



Illinois Department of Transportation

Office of Intermodal Project Implementation / Division of Aeronautics
1 Langhorne Bond Drive / Springfield, Illinois 62707-8415

June 12, 2023

SUBJECT: MidAmerica St. Louis Airport
Mascoutah, Illinois
St. Clair County
Illinois Project Number: BLV-5101
AIP Project Number: 3-17-0146-TBD
Contract No. SC071
Item No. 12A, June 16, 2023 Letting
Addendum A

NOTICE TO PROSPECTIVE BIDDERS

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

Reason for Addendum:

Revisions to the Plans, Specifications and Schedule of Prices

To All Plan Holders:

The following changes to the bid documents dated April 21, 2023, are included in Addendum A:

1. Add notes for new pay items on Plan Sheet GI102
2. Add notes for new pay items on Plan Sheet GI103
3. Add notes for new pay items on Plan Sheet GC101
4. Add notes for new pay items on Plan Sheet GC102
5. Add notes for new pay items on Plan Sheet GC103
6. Update grades and profile on Plan Sheet CI101
7. Update staking elevations on Plan Sheet CP801
8. Update elevations and contours on Plan Sheet CG101
9. Update profiles on Plan Sheet CG301
10. Update profiles on Plan Sheet CG302
11. Update profiles on Plan Sheet CG303
12. Add CG501 to plan set
13. Renumber Plan Sheet CG502
14. Clarify notes on Plan Sheet CG506
15. Update cross sections on Plan Sheets CG706-710
16. Clarify Item SP-3 Sanitary Sewer Installation, Section 3-1.4 Project Conditions
17. Clarify Item SP-3 Sanitary Sewer Installation, Section 3-3.2 Pipe Accessories
18. Clarify Item SP-3 Sanitary Sewer Installation, Section 3-3.3 Cleanouts and Manholes
19. Clarify Item SP-3 Sanitary Sewer Installation, Section 3-4.3 Bedding
20. Clarify Item SP-3 Sanitary Sewer Installation, Section 3-4.4 Installation-Pipe, Section J
21. Clarify Item SP-3 Sanitary Sewer Installation, Section 3-4.6 Field Quality Control, Section I
22. Clarify item SP-6 Sanitary Forcemain System, Section 2-1.1 General
23. Add Item SP-9 Temporary Access Roads

Plan Changes:

- Sheet GI102
 - Updated to add pay items AW801455 and AW801958.
- Sheet GI103
 - Updated to add pay items AW801455 and AW801958.
- Sheet GC101
 - Updated to show access roads are now pay items AW801455 and AW801958.
- Sheet GC102
 - Updated to show access roads are now pay items AW801455 and AW801958.
- Sheet GC103
 - Updated to show access roads are now pay items AW801455 and AW801958.
- Sheet CI101
 - Updated grades and profile for the service road.
- Sheet CP801
 - Updated staking elevations.
- Sheet CG101
 - Updated contours and structure rim elevations.
- Sheet CG301
 - Updated profile elevations
- Sheet CG302
 - Updated profile elevations
- Sheet CG303
 - Updated profile elevations
- Sheet CG501
 - Add sheet to plan set
- Sheet CG502
 - Add updated plan sheet to plan set
- Sheet CG506
 - Revise call offs on Detail "Part Section A-A"
- Sheet CG706-710
 - Updated cross sections

Specification Changes:

- Item SP-3 Sanitary Sewer Installation, Section 3-1.4 Project Conditions
 - REPLACE: The first sentence with:
N/A
- Item SP-3 Sanitary Sewer Installation, Section 3-3.2 Pipe Accessories
 - DELETE: Paragraph A

- Item SP-3 Sanitary Sewer Installation, Section 3-3.3 Cleanouts and Manholes
 - DELETE: Paragraphs A-C
 - REPLACE: Paragraph A with:
Manholes shall conform to SP-4

- Item SP-3 Sanitary Sewer Installation, Section 3-4.3 Bedding
 - DELETE: “in accordance with Section 02300
 - REPLACE: with:
Bedding material shall be IDOT CA 7 or CA6 and placed at 97% proctor.

- Item SP-3 Sanitary Sewer Installation, Section 3-4.4 Installation-Pipe, Section J
 - DELETE: “in accordance with Section 02300
 - REPLACE: with:
With bedding material. Bedding material shall be IDOT CA 7 or CA6 and placed at 97% proctor.

- Item SP-3 Sanitary Sewer Installation, Section 3-4.6 Field Quality Control, Section I
 - DELETE: first sentence
 - REPLACE: with:
See SP-6 for forcemain requirements

- Item SP-6 Sanitary Sewer Forcemain System, Section 2-1.1 General
 - DELETE: “gravity and” from second sentence

- Item SP-9 Temporary Access Roads
 - ADD: Add this specification to the project.

Schedule of Prices Changes:

- Add pay item AW801455 24' TEMPORARY ACCESS ROAD #1 – per Lump Sum
- Add pay item AW801958 24" TEMPORARY ACCESS ROAD #2 – per Lump Sum

Prime contractors must utilize the enclosed material when preparing their bid and must include any changes to the Schedule of Prices in their bid.

Questions on this addendum may be directed to Tom Morris of CMT at 314-571-9080 or by email tmorris@cmtengr.com.

Attachments

- Revised Plan Sheet GI102, GI103, GC101, GC102, GC103, CI101, CP801, CG101, CG301, CG302, CG303, CG501, CG 502, CG506, CG706-710
- Revised Specification SP-3
- Revised Specification SP-6
- Specification SP-9 Temporary Access Roads

BID ISSUE
APRIL 21, 2023

TERMINAL APRON EXPANSION -
PROJECT 1



MIDAMERICA
ST. LOUIS AIRPORT
ST. CLAIR COUNTY, IL

A 6/9/23 ADDENDUM A

MARK DATE DESCRIPTION

BLV PROJECT NO. 2022-14
IL PROJECT NO. BLV-5087
CMT PROJECT NO: 22001186.00
CAD DWG FILE: 22001186 - G1100 UPDATED.DWG
DESIGNED BY: CMT
DRAWN BY: %%U
CHECKED BY: CMT
APPROVED BY: CMT
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SHEET TITLE

SUMMARY OF
QUANTITIES

SHEET 3 G1102 OF 60

SUMMARY OF QUANTITIES
BASE BID - TERMINAL APRON EXPANSION - PROJECT 1

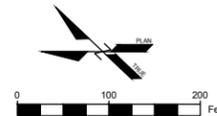
ITEM #	DESCRIPTION	UNIT	NORTH EXPANSION QUANTITY	TOTAL PROJECT QUANTITY	RECORDED QUANTITY
AW108040	#4/0 XLP-USE CABLE	FOOT	200.0	200.0	
AW108086	#6 XLP-USE CABLE	FOOT	4,200.0	4,200.0	
AW108088	#8 XLP-USE CABLE	FOOT	95.0	95.0	
AW108090	#10 XLP-USE CABLE	FOOT	4,000.0	4,000.0	
AW108092	#12 XLP-USE CABLE	FOOT	9,900.0	9,900.0	
AW108108	1/C #8 5 KV UG CABLE	FOOT	350.0	350.0	
AW108706	1/C #6 COUNTERPOISE	FOOT	175.0	175.0	
AW108960	REMOVE CABLE	FOOT	710.0	710.0	
AW110201	1" PVC DUCT, DIRECT BURY	FOOT	2,325.0	2,325.0	
AW110202	2" PVC DUCT, DIRECT BURY	FOOT	875.0	875.0	
AW110502	2-WAY CONCRETE ENCASED DUCT	FOOT	370.0	370.0	
AW110610	ELECTRICAL HANDHOLE	EACH	4.0	4.0	
AW125415	MIL-BASE MOUNTED	EACH	3.0	3.0	
AW125902	REMOVE BASE MOUNTED LIGHT	EACH	1.0	1.0	
AW150510	ENGINEER'S FIELD OFFICE	L SUM	1.0	1.0	
AW150520	MOBILIZATION	L SUM	1.0	1.0	
AW152410	UNCLASSIFIED EXCAVATION	CU YD	11,846.0	11,846.0	
AW155540	BY-PRODUCT LIME	TON	300.0	300.0	
AW155612	SOIL PROCESSING-12"	SQ YD	7,094.0	7,094.0	
AW156510	SILT FENCE	FOOT	1,507.0	1,507.0	
AW156511	DITCH CHECK	EACH	6.0	6.0	
AW156520	INLET PROTECTION	EACH	1.0	1.0	
AW156531	EROSION CONTROL BLANKET	SQ YD	2,000.0	2,000.0	
AW161515	TEMPORARY CLASS C FENCE	FOOT	1,150.0	1,150.0	
AW161516	TEMPORARY CLASS C FENCE WITH JERSEY BARRIER	FOOT	445.0	445.0	
AW161601	TEMPORARY GATE	EACH	1.0	1.0	
AW162508	CLASS E FENCE 8'	FOOT	265.0	265.0	
AW209609	CRUSHED AGG. BASE COURSE- 9"	SQ YD	6,910.0	6,910.0	
AW209611	CRUSHED AGGREGATE BASE COURSE- 11"	SQ YD	184.0	184.0	
AW302611	ASPHALT TREATED PERMEABLE SUBBASE	SQ YD	6,313.0	6,313.0	
AW302630	ATPS TEST SECTION	EACH	1.0	1.0	
AW401610	BITUMINOUS SURFACE COURSE	TON	292.0	292.0	
AW401900	REMOVE BITUMINOUS PAVEMENT	SQ YD	1,613.0	1,613.0	
AW501509	9" PCC PAVEMENT	SQ YD	513.0	513.0	
AW501516	16" PCC PAVEMENT	SQ YD	5,573.0	5,573.0	
AW501530	PCC TEST BATCH	EACH	1.0	1.0	
AW602510	BITUMINOUS PRIME COAT	GALLON	255.0	255.0	
AW603510	BITUMINOUS TACK COAT	GALLON	218.0	218.0	
AW620520	PAVEMENT MARKING-WATERBORNE	SQ FT	3,600.0	3,600.0	
AW620525	PAVEMENT MARKING-BLACK BORDER	SQ FT	1,200.0	1,200.0	
AW620900	PAVEMENT MARKING REMOVAL	SQ FT	650.0	650.0	
AW701524	24" RCP, CLASS IV	FOOT	360.0	360.0	
AW701536	36" RCP, CLASS IV	FOOT	185.0	185.0	
AW701900	REMOVE PIPE	FOOT	74.0	74.0	
AW705526	6" PERFORATED UNDERDRAIN W/SOCK	FOOT	1,087.0	1,087.0	
AW705635	UNDERDRAIN COLLECTION STRUCTURE	EACH	4.0	4.0	
AW705640	UNDERDRAIN CLEANOUT	EACH	9.0	9.0	
AW751416	TYPE 1 INLET	EACH	1.0	1.0	
AW752424	PRECAST REINFORCED CONC. FES 24"	EACH	2.0	2.0	
AW752436	PRECAST REINFORCED CONC. FES 36"	EACH	1.0	1.0	
AW752900	REMOVE END SECTION	EACH	2.0	2.0	
AW754610	PAVED DITCH	FOOT	490.0	490.0	
AW770508	8" SANITARY SEWER	FOOT	394.0	394.0	
AW770704	SANITARY MANHOLE 4'	EACH	1.0	1.0	
AW770900	REMOVE SANITARY SEWER	FOOT	178.0	178.0	
AW801455	24" TEMPORARY ACCESS ROAD #1	L SUM	1.0	1.0	
AW801958	24" TEMPORARY ACCESS ROAD #2	L SUM	1.0	1.0	
AW801966	3" GRS CONDUIT	FOOT	50.0	50.0	
AW801967	RECEPTACLE PEDESTAL	EACH	5.0	5.0	
AW801968	STRUT FRAMING AND PEDESTAL	L SUM	1.0	1.0	
AW801969	UTILITY SERVICE INSTALLATION	L SUM	1.0	1.0	
AW801971	4' X 20' TRENCH DRAIN	EACH	1.0	1.0	
AW801972	8" VALVE & ACTUATOR	EACH	1.0	1.0	
AW801973	CONTROL SWITCHES	L SUM	1.0	1.0	
AW801980	50KVA DISTRIBUTION TRANSFORMER, 480-120/240V, 1PH, 3W	EACH	1.0	1.0	
AW801981	DISTRIBUTION PANEL BOARD, 200A, 480/277V, 3PH, 4W, NEMA 3R, 30C	EACH	1.0	1.0	
AW801985	POWER PANEL, 200A, 120/240V, 1PH, 3W, NEMA 3R	EACH	1.0	1.0	
AW801992	YIELD SIGN AND POST	EACH	1.0	1.0	
AW801994	8" SANITARY FORCEMAIN	FOOT	178.0	178.0	
AW801996	REMOVE FENCE	FOOT	265.0	265.0	
AW801997	FIBER OPTIC CABLE	FOOT	400.0	400.0	
AW801998	NON-FUSIBLE SERVICE DISCONNECT, 200A, 600V, 2-POLE, NEMA 3R	EACH	1.0	1.0	
AW801999	#14 XLP-USE CABLE	FOOT	12,100.0	12,100.0	
AW901510	SEEDING	ACRE	4.0	4.0	
AW904510	SODDING	SQ YD	350.0	350.0	
AW908510	MULCHING	ACRE	4.0	4.0	
AW910915	REMOVE ROADWAY SIGN	EACH	1.0	1.0	

