

Kari K. Steele
President
Patricia Theresa Flynn
Vice President
Marcelino Garcia
Chairman of Finance
Precious Brady-Davis
Yumeka Brown
Cameron Davis
Beth McElroy Kirkwood
Eira L. Corral Sepúlveda
Sharon Waller

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET CHICAGO, ILLINOIS 60611-3154 312.751.5600

Darlene A. LoCascio
Director of Procurement and Materials Management

312.751.6600 f: 312.894.2011
darlene.locascio@mwrdr.org

November 12, 2025

Dear Bidder:

Enclosed herewith is "Notice of Revision and Addendum in Contract Documents," Addendum 4, consisting of twelve (12) pages and other attachments as referenced in the addendum. This addendum is dated November 12, 2025, and pertains to Contract 21-092-3P, "Battery E Activated Sludge Facility, O'Brien Water Reclamation Plant."

Proposers must download Addendum 4 and the attachments in their entirety from the District's Portal at www.mwrdr.org. The path is as follows: **Doing Business→Procurement and Materials Management→Contract Announcements**. Scroll to Contract 21-092-3P and click "Addenda" to obtain this and all other addenda. If you are unable to download this addendum or any other contract documents, please email the Contract Desk at contractdesk@mwrdr.org or call (312) 751-6629 for assistance.

The Notice must also be signed, dated, inserted in the Contract Documents, and submitted with the Proposal, OR the Bidder may identify the addendum number in the space provided on the Proposal signature page.

Very truly yours,

Darlene A. LoCascio -ES

Darlene A. LoCascio
Director of Procurement and
Materials Management

Attachment

Acknowledgment of receipt of the above-cited Notice:

DATE _____
NAME _____
FIRM _____
SIGNED _____



Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET CHICAGO, ILLINOIS 60611-3154 312.751.5600

BOARD OF COMMISSIONERS

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Page 1 of 12

NOTICE OF REVISION AND ADDENDUM IN CONTRACT DOCUMENTS

ADDENDUM 4

NOVEMBER 12, 2025

**CONTRACT 21-092-3P
BATTERY E ACTIVATED SLUDGE FACILITY
O'BRIEN WATER RECLAMATION PLANT**

All bidders are hereby notified of the following revisions:

Volume 1 of 4 – Signature Book for Submission of Bid

1. INVITATION TO BID – PAGE I-1

Delete line nine in its entirety and replace it with “**PROPOSALS ARE DUE TUESDAY, DECEMBER 9, 2025**”.

2. INVITATION TO BID – PAGE I-1

Refer to the paragraph beginning with “Sealed Proposals, endorsed...”

Delete the phrase “November 18, 2025” from the referenced paragraph and replace it with “December 9, 2025”.

Volumes 2 and 3 of 4 – Specifications

3. SECTION 02220 – PAGE 2

Delete Paragraph 1.02 D. and renumber subsequent paragraphs.

4. SECTION 02317 – PAGE 1

Delete Paragraph 1.02 C.1. and renumber subsequent paragraphs.

Delete Paragraph 1.02 C.2. and renumber subsequent paragraphs.

Delete Paragraph 1.02 C.3. and renumber subsequent paragraphs.

5. SECTION 02317 – PAGE 4

Delete Part 1.08 SITE CONDITIONS in its entirety.

6. SECTION 02317 – PAGE 6

Delete Paragraph 2.02 A.3. and renumber subsequent paragraphs.

7. SECTION 02465 – PAGE 1

Delete Paragraph 1.02 A.2. and renumber subsequent paragraphs.

Delete Paragraph 1.02 A.3. and renumber subsequent paragraphs.

Delete Paragraph 1.02 A.4. and renumber subsequent paragraphs.

Delete Paragraph 1.02 A.5. and renumber subsequent paragraphs.

Delete Paragraph 1.02 A.7.

Delete Paragraph 1.02 B.3. and renumber subsequent paragraphs.

Delete Paragraph 1.02 B.4. and renumber subsequent paragraphs.

Delete Paragraph 1.02 B.5. and renumber subsequent paragraphs.

Delete Paragraph 1.02 B.8. and renumber subsequent paragraphs.

Delete Paragraph 1.02 B.9. and renumber subsequent paragraphs.

8. SECTION 02465 – PAGE 2

Delete Paragraph 1.02 B.13. and renumber subsequent paragraphs.

Delete Paragraph 1.02 B.15. and renumber subsequent paragraphs.

Delete Paragraph 1.02 B.21. and renumber subsequent paragraphs.

9. SECTION 02465 – PAGE 2

Refer to Paragraph 1.02 B.22.

Add the following after the referenced paragraph and renumber subsequent paragraphs:

“C. MWRDGC – General Specifications – Concrete”

10. SECTION 02465 – PAGE 4

Refer to Paragraph 1.06 C.

Insert the wording “General Specifications – Concrete and” before “Section 03200”.

11. SECTION 02465 – PAGE 8

Delete Paragraph 3.03 B.4. and renumber subsequent paragraphs.

12. SECTION 02606 – PAGE 1

Delete Paragraph 1.02 A.1. and renumber subsequent paragraphs.

Refer to Paragraph 1.03 A.

Add the wording “and General Specifications – Concrete” at the end of the paragraph.

Refer to Paragraph 1.03 A.3.

Delete the wording “Section 03300” and replace it with “General Specifications – Concrete”.

Delete Paragraph 1.03 A.5. and renumber subsequent paragraphs.

Delete Paragraph 1.03 A.7.

Delete Paragraph 1.03 A.8.

Delete Paragraph 1.03 A.9.

13. SECTION 02606 – PAGE 3

Delete Paragraph 1.07 A. and renumber subsequent paragraphs.

Delete Paragraph 1.08 B.

Refer to Paragraph 2.01 C.

Delete the wording “Section 03300” and replace it with “General Specifications – Concrete”.

14. SECTION 02606 – PAGE 4

Refer to Paragraph 2.01 E.

Delete the wording "Section 03300" and replace it with "General Specifications – Concrete".

Refer to Paragraph 2.01 F.

Delete the wording "Section 03300" and replace it with "General Specifications – Concrete".

15. SECTION 02606 – PAGE 7

Refer to Paragraph 3.05 D.

Add the wording "and Section 03390".

16. SECTION 02606 – PAGE 8

Refer to Paragraph 3.07 C.4.

Delete the wording "in accordance with Section 03300". Add a new sentence to the end of the referenced paragraph as follows: "Use Sikalatex R or Engineer approved equal with sand and cement per manufacturer instructions for bonding grout."

17. SECTION 02630 – PAGE 1

Delete Paragraph 1.02 B.9. and renumber subsequent paragraphs.

18. SECTION 02630 – PAGE 3

Refer to Paragraph 1.05 A.

Add the wording "and General Specifications – Concrete" at the end of the paragraph.

19. SECTION 02750 – PAGE 1

Refer to Paragraph 1.02 B.

Delete the wording "Section 03300" and replace it with "General Specifications – Concrete".

Refer to Paragraph 1.03 A.

Add the wording "and General Specifications – Concrete" at the end of the paragraph.

20. SECTION 02770 – PAGE 1

Refer to Paragraph 1.03 B.

Delete the wording "Section 03300" and replace it with "General Specifications – Concrete (Class P)".

21. SECTION 02770 – PAGE 2

Refer to Paragraph 1.05 D.

Add the wording “and General Specifications – Concrete” at the end of the paragraph.

Refer to Paragraph 2.02 A.

Add the wording “and General Specifications – Concrete” at the end of the paragraph.

22. SECTION 02775 – PAGE 1

Refer to Paragraph 1.02 A.

Delete the wording “: Illinois Department of Transportation, “Standard Specifications for Road and Bridge Construction,” adopted April 1, 2016 current, revised, and supplemental specifications” and replace it with “, latest edition”

23. SECTION 02775 – PAGE 2

Refer to Paragraph 1.05 A.

Add the wording “and General Specifications – Concrete” at the end of the paragraph.

24. SECTION 02850 – PAGE 1

Delete Paragraph 1.02 A.9.

25. SECTION 02850 – PAGE 5

Refer to Paragraph 2.01 C.4.d.

Delete the wording “Specification Section 03300” and replace it with “General Specifications – Concrete”.

Refer to Paragraph 2.03 A.1.b.

Delete the referenced paragraph.

Refer to Paragraph 2.03 A.2.

Delete the referenced paragraph.

Refer to Paragraph 2.03 A.3.

Delete the referenced paragraph.

26. SECTION 02930 - 1

Refer to Paragraph 1.02 A.

Delete the wording “- Project Management System”

27. SECTION 03100 – PAGE 1

Delete Paragraph 1.02 A.1. and renumber subsequent paragraphs.

Delete Paragraph 1.02 A.2. and renumber subsequent paragraphs.

Delete Paragraph 1.02 A.3. and renumber subsequent paragraphs.

28. SECTION 03100 – PAGE 5

Refer to Paragraph 3.04 A.2.

Delete the wording “Subsection 3.8” and replace it with “Subsection 3.11”.

29. SECTION 03200 – PAGE 1

Delete Paragraph 1.02 A.1. and renumber subsequent paragraphs.

Delete Paragraph 1.02 A.2. and renumber subsequent paragraphs.

Delete Paragraph 1.02 A.3. and renumber subsequent paragraphs.

30. SECTION 03200 – PAGE 6

Refer to Paragraph 3.02 C.

Delete the wording “as well as ACI 315 Details and Detailing of Concrete Reinforcement”.

31. SECTION 05500 – PAGE 1

Refer to Paragraph 1.02 A.13.d.

Add the following after the referenced paragraph:

“14. MWRDGC General Specifications – Concrete (2024 Edition).”

32. SECTION 05500 – PAGE 7

Refer to Paragraph 2.04 B.1.c.

Delete the wording “Power-Stud” and replace it with “Power-Stud+ SD1/SD2”.

33. SECTION 05500 – PAGE 8

Refer to Paragraph 2.04 D.1.b.

Add the following after the referenced paragraph:

“c. CCU+ Undercut Anchor by DeWalt.”

Refer to Paragraph 2.04 F.1.b.

Delete the wording “Wedge Bolt Screw” and replace it with “Screw-Bolt+”.

34. SECTION 05500 – PAGE 9

Refer to Paragraph 2.04 G.4.g.

Add the following after the referenced paragraph:

“h. Pure 220+ Standard cure Epoxy Adhesive Anchor System by DeWalt.

i. AC200+ Fast cure Acrylic Adhesive Anchor System by DeWalt.

j. AC100+ Gold Fast cure Acrylic Adhesive Anchor System for Masonry by DeWalt.”

Refer to Paragraph 2.06 A.

Delete the wording “or equal” and replace it with “Pure 220+ as manufactured by DeWalt, Brewster, NY, or equal”.

35. SECTION 05500 – PAGE 15

Delete Paragraph 3.03 G.1. and replace it with the following:

“1. Refer to manufacturer’s printed installation instructions for allowable temperature range during the installations.”

36. SECTION 05500 – PAGE 16

Delete Paragraph 3.07 E. and replace it with the following:

“E. Concrete and Masonry Drilled Anchors:

1. Contractor shall provide continuous inspection for adhesive anchors installed horizontally or upwardly (overhead) per ACI 318 Chapter 26 and product ICC Evaluation Service report.

2. Contractor shall provide periodic inspection for mechanical anchors and adhesive anchors installed other than horizontally or upwardly (overhead) per ACI 318 Chapter 26 and product ICC Evaluation Service report.

3. Inspect for anchor type, anchor dimensions, concrete type, concrete compressive strength, hole dimensions, hole cleaning procedures, anchor spacing, edge distances, anchor embedment, and tightening torque.
4. The inspector shall be certified per ACI 318 Chapter 26."

37. SECTION 11341 – PAGE 16

Refer to Paragraph 2.17 Q.

Delete the wording “, whether in shop or field” from the referenced paragraph.

Add the following sentence to the end of the referenced paragraph:

“Prime coating of the final settling tank mechanisms shall be shop applied by the mechanism manufacturer. Top coating of the final settling tank mechanisms shall be field applied by the Contractor.”

38. SECTION 11341 – PAGE 24

Refer to the row in the Equipment Data Sheet for Maximum Design Torque.

Delete the wording “80,000 ft-lbs” and replace it with “100,000 ft-lbs”.

Add the following row below the referenced row.

“Maximum Stalled Torque 200,000 ft-lbs.”

39. SECTION 11355 – PAGE 5

Refer to Paragraph 2.01 C.

Add the following after the referenced paragraph and renumber subsequent paragraphs:

“D. Fiberglass Fabricators.”

40. SECTION 11850 – PAGE 7

Refer to Paragraph 2.02 B.2.d.1).

Delete the wording “L/360” from the referenced paragraph and replace it with “L/240”.

41. SECTION 11850 – PAGE 7

Refer to Paragraph 2.02 B.2.d.2).

Delete the wording “L/360” from the referenced paragraph and replace it with “L/240”.

42. SECTION 13300 – PAGE 8

Delete Paragraph 2.06 A.1. and replace it with the following:

- “1. Payment milestones for the ABB scope supplied under this Contract shall adhere to the following items:
- a. 20% - upon submittal of the Kick-Off Meeting Minutes
 - b. 20% - upon initial DCS Hardware Drawings Submittal
 - c. 20% - upon initial Functional Narrative and Control Drawings Submittal
 - d. 20% - upon Hardware Ordering
 - e. 10% - upon System Shipment
 - f. 5% - upon Completion of 60-day test
 - g. 5% - upon District Acceptance of Final O&M and As-Built Drawings or 30 days from completion of 60-day test, whichever occurs first”

43. SECTION 13300 – PAGE 8

Delete Paragraph 2.06.B. and replace it with the following:

- “B. Manufacturer warranty terms can be found in Appendix E.”

44. SECTION 13435 – PAGE 3

Refer to Paragraph 2.02 A.2.

Delete the wording “1600 (a HACH Company Brand) Automatic Liquid Sampler” and replace with “AS 950”.

45. SECTION 15051 – PAGE 4

Delete Paragraph 2.01 B.2. and replace it with the following:

- “2. Flanged Joints: Bolt material type will vary based on the material type of the piping. See individual piping specification sections for the corresponding bolt material type required.”

46. SECTION 15051 – PAGE 5

Refer to Paragraph 2.01 B.5.

Add the following after the referenced paragraph:

- “6. Piping Material Transitions: For connections where there are dissimilar metals, isolate all mating surfaces and bolts, nuts and washers to prevent galvanic corrosion.”

47. SECTION 15072 – PAGE 4

Refer to Paragraph 2.03 A.1.

Delete the wording “or push-on joint” from the referenced paragraph.

Refer to Paragraph 2.03 B.

Delete the wording “and Push-on Joints” from the referenced paragraph.

48. SECTION 15072 – PAGE 5

Refer to Paragraph 2.03 B.3.c.

Add the following wording to the end of the referenced paragraph:

“In lieu of mechanical locking type restrained joints, mechanical wedge type restraints can be used only at select locations, to be submitted during shop drawing review and approved by the Engineer.”

49. PLANS

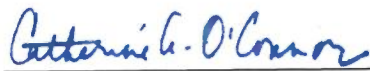
The following revised plans are included in this Addendum. The revised plans replace previously issued plans having corresponding sheet numbers:

<u>PAGE</u> <u>NO.</u>	<u>SHEET</u> <u>NO.</u>	<u>REV#</u>	<u>TITLE OF SHEET</u>
28	C-012	1	STANDARD DETAILS – 1
33	C-017	1	STANDARD DETAILS – 6
41	C-025	1	SITE DEMOLITION PLAN – 2
42	C-026	1	SITE DEMOLITION PLAN – 3
43	C-027	1	SITE DEMOLITION PLAN – 4
44	C-028	2	SITE DEMOLITION PLAN – 5
59	C-043	1	SITE STORM SEWER PLAN – 1
60	C-044	1	SITE STORM SEWER PLAN – 2
64	C-048	1	STORM SEWER SCHEDULE TABLES
66	C-050	1	SITE YARD PIPING – 1
67	C-051	1	SITE YARD PIPING – 2
68	C-052	1	SITE YARD PIPING – 3
69	C-053	1	SITE YARD PIPING – 4
70	C-054	1	SITE YARD PIPING – 5
73	C-057	1	SITE YARD PIPING DETAILS

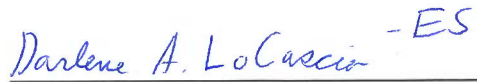
<u>PAGE</u> <u>NO.</u>	<u>SHEET</u> <u>NO.</u>	<u>REV#</u>	<u>TITLE OF SHEET</u>
77	S-004	1	STANDARD DETAILS – 2
81	S-008	1	STANDARD DETAILS – 6
83	S-010	1	STANDARD DETAILS – 8
84	S-201	1	OVERALL PLAN
85	S-202	1	BASE PLAN
86	S-203	1	BASE PLAN
87	S-204	1	BASE PLAN
88	S-205	1	BASE PLAN
89	S-206	1	TOP PLAN
90	S-207	1	TOP PLAN
91	S-208	1	TOP PLAN
92	S-209	1	TOP PLAN
93	S-210	1	SECTIONS
106	S-301	1	OVERALL PLAN
131	S-326	1	SECTIONS
140	S-401	1	LOWER AND UPPER OPERATING GALLERY OVERALL PLANS
149	S-410	1	SECTIONS
150	S-411	1	SECTIONS
154	S-415	1	SECTIONS
160	S-421	1	SECTIONS
163	S-501	1	GENERAL LAYOUT PLAN
181	S-519	1	MIXED LIQUOR AND EFFLUENT CONDUITS PLAN – SOUTH
185	S-523	1	FINAL SETTLING TANK OVERALL SECTIONS
191	S-601	1	OVERALL PLAN
192	S-602	1	BASE PLAN
193	S-603	1	BASE PLAN
194	S-604	1	BASE PLAN
195	S-605	1	BASE PLAN
196	S-606	1	BASE PLAN
197	S-607	1	BASE PLAN
198	S-608	1	BASE PLAN
199	S-609	1	TOP PLAN
200	S-610	1	TOP PLAN
201	S-611	1	TOP PLAN

<u>PAGE</u> <u>NO.</u>	<u>SHEET</u> <u>NO.</u>	<u>REV#</u>	<u>TITLE OF SHEET</u>
202	S-612	1	ROOF PLAN
203	S-613	1	ROOF PLAN
204	S-614	1	ROOF PLAN
205	S-615	1	ROOF PLAN

This Notice must also be signed, dated, inserted in the Contract Documents, and submitted with the Proposal, OR the Bidder may identify the addendum number in the space provided on the Proposal signature page.

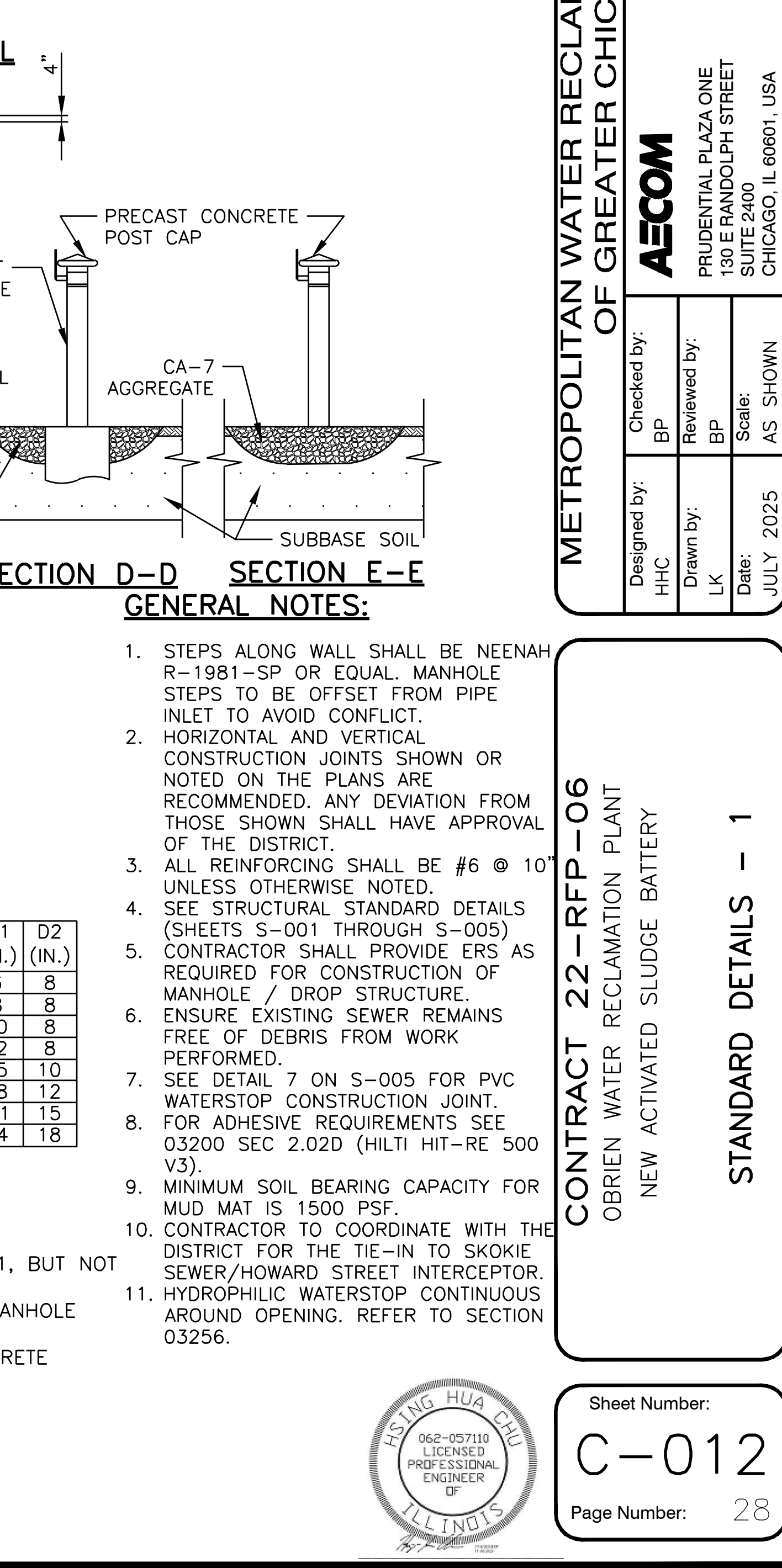
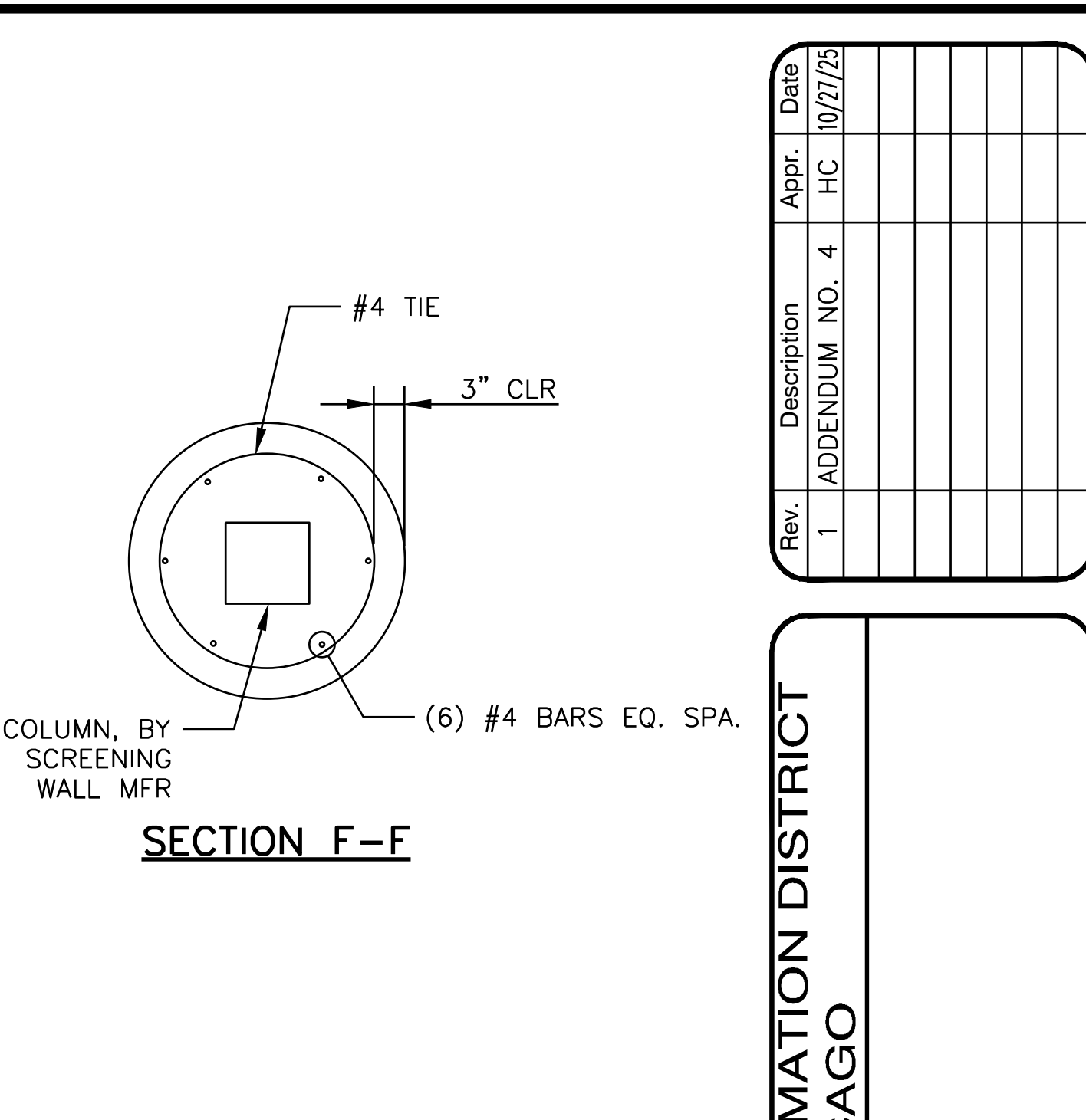
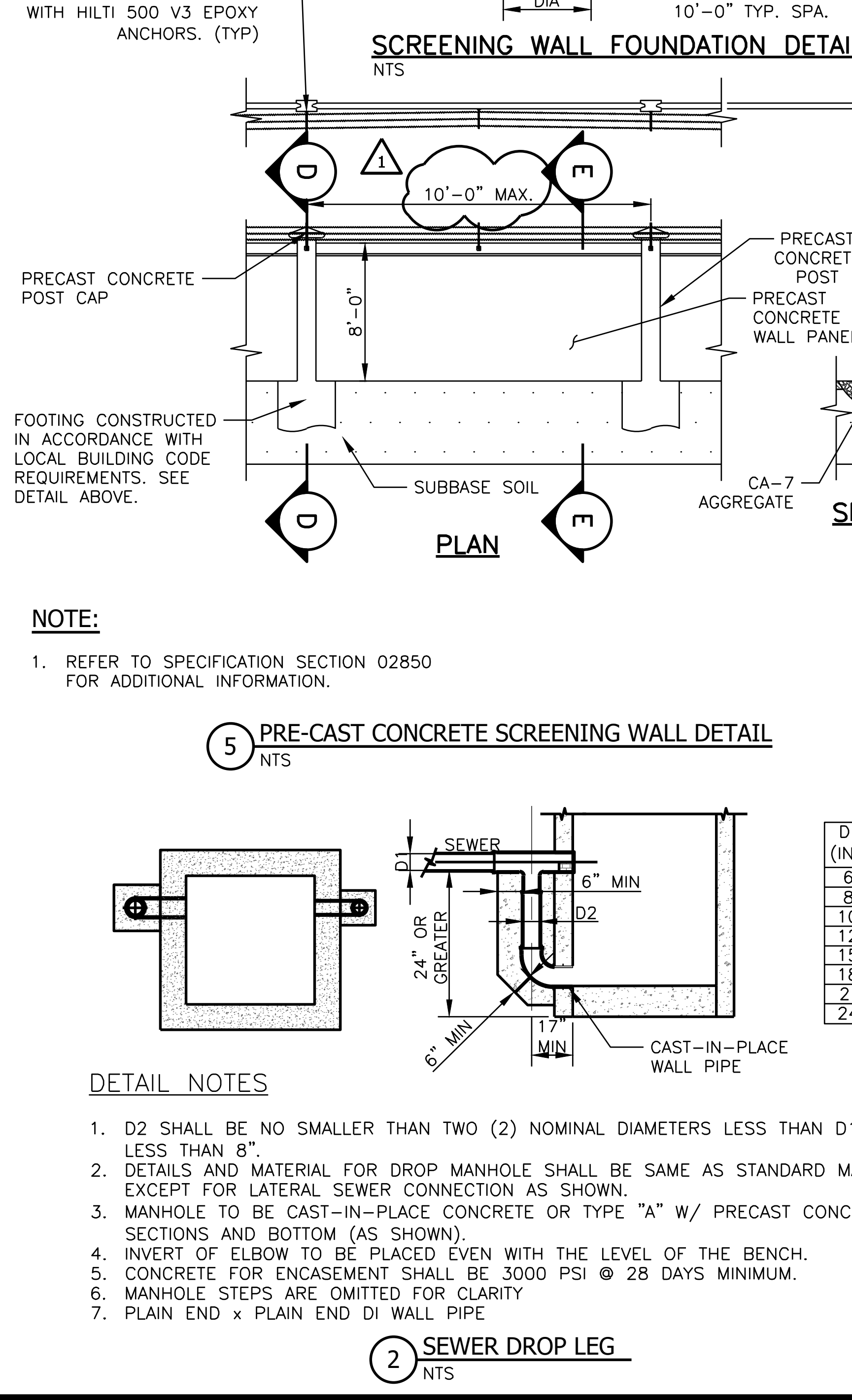
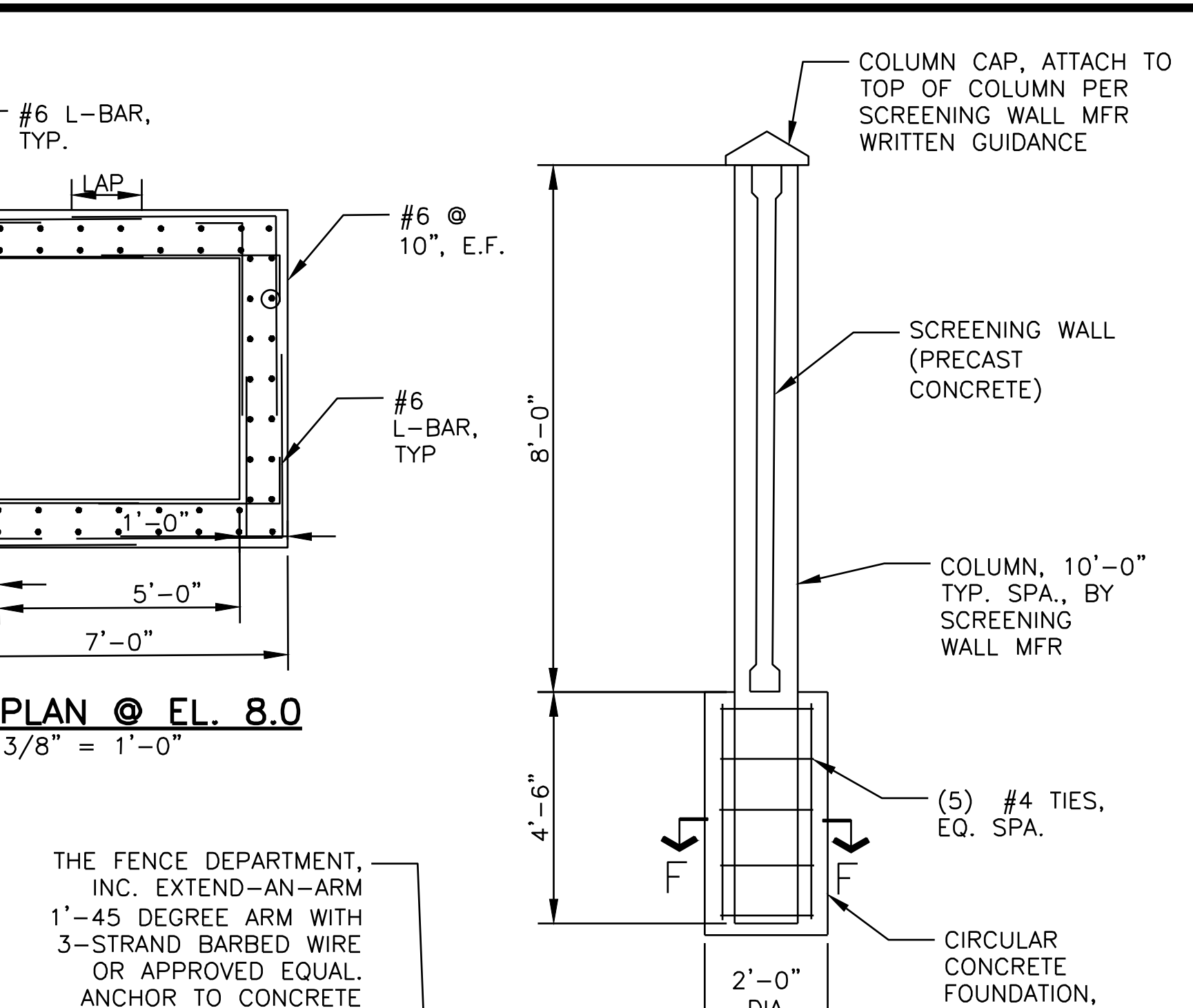
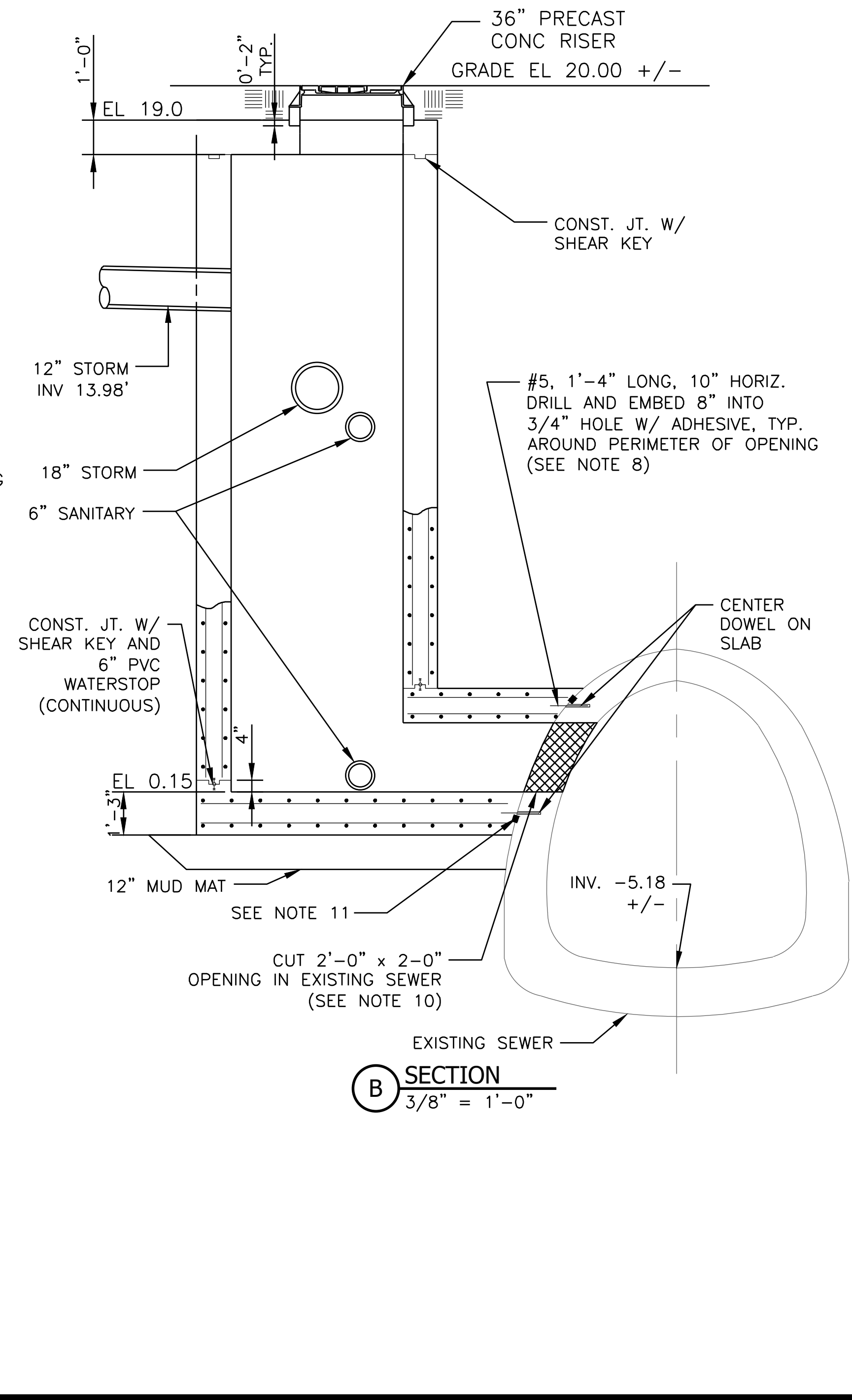
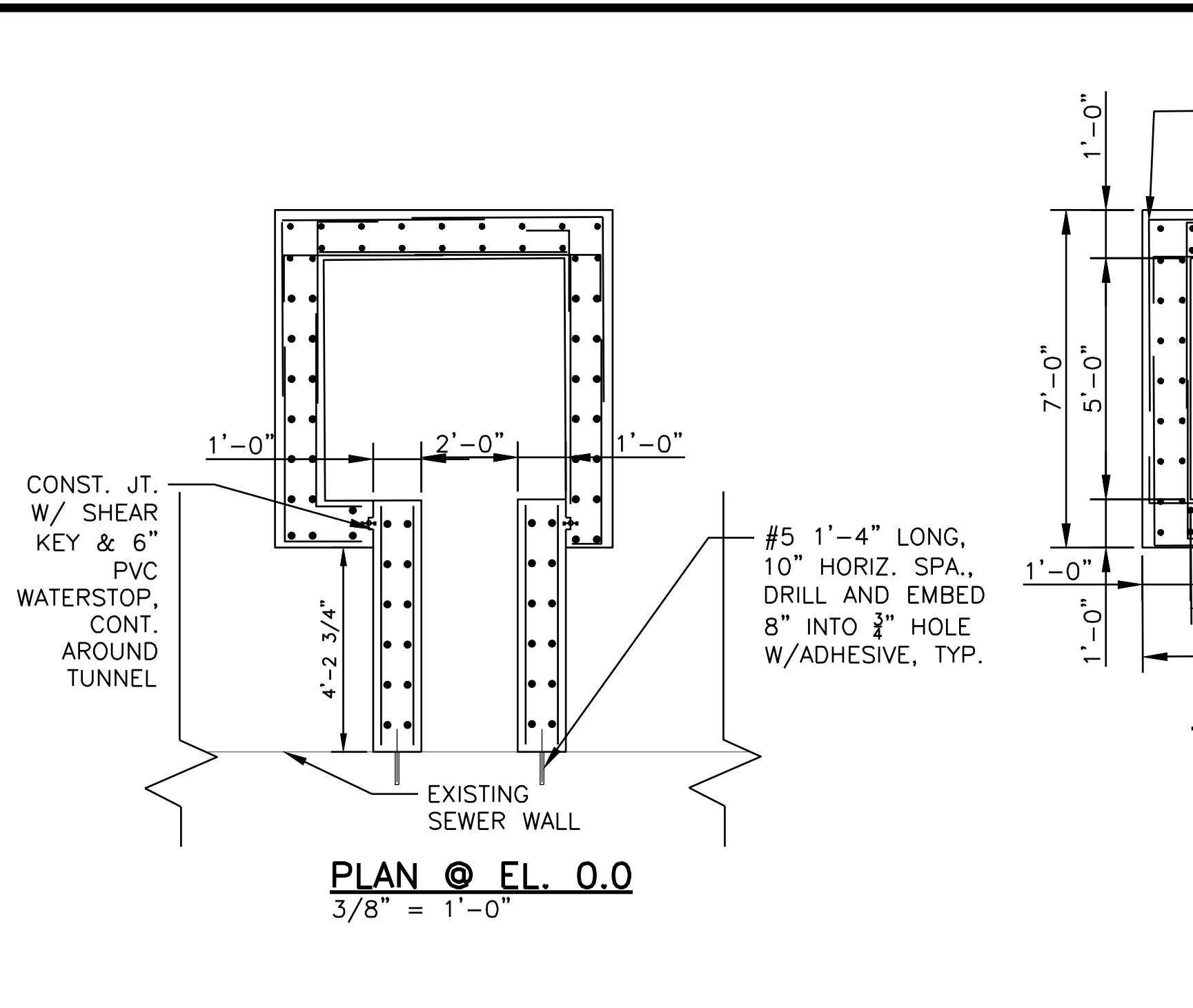
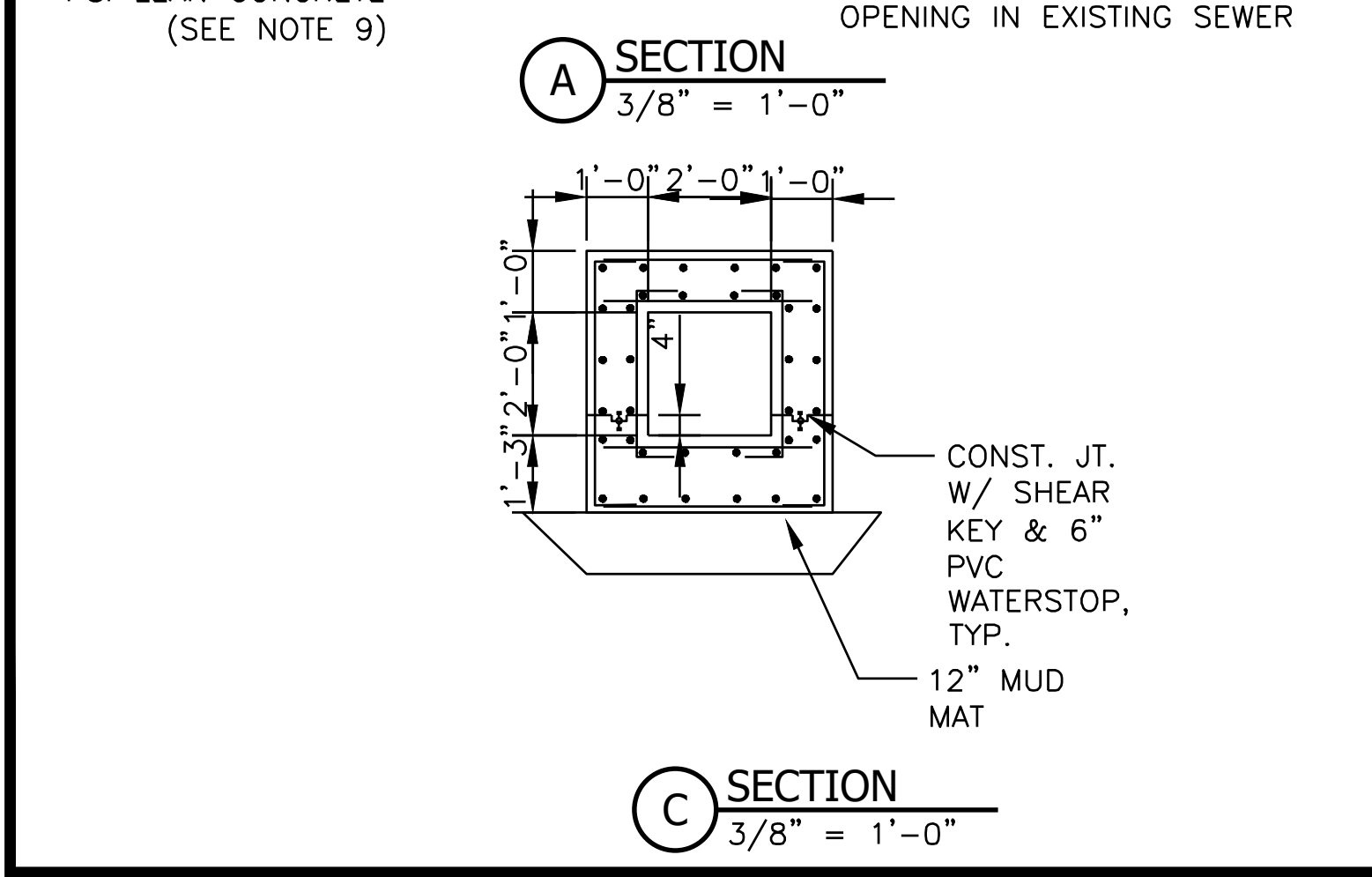
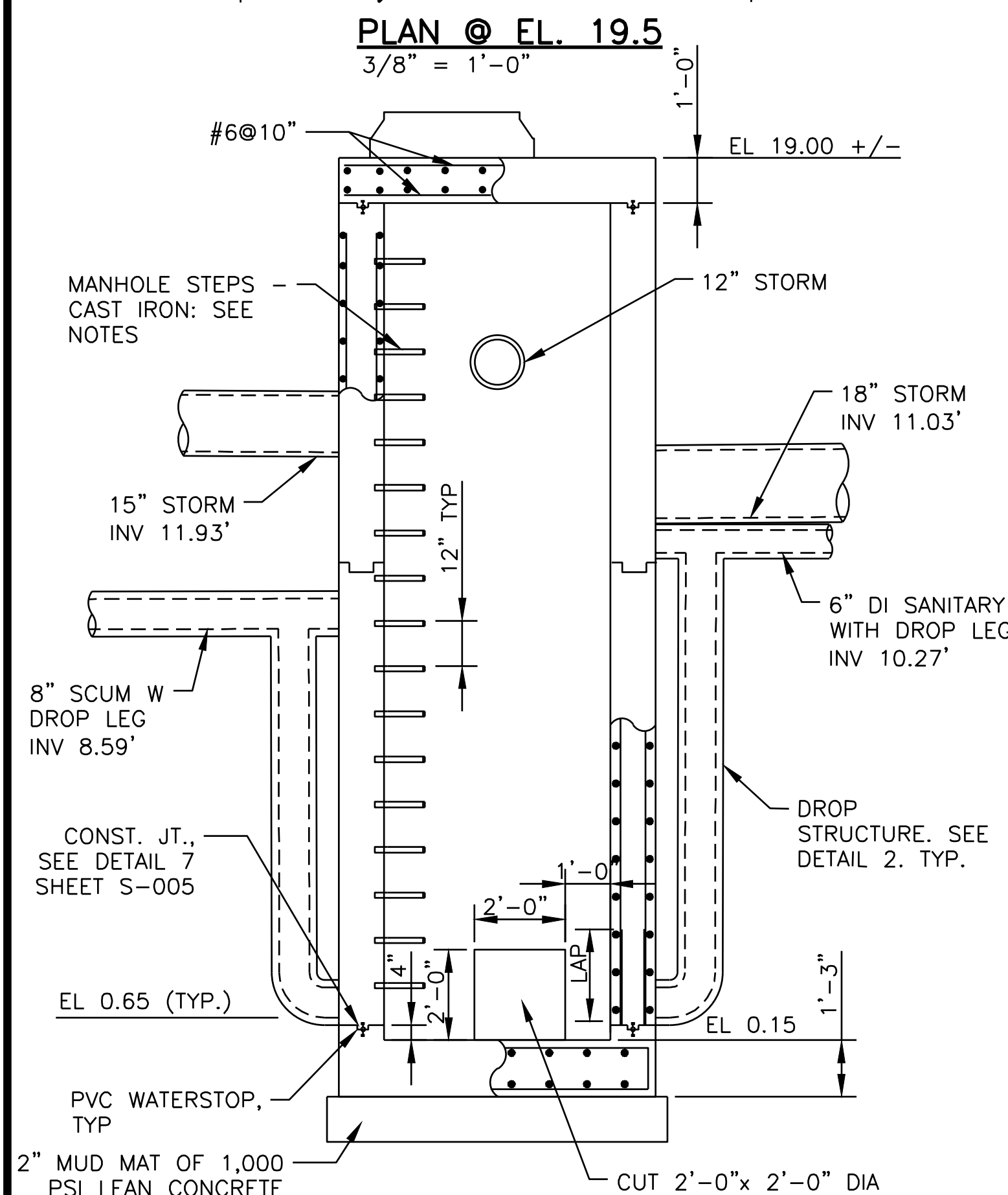
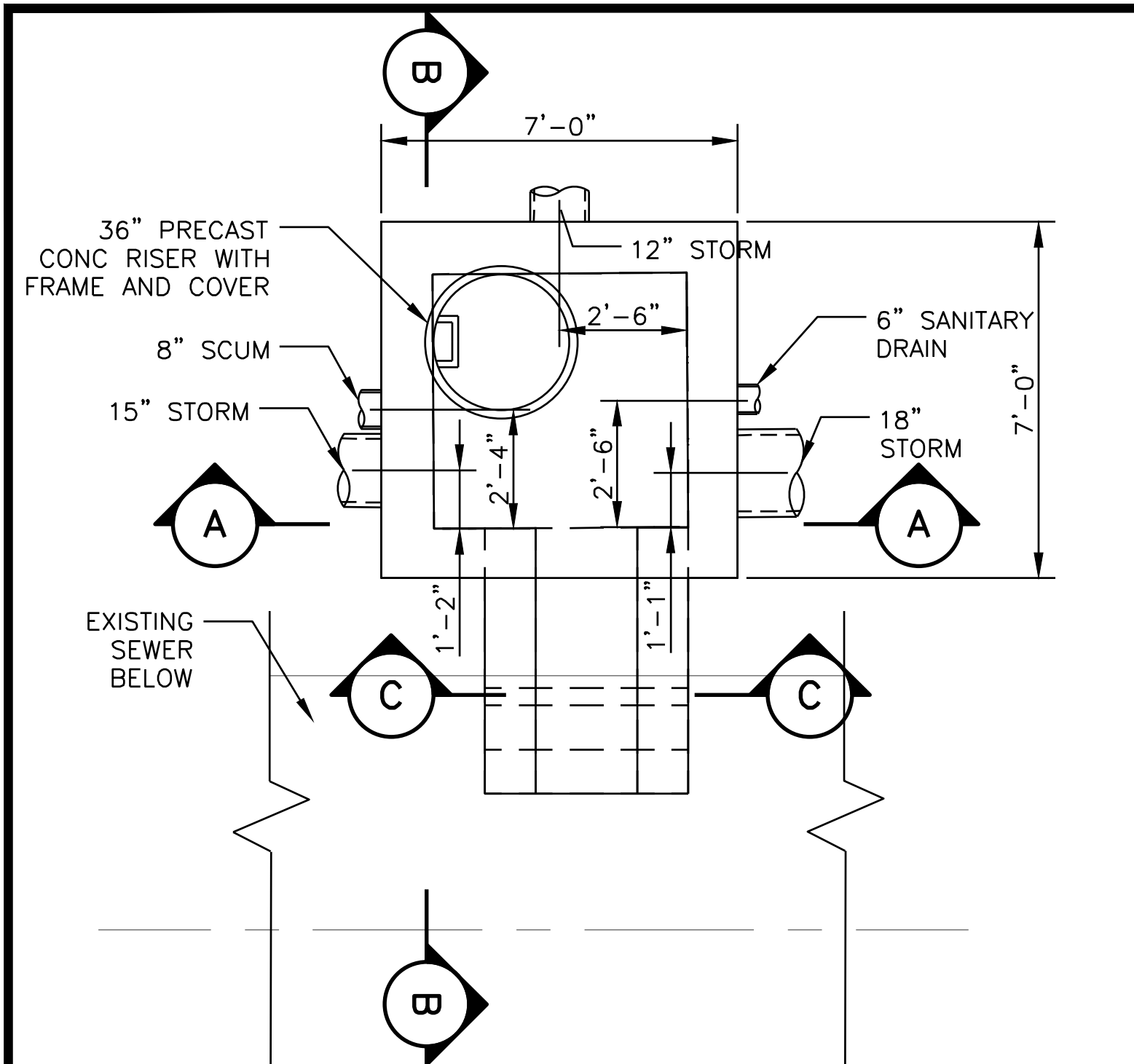


Catherine A. O'Connor
Director of Engineering



Darlene A. LoCascio
Director of Procurement and
Materials Management

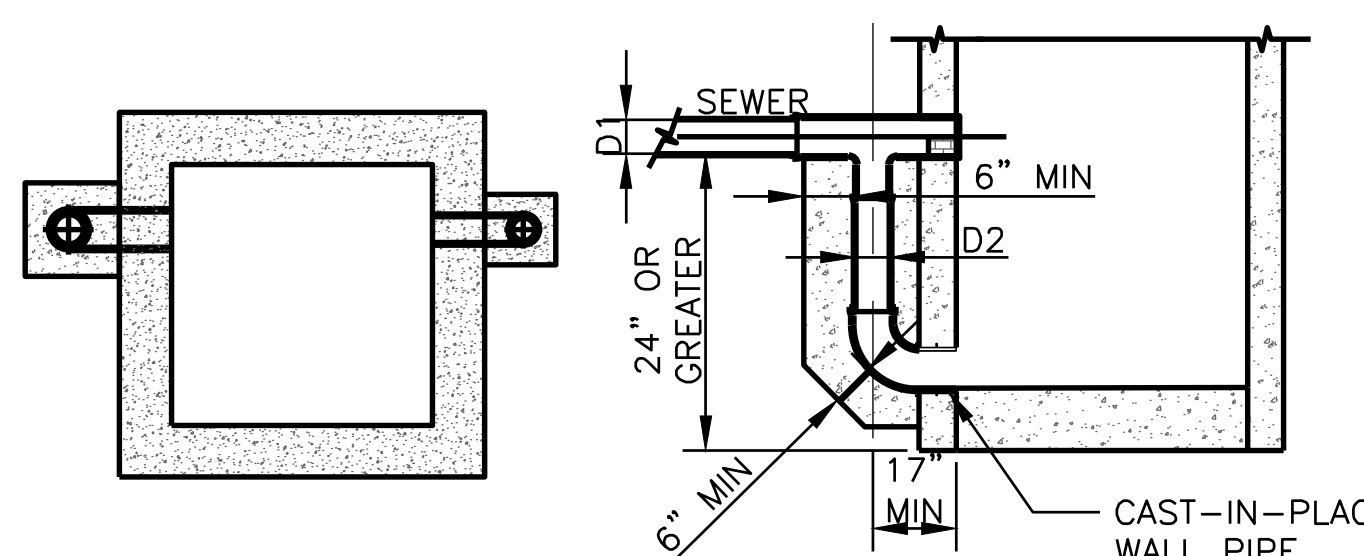
The bidder acknowledges that he/she has read this Notice of Revision, dated November 12, 2025, to the Contract Documents and that he/she has taken the provisions thereof into consideration when preparing and submitting this Proposal.



NOTE:

1. REFER TO SPECIFICATION SECTION 02850 FOR ADDITIONAL INFORMATION.

5 PRE-CAST CONCRETE SCREENING WALL DETAIL



DETAIL NOTES

1. D2 SHALL BE NO SMALLER THAN TWO (2) NOMINAL DIAMETERS LESS THAN D1, BUT NOT LESS THAN 8".
2. DETAILS AND MATERIAL FOR DROP MANHOLE SHALL BE SAME AS STANDARD MANHOLE EXCEPT FOR LATERAL SEWER CONNECTION AS SHOWN.
3. MANHOLE TO BE CAST-IN-PLACE CONCRETE OR TYPE "A" W/ PRECAST CONCRETE SECTIONS AND BOTTOM (AS SHOWN).
4. INVERT OF ELBOW TO BE PLACED EVEN WITH THE LEVEL OF THE BENCH.
5. CONCRETE FOR ENCASEMENT SHALL BE 3000 PSI @ 28 DAYS MINIMUM.
6. MANHOLE STEPS ARE OMITTED FOR CLARITY
7. PLAIN END x PLAIN END DI WALL PIPE

2 SEWER DROP LEG

1. STEPS ALONG WALL SHALL BE NEENAH R-1981-SP OR EQUAL. MANHOLE STEPS TO BE OFFSET FROM PIPE INLET TO AVOID CONFLICT.
2. HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS SHOWN OR NOTED ON THE PLANS ARE RECOMMENDED. ANY DEVIATION FROM THOSE SHOWN SHALL HAVE APPROVAL OF THE DISTRICT.
3. ALL REINFORCING SHALL BE #6 @ 10" UNLESS OTHERWISE NOTED.
4. SEE STRUCTURAL STANDARD DETAILS (SHEETS S-001 THROUGH S-005)
5. CONTRACTOR SHALL PROVIDE ERS AS REQUIRED FOR CONSTRUCTION OF MANHOLE / DROP STRUCTURE.
6. ENSURE EXISTING SEWER REMAINS FREE OF DEBRIS FROM WORK PERFORMED.
7. SEE DETAIL 7 ON S-005 FOR PVC WATERSTOP CONSTRUCTION JOINT.
8. FOR ADHESIVE REQUIREMENTS SEE 03200 SEC 2.02D (HILTI HIT-RE 500 V3).
9. MINIMUM SOIL BEARING CAPACITY FOR MUD MAT IS 1500 PSF.
10. CONTRACTOR TO COORDINATE WITH THE DISTRICT FOR THE TIE-IN TO SKOKIE SEWER/HOWARD STREET INTERCEPTOR.
11. HYDROPHILIC WATERSTOP CONTINUOUS AROUND OPENING. REFER TO SECTION 03256.

