

**Project: South Battery Park City Resiliency Project:
Wagner Park / Museum of Jewish Heritage
Site Work Construction Services Project
(the “Project”) Request for Proposals (“RFP”)**

Date: June 28, 2022

**RE: Addendum #10
of Pages: 42**

REVISIONS TO RFP:

1) The following new or revised Wagner/MJH Project Drawings and Specifications related to the area of the Project Site adjacent to First Place, are hereby formally incorporated into the RFP’s *Exhibit B-1 – Construction Documents (Project Drawings & Specifications)*. These revised drawings replace and supersede all prior versions issued with the RFP:

- **Structural Drawings – Attachment #1:** Note that the changes to the below-listed drawings are indicated via a “bubble” that circles the area of the drawings that is revised. Also note that all other Structural Drawings included in the RFP should be considered the current versions to date.

SF301 – Flood Wall Foundation Plan 1 of 5
SF306 – Flood Wall Plan 1 of 5
SF307 – Flood Wall Plan 2 of 5
SF308 – Flood Wall Plan 3 of 5
SF312 – Concrete Post Enlarged Plans 1 of 2
SF321 – Enlarged Plans – First Place and MJH
SF401 – Floodwall Profile 1 of 2

SF403 – Floodwall Sections 1 of 4
SF412 – Floodwall Sections at First Place ConEd Vaults
SF601 – Flip Up Gate Details
SS301 – Site Structures Plan 1 of 5
SS602 – Light Pole Details
SS803 – 54-Inch Tide Gate at 1st Place Details
SS804 – 54-Inch Tide Gate at 1st Place Details

- **New Specification #107119.16 | Removable Flood Barriers – Attachment #2.**
- **Civil Drawings – Attachment #3:** Note that the changes to the below-listed drawings are indicated via a “bubble” that circles the area of the drawings that is revised. Also note that all other Structural Drawings included in the RFP should be considered the current versions to date.

C002 – General Notes and Notes
C100B – Site Demolition Legend and Flag Notes
C101SW – Site Demolition Plan 01
C101SE – Site Demolition Plan 02
C401SW – Storm Drainage Plan 01
C401SE – Storm Drainage Plan 02

C601SW – Water and Sewer Plan 01
C601SE – Water and Sewer Plan 02
C802 – Sections and Details
C903 – Storm Drainage Utility Profile
C913 – Sewer Utility Profile

- **Specification #321123 | Aggregate Base Courses – Attachment #4:** The revised content, compared to the content included in the version of Specification #321123 of the RFP’s *Exhibit B-1 – Construction Documents (Project Drawings and Specifications)*, is yellow-highlighted in this corrected version of such Specification.

[SIGNATURE PAGE TO FOLLOW]

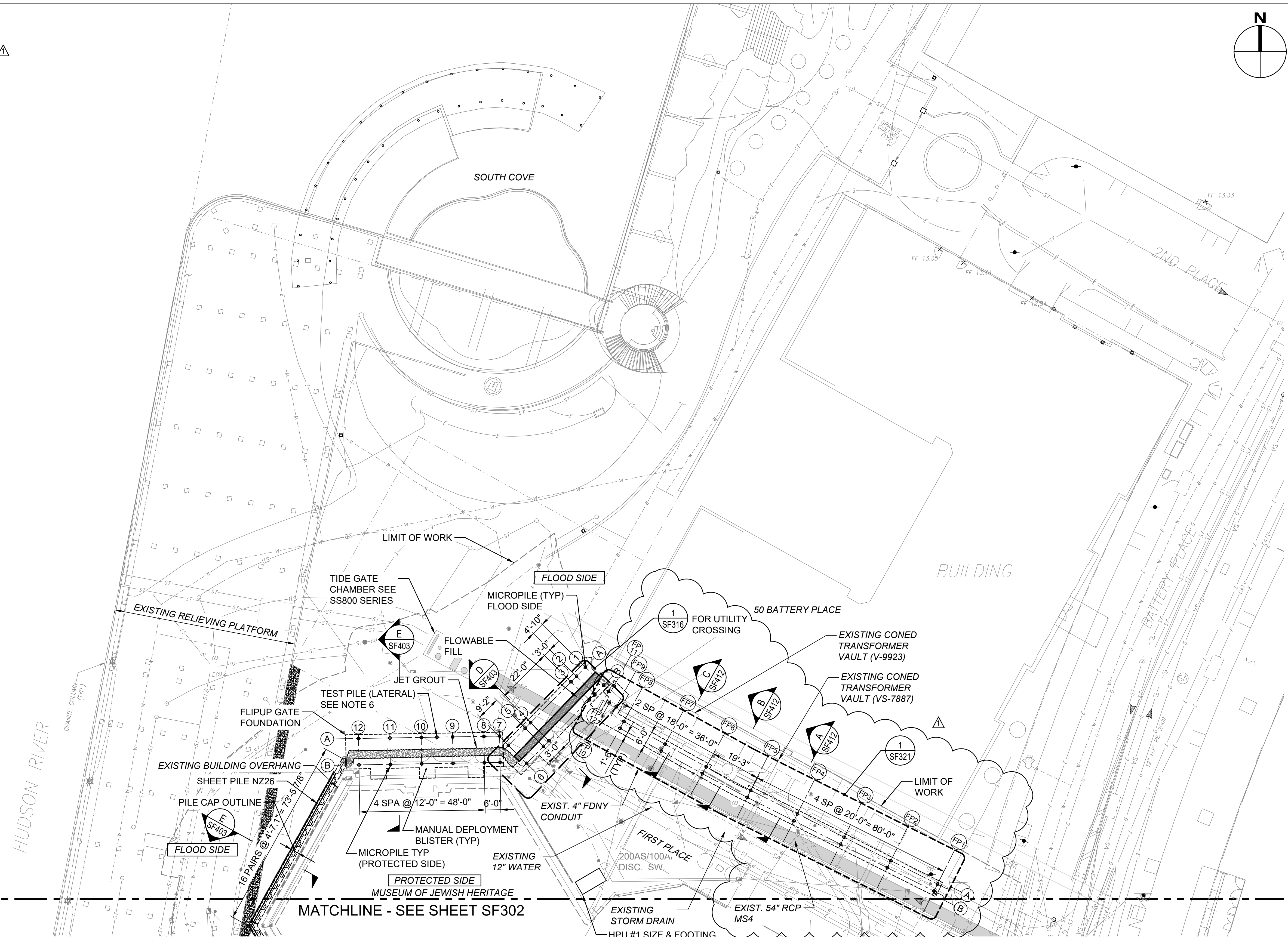
ATTACHMENT #1
REVISED STRUCTURAL DRAWINGS:

- SF301 – Flood Wall Foundation Plan 1 of 5*
- SF306 – Flood Wall Plan 1 of 5*
- SF307 – Flood Wall Plan 2 of 5*
- SF308 – Flood Wall Plan 3 of 5*
- SF312 – Concrete Post Enlarged Plans 1 of 2*
- SF321 – Enlarged Plans – First Place and MJH*
- SF401 – Floodwall Profile 1 of 2*
- SF403 – Floodwall Sections 1 of 4*
- SF412 – Floodwall Sections at First Place ConEd Vaults*
- SF601 – Flip Up Gate Details*
- SS301 – Site Structures Plan 1 of 5*
- SS602 – Light Pole Details*
- SS803 – 54-Inch Tide Gate at 1st Place Details*
- SS804 – 54-Inch Tide Gate at 1st Place Details*

(ATTACHED)

ANSI D 22" x 34"

PILE SCHEDULE		
PILE NUMBER	NORTHING	EASTING
FP01A	196596.02	979236.44
FP01B	196593.34	979235.09
FP02A	196604.99	979218.56
FP02B	196602.31	979217.22
FP03A	196613.96	979200.69
FP03B	196611.28	979199.34
FP04A	196622.94	979182.81
FP04B	196620.25	979181.47
FP05A	196631.91	979164.94
FP05B	196629.23	979163.59
FP06A	196640.91	979147.89
FP06B	196638.29	979146.44
FP07A	196649.61	979132.13
FP07B	196646.98	979130.68
FP08A	196658.31	979116.38
FP08B	196655.68	979114.93
FP09	196663.89	979113.43
FP10	196665.34	979110.80
FP11	196671.94	979112.62
FP12	196669.80	979110.52
1A	196679.11	979101.66
1B	196672.21	979108.67
2A	196675.63	979098.25
2B	196668.75	979105.25
3A	196673.49	979096.15
3B	196666.61	979103.14
4A	196657.84	979080.70
4B	196650.93	979087.71
5A	196655.70	979078.59
5B	196648.79	979085.61
6A	196649.15	979072.17
6B	196642.26	979079.17
7A	196652.71	979068.81
7B	196642.62	979068.98
8A	196652.54	979062.81
8B	196642.45	979062.99
9A	196652.35	979050.81
9B	196642.26	979050.99
TEST	196652.25	979044.81
10A	196652.16	979038.81
10B	196642.07	979038.99
11A	196651.96	979026.81
11B	196641.87	979026.99
12A	196651.77	979014.82
12B	196641.68	979014.99



- NOTES:**
- UTILITY LOCATIONS ARE BASED ON FIELD OBSERVATIONS AND RECORD DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION. ONLY PROPOSED UTILITIES AND EXISTING UTILITIES TO REMAIN ARE SHOWN. FOR EXISTING UTILITIES TO BE DEMOLISHED SEE CIVIL DWGS.
 - SEE SF605 FOR PILE INSTALLATION. SEE GENERAL NOTES FOR JET GROUTING NOTES.
 - SUBMIT A VIBRATION MONITORING PLAN PRIOR TO INSTALLATION OF PILES. VIBRATORY INSTALLATION OF PILES IS NOT PERMITTED WITHIN 50 FEET OF THE MUSEUM BUILDINGS.
 - WORK THIS SHEET WITH SHEET SF306.
 - REFER TO CIVIL DWGS FOR ADDITIONAL INFORMATION ABOUT EXISTING UTILITIES TO BE RECONSTRUCTED, DETERMINE SIZE AND ELEVATIONS IN THE FIELD.
 - FOR TEST PILE NOTES, SEE SHEET SF605.

AECOM
 PROJECT
 SOUTH BATTERY PARK CITY
 RESILIENCY DESIGN
 SERVICES
 CLIENT
 HUGH L. CAREY
 BATTERY PARK CITY
 AUTHORITY
 CONSULTANT

AECOM
 AECOM USA
 605 3rd Ave, 2nd Floor, New York, NY 10158
 212.973.2900 tel www.aecom.com

SUB-CONSULTANT
 MAGNUSON KLEMENIC ASSOCIATES
 1301 Fifth Avenue, Suite 3200, Seattle, WA 98101-2699
 206.292.1200 tel 206.292.1201 fax www.mka.com

SITEWORKS
 150 West 28th St, Suite 605
 New York, NY 10001 212.255.8350 siteworks.com

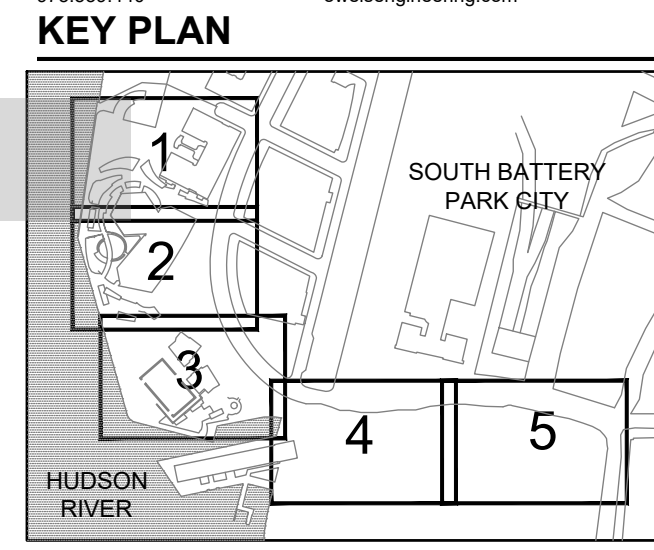
MILHOUSE
 333 South Wabash Ave, Suite 2901,
 Chicago, IL 60604 313.987.0061 milhouseinc.com

TILLOTSON DESIGN ASSOCIATES
 40 Worth St, Rm 703, New York, NY 10013
 212.675.7760 tilloftsondesign.com

THOMAS PHIFER AND PARTNERS
 180 Varick St, New York, NY 10014
 212.337.0334 thomaspifer.com

NAIK CONSULTING GROUP, PC
 111 West 33rd St, Suite 605 New York, NY 10120
 212.575.2701 naikgroup.com

OWEIS
 100 East Hanover Ave., Suite 101, Cedar Knolls, NJ 07927
 973.539.440 oweisengineering.com



REGISTRATION

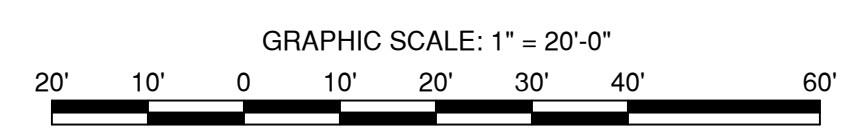
ISSUE/REVISION

NO.	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS
1	JAN 2022	BID SET
I/R	DATE	DESCRIPTION

Designed By: L.DIAZ
Drawn By: F.LIZANO
Checked By: M.GONSKI
Approved By: J.CAREL

PROJECT/TERM CONTRACT NUMBER
 Contract No. 18-2586
SHEET TITLE

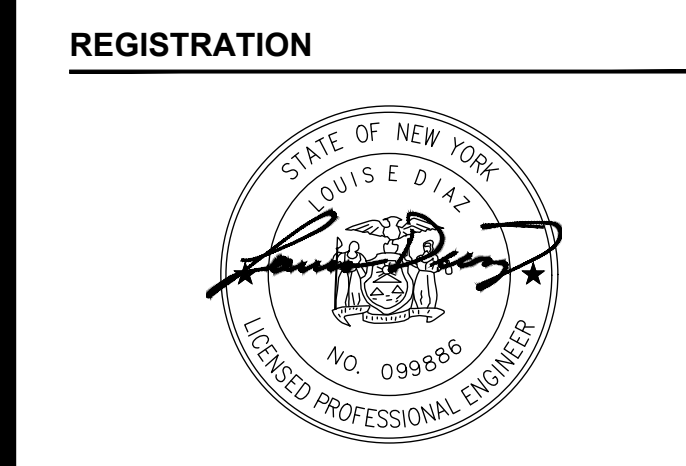
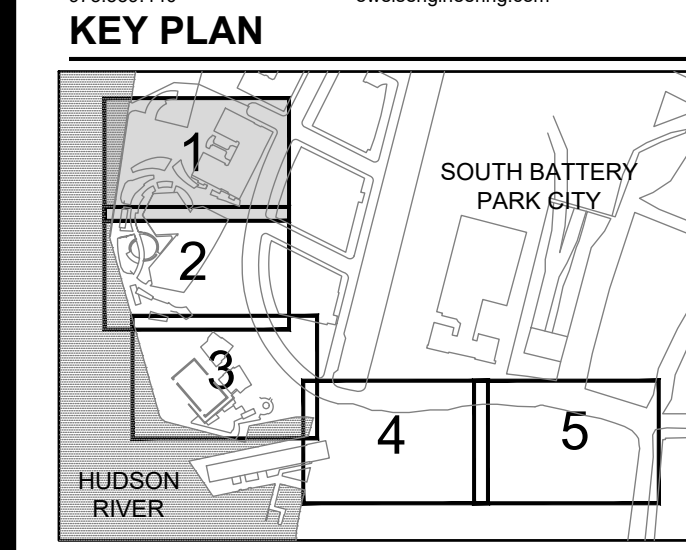
FLOOD WALL FOUNDATION
 PLAN 1 OF 5
SHEET NUMBER



SF301

Last saved by: LOUIS DIAZ (20220604-17) Ldiaz Plotfile: 2022-06-25
 Filename: C:\P\WORK\BATTERY PARK CITY\AECOM\COM\09848185\PCS\F010101.DWG

ANSI D 22" x 34"



ISSUE/REVISION

NO.	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS
1	JAN 2022	BID SET
I/R	DATE	DESCRIPTION

Designed By: L. DIAZ
Drawn By: F. LIZANO
Checked By: M. GONSKI
Approved By: J. CAREL

PROJECT/TERM CONTRACT NUMBER
 Contract No. 18-2586
SHEET TITLE

FLOOD WALL
 PLAN 1 OF 5

SHEET NUMBER
SF306

WORKING POINT	NORTHING	EASTING
WP-01	196593.46	979235.71
WP-02	NOT USED	
WP-03	196632.34	979158.25
WP-04	196641.01	979076.96
WP-05	196667.89	979113.17
WP-06	196671.90	979107.79
WP-07	196641.01	979076.96
WP-08	196644.46	979073.43
WP-09	196644.41	979069.16
WP-10	196643.44	979012.80
WP-11	196643.41	979008.94
WP-12	SEE SHEET SF307	

- NOTES:**
- NORTHINGS AND EASTINGS ARE IN NAD83 NY STATE PLANE COORDINATES.
 - THE LOCATIONS OF SUBSURFACE STRUCTURES HAVE NOT BEEN PHYSICALLY VERIFIED. VERIFY LOCATIONS OF TUNNELS, VAULTS AND OTHER SUBSURFACE STRUCTURES PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION.
 - SEE SM SERIES FOR MARINE STRUCTURES AND SEE SS SERIES FOR SITE STRUCTURES.
 - WORK THIS SHEET WITH SHEET SF301.
 - SEE SHEET NO. SF001 FOR GATE FLOOD LOAD SEGMENTS.
 - PROVIDE HYDRAULIC LINES AS RECOMMENDED BY THE GATE VENDOR FROM THE HPU TO THE HYDRAULIC ARMS USED TO RAISE THE GATES. THE CONDUITS FOR THE HYDRAULIC FLUID MUST BE MADE OF CORROSION RESISTANT MATERIAL. FURNISH AND INSTALL A PERFORATED STAINLESS STEEL ENCLOSURE FOR THE HPU, SEE LARCH FOR ENCLOSURE DETAILS.
 - ALL WORK POINTS ARE ON THE FLOOD SIDE OF THE WALL.

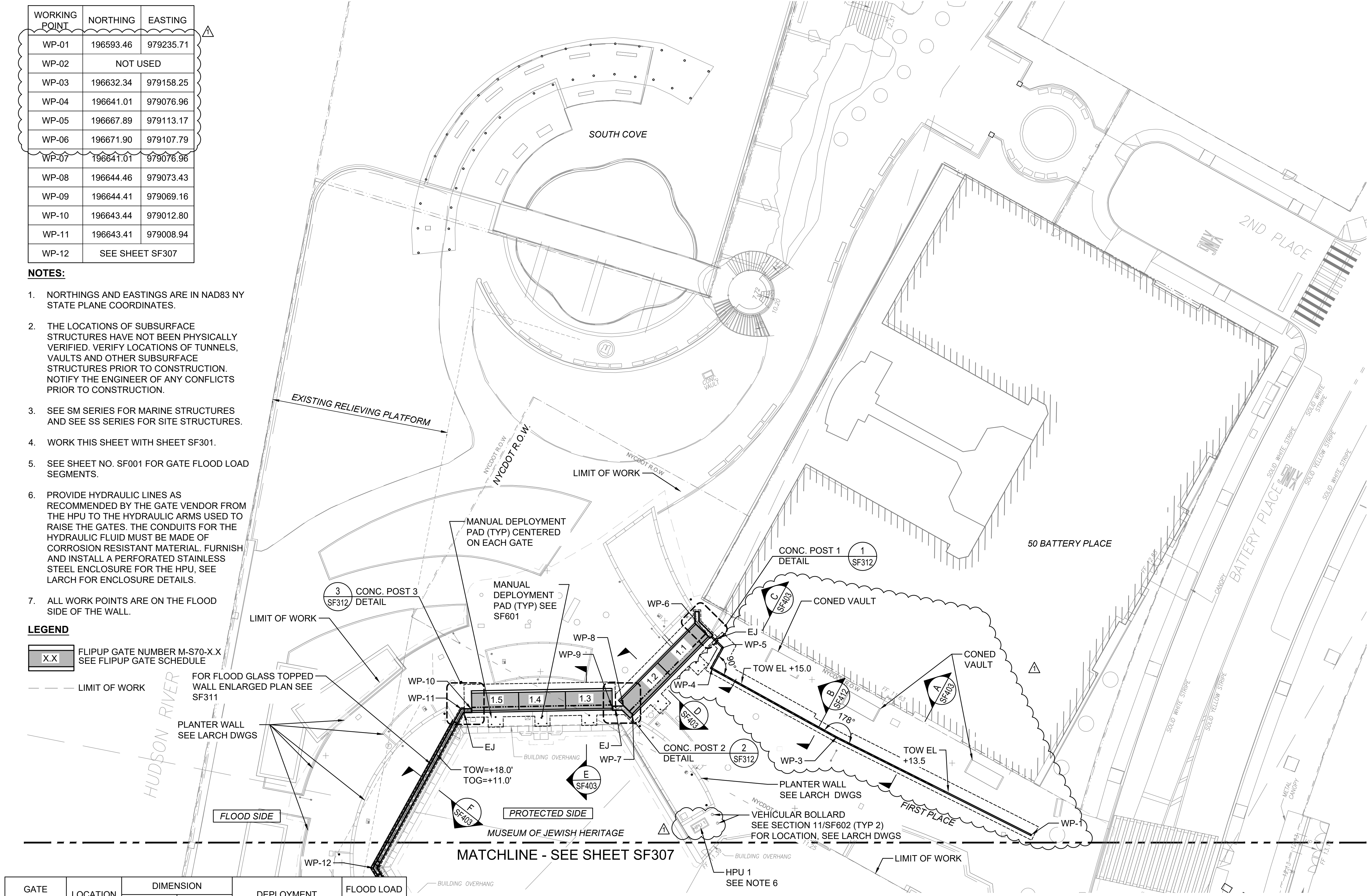
LEGEND

X.X FLIPUP GATE NUMBER M-S70-X.X
 SEE FLIPUP GATE SCHEDULE

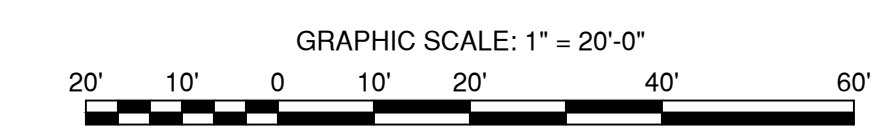
--- LIMIT OF WORK

FOR FLOOD GLASS TOPPED WALL ENLARGED PLAN SEE SF311

PLANTER WALL SEE LARCH DWGS

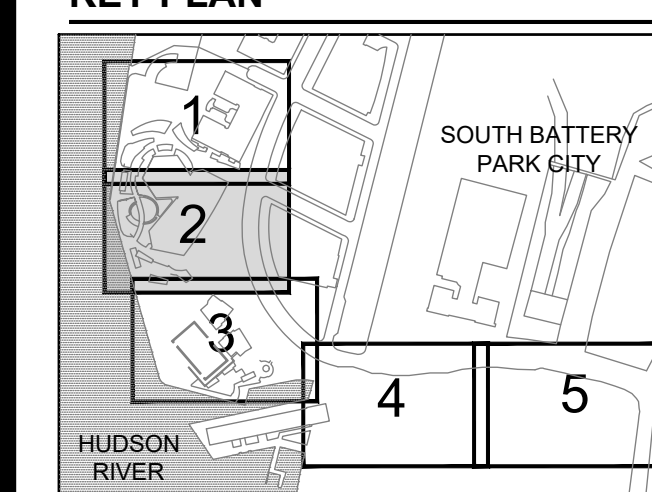


GATE NUMBER	LOCATION	DIMENSION		DEPLOYMENT	FLOOD LOAD SEGMENTS
		HEIGHT (ft)	WIDTH (ft)		
M-S70-1.1	MJH	7	21.5	HPU, PORTABLE HPU, MANUAL WINCH	5
M-S70-1.2	MJH	7	21.5	HPU, PORTABLE HPU, MANUAL WINCH	5
M-S70-1.3	MJH	7	18.6	HPU, PORTABLE HPU, MANUAL WINCH	4
M-S70-1.4	MJH	7	18.6	HPU, PORTABLE HPU, MANUAL WINCH	4
M-S70-1.5	MJH	7	18.6	HPU, PORTABLE HPU, MANUAL WINCH	4

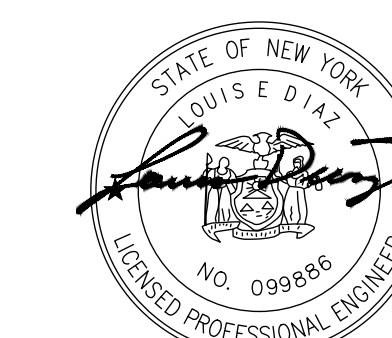


Last saved by: LOUIS DIAZ (2022-06-17) | Last Printed: 2022-06-25
 Filename: C:\P\WORK\NYC\AECOM\18-2586\18-2586-SF306\18-2586-SF306.dwg

KEY PLAN



REGISTRATION



ISSUE/REVISION

NO.	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS
1	JAN 2022	BID SET
I/R	DATE	DESCRIPTION

Designed By: L.DIAZ
Drawn By: F.LIZANO
Checked By: M.GONSKI
Approved By: J.CAREL

PROJECT/TERM CONTRACT NUMBER

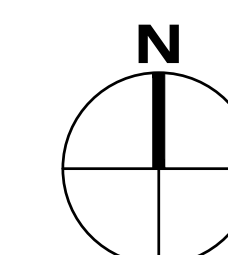
Contract No. 18-2586

SHEET TITLE

FLOOD WALL PLAN
2 OF 5

SHEET NUMBER

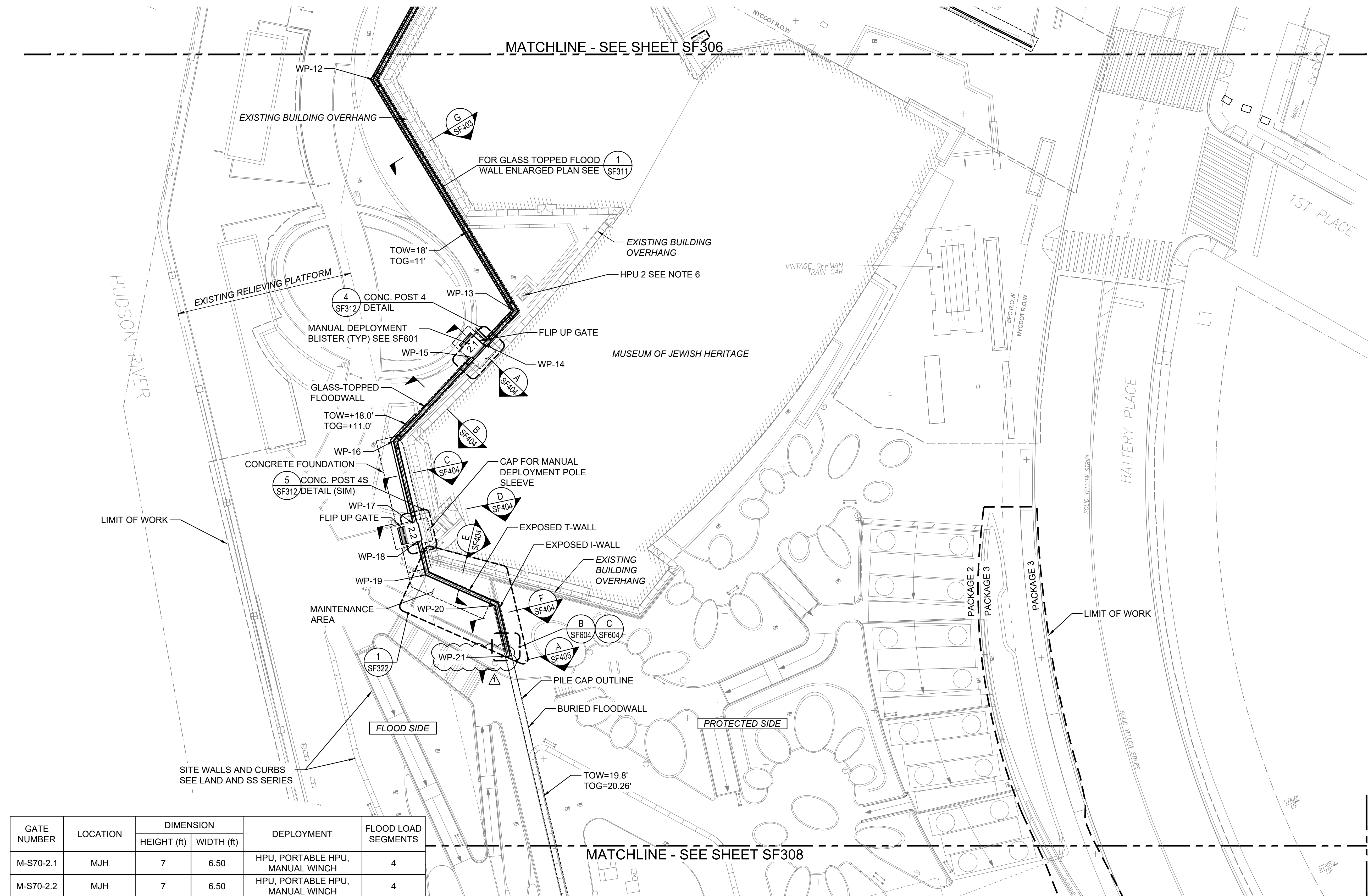
SF307



ANSI D 22' x 34'

MATCHLINE - SEE SHEET SF306

MATCHLINE - SEE SHEET SF308



GATE NUMBER	LOCATION	DIMENSION		DEPLOYMENT	FLOOD LOAD SEGMENTS
		HEIGHT (ft)	WIDTH (ft)		
M-S70-2.1	MJH	7	6.50	HPU, PORTABLE HPU, MANUAL WINCH	4
M-S70-2.2	MJH	7	6.50	HPU, PORTABLE HPU, MANUAL WINCH	4

WORKING POINT	NORTHING	EASTING	WORKING POINT	NORTHING	EASTING
WP-12	196580.17	978973.88	WP-17	196403.50	978989.87
WP-13	196488.24	979029.95	WP-18	196396.47	978991.56
WP-14	196475.01	979017.71	WP-19	196383.23	978994.80
WP-15	196469.78	979012.88	WP-20	196371.01	979022.33
WP-16	196436.50	978981.98	WP-21	196350.73	979027.06

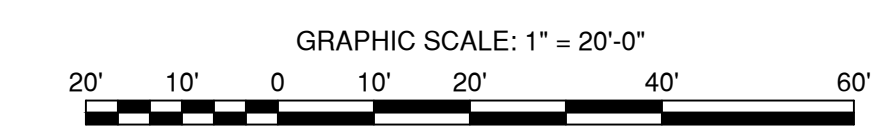
NOTES:

- NORTHINGS AND EASTINGS ARE IN NAD83 NY STATE PLANE COORDINATES.
- THE LOCATIONS OF SUBSURFACE STRUCTURES HAVE NOT BEEN PHYSICALLY VERIFIED. VERIFY LOCATIONS OF TUNNELS, VAULTS AND OTHER SUBSURFACE STRUCTURES PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION.
- SEE SM SERIES FOR MARINE STRUCTURES AND SEE SS SERIES FOR SITE STRUCTURES.

- WORK THIS SHEET WITH SHEET SF 302.
- SEE SHEET NO. SF001 FOR GATE FLOOD LOAD SEGMENTS.
- PROVIDE HYDRAULIC LINES AS RECOMMENDED BY THE GATE VENDOR FROM THE HPU TO THE HYDRAULIC ARMS USED TO RAISE THE GATES. THE CONDUITS FOR THE HYDRAULIC FLUID MUST BE MADE OF CORROSION RESISTANT MATERIAL. FURNISH AND INSTALL A PERFORATED STAINLESS STEEL ENCLOSURE FOR THE HPU, SEE LAND FOR ENCLOSURE DETAILS.
- ALL WORK POINTS ARE ON THE FLOOD SIDE OF THE WALL.

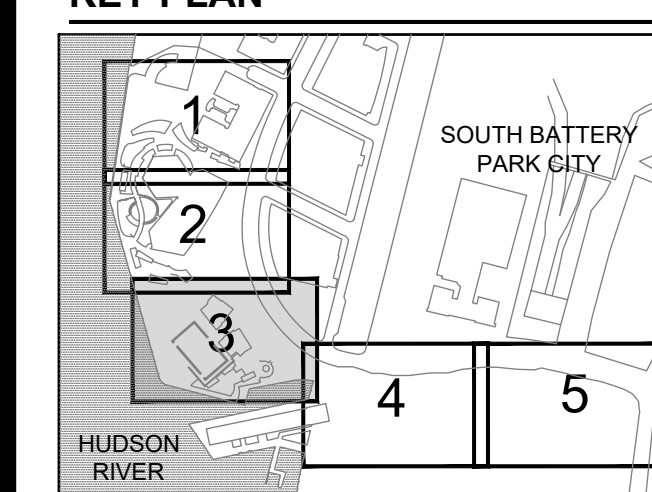
LEGEND

- X.X FLIPUP GATE NUMBER M-S70-X.X SEE FLIPUP GATE SCHEDULE
- - - LIMIT OF WORK

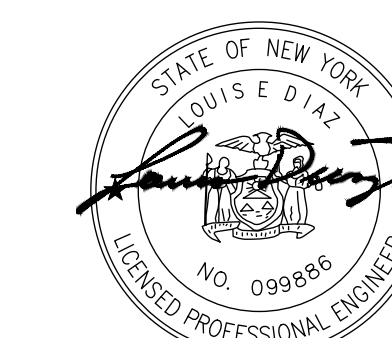


Last saved by: FEERERAM (2022-06-17) Last Plotted: 2022-06-17
Filename: C:\TEMP\WORKING\20220617_SF307.dwg SHEET307.PN1\$BPCSF307R01.DWG

KEY PLAN



REGISTRATION



ISSUE/REVISION

NO.	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS
1	JAN 2022	BID SET
I/R	DATE	DESCRIPTION

Designed By: L.DIAZ
Drawn By: F.LIZANO
Checked By: M.GONSKI
Approved By: J.CAREL

PROJECT/TERM CONTRACT NUMBER

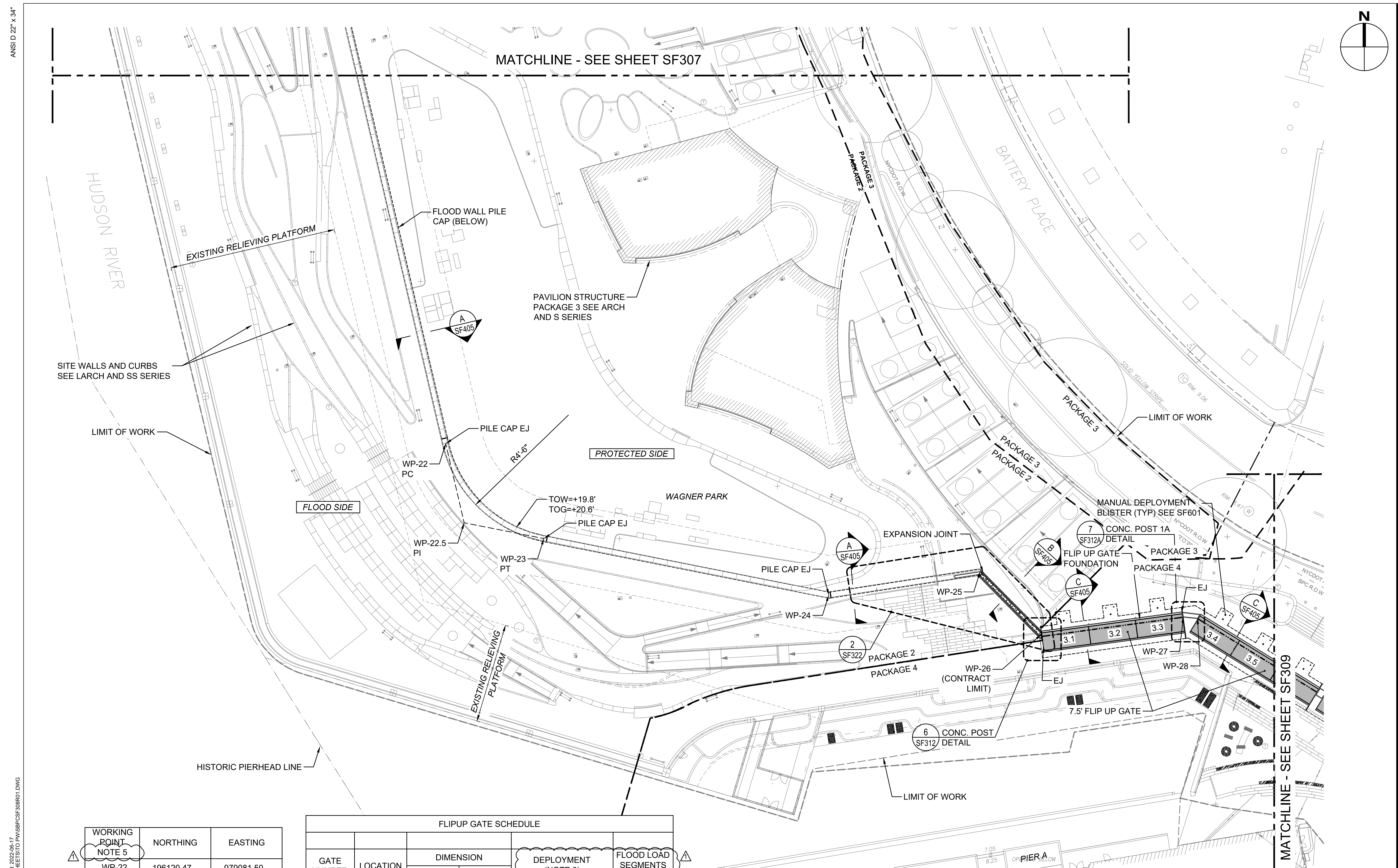
Contract No. 18-2586

SHEET TITLE

FLOOD WALL PLAN
3 OF 5

SHEET NUMBER

SF308



WORKING POINT NOTE 5

WORKING POINT	NORTHING	EASTING
WP-22	196120.47	979081.50
WP-22.5	196087.18	979089.26
WP-23	196080.52	979122.87
WP-24	196056.76	979242.75
WP-25	196066.61	979306.46
WP-26	196040.17	979332.13
WP-27	196047.63	979391.95
WP-28	196047.02	979397.95

FLIPUP GATE SCHEDULE

GATE NUMBER	LOCATION	DIMENSION		DEPLOYMENT (NOTE 3)	FLOOD LOAD SEGMENTS (NOTE 4)
		HEIGHT (ft)	WIDTH (ft)		
M-S70-3.1	PIER A	7.50	20	HPU, PORTABLE HPU, MANUAL WINCH	-1
M-S70-3.2	PIER A	7.50	20	HPU, PORTABLE HPU, MANUAL WINCH	-1
M-S70-3.3	PIER A	7.50	20	HPU, PORTABLE HPU, MANUAL WINCH	-1
M-S70-3.4	PIER A	7.50	20	HPU, PORTABLE HPU, MANUAL WINCH	-1
M-S70-3.5	PIER A	7.50	20	HPU, PORTABLE HPU, MANUAL WINCH	-1

- NOTES:**
- NORTHINGS AND EASTINGS ARE IN NAD83 NY STATE PLANE LONG ISLAND COORDINATES.
 - SEE SM SERIES FOR MARINE STRUCTURES AND SEE SS SERIES FOR SITE STRUCTURES.
 - PROVIDE HYDRAULIC LINES AS RECOMMENDED BY THE GATE VENDOR FROM THE HPU TO THE HYDRAULIC ARMS USED TO RAISE THE GATES. THE CONDUITS FOR HYDRAULIC FLUID MUST BE MADE OF CORROSION RESISTANT MATERIALS.
 - SEE SHEET NO. SF001 FOR GATE FLOOD LOAD SEGMENTS.
 - ALL WORK POINTS ARE ON THE FLOOD SIDE OF THE STRUCTURAL WALL (EXCLUSIVE OF CLADDING OR FINISHES).

