
Southern 5 Sewer District Wastewater Collection System Phase 1, Contract 2 – Celeryville

ADDENDUM 2

August 6, 2026

Planholders on the Southern 5 Sewer District, Wastewater Collection System Phase 1, Contract 2 - Celeryville, are hereby notified of the following amendments to the Contract Documents. This Addendum is hereby made a part of the Contract Documents.

QUESTIONS AND ANSWERS

All questions and answers can be found in the Pre-Bid Questions document.

SPECIFICATIONS

Replace the following specifications with the attached:

- C-800 - Exhibit 1 Wage Rates
- C-111 - Advertisement for Bid
- C-410 - Bid Form for Construction Contracts
- 01010 - Definition of Contract Items
- 01043 - Coordination and Control of the Work
- 02790 - Horizontal Directional Drilling
- 11733 - Suction Lift Pump Stations

Add the following specifications in its entirety:

- 01021 - Allowances

Planholders should update the Table of Contents to reflect the above sections.

An updated Table of Contents will be included in the Issued for Construction Project Manual.

DRAWINGS

Replace the following drawings with the attached:

G-0.2	2 of 75	SA-0.3	14 of 75	SA-11.6	36 of 75
G-0.3	3 of 75	SA-1.1	15 of 75	SA-11.7	37 of 75
G-0.4	4 of 75	SA-1.3	17 of 75	FM-0.3	43 of 75
G-0.6	6 of 75	SA-1.4	18 of 75	FM-9.1	45 of 75
G-0.7	7 of 75	SA-1.5	19 of 75	FM-11.3	55 of 75
C-2.1	10 of 75	SA-1.6	20 of 75	FM-11.4	56 of 75
C-2.2	11 of 75	SA-1.7	21 of 75	PE-1.1	71 of 75
SA-0.1	12 of 75	SA-9.1	34 of 75	E-1.1	75 of 75



Southern 5 Sewer District
WW Collection System Ph. 1, Contract 2 - Celeryville, OH
R01009-08090-01
Addendum 2

Page 2

Planholders should update the Drawing Index to reflect the above changes.

An updated Drawing Index will be included in the Issued for Construction Project Manual.

RECEIPT OF THIS ADDENDUM MUST BE ACKNOWLEDGED ON PAGE C-410-1 OF THE BID.

**SOUTHERN 5 SEWER DISTRICT
WASTEWATER COLLECTION SYSTEM
PRE-BID QUESTIONS**

1. Have all easements been obtained?

All mainline easements have been obtained. There are still a few grinder pump easements to be signed.

2. Are there soil borings?

See Specification Section C-800.

3. When is the anticipated Notice to Proceed going to be given?

Late September or early October

4. Is there a specific sequence required for construction?

See Addendum 2, revised Specification Section 01043

5. What are the pay limits for item 5a) 6-inch Lateral, Public Property and item 17) 6-inch Lateral, Private Property?

See Addendum 2, Sheet SA-0.3

6. Will the contractor be paid under Item 17) 6-inch Lateral, Private Property for laterals running from the grinder pumps to the connection at the septic tanks?

See Addendum 2, revised Specification Section 01010

7. Will the contractor be paid for 6" risers for the sanitary laterals?

See Addendum 2, revised Specification Section 01010

8. Will Protecto 401 ceramic epoxy coating be required on ductile iron force main fittings and pipe or the pump station only?

Pump station only

9. Can MJ solid sleeves with megalugs and stainless-steel stiffeners be used for closures on the force main directional drills?

See Addendum 2, revised Specification Section 02790

10. Will the contractor be paid for undercut of poor soils?

See Addendum 2, revised Specification Section 01010

11. Will the contractor be paid for landscaping, tree removal, fences, etc. for private laterals? Can an allowance be set up?

See Addendum 2, revised Specification Section 01010

12. Who will be responsible for paying to hold or relocate utility poles that could be in conflict?

See Addendum 2, Specification Section 01021

13. Can trees be removed in the temporary easements?

Yes

14. Will a field office be required for the project? If so how will this be paid?

See Specification Section 01590. Cost is to be included in bid prices for other items.

15. Will the contractor be paid for repairing existing storm sewers? Shown on the plans and not shown?

See Addendum 2, Specification Section 01010, Item 5

16. Is the owner to provide/ install the 30 Amp disconnect for the grinder pumps?

The property owner is responsible to have the 30 Amp disconnect installed.

17. Is a generator required for the pump station? Is there a spec section for this?

See Addendum 2, revised Sheet PE-1.1

18. Where is the RTU antenna to be installed at the pump station? Where is the MTU antenna to be installed at the Treatment Plant? Is a pole or tower required?

It can be mounted on the light pole at the pump station. Location at the treatment plant is to be coordinated with the City of Willard. See Addendum 2, Specification Section 01021

19. Are anchor bolts required for sanitary manhole castings?

See Specification Section 02552

20. Can the force main be installed at 5' min cover or does it have to be at the depths shown on the plans?

The force main is to be installed at the elevations as shown on the plans.

21. Will the owner provide water for construction and testing at no cost to the Contractor?

See Addendum 2, revised Specification Section 01043

22. Bid item for trench repair is per LF, if the trench width exceeds the pay limits in spec section 01010 will the contractor be compensated for the additional width?

See Addendum 2, revised Specification Section C-410

23. Will the flow meter require power? If so, is there an electrical drawing for this? Where will the electrical service be coming from?

Yes it will require power. No drawings have been created.

24. What will be required to abandon the existing septic tanks? Will the owner pay for any permits or fees required by the Health Department or will it be the contractors responsibility?

Property owners will pay for the permit. Abandonment will be per the Ohio Department of Health requirements.

25. Is there any additional elevation data for the existing storm sewers/ structures shown on the plans?

Yes, invert elevations are available and can be provided prior to construction

26. Are tracer wire test stations and line markers required for the force main?

See Specification Sections 02555 and 02790

27. Are the 2" and 1-1/4" force mains to be CTS or IPS?

See Addendum 2, revised Specification Section 02790

28. Will the Owner pay for any permits, fees or costs from the power company to provide new electrical service for the pump station and flow meter?

See Addendum 2, Specification Section 01021

29. Will Cor-Blue bolts be required for the force main fittings or 316 stainless steel?

See Addendum 2, Specification Section 02790

30. Page SA-0.1 provides the typical trench repair detail for local streets. However, no corresponding detail appears to be provided for Item 10b (Flexible Pavement Trench Repair - Driveways) or Item 10c (1.25-Inch Overlay). Please provide the applicable construction details and specifications for these items, including, but not limited to, pavement section requirements, asphalt mix design, lift thicknesses, and any other relevant installation criteria.

See Addendum 2, revised Sheet SA-0.1

31. The drawings indicate cleanouts on the sanitary force main, but no specific cleanout detail is given for the force main. Since the force main operates under pressure, please clarify whether these cleanouts are intended to be constructed differently from standard gravity sewer cleanouts.

There are no cleanouts on the force main

32. It appears that the 3" force main on sheet #70 was omitted from the quantity on the bid form and included with the 2" force main quantity?

See Addendum 2, revised Specification Section C-410

33. Should bid item 4E & 4F be the same quantity? I'm only locating one bore location for the 6" force main @ 60'.

See Addendum 2, revised Sheets SA-1.1 through SA-1.7

34. Bid item 4G should have a quantity of 31 each. It appears that the 1 1/4" force main and grinder pumps for property #4122 Bevier Road were omitted from the quantities on the bid form. Can a length of service be provided for both properties at this location?

See Addendum 2, revised Sheet FM-11.4 and Specification Section C-410

35. Bid item 6D should have a quantity of 4 each?

See Addendum 2, revised Specification Section C-410

36. Can a bid item for a 2" air release structure be added for the location on sheet #53?

See Addendum 2, revised Specification Sections C-410 and 01010

37. For bid item 5B, what are the limit lengths that will be required for the casing pipe? What is the size of the casing pipe? Are the casing bores only required on SR 103?

See Addendum 2, revised Sheets SA-1.1 through SA-1.7

38. Bid items 5D & 5E have the correct quantity? Per plan shows 303' of casing bores that are required.

See Addendum 2, revised Specification Section C-410

39. After performing a manhole takeoff, the quantities for bid items 6A & 6B are incorrect. 6A @ 400vf and 6B @ 141vf

See Addendum 2, revised Specification Section C-410

40. On sheet #19 there are 2 properties (#4175 & #4183) showing no sewer being installed. However, there was a postcard provided for these properties showing a 6" lateral. Are these properties to be provided with sanitary service?

Easements were unable to be obtained for these properties. They will not be part of the project.

41. Per the force main pipe schedule it states that all pipe is to be HDPE. Can the contractor utilize C900 certalok in lieu of for the 6"

HDPE

42. Do DBE requirements apply to this project?

See Specification Section C-800 Exhibit 2

43. Are shear ferroc required for sanitary lateral connections and storm repairs or can regular ferroc be used?

See Specification 02550

44. Is there a detail/ pavement section for Item 10b) Flexible Pavement Trench Repair- Driveway?

See Addendum 2, revised Sheet SA-0.1

45. The drawings show a power cable to run from the control cabinet at each house to the grinder pump need a part number for the cable .

The cable from the control panel to the grinder pump is supplied by the grinder pump manufacturer.

46. Do the control pumps at each house need a seal off? One detail shows one the other does not .

Yes

47. The drawings say to supply a NEMA 4x box for the control for the grinder pump need to know a size.

The control panel for the grinder pumps is supplied by the grinder pump manufacturer.

48. The drawings show a wooden post at each grinder pump for the control box 6 foot deep and 10 feet out of the ground is that correct?

See Addendum 2, revised Sheet FM-0.3

49. On the electrical details there is a pole light shown but cannot find where it goes at the lift station.

See Addendum 2, revised Sheet E-1.1

50. What are the permitting requirements for the electrical connections at the houses? Will each house need a separate permit? Is this the responsibility of the homeowner, contractor, or village?

The property owner is responsible to have power installed to a disconnect. Contractor to pull power from disconnect to grinder pump control panel.

51. There is a light pole base detail and a pole light slab detail on drawing E0.3. I don't see anything on the drawings where we are installing any of these. Are there any of the lights being installed anywhere?

See Addendum 2, revised Sheet E-1.1

52. On drawing E0.3 it is showing JB1 & JB2. Do we have to provide the junction boxes or are they part of the pre-fabricated pump station building?

The pre-fabricated building is supplied with sleeves in the floor below the control panel for conduit. Terminations can be made directly in the panel and no junction box is needed.

53. Double check Bid Item 10a - I believe the Unit should be SY. Additionally, page 15 - "Definition of Contract Terms" Item 10a is stated to be in Square Yards. The UPS is set up in LF.

See Addendum 2, revised Specification Section C-410

54. Will open cut installation of the force main be acceptable through the farm fields?

Yes

55. Based on our soil borings and test digs it appears the soil conditions are worse than what was indicated in the soils report provided for the project. Many areas appear to have wet sand.

Provided for information

**SOUTHERN 5 SEWER DISTRICT
OHIO
WASTEWATER COLLECTION SYSTEM PHASE 1, CONTRACT 2 - CELERYVILLE**

ADVERTISEMENT FOR BIDS

Sealed Bids for Wastewater Collection System Phase 1, Contract 2 - Celeryville, will be received by the Southern 5 Sewer District, at 631 South Myrtle Avenue, Willard, Ohio 44890, until 11:00 AM, local time, on ~~August 3, 2026~~ ~~August 10, 2026~~, (**Addendum 1, Issued July 23, 2026**) ~~August 13, 2026~~, (**Addendum 2, Issued August 6, 2026**) at which time they will be publicly opened and read.

In general, the work consists of the construction of a gravity and low pressure sewer system in Celeryville with collected wastewater pumped to the City of Willard. A collection pump station will be constructed on the south end of the project area on the west side of SR-103 and the north side of Sharpless Ditch. The pump station will be a suction lift pump station.

The issuing office is Jones & Henry Engineers, Ltd., 3103 Executive Parkway, Suite 300, Toledo, Ohio 43606. Copies of the Bidding Documents may be examined at the issuing office, without charge.

Technical questions regarding the project should be e-mailed to the Project Manager Rick Kelly Jr., PE, rkelly@jheng.com at Jones & Henry Engineers, Ltd.

A pre-bid conference will be held on ~~July 15, 2026~~ ~~August 4, 2026~~, (**Addendum 1, Issued July 23, 2026**) at 10:30 a.m. local time at Willard City Hall offices at 631 South Myrtle Avenue, Willard, Ohio 44890. Attendance at the pre-bid conference is highly encouraged but is not mandatory.

Copies of Bidding Documents and Contract Documents may be obtained electronically from www.jhplanroom.com. There is no charge to download from the digital print-room, however, registration is required. If hard copies of the bidding documents are needed, they can be ordered from the print-room for a fee. If you have any problems using the digital print-room, you are encouraged to contact either the Engineer's Project Manager, or Eastern Engineering at 419-661-9841.

Neither Owner nor Engineer has any responsibility for the accuracy, completeness or sufficiency of any bid documents obtained from any source other than the source indicated in these documents. Obtaining these documents from any other source(s) may result in obtaining incomplete and inaccurate information. Obtaining these documents from any source other than directly from the source listed herein may also result in failure to receive any addenda, corrections, or other revisions to these documents that may be issued.

Bids must be submitted on the forms bound herein, must contain the names of every person or company interested therein, and shall be accompanied by either a Bid Guaranty and Contract Bond in the amount of 100% of the amount bid with satisfactory corporate surety, or by a certified check on a solvent bank in the amount of not less than 10% of the amount of the Bid, subject to conditions provided in the Instructions to Bidders. The successful bidder will be required to furnish satisfactory Performance Bond and Maintenance and Guarantee Bond in the amount of 100% of the Bid.

The Contractor shall be required to pay not less than the prevailing wage rates established by the Ohio Bureau of Employment Services, Wage and Hour Division.

Special attention must be given to all requirements of Ohio EPA Water Pollution Control Loan Fund (WPCLF):

1. Attention of bidders is called to all the requirements contained in this bid packet. General requirements are contained in the Additional Supplementary Conditions and include Equal Opportunity Requirements, Minority and Woman's Business Enterprise Utilization, Debarment, the Violating Facilities Clause, and the use of Small Businesses in Rural Areas. Davis-Bacon (Federal) Prevailing Wage Determinations must be used.
2. Attention of bidders is called to the Buy American Requirements pertaining to iron and steel products.
3. This procurement is subject to the EPA policy of encouraging the participation of small businesses in rural areas (SBRAs). Any Bid may be withdrawn prior to the scheduled closing time for receipt of Bids, but no bidder shall withdraw his Bid within 60 days after the actual opening thereof.

The Owner reserves the right to reject any or all Bids, waive irregularities in any Bid, and to accept any Bid which is deemed most favorable to the Owner.

Engineer's Estimate is ~~\$5,932,000~~ 6,366,000 (Addendum 2, Issued August 6, 2026)

Tom Secor
Southern 5 Sewer District Board President

Dated: _____

BID FORM

WASTEWATER COLLECTION SYSTEM PHASE 1, CONTRACT 2 - CELERYVILLE

ARTICLE 1 – BID RECIPIENT

- 1.01 This Bid is submitted to:
Southern 5 Sewer District, Willard City Hall, 631 South Myrtle Avenue, Willard, Ohio 44890
- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

- 2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER’S REPRESENTATIONS

- 3.01 In submitting this Bid, Bidder represents that:
- A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum, Date</u>
_____	_____
_____	_____
_____	_____
_____	_____

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent

to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;

2. “fraudulent practice” means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

- 5.01 Not Used.
- 5.02 Bidder shall fill in all blanks on the Bid Form.
- 5.03 Bidder shall provide pricing for the Mandatory Equipment or Product Manufacturer Alternates below.
 - A. Not Used.

UNIT PRICE BID

Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

Item No.	Description	Estimated Quantity	Unit	Unit Cost in Numbers		Unit Price in Words	Total Estimated Cost of Item	
1	Mobilization and Demobilization	1	LS					
2	Clearing and Grubbing	1	LS					
3	Video Recording of the Zone of Influence	1	LS					
4a	1-1/4—inch Low Pressure Sewer Lateral	4,632	LF					
4b	2-inch Force Main	1,650	LF					
4c	3-inch Force Main	2,186	LF					
4d	6-inch Force Main	8,103	LF					
4e	6-inch Force Main in 16-inch Bored Casing	27	LF					
4f	16-inch Bored Casing	482	LF					
4g	Simplex Grinder Pump Station	29-31	EA					

R01009-08090-01
08/2026

Addendum 2
Southern 5 Sewer District
WW Collection System Ph. 1, Contract 2 - Celeryville

Item No.	Description	Estimated Quantity	Unit	Unit Cost in Numbers		Unit Price in Words	Total Estimated Cost of Item	
4h	Grinder Pump Station Extension Kit, 1-foot	10	EA					
4i	Grinder Pump Station Extension Kit, 2-foot	10	EA					
4j	Grinder Pump Station Extension Kit, 4-foot	10	EA					
4k	Spare Grinder Pump	5	EA					
5a	6-inch Lateral, Public Property	2,060	LF					
5b	6-inch Lateral in Bored Casing	455	LF					
5c	8-inch Sanitary Sewer	11,245	LF					
5d	8-inch Sanitary Sewer in Bored Casing	111 302	LF					
5e	18-inch Bored Casing	111 302	LF					
5f	4-inch Storm Sewer	100	LF					
5g	6-inch Storm Sewer	100	LF					
5h	8-inch Storm Sewer	100	LF					

R01009-08090-01
08/2026

Addendum 2
Southern 5 Sewer District
WW Collection System Ph. 1, Contract 2 - Celeryville

Item No.	Description	Estimated Quantity	Unit	Unit Cost in Numbers		Unit Price in Words	Total Estimated Cost of Item	
5i	Cleanouts	121	EA					
6a	Sanitary Sewer Manhole, Type I	544-435	VLF					
6b	Sanitary Sewer Manhole, Type I with Outside Drop	1467	VLF					
6c	New Pipe Connection to Existing Manhole	1	EA					
6d	Flushing Connection Structure	3-5	EA					
6e	Flow Meter Manhole Structure	1	EA					
6f	3-inch Force Main Air Release Manhole Structure	2	EA					
6g	6-inch Force Main Air Release Manhole Structure	3	EA					
6h	2-inch Force Main Air Release Manhole Structure	1	EA					
7a	Catch Basin, ODOT Type 2-2B	4	EA					
7b	Catch Basin Removed	4	EA					

R01009-08090-01
08/2026

Addendum 2
Southern 5 Sewer District
WW Collection System Ph. 1, Contract 2 - Celeryville

Item No.	Description	Estimated Quantity	Unit	Unit Cost in Numbers		Unit Price in Words	Total Estimated Cost of Item	
8a	Sewer Repair (Less Than or Equal to 15-inch Diameter)	100	LF					
8b	Sewer Repair (18-inch Diameter and Larger)	100	LF					
9a	Water Service Repair	10	LF					
9b	6-inch Water Main Repair	25	LF					
10a	Flexible Pavement Trench Repair - Roadway	4,055	LF SY					
10b	Flexible Pavement Trench Repair - Driveway	245	SY					
10c	Flexible Pavement 1.25-inch Overlay	250	CY					
10d	ODOT Item 411 Stabilized Crushed Aggregate (Berm and Drive)	170	SY					
11a	6-inch ODOT Item 452 Non-Reinforced Concrete Pavement, Class MS (Approach)	401	SY					
11b	4-inch Concrete Sidewalk	448	SF					
11c	Concrete Steps	100	SF					

R01009-08090-01
08/2026

Addendum 2
Southern 5 Sewer District
WW Collection System Ph. 1, Contract 2 - Celeryville

Item No.	Description	Estimated Quantity	Unit	Unit Cost in Numbers		Unit Price in Words	Total Estimated Cost of Item	
12	Post-Construction Sewer Televising	11,245	LF					
13	Storm Water Pollution Prevention	1	LS					
14	Force Main Cleaning	8,103	LF					
15	Pump Station Wet Well, Valve Building, Piping, Site Improvements, Appurtenances and Accessories	1	LS					
16a	Fence with Maintenance Strip	160	LF					
16b	Vehicle Fence Gate	1	EA					
17a	6-inch Lateral, Private Property	7,541	LF					
17b	4-inch Lateral, Private Property	600	LF					
18a	House Connection, Gravity Sewer Service	92	EA					
18b	House Connection, Low-Pressure Sewer Service	29 31	EA					
19	Septic Tank Abandonment	121	EA					

R01009-08090-01
08/2026

Addendum 2
Southern 5 Sewer District
WW Collection System Ph. 1, Contract 2 - Celeryville

Item No.	Description	Estimated Quantity	Unit	Unit Cost in Numbers		Unit Price in Words	Total Estimated Cost of Item	
20a	Electrical Connection from Meter Base or Homeowner Provided Disconnect	29	EA					
20b	Power Cable, #10, 4-wire	1,360	LF					
20c	1-inch Conduit	278	LF					
21	Additional Excavation	100	CY					
22	Allowances	1	LS	\$275,000				
Total Estimated Construction Cost:								

(Addendum 2, Issued August 6, 2026)

ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.01 The following documents are submitted with and made a condition of this Bid:
- A. Required Bid security;
 - B. Evidence of authority to do business in the state of the Project; and
 - C. WCPLF Forms included in Supplemental Conditions SC800 Exhibit 2.
 - D. List of Project References Contractor's License No.: _____[or] Evidence of Bidder's ability to obtain a State Contractor's License and a covenant by Bidder to obtain said license within the time for acceptance of Bids; and
 - E. Required Bidder Qualification Statement with supporting data.

ARTICLE 8 – DEFINED TERMS

- 8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

BIDDER: *[Indicate correct name of bidding entity]*

By:

[Signature] _____

[Printed name] _____

(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:

[Signature] _____

[Printed name] _____

Title: _____

**R01009-08090-01
08/2026**

**Addendum 2
Southern 5 Sewer District
WW Collection System Ph. 1, Contract 2 - Celeryville**

Submittal Date:

Address for giving notices:

Telephone Number:

Fax Number:

Contact Name and e-mail address:

Bidder's License No.:

(where applicable)

STATE OF OHIO)
)ss.
COUNTY OF _____)

1. ☐ We are not charged with any delinquent personal property taxes on the general tax list of personal property in _____ County, Ohio.
2. ☐ We are charged with delinquent personal property taxes on the general tax list of _____ County, Ohio including unpaid penalties and interest in the amount of \$_____.

By: _____

Title: _____

20

Prevailing Wage Rate Skilled Crafts

Name of Union: Asbestos Local 207

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Asbestos Worker

Effective Date:
7/8/2026

Effective Date:
7/8/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Asbestos Abatement	\$35.25		\$11.20	\$7.50	\$1.00	\$4.00	\$0.00	\$0.05	\$0.00	\$0.00	\$59.00	\$76.63
Apprentice	BHR	Percent										
Trainee 1 Year - 600 Hrs	\$25.00	\$70.92	\$11.20	\$1.90	\$1.00	\$1.00	\$0.00	\$0.05	\$0.00	\$0.00	\$40.15	\$52.65

(*)Special Calculation Note :

Other: Drug Testing

Ratio :

3 Journeymen to 1 Trainee

Jurisdiction (* denotes special jurisdictional note) :

Adams, Ashland, Ashtabula*, Athens, Auglaize, Brown, Butler*, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Cuyahoga, Darke, Delaware, Erie*, Fairfield, Fayette, Franklin, Geauga, Greene, Guernsey, Hamilton, Hardin, Harrison, Highland, Hocking, Holmes, Huron, Knox, Lake, Licking, Logan, Lorain, Madison, Mahoning, Marion, Medina, Miami, Montgomery, Morgan, Morrow, Muskingum, Noble, Perry, Pickaway, Portage, Preble, Richland, Ross, Shelby, Stark, Summit, Trumbull, Tuscarawas, Union, Vinton, Warren*, Wayne

Special Jurisdictional Note :

Ashtabula County: (post offices & townships of Ashtabula, Austinburg, Geneva, Harperfield, Jefferson, Plymouth & Saybrook) (townships of Andover, Cherry Valley, Colbrook, Canneaut, Denmark, Dorset, East Orwell, Hartsgrove, Kingville, Lenox, Monroe, Morgan, New Lyme, North Kingsville, Orwell, Pierpoint, Richmond Rock Creek, Rome, Sheffield, Trumbull, Wayne, Williamsfield & Windsor)

Butler County: (townships of Fairfield, Hanover, Liberty, Milford, Morgan, Oxford, Ripley, Ross, St. Clair, Union & Wayne) (Lemon & Madison)

Erie County: (post offices & townships of Berlin, Berlin Heights, Birmingham, Florence, Huron, Milan, Shinrock & Vermilion)

Warren County: (townships of: Deerfield, Hamilton, Harlan, Salem, Union & Washington) (Clear Creek, Franklin, Mossie, Turtle Creek & Wayne)

Details :

An Abatement Journeyman is anyone who has more than 600 hours in the Asbestos Abatement field.

Asbestos & lead paint abatement including, but not limited to the removal or encapsulation of asbestos & lead paint, all work in conjunction with the preparation of the removal of same & all work in conjunction with the clean up after said removal. The removal of all insulation materials, whether they contain asbestos or not, from mechanical systems (pipes, boilers, ducts, flues, breaching, etc.) is recognized as being the exclusive work of the Asbestos Abatement Workers.

On all mechanical systems (pipes, boilers, ducts, flues, breaching, etc.) that are going to be demolished, the removal of all insulating materials whether they contain asbestos or not shall be the exclusive work of the Laborers.

Prevailing Wage Rate Skilled Crafts

Name of Union: Asbestos Local 3 Heat & Frost Insulators

Type of Rate: Commercial

Change #:
LCN01-2025ib

Craft:
Asbestos Worker

Effective Date:
8/20/2025

Effective Date:
8/20/2025

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Asbestos Insulation Worker	\$45.63		\$16.60	\$10.75	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$72.98	\$95.80
Fire Stop Specialist	\$45.63		\$16.60	\$10.75	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$72.98	\$95.80
Fire Stop Technician	\$37.28		\$16.60	\$4.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$58.38	\$77.02
Apprentice	BHR	Percent										
1st year	\$25.69	\$56.30	\$16.60	\$1.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.79	\$56.64
2nd year	\$28.34	\$62.10	\$16.60	\$2.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$47.44	\$61.61
3rd year	\$31.00	\$67.93	\$16.60	\$3.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$51.10	\$66.60
4th year	\$37.28	\$81.70	\$16.60	\$4.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$58.38	\$77.02

(*)Special Calculation Note :

Ratio :

3 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula*, Cuyahoga, Erie*, Geauga, Huron, Lake, Lorain

Special Jurisdictional Note :

Ashtabula: the townships of Ashtabula, Austinburg, Geneva, Jefferson, Plymouth & Saybrook
Erie: to Sandusky limits

Details :

Mechanics & apprentices engaged in the manufacture, fabrication, assembling, molding, handling, erection, spraying, pouring, mixing, hanging, clean-up, preparation, application, adjusting, alteration, repairing, dismantling, reconditioning, testing & maintenance of Heat & Frost Insulation such as Magnesite, Asbestos, Hair Felt, Wool Felt, Cork, Mineral Wool, Infusorial Earth, Mercerized Silk, Flax, Fiber, Fire Felt, Asbestos Paper, Asbestos Curtain, Asbestos Millboard, Fiberglass, Foam glass, Styrofoam, Polyurethane, fire stopping, smoke stopping, all recyclable material, soundproofing, all penetrations, any flexible or rigid fireproofing, all jacketing systems including metal, lead, and PVC or other material.

Prevailing Wage Rate Skilled Crafts

Name of Union: Boilermaker Local 85

Type of Rate: Commercial

Change #:
LCN01-2012kp

Craft:
Boilermaker

Effective Date:
3/28/2012

Effective Date:
3/28/2012

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Boilermak er	\$31.01		\$6.97	\$10.77	\$0.35	\$0.00	\$3.00	\$2.09	\$0.00	\$0.00	\$54.19	\$69.70
Apprentice	BHR	Percent										
1st 6 months	\$21.71	\$70.00	\$6.97	\$0.25	\$0.35	\$0.00	\$0.25	\$2.09	\$0.00	\$0.00	\$31.62	\$42.47
2nd 6 months	\$22.48	\$72.50	\$6.97	\$0.25	\$0.35	\$0.00	\$0.25	\$2.09	\$0.00	\$0.00	\$32.39	\$43.63
3rd 6 months	\$23.26	\$75.00	\$6.97	\$0.25	\$0.35	\$0.00	\$0.25	\$2.09	\$0.00	\$0.00	\$33.17	\$44.80
4th 6 months	\$24.03	\$77.50	\$6.97	\$10.77	\$0.35	\$0.00	\$3.00	\$2.09	\$0.00	\$0.00	\$47.21	\$59.23
5th 6 months	\$24.81	\$80.00	\$6.97	\$10.77	\$0.35	\$0.00	\$3.00	\$2.09	\$0.00	\$0.00	\$47.99	\$60.39
6th 6 months	\$26.36	\$85.00	\$6.97	\$10.77	\$0.35	\$0.00	\$3.00	\$2.09	\$0.00	\$0.00	\$49.54	\$62.72
7th 6 months	\$27.91	\$90.00	\$6.97	\$10.77	\$0.35	\$0.00	\$3.00	\$2.09	\$0.00	\$0.00	\$51.09	\$65.04
8th 6 months	\$29.46	\$95.00	\$6.97	\$10.77	\$0.35	\$0.00	\$3.00	\$2.09	\$0.00	\$0.00	\$52.64	\$67.37

(*)Special Calculation Note :

No special calculations for this skilled craft wage rate are required at this time.

Ratio :

5 Journeymen to 1 Apprentice 10 Journeymen to 2 Apprentice 15 Journeymen to 3 Apprentice Helpers will be referred in the event that apprentices are NOT available.

Jurisdiction (* denotes special jurisdictional note) :

Allen, Ashland, Auglaize, Crawford, Darke, Defiance, Delaware, Erie, Fulton, Hancock, Hardin, Henry, Huron, Knox, Logan, Lucas, Marion, Mercer, Morrow, Ottawa, Paulding, Putnam, Richland, Sandusky, Seneca, Shelby, Union, Van Wert, Williams, Wood, Wyandot

Special Jurisdictional Note :

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Bricklayer Local 23 (Fremont Cement Mason)

Type of Rate: Commercial

Change #:
LCN01-2024ib

Craft:
Bricklayer

Effective Date:
6/5/2024

Effective Date:
6/5/2024

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Bricklayer Cement Mason	\$36.53		\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$60.56	\$78.83
Plaster	\$36.53		\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$60.56	\$78.83
Cement Mason Verticle Slip Work from base of 50 ft	\$38.03		\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$62.06	\$81.08
Cement Mason Verticle Slip work ABOVE 50 ft	\$54.80		\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$78.83	\$106.23
Masonry Maintenance Specialist	\$18.27		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$18.27	\$27.41
Apprentice	BHR	Percent										
1st 6 Months	\$21.92	\$60.00	\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$45.95	\$56.91
2nd 6 Months	\$23.74	\$65.00	\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$47.77	\$59.65
3rd 6 Months	\$25.57	\$70.00	\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$49.60	\$62.39
4th 6 Months	\$27.40	\$75.00	\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$51.43	\$65.13
5th 6 Months	\$29.22	\$80.00	\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$53.25	\$67.87
6th 6 Months	\$31.05	\$85.00	\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$55.08	\$70.61
7th 6 Months	\$32.88	\$90.00	\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$56.91	\$73.35
8th 6 Months	\$34.70	\$95.00	\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$58.73	\$76.09
Mason Trainee 1-90 Days	\$21.92	\$60.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$23.45	\$34.41
91-365 Days	\$21.92	\$60.00	\$10.00	\$0.00	\$0.00	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$33.45	\$44.41
2nd Year	\$25.57	\$70.00	\$10.00	\$0.00	\$0.00	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$37.10	\$49.89

(*)Special Calculation Note :

Classification title contains "Bricklayer" because contract originates within the Bricklayer Local. Note that the classification description is clarified after the local union number at the top of the page.

Ratio :

1-2 Journeyman to 1 Apprentice 3-4 Journeyman to 2 Apprentice 5-6 Journeyman to 2 Apprentice 6-10 Journeyman to 3 Apprentice Apprentice must be hired prior to hiring Mason Trainees Mason Trainee Ratio 1 Apprentice permits 1 Mason Trainee 2 Apprentice permits 1 Mason Trainee 3 Apprentice permits 2 Mason Trainee 4 Apprentice permits 2 Mason Trainee.

Jurisdiction (* denotes special jurisdictional note) :

Defiance, Erie*, Fulton, Hancock, Henry, Huron, Lucas, Ottawa, Paulding, Putnam, Sandusky*, Seneca, Williams, Wood

Special Jurisdictional Note :

The Islands of Lake Erie north of Sandusky.

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Bricklayer Local 23 (Fremont Tile Setter & Finisher)

Type of Rate: Commercial

Change #:
LCN01-2024ib

Craft:
Bricklayer

Effective Date:
6/5/2024

Effective Date:
6/5/2024

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Bricklayer Tile Layer	\$36.53		\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$60.56	\$78.83
Marble Mason	\$36.53		\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$60.56	\$78.83
Mosaic Worker	\$36.53		\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$60.56	\$78.83
Terrazzo Worker	\$36.53		\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$60.56	\$78.83
Tile Marble Terrazzo Finisher Helper	\$32.78		\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$56.81	\$73.20
Masonry Maintenance Specialist	\$18.27		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$18.27	\$27.41
Apprentice	BHR	Percent										
1st 6 Months	\$21.92	\$60.00	\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$45.95	\$56.91
2nd 6 Months	\$23.74	\$65.00	\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$47.77	\$59.65
3rd 6 Months	\$25.57	\$70.00	\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$49.60	\$62.39
4th 6 Months	\$27.40	\$75.00	\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$51.43	\$65.13
5th 6 Months	\$29.22	\$80.00	\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$53.25	\$67.87
6th 6 Months	\$31.05	\$85.00	\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$55.08	\$70.61
7th 6 Months	\$32.88	\$90.00	\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$56.91	\$73.35
8th 6 Months	\$34.70	\$95.00	\$10.00	\$11.69	\$0.81	\$0.00	\$1.53	\$0.00	\$0.00	\$0.00	\$58.73	\$76.09

(*)Special Calculation Note :

Classification title contains "Bricklayer" because contract originates within the Bricklayer Local. Note that the classification description is clarified after the local union number at the top of the page.

Ratio :

Tile & Marble Finishers Ratio: 1 Apprentice to 1-2 Journeyman 2 Apprentices to 3-4 Journeyman 2 Apprentices to 5-6 Journeyman 3 Apprentices to 7-10 Journeyman

Jurisdiction (* denotes special jurisdictional note) :

Erie*, Hancock, Huron, Ottawa, Sandusky*, Seneca, Wood*

Special Jurisdictional Note :

The islands of Lake Erie north of Sandusky and the Townships of Perry and Bloom in Wood County.

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Bricklayer Local 23 (Fremont)

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Bricklayer

Effective Date:
6/3/2026

Effective Date:
6/3/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Bricklayer	\$38.67		\$11.03	\$12.30	\$0.91	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$65.41	\$84.75
Stone Mason	\$38.67		\$11.03	\$12.30	\$0.91	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$65.41	\$84.75
Pointer Caulker Cleaner	\$38.67		\$11.03	\$12.30	\$0.91	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$65.41	\$84.75
Layout Man	\$38.67		\$11.03	\$12.30	\$0.91	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$65.41	\$84.75
Saw Man	\$38.67		\$11.03	\$12.30	\$0.91	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$65.41	\$84.75
Stack Worker	\$40.17		\$11.03	\$12.30	\$0.91	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$66.91	\$87.00
Carbon Masonry and Swing Sand Blasting	\$40.17		\$11.03	\$12.30	\$0.91	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$66.91	\$87.00
Refractory Hot Work	\$41.17		\$11.03	\$12.30	\$0.91	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$67.91	\$88.50
Masonry Maintenance Specialist	\$23.20		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$23.20	\$34.80
Apprentice	BHR	Percent										
1st 6 Months	\$23.20	\$60.00	\$11.03	\$12.30	\$0.91	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$49.94	\$61.54
2nd 6 Months	\$25.14	\$65.00	\$11.03	\$12.30	\$0.91	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$51.88	\$64.45
3rd 6 Months	\$27.07	\$70.00	\$11.03	\$12.30	\$0.91	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$53.81	\$67.34
4th 6 Months	\$29.00	\$75.00	\$11.03	\$12.30	\$0.91	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$55.74	\$70.24
5th 6 Months	\$30.94	\$80.00	\$11.03	\$12.30	\$0.91	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$57.68	\$73.15
6th 6 Months	\$32.87	\$85.00	\$11.03	\$12.30	\$0.91	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$59.61	\$76.04
7th 6 Months	\$34.80	\$90.00	\$11.03	\$12.30	\$0.91	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$61.54	\$78.94
8th 6 Months	\$36.74	\$95.00	\$11.03	\$12.30	\$0.91	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$63.48	\$81.85
MASON TRAINEES 1-90 Days	\$23.20	\$60.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$25.70	\$37.30
91-365 Days	\$23.20	\$60.00	\$11.03	\$0.00	\$0.00	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$36.73	\$48.33
2nd Year	\$27.07	\$70.00	\$11.03	\$0.00	\$	\$0.00	\$2.50	\$0.00	\$0.00	\$0.00	\$40.60	\$54.14

(*)Special Calculation Note :

Ratio :

1-2 Journeymen to 1 Apprentice
3-4 Journeymen to 2 Apprentices
5-6 Journeymen to 2 Apprentices
6-10 Journeymen to 3 Apprentices

Apprentices must be hired prior to hiring Mason Trainees

Mason Trainee Ratio

1 Apprentice permits 1 Mason Trainee
2 Apprentices permits 1 Mason Trainee
3 Apprentices permits 2 Mason Trainees
4 Apprentices permits 2 Mason Trainees

Jurisdiction (* denotes special jurisdictional note) :

Erie, Hancock, Huron, Ottawa, Sandusky*, Seneca, Wood*

Special Jurisdictional Note :

The Islands of Lake Erie north of Sandusky and the Townships of Perry and Bloom in Wood County.

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Bricklayer Local 23 Heavy Hwy (A)

Type of Rate: Commercial

Change #:
LCN02-2026ib

Craft:
Bricklayer

Effective Date:
6/10/2026

Effective Date:
6/10/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Cement Mason Bricklayer Sewer Water Works A	\$35.31		\$10.71	\$10.14	\$0.59	\$0.00	\$1.80	\$0.00	\$0.00	\$0.00	\$58.55	\$76.21
Apprentice	BHR	Percent										
1st year	\$24.72	\$70.00	\$10.71	\$10.14	\$0.59	\$0.00	\$1.80	\$0.00	\$0.00	\$0.00	\$47.96	\$60.32
2nd year	\$28.25	\$80.00	\$10.71	\$10.14	\$0.59	\$0.00	\$1.80	\$0.00	\$0.00	\$0.00	\$51.49	\$65.62
3rd year	\$31.78	\$90.00	\$10.71	\$10.14	\$0.59	\$0.00	\$1.80	\$0.00	\$0.00	\$0.00	\$55.02	\$70.91

(*)Special Calculation Note :

This rate is not for building construction.

This rate applies only to the Cement Masons. All other Bricklaying, PCC, Stone, Tile, Marble, Refractory, Industrial and all other applicable work performed will be performed under the applicable rates for those contracts.

Ratio :

3 Journeymen to 1 Apprentice
6 Journeymen to 2 Apprentice
9 Journeymen to 3 Apprentice
12 Journeymen to 4 Apprentice
15 Journeymen to 5 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Adams, Allen, Ashland, Ashtabula, Athens, Auglaize, Belmont, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Cuyahoga, Darke, Defiance, Delaware, Erie, Fairfield, Fayette, Franklin, Fulton, Gallia, Geauga, Greene, Guernsey, Hamilton, Hancock, Hardin, Harrison, Henry, Highland, Hocking, Holmes, Huron, Jackson, Jefferson, Knox, Lake, Lawrence, Licking, Logan, Lorain, Lucas, Madison, Mahoning, Marion, Medina, Meigs, Mercer, Miami, Monroe, Montgomery, Morgan, Morrow, Muskingum, Noble, Ottawa, Paulding, Perry, Pickaway, Pike, Portage, Preble, Putnam, Richland, Ross, Sandusky, Scioto, Seneca, Shelby, Stark, Summit, Trumbull, Tuscarawas, Union, Van Wert, Vinton, Warren, Washington, Wayne

Special Jurisdictional Note :

Details :

Bricklayer Local 23 Heavy Hwy (A): Highway Construction, Sewer, Waterworks And Utility Construction, Industrial & Building Site Heavy Construction, Airport Construction Or Railroad Construction Work.

Bricklayer Local 23 Heavy Hwy (B): Power Plant, Tunnels, Amusement Park, Athletic Stadium Site Work ,Pollution Control, Sewer Plant, Waste Plant, & Water Treatment Facilities, Construction.

Prevailing Wage Rate Skilled Crafts

Name of Union: Bricklayer Local 23 Heavy Hwy (B)

Type of Rate: Commercial

Change #:
LCN02-2026ib

Craft:
Bricklayer

Effective Date:
6/10/2026

Effective Date:
6/10/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Cement Mason Bricklayer Power Plants Tunnels Amuseme nt Parks B	\$36.31		\$10.71	\$10.14	\$0.60	\$0.00	\$1.80	\$0.00	\$0.00	\$0.00	\$59.56	\$77.72
Apprentice	BHR	Percent										
1st year	\$25.42	\$70.00	\$10.71	\$10.14	\$0.60	\$0.00	\$1.80	\$0.00	\$0.00	\$0.00	\$48.67	\$61.38
2nd year	\$29.05	\$80.00	\$10.71	\$10.14	\$0.60	\$0.00	\$1.80	\$0.00	\$0.00	\$0.00	\$52.30	\$66.83
3rd year	\$32.68	\$90.00	\$10.71	\$10.14	\$0.60	\$0.00	\$1.80	\$0.00	\$0.00	\$0.00	\$55.93	\$72.27

(*)Special Calculation Note :

This rate is not for building construction.

This rate applies only to the Cement Masons. All other Bricklaying, PCC, Stone, Tile, Marble, Refractory, Industrial and all other applicable work performed will be performed under the applicable rates for those contracts.

Ratio :

3 Journeymen to 1 Apprentice
6 Journeymen to 2 Apprentice
9 Journeymen to 3 Apprentice
12 Journeymen to 4 Apprentice
15 Journeymen to 5 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Adams, Allen, Ashland, Ashtabula, Athens, Auglaize, Belmont, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Cuyahoga, Darke, Defiance, Delaware, Erie, Fairfield, Fayette, Franklin, Fulton, Gallia, Geauga, Greene, Guernsey, Hamilton, Hancock, Hardin, Harrison, Henry, Highland, Hocking, Holmes, Huron, Jackson, Jefferson, Knox, Lake, Lawrence, Licking, Logan, Lorain, Lucas, Madison, Mahoning, Marion, Medina, Meigs, Mercer, Miami, Monroe, Montgomery, Morgan, Morrow, Muskingum, Noble, Ottawa, Paulding, Perry, Pickaway, Pike, Portage, Preble, Putnam, Richland, Ross, Sandusky, Scioto, Seneca, Shelby, Stark, Summit, Trumbull, Tuscarawas, Union, Van Wert, Vinton, Warren, Washington, Wayne

Special Jurisdictional Note :

Details :

Bricklayer Local 23 Heavy Hwy (A): Highway Construction, Sewer, Waterworks And Utility Construction, Industrial & Building Site Heavy Construction, Airport Construction Or Railroad Construction Work.

Bricklayer Local 23 Heavy Hwy (B): Power Plant, Tunnels, Amusement Park, Athletic Stadium Site Work ,Pollution Control, Sewer Plant, Waste Plant, & Water Treatment Facilities, Construction.

Prevailing Wage Rate Skilled Crafts

Name of Union: Carpenter Commercial Zone NEO 4B

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Carpenter

Effective Date:
6/24/2026

Effective Date:
6/24/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter	\$35.03		\$9.61	\$10.83	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$59.61	\$77.13
Apprentice	BHR	Percent										
1st 3 Months	\$21.02	\$60.00	\$9.61	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.63	\$41.14
2nd 3 Months	\$21.02	\$60.00	\$9.61	\$0.00	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$34.77	\$45.28
2nd 6 Months is 1st year	\$22.77	\$65.00	\$9.61	\$0.00	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$36.52	\$47.91
3rd 6 Months	\$24.52	\$70.00	\$9.61	\$0.00	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$38.27	\$50.53
4th 6 Months is 2nd year	\$26.27	\$75.00	\$9.61	\$0.00	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$40.02	\$53.16
5th 6 Months	\$28.02	\$80.00	\$9.61	\$8.66	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$50.43	\$64.44
6th 6 Months is 3rd year	\$29.78	\$85.02	\$9.61	\$9.21	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$52.74	\$67.63
7th 6 Months	\$31.53	\$90.00	\$9.61	\$9.75	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$55.03	\$70.80
8th 6 Months is 4th year	\$33.28	\$95.00	\$9.61	\$10.29	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$57.32	\$73.96

(*)Special Calculation Note :

Other: International Training

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Huron, Richland

Special Jurisdictional Note :

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Carpenter Floorlayer Zone NEO 4B

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Carpenter

Effective Date:
7/1/2026

Effective Date:
7/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter Floorlayer	\$35.03		\$9.61	\$10.83	\$0.82	\$0.00	\$3.16	\$0.18	\$0.00	\$0.00	\$59.63	\$77.14
Apprentice	BHR	Percent										
1st 3 Months	\$21.02	\$60.00	\$9.61	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.63	\$41.14
2nd 3 Months	\$21.02	\$60.00	\$9.61	\$0.00	\$0.82	\$0.00	\$3.16	\$0.18	\$0.00	\$0.00	\$34.79	\$45.30
2nd 6 Months	\$22.78	\$65.02	\$9.61	\$0.00	\$0.82	\$0.00	\$3.16	\$0.18	\$0.00	\$0.00	\$36.55	\$47.94
3rd 6 Months	\$24.52	\$70.00	\$9.61	\$0.00	\$0.82	\$0.00	\$3.16	\$0.18	\$0.00	\$0.00	\$38.29	\$50.55
4th 6 Months	\$26.27	\$75.00	\$9.61	\$0.00	\$0.82	\$0.00	\$3.16	\$0.18	\$0.00	\$0.00	\$40.04	\$53.17
5th 6 Months	\$28.02	\$80.00	\$9.61	\$8.66	\$0.82	\$0.00	\$3.16	\$0.18	\$0.00	\$0.00	\$50.45	\$64.46
6th 6 Months	\$29.78	\$85.02	\$9.61	\$9.21	\$0.82	\$0.00	\$3.16	\$0.18	\$0.00	\$0.00	\$52.76	\$67.65
7th 6 Months	\$31.53	\$90.00	\$9.61	\$9.75	\$0.82	\$0.00	\$3.16	\$0.18	\$0.00	\$0.00	\$55.05	\$70.81
8th 6 Months	\$33.28	\$95.00	\$9.61	\$10.29	\$0.82	\$0.00	\$3.16	\$0.18	\$0.00	\$0.00	\$57.34	\$73.98

(*)Special Calculation Note :

Other: International Training

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Huron, Richland

Special Jurisdictional Note :

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Carpenter Hev Hwy Zone NHH C2-H

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Carpenter

Effective Date:
7/1/2026

Effective Date:
7/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter	\$35.80		\$9.59	\$10.83	\$0.82	\$0.00	\$3.43	\$0.15	\$0.00	\$0.00	\$60.62	\$78.52
Apprentice	BHR	Percent										
1st 3 Months	\$21.48	\$60.00	\$9.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31.07	\$41.81
2nd 3 Months	\$21.48	\$60.00	\$9.59	\$0.00	\$0.82	\$0.00	\$3.43	\$0.15	\$0.00	\$0.00	\$35.47	\$46.21
2nd 6 Months	\$23.27	\$65.00	\$9.59	\$0.00	\$0.82	\$0.00	\$3.43	\$0.15	\$0.00	\$0.00	\$37.26	\$48.90
3rd 6 Months	\$25.06	\$70.00	\$9.59	\$0.00	\$0.82	\$0.00	\$3.43	\$0.15	\$0.00	\$0.00	\$39.05	\$51.58
4th 6 Months	\$26.85	\$75.00	\$9.59	\$0.00	\$0.82	\$0.00	\$3.43	\$0.15	\$0.00	\$0.00	\$40.84	\$54.27
5th 6 Months	\$28.64	\$80.00	\$9.59	\$8.66	\$0.82	\$0.00	\$3.43	\$0.15	\$0.00	\$0.00	\$51.29	\$65.61
6th 6 Months	\$30.43	\$85.00	\$9.59	\$9.21	\$0.82	\$0.00	\$3.43	\$0.15	\$0.00	\$0.00	\$53.63	\$68.84
7th 6 Months	\$32.22	\$90.00	\$9.59	\$9.75	\$0.82	\$0.00	\$3.43	\$0.15	\$0.00	\$0.00	\$55.96	\$72.07
8th 6 Months	\$34.01	\$95.00	\$9.59	\$10.29	\$0.82	\$0.00	\$3.43	\$0.15	\$0.00	\$0.00	\$58.29	\$75.30

(*)Special Calculation Note :

Other: Training

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Huron, Richland

Special Jurisdictional Note :

Details :

Any construction work as performed within the definitions listed here below, all of which, taken together are "Heavy-Highway Construction" work:

"HIGHWAY CONSTRUCTION" work is defined as work performed to provide a facility to accommodate vehicular or pedestrian traffic and includes, but is not limited to, the construction of all streets, roads, expressways, turnpikes, bridges, drainage structures, grade separations, parking lots, rest areas, alleys, sidewalks, guardrails, fences, and sound barriers, but shall not include construction of buildings. "AIRPORT CONSTRUCTION" work is defined as including site preparation, grading, paving, drainage, fences, sidewalks, driveways, parking areas and similar work incidental to the construction of airfields but shall not include the construction of buildings. "HEAVY CONSTRUCTION" work is defined as including, but not limited to grade separations, foundations (does not include building foundations), abutments, retaining walls, shafts, tunnels, subways, elevators, drainage projects, flood control projects, reclamation projects, reservoirs, water supply projects, water development projects, hydro-electric development, utility transmission lines, including right-of-way clearing, locks, dams, dikes, levees, revetments, channels, channel cutoffs, intakes, dredging projects, jetties, breakwater, docks, harbors; and all municipal and utility construction except construction classified as building construction.

"RAILROAD CONSTRUCTION" work is defined as including, grading, drainage, placing of rails, crossties, ballast and the construction of bridges, and other incidentals for railroads, street railways construction projects and rapid transit system projects, but shall not include the construction of buildings.

"SEWER WATERWORKS AND UTILITY CONSTRUCTION" work is defined as including construction of all storm sewers, sanitary sewers, supplying and distributing waterlines, gas lines, telephone and television conduit, underground electrical lines, and similar utility construction. Main waterline and trunk sewers connecting water works and/or sewage disposal plants are included within this definition.

"SUPPORTIVE EXCAVATION AND DEEP FOUNDATIONS" work is all driven and drilled foundations within the building site.

"POWER PLANT SITE" work is defined as all work which is inside the property line, but outside the actual building construction. Such work shall include, but is not limited to, the grading and installation of sewer lines, drainage lines, gas lines, telephone and television conduit, underground electrical lines and similar utility construction, parking lots, bridges, roads, streets, sidewalks, reservoirs, ash pits, storage tanks, ramps and other such construction work performed on the work site, but shall not include the actual excavation for the buildings, foundations or footers or construction of the buildings.

"POLLUTION CONTROL, SEWAGE PLANT, WASTE PLANT AND WATER TREATMENT FACILITIES CONSTRUCTION" WORK shall be all work in construction of pumping stations, waste and sewage disposal plants, incinerator plants, water treatment plants, filtration plants, solid waste disposal and similar pollution control facilities.

"SOLAR & WIND FARM" WORK is considered "HEAVY CONSTRUCTION" and includes all work in the construction of solar fields/farms and wind fields/farms (not installations on buildings).

Prevailing Wage Rate Skilled Crafts

Name of Union: Carpenter Insulation Zone NEO 4B

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Carpenter

Effective Date:
7/15/2026

Effective Date:
7/15/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter Insulation	\$28.02		\$9.61	\$10.83	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$52.60	\$66.61
Apprentice	BHR	Percent										
1st 3 Months	\$16.81	\$60.00	\$9.61	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$26.42	\$34.82
2nd 3 Months	\$16.81	\$60.00	\$9.61	\$0.00	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$30.56	\$38.96
2nd 6 Months	\$18.21	\$65.00	\$9.61	\$0.00	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$31.96	\$41.06
3rd 6 Months	\$19.61	\$70.00	\$9.61	\$0.00	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$33.36	\$43.16
4th 6 Months	\$21.02	\$75.00	\$9.61	\$0.00	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$34.77	\$45.28
5th 6 Months	\$22.42	\$80.00	\$9.61	\$8.66	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$44.83	\$56.04
6th 6 Months	\$23.82	\$85.02	\$9.61	\$9.21	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$46.78	\$58.69
7th 6 Months	\$25.22	\$90.00	\$9.61	\$9.75	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$48.72	\$61.33
8th 6 Months	\$26.62	\$95.02	\$9.61	\$10.29	\$0.82	\$0.00	\$3.17	\$0.15	\$0.00	\$0.00	\$50.66	\$63.97

(*)Special Calculation Note :

*Other is Training

Ratio :

1 Journeyman to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Huron, Richland

Special Jurisdictional Note :

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Carpenter Millwright NE Zone M1-A

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Carpenter

Effective Date:
7/1/2026

Effective Date:
7/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter Millwright	\$37.41		\$9.60	\$11.33	\$0.82	\$0.00	\$6.87	\$0.20	\$0.00	\$0.00	\$66.23	\$84.94
Certified Welder	\$38.41		\$9.60	\$11.33	\$0.82	\$0.00	\$6.87	\$0.20	\$0.00	\$0.00	\$67.23	\$86.44
Layout man on Monorail	\$40.22		\$9.60	\$11.33	\$0.82	\$0.00	\$6.87	\$0.20	\$0.00	\$0.00	\$69.04	\$89.15
Apprentice	BHR	Percent										
1st 6 months	\$22.45	\$60.00	\$9.60	\$11.33	\$0.82	\$0.00	\$6.87	\$0.20	\$0.00	\$0.00	\$51.27	\$62.49
2nd 6 months	\$24.32	\$65.00	\$9.60	\$11.33	\$0.82	\$0.00	\$6.87	\$0.20	\$0.00	\$0.00	\$53.14	\$65.30
3rd 6 months	\$26.19	\$70.00	\$9.60	\$11.33	\$0.82	\$0.00	\$6.87	\$0.20	\$0.00	\$0.00	\$55.01	\$68.11
4th 6 months	\$28.06	\$75.00	\$9.60	\$11.33	\$0.82	\$0.00	\$6.87	\$0.20	\$0.00	\$0.00	\$56.88	\$70.91
5th 6 months	\$29.93	\$80.00	\$9.60	\$11.33	\$0.82	\$0.00	\$6.87	\$0.20	\$0.00	\$0.00	\$58.75	\$73.72
6th 6 months	\$31.80	\$85.00	\$9.60	\$11.33	\$0.82	\$0.00	\$6.87	\$0.20	\$0.00	\$0.00	\$60.62	\$76.52
7th 6 months	\$33.67	\$90.00	\$9.60	\$11.33	\$0.82	\$0.00	\$6.87	\$0.20	\$0.00	\$0.00	\$62.49	\$79.33
8th 6 months	\$35.54	\$95.00	\$9.60	\$11.33	\$0.82	\$0.00	\$6.87	\$0.20	\$0.00	\$0.00	\$64.36	\$82.13

(*)Special Calculation Note :

Other is Training

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Ashtabula, Cuyahoga, Erie, Geauga, Huron, Lake, Lorain, Medina, Portage, Richland, Summit

Special Jurisdictional Note :

Details :

The term "Millwright and Machine Erectors" jurisdiction shall mean the unloading, hoisting, rigging, skidding, moving, dismantling, aligning, erecting, assembling, repairing, maintenance and adjusting of all structures, processing areas either under cover, under ground or elsewhere, required to process material, handle, manufacture or service, be it powered or receiving power manually, by steam, gas, electricity, gasoline, diesel, nuclear, solar, water, air or chemically, and in industries such as and including, which are identified for the purpose of description, but not limited to, the following: woodworking plants; canning industries; steel mills; coffee roasting plants; paper and pulp; cellophane; stone crushing; gravel and sand washing and handling; refineries; grain storage and handling; asphalt plants; sewage disposal; water plants; laundries; bakeries; mixing plants; can, bottle and bag packing plants; textile mills; paint mills; breweries; milk processing plants; power plants; aluminum processing or manufacturing plants; and amusement and entertainment fields. The installation of mechanical equipment in atomic energy plants; installation of reactors in power plants; installation of control rods and equipment in reactors; and installation of mechanical equipment in rocket missile bases, launchers, launching gantry, floating bases, hydraulic escape doors and any and all component parts thereto, either assembled, semi-assembled or disassembled. The installation of, but not limited to, the following: setting-up of all engines, motors, generators, air compressors, fans, pumps, scales, hoppers, conveyors of all types, sizes and their supports; escalators; man lifts; moving sidewalks; hoists; dumb waiters; all types of feeding machinery; amusement devices; mechanical pin setters and spotters in bowling alleys; refrigeration equipment; and the installation of all types of equipment necessary and required to process material either in the manufacturing or servicing. The handling and installation of pulleys, gears, sheaves, fly wheels, air and vacuum drives, worm drives and gear drives directly or indirectly coupled to motors, belts, chains, screws, legs, boots, guards, booth tanks, all bin valves, turn heads and indicators, shafting, bearings, cable sprockets, cutting all key seats in new and old work, troughs, chippers, filters, calendars, rolls, winders, rewinders, slitters, cutters, wrapping machines, blowers, forging machines, rams, hydraulic or otherwise, planing, extruder, ball, dust collectors, equipment in meat packing plants, splicing of ropes and cables. The laying-out, fabrication and installation of protection equipment including machinery guards, making and setting of templates for machinery, fabrication of bolts, nuts, pans, drilling of holes for any equipment which the Millwrights install regardless of materials; all welding and burning regardless of type, fabrication of all lines, hose or tubing used in lubricating machinery installed by Millwrights; grinding, cleaning, servicing and any machine work necessary for any part of any equipment installed by the Millwrights; and the break-in and trial run of any equipment or machinery installed by the Millwrights. It is agreed the Millwrights shall use the layout tools and optic equipment necessary to perform their work.