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	HC	10/27/25

METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

DESIGNED BY: HHC
CHECKED BY: BP
DRAWN BY: LK
DATE: JULY 2025

REVIEWED BY: BP
SCALE: AS SHOWN

PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

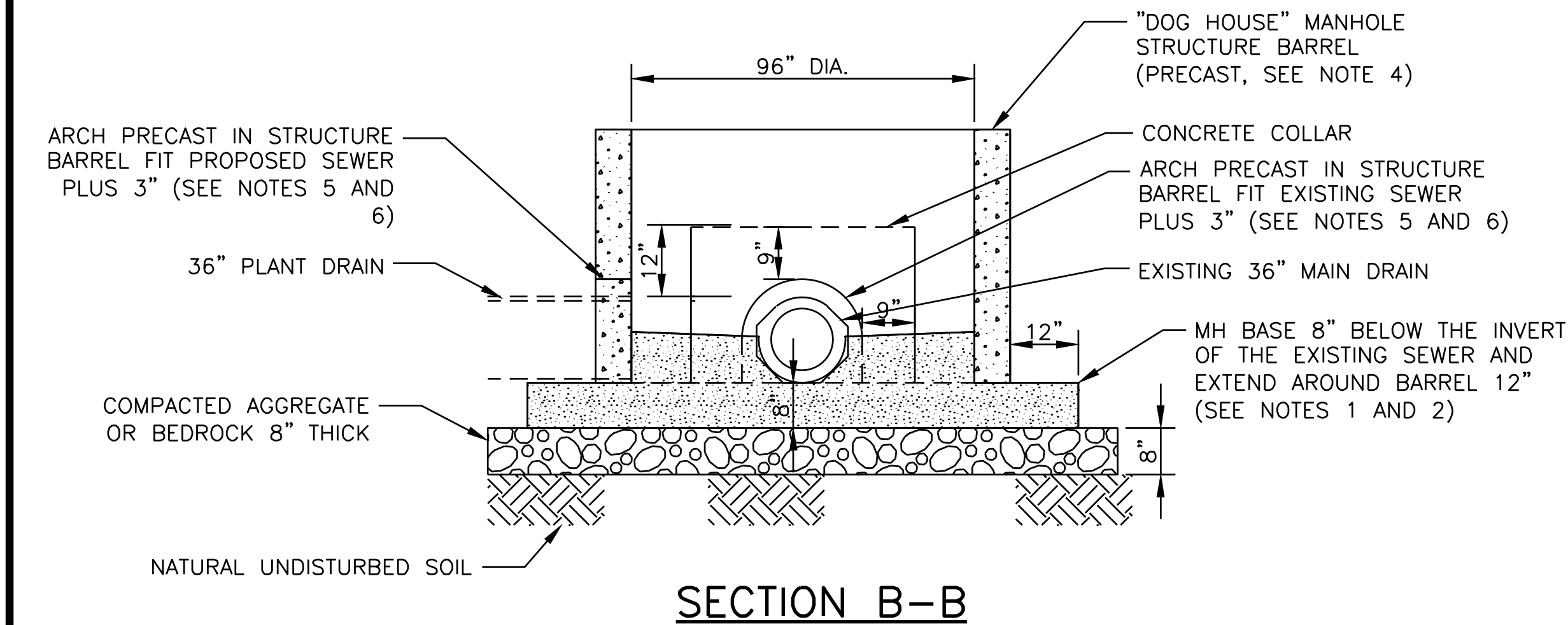
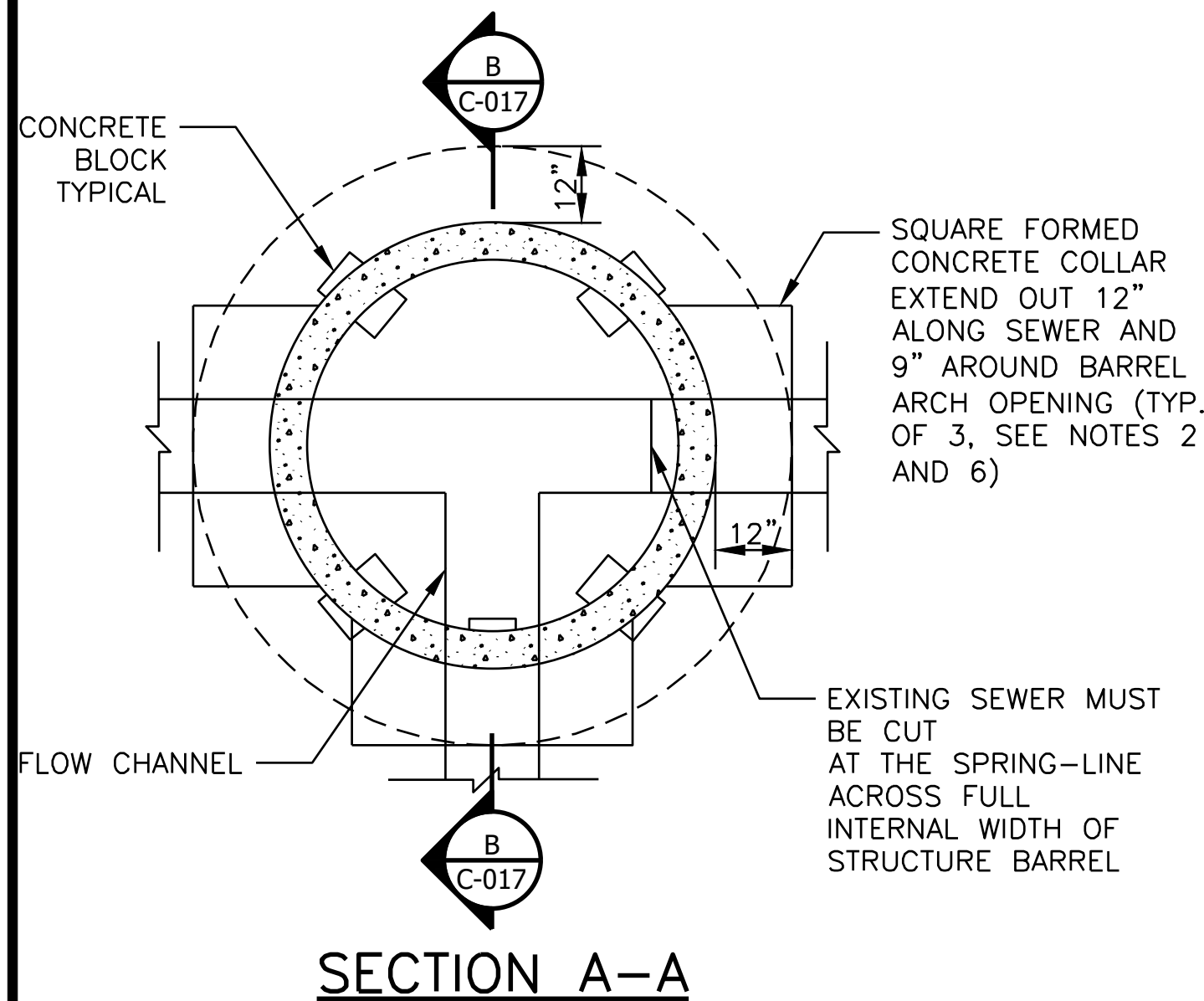
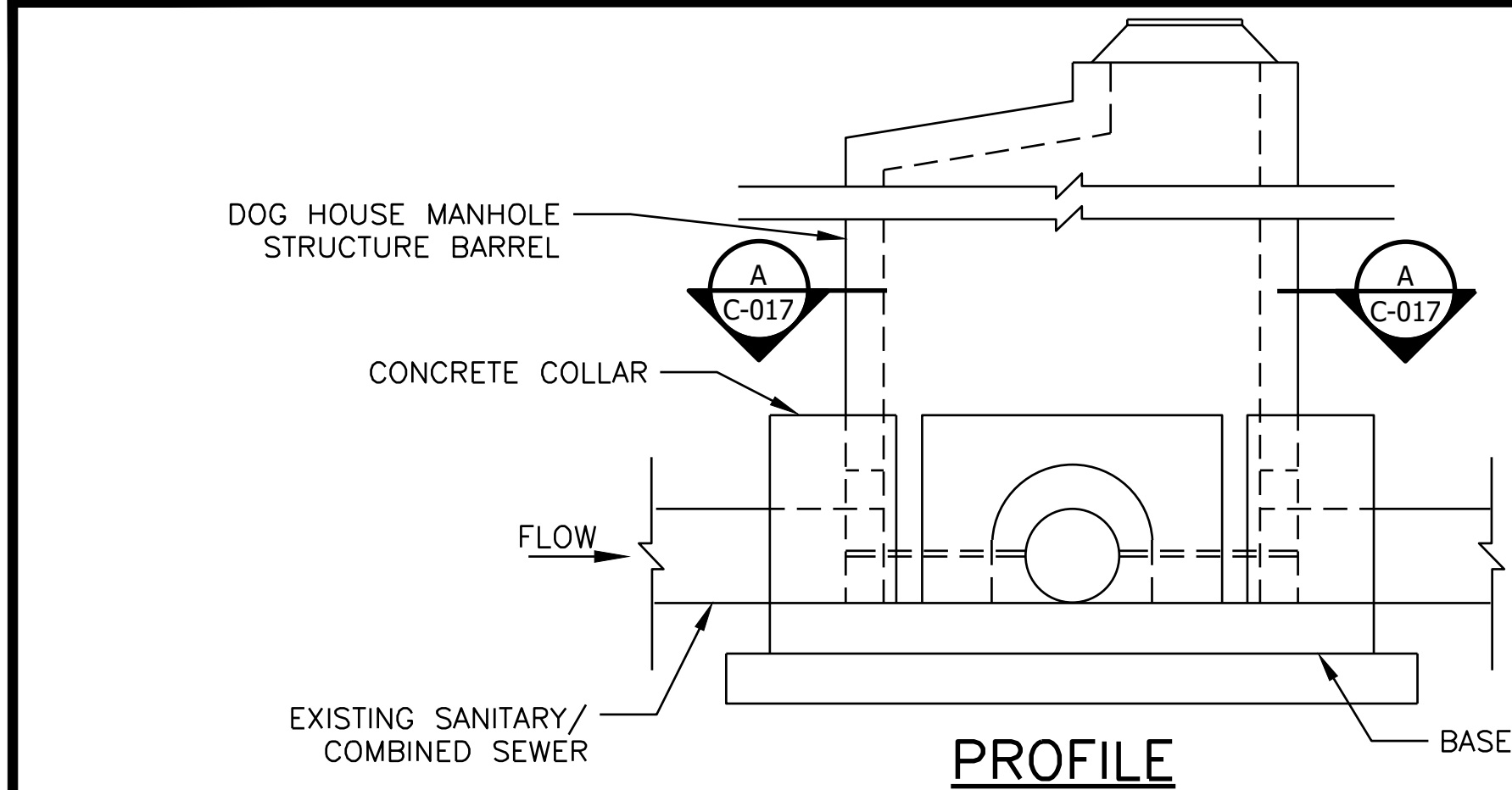
CONTRACT 22-RFP-06
OBRIEN WATER RECLAMATION PLANT
NEW ACTIVATED SLUDGE BATTERY

STANDARD DETAILS - 1

Sheet Number:
C-012

Page Number: 28

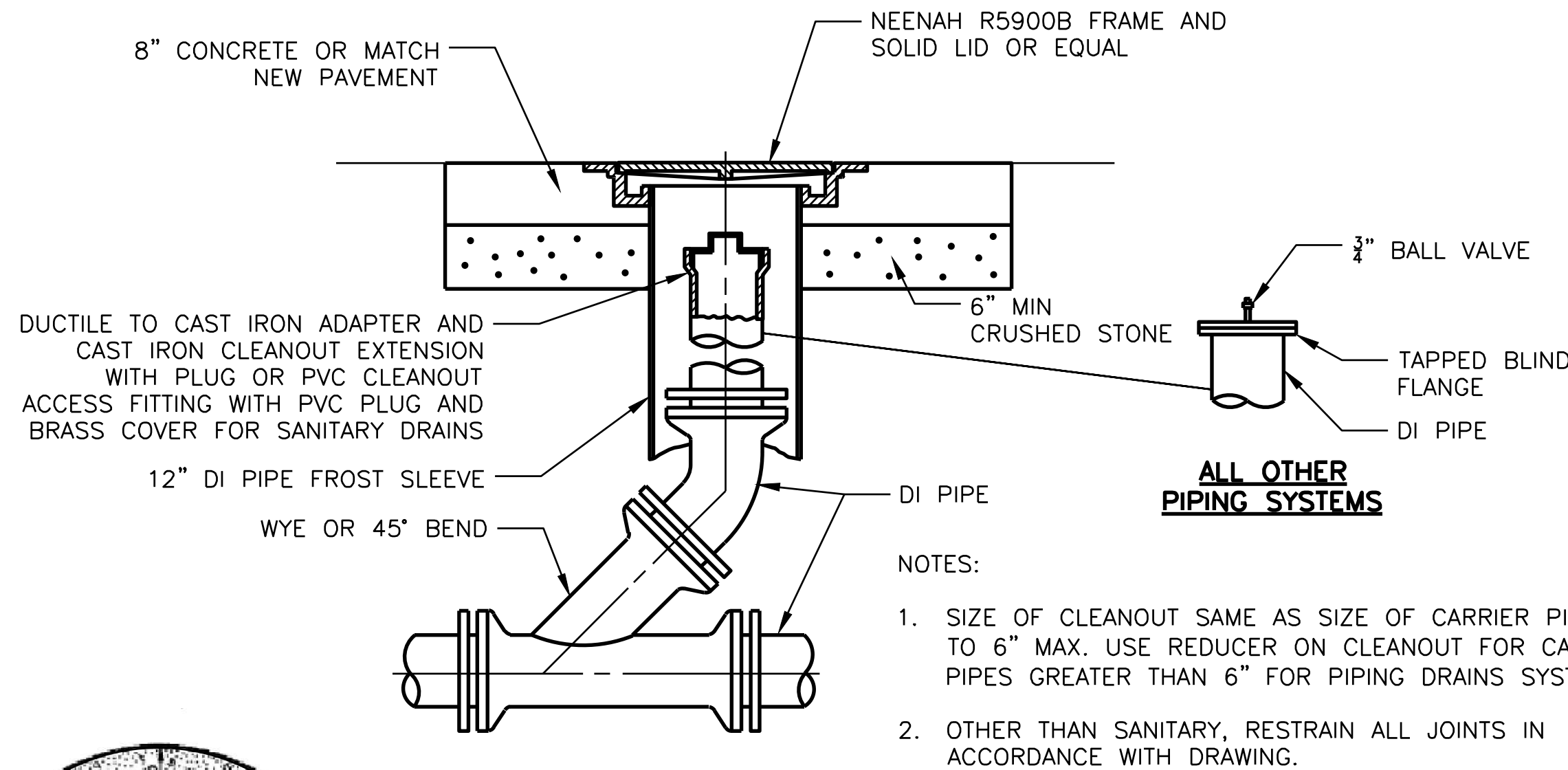




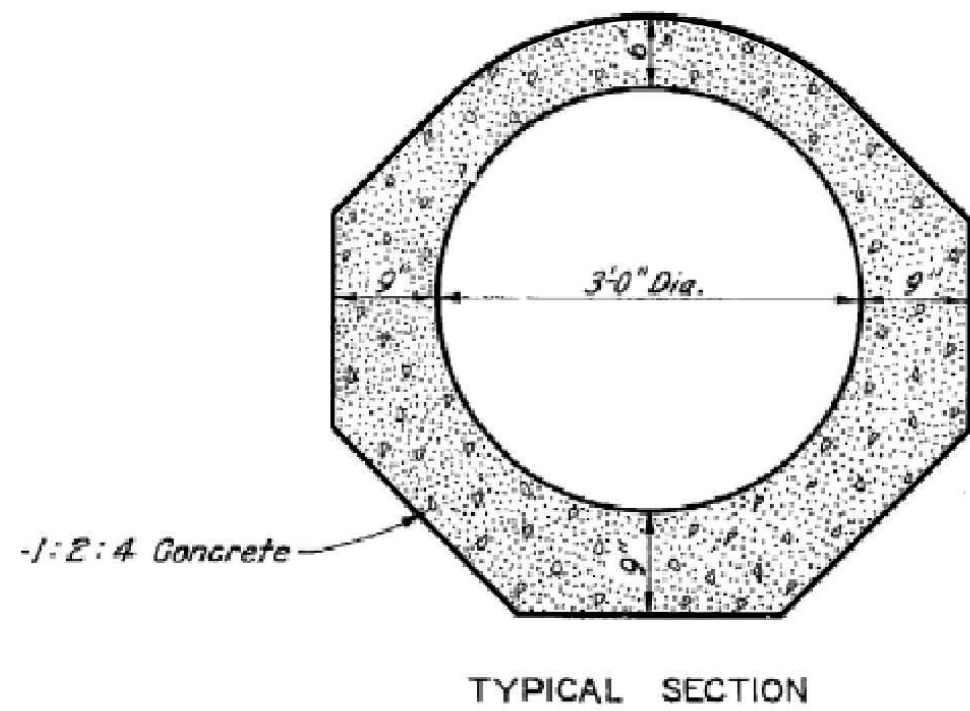
DOG HOUSE MANHOLE

1. INTEGRAL POUR FOR BASE AND BENCH. (NO PRECAST BASE)
2. ALL POURED-IN-PLACE CONCRETE MUST BE 4000 PSI NON-SHRINK MIX.
3. EXTERNAL DROP CONNECTION MUST BE PROVIDED IF INVERT OF CONNECTING SEWER IS 24" OR MORE ABOVE THE INVERT OF OUTLET (SEE SEPARATE MWRD STANDARD DROP DETAIL).
4. CONFORM TO IDOT MANHOLE TYPE A UNLESS OTHERWISE NOTED.
5. CONCRETE BONDING AGENT MUST BE APPLIED TO ALL INTERFACES OF PRECAST CONCRETE SURFACES WITH POURED-IN-PLACE CONCRETE.
6. A CURVED INTERNAL ARCH FORM MUST BE USED DURING COLLAR CONCRETE FILL. NO BRICK, MORTAR, OR DEBRIS IS TO BE USED IN PLACE OF CONSOLIDATED CONCRETE.
7. DEBRIS MUST NOT BE ALLOWED TO ENTER THE SEWER SYSTEM AT ANY TIME DURING CONSTRUCTION.
8. ALL DIMENSIONS NOTED ARE MINIMUM ALLOWED.
9. THE STRUCTURE MUST NOT BE BACKFILLED FOR A MINIMUM OF 24 HOURS AFTER CONSTRUCTION.
10. PUMPING IN LIEU OF "DOG HOUSE" MANHOLE UPON ENGINEER AND INSPECTOR APPROVAL.

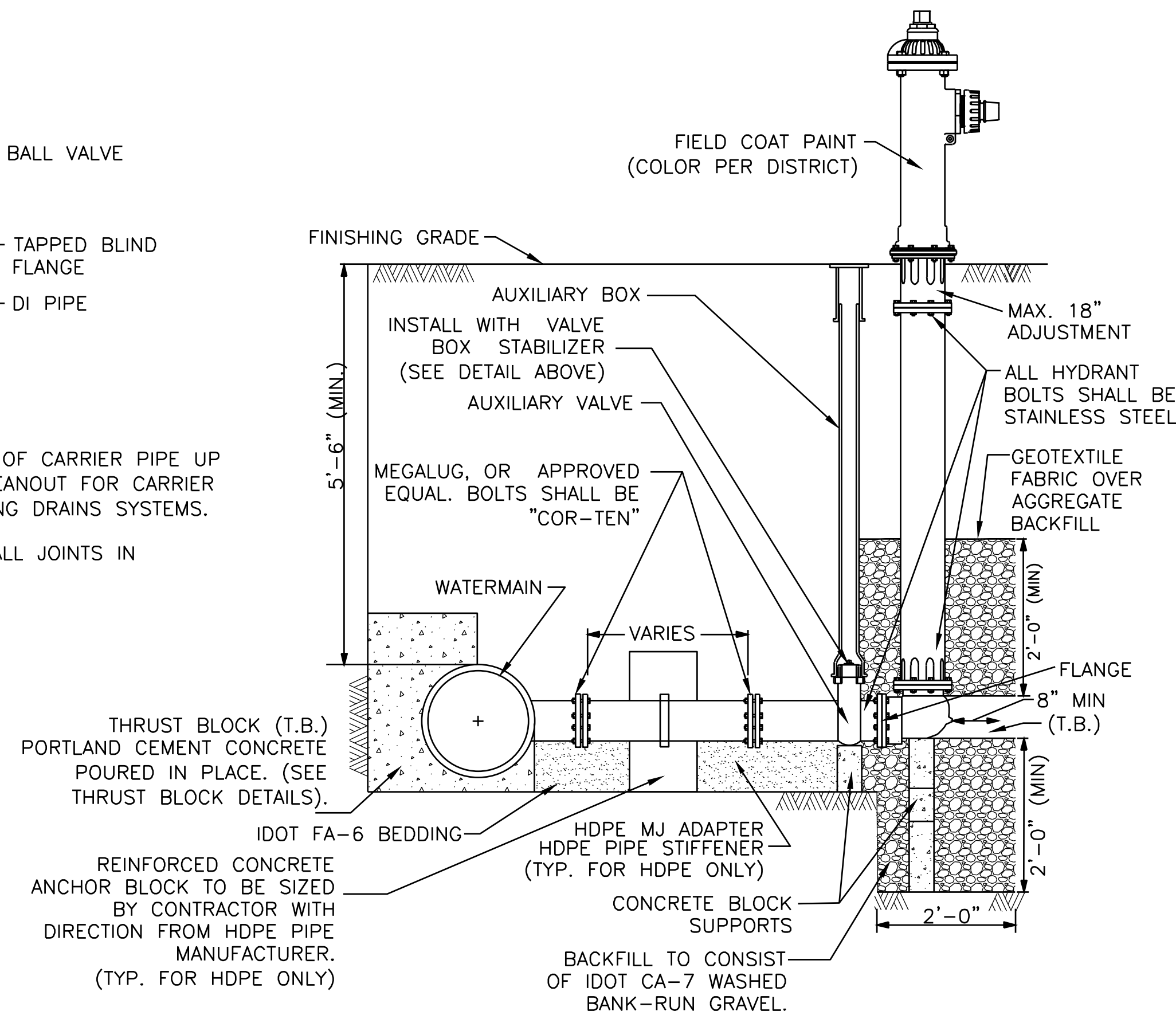
DOG HOUSE MANHOLE
SCALE: NTS



CLEANOUT
NTS



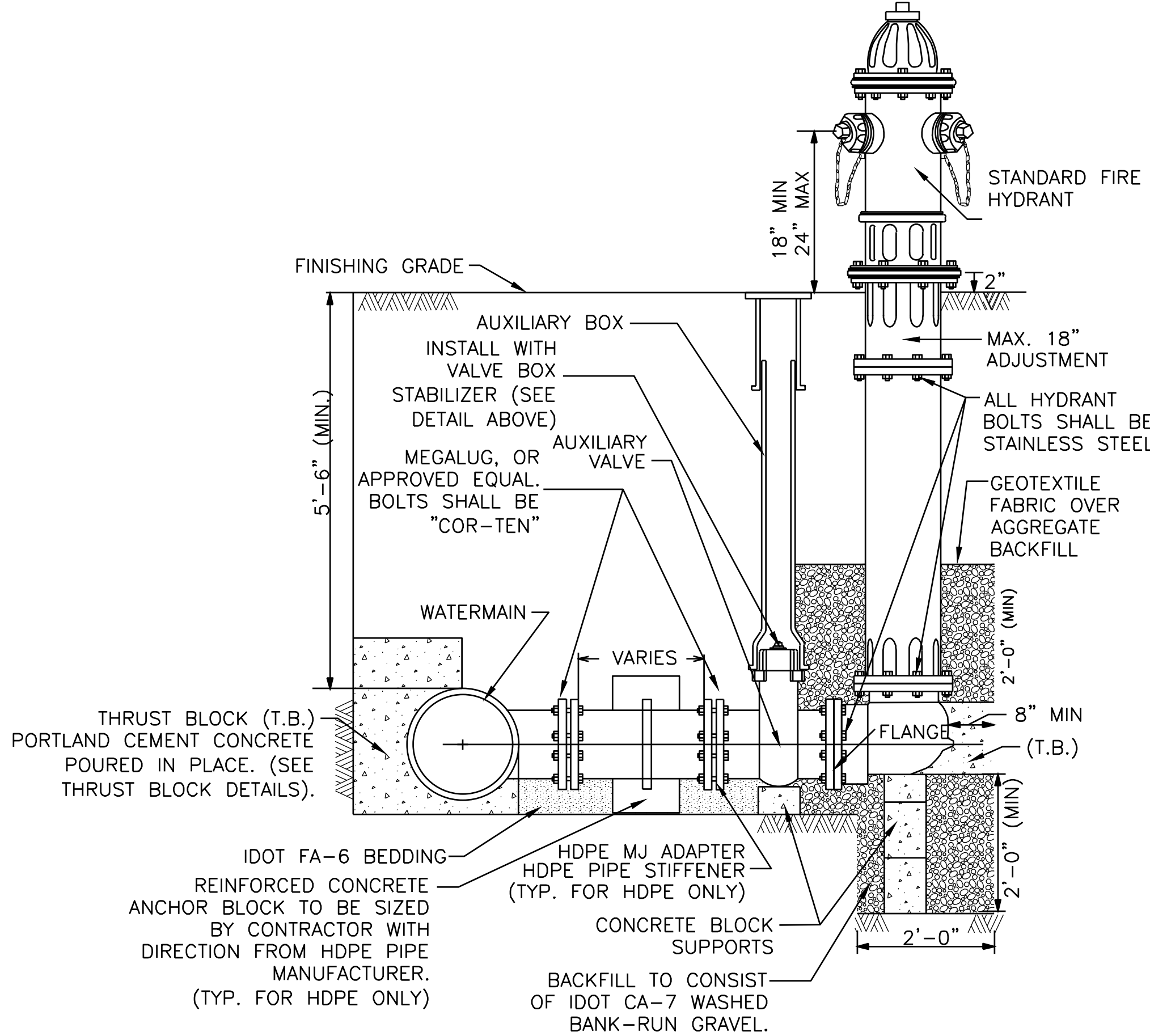
EXISTING MAIN DRAIN SECTION



YARD HYDRANT INSTALLATION
NTS

HYDRANT NOTES:

1. YARD HYDRANTS SHALL BE SELF-DRAINING, NON-FREEZING, COMPRESSION TYPE WITH 2-3/16" MAIN VALVE OPENING. INLET CONNECTION SHALL BE 3" MJ. OUTLET SHALL BE 2" NST.
2. YARD HYDRANTS SHALL BE SET IN 4 CUBIC FEET OF CRUSHED STONE TO ALLOW FOR PROPER DRAINAGE OF YARD HYDRANT. RECOMMENDATIONS OF THE AWWA SHOULD BE FOLLOWED WHEN INSTALLING YARD HYDRANTS.
3. YARD HYDRANTS SHALL BE #2 ECLIPSE POST HYDRANT AS MANUFACTURED BY THE KUPFERLE FOUNDRY, ST. LOUIS MO. OR APPROVED EQUAL.
4. YARD HYDRANTS SHALL HAVE A 3" DUCTILE IRON PIPE RISER WITH A CAST IRON STOCK TOP, AND NON-TURNING OPERATING ROD. PRINCIPAL INTERIOR OPERATING PARTS SHALL BE BRASS AND REMOVABLE FROM THE HYDRANT FOR SERVICING WITHOUT EXCAVATING THE YARD HYDRANT.
5. EACH YARD HYDRANT SHALL BE INSTALLED WITH AN ISOLATION VALVE AND VALVE BOX.
6. FIRE HYDRANT SHALL BE MANUFACTURED BY EJIW, MUELLER CO., OR WATEROUS COMPANY
7. FOR DIP WATER MAIN, INSTALL THRUST BLOCK AT CONNECTION TO MAIN. OMIT THRUST BLOCK IN CASE OF HDPE WATER MAIN AND INSTALL CONCRETE ANCHOR, HDPE MJ ADAPTER, AND HDPE PIPE STIFFENER.
8. FIRE AND YARD HYDRANT COLORS TO BE AS DIRECTED BY DISTRICT.
9. CONTRACTOR IS TO PROVIDE MANUFACTURERS TEE FOR YARD HYDRANT.



FIRE HYDRANT INSTALLATION
NTS

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	HC	10/27/25

**METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO**

Designed by:	Checked by:
HHC	BP
Drawn by:	Reviewed by:
LK	BP
Date:	Scale:
JULY 2025	AS SHOWN

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

CONTRACT 22-RFP-06
OBRIEN WATER RECLAMATION PLANT
NEW ACTIVATED SLUDGE BATTERY

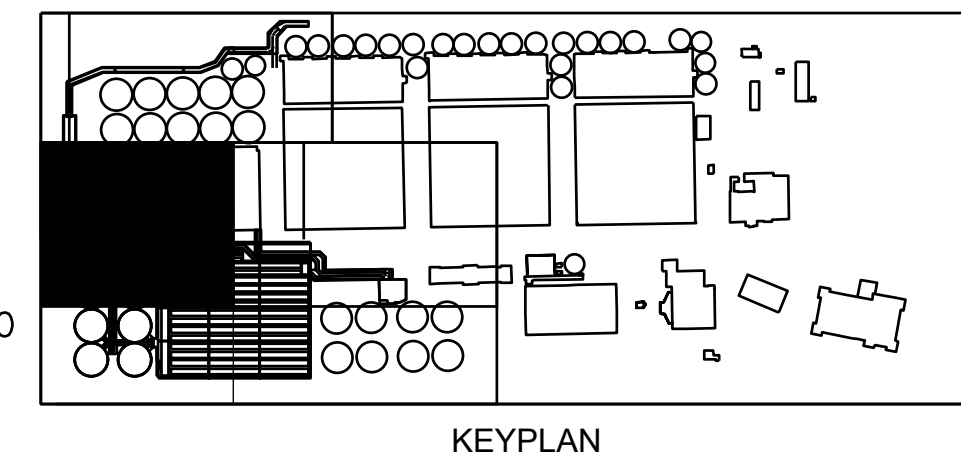
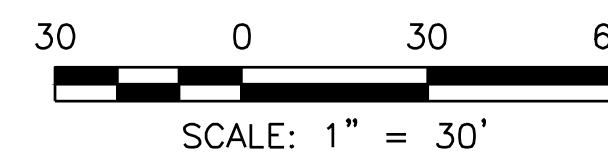
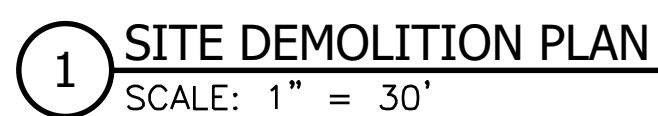
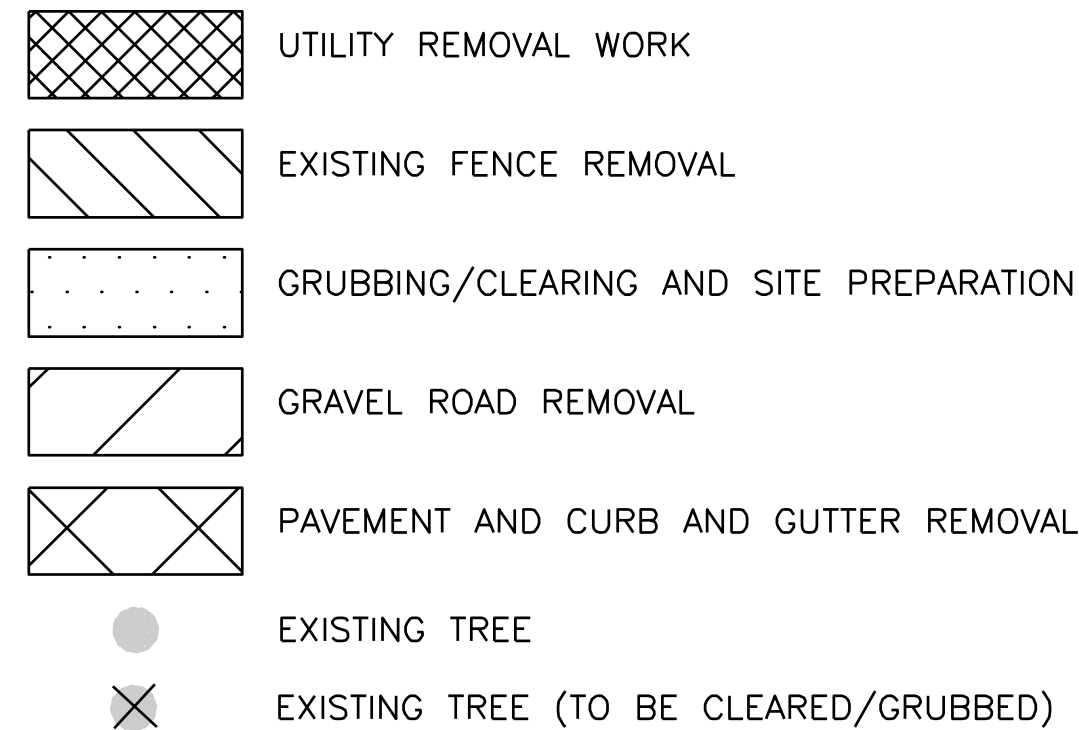
STANDARD DETAILS - 6

Sheet Number:

C-017

Page Number: 33

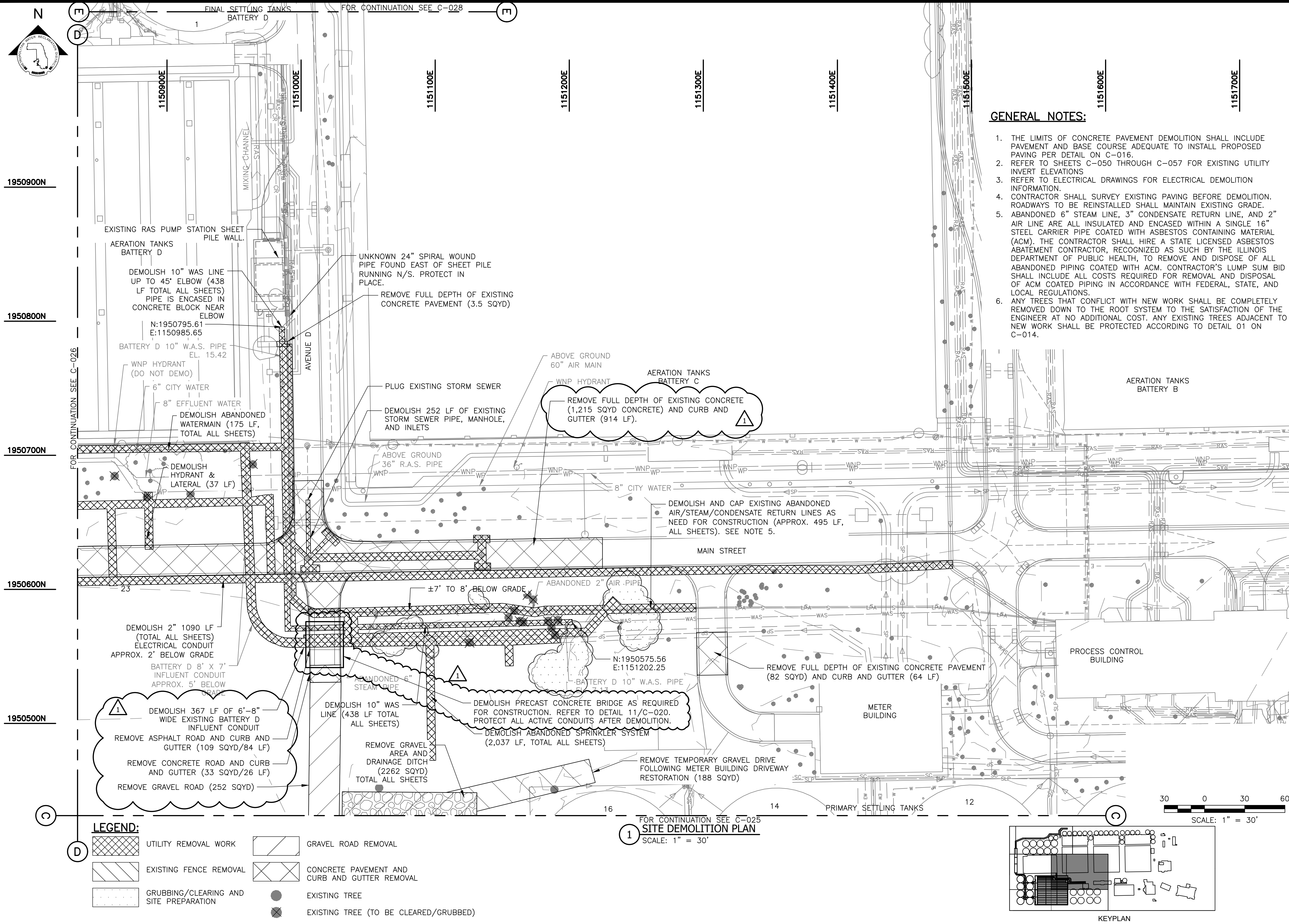




Sheet Number: C-026

Page Number: 42

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GENERAL NOTES:

1. THE LIMITS OF CONCRETE PAVEMENT DEMOLITION SHALL INCLUDE PAVEMENT AND BASE COURSE ADEQUATE TO INSTALL PROPOSED PAVING PER DETAIL ON C-016.
2. REFER TO SHEETS C-050 THROUGH C-057 FOR EXISTING UTILITY INVERT ELEVATIONS
3. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL DEMOLITION INFORMATION.
4. CONTRACTOR SHALL SURVEY EXISTING PAVING BEFORE DEMOLITION. ROADWAYS TO BE REINSTALLED SHALL MAINTAIN EXISTING GRADE.
5. ABANDONED 6" STEAM LINE, 3" CONDENSATE RETURN LINE, AND 2" AIR LINE ARE ALL INSULATED AND ENCASED WITHIN A SINGLE 16" STEEL CARRIER PIPE COATED WITH ASBESTOS CONTAINING MATERIAL (ACM). THE CONTRACTOR SHALL HIRE A STATE LICENSED ASBESTOS ABATEMENT CONTRACTOR, RECOGNIZED AS SUCH BY THE ILLINOIS DEPARTMENT OF PUBLIC HEALTH, TO REMOVE AND DISPOSE OF ALL ABANDONED PIPING COATED WITH ACM. CONTRACTOR'S LUMP SUM BID SHALL INCLUDE ALL COSTS REQUIRED FOR REMOVAL AND DISPOSAL OF ACM COATED PIPING IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
6. ANY TREES THAT CONFLICT WITH NEW WORK SHALL BE COMPLETELY REMOVED DOWN TO THE ROOT SYSTEM TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST. ANY EXISTING TREES ADJACENT TO NEW WORK SHALL BE PROTECTED ACCORDING TO DETAIL 01 ON C-014.

METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO



ORION ENGINEERS
312 NORTH MAY STREET
SUITE 100
CHICAGO, IL 60607



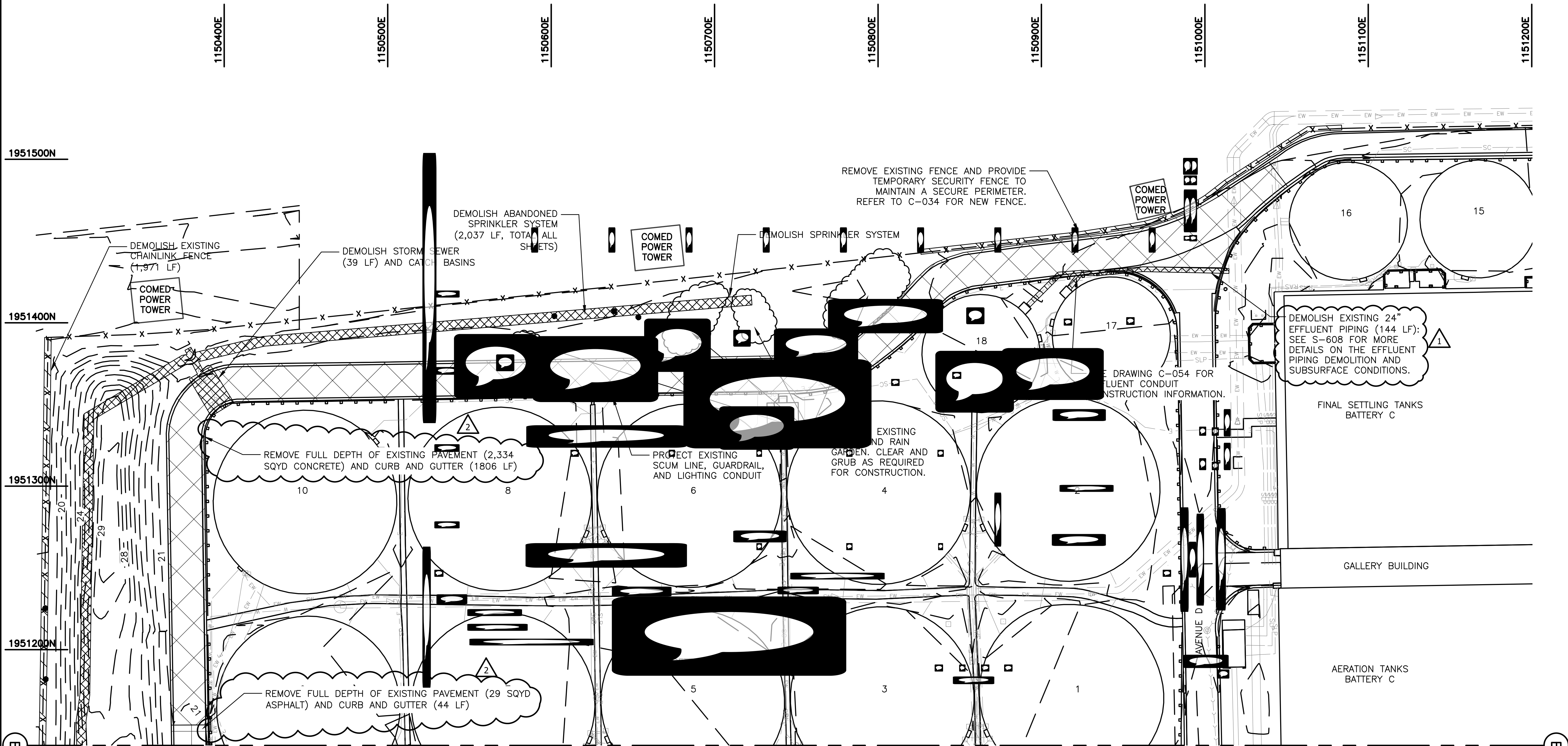
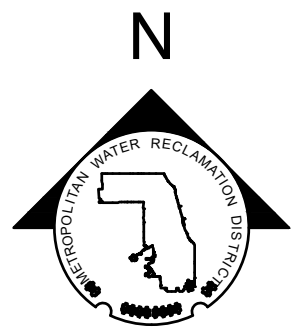
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Checked by: BP
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Scale: AS SHOWN

CONTRACT 22-RFP-06
OBRIEN WATER RECLAMATION PLANT
NEW ACTIVATED SLUDGE BATTERY

SITE DEMOLITION PLAN - 4

Sheet Number:
C-027
Page Number: 43

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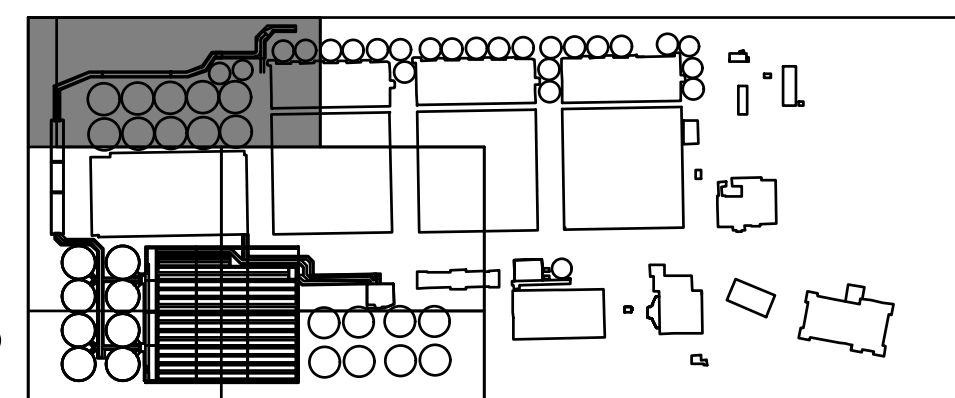
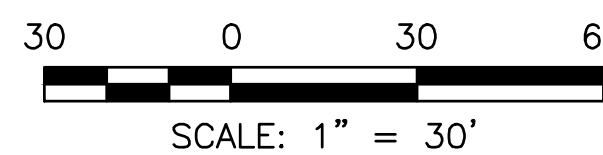


- LEGEND:**
- UTILITY REMOVAL WORK
 - EXISTING FENCE REMOVAL
 - CONCRETE PAVEMENT AND CURB AND GUTTER REMOVAL

GENERAL NOTES:

- MAINTAIN 15-FOOT SEPARATION BETWEEN ALL EQUIPMENT OR LOAD AND ANY 138KV TRANSMISSION CIRCUIT
- REFER TO SHEETS C-050 THROUGH C-057 FOR EXISTING UTILITY INVERT ELEVATIONS.
- REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL DEMOLITION INFORMATION.
- CONTRACTOR SHALL SURVEY EXISTING PAVING AND SUBMIT TO DISTRICT FOR APPROVAL BEFORE DEMOLITION. ROADWAYS TO BE REINSTALLED SHALL MAINTAIN EXISTING GRADE.
- CONTRACTOR PHASING TO BE SUBMITTED TO ENGINEER AND DISTRICT. NOTE THAT ACCESS TO AVE D IS REQUIRED AT ALL TIMES.
- ANY TREES THAT CONFLICT WITH NEW WORK SHALL BE COMPLETELY REMOVED DOWN TO THE ROOT SYSTEM TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST. ANY EXISTING TREES ADJACENT TO NEW WORK SHALL BE PROTECTED ACCORDING TO DETAIL 01 ON C-014.

1 SITE DEMOLITION PLAN
SCALE: 1" = 30'



KEYPLAN



METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

Designed by: HHC

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CHICAGO, IL 60601, USA

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ORION ENGINEERS
312 NORTH MAY STREET
SUITE 100
CHICAGO, IL 60607

CONTRACT 22-RFP-06
22-RFP-06
NEW ACTIVATED SLUDGE BATTERY

SITE DEMOLITION PLAN - 5

Sheet Number:

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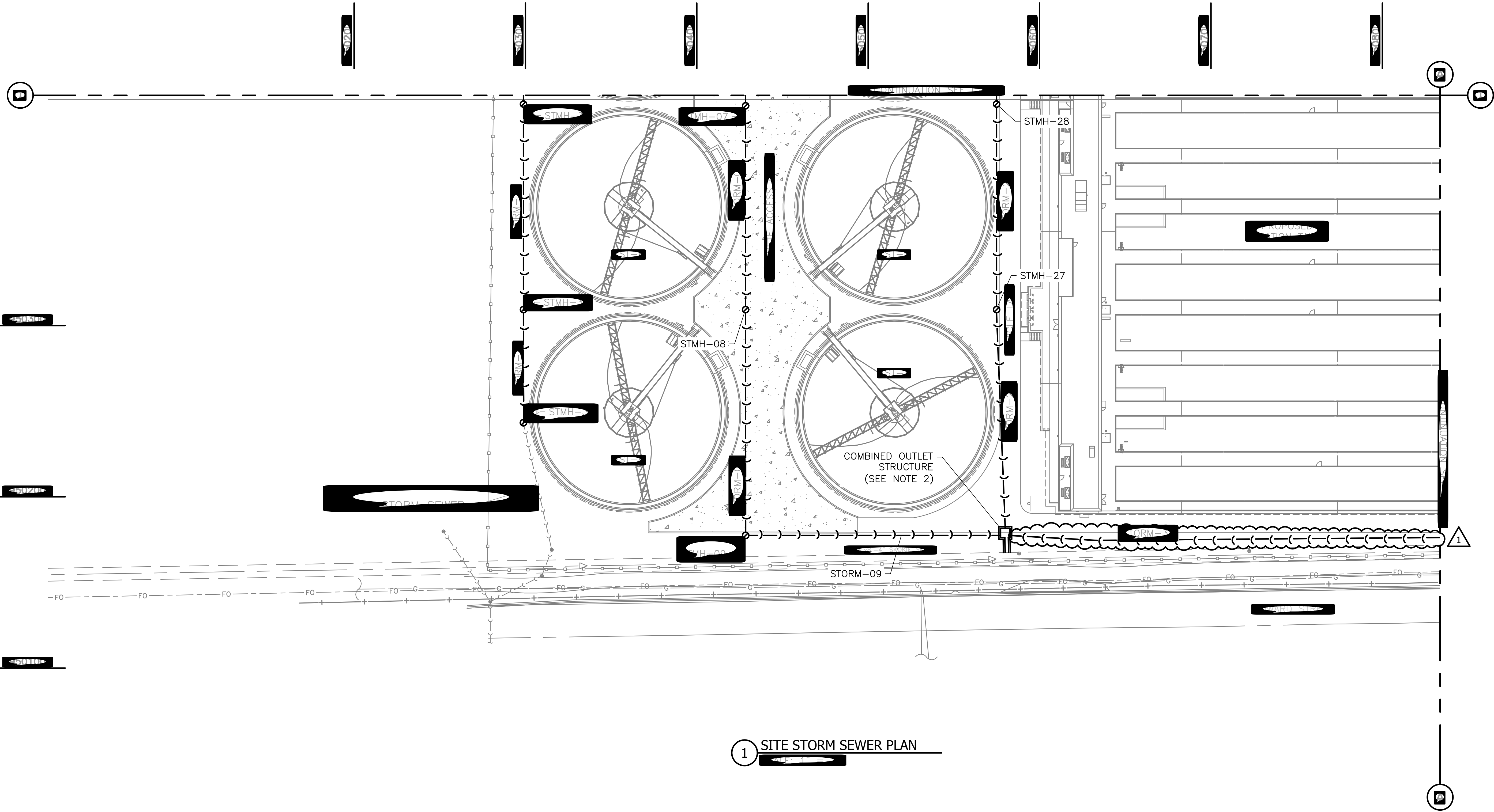
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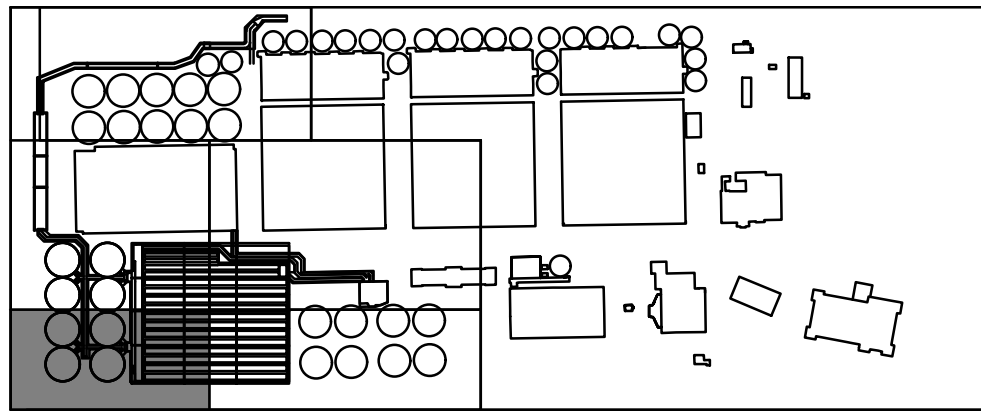
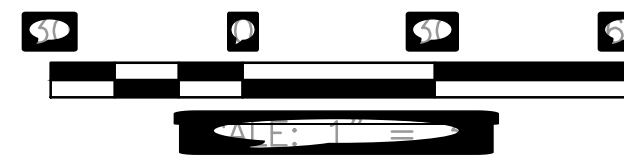


- [Symbol] EXISTING PAVEMENT
- [Symbol] WORK TO REMAIN FOR NEW PAVEMENT AND INSTALLED UNDER
- [Symbol] EXISTING
- [Symbol] NEW
- [Symbol] EXISTING

GENERAL NOTE:
1. 10' 7" x 8' 4" SEWER MANHOLE PRECAST STRUCTURE (SEE DETAILS C-012).
2. SPECIFICATIONS



1 SITE STORM SEWER PLAN



METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

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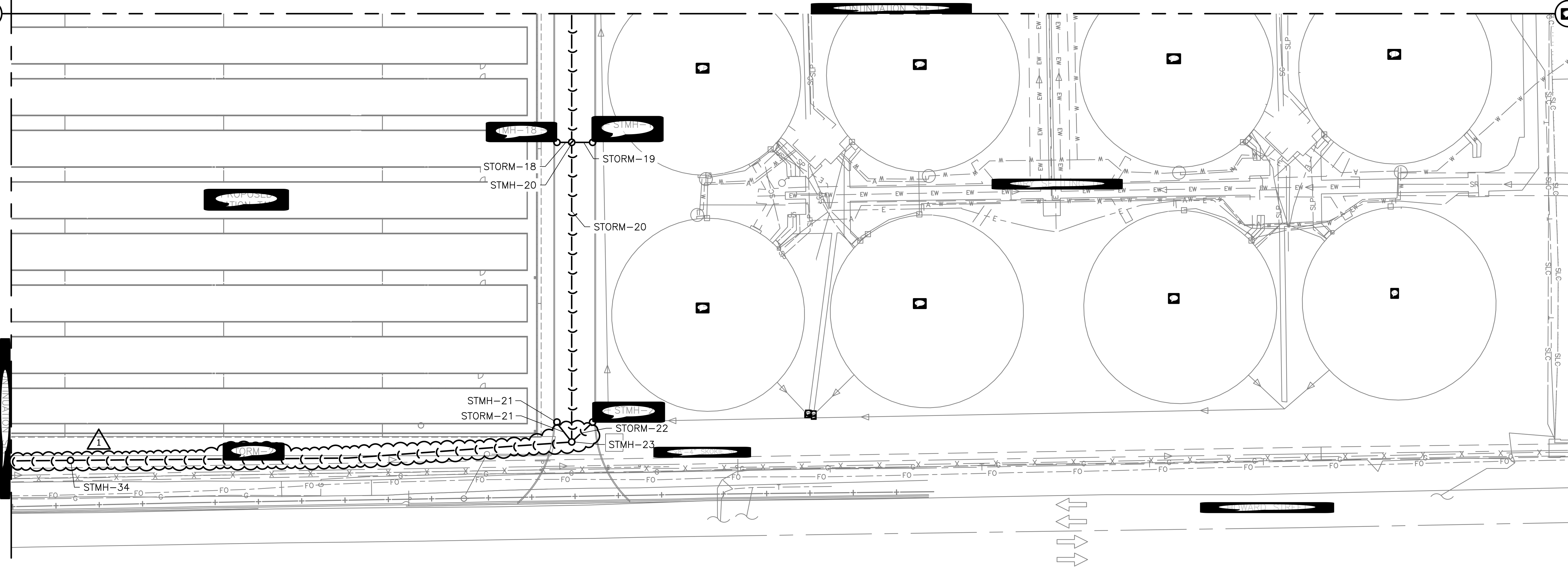
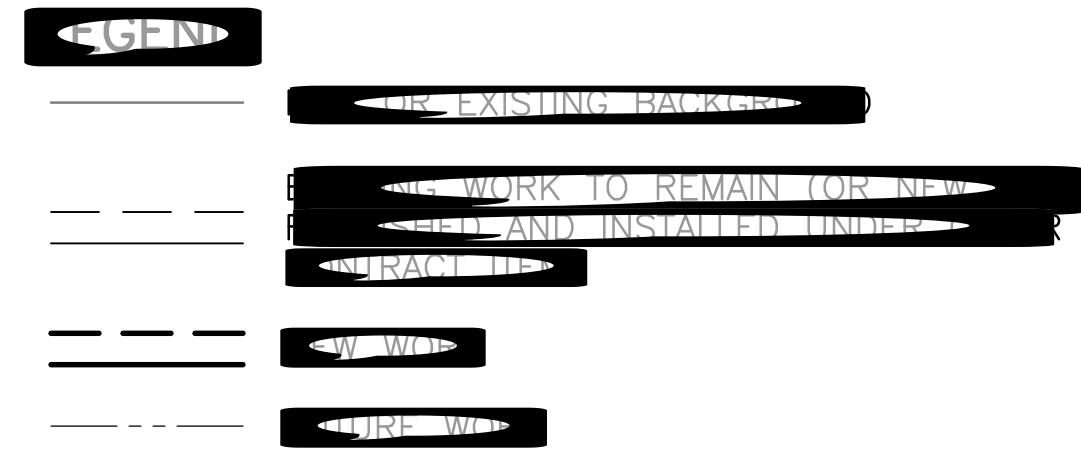
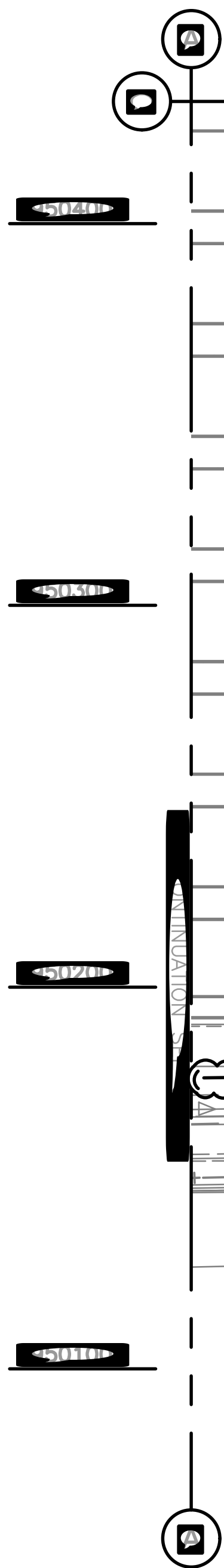
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SUITE 100
CHICAGO, IL 60607

Rev.	Description	Appr.	Date
1	ISSUED FOR CONSTRUCTION	[Signature]	10/25/2025

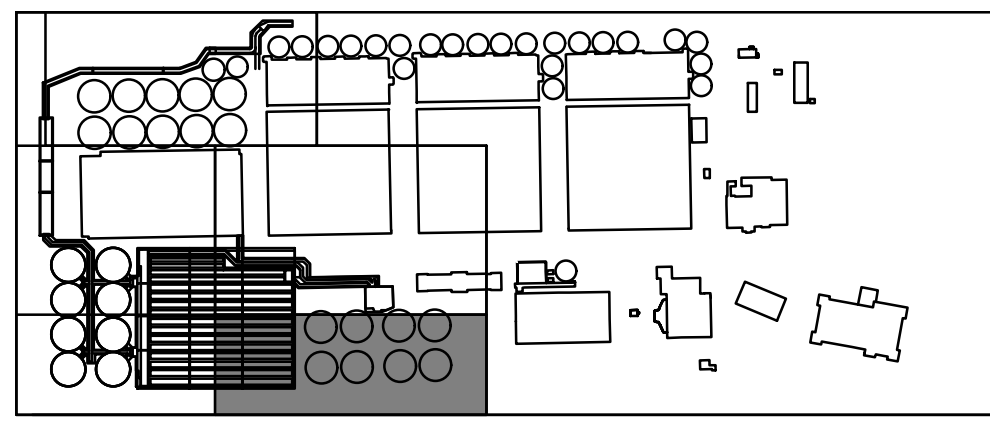
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1 SITE STORM SEWER PLAN



KEYPLAN



ORION ENGINEERS
ORION ENGINEERS
312 NORTH MAY STREET
SUITE 100
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CHICAGO, IL 60601, USA

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Date:	Scale:
[REDACTED]	[REDACTED]

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STORM SEWER STRUCTURES SCHEDULE

STRUCTURE NO.	STRUCTURE TYPE	RISER TYPE	FRAME & GRATE	RIM ELEVATION	INVERT ELEVATION				BOTTOM EL
					NORTH	EAST	SOUTH	WEST	
STMH-00	INLET, TYPE A	N/A	TYPE 1, OPEN LID	±22.58				19.38	18.38
STMH-01	CATCH BASIN, TYPE D**	FLAT TOP	TYPE 1, OPEN LID	±22.00		18.83	15.37	18.83	14.37
STMH-02	INLET, TYPE B	N/A	TYPE 1, OPEN LID	±21.60		17.66		17.66	16.66
STMH-03	INLET, TYPE B	N/A	TYPE 1, OPEN LID	±20.0		15.93		15.93	14.93
STMH-04	INLET, TYPE A	N/A	TYPE 1, OPEN LID	±20.0		15.50			14.50
STMH-05	CATCH BASIN, TYPE D**	FLAT TOP	TYPE 3	±19.00	15.60 (NW)		15.02	15.02	13.52
STMH-06	CATCH BASIN, TYPE D**	FLAT TOP	TYPE 3	±19.00	14.50			14.50	13.00
STMH-07	CATCH BASIN, TYPE D**	FLAT TOP	TYPE 3	±19.00	13.90		13.90		12.40
STMH-08	CATCH BASIN, TYPE D**	FLAT TOP	TYPE 3	±19.00	13.33		13.33		11.83
STMH-09	CATCH BASIN, TYPE D**	FLAT TOP	TYPE 3	±19.00	12.67				11.17
MH #1	COMBINED OUTLET	N/A	TYPE 3	±20.50	13.98	11.03		11.93	
STMH-10	INLET, TYPE A	N/A	TYPE 1, OPEN LID	±22.84			18.56		17.56
STMH-11	INLET, TYPE B	N/A	TYPE 1, OPEN LID	±22.83	18.48	18.48			17.48
STMH-12	INLET, TYPE A	N/A	TYPE 1, OPEN LID	±22.90	18.56				17.56
STMH-13	INLET, TYPE B	N/A	TYPE 1, OPEN LID	±22.48			18.47	18.47	17.47
STMH-14	CATCH BASIN, TYPE D**	FLAT TOP	TYPE 3	±22.65		18.27	18.27	18.32	16.97
STMH-15	INLET, TYPE A	N/A	TYPE 1, OPEN LID	±22.52		17.80			16.80
STMH-16	INLET, TYPE A	N/A	TYPE 1, OPEN LID	±22.12				17.80	16.80
STMH-17	CATCH BASIN, TYPE D**	FLAT TOP	TYPE 3	±22.43	17.75	17.70 (NE) 17.77 (E)	17.75	17.77	16.20
STMH-18	INLET, TYPE A	N/A	TYPE 1, OPEN LID	±20.53		17.14			16.14
STMH-19	INLET, TYPE A	N/A	TYPE 1, OPEN LID	±20.53				17.14	17.14
STMH-20	CATCH BASIN, TYPE D**	FLAT TOP	TYPE 3	±20.45	16.91	17.10	16.91	17.10	15.41
STMH-21	INLET, TYPE A	N/A	TYPE 1, OPEN LID	±18.69			16.30		15.30
STMH-22	INLET, TYPE A	N/A	TYPE 1, OPEN LID	±18.69			16.30		15.30
STMH-23	CATCH BASIN, TYPE D**	FLAT TOP	TYPE 3	±18.47	15.19	16.25(NE)		16.25(NW) 15.00 (W)	13.50
STMH-24	INLET, TYPE A	N/A	TYPE 1, OPEN LID	±21.99		19.00			18.00
STMH-25	INLET, TYPE A	N/A	TYPE 1, OPEN LID	±21.91				19.00	18.00
STMH-26	CATCH BASIN, TYPE D**	FLAT TOP	TYPE 3	±21.86	18.25 (EST)	18.95		18.95	16.75
STMH-27	CATCH BASIN, TYPE D**	FLAT TOP	TYPE 3	±20.24	14.63				13.13
STMH-28	CATCH BASIN, TYPE D**	FLAT TOP	TYPE 3	±20.24	15.44				13.94
STMH-29	CATCH BASIN, TYPE D**	FLAT TOP	TYPE 3	±20.24			16.07		14.57
STMH-30	INLET, TYPE B	N/A	TYPE 1, OPEN LID	±19.00	14.18		14.18		13.18
STMH-31	INLET, TYPE B	N/A	TYPE 1, OPEN LID	±19.00	13.91		13.91		12.91
STMH-32	INLET, TYPE B	N/A	TYPE 1, OPEN LID	±19.00	13.65		13.65		12.65
STMH-33	INLET, TYPE B	N/A	TYPE 1, OPEN LID	±19.00	13.50		13.50 (EST)		12.50
STMH-34	CATCH BASIN, TYPE D**	FLAT TOP	TYPE 3	±22.21		13.00		13.00	11.50
STMH-35	INLET, TYPE A	N/A	TYPE 1, OPEN LID	±21.88	18.20				17.20
STMH-36	INLET, TYPE B	N/A	TYPE 1, OPEN LID	±21.82	18.10		18.10		17.10
STMH-37	INLET, TYPE A	N/A	TYPE 1, OPEN LID	±20.79				16.79	15.79
STMH-38	INLET, TYPE A	N/A	TYPE 1, OPEN LID	±20.59				16.30	15.30
STMH-39	INLET, TYPE A	N/A	TYPE 1, OPEN LID	±19.00			15.80		14.80

* REFER TO DETAILS AND PLANS FOR ADDITIONAL PIPE PENETRATIONS FOR THIS STRUCTURE
** 4" DIAMETER UNLESS OTHERWISE NOTED

STORM SEWER PIPE SCHEDULE

PIPE NO.	SIZE (IN)	MATERIAL	CLASS	TYPE	LENGTH	SLOPE (%)	FROM	TO
STORM-00	12	HDPE	A	1	116	0.50%	STMH-00	STMH-01
STORM-01	12	HDPE	A	1	149.8	0.80%	STMH-01	STMH-02
STORM-02	12	HDPE	A	1	49.5	3.50%	STMH-02	STMH-03
STORM-03	12	HDPE	A	1	40.2	2.30%	STMH-03	STMH-05
STORM-04	12	HDPE	A	1	21.3	2.30%	STMH-04	STMH-05
STORM-05	12	HDPE	A	1	104.4	0.50%	STMH-05	STMH-06
STORM-06	12	HDPE	A	1	120.0	0.50%	STMH-06	STMH-07
STORM-07	12	HDPE	A	1	120.0	0.50%	STMH-07	STMH-08
STORM-08	12	HDPE	A	1	131.8	0.50%	STMH-08	STMH-09
STORM-09	12	HDPE	A	1	151.4	0.50%	STMH-09	MH#1
STORM-10	12	HDPE	A	1	16.3	0.50%	STMH-10	STMH-11
STORM-11	12	HDPE	A	1	33.9	0.50%	STMH-11	STMH-14
STORM-12	12	HDPE	A	1	20.6	0.40%	STMH-12	STMH-13
STORM-13	12	HDPE	A	1	43.8	0.50%	STMH-13	STMH-14
STORM-14	12	HDPE	A	1	108.5	0.50%	STMH-14	STMH-17
STORM-15	12	HDPE	A	1	8.5	0.40%	STMH-15	STMH-17
STORM-16	12	HDPE	A	1	12.0	0.30%	STMH-16	STMH-17
STORM-17	12	HDPE	A	1	171.1	0.50%	STMH-17	STMH-20
STORM-18	12	HDPE	A	1	8.5	0.50%	STMH-18	STMH-20
STORM-19	12	HDPE	A	1	12.0	0.30%	STMH-19	STMH-20
STORM-20	12	HDPE	A	1	174.4	1.00%	STMH-20	STMH-23
STORM-21	12	HDPE	A	1	16.7	0.30%	STMH-21	STMH-23
STORM-22	12	HDPE	A	1	18.7	0.30%	STMH-22	STMH-23
STORM-23	18	HDPE	A	1	286.7	0.70%	STMH-23	STMH-34
STORM-24	18	HDPE	A	1	14.7	0.30%	STMH-24	STMH-26
STORM-25	12	HDPE	A	1	15.4	0.30%	STMH-25	STMH-26
STORM-27	12	HDPE	A	1	129.0	0.50%	STMH-27	MH#1
STORM-28	12	HDPE	A	1	120.0	0.70%	STMH-28	STMH-27
STORM-29	12	HDPE	A	1	120.0	0.50%	STMH-29	STMH-28
STORM-30	12	HDPE	A	1	181.8	0.20%	INLET	STMH-30
STORM-31	12	HDPE	A	1	120.00	0.20%	STMH-30	STMH-31
STORM-32	12	HDPE	A	1	120.00	0.20%	STMH-31	STMH-32
STORM-33	12	HDPE	A	1	66.00	0.20%	STMH-32	STMH-33
STORM-34	18	HDPE	A	1	287.00	0.60%	STMH-34	MH#1
STORM-35	12	HDPE	A	1	20.10	0.50%	STMH-35	STMH-36
STORM-36	12	HDPE	A	1	19.00	0.50%	STMH-36	OUTLET
STORM-37	12	HDPE	A	1	22.8	2.10%	STMH-37	STMH-38
STORM-38	12	HDPE	A	1	61.0	2.20%	STMH-38	OUTLET
STORM-39	12	HDPE	A	1	80.0	0.25%	STMH-39	STMH-05

STORM MANHOLE COORDINATES		
MH #	NORTHING	EASTING
STMH-00	1950679.28	1150778.49
STMH-01	1950677.84	1150662.53
STMH-02	1950675.96	1150512.78
STMH-03	1950653.51	1150468.65
STMH-04	1950653.51	1150407.17
STMH-05	1950653.51	1150428.44
STMH-06	1950549.26	1150428.44
STMH-07	1950429.26	1150428.44
STMH-08	1950309.26	1150428.44
STMH-09	1950177.44	1150428.49
STMH-10	1950653.90	1151120.26
STMH-11	1950637.61	1151120.26
STMH-12	1950617.13	1151197.95
STMH-13	1950637.73	1151197.95
STMH-14	1950638.03	1151154.15
STMH-15	1950529.51	1151145.70
STMH-16	1950529.51	1151166.10
STMH-17	1950529.51	1151154.15
STMH-18	1950358.38	1151145.70
STMH-19	1950358.38	1151166.10
STMH-20	1950358.38	1151154.15
STMH-21	1950198.38	1151145.70
STMH-22	1950198.38	1151166.10
STMH-23	1950183.99	1151154.17
STMH-24	1950661.51	1150991.35
STMH-25	1950661.42	1151019.59
STMH-26	1950666.67	1151005.09
STMH-27	1950309.28	1150574.89
STMH-28	1950429.26	1150574.87
STMH-29	1950549.23	1150574.87
STMH-30	1950549.26	1150298.85
STMH-31	1950429.26	1150298.85
STMH-32	1950309.26	1150298.85
STMH-33	1950243.21	1150298.81
STMH-34	1950179.80	1150867.55
STMH-35	1951251.35	1150395.72
STMH-36	1951265.50	1150387.56
STMH-37	1951031.68	1150388.66
STMH-38	1951031.35	1150369.42
STMH-39	1950712.43	1150374.21

CONTRACT 22-RFP-06
OBRIEN WATER RECLAMATION PLANT
NEW ACTIVATED SLUDGE BATTERY

STORM SEWER SCHEDULE TABLES

Sheet Number:
C-048
Page Number: 64

METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

Checked by:
BP

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BP

Scale:
AS SHOWN

Designed by:
HHC

Drawn by:
LK

Date:
JULY 2025

AECOM
ENGINEERS

ORION
ENGINEERS

ORION ENGINEERS
312 NORTH MAY STREET
SUITE 100
CHICAGO, IL 60601, USA

Rev.