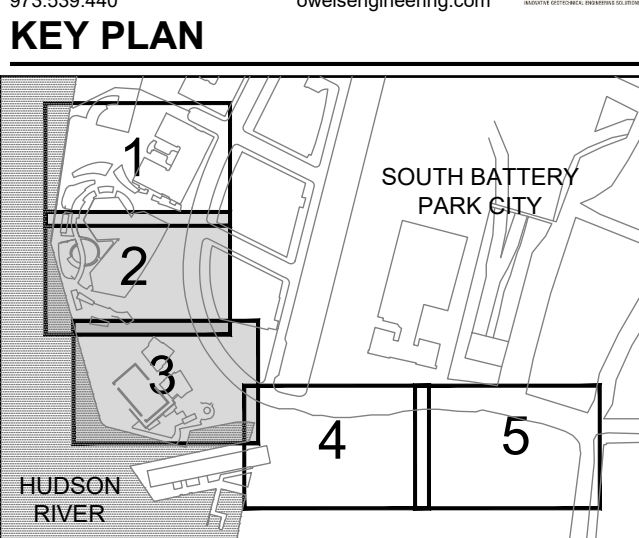
LEGEND

X.X FLIPUP GATE NUMBER M-S70-X.X
SEE FLIPUP GATE SCHEDULE

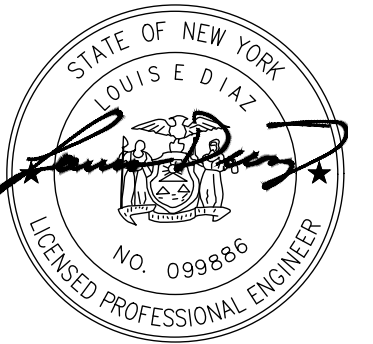
--- LIMIT OF WORK

GRAPHIC SCALE: 1" = 20'-0"

ANSI D 222 X 34" / Printed on 100% Post-Consumer Recycled Content Paper / Last saved by: FERREIRA/2022-06-17 / Filename: C:\TEMP\MARINE\B00792821_SFP-020_SHEETS\TO P\HSP\CSF308R01.DWG



REGISTRATION



ISSUE/REVISION

NO.	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS
1	JAN 2022	BID SET
I/R	DATE	DESCRIPTION

Designed By: L.DIAZ
Drawn By: F.LIZANO
Checked By: M.GONSKI
Approved By: J.CAREL

PROJECT/TERM CONTRACT NUMBER

Contract No. 18-2586

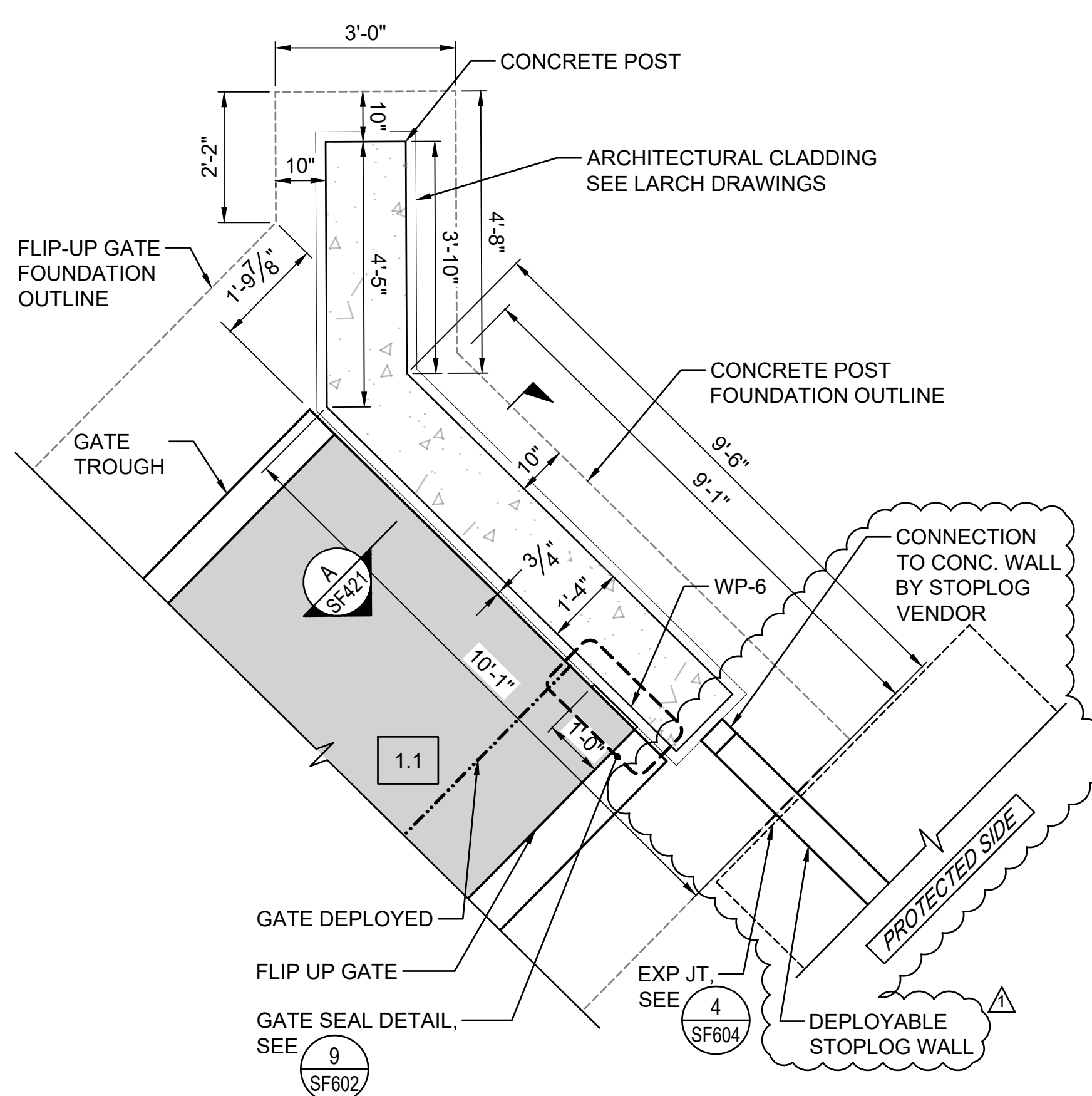
SHEET TITLE

CONCRETE POST
ENLARGED PLANS 1 OF 2

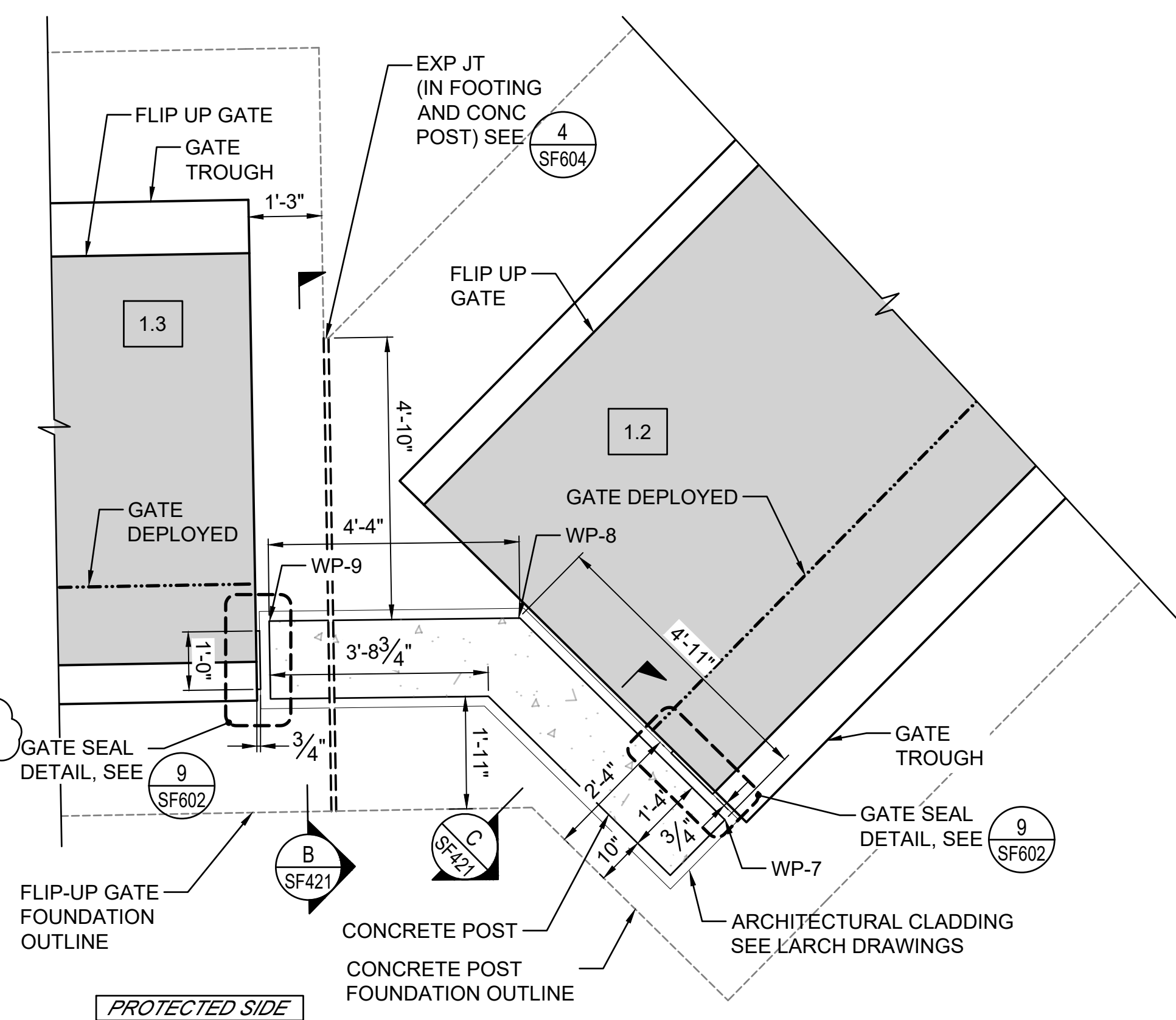
SHEET NUMBER

SF312

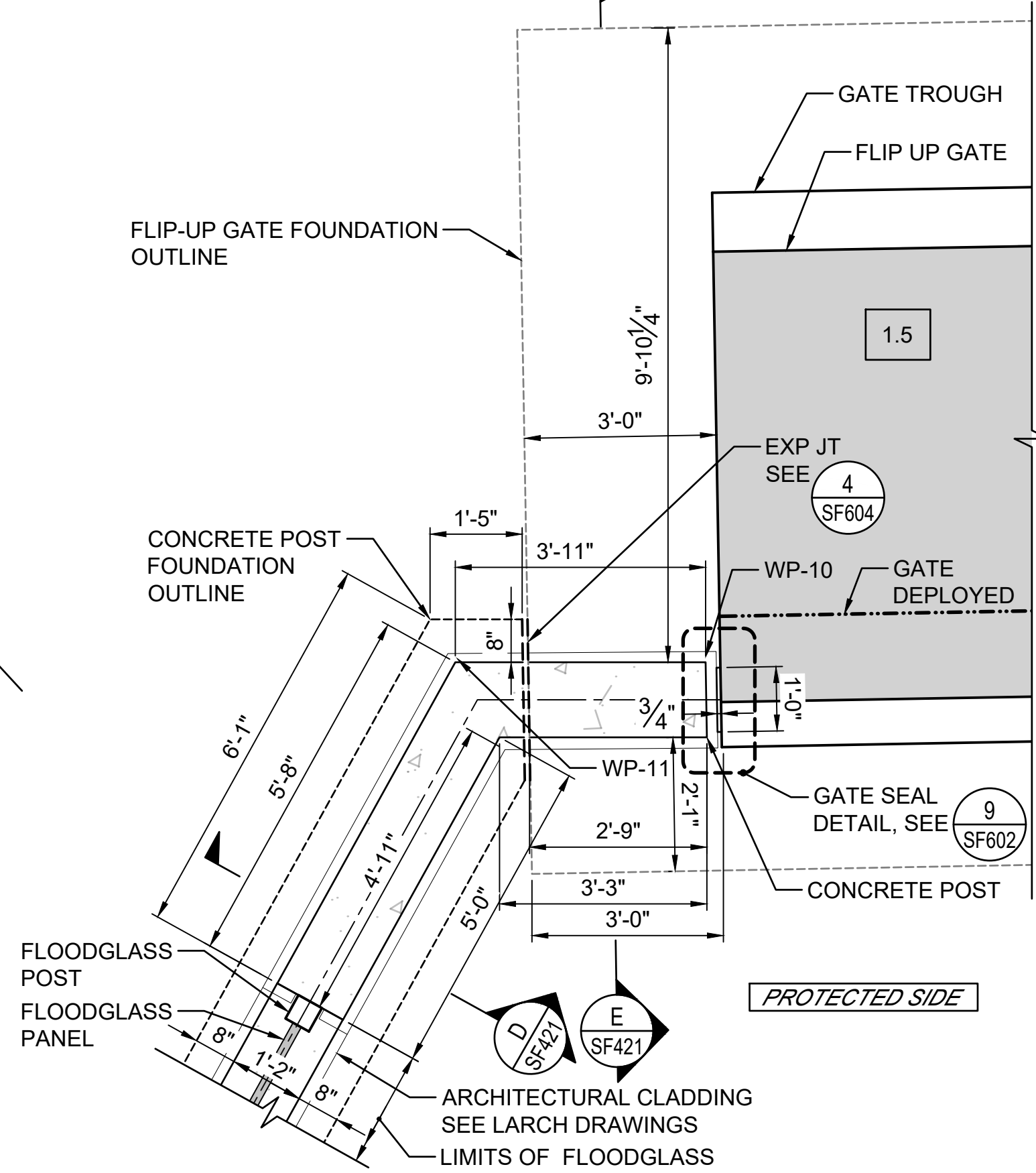
ANSI D 22" x 34"



1 POST 1 DETAIL AT WP6 (PACKAGE 2)
SF306 SCALE: 1/2" = 1'-0"

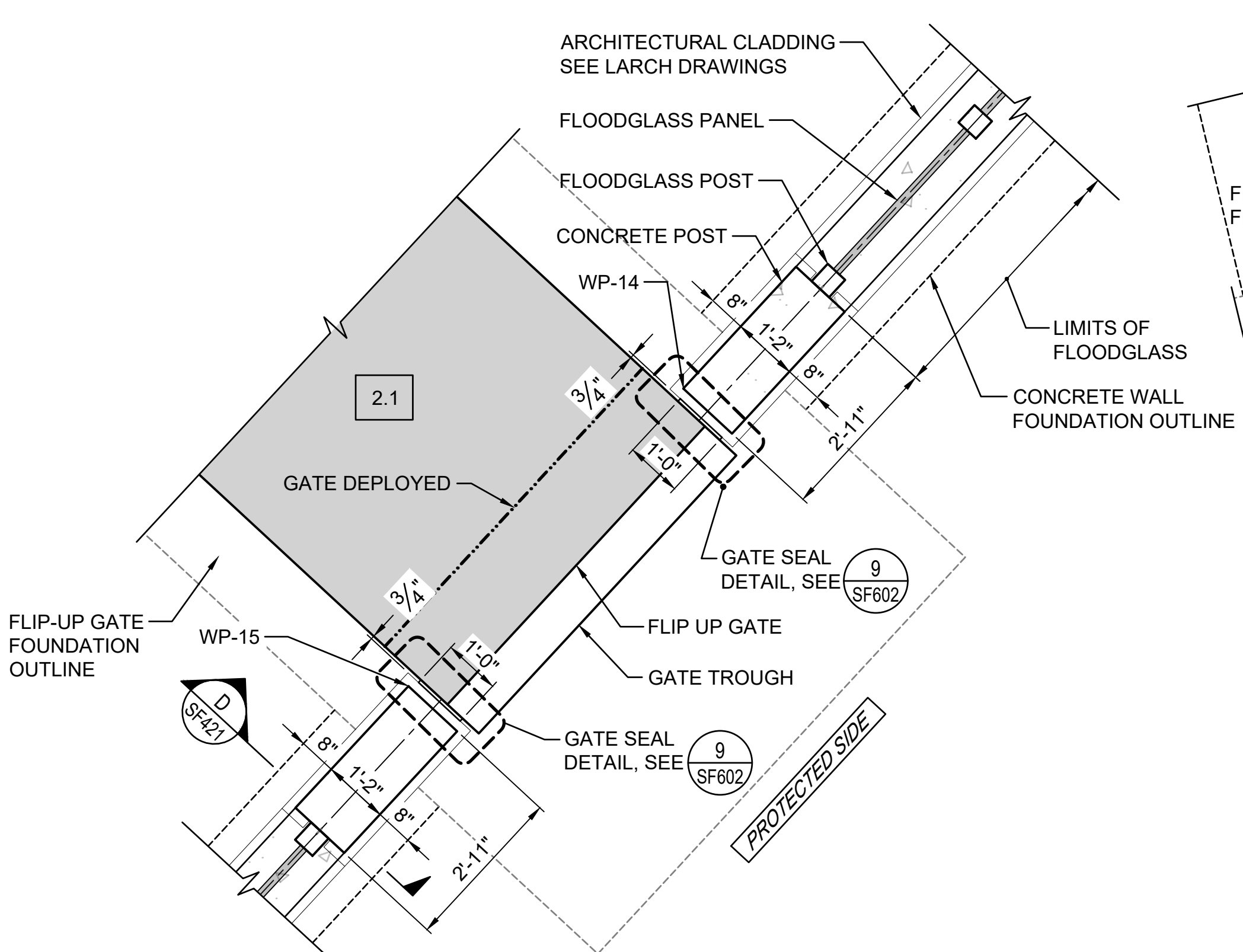


2 POST 2 DETAIL AT WP7 TO WP9 (PACKAGE 2)
SF306 SCALE: 1/2" = 1'-0"



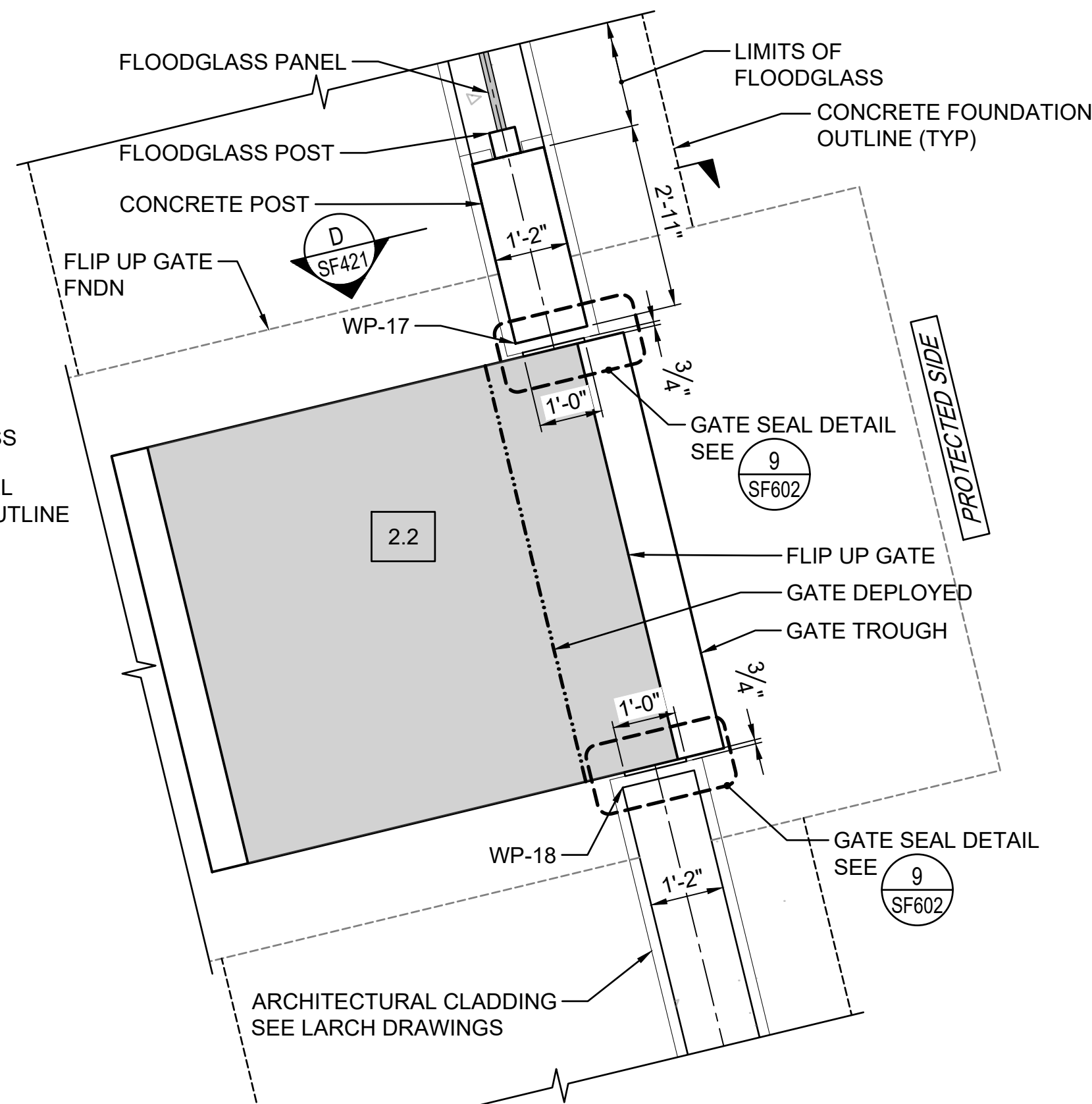
3 POST 3 DETAIL AT WP10 & WP11 (PACKAGE 2)
SF306 SCALE: 1/2" = 1'-0"

SF311



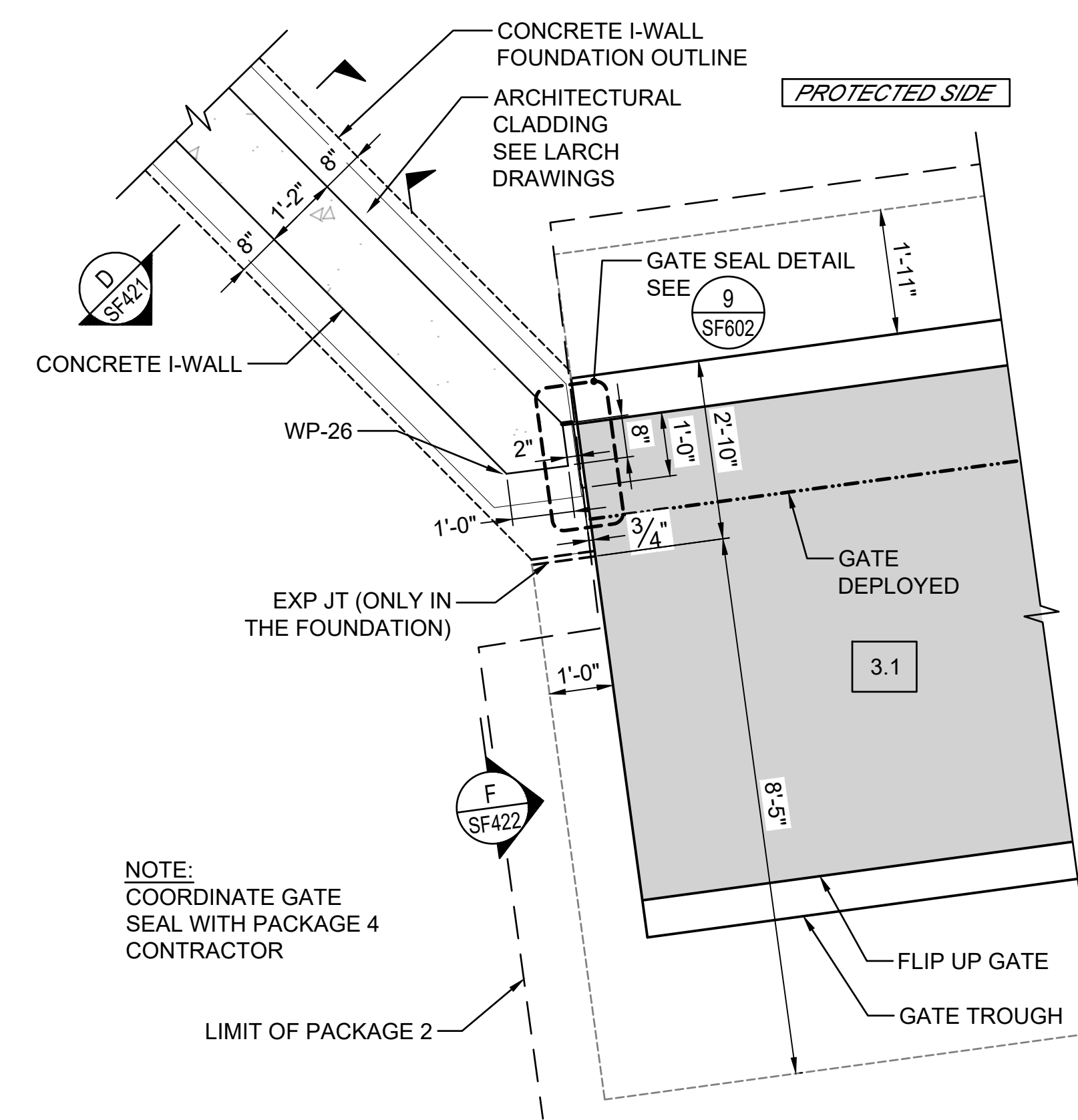
4 POST 4 DETAIL AT WP15 (PACKAGE 2)
SF307 SCALE: 1/2" = 1'-0"

SF311



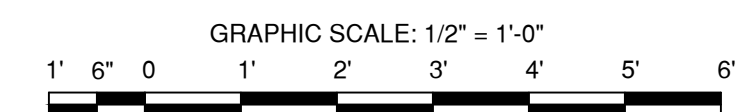
5 POST 4S (SIM) DETAIL AT WP17 (PACKAGE 2)
SF307 SCALE: 1/2" = 1'-0"

SF311

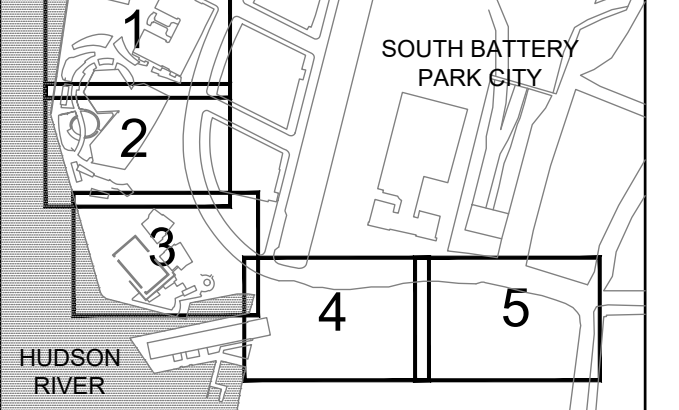


6 POST 5 DETAIL AT WP26 (PACKAGE 2 AND 4)
SF308 SCALE: 1/2" = 1'-0"

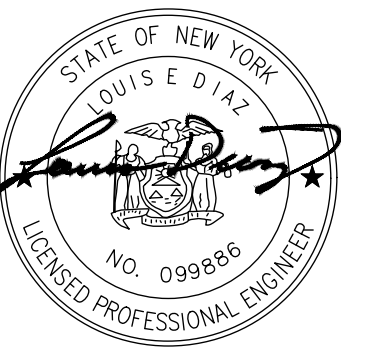
SF311



Last saved by: LIZANO (2022-06-15) Last Printed: 2022-06-15
Filename: C:\TEMP\WORK\RES\2022\2022_SF312_1.dwg



REGISTRATION



ISSUE/REVISION

NO.	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS
1/R	JAN 2022	BID SET
I/R	DATE	DESCRIPTION

Designed By: L. DIAZ
Drawn By: F. LIZANO
Checked By: M. GONSKI
Approved By: J. CAREL

PROJECT/TERM CONTRACT NUMBER

Contract No. 18-2586

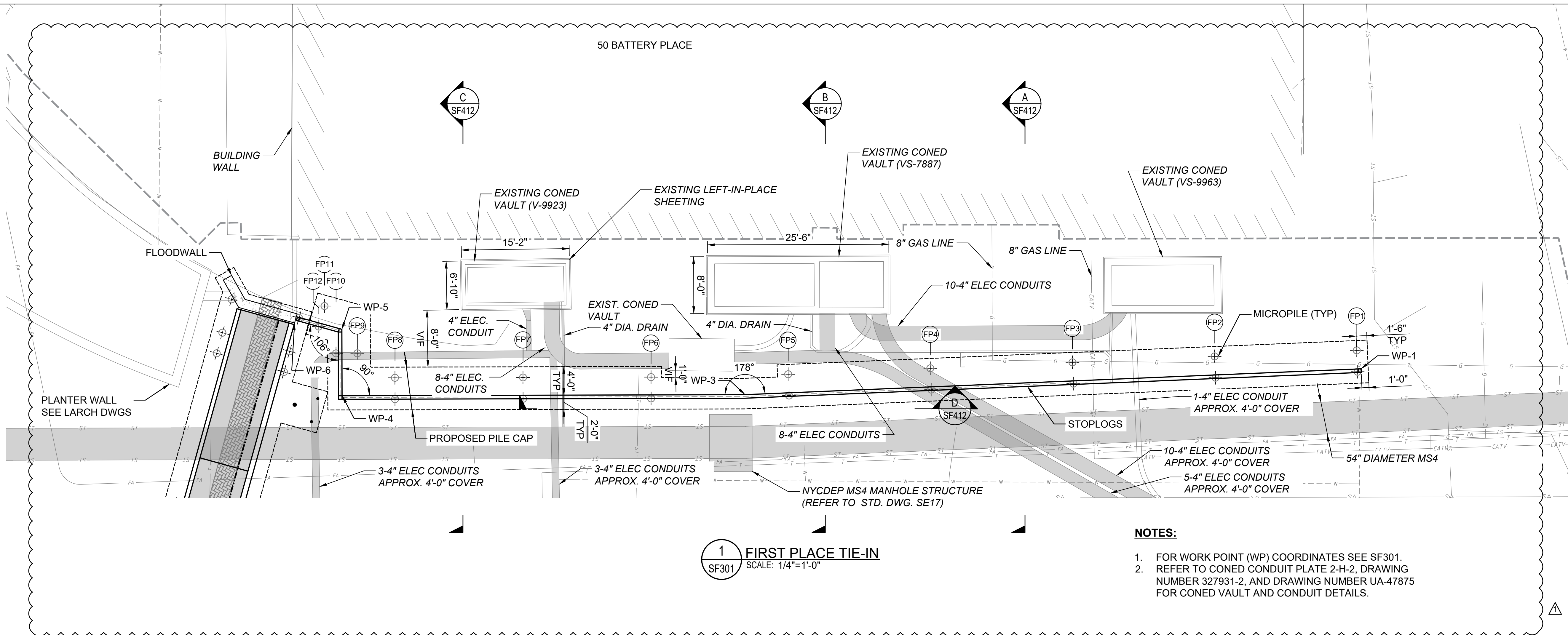
SHEET TITLE

ENLARGED PLANS -
FIRST PLACE AND MJH

SHEET NUMBER

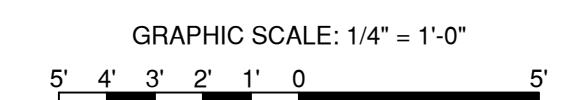
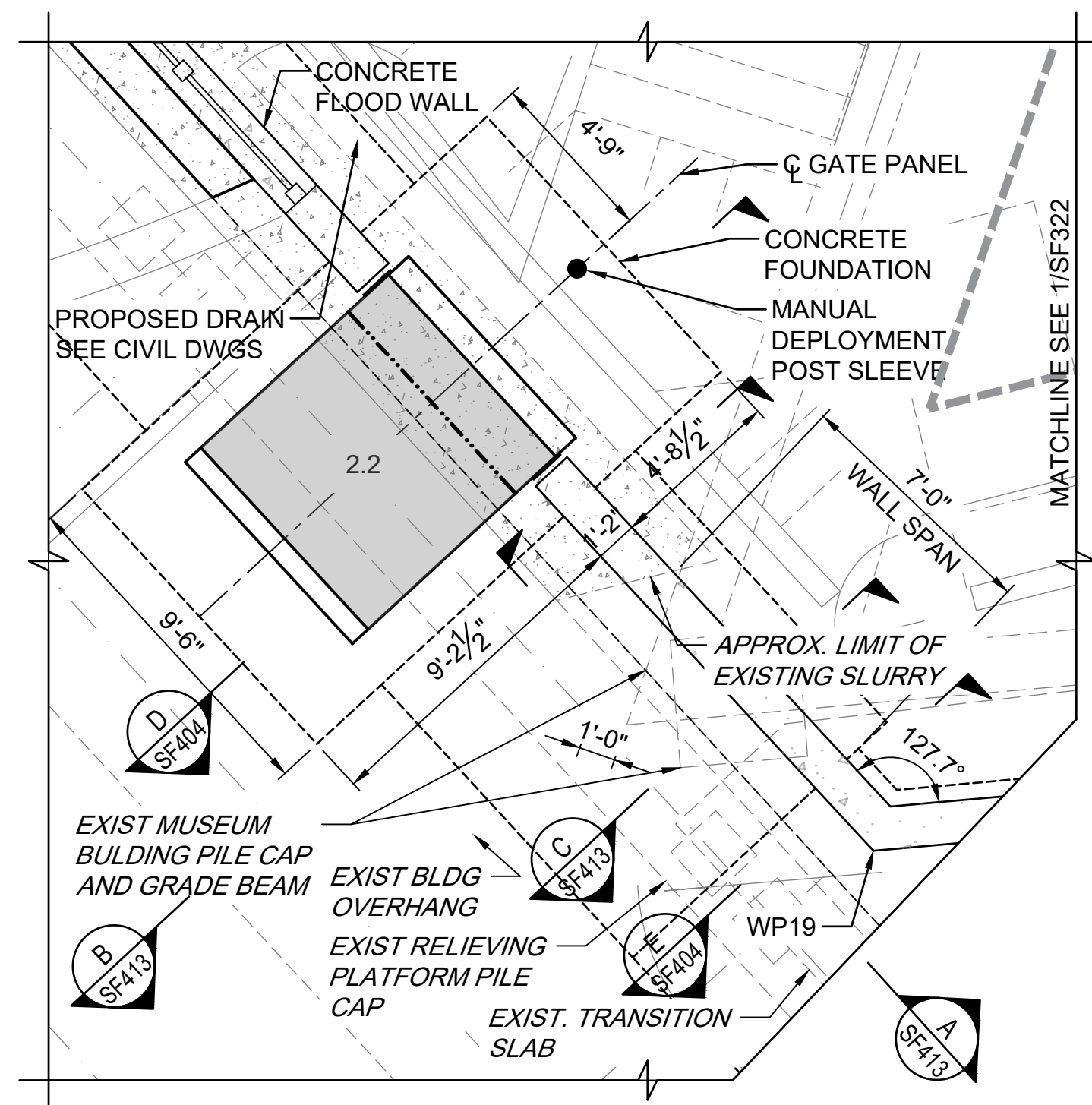
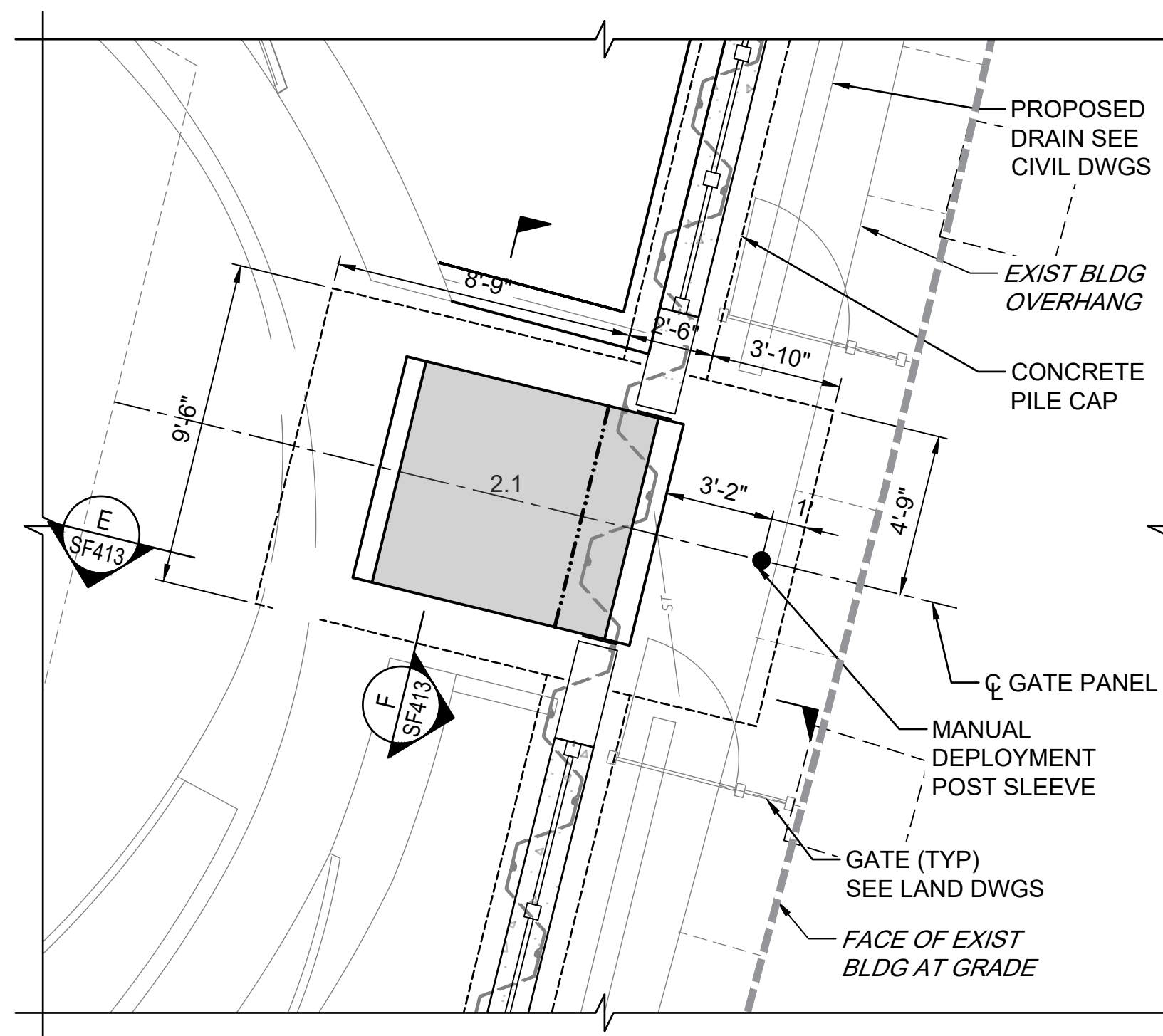
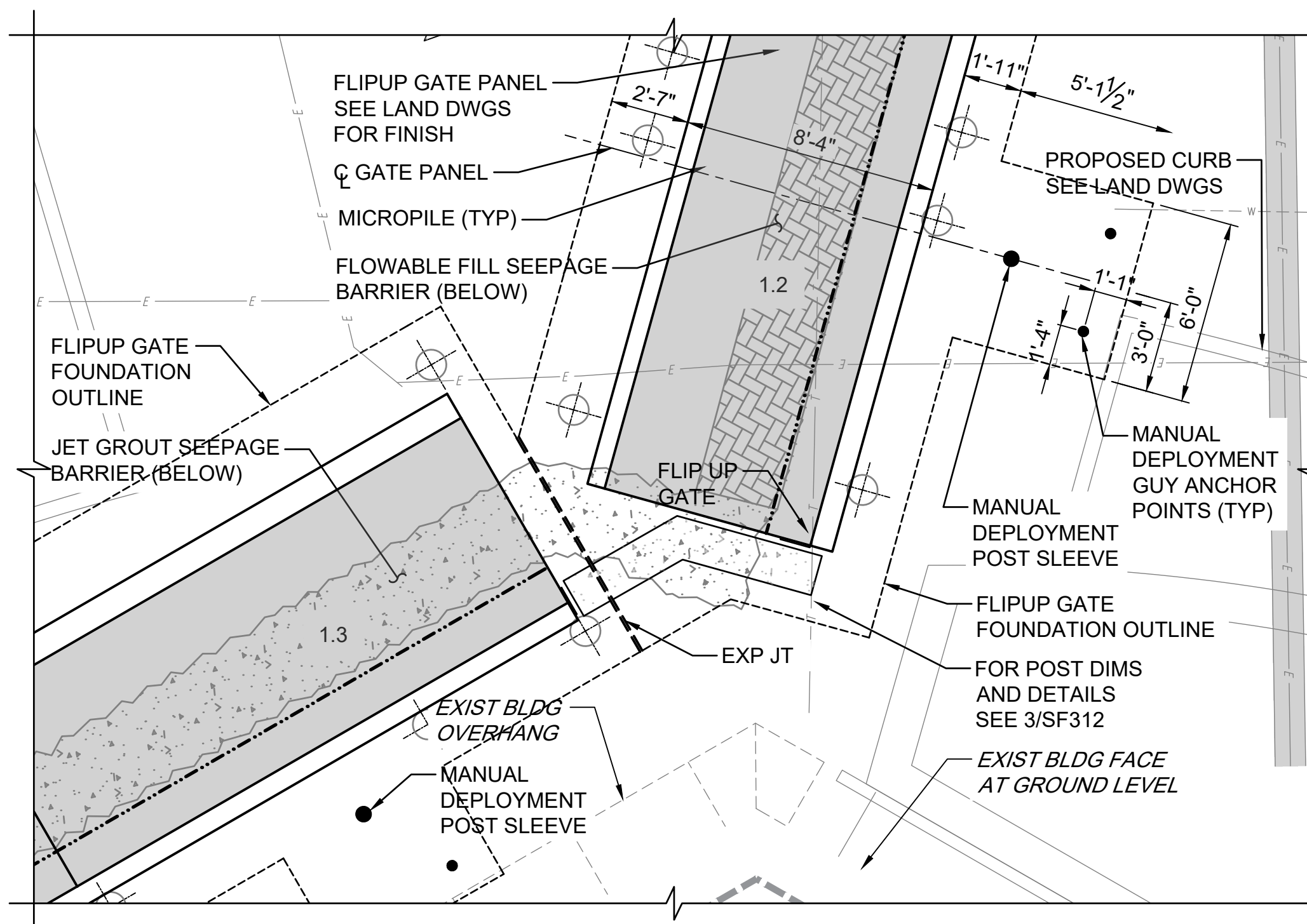
SF321

ANSI D 22" x 34"

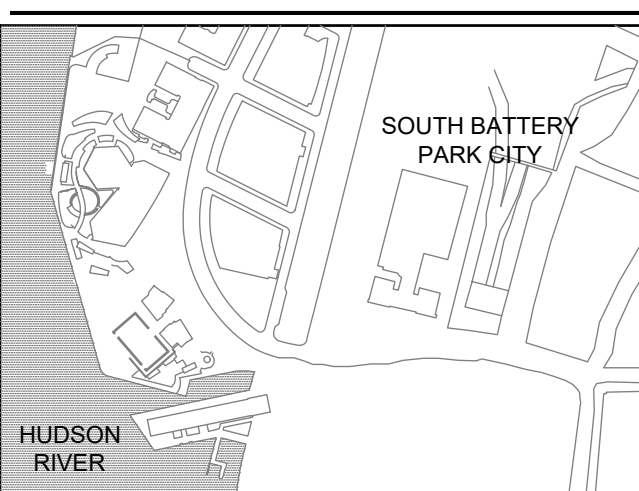


NOTES:

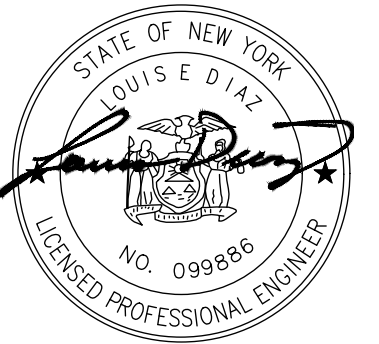
- FOR WORK POINT (WP) COORDINATES SEE SF301.
- REFER TO CONED CONDUIT PLATE 2-H-2, DRAWING NUMBER 327931-2, AND DRAWING NUMBER UA-47875 FOR CONED VAULT AND CONDUIT DETAILS.



Last saved by: LOUIS DIAZ (2022-06-23) File name: C:\P\WORK\AECOM\SF321\181.DWG



REGISTRATION



ISSUE/REVISION

NO.	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS
1	JAN 2022	BID SET
I/R	DATE	DESCRIPTION

Designed By: L.DIAZ
Drawn By: F.LIZANO
Checked By: M.GONSKI
Approved By: J.CAREL

PROJECT/TERM CONTRACT NUMBER

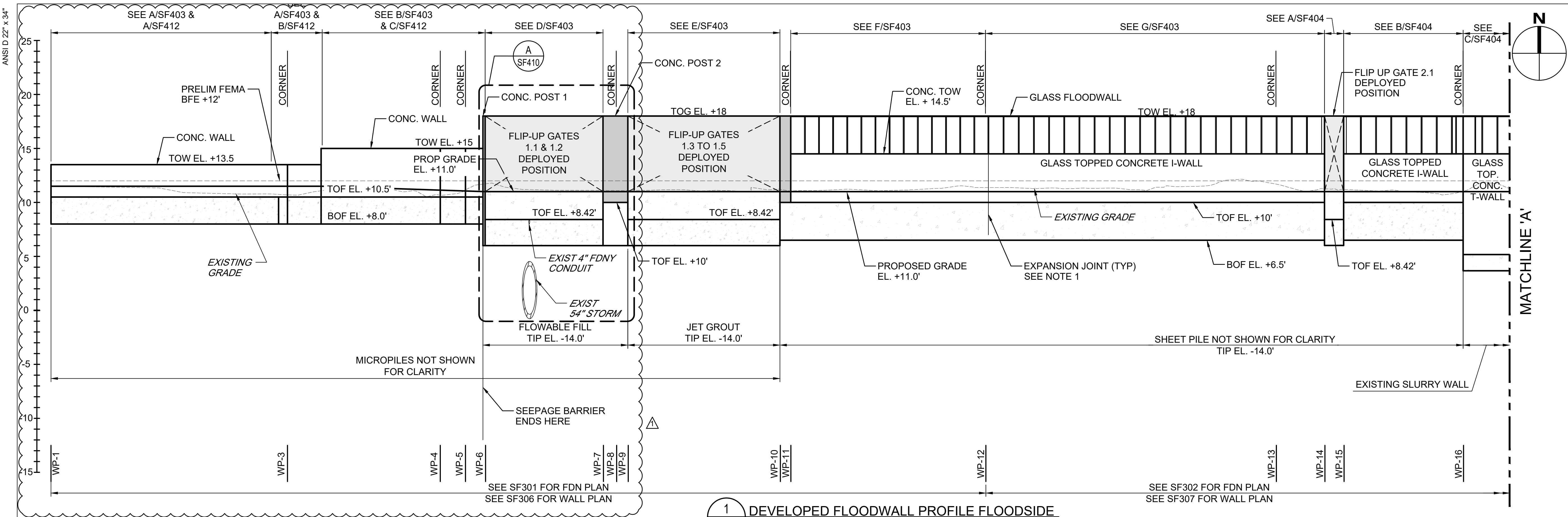
Contract No. 18-2586

SHEET TITLE

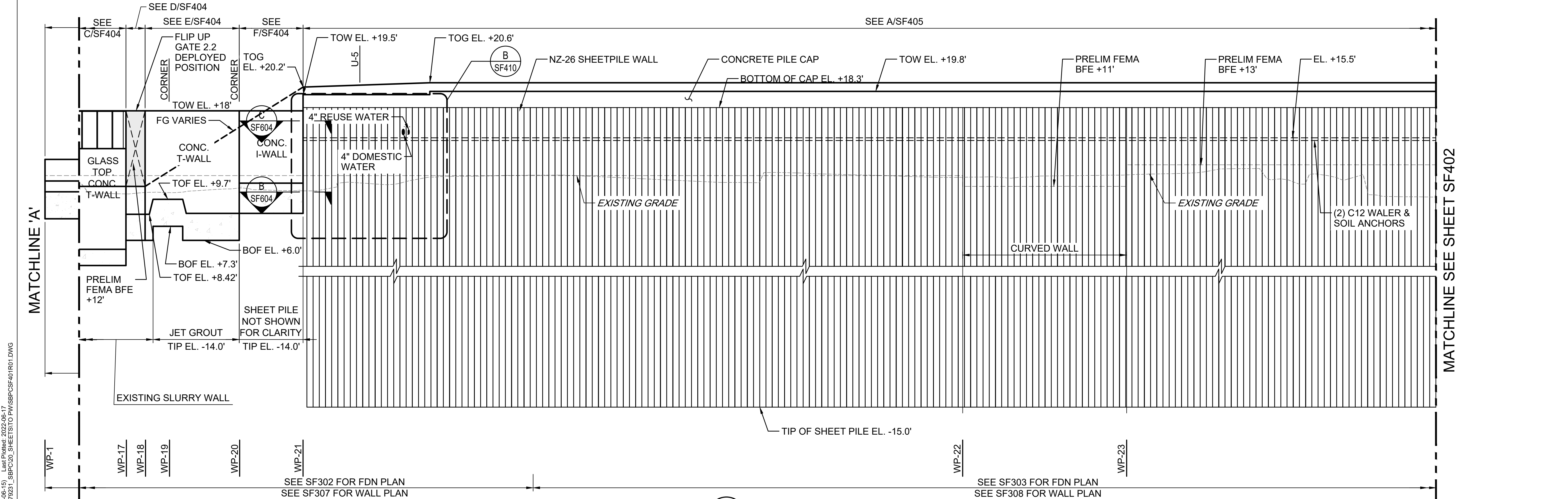
FLOODWALL PROFILE 1 OF 2

SHEET NUMBER

SF401



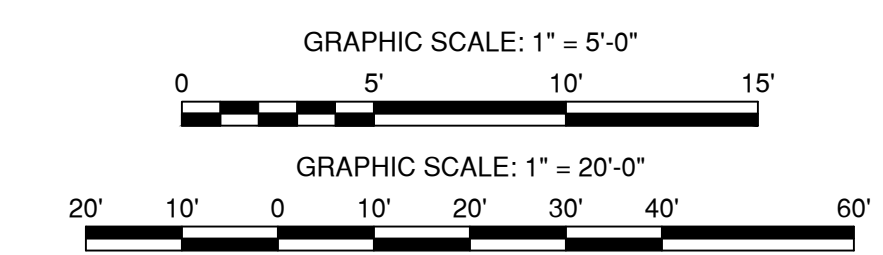
1 DEVELOPED FLOODWALL PROFILE FLOODSIDE
SF401 SCALE: HORIZONTAL: 1"=20'
VERTICAL: 1"=5'



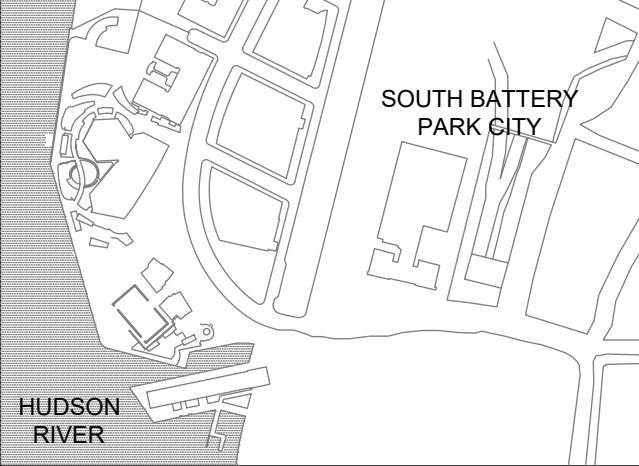
2 DEVELOPED FLOODWALL PROFILE FLOODSIDE
SF401 SCALE: HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

