

VILLAGE OF WEST LAFAYETTE
COSHOCTON COUNTY, OHIO

WWTP OUTFALL & STORM SEWER OUTFALL IMPROVEMENTS

ADDENDUM #1

AUGUST 22, 2023

THRASHER PROJECT #101-020-10127



TO WHOM IT MAY CONCERN:

The following are clarifications and responses to questions posed by contractors for the above-referenced project.

A. GENERAL

1. **THE BID OPENING DATE HAS CHANGED TO SEPTEMBER 12. PLEASE REPLACE THE AFB WITH THE ONE IN THIS ADDENDUM.**
2. **PAGES BID 3 AND BID 4 OF THE BID FORM HAVE BEEN REVISED. YOU MUST USE THE REVISED BID FORM WHEN PREPARING YOUR BID PACKAGE FOR THIS PROJECT. PLEASE REPLACE PAGES BID 3 AND BID 4 WITH THE REVISED PAGES IN THIS ADDENDUM. ITEMS #5 AND #9 HAVE BEEN CHANGED.**

B. SPECIFICATIONS

1. Please **REPLACE** specification 012000 Price and Payment with the one in this addendum
2. Please **ADD** specification 329117 Helical Pile Per Plan.

C. DRAWINGS

1. Please **REPLACE** Sheets 6, 7, 18, 19, 20, and 27 with the Sheets in this addendum.

D. QUESTIONS AND RESPONSES

QUESTION

1. Is the detail on page 27 used only on the pile pointed to on sheet 18?

RESPONSE

The detail on page 27 is used for all piles in the project. There are a total of 58 piers with 2 Helical piles per pier.

QUESTION

2. Will you provide a Helical Pile spec?

RESPONSE

Yes, please see attached.

QUESTION

3. What Helical Pile material is required to meet AIS requirements?

RESPONSE

Please see attached.

QUESTION

4. Is there a geotechnical report for this project, and if so, how can we gain access to it?

RESPONSE

No there is no geotechnical report for this project.

QUESTION

5. If no geotechnical report is available, will you be providing bid length? (With a add/deduct cost)

RESPONSE

Item SPEC, Helical Piles, Per Plan have been added to the Bid Tabulation sheet with a footage estimated for bidding purposes.

QUESTION

6. Can you clarify the quantity of Helical Piles?

RESPONSE

There are a total of 58 piers with 2 Helical piles per pier.

If you have any questions or comments, please feel free to contact me at your earliest convenience. **As a reminder, bids will be received until 4:00 p.m. on Tuesday, September 12, 2023, at 115 E Railroad St in West Lafayette, OH.** Good luck to everyone and thank you for your interest in the project.

Sincerely,

THE THRASHER GROUP, INC.



Project Manager

ADVERTISEMENT FOR BIDS
VILLAGE OF WEST LAFAYETTE
COSHOCTON COUNTY, OHIO
WWTP OUTFALL AND STORM SEWER OUTFALL IMPROVEMENTS

General Notice

The Village of West Lafayette (Owner) is requesting Bids for the construction of the following Project:

WWTP OUTFALL AND STORM SEWER OUTFALL IMPROVEMENTS
THRASHER PROJECT #101-020-10127

Bids for the construction of the project will be received at the **West Lafayette Council Chambers** located at **115 E. Railroad St. West Lafayette, OH 43845**, until **Tuesday, September 12th, 2023, at 4:00 PM local time**. At that time the Bids received will be publicly opened and read.

The Project includes the following Work:

Install 4,280 feet of new 18-inch sanitary outfall main from the wastewater treatment plant to the Tuscarawas River and install 4,280 feet of 30" storm sewer main parallel to the existing sanitary main. The project includes trenchless construction methods and other mitigation efforts to minimize impacts to sensitive environmental areas, including but not limited to wetlands and potential endangered species habitat.

Bids are requested for the following Contract: **WWTP OUTFALL AND STORM SEWER OUTFALL IMPROVEMENTS**

The Work will be substantially completed within 180 calendar days after the date when the Contract Times commence to run and completed and ready for final payment within 210 days after the date when the Contract Times commence to run. Liquidated damages shall be \$1,000 per day.

Obtaining the Bidding Documents

Information and Bidding Documents for the Project can be found at the following designated website:

QuestCDN: <https://tinyurl.com/zu5z8553> or www.thethrashergroup.com

To bid on this project and be considered a plan holder you MUST download the digital project bidding documents from QuestCDN and pay the download delivery fee. Complete digital project bidding documents are available at www.questcdn.com. You may register for a free membership with QuestCDN and download the digital plan documents for \$40 by inputting Quest project #8601905 or Soliciting Agent's project number #020-10127 on the website's Project Search page. Please contact QuestCDN.com at 952-233-1632 or info@questcdn.com for assistance in free membership registration, downloading, and working with this digital project information.

The designated website will be updated periodically with addenda, lists of registered plan holders, reports, and other information relevant to submitting a Bid for the Project. All official notifications, addenda, and other Bidding Documents will be offered only through the designated website. Neither Owner nor Engineer will be responsible for Bidding Documents, including addenda, if any, obtained from sources other than the designated website.

The Issuing Offices for the Bidding Documents is:

The Thrasher Group, Inc.
400 3rd Street SE, Suite 309
Canton, OH 44702

Village of West Lafayette
113 East Railroad St.
West Lafayette, Ohio 43845

Prospective Bidders may examine the Bidding Documents at the Issuing Office(s) on Monday through Friday between the hours of **8:00 am to 4:00 pm**.

A one-envelope system will be used.

Envelope must have the following information presented on the front:

Name and address of Bidder
Bid on Contract – **WWTP OUTFALL AND STORM SEWER OUTFALL
IMPROVEMENTS**
Received by the **VILLAGE OF WEST LAFAYETTE, OHIO**

Bids will be publicly read aloud, and an apparent low bidder will be announced. After the completion of the bid opening, the Bid Opening Requirement items will be checked for compliance as outlined on the Bid Opening Checklist on page BOR - 1 of these contract documents.

A bidder may not withdraw his bid for a period of ninety (90) days after the date set for the opening of bids.

Bids shall be accompanied by a certified check or bid bond payable to **Village of West Lafayette** in an amount equal to ten percent (10%) of the base bid.

Contractor is required to comply with Davis-Bacon Wage Rate Requirements.

Bids received after the scheduled closing time for the reception of bids will be returned unopened to the bidders.

The **Village of West Lafayette** reserves the right to reject any and all bids.

Instructions to Bidders.

For all further requirements regarding bid submittal, qualifications, procedures, and contract award, refer to the Instructions to Bidders that are included in the Bidding Documents.

This Advertisement is issued by:

Owner: **Village of West Lafayette**

By: **Tammy Hicks**

Title: **Village Administrator**

Dates of Publication: **August 11 and August 18 in the Coshocton Tribune**

ARTICLE 1 – BASIS OF BID

GENERAL

The Bidder shall take notice of and shall be responsible for any local or state taxes levied and applicable, and the cost for the same shall be included as part of the submitted Bid.

The total Bid cost stated includes a complete operating installation including furnishing and installation of any and all changes or additions in plans, piping, mechanical work, additional electrical work, accessories, controls, etc. necessary to accommodate alternative equipment systems or materials used in construction.

BID PROPOSAL

THE BIDDER AGREES TO PERFORM ALL REQUIRED WORK DESCRIBED IN THE DETAILED SPECIFICATIONS AND AS SHOWN ON THE PLANS FOR THE COMPLETE CONSTRUCTION AND PLACING IN SATISFACTORY OPERATION OF THE CONTRACT

The Project "Sequence of Construction" has been detailed in the Drawings and Specification Division 1, Project Summary, Section 1010, Part-2 Execution. The Bidder agrees to perform all the Work proposed for the total of the following Bid prices.

