, computers, and air conditioners; the rest is due to new construction. If these trends continue, by 2030, the city's CO_2e production will increase 27% over our 2005 emissions.

Efficiency efforts often focus on automobiles and power plants. But in New York, we must add a third critical category: buildings. With 950,000 structures containing 5.2 billion square feet, buildings account for 69% of our emissions, compared to 32% nationally. Energy turns on our lights and televisions, runs our heating systems in the winter, and cools us in the summer. It also powers proliferating numbers of air conditioners and other appliances. *(See chart above: Projected Emissions and Targeted Reductions)*

When buildings *are* discussed, standards for new construction are generally the focus. New York has emerged as a leader in green design, with some of the most sustainable skyscrapers and affordable housing developments in the country—and we must continue these efforts. But 85% of the buildings we will have in 2030 already exist today.

That's why our energy plan focuses on reducing consumption in the city's large existing building stock. We have also outlined strategies to ensure that the energy we do use is cleaner and more efficient than our supply today, addressing the second major category of CO_2 emissions: power.

Transportation is the final significant culprit, accounting for 23% of our emissions. Of that, 70% comes from private vehicles—

even though they account for only 55% of all trips in the city. By contrast, mass transit is responsible for only 11.5% of our transportation emissions, meaning car trips are, on average, five times more carbon intensive than a subway ride.

The most effective strategy is simply to reduce the number of vehicles on the road. A simultaneous expansion around of our transit system combined with congestion pricing would help achieve the city's first major mode shift in decades. But we must also address the trucks and automobiles that we *do* have; making them more fuel-efficient, and ensuring that they burn cleaner fuels.

The graph on page 134 shows how we will reduce our CO_2 emissions. Around 50% of our reductions will come from efficiencies in buildings; 32% from improved power generation; and 18% from transportation.

These initiatives will achieve our 30% goal, but ultimately that won't be enough. Scientists agree that far deeper cuts—on the order of 60% to 80%—will be necessary by mid-century if we are to stabilize global temperatures.

That is why we must aggressively track emerging technologies and encourage their adoption. For example, the rooftops of New York City, if covered with solar panels, could produce nearly 18% of the city's energy needs during daytime hours. We have not depended on the widespread use of solar energy in this plan because its costs today are too high for general use; we have tried to rely only on technologies feasible today. But near-term advances promise to reduce the cost of solar panels dramatically; we are also actively accelerating this process by incorporating solar energy into City buildings and reducing some of the legislative barriers to expansion. Once these renewable energy strategies become economically viable, we must be ready to promote adoption on the widest possible scale.

Improvements in batteries, biofuel-burning engines, wind power, and fuel cells for vehicles; higher-efficiency electricity transmission lines; building materials that weigh less and insulate more; and new types of appliances and lighting that consume less electricity: all would help us achieve, and exceed, our 30% goal.

These additional savings must be used to surpass our target, not substitute for the measures envisioned in this plan. Our 30% goal is only a starting point toward the greater cuts that will be required after 2030. That means we cannot rely on technology in the future to replace the initiatives we propose for the near-term; we will need those additional savings later.

New York City will lead the way. Municipal government accounts for approximately 6.5% of the city's overall emissions, concentrated mainly in buildings, wastewater treatment, and transportation. Since 2001, the City has managed to keep its emissions constant, despite an annual 2% rise in electricity use. Actions the City has already taken, such as local laws requiring energy efficiency in new buildings, new purchases of energy-using equipment, and more efficient City fleets, would keep our emissions stable for the next decade. But that won't be enough. *(See chart above: New York City Municipal Greenhouse Gas Emissions)*

That's why our energy plan has set an ambitious, accelerated goal to reduce emissions from City government operations by 30% by 2017.

We also recognize that New York City cannot stop climate change by itself. While there is no substitute for Federal action, all levels of government have a role to play in confronting climate change and its potential impacts.

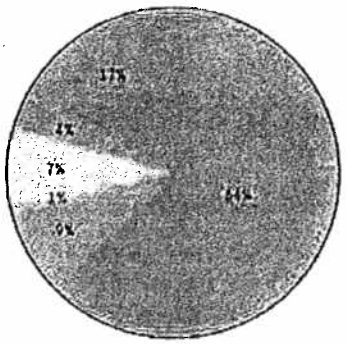
Broader solutions—such as a cap and trade system, which would allow industries to buy and sell carbon credits, or a carbon tax, which would tax all fuels, cars and power plants on the basis of their carbon intensity—cannot feasibly be implemented at the city level. They must be State, regional, or national efforts—and we will advocate for their adoption.

These measures will help slow the pace of climate change, and—if other cities, states, and nations around the world act in concert—we can stabilize our environment by mid-century.

But climate change is already underway. Worldwide, more than 256 billion tons of carbon dioxide have already been released into the atmosphere during the past 10 years, and the impacts will continue being felt for decades. We also cannot depend on the actions of others.

That is why, even as we work to stem the rise of global warming, we must also prepare for the changes that are already inevitable.

New York City Municipal Greenhouse Gas Emissions
Carbon Dioxide Equivalent in Metric Tons per Year, 2006



Total: 3.8 million metric tons

- MUNICIPAL BUILDINGS
- MUNICIPAL VEHICLE FLEET
- SCHOOL BUSES
- DSNY LONG-HAUL TRANSPORT
- STREETLIGHTS/TRAFFIC SIGNALS
- WATER AND SEWER

Note: Figures total to 102% due to carbon absorption by waste and independent rounding
Source: NYC Mayor's Office of Long-Term Planning and Sustainability

Our plan for climate change adaptation:

1. Creates an intergovernmental Task Force to protect our city's vital infrastructure
2. Work with vulnerable neighborhoods to develop site-specific strategies
3. Launch a citywide strategic planning process for climate change adaptation

Adapting to climate change

We will embark on a broad effort to adapt our city to the unavoidable climate shifts ahead. This will include measures to fortify our critical infrastructure, working in conjunction with City, State, and Federal agencies and authorities; update our flood plain maps to protect areas most prone or vulnerable to flooding; and work with at-risk neighborhoods across the city to develop site-specific plans. In addition to these targeted initiatives, we must also embrace a broader perspective, tracking the emerging data on climate change and its potential impacts on our city. *(See case study on facing page: New York City Disaster Planning; see map on facing page: New York City Flood Evacuation Zones)*

CASE STUDY

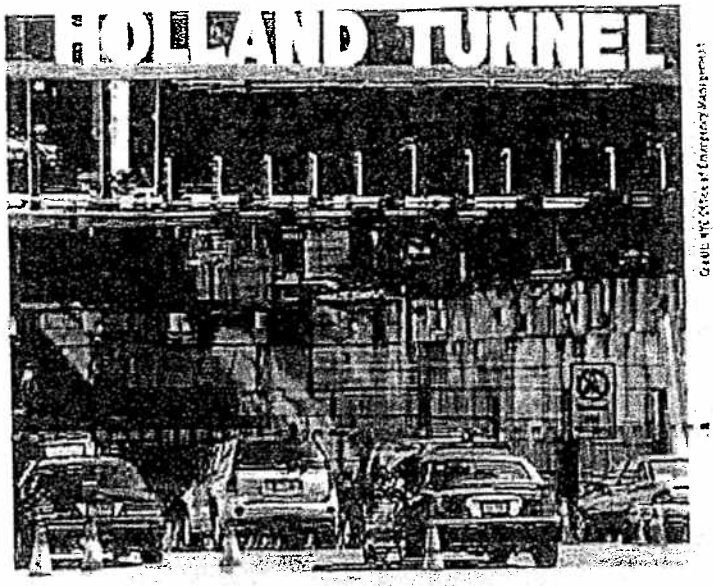
New York City Disaster Planning

The sobering images of Hurricane Katrina still haunt us—a testament to our vulnerability in the face of nature's ferocity.

For many New Yorkers, the idea of a similar catastrophe affecting our own city is unthinkable. But a 1995 study by the U.S. Army Corps of Engineers concluded that a Category 3 hurricane in New York could create a surge of up to 16 feet at La Guardia Airport, 21 feet at the Lincoln Tunnel entrance, 24 feet at the Battery Tunnel, and 25 feet at John F. Kennedy International Airport. The impacts could be even greater as a result of waves following the surge or tides, both of which could increase the damage.

As many as three million people would need to be evacuated.

In 2006, the City responded to this threat by unveiling an emergency response plan. A team of more than 34,000 City employees would lead the mobilization effort, bringing residents to evacuation shelters throughout the city. The Fire Department would assist in evacuating the elderly and infirm from hospitals and nursing homes. Mass transit would also be used in the evacuation process, with fares and tolls waived.



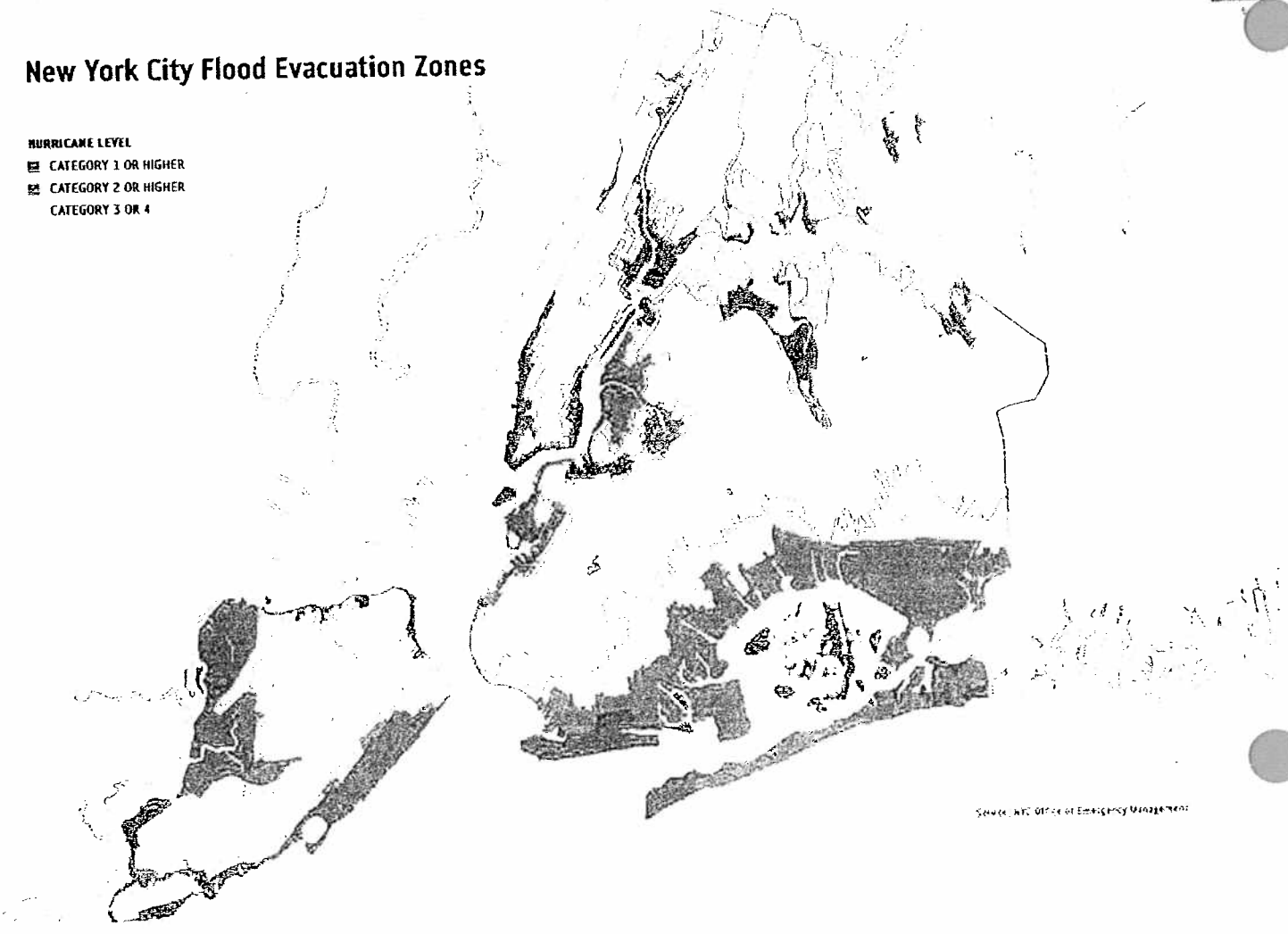
Credit: NYC Office of Emergency Management

Illustrative Depiction of Holland Tunnel Flood Level from Storm Surge

But our dense urban environment would require new approaches from previous disaster recovery efforts. That's why the City has also launched a design competition to create "safe, clean, affordable and rapidly deployable" housing for up to two years.