NOTES:

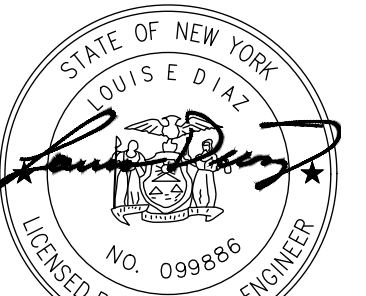
- EXPANSION JOINTS TO BE LOCATED AT ALL LOCATIONS NOTED, ALL CORNERS AND MAXIMUM 40'-0" O.C., UNLESS NOTED OTHERWISE. FOR I-WALL EXPANSION JOINT DETAIL, SEE DETAIL 2 ON SF604.
- SEE SF306-SF310 FOR WP LOCATIONS



Last saved by: LOUIS DIAZ (2022-06-15) | Last Printed: 2022-06-17 | Filename: C:\TEMP\WORK\2022\2022_SF401_SHEET\SF401R01.DWG



REGISTRATION



ISSUE/REVISION

NO.	DATE	DESCRIPTION
1	JUNE 2022	FIRST PLACE REVISIONS
1	JAN 2022	BID SET
I/R	DATE	DESCRIPTION

Designed By: L.DIAZ
Drawn By: F.LIZANO
Checked By: M.GONSKI
Approved By: J.CAREL

PROJECT/TERM CONTRACT NUMBER

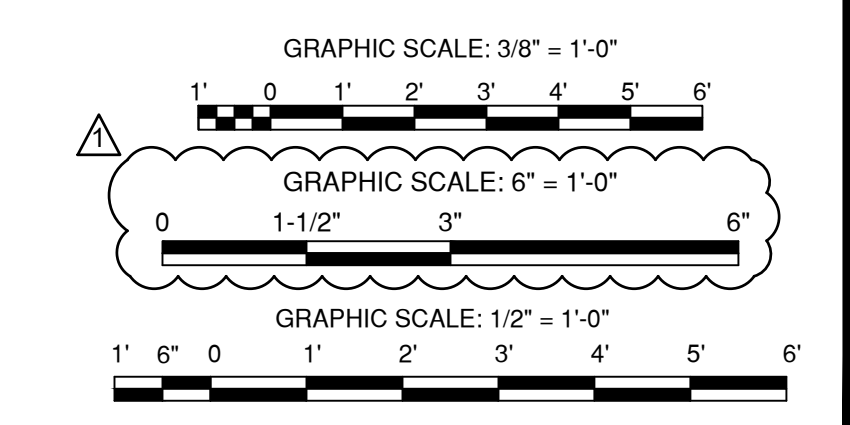
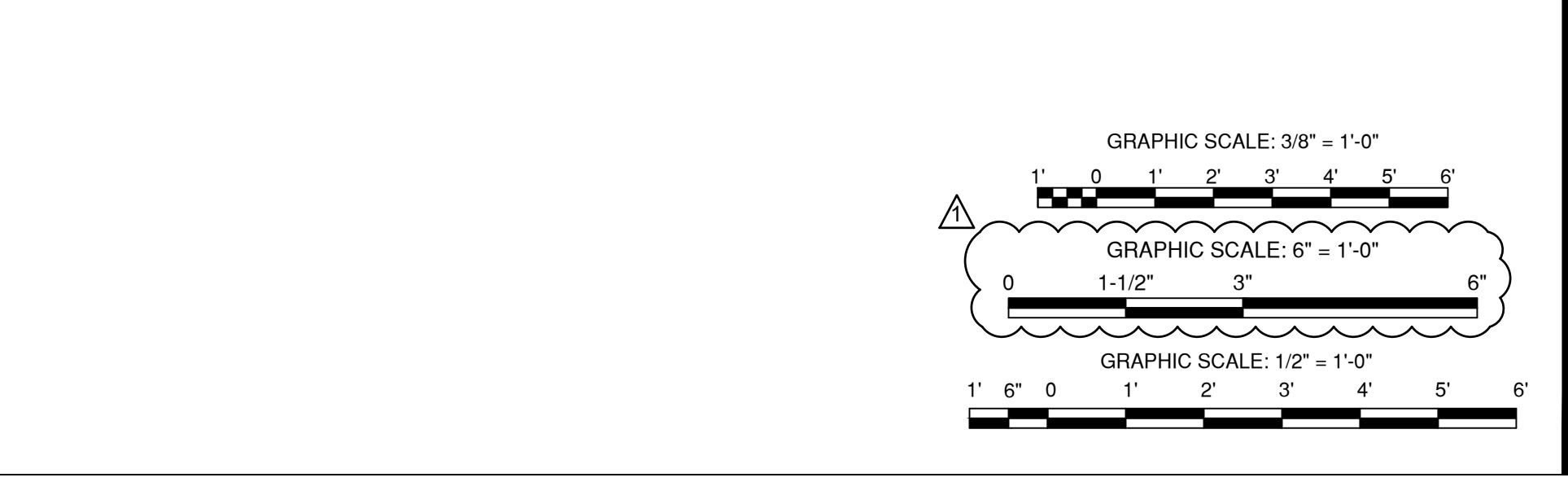
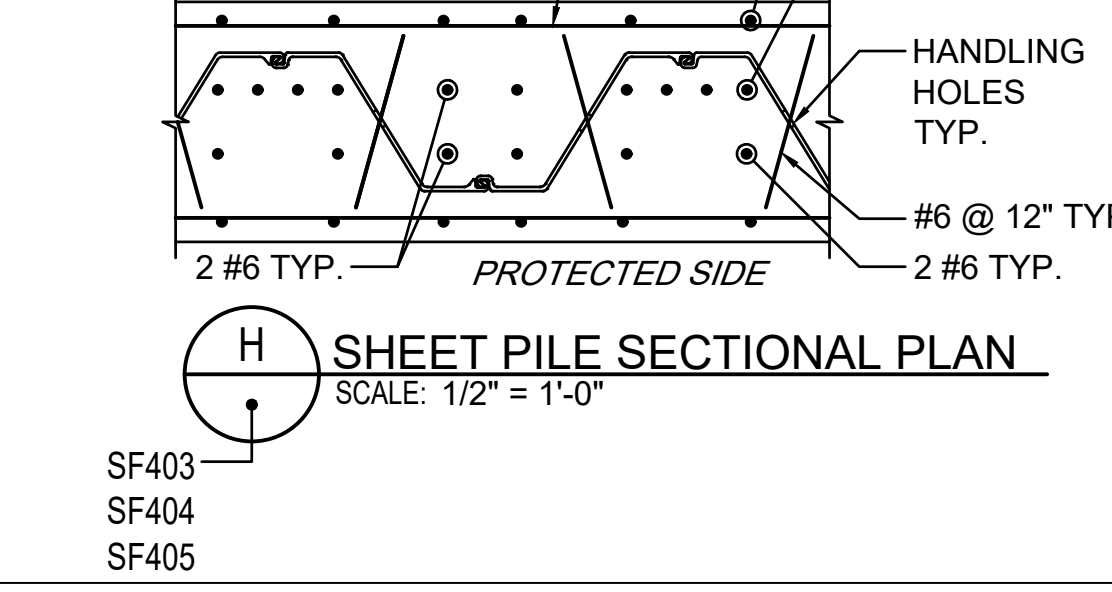
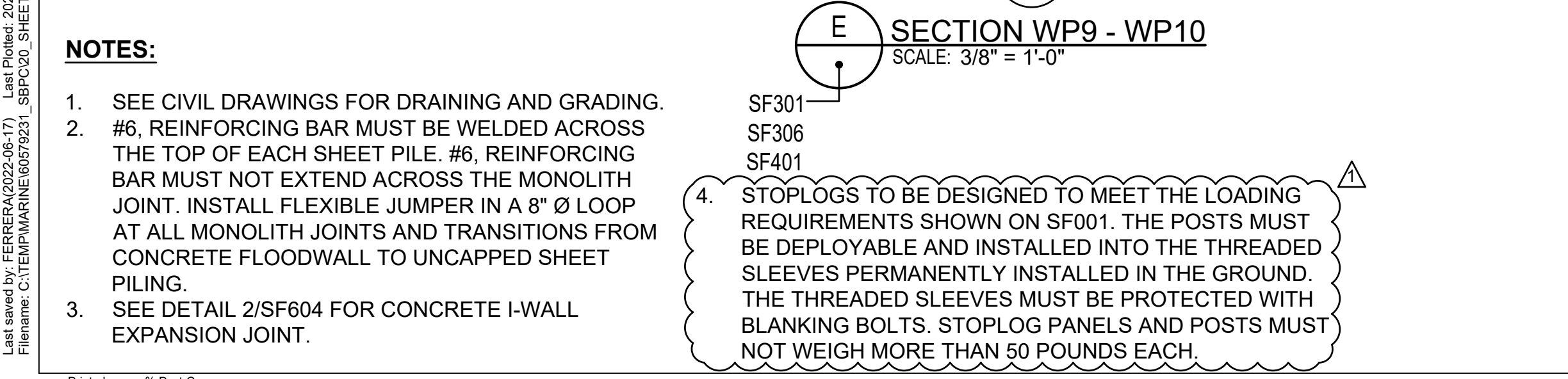
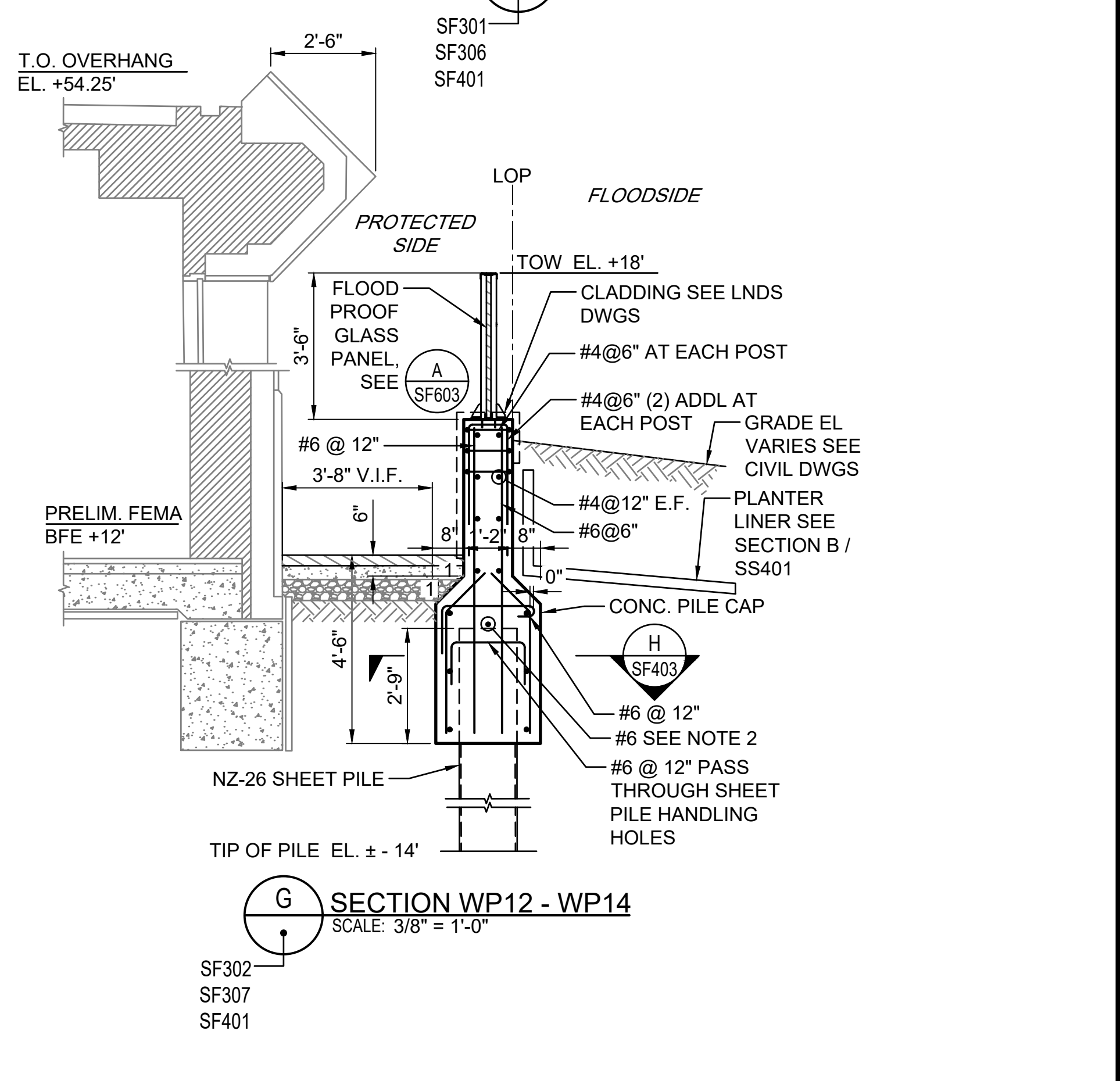
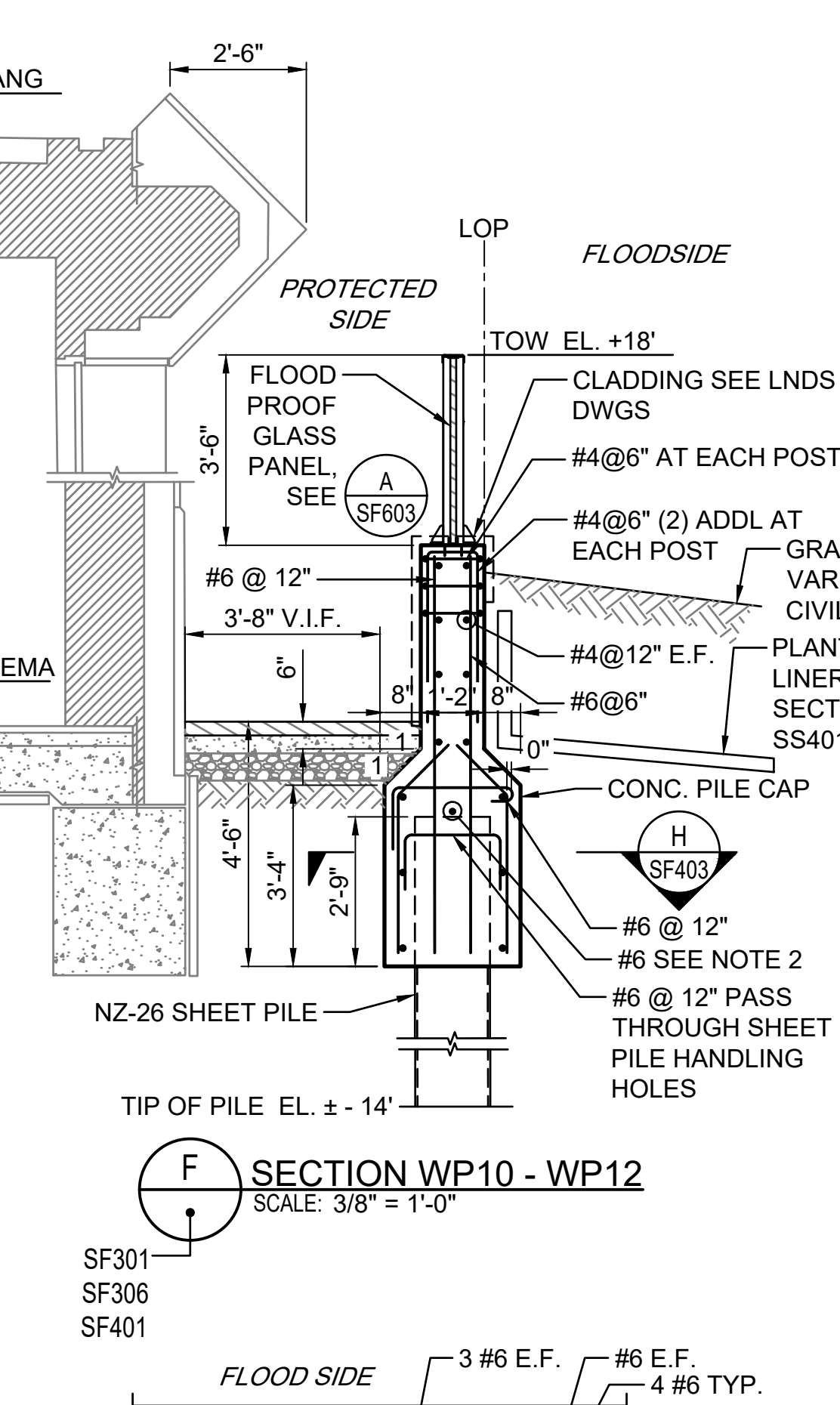
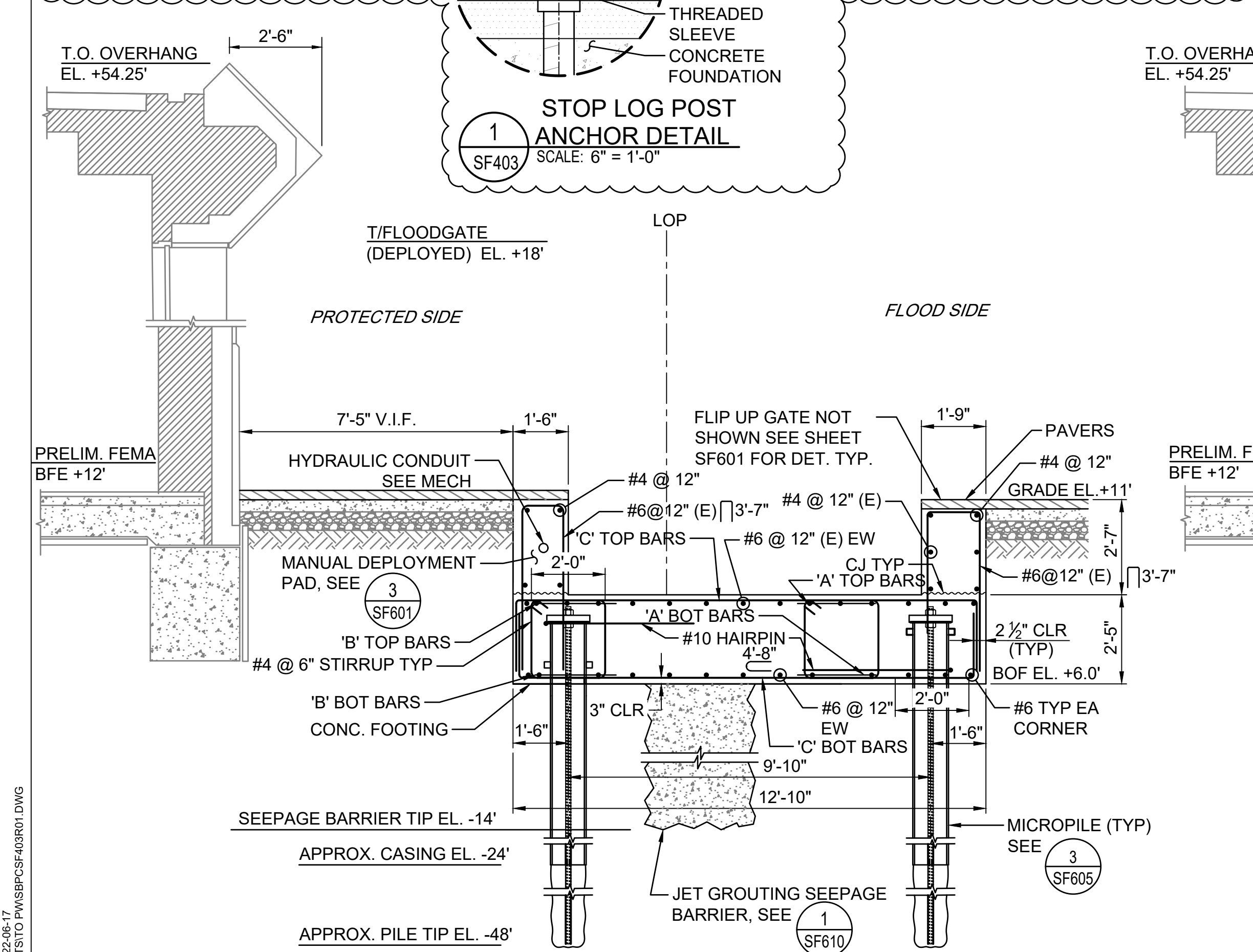
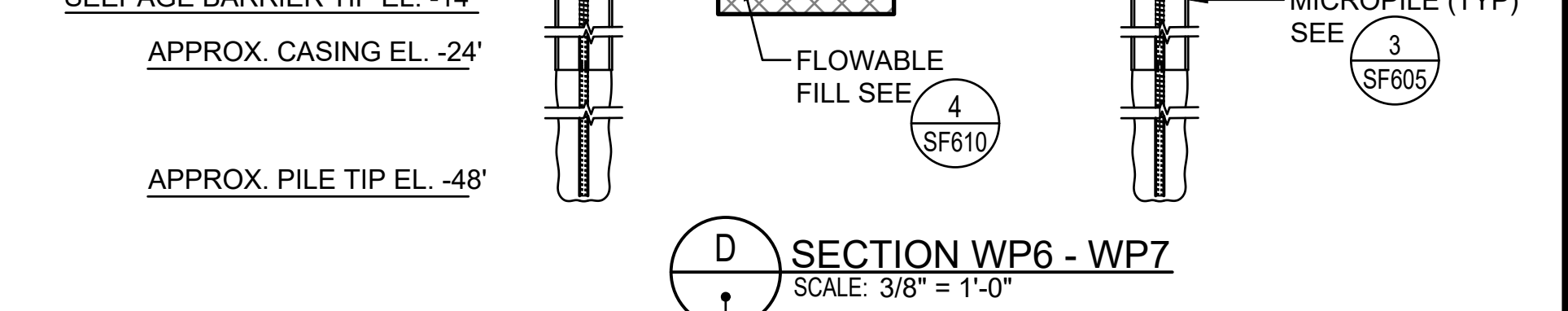
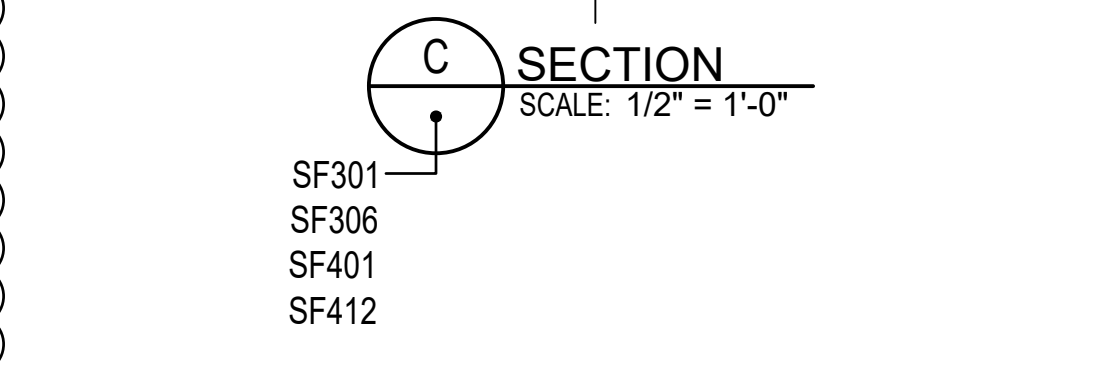
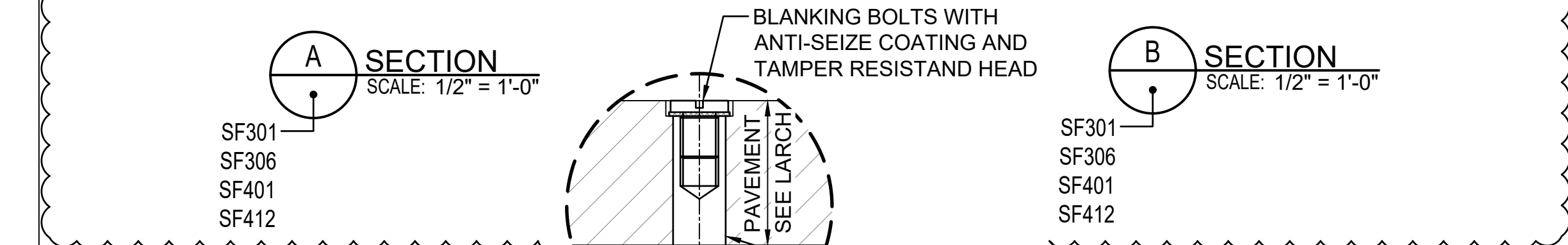
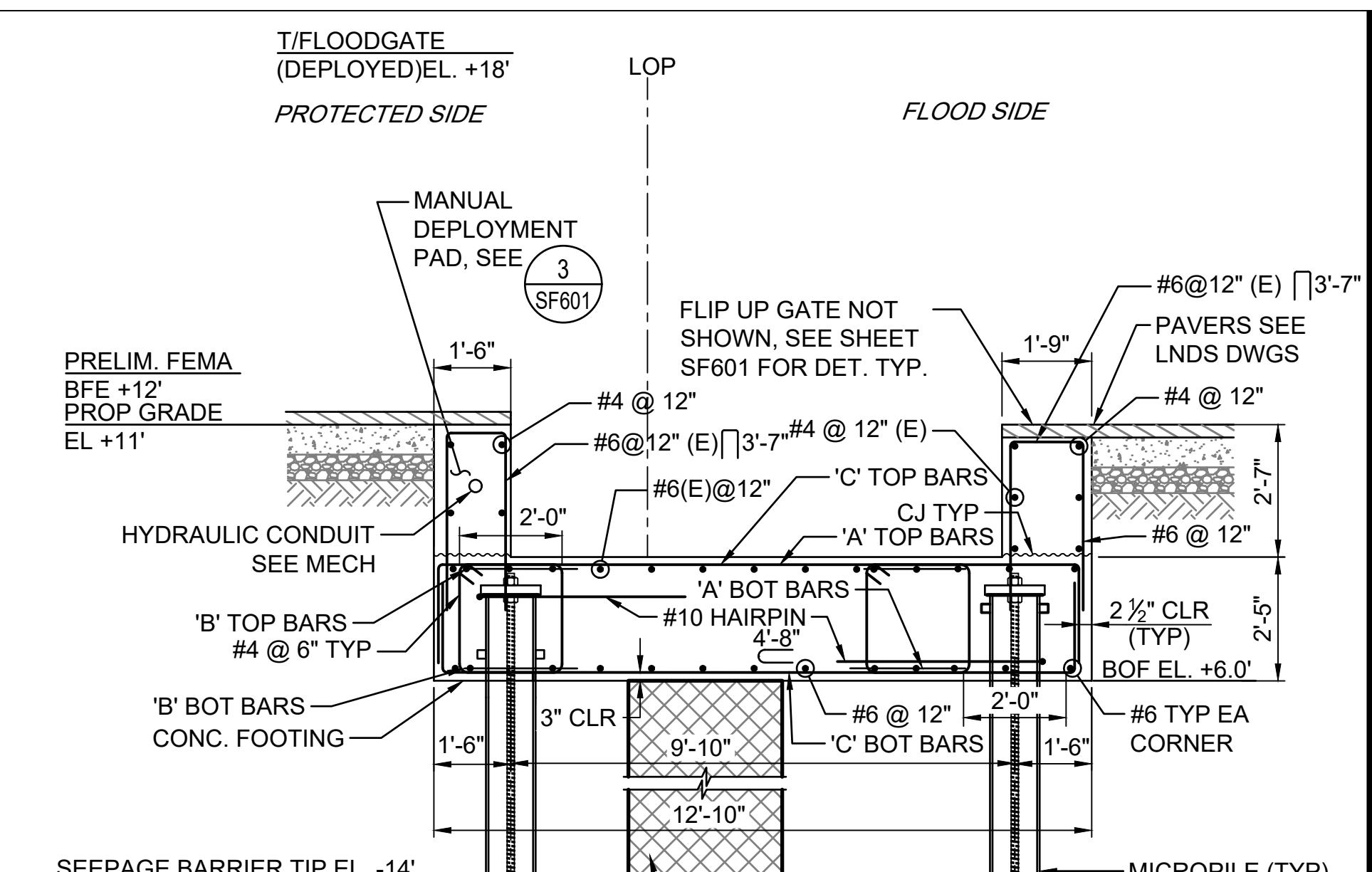
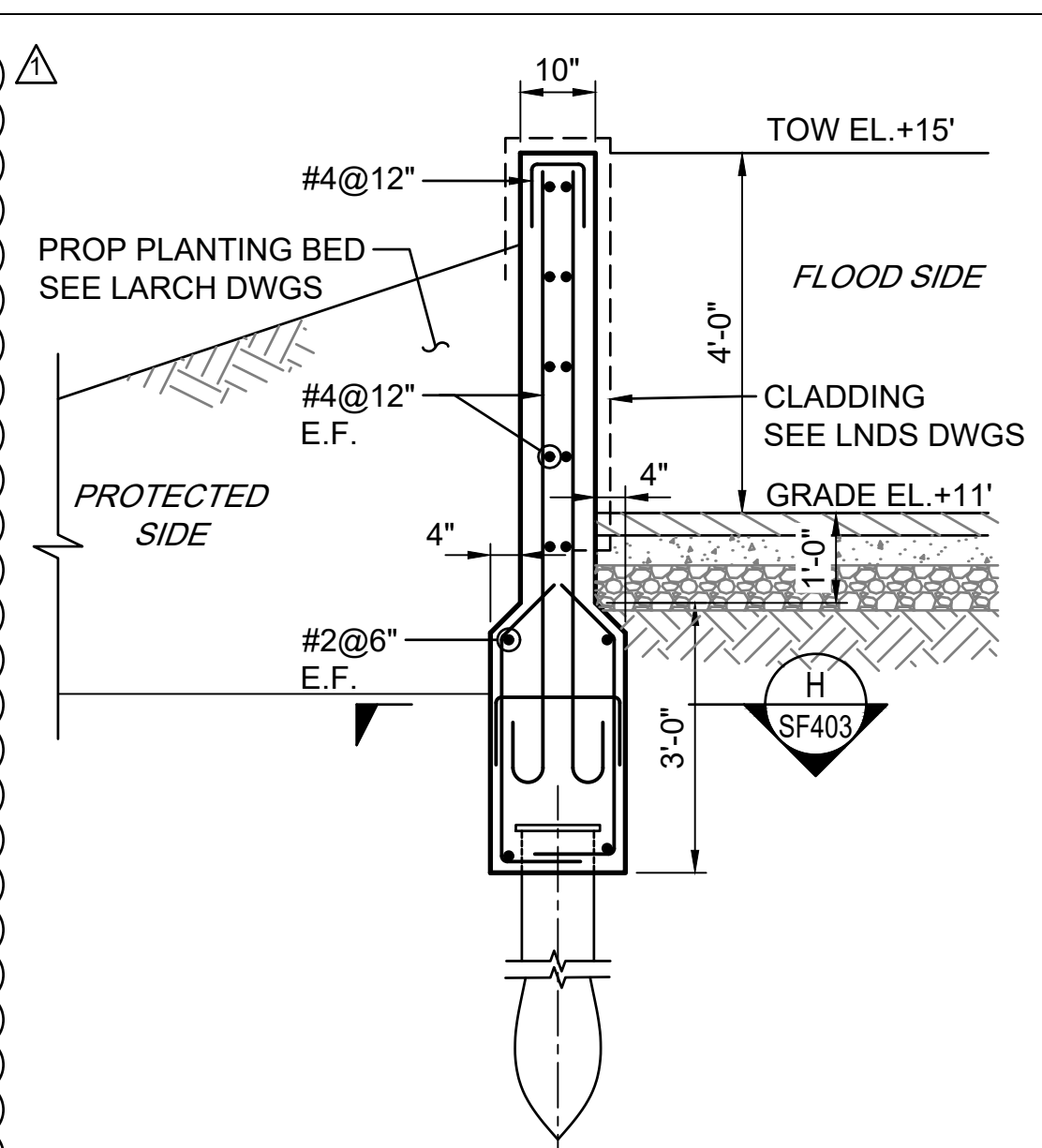
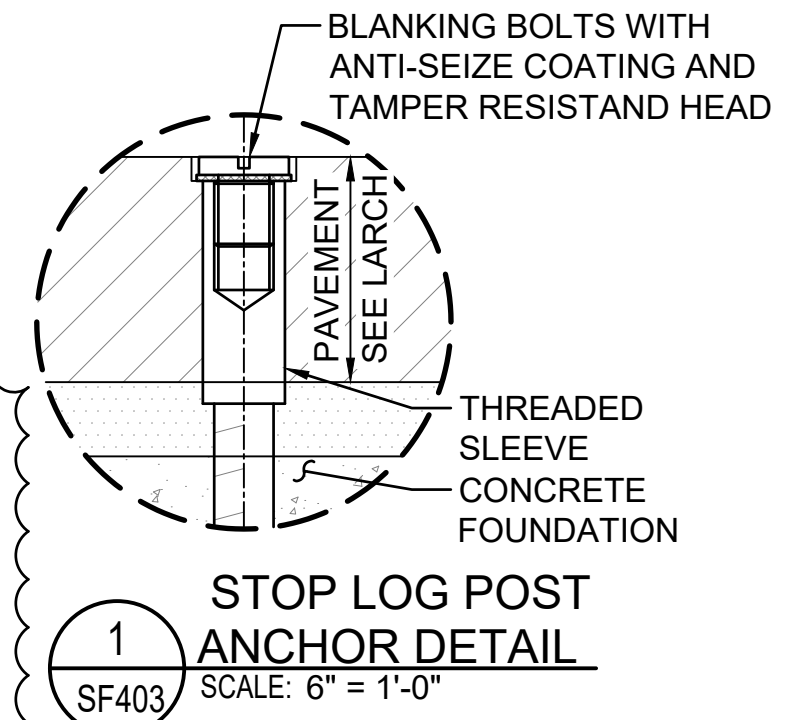
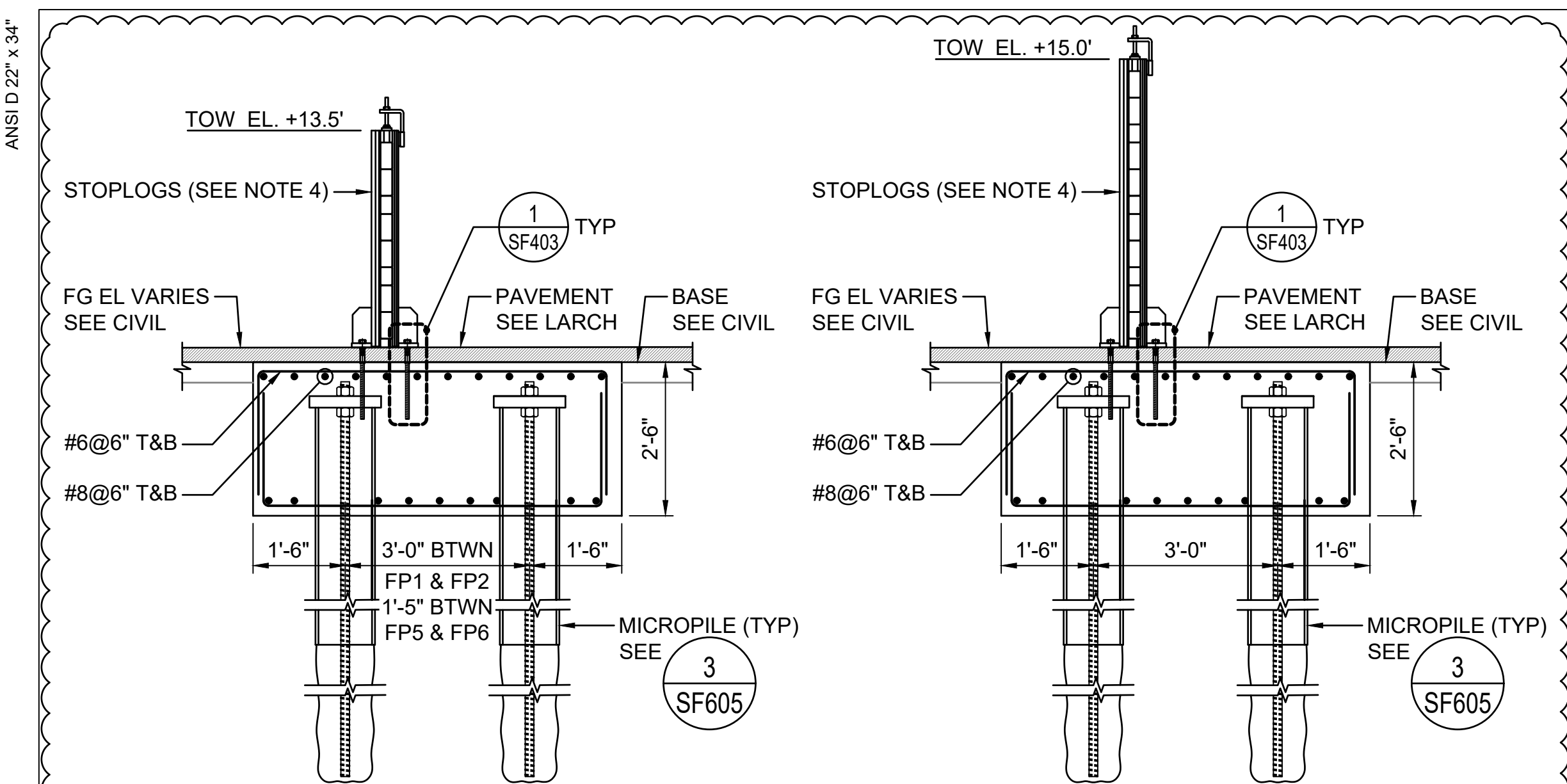
Contract No. 18-2586

SHEET TITLE

FLOODWALL SECTIONS 1 OF 4

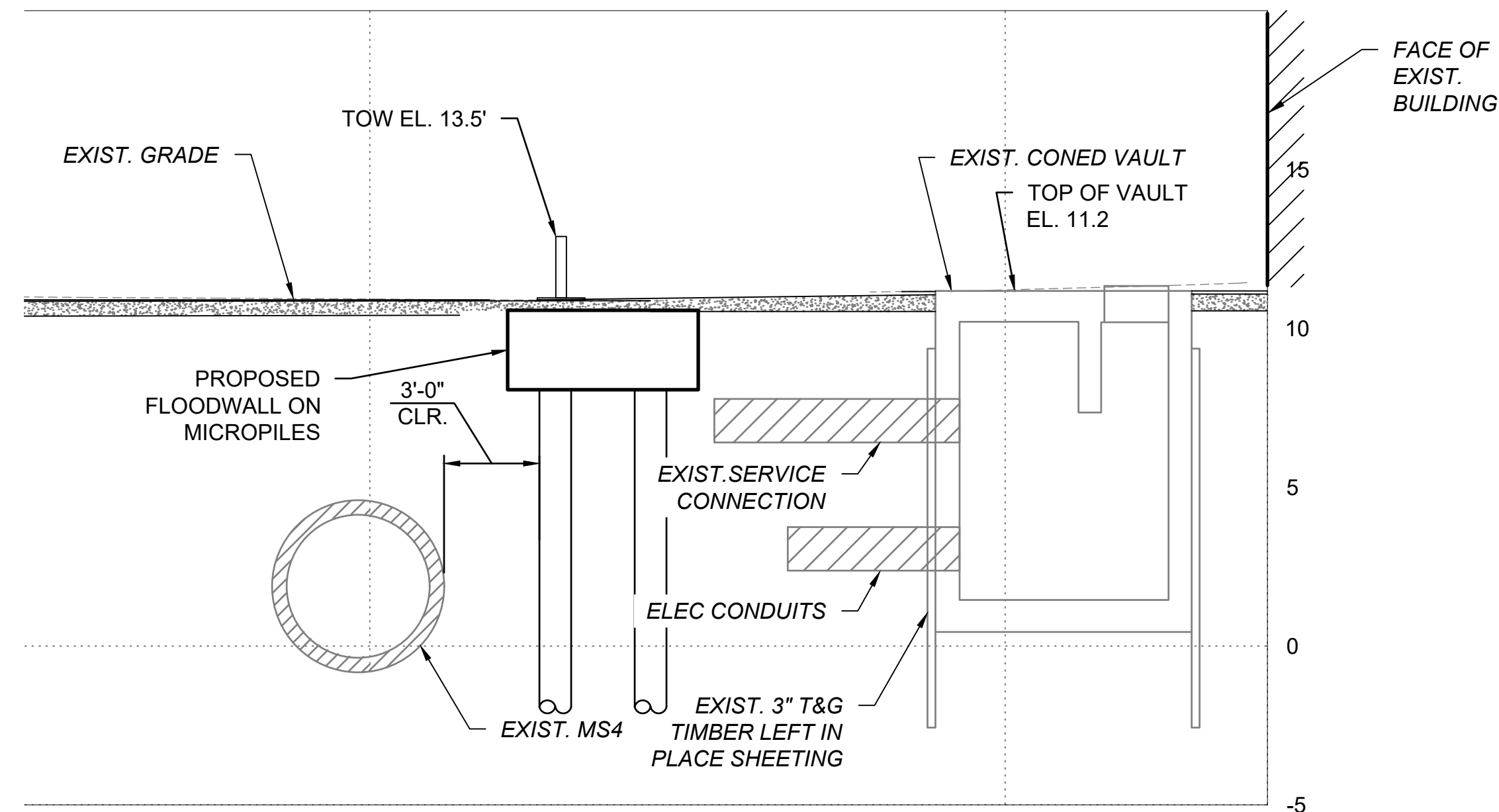
SHEET NUMBER

SF403



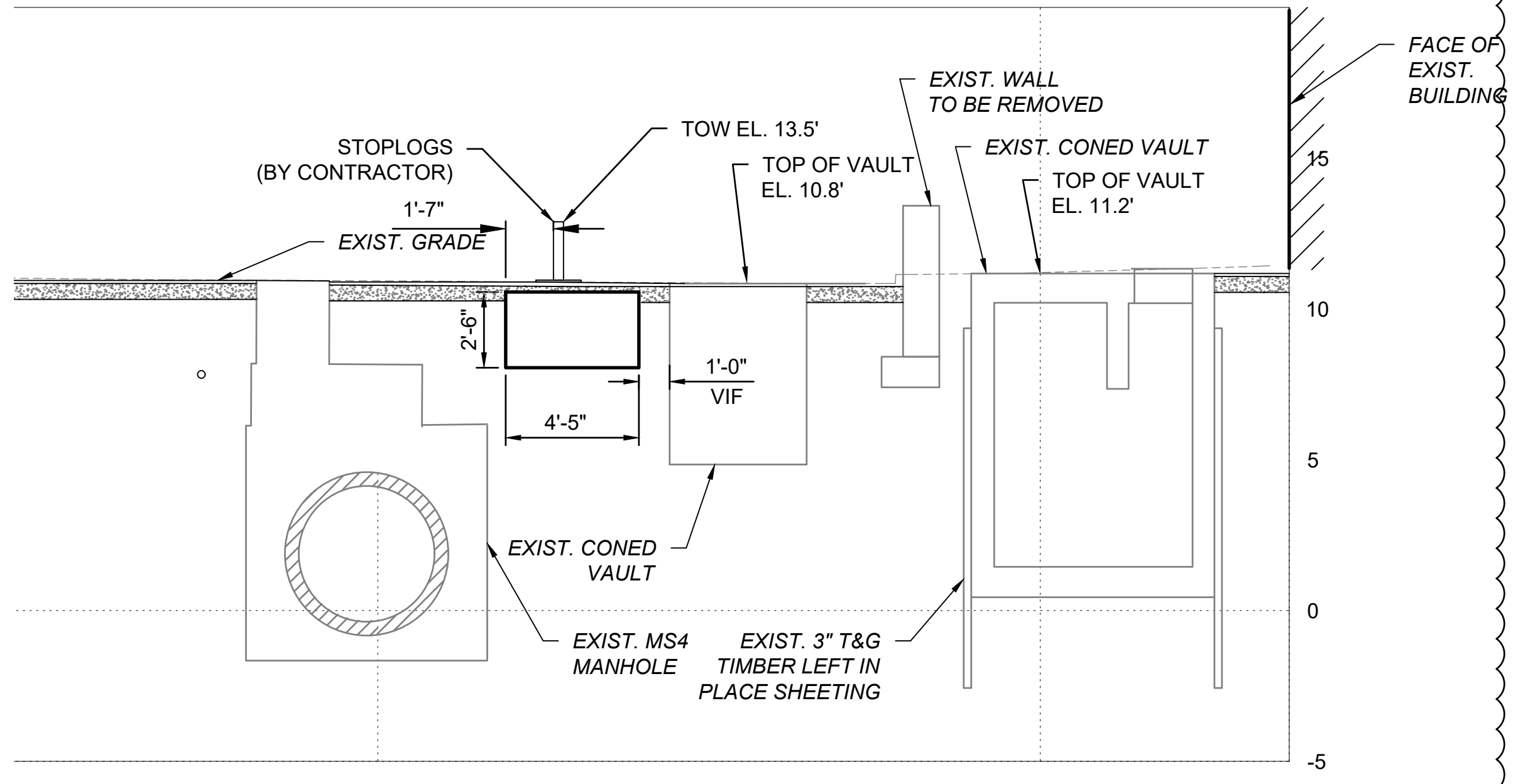
- NOTES:**
- SEE CIVIL DRAWINGS FOR DRAINING AND GRADING.
 - #6 REINFORCING BAR MUST BE WELDED ACROSS THE TOP OF EACH SHEET PILE. #6 REINFORCING BAR MUST NOT EXTEND ACROSS THE MONOLITH JOINT. INSTALL FLEXIBLE JUMPER IN A 8" Ø LOOP AT ALL MONOLITH JOINTS AND TRANSITIONS FROM CONCRETE FLOODWALL TO UNCAPPED SHEET PILING.
 - SEE DETAIL 2/SF604 FOR CONCRETE I-WALL EXPANSION JOINT.
 - STOPLOGS TO BE DESIGNED TO MEET THE LOADING REQUIREMENTS SHOWN ON SF001. THE POSTS MUST BE DEPLOYABLE AND INSTALLED INTO THE THREADED SLEEVES PERMANENTLY INSTALLED IN THE GROUND. THE THREADED SLEEVES MUST BE PROTECTED WITH BLANKING BOLTS. STOPLOG PANELS AND POSTS MUST NOT WEIGH MORE THAN 50 POUNDS EACH.