Description

Appr.

Date

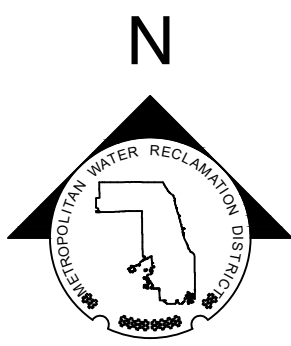
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ADDENDUM NO. 4

HC

10/27/25





1950300N

1950200N

1950100N

1150200E

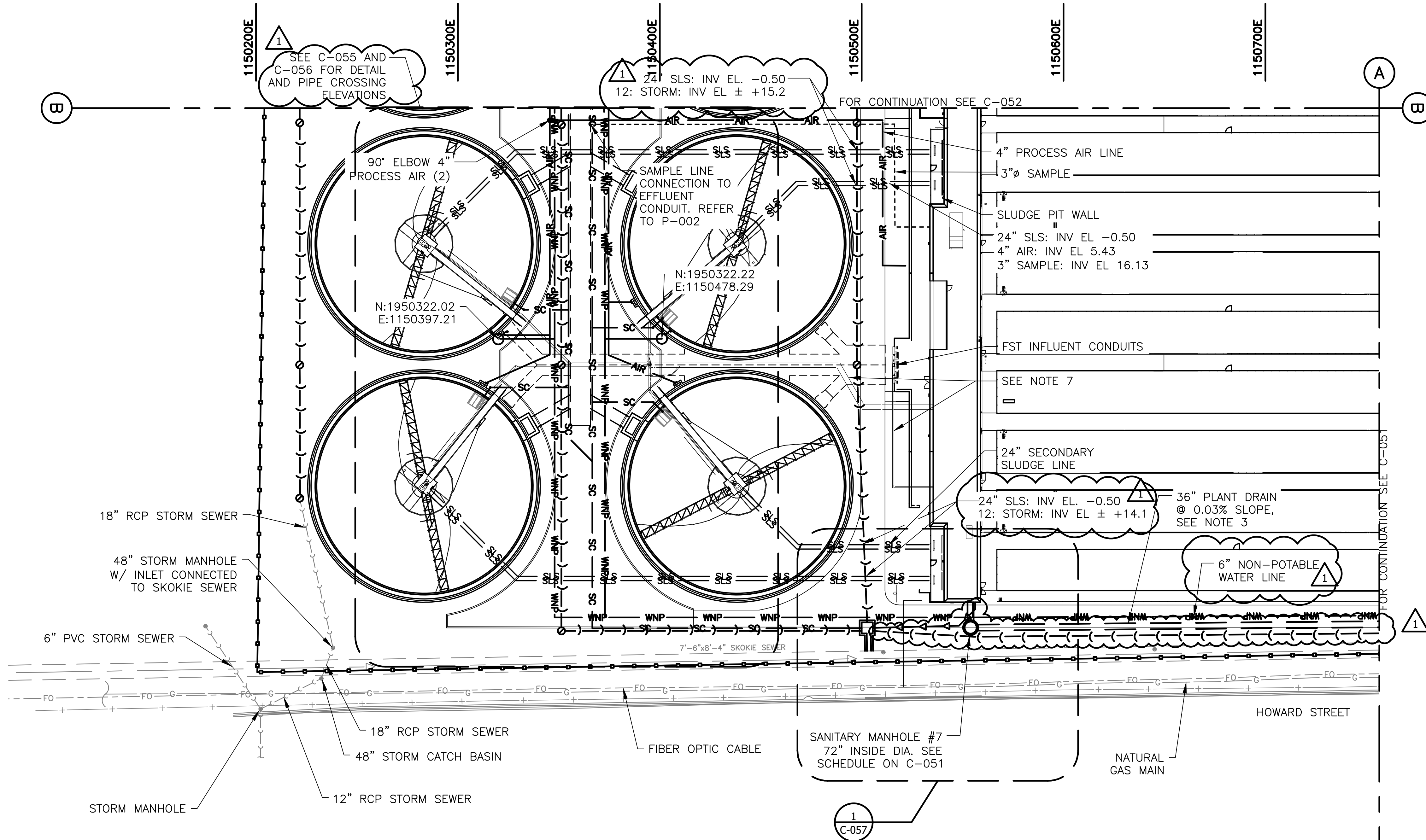
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1150600E

1150700E



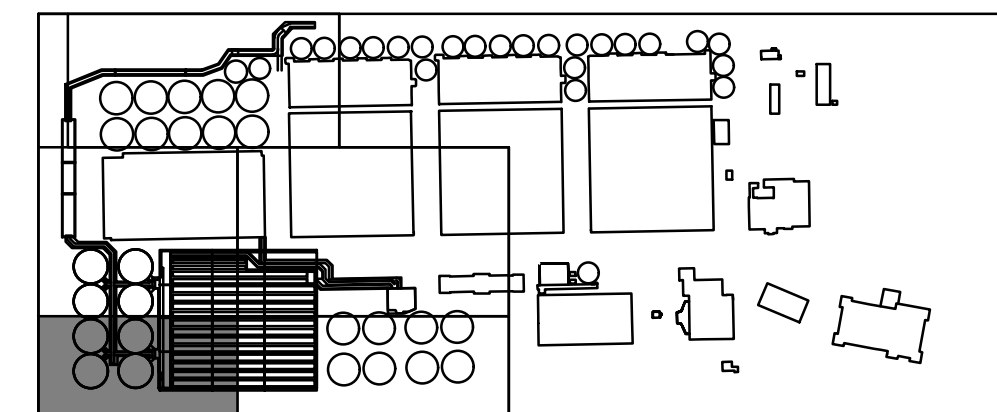
NOTES:

1. FOR PIPE MATERIALS REFER TO PROCESS PIPE SCHEDULE ON SHEET P-019

LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK
- FUTURE WORK

30 0 30 60
SCALE: 1" = 30'



KEYPLAN



METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

Designed by:	Checked by:	AECOM DBS DB STERLIN CONSULTANTS INC. DB STERLIN CONSULTANTS 123 N UPPER WACKER DR. SUITE 200 CHICAGO, IL 60601, USA
HHC	BP	
Drawn by:	Reviewed by:	
LK	BP	
Date:	Scale:	
JULY 2025	AS SHOWN	

CONTRACT 21-092-3P
OBRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY

SITE YARD PIPING - 1

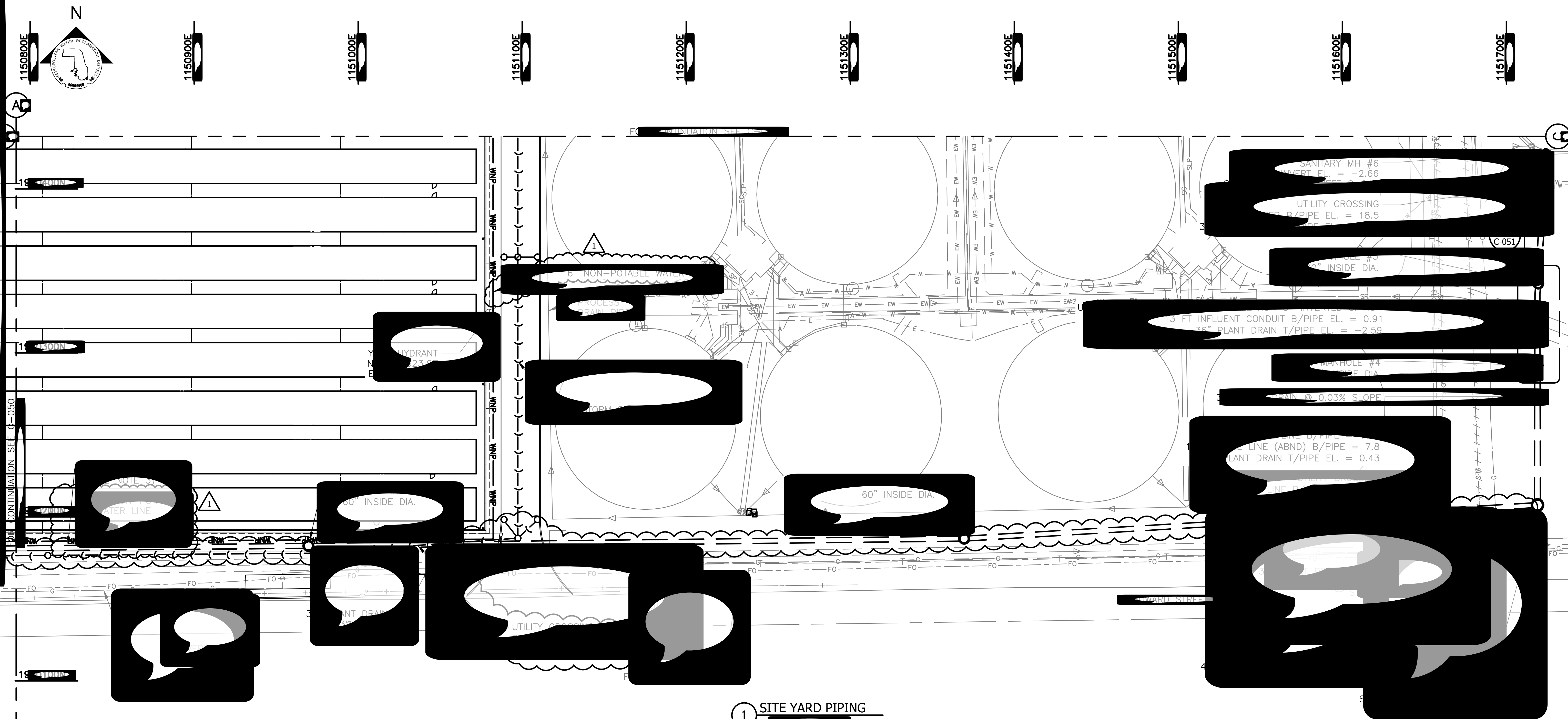
Sheet Number:

C-050

Page Number:

66

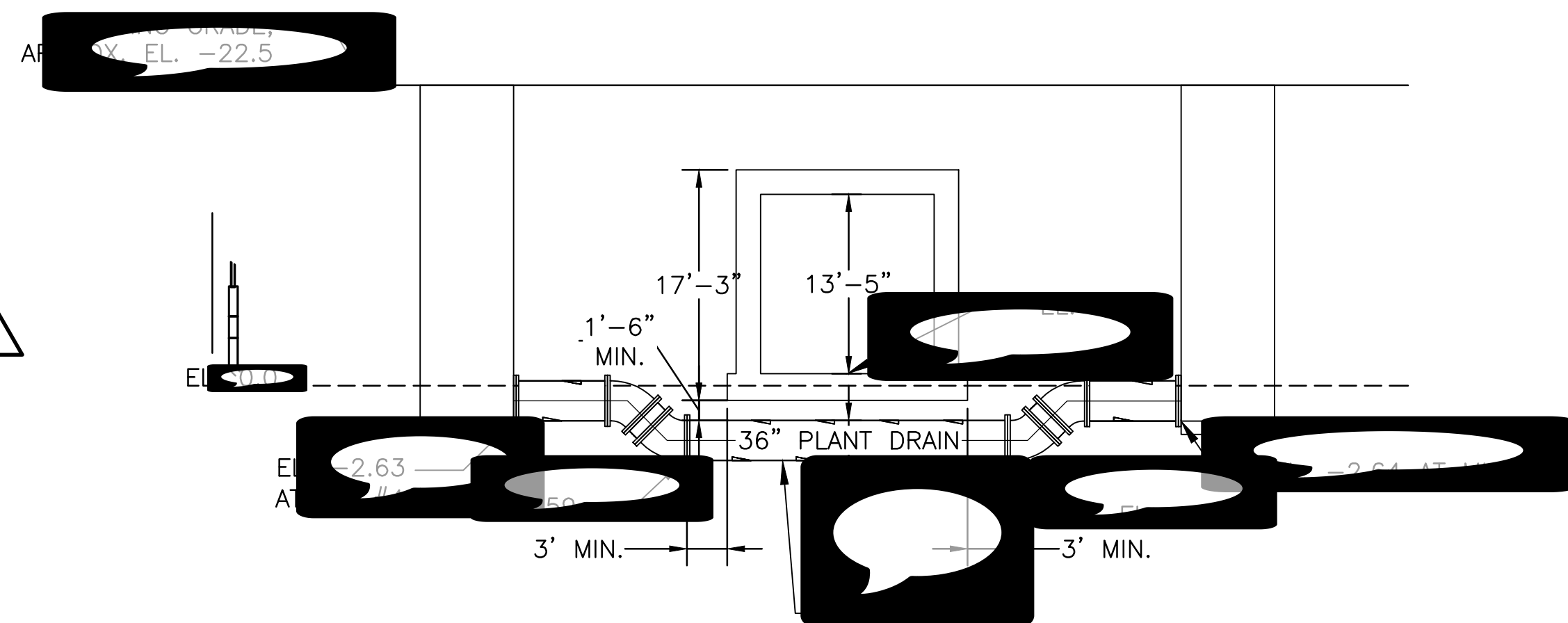
Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	HC	10/07/25



NOTE:

1. REFER TO ELECTRICAL/PROCESS SHEETS FOR

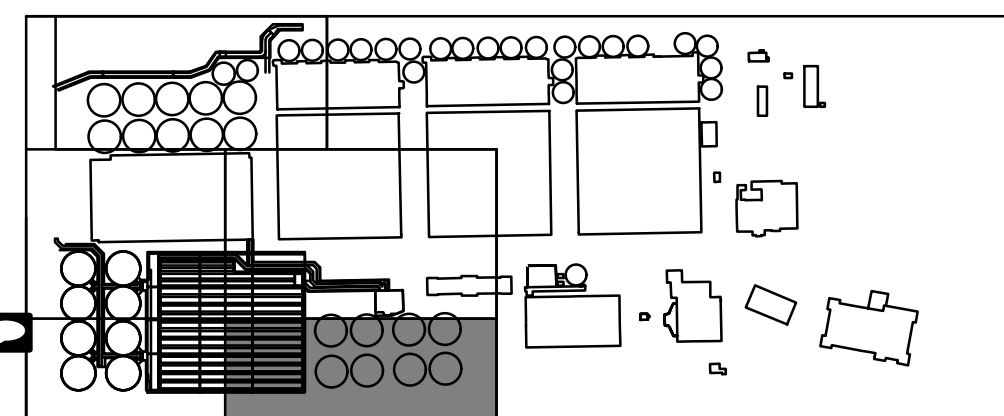
2. INSTALLATION OF THE 36" PLANT DRAIN (DUCTILE IRON PIPE) SHALL BE PERFORMED VIA JACK AND BORE OR HORIZONTAL DRILL. THE EXISTING INFLUENT CULVERT SHALL BE PROTECTED FROM DAMAGE DURING INSTALLATION OF THE 36" PLANT DRAIN. COORDINATE WITH THE 36" PLANT DRAIN INSTALLATION. OTHER WORK SHALL BE COMPLETED PRIOR TO THE 36" PLANT DRAIN INSTALLATION.



2 SITE YARD PIPING DETAIL

SANITARY MANHOLE SCHEDULE									
S	R	IN				N	E		
		N	S	E	W				
1	18	-	-	-	-	19	11		
2	18	-	-	-	-	19	11		
3	18	-	-	-	-	19	11		
4	22	-	-	-	-	19	11		
5	22	-	-	-	-	19	11		
6	22	-	-	-	-	19	11		
7	22	-	-	-	-	19	11		

PL	DRAIN TEN
SA	LE
BL	12
7	3
1	4
2	3
3	8
4	5
5	8



KEYPLAN



**METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO**

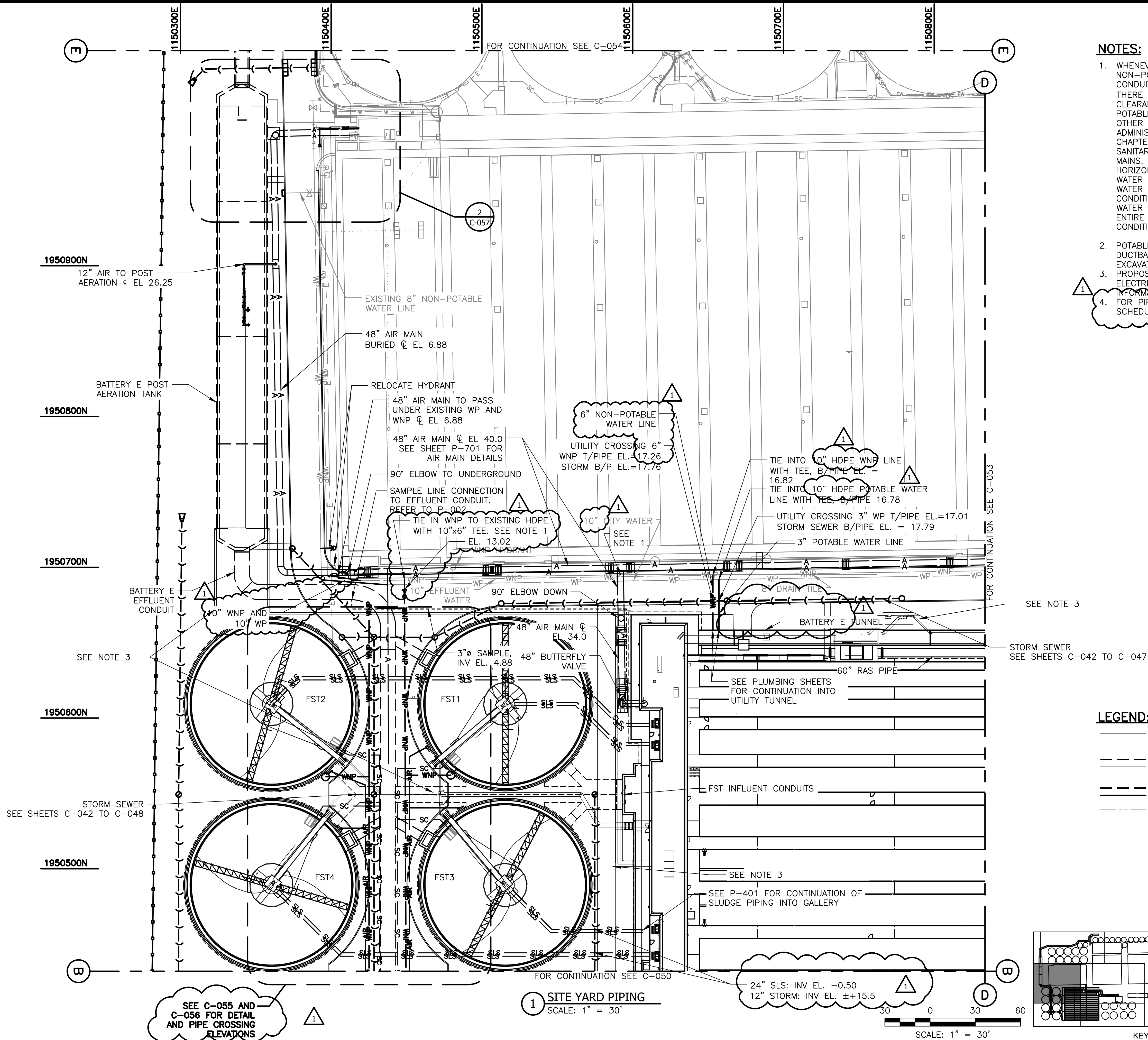
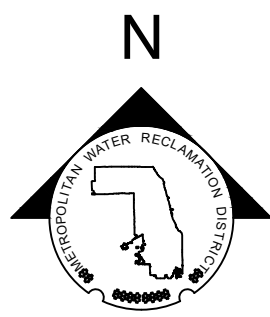
Designed by:	Checked by:	 AECOM DBS DB STERLING CONSULTANTS INC.
Client:	Reviewed by:	
Drawn by:	BP	
Scale:	BP	
AS SHOWN	BP	
DATE:		
JULY 2025		
		DB STERLING CONSULTANTS 132 N UPPER WACKER DR. SUITE 20 CHICAGO, IL 60606

CONTRACT 21-092-3P
CUBRIEN WATER RECLAMATION PLANT

SITE YARD PIPING - 2

Sheet Number:

Page Number: 6 

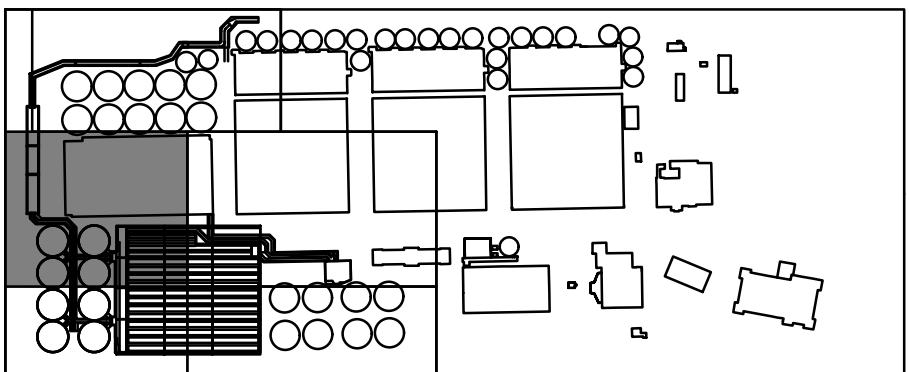


NOTES:

- WHENEVER POTABLE WATER CROSSES NON-POTABLE WATER, SEWER OR ANY OTHER CONDUITS NOT CARRYING POTABLE WATER, THERE SHOULD BE AN 18" (INCH) VERTICAL CLEARANCE FROM THE BOTTOM OF THE POTABLE WATER LINE AND THE TOP OF THE OTHER CONDUIT. REFER TO ILLINOIS ADMINISTRATIVE CODE, TITLE 35, SUBTITLE F, CHAPTER I, PART 604, SECTION 604.1440, SANITARY SEPARATION FOR FINISHED WATER MAINS. THERE SHOULD ALSO BE A 10 FOOT HORIZONTAL CLEARANCE BETWEEN POTABLE WATER LINES AND ANY OTHER NON-POTABLE WATER CONDUIT. IF NEITHER OF THE CONDITIONS CAN BE MET, THEN THE POTABLE WATER LINE SHALL BE ENCASED FOR THE ENTIRE LENGTH PLUS 10 FEET UNTIL THE CONDITION IS MET.
- POTABLE WATER LINE AND ELECTRICAL DUCTBANK TO BE PROTECTED DURING EXCAVATION.
- PROPOSED ELECTRICAL DUCT BANK REFER TO ELECTRICAL SITE PLAN FOR ADDITIONAL INFORMATION.
- FOR PIPE MATERIALS REFER TO PROCESS PIPE SCHEDULE ON SHEET P-019

LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK
- FUTURE WORK



KEYPLAN



**METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO**

AECOM

Designed by: HHC
Checked by: BP
Drawn by: LK
Reviewed by: BP
Date: JULY 2025
Scale: AS SHOWN

**DB STERLIN
CONSULTANTS INC.**

DB STERLIN CONSULTANTS
123 N UPPER WACKER DR.
SUITE 200
CHICAGO, IL 60601, USA

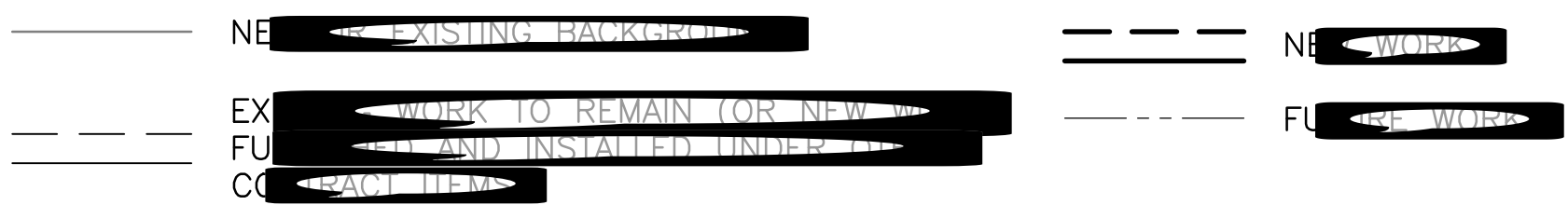
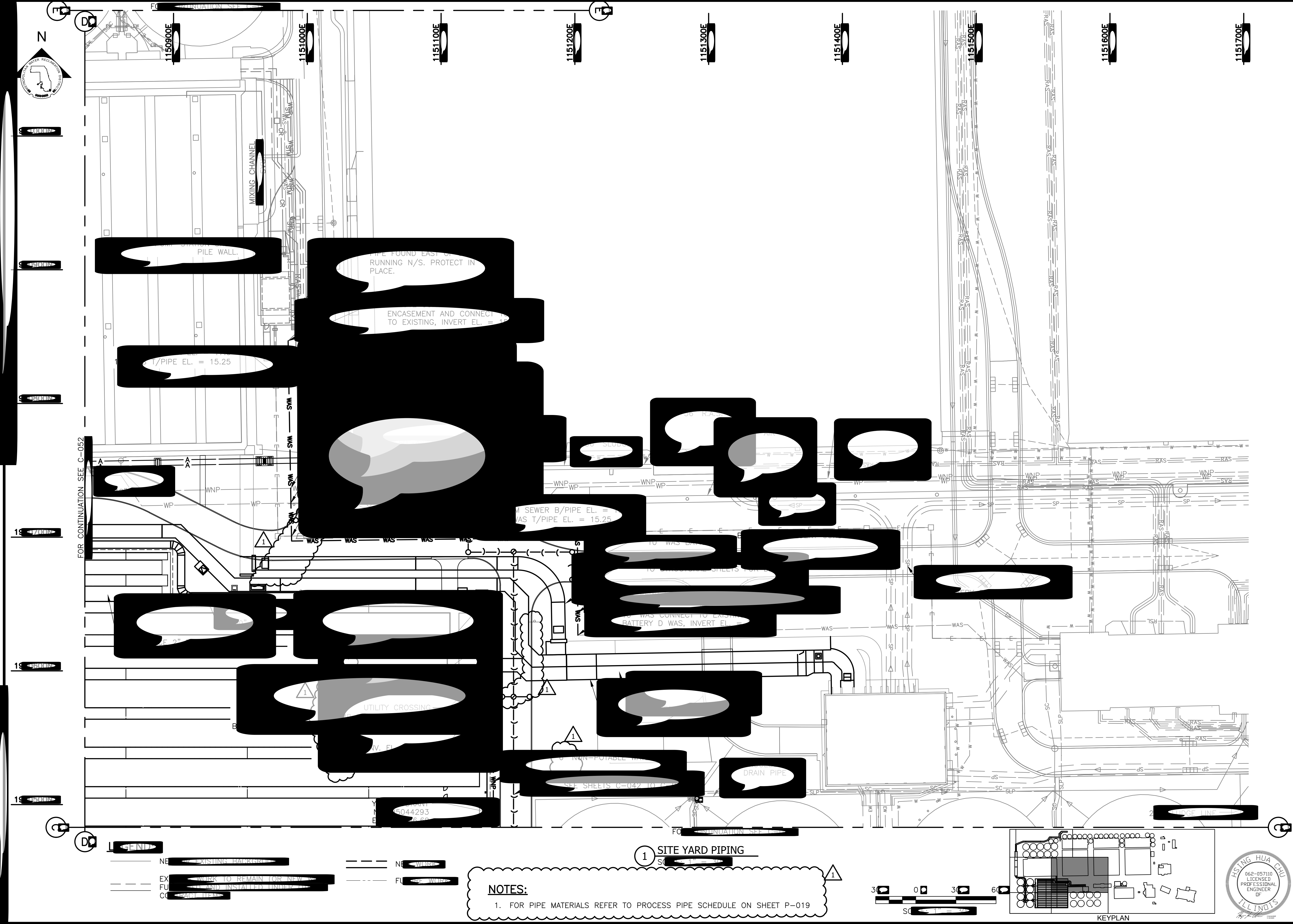
CONTRACT 21-092-3P
OBRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY

SITE YARD PIPING - 3

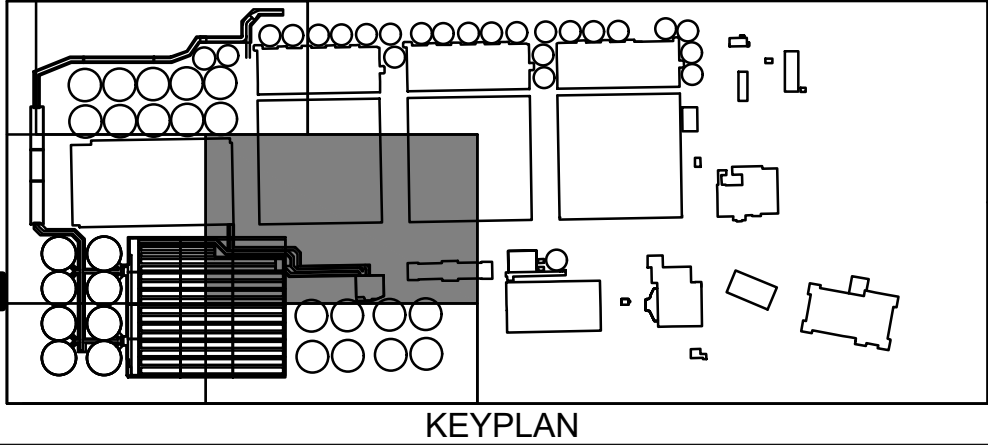
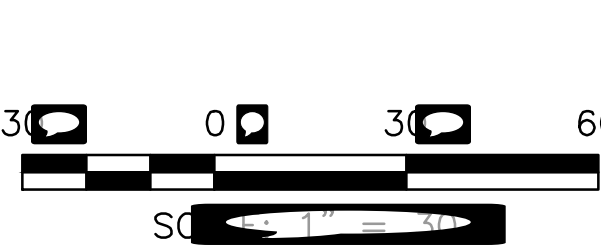
Sheet Number:
C-052

Page Number: 68

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 PLOT DATE: 11/13/2025 3:22 PM PLOTTED BY: CHU, HSING



NOTES:
 1. FOR PIPE MATERIALS REFER TO PROCESS PIPE SCHEDULE ON SHEET P-019



Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	HC	10/07/25

METROPOLITAN WATER RECLAMATION DISTRICT
 OF GREATER CHICAGO

AECOM
 DB STERLIN CONSULTANTS
 DB STERLIN CONSULTANTS
 123 N UPPER WACKER DR.
 SUITE 200
 CHICAGO, IL 60601, USA

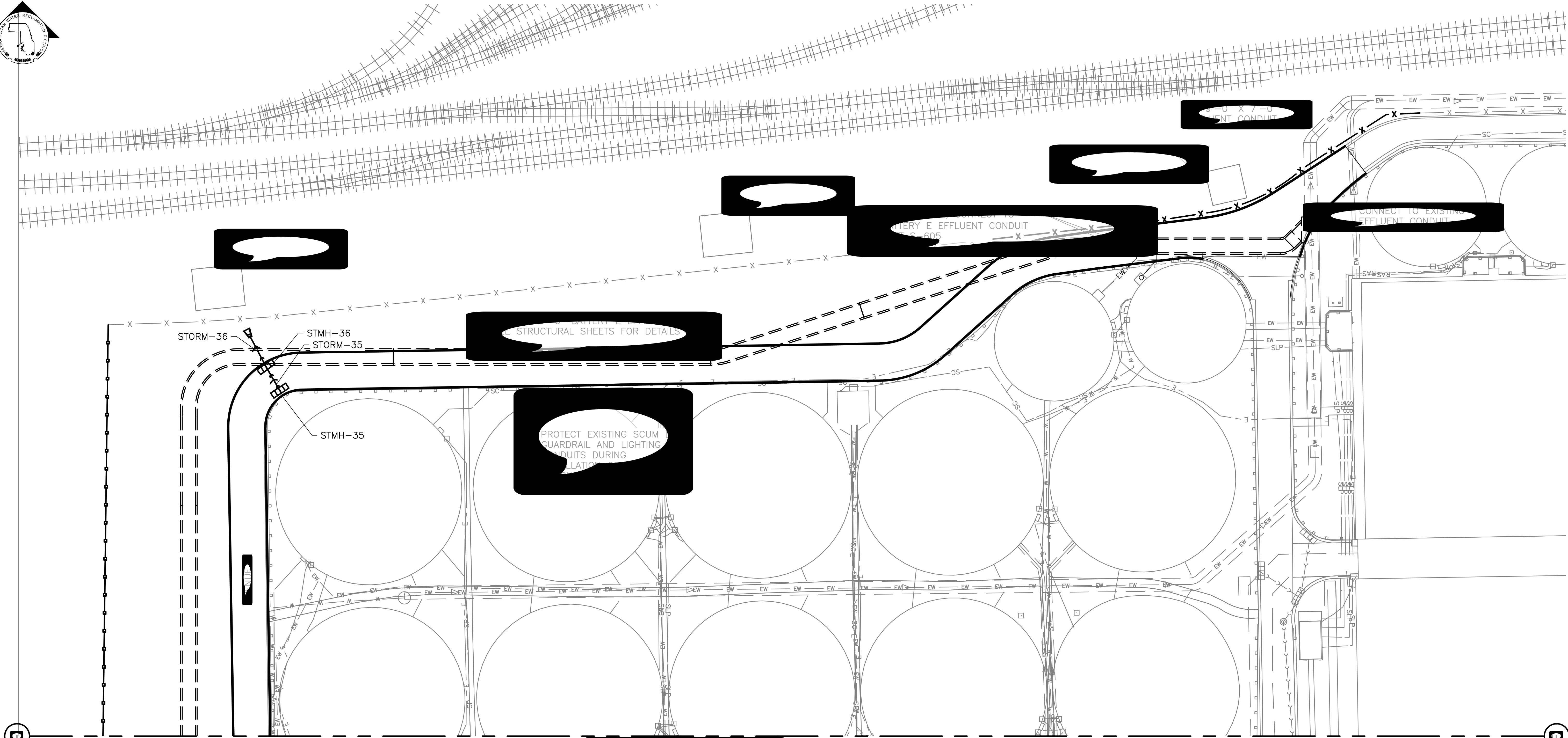
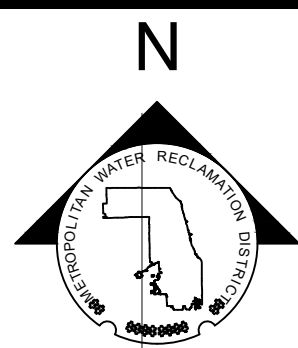
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 Checked by: BP
 Drawn by: BP
 Date: JULY 2025
 Title: AS SHOWN

CONTRACT 21-092-3P
 URBAN WATER RECLAMATION PLANT
 BATTERY F ACTIVATED SLUDGE FACILITY

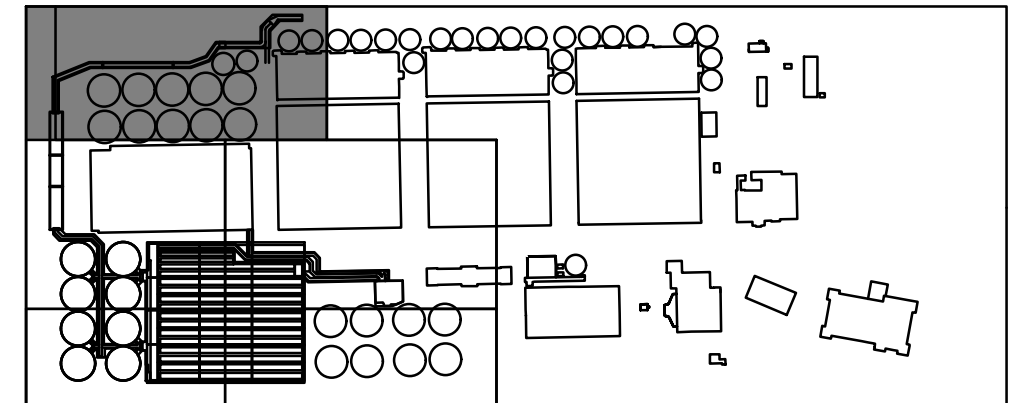
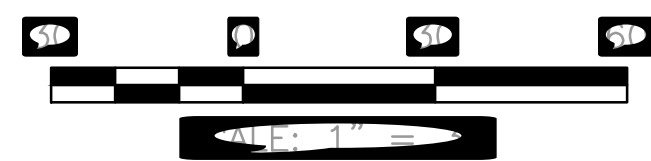
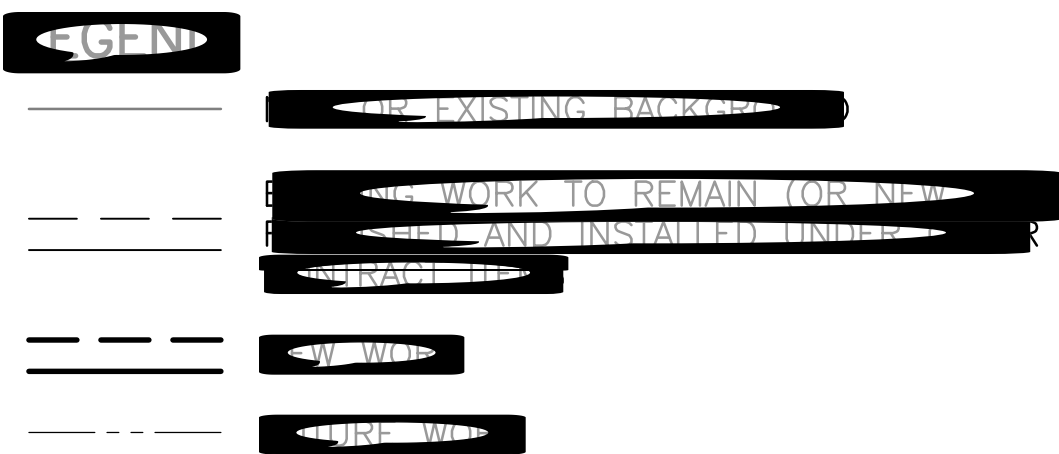
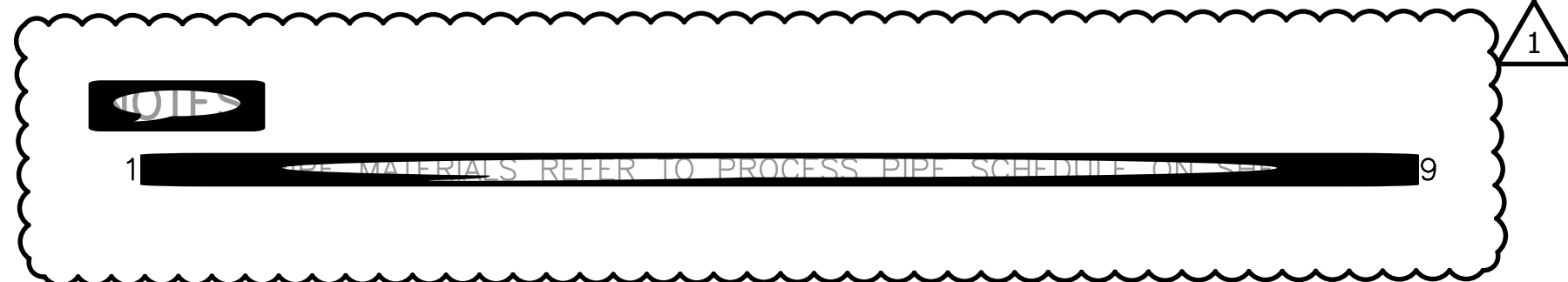
SITE YARD PIPING - 4

Sheet Number: 4
 Page Number: 6

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1 SITE YARD PIPING



KEYPLAN



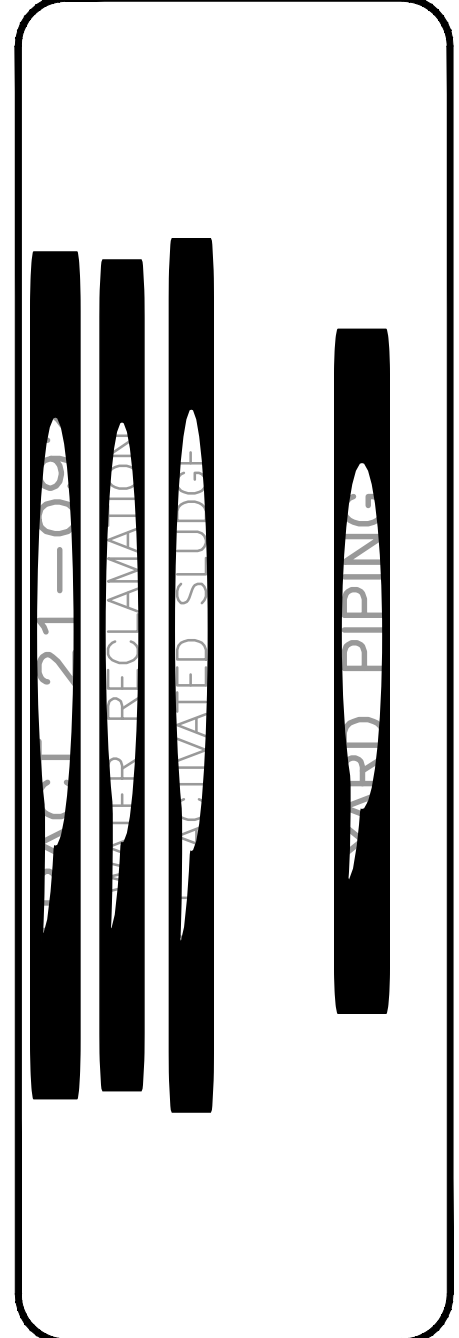
Rev.	Description	Appr.	Date
1	ISSUED FOR CONSTRUCTION	[Signature]	11/25/2015

METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

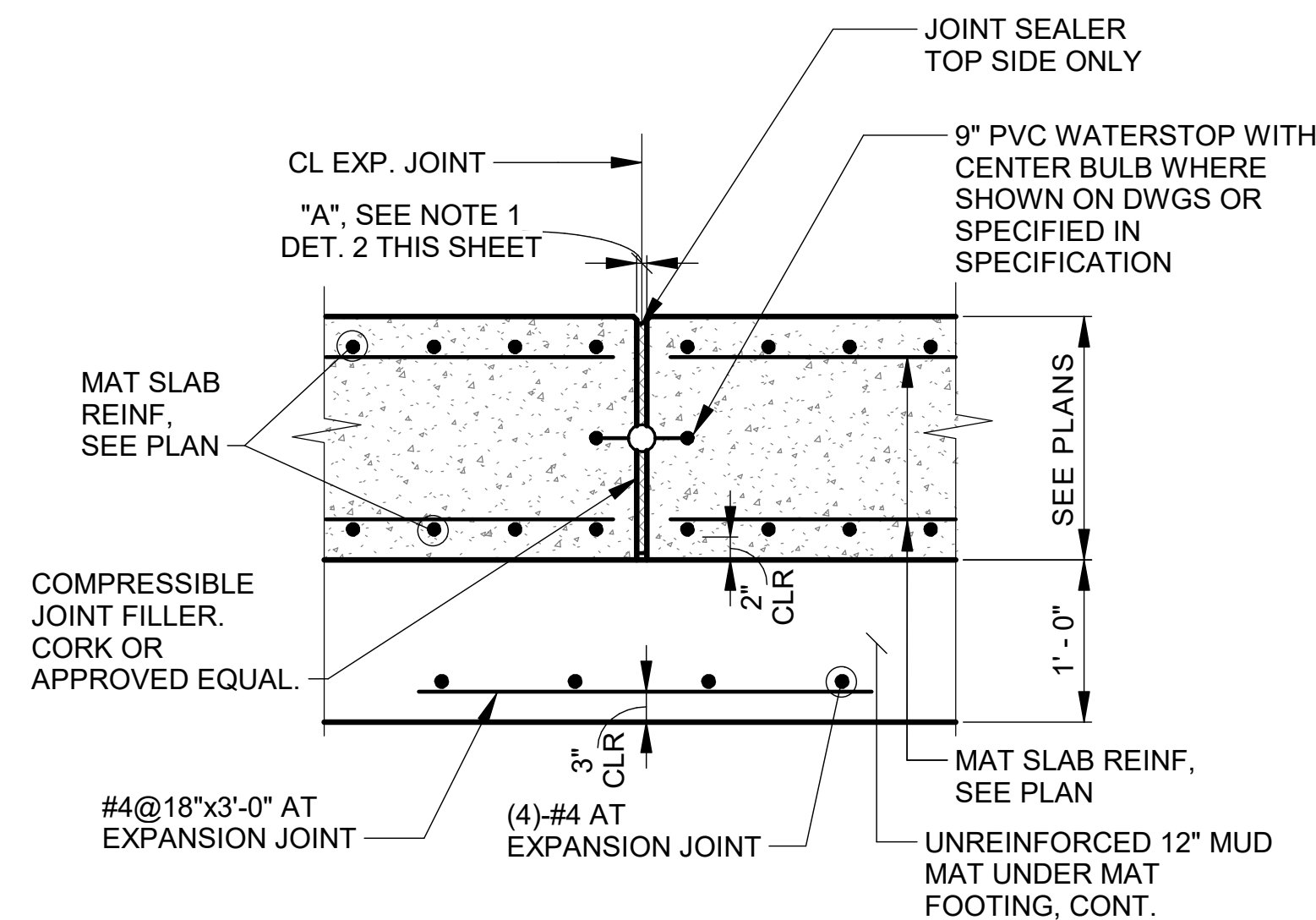
AECOM
DESIGNED BY:
DRAWN BY:
DATE:

DBS | **DB STERLIN**
CONSULTANTS INC.
DB STERLIN CONSULTANTS
123 N UPPER WACKER DR.
SUITE 200
CHICAGO, IL 60601, USA

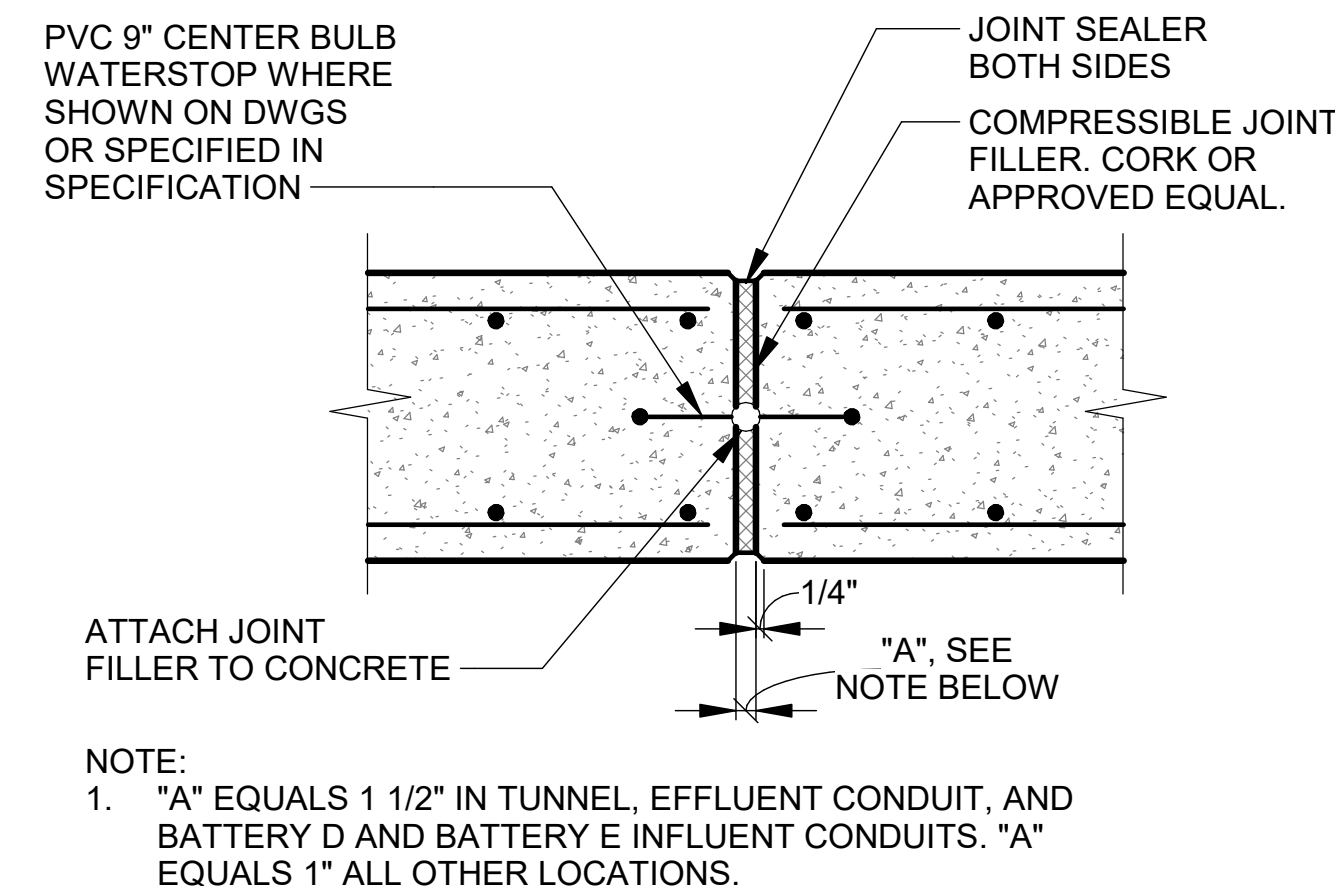
CHECKED BY:
REVIEWED BY:
SCALE:



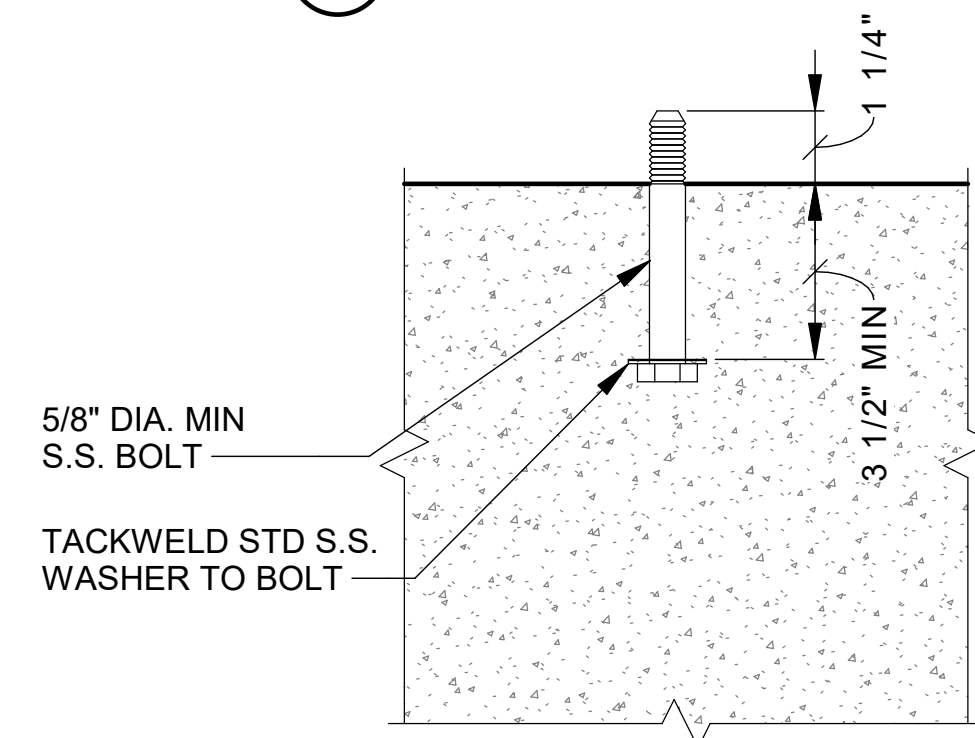
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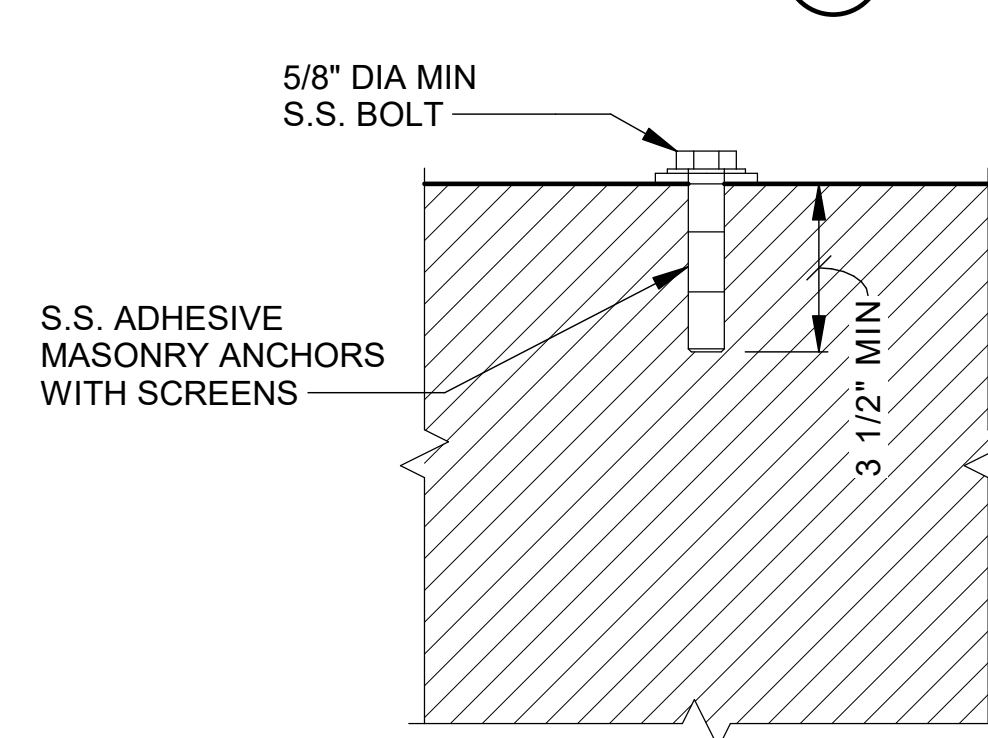
1 BASE SLAB EXPANSION JOINT DETAIL
SCALE: 1" = 1'-0"



