PUBLIC NOTICE

US Army Corps
of Engineers
New York District
Jacob K. Javits Federal Building
New York, N.Y. 10278-0090
ATTN: Regulatory Branch

In replying refer to:
Public Notice Number: NAN-2014-00661-EHA
Issue Date: May 27, 2015
Expiration Date: June 26, 2015

To Whom It May Concern:

The New York District, Corps of Engineers has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344).

APPLICANT: New York City Economic Development Corporation
Attn: Jawad Assaf
110 William Street
New York, New York 10038

ACTIVITY: Discharge fill into wetlands and waters of the United States for two road construction projects: the Linden Place Reconstruction and the 132nd Street Extension.

WATERWAY: Mill Creek, tributary to Flushing Bay

LOCATION: College Point, Borough of Queens, Queens County, New York.

A detailed description and plans of the applicant's activity are enclosed to assist in your review.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

ALL COMMENTS REGARDING THE PERMIT APPLICATION MUST BE PREPARED IN WRITING AND MAILED TO REACH THIS OFFICE BEFORE THE EXPIRATION DATE OF THIS NOTICE, otherwise, it will be presumed that there are no objections to the activity. Comments

provided will become a part of the public record for this action. Comments submitted in response to this notice will be fully considered during the public interest review for this permit application. All written comments, including names and addresses, will be made a part of the administrative record, available to the public under the Freedom of Information Act. The Administrative Record, or portions thereof, may also be posted on a Corps of Engineers internet web site. Due to resource limitations, this office will normally not acknowledge the receipt of comments or respond to individual letters of comment.

Any person may request, in writing, before this public notice expires, that a public hearing be held to collect information necessary to consider this application. Requests for public hearings shall state, with particularity, the reasons why a public hearing should be held. It should be noted that information submitted by mail is considered just as carefully in the permit decision process and bears the same weight as that furnished at a public hearing.

Our determination is that the activity for which authorization is sought herein will not affect any Federally endangered or threatened species or their critical habitat.

Based upon a review of the latest published version of the National Register of Historic Places, there are no known sites eligible for, or included in, the Register within the permit area. Presently unknown archeological, scientific, prehistorical, or historical data may be lost by work accomplished under the required permit.

Reviews of activities pursuant to Section 404 of the Clean Water Act will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404 (b) of the Clean Water Act and the applicant will obtain a water quality certificate or waiver from the appropriate state agency in accordance with Section 401 of the Clean Water Act prior to a permit decision.

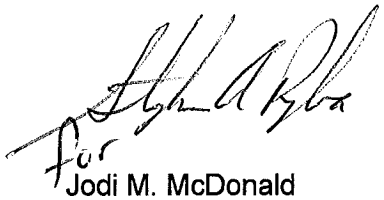
In addition to any required water quality certificate the applicant has obtained or requested the following governmental authorization for the activity under consideration:

- New York State Department of Environmental Conservation

It is requested that you communicate the foregoing information concerning the activity to any persons known by you to be interested and who did not receive a copy of this notice. If you have any questions concerning this application, you may contact this office at (917) 790-8523 and ask for Naomi Handell.

In order for us to better serve you, please complete our Customer Service Survey located at http://www.nan.usace.army.mil/Missions/Regulatory/CustomerSurvey.aspx.

For more information on New York District Corps of Engineers programs, visit our website at http://www.nan.usace.army.mil.



For
Jodi M. McDonald
Chief, Regulatory Branch

Enclosures

WORK DESCRIPTION

The applicant, New York Economic Development Corporation, has requested Department of the Army authorization (including after-the-fact authorization) for the placement of fill in wetlands and waters of the United States for road construction in Mill Creek and associated wetlands, tributary to Flushing Bay, College Point, Borough of Queens, Queens County, New York.

The work would involve:

132nd Street Extension

Placement of fill in 0.53 acres of waters of the United States and 1.17 acres of wetlands to facilitate construction of the 132nd Street extension. The 1,050 foot long by 125 foot wide roadway extension would connect 23rd Avenue and 20th Avenue via the construction of 132nd Street (See Sheets 2 through 11 of 38).

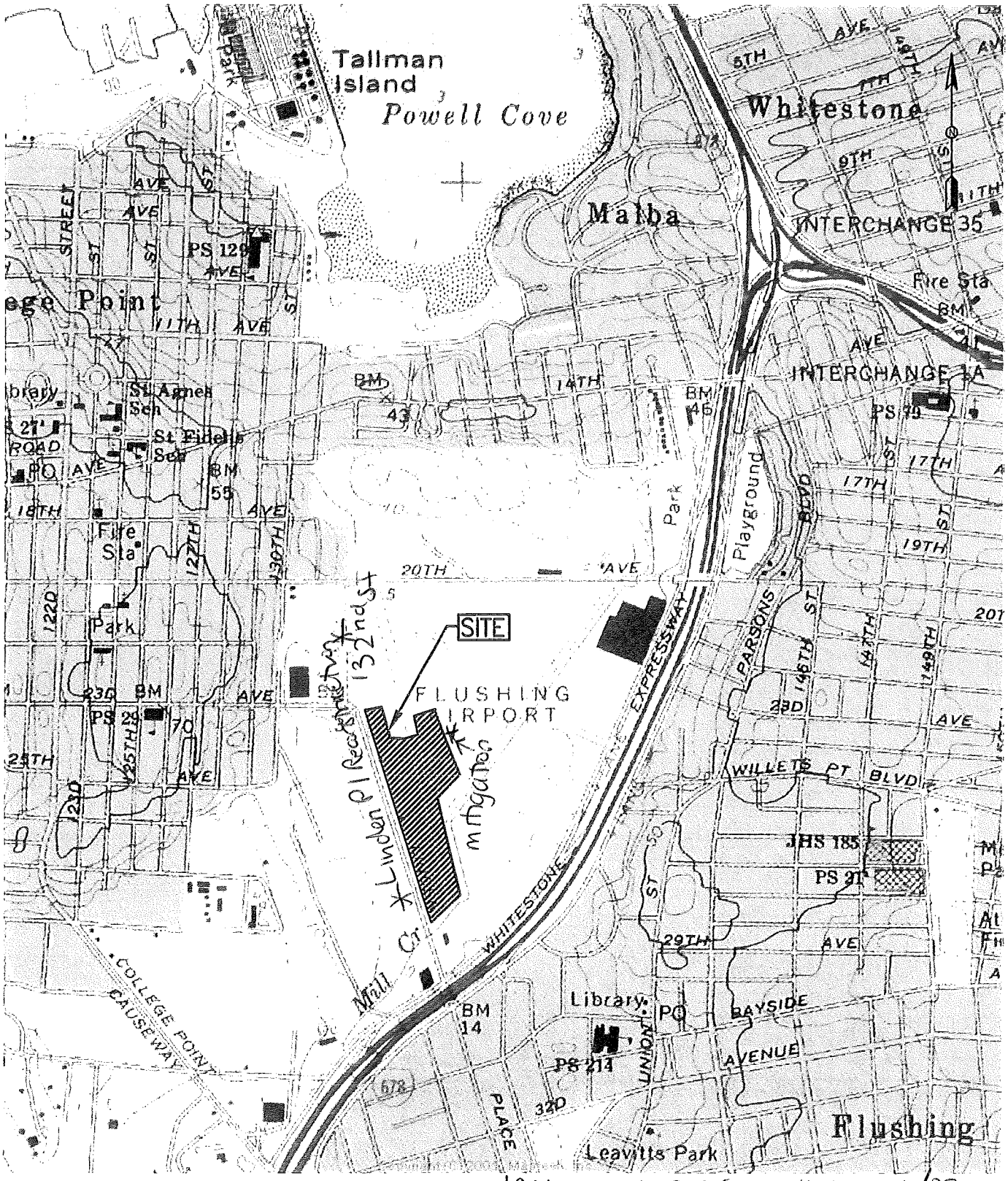
Linden Place Reconstruction-After the Fact Permit Application

Without Department of the Army authorization, the applicant commenced work on this portion of the project during late winter/early spring of 2015 and work is expected to be complete by Spring 2015. As per 33 CFR 326.3(e), the applicant has requested after-the-fact authorization for the proposed Linden Place Reconstruction.

Placement of fill in 0.76 acres of wetlands to facilitate re-construction of Linden Place. The 3,750 foot long by 64 to 67 foot wide roadway reconstruction is currently underway on Linden Place from 28th Avenue to 23rd Avenue (See Sheets 12 through 18 of 38).

The applicant has stated that they have avoided, minimized, and mitigated for proposed impacts to the maximum extent practicable by avoiding impacts to the maximum extent practicable, including a reduction in the 132nd Street Extension wetland impacts from 1.77 to 1.17 acres and constructing the following compensatory mitigation: 11.78 acres of open water habitat and enhancement of 1.67 acres of existing wetlands (See Sheets 19 through 38 of 38). The applicant intends the proposed compensatory mitigation for the Linden Place Reconstruction, the 132nd Street Extension and to meet the requirements of a New York State Department of Environmental Conservation Order on Consent.

The stated purpose of this project is to reconstruct the roadway in accordance with New York City Department of Transportation standards and provide the required compensatory mitigation.



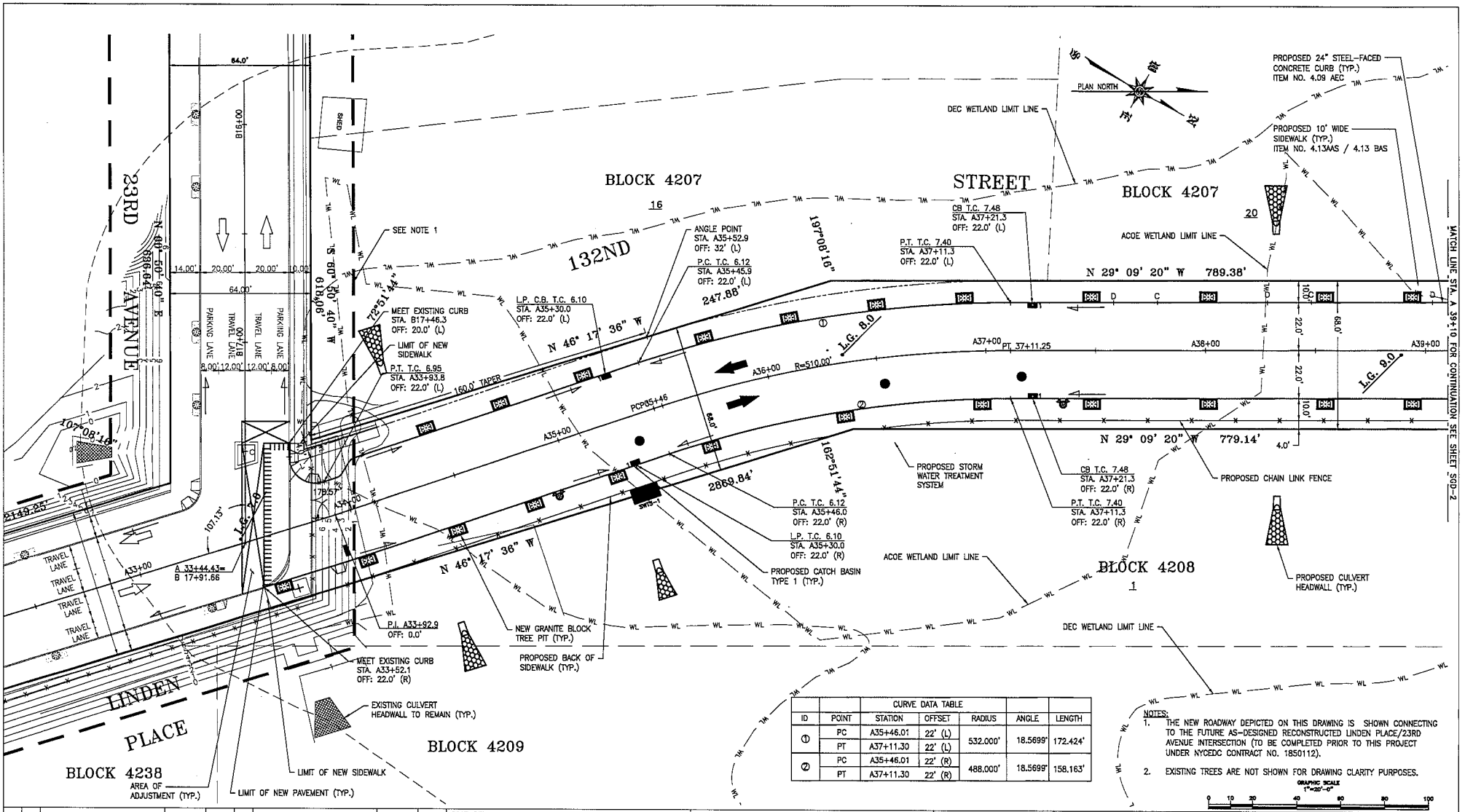
NAN-2014-00661-EHA 1/38

NY City Economic Development Corporation Queens, NY

DATE:	06-2013
JOB NUMBER:	--
SCALE:	1" = 1,200'
SHEET NUMBER:	

The RBA Group
ENGINEERS ARCHITECTS PLANNERS

Linden St Reconstruction
132nd St Extension
Compensatory Mitigation
USGS LOCATION MAP



ID	POINT	STATION	OFFSET	RADIUS	ANGLE	LENGTH
CURVE DATA TABLE						
①	PC	A35+46.01	22' (L)	532.000'	18.5699°	172.424'
	PT	A37+11.30	22' (L)			
②	PC	A35+46.01	22' (R)	488.000'	18.5699°	158.163'
	PT	A37+11.30	22' (R)			

NOTES:
1. THE NEW ROADWAY DEPICTED ON THIS DRAWING IS SHOWN CONNECTING TO THE FUTURE AS-DESIGNED RECONSTRUCTED LINDEN PLACE/23RD AVENUE INTERSECTION (TO BE COMPLETED PRIOR TO THIS PROJECT UNDER NYCEDC CONTRACT NO. 1850112).
2. EXISTING TREES ARE NOT SHOWN FOR DRAWING CLARITY PURPOSES.

GRAPHIC SCALE 1"=20'-0" (0, 10, 20, 40, 60, 80, 100)

NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY
REVISIONS							

PREPARED BY
The RBA New York
ENGINEERS • ARCHITECTS • PLANNERS
27 UNION SQUARE WEST, 4TH FLOOR
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(212) 741-8090 FAX (212) 633-1206
/ /2011
LINDA REARDON, P.E., VICE PRESIDENT — DATE
NEW YORK STATE P.E. No. 059524

New York City Economic Development Corporation

DESIGNED BY	I.S.
DRAWN BY	C.O.
CHECKED BY	R.K.
PROJECT ENGR	J.M.
CAD FILE	SGD.DWG

132ND STREET CONSTRUCTION, BOROUGH OF QUEENS, NEW YORK
BID PACKAGE 2 – ROADWAY CONSTRUCTION
CONSTRUCTION PLAN
STA. A 33+00 TO STA. A 39+10

SCALE 1"=20' REVISION
DATE 08/25/2014
DRAWING C1
SHEET 2/38

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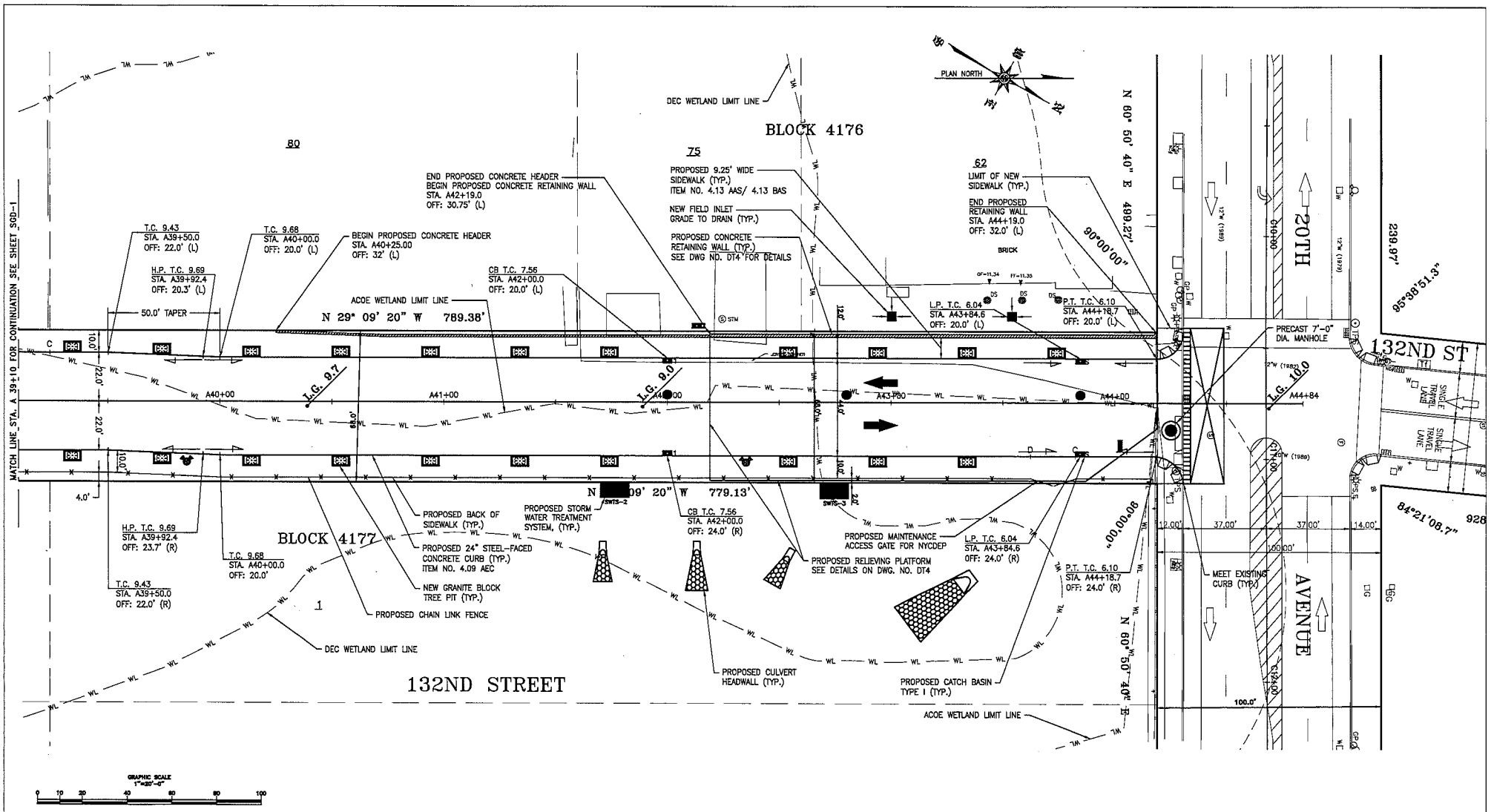

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New York City Economic Development Corporation

DESIGNED BY	I.S.	132ND STREET CONSTRUCTION, BOROUGH OF QUEENS, NEW YORK	SCALE 1"=20' / REVISION XX
DRAWN BY	C.O.	BID PACKAGE 2 – ROADWAY CONSTRUCTION	DATE 08/25/2014
CHECKED BY	R.K.	CONSTRUCTION PLAN STA. A 39+10 TO STA. A 44+84	DRAWING C2
PROJECT ENGR	J.M.		SHEET 3 of 38
CAD FILE	SGD.DWG		

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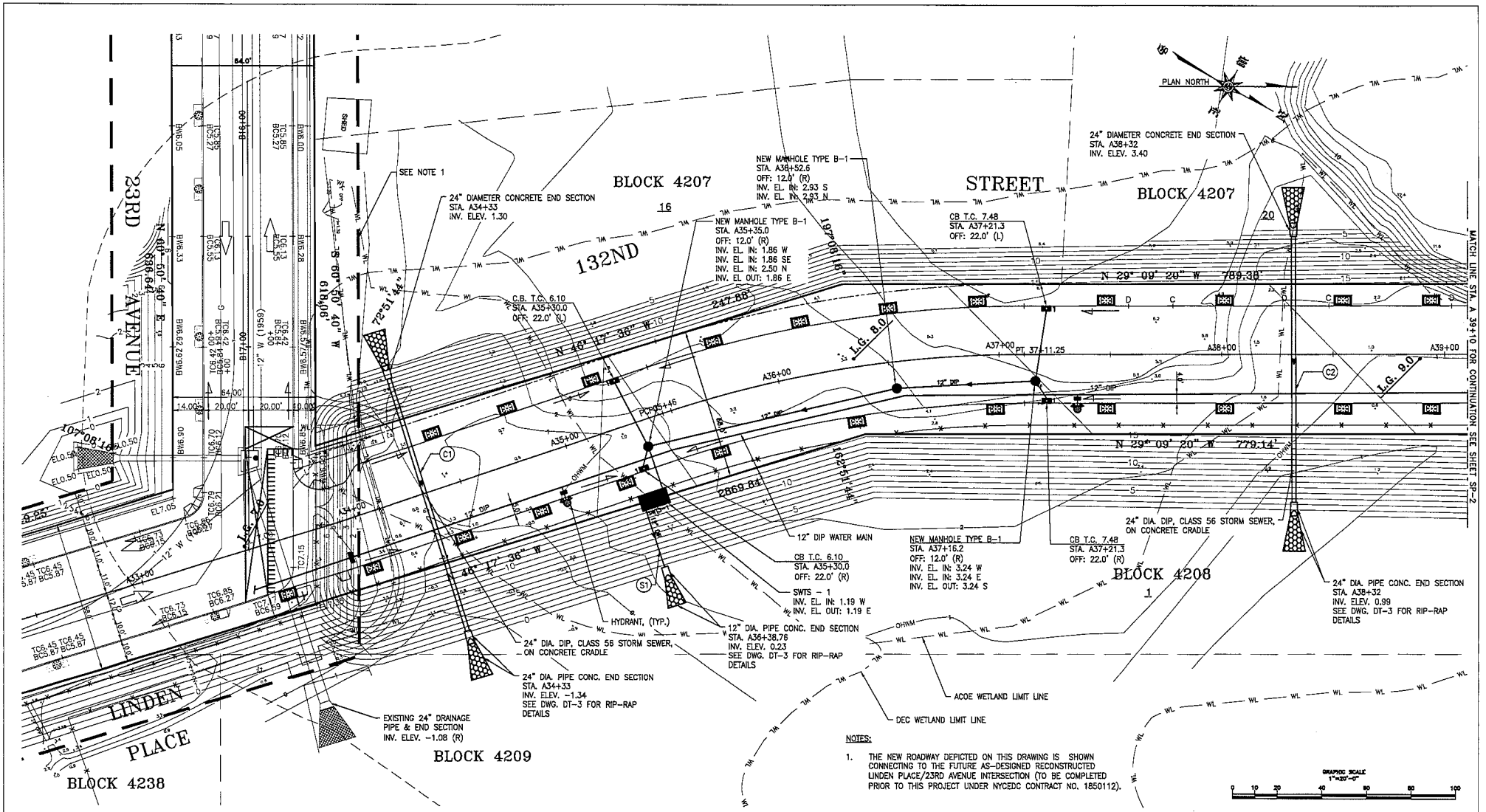

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CHECKED BY	R.K.
PROJECT ENGR	J.M.
CAD FILE	SP.DWG

132ND STREET CONSTRUCTION, BOROUGH OF QUEENS, NEW YORK

BID PACKAGE 2 – ROADWAY CONSTRUCTION

UTILITY PLAN
STA. A 33+00 TO STA. A 39+10

SCALE	1"=20'
REVISION	
DATE	08/25/2014
DRAWING	UP1
SHEET	4/38

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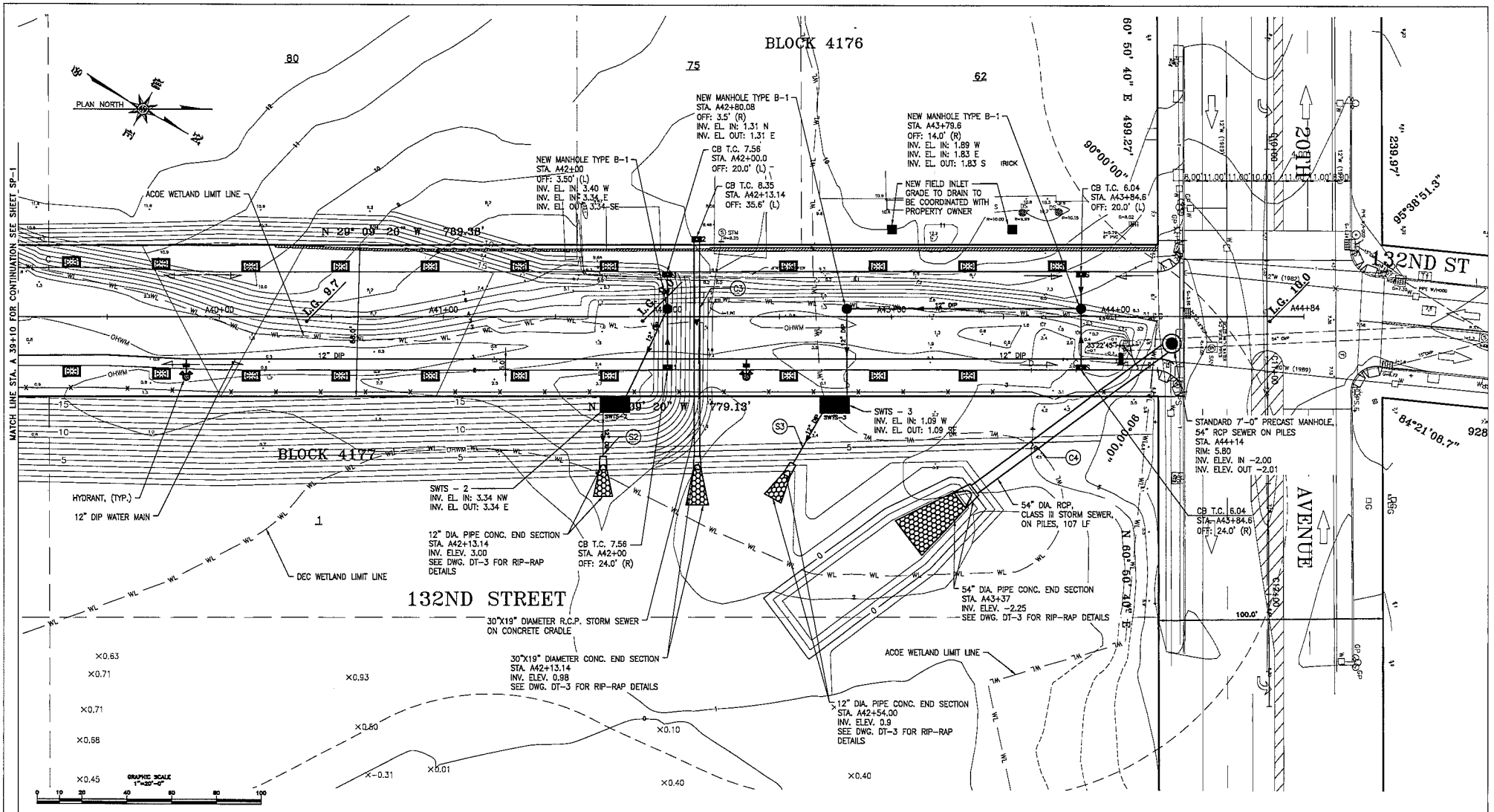