The only way to reduce the risk of violent storms in the future is to reduce greenhouse gas emissions and thus prevent dangerous climate change. But that will not eliminate the need to be prepared for the worst. By planning for potential future storms today, the worst impacts can be avoided.

New York City Flood Evacuation Zones



Source: NYC Office of Emergency Management

INITIATIVE 1

Create an intergovernmental Task Force to protect our vital infrastructure

We will expand our adaptation strategies beyond the protection of our water supply, sewer, and wastewater treatment systems to include all essential city infrastructure

In 2004, the City's Department of Environmental Protection (DEP) initiated a Climate Change Task Force to study the potential impacts of climate change on our water infrastructure. Working with research scientists at the NASA Goddard Institute for Space Studies, Columbia University's Center for Climate Systems Research, and other institutions, DEP has generated global and regional climate models that have been included in the agency's strategic and capital planning.

For example, the design and operation of our sewer and wastewater treatment systems have been based on existing sea levels—as they are in most jurisdictions. But these levels are changing. When combined with increasingly severe storm surges, there will be significant operational effects. The Task Force evaluated these impacts, enabling DEP to take such risks into account as they site new facilities and invest in existing ones.

But substantial other aspects of our infrastructure remain at risk, especially from sea level change; our subterranean subway system and tunnels, the airports, which are at sea level, power plants, which are often on waterfront sites, waste transfer terminals, and other critical infrastructure are all potentially vulnerable. As these facilities are owned and operated by a variety of entities, protecting these sites will require a coordinated effort among the City, the State, the MTA, the Port Authority, and the utilities.

That's why the City will invite these and other relevant public and quasi-public entities to join the New York City Climate Change Task Force. The Task Force will create an inventory of existing at-risk infrastructure, analyze and prioritize the components of each system, develop adaptation strategies, and design guidelines for new infrastructure.

This will not be an easy task. For most agencies, planning for climate change is a new challenge and given other competing—and often immediate—needs, it is often difficult to prioritize. As a result, integrating climate change impacts into long-term capital planning will require new ways of thinking. But it is essential to begin.

INITIATIVE 2

Work with vulnerable neighborhoods to develop site-specific strategies

We will create a community planning process to engage all stakeholders in community-specific climate adaptation strategies

Protecting our infrastructure is crucial, but we also need to prepare our city to deal with the consequences of climate change, especially in flood-prone areas. There are obvious impacts to people's property and livelihoods from windstorms, flooding, heat waves, and other direct effects of climate change. Shifting climate patterns can take lives and pose major public health dangers.

While all five boroughs have vulnerable coastline, each community's risk and the optimal solutions to minimize that risk will vary. Therefore, preparing for these impacts must include community-specific planning.

A successful community planning process provides the neighborhood with the tools necessary to understand the challenges, engage in problem solving, and effectively communicate preferred solutions. In addition, the process must take into account the unique challenges associated with planning for climate change. Beyond a broadening awareness of the general issues, the details about climate change remain unfamiliar to most of the public—and most publications on the topic are extremely technical and difficult to read. Also, all scenarios are based on projections that continue to evolve.

To begin addressing these challenges, the City has partnered with Columbia University, UPROSE, and the Sunset Park community to design a standardized process to engage waterfront neighborhoods in conversations about climate change adaptation.

We will work with the community to inform them about the potential impacts of climate change and possible solutions—and seek to understand their priorities moving forward. By 2008, we will have a process that can be applied to all at-risk neighborhoods across the city, mostly along the waterfront. We must ensure that all new plans consider the effects of climate change and develop strategies that respond to each community's unique characteristics, including building types, access and use of waterfront, and existing community planning efforts, such as 197A plans and Brownfield Opportunity Area applications.

INITIATIVE 3

Launch a citywide strategic planning process for climate change adaptation

We will begin developing a comprehensive climate change adaptation policy

But all New Yorkers—not just individual neighborhoods—will be impacted by climate change. Protecting the city will require a citywide strategy. *(See case study on facing page: The Cost of Inaction)*

Countries around the world have begun to develop this kind of broad-based framework for climate change adaptation—in Britain, Japan, and the Netherlands.

But New York will become the first major American city to comprehensively assess the risks, costs, and potential solutions for adapting to climate change.

This effort will be unprecedented and challenging. Climate change projections for sea level rise, intensifying storms, and hotter temperatures are just that—projections. The variables involved in forecasting mean that there are no certainties, only probabilities. As a result, a step-by-step approach, with decision points along the way, will be necessary.

Further, some proposals require thinking on a scale that is beyond the traditional scope for public planning. Concepts like sea walls—concrete barriers that would surround the city's coast line—or a series of more targeted storm surge barriers are possibilities, but each raises serious questions. Storm surge barriers could protect significant swaths of our coastline, but still leave others exposed—and cost billions. Any assessment of investments on that scale will need to be undertaken carefully.

We will create a strategic planning process to adapt to climate change impacts

That's why we will create a New York City Climate Change Advisory Board. Composed of non-City government agencies, as well as scientists, engineers, insurance experts, and public policy experts, the advisory board will help the Office of Long-Term Planning and Sustainability develop a planning framework by:

- Developing a risk-based, cost-benefit assessment process to inform investment decisions, including the establishment of clear metrics and decision points
- Assessing possible strategies to protect against flooding and storm surges, and providing recommendations

As the first American city to undertake such a comprehensive climate change planning process, the first phase of this effort includes a scoping study to identify necessary experts, methodology, and design of the larger planning process. This study will look to models abroad, as well as to academic and other work here in the United States.

In addition, we will work with other coastal cities in the United States to share information on climate change planning experiences, develop joint strategies, and pool resources when appropriate.

We will ensure that New York's 100-year floodplain maps are updated

FEMA's floodplain maps for New York City are significantly out of date. The last major revisions were in 1983, based on even earlier data. Since that time, numerous shifts have occurred that should be reflected in these plans: changes to the shoreline and elevations, rising sea levels, and an increased severity of storms, along with technological changes that allow for more accurate mapmaking. Mapping like that done by the U.S. Army Corps of Engineers for the city's hurricane zones will inform the revisions.

These maps determine insurance rates and establish areas subject to building code requirements, so it is critically important that they be accurate and up-to-date. We will work with FEMA to ensure that our floodplain maps reflect the most current information.

We will document the City's floodplain management strategies to secure discounted flood insurance for New Yorkers

The National Flood Insurance Program's (NFIP) Community Rating System (CRS) is a voluntary incentive program that recognizes community floodplain management strategies that go beyond the minimum required. On the basis of this rating system, the 15,000 flood insurance policyholders in the city can receive discounts for aggressive action.

New York City already has relatively strict standards that should make residents eligible for reduced premiums, but we must submit an extensive application documenting our actions to FEMA. The City will compile and submit the documentation required to establish its CRS rating.

We will amend the building code to address the impacts of climate change

The Department of Buildings will assemble a task force composed of City officials, building professionals, and other experts to make recommendations for changes to the building code that address the consequences of climate change. Impacts to be considered include the increased potential for flooding, droughts, high winds, heat waves, the disruption of utility services, and the need for buildings to be inhabitable without energy, a concept known as "passive survivability." This task force will coordinate with other working groups analyzing the impacts of climate change and requirements for adaptation.

CASE STUDY

The Cost of Inaction

Preparing for climate change will be costly. But it is becoming increasingly clear: not preparing will be worse.

According to the Stern Review on the Economics of Climate Change, the overall costs and risks of not adapting to climate change will be equivalent to losing 5% of global Gross Domestic Product (GDP). If environmental and health impacts are taken into account, the estimates of damage could rise to 20% of GDP or more.

Whether or not one believes the science behind global warming, more and more markets do. The insurance industry is already beginning to evaluate municipal investments in light of risks due to climate change. Cities that don't have strong climate change strategies in place may face lower credit ratings, increased insurance costs, and reduced bonding capacity. For example, the world's largest reinsurer, Swiss Re, has instructed corporate clients to come up with strategies for handling global warming or risk losing liability coverage.

The insurance industry's response to the consequences of climate change is continuing to shape the economy. U.S. insurers are already raising rates or leaving markets as a result of increased risk in coastal and fire-prone areas. In areas where insurers feel the risk is too great, or their ability to raise premiums is hampered by political or regulatory limitations, the risk burden will be shifted to the public as well as to banks and investors. For example, Allstate considered cancelling 20,000 homeowner policies in the Tampa Bay Area; the cuts would have come on top of 32,000 policies that Allstate canceled in South Florida since the 1992 storm. CIGNA Corporation stopped writing new policies in South Florida entirely to reduce its risk of claim losses. CIGNA's sales moratorium took effect a month before the start of the Atlantic hurricane season.

These developments, and others like them, make clear that the costs of inaction now outweigh the expense of action.

Next Steps

This Plan has laid out an ambitious agenda for action that can create a sustainable New York City—and allow us to achieve the overall goal of leaving our children a city that is cleaner, healthier, and more reliable than it is today.

This agenda will require tremendous effort: on the part of City officials and State legislators; by community leaders and our delegation in Washington; from the State government and from every New Yorker. It will not be easy, and it will not be free. But the payoff is real, and big; and the perils of inaction are far greater than the costs of action.

Further, we must start today. We may call this a long-term plan, but building that future will require immediate action. Some will have an impact and meet a need right away; in 2007 we will begin unlocking school playgrounds. For others, like reducing our greenhouse gas emissions, a window of opportunity may be closing.

As a result, we are committed to acting quickly to begin implementing this Plan. We will submit draft legislation to the State Assembly, State Senate, and City Council, and work with legislators to secure its passage. We will work closely, starting immediately, with State agencies to implement the regulatory and administrative aspects of this plan at the State level.

Many of the initiatives In this Plan can be implemented directly by the City. All of the relevant City agencies have participated in shaping these initiatives and will begin as quickly as possible to implement everything that is under our control. The Mayor will ask his Sustainability Advisory Board to continue providing their assistance to this effort, through ongoing advice and by helping City agencies work through the challenges of implementation.

In addition, we will expand the Office of Long-Term Planning and Sustainability to take on new responsibilities, such as fostering interagency cooperation on stormwater management practices and developing a climate change adaptation strategy.