SUMMARY OF QUANTITIES
ALTERNATE 1 - TERMINAL APRON EXPANSION - PROJECT 1

ITEM #	DESCRIPTION	UNIT	NORTH EXPANSION AA QUANTITY	TOTAL AA QUANTITY	RECORDED QUANTITY
AX108088	#8 XLP-USE CABLE	FOOT	580.0	580.0	
AX108090	#10 XLP-USE CABLE	FOOT	800.0	800.0	
AX110201	1" PVC DUCT, DIRECT BURY	FOOT	175.0	175.0	
AX110202	2" PVC DUCT, DIRECT BURY	FOOT	175.0	175.0	
AX801474	LIGHTING CONTROLLER IN NEMA 3R ENCLOSURE	L SUM	1.0	1.0	
AX801993	60' APRON LIGHT POLE W/FIXTURES	EACH	2.0	2.0	
AX801995	PASSENGER BOARDING RAMP	EACH	1.0	1.0	
AX801997	FIBER OPTIC CABLE	FOOT	300.0	300.0	



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BID ISSUE
APRIL 21, 2023

TERMINAL APRON EXPANSION -
PROJECT 1



MIDAMERICA
ST. LOUIS AIRPORT
ST. CLAIR COUNTY, IL

A 6/9/23 ADDENDUM A

MARK DATE DESCRIPTION

BLV PROJECT NO. 2022-14

IL PROJECT NO. BLV-5087

CMT PROJECT NO: 22001186.00

CAD DWG FILE: 22001186 - GC100.DWG

DESIGNED BY: CMT

DRAWN BY: %U

CHECKED BY: CMT

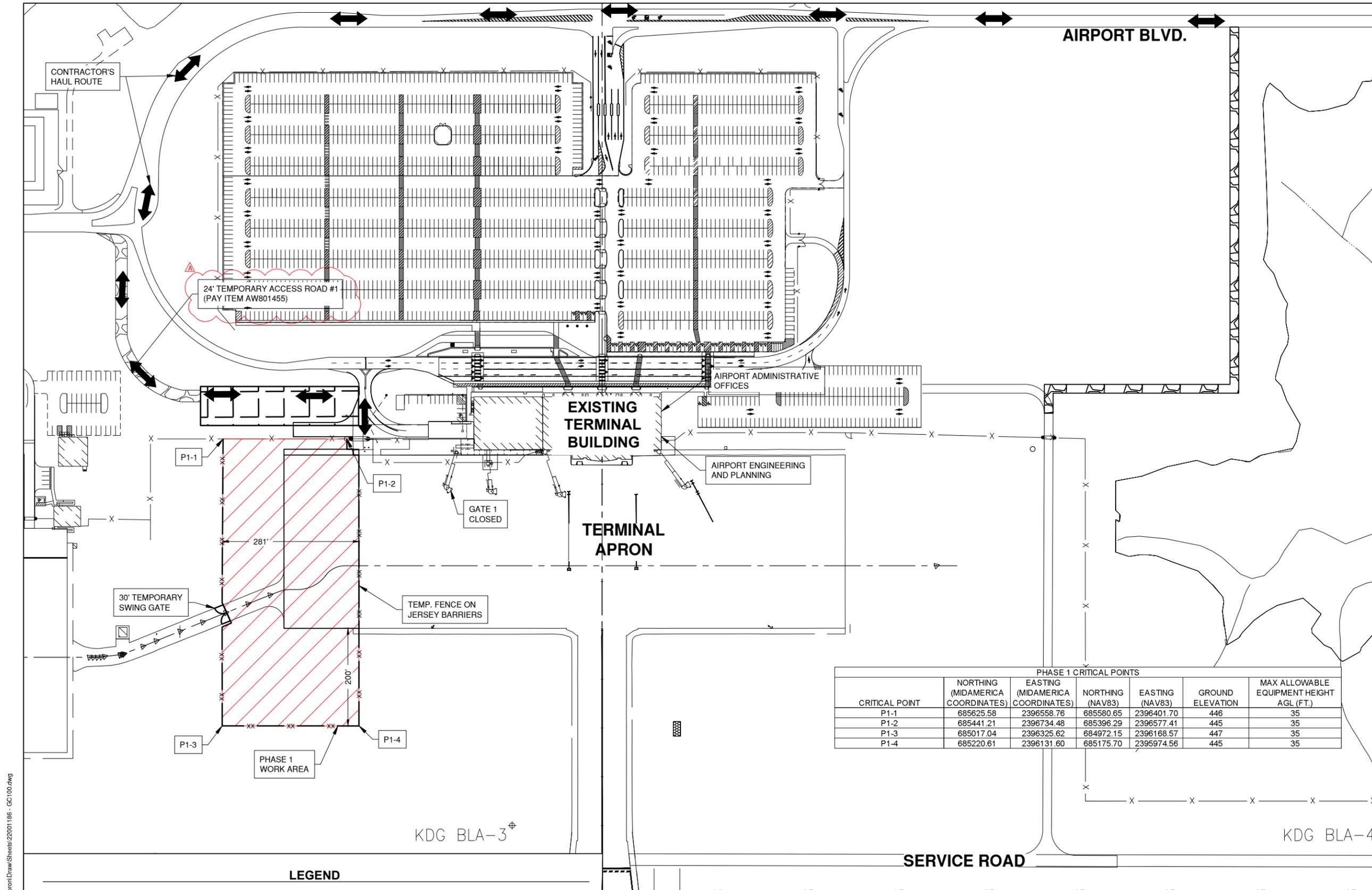
APPROVED BY: CMT

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SHEET TITLE

CONSTRUCTION
ACTIVITY PLAN -
PHASE 1

GC102
SHEET 11 OF 60



PHASE 1 CRITICAL POINTS						
CRITICAL POINT	NORTHING (MIDAMERICA COORDINATES)	EASTING (MIDAMERICA COORDINATES)	NORTHING (NAV83)	EASTING (NAV83)	GROUND ELEVATION	MAX ALLOWABLE EQUIPMENT HEIGHT AGL (FT.)
P1-1	685625.58	2396558.76	685580.65	2396401.70	446	35
P1-2	685441.21	2396734.48	685396.29	2396577.41	445	35
P1-3	685017.04	2396325.62	684972.15	2396168.57	447	35
P1-4	685220.61	2396131.60	685175.70	2395974.56	445	35

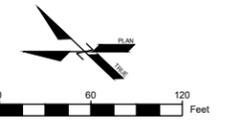
LEGEND

- PHASE 1 WORK AREA
- CONTRACTOR HAUL ROUTE
- PROPOSED TEMPORARY FENCING
- 4' BARRICADE SPACING FOR CONSTRUCTION PHASE OPERATIONS - RESTRICT VEHICLE MOVEMENTS
- 30' TEMPORARY GATE
- PHASING CRITICAL POINT

PHASE 1 NOTES:

1. THIS PHASE SHALL CONSIST OF ALL WORK OUTSIDE OF THE TAXIWAY K, K4 AND TERMINAL APRON OFA.
2. PHASE 1 SHALL BE COMPLETED WITHIN THE OVERALL PROJECT CALENDAR DAYS (110 CALENDAR DAYS).
3. ALL PHASES MAY BE CONCURRENT WITH PHASE 1.
4. A TEMPORARY FENCE SHALL BE INSTALLED 142.5 FEET AWAY FROM THE TAXIWAY K4 CENTERLINE AND APRON PARKING CENTERLINE TO THE SOUTH TO ALLOW WORK OUTSIDE OF THE AOA.
5. A TEMPORARY FENCE ON JERSEY BARRIERS SHALL BE INSTALLED 50 FEET AWAY FROM THE EXISTING EDGE OF THE NORTH APRON CONCRETE LIMITS TO ALLOW FOR WORK TO BE PERFORMED OUTSIDE OF THE AOA. GATE 1 WILL BE CLOSED FOR THE DURATION OF THIS PHASE.
6. WORK INSIDE OF THE AOA FOR INSTALLATION OF THE TEMPORARY FENCE AND GRADING OPERATIONS MUST BE DONE IN ACCORDANCE WITH THE AOA REQUIREMENTS.
7. TEMPORARY GATES SHALL BE INSTALLED TO ALLOW ACCESS BETWEEN THE PROPOSED AIRSIDE SERVICE ROAD AND THE EXISTING JPALS ACCESS ROAD.
8. HAUL ROUTES SHALL BE PAID FOR AS PAY ITEMS AW801455 AND AW801958.

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Date: Thursday, June 8, 2023 9:45:16 AM



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APRIL 21, 2023
 BID ISSUE

TERMINAL APRON EXPANSION -
 PROJECT 1



MIDAMERICA
 ST. LOUIS AIRPORT
 ST. CLAIR COUNTY, IL

A 6/9/23 ADDENDUM A

MARK DATE DESCRIPTION

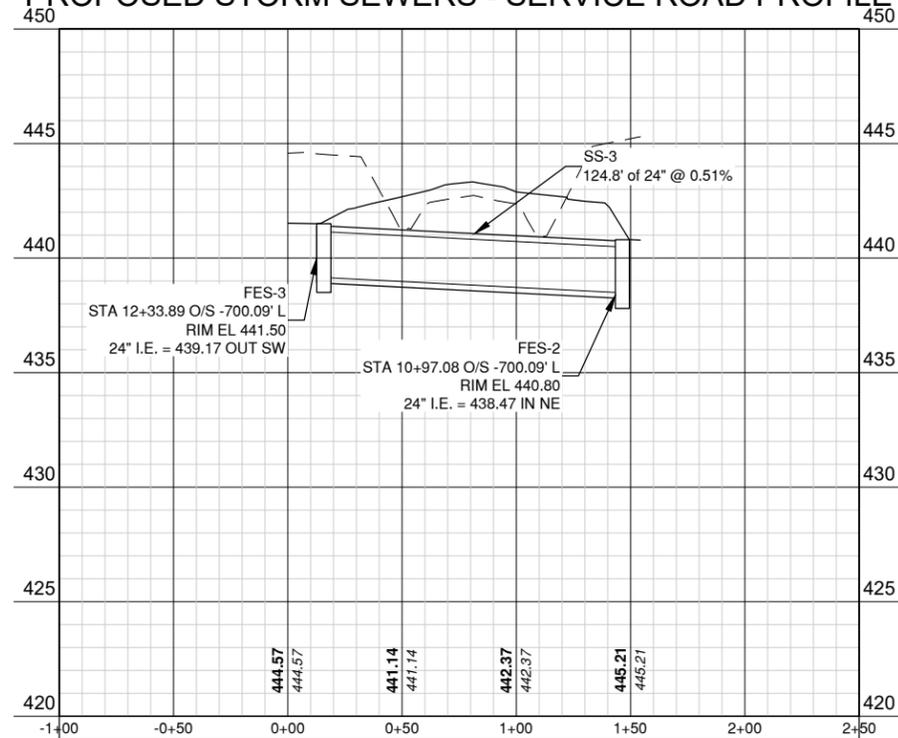
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 IL PROJECT NO. BLV-5087
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 DRAWN BY: %%U
 CHECKED BY: CMT
 APPROVED BY: CMT
 COPYRIGHT: CRAWFORD, MURPHY & TILLY, INC. 2021