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CHECKED BY	R.K.
PROJECT ENGR	J.M.
CAD FILE	SP.DWG

132ND STREET CONSTRUCTION, BOROUGH OF QUEENS, NEW YORK

BID PACKAGE 2 – ROADWAY CONSTRUCTION

UTILITY PLAN
STA. A 39+10 TO STA. A 44+84

SCALE	1"=20'
REVISION	
DATE	08/25/2014
DRAWING	UP2
SHEET	5 of 38

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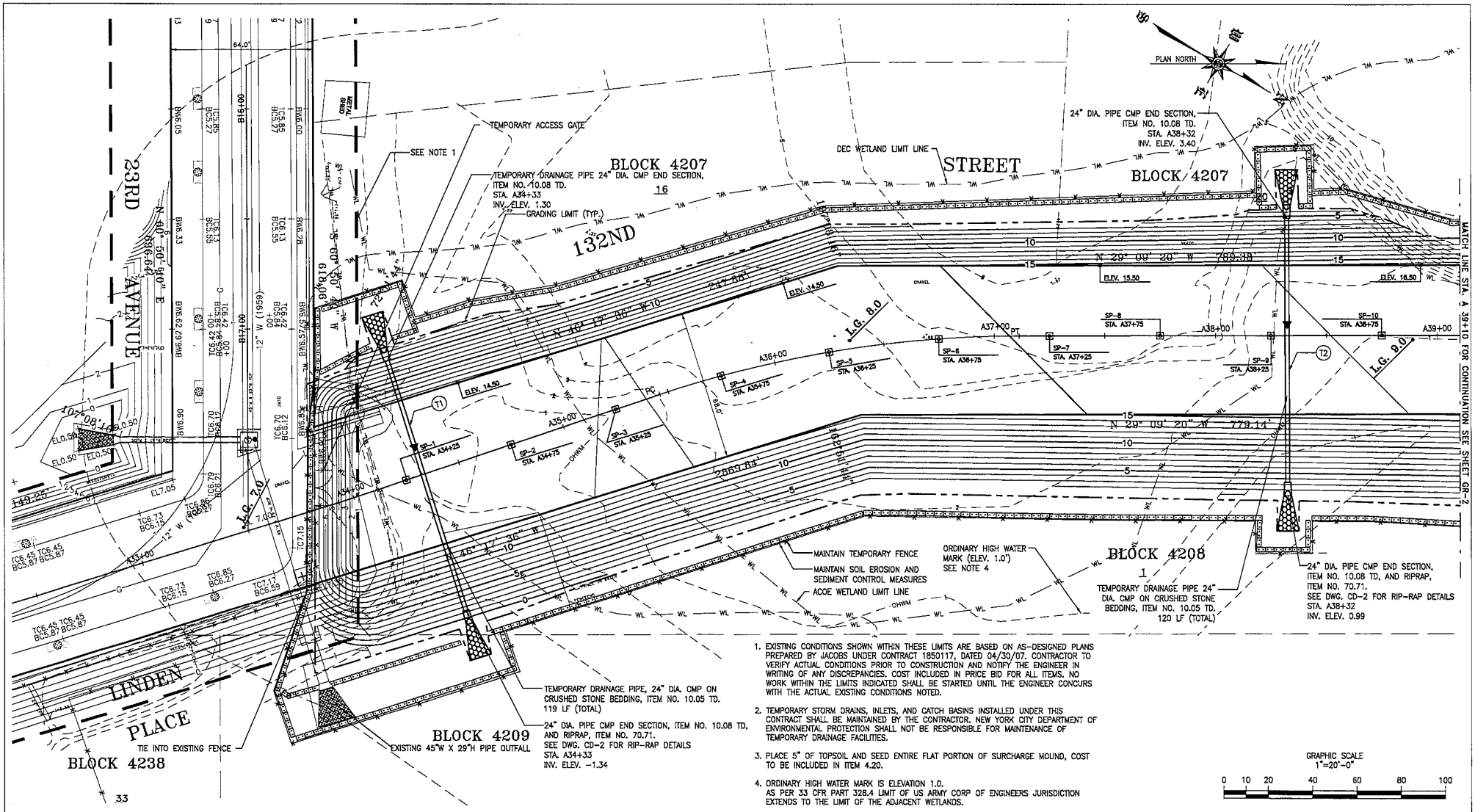

1. EXISTING CONDITIONS SHOWN WITHIN THESE LIMITS ARE BASED ON AS-DESIGNED PLANS PREPARED BY JACOBS UNDER CONTRACT 1850117, DATED 04/30/07. CONTRACTOR TO VERIFY ACTUAL CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES. COST INCLUDED IN PRICE BID FOR ALL ITEMS. NO WORK WITHIN THE LIMITS INDICATED SHALL BE STARTED UNTIL THE ENGINEER CONCURS WITH THE ACTUAL EXISTING CONDITIONS NOTED.
2. TEMPORARY STORM DRAINS, INLETS, AND CATCH BASINS INSTALLED UNDER THIS CONTRACT SHALL BE MAINTAINED BY THE CONTRACTOR. NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION SHALL NOT BE RESPONSIBLE FOR MAINTENANCE OF TEMPORARY DRAINAGE FACILITIES.
3. PLACE 5" OF TOPSOIL AND SEED ENTIRE FLAT PORTION OF SURCHARGE MOUND, COST TO BE INCLUDED IN ITEM 4.20.
4. ORDINARY HIGH WATER MARK IS ELEVATION 1.0. AS PER 33 CFR PART 328.4 LIMIT OF US ARMY CORP OF ENGINEERS JURISDICTION EXTENDS TO THE LIMIT OF THE ADJACENT WETLANDS.

IN CHARGE OF | DESIGNED BY | CHECKED BY | ESTIMATED BY | CHECKED BY | DRAFTED BY | CHECKED BY | DATE

REVISIONS

NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY

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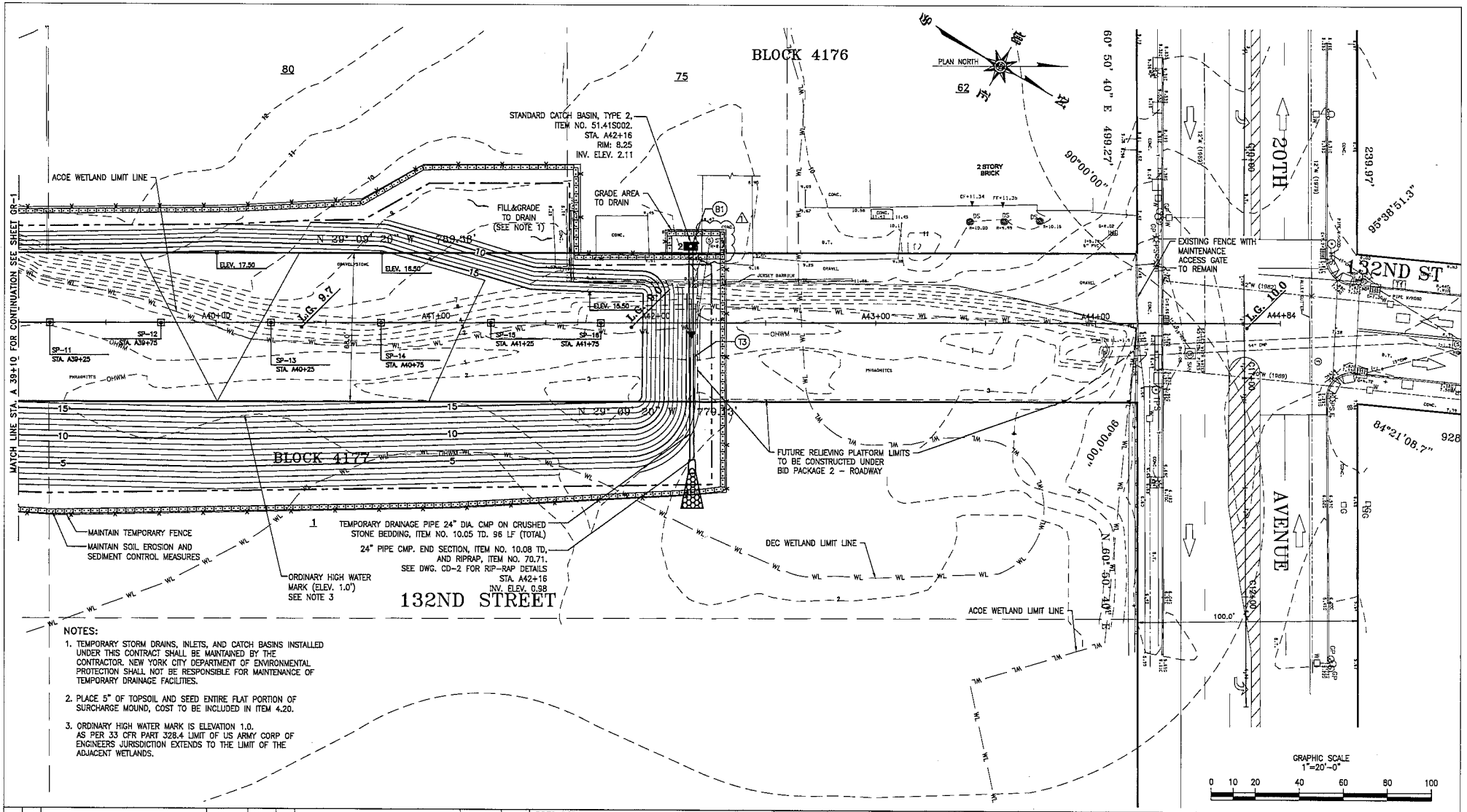
NEW YORK STATE P.E. No. 069524
DATE

NYCEDC

132ND STREET SURCHARGE, BOROUGH OF QUEENS, NEW YORK
BID PACKAGE I – SURCHARGE
SURCHARGE GRADING AND DRAINAGE PLAN STA. A 33+00 TO STA. A 39+10

SCALE 1"=20'
DATE 09/19/2014
DRAWING GR-1
SHEET 6/38

NAN-2014-00601-EHA



NOTES:

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3. ORDINARY HIGH WATER MARK IS ELEVATION 1.0. AS PER 33 CFR PART 328.4 LIMIT OF US ARMY CORP OF ENGINEERS JURISDICTION EXTENDS TO THE LIMIT OF THE ADJACENT WETLANDS.

REVISIONS NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY
1	ADDENDUM 2	10/24/14					

PREPARED BY
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NEW YORK STATE P.E. No. 069524

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132ND STREET SURCHARGE, BOROUGH OF QUEENS, NEW YORK
BID PACKAGE I – SURCHARGE
SURCHARGE GRADING AND DRAINAGE PLAN STA. A 39+10 TO STA. A 44+84

SCALE 1"=20'
DATE 09/19/2014
DRAWING GR-2
SHEET 7/38

NAN-2014-00661-EHA

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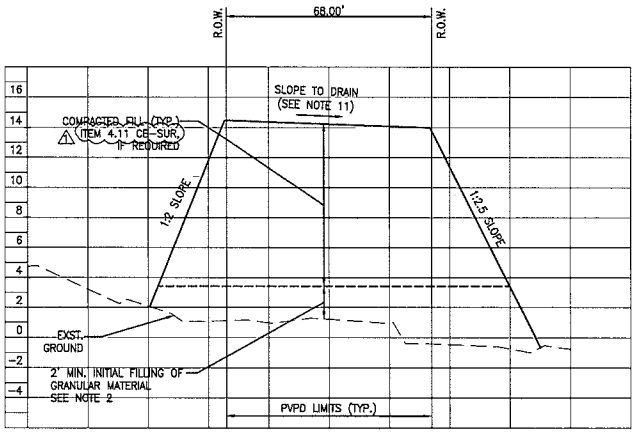
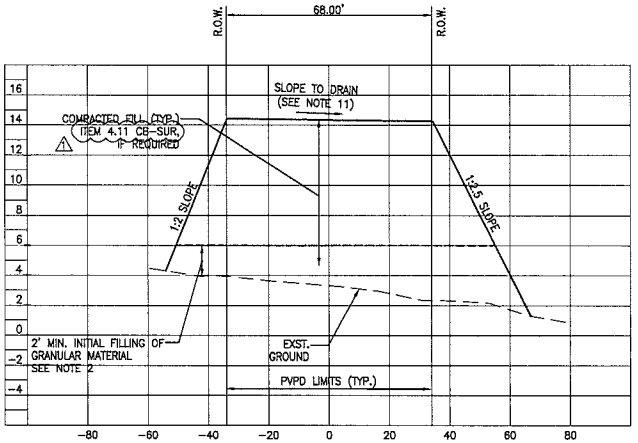


SECTION 2
STA. A34+50



SECTION 3
STA. A36+00

GRAPHIC SCALE

1"=20'-0" (H)

0 10 20 40 60 80 100

1"=4'-0" (V)

0 2 4 8 12 16 20

NOTE: ORDINARY HIGH WATER MARK DOES NOT FALL WITHIN THE CONSTRUCTION/SURCHARGE LIMITS FOR THIS SECTION.

SURCHARGE SECTIONS

SUGGESTED CONSTRUCTION SEQUENCE:

A. PLACE SILT FENCE WITH STRAWBALES AND TEMPORARY FENCE AT LOCATIONS SHOWN ON DRAWING SEC-1 AND SEC-2. SEE DRAWING SE-1 FOR DETAILS.

B. CLEAR AND GRUB SITE, REMOVE OBSTRUCTIONS AND ESTABLISH STABLE WORKING SURFACE. SEE NOTE 2 AND DWG. DP-1 AND DP-2 FOR LIMITS.

C. CONSTRUCT DRAINAGE STRUCTURES AND DRAINAGE CONDUITS. SEE DWG. CD-2 AND SSP-1 FOR DETAILS, AND DWG. GR-1 AND GR-2 FOR LOCATIONS.

D. PLACE INITIAL GRANULAR MATERIAL LAYER WITHIN SECTION LIMITS. SEE NOTES 3 AND 6 AND SURCHARGE SECTIONS THIS SHEET.

E. INSTALL INSTRUMENTATION AND WICK DRAINS (PVPD).

F. PLACE AND COMPACT FILL TO SURCHARGE ELEVATION SHOWN ON PLANS. SEE NOTE 5.

G. ESTABLISH TURF FOR PLANTING AND PLACE 5" INCHES OF TOP SOIL (COST INCLUDED IN ITEM 4.20).

H. PLANT SEEDING (ITEM 4.20).

I. PLACE EROSION BLANKETS.

GENERAL NOTES:

1. THE SITE IS UNDERLAIN BY VERY SOFT COMPRESSIBLE SILTS AND PARTICULAR CARE WILL NEED TO BE TAKEN DURING THE INITIAL FILLING TO ACHIEVE A STABLE WORKING SURFACE. LOW PRESSURE TRACKED CONSTRUCTION EQUIPMENT WILL LIKELY BE MOST SUITABLE DURING THE INITIAL FILLING OPERATIONS. SITE PREPARATION SHALL COMMENCE WITH REMOVAL OF ANY SURFACE DEBRIS AS WELL AS FENCES, CONCRETE PADS, TREES, STUMPS, TREES / ROOTS GREATER THAN 4-INCHES IN DIAMETER, AND OTHER OBSTRUCTIONS. DEPENDING ON CONSTRUCTION EQUIPMENT USED, THE EXISTING MARSH VEGETATION MAY BE LEFT IN-PLACE TO USE AS A "NATURAL WORKING MAT" FOR THE START OF FILLING. AS AN ALTERNATIVE THE VEGETATION SHALL BE STRIPPED A.O.B.E. AND A GEOGRID PLACED PRIOR TO FILLING. THE COST OF REMOVING 5-INCHES OF TOP SOIL AND INSTALLING THE GEOGRID SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 6.01 AA – CLEARING AND GRUBBING.

2. THE INITIAL FILLING IN THE LOW-LYING MARSH AREAS SHALL CONSIST OF SURCHARGE FILL (SEE NOTE ON DWG. GP-3 FOR DETAILS) EXCEPT THAT LESS THAN 10% BY WEIGHT PASSING NO. 200 SIEVE. THE COST OF SCREENING (IF REQUIRED) IS INCLUDED IN THE PRICE BID FOR ITEM 4.11 CB-SUR. THE GRANULAR MATERIALS SHALL BE SPREAD AND TRACKED-OVER WITH CONSTRUCTION EQUIPMENT TO AN ELEVATION APPROXIMATELY 2 FEET ABOVE GROUNDWATER TO PROVIDE A WORKING SURFACE FOR THE INSTALLATION OF WICK DRAINS. FOLLOWING INSTALLATION OF THE WICK DRAIN SYSTEM, FILLING SHOULD BE PROCEED WITH GENERAL LOAD-BEARING FILL AS DEFINED IN DRAWING GP-2 AND GP-3. AT LEAST 85 PERCENT COMPACTION (BASED ON A MODIFIED PROCTOR ASTM D-1557) SHALL BE OBTAINED IN THE FIRST TWO FEET OF THE GENERAL LOAD-BEARING FILL FOLLOWING WICK DRAIN INSTALLATION AND AT LEAST 90 PERCENT THEREAFTER. PUMPING OF THE SOILS DURING PLACEMENT AND COMPACTION SHOULD BE AVOIDED. LOW-PRESSURE TRACKED EQUIPMENT AND STATIC COMPACTION WILL LIKELY BE MOST SUITABLE FOR THE INITIAL FILL LIFTS FOLLOWING WICK DRAIN INSTALLATION.

3. SURCHARGE FILL SHALL CONSIST OF WELL GRADED MINERAL SOIL AGGREGATES FREE OF ORGANIC MATTER. SEE SURCHARGE NOTES ON DWG. GP-2 FOR SPECIFICS.

4. LOAD BEARING SURCHARGE FILLS SHALL BE PLACED ON STABLE NEAR LEVEL SUBGRADE PREPARED BY THE REMOVAL OF WEAK SOIL DEPOSITS. THE LOAD BEARING FILLS SHALL BE PLACED IN LIFTS NOT EXCEEDING A LOOSE THICKNESS OF 12 INCHES. FILL PLACED AGAINST EXISTING SLOPES STEEPER THAN 4H:1V SHALL BE BENCHED INTO THE EXISTING SLOPES. BENCH HEIGHTS SHALL BE LIMITED TO FOUR FEET AS FILLING PROGRESSES FROM THE BOTTOM UP. SEE DRAWING CD-1 FOR DETAILS. THE CONTRACTOR SHALL NOT PLACE BACKFILL OR FILL MATERIAL ON SUBGRADE SURFACES THAT ARE FROZEN OR CONTAIN FROST/ICE. FROZEN SOILS ARE NOT SUITABLE FILL SOURCES.

5. THE PLACEMENT OF SURCHARGE MATERIAL SHALL PROCEED FROM SOUTH TO NORTH DEPENDING ON THE RESULTS OF THE SETTLEMENT MONITORING AND THE SPEED WITH WHICH THE NEW ROADWAY EMBANKMENT IS CONSTRUCTED. AN ADJUSTMENT IN THE EARTHWORK PLACEMENT SCHEDULE MAY BE REQUIRED BETWEEN THE TIME THE FILL AND OVERFILL IS COMPLETED AND THE SURCHARGE IS PLACED. THE E.I.C. SHALL NOTIFY THE CONTRACTOR OF ANY ADJUSTMENTS IN THE PLACEMENT SCHEDULE.

6. THE CONTRACTOR SHALL REFER TO AND COMPLY WITH ALL APPLICABLE PARTS OF SECTION 6.02, UNCLASSIFIED EXCAVATION, NYCDOT STANDARD SPECIFICATIONS.

7. THE SURCHARGE SHALL EXTEND OVER SECTIONAL LIMITS SHOWN, AND SHALL SLOPE DOWN AT 1:2 (MAX.) ON THE WEST SIDE OF THE FILL AND 1:2.5 (MAX) ON THE EAST SIDE OF THE FILL. PRIOR TO PLACEMENT OF FILL, THE SUBGRADE SHALL BE COMPACTED. THE SURCHARGE FILL SHALL BE PLACED UP TO THE RECOMMENDED ELEVATIONS SPECIFIED. SEE DWGS GR-1 AND GR-2 FOR DETAILS.

8. UNDERNEATH THE SURCHARGED AREA, PREFABRICATED VERTICAL PLASTIC DRAINS (PVPD) SHALL BE PLACED THROUGH THE ORGANIC LAYER AND 1'-0" INTO THE BEARING STRATA. SEE DRAWING CD-1 FOR ESTIMATED TOP ELEVATION OF BEARING STRATA.

9. REFER TO DWG. CD-1 FOR OTHER SURCHARGING REQUIREMENTS AND INSTRUMENTATION DETAILS.

10. REFER TO DWGS. SE-1 AND SE-2 FOR SOIL EROSION AND SEDIMENT CONTROL DETAILS.

11. SLOPE TOP SURFACE OF COMPACTED FILL TOWARDS WETLANDS AREA AT A RATE OF APPROXIMATELY 0.5' PER 68' OF R.O.W. WIDTH. SEE DWGS. GR-1 AND GR-2 FOR PROPOSED SPOT ELEVATIONS.

DESIGNED BY | CHECKED BY | ESTIMATED BY | CHECKED BY | DRAFTED BY | CHECKED BY | DATE

IN CHARGE OF

REVISIONS

NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY
1	ADDENDUM 2	10/24/14					

PREPARED BY
The RBA New York
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NEW YORK, NEW YORK 10003
(212) 741-0090 Fax (212) 633-1206

LINDA REARDON, P.E., VICE PRESIDENT
NEW YORK STATE P.E. No. 069524
DATE

NYCEDC

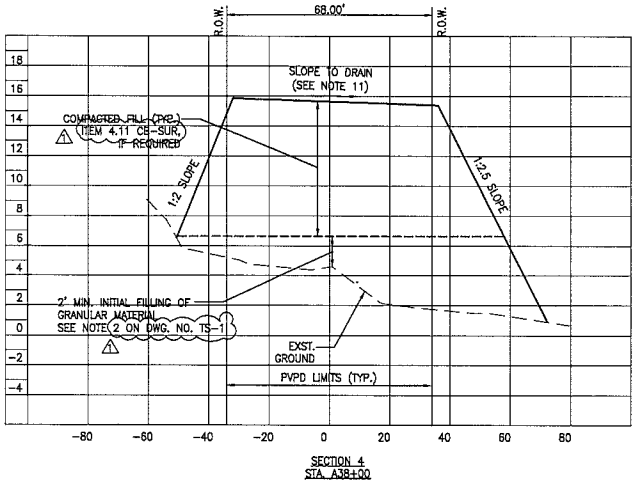
132ND STREET SURCHARGE, BOROUGH OF QUEENS, NEW YORK

BID PACKAGE I – SURCHARGE

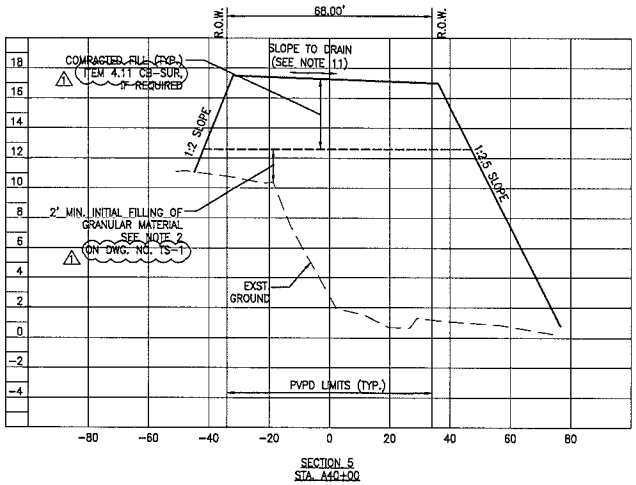
SURCHARGE TYPICAL SECTIONS

SCALE 1"=20'
DATE 09/19/2014
DRAWING TS-1
SHEET 8/38

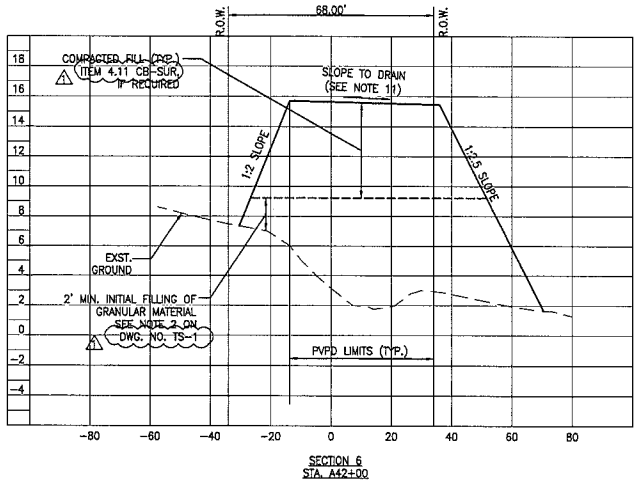
NAN-2014-00661-CHA



SECTION 4
STA. A38+00



SECTION 5
STA. A40+00



SECTION 6
STA. A42+00

GRAPHIC SCALE

1"=20'-0" (H)

0 10 20 40 60 80 100

1"=4'-0" (V)

0 2 4 8 12 16 20

SURCHARGE SECTIONS

REVISIONS	NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY
	1	ADDENDUM 2	10/24/14					

PREPARED BY

The RBA New York
ENGINEERS • ARCHITECTS • PLANNERS
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(212) 741-8090 Fax (212) 633-1205

LINDA REARDON, P.E., VICE PRESIDENT
NEW YORK STATE P.E. No. 069524
DATE

NYCEDC

132ND STREET SURCHARGE, BOROUGH OF QUEENS, NEW YORK

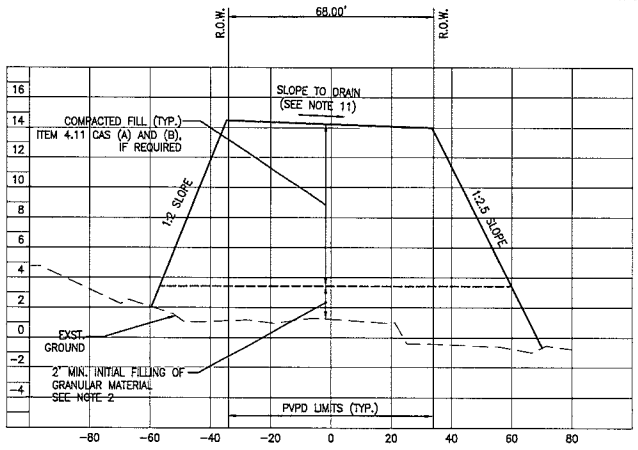
BID PACKAGE I – SURCHARGE

SURCHARGE TYPICAL SECTIONS

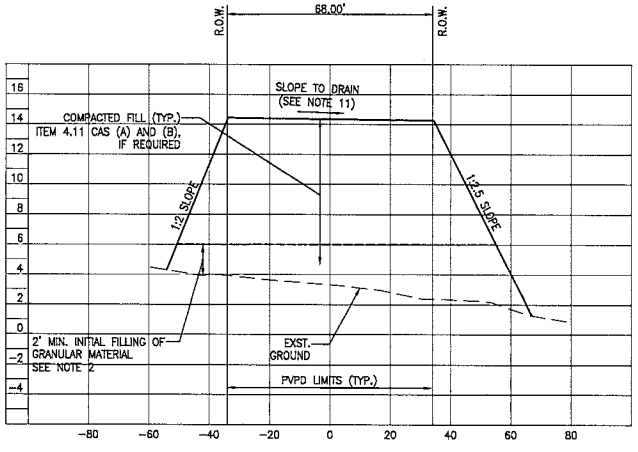
SCALE 1"=20'
DATE 09/19/2014
DRAWING TS-2
SHEET 9/38

NAN-2014-00661-EHA

IN CHARGE OF DESIGNED BY CHECKED BY ESTIMATED BY CHECKED BY DRAFTED BY CHECKED BY DATE



SECTION 2
STA. A34+50



SECTION 3
STA. A36+00

GRAPHIC SCALE

1"=20'-0" (H)

0 10 20 40 60 80 100

1"=4'-0" (V)

0 2 4 8 12 16 20

NOTE: ORDINARY HIGH WATER MARK DOES NOT FALL WITHIN THE CONSTRUCTION/SURCHARGE LIMITS FOR THIS SECTION.