1.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

PROPOSED

WWTP OUTFALL AND STORM SEWER OUTFALL IMPROVEMENTS

VILLAGE OF WEST LAFAYETTE, OHIO

BID SCHEDULE

ODOT							
Item #	ODOT #		DESCRIPTION	QTY.	UNIT	UNIT COST	COST
1	201	11000	CLEARING AND GRUBBING	1	LS		
2	832	15000	STORM WATER POLLUTION PREVENTION PLAN	1	LS		
3	202	58000	MANHOLE REMOVED	2	EA		
4	451	98000	REINFORCED CONCRETE PAVEMENT, MISC	35	SY		
5	SPEC		HELICAL PILE, PER PLAN	3360	LF		
6	511	46610	CLASS CY QC1 CONCRETE, HEADWALL	15	CY		
7	301	34400	ROCK CHANNEL PROTECTION W/ GROUT	4	CY		

ODOT							
Item #	ODOT #		DESCRIPTION	QTY.	UNIT	UNIT COST	COST
8	611	04600	12" CONDUIT, TYPE C 707.65	35	FT		
9	611	13600	30" CONDUIT, TYPE C 707.65	5425	FT		
10	611	19600	42" CONDUIT, TYPE C 509.02	1200	FT		
11	611	07600	18" CONDUIT, TYPE C 706.02	300	FT		
12	611	99674	MANHOLE, NO 3 (W/ VENTED LID)	11	EA		
13	611	99654	MANHOLE ADJUST TO GRADE	9	EA		
14	611	99674	MANHOLE, NO 3	1	EA		
15	611	96650	SPECIAL- GROUTING VOIDS BETWEEN PIPES (STEEL PIPES)	425	CY		
16	630	08600	SIGNPOST REFLECTOR	50	EA		
17	630	84600	GROUND MOUNTED PIPE SUPPORT FOUNDATION	60	EA		
18	630	00100	SOIL ANALYSIS TEST	3	EA		
19	202	35200	PIPE REMOVED OVER 24"	300	FT		
20	611	99690	MANHOLE, MISC. (MANHOLE REHAB)	8	EA		
21	601	34400	ROCK CHANNEL PROTECTION, W/ GROUT	4	CY		
22	202	98300	REMOVAL MISC. (GRAVEL DRIVEWAY)	250	SY		
23	204	30020	GRANULAR MATERIAL, TYPE C (GRAVEL DRIVEWAY)	120	CY		
24	202	75000	FENCE REMOVED	300	FT		
25	607	20000	FENCE, TYPE CL	300	FT		
26	623	10000	CONSTRUCTION LAYOUT STAKES AND SURVEYING	1	LS		
27	624	10000	MOBILIZATION	1	LS		

SECTION 012000 - PRICE AND PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Application for Payment.
- B. Measurement and Payment

1.2 APPLICATION FOR PAYMENT

- A. Submit six (6) executed copies of each Application for Payment on EJCDC C-620 - Contractor's Application for Payment.
- B. Submit six (6) copies of executed copies of Abnormal Weather Conditions forms regardless of if any days are claimed or not and Affidavit of Payment.
- C. If required in the Contract Documents, submit six (6) American Iron and Steel Qualifying and De Minimus Materials List (if required by the Contract Documents).
- D. Payment Period: Submit at intervals stipulated in the Agreement.

1.3 MEASUREMENT AND PAYMENT

- A. Take measurements and compute quantities. Engineer will verify measurements and quantities.
- B. Unit Quantities: Quantities and measurements indicated on Bid Form are for Contract purposes only. Actual quantities provided shall determine payment.
- C. Payment Includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services and incidentals; erection, application, or installation of item of the Work; overhead and profit.
- D. Final payment for Work governed by unit prices will be made on basis of actual measurements and quantities accepted by Engineer multiplied by unit sum/price for Work incorporated in or made necessary by the Work.
- E. Measurement of Quantities:
 - 1. Weigh Scales: Inspected, tested, and certified by state in which work is being performed or state of origin of materials within past year.
 - 2. Platform Scales: Of sufficient size and capacity to accommodate conveying vehicle.
 - 3. Metering Devices: Inspected, tested, and certified by state in which work is being performed or state of origin of materials within past year.

Village of West Lafayette
WWTP Outfall & Storm Sewer Outfall Improvements

101-020-10127

4. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel, or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight.
5. Measurement by Volume: Measured by cubic dimension using mean length, width, and height or thickness.
6. Measurement by Area: Measured by square dimension using mean length and width or radius.
7. Linear Measurement: Measured by linear dimension, at item centerline or mean chord.
8. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as completed item or unit of the Work.

F. Payment

Bid Item 1 – (ODOT Item 201-11000) – Clearing and Grubbing – Lump Sum

- A. The cost for this work shall be paid for at a lump sum bid price.
- B. No compensation shall be made.
- C. All trees and vegetation within temporary construction easement limits shall be cleared (and grubbed is so specified) unless the property owner indicates in writing that certain trees are to remain, and that the property owner will assume all responsibilities for removal of the trees in the future. Any such letter from the property owner shall be submitted to the Engineer for the record.

Bid Item 2 – (ODOT Item 832-15000) – Storm Water Pollution Prevention Plan – Lump Sum

- A. The cost of this work shall be paid for at a lump sum bid price for installation and maintenance of the Storm Water Pollution Prevention Plan and the Erosion and Sedimentation Controls needed to comply with the plan.
- B. No additional compensation shall be made.

Bid Item 3 – (ODOT Item 202-58000) – Manhole Removed – Each

- A. The cost for this work shall be paid for at a per unit bid price for removal of manholes, measured as shown in the Drawings.
- B. No additional compensation shall be made.

Bid Item 4 – (ODOT Item 451-98000) – Reinforced Concrete Pavement – Square Yard

- A. The cost for this work shall be paid for at a square yard unit bid price for reinforced concrete pavement as shown in the Drawings.
- B. No additional compensation shall be made.

Bid Item 5 – (SPEC) – Helical Piles, As Per Plan – LF

- A. The cost of this work shall be paid for at a unit price for installation of helical piles installed to meet the design parameters, in the Drawings.
- B. No additional compensation shall be made.

Bid Item 6 – (ODOT Item 511-46610) – Concrete Headwall – Cubic Yards

- A. The cost for this work shall be paid for at a cubic yard unit bid price for concrete headwalls, measured as shown in the Drawings.
- B. No additional compensation shall be made.

Bid Item 7 – (ODOT Item 301-34400) – Rock Channel Protection, with Grout – Cubic Yard

- A. The cost of this work shall be paid for at a cubic yard bid price for installation of rock channel protection as required in the Drawings.
- B. No additional compensation shall be made.

Bid Item 8 – (ODOT Item 611-04600) – 12-inch Conduit, Type C, 707.65 – Linear Foot

Bid Item 9 – (ODOT Item 611-13600) – 30-inch Conduit, Type C, 707.65 – Linear Foot

Bid Item 10 – (ODOT Item 611-19600) – 42-inch Conduit, Type C, 509.02 – Linear Foot

Bid Item 11 – (ODOT Item 611-07600) – 18-inch Conduit, Type C, 706.02 – Linear Foot

- A. The cost for Gravity Sanitary Sewer Main Lines shall be paid for by the unit bid price(s) by the horizontal linear foot for the type, size and depth of the pipe.
- B. Measurement for Gravity Sanitary Sewer Main Line under this item shall be the horizontal measured length of pipe and fittings in place and accepted. Depth measurement shall be made perpendicular to the pipe and measured from the original ground to top of pipe.
- C. The unit price(s) shall include all required labor, materials, equipment, testing and all other cost associated with a complete installation including excavation, bedding, backfill, materials, fitting, pipe joints, pipe, tools, supplies, marking tape and testing.
- D. Cost for associated items with Sanitary Sewer Gravity Clean Outs shall be paid for by the unit bid price(s) for each complete installed per details on contract drawings.
- E. Cost for associated Concrete Gravity Pipe Anchors shall be paid for by the unit bid price for each complete in place per details on contract drawings.
- F. Cost shall include if not covered by another bid item repair such as flower beds, walls, shrubs, trees, fencing or other incidentals.
- G. Restoration of disturbed area, concrete resurfacing, crushed stone resurfacing and asphalt paving shall be paid for under other Bid Item(s) specified elsewhere.

Bid Item 12 – (ODOT Item 611-99674) – Manhole, No. 3 (With Vented Lid) – Each

- A. The cost for this work shall be paid for at a per unit bid price for new manhole structures as shown in the Drawings.
- B. Cost shall include all required labor, materials, equipment, and all other costs associated with excavation and backfill, installation of pre-cast manhole or structure and other appurtenances as indicated on Drawings.
- C. Payment for manholes shall be as follows:
 - 1) Gravel sub-base, manhole base, seps, cone top, frame, and cover (watertight where indicated), up to 6-foot depth measured from invert out elevation to top of cover elevation, shall be paid at the Contract Unit Bid price per each.
 - 2) Manhole riser piping of specified inside diameter required for additional depth over 6 feet shall be paid for at the Unit Bid price per vertical foot for Precast Manhole Riser Pipe.

- 3) All necessary tie-in's will be included in the unit price for this bid item.
- D. Cost item includes all necessary testing of the manholes and its appurtenances.
- E. No additional compensation shall be made.

Bid Item 13 - (ODOT Item 611-99654) – Manhole Adjusted to Grade – Each

- A. The cost of this work shall be paid for at a per unit bid price for the bid item for which adjustments to manhole frame and covers are required.
- B. No additional compensation shall be made.

Bid Item 14 – (ODOT Item 611-99674) – Manhole, No. 3 – Each

- F. The cost for this work shall be paid for at a per unit bid price for new manhole structures as shown in the Drawings.
- G. Cost shall include all required labor, materials, equipment and all other costs associated with excavation and backfill, installation of pre-cast manhole or structure and other appurtenances as indicated on Drawings.
- H. Payment for manholes shall be as follows:
 - 1) Gravel sub-base, manhole base, seps, cone top, frame, and cover (watertight where indicated), up to 6-foot depth measured from invert out elevation to top of cover elevation, shall be paid at the Contract Unit Bid price per each.
 - 2) Manhole riser piping of specified inside diameter required for additional depth over 6 feet shall be paid for at the Unit Bid price per vertical foot for Precast Manhole Riser Pipe.
 - 3) All necessary tie-in's will be included in the unit price for this bid item.
- I. Cost item includes all necessary testing of the manholes and its appurtenances.
- J. No additional compensation shall be made.