SHEET TITLE

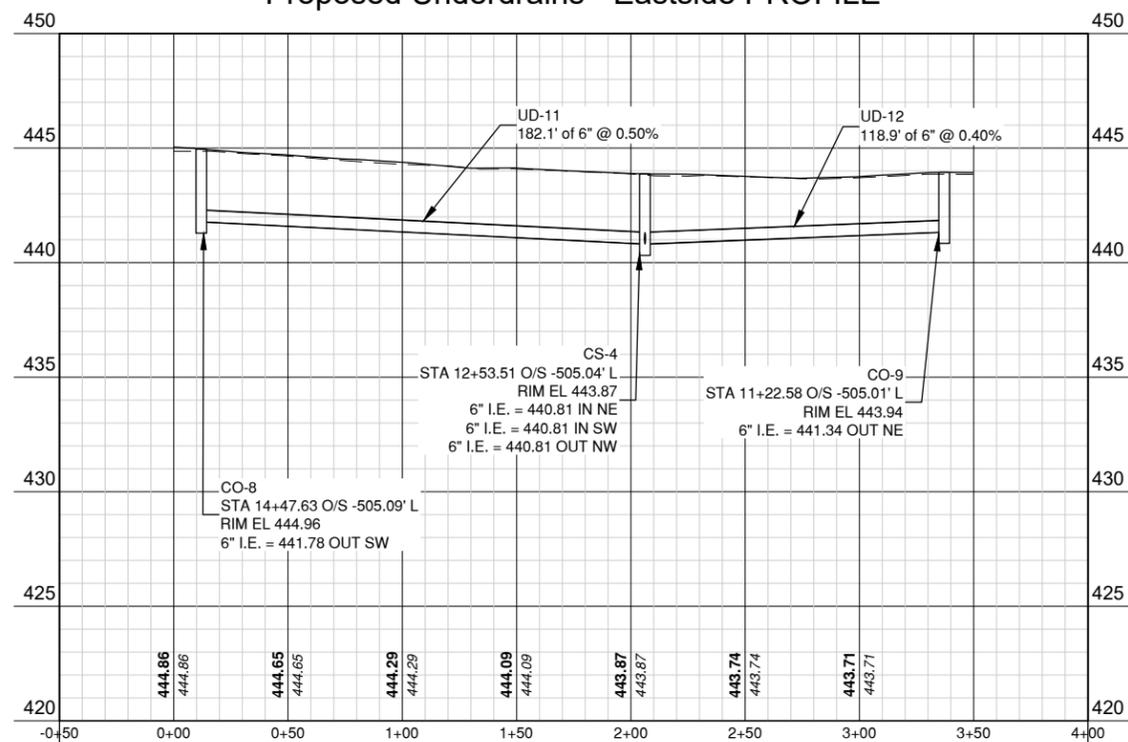
UNDERDRAIN
 PROFILE 3

CG303
 SHEET 32 OF 60

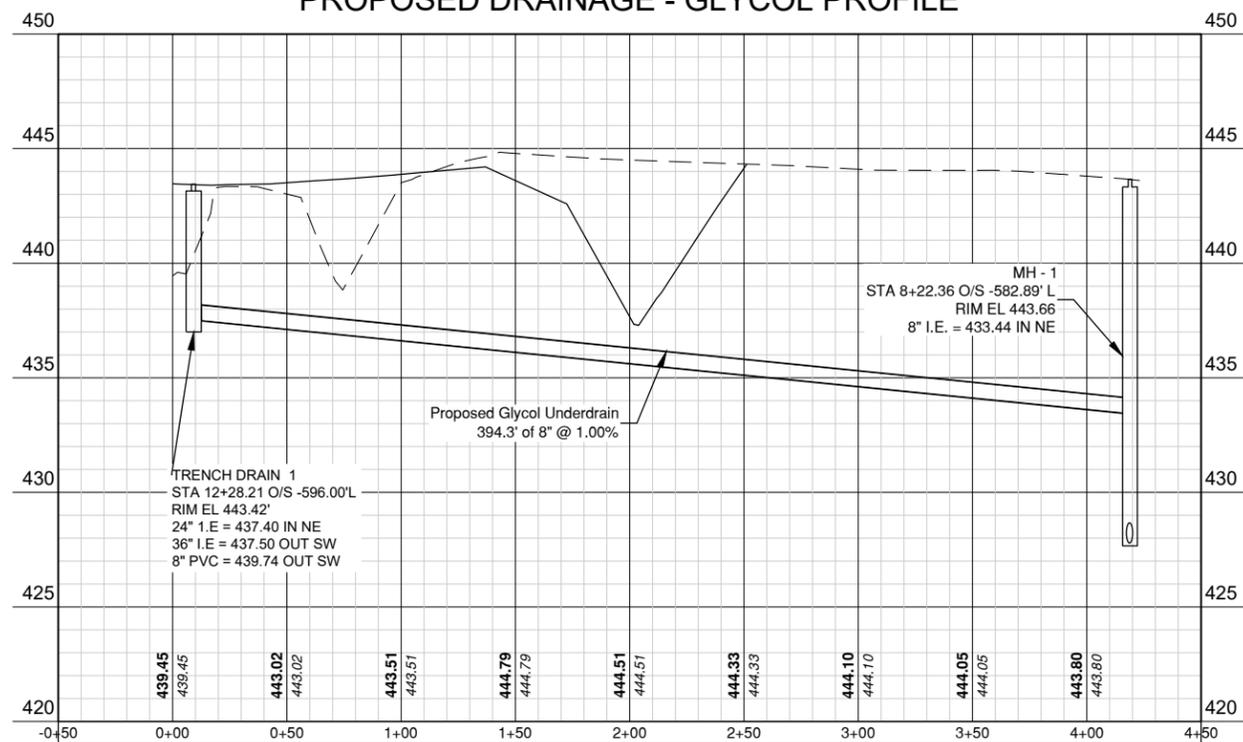
PROPOSED STORM SEWERS - SERVICE ROAD PROFILE



Proposed Underdrains - Eastside PROFILE



PROPOSED DRAINAGE - GLYCOL PROFILE

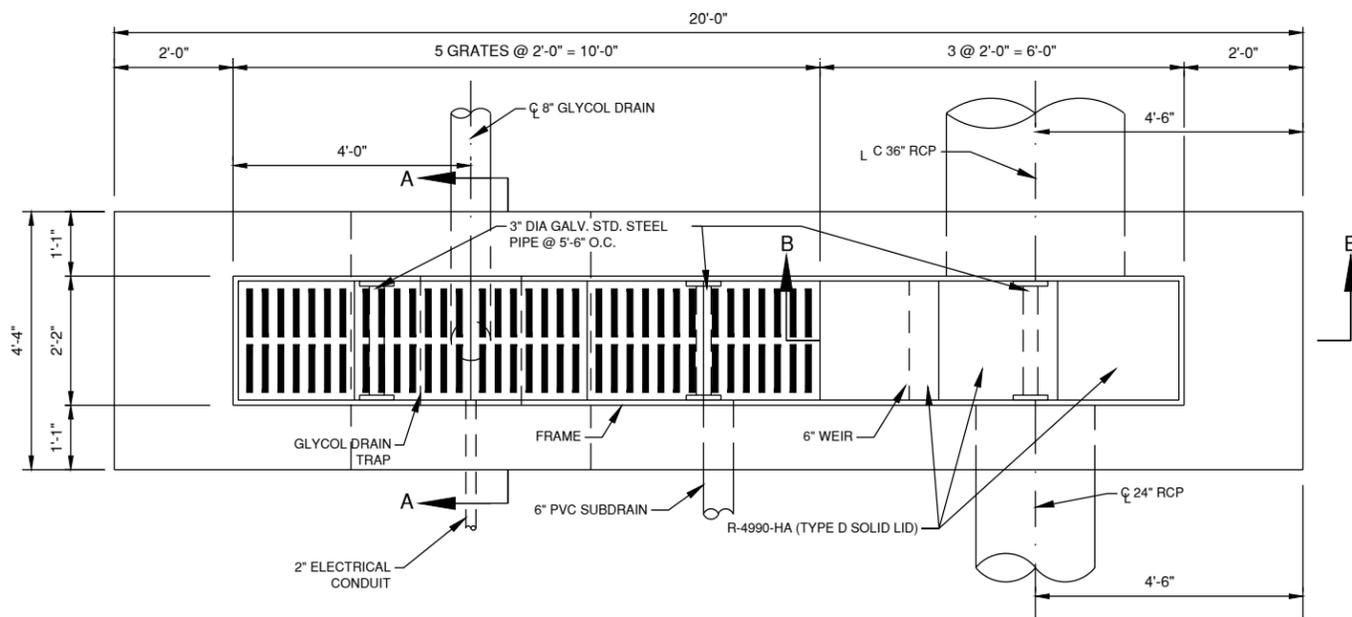


MARK	DATE	DESCRIPTION
A	6/9/23	ADDENDUM A

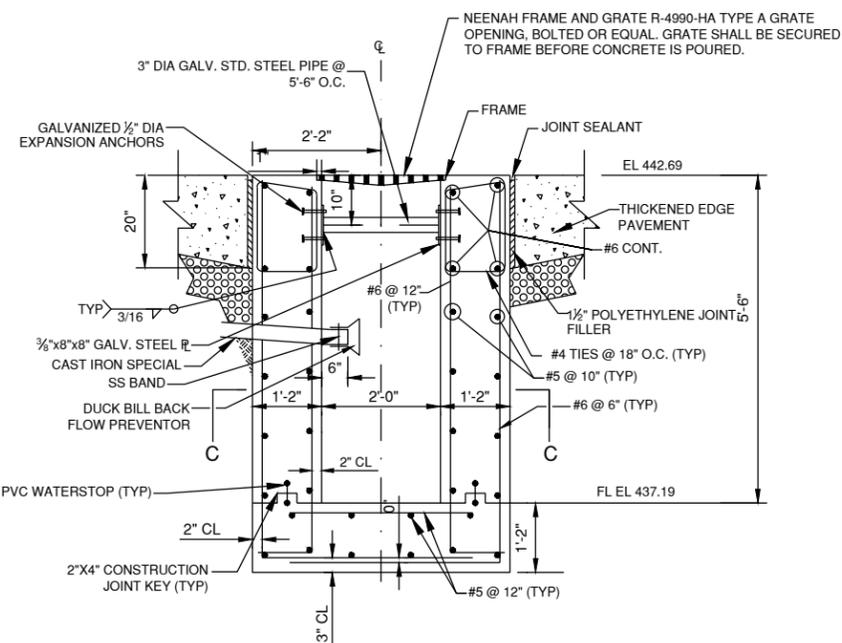
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IL PROJECT NO.	BLV-5087
CMT PROJECT NO.	22001186.00
CAD DWG FILE:	22001186 - CG500.DWG
DESIGNED BY:	CMT
DRAWN BY:	%%LJ
CHECKED BY:	CMT
APPROVED BY:	CMT
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SHEET TITLE

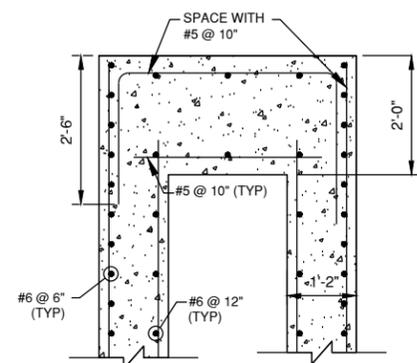
TRENCH DRAIN
DETAILS



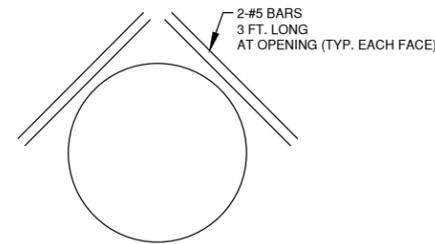
20' TRENCH DRAIN GRATE LAYOUT
N.T.S.