SURCHARGE SECTIONS

SUGGESTED CONSTRUCTION SEQUENCE:

A. PLACE SILT FENCE WITH STRAWBALES AND TEMPORARY FENCE AT LOCATIONS SHOWN ON DRAWING SEC-1 AND SEC-2. SEE DRAWING SE-1 FOR DETAILS.

B. CLEAR AND GRUB SITE, REMOVE OBSTRUCTIONS AND ESTABLISH STABLE WORKING SURFACE. SEE NOTE 2 AND DWG. DP-1 AND DP-2 FOR LIMITS.

C. CONSTRUCT DRAINAGE STRUCTURES AND DRAINAGE CONDUITS. SEE DWG. CD-2 AND SSP-1 FOR DETAILS, AND DWG. GR-1 AND GR-2 FOR LOCATIONS.

D. PLACE INITIAL GRANULAR MATERIAL LAYER WITHIN SECTION LIMITS. SEE NOTES 3 AND 6 AND SURCHARGE SECTIONS THIS SHEET.

E. INSTALL INSTRUMENTATION AND WICK DRAINS (PVPD).

F. PLACE AND COMPACT FILL TO SURCHARGE ELEVATION SHOWN ON PLANS. SEE NOTE 5.

G. ESTABLISH TURF FOR PLANTING AND PLACE 5" INCHES OF TOP SOIL (COST INCLUDED IN ITEM 4.20).

H. PLANT SEEDING (ITEM 4.20).

I. PLACE EROSION BLANKETS.

GENERAL NOTES:

1. THE SITE IS UNDERLAIN BY VERY SOFT COMPRESSIBLE SILTS AND PARTICULAR CARE WILL NEED TO BE TAKEN DURING THE INITIAL FILLING TO ACHIEVE A STABLE WORKING SURFACE. LOW PRESSURE TRACKED CONSTRUCTION EQUIPMENT WILL LIKELY BE MOST SUITABLE DURING THE INITIAL FILLING OPERATIONS. SITE PREPARATION SHALL COMMENCE WITH REMOVAL OF ANY SURFACE DEBRIS AS WELL AS FENCES, CONCRETE PADS, TREES, STUMPS, TREES / ROOTS GREATER THAN 4-INCHES IN DIAMETER, AND OTHER OBSTRUCTIONS. DEPENDING ON CONSTRUCTION EQUIPMENT USED, THE EXISTING MARSH VEGETATION MAY BE LEFT IN-PLACE TO USE AS A "NATURAL WORKING MAT" FOR THE START OF FILLING. AS AN ALTERNATIVE THE VEGETATION SHALL BE STRIPPED A.O.B.E. AND A GEOGRID PLACED PRIOR TO FILLING. THE COST OF REMOVING 5-INCHES OF TOP SOIL AND INSTALLING THE GEOGRID SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 6.01 AA – CLEARING AND GRUBBING.

2. THE INITIAL FILLING IN THE LOW-LYING MARSH AREAS SHALL CONSIST OF SURCHARGE FILL (SEE NOTE ON DWG. GP-3 FOR DETAILS) EXCEPT THAT LESS THAN 10% BY WEIGHT PASSING NO. 200 SIEVE. THE COST OF SCREENING (IF REQUIRED) IS INCLUDED IN THE PRICE BID FOR ITEM 4.11 CAS (A) AND ITEM 4.11 CAS (B). THE GRANULAR MATERIALS SHALL BE SPREAD AND TRACKED-OVER WITH CONSTRUCTION EQUIPMENT TO AN ELEVATION APPROXIMATELY 2 FEET ABOVE GROUNDWATER TO PROVIDE A WORKING SURFACE FOR THE INSTALLATION OF WICK DRAINS. FOLLOWING INSTALLATION OF THE WICK DRAIN SYSTEM, FILLING SHOULD BE PROCEED WITH GENERAL LOAD-BEARING FILL AS DEFINED IN DRAWING GP-2 AND GP-3. AT LEAST 85 PERCENT COMPACTION (BASED ON A MODIFIED PROCTOR ASTM D-1557) SHALL BE OBTAINED IN THE FIRST ONE TO TWO LIFTS OF THE GENERAL LOAD-BEARING FILL FOLLOWING WICK DRAIN INSTALLATION AND AT LEAST 90 PERCENT THEREAFTER. PUMPING OF THE SOILS DURING PLACEMENT AND COMPACTION SHOULD BE AVOIDED. LOW-PRESSURE TRACKED EQUIPMENT AND STATIC COMPACTION WILL LIKELY BE MOST SUITABLE FOR THE INITIAL FILL LIFTS FOLLOWING WICK DRAIN INSTALLATION.

3. SURCHARGE FILL SHALL CONSIST OF WELL GRADED MINERAL SOIL AGGREGATES FREE OF ORGANIC MATTER. SEE SURCHARGE NOTES ON DWG. GP-2 FOR SPECIFICS.

4. LOAD BEARING SURCHARGE FILLS SHALL BE PLACED ON STABLE NEAR LEVEL SUBGRADE PREPARED BY THE REMOVAL OF WEAK SOIL DEPOSITS. THE LOAD BEARING FILLS SHALL BE PLACED IN LIFTS NOT EXCEEDING A LOOSE THICKNESS OF 12 INCHES. FILL PLACED AGAINST EXISTING SLOPES STEEPER THAN 4H:1V SHALL BE BENCHED INTO THE EXISTING SLOPES. BENCH HEIGHTS SHALL BE LIMITED TO FOUR FEET AS FILLING PROGRESSES FROM THE BOTTOM UP. SEE DRAWING CD-1 FOR DETAILS. THE CONTRACTOR SHALL NOT PLACE BACKFILL OR FILL MATERIAL ON SUBGRADE SURFACES THAT ARE FROZEN OR CONTAIN FROST/ICE. FROZEN SOILS ARE NOT SUITABLE FILL SOURCES.

5. THE PLACEMENT OF SURCHARGE MATERIAL SHALL PROCEED FROM SOUTH TO NORTH DEPENDING ON THE RESULTS OF THE SETTLEMENT MONITORING AND THE SPEED WITH WHICH THE NEW ROADWAY EMBANKMENT IS CONSTRUCTED, AN ADJUSTMENT IN THE EARTHWORK PLACEMENT SCHEDULE MAY BE REQUIRED BETWEEN THE TIME THE FILL AND OVERFILL IS COMPLETED AND THE SURCHARGE IS PLACED. THE E.I.C. SHALL NOTIFY THE CONTRACTOR OF ANY ADJUSTMENTS IN THE PLACEMENT SCHEDULE.

6. THE CONTRACTOR SHALL REFER TO AND COMPLY WITH ALL APPLICABLE PARTS OF SECTION 6.02, UNCLASSIFIED EXCAVATION, NYCDOT STANDARD SPECIFICATIONS.

7. THE SURCHARGE SHALL EXTEND OVER SECTIONAL LIMITS SHOWN, AND SHALL SLOPE DOWN AT 1:2 (MAX.) ON THE WEST SIDE OF THE FILL AND 1:2.5 (MAX) ON THE EAST SIDE OF THE FILL PRIOR TO PLACEMENT OF FILL, THE SUBGRADE SHALL BE COMPACTED. THE SURCHARGE FILL SHALL BE PLACED UP TO THE RECOMMENDED ELEVATIONS SPECIFIED. SEE DWGS GR-1 AND GR-2 FOR DETAILS.

8. UNDERNEATH THE SURCHARGED AREA, PREFABRICATED VERTICAL PLASTIC DRAINS (PVPD) SHALL BE PLACED THROUGH THE ORGANIC LAYER AND 1'-0" INTO THE BEARING STRATA. SEE DRAWING CD-1 FOR ESTIMATED TOP ELEVATION OF BEARING STRATA.

9. REFER TO DWG. CD-1 FOR OTHER SURCHARGING REQUIREMENTS AND INSTRUMENTATION DETAILS.

10. REFER TO DWGS. SE-1 AND SE-2 FOR SOIL EROSION AND SEDIMENT CONTROL DETAILS.

11. SLOPE TOP SURFACE OF COMPACTED FILL TOWARDS WETLANDS AREA AT A RATE OF APPROXIMATELY 0.5' PER 68' OF R.O.W. WIDTH. SEE DWGS. GR-1 AND GR-2 FOR PROPOSED SPOT ELEVATIONS.

DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ DATE ____

IN CHARGE OF

REVISIONS

NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY

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LINDA REARDON, P.E., VICE PRESIDENT DATE
NEW YORK STATE P.E. No. 069524

NYCEDC

132ND STREET SURCHARGE, BOROUGH OF QUEENS, NEW YORK

BID PACKAGE I – SURCHARGE

SURCHARGE TYPICAL SECTIONS

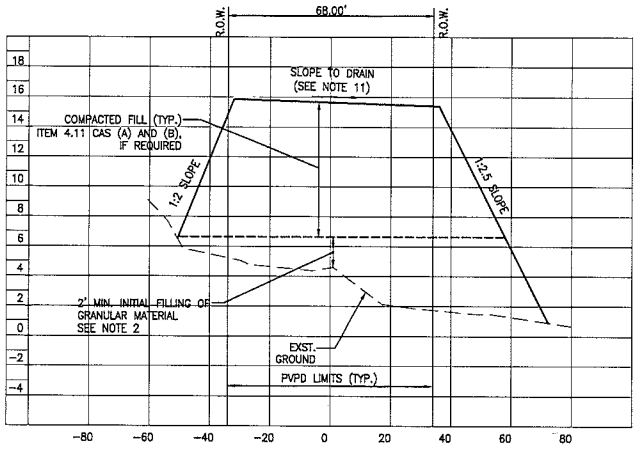
SCALE 1"=20'

DATE 09/19/2014

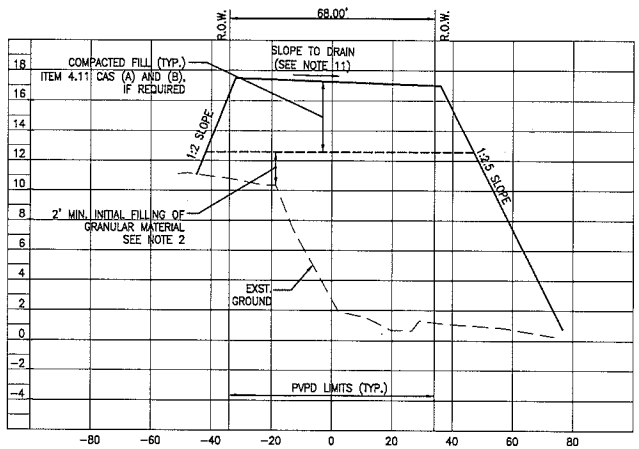
DRAWING TS-1

SHEET 10/33

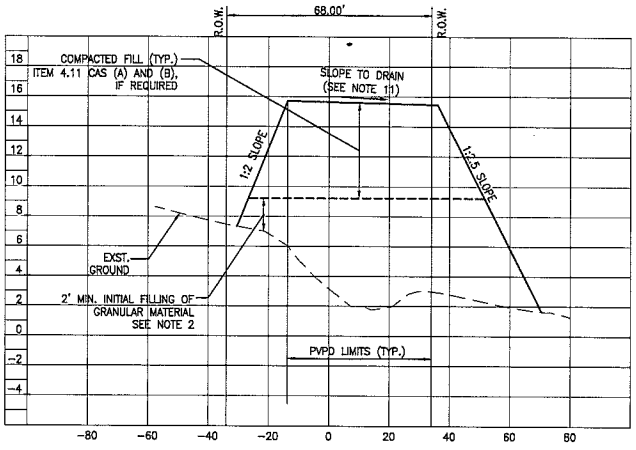
NAN-2014-00661-EHA



SECTION 4
STA. A38+00



SECTION 5
STA. A40+00



SECTION 6
STA. A42+00

GRAPHIC SCALE

1"=20'-0" (H)

0 10 20 40 60 80 100

1"=4'-0" (V)

0 2 4 8 12 16 20

SURCHARGE SECTIONS

REVISIONS	NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY

PREPARED BY

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132ND STREET SURCHARGE, BOROUGH OF QUEENS, NEW YORK

BID PACKAGE I – SURCHARGE

SURCHARGE TYPICAL SECTIONS

SCALE 1"=20'

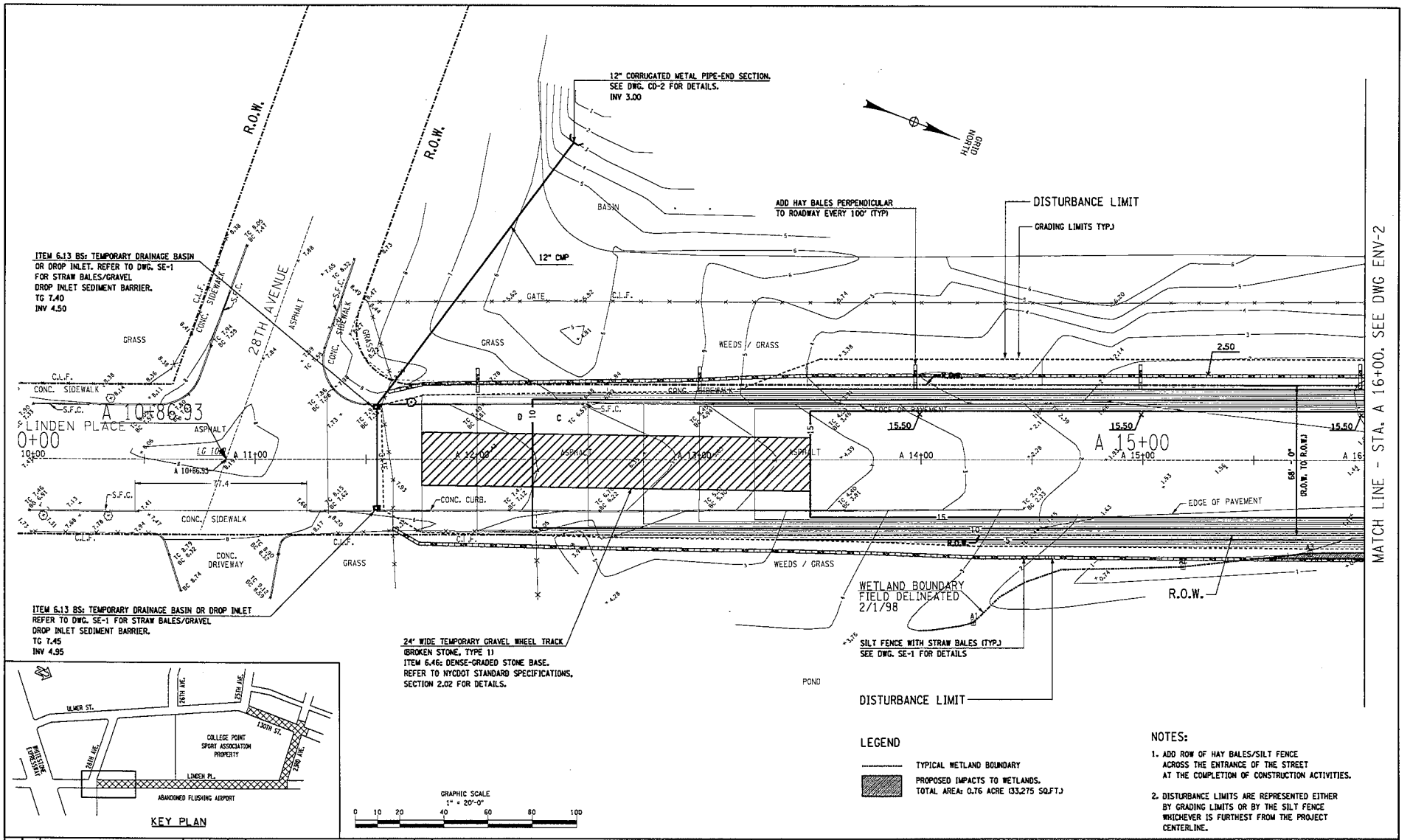
DATE 09/19/2014

DRAWING TS-2

SHT 11/38

NAN-2014-00601-EFFA

IN CHARGE OF ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ DATE ____



KEY PLAN

GRAPHIC SCALE
1" = 20'-0"
0 10 20 40 60 80 100

LEGEND

TYPICAL WETLAND BOUNDARY

PROPOSED IMPACTS TO WETLANDS.
TOTAL AREA: 0.76 ACRE (33,275 SQ.FT.)

NOTES:

1. ADD ROW OF HAY BALES/SILT FENCE ACROSS THE ENTRANCE OF THE STREET AT THE COMPLETION OF CONSTRUCTION ACTIVITIES.
2. DISTURBANCE LIMITS ARE REPRESENTED EITHER BY GRADING LIMITS OR BY THE SILT FENCE WHICHEVER IS FURTHEST FROM THE PROJECT CENTERLINE.

REVISIONS	NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY

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NEW YORK STATE P.E. NO. 061675-1
DATE

New York City Economic Development Corporation

DESIGNED BY
DRAWN BY
CHECKED BY
PROJECT ENGR
CAD FILE

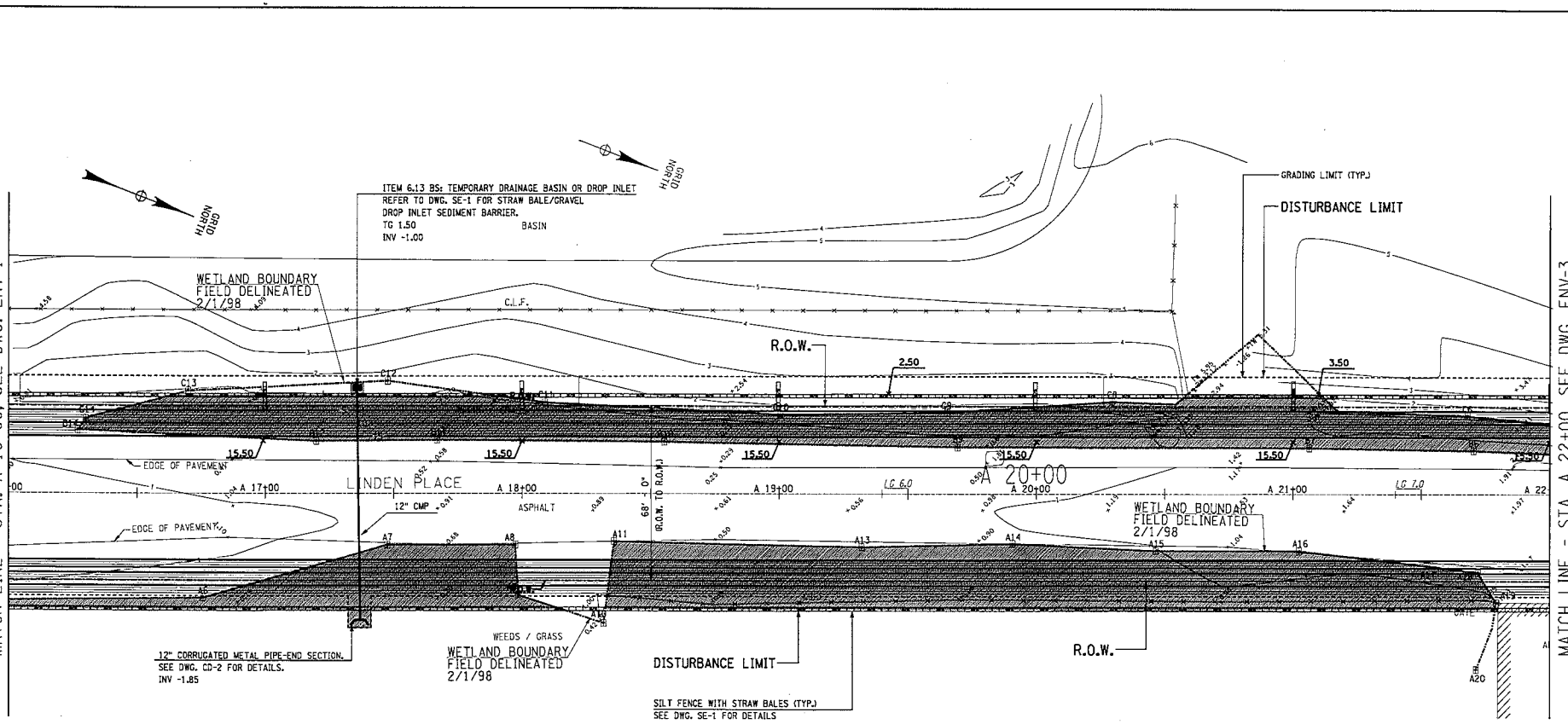
THE RECONSTRUCTION OF LINDEN PLACE
BOROUGH OF QUEENS, NEW YORK

ENVIRONMENTAL PLAN
STA. A 10+00 TO STA. A 16+00

SCALE 1" = 20'-0"
DATE 08-07-01
REVISION
DRAWING ENV-1
SHEET 12/33

After the Fact

NAN-2014-00661-EHA



LEGEND

TYPICAL WETLAND BOUNDARY

PROPOSED IMPACTS TO WETLANDS.
TOTAL AREA: 0.76 ACRE (33,275 SQ.FT.)

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GRAPHIC SCALE
1" = 20'-0"
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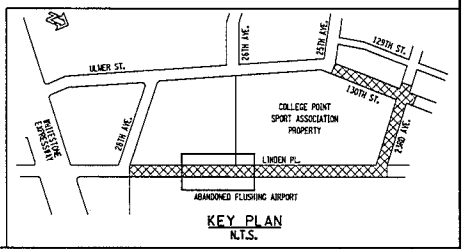

KEY PLAN
N.T.S.

REVISIONS	NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY

PREPARED BY
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New York City Economic Development Corporation

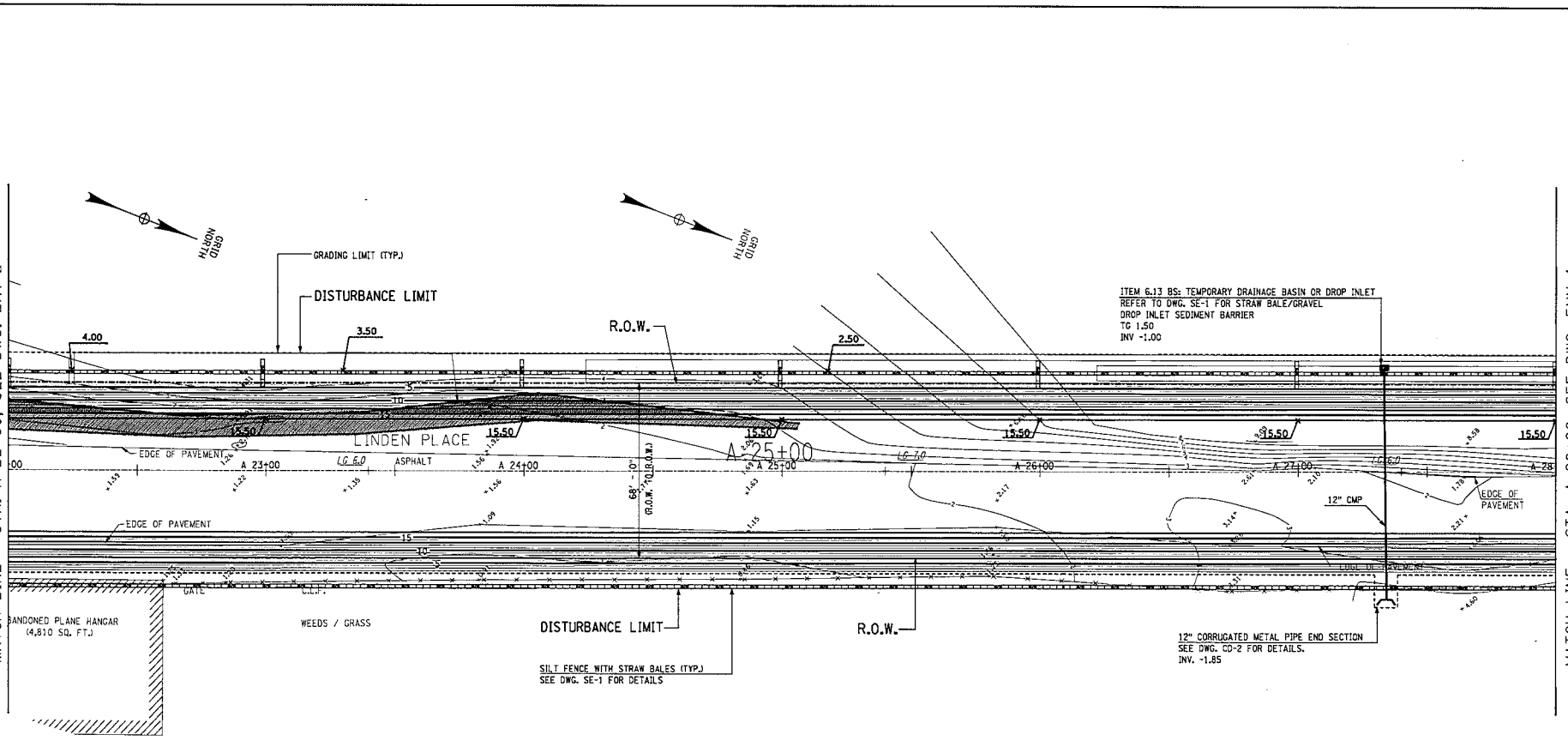
DESIGNED BY	
DRAWN BY	
CHECKED BY	
PROJECT ENGR	
CAD FILE	

THE RECONSTRUCTION OF LINDEN PLACE
BOROUGH OF QUEENS, NEW YORK

ENVIRONMENTAL PLAN
STA. A 16+00 TO STA. A 22+00

SCALE	1" = 20'-0"
DATE	08-07-01
REVISION	
DRAWING	ENV-2
SHEET	13/58

After the Fact NAN-2014-00661-EHA



LEGEND

TYPICAL WETLAND BOUNDARY

PROPOSED IMPACTS TO WETLANDS.
TOTAL AREA: 0.76 ACRE (33,275 SQ.FT.)

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GRAPHIC SCALE
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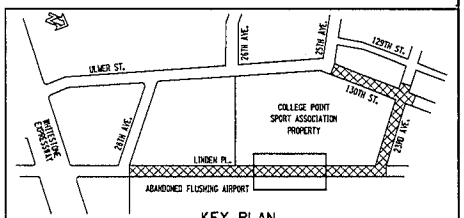

KEY PLAN
N.T.S.

