Jones & Henry
ENGINEERS, LTD.

Turkey Creek Regional Sewer District
Fascination Place
Water Main Improvements

ADDENDUM 2

January 30, 2026

Plan holders on the Turkey Creek Regional Sewer District, Fascination Place Water Main Improvement, are hereby notified of the following amendments to the contract documents. This Addendum is hereby made a part of the Contract Documents.

REFERENCE NOTE

- A Pre-bid meeting was conducted on January 22, 2026. The minutes to the meeting are attached for reference only, see attached.

SPECIFICATIONS

Instructions To Bidders: GRP not required at this time by the contractor.

Bid Form: Delete and replace with attached pages, Changes to bid items

Replace Pages 1 thru 9 with the attached Notice for Bids

Section C-01010: Delete and replace with attached pages, Changes to bid items.

Replace Pages 1 thru 19 with the attached Section 01010.

Section C-02599: Delete and replace with attached pages, Changes to meters and meter pits.

Replace Pages 1 thru 4 with the attached Section 02599.

DRAWINGS

All Sheets: Delete and replace all sheets, missing logo and checked by note, added sheets G-0.5- (General Summary), & SR-0.4- (Erosion Control Narrative). Note updates sheet W-0.2.

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

Jones & Henry
ENGINEERS, LTD.

Fluid thinking®
1700 Magnavox Way, Suite 102, Fort Wayne, IN 46804
Phone: 260.482.1920 JHeng.com

Turkey Creek Regional Sewer District

Project: Fascination Place Water Main Improvements
Date: January 22, 2026 @ 10:00 am
Location: 4852 N 1200 W, Cromwell, IN 46732

1. **Sign-In,** please complete the sign-in information, see attached

2. **Opening:**
No changes can be made at this meeting. Only an addendum can make changes to the construction documents.

3. **Addendum (1 at this time):** A second addendum will be issued after this meeting.
Addendum 1 was for the "Notice for Bids". Some wording was revised for SRF.

4. **Communications & Correspondence**
   a. TCRSD — Tim Woodward
   b. Engineers — John Magsam, email at tcrsd-wm@jheng.com
   c. Inspector — J&H

5. **Bid Date: see below**

6. **Bidding**
Bid Date: February 12, 2026 @ 2:00 pm to be opened during a public meeting
Deliver Bids to: Turkey Creek Regional Sewer District Wastewater Treatment Plant; 4852 N 1200 W, Cromwell, IN 46732
   a. Include with your Bid:
      i. Bid Pages C-410-1 through C-410-7
      ii. Bid Security
      iii. Evidence to do business in Indiana.
      iv. Form 96
      ~~v. GPR Breakdown, Attachment G in SRF Requirements, Exhibit 2~~ Not needed
   b. Bid Award determination will be based on Base Bid
   c. Bid to be held for up to 180 days.
   d. Apparent Successful Bidder will be required to complete:
      i. SRF Requirements in Exhibit 2
         1. Certification of Non-Segregated Facilities & Non-Discrimination
         2. Payroll Reporting (weekly or monthly) for Contractor & all Subcontractors
            a. Wage/Fringe Benefit Certifications
         3. Good Faith (DBE) Efforts, Attachment D
            a. Goals; MBE 7%, WBE 5%
         4. Attachment J, American Iron & Steel Certification
         5. Bidder's List Form
   e. Davis Bacon Requirements, to be updated Friday before Bid Opening

7. Contract Time / Liquidated Damages (page A-1):

Approximate Start Date	Early August
Substantial Completion	270 days from Notice to Proceed date
Final Completion	300 days from the Notice to Proceed date
Liquidate Damages	$500.00 per day

8. Description of the Work

To furnish and install approximately 11,000 LF of 6 to 12-inch water mains with hydrants, valves, around 180 meters & meter pits in Fascination Place subdivision.

a. Allowances

9. General & Supplementary Conditions, (Contractor to review in detail)

a. Insurance Requirements (see pages SC-5):
   i. Separate Policy:
   ii. Builders Risk

10. Payment:

a. Once a month, third Mondays

11. General:

a. Contractor to notify residents of parking restrictions
b. Pressure testing
c. Erosion / Pollution Control
d. Traffic Control; local roads
e. 02200-9 4.03 B & C
   i. Existing soil can be used adjacent to pavement if no organic material is present.

12. Other Comments and Discussions

a. The service line can be PEXa pipe or copper per the Specification section 02558. Drawing sheet W-0.2 only states copper but PEXa is allowed. We will add this note to the drawing.

b. The project will require erosion control. Turkey Creek RSD will apply for the SWPPP. The contractor will have to provide erosion control per the plan.

c. Meter software setup will be through the contract. The meter supplier will need to provide meter reading services per the specifications.

d. The contractor shall pay for the Electronic Project Management System (EMPS). It will be part of Modulization costs.

e. **Do sewer laterals need to meet the 18" vertical separation? No.**

f. **Were soil borings done? We are expecting them soon and will post on bidding site when we get them.**

g. **The alternate bid item for piping does not match the base bid piping quantities. We will review the items and adjust as necessary.**

h. **What is the anticipated start date, can it be adjusted? We are looking to start construction this fall. If you need a later date than this, please let us know.**

i. **Are there any tree replacements? No, not currently.**

j. **Please note that right-of-way is 50-foot in the subdivision.**

k. **Turkey Creek RSD is working on a "Right of Entry" to work on service lines that need to go beyond the right-of-way.**

l. **Meter pits will be installed in the right-of-way. Currently there are approximately 25-27 existing shutoffs outside the right-of-way. The intent is to remove these shutoffs with the new service lines.**

m. **Turkey Creek RSD is working on a boil advisory for the entire project timeline. TCRSD will provide the notices to the residents.**

n. **Turkey Creek RSD offered to provide store in their well field site. After reviewing other projects in the area during the construction timeline the District cannot offer the well field site for this project.**

13. Meeting ended at 10:32am

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Turkey Creek Regional Sewer District

Project: **Fascination Place Water Main Improvements**

Date: January 22, 2026 @ 10:00 am

Location: 4852 N 1200 W, Cromwell, IN 46732

Name	Representing	Phone Number	Email (optional)
John Magsam	Jones+Henry Eng	260.440.8304	jmagsam@jheng.com
Mike Harkness	Jones&Henry	260-440-8301	mharkness@jheng.com
Trevor Molen	Eshelman Excavating	260-302-7906	Trevor@eshelmanco-p.co
Branden Klood	C&E Excavating	574.350.6455	bwood@candeexcavating.c
Roy Fisher	KLS	269-621-5725	rofisher@KLS.c
Brian Swallow	Niblock Excavating	(574) 326-8118	Bswallow@niblockexc.c
Kevin L Sharick	KLS	260-350-1534	KSharick@KLSUND
Tim Wachwart	TCPSD	1-574-529-0098	TIM@TC
Emily Delorey	TCRSD	260.856.4341	emily@tcrsd.ca
Jonathan W. Bercot	Bercot, Inc	(260) 489-4561	johnc@bercot-inc.c
Jeffrey S. Bercot	Bercot, Inc	(260) 489-4561	jsbercot@bercotg.bs

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Turkey Creek Regional Sewer District

Project: **Fascination Place Water Main Improvements**

Date: January 22, 2026 @ 10:00 am

Location: 4852 N 1200 W, Cromwell, IN 46732

Name	Representing	Phone Number	Email (optional)
Bob Kuhns	Selge Const.	(574) 292-8943	bkuhns@selgeconstruction.c
Ryan Gurtis	TCRSD		
[illegible] Poore	TCRSD		
Ethan Knepp	HRP Construction	574-271-7800	estimating@HRPconstruct.com

BID FORM

FASCINATION PLACE WATER IMPROVEMENTS

ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

Turkey Creek Regional Sewer District
4852 North 1200 West
Cromwell, Indiana 46732

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 150 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:

Addendum No.	Addendum, Date
_____	_____
_____	_____
_____	_____
_____	_____

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 (geotechnical) and drawings, 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 anything 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 e execution of the Contract.

ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the price(s) included on C-410-4 and C-410-8. Bidder shall fill in all blanks on the Bid Form.

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	1	LS					
2	Audio-Video Recording of the Zone of Influence	1	LS					
3	Pollution Prevention	1	LS					
4	Survey & Staking	1	LS					
5	Maintenance of Traffic	1	LS					
6a	6-inch Sanitary Sewer Tap Connection	40	EA					
6b	6-inch, PVC-SDR 26, Lateral	800	LF					
7a	6-inch Watermain, Open Cut, PVC / DIP	6,310	LF					
7b	8-inch Watermain, Open Cut, PVC / DIP	3,015	LF					
7c	12-inch Watermain, Open Cut, PVC / DIP	745	LF					
7d	12-inch watermain, HDPE, DR11, DI, HDD	480	LF					
7e	6-inch Insertion Tee	1	EA					

Item No.	Description	Estimated Quantity	Unit	Unit Cost in Numbers		Unit Price in Words	Total Estimated Cost of Item	
7f	8-inch Insertion Tee	1	EA					
7g	Water Main Connection @ Robinhood	1	EA					
8a	6-inch Insertion Valve	1	EA					
8b	8-inch Insertion Valve	1	EA					
8c	6-inch Gate Valve	17	EA					
8d	8-inch Gate Valve	8	EA					
8e	12-inch Gate Valve	2	EA					
8f	Valve Removal of Existing Valve	8	EA					
9a	Hydrants	12	EA					
9b	Hydrant removal	5	EA					
10a	Service Tubing, 3/4-inch, Open Cut	1,500	LF					
10b	Service Tubing, 1-inch, Bored	2,800	LF					
10c	Service Tubing, 1-inch, Open Cut	710	LF					
10d	¾-inch Lead Service Line Replacement (Undistributed)	1	LS	$15,000	00	Fifteen thousand dollars	$15,000	00

Item No.	Description	Estimated Quantity	Unit	Unit Cost in Numbers		Unit Price in Words	Total Estimated Cost of Item	
10e	Water Service Connection, 1-inch	135	EA					
10f	¾-inch Water Meter, Install only	186	EA					
10g	1-inch Water Meter, Install only	2	EA					
10h	Single Water Meter Pit	83	EA					
10i	Dual Water Meter Pit	52	EA					
~~11a~~	~~Automated Meter Reading Software & Equipment~~	~~1~~	~~LS~~			Deleted Item		
~~11b~~	~~Advanced Metering Infrastructure Equipment~~	~~1~~	~~LS~~			Deleted Item		
12	Special Backfill	3,300	CY					
13a	12-inch, #8 Aggregate Base	3,000	SY					
13b	8-Inch, #53 Aggregate Drive	1,000	SY					
13c	3-inch Asphalt Cement Base	370	TON					
13d	1-1/2-inch Asphalt Cement Surface	200	TON					
14	6-inch Concrete Drive	300	SF					

Item No.	Description	Estimated Quantity	Unit	Unit Cost in Numbers		Unit Price in Words	Total Estimated Cost of Item	
15a	Clearing & Grubbing	100	LF					
15b	Tree Removal, 6-inches Diameter or Larger	5	EA					
16	Seed & Mulch	6,500	SY					
17	Record Documents	1	LS					
Base Bid Total Estimated Construction Cost Bid:								
Alternate Bid Items								
7a	8-inch Watermain, HDPE, DR11, DI, HDD for 6-inch PVC / DIP main	6310	LF					
7b	10-inch Watermain, HDPE, DR11, DI, HDD, 8-inch PVC / DIP main	3,015	LF					
7c	12-inch Watermain, HDPE, DR11, DI, HDD, 12-inch PVC / DIP main	1,225	LF					
Alternate Bid Total Estimated Construction Cost Bid:								

ARTICLE 6 – TIME OF COMPLETION

6.01 Bidder agrees that the Work will be substantially complete within 270 calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 310 calendar days after the date when the Contract Times commence to run.

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.

C. Required Bidder Qualification Statement with supporting data; and

D. List of Proposed Subcontractors.

E. List of Proposed Suppliers.

F. List of Project References;

G. 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; *[List other documents and edit above as pertinent]*

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: _____

Submittal Date: _____

Address for giving notices:

_____

_____

_____

Telephone Number: _____

Fax Number: _____

Contact Name and e-mail address: _____

_____

Bidder's License No.: _____
(where applicable)

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.

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.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

PART 4 SPECIAL PROVISIONS

4.01 CONTRACT ITEMS

A. The contract items are defined on the following pages.

ITEM 1
MOBILIZATION

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 2.6.