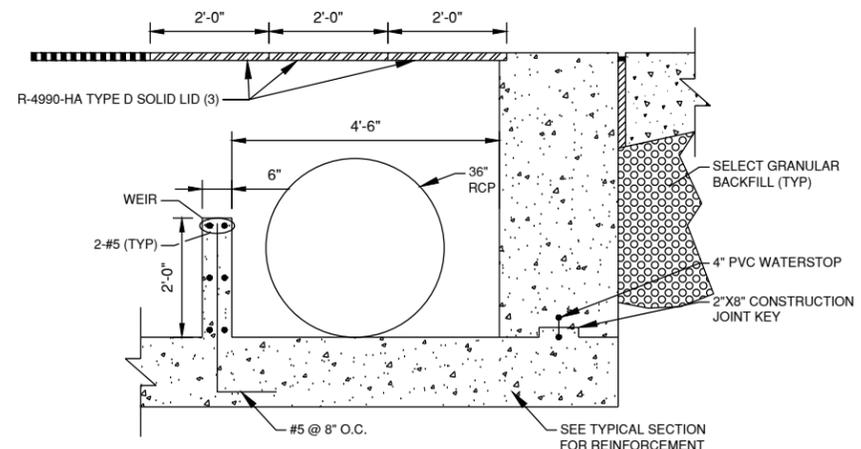
20' TRENCH DRAIN TYPICAL SECTION
N.T.S.



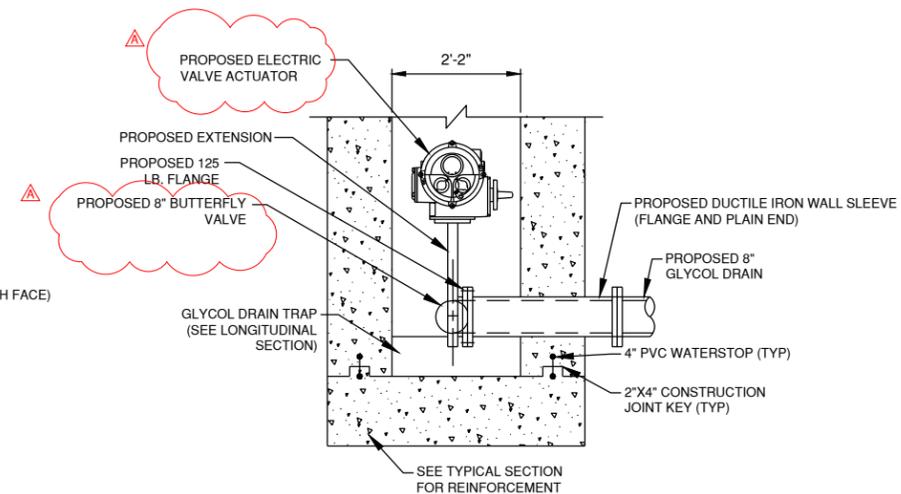
PART SECTION C-C
N.T.S.



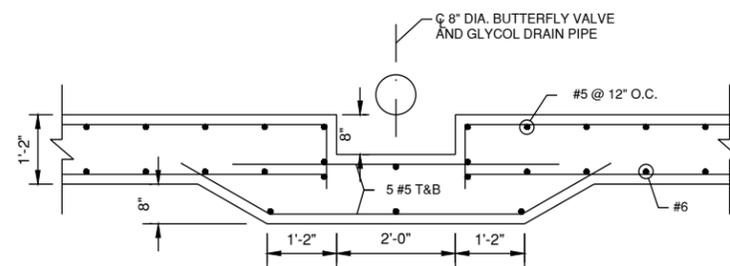
TYPICAL PIPE PENETRATION DETAIL
N.T.S.



PART SECTION B-B
N.T.S.



PART SECTION A-A
N.T.S.



PART LONGITUDINAL SECTION THROUGH GLYCOL DRAIN TRAP
N.T.S.

NOTES:

1. CAST IN PLACE CONCRETE SHALL HAVE A MINIMUM 14 DAY COMPRESSIVE STRENGTH OF 3500 PSI.
2. ALL REINFORCEMENT SHALL BE ASTM A615 GRADE 60.
3. REINFORCING BARS SHALL BE CUT AND/OR FIELD BENT AT ALL PIPE OPENINGS TO MAINTAIN 1" CLEARANCE FROM PIPES.
4. MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1/2" UNLESS OTHERWISE SHOWN.
5. ALL CONCRETE, REINFORCING STEEL, EXCAVATION, BACKFILL, DUCTILE IRON FRAME AND GRATE, STEEL PIPES AND PLATES, ANCHORS, WATERSTOPS, JOINT FILLER AND JOINT SEALANT NECESSARY TO CONSTRUCT THE TRENCH DRAIN SHALL BE INCLUDED IN THE COST OF 4'X20' TRENCH DRAIN (EACH).
6. FIELD VERIFY ALL SIZES AND LOCATIONS PRIOR TO CONSTRUCTION/INSTALLATION OF STRUCTURES AND PIPES.



License No.

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THIS BAR IS EQUAL TO 2" AT FULL SCALE (22X34)

APRIL 21, 2023
BID ISSUE

TERMINAL APRON
EXPANSION - PROJECT 1



MIDAMERICA
ST. LOUIS AIRPORT
ST. CLAIR COUNTY, IL

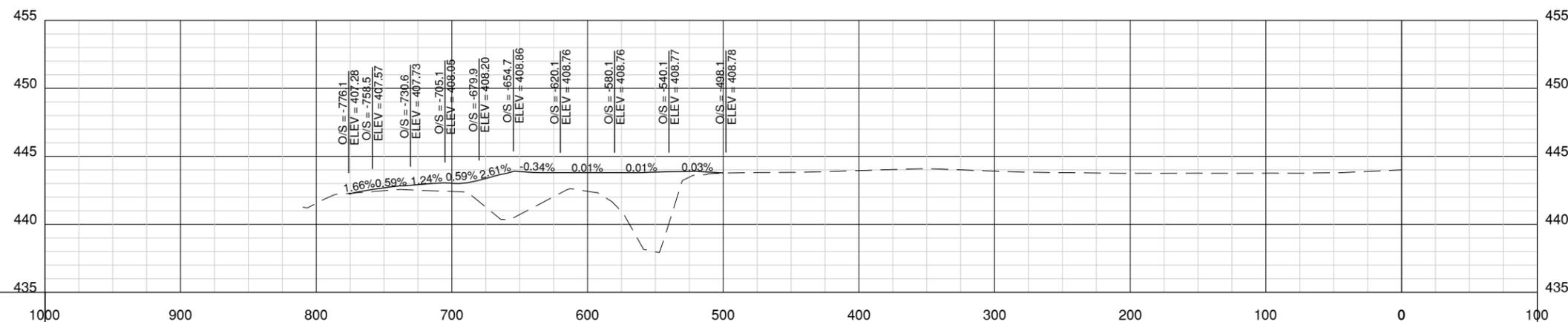
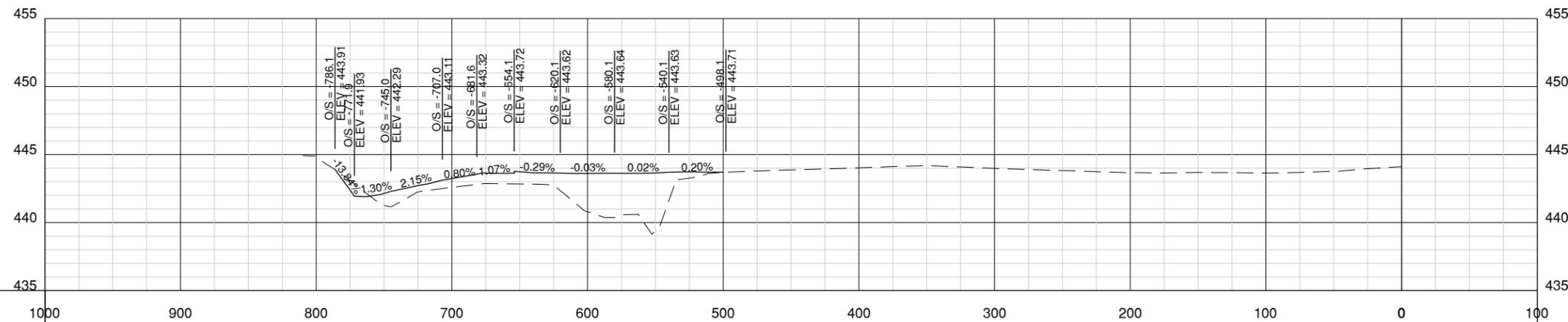
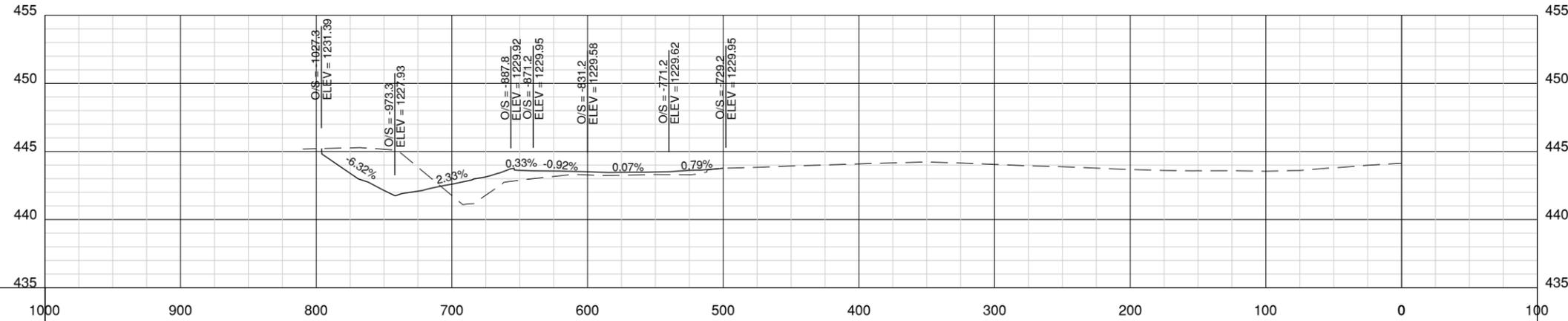
A 6/9/23 ADDENDUM A

MARK DATE DESCRIPTION

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CAD DWG FILE: APRON XS SHEETS.DWG
DESIGNED BY: DHC
DRAWN BY: %%UJ
CHECKED BY: TWMM
APPROVED BY: CMT
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SHEET TITLE
APRON EXPANSION
CROSS SECTIONS 6

CG706
SHEET 56 OF 60





License No.
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THIS BAR IS EQUAL TO 2" AT FULL SCALE (22X34)