Prevailing Wage Rate Skilled Crafts

Name of Union: Carpenter Pile Driver Hev Hwy Zone NHH P2-B

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Carpenter

Effective Date:
7/1/2026

Effective Date:
7/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter Pile Driver	\$37.35		\$9.55	\$11.33	\$0.82	\$0.00	\$6.98	\$0.20	\$0.00	\$0.00	\$66.23	\$84.91
Diver	\$56.03		\$9.55	\$11.33	\$0.82	\$0.00	\$6.98	\$0.20	\$0.00	\$0.00	\$84.91	\$112.93
Certified Welder	\$38.40		\$9.55	\$11.33	\$0.82	\$0.00	\$6.98	\$0.20	\$0.00	\$0.00	\$67.28	\$86.48
Apprentice	BHR	Percent										
1st 6 months	\$22.41	\$60.00	\$9.55	\$11.33	\$0.82	\$0.00	\$6.98	\$0.20	\$0.00	\$0.00	\$51.29	\$62.50
2nd 6 months	\$24.28	\$65.00	\$9.55	\$11.33	\$0.82	\$0.00	\$6.98	\$0.20	\$0.00	\$0.00	\$53.16	\$65.30
3rd 6 months	\$26.14	\$70.00	\$9.55	\$11.33	\$0.82	\$0.00	\$6.98	\$0.20	\$0.00	\$0.00	\$55.02	\$68.09
4th 6 months	\$28.01	\$75.00	\$9.55	\$11.33	\$0.82	\$0.00	\$6.98	\$0.20	\$0.00	\$0.00	\$56.89	\$70.90
5th 6 months	\$29.88	\$80.00	\$9.55	\$11.33	\$0.82	\$0.00	\$6.98	\$0.20	\$0.00	\$0.00	\$58.76	\$73.70
6th 6 months	\$31.75	\$85.00	\$9.55	\$11.33	\$0.82	\$0.00	\$6.98	\$0.20	\$0.00	\$0.00	\$60.63	\$76.50
7th 6 months	\$33.62	\$90.00	\$9.55	\$11.33	\$0.82	\$0.00	\$6.98	\$0.20	\$0.00	\$0.00	\$62.50	\$79.31
8th 6 months	\$35.48	\$95.00	\$9.55	\$11.33	\$0.82	\$0.00	\$6.98	\$0.20	\$0.00	\$0.00	\$64.36	\$82.10

(*)Special Calculation Note :

*Other is Training

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Ashtabula, Cuyahoga, Erie, Geauga, Huron, Lake, Lorain, Medina, Portage, Richland, Summit

Special Jurisdictional Note :

Details :

Pile Drivers duties shall include but not limited to: Pile driving, milling, fashioning, joining assembling, erecting, fastening, or dismantling of all material of wood, plastic, metal, fiber, cork and composition and all other substitute materials: pile driving, cutting, fitting and placing of lagging, and the handling, cleaning, erecting, installing and dismantling of machinery, equipment and erecting pre-engineered metal buildings. Pile Drivers work but not limited to: unloading, assembling, erection, repairs, operation, signaling, dismantling and reloading all equipment that is used for pile driving including pile butts is defined as sheeting or scrap piling. Underwater work that may be required in connection with the installation of piling. The driver and his tender work as a team and shall arrive at their own financial arrangements with the contractor. Any configuration of wood, steel, concrete or composite that is jetted, driven or vibrated onto the ground by conventional pile driving equipment for the purpose of supporting a future load that may be permanent or temporary. The construction of all wharves and docks, including the fabrication and installation of floating docks. Driving bracing, plumbing, cutting off and capping of all piling whether wood, metal, pipe piling or composite, loading, unloading, erecting, framing, dismantling, moving and handling of pile driving equipment piling used in the construction and repair of all wharves, docks, piers, trestles, caissons, cofferdams and erection of all sea walls and breakwaters. All underwater and marine work on bulkheads, wharves, docks, shipyards, caissons, piers, bridges, pipeline, work, viaducts, marine cable and trestles, as well as salvage and reclamation work where divers are employed. Rate shall include carpenters, acoustic and ceiling installers, drywall installers, pile drivers and floorlayers.

Prevailing Wage Rate Skilled Crafts

Name of Union: Cement Mason Local 886 (Toledo)

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Cement Mason

Effective Date:
7/1/2026

Effective Date:
7/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Cement Mason	\$38.64		\$10.20	\$9.90	\$0.92	\$0.00	\$5.28	\$0.00	\$0.00	\$0.00	\$64.94	\$84.26
Apprentice	BHR	Percent										
1st Year	\$27.05	\$70.00	\$10.20	\$9.90	\$0.92	\$0.00	\$5.28	\$0.00	\$0.00	\$0.00	\$53.35	\$66.88
2nd Year	\$30.91	\$80.00	\$10.20	\$9.90	\$0.92	\$0.00	\$5.28	\$0.00	\$0.00	\$0.00	\$57.21	\$72.67
3rd Year	\$34.78	\$90.02	\$10.20	\$9.90	\$0.92	\$0.00	\$5.28	\$0.00	\$0.00	\$0.00	\$61.08	\$78.47

(*)Special Calculation Note :

Ratio :

5 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Defiance, Erie, Fulton, Hancock, Henry, Huron, Lucas, Ottawa, Paulding, Putnam, Sandusky, Seneca, Williams, Wood

Special Jurisdictional Note :

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Cement Mason Local 886 Hev Hwy

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Cement Mason

Effective Date:
5/1/2026

Effective Date:
5/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Cement Mason	\$37.74		\$9.30	\$8.35	\$1.14	\$0.00	\$2.80	\$0.08	\$0.00	\$0.00	\$59.41	\$78.28
Apprentice	BHR	Percent										
1st Year	\$26.42	\$70.00	\$9.30	\$8.35	\$1.14	\$0.00	\$2.80	\$0.08	\$0.00	\$0.00	\$48.09	\$61.30
2nd Year	\$30.19	\$80.00	\$9.30	\$8.35	\$1.14	\$0.00	\$2.80	\$0.08	\$0.00	\$0.00	\$51.86	\$66.95
3rd Year	\$33.97	\$90.00	\$9.30	\$8.35	\$1.14	\$0.00	\$2.80	\$0.08	\$0.00	\$0.00	\$55.64	\$72.63

(*)Special Calculation Note :

Other: International Training Fund

Ratio :

- 1 Journeyman to 1 Apprentice
- 2 Journeymen to 1 Apprentice thereafter

Jurisdiction (* denotes special jurisdictional note) :

Allen, Auglaize, Defiance, Erie, Fulton, Hancock, Hardin, Henry, Huron, Logan, Lucas, Mercer, Ottawa, Paulding, Putnam, Sandusky, Seneca, Van Wert, Williams, Wood

Special Jurisdictional Note :

Details :

Highway Construction, Sewer, Waterworks And Utility Construction, Industrial & Building Site, Heavy Construction, Airport Construction Or Railroad Construction Work, Power Plant, Tunnels, Amusement Park, Athletic Stadium Site Work, Pollution Control, Sewer Plant, Waste & Water Plant, Water Treatment Facilities Construction.

Prevailing Wage Rate Skilled Crafts

Name of Union: Electrical Local 245 Commercial Outside Lake Erie Division

Type of Rate: Commercial

Change #:
LCN01-2025ib

Craft:
Electrical

Effective Date:
1/22/2025

Effective Date:
1/22/2025

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrical Lineman	\$46.87		\$7.50	\$1.41	\$0.47	\$0.00	\$11.25	\$0.00	\$0.00	\$0.00	\$67.50	\$90.94
Traffic Signal Lighting	\$42.18		\$7.50	\$1.27	\$0.42	\$0.00	\$10.12	\$0.00	\$0.00	\$0.00	\$61.49	\$82.58
Operator Class 2	\$32.81		\$7.50	\$0.98	\$0.33	\$0.00	\$7.87	\$0.00	\$0.00	\$0.00	\$49.49	\$65.90
Operator Class 1	\$37.50		\$7.50	\$1.13	\$0.38	\$0.00	\$9.00	\$0.00	\$0.00	\$0.00	\$55.51	\$74.26
Groundma n Truck Driver 0-6 Months	\$20.51		\$7.50	\$0.62	\$0.21	\$0.00	\$4.92	\$0.00	\$0.00	\$0.00	\$33.76	\$44.02
Groundma n Truck Driver 6-12 Months	\$23.55		\$7.50	\$0.71	\$0.24	\$0.00	\$5.65	\$0.00	\$0.00	\$0.00	\$37.65	\$49.43
Groundma n Truck Driver 12 Months & Over	\$28.02		\$7.50	\$0.84	\$0.28	\$0.00	\$6.72	\$0.00	\$0.00	\$0.00	\$43.36	\$57.37
Apprentice Traffic Signal Lighting	\$		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1st 6 Months	\$25.31		\$7.50	\$0.76	\$0.25	\$0.00	\$6.07	\$0.00	\$0.00	\$0.00	\$39.89	\$52.55
2nd 6 Months	\$27.42		\$7.50	\$0.82	\$0.27	\$0.00	\$6.58	\$0.00	\$0.00	\$0.00	\$42.59	\$56.30
3rd 6 Months	\$29.53		\$7.50	\$0.89	\$0.30	\$0.00	\$7.09	\$0.00	\$0.00	\$0.00	\$45.31	\$60.08
4th 6 Months	\$31.64		\$7.50	\$0.95	\$0.32	\$0.00	\$7.59	\$0.00	\$0.00	\$0.00	\$48.00	\$63.82
5th 6 Months	\$33.74		\$7.50	\$1.01	\$0.34	\$0.00	\$8.10	\$0.00	\$0.00	\$0.00	\$50.69	\$67.56
6th 6 Months	\$37.96		\$7.50	\$1.14	\$0.38	\$0.00	\$9.11	\$0.00	\$0.00	\$0.00	\$56.09	\$75.07
Apprentice	BHR	Percent										
1st 6 Months	\$28.12	\$60.00	\$7.50	\$0.84	\$0.28	\$0.00	\$6.75	\$0.00	\$0.00	\$0.00	\$43.49	\$57.55
2nd 6 Months	\$30.47	\$65.00	\$7.50	\$0.91	\$0.30	\$0.00	\$7.31	\$0.00	\$0.00	\$0.00	\$46.49	\$61.72
3rd 6 Months	\$32.81	\$70.00	\$7.50	\$0.98	\$0.33	\$0.00	\$7.87	\$0.00	\$0.00	\$0.00	\$49.49	\$65.89
4th 6 Months	\$35.15	\$75.00	\$7.50	\$1.05	\$0.35	\$0.00	\$8.44	\$0.00	\$0.00	\$0.00	\$52.49	\$70.07

5th 6 Months	\$37.50	\$80.00	\$7.50	\$1.13	\$0.38	\$0.00	\$9.00	\$0.00	\$0.00	\$0.00	\$55.51	\$74.25
6th 6 Months	\$39.84	\$85.00	\$7.50	\$1.20	\$0.40	\$0.00	\$9.56	\$0.00	\$0.00	\$0.00	\$58.50	\$78.42
7th 6 Months	\$42.18	\$90.00	\$7.50	\$1.27	\$0.42	\$0.00	\$10.12	\$0.00	\$0.00	\$0.00	\$61.49	\$82.58

(*)Special Calculation Note :

Ratio :

1 Journeymen to 1 Apprentices

Jurisdiction (* denotes special jurisdictional note) :

Erie, Huron

Special Jurisdictional Note :

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Electrical Local 245 High Tension Pipe Type Cable

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Electrical

Effective Date:
1/21/2026

Effective Date:
1/21/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrical Lineman	\$54.94		\$7.50	\$1.65	\$0.55	\$0.00	\$13.19	\$0.00	\$0.00	\$0.00	\$77.83	\$105.30
Cert. Lineman Welder	\$54.94		\$7.50	\$1.65	\$0.55	\$0.00	\$13.19	\$0.00	\$0.00	\$0.00	\$77.83	\$105.30
Cert. Cable Splicer	\$54.94		\$7.50	\$1.65	\$0.55	\$0.00	\$13.19	\$0.00	\$0.00	\$0.00	\$77.83	\$105.30
Equipment Mechanic C	\$34.92		\$7.50	\$1.05	\$0.35	\$0.00	\$8.38	\$0.00	\$0.00	\$0.00	\$52.20	\$69.66
Equipment Mechanic B	\$39.92		\$7.50	\$1.18	\$0.39	\$0.00	\$9.41	\$0.00	\$0.00	\$0.00	\$58.40	\$78.36
Equipment Mechanic A	\$43.52		\$7.50	\$1.31	\$0.44	\$0.00	\$10.44	\$0.00	\$0.00	\$0.00	\$63.21	\$84.97
Equipment Operator C	\$34.92		\$7.50	\$1.05	\$0.35	\$0.00	\$8.38	\$0.00	\$0.00	\$0.00	\$52.20	\$69.66
Equipment Operator B	\$43.52		\$7.50	\$1.31	\$0.44	\$0.00	\$10.44	\$0.00	\$0.00	\$0.00	\$63.21	\$84.97
Equipment Operator A	\$49.20		\$7.50	\$1.48	\$0.49	\$0.00	\$11.81	\$0.00	\$0.00	\$0.00	\$70.48	\$95.08
Groundman Truck Driver 0 to 12 Months	\$27.47		\$7.50	\$0.82	\$0.27	\$0.00	\$6.59	\$0.00	\$0.00	\$0.00	\$42.65	\$56.38
Groundman Truck Driver 0 to 12 Months with CDL	\$30.22		\$7.50	\$0.91	\$0.30	\$0.00	\$7.25	\$0.00	\$0.00	\$0.00	\$46.18	\$61.29
Groundman Truck Driver 1 Year or More	\$30.22		\$7.50	\$0.91	\$0.30	\$0.00	\$7.25	\$0.00	\$0.00	\$0.00	\$46.18	\$61.29
Groundman Truck Driver 1 Year or More with CDL	\$35.71		\$7.50	\$1.07	\$0.36	\$0.00	\$7.25	\$0.00	\$0.00	\$0.00	\$51.89	\$69.75
Apprentice	BHR	Percent										
1st 6 Month	\$32.96	\$60.00	\$7.50	\$0.99	\$0.33	\$0.00	\$7.91	\$0.00	\$0.00	\$0.00	\$49.69	\$66.17
2nd 6 Month	\$35.71	\$65.00	\$7.50	\$1.07	\$0.36	\$0.00	\$8.57	\$0.00	\$0.00	\$0.00	\$53.21	\$71.06

3rd 6 Month	\$38.46	\$70.00	\$7.50	\$1.15	\$0.38	\$0.00	\$9.23	\$0.00	\$0.00	\$0.00	\$56.72	\$75.95
4th 6 Month	\$41.20	\$75.00	\$7.50	\$1.24	\$0.41	\$0.00	\$9.89	\$0.00	\$0.00	\$0.00	\$60.24	\$80.84
5th 6 Month	\$43.95	\$80.00	\$7.50	\$1.32	\$0.44	\$0.00	\$10.55	\$0.00	\$0.00	\$0.00	\$63.76	\$85.74
6th 6 Month	\$46.70	\$85.00	\$7.50	\$1.40	\$0.47	\$0.00	\$11.21	\$0.00	\$0.00	\$0.00	\$67.28	\$90.63
7th 6 Month	\$49.45	\$90.00	\$7.50	\$1.48	\$0.49	\$0.00	\$11.87	\$0.00	\$0.00	\$0.00	\$70.79	\$95.52

(*)Special Calculation Note :

No special calculations for this skilled craft wage rate are required at this time.

Ratio :

1 Journeyman to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Allen, Defiance, Erie, Fulton, Hancock, Hardin, Henry, Huron, Lucas, Ottawa, Paulding, Putnam, Sandusky, Seneca, Van Wert, Williams, Wood, Wyandot

Special Jurisdictional Note :

Details :

A groundman when directed shall assist a Journeymen in the performance of his/her work on the ground, including the use of hand tools. A Groundman, Under no circumstances , shall this classification climb poles, towers, ladders, or work from an elevated platform or bucket truck. Heli - Arc Welding will be paid \$.30 above Journeyman rate. Additional compensation of 10% over the Journeyman Lineman and Journeyman Technician for performing work on structures outside of buildings such as water towers, smoke stacks, radio and television towers, more than 75' above the ground.

Prevailing Wage Rate Skilled Crafts

Name of Union: Electrical Local 245 Outside Utility Power

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Electrical

Effective Date:
1/21/2026

Effective Date:
1/21/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrical Lineman	\$52.03		\$7.50	\$1.56	\$0.52	\$0.00	\$12.49	\$0.00	\$0.00	\$0.00	\$74.10	\$100.12
Substation Technician	\$52.03		\$7.50	\$1.56	\$0.52	\$0.00	\$12.49	\$0.00	\$0.00	\$0.00	\$74.10	\$100.12
Cable Splicer	\$54.50		\$7.50	\$1.64	\$0.55	\$0.00	\$13.08	\$0.00	\$0.00	\$0.00	\$77.27	\$104.52
Equipment Mechanic C	\$33.00		\$7.50	\$0.99	\$0.33	\$0.00	\$7.92	\$0.00	\$0.00	\$0.00	\$49.74	\$66.24
Equipment Mechanic B	\$37.09		\$7.50	\$1.11	\$0.37	\$0.00	\$8.90	\$0.00	\$0.00	\$0.00	\$54.97	\$73.52
Equipment Mechanic A	\$41.17		\$7.50	\$1.24	\$0.41	\$0.00	\$9.88	\$0.00	\$0.00	\$0.00	\$60.20	\$80.78
Equipment Operator C	\$33.00		\$7.50	\$0.99	\$0.33	\$0.00	\$7.92	\$0.00	\$0.00	\$0.00	\$49.74	\$66.24
Equipment Operator B	\$41.17		\$7.50	\$1.24	\$0.41	\$0.00	\$9.88	\$0.00	\$0.00	\$0.00	\$60.20	\$80.78
Equipment Operator A	\$46.61		\$7.50	\$1.40	\$0.47	\$0.00	\$11.19	\$0.00	\$0.00	\$0.00	\$67.17	\$90.47
Groundman Truck Driver 0 to 12 Months	\$26.02		\$7.50	\$0.78	\$0.26	\$0.00	\$6.24	\$0.00	\$0.00	\$0.00	\$40.80	\$53.81
Groundman Truck Driver 0 to 12 Months with CDL	\$28.62		\$7.50	\$0.86	\$0.29	\$0.00	\$6.87	\$0.00	\$0.00	\$0.00	\$44.14	\$58.45
Groundman Truck Driver 1 Year or More	\$28.62		\$7.50	\$0.86	\$0.29	\$0.00	\$6.87	\$0.00	\$0.00	\$0.00	\$44.14	\$58.45
Groundman Truck Driver 1 Year or More with CDL	\$33.82		\$7.50	\$1.01	\$0.34	\$0.00	\$8.12	\$0.00	\$0.00	\$0.00	\$50.79	\$67.70
Apprentice	BHR	Percent										
1st 6 Month	\$31.22	\$60.00	\$7.50	\$0.94	\$0.31	\$0.00	\$7.49	\$0.00	\$0.00	\$0.00	\$47.46	\$63.07
2nd 6 Month	\$33.82	\$65.00	\$7.50	\$1.01	\$0.34	\$0.00	\$8.12	\$0.00	\$0.00	\$0.00	\$50.79	\$67.70

3rd 6 Month	\$36.43	\$70.01	\$7.50	\$1.09	\$0.36	\$0.00	\$8.74	\$0.00	\$0.00	\$0.00	\$54.12	\$72.33
4th 6 Month	\$39.02	\$75.00	\$7.50	\$1.17	\$0.39	\$0.00	\$9.36	\$0.00	\$0.00	\$0.00	\$57.44	\$76.95
5th 6 Month	\$41.62	\$80.00	\$7.50	\$1.25	\$0.42	\$0.00	\$9.99	\$0.00	\$0.00	\$0.00	\$60.78	\$81.59
6th 6 Month	\$44.23	\$85.00	\$7.50	\$1.33	\$0.44	\$0.00	\$10.62	\$0.00	\$0.00	\$0.00	\$64.12	\$86.23
7th 6 Month	\$46.83	\$90.00	\$7.50	\$1.40	\$0.47	\$0.00	\$11.24	\$0.00	\$0.00	\$0.00	\$67.44	\$90.86

(*)Special Calculation Note :

No special calculations for this skilled craft wage rate are required at this time.

Ratio :

1 Journeyman to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Allen, Defiance, Erie, Fulton, Hancock, Hardin, Henry, Huron, Lucas, Ottawa, Paulding, Putnam, Sandusky, Seneca, Van Wert, Williams, Wood, Wyandot

Special Jurisdictional Note :

Details :

A groundman when directed shall assist a Journeymen in the performance of his/her work on the ground, including the use of hand tools. A Groundman, Under no circumstances , shall this classification climb poles, towers, ladders, or work from an elevated platform or bucket truck. Heli - Arc Welding will be paid \$.30 above Journeyman rate. Additional compensation of 10% over the Journeyman Lineman and Journeyman Technician for performing work on structures outside of buildings such as water towers, smoke stacks, radio and television towers, more than 75' above the ground.

Prevailing Wage Rate Skilled Crafts

Name of Union: Elevator Local 44

Type of Rate: Commercial

Change #:
LCN01-2025ib

Craft:
Elevator

Effective Date:
1/29/2025

Effective Date:
1/29/2025

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Elevator Mechanic	\$62.27		\$16.27	\$10.96	\$0.80	\$4.98	\$10.40	\$2.34	\$0.00	\$0.00	\$108.02	\$139.16
Assistant Mechanic	\$49.82		\$16.27	\$10.96	\$0.80	\$3.99	\$10.40	\$1.80	\$0.00	\$0.00	\$94.04	\$118.95
Apprentice	BHR	Percent										
0-6 months Probation	\$31.14	\$50.01	\$0.00	\$0.00	\$0.00	\$1.87	\$0.00	\$0.00	\$0.00	\$0.00	\$33.01	\$48.58
1st year	\$34.25	\$55.00	\$16.27	\$10.96	\$0.80	\$2.06	\$10.40	\$1.24	\$0.00	\$0.00	\$75.98	\$93.10
2nd year	\$40.48	\$65.00	\$16.27	\$10.96	\$0.80	\$2.43	\$10.40	\$1.46	\$0.00	\$0.00	\$82.80	\$103.03
3rd year	\$43.59	\$70.00	\$16.27	\$10.96	\$0.80	\$2.63	\$10.40	\$1.57	\$0.00	\$0.00	\$86.22	\$108.01
4th year	\$49.82	\$80.00	\$16.27	\$10.96	\$0.80	\$2.99	\$10.40	\$1.80	\$0.00	\$0.00	\$93.04	\$117.94
Helper	\$43.59	\$70.00	\$16.27	\$10.96	\$0.80	\$3.49	\$10.40	\$1.57	\$0.00	\$0.00	\$87.08	\$108.87

(*)Special Calculation Note :

OTHER IS: HOLIDAY PAY

Ratio :

1 Journeyman to 1 Apprentice 1 Journeyman to 1 Helper 1 Journeyman to 1 Assistant Mechanic

Jurisdiction (* denotes special jurisdictional note) :

Allen, Auglaize, Crawford, Defiance, Erie, Fulton, Hancock, Hardin, Henry, Huron, Lucas, Mercer, Ottawa, Paulding, Putnam, Sandusky, Seneca, Van Wert, Williams, Wood, Wyandot

Special Jurisdictional Note :

Details :

A Helper or Apprentice certified to weld shall be paid mechanic's rate when performing welding (excluding tack welding).

Prevailing Wage Rate Skilled Crafts

Name of Union: Glazier Local 181

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Glazier

Effective Date:
6/17/2026

Effective Date:
6/17/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Glazier	\$38.00		\$9.92	\$12.60	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$60.97	\$79.97
Apprentice	BHR	Percent										
1st Year	\$24.70	\$65.00	\$9.92	\$1.02	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.09	\$48.44
2nd Year	\$26.60	\$70.00	\$9.92	\$3.52	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.49	\$53.79
3rd Year	\$30.40	\$80.00	\$9.92	\$7.69	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$48.46	\$63.66
4th Year	\$34.20	\$90.00	\$9.92	\$8.53	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$53.10	\$70.20

(*)Special Calculation Note :

High Pay: All work is defined for the purpose of the agreement as being work which requires that the employee be supported by equipment that hangs from or suspends from the wall or roof of a building or structure. This work shall receive an additional \$1.50 per hour.

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Erie*, Geauga, Huron, Lake, Lorain, Medina*, Portage*, Summit*

Special Jurisdictional Note :

Start at the intersection of Route 305 and the eastern boundary line of Portage County. Follow Route 305 west onto Route 82, follow Route 82 west to the intersection of Routes 82, 8 and 271, follow Route 271 south to Medina County line west to Route 94, follow Route 94 south to Route 303, follow Route 303 west to Route 252, follow Route 252 south to Route 18, follow Route 18 west to Route 301, follow Route 301 south to Route 162, follow Route 162 west to Route 58, follow Route 58 south to the Ashland County line, follow the Ashland County line. The eastern part of Route 4 north to Lake Erie is the jurisdiction of Local 181. Local 181 has the jurisdiction on all projects built on the property which borders on the above Routes and/or intersections, wherever a County line is the divider between Local 181 and another Union, the jurisdiction is only to the county line.

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Ironworker Local 17

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Ironworker

Effective Date:
5/1/2026

Effective Date:
5/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Ironworker	\$39.48		\$9.14	\$10.00	\$0.72	\$2.50	\$8.00	\$0.00	\$0.00	\$0.00	\$69.84	\$89.58
Apprentice	BHR	Percent										
1st Year - 1st 6 Months	\$23.69	\$60.00	\$9.14	\$10.00	\$0.72	\$2.50	\$8.00	\$0.00	\$0.00	\$0.00	\$54.05	\$65.90
1st Year - 2nd 6 Months	\$25.66	\$65.00	\$9.14	\$10.00	\$0.72	\$2.50	\$8.00	\$0.00	\$0.00	\$0.00	\$56.02	\$68.85
2nd Year - 1st 6 Months	\$27.64	\$70.00	\$9.14	\$10.00	\$0.72	\$2.50	\$8.00	\$0.00	\$0.00	\$0.00	\$58.00	\$71.82
2nd Year - 2nd 6 Months	\$29.61	\$75.00	\$9.14	\$10.00	\$0.72	\$2.50	\$8.00	\$0.00	\$0.00	\$0.00	\$59.97	\$74.78
3rd Year - 1st 6 Months	\$31.58	\$80.00	\$9.14	\$10.00	\$0.72	\$2.50	\$8.00	\$0.00	\$0.00	\$0.00	\$61.94	\$77.73
3rd Year - 2nd 6 Months	\$33.56	\$85.00	\$9.14	\$10.00	\$0.72	\$2.50	\$8.00	\$0.00	\$0.00	\$0.00	\$63.92	\$80.70
4th Year - 1st 6 Months	\$35.53	\$90.00	\$9.14	\$10.00	\$0.72	\$2.50	\$8.00	\$0.00	\$0.00	\$0.00	\$65.89	\$83.66
4th Year - 2nd 6 Months	\$37.51	\$95.00	\$9.14	\$10.00	\$0.72	\$2.50	\$8.00	\$0.00	\$0.00	\$0.00	\$67.87	\$86.63

(*)Special Calculation Note :

Ratio :

4 Journeymen to 1 Apprentice on Structural Work
 3 Journeymen to 1 Apprentice on Rod Work
 2 Journeymen to 1 Apprentice on Finishing, Steel Sash, Stairway and Ornamental Work
 1 Apprentice for every Sheeting Gang
 1 Journeymen to 2 Apprentice Roadway Signage and Sound Barriers
 2 Journeymen to 2 Apprentice Unloading and Erection of Light Gauge Metal Trusses

Jurisdiction (* denotes special jurisdictional note) :

Ashland*, Ashtabula, Cuyahoga, Erie, Geauga, Huron, Lake, Lorain, Medina, Ottawa*, Portage, Summit

Special Jurisdictional Note :

WEST BOUNDARY LINE: Sandusky, Ohio - Columbus Avenue north to Sandusky Bay (and/or Lake Erie); Columbus Avenue south to present Route 4; Route 4 south to present Route 99; from Route 99 south to old Route 224 - all territory to the west of the boundary line is to be within the jurisdiction of Local Union No. 55, Toledo, Ohio. All territory to the east of the boundary line is to be within the jurisdiction of Local Union No. 17, Cleveland, Ohio. Kelly's Island is to be within the jurisdiction of Local Union No. 17, Cleveland, Ohio. All bridges, tunnels, viaducts, etc., relative to these boundary lines shall be under the jurisdiction of Local Union No. 17, Cleveland, Ohio.

EAST BOUNDARY LINE: Ashtabula, Ohio - All territory from the Geauga County Line on the West boundary North of State Route 6 and West of State Route 11 and North of Interstate Route 90 to the Pennsylvania Line on the East boundary shall fall under the jurisdiction of Local Union No. 17, Cleveland, Ohio.

SOUTH BOUNDARY LINE: Canton, Ohio - All territory north of old Route 224 line to be within the jurisdiction of Local Union No. 17, Cleveland, Ohio. All bridges, tunnels, viaducts, signs, etc., relative to old Route 224 line to be within the jurisdiction of Local Union No. 17, Cleveland, Ohio. All territory south of old Route 224 line is to be within the jurisdiction of Local Union No. 550, Canton, Ohio, except for everything within the city limits of Barberton, Ohio, which shall be under the jurisdiction of Local Union No. 17, Cleveland, Ohio.

SOUTHEAST BOUNDARY: West of a line from Middlefield to Shalersville to Deerfield, shall be under the jurisdiction of Local Union No.

17, Cleveland, Ohio. East of a line from Middlefield, to Shalersville to Deerfield, shall be under the jurisdiction of Local Union No.

207, Youngstown, Ohio. Local Union No. 17, Cleveland, Ohio and Local Union No. 207, Youngstown, Ohio has agreed that the Ohio County of Ashtabula, shall be as follows: Ashtabula County in Ohio-All territory from the Portage County Line on the West boundary South of State Route 6 and East of State Route 11 and South of Interstate Route 90 to the Pennsylvania Line on the East boundary shall fall under the jurisdiction of Local Union 207, Youngstown, Ohio. Everything south, starting at the Geauga County line, shall be under the jurisdiction of Local Union No. 207, Youngstown, Ohio.

NORTH BOUNDARY: The east boundary line and the west boundary line continuing north half-way across Lake Erie.

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Ironworker Local 550

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Ironworker

Effective Date:
5/1/2026

Effective Date:
5/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Ironworker	\$38.65		\$11.52	\$9.52	\$0.81	\$0.00	\$3.50	\$0.21	\$0.00	\$0.00	\$64.21	\$83.53
Apprentice	BHR	Percent										
1st 6 months	\$25.12	\$65.00	\$11.52	\$9.52	\$0.81	\$0.00	\$3.50	\$0.21	\$0.00	\$0.00	\$50.68	\$63.24
2nd 6 months	\$26.67	\$69.00	\$11.52	\$9.52	\$0.81	\$0.00	\$3.50	\$0.21	\$0.00	\$0.00	\$52.23	\$65.56
3rd 6 months	\$28.21	\$73.00	\$11.52	\$9.52	\$0.81	\$0.00	\$3.50	\$0.21	\$0.00	\$0.00	\$53.77	\$67.88
4th 6 months	\$29.76	\$77.00	\$11.52	\$9.52	\$0.81	\$0.00	\$3.50	\$0.21	\$0.00	\$0.00	\$55.32	\$70.20
5th 6 months	\$31.31	\$81.00	\$11.52	\$9.52	\$0.81	\$0.00	\$3.50	\$0.21	\$0.00	\$0.00	\$56.87	\$72.52
6th 6 months	\$32.85	\$85.00	\$11.52	\$9.52	\$0.81	\$0.00	\$3.50	\$0.21	\$0.00	\$0.00	\$58.41	\$74.84
7th 6 months	\$34.78	\$90.00	\$11.52	\$9.52	\$0.81	\$0.00	\$3.50	\$0.21	\$0.00	\$0.00	\$60.34	\$77.73
8th 6 months	\$36.72	\$95.00	\$11.52	\$9.52	\$0.81	\$0.00	\$3.50	\$0.21	\$0.00	\$0.00	\$62.28	\$80.64

(*)Special Calculation Note :

OTHER: JIW Upgrading & Drug Testing Fund

Ratio :

4 Journeymen to 1 Apprentice
 1 Journeyman to 1 Apprentice, Spinning of Cable for Suspension Bridge
 1 Journeyman to 1 Apprentice, Ornamental Work
 2 Journeymen to 1 Apprentice, Reinforcing Work
 1 Journeyman to 2 Apprentices, Roadway

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Carroll, Columbiana*, Coshocton, Holmes*, Huron, Mahoning*, Medina*, Portage*, Richland, Stark, Summit*, Tuscarawas, Wayne

Special Jurisdictional Note :

The jurisdictional line between Local 17 and Local 550 is determined as follows: All territory North of Old Route 224 line to be within the jurisdiction of Local 17. All territory South of Old Route 224 line is to be the jurisdiction of Local 550, except for everything within the City limits of Barberton which shall be under the jurisdiction of Local 17.

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Labor HevHwy 2

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Laborer

Effective Date:
5/1/2026

Effective Date:
5/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Laborer Group 1	\$39.20		\$9.45	\$4.60	\$0.45	\$0.00	\$2.50	\$0.00	\$0.10	\$0.00	\$56.30	\$75.90
Group 2	\$39.37		\$9.45	\$4.60	\$0.45	\$0.00	\$2.50	\$0.00	\$0.10	\$0.00	\$56.47	\$76.16
Group 3	\$39.70		\$9.45	\$4.60	\$0.45	\$0.00	\$2.50	\$0.00	\$0.10	\$0.00	\$56.80	\$76.65
Group 4	\$40.15		\$9.45	\$4.60	\$0.45	\$0.00	\$2.50	\$0.00	\$0.10	\$0.00	\$57.25	\$77.32
Watch Person	\$33.50		\$9.45	\$4.60	\$0.45	\$0.00	\$2.50	\$0.00	\$0.10	\$0.00	\$50.60	\$67.35
Apprentice	BHR	Percent										
0-1000 hrs	\$31.36	\$80.00	\$9.45	\$4.60	\$0.45	\$0.00	\$2.50	\$0.00	\$0.10	\$0.00	\$48.46	\$64.14
1001-2000 hrs	\$33.32	\$85.00	\$9.45	\$4.60	\$0.45	\$0.00	\$2.50	\$0.00	\$0.10	\$0.00	\$50.42	\$67.08
2001-3000 hrs	\$35.28	\$90.00	\$9.45	\$4.60	\$0.45	\$0.00	\$2.50	\$0.00	\$0.10	\$0.00	\$52.38	\$70.02
3001-4000 hrs	\$37.24	\$95.00	\$9.45	\$4.60	\$0.45	\$0.00	\$2.50	\$0.00	\$0.10	\$0.00	\$54.34	\$72.96
More Than 4000 hrs	\$39.20	\$100.00	\$9.45	\$4.60	\$0.45	\$0.00	\$2.50	\$0.00	\$0.10	\$0.00	\$56.30	\$75.90

(*)Special Calculation Note :

Tunnel Laborer rate with air-pressurized add \$1.00 to the above wage rate.

Commercial Driver's License – Any Laborer required to utilize a valid Commercial Driver's License (CDL), are in compliance with necessary FMCSA regulations and approved by the Contractor to operate a Commercial Motor Vehicle (CMV), shall be paid one dollar (\$1.00) per hour above the base rate for the entirety of their working shift.

Ratio :

1 Journeyman to 1 Apprentice
3 Journeymen to 1 Apprentice thereafter

Watchman has no Apprentices.

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Erie, Huron, Lorain, Lucas, Mahoning, Medina, Ottawa, Portage, Sandusky, Stark, Summit, Trumbull, Wood

Special Jurisdictional Note :

Hod Carriers and Common Laborers - Heavy, Highway, Sewer, Waterworks, Utility, Airport, Railroad, Industrial and Building Site, Sewer Plant, Waste Water Treatment Facilities Construction

Details :

Group 1 Laborer (Construction); Plant Laborer or Yardman, Right-of-way Laborer, Landscape Laborer, Highway Lighting Worker, Signalization Worker, (Swimming) Pool Construction Laborer, Utility Man, *Bridge Man, Handyman, Joint Setter, Flagperson, Carpenter Helper, Waterproofing Laborer, Slurry Seal, Seal Coating, Surface Treatment or Road Mix Laborer, Riprap Laborer & Grouter, Asphalt Laborer, Dump Man (batch trucks), Guardrail & Fence Installer, Mesh Handler & Placer, Concrete Curing Applicator, Scaffold Erector, Sign Installer, Hazardous Waste (level D), Diver Helper, Zone Person and Traffic Control. *Bridge Man will perform work as per the October 31, 1949, memorandum on concrete forms, by and between the United Brotherhood of Carpenters and Joiners of America and the Laborers' International Union of North America, which states in; "the moving, cleaning, oiling and carrying to the next point of erection, and the stripping of forms which are not to be re-used, and forms on all flat arch work shall be done by members of the Laborers' International Union of North America."

Group 2 Asphalt Raker, Screwman or Paver, Concrete Puddler, Kettle Man (pipeline), All Machine-Driven Tools (Gas, Electric, Air), Mason Tender, Brick Paver, Mortar Mixer, Skid Steer, Sheeting & Shoring Person, Surface Grinder Person, Screedperson, Water Blast, Hand Held Wand, Power Buggy or Power Wheelbarrow, Paint Striper, Plastic fusing Machine Operator, Rodding Machine Operator, Pug Mill Operator, Operator of All Vacuum Devices Wet or Dry, Handling of all Pumps 4 inches and under (gas, air or electric), Diver, Form Setter, Bottom Person, Welder Helper (pipeline), Concrete Saw Person, Cutting with Burning Torch, Pipe Layer, Hand Spiker (railroad), Underground Person (working in sewer and waterline, cleaning, repairing and reconditioning). Tunnel Laborer (without air), Caisson, Cofferdam (below 25 feet deep), Air Track and Wagon Drill, Sandblaster Nozzle Person, Hazardous Waste (level B), ***Lead Abatement, Hazardous Waste (level C) ***Includes the erecting of structures for the removal, including the encapsulation and containment of Lead abatement process.

Group 3 Blast and Powder Person, Muckers will be defined as shovel men working directly with the miners, Wrencher (mechanical joints & utility pipeline), Yarnier, Top Lander, Hazardous Waste (level A), Concrete Specialist, Curb Setter and Cutter, Grade Checker, Concrete Crew in Tunnels. Utility pipeline Tappers, Waterline, Caulker, Signal Person will receive the rate equal to the rate paid the Laborer classification for which the Laborer is signaling.

Group 4 Miner, Welder, Guniting Nozzle Person A.) The Watchperson shall be responsible to patrol and maintain a safe traffic zone including but not limited to barrels, cones, signs, arrow boards, message boards etc. The responsibility of a watchperson is to see that the equipment, job and office trailer etc. are secure.

Prevailing Wage Rate Skilled Crafts

Name of Union: Labor Local 480 Building

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Laborer

Effective Date:
5/20/2026

Effective Date:
5/20/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Laborer Group 1	\$34.46		\$9.45	\$4.60	\$0.40	\$0.00	\$2.00	\$0.00	\$0.10	\$0.00	\$51.01	\$68.24
Laborer Group 2	\$34.66		\$9.45	\$4.60	\$0.40	\$0.00	\$2.00	\$0.00	\$0.10	\$0.00	\$51.21	\$68.54
Laborer Group 3	\$35.06		\$9.45	\$4.60	\$0.40	\$0.00	\$2.00	\$0.00	\$0.10	\$0.00	\$51.61	\$69.14
Laborer Group 4	\$26.37		\$9.45	\$4.60	\$0.40	\$0.00	\$2.00	\$0.00	\$0.10	\$0.00	\$42.92	\$56.11
Apprentice	BHR	Percent										
0-1000	\$27.57	\$80.00	\$9.45	\$4.60	\$0.40	\$0.00	\$2.00	\$0.00	\$0.10	\$0.00	\$44.12	\$57.91
1001-2000	\$29.29	\$85.00	\$9.45	\$4.60	\$0.40	\$0.00	\$2.00	\$0.00	\$0.10	\$0.00	\$45.84	\$60.48
2001-3000	\$31.01	\$90.00	\$9.45	\$4.60	\$0.40	\$0.00	\$2.00	\$0.00	\$0.10	\$0.00	\$47.56	\$63.06
3001-4000	\$32.74	\$95.00	\$9.45	\$4.60	\$0.40	\$0.00	\$2.00	\$0.00	\$0.10	\$0.00	\$49.29	\$65.66
More than 4000 Hrs	\$34.46	\$100.00	\$9.45	\$4.60	\$0.40	\$0.00	\$2.00	\$0.00	\$0.10	\$0.00	\$51.01	\$68.24

(*)Special Calculation Note :

\$0.10 LECET is for Labor Management

Ratio :

1 Journeyman to 1 Apprentice
4 Journeyman to 1 Apprentice thereafter

Jurisdiction (* denotes special jurisdictional note) :

Erie, Huron, Ottawa, Sandusky

Special Jurisdictional Note :

Details :

Group 1 Building & Construction Laborer, Signalman, Flagman, Tool Cribman, Carpenter Tender, Finisher Tender, Concrete Handler, Utility Construction Laborer, Guard Rail Erectors, Railroad Spur Work Hazardous Waste Worker Level D

Group 2 Bottom Man, Scaffold Builder, Tunnel laborer, Pipe Layer, Air and Power Driven Tools, Burner on Demolition Work, Swinging Scaffold, Mucker, Caisson Worker, Cofferdam Worker, Powder Men and Dynamite Blaster, Creosote Worker, Mortar Mixer, Skid Skeer, Concrete Specialist, Form Setter, Mason Tender, Plasterer Tender, Hod Carrier Laser Beam Set-up Man, Stonemason Tender, All Wet and Dry Vacuum Devices. Hazardous Waste Worker Level C

Group 3 Gunnite Operator, Dry Sandblast, Caustic Lime Worker, Radioactive Atmosphere Worker. Hazardous Waste Worker Level A & B. NOTE: Caustic Lime Worker and Radioactive Atmosphere Worker is defined to mean only when special wearing apparel is required to perform the work.

Group 4 Watchman Hazardous Waste Removal and Lead Abatement For laborers working in an exclusive or "hot" area with toxic or hazardous materials, one of the following personal protective equipment ensembles will be required for necessary protection against toxic contaminants. Level A (Wage Group C) This ensemble includes a fully encapsulated chemical suit (moon suit), Self-Contained Breathing Apparatus (SCBA), or Airline Fed Respirator, and various types and numbers of boots and gloves: cool vests and voice-activated radios are optional equipment sometimes worn. Level B (Wage Group C) This Protective equipment includes a chemically resistant splash suit and SCBA or Airline Respirator. This ensemble is required when the situation is very hazardous, such as oxygen deficient atmospheres, IDLH atmospheres, or confined space entries. Level C (Wage Group B) Protective equipment includes a protective suit and an Air Purifying Respirator (APR) with the appropriate filter canisters. The ensemble is used when the contaminants are reliably known not to be hazardous to the skin and not IDLH (Immediately Dangerous to Life or Health) and correct filter protection is available. Level D (Wage Group A) To be worn only in established "safe zones" may consist of, from normal work clothes to normal skin protection, such as gloves, face shields, goggles, coveralls and occasionally respiratory protection.

Prevailing Wage Rate Skilled Crafts

Name of Union: Operating Engineers - Building Local 18 - Zone I (A)

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Operating Engineer

Effective Date:
5/1/2026

Effective Date:
5/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Operator Group A	\$51.61		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$69.06	\$94.86
Operator Group B	\$51.46		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$68.91	\$94.64
Operator Group C	\$50.01		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$67.46	\$92.47
Operator Group D	\$49.23		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$66.68	\$91.30
Operator Group E	\$48.91		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$66.36	\$90.81
Operator Group F	\$41.83		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$59.28	\$80.19
Master Mechanic	\$52.61		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$70.06	\$96.36
Lift Director	\$52.61		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$70.06	\$96.36
Crane 200'-299'	\$52.61		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$70.06	\$96.36
Crane 300' and over	\$53.11		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$70.56	\$97.11
Mobile Concrete Pumps 200'-299'r	\$52.61		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$70.06	\$96.36
Mobile Concrete Pumps 300' and over	\$53.11		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$70.56	\$97.11
Apprentice	BHR	Percent										
1st Year	\$30.88	\$59.83	\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$48.33	\$63.77
2nd Year	\$36.02	\$69.79	\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$53.47	\$71.48
3rd Year	\$41.17	\$79.77	\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$58.62	\$79.20
4th Year	\$46.31	\$89.73	\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$63.76	\$86.92

(*)Special Calculation Note :

Other & Misc is Education & Safety and National Training Fund.

Note: There will be a 5% increase for the apprentices on top of the percentages listed above provided they are operating mobile equipment.

Operating Engineers employed on any piece of equipment requiring a Certified Crane Operator (CCO) certification or employed on cranes involved in pile driving operations shall be paid a premium of one dollar (\$1.00) per hour in addition to the crane rate or any escalated rate that may be in effect.

Ratio :

For every (3) Operating Engineer Journeymen employed by the company ,there may be employed (1) Registered Apprentice. An apprentice, while employed as part of a crew per Article VIII, paragraph 77, will not be subject to the apprenticeship ratios in this collective bargaining agreement.

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Erie, Geauga, Huron, Lake, Lorain, Medina

Special Jurisdictional Note :

Details :

Group A - A-Frames; " Boiler Operators, Compressor Operators, Hydraulic Pumps & Power Packs when mounted on a crane or regardless of where said equipment is mounted (piggy-back operation)"; Boom Trucks (all types); Cableways; Cherry Pickers; Combination - Concrete Mixers & Towers; Concrete Pumps; Cranes (all types); Cranes-compact: Track or rubber over 4000lbs. capacity; Cranes- self erecting: stationary, track or truck (all configurations); Derricks (all types); Draglines; Dredges (dipper, clam or suction) 3-man crew; Elevating Graders or Euclid Loaders; Floating Equipment; Gradalls; Helicopter Operators, hoisting building materials; Helicopter Winch Operators, hoisting building materials; Hoes (All types); Hoists (two or more drums); Lift Slab or Panel Jack Operators; Locomotives (all types); Maintenance Engineers (Maintenance Operators and/or Welder); Mixers, paving (multiple drum); Mobile Concrete Pumps with booms; Panelboards, (all types on site); Pile Drivers; Power Shovels; Robotics Equipment Operator/Mechanic; Rotary Drills (all), used on caissons work, wells (all types), Geothermal work and sub-structure work; Rough Terrain Forklifts with Winch/Hoist (when used as a crane); Side Booms; Slip Form Pavers; Straddle Carriers (Building Construction on site); Trench Machines (over 24" wide); Tug Boats; Tunnel Boring Machine (TBM).

Group B - Asphalt Pavers; Bulldozers; CMI type Equipment; End Loaders; Horizontal Directional Drill Locator; Horizontal Directional Drill Operator; Instrument Man; Kolman-type Loaders (Dirt Loading); Lead Greasemen; Mucking Machines; Power Graders; Power Scoops; Power Scrapers; Push Cats; Rotomills; Vermeer Type Concrete Saw.

Group C - Air Compressors, Pressurizing Shafts or Tunnels; Articulating/Straight bed end dumps if assigned by the employer (minus \$4.00 per hour from Group C); All Asphalt Rollers; Fork Lifts; Hoists (with one drum); House Elevators (except those automatic call button controlled); Hydro Excavator (all types C rate) (F rate if a second person is needed) Helper rate; Laser Screeds and like equipment; Man Lifts; Modular Moving and Placement machine (C Rate) (F Rate if second person is needed); Mud Jacks; Portable Hydraulic Gantry (lift system C rate) (F Rate if a second person is needed); Power Boilers (over 15 lbs. pressure); Pump Operators (installing or operating Well Points or other types of Dewatering Systems); Pressure Grouting; Trenchers (24" and under); Utility Operators.

Group D – Brokks with a manufacture's weight of 3,500 lbs. and above; Compressors, on building construction; Conveyors, used for handling building materials; Generators; Guniting Machines; Mixers, more than one bag capacity; Mixers, one bag capacity (side loader); Pavement Breakers (hydraulic or cable); Post Drivers; Post Hole Diggers; Road Widening Trenchers; Rollers; Welder Operators.

Group E - Backfillers and Tampers; Batch Plants; Bar and Joint Installing Machines; Bull Floats; Burlap and Curing Machines; Cleaning Machine Operator (decontamination included); Clefplanes; Concrete Spreading Machines; Crushers; Deckhands; Drum Fireman (asphalt); Farm-type, Tractor, pulling attachments; Finishing Machines; Forklifts (masonry work only); Form Trenchers; High Pressure Pumps (over 1/2" discharge); Hydro Seeders; Pumps (4" and over discharge), provided it is not part of a de-watering system discharged into a common header; Self-Propelled Power Spreaders; Self-Propelled Sub Graders; Submersible Pump (4" and over discharge), provided it is not part of a dewatering system discharged into a common header; Tire Repairman; Tractors, pulling sheepsfoot rollers or graders; Vibratory Compactors with integral power.

Group F - Apprentice/Helpers, Oiler, Signalmen; Barrier Moving Machines (additional duty, paid same rate); Bobcat-type and/or Skid Steer Loader; Bobcat-type and/or Skid Steer Loader with any and all attachments; Brokks with a manufacture's weight less than 3,500 lbs.; Cranes – compact, track or rubber under 4000 lbs. capacity; Geodimeter; Grade Checker; Grinders (all); Inboard/Outboard Motor Boat Launches; Light Plant Operators; Planers (all types); Power Boilers (less than 15 lbs. pressure); Power Driven Heaters (oil fired); Power Scrubbers; Power Sweepers; Pumps (under 4 inch discharge); Rod Man; Rotomills; Saw (concrete Vermeer-type); Submersible Pumps (under 4 inch discharge); Vac Alls; Cutting, burning and fabricating on equipment and their attachments.

Master Mechanic - Master Mechanic

Crane 200'-299' - Boom & Jib 200' feet and over Crane 300' and Over - Boom & Jib 300' and over

Prevailing Wage Rate Skilled Crafts

Name of Union: Operating Engineers - HevHwy Zone II

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Operating Engineer

Effective Date:
5/1/2026

Effective Date:
5/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Operator Class A	\$47.29		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$64.74	\$88.39
Operator Class B	\$47.17		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$64.62	\$88.20
Operator Class C	\$46.13		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$63.58	\$86.65
Operator Class D	\$44.95		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$62.40	\$84.88
Operator Class E	\$39.49		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$56.94	\$76.69
Master Mechanic	\$48.29		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$65.74	\$89.89
Lift Director	\$48.29		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$65.74	\$89.89
Crane and Mobile Concrete Pump 150' - 179'	\$47.79		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$65.24	\$89.14
Crane and Mobile Concrete Pump 180' - 249'	\$48.29		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$65.74	\$89.89
Crane and Mobile Concrete Pump 250' and Ove	\$48.54		\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$65.99	\$90.26
Apprentice	BHR	Percent										
1st Year	\$23.64	\$50.00	\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$41.09	\$52.91
2nd Year	\$28.37	\$60.00	\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$45.82	\$60.00
3rd Year	\$33.10	\$70.00	\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$50.55	\$67.10
4th Year	\$37.83	\$80.00	\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.10	\$55.28	\$74.19
Field Mech Trainee	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1st year	\$28.37	\$60.00	\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$45.72	\$59.91
2nd year	\$33.10	\$70.00	\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$50.45	\$67.00
3rd year	\$37.83	\$80.00	\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$55.18	\$74.09
4th year	\$42.56	\$90.00	\$10.01	\$6.25	\$1.00	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$59.91	\$81.19

(*)Special Calculation Note :

Other: Education & Safety Fund
Misc: National Training

**Apprentices will receive a 10% increase on top of the percentages listed above provided they are operating mobile equipment.

Ratio :

For every (3) Operating Engineer Journeymen employed by the company, there may be employed (1) Registered Apprentice or Trainee Engineer through the referral when they are available. An Apprentice, while employed as part of a crew per Article VIII, paragraph 68 will not be subject to the apprenticeship ratios in this collective bargaining agreement

Jurisdiction (* denotes special jurisdictional note) :

Adams, Allen, Ashland, Athens, Auglaize, Belmont, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Coshocton, Crawford, Darke, Defiance, Delaware, Fairfield, Fayette, Franklin, Fulton, Gallia, Greene, Guernsey, Hamilton, Hancock, Hardin, Harrison, Henry, Highland, Hocking, Holmes, Huron, Jackson, Jefferson, Knox, Lawrence, Licking, Logan, Lucas, Madison, Marion, Meigs, Mercer, Miami, Monroe, Montgomery, Morgan, Morrow, Muskingum, Noble, Ottawa, Paulding, Perry, Pickaway, Pike, Preble, Putnam, Richland, Ross, Sandusky, Scioto, Seneca, Shelby, Stark, Tuscarawas, Union, Van Wert, Vinton, Warren, Washington, Wayne, Williams, Wood, Wyandot

Special Jurisdictional Note :

Details :

Class A - Air Compressors on Steel Erection; Asphalt Plant Engineers (Cleveland District Only); Barrier Moving Machine; Boiler Operators, Compressor Operators, or Generators, when mounted on a rig; Boom Trucks (all types); Cableways; Cherry Pickers; Combination- Concrete Mixers & Towers; Concrete Plants (over 4 yd capacity); Concrete Pumps; Cranes (all types); Compact Cranes track or rubber over 4,000 pounds capacity; Cranes self-erecting stationary, track or truck; Derricks (all types); Draglines; Dredges dipper, clam or suction; Elevating Graders or Euclid Loaders; Floating Equipment (all types); Gradalls; Helicopter Crew (Operator- hoist or winch); Hoes (all types); Hoisting Engines; Hoisting Engines, on shaft or tunnel work; Hydraulic Gantry (lifting system); Industrial-type Tractors; Jet Engine Dryer (D8 or D9) diesel Tractors; Locomotives (standard gauge); Maintenance Operators/Technicians (class A); Mixers, paving (single or double drum); Mucking Machines; Multiple Scrapers; Piledriving Machines (all types); Power Shovels, Prentice Loader; Quad 9 (double pusher); Rail Tamper (with automatic lifting and aligning device); Refrigerating Machines (freezer operation); Rotary Drills, on caisson work; Rough Terrain Fork Lift with winch/hoist; Side Booms; Slip Form Pavers; Survey Crew Party Chiefs; Tower Derricks; Tree Shredders; Trench Machines (over 24" wide); Truck Mounted Concrete Pumps; Tug Boats; Tunnel Machines and /or Mining Machines; Wheel Excavators.

Class B - Asphalt Pavers; Automatic Subgrade Machines, self-propelled (CMI-type); Bobcat-type and /or Skid Steer Loader with hoe attachment greater than 7000 lbs.; Boring Machine Operators (more than 48 inches); Bulldozers; Concrete Saws, Vermeer type; Endloaders; Horizontal Directional Drill (50,000 ft. lbs. thrust and over); Hydro Milling Machine; Kolman-type Loaders (production type-dirt); Lead Greasemen; Lighting and Traffic Signal Installation Equipment includes all groups or classifications; Maintenance Operators/Technicians, Class B; Material Transfer Equipment (shuttle buggy) Asphalt; Pettibone-Rail Equipment; Power Graders; Power Scrapers; Push Cats; Rotomills (all), Grinders and Planners of all types, Groovers (excluding walk-behinds); Trench Machines (24 inch wide and under).

Class C - A-Frames; Air Compressors, on tunnel work (low Pressure); Articulating/straight bed end dumps if assigned (minus \$4.00 per hour); Asphalt Plant Engineers (Portage and Summit Counties only); Bobcat-type and/or skid steer loader with or without attachments; Drones; Highway Drills (all types); HydroVac/Excavator (when a second person is needed, the rate of pay will be "Class E"); Locomotives (narrow gauge); Material Hoist/Elevators; Mixers, concrete (more than one bag capacity); Mixers, one bag capacity (side loader); Power Boilers (over 15 lbs. pressure); Pump Operators (installing or operating well Points); Pumps (4 inch and over discharge); Railroad Tie Inserter/Remover; Rollers, Asphalt; Rotovator (lime-soil Stabilizer); Switch & Tie Tampers (without lifting and aligning device); Utilities Operators, (small equipment); Welding Machines and Generators.

Class D – Backfillers and Tampers; Ballast Re-locator; Bar and Joint Installing Machines; Batch Plant Operators; Boring Machine Operators (48 inch or less); Bull Floats; Burlap and Curing Machines; Concrete Plants (capacity 4 yds. and under); Concrete Saws (multiple); Conveyors (highway); Crushers; Deckhands; Farm type tractors, with attachments (highway); Finishing Machines; Firemen, Floating Equipment (all types); Fork Lifts (highway), except masonry; Form Trenchers; Hydro Hammers; Hydro Seeders; Pavement Breakers (hydraulic or cable); Plant Mixers; Post Drivers; Post Hole Diggers; Power Brush Burners; Power Form Handling Equipment; Road Widening Trenchers; Rollers (brick, grade, macadam); Self-Propelled Power Spreaders; Self-Propelled Sub-Graders; Steam Firemen; Survey Instrument men; Tractors, pulling sheepsfoot rollers or graders; Vibratory Compactors, with integral power.

Class E - Compressors (portable, Sewer, Heavy and Highway); Cranes-Compact, track or rubber under 4,000 pound capacity; Drum Firemen (asphalt plant); Fueling and greasing (Primary Operator with Specialized CDL Endorsement Add \$3.00/hr); Generators; Inboard-Outboard Motor Boat Launches; Masonry Fork Lifts; Oil Heaters (asphalt plant); Oilers/Helpers; Power Driven Heaters (oil fired); Power Scrubbers; Power Sweepers; Pumps (under 4 inch discharge); Signalperson; Survey Rodmen or Chairmen; Tire Repairmen; VAC/ALLS.

Master Mechanic - Master Mechanic

Cranes and Mobile Concrete Pumps 150' -179' - Boom & Jib 150 - 179 feet Cranes and Mobile Concrete Pumps 180' - 249' - Boom & Jib 180 - 249 feet Cranes and Mobile Concrete Pumps 250' and over - Boom & Jib 250 feet or over

Prevailing Wage Rate Skilled Crafts

Name of Union: Painter Local 639 Sign and Display

Type of Rate: Commercial

Change #:
LCN01-2025ib

Craft:
Painter

Effective Date:
6/18/2025

Effective Date:
6/18/2025

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Top Mechanic Class A	\$27.53		\$4.50	\$0.00	\$0.00	\$0.00	\$0.00	\$1.45	\$0.00	\$0.00	\$33.48	\$47.25
Top Mechanic Class B	\$27.53		\$4.50	\$0.75	\$0.00	\$0.53	\$0.00	\$1.45	\$0.00	\$0.00	\$34.76	\$48.53
Top Helper Class A	\$22.33		\$4.50	\$0.00	\$0.00	\$0.00	\$0.00	\$1.20	\$0.00	\$0.00	\$28.03	\$39.20
Top Helper Class B	\$22.33		\$4.50	\$0.75	\$0.00	\$0.43	\$0.00	\$1.20	\$0.00	\$0.00	\$29.21	\$40.38
Helper Class A	\$17.19		\$4.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.90	\$0.00	\$0.00	\$22.59	\$31.19
Helper Class B	\$17.19		\$4.50	\$0.75	\$0.00	\$0.30	\$0.00	\$0.90	\$0.00	\$0.00	\$23.64	\$32.24
New Hire (90 Days)	\$15.75		\$4.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.55	\$0.00	\$0.00	\$20.80	\$28.68
Apprentice	BHR	Percent										

(*)Special Calculation Note :

Other: Sick, Personal & Holiday Pay Swing Stage Rate: Employees shall receive a differential of \$1.50 per hour for all hours worked on scaffolds four sections or higher, including any boom lifts and swing stage scaffolds. In addition, the rigging and derigging of hanging/suspended swing stage systems and rappelling/bolson chair work of a single employee will qualify for \$1.50 differential, will be paid to a single lead Top Mechanic or single lead Top Helper on any given swing stage job, even when it includes multiple running rigs on a single jobsite.

Ratio :

Jurisdiction (* denotes special jurisdictional note) :

Adams, Allen, Ashland, Ashtabula, Athens, Auglaize, Belmont, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Cuyahoga, Darke, Defiance, Delaware, Erie, Fairfield, Fayette, Franklin, Fulton, Gallia, Geauga, Greene, Guernsey, Hamilton, Hancock, Hardin, Harrison, Henry, Highland, Hocking, Holmes, Huron, Jackson, Jefferson, Knox, Lake, Lawrence, Licking, Logan, Lorain, Lucas, Madison, Mahoning, Marion, Medina, Meigs, Mercer, Miami, Monroe, Montgomery, Morgan, Morrow, Muskingum, Noble, Ottawa, Paulding, Perry, Pickaway, Pike, Portage, Preble, Putnam, Richland, Ross, Sandusky, Scioto, Seneca, Shelby, Stark, Summit, Trumbull, Tuscarawas, Union, Van Wert, Vinton, Warren, Washington, Wayne, Williams, Wood, Wyandot

Special Jurisdictional Note :

Details :

The work performed by employees covered by this rate shall include cleaning and refinishing of architectural metals using chemicals, solvents, coatings and hand-applied lacquer thinner, removing scratches from mirror finished metals, burnishing of bronze, statuary finishes on exterior and interior surfaces during the course of the restoration and maintenance of architectural metals, and other specialty metal finishing work, and the use of all tools required to perform such work, including but not limited to polishes, spray equipment and scaffolding. Class A: Less Than 1 Year of Service Class B: More Than 1 Year of Service Top Mechanic: Top Mechanic shall be responsible for ensuring the highest quality of workmanship by Helpers, and be highly competent and knowledgeable in the following areas: coatings, both solvent and waterborne, spraying ability, stainless steel, aluminum and bronze finishing, scaffolding and swing stage work. The Top Mechanic shall also be responsible for providing necessary training of employees in lower classifications and for directing all employees in his/her crew to perform their responsibilities in a productive and efficient manner. Top Helper: For existing Top Helpers at the time of this Agreement shall, in addition to performing the responsibilities of a Helper, be responsible and accountable for the setup, breakdown, safety and quality of the Company's product. Helper: A Helper shall be responsible for performing tasks in refinishing, compliance with safety procedures, setting up and breaking down job sites, setting up and breaking down scaffolding and swing stages, preparing surfaces for refinishing, including but not limited to masking and stripping, cleaning, oxidizing, polishing and scratch removal on various finishes.