Bid Item 15 – (ODOT Item 611-96650) – Grouting Voids Between Pipes – Cubic Yards

- A. The cost for this work shall be paid for at a cubic yard unit bid price for grouting voids between pipes, measured as shown in the Drawings.
- B. No additional compensation shall be made.

Bid Item 16 – (ODOT Item 630-08600) – Signpost Reflector – Each

- A. The cost of this work shall be paid for at a per unit bid price for the bid item for which signpost reflectors are required.
- B. No additional compensation shall be made.

Bid Item 17 – (ODOT Item 630-84600) – Ground Mounted Pipe Support Foundation – Each

- A. The cost for this work shall be paid for at a per unit bid price for ground mounted pipe support foundations, measured as shown in the Drawings.
- B. No additional compensation shall be made.

Bid Item 18 – (ODOT Item 630-00100) – Soil Analysis Test – Each

- A. The cost for soil analysis testing shall be paid for at a per unit bid price.
- B. No additional compensation shall be made.

Bid Item 19 – (ODOT Item 202-35200) – Pipe Removed, Over 24” – Linear Foot

- A. The cost for this work shall be paid for at a linear foot unit bid price for removal of pipes over 24 inches in diameter, measured along the centerline of the utility pipe.
- B. No additional compensation shall be made.

Bid Item 20 – (ODOT Item 611-99690) – Manhole Rehabilitation – Each

- A. The cost for this work shall be paid for at a per unit bid price for manhole rehabilitation as shown in the Drawings.
- B. No additional compensation shall be made.

Bid Item 21 - (ODOT Item 601-34400) – Rock Channel Protection, with Grout – Cubic Yard

- A. The cost of this work shall be paid for at a cubic yard bid price for installation of rock channel protection as required in the Drawings.
- B. No additional compensation shall be made.

Bid Item 22 - (ODOT Item 202-98300) – Removal of Gravel Driveway – Square Yard

- A. The cost for this work shall be paid for at a square yard unit bid price for gravel driveway removal as shown in the Drawings. The cost of other excavation shall be included in the lump sum bid price(s) and/or unit bid price(s) for the bid item(s) for which excavation is required.
- B. No additional compensation shall be made.

Bid Item 23 – (ODOT Item 204-30020) – Granular Material, Type C (Gravel Driveway) – Cubic Yard

- A. The cost of this work shall be paid for at a cubic yard unit bid price for gravel surfacing as required in the Drawings.
- B. Trench repairs, street, roadway, and driveway asphalt driveway repairs, bituminous concrete curb, and crushed stone repairs as required in the Drawings and/or Specifications shall be paid for at the linear foot unit bid price(s) for the type of repair and/or curb specified measured along the centerline of the utility pipe.
- C. Improved and unimproved areas disturbed by the Contractor in areas where utility pipe is not installed shall be repaired by the Contractor at his expense at no additional cost to the Owner.
- D. No additional compensation shall be made.

Bid Item 24 – (ODOT Item 202-75000) – Fence Removed – Linear Foot

- A. The cost for this work shall be paid for at a linear foot unit bid price for fence removal, measured as shown in the Drawings.
- B. No additional compensation shall be made.

Bid Item 25 – (ODOT Item 607-20000) – Fence Type CL – Linear Foot

- A. The cost for this work shall be paid for at a linear foot unit bid price for fence construction, measured as shown in the Drawings.
- B. No additional compensation shall be made.

Bid Item 26 - (ODOT Item 623-10000) – Construction Layout Stakes and Surveying – Lump Sum

- A. This work shall be paid for at the lump sum bid price for construction survey work including, but not limited to, the use of survey personnel and equipment on the project site for construction staking and other surveying as required.
- B. No additional compensation shall be made.

Bid Item 27 – (ODOT Item 624-10000) – Mobilization/Demobilization – Lump Sum

- A. This work shall be paid for at the lump sum bid price for construction preparatory operations including, but not limited to, the movement of personnel and equipment to the project site and the establishment of field office(s), building(s), and/or other facilities, and the installation of the project sign if a sign is required in the Supplemental General Conditions

Partial payment not exceeding three percent (3%) of the awarded total contract bid price shall be made as part of the first application for payment after mobilization is completed. The balance of this lump sum bid price shall be paid for as part of the first application for payment after substantial completion.

No deduction shall be made, nor shall any increase be made, in the lump sum bid price for Mobilization regardless of any decreases or increases in the final total contract price or for any other cause.

- B. No additional compensation shall be made.

General Conditions, Supplemental General Conditions, Specification Section 011000 through 019100, except Temporary Facilities And Controls Section 015000 and Construction Waste Management and Disposal Section 017419

Incidental

- A. The cost of this work shall be included in the lump sum bid price(s) and/or unit bid price(s) for the bid item(s) for which it is required.
- B. No additional compensation shall be made.

Section 024010 – Video Recording

Incidental

- A. The cost of this work shall be included in the lump sum bid price(s) and/or unit bid price(s) for the bid item(s) for which video recording is required.
- B. No additional compensation shall be made.

Section 033050 – Crystalline Concrete Waterproofing

Incidental

- A. The cost of this work shall be included in the lump sum bid price(s) and/or unit bid price(s) for the bid item(s) for which crystalline concrete waterproofing is required.
- B. No additional compensation shall be made.

Section 310516 – Aggregates for Earthwork

Incidental

- A. The cost of this work shall be included in the lump sum bid price(s) and/or unit bid price(s) for the bid item(s) for which aggregates are required.
- B. No compensation shall be made.

Section 312316.13 – Trenching

Incidental

- A. Unless otherwise provided, all excavation shall be unclassified regardless of the material encountered. No additional compensation shall be made for rock or any soft or otherwise unsuitable material. No additional compensation shall be made for dewatering and/or sheet piling.

Section 312319 – Dewatering

Incidental

- A. The cost of this work shall be included in the lump sum bid price(s) and/or unit bid price(s) for the bid item(s) for which dewatering is required.
- B. No additional compensation shall be made.

Section 312323.33 – Flowable Fill

Incidental

- A. The cost of this work shall be included in the lump sum bid price(s) and/or unit bid price(s) for the bid item(s) for which flowable fill is required.
- B. No additional compensation shall be made.

Section 330130.13 – Sewer and Manhole Testing

Incidental

- A. The cost of this work shall be included in the lump sum bid price(s) and/or unit bid price(s) for the bid item(s) for which testing is required.
- B. No additional compensation shall be made.

Village of West Lafayette
WWTP Outfall & Storm Sewer Outfall Improvements

101-020-10127

Section 330505.43 – Mandrel Testing

Incidental

- A. The cost of this work shall be included in the lump sum bid price(s) and/or unit bid price(s) for the bid item(s) for which testing is required.
- B. No additional compensation shall be made.

Section 330505.56 – Vacuum Testing

Incidental

- A. The cost of this work shall be included in the lump sum bid price(s) and/or unit bid price(s) for the bid item(s) for which testing is required.
- B. No additional compensation shall be made.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION 012000

SECTION 329117 HELICAL PILES, PER PLAN

PART 1 - GENERAL

1.1 SUMMARY

- A. The Contractor shall furnish, install and place into satisfactory operating condition a Helical Pile as shown on the drawings and described in this specification. Equipment supplied under this specification shall be installed in locations shown on the drawings.
- B. Scope:
 - 1. Scope of work under this section this work consists of furnishing all necessary engineering and design services (if required), supervision, labor, tools, materials, and equipment to perform all work necessary to install the Helical Piles per the specifications described herein, and as shown on the drawings. The Contractor shall install a Helical Pile that will develop the load capacities as detailed on the drawings.

1.2 COORDINATION

- A. Section 013000 - Administrative Requirements: Requirements for coordination.
- B. Coordinate installation and startup of Work of this Section with Engineer.

1.3 SUBMITTALS

- A. Section 013300 - Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit manufacturer's product data for system materials and component equipment.
- C. Shop Drawings:
 - 1. Indicate system materials and component equipment, including detailed wiring and control diagrams.
 - 2. Indicate complete information concerning fabrication, installation, anchoring, fasteners, and other details.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
 - 1. Certify installation is completed according to manufacturer's instructions.
 - 2. Submit manufacturer's affidavit certifying that the piles have been designed to resist loading and attest to structural adequacy; calculations are not to be submitted.
- E. Manufacturer's Instructions: Submit detail instructions on installation requirements, including storage and handling procedures, anchoring, and layout.