The office will also begin issuing two annual reports. One will report on progress made on each of the Plan's initiatives and overall progress towards the goals. The other will report on climate change, which will include annual updates to the city's greenhouse gas emissions inventory; an assessment of how well our strategies are working toward achieving our greenhouse gas reduction goals; reports on the extent of climate change and the impacts we face; and updates on the city's efforts towards climate change adaptation.

While 2030 may seem like a long way off, there is much that we can accomplish in the next few years. For virtually all of our initiatives, we have identified short-term milestones that can be achieved before the end of this Administration and this City Council in December 2009. Fast action now will be crucial to setting this Plan on the way to realization.

There are now 8.2 million New Yorkers—more than at any time in our history. And more are coming.

They are coming because New York has renewed itself; because over the past three decades **we have achieved one of the greatest resurgences of any American city.**

Growth is ultimately an expression of optimism; it depends on a belief in possibility—essential to New York's soul since its days as an inclusive, turbulent, tolerant Dutch colony.

That is why our recovery has not only strengthened our quality of life, but also our sense of hope. We have proven that challenges once considered insurmountable can be overcome. **It is time to summon that spirit again.**

Over the next two decades, more people, visitors, and jobs will bring vibrancy, diversity, opportunity—and revenue. But **unless we act, they will also bring challenges;** infrastructure strained beyond its limits; parks packed with too many people; streets choked with traffic; trains crammed with too many passengers. Meanwhile, we will face an increasingly precarious environment and the growing danger of climate change that imperils not just our city, but the planet.

We have offered a different vision.

It is a vision of providing New Yorkers with the cleanest air of any big city in the nation; of maintaining the purity of our drinking water and opening more of our rivers and creeks and coastal waters to recreation; of producing more energy more cleanly and more reliably, and offering more choices on how to travel quickly and efficiently across our city. It is a vision where contaminated land is reclaimed and restored to communities; where every family lives near a park or playground; where housing is sustainable and available to New Yorkers from every background, reflecting the diversity that has defined our city for centuries.

It is a vision of New York as the first sustainable 21st century city—but it is more than that. **It is a plan to get there.**

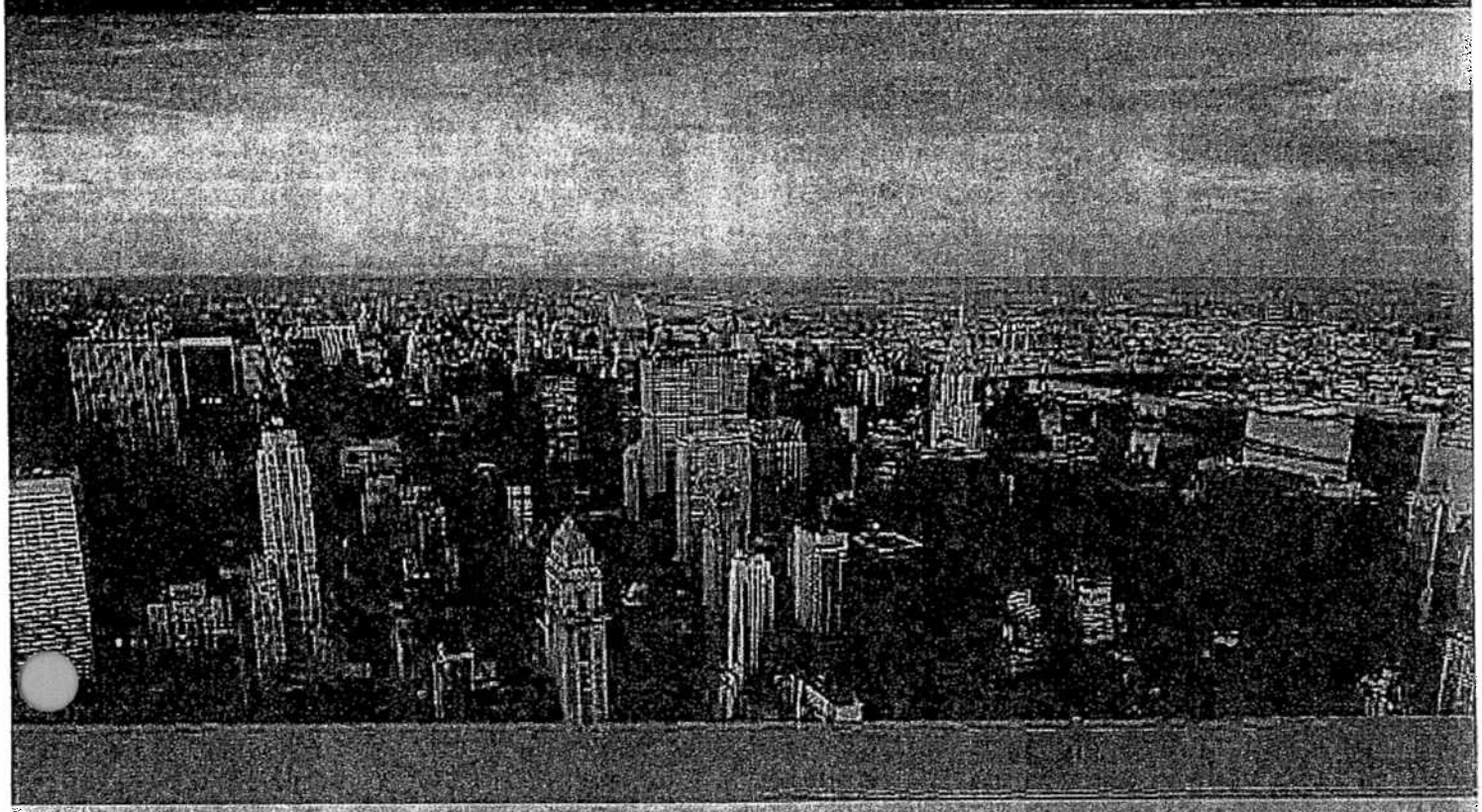
The 127 new initiatives detailed here will strengthen our economy, public health, and quality of life. Collectively, they will add up to the broadest attack on climate change ever undertaken by an American city.

New Yorkers used to think this boldly all the time. Previous generations looked ahead and imagined how their city would grow. They built subways through undeveloped land and established Central Park far from the heart of the city. They constructed water tunnels that could serve millions when our city was a fraction of the size.

Their actions made our modern city possible.

Now it is our turn.

The City of New York



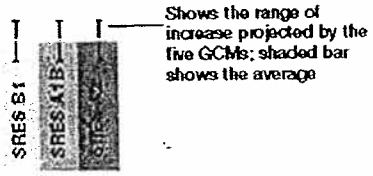
The New York City Department of Environmental Protection

CLIMATE CHANGE PROGRAM

Assessment and Action Plan

MAY 2008 REPORT 1

A Report Based on the Ongoing Work of the DEP Climate Change Task Force

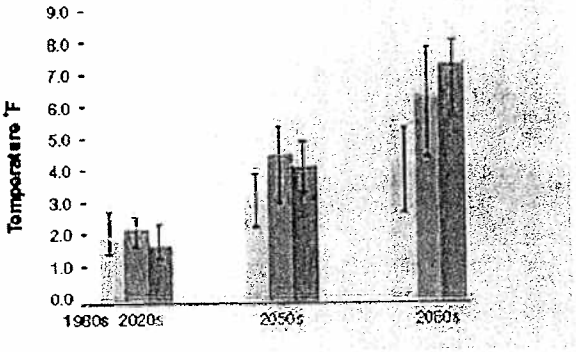


SRES Emission Scenarios and Range of GCM Projections

Air Temperature

The average regional temperature increase for the 15 scenarios over the base period (1970 - 1999) is 2.0°F for the 2020s, 4.0°F for the 2050s, and 6.9°F for the 2080s (Figure 1.11). Although there is a fair amount of variability across the GCMs, they all show a future progression of warming temperatures in all seasons. Seasonal projections from Columbia University show summer increases slightly greater than winter increases. These projections are for the larger NYC Watershed Region. Temperatures in the City might exceed these projections because of the urban heat island effect. The projected temperature increases for the NYC Watershed Region exceed globally averaged changes, indicating that the New York City region might be especially sensitive to the effects of climate change.

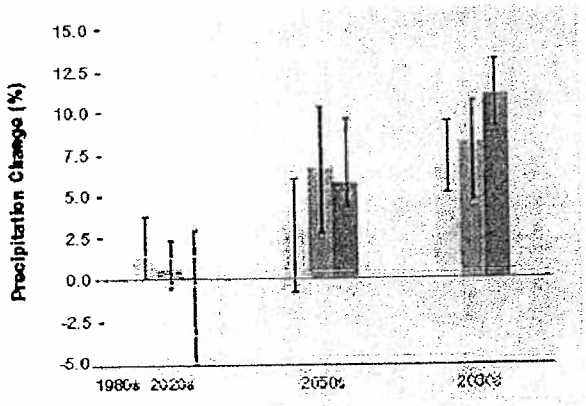
Figure 1.11
Modeled Annual Temperature Changes For the NYC Watershed Region Relative to the 1980s (Columbia Center for Climate Systems Research, 2006)



Precipitation

The average regional precipitation increase for the 15 scenarios over the base period (1970 - 1999) is 0.7% for the 2020s, 5.7% for the 2050s, and 8.6% for the 2080s (Figure 1.12). There is more variability across the models for projected change in precipitation than for temperature. Especially in the 2020s, the models forecast a range of wetter to drier conditions. By the 2050s, however, most projections show increased precipitation for the region. Seasonal projections from Columbia University show precipitation increases may be greater during the winter than in summer in the 2050s and even more so in the 2080s. The synergistic effect of parallel increases in temperature and precipitation are not yet fully evaluated. It remains unclear how much of the increased precipitation will fall as snow, or how snowpack and thaw in the NYC Watershed Region will be affected.

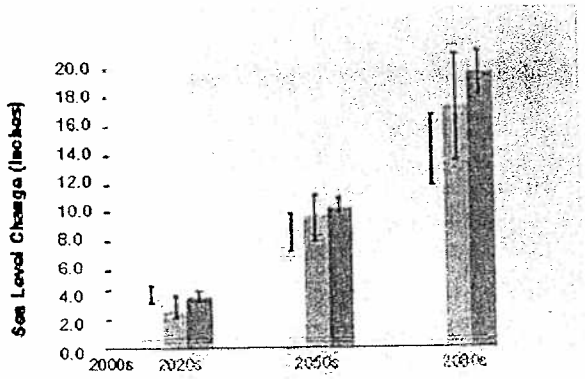
Figure 1.12
Modeled Annual Precipitation Changes For the NYC Watershed Region Relative to the 1980s (Columbia Center for Climate Systems Research, 2006)