Prevailing Wage Rate Skilled Crafts

Name of Union: Painter Local 639 Zone 2 Sign

Type of Rate: Commercial

Change #:
LCN01-2025ib

Craft:
Painter

Effective Date:
5/28/2025

Effective Date:
5/28/2025

	BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification											
Painter Sign Journeym an Tech/Tea m Leader Class A	\$26.56	\$3.36	\$0.21	\$0.00	\$0.00	\$0.00	\$0.72	\$0.00	\$0.00	\$30.85	\$44.13
Painter Sign Journeym an Tech/Tea m Leader Class B	\$26.56	\$3.36	\$0.21	\$0.00	\$0.51	\$0.00	\$0.72	\$0.00	\$0.00	\$31.36	\$44.64
Painter Sign Journeym an Tech/Tea m Leader Class C	\$26.56	\$3.36	\$0.21	\$0.00	\$1.02	\$0.00	\$0.72	\$0.00	\$0.00	\$31.87	\$45.15
Painter Sign Journeym an Tech/Tea m Leader Class D	\$26.56	\$3.36	\$0.21	\$0.00	\$1.53	\$0.00	\$0.72	\$0.00	\$0.00	\$32.38	\$45.66
Sign Journeym an Class A	\$26.27	\$3.36	\$0.21	\$0.00	\$0.00	\$0.00	\$0.71	\$0.00	\$0.00	\$30.55	\$43.69
Sign Journeym an Class B	\$26.27	\$3.36	\$0.21	\$0.00	\$0.51	\$0.00	\$0.71	\$0.00	\$0.00	\$31.06	\$44.20
Sign Journeym an Class C	\$26.27	\$3.36	\$0.21	\$0.00	\$1.01	\$0.00	\$0.71	\$0.00	\$0.00	\$31.56	\$44.70
Sign Journeym an Class D	\$26.27	\$3.36	\$0.21	\$0.00	\$1.52	\$0.00	\$0.71	\$0.00	\$0.00	\$32.07	\$45.21
Tech Sign Fabricatio n/ Erector Class A	\$20.67	\$3.36	\$0.21	\$0.00	\$0.00	\$0.00	\$0.56	\$0.00	\$0.00	\$24.80	\$35.14
Tech Sign Fabricatio n/ Erector Class B	\$20.67	\$3.36	\$0.21	\$0.00	\$0.40	\$0.00	\$0.56	\$0.00	\$0.00	\$25.20	\$35.54

Tech Sign Fabrication/ Erector Class C	\$20.67		\$3.36	\$0.21	\$0.00	\$0.80	\$0.00	\$0.56	\$0.00	\$0.00	\$25.60	\$35.94
Tech Sign Fabrication/ Erector Class D	\$20.67		\$3.36	\$0.21	\$0.00	\$1.19	\$0.00	\$0.56	\$0.00	\$0.00	\$25.99	\$36.33
Apprentice	BHR	Percent										

(*)Special Calculation Note :

Other is for paid holidays.

Ratio :

Jurisdiction (* denotes special jurisdictional note) :

Adams, Allen, Auglaize, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Darke, Defiance, Delaware, Erie, Fairfield, Fayette, Franklin, Fulton, Greene, Hamilton, Hancock, Hardin, Henry, Highland, Holmes, Huron, Jackson, Knox, Licking, Logan, Lorain, Lucas, Madison, Mahoning, Marion, Mercer, Miami, Montgomery, Morrow, Muskingum, Ottawa, Paulding, Perry, Pickaway, Pike, Preble, Putnam, Ross, Sandusky, Scioto, Seneca, Shelby, Stark, Trumbull, Tuscarawas, Union, Van Wert, Warren, Wayne, Williams, Wood, Wyandot

Special Jurisdictional Note :

Details :

Class A: less that 1 year. Class B: 1-3 years. Class C; 3-10 years. Class D: More than 10 years.

Prevailing Wage Rate Skilled Crafts

Name of Union: Painter Local 788

Type of Rate: Commercial

Change #:
LCN01-2025ib

Craft:
Painter

Effective Date:
7/23/2025

Effective Date:
7/23/2025

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Painter Brush Roll	\$30.23		\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$48.75	\$63.86
REFINERY RATE	\$		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Painter Brush Roll	\$32.02		\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$50.54	\$66.55
POWERHOUSE RATE	\$		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Painter Brush Roll	\$34.90		\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$53.42	\$70.87
Apprentice	BHR	Percent										
1st Year	\$19.65	\$65.00	\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.17	\$47.99
2nd Year	\$22.67	\$75.00	\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41.19	\$52.53
3rd Year	\$25.70	\$85.00	\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$44.22	\$57.07
4th Year	\$28.72	\$95.00	\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$47.24	\$61.60

(*)Special Calculation Note :

Apprentice rate based upon % of each classification.

A. \$0.50 per hour shall be added to the rate of pay for the classification of work, while working: Swing stage, Boatswain Chair, Needle Beam & Horizontal Cable.

B. \$1.00 per hour shall be added to the rate of pay for the classification of work, while operating: Any spray equipment, Sandblasting, Cob blasting, High Pressure Water blasting (4000 PSI), and for Automatic Taping & Finishing Tools for Drywall.

C. \$0.50 per hour shall be added to the rate of pay for the classification of work, for tending: three (3) or more sprayers.

D. \$1.00 per hour shall be added to the rate of pay for the classification of work, for the application of: Catalyzed Epoxy, including latex Epoxy that is deemed hazardous, Lead Abatement, or for work or material, where special precautions beyond normal work duties must be taken. Questionable work or material shall be approved by the Business Representative and/or Joint Trade Board.

E. \$1.00 per hour shall be added to the rate of pay for the classification of work, for working on: Stacks, Tanks, and Towers over forty (40) feet in height.

F. \$0.40 per hour shall be added to the rate of pay for the classification of work, for Paperhanging.

G. \$1.00 per hour shall be added to the rate of pay for the classification of work, for Spray Painting.

H. \$1.50 per hour shall be added to the rate of pay for the classification of work, for Drywall Finishing.

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Crawford, Erie, Hancock, Huron, Marion, Morrow, Ottawa, Richland, Sandusky, Seneca, Wyandot

Special Jurisdictional Note :

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Painter Local 788 Drywall

Type of Rate: Commercial

Change #:
LCN01-2025ib

Craft:
Painter

Effective Date:
7/23/2025

Effective Date:
7/23/2025

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Painter Drywall Finisher	\$31.73		\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$50.25	\$66.11
REFINERY RATE	\$		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Painter Drywall Finisher	\$33.52		\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$52.04	\$68.80
POWERHOUSE RATE	\$		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Painter Drywall Finisher	\$36.40		\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$54.92	\$73.12
Apprentice	BHR	Percent										
1st Year	\$20.62	\$65.00	\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$39.14	\$49.45
2nd Year	\$23.80	\$75.00	\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$42.32	\$54.22
3rd Year	\$28.56	\$90.00	\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$47.08	\$61.36

(*)Special Calculation Note :

Apprentice rate based upon % of each classification.

A. \$0.50 per hour shall be added to the rate of pay for the classification of work, while working: Swing stage, Boatswain Chair, Needle Beam & Horizontal Cable.

B. \$1.00 per hour shall be added to the rate of pay for the classification of work, while operating: Any spray equipment, Sandblasting, Cob blasting, High Pressure Water blasting (4000 PSI), and for Automatic Taping & Finishing Tools for Drywall.

C. \$0.50 per hour shall be added to the rate of pay for the classification of work, for tending: three (3) or more sprayers.

D. \$1.00 per hour shall be added to the rate of pay for the classification of work, for the application of: Catalyzed Epoxy, including latex Epoxy that is deemed hazardous, Lead Abatement, or for work or material, where special precautions beyond normal work duties must be taken. Questionable work or material shall be approved by the Business Representative and/or Joint Trade Board.

E. \$1.00 per hour shall be added to the rate of pay for the classification of work, for working on: Stacks, Tanks, and Towers over forty (40) feet in height.

F. \$0.40 per hour shall be added to the rate of pay for the classification of work, for Paperhanging.

G. \$1.00 per hour shall be added to the rate of pay for the classification of work, for Spray Painting.

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Crawford, Erie, Hancock, Huron, Marion, Morrow, Ottawa, Richland, Sandusky, Seneca, Wyandot

Special Jurisdictional Note :

Details :

Class 5: Quality Control/Q uality Assurance , Traffic Safety, Competen t Person	\$34.71		\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$53.23	\$70.58
Apprentice	BHR	Percent										
1st Year	\$29.20	\$70.00	\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$47.72	\$62.32
2nd Year	\$33.37	\$80.00	\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$51.89	\$68.57
3rd Year	\$37.54	\$90.00	\$9.52	\$8.55	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$56.06	\$74.83

(*)Special Calculation Note :

Apprentice pay based upon percentage of each classification.

Ratio :

1 Apprentice to 1 Journeyman

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Crawford, Erie, Hancock, Huron, Marion, Morrow, Ottawa, Richland, Sandusky, Seneca, Wyandot

Special Jurisdictional Note :

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Plasterer & Drywall Finisher Local 886 (Toledo)

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Plasterer

Effective Date:
7/1/2026

Effective Date:
7/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Plasterer & Drywall Finisher	\$38.00		\$10.71	\$8.00	\$1.33	\$0.00	\$6.00	\$0.00	\$0.00	\$0.00	\$64.04	\$83.04
Apprentice	BHR	Percent										
Improver	\$22.80	\$60.00	\$10.71	\$8.00	\$1.33	\$0.00	\$6.00	\$0.00	\$0.00	\$0.00	\$48.84	\$60.24
1st Year	\$24.70	\$65.00	\$10.71	\$8.45	\$1.26	\$0.00	\$6.00	\$0.00	\$0.00	\$0.00	\$51.12	\$63.47
2nd Year	\$28.50	\$75.00	\$10.71	\$8.45	\$1.26	\$0.00	\$6.00	\$0.00	\$0.00	\$0.00	\$54.92	\$69.17
3rd Year	\$32.30	\$85.00	\$10.71	\$8.45	\$1.26	\$0.00	\$6.00	\$0.00	\$0.00	\$0.00	\$58.72	\$74.87
4th Year	\$36.10	\$95.00	\$10.71	\$8.45	\$1.26	\$0.00	\$6.00	\$0.00	\$0.00	\$0.00	\$62.52	\$80.57

(*)Special Calculation Note :

Drywall Finishers will receive the same rates of pay as Plasterers.

An Improver receive no fringe benefits for the first ninety (90) days of employment.

Workers on Swing Stage will be paid twenty-five cents (\$.25) per hour above the regular journeyman rate of pay.

Nozzle premium of seventy-five cents (\$.75) per hour above journeyman rate will be paid for nozzleman or operator for fireproofing only.

Ratio :

1 Journeyman to 1 Apprentice

3 Journeymen to 1 Apprentice thereafter

Jurisdiction (* denotes special jurisdictional note) :

Allen, Auglaize, Defiance, Erie, Fulton, Hancock, Hardin, Henry, Huron, Logan, Lucas, Mercer, Ottawa, Paulding, Putnam, Sandusky, Seneca, Van Wert, Williams, Wood

Special Jurisdictional Note :

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Plumber Pipefitter Local 42

Type of Rate: Commercial

Change #:
LCN01-2025ib

Craft:
Plumber Pipefitter

Effective Date:
7/1/2026

Effective Date:
7/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Plumber Pipefitter	\$44.87		\$13.02	\$12.73	\$1.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$72.20	\$94.63
Plumber Pipefitter Heavy Industrial	\$45.37		\$13.02	\$12.73	\$1.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$72.70	\$95.38
Apprentice Heavy Industrial	\$		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1st Year	\$23.89		\$8.92	\$0.00	\$1.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.39	\$46.34
2nd Year	\$28.04		\$13.02	\$8.51	\$1.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$51.15	\$65.17
3rd Year	\$32.58		\$13.02	\$8.51	\$1.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$55.69	\$71.98
4th Year	\$36.11		\$13.02	\$9.51	\$1.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$60.22	\$78.28
5th Year	\$39.65		\$13.02	\$10.51	\$1.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$64.76	\$84.58
Apprentice	BHR	Percent										
1st Year	\$23.68	\$52.78	\$8.92	\$0.00	\$1.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.18	\$46.02
2nd Year	\$27.78	\$61.92	\$13.02	\$8.51	\$1.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$50.89	\$64.78
3rd Year	\$32.26	\$71.90	\$13.02	\$8.51	\$1.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$55.37	\$71.50
4th Year	\$35.75	\$79.68	\$13.02	\$9.51	\$1.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$59.86	\$77.73
5th Year	\$39.24	\$87.46	\$13.02	\$10.51	\$1.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$64.35	\$83.97

(*)Special Calculation Note :

Ratio :

1 Journeyman to 1 Apprentice
2 Journeymen to 2 Apprentices
3 Journeymen to 3 Apprentices
4-6 Journeymen to 4 Apprentices
7-10 Journeymen to 5 Apprentices
11-13 Journeymen to 6 Apprentices
14-15 Journeymen to 7 Apprentices
16-18 Journeymen to 8 Apprentices
19-20 Journeymen to 9 Apprentices
21-23 Journeymen to 10 Apprentices
24-26 Journeymen to 11 Apprentices
27-30 Journeymen to 12 Apprentices
31-34 Journeymen to 13 Apprentices
35-38 Journeymen to 14 Apprentices
39-40 Journeymen to 15 Apprentices
Then 1 Journeyman to 5 Apprentices thereafter

Water Treatment Work described below is a ratio of: 1 Journeyman to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Crawford, Erie, Huron, Knox, Lorain, Morrow, Richland, Wyandot

Special Jurisdictional Note :

Details :

Includes but not limited to: all water services from main to building including water meters and water meter foundations, all lawn sprinkler work including piping, fittings, and lawn sprinkler heads, all power plant piping of every description. All fire extinguishing systems and piping whether by water, steam, gas, or chemical, fire alarm piping and control tubing. On Water Treatment Plants, waste water treatment plants, prefabricated water treatment plants, lift stations, elevated water tanks, meter vaults, underground work on site at treatment, water mains and fire protection external mains, all construction work on public utilities obtained by employer other than plumbing and heating. On all construction projects wherein the work involves sanitary sewers, storm sewers and water lines (site work) performed outside the structure of the building.

Prevailing Wage Rate Skilled Crafts

Name of Union: Roofer Local 88

Type of Rate: Commercial

Change #:
ORC01-2026ib

Craft:
Roofer

Effective Date:
6/17/2026

Effective Date:
6/17/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Roofer	\$35.00		\$10.91	\$10.80	\$0.40	\$0.00	\$3.10	\$0.21	\$0.00	\$0.00	\$60.42	\$77.92
HELPERS	\$		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Helper -500 Hrs. 1st 6 months	\$20.00		\$2.25	\$0.00	\$0.40	\$0.00	\$3.10	\$0.21	\$0.00	\$0.00	\$25.96	\$35.96
Helper - 500 Hrs. 2nd 6 months	\$22.75		\$10.91	\$10.80	\$0.40	\$0.00	\$3.10	\$0.21	\$0.00	\$0.00	\$48.17	\$59.55
2nd year Helper	\$24.50		\$10.91	\$10.80	\$0.40	\$0.00	\$3.10	\$0.21	\$0.00	\$0.00	\$49.92	\$62.17
3rd year Helper	\$26.25		\$10.91	\$10.80	\$0.40	\$0.00	\$3.10	\$0.21	\$0.00	\$0.00	\$51.67	\$64.80
4th year Helper	\$28.00		\$10.91	\$10.80	\$0.40	\$0.00	\$3.10	\$0.21	\$0.00	\$0.00	\$53.42	\$67.42
5th year Helper	\$29.75		\$10.91	\$10.80	\$0.40	\$0.00	\$3.10	\$0.21	\$0.00	\$0.00	\$55.17	\$70.05
Apprentice	BHR	Percent										
1st 6 months w/500 hrs	\$22.75	\$65.00	\$10.91	\$10.80	\$0.40	\$0.00	\$3.10	\$0.21	\$0.00	\$0.00	\$48.17	\$59.55
2nd 6 months w/500 hrs	\$24.50	\$70.00	\$10.91	\$10.80	\$0.40	\$0.00	\$3.10	\$0.21	\$0.00	\$0.00	\$49.92	\$62.17
3rd 6 months w/500 hrs	\$26.25	\$75.00	\$10.91	\$10.80	\$0.40	\$0.00	\$3.10	\$0.21	\$0.00	\$0.00	\$51.67	\$64.80
4th 6 months w/500 hrs	\$28.00	\$80.00	\$10.91	\$10.80	\$0.40	\$0.00	\$3.10	\$0.21	\$0.00	\$0.00	\$53.42	\$67.42
5th 6 months w/500 hrs	\$29.75	\$85.00	\$10.91	\$10.80	\$0.40	\$0.00	\$3.10	\$0.21	\$0.00	\$0.00	\$55.17	\$70.05
6th 6 months w/500 hrs	\$31.50	\$90.00	\$10.91	\$10.80	\$0.40	\$0.00	\$3.10	\$0.21	\$0.00	\$0.00	\$56.92	\$72.67
7th 6 months w/500 hrs	\$33.25	\$95.00	\$10.91	\$10.80	\$0.40	\$0.00	\$3.10	\$0.21	\$0.00	\$0.00	\$58.67	\$75.30

(*)Special Calculation Note :

Other: \$0.07 Drug Education, \$0.05 Construction Industry Development Board, \$0.09 International Training Fund
Roofers working in any form of coal tar pitch, whether hot or cold, installing and/or removing will be paid \$.25 more per hour.

Ratio :

1 Journeyman to 1 Apprentice to 1 Helper
No helper shall be used on any one job unless 1 Journeyman and 1 Apprentice are working on said job

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Carroll, Coshocton, Crawford, Holmes, Huron, Medina, Portage, Richland, Stark, Summit, Tuscarawas, Wayne

Special Jurisdictional Note :

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Sheet Metal Local 33 (Vermilion)

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Sheet Metal Worker

Effective Date:
6/17/2026

Effective Date:
6/17/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Sheet Metal Worker	\$37.38		\$11.90	\$12.66	\$0.98	\$0.00	\$5.49	\$0.00	\$0.00	\$0.00	\$68.41	\$87.10
Apprentice	BHR	Percent										
1st Year	\$22.43	\$60.00	\$11.90	\$7.60	\$0.22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$42.15	\$53.36
2nd Year	\$24.30	\$65.00	\$11.90	\$8.23	\$0.98	\$0.00	\$2.75	\$0.00	\$0.00	\$0.00	\$48.16	\$60.31
3rd Year	\$28.04	\$75.02	\$11.90	\$9.50	\$0.98	\$0.00	\$2.75	\$0.00	\$0.00	\$0.00	\$53.17	\$67.19
4th Year	\$29.90	\$80.00	\$11.90	\$10.13	\$0.98	\$0.00	\$2.75	\$0.00	\$0.00	\$0.00	\$55.66	\$70.61

(*)Special Calculation Note :

Ratio :

1 Journeyman to 1 Apprentice
 2 Journeymen to 1 Apprentice
 3 Journeymen to 2 Apprentices
 5 Journeymen to 3 Apprentices
 7 Journeymen to 4 Apprentices
 9 Journeymen to 5 Apprentices
 11 Journeymen to 6 Apprentices
 14 Journeymen to 7 Apprentices
 17 Journeymen to 8 Apprentices
 19 Journeymen to 8 Apprentices
 Thereafter 3 Journeymen to 1 Apprentice Ratio

Jurisdiction (* denotes special jurisdictional note) :

Erie, Huron, Lorain, Sandusky

Special Jurisdictional Note :

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Sheet Metal Local 33 Industrial Door

Type of Rate: Commercial

Change #:
LCN01-2025ib

Craft:
Sheet Metal Worker

Effective Date:
8/1/2025

Effective Date:
8/1/2025

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Sheet Metal Worker	\$26.53		\$8.71	\$5.66	\$0.19	\$0.00	\$2.61	\$0.61	\$0.00	\$0.00	\$44.31	\$57.58
Apprentice	BHR	Percent										
Probationary Period (60 Days)	\$13.80	\$52.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$13.80	\$20.70
61st day -12 months	\$15.39	\$58.00	\$8.71	\$1.96	\$0.19	\$0.00	\$1.68	\$0.35	\$0.00	\$0.00	\$28.28	\$35.98
2nd Year	\$18.04	\$68.00	\$8.71	\$1.96	\$0.19	\$0.00	\$1.90	\$0.41	\$0.00	\$0.00	\$31.21	\$40.23
3rd Year	\$19.37	\$73.00	\$8.71	\$1.96	\$0.19	\$0.00	\$2.05	\$0.45	\$0.00	\$0.00	\$32.73	\$42.41
4th Year	\$21.22	\$80.00	\$8.71	\$1.96	\$0.19	\$0.00	\$2.17	\$0.49	\$0.00	\$0.00	\$34.74	\$45.35
5th Year	\$22.82	\$86.00	\$8.71	\$1.96	\$0.19	\$0.00	\$2.31	\$0.52	\$0.00	\$0.00	\$36.51	\$47.92

(*)Special Calculation Note :

Other: Holiday Pay

Ratio :

1-2 Journeyman to 1 Trainee
 3-4 Journeymen to 2 Trainee
 5-6 Journeymen to 3 Trainees
 7-8 Journeymen to 4 Trainees
 9-10 Journeymen to 5 Trainees
 11-13 Journeymen to 6 Trainees
 14-16 Journeymen to 7 Trainees
 17-19 Journeymen to 8 Trainees
 Maintaining a 3 Journeymen to 1 Trainee ratio thereafter

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Ashtabula, Carroll, Columbiana, Coshocton, Crawford, Cuyahoga, Defiance, Erie, Fulton, Geauga, Hancock, Henry, Holmes, Huron, Lake, Lorain, Lucas, Mahoning, Medina, Ottawa, Paulding, Portage, Putnam, Richland, Sandusky, Seneca, Stark, Summit, Trumbull, Tuscarawas, Wayne, Williams, Wood

Special Jurisdictional Note :

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Sprinkler Fitter Local 669

Type of Rate: Commercial

Change #:
LCR01-2025ib

Craft:
Sprinkler Fitter

Effective Date:
8/6/2025

Effective Date:
8/6/2025

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Sprinkler Fitter	\$48.28		\$12.40	\$7.40	\$0.54	\$0.00	\$7.74	\$0.00	\$0.00	\$0.00	\$76.36	\$100.50
Apprentice	BHR	Percent										
CLASS 1	\$24.14	\$50.00	\$9.03	\$0.00	\$0.54	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33.71	\$45.78
CLASS 2	\$27.04	\$56.00	\$9.03	\$0.00	\$0.54	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.61	\$50.13
CLASS 3	\$29.45	\$61.00	\$12.40	\$7.40	\$0.54	\$0.00	\$1.15	\$0.00	\$0.00	\$0.00	\$50.94	\$65.66
CLASS 4	\$31.38	\$65.00	\$12.40	\$7.40	\$0.54	\$0.00	\$1.15	\$0.00	\$0.00	\$0.00	\$52.87	\$68.56
CLASS 5	\$33.31	\$69.00	\$12.40	\$7.40	\$0.54	\$0.00	\$1.40	\$0.00	\$0.00	\$0.00	\$55.05	\$71.70
CLASS 6	\$36.21	\$75.00	\$12.40	\$7.40	\$0.54	\$0.00	\$1.40	\$0.00	\$0.00	\$0.00	\$57.95	\$76.05
CLASS 7	\$38.14	\$79.00	\$12.40	\$7.40	\$0.54	\$0.00	\$1.40	\$0.00	\$0.00	\$0.00	\$59.88	\$78.95
CLASS 8	\$40.56	\$84.00	\$12.40	\$7.40	\$0.54	\$0.00	\$1.40	\$0.00	\$0.00	\$0.00	\$62.30	\$82.58
CLASS 9	\$42.97	\$89.00	\$12.40	\$7.40	\$0.54	\$0.00	\$1.40	\$0.00	\$0.00	\$0.00	\$64.71	\$86.19
CLASS 10	\$44.90	\$93.00	\$12.40	\$7.40	\$0.54	\$0.00	\$1.40	\$0.00	\$0.00	\$0.00	\$66.64	\$89.09

(*)Special Calculation Note :

Ratio :

1 Journeyman to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Adams, Allen, Ashland, Ashtabula, Athens, Auglaize, Belmont, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Darke, Defiance, Delaware, Erie, Fairfield, Fayette, Franklin, Fulton, Gallia, Greene, Guernsey, Hamilton, Hancock, Hardin, Harrison, Henry, Highland, Hocking, Holmes, Huron, Jackson, Jefferson, Knox, Lawrence, Licking, Logan, Lucas, Madison, Mahoning, Marion, Medina, Meigs, Mercer, Miami, Monroe, Montgomery, Morgan, Morrow, Muskingum, Noble, Ottawa, Paulding, Perry, Pickaway, Pike, Portage, Preble, Putnam, Richland, Ross, Sandusky, Scioto, Seneca, Shelby, Stark, Summit, Trumbull, Tuscarawas, Union, Van Wert, Vinton, Warren, Washington, Wayne, Williams, Wood, Wyandot

Special Jurisdictional Note :

Details :

Sprinkler Fitter work shall consist of the installation, dismantling, maintenance, repairs, adjustments, and corrections of all fire protection and fire control systems including the unloading, handling by hand, power equipment and installation of all piping or tubing, appurtenances and equipment pertaining thereto, including both overhead and underground water mains, fire hydrants and hydrant mains, standpipes and hose connections to sprinkler systems used in connection with sprinkler and alarm systems. Also all tanks and pumps connected thereto, also included shall be CO-2 and Cardox Systems, Dry Chemical Systems, Foam Systems and all other fire protection systems.

Prevailing Wage Rate Skilled Crafts

Name of Union: Truck Driver Locals 20,40,92,100,175,284,348,377,637,697,908,957 - Bldg & HevHwy Class 1

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Truck Driver

Effective Date:
5/1/2026

Effective Date:
5/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Truck Driver CLASS 1	\$34.90		\$10.75	\$9.60	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$55.75	\$73.20
Apprentice	BHR	Percent										
First 6 months	\$27.92	\$80.00	\$10.75	\$9.60	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$48.77	\$62.73
7-12 months	\$29.67	\$85.02	\$10.75	\$9.60	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$50.52	\$65.36
13-18 months	\$31.41	\$90.00	\$10.75	\$9.60	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$52.26	\$67.97
19-24 months	\$33.16	\$95.02	\$10.75	\$9.60	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$54.01	\$70.59
25-30 months	\$34.90	\$100.00	\$10.75	\$9.60	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$55.75	\$73.20

(*)Special Calculation Note :

Ratio :

3 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Adams, Allen, Ashland, Ashtabula, Athens, Auglaize, Belmont, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Darke, Defiance, Delaware, Erie, Fairfield, Fayette, Franklin, Fulton, Gallia, Greene, Guernsey, Hamilton, Hancock, Hardin, Harrison, Henry, Highland, Hocking, Holmes, Huron, Jackson, Jefferson, Knox, Lawrence, Licking, Logan, Lorain, Lucas, Madison, Mahoning, Marion, Medina, Meigs, Mercer, Miami, Monroe, Montgomery, Morgan, Morrow, Muskingum, Noble, Ottawa, Paulding, Perry, Pickaway, Pike, Portage, Preble, Putnam, Richland, Ross, Sandusky, Scioto, Seneca, Shelby, Stark, Summit, Trumbull, Tuscarawas, Union, Van Wert, Vinton, Warren, Washington, Wayne, Williams, Wood, Wyandot

Special Jurisdictional Note :

Details :

CLASS 1: Drivers on trucks, including but not limited to: 4-wheel service trucks; 4-wheel dump trucks; batch trucks; drivers on tandems; truck sweepers (not to include power sweepers and scrubbers) Drivers on tractor – trailer combinations including but not limited to the following: Semi-tractor trucks; pole trailers; ready-mix trucks; fuel trucks; all trucks five (5) axle and over; drivers on belly dumps; truck mechanics (when needed).

Prevailing Wage Rate Skilled Crafts

Name of Union: Truck Driver Locals 20,40,92,100,175,284,348,377,637,697,908,957 - Bldg & Hwy Class 2

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Truck Driver

Effective Date:
5/1/2026

Effective Date:
5/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Truck Driver CLASS 2	\$35.91		\$10.75	\$9.60	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$56.76	\$74.72
Apprentice	BHR	Percent										
First 6 months	\$28.72	\$79.99	\$10.75	\$9.60	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$49.57	\$63.93
7-12 months	\$30.52	\$85.00	\$10.75	\$9.60	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$51.37	\$66.63
13-18 months	\$32.32	\$90.00	\$10.75	\$9.60	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$53.17	\$69.33
19-24 months	\$34.11	\$95.00	\$10.75	\$9.60	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$54.96	\$72.02
25-30 months	\$35.91	\$100.00	\$10.75	\$9.60	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$56.76	\$74.72

(*)Special Calculation Note :

Ratio :

3 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Adams, Allen, Ashland, Ashtabula, Athens, Auglaize, Belmont, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Darke, Defiance, Delaware, Erie, Fairfield, Fayette, Franklin, Fulton, Gallia, Greene, Guernsey, Hamilton, Hancock, Hardin, Harrison, Henry, Highland, Hocking, Holmes, Huron, Jackson, Jefferson, Knox, Lawrence, Licking, Logan, Lorain, Lucas, Madison, Mahoning, Marion, Medina, Meigs, Mercer, Miami, Monroe, Montgomery, Morgan, Morrow, Muskingum, Noble, Ottawa, Paulding, Perry, Pickaway, Pike, Portage, Preble, Putnam, Richland, Ross, Sandusky, Scioto, Seneca, Shelby, Stark, Summit, Trumbull, Tuscarawas, Union, Van Wert, Vinton, Warren, Washington, Wayne, Williams, Wood, Wyandot

Special Jurisdictional Note :

Details :

CLASS 2: Drivers on articulated dump trucks; rigid-frame rock trucks; distributor trucks; low boys/drag driver on the construction site only and heavy duty equipment (irrespective of load carried) when used exclusively for transportation on the construction site only.

**SECTION 01010
DEFINITION OF CONTRACT ITEMS**

PART 1 GENERAL

1.01 FOREWORD

- A. This Section describes the various Contract Items listed in the Bid.

1.02 WORK INCLUDED

- A. Under each Item the Contractor shall furnish all labor, materials, tools, plant equipment, supplies, maintenance of equipment, heating, lighting and power, insurance and bonds, coordination, and all Work and in accordance with the Specifications Parts A, B, and Divisions 1 through 16 of Part C and necessary to complete the Work in accordance with the obvious or expressed intent of the Contract Documents.
- B. The removal and proper disposal of debris generated by work under each Item shall be included in that corresponding Item.

1.03 WORKMANSHIP AND MATERIALS

- A. The quality of workmanship and materials entering into any and all of the Items and the Work included shall conform to pertinent sections, paragraphs, sentences, and clauses, both directly and indirectly applicable thereto, contained in the Contract Documents, whether or not direct reference to such occurs under each Item in this Section.

1.04 PAYMENT

- A. The lump sum and unit prices stated in the Bid shall be payment in full for the completion of all Work specified and described or required to be included in the Contract, complete, and ready for use.

1.05 CONTRACT ITEMS

- A. The contract items are defined on the following pages.
- B. The alternate bid items are identified by the suffix -alt on the bid form. The Owner may select the Alternate Bid Items at the Owner's discretion.

**ITEM 1
MOBILIZATION AND DEMOBILIZATION**

1.01 DESCRIPTION

- A. This Item is intended to pay non-recurring cost to the Contractor not recovered under other pay Items of the Contract.
- B. This Item shall include, but not be limited to, the cost for moving equipment in and out, performance and payment bonds, insurance, permits, utility connection cost, and other expenses associated with preparation for construction in accordance with the requirements of the Contract Documents.
- C. This Item is intended to be in accordance with the Supplemental Conditions SC 15.01, A.

1.02 WORK NOT INCLUDED

- A. Any Work specifically included under other Bid Items.

1.03 DEFINITION OF ITEM

- A. Item 1 - Includes Mobilization and Demobilization.

1.04 MEASUREMENT AND PAYMENT

- A. The lump sum stated in the Bid shall be full compensation for all Work required under Item 1.
- B. The Contractor is reminded of the requirements of Supplemental Conditions Section 15.01.A regarding Mobilization and Demobilization costs as a percentage of the total project cost.
- C. Payment shall be in accordance with Supplemental Conditions 15.01, A. The Engineer may reduce the amount to be paid under Item 1 if the percentage requested is not represented by the actual amount performed.

**ITEM 2
CLEARING AND GRUBBING**

2.01 DESCRIPTION

- A. This Item shall include all clearing and grubbing of lands required to complete the Work as specified, shown in the Contract Documents and as directed by the Engineer.
- B. This Work shall include, but not limited to, the complete removal of all vegetation including plants, shrubs, sod, agricultural crop residue, trimming and cutting of trees, removal of tree cuttings and stumps, scalping and the removal and disposal of all debris

generated by the clearing and grubbing operation as specified and shown on the Drawings.

- C. The removal of stumps and trees shall be included under these items in accordance with the Specifications and Drawings.

2.02 WORK NOT INCLUDED

- A. Any Work specifically included under other Bid Items.

2.03 DEFINITION OF ITEMS

- A. Item 2 - Clearing and Grubbing.

2.04 MEASUREMENT & PAYMENT

- A. The lump sum stated in the Bid shall be full compensation for all Work required under Item 2.

ITEM 3
VIDEO RECORDING

3.01 DESCRIPTION

- A. Under this Item, the Contractor shall produce and deliver to the Owner, color video recordings of existing topography within the zone of influence within the project limits as specified and directed.

3.02 WORK NOT INCLUDED

- A. Any work specifically included under other Bid Items.

3.03 DEFINITION OF ITEM

- A. Item 4 - Video Recording of the Zone of Influence.

3.04 MEASUREMENT & PAYMENT

- A. The quantity to be paid for under Item 3 shall be a lump sum for video recording of the defined zone of influence along specified routes provided in accordance with the Specifications and Drawings.

ITEM 4
FORCE MAIN

4.01 DESCRIPTION

- A. Under these Items, the Contractor shall provide all materials, equipment, labor, supervision and coordination as necessary for the installation of the force main pipe by open-cut or trenchless methods as scheduled, as shown on the Drawings.
- B. These Items shall include all work to install the new force main by trenchless methods, including, but not limited to, the following additional items, bore and receiving pit excavation (all materials encountered, including rock) and backfill, bore-hole reaming, pipe pullback, force main pipe, casing accessories, pipe connection materials, fittings, maintenance of trenches, and connections to existing force mains.
- C. These Items shall include all Work to install the force mains by open-cut methods, including but not limited to the following: excavation; hauling excess spoil material from the Site, bedding; pipe materials; fittings; backfill; compaction; maintenance of trenches and related Work such as testing.
- D. These Items shall include all related Work and materials such as blowoffs testing, flushing, performing pressure tests as shown on the Drawings and specified in conformance with relevant Sections of the Specifications.
- E. These Items include providing all force main fittings, accessories, and appurtenances not included in other pay items. Fittings include those not shown on the plans required to avoid existing utilities shall be included under these Items incidental to the force main construction.
- F. These Items include all low-pressure sewer service fittings, accessories, and appurtenances not included in other pay items. Fittings include those not shown on the plans required to avoid existing utilities shall be included under these Items incidental to the low-pressure sewer service construction.
- G. Grinder pumps and connections from the house to the low-pressure sewer service are included in these Items.
- H. Replacement or repair of existing sewers or field drainage tiles removed or damaged as a result of construction, not included in other Items, are included in these Items.
- I. All required sheeting, shoring and trench and excavation protection is included in these Items.
- J. All Work required to dewater sewer pipe trenches and excavation is included under these Items.
- K. All relocating, holding, and replacement of other utility facilities are included under these Items, unless specifically included in other Items.

- L. The furnishing and placing of special backfill in required areas excavated for this work included under these Items is included in these Items. Special backfill for the purpose of delineation is as carried to the bottom of aggregate pavement base.
- M. Temporary support for existing utilities, locating of existing utilities, exploratory excavation and backfill required by the utility owner for existing utilities encountered during sewer construction is included under these Items.
- N. The removal and resetting of obstructions including but not limited to signs, mailboxes, landscaping, rocks, and posts shall be included under these Items, unless specifically included under other Items.
- O. Under these Items, the Contractor shall remove existing pavement material including flexible or rigid pavement, roadway base material, intermediate or surfaces courses, sidewalk or pavement base for pipeline construction as scheduled, shown on the Drawings and specified herein.
- P. The saw-cutting and preparation of the trench excavation both prior to the removal pavement for trench construction and for new pavement placement is included in these Items.
- Q. The disposal of debris generated by work performed under these Items is included in these Items.
- R. Restoration of landscape surface improvements including seeding, mulching, and fertilizing all disturbed lawn areas shall be included under these Items, unless specifically included under other Items.

4.02 WORK NOT INCLUDED

- A. Pavement replacement within the Contract limits is included under other Items.
- B. Damage to existing utilities shall be the responsibility of the Contractor.

4.03 DEFINITION OF ITEMS

- A. Item 4a - 1-1/4-inch Low Pressure Sewer Lateral.
- B. Item 4b - 2-inch Force Main.
- C. Item 4c - 3-inch Force Main.
- D. Item 4d - 6-inch Force Main.
- E. Item 4e - 6-inch Force Main in 16-inch Bored Casing.
- F. Item 4f – 16-inch Bored Casing
- G. Item 4g - Simplex Grinder Pump Station.
- H. Item 4h - Grinder Pump Station Extension Kit, 1-foot.
- I. Item 4i - Grinder Pump Station Extension Kit, 2-foot.

- J. Item 4j – Grinder Pump Station Extension Kit, 4-foot.
- K. Item 4k – Spare Grinder Pumps

4.04 MEASUREMENT & PAYMENT

- A. The quantities to be paid under Items 4a through 4e shall be the horizontal length of pipe measured parallel to the axis of the line along the surface of the ground.
- B. The quantity to be paid under Items 4f shall be the horizontal length of casing measured parallel to the axis of the line along the surface of the ground.
- C. The quantity to be paid under Item 4g shall be the full compensation for each simplex grinder pump provided in accordance with the Specifications and Drawings.
- D. The quantities to be paid under Items 4h through 4j shall be the full compensation for each grinder pump and grinder pump extension kit provided in accordance with the Specifications and Drawings.
- E. The quantity to be paid under Item 4k shall be the full compensation for each spare grinder pump provided in accordance with the Specifications and Drawings.

ITEM 5

SEWER PIPE

5.01 DESCRIPTION

- A. Under these Items, the Contractor shall remove existing sewer pipe in locations as
Under these Items, the Contractor shall furnish and perform all Work necessary for the installation of the sewer pipe as scheduled, shown on the Drawings and specified, in conformance with relevant sections of the Specifications.
- B. These Items shall include all Work to install gravity sewers by open-cut methods, including but not limited to the following: excavation; hauling excess spoil material from the Site; bedding; pipe materials; fittings; backfill; compaction; maintenance of trenches and related Work such as performing material testing; deflection and infiltration tests.
- C. Connections of new sewers to existing sewers shall be included under these Items.
- D. Maintaining existing sewers in operation and temporary flow stoppage, diversions and sewer flow bypass connections shall be included under these Items.
- E. All required sheeting, shoring and trench and excavation protection is included under these Items.
- F. All Work required to dewater sewer pipe trenches and excavations are included under these Items.

- G. Temporary support for existing utilities, locating of existing utilities, exploratory excavation and backfill required by the utility owner for existing utilities encountered during sewer construction is included under these Items.
- H. Replacement or repair of existing sewers or field drainage tiles removed or damaged as a result of construction, not included in other Items, are included in these Items.
- I. All relocating, holding, and replacement of other utility facilities are included under these Items, unless specifically included in other Items.
- J. The furnishing and placing of special backfill in required areas excavated for this work included under these Items is included in these Items. Special backfill for the purpose of delineation is as carried to the bottom of aggregate pavement base.
- K. The removal and resetting of obstructions including but not limited to signs, mailboxes, landscaping, rocks, and posts shall be included under these Items, unless specifically included under other Items.
- L. Under these Items, the Contractor shall remove existing pavement material including flexible or rigid pavement, roadway base material, intermediate or surface courses, sidewalk or pavement base for pipeline construction as scheduled, shown on the Drawings and specified herein.
- M. The saw-cutting and preparation of the trench excavation both prior to the removal pavement for trench construction and for new pavement placement is included in these Items.
- N. The disposal of debris generated by work performed under these Items is included in these Items.
- O. Restoration of landscape surface improvements including seeding, mulching, and fertilizing all disturbed lawn areas shall be included under these Items, unless specifically included under other Items.

5.02 WORK NOT INCLUDED

- A. Pavement replacement within the Contract limits is included under other Items.
- B. Damage to existing utilities shall be the responsibility of the Contractor.
- C. Closed circuit television inspection of new sewers 8-inches in diameter and larger installed as part of the Work are included in other Items.

5.03 DEFINITION OF ITEM

- A. Item 5a - 6-inch Lateral, Public Property.
- B. Item 5b - 6-inch Lateral in Bored Casing.
- C. Item 5c - 8-inch Sanitary Sewer
- D. Item 5d - 8-inch Sanitary Sewer in Bored Casing

- E. Item 5e – 18-inch Bored Casing
- F. Item 5f - 4-inch Storm Sewer
- G. Item 5g - 6-inch Storm Sewer
- H. Item 5h - 8-inch Storm Sewer
- I. Item 5i - Cleanouts.

5.04 MEASUREMENT & PAYMENT

- A. The quantities to be paid under Item 5a shall be the length of pipe measured parallel to the axis including the vertical rise in the case of a riser, with no deduction for laying length of fittings for the specified sizes and trench detail, unless otherwise amended herein. **(Addendum 2, Issued August 6, 2026)**
- B. The quantities to be paid under Items 5ab **(Addendum 2, Issued August 6, 2026)** through 5h shall be the horizontal length of pipe or casing measured parallel to the axis of the line along the surface of the ground, with no deduction for laying length of fittings for the specified sizes and trench detail, unless otherwise amended herein.
- C. Measurement will be to the center of existing and new manholes or catch basins and the inside face of chambers. No deduction will be made for precast manholes on lines of the same size. Where branches or lines of different diameters enter such manholes, each will be measured to the center thereof.
- D. The quantity to be paid under Item 6gi **(Addendum 2, Issued August 6, 2026)** shall be the full compensation for each cleanout provided in accordance with the Specifications and Drawings.

ITEM 6 MANHOLE STRUCTURES

6.01 DESCRIPTION

- A. Under these Items, the Contractor shall construct manholes and drops in locations and of types shown and scheduled on the Drawings and in accordance with the Contract Documents.
- B. These Items shall include all Work to install the manholes by open-cut methods, including but not limited to the following: excavation; hauling excess spoil material from the Site, bedding; manhole materials; backfill; compaction; maintenance of trenches and related Work such as performing material testing.
- C. Work beyond the specified pay limits for the pipe trench, but necessary for the placement of the manholes, shall be included under these Items. Such Work shall include excavation of any material encountered, special backfill material, and pavement replacement.

- D. All castings, accessories and appurtenances required for manhole structures shown on the Drawings are included in these Items.
- E. Connections of new sewers to existing manholes shall be included under these Items.
- F. All required sheeting, shoring and trench and excavation protection is included in these Items.
- G. All Work required to dewater manhole excavations is included under these Items.
- H. The furnishing and placing of special backfill in required areas excavated for this work included under these Items is included in these Items.
- I. All relocating, holding, and replacement of other utility facilities are included under these Items, unless specifically included in other Items.
- J. Temporary support for existing utilities, locating of existing utilities, exploratory excavation and backfill required by the utility owner for existing utilities encountered during sewer construction is included under these Items.
- K. Under these Items, the Contractor shall remove existing pavement material including flexible or rigid pavement, roadway base material, intermediate or surfaces courses, sidewalk or pavement base for pipeline construction as scheduled, shown on the Drawings and specified herein.
- L. The saw-cutting and preparation of the trench excavation both prior to the removal pavement for trench construction and for new pavement placement is included in these Items.
- M. The disposal of debris generated by work performed under these Items is included in these Items.
- N. Restoration of landscape surface improvements including seeding, mulching, and fertilizing all disturbed lawn areas shall be included under these Items.

6.02 WORK NOT INCLUDED

- A. The excavation and backfill of unsuitable subgrade materials encountered as part of the work is included under other Items.

6.03 DEFINITION OF ITEMS

- A. Item 6a - Sanitary Sewer Manhole, Type I.
- B. Item 6b - Sanitary Sewer Manhole, Type I with Outside Drop.
- C. Item 6c - New Pipe Connection to Existing Manhole.
- D. Item 6d - Flushing Connection Structure.
- E. Item 6e - Flow Meter Manhole Structure.
- F. Item 6f - 3-inch Force Main Air Release Manhole Structure.

- G. Item 6g - 6-inch Force Main Air Release Manhole Structure.
- H. Item 6h – 2-inch Force Main Air Release Manhole Structure. (Addendum 2, Issued August 6, 2026)

6.04 MEASUREMENT & PAYMENT

- A. The quantities to be paid under Items 6a, and 6b and 6h (Addendum 2, Issued August 6, 2026) shall be full compensation for each vertical foot of complete manhole provided in accordance with the Specifications and Drawings.
- B. The quantity to be paid under Item 6c shall be full compensation for each new connection to an existing manhole in accordance with the Specifications and Drawings.
- C. The quantities to be paid under Items 6d through 6g shall be full compensation for each complete flushing connection, flow meter manhole, and air release valve manhole provided in accordance with the Specifications and Drawings.

ITEMS 7 CATCH BASINS

7.01 DESCRIPTION

- A. Under these Items, the Contractor shall perform all Work necessary for the construction of new catch basins, shown on the Drawings, and specified herein.
- B. These Items shall include all Work to install the catch basins, including but not limited to the following: excavation; sloping & shoring excavations; hauling and disposal of material from Site; backfill; special backfill; catch basin concrete collars; compaction; bedding; pipe materials; fittings; connections to new and existing sewers; construction, maintenance and removal of temporary access to the Work area; and related Work such as performing material testing.
- C. All Work required to dewater trenches is included under these Items.
- D. Temporary supporting existing utilities, locating existing utilities, exploratory excavation and backfill required by the utility owner for existing utilities encountered during construction is included under these Items.
- E. Under these Items, the Contractor shall remove existing pavement material including flexible or rigid pavement, roadway base material, intermediate or surfaces courses, sidewalk or pavement base for pipeline construction as scheduled, shown on the Drawings and specified herein.
- F. The saw-cutting and preparation of the trench excavation both prior to the removal pavement for trench construction and for new pavement placement is included in these Items.

- G. The disposal of debris generated by work performed under these Items is included in these Items.
- H. Restoration of landscape surface improvements including seeding, mulching, and fertilizing all disturbed lawn areas shall be included under this Item, unless specifically included under other Items.

7.02 WORK NOT INCLUDED

- A. Pavement replacement within Contract limits is included for payment under other Items.
- B. Sewer pipe, including the catch basin lead, shall be included under the respective sewer pipe item.

7.03 DEFINITION OF ITEMS

- A. Item 7a - Catch Basin, ODOT Type 2-2B.
- B. Item 7b - Catch Basin Removed.

7.04 MEASUREMENT & PAYMENT

- A. The quantity to be paid under Item 8a shall be the full compensation for each new catch basin furnished and installed in accordance with the Specifications and Drawings.
- B. The price stated in the Bid for Item 8b shall be full compensation for each existing catch basin removed in accordance with the Specifications and Drawings and so measured.

ITEM 8
SEWER PIPE REPAIR

8.01 DESCRIPTION

- A. Under these Items, the Contractor shall furnish and perform all work necessary for the installation of the sewer pipe as scheduled, shown on the Drawings and specified, in conformance with relevant sections of the Specifications.
- B. These Items shall include all work to install the sewers, including but not limited to the following: excavation; hauling excess spoil material from project site; backfill; compaction; bedding; pipe materials; fittings; maintenance of trenches; temporary pavement; connections to existing sewers; and related work such as performing material testing; deflection and infiltration tests.
- C. Connections of new sewers to existing sewers shall be included under these Items, unless specifically included under other Items.
- D. Maintaining existing sewers in operation and temporary flow stoppage, diversions and sewer flow by-pass connections shall be included under these Items.

- E. Under these Items, the Contractor shall remove existing pavement material including flexible or rigid pavement, roadway base material, intermediate or surfaces courses, sidewalk or pavement base for pipeline construction as scheduled, shown on the Drawings and specified herein.
- F. The saw-cutting and preparation of the trench excavation both prior to the removal pavement for trench construction and for new pavement placement is included in these Items.
- G. The disposal of debris generated by work performed under these Items is included in these Items.
- H. Restoration of landscape surface improvements including seeding, mulching, and fertilizing all disturbed lawn areas shall be included under these Items, unless specifically included under other Items.
- I. The furnishing and placing of special backfill in areas excavated for this work included under these Items.
- J. All repairs of existing utilities damaged, as a result of construction, are included under these Items. The repair of drainage pipes crossing the proposed pipes shall be considered incidental to these Items and is not specifically intended to be paid by these Items.
- K. Vertical pipe sections and riser pipes for 6-inch lateral sewers and cleanouts shall be included under these Items.

8.02 WORK NOT INCLUDED

- A. Pavement replacement within the Contract limits is included under other Items.
- B. Sewers installed to convey sewage around or through the work during construction will not be measured for payment.
- C. Damage to existing utilities shall be the responsibility of the Contractor.

8.03 DEFINITION OF ITEM

- A. Item 8a - Sewer Repair (Less Than or Equal to 15-inch Diameter).
- B. Item 8b - Sewer Repair (18-inch Diameter and Larger).

8.04 MEASUREMENT & PAYMENT

- A. The quantities to be paid for under Items 9a and 9b shall be the horizontal length in linear feet of pipe measured parallel to the axis of the line along the surface of the ground, provided in accordance with the Specifications and Drawings, with no deduction for laying length of fittings for the specified sizes and trench detail. The depth of the pipe shall be the average depth below the original ground surface of the pipe along a section between manholes.

**ITEM 9
WATER MAIN AND SERVICES**

9.01 DESCRIPTION

- A. Under these Items, the Contractor shall furnish and perform all Work necessary for the installation of the water mains and services as scheduled, shown on the Drawings and specified, in conformance with relevant sections of the Specifications.
- B. These Items shall include all Work to install the water mains, including but not limited to the following: excavation; hauling excess spoil material from Site; backfill; compaction; bedding; pipe materials; fittings; maintenance of trenches; connections to existing water mains; and related Work and materials such as blowoffs to perform disinfection, flushing, performing pressure and bacteriological tests as shown on the Drawings and specified in conformance with relevant Sections of the Specifications.
- C. Connections of new water mains to new and existing water mains shall be included under these Items. Temporary supporting of existing utilities, locating of existing utilities, exploratory excavation and backfill required by the utility owner for existing utilities encountered during construction is included under these Items. A temporary blowoff assembly for testing is required prior to the completion of the connection.
- D. The removal of existing water mains and services, including existing pipe, fittings, valves, backfill, bedding, structures, concrete encasements, and other associated appurtenances incidental to water main construction shall be included under these Items.
- E. These Items shall include all water main and service fittings, accessories and appurtenances not included in other pay items. Fittings, including those not shown on the plans required to avoid existing utilities shall be included under these Items incidental to water main construction.
- F. The furnishing and placing of special backfill in areas excavated for this work included under these Items.
- G. Reinstatement of existing water services to the new water mains shall be included under these Items.
- H. All work to dewater trenches is included in these Items.
- I. All repairs of existing utilities damaged, as a result of construction, are included under these Items.
- J. Under these Items, the Contractor shall remove existing pavement material including flexible or rigid pavement, roadway base material, intermediate or surfaces courses, sidewalk or pavement base for pipeline construction as scheduled, shown on the Drawings and specified herein.

- K. The saw-cutting and preparation of the trench excavation both prior to the removal pavement for trench construction and for new pavement placement is included in these Items.
- L. The disposal of debris generated by work performed under these Items is included in these Items.
- M. Restoration of landscape surface improvements including seeding, mulching, and fertilizing all disturbed lawn areas shall be included under these Items, unless specifically included under other Items.

9.02 WORK NOT INCLUDED

- A. Pavement replacement within the Contract limits is included under other Items.

9.03 DEFINITION OF ITEM

- A. Item 9a - Water Service Repair.
- B. Item 9b - 6-inch Water Main Repair.

9.04 MEASUREMENT & PAYMENT

- A. The quantities to be paid for under Items 10a and 10b shall be the horizontal length of pipe measured parallel to the axis of the line along the surface of the ground, provided in accordance with the Specifications and Drawings, with no deduction for laying length of fittings and valves. Vertical portions of the water main shall not be measured for payment.

ITEM 10
FLEXIBLE PAVEMENT REPAIR

10.01 DESCRIPTION

- A. Under these Items, the Contractor shall construct aggregate base, flexible pavement base and surface courses to replace pavement removed for pipeline construction as scheduled, shown on the Drawings and specified herein.
- B. The preparation of subgrade material prior to the placement of roadway base is included in these Items.
- C. The provision of the specified compaction testing is included in these Items.
- D. Bonding coats of prime or tack coats as specified are included in these Items.
- E. The provision of temporary pavement to maintain traffic is included in these Items.
- F. The repair of pavement markings damaged by the Work is included in these Items.

- G. The adjustment of structures to final grade is included in these Items.

10.02 WORK NOT INCLUDED

- A. Pavement replacement required beyond specified pay limits for construction of manholes and chambers is included for payment under other Items.
- B. The removal of pavement is included under other Items.

10.03 DEFINITION OF ITEM

- A. Item 10a - Flexible Pavement Trench Repair - Roadway.
- B. Item 10b - Flexible Pavement Trench Repair - Driveway.
- C. Item 10c - Flexible Pavement 1.25-inch Overlay.
- D. Item 10d - ODOT Item 411 Stabilized Crushed Aggregate (Berm and Drive).

10.04 MEASUREMENT

- A. Quantities to be paid for under these Items shall be the actual quantity constructed, measured in place within the limits as defined below, and scheduled on the Drawings, unless otherwise authorized by the Engineer; in which case, measurement will be made to the authorized limits. When uniform courses are specified, the volume to be paid for shall not exceed the quantity calculated from plan lines and dimensions. Bituminous materials will be measured in gallons at 60-degrees F applied at the specified rates and within the pay limits.
- B. Pay Limits:
1. Depth - As specified, scheduled, or directed by the Engineer. To differentiate from special backfill material provided to backfill pipes and appurtenance excavations, aggregate base shall only be measured for the thickness shown on the Drawings or directed by the Engineer.
 2. Length - The actual length measured.
 3. Width:
 - a. Except as otherwise scheduled on the Drawings, the width of replacement over pipe trenches shall not exceed the nominal diameter of the pipe plus 2-1/2 feet on each side for trench depths of 16 feet and less; and 4 feet on each side for trench depths greater than 16 feet. No additional width will be allowed for precast manholes or manhole chamber construction.
 4. Trench depth as used herein shall mean the distance from the original surface of the pavement to the invert grade of the main line pipe.

10.05 PAYMENT

- A. The unit prices stated in the Bid for Items 10a, 10b, and 10d shall be full compensation for each square yard of roadway or driveway repaired with flexible pavement including all specified pavement materials down to the bottom of the aggregate base course and with lift thicknesses provided in accordance with the Specifications and Drawings.
- B. The unit price stated in the Bid for Item 10c shall be full compensation for each cubic yard of roadway overlay, provided in accordance with the Specifications and Drawings.
- C. The unit price stated in the Bid for Item 10d shall be full compensation for each square yard of temporary pavement placed with the prescribed limits provided in accordance with the Specifications and Drawings.

ITEM 11
RIGID PAVEMENT REPAIR

11.01 DESCRIPTION

- A. Under these Items, the Contractor shall construct aggregate base, rigid pavement base and surface courses to replace pavement removed for pipeline construction as scheduled, shown on the Drawings and specified herein.
- B. The preparation of subgrade material prior to the placement of roadway base is included in these Items.
- C. The provision of the specified compaction testing is included in these Items.
- D. Any concrete pavement or base discovered will be measured and paid as approach.
- E. The adjustment of structures to final grade is included in these Items.

11.02 WORK NOT INCLUDED

- A. Pavement replacement required beyond specified pay limits.
- B. The replacement of non-rigid pavement base, intermediate and surface courses is included under other Items.
- C. The replacement of curbs is included under other Items.

11.03 DEFINITION OF ITEMS

- A. Item 11a - 6-inch ODOT Item 452 Non-Reinforced Concrete Pavement, Class MS (Approach).
- B. Item 11b - 4-inch Concrete Sidewalk.
- C. Item 11c - Concrete Steps.

11.04 MEASUREMENT

- A. The quantities to be paid for under these Items shall be the actual quantity constructed, measured in place within the limits as defined below, and/or scheduled on the Drawings, unless otherwise authorized by the Engineer; in which case, measurement will be made to the authorized limits. When uniform courses are specified, the volume to be paid for shall not exceed the quantity calculated from plan lines and dimensions.
- B. Pay Limits:
 - 1. Depth - As specified, scheduled, or ordered. Trench depth as used herein shall mean the distance from the original surface of the pavement to the invert grade of the main line pipe.
 - 2. Length - The actual length ordered.
 - 3. Width - Except as otherwise scheduled on the Drawings, the width of replacement over pipe trenches shall not exceed the nominal diameter of the pipe plus 2-1/2 feet on each side for trench depths 16 feet and less and 4 feet on each side for trench depths greater than 16 feet. No additional width will be allowed for precast manholes or manhole chamber construction.

11.05 PAYMENT

- A. The unit price stated in the Bid for Item 11a shall be full compensation for each square yard of rigid pavement placed within the prescribed limits down to the bottom of the aggregate base course provided in accordance with the Specifications and Drawings.
- B. The unit prices stated in the Bid for Items 11b and 11c shall be full compensation for each square foot of rigid pavement placed within the prescribed limits provided in accordance with the Specifications and Drawings.

ITEM 12

POST-CONSTRUCTION CCTV INSPECTION OF INSTALLED SEWERS (8-INCH AND LARGER)

12.01 DESCRIPTION

- A. Under this Item, the Contractor shall perform closed circuit television inspection of new sewers 8-inch and larger, installed as part of the work, as specified.
- B. Cleaning of the sewers prior to the CCTV inspection shall be included under this Item.
- C. The preparation and submittal of video records and submission to the Owner and Engineer shall be included under this Item.

12.02 WORK NOT INCLUDED

- A. Any work specifically included under other Bid Items.

12.03 DEFINITION OF ITEM

- A. Item 12 - Post-Construction Sewer Televising.

12.04 MEASUREMENT

- A. The quantity to be paid for under Item 13 shall be the horizontal length of new sewer inspected as measured, parallel to the axis of the sewer line along the surface of ground from the center of manholes. No deductions shall be made for manholes along the length of the sewer inspected.

12.05 PAYMENT

- A. The unit price stated in the Bid for Item 13 shall be full compensation for each linear foot inspected, provided in accordance with the Specifications and Drawings, so measured.

**ITEM 13
STORM WATER POLLUTION PREVENTION**

13.01 DESCRIPTION

- A. This Item shall include all Work specified in the SWPPP including preparation of a Storm Water Pollution Prevention Plan, installation, maintenance, and removal of all Storm Water Pollution Prevention measures.
- B. The weekly inspection and reporting of all Storm Water Pollution Prevention measures shall be included under this item.
- C. Obtaining permits and co-permittee coverage specified shall be included under this item.

13.02 WORK NOT INCLUDED

Not used.

13.03 DEFINITION OF ITEM

- A. Item 13 - Storm Water Pollution Prevention.

13.04 MEASUREMENT & PAYMENT

- A. The lump sum stated in the Bid shall be full compensation for all Work required under Item 14.

- B. Payment shall be made in the amount of 20% of the lump sum Bid price for Item 14 for the first monthly estimate and 5% for each monthly estimate thereafter until the lump sum Bid amount for Item 14 has been paid.
- C. The Engineer may reduce the amount to be paid under Item 14 if the percentage requested is not represented by the actual amount performed.

ITEMS 14
FORCE MAIN CLEANING

14.01 DESCRIPTION

- A. Under this Item, the Contractor shall perform the required cleaning of new force mains upon prior to the start-up of new pumping equipment in accordance with the Specifications and Drawings.
- B. This Item shall include the removal and disposal of debris generated by the cleaning operations. This includes the identification of locations for the disposal of the debris.
- C. The Contractor shall submit a time and materials basis for additional cleaning effort in accordance with the Specifications.