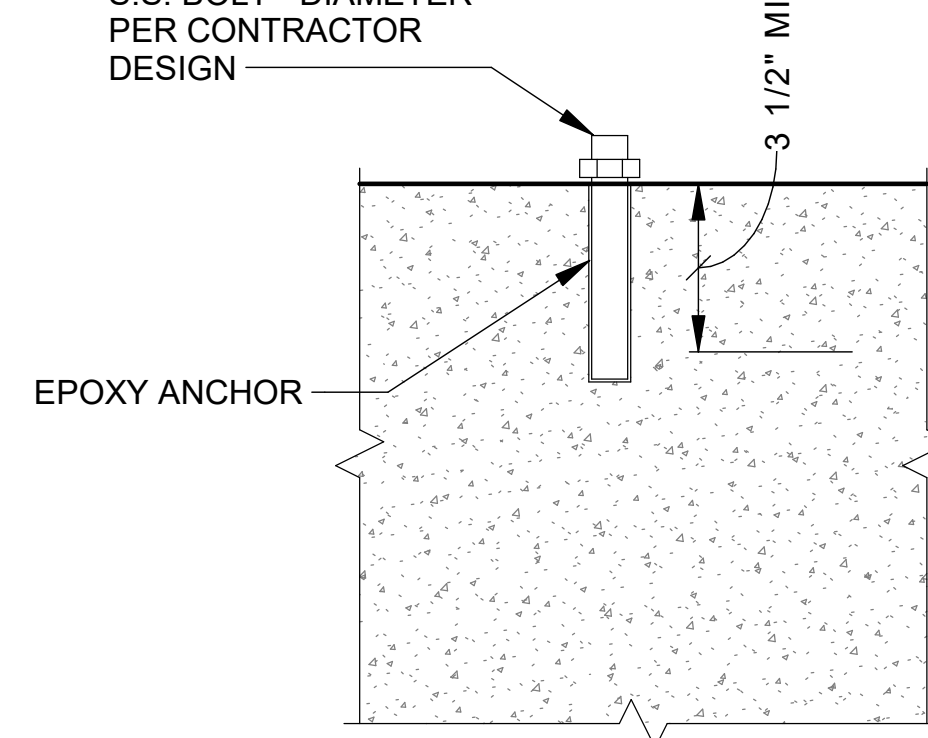
2 TYPICAL SLAB AND WALL EXPANSION JOINT DETAIL
SCALE: 1" = 1'-0" S.S. BOLT - DIAMETER Z



CAST IN PLACE



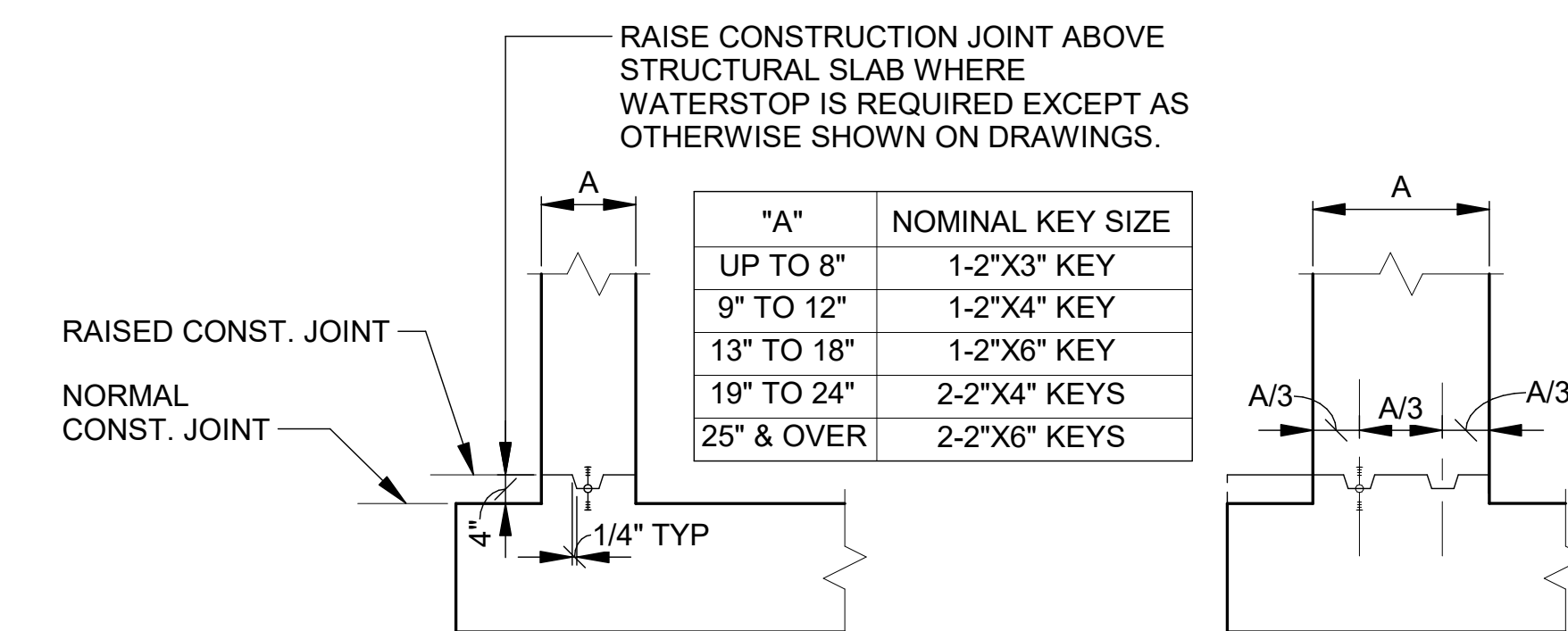
POST INSTALLED IN MASONRY



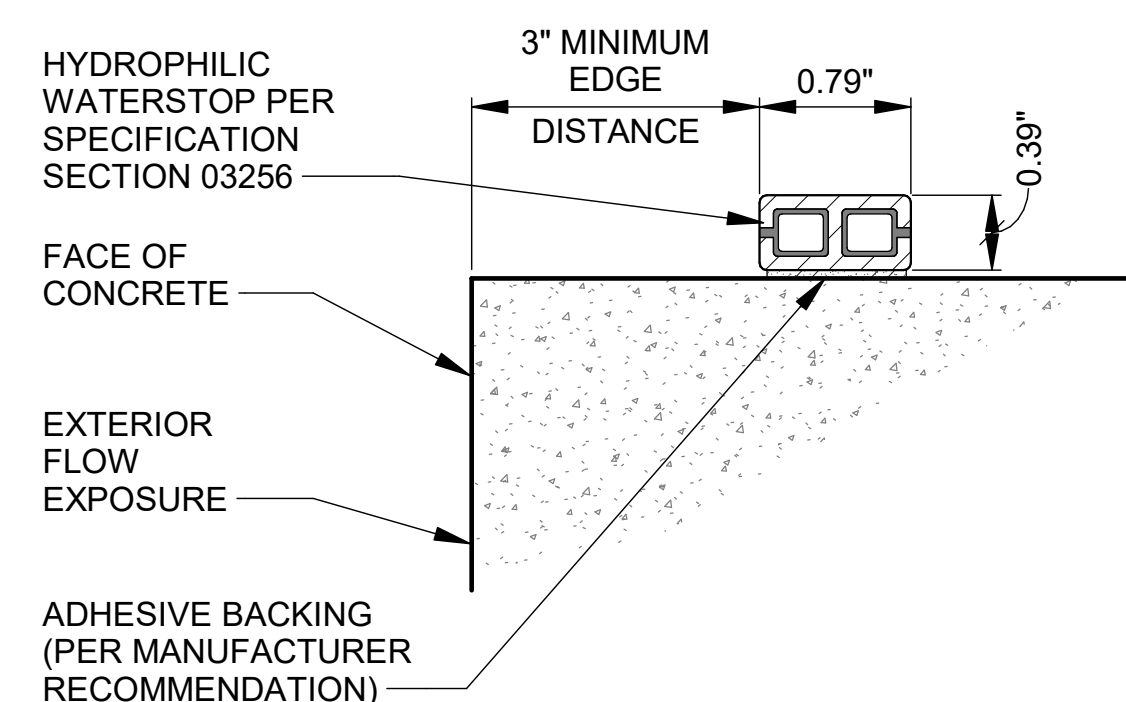
POST INSTALLED IN CONCRETE

NOTE:

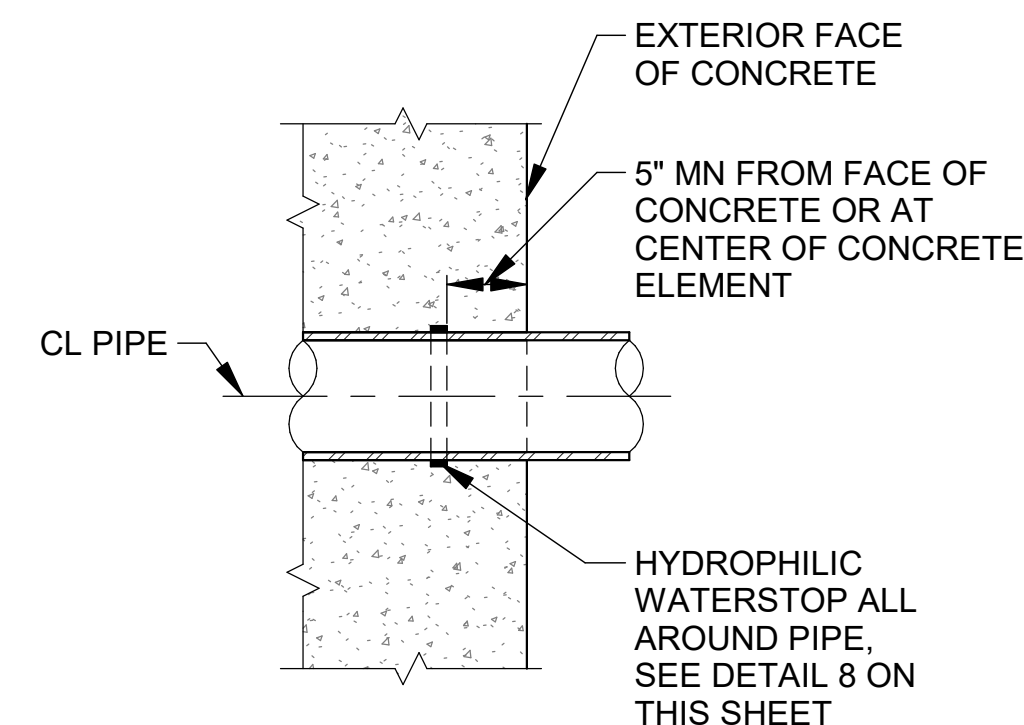
1. MECHANICAL POST INSTALLED ANCHOR IN CONCRETE EXPOSED TO ELEMENTS NOT PERMITTED.
2. ALL EQUIPMENT ANCHOR TO BE DESIGNED BY THE CONTRACTOR S.E. (LICENSED IN THE STATE OF ILLINOIS).



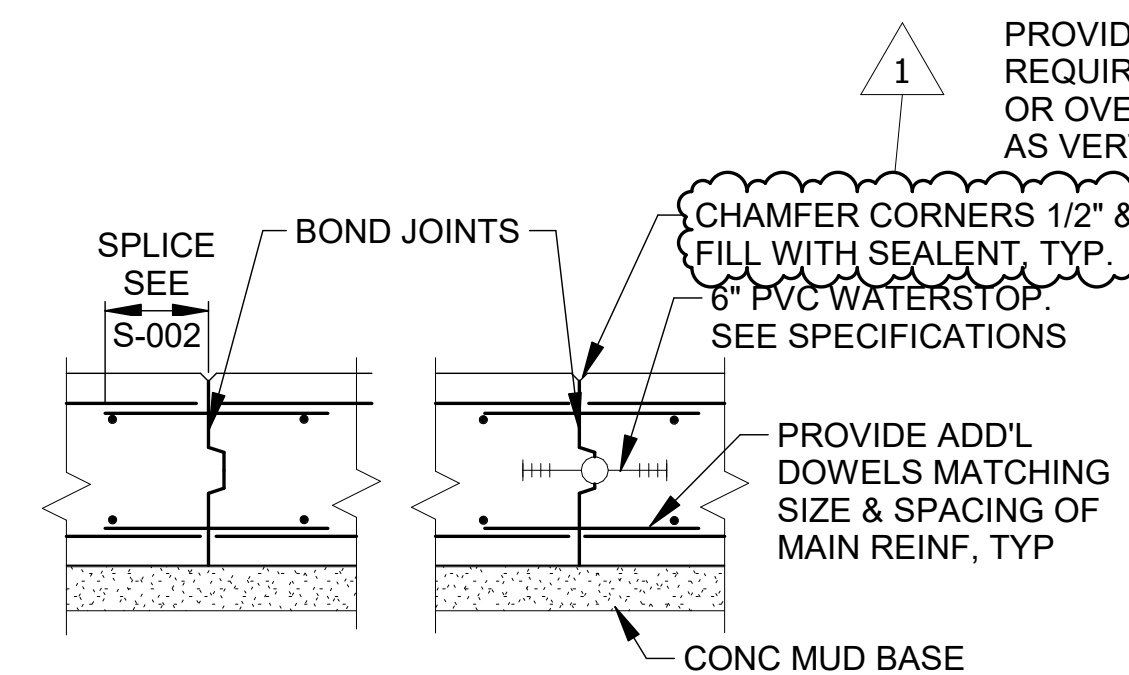
7 CONSTRUCTION JOINTS DETAILS



8 HYDROPHILIC WATERSTOP
SCALE: 6" = 1'-0"



3 PIPE PENETRATION
WITH HYDROPHILIC WATERSTOP
SCALE: 1" = 1'-0"



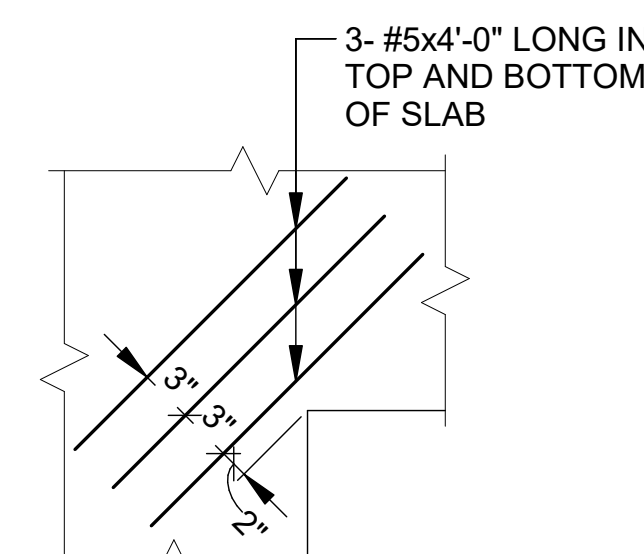
TYPE C1

TYPE C2

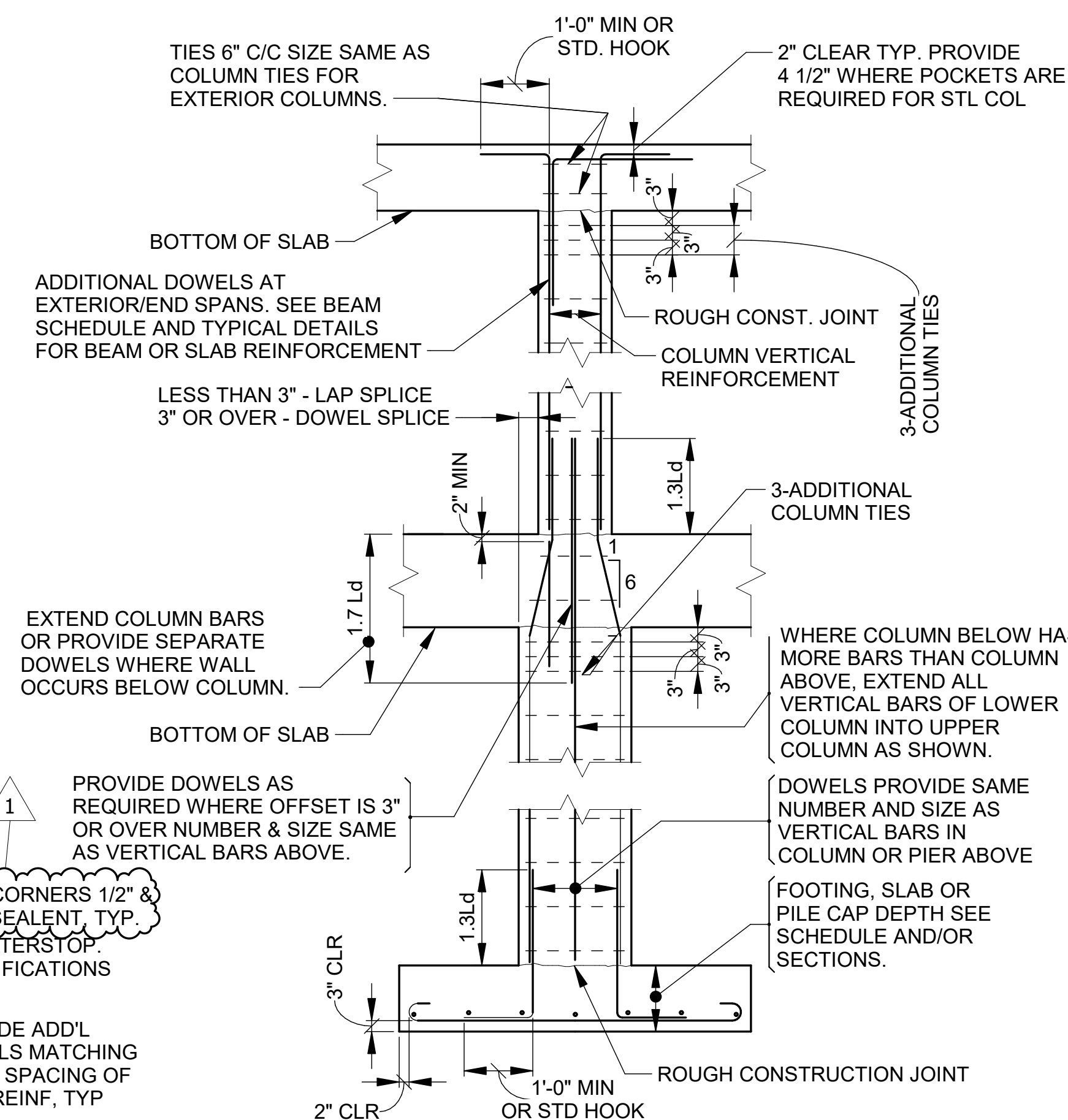
DETAIL NOTES:

1. IN JOINTS WITH MORE THAN ONE KEY, PLACE WATERSTOP IN KEY NEAREST TO SURFACE AGAINST EARTH OR WATER.
2. CONTRACTOR MAY USE MECHANICAL REBAR COUPLERS IN LIEU OF LAP SPLICES. LENGTH OF MAT MAIN REINFORCEMENT EXTENDING PAST THE CONSTRUCTION JOINT SHALL NOT EXCEED DEVELOPMENT LENGTH.

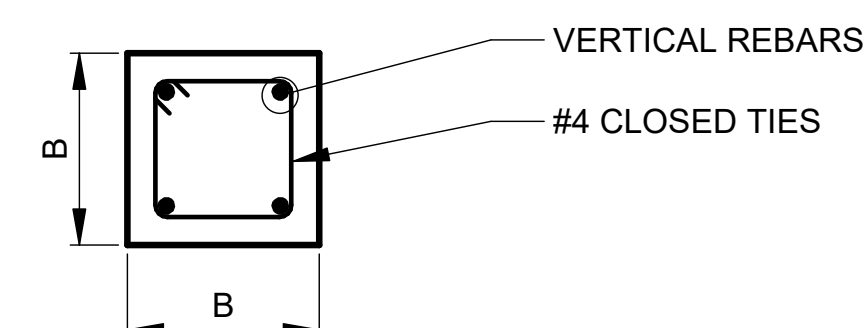
6 CONSTRUCTION JOINTS BASE SLAB
NOT TO SCALE



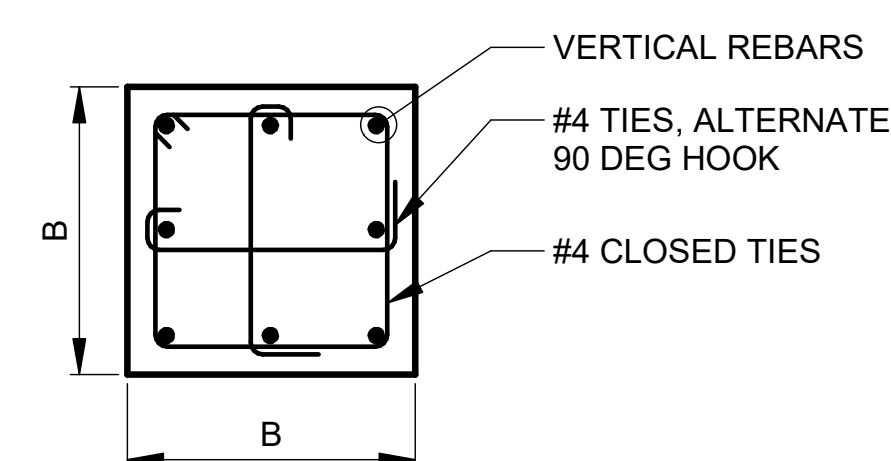
9 SLAB DETAIL AT RE-ENTRANT CORNER
NOT TO SCALE



4 TYPICAL COLUMN DETAIL
NOT TO SCALE

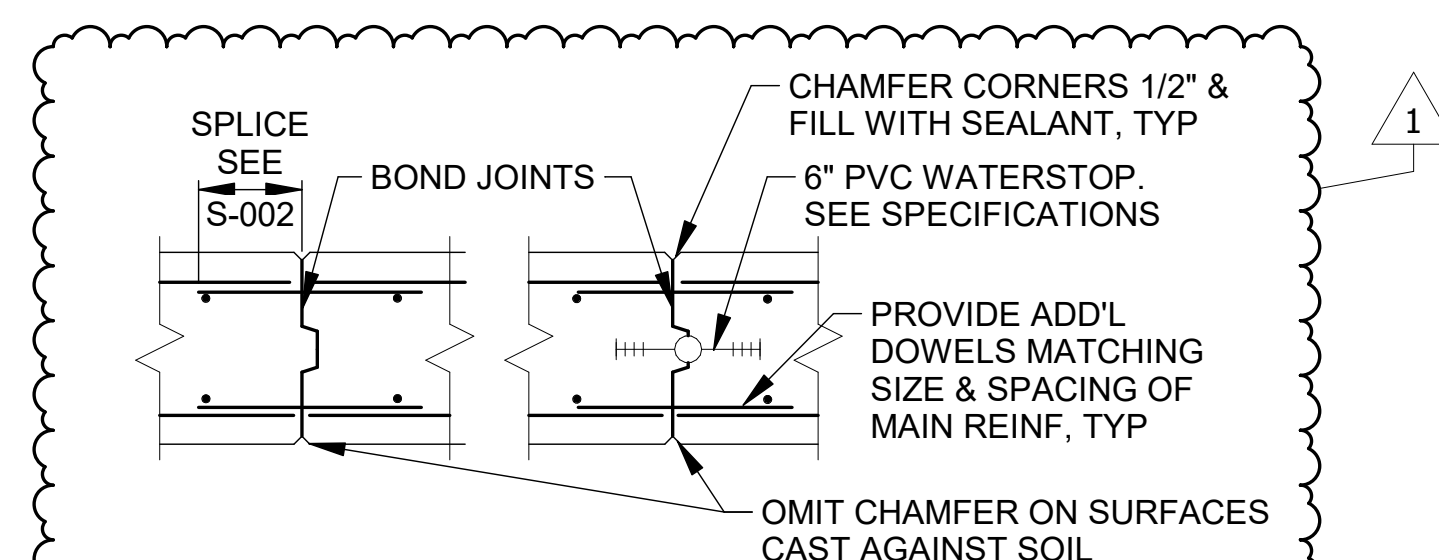


COLUMN SECTION FOR B 12" OR LESS



COLUMN SECTION FOR B MORE THAN 12"

10 CONCRETE COLUMN SECTION DETAIL
SCALE: 1" = 1'-0"

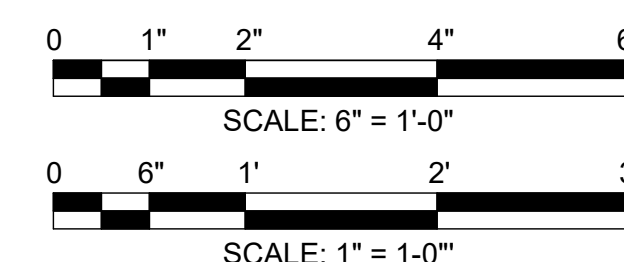


TYPE C1

TYPE C2

11 WALL OR SLAB CONSTRUCTION JOINTS
NOT TO SCALE

DETAILS SHOWN ON THIS DRAWING ARE TYPICAL DETAILS AND SHALL BE USED, WHOLLY OR IN PART, WHERE THEY APPLY EXCEPT WHERE MODIFIED BY DETAILED DRAWINGS & SPECIFICATIONS.



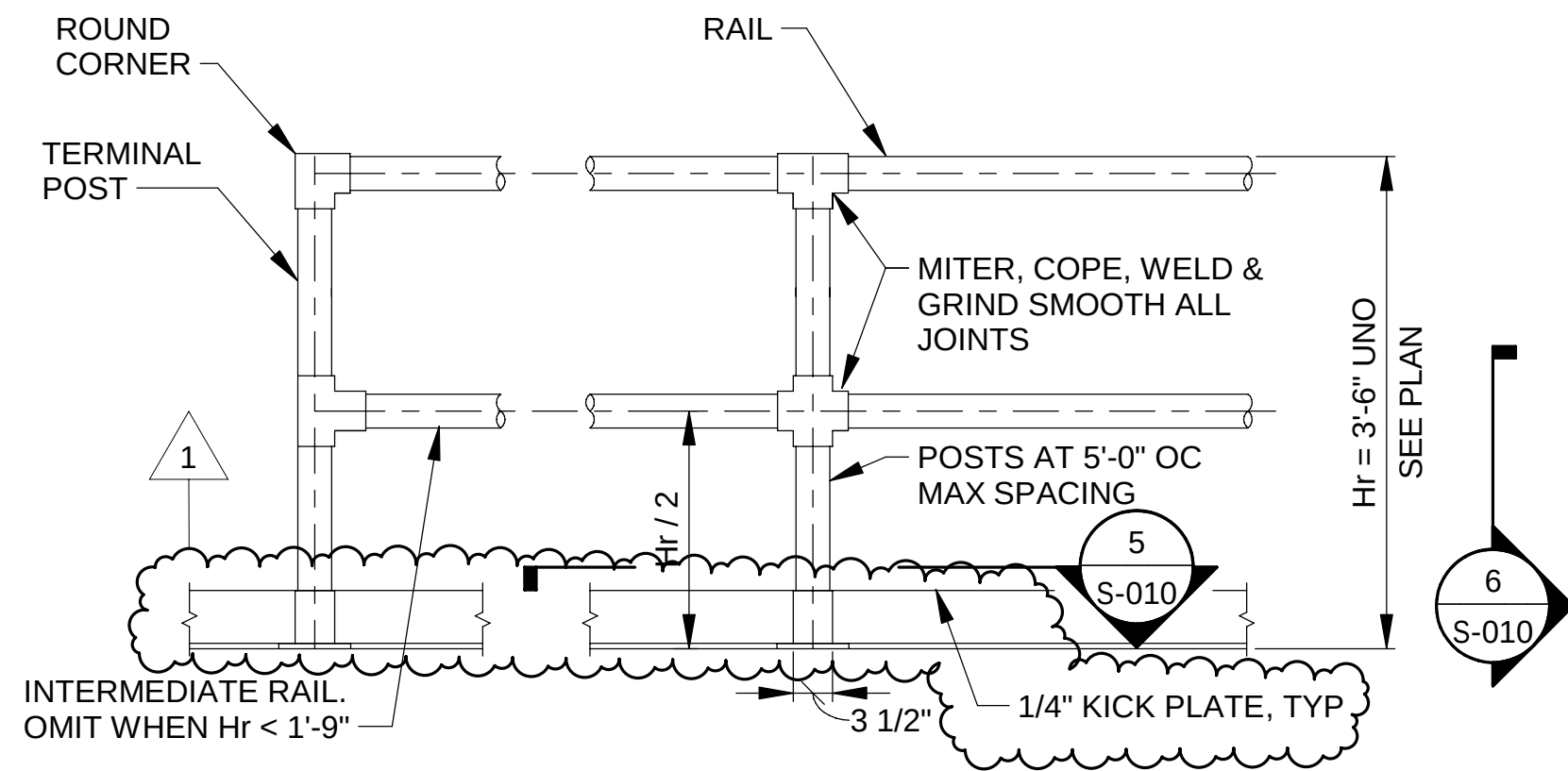


CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL
STANDARD DETAILS - 6

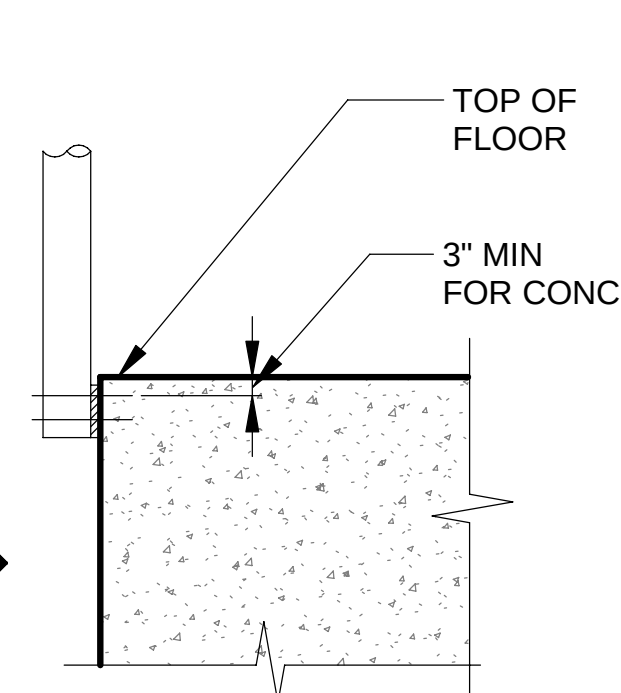
Sheet Number:

S-008

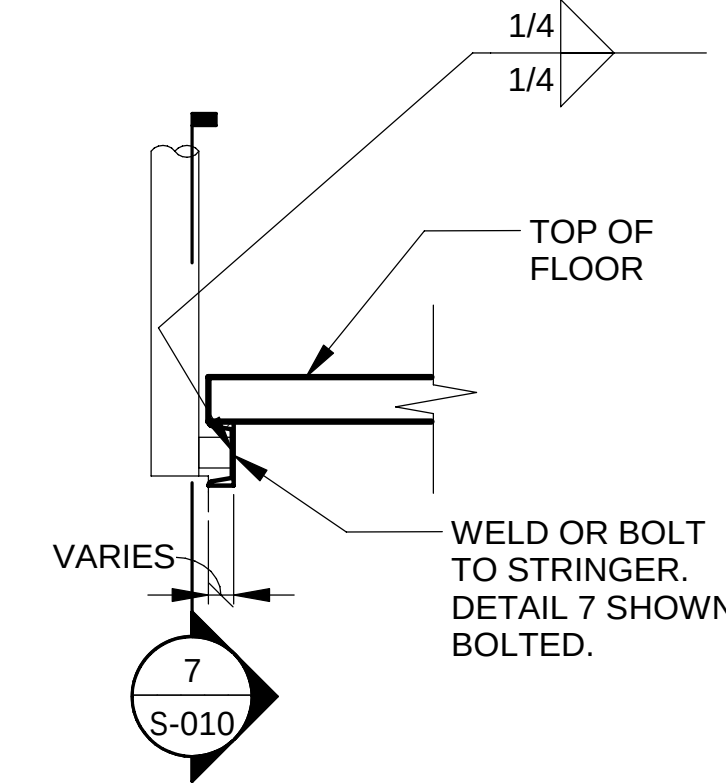
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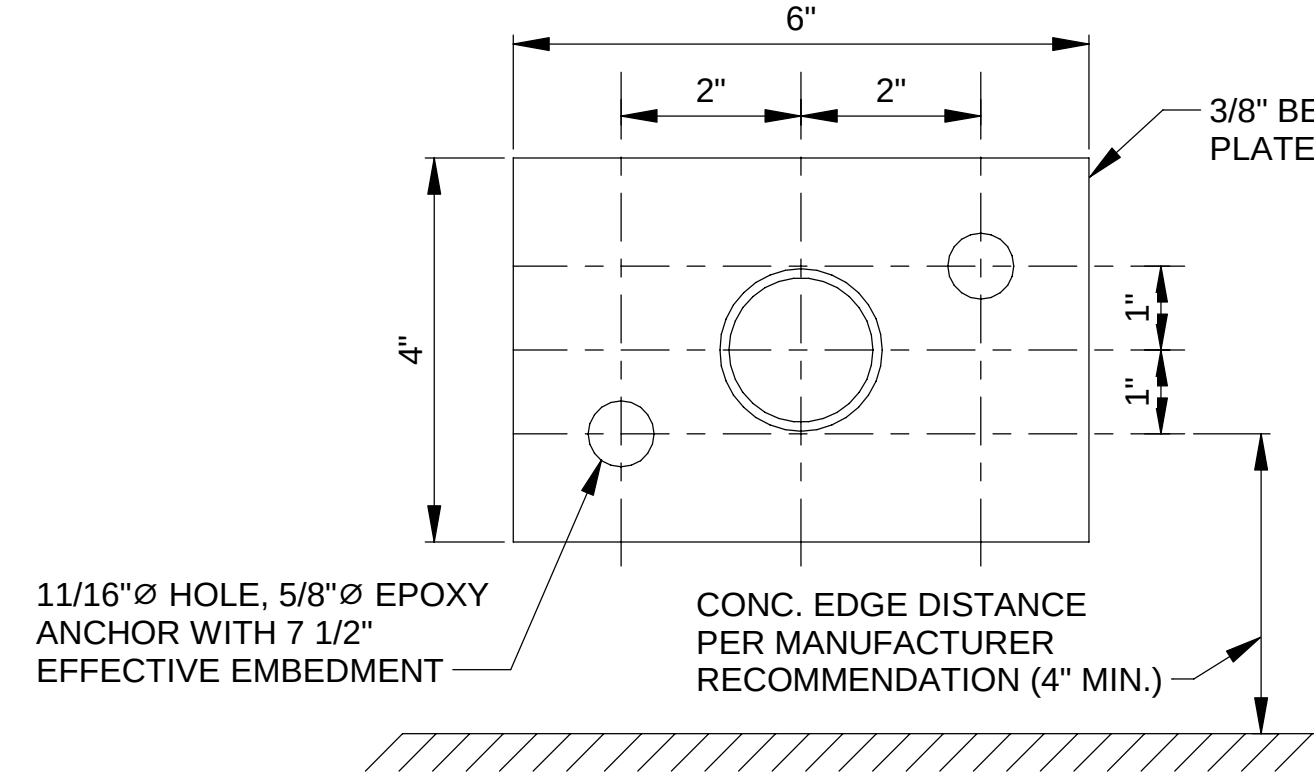
1 TYPICAL TOP MOUNTED RAILING
SCALE: 3/4" = 1'-0"



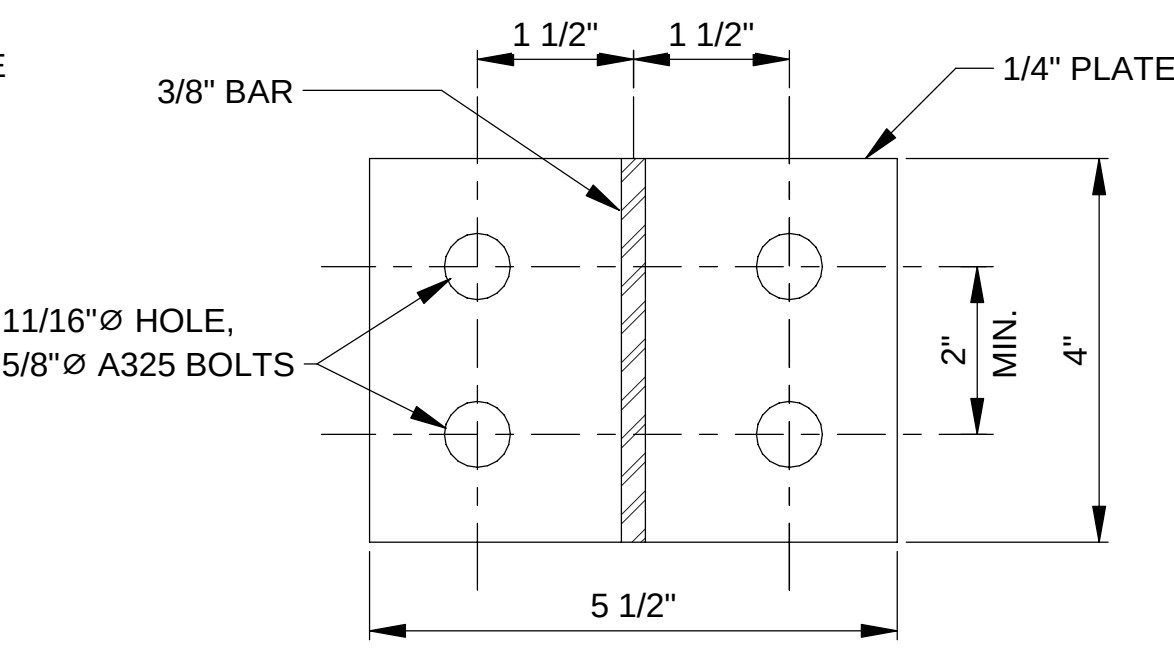
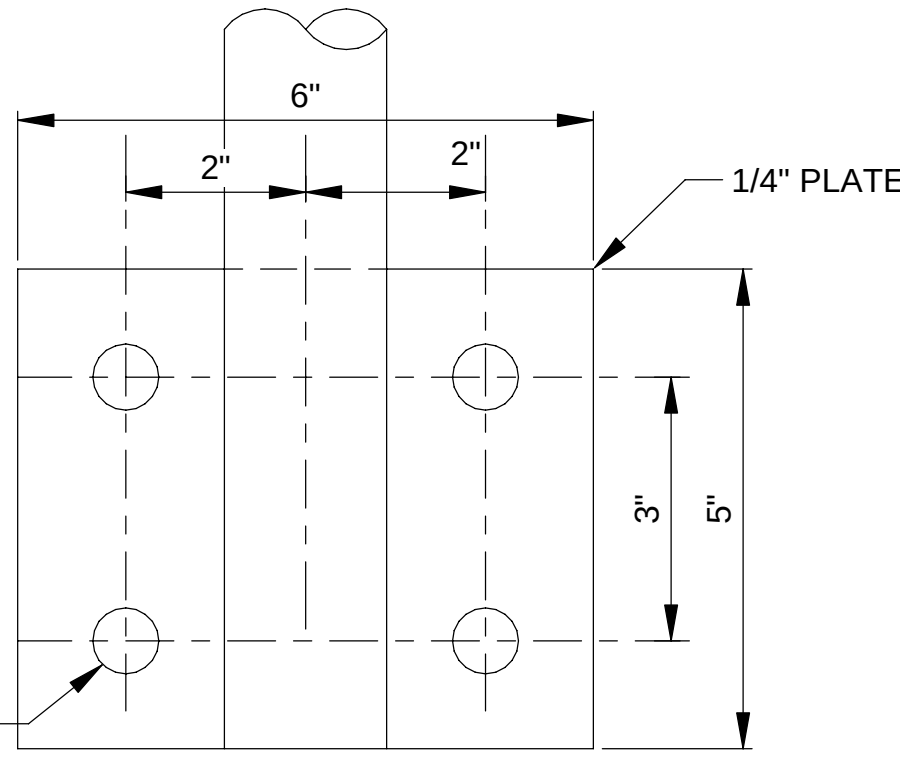
2 TYPICAL SIDE MOUNTED RAILING
NOT TO SCALE



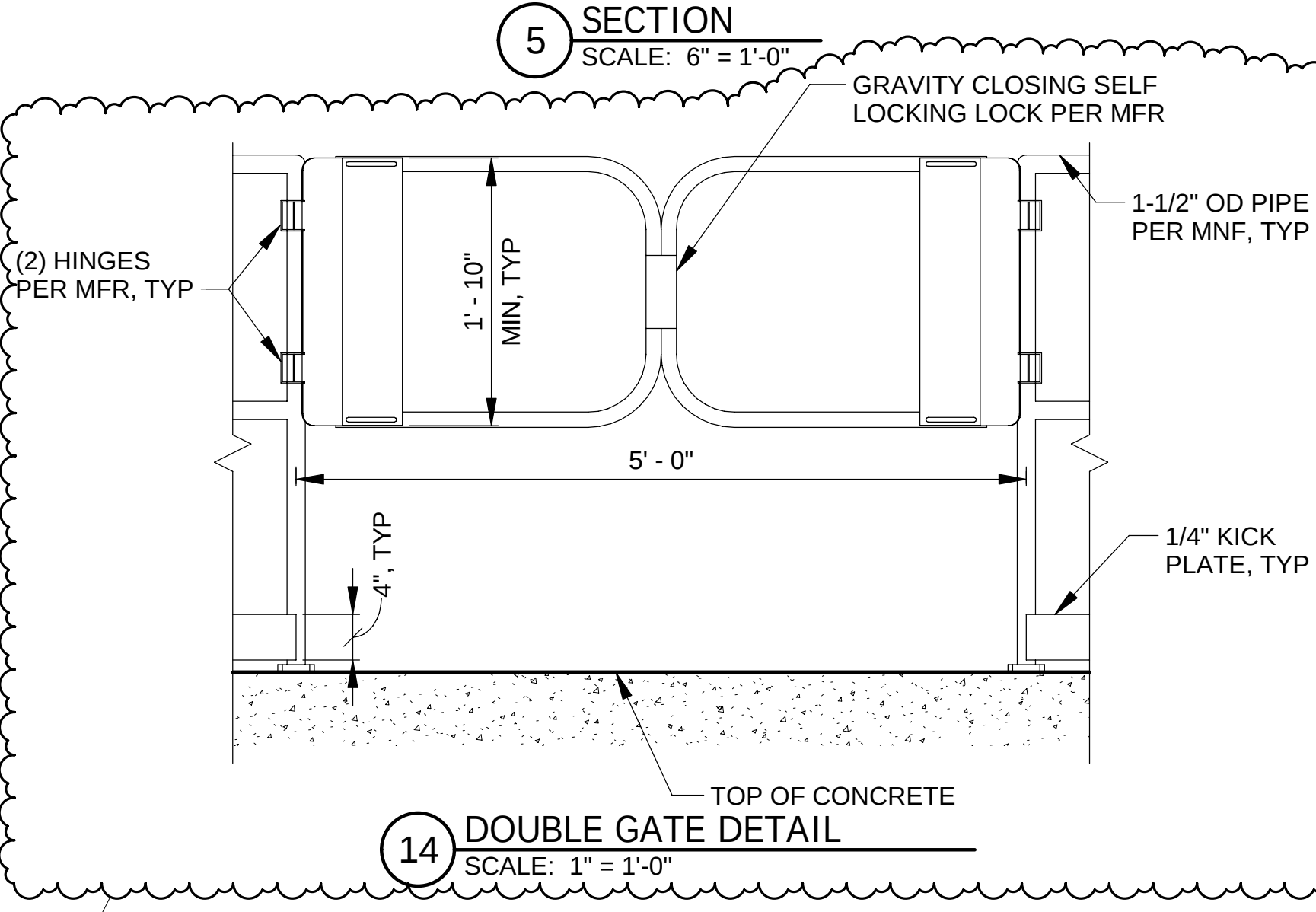
3 STAIR TREAD NOSING DETAIL
NOT TO SCALE



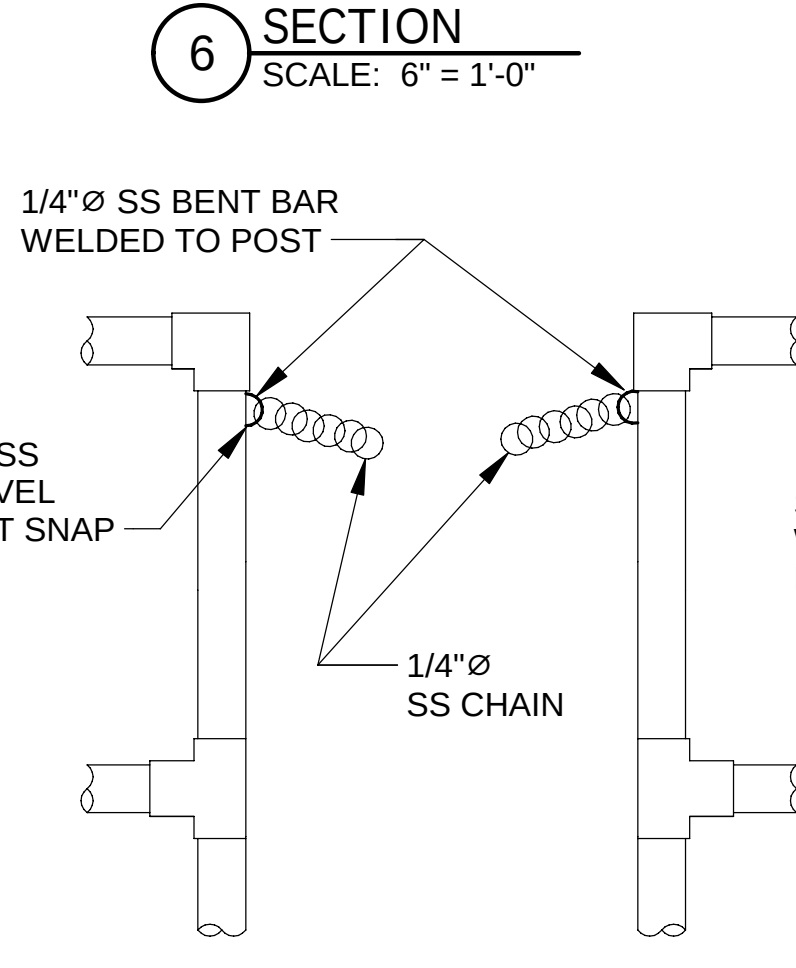
4 TYPICAL WALL MOUNTED RAIL
SCALE: 1/2" = 1'-0"



7 SECTION
SCALE: 6" = 1'-0"



14 DOUBLE GATE DETAIL
SCALE: 1" = 1'-0"



9 CHAIN GATE DETAIL
SCALE: 1" = 1'-0"

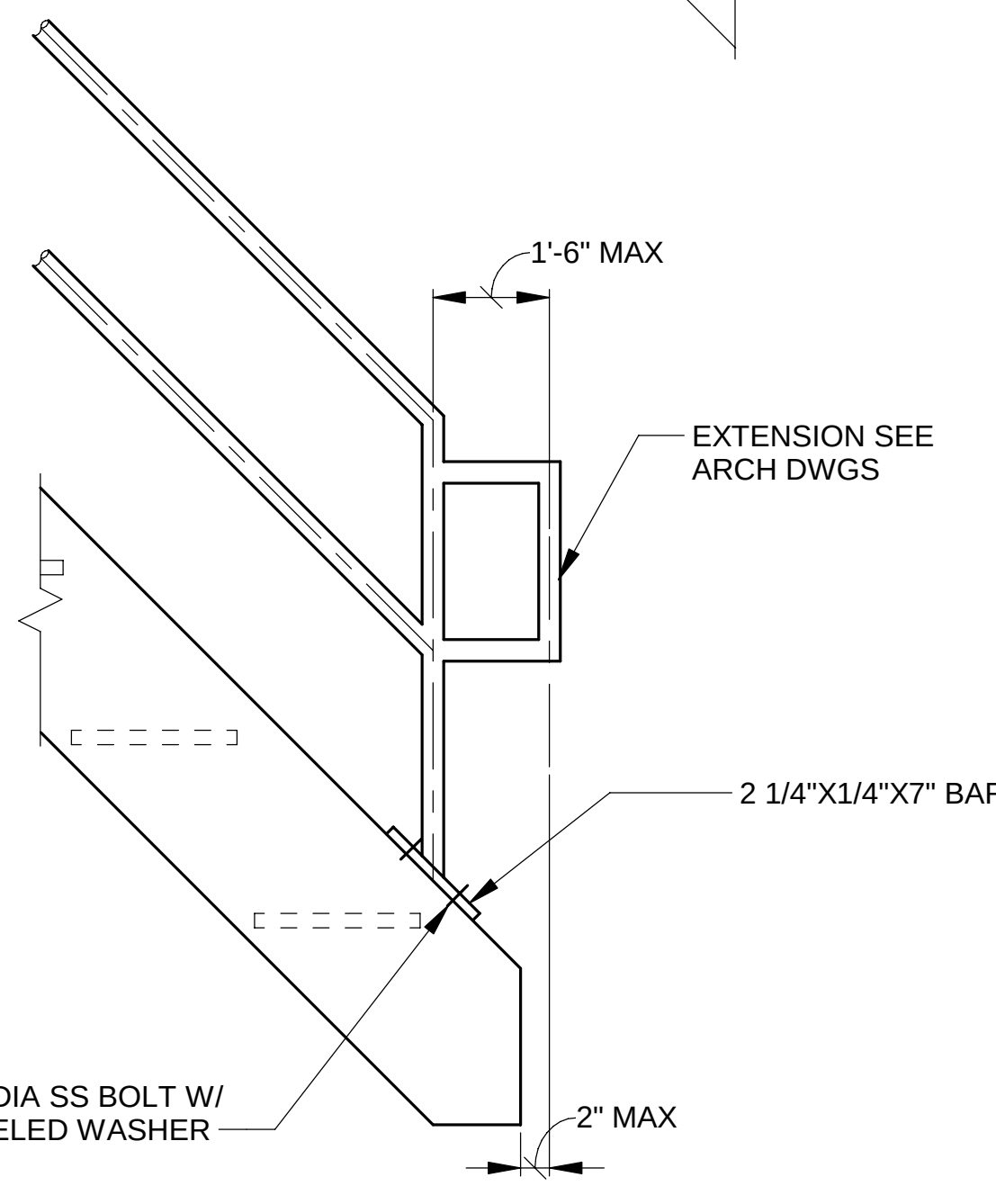
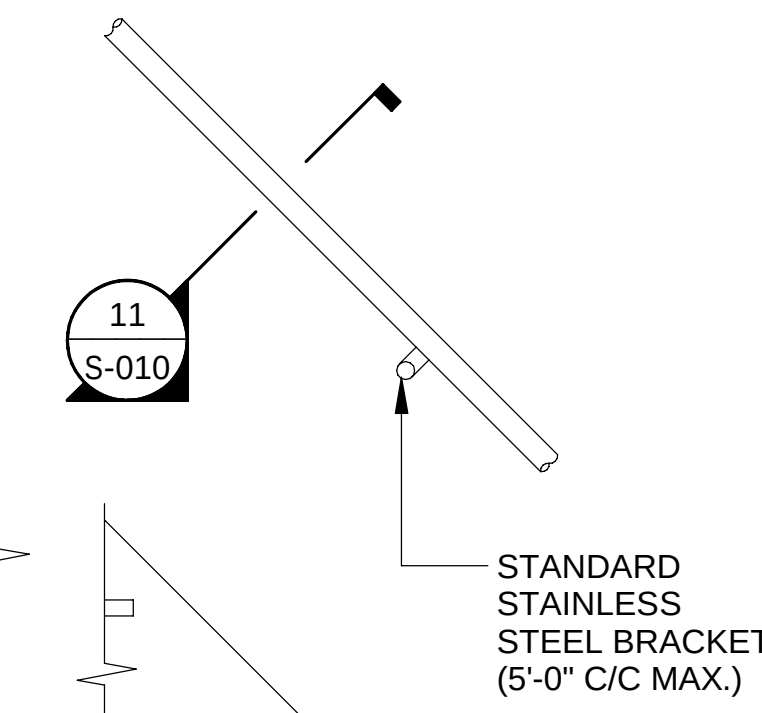
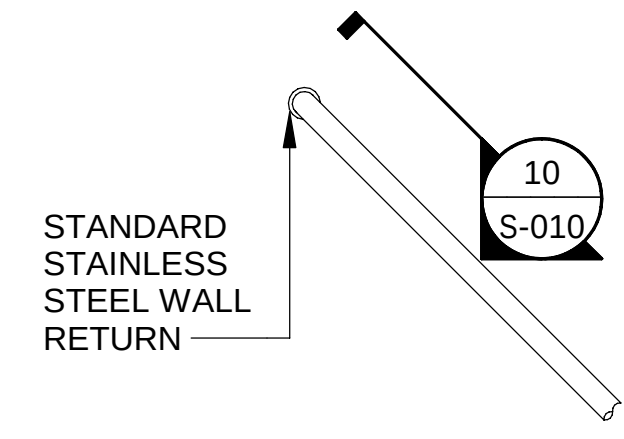
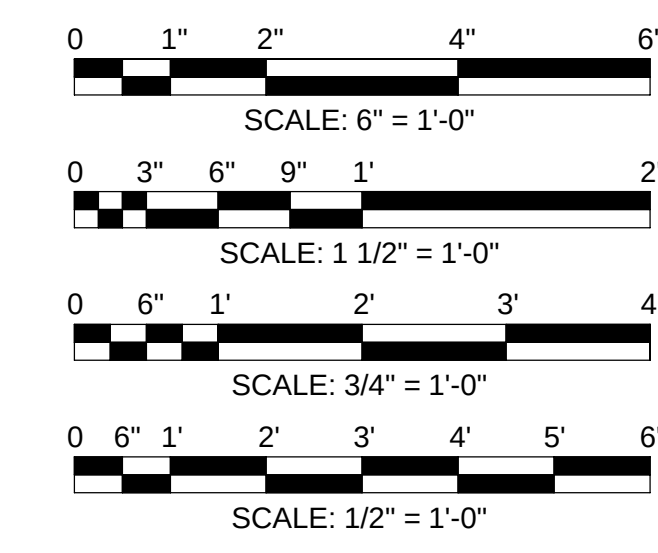
10 PLANAL VIEW
SCALE: 3/4" = 1'-0"

11 SECTION
SCALE: 3/4" = 1'-0"

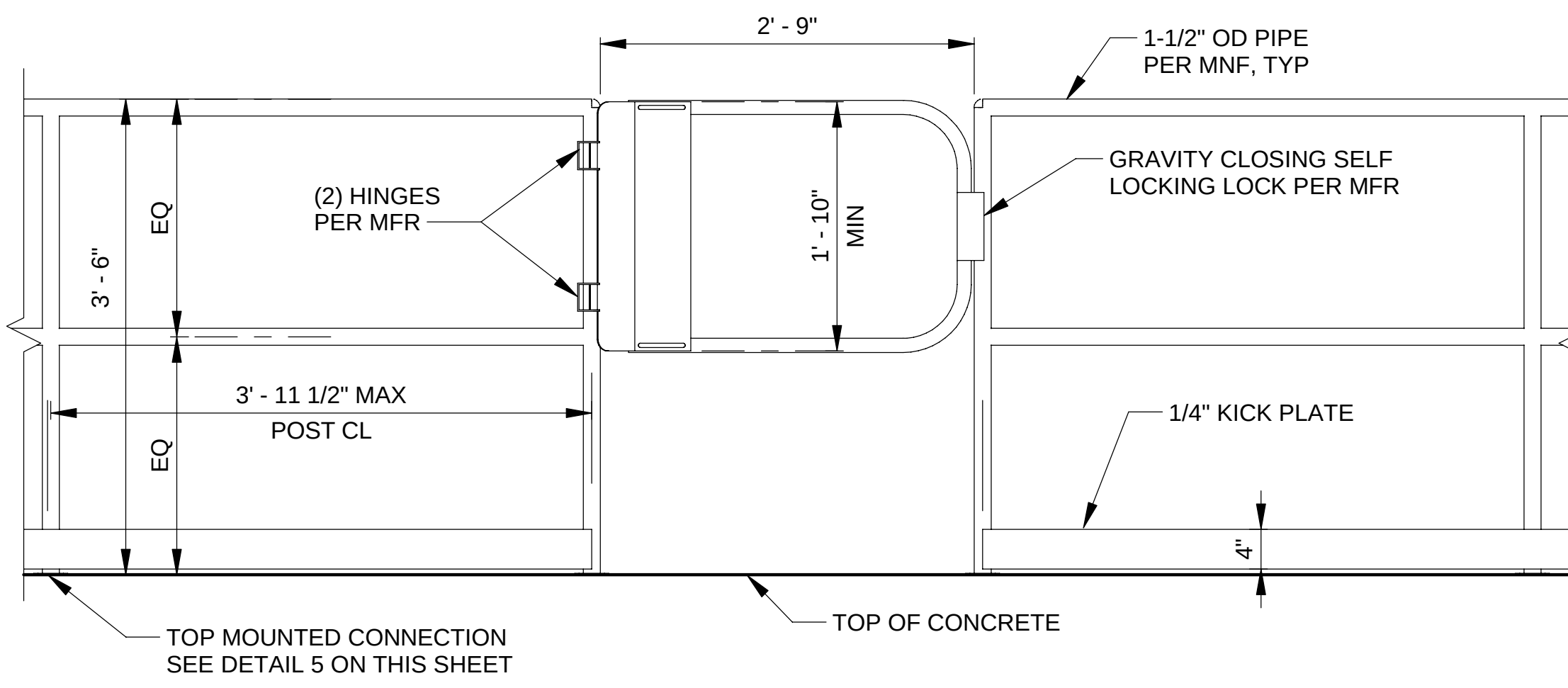
12 RAILING EXPANSION JOINT
SCALE: 1 1/2" = 1'-0"

NOTES:

- ALL RAILING (INTERIOR AND EXTERIOR) MATERIAL IS STAINLESS STEEL. SEE SPECIFICATION 05523.
- RAILING AND RAILING SUPPORT TO BE **DELEGATED** DESIGN. THE CONTRACTOR SHALL ENGAGE A STRUCTURAL ENGINEER LICENSED IN THE STATE OF ILLINOIS TO DESIGN THE RAILING AND ATTACHMENTS TO THE STRUCTURE. THE CONTRACTOR SHALL SUBMIT DRAWINGS AND CALCULATIONS FOR THE RAILING AND ATTACHMENTS SIGNED AND SEALED BY THE STRUCTURAL ENGINEER PRIOR TO WORK. SEE S-001 FOR DESIGN LOADINGS.



8 TYPICAL STRINGER MOUNTED RAIL
SCALE: 1/2" = 1'-0"



13 GATE DETAIL
SCALE: 1" = 1'-0"

DETAILS SHOWN ON THIS DRAWING ARE TYPICAL DETAILS AND SHALL BE USED, WHOLLY OR IN PART, WHERE THEY APPLY EXCEPT WHERE MODIFIED BY DETAILED DRAWINGS & SPECIFICATIONS.