ANSI D 22" x 34"



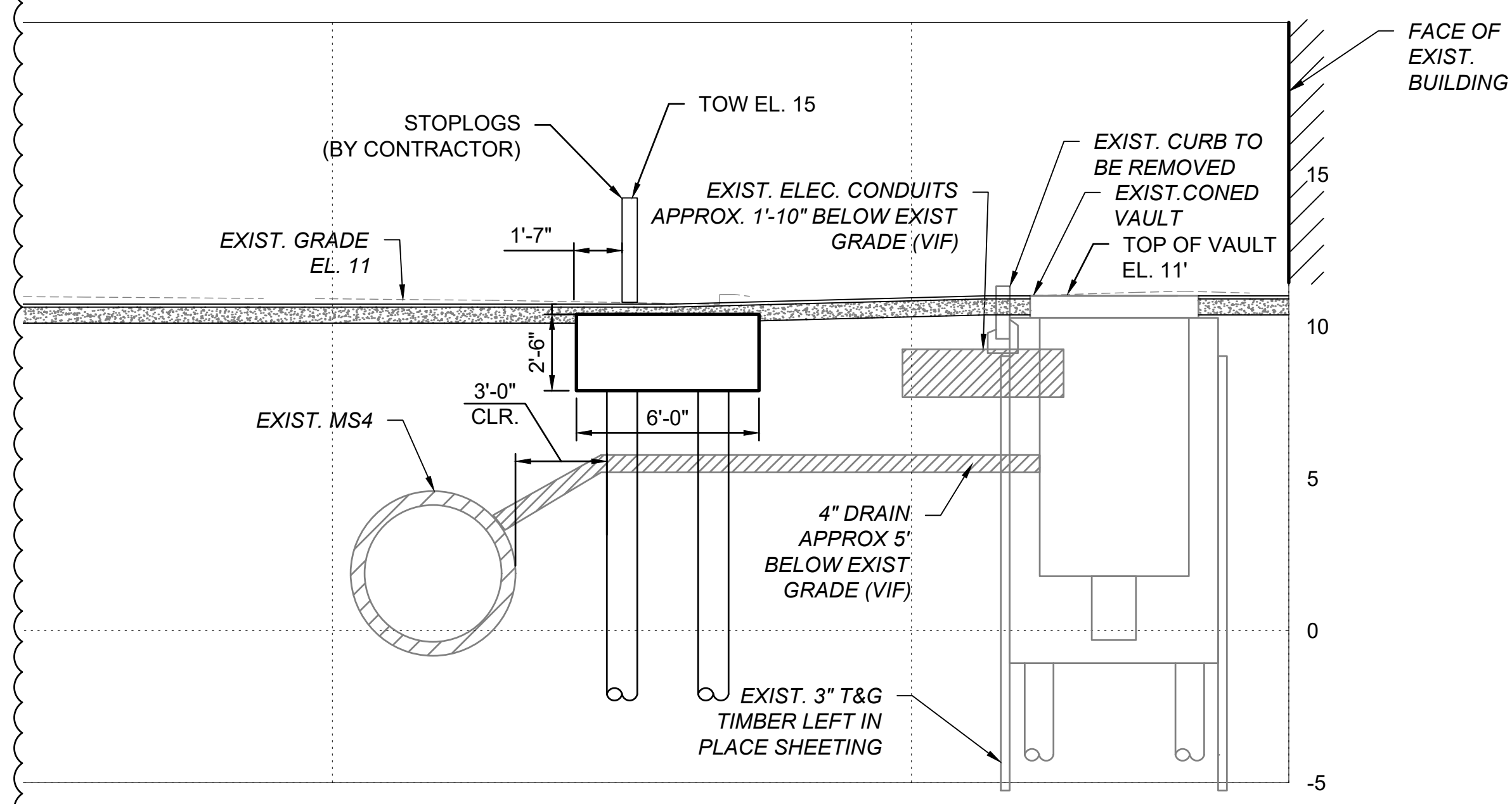
A FIRST PLACE FIXED WALL
SCALE: 1/4" = 1'-0"

SF301
SF321



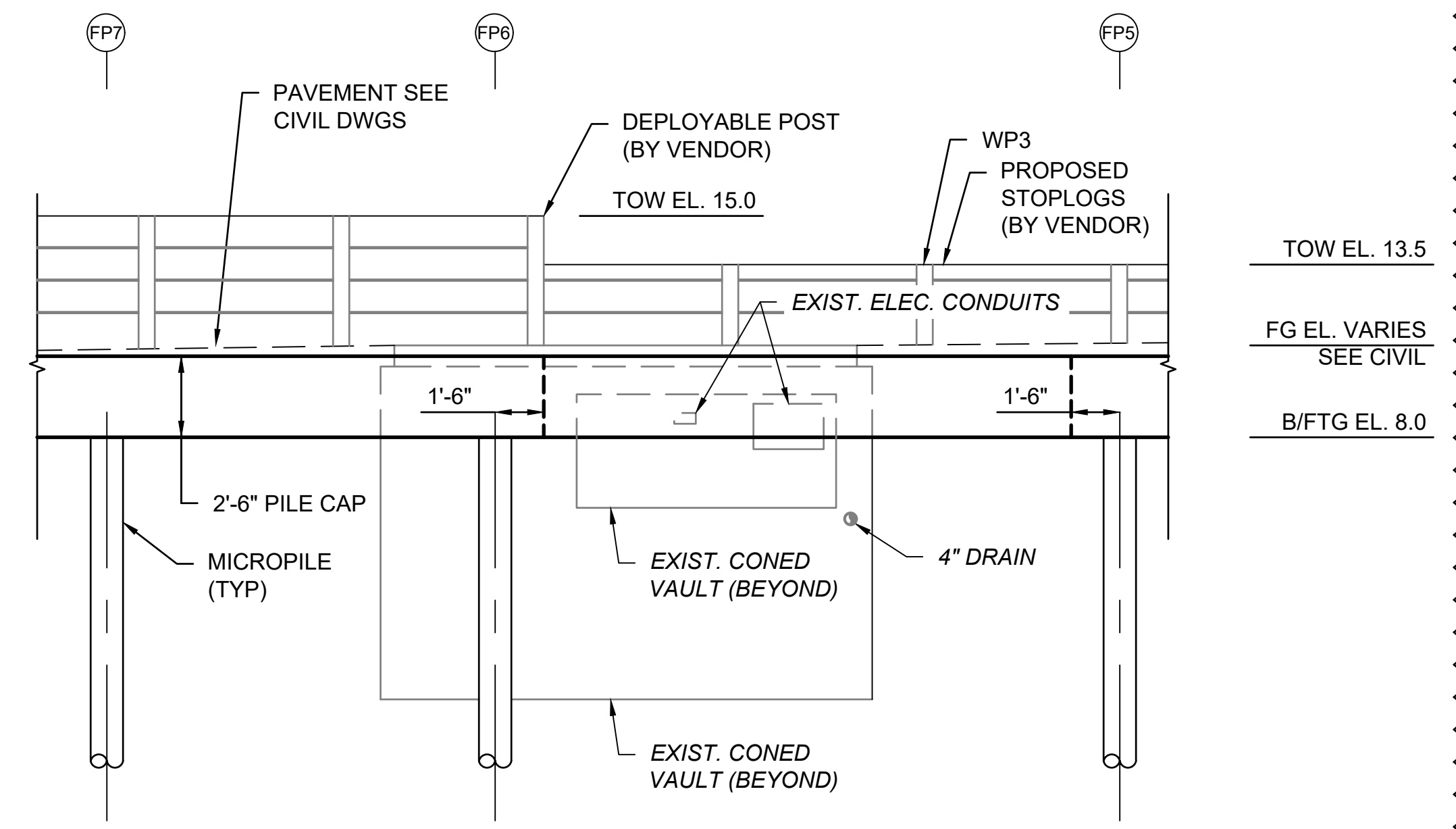
B FIRST PLACE FIXED WALL
SCALE: 1/4" = 1'-0"

SF301



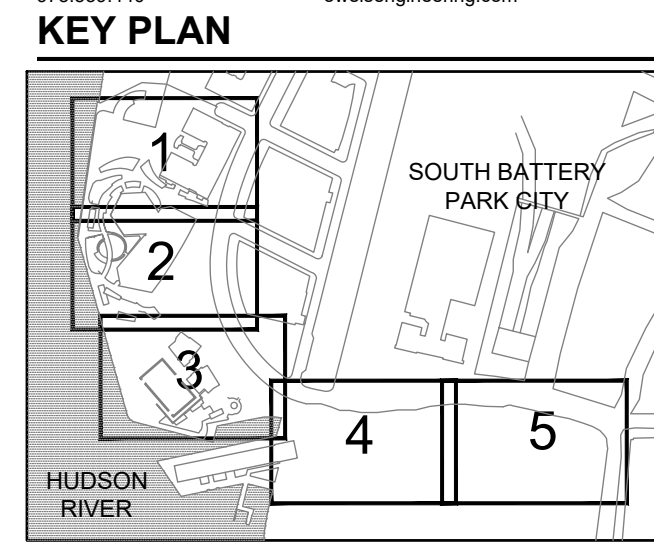
C FIRST PLACE FIXED WALL
SCALE: 1/4" = 1'-0"

SF301
SF321

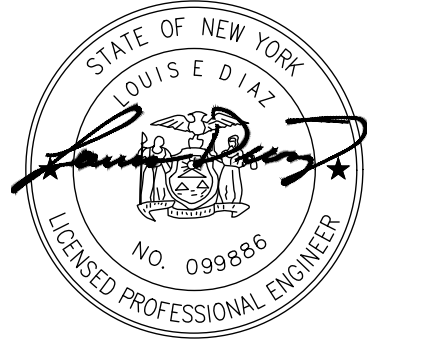


D ELEVATION AT CONED VAULT
SCALE: 1/4" = 1'-0"

SF301
SF321



REGISTRATION



ISSUE/REVISION

NO.	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS
I	JAN 2022	BID SET
I/R	DATE	DESCRIPTION

Designed By: L.DIAZ
Drawn By: F.LIZANO
Checked By: M.GONSKI
Approved By: J.CAREL

PROJECT/TERM CONTRACT NUMBER

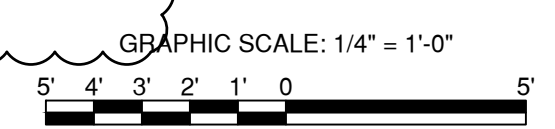
Contract No. 18-2586

SHEET TITLE

FLOODWALL SECTIONS AT
FIRST PLACE CONED VAULTS

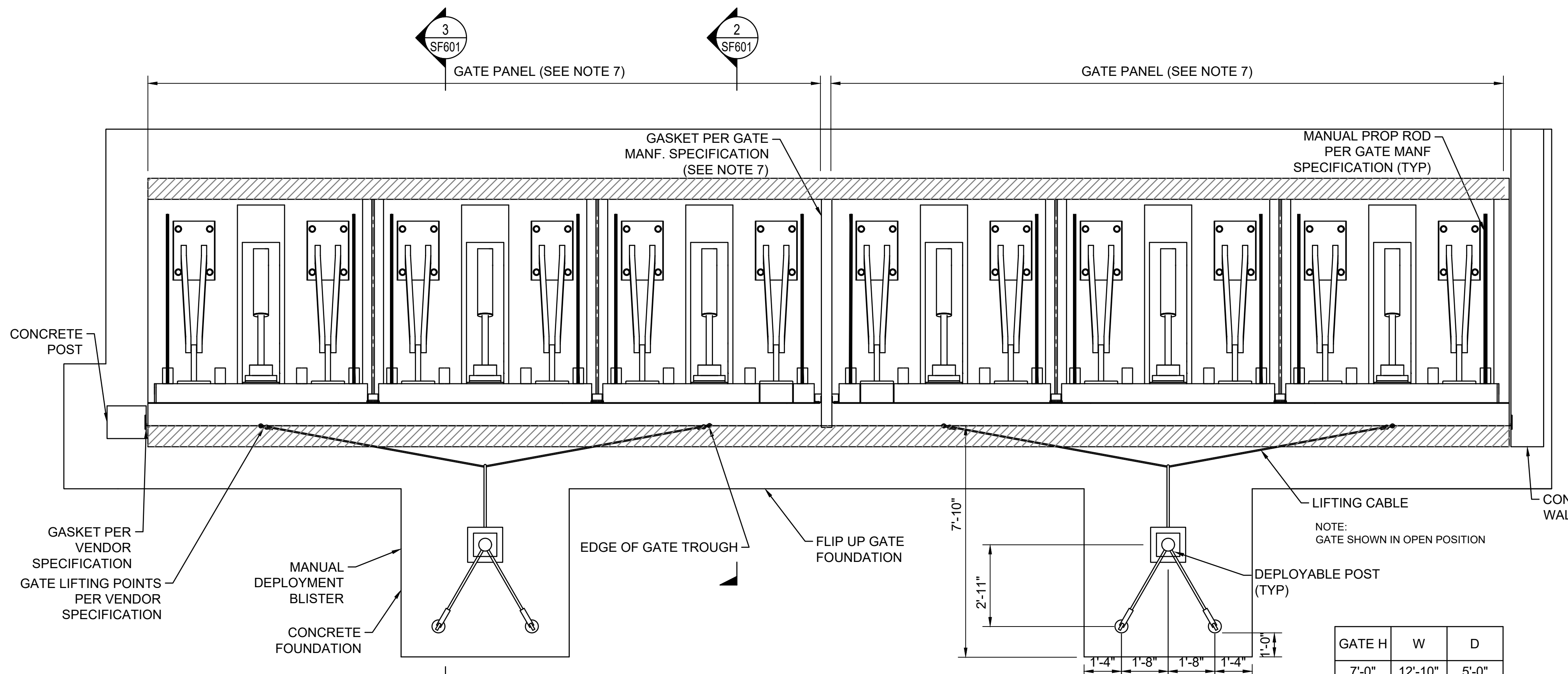
SHEET NUMBER

SF412



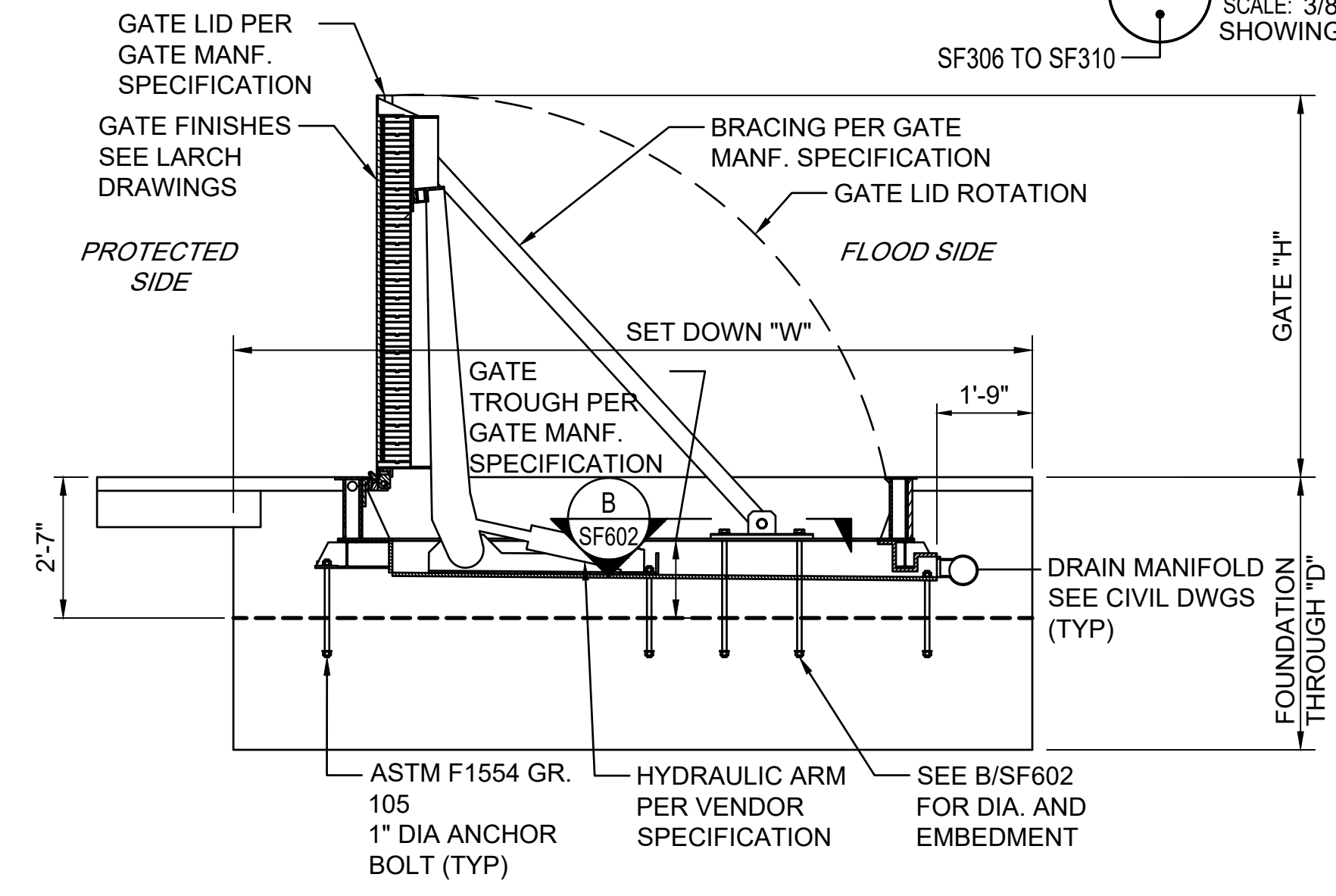
Last saved by: FERREIRA/2022-06-17, File name: C:\P\WORK\N\N\AECOM\COM\18-2586\18-2586-SF412\18-2586-SF412.RVT, DWG

ANSI D 22' x 34'

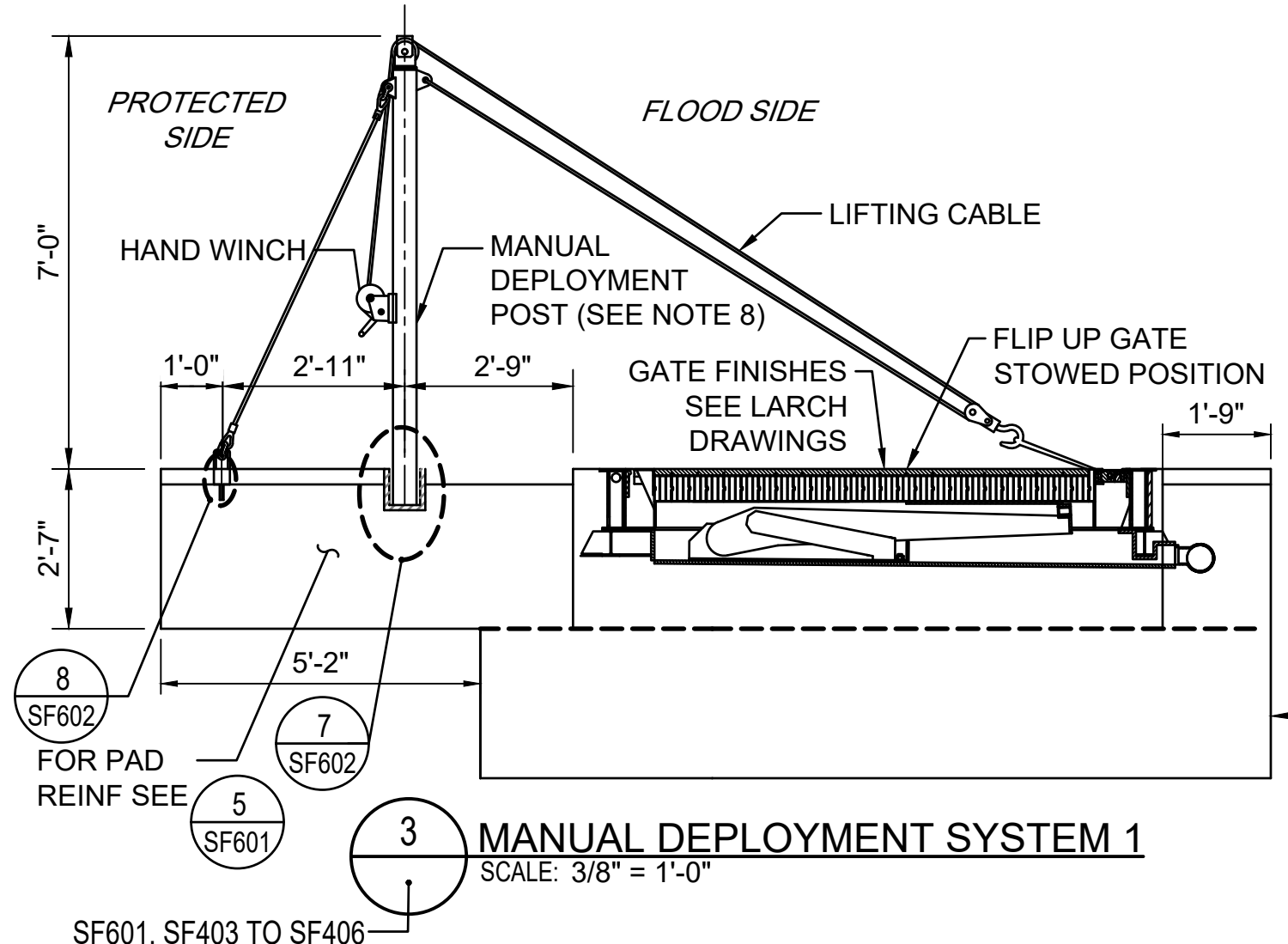


GATE H	W	D
7'-0"	12'-10"	5'-0"
7'-6"	13'-2"	5'-0"
10'-0"	15'-10"	5'-0"

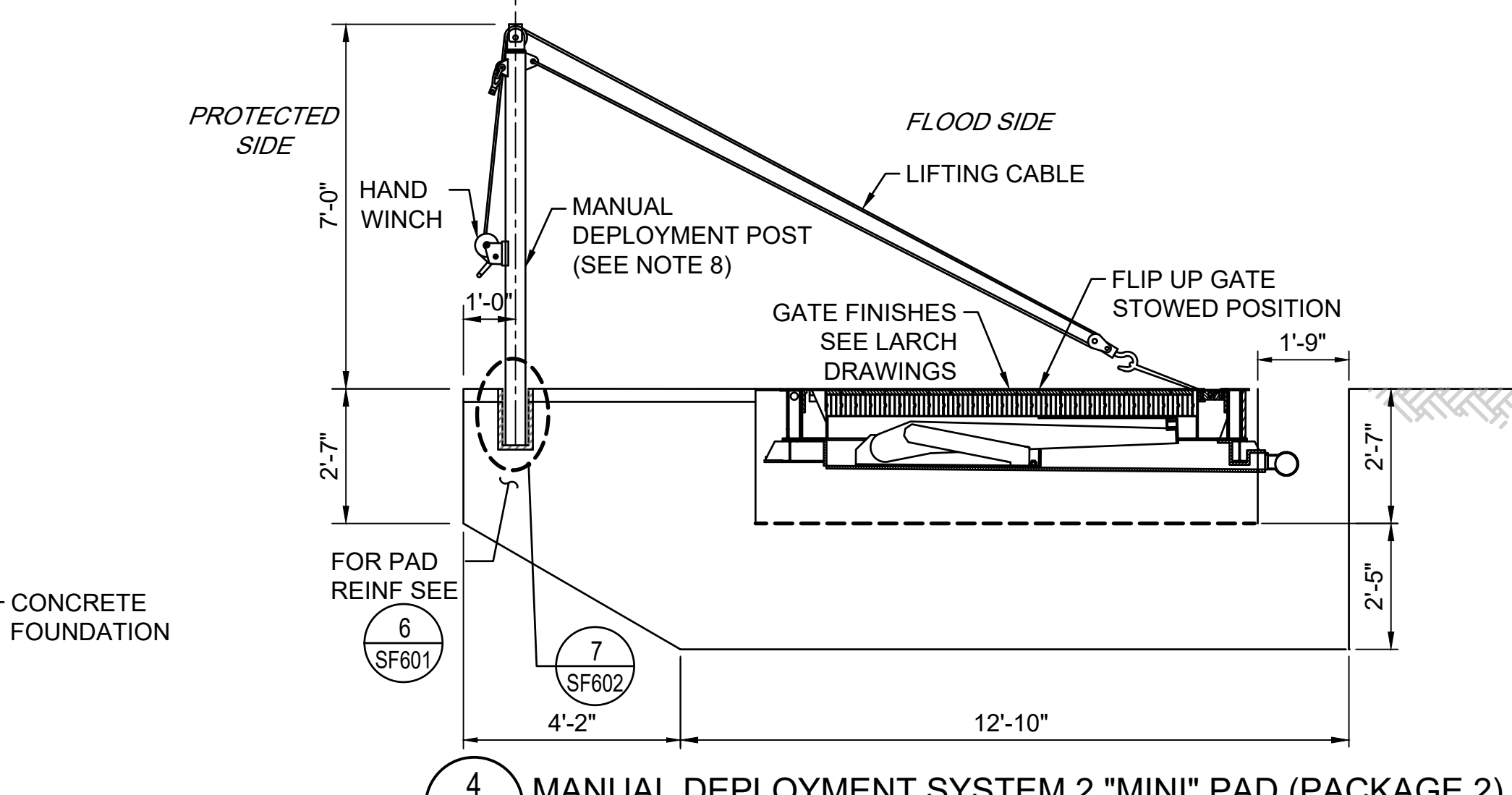
1 TYPICAL FLIP UP GATE PLAN VIEW
SCALE: 3/8" = 1'-0"
SHOWING GENERIC GATE - SEE DETAIL PLANS FOR OVERALL LENGTHS
SF306 TO SF310



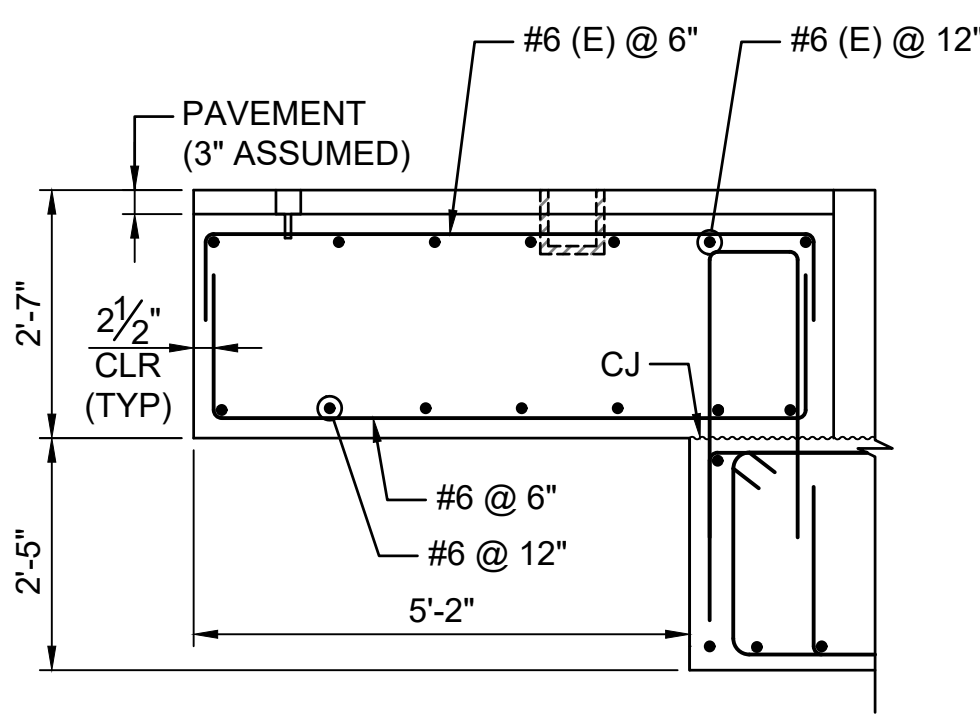
2 FLIP UP GATE TYPICAL SECTION
SCALE: 3/8" = 1'-0"
SF601



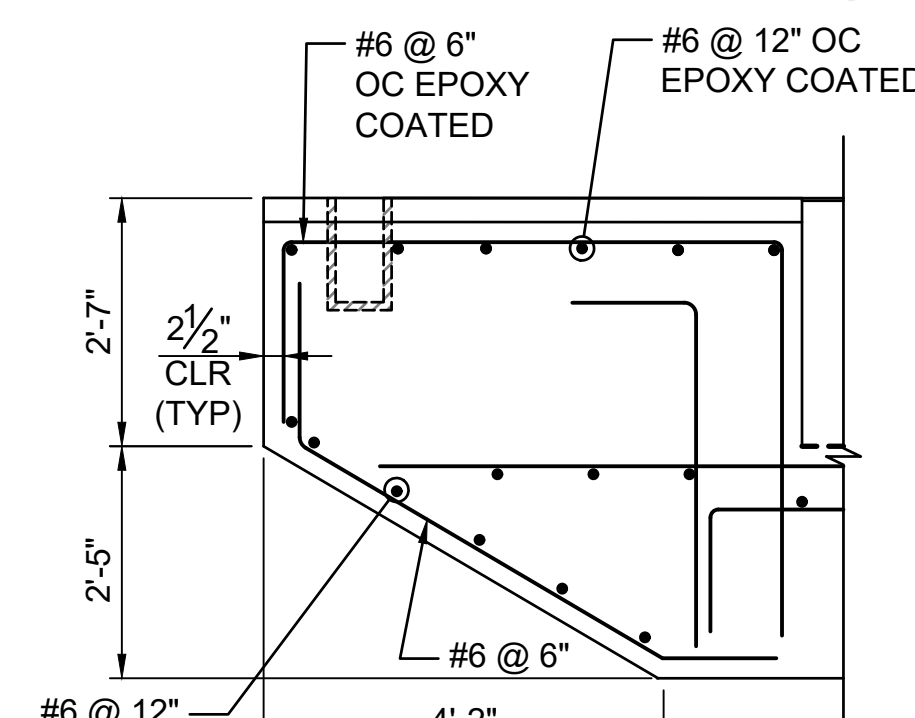
3 MANUAL DEPLOYMENT SYSTEM 1
SCALE: 3/8" = 1'-0"
SF601, SF403 TO SF406



4 MANUAL DEPLOYMENT SYSTEM 2 "MINI" PAD (PACKAGE 2)
SCALE: 3/8" = 1'-0"
SF404



5 SYSTEM 1 DEPLOYMENT PAD
SCALE: 1/2" = 1'-0"
SF601



6 SYSTEM 2 DEPLOYMENT PAD (PACKAGE 2)
SCALE: 1/2" = 1'-0"
SF601

- NOTES:**
- GATE WEIGHT, INCLUSIVE OF CLADDING AND FINISHES, MUST BE LESS THAN 55 PSF TO FACILITATE MANUAL DEPLOYMENT. MANUFACTURER MAY VARY THE PANEL WEIGHT WIDTH TO MEET THE GATE LAYOUT REQUIREMENTS, BUT MUST NOT EXCEED THE MAXIMUM PANEL WEIGHT.
 - WHEN STOWED, GATES MAY BE SUBJECT TO REGULAR NYC TRAFFIC, WEATHER, CONTAMINANTS AND STREET MAINTENANCE. VENDOR TO ESTABLISH ADEQUACY AND DURABILITY OF THE GATE, GASKET AND ALL COMPONENTS SUBJECT TO THE ENVIRONMENTAL FACTORS DESCRIBED ABOVE SEE DESIGN CRITERIA NOTE A.2. ON SHEET SF001.
 - THE PRIMARY METHOD OF GATE DEPLOYMENT IS PUSH BUTTON ACTIVATION OF ONSITE HYDRAULIC POWER UNITS. TO ENSURE REDUNDANCY A PORTABLE POWER UNIT AND MANUAL MODE OF DEPLOYMENT ARE REQUIRED AS SECONDARY AND TERTIARY METHODS. ALL METHODS TO BE DETAILED IN THE OPERATION AND MAINTENANCE (O&M) MANUAL.
 - MAXIMUM LEAKAGE RATE IS 0.25 GAL PER MINUTE PER LINEAR FOOT AROUND THE PERIMETER OF GATE DURING A STORM EVENT PER ANSI/FM 2510.
 - ALL MATERIALS MUST BE CORROSION RESISTANT (I.E. STAINLESS STEEL (316 OR DUPLEX) OR ALUMINUM, AND BE COMPATIBLE OR ISOLATED TO RESIST CORROSION. CARBON STEEL IS NOT ACCEPTABLE IN THE FLIPUP GATE ASSEMBLY.
 - DRAWINGS ARE PROVIDED FOR REFERENCE ONLY. SUBMIT A SET OF SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION OF GATES.
 - WHERE MULTIPLE PANELS ARE REQUIRED BETWEEN POSTS, THE PANELS MUST SEAL AGAINST EACH OTHER WITHOUT THE NEED FOR ADDITIONAL SEALING POSTS.
 - PROVIDE A MANUAL DEPLOYMENT SYSTEM COMPATIBLE WITH THEIR SYSTEM. DEPLOYABLE ELEMENTS, SUCH AS THE POST,

PROJECT
SOUTH BATTERY PARK CITY
RESILIENCY DESIGN
SERVICES

CLIENT
HUGH L. CAREY
BATTERY PARK CITY
AUTHORITY
CONSULTANT

AECOM
AECOM USA
605 3rd Ave, 2nd Floor, New York, NY 10158
212.973.2900 tel www.aecom.com

SUB-CONSULTANT
MAGNUSON KLEMENCIC ASSOCIATES
1301 Fifth Avenue, Suite 2500, Seattle, WA 98101-2699
206.292.1200 tel 206.292.1201 fax www.mka.com

SITE WORKS
150 West 28th St, Suite 605
New York, NY 10001 212.255.8350 siteworksc.com

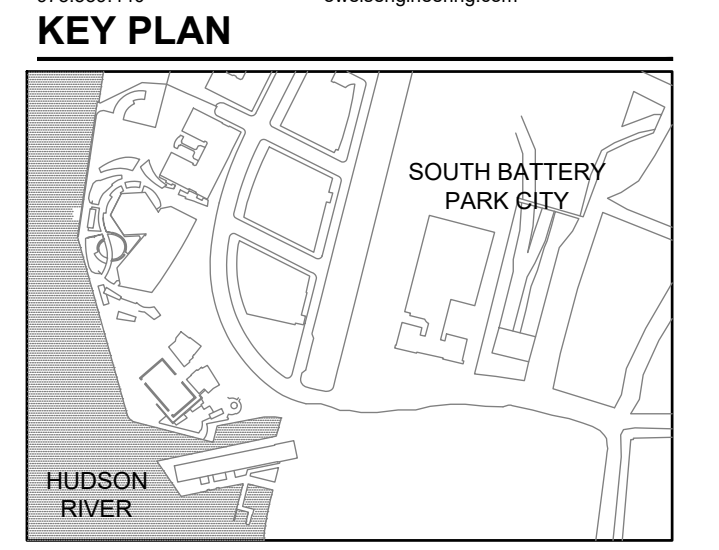
MILHOUSE
333 South Wabash Ave, Suite 2901,
Chicago, IL 60604 313.987.0061 milhouseinc.com

TILLOTSON DESIGN ASSOCIATES
40 Worth St, Rm 703, New York, NY 10013
212.675.7760 tillotsondesign.com

THOMAS PHIFER AND PARTNERS
180 Varick St, New York, NY 10014
212.337.0334 thomaspifer.com

NAIK CONSULTING GROUP, PC
111 West 33rd St, Suite 605 New York, NY 10120
212.575.2701 naikgroup.com

OWEIS
100 East Hanover Ave., Suite 101, Cedar Knolls, NJ 07927
973.539.440 oweisengineering.com



REGISTRATION

ISSUE/REVISION

NO.	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS
I	JAN 2022	BID SET
I/R	DATE	DESCRIPTION

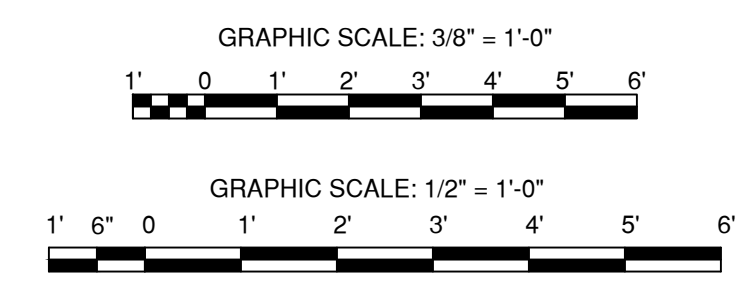
Designed By: L.DIAZ
Drawn By: F.LIZANO
Checked By: M.GONSKI
Approved By: J.CAREL

PROJECT/TERM CONTRACT NUMBER
Contract No. 18-2586
SHEET TITLE

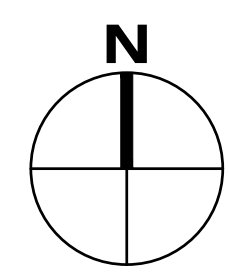
FLIP UP GATE DETAILS

SHEET NUMBER

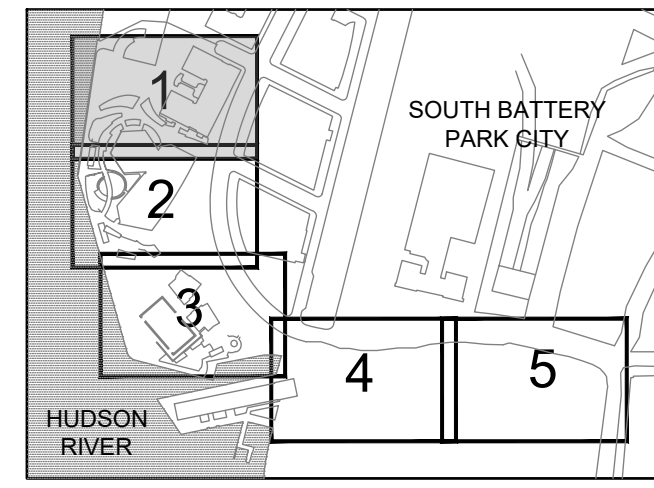
SF601



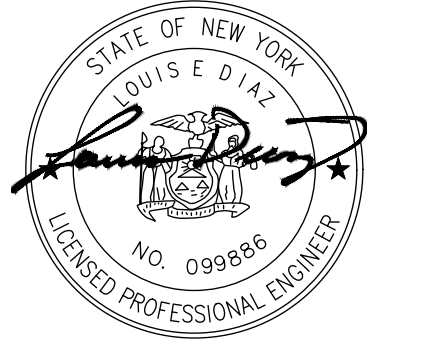
Last saved by: FERREIRA (2022-04-18) Last Printed: 2022-06-17
Filename: C:\P\WORK\CONTR\AECOM\18-2586\18-2586-SF601\18-2586-SF601.dwg



KEY PLAN



REGISTRATION



ISSUE/REVISION

NO.	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS
1	JAN 2022	BID SET
I/R	DATE	DESCRIPTION

Designed By: L.DIAZ
Drawn By: F.LIZANO
Checked By: M.GONSKI
Approved By: J.CAREL

PROJECT/TERM CONTRACT NUMBER

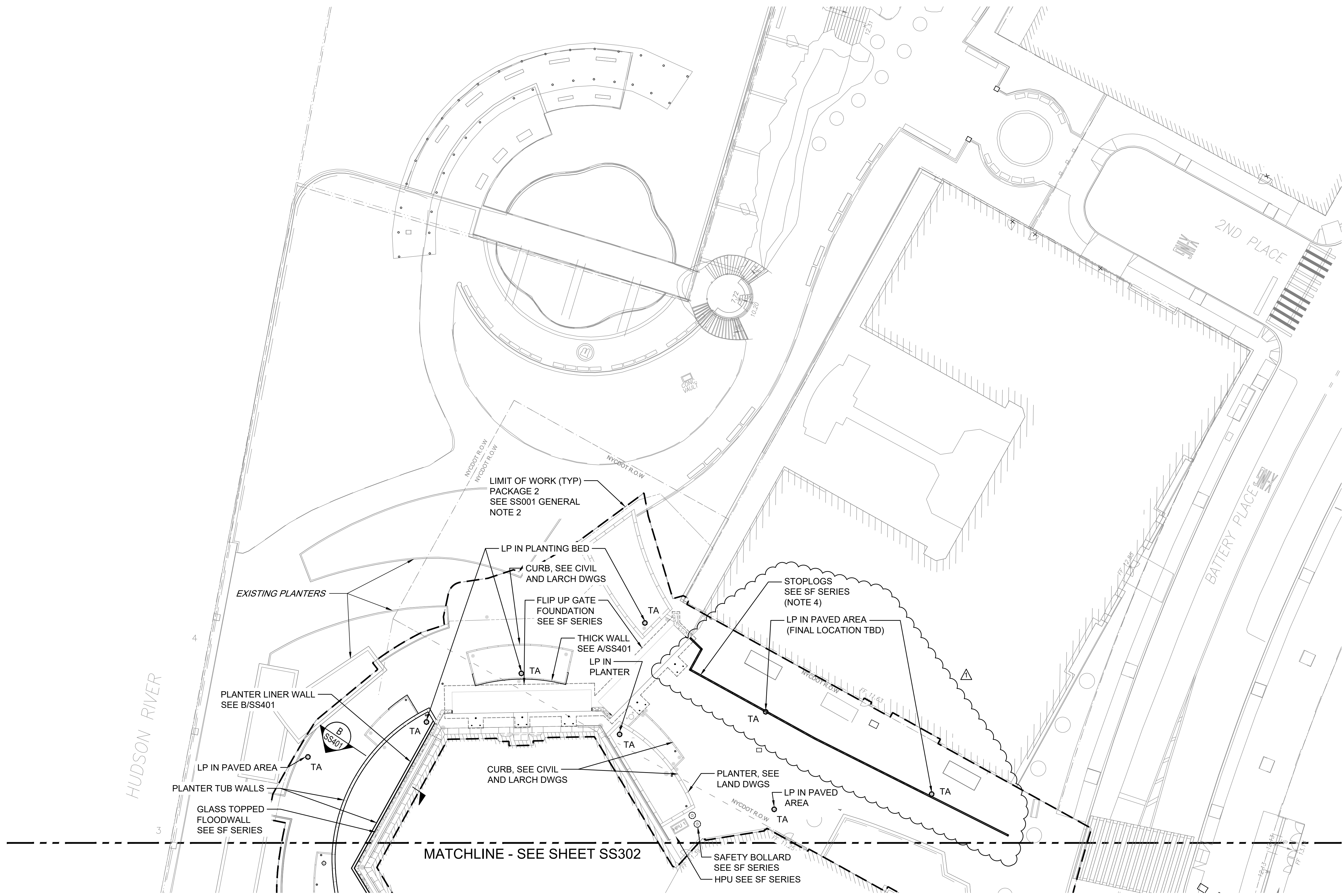
Contract No. 18-2586

SHEET TITLE

SITE STRUCTURES
PLAN 1 OF 5

SHEET NUMBER

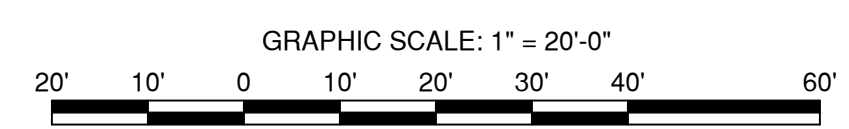
SS301



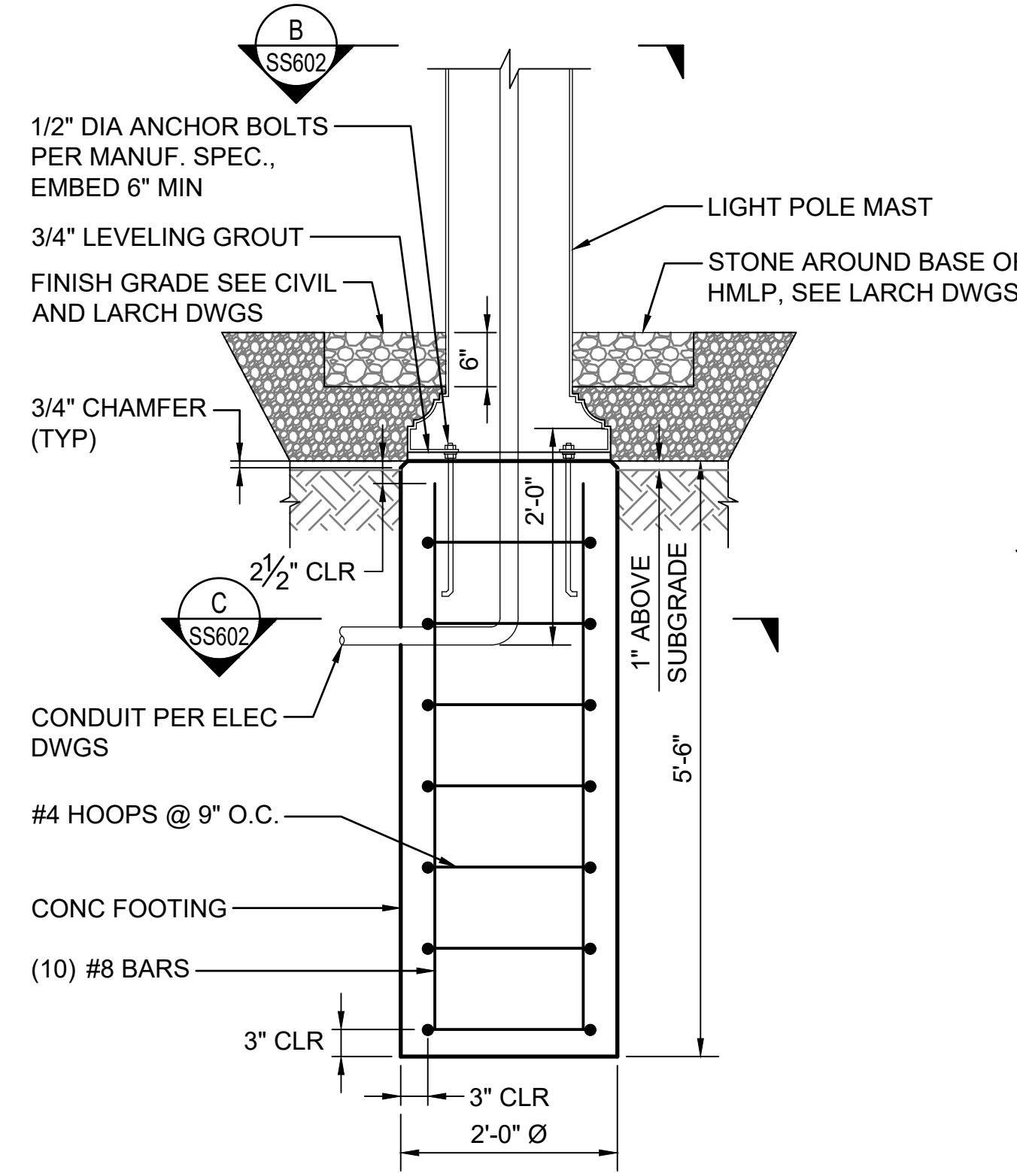
- NOTES:**
- SEE LANDSCAPE DRAWINGS FOR FINISHES AND ELEVATIONS.
 - SEE CIVIL DRAWINGS FOR GRADING.
 - SEE SF SERIES FOR FLOODWALL ALIGNMENT AND DETAILS.
 - FIRST PLACE WORK IS BEING COORDINATED WITH CONED AND LAYOUT AND DESIGN WILL BE UPDATED IN AN ADDENDUM.