14.02 WORK NOT INCLUDED

- A. Any work specifically included under other Bid Items.

14.03 DEFINITION OF ITEMS

- A. Item 14 - 6-inch Force Main Cleaning.

14.04 MEASUREMENT & PAYMENT

- A. The quantity to be paid under Item 15 shall be the horizontal length of cleaned force main measured parallel to the axis of the line along the surface of the ground, provided in accordance with the Specifications and Drawings. Vertical portions of the force main shall not be measured for payment.

ITEMS 15
PUMP STATION WET WELL, VALVE ENCLOSURE,
ACCESSORIES AND APPURTENANCES

15.01 DESCRIPTION

- A. This Item includes all work shown on the Drawings and in accordance with the Specifications, Divisions 1 through 16 for the new pump station unless identified in other Items. The summary of work listed below is not intended to be an exhaustive list, instead

the list is provided to highlight major work components and to differentiate what work is not included in the other Items provided.

- B. Under this Item, the Contractor shall include materials, equipment, electrical mechanical and civil work and controls, piping and valves, labor, supervision, coordination, overhead, and profit as specified, shown on the Drawings, or otherwise required to complete and place in operation the new pump station wet well and above grade enclosure, including all specified equipment, accessories, and appurtenances with the expectation of a fully functional project at completion.
- C. The construction of the wet well, above grade enclosure along with all equipment including but not limited to valves, piping fittings, pumps control panels, floor doors and accessories and appurtenances is included in this Item.
- D. All piping and fittings needed for the connection to the new force main is included in this Item.
- E. Under this Item, the Contractor shall include materials, equipment, electrical and civil work and controls, piping and valves, labor, supervision, coordination, overhead, and profit as specified, shown on the Drawings, or otherwise required to complete and place in operation the new pig launch structure, including all specified equipment, accessories, and appurtenances with the expectation of a fully functional project at completion.
- F. The provision of new electrical equipment including a generator and ATS is included in this Items.
- G. This Item includes all excavation of materials including native soils, rock, cobbles, or other materials indicated on relevant technical documents included as referenced, not included for payment under other Items, including hauling excess spoil material from Site and the placement and compaction of backfill in excavated areas.
- H. This Item includes the design and construction of shoring & earth retaining systems as required for excavations included in this Item. The design of the shoring & earth retaining systems shall include coordination and obtaining the required permits for the Work.
- I. This item includes the maintenance of trenches and excavations including dewatering and others measures to maintain open excavations necessary for work included under this Item.
- J. The furnishing and placing of special backfill as specified in Section 02200 in areas excavated for this work included under this Item. All required testing of backfill for excavations made under this Item shall be included in this Item.
- K. The temporary support of utilities as required to complete the Work, shall be included under this Item. All repairs to existing utilities damaged, due to the Work, are included under this Item.
- L. The furnishing and placing of bollards at the pump station enclosure are included under this Item.

- M. Restoration of landscape surface improvements including seeding, mulching, and fertilizing all disturbed lawn areas shall be included under this Item.

15.02 WORK NOT INCLUDED

- A. Any work specifically included under other Bid Items.

15.03 DEFINITION OF ITEMS

- A. Item 16 - Pump Station Wet Well, Valve Building, Piping, Site Improvements, Appurtenances and Accessories.

15.04 MEASUREMENT & PAYMENT

- A. The quantity to be paid for under Item 16 shall be the lump sum for the identified scope of work in accordance with the Specifications and Drawings.

ITEM 16
FENCE

16.01 DESCRIPTION

- A. Under these Items, the Contractor shall furnish and install the fencing and accessories as shown on the Drawings and specified in conformance with relevant Sections of the Specifications.
- B. These Items shall include all the materials, equipment, labor, and supervision necessary for the installation of new fencing as shown on the Drawings and to replace fencing damaged during construction in accordance with the Contract Documents.
- C. These Items shall include the fence fabric, fence posts and rails, accessories, gates, aggregate maintenance strip, barbed wire, and concrete footings as shown on the Drawings and specified in conformance with relevant Sections of the Specifications.

16.02 WORK NOT INCLUDED

- A. Any work specifically included under other Bid Items.

16.03 DEFINITION OF ITEM

- A. Item 16a - Fence with Maintenance Strip.
- B. Item 16b - Vehicle Fence Gate.

16.04 MEASUREMENT & PAYMENT

- A. The quantity to be paid for under Item 16a shall be linear foot of fence installed and provided in accordance with the Specifications and Drawings.
- B. The quantity to be paid under Item 16b shall be for each vehicle gate installed and provided in accordance with the Specifications and Drawings. The vehicle gate for this project shall include both leaves in each Item.

ITEM 17 PRIVATE PROPERTY LATERAL

17.01 DESCRIPTION

- A. Under this Item, the Contractor shall remove existing sewer pipe in locations as Under these Items, the Contractor shall furnish and perform all Work necessary for the installation of the sewer lateral as scheduled, shown on the Drawings and specified, in conformance with relevant sections of the Specifications.
- B. This Item shall include all Work to install gravity sewer laterals by open-cut methods, including but not limited to the following: excavation; hauling excess spoil material from the Site; bedding; pipe materials; fittings; backfill; compaction; maintenance of trenches and related Work such as performing material testing; deflection and infiltration tests.
- C. Connections of private property laterals to public property laterals shall be included under this Item.
- D. This Item includes providing all lateral fittings, accessories, and appurtenances not included in other pay items. Fittings include those not shown on the plans required to avoid existing utilities shall be included under this Item incidental to the lateral construction.
- E. Replacement or repair of existing sewers or field drainage tiles removed or damaged as a result of construction, not included in other Items, are included in this Item.
- F. All required sheeting, shoring and trench and excavation protection is included in this Item.
- G. All Work required to dewater sewer pipe trenches and excavation is included under this Item.
- H. The furnishing and placing of special backfill in required areas excavated for this work included under this Item is included in these Items. Special backfill for the purpose of delineation is as carried to the bottom of aggregate pavement base.
- I. All relocating, holding, and replacement of other utility facilities are included under these Items, unless specifically included in other Items.

- J. Temporary support for existing utilities, locating of existing utilities, exploratory excavation and backfill required by the utility owner for existing utilities encountered during sewer construction is included under this Item.
- K. The removal and resetting of obstructions including but not limited to signs, mailboxes, landscaping, rocks, and posts shall be included under this Item, unless specifically included under other Items.
- L. Under this Item, the Contractor shall remove existing pavement material including flexible or rigid pavement, roadway base material, intermediate or surfaces courses, sidewalk or pavement base for pipeline construction as scheduled, shown on the Drawings and specified herein.
- M. The saw-cutting and preparation of the trench excavation both prior to the removal pavement for trench construction and for new pavement placement is included in this Item.
- N. The disposal of debris generated by work performed under these Items is included in this Item.
- O. Restoration of landscape surface improvements including seeding, mulching, and fertilizing all disturbed lawn areas shall be included under this Item, unless specifically included under other Items.

17.02 WORK NOT INCLUDED

- A. Pavement replacement within the Contract limits is included under other Items.
- B. Damage to existing utilities shall be the responsibility of the Contractor.

17.03 DEFINITION OF ITEM

- A. Item 17a - 6-inch Lateral, Private Property. (Addendum 2, Issued August 6, 2026)
- B. Item 17b – 4-inch Lateral, Private Property. (Addendum 2, Issued August 6, 2026)

17.04 MEASUREMENT & PAYMENT

- A. The quantity to be paid under Items 17a and 17b (Addendum 2, Issued August 6, 2026) shall be the horizontal length of pipe measured parallel to the axis of the line along the surface of the ground, with no deduction for laying length of fittings for the specified sizes and trench detail, unless otherwise amended herein.

ITEM 18
HOUSE CONNECTION

18.01 DESCRIPTION

- A. Under these Items, the Contractor shall remove existing sewer service pipe in locations as Under these Items, the Contractor shall furnish and perform all Work necessary for the connection of house to the service line, shown on the Drawings and specified, in conformance with relevant sections of the Specifications.
- B. These Items shall include all Work to install gravity sewers by open-cut methods, including but not limited to the following: excavation; hauling excess spoil material from the Site; bedding; pipe materials; fittings; backfill; compaction; maintenance of trenches and related Work such as performing material testing; deflection and infiltration tests.
- C. Connections of new sewers to existing sewers shall be included under these Items.
- D. All required sheeting, shoring and trench and excavation protection is included under these Items.
- E. All Work required to dewater sewer pipe trenches and excavations are included under these Items.
- F. Temporary support for existing utilities, locating of existing utilities, exploratory excavation and backfill required by the utility owner for existing utilities encountered during sewer construction is included under these Items.
- G. Replacement or repair of existing sewers or field drainage tiles removed or damaged as a result of construction, not included in other Items, are included in these Items.
- H. The furnishing and placing of special backfill in required areas excavated for this work included under these Items is included in these Items. Special backfill for the purpose of delineation is as carried to the bottom of aggregate pavement base.
- I. The removal and resetting of obstructions including but not limited to signs, mailboxes, landscaping, rocks, and posts shall be included under there Items, unless specifically included under other Items.
- J. Under these Items, the Contractor shall remove existing pavement material including flexible or rigid pavement, roadway base material, intermediate or surfaces courses, sidewalk or pavement base for pipeline construction as scheduled, shown on the Drawings and specified herein.
- K. The saw-cutting and preparation of the trench excavation both prior to the removal pavement for trench construction and for new pavement placement is included in these Items.
- L. The disposal of debris generated by work performed under these Items is included in these Items.

- M. Restoration of landscape surface improvements including seeding, mulching, and fertilizing all disturbed lawn areas shall be included under these Items, unless specifically included under other Items.

18.02 WORK NOT INCLUDED

- A. Pavement replacement within the Contract limits is included under other Items.
- B. Damage to existing utilities shall be the responsibility of the Contractor.

18.03 DEFINITION OF ITEM

- A. Item 18a - House Connection, Gravity Sewer Service.
- B. Item 18b - House Connection, Low-Pressure Sewer Service.

18.04 MEASUREMENT & PAYMENT

- A. The quantities to be paid under Items 18a and 18b shall be the full compensation for each house connection made for the gravity and low-pressure sewer service in accordance with the Specifications and Drawings.

ITEM 19
SEPTIC TANK ABANDONMENT

19.01 DESCRIPTION

- A. This Item includes all abandonment work at the existing septic tank shown on the Drawings unless identified in other Items. The summary of items listed below is not intended to be an exhaustive list, instead the list is provided to highlight major work.
- B. This Item shall include all Work to remove and safely dispose of contents inside the tanks, including but not limited to the following: waste, debris, any mechanical components, and pipe, fittings, accessories, and appurtenances.
- C. Disconnection of the septic line from the tank to the house shall be included under this Item.
- D. The filling of the existing septic tank as specified is included under this Item.
- E. This Item includes the construction of shoring & earth retaining systems as required for excavations included in this Item.
- F. This Item includes the maintenance of trenches and excavations including dewatering and others measures to maintain open excavations necessary for work included under this Item.
- G. The furnishing and placing of special backfill or specified backfill as specified in Section 02200 in areas excavated or to be abandoned for this work included under this Item.

- H. The temporary support of utilities as required to complete the Work, shall be included under this Item. All repairs to existing utilities damaged, as a result of construction, are included under this Item.
- I. Restoration of landscape surface improvements including seeding, mulching, and fertilizing all disturbed lawn areas shall be included under this Item, unless specifically included under other Items.

19.02 WORK NOT INCLUDED

- A. Any work specifically included under other Bid Items.

19.03 DEFINITION OF ITEM

- A. Item 19 - Septic Tank Abandonment.

19.04 MEASUREMENT & PAYMENT

- A. The quantity to be paid under Item 19 shall be the full compensation for each septic tank abandoned proceeding the lateral or low-pressure gravity service installation in accordance with the Specifications and Drawings.

ITEM 20
ELECTRICAL SERVICE

20.01 DESCRIPTION

- A. Under these Items, the Contractor shall furnish and install the electrical service as shown on the Drawings and specified in conformance with relevant Sections of the Specifications.
- B. These Items shall include all the materials, equipment, labor, and supervision necessary for the installation of the new grinder pump electrical service as shown on the Drawings and to replace fencing damaged during construction in accordance with the Contract Documents.
- C. These Items shall include the wire, conduit, control panel, MPZ, alarm system, level alarms/floats, disconnect switch, rack mount, concrete slab and foundation supports as shown on the Drawings and specified in conformance with relevant Sections of the Specifications.

20.02 WORK NOT INCLUDED

- A. Any work specifically included under other Bid Items.

20.03 DEFINITION OF ITEM

- A. Item 20a - Electrical Connection from Meter Base or Homeowner Provided Disconnect.
- B. Item 20b - Power Cable, 10, 4-wires
- C. Item 20c - 1-inch Conduit.

20.04 MEASUREMENT & PAYMENT

- A. The quantity to be paid for under Item 20a shall be for each electrical service installed and provided in accordance with the Specifications and Drawings.
- B. The quantity to be paid under Item 20b shall be for linear foot of power cable installed and provided in accordance with the Specifications and Drawings.
- C. The quantity to be paid under Item 20c shall be for linear foot of conduit installed and provided in accordance with the Specifications and Drawings.

ITEM 21
ADDITIONAL EXCAVATION

21.01 DESCRIPTION

- A. Under this Item, the Contractor shall excavate additional material and control groundwater as necessary in that excavation and backfill all as ordered by the Engineer. This item includes excavation, which is not otherwise shown on the contract documents. The Contractor shall over excavate and dispose of any material that the Engineer determines to be unsuitable.
- B. This work shall be done only upon authorization by the Engineer and to the extent specifically ordered by the Engineer. All work done under this Item shall comply with the provisions of Section 02200.
- C. Only the removal of unsuitable material below the elevation of the planned Work is included and will be paid for under this item.
- D. The additional work resulting from the provisions of this item will be paid as described herein. If a change in the work results in a net reduction in the quantity of excavation required by the Contract Documents, the lump sum price stated in the Bid will be reduced by a sum based on the unit price stated in the Bid for Item 2.
- E. The scope of work under this Item covers the following:
 - 1. Excavation of Unsuitable Material – This work includes controlling water, excavation, hauling and disposing of unsuitable materials, and backfilling of the resultant voids with materials that meet the requirements of engineered fill as described in Specification 02202, Section 2.01 B.1.

21.02 MEASUREMENT

- A. The quantities to be paid for under this Item shall be determined by the volume of material removed in its original place.

21.03 PAYMENT

- B. The unit price stated in the Bid shall be full compensation for each cubic yard of additional excavation ordered under the provisions of Item 21. (Addendum 2, Issued August 6, 2026)

END OF SECTION

**SECTION 01021
ALLOWANCES**

(Addendum 2, Issued August 6, 2026)

PART 1 GENERAL

1.01 SCOPE

- A. This Section includes the allowances which are to be furnished by the Contractor per Paragraph GC-13.02 of the General Conditions.
- B. The Contractor shall include in the Contract Price all allowances stated in the Contract Documents. These allowances shall cover the net cost of the materials and equipment delivered and unloaded at the Site, and all applicable taxes.
- C. The Contractor's handling costs on the Site, labor installation costs, overhead, profit and other expenses contemplated for the original allowance shall be included in the Contract Price and not in the allowance.
- D. The Contractor shall cause the Work covered by these allowances to be performed for such amounts and by such persons as the Engineer may direct, but he will not be required to employ persons against whom he makes a reasonable objection.
- E. If the cost, when determined, is more than or less than the allowance, the Contract Price shall be adjusted accordingly by Change Order.

1.02 SUBMITTALS

- A. Submittals shall be in accordance with the requirements of Section 01300 and shall include:
 - 1. Shop Drawings for Review:
 - a. Contractor shall prepare and submit proposals for the Owner to select the items included in allowance.
 - 2. Information for the Record:
 - a. Operation and maintenance manuals as may be required for items included in allowance.
 - b. Invoices and delivery slips, for items provided under the allowance, shall be submitted to the resident project representative or Engineer.

1.03 PRODUCT HANDLING

- A. The Contractor shall provide all labor, material and equipment to insure the safe delivery, handling and storage of goods until acceptance by Owner and Engineer.

1.04 GUARANTEE

- A. Contractor shall provide manufacturer's warranties to the Owner for all goods provided.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.01 COORDINATION

- A. Contractor shall advise Owner and Engineer of, and include in the schedule, the timing of the selection, Shop Drawing review and procurement of the goods or services required in the allowance.
- B. Contractor shall be responsible for the coordination, of all allowance item(s) provided, with the remainder of the contract work.

3.02 ERECTION, INSTALLATION AND APPLICATION

- A. Contractor shall assemble, install or apply all goods as may be required to complete the requirements of the allowance.

3.03 PROTECTION

- A. Contractor shall examine all goods on delivery. All damaged or defective goods shall be returned to the manufacturer for replacement.

PART 4 SPECIAL PROVISIONS

4.01 LIST OF ALLOWANCES

	Allowance
A. Telemetry System Mounting	\$75,000.00
B. Holding of Utility Poles	\$25,000.00
C. Utility Permits and Fees for Electric Service to Pump Station and Flow Meter	\$125,000.00
D. Landscaping	\$50,000.00

4.02 DEFINITION OF ALLOWANCE

- A. Telemetry System Mounting shall be in accordance with the specification, as shown on the Drawings and as directed.
- B. The Holding of Utility Poles shall be as needed for construction of the sewer system and coordinated with the utility by the Contractor.
- C. The Utility Permits for Electric Service to Pump Station shall be as needed for construction of the sewer system and coordinated with the utility by the Contractor.

R01009-08090-01
08/2026

Addendum 2
Southern 5 Sewer District
WW Collection System Ph. 1, Contract 2 - Celeryville, OH

D. Landscaping shall be as directed.

END OF SECTION

This page was intentionally left blank.

**SECTION 01043
COORDINATION AND CONTROL OF THE WORK**

PART 1 GENERAL

1.01 SCOPE

- A. This Section includes coordination and control of the Work.

1.02 SUBMITTALS

- A. Submittals shall be in accordance with the requirements of Section 01300 and shall include:
 - 1. Information for the Record:
 - a. Septic tank pumping plan
 - a. Pumping & hauling contractor(s)
 - b. Receiving facility agreement

1.03 LINES AND GRADES

- A. All Work under this Contract shall be built in accordance with the lines and grades shown on the Drawings or as altered or modified by authority of the Owner and Engineer.

1.04 EXISTING STRUCTURES SHOWN ON DRAWINGS

- A. Where underground and surface structures are shown on the Drawings, the location, depth, and dimensions of such structures are believed to be reasonably correct but are not guaranteed.
- B. Such structures are shown for the information of the Contractor, but information so given is not to be construed as a representation that such structures will in all cases be found or encountered just where shown, or that they represent all the structures which may be encountered.

1.05 COOPERATION OF CONTRACTOR

- A. The Contractor shall conduct his operations so as to interfere as little as possible with those of the Owner, other contractors, utilities, or any public authority on or near the Work.
- B. The Owner reserves the right to perform other Work by contract or otherwise, and to permit other public bodies, public utility companies, and others to do Work on or near

the project during progress of the Work. If a conflict arises, the Owner will determine when and how the Work shall proceed.

- C. Claims for delay or inconvenience due to operations of such other parties on Work specified, shown on the Drawings, as directed or which can be reasonably expected to be encountered by the nature and location of the Work will not be considered.
- D. Operations entailing the use of construction equipment and lights outside the hours of 7:00 am and 7:00 pm or outside the hours allowed for construction by local ordinances or regulations are prohibited.
- E. Closing off clear access to any public alley, street, road, avenue or boulevard without the prior consent of municipal officials and the Engineer is prohibited.
- F. Contractors and subcontractors are required under Ohio Revised Code Section 149.53 to Notify the Ohio Historical society and the Ohio Historic Site Preservation Board of archeological discoveries located in the project area and to cooperate with these entities in archeological and historical surveys.

1.06 MAINTENANCE OF SANITARY SYSTEM DURING CONSTRUCTION

- A. All construction which requires interruption of existing sanitary system flow shall be executed during periods designated by the Owner.
- B. Bypassing of untreated sanitary wastewater to any stream or body of water is prohibited.

1.07 PERMANENT PAVEMENT AND FINAL RESTORATION

- A. When construction is being done between April 15 and November 15, the final pavement restoration work shall be completed by November 15. When work is being performed between November 15 and April 15, temporary pavement as specified shall be provided. Final restoration of paved areas shall be completed within 30 days of the opening of asphalt plants for the season. The dates listed are intended to loosely define the period of operation of asphalt plants. Concrete pavement construction may continue beyond the dates listed with proper thermal protection as approved by the Owner and Roadway Authority.
- B. Pavement restoration shall include, but not limited to, replacement of pavement, driveways, and sidewalks.
- C. The fine grading, topsoil, and seeding operation shall be completed within 30 days of pavement restoration, unless weather conditions prevent such work from being completed.
- D. If at any time the pavement restoration and the fine grading, topsoil, and seeding operation does not meet the above conditions, no further mainline pipe construction will be permitted until the Contractor has completed restoration work to the satisfaction of the Engineer and Owner.

- E. In order to comply with the above conditions, the Contractor shall complete the pipeline and all appurtenances including, but not limited to, testing, in order to begin final pavement restoration and the fine grading, topsoil, and seeding operation.

1.08 TEMPORARY PAVEMENT RESTORATION

- A. The Contractor shall provide and maintain temporary pavement for all roads in which construction occurs. Temporary pavement shall be in accordance with Section 01565 and as shown on the drawings.

1.09 TEMPORARY PARKING FACILITIES

- A. No parking or staging area has been identified for this Work. The Contractor is expected to locate and obtain permission from private property owners for construction staging and parking.
- B. Parking spaces for the Contractor's personnel shall be provided and maintained in usable condition by the Contractor at all times. Provisions shall be made so that sediment is not tracked onto paved roadways from the vehicles operated by the Contractor's personnel.

1.10 TEMPORARY WATER SERVICE

- A. The source for temporary water can be from the City of Willard Village. The Contractor shall coordinate with the City Village to obtain shall furnish a meter and all backflow prevention devices through a permit obtained by the Contractor. (Addendum 2, Issued August 6, 2026)
- B. ~~There will be no charge for water used for the work and for the initial filling of the water main for testing and disinfection.~~ (Addendum 2, Issued August 6, 2026)

1.11 DISPOSAL OF DEBRIS

- A. All debris resulting from construction operations, i.e., packaging, waste materials, damaged equipment, etc., shall be trucked from the Site by the Contractor and disposed of at spoil sites.
- B. The Contractor shall police the hauling of debris to ensure that all spillage from haul trucks is promptly and completely removed from public or private rights-of-way.
- C. All debris shall be disposed of in accordance with federal, state, and local laws and regulations.

1.12 CONTROL OF NOISE

- A. The Contractor shall eliminate noise to as great an extent as possible at all times. Air compressors shall be equipped with silencers and the exhaust of all gasoline motors and other power equipment shall be provided with mufflers. In the vicinity of hospitals,

libraries, and schools, precautions shall be taken to avoid noise and other nuisance, and the Contractor shall require strict observances of all pertinent ordinances and regulations. Any blasting permitted in such locations shall be done with reduced charges.

1.13 RESERVED

1.14 DUST DEBRIS AND SMOKE PREVENTION

- A. Strict compliance with all ordinances regulating the production and emission of smoke will be required.
- B. Contractor shall control debris and dust in accordance with Section 01568.
- C. The Owner may require additional dust control measures during dry weather.
- D. The Contractor shall accept full responsibility for all damage that may occur to property as a result of negligence in providing required control.

1.15 SANITARY REGULATIONS

- A. The Contractor shall provide all necessary housing accommodations for the workers for changing clothes and for protection during inclement weather. Toilet accommodations shall also be maintained for the use of the employees on the Work. The accommodations shall be in approved locations, properly screened from public observance and shall be maintained in a strictly sanitary manner.
- B. The Contractor shall obey and enforce all other sanitary regulations and orders; shall take precautions against infectious diseases and the spread of same; and shall maintain at all times satisfactory sanitary conditions around all shanties, tool and supply houses, and on all other parts of the Work.

1.16 RESERVED

1.17 EMERGENCY MAINTENANCE SUPERVISOR

- A. The Contractor shall submit to the Engineer the names, addresses, and telephone numbers of two employees responsible for performing emergency maintenance and repairs when the Contractor is not working, See GC 2.04 and 7.01. These employees shall be designated in writing by the Contractor to act as his representative and shall have full authority to act on his behalf.
- B. Contractor shall post at job Site, in a conspicuous location, the emergency numbers for the project.
- C. Contractor shall be responsible for contacting the local fire, police, and emergency response personnel and organizations in advance of the Work. The Contractor shall be

responsible for the coordination and compliance with emergency response plans, whether developed by the governing agency, laws, or the Contractor for the project.

- D. At least one of the designated employees shall be available for a telephone call any time an emergency arises.

1.18 PUBLIC SERVICE STRUCTURES

- A. Public service structures shall be understood to include all poles, tracks, pipes, wires, conduits, house-service connections, vaults, manholes, and other appurtenances, whether owned or controlled by the Owner or other public bodies or by privately-owned corporations, used to supply the public with transportation, heating, electric, telephone, gas, water, sewer, or other services.
- B. At least a week in advance of breaking ground, the Contractor shall notify the registered underground protection service, all public bodies, and other owners of such facilities of the proposed location of his operations, advising them that their property may be affected and that such measures as they may deem necessary should be promptly taken to protect, adjust, remove, or build them.
- C. In developed residential and commercial areas, the Contractor shall assume each building and dwelling has gas, electric, cable television, telephone, water and sewer services and that they shall be protected and repaired as needed as part of the pipeline installation. No additional payment will be made for Work associated with supporting or repairs of such services.
- D. Three conditions which may be encountered will be dealt with as follows:
 - 1. Structures which are adjacent to but not included within the limits of an excavation required for performance of the Work shall be protected, supported, and maintained in service by the Contractor at his expense.
 - 2. Structures within the limits of the Work which can be satisfactorily supported and maintained in service, and which do not require removal and rebuilding in the judgment of the Engineer shall be thus supported by the Contractor at his expense, including cost of repair of damage incident to his operations.
 - a. Supports for water and gas mains, sewers, conduits, and similar structures shall be constructed of timber or other acceptable materials; shall be supported from undisturbed foundations and shall be sufficiently substantial to ensure against settlement when pipe trenches or other excavations are backfilled. In all cases where permits or inspection fees are required by utilities in connection with changes to or temporary support of their conduits, the Contractor shall secure such permits and pay all permit and inspection fees.
 - b. The Contractor shall assume full responsibility for maintaining all public service structures in service and shall support and protect or remove and rebuild them at his own expense. Such services shall not be

interrupted without permission of the owner of the public service structure.

3. In case relocation of pipelines or other utility structures is required because of direct interference, as determined jointly by the Owner, Engineer, and Contractor, with the installation of the Work, the Contractor shall notify the Owners of the utility structure involved.
 - a. The Contractor will not be reimbursed for the cost of the relocation if the interference is shown on the Drawings, described in the Specifications, apparent on visual inspection, or specifically included in the Work to be performed by the Contractor.
 - b. The Contractor will not be paid for time lost because of such direct interference. Where it is the policy of any utility owner to perform such Work with his own forces, the Contractor shall cooperate to the fullest extent with such utility owner.

1.19 UNAUTHORIZED OR PROHIBITED WORK

- A. Work done beyond the lines shown on the Drawings or ordered, Work done without required inspection, except as herein provided, or any extra work done without authority will be considered as unauthorized and will not be paid for under the provisions of the Contract. Work so done may be ordered removed at the Contractor's expense. Work done without lines and grades being given shall be considered unauthorized and subject to rejection.
- B. Disposing of excess or unsuitable materials, including but not limited to excavated material, demolition debris, clearing and grubbing debris, in wetlands or flood plains.
- C. Locating stock piles in environmentally sensitive areas.
- D. Pumping of sediment-laden water from trenches or excavations directly into any surface waters, streams, wetlands, or sewers. Pumped water shall be properly filtered and desilted prior to discharge.
- E. Open burning without a permit.
- F. Discharging injurious silica dust concentrations into the atmosphere within 200 feet of any residential or commercial, or public or private places of human occupancy.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

PART 4 SPECIAL PROVISIONS

4.01 POTENTIALLY HAZARDOUS ENVIRONMENT

- A. The environment in portions of the Site is rated as Class I Division 1 or 2 or some areas of the Site are designated as permitted Confined Spaces. As a minimum, whenever the Contractor is performing Work in these areas, the Contractor shall provide Factory Mutual- and UL-approved continuous monitoring of the atmosphere for the presence of hydrogen sulfides, of low oxygen concentration, and of explosive gases (both lighter and heavier than air). The Contractor shall evacuate all personnel from the areas whenever the detection system registers hydrogen sulfide levels of greater than 20 ppm, oxygen levels less than 19.5% or combustible gas levels of greater than 10% of the LEL. In addition, whenever the Contractor is using tools producing open flames or sparks, such as cutting torches, saws, and grinders, the Contractor shall provide for the forced air exhaust ducted from the immediate area of the Work.

4.02 REQUIRED SAFETY DOCUMENTATION TO BE SUBMITTED

- A. On all projects that require the Contractor's or subcontractor's personnel to occupy permitted confined spaces and/or hazardous atmospheres on the Site, the Contractor shall submit to the Owner, a written proposed safety program. The safety program shall comply with all Federal, State, and local requirements. If the Owner has a safety plan that is more stringent than the Federal and State requirements, it will be made available to the Contractor for review. The submittal of the proposed safety program to the Owner shall be made well in advance of the start of construction at the Site. The submittal shall include a written Safety Management Plan including Confined Space Entry procedures. The Contractor shall be responsible to maintain documentation that anyone employed by the Contractor, subcontractors, or suppliers of any tier to the Contractor occupying such hazardous locations has received the appropriate confined space entry training and other applicable training. The Contractor is also responsible to maintain completed confined space entry permits.

4.03 SEQUENCE OF CONSTRUCTION

- A. The following is a suggested sequence of construction to complete the pump station improvements while pumping capabilities during the work.
- B. The Contractor may modify this sequence but will still be responsible for meeting the contract complete dates outline in the Contract.
- C. The following is a suggested sequence of construction for the Celeryville Wastewater Collections System.
 - 1. Record preconstruction video inspection.
 - 2. Construct New Pump Station and wet well.
 - a. Construct according to site plan sheet C-2.1 and details sheet C-0.1.

- b. Install pump station according to piping and equipment sheet PE-1.1.
 - c. Construct all electrical components according to electrical detail sheets E-0.1, 0.2, 0.3, 1.1.
3. Install 8 inch sanitary sewer on pump station site.
4. Install 8 inch sanitary sewer.
 - a. Begin at pump station and work upstream and install based on plan sheets SA-1.1-15.2.
 - b. Reference sanitary sewer detail sheets SA-0.1-0.3 during installation.
5. Install the 6 inch force main.
 - a. Begin with the force main along Vogel Rd. and install with the sequence of the plan sheets FM-9.1-10.6, 11.9-12.3.
 - b. Reference force main detail sheets FM-0.1-0.3 during installation.
6. Install the low pressure force main.
 - a. Begin with the force main along Vogel Rd. and install with the sequence of the plan sheets FM-11.1-11.6, 14.2-14.3.
 - b. Reference force main detail sheets FM-0.1-0.3 during installation.
7. Complete start up and testing of new pump station.
8. Install sanitary laterals.
9. Install grinder pumps and laterals according to sheet FM-0.4.
10. Install electric service to grinder pumps
11. Complete startup and testing of grinder pumps.
12. Connect homes to grinder pump stations and sanitary laterals
13. Abandon septic tanks
14. Restoration, paving and cleanup.

4.04 UTILITY STRUCTURES AND POLES

- A. The Contractor shall be responsible for the cost and coordination required for the temporary support required for all utility poles or utility structures above or below grade inside the work limits.

4.05 PROPERTY CARD REVIEW

The contractor shall review property cards prior to the beginning of construction. Property cards are provided as a part of the bid documents.

4.06 COORDINATION WITH OUTSIDE ENTITIES

- A. The Contractor shall contact emergency services, schools, and trash collection to coordinate access to the work area.
- B. The Contractor shall provide a door hanger notice to residents and businesses of the status of the work ahead of the Work.

4.07 OTHER ISSUES

- A. The procedures for addressing coordination items not discussed herein will be discussed and decided upon at a pre-construction meeting.

END OF SECTION

This page was intentionally left blank.

**SECTION 02790
HORIZONTAL DIRECTIONAL DRILLING**

PART 1 GENERAL

1.01 SCOPE

- A. This Section includes furnishing and installing pipelines by directional drilling of the sizes, types and lengths as shown on the Drawings, specified, or directed.
- B. Pipelines constructed under this Section shall include but are not limited to sewer force mains, water mains, pressurized sanitary sewers, gravity sewer mains, and gravity house leads.
 - 1. This Section shall include furnishing all labor, components, materials, tools and appurtenances necessary or proper to install, locate, and test pipeline.
- C. Horizontal directional drilling is a method of trenchless construction using a surface launched steerable drill tool controlled from a mobile drilling frame, and includes a field power unit, drilling fluid mixing system, and mobile spoils extraction system.
 - 1. The Work generally consists of three phases, beginning with drilling a pilot hole from the surface or pit at a starting point to an exit pit at the surface beyond the obstacle or area that is to be avoided. The second phase consists of reaming the pilot hole to make it large enough for the pipeline to be installed. Finally, the pipeline is pulled into place. During the pipe pulling operation, drilling fluid (a bentonite, water, and polymer solution) is injected to stabilize the hole, remove cuttings, and lubricate the pipe.

1.02 QUALIFICATIONS

- A. Directional drilling Contractors or subcontractors shall have actively engaged in the installation of pipe using directional drilling for a minimum of five years.
- B. Field supervisory personnel employed by the directional drilling Contractor or subcontractor shall have at least three years experience in the performance of the Work and tasks required.
- C. Contractor shall provide a list of jobs with contact names and phone numbers where he has performed directional drilling operations during the last five years. A similar list of jobs shall be provided for the field supervisor personnel.

1.03 SUBMITTALS

- A. Submittals shall be in accordance with the requirements of Section 01300 and shall include:
1. Shop Drawings for Review:
 - a. Manufacturer's Shop Drawing indicating physical dimensions, joint details, fittings, and special details for each size, type, and class of pipe furnished for the project. Shop Drawings shall also note salient features of a specific pipe, i.e., concrete strength and reinforcing details.
 - b. Samples, if requested by the Engineer.
 - c. Contractor shall submit the Work plans for all segments of drilling including but not limited to the launch and recovery location and requirements, and the drill path survey.
 - d. The Contractor shall submit to the Engineer for review and comment, and compliance with permit requirements prior to commencing any Work, a detailed statement of the drilling equipment, with a pulling gauge monitor, and tracking transmitter/devices selected and procedures to be used in performance of the Work. A drilling fluid disposal plan shall also be submitted.
 - 1) During the construction, a data sheet or drilling log for each pilot hole shall be prepared to document the location and depth of the drill head in relation to the found elevation and centerline of the drilling path at a minimum of 10-foot intervals. Locating and guidance can be completed by hand wire tracing or by wireless steering tool system.
 2. Information for the Record:
 - a. Manufacturer's certification indicating that the pipe and joints meet Specifications for each production run for each size, type, and class of pipe furnished. The Engineer may request test results to verify certification.

PART 2 PRODUCTS

2.01 HDPE PIPE

- A. Polyethylene pipe shall meet the requirements of AWWA C906. Polyethylene pipe shall conform to the material designations of PPI and ASTM, PE4710, and ASTM F714. The resin shall contain antioxidants and be stabilized for protection against ultra-violet degradation. Pipe shall have a cell classification of PE 445574C and meet or exceed all requirements of ASTM D3350. Pipe shall have a designated use color stripe applied during production.

- B. Pipe size shall be DIP nominal diameters. The minimum wall thickness for the directional drilling installation process shall be DR 11.
- C. HDPE Pipe for grinder pump laterals shall be Coper Tube Size. (Addendum 2, Issued August 6, 2026)

2.02 RESERVED

2.03 RESERVED

2.04 SOURCE QUALITY CONTROL

- A. Pipe Manufacturer's Certification:
 - 1. The pipe manufacturer's certificate shall state that the materials have been sampled and tested in accordance with the provision for and meet the requirements of the designated specification and shall be signed by an authorized agent of the seller or the manufacturer.
 - 2. A test results report shall accompany the manufacturer's certificate, if requested by the Engineer. The report shall compare test results to Specification requirements. Test specimens shall be selected in conformance with the designated specification for each production run of each size, type, and class of pipe furnished and further, that in case tests are unsatisfactory, additional tests shall be made to the maximum number in the referenced ASTM or AWWA Specification.

2.05 PIPE FITTINGS

- A. HDPE fittings, including but not limited to, elbows, tees, branch saddles, adaptors and transitions shall be HDPE. Fittings shall have the same or better cell classification as the pipe. Fittings shall provide a pressure rating equal to or better than the HDPE pipe.
- B. DIP fittings shall be as specified in Section 02555.
- C. HDPE fittings for service taps shall be as specified in Section 02558.

2.06 PIPE JOINING

- A. Joining of pipe and fittings shall be done in accordance with manufacturer recommendations.
- B. All heat fused butt weld joints and electrofusion couplings and fittings shall be installed using a data logger or comparable equipment to verify the joint conforms to manufacturer's specifications.

- C. HDPE pipe shall be joined by heat fusion butt welds. Where conditions are not conducive to allow or manufacturer does not recommend heat fusion butt welds, an electrofusion coupling shall be used.
- D. Flange Adapters and Mechanical Joint Adapters:
 - 1. HDPE mechanical joint adaptors and flange adapters shall include a backer ring (retainer gland) attached to the HDPE pipe as specified herein. The HDPE pipe shall be connected to the DIP mechanical joint end using standard mechanical joint connection.
 - 2. HDPE material used for adapters shall match the material specified for HDPE pipe with minimum cell classification as specified.
 - 3. Flange adapters and mechanical joint adapters shall be manufactured in accordance with ASTM D3261 or F2206.
 - 4. Flange adapters and mechanical joint adapters shall be provided with a pressure rating equal to the HDPE pipe being connected.
 - 5. Flanges for flange adapters shall be manufactured in accordance with AWWA C115 consistent with the requirements for ductile iron pipe and flanges as specified elsewhere.
 - 6. The backup ring shall be constructed of ductile iron material or approved equal.
 - 7. Nuts, bolts and hardware shall be ~~Cor-Blue coated low alloy steel~~ **316 stainless steel. (Addendum 2, Issued August 6, 2026)**
 - 8. Mechanical joint adapters shall incorporate a stainless-steel stiffener sleeve installed inside the HDPE pipe. The OD of the stiffener sleeve shall be matched to the ID of the HDPE pipe. Stainless steel sleeve shall be Romac Industries or equal. The HDPE pipe shall be connected to the DIP mechanical joint end using standard mechanical joint connections. The mega lug shall be Ebaa Iron Works Inc. or equal. The mechanical joint adapters shall be Integrity Fusion Products, Inc. Molded Butt Fusion Adapter, Wolseley Industrial Group DIPS Fab MJ Adapter, or approved equal.

2.07 TRACER WIRE

- A. Direct Burial #12 AWG Solids (0.0808-inch diameter), 21% conductivity copper-clad annealed high carbon steel high strength tracer wire, 1150-pound average tensile break load, 45 mil, high molecular weight, high density polyethylene jacket complying with ASTM D1248, 30-volt rating. Soloshot™ extra high strength No. 1245 as manufactured by Copperhead Industries, LLC, or equal. Wire shall be secured to the pipe with tape at intervals not to exceed 10 feet.
 - 1. Tracer wire installed on pipe by horizontal directional drilling shall be continuous without any splices.
 - 2. Heat shrink splices are permissible only on tracer wire at connection pipe.

- B. Tracer wires shall terminate inside all structures including but not limited to, air relief structures, valve box assemblies, indicated on plans. Tracer wire shall extend 4-feet above the opening on structures.

PART 3 EXECUTION

3.01 COORDINATION

- A. Drilling operations shall not interfere with, interrupt or endanger surface features or surface activities.
- B. When rock stratum, boulders, underground obstructions, or other soil conditions that impede the progress of drilling operations are encountered, the Contractor and Engineer shall review the situation and jointly determine the feasibility of continuing drilling operations, making adjustments or switching to an alternative construction method.
- C. The Contractor shall familiarize himself with the geologic characterization of the soil stratum at the proposed drilling path. Contractor shall be responsible for informing the Engineer of any changes that are required in the directional drilling procedure due to geologic conditions.
- D. If any obstruction is encountered that stops the forward progress of the drilling operation or the pullback process, the Contractor and Engineer shall review the situation and jointly determine the feasibility of continuing drilling operations, making adjustments or switching to an alternative construction method.
- E. Launching and recovery pits shall be as small as practicable. Dewatering of pits and excavations shall be done in accordance with the General Provisions and Specifications Section 02200. When water is encountered, the Contractor shall provide a dewatering system of sufficient capacity to keep any excavation free of water until the backfill operation is in progress. Dewatering shall be performed in a manner that removal of soil particles are held to a minimum. Water from the dewatering system shall be desilted before discharge. Methods of dewatering and desilting, including all costs shall be the Contractor's responsibility.
- F. Utilities shown on the contract Drawings are approximate. In areas where there is potential conflict, the Contractor shall dig up and verify the location and elevation of the utility at no additional expense to the Owner. The Contractor shall assume full responsibility for the protection of all utilities, structures and their foundations which may be affected by the Work.
- G. Prior to any alterations to Work site, the Contractor shall photograph or videotape the entire Work area, including entry and exit points. One copy of which shall be given to Engineer and one copy to remain with Contractor for a period of one year following the completion of the project. The Work site, as indicated on Drawings, within right-of-way or easements, shall be graded or filled to provide a level working area. No alterations

beyond what is required for the Work are to be made. Contractor shall confine all activities to designated Work areas.

- H. Before beginning the drilling operation, the field survey and drill log shall be completed as specified in Section 01800.

3.02 DRILL PATH SURVEY

- A. Drilling path shall be walked in the presence of the Engineer, and Contractor with the guidance system that shall be used for each segment of drill path. The Contractor shall locate and record any surface and subsurface magnetic variations or abnormalities and all points of interference, as well as verifying all utility(ies) location and corresponding utility maps. Should any discrepancy arise between utility maps, field locations, and guidance system findings the Contractor shall clarify all discrepancies prior to beginning drilling operations. The drill path survey shall be performed no earlier than two days prior to commencing drilling operations. Provide Engineer 48-hour notice of drill path survey.

3.03 EQUIPMENT

- A. Equipment:
1. The drilling equipment shall be capable of placing the pipe within the planned line and grade without inverted slopes.
 2. The drilling equipment shall be capable of pulling product pipe from either the downstream or upstream manhole location. The equipment must be adequately sized for the application.
 3. The guide system shall have the capability of measuring inclination, roll and azimuth. The guidance system shall have an independent means to ensure the accuracy of the installation. The Contractor shall demonstrate a viable method to eliminate accumulated error due to the inclinometer (pitch or accelerometer). The guidance system shall be capable of generating a plot of the borehole survey for the purpose of a record drawing. The guidance system shall meet the following specifications.

Inclination:	Accuracy	+ 0.05
	Range	+ 90
	Repeatability	+ 0.02
Roll:	Accuracy	+ 0.05
	Range	+ 90
Azimuth:	Accuracy	+ 0.05
	Range	+ 90

4. Equipment set-up requirements at the launch and recover locations shall be determined by the Contractor in accordance with the Contract Drawings and submitted to the Engineer per the requirements of Specification Section 01300.
- B. Pilot Hole Drilling:
 1. The entry angle of the pilot hole and the drilling process shall maintain a curvature that does not exceed the allowable bending radii of the product pipe. Unless the Contractor can demonstrate this, the minimum radius shall be 25 times the outside diameter of the pipe.
 2. Alignment, Adjustments, and Restarts.
- C. The Contractor shall follow the pipeline alignment as shown on the Drawings, within the specification requirements. The location and depth of the drill head in relation to the profile and centerline of the alignment shall be determined at a maximum of 10-foot intervals. Acceptable tolerance shall be 0.5 feet variation from the centerline of the pipe in both vertical and horizontal directions (1-foot window).
- D. In the event of difficulties at any time during drilling operations requiring the complete withdrawal from the tunnel, the Contractor shall either be allowed to withdraw and abandon the tunnel and begin a second attempt at a different location; or excavate at the point of the difficulty and install the product pipe by an alternate method of installation. Either alternative shall be approved by the Engineer before the Contractor withdraws.
- E. Access pits shall be at the beginning and end of the segments shown on the Drawings. Intermittent pits shall be approved by the Engineer prior to proceeding with drilling operations. No intermittent access pits shall be allowed in wetland areas.
- F. Installing Product Pipe:
 1. After the pilot hole is completed, the Contractor shall install a swivel to the reamer and commence pullback operations.
 2. Reaming diameter shall not exceed 1.5 times the diameter of the product pipe being installed.
 3. The product pipe being pulled into the tunnel shall be protected and supported so that it moves freely and is not damaged by stones and debris on the ground during installation.
 4. Tracer wire shall be attached to product pipe before pullback operations begin.
 5. Pullback forces shall not exceed the allowable forces for the product pipe.
- G. The Contractor shall allow sufficient lengths of product pipe to extend past the termination point to allow connections to adjacent pipe sections, manholes, or tees. Pulled pipe shall be allowed 24 hours of stabilization prior to making tie-ins. The length of extra product pipe shall be at the Contractor's discretion.

3.04 GRAVITY SEWERS

- A. Where approved by the Engineer, the Contractor may perform low pressure air acceptance tests in lieu of infiltration of exfiltration tests. Tests shall be made in accordance with ASTM F1417.
- B. The Contractor shall furnish all equipment materials, and labor, and conduct the tests under observation the Engineer.
- C. Test Method:
 - 1. Testing for infiltration and exfiltration shall be in conformance with Section 02550.
 - 2. Low Pressure Air testing shall be in conformance with Section 02550.
 - 3. Deflection testing shall be in conformance with Section 02550.

3.05 GRAVITY SEWER INSPECTION

- A. All gravity sewers installed by directional drilling shall have a vertical ring deflection test performed a minimum of 30 days after installation. Maximum deflection under full load shall not exceed 5% of the ASTM designated average inside diameter.
- B. The Contractor shall videotape the pipe interior for the entire length of the gravity sewer at a minimum of 30 days after installation. The Contractor shall flush clean water into the furthest upstream manhole immediately prior to videotaping to aid in identifying areas of reverse slope. Sufficient water shall be added to obtain flow out of the furthest downstream manhole. The video shall be in color and have sufficient clarity to clearly identify defects in the pipe interior.

3.06 FIELD INSPECTION

- A. All pipe sections, specials, and jointing materials shall be carefully examined for defects and no piece shall be laid that is known to be defective. Any defective piece discovered installed shall be removed and replaced with a sound one in a manner satisfactory to the Resident Project Representative at the Contractor's expense.
- B. Defective material shall be marked with lumber crayon and removed from the job site before the end of the following day.

3.07 PRESSURE AND LEAKAGE TESTS FOR FORCE MAINS AND WATER LINES

- A. Pressure and leakage testing shall be in conformance with Section 02555.
- B. Contractor shall perform a hydrostatic test of pipe to be installed by horizontal directional drill prior to commencing pull back operation.

PART 4 SPECIAL PROVISIONS

4.01 PIPE SCHEDULE

Service	Size	Thickness Class	Material	Section	Comments
Force Main	2"	DR-11	HDPE	2.01	HDD
Force Main	3"	DR-11	HDPE	2.01	HDD
Force Main	6"	DR-11	HDPE	2.01	HDD

4.02 BORE AND RECEIVING PITS

- A. The locations and dimensions of bore and receiving pits shown on the Drawings are recommendations. The locations and dimensions may be changed by the Contractor to accommodate the Contractors equipment and methods.
- B. Modification of the location and dimensions of bore and receiving pit shall be permitted to the extent that the horizontal centerline alignment of the proposed pipeline is not changed.

4.03 FRAC-OUT CONTINGENCY PLAN

- A. The Contractor shall provide a contingency plan to address the "frac-out" of any directional drilling fluids during the horizontal directional drilling operation.
- B. The contingency plan shall address the following areas of concern:
 - 1. Temporary Barriers installed at drilling entrance and exit point to contain drilling fluids.
 - 2. List of materials available on site to control frac-out of drilling fluids including:
 - a. Sand bags
 - b. Hand tools
 - c. Portable pumps and hoses
 - d. Straw bales
 - e. Silt fence
 - f. Spill kits
 - g. Backhoe or excavator
 - 3. In the event of a frac-out, the person discovering the release will notify the Contractor, Engineer and Owner. The Contractor shall coordinate notification of appropriate agencies and obtaining permission for clean-up operations.
 - 4. Measures for monitoring for excessive fluid loss during drilling through terrestrial, wetland areas or streams.

5. Plans for addressing excessive fluid loss while drilling including:
 - a. Measures to suspend forward progress of the drilling operations if excessive loss of bentonite circulation is observed.
 - b. Measures to isolate areas where frac-out has occurred or to remove releases with a vacuum truck.
 - c. Measures to restore affected areas to match conditions prior to commencing the Work.
6. If the frac-out occurs in a wetlands or stream area, Ohio EPA Northwest District Office shall be notified.
7. After containment has been achieved, the drilling contractor and the inspector will make every effort to determine why the frac-out occurred and develop corrective measures to minimize the chance of recurrence.

END OF SECTION

**SECTION 11733
SUCTION LIFT PUMP STATIONS WITH
ABOVE-GROUND MODULAR ENCLOSURE**

PART 1 GENERAL

1.01 SCOPE

- A. This Section includes the design, furnishing, and installation of a complete factory-built package, suction-lift duplex pump station as indicated on the project drawings, herein specified, as necessary for proper and complete performance. ~~s.~~ (Addendum 2, Issued August 6, 2026) Pump station shall be an above-ground, base-mounted, pumping station furnished with self-priming pumps and accessories, and a motor-controlled center with variable frequency drives (VFDs), and PLC-based level/logic control.
- B. The pump stations shall include, but are not limited to, the following items as specified here in:
 - 1. Modular fiberglass panel composite structure assembly (building), factory-fabricated to the nominal dimensions shown on the Drawings.
 - 2. Design in accordance with local codes.
 - 3. HVAC system.
 - 4. Electrical Controls Instrumentation.
 - 5. Floor doors, entry doors, and hardware.
 - 6. Interior and exterior finishes.
 - 7. Piping and appurtenances as specified or shown on the Drawings.
 - 8. Accessories and appurtenances as specified or shown on the Drawings.
 - 9. Excavation, shoring, and backfill.
- C. Under this Section, the Contractor shall furnish, install, and place in operation the package pump station system(s) with influent sewer and force main to the limits as shown on the Drawings.
- D. The Section shall include pump units, piping, valves, precast concrete wet well, modular fiberglass building and appurtenance, electrical equipment and wiring, meter and control, discharge force mains with all fittings and valves necessary, influent sewers where required, and any other incidental work implied by the Drawings and/or ordered by the Engineer.
- E. Power supply is not included under this Section.
- F. In order to unify responsibility for proper operation of the complete pumping station, it is the intent of these Specifications that all system components are furnished by a single supplier (unitary source).

- G. The standard supplier for complete pump station as specified in this Section and related Sections shall be Gorman-Rupp.

1.02 REFERENCES

- A. Publications listed below form part of this specification to extent referenced in the text by basic designation only. Consult latest edition of publication unless otherwise noted.
1. American National Std. Institute (ANSI) / American Water Works Assoc. (AWWA)
 - a. ANSI B16.1 Cast iron pipe flanges and flanged fittings.
 - b. ANSI/AWWA C115/A21.51 Cast/ductile iron pipe with threaded flanges.
 - c. ANSI 253.1 Safety Color Code for Marking Physical Hazards.
 - d. ANSI B40.1 Gages, Pressure and Vacuum.
 - e. AWWA C508 Single Swing Check Valves.
 - f. American Society for Testing and Materials (ASTM)
 - g. ASTM A48 Gray Iron Castings.
 - h. ASTM A126 Valves, Flanges, and Pipe Fittings.
 - i. ASTM A307 Carbon Steel Bolts and Studs.
 - j. ASTM A36 Structural Steel.
 2. Institute of Electrical and Electronics Engineers (IEEE)
 - a. ANSI/IEEE Std 100 Standard Dictionary of Electrical Terms.
 - b. ANSI/IEEE Std 112 Test Procedure for Polyphase Induction
 - c. IEEE Std 242 Protection of Industrial and Control Power Systems.
 3. National Electric Code (NEC) / National Electrical Manufacturers Assoc. (NEMA)
 - a. NEC National Electric Code.
 - b. NEC 701 National Electric Code article 701.
 - c. NEMA Std MG1 Motors and Generators.
 4. Miscellaneous References
 - a. Ten-State Standards Recommended Standards for Sewage Works.
 - b. Hydraulic Institute Std for Centrifugal, Rotary and Reciprocating Pumps.
 - c. NMTBA and JIC Std National Machine Tool Builders Association and Joint Industrial Council Standards
 - d. ISO 9001 International Organization for Standardization.

1.03 SYSTEM DESCRIPTION

- A. Contractor shall furnish and install one factory built above ground, automatic pump station. The station shall be complete with all equipment specified herein; factory assembled in a fiberglass reinforced polyester resin enclosure.
- B. In addition to the station enclosure, principal items of equipment shall include two horizontal, self-priming, centrifugal sewage pumps, V-belt drives, motors, internal piping, valves, motor control panel, automatic liquid level control system, and internal wiring.
- C. Factory built pump station design, including materials of construction, pump features, valves and piping, and motor controls shall be in accordance with requirements listed under PART 2 - PRODUCTS of this section.

1.04 PERFORMANCE CRITERIA (PUMP STATION CONDITIONS – SCHEDULE)

- A. Pumps must be designed to handle raw, unscreened, domestic sanitary sewage. Pumps shall have 4" suction connection, and 4" discharge connection. Each pump shall be selected to perform under following operating conditions:

Pump Station Schedule		
	PS ID	
	PS NAME	Celeryville
	Pump Mfg.	Gorman-Rupp
	Pump Model	V3C71SC-B
2.01 B	Design Point	175 GPM at 84.5 ft.
	Approx. Design Point 1	350 GPM at 76 ft.
	Approx. Design Point 2	110 GPM at 92 ft.
2.01 C	Power/Phase	480 V, 3-Phase
2.02 J2	Exhaust Fans	400 CFM
2.03 A	Volute Inlet (in.)	4-inches
	Volute Outlet (in.)	3-inches
2.03 A	Total Dynamic Suction Lift	20.9 ft.
2.03 A	Maximum Re-Priming Lift	20.0 ft. at 1920 RPM
2.03 A	Maximum Static Suction Lift	22.0 ft.
2.03 A	HP/Speed	20 HP/1750 RPM
2.04 A	Control of PS Operation	Automatic Control Center
2.04 A	Pump Motors	15 HP; 1750 RPM; 3/60/480 Volt; 254T-Frame; Premium Efficiency, ODP
2.02 A	Door	3 feet wide by 6 feet-6 inches high
	(2) Removable Access Panels	5 feet-3 inches by 4 feet-10 inches
2.06 B	Control Panel Dimensions (NEMA SST)	48-inch width, 60 height, 12-inch depth.

PS – Pump Station	HP – Horsepower
FD – Floor Door	IC = Iron Casting

1.05 SUBMITTALS

Site power furnished to the pump station shall be three phase, 60 hertz, 240 volts, 4 wire, maintained within industry standards. The available fault current provided at the pump station control panel is 10,000 ka rms symmetrical. Voltage tolerance shall be plus or minus 10 percent. Phase-to-phase unbalance shall not exceed 1% average voltage as set forth in nema standard mg-1. Control voltage shall not exceed 132 volts. **(Addendum 2, Issued August 6, 2026)**

- A. Submittals shall be in accordance with the requirements of Section 01300 and shall include:
 - 1. Submittals for Review:
 - a. General arrangement and scaled dimensional drawings.
 - b. Wiring diagrams with termination point identification.
 - c. Materials of construction.
 - d. Details of the modular fiberglass building, including equipment and panel-mounting locations and details, wall penetrations, and operating platforms.
 - e. Manufacturer's product literature for each piece of equipment, component or product incorporated into the package station.
 - f. Manufacturer's Warranty(s).
 - g. Motor data, per Section 11050.
 - 2. Information for Record:
 - h. Manufacturer's certified test curves, indicating capacity, head, efficiency, brake horsepower and speed. No pump shall be shipped to the job site until the test curves have been submitted and reviewed.
 - i. Manufacturer's certification of installation and operation.
 - j. Manufacturer's certification the equipment is suitable for the intended use.
 - k. Manufacturer's Operation and Maintenance Manuals.
 - l. Design certifications and calculations sealed by Professional Engineer responsible for enclosure design. The Professional Engineer shall be licensed in the state where the enclosure is to be constructed.

B. Product Data

- 1. Prior to fabrication, pump station manufacturer shall submit one electronic copy of submittal data for review and approval.
- 2. Submittal shall include shop drawings, electrical ladder logic drawings, and support data as follows: Catalog cut sheets reflecting characteristics for major items of equipment, materials of construction, major dimensions, motor and v-belt drive data, pump characteristic curves showing the design duty point

capacity (GPM), head (FT), net positive suction head required (NPSHr), and hydraulic brake horsepower (BHP). Electrical components used in the motor branch and liquid level control shall be fully described.

3. Shop drawings shall provide layout of mechanical equipment and anchor bolt locations for station. Pipe penetrations and station access clearances shall be dimensioned relative to the station centerline. The electrical ladder logic drawings shall illustrate motor branch and liquid level control circuits to extent necessary to validate function and integration of circuits to form a complete working system.

C. Operations and Maintenance Manuals

- D. Operation shall be in accordance with written instructions provided by the pump station manufacturer. Comprehensive instructions supplied at time of shipment shall enable personnel to properly operate and maintain all equipment supplied. Content and instructions shall assume operating personnel are familiar with pumps, motors, piping and valves, but lack experience with the exact equipment supplied.

- E. Documentation shall be specific to the pump station supplied and collated in functional sections. Each section shall combine to form a complete system manual covering all aspects of equipment supplied by the station manufacturer. Support data for any equipment supplied by others, even if mounted or included in overall station design, shall be provided by those supplying the equipment. Instructions shall include the following as a minimum:

1. Functional description of each major component, complete with operating instructions.
2. Instructions for operating pumps and pump controls in all modes of operation.
3. Calibration and adjustment of equipment for initial start-up, replacement of level control components, or as required for routine maintenance.
4. Support data for commercially available components not produced by the station manufacturer, but supplied in accordance with the specifications, shall be supported by literature from the prime manufacturer and incorporated as appendices.
5. Electrical schematic diagram of the pump station circuits shall be in accordance with NFPA 79. Schematics shall illustrate, to the extent of authorized repair, pump motor branch, control and alarm system circuits including interconnections. Wire numbers and legend symbols shall be shown. Schematic diagrams for individual components, not normally repairable by the station operator, need not be included. Details for such parts shall not be substituted for an overall system schematic. Partial schematics, block diagrams, and simplified schematics shall not be provided in lieu of an overall system diagram.
6. Mechanical layout drawing of the pump station and components, prepared in accordance with good commercial practice, shall provide installation dimensions and location of all pumps, motors, valves and piping.

7. Operation and maintenance instructions which rely on vendor cut-sheets and literature which include general configurations or require operating personnel to selectively read portions of the manual shall not be acceptable. Operation and maintenance instructions must be specific to equipment supplied in accordance with these specifications. (Addendum 2, Issued August 6, 2026)

1.06 QUALITY ASSURANCE

- A. Publications listed below form part of this specification to extent referenced in the text by basic designation only. Consult latest edition of publication unless otherwise noted.
 1. American National Std. Institute (ANSI) / American Water Works Assoc. (AWWA).
 2. American Society for Testing and Materials (ASTM).
 3. Institute of Electrical and Electronics Engineers (IEEE).
 4. National Electric Code (NEC)/National Electrical Manufacturers Assoc. (NEMA).
- B. The wet well shall be classified as Class 1, Group D, Division 1, environment. The package station shall comply with the provisions of the NEC related to the classified environment.
- C. Each pump shall be designed and furnished to meet the operating conditions specified herein.
- D. Pump station manufacturer shall show evidence of other installations of same design as specified. At least five installations within the State of Ohio shall be submitted, that have been installed in the last 12 months.
 1. In event the contractor obtains Engineer's or Owner's approval for equipment substitution, the contractor shall, at his own expense, make all resulting changes to the enclosures, buildings, piping or electrical systems as required to accommodate the proposed equipment. Revised detail drawings illustrating the substituted equipment shall be submitted to the Engineer or Owner prior to acceptance.
- E. The manufacturers' technical representative shall inspect the completed installation, correct or supervise the correction of any defect or malfunction, and instruct operating personnel in the proper operation and maintenance of the equipment as described in Part 3 of this Section.
- F. The pumps and pump station manufacturer must be ISO 9001:2008 revision certified, with scope of registration including design control and service after sales activities.
- G. The pumps and pump station manufacturer must be registered to the ISO 14001 Environmental Management System standard and as such is committed to minimizing the impact of its activities on the environment and promoting environmental sustainability by the use of best management practices, technological advances, promoting environmental awareness and continual improvement.