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PREPARED BY
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NEW YORK STATE P.E. NO. 061679-1
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New York City Economic Development Corporation

DESIGNED BY	
DRAWN BY	
CHECKED BY	
PROJECT ENGR	
CAD FILE	

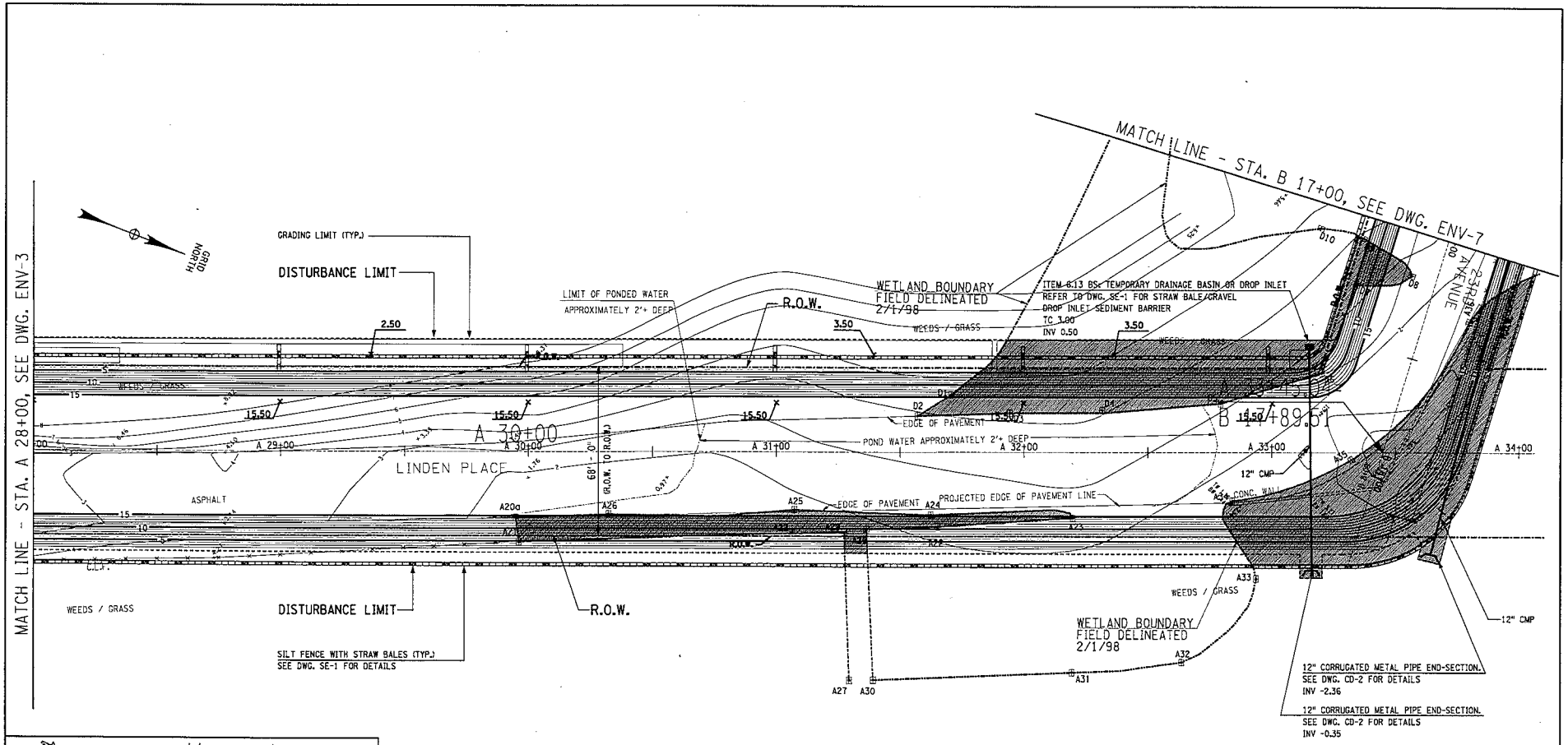
THE RECONSTRUCTION OF LINDEN PLACE
BOROUGH OF QUEENS, NEW YORK

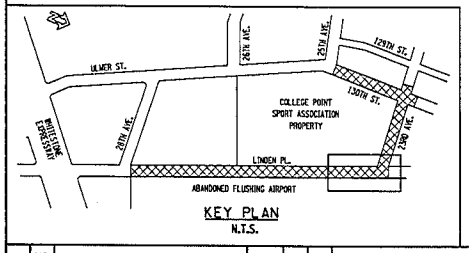
ENVIRONMENTAL PLAN
STA. A 22+00 TO STA. A 28+00

SCALE	1" = 20'-0"
DATE	06-07-01
REVISION	
DRAWING	ENV-3
SHEET	14 | 38

IN CHARGE OF ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ DATE ____

After the fact
NAN-2014-00661-EHA





KEY PLAN
N.T.S.

GRAPHIC SCALE
1" = 20'-0"
0 10 20 40 60 80 100

LEGEND

TYPICAL WETLAND BOUNDARY

PROPOSED IMPACTS TO WETLANDS.
TOTAL AREA: 0.76 ACRE (33,275 SQ.FT.)

NOTES:

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NEW YORK STATE P.E. NO. 081679-1
DATE

New York City Economic Development Corporation

DESIGNED BY	
DRAWN BY	
CHECKED BY	
PROJECT ENGR	
CAD FILE	

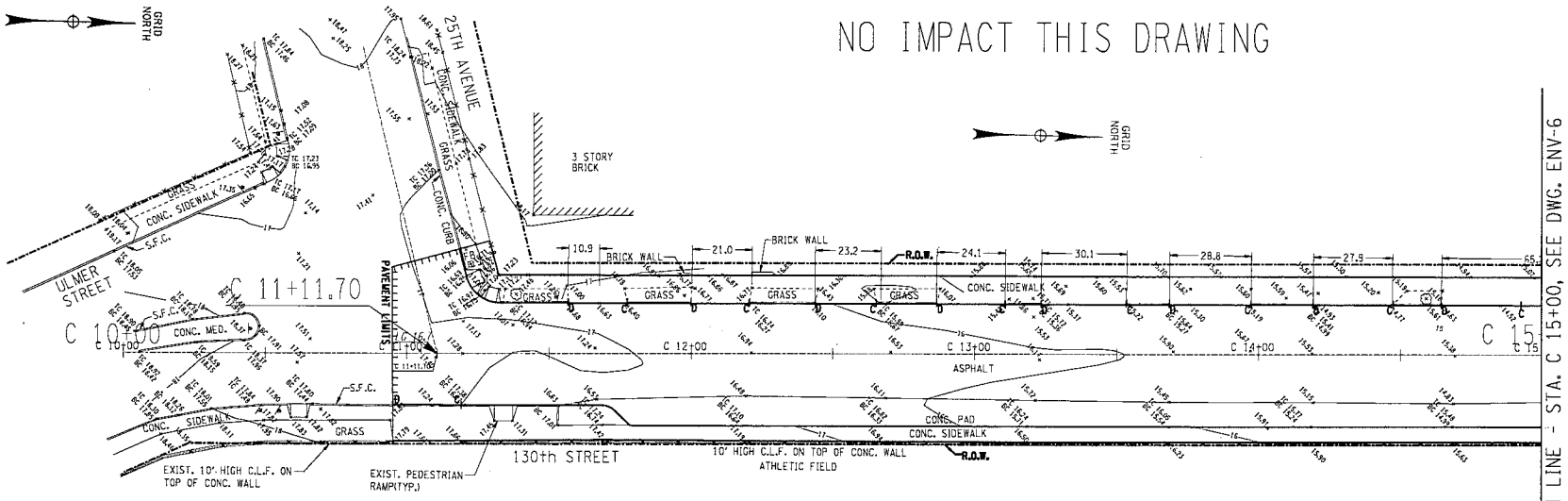
THE RECONSTRUCTION OF LINDEN PLACE
BOROUGH OF QUEENS, NEW YORK

ENVIRONMENTAL PLAN
STA. A 28+00 TO STA. A 34+00

SCALE	1" = 20'-0"
DATE	08-07-01
REVISION	
DRAWING	ENV-4
SHEET	15/33

IN CHARGE OF ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ DATE ____

After the fact
NAN-2014-00661-EHA



REVISIONS	NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY

IN CHARGE OF — DESIGNED BY — DRAFTED BY — ESTIMATED BY — CHECKED BY — CHECKED BY — DATE

PREPARED BY
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MICHAEL P. CAVANAUGH, VICE PRESIDENT — DATE
NEW YORK STATE P.E. NO. 061675-1

New York City Economic Development Corporation

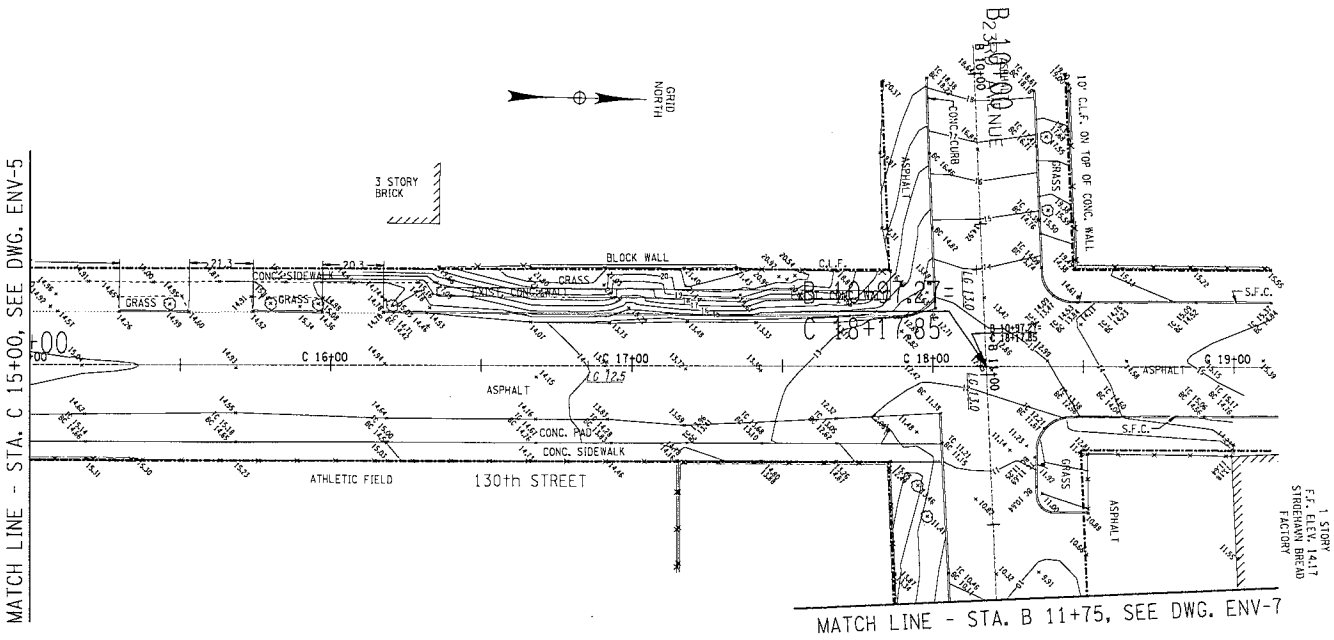
DESIGNED BY	
DRAWN BY	
CHECKED BY	
PROJECT ENGR	
CAD FILE	

THE RECONSTRUCTION OF LINDEN PLACE
BOROUGH OF QUEENS, NEW YORK

ENVIRONMENTAL PLAN
STA. C 10+94.943
TO STA. C 15+00.000

SCALE	REVISION
DATE 08-07-01	
DRAWING ENV-5	
SHEET 16/38	

After the fact
NAN-2014-00661-EHA



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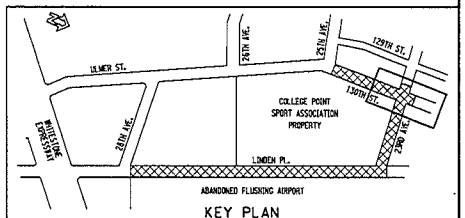

KEY PLAN
N.T.S.

REVISIONS	NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY

PREPARED BY
Edwards and Kelcey
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MICHAEL P. CAVANAUGH, VICE PRESIDENT
NEW YORK STATE P.E. NO. 061679-1
DATE

New York City Economic Development Corporation

DESIGNED BY	
DRAWN BY	
CHECKED BY	
PROJECT ENGR	
CAD FILE	

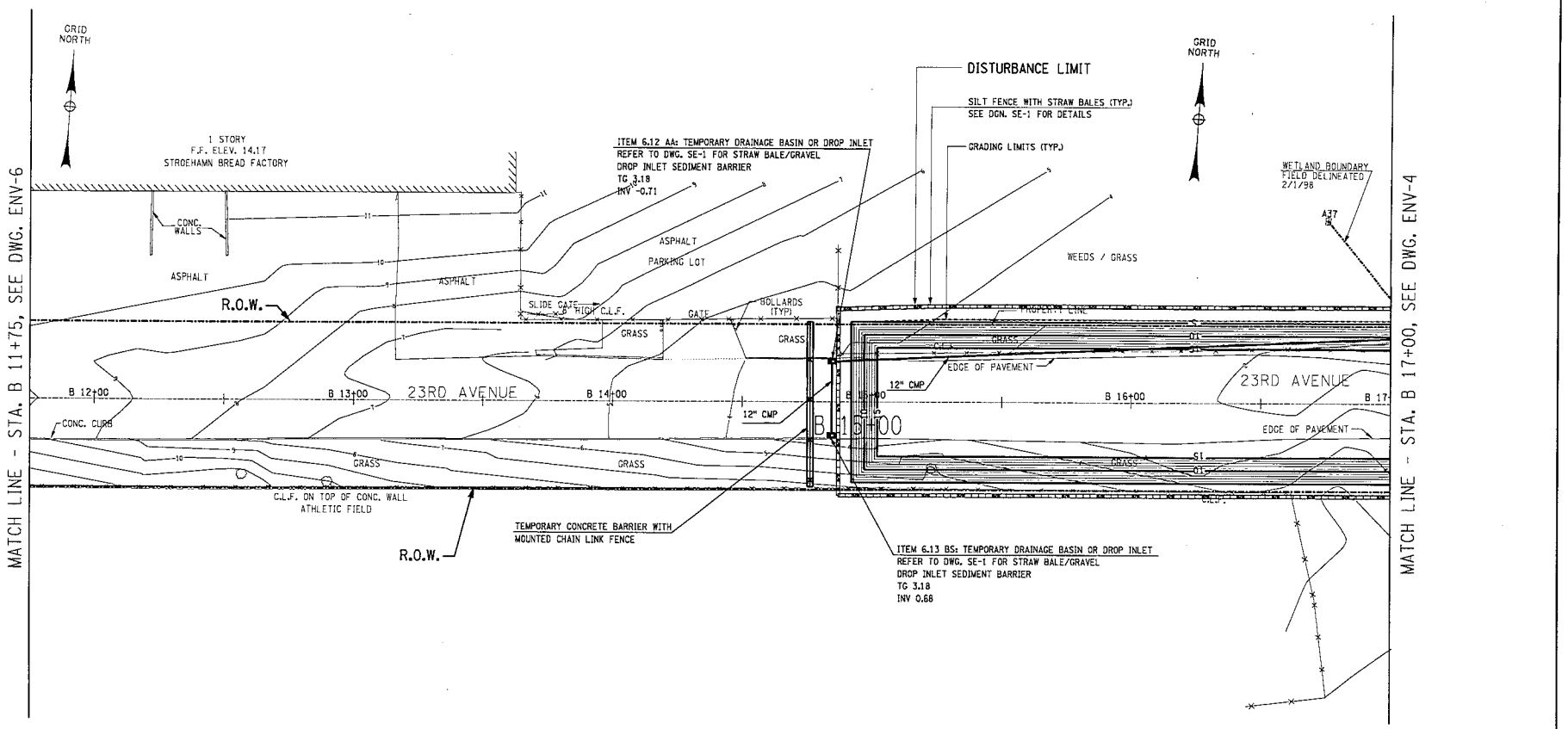
THE RECONSTRUCTION OF LINDEN PLACE
BOROUGH OF QUEENS, NEW YORK

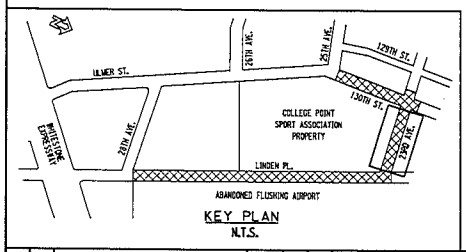
ENVIRONMENTAL PLAN
STA. B 11+75 TO STA. C 15+00

SCALE
DATE 08-07-01
REVISION
DRAWING ENV-6
SHEET 17/38

IN CHARGE OF ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ DATE ____

After the fact
NAN-2014-00661-EHA





GRAPHIC SCALE
1" = 20'-0"
0 10 20 40 60 80 100

LEGEND:

TYPICAL WETLAND BOUNDARY

NOTE:

DISTURBANCE LIMITS ARE REPRESENTED EITHER BY GRADING LIMITS OR BY THE SILT FENCE WHICHEVER IS FURTHEST FROM THE PROJECT CENTERLINE.

REVISIONS	NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY

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MICHAEL P. CAVANAUGH, VICE PRESIDENT
NEW YORK STATE P.E. NO. 061679-1
DATE

New York City Economic Development Corporation

DESIGNED BY	
DRAWN BY	
CHECKED BY	
PROJECT ENGR	
CAD FILE	

THE RECONSTRUCTION OF LINDEN PLACE
BOROUGH OF QUEENS, NEW YORK

ENVIRONMENTAL PLAN
STA. B 11+75 TO STA. B 17+00

SCALE 1" = 20'-0"
DATE 08-07-01
REVISION
DRAWING ENV-7
SHT 18/38

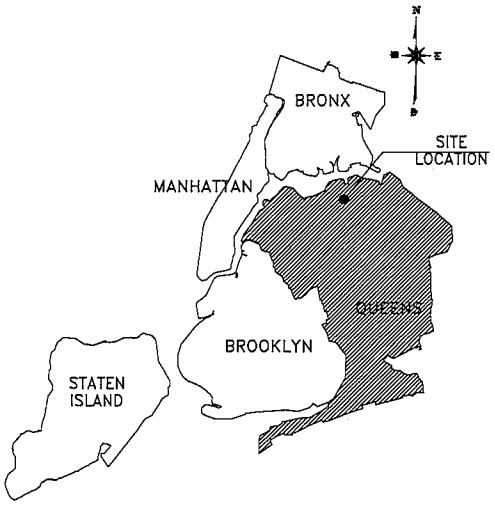
IN CHARGE OF ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ DATE ____

After the fact
NAN-2014-00661-ETHA

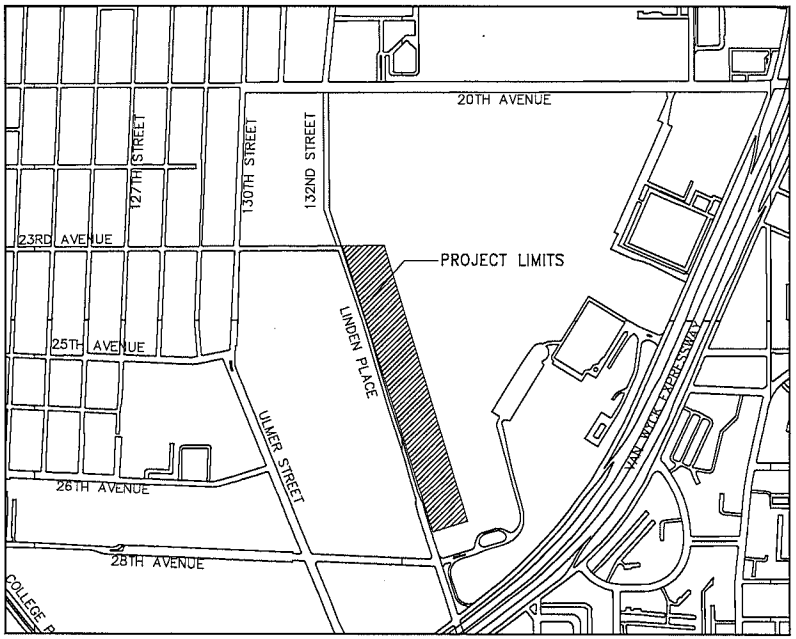
NEW YORK CITY ECONOMIC DEVELOPMENT CORPORATION

FORMER FLUSHING AIRPORT
WETLAND MITIGATION

CONTRACT NO. 39580002



KEY PLAN
N.T.S.



LOCATION PLAN
N.T.S.

APPROVED BY:

NEW YORK CITY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
97-07 HORACE HARDING EXPRESSWAY
CORONA, NEW YORK 11368

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ACTING DIVISION CHIEF – PLAN REVIEW SECTION
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JAMES GARIN, P.E. — DATE
DIRECTOR OF ENGINEERING
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JANETTE SADIK-KHAN — DATE
COMMISSIONER

HENRY D. PERAHIA, P.E. — DATE
CHIEF ENGINEER

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CAPITAL PROGRAM DIVISION

IN CHARGE OF ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ DATE ____

REVISIONS	NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY

PREPARED BY
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New York City Economic Development Corporation

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PROJECT ENGR	
CAD FILE	

FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK
WETLAND MITIGATION PLAN
TITLE SHEET

SCALE N.T.S. — REVISION
DATE 9/19/2014
DRAWING GP-0
SHEET 19/38

NAN-2014-00661-EHA

ABBREVIATIONS

ABANDONED	ABDN.
APARTMENT	APT.
ASPHALT	ASPH.
BASEMENT	BSMT.
BITUMINOUS	BIT.
BLOCK	BLK.
BLUESTONE	B.S.
BLUESTONE CURB	B.S.C.
BOTTOM OF CURB	B.C.
BOTTOM OF FOOTING	BF
BRICK	BRK.
BUILDING	BLDG.
CAST IRON	C.I.
CENTER LINE	C.L.
CHAIN LINK FENCE	C.L.F.
CHAMBER	CH.
CLASS NUMBER	CL. #
COMBINED	COMB.
COMMERCIAL	COML.
CONCRETE	CONC.
CONCRETE CURB	C.C.
CONCRETE WALK	C.W.
CORRUGATED METAL PIPE	C.M.P.
DIAMETER	DIA.
DOUBLE BARREL	D.B.
DOWN	DN.
DRAWING	DWG.
DUCTILE IRON PIPE	D.I.P.
EDGE OF GRANITE BLOCK STRIP	E.O.B.
EDGE OF PAVEMENT	E.O.P.
ELEVATION	ELEV.
EXISTING	EXIST.
EXTRA STRENGTH VITRIFIED PIPE	E.S.V.P.
EXISTING	EX.
FIRE ALARM	F.A.
FIRE DEPARTMENT	F.D.
FLAT TOP REINFORCED CONCRETE	F.T.R.C.
FRAME	FR.
GRANITE	GRAN.
GRANITE CURB	GRAN. C.
HIGH POINT	H.P.
INTERCEPTOR	INT.
INVERT ELEVATION	INV. EL.
IRREGULAR	IRR.
LOW POINT	L.P.
MANHOLE	MH
NOT IN CONTRACT	N.I.C.
NOT TO SCALE	N.T.S.
PAVEMENT	PVMT.
POINT OF CURVATURE	P.C.
POINT OF INTERSECTION	P.I.
POINT OF TANGENCY	P.T.
POINT OF CONTINUOUS CURVATURE	P.C.C.
POINT OF REVERSE CURVATURE	P.R.C.
PREFABRICATED VERTICAL PLASTIC DRAIN	PVPD
RADIUS	R
REINFORCED CONCRETE PIPE	R.C.P.
ROADWAY	RDWY.
SANITARY	SAN.
SEWER	SWR.
SIDEWALK	SWK.
STANDARD	STD.
STEEL	STL.
STEEL FACED	ST.F.
STEEL FACED CONCRETE CURB	S.F.C.C./ST.F.C.
STONE	STN.
STORM	STM.
STORY	STY.
TOP OF CURB	T.C.
TOP OF WALL	TW
TRAFFIC SIGN	T.S.
TYPICAL	TYP.
VACANT	VAC.
WORKING POINT	W.P.
VARIES	VAR.