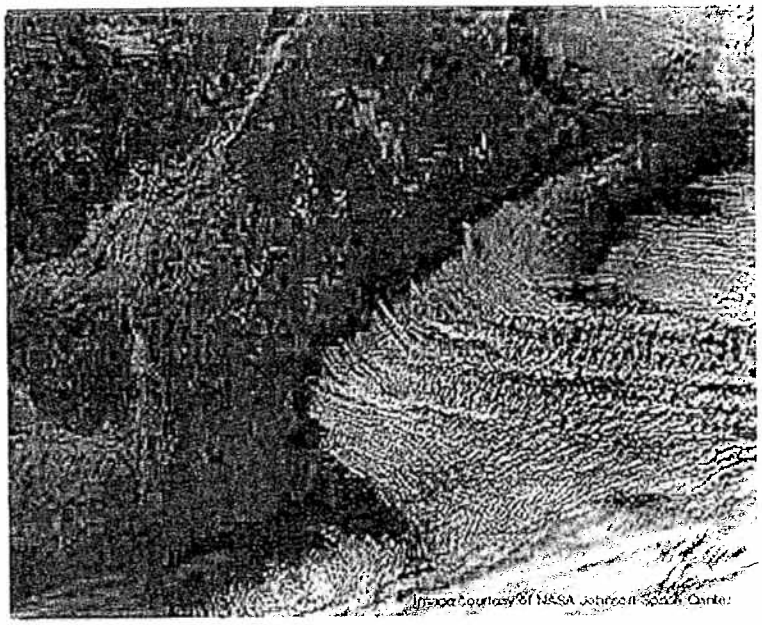


Sea Level

The average projected rise in sea level for the 9 scenarios over the base period (1970 - 1999) is 3.2 inches for the 2020s, 9.0 inches for the 2050s, and 16.5 inches for the 2080s (Figure 1.13). There is somewhat less variability across the GCMs for sea level than for air temperature and precipitation; however, these projections do not account for recent research that suggests that the rate of ice melt is accelerating more quickly than most sea level projections have indicated to date. A new study by the National Snow and Ice Data Center found that the area of Arctic sea ice in September, the month when it shrinks the most, has decreased at an average rate of 7.8% per decade since 1953, yet computer climate simulations have used an average ice loss rate of 2.5% per decade for this period (Stroeve, 2007). DEP's long-term planning should include the risk of

Figure 1.13
Modeled Regional Sea Level Rise Relative to the 2000s (Columbia University Center for Climate Systems Research, 2006)





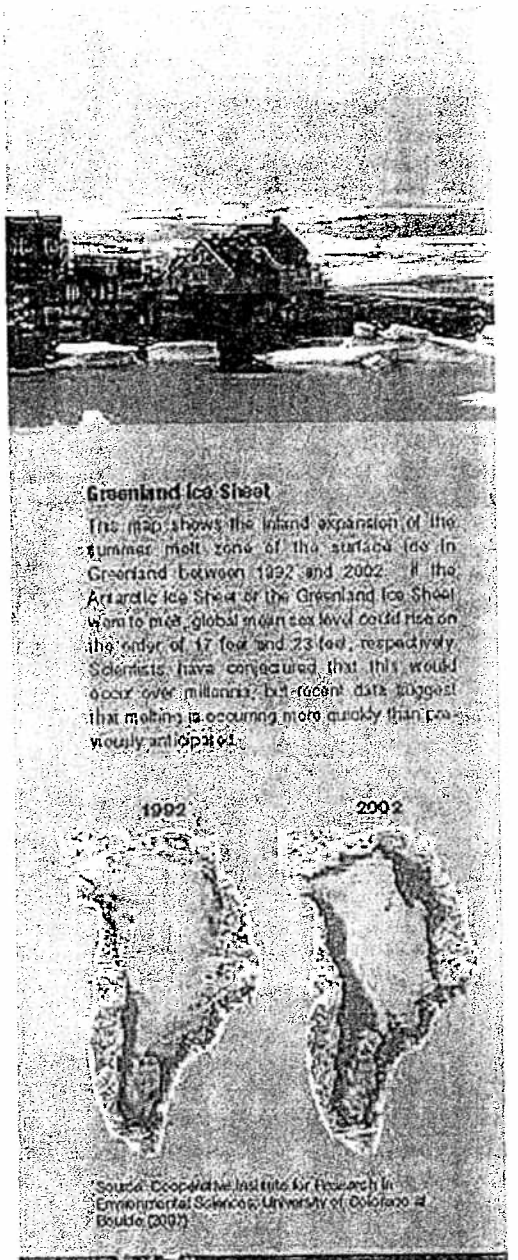
Extreme Events

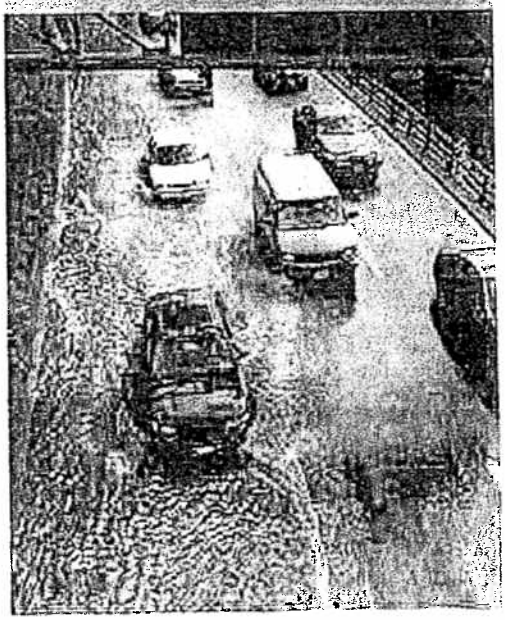
In planning for climate change it is also important to consider the increased likelihood of severe and extreme weather events, such as storms, coastal and inland flooding, drought, and heat waves. These events are not as well modeled in current GCMs as are long-term trends in temperature, precipitation and sea level, so forecasts are more uncertain. Nevertheless, because of rising sea levels and the intensification of the hydrologic cycle due to rising temperatures, it is expected that many types of extreme events will occur more frequently (IPCC, 2007). Recent scientific studies have shown a strong correlation between powerful hurricanes and ocean temperature in the North Atlantic (Mann & Emanuel, 2006). New York City and its watershed, particularly because of NYC's coastal geography, may experience more frequent and intense storms in the future as the atmosphere and ocean continue to warm. This is an active area of scientific research that will become more refined and precise over time, though existing data enables the formulation of some broad global projections (Table 1.2).

Table 1.2
Recent Global Trends and Anticipated Changes in Potentially Severe and Extreme Events During the 21st Century (IPCC, 2007)

Virtually certain > 99% probability of occurrence
Very likely > 90%
Likely > 66%

Phenomenon and Direction of Trend	Likelihood that Trend Occurred in Late 20th Century (typically post 1960)	Likelihood of Future Trends Based on Projections for 21st Century using SRES Scenarios
Warmer and fewer cold days and nights over most land areas	Very likely	Virtually certain
Warmer and more frequent hot days and nights over most land areas	Very likely	Virtually certain
Warm spells / heat waves. Frequency increases over most land areas	Likely	Very likely
Heavy precipitation events. Frequency (or proportion of total rainfall from heavy falls) increases over most areas	Likely	Very likely
Area affected by droughts increases	Likely in many regions since 1970s	Likely
Intense tropical cyclone activity increases	Likely in some regions since 1970s	Likely
Increased incidence of extreme high sea level (excludes tsunamis)	Likely	Likely





Flooding
Flooding due to rainfall is likely to increase because of the expected increase in the intensity of rainfall events.

Mean values of climate change are of great importance in planning as are extreme events: storms, coastal and inland flooding, droughts, and heat waves. As indicated by IPCC (2007), there is currently large uncertainty about future changes in extreme events, and climate modeling of extreme events is an emerging science.

It is therefore anticipated that scientific understanding of extreme events will continue to evolve. As new data become available from GCM simulations associated with the next IPCC report in approximately 3-4 years, scientific understanding is likely to improve, since these GCMs will feature more advanced physics, higher spatial (and possibly temporal) resolution (critical for modeling extreme events), and more variables will be stored with longer temporal coverage. Therefore, the current model projections offer the best guidance for future changes in extreme events. While it may be premature to use the precise quantification of changes in extreme events to guide policy, the general direction of many changes, such as a tendency for more heat waves, enhanced coastal flooding, and an intensified hydrological cycle, can be viewed with high confidence, as described by IPCC (2007).

A range of other extreme events is expected to become more severe with global climate change. Heat waves are also almost certain to increase in the region. As mean temperature increases, extreme heat is expected to increase in frequency, intensity, and duration. Even relatively small changes in heat statistics can have large societal impacts, given the severe stresses imposed by heat waves in the current climate. Flooding due to rainfall is likely to increase because of the expected increase in the intensity of rainfall events. Droughts may become more frequent in the region, because as temperatures rise, evaporation rates will increase; droughts may become more common even with increased precipitation.

As the mean sea level increases, smaller storms are able to produce the amounts of flooding previously associated with larger storms.

Further, changes in the intra-annual distribution of rainfall could also contribute to droughts and floods in the region. While evaporation is a relatively steady process, precipitation is highly variable, spatially and temporally. If, as much research suggests (Karl and Knight, 1998 for example), precipitation becomes concentrated in intense events, this could contribute to increased duration and frequency of both floods and the dry intervals between rainfall events.

Coastal flooding is almost certain to become a more serious problem due to increasing sea level. As a result, the recurrence interval for coastal floods at each level of inundation is expected to decrease as sea levels rise. Therefore, any increase in storm frequency or intensity would further contribute to higher incidence of coastal flooding.

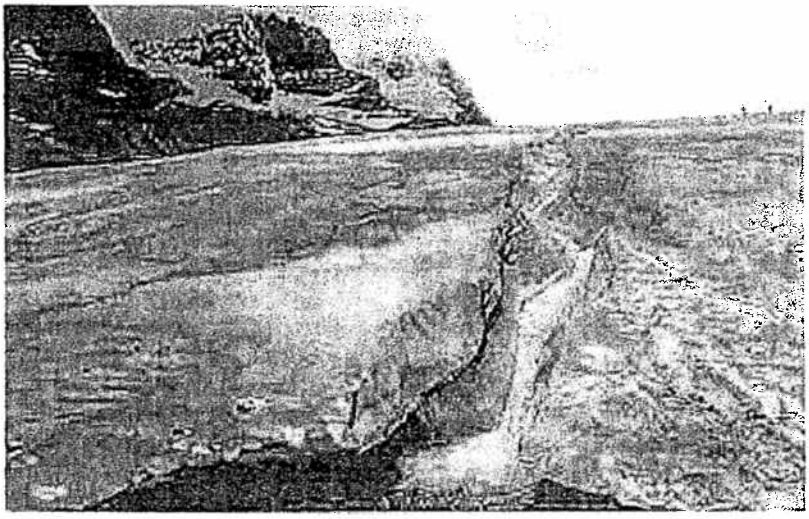
1.4 | Model Uncertainty and Validation

Quantitatively Comparing Data with Historical Hindcast Simulations

As with all forecasting, some level of uncertainty in climate change projections is unavoidable. Uncertainties in GCM projections stem from the difficulty of understanding and expressing the physics of the weather and climate systems, grid sizes, topography, and the amount of future GHG emissions. Given the uncertainties, an approach that considers the range, frequency and general confidence of various levels of change is more appropriate than basing decisions on mean changes. Columbia University used multiple GCMs and GHG emissions scenarios to produce a range of projections (Table 1.3). For the three climate variables, considering only the modeling projections from the 15 model-emission scenarios framework created by Columbia University, it is most probable that the increase in sea level will be within the GCM-projected range shown, followed by air temperature then precipitation increases, based on the modeling probabilities associated with the various ranges.

Columbia University validated the temperature and precipitation projections for the NYC Watershed Region by quantitatively comparing data from historical hindcast simulations of the GCMs to historical observed data. This process is undertaken to gain assurance as to the appropriateness of the models for projecting future climate scenarios. The differences in hindcast values and observed values are not part of the process of developing future scenarios, which are based on assumptions about future GHG emissions and on generated future climates that are different from the present climate. Rather, the forecasting procedure applies the difference between the GCM projections and the hindcast values for the base period to the observed average values for the base period (1970-1999).