D. This item specifically includes the cost of the EPMS specified in section 01320.

1.02 WORK NOT INCLUDED

A. Any Work specifically included under other Bid Items.

1.03 DEFINITION OF ITEM

A. Item 1 - Includes Mobilization

1.04 MEASUREMENT

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 2.6.3 regarding Mobilization and Demobilization costs as a percentage of the total project cost.

1.05 PAYMENT

A. Payment shall be in accordance with Supplemental Conditions SC 2.6 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
AUDIO-VIDEO RECORDING

2.01 DESCRIPTION

A. Under this Item, the Contractor shall produce and deliver to the Owner, color audio-video recordings of existing topography within the zone of influence along all water main routes and audio-video recordings of designated buildings and dwellings as specified and directed.

2.02 WORK NOT INCLUDED

Not used.

2.03 DEFINITION OF ITEM

A. Item 2 - Includes Audio-Video Recording of the Zone of Influence.

2.04 MEASUREMENT

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

B. Audio-video recording of the defined zone of influence along specified routes as shown in the drawings of proposed water main & meters.

2.05 PAYMENT

A. The lump sum price stated in the Bid for Item 2 shall be full compensation for all audio-video recording production.

ITEM 3
POLLUTION PREVENTION

3.01 DESCRIPTION

A. This Item shall include all Work specified in the SWPPP including preparation of a Pollution Prevention Plan, installation, maintenance, and removal of all Pollution Prevention measures.

B. The weekly inspection and reporting of all Pollution Prevention measures shall be included under this item.

C. Obtaining permits and co-permittee coverage specified shall be included under this item.

3.02 WORK NOT INCLUDED

Not used.

3.03 DEFINITION OF ITEM

A. Item 3 - Includes Pollution Prevention.

3.04 MEASUREMENT

A. The quantities to be paid for under Item 3 shall be lump sum for all pollution prevention measures.

3.05 PAYMENT

A. The lump sum stated in the Bid shall be full compensation for all Work required under Item 3.

B. Payment shall be made in the amount of 20% of the lump sum Bid price for Item 3 for the first monthly estimate and 5% for each monthly estimate thereafter until the lump sum Bid amount for Item 3 has been paid.

C. The Engineer may reduce the amount to be paid under Item 3 if the percentage requested is not represented by the actual amount performed.

ITEM 4
SURVEY AND STAKING

4.01 DESCRIPTION

A. Under this Item, the Contractor shall perform all work that pertains to the survey and staking of the project, as shown on the Drawings and specified within relevant sections.

B. This Item shall include all survey and staking to locate easements, right-of-way, place structures, force mains, and sewers required to complete the work as specified.

C. Surveying of the project includes staking station deflection points in the field prior to work commencing. A minimum of 3 ties are required for reestablishing survey points at any time during and after the construction phase.

4.02 DEFINITION OF ITEM

A. Item 4 - Includes Survey and Staking

4.03 MEASUREMENT

A. The lump sum to be paid for under Item 4 shall be to stake, inspect, maintain and record survey control items throughout the project.

4.04 PAYMENT

A. The lump sum price stated in the Bid shall be full compensation for survey and staking of the work as required to completed work as specified, shown on the Drawings or required.

ITEM 5
MAINTENANCE OF TRAFFIC

5.01 DESCRIPTION

A. This Item shall include the furnishing and maintaining of measures required to maintain traffic through or around the proposed Work.

B. This Item shall include detour routes as specified in the Contract Documents.

C. Flaggers may be required as needed during construction, including installation of the water main, removing existing items, service lines, road repair, etc.

5.02 WORK NOT INCLUDED

Not used.

5.03 DEFINITION OF ITEM

A. Item 5 – Includes Maintenance of Traffic.

5.04 MEASUREMENT

A. The quantities to be paid for under Item 5 shall be lump sum for all maintenance of traffic measures.

5.05 PAYMENT

B. The unit price stated in the Bid for Item 5 shall be full compensation for the lump sum of maintenance of traffic measures provided.

ITEMS 6
SEWER PIPE

6.01 DESCRIPTION

A. Under these Items, the Contractor shall furnish and perform all Work necessary for the installation of the sewer pipe damaged as part of the installation of the new water main, service lines or meter pit.

B. These Items shall include all Work to install the sewers, including but not limited to the following: excavation; pavement removal; saw-cutting; concrete drive, curb and walk removal; removal and replacement of fences including fabric and posts; hauling excess spoil material from Site; backfill; compaction; bedding; pipe materials; fittings; connections to existing sewers; construction maintenance and removal of temporary access to the Work area; and related Work such as performing material testing; deflection and infiltration tests.

C. Sewer tap connection, for existing sewer pipe, to the sewer shall be included under these 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. All Work required to dewater trenches is included under these Items.

F. Temporary supporting 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. Vertical pipe sections and riser pipes for 6-inch lateral sewers and cleanouts shall be included under these Items.

H. No addition compensation shall be considered for sewers installed within 2 feet of the elevation shown on the Drawings.

I. The placement, compaction and grading of fill required for backfilling drainage ways enclosed in pipes is included under this Item.

6.02 WORK NOT INCLUDED

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

B. Seeding, mulching, and fertilizing all disturbed lawn areas shall be included under other Items.

C. Sewers installed to convey sewage around or through the Work during construction will not be measured for payment.

D. Damage to existing utilities shall be the responsibility of the Contractor.

E. The furnishing and placing of special backfill in areas specified under Section 02200, is included under other Items.

6.03 DEFINITION OF ITEMS

A. Item 6a – Includes 6-inch Sanitary Sewer Tap Connection

B. Item 6b - Includes 6-inch, PVC – SDR 26 Laterals

6.04 MEASUREMENT

A. The quantities to be paid under Item 6a shall be full compensation for each lateral tap provided and installed in accordance with the Specifications and Drawings.

B. The quantities to be paid under Item 6b shall be the horizontal length of pipe measured parallel to the axis of the line along the surface of the ground.

6.05 PAYMENT

A. The unit price stated in the Bid for Item 6a shall be full compensation for each lateral tap supplied and installed as specified and required.

B. The unit prices stated in the Bid for Item 6b shall be full compensation for each linear foot of pipe of the sizes furnished and installed as specified, so measured.

ITEMS 7
WATER LINES

7.01 DESCRIPTION

A. Under these Items, the Contractor shall furnish and perform all Work necessary for the installation of the water lines 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 waterlines , including but not limited to the following: excavation; pavement and rigid base removal; saw-cutting, concrete drive, curb and walk removal; backfill; compaction; bedding; pipe materials; fittings; maintenance of trenches; temporary pavement; connections to existing water mains; and related Work and materials such as blow offs 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. These Items shall also include all Work under the Contract unless specifically included for payment under other Items.

D. Connections of new water lines to existing water lines shall be included under these Items, unless specifically included under other items. Temporary supporting of existing utilities, locating of existing utilities, exploratory excavation and backfill required. Items, include cutting and removal of existing main to furnish and install all fittings (couplings, tee), and piping to complete the connection.

E. These Items shall include all water main 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.

F. All Work necessary to abandon designated existing water lines is included under these Items.

G. All repairs of existing utilities damaged, as a result of construction, are included under these Items.

7.02 WORK NOT INCLUDED

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

B. Valves, inserting valves, valve manhole structures are included under other items.

C. Hydrant assemblies including associated 6-inch water main piping are included under other items.

D. The abandonment of existing valves and removal of existing fire hydrants are included under other Items.

E. All Work necessary to reconnect existing water services are included for payment under other Items.

F. 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.

7.03 DEFINITION OF ITEMS

A. Item 7a – Includes 6-inch Watermain, Open Cut, PVC / DIP.

B. Item 7b – Includes 8-inch Watermain, Open Cut, PVC / DIP

C. Item 7c – Includes 12-inch Watermain, Open Cut, PVC / DIP

D. Item 7d – Includes 12-inch watermain, HDPE, DR11, DI, HDD

E. Item 7e – Includes 6-inch Insertion Tee

F. Item 7f – Includes 8-inch Insertion Tee

G. Item 7g – Includes Water Main Connection at Robinhood

7.04 MEASUREMENT

A. The quantities to be paid for under Items 7a through 7d shall be the horizontal length of pipe measured parallel to the axis of the line along the surface of the ground.

B. The quantities to be paid under Items 7e and 7f shall be full compensation for each item installed in accordance with the Specifications and Drawings.

C. The quantity to be paid under Item 7g shall be lump sum for the item installed in accordance with the Specifications and Drawings.

7.05 PAYMENT

A. The unit price stated in the Bid for Items 7a through 7d shall be full compensation for each linear foot, furnished and installed as specified so measured.

B. The unit price stated in the Bid for Items 7e & 7f shall be full compensation for each item, so measured, as specified, and required.

C. The unit price stated in the Bid for Item 7g shall be full compensation for the lump sum of water main connection in accordance with the Specifications and Drawings.

ITEM 8
VALVES

8.01 DESCRIPTION

A. Under these Items, the Contractor shall furnish and perform all Work necessary for the installation of the valves and accessories as shown on the Drawings and specified in conformance with relevant Sections of the Specifications.

B. These Items shall include all Work to install or remove the valves, including but not limited to the following: excavation; pavement removal; saw-cutting; concrete drive, curb and walk removal; removal and replacement of fences including fabric and posts; hauling excess spoil material from Site; backfill; compaction; bedding; pipe materials; fittings and pipe connections; construction, maintenance and removal of temporary access to the Work area; and related Work such as performing material testing.

C. Inserting valves (cutting-in-valves) shall be included under these Items.

8.02 WORK NOT INCLUDED

A. Pavement replacement within Contract limits is included for payment under other Items.

B. 6-inch gate valves associated with fire hydrant assemblies are included under Hydrant Item.

8.03 DEFINITION OF ITEMS

A. Item 8a – Includes 6-Inch Insertion Valve.

B. Item 8b – Includes 8-Inch Insertion Valve

C. Item 8c – Includes 6-inch Gate Valve.

D. Item 8d – Includes 8-inch Gate Valve

E. Item 8e – Includes 12-inch Gate Valve.

F. Item 8f – Includes Valve Removal of Existing Valve

8.04 MEASUREMENT

A. The quantities to be paid under Items 8a through 8f shall be full compensation for each valve and box or manhole provided in accordance with the Specifications and Drawings.

8.05 PAYMENT

A. The unit price stated in the Bid for Items 8a through 8e shall be full compensation for each valve and box as specified and required.

B. The unit price stated in the Bid for Item 8f shall be full compensation for each existing valve removed so measured, as specified and required.

ITEM 9
HYDRANT ASSEMBLIES

9.01 DESCRIPTION

A. Under these Items, the Contractor shall furnish and perform all Work necessary for the installation of the fire hydrant assemblies, shown on the Drawings and specified, in conformance with relevant sections of the Specifications.

B. These Items shall include all Work to install the fire hydrant assemblies, including but not limited to the following: excavation; pavement removal; saw-cutting; concrete drive, curb and walk removal; removal and replacement of fences including fabric and posts; hauling excess spoil material from Site; backfill; compaction; bedding; pipe materials; fittings; connections to water lines; construction, maintenance and removal of temporary access to the Work area; and related Work such as performing material testing.

C. The removal and salvaging of existing fire hydrants for the owner shall be included under these Items. Hydrant valves to be removed shall be included under these Items.

9.02 WORK NOT INCLUDED

A. Pavement replacement within Contract limits is included for payment under other Items.

9.03 DEFINITION OF ITEMS

A. Item 9a – Includes Hydrant Assembly.

B. Item 9b – Includes Hydrant Removed.

9.04 MEASUREMENT

A. The quantity to be paid under Items shall be the measured quantity of each fire hydrant assembly completed or removed as specified, shown on the drawings and so measured.

9.05 PAYMENT

B. The unit price stated in the Bid for Item 9a shall be full compensation for each hydrant assembly so measured, as specified and required.

C. The unit price stated in the Bid for Item 9b shall be full compensation for each hydrant removed so measured, as specified and required.

ITEM 10
WATER SERVICES

10.01 DESCRIPTION

A. Under these Items, the Contractor shall perform all work necessary for the installation of the water services and meters. The Contractor shall furnish and preform all work necessary for the installation of the meter pits 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 services and meter pits, including but not limited to the following: excavation; pavement removal; saw-cutting; concrete drive, curb and walk removal; removal and replacement of fences including fabric and posts; hauling excess spoil material from site; backfill; compaction; bedding; pipe materials; fittings; connections to existing sewers; construction, maintenance and removal of temporary access to the Work area; and related Work such as performing material testing.

C. The removal of existing water services, including existing fittings, valves, structures and other associated appurtenances shall be included under these items.

D. All repair of existing utilities damaged during water service construction is included under these Items.

E. Connections of new water services to existing water services as shown on the Drawings are included under these Items. This shall include connections of new water services to new water meter pits.