LEGEND

	EXISTING	PROPOSED
MANHOLES		
ELECTRIC	E	
CABLE TV	TV	
TELEPHONE	T	
TRAFFIC	TR	
NYC MH	NYC	
GAS	G	
WATER	W	
FIRE DEPT.	F	
SUBWAY	S	
COAL CHUTE	CCC	
STORM SEWER	STM	
COMBINED SEWER	COMB	
SANITARY SEWER	SAN	
INTERCEPTOR SEWER	INT	
UNIDENTIFIED MANHOLE (NO RECORD AVAILABLE)		
RECORD MANHOLE		
HARDWARE RIM EL. & INV. EL. (SEWER, ETC.)	61.23 INV.47.98	
BASINS		
EXISTING CATCH BASIN		
CATCH BASIN – TYPE 2		
INLET		
HYDRANTS		
LOW PRESSURE HYDRANT		
HIGH PRESSURE HYDRANT		
SIAMESE CONNECTION		
STREET LIGHTING AND TRAFFIC CONTROLS		
TRAFFIC SIGN	TS.	
WOOD UTILITY POLE		
WOOD UTILITY POLE WITH STREET LIGHT	SL	
WOOD UTILITY POLE WITH TRAFFIC SIGNAL	T	
WOOD UTILITY POLE WITH STREET LIGHT AND FIRE ALARM BOX	SL F	
WOOD UTILITY POLE WITH FIRE ALARM BOX	F	
WOOD UTILITY POLE WITH PEDESTRIAN SIGNAL	PS	
WOOD UTILITY POLE WITH TRAFFIC AND PEDESTRIAN SIGNAL	T PS	
WOOD UTILITY POLE WITH STREET LIGHT AND TRAFFIC AND PEDESTRIAN SIGNAL	SL T PS	
WOOD UTILITY POLE WITH STREET LIGHT AND PEDESTRIAN SIGNAL	SL PS	
STREET LIGHT (METAL POLE)	SL	
STREET LIGHT AND TRAFFIC SIGNAL	SL T	
STREET LIGHT AND TRAFFIC SIGNAL WITH PEDESTRIAN SIGNAL	SL T PS	
STREET LIGHT WITH PEDESTRIAN SIGNAL	SL PS	
STREET LIGHT WITH FIRE ALARM BRACKET	SL F	
TRAFFIC SIGNAL POST	T	
TRAFFIC SIGNAL CONTROL BOX	T	
STANCHION WITH TRAFFIC SIGNAL	S T	
STANCHION W/PEDESTRIAN SIGNAL	S PS	
TRAFFIC SIGNAL POST W/PEDESTRIAN SIGNAL	T PS	
VALVE BOXES		
GAS	G	
WATER	W	
STEAM	S	
TREES		
EXISTING TREE (SIZE AS LABELED)	18"	
EXISTING TREE TO BE REMOVED		
SHRUB		
HEDGE (HEIGHT AS LABELED)		

LEGEND

	EXISTING	PROPOSED
MISCELLANEOUS		
VAULT (SIDEWALK)	V	
CELLAR WINDOW GRATING		
CELLAR DOOR		
CONTOUR LINE		
SUBWAY GRATING		
SURFACE WATER FLOW		
TRAFFIC DIRECTION		
AREA TO BE MILLED AND RESURFACED		
PARKING METER	○ OR ○PM	
OIL FILL CAP OR OIL VENT	● OR ○FILL	
FIRE ALARM BOX	□F	
FIRE ALARM BOX (RECORD)	□F(R)	
MAIL BOX, PUBLIC PHONE	□MB □TEL.	
COLUMN – NYCT ELEVATED SUBWAY	▫ COL.	
PROPOSED SETTLEMENT PLATFORM		SP-4 STA. A33+75
RIPRAP APRON		
SAWCUT		
HEADER		
ECA, 1996 WETLANDS BOUNDARY	SWL SWL	
EXISTING WETLAND		
WETLAND MITIGATION BOUNDARY		
UPLAND LIMIT LINE		
WETLAND REMEDIATION BOUNDARY		
WETLAND MITIGATION AREA		
PROPOSED CONTOUR ELEVATION		1
LIMIT OF DISTURBANCE		
EXISTING WETLAND LIMITS	WL	
100' WETLANDS BUFFER		
ROCK OUTCROP		
NORTH ARROW		
BARRIERS		
BEAM TYPE MALL BARRIER		
PORTABLE PRECAST CONCRETE BARRIER		
CAST IN PLACE CONCRETE BARRIER		
RETAINING WALL (W/TYPE)	RW (STR.)	
FENCE (WITH HEIGHT AND TYPE)		
CHAIN LINK FENCE	6'	6'
IRON PICKET FENCE	6'	
WIRE FENCE	6'	
IRON ON CONCRETE COPING	6'	
WOOD PICKET FENCE	6'	

LEGEND

	EXISTING	PROPOSED
CONDUITS		
WATER MAIN (WITH SIZE – LESS THAN 20")	W	
WATER MAIN (WITH SIZE – 20" AND GREATER)*	20"W	
VALVE		
BOUNDARY VALVE		
CHECK VALVE		
REDUCER		
CONNECTION		
CAP		
PLUG		
STORM SEWER (WITH SIZE – LESS THAN 18")	18"STM	
STORM SEWER (WITH SIZE – 18" AND GREATER)*	18"STM	
SANITARY SEWER (WITH SIZE – LESS THAN 18")	18"SAN	
SANITARY SEWER (WITH SIZE – 18" AND GREATER)*	18"SAN	
COMBINED SEWER (WITH SIZE – LESS THAN 18")	18"COMB	
COMBINED (WITH SIZE – 18" AND GREATER)*	18"COMB	
INTERCEPTOR SEWER (WITH SIZE – LESS THAN 18")	18"INT	
INTERCEPTOR SEWER (WITH SIZE – 18" AND GREATER)*	18"INT	
CATCH BASIN CONNECTION		
STORM SEWER PIPE END SECTION		
GAS LINE (WITH SIZE)	4" G	
STEAM (WITH SIZE)	16" ST	
ELECTRIC		
TELEPHONE		
FIRE ALARM		
OVERHEAD (AERIAL) UTILITY LINE	A/T/LT	
MISCELLANEOUS UTILITY LINE – TR–TRAFFIC TA–TRANSIT	TR,TA	
LEGAL DATA		
LOT & BLOCK NUMBER		BLOCK 2109
ESTABLISHED/LEGAL GRADE		
INTERPOLATED LEGAL GRADE		
ANGLE		87°20'48"
BLOCK LENGTH		187.01'
INTERPOLATED/CALCULATED ANGLE OR LENGTH		[88°-39'-48"] [187.01']
PROPERTY POSSESSION LINE		
MAPPED PROPERTY LINE (RIGHT-OF-WAY LINE)		
LOT LINE		
SURVEY MONUMENT (CITY) – IDENTIFY BY TOPO NUMBER		
BENCH MARK (LABEL)		
SURVEY CONTROLS		
CONTROL SURVEY TRAVERSE		
CENTER LINE BASE LINE		10+00 11+00

* LINE SPACING IN SYMBOL TO BE SCALED TO CONDUIT SIZE

INDEX OF DRAWINGS

DWG NO.	SHEET NO.	SHEET TITLE
GP–0	1	TITLE SHEET
GP–1	2	LEGEND AND LIST OF DRAWINGS, LEGEND AND ABBREVIATIONS
GP–2	3	GENERAL NOTES
EC–1	4	EXISTING CONDITIONS PLANS – 1
EC–2	5	EXISTING CONDITIONS PLAN – 2
GR–1	6	GRADING PLAN – 1
GR–2	7	GRADING PLAN – 2
TS–1	8	TYPICAL SECTIONS
TS–2	9	CROSS SECTIONS
CS–1	10	CONSTRUCTION STAGING AND EROSION CONTROL PLAN – 1
CS–2	11	CONSTRUCTION STAGING AND EROSION CONTROL PLAN – 2
CS–3	12	CONSTRUCTION STAGING AND EROSION CONTROL PLAN – 3 & 4
CSS–1	13	CONSTRUCTION STAGING SECTIONS
ECD–1	14	SOIL EROSION CONTROL DETAILS – 1
ECD–2	15	SOIL EROSION CONTROL DETAILS – 2
ECD–3	16	SOIL EROSION CONTROL DETAILS – 3
D–1	17	DETAILS
LP–1	18	PLANTING PLAN – 1
LP–2	19	PLANTING PLAN – 2
LP–3	20	PLANTING DETAILS – 3
SBP–1	21	SOIL BORING LOCATION PLAN
SBL–1	22	SOIL BORING LOGS

DESIGNED BY | DRAFTED BY | CHECKED BY | ESTIMATED BY | CHECKED BY | CHECKED BY | IN CHARGE OF | DATE

REVISIONS

NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY
1	ADDENDUM 2	10/24/14					

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New York City Economic Development Corporation

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PROJECT ENGR	
CAD FILE	

FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK

WETLAND MITIGATION PLAN

LEGEND AND LIST OF DRAWINGS
LEGEND AND ABBREVIATIONS

SCALE	N.T.S.
REVISION	
DATE	9/19/2014
DRAWING	GP–1
SHEET	2

NAN-2014-00661-EHA

1. GENERAL

1.01 ELEVATION 0.0 IS 2.725 FEET ABOVE THE MEAN SEA LEVEL AS ESTABLISHED BY THE U.S.C.&G. SURVEY AT SANDY HOOK, NEW JERSEY.

1.02 BLOCK INTERIOR ANGLES, BLOCK LENGTHS AND LEGAL GRADES WERE OBTAINED FROM THE FINAL MAPS OF THE BOROUGH OF QUEENS.

1.03 EXISTING UNDERGROUND AND OVERHEAD UTILITIES AS SHOWN HERE HAVE BEEN DETERMINED BY STANDARD SURVEYING METHODS AND AVAILABLE RECORDS. NEITHER THE EXACT LOCATION NOR THE INFORMATION OF THESE EXISTING UTILITIES IS GUARANTEED TO BE COMPLETE OR CORRECT.

1.05 ALL COMMUNICATIONS AND COORDINATION MEETINGS RELATIVE TO THIS PROJECT BETWEEN THE CONTRACTOR AND ANY AGENCY, UTILITY COMPANY OR ORGANIZATION WILL BE CONDUCTED AND/OR APPROVED BY THE ENGINEER.

1.06 ALL SHEETING PLACED UNDER THIS CONTRACT, NO MATTER UNDER WHICH ITEMS, SHALL BE REMOVED, AND THE COST SHALL BE DEEMED INCLUDED IN THE PRICES BID FOR ALL SCHEDULED ITEMS.

1.07 THE FOLLOWING SHALL PERTAIN TO ALL ITEMS HAVING BACKFILL: "THE BACKFILLING SHALL COMPLY WITH SUBSECTION 4.11.3 OF THE NYC DEPARTMENT OF TRANSPORTATION (NYCDOT) STANDARD HIGHWAY SPECIFICATIONS, AND THE COST THEREOF SHALL BE DEEMED INCLUDED IN THE PRICES BID FOR ALL RELATED ITEMS."

1.08 ALL HYDRANTS, LIGHT POLES, TREES OR OTHER FIXED OBJECTS THAT ARE TO BE CONSTRUCTED, PLANTED, RESET, OR RELOCATED AS A RESULT OF THE PROJECT SHALL BE CONSTRUCTED OR PLANTED SO AS TO PROVIDE AT LEAST ONE AND ONE HALF (1 1/2) FOOT CLEAR DISTANCE FROM THE FACE OF THE CURB TO THE FACE OF THE OBJECT.

1.09 AS A RESULT OF CURB RELOCATION WITHIN THE CONTRACT LIMITS, EXISTING STREET APPURTENANCES PROJECTING ABOVE PAVED SURFACES, SUCH AS HYDRANTS, LAMPPOSTS AND TRAFFIC SIGNAL POLES, BUS SHELTERS, ETC., WILL HAVE TO BE RELOCATED, NOT WITHSTANDING ANY CONSTRUCTION SEQUENCE AS DEFINED BY THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL PLAN HIS CONSTRUCTION OPERATIONS TO INSURE THAT THESE APPURTENANCES ARE CONSTRUCTED OR RELOCATED IN CONJUNCTION WITH THE INSTALLATION OF THE NEW CURB.

IN PARTICULAR, IN THE EVENT THE SIDEWALK IS WIDENED, THE STREET APPURTENANCES SHALL BE MAINTAINED AT THEIR EXISTING LOCATION BEHIND THE EXISTING CURB UNTIL THE NEW SIDEWALK IS CONSTRUCTED. IF THE SIDEWALK IS NARROWED, THE STREET APPURTENANCES MUST BE MOVED TO THEIR NEW LOCATIONS BEHIND THE PROPOSED NEW CURB PRIOR TO REMOVAL OF THE EXISTING CURB.

SERVICES MUST BE MAINTAINED BY INSTALLING AND ENERGIZING NEW APPURTENANCES OR BY USING TEMPORARY APPURTENANCES, AS DIRECTED BY THE ENGINEER. UNLESS OTHERWISE PROVIDED FOR, ALL TEMPORARY APPURTENANCES SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE CITY.

2. EARTHWORK

2.01 REMOVAL OF ALL SHRUBBERY, DEBRIS, FENCES, AND OTHER ENCROACHMENTS FOUND ON AND WITHIN THE CITY'S RIGHT OF WAY WHICH INTERFERE WITH THE NEW WORK ARE DEEMED INCLUDED IN THE PRICES BID FOR ALL SCHEDULED ITEMS, UNLESS OTHERWISE NOTED ON THE PLANS.

2.02 EARTHWORK CONSTRUCTION OPERATIONS REQUIRING COMPACTION SHALL NOT BE PERFORMED FROM NOVEMBER 1ST THRU APRIL 1ST EXCEPT WITH A WINTER EARTHWORK SUBMITTAL APPROVED BY THE ENGINEER.

2.03 FOR CONTRACTORS CHOOSING TO PROCEED WITH EARTHWORK COMPACTION OPERATIONS BETWEEN NOVEMBER 1ST THRU APRIL 1ST, PROVIDE ENGINEER WITH A WINTER EARTHWORK SUBMITTAL OUTLINING THE MODIFICATIONS TO THE MATERIALS AND METHODS INCLUDING THE FOLLOWING:

MATERIAL REQUIREMENTS

EMBANKMENT IN PLACE - PROVIDE MATERIAL CONSISTING OF ROCK, STONE, SLAG, COBBLES, OR GRAVEL, SUBSTANTIALLY FREE OF SHALE OR OTHER SOFT, POOR DURABILITY PARTICLES. THE MATERIAL SHALL HAVE NO PARTICLES GREATER THAT 12 IN. IN MAXIMUM DIMENSION. THE MATERIAL SHALL HAVE A GRADATION IN ACCORDANCE WITH THE FOLLOWING

TABLE 1

SIEVE SIZE DESIGNATION	PERCENTAGE PASSING BY WEIGHT
MAXIMUM DIMENSION	100
2.5 (MAXIMUM DIMENSION)	0-60
#4 IN.	0-10
NO. 200	0-4

SELECT GRANULAR FILL - PROVIDE MATERIAL MEETING THE REQUIREMENTS OF NYCDOT STANDARD SPECIFICATIONS SECTION 4.11, SELECT GRANULAR FILL WITH THE FOLLOWING GRADATION ADJUSTMENT: THE MATERIAL SHALL HAVE NO PARTICLES GREATER THAN 4 IN. IN MAXIMUM DIMENSION. THE MATERIAL SHALL HAVE A GRADATION IN ACCORDANCE WITH TABLE 1.

2.04 TRANSITIONING FROM THE NORMAL CONSTRUCTION SEASON TO THE EXEMPT WINTER EARTHWORK MONTHS BETWEEN NOVEMBER 1ST AND APRIL 1ST, THE USE OF STANDARD EARTHWORK MATERIALS MAY BE PERMITTED ONLY UNDER THE CONDITIONS WHERE THE AIR TEMPERATURE, GROUND TEMPERATURE AND MATERIAL TEMPERATURE ARE ALL ABOVE 32°F AT THE TIME OF PLACEMENT. MODIFICATIONS TO COMPACTION PROCEDURES, INCLUDING BUT NOT LIMITED TO THE USE OF THINNER LIFTS, MAY BE REQUIRED WHEN THE TEMPERATURES ARE ABOVE 32°F BUT BELOW 40°F AT THE TIME OF PLACEMENT.

2.05 BETWEEN NOVEMBER 1ST AND APRIL 1ST, IF THE AIR TEMPERATURE, GROUND TEMPERATURE, OR MATERIAL TEMPERATURE IS AT OR BELOW 32°F AT THE TIME OF PLACEMENT, EARTHWORK MAY ONLY PROCEED USING MATERIAL THAT MEETS THE REQUIREMENTS OF NOTE 2.03.

2.06 IN ALL WORK INCORPORATED INTO THE FINAL PRODUCT, THE CONTRACTOR SHALL NOT PLACE MATERIAL THAT IS FROZEN, OR PLACE FILL MATERIAL ON FROZEN GROUND REGARDLESS OF THE DATE.

3. DRAINAGE WORK

3.01 ALL PROPOSED DRAINAGE WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST STANDARDS OF THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION (N.Y.C.D.E.P.) BUREAU OF SEWERS.

3.02 ALL EXISTING SEWER MANHOLES WITHIN THE CONTRACT LIMITS SHALL BE ADJUSTED, AS NECESSARY, SO THAT THEY WILL BE FLUSH WITH THE FINISHED GRADES AFTER COMPLETION OF THE WORK. ANY MANHOLES WHICH HAVE DAMAGED, WORN OR NON-STANDARD FRAMES AND COVERS SHALL BE PROVIDED WITH NEW TWENTY-SEVEN (27) INCH CASTINGS IN ACCORDANCE WITH THE LATEST STANDARDS OF N.Y.C.D.E.P. BUREAU OF SEWERS.

3.03 ANY DAMAGE TO EXISTING SEWERS, MANHOLES, BASINS AND CONNECTIONS CAUSED BY THE CONTRACTOR'S WORK SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, AS DIRECTED BY THE ENGINEER, AT NO COST TO THE CITY.

3.04 WHERE THE HEIGHT OF AN EXISTING MANHOLE PERMITS MORE THAN ONE BASIN CONNECTION TO BE MADE ON THE SAME WALL, SPECIAL PRECAUTION SHALL BE TAKEN TO PROTECT THE STRUCTURAL INTEGRITY OF THE MANHOLE. THE MINIMUM CLEARANCE BETWEEN THE OUTSIDE WALLS OF ANY TWO BASIN CONNECTIONS OR BETWEEN A BASIN CONNECTION AND SEWER, VERTICALLY OR HORIZONTALLY, SHALL BE 12 INCHES.

3.05 THE COST OF RAISING OR LOWERING CITY OWNED MANHOLE, BASIN, AND INLET HEADS TO PROPOSED GRADES WILL BE DEEMED INCLUDED IN THE PRICES BID FOR ALL THE SCHEDULED ITEMS WHEN THE VERTICAL UPWARD MOVEMENT OF ALL HEADS IS TWENTY FOUR (24) INCHES OR LESS. WHEN THE VERTICAL DOWNWARD MOVEMENT OF MANHOLE HEADS IS SIX (6) INCHES OR LESS, AND WHEN THE VERTICAL DOWNWARD MOVEMENT OF BASIN HEADS IS THREE (3) INCHES OR LESS, UNLESS OTHERWISE PROVIDED OR DIRECTED, AND WHERE THE ADJUSTMENT IS WITHIN THE BRICK WORK LIMIT, WHEN THE EXISTING STRUCTURE CONSISTS OF A BRICK CHIMNEY OR A CONCRETE ROOF SLAB OR BRICK ON CONCRETE WALLS, THE MAXIMUM ALLOWABLE HEIGHT OF BRICK, AFTER ADJUSTMENT, SHALL BE TWENTY-FOUR (24) INCHES. ALL OTHER ADJUSTMENTS WILL BE PAID FOR UNDER THE APPROPRIATE MANHOLE, BASIN, OR INLET MODIFICATION ITEMS.

3.06 ALL EXISTING SEWERS, MANHOLES, BASINS, AND CONNECTIONS WITHIN THE LIMITS OF THIS CONTRACT AND CONTIGUOUS THERETO ARE TO BE REPAIRED, IF DAMAGED.

3.07 ALL EXISTING BASINS AND CONNECTIONS WITHIN THE LIMITS OF THIS CONTRACT AND CONTIGUOUS THERETO ARE TO BE CLEANED, FLUSHED AND OTHERWISE MADE OPERABLE TO THE SATISFACTION OF THE ENGINEER, ITEM NO. 0.50. WHERE THE EXISTING BASIN CONNECTIONS ARE FOUND TO BE DAMAGED OR IN DETERIORATING CONDITION THEY SHOULD BE REPLACED WITH NEW 12" DIAMETER DUCTILE IRON PIPE IN ACCORDANCE WITH THE N.Y.C.D.E.P. BUREAU OF SEWERS STANDARDS (ITEM NO. 52.11D12).

3.08 CATCH BASINS SHALL NOT, UNDER ANY CIRCUMSTANCES, BE CONNECTED TO A SANITARY SEWER. CATCH BASINS SHALL NOT BE LOCATED WITHIN PEDESTRIAN CROSSWALKS.

3.09 ALL NEW CATCH BASIN CONNECTIONS SHALL BE MADE TO EXISTING SEWERS AT MANHOLES, WITH 12" DIAMETER DUCTILE IRON PIPE, CLASS 56, WITH INTERNALLY LOCKED "PUSH-ON" JOINTS LAID ON 6" OF BROKEN STONE FOR THE ENTIRE WIDTH OF THE TRENCH AND FOR ONE-HALF THE PIPE DIAMETER. THE BROKEN STONE SHALL BE CLEAN, UN-WEATHERED STONE, UNIFORMLY GRADED FROM 1/4" TO 3/4" IN DIAMETER. IT SHALL CONFORM TO COMMERCIAL 1/4" TO 3/4" STONE. ALL NEW CATCH BASINS SHALL HAVE A HOOD ON THE OUTLET PIPE.

3.10 ALL CATCH BASINS SHALL BE TYPE 1 UNLESS OTHERWISE INDICATED ON THE DRAWINGS. ALL CATCH BASIN SHALL BE INSTALLED 6" BELOW TOP OF CURB.

3.11 SLOPE ON ALL NEW CATCH BASIN CONNECTIONS SHALL BE A MINIMUM OF 1/2% AND A MAXIMUM OF 4%, PROVIDED THE TOTAL DROP BETWEEN BASIN AND BASIN/ MANHOLE SHALL BE AT LEAST SIX (6) INCHES.

3.12 WHERE THE CONTRACT DRAWINGS SPECIFY A NEW CATCH BASIN IN THE SAME LOCATION AS THE EXISTING CATCH BASIN AND THE CONTRACTOR ELECTS, FOR HIS OWN CONVENIENCE, TO RELOCATE THE NEW CATCH BASIN ADJACENT TO THE PRE-EXISTING LOCATION WHILE MAINTAINING BASIN AND PIPE CONNECTION, THE CONTRACTOR SHALL PERFORM ALL WORK ASSOCIATED WITH ABANDONING THE EXISTING BASIN, AS PER SECTION 5.21 OF THE NYCDEP STANDARD SEWER SPECIFICATIONS, AND THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST BID FOR NEW BASINS, AND MANHOLES UNLESS OTHER NOTED ON THE PLANS.

3.13 ALL EXISTING SEWER HOUSE CONNECTIONS SHOULD BE CONTINUOUSLY MAINTAINED DURING ALL STAGES OF CONSTRUCTION. IF ANY HOUSE CONNECTION MUST BE DISCONNECTED FOR CONSTRUCTION PURPOSES, FLOW MUST BE MAINTAINED BY FLUMING OR OTHER SUITABLE MEANS AS DIRECTED BY THE ENGINEER AND IN SUCH A MANNER THAT NO BACK-UPS OCCUR. ANY AND ALL EXISTING SEWERS, HOUSE CONNECTIONS OR OTHER SEWER APPURTENANCES WHICH ARE TO REMAIN, AND WHICH MUST BE DISTURBED FOR CONSTRUCTION PURPOSES, SHALL BE RESTORED TO THEIR PRESENT CONDITION AFTER COMPLETION OF THE WORK, AND ANY DAMAGE ONE AS A RESULT OF THE WORK SHALL BE REPAIRED AT NO COST TO THE CITY.

3.14 CATCH BASINS IN THE PROJECT AREA SHALL BE MAINTAINED OPERABLE AT ALL TIMES. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO AVOID CLOGGING CATCH BASINS WITH DEBRIS DURING THE CONTRACTOR'S OPERATIONS. IF, AS A RESULT OF CONSTRUCTION, A FLOODING CONDITION OCCURS OR IN THE EVENT THE CONTRACTOR'S OPERATIONS DAMAGE OR BLOCK THE DRAINAGE SYSTEM, THE CONTRACTOR SHALL AT HIS/HER OWN EXPENSE IMMEDIATELY REPAIR OR RESTORE THE DRAINAGE SYSTEM AS DIRECTED BY THE ENGINEER AT NO EXTRA COST TO THE CITY.

3.15 ALL SOIL DENSITY TESTING, CONSISTING OF BOTH PROCTOR ANALYSIS OF SOIL SAMPLES AND IN-PLACE SOIL DENSITY TESTS, TO BE PERFORMED DURING THE BACKFILLING OF SEWER TRENCHES SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 4.05.3 AND 4.05.4 OF THE NYCDEP STANDARD SEWER SPECIFICATIONS. THE COST OF THIS WORK SHALL BE DEEMED INCLUDED IN THE UNIT PRICES BID FOR LAYING THE VARIOUS SEWER PIPES. NO SEPARATE OR ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK.

3.16 PRIOR TO FABRICATION OF NEW TYPE 3 CATCH BASIN WITH CURB PIECE, CONTRACTOR SHALL BE REQUIRED TO SUBMIT SHOP DRAWING OF ITS DETAILS TO THE ENGINEER FOR REVIEW AND APPROVAL. SHOP DRAWING SHALL NOTE ALL THE REQUIRED CONFIGURATION OF THE TYPE 3 CATCH BASIN WITH THE CURB PIECE, INCLUDING BUT NOT LIMITED TO, REINFORCEMENT DETAILS, LOCATION OF CURB, LOCATION AND ANGLE OF BASIN CONNECTS RELATION TO THE BASIN, CURB AND SIDEWALK, SETTING OF FRAMES, GRATES AND COVERS, ETC.

4. LANDSCAPING WORK

4.01 REPLACEMENT TREES SHALL BE PLANTED WITHIN THE PROJECT AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH SECTION 4.18 OF NYCDOT STANDARD HIGHWAY SPECIFICATIONS.

4.02 THE CONTRACTOR SHALL OBTAIN THE NECESSARY TREE PLANTING PERMIT FROM THE NYC DEPARTMENT OF PARKS AND RECREATION (DPR) PRIOR TO THE START OF WORK. ALL NECESSARY TREE PLANTING SHALL BE PERFORMED BY QUALIFIED ARBORISTS.

4.03 NO TREE SHALL BE REMOVED BY THE CONTRACTOR UNTIL HE IS SPECIFICALLY ORDERED IN WRITING TO DO SO BY THE ENGINEER. EVERY CONSCIONABLE EFFORT IS TO BE MADE TO SAVE TREES BY THE USE OF THE CURB DETAIL AT EXISTING TREES, BY SLIGHT MODIFICATION IN CURB ALIGNMENT, OR BY OTHER METHODS SO ORDERED BY THE ENGINEER, IN ACCORDANCE WITH ACCEPTABLE ENGINEERING PRACTICES.

4.04 TREE STAKES ARE TO BE REMOVED BY THE CONTRACTOR NOT LESS THAN ONE YEAR AFTER PLANTING OF SAID TREES AND PRIOR TO THE FINAL ACCEPTANCE OF THE WORK.

4.05 THE CONTRACTOR SHALL NOT BE PERMITTED TO OPERATE AUXILIARY EQUIPMENT WHICH GENERATES EXHAUST OR OTHER HEAT UPWARD (E.G., GENERATORS AND COMPRESSORS), UNDER THE BRANCHES OF TREES WHERE THE BRANCHES ARE LESS THAN 20' ABOVE THE GROUND, UNLESS APPROVED BY THE ENGINEER IN CONSULTATION WITH THE TREE CONSULTANT.

4.06 THE CONTRACTOR SHALL NOT BE PERMITTED TO STORE, STOCKPILE, OR LAY DOWN, ANY CONSTRUCTION MATERIAL INCLUDING, BUT NOT LIMITED TO, LUMBER, FUEL, AND OIL CONTAINERS, PIPES, AND/OR PIPE FITTINGS, BARRICADES, HAND TOOLS, HOSES, RECEPTACLES, AND ASPHALT WITHIN ANY EXISTING TREE PIT.

5. EROSION CONTROL NOTES

5.01 ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL".

5.02 THE CONTRACTOR SHALL OBTAIN APPROVAL, IN WRITING, FROM THE ENGINEER FOR DEVIATIONS FROM THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.

5.03 ALL SEDIMENT CONTROL MEASURES SHALL BE INSPECTED FOLLOWING EVERY RAINFALL BUT IN NO CASE LESS THAN ONE WEEK.

5.04 CONTRACTOR SHALL CONFORM TO SPECIFICATION SECTION 5.01, NYSDEC AND NYCDEP REGULATIONS WITH REGARD TO SOIL EXCAVATION, TEMPORARY STOCKPILING AND HANDLING, AND TRANSPORATION TO OFF-SITE DISPOSAL.

5.05 PAVEMENT, CONSTRUCTION DEBRIS, ETC., SHALL BE PROPERLY REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL CODES, ORDINANCES AND LAWS.

5.06 DEWATERING - CONTRACTOR SHALL NOT DISCHARGE ANY GROUNDWATER INTO THE EXISTING DEP STORMWATER DRAINAGE SYSTEM OR INTO THE WATER OF THE STATE OF NY UNLESS NYCDEP AND NYSDEC PERMITS HAVE BEEN OBTAINED.