The calculated GCM ensemble hindcast average temperature is 2°F less than the observed 30-year average for the period 1970 to 1999, just outside of one standard deviation of the measurements.



Melting Glaciers

When meltwater seeps through cracks in the ice sheet, it may accelerate melting and, in some areas, allow the ice to slide more easily over the bedrock below, speeding the movement of the ice sheet to the sea.

Table 1.3

Model-Based Probability of Change[1] in Climate-Related Characteristics in the NYC Watershed Region

	Air Temperature[2]		Precipitation[3]		Sea Level Rise[3]	
Decadal Average	Range (°F)	Model-Based Probability (%)	Range (%)	Model-Based Probability (%)	Range (inches)	Model-Based Probability (%)
2020s	3.0 to 3.4	100	2.5 to 7.5	81	4 to 12	90
2050s	5.0 to 5.8	80	2.5 to 7.5	81	8 to 19	90
2080s	5.0 to 8.6	67	2.5 to 15.0	77	12 to 29	90

[1] Model-based probability that the projected increase will be within the range shown across selected GCMs and three emissions scenarios.

[2] Relative to the 1970-1999 base period from five GCMs.

[3] Relative to the 1970-1999 base period from three GCMs. Percentages rounded to nearest integer.

Source: Columbia University Center for Climate Systems Research (2006).

For precipitation it is approximately 0.2 inches/month (5.4%) greater than the 30-year average, and within one standard deviation of the measurements (Table 1.4). These are considered strong performance comparisons, but even these minor inaccuracies should be considered in the application of GCM projections in those cases where forecasted changes are on the same order as these variances. Modeled sea level rise can not be validated through comparing model hindcasts to observed sea level because sea level rise is not a direct GCM output. IPCC experts determine global sea level projections based on the historical relationship between observed sea level rise and observed temperature increase over the 20th century (IPCC 2001, 2007 and Rahmstorf, 2007).

Regional projections for sea level rise at the Battery in NYC are based on three additional factors:

- Change in land height (primarily due to Glacial Isostatic Adjustment, which is causing land subsidence in the NYC region)
- Change in global mean sea level (projected based on a linear fit with GCM projections of global temperature change, as described above)
- Regional distribution of sea surface height, which is a function of ocean temperature, surface wind, salinity, current velocity, and atmospheric pressure

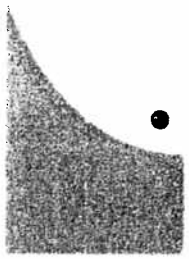
Standard techniques were also used to assess the statistical significance of the projected changes in mean temperature, precipitation, and sea level. Analysis shows that all regional temperature projections are significantly different statistically from the historical base period; that is, in each case there is less than a 2.5% chance that future warming of that magnitude would occur by chance alone. Similarly, 7 of the 15 projected precipitation changes for the 2050s and 14 of the 15 projected precipitation changes for the 2080s are significantly different statistically.

The precipitation projections for the 2020s are not yet distinguishable from natural variability (although increases are projected in 11 of the 15 models, the trend is not statistically significant at the 2.5% level). The sea level rise projections are all statistically significant at the 95% level; that is, given sea level variability over the 20th century, there is less than a 5% chance that the projected level of rising would occur by chance alone (i.e., without global warming).

Table 1.4
Model Validation for the NYC Watershed Region Annual Temperature and Precipitation Hindcast Projections for 1970-1999

	Observed Data (± Standard Deviation)	Average of Model Hindcasts	Model Hindcast Range
Temperature (°F)	48.0 ± 1.0	46.0	43.5 - 48.6
Precipitation (inches/mo)	3.7 ± 0.5	3.9	3.2 - 4.5

* Model results based on five GCMs.
* Sea level rise projections are not validated through hindcasting.
Source: Columbia University Center for Climate Systems Research (2006).



WOMEN BUILDERS COUNCIL, INC.

OPENING NEW DOORS

Statement by Sandra Wilkin
President, Women Builders Council

Contact: Walter McCaffrey
718 683-1500

Good afternoon Chairperson Burden and members of the Commission.

I am Sandra Wilkin, President of the Women Builders Council. Women Builders Council is a leading organization advocating for expanded opportunities for women in the construction and building fields.

I ask that the Commission *approve* the proposal to re-develop Willets Point.

This plan will serve as a major economic shot in the arm for New York City.

The benefits are numerous.

The project will provide for nearly 6,000 good paying construction jobs.

It will result in the creation of hundreds of permanent jobs in its retail sector, in the new hotel and convention space and on-site services.

These will be good paying employment opportunities for residents of New York City and particular Queens.

The plan includes important job re-training opportunities as well. Desperately needed affordable housing will be provided at Willets Point.

The Women Builders Council is ***particularly*** pleased by the inclusion of new employment for women and minorities in its construction.

For the first time, the Economic Development Corporation has included an aggressive component to include women and minority business enterprises in a major economic development project.

Borough President Helen Marshall and Deputy Mayor Robert Lieber have organized a W/MBE Task Force that has developed a comprehensive package of measures to involve W/MBEs in every phase of the project's development. WBC was pleased to have played a prominent role in those deliberations.

The result of the work of the Borough President and Deputy Mayor and that of the task force has been most impressive.

The plan breaks new grounds in transparency and accountability. It includes very significant goals for W/MBE participation which the administration will pursue.

Women Builders Council believes that improving opportunities for W/MBEs will result is a strengthened city economy for years to come.

WBC enthusiastically urges your passage of this plan.

It will be good for New York City and good for Queens!

These will be good paying employment opportunities for residents of New York City and particular Queens.

The plan includes important job re-training opportunities as well. Desperately needed affordable housing will be provided at Willets Point.

The Women Builders Council is ***particularly*** pleased by the inclusion of new employment for women and minorities in its construction.

For the first time, the Economic Development Corporation has included an aggressive component to include women and minority business enterprises in a major economic development project.

Borough President Helen Marshall and Deputy Mayor Robert Lieber have organized a W/MBE Task Force that has developed a comprehensive package of measures to involve W/MBEs in every phase of the project's development. WBC was pleased to have played a prominent role in those deliberations.

The result of the work of the Borough President and Deputy Mayor and that of the task force has been most impressive.

The plan breaks new grounds in transparency and accountability. It includes very significant goals for W/MBE participation which the administration will pursue.

Women Builders Council believes that improving opportunities for W/MBEs will result is a strengthened city economy for years to come.

WBC enthusiastically urges your passage of this plan.

It will be good for New York City and good for Queens!

Joseph Ardizzone
126-96 Willets Point Blvd Corona NYC 11368-1604

1 He conquered his people by beating the drum of protecting them
2. While searching out his enemies he conquered many countrie's
3 Don't let him conquor you, the city State or country
4 Many generation's of children to come canot pay the debt he is adding To th Future
5 For the city, state or federal Government to take property from a person to sell it to a developer is an abuse of emenent domaine
6 Willets Point is in comunity board #7 Corona. Why why was decesion's made by Comunity board #7 Flushing if not criminal it is wrong
There wasen't any plan at board #7 thay never had a definate place for where any building was to be put
At one point it was described as an artist rendering by a member of E.D.C.

11

9 Where are you puting the sky Train
From Kennedy air port to Willets point
answer what sky Train. The one funded
10 Where is sewerage treatment plant
how are you geting Sewerage there
11 Where is the bulk head being put when
you dredge the human waste From
Flushing creek the odor makes your eye
tear in the Summer
12 What are you doing about the exhaust
From the plane's at take off
13 How will this new developement be effected by exhaust
14 The roads are to capacity now added
traffic by new developement impossible
15 New developer : will be 25 years
plus Tax free who will pay for the
Service's thay need, Tax payer gets inurease
16 A Larg number of business can only function
in a m-3 zone there arent any
17 Schooling plan deseigned to fail
18 Neglected if not punished workers dserve Nothing
19 Aeria would have To be raised 5 feet
Roosevelt ave 11 feet heigh

This presentation is designed to fail
it's purpose to bring more money to
the city of New York
E.D.C. is to develope city owned
property for the good of people not
the developer's
Free enterprise made this country
a great nation
E.D.C. wants to set a legal term
called precedence. The right of
taking private property and selling
it to a developer. This will be the
end of demorady in this country
Let the owners' sell or buy
Free enterprise made this country
a great nation
Vote against this project

Commenter #38



August 12, 2008

To The New York City Planning Commission

Re: Redevelopment Proposal for Willets Point

This testimony is submitted as an expression of my outrage regarding the Willets Point Development project as presented by the New York City Economic Development Corporation.

Under the guise of a "plan" designed to "provide economic stimulus to a blighted area", New York City, through its agency the NYEDC has been executing a carefully crafted campaign aimed at justifying the razing of Willets Point and with it the eradication of the neighborhood and businesses which have provided millions of dollars in economic benefits and tax revenue and thousands of jobs for generations. For upwards of forty years, the business owners of Willets Point have asked for the infrastructure, maintenance and basic services that other taxpaying businesses in New York City receive, but the city chose to continually ignore the pleas. It seems that there was always a grander plan for Willets Point. During the 1980's and 1990's, project after project attempted to acquire the property at Willets Point. Finally, in 1993, a study authorized by then Borough President Claire Schulman concluded that the best use for the area was industrial/manufacturing. It was recommended that the infrastructure be implemented and the area would develop on its own. The infrastructure was never implemented and a barrage of eminent domain projects ensued; a stadium for Trump's New Jersey Generals, a domed stadium for the Jets, a new stadium for the Mets and finally an Olympic stadium and village. Though none of these projects were successful the city never lost the drive to acquire the land. We, however, now had to function with an "economic noose" around our necks. Plans to expand and develop new business projects had to be put on hold indefinitely. At Fodera Foods, we even had plans to explore alternate energy sources such as wind and solar which we had to shelve. We would have been "green" long before it was trendy! How could we make these kinds of investments in our business when the city refused to show that they were committed to the

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growth and development we could provide for the community? Held in economic limbo, we could do nothing but continue to ask for services, run our business and wait for the next "big project" to attempt to acquire our property and as Borough President Helen Marshall put it,

"Here it is, the Queen Mary of economic development." Not only has the city's neglect resulted in a public perception of 'blight", (Deputy Mayor Lieber said at a recent Crains Breakfast Forum, " Look up blight in the dictionary and you will see a picture of Willets Point".), but it also prevented us from investing in and expanding our business, resulting in being designated as "underutilized". This "plan" is an egregious assault on our livelihoods and property rights and an insult to our dignity and humanity. How could the city ever provide "just compensation" for what we have endured or the disruption to our lives yet to come? Tom Mcknight stated at a Community Board 7 meeting that they may be unable to relocate some businesses and Deputy Mayor Lieber stated recently that some businesses might not survive. The arrogance and insensitivity is astounding. How could this be acceptable? You must acknowledge that you are not voting to implement a specific project, rather you are voting to raze a vital and bustling economic community based on convincing promises, conditions and contingencies carefully construed to justify the destruction of livelihoods and death of our American dream.

It's time to be honest about the reality of this project. What exactly is the "plan" that you are evaluating? There is no developer. There are promises of a convention center, affordable housing, a school and retail opportunities that claim to provide 20,000 construction jobs and 5,000 permanent jobs. There are promises of job training, and worker protection but no guarantees of new jobs. The reality is that the employees of Willets Point are skilled professionals who earn excellent, middle-income wages. These employees neither need nor want retraining. They are specialized professionals who want the opportunities that the Willets Point businesses provide. They do not need or want minimum wage retail or hospitality jobs. Was there a needs analysis performed to assess the needs and the impact of this plan on the employees of Willets Point? There are claims of a relocation plan, which seems to be unable to relocate the businesses comprehensively. The reality of this plan is that there is no plan! There are simply promises with no guarantees of fulfillment, no accountability (Have we learned anything from Yankee Stadium?) and an artists rendering. When you know what you are voting for please share it.