F. The installation of meter pits shall be included under this item.

G. Reinstatement of existing water services onto the new water line shall be included under these Items.

H. Restoration of landscape surface improvements including seeding, mulching, and fertilizing all disturbed lawn areas shall be included under these Items.

I. These Items shall include all water 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.

J. The excavation and backfill of bore and receiving pits for trenchless water service construction is included under these items.

10.02 WORK NOT INCLUDED

A. Pavement replacement within Contract limits is included for payment under other Items.

B. Repairing of water services which were damage and not planned to be replaced, by Contractor as a result of the construction, will be at the Contractor's expense.

10.03 DEFINITION OF ITEMS

A. Item 10a – Includes. Service Tubing, 3/4-inch, Open Cut

B. Item 10b – Includes Service Tubing, 1-inch, Bored

C. Item 10c – Includes Service Tubing, 1-inch, Open Cut

D. Item 10d – Includes ¾-inch Lead Service Line Replacement (Undistributed)

E. Item 10e – Includes Water Service Connection, 1-inch

F. Item 10f – Includes ¾-inch Water Meter. Install only

G. Item 10g – Includes 1-inch Water Meter, Install only

H. Item 10h – Includes Single Water Meter Pit

I. Item 10i – Includes Dual Water Meter Pit

10.04 MEASUREMENT

A. The quantities to be paid for under Items 10a through 10c 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 and valves. Vertical portions of the water service shall not be measured for payment.

B. Item 10d shall be lump sum allowance for any lead service lines that need replaced with ¾-inch service tubing from meter pit to the building furnished and installed in accordance with the Specifications and Drawings.

C. The quantities to be paid under Item 10e through 10i shall be each water service connection (1-inch or smaller); meter or meter pit installed in accordance with the Specifications and Drawings.

10.05 PAYMENT

A. The unit price stated in the Bid for Items 10a through 10d shall be full compensation for each linear foot of service tubing, so measured, as specified and required.

B. The unit price stated in the Bid for Item 10e through 10i shall be full compensation for each water service connection or meter pit, so measured, as specified and required.

ITEM 11 (DELETED ITEMS)
~~METER SOFTWARE / AMR & AMI~~

~~11.01 DESCRIPTION~~

A. ~~Under these Items, the Contractor shall furnish and perform all Work necessary for the installation, AMI (Advanced Metering Infrastructure), shown on the Drawings and specified, in conformance with relevant sections of the Specifications.~~

B. ~~Meter reading software to included~~

C. ~~AMR (Automated Meter Reading) to include:~~

1. ~~Carrying case with 2 converts, 2 whip antennas, 2 wall charges, 2 micro-USB cables~~
2. ~~USB Optical Reader~~
3. ~~Manager Software~~
4. ~~AMR system rollout~~
5. ~~AMR Hosting fee annual fee (1 year)~~

D. ~~AMI (Advanced Metering Infrastructure) to include.~~

1. ~~Collector install~~
2. ~~AMI system rollout~~
3. ~~AMI hosting fee~~
4. ~~AMI manager annual fee (1 year)~~

~~11.02 WORK NOT INCLUDED~~

A. ~~New water meter pits shall be provided under other items.~~

~~11.03 DEFINITION OF ITEMS~~

A. ~~Item 11a – Includes Automated Meter Reading Equipment~~

B. ~~Item 11b – Includes Advanced Metering Infrastructure Equipment~~

~~11.04 MEASUREMENT~~

A. ~~The quantities to be paid under Item 11 shall be lump sum to be furnished and installed in accordance with the Specifications and Drawings.~~

~~11.05 PAYMENT~~

A. ~~The unit price stated in the Bid for Item 11 shall be full compensation for each item, so measured, as specified and required.~~

ITEM 12
SPECIAL BACKFILL MATERIAL

12.02 DESCRIPTION

A. Under this Item, the Contractor shall furnish and install special backfill material as shown on the Drawings, specified or ordered.

B. Material shall be furnished, placed, and mechanically compacted in 6-inch lifts where shown on the Drawings, specified, or ordered.

12.03 WORK NOT INCLUDED

A. Granular pipe bedding material used for pipe bedding is included under other Items.

12.04 DEFINITION OF ITEM

A. Item 12 – Includes Special Backfill Material

12.05 MEASUREMENT

A. The quantities to be measured for payment under this Item shall be the aggregate volume of compacted material used within the following prescribed limits:

B. Pipe Trench

1. Depth – One foot above the Pipe to the bottom of the aggregate base for pavement. When in the zone of influence of the road it shall be in accordance with the zone of influence detail on the Drawings.

2. Width - The width shall be the measured with of the trench but shall not exceed the nominal diameter of the pipe, plus one foot on each side. No additional compensation shall be allowed when the Contractors equipment, techniques or means and methods. No additional width will be allowed for precast manholes construction.

3. Length - The quantities to be paid shall be the horizontal length of trench measured parallel to the axis of the line along the surface of the ground, with no deductions for manholes.

C. All Other installation, including but not limited to, filling areas of over excavation and as shown on the drawings, shall be the actual quantities measured in the field, as installed, which do not exceed the limits shown on the drawings. Delivery tickets shall not be utilized for determining the quantity.

12.06 PAYMENT

A. The unit price stated in the Bid for Item 12 shall be full compensation for each cubic yard of special backfill material furnished and placed as specified, so measured.

ITEM 13
PAVEMENT

13.01 DESCRIPTION

A. Under these Items, the Contractor shall construct pavement base and surface courses to replace pavement removed for pipeline construction as scheduled, shown on the Drawings and specified herein.

B. No additional payment will be made for the following:

1. Aggregate is used for adjusting roadway shoulders and driveways to match new roadway surfaces.

13.02 WORK NOT INCLUDED

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

13.03 DEFINITION OF ITEMS

A. Item 13a – Includes 12-Inch, #8 Aggregate Base

B. Item 13b – Includes 8-Inch, #53 Aggregate Drive

C. Item 13c – Includes 3-Inch Asphalt Cement Base

D. Item 13d – Includes 1-1/2-inch Asphalt Cement Surface

13.04 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/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. 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 ordered.

2. Length - The actual length ordered.

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 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.

b. 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.

4. Asphalt Tonnage equals:

$$\frac{\text{Thickness (inches)} * 110 \text{ (\#-yd/in)} * \text{Area (square yard)}}{2000 \text{ (\#-cy/ton-cy)}}$$

13.05 PAYMENT

A. The unit prices stated in the Bid for Items 13a & 13b shall be full compensation for each square yard of aggregate placed within the prescribed limits as specified, so measured.

B. The unit prices stated in the Bid for Item 13c & 13d shall be full compensation for each ton of pavement placed within the prescribed limits as specified, so measured.

ITEM 14
CONCRETE

14.01 DESCRIPTION

A. Under these Items, the Contractor shall construct concrete drives to replace drives removed for pipeline construction as scheduled, shown on the Drawings and specified herein.

14.02 WORK NOT INCLUDED

A. Concrete surfaces replacement required beyond specified pay limits for construction of pipeline items is included for payment under other Items.

B. Drives and surfaces damaged or destroyed beyond specified pay limits shall be replaced at the Contractor's expense.

14.03 DEFINITION OF ITEMS

A. Item 14 – Includes 6-inch Concrete Drive

14.04 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/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.

14.05 PAYMENT

A. The quantities to be paid for under Item 14 shall be the measured quantity in square foot as specifically ordered by the Owner

ITEM 15
CLEARING AND GRUBBING, TREE REMOVAL

15.01 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. Tree removal is for trees with trucks 6-inches diameter or larger at a height of 48-inches, otherwise it is part of cleaning and grubbing.

15.02 WORK NOT INCLUDED

A. Any Work specifically included under other Bid Items.

15.03 DEFINITION OF ITEM

A. Item 15a – Includes Clearing and Grubbing

B. Item 15b – Includes Tree Removal, 6-inches Diameter or Larger

15.04 MEASUREMENT

A. The quantity stated in each Bid Item 15 shall be full compensation for all Work required under Items 15.

15.05 PAYMENT

A. The unit prices stated in the Bid for Item 15a shall be lump sum for area cleared as specified, so measured.

B. The unit prices stated in the Bid for Item 15b shall be full compensation for each item cleared or removed as specified, so measured.

ITEM 16
SEED & MULCH

16.01 DESCRIPTION

A. Under this Item the Contractor shall furnish and install seed and mulch, This Item includes fertilizing, watering, and grading of the area to receive seed and mulch or planting

16.02 WORK NOT INCLUDED

B. All areas outside of easements and right-of-ways, damaged by the Contractor, shall have seed and mulch installed at the Contractor's expense.

16.03 DEFINITION OF ITEMS

C. Item 16 - Includes Seeding and Mulch

16.04 MEASUREMENT

D. The quantities to be paid under Item 16 shall be the measured quantity in square yards as specifically ordered by the Owner.

16.05 PAYMENT

A. The Item 16 shall be full compensation for each square yard of seed and mulch installed, fertilized, and watered.

ITEM 17
RECORD DOCUMENTS

17.01 DESCRIPTION

A. Under this Item the Contractor shall furnish and perform all work necessary for the submission of the marked-up drawings, service location sheets, and chances to the construction documents, in conformance with relevant sections of the Specifications.

B. This Item shall include all work to provide information as to the actual installation of the proposed water main. Items such as valves, fittings, service connections, tees, manhole locations & inverts, etc. shall be recorded. Additional information shall be provided from excavation, potholing, or exploratory digs locating existing pipelines or obstructions.

C. The Owner & Engineer shall review document each pay request to ensure markups are adequate for final submission. Partial payment can be requested if markups are provided.

17.02 DEFINITION OF ITEMS

A. Item 17 - Includes Record Documentation

17.04 PAYMENT

A. The unit prices stated in the Bid for Item 17 shall be full compensation for each item furnished as specified, so measured.

END OF SECTION

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SECTION 02559
WATER METERS & METER PITS

PART 1 GENERAL

1.01 SCOPE

A. This Section includes installation of owner provided water meters and Advanced Metering Infrastructure as reading equipment as indicated by these specifications or directed by the Owner.

B. This Section includes the furnishing and installation of meter pits as indicated by these specifications or directed by the Owner.

1.02 SUBMITTALS

A. Submittals shall be in accordance with the requirements of Section 01300 and shall include:

1. Shop Drawings for review:

a. Manufacturer's assembly drawing and parts list for water meters and required accessories indicating materials of construction and model numbers.

b. Manufacturer's recommendations for installation.

1.03 MANUFACTURERS

A. Water Meters and AMI equipment to be supplied by the Owner.

B. A single contract will be awarded for water meters, and AMI infrastructure and system maintenance.

C. To establish a minimum of quality required, the products furnished under this Section shall be one of the following manufacturers: Kamstrup, Metron, Badger, or equal.

D. Meter pits shall be for outdoor cold climate. The pits shall be of adequate size with double lid covers to prevent freezing. Pit setters shall have inlet angle ball valve and outlet angle cartridge dual check valve. Meter pits shall be equal to Plastic Pitsetters per construction documents.

1.04 QUALITY ASSURANCE

A. The products specified herein shall comply with the listed ASTM standards and the noted design requirements.

PART 2 PRODUCTS.

2.01 5/8-INCH THROUGH 1-INCH METERS (BY OWNER)

A. Ultrasonic meters

1. Ultrasonic water meters shall be provided by and installed by the Contractor. The Contractor shall coordinate the startup of water meters with the Owner's staff.
2. Ultrasonic meters shall meet AWWA C-715 size, capacity, meter lengths, accuracy and pressure loss requirements. The meter shall be compliant with ANSI/NSF Standard 61.
3. Meters shall include US PIT external antenna to work with the District's meter reading software.

2.02 METER PIT

A. Meter pits shall be by Plastic Pitsetter, PDDBH-188-20-60-NL for single meter pits or equal.

B. Meter pits shall be by Plastic Pitsetter, PDDBH-288-20-60-NL, for double meter pits or equal.

C. Meter box frames shall be from Ford Meter Box Company, meter box frame (FW3), 11-1/2" Wabash Double Inset lid for 20" tile or equal.

D. Meter lid shall be by Trumbull Manufacturing, thermoplastic with locking mechanism.

E. Lid locks shall be provided on each lid. The owner shall be provided with 4 keys to the lids.

2.03 ADVANCED METERING INFRASTRUCTURE (AMI) SYSTEM (BY OWNER)

A. The AMI system may utilize either:

1. Radio frequency (RF) system with proper FCC licensing if operating on the applicable frequencies to transmit data to and from MIUs to the system. RF systems should include all base stations, repeaters and all infrastructure required to ensure accuracy and read rates per this specification.
2. Cellular - based system to transmit data to and from transceivers to the system to transmit data to and from MIUs to the system.