- H. Upon request from the engineer, the pump station manufacturer shall prove financial stability and ability to produce the station within the specified delivery schedules. Evidence of facilities, equipment and expertise shall demonstrate the manufacturer's commitment to long-term customer service and product support.
- I. In order to unify responsibility for proper operation, it is the intent of these Specifications that all system components be furnished by a single supplier (unitary source) and that source shall be the pump manufacturer. The pumps must be of standard catalog design, totally warranted by the manufacturer. Under no circumstances will a system consisting of parts compiled and assembled by a manufacturer's representative or distributor be accepted.
- J. Manufacturer must show proof of original product design and testing. Products violating intellectual property regulations shall not be allowed, as they may violate international law and expose the user or engineer to unintended liabilities. "Reverse-engineered" products fabricated to substantially duplicate the design of original product shall not be allowed, as they may contain substantial differences in tolerances and material applications addressed in the original design, which may contribute to product failure.
- K. The term "pump manufacturer" or "pump station manufacturer" shall be defined as the entity which designs, machines, assembles, hydraulically tests and warranties the final product. Any entity that does not meet this definition will not be considered a "pump manufacturer" or "pump station manufacturer" and is not an acceptable supplier. For quality control reasons and future pump and parts availability, all major castings of the pump shall be sourced and machined in North America.
- L. Pump Performance Certifications
 - 1. ERADICATOR™ – Solids Management System designed for management of sanitary wipes, plastic bags, feathers, hair, sludge, and all other types of stringy solids.
 - 2. Reprime Performance
 - a. Consideration shall be given to the sanitary sewage service anticipated, in which debris is expected to lodge between the suction check valve and its seat, resulting in the loss of the pump suction leg, and siphoning of liquid from the pump casing to the approximate center line of the impeller. Such occurrence shall be considered normal, and the pump must be capable of automatic, unattended operation with an air release line installed.
 - b. During unattended operation, the pump shall retain adequate liquid in the casing to ensure automatic repriming while operating at its rated speed in a completely open system. The need for a suction check valve or external priming device shall not be required.
 - c. Pump must be capable of repriming 14.7 vertical feet at the specified speed and impeller diameter. Reprime lift is defined as the static height of the pump suction above the liquid, while operating with only one-half

of the liquid remaining in the pump casing. The pump must reprime and deliver full capacity within five minutes after the pump is energized in the reprime condition. Reprime performance must be confirmed with the following test set-up:

- 1) A check valve to be installed downstream from the pump discharge flange. The check valve size shall be equal (or greater than) the pump discharge diameter.
- 2) A length of air release pipe shall be installed between pump and the discharge check valve. This line shall be open to atmosphere at all times duplicating the air displacement rate anticipated at a typical pump station fitted with an air release valve.
- 3) The pump suction check valve shall be removed. No restrictions in the pump or suction piping will prevent the siphon drop of the suction leg. Suction pipe configuration for reprime test shall incorporate a 2 feet minimum horizontal run, a 90o elbow and vertical run at the specified lift. Pipe size shall be equal to the pump suction diameter.
- 4) Impeller clearances shall be set as recommended in the pump service manual.
- 5) Repeatability of performance shall be demonstrated by testing five consecutive reprime cycles. Full pump capacity (flow) shall be achieved within five minutes during each cycle.
- 6) Liquid to be used for reprime test shall be water.
- 7) Utilize 6" suction piping for the reprime test.

3. Upon request from the engineer, certified reprime performance test results, prepared by the manufacturer, and certified by a registered professional engineer, shall be submitted for approval prior to shipment.

M. Factory System Test

1. All internal components including the pumps, motors, valves, piping and controls will be tested as a complete working system at the manufacturer's facility. Tests shall be conducted in accordance with Hydraulic Institute Standards at the specified head, capacity, rated speed and horsepower. Factory operational test shall simulate actual performance anticipated for the complete station.
2. Upon request from the engineer, the operational test may be witnessed by the engineer, and/or representatives of his choice, at the manufacturer's facility.

- N.** The manufacturer's technical representative shall inspect the completed installation, correct or supervise the correction of any defect or malfunction, and instruct operating

personnel in the proper operation and maintenance of the equipment as described in Part 3 of this section.

1.07 MANUFACTURER'S WARRANTY

- A. The pump station manufacturer shall warrant all equipment to be of quality construction, free of defects in material and workmanship. A written warranty shall include specific details described below.
 - 1. In addition to defects in material and workmanship, fiberglass reinforced polyester station enclosures are warranted for sixty (60) months to be resistant to rust, corrosion, corrosive soils, effects of airborne contamination or physical failures occurring in normal service for the period of the pump station warranty.
 - 2. All other equipment, apparatus, and parts furnished shall be warranted for sixty (60) months, excepting only those items that are normally consumed in service, such as light bulbs, oils, grease, packing, gaskets, O rings, etc. The pump station manufacturer shall be solely responsible for warranty of the station and all components.
- B. Components failing to perform as specified by the engineer, or as represented by the manufacturer, or as proven defective in service during the warranty period, shall be replaced, repaired, or satisfactorily modified by the manufacturer.
- C. It is not intended that the station manufacturer assume liability for consequential damages or contingent liabilities arising from failure of any vendor supplied product or part which fails to properly operate, however caused. Consequential damage resulting from defects in design, or delays in delivery are also beyond the manufacturer's scope of liability.
- D. Equipment supplied by others and incorporated into a pump station or enclosure is not covered by this limited warranty. Any warranty applicable to equipment selected or supplied by others will be limited solely to the warranty, if any, provided by the manufacturer of the equipment.
- E. This limited warranty shall be valid only when installation is made and use and maintenance is performed in accordance with manufacturer recommendations. A start-up report completed by an authorized manufacturer's representative must be received by manufacturer within thirty (30) days of the initial date the unit is placed into service. The warranty shall become effective on the date of acceptance by the purchaser or the purchaser's authorized agent, or sixty (60) days after installation, or ninety (90) days after shipment from the factory, whichever occurs first. (Addendum 2, Issued August 6, 2026)

1.08 GUARANTEE

- A. The equipment, apparatus, and parts furnished shall be warranted for a period of five years, excepting only those items that are normally consumed in service, such as light bulbs, oils grease, packing, gaskets, O-rings, etc. The pump station manufacturer shall be solely responsible for the warranty of the station and all components.

- B. Components failing to perform as specified by the Engineer or Owner, or as represented by the manufacturer, or as proven defective in service during the warranty period, shall be replaced, repaired, or satisfactorily modified by the manufacturer without cost of parts or labor to the Owner.
- C. It is not intended that the station manufacturer assume liability for consequential damages or contingent liabilities arising from failure of any vendor supplied product or part which fails to properly operate, however caused.
- D. The warranty shall become effective upon certificate of substantial completion.

PART 2 PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

- A. In order to unify responsibility for proper operation of the complete pumping station, it is the intent of these Specifications that all system components be furnished by a single supplier (unitary source). The pumping station must be of standard catalog design, totally warranted by the manufacturer. Under no circumstances will a system consisting of parts compiled and assembled by a manufacturer's representative or distributor be accepted. **(Addendum 2, Issued August 6, 2026)**
- B. The pump(s) shall be capable of continuous operation in a totally dry environment, such as in a below-ground pump station, or in a totally submerged environment in the event of catastrophic flooding.
- C. Each pump must be designed to handle raw, unscreened, domestic sanitary sewage. Each pump shall be selected to deliver the pump flow rate at a design dynamic discharge head as specified in Part 4.
- D. Site power furnished to pump station shall be as specified in Part 4, maintained within industry standards. Voltage tolerance shall be plus or minus 10 percent. Control voltage shall not exceed 132 volts.

2.02 MANUFACTURER

- A. The pump station system integrator must be ISO 9001:2008 revision certified, with scope of registration including design control and service after sales activities.
- B. The specifications and project drawings depict equipment and materials manufactured by The Gorman-Rupp Company which are deemed most suitable for the service anticipated. The contractor shall prepare his bid based on the specified equipment for purposes of determining low bid. Award of a contract shall constitute an obligation to furnish the specified equipment and materials.

2.03 MODULAR PUMP STATION ENCLOSURE

- A. The station enclosure shall provide sufficient inside area for maintenance personnel to perform normal operation and maintenance inside, sheltered, and free from foul weather. The enclosure shall consist of a base to support the pumps and a cover. Minimum dimensions of the enclosure shall be eight feet by twelve feet and nine feet in height.

- B. The station enclosure shall be manufactured of molded fiberglass reinforced orthophthalic polyester resins with a minimum of 30% fiberglass, and a maximum of 70% resin. Glass fibers shall have a minimum average length of 1¼ inches. Resin fillers or extenders shall not be used. Major design considerations shall be given to structural stability, corrosion resistance, and watertight properties. The polyester laminates shall provide a balance of mechanical, chemical, and electrical properties to ensure long maintenance free life. They must be impervious to microorganisms, mildew, mold, fungus, corrosive liquids, and gases which can reasonably be expected to be present in the environment surrounding the wet well. Wood core type enclosures shall not be considered acceptable and shall be basis for equipment rejection. See manufacturer's requirements for enclosure warranty in these specifications.
- C. All interior surfaces of the housing shall be gel coated with a polyester resin. It shall be of suitable thickness and formulated to provide:
 - 1. Maintenance free service
 - 2. Abrasion resistance
 - 3. Protection from sewage, greases, oils, gasoline, and other common chemicals.
 - 4. Color fastness
 - 5. Gloss retention
- D. Interior surfaces of the enclosure cover shall be white for maximum light reflectivity. The base shall be of a darker color to de-emphasize the presence of dirt, grease, etc. Colors used for both portions shall result in a pleasing looking structure.
- E. The pump station shall be furnished with 1" thick foam insulation which shall be applied to the walls, door, and roof to achieve an R-6 insulation factor. A gasketed seal around the door shall also be included.
- F. The outside of the enclosure shall be coated with a suitable pigmented resin compound to ensure long, maintenance free life. The fiberglass enclosure shall be a regular product of the pump station manufacturer.
- G. Station base shall be constructed of pre cast, reinforced concrete encapsulated in a fiberglass mold. The design shall resist deformation of the structure during shipping, lifting, or handling. Base shall incorporate drainage provisions, and an opening sized to permit installation of piping and service connections to the wet well. After installation, the opening shall serve as a grout dam to be utilized by the contractor. The base shall incorporate anchor bolt recesses for securing the complete station to a concrete pad (supplied by the contractor) in accordance with the project plans.
- H. Holes through the base shall be provided for suction and discharge lines, air release lines, and level control line. Holes for the suction and discharge lines shall be provided with a grout dam incorporated in a grout retention cavity which the contractor shall fill at installation with suitable grout to seal each pipe to base joint against the entrance of hazardous gases from the wet well.

- I. Station base shall incorporate a suitable flange designed for securing the pump station to the concrete pad in accordance with the station plans.
- J. The enclosure cover shall be provided with a hinged fiberglass reinforced access door. Minimum dimensions of the door shall be 36 inches wide by 78 inches high for access by maintenance personnel to station interior. Door shall be a minimum 1 7/8 inch thick and shall be hinged with a minimum of two heavy duty stainless steel hinges to the enclosure cover. Door shall be furnished with a padlockable handle connected to a latching mechanism. Latch shall engage door casing or maximum security against vandalism. All mounting hardware for door casing and door must be concealed or of such type as to prevent vandalism with ordinary tools.
- K. Removable panels shall be supplied on two sides of the enclosure for additional access to equipment. Location and size shall permit access for routine maintenance functions such as pump and motor inspection, drive belt adjustment, and pump clean out. Non-hinged panels shall be secured with stainless steel tamper-proof hardware
- L. A duplex ground fault indicating utility receptacle providing 115 volts, single phase, 60 hertz shall be mounted inside the pump station. Receptacle shall be NEMA 5 15r configuration, heavy duty, specification grade and fitted with a weatherproof cover. The receptacle shall be protected by normal duty circuit breaker.
- M. A shuttered exhaust fan with a minimum capacity of 500 CFM to change the air in the enclosure once every minute, shall be mounted in the end wall approximately opposite the hinged door opening. An air intake vent shall be mounted in the hinged door assembly. Both intake and exhaust opening shall be equipped with a screen and cowl suitably designed to prevent the entrance of rain, snow, rocks, and other foreign material. The thermostatically controlled exhaust fan shall energize automatically at approximately 70 degrees F and turned off at 55 degrees F. Fan circuit shall be protected by a normal duty circuit breaker.
- N. Two enclosed and gasketed 80 watt fluorescent light fixtures shall be provided. The fixtures shall be NEMA 4, suitable for wet location. The fixtures shall be located to provide adequate light to all parts of the station and shall not constitute a physical hazard to inspection or service personnel. Light circuit shall be protected by a normal duty circuit breaker and shall be provided with a disconnect switch.
- O. Station Heater:
 - 1. A 5 KW three-phase wall mounted forced air heater shall be provided for protection of the pump station equipment. The heater shall maintain an inside/outside temperature differential of 60 degrees F while operating on the primary electrical power available to the station. The heater shall be controlled by a thermostat and contactor and protected by a heavy duty circuit breaker.
- P. 12V DC Emergency Light
 - 1. Station manufacturer will supply one Internal emergency light, LED, 12volt DC, self-contained battery backed, automatic emergency lighting system.

2. The 12 volt DC emergency lighting system shall provide illumination for 1-1/2 hours in the event of power outage. The system shall be fully self-contained for automatic operation of (2) two sealed beam lamps powered by a maintenance free pure-lead 12 volt battery. An automatic solid state battery charger with integral transfer circuit shall maintain the battery in a constant state of readiness. A charge rate pilot light and test switch shall be provided. The charging circuit shall be protected by a thermal-magnetic circuit breaker.
(Addendum 2, Issued August 6, 2026)

- Q. The enclosure shall be square/rectangular with outside dimensions as specified in Part 4 and having a minimum outside height of 9 feet at the roof peak.
- R. A minimum of four lifting eyes arranged on the corners shall be provided to ease handling and installation onto a concrete pad furnished by the contractor.
- S. Enclosure walls and roof shall be seamless, one-piece sprayed fiberglass panels laminated to form a structural composite as follows: 1/8-inch-thick fiberglass outside surface, 1-inch-thick urea foam polyurethane core, 7/16-inch-oriented strand board (OSB), and 3/32-inch-thick fiberglass inside surface. OSB shall replace foam at all cut-out openings and penetration points.
- T. Each wall panel shall overlap at the corner and form an internal connection joint using stainless-steel hardware. All panel joints shall be thoroughly sealed with silicone caulk. The enclosure shall have a minimum R-20 insulation factor and shall be capable of withstanding 150-mph wind loads.
- U. All exterior surfaces shall be textured (green, tan, or gray colored; color selected by Owner) isophthalic gel coat finish incorporating ultraviolet inhibitors.
- V. All interior surfaces shall be sprayed white isophthalic gel coat finish offering the same characteristics as the exterior surfaces.
- W. The roof panel shall be an arched, one-piece design incorporating the same materials of construction as the side walls. The roof shall be removable as a unit, allowing for complete access to the pumping equipment with a crane. The pitch of the roof shall be sufficient for good moisture drainage and withstand a minimum snow load of 40 pounds per square foot.
- X. The structure shall have entrance door(s) as specified in Part 4. Entrance door(s) shall be constructed of the same laminated fiberglass and foam core materials as the remainder of the station. OSB will replace the insulation in areas where auxiliary equipment will be mounted. Each door shall be hung with three stainless-steel ball bearing type hinges incorporating a three-point closure system with a lockable door handle. An adjustable door positioner and holder shall be mounted at the top of the door. A gasket consisting of solid rubber and sponge shall seal the door while closed. The door and all hardware shall be mounted to withstand 150-mph winds. A wall-mounted drip molding will be installed above each door.
- Y. After the pumping equipment is installed, the fully assembled station enclosure shall be positioned on the concrete mounting pad or wall and sealed with butyl sealant tape as furnished by the pump station manufacturer. The interior base flange shall be drilled

positioning and fastened to the pad or wall using expansion anchors on 24 inch maximum centers.

Z. Enclosure Accessories/Equipment:

1. The interior of the station shall be illuminated by factory installed 120-volt, 40-watt, LED light fixtures providing two watts illumination per square foot. All lights will be pre-wired and run to a load center through PVC conduit and a weatherproof switch shall be installed adjacent to each station entrance. The lighting circuit shall be protected by a thermal-magnetic circuit breaker in the mini-power zone as specified in Section 16453.
2. A thermostatically controlled, 120-VAC exhaust fan with screen and weatherproof shutters shall be installed in the wall approximately opposite the fresh air intake vent. The fan shall have a minimum capacity, as specified in Part 4, at free air and be capable of changing the air in the enclosure a minimum of six times per hour. The exhaust fan shall be protected by a thermal-magnetic circuit breaker in the mini-power zone as specified in Section 16453.
3. Two self-contained, unpowered, thermally actuated fresh air intake vents shall progressively open or close exterior louvers as a result of thermal expansion or contraction of a wax-like material contained in an enclosed plunger actuator. Movement for the plunger rod shall drive the louver vane mechanical linkage. The louvers will progressively open at 75-degrees F, and progressively close at 60-degrees F. Operation of the intake louvers shall not require use of motors, solenoids, or other electrically related devices. The plunger actuator shall be mounted out of the incoming air flow and shall hold the louvers fully open based on the ambient temperature of the pump station interior. The louver vanes and frame shall be constructed of anodized aluminum, with zinc-plated steel actuator mounting and linkage. The louver vanes shall pivot on plastic bearings.
4. All air intake and exhaust openings located on the enclosure exterior shall be equipped with a protective hood designed to limit the entrance of rain, snow, and any foreign matter.
5. A battery back-up 12-volt DC emergency lighting system shall provide 50 watts of illumination for 1 1/2 hours in the event of power outage. The system shall be fully self-contained for automatic operation of two sealed beam lamps powered by a maintenance free pure-lead 12-volt battery. An automatic solid state battery charger with integral transfer circuit shall maintain the battery in a constant state of readiness. A charge rate pilot light and test switch shall be provided. The charging circuit shall be protected by a thermal-magnetic circuit breaker in the mini-power zone as specified in Section 16453.
6. A high capacity 7.5 kw electric blower type station heater shall be provided for the protection of the pumping equipment. The heater shall maintain an inside/outside differential temperature of 60-degrees F while operating on the

~~primary voltage supplied to the station. The heater shall be provided with an adjustable thermostat, circuit breaker, and contactor.~~

- ~~7. The pump station enclosure shall incorporate an insulation package which increases the standard R10 insulation rating to R20 by doubling the thickness of the urea foam polyurethane core in the wall and roof panels.~~
- ~~8. The station enclosure shall be furnished with single 3 feet wide by 6 feet 8-inch entrance door, single hung door design with 3-point locking hardware, door closer, and hinges on each section shall allow complete access. A 6 foot 0 inch by 6 feet 8-inch high equipment removal door without the need for a center sill.~~
- ~~9. A wall-mounted duplex GFI utility receptacle providing 120-volt AC power shall be installed and prewired through PVC conduit with the station lighting. The receptacle shall be protected by thermal magnetic circuit breakers in the mini-power zone as specified in Section 16453.~~
- ~~10. Floor drain consisting of a three-piece assembly including duck-bill check valve, SST strainer top, and PVC spacer to provide a gas and watertight drain receptacle for use in concrete pad within Modular Enclosure. Provide PVC drain pipe and PVC coupling as required for complete assembly.~~
- ~~11. The pump station shall be equipped with a glycerin-filled pressure gauge to monitor discharge pressures. Gauge shall be a minimum of 4 inches in diameter and shall be graduated in feet water column. Rated accuracy shall be 1 percent of full-scale reading. Pressure gauge shall be graduated 0 to 70 feet water column minimum. Gauge kit shall be mounted and complete with all hoses and fittings and shall include a shutoff valve installed in each connection to discharge piping and three-way valve to monitor either pump.~~
- ~~12. Provide low enclosure temperature sensor with alarm contact. (Addendum 2, Issued August 6, 2026)~~

2.04 SELF-PRIMING PUMP

- A. Pumps shall be horizontal, self-priming centrifugal type, designed specifically for handling raw, unscreened, domestic sanitary sewage. Pump solids handling capability and performance criteria shall be in accordance with requirements listed under PART 1 - GENERAL of this section.
- B. The pump manufacturer must be ISO 9001 certified, with scope of registration including design control and service after sales activities.
- C. Materials and Construction Features:
 1. Pump casing: Casing shall be cast iron Class 30 with integral volute scroll. Casing shall incorporate following features:
 - a. Mounting feet sized to prevent tipping or binding when pump is completely disassembled for maintenance.

- b. Fill port coverplate, 3 1/2" diameter, shall be opened after loosening a hand nut/clamp bar assembly. In consideration for safety, hand nut threads must provide slow release of pressure, and the clamp bar shall be retained by detente lugs. A Teflon gasket shall prevent adhesion of the fill port cover to the casing.
 - c. Casing drain plug shall be at least 1 1/4" NPT to ensure complete and rapid draining.
 - d. Liquid volume and recirculation port design shall be consistent with performance criteria listed under PART 1 - GENERAL of this section.
- D. Coverplate: Coverplate shall be cast iron Class 30. Design must incorporate following maintenance features:
 - 1. A lightweight inspection coverplate, retained by acorn nuts, for access to pump interior for removal of stoppages. Designs that require removal of complete coverplate assembly for access to the impeller will not be accepted.
 - 2. Retained by acorn nuts for complete access to pump interior. Back coverplate removal must allow service to the impeller, seal, wear plate or check valve without removing suction or discharge piping. Back coverplate shall incorporate an obstruction free flow path by combining four support posts into a two-point "webbed" plate design for increased durability, reduced clogging, and increased operational efficiency.
 - a. A replaceable austempered ductile iron wear plate secured to the back cover plate by studs and nuts. Wear plate shall be self-cleaning design ensuring that debris is cleared away and does not collect on the impeller vanes.
 - b. The nature of the conveyed medium poses significant challenges to the continuous operation of the pump. Of particular concern is the clogging of the impeller by debris in the pumped medium including but not limited to long rags, fibers, and like debris which are able to wrap around the impeller vanes, stick to the center of the vanes or hub, or lodge within the spaces between the impeller and the housing.
- E. Aggressive Self-Cleaning Wear Plate
 - 1. The aggressive self-cleaning wear plate shall have integral laser cut notches and grooves in combination with a "tooth" designed to disturb and dislodge any solids which might otherwise remain on the impeller in dynamic operation. Wear plate is designed to constantly and effectively clear the eye of the impeller without the use of blades or cutters.
- F. In consideration for safety, a pressure relief valve shall be supplied in the inspection coverplate. Relief valve shall open at 75-200 PSI.
- G. One O-ring of Buna-N material shall seal inspection coverplate to back coverplate.
- H. Two O-rings of Buna-N material shall seal back coverplate to pump casing.

- I. Pusher bolt capability to assist in removal of inspection coverplate or back coverplate. Pusher bolt threaded holes shall be sized to accept same retaining capscrews as used in rotating assembly.
- J. Easy-grip handle shall be mounted to face of inspection coverplate.
- K. Rotating Assembly: A rotating assembly, which includes impeller, shaft, mechanical shaft seal, lip seals, bearings, sealplate and bearing housing, must be removable as a single unit without disturbing the pump casing or piping. Design shall incorporate following features:
 - 1. Sealplate and bearing housing shall be cast iron Class 30. Separate oil filled cavities, vented to atmosphere, shall be provided for shaft seal and bearings. Cavities must be cooled by the liquid pumped. Three lip seals will prevent leakage of oil.
 - a. The bearing cavity shall have an oil level sight gauge and fill plug check valve. The clear sight gauge shall provide easy monitoring of the bearing cavity oil level and condition of oil without removal of the fill plug check valve. The check valve shall vent the cavity but prevent introduction of moist air to the bearings.
 - b. The seal cavity shall have an oil level sight gauge and fill/vent plug. The clear sight gauge shall provide easy monitoring of the seal cavity oil level and condition of oil without removal of the fill/vent plug.
 - c. Double lip seal shall provide an atmospheric path providing positive protection of bearings, with capability for external drainage monitoring.
 - d. Impeller shall be austempered ductile iron (G-R hard iron), five-vane, semi-open, with integral pump out vanes on the back shroud. Impeller shall thread onto the pump shaft and be secured with a lockscrew and conical washer.
 - e. Shaft shall be AISI 4140 alloy steel unless otherwise specified by the engineer, in which case AISI 17-4 pH stainless steel shall be supplied.
 - f. Bearings shall be anti-friction ball type of proper size and design to withstand all radial and thrust loads expected during normal operation. Bearings shall be oil lubricated from a dedicated reservoir. Pump designs which use the same oil to lubricate the bearings and shaft seal shall not be acceptable.
 - g. Shaft seal shall be oil lubricated mechanical type. The stationary and rotating seal faces shall be tungsten titanium carbide alloy. Each mating surface shall be lapped to within three light bands flatness (35 millionths of an inch), as measured by an optical flat under monochromatic light. The stationary seal seat shall be double floating by virtue of a dual O-ring design; an external O-ring secures the stationary seat to the sealplate, and an internal O-ring holds the faces in alignment during periods of mechanical or hydraulic shock (loads which

cause shaft deflection, vibration, and axial/radial movement). Elastomers shall be viton. Cage and spring to be stainless steel. Seal shall be oil lubricated from a dedicated reservoir. The same oil shall not lubricate both shaft seal and shaft bearings. Seal shall be warranted in accordance with requirements listed under PART 1 - GENERAL of this section.

- h. Pusher bolt capability to assist in removal of rotating assembly. Pusher bolt threaded holes shall be sized to accept same capscrews as used for retaining rotating assembly.

- L. Adjustment of the impeller face clearance (distance between impeller and wearplate) shall be accomplished by external means.

- 1. Clearances shall be maintained by a four point external shimless coverplate adjustment system, utilizing a four collar and four adjusting screw design allowing for incremental adjustment of clearances by hand as required. Each of the four points shall be lockable to prevent inadvertent clearance increases or decreases due to equipment vibration or accidental operator contact. The four point system also allows for equal clearance gaps at all points between the impeller and wear plate. Requirement of realignment of belts, couplings, etc., shall not be acceptable. Coverplate shall be capable of being removed without disturbing clearance settings. Clearance adjustment systems that utilize less than four points will not be considered.
- 2. There shall be provisions for additional clearance adjustment in the event that adjustment tolerances have been depleted from the coverplate side of the pump. The removal of stainless steel shims from the rotating assembly side of the pump shall allow for further adjustment as described above
- 3. Clearance adjustment, which requires movement of the shaft only, thereby adversely affecting seal working length or impeller back clearance, shall not be acceptable.

- M. Suction check valve shall be molded Neoprene with integral steel and nylon reinforcement. A blow-out center shall protect pump casing from hydraulic shock or excessive pressure. Removal or installation of the check valve must be accomplished through the coverplate opening, without disturbing the suction piping. Sole function of check valve shall be to save energy by eliminating need to reprime after each pumping cycle. Pumps requiring a suction check valve to assist reprime will not be acceptable.

- N. Spool flanges shall be one-piece cast iron, class 30 fitted to suction and/or discharge ports. Each spool shall have one 1-1/4" NPT and one 1/4" NPT tapped hole with pipe plugs for mounting gauges or other equipment.

- O. Serviceability:

- 1. The pump manufacturer shall demonstrate to the engineer's satisfaction that consideration has been given to reducing maintenance costs.

2. No special tools shall be required for replacement of any components within the pump.

P. Drain Kit:

1. Pumps to be supplied with a drain kit for ease of maintenance. The kit to contain 20' length of reinforced plastic hose with a female quick connect fitting at one end, and factory installed drain fittings in each pump. Fittings include a stainless steel pipe nipple, stainless steel bushing, stainless steel ball valve and aluminum male quick connect fitting.

Q. Spare Parts Kit:

1. The following minimum spare parts shall be furnished with the pump station:
 - a. Two spare pump mechanical seals (complete with shaft sleeves).
 - b. Two cover plate O-Rings.
 - c. Two rotating assembly O-Rings.
 - d. Two sets of rotating assembly spacers.
 - e. One spare rotating assembly with full diameter impeller.
 - f. One spare suction flap valve.
 - g. One spare set of belts. (Addendum 2, Issued August 6, 2026)

R. ~~Pumps shall be horizontal, self-priming centrifugal type, designed specifically for handling raw, unscreened, domestic sanitary sewage or sludge. Pumps shall be mounted on a base plate in a vertical V-belt base arrangement. Pumps shall have suction connections and discharge connections as specified in Part 4. Pump solids handling capability and performance criteria shall be in accordance with requirements listed in Part 4.~~

S. ~~Casing shall be cast iron Class 30 with integral volute scroll. Casing shall incorporate the following features:~~

1. ~~Mounting feet sized to prevent tipping or binding when pump is completely disassembled for maintenance.~~
2. ~~Fill port cover plate, 3 1/2 inch diameter, shall be opened after loosening a hand nut/clamp bar assembly. In consideration for safety, hand nut threads must provide slow release of pressure, and the clamp bar shall be retained by detente lugs. A Teflon gasket shall prevent adhesion of the fill port cover to the casing.~~
3. ~~Casing drain plug shall be at least 1 1/4 inch NPT to ensure complete and rapid draining.~~
4. ~~Liquid volume and recirculation port design shall be consistent with performance criteria listed in Part 4.~~

T. ~~Coverplate shall be cast iron, Class 30. Design must incorporate the following maintenance features:~~

1. Retained by hand nuts for complete access to pump interior. Coverplate removal must provide ample clearance for removal of stoppages, and allow service to the impeller, seal, wearplate or check valve without removing suction or discharge piping.
 2. A replaceable, self-cleaning, wearplate secured to the cover plate by welded studs and nuts shall be AISI 1015 HRS. Wear plate material shall be an austempered ductile iron with a minimum Brinell hardness of 400. Wear plate shall be self-cleaning design ensuring that debris is cleared away and does not collect on the impeller vanes.
 3. In consideration for safety, a pressure relief valve shall be supplied in the coverplate. Relief valve shall open at 75 to 200 psi.
 4. Two O-rings of Buna-N material shall seal coverplate to pump casing.
 5. Pusher bolt capability to assist in removal of coverplate. Pusher bolt threaded holes shall be sized to accept same retaining capscrews as used in rotating assembly.
 6. Easy-grip handle shall be mounted to face of coverplate.
- U. A rotating assembly, which includes impeller, shaft, mechanical shaft seal, lip seals, bearings, sealplate and bearing housing, must be removable as a single unit without disturbing the pump casing or piping. Design shall incorporate following features:
1. Sealplate and bearing housing material shall be an austempered ductile iron with a minimum Brinell hardness of 400. Separate oil filled cavities, vented to atmosphere, shall be provided for shaft seal and bearings. Cavities must be cooled by the liquid pumped. Three lip seals will prevent leakage of oil.
 2. The bearing cavity shall have an oil level sight gauge and fill plug check valve. The clear sight gauge shall provide easy monitoring of the bearing cavity oil level and condition of oil without removal of the fill plug check valve. The check valve shall vent the cavity but prevent introduction of moist air to the bearings.
 3. The seal cavity shall have an oil level sight gauge and fill/vent plug. The clear sight gauge shall provide easy monitoring of the seal cavity oil level and condition of oil without removal of the fill/vent plug.
 4. Double lip seal shall provide an atmospheric path providing positive protection of bearings, with capability for external drainage monitoring.
 5. Impeller material shall be an austempered ductile iron with a minimum Brinell hardness of 400. Impeller to be two-vane, semi-open, non-clog, with integral pump-out vanes on the back shroud. Impeller shall thread onto the pump shaft and be secured with a lockscrew and conical washer.
 6. Shaft shall be AISI 4140 alloy steel unless otherwise specified by the engineer, in which case AISI 17-4 pH stainless steel shall be supplied.
 7. Bearings shall be anti-friction ball type of proper size and design to withstand all radial and thrust loads expected during normal operation. Bearings shall be oil

- lubricated from a dedicated reservoir. Pump designs which use the same oil to lubricate the bearings and shaft seal shall not be acceptable.
8. Shaft seal shall be oil lubricated mechanical type. The stationary and rotating seal faces shall be tungsten titanium carbide alloy. Each mating surface shall be lapped to within three light bands flatness (35 millionths of an inch), as measured by an optical flat under monochromatic light. The stationary seal seat shall be double floating by virtue of a dual O-ring design; an external O-ring secures the stationary seat to the sealplate, and an internal O-ring holds the faces in alignment during periods of mechanical or hydraulic shock (loads which cause shaft deflection, vibration, and axial/radial movement). Elastomers shall be viton. Cage and spring to be AISI 316 stainless steel. Seal shall be oil lubricated from a dedicated reservoir. The same oil shall not lubricate both shaft seal and shaft bearings.
 9. Pusher bolt capability to assist in removal of rotating assembly. Pusher bolt threaded holes shall be sized to accept the same capscrews as used for retaining rotating assembly.
- V. Adjustment of the impeller face clearance (distance between impeller and wearplate) shall be accomplished by external means.
1. Clearances shall be maintained by external shim-less cover-plate adjustment, utilizing collar and adjusting screw design for incremental adjustment of clearances by hand. Requirement of realignment of belts, couplings, etc., shall not be acceptable. Coverplate shall be capable of being removed without disturbing clearance settings.
 2. There shall be provisions for additional clearance adjustment in the event that adjustment tolerances have been depleted from the cover plate side of the pump. The removal of stainless steel shims from the rotating assembly side of the pump shall allow for further adjustment as described above
 3. Clearance adjustment, which requires movement of the shaft only, thereby adversely affecting seal working length or impeller back clearance, shall not be acceptable.
- W. Suction check valve shall be molded Neoprene with integral steel and nylon reinforcement. A blow out center shall protect pump casing from hydraulic shock or excessive pressure. Removal or installation of the check valve must be accomplished through the cover plate opening, without disturbing the suction piping. Sole function of check valve shall be to save energy by eliminating the need to re-prime after each pumping cycle. Pumps requiring a suction check valve to assist re-prime will not be acceptable.
- X. Spool flanges shall be one piece cast iron; Class 30 fitted to suction and/or discharge ports. Each spool shall have one 1-1/4 inch NPT and one 1/4 inch NPT tapped hole with pipe plugs for mounting gauges or other equipment.
- Y. Pumps to be supplied with a drain kit for ease of maintenance. The kit shall contain 10 feet length of reinforced plastic hose with a female quick connect fitting at one end, and

~~factory installed drain fittings in each pump. Fittings include a stainless steel pipe nipple, stainless steel bushing, stainless steel gate valve and aluminum male quick connect fitting.~~

Z. Spare Parts Kit:

1. ~~The following minimum spare parts shall be furnished with each pumping system:~~
 - a. ~~One spare pump mechanical seal (complete), and with it all gaskets, seals, sleeves, "O" rings, and packings required to be replaced during replacement of the seal.~~
 - b. ~~One set of impeller clearance adjustment shims.~~
 - c. ~~One cover plate "O" ring.~~
 - d. ~~One rotating assembly "O" ring.~~
 - e. ~~One spare rotating assembly for each pump size.~~ **(Addendum 2, Issued August 6, 2026)**

2.05 MOTORS

- A. Pump motors shall be 20 HP, three phase, 60 hertz, 480 VAC, horizontal ODP, 1,800 RPM, NEMA design B with cast iron frame with copper windings, induction type, with Class F insulation and 1.15 service factor for normal starting torque and low starting current characteristics, suitable for continuous service. The motors shall not overload at the design condition or at any head in the operating range as specified.
- B. Motors shall be tested in accordance with provisions of ANSI/IEEE Std 112 and to be premium efficient, inverter duty. **(Addendum 2, Issued August 6, 2026)**
- C. ~~Pump motors shall be furnished as specified in Part 4 and shall be horizontal, TEFC, NEMA design B with cast iron frame with copper windings, induction type, with normal starting torque and low starting current characteristics, suitable for continuous service. The motors shall not overload at the design condition or at any head in the operating range as specified. Motors shall comply with the requirements of Section 11050.~~ **(Addendum 2, Issued August 6, 2026)**

2.06 DRIVE TRANSMISSION

- A. Power to pumps transmitted V-belt drive assemblies. The sheave/belt combination shall provide the speed ratio needed to achieve the specified pump operating conditions.
- B. Each drive assembly shall utilize at least two V-belts providing a minimum combined safety factor of 1.5. Single belt drives or systems with a safety factor of less than 1.5 are not acceptable. Computation of safety factors shall be based on performance data published by the drive manufacturer.
- C. Precise alignment tolerances of the drive assemblies shall be achieved by means of a belt/sheave laser alignment system resulting in the reduction of vibration, accelerated wear, and premature failure. **(Addendum 2, Issued August 6, 2026)**

- D. The pump manufacturer shall submit power transmission calculations which document the following:
1. Ratio of pump/motor speed.
 2. Pitch diameter of driver and driven sheaves.
 3. The number of belts required per drive.
 4. Theoretical horsepower transmitted per belt, based on vendor's data.
 5. Center distance between pumps and motor shafts.
 6. Arc-length correction factor applied to theoretical horsepower transmitted.
 7. The service factor applied to established design horsepower.
 8. Safety factor ratio of power transmitted/brake horsepower required.
- E. Belt Guards:
1. Pump drives are to be enclosed on all sides by a guard constructed of fabricated steel or combination of materials including expanded, perforated, or solid sheet metal. No opening to a rotating member shall exceed 1/2-inch.
 2. Guards must be completely removal without interference from any unit component and shall be securely fastened and braced to the unit base.
 3. Metal to be free from burrs and sharp edges. Structural joints shall be continuously welded. Rivet spacing on panels shall not exceed 5 inches. Tack welds shall not exceed four-inch spacing.
 4. The guard shall be finished with one coat of gray W.R. non-lift primer and one coat of orange acrylic alkyd W.R. enamel in accordance with Section 3, Color Definitions of ANSI 253.1; Safety Color Code for Marking Physical Hazards.
- F. Pumps, piping, and exposed steel framework shall be cleaned prior to coating using an approved solvent wipe or phosphatizing cleaner. The part must thoroughly dry before paint application. Open joints shall be caulked with an approved polyurethane sealant. Exposed surfaces shall be applied with one coat of Tnemec Series 69 Polyimide Epoxy Primer and one finish coat of Series 73 Aliphatic Acrylic Polyurethane for a total dry film thickness of 4-6 mils. Finish coat shall be semi-gloss white for optimum illumination and enhancement. The coating shall be corrosion, moisture, oil, and solvent resistant when completely dry. The factory finish shall allow for over-coating and touch-up for 6 months after coating. Thereafter, it will generally require sanding to accept a topcoat or touch-up coating. See Product Data Sheet for additional information.

2.07 ELECTRICAL CONTROL COMPONENTS

- A. Variable Frequency Pump Control System
1. The pump control system shall be factory built and furnished by the manufacturer of the originally installed self-priming pumps, The Gorman-Rupp Company of Mansfield, Ohio. This will serve to ensure a completely integrated system and total system responsibility.

B. General

1. This specification covers a pump control system to work in conjunction with a duplex self-priming pump system. Major items of equipment include variable frequency drive assemblies (one for each pump), programmable logic controller and a solid state liquid level control system, furnished as part of a common motor control center.
2. The drive assemblies shall each include a motor circuit breaker, inverter and door mounted operator controls.
3. The primary liquid level control will include an air bubbler level control, PLC based level/logic control with operator interface including level transmitter, speed set-point control, pump sequence control, alarms and pump safety shutdowns.
4. The pump control system shall be supplied by the pump manufacturer to assure a complete unit and total system responsibility. The pumps, motors, and control system shall be set-up and tested as unit at the pump manufacturer's facility.

C. UL Listing

1. The drive assemblies and liquid level control shall be manufactured by a UL panel builder and each assembly shall bear a serialized UL label for ENCLOSED INDUSTRIAL CONTROL PANELS. Listing for open style industrial control panels or an assembly of listed or recognized components shall not be acceptable.

D. Panel Enclosures

1. Pump control panel enclosure shall be constructed in conformance with applicable section of National Electrical Manufacturers' Association (NEMA) standards for Type 1 electrical enclosures. Enclosure shall be fabricated of stainless steel having a minimum thickness of not less than 0.075 inch (14 gauge). Interior and exterior surfaces shall be enamel over phosphatized surfaces. Ventilated Type 1 enclosures will be permitted provided that internally powered fans and replaceable intake air filters are provided. Exhaust openings shall be near the top of the enclosure, intake openings near the bottom. Ventilation fans, louvers, and filters shall have the same NEMA rating as the enclosure so that the enclosure rating is not degraded.
2. The electrical control equipment shall be mounted within a NEMA 3R, dead front-type control enclosure of the size specified in Part 4. The enclosure door shall be hinged and sealed with a neoprene gasket. It shall include a removable plated steel back panel on which control components shall be mounted. Back panel shall be secured to enclosure with collar studs. Operator controls shall be mounted on the enclosure door. The control panel shall be equipped with vapor emission type corrosion inhibitors.
3. All components shall be of the highest industrial quality, securely fastened to a removable subplate with screws and lock washers. The sub plate shall be tapped

to accept all mounting screws. Self-tapping screws shall not be used to mount any component. All operating controls and instruments shall be securely mounted and shall be clearly labeled to indicate function.

4. A main terminal block and ground bar shall be furnished for field connection of the electrical supply. The connections shall be designed to accept copper conductors of sufficient size to serve the pump station loads. The main terminal block shall be mounted to allow incoming wire bending space in accordance with Article 373 of the National Electrical Code (NEC).

E. Door

1. Enclosure shall be equipped with a hinged door held closed with clamps that are quick and easy to operate. The door shall accommodate the mounting of switches and indicators.

F. Back Panel

1. Enclosure shall be furnished with a removable back panel, fabricated of steel having a thickness of not less than 0.106 inch (12 gauge), which shall be secured to the enclosure with collar studs. Such panel shall be of adequate size to accommodate all basic components.

G. Mounting

1. All control components shall be securely fastened to a removable back panel with screws and lock washers. Switches, indicators and instruments shall be mounted through the control panel door. Self-tapping screws shall not be used to mount any components.

H. Main Connections

1. Each control assembly shall be furnished with main terminals and ground lug for field connection of the electrical supply. The connections shall be designed to accept copper conductors of sufficient size to serve the loads. The main terminals shall be mounted to allow incoming wire bending space in accordance with article 373 of the National Electric Code (NEC). A separate terminal strip shall be provided for 115 volt, single phase control power and shall be segregated from the main terminals. Ten percent of the control terminals shall be furnished as spares.

I. Indicators

1. LED Indicating lights shall be supplied.

J. Switch Controls

1. The manufacturer may use selector switches, pushbutton switches, or any combination thereof, to accomplish the switching tasks described herein. Switches shall be oil tight type with contacts rated NEMA A-300 minimum.

K. Control Circuit Components and Control Logic

1. Description and function (Addendum 2, Issued August 6, 2026)

- L. ~~The pump station control panel will be tested as an integral unit by the pump station manufacturer.~~
- M. ~~Panel Enclosure:~~
1. ~~The electrical control equipment shall be mounted within a NEMA 3R, dead front type control enclosure of the size specified in Part 4. The enclosure door shall be hinged and sealed with a neoprene gasket. It shall include a removable plated steel back panel on which control components shall be mounted. Back panel shall be secured to enclosure with collar studs. Operator controls shall be mounted on the enclosure door. The control panel shall be equipped with vapor emission type corrosion inhibitors.~~
 2. ~~All components shall be of the highest industrial quality, securely fastened to a removable subplate with screws and lock washers. The sub plate shall be tapped to accept all mounting screws. Self-tapping screws shall not be used to mount any component. All operating controls and instruments shall be securely mounted and shall be clearly labeled to indicate function.~~
 3. ~~A main terminal block and ground bar shall be furnished for field connection of the electrical supply. The connections shall be designed to accept copper conductors of sufficient size to serve the pump station loads. The main terminal block shall be mounted to allow incoming wire bending space in accordance with Article 373 of the National Electrical Code (NEC).~~
- N. ~~UL Label Requirement:~~
1. ~~Pump station controls shall conform to third party safety certification. The panel shall bear a serialized UL label listed for "Enclosed Industrial Control Panels". The enclosure, and all components mounted on the sub panel or control cover shall conform to UL descriptions and procedures. (Addendum 2, Issued August 6, 2026)~~
- O. ~~Auxiliary Power Transformer:~~
1. ~~The lift station shall be equipped with a 500 VA stepdown transformer to supply 115-volt, AC, single phase for the control and auxiliary equipment. The primary and secondary side of the transformer to be protected by a thermal magnetic circuit breaker, sized to meet the power requirements of the transformer. An operating mechanism shall penetrate the control panel door, and a pad-lockable operator handle shall be secured on the exterior surface. Interlocks must prevent opening the door until circuit breakers are in "OFF" position.~~
- P. The control panel shall be equipped to monitor the incoming power and shut down the pump motors when required to protect the motor(s) from damage caused by phase reversal, phase loss, voltage unbalance, high voltage, and low voltage. An adjustable time delay shall be provided to minimize nuisance trips. The motor(s) shall automatically restart, following an adjustable time delay, when power conditions return to normal.
- Q. The control panel shall be equipped with a transient voltage surge suppressor to minimize damage to the pump motors and control from transient voltage surges. The

suppressor shall utilize thermally protected silicon oxide varistors encapsulated in a non-conductive housing. Mechanical indicators shall be provided on each phase to indicate protection has been lost. The suppressor shall have a surge current rating of 100,000 amps per phase and a 100-kA interrupting rating.

R. Motor Branch Components:

1. A main terminal block and ground bar shall be furnished for field connection of the electrical supply. The connections shall be designed to accept copper conductors of sufficient size to serve the pump station loads. The main terminal block shall be mounted to allow incoming wire bending space in accordance with Article 373 of the National Electrical Code (NEC).
2. A properly sized heavy-duty air circuit breaker shall be furnished for each pump motor and shall have a symmetrical RMS interrupting rating of 4,200 amperes at 480 volts. The manufacturer shall seal all circuit breakers after calibration to prevent tampering. A padlocking operating mechanism shall be installed on each motor circuit breaker. Operator handles for the mechanisms shall be located on the inner door, with interlocks, which permit the inner door to be opened only when circuit breakers are in the "OFF" position.
3. Provide VFD as required per Specification Section 16230.
4. Spare 15-amp breakers shall be provided to accommodate the telemetry system and the magmeter flow meter.

S. ~~Primary Level Control System / Programmable Logic Controller (PLC):~~

1. ~~The primary liquid level control as specified in Section 16902 to be operated through an Allen Bradley Compact Logic L2 PLC. Operator interface to be through Panel View 6700 color operator interface display. Primary controls will sense wet well level via an analog signal, scaled to control speed of the pump drive. (Addendum 2, Issued August 6, 2026)~~

T. Dry Contacts:

1. The control panel shall be supplied with dry contacts wired to terminal blocks. Conditions to be monitored are:
 - a. Low Water Alarm (Ultra Sonic Sensor Control)
 - b. High Water Alarm (Ultra Sonic Sensor Control)
 - c. Backup Float Switch Control Activated
 - d. Moisture/Thermal Failure - Pump 1
 - e. Moisture/Thermal Failure - Pump 2
 - f. Moisture/Thermal Failure - Pump 3 (where applicable)
 - g. Pump Run - Pump 1
 - h. Pump Run - Pump 2
 - i. Pump Run - Pump 3 (where applicable)

- j. Station Enclosure Low Temperature Alarm
 - k. Motor Overload Trip Pump 1
 - l. Motor Overload Trip Pump 2
 - m. Motor Overload Trip Pump 3 (where applicable)
 - n. VFD Fault 1
 - o. VFD Fault 2
 - p. VFD Fault 3 (where applicable)
- U. Overload Relays:
- 1. Overload relays shall be of block type, utilizing melting alloy type spindles, and shall have visual trip indication with trip free operation. Pressing the overload-reset lever shall not actuate the control contact until such time as the overload spindle has reset.
 - 2. Resetting of the overload reset lever will cause a snap action control contact to reset, thus re-establishing a control circuit. Overload relays shall be of manual reset only and not convertible to automatic reset. Trip settings shall be determined by the heater element only and not by adjustable settings. Heater elements shall provide NEMA class 10 trip times and shall be selected in accordance with the actual motor nameplate data. An overload reset push button shall be mounted through the door of the control panel in such a manner as to permit resetting the overload relays without opening the control panel door.
- V. Pump Motor Protection:
- 1. The pump control panel shall be equipped to terminate pump operation due to high-motor winding temperature or moisture in the motor housing and shall utilize the contacts in the pump motor.
- W. Other Control Components:
- 1. The pump control panel shall be equipped to terminate pump operation due to high-motor winding temperature or moisture in the motor housing and shall utilize the contacts in the pump motor. If either event should occur, the motor starter will drop out, and a mechanical indicator, visible on the inner door, shall indicate the pump motor has been shut down. The pump motor shall automatically reset when the condition has been corrected. However, the mechanical indicator shall require manual reset. Dry contacts, wired to terminal blocks, shall be furnished for each pump for thermal/moisture shutdown.
 - 2. The control circuit shall be protected by a normal duty thermal magnetic air circuit breaker, which shall be connected in such a manner as to allow control power to be disconnected from all control circuits.
 - 3. Pump mode selector switches shall be connected to permit manual start and manual stop for each pump individually, and to select automatic operation of

each pump under control of the liquid level control system. Manual operation shall override the liquid level control system. Selector switches shall be heavy duty, oil tight design, with contacts rated NEMA A300 minimum.

4. Pump alternator relay contacts shall operate after pump shutdown. Relay contacts shall be rated 10 amperes minimum at 120 volts non inductive.
5. The control panel shall be equipped with one oil tight pilot light for each pump motor. Light shall be wired in parallel with the related pump motor starter to indicate that the motor is on or should be running.
6. Six-digit elapsed time indicators (non-reset type) shall be connected to each motor starter to indicate the total running time of each pump in "hours" and "tenth of hours".
7. A switch shall be provided to permit the station operator to select automatic alternation of the pumps, to select pump number one to be the lead pump for each pumping cycle or to select pump number two to be the lead pump for each pumping cycle. Selector switch shall be heavy duty, oil tight design, with contacts rated NEMA A300 minimum.
8. A duplex ground fault indicating utility receptacle providing 115 VAC, 60 Hertz, single-phase current, shall be mounted through the door of the control enclosure. Receptacle circuits shall be protected by a 15-ampere thermal magnetic circuit breaker.

X. ~~Pump Start Delay:~~

1. ~~The control circuit for Pump 2 and Pump 3 shall be equipped with a time delay to prevent simultaneous motor starts.~~

Y. ~~Panel Heater:~~

1. ~~The control panel shall be equipped with a panel heater to minimize the effects of humidity and condensation. The heater shall include a thermostat.~~

Z. ~~Wiring:~~

1. ~~The control panel, as furnished by the manufacturer, shall be completely wired. The contractor shall field connect the power feeder lines to the main terminal block, final connections to the remote alarm devices, and the connections between the pump and the pump motor control. All wiring, workmanship, and schematic wiring diagrams shall be in compliance with applicable standards and specifications set forth by the National Electric Code (NEC).~~
2. ~~All user serviceable wiring shall be type MTW or THW, 600 volts, and shall be color coded as follows:~~
 - a. ~~Line and load circuits, AC or DC power~~ ~~Black~~
 - b. ~~AC control circuit less than line voltage~~ ~~Red~~
 - c. ~~DC control circuit~~ ~~Blue~~

- d. ~~Interlock control circuit, from external source~~ ~~Yellow~~
 - e. ~~Equipment grounding conductor~~ ~~Green~~
 - f. ~~Current carrying ground~~ ~~White~~
 - g. ~~Hot with circuit breaker open~~ ~~Orange~~
3. ~~Control circuit wiring inside the panel, except for internal wiring of individual components, shall be of 16 gauge minimum, type MTW or THW, 600 volts. Power wiring shall be 14 gauge minimum.~~
4. ~~Motor branch and other power conductors shall not be loaded above the temperature rating of the connected termination. Wires shall be clearly numbered at each end in accordance with the electrical diagrams. All wires on the sub plate shall be bundled and tied.~~
5. ~~Wires connected to components mounted on the enclosure door shall be bundled and tied in accordance with good commercial practice. Bundles shall be made flexible at the hinged side of the enclosure. Adequate length and flex shall be provided to allow the door to swing to its full open position without undue stress or abrasion on the wire or insulation. Bundles shall be held in place on each side of the hinge by mechanical fastening devices.~~
- AA. ~~Conduit requirements shall be in accordance with Section 16130.~~
- BB. ~~Grounding:~~
- 1. ~~The pump control manufacturer shall provide a common ground bar mounted on the enclosure back plate. The mounting surface of the ground bar shall have any paint removed before making final connections.~~
 - 2. ~~The contractor shall make the field connections to the main ground lug and each pump motor in accordance with the National Electric Code.~~
- CC. ~~Identification:~~
- 1. ~~A permanent corrosion resistant name plate(s) shall be attached to the control and include the following information:~~
 - a. ~~Equipment serial number~~
 - b. ~~Control panel short circuit rating~~
 - c. ~~Supply voltage, phase and frequency~~
 - d. ~~Current rating of the minimum main conductor~~
 - e. ~~Electrical wiring diagram number~~
 - f. ~~Motor horsepower and full load current~~
 - g. ~~Motor overload heater element~~
 - h. ~~Motor circuit breaker trip current rating~~
 - i. ~~Name and location of equipment manufacturer~~

2. ~~Control components shall be permanently marked using the same identification shown on the electrical diagram. Identification labels shall be mounted adjacent to the device.~~
 3. ~~Switches, indicators, and instruments shall be plainly marked to indicate function, position, etc. Marking shall be mounted adjacent to and above the device.~~ (Addendum 2, Issued August 6, 2026)
- DD. Miscellaneous Pump Station Power:
1. Provide a 120/208 Volt panel, transformer and surge protection for miscellaneous pump station ventilation lights, receptacles, and instrumentation per Specification Sections 16453 and 16251.

2.08 PLC CONTROL SYSTEM

A. Programmable Logic Controller

1. The PLC shall be an Allen-Bradley Compac Logix Model L3 system. The PLC shall be equipped with a Model LRP CPU with 14K memory, and a configurable port which is reserved for future customer use.
2. The PLC shall operate on 24VDC power and be equipped with the communication devices, digital and analog I/O necessary to accomplish the specified operation. A minimum of 10% spare of the I/O used shall be supplied.
3. The program logic shall be stored in battery backed random access memory, as well as on a programmable, read only memory module. The memory module shall auto load and run when installed in the programmable control processor and is included to facilitate field repair or replacement of the programmable control hardware without the use of programming terminals or personal computers.
4. The power supply to the programmable control shall be industrial grade design with integral power factor correction, DC "OK" signal indicator, and adjustable voltage. Operating range shall be -10 degrees C to +60 degrees C. Power supply shall have infinite short circuit, overvoltage and overtemperature protection. Each motor starter or contactor shall be equipped with a surge suppressor.
5. An Allen-Bradley Panelview Plus 7 1000c (10.4") color electronic operator interface shall be provided for data entry and display. The operator interface shall be mounted on the front of the control panel with other operator controls. The operator interface shall be a TFT touch-screen terminal. A memory module shall be included.
6. Electromechanical relays and timers, when used shall be equipped with 120VAC coils and contacts rated Nema A-300 minimum.
7. All user adjustable timer settings shall be PLC based. Time delay adjustment to be accessible via the operator interface without opening control panel door.

B. Compac Logix

1. Compac Logix shall be accomplished using programmable controllers. Electromechanical relays may be used when necessary. However, the primary control logic shall be performed by the PLC.
2. The O&M manual shall be provided with complete ladder logic program documentation including English names, rung comments, and coil/contact cross-references.
3. The control shall be pre-programmed or wired to provide the following routines:
 - a. Pump alternation at lead stop
 - b. Excessive pump run time alternation
 - c. Jump to next pump on lead failure
 - d. Start/stop pumps at normal level settings
 - e. Pump start delays when called simultaneously
 - f. General alarm pilot light activation: Quick flashing alarm/slow flashing acknowledge/ steady on reset/off when clear
 - g. Station trouble alarm (115VAC and normally open dry contact)
 - h. High and low level alarms
 - i. Pump start/stop level control
 - j. Pump high temperature shutdown
4. The operator interface shall be equipped with the following displays and functions:
 - a. Main Menu
 - b. Wet Well Level
 - c. Drive speed set points for single pump and parallel pump operation
 - d. Wet Well Level Simulation
 - e. Low Water Alarm Status
 - f. High Water Alarm Status
 - g. Pump High Temperature Status #1, #2
 - h. Pump Sequence Selection
 - i. Alarm Silence
 - j. Alarm Reset
 - k. Alarm History
 - l. General Alarm Lamp Test
 - m. Lead Level Start/Stop Setpoints

- n. Lag Level Start/Stop Setpoints
- o. Low Water Alarm Setpoints
- p. High Water Alarm Setpoints
- q. Power-up Delay Setpoint
- r. Alarm Delay Setpoint
- s. Pump Start Delay Setpoint
- t. Alternation Time Interval Setpoint
- u. Level Transmitter Calibration

C. Control Logic

1. Control logic shall be accomplished using programmable controllers. Electromechanical relays may be used when necessary. However, the primary control logic shall be performed by the PLC.
2. The O&M manual shall be provided with complete ladder logic program documentation including English names, rung comments, and coil/contact cross-references.
3. The control shall be pre-programmed or wired to provide the following routines:
 - a. Pump alternation at lead stop
 - b. Excessive pump run time alternation
 - c. Jump to next pump on lead failure
 - d. Start/stop pumps at normal level settings
 - e. Pump start delays when called simultaneously
 - f. General alarm pilot light activation: Quick flashing alarm/slow flashing acknowledge/ steady on reset/off when clear
 - g. Station trouble alarm(115vac and normally open dry contact)
 - h. High and low level alarms
 - i. Pump start/stop level control
 - j. Drive speed/level control
 - k. Pump high temperature shutdown
 - l. Drive fault alarm
4. The operator interface shall be equipped with the following displays and functions:
 - a. Main Menu
 - b. Wet Well Level
 - c. Wet Well Level Simulation

- d. Low Water Alarm Status
- e. High Water Alarm Status
- f. Pump High Temp. Status #1, #2
- g. Drive Fault Status #1, #2
- h. Pump Sequence Selection
- i. Alarm Silence
- j. Alarm Reset
- k. General Alarm Lamp Test
- l. Lead Level Start/Stop Setpoints
- m. Lag Level Start/Stop Setpoints
- n. Low Water Alarm Setpoints
- o. High Water Alarm Setpoints
- p. Speed/Level Setpoints (1 pump running)
- q. Speed/Level Setpoints (2 pumps running)
- r. Power-up Delay Setpoint
- s. Alarm Delay Setpoint
- t. Pump Start Delay Setpoint
- u. Alternation Time Interval Setpoint
- v. Level Transmitter Calibration

D. Drive Assembly

- 1. All motor branch components shall be of the highest industrial quality. Operating coils of all AC control devices shall be rated for 120 volts, and shall be suitable for use in a voltage range of 108 to 132 volts, 60 hertz.

E. Drive Control

- 1. Each drive assembly shall be equipped with a control power transformer with primary and secondary fuses and all relays and components necessary to perform the specified functions.
- 2. Operator controls shall be mounted through the drive assembly enclosure door and consist of the following:
 - a. Mode selector switch (Hand-off-auto)
 - b. Manual speed potentiometer
 - c. Digital display
 - d. Drive fault reset/stop pushbutton

e. Elapsed time meter

F. Circuit Breakers and Operating Mechanisms

1. A properly sized heavy duty air circuit breaker shall be furnished for each pump motor and shall have a symmetrical RMS interrupting rating of 14,000 amperes at 480 volts. All circuit breakers shall be sealed by the manufacturer after calibration to prevent tampering. A padlocking operating mechanism shall be installed on each motor circuit breaker. Operator handles for the mechanisms shall be located on the exterior of the control compartment door, with interlocks which permit the door to be opened only when circuit breakers are in the "off" position.