LEGEND

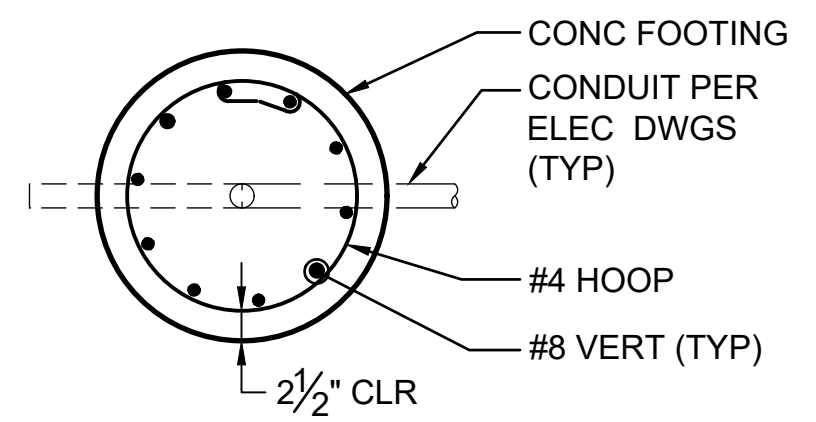
⊙ TA LIGHTPOLE TYPE TA FOR FOUNDATION SEE 2 & 3
SS602 & SS602



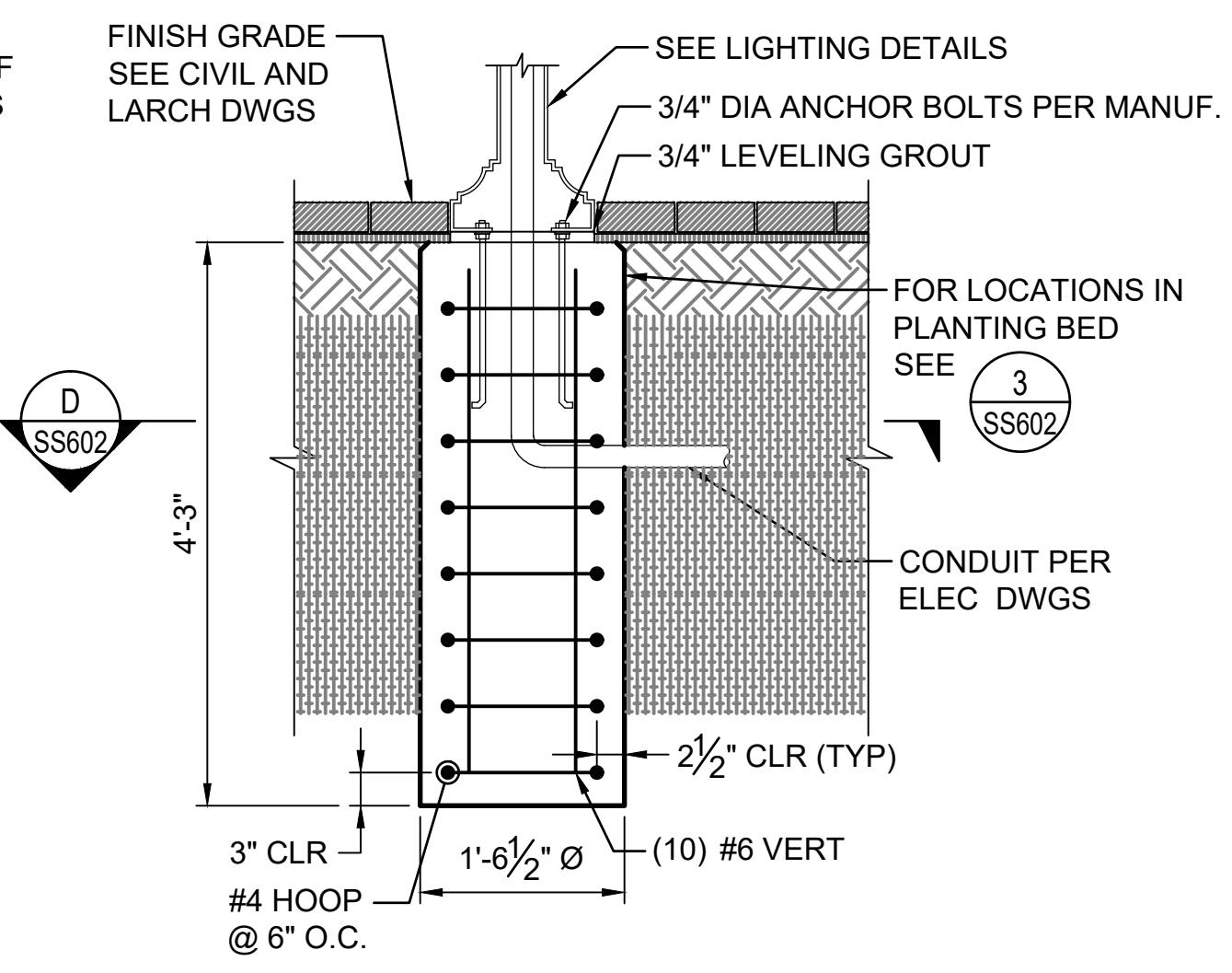
ANSI D 22' x 34'



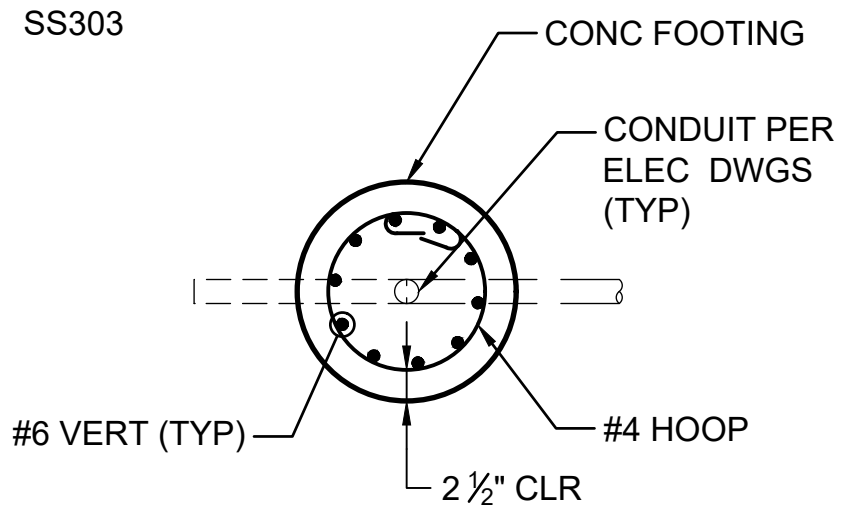
1 LIGHT POLE (TB) FOOTING DETAIL (PACKAGE 2 AND 4)
SS303 SCALE: 3/4"=1'-0"



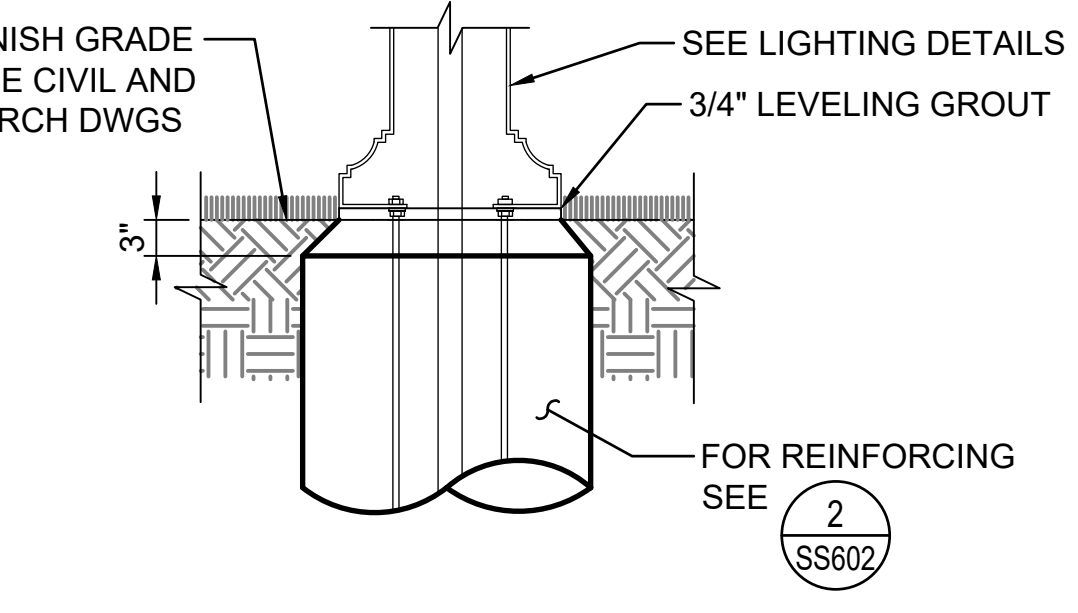
C TB FOOTING SECTION
SS602 SCALE: 3/4"=1'-0"



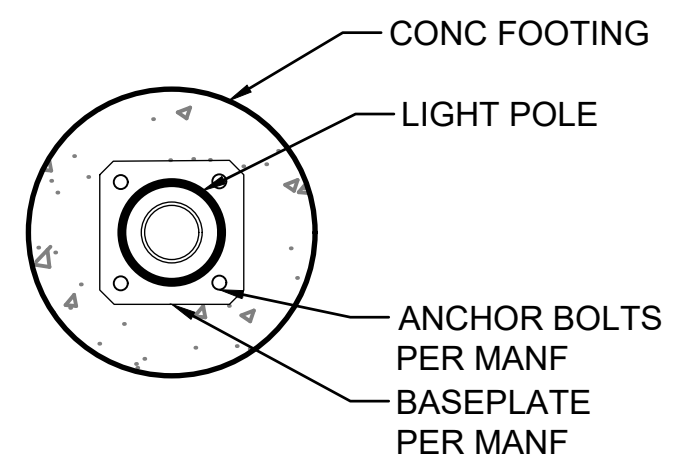
2 LIGHT POLE (TA) FOOTING IN PAVED AREAS (PACKAGE 2 AND 4)
SS301 SCALE: 3/4"=1'-0"



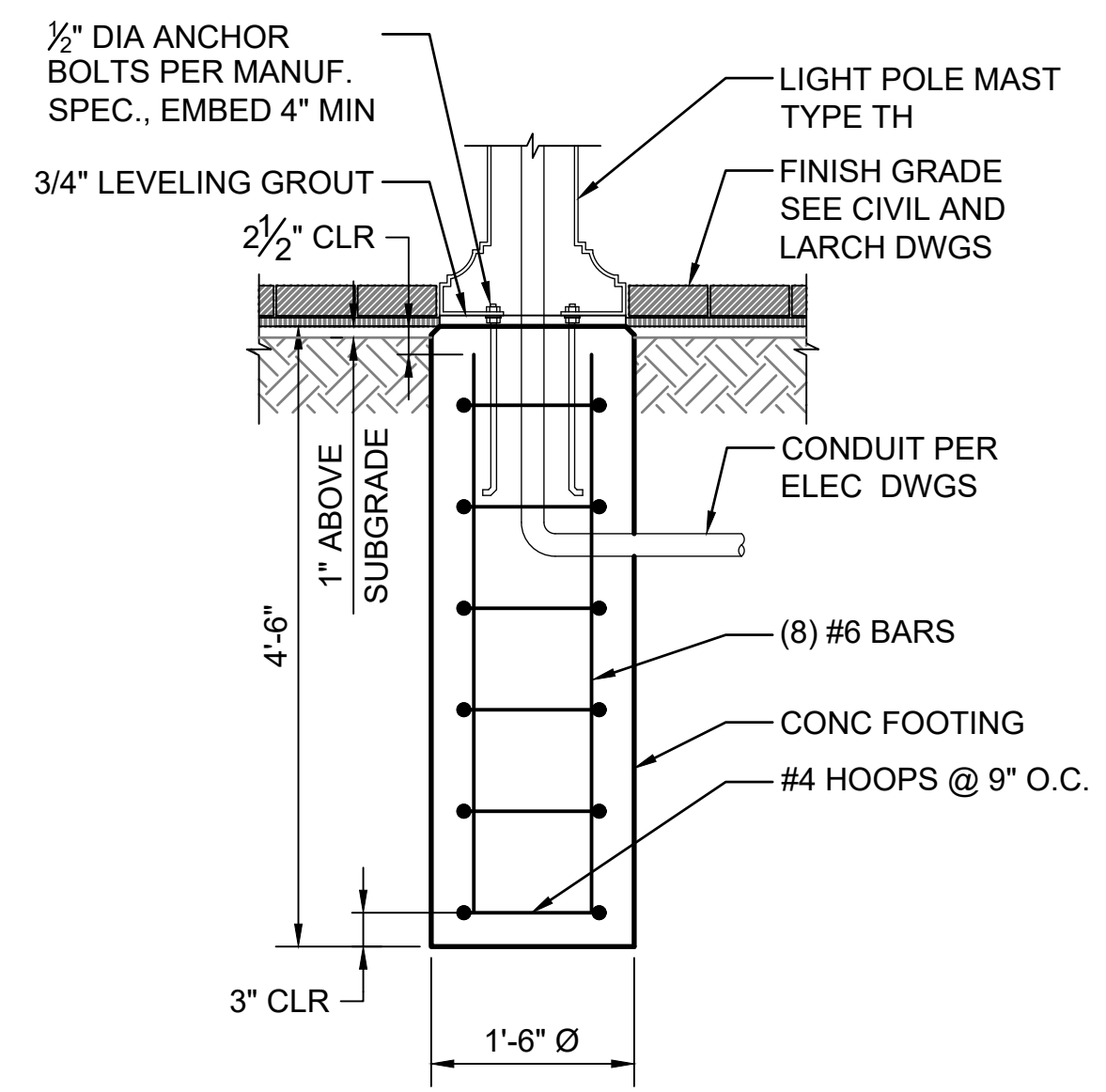
D TA FOOTING SECTION
SS602 SCALE: 3/4"=1'-0"



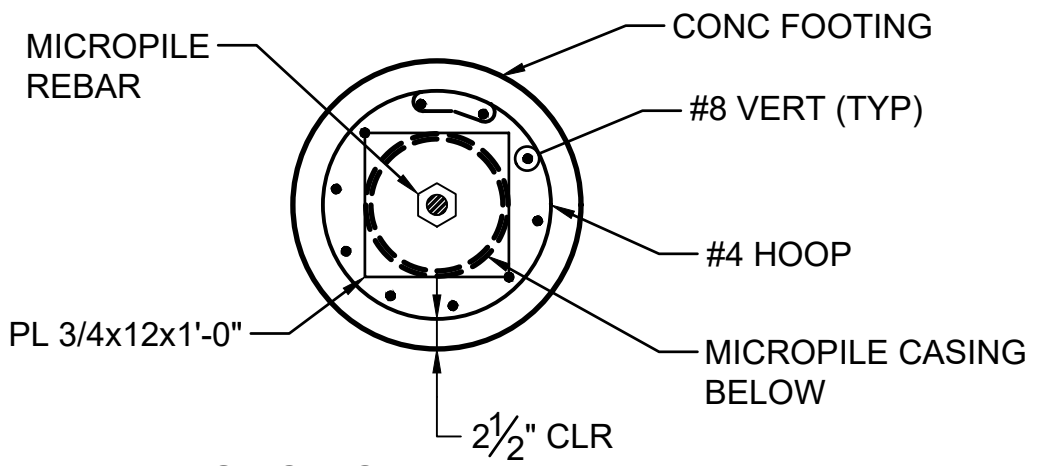
3 LIGHT POLE (TA) FOOTING AT PLANTING BED (PACKAGE 2 AND 4)
SS302 SCALE: 3/4"=1'-0"



B PLAN
SS602 SCALE: 3/4"=1'-0"

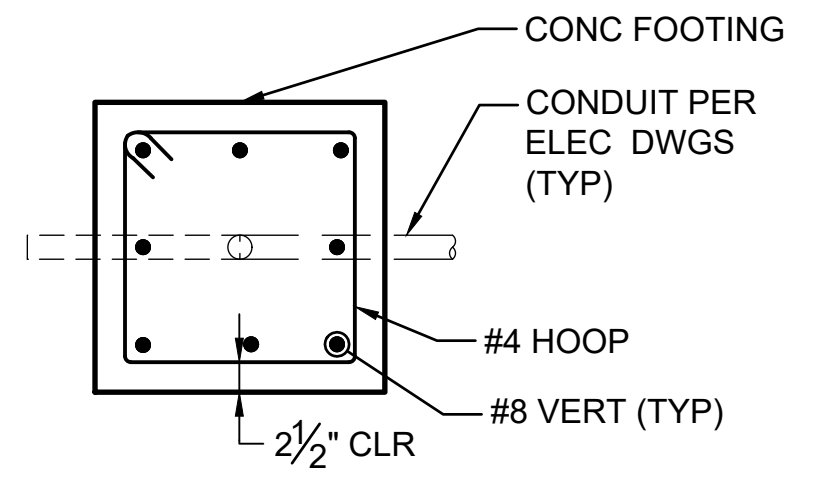


4 LIGHT POLE (TH) FOOTING DETAIL (PACKAGE 2)
SS302 SCALE: 3/4"=1'-0"

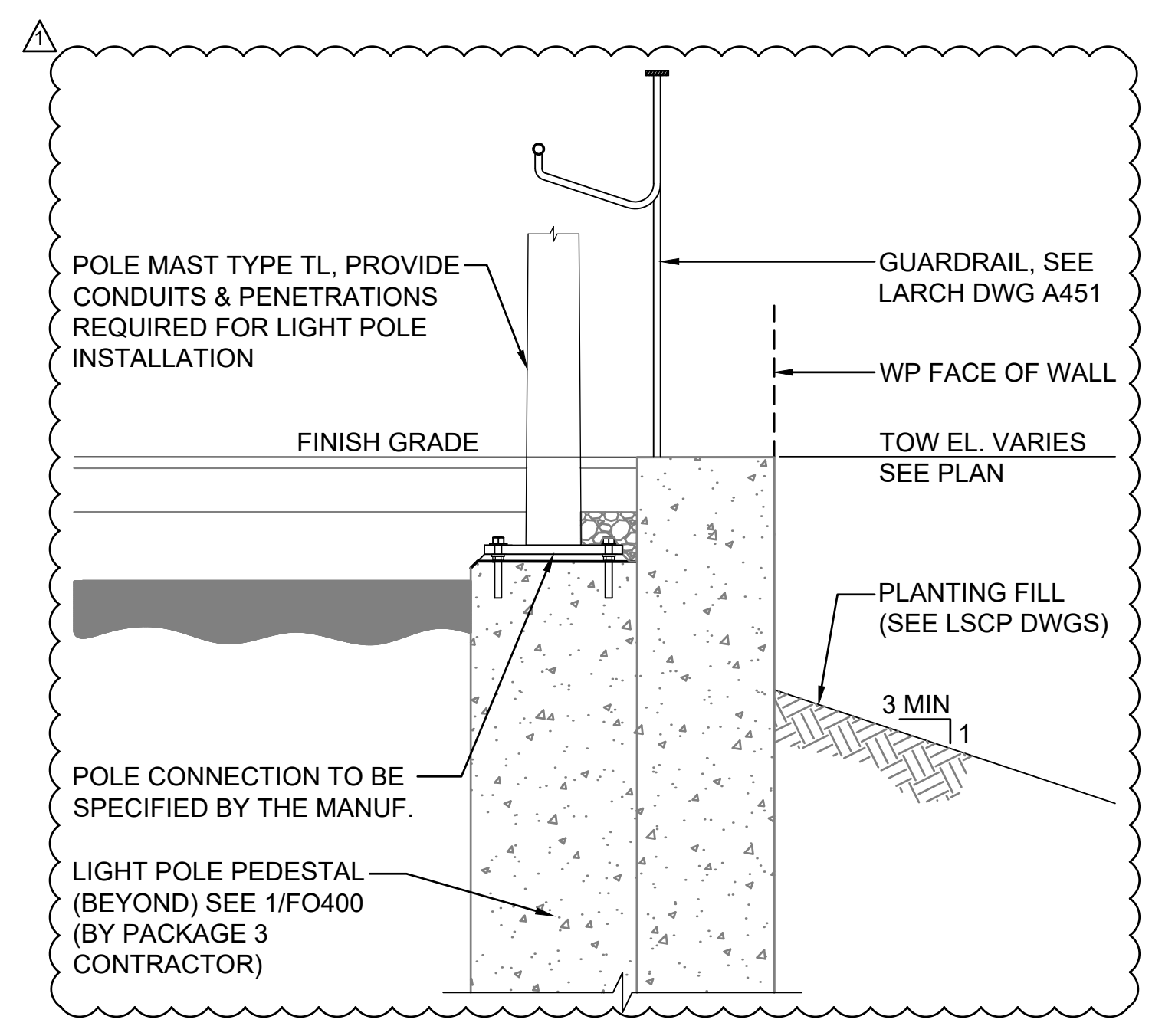


E SECTION THROUGH HMLP PILE CAP
SS602 SCALE: 3/4"=1'-0"

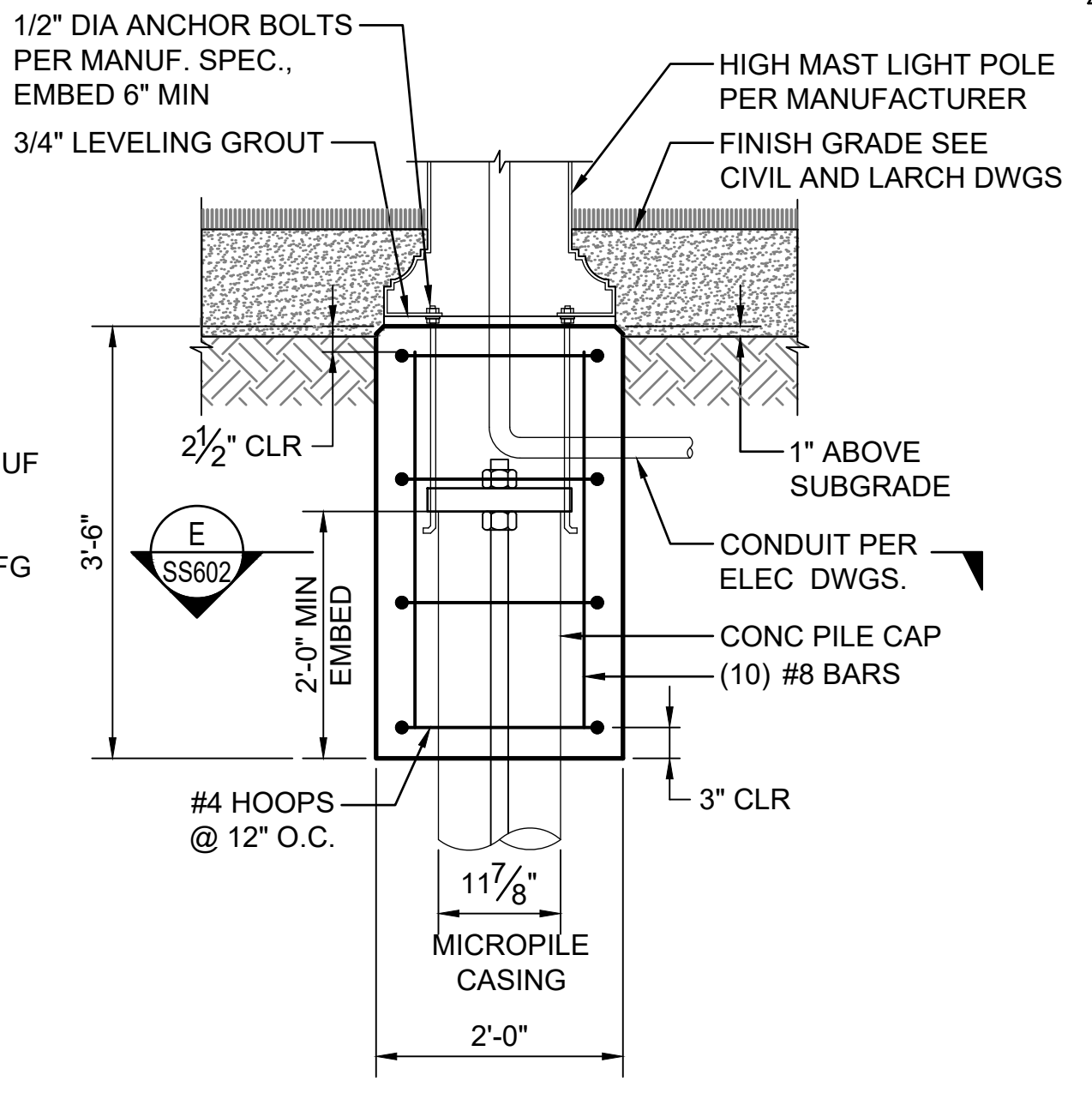
NOTE:
1. FOR MICROPILE DETAILS SEE SF605



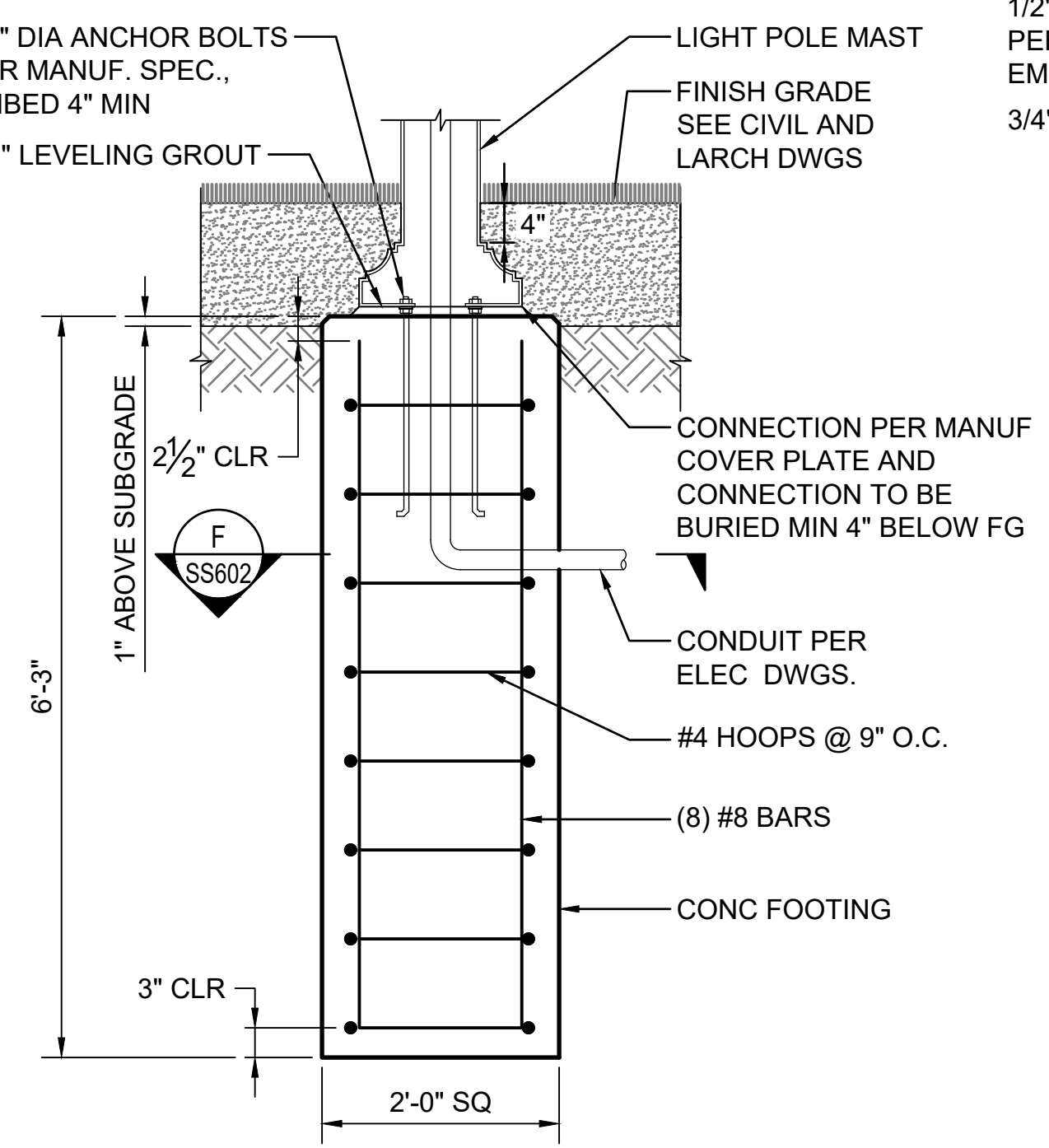
F TL FOOTING SECTION
SS602 SCALE: 3/4"=1'-0"



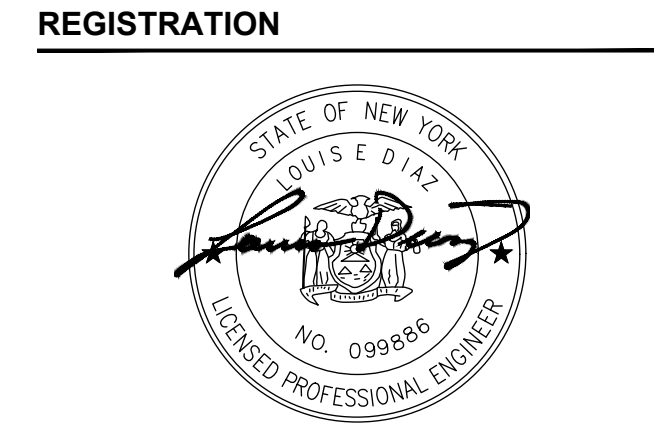
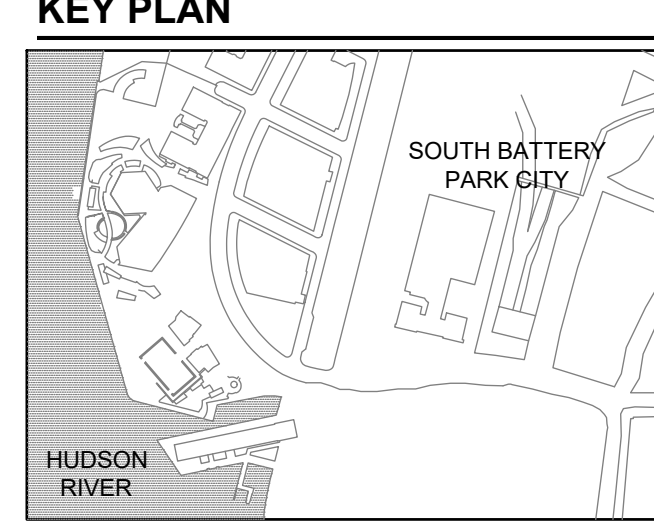
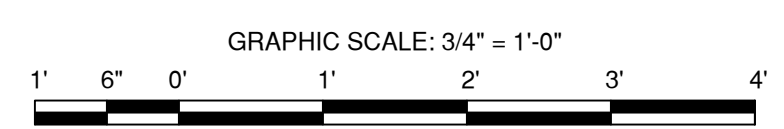
7 BATTERY PLACE WALL AND INTEGRAL TL LIGHT POLE PEDESTAL (PACKAGE 2)
SS302 SCALE: 3/4"=1'-0"



6 HIGH MAST LIGHT POLE (TB) ON MICROPILE (PACKAGE 2 AND 4)
SS302 SCALE: 3/4"=1'-0"



5 LIGHT POLE (TL) FOOTING DETAIL (PACKAGE 2)
SS302 SCALE: 3/4"=1'-0"



ISSUE/REVISION

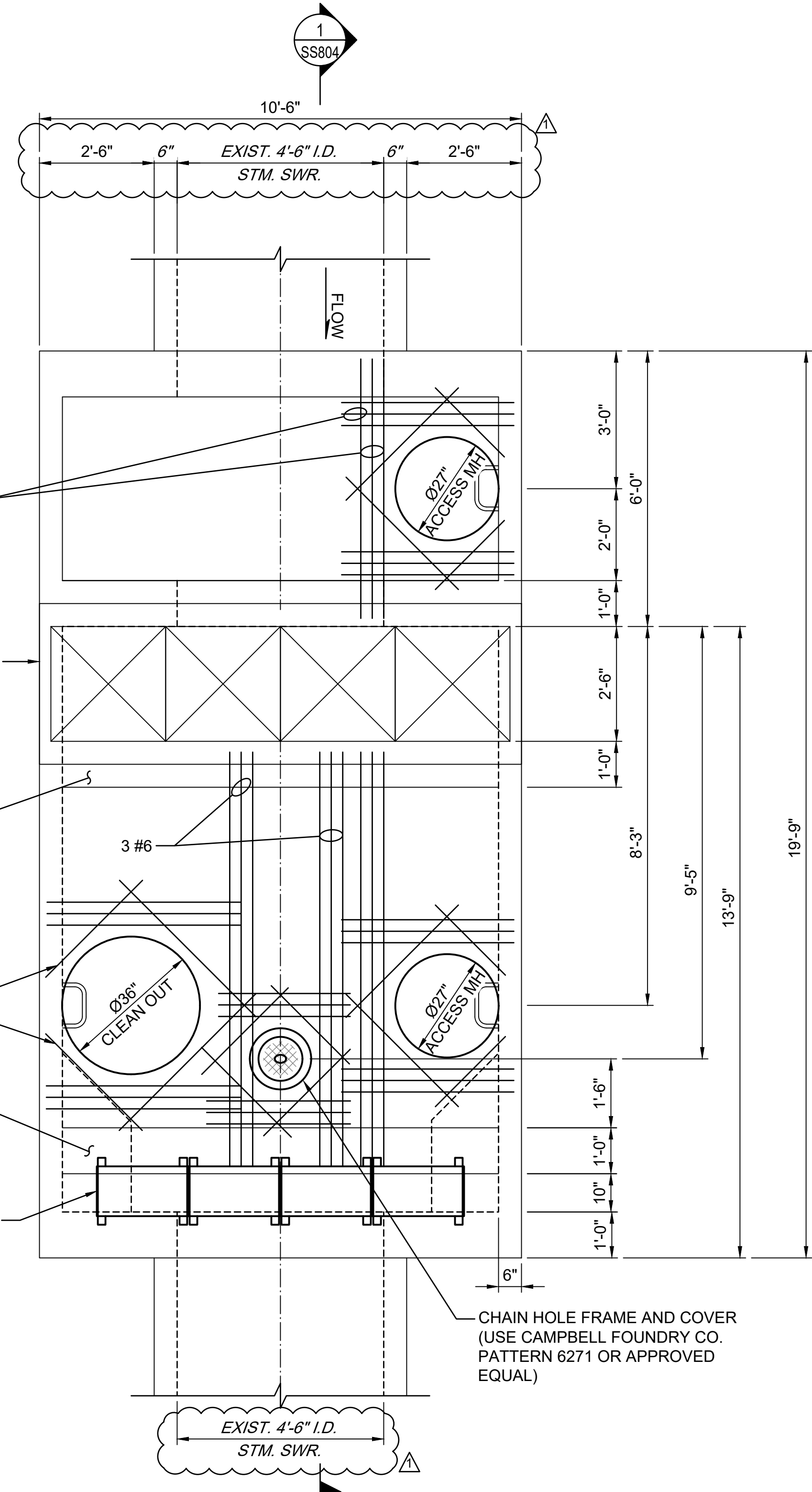
NO.	DATE	DESCRIPTION
1	MAY 2022	ADDED DETAIL 7
	JAN 2022	BID SET
I/R	DATE	DESCRIPTION

Designed By: L.DIAZ
Drawn By: F.LIZANO
Checked By: M.GONSKI
Approved By: J.CAREL

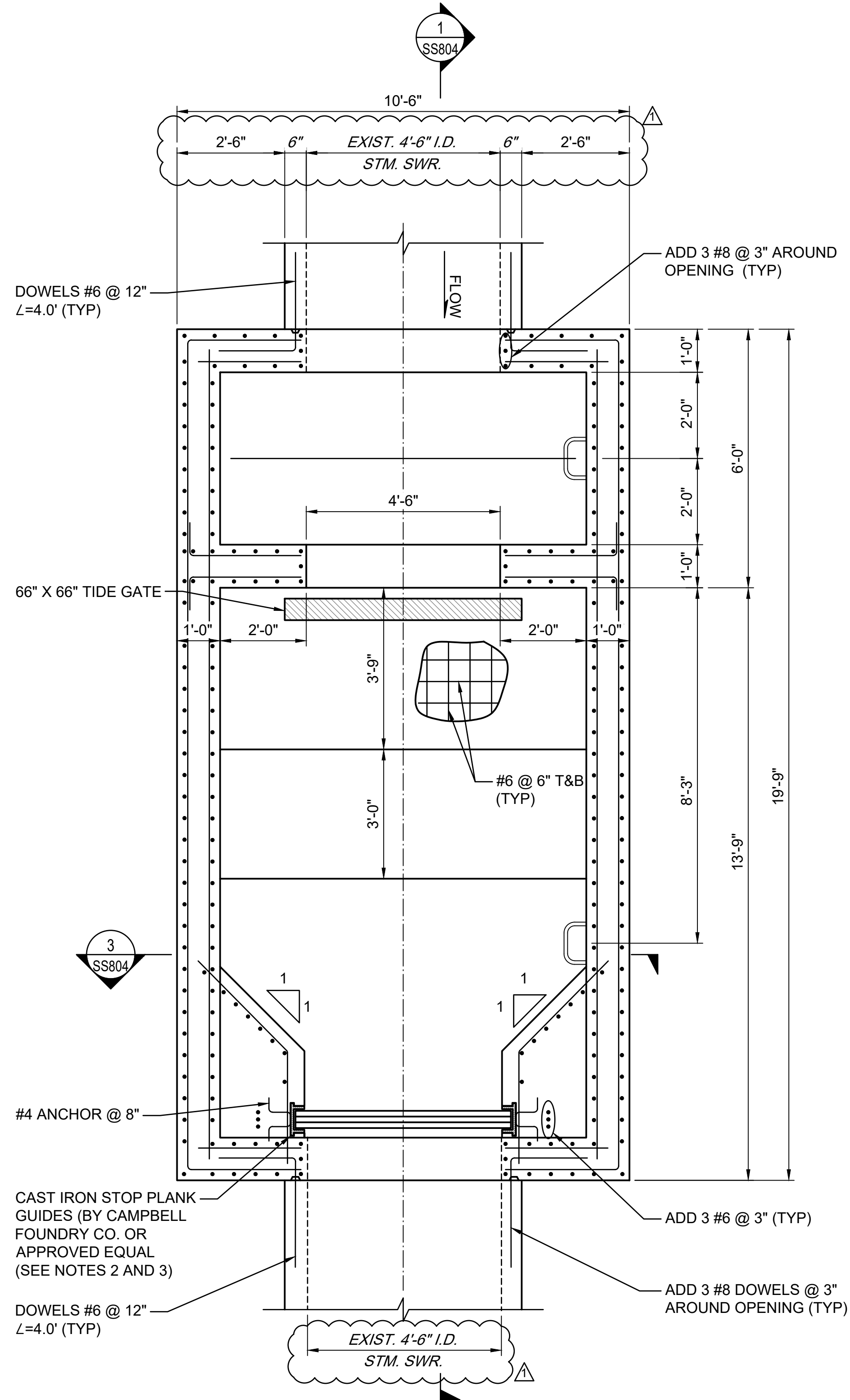
PROJECT/TERM CONTRACT NUMBER
Contract No. 18-2586
SHEET TITLE

SHEET NUMBER
LIGHT POLE
DETAILS
SS602

Last saved by: FERREIRA/2022-06-13 11:01:13 AM
Filename: C:\TEMP\WORKING\2022072621_SBP-020_SHEETS\TO P\18\BPC-SS602R01.DWG



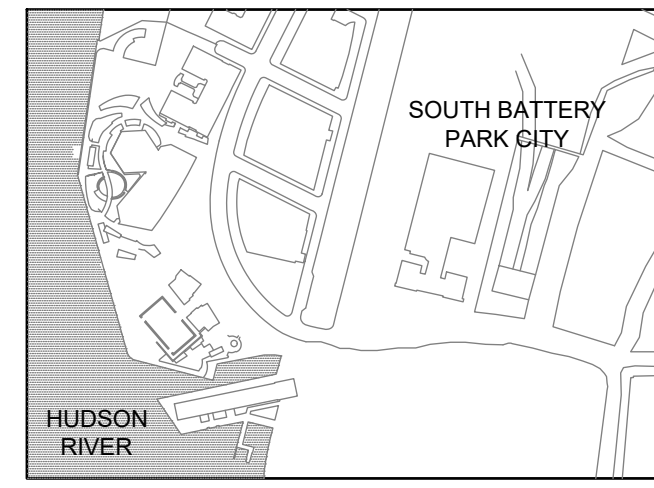
1 CHAMBER ROOF PLAN (PACKAGE 2)
SS804 SCALE: 1/2" = 1'-0"



2 CHAMBER FLOOR PLAN (PACKAGE 2)
SS804 SCALE: 1/2" = 1'-0"

- NOTES:**
- SEE SHEET C001 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
 - STOP PLANK GUIDE SHALL BE 1" WIDER THAN STOP PLANK THICKNESS.
 - THE CONFIGURATION OF SLOT MOUNTED AND REINFORCED CONCRETE NECK-DOWN WILL BE CHANGED SUBJECT TO THE SELECTED PRODUCTS AND INSTALLATION METHODS (EMBEDDED / FACE-MOUNTED - CHANNEL MOUNTED) BY THE MANUFACTURER OR CONTRACTOR.
 - WALL THIMBLE SHALL BE DRILLED WITH HOLES AND TAPPED FOR THREADED RODS TO MOUNT TIDE GATE. WALL THIMBLE AND TIDE GATE SHALL BE STAINLESS STEEL TYPE 316 AND THREADED RODS SHALL BE STAINLESS STEEL TYPE 316.
 - SEE C400 SERIES AND C850 SERIES SHEETS FOR ADDITIONAL DETAIL RELATED TO TIDE GATES.