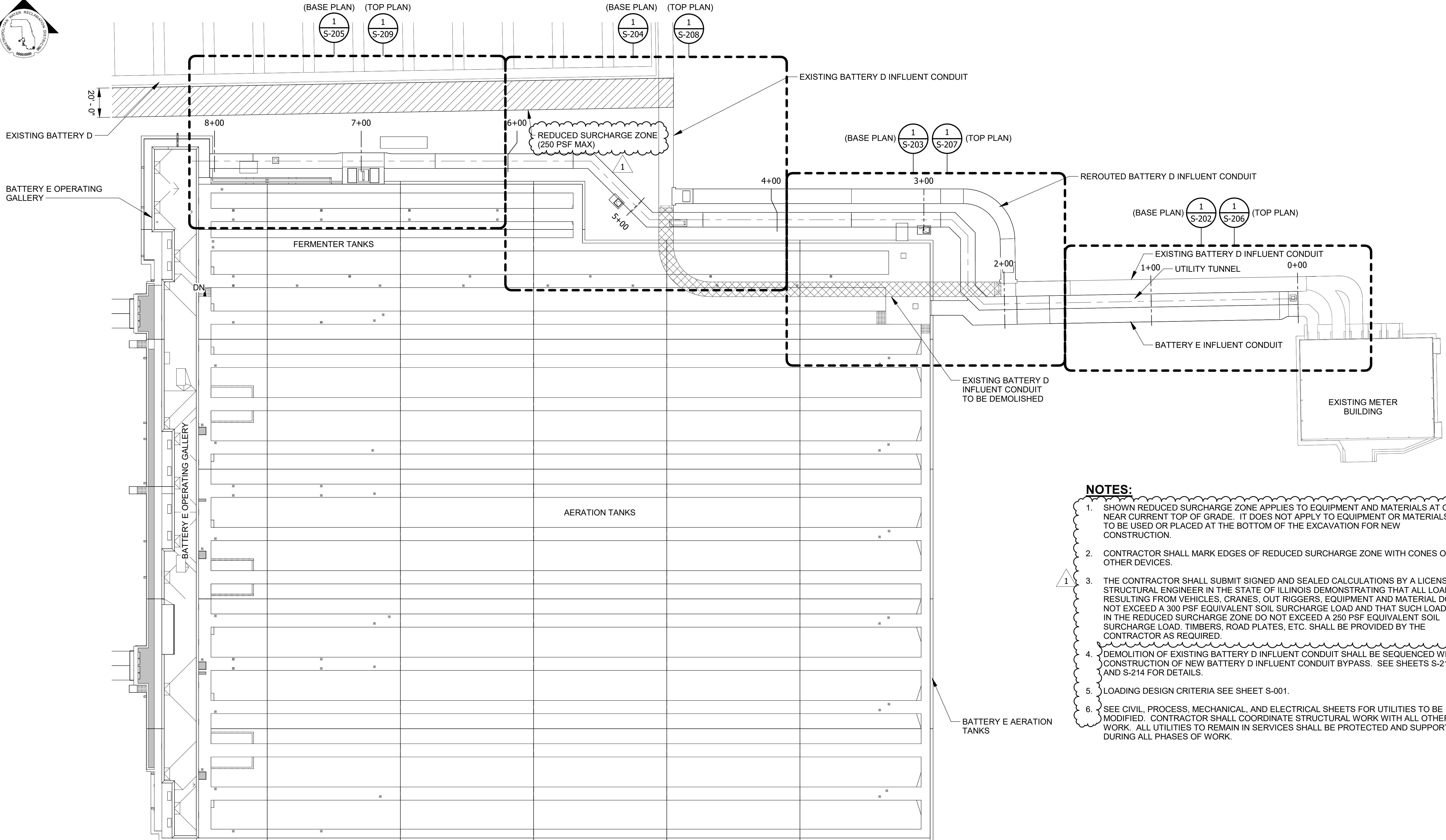


METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

Designed by:	Checked by:	Rubinos & Mesa Engineers, Inc.	
JB	AS	200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482	
Drawn by:	Reviewed by:	PRUDENTIAL PLAZA ONE	
DA	MF	130 E RANDOLPH STREET	
Date:	Scale:	SUITE 2400	
7/1/2025	AS SHOWN	CHICAGO, IL 60601, USA	

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

STANDARD DETAILS - 8



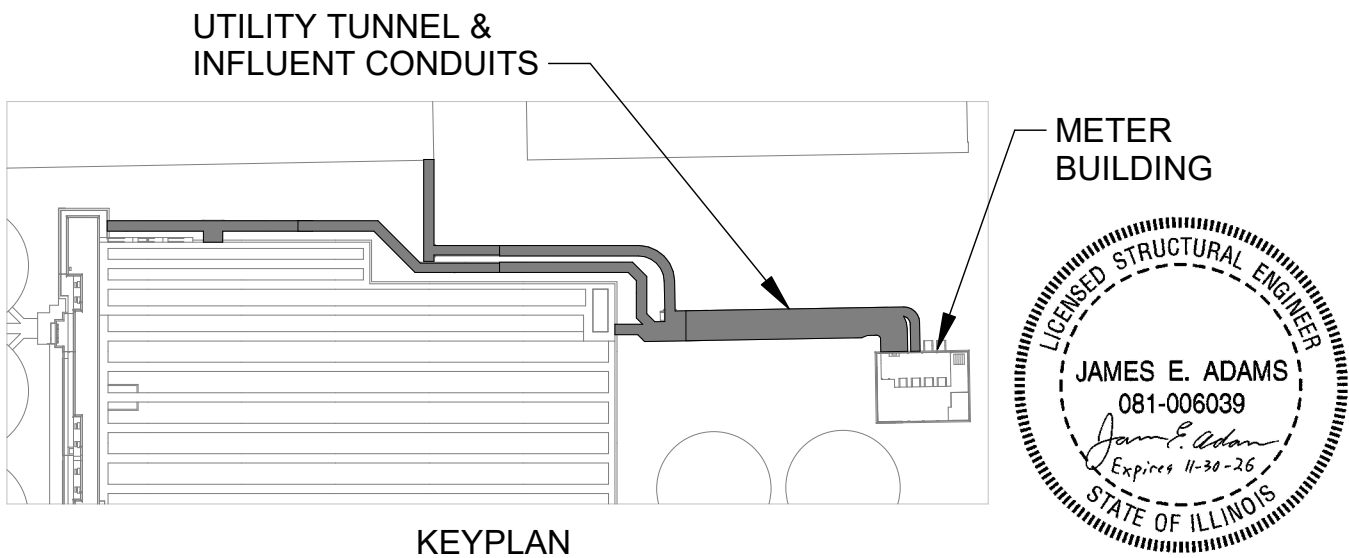
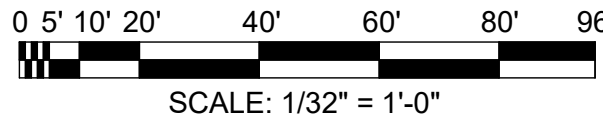
NOTES:

1. SHOWN REDUCED SURCHARGE ZONE APPLIES TO EQUIPMENT AND MATERIALS AT OR NEAR CURRENT TOP OF GRADE. IT DOES NOT APPLY TO EQUIPMENT OR MATERIALS TO BE USED OR PLACED AT THE BOTTOM OF THE EXCAVATION FOR NEW CONSTRUCTION.
2. CONTRACTOR SHALL MARK EDGES OF REDUCED SURCHARGE ZONE WITH CONES OR OTHER DEVICES.
3. THE CONTRACTOR SHALL SUBMIT SIGNED AND SEALED CALCULATIONS BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ILLINOIS DEMONSTRATING THAT ALL LOADS RESULTING FROM VEHICLES, CRANES, OUT RIGGERS, EQUIPMENT AND MATERIAL DO NOT EXCEED A 300 PSF EQUIVALENT SOIL SURCHARGE LOAD AND THAT SUCH LOADS IN THE REDUCED SURCHARGE ZONE DO NOT EXCEED A 250 PSF EQUIVALENT SOIL SURCHARGE LOAD. TIMBERS, ROAD PLATES, ETC. SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED.
4. DEMOLITION OF EXISTING BATTERY D INFLUENT CONDUIT SHALL BE SEQUENCED WITH CONSTRUCTION OF NEW BATTERY D INFLUENT CONDUIT BYPASS. SEE SHEETS S-213 AND S-214 FOR DETAILS.
5. LOADING DESIGN CRITERIA SEE SHEET S-001.
6. SEE CIVIL, PROCESS, MECHANICAL, AND ELECTRICAL SHEETS FOR UTILITIES TO BE MODIFIED. CONTRACTOR SHALL COORDINATE STRUCTURAL WORK WITH ALL OTHER WORK. ALL UTILITIES TO REMAIN IN SERVICES SHALL BE PROTECTED AND SUPPORTED DURING ALL PHASES OF WORK.

LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK
- REMOVAL WORK
- REDUCED SURCHARGE ZONE

1 UTILITY TUNNEL OVERALL PLAN
SCALE: 1/32" = 1'-0"



**METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO**

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by:	Checked by:
JA	JA
Drawn by:	Reviewed by:
MM	AG
Date:	Scale:
7/1/2025	1/32" = 1'-0"

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
UTILITY TUNNEL & INFLUENT CONDUITS
OVERALL PLAN

Sheet Number:

S-201

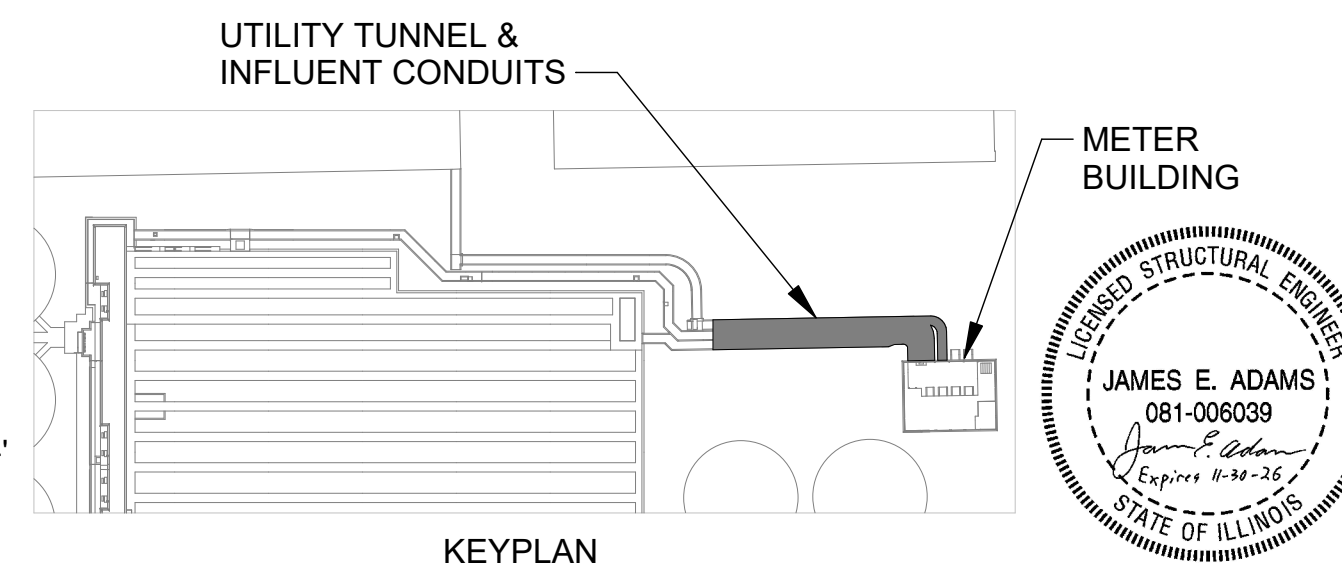
Page Number: **84**

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	GD	10/27/25



1. STATIONING MEASURED ALONG CENTERLINE OF UTILITY TUNNEL
2. CONTRACTOR SHALL VERIFY EXTENTS OF EXISTING UTILITY TUNNEL AND BATTERY D INFLUENT CONDUIT VIA POT-HOLING AND/OR GPR PRIOR TO WORK. NOTIFY DISTRICT OF DISCREPANCIES WITH THESE DRAWINGS. THE ENGINEER WILL PROVIDE GUIDANCE REGARDING ADJUSTMENTS OF TUNNEL AND/OR CONDUITS REQUIRED DUE TO DISCREPANCIES. ANY ADJUSTMENTS TO THE PROPOSED TUNNEL AND INFLUENT CONDUITS MUST BE APPROVED BY THE ENGINEER.
3. SEE DETAILS 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURAL NOTES AND STANDARD DETAILS SEE S-001 THROUGH S-010.

- | | |
|---|--|
|  | NEW OR EXISTING BACKGROUND |
|  | EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS) |
|  | NEW WORK |
|  | REMOVAL WORK |

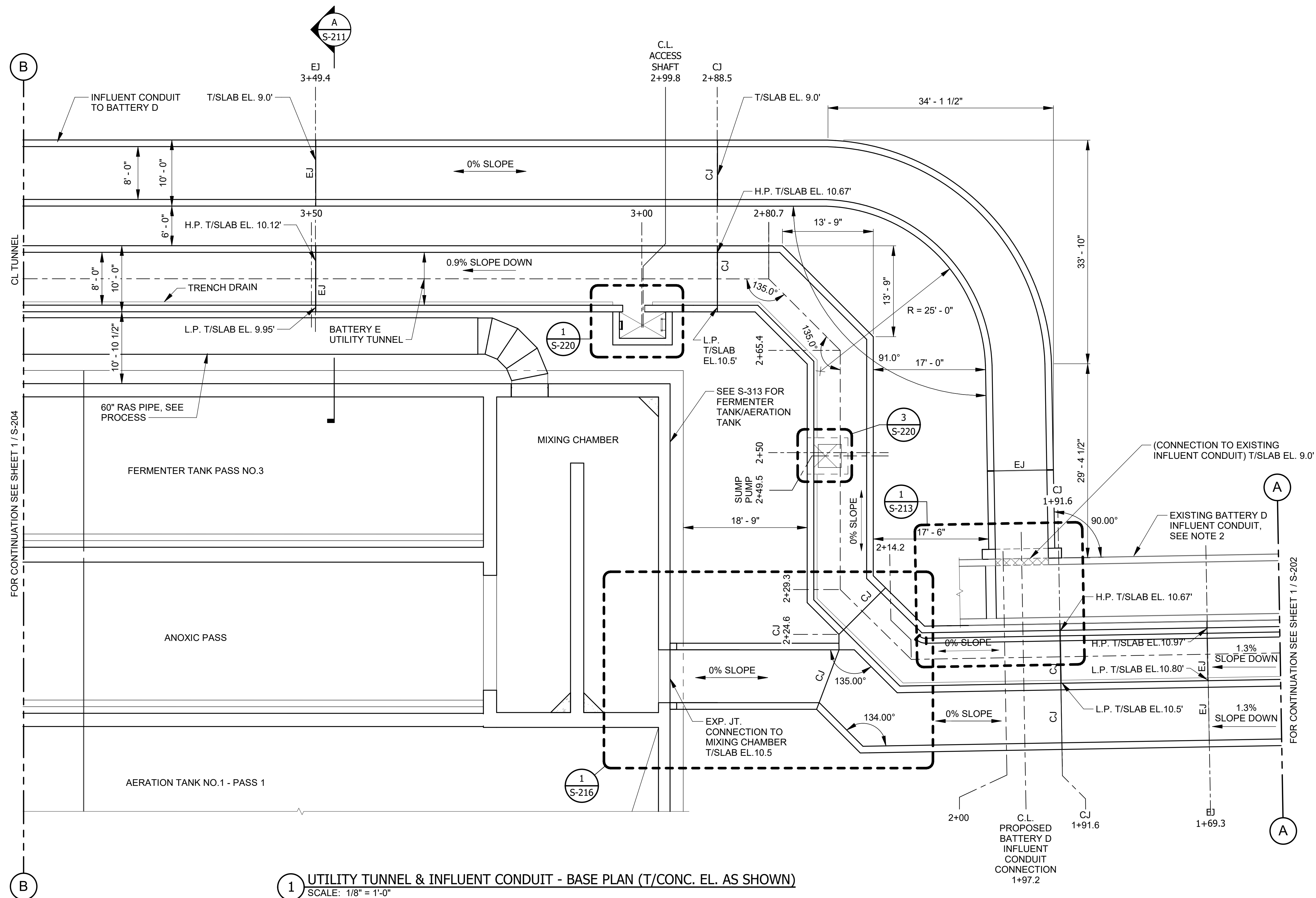


Designed by: JA	Checked by: JA	 PRUDENTIAL PLAZA ONE 130 E RANDOLPH STREET SUITE 2400 CHICAGO, IL 60601, USA
Drawn by: MM	Reviewed by: AG	
Date: 7/1/2025	Scale: 1/8" = 1'-0"	

BASE PLAN

Sheet Number: **S-202**

Page Number: **85**

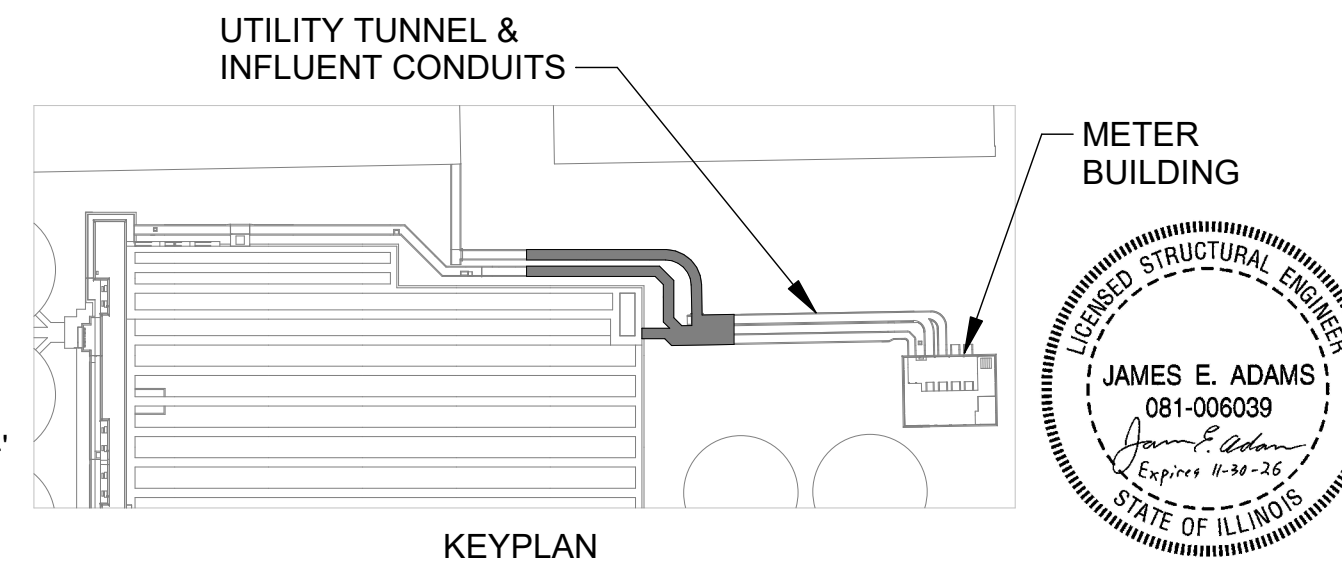


LEGEND:

	NEW OR EXISTING BACKGROUND
	EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
	NEW WORK
	REMOVAL WORK

NOTES:

1. STATIONING MEASURED ALONG CENTERLINE OF UTILITY TUNNEL.
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4. MAXIMUM SPACING BETWEEN CONSTRUCTION JOINTS, AND BETWEEN CONSTRUCTION JOINTS AND EXPANSION JOINTS SHALL BE 60'-0". JOINTS SHALL BE CONTINUOUS FROM BASE SLAB TO WALLS AND ROOFS. PROVIDE CONTINUOUS WATERSTOPS AT VERTICAL CONSTRUCTION JOINTS. REFER TO DETAIL 6/S004, TYP. C2 JOINT.
5. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, I.E. EARTH RETENTION SYSTEM (ERS) AS NEEDED, SEE NOTE 5 SHEET S-202.
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**METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO**

Checked by:

JA

Reviewed by:

AG

Scale: 1/8" = 1' 0"

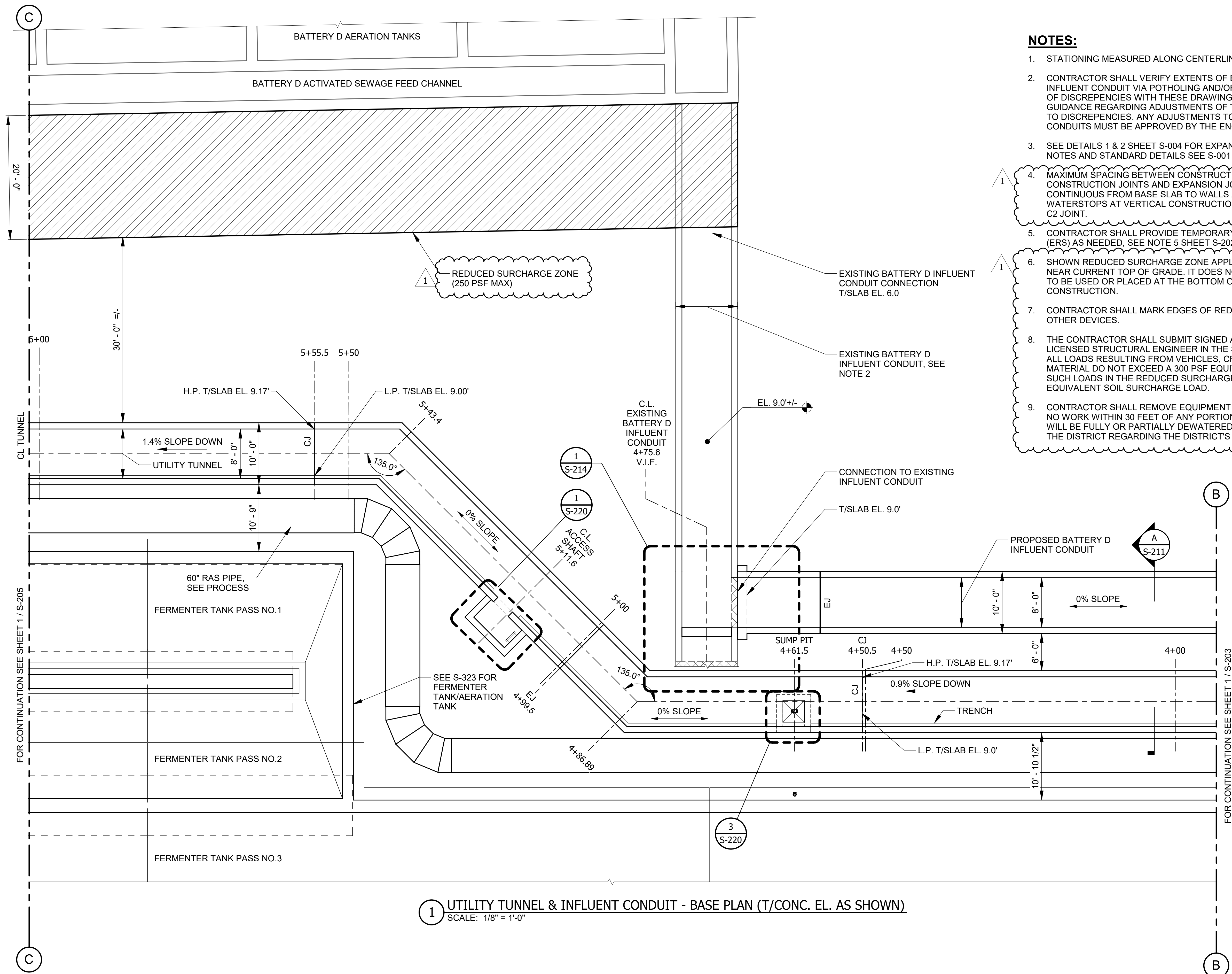
BATTERY E ACTIVATED SLUDGE FACILITY
UTILITY TUNNEL & INFLUENT CONDUITS

BASE PLAN

Sheet Number:

S-203

Page Number: 86



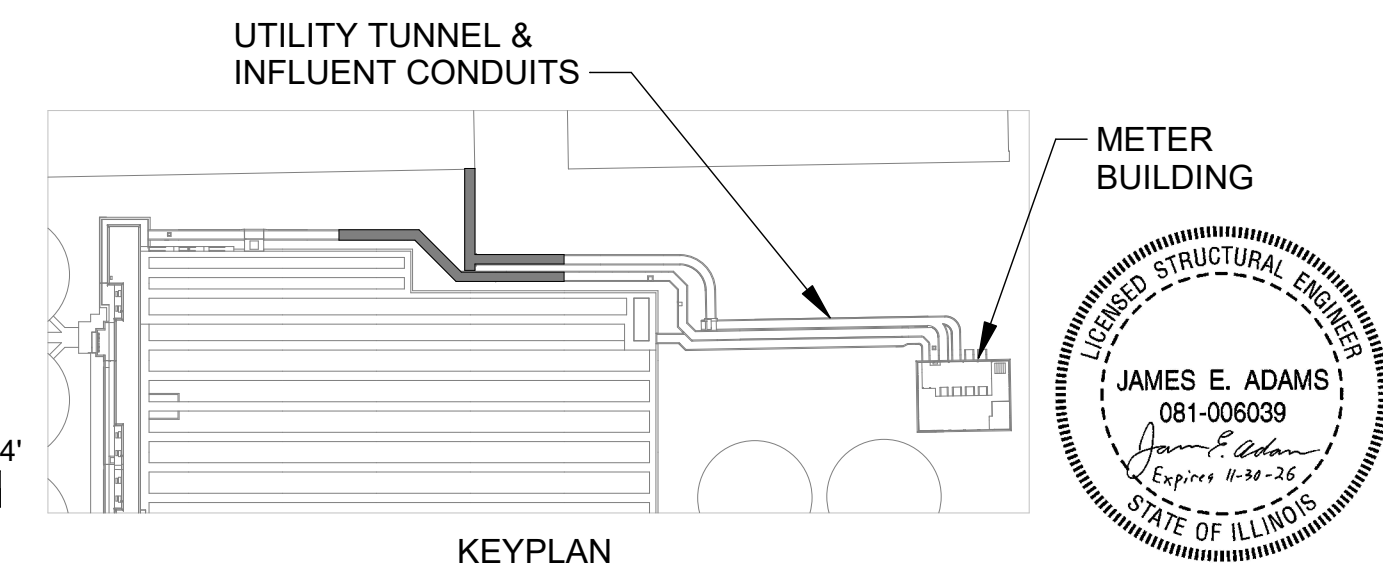
LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK
- REMOVAL WORK
- REDUCED SURCHARGE ZONE

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1 UTILITY TUNNEL & INFLUENT CONDUIT - BASE PLAN (T/CONC. EL. AS SHOWN)
SCALE: 1/8" = 1'-0"



METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

Designed by: JA
Checked by: JA
Drawn by: MM
Reviewed by: AG
Date: 7/1/2025
Scale: 1/8" = 1'-0"

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
UTILITY TUNNEL & INFLUENT CONDUITS

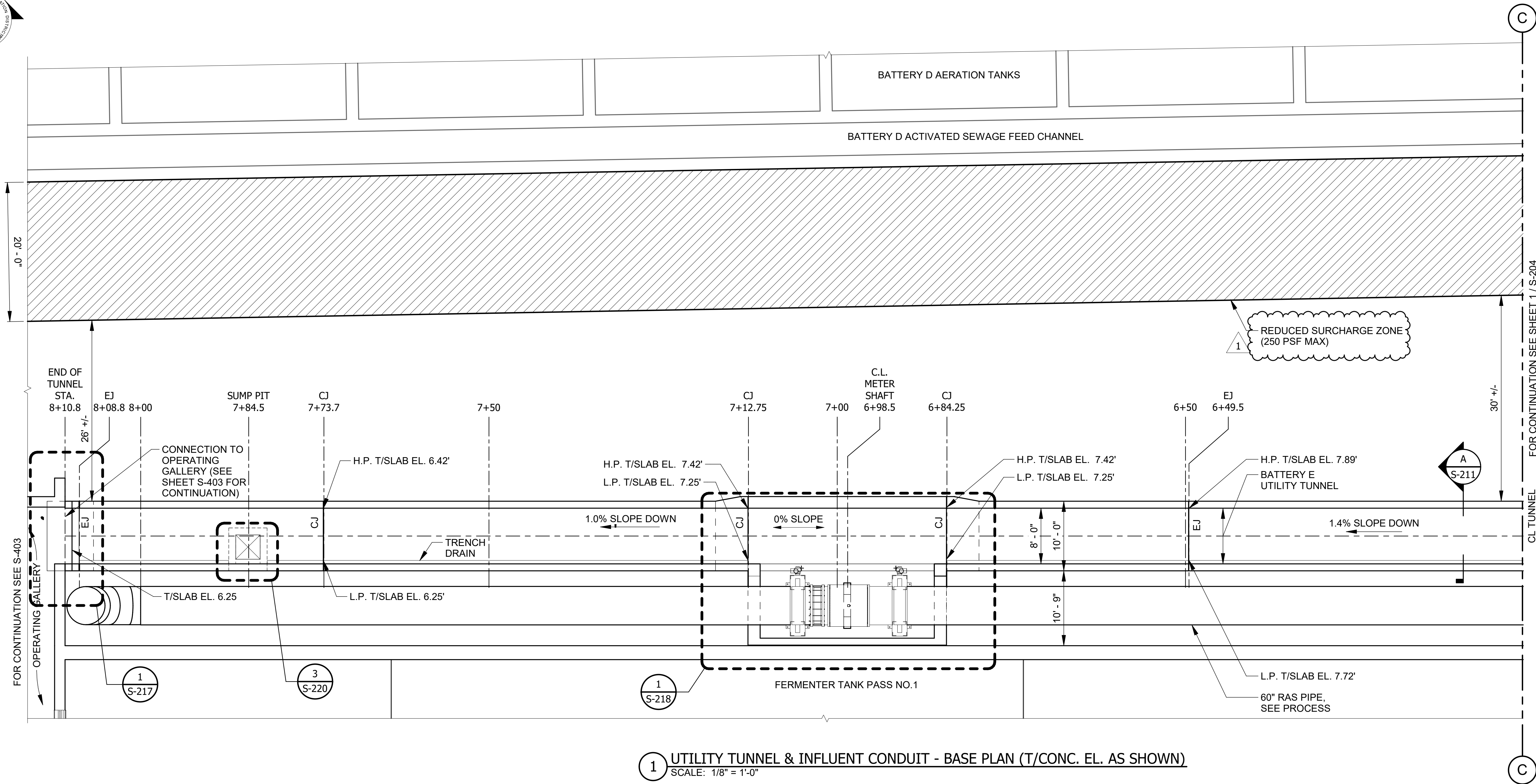
BASE PLAN

Sheet Number:

S-204

Page Number: 87

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	GD	10/27/25



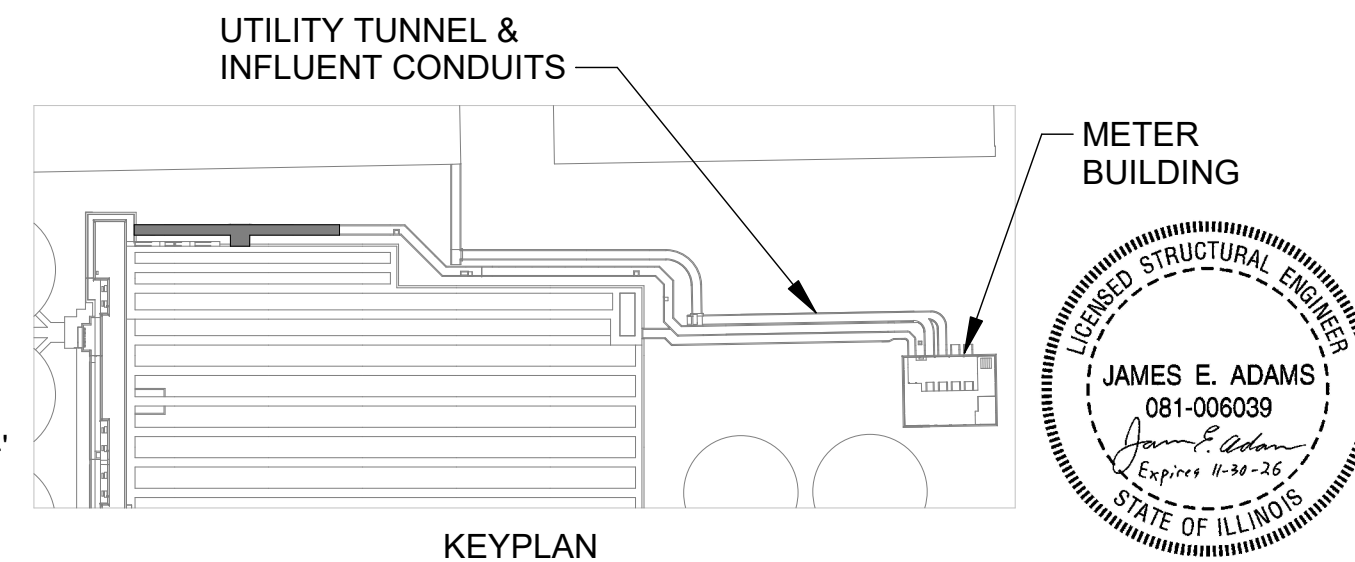
1 UTILITY TUNNEL & INFLUENT CONDUIT - BASE PLAN (T/CONC. EL. AS SHOWN)
SCALE: 1/8" = 1'-0"

NOTES:

- STATIONING MEASURED ALONG CENTERLINE OF UTILITY TUNNEL.
- SEE DETAILS 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURAL NOTES AND STANDARD DETAILS SEE S-001 THROUGH S-010.
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- SHOWN REDUCED SURCHARGE ZONE APPLIES TO EQUIPMENT AND MATERIALS AT OR NEAR CURRENT TOP OF GRADE. IT DOES NOT APPLY TO EQUIPMENT OR MATERIALS TO BE USED OR PLACED AT THE BOTTOM OF THE EXCAVATION FOR NEW CONSTRUCTION.
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LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK
- REMOVAL WORK
- REDUCED SURCHARGE ZONE



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Checked by:
JA

Designed by:
JA

Reviewed by:
AG

Drawn by:
MM

Date:
7/1/2025

Scale:
1/8" = 1'-0"

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
UTILITY TUNNEL & INFLUENT CONDUITS

BASE PLAN

Sheet Number:

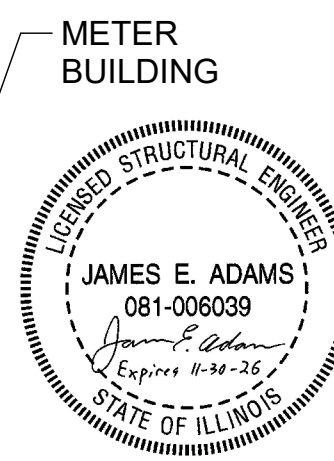
S-205

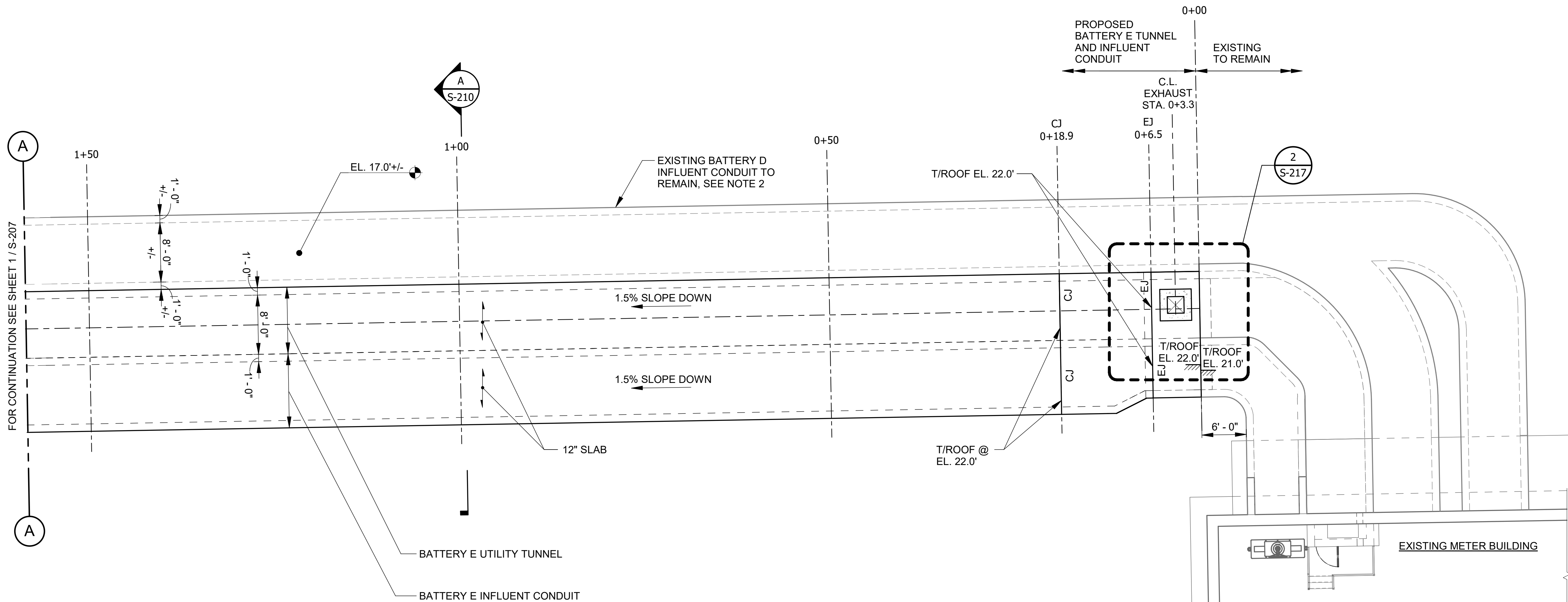
Page Number:

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Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	GD	10/27/25

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA





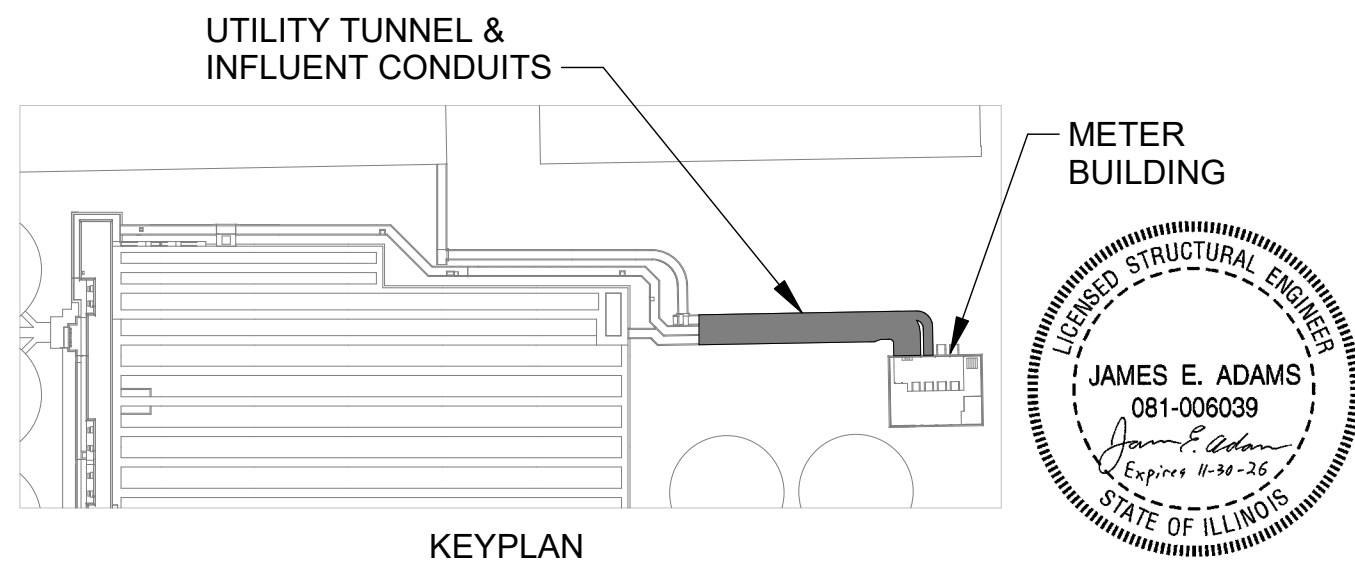
1 UTILITY TUNNEL & INFLUENT CONDUIT - TOP PLAN (T/CONC. EL. AS SHOWN)
SCALE: 1/8" = 1'-0"

NOTES:

1. STATIONING MEASURED ALONG CENTERLINE OF UTILITY TUNNEL.
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LEGEND:

- NEW OR EXISTING BACKGROUND
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- REMOVAL WORK



METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

Designed by: JA
Checked by: JA
Drawn by: MM
Reviewed by: AG
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Scale: 1/8" = 1'-0"

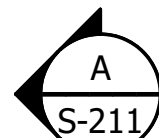
CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
UTILITY TUNNEL & INFLUENT CONDUITS

TOP PLAN

Sheet Number:

S-206

Page Number: 89



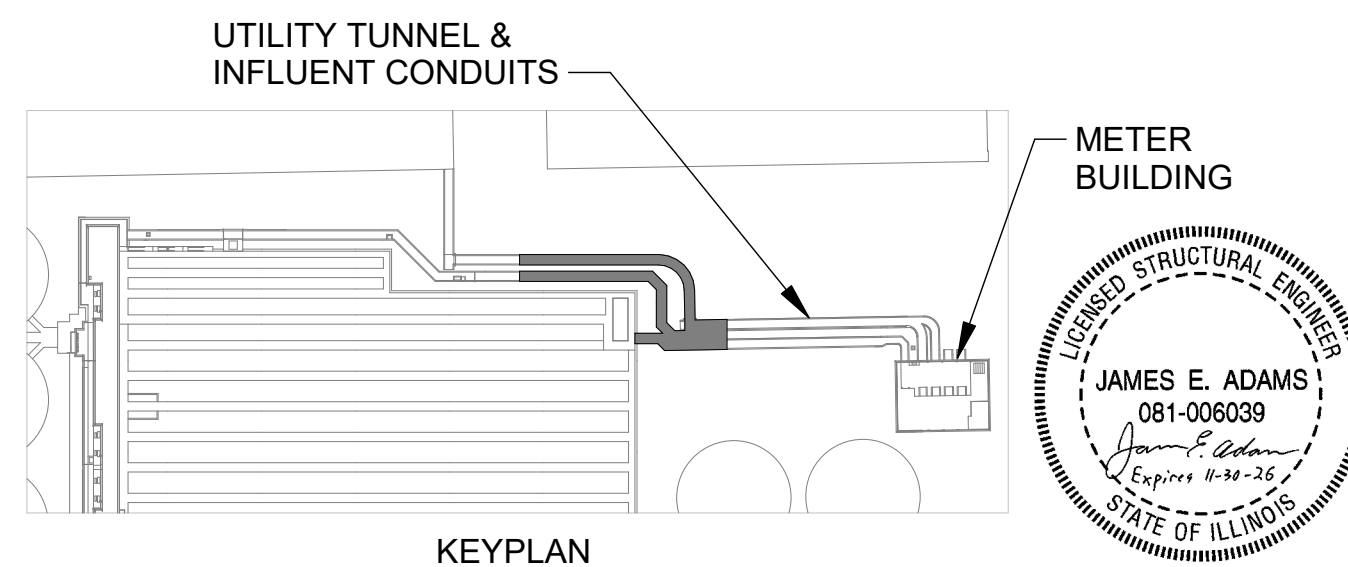
NEW OR EXISTING BACKGROUND

EXISTING WORK TO REMAIN (OR NEW
WORK FURNISHED AND INSTALLED
UNDER OTHER CONTRACT ITEMS)

NEW WORK

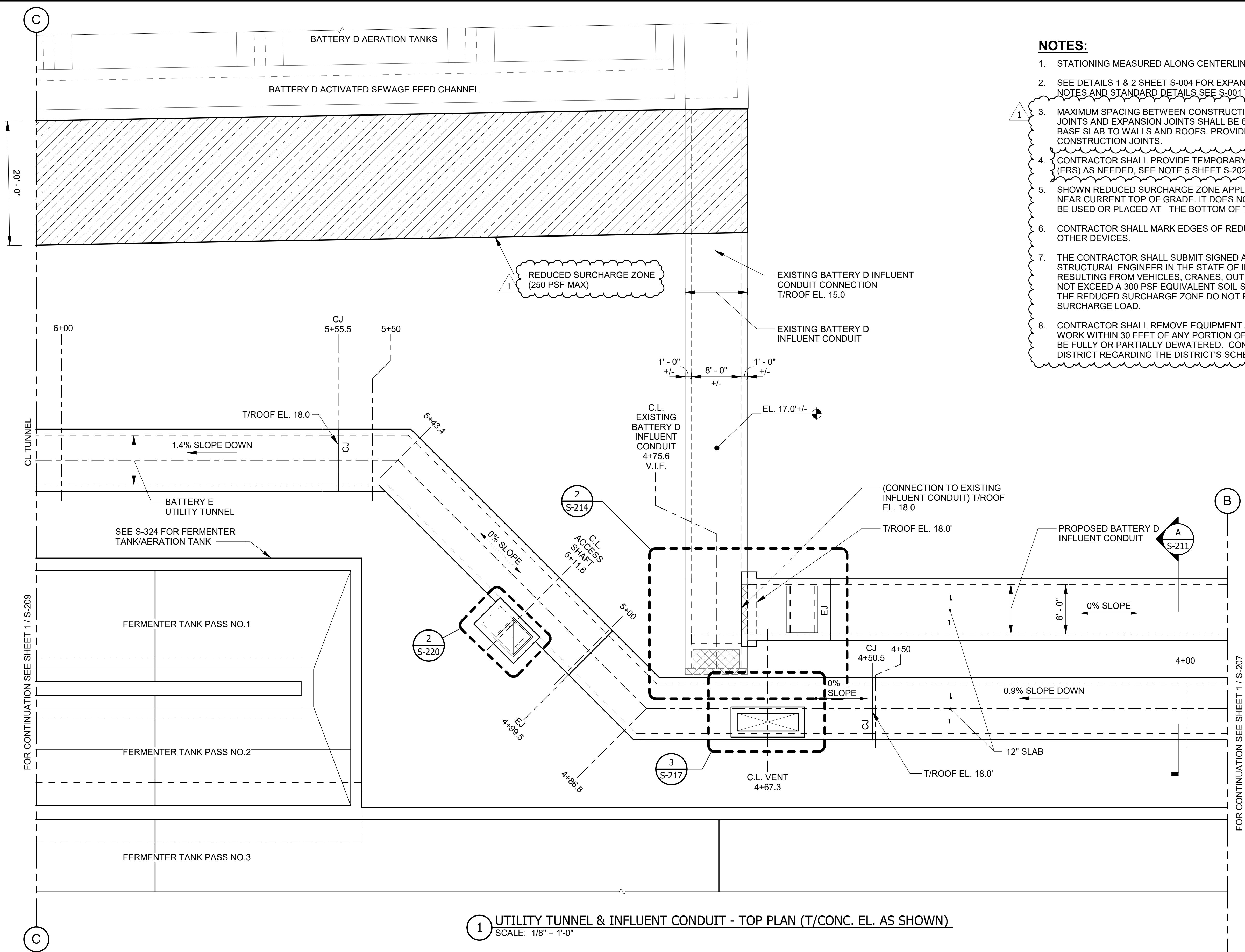
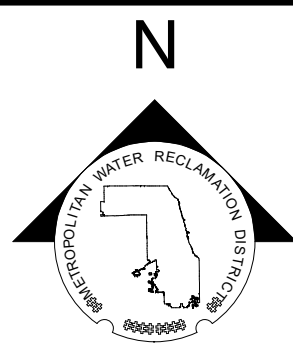
REMOVAL WORK

1. STATIONING MEASURED ALONG CENTERLINE OF UTILITY TUNNEL.
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Sheet Number:
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Page Number: 90

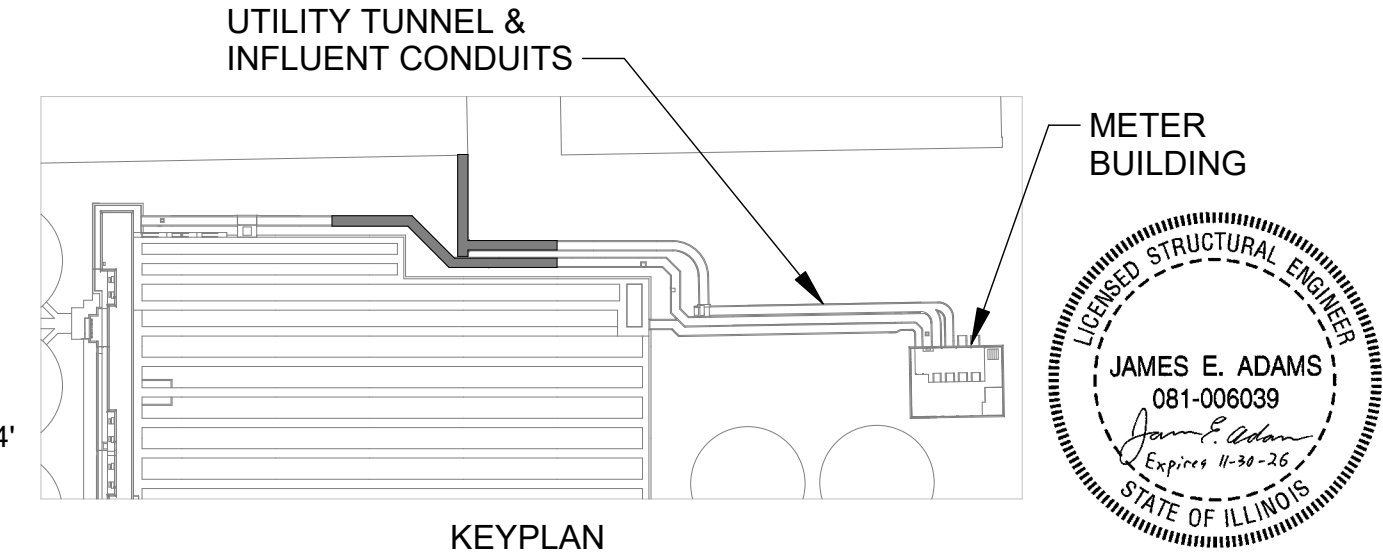
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LEGEND:

- NEW OR EXISTING BACKGROUND
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- NOTES:**
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**METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO**

DESIGNED BY: JA
DRAWN BY: MM
DATE: 7/1/2025

CHECKED BY: JA
REVIEWED BY: AG
SCALE: 1/8" = 1'-0"

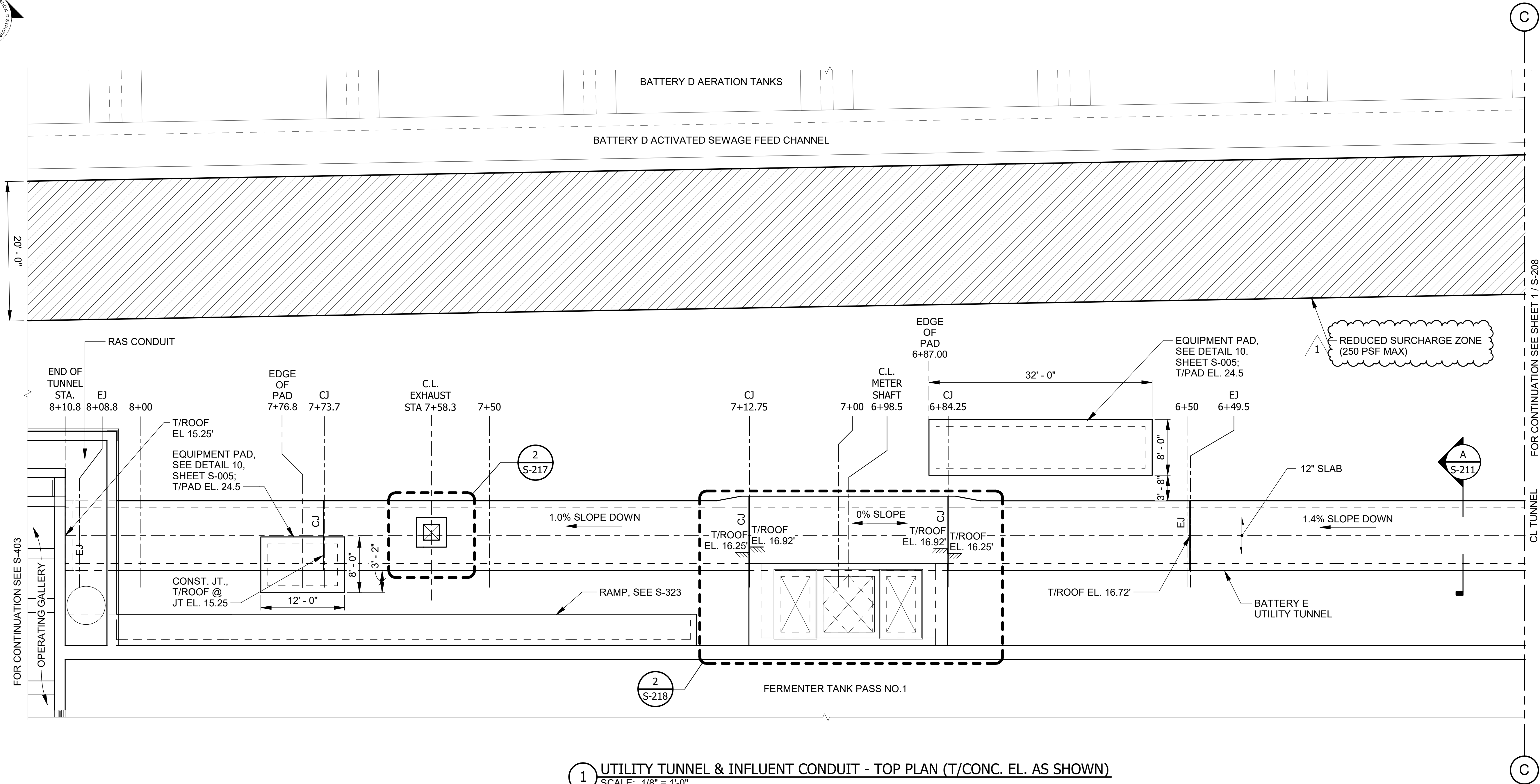
**CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
UTILITY TUNNEL & INFLUENT CONDUITS**

TOP PLAN

Sheet Number:
S-208

Page Number: 91

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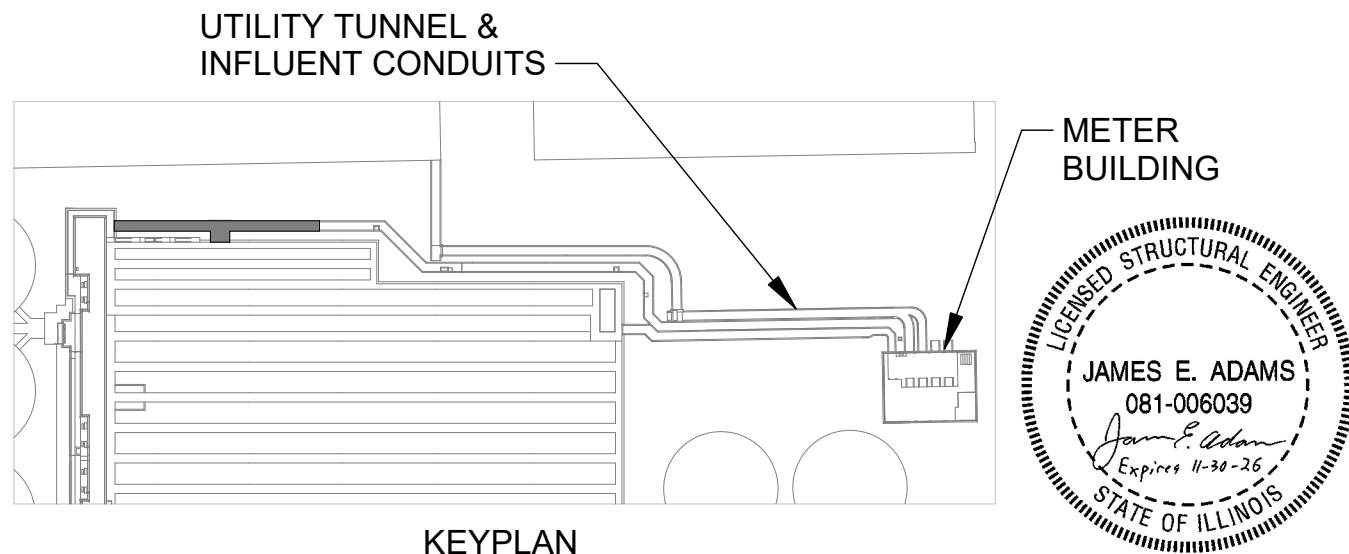
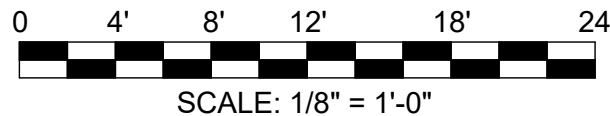


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METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by: JA
Checked by: JA
Drawn by: MM
Reviewed by: AG
Date: 7/1/2025
Scale: 1/8" = 1'-0"

PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

AECOM

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
UTILITY TUNNEL & INFLUENT CONDUITS

TOP PLAN

Sheet Number:

S-209

Page Number: 92

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	GD	10/27/25

STRUCTURAL PIPE SUPPORT NOTES (CONT):

6. WHERE PIPE SUPPORTS ARE ANCHORED TO EXISTING CONCRETE, MASONRY, STEEL, ETC. SECTIONS CUTS SHOWING EXISTING CONDITIONS SUCH AS CONCRETE THICKNESS, CONCRETE REINFORCING STEEL, MASONRY WYTHES, STEEL SHAPES, ETC. SHALL BE PROVIDED. SEE ADHESIVE ANCHOR NOTES (SHEET S-002) FOR POST-INSTALLED ANCHORS.
7. U.N.O. CONTRACTOR'S S.E. SHALL DESIGN PIPE SUPPORTS FOR THE GREATER OF DESIGN CODES INDICATED UNDER STRUCTURAL DESIGN CRITERIA ON SHEET S-001 OR AS INDICATED IN NOTE F BELOW.
8. U.N.O. CONTRACTOR'S S.E. TO DETERMINE PIPE SUPPORT DESIGN LOADS AND CONSIDER ALL GRAVITY LOADS, THERMAL LOADS, TRANSIENT LOADS, WIND LOADS, LATERAL DISPLACEMENT AND OTHER ANTICIPATED LOADS AS NECESSARY.
9. AT A MINIMUM DESIGN PIPE SUPPORTS TO RESIST LATERAL AND LONGITUDINAL LOADS EQUAL TO 10% OF TOTAL GRAVITY LOAD.
10. EVALUATE EXISTING/NEW STRUCTURES FOR PIPE SUPPORT LOADS.