G. Inverter

1. The inverter shall be suitable for operation of standard Nema Design B, 4 pole motors. The inverter will have a diode bridge rectifier on the input to minimize the generation of electrical noise back into the line and provide near unity power factor. Output devices shall be transistors.
2. Environment Conditions
 - a. The inverter shall be capable of operation under any combination of the following conditions without mechanical or electrical damage.
 - 1) Ambient Temperature: -10 + 40 degrees C
 - 2) Relative Humidity: Less than 90% non-condensing
 - 3) Altitude: Less than 1,000M (3300 ft) above sea level
 - 4) Vibration: .006 inches displacement, 1G peak
 - 5) Shock: 15G peak for 11mS (+/-1.0mS)
 - b. Control Specification
 - 1) Control System: Sinusoidal pulse width modulated voltage waveform
 - 2) Frequency Accuracy: +/- 1% of max. frequency
 - 3) Volts/Hertz Ratio: 1 to 14.3 V/HZ user programmable
 - 4) Operation Frequency: 0 to 250 Hz
 - 5) Overload Capacity: 115 for 60 seconds

H. Digital Readout and Monitor

1. A five digit panel meter will display standby status, output frequency, set-up parameters and fault. With pushbutton, user can monitor current, voltage, frequency, acceleration and deceleration time, minimum frequency and maximum frequency. Readout also provides inverter status and protective circuit status.

I. Protection

1. The variable speed drive system shall include a diode bridge rectifier, capacitor filter, and transistorized inverter section. Base driver signals to control firing of the power transistors will be designed with optically coupled isolators for maximum protection of the control circuits from high voltage and noise. The output will be a sinusoidal, pulse width modulated, voltage waveform for reduced harmonic heating in the motor.
2. The system protection will provide the following:
 - a. Intermittent overload - 50 to 115%
 - b. Current limit - 50 to 150%
 - c. Overcurrent - 180% of rated output current
 - d. Inverse time overload - 50 to 100%
 - e. Short circuit - Phase to phase or phase to ground
 - f. Overvoltage - 10% above input line or DC bus voltage
 - g. Undervoltage - 10% below line voltage
 - h. Component burnout - DC bus fuse protection and/or phase input fusing
 - i. Power loss ride-through - 500mS
3. When the inverter trips out on a fault, the fault relay shall activate and the display shall indicate the reason for the trip as follows:
 - a. Overcurrent
 - b. Short circuit
 - c. Overload
 - d. Overvoltage
 - e. Undervoltage
 - f. Overheat
 - g. Ground fault
 - h. Motor stalled
 - i. Power supply fault
4. Auto restart shall occur when the inverter trips on undervoltage. Auto restart will not be attempted for any other type of fault and the inverter will trip out immediately, activate the fault relay and make the appropriate indication on the display.
5. Save the status of the inverter at the time of the fault and make that information available on the LED display until the inverter is reset or the control power is removed.

J. Operational Functions:

1. Acceleration and deceleration time independently adjustable from 1 to 600 seconds (selectable ranges).
2. Signal follower 0-10VDC or 4-20MA user selectable. An increasing input signal can command increasing or decreasing frequency as required by the application.
3. Volts/Hertz patterns user selectable.
4. Maximum and minimum frequency limit adjustments.

K. EMI Protection

1. Each inverter input shall be equipped with a solid state, soft clamping transient voltage protector. The protector shall be capable of dissipating 16,000 joules or greater and a response time of 6 nanoseconds.
2. All contactor coils shall be equipped with MOV or RC surge arresters.

L. Auxiliary Power Transformer

1. The liquid level control shall be equipped with a 5 kVA stepdown transformer to supply 115 volts. The primary side of the transformer shall be protected by a thermal-magnetic air circuit breaker, specifically sized to meet the power requirements of the transformer. A mechanical operating mechanism shall be installed on the circuit breaker to provide a means of disconnecting power to the transformer. The operator handle for the operating mechanism shall be located on the exterior of the control panel with interlocks which permit the door to be opened only when the circuit breaker is in the "off" position.

M. Surge Protective Device

1. The control panel shall be equipped with a modular surge arrester to minimize damage to the pump motors and control from transient voltage surges. The suppressor shall utilize thermally protected by heavy duty zinc oxide varistors encapsulated in a non conductive housing. Mechanical indicators shall be provided on each phase to indicate protection has been lost. The suppressor shall have a short circuit current rating of 200,000 Amps and a Maximum Discharge current rating [I_{max}] of 40,000 Amperes. Nominal discharge current [I_n] is 20,000 Amperes. Surge arrester according to UL 1449 3rd Edition, Type 2 component assembly.

N. Three Phase Voltage Monitor

1. Voltage monitor will be wired to stop pump motors in the event of any of the following: Low voltage, voltage unbalance, phase loss, phase reversal. Power to pumps will automatically be restored upon return to normal power conditions. Includes integral pick-up and drop-out delay.

O. Receptacle

1. A duplex ground fault interrupter utility receptacle providing 115 VAC, 60 hertz, single phase current shall be provided. Receptacle circuit shall be protected by a 15 ampere thermal-magnetic circuit breaker.

P. Operator Controls

1. Operator controls shall be mounted through the level control assembly enclosure door. These shall consist of the following:
 - a. Control selector switch
 - b. Pump sequence selector switch
 - c. Alarm silence/reset pushbutton
 - d. Air pump selector switch
 - e. #1 high pump temperature pilot light
 - f. #2 high pump temperature pilot light
 - g. High water alarm pilot light
 - h. PLC interface module (Panelview 1000c display)
 - i. General alarm fault
 - j. #1 pump run (Integral to HIM module)
 - k. #2 pump run (Integral to HIM module)
 - l. #1 drive fault (integral to HIM module)
 - m. #2 drive fault (integral to HIM module)
2. The control circuit shall be fused and shall be provided with a disconnect switch connected in such a manner as to allow control power to be disconnected from all control circuits.
3. Pump sequence selector switch shall permit selection of automatic pump alternation, or selection of any pump to run as lead pump for each cycle.
4. An alarm silence/reset pushbutton shall be provided to acknowledge and reset the alarm circuits while corrective actions are underway. Following an alarm condition, the respective alarm pilot light shall flash until acknowledged and then glow continuously until the condition has cleared. A general alarm dry contact and 115 vac powered station trouble circuit shall energize continuously until acknowledged.
5. A selector switch shall provide manual alternation of the air pumps in the bubbler system. The switch shall be connected in such a manner that either pump may be selected to operate continuously.

Q. High Pump Temperature Shutdown

1. The control panel shall be equipped with circuitry to override the level control system and shut down the pump motor(s) when required to protect the pump from damage caused by excessive temperature.
2. A thermostat shall be mounted on each pump to detect its temperature. If the pump temperature should rise to a level, which could cause pump damage, the thermostat shall cause the pump motor to shut down. A pilot light shall indicate that the pump motor has been stopped because of a high temperature condition. The pump shall remain locked out until the pump has cooled and the circuit has been manually reset. Automatic reset of such a circuit shall not be acceptable.

R. Fault Monitoring Contacts

1. Dry contacts wired to terminal blocks shall be provided for each of the following monitoring conditions:
 - a. High Water Alarm (Primary Level Control).
 - b. Low Water Alarm (Primary Level Control).
 - c. Three Phase Voltage Monitor Fault.
 - d. Backup Float Control System Activated.
 - e. VFD Fault #1, #2.
 - f. Wet Well Level Sensed by Analog Signal.
 - g. Pump Fault #1, #2.
 - h. Pump Run #1, #2.
 - i. Low Station Enclosure Temperature.

S. Control Circuit

1. A normal duty thermal magnetic circuit breaker shall protect all control circuits by interrupting control power.
2. Pump mode selector switches shall permit manual start or stop of each pump individually or permit automatic operation under control of the liquid level control system. Manual operation shall override all shutdown systems, except the motor overload relays. Selector switches to be oil tight design with contacts rated NEMA A300 minimum.

T. Pump Start Delay:

1. The control circuit for pump #2 shall be equipped with a time delay to prevent simultaneous motor starts.

U. Panel Heater

1. The control panel shall be equipped with a panel heater to minimize the effects of humidity and condensation. The heater shall include a thermostat.

V. Wiring

1. The pump station, as furnished by the manufacturer, shall be completely wired, except for power feed lines to the main entrance terminal blocks and final connections to remote alarm devices.
2. All wiring, workmanship, and schematic wiring diagrams shall comply with applicable standards and specifications of the National Electric Code (NEC).
3. All user serviceable wiring shall be type MTW or THW, 600 volts, color coded as follows:
 - a. Line and Load Circuits, AC or DC power.....Black
 - b. AC Control Circuit Less Than Line Voltage.....Red
 - c. DC Control Circuit.....Blue
 - d. Interlock Control Circuit, from External Source.....Yellow
 - e. Equipment Grounding Conductor.....Green
 - f. Current Carrying Ground.....White
 - g. Hot With Circuit Breaker Open.....Orange
4. Control circuit wiring inside the panel, with exception of internal wiring of individual components, shall be 16 gauge minimum, type MTW or THW, 600 volts. Power wiring to be 14 gauge minimum. Motor branch wiring shall be 10 gauge minimum.
5. Motor branch and other power conductors shall not be loaded above the temperature of the connected termination. Wires must be clearly numbered at each end in conformance with applicable standards. All wire connectors in the control panel shall be ring tongue type with nylon insulated shanks. All wires on the sub-plate shall be bundled and tied. All wires extending from components mounted on door shall terminate at a terminal block mounted on the back panel. All wiring outside the panel shall be routed through conduit.
6. Control wires connected to door mounted components must be tied and bundled in accordance with good commercial practice. Bundles shall be made flexible at the hinged side of the enclosure. Adequate length and flex shall allow the door to swing full open without undue stress or abrasion. Bundles shall be held on each side of hinge by mechanical fastening devices.

W. Factory installed conduit shall conform to following requirements:

1. All conduit and fittings to be UL listed.
2. Liquid tight flexible metal conduit to be constructed of smooth, flexible galvanized steel core with smooth abrasion resistant, liquid tight polyvinyl chloride cover
3. Conduit to be supported in accordance with articles 346, 347, and 350 of the National Electric Code.

4. Conduit shall be sized according to the National Electric Code.

X. Grounding

1. Station manufacturer shall ground all electrical equipment inside the pump station to the control panel back plate. All paint must be removed from the grounding mounting surface before making final connection.
2. The contractor shall provide an earth driven ground connection to the pump station at the main grounding lug in accordance with the National Electric Code (NEC).

Y. Equipment Marking

1. Permanent corrosion resistant name plate(s) shall be attached to the control and include following information:
 - a. Equipment serial number
 - b. Control panel short circuit rating
 - c. Supply voltage, phase and frequency
 - d. Current rating of the minimum main conductor
 - e. Electrical wiring diagram number
 - f. Motor horsepower and full load current
 - g. Motor overload heater element
 - h. Motor circuit breaker trip current rating
 - i. Name and location of equipment manufacturer
2. Control components shall be permanently marked using the same identification keys shown on the electrical diagram. Labels shall be mounted adjacent to device being identified.
3. Switches, indicators, and instruments mounted through the control panel door shall be labeled to indicate function, position, etc. Labels shall be mounted adjacent to, or above the device.

2.09 LIQUID LEVEL CONTROL

- A. The level control system shall start and stop the pump motors in response to changes in wet well level, as set forth herein.
- B. The level control system shall utilize the PLC sequencer to select first one pump, then the second pump, to run as lead pump for a pumping cycle. Alternation shall occur at the end of a pumping cycle or if one pump runs as the lead pump for an excessive time.
- C. Level and speed controls shall include logical comparator setpoints. Settings shall be provided to control the levels at which the pumps start and stop as well as level endpoints for minimum and maximum speed. Two sets of speed setpoints shall be provided. The first set will be enabled when a single pump is running. The second set shall be enabled when two pumps are running. Each of the settings shall be adjustable

and accessible to the operator without opening the control panel. Controls shall be provided to permit the operator to read and adjust the selected levels and speeds on the operator interface. Setpoint adjustments which require hard wiring, the use of electronic test equipment or artificial level simulation are not acceptable.

- D. Upon operator selection of automatic operation, the PLC shall start the motor for one pump when the liquid level in the wet well rises to the "lead pump start level". When the liquid is lowered to the "lead pump stop level", the PLC shall stop this pump. These actions shall constitute one pumping cycle. Should the wet well level continue to rise, the PLC shall start the second pump when the liquid reaches the "lag pump start level" so that both pumps are operating.
- E. When a single pump is running and the wet well is equal to the "1 pump minimum level", the drive will run at the "1 pump minimum speed". As the level rises, drive speed will increase to the "1 pump maximum speed" when the wet well level is equal to the "1 pump minimum level". Likewise, when two pumps are running, the "1 pump" settings will be disabled and the control will use the "2 pump" level and speed settings.
- F. Level control range shall be 0 to 12.0 feet of water. Speed control range shall be 20.0 to 60.0 hertz. Overall repeat accuracy shall be (plus/minus) 0.1 feet of water or hertz.
- G. Alarms and shutdown routines shall operate as follows:
 - 1. Condition abnormal: The general alarm pilot light will quick flash until silenced, then slow flash until reset, then glow steady until condition returns to normal, then off. The operator interface will display the alarm when acknowledged. The external alarms will be active until silenced, and then off.
 - 2. Condition abnormal then returns to normal: The general alarm pilot light will quick flash until silenced, then slow flash until reset, then off. The operator interface will display the alarm when acknowledged. The external alarms will be active until silenced, and then off.
 - 3. Subsequent alarms will re-alarm when silenced or reset.
- H. VEGA Radar
 - 1. The transducer shall be FMCW radar type, emitting W-Band energy. The frequency change is proportional to distance and is converted into filling height. Variations in the filling height are converted into a linear 4-20mA dc signal. Signal processing shall filter out false reflections and other background noises.
- I. Range
 - 1. Up to 15 meters (49.21 feet)
- J. Performance Requirements:
 - 1. Accuracy: ± 2 mm
 - 2. Process pressure: -14.5 to 43.5 psig
 - 3. Process temperature: -40 to +176 deg F

4. Ambient temperature: -40 to +176 deg F
5. Sinusoidal Vibrations resistance Class 4M8 according to IEC 60271-3-4
6. Shock resistance 50 g, 2.3 ms; according to EN 60068-2-27
7. Impact resistance IK07 according to IEC 62262

K. Characteristics

1. Protection rating IP 66/68 (3 bar) NEMA 6P submersible
2. Measuring cycle time ≤ 250 ms
3. Boot strap time ≤ 10 s
4. Step response time < 3 s
5. Beam angle 8 deg
6. Output signal 4-20mA with HART
7. 32-point linearization curve
8. Integrated open channel flow algorithms
9. Flumes – Parshall, Palmer-Bowlus, Venturi
10. Weirs – Trapezoidal, Rectangular, V-Notch

L. Communications

1. Encrypted Bluetooth communication with PIN and authentication process

M. Certifications

1. CE approved
2. FCC 15.256 approved
3. CSA certified to Ordinary Location for use in Canada and USA
4. CSA certified Intrinsically Safe to Class I, Division 1, Groups A, B, C, and D; Class II, Division 1 Groups E, F, and G; Class III for use in Canada and USA
5. CSA certified Non-Incendive to Class I, Division 2, Groups A, B, C, and D; Class II, Division 2 Groups F and G for use in Canada and USA

N. Memory

1. The radar shall include a counter for tracking the number of parameter changes to the sensor
2. The radar shall track the minimum and maximum distance measured, measurement reliability, measurement rate and electronics temperature.

O. Diagnosis

1. The radar sensor shall include self-monitoring and diagnostics according to NE 107 and VDI/VDE 2650.

2. Status messages categories shall be failure, function check, out of specification and maintenance requirement.

3. The radar sensor shall be able to perform a function test and produce a test report verifying that the sensor is functioning properly.

P. Mounting

1. The radar sensor shall have mounting options of a straining clamp or a mounting bracket.

Q. Maintenance

1. No maintenance required in normal operation.

R. Manufacturer

1. VEGA Americas/ VEGA Grieshaber KG

2. VEGAPULS C21 radar sensor

S. An intrinsically safe repeater shall be supplied in the control enclosure. Repeater must be recognized and listed as intrinsically safe by a nationally recognized testing laboratory. Station manufacturer shall make all connections from repeater to feeder lines and motor controls. Installing contractor shall make connections from repeater to transducer. **(Addendum 2, Issued August 6, 2026)**

T. ~~The level control system shall start and stop pump motors in response to changes in wet well level. Control shall be an ultra-sonic, continuous level monitoring unit, as specified in Section 16902. Should the ultra-sonic unit fail, it shall be backed up by intrinsically safe, high and low-level float switches, also specified in Section 16902. These devices shall be furnished by the installation contractor and wired to the control panel, per the control panel schematics.~~

2.10 PIPING AND VALVES

A. ~~Piping in the pump station shall be ductile iron, as specified in Section 02555.~~

B. ~~Plug valves in the pump station with gear operators shall be as specified in Section 02557.~~

C. ~~Check valves on the pump discharges shall be as specified in Section 02557 and include factory mounted limit switches wired on the check valve lever arm to work in conjunction with the PLC and allow for pump re-priming and discharge failure protection.~~

D. ~~Air relief valves required by the pump manufacturer for proper operation of the pumps and to maintain suction prime shall be supplied by the pump manufacturer. Any air/vacuum release valves show on the common header or in the force main shall be as specified in Section 02557.~~

E. ~~Suction and discharge pressure gauge kits with stainless steel hardware as specified in Section 15211.~~ **(Addendum 2, Issued August 6, 2026)**

2.11 BACKUP LIQUID LEVEL CONTROL

- A. A backup level control system shall be provided to operate the pumps, in the event of a failure of the primary solid state level control system. This backup level control will allow for a redundant pump off switch to turn the pump motors off in the event of a primary level control failure.
- B. The backup level control system shall start and stop pump motors in response to changes in wet well level. It shall be the mercury float switch type, incorporating intrinsically safe relays. Rising and falling liquid level in the wet well causes switches within the floats to open and close, providing start and stop signals to the remainder of the level control system.
- C. The backup level control system shall start and stop the pumps in accordance to the wet well level. The pump start and stop float switches shall be set above and below the normal pump start and stop level settings utilized for the primary level control. Upon operator selection of automatic operation, a float switch shall start one pump motor when water rises to the "pump start level". When the water is lowered to the "pump stop level", the system shall stop the pump. These actions shall constitute one pumping cycle.
- D. The backup level control system shall work in conjunction with an alternator relay to select first one pump, then the second pump, to run as "Lead" pump. Alternation will occur at the end of each pumping cycle.
- E. Two (2) float switches shall be supplied for installation by the contractor. Each float shall contain a mercury switch sealed in a polypropylene housing, with 50 feet of power cord, and polypropylene mounting hardware. A stainless steel chain with weight shall be furnished to secure the switches in the wet well.
- F. Two intrinsically safe relays shall be supplied in a separate level control enclosure. Relays must be recognized and listed as intrinsically safe by a nationally recognized testing laboratory. Installing contractor shall make connections from relays to motor controls.
- G. Alarm Light (External):
 - 1. Station manufacturer will supply one 115 VAC NEMA 4X alarm light fixture with red globe, conduit box, and mounting base. The design must prevent rain water from collecting in the gasketed area of the fixture, between the base and globe. The alarm light will be shipped loose for installation by the contractor.

2.12 MAGNETIC FLOW METER

- A. Toshiba Electromagnetic Install-Anywhere Flow Meter, Model LF654, to include:
 - 1. Flow Meter Body.
 - 2. 4" 150# Flanged Body.
 - 3. 316 Stainless Steel Electrodes.
 - 4. 316 Stainless Steel Integral Grounding Rings.

5. Remote Transmitter with Display/Keypad (factory installed by pump station manufacturer).
6. Operates on 120 VAC, 15 Amp Power.
7. 4-20 mA Flow Rate Signal and Scaled Pulsed Outputs.
8. Model 2AT and 3AT Cables Supplied for Field Connection from Remote Transmitter to Flow Meter.
9. Flow Meter Factory Mounted by Pump Station Manufacturer in Common Discharge Line. **(Addendum 2, Issued August 6, 2026)**

2.13 SOURCE QUALITY CONTROL

A. Performance Test:

1. Each pump shall be tested to Hydraulic Institute standards at the design duty point and at least two other points on the performance curve in addition to shut-off point. Test data shall include capacity, head, line-to-line voltage, current on each phase, frequency, power factor, KVA, KW, KVAR, KW demand, and KVA demand. Scaled testing is not considered acceptable or accurate for this application. The Engineer and Owner shall be notified at least 10 days in advance of testing and given the opportunity to witness the performance testing procedure and results. The test results shall be approved by the Engineer prior to shipment or installation.

B. System Testing:

1. The entire pump/motor, and control system shall be tested as a complete system by the pump manufacturer, at the place of assembly, prior to shipment. The pump manufacturer shall be responsible for correct system operational performance and provide warranty for all pumping system equipment.
2. The test shall include operational performance of all components as an integrated system and demonstration of correct operation of all functions of the system under actual hydraulic conditions including liquid level changes, start/stop pump operation as a function of liquid level, automatic and manual control of pump units under load, and all other automatic control and/or data collection requirements specified, including output to contract for local and remote alarms.
3. The Engineer and Owner shall be given the opportunity to witness the operational performance testing at the pump manufacturer's facilities. The installing Contractor shall also be provided the opportunity to attend the operational testing.

2.14 SPARE PARTS

A. Provide the following spare parts:

1. Mechanical Seal and O-Ring – One for each pump.
2. Suction Flap Valve – One for each pump group.

3. Pump Rotating Assembly – One for each pump group.
4. Drive Belts – One set of belts for each pump group.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Contractor shall off-load equipment at installation site using equipment of sufficient size and design to prevent injury or damage. Station manufacturer shall provide written instruction for proper handling. Immediately after off-loading, contractor shall inspect complete pump station and appurtenances for shipping damage or missing parts. Any damage or discrepancy shall be noted in written claim with shipper prior to accepting delivery. Validate all station serial numbers and parts lists with shipping documentation. Notify the manufacturer's representative of any unacceptable conditions noted with shipper.

3.02 INSTALLATION

- A. Install, level, align, and lubricate pump station as indicated on project drawings. Installation must be in accordance with written instructions supplied by the manufacturer at time of delivery.
- B. Suction pipe connections must be vacuum tight. Fasteners at all pipe connections must be tight. Install pipe with supports and thrust blocks to prevent strain and vibration on pump station piping. Install and secure all service lines (level control, air release valve or pump drain lines) as required in wet well.
- C. Check motor and control data plates for compatibility to site voltage. Install and test the station ground prior to connecting line voltage to station control panel.
- D. Prior to applying electrical power to any motors or control equipment, check all wiring for tight connection. Verify that protective devices (fuses and circuit breakers) conform to project design documents. Manually operate circuit breakers and switches to ensure operation without binding. Open all circuit breakers and disconnects before connecting utility power. Verify line voltage, phase sequence and ground before actual start-up.
- E. After all anchor bolts, piping and control connections are installed, completely fill the grout dam in the pump station base with non-shrink grout.

3.03 FIELD QUALITY CONTROL

- A. Operational Test
 1. Prior to acceptance by owner, an operational test of all pumps, drives, and control systems shall be conducted to determine if the installed equipment meets the purpose and intent of the specifications. Tests shall demonstrate that all equipment is electrically, mechanically, structurally, and otherwise acceptable; it is safe and in optimum working condition; and conforms to the specified operating characteristics.
 2. After construction debris and foreign material has been removed from the wet well, contractor shall supply water volume adequate to operate station through

several pumping cycles. Observe and record operation of pumps, suction and discharge gauge readings, ampere draw, pump controls, and liquid level controls. Check calibration of all instrumentation equipment, test manual control devices, and automatic control systems.

- B. Co-ordinate station start-up with manufacturer's technical representative. The representative or factory service technician will inspect the completed installation. The technician will calibrate and adjust instrumentation, correct or supervise correction of defects or malfunctions, and instruct operating personnel in proper operation and maintenance procedures.
- C. Prior to acceptance, inspect interior and exterior of pump station for dirt, splashed material or damaged paint. Clean or repair accordingly. Remove from the job site all tools, surplus materials, scrap and debris.
- D. The pump station should be placed into service immediately. If operation is delayed, station is to be stored and maintained per manufacturer's written instructions.

(Addendum 2, Issued August 6, 2026)

3.04 COORDINATION

- A. Pump stations in an existing system, being modified, replaced, or abandoned shall be coordinated with the operation of the Owner's existing sewer system so as to cause the least disruption to sewer service.
- B. Contractor shall coordinate with Owner as may be required for sequencing and timing or re-timing of existing pump stations in the Owner's system as may be affected by the work.
- C. Contractor shall be responsible for providing and operating bypass pumping. No sanitary overflows will be allowed.

3.05 ERECTION

- A. The equipment shall be erected in accordance with the manufacturer's recommendations. Required grout and leveling shims shall be provided by the Contractor.
- B. The Contractor shall strip the immediate area of organic material and stockpile the topsoil as directed by the Engineer.
- C. Check motor and control data plates for compatibility to site voltage. Install and test the station ground prior to connecting line voltage to station control panel.
- D. Excavation and backfill for each pump unit and force main shall conform to the requirements of Section 02200.
- E. Pavement removed shall be replaced as scheduled or shown in the Drawings.

3.06 INSPECTION, START-UP AND TESTING

- A. The Contractor shall furnish a representative of the manufacturer to perform inspection, start-up and training services. The manufacturer's representative shall be experienced in the operation and maintenance of the equipment.

- B. Initial lubrication required for start-up and field test operation shall be furnished and applied in accordance with the manufacturer's recommendations.
- C. The representative shall check the installation and supervise initial start-up of the equipment. He shall certify that the installation is correct and that the equipment has operated satisfactorily. This service shall be provided for a minimum period of one trip and one day.
- D. After the installation and operation of the equipment has been certified, the manufacturer's representative shall train the Owner's personnel for one eight-hour day in the proper operation and maintenance of the equipment. The Owner may videotape the training.

3.07 PUMP STATION PERFORMANCE TESTING

- A. Contractor shall perform all tests with clean water (no sewage will be allowed). Contractor shall be responsible for providing water for all testing at no additional cost to the Owner.
 - 1. Pump(s) shall discharge through the force main system as planned.
 - 2. All downstream systems shall be able to appropriately handle the discharge.
- B. Run pumps continuously for a minimum of one hour or as required to ensure force mains piping is full before starting test. (Providing inflow as required):
 - 1. Turn all pump selector switches to the OFF position.
 - 2. Fill Wet Well to just below inlet pipe. (Well may be filled higher if inlet pipe is plugged at Well).
 - 3. Measure water elevation.
 - 4. Start one pump and pump for a measured time period. (At least 3 minutes.)
 - 5. Measure water elevation.
 - 6. Calculate volume pumped, flow rate, and pressure gauge recording. Check against pump curve.
 - 7. Repeat steps 2 through 6 three times for each pump.
- C. Pump Station and Telemetry Test:
 - 1. Supply a steady flow to the station wet well at a rate less than the pump capacity. Confirm telemetry system is communicating.
 - 2. Turn all pump selector switches to the Auto position. Confirm telemetry indicates pumps are in Auto Mode.
 - 3. Turn the Lead Pump selector switch to the Pump One position. Let well fill to Lead Pump On position and measure water elevation. Confirm Pump One is running and that telemetry indicates Pump One is running. Let well empty to Pump OFF position and measure water elevation. Confirm Pump One shuts off.

4. Turn Pump One selector switch to the OFF position. Confirm telemetering indicates Pump One is not in Auto Mode. Let well fill to Lag Pump On position and measure water elevation. Confirm Pump Two is running and that telemetering indicates Pump Two is running. Turn Pump One selector switch to the Auto position. Confirm Pump One is running and that telemetering indicates Pump One is running and in Auto Mode. Let well empty to Pump OFF position.
5. Confirm both pumps shut off.
6. Turn all pump selector switches to the OFF position. Let well fill to High Water Alarm and measure water elevation and confirm that telemetering indicates High level.
7. Make sure generator and automatic transfer switch are in the Auto position.
8. Confirm that telemetering indicates service disconnect in closed position.
9. Open disconnect and confirm that telemetering indicates disconnect in open position and power fail. Leave power off until automatic transfer switch starts generator and transfers power. Confirm that telemetering indicates Generator is running.
10. Let station run on generator and repeat steps 2 through 9. Generator should run for at least 15 minutes.
11. Turn selector switch of generator to the OFF position. Allow generator fail alarm to activate and confirm that telemetering indicates Generator Fail.
12. Turn selector switch of generator to the Auto position. Allow Generator to restart and run for 5 minutes.
13. Close disconnect and let automatic transfer switch transfer power and stop generator. Confirm all telemetering signals.
14. Simulate phase loss, intrusion, and authorized entry and confirm all telemetering signals.
15. Simulate station out of service. Confirm upstream stations, as applicable to system, will not operate.
16. Simulate downstream pump station out of service and check Enable Function prevents pumps from operating, where applicable.

PART 4 SPECIAL PROVISIONS

4.01 PUMP STATION CONDITIONS

Pump Station Schedule		
		PS ID
	PS Name	Celeryville
	Pump Mfg	Gorman-Rupp
	Pump Model	V3C60SC-B
2.01 B	Design Point	175 gpm at 84.5 ft
	Approx. Design Point 1	350 gpm at 76 ft

	Approx. Design Point 2	110 gpm at 92 ft
2.01 C	Power/Phase	480 V, 3-phase
2.02 J2	Exhaust Fans	400 cfm
2.03 A	Volute Inlet (in)	6-inch
	Volute Outlet (in)	6-inch
2.03 A	Total Dynamic Suction lift	20.9 ft
2.03 A	Maximum Re-priming Lift	18.0 ft at 1,050 rpm
2.03 A	Maximum Static Suction Lift	20.0 ft
2.03 A	Hp / Speed	20/1,750 rpm
2.04 A	Control of PS Operation	Automatic Control Center
2.04 A	Pump Motors	20 hp; 1,750 rpm; 3/60/480 volt; 286 T frame; premium efficiency
2.02 A	Enclosure Size (length, width)	12 feet by 20 feet
2.02 H	Doors	3 feet wide by 6 feet-8 inches high and 6 feet wide by 6 feet-8 inches high
2.06 B	MCC Dimensions	110-inch width, 92.5 height, 15-inch depth

Abbreviations:

PS = Pump Station	HP = Horse Power
FD = Floor Door	IC = Iron Casting

4.02 PUMP SELECTION

- A. The following pump selections were made based on the force main as shown on the Drawings. If force main is installed other than shown, the Contractor shall adjust pump heads to account for the differences in friction losses.

4.03 REPRIME PERFORMANCE

- A. Pump must be capable of accomplishing the re-prime lift requirement as defined above. This includes achieving the vertical lift in feet at the specified speed and impeller diameter. Re-prime lift is defined as the static height of the pump suction above the liquid, while operating with only one-half of the liquid remaining in the pump casing. The pump must re-prime and deliver full capacity within five minutes after the pump is energized in the re-prime condition. Re-prime performance must be confirmed with the following test set-up:
1. A check valve to be installed downstream from the pump discharge flange. The check valve size shall be equal (or greater than) the pump discharge diameter.
 2. A length of air release pipe shall be installed between pump and the discharge check valve. This line shall be open to atmosphere at all times duplicating the air displacement rate anticipated at a typical pump station fitted with an air release valve.
 3. The pump suction check valve shall be removed. No restrictions in the pump or suction piping will prevent the siphon drop of the suction leg. Suction pipe configuration for re-prime test shall incorporate a 2 feet minimum horizontal

run, a 90 degree elbow and vertical run at the specified lift. Pipe size shall be equal to the pump suction diameter.

4. Impeller clearances shall be set as recommended in the pump service manual.
 5. Repeatability of performance shall be demonstrated by testing five consecutive re-prime cycles. Full pump capacity (flow) shall be achieved within five minutes during each cycle.
 6. Liquid to be used for re-prime test shall be water.
 7. Perform re-prime test with suction piping sized as per the plans.
- B. Upon request from the engineer, certified re-prime performance test results, prepared by the manufacturer, and certified by a registered professional engineer, shall be submitted for record.
- C. Pump shall be tested in the field to confirm that it will re-prime under normal operating conditions.

4.04 METALS

- A. Fasteners, stairs, grating, floor plate, and handrail are specified in Division 5.

4.05 PRECAST CONCRETE STRUCTURES

- A. Precast concrete structures are specified in Section 02551.

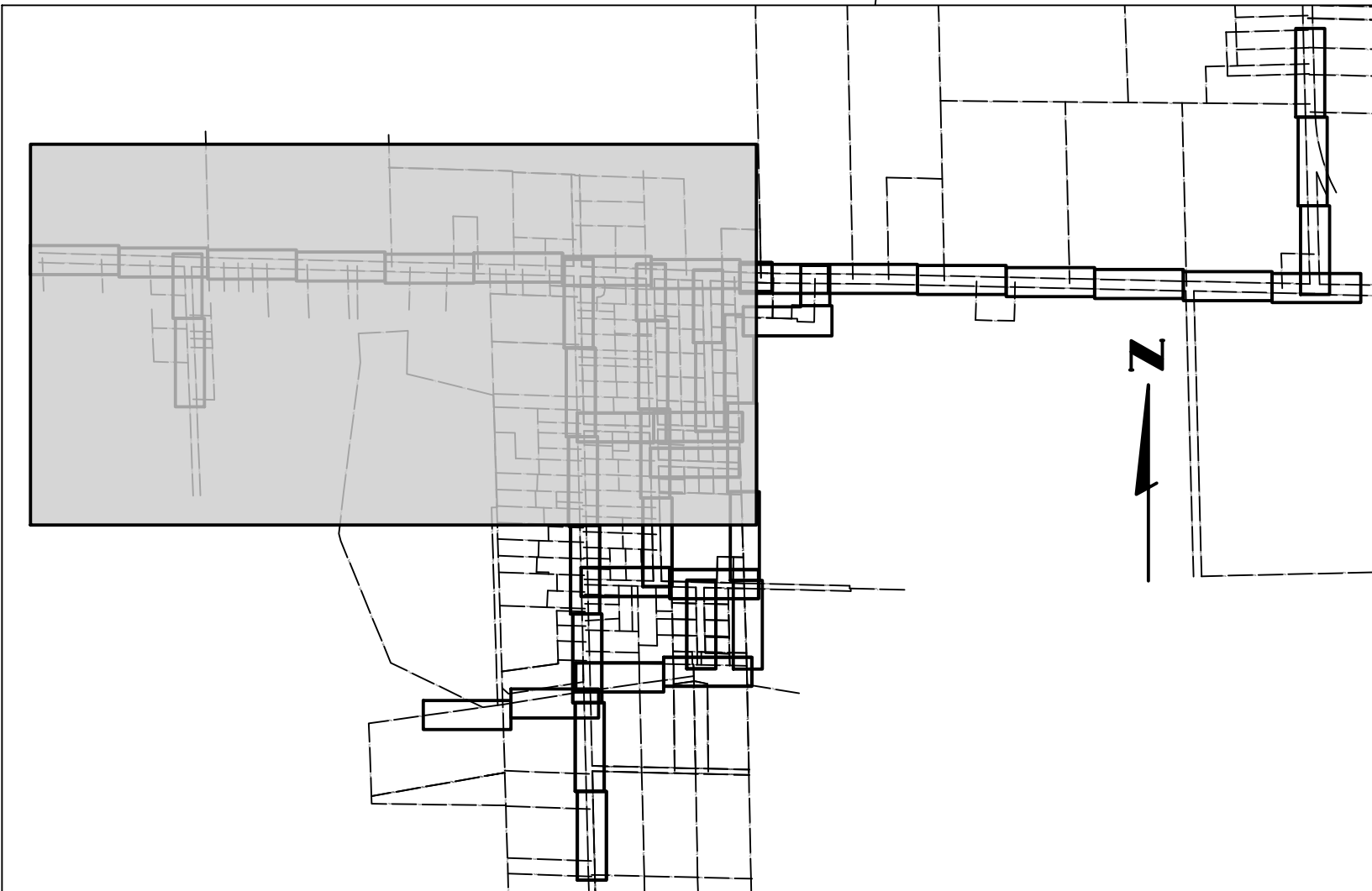
4.06 PAINTING

- A. Ferrous metals in Class 1, Division 1, Group D areas (wet wells, manholes, etc.) - One coat Sherwin Williams Copoxy Primer or equal and 2 coats Sherwin Williams TarGuard Coal Tar Epoxy or equal.
- B. Ferrous metals not in Class 1, Division 1, Group D areas (outside wet wells or manholes, interior of pump station enclosure, etc.) - Two coats Sherwin Williams Macropoxy 646 or equal and 1 coat Sherwin Williams Hi-Solids Polyurethane or equal.
- C. Before final approval of the work, all damaged coating surfaces (factory or field applied) shall be cleaned and repainted or touched up as directed.

4.07 SCADA SYSTEM

- A. An interface panel shall be provided to interconnect the status and alarm signals from the pump station to the new SCADA system provided by allowance provisions of the contract. The status and alarm signals included in the control panel shall be terminated on a strip, and a conduit shall be extended out of the control panel and connect to the SCADA panel. Similar provisions shall be done for the status and alarm signals from the automatic transfer switch.

END OF SECTION.





KEY PLAN



SANITARY SEWERS
SURVEY SCHEMATIC AND CONTROL
SOUTHERN 5 SEWER DISTRICT, OHIO
WASTEWATER COLLECTION SYSTEM PHASE 1 CONTRACT 2

NO.		DATE	REVISIONS AFTER ISSUED FOR BID	RNK	BY
1	8/6/26	ADENDUM 2			

Jones & Henry
Engineers, Ltd.

Fluid thinking®.
www.JHeng.com

JOB NO. 1009-8090.001

SCALE 1"=150'

THIS LINE SCALES IF WHEN
PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
RNK	JAH	PAL

STATUS ISSUED FOR BID

DATE 6/17/26

SHEET NO.
G-0.3
3 OF 75



FORCE MAIN SURVEY SCHEMATIC AND CONTROL

SOUTHERN 5 SEWER DISTRICT, OHIO

NO	DATE	REVISIONS AFTER ISSUED FOR BID	BY	ROW
1	8/06/26	ADDENDUM 2		ROW

Jones & Henry
Engineers. Ltd



Fluid thinking.
www.JHeng.com

JOB NO. 1009-8090.00

SCALE 1"=150'

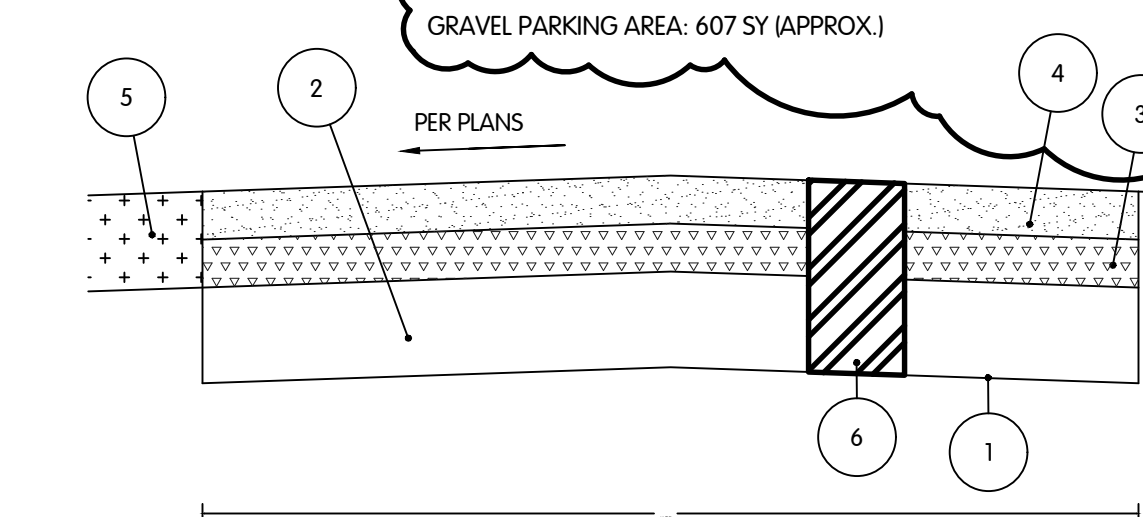
THIS LINE SCALES 1" WITH
PLOTTER TO NOTED SC

DESIGNED	DRAWN	CHECKED
----------	-------	---------

STATUS: ISSUED FOR BID

G-0.

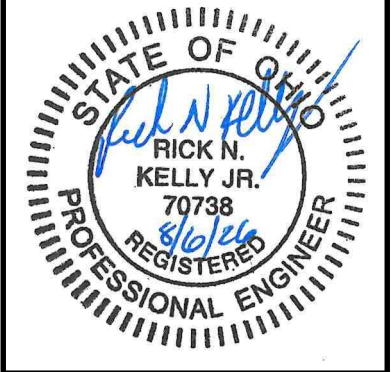
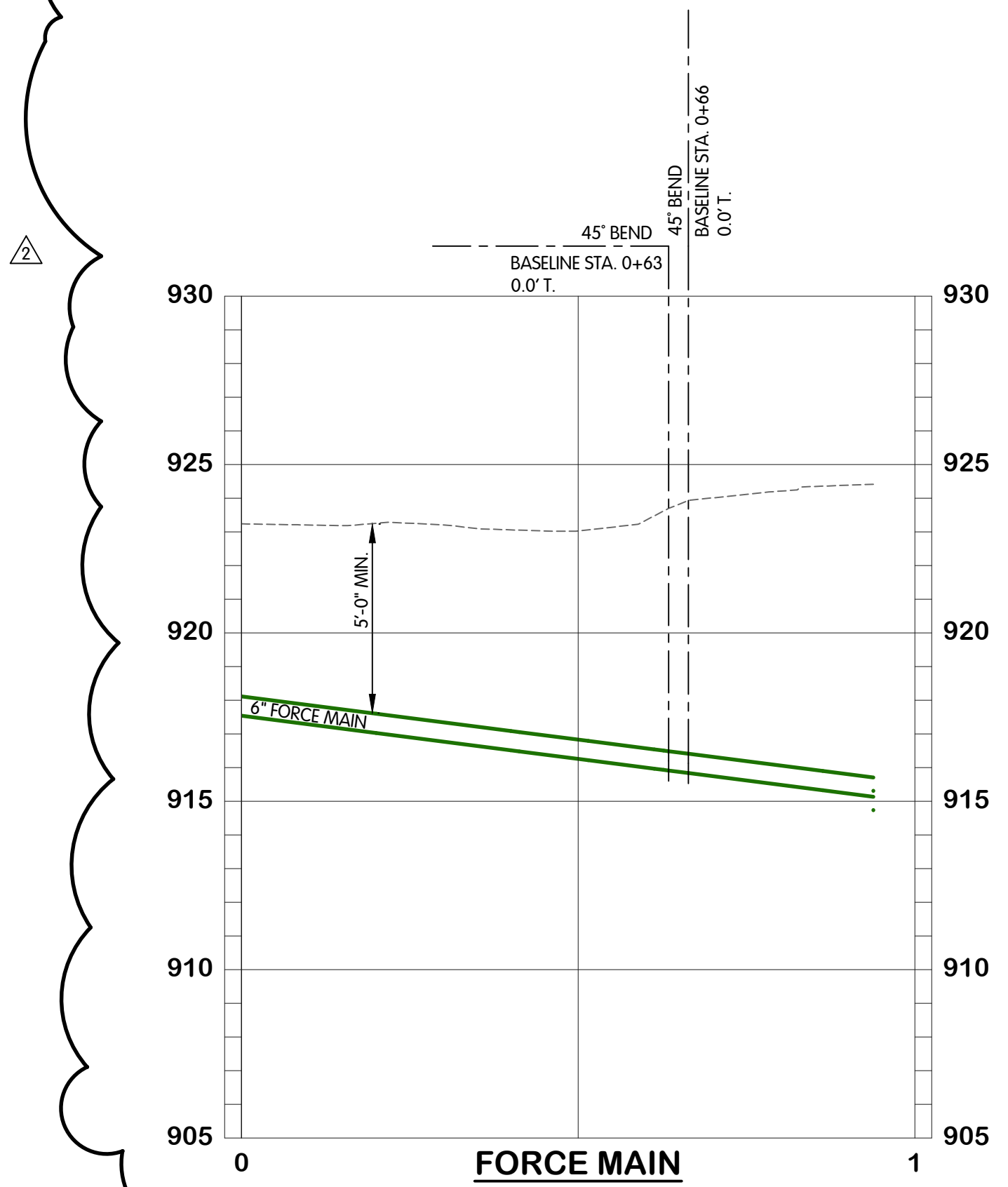
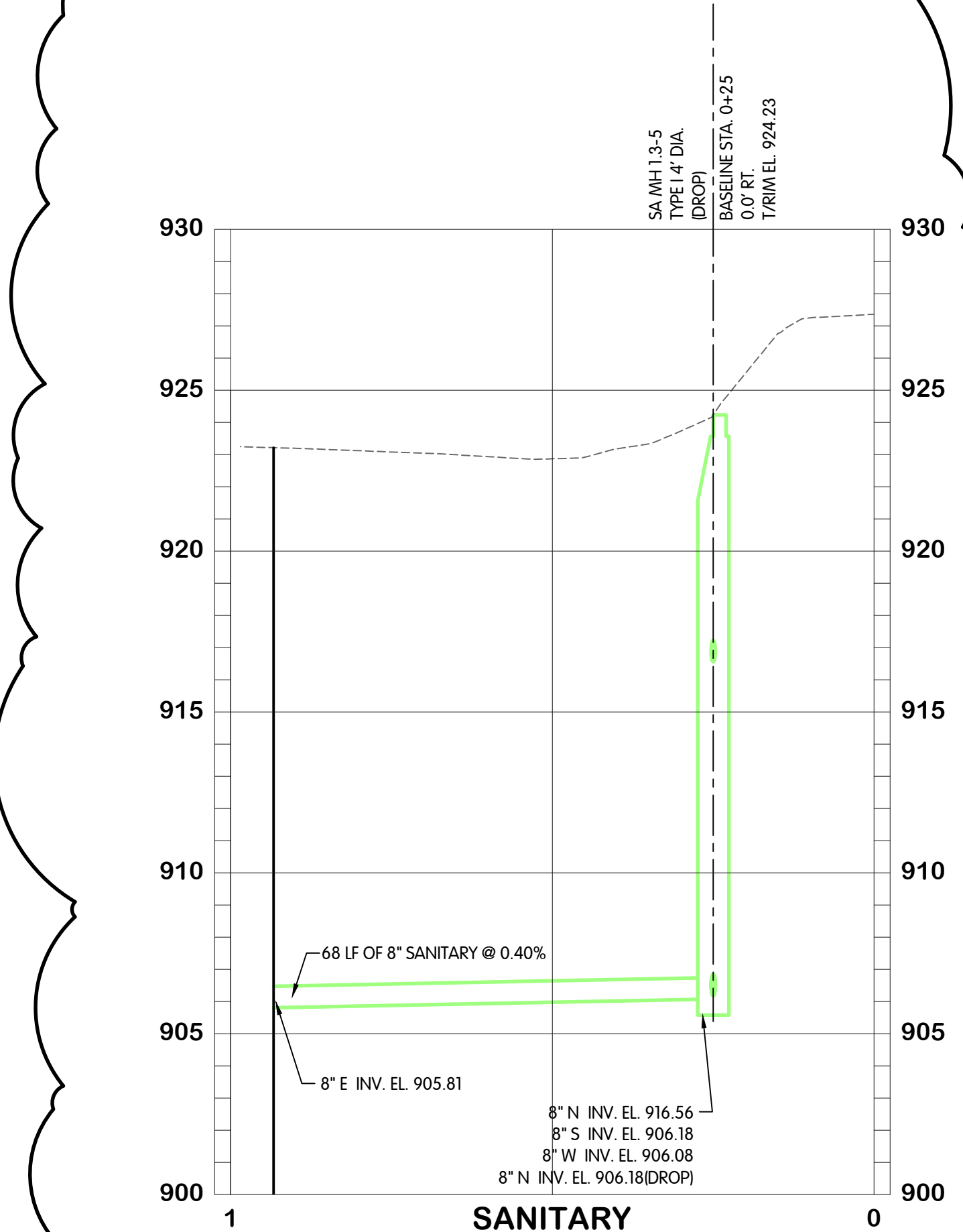




GRAVEL DRIVE AND PARKING AREA TYPICAL SECTION

- | | | |
|---|---|-----|
| 1 | ITEM 204 - SUBGRADE COMPACTION | NTS |
| 2 | 12" ODOT ITEM 703.19 - NO. 1 AND NO. 2 STONE | |
| 3 | 6" ODOT ITEM 304 - AGGREGATE BASE | |
| 4 | 3" ODOT ITEM 411 - STABILIZED CRUSHED AGGREGATE | |
| 5 | ITEM 659 SEEDING AND MULCHING (ALL DISTURBED AREAS) | |
| 6 | ODOT ITEM 203 - EXCAVATION OF EXISTING GRAVEL AND SOILS, SEE PLANS FOR LIMITS | |

TOL-809000C02-C-2.2 CELERYVILLE YARD PIPING PROFILE
8/6/2026 7:56 AM - JHARRISON
8/6/2026 11:52 AM



CELERYVILLE PUMP STATION
YARD PIPING PROFILES

SOUTHERN 5 SEWER DISTRICT, OHIO
WASTEWATER COLLECTION SYSTEM PHASE 1 CONTRACT 2

REVISIONS AFTER ISSUED FOR BID		RNK	BY
NO.	DATE		
1	8/6/24		ADENDUM 2
2			
3			
4			
5			

Jones & Henry
Engineers, Ltd.

Fluid thinking®
www.JHeng.com

JOB NO. 1009-8090.001

SCALE 1"=20' HOR.
1"=4' VERT.

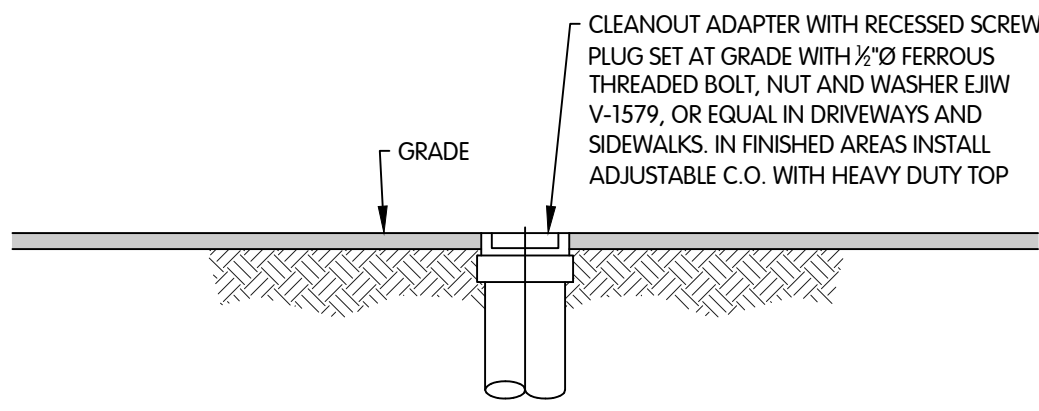
THIS LINE SCALES IF WHEN
PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
RNK	JAH	PAL

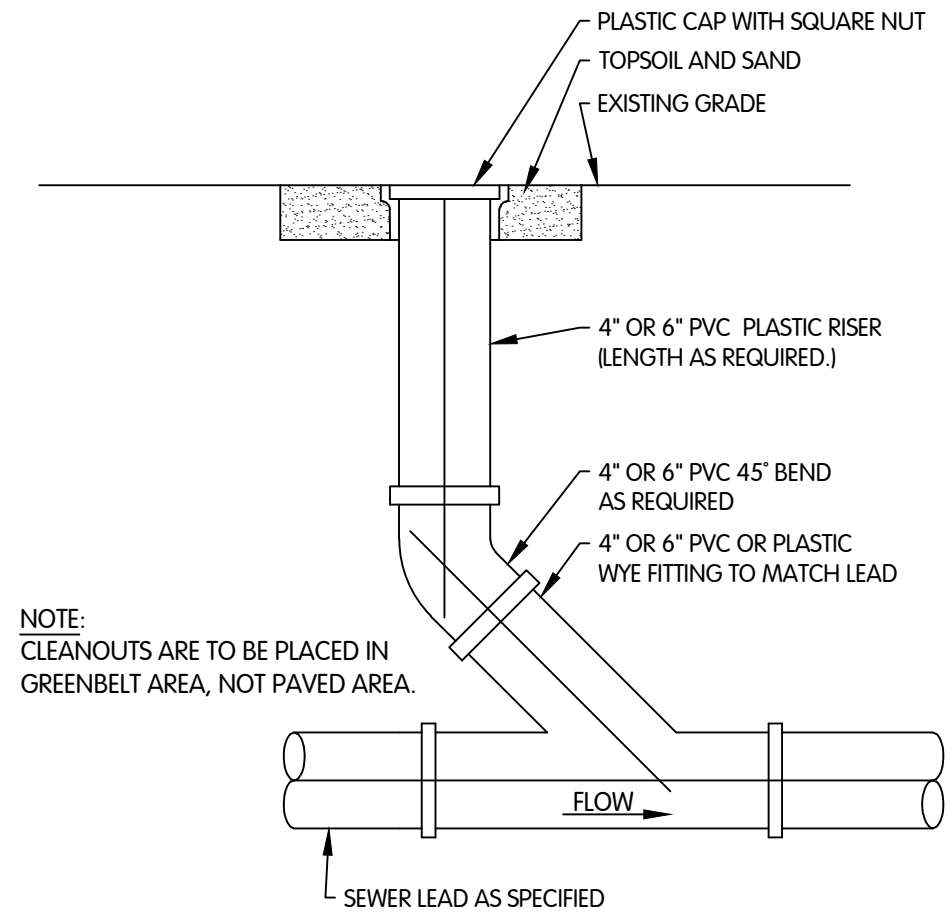
STATUS ISSUED FOR BID

DATE 6/17/26

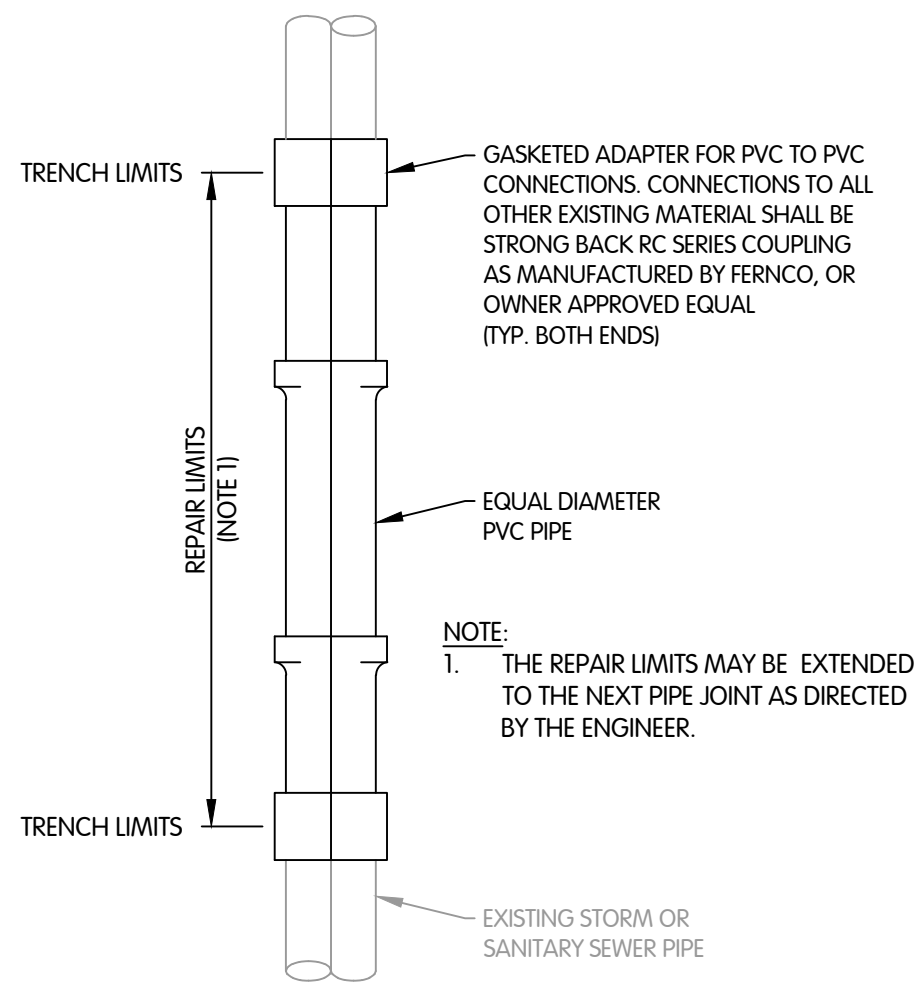
SHEET NO.
C-2.2
11 OF 75



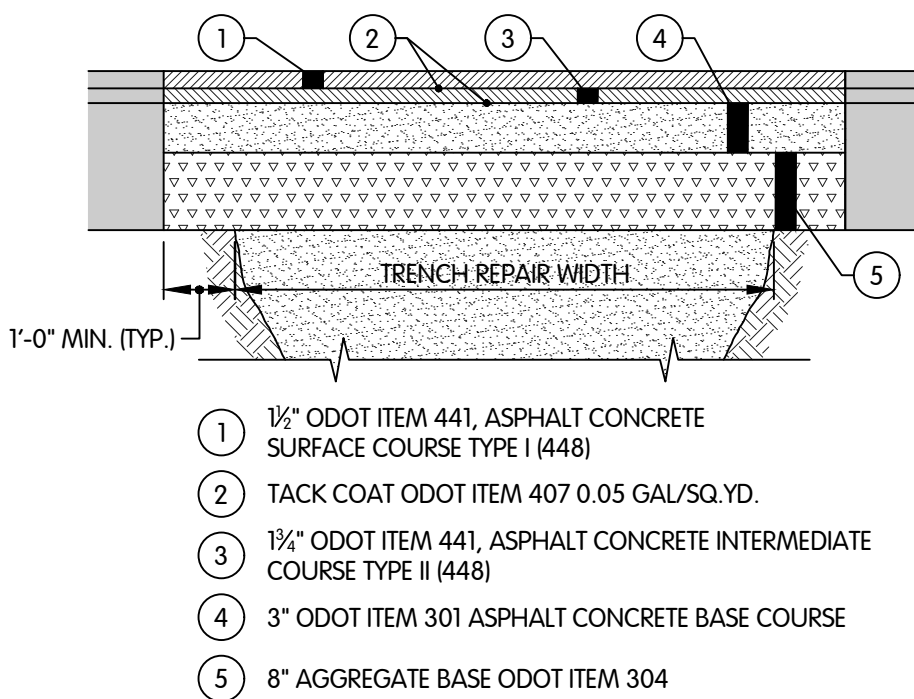
CLEANOUT TOP IN PAVEMENT
NTS



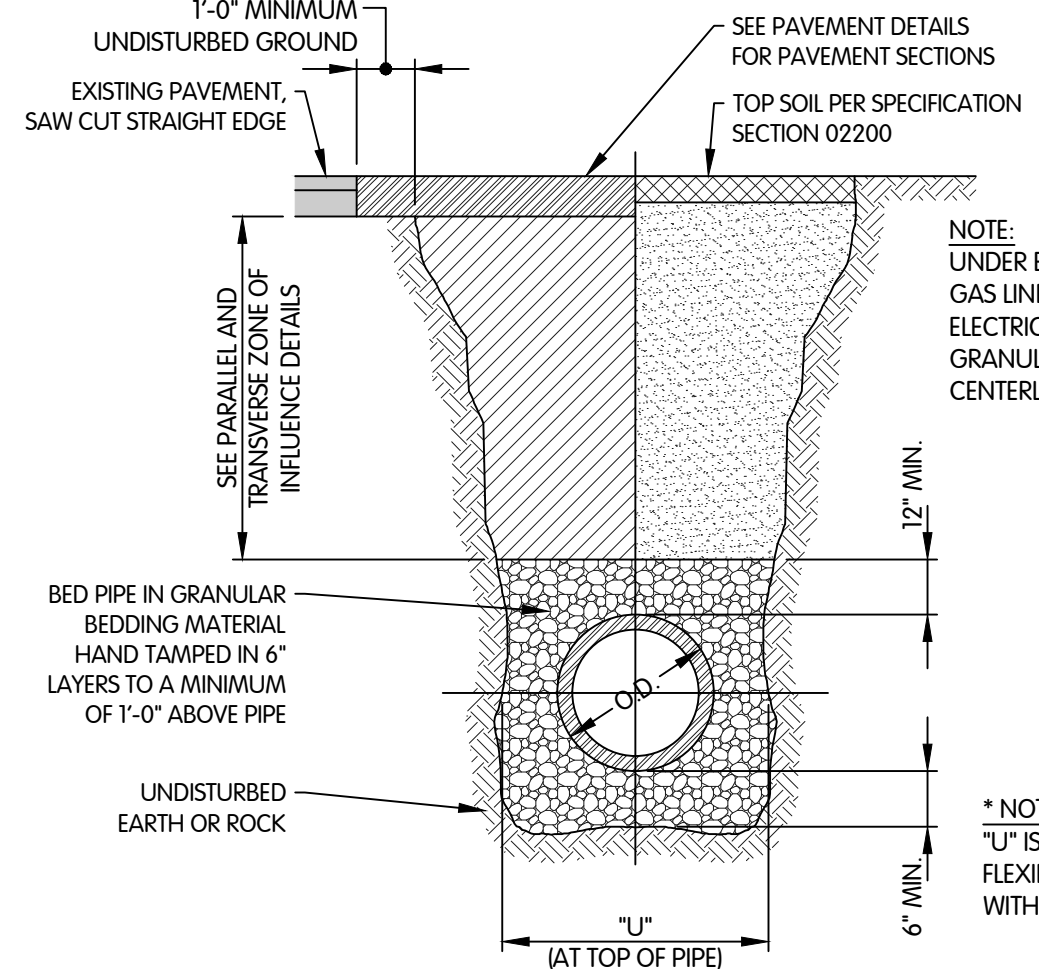
SANITARY SEWER LATERAL CLEANOUT
NTS



SEWER PIPE REPAIR DETAIL
NTS



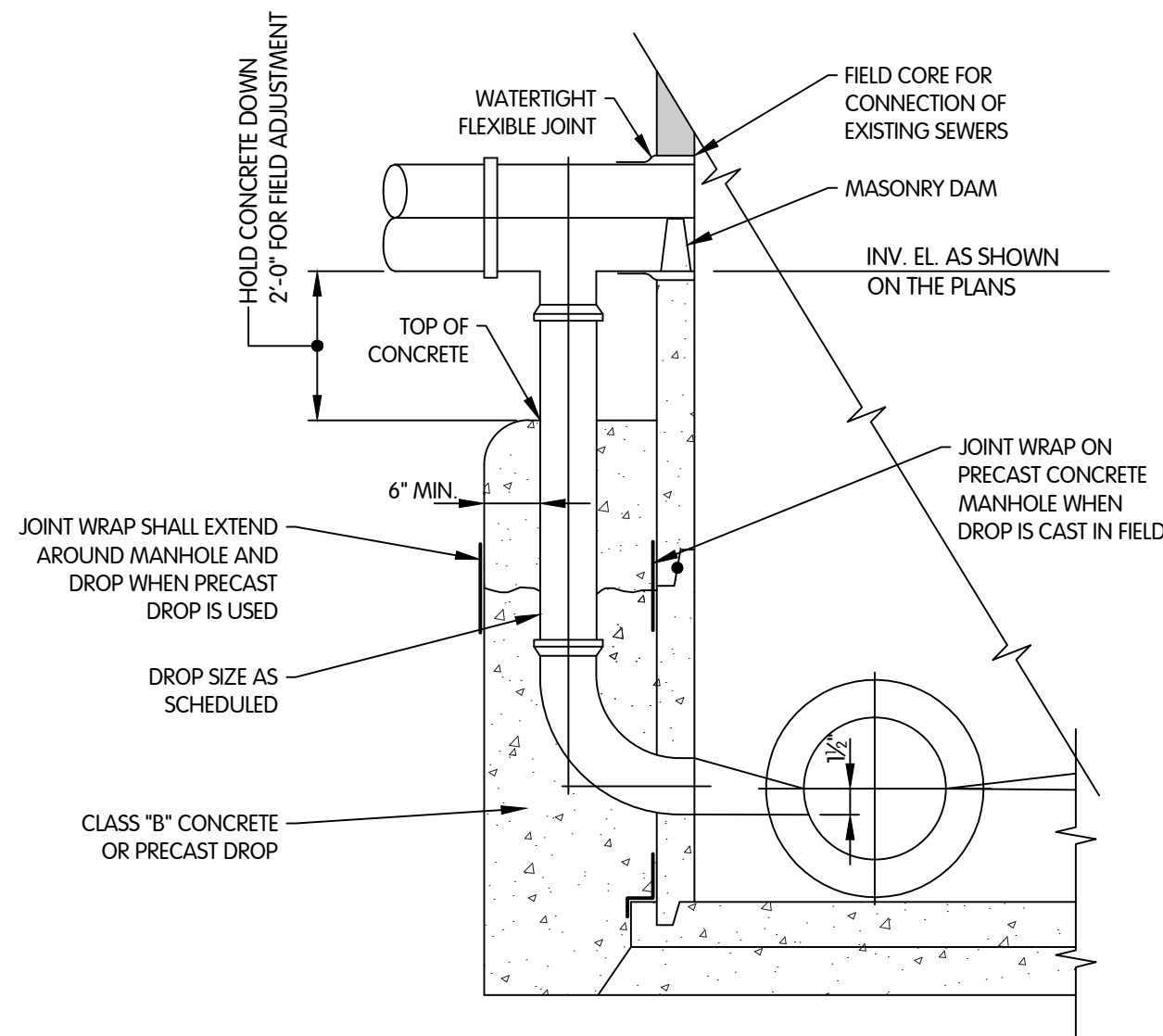
**TYPICAL LOCAL STREETS
TRENCH PAVEMENT REPAIR DETAIL**
NTS