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Is it the "Marshall Plan", complete with list of conditions that includes everybody except the current/business property owners in the process, or the Marshall Plan plus the CB7 conditions, or a new laundry list of promises designed to force a flawed plan through a corrupted process? Whatever it turns out to be, one fact is certain. The "gun" of eminent domain remains on the table and as long as it is there, the commitment to fair and equitable negotiations is simply not believable. Thirty council members know that this plan is deeply flawed and have the courage and integrity to demand specific answers to the ambiguous issues and commit to removing eminent domain from the process. The City Planning Commission has the opportunity to join these Council members in restoring integrity to this process. The acrimonious atmosphere surrounding the development of Willets Point must be replaced by an honest, cooperative spirit that focuses first and foremost on meeting the needs of the community, the business/property owners, and the development goals rather than individual and political agendas.

I have been a business/property owner in Willets Point since 1974. My brothers, sisters and I represent the third generation of Fodera Foods, Inc., which was started by my grandfather, an Italian immigrant in 1935. Our business is not a chop shop or junkyard; nor is it an eyesore. We operate a wholesale bakery products distribution facility in a clean, well-maintained historic building with a lush, green front lawn.

However, in its efforts to justify the need to level the community, the city has been waging a campaign to portray Willets Point as "a gritty area of chop shops and auto related industry in the shadow of the new Citifield Stadium", riddled with crime and illegal activity as well as highly contaminated. I've never heard of razing a neighborhood due to illegal activity; it would seem that we have law enforcement to handle that. As for widespread contamination, the city has yet to show data that supports this. Representatives from the EDC and their consultant told us that they did NOT find widespread contamination! On the contrary, they found localized "pockets" of contamination that could be remediated without removing existing businesses. I find it difficult to accept that in 2008, we don't have the technology to identify and remediate the environment without leveling an entire community! Finally, the city claims that the area needs to be leveled because it resides in the 100 year flood plain and must be raised. Many communities in New York City reside in

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the 100 year flood plain yet none needed to be razed, sacrificing livelihoods in the process to mitigate this situation.

Willets Point is a portrait of the American Dream. The businesses of Willets Point represent a microcosm of the surrounding communities of Flushing, Corona, and Jackson Heights and provide the people of these communities with professional, upwardly mobile employment opportunities. My business, as well as those of my neighbors, have stood the test of time and continue to be successful in spite of the uncertain economic environment. I share Mayor Bloomberg's belief that Willets Point can be New York's next great neighborhood but not his vision. The property owners of Willets Point are ready, willing and able to continue to grow and develop in Willets Point. With the implementation of the necessary infrastructure, and the support and protection of our property rights, we will not only be New York's next great neighborhood, we will be America's next great neighborhood. Given the opportunity, we will be able to expand and implement our development projects long on hold. We have the ability to invest in ourselves and in Willets Point. With infrastructure in place, the area will attract quality business and development. A new Willets Point will emerge-nitty-gritty and pretty! Willets Point will become a model of sustainable, responsible development for the 21st century, for we will sustain and preserve that which is most fundamental to our American way of life- our inalienable rights and the survival of the American dream.

Sincerely,

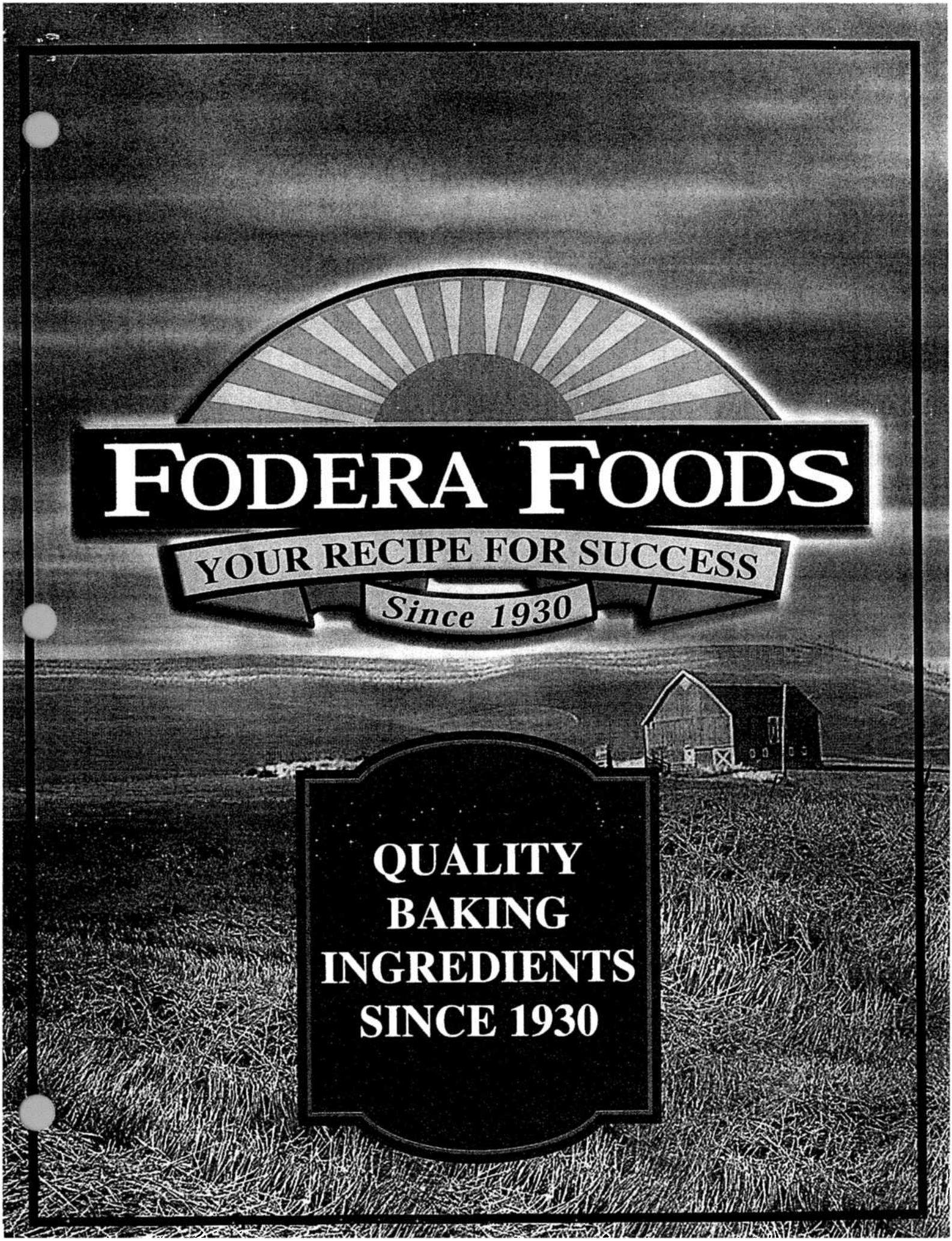
Fodera Foods, Inc.

Anthony Fodera

President, Fodera Foods, Inc.

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HORIZON MILLING™

caravan

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Fodera Foods has a long and successful history of more than 70 years in the bakery supply business. We are family owned and operated for three generations, and are "hands on" in the business. We are growing each year with a line of exciting new products that is constantly being expanded. Everything that Fodera Foods brings to the market is built around exceeding your needs. We continue to add services to improve our abilities to help you grow your business and reduce your workload.

Fodera Foods is committed to providing unsurpassed service. In most cases, orders placed are processed and delivered within 24 hours! Special attention is paid to all orders - especially those which include refrigerated and frozen items. Requirements for A.M. or P.M. deliveries are honored without question. Should an emergency arise, the customer can depend on Fodera Foods to fulfill the bakers need for an unscheduled delivery.

Our sales force is anxious to assist you and is always available with recommendations and technical support. They have additional training in serving special cultural and food preparation needs. Our Customer Service Department is in place and attending to your needs and interests from early in the morning until late in the evening.

Our inventory is varied and extensive. It includes full product lines for the baking needs of various ethnic groups as well as high quality staples requested for the industry in general. Our relations with many vendors dates back to 1930.

We are proud to be servicing the wide spectrum of the baking industry - from wholesale and retai bakeries to donut shops, bagel cafes, and restaurants. It is our hope that we can be of service to you ar that you will soon be one of our many satisfied customers. After three generations in the bakery suppli business, we we recognize the customer's need for quality products, competitive pricing, and excell service. That's why Fodera Foods is

"YOUR RECIPE FOR SUCCESS"



ADM

Pillsbury

General Mills

NORTH DAKOTA MILL
Quality Millers Since 1922

FOR ALL YOUR BAKERY NEEDS

BAKERIES AND CAFES

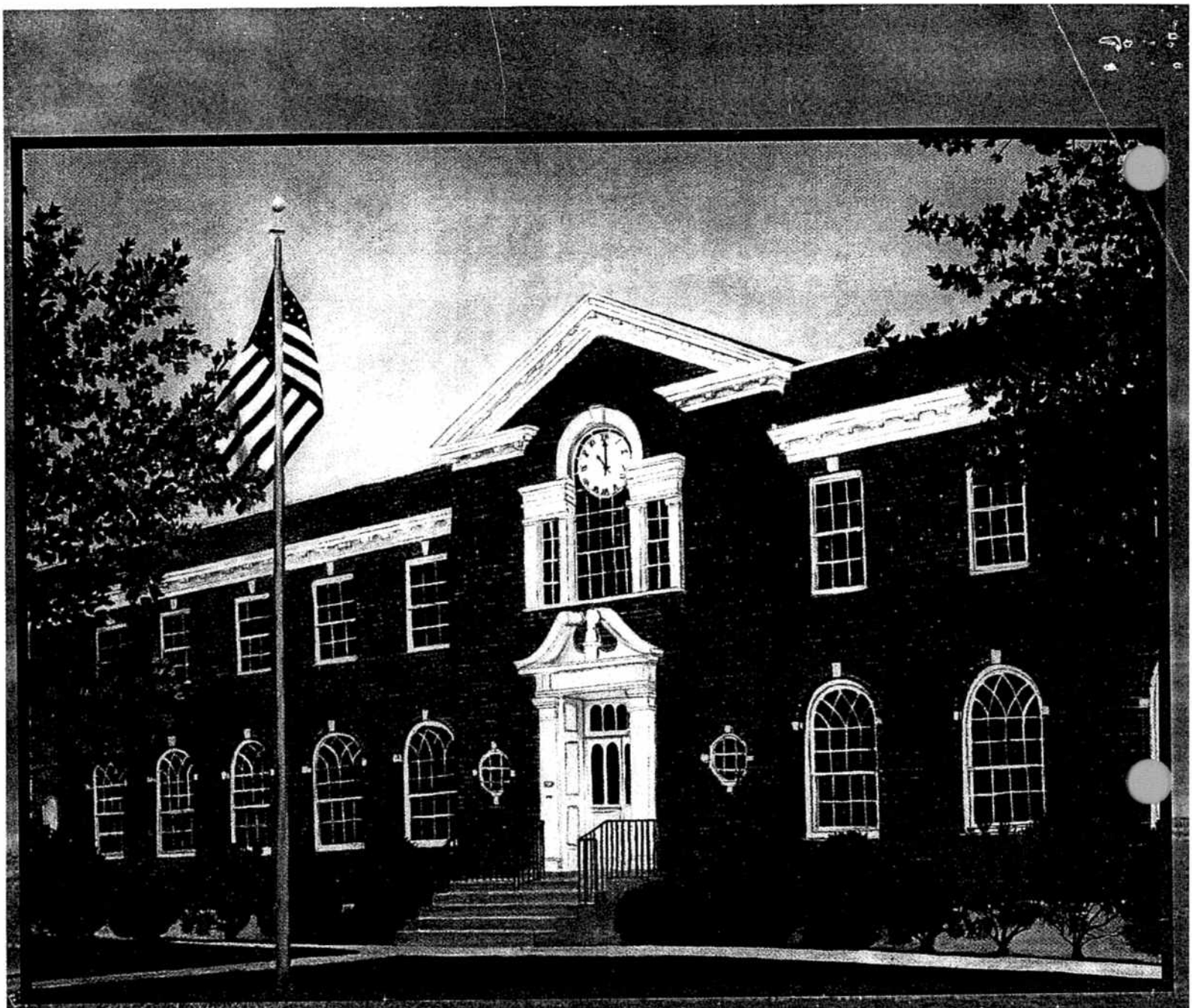
- Flour
- Sugar
- Fillings
- Frozen Batters
- Fresh And Frozen Eggs
- Butter
- Croissants
- Toppings And Coatings
- Cream Cheese
- Colorings & Flavorings
- Yeast
- Cocoa & Fudge
- Margarine
- Milk Powders
- Frozen Whipped Topping
- Shortening & Oils
- Bakery Mixes
- Raisins & Nuts
- Seeds
- Starches
- Cookies
- Frozen Bagels & Breads
- Stabilizers
- Canned & Frozen Fruits
- Spices
- Pies