APRIL 21, 2023
BID ISSUE

TERMINAL APRON
EXPANSION - PROJECT 1



MIDAMERICA
ST. LOUIS AIRPORT
ST. CLAIR COUNTY, IL

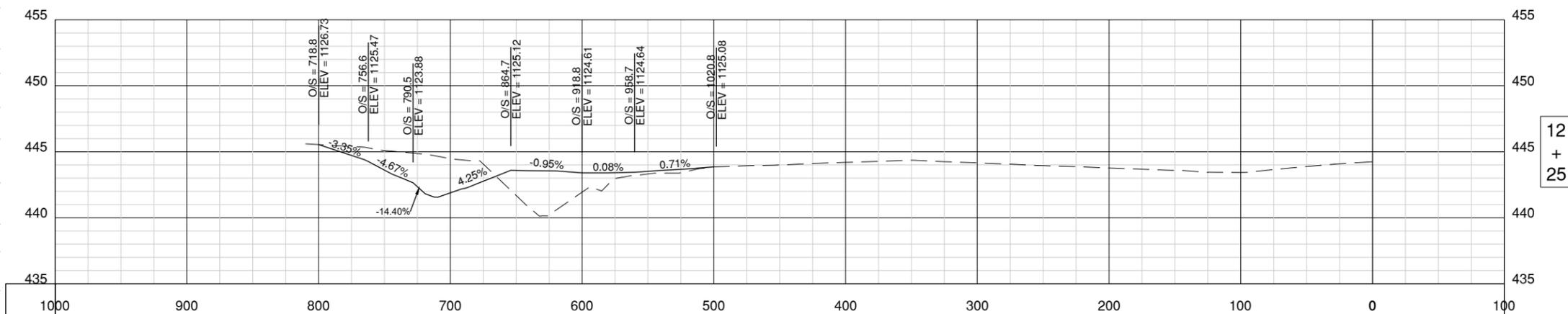
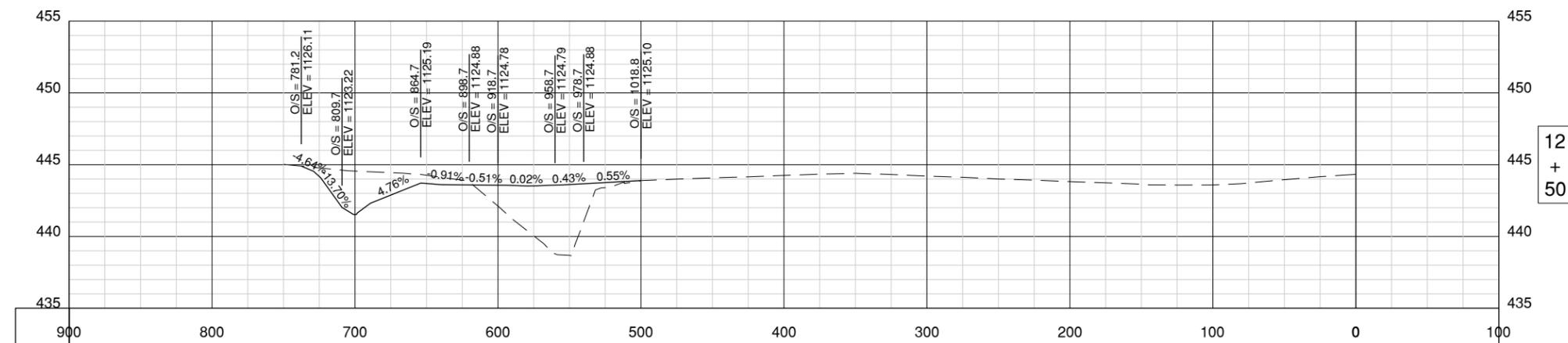
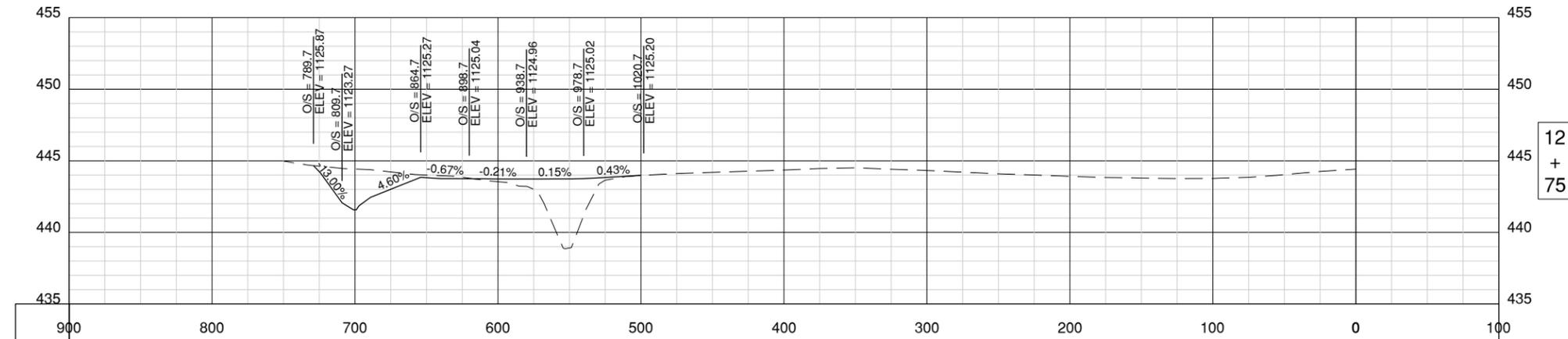
A	6/9/23	ADDENDUM A
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MARK	DATE	DESCRIPTION
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CMT PROJECT NO:22001186.00
 CAD DWG FILE: APRON XS SHEETS.DWG
 DESIGNED BY: DHC
 DRAWN BY: %%UJ
 CHECKED BY: TWM
 APPROVED BY: CMT
 COPYRIGHT: CRAWFORD, MURPHY & TILLY, INC. 2021

SHEET TITLE
**APRON EXPANSION
CROSS SECTIONS 7**

SHEET 57 OF 60
CG707



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Date: Thursday, June 8, 2023 2:40:02 AM



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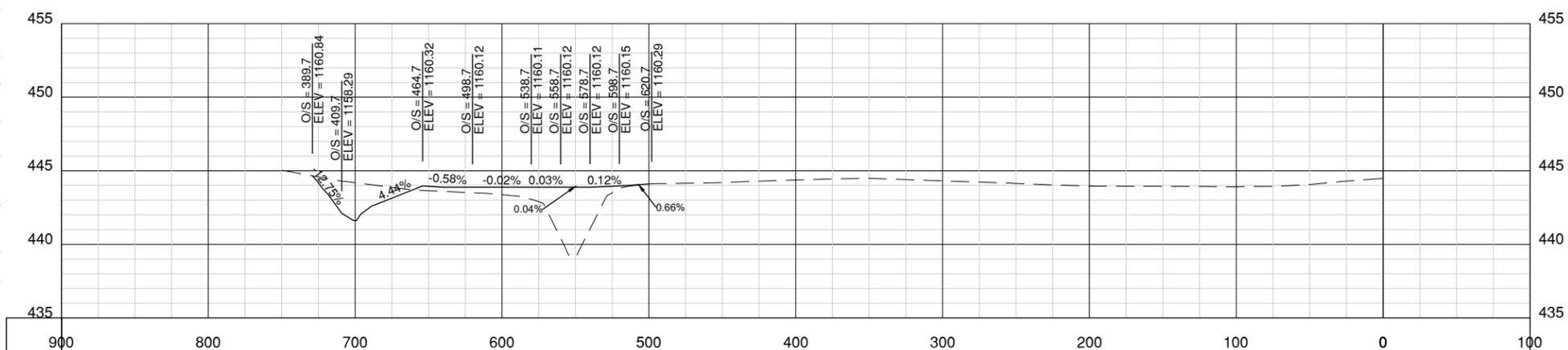
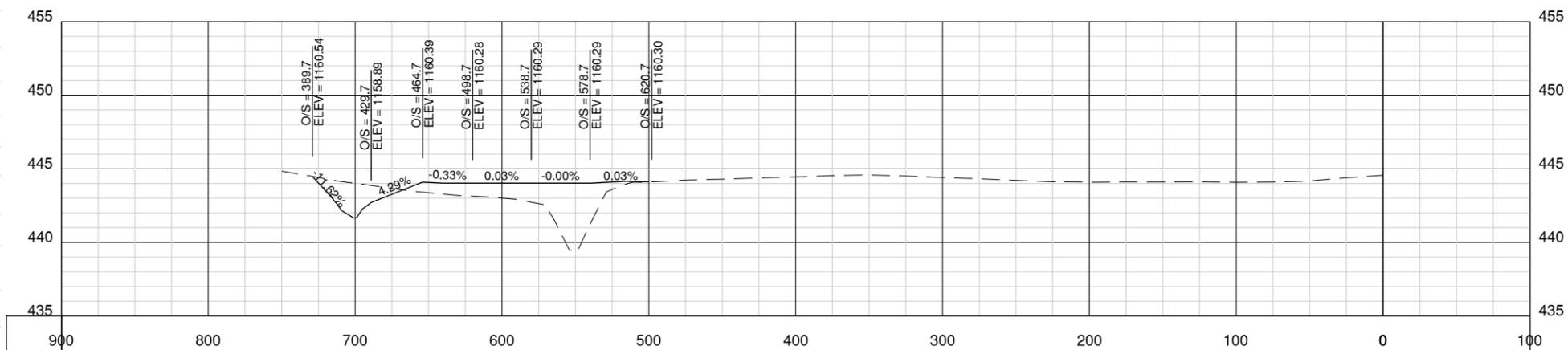
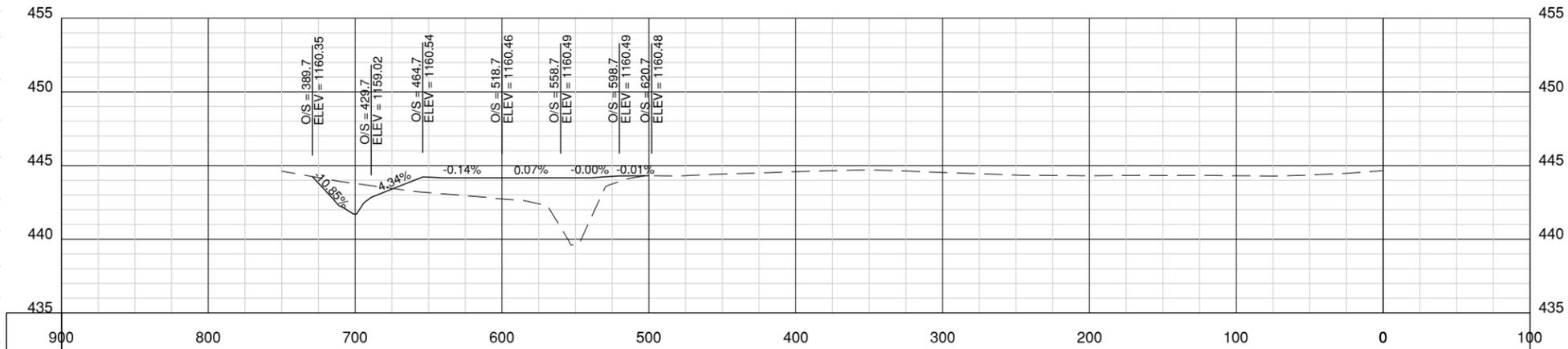
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DESIGNED BY: DHC
DRAWN BY: %%U
CHECKED BY: TWB
APPROVED BY: CMT
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SHEET TITLE
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CROSS SECTIONS 8**