- F. Source Quality-Control Submittals: Indicate results of factory tests and inspections.
- G. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.
- H. Manufacturer Reports: Indicate results of manufacturer's inspections and instructions issued.
- I. Qualifications Statements:
 - 1. Submit qualifications for manufacturer, installer, and licensed professional.
 - 2. Submit manufacturer's approval of installer.
- J. A copy of this specification section, with addendum updates included, and all referenced and applicable sections, with addendum updates included, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements. Check marks (✓) shall denote full compliance with a paragraph as a whole. If deviations from the specifications are indicated, and therefore requested by the Contractor, each deviation shall be underlined and denoted by a number in the margin to the right of the identified paragraph, referenced to a detailed written explanation of the reasons for requesting the deviation. The Engineer shall be the final authority for determining acceptability of requested deviations. The remaining portions of the paragraph not underlined shall signify compliance on the part of the Contractor with the specifications. Failure to include a copy of the marked-up specification sections, along with justification(s) for any requested deviations to the specification requirements, with the submittal shall be sufficient cause for rejection of the entire submittal with no further consideration.

1.4 QUALITY ASSURANCE

- A. Perform Work according to all applicable regulatory and industry standards.
- B. Maintain one copy of each standard affecting the Work of this Section on site.
- C. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."

1.5 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum five years' documented experience.
- B. Installer: Company specializing in performing Work of this Section with minimum five year's documented experience and approved by manufacturer.

1.6 SOURCE QUALITY CONTROL

- A. Comply with requirements of project funding agency.

PART 2 – PRODUCTS

2.1 CENTRAL STEEL SHAFT

- A. The central steel shaft, consisting of lead sections, helical extensions, and plain extensions, shall be Type SS (Square Shaft) or RS (Round Shaft) or a combination of the two (SS to RS Combo Pile) as manufactured.

2.2 HELIX BEARING PLATE

- A. Shall be hot rolled carbon steel sheet, strip, or plate formed on matching metal dies to true helical shape and uniform pitch. Bearing plate material shall conform to the following ASTM specifications.
 - 1. RS2875 Material: Per ASTM A36, or A572, with minimum yield strength of 36 ksi. Plate thickness is 3/8" or 1/2".

2.3 BOLTS

- A. The size and type of bolts used to connect the central steel shaft sections together shall conform to the following ASTM specifications.
 - 1. RS2875 2-7/8" OD Material: 3/4" diameter bolts (2 or 4 per coupling) per SAE J429 Grade 5 or 8.

2.4 COUPLINGS

- A. For Type RS287 material, the couplings shall either be formed as an integral part of the plain and helical extension material as hot forge expanded sockets, or as internal sleeve wrought steel connectors. The steel connectors can be either tubing or solid steel bar with holes for connecting shaft sections together.

2.5 PLATES, SHAPES, OR PILE CAPS

- A. Depending on the application, the pile cap shall be a welded assembly consisting of structural steel plates and shapes designed to fit the pile and transfer the applied load. Structural steel plates and shapes for HELICAL PILE top attachments shall conform to ASTM A36 or ASTM A572 Grade 50.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Section 017000 - Execution and Closeout Requirements: Requirements for installation examination.

3.2 INSTALLATION AND OPERATING INSTRUCTIONS

- A. The contractor shall install the system in accordance with the Installation Instructions in the manual provided by the Manufacturer. Installation by the contractor shall specifically include, but not be limited to the following:
 - 1. Prior to commencing Helical Pile installation, the Contractor shall inspect the work of all other trades and verify that all said work is completed to the point where Helical Piles may commence without restriction.
 - 2. The Contractor shall verify that all Helical Piles may be installed in accordance with all pertinent codes and regulations regarding such items as underground obstructions, right-of-way limitations, utilities, etc.
 - 3. In the event of a discrepancy, the Contractor shall notify the Engineer. The Contractor shall not proceed with Helical Pile installation in areas of discrepancies until said discrepancies have been resolved. All costs associated with unresolved discrepancies shall be the responsibility of the Engineer.

3.3 INSTALLATION EQUIPMENT

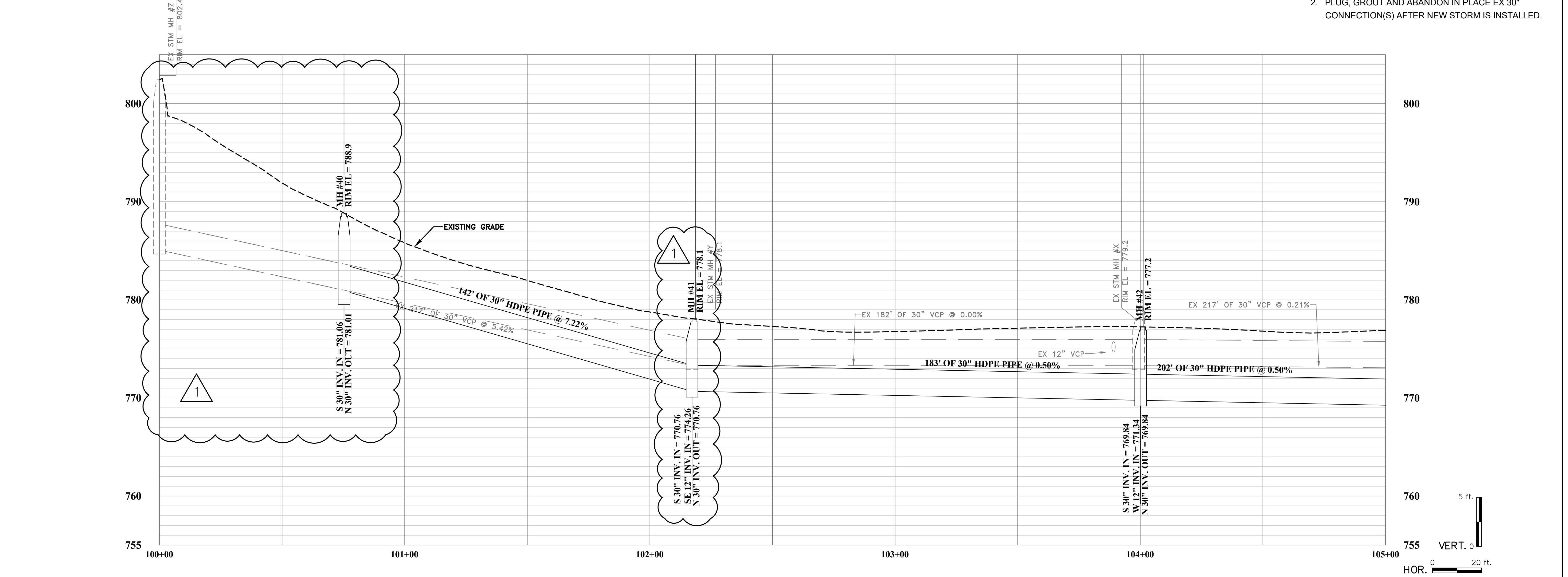
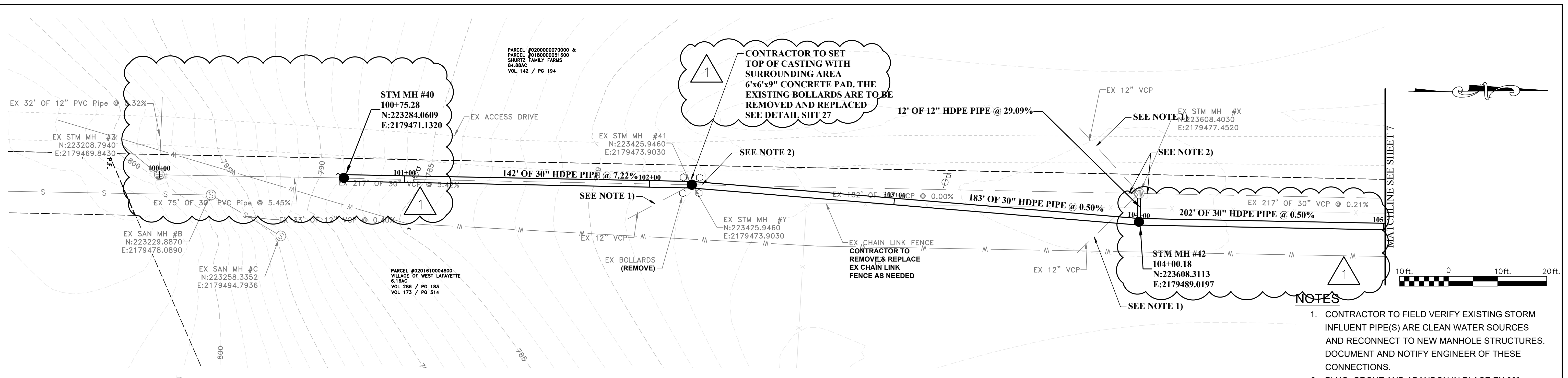
- A. Shall be rotary type, hydraulic power-driven torque motor with clockwise and counter-clockwise rotation capabilities. The torque motor shall be capable of continuous adjustment to revolutions per minute (RPM's) during installation. Percussion drilling equipment shall not be permitted. The torque motor shall have torque capacity 15% greater than the torsional strength rating of the central steel shaft to be installed.
- B. Equipment shall be capable of applying adequate down pressure (crowd) and torque simultaneously to suit project soil conditions and load requirements. The equipment shall be capable of continuous position adjustment to maintain proper Helical Pile alignment.
- C. Installation tool shall be a Kelly Bar Adapter (KBA) and Type SS or RS drive tools as manufactured.