KEY PLAN



REGISTRATION



ISSUE/REVISION

NO.	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS
1	JAN 2022	BID SET
I/R	DATE	DESCRIPTION

Designed By: L.DIAZ
Drawn By: F.LIZANO
Checked By: M.GONSKI
Approved By: J.CAREL

PROJECT/TERM CONTRACT NUMBER

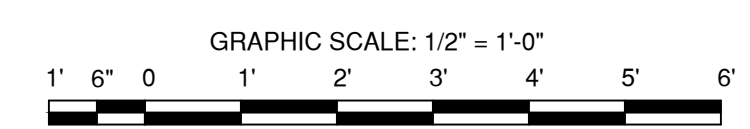
Contract No. 18-2586

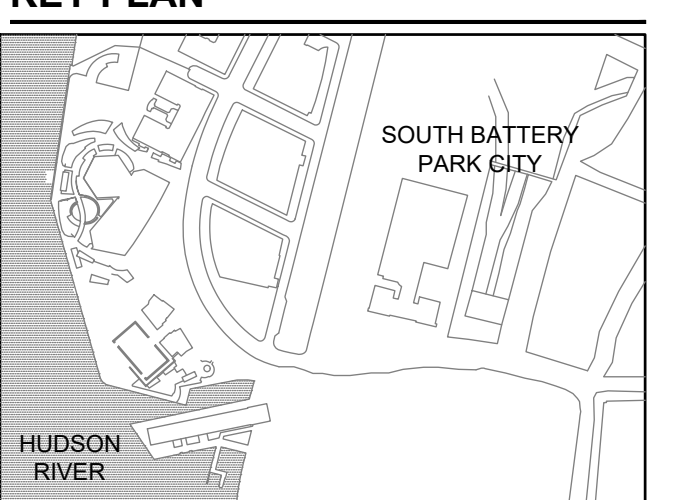
SHEET TITLE

54-INCH TIDE GATE AT
1ST PLACE DETAILS

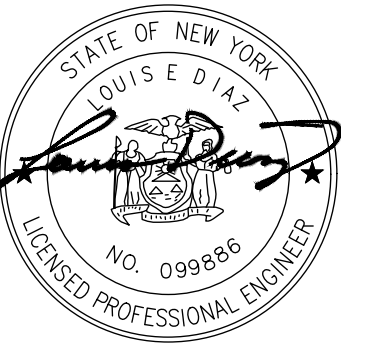
SHEET NUMBER

SS803





REGISTRATION



ISSUE/REVISION

I/R	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS
1	JAN 2022	BID SET

Designed By: L.DIAZ
Drawn By: F.LIZANO
Checked By: M.GONSKI
Approved By: J.CAREL

PROJECT/TERM CONTRACT NUMBER

Contract No. 18-2586

SHEET TITLE

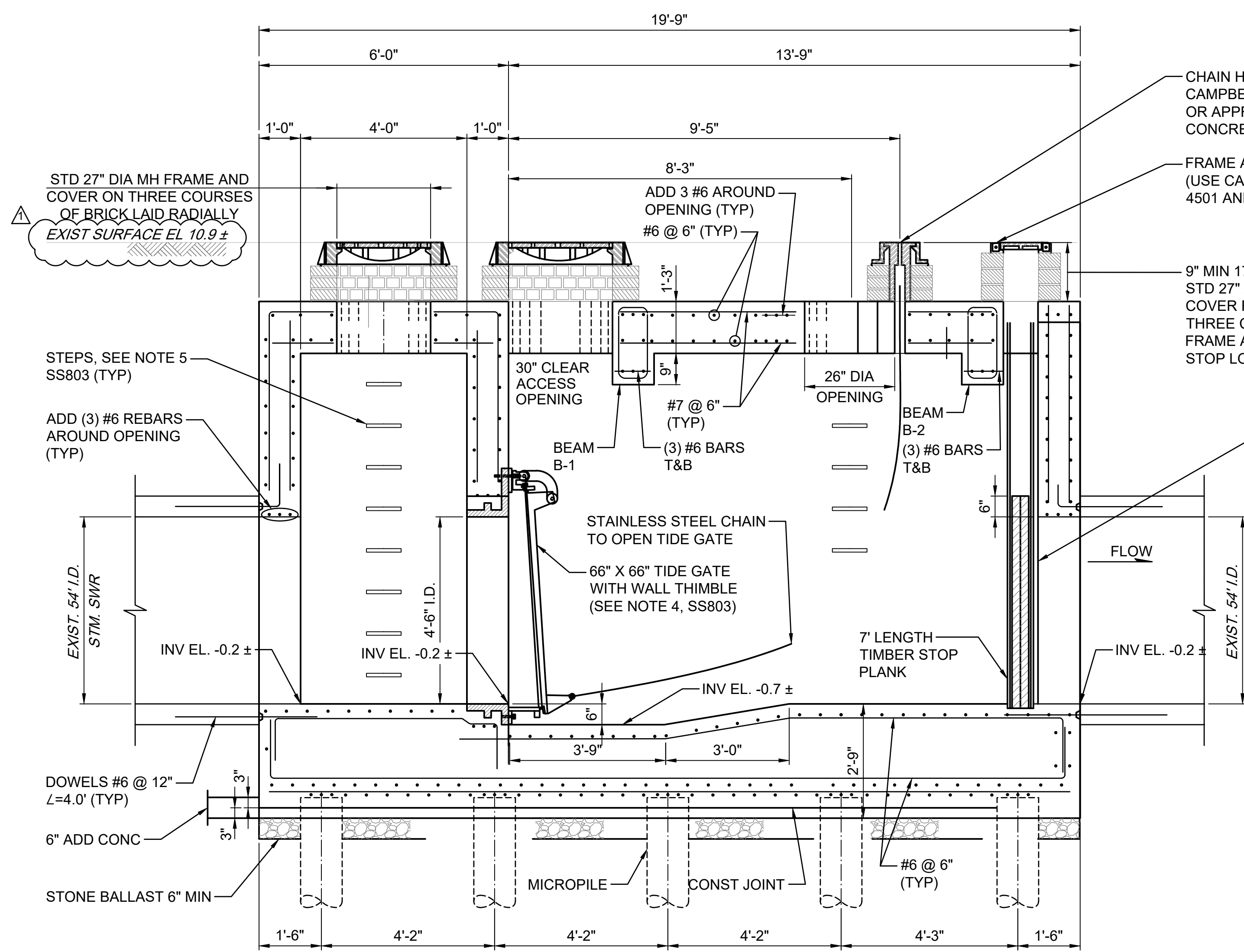
54-INCH TIDE GATE AT
1ST PLACE DETAILS

SHEET NUMBER

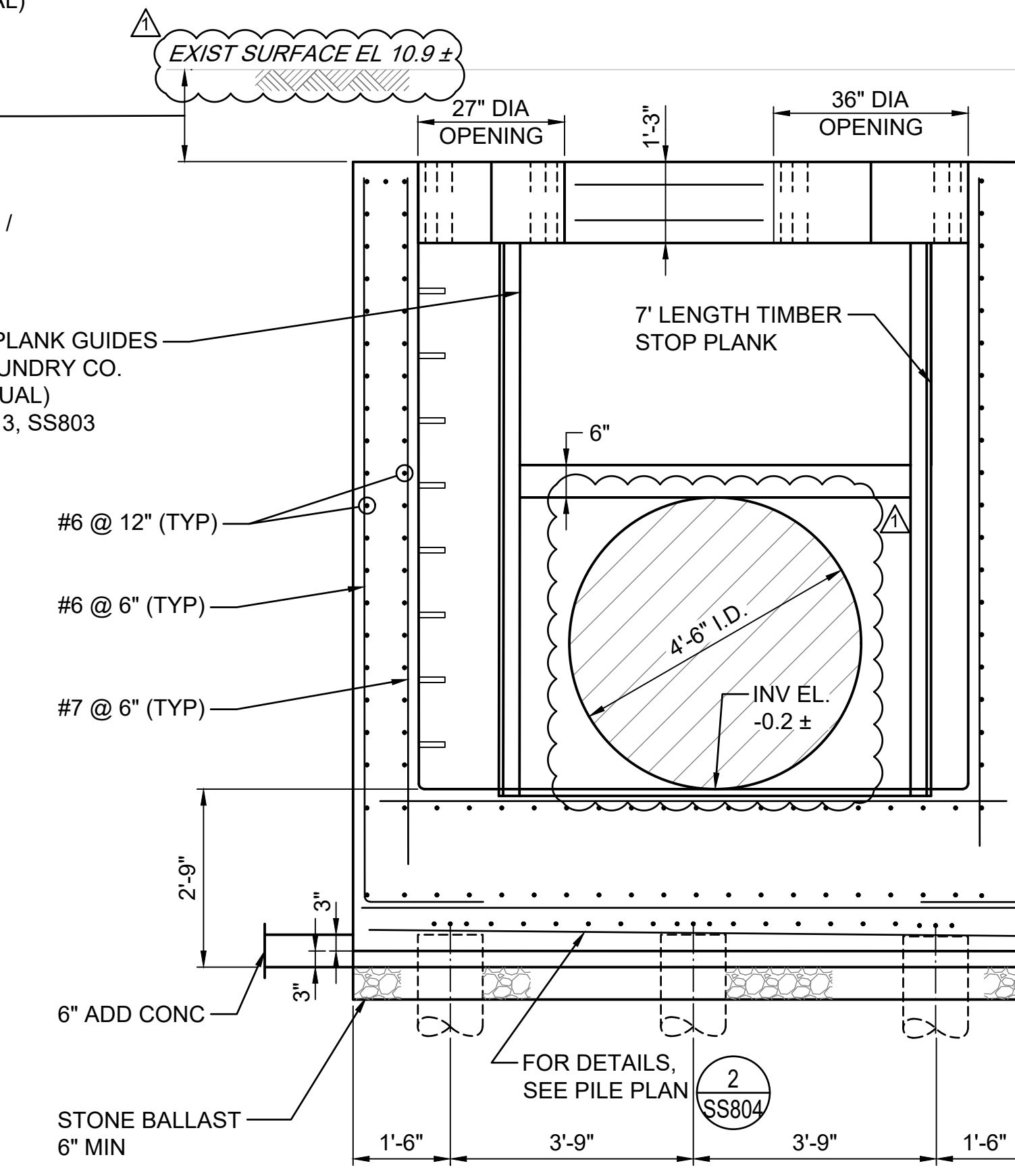
SS804

NOTES:

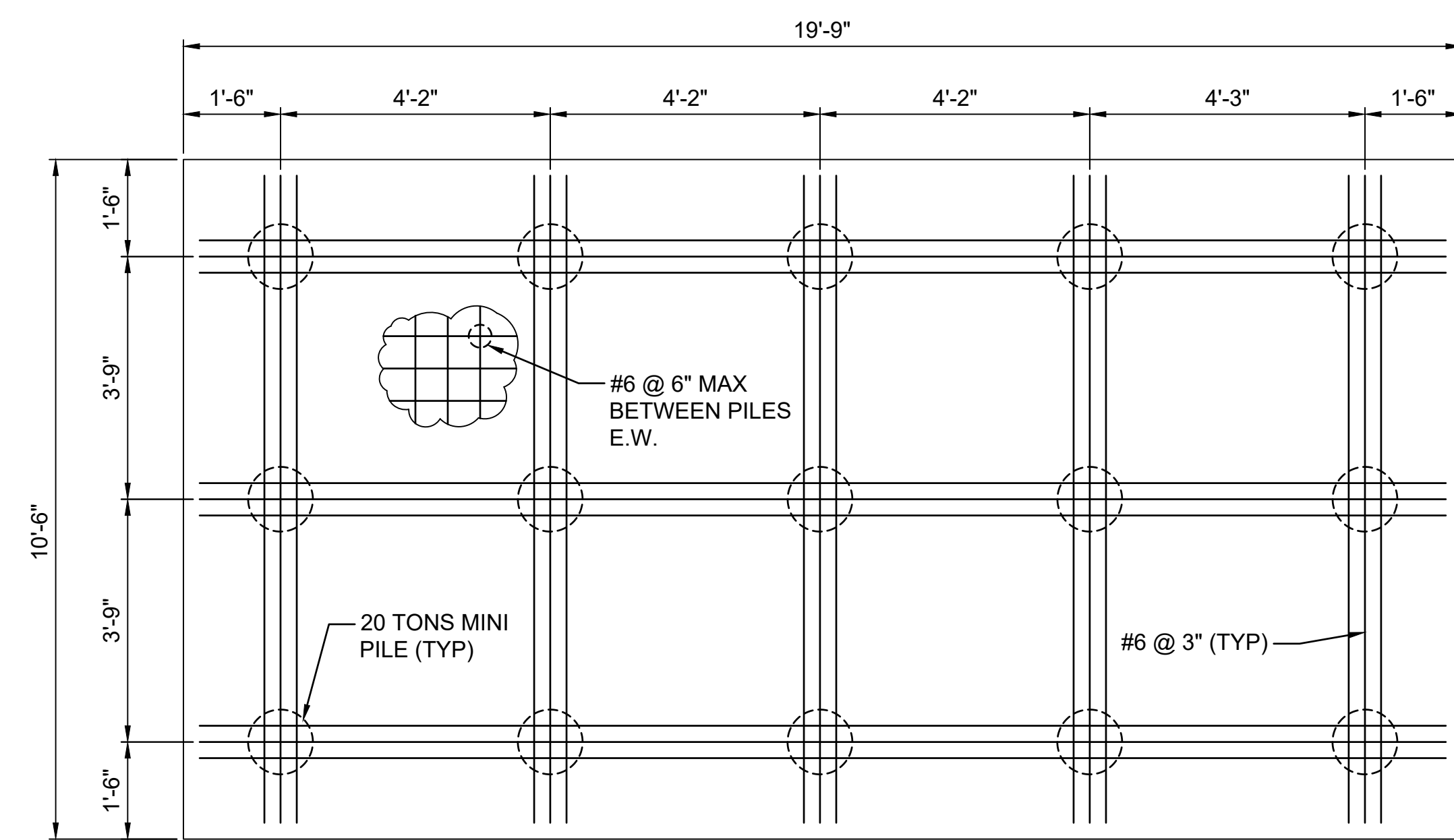
1. THE CONTRACTOR IS TO SUBMIT FOR REVIEW AND APPROVAL SHOP DRAWINGS OF THE NEW TIDE GATE CHAMBER.



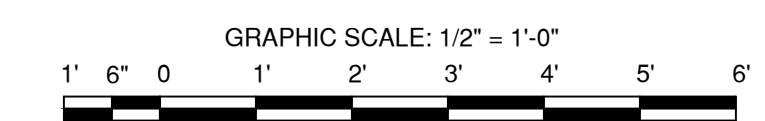
1 CHAMBER SECTION @ CL (PACKAGE 2)
SS803 SCALE: 1/2" = 1'-0"



3 CHAMBER SECTION @ TIDE GATE (PACKAGE 2)
SS803 SCALE: 1/2" = 1'-0"



2 PILE PLAN (PACKAGE 2)
SS804 SCALE: 1/2" = 1'-0"



ANSI D 22' x 34'

Last saved by: LIZANO (2022-06-15) Last Plotter: 2022-06-17 Filename: C:\TEMP\WORK\2022\07\2021_LSP\2021_SHEETS\10_PWS\SPSS804R01.DWG

ATTACHMENT #2
NEW SPECIFICATION #107119.16 –
REMOVEABLE FLOOD BARRIERS

(ATTACHED)

SECTION 107119.16 – REMOVABLE FLOOD BARRIERS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Drawings and general provisions of the Contract, including General and Special Conditions and Division 01 Specification Sections, apply to this Section.
- B. This work consists of providing all materials, products, accessories, tools, equipment, services, transportation, labor, supervision, and manufacturing techniques required to assemble and install deployable stop log type flood barriers described herein and as shown on the Contract Drawings.

1.02 REFERENCES

- A. Unless otherwise noted, the latest edition of the following codes and standards will govern this work. If any conflicts exist between these codes and standards the more restrictive requirements will govern.
- B. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.
 - 1. Aluminum Association (AA)
 - a. AA Aluminum Design Manual 2010
 - 2. American Institute of Steel Construction (AISC)
 - a. AISC Design Guide 27-2013 – Structural Stainless Steel
 - 3. American Society of Civil Engineers (ASCE)
 - a. ASCE 24-05: Flood Resistant Design and Construction
 - b. ASCE 7-05 or 7-10: Minimum Design Loads for Buildings and Other Structures (Including provisions for impact in accordance with Commentary Section C5.4.5)
 - 4. American Society of Mechanical Engineers (ASME)
 - a. ASME Structural Welding Code Section IX.
 - 5. American Welding Society (AWS)
 - a. AWS Structural Welding Code D1, D1.2, D1.3, D1.6.
 - 6. FEMA
 - a. FEMA Technical Bulletin 3-93 Non-Residential Flood proofing

- b. FEMA Flood Proofing Non-Residential Structures #102
- c. FEMA Recommendations on Dry Proofing
- 7. United States Army Corps of Engineers (USACE)
 - a. US Army Corps of Engineers, Flood Proofing Regulations
- 8. New York City Department of Buildings (NYC DOB)
 - a. New York City Building Code (2014)

1.03 SUBMITTALS

- A. General: Refer to and comply with Section 013300, “*Submittal Procedures*”, for procedures and additional submittal criteria.
- B. Action Submittals
 - 1. QA Submittals: Submit test reports showing compliance with specified performance characteristics.
- C. Informational Submittals
 - 1. Manufacturers Data: Submit installation, operation and maintenance manuals for flood barrier.
 - 2. Shop Drawings: Submit shop drawings approved by a New York State licensed Professional Engineer for flood barriers including dimensional plans, elevations, sections, details for all mountings/connections, and parts list. Contractor to coordinate with foundation and architectural concrete shop drawings as necessary.
 - 3. Calculations: Submit calculations sealed by a New York State licensed Professional Engineer verifying the flood barrier’s ability to withstand the design pressure loading.
 - 4. Samples: Provide samples of all permanently installed connection points and cover plates present on building façade or in pavement.

1.04 QUALITY ASSURANCE

- A. Perform work in accordance with issued permits, Municipalities (New York City, Battery Park City) and the State of New York, ordinances, and regulations, in accordance with Section 014100.
- B. The manufacturer of the stop log flood barriers must have provided removable stop log flood barriers on at least five (5) installations similar to the requirements of this project
- C. Manufacturer must demonstrate compliance and certification of a Quality Management System administered by the International Organization for Standardization (ISO). Documentation of current certification status to be provided upon request.

1.05 SUSTAINABLE DESIGN REQUIREMENTS

- A. Sustainable Design Requirements: The Owner requires the Contractor to implement practices and procedures to meet the Project's environmental performance goals, which include achieving ILFI Zero Carbon and WEDG Certification. Refer to Section 018113 - Sustainable Design Requirements for the Project's targets and specific requirements. The Contractor must ensure that the requirements related to the Project's sustainability design goals are implemented to the fullest extent. Substitutions, or other changes to the work proposed by the Contractor or their Subcontractors, must not be allowed if such changes compromise the Project's sustainability goals and ILFI Zero Carbon or WEDG certification.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Components must be undamaged when delivered to site and must be handled and stored so as to prevent damage, including attention to gaskets.
- B. Protect from exposure to damaging liquids, oils and greases, and unnecessary exposure to weather.

1.07 WARRANTY

- A. Provide 1-Year limited warranty against defects in material and workmanship from date of substantial completion.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Aluminum Beams: Made up from bolted Grade 6063-T6 Aluminum alloy
- B. Intermediate Posts and End Tracks: All posts and tracks must be deployable (i.e. not permanently installed) and be aluminum manufactured from minimum 6005A-T61 alloy.
- C. Sills: Level, smooth concrete or paving per the Contract Drawings.
- D. Bolts must be stainless steel Type 316 complying with ASTM F593A. Nuts must be stainless steel Type 316 complying with ASTM F594. Washers must be stainless steel Type 316.
- E. Plate gaskets must be EPDM, 40 durometer. Panel and track gaskets must be EPDM with a durometer appropriate for the waterproofing needs. Panel and track gaskets must be set without the use of mechanical fasteners.
- F. Sealants: Sealant must be a one-part polysulphide gun-applied sealant and must be compatible with all substrates and field applied in accordance with the manufacturer's recommendations

2.02 EQUIPMENT

- A. Flood control barrier must provide an effective seal against short term and long-term high-water situations, to the protection level indicated on the drawings.

- B. The flood barrier consists of deployable end channels and intermediate posts with removable aluminum beams with integral gaskets.
- C. The flood barrier system must be deployed by hand by a two (2) person team and not require any additional equipment to install the stop log beams or posts aside from hand tools required for tightening the gates. Cranes or telehandlers will not be permitted to be used as a primary method of deployment.
- D. Permanent sleeve anchors in the pavement and concrete walls must be fitted with a tamperproof cap, be flush with the proposed finished grade and comply with the Americans with Disabilities Act (ADA) requirements for uneven surfaces.
- E. The flood barrier must utilize only one set of clamps per span. Systems requiring individual beams to be fixed in place must not be allowed
- F. Barrier beam installation and clamping is to be able to be undertaken from either side of the barrier.
- G. Flood barrier gaskets must be replaceable in the field without the need for specialized tools.
- H. The flood barrier is to be operable on the pavement material indicated on the Contract Drawings. Flood barrier systems must not require a ground beam to be cast in across thresholds.
- I. Storage containers must be provided to compactly house and protect the stoplog components when not in use.

2.02 DESIGN

- A. Design Loads for the Stop Log Flood Panel System in accordance with ASCE 24-05 and New York City Building Code Appendix G.
- B. Stop Log System Flood Panel System must be designed for load combinations in accordance with ASCE 7, Chapter 2.0 (Combinations of Loads), flood loads in accordance with ASCE 7 Section 5.4 (Loads During Flooding), and wind loads in accordance with ASCE 7-05, Chapter 16 or ASCE 7-10 Chapter 26 and 30. Flood loads must be developed based on the Design Flood Elevation indicated on the Contract Drawings and the following:
 - 1. Hydrostatic Loads, caused by water which is either stagnant or moves at velocities less than 5 ft/sec, according with ASCE 24-05, Section 6.2.1 and ASCE 7, Section 5.4.2.
 - 2. Hydrodynamic Loads: Hydrodynamic loads considered with a maximum flow velocity of 5 ft/sec in accordance with ASCE 24-05, Section 6.2.1 (Dry Floodproofing Limitations) and ASCE 7, Section 5.4.3.
 - 3. Wave Loads: Nonbreaking and broken wave loads in accordance with ASCE 7, Section 5.4.4 referencing hydrostatic and hydrodynamic loads.
 - 4. Impact Loads: Impact loads in accordance with ASCE 7, Section 5.4.5 and the Commentary, Section C5.4.5 utilizing a debris weight not less than 500 lbs, a flow velocity of 5.0 ft/sec, an Importance Coefficient not less than 1.0, and a Blockage Coefficient not

greater than 0.20. Values of R_{max} must be developed in accordance with ASCE 7 Commentary Section C5.4.5.

- C. Stop Log System Flood Panel System must be designed for a maximum wind load pressure based on the wind speed indicated on the Contract Drawings.
- D. Custom details required for connection points at building façade and pavement. Submit shop drawings and samples of façade connection and pavement connection/ cover plate for review of Architect and Landscape Architect. Custom connection points and cover plates to comply with requirements of Section 057000 “Ornamental Metals” and Section 099000 “Painting and Finishing.”
- E. Contractor to coordinate extents of removable flood barrier system with structural foundation design, cast-in-place architectural concrete design, and code required means of egress. Removable flood barrier system shall be documented in foundation concrete and architectural concrete shop drawings as necessary.

PART 3 - EXECUTION

3.1 FABRICATION

- A. The finished product must be rigid, neat in appearance, and free from all defects, warps, and buckles. All exposed joints and corners must be well rounded.
- B. The panel and frame must be flat within 1/8” in any 6’ length.
- C. All butt welds in frame to be full penetration welds.

3.2 INSTALLATION

- A. Substrate: Verify new and/or existing substrate for compliance with manufacturer’s requirements.
- B. Installation: Install flood barriers in accordance with manufacturer's instructions and approved shop drawings.
- C. Jambs and mullions must be installed level, square, plumb and rigid.
- D. Only the designed and provided fixings are to be used in accordance with manufacturer's installation instructions.
- E. Sealants to be applied per product application directions and in accordance with manufacturer’s instructions.

3.3 FIELD QUALITY CONTROL

- A. Flood barrier to be operated and field verified including the sealing surfaces to check they maintain the correct level of contact at all points.

- B. A ‘paper pull-out test’ to be performed on all sealing surfaces to ensure a tight fit and a full height water test is to be undertaken on each gate, with water held against the gate at full design height for 2hours. Any leakage through the gate must be collected and quantified to assess gate performance against specification.
- C. Verify that the barrier assembly operates freely without undue force in installing and removing stop logs.
- D. Verify all anchors are installed in accordance with ACI 318 and the manufacturer’s recommendations.

3.4 DEMONSTRATION

- A. After installation of the gates, the CONTRACTOR and a representative from the gate manufacturer must conduct two training sessions to demonstrate the maintenance and operation of the deployable system.

END OF SECTION 107119.16

ATTACHMENT #3
REVISED CIVIL DRAWINGS:

- C002 – General Notes and Notes*
- C100B – Site Demolition Legend and Flag Notes*
- C101SW – Site Demolition Plan 01*
- C101SE – Site Demolition Plan 02*
- C401SW – Storm Drainage Plan 01*
- C401SE – Storm Drainage Plan 02*
- C601SW – Water and Sewer Plan 01*
- C601SE – Water and Sewer Plan 02*
- C802 – Sections and Details*
- C903 – Storm Drainage Utility Profile*
- C913 – Sewer Utility Profile*

(ATTACHED)

GENERAL NOTES:

- 1. SEE SHEETS G004 THROUGH G007 FOR PROJECT SPECIFIC GENERAL NOTES. NOTES CONTAINED HEREIN APPLY TO C SERIES SHEETS. SEE G SERIES SHEETS FOR INFORMATION PERTAINING TO NON-C SERIES SHEETS.
2. WORK SHALL CONFORM TO THE NYC BUILDING CODE, THE NYC DRAFT STORMWATER MANAGEMENT PROGRAM PLAN (2018), NYC DEP SEWER DESIGN STANDARDS, NYC DEP WATER MAIN DESIGN STANDARDS, AND THE NYC PLUMBING CODE STANDARDS. CONTRACTOR SHALL MAINTAIN A COPY OF THESE DOCUMENTS ON-SITE DURING CONSTRUCTION.
3. THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL DURING CONSTRUCTION.
4. THE CONTRACTOR SHALL CONTACT DIG SAFELY NEW YORK 811(1-800-272-4480) A MINIMUM OF THREE DAYS PRIOR TO ANY EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE SERVICES OF A PROFESSIONAL UNDERGROUND UTILITY LOCATION SERVICE TO LOCATE AND MAINTAIN MARKINGS THAT INDICATE LOCATIONS OF UNDERGROUND UTILITIES IN THE CONSTRUCTION AREA.
5. SANITARY, CSO, AND STORM SEWER OUTFALLS AND DEP PIPES WITHIN THE PROJECT LIMITS SHALL BE CLEANED AND TELEVISIONED (CCTV INSPECTIONS) BOTH PRIOR TO AND AFTER CONSTRUCTION IN ACCORDANCE WITH DEP CSI (COLLECTION SYSTEM INVESTIGATION) STANDARDS. CONTRACTOR SHALL COORDINATE WITH DEP CSI BEFORE PERFORMING CCTV OF THE SEWERS. PLEASE CONTACT TERRANCE BROCK (TBROCK@DEP.NYC.GOV). REPORTS OF INSPECTION SHALL BE SUBMITTED TO DEP FOR REVIEW. DEP INFRASTRUCTURE IMPACTED BY CONTRACTOR SHALL BE REPLACED/RELOCATED IN ACCORDANCE WITH DEP REQUIREMENTS.
6. FLOOD ALIGNMENT PROVIDED HEREIN FOR REFERENCE ONLY. NOTE THAT PORTIONS OF THE ALIGNMENT ARE ON THE SURFACE AND OTHERS ARE UNDERGROUND. SEE STRUCTURAL PLANS FOR DETAILS.
7. WALL PENETRATION FOR STORM DRAIN, WATER, AND SANITARY SEWER PIPING SHALL BE IN ACCORDANCE WITH THE STRUCTURAL DOCUMENTS, UNLESS NOTED OTHERWISE.
8. PROJECT DATUM:
A. COORDINATES SHOWN HEREON ARE REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM NYLI NAD 83 AS ESTABLISHED BY GPS METHODS. THESE VALUES HAVE BEEN SCALED TO GROUND AND SUBJECT TO TRAVERSE ADJUSTMENT.
B. ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AS ESTABLISHED BY GPS METHODS.

SITE DEMOLITION NOTES:

- 1. SEE DRY UTILITY DEMOLITION PLANS, SE SHEETS, FOR DEMOLITION OF DRY UTILITIES ACROSS THE PROJECT.
2. SEE SITE MEP PLANS, SPF SHEETS, FOR DEMOLITION OF EXISTING IRRIGATION UTILITIES AND APPURTENANCES.
3. SEE PAVILION DEMOLITION PLANS, DM SHEETS, FOR DETAILS ON REMOVAL AND DEMOLITION OF EXISTING PAVILION ELEMENTS.
4. SEE RIGHT-OF-WAY DEMOLITION PLANS, MT SHEETS, FOR DEMOLITION WITHIN THE RIGHT OF WAY, AND FOR TESC DRAWINGS.
5. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN ALL TEMPORARY BARRIERS AND SECURITY DEVICES AS NECESSARY FOR THE PROTECTION OF THE ADJACENT PUBLIC IMPROVEMENTS WITHIN THE STREET RIGHT-OF-WAYS.
6. SEE IRRIGATION PLANS, I SHEETS, AND SPECIFICATIONS FOR IRRIGATION DEMOLITION AND TEMPORARY IRRIGATION.
7. SEE TREE PROTECTION PLANS, L SHEETS, AND SPECIFICATIONS FOR CARE, TRANSPLANTING AND PROTECTION OF EXISTING PLANTS TO REMAIN.
8. THE CONTRACTOR SHALL COORDINATE THE REMOVAL, ABANDONMENT AND/OR CAPPING OF EXISTING UTILITIES WITH THE APPLICABLE UTILITY AGENCY, INCLUDING BUT NOT LIMITED TO:
A. EXISTING WATER CONNECTIONS, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION.
B. EXISTING SANITARY SEWER, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION.
C. EXISTING STORM DRAINAGE, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION.
9. EXCAVATION FOR REMOVAL OF UTILITIES SHALL BE IN ACCORDANCE WITH THE PROJECT'S GEOTECHNICAL ENGINEERING REPORT PREPARED BY OWENS ENGINEERING. A DRAFT GEOTECHNICAL REPORT WAS PROVIDED ON 05/12/2020.
10. THE CONTRACTOR SHALL COMPLY WITH THE REPORT RECOMMENDATIONS FOR TEMPORARY CONSTRUCTION SLOPES AND SHALL NOT EXCEED THOSE SLOPES WITHOUT PRIOR APPROVAL OF THE GEOTECHNICAL ENGINEER.
11. CAP OR PLUG UTILITY SERVICES AT THE LIMITS OF EXCAVATION OR AT THE LIMITS OF DEMOLITION, UNLESS NOTED OTHERWISE.
12. ABANDON PIPES AND STRUCTURES SHOWN HEREON ACCORDING TO NYC DEP STANDARD SPECIFICATION SECTION 72.11.



SITE DEMOLITION NOTES CONT.:

- 13. ABANDONMENT OF UTILITY PIPELINES SMALLER THAN 12 INCHES IN DIAMETER SHALL REQUIRE CAPPING OR PLUGGING OF THE PIPE ENDS ONLY, UNLESS NOTED OTHERWISE.
14. REMOVE EXISTING PAVEMENTS AND WALKS, BASE COURSE, AND SUBBASE MATERIAL TO FULL DEPTH.
15. REMOVE EXISTING PAVERS AND CRUSHED ROCK SURFACING, BASE COURSE, AND SUBBASE MATERIAL TO FULL DEPTH.
16. PROTECT ALL EXISTING STRUCTURES AND FOUNDATIONS TO REMAIN WITHIN THE LIMITS OF WORK DURING CONSTRUCTION UNLESS NOTED OTHERWISE. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AS REQUIRED IN ORDER TO AVOID IMPACTS TO EXISTING STRUCTURES, FOUNDATIONS AND RETAINING WALLS.
17. PROTECT ALL EXISTING UTILITIES INDICATED TO REMAIN FROM DAMAGE AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AS REQUIRED TO ENSURE ADEQUATE PROTECTION OF UTILITIES AND APPURTENANCES TO REMAIN. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF DEMOLITION OPERATIONS AND NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES.
18. THE CONTRACTOR SHALL REPLACE PAVEMENT MARKINGS AND/OR SIGNAGE THAT HAS BEEN REMOVED OR DAMAGED FROM CONSTRUCTION ACTIVITIES.
19. MONITORING WELLS, IF ENCOUNTERED, SHALL BE DECOMMISSIONED IN ACCORDANCE WITH THE CITY OF NEW YORK REQUIREMENTS.
20. ITEMS SPECIFIED FOR SALVAGE ARE FOR REUSE WITHIN THE PROJECT LIMITS. CONTRACTOR SHALL COORDINATE WITH THE OWNER REGARDING ADDITIONAL SALVAGE REQUIREMENTS.
21. SALVAGE AND PROTECT THE FOLLOWING FOR REUSE ON SITE:
A. BLUE STONE AND TAPESTRY STONE, INCLUDING BUT NOT LIMITED TO PAVEMENTS, CURBS, WALLS, CLADDING, AND STEPS.
B. WOOD AS NOTED ON DRAWINGS (SEE DEMOLITION NOTE 3 FOR WOOD ON EXISTING BUILDING).
C. BENCHES AS NOTED ON DRAWINGS.
D. FLAG POLES AND BASES.
22. SEE LANDSCAPING PLANS FOR REUSE OF SITE SALVAGE ITEMS WITHIN THE PROJECT LIMITS.
23. SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION ON EXISTING BULKHEAD, RELIEVING PLATFORM, AND RAILING REMOVAL.
24. SEE LANDSCAPING PLANS FOR RESTORATION AND REPLACEMENT OF EXISTING HISTORICAL BULKHEAD DEMARCATIONS.
25. RELOCATED FIRE HYDRANTS SHALL BE OPERATIONAL PRIOR TO DISCONNECTION OF EXISTING FIRE HYDRANTS.

SITE PAVING SECTION NOTES:

- 1. DIMENSIONS AND COORDINATES ARE TO FACE OF CURB, FACE OF BUILDING, FACE OF WALL, OR LIMIT OF PAVEMENT SECTION, UNLESS NOTED OTHERWISE.
2. APPLY A BITUMINOUS TACK COAT AT LOCATIONS WHERE ASPHALT PAVEMENT ABUTS ANY BUILDING STRUCTURE, UTILITY APPURTENANCE OR OTHER PAVEMENT TYPE.
3. CONCRETE FOR EXTERIOR SITE FACILITIES, INCLUDING BUT NOT LIMITED TO CURBS, SIDEWALKS, PAVING PADS, THRUST BLOCKING, FENCE POST AND BOLLARD FOUNDATIONS, RAMPS, AND UTILITY STRUCTURES SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 033000, "CAST-IN-PLACE CONCRETE" AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS. MAXIMUM WATER/CEMENT RATIO SHALL BE 0.45 AND CONCRETE SHALL HAVE 5 PLUS OR MINUS 0.5 PERCENT AIR ENTRAINMENT. CONCRETE BASE FOR PAVEMENT AND CONCRETE FOR PAVING SHALL CONFORM TO CLASS A-40, TYPE 1A CONCRETE IN ACCORDANCE WITH NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS SECTION 3.05, "CONCRETE." CONCRETE BASE FOR PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS SECTION 4.04, "CONCRETE BASE FOR PAVEMENT." CONCRETE FOR PAVING SHALL BE CONSTRUCTED IN ACCORDANCE WITH NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS SECTION 4.05, "CONCRETE PAVEMENT."
4. PROVIDE AN EXPANSION JOINT AT LOCATIONS WHERE CONCRETE WALK OR CONCRETE PAVEMENT ABUT STRUCTURAL FOUNDATION, COLUMN OR WALL, AND FIXED OBJECTS.
5. EXTERIOR CONCRETE PAVEMENT JOINTS SHALL BE WEAKENED PLANE JOINTS WITH A MAXIMUM SPACING OF X (SPACING SHALL BE THICKNESS OF CONCRETE IN FEET X 24) FEET ON CENTER. PAVEMENT PANEL LENGTH TO WIDTH RATIO SHALL NOT EXCEED 1.25. AT THE CONTRACTOR'S OPTION, CONTRACTOR MAY SUBSTITUTE CONSTRUCTION JOINTS FOR WEAKENED PLANE [CONTROL] JOINTS. JOINTS SHALL BE COORDINATED WITH LANDSCAPE PLANS.
6. SEE LANDSCAPE PLANS FOR PAVEMENT MATERIALS, COLOR, AND FINISH.
7. SEE CIVIL MAINTENANCE AND TRAFFIC PROTECTION DRAWINGS FOR DETAILS ON SITE ELEMENTS LOCATED WITH THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION RIGHT OF WAY.

GRADING NOTES:

- 1. SPOT ELEVATIONS ARE TO TOP OF PAVEMENT, GUTTER ELEVATION, BOTTOM OF WALL, OR FINISHED GRADE UNLESS NOTED OTHERWISE.
2. CURB AND/OR WALL REVEAL WHERE ADJACENT TO PLANTING ZONES AND/OR WALKING SURFACES SHALL BE 4 INCHES UNLESS NOTED OTHERWISE. REFER TO 10/C811 FOR A SCHEMATIC DETAIL.
3. FOR UTILITIES TO REMAIN, ADJUST UTILITY ACCESS COVERS TO FINISH GRADE.
4. TOP ELEVATION FOR VAULTS SHALL MATCH FINISH GRADE. SLOPE VAULT LIDS AS REQUIRED.
5. SLOPES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. CONSTRUCTION SHALL BE BASED ON SPOT ELEVATIONS.

STORM DRAINAGE NOTES:

- 1. LENGTHS OF PIPING SHOWN ON STORM DRAIN ARE FROM CENTER OF STRUCTURE, FITTING OR POINT OF INTERSECTION AND ARE SHOWN FOR INFORMATION ONLY. ALL PIPING SHALL BE INSTALLED AT THE LOCATION SHOWN ON THE PLANS AND LOCATED BY COORDINATES OR DIMENSIONS. VERIFY LOCATIONS OF LATERAL BUILDING CONNECTIONS WITH THE PLUMBING DRAWINGS PRIOR TO INSTALLATION.
2. TRENCH DRAIN GRATES SHALL BE LOCKING QUE CAST BRONZE BY IRON AGE DESIGNS, UNLESS NOTED OTHERWISE.
3. STORM DRAINAGE DETAILS ARE FOR A PRIVATE DRAIN SYSTEM. FOR NYC DEP OWNED STORM DRAINAGE AND MANHOLE DETAILS SEE NYC DEP STANDARD DETAILS OF CONSTRUCTION.
4. HYDRODYNAMIC SEPARATORS SHALL BE SIZED ACCORDING TO THE FOLLOWING REQUIREMENTS:
A. HDS1-1-1: TREATMENT FLOW RATE - 2.50 CFS, SQUARE STRUCTURE
B. HDS3-1-1: TREATMENT FLOW RATE - 1.25 CFS, ROUND STRUCTURE
C. HDS6-1-1: TREATMENT FLOW RATE - 1.25 CFS, ROUND STRUCTURE
D. HDS7-1-1: TREATMENT FLOW RATE - 0.50 CFS, ROUND STRUCTURE
E. HDS8-1-1: TREATMENT FLOW RATE - 1.75 CFS, ROUND STRUCTURE
F. HDS9-1-1: TREATMENT FLOW RATE - 2.50 CFS, ROUND STRUCTURE
G. HDS10-1-1: TREATMENT FLOW RATE - 1.25 CFS, ROUND STRUCTURE
H. HDS11-1-1: TREATMENT FLOW RATE - 2.00 CFS, ROUND STRUCTURE
5. METAL DRAINAGE HARDWARE IDENTIFIED IN SECTIONS AND DETAILS SHALL BE SS316 OR GALVANIZED STEEL, UNLESS NOTED OTHERWISE.
6. PIPE LOCATED WITHIN MAPPED STREETS SHALL BE IN ACCORDANCE WITH NYC DEP SEWER DESIGN STANDARDS. PIPE LOCATED WITHIN THE BATTERY PROPERTY SHALL BE IN ACCORDANCE WITH NYC DPR STANDARDS. PIPE LOCATED IN OTHER AREAS THAN NOTED ABOVE SHALL BE A MATERIAL IDENTIFIED WITHIN THE PROJECT SPECIFICATIONS.

SUBDRAINAGE NOTES:

- 1. LENGTHS OF PIPING SHOWN ON SUBDRAINAGE ARE FROM CENTER OF STRUCTURE, FITTING OR POINT OF INTERSECTION AND ARE SHOWN FOR INFORMATION ONLY. ALL PIPING SHALL BE INSTALLED AT THE LOCATION SHOWN ON THE PLANS AND LOCATED BY COORDINATES OR DIMENSIONS.
2. SUBDRAINAGE DETAILS ARE FOR A PRIVATE DRAIN SYSTEM. FOR NYC DEP OWNED STORM DRAINAGE AND MANHOLE DETAILS SEE NYC DEP STANDARD DETAILS OF CONSTRUCTION.

WATER NOTES:

- 1. WATER AND REUSE WATER MATERIALS AND CONSTRUCTION SHALL CONFORM TO NYC DEP STANDARD SEWER AND WATER MAIN SPECIFICATIONS FOR WATER LINES INSTALLED WITHIN THE PUBLIC RIGHT OF WAY. FOR WATER AND REUSE WATER MATERIALS AND CONSTRUCTION WITHIN PRIVATE PROPERTY, REFER TO THE PROJECT SPECIFICATIONS AND PLAN DOCUMENTATION.
2. SEE NOTE 9 FOR TYPICAL COVER OVER WATER AND REUSE WATER LINES. MAINTAIN A MINIMUM OF 12 INCHES CLEAR AT CROSSINGS WITH UTILITIES OTHER THAN SANITARY SEWER LINES. WATER AND REUSE WATER LINES SHALL PASS UNDER THE OTHER UTILITY IF THE MINIMUM SPECIFIED COVER CANNOT BE OBTAINED.
3. MAINTAIN A MINIMUM OF 18 INCHES CLEAR BETWEEN CROSSINGS OF WATER AND REUSE WATER LINES AND SANITARY SEWER LINES. WATER AND REUSE WATER LINES SHALL CROSS ABOVE SANITARY SEWER LINES. PROVIDE HORIZONTAL AND VERTICAL BENDS WHERE INDICATED. WHERE A POINT OF INTERSECTION (HORIZONTAL OR VERTICAL) IS SHOWN AND THE DEFLECTION ANGLE IS MORE OR LESS THAN A STANDARD BEND, USE A COMBINATION OF THE STANDARD BEND AND JOINT DEFLECTION OF THE PIPE TO MEET THE ALIGNMENT SHOWN. MAXIMUM JOINT DEFLECTION IS 3 DEGREES OR THE MAXIMUM THAT IS RECOMMENDED BY THE PIPE MANUFACTURER, WHICHEVER IS SMALLER.

WATER NOTES CONT.:

- 4. PROVIDE RESTRAINED JOINTS AT ALL HORIZONTAL AND VERTICAL BENDS IN ACCORDANCE WITH NYC DEP STANDARD SEWER AND WATER MAIN DETAILS AND SPECIFICATIONS FOR WATER LINES INSTALLED WITHIN THE PUBLIC RIGHT OF WAY AND WITHIN PRIVATE PROPERTY. FOR WATER AND REUSE WATER MATERIALS AND CONSTRUCTION WITHIN PRIVATE PROPERTY, REFER TO THE PROJECT SPECIFICATIONS AND PLAN DOCUMENTATION FOR ADDITIONAL THRUST BLOCKING RESTRAINT. THE CONTRACTOR MAY ELIMINATE HORIZONTAL AND/OR VERTICAL THRUST BLOCKING AT LOCATIONS WHERE INSTALLATION OF THE THRUST BLOCKING WILL INTERFERE WITH OTHER CONSTRUCTION. SEE SPECIFICATION FOR REQUIREMENTS.
5. CAPPED WATER LINES OR TEES SHALL HAVE RESTRAINED JOINTS. COORDINATE POINTS AND ELEVATIONS SHOWN FOR ALL MANHOLES ARE TO THE CENTER OF THE MANHOLE, UNLESS NOTED OTHERWISE.
6. THE CONTRACTOR SHALL VERIFY EXISTING AND NEW UTILITY CROSSINGS PRIOR TO WATER AND SANITARY SEWER SYSTEM INSTALLATION. TRENCHING FOR WATER AND REUSE WATER LINES SHALL CONFORM TO NYC DEP STANDARD SEWER AND WATER MAIN SPECIFICATIONS AND PIPE BEDDING SHALL CONFORM TO NYC DEP STANDARD SEWER AND WATER MAIN SPECIFICATIONS.
7. UTILITY CROSSINGS SHOWN ON THE UTILITY PROFILES ARE FOR THE CONTRACTOR'S INFORMATION AND REFERENCE. THE CONTRACTOR SHALL VERIFY EXISTING AND NEW UTILITY CROSSINGS PRIOR TO UTILITY SYSTEM INSTALLATION.
8. WATER AND REUSE WATER LINES SHALL BE DUCTILE IRON FOR PIPES GREATER THAN OR EQUAL TO 3 INCHES, AND TYPE K COPPER FOR PIPES SMALLER THAN 3 INCHES.
9. WATER AND REUSE WATER LINES SHALL BE LAID WITH THE FOLLOWING MINIMUM COVERS:

<8 INCH PIPE - MINIMUM 4'-0" OF COVER
8-INCH PIPE - MINIMUM 3'-9" OF COVER
10-INCH PIPE - MINIMUM 3'-7" OF COVER
12-INCH PIPE - MINIMUM 3'-5" OF COVER

- 10. PIPES AND FITTINGS FOR PROPOSED WATER LINES TO BE EQUIPPED WITH RESTRAINED JOINTS WHERE LOCATED IN/OR NEAR GEOFOAM AND/OR WHERE THRUST BLOCKS CANNOT BE USED.
11. BOTH REUSE AND DOMESTIC WATER DISTRIBUTION LINES ARE SHOWN, IN PARALLEL, WITH A 2' CENTERLINE OFFSET. PIPE DIMENSIONS SHOWN APPLY TO BOTH LINES, WHILE N/E DIMENSIONS APPLY TO THE DOMESTIC LINE. HORIZONTAL LOCATION FOR THE REUSE WATER LINE CAN BE OBTAINED BY APPLYING A 2' OFFSET FROM SHOWN DOMESTIC LINE N/E, UNLESS NOTED OTHERWISE.
12. WHERE A NON-STANDARD FITTING ANGLE IS REFERENCED IN THE PLAN, PROVIDE A COMBINATION OF STANDARD FITTINGS (11 1/4", 22 1/2", AND 45"), PLUS ALLOWABLE PIPE DEFLECTION, IN ORDER TO MEET INDICATED FITTING ANGLE.
13. HYDRANTS ORDERED INSTALLED OR REQUIRED TO REPLACE EXISTING HYDRANTS; AND, EXISTING HYDRANTS ORDERED RETAINED AND ADJUSTED TO NEW GRADE, REMOVED AND RESET, OR RECONNECTED TO NEW OR EXISTING WATER MAINS SHALL BE TWO-PIECE "BREAKAWAY" HYDRANTS, TYPES S-2-LP OR D-2-LP, AS SHOWN ON THE LATEST REVISIONS OF BWSO STANDARD DRAWING NOS. 43250-Z OR 43142-Z, RESPECTIVELY, AND AS SPECIFIED IN ACCORDANCE WITH SECTION 2.08 - STANDARD SPECIFICATIONS FOR DRY BARREL FIRE HYDRANTS AND EXTENSION KITS

SANITARY SEWER NOTES:

- 1. SANITARY SEWER MATERIALS AND CONSTRUCTION SHALL CONFORM NYC DEP STANDARD SEWER AND WATER MAIN SPECIFICATIONS.
2. SANITARY SEWER PIPING SHALL BE REINFORCED CONCRETE PIPING UNLESS NOTED OTHERWISE.
3. TRENCHING FOR SANITARY SEWERS SHALL CONFORM TO NYC DEP STANDARD SEWER AND WATER MAIN SPECIFICATIONS AND PIPE BEDDING SHALL CONFORM TO NYC DEP STANDARD SEWER AND WATER MAIN SPECIFICATIONS. SANITARY SEWER MANHOLES SHALL BE 48 INCHES IN DIAMETER, UNLESS NOTED OTHERWISE.