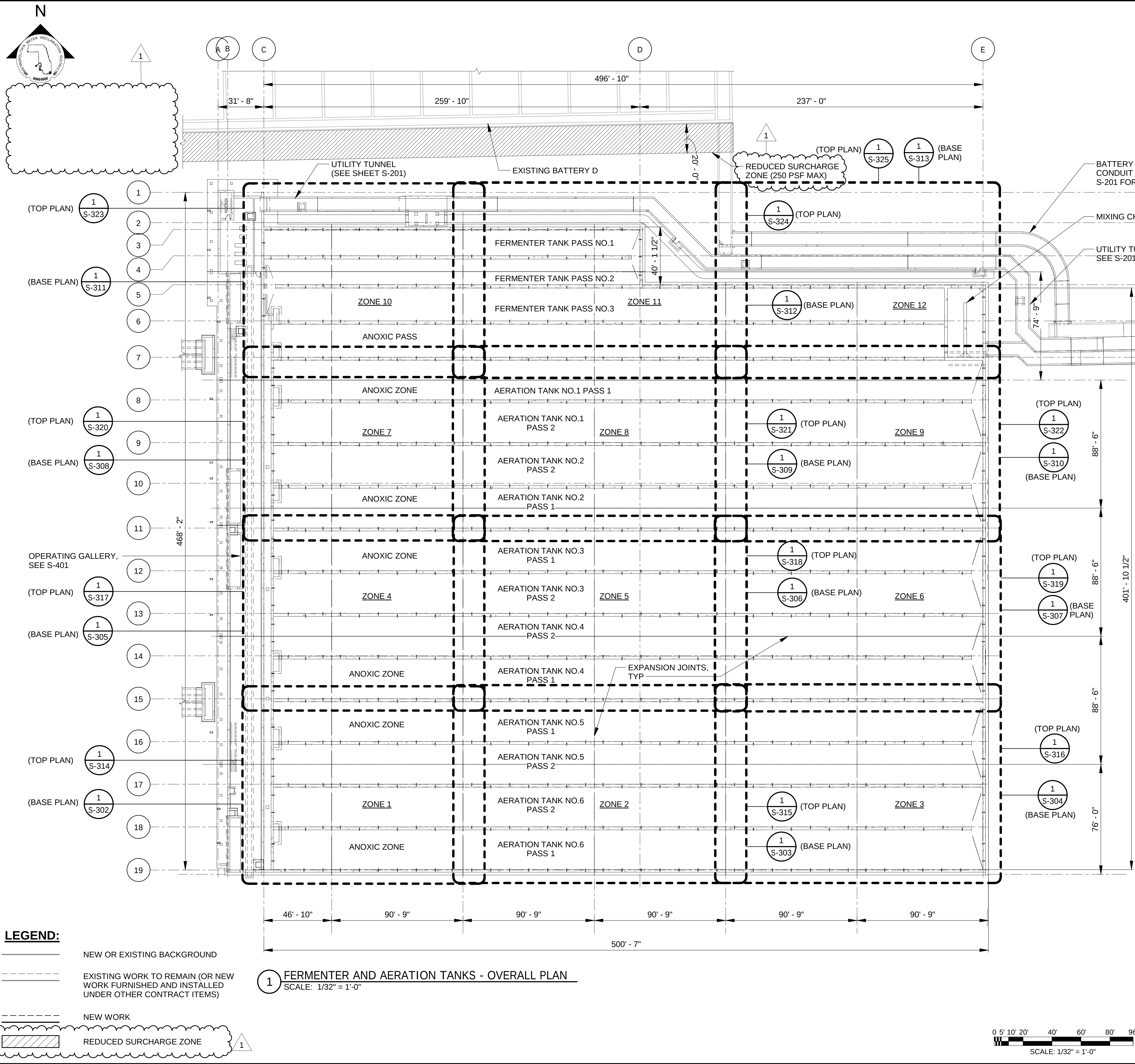


0 6" 1' 2' 3' 4' 5' 6'

SCALE: 1/2" = 1'-0"

-
- LICENSED STRUCTURAL ENGINEER
 JAMES E. ADAMS
 081-006039
James E. Adams
 Expires 4-30-26
 STATE OF ILLINOIS

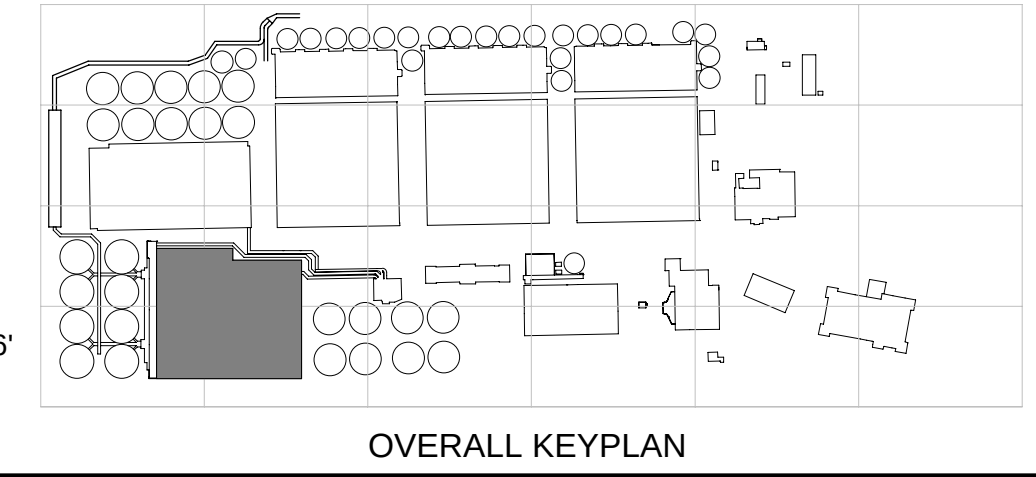
Sheet Number:
S-210
Page Number: **93**



LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK
- REDUCED SURCHARGE ZONE

- NOTES:**
- FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS SEE SHEETS S-001 TO S-010.
 - FOR LOADING DESIGN CRITERIA SEE SHEET S-001.
 - ALL CONSTRUCTION JOINTS IN SLAB AND WALL OF AERATION TANKS TO BE TYPE C2 PER DETAIL 6/S-004.
 - THE CONTRACTOR SHALL ENGAGE A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ILLINOIS TO DESIGN THE TEMPORARY EARTH RETENTION SYSTEM (ERS) TO PREVENT ROTATION, DISPLACEMENT, AND UNDERMINING OF EXISTING STRUCTURES, UTILITIES, ETC. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED CALCULATIONS AND DRAWINGS OF ERS FOR REVIEW AND APPROVAL BY THE DISTRICT. ERS PROVIDED SHALL USE SOLDIER PILES OR OTHER ACCEPTABLE NON-DRIVEN/NON-VIBRATORY METHODS UNLESS OTHERWISE INDICATED. ERS SHALL BE IN PLACE PRIOR TO EXCAVATING.
 - THE CONTRACTOR SHALL SUBMIT SIGNED AND SEALED CALCULATIONS BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ILLINOIS DEMONSTRATING THAT ALL LOADS RESULTING FROM EQUIPMENT AND MATERIAL DO NOT EXCEED A 300 PSF EQUIVALENT SOIL SURCHARGE LOAD.
 - SEE CIVIL, PROCESS, MECHANICAL AND ELECTRICAL FOR UTILITIES TO BE MODIFIED. CONTRACTOR SHALL COORDINATE STRUCTURAL WORK WITH ALL OTHER WORK. ALL UTILITIES TO REMAIN IN SERVICE SHALL BE PROTECTED AND SUPPORTED DURING ALL PHASES OF WORK.



**METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO**

**CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
FERMENTER & AERATION TANKS**

OVERALL PLAN

Designed by: AS
Drawn by: MS
Date: 7/1/2025

Checked by: JB
Reviewed by: MF
Scale: 1/32" = 1'-0"

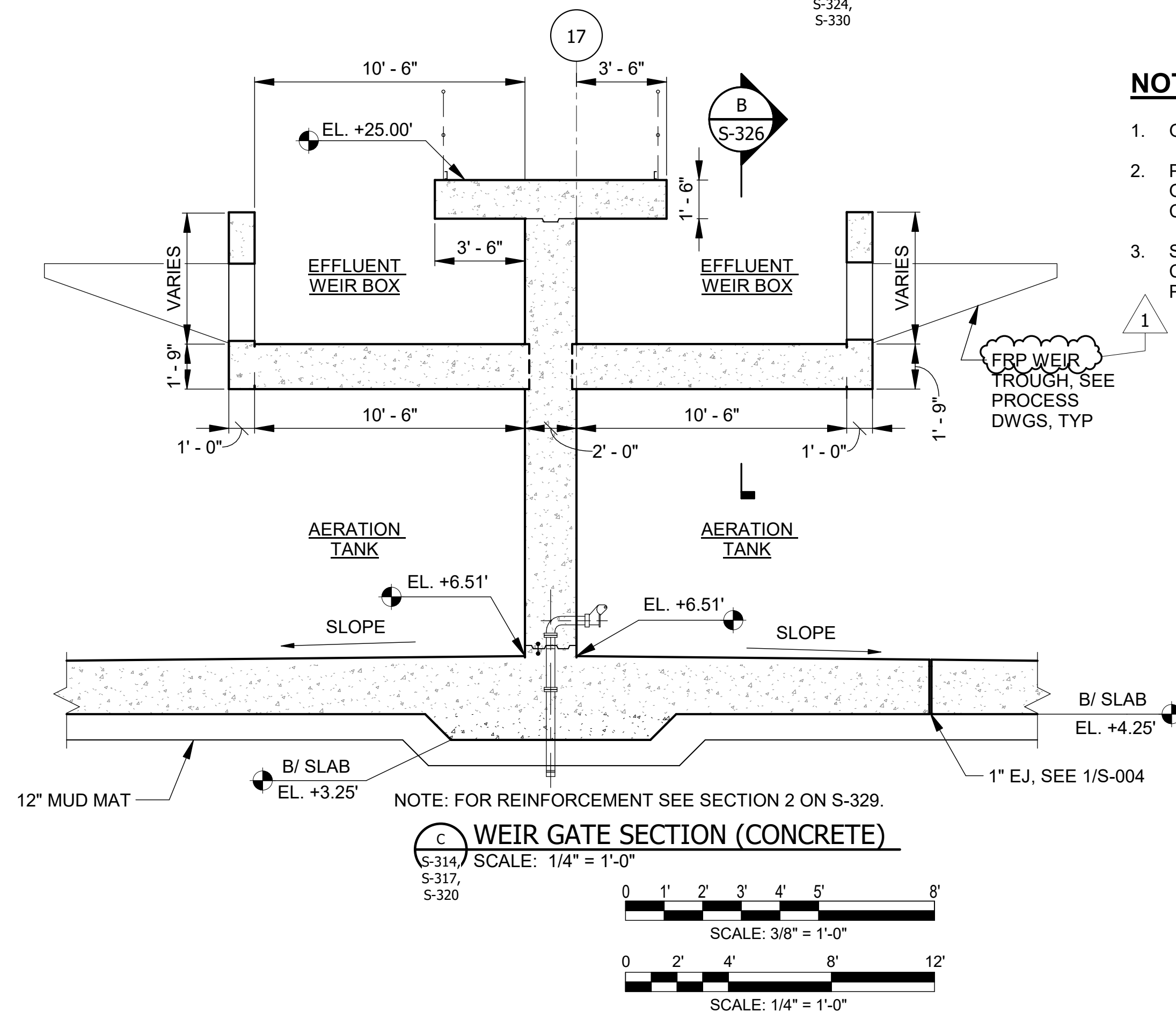
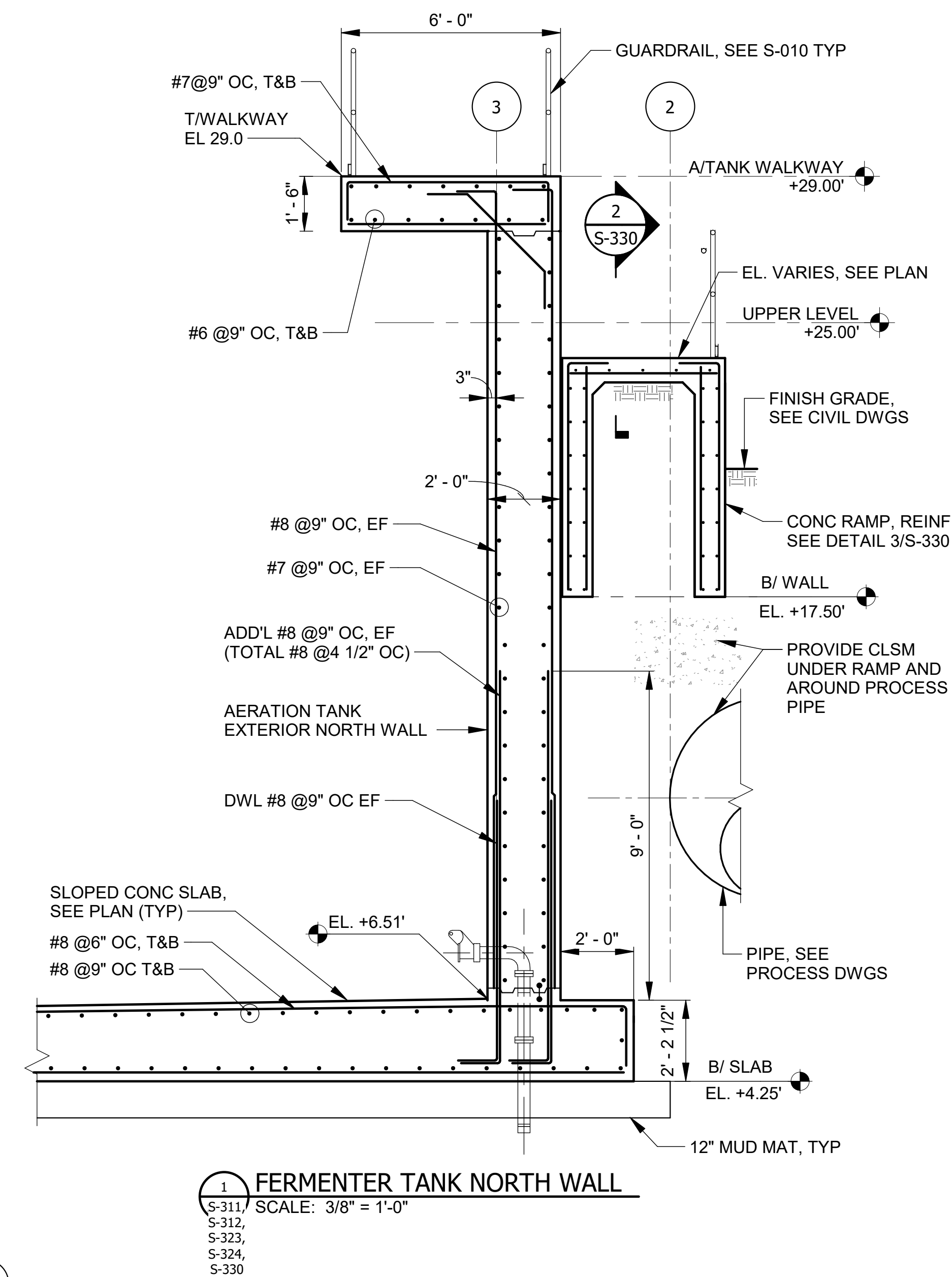
AECOM
Rubinos & Mesa
Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Rev. Description Appr. Date
1 ADDENDUM NO. 4 GD 10/27/25

Sheet Number:
S-301

Page Number: 106



- NOTES:**
1. GENERAL NOTE SEE SHEETS S-001 AND S-002.
 2. PROVIDE MINIMAL SLOPE (1/16" PER FOOT) OF TOP OF WALKWAY CONCRETE SLAB FOR DRAIN FROM CENTER TO EACH EDGE.
 3. STRUCTURAL BACKFILL TO BE CA-6, TYPE B, COMPACTED IN 8-INCH LIFTS TO 90%MODIFIED PROCTOR.

[illegible]

**METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO**

Designed by:	AS	Checked by:	JB
Drawn by:	MS	Reviewed by:	MF
Date:	7/1/2025	Scale:	As indicated

AECOM

PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

R M E

Rubinos & Mesia
Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
FERMENTER & AERATION TANKS

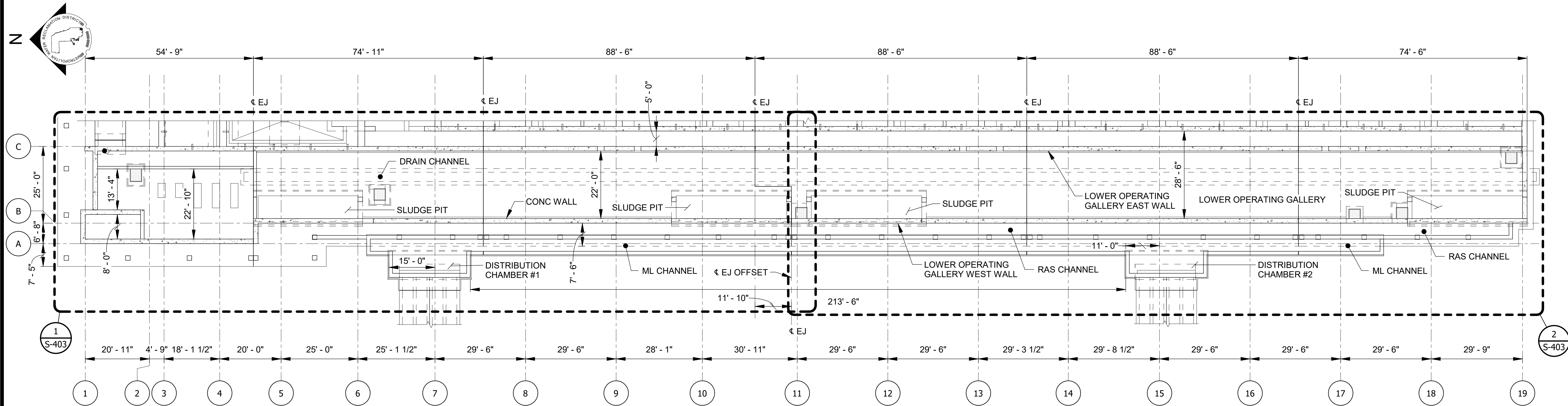
SECTIONS

Sheet Number:

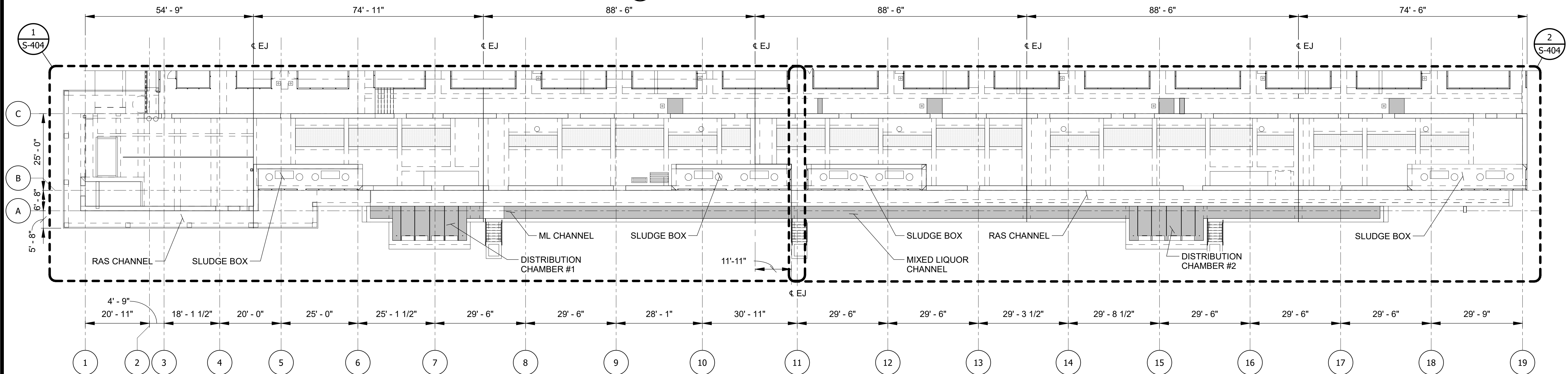
S-326

Page Number: 131





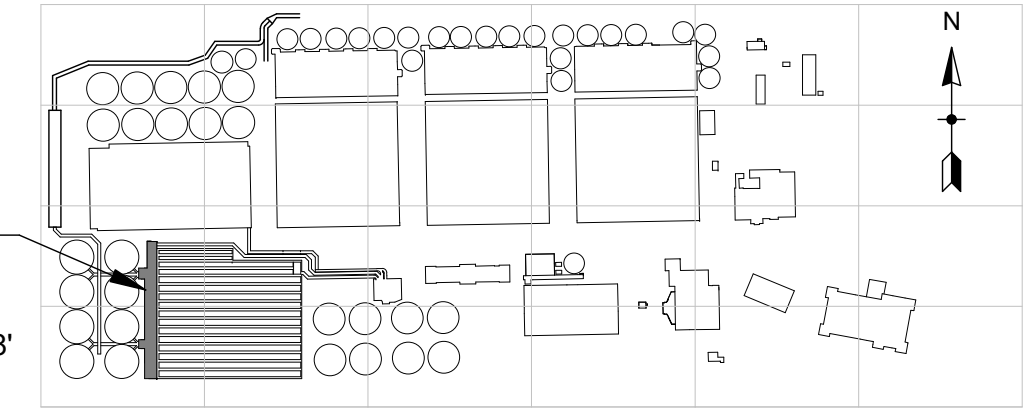
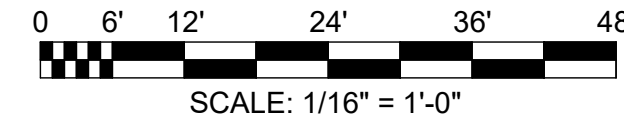
1 LOWER OPERATING GALLERY - OVERALL PLAN
SCALE: 1/16" = 1'-0"



2 UPPER OPERATING GALLERY - OVERALL PLAN
SCALE: 1/16" = 1'-0"

NOTES:

- SEE DETAIL 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURAL NOTES AND STANDARD DETAILS, SEE SHEETS S-001 THROUGH S-010.
- OG - OPERATING GALLERY.
- LOADING DESIGN CRITERIA SEE SHEET S-001.
- THE CONTRACTOR SHALL ENGAGE A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ILLINOIS TO DESIGN THE TEMPORARY EARTH RETENTION SYSTEM (ERS) TO PREVENT ROTATION, DISPLACEMENT, AND UNDERMINING OF EXISTING STRUCTURES, UTILITIES, ETC. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED CALCULATIONS AND DRAWINGS OF ERS FOR REVIEW AND APPROVAL BY THE DISTRICT. ERS PROVIDED SHALL USE SOLDIER PILES OR OTHER ACCEPTABLE NON-DRIVEN NON-VIBRATORY METHODS UNLESS OTHERWISE INDICATED. ERS SHALL BE IN PLACE PRIOR TO EXCAVATING.
 - THE CONTRACTOR SHALL ENGAGE A LICENSED GEOTECHNICAL ENGINEER TO PROVIDE ANY ADDITIONAL PARAMETERS OR RECOMMENDATIONS REQUIRED TO DESIGN ERS AT NO ADDITIONAL COST TO THE DISTRICT.
 - CONTRACTOR SHALL FIELD VERIFY AND LOCATE EXISTING BURIED UTILITIES, ELECTRICAL DUCT BANKS, ETC. VIA POT-HOLING PRIOR TO INSTALLATION OF ERS. ERS SHALL BE DESIGNED AND INSTALLED TO ACCOMMODATE EXISTING BURIED UTILITIES, DUCT BANKS, ETC. WITHIN AND ADJACENT TO EXCAVATED AREAS. UTILITIES TO REMAIN SHALL BE PROTECTED AND SUPPORTED DURING ALL PHASES OF WORK.
- THE CONTRACTOR SHALL SUBMIT SIGNED AND SEALED CALCULATIONS BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ILLINOIS DEMONSTRATING THAT ALL LOADS RESULTING FROM EQUIPMENT AND MATERIAL DO NOT EXCEED A 300 PSF EQUIVALENT SOIL SURCHARGE LOAD.



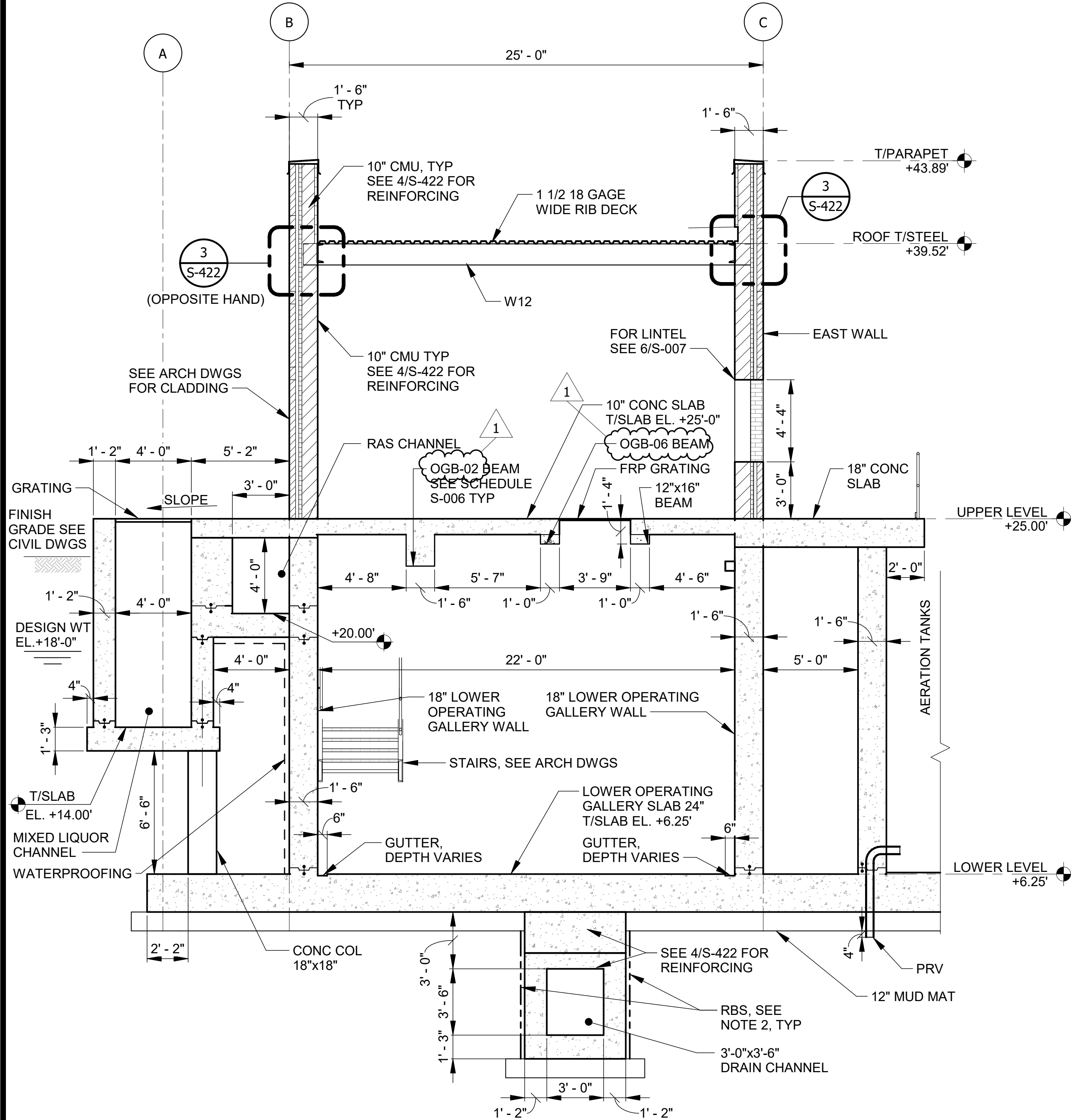
METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
OPERATING GALLERY
LOWER AND UPPER OPERATING GALLERY
OVERALL PLANS

Sheet Number:
S-401
Page Number: 140

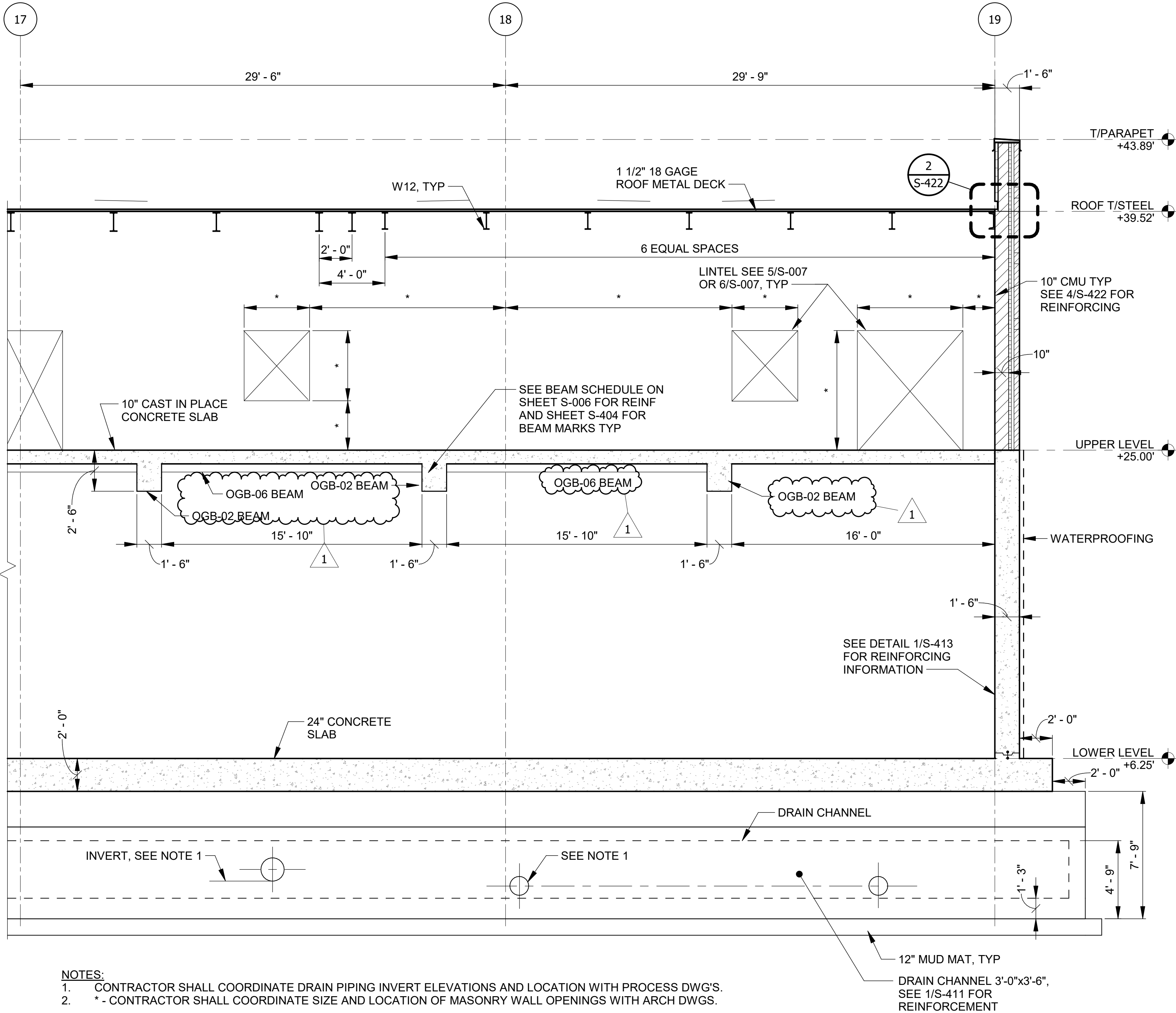
Designed by: JB	Checked by: AS	 PRUDENTIAL PLAZA ONE 130 E RANDOLPH STREET SUITE 2400 CHICAGO, IL 60601, USA	 Rubinos & Mesa Engineers, Inc. 200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482
Drawn by: DA	Reviewed by: MF		
Date: 7/1/2025	Scale: 1/16" = 1'-0"		

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	GD	10/27/25



NOTE:
1. SEE DETAIL 1/S-411 FOR REINFORCING INFORMATION.

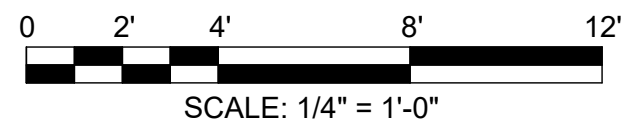
1 SECTION (LOOKING NORTH)
SCALE: 1/4" = 1'-0"



NOTES:
1. CONTRACTOR SHALL COORDINATE DRAIN PIPING INVERT ELEVATIONS AND LOCATION WITH PROCESS DWG'S.
2. * - CONTRACTOR SHALL COORDINATE SIZE AND LOCATION OF MASONRY WALL OPENINGS WITH ARCH DWGS.

2 OPERATING GALLERY - BUILDING SECTION
SCALE: 1/4" = 1'-0"

NOTES:
1. GENERAL NOTES SEE SHEETS S-001 AND S-002.
2. SOIL STRENGTH IS MINIMUM. THE CONTRACTOR TO DESIGN THE RIGID BRACING SYSTEM (RBS) TO SUPPORT THE SOIL DURING CONSTRUCTION.
3. ANY DISTURBED AREAS OF IN-SITU SOIL SHALL BE REPLACED WITH STRUCTURAL BACKFILL. STRUCTURAL BACKFILL TO BE CA-6, TYPE B, COMPACTED IN 8" LIFTS TO 90% MODIFIED PROCTOR.



METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
OPERATING GALLERY

Designed by:	Checked by:
JB	AS
Drawn by:	Reviewed by:
DA	MF
Date:	Scale:
7/1/2025	1/4" = 1'-0"

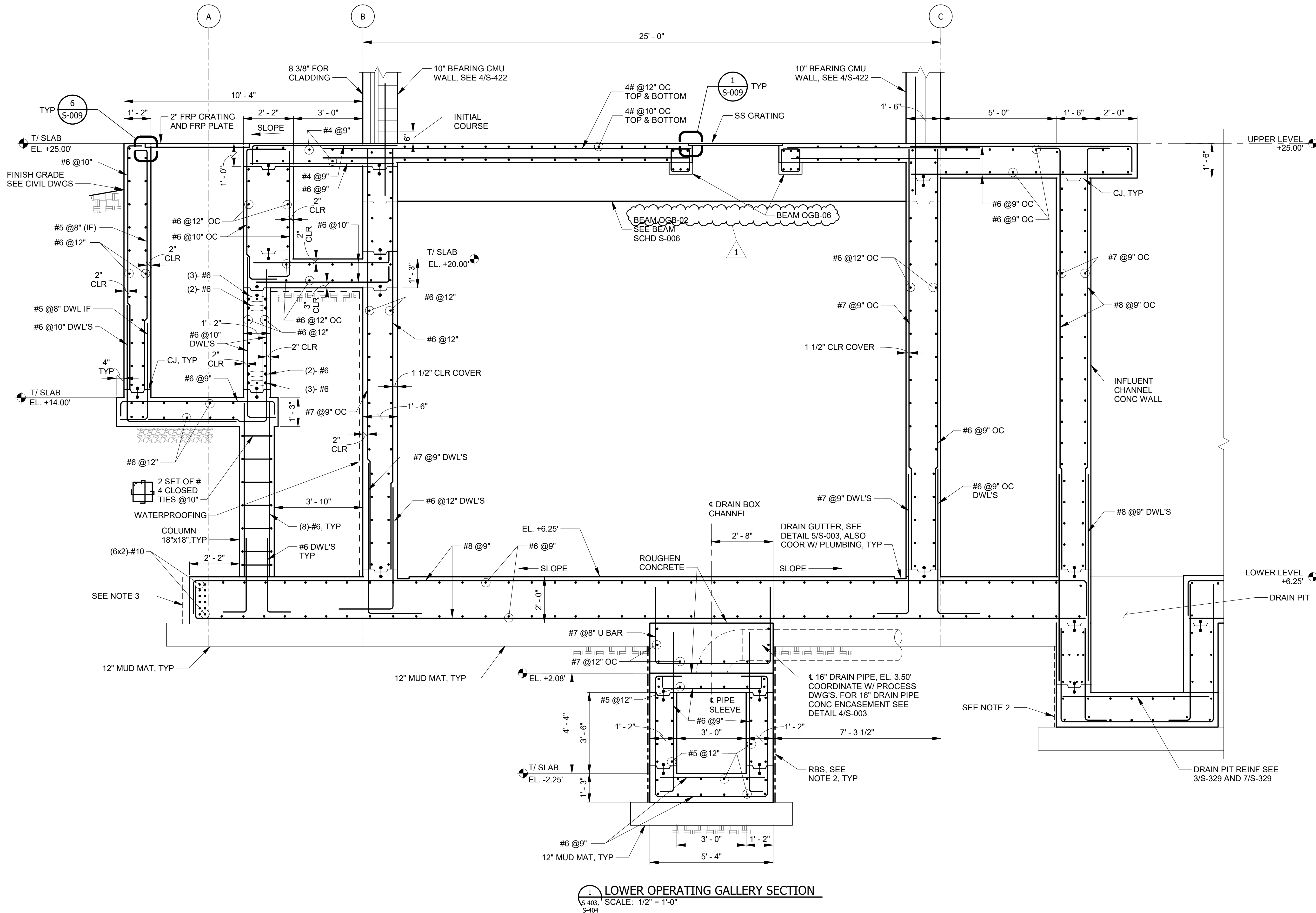
AECOM
Rubinos & Mesa Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	GD	10/27/25

Sheet Number:

S-410

Page Number: 149



1 LOWER OPERATING GALLERY SECTION
S-403, SCALE: 1/2" = 1'-0"
S-404

NOTES:

- GENERAL NOTES SEE SHEETS S-001 AND S-002.
- SOIL STRENGTH IS MINIMUM. THE CONTRACTOR TO DESIGN THE RIGID BRACING SYSTEM (RBS) TO SUPPORT THE SOIL DURING CONSTRUCTION.
- ANY DISTURBED AREAS OF IN-SITU SOIL SHALL BE REPLACED WITH STRUCTURAL BACKFILL. STRUCTURAL BACKFILL TO BE CA-6, TYPE B, COMPACTED IN 8" LIFTS TO 90% MODIFIED PROCTOR.



**METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO**

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
OPERATING GALLERY

Sheet Number:

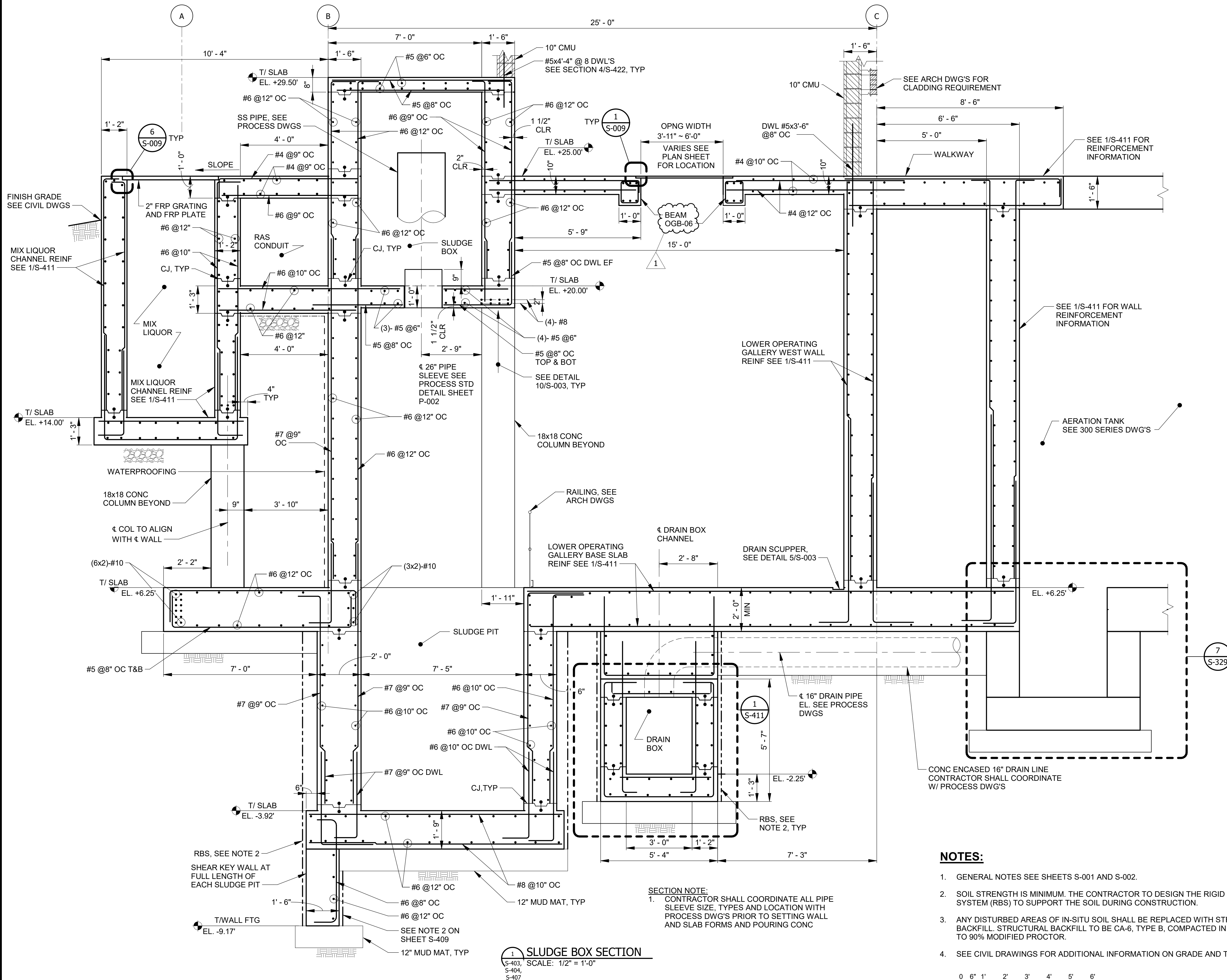
S-411

Page Number: 150

AECOM
Rubinos & Mesa
Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by:	Checked by:
JB	AS
Drawn by:	Reviewed by:
DA	MF
Date:	Scale:
7/1/2025	1/2" = 1'-0"

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	GD	10/27/25

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**METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO**

AECOM

RUBINOS &
MESTA
ENGINEERS, INC.

200 S. MICHIGAN AVENUE, SUITE 1900, CHICAGO, IL 60604-2482

PRUDENTIAL PLAZA ONE
130 E. RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by:	JB	Checked by:	AS
Drawn by:	DA	Reviewed by:	MF
Date:	7/11/2025	Scale:	1/2" = 1'-0"

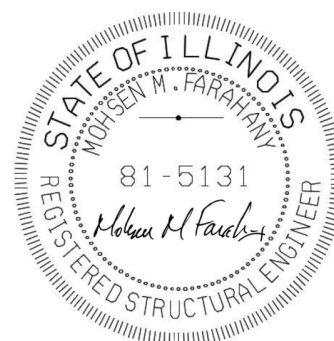
CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
OPERATING GALLERY

SECTIONS

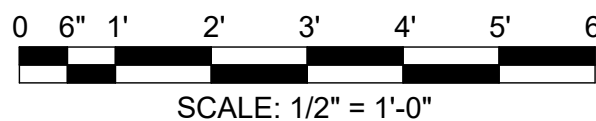
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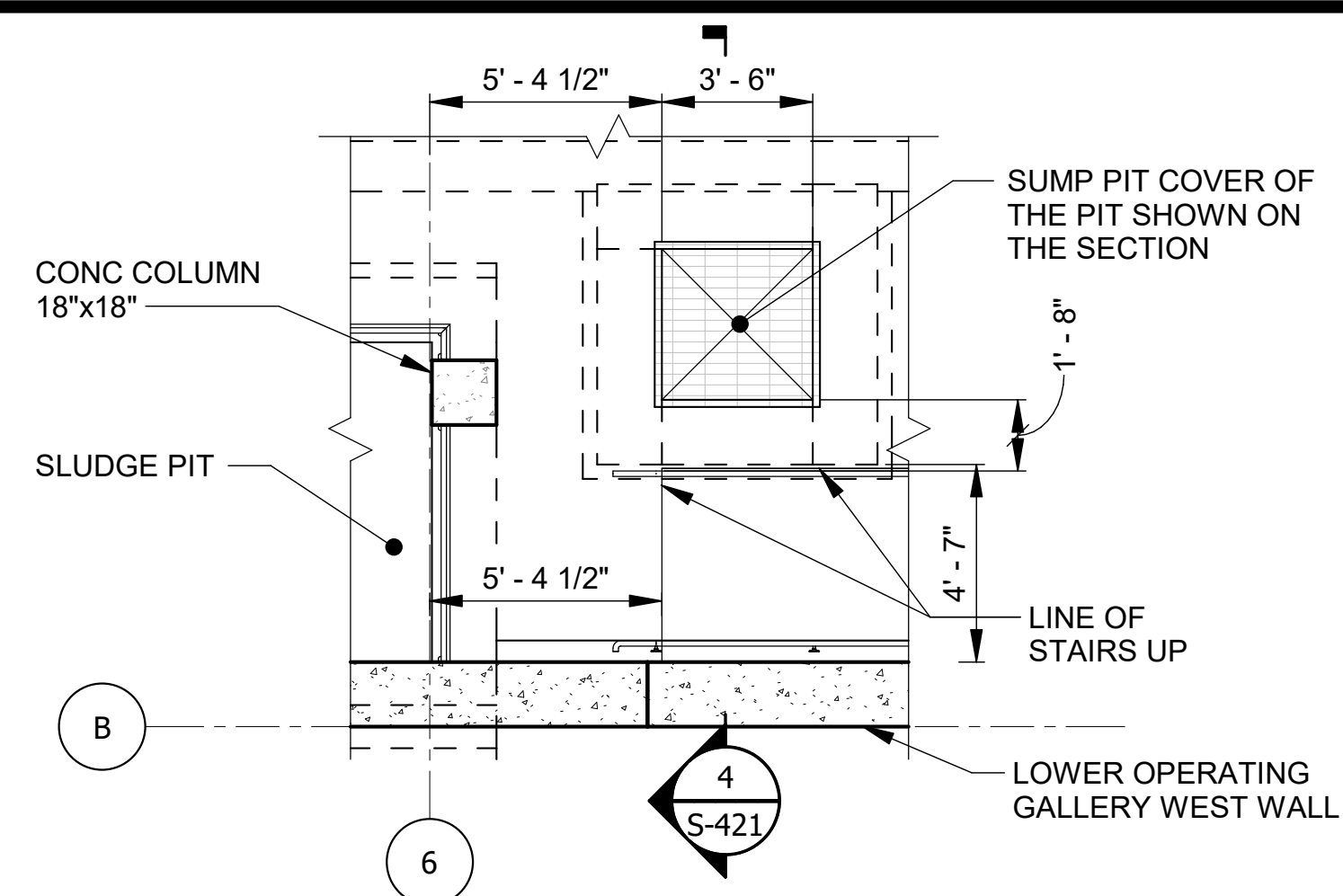
S-415

Page Number: 154



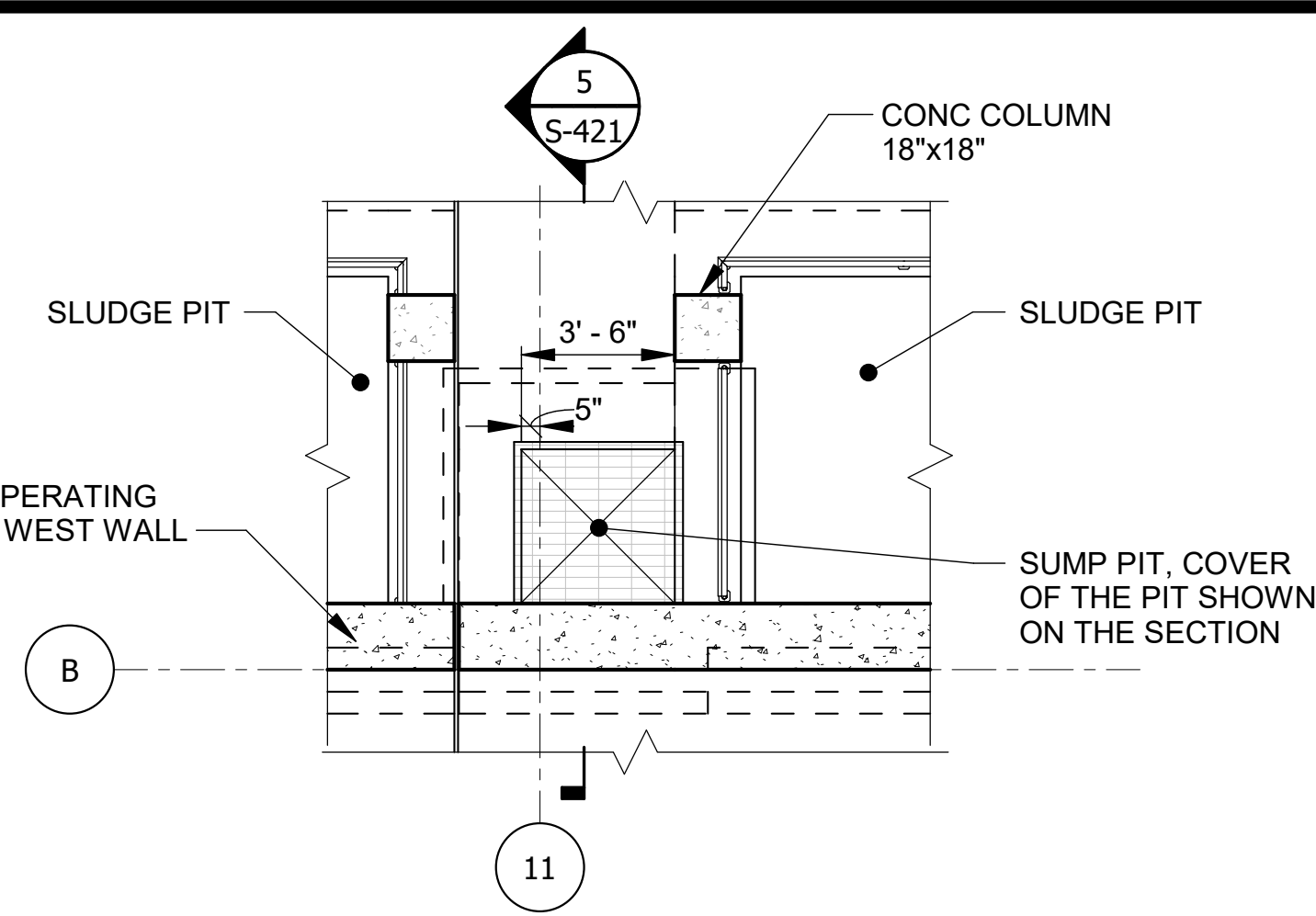
- NOTES:**
1. GENERAL NOTES SEE SHEETS S-001 AND S-002.
 2. SOIL STRENGTH IS MINIMUM. THE CONTRACTOR TO DESIGN THE RIGID BRACING SYSTEM (RBS) TO SUPPORT THE SOIL DURING CONSTRUCTION.
 3. ANY DISTURBED AREAS OF IN-SITU SOIL SHALL BE REPLACED WITH STRUCTURAL BACKFILL. STRUCTURAL BACKFILL TO BE CA-6, TYPE B, COMPACTED IN 8-INCH LIFTS TO 90% MODIFIED PROCTOR.
 4. SEE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION ON GRADE AND TOP OF CURB





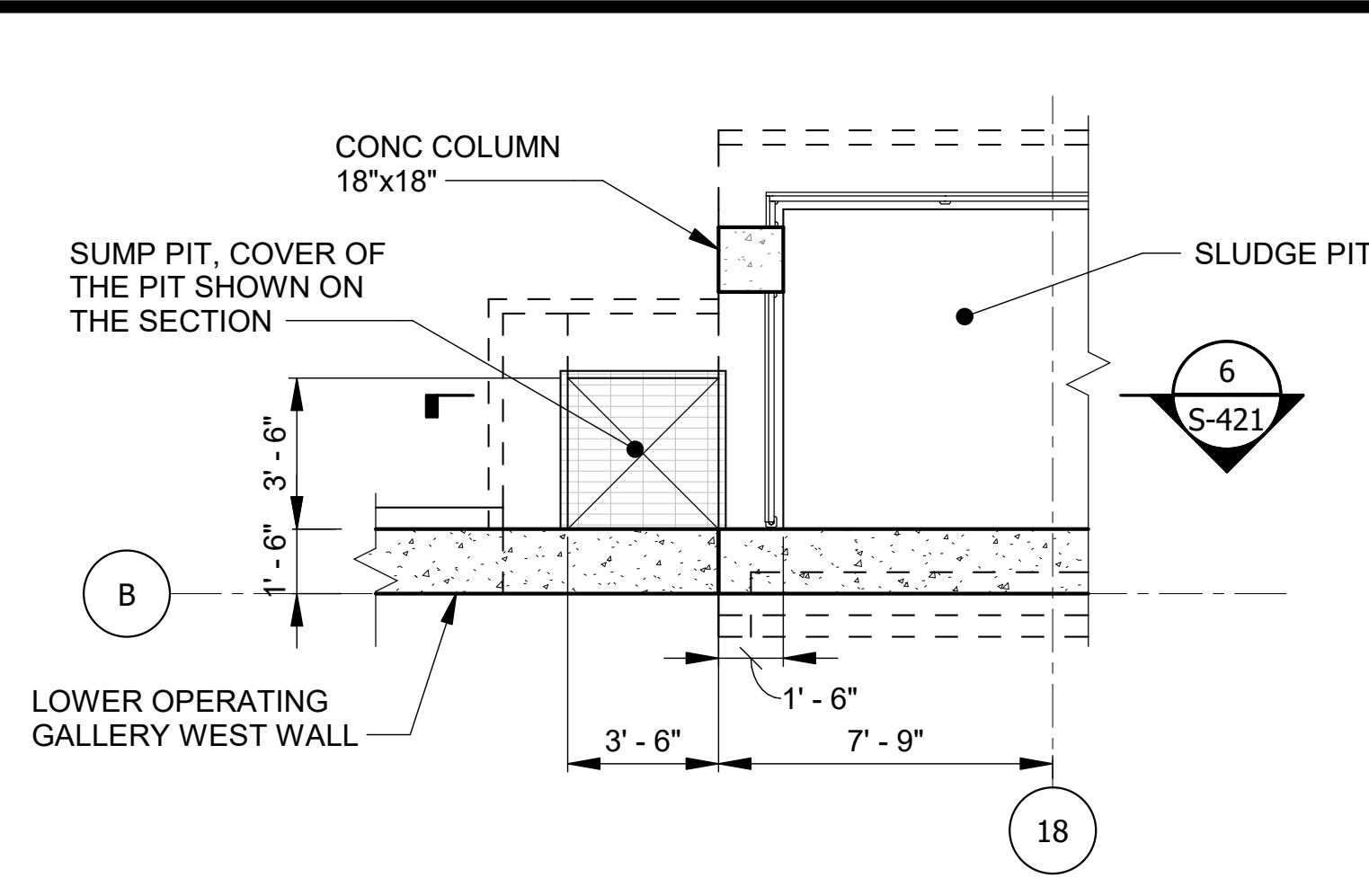
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S-403

DETAIL - SUMP PIT
SCALE: 1/4" = 1'-0"



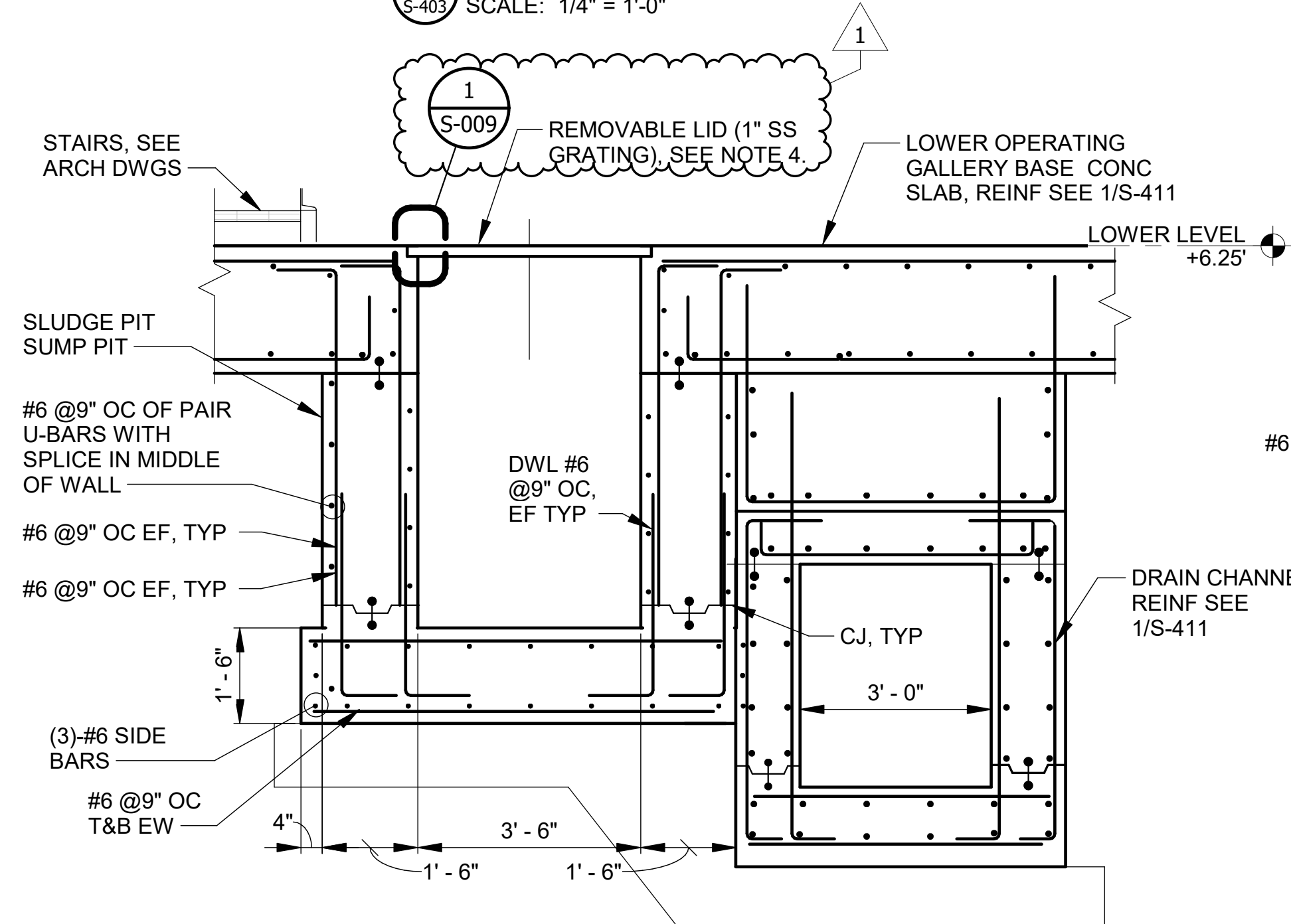
2
S-403

DETAIL - SUMP PIT
SCALE: 1/4" = 1'-0"



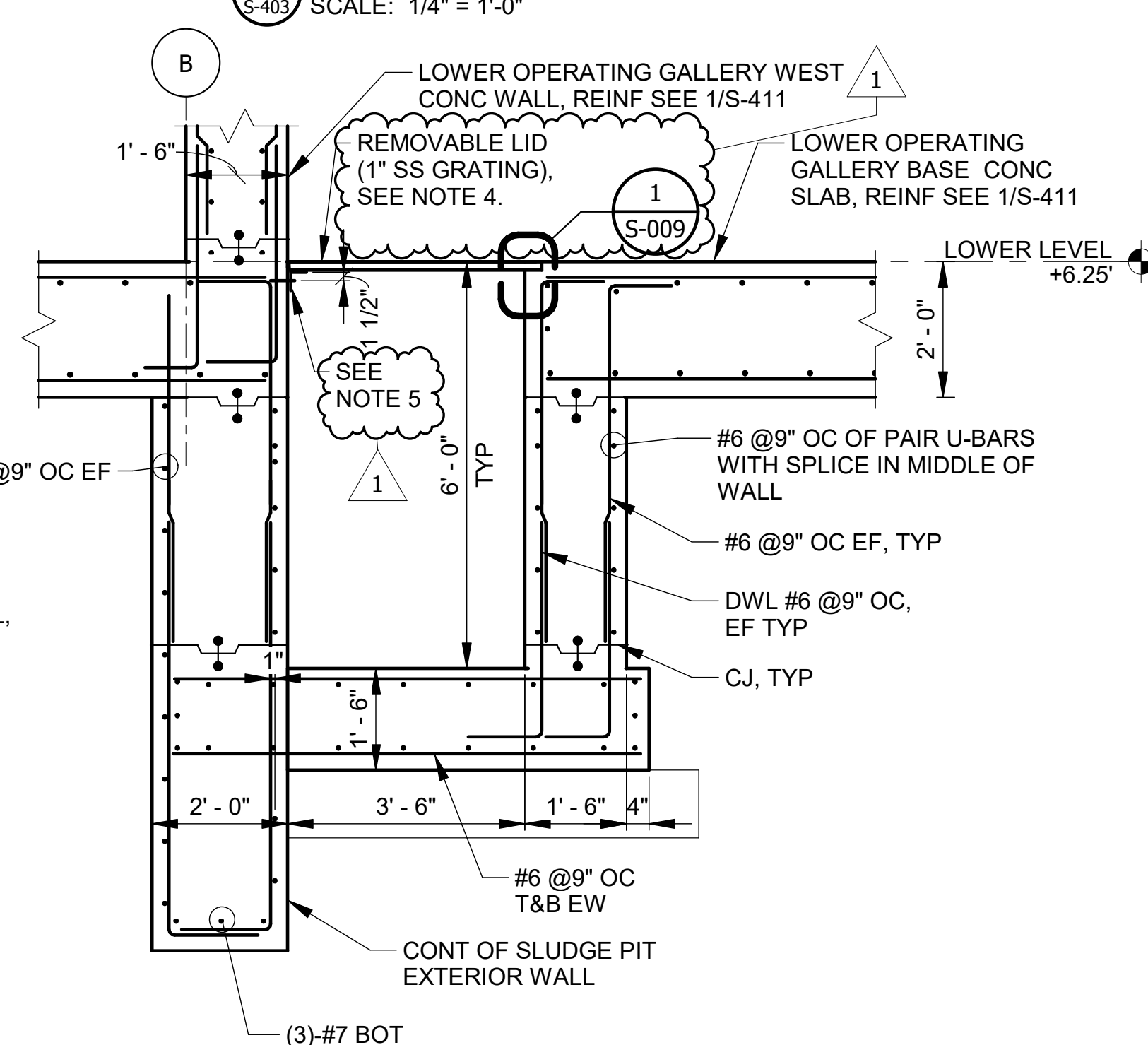
3
S-403

DETAIL - SUMP PIT
SCALE: 1/4" = 1'-0"

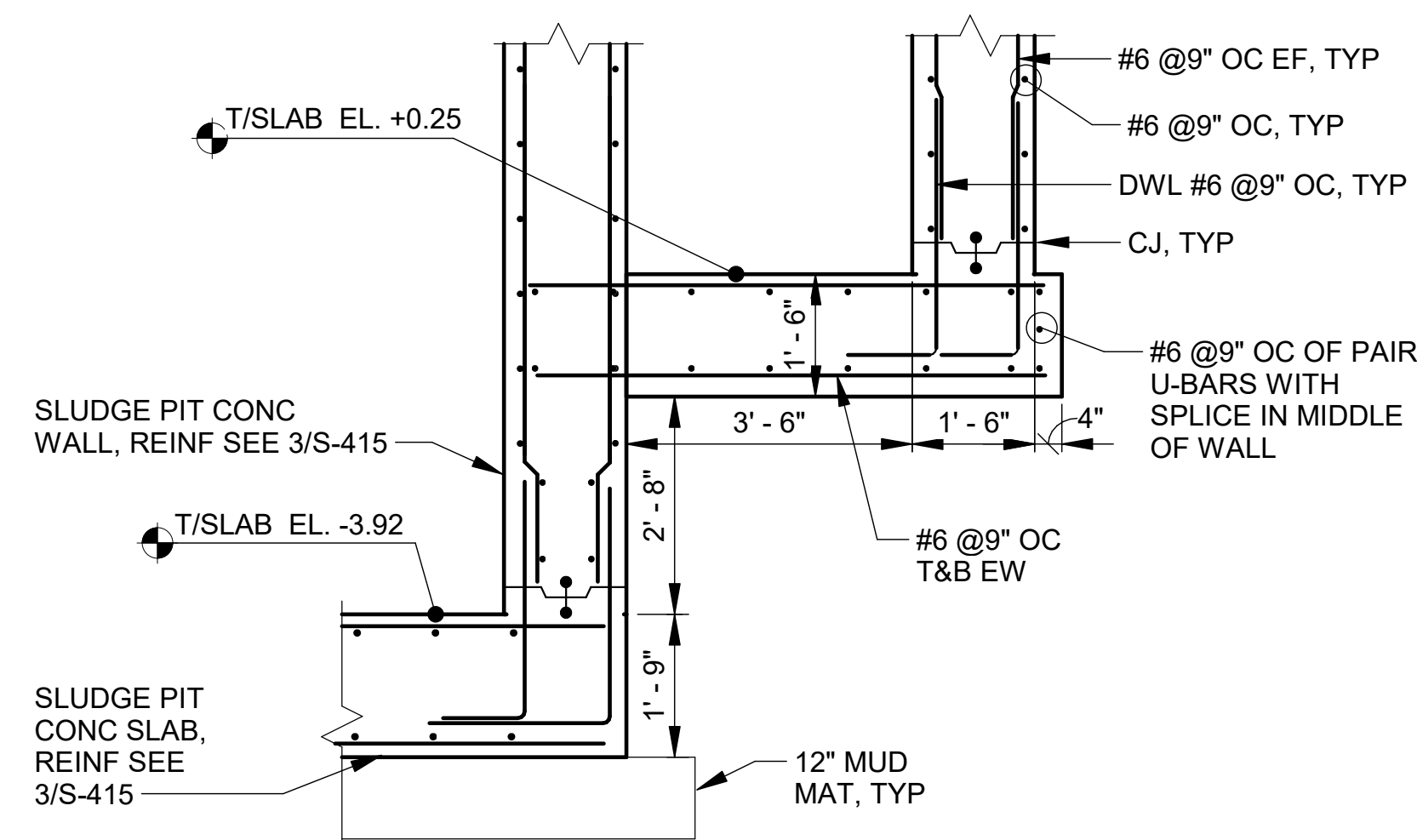


- DETAIL NOTE:**
1. PROVIDE 12" MUD MAT UNDER ENTIRE STRUCTURE PER GEOTECHNICAL REPORT.
 2. COORDINATE CONSTRUCTION JOINTS WITH SEQUENCE OF CONSTRUCTION OF DRAIN CHANNEL AND SUMP PIT.