B. The AMI system shall consist of

1. Meter Interface Units (MIUs) capable of sending readings for collection every 12 hours at a minimum either to a base station for an RF system or directly to a cellular network with a cellular-based system.
2. Base Station if a RF system is being utilized to collect data from the MIU and send to the District's web-based or SCADATA platform.

3. All additional infrastructure including software, billing integration, customer portal

C. When deployed as a fixed network, the System shall provide hourly consumption interval data, time-synchronized at the host meter reading software. The host software shall provide individual account consumption interval data displayed in graphical as well as tabular formats, readily accessible to utility Customer Service Representatives to facilitate customer bill complaint resolution without the need for a truck roll.

PART 3 EXECUTION

3.01 INSTALLER REQUIREMENTS

A. Contractor to implement a call-in program to meter owners and provide door hanger notification tags before meter is to be placed. The Contractor is responsible for providing and hanging the notification tags.

3.02 WARRANTIES

A. The following includes the warranty period for system components starting at the date of substantial completion.

1. Ultrasonic Meters:

a.	General materials and workmanship -	2 year
b.	Housings or Main Case -	10 years
c.	Registers	10 years (5 years full/ 5 years prorated)
d.	MIUs -	20 years (10 years full/ 10 years prorated)
e.	Base Stations	1 year

3.03 REMOVAL

A. The Contractor shall clean and flush the inlet side of the service line thoroughly before installing the new meter. Make sure that metallic water service plumbing is properly grounded as per local electrical codes.

B. Coordinate with the District and shut off water supply valves if the shutoff valves in the area inoperable and remove existing shut off valve.

3.04 INSTALLATION

A. The Contractor shall orient the new meter so that the flow arrow on the body of the meter is aligned with the flow in the plumbing system.

B. The Contractor shall install water meters inside new meter pits as directed by the District. The installation location will match the existing location. Any required relocations of meters will be performed by the Owner outside of the Work.

C. After completing installation, the Contractor shall test for leakage and proper meter operation in accordance with the manufacturer's instructions.

D. For each residence, a photo taken after the new meter has been installed and a photograph taken to show the new meter programed and operating.

3.05 TRAINING AND SUPPORT (BY OWNER)

A. Complete installation and operating instructions will be included for all of the supplied hardware and software equipment. The training must be supplied by the System manufacturer. The vendor will also inform the customer of what pre-installation activities are to be completed and what support material will be needed for the initial installation.

B. Equipment vendors are required to supply information on required maintenance programs and should offer a five-year maintenance contract. The vendor shall have a customer support department required to help maintain and support the system through the use of the service agreement.

PART 4 SPECIAL PROVISIONS

4.01 WATER METER SCHEDULE

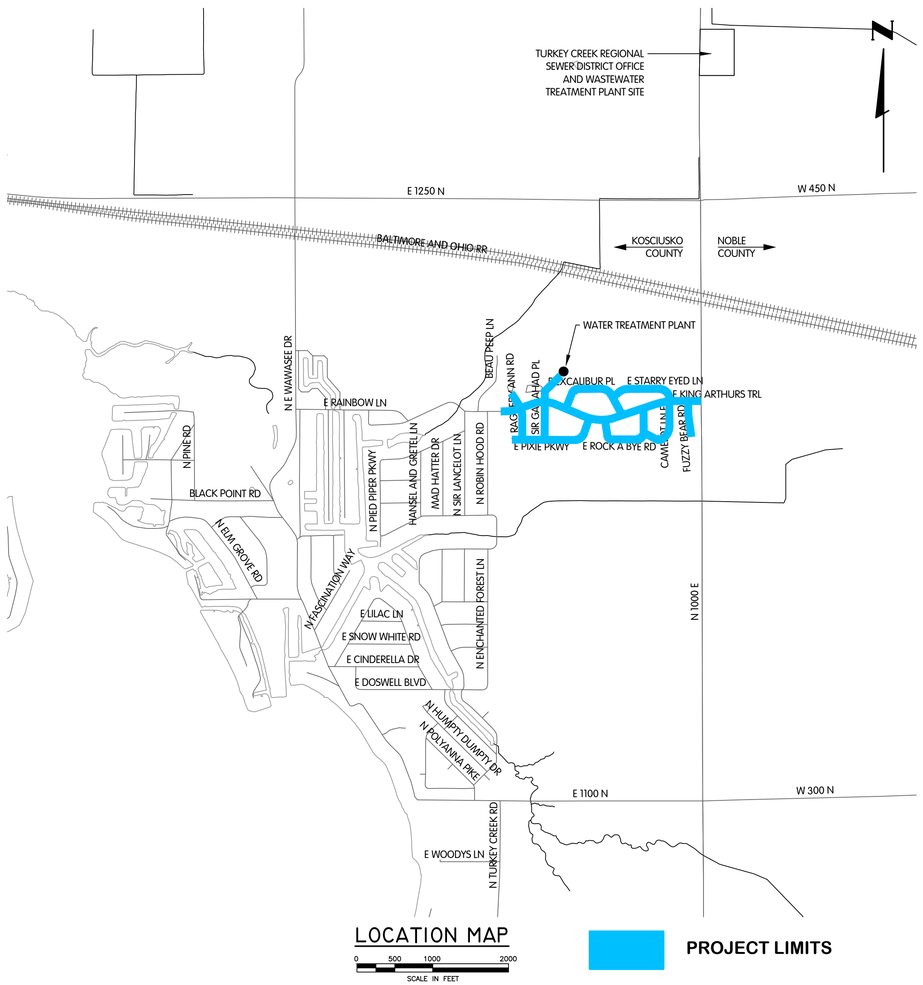
Water Meter	Quantity
¾-inch (Pit)	186
1-inch (Pit)	2

END OF SECTION

TURKEY CREEK REGIONAL SEWER DISTRICT

FASCINATION PLACE WATER MAIN IMPROVEMENTS

2026



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STATE OF
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01-13-2025

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EXISTING SYMBOLS AND ABBREVIATIONS

AERIAL CONTROL POINT	POWER LINE MARKER
AERIAL WING POINT	POWER POLE
AIR CONDITIONING UNIT	POWER POLE AND TELEPHONE POLE
AXLE	RAIL ROAD CROSSING SIGNAL
BARBEQUE GRILL	RAIL ROAD GATE
BENCHMARK	RAIL ROAD FROG
BOLLARD	RAIL ROAD MILE POST
BOLT	RAIL ROAD SPIKE
CABLE TV	RAIL ROAD SPIKE SET
CATCH BASIN	SANITARY MANHOLE
CLEAN OUT	SANITARY VALVE
CONCRETE MONUMENT	SANITARY VENT
CONIFEROUS TREE	SANITARY MARKER
CONTROL POINT	SATELLITE DISH
CONTROLLER POLE MOUNTED	SEPTIC TANK
CURB INLET	SHRUB
DECIDUOUS TREE	SIGN
DECORATIVE ROCK	SIGNAL
DRAIN TILE	SOIL BORING
DRILL HOLE	SPIGOT
DRY WELL	SPRINKLER HEAD
EDGE OF PAVEMENT	SPOT ELEVATION *POINT OF ELEVATION IS DECIMAL
ELECTRIC MANHOLE	STORM LINE MARKER
ELECTRIC METER	STORM MANHOLE
ELECTRIC PULLBOX	STUMP
ELECTRIC TRANSFORMER	SUPPORT POLE
ELECTRIC VAULT	T-BAR
EXISTING BUILDING	TACKED HUB
FIRE HYDRANT OR YARD HYDRANT	TANK FILLER CAP
FLAG POLE	TC - TOP OF CURB ELEVATION G - GUTTER ELEVATION
FORCE MAIN FLUSHING CONNECTION	TELEPHONE BOOTH
FOUND MONUMENT BOX	TELEPHONE LINE MARKER
GAS LINE MARKER	TELEPHONE MANHOLE
GAS LINE VENT	TELEPHONE PEDESTAL
GAS MANHOLE	TELEPHONE POLE
GAS METER	TELEPHONE POLE AND LIGHT POLE
GAS TEST STATION	TOP OF WALK
GAS VALVE	TOPO GRADE SHOT (THE OF THE NUMBER SIGNIFIES THE LOCATION OF THE SHOT)
GAS WELL	TOWER
GOLF BALL WASHER	TPB
GUY WIRE	TRAFFIC MANHOLE
HEAD STONE	TRAFFIC PULL BOX
INLET PROTECTION	UNKNOWN BOX
INVERT ELEVATION	UNKNOWN MANHOLE
IRON PIN (OR LABELED POST, MARKER ETC.)	UNKNOWN PEDESTAL
LIGHT, POWER POLE AND TELEPHONE POLE	UNKNOWN POLE
LIGHT POLE	UNKNOWN VALVE
LIGHT POLE BOX	UNKNOWN WELL
MAILBOX	VAULT
METER PIT	VENT PIPE
MINE SPIKE	WATER LINE MARKER
MONITORING WELL	WATER MANHOLE
NEWS PAPER BOX	WATER MAIN PLUG
OIL TANK	WATER METER
PARKING METER	WATER METER PIT
PAVEMENT BORING	WATER WELL
PAY PHONE	WATER VALVE
PETROLEUM PUMP	WATER VENT
POST	YARD LIGHT

PROPOSED SYMBOLS

ABANDON VALVE BOX	METER PIT
ABANDON VALVE MANHOLE	PLUG VALVE AND BOX
AIR RELEASE VALVE AND MANHOLE	PLUG VALVE AND MANHOLE
BUTTERFLY VALVE AND BOX	POLE TO BE TEMPORARILY SUPPORTED AND PROTECTED BY CONTRACTOR
BUTTERFLY VALVE AND MANHOLE	REDUCER
CATCH BASIN	SANITARY MANHOLE
CLEAN OUT	STORM MANHOLE
CURB INLET	STUMP TO BE REMOVED
FIRE HYDRANT ASSEMBLY, TYPE A	TAPPING SLEEVE VALVE (TYPE) AND BOX (LINE SIZE BY VALVE SIZE)
FIRE HYDRANT ASSEMBLY, TYPE B	TAPPING SLEEVE VALVE (TYPE) AND MANHOLE (LINE SIZE BY VALVE SIZE)
FIRE HYDRANT TO BE REMOVED	TREE TO BE REMOVED (STUMPS, ROOTS, OTHER PROTRUDING OBSTRUCTIONS SHALL BE REMOVED TO A MIN. OF 6" BELOW FINAL GROUND SURFACE)
FORCE MAIN FLUSHING CONNECTION	ABANDON / ABANDON / ABANDON / ABANDON — WATER VALVE MANHOLE OR BOX TO BE ABANDONED, SEE SPECIFICATIONS
GATE VALVE AND BOX	
GATE VALVE AND MANHOLE	
INSERTING VALVE AND BOX	
INSERTING VALVE AND MANHOLE	

TOPOGRAPHY LINES:

	CENTER LINE
—x—x—x—x—x—x—x—x—x—x—	FENCE LINE
—P/L—P/L—P/L—	PROPERTY LINE
—R/W—R/W—R/W—	RIGHT OF WAY
	PERMANENT EASEMENT
	CONSTRUCTION EASEMENT
—○—○—○—○—○—	SILT FENCE

UTILITY LINES:

—C—C—C—	CABLE (UNDERGROUND)*
—CO15—CO15—	COMBINED SEWER
—E—E—E—	ELECTRICAL (UNDERGROUND)*
—FO—FO—FO—	FIBER OPTIC
—FM—FM—FM—	FORCE MAIN
—NG4—NG4—NG4—	NATURAL GAS LINE
—oh—oh—oh—	OVERHEAD WIRES
—PET—PET—PET—	PETROLEUM, OIL, LUBRICANTS
—SA10—SA10—	SANITARY SEWER
—S—S—S—	SIGNAL (UNDERGROUND)*
—ST18—ST18—	STORM SEWER
—T—T—T—	TELEPHONE (UNDERGROUND)*
—VSAB—VSAB—	VACUUM SANITARY SEWER
—WS—WS—WS—	WATER LINE
—ST54—ST54—	LARGE DIAMETER LINES (ANY TYPE)
—WS—WS—WS—	UTILITY LINE TO BE REMOVED ***
—WS—WS—WS—	UTILITY LINE TO BE ABANDONED
	PROPOSED UTILITY
	PROPOSED LARGE DIAMETER UTILITY
	PROPOSED TRENCHLESS UTILITY

ALPHA DESIGNATION REFERS TO UTILITY TYPE OR SERVICE TYPES, NUMERICAL DESIGNATION REFERS TO PIPE NOMINAL DIAMETER. LINES WITH NO NUMERICAL DESIGNATION ARE OF UNKNOWN SIZE.