PROJECT
SOUTH BATTERY PARK CITY
RESILIENCY DESIGN
SERVICES
CLIENT

HUGH L. CAREY
BATTERY PARK CITY
AUTHORITY
CONSULTANT

AECOM USA
605 3rd Ave, 2nd Floor, New York, NY 10158
212.973.2900 tel www.aecom.com

SUB-CONSULTANT
MAGNUSSON KLEMNIC ASSOCIATES
1301 Fifth Avenue, Suite 3200, Seattle, WA 98101-2699
206.292.1200 tel 206.292.1201 fax www.mka.com

SITE WORKS
150 West 28th St., Suite 605
New York, NY 10001 212.255.6350 siteworks.com

MILHOUSE
333 South Wabash Ave., Suite 2801,
Chicago, IL 60604 313.987.0061 milhouseinc.com

TILLOTSON DESIGN ASSOCIATES
40 Worth St., Rm 703, New York, NY 10013
212.675.7760 tillotsondesign.com

THOMAS PHIFER AND PARTNERS
180 Varick St., New York, NY 10014
212.337.0334 thomasphifer.com

NAIK CONSULTING GROUP, PC
111 West 33rd St., Suite 605 New York, NY 10120
212.675.2701 naikgroup.com

OWENS
100 East Hanover Ave., Suite 101, Cedar Knolls, NJ 07927
973.539.440 owensengineering.com

KEY PLAN

REGISTRATION

ISSUE/REVISION

Table with 2 columns: Issue/Revision, Description

Table with 2 columns: Date, Responses to Questions

Table with 2 columns: Field, Name (Designed By: J. DUPUY, Drawn By: J. POPE, Checked By: S. HALUSCHAK, Approved By: M. JONES)

PROJECT/TERM CONTRACT NUMBER

Contract No. 18-2586

SHEET TITLE

GENERAL NOTES AND NOTES

SHEET NUMBER

C002

ITEMS TO REMAIN

FLAG	DESCRIPTION
1	EXISTING BUILDING TO REMAIN
2	EXISTING FENCE TO REMAIN
3	EXISTING WALL TO REMAIN
4	EXISTING CURB TO REMAIN
5	EXISTING PAVEMENT TO REMAIN
6	EXISTING CURB RAMP TO REMAIN
7	EXISTING PLANTER TO REMAIN
8	EXISTING VENT TO REMAIN
9	EXISTING BIKE RACK TO REMAIN
10	EXISTING BENCH TO REMAIN
11	EXISTING STONE CURB TO REMAIN
12	EXISTING TUNNEL TO REMAIN
13	EXISTING STORM SEWER PIPE OR STRUCTURE TO REMAIN
14	EXISTING POLE TO REMAIN
15	EXISTING MONUMENT TO REMAIN
16	EXISTING WATER PIPE OR STRUCTURE TO REMAIN
17	EXISTING SITE FEATURE TO REMAIN
18	EXISTING SANITARY SEWER PIPE OR STRUCTURE TO REMAIN
19	EXISTING SIGN TO REMAIN
20	EXISTING BULKHEAD TO REMAIN
21	EXISTING BOLLARD TO REMAIN
22	EXISTING STAIRS TO REMAIN
23	EXISTING TREE PIT TO REMAIN
24	EXISTING VAULT TO REMAIN
25	EXISTING LIGHT POLE AND PILLAR TO REMAIN
26	EXISTING GRADE BEAM AND PILE CAPS TO REMAIN
27	EXISTING RELIEVING PLATFORM TO REMAIN
28	EXISTING FOUNTAIN TO REMAIN
29	EXISTING SANITARY SEWER PIPE TO BE ABANDONED

2

SURFACE ELEMENTS TO BE REMOVED OR SALVAGED

FLAG	DESCRIPTION
S1	REMOVE EXISTING WALL AND FOUNDATION, SEE SITE DEMOLITION NOTES 20 THROUGH 22
S2	REMOVE EXISTING FENCE POSTS AND POST FOUNDATIONS
S3	REMOVE EXISTING LIGHT POLE AND PILLAR, SEE SITE DEMOLITION NOTES 20 THROUGH 23
S4	REMOVE EXISTING CONCRETE CURB
S5	REMOVE EXISTING BENCH
S6	REMOVE AND SALVAGE EXISTING GRANITE, SEE SITE DEMOLITION NOTES 20 THROUGH 22
S7	REMOVE AND SALVAGE FLAG POLE AND BASE FOR REUSE ON SITE, SEE SITE DEMOLITION NOTE 21
S8	REMOVE AND SALVAGE EXISTING BLUE STONE AND TAPESTRY STONE, SEE SITE DEMOLITION NOTES 20 THROUGH 22
S9	REMOVE EXISTING RAMP
S10	REMOVE EXISTING METAL EDGING
S11	REMOVE EXISTING BIKE RACK
S12	REMOVE EXISTING CONCRETE BLOCK
S13	REMOVE EXISTING PLANTER WALL, SEE SITE DEMOLITION NOTES 20 THROUGH 22
S14	REMOVE HISTORICAL BULKHEAD MARKER, SEE SITE DEMOLITION NOTE 24
S15	REMOVE EXISTING METAL CYLINDER
S16	REMOVE EXISTING POLE AND FOUNDATION
S17	REMOVE EXISTING BULKHEAD, SEE SITE DEMOLITION NOTE 23
S18	REMOVE EXISTING RAILING
S19	REMOVE EXISTING STEPS, SEE SITE DEMOLITION NOTES 20 THROUGH 22
S20	REMOVE EXISTING FOUNTAIN, FOUNDATIONS, DRAINS, WATER LINES, AND APPURTENANCES
S21	REMOVE EXISTING TREE PIT
S22	REMOVE EXISTING BUILDING, APPURTENANCES, AND FOUNDATION, SEE SITE DEMOLITION NOTES 20 THROUGH 22
S23	REMOVE EXISTING BOLLARDS AND FOUNDATIONS
S24	REMOVE AND SALVAGE WOOD, SEE SITE DEMOLITION NOTES 20 THROUGH 22
S25	REMOVE PLANTER WALL, PILE CAPS, AND GRADE BEAM. MATCH EXISTING WALL FINISH/APPEARANCE AT REMOVED EDGE
S26	REMOVE AND SALVAGE EXISTING ARTWORK, SEE LARCH
S27	REMOVE WOODEN SITE ELEMENT
S28	REMOVE AND SALVAGE EXISTING BENCH
S29	REMOVE EXISTING STONE
S30	REMOVE AND SALVAGE EXISTING RIVER BENCH, SEE SITE DEMOLITION NOTES 20 THROUGH 22
S31	REMOVE AND SALVAGE EXISTING GRANITE CURB, SEE SITE DEMOLITION NOTES 20 THROUGH 22

1

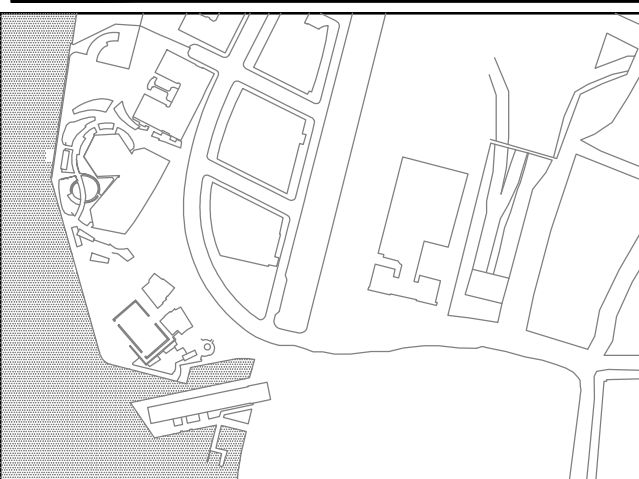
UTILITIES TO BE REMOVED, RELOCATED, OR SALVAGED

FLAG	DESCRIPTION
U1	REMOVE EXISTING WATER PIPE
U2	REMOVE EXISTING UTILITY VAULT
U3	REMOVE EXISTING STORM SEWER PIPE OR STRUCTURE
U4	REMOVE EXISTING SANITARY SEWER PIPE OR STRUCTURE
U5	REMOVE EXISTING WATER METER/VALVE
U6	REMOVE EXISTING HYDRANT
U7	REMOVE EXISTING TRENCH DRAIN
U8	REMOVE AND SALVAGE WAVE PATTERN TRENCH DRAIN GRATE FOR REUSE ONSITE, SEE SITE DEMOLITION NOTES 20 AND 22
U9	RELOCATE EXISTING FIRE HYDRANT ASSEMBLY, SEE SITE DEMOLITION NOTE 25
U10	REMOVE EXISTING DRINKING WATER FOUNTAIN

SITE DEMOLITION LEGEND

DESCRIPTION	SYMBOL
ITEM TO BE REMOVED	_____
ITEM TO REMAIN
CAP UTILITY, SEE SITE DEMOLITION-
PLUG UTILITY, SEE SITE DEMOLITION-E
REMOVE EXISTING STONE PAVING	[Pattern]
REMOVE EXISTING CONCRETE WALK	[Pattern]
REMOVE EXISTING HEX PAVERS	[Pattern]
REMOVE EXISTING CRUSHED ROCK SURFACING	[Pattern]
REMOVE EXISTING GRANITE PAVING, SEE SITE DEMOLITION NOTES 20, 21, AND 22	[Pattern]
REMOVE EXISTING BRICK PAVERS	[Pattern]

KEY PLAN



REGISTRATION

ISSUE/REVISION

NO.	DATE	DESCRIPTION

NO.	DATE	DESCRIPTION
2	JUNE 2022	RESPONSES TO QUESTIONS

Designed By: B. DUPUY
 Drawn By: J. POPE
 Checked By: S. HALUSCHAK
 Approved By: M. JONES

PROJECT/TERM CONTRACT NUMBER

Contract No. 18-2586

SHEET TITLE

SITE DEMOLITION LEGEND
AND FLAG NOTES

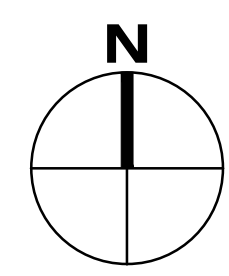
SHEET NUMBER

C100B

NOTES:

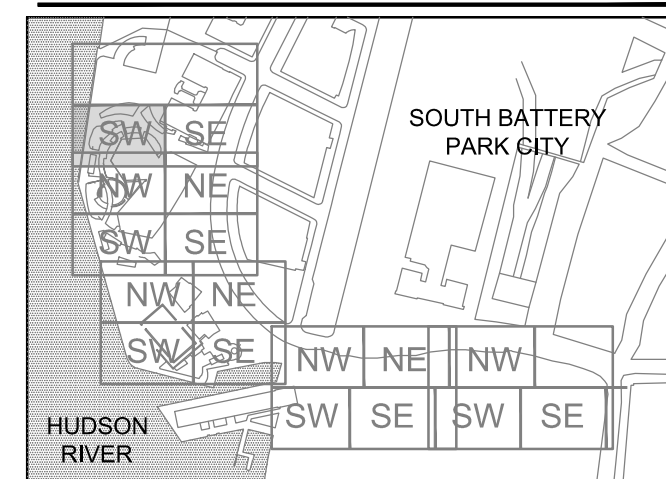
- 1. SEE SHEET C001 FOR LEGEND AND ABBREVIATIONS.
- 2. SEE SHEET C002 FOR GENERAL NOTES AND SITE DEMOLITION NOTES.
- 3. SEE SHEET C100B FOR SITE DEMOLITION LEGEND AND FLAG NOTES.
- 4. RECORDS INDICATE THAT THIS STRUCTURE IS A STORM DRAINAGE MANHOLE, THAT CONTAINS LATERALS FOR ROOF DRAINAGE FROM THE MUSEUM OF JEWISH HERITAGE. CONTRACTOR TO SEQUENCE DEMOLITION OF EXISTING LATERAL WITH CONSTRUCTION OF STORM DRAINAGE SYSTEM.

- 5. SANITARY SEWER IN MAPPED STREETS TO BE ABANDONED SHALL BE ABANDONED PER NYC DEP STANDARDS.
- 6. ABANDON EXISTING 12" DUCTILE IRON WATER LINE WITHIN MAPPED STREETS PER NYC DEP STANDARDS.



SUB-CONSULTANT

KEY PLAN



REGISTRATION

ISSUE/REVISION

IR	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS

IR	DATE	DESCRIPTION

Designed By: B. DUPUY
Drawn By: J. POPE
Checked By: S. HALUSCHAK
Approved By: M. JONES

PROJECT/TERM CONTRACT NUMBER

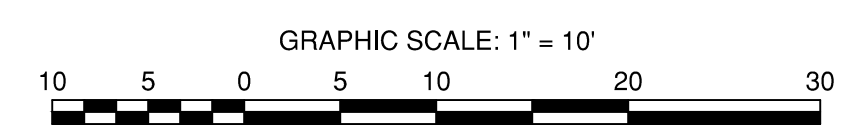
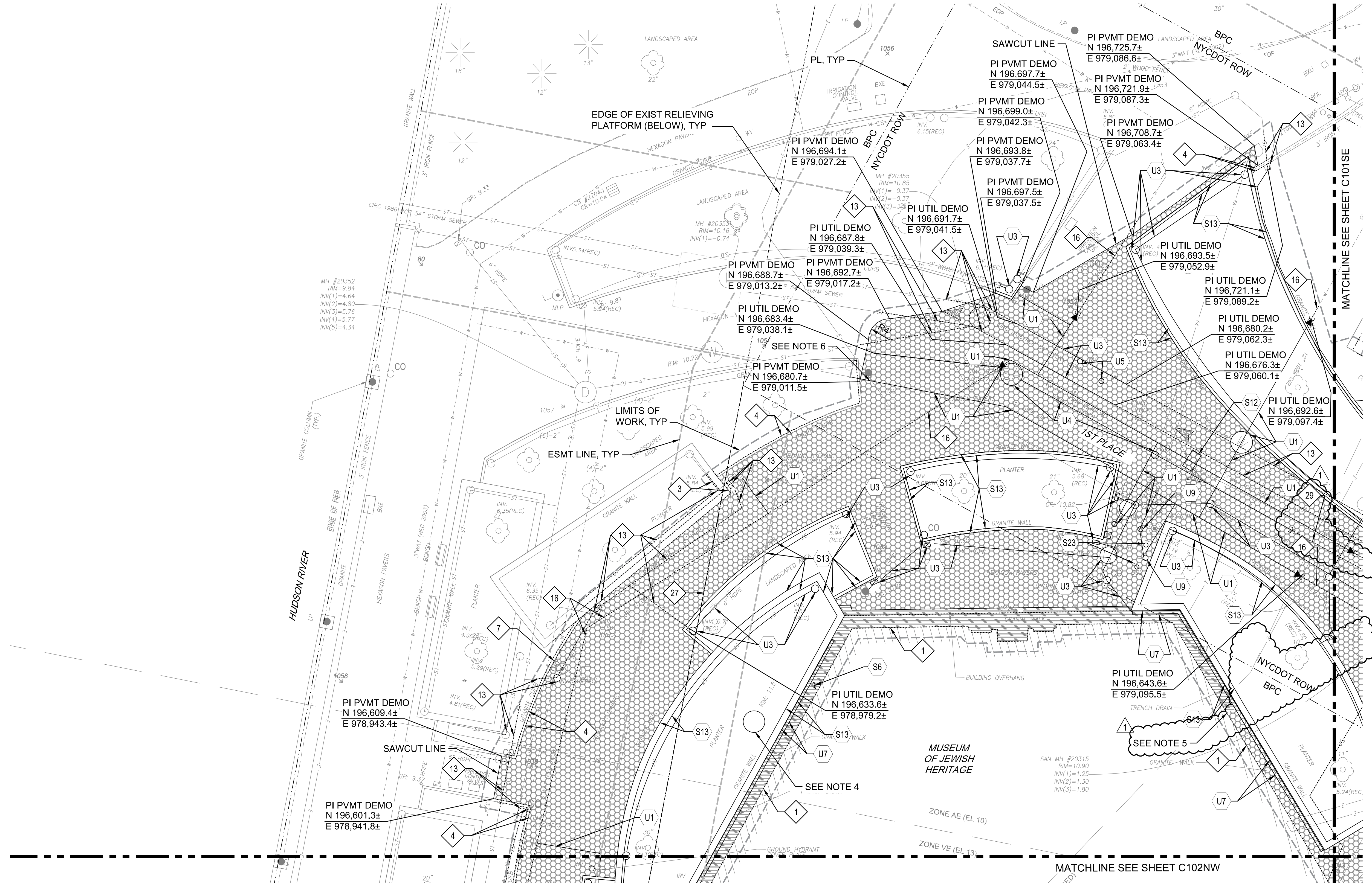
Contract No. 18-2586

SHEET TITLE

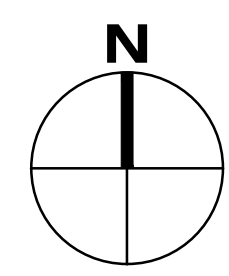
SITE DEMOLITION PLAN 01

SHEET NUMBER

C101SW



- NOTES:**
1. SEE SHEET C001 FOR LEGEND AND ABBREVIATIONS.
 2. SEE SHEET C002 FOR GENERAL NOTES AND SITE DEMOLITION NOTES.
 3. SEE SHEET C100B FOR SITE DEMOLITION LEGEND AND FLAG NOTES.
 4. SANITARY SEWER IN MAPPED STREETS TO BE ABANDONED SHALL BE ABANDONED PER NYC DEP STANDARDS.



PROJECT
SOUTH BATTERY PARK CITY
RESILIENCY DESIGN
SERVICES

CLIENT
HUGH L. CAREY
BATTERY PARK CITY
AUTHORITY

CONSULTANT

AECOM
AECOM USA
605 3rd Ave, 2nd Floor, New York, NY 10158
212.973.2900 tel www.aecom.com

SUB-CONSULTANT

MAGNUSSON KLEMNIC ASSOCIATES
1301 Fifth Avenue, Suite 3200, Seattle, WA 98101-2699
206.292.1200 tel 206.292.1201 fax www.mka.com

SITEWORKS
150 West 28th St, Suite 605
New York, NY 10001 212.255.8350 siteworks.com

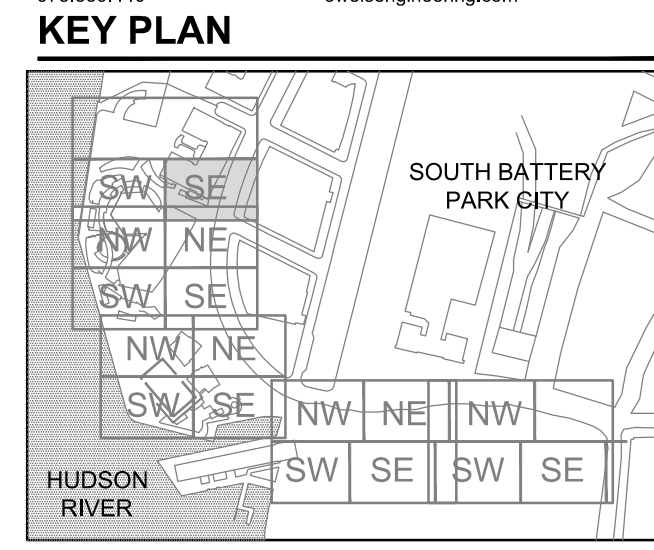
MILHOUSE
333 South Wabash Ave, Suite 2801
Chicago, IL 60604 313.987.0061 milhouseinc.com

TILLOTSON DESIGN ASSOCIATES
40 Worth St, Rm 703, New York, NY 10013
212.675.7760 tillotdesign.com

THOMAS PHIFER AND PARTNERS
180 Varick St, New York, NY 10014
212.337.0334 thomasphifer.com

NAIK CONSULTING GROUP, PC
111 West 33rd St, Suite 605 New York, NY 10120
212.575.2701 naikgroup.com

OWEIS
100 East Hanover Ave., Suite 101, Cedar Knolls, NJ 07927
973.539.440 oweisengineering.com



REGISTRATION

ISSUE/REVISION

IR	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS

Designed By: B. DUPUY
Drawn By: J. POPE
Checked By: S. HALUSCHAK
Approved By: M. JONES

PROJECT/TERM CONTRACT NUMBER

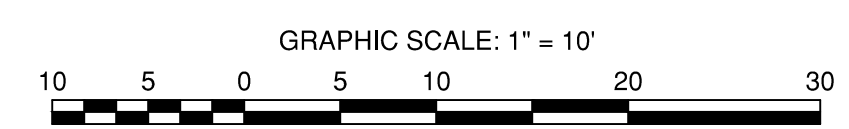
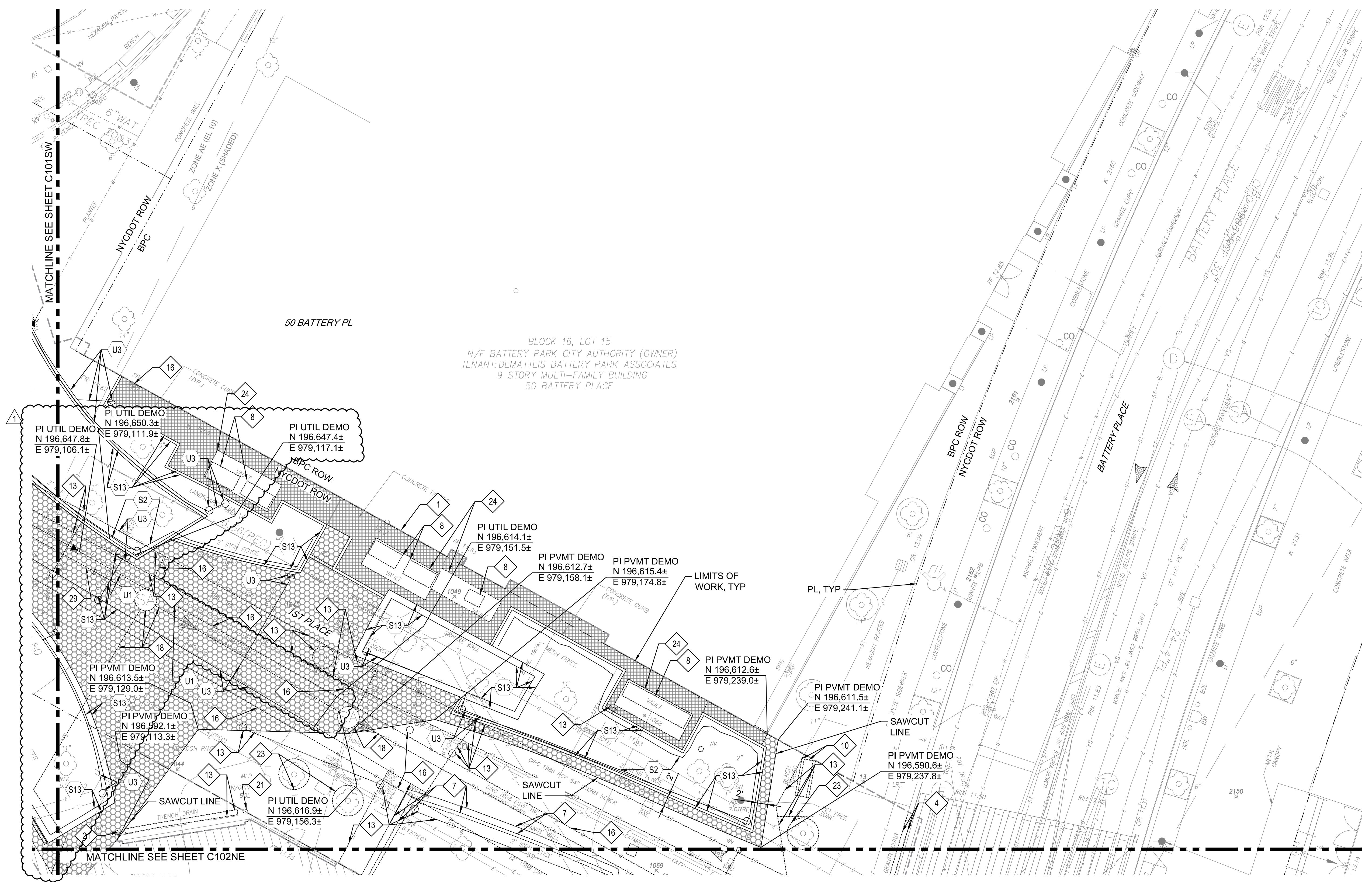
Contract No. 18-2586

SHEET TITLE

SITE DEMOLITION PLAN 02

SHEET NUMBER

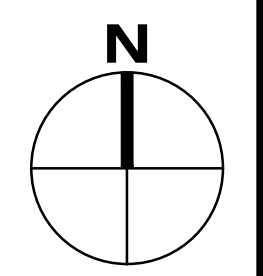
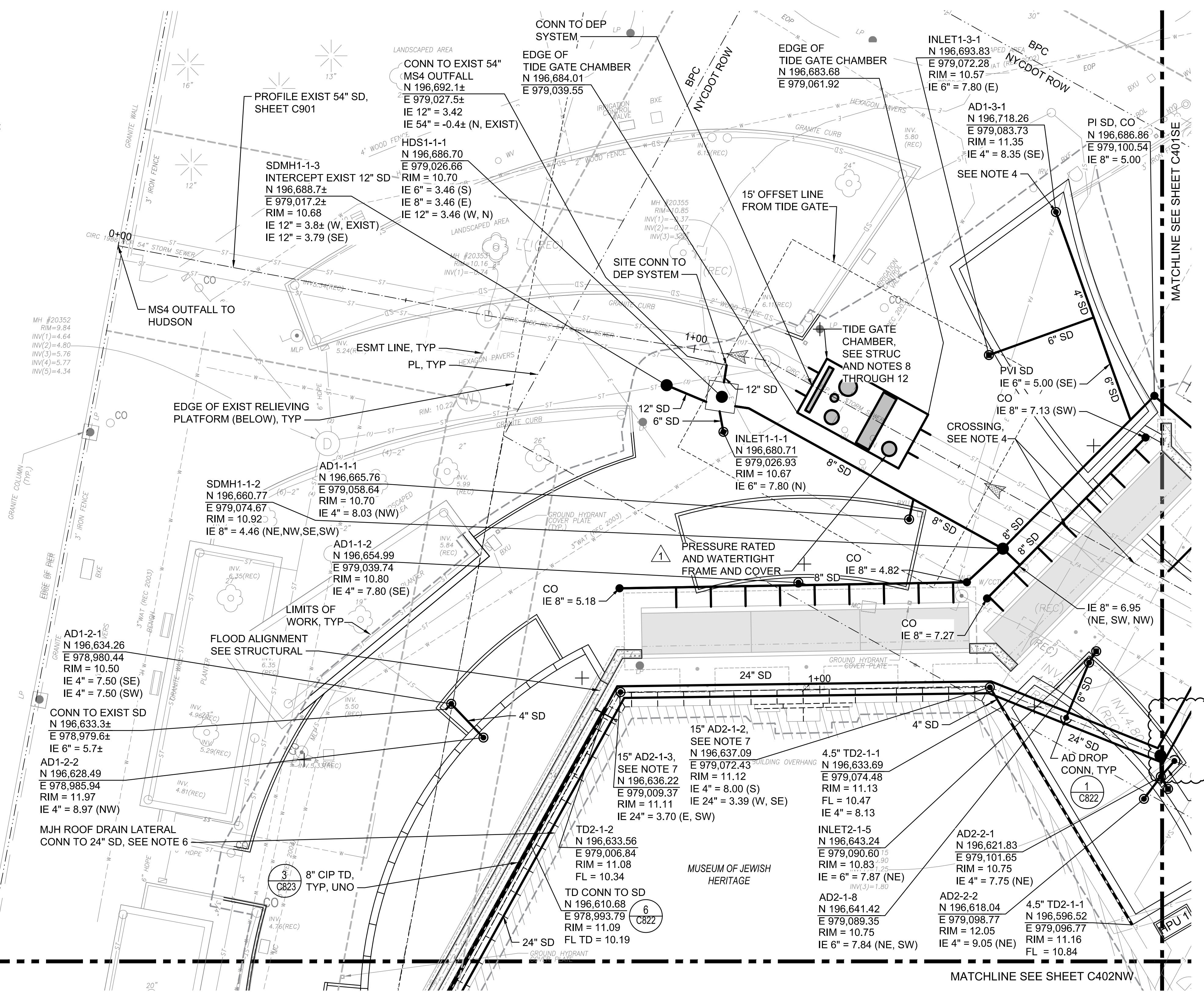
C101SE



ANSI D 22" x 34"

NOTES:

- SEE SHEET C001 FOR LEGEND AND ABBREVIATIONS.
- SEE SHEET C002 FOR GENERAL NOTES AND STORM DRAINAGE NOTES.
- INSTALL INLINE BACKFLOW PREVENTION DEVICE ON OUTLET PIPE IN STORM DRAIN MANHOLE.
- SEE STRUCTURAL PLANS FOR DETAILS ON EXISTING 54" MS4 OUTFALL CROSSING THE FLOOD ALIGNMENT.
- SEE C501SW FOR DETAILS ON SUBDRAINAGE.
- INTERCEPT EXISTING ROOF DRAINAGE LATERAL FROM MUSEUM OF JEWISH HERITAGE. TIE INTO 24" SD VIA TEE. PROVIDE BACKFLOW PREVENTION DEVICE ON ROOF DRAIN LATERAL.
- INSTALL 30" BASIN WITH 15" BRONZE SOLID GRATE.
- DURING CONSTRUCTION OF THE TIDE GATE, THE CONTRACTOR(S) SHALL PREVENT STORMWATER AND RIVER WATER FROM ENTERING THE CONSTRUCTION ZONE OF THE TIDE GATE STRUCTURE, MANAGE BYPASS FLOWS, DESIGN, INSTALL AND MAINTAIN TEMPORARY COFFERDAM/WATERTIGHT SHEETING AND BRACING SYSTEM(S), AND MAINTAIN GROUNDWATER TO A DEPTH BELOW THE BOTTOM OF EXCAVATION, IN ACCORDANCE WITH NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARD SEWER AND WATER MAIN SPECIFICATIONS, INCLUDING:
 - PARAGRAPHS 10.13 AND 50.71.2(H) FOR MANAGING BYPASS FLOWS.
 - PARAGRAPHS 40.05 FOR TEMPORARY COFFERDAM/WATERTIGHT SHEETING AND BRACING SYSTEM(S).
 - PARAGRAPHS 40.02.15 FOR DISPOSAL OF WATER.
- THE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF A SUITABLE TEMPORARY COFFERDAM/WATERTIGHT SHEETING AND BRACING SYSTEM(S), SUBJECT TO THE REVIEW AND APPROVAL BY THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION ENGINEER.
- THE CONTRACTOR(S) SHALL SUBMIT THEIR PROPOSED METHOD FOR MAINTAINING BYPASS FLOWS TO THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION ENGINEER FOR APPROVAL A MINIMUM OF 30 DAYS PRIOR TO WHEN THEY PLAN TO BEGIN WORK ON THE COFFERDAM/WATERTIGHT SHEETING AND BRACING SYSTEM(S).
- IF THE CONTRACTOR(S) ELECTS TO CONSTRUCT A TEMPORARY DIVERSION SEWER FOR MANAGING BYPASS FLOWS, THEY SHALL BE RESPONSIBLE FOR REPAIRING/REPLACING THE PORTIONS OF THE SEWER AT THE POINTS OF CONNECTION TO THE DIVERSION. THE FOLLOWING POTENTIAL SEQUENCE OF CONSTRUCTION RELATED TO THE TIDE GATE IS IDENTIFIED AS AN APPROACH OPTION. THE CONTRACTOR(S) IS SOLELY RESPONSIBLE FOR THE CONSTRUCTION APPROACH AND CONSTRUCTION SEQUENCE RELATED TO TIDE GATE.
 - BLOCK AND PREVENT STORMWATER AND RIVER WATER FROM ENTERING THE TIDE GATE CONSTRUCTION ZONE BY INSTALLING AIR BLADDERS OR OTHER EQUIVALENT MEASURES IN THE PIPE AT DOWNSTREAM AND UPSTREAM MAINTENANCE HOLES TO PREVENT WATER FROM ENTERING THE PIPE WITHIN THE ZONE OF CONSTRUCTION.
 - CONSTRUCT TEMPORARY COFFERDAM/WATERTIGHT SHEETING AND BRACING SYSTEM(S) AS REQUIRED TO CONSTRUCT THE TIDE GATE STRUCTURE.
 - CONSTRUCT A TEMPORARY DIVERSION SEWER AND/OR PUMPS TO BYPASS WATER TO THE EXISTING OUTFALL.
 - DEMOLISH AND REMOVE THE EXISTING OUTFALL SEWER WITHIN THE LIMITS OF THE COFFERDAM/WATERTIGHT SHEETING AND BRACING SYSTEM(S) FOR THE PROPOSED TIDE GATE STRUCTURE. NOTE THAT THE EXISTING SEWERS ARE SUPPORTED ON PILES AND ON A CONCRETE CRADLE. THE CONTRACTOR(S) SHALL REMOVE ANY PIPE, STRUCTURE, OR PILES DOWN TO 18 INCHES BELOW THE PROPOSED BOTTOM OF THE NEW SDMH2-1-1.
 - INSTALL PILES FOR THE TIDE GATE STRUCTURE (SEE STRUCTURAL).
 - CONSTRUCT THE TIDE GATE STRUCTURE AND SEWER PIPE CONNECTIONS (SEE STRUCTURAL) AND INSTALL INTERIOR COMPONENTS.
 - REMOVE THE COFFERDAM/WATERTIGHT SHEETING AND BRACING SYSTEM(S) AND BACKFILL WITH SELECT GRANULAR FILL.
 - REMOVE THE TEMPORARY DIVERSION SEWER (AND REPAIR/REPLACE SEWER AT CONNECTION) AND/OR PUMPS.
 - REMOVE THE AIR BLADDERS OR OTHER EQUIVALENT MEASURES.



AECOM

PROJECT
SOUTH BATTERY PARK CITY
RESILIENCY DESIGN
SERVICES
CLIENT

HUGH L. CAREY
BATTERY PARK CITY
AUTHORITY
CONSULTANT

AECOM
AECOM USA
605 3rd Ave, 2nd Floor, New York, NY 10158
212.973.2900 tel www.aecom.com

SUB-CONSULTANT
MAGNUSSON KLEMENCIC ASSOCIATES
1301 Fifth Avenue, Suite 3200, Seattle, WA 98101-2699
206.292.1200 tel 206.292.1201 fax www.mka.com

SITE WORKS
150 West 28th St, Suite 605
New York, NY 10001 212.255.6350 siteworks.com

MILHOUSE
333 South Wabash Ave, Suite 2801
Chicago, IL 60604 313.987.0061 milhouseinc.com

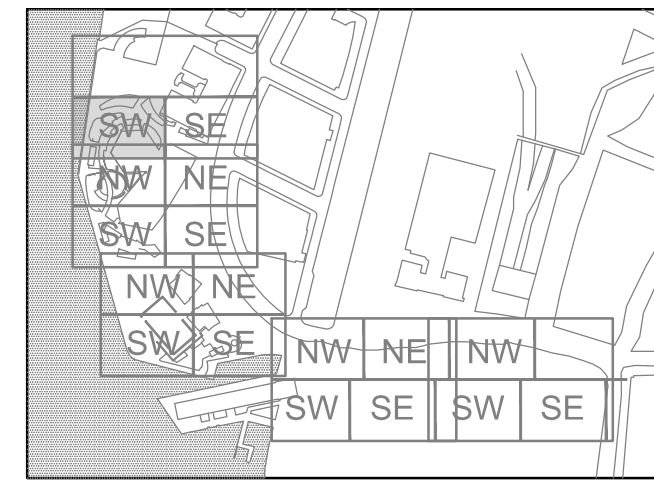
TILLOTSON DESIGN ASSOCIATES
40 Worth St, Rm 703, New York, NY 10013
212.675.7760 tillotsondesign.com

THOMAS PHIFER AND PARTNERS
180 Varick St, New York, NY 10014
212.337.0334 thomasphifer.com

NAIK CONSULTING GROUP, PC
111 West 33rd St, Suite 605 New York, NY 10012
212.575.2701 naikgroup.com

OWEIS
100 East Hanover Ave., Suite 101, Cedar Knolls, NJ 07927
973.539.440 oweisengineering.com

KEY PLAN



REGISTRATION

ISSUE/REVISION

Designed By: B. DUPUY
Drawn By: J. POPE
Checked By: S. HALUSCHAK
Approved By: M. JONES

PROJECT/TERM CONTRACT NUMBER

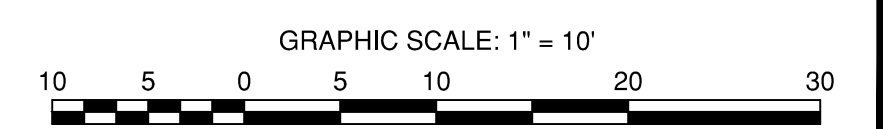
Contract No. 18-2586

SHEET TITLE

STORM DRAINAGE PLAN 01

SHEET NUMBER

C401SW



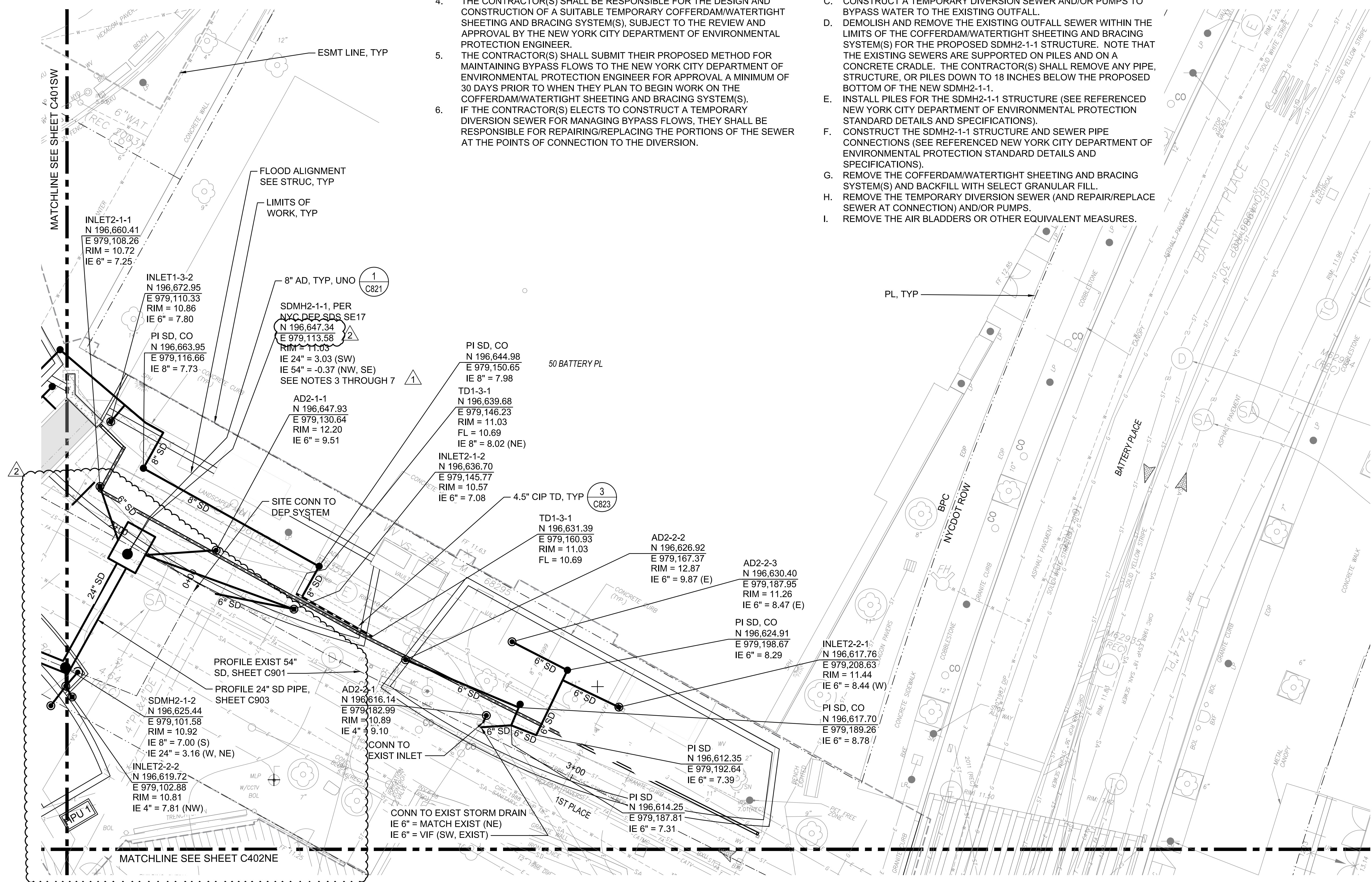
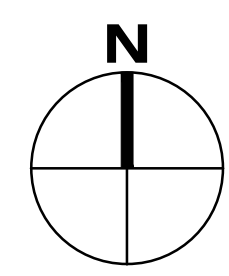
Last saved by: BLC1(2022-06-25) - Last Plotter: 2022-06-25
Filename: C:\P\WORKING\REC\CLD_DOS\12\NACLA1859302046725BPC-C401SW.dwg

ANSI D 22" x 34"

NOTES:

- 1. SEE SHEET C001 FOR LEGEND AND ABBREVIATIONS.
- 2. SEE SHEET C002 FOR GENERAL NOTES AND STORM DRAINAGE NOTES.

- 3. DURING CONSTRUCTION OF SDMH2-1-1, THE CONTRACTOR(S) SHALL PREVENT STORMWATER AND RIVER WATER FROM ENTERING THE CONSTRUCTION ZONE OF SDMH2-1-1. MANAGE BYPASS FLOWS, DESIGN, INSTALL AND MAINTAIN TEMPORARY COFFERDAM/WATERTIGHT SHEETING AND BRACING SYSTEM(S), AND MAINTAIN GROUNDWATER TO A DEPTH BELOW THE BOTTOM OF EXCAVATION, IN ACCORDANCE WITH NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARD SEWER AND WATER MAIN SPECIFICATIONS, INCLUDING:
 - A. PARAGRAPHS 10.13 AND 50.71.2(H) FOR MANAGING BYPASS FLOWS,
 - B. PARAGRAPHS 40.05 FOR TEMPORARY COFFERDAM/WATERTIGHT SHEETING AND BRACING SYSTEM(S),
 - C. PARAGRAPHS 40.02.15 FOR DISPOSAL OF WATER.
- 4. THE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF A SUITABLE TEMPORARY COFFERDAM/WATERTIGHT SHEETING AND BRACING SYSTEM(S), SUBJECT TO THE REVIEW AND APPROVAL BY THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION ENGINEER.
- 5. THE CONTRACTOR(S) SHALL SUBMIT THEIR PROPOSED METHOD FOR MAINTAINING BYPASS FLOWS TO THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION ENGINEER FOR APPROVAL A MINIMUM OF 30 DAYS PRIOR TO WHEN THEY PLAN TO BEGIN WORK ON THE COFFERDAM/WATERTIGHT SHEETING AND BRACING SYSTEM(S).
- 6. IF THE CONTRACTOR(S) ELECTS TO CONSTRUCT A TEMPORARY DIVERSION SEWER FOR MANAGING BYPASS FLOWS, THEY SHALL BE RESPONSIBLE FOR REPAIRING/REPLACING THE PORTIONS OF THE SEWER AT THE POINTS OF CONNECTION TO THE DIVERSION.
- 7. THE FOLLOWING POTENTIAL SEQUENCE OF CONSTRUCTION RELATED TO SDMH2-1-1 IS IDENTIFIED AS AN APPROACH OPTION. THE CONTRACTOR(S) IS SOLELY RESPONSIBLE FOR THE CONSTRUCTION APPROACH AND CONSTRUCTION SEQUENCE RELATED TO SDMH2-1-1.
 - A. BLOCK AND PREVENT STORMWATER AND RIVER WATER FROM ENTERING THE SDMH2-1-1 CONSTRUCTION ZONE BY INSTALLING AIR BLADDERS OR OTHER EQUIVALENT MEASURES IN THE PIPE AT DOWNSTREAM AND UPSTREAM MAINTENANCE HOLES TO PREVENT WATER FROM ENTERING THE PIPE WITHIN THE ZONE OF CONSTRUCTION.
 - B. CONSTRUCT TEMPORARY COFFERDAM/WATERTIGHT SHEETING AND BRACING SYSTEM(S) AS REQUIRED TO CONSTRUCT SDMH2-1-1.
 - C. CONSTRUCT A TEMPORARY DIVERSION SEWER AND/OR PUMPS TO BYPASS WATER TO THE EXISTING OUTFALL.
 - D. DEMOLISH AND REMOVE THE EXISTING OUTFALL SEWER WITHIN THE LIMITS OF THE COFFERDAM/WATERTIGHT SHEETING AND BRACING SYSTEM(S) FOR THE PROPOSED SDMH2-1-1 STRUCTURE. NOTE THAT THE EXISTING SEWERS ARE SUPPORTED ON PILES AND ON A CONCRETE CRADLE. THE CONTRACTOR(S) SHALL REMOVE ANY PIPE, STRUCTURE, OR PILES DOWN TO 18 INCHES BELOW THE PROPOSED BOTTOM OF THE NEW SDMH2-1-1.
 - E. INSTALL PILES FOR THE SDMH2-1-1 STRUCTURE (SEE REFERENCED NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARD DETAILS AND SPECIFICATIONS).
 - F. CONSTRUCT THE SDMH2-1-1 STRUCTURE AND SEWER PIPE CONNECTIONS (SEE REFERENCED NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARD DETAILS AND SPECIFICATIONS).
 - G. REMOVE THE COFFERDAM/WATERTIGHT SHEETING AND BRACING SYSTEM(S) AND BACKFILL WITH SELECT GRANULAR FILL.
 - H. REMOVE THE TEMPORARY DIVERSION SEWER (AND REPAIR/REPLACE SEWER AT CONNECTION) AND/OR PUMPS.
 - I. REMOVE THE AIR BLADDERS OR OTHER EQUIVALENT MEASURES.