3.4 STARTUP AND COMMISSIONING FIELD QUALITY CONTROL

- A. The contractor is to test the helical pile as per ASTM D1143.

END OF SECTION 329117

USER: alexandra.m. fechtko
 LAYOUT: 6 PLAN & PROFILE STM 100+00-105+00
 PLOT DATE/TIME: 8/22/2023 11:06 AM
 CAD FILE: R:\020\020-10127\00-West Lafayette WWTP And SS Outfall Improvements\Drawings\6 PLAN & PROFILE STM 100+00-105+00.dwg



- NOTES**
- CONTRACTOR TO FIELD VERIFY EXISTING STORM INFLUENT PIPE(S) ARE CLEAN WATER SOURCES AND RECONNECT TO NEW MANHOLE STRUCTURES. DOCUMENT AND NOTIFY ENGINEER OF THESE CONNECTIONS.
 - PLUG, GROUT AND ABANDON IN PLACE EX 30" CONNECTION(S) AFTER NEW STORM IS INSTALLED.

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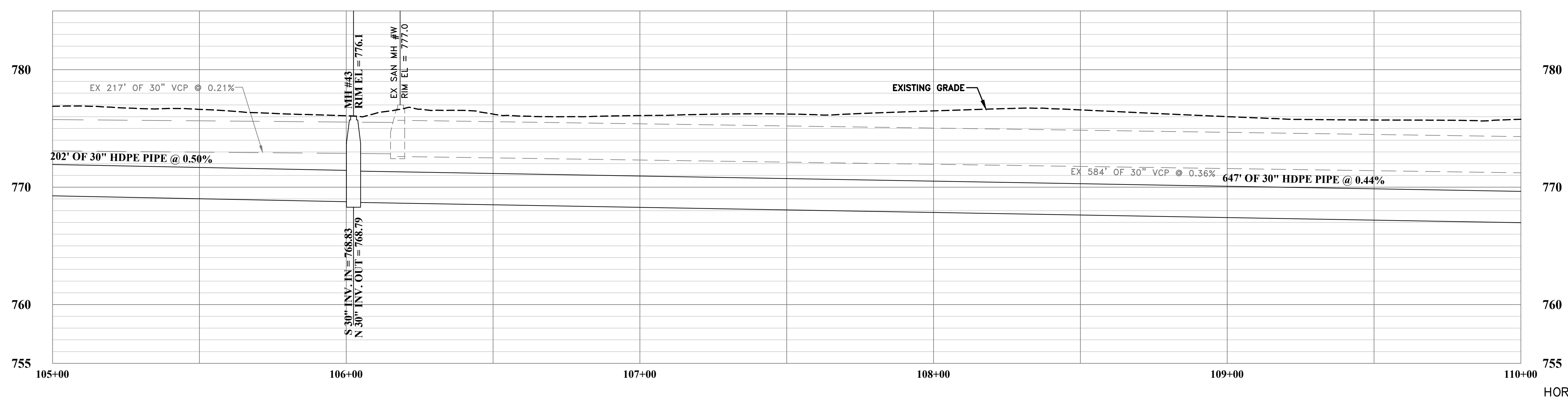
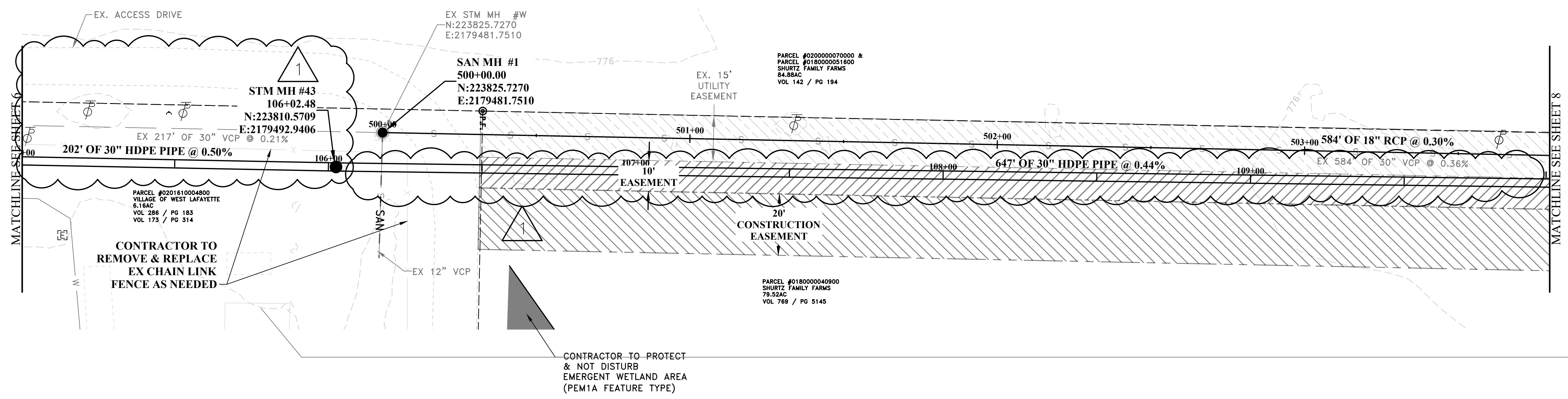
NO.	BY	DATE	DESCRIPTION
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SCALE: AS NOTED
 DRAWN: SMD DATE: 25MAY2022
 CHECKED: --- DATE: ---
 APPROVED: --- DATE: ---
 SURVEY DATE:
 SURVEY BY:
 FIELD BOOK No.:

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PHASE No.	WEST LAFAYETTE WWTP OUTFALL AND STORM SEWER OUTFALL IMPROVEMENTS	SHEET No.	6
CONTRACT No.			
PROJECT No.	020-10127		

USER: alexandria m. fechtko
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NO.	BY	DATE	DESCRIPTION
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SCALE: AS NOTED
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 CHECKED: --- DATE: ---
 APPROVED: --- DATE: ---
 SURVEY DATE:
 SURVEY BY:
 FIELD BOOK No.:

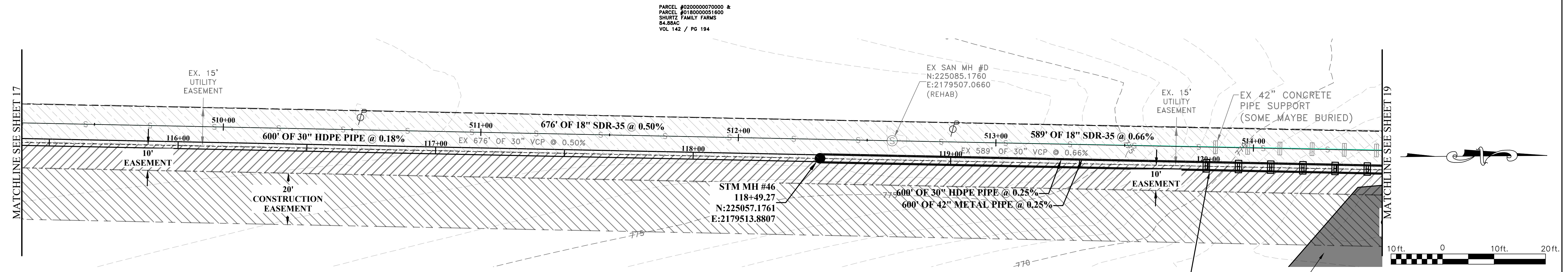
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PLAN & PROFILE STM 105+00-110+00

SHEET No.
7

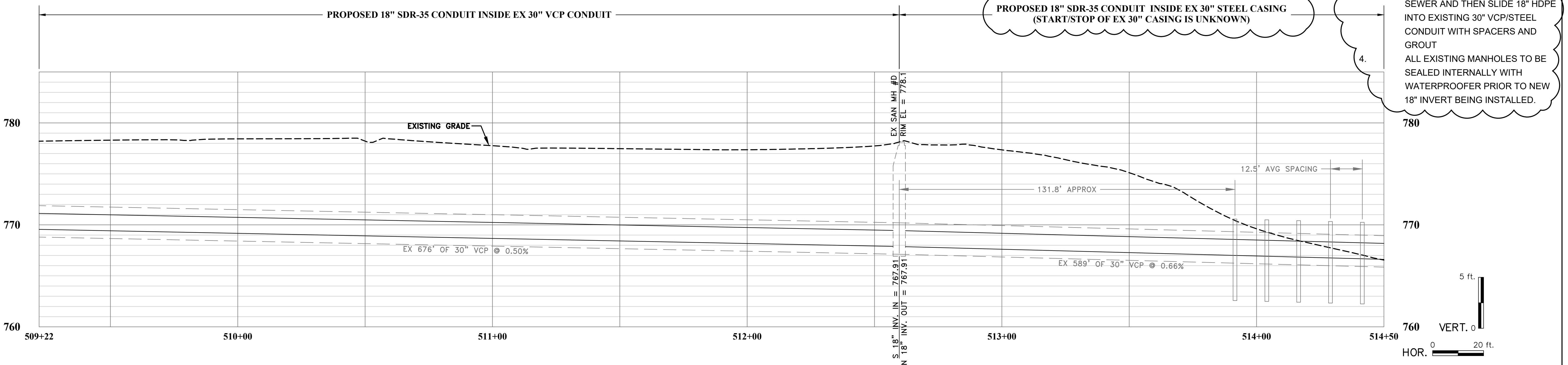
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SAN OUTFALL CONDUIT

1. STA. 512+59.70 REHAB EXISTING STRUCTURE, LINE AND SEAL. GROUT 18" SDR-35 INSIDE EXISTING 30" VCP.
2. EXACT NUMBER OF EXISTING CONCRETE PIPE SUPPORTS IS UNKNOWN. CONTRACTOR TO VERIFY PRIOR TO EXCAVATING IN/AROUND AREAS OF EXPOSED PIPE.
3. CLEAN EXISTING COMBINED SEWER AND THEN SLIDE 18" HDPE INTO EXISTING 30" VCP/STEEL CONDUIT WITH SPACERS AND GROUT
4. ALL EXISTING MANHOLES TO BE SEALED INTERNALLY WITH WATERPROOFER PRIOR TO NEW 18" INVERT BEING INSTALLED.