SHEET 58 OF 60
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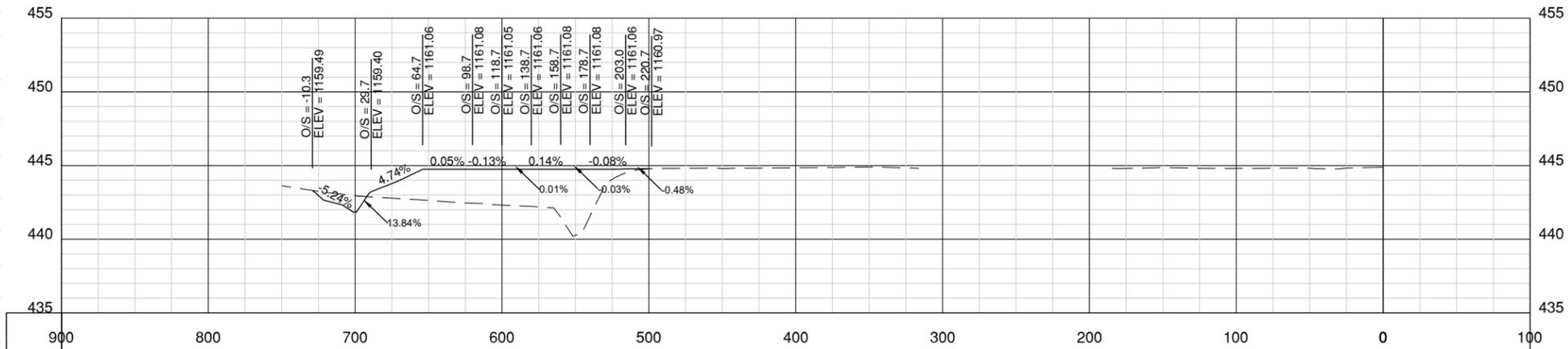
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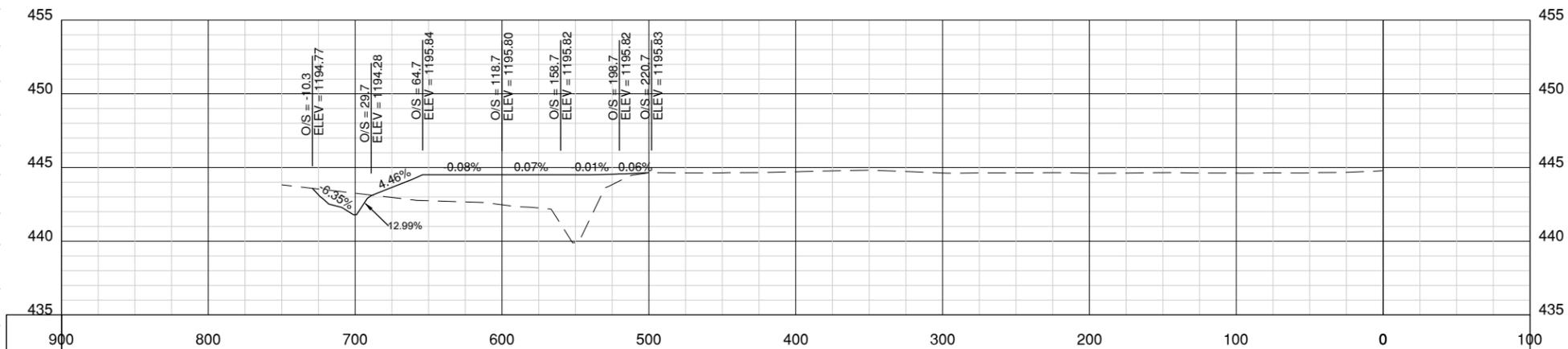
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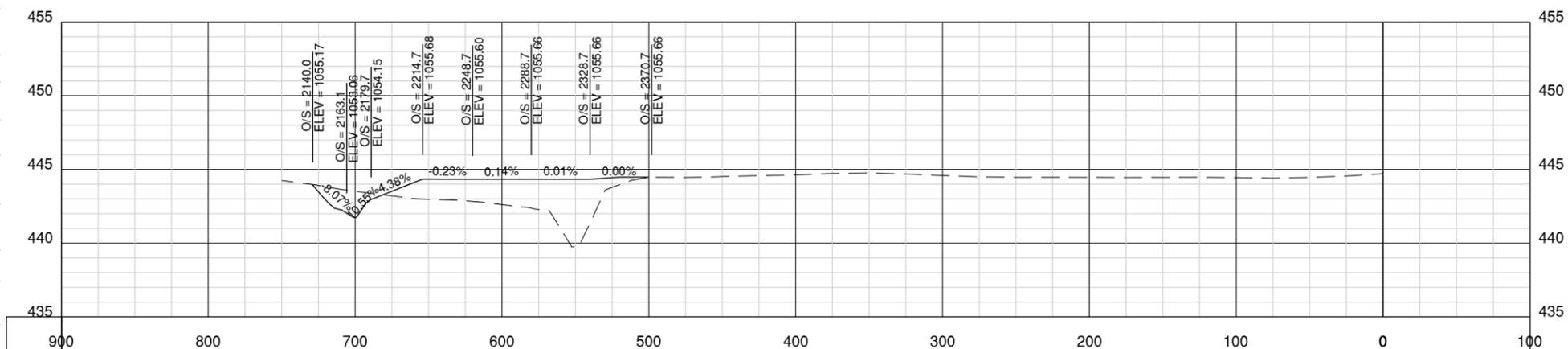
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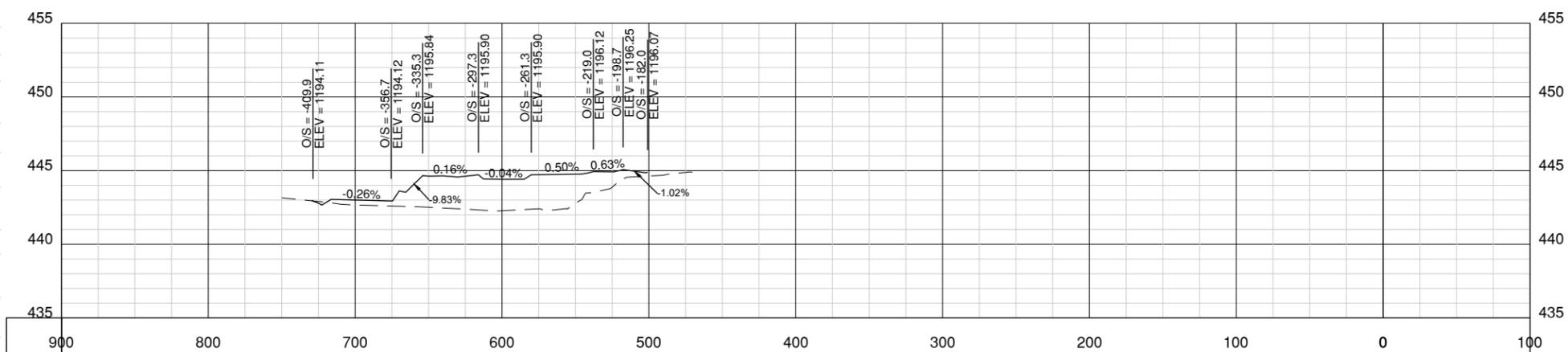
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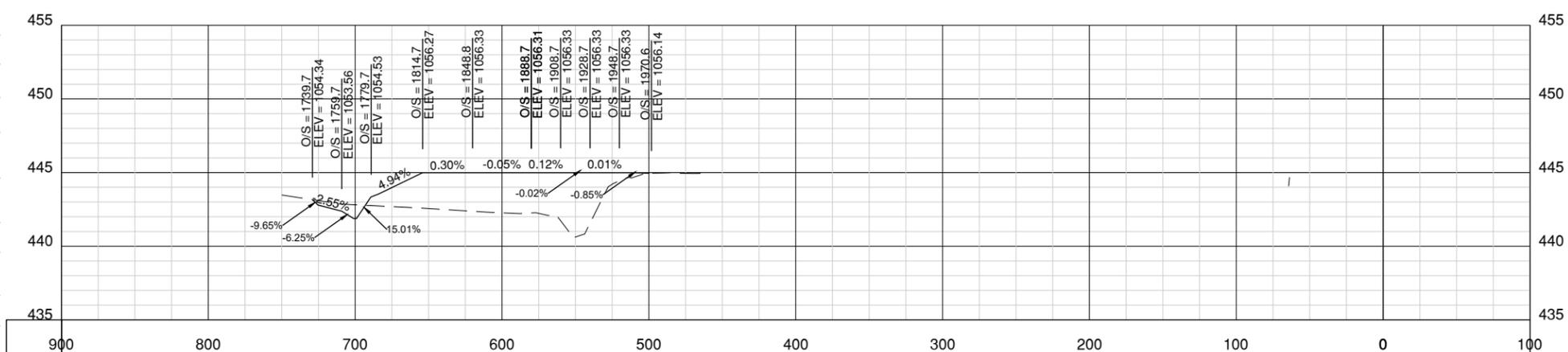
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SP-3 – Sanitary Sewer System

GENERAL

3-1.1 SUMMARY

A. Section Includes

1. Sanitary sewer drainage piping, fittings, accessories, cleanouts, and bedding.
2. Connection of site sanitary sewer system to glycol system.

B. RELATED SECTIONS

1. Item P-152 – Excavating, Backfilling and Compacting for Utilities
2. Item C-102 – Erosion & Sedimentation Control (Including SWPPP)
3. SP-4 – Sanitary Manholes and Covers

3-1.2 REFERENCES

A. ASTM International (ASTM)

1. ASTM A74 - Cast Iron Soil Pipe and Fittings
2. ASTM A746 - Ductile Iron Gravity Sewer Pipe
3. ASTM C425 - Compression Joints for Vitrified Clay Pipe and Fittings
4. ASTM C564 - Rubber Gaskets for Cast Iron Soil Pipe and Fittings
5. ASTM C700 - Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated
6. ASTM D2241 - Poly (vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series)
7. ASTM D2657 - Heat-Joining Polyolefin pipe and Fittings
8. ASTM D3034 - Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings
9. ASTM D3035 - Polyethylene (PE) Plastic Pipe Using Flexible Elastomeric Seals
10. ASTM D3139 - Joints for Plastic Pressure Pipe Using Flexible Elastomeric Seals
11. ASTM D3212 – Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals
12. ASTM D3261 - Butt Heat Fusion Polyethylene (PE) Plastic Fittings For Polyethylene Plastic Pipe And Tubing
13. ASTM F477 - Elastomeric Seals (Gaskets) for Joining Plastic Pipe
14. ASTM F1417 - Standard Test Method for Installation Acceptance of Plastic Gravity Sewer Lines Using Low-Pressure Air.

B. American Water Works Association (AWWA)

1. AWWA C111 - Rubber-Gasket Joints for Ductile Iron Pressure Pipe and Fittings
2. AWWA C600 - Ductile-Iron Water Mains And Their Appurtenances
3. AWWA C900 - Polyvinyl Chloride (PVC) Pressure Pipe, 4 In. Through 12 In, For Water Distribution

4. AWWA C901 - Polyethylene (PE) Pressure Pipe, Tubing And Fittings 1/2 Inch Through 3 Inches, For Water Distribution
5. AWWA C906 - Polyethylene (PE) Pressure Pipe And Fittings, 4 Inch Through 63 Inch, For Water Distribution

C. Standard Specifications for Water and Sewer Construction in Illinois

D. Illinois Department of Transportation (IDOT), Standard Specifications for Road and Bridge Construction, latest Edition

SUBMITTALS

3-2.0 PROOF OF BUY AMERICAN NOTICE: All tier contractors and subcontractors shall provide proof of Buy American compliance for all manufactured products.

All materials used for this work shall meet the requirements of Buy American in accordance with Title 49 U.S.C. § 50101. The product manufacturer shall submit a certification statement or waiver request for each proposed material. All waiver requests shall be submitted prior to issuance of the Notice to Proceed. No waiver will be allowed for steel. The AIP Buy American preference does NOT recognize US trade agreements such as NAFTA. The American Recovery and Reinvestment Act (ARRA) does not satisfy the AIP Buy American requirement.

3-2.1 SUBMITTALS

A. Manufacturer's certifications shall not relieve the Contractor of their responsibility to provide materials in accordance with these specifications and acceptable to the RPR. Materials supplied and/or installed that do not comply with these specifications shall be removed, when directed by the RPR and replaced with materials, which do comply with these specifications, at the sole cost of the Contractor.

B. All materials and equipment used shall be submitted to the RPR for approval prior to ordering the equipment. Submittals consisting of marked catalog sheets or shop drawings shall be provided. Clearly mark each copy to identify pertinent products or models applicable to this project. Indicate all optional equipment and delete non-pertinent data. Submittals for components of equipment and systems shall identify the equipment for which they apply on each submittal sheet. Markings shall be clearly made with arrows or circles. Highlighting is not acceptable. The Contractor shall be responsible for delays in the project accruing directly or indirectly from late submissions or resubmissions of submittals.

C. The data submitted shall be sufficient, in the opinion of the RPR, to determine compliance with the plans and specifications. The Contractor's submittals shall be submitted in electronic PDF format. The RPR reserves the right to reject any or all equipment, materials or procedures, which, in the RPR's opinion, does not meet the system design and the standards and codes, specified herein.