5.07 COST FOR EROSION AND SEDIMENT CONTROL INSTALLATION AND MAINTENANCE SHALL BE PAID FOR UNDER ITEM NO. 0.30 WHEN NOT OTHERWISE CALLED OUT ON THE PLANS.

5.08 CONTRACTOR TO PROVIDE DUST CONTROL AS REQUIRED USING A NYCDOT AND NYCDEC APPROVED DUST PALLIATIVE.

5.09 DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%).

5.10 SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REPAIRED OR REPLACED IMMEDIATELY AS REQUIRED TO MAINTAIN PERFORMANCE OF MEASURE.

5.11 ANY DISCREPANCY BETWEEN THE NYS STANDARD SPECIFICATIONS FOR EROSION CONTROL AND THE CONTRACT PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IN WRITING. IN ALL CASES, UNLESS A.O.B.E. THE MOST CONSERVATIVE METHOD SHALL GOVERN.

5.12 INITIAL EARTH DISTURBANCES SHALL BE LIMITED TO THOSE AREAS NECESSARY TO INSTALL SEDIMENT AND EROSION CONTROL MEASURES.

5.13 WORK SHALL NOT BEGIN UNTIL A PERMIT IDENTIFICATION NUMBER IS ISSUED BY THE NYSDEC, AND AN INITIAL INSPECTION IS CONDUCTED BY THE QUALIFIED INSPECTOR CERTIFYING THAT THE APPROPRIATE CONTROL MEASURES SPECIFIED IN THE SWPPP HAVE BEEN ADEQUATELY IMPLEMENTED TO THE SATISFACTION OF THE RESIDENT ENGINEER.

6. CONTROLLING INVASIVE PLANTS

6.01 APPLY HERBICIDE TO EXISTING VEGETATION WITHIN PROJECT LIMITS AS SHOWN.

6.02 THE HERBICIDE SHALL CONSIST OF A WATER SOLUBLE GLYPHOSATE HERBICIDE AND A SURFACTANT AS APPROVED FOR USE IN WETLANDS BY THE USEPA AND SHALL BE CAPABLE OF CONTROLLING ALL TARGETED VEGETATION. THE CONTRACTOR SHALL PROVIDE REASONABLE EVIDENCE OF HERBICIDE COMPATIBILITY, PRIOR TO APPLICATION, ALL HERBICIDES SHALL BE APPROVED BY THE ENGINEER.

6.03 THE CONTRACTOR SHALL APPLY THE HERBICIDE AND SURFACTANT AT THE MANUFACTURER'S RECOMMENDED RATE FOR THE INTENDED PURPOSE BASED ON A FIELD REVIEW OF THE PROJECT.

6.04 HERBICIDE SHALL BE APPLIED AFTER JULY 30 AND BEFORE OCTOBER 15. HERBICIDES SHALL NOT BE APPLIED DURING RAIN, WHEN RAIN IS EXPECTED WITHIN 24 HOURS, ON FROZEN GROUND, WHEN WIND SPEEDS EXCEED 15 MILES PER HOUR, WHEN THERE IS DANGER OF DRIFT ONTO NON-TARGET VEGETATION OR DURING OTHER RESTRICTIVE PERIODS INDICATED ON THE MANUFACTURER'S LABEL, OR IN THE CONTRACT DOCUMENTS.

6.05 HERBICIDES SHALL BE APPLIED BY PERSONS QUALIFIED TO APPLY PESTICIDES ON HIGHWAY RIGHTS OF WAY IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PESTICIDE APPLICATOR REGULATIONS THAT ARE IN EFFECT WHEN THE HERBICIDE APPLICATIONS ARE MADE.

6.06 THE PRICE BID FOR ITEM NO. NYC 617.1A, CONTROLLING INVASIVE SPECIES WITH HERBICIDE SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT FOR THE APPLICATION OF HERBICIDE. SITE PREPARATION INCLUDING CUTTING OF PLANTS PRIOR TO HERBICIDE APPLICATION, DISPOSAL OF CUT PLANT MATERIAL, AND CLEANING OF ANY EQUIPMENT USED IN AREAS CONTAINING INVASIVE PLANTS.

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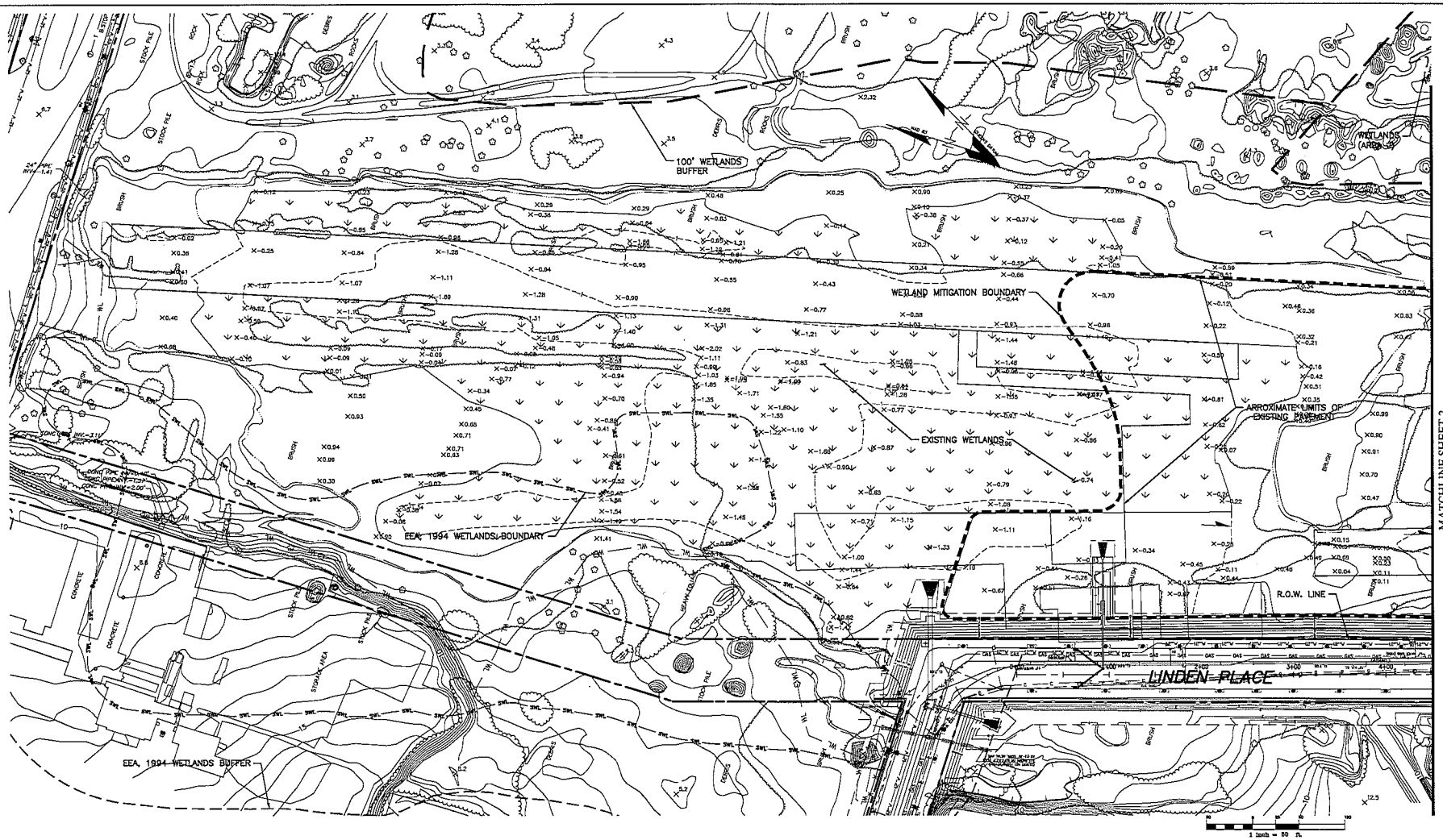
FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK

WETLAND MITIGATION PLAN

GENERAL NOTES AND GENERAL NOTES

SCALE	N.T.S.
REVISION	
DATE	9/19/2014
DRAWING	GP-2
SHEET	21/38

NAN-2014-00661-EHA



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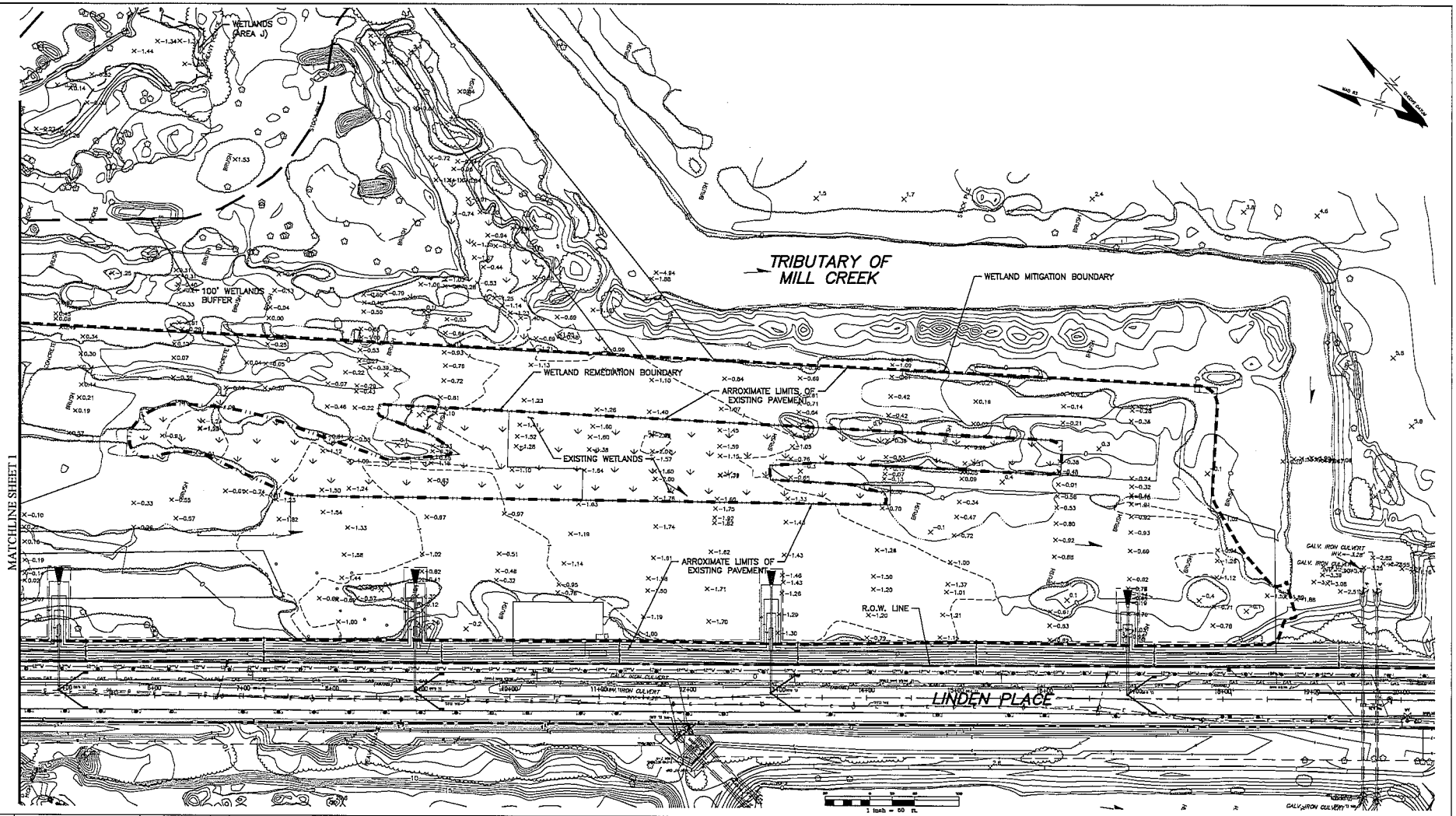
FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK

WETLAND MITIGATION PLAN

EXISTING CONDITIONS PLANS – 1

SCALE	1"=50'
REVISION	
DATE	9/19/2014
DRAWING	EC–1
SHEET	22/38

NAN-2014-00661-EHA



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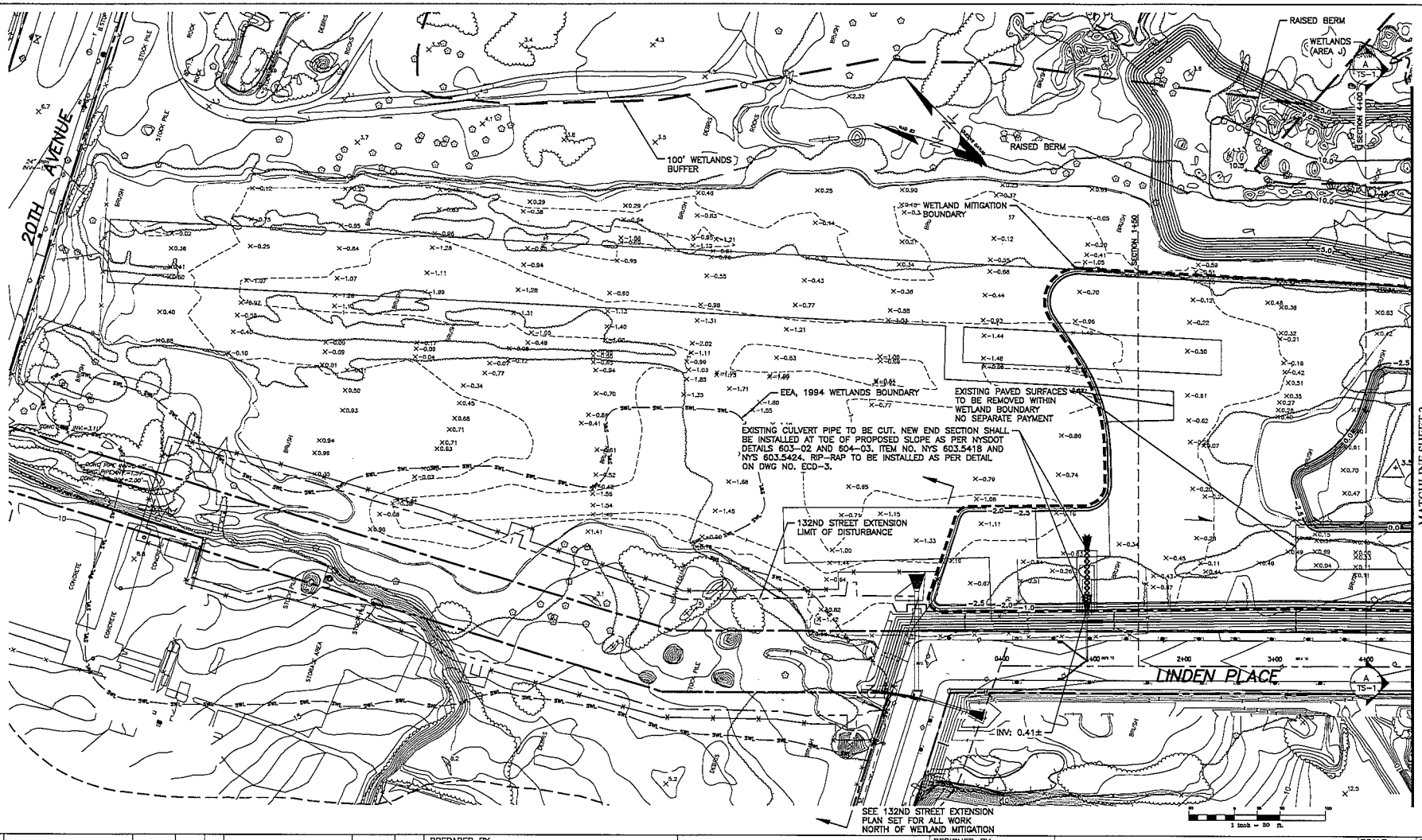
FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK

WETLAND MITIGATION PLAN

EXISTING CONDITIONS PLAN – 2

SCALE 1"=50' | REVISION
DATE 9/19/2014
DRAWING EC-2
SHEET 23/38

NAN-2014-00661-EHA



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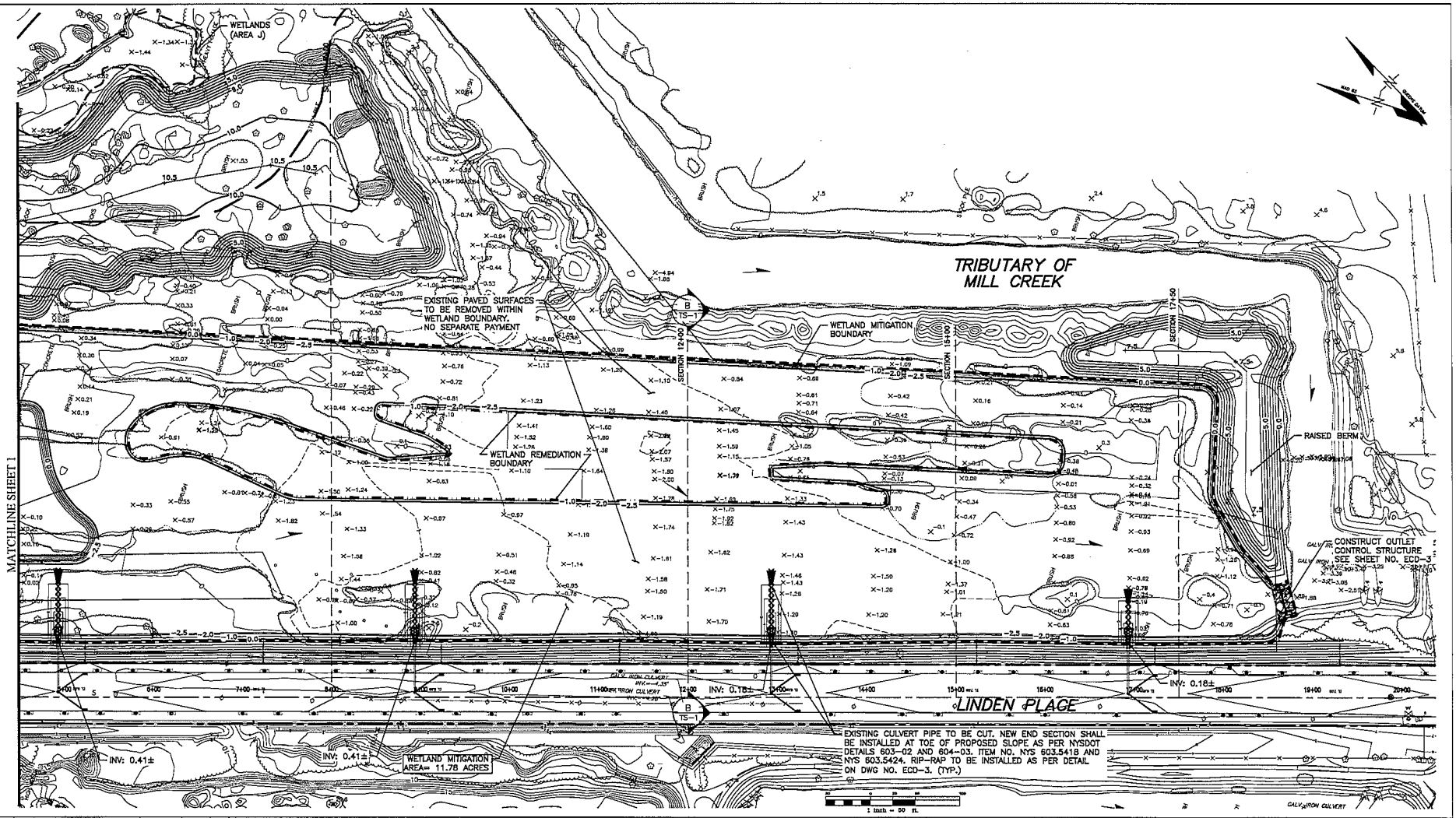
WETLAND MITIGATION PLAN

GRADING PLAN – 1

SCALE	1"=50'
REVISION	
DATE	9/19/2014
DRAWING	GR-1
SHEET	24/38

NAN-2014-00001-EHA



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WETLAND MITIGATION PLAN

GRADING PLAN – 2

SCALE	1"=50'
REVISION	
DATE	9/19/2014
DRAWING	GR-2
SHEET	25/38

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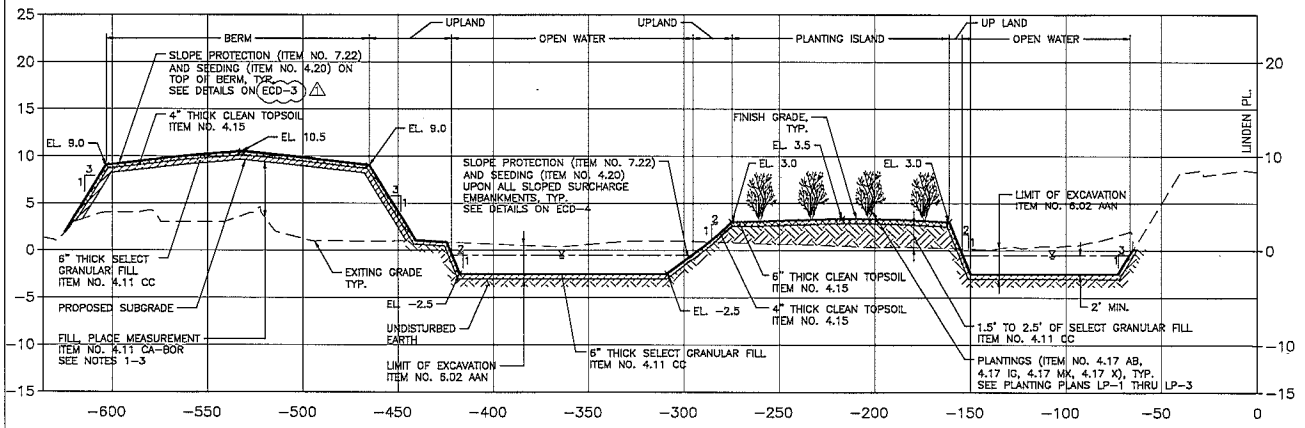
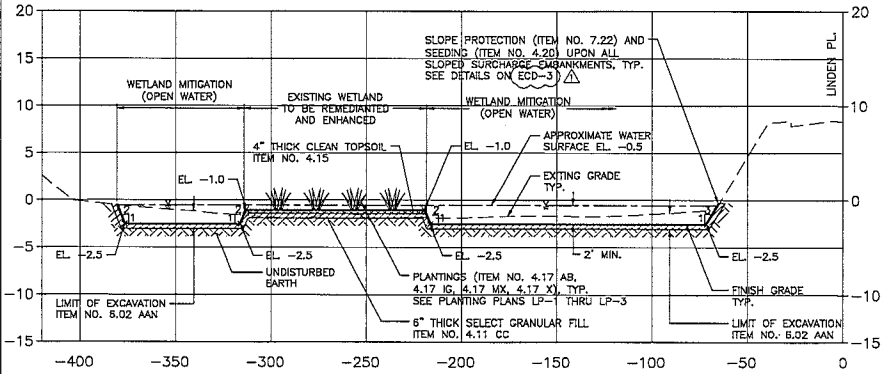


A TYPICAL SECTION A
SCALE: 1" = 30' H
1" = 6' V



B TYPICAL SECTION B
SCALE: 1" = 30' H
1" = 6' V

NOTES:

1. BORROWED MATERIAL EXCAVATED FROM PROPOSED OPEN WATER AREAS TO BE STOCKPILED AND USED AS FILL IN PROPOSED BERM. FILL AND GRADING OPERATIONS TO BOTTOM OF SELECT GRANULAR FILL LAYER (SUBGRADE ELEVATION) AND INCLUDED IN PRICE BID FOR ITEM 6.02 AAN AND MEASURED BY CALCULATING THE TOTAL VOLUME BETWEEN EXISTING SURVEYED GRADE AND FINAL SURVEYED SUBGRADE. ⚠
2. CONTRACTOR TO BE MADE AWARE THAT THE MATERIAL EXCAVATED TO CREATE OPEN WATER AREAS MAY BE CONTAMINATED AND/OR HAZARDOUS. THE CONTRACTOR SHALL FOLLOW ALL THE PROTOCOLS IN SPECIFICATION SECTIONS 8.01 AND DETAILS ON ECD-1 FOR STOCKPILING CONTAMINATED MATERIAL.
3. FINAL GRADE OF PROPOSED BERM BASED ON AVAILABLE BORROWED MATERIAL FROM PROPOSED OPEN WATER AREAS AND OTHER AVAILABLE ON-SITE MATERIAL. NO ADDITIONAL MATERIAL TO BE BROUGHT ON-SITE FOR CONSTRUCTION OF BERM SUBGRADE WITHOUT WRITTEN APPROVAL FROM ENGINEER.