CONTRACTOR TO MINIMIZE ANY DISTURBANCE IN EXISTING WETLAND EMERGENT WETLAND AREA (PSS1/EM1C FEATURE TYPE)



PROPOSED STORM PIPE REMOVED FOR CLARITY. (SEE STM SHEETS FOR DETAILS)

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NO.	BY	DATE	DESCRIPTION
1	AMF	21AUG2023	CORRECTED STEEL PIPE SIZE

SCALE: AS NOTED	
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APPROVED: ----	DATE: ----
SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No.:	

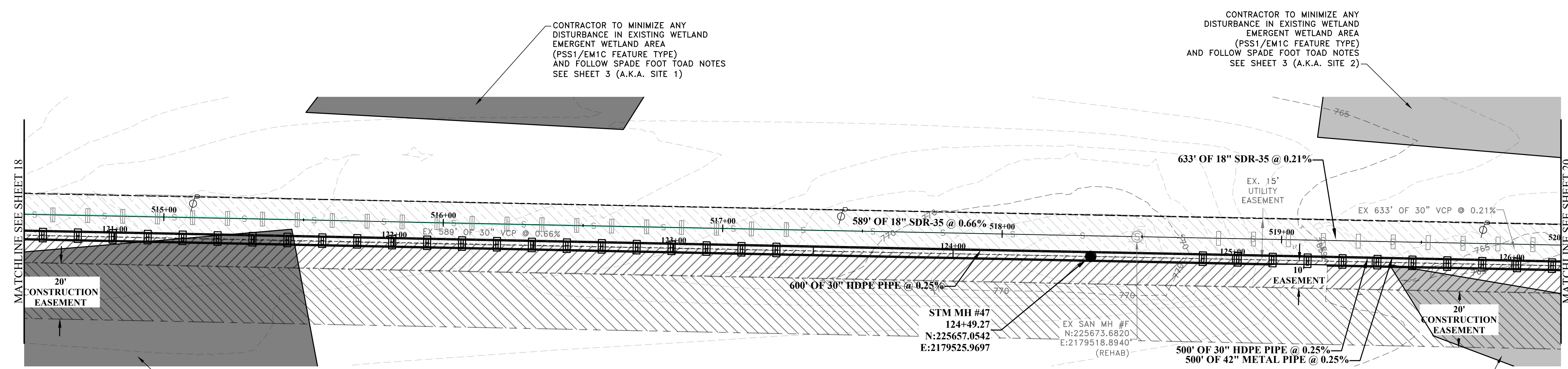
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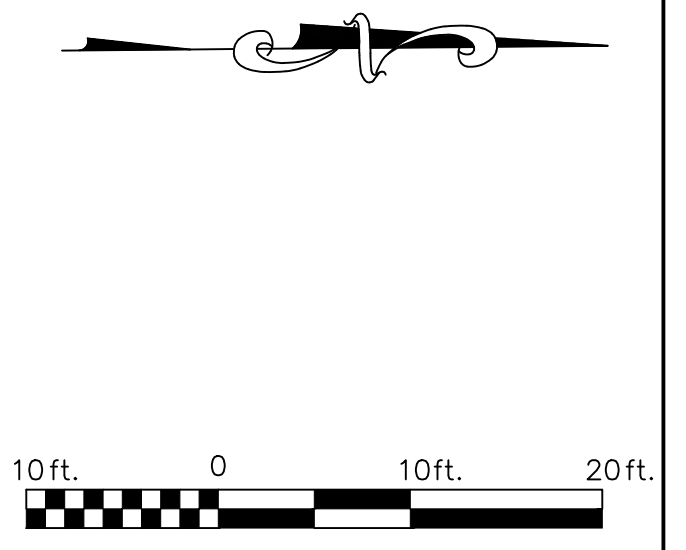
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CONTRACT No.			
PROJECT No.	020-10127		
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USER: alexandra.m. fechtko
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CONTRACTOR TO MINIMIZE ANY DISTURBANCE IN EXISTING WETLAND EMERGENT WETLAND AREA (PSS1/EM1C FEATURE TYPE) AND FOLLOW SPADE FOOT TOAD NOTES SEE SHEET 3 (A.K.A. SITE 1)

CONTRACTOR TO MINIMIZE ANY DISTURBANCE IN EXISTING WETLAND EMERGENT WETLAND AREA (PSS1/EM1C FEATURE TYPE) AND FOLLOW SPADE FOOT TOAD NOTES SEE SHEET 3 (A.K.A. SITE 2)

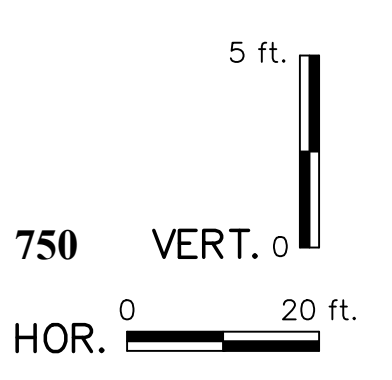
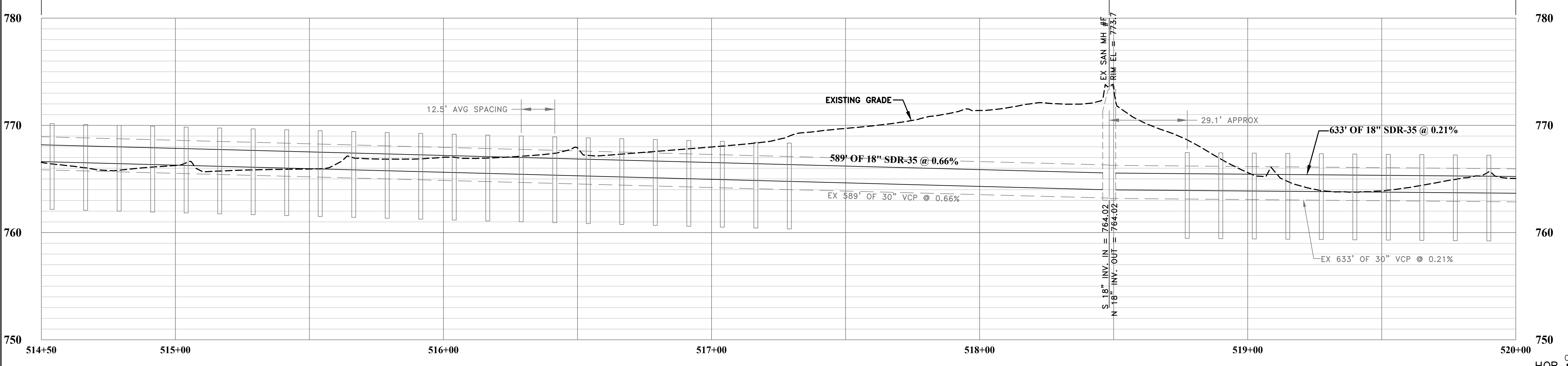


SAN OUTFALL CONDUIT

1. STA. 518+48.33 REHAB EXISTING STRUCTURE, LINE AND SEAL. GROUT 18" SDR-35 INSIDE EXISTING 30" VCP. EXACT NUMBER OF EXISTING CONCRETE PIPE SUPPORTS IS UNKNOWN. CONTRACTOR TO VERIFY PRIOR TO EXCAVATING IN/AROUND AREAS OF EXPOSED PIPE.
2. CONTRACTOR TO SLIDE 18" HDPE INTO EXISTING 30" STEEL WITH SPACERS AND GROUT.
3. ALL EXISTING MANHOLES TO BE SEALED INTERNALLY WITH WATERPROOFER PRIOR TO NEW 18" INVERT BEING INSTALLED.