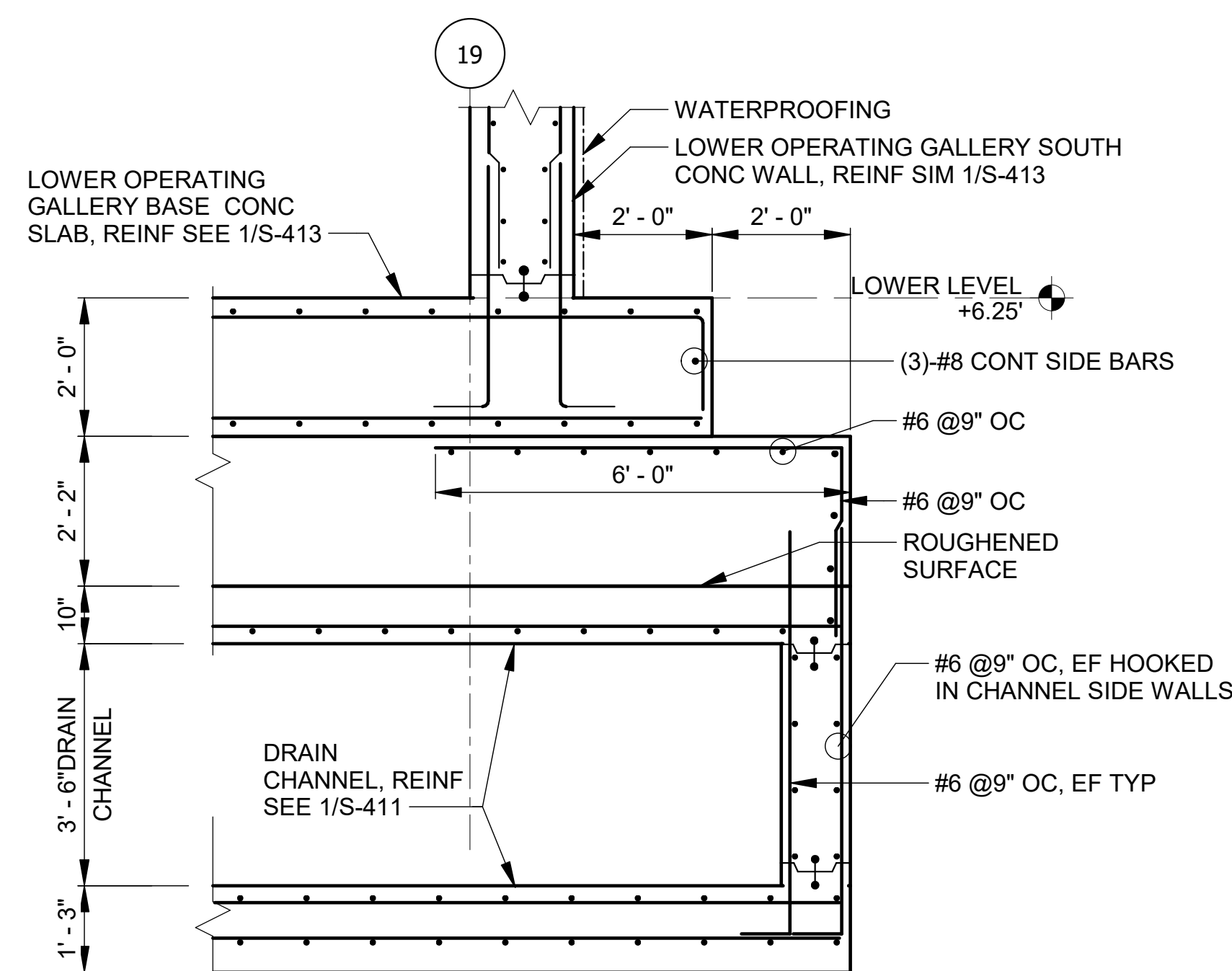
4 E-W SUMP PIT AT LINE 6 SECTION
S-406 SCALE: 1/2" = 1'-0"



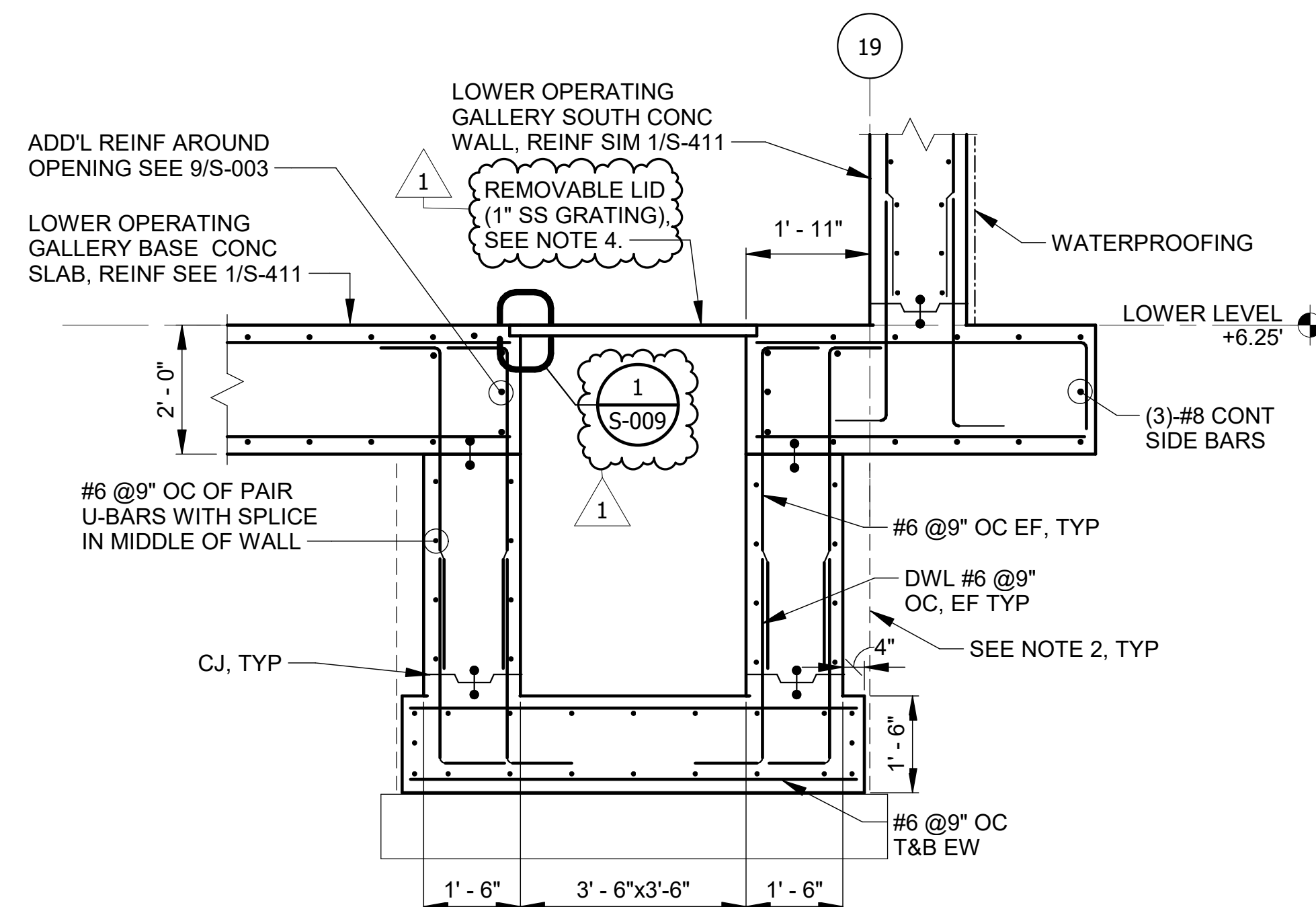
 **SUMP PIT SECTION**
S-407, SCALE: 1/2" = 1'-0"
S-408



6 SUMP PIT SECTION
S-408 SCALE: 1/2" = 1'-0"



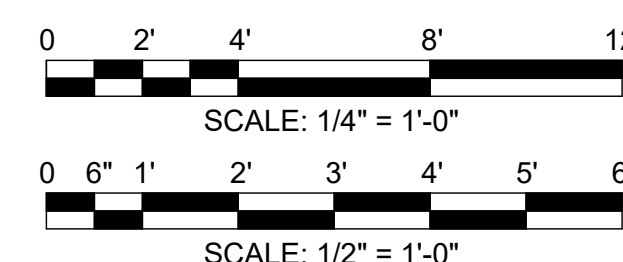
 DRAIN CHANNEL AT SOUTH WALL
S-403, SCALE: 1/2" = 1'-0"
S-408



8 SUMP PIT AT SOUTH WALL
S-403, SCALE: 1/2" = 1'-0"
S-408

NOTES:

1. GENERAL NOTES SEE SHEETS S-001 AND S-002.
2. SOIL STRENGTH IS MINIMUM. THE CONTRACTOR TO DESIGN THE RIGID BRACING SYSTEM (RBS) TO SUPPORT THE SOIL DURING CONSTRUCTION.
3. ANY DISTURBED AREAS OF IN-SITU SOIL SHALL BE REPLACED WITH STRUCTURAL BACKFILL. STRUCTURAL BACKFILL TO BE CA-6, TYPE B, COMPACTED IN 8-INCH LIFTS TO 90% MODIFIED PROCTOR.
4. PROVIDE STAINLESS STEEL GRATING 1"x3/16" @ 1-3/16" OC FOR SUMP PIT LID. PROVIDE (2) HAND HOLDS ON OPPOSITE SIDES OF EACH LID. REFER TO DETAIL 9 SHEET S-009.
5. PROVIDE STAINLESS STEEL ANGLE L3x2x5/16 WITH 5/8" DIA EPOXY ANCHOR @ 12" OC MAX. AND 4" FROM EACH END (4" EFFECTIVE EMBEDMENT).



**METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO**

RME Rubinos & Mesia Engineers, Inc.
500 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by:	JB	Checked by:	AS
Drawn by:	DA	Reviewed by:	MF
Date:	7/1/2025	Scale:	AS SHOWN

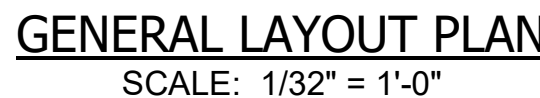
CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
OPERATING GALLERY

SECTIONS

Sheet Number:

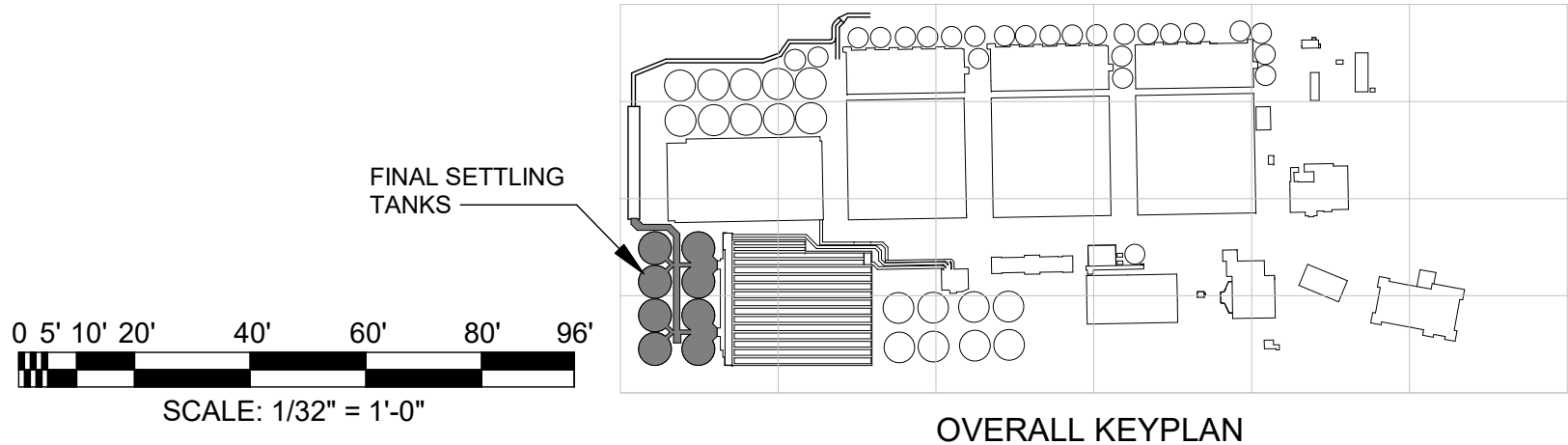
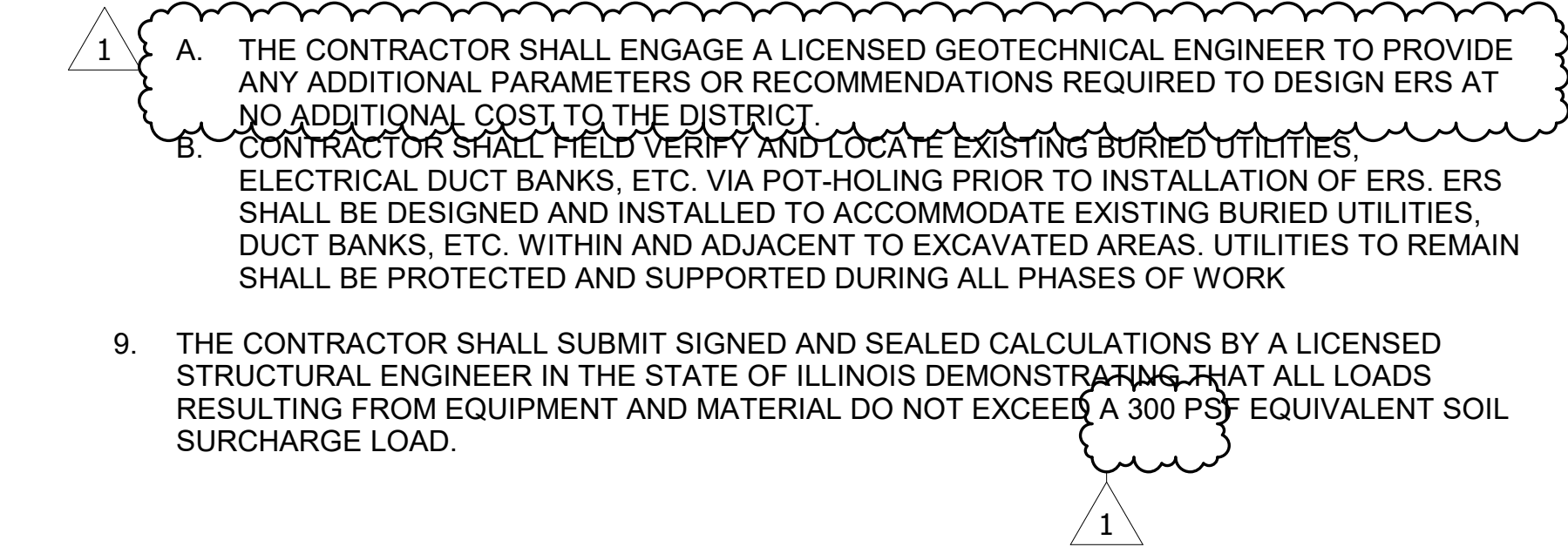
S-421

Page Number: 160



NOTES:

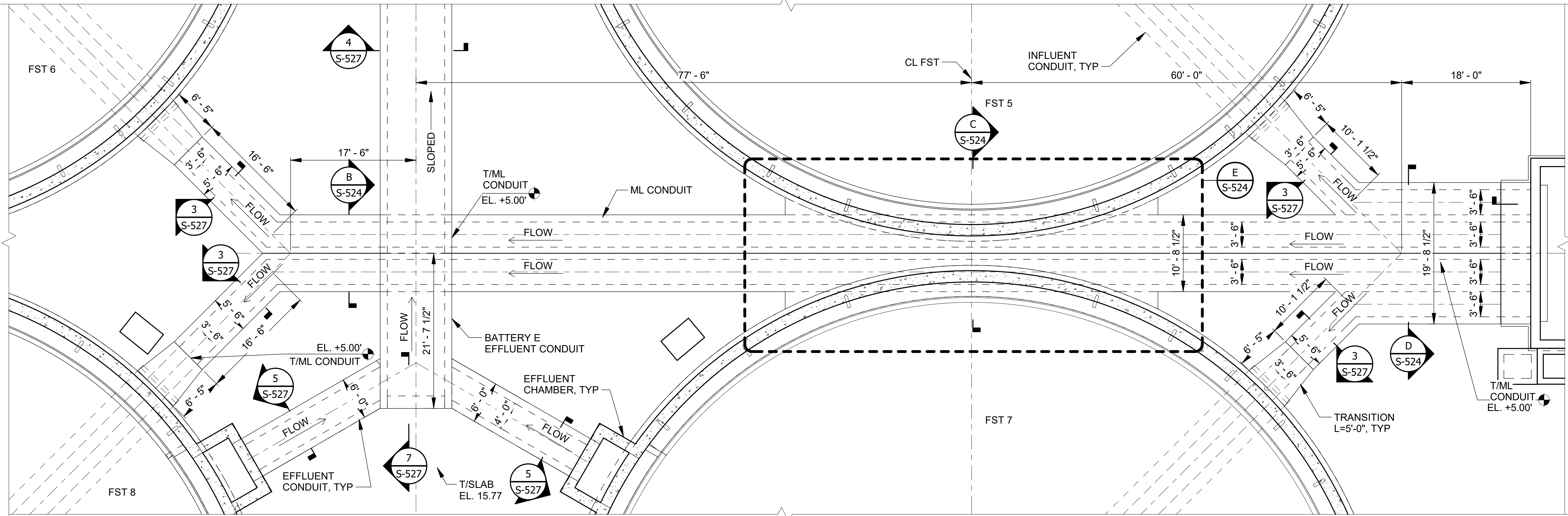
1. GENERAL NOTES AND TYPICAL DETAILS SEE SHEETS S-001 TO S-007.
2. FST - FINAL SETTLING TANK.
3. LOADING DESIGN CRITERIA SEE SHEET S-001.
4. SEE SHEET S-518 FOR FST BASE SLAB AND WALL REINFORCEMENT.
5. HATCH WITH DIAGONAL LINES DENOTES AREA WITH MAXIMUM SURCHARGE OF 600 PSF.
6. GRAY HATCH INDICATES CRANE STATION AREA. CRANE CAPACITY IS 200 TONS MAXIMUM. OUTRIGGER POINT LOAD MUST BE LESS THAN 210.0 KIPS. OUTRIGGER LOAD SHALL BE DISTRIBUTED WITH MAT 8'-0"x8'-0" MINIMUM. DISTANCE FROM ANY EDGE OF MAT TO EDGE OF CONCRETE PAVEMENT SHALL BE 5'-0" MINIMUM.
7. CRANE STATION AREA CONCRETE PAVEMENT SHALL BE 12" MINIMUM WITH DOUBLE LAYERS OF REINFORCEMENT - SEE CIVIL DRAWINGS C-037 AND C-039.
8. THE CONTRACTOR SHALL ENGAGE A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ILLINOIS TO DESIGN THE TEMPORARY EARTH RETENTION SYSTEM (ERS) TO PREVENT ROTATION, DISPLACEMENT, AND UNDERMINING OF EXISTING STRUCTURES, UTILITIES, ETC. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED CALCULATIONS AND DRAWINGS OF ERS FOR REVIEW AND APPROVAL BY THE DISTRICT. ERS PROVIDED SHALL USE SOLDIER PILES OR OTHER ACCEPTABLE NON-DRIVEN/NON-VIBRATORY METHODS UNLESS OTHERWISE INDICATED. ERS SHALL BE IN PLACE PRIOR TO EXCAVATING.
- A. THE CONTRACTOR SHALL ENGAGE A LICENSED GEOTECHNICAL ENGINEER TO PROVIDE ANY ADDITIONAL PARAMETERS OR RECOMMENDATIONS REQUIRED TO DESIGN ERS AT NO ADDITIONAL COST TO THE DISTRICT.
- B. CONTRACTOR SHALL FIELD VERIFY AND LOCATE EXISTING BURIED UTILITIES, ELECTRICAL DUCT BANKS, ETC. VIA POT-HOLING PRIOR TO INSTALLATION OF ERS. ERS SHALL BE DESIGNED AND INSTALLED TO ACCOMMODATE EXISTING BURIED UTILITIES, DUCT BANKS, ETC. WITHIN AND ADJACENT TO EXCAVATED AREAS. UTILITIES TO REMAIN SHALL BE PROTECTED AND SUPPORTED DURING ALL PHASES OF WORK
9. THE CONTRACTOR SHALL SUBMIT SIGNED AND SEALED CALCULATIONS BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ILLINOIS DEMONSTRATING THAT ALL LOADS RESULTING FROM EQUIPMENT AND MATERIAL DO NOT EXCEED A 300 PSF EQUIVALENT SOIL SURCHARGE LOAD.

[illegible]

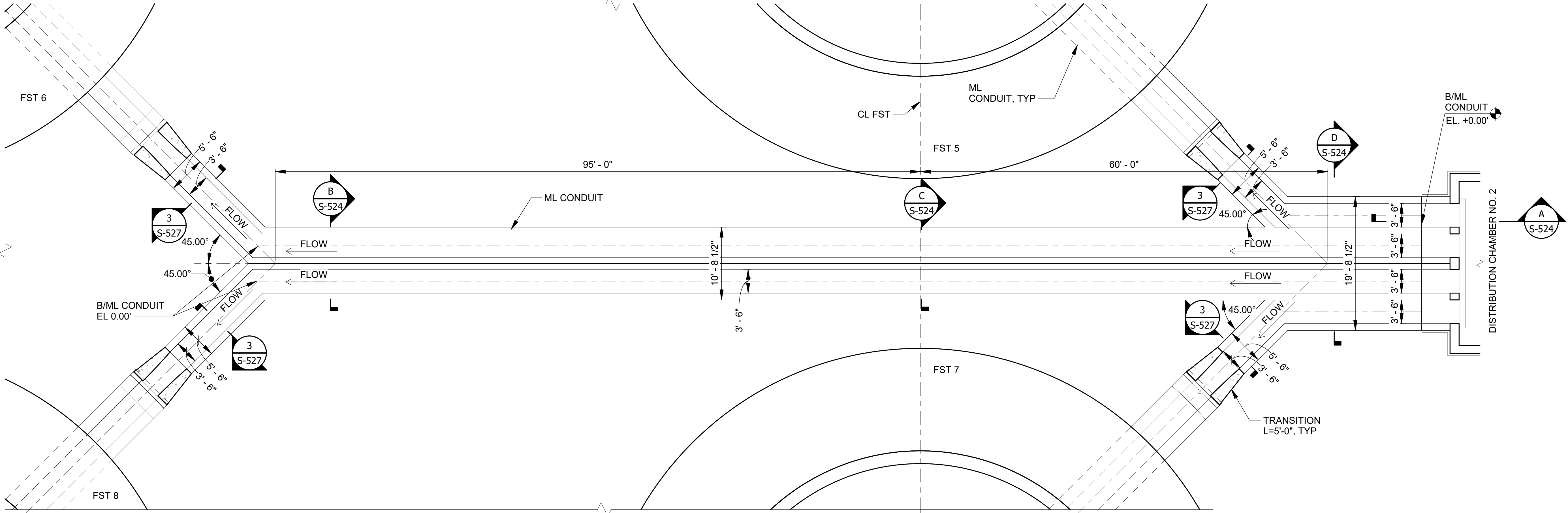
METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO		AECOM	R M E	Rubinos & Mesia Engineers, Inc.
Designed by: RA	Checked by: AS			200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2452
Drawn by: MS	Reviewed by: MF			
Date: 7/1/2025	Scale: AS SHOWN			
		PRUDENTIAL PLAZA ONE 130 E RANDOLPH STREET SUITE 2400 CHICAGO, IL 60601, USA		

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
FINAL SETTLING TANKS & EFFLUENT CONDUIT
GENERAL LAYOUT PLAN

Sheet Number:
S-501
Page Number: 163



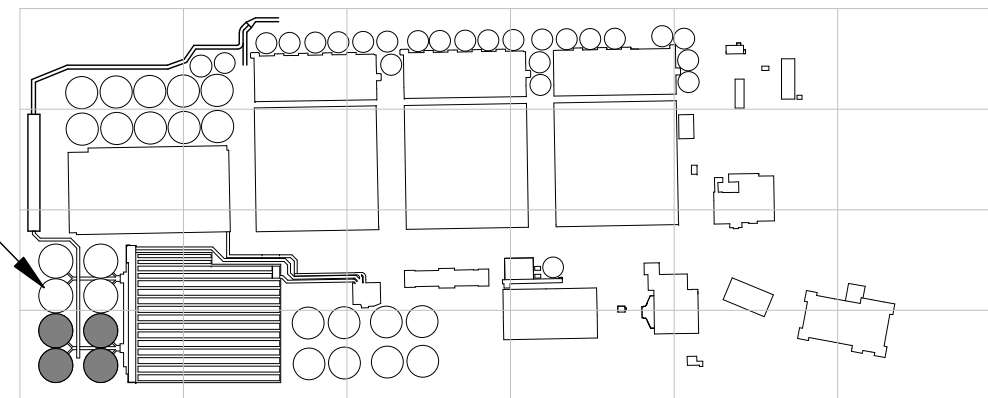
1 ML & EFFLUENT CONDUITS TOP PLAN(T/CONC EL.AS SHOWN)
S-501 SCALE: 1/8" = 1'-0"



2 ML CONDUIT BASE PLAN(T/CONC EL.AS SHOWN)
S-501 SCALE: 1/8" = 1'-0"

NOTES

- SEE DETAILS 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURAL NOTES AND STANDARD DETAILS SEE S-001 THROUGH S-010.
- MAXIMUM SPACING BETWEEN CONSTRUCTION JOINTS, AND BETWEEN CONSTRUCTION JOINTS AND EXPANSION JOINTS SHALL BE 60'-0". JOINTS SHALL BE CONTINUOUS FROM BASE SLAB TO WALLS AND ROOFS OR WALKWAY SLABS. PROVIDE CONTINUOUS WATERSTOPS AT VERTICAL CONSTRUCTION JOINTS. REFER TO DETAIL 6/S-004, TYP. C2 JOINT.



OVERALL KEYPLAN



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by:	Checked by:	AECOM Rubinos & Mesia Engineers, Inc. 200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482
RA	AS	
Drawn by:	Reviewed by:	
MS	MF	
Date:	Scale:	
7/1/2025	1/8" = 1'-0"	

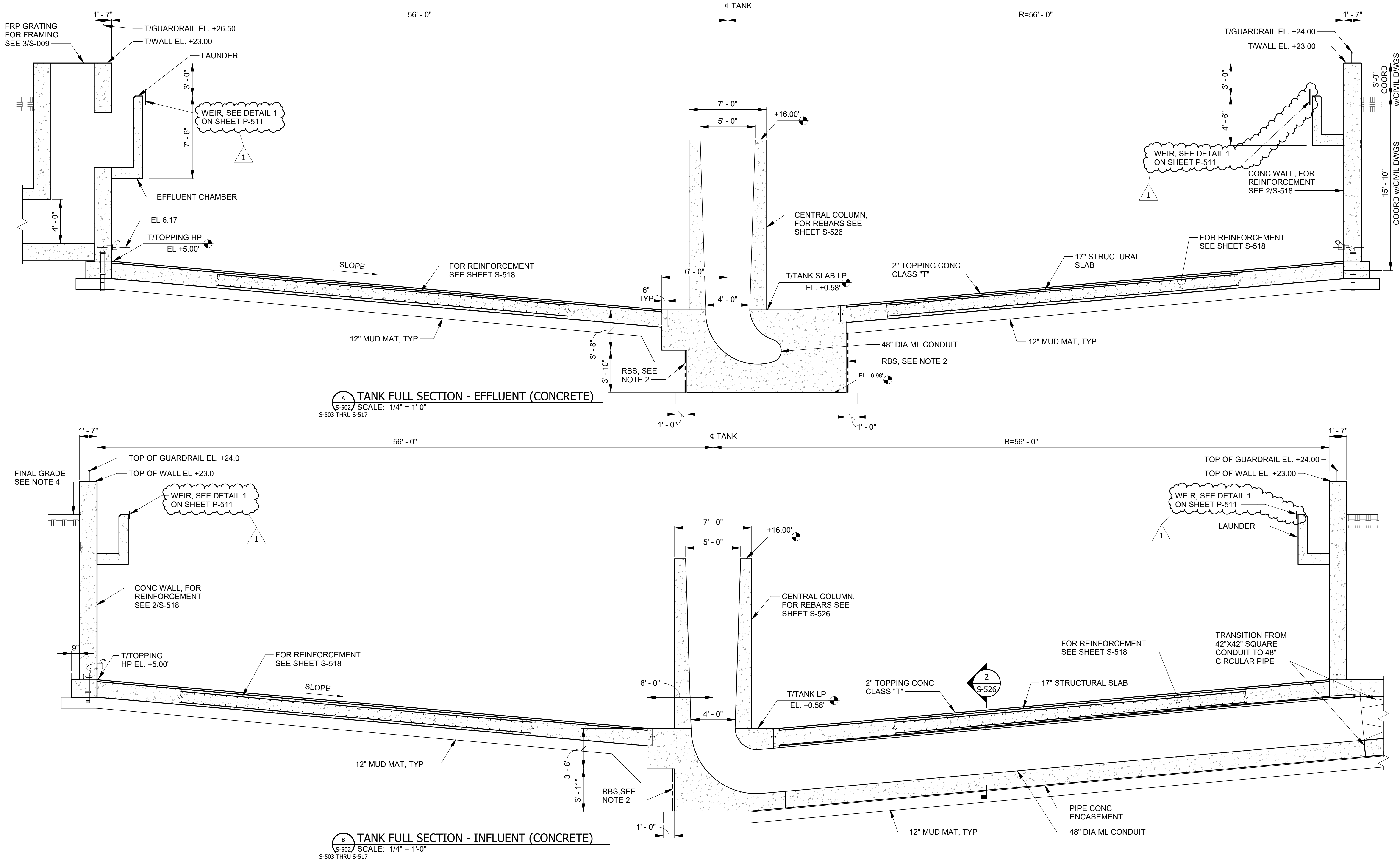
CONTRACT 21-092-3P O'BRIEN WATER RECLAMATION PLANT BATTERY E ACTIVATED SLUDGE FACILITY FINAL SETTLING TANKS & EFFLUENT CONDUIT MIXED LIQUOR AND EFFLUENT CONDUITS PLAN - SOUTH

Sheet Number:

S-519

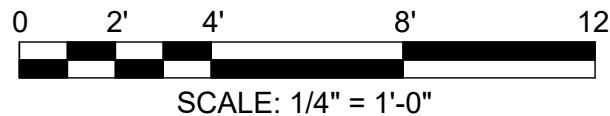
Page Number: 181

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	GD	10/27/25



NOTES:

- GENERAL NOTES SEE SHEETS S-001 AND S-002.
- SOIL STRENGTH IS MINIMUM. THE CONTRACTOR TO DESIGN THE RIGID BRACING SYSTEM (RBS) TO SUPPORT THE SOIL DURING CONSTRUCTION.
- ANY DISTURBED AREAS OF IN-SITU SOIL SHALL BE REPLACED WITH STRUCTURAL BACKFILL. STRUCTURAL BACKFILL TO BE CA-6, TYPE B, COMPACTED IN 8-INCH LIFTS TO 90% MODIFIED PROCTOR.
- SEE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION ON GRADE AND TOP OF CURB.



METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
FINAL SETTLING TANKS & EFFLUENT CONDUIT
FINAL SETTLING TANK OVERALL SECTIONS

Sheet Number:

S-523

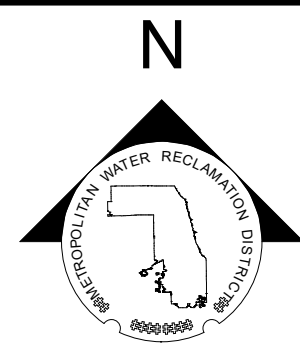
Page Number: 185

Designed by:	Checked by:
RA	AS
Drawn by:	Reviewed by:
MS	MF
Date:	Scale:
7/1/2025	1/4" = 1'-0"

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

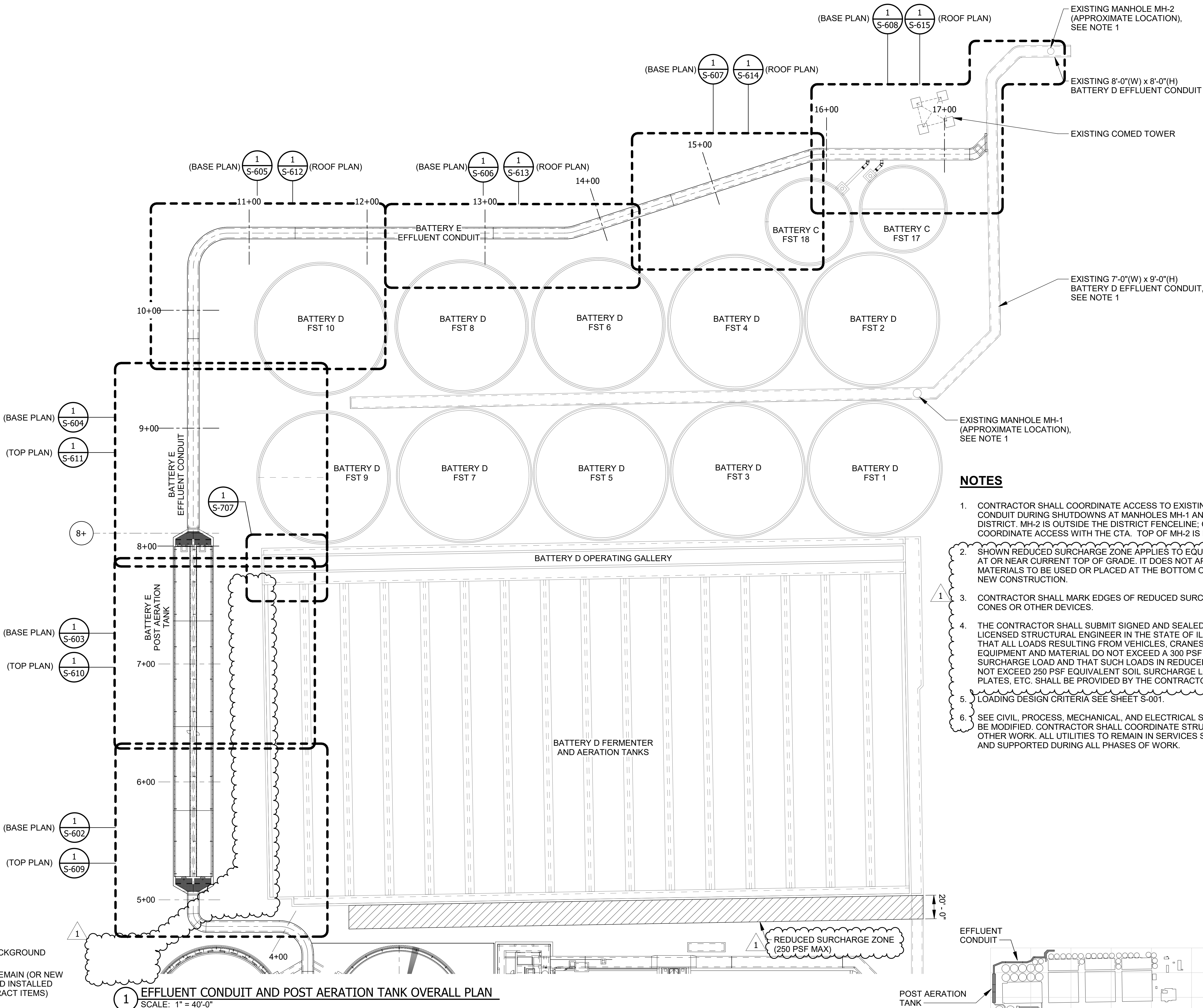
R M E
Rubinos &
Mesia
Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	GD	10/27/25



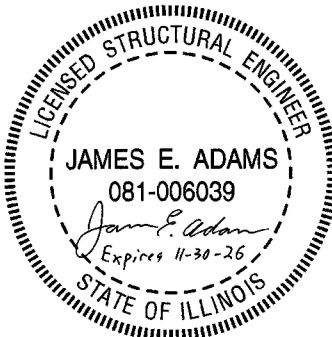
LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK
- REDUCED SURCHARGE ZONE



NOTES

- CONTRACTOR SHALL COORDINATE ACCESS TO EXISTING BATTERY D EFFLUENT CONDUIT DURING SHUTDOWNS AT MANHOLES MH-1 AND MH-2 WITH THE DISTRICT. MH-2 IS OUTSIDE THE DISTRICT FENCELINE; CONTRACTOR SHALL COORDINATE ACCESS WITH THE CTA. TOP OF MH-2 IS BURIED BELOW GRADE.
- SHOWN REDUCED SURCHARGE ZONE APPLIES TO EQUIPMENT AND MATERIALS AT OR NEAR CURRENT TOP OF GRADE. IT DOES NOT APPLY TO EQUIPMENT OR MATERIALS TO BE USED OR PLACED AT THE BOTTOM OF THE EXCAVATION FOR NEW CONSTRUCTION.
- CONTRACTOR SHALL MARK EDGES OF REDUCED SURCHARGE ZONE WITH CONES OR OTHER DEVICES.
- THE CONTRACTOR SHALL SUBMIT SIGNED AND SEALED CALCULATIONS BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ILLINOIS DEMONSTRATING THAT ALL LOADS RESULTING FROM VEHICLES, CRANES, OUT RIGGERS, EQUIPMENT AND MATERIAL DO NOT EXCEED A 300 PSF EQUIVALENT SOIL SURCHARGE LOAD AND THAT SUCH LOADS IN REDUCED SURCHARGE ZONES DO NOT EXCEED 250 PSF EQUIVALENT SOIL SURCHARGE LOAD. TIMBERS, ROAD PLATES, ETC. SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED.
- LOADING DESIGN CRITERIA SEE SHEET S-001.
- SEE CIVIL, PROCESS, MECHANICAL, AND ELECTRICAL SHEETS FOR UTILITIES TO BE MODIFIED. CONTRACTOR SHALL COORDINATE STRUCTURAL WORK WITH ALL OTHER WORK. ALL UTILITIES TO REMAIN IN SERVICES SHALL BE PROTECTED AND SUPPORTED DURING ALL PHASES OF WORK.



METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

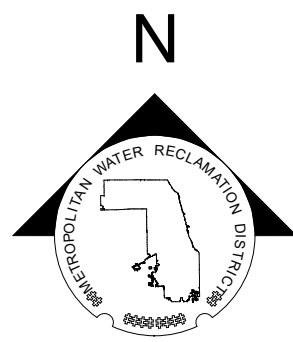
Checked by: JA
Reviewed by: JA
Scale: 1" = 40'-0"
Date: 7/1/2025

DESIGNED BY: JA
DRAWN BY: MM

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
POST AERATION TANK & EFFLUENT CONDUIT
OVERALL PLAN

Sheet Number:
S-601
Page Number: 191

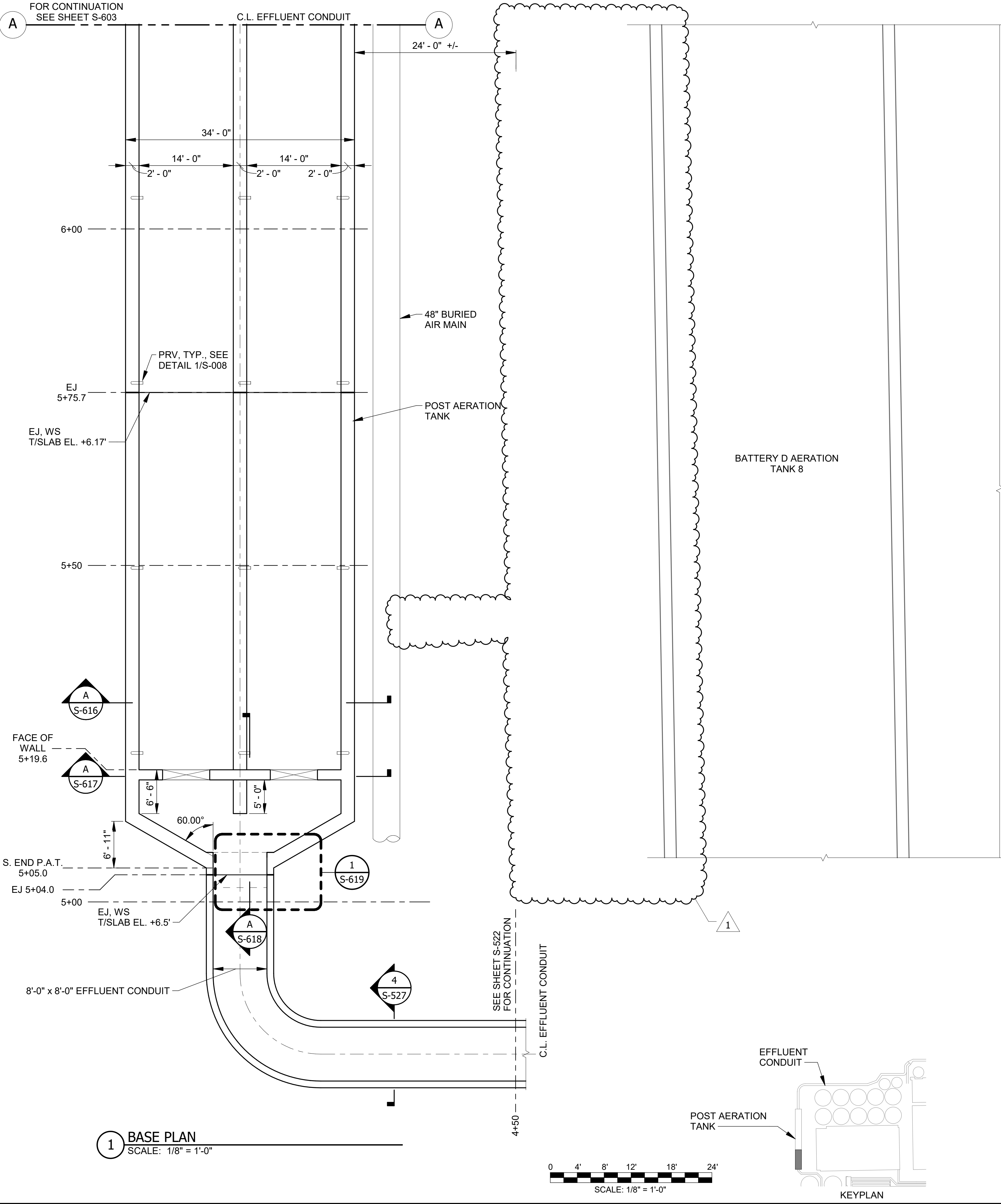


NOTES

1. STATIONING MEASURED ALONG CENTERLINE OF EFFLUENT CONDUIT.
 2. SEE DETAILS 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURAL NOTES AND STANDARD DETAILS SEE S-001 THROUGH S-010.
 3. MAXIMUM SPACING BETWEEN CONSTRUCTION JOINTS, AND BETWEEN CONSTRUCTION JOINTS AND EXPANSION JOINTS SHALL BE 60'-0". JOINTS SHALL BE CONTINUOUS FROM BASE SLAB TO WALLS AND ROOFS OR WALKWAY SLABS. PROVIDE CONTINUOUS WATERSTOPS AT VERTICAL CONSTRUCTION JOINTS. REFER TO DETAIL 6/S004, TYP. C2 JOINT.
 4. THE CONTRACTOR SHALL ENGAGE A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ILLINOIS TO DESIGN THE TEMPORARY EARTH RETENTION SYSTEM (ERS) TO PREVENT ROTATION, DISPLACEMENT, AND UNDERMINING OF EXISTING STRUCTURES, UTILITIES, ETC. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED CALCULATIONS AND DRAWINGS OF ERS FOR REVIEW AND APPROVAL BY THE DISTRICT. ERS PROVIDED SHALL USE SOLDIER PILES OR OTHER ACCEPTABLE NON-DRIVEN/NON-VIBRATORY METHODS UNLESS OTHERWISE INDICATED. ERS SHALL BE IN PLACE PRIOR TO EXCAVATING.
- A. THE CONTRACTOR SHALL ENGAGE A LICENSED GEOTECHNICAL ENGINEER TO PROVIDE ANY ADDITIONAL PARAMETERS OR RECOMMENDATIONS REQUIRED TO DESIGN ERS AT NO ADDITIONAL COST TO THE DISTRICT.
- B. CONTRACTOR SHALL FIELD VERIFY AND LOCATE EXISTING BURIED UTILITIES, ELECTRICAL DUCT BANKS, ETC. VIA POT-HOLING PRIOR TO INSTALLATION OF ERS. ERS SHALL BE DESIGNED AND INSTALLED TO ACCOMMODATE EXISTING BURIED UTILITIES, DUCT BANKS, ETC. WITHIN AND ADJACENT TO EXCAVATED AREAS. UTILITIES TO REMAIN SHALL BE PROTECTED AND SUPPORTED DURING ALL PHASES OF WORK.

LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK
- REMOVAL WORK



METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

ADDENDUM NO. 4

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	GD	10/27/25



PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by:	Checked by:
JA	JA
Drawn by:	Reviewed by:
MM	JA
Date:	Scale:
7/1/2025	1/8" = 1'-0"

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
POST AERATION TANK & EFFLUENT CONDUIT

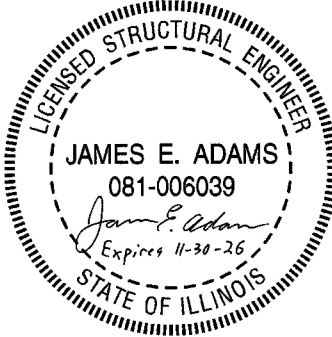
BASE PLAN

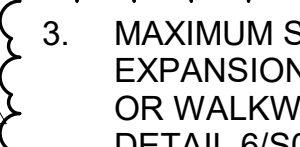
Sheet Number:

S-602

Page Number:

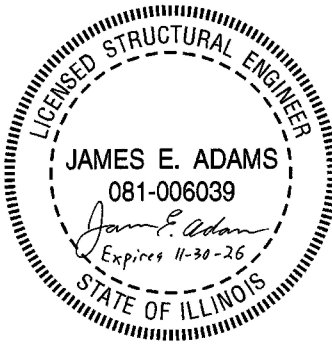
192





LEGEND:

- | | |
|-------|--|
| _____ | NEW OR EXISTING BACKGROUND |
| _____ | |
| _____ | |
| _____ | EXISTING WORK TO REMAIN (OR NEW
WORK FURNISHED AND INSTALLED
UNDER OTHER CONTRACT ITEMS) |
| _____ | |
| _____ | |
| _____ | NEW WORK |



AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

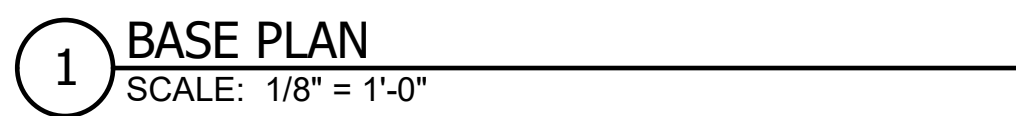
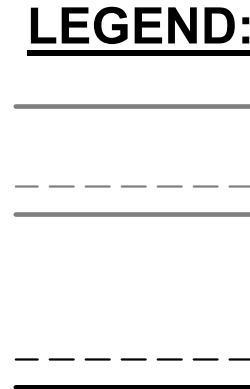
CONTRACT 21-092-3F
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
POST AERATION TANK & EFFLUENT CONDUIT

BASE PLAN

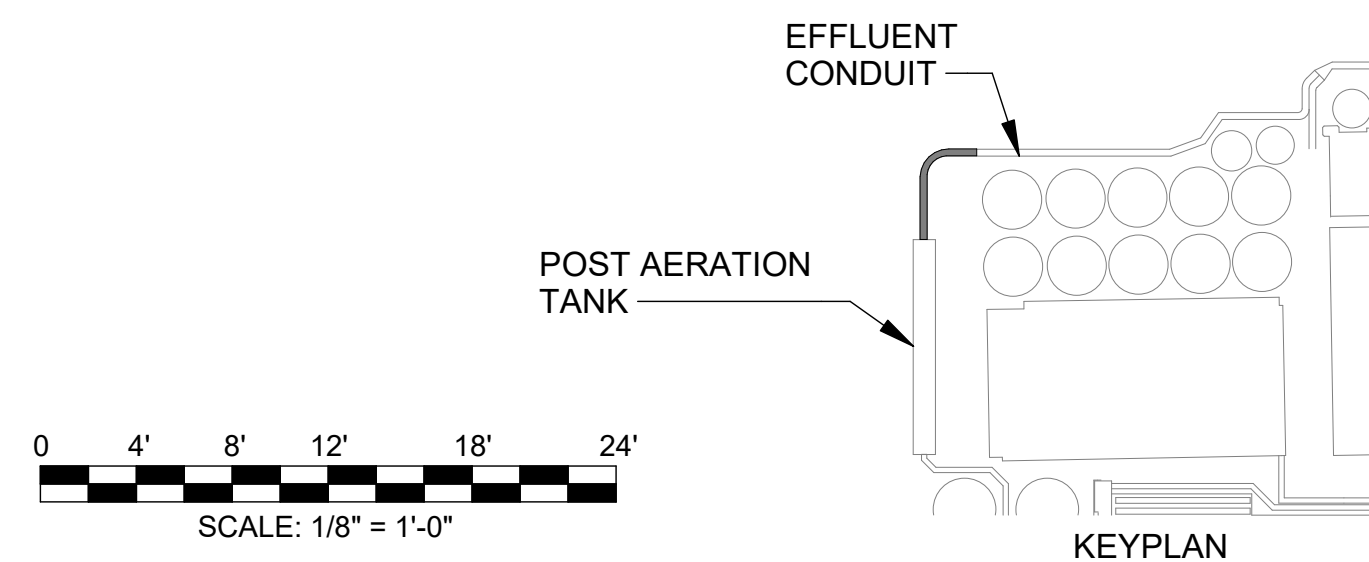
Sheet Number:

S-603

Page Number: 193



1. STATIONING MEASURED ALONG CENTERLINE OF EFFLUENT CONDUIT.
2. SEE DETAILS 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURE DETAILS SEE S-001 THROUGH S-010.
3. MAXIMUM SPACING BETWEEN CONSTRUCTION JOINTS, AND BETWEEN CONSTRUCTION JOINTS SHALL BE 60'-0". JOINTS SHALL BE CONTINUOUS FROM BACKFILL OR WALKWAY SLABS. PROVIDE CONTINUOUS WATERSTOPS AT VERTICAL CURVES. SEE DETAIL 6/S004, TYP. C2 JOINT.
4. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, I.E. EARTH RETENTION WALLS, WHERE NECESSARY. SEE DETAIL 4 SHEET S-602.
5. SEE DETAIL 1 SHEET S-620 FOR REINFORCING AT CURVED BEND IN CONDUIT.



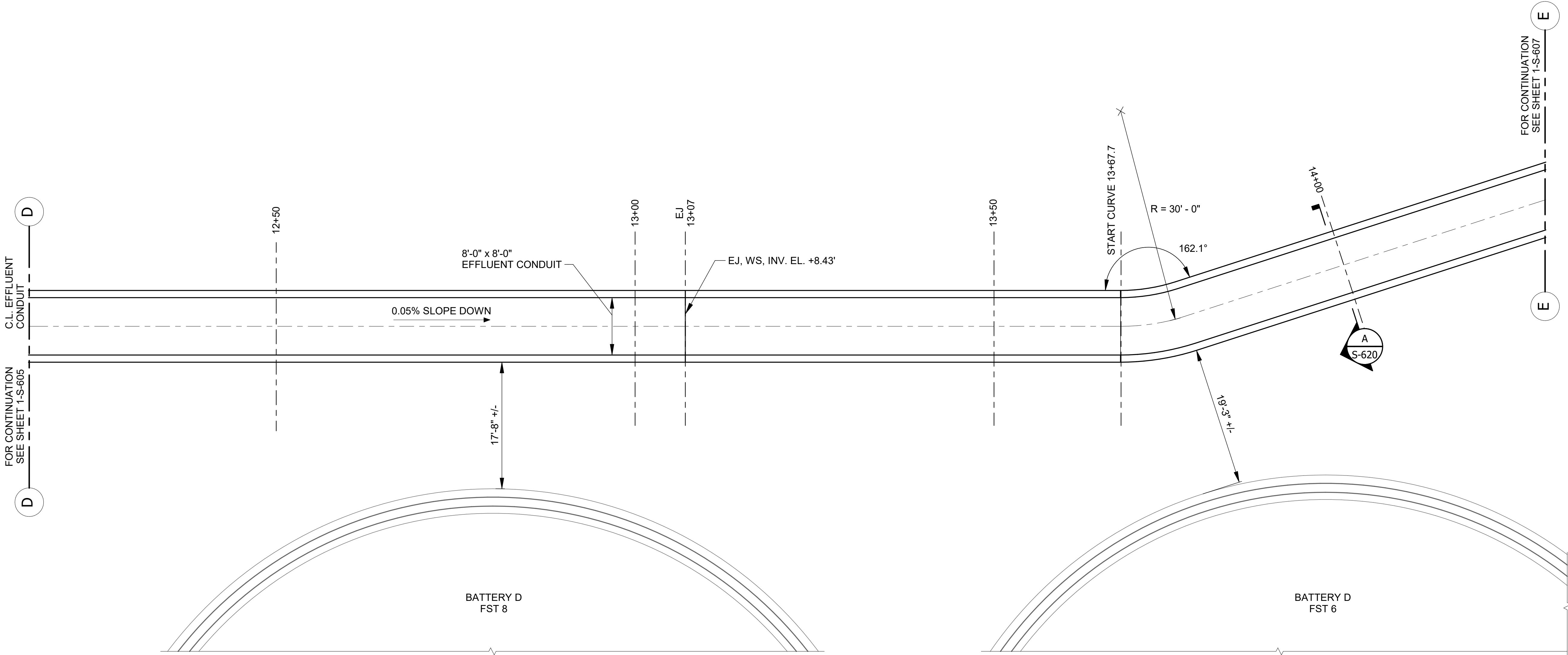
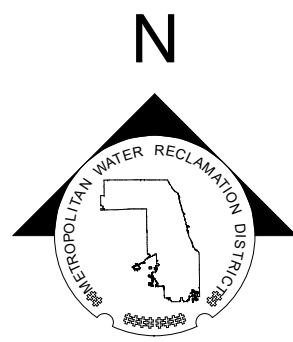
LICENSED STRUCTURAL ENGINEER
 JAMES E. ADAMS
 081-006039
James E. Adams
 Expires 11-30-26
 STATE OF ILLINOIS

Designed by:	JA	Checked by:	JA
Drawn by:	MM	Reviewed by:	JA
Date:	7/11/2025	Scale:	1/8" = 1'-0"

Sheet Number: **S-605**

Page Number: **195**

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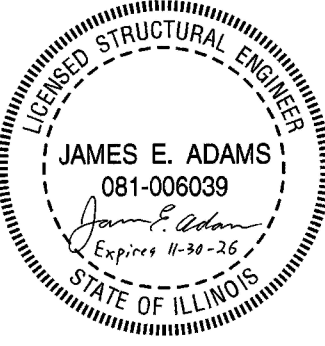
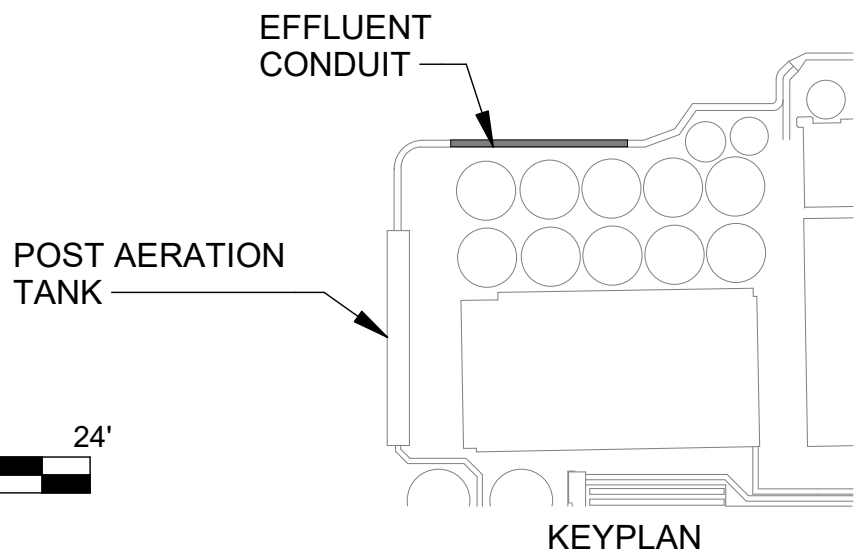
1 BASE PLAN
SCALE: 1/8" = 1'-0"

NOTES

1. STATIONING MEASURED ALONG CENTERLINE OF EFFLUENT CONDUIT.
2. SEE DETAILS 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURAL NOTES AND STANDARD DETAILS SEE S-001 THROUGH S-010.
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4. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, I.E. EARTH RETENTION SYSTEM (ERS) AS NEEDED, SEE NOTE 4 SHEET S-602.
5. SEE DETAIL 1 SHEET S-620 FOR REINFORCING AT CURVED BEND IN CONDUIT.

LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK



METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

Designed by:	Checked by:
JA	JA
Drawn by:	Reviewed by:
MM	JA
Date:	Scale:
7/1/2025	1/8" = 1'-0"

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
POST AERATION TANK & EFFLUENT CONDUIT

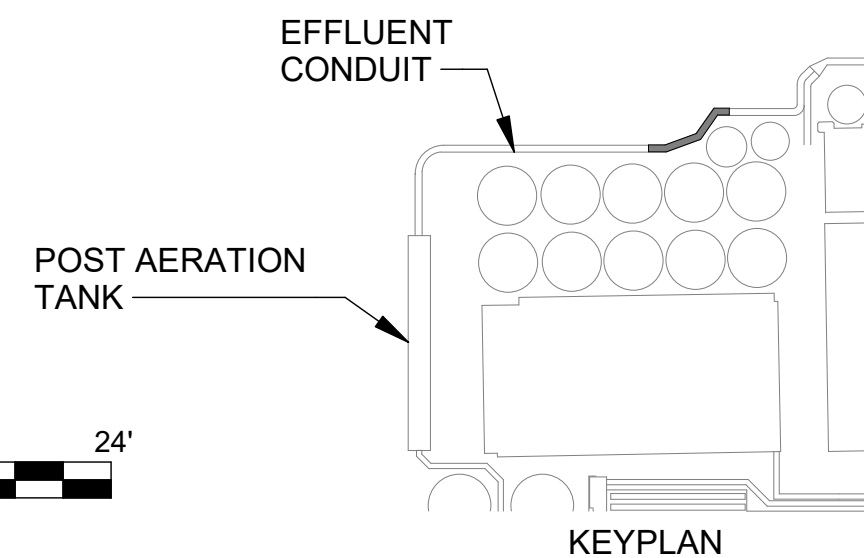
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Sheet Number:

S-606

Page Number: 196

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	GD	10/27/25



1. STATIONING MEASURED ALONG CENTERLINE OF EFFLUENT CONDUIT.
2. SEE DETAILS 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURE DETAILS SEE S-001 THROUGH S-010.
3. MAXIMUM SPACING BETWEEN CONSTRUCTION JOINTS, AND BETWEEN CONSTRUCTION JOINTS SHALL BE 60'-0". JOINTS SHALL BE CONTINUOUS FROM BACKFILL OR WALKWAY SLABS. PROVIDE CONTINUOUS WATERSTOPS AT VERTICAL CONDUIT DETAILS 6/S004, TYP. C2 JOINT.
4. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, I.E. EARTH RETENTION NOTE 4 SHEET S-602.
5. SEE DETAIL 1 SHEET S-620 FOR REINFORCING AT CURVED BEND IN CONDUIT.

NEW OR EXISTING BACKGROUND

EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)

NEW WORK

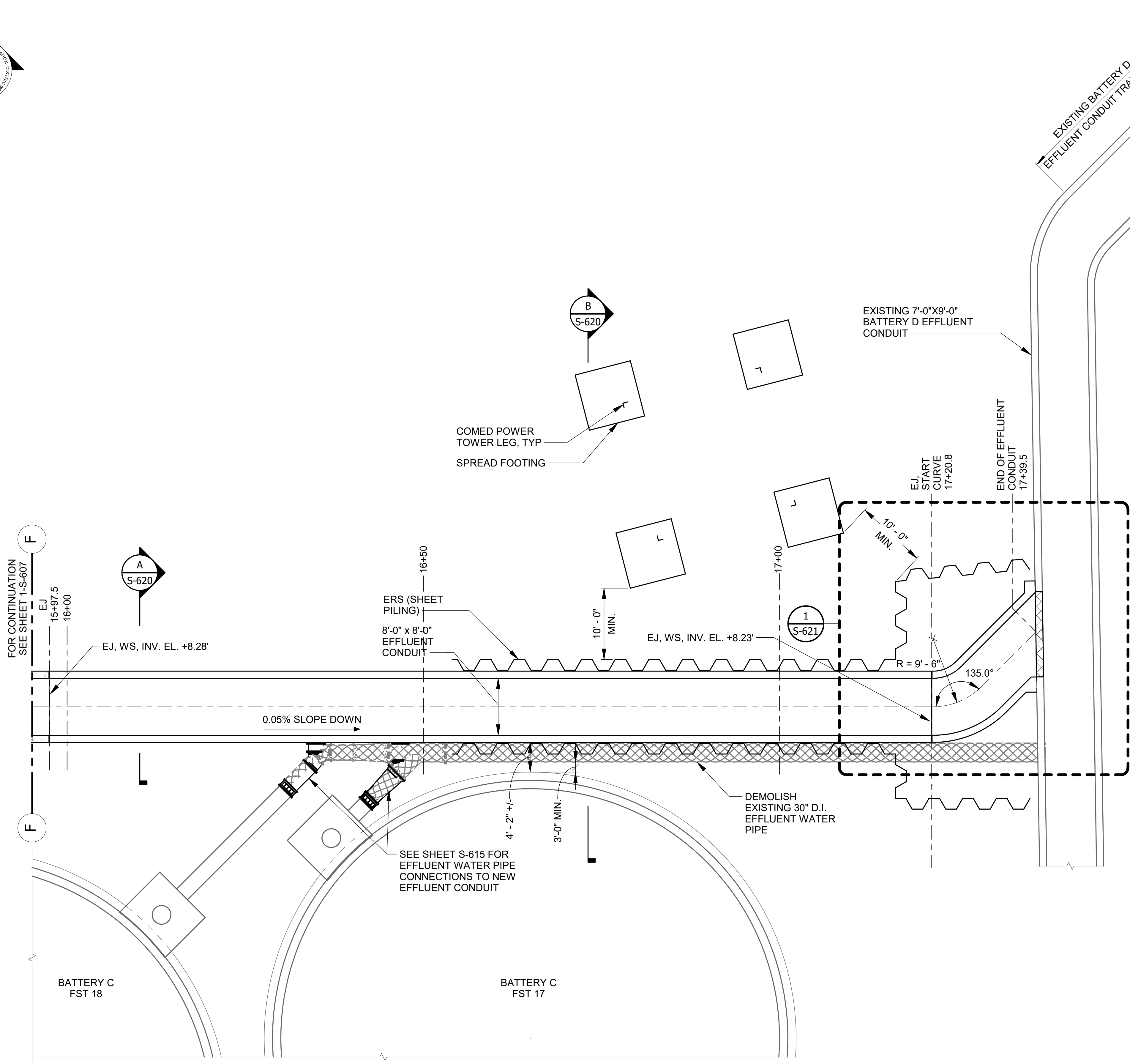
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SCALE: 1/8" = 1'-0"

Designed by: JA	Checked by: JA
Drawn by: MM	Reviewed by: JA
Date: 7/1/2025	Scale: 1/8" = 1'-0"

BASE PLAN

Page Number: 197

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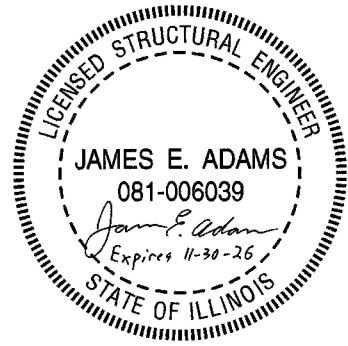
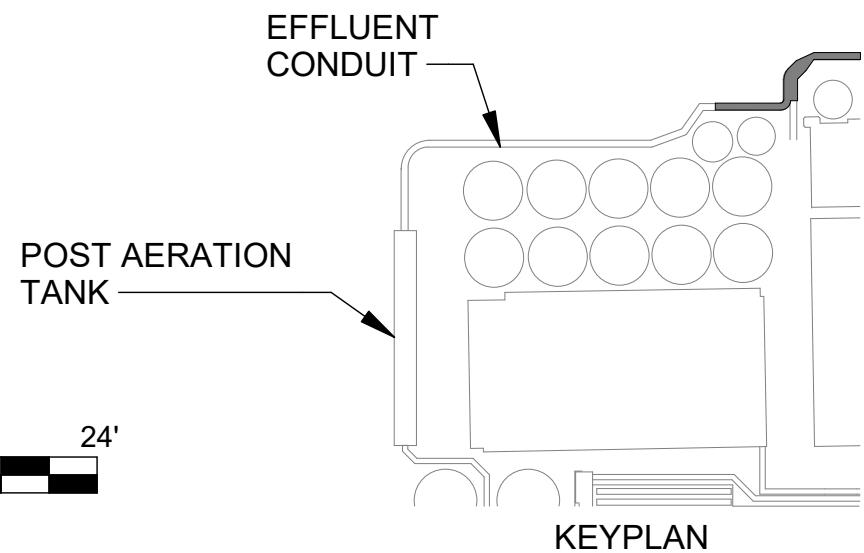


LEGEND:	
	NEW OR EXISTING BACKGROUND
	EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
	NEW WORK
	REMOVAL WORK

1 BASE PLAN
SCALE: 1/8" = 1'-0"

NOTES

- STATIONING MEASURED ALONG CENTERLINE OF EFFLUENT CONDUIT.
- SEE DETAILS 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURAL NOTES AND STANDARD DETAILS SEE S-001 THROUGH S-010.
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- CONTRACTOR SHALL VERIFY EXTENTS OF EXISTING BATTERY D EFFLUENT CONDUIT VIA POTHOLING AND/OR GPR PRIOR TO WORK. NOTIFY DISTRICT OF DISCREPANCIES WITH THESE DRAWINGS. THE DISTRICT SHALL PROVIDE GUIDANCE REGARDING ADJUSTMENTS OF TUNNEL AND/OR CONDUITS REQUIRED DUE TO DISCREPANCIES.
- ACCORDING TO AVAILABLE DOCUMENTS, THE COMED TOWER FOOTING TYPICAL LENGTH AND WIDTH ARE 8'x8' MINIMUM AND 11'x11' MAXIMUM. CLEARANCE BETWEEN ERS ELEMENTS AND THE COMED TOWER FOOTINGS SHALL BE 10'-0" MINIMUM. CLEARANCE BETWEEN THE EDGES OF OPEN EXCAVATIONS AND THE COMED TOWER FOOTINGS SHALL BE 15'-0" MINIMUM.
- CONTRACTOR SHALL PERFORM A GEOTECHNICAL INVESTIGATION IN THE VICINITY OF THE SHOWN EARTH RETENTION SYSTEM (ERS). THE GEOTECHNICAL INVESTIGATION SHALL INCLUDE AS MANY SOIL BORINGS AND EXPLORATORY DRILLING AS NECESSARY TO IDENTIFY ALL SOIL CONDITIONS AND UNDERGROUND OBSTRUCTIONS IN THE VICINITY OF THE ERS. THE CONTRACTOR SHALL PRODUCE A GEOTECHNICAL REPORT SIGNED AND STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF ILLINOIS. THE REPORT SHALL CONTAIN SOIL PARAMETERS FOR USE IN THE DESIGN OF THE ERS.
- CONTRACTOR SHALL PROVIDE TEMPORARY ERS SUCH AS TRENCH BOXES FOR THE DEMOLITION OF THE EFFLUENT WATER PIPE. NO PART OF THE ERS SHALL BE CLOSER THAN 15 FEET TO THE COMED TOWER FOOTINGS. ANY VOIDS ALONG THE OUTSIDE OF THE ERS SHALL BE FILLED AS SOON AS POSSIBLE TO PREVENT GROUND MOVEMENT. THE EXCAVATION WITHIN THE ERS SHALL BE BACKFILLED AND ERS REMOVED AFTER PIPE DEMOLITION IS COMPLETE.
- REFER TO SHEET S-623 FOR SUGGESTED SEQUENCE OF DEMOLITION OF EFFLUENT WATER PIPE.
- GROUND INJECTION GROUTING WAS PERFORMED BY THE DISTRICT TO STOP LEAKAGE AT THE CONNECTION OF THE 30" EFFLUENT PIPE TO THE PLANT EFFLUENT CONDUIT. GROUT WAS INJECTED AT THE DEPTH OF THE EFFLUENT PIPE TO ENCASE IT. AT GROUND LEVEL, SEVERAL GROUT INJECTION POINTS WERE INSERTED OVER A 12' BY 20' AREA DIRECTLY ABOVE THE EFFLUENT PIPE CONNECTION POINT TO THE EFFLUENT CONDUIT. ANY GROUT OR CONCRETE THAT THE CONTRACTOR ENCOUNTERS DURING THE ERS INSTALLATION, DEMOLITION, OR PIPING REROUTING SHALL BE REMOVED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE DISTRICT.
- CONTRACTOR SHALL ENGAGE AN ILLINOIS LICENSED STRUCTURAL ENGINEER TO DESIGN ALL PROPOSED ERS SYSTEMS. CALCULATIONS AND STAMPED DRAWINGS FOR THE ERS SHALL BE SUBMITTED TO THE DISTRICT FOR REVIEW.
- SHOWN ERS ON THIS DRAWING SHALL BE INTERNALLY BRACED SHEET PILING. WALERS ALONG THE INSIDE FACES OF THE SHEET PILING SHALL BE PART OF THE BRACING SYSTEM. SHOWN SHEET PILING LAYOUT AND SHAPES ARE CONCEPTUAL, WITH THE EXCEPTION OF SHOWN REQUIRED MINIMUM CLEARANCES. CONTRACTOR SHALL DETERMINE FINAL LAYOUT AND SHEET PILING SHAPES.
- SHEET PILING (ERS) INSTALLED WITHIN 60 FEET OF SHOWN COMED TOWER FOOTINGS SHALL BE PERMANENT, WITH THE EXCEPTION OF REMOVAL OF BRACES AND THE TOPS OF THE SHEET PILING, PER SECTION B ON SHEET S-620.
- ERS SHALL BE DESIGNED FOR APPLIED LOADS FROM THE COMED TOWER FOOTING. THE DESIGN BEARING PRESSURE FROM THE FOOTING SHALL BE DETERMINED BY THE STRUCTURAL ENGINEER OF RECORD FOR THE ERS DESIGN, BUT IN NO CASE SHALL BE LESS THAN 1500 PSF.
- IF UNDERGROUND OBSTRUCTIONS ARE ENCOUNTERED AT ERS LOCATIONS, THE CONTRACTOR SHALL MODIFY THE DESIGN AND INSTALLATION OF ERS AS NECESSARY AT NO ADDITIONAL COST TO THE DISTRICT.
- CONTRACTOR SHALL NOT IMPOSE A SURCHARGE OF GREATER THAN 300 PSF WITHIN 20 FEET OF THE EXISTING BATTERY D EFFLUENT CONDUIT. THIS PERTAINS TO EQUIPMENT OR MATERIALS TO BE PLACED AT OR NEAR CURRENT TOP OF GRADE. IT DOES NOT APPLY TO EQUIPMENT OR MATERIALS TO BE PLACED AT THE BOTTOM OF THE EXCAVATION FOR NEW CONSTRUCTION.
- CONTRACTOR SHALL VERIFY EXTENTS OF EXISTING BATTERY D EFFLUENT CONDUIT VIA POTHOLING AND/OR GPR PRIOR TO WORK. NOTIFY DISTRICT OF DISCREPANCIES WITH THESE DRAWINGS. THE ENGINEER SHALL PROVIDE GUIDANCE REGARDING ADJUSTMENTS OF BATTERY E EFFLUENT CONDUIT REQUIRED DUE TO DISCREPANCIES. ANY ADJUSTMENTS TO THE PROPOSED EFFLUENT CONDUIT MUST BE APPROVED BY THE ENGINEER.



Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	GD	10/27/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by: JA	Checked by: JA
Drawn by: MM	Reviewed by: JA
Date: 7/1/2025	Scale: 1/8" = 1'-0"

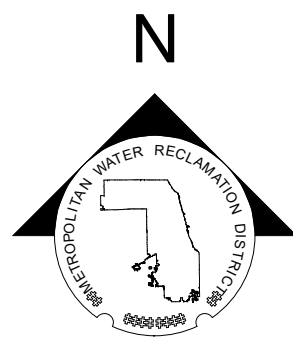
AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
POST AERATION TANK & EFFLUENT CONDUIT
BASE PLAN

Sheet Number:

S-608

Page Number: 198

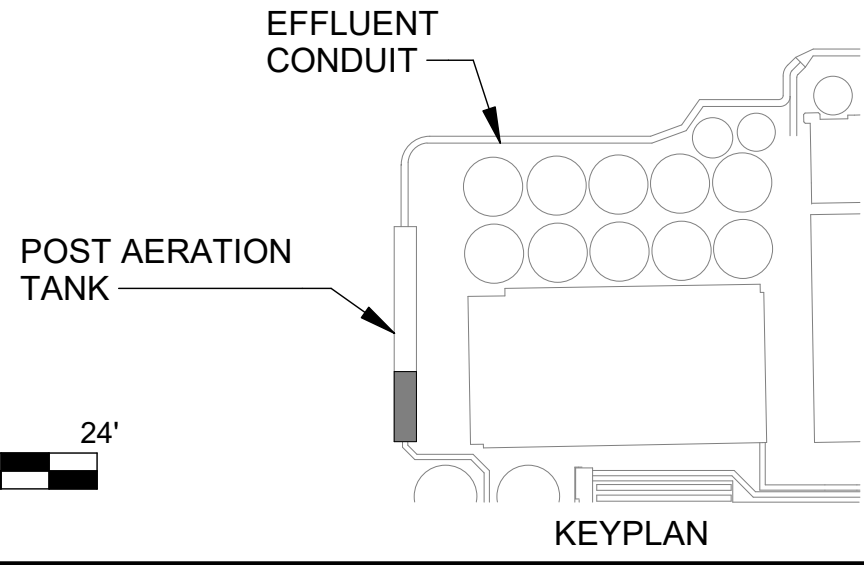
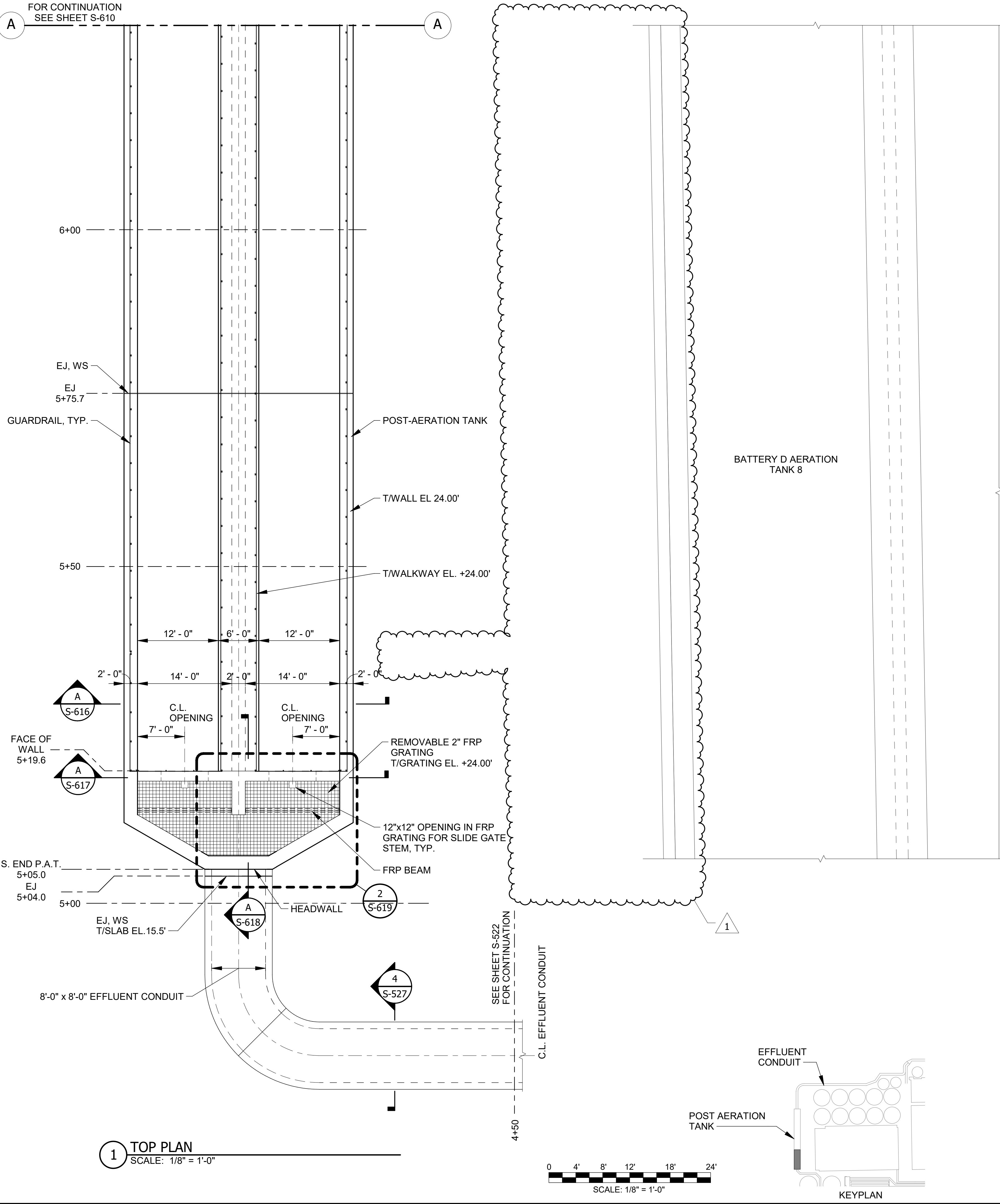


NOTES

1. STATIONING MEASURED ALONG CENTERLINE OF EFFLUENT CONDUIT.
2. SEE DETAILS 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURAL NOTES AND STANDARD DETAILS SEE S-001 THROUGH S-010.
3. MAXIMUM SPACING BETWEEN CONSTRUCTION JOINTS, AND BETWEEN CONSTRUCTION JOINTS AND EXPANSION JOINTS SHALL BE 60'-0". JOINTS SHALL BE CONTINUOUS FROM BASE SLAB TO WALLS AND ROOFS OR WALKWAY SLABS. PROVIDE CONTINUOUS WATERSTOPS AT VERTICAL CONSTRUCTION JOINTS. REFER TO DETAIL 6/S004, TYP. C2 JOINT.
4. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, I.E. EARTH RETENTION SYSTEM (ERS) AS NEEDED, SEE NOTE 4 SHEET S-602.
5. PROVIDE MINIMAL SLOPE (1/16" PER FOOT) OF TOP OF WALKWAY CONCRETE SLAB FOR DRAIN FROM CENTER TO EACH EDGE.

LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK



METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by:	Checked by:
JA	JA
Drawn by:	Reviewed by:
MM	JA
Date:	Scale:
7/1/2025	1/8" = 1'-0"

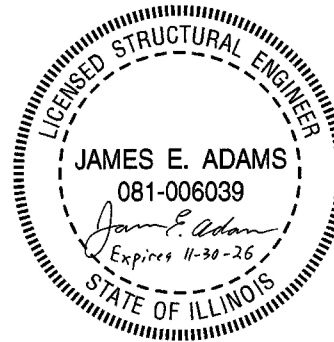
CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
POST AERATION TANK & EFFLUENT CONDUIT

TOP PLAN

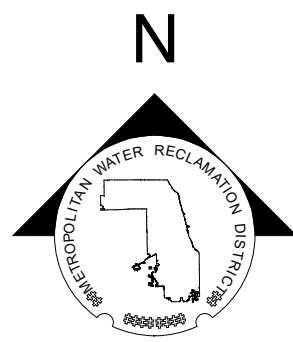
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S-609

Page Number: 199



Rev.	Description	Appr.	Date
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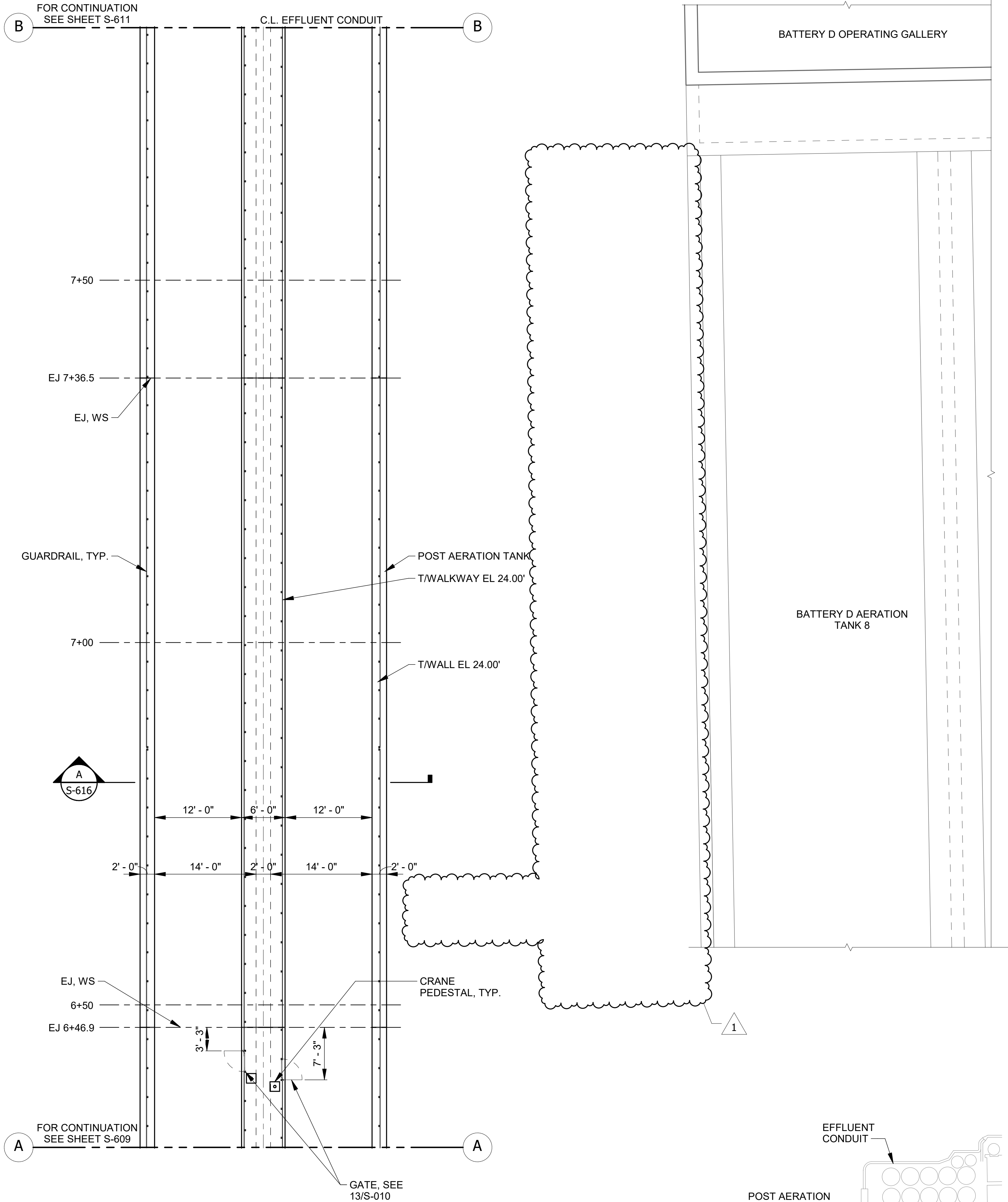


NOTES

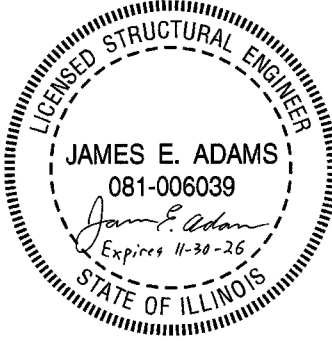
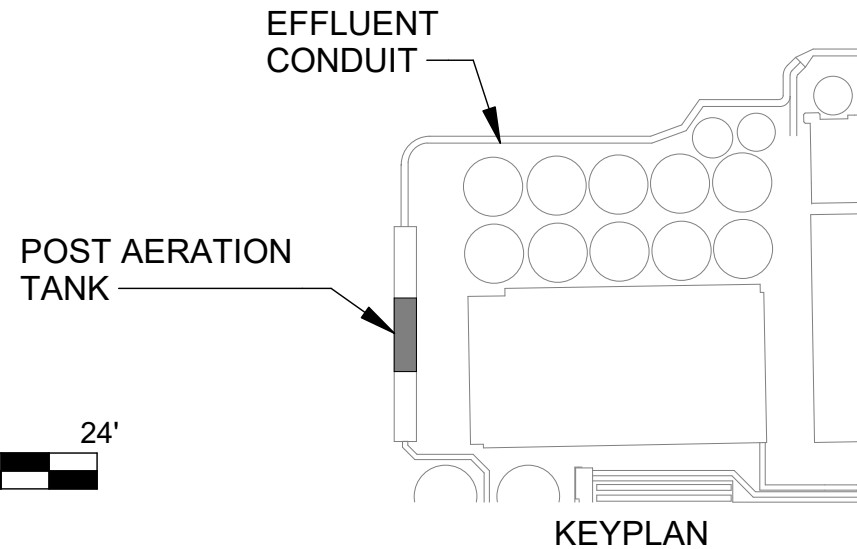
1. STATIONING MEASURED ALONG CENTERLINE OF EFFLUENT CONDUIT.
2. SEE DETAILS 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURAL NOTES AND STANDARD DETAILS SEE S-001 THROUGH S-010.
3. MAXIMUM SPACING BETWEEN CONSTRUCTION JOINTS, AND BETWEEN CONSTRUCTION JOINTS AND EXPANSION JOINTS SHALL BE 60'-0". JOINTS SHALL BE CONTINUOUS FROM BASE SLAB TO WALLS AND ROOFS OR WALKWAY SLABS. PROVIDE CONTINUOUS WATERSTOPS AT VERTICAL CONSTRUCTION JOINTS. REFER TO DETAIL 6/S004, TYP. C2 JOINT.
4. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, I.E. EARTH RETENTION SYSTEM (ERS) AS NEEDED, SEE NOTE 4 SHEET S-602.
5. PROVIDE MINIMAL SLOPE (1/16" PER FOOT) OF TOP OF WALKWAY CONCRETE SLAB FOR DRAIN FROM CENTER TO EACH EDGE.

LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK



1 TOP PLAN
SCALE: 1/8" = 1'-0"



METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

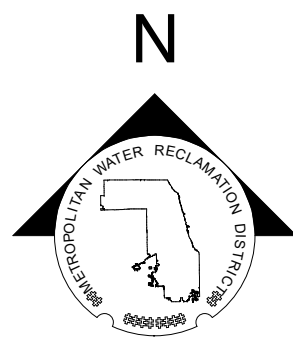
Designed by:	Checked by:
JA	JA
Drawn by:	Reviewed by:
MM	JA
Date:	Scale:
7/1/2025	1/8" = 1'-0"

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
POST AERATION TANK & EFFLUENT CONDUIT

TOP PLAN

Sheet Number:
S-610
Page Number: 200

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	GD	10/27/25

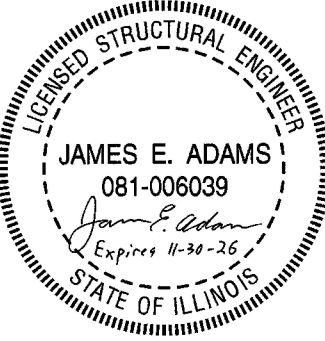
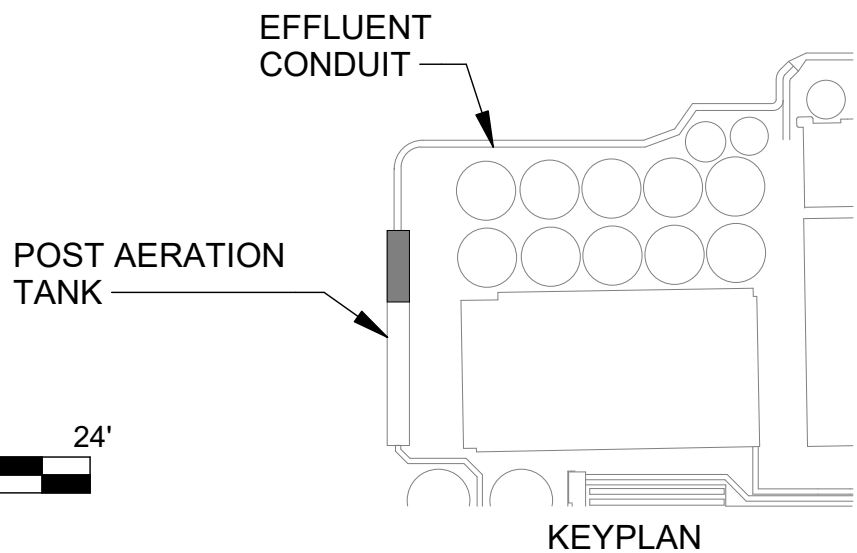
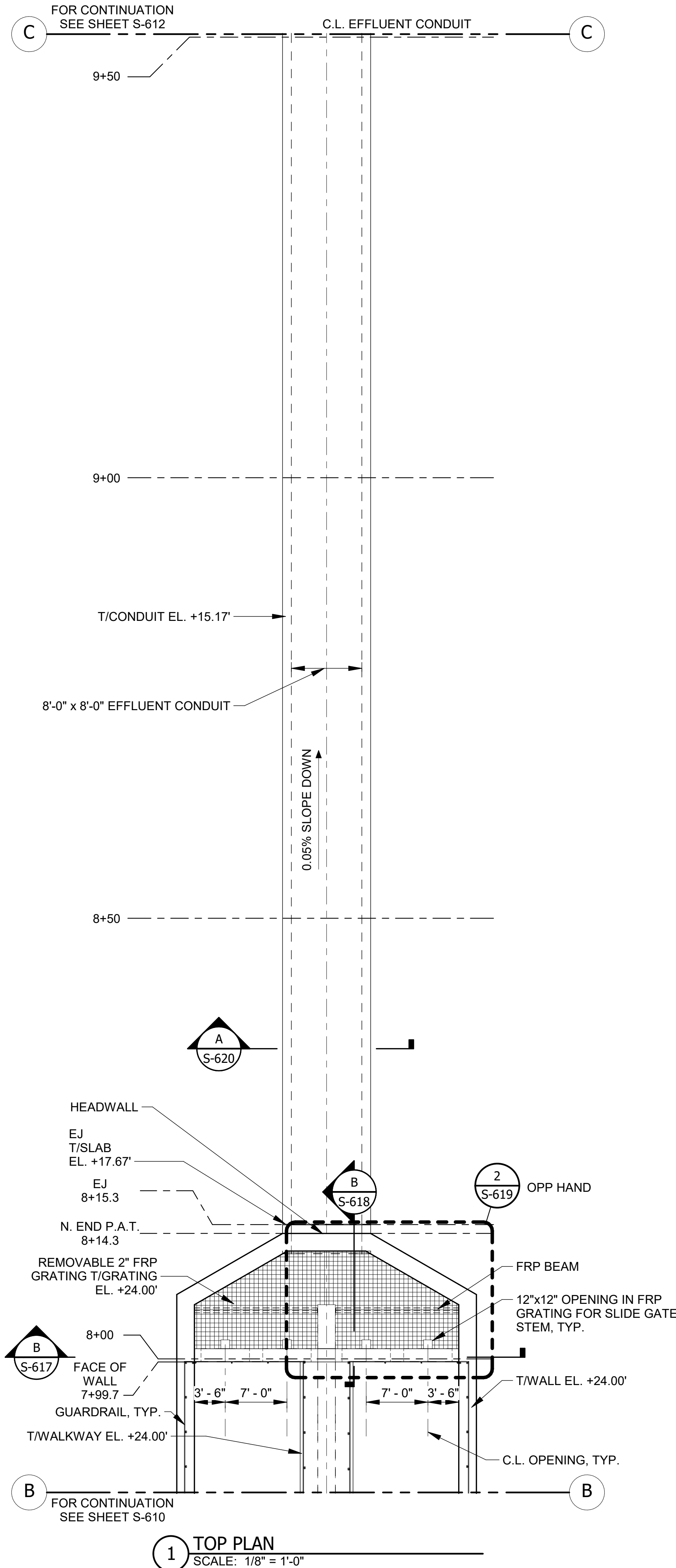


NOTES

1. STATIONING MEASURED ALONG CENTERLINE OF EFFLUENT CONDUIT.
2. SEE DETAILS 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURAL NOTES AND STANDARD DETAILS SEE S-001 THROUGH S-010.
3. MAXIMUM SPACING BETWEEN CONSTRUCTION JOINTS, AND BETWEEN CONSTRUCTION JOINTS AND EXPANSION JOINTS SHALL BE 60'-0". JOINTS SHALL BE CONTINUOUS FROM BASE SLAB TO WALLS AND ROOFS OR WALKWAY SLABS. PROVIDE CONTINUOUS WATERSTOPS AT VERTICAL CONSTRUCTION JOINTS. REFER TO DETAIL 6/S004, TYP. C2 JOINT.
4. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, I.E. EARTH RETENTION SYSTEM (ERS) AS NEEDED, SEE NOTE 4 SHEET S-602.
5. PROVIDE MINIMAL SLOPE (1/16" PER FOOT) OF TOP OF WALKWAY CONCRETE SLAB FOR DRAIN FROM CENTER TO EACH EDGE.

LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK



METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	GD	10/27/25

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PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by: JA	Checked by: JA
Drawn by: MM	Reviewed by: JA
Date: 7/1/2025	Scale: 1/8" = 1'-0"

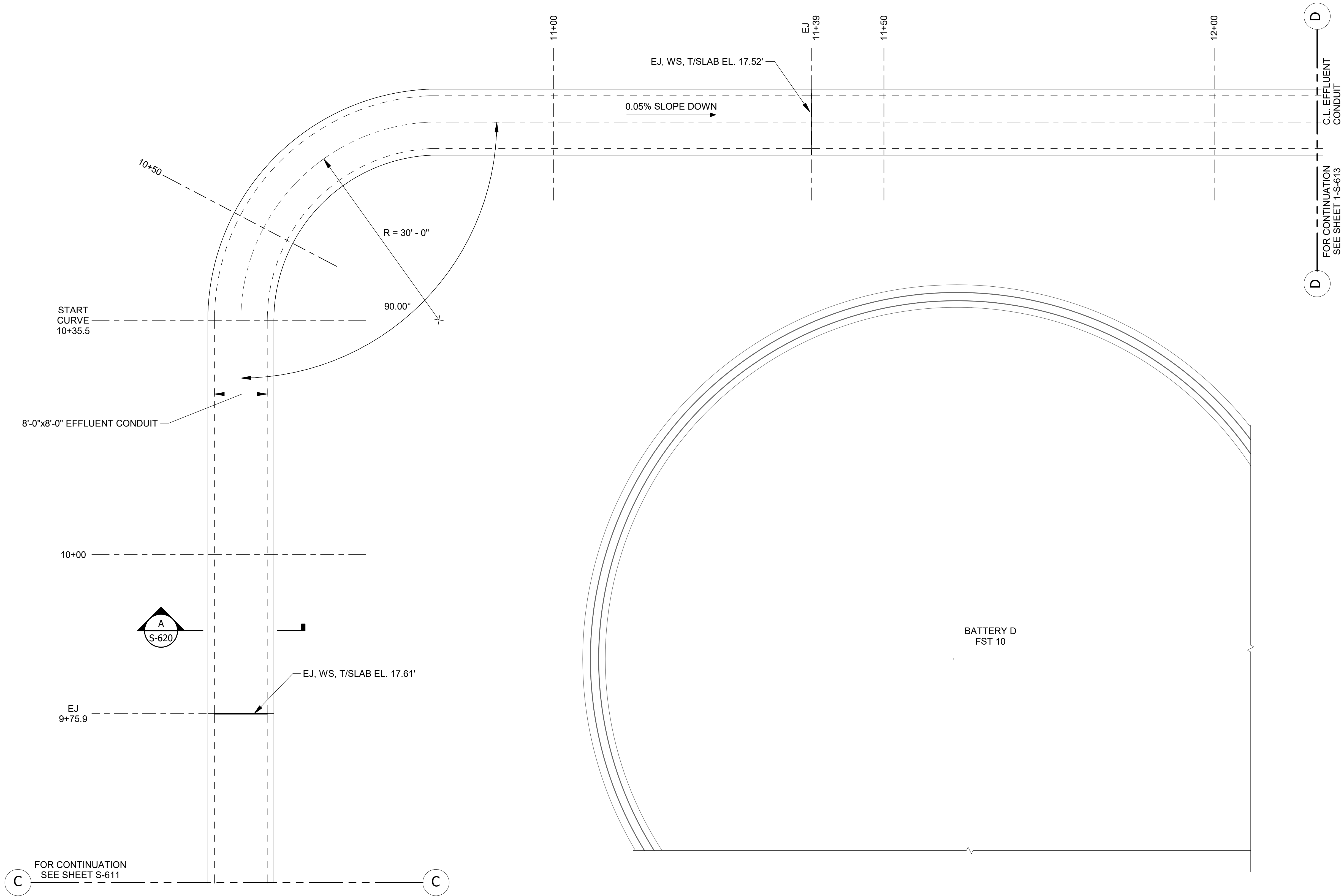
CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
POST AERATION TANK & EFFLUENT CONDUIT

TOP PLAN

Sheet Number:

S-611

Page Number: 201

**LEGEND:**

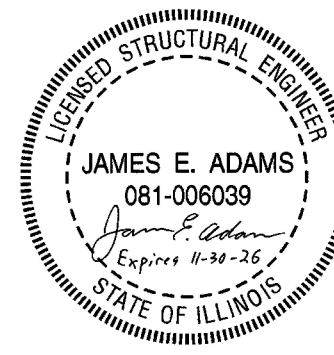
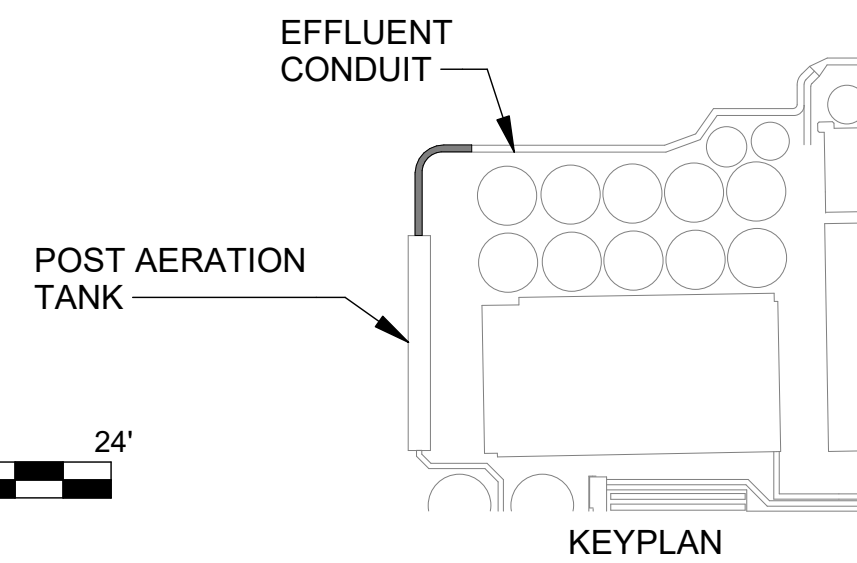
	NEW OR EXISTING BACKGROUND
	EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
	NEW WORK

NOTES

- STATIONING MEASURED ALONG CENTERLINE OF EFFLUENT CONDUIT.
- SEE DETAILS 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURAL NOTES AND STANDARD DETAILS SEE S-001 THROUGH S-010.
- MAXIMUM SPACING BETWEEN CONSTRUCTION JOINTS, AND BETWEEN CONSTRUCTION JOINTS AND EXPANSION JOINTS SHALL BE 60'-0". JOINTS SHALL BE CONTINUOUS FROM BASE SLAB TO WALLS AND ROOFS OR WALKWAY SLABS. PROVIDE CONTINUOUS WATERSTOPS AT VERTICAL CONSTRUCTION JOINTS. REFER TO DETAIL 6/S004, TYP. C2 JOINT.
- CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, I.E. EARTH RETENTION SYSTEM (ERS) AS NEEDED. SEE NOTE 4 SHEET S-602.
- SEE DETAIL 1 SHEET S-620 FOR REINFORCING AT CURVED BEND IN CONDUIT.

1 ROOF PLAN

SCALE: 1/8" = 1'-0"

**METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO**

Designed by: JA

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Reviewed by: JA

Date: 7/1/2025

Scale: As indicated

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
POST AERATION TANK & EFFLUENT CONDUIT

ROOF PLAN

Sheet Number:

S-612

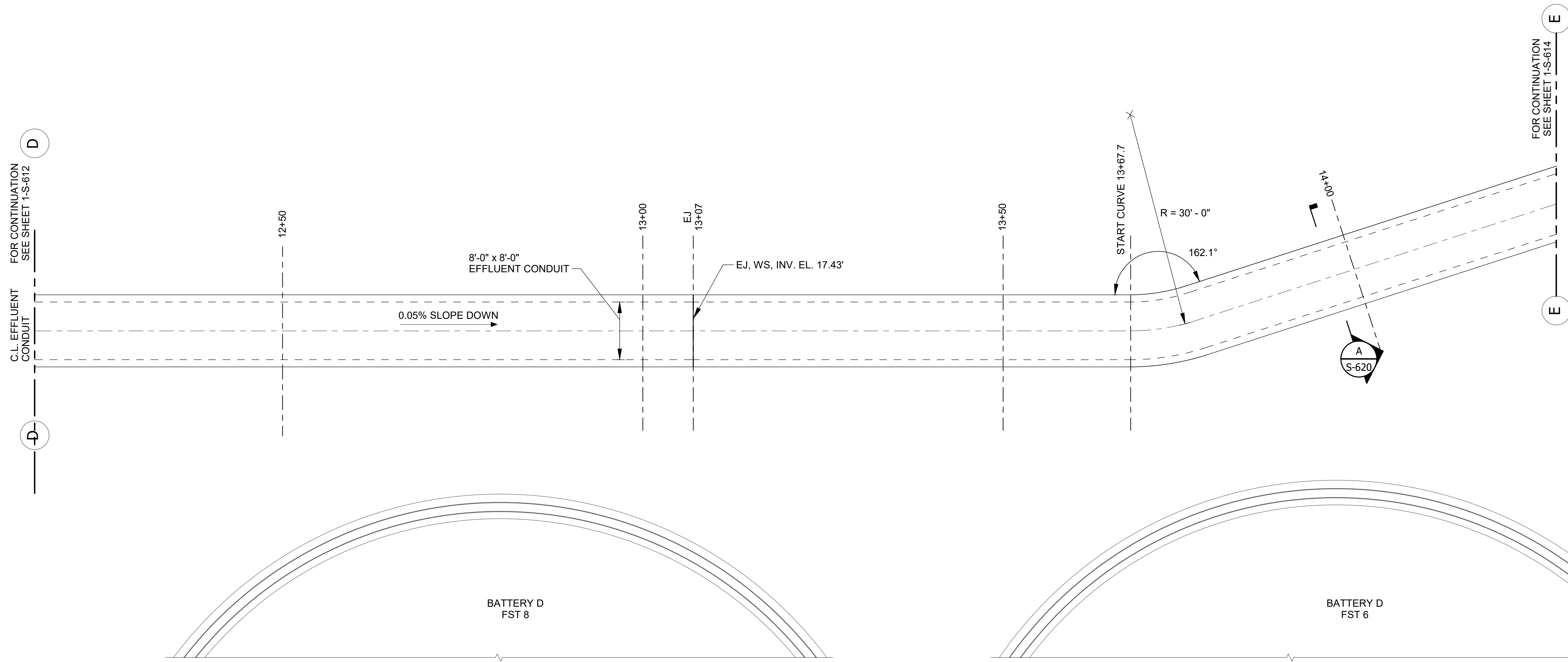
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Rev.	Description	Appr.	Date
1	ADDENDUM NO. 4	GD	10/27/25



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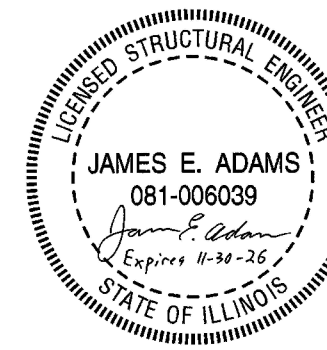
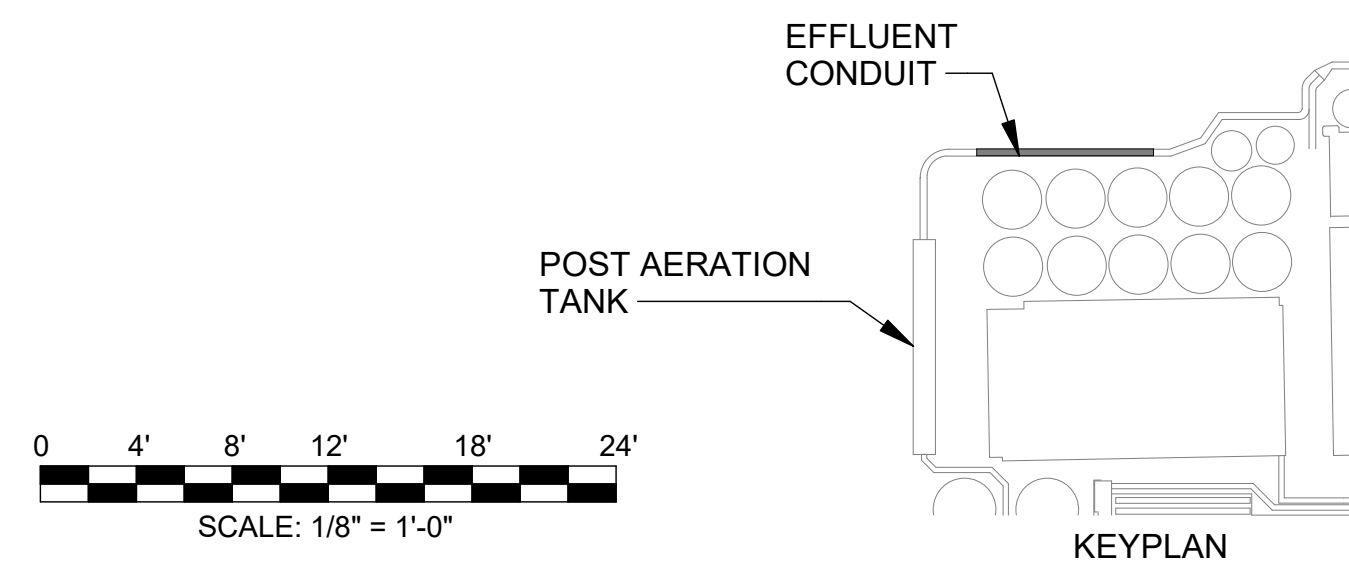


1 ROOF PLAN
SCALE: 1/8" = 1'-0"

NOTES

- | | |
|----------------|--|
| _____ | NEW OR EXISTING BACKGROUND |
| -----
_____ | EXISTING WORK TO REMAIN (OR NEW
WORK FURNISHED AND INSTALLED
UNDER OTHER CONTRACT ITEMS) |
| ----- | NEW WORK |

1. STATIONING MEASURED ALONG CENTERLINE OF EFFLUENT CONDUIT.
2. SEE DETAILS 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURE DETAILS SEE S-001 THROUGH S-010.
3. MAXIMUM SPACING BETWEEN CONSTRUCTION JOINTS, AND BETWEEN CONSTRUCTION JOINTS SHALL BE 60'-0". JOINTS SHALL BE CONTINUOUS FROM BACKFILL OR WALKWAY SLABS. PROVIDE CONTINUOUS WATERSTOPS AT VERTICAL CURVES. SEE DETAIL 6/S004, TYP. C2 JOINT.
4. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, I.E. EARTH RETENTION SYSTEMS, NOTE 4 SHEET S-602.
5. SEE DETAIL 1 SHEET S-620 FOR REINFORCING AT CURVED BEND IN CONDUIT.



**METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO**

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BATTERY E ACTIVATED SLUDGE FACILITY
POST AERATION TANK & EFFLUENT CONDUIT
ROOF PLAN

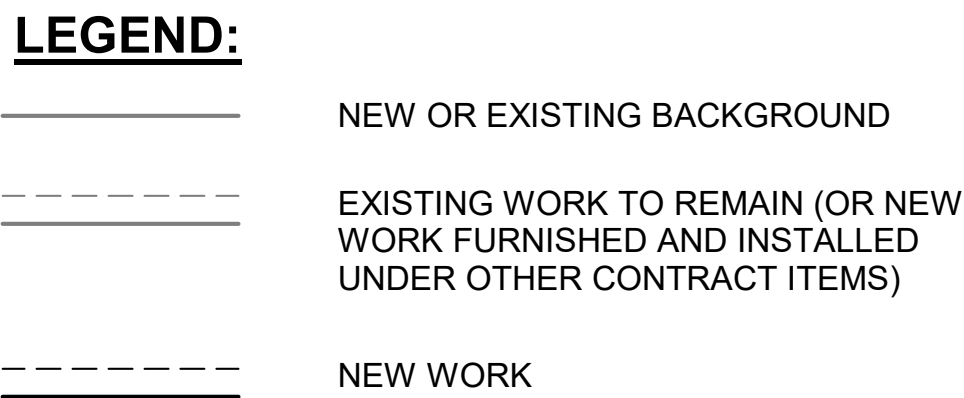
ROOF PLAN

Sheet Number:

S-613

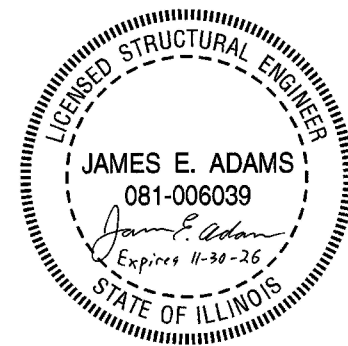
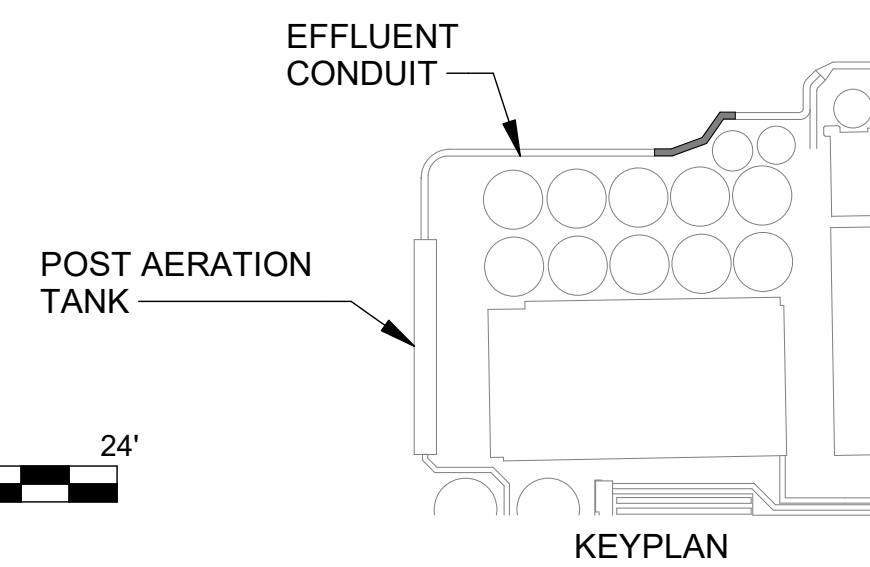
Page Number: 203

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1. STATIONING MEASURED ALONG CENTERLINE OF EFFLUENT CONDUIT.
2. SEE DETAILS 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURE DETAILS SEE S-001 THROUGH S-010.
3. MAXIMUM SPACING BETWEEN CONSTRUCTION JOINTS, AND BETWEEN CONSTRUCTION JOINTS SHALL BE 60'-0". JOINTS SHALL BE CONTINUOUS FROM BOTTOM OF WALKWAY SLABS. PROVIDE CONTINUOUS WATERSTOPS AT VERTICAL CURVES. SEE DETAIL 6/S004, TYP. C2 JOINT.
4. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, I.E. EARTH RETENTION SYSTEMS, TO MAINTAIN EXISTING CONDITIONS. SEE DETAIL 4 SHEET S-602.
5. SEE DETAIL 1 SHEET S-620 FOR REINFORCING AT CURVED BEND IN CONDUIT.

1



ROOF PLAN

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Drawn by: MM	Reviewed by: JA
Date: 7/1/2025	Scale: As indicated

Sheet Number: S-614

Page Number: 204

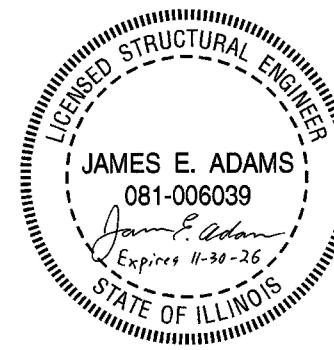
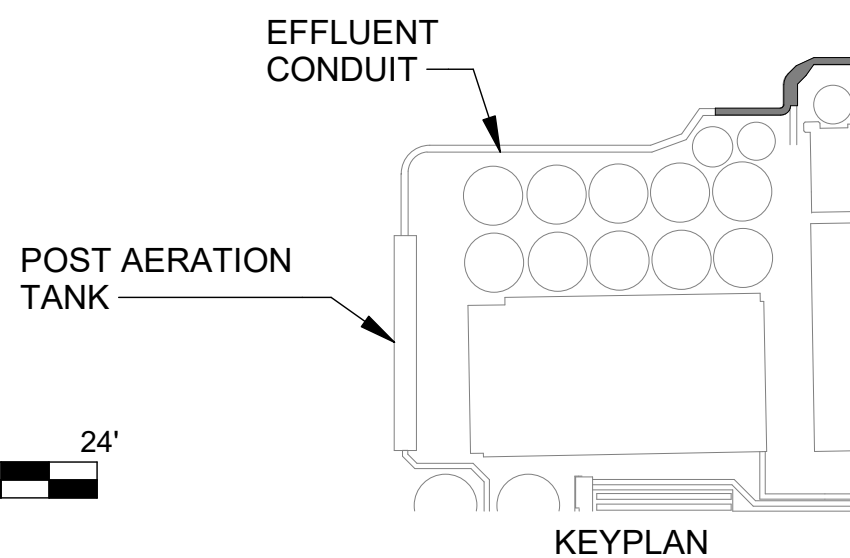


NEW OR EXISTING BACKGROUND

EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)

NEW WORK

1. STATIONING MEASURED ALONG CENTERLINE OF EFFLUENT CONDUIT.
2. SEE DETAILS 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURAL NOTES AND STANDARD DETAILS SEE S-001 THROUGH S-010.
3. MAXIMUM SPACING BETWEEN CONSTRUCTION JOINTS, AND BETWEEN CONSTRUCTION JOINTS AND EXPANSION JOINTS SHALL BE 60'-0". JOINTS SHALL BE CONTINUOUS FROM BASE SLAB TO WALLS AND ROOFS OR WALKWAY SLABS. PROVIDE CONTINUOUS WATERSTOPS AT VERTICAL CONSTRUCTION JOINTS. REFER TO DETAIL 6/S004, TYP. C2 JOINT.
4. REFER TO NOTES ON SHEET S-608.



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Sheet Number: **S-615**

Page Number: **205**

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