* AERIAL LINES, IF SHOWN, ARE DESIGNATED WITH LOWER CASE LETTERS
** FOR ELLIPTICAL SEWERS, THE VERTICAL DIMENSION (RISE) IS CALLED OUT FIRST FOLLOWED BY THE HORIZONTAL DIMENSION (SPAN). EXAMPLE: 45X35 (RISE X SPAN) THE VERTICAL DIMENSION IS 45", THE HORIZONTAL DIMENSION IS 35".
*** INDICATES THE REMOVAL OF ALL SPECIFIED STRUCTURES AND APPURTENANCES.

DRAWING INDEX

CONST. No.	SHEET No.	DESCRIPTION
		GENERAL
1	G-0.1	LEGENDS AND INDEX
2	G-0.2	SCHEMATIC AND SURVEY CONTROL
3	G-0.3	CIVIL OVERALL SITE PLAN
4	G-0.4	CIVIL WATER TREATMENT PLANT SITE PLAN
5	G-0.5	GENERAL SUMMARY
		WATER
6	W-1.1	KING ARTHUR TR, PLAN AND PROFILE, STA. 0+00 TO 5+50
7	W-1.2	KING ARTHUR TR, PLAN AND PROFILE, STA. 5+50 TO 11+00
8	W-1.3	KING ARTHUR TR, PLAN AND PROFILE, STA. 11+00 TO 16+50
9	W-1.4	KING ARTHUR TR, PLAN AND PROFILE, STA. 16+50 TO 22+00
10	W-1.5	KING ARTHUR TR, PLAN AND PROFILE, STA. 22+00 TO 27+50
11	W-1.6	KING ARTHUR TR, PLAN AND PROFILE, STA. 27+50 TO 30+00
12	W-2.1	RAGGEDY ANN RD, PLAN AND PROFILE, STA. 0+0 TO 5+50
13	W-2.2	RAGGEDY ANN RD, PLAN AND PROFILE, STA. 5+50 TO 7+50
14	W-3.1	SIR GALLAHAD PL, PLAN AND PROFILE, STA. 0+00 TO 5+50
15	W-3.2	SIR GALLAHAD PL, PLAN AND PROFILE, STA. 5+50 TO 9+00
16	W-4.1	EXCALIBUR PL, PLAN AND PROFILE, STA. 0+00 TO 5+50
17	W-4.2	EXCALIBUR PL, PLAN AND PROFILE, STA. 5+50 TO 11+00
18	W-4.3	EXCALIBUR PL, PLAN AND PROFILE, STA. 11+00 TO 11+50
19	W-5.1	PIXIE PKWY, PLAN AND PROFILE, STA. 0+00 TO 5+50
20	W-5.2	PIXIE PKWY, PLAN AND PROFILE, STA. 5+50 TO 11+00
21	W-5.3	PIXIE PKWY, PLAN AND PROFILE, STA. 11+00 TO 13+00
22	W-6.1	ROCK-A-BYE RD, PLAN AND PROFILE, STA. 0+00 TO 5+50
23	W-6.2	ROCK-A-BYE RD, PLAN AND PROFILE, STA. 5+50 TO 11+00
24	W-7.1	STARRY EYED LN, PLAN AND PROFILE, STA. 0+00 TO 5+50
25	W-7.2	STARRY EYED LN, PLAN AND PROFILE, STA. 5+50 TO 11+00
26	W-8.1	CAMELOT LN, PLAN AND PROFILE, STA. 0+00 TO 5+50
27	W-8.2	CAMELOT LN, PLAN AND PROFILE, STA. 5+50 TO 9+00
28	W-9.1	FUZZY BEAR RD, PLAN AND PROFILE, STA. 0+00 TO 5+50
29	W-0.1	MANHOLE, FIRE HYDRANT, WATER SERVICE, VALVE AND BLOWOFF DETAILS, STANDARDS
30	W-0.2	SERVICE AND ABANDONMENT DETAILS, STANDARDS
31	W-0.3	JOINT RESTRAINT AND SEWER CROSSING DETAILS, STANDARDS
32	W-0.4	JOINT RESTRAINT AND BLOCKING DETAILS, STANDARDS
		SURFACE RESTORATION
33	SR-1.1-2	KING ARTHUR TRAIL, STA. 0+00 TO 11+00
34	SR-1.3-4	KING ARTHUR TRAIL, STA. 11+00 TO 22+00
35	SR-1.4-5	KING ARTHUR TRAIL, STA. 22+00 TO 30+00
36	SR-2.1-2	RAGGEDY ANN ROAD, STA. 0+00 TO 11+00
37	SR-3.1-2	SIR GALLAHAD PLACE, STA. 0+00 TO 9+00
38	SR-4.1-2	EXCALIBUR PLACE, STA. 0+00 TO 5+50
39	SR-5.1-2	PIXIE PARKWAY, STA. 0+00 TO 11+00
40	SR-5.3	PIXIE PARKWAY, STA. 11+00 TO 13+00
41	SR-6.1-2	ROCK-A-BYE ROAD, STA. 0+00 TO 11+00
42	SR-7.1-2	STARRY EYED LANE, STA. 0+00 TO 9+00
43	SR-8.1-2	CAMELOT LANE STA. 0+00 TO 9+00
44	SR-9.1-2	FUZZY BEAR ROAD STA. 0+00 TO 5+50
45	SR-0.1	DETAILS
46	SR-0.2	DETAILS
47	SR-0.3	DETAILS
48	SR-0.4	EROSION CONTROL NARRATIVE

VERTICAL DATUM:

VERTICAL DATUM IS BASED ON '88 NAVD.

NOTE: ACCURACY OF EXISTING ELEVATIONS AND DIMENSIONS IS NOT GUARANTEED. FIELD VERIFY BEFORE CONSTRUCTION.

UTILITY CONTACTS:

ELECTRIC
NAME, ADDRESS, PHONE, EMAIL
CABLE
NAME, ADDRESS, PHONE, EMAIL
GAS
NAME, ADDRESS, PHONE, EMAIL
WATER
NAME, ADDRESS, PHONE, EMAIL
SEWER
NAME, ADDRESS, PHONE, EMAIL

MICHAEL S. HARKNESS REGISTERED No. 19900563 STATE OF INDIANA PROFESSIONAL ENGINEER
01-13-2025

TCRSD

LEGENDS AND INDEX

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
2	01-29-2026	ADDENDUM	JPM

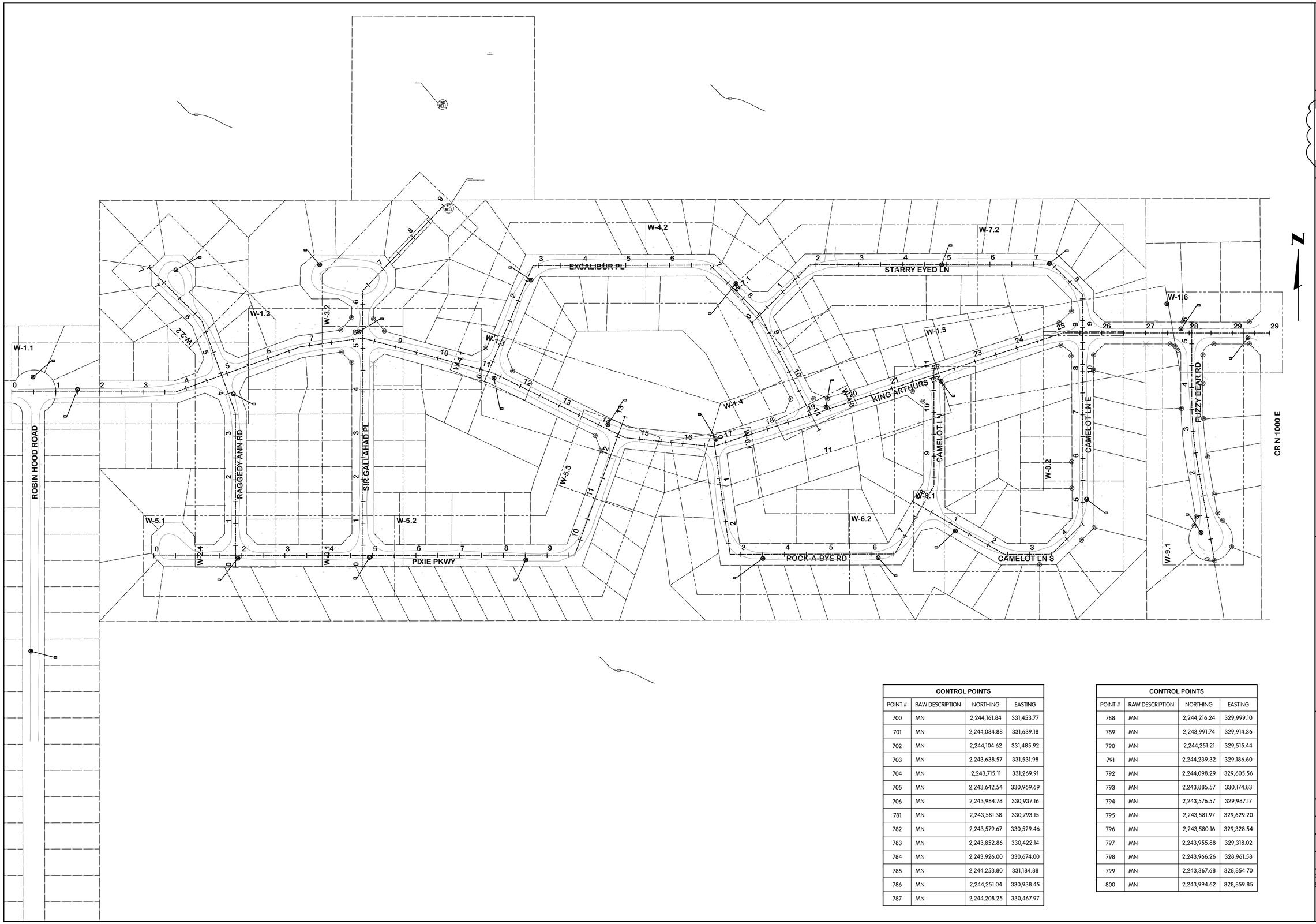
Jones & Henry Engineers, Ltd.
Fluid thinking.
www.JHeng.com

JOB NO. 868-8305.400
SCALE AS INDICATED
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE 2026
SHEET NO. G-0.1
1 OF 48

FTW-8305400G0-G-0.1 LEGENDS AND INDEX
jmartin@jhengineers.com
1/29/2026 11:54 AM - ABLANSING



CONTROL POINTS			
POINT #	RAW DESCRIPTION	NORTHING	EASTING
700	MN	2,244,161.84	331,453.77
701	MN	2,244,084.88	331,639.18
702	MN	2,244,104.62	331,485.92
703	MN	2,243,638.57	331,531.98
704	MN	2,243,715.11	331,269.91
705	MN	2,243,642.54	330,969.69
706	MN	2,243,984.78	330,937.16
781	MN	2,243,581.38	330,793.15
782	MN	2,243,579.67	330,529.46
783	MN	2,243,852.86	330,422.14
784	MN	2,243,926.00	330,674.00
785	MN	2,244,253.80	331,184.88
786	MN	2,244,251.04	330,938.45
787	MN	2,244,208.25	330,467.97

CONTROL POINTS			
POINT #	RAW DESCRIPTION	NORTHING	EASTING
788	MN	2,244,216.24	329,999.10
789	MN	2,243,991.74	329,914.36
790	MN	2,244,251.21	329,515.44
791	MN	2,244,239.32	329,186.60
792	MN	2,244,098.29	329,605.56
793	MN	2,243,885.57	330,174.83
794	MN	2,243,576.57	329,987.17
795	MN	2,243,581.97	329,629.20
796	MN	2,243,580.16	329,328.54
797	MN	2,243,955.88	329,318.02
798	MN	2,243,966.26	328,961.58
799	MN	2,243,367.68	328,854.70
800	MN	2,243,994.62	328,859.85

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF
INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

SCHEMATIC AND SURVEY CONTROL

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
1	01-29-2026	ADDENDUM 2	JPM

Jones & Henry Engineers, Ltd.