BAGELS AND DELI

- Flour
- Frozen Batters
- Muffin & Cake Mixes
- Sponges
- Salts
- Sugars
- Margarine
- Nuts
- Oils
- Spices
- Croissants & Cookies
- Colorings
- Malts
- Yeast
- Eggs
- Cream Cheese
- Butter
- Pies

DONUTS

- Donuts & Muffin Mixes
- Shortening
- Sugars
- Pancake & Waffle Mixes
- Donut Fillings
- Colors
- Spices
- Glazes
- Nuts & Coconut
- Chocolate Chip
- Croissants & Batters
- Yeast
- Cheese & Butter
- Eggs
- Sprinkles



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138-27 78th Drive
Flushing, New York 11367
August 25, 2008

City Planning Commission
22 Reade Street
New York, NY 10007

Re: TESTIMONY – Willets Point Proposed Redevelopment

Dear Commissioners:

It should come as no surprise that tensions flare with regard to the Willets Point proposal, as indeed they should, given the havoc it will create in the destruction of over 225 businesses and the dislocation of over 1,300 employees and thousands of their dependents. While the City may relocate a few of the larger businesses, there is no way all or even a majority of the businesses will be relocated, nor all the employees not only retrained but placed in other comparable jobs; and anything the city says to the contrary must be dismissed as political fantasy. They will simply be discarded at the altar of the real estate interests.

Apart from the plethora of flaws inherent in the proposal, which in and of themselves warrant its rejection, there are three distinct aspects that merit close scrutiny:

1. No one knows exactly how much taxpayer money will be spent to acquire all of the property, to be given to the developer free of charge; how much the city will spend to repair the infrastructure; how much will be spent for access and ingress to the area; and how much in subsidies, either directly or indirectly, including tax breaks, the cost of which taxpayers will absorb, the developer will receive. Whatever the taxpayer bill is said to be, history tells us that when all is said and done, miscalculations, inflation and cost over-runs will greatly increase the taxpayer cost.

2. The linchpin for the proposal is that Willets Point does not have streets or sewers, and requires infrastructure repair. The existing Willlets Point businesses for years have been paying taxes and have requested these repairs be made. But they have been ignored, because the city willfully refused to do so, deciding the area should be kept in disrepair so that it could argue that very fact, as a reason to justify a football stadium or some other fat-cat real estate development. This willfulness goes as far back as the tenure of Donald Manes, Claire Shulman's predecessor; and extends through her tenure, as well as that of Helen Marshall, her successor; and the tenures of State Senator Toby Stavisky and State Assemblywoman Nettie Mayersohn. The support by these four persons who have have been in public office ad nauseam, and who are members in good standing in the "I love real estate developers" club and failed in all these years to ever lift a finger to help the Willets

Point businesses, is not only arrogant, but reprehensible. To do so now for the benefit of their real estate friends, is unacceptable, and particularly since no reason exists why the repairs cannot be made at this time and the current businesses remain. That Ms. Shulman and her cohorts participated in the current infrastructure problems and now seek to portray its condition as a reason to support the proposal, reduces hack politics to a new low. Shulman's admonition that City Councilman Hiram Monserrate, an opponent of the proposal, should be ashamed, is misplaced. It is Ms. Shulman who should be ashamed.

3. The city intends to use eminent domain to take private property if the owners refuse to sell. The taking of property for a public use is one thing. But taking it to turn over to a private real estate developer is different and **will represent an ominous precedent in this city**. One can easily envision the real estate interests gloating over the fact that Willets Point will have effectively created the mechanism to destroy all small businesses and any and all private property. Will your neighborhood and your property be next?

As to Mss. Shulman, Marshall, Stavisky and Mayersohn, like old soldiers, the time has come for them to fade away. The fate of Willets point should not be in their hands, but in those of elected officials who are not beholden to real estate interests, and who care about the little people.

Sincerely,

Benjamin M. Haber
718-380-3955

169-06 22nd Avenue
Whitestone, NY 11357
August 25, 2008

City Planning Commission
22 Reade Street
New York, NY 10007

Re: TESTIMONY – Willets Point Proposed Redevelopment

Dear Commissioners:

I would like to bring to your attention the following information pertaining to the Willets Point Redevelopment Plan that is presently being considered by the Commission.

(1.) CLARIFICATION OF COMMUNITY BOARD'S RECOMMENDATION

Community Board 7 intended its conditional approval to be considered a negative recommendation for purposes of Charter §197-d(b)(2), if the conditions that the Board established are not adopted by the Commission; however, **the Board neglected to so state within its written recommendation.**

Pursuant to ULURP Rules, Community Board conditional approvals may be classified into two groups: (1.) Those which state that the conditional approval shall be considered a negative recommendation for purposes of Charter §197-d(b)(2), if certain conditions that the Board establishes are not adopted by the Commission; and (2.) Those which do not so state. The former type of conditional approval, which can convert to a DIS-approval if conditions are not adopted by the Commission, maximally elevates the significance of the conditions. It is this more grave type of conditional approval that Community Board 7 intended to grant, as concerns the present Willets Point Redevelopment Plan.

During the Community Board 7 Land Use Committee meeting on June 23, 2008, a Committee member explicitly asked the Committee Chair, on the record, whether the Board would intend a conditional approval, if granted, to be considered a negative recommendation under circumstances described within the ULURP Rules. The Committee Chair responded, "Without a doubt."

On June 23, 2008, relying in part upon the Committee Chair's representation that a conditional approval in this instance would be intended to convert to a negative recommendation under certain circumstances, as permitted under ULURP Rules, the Committee voted to approve with numerous conditions. On June 30, 2008, prior to the full Community Board vote, the Board Chair re-affirmed, on the record, that a conditional approval, if granted in this instance, would convert to a negative recommendation if the conditions were not subsequently adopted. Relying on the representations of both the Board Chair and the Committee Chair, the full Community Board voted to approve with numerous conditions.

If a Community Board intends its conditional approval to be considered a negative recommendation under circumstances specified within ULURP Rules, then, pursuant to ULURP Rules, the Board must so state within its recommendation. However, although the Board Chair and the Committee Chair orally communicated to members, on the record and prior to the Board's vote, the Board's intent to invoke the ULURP provision which triggers conversion of a conditional approval into a negative recommendation under certain circumstances, **the Board's post-vote written recommendation omits any such statement.** Accordingly, the Board's written recommendation constitutes a breach of key representations made to Board members prior to their votes, and on which Board members relied when formulating their votes. Moreover, the Queens Borough President and the City Planning Commission have never been duly informed of the Board's intent that its conditional approval be considered a negative recommendation under circumstances specified within ULURP Rules, with the resulting heightened significance of the Board's conditions. As a result, the Queens Borough President granted conditional approval, without ever having been duly informed of the severity of the Board's conditions. This is inconsistent with ULURP Rules, and utterly unacceptable, given what is at stake.

(2.) BUSINESS SURVIVAL – THE PRIORITY

During the Commission's public hearing on August 13, 2008, a Commissioner asked EDC's representative whether there are plans to relocate existing Willets Point automotive businesses together in a group, or in clusters. Doing so would help to ensure the survival of those particular businesses, which are interdependent to a much higher degree than was expressed on August 13. However, at City Hall on November 29, 2007, Robert Leiber testified that there is no such plan.

EDC has asserted that at present, it cannot relocate tenant businesses, for fear of committing tortious interference. Meanwhile, the Willets Point businesses now operate under heightened anxieties, because no one has made their survival the top priority if the redevelopment proceeds.

The automotive businesses of Willets Point are undeservedly much-maligned. That they have survived for decades despite the area's ridiculously pitiful infrastructure proves that their services are very much in demand. Indeed, customers deliberately travel to the Willets Point automotive district from the entire tri-state area, and far beyond. If these businesses must move to make way for redevelopment, every courtesy must be extended to them, and they must be absolutely indemnified against any and all losses that may occur before, during and after the relocation. Anything less will strike New Yorkers as unfair. And, the City should find a way to maneuver around claims of tortious interference, so that it may **immediately** formulate and announce a comprehensive relocation plan, and thereby show these businesses a clear path to their survival.

Finally, it is insulting to suggest, as redevelopment proponents do, that automotive workers will be "better off" retrained for other jobs. Willets Point employs many master mechanics who have spent their lives perfecting their craft.

(3.) "JUNKYARDS" MYTH

It is well documented elsewhere that Willets Point is home to numerous large, non-automotive industrial businesses, which employ hundreds of skilled individuals. There is no truth to the popular myth that the area consists only of "junkyards," and the Commission should not be fooled by any such claims.

(4.) HOUSING UNDER RUNWAY APPROACH

The periodic, ear-splitting noise of overhead jet aircraft has made Shea Stadium, which is across the street from Willets Point, the laughingstock of American sports venues. An element of the proposed Willets Point redevelopment plan is the construction of housing units, to be situated directly beneath the well-worn flight path to LaGuardia's runway. Understand that Willets Point is at the closest possible location to this very active runway. Standing in Willets Point, airport aircraft fly so low overhead that one can practically see the pilots through the windows. The noise is absolutely deafening.

City Council member Leroy Comrie has told ACORN that he doubts that any affordable housing can ever be built at Willets Point, because under the circumstances, to provide successful sound insulation will require extremely expensive construction techniques that no developer will want to employ, unless the resulting units are of the luxury type.

(5.) KELO

The decision of the U.S. Supreme Court in the Kelo matter apparently has opened the door to the use of eminent domain to acquire property in circumstances such as Willets Point. However, to prevent eminent domain abuse that could potentially occur in the wake of Kelo, the overwhelming majority of states in the Union have enacted local laws that restrict the use of eminent domain to traditional purposes. New York is among the handful of states that have not yet done so – but not for lack of desire.