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	1	ADDENDUM 2	10/24/14					

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FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK
WETLAND MITIGATION PLAN
TYPICAL SECTIONS

SCALE	REVISION
DATE	9/19/2014
DRAWING	TS-1 ⚠
SHEET	26/38

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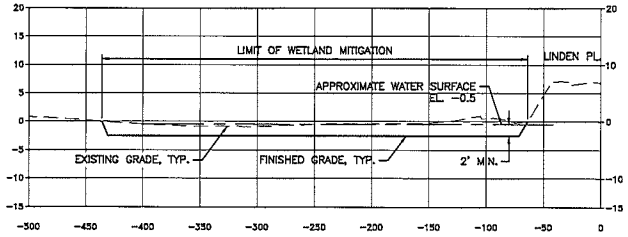
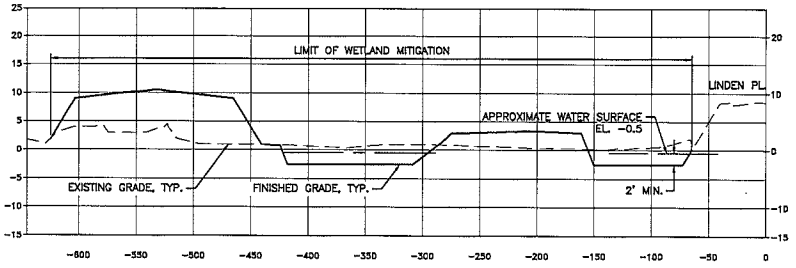
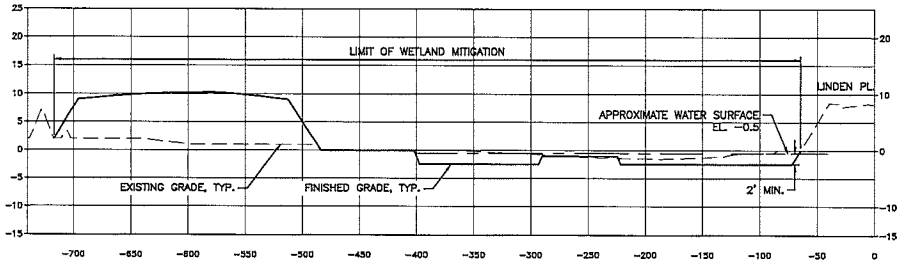


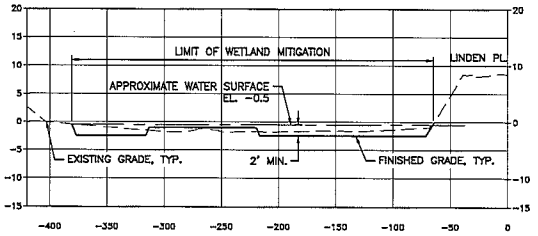
SECTION 1+50



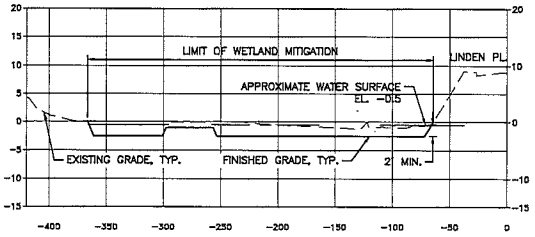
SECTION 4+00



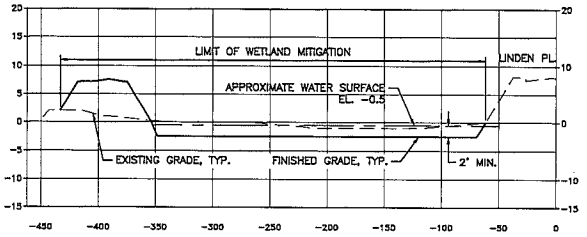
SECTION 8+00



SECTION 12+00



SECTION 15+00



SECTION 17+50

SECTIONS

SCALE: 1" = 30' H
1" = 10' V

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1	ADDENDUM 2	10/24/14					

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FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK

WETLAND MITIGATION PLAN

CROSS SECTIONS

SCALE	REVISION
DATE	9/19/2014
DRAWING	TS-2
SHEET	27/33

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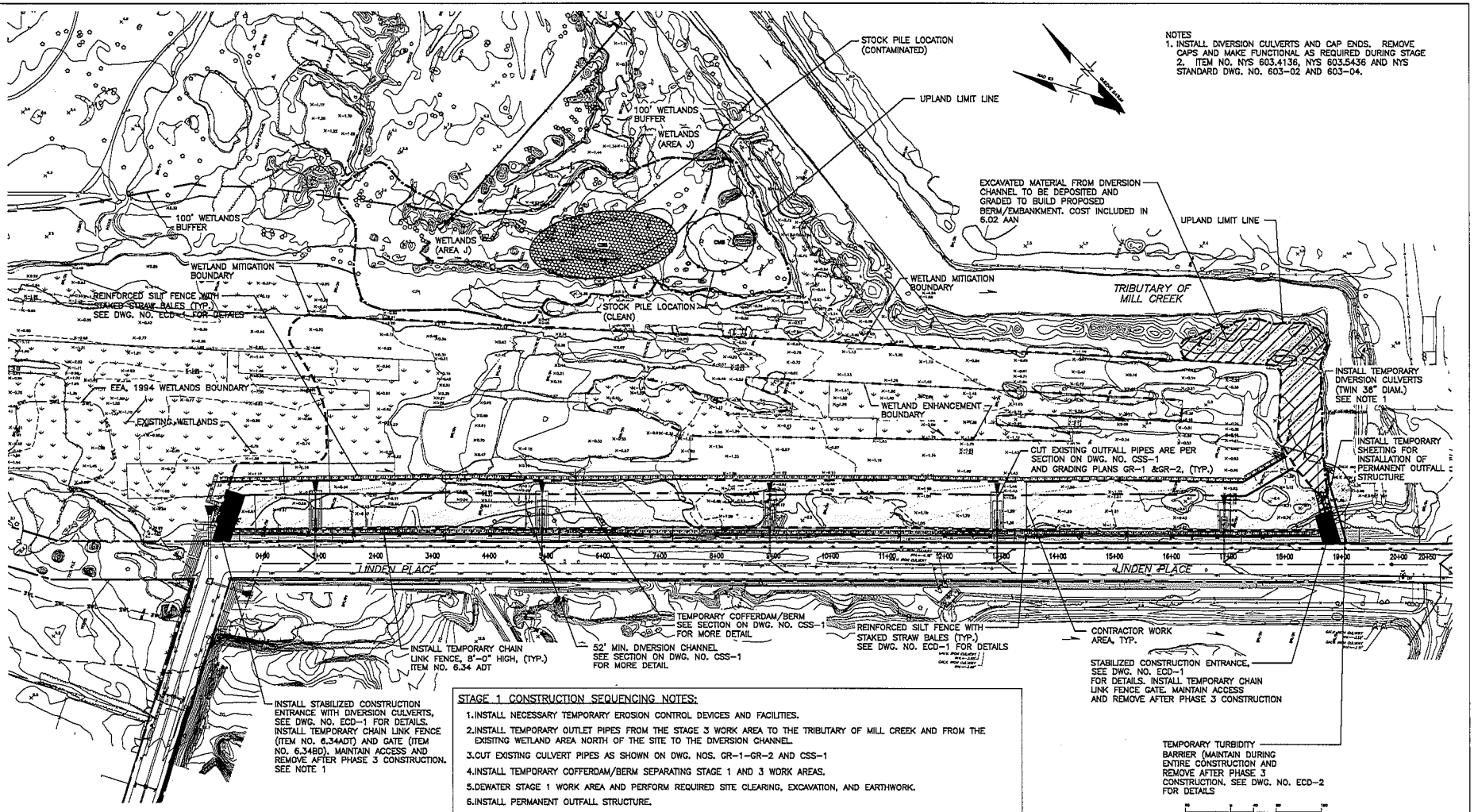

NOTES
1. INSTALL DIVERSION CULVERTS AND CAP ENDS. REMOVE CAPS AND MAKE FUNCTIONAL AS REQUIRED DURING STAGE 2. ITEM NO. NYS 603.4136, NYS 603.5436 AND NYS STANDARD DWG. NO. 603-02 AND 603-04.

STAGE 1 CONSTRUCTION SEQUENCING NOTES:

1. INSTALL NECESSARY TEMPORARY EROSION CONTROL DEVICES AND FACILITIES.
2. INSTALL TEMPORARY OUTLET PIPES FROM THE STAGE 3 WORK AREA TO THE TRIBUTARY OF MILL CREEK AND FROM THE EXISITNG WETLAND AREA NORTH OF THE SITE TO THE DIVERSION CHANNEL.
3. CUT EXISTING CULVERT PIPES AS SHOWN ON DWG. NOS. GR-1-GR-2 AND CSS-1
4. INSTALL TEMPORARY COFFERDAM/BERM SEPARATING STAGE 1 AND 3 WORK AREAS.
5. DEWATER STAGE 1 WORK AREA AND PERFORM REQUIRED SITE CLEARING, EXCAVATION, AND EARTHWORK.
6. INSTALL PERMANENT OUTFALL STRUCTURE.
7. PERFORM FINAL GRADING, TOPSOILING, PLANTING AND OTHER WETLAND MITIGATION CONSTRUCTION IN STAGE 1 WORK AREA.

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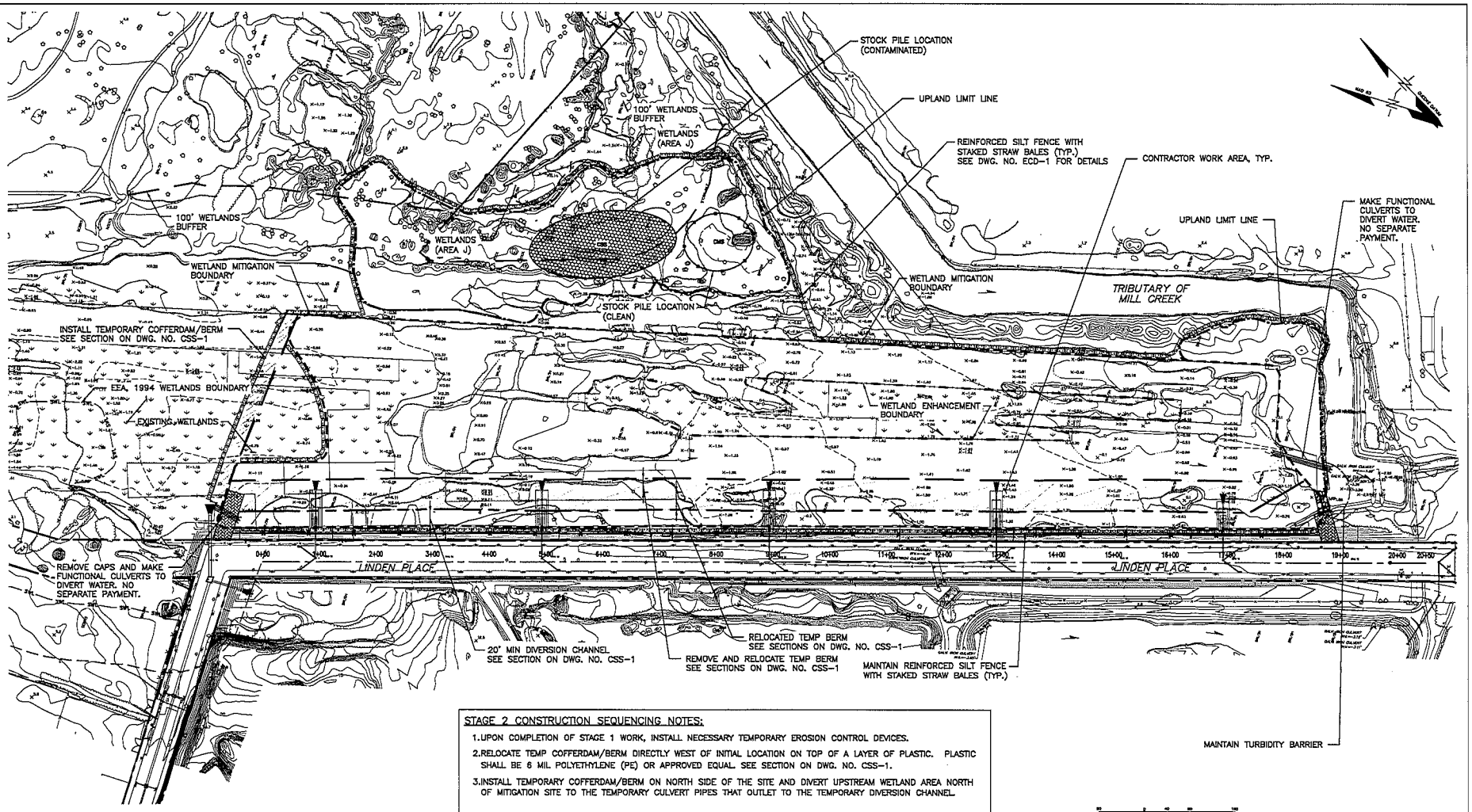
FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK

WETLAND MITIGATION PLAN

CONSTRUCTION STAGING AND EROSION CONTROL PLAN – 1

SCALE	1"=80'
REVISION	
DATE	9/19/2014
DRAWING	CS-1
SHEET	28/38

NAN-2014-000661-EHA



STAGE 2 CONSTRUCTION SEQUENCING NOTES:

1. UPON COMPLETION OF STAGE 1 WORK, INSTALL NECESSARY TEMPORARY EROSION CONTROL DEVICES.
2. RELOCATE TEMP COFFERDAM/BERM DIRECTLY WEST OF INITIAL LOCATION ON TOP OF A LAYER OF PLASTIC. PLASTIC SHALL BE 6 MIL POLYETHYLENE (PE) OR APPROVED EQUAL. SEE SECTION ON DWG. NO. CSS-1.
3. INSTALL TEMPORARY COFFERDAM/BERM ON NORTH SIDE OF THE SITE AND DIVERT UPSTREAM WETLAND AREA NORTH OF MITIGATION SITE TO THE TEMPORARY CULVERT PIPES THAT OUTLET TO THE TEMPORARY DIVERSION CHANNEL.

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FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK

WETLAND MITIGATION PLAN

CONSTRUCTION STAGING AND EROSION CONTROL PLAN – 2

SCALE	1"=80'
REVISION	
DATE	9/19/2014
DRAWING	CS-2
SHEET	29/35

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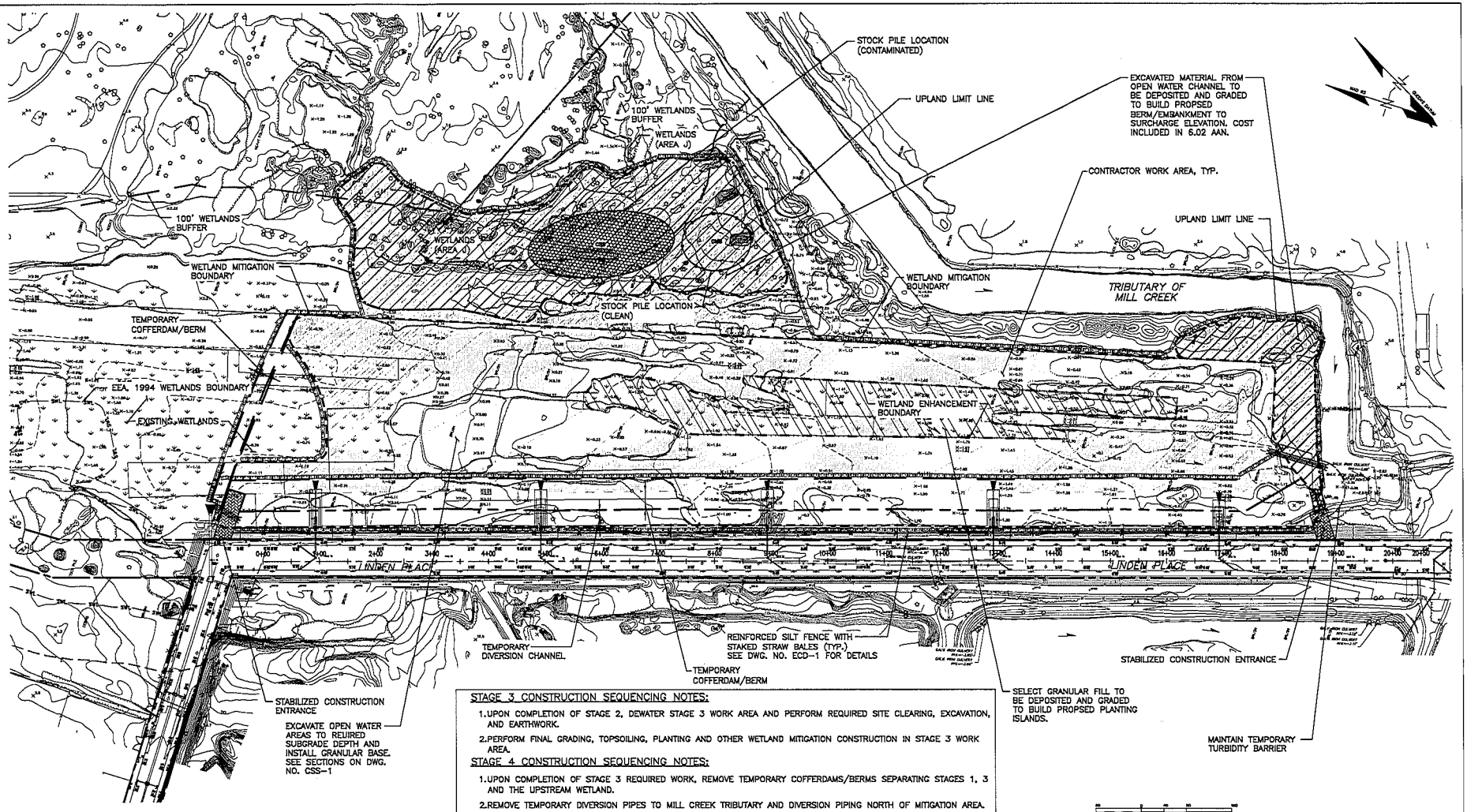

STAGE 3 CONSTRUCTION SEQUENCING NOTES:

1. UPON COMPLETION OF STAGE 2, DEWATER STAGE 3 WORK AREA AND PERFORM REQUIRED SITE CLEARING, EXCAVATION, AND EARTHWORK.
2. PERFORM FINAL GRADING, TOPSOILING, PLANTING AND OTHER WETLAND MITIGATION CONSTRUCTION IN STAGE 3 WORK AREA.

STAGE 4 CONSTRUCTION SEQUENCING NOTES:

1. UPON COMPLETION OF STAGE 3 REQUIRED WORK, REMOVE TEMPORARY COFFERDAMS/BERMS SEPARATING STAGES 1, 3 AND THE UPSTREAM WETLAND.
2. REMOVE TEMPORARY DIVERSION PIPES TO MILL CREEK TRIBUTARY AND DIVERSION PIPING NORTH OF MITIGATION AREA.
3. UPON STABILIZATION OF ENTIRE SITE, REMOVE TEMPORARY EROSION CONTROLS.

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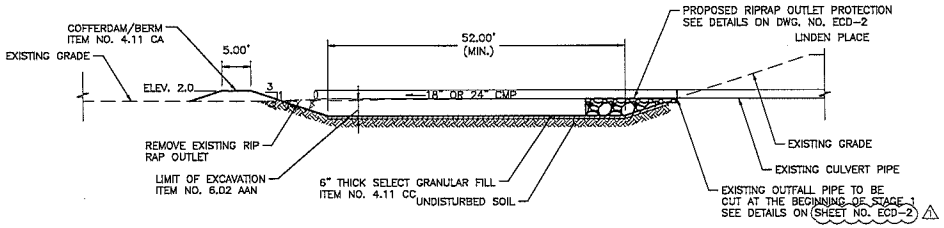
FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK

WETLAND MITIGATION PLAN

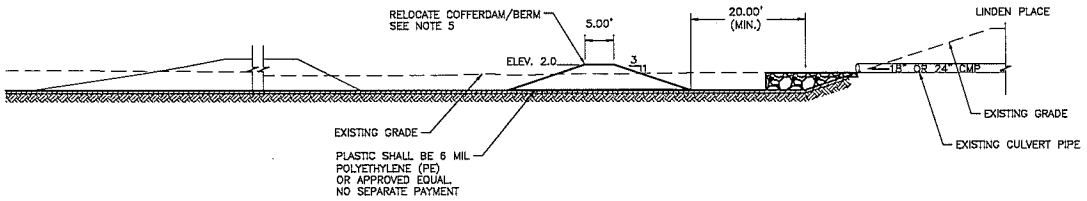
CONSTRUCTION STAGING AND EROSION CONTROL PLAN – 3 & 4

SCALE	1"=80'
REVISION	
DATE	9/19/2014
DRAWING	CS-3
SHEET	30/38

NAN-2014-00661-EHA



1 STAGE 1 – DIVERSION CHANNEL
SCALE: N.T.S.



2 STAGE 2 – BERM RELOCATION
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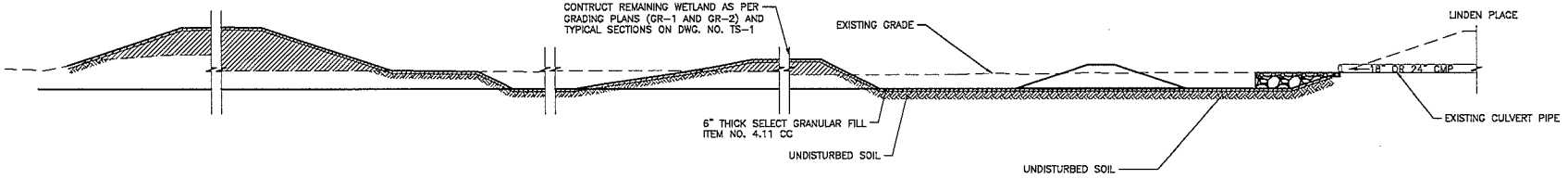

3 STAGE 3 & 4 – WETLAND MITIGATION
SCALE: N.T.S.

NOTES

DEWATERING
1. OPEN WATER AND/OR DIVERSION CHANNELS TO BE CONSTRUCTED 'IN THE DRY'. THE CONTRACTORS MEANS AND METHODS OF CONSTRUCTION FOR THE OPEN WATER AND/OR DIVERSION CHANNELS SHALL BE SUBMITTED PRIOR TO THE START OF WORK, TO THE ENGINEER FOR WRITTEN APPROVAL.
2. THE CONTRACTOR SHALL, WITH HIS OWN EQUIPMENT, PROVIDE DEWATERING DURING ALL STAGES OF CONSTRUCTION, WHERE REQUIRED AT NO ADDITIONAL COST TO THE CITY.
3. ALL PUMPS USED IN THE DEWATERING OPERATION SHALL BE ELECTRIC AND SHALL BE POWERED DIRECTLY FROM A CON EDISON DROP.
4. THE CONTRACTOR MAY EMPLOY DEWATERING AND/OR DIVERSION OF THE STORM FLOW IN THE EXISTING OUTLET PIPES AS NECCESSARY TO WORK "IN THE DRY" WHERE REQUIRED AT NO ADDIOTNAL COST TO THE CITY.

EARTHWORK
5. THE COST FOR BRINGING NEW FILL MATERIAL ON-SITE TO BE USED TO BUILD THE INITIAL COFFERDAM/BERM IN STAGE I AND NORTH SIDE BERM ONLY IN STAGE II WILL BE PAID FOR UNDER ITEM NO. 4.11 CA. THE COST FOR RELOCATING COFFERDAM/BERMS IN SUBSEQUENT STAGES, AS REQUIRED TO PROGRESS WORK "IN THE DRY" AND IN ACCORDANCE WITH CONTRACT PLANS AND SPECIFICATIONS IS DEEMED INCLUDED IN ALL OTHER BID ITEMS.

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1	ADDENDUM 2	10/24/14					

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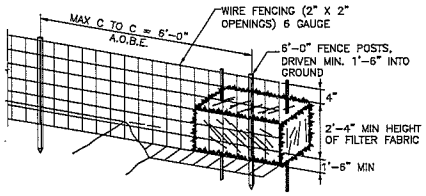
FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK

WETLAND MITIGATION PLAN

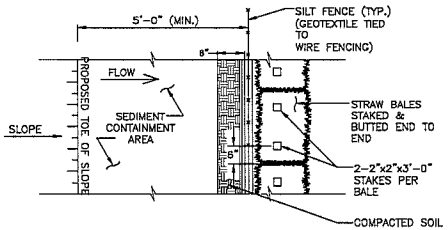
CONSTRUCTION STAGING SECTIONS

SCALE	
REVISION	
DATE	9/19/2014
DRAWING	CSS-1
SHEET	31/38

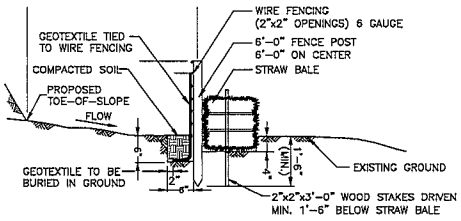
NAN-2014-00661-EIIA



PROSPECTIVE VIEW

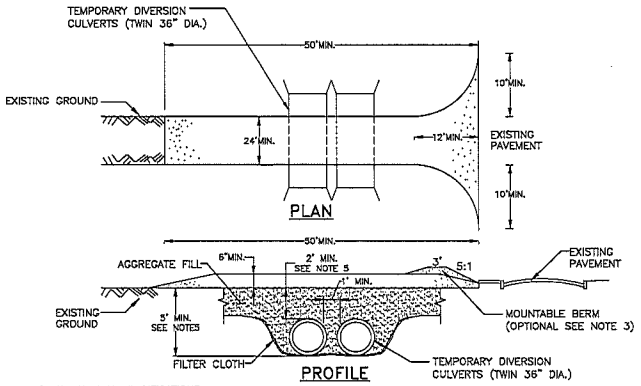


PLAN VIEW



ELEVATION VIEW

1 SILT FENCE WITH STRAW BALES
SCALE: N.T.S.



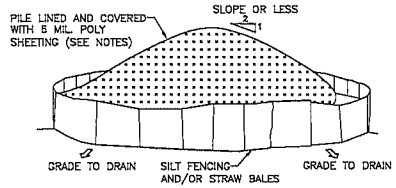
CONSTRUCTION SPECIFICATIONS:

1. LENGTH – NOT LESS THAN 50 FEET
2. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
3. MOUNTABLE BERM SHALL ONLY BE USED WHEN APPROVED OR DIRECTED BY ENGINEER.
4. AGGREGATE FILL SHALL MEET NYSDOT SPECIFICATIONS FOR COURSE AGGREGATE DESIGNATION NO.4 (3/4" TO 4")
5. MINIMUM COVER ON PIPE SHALL BE AS PER MANUFACTURERS SPECIFICATION FOR TEMPORARY PIPE AND APPROVED BY THE ENGINEER.
6. ALL WORK INCLUDED IN THE INSTALLATION OF THE STABILIZED CONSTRUCTION ENTRANCE WITH TEMPORARY CULVERTS INCLUDING LABOR, EXCAVATION, MATERIALS, EQUIPMENT AND MAINTENANCE IS INCLUDED IN PRICE BID FOR ITEM 9.30, STORMWATER POLLUTION PREVENTION.

2 STABALIZED CONSTRUCTION ENTRANCE
SCALE: N.T.S.

NOTES:

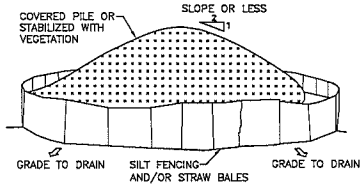
1. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THE CONTRACTOR SHALL OVERLAP THE CLOTH 6-INCHES AND FOLD A.O.B.E.
2. ALL WORK INCLUDED IN THE INSTALLATION OF THE SILT FENCE, LABOR, EXCAVATION, MATERIAL, EQUIPMENT, AND MAINTENANCE, IS INCLUDED IN PRICE BID FOR ITEM 9.30, STORMWATER POLLUTION PREVENTION.
3. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%)
4. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. EXCAVATION OF A BASIN ADJACENT TO THE DROP INLET OR A TEMPORARY DIKE ON THE DOWNSLOPE OF THE STRUCTURE MAY BE NECESSARY.



CONSTRUCTION SPECIFICATIONS

1. THIS DETAIL IS TO BE USED FOR ALL MATERIAL STOCKPILES UNLESS MATERIAL IS CLEAN AND TESTED.
2. AREA CHOSEN FOR FILL MATERIAL SHALL BE DRY AND STABLE
3. STOCKPILE AREA SHALL BE UNDERLAIN BY A LAYER OF PLASTIC.
4. PLASTIC SHALL BE 6 MIL POLYETHYLENE (PE) OR APPROVED EQUAL.
5. MAXIMUM SLOPE OF FILL MATERIAL PILE SHALL BE 2:1
6. PRIOR TO DISTURBING FILL MATERIAL, EACH PILE SHALL BE SURROUNDED BY SILT FENCING.
7. UPON COMPLETION OF FILL MATERIAL GRADING, EACH PILE SHALL BE COVERED WITH PLASTIC. THE PLASTIC SHALL BE TIED DOWN WITH SANDBAGS OR APPROVED EQUAL.
8. SEGREGATE CERTIFIED CLEAN MATERIALS FROM OTHER MATERIALS WHEN STOCKPILING.
9. ALL WORK INCLUDED IN THE INSTALLATION OF THE CONTAMINATED MATERIAL CONTAINMENT AREA SHALL BE INCLUDED IN PRICE BID FOR ITEM 9.30, STORMWATER POLLUTION PREVENTION.