PROPOSED 18" SDR-35 CONDUIT INSIDE EX 30" STEEL CASING (START/STOP OF EX 30" CASING IS UNKNOWN)

PROPOSED 18" SDR-35 CONDUIT INSIDE EX 30" STEEL CASING (START/STOP OF EX 30" CASING IS UNKNOWN)



PROPOSED STORM PIPE REMOVED FOR CLARITY. (SEE STM SHEETS FOR DETAILS)

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NO.	BY	DATE	DESCRIPTION
1	AMF	21AUG2023	CORRECTED STEEL PIPE SIZE

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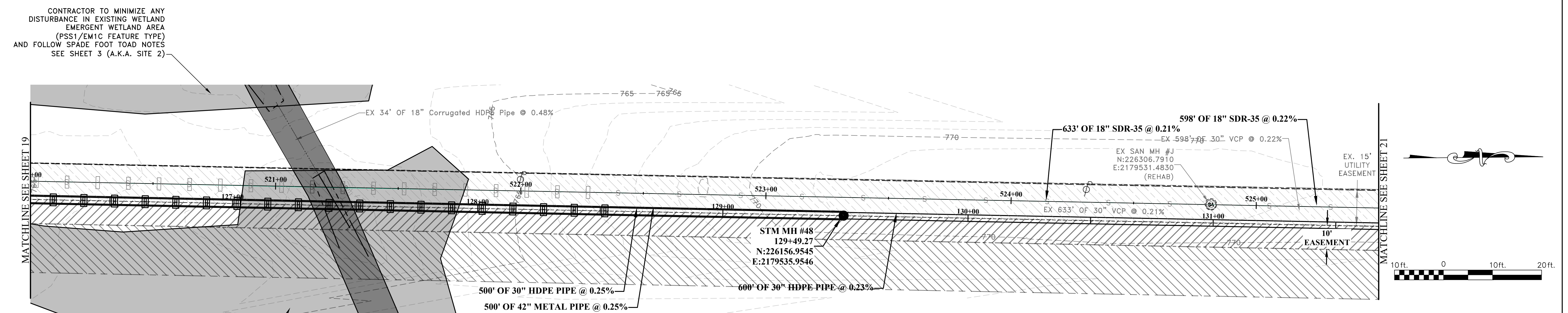
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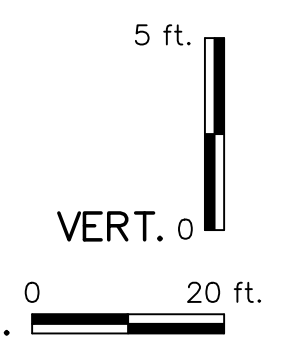
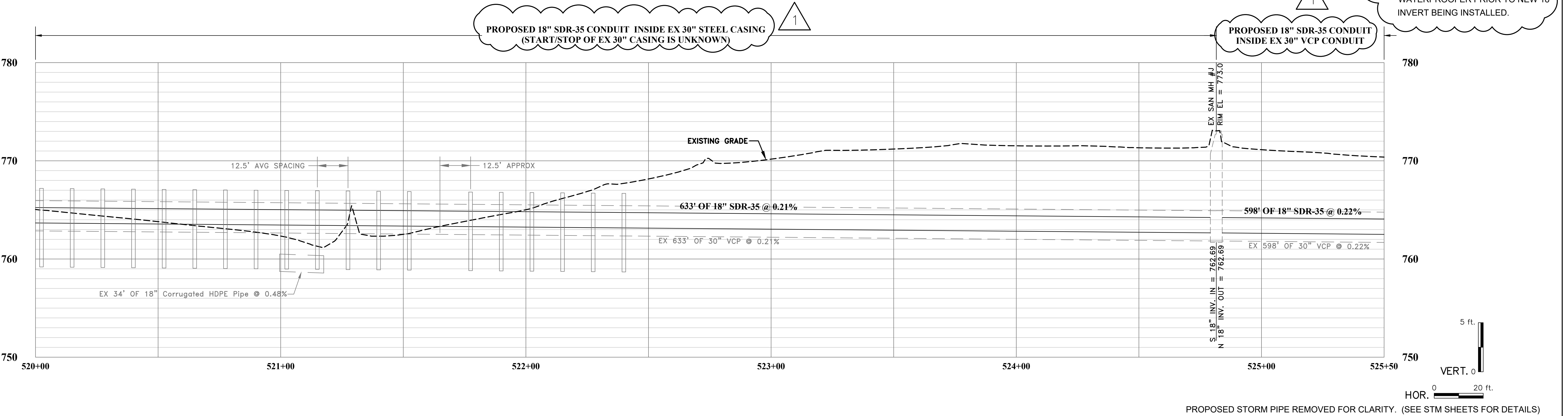
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CONTRACT No.			
PROJECT No.	020-10127		
PLAN & PROFILE SAN 514+50-520+00			

USER: alexandria m. fechtko
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SAN OUTFALL CONDUIT

1. STA. 524+81.56 REHAB EXISTING STRUCTURE, LINE AND SEAL. GROUT 18" SDR-35 INSIDE EXISTING 30" VCP.
2. EXACT NUMBER OF EXISTING CONCRETE PIPE SUPPORTS IS UNKNOWN. CONTRACTOR TO VERIFY PRIOR TO EXCAVATING IN/AROUND AREAS OF EXPOSED PIPE.
3. CONTRACTOR TO SLIDE 18" HDPE INTO EXISTING 30" STEEL WITH SPACERS AND GROUT
4. ALL EXISTING MANHOLES TO BE SEALED INTERNALLY WITH WATERPROOFER PRIOR TO NEW 18" INVERT BEING INSTALLED.



PROPOSED STORM PIPE REMOVED FOR CLARITY. (SEE STM SHEETS FOR DETAILS)

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1	AMF	21AUG2023	CORRECTED STEEL PIPE SIZE