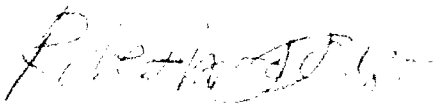
The strong sentiment within the City and the nation is that taking one man's private property, against the will of its owner, to eventually transfer it to another private entity only for the purported purpose of "economic development," is inconsistent with the spirit of the Constitution's eminent domain provision, and the respect for property rights that is a foundation of America. The Commission should not approve a plan that relies upon exploiting a controversial 5-4 Supreme Court decision to which New York State law makers have not yet responded.

(6.) REPAIRS

The Commission should support the development of Willets Point as a natural outgrowth of the installation of essential infrastructures and provision of basic City services, which for decades have been deliberately withheld from Willets Point. Existing Willets Point businesses are eager to collaborate with the City to improve and transform the area. Indeed, there are businesses located in Willets Point that routinely design and execute very large-scale infrastructure and building projects, and whose expertise and convenient location could expedite improvements. In this respect, Willets Point is wholly distinguished from New London,

Connecticut (home of Suzette Kelo at the time of her lawsuit), where no businesses existed that were either already contributing to the City's economy, or that were capable and desirous of developing the area.

Respectfully Submitted,



Robert W. LoScalzo

NEIL GAGLIARDI - Re: Willets Point Speech

From: John YOUNG
To: GW_READE:"Michael.Meyer@fandtgroup.com"@GW_READE.gwia
Date: 8/14/2008 5:05 PM
Subject: Re: Willets Point Speech
CC: GAGLIARDI, NEIL; PHILLIPS, Mark

Michael -
Thank you for sending us your remarks and certainly for providing this compelling testimony at yesterday's Planning Commission hearing.

Best,
John

>>> Michael Meyer <Michael.Meyer@fandtgroup.com> 8/14/2008 4:38 PM >>>
John,
As requested, below is the text of my speech to the Commission yesterday.
Best regards,
Michael

Hello,
My name is Michael Meyer, president of TDC Development. We are major developers and landowners in Flushing. Our project at the Municipal Parking Lot in downtown Flushing which we are re-developing with our partners, The Rockefeller Development Group, is the other major project that arose from Mayor Bloomberg's "Downtown Flushing Re-Development Framework" which was created with the input of community stakeholders and urban planning professionals.

So, we are local players who well understand our community dynamics. We understand that Willets Point is critical to achieving the framework vision. Without the Willets Point project the new Citifield and emerging downtown will be stunted and never achieve its potential. With the Willets Point project, as the Framework recognized, a vibrant mixed use community will attract business activity and will be the critical link between Citifield and Flushing. Queens will finally gain its commercial center.

With a project that will clearly generate so much benefit in the form of jobs, taxes and environmental clean-up, I ask that the commission when considering the many emotional issues involved in such a large urban undertaking not succumb to scare tactics or respond to myths that suggest that landowners will be victims of a land grab by the city or that the hundreds of currently unprotected workers will go without city assistance.

We have an historic opportunity to improve our city in a major way. It's been decades since an administration has had the will and vision to undertake such an ambitious project in this critical area. No project of this scale and ambition can be accomplished without displacement. But the efforts by the city to work with business owners, retrain workers and not reflexively rely on eminent domain demonstrates the commitment of the city to mitigate that displacement and achieve the project in the most responsible manner.

To do nothing is not acceptable to the greatest city in the world and would be a lasting shame.

Michael Meyer
President

TDC Development International, LLC
member of the F&T Group

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Flushing, NY 11354
Tel: (718) 713-0268
Cell: (914) 629-5072
Fax: (718) 888-7752
michael.meyer@fandtgroup.com

May 10, 2007

Ms. Asma Syed, Planner
New York City Economic Development Corporation
110 William Street
New York City, New York, 10038 212 - 618-5589
FAX 212 - 312 -- 3989

RE: Willets Point

Dear Ms Syed,

I am a property owner in the Willets Point area slated for proposed redevelopment. I am writing this letter to add too and reiterate some of the comments I made at the public scoping meeting held in Flushing, New York on Tuesday May 1st, 2007.

To my knowledge this is the third attempt by the city to take this property from its rightful and legal owners, and give it to big business and the politically connected few. To do so by Eminent Domain is shameful and in reality illegal. Eminent Domain as I understand it , was originally conceived and put into law to benefit the public at large when absolutely necessary. Now, in the hands of greedy developers and unscrupulous politicians it has become a vicious and voracious monster gobbling up properties and destroying families simply for their own monetary gain.

The media and the city of New York depict Willets Point property owners and businesses as the villians who have created the squalor, blight and environmentally hazardous conditions that exist in parts of the area.. The finger of blame for these conditions has to be pointed at the true villians; the city of New York , its agencies, and the developers working with them in consort to steal this property. They have created and perpetuated a cycle of greed and avarice by1) levying taxes for services never given 2) issuing violations for not providing same services 3) collecting fines for these violations and then denying the property owner or business the right to rectify the situation! We are stonewalled at every attempt to improve our property by the bureaucrats in the agencies run by the city for this purpose. Hundreds of thousands of dollars in taxes are collected by the city yearly from Willets Point property owners. How much is that over the last thirty years? My guess is well into the hundreds of millions!!!!! This is a case of purposeful neglect on the part of the city. Keeping this property within their grasp so that when they are ready they could unleash their creation of the ugly monster of Eminent Domain and take everything. This is not Eminent Domain to beautify an area for the public good; this is not the Dept. of Environmental Protection protecting its citizens; this is STEALING property from its rightful owners simply because they can and giving it to a chosen few.

New Yorkers are a pretty savvy group of people. Do they really think human beings choose to live and work in such horrible conditions and deliberately keep it that way?? I believe the people of New York have been conveniently denied the truth regarding Willets Point so the city can use them for support in their takeover attempts. I wonder if there is a news source or journalist willing to tell the citizens of New York the truth about Willets Point without always slanting the articles in favor of the city? I personally have tried for years to correct conditions on my property. I have hired and paid lawyers, architects, surveyors, etc., all to no avail because of that stone wall I mentioned .. The bureaucracies of New York. I was actually told by one architect and I quote " The city greases its own way Mrs. Presti, I cannot help you"! This was in reply to my question;" If the city can build a recycling plant complete with sidewalks, sewers, water supply, bathrooms, etc., right down the street from me then why can't I do the same on my property? The question begs to be answered along with many others. By the way, that architect told me he worked on that recycling plant. Interesting???

I would like to know why the Mayor and his agencies never contacted the property owners when they were meeting with their potential new tenants for our property? Everything points to deliberately denying the property owners a part in the process of redevelopment in order to accomodate only those whom they chose and who are politically connected . These people have not paid thousands of dollars in taxes yearly nor toiled and earned their living here as have the

owners and their families. They have no preferential rights here. Why are they being given them by the city? It is morally and unconscionably wrong to take property from its owner and give it to big business and private interests the city has made deals with. SHAME ON YOU MR.MAYOR; SHAME ON YOU HELEN MARSHALL;AND SHAME,SHAME ON YOU CLAIRE SHULMAN WHOSE REGIME AS FORMER BOROUGH PRESIDENT SEEMS TO HAVE BEEN THE BIRTHPLACE OF THIS TAKEOVER PLAN!! I find it arrogant and shameful that you are now a partner with the developers trying to take our property!

The city spoke of helping to relocate businesses. To Where?? Another industrial park? To start the whole cycle of Eminent Domain again when some developer and their political friends see a fine opportunity for themselves? Pretty lucrative for the politicians and developers. Certain DEATH and DISASTER for the business! Every businessman knows a business's long standing in one location builds a reliable reputation and creates a client base that grows steadily. You cannot re-locate that!! The process takes years! There are hundreds of people and their families impacted adversely by this. Mayor Bloomberg, you were elected to represent us ALL, not to condemn the people of Willets Point!!

Willets Point is in large part an Industrial Park. It was created to house heavy industry. The city itself has placed some of the businesses there. The area encompasses 61 acres. That is more than enough acreage to build a proper industrial park with sewers,water supply, sidewalks, bathrooms etc., like the recycling plant mentioned earlier, to house re-located businesses. It could be located on one side of that beautiful park shown in the plans for the area for all to share! On the other side in the shadow of Citifield there is more than enough space to accomodate the private investors with their restaurants, shops, office buildings, etc.

The fact that Willets Point has survived in spite of itself and has paid millions to the city over the years, testifies to its necessity and viable economic contributions to New York and its citizens. This area can be redeveloped and accomodate all interested parties. The city and its citizens stand to benefit from an ALLIANCE with the property and business owners of Willets Point; Not a fight with them for an unfair takeover. That would be a terrible waste of the tax dollars of every hard working citizen of New York.

Yours truly,

Irene Presti

Cc: Mr. Anthony Fodera
Mr. Howard Feinstein
Mr. Neil Soni
Mr. Dan Scully
Mr. Thomas Mina
Mr. Daniel Sambucci
Mr. Richard Musick
Mr. Nelson Johnson

Commenter #43

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Testimony of Daniel Scully
Vice President, Tully Environmental, Inc.
City Planning Commission Hearing
Willets Point Redevelopment, August 13, 2008

My name is Daniel Scully and I am the Vice President of Tully Environmental, Inc. Tully has had its main office and many ancillary facilities in Willets Point for over 60 years. We employ a union work force of over 1200 people.

I am here today to oppose the EDC's plan to redevelop Willets Point. Not only will this project have a severe impact on the businesses that are currently thriving in Willets Point, the plan itself if riddled with shortcomings that, to date, have not been addressed by the EDC and is based on pure speculation from the administration. To add insult to injury, the City is justifying its use of eminent domain by claiming Willets Point is blighted and continually parade around the worst pictures it can find of the area. But Willets Point is not blighted, it is neglected. It is neglected by New York City and has been for over 30 years. No street repair, dilapidated storm sewers and no sanitary sewers. The City doesn't even provide snow removal in the winter. By its own studies[1] the City determined that Willets Point would be a thriving industrial park were it only to get these services that have been intentionally withheld.

Now the City has decided to "fix" the problem it created. They will remove all of the existing businesses and install the infrastructure we have been denied for a new developer. However, the plan that is before the Planning Commission today is little more than a concept and a poor concept at that. They have no answers for the many problems that plague this proposal but give the Commission assurances that they will work them out after the approval. That is why the EDC has attempted to short circuit the ULURP

process. The ULURP process is designed to give the community and the City Council input over land use in the City. It is a means to get commitments from the developer and to set guidelines for the project. To do this, a final plan, not a concept, should be presented to the Commission. But the EDC has decided that it will negotiate with a developer and it will have the final approval of what will be built in Willets Point. Unfortunately, the EDC's record speaks for itself. It has a long list of failed projects including several in Flushing.

The Community Board and the Borough President have given their approvals only if the EDC can successfully address their many concerns over this project. So far, the EDC has not been able to do so with any conviction.

Our greatest fear is that the EDC will succeed in destroying a thriving industrial area only to fall short of its goals. There are many facts that support this fear including a slowing economy and an environmental impact statement that clearly shows the devastating impacts this development will have on Flushing for years to come. The EDC should not be allowed to proceed with this development until it has chosen a developer and can prove to the City Council and the community that this is a viable project and will be accountable for it. Until that time, the City should be helping the businesses of Willets Point by providing the services we have lacked for decades. We have been growing and vibrant in spite of the City; imagine what we could do if the City were to give us just a little help.