Fluid thinking©.
www.JHeng.com

JOB NO. 868-8305.400

SCALE 1"=100'

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

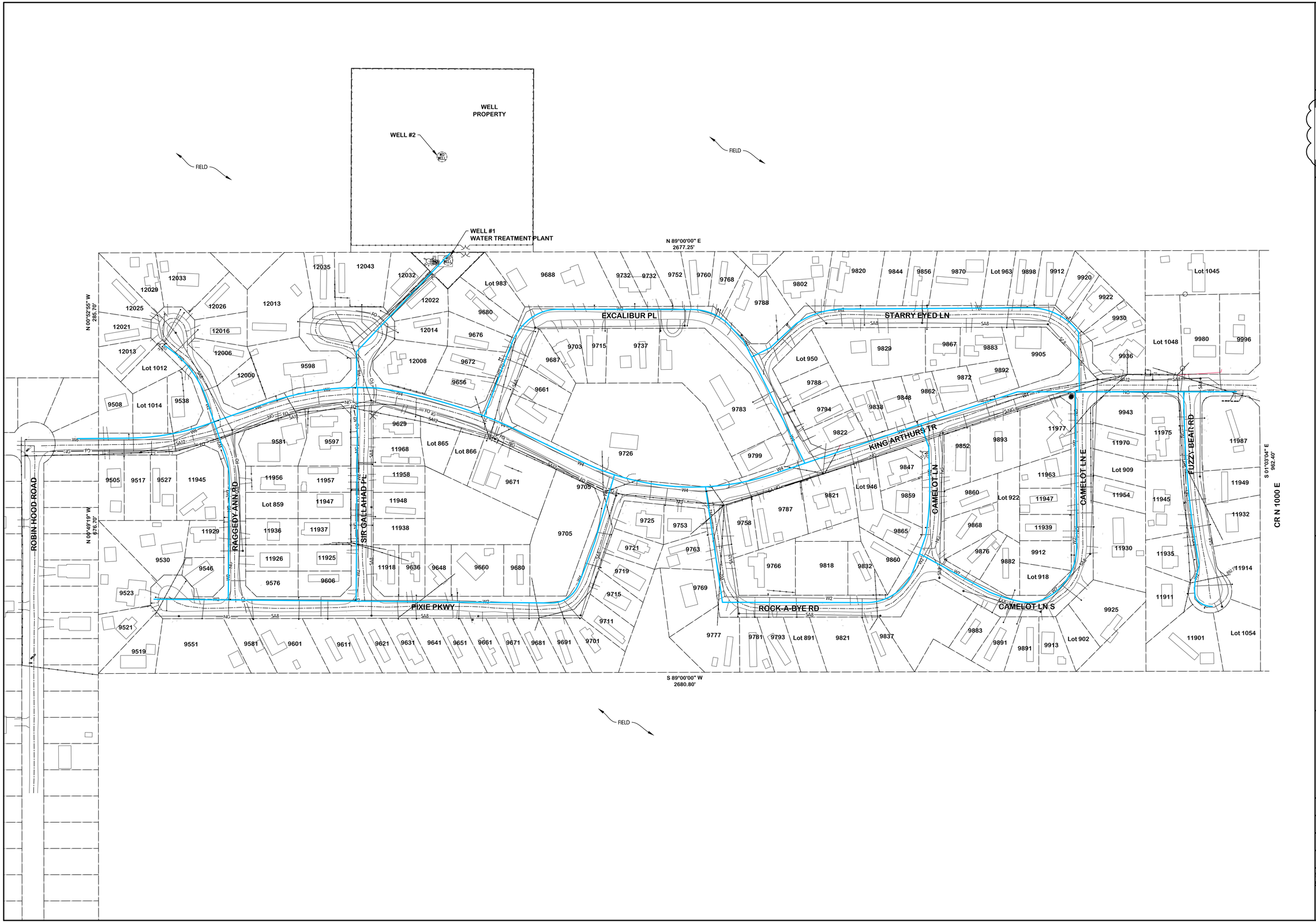
STATUS: ISSUED FOR BID

DATE: 2026

SHEET NO. G-0.2

2 OF 48

FTW-8305L00G02-G-0.2 SCHEMATIC AND SURVEY CONTROL
1/29/2026 11:34 AM - ABLASING
1/29/2026 11:35 AM



FTW-8305\00G03-G-0.3 OVERALL SITE PLAN
1/30/2026 10:20 AM JPM
1/29/2026 11:56 AM ABLAISING

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF
INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD 2

CIVIL
OVERALL SITE PLAN

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
1	01-28-2026	ADDENDUM 2	JPM

Jones & Henry Engineers, Ltd.

Fluid thinking℠.
www.JHeng.com

JOB NO. 868-8305.400

SCALE AS INDICATED

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
AJB	JPM	MSH

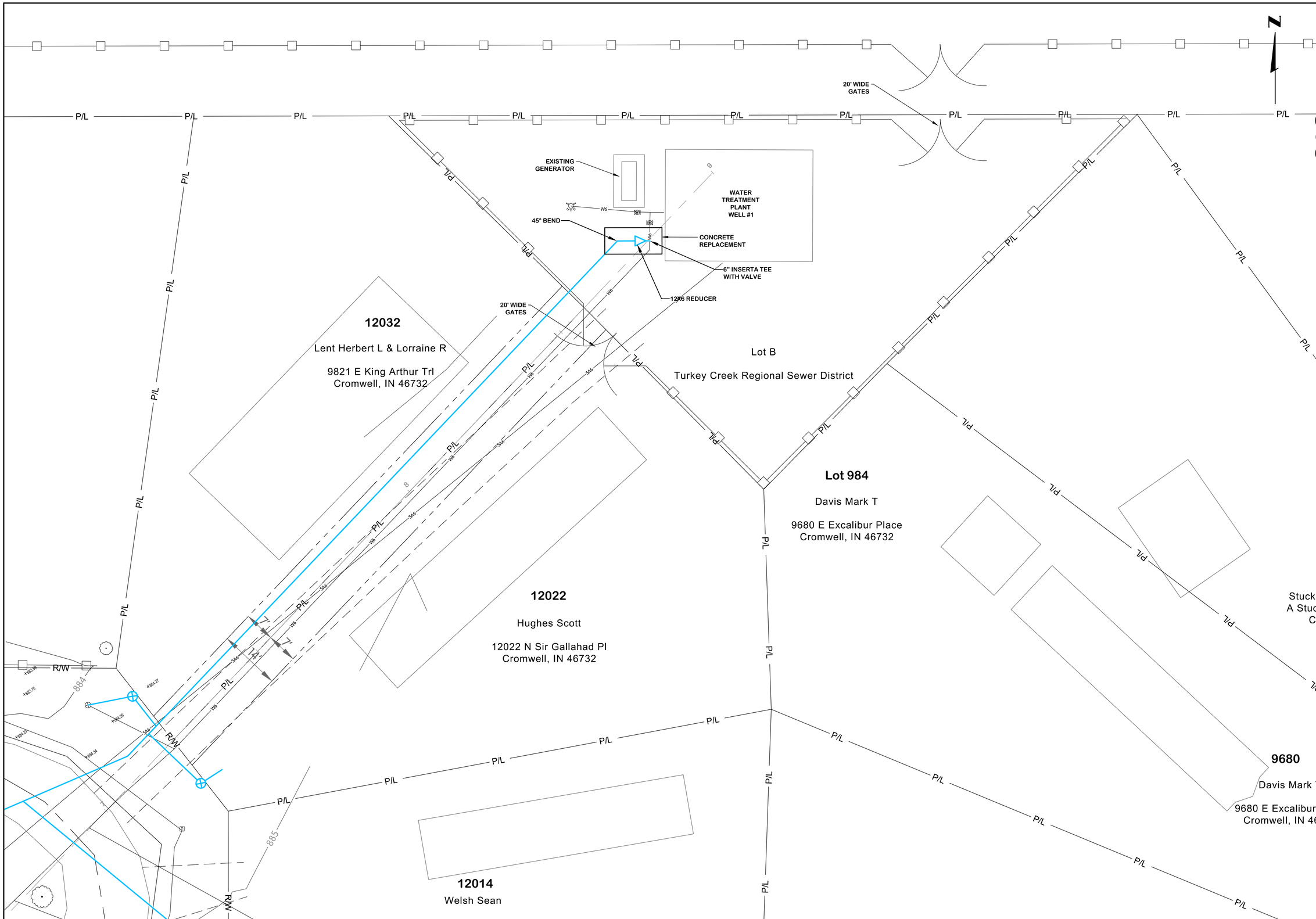
STATUS: ISSUED FOR BID

DATE: 2026

2

SHEET NO.

G-0.3



MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

CIVIL
WATER TREATMANT PLANT
SITE PLAN

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
1	01-29-2026	ADDENDUM 2	JPM

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JOB NO. 868-8305.400

SCALE 1"=10'

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE: 2026

SHEET NO.
G-0.3
4 OF 48

FTW-8305\00G04-SITE PLAN
1/29/2026 11:37 AM ABLAISING
1/29/2026 11:37 AM

TCRSD

Fascination Place Meter Pits

			Meter Pit (each)		each	Service line (lf)		
Lot #	Address	Street	Single	Double	Meter	Open Cut	Bore	Notes
897	no address	Camelot Lane			1			9883
898	9883	Camelot Lane		1	1		37	with Lot 897
899	9891	Camelot Lane	1		1		33	
900	9899	Camelot Lane	1		1		36	
901	9913	Camelot Lane		1	1		35	with Lot 902
902	no address	Camelot Lane			1			9913
903	9925	Camelot Lane	1		1		25	
905	11930	Camelot Lane	1		1		35	
908	11954	Camelot Lane		1	1		35	with Lot 909
909	no address	Camelot Lane			1			11954
910	11970	Camelot Lane		1	1		34	9943
911	9943	Camelot Lane			1			11970
912	11977	Camelot Lane	1		1	12		
914	11963	Camelot Lane	1	0	1	9		
915	11947	Camelot Lane		1	1			11939
916	11939	Camelot Lane		0	1	9		11947
917	11912	Camelot Lane		1	1	9		with Lot 918
918	no address	Camelot Lane			1			11912
919	9882	Camelot Lane	1		1	8		
920	9876	Camelot Lane		1	1	15		9868
921	9868	Camelot Lane			1			9876
922	9860	Camelot Lane	1		1		39	
923	9852	Camelot Lane	1		1		42	
933	9859	Camelot Lane	0	1	1	7		9865
934	9865	Camelot Lane			1			9859
1045	12043	CR N1200 W	1		1		41	
870	9661	Excalibur Place	1		1		28	
872	9687	Excalibur Place	1		1		36	
873	9703	Excalibur Place	1		1		33	
874	9715	Excalibur Place	1		1		33	
875	9737	Excalibur Place		1	1		30	9747
877	9747	Excalibur Place			1			9737
879	9783	Excalibur Place	1		1	7		
882	9799	Excalibur Place	1		1	15		
948	9794	Excalibur Place	0	1	1		33	9788
949	9788	Excalibur Place			1			9794
950	no address	Excalibur Place	1		1		34	
973	9778	Excalibur Place		1	1	13		9768
974	9768	Excalibur Place			1			9778
975	9760	Excalibur Place	1		1	11		
976	9752	Excalibur Place	1		1	6		
977	9732	Excalibur Place	1		1	7		
979	9688	Excalibur Place	1		1	6		
983	no address	Excalibur Place		1	1	8		9680
984	9680	Excalibur Place			1			with Lot 983
985	9676	Excalibur Place		1	1	8		7972
986	9672	Excalibur Place			1			9776
987	9656	Excalibur Place	1		1	8		
1049	11975	Fuzzy Bear	1		1	12		
1050	11945	Fuzzy Bear	1		1	11		
1051	11935	Fuzzy Bear	1		1	8		
1052	11911	Fuzzy Bear	1		1		31	
1053	11901	Fuzzy Bear	1		1	18		
1054	no address	Fuzzy Bear	1		1	16		
1055	11914	Fuzzy Bear	1	0	1		61	