D. All equipment and materials furnished and installed under this section shall be guaranteed against defects in materials and workmanship for a period of at least twelve (12) months from the date of final acceptance by the Owner, not the installation date. The defective materials and/or equipment shall be repaired or replaced, at the Owner's discretion, with no additional cost to the Owner.

E. Product Data: Provide data of pipe materials, pipe fittings, and accessories.

F. Manufacturer's Certificate: Certify that products meet or exceed specified or local requirements.

G. Project Record Documents:

1. Accurately record actual locations of pipe runs, connections, cleanouts, and invert elevations.

2. Identify and describe unexpected variations to subsoil conditions and location of uncharted utilities.

3-1.4 PROJECT CONDITIONS

A. N/A

~~Coordinate work with termination of sanitary sewer connection outside building and connection to municipal sewer utility service.~~

PRODUCTS

3-3.1 SEWER PIPE, FITTINGS, AND JOINTS

A. GRAVITY PIPE

1. Material and Wall Thickness:
 - a. Pipe sizes 4” through 15” shall be ASTM D3034
 - b. For sewers fifteen feet (15’) deep or less, SDR 35
 - c. For sewers deeper than fifteen feet (15’), SDR 26
2. Pipe sizes 18” through 48” shall be ASTM F679
 - a. Where required to meet the horizontal and vertical separation requirements for water mains and sewer construction, the sewer shall be constructed of AWWA C900, DR 18 pipe as specified herein
3. Joints: Push-on type with rubber gaskets meeting the requirements of ASTM D3212

B. PVC pipe shall have rubber gasketed joints. Rubber gaskets shall meet ASTM Specification F477.

C. All pipe shall be furnished with a painted ring or other acceptable marking suitable for determining whether or not the pipe has been properly inserted into the coupling. Each pipe shall be clearly marked with the nominal diameter, manufacturer’s name, class pressure rating and identification code.

3-3.2 PIPE ACCESSORIES

- A. ~~Pipe Joints: Mechanical clamp ring type, stainless steel expanding and contracting sleeve, neoprene-ribbed gasket for positive seal.~~
- B. Fittings: Same material as pipe molded or formed to suit pipe size and end design, in required tee, bends, elbows, cleanouts, reducers, traps, etc.

3-3.3 CLEANOUTS AND MANHOLES

A. Manholes shall conform to SP-4.

~~A. Manholes shall conform to Section 02605.~~

~~B. Lid and Frame: Provide in accordance with Section 02605. Provide traffic grade and rated covers and frames where cleanouts and manholes are within pavement, with the letters “SSCO” or “SANITARY SEWER” respectively cast into the cover.~~

~~C. Shaft Construction: Cast iron shaft of internal diameter as specified on Construction Drawings with 2500 psi concrete collar for cleanouts.~~

3-3.4 APPURTENANCES

- A. Trace Wire: Magnetic detectable conductor (#12 copper), brightly colored plastic covering, imprinted with “Sanitary Sewer Service” in large letters.

PART 3 EXECUTION

3-4.1 EXAMINATION

- A. Verify that trench cut and excavation is ready to receive work and excavations, dimensions, and elevations are as indicated on Construction Drawings.

3-4.2 PREPARATION

- A. Hand trim excavations to required elevations. Correct over excavation with bedding material.
- B. Remove large stones or other hard matter that could damage pipe or impede consistent backfilling or compaction.

3-4.3 BEDDING

- A. Excavate trench and place bedding material. ~~in accordance with Section 02300.~~ Bedding material shall be IDOT CA7 or CA6 and placed at 97% proctor.

3-4.4 INSTALLATION - PIPE

- A. Install type and class of pipe as shown on the drawings. Pipes shall be laid and maintained to the required line and grade with necessary fittings, bends, manhole risers, cleanouts and other appurtenances placed at the required locations. The pipe shall be installed with uniform bearing under the full length of the barrel of the pipe. The pipe shall be inspected for defects and cracks before being lowered into the trench. Defective, damaged or unsound pipe, or pipe that has had its grade disturbed after laying shall be taken up and replaced. Commence installation at lowest point with the bell end upgrade.
- B. No pipe shall be laid in water or when trench conditions are unsuitable for work.
- C. Pipe connecting to manholes or other structures shall terminate flush inside of the structure wall.
- D. Joints for PVC and CISP shall be thoroughly lubricated with an approved lubricant before pipe sections are slipped together. Open ends shall be fully protected with a stopper to prevent earth or other material from entering the pipe during construction. Carefully free interior of the pipe from dirt, cement and other deleterious material as the work progresses.
- E. Maintain separation of potable water main from sewer piping at crossings a minimum of 10 feet horizontal and 18 inches vertical.
- F. Install HDPE piping and fittings to AWWA C901 and C906. Butt fusion welded per ASTM D3261.
- G. Route pipe in straight line parallel to roads, buildings and adjacent utilities and as shown on the drawings.
- H. Establish elevations of buried piping with sufficient cover as recommended by pipe manufacturer to ensure not less than 3 feet of cover, except as noted on drawings.
- I. Form and place concrete for thrust blocks at each elbow of pipe force main. See construction drawing for details of construction.
- J. Backfill trench ~~in accordance with Section 02227.~~ with bedding material. Bedding material shall be IDOT CA7 or CA6 and placed at 97% proctor.
- K. Install trace wire continuous over top of non-metal pipe. Bury 6 inches minimum below finish grade, above pipeline.

3-4.5 INSTALLATION – CLEANOUTS AND MANHOLES

- A. Form bottom of excavation clean and smooth to correct elevation.
- B. For cleanouts, form and place cast-in-place concrete base pad with provision for sanitary sewer pipe to be installed to proper elevations.
- C. For manholes, construct inverts according to the following guidelines:
 - 1. Invert channel shall be smooth and accurately shaped to a semicircular bottom to match with the inside of the adjacent sewer section.
 - 2. Invert channels and structure bottoms shall be shaped with mortar and lean concrete.
 - 3. Changes in size and grade of invert shall be made gradually and evenly.
 - 4. Changes in the direction of the sewer entering branch or branches shall have a true curve of as large a radius as the manhole will permit.
- D. For manholes, provide manhole rings, frame, and cover as shown on the construction drawings.

3-4.6 FIELD QUALITY CONTROL

- A. Pipes and joints shall not be completely backfilled until after inspection, testing, and approval by the Owner and local jurisdiction.
- B. Prior to testing for leakage, the pipe trench shall be backfilled to at least the spring line of the pipe. If required to prevent pipe movement during testing, additional backfill shall be added leaving the pipe joints uncovered to permit inspection.
- C. Leakage testing of all manholes shall be in accordance with ASTM C1244-93 or C969-94.
- D. Exfiltration Test
 - 1. Each section of sewer line between successive manholes shall be tested by closing the lower end of the sewer to be tested and the inlet sewer of the upper manhole, using stoppers.
 - 2. Fill the manhole and pipe with a minimum 24 inches of water above the crown of the sewer at the center of the upper manhole; or if groundwater is present, 24 inches of head above the average adjacent groundwater level.
 - 3. The allowable leakage shall be 240 gal/inch of pipe diameter/mile/day.
 - 4. Testing shall be in accordance with the Standard Specifications for Water and Sewer Main Construction in Illinois, Section 31.11B.
- E. Infiltration Test
 - 1. If excessive ground water is encountered in the construction of a section of the sewer, the exfiltration test shall not be used.
 - 2. The upper and lower ends of the sewer to be tested shall be closed sufficiently to prevent the entrance of water.
 - 3. Pumping of ground water shall be discontinued for at least 3 days; then infiltration shall be tested.

4. Infiltration into each section of sewer between adjoining manholes shall not exceed that allowed for the exfiltration test, except that head conditions shall be a maximum of 6 feet.
 5. The allowable leakage shall be 200 gal/inch of diameter/mile/day.
 6. Testing shall be in accordance with the Standard Specifications for Water and Sewer Main Construction in Illinois, Section 31.11B
- F. The Exfiltration Test may be limited to the manholes only when the authority having jurisdiction does not require the test and the construction manager waives the test. The Infiltration Test will always be required when excessive ground water is encountered in addition to the air test.
- G. Air Test: Gravity systems shall be air tested between manholes at 3.5 psi for 5 minutes per ASTM F1417 for plastic pipes.
- H. Deflection Test:
1. Deflection tests shall be conducted on all plastic pipe using a mandrel with a diameter equal to 95 percent of the inside diameter of the pipe. The test shall be performed without mechanical pulling devices.
 2. Allowable Deflection: Maximum allowable pipe deflection shall not exceed 5 percent of nominal inside diameter.
 3. Mandrel: Mandrel, go/no-go, device shall be cylindrical in shape and constructed with either 9 or 16 evenly spaced arms or prongs. Mandrels with fewer arms will be rejected as not sufficiently accurate. Contact length of mandrel's arms shall equal or exceed nominal inside diameter of sewer to be inspected. Critical mandrel dimensions shall carry tolerance of 0.01-inch maximum. Contractor shall provide mandrel and necessary equipment for mandrel test.
 4. Procedure: Mandrel shall be hand-pulled through flexible pipe sewer lines no earlier than 30 days after trench has been completely backfilled. Sections of sewer not passing mandrel shall be uncovered and rebedded, rerounded, or replaced to satisfaction of Owner or governing agency. Repaired section shall be retested.
- I. Hydrostatic Test: ~~Force main piping shall be hydrostatically tested at 150 psi in accordance with AWWA-C 600.~~ See SP-6 for forcemain requirements.
- J. Provide measuring devices, meters, water, materials, and labor for making the required tests.
- K. Tests shall be conducted by the Contractor in the presence of the Engineer. Test data shall be submitted to the Engineer for review and approval.

METHOD OF MEASUREMENT

3-5.1 SANITARY SEWER. The quantity of 8" PVC sanitary sewer to be paid for shall be measured by the number of linear feet of material furnished and installed and accepted by the RPR as compliant with the plans and specifications. All fittings and connections shall be included in the footage as typical pipe sections in the pipe being measured.

3-5.2 PIPE CONNECTIONS TO STRUCTURES. Connections shall not be measured directly for payment but incidental to the pipe being measured.

3-5.3 PIPE REMOVAL. The quantity of sanitary pipe to be removed shall be the number of linear feet of material removed, backfilled, restored, and accepted by the RPR as compliant with the plans and specifications. All fittings and connection removals shall be included in the footage as typical pipe sections in the pipe being measured.

3-5.4 EXCAVATION AND BACKFILL. Excavation and backfill for this item shall not be measured directly for payment, but incidental to the pipe being measured.

3-5.5 RESTORATION AND TURFING. Ground restoration and turfing shall not be measured directly for payment but incidental to the pipe being measured.

BASIS OF PAYMENT

3-6.1 PAYMENT. Payment for the furnishing and installation of sanitary sewer pipe and pipe removal shall be made at contract unit price for the unit of measurement as specified above.

These prices shall be full compensation for furnishing all materials and for all preparation, Installation, and placement of the material and for all labor, equipment, tools, and incidentals necessary to complete these items as specified herein and as shown in the plans and details.

Payment will be made under:

Item AW770508	8" Sanitary Sewer – per linear foot
Item AW770900	Remove Sanitary Sewer – per linear foot

END OF SECTION SP-3

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Item SP-6 Sanitary Forcemain System

Description

2-1.1 GENERAL. This item shall consist of the following items of work:

- a. Furnishing and installing new sanitary sewer pipe and fittings as shown on the Contract Drawings. This item's sanitary sewer pipe refers to the ~~gravity and~~ forcemain pipe included in this work item.
- b. Removal and disposal of a section of existing pipe and appurtenant equipment as shown on the Contract Drawings.
- c. Installation of new valves and actuators with power cabling complete.

2-1.2 SUBMITTALS. Before ordering materials, the Contractor shall submit shop drawings for all components to be incorporated into the work for review according to Paragraphs 2-2.0 & 2-2.1.

Materials

2-2.0 PROOF OF BUY AMERICAN NOTICE: All tier contractors and subcontractors shall provide proof of Buy American compliance for all manufactured products.