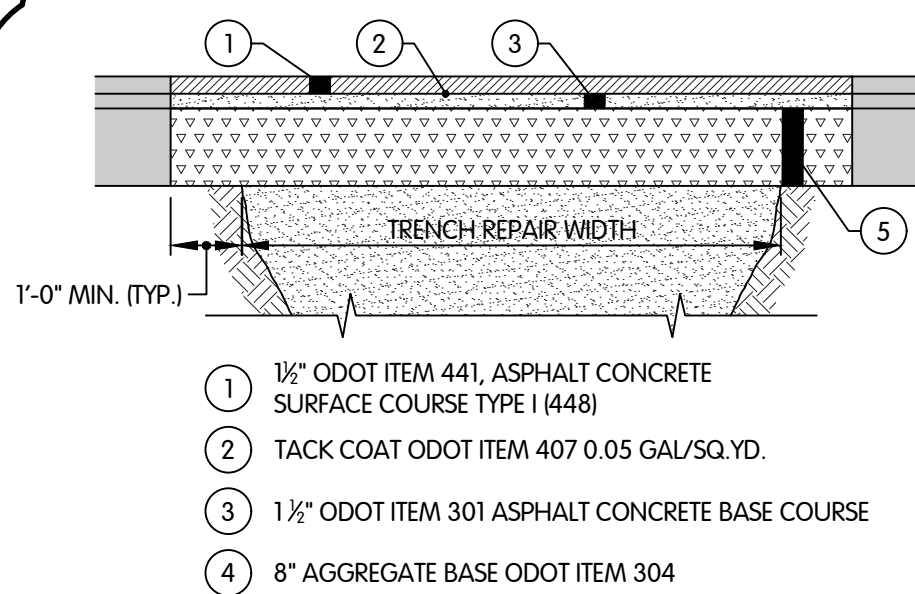
TRENCH DETAIL FOR FLEXIBLE PIPE
NTS

PIPE O.D.	"U"
0" TO 14"	O.D. + 16"
14.1" TO 28"	O.D. + 20"
28.1" TO 48"	O.D. + 24"
48.1" TO 70"	O.D. + 30"

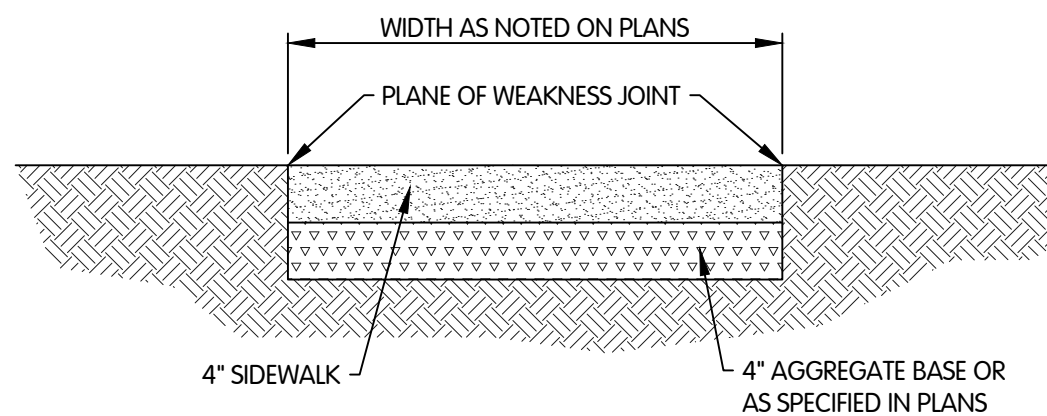
* NOTE:
"U" IS THE MINIMUM WIDTH FOR
FLEXIBLE PIPES IN ACCORDANCE
WITH ASTM D-2321 AND D-2774.



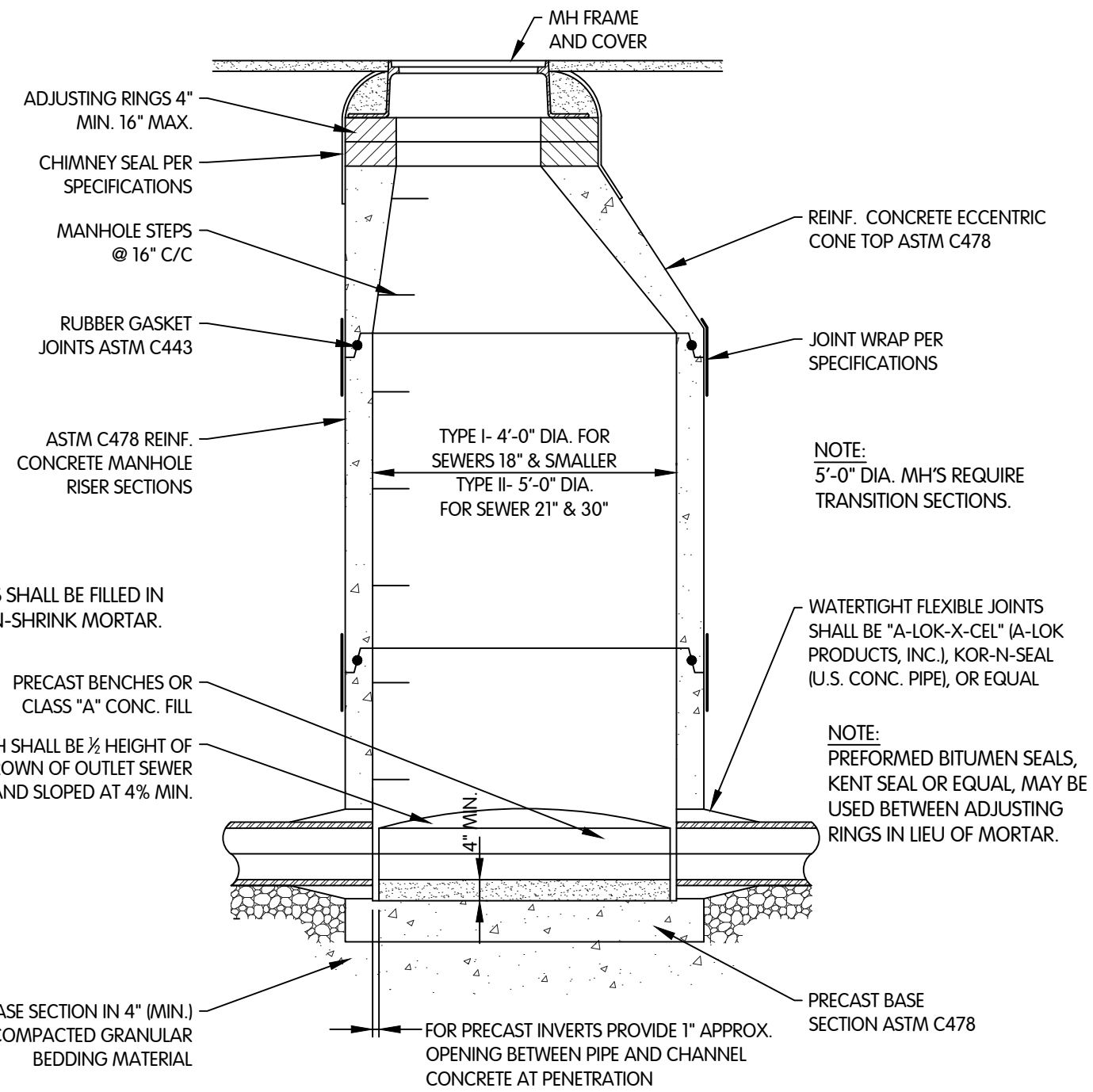
MANHOLE WITH OUTSIDE DROP
NTS



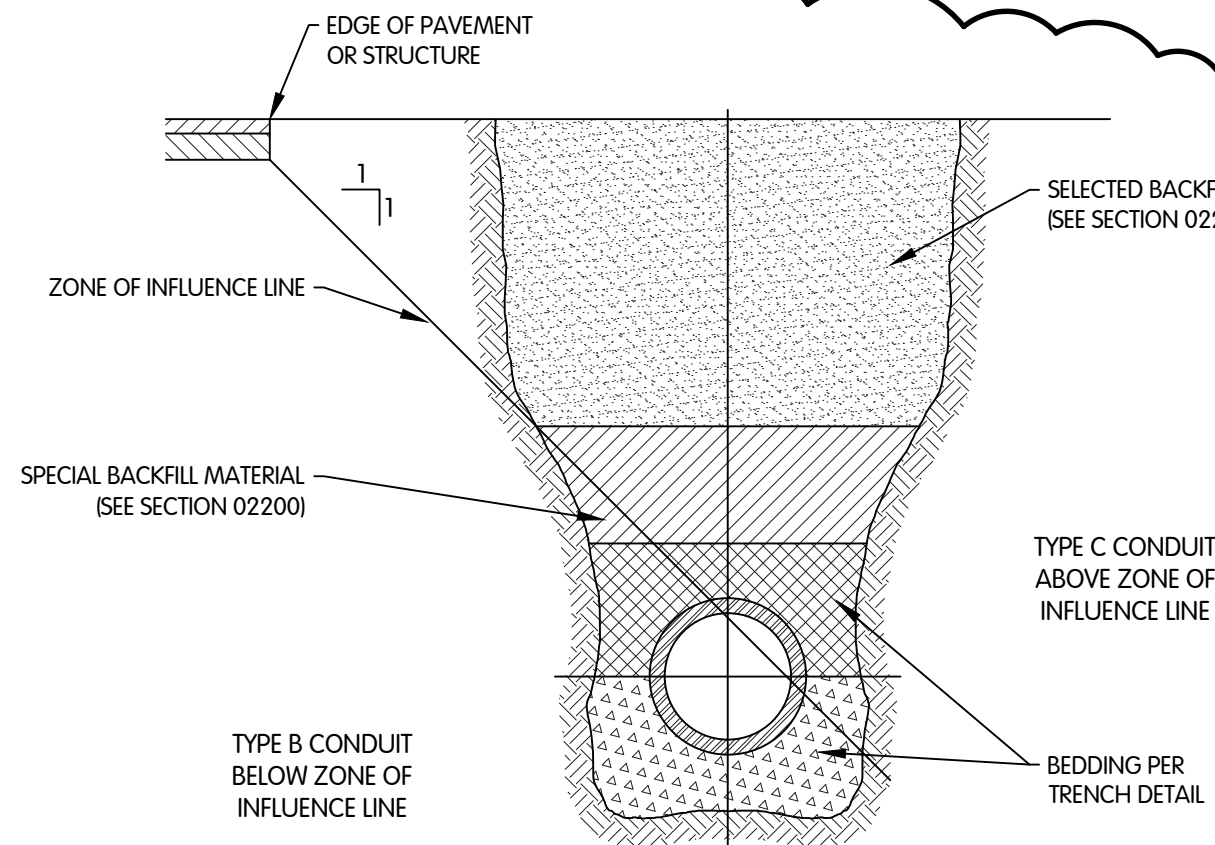
**TYPICAL ASPHALT DRIVE
TRENCH PAVEMENT REPAIR DETAIL**
NTS



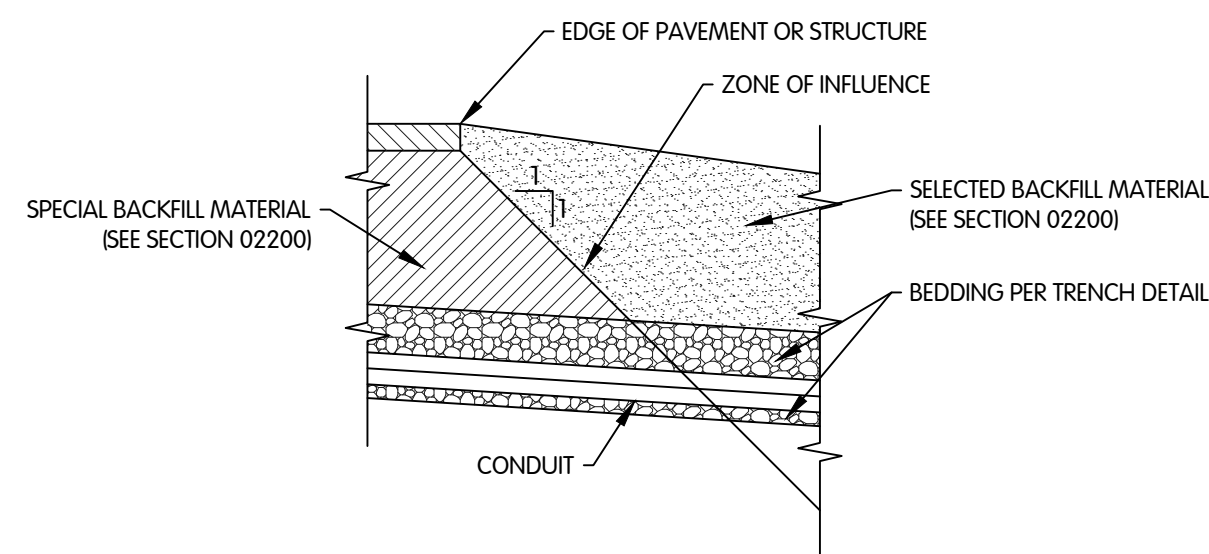
4" CONCRETE SIDEWALK
NTS



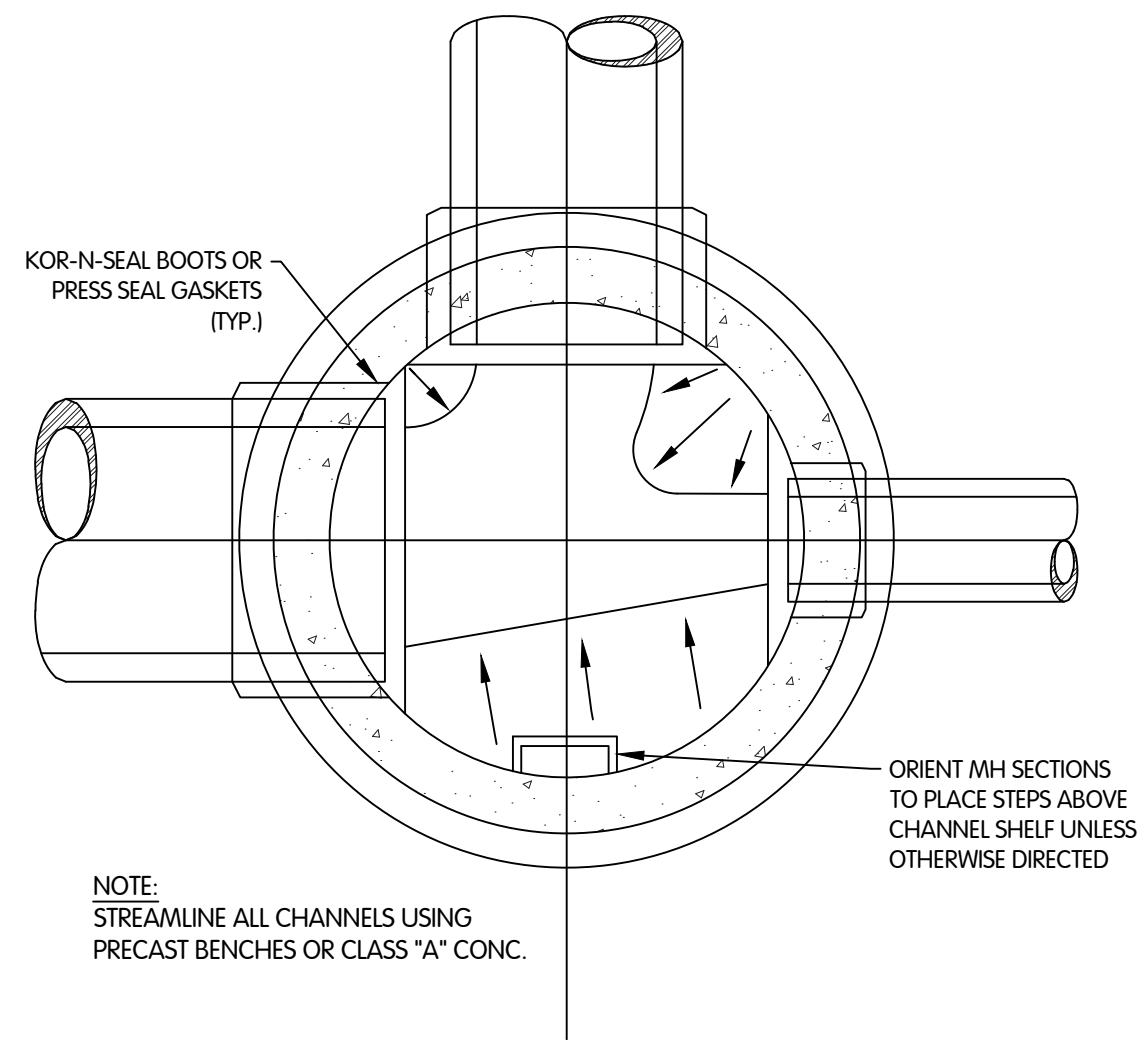
TYPE I AND II MANHOLES
NTS



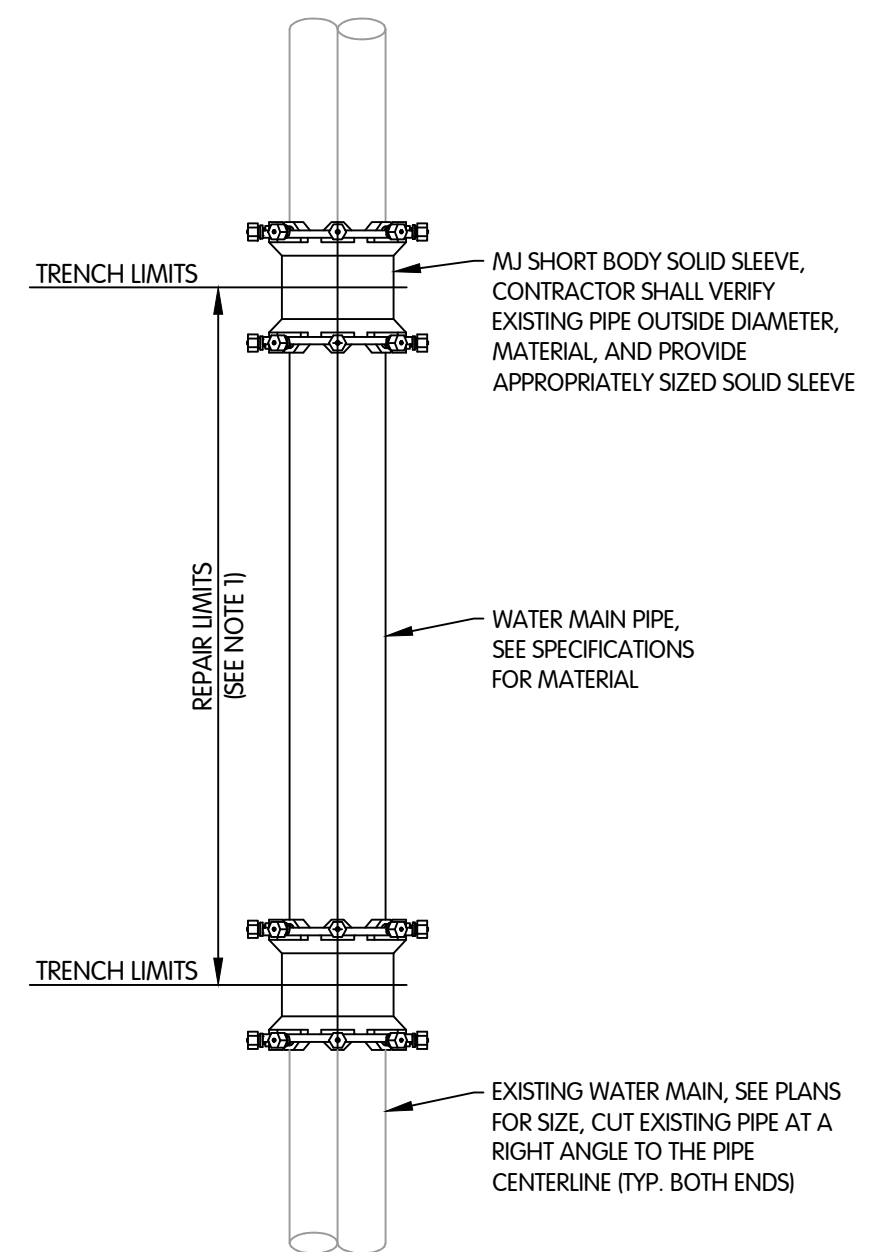
PARALLEL ZONE OF INFLUENCE DETAIL
NTS



TRANSVERSE ZONE OF INFLUENCE
NTS

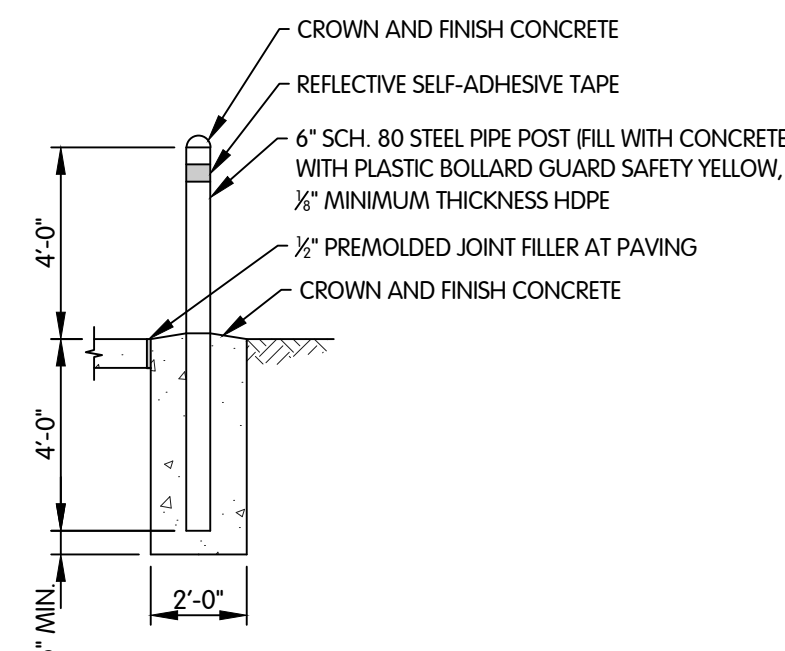


SECTIONAL PLAN
NTS



NOTE:
1. THE REPAIR LIMITS MAY BE EXTENDED TO THE
NEXT PIPE JOINT AS DIRECTED BY THE ENGINEER.

WATER MAIN REPAIR DETAIL
NTS



BOLLARD DETAIL
NTS



SANITARY DETAILS

SOUTHERN 5 SEWER DISTRICT, OHIO
WASTEWATER COLLECTION SYSTEM PHASE 1 CONTRACT 2

RNK BY
1. 8/6/24
2. DATE
3. REVISIONS AFTER ISSUED FOR BID

Jones & Henry
Engineers, Ltd.



Fluid thinking®
www.JHeng.com

JOB NO. 1009-8090.001

SCALE AS NOTED

THIS LINE SCALES IF WHEN
PLOTTED TO NOTED SCALE

DESIGNED RNK DRAWN JAH CHECKED PAL

STATUS ISSUED FOR BID

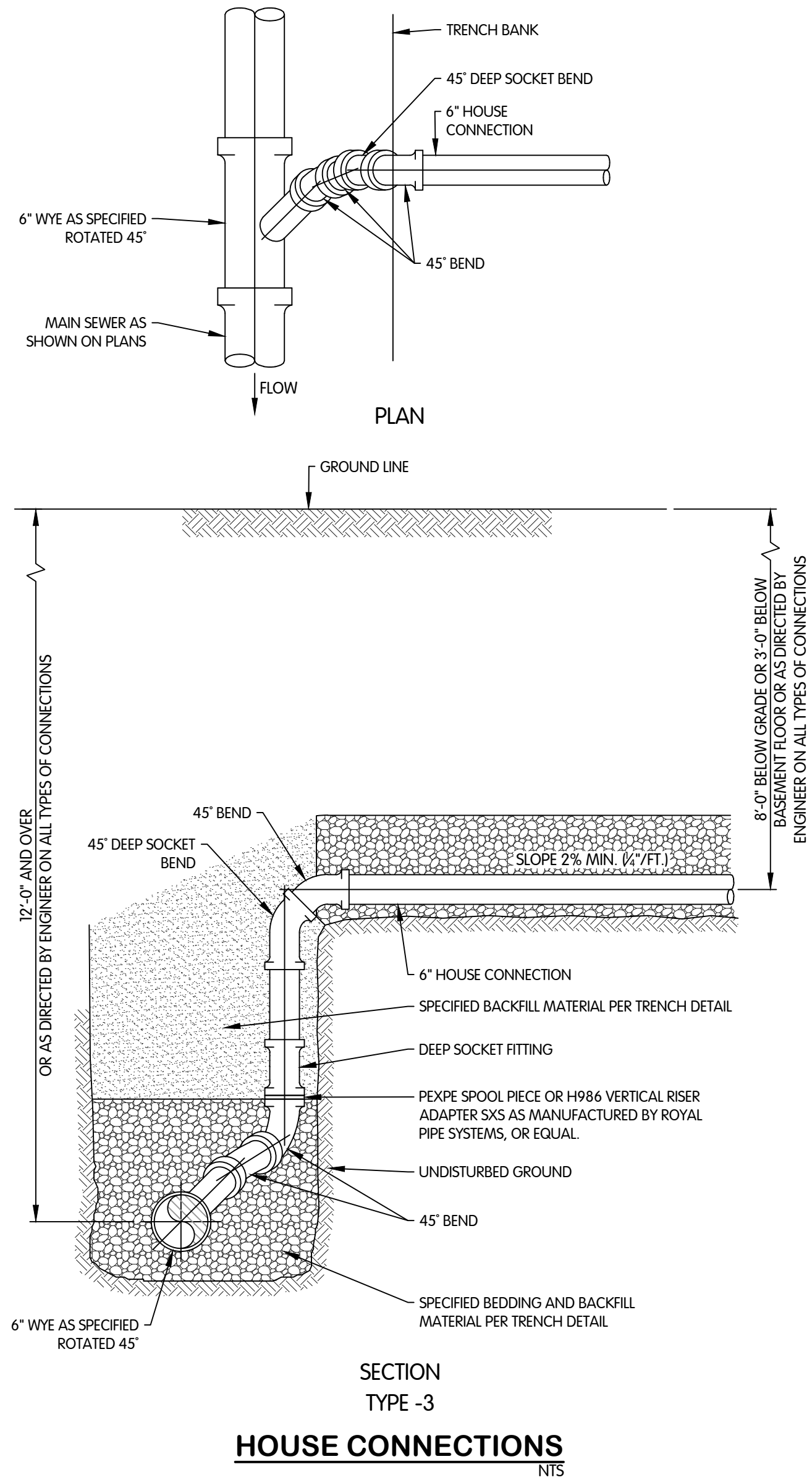
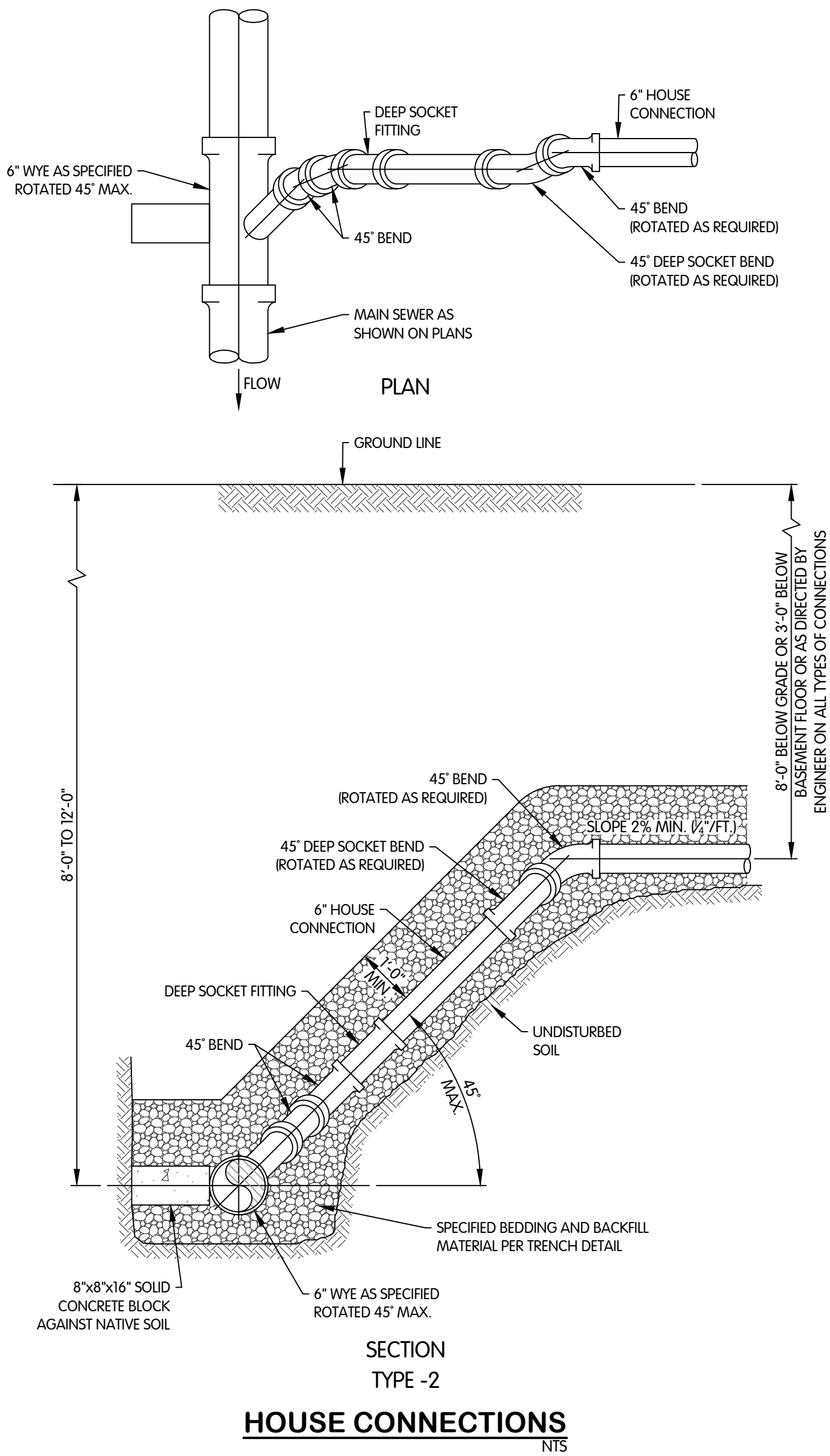
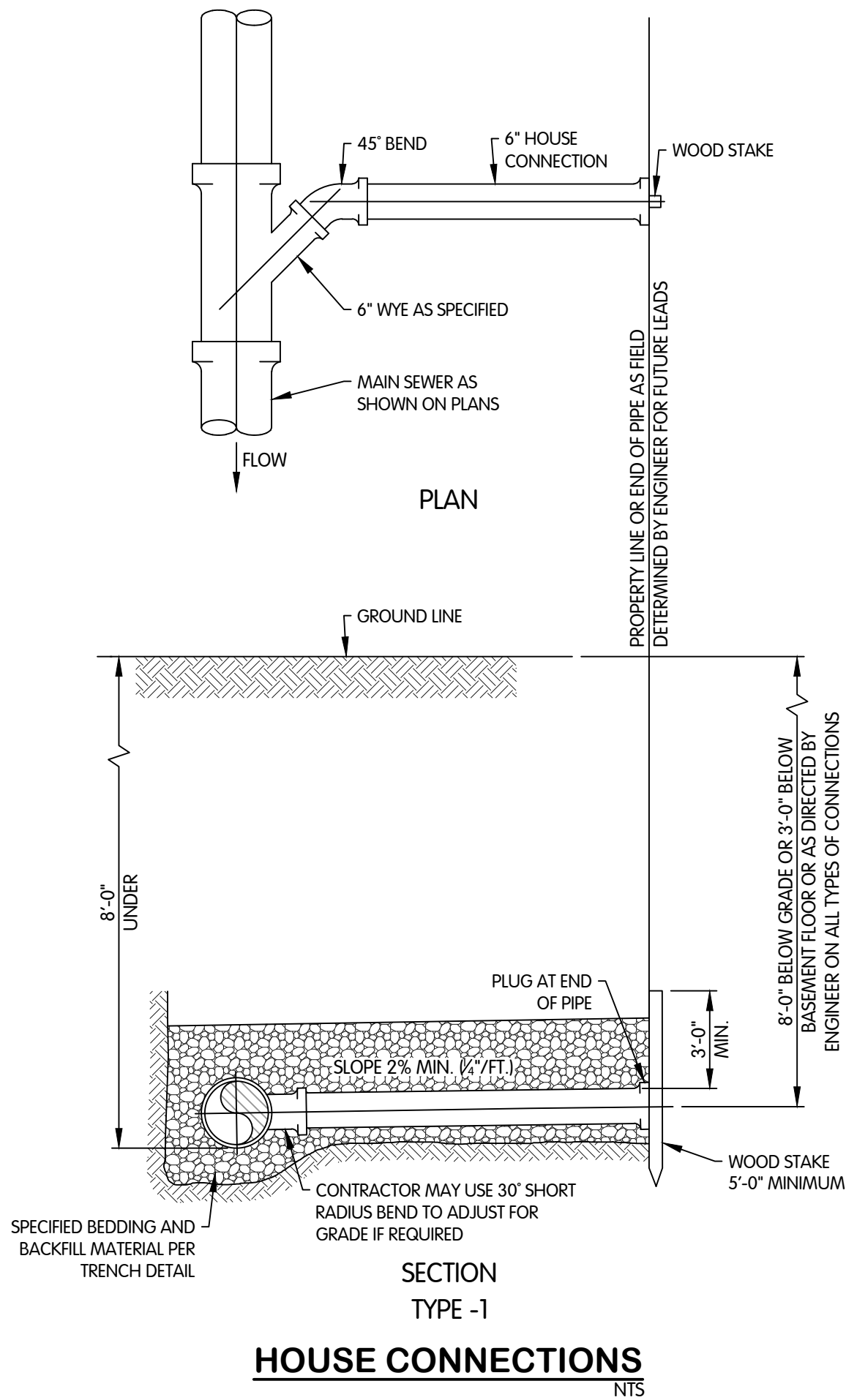
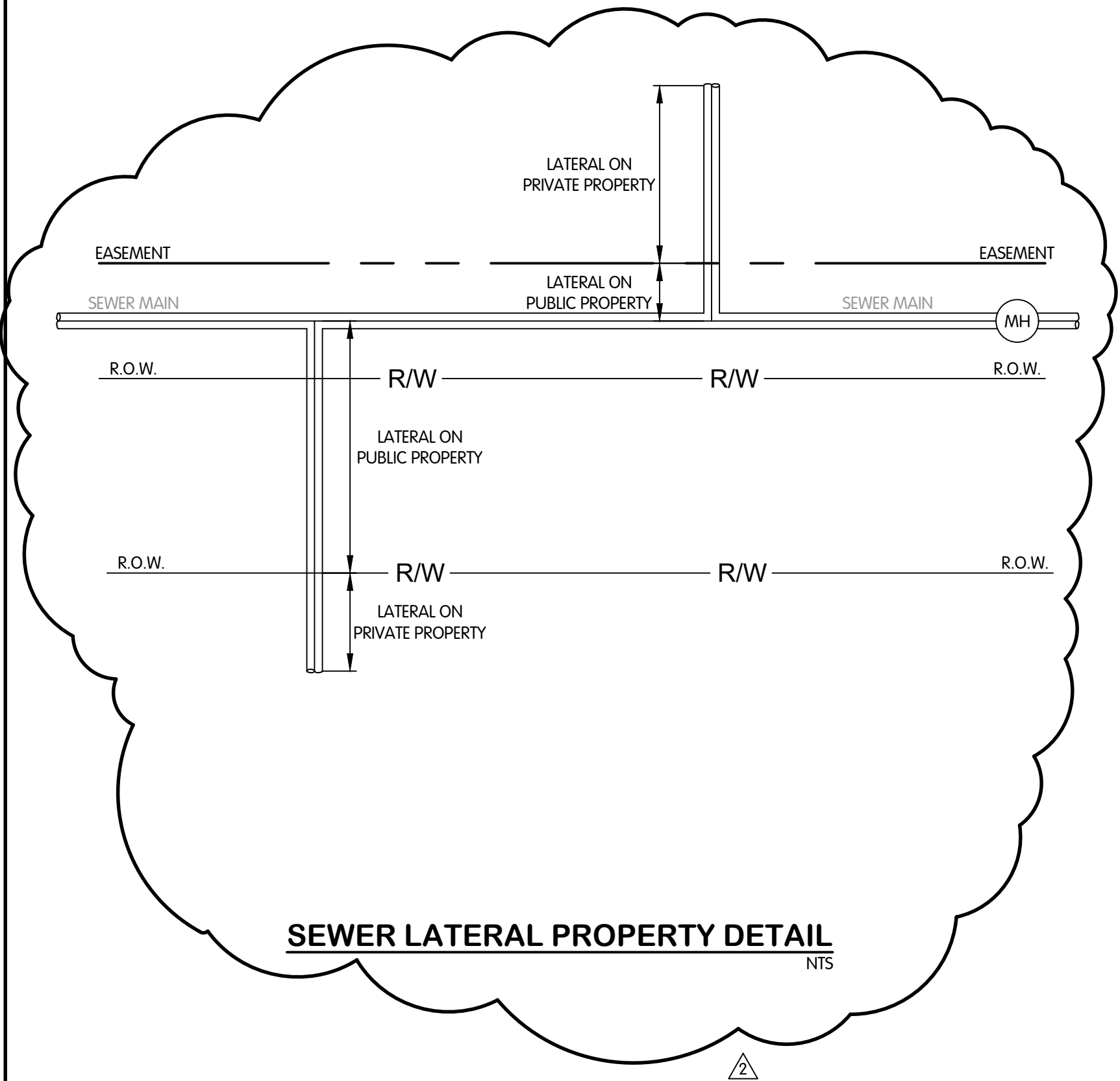
DATE 6/17/26

SHEET NO.

SA-0.1

12 OF 75

TOL-809000SA01-SA-0.3 SANITARY DETAILS
8/6/2026 8:00 AM - JHARRISON
8/6/2026 11:52 AM



STATE OF OHIO

RICK N. KELLY JR. 70738

REGISTERED PROFESSIONAL ENGINEER

SANITARY DETAILS

SOUTHERN 5 SEWER DISTRICT, OHIO

WASTEWATER COLLECTION SYSTEM PHASE 1 CONTRACT 2

NO.

1

2

3

4

5

DATE

8/06/24

ADDENDUM 2

REVISIONS AFTER ISSUED FOR BID

BY

RNK

Jones & Henry Engineers, Ltd.



Fluid thinking®
www.JHeng.com

JOB NO.

1009-8090.001

SCALE

AS NOTED

THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE

DESIGNED RNK DRAWN JAH CHECKED PAL

STATUS

ISSUED FOR BID

DATE

6/17/26

SHEET NO.

SA-0.3

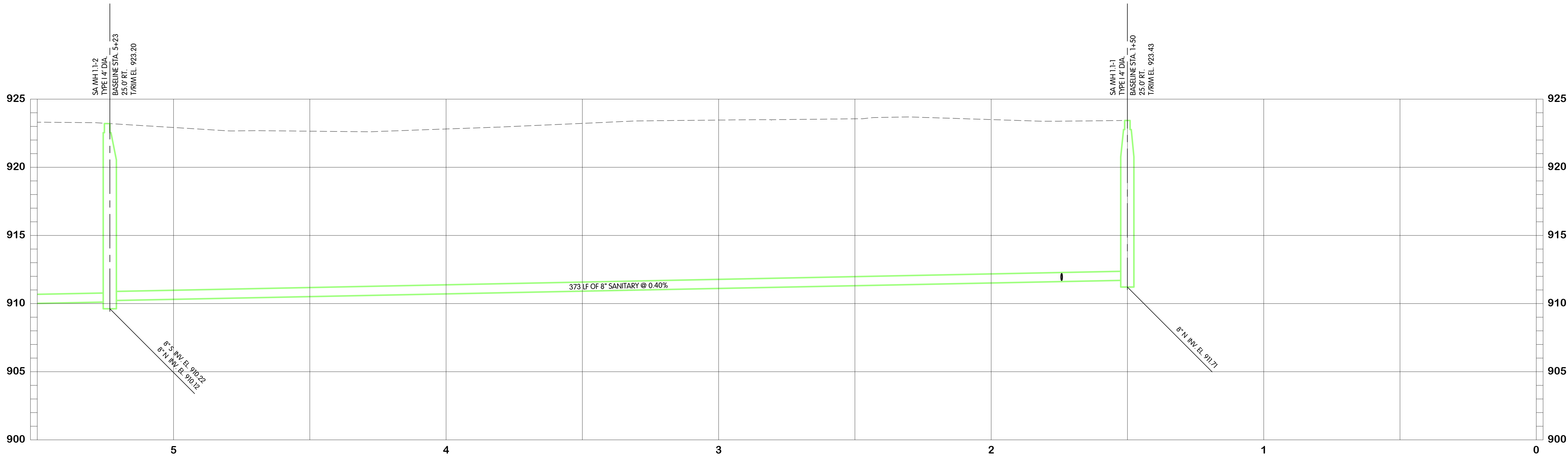
14 OF 75

TOL-809000SA-SA-1.1 ST RT 103 STA 0+00 TO 5+50
8/6/2026 11:46 AM - JHARRISON
8/6/2026 11:52 AM



NOTE:
ALL GRAVITY SEWER ANTICIPATED TO BE INSTALLED VIA OPEN CUT METHODS UNLESS
OTHERWISE NOTED. ALL FORCE MAIN ANTICIPATED TO BE INSTALLED VIA HORIZONTAL
DIRECTIONAL DRILL

STATE ROUTE 103



STATE ROUTE 103
SANITARY
PLAN AND PROFILE
STA. 0+00 TO 5+50

SOUTHERN 5 SEWER DISTRICT, OHIO
WASTEWATER COLLECTION SYSTEM PHASE 1 CONTRACT 2

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	RNK	BY
1	8/6/24	ADDENDUM 2		

Jones & Henry
Engineers, Ltd.



Fluid thinking®
www.JHeng.com

JOB NO. 1009-8090.001

SCALE 1"=20' HOR.
1"=4' VERT.

THIS LINE SCALES IF WHEN
PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
RNK	JAH	PAL

STATUS ISSUED FOR BID

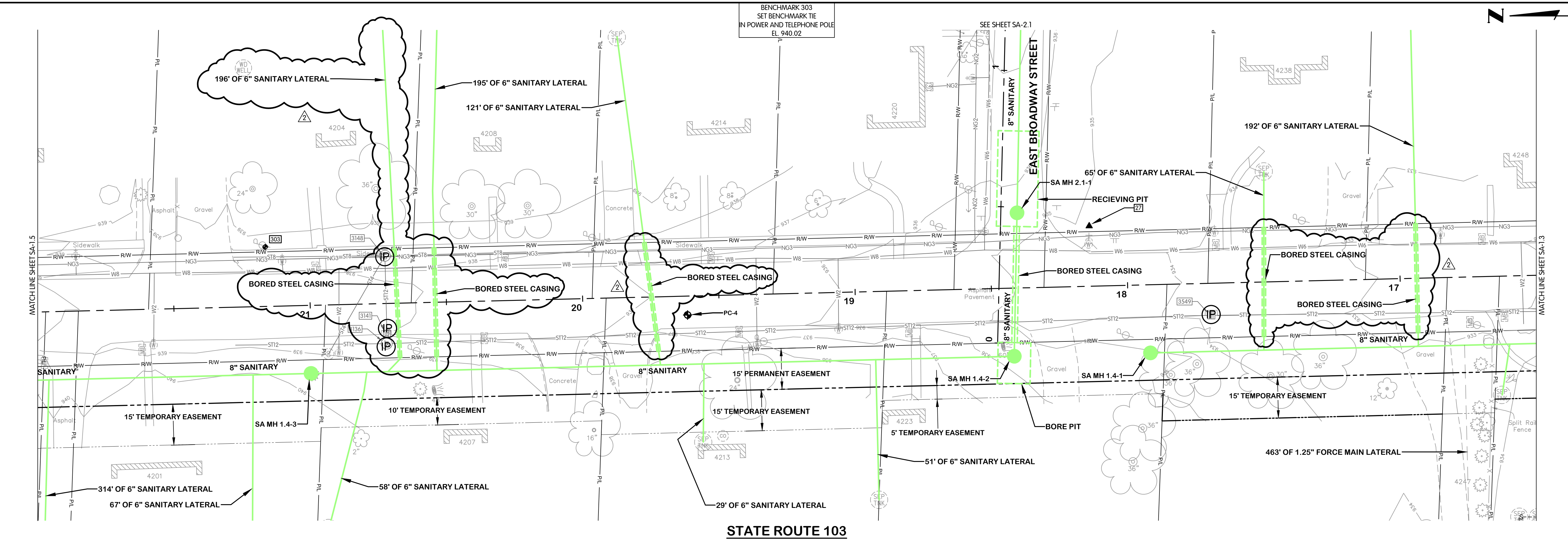
DATE 6/17/26

SHEET NO.

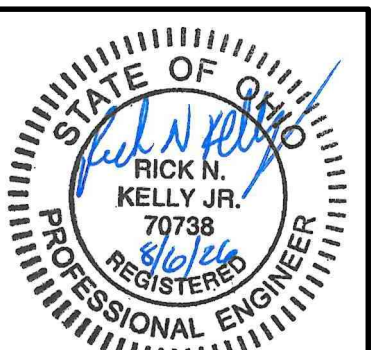
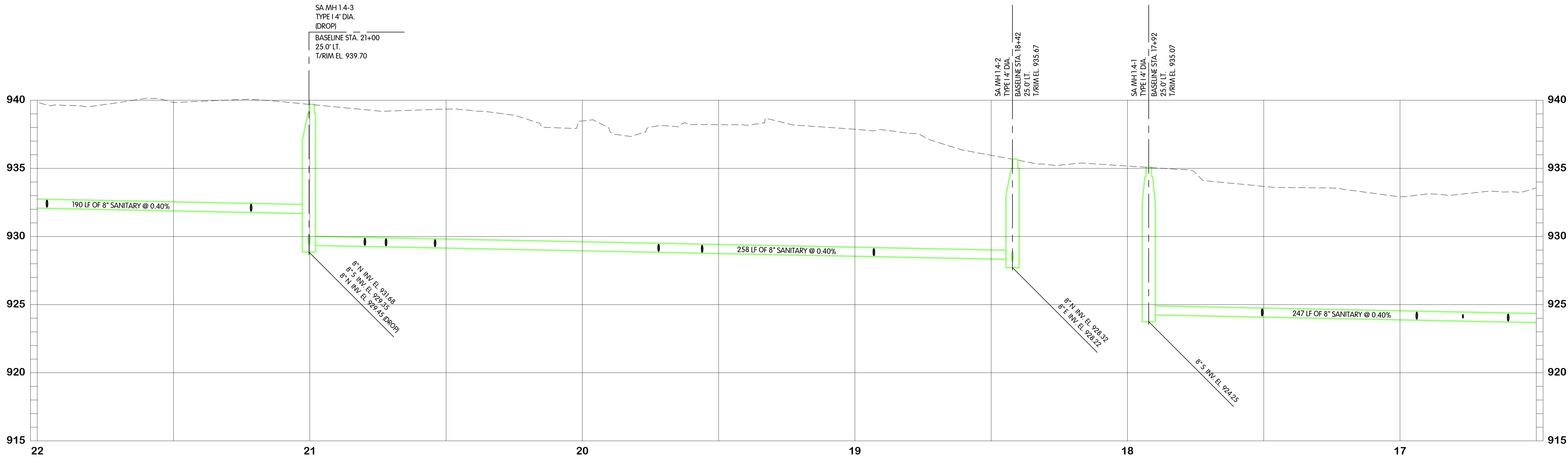
SA-1.1

15 OF 75

TOL-809000SA-SA-1.4, ST RT 103 STA 16+50 TO 22+00
8/6/2026 11:46 AM - JHARRISON
8/6/2026 11:53 AM



NOTE:
ALL GRAVITY SEWER ANTICIPATED TO BE INSTALLED VIA OPEN CUT METHODS UNLESS OTHERWISE NOTED. ALL FORCE MAIN ANTICIPATED TO BE INSTALLED VIA HORIZONTAL DIRECTIONAL DRILL



STATE ROUTE 103

SANITARY

PLAN AND PROFILE
STA. 16+50 TO 22+00

SOUTHERN 5 SEWER DISTRICT, OHIO
WASTEWATER COLLECTION SYSTEM PHASE 1 CONTRACT 2

NO. 1
DATE 8/06/24
ADENDUM 2
REVISIONS AFTER ISSUED FOR BID
RNK BY

Jones & Henry
Engineers, Ltd.



Fluid thinking®
www.JHeng.com

JOB NO. 1009-8090.001

SCALE 1"=20' HOR.
1"=4' VERT.