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TCRSD

Fascination Place Meter Pits

			Meter Pit (each)		each	Service line (lf)		
Lot #	Address	Street	Single	Double	Meter	Open Cut	Bore	Notes
1056	11932	Fuzzy Bear	1		1		33	
801	9505	King Arthur's Trail		1	1	0	42	9517
802	9517	King Arthur's Trail			1	0		9505
803	9527	King Arthur's Trail	1		1		42	
836	9705	King Arthur's Trail	1		1	6		
861	9581	King Arthur's Trail	1		1		41	
863	9597	King Arthur's Trail	1	0	1	7		
864	9629	King Arthur's Trail	1		1		41	
865	no address	King Arthur's Trail		1	1		39	no address
866	no address	King Arthur's Trail			1			no address
867	9671	King Arthur's Trail	1		1		35	9671
869	no address	King Arthur's Trail	1		1		36	no address
883	9753	King Arthur's Trail		0	1			9725 Pixie W
913	no address	King Arthur's Trail	1		1		36	
924	9893	King Arthur's Trail	0		1			9852
925	9893	King Arthur's Trail	1		1		38	
927	9892	King Arthur's Trail	1		1	3		
928	9872	King Arthur's Trail	1	0	1	4		
929	9862	King Arthur's Trail		1	1	4		9848
930	9848	King Arthur's Trail			1			9829
931	9838	King Arthur's Trail	1		1	4		
932	9847	King Arthur's Trail	1		1	10		
942	9787	King Arthur's Trail	1		1		25	
943	no address	King Arthur's Trail	1		1		25	empty lot
944	9821	King Arthur's Trail		1	1		26	9833
946	9833	King Arthur's Trail			1			9821
947	9822	King Arthur's Trail	1	0	1		36	
1000	9598	King Arthur's Trail	1		1	3		
1013	9538	King Arthur's Trail			1			with Lot 835
1014	no address	King Arthur's Trail		1	1	0		9508
1015	9508	King Arthur's Trail		0	1	3		with Lot 1014
1046	9996	King Arthur's Trail						9996
1047	9980	King Arthur's Trail		1	1		35	9980
1057	11949	N 1000 E	1		1		31	
1058	11987	N 1000 E	1		1		33	
807	9546	Pixie Parkway	1		1	0	42	
808	9530	Pixie Parkway	1		1	0	55	
810	9523	Pixie Parkway	1		1	10		
812	9521	Pixie Parkway		1	1		27	9519
813	9519	Pixie Parkway			1			9521
814	no address	Pixie Parkway	1		1		29	
816	9551	Pixie Parkway		1	1		30	with Lot 817
817	no address	Pixie Parkway		0	1			9551
818	9581	Pixie Parkway		1	1		29	with Lot 819
819	no address	Pixie Parkway			1			9581
820	9601	Pixie Parkway		1	1		25	9611
821	9611	Pixie Parkway		0	1			9601
822	9621	Pixie Parkway		1	1		25	9631
823	9631	Pixie Parkway		0	1			9621
824	no address	Pixie Parkway		1	1		24	9651
825	9651	Pixie Parkway		0	1			with Lot 824
826	9661	Pixie Parkway		1	1		25	9671
827	9671	Pixie Parkway		0	1			9661
828	9681	Pixie Parkway		1	1		34	9691
829	9691	Pixie Parkway		0	1			9681

L:\TurkeyCreek.868\8305\300_400\Estimating\20260130 meter only TC Water Est WM FP-2.xlsx

TCRSD

Fascination Place Meter Pits

			Meter Pit (each)		each	Service line (lf)		
Lot #	Address	Street	Single	Double	Meter	Open Cut	Bore	Notes
830	9701	Pixie Parkway		1	1		30	9711
831	9711	Pixie Parkway		0	1			9701
832	9715	Pixie Parkway		1	1		36	9719
833	9719	Pixie Parkway		0	1			9715
834	9721	Pixie Parkway	1	0	1		33	
835	9725	Pixie Parkway		1	1		39	9753 King Arthur
840	9680	Pixie Parkway	1		1	5		
841	no address	Pixie Parkway		1	1	13		9660
842	9660	Pixie Parkway			1			with Lot 841
843	9648	Pixie Parkway	1		1	12		
844	9636	Pixie Parkway	1	0	1	12		11918 Sir Gallahad
855	9606	Pixie Parkway		1	1	8		with Lot 856
856	no address	Pixie Parkway			1			9606
804	11945	Raggedy Ann Road	1		1	11		empty lot
805	11945	Raggedy Ann Road		1	1	11		11929
806	11929	Raggedy Ann Road		0	1	0		11945
857	11926	Raggedy Ann Road		1	1		30	11936
858	11936	Raggedy Ann Road			1			11926
859	no address	Raggedy Ann Road		1	1		29	11956
860	11956	Raggedy Ann Road		0	1			with Lot 859
1002	12000	Raggedy Ann Road		1	1		40	12006
1003	12006	Raggedy Ann Road			1			12000
1004	12016	Raggedy Ann Road		1	1		78	12026
1005	12026	Raggedy Ann Road			1			12016
1006	12033	Raggedy Ann Road		1	1		78	12033
1008	12029	Raggedy Ann Road		1	1		48	12025
1009	12025	Raggedy Ann Road			1			12029
1010	12021	Raggedy Ann Road		1	1	15		12013
1011	12013	Raggedy Ann Road			1			12021
1012	no address	Raggedy Ann Road		1	1	6		9538 King Arthur
884	9763	Rock A Bye Road	1		1	9		
885	9769	Rock A Bye Road	1		1	101		
887	no address	Rock A Bye Road	1		1	21		
888	9777	Rock A Bye Road	1		1		33	
889	9781	Rock A Bye Road	1		1		38	
890	9793	Rock A Bye Road	1		1		36	
891	no address	Rock A Bye Road	1		1		35	
892	9821	Rock A Bye Road		1	1		33	9837
894	9837	Rock A Bye Road			1			9821
935	9860	Rock A Bye Road	1		1	9		
936	9832	Rock A Bye Road	1		1	12		
937	no address	Rock A Bye Road		1	1	8		with Lot 938
938	no address	Rock A Bye Road			1			with Lot 937
939	9766	Rock A Bye Road	1		1	10		
941	9758	Rock A Bye Road	1		1		38	
845	11918	Sir Gallahad Place	1		1			
846	no address	Sir Gallahad Place		1	1		33	
847	11948	Sir Gallahad Place			1			
848	11958	Sir Gallahad Place		1	1		38	11968
849	11968	Sir Gallahad Place			1			11958
851	11957	Sir Gallahad Place		1	1	8		11947
852	11947	Sir Gallahad Place			1			11957
853	11937	Sir Gallahad Place		1	1	5		11925
854	11925	Sir Gallahad Place			1			11937
989	12008	Sir Gallahad Place		1	1	45		12014

L:\TurkeyCreek.868\8305\300_400\Estimating\20260130 meter only TC Water Est WM FP-2.xlsx

TCRSD

Fascination Place Meter Pits

			Meter Pit (each)		each	Service line (lf)		
Lot #	Address	Street	Single	Double	Meter	Open Cut	Bore	Notes
990	12014	Sir Gallahad Place			1			12008
991	12022	Sir Gallahad Place	1		1		17	
992	12032	Sir Gallahad Place	1		1	10		
993	12043	Sir Gallahad Place	1		1	35		
995	12035	Sir Gallahad Place		1	1		110	12013
996	12013	Sir Gallahad Place			1			12035
926	9905	Starry Eyed Lane	1		1		35	
951	9829	Starry Eyed Lane	1		1		36	
954	9867	Starry Eyed Lane	1		1		36	
955	9883	Starry Eyed Lane	1		1		36	
957	9936	Starry Eyed Lane	1		1		42	
958	9930	Starry Eyed Lane		1	1	11		9922
959	9922	Starry Eyed Lane			1			9930
960	6620	Starry Eyed Lane	1		1	5		
961	9912	Starry Eyed Lane	1		1	7		
962	9889	Starry Eyed Lane		1	1	7		with Lot 963
963	no address	Starry Eyed Lane			1			9889
964	9870	Starry Eyed Lane		1	1	7		9856
966	9856	Starry Eyed Lane	0		1	0		9870
967	9844	Starry Eyed Lane	1		1	7		
968	9820	Starry Eyed Lane	1		1	8		
970	9802	Starry Eyed Lane	1		1	6		
972	9788	Starry Eyed Lane	1		1	6		
			84	52	187	707	2687	

GENERAL SUMMARY

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
1			
2			
3			
4			
5			

Jones & Henry Engineers, Ltd.

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JOB NO. 868-8305.400

SCALE AS INDICATED

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED JPM | DRAWN AJB | CHECKED MSH

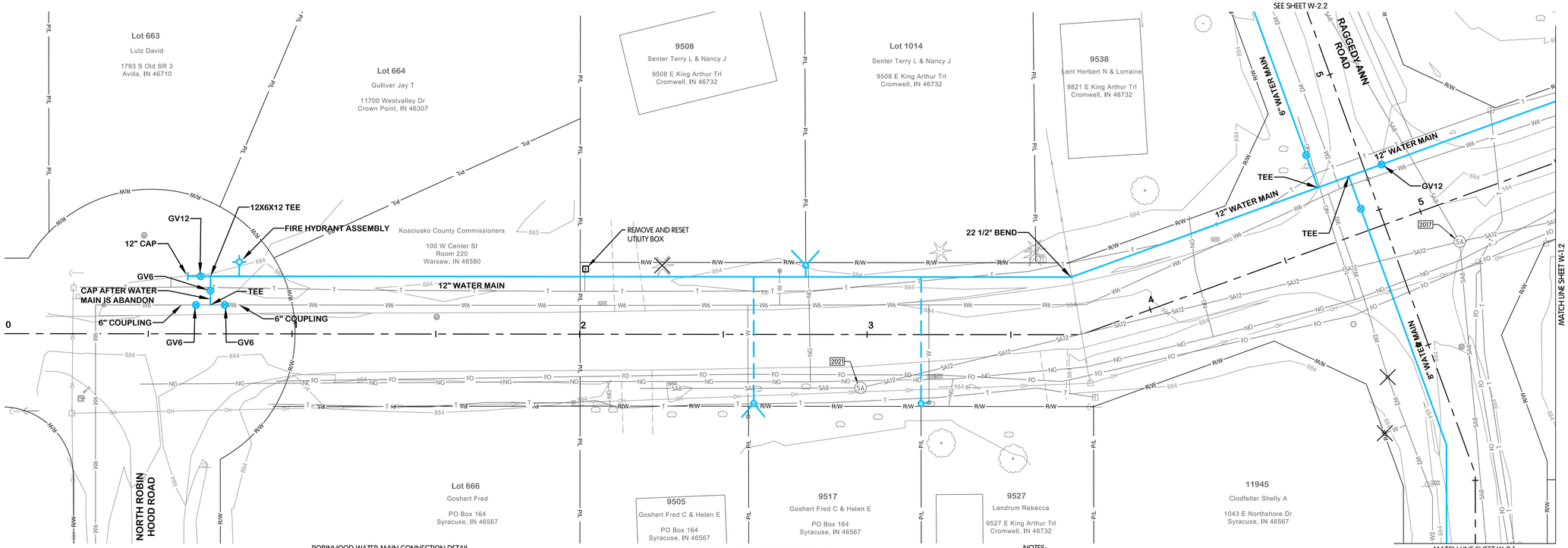
STATUS: ISSUED FOR BID

DATE: 2026

SHEET NO.

G-0.5

FTW-8305400G05-G-0.5 GENERAL SUMMARY
1/28/2026 10:35 AM - ABLAISING
1/29/2026 11:37 AM

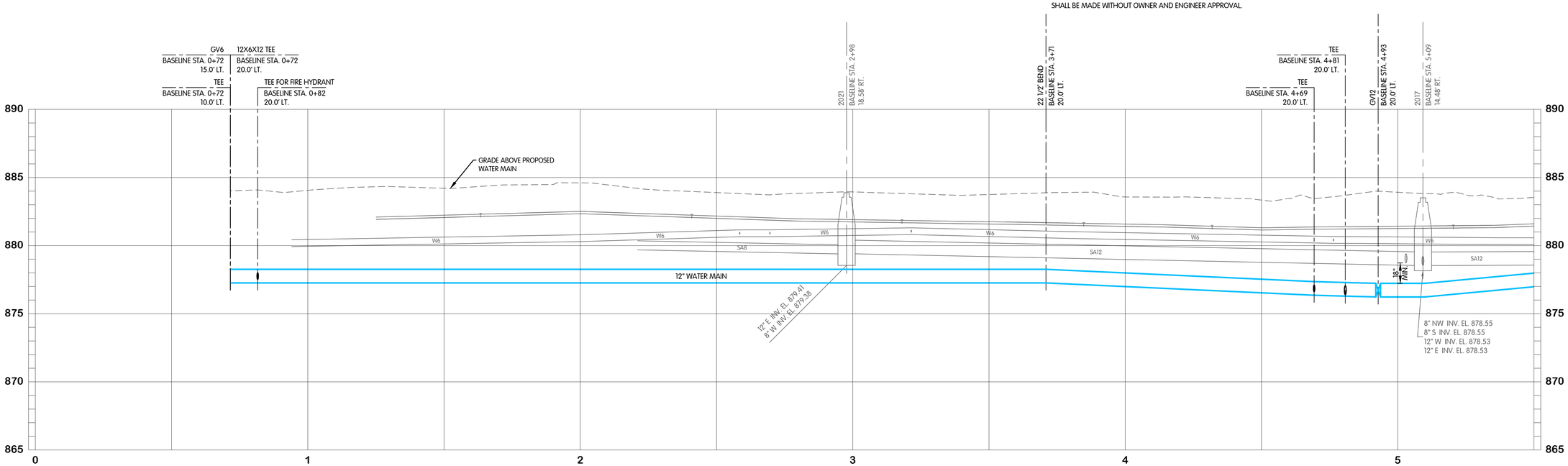


KING ARTHUR TRAIL

EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2017	SANITARY MANHOLE	CASTING EL. 883.51 8" NW INV. EL. 878.55 12" W INV. EL. 878.53 8" S INV. EL. 878.55 12" E INV. EL. 878.53
2021	SANITARY MANHOLE	CASTING EL. 883.88 12" E INV. EL. 879.41 8" W INV. EL. 879.38

ROBINHOOD WATER MAIN CONNECTION DETAIL
SAW CUT EXISTING 6" PIPE, INSERT PVC PIPE, WITH TEE, REDUCER, 2- COUPLERS & 2- 6" VALVES, AND BEDDING. ALL OTHER ITEMS TO BE PAID UNDER OTHER ITEMS.