PROJECT
 SOUTH BATTERY PARK CITY
 RESILIENCY DESIGN
 SERVICES
 CLIENT

HUGH L. CAREY
 BATTERY PARK CITY
 AUTHORITY
 CONSULTANT

AECOM
 AECOM USA
 605 3rd Ave, 2nd Floor, New York, NY 10158
 212.973.2900 tel www.aecom.com

SUB-CONSULTANT
 MAGNUSSON KLEMANIC ASSOCIATES
 1301 Fifth Avenue, Suite 3200, Seattle, WA 98101-2699
 206.292.1200 tel 206.292.1201 fax www.mka.com

SITEWORKS
 150 West 28th St, Suite 605
 New York, NY 10001 212.255.6350 siteworks.com

MILHOUSE
 333 South Wabash Ave, Suite 2901
 Chicago, IL 60604 313.987.0061 milhouseinc.com

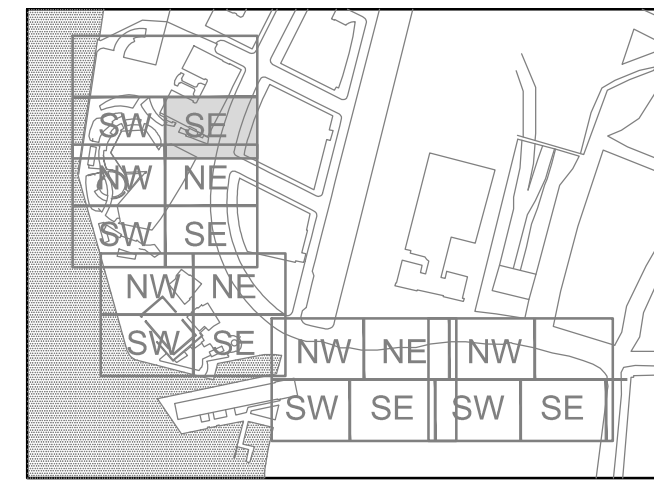
TILLOTSON DESIGN ASSOCIATES
 40 Worth St, Rm 703, New York, NY 10013
 212.675.7760 tillotdesign.com

THOMAS PHIFER AND PARTNERS
 180 Varick St, New York, NY 10014
 212.337.0334 thomasphifer.com

NAIK CONSULTING GROUP, PC
 111 West 33rd St, Suite 605 New York, NY 10120
 212.575.2701 naikgroup.com

OWEIS
 100 East Hanover Ave., Suite 101, Cedar Knolls, NJ 07927
 973.539.440 oweisengineering.com

KEY PLAN



REGISTRATION

ISSUE/REVISION

IR	DATE	DESCRIPTION
2	JUNE 2022	RESPONSES TO QUESTIONS

Designed By: B. DUPUY
 Drawn By: J. POPE
 Checked By: S. HALUSCHAK
 Approved By: M. JONES

PROJECT/TERM CONTRACT NUMBER

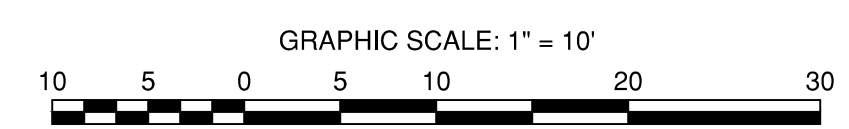
Contract No. 18-2586

SHEET TITLE

STORM DRAINAGE PLAN 02

SHEET NUMBER

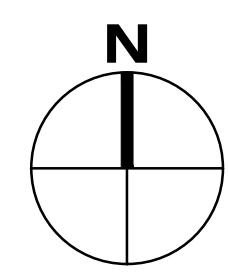
C401SE



Last saved by: BLC1(2022-06-23) - Last Plotter: 2022-06-23
 Filename: C:\P\WORKING\AECOM_DSS\CL\A\1859102\02\46725B\FCC-401C\MR00.DWG

NOTES:

- 1. SEE SHEET C001 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
- 2. PIPES AND FITTINGS FOR PROPOSED WATER LINES TO BE EQUIPPED WITH RESTRAINED JOINTS WHERE LOCATED IN/OR NEAR GEOFOAM AND/OR WHERE THRUST BLOCKS CANNOT BE USED.
- 3. CUT AND CAP EXISTING 3" WATER LINE SERVING GROUND HYDRANTS. REFER TO C101SW FOR ADDITIONAL DETAILS.
- 4. RELOCATED FIRE HYDRANT SHALL BE OPERATIONAL PRIOR TO DISCONNECTION OF EXISTING FIRE HYDRANT.



KEY PLAN



REGISTRATION

ISSUE/REVISION

IR	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS

Designed By: B. DUPUY
 Drawn By: J. POPE
 Checked By: S. HALUSCHAK
 Approved By: M. JONES

PROJECT/TERM CONTRACT NUMBER

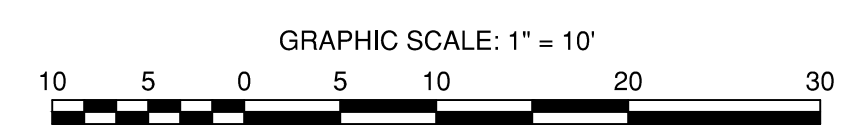
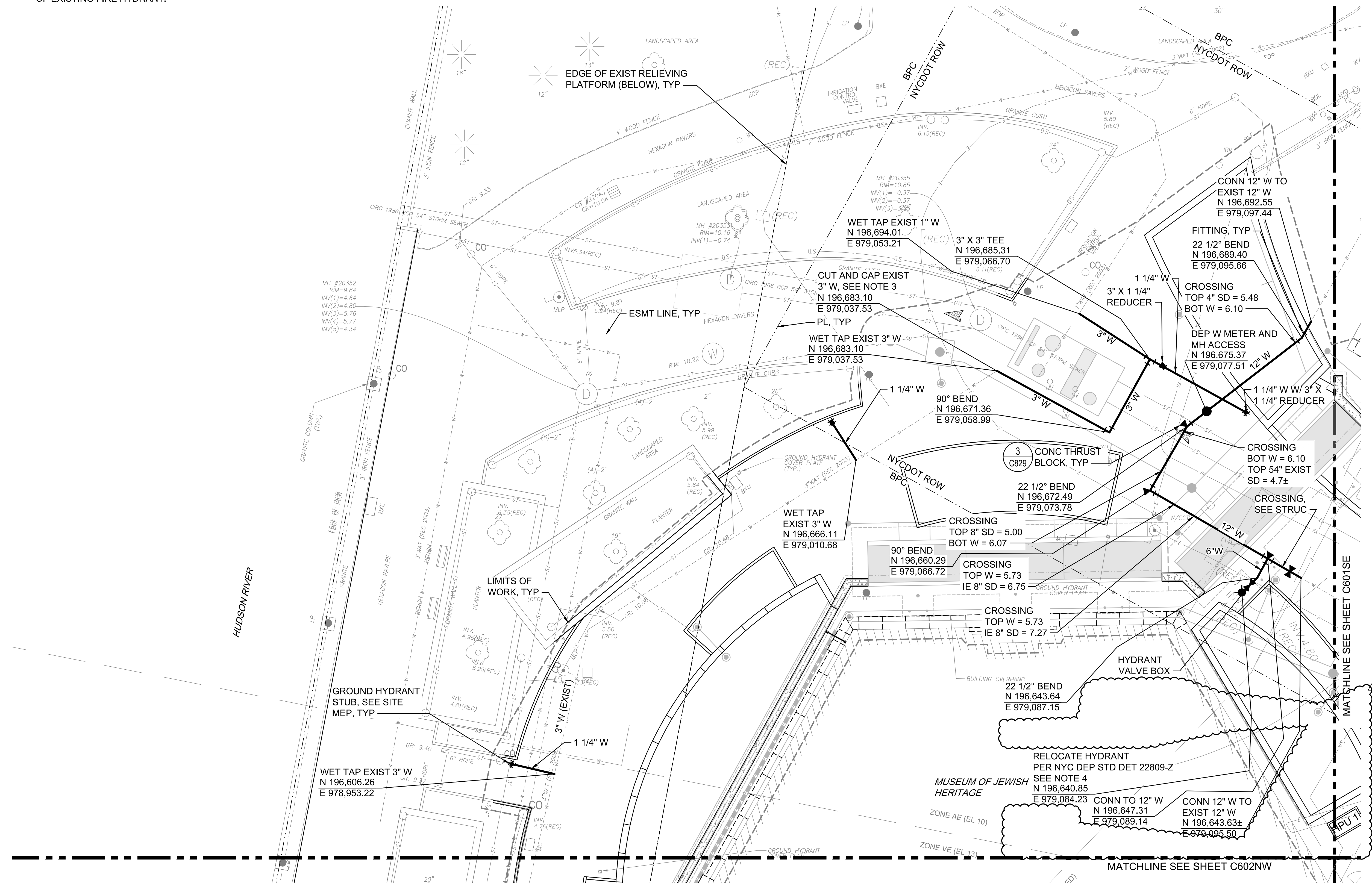
Contract No. 18-2586

SHEET TITLE

WATER AND SEWER PLAN 01

SHEET NUMBER

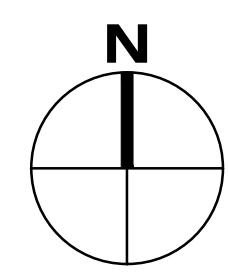
C601SW



ANSI D 22" x 34"

NOTES:

- SEE SHEET C001 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
- PIPES AND FITTINGS FOR PROPOSED WATER LINES TO BE EQUIPPED WITH RESTRAINED JOINTS WHERE LOCATED IN/OR NEAR GEOFOAM AND/OR WHERE THRUST BLOCKS CANNOT BE USED.
- CUT AND CAP EXISTING 3" WATER LINE SERVING GROUND HYDRANTS. REFER TO C101SE FOR ADDITIONAL DETAILS.
- PROTECT FIRE DEPARTMENT CONNECTION DURING CONSTRUCTION.



PROJECT
SOUTH BATTERY PARK CITY
RESILIENCY DESIGN
SERVICES

CLIENT
HUGH L. CAREY
BATTERY PARK CITY
AUTHORITY

CONSULTANT
AECOM

AECOM USA
605 3rd Ave, 2nd Floor, New York, NY 10158
212.973.2900 tel www.aecom.com

SUB-CONSULTANT
MAGNUSON KLEMENCIC ASSOCIATES
1301 Fifth Avenue, Suite 3200, Seattle, WA 98101-2699
206.292.1200 tel 206.292.1201 fax www.mka.com

SITE WORKS
150 West 28th St, Suite 605
New York, NY 10001 212.255.8350 siteworkscm.com

MILHOUSE
333 South Wabash Ave, Suite 2801
Chicago, IL 60604 313.987.0061 milhouseinc.com

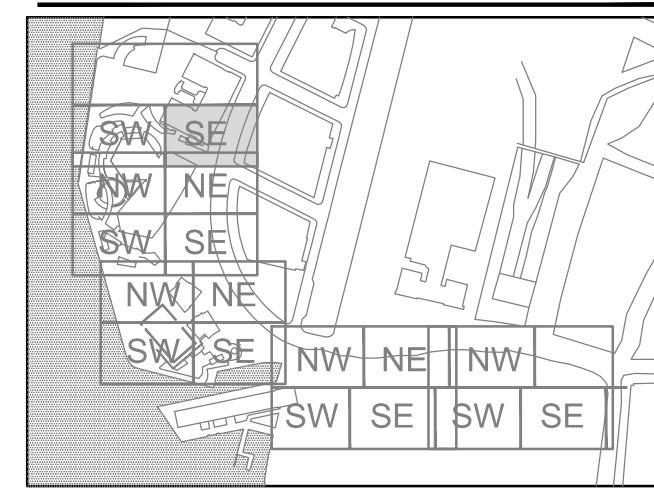
TILLOTSON DESIGN ASSOCIATES
40 Worth St, Rm 703, New York, NY 10013
212.675.7760 tilloftsondesign.com

THOMAS PHIFER AND PARTNERS
180 Varick St, New York, NY 10014
212.337.0334 thomasphifer.com

NAIK CONSULTING GROUP, PC
111 West 33rd St, Suite 605 New York, NY 10120
212.575.2701 naikgroup.com

OWEIS
100 East Hanover Ave., Suite 101, Cedar Knolls, NJ 07927
973.539.440 oweisengineering.com

KEY PLAN



REGISTRATION

ISSUE/REVISION

IR	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS

Designed By: B. DUPUY
Drawn By: J. POPE
Checked By: S. HALUSCHAK
Approved By: M. JONES

PROJECT/TERM CONTRACT NUMBER

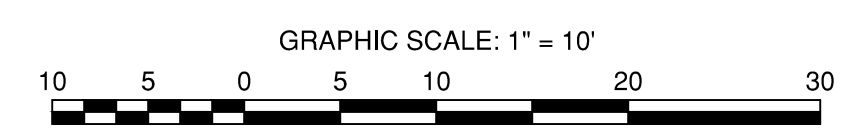
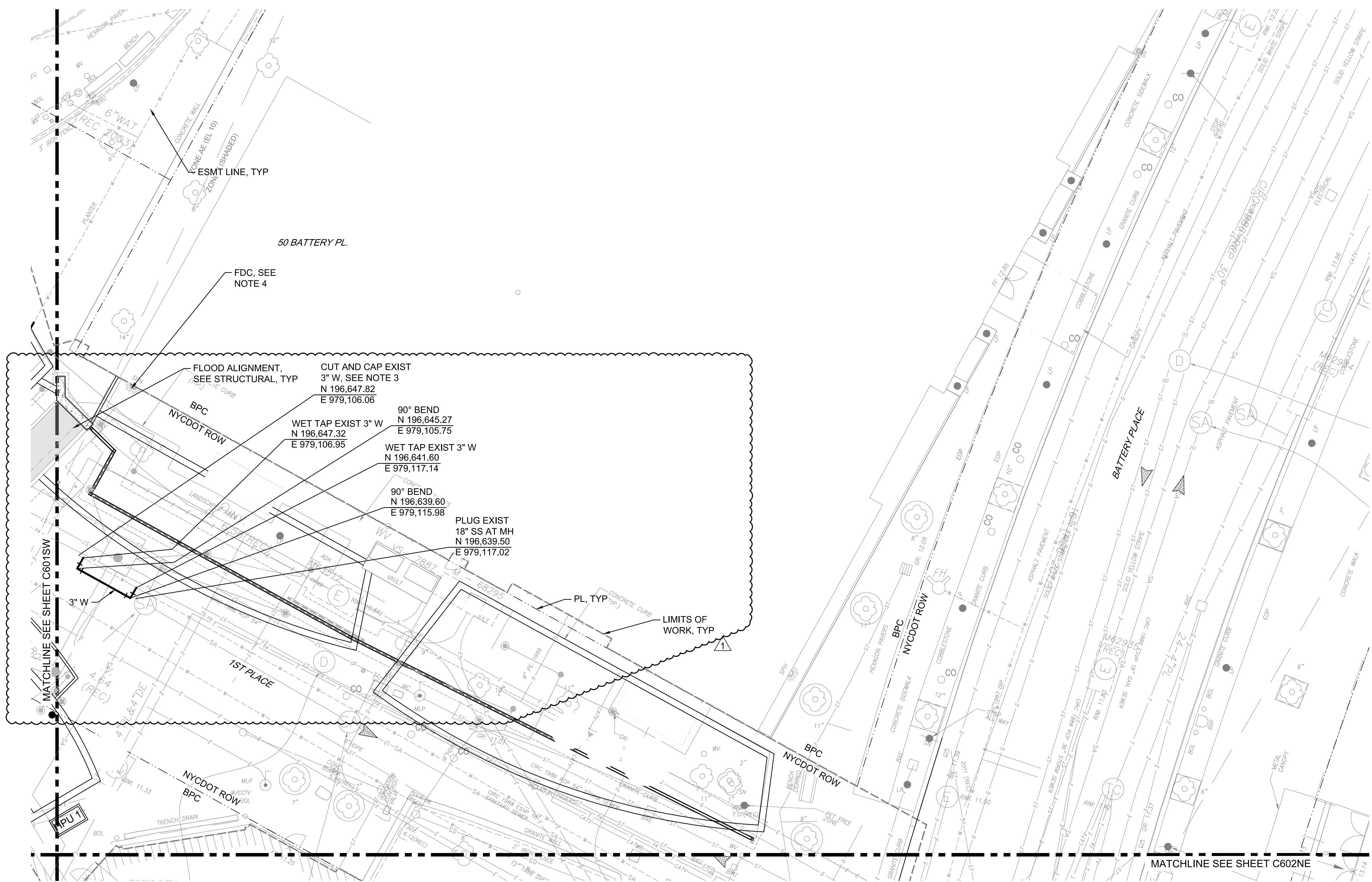
Contract No. 18-2586

SHEET TITLE

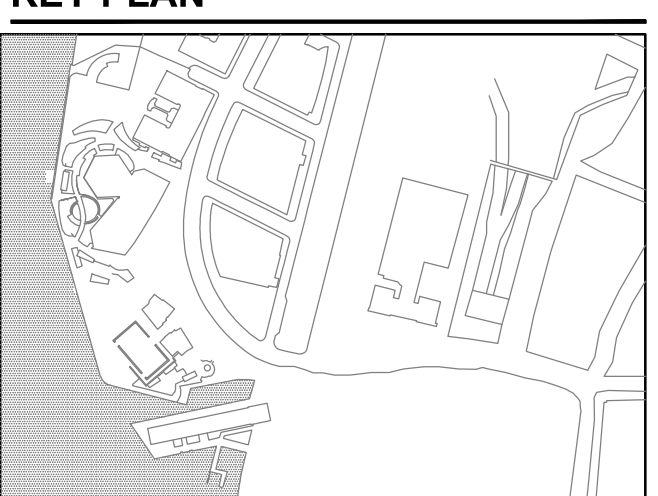
WATER AND SEWER PLAN 02

SHEET NUMBER

C601SE



Last saved by: BLC1(2022-06-23) - Last Plotter: 2022-06-23
Filename: C:\P\WORKING\AECOM_D\312\NACLA18591020246725BPC601SE\DWG



REGISTRATION

ISSUE/REVISION

IR	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS

Designed By: B. DUPUY
Drawn By: J. POPE
Checked By: S. HALUSCHAK
Approved By: M. JONES

PROJECT/TERM CONTRACT NUMBER

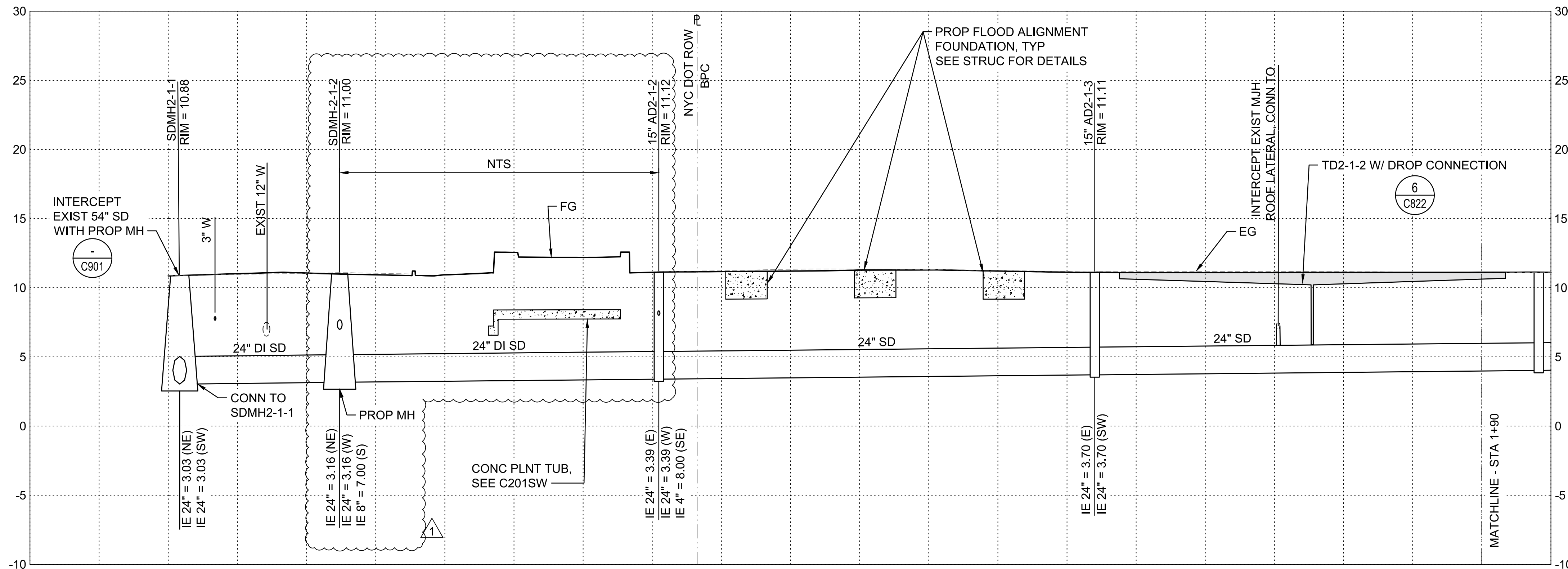
Contract No. 18-2586

SHEET TITLE

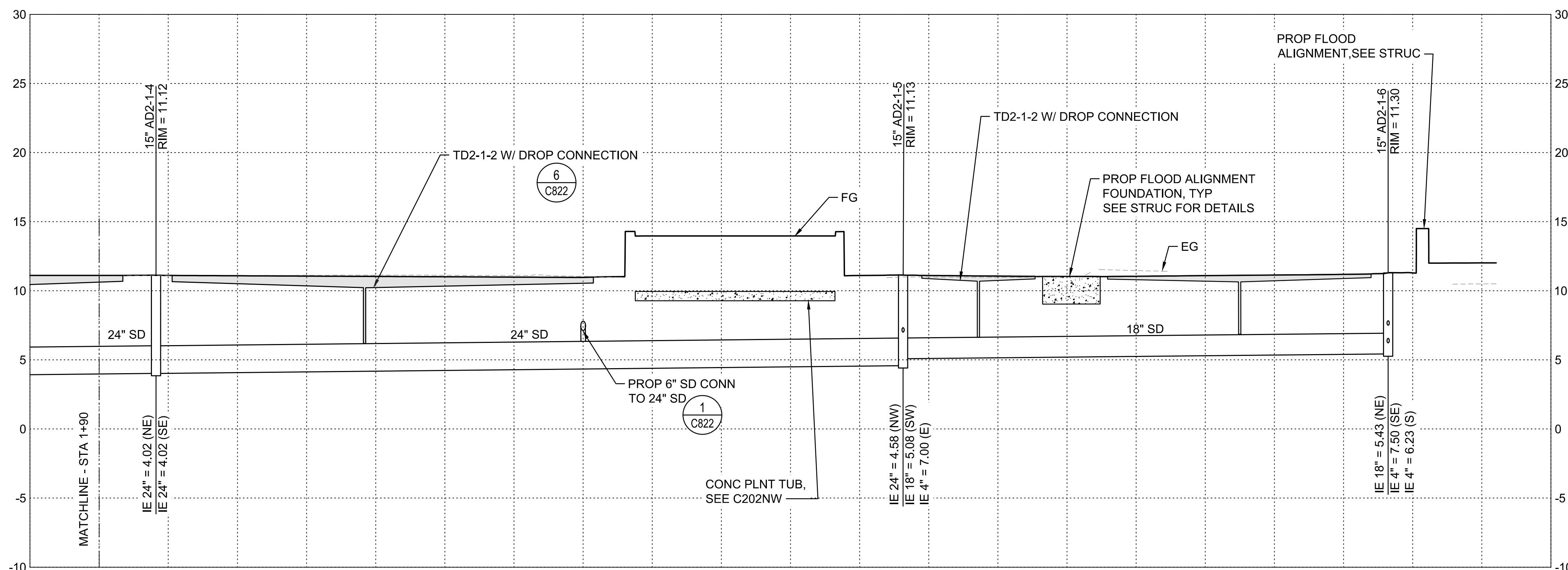
STORM DRAINAGE
UTILITY PROFILE

SHEET NUMBER

C903



PROFILE - MJH STORM LINE (PACKAGE 2)
SCALE: HORZ. 1" = 10' VERT 1" = 5'

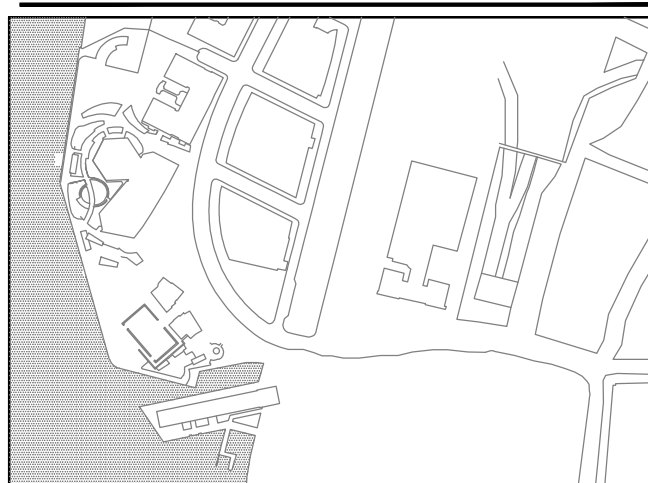


PROFILE - MJH STORM LINE (PACKAGE 2)
SCALE: HORZ. 1" = 10' VERT 1" = 5'

ANSI D 22' x 34'

Last saved by: BEE/2022-06-23 1:41 PM
Filename: C:\P\WORK\NY\BPC\CON_C903\NY\CL\18-2586\18-2586-475BPC-C903R00.DWG

KEY PLAN



REGISTRATION

ISSUE/REVISION

IR	DATE	DESCRIPTION

IR	DATE	DESCRIPTION
1	JUNE 2022	RESPONSES TO QUESTIONS

Designed By: B. DUPUY
 Drawn By: J. POPE
 Checked By: S. HALUSCHAK
 Approved By: M. JONES

PROJECT/TERM CONTRACT NUMBER

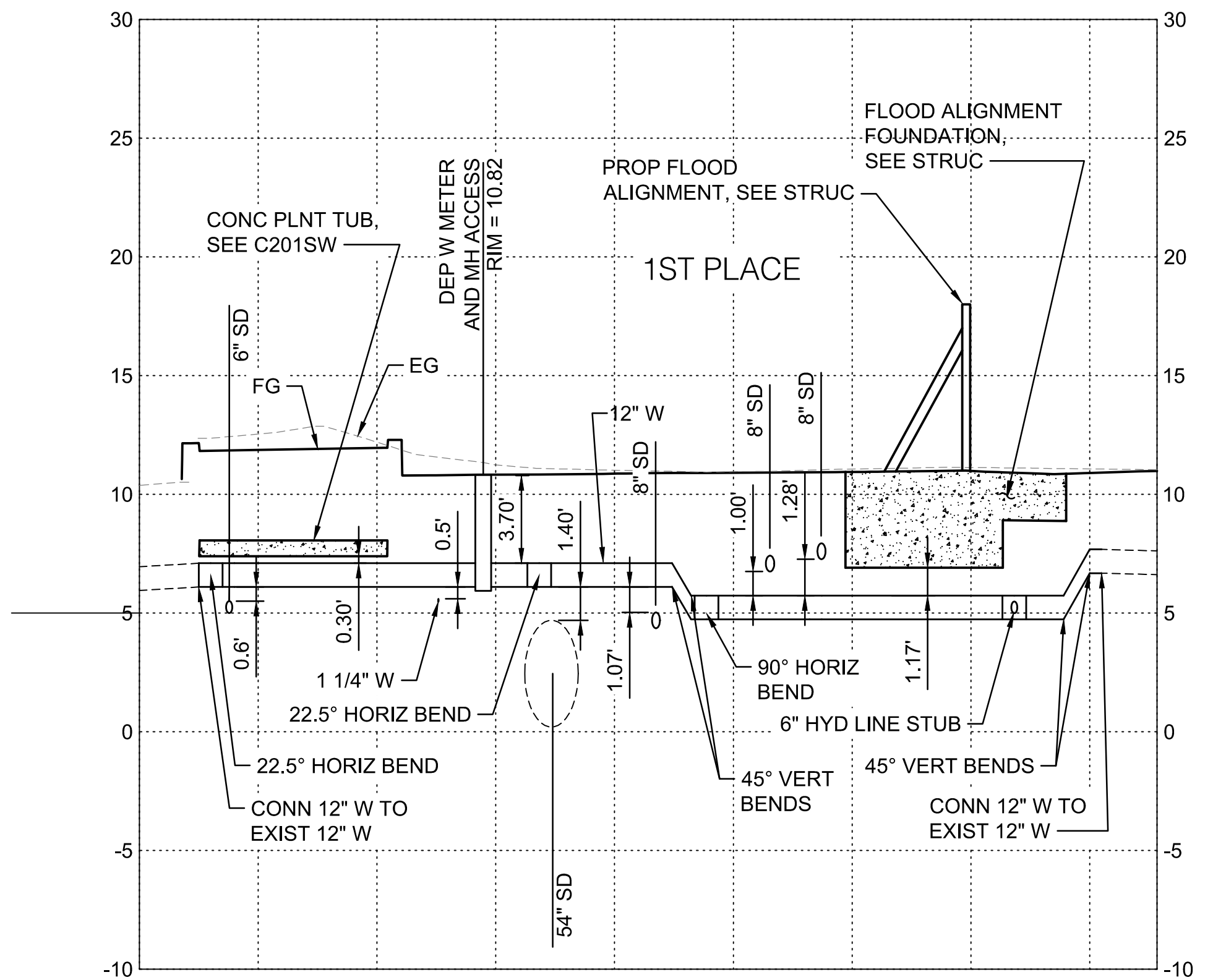
Contract No. 18-2586

SHEET TITLE

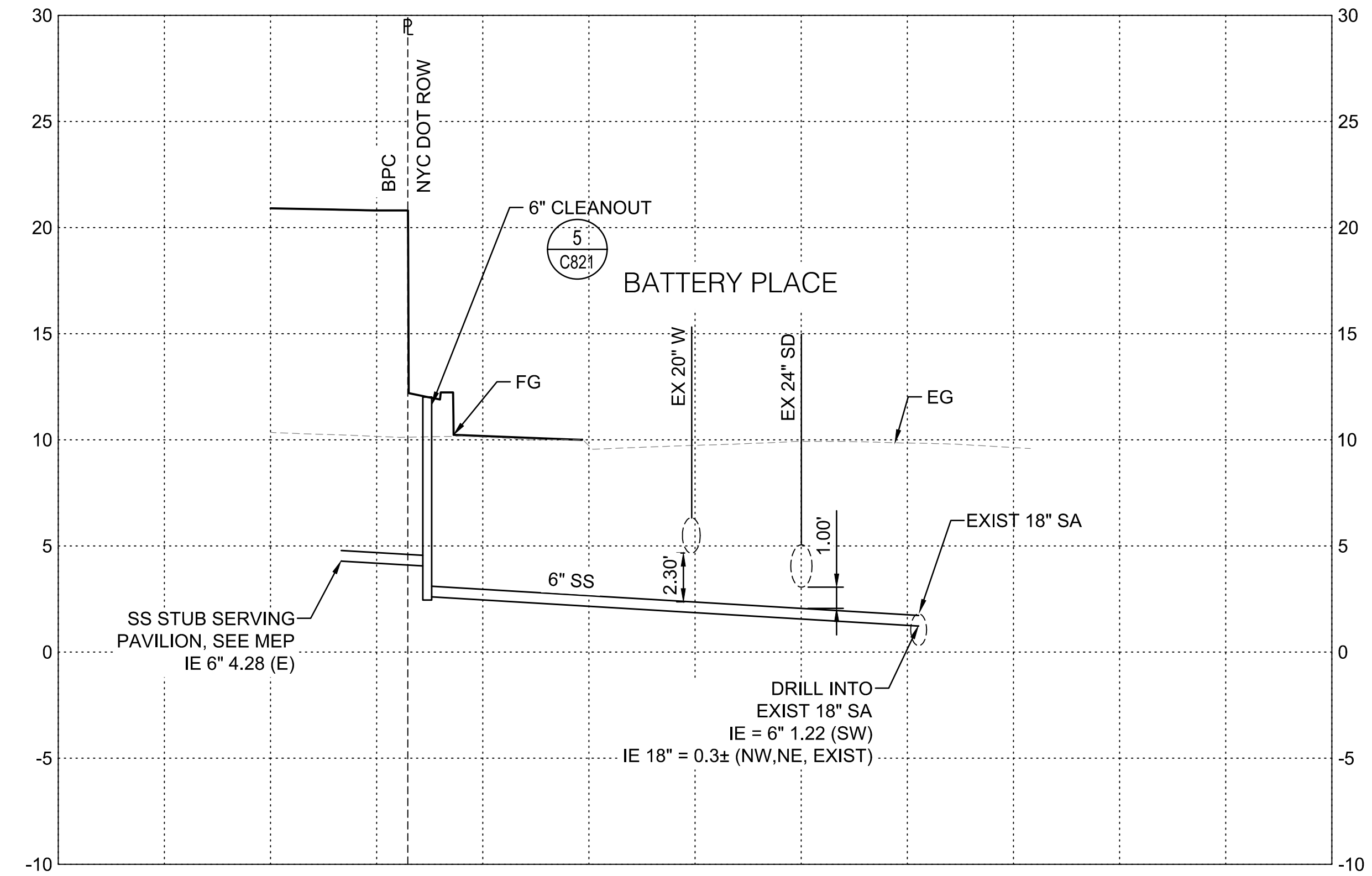
SEWER
UTILITY PROFILE

SHEET NUMBER

C913



PROFILE - MJH 12 IN WATER REROUTE (PACKAGE 2)
SCALE: HORIZ 1" = 10' VERT 1" = 5'



PROFILE - PAVILION 6 IN SS CONNECTION (PACKAGE 3)
SCALE: HORIZ 1" = 10' VERT 1" = 5'

ATTACHMENT #4
REVISED SPECIFICATION #321123 –
AGGREGATE BASE COURSES

(ATTACHED)

SECTION 321123 – AGGREGATE BASE COURSES

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes: Requirements for materials, placement and testing of base course under all roads, drives, pavements, and walks.

1.02 RELATED SECTIONS

- A. Section 013300, “Submittal Procedures”
- B. Section 017419, “Construction and Demolition Waste Management and Disposal”
- C. Section 018113, “Sustainable Design Requirements”

1.03 REFERENCES

- A. The latest version, unless noted otherwise, of the publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.
- B. American Society for Testing and Materials (ASTM):
 - 1. ASTM D 1556: Density and Unit Weight of Soil in Place by the Sand-Cone Method
 - 2. ASTM D 1557: Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft)
 - 3. ASTM D 2922: Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
 - 4. ASTM D 3017: (Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth)
- C. New York State Department of Transportation (NYSDOT):
 - 1. NYSDOT: (2021) Standard Specifications
- D. New York City Department of Transportation (NYCDOT):
 - 1. NYCDOT: (2009) Standard Highway Specifications

1.04 SUBMITTALS

- A. Submit the following in accordance with Section 013300, "Submittal Procedures."
 - 1. Factory Test Reports: Submit test reports for gradation of base course material taken at the source.
 - 2. Field Test Reports: Submit test results for smoothness, density and thickness of in-place base course.
 - 3. Sustainability Submittals: For permanently installed and/or placed products and materials related to the work of this Section, submit product and material

documentation to comply with and contribute to the Project’s sustainability requirements, as outlined in the Submittals article of Section 018113 – Sustainable Design Requirements.

4. Environmental Product Declarations: To quantify the embodied carbon of the building’s materials, ILFI ZC requires that Environmental Product Declarations (EPDs) with Life Cycle Analyses (LCAs) be provided. Include product-specific non-expired EPDs for applicable products. When product-specific EPDs are not available, provide industry-wide EPDs or product LCAs.
5. Product Data Sheets: Provide product data sheets that describe the material make up of products (e.g., material ingredient lists, CAS RN#, description of product’s material sourcing).

1.05 DELIVERY AND STORAGE

- A. Inspect materials delivered to site for damage and store as to prevent segregation and contamination.

1.06 WEATHER LIMITATIONS

- A. Do not construct base course when atmospheric temperature is below 35 degrees F or when rainfall or other weather conditions detrimentally affect the quality of the finished course.

1.07 CONSTRUCTION EQUIPMENT

- A. Maintain equipment in satisfactory and safe operating condition. Subject to approval, special equipment dictated by local conditions may be used. Calibrated equipment, such as scales, batching equipment, spreaders, and similar items, shall have been recalibrated by an approved calibration laboratory within 12 months of commencing work.

1.08 SUSTAINABLE DESIGN REQUIREMENTS

- A. The Owner requires the Contractor to implement practices and procedures to meet the Project’s environmental performance goals, which include achieving ILFI Zero Carbon and WEDG Certification. Refer to Section 018113, “Sustainable Design Requirements,” for the Project’s targets and specific requirements. The Contractor shall ensure that the requirements related to the Project’s sustainability design goals are implemented to the fullest extent. Substitutions, or other changes to the work proposed by the Contractor or their Subcontractors, shall not be allowed if such changes compromise the Project’s sustainability goals and ILFI Zero Carbon or WEDG certification.

PART 2 - PRODUCTS

2.01 GENERAL REQUIREMENTS

- A. For permanently installed products and materials related to the work of this Section, provide products and materials that meet the Project’s sustainability performance criteria

as outlined in PART 2–PRODUCTS of Section 018113 – Sustainable Design Requirements.

- B. Provide products and materials with product-specific or industry-wide Environmental Product Declarations (or alternative environmental declaration accepted by LEED), as outlined in Section 018113, “Sustainable Design Requirements.”
- C. Provide products and materials with manufacturer’s product-specific Health Product Declaration (HPD), Declare label, or Cradle to Cradle certificate (or alternative health-related declaration accepted by LEED), as outlined in Section 018113, “Sustainable Design Requirements.”

2.02 MATERIALS

- A. **Compacted Aggregate Base:** Provide imported materials conforming to **Base Course in accordance with NYSDOT, Section 667, "Local Road Gravel Surface, Base, and Subbase Courses."**
- B. **Asphalt Binder Base:** Provide imported materials conforming to **Binder Mixture in accordance with NYCDOT, Section 3.01, "Asphalt Paving Mixtures (BINDER, ASPHALTIC CONCRETE)."**
- C. **Bituminous Setting Bed:** Provide imported materials conforming to **NYCDOT, Section 3.02, "Bed, Bitumen-sand."**

PART 3 - EXECUTION

3.01 GENERAL REQUIREMENTS

- A. **Waste Management:** Construction waste shall be removed and managed in accordance with Section 017419, “Construction and Demolition Waste Management and Disposal.”

3.02 BASE COURSE

- A. Construct the graded aggregate base course on a previously constructed subbase course, as indicated. Provide line and grade stakes for control. Place grade stakes in lanes parallel to the centerline of areas to be paved and space for string lining or other control methods. The base course shall consist of aggregate processed, deposited, spread, and compacted on a prepared surface. The Contractor shall be responsible for protection of completed areas against detrimental effects. Recondition, reshape, and recompact areas damaged by freezing, rainfall, or other weather conditions.
 - 1. **Construct Compacted Aggregate Base course in accordance with NYSDOT, Section 667, "Local Road Gravel Surface, Base, and Subbase Courses."**
 - 2. **Construct Asphalt Binder Base course conforming to Class 3 Plant Mix Binder in accordance with NYCDOT, Section 4.01 "Asphalt Macadam Pavement."**
 - 3. **Install Bituminous Setting Bed in accordance with the asphalt paver manufacturer's recommendations.**

3.03 PLACING

- A. Place on prepared subbase in layers of uniform thickness with a spreader. When a compacted course 6 inches in thickness is required, place material in a single layer. When a compacted course in excess of 6 inches is required, place material in layers of equal thickness. Do not exceed 6 inches or have less than 3 inches in thickness for any compacted layer. Place layers so that when compacted, they will be true to grades or levels required with the least possible surface disturbance. Where the base course is constructed in more than one layer, clean previously constructed layers of loose and foreign matter. Maintain material water content during the placing period to obtain the compaction specified. Make adjustments in placing procedures or equipment to obtain true grades, to minimize segregation and degradation, to reduce or increase water content, and to insure a satisfactory base course.

3.04 COMPACTING AND FINISHING

- A. Immediately following the placing, spread the finished mixture uniformly in a layer and bring to optimum moisture content. The loose thickness and the surface of the layer shall be such that the specified density and the required thickness shall be obtained after compaction. Compact the layer with steel-faced, vibrating or pneumatic-tired rollers, or other suitable compacting equipment or combinations thereof. Continue compacting until the layer is compacted through the full depth to a field density of at a minimum of 95 percent of the ASTM D 1557 maximum density when tested in accordance with ASTM D 1556 or ASTM D 2922 and ASTM D 3017. In areas not accessible to rollers or compactors, compact the mixture with mechanical hand tampers. If the mixture is excessively moistened by rain, aerate by blade graders, or other suitable equipment. Aerate until the moisture content of the material is that needed to obtain the required density. Finish the surface of the layer by a combination of rolling and blading. Final surface shall be smooth and free from waves, irregularities, and ruts or soft yielding spots.

3.05 PROOF ROLLING

- A. In addition to compacting the base course to the required density, proof roll the top surface of the completed base course by making eight coverages with a heavy rubber-tired roller having four tires with each tire loaded to 30,000 pounds or more and inflated to at least 150 psi. Make four coverages over all areas to be paved. A coverage is defined as one application of one tire print over each point in the surface of the designated area. When under the action of the proof rolling, the base course yields, pumps, or otherwise fails, remove, replace with suitable materials, and recompact materials in the base course or in the underlying layers indicated to be unsatisfactory. The speed of the roller shall not exceed 5 miles per hour. Obtain approval upon completion of the proof rolling of the base course.

3.06 FINISHING AT EDGES OF BASE COURSE

- A. Place earth or other approved materials along the edges of the base course in such quantity that it will compact to the thickness of the course being constructed. When the

course is being constructed in two or more layers, place material to the thickness of each layer. In each operation, allow at least a one-foot width of the shoulder to be rolled and compacted simultaneously with the rolling and compacting of each layer.

3.07 FIELD QUALITY CONTROL

- A. Approve materials and material sources in advance of the use of such materials in the work. Replace base where samples are removed.
- B. Testing:
 - 1. Smoothness Tests: Test with a 10 foot straightedge, applied parallel with and at right angles to the center line of the paved area. Correct deviations in the surface in excess of 3/8 inch by loosening, adding or removing material, reshaping, watering, and compacting. The smoothness requirements specified herein apply only to the top layer when base course is constructed in more than one layer.
 - 2. Field Density Tests: ASTM D 1556 or ASTM D 2922 and ASTM D 3017. Take one test for each 500 square yards of each layer of base course.
 - 3. Laboratory Density Tests: In accordance with ASTM D 1557.
 - 4. Thickness Tests: Measure thickness of base course at intervals such that there will be a depth measurement for at least each 500 square yards of complete base course. Make depth measurements by test holes, at least 3 inches in diameter, through the base course. Where base course deficiency is more than 1/2 inch, correct by scarifying, adding mixture of proper gradation, reblading, and recompacting. Where the measured thickness is more than 1/2 inch thicker than indicated, consider it as the indicated thickness plus 1/2 inch for determining the average. The average thickness is the average of the depth measurements and shall not underrun the thickness indicated.

3.08 MAINTENANCE

- A. After construction is completed, maintain the base course throughout, except where portion of the succeeding course is under construction thereon. Maintenance includes drainage, rolling, shaping, and watering, as necessary, to maintain the course in proper condition. Correct deficiencies in thickness, composition, construction, smoothness, and density, which develop during the maintenance, to conform to the requirements specified herein. Maintain sufficient moisture by light sprinkling with water at the surface to prevent a dusty condition.

END OF SECTION 321123