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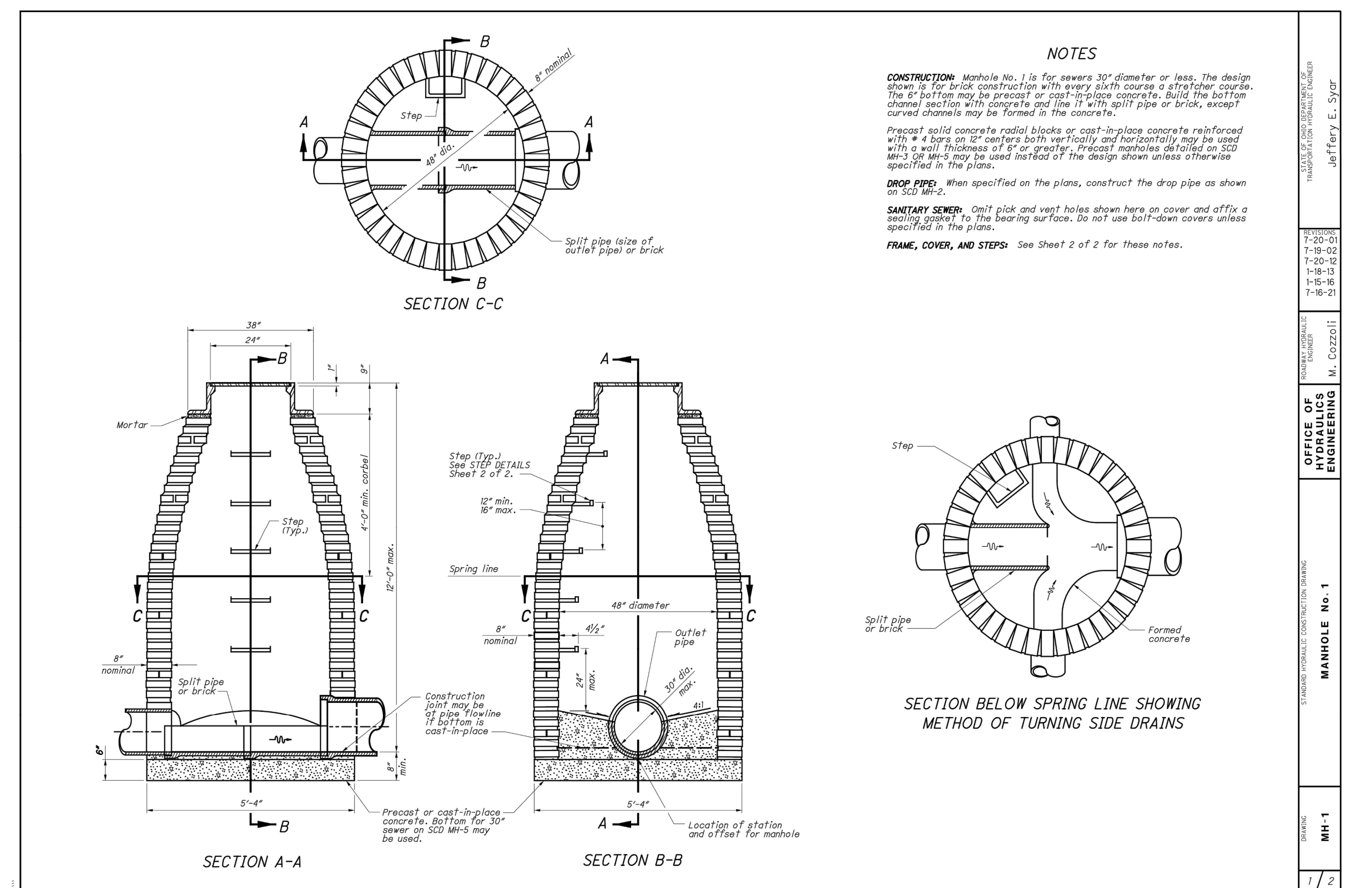
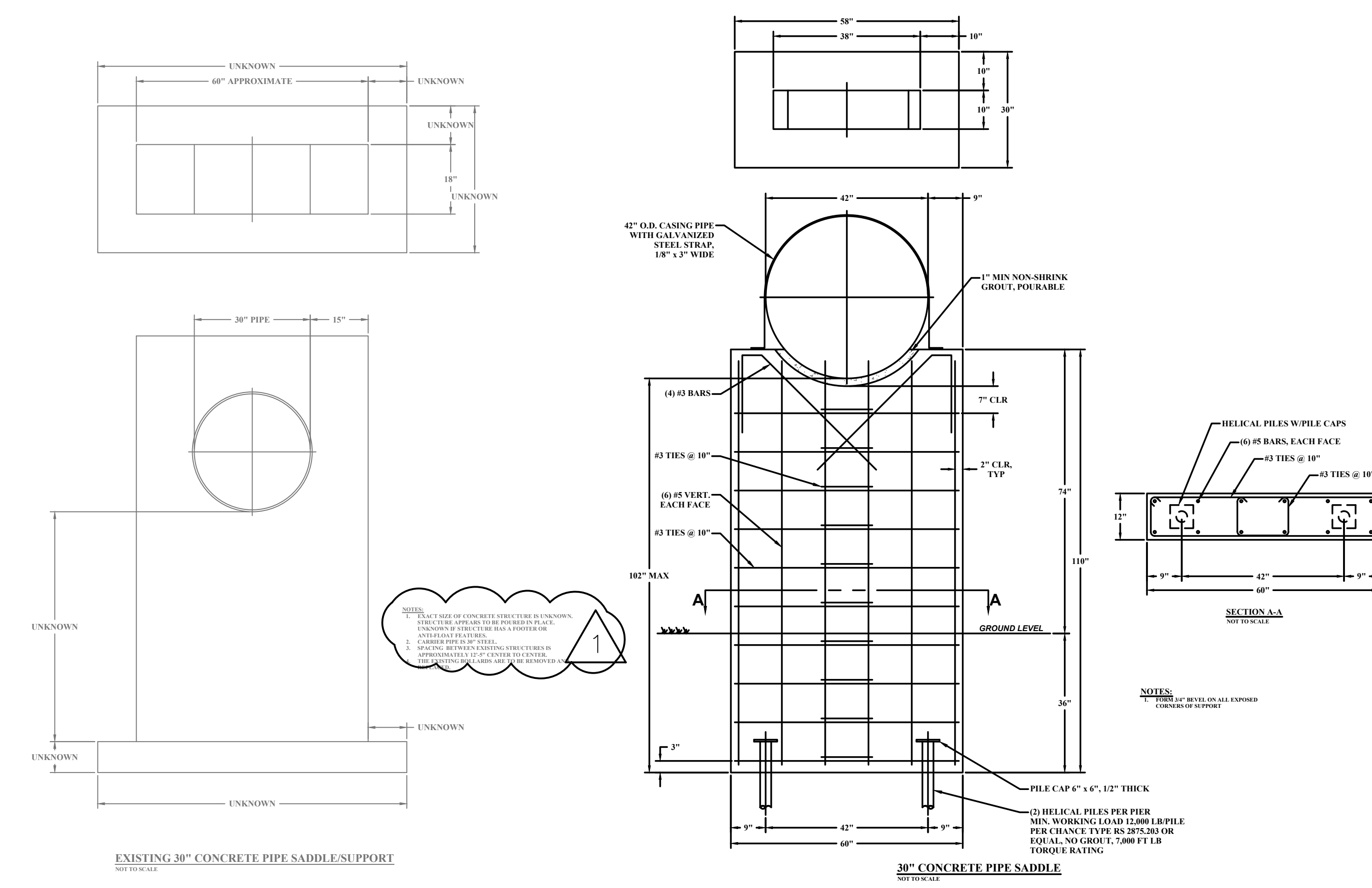
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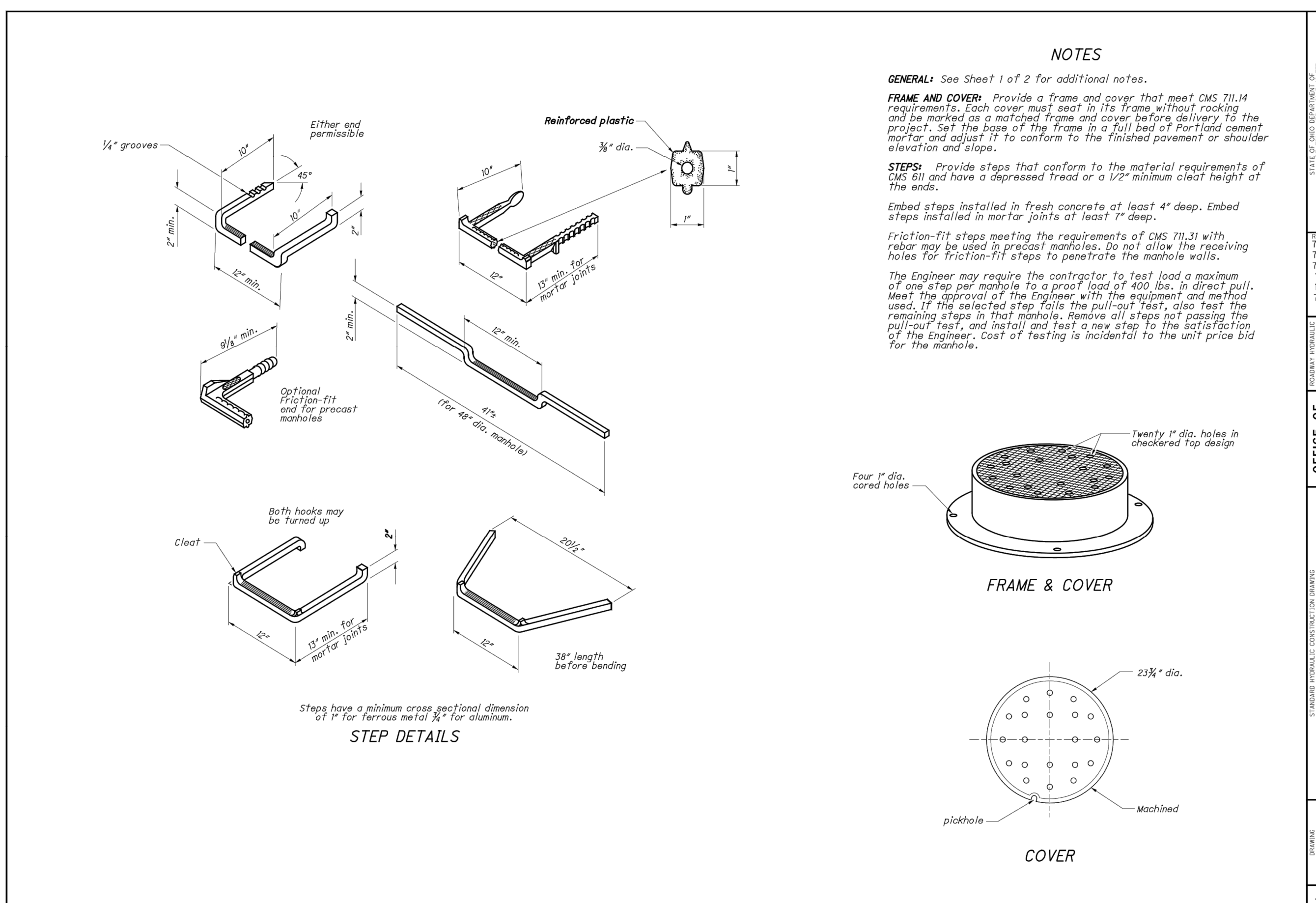
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CONTRACT No.			
PROJECT No.	020-10127		
PLAN & PROFILE SAN 520+00-525+50			

USER: alexandra m. fechnko
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STATE OF OHIO DEPARTMENT OF TRANSPORTATION TRANSPORTATION ENGINEER Jeffery E. Syar
DATE OF SHEET 7-20-01 7-19-02 7-20-12 1-18-13 1-15-16 7-16-21
DESIGNER M. COZZOLI
PROJECT NAME MANHOLE No. 1
DATE MH-1
SHEET NO. 1 / 2



STATE OF OHIO DEPARTMENT OF TRANSPORTATION TRANSPORTATION ENGINEER Jeffery E. Syar
DATE OF SHEET 7-20-01 7-19-02 7-20-12 1-18-13 1-15-16 7-16-21
DESIGNER M. COZZOLI
PROJECT NAME MANHOLE No. 1
DATE MH-1
SHEET NO. 2 / 2

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NO.	BY	DATE	DESCRIPTION
1	AMF	21AUG2023	CORRECTED NOTE

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CONTRACT No.			
PROJECT No.	020-10127		
GENERAL DETAILS			