CONTAMINATED MATERIAL



CONSTRUCTION SPECIFICATIONS

1. THIS DETAIL IS TO BE USED ONLY FOR CLEAN, TESTED MATERIAL STOCKPILING.
2. AREA CHOSEN FOR FILL MATERIAL SHALL BE DRY AND STABLE
3. MAXIMUM SLOPE OF FILL MATERIAL PILE SHALL BE 2:1
4. PRIOR TO DISTURBING FILL MATERIAL, EACH PILE SHALL BE SURROUNDED BY SILT FENCING.
5. UPON COMPLETION OF FILL MATERIAL GRADING, EACH PILE SHALL BE COVERED OR STABILIZED WITH VEGETATION.
6. SEGREGATE CERTIFIED CLEAN MATERIALS FROM OTHER MATERIALS WHEN STOCKPILING.
7. ALL WORK INCLUDED IN THE INSTALLATION OF THE CLEAN MATERIAL CONTAINMENT AREA SHALL BE INCLUDED IN PRICE BID FOR ITEM 9.30, STORMWATER POLLUTION PREVENTION.

CLEAN MATERIAL

3 STOCKPILE DETAIL
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FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK

WETLAND MITIGATION PLAN

SOIL EROSION CONTROL DETAILS – 1

SCALE	REVISION
DATE	9/19/2014
DRAWING	ECD-1
SHEET	32/38

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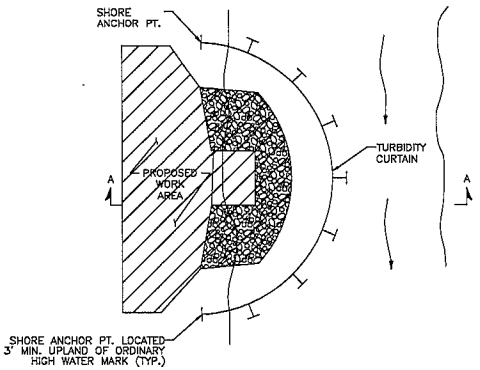
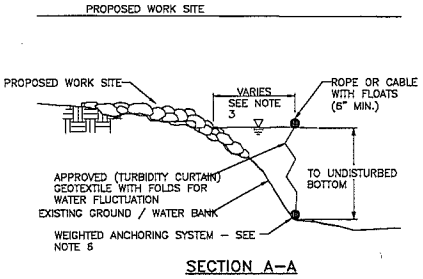


PLAN
FLOW VELOCITY ≤ 5 FT/S



SECTION A–A

APPLICATION NOTES:

A. THE PURPOSE OF A TURBIDITY CURTAIN IS TO SEPARATE WORK AREAS IN OR ADJACENT TO WATERWAYS, TO PREVENT TURBIDITY FROM ENTERING THE WATERWAY.

B. TURBIDITY CURTAIN SHALL NOT BE PLACED ACROSS A FLOWING WATERWAY.

C. CONCENTRATED FLOW OUTLETS SUCH AS CULVERT OUTLETS, DITCHES, ETC. SHALL NOT BE LOCATED BEHIND TURBIDITY CURTAIN.

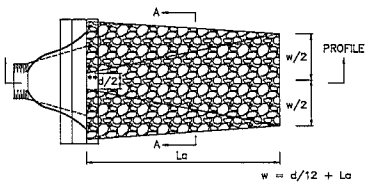
GENERAL NOTES:

1. TURBIDITY CURTAIN SHALL BE A MAXIMUM OF 100' LONG FOR EACH SECTION OF CURTAIN REQUIRED. END SECTIONS SHALL TERMINATE 10' BEYOND THE LIMIT OF DISTURBANCE.
2. THE TURBIDITY CURTAIN SHALL BE PLACED AS CLOSE TO THE WORK AS POSSIBLE WITHOUT INTERFERING WITH CONSTRUCTION OPERATIONS.
3. THE CONTRACTOR SHALL CONTINUALLY MONITOR THE INSTALLATION, TAKING INTO ACCOUNT WEATHER PATTERNS AND PREVAILING WIND DIRECTIONS THAT MAY AFFECT WATER LEVELS, VELOCITY AND MOVEMENT OF THE TURBIDITY CURTAIN.
4. THE TURBIDITY CURTAIN SHALL BE REMOVED BY PULLING TOWARD THE SHORE TO MINIMIZE ESCAPE OF SEDIMENTS INTO THE WATERWAY.
5. THE WEIGHTED ANCHOR SYSTEM SHALL BE A TYPE THAT ALLOWS THE CURTAIN TO CONFORM TO THE CONTOUR OF THE BOTTOM ON THE WATERWAY.
6. FOR FLOW VELOCITIES > 5 FT/SEC, USE A REDIRECTION BARRIER SUCH THAT FLOW EXPANDING AT 20° FROM THE BARRIER WILL REACH THE CURTAIN AT A POINT WHERE THE CURTAIN IS ESSENTIALLY PARALLEL TO STREAM FLOW.

WORK AREA

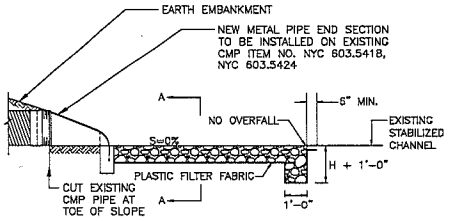
STAKE OR ANCHOR EVERY 100 FT. MAX.

1 TYPICAL TURBIDITY CURTAIN LAYOUT
SCALE: N.T.S.

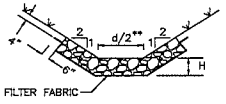


PLAN VIEW

RIPRAP OUTLET PROTECTION TABLE				
PIPE DIA.–in (d)	RIPRAP SIZE–in D_{50}	D_{MAX}	APPROX. LENGTH–ft (Lo)	MIN. BLANKET THICKNESS–in (H)
18	4	6	16	9
24	7	11	18	17



PROFILE VIEW



SECTION A–A

NOTES
1. A TOE PLATE EXTENSION IN ACCORDANCE WITH NYS STANDARD DETAIL 603–02 SHALL BE USED TO SECURE END SECTION.
2. CONCRETE CUT–OFF WALL SHALL BE INSTALLED IN ACCORDANCE WITH NYS STANDARD DETAIL 603–04, CUT–OFF WALLS FOR END SECTIONS. ITEM NO. 4.06

RIPRAP DETAIL AT PIPE–END SECTIONS
** CONFORM TO PIPE END SECTION WHEN USED

2 RIPRAP OUTLET PROTECTION
SCALE: N.T.S.

NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY

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FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK

WETLAND MITIGATION PLAN

SOIL EROSION CONTROL DETAILS – 2

SCALE	REVISION
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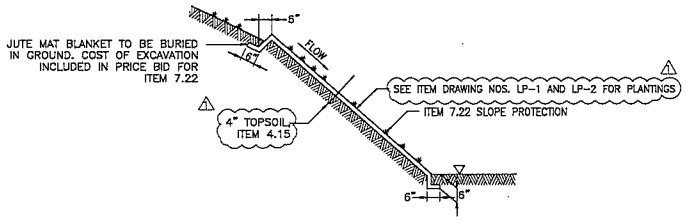
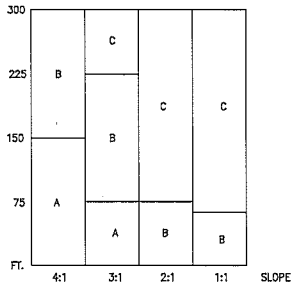


DETAIL "A"
N.T.S.

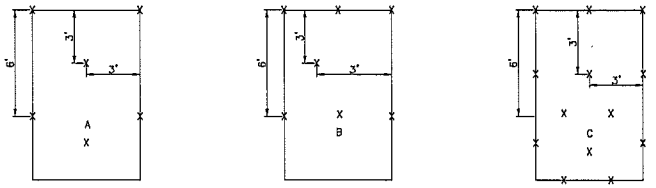
SLOPE PROTECTION LIMITS:
INSTALL JUTE MAT BLANKET AS SHOWN IN DETAIL 'A' AND 'B' UPON ALL SLOPED SURCHARGE EMBANKMENTS.

NOTES:

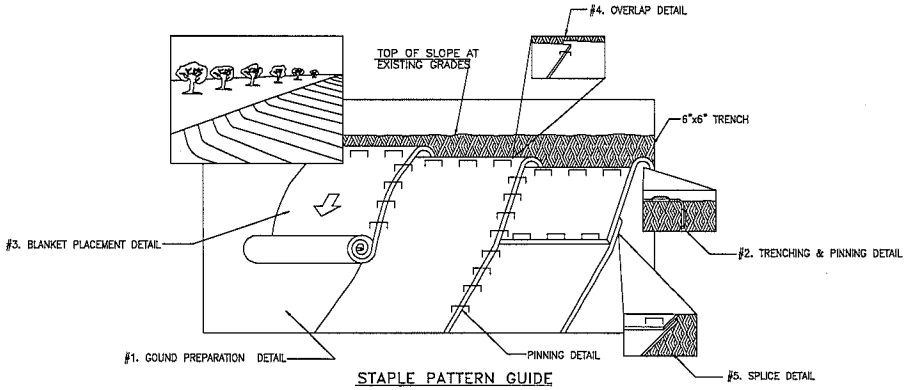
1. JUTE MAT BLANKET SHALL BE INSTALLED AS SHOWN IN THE DETAILS AND SPECIFICATIONS OR IN ACCORDANCE WITH THE MANUFACTURES SPECIFICATIONS.
2. THE UNDERLYING SOIL SHALL BE PREPARED BY PLACING THE REQUIRED AMOUNTS OF LIME, FERTILIZER, AND SEED AS SPECIFIED UNDER THE APPROPRIATE ITEMS SHOWN ON DETAIL "A".
3. THE CONTRACTOR SHALL BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH. THE CONTRACTOR SHALL BACKFILL AND COMPACT THE TRENCH AFTER STAKING/STAPLING. SEE DETAIL B– #2 BELOW AND A.O.B.E..
4. THE CONTRACTOR SHALL ROLL THE BLANKETS DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW. SEE DETAIL B – #3 AND A.O.B.E..
5. THE EDGES OF PARALLEL BLANKETS SHALL BE STAKED/STAPLED WITH A MINIMUM OF A 6" OVERLAP. SEE DETAIL B – #4 AND A.O.B.E..
6. WHEN THE BLANKETS MUST BE SPLICED DOWN THE SLOPE, THE CONTRACTOR SHALL PLACE THE BLANKETS, END OVER END (SHINGLE STYLE), WITH A MINIMUM OF 6" OVERLAP. THE CONTRACTOR SHALL STAKE/STAPLE THROUGH THE OVERLAPPED AREA 12" ON CENTER WITH THE REQUIRED STAKES/STAPLES. SEE DETAIL B – #5 A.O.B.E..
7. FOR STAKING/STAPLING PATTERN SEE DETAIL "STAPLE PATTERN GUIDE" BELLOW.
8. EXCEPT WHERE NOTED, ALL WORK REQUIRED TO INSTALL THE BLANKETS, INCLUDING THE EXCAVATION, PINNING, BACKFILL, AND MAINTENANCE SHALL BE INCLUDED IN THE ITEM 7.22.
9. CONTRACTOR SHALL SUBMIT SAMPLE OF BLANKET TO THE ENGINEER FOR APPROVAL.



STAPLE PINNING GUIDE



SLOPE APPLICATIONS



STAPLE PATTERN GUIDE

DETAIL "B"
N.T.S.

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	1	ADDENDUM 2	10/24/14					

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FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK

WETLAND MITIGATION PLAN

SOIL EROSION CONTROL DETAILS – 3

SCALE	
REVISION	
DATE	9/19/2014
DRAWING	ECD-3
SHEET	34/38

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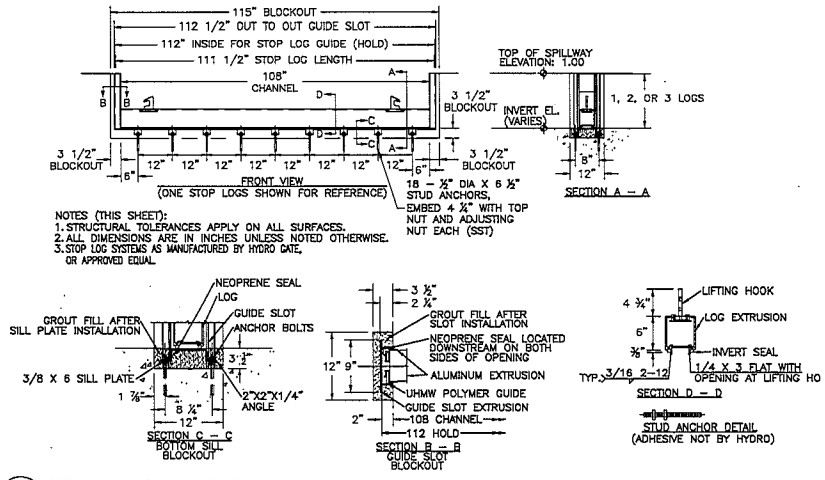
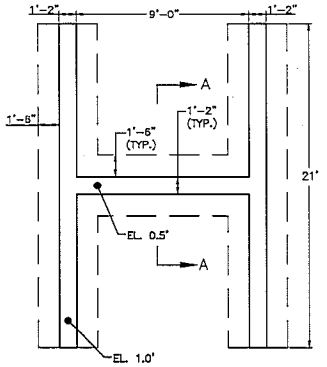
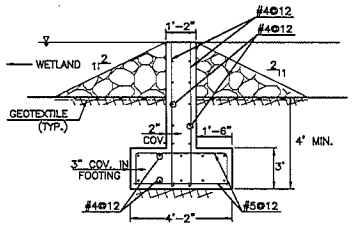


1 STOP LOG SYSTEM
SCALE: N.T.S.

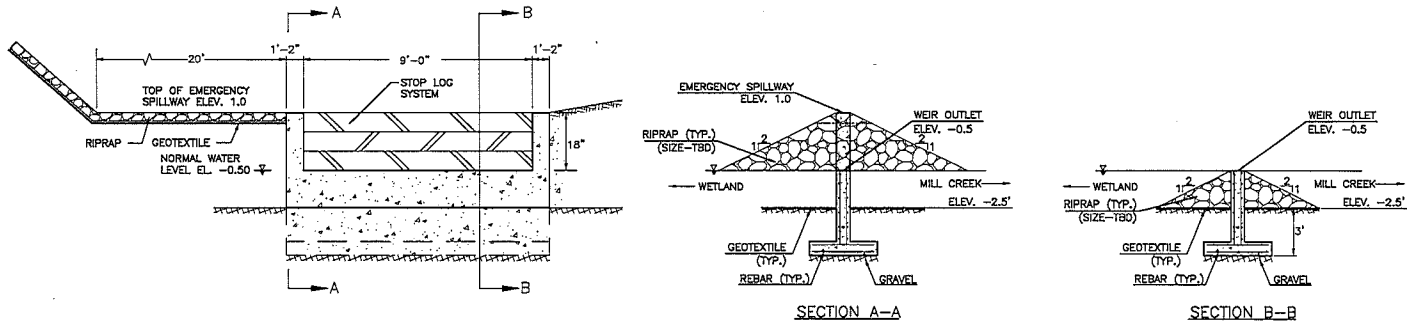


3 OUTLET WEIR STRUCTURE – PLAN
SCALE: N.T.S.



SECTION A–A

4 OUTLET WEIR STRUCTURE – SECTION
SCALE: N.T.S.



SECTION A–A

SECTION B–B

2 WEIR OUTLET CONTROL STRUCTURE
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FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK

WETLAND MITIGATION PLAN

DETAILS

SCALE	REVISION
DATE	9/19/2014
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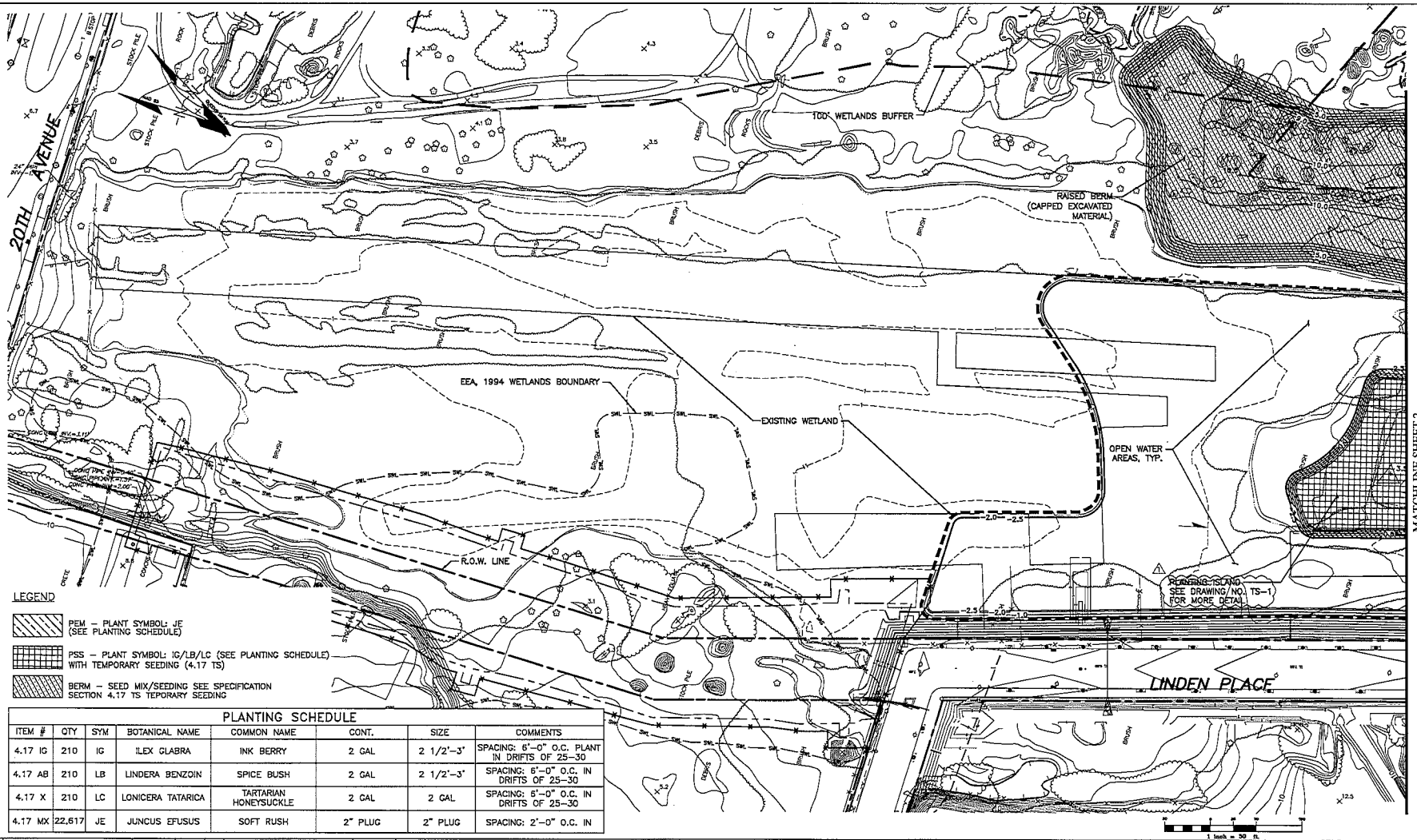
SHEET	35/38

NAN-2014-00661-EHA



LEGEND

- PEM – PLANT SYMBOL: JE (SEE PLANTING SCHEDULE)
- PSS – PLANT SYMBOL: IG/LB/LC (SEE PLANTING SCHEDULE) WITH TEMPORARY SEEDING (4.17 TS)
- BERM – SEED MIX/SEEDING SEE SPECIFICATION SECTION 4.17 TS TEPORARY SEEDING

PLANTING SCHEDULE

ITEM #	QTY	SYM	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	COMMENTS
4.17 IG	210	IG	ILEX GLABRA	INK BERRY	2 GAL	2 1/2'–3'	SPACING: 6'–0" O.C. PLANT IN DRIFTS OF 25–30
4.17 AB	210	LB	LINDERA BENZOIN	SPICE BUSH	2 GAL	2 1/2'–3'	SPACING: 6'–0" O.C. IN DRIFTS OF 25–30
4.17 X	210	LC	LONICERA TATARICA	TARTARIAN HONEYSUCKLE	2 GAL	2 GAL	SPACING: 6'–0" O.C. IN DRIFTS OF 25–30
4.17 MX	22,617	JE	JUNCUS EFUSUS	SOFT RUSH	2" PLUG	2" PLUG	SPACING: 2'–0" O.C. IN

IN CHARGE OF _____ DESIGNED BY _____ CHECKED BY _____ ESTIMATED BY _____ CHECKED BY _____ DRAFTED BY _____ CHECKED BY _____ DATE _____

REVISIONS

NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY
1	ADDENDUM 2	10/24/14					

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NEW YORK STATE P.E. No. 089574

New York City Economic Development Corporation

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PROJECT ENGR	
CAD FILE	

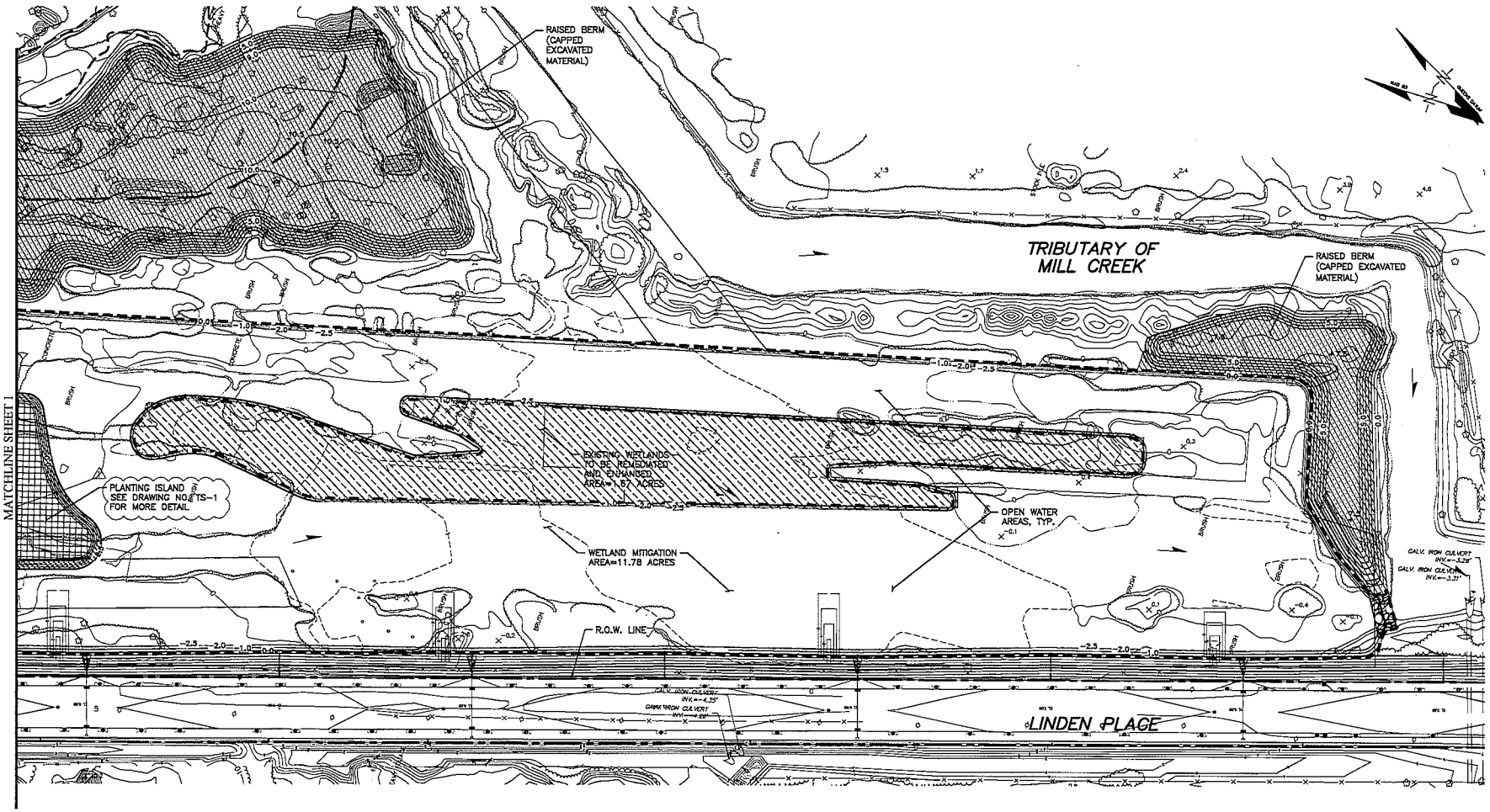
FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK

WETLAND MITIGATION PLAN

PLANTING PLAN – 1

SCALE	1"=50'
REVISION	
DATE	9/19/2014
DRAWING	LP-1
SHEET	36/38

NAN-2014-00001-EITA



IN CHARGE OF ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ DATE ____

REVISIONS

NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY
1	ADDENDUM 2	10/24/14					

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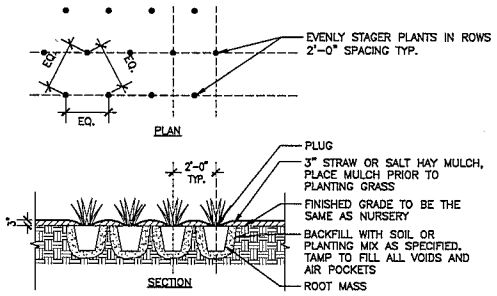
FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK

WETLAND MITIGATION PLAN

PLANTING PLAN – 2

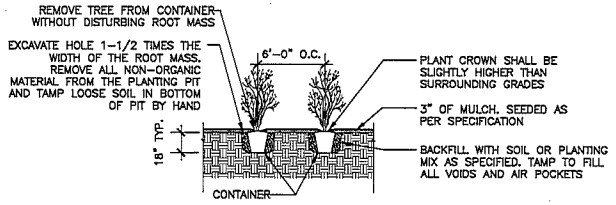
SCALE	1"=50'
REVISION	
DATE	9/19/2014
DRAWING	LP-2
SHEET	31/38

NAN-2014-00601-EHA



NOTE:
1. ALL OPEN AREAS UNDER AND BETWEEN PLUG PLANTING TO RECEIVE 3" OF STRAW OR SALT HAY MULCH. (NO SEPARATE PAY ITEM)

1 TYPICAL PLUG PLANTING
SCALE: N.T.S.



NOTE:
1. SHRUBS TO BE PLANTED IN DRIFTS.
2. MULCH TO BE STRAW OR SALT HAY.
3. ALL OPEN AREAS ARE UNDER AND BETWEEN SHRUBS TO RECEIVE MULCH AND TEMPORARY SEEDING AS PER THE SPECIFICATION 4.17 TS.
4. TEMPORARY SEEDING IN SHRUB AREA TO BE PAID FOR UNDER ITEM NO. 4.17 TS.

2 TYPICAL SHRUB PLANTING
SCALE: N.T.S.

IN CHARGE OF ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ DATE ____

REVISIONS

NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY

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FORMER FLUSHING AIRPORT, BOROUGH OF QUEENS, NEW YORK

WETLAND MITIGATION PLAN

PLANTING DETAILS – 3

SCALE	
REVISION	
DATE	9/19/2014
DRAWING	LP-3
SHEET	35/35

NAN-2014-00601-CHA