NOTES:
1. CONTRACTOR SHALL TRIM TREES AND BRUSH AS NECESSARY FOR THE INSTALLATION OF THE WORK.
2. THE CONTRACTOR SHALL PROVIDE WATER SERVICE CONNECTIONS OF A DIAMETER TO MATCH THE ORIGINAL NOMINAL DIAMETER OF THE SERVICE. THE MINIMUM SERVICE DIAMETER SHALL BE 3/4". WATER SERVICE WITH NO SIZE SHOWN SHALL BE ASSUMED TO BE 3/4" DIAMETER. PROPOSED WATER SERVICES SHALL BE 1" DIAMETER UP TO THE CURB BOX, UNLESS NOTED OTHERWISE. EXISTING SERVICE SIZE IS PROVIDED IN VERTICAL TEXT WHERE KNOWN.
3. WATER SERVICES ARE SHOWN OFFSET FROM THE EXISTING WATER SERVICES FOR CLARITY AND SHALL BE INSTALLED ALONG THE SAME ALIGNMENT.
4. NOT ALL CONSTRUCTION NOTES ARE APPLICABLE TO EVERY SHEET.
5. RIGHT-OF-WAY LIMITS SHOWN ARE APPROXIMATE.
6. WATER METER PITS TO BE LOCATED OFF OF PAVEMENT AND WITHIN THE RIGHT-OF-WAY. EXACT LOCATION OF THE METER PITS TO BE COORDINATED WITH THE OWNER.
7. UTILITIES HAVE BEEN SHOWN BASED UPON BEST AVAILABLE INFORMATION FROM SURVEYS AND MAPS PROVIDED BY THE UTILITIES. CONTRACTOR SHALL FIELD VERIFY UTILITIES VIA VACUUM EXCAVATION / POTHOLING PRIOR TO CONSTRUCTION. SUCH WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION. NO CHANGES FROM PLANS SHALL BE MADE WITHOUT OWNER AND ENGINEER APPROVAL.



MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

KING ARTHUR TRAIL
WATER
PLAN AND PROFILE
STA. 0+00 TO 5+50

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-28-2026	ADDENDUM 2	JPM
1			

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Fluid thinking℠
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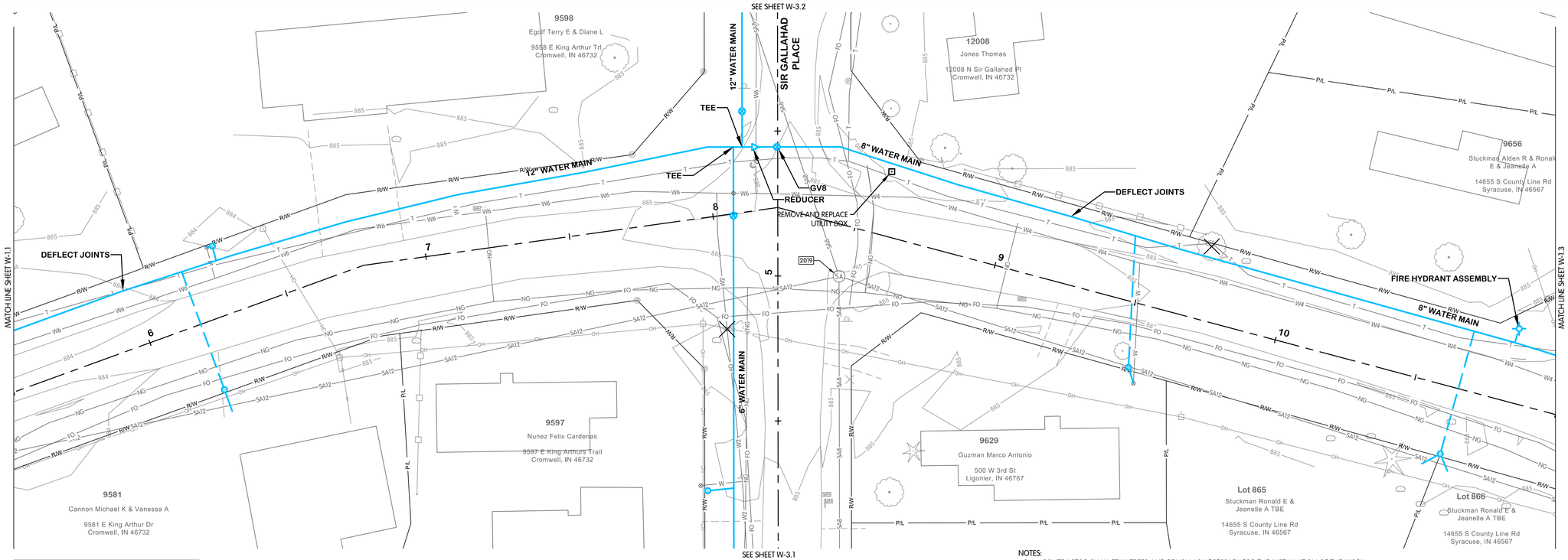
JOB NO. 868-8305.400
SCALE 1"=20' HOR. 1"=4' VERT.
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
DESIGNED JPM | DRAWN AJB | CHECKED MSH
STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO. W-1.1
6 OF 48

FTW-8305.400W-W-1.1 KING ARTHUR STA. 0+00 TO 5+50
FTW-8305.400-W-1.1.DWG
1/29/2026 11:37 AM - ABLANSING
1/29/2026 11:38 AM



KING ARTHUR TRAIL

EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2019	SANITARY MANHOLE	CASTING EL. 884.79 8" S INV. EL. 878.88 12" W INV. EL. 878.84 12" E INV. EL. 878.83 8" N INV. EL. 878.90

NOTES:

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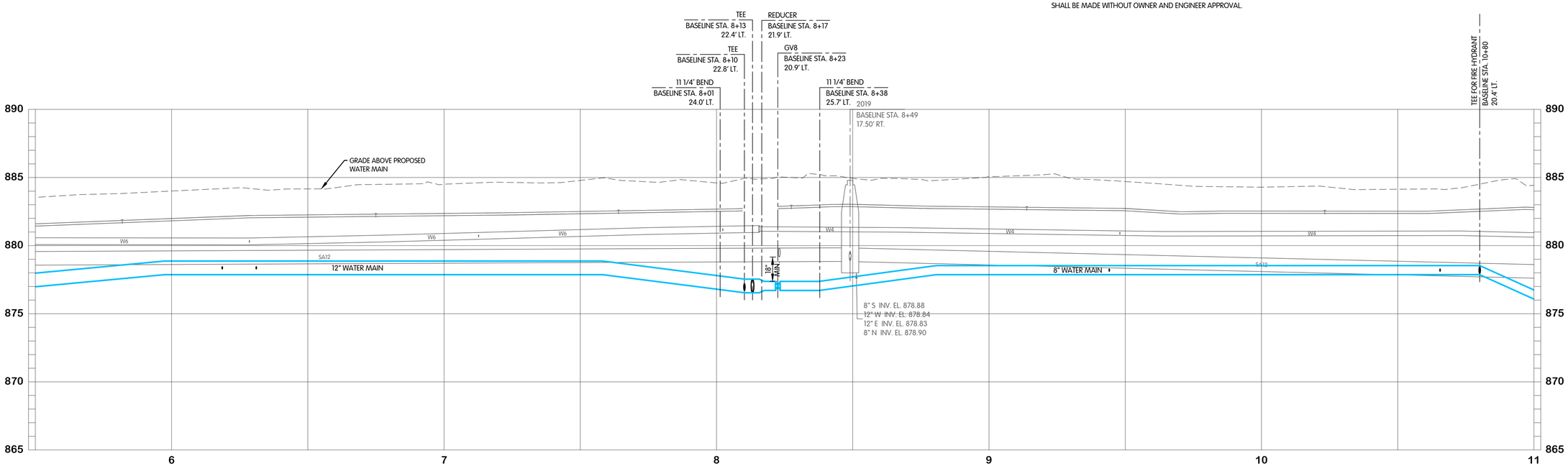

KING ARTHUR TRAIL
WATER
PLAN AND PROFILE
STA. 5+50 TO 11+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-29-2026	ADDENDUM 2	JPM
1			

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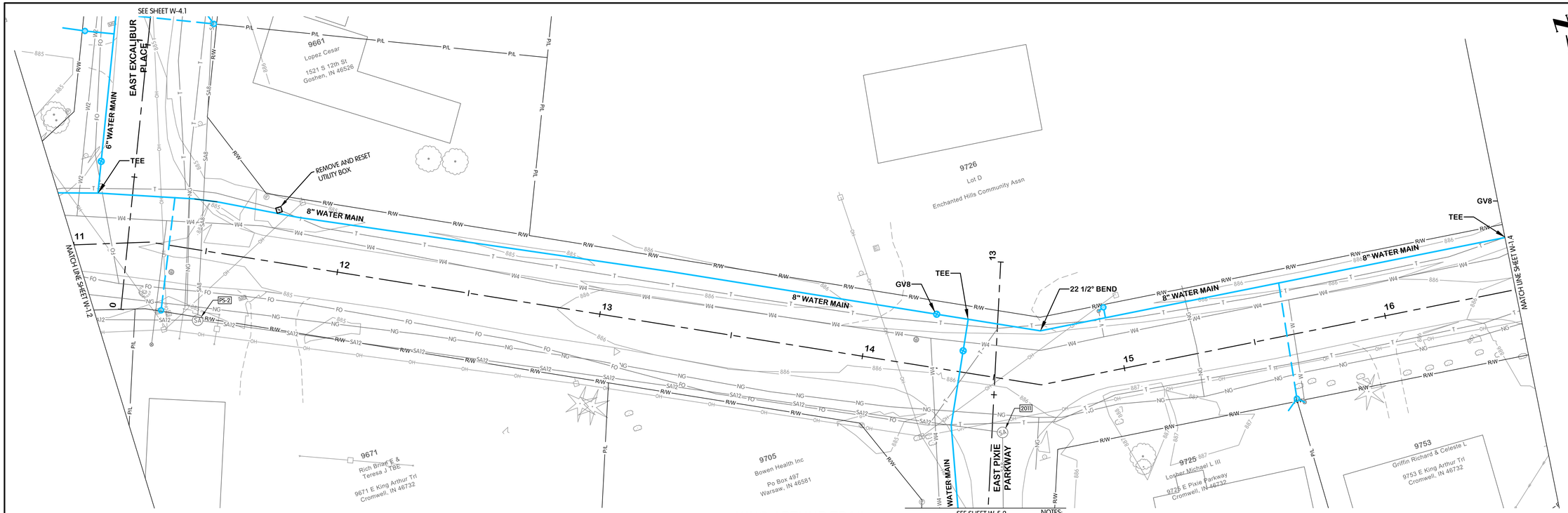
JOB NO. 868-8305.400
SCALE 1"=20' HOR. 1"=4' VERT.
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
DESIGNED JPM | DRAWN AJB | CHECKED MSH
STATUS: ISSUED FOR BID
DATE 2026
SHEET NO. W-1.2
7 OF 48

FTW-8305400W-W-1.2 KING ARTHUR STA. 5+50 TO 11+00
JJPRINS 1/29/2026 11:37 AM - ABLAISING
1/29/2026 11:38 AM



EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2011	SANITARY MANHOLE	CASTING EL. 886.07 8" S INV. EL. 880.14 12" NW INV. EL. 880.18
PS-2	SANITARY MANHOLE	CASTING EL. 885.12 12" W INV. EL. 877.36 12" SE INV. EL. 877.36 8" N INV. EL. 877.36

NOTES:

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