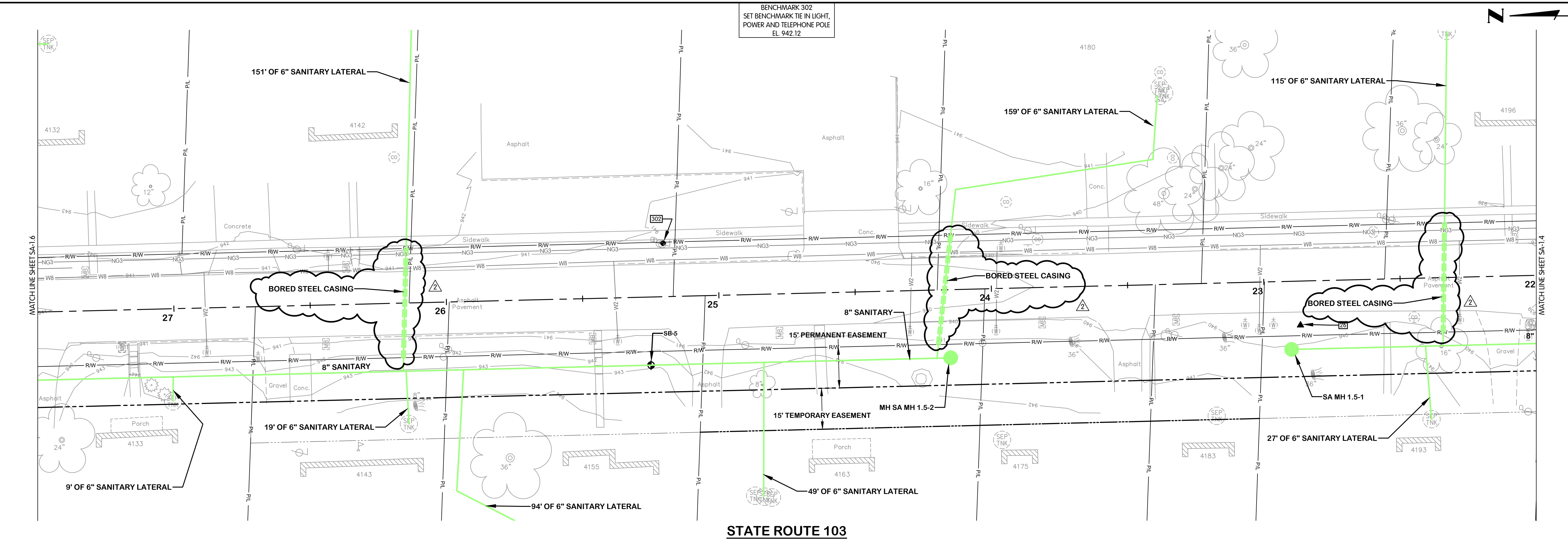
THIS LINE SCALES IF WHEN
PLOTTED TO NOTED SCALE

DESIGNED RNK DRAWN JAH CHECKED PAL

STATUS ISSUED FOR BID
DATE 6/17/26

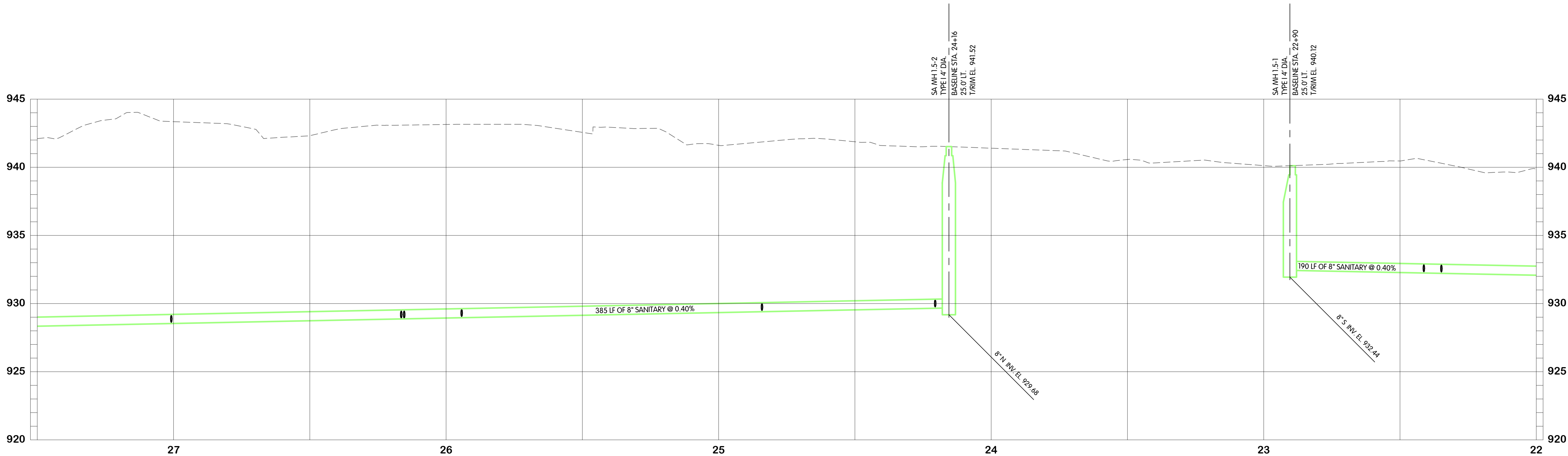
SHEET NO.
SA-1.4
18 OF 75

TOL-809000SA-SA-1.5 ST RT 103 STA 22+00 TO 27+50
8/6/2026 11:46 AM - JHARRISON
8/6/2026 11:53 AM



NOTE:
ALL GRAVITY SEWER ANTICIPATED TO BE INSTALLED VIA OPEN CUT METHODS UNLESS OTHERWISE NOTED. ALL FORCE MAIN ANTICIPATED TO BE INSTALLED VIA HORIZONTAL DIRECTIONAL DRILL

STATE ROUTE 103



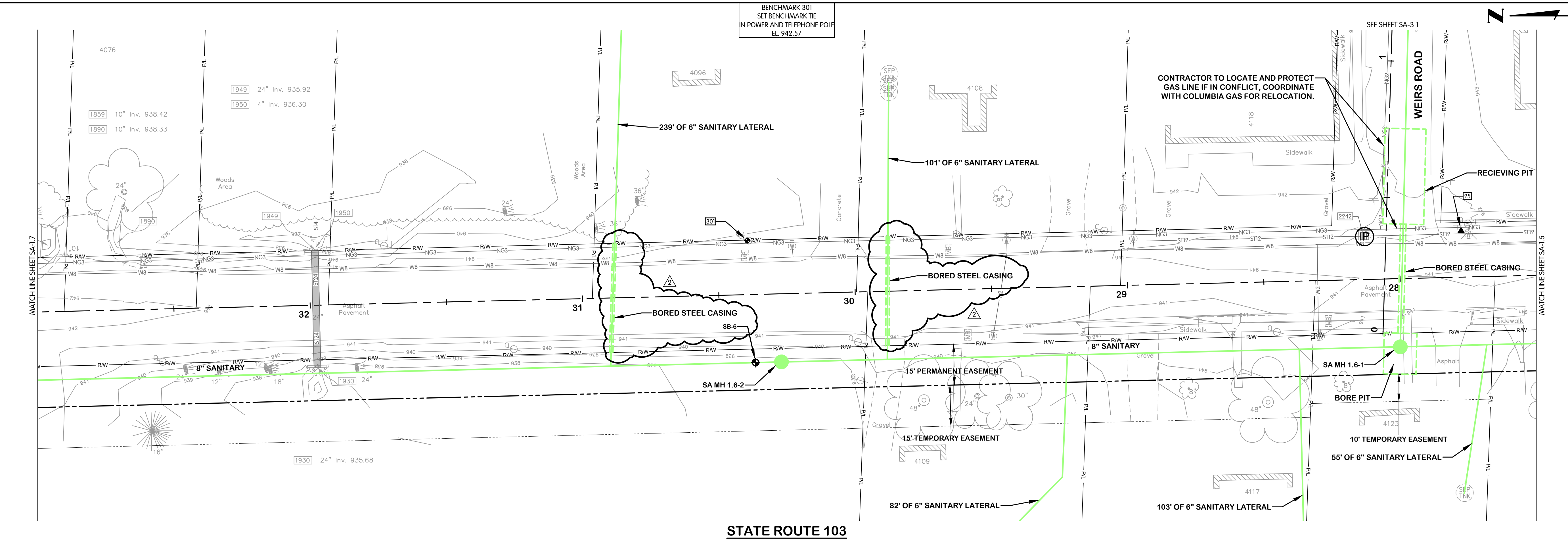
STATE ROUTE 103
SANITARY
PLAN AND PROFILE
STA. 22+00 TO 27+50
SOUTHERN 5 SEWER DISTRICT, OHIO
WASTEWATER COLLECTION SYSTEM PHASE 1 CONTRACT 2

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	RNK	BY
1	8/6/24	ADDENDUM 2		

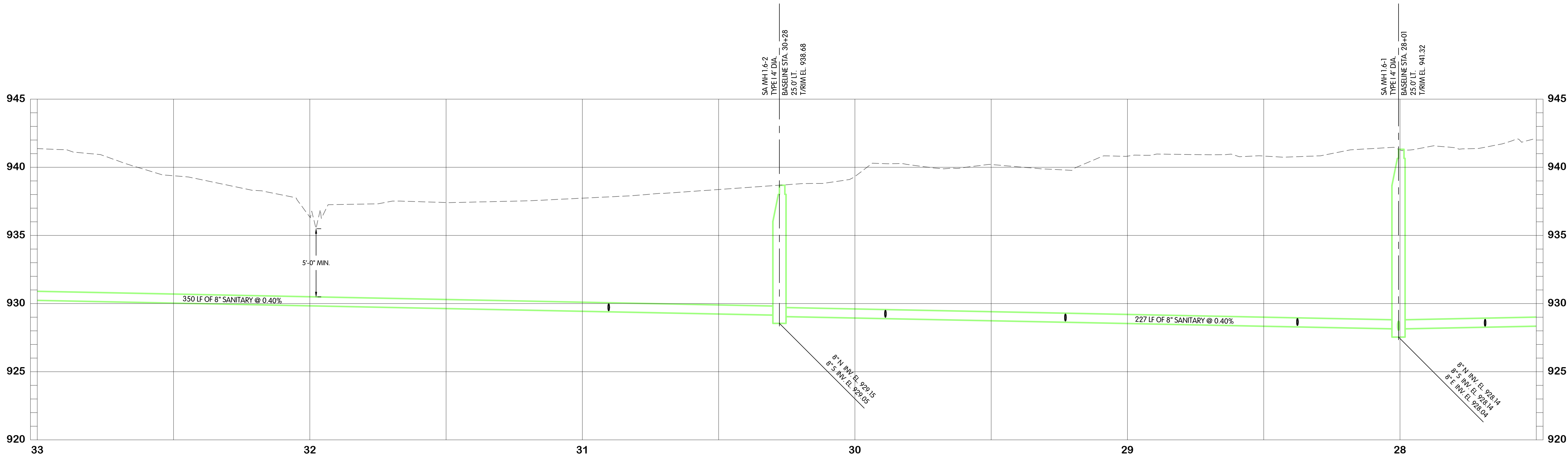
Jones & Henry
Engineers, Ltd.
Fluid thinking®
www.JHeng.com

JOB NO.	1009-8090.001		
SCALE	1"=20' HOR. 1"=4' VERT.		
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE			
DESIGNED RNK	DRAWN JAH	CHECKED PAL	
STATUS	ISSUED FOR BID		
DATE	6/17/26		
SHEET NO.			
SA-1.5			
19 OF 75			

TOL-809000SA-SA-1.6 ST RT 103 STA 27+50 TO 33+00
8/6/2026 11:46 AM - JHARRISON
8/6/2026 11:53 AM



NOTE:
ALL GRAVITY SEWER ANTICIPATED TO BE INSTALLED VIA OPEN CUT METHODS UNLESS OTHERWISE NOTED. ALL FORCE MAIN ANTICIPATED TO BE INSTALLED VIA HORIZONTAL DIRECTIONAL DRILL



STATE ROUTE 103
SANITARY
PLAN AND PROFILE
STA. 27+50 TO 33+00
SOUTHERN 5 SEWER DISTRICT, OHIO
WASTEWATER COLLECTION SYSTEM PHASE 1 CONTRACT 2

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
1	8/06/24	ADDENDUM 2	RNK

Jones & Henry
Engineers, Ltd.

Fluid thinking®
www.JHeng.com

JOB NO. 1009-8090.001

SCALE 1"=20' HOR.
1"=4' VERT.

THIS LINE SCALES IF WHEN
PLOTTED TO NOTED SCALE

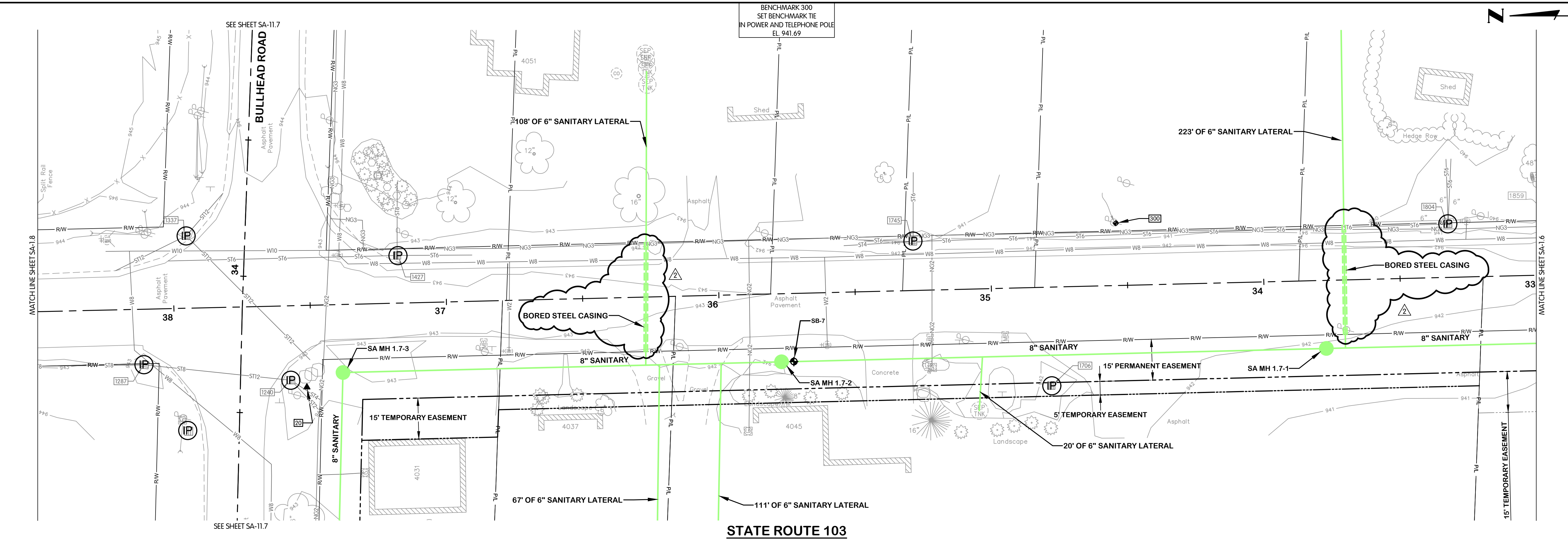
DESIGNED	DRAWN	CHECKED
RNK	JAH	PAL

STATUS ISSUED FOR BID

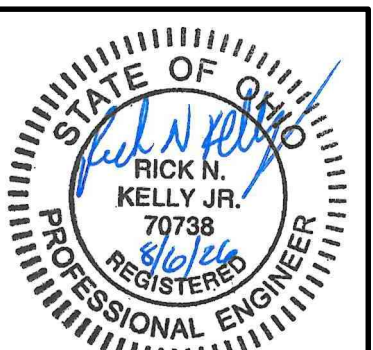
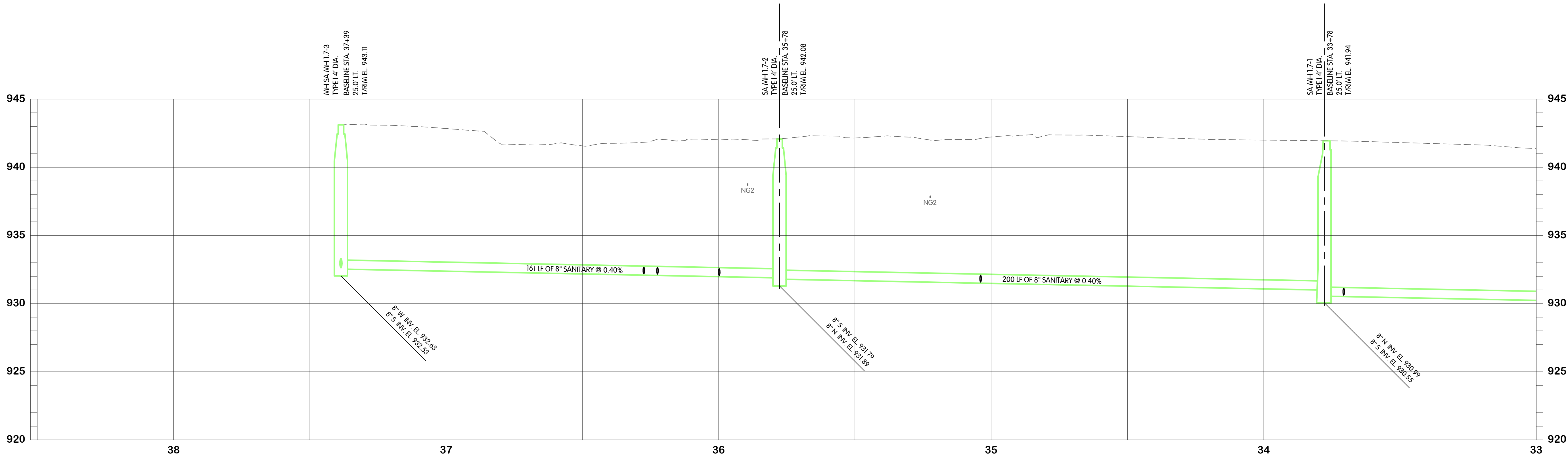
DATE 6/17/26

SHEET NO.
SA-1.6
20 OF 75

TOL-809000SA-SA-1.7 ST RT 103 STA 33+00 TO 38+50
8/6/2026 11:46 AM - JHARRISON
8/6/2026 11:54 AM



NOTE:
ALL GRAVITY SEWER ANTICIPATED TO BE INSTALLED VIA OPEN CUT METHODS UNLESS OTHERWISE NOTED. ALL FORCE MAIN ANTICIPATED TO BE INSTALLED VIA HORIZONTAL DIRECTIONAL DRILL



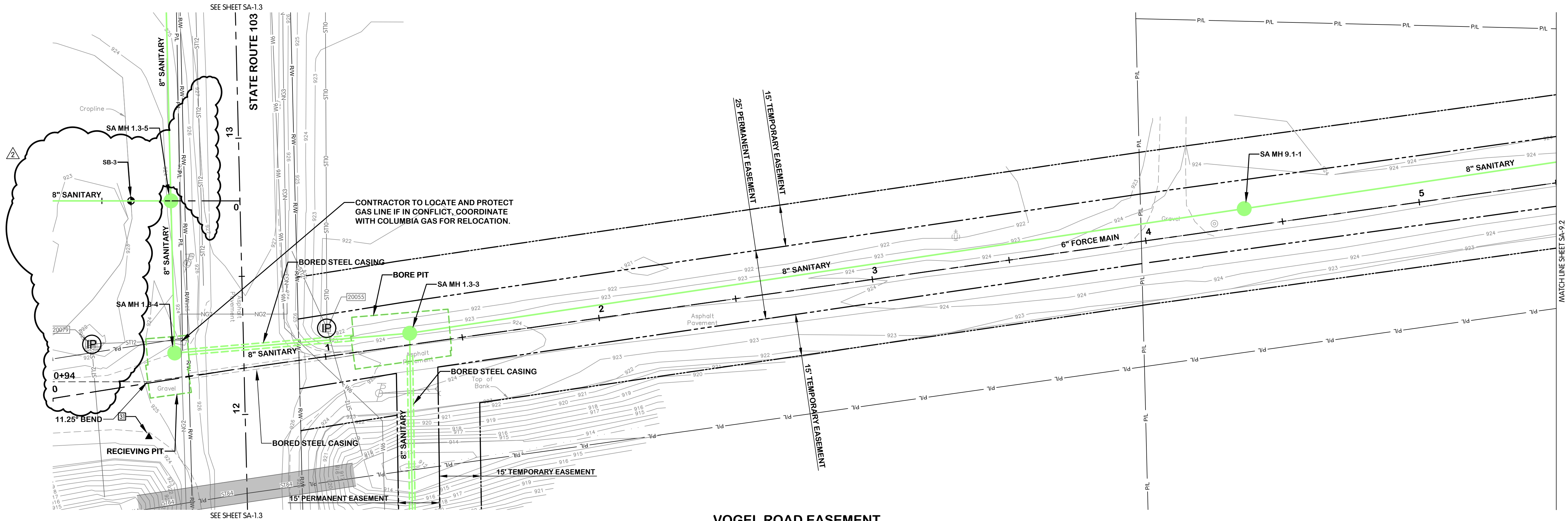
STATE ROUTE 103
SANITARY
PLAN AND PROFILE
STA. 33+00 TO 38+50
SOUTHERN 5 SEWER DISTRICT, OHIO
WASTEWATER COLLECTION SYSTEM PHASE 1 CONTRACT 2

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY	CHK
1	8/6/24	ADENDUM 2		

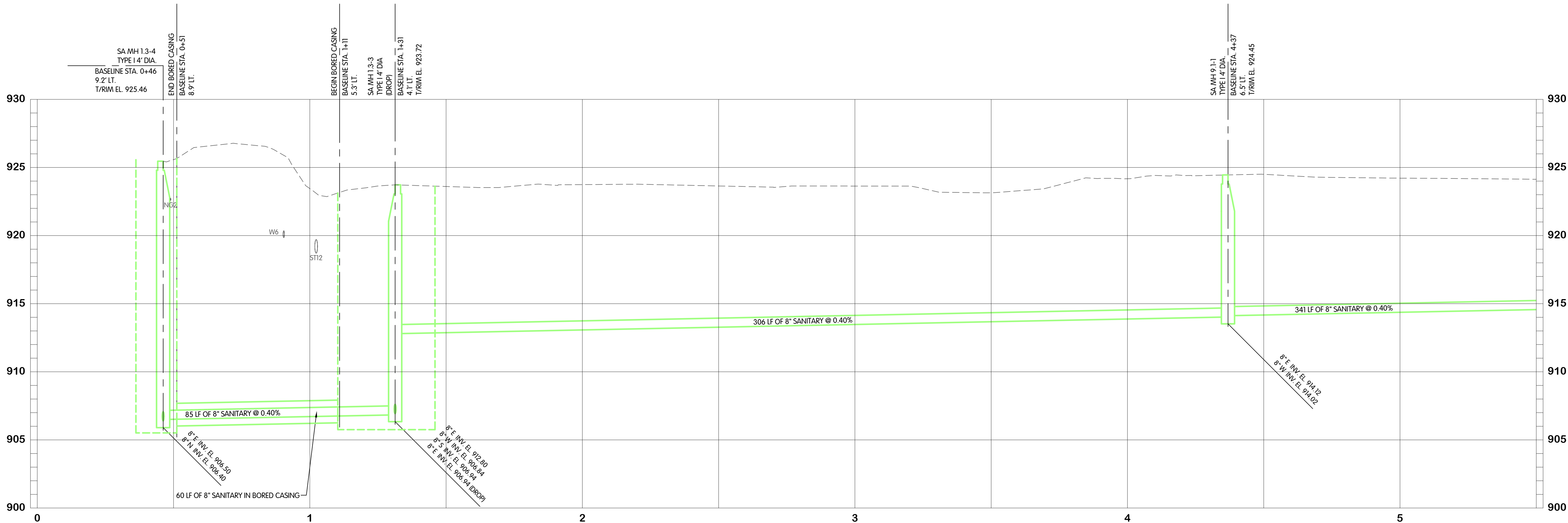
Jones & Henry
Engineers, Ltd.
Fluid thinking®
www.JHeng.com

JOB NO.	1009-8090.001		
SCALE	1"=20' HOR. 1"=4' VERT.		
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE 			
DESIGNED	DRAWN	CHECKED	
RNK	JAH	PAL	
STATUS:	ISSUED FOR BID		
DATE:	6/17/26		
SHEET NO.			
SA-1.7			
21 OF 75			

TOL-809000SA9-SA-9.1 VOGEL STA 0+00 TO 5+50
8/6/2026 8:04 AM - JHARRISON
8/6/2026 11:54 AM



NOTE:
ALL GRAVITY SEWER ANTICIPATED TO BE INSTALLED VIA OPEN CUT METHODS UNLESS OTHERWISE NOTED. ALL FORCE MAIN ANTICIPATED TO BE INSTALLED VIA HORIZONTAL DIRECTIONAL DRILL



VOGEL ROAD EASEMENT
SANITARY
PLAN AND PROFILE
STA. 0+00 TO 5+50

SOUTHERN 5 SEWER DISTRICT, OHIO
WASTEWATER COLLECTION SYSTEM PHASE 1 CONTRACT 2

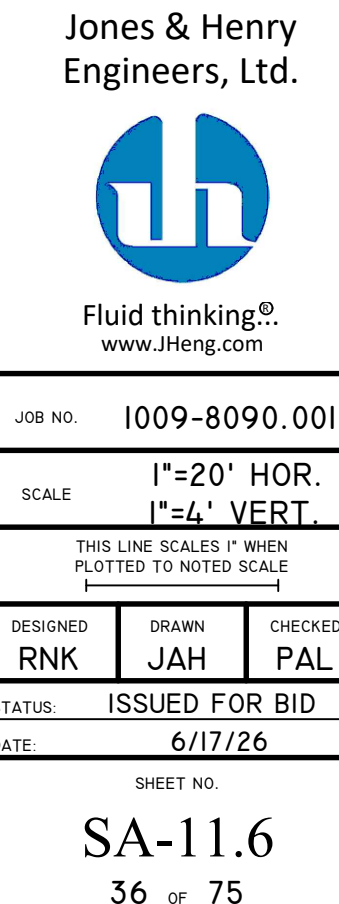
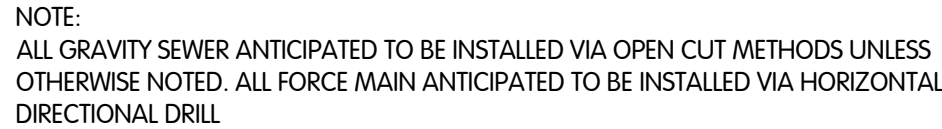
REVISIONS AFTER ISSUED FOR BID		RNK	BY
NO.	DATE		
1	8/6/24		
2			
3			
4			
5			

Jones & Henry
Engineers, Ltd.

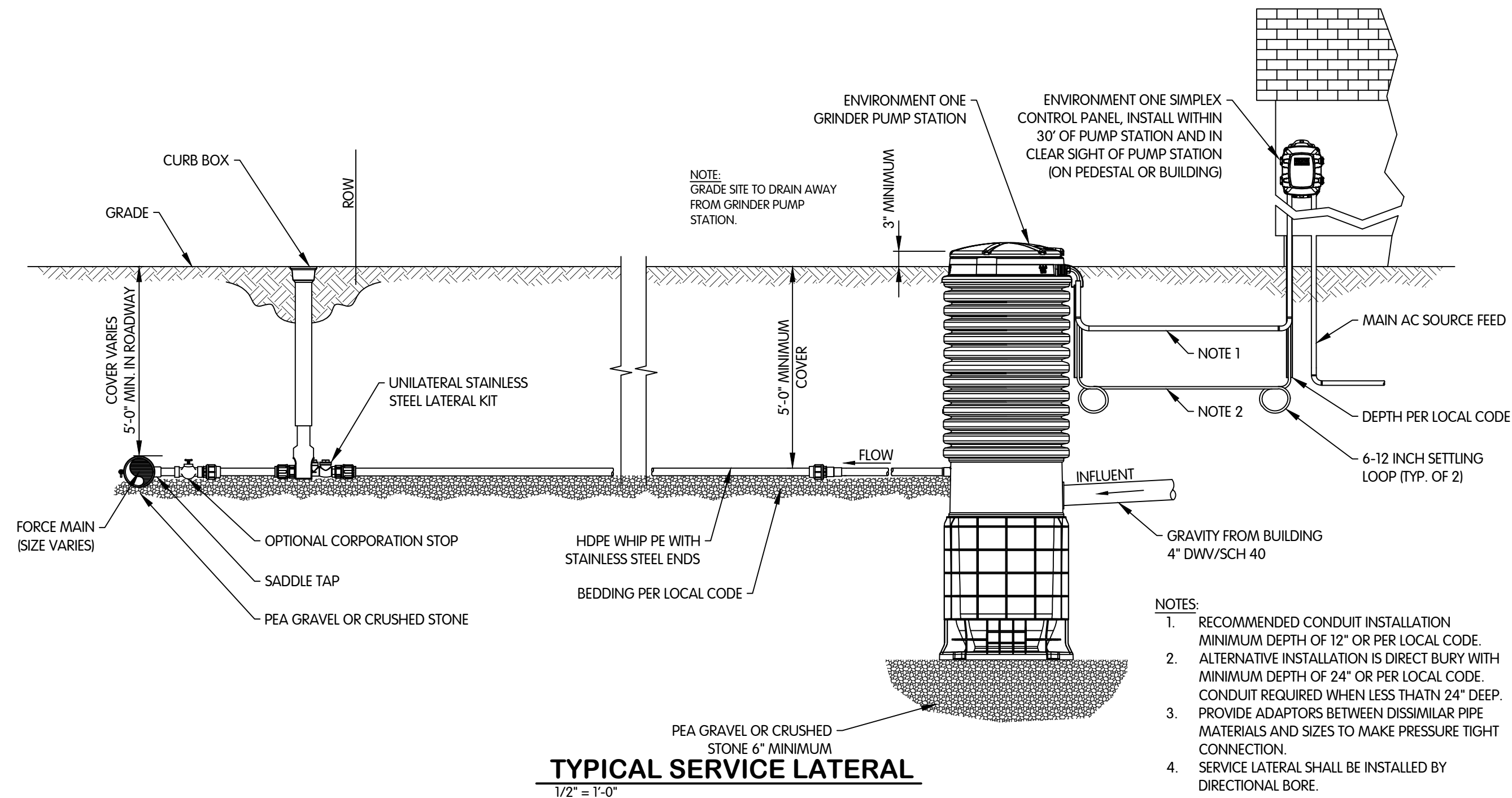
Fluid thinking®
www.JHeng.com

JOB NO.	1009-8090.001	
SCALE	1"=20' HOR. 1"=4' VERT.	
THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE 		
DESIGNED	DRAWN	CHECKED
RNK	JAH	PAL
STATUS:	ISSUED FOR BID	
DATE:	6/17/26	

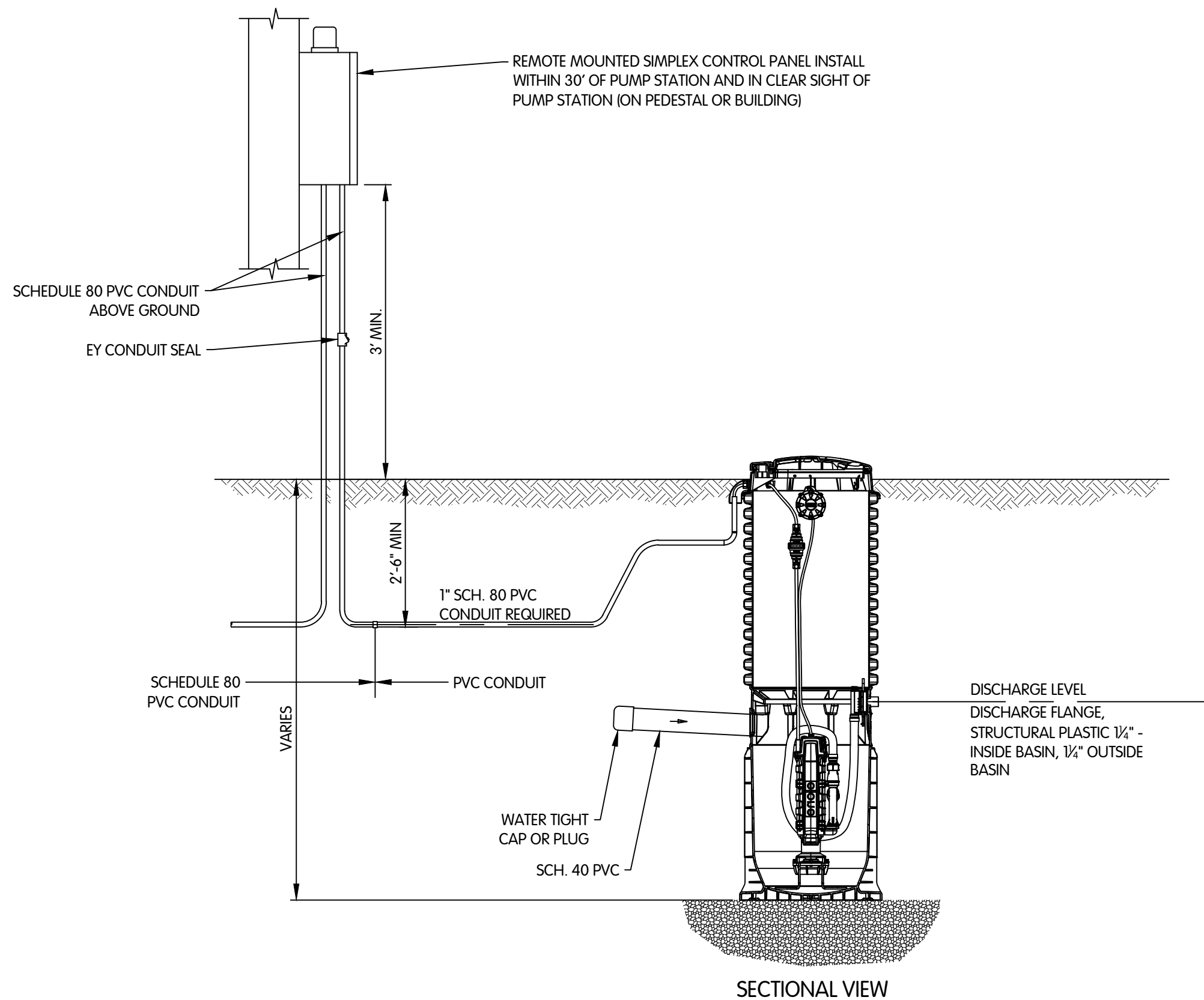
SHEET NO.
SA-9.1
34 OF 75



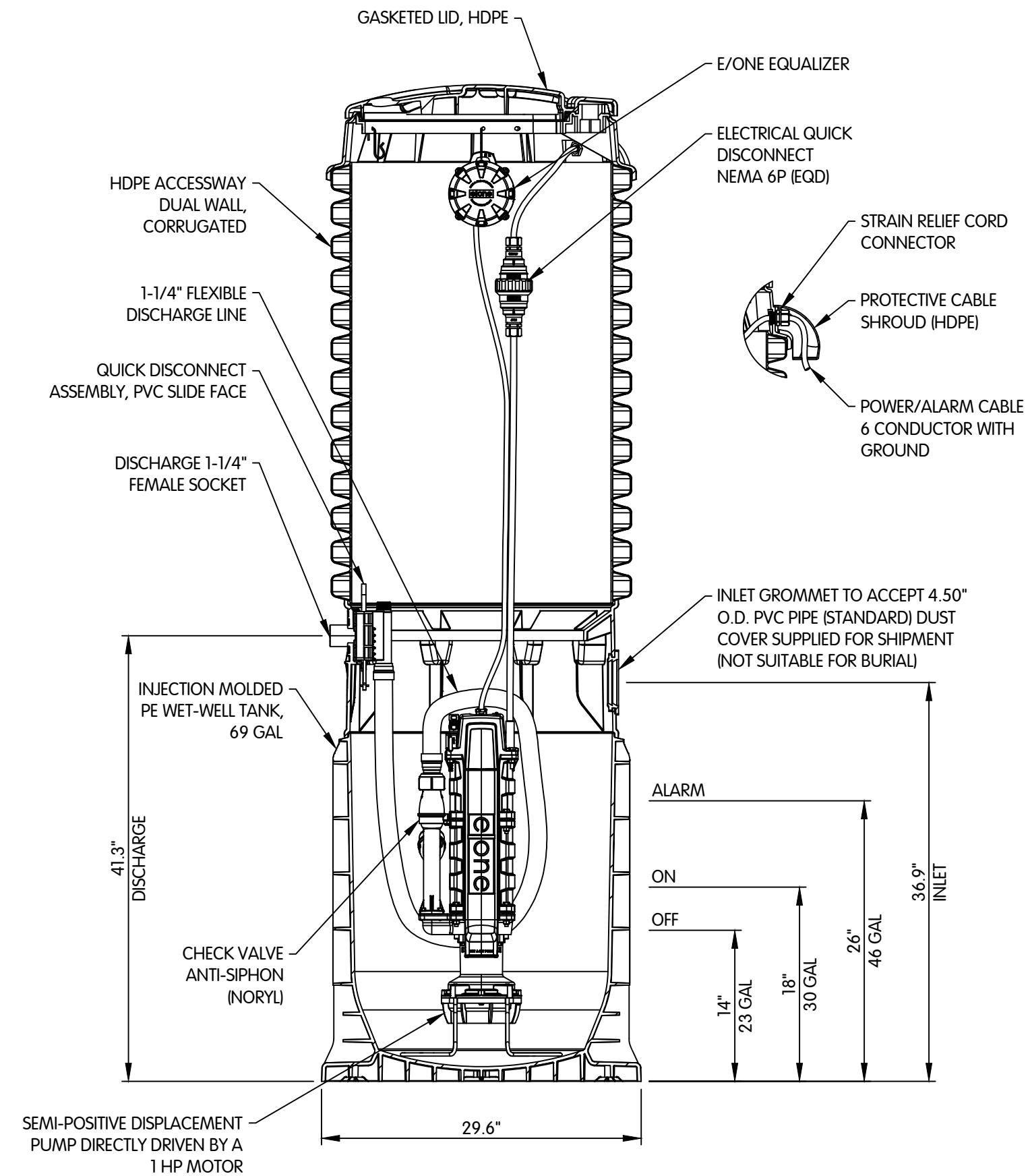
TOL-809000FM-03 FORCE MAIN DETAILS
8/6/2026 9:52 AM - JHARRISON
8/6/2026 12:01 PM



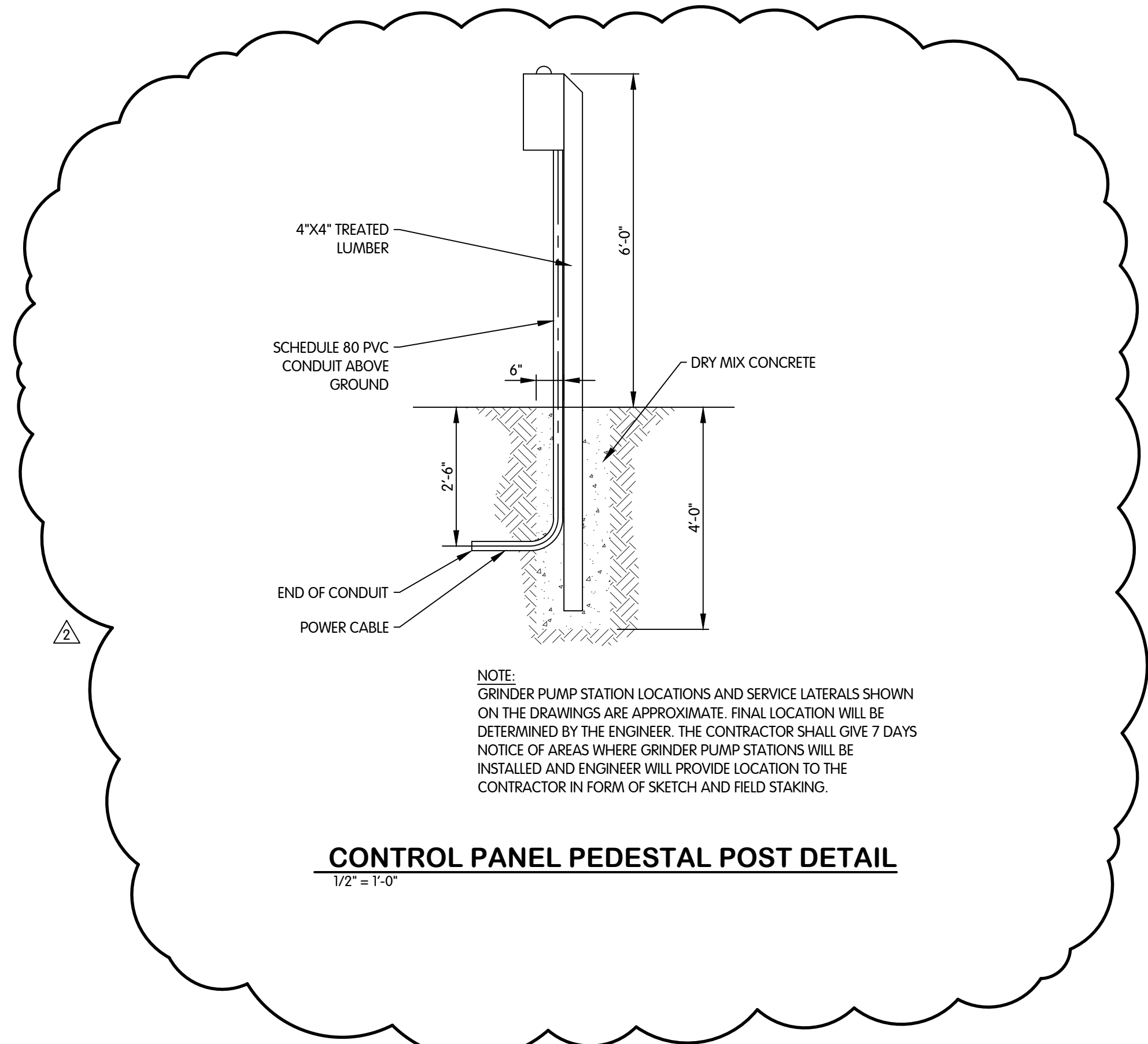
TYPICAL SERVICE LATERAL
1/2" = 1'-0"



GRINDER STATION DETAIL
1/2" = 1'-0"



GRINDER PUMP DETAIL
1" = 1'-0"



CONTROL PANEL PEDESTAL POST DETAIL
1/2" = 1'-0"



FORCE MAIN DETAILS
SOUTHERN 5 SEWER DISTRICT, OHIO
WASTEWATER COLLECTION SYSTEM PHASE 1 CONTRACT 2

NO. 1 8/6/24 ADENDUM 2
DATE
REVISIONS AFTER ISSUED FOR BID

Jones & Henry
Engineers, Ltd.



Fluid thinking®
www.JHeng.com

JOB NO. 1009-8090.001

SCALE AS NOTED

THIS LINE SCALES IF WHEN
PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
RNK	JAH	PAL

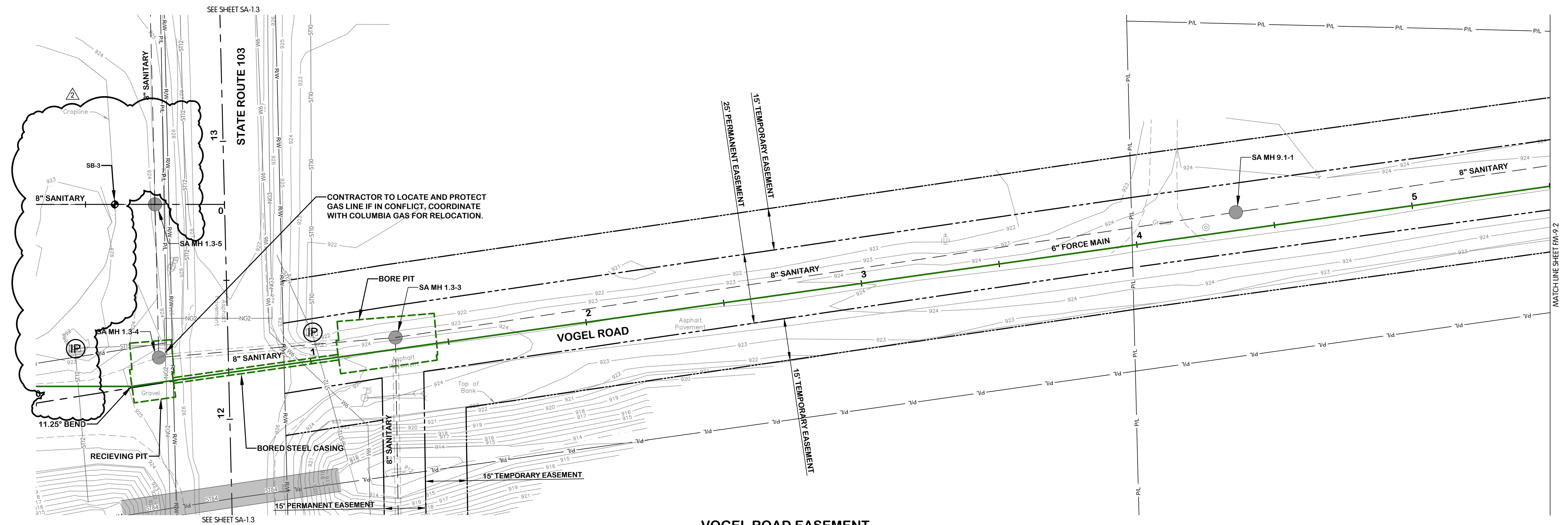
STATUS: ISSUED FOR BID

DATE: 6/17/26

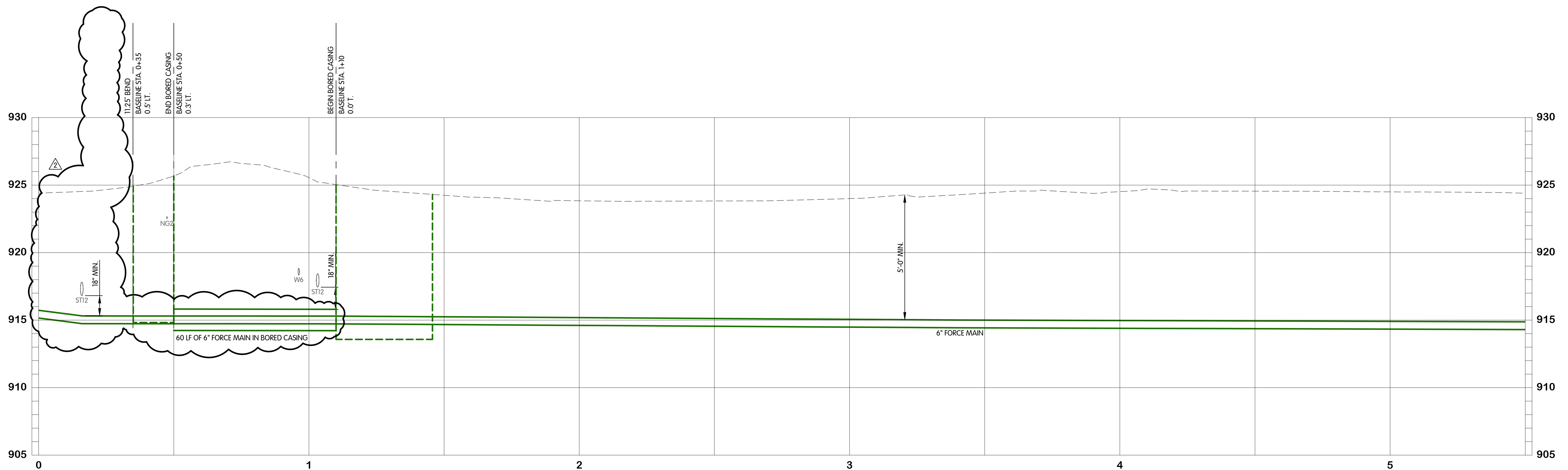
SHEET NO.

FM-0.3

43 OF 75



NOTE:
ALL GRAVITY SEWER ANTICIPATED TO BE INSTALLED VIA OPEN CUT METHODS UNLESS OTHERWISE NOTED. ALL FORCE MAIN ANTICIPATED TO BE INSTALLED VIA HORIZONTAL DIRECTIONAL DRILL



TOL-809000IFM9-FM-9.I VOGEL STA 0+00 TO 5+50
8/6/2026 8:11 AM - JHARRISON
8/6/2026 11:57 AM



FORCE MAIN
PLAN AND PROFILE
STA. 0+00 TO 5+50

**SOUTHERN S SEWER DISTRICT, OHIO
WASTEWATER COLLECTION SYSTEM PHASE 1 CONTRACT 2**

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	RNK
1	8/08/76	APPENDIX 2	81
2			
3			
4			
5			

ones & Henry
Engineers, Ltd.



DB NO. 1009-8090.001

SCALE	1"=20' HOR. 1"=4' VERT.
-------	----------------------------

THIS LINE SCALES 1" WHEN
PLOTTED TO NOTED SCALE

SIGNED	DRAWN	CHECKED
RNK	CAL	PAL

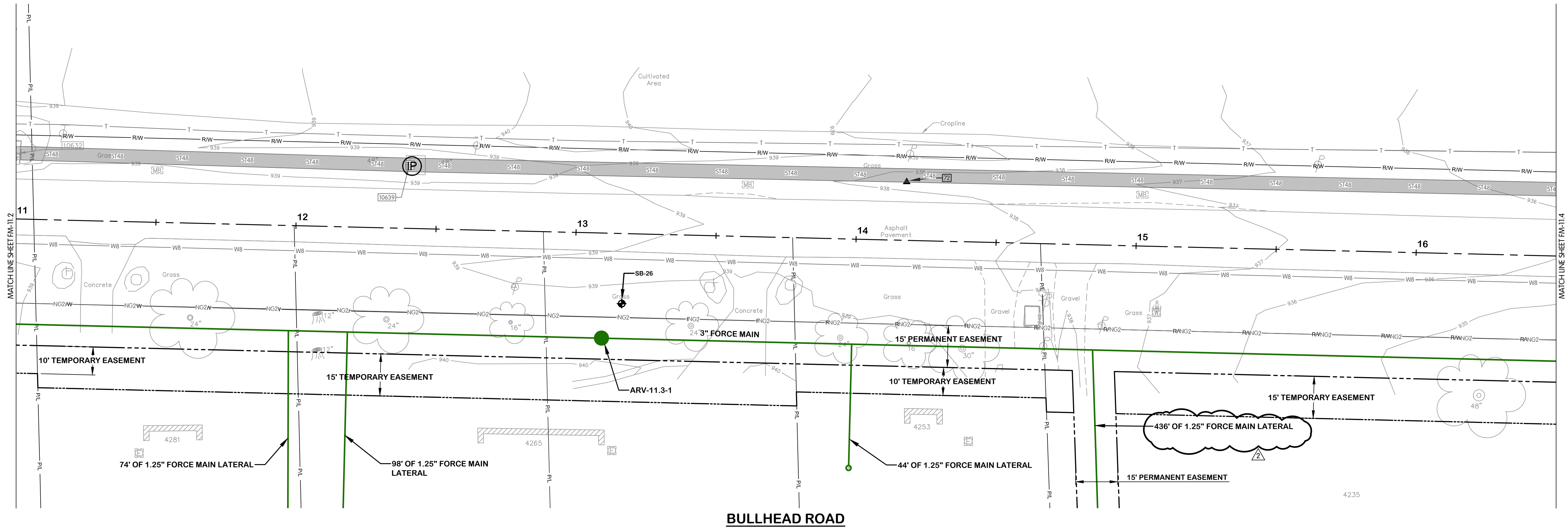
US:	ISSUED FOR BID
	6/17/26

SHEET NO.

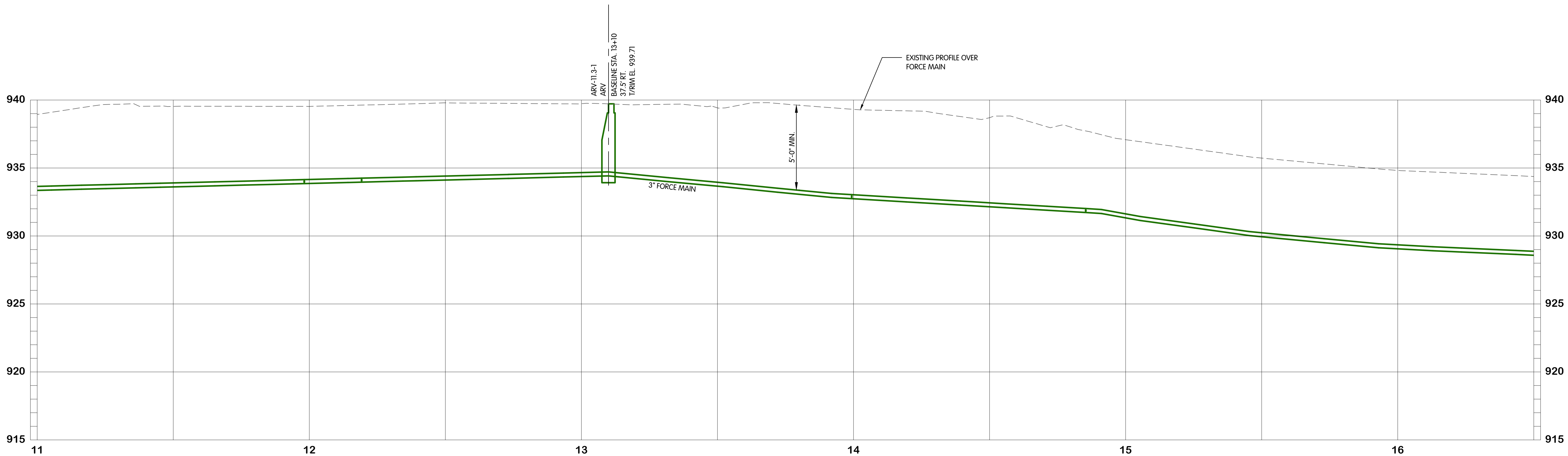
EM-9 1

45 OF 75

TOL-809000FM11-FM-11.3 BULLHEAD STA 11+00 TO 16+50
8/6/2026 8:02 AM - JHARRISON
8/6/2026 11:57 AM



NOTE:
ALL GRAVITY SEWER ANTICIPATED TO BE INSTALLED VIA OPEN CUT METHODS UNLESS
OTHERWISE NOTED. ALL FORCE MAIN ANTICIPATED TO BE INSTALLED VIA HORIZONTAL
DIRECTIONAL DRILL



BULLHEAD ROAD
FORCE MAIN
PLAN AND PROFILE
STA. 11+00 TO 16+50

SOUTHERN 5 SEWER DISTRICT, OHIO
WASTEWATER COLLECTION SYSTEM PHASE 1 CONTRACT 2

NO. 1 8/6/26 DATE 6/17/26
REVISIONS AFTER ISSUED FOR BID

Jones & Henry
Engineers, Ltd.



Fluid thinking®
www.JHeng.com

JOB NO. 1009-8090.001

SCALE 1"=20' HOR.
1"=4' VERT.

THIS LINE SCALES IF WHEN
PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
RNK	CAL	PAL

STATUS: ISSUED FOR BID

DATE: 6/17/26

SHEET NO.

FM-11.3

55 OF 75

TOL-809000(FM)-11.4 BULLHEAD STA 16+50 TO 22+00
8/6/2026 8:02 AM - JHARRISON
8/6/2026 11:57 AM

BENCHMARK 452
SET BENCHMARK TIE IN LIGHT,
POWER AND TELEPHONE POLE
EL. 935.69

34107 48" Inv. 928.43
34116 8" Inv. 927.93
34115 6' x 9' Inv. 925.48



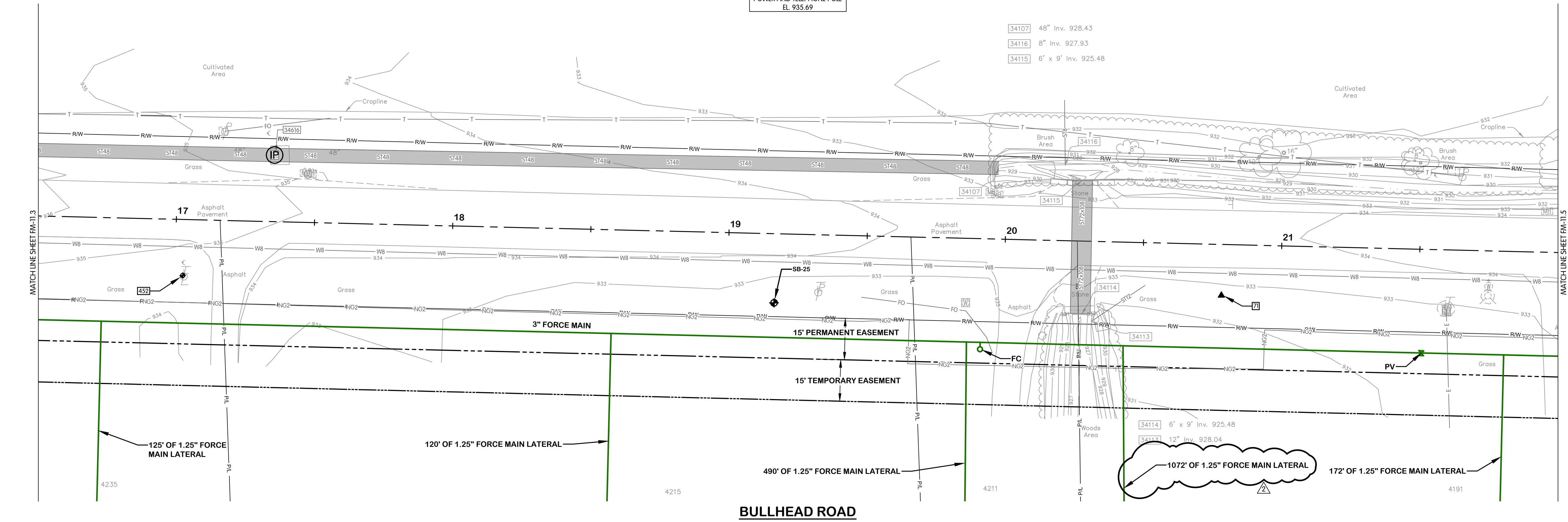
BULLHEAD ROAD
FORCE MAIN
PLAN AND PROFILE
STA. 16+50 TO 22+00
SOUTHERN 5 SEWER DISTRICT, OHIO
WASTEWATER COLLECTION SYSTEM PHASE 1 CONTRACT 2

NO. 1 8/6/24 ADENDUM 2
DATE REVISIONS AFTER ISSUED FOR BID

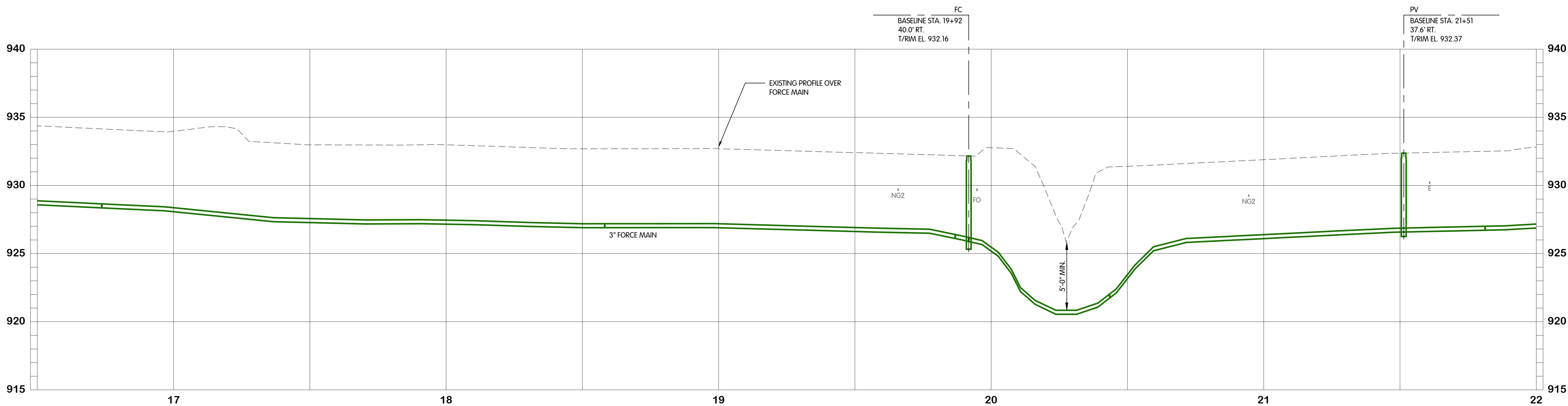
Jones & Henry
Engineers, Ltd.
Fluid thinking®
www.JHeng.com

JOB NO. 1009-8090.001
SCALE 1"=20' HOR.
1"=4' VERT.
THIS LINE SCALES IF WHEN
PLOTTED TO NOTED SCALE
DESIGNED RNK DRAWN CAL CHECKED PAL
STATUS ISSUED FOR BID
DATE 6/17/26

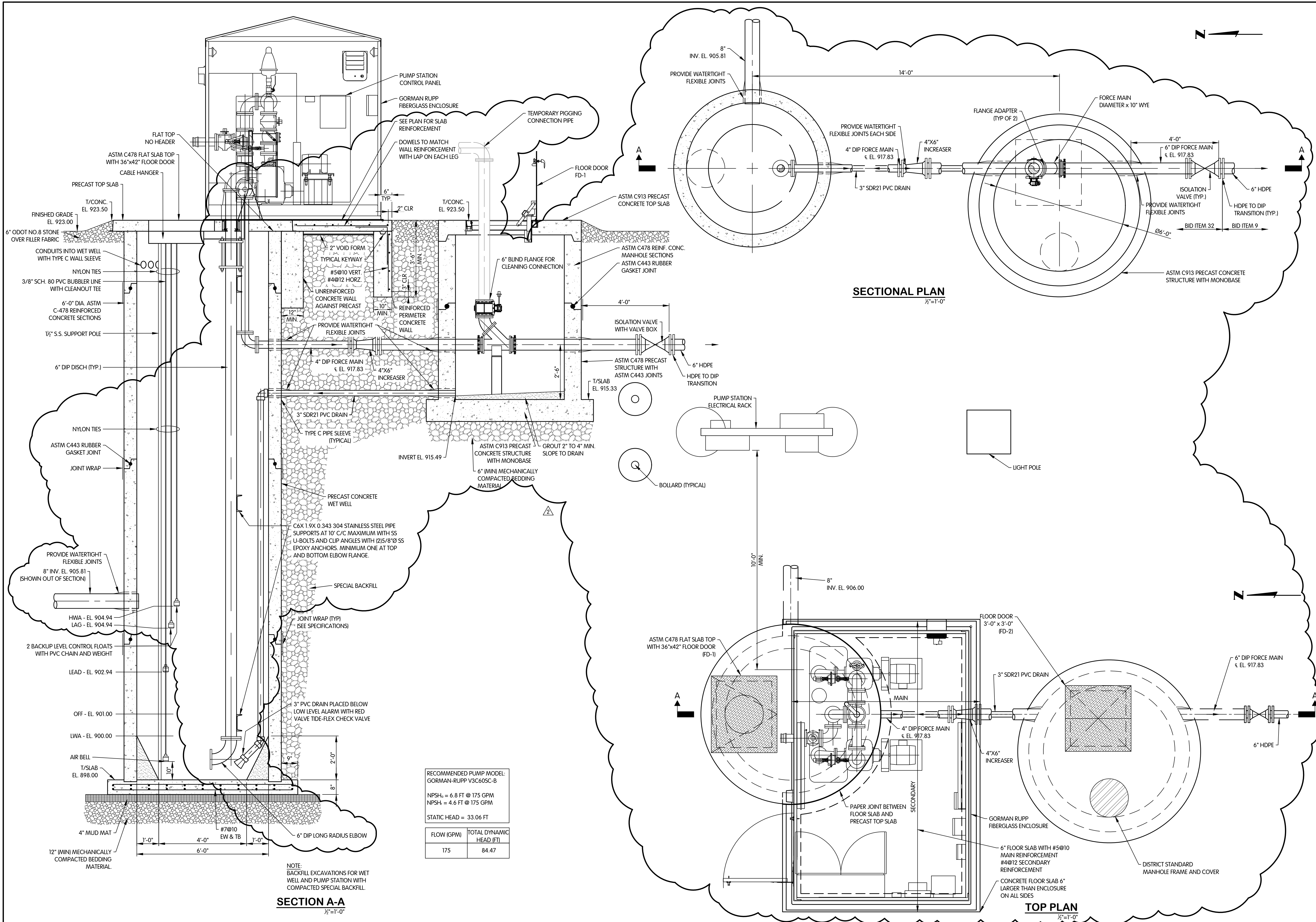
SHEET NO.
FM-11.4
56 OF 75



NOTE:
ALL GRAVITY SEWER ANTICIPATED TO BE INSTALLED VIA OPEN CUT METHODS UNLESS
OTHERWISE NOTED. ALL FORCE MAIN ANTICIPATED TO BE INSTALLED VIA HORIZONTAL
DIRECTIONAL DRILL



TOL-809000PEL-PUMP STATION PLANS AND SECTIONS
8/6/2026 10:34 AM - JHARRISON
8/6/2026 11:58 AM



STATE OF OHIO
RICK N. KELLY JR.
70738
REGISTERED
PROFESSIONAL ENGINEER

PUMP STATION
PIPING AND EQUIPMENT
PLANS AND SECTIONS

SOUTHERN 5 SEWER DISTRICT, OHIO
WASTEWATER COLLECTION SYSTEM PHASE 1 CONTRACT 2

RNK
BY

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

REVISIONS AFTER ISSUED FOR BID

DATE

NO.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

Jones & Henry
Engineers, Ltd.

Fluid thinking®
www.JHeng.com

JOB NO. 1009-8090.001

SCALE AS NOTED

THIS LINE SCALES IT WHEN PLOTTED TO NOTED SCALE

DESIGNED RNK DRAWN JAH CHECKED PAL

STATUS ISSUED FOR BID

DATE 11/19/2025

SHEET NO. PE-1.1

71 OF 75