All materials used for this work shall meet the requirements of Buy American in accordance with Title 49 USC § 50101. The product manufacturer shall submit a certification statement or waiver request for each proposed material. All waiver requests shall be presented prior to issuance of the Notice to Proceed. No waiver will be allowed for steel. The AIP Buy American preference does NOT recognize US trade agreements such as NAFTA. The American Recovery and Reinvestment Act (ARRA) does not satisfy the AIP Buy American requirement.

2-2.1 SUBMITTALS

- a. Manufacturer's certifications shall not relieve the Contractor of their responsibility to provide materials in accordance with these specifications and acceptable to the RPR Materials supplied and/or installed that do not comply with these specifications shall be removed, when directed by the RPR and replaced with materials, which do comply with these specifications, at the sole cost of the Contractor.
- b. All materials and equipment used shall be submitted to the RPR for approval prior to ordering the equipment. Submittals consisting of marked catalog sheets or shop drawings shall be provided. Clearly mark each copy to identify pertinent products or models applicable to this project. Indicate all optional equipment and delete non-pertinent data. Submittals for components of equipment and systems shall identify the equipment for which they apply on each submittal sheet. Markings shall be clearly made with arrows or circles (highlighting is not acceptable). The Contractor shall be responsible for delays in the project accruing directly or indirectly from late submissions or resubmissions of submittals.
- d. The data submitted shall be sufficient, in the opinion of the RPR, to determine compliance with the plans and specifications. The Contractor's submittals shall be submitted in electronic PDF format. The RPR reserves the right to reject any or all equipment, materials or procedures, which, in the RPR's opinion, does not meet the system design and the standards and codes, specified herein.
- e. All equipment and materials furnished and installed under this section shall be guaranteed against defects in materials and workmanship for a period of at least twelve (12) months from the date of final acceptance by the Owner, not the installation date. The defective materials and/or equipment shall be repaired or replaced, at the Owner's discretion, with no additional cost to the Owner.

2-2.2 FORCEMAIN PIPE. Forcemain pipe shall be manufactured by JM Eagle, or equal. Forcemain pipe shall be PVC in conformance with AWWA C900 pressure class 235 psi (DR 18). Joints shall be push-on type with integral bells meeting ASTM D3139 and gaskets meeting ASTM F477. PVC compound shall meet ASTM D1784 Cell Class 12454. Pipe shall be UL or FM listed.

2-2.3 FITTINGS. Ductile Iron Fittings shall be in accordance with ANSI A21.53 (AWWA C153). All fittings shall be standard body, mechanical joint type with EBAA Iron MEGALUGs, unless noted otherwise, and shall be of class or pressure rating not less than that of connecting pipe.

Cement Lining shall be in accordance with ANSI A21.4 or AWWA C104. Unless otherwise indicated, all ductile iron pipe and fittings shall be cement lined and coated within an asphalt seal coat.

Exterior of fittings shall have a bituminous coating in accordance with ANSI A21.51.

Buried ductile iron pipe and fittings shall be encased in polyethylene conforming to the requirements of ANSI/AWWA A21.5/C105. The polyethylene encasement shall be provided by the ductile iron pipe manufacturer and shall be installed per the manufacturer's recommendations or instructions.

Unless noted otherwise, gaskets shall be SBR, styrene butadiene rubber, conforming to AWWA C111. Provide anti-rotation, high-strength, low-allow (Cor-Ten) T-bolts with ASTM A563, Grade A heavy hex head nuts. Bolting shall conform to AWWA C111, including Appendix A.

2-2.4 DETECTABLE WARNING TAPE. All forcemain pipe shall be installed with a detectable warning tape buried within approximately twelve (12) inches above the pipe for the entire length of the forcemain for locating purposes. Warning tape shall be green metallic detectable warning tape and shall caution that a buried forcemain exists below.

2-2.5 TRACER WIRE. Tracer wire shall be a direct burial #12 AWG Solid (0.0808" diameter), 21" conductivity annealed copper-clad high carbon steel strength tracer wire, 380# average tensile break load, 30 mil. High molecular weight-high density blue polyethylene jacket complying with ASTM D1248, 30 volt rating. The wire shall be contiguous except at test stations, valve boxes, and where splicing is required. All splices shall be encased with a 3M-Gel Pack Model No 054007-09053. Wire insulation shall be highly resistant to alkalis, acid, and other destructive agents found in soil. Tracer wire shall be Copperhead Industries, LLC, part number 1230B-HS, or approved equal.

Construction Methods

2-3.1 BURIED PIPING SYSTEMS. Excavation and backfill shall include all excavation, backfilling, compacting, disposal of surplus material, and all other work incidental to the construction of trenches, including any additional excavation which may be required for other structures forming a part of the pipeline. All costs for excavation and backfill shall be included in the cost of this Item.

Unless otherwise shown on the drawings or directed by the RPR, all pipe shall be laid to minimum depth of three and one-half (3 1/2) feet measured from the existing ground surface or final grade to the top of the barrels of the pipe. In areas subject to subsequent excavation or fill, the pipes shall be laid to grades provided by the RPR.

The trench shall be excavated to a depth of at least six inches below the bottom of the pipe. The trench shall be at least twelve inches wider than the outside diameter of the pipe. The pipe shall be laid in the center of the trench so a minimum distance of six inches is maintained between the outside of the pipe and each trench wall. The trench width may vary with and depend upon the depth of the trench and the nature of the excavated material encountered, but in any case shall be of ample width to permit the pipe to be laid and jointed properly and the backfill to be placed and compacted properly. The minimum width of unsheeted trench shall be 2'-6".

Prior to placing the pipe, at least six inches of crushed limestone bedding shall be placed and leveled in the bottom of the trench. The bedding shall be true and even, and shall provide a uniform and continuous bearing and support for the pipe, except that it will be permissible to disturb the backfill material near the center of each length of pipe to permit the withdrawal of pipe slings and other lifting equipment. Blocking shall never be used to support the pipe. Bedding shall be excavated beneath all pipe bells to allow the bell to be fully supported.

After the pipe is laid in the trench, crushed limestone shall be placed around each side of the pipe (six-inch minimum width on each side), and over the top of the pipe (minimum thickness of twelve inches).

Trench backfill from one foot above the pipe to the level of proposed grade adjacent to the trench shall be in accordance with the drawings and specifications for SP-4.

The trench shall be dug to the depth and alignment required and only so far in advance of pipe laying as the RPR shall permit. The trench shall be so braced and drained that workmen may work therein safely and efficiently. The Contractor shall note that excavations shall conform to the latest OSHA requirements for excavations.

The Contractor shall at all times during construction provide and maintain ample means and devices with which to promptly remove and properly dispose of all water entering the excavations or other parts of the work until all work to be performed therein has been completed. Where possible, surface runoff should be prevented from entering the excavation. No water containing settleable solids shall be discharged into storm sewers. The proposed method for controls of groundwater shall be submitted to the RPR for approval. No additional compensation will be allowed for dewatering of excavations. It is essential that the discharge from temporary construction pumps be led to natural drainage channels or to drains.

The Contractor shall proceed with caution in the excavation and preparation of the trench so that the exact location of underground structures and piping, both known and unknown, may be determined, and he shall be held responsible for the repair of such structures and piping when broken or otherwise damaged by him.

All foreign matter or dirt shall be removed from the inside of the pipe before it is lowered in its position in the trench, and it shall be kept clean by approved means during and after laying.

Cutting of the pipe for inserting valves, fittings, or closure pieces shall be done in a workmanlike manner without damage to the pipe. The Contractor shall dispose of all water from existing mains from trenches without additional compensation.

Whenever necessary to deflect pipe from a straight line either in a vertical or horizontal plane to avoid obstructions, to plumb stems, or where long radius curves are permitted, the degree of deflection shall be no greater than recommended by the pipe manufacturer and shall be approved by the RPR.

2-3.2 TESTING. All forcemain pipes and valves shall be subjected to a pressure test and leakage test according to the Standard Specification For Water & Sewer Main Construction In Illinois, 8th Edition. Any deficiencies discovered during testing shall be repaired by the Contractor at no additional cost. Coordinate all leakage and pressure testing and all disinfection and flushing with the Owner.

2-3.3 RESTORATION. Ground disturbed by the Contractor shall be restored to pre-disturbed conditions except to provide a smooth finish that drains readily. Restoration shall include establishing a stand of grass compliant with Items T-901 and T-908.

Method of Measurement

2-4.1 SANITARY SEWER PIPE. The quantity of sanitary sewer pipe to be paid for shall be measured by the number of linear feet of material furnished and installed and accepted by the RPR as compliant with the plans and specifications. Measurement shall be on the top of the pipe centerline up to the

connection point. Separate measurements shall be made for each size and type of pipe. Pipe fittings shall not be measured separately for payment but are considered incidental to the pipe.

2-4.2 PIPE CONNECTIONS TO STRUCTURES. Connections to manhole structures shall not be measured directly for payment but included in cost of the pipe installation.

2-4.3 FORCEMENT PIPE REMOVAL. The quantity of pipe removal shall be the number of linear feet of material removed, backfilled, restored, and accepted by the RPR as compliant with the plans and specifications. Fittings will not be measured separately for payment and are considered incidental to the pipe removal.

2-4.4 VALVE AND ACTUATORS. Valves and Actuators shall be measured by the unit installed and accepted by the RPR as compliant with the plans and specifications. Connections shall not be measured directly for payment but included in the cost of the items measured for payment.

2-4.6 EXCAVATION AND BACKFILL. Excavation and backfill for this item shall not be measured directly for payment, but shall be included in the cost of the pipe installation or removal.

2-4.7 RESTORATION AND TURFING. Ground restoration and turfing shall not be measured directly for payment but included in the cost of Item SP-6 pay items measured for payment.

Basis of Payment

2.5-1 PAYMENT. Payment for the furnishing and installation of sanitary sewer pipe and related equipment shall be made at contract unit price for the unit of measurement as specified above.

These prices shall be full compensation for furnishing all materials and for all preparation, installation, and placement of the material and for all labor, equipment, tools, and incidentals necessary to complete these items as specified herein and as shown in the plans and details.

Payment will be made under:

Item AW801994	8" Sanitary Force Main – per linear foot
Item AW801792	8' Valve & Actuator – per each

End of Item SP-6

SP-9 TEMPORARY ACCESS ROADS

DESCRIPTION

9-1.1 This item shall consist installation and removal of temporary access roads at the locations shown on the plans. Seeding, mulching and restoration to existing conditions shall be considered incidental to each pay item.

MATERIALS

9-2.0 PROOF OF BUY AMERICAN NOTICE: All tier contractors and subcontractors shall provide proof of Buy American compliance for all manufactured products.

All materials used for this work shall meet the requirements of Buy American per Title 49 USC § 50101. The product manufacturer shall submit a certification statement or waiver request for each proposed material. All waiver requests shall be submitted before the Notice to Proceed issuance. No waiver will be allowed for steel. The AIP Buy American preference does NOT recognize US trade agreements such as NAFTA. The American Recovery and Reinvestment Act (ARRA) does not satisfy the AIP Buy American requirement.

9-2.1 GENERAL. Contractor shall chose sufficient thickness and gradation to support hauling and equipment for the length of the project. The top shall be capped with 3-inches of CA-6 aggregate.

CONSTRUCTION METHODS

9-3.1 GENERAL. The Contractor shall furnish all material and labor to assemble and remove the temporary access roads to place it in fully operational working condition.

All work shall be subject to the inspection and approval of the RPR or the RPR's authorized representative.

METHOD OF MEASUREMENT

9-4.2 The temporary access roads shall be measured per the unit complete, in place, and accepted by the RPR. Seeding, mulching and restoration to existing conditions shall be considered incidental to each pay item. Any improvements necessary during the project shall be considered incidental to the pay items.

BASIS OF PAYMENT

9-5.1 This price shall fully compensate the Contractor for furnishing all materials and for all preparation, coordination, and installation of these materials; assembly, testing, training, and all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item AW801455	24' Temporary Access Road #1 – per Lump Sum
Item AW801958	24' Temporary Access Road #2 - per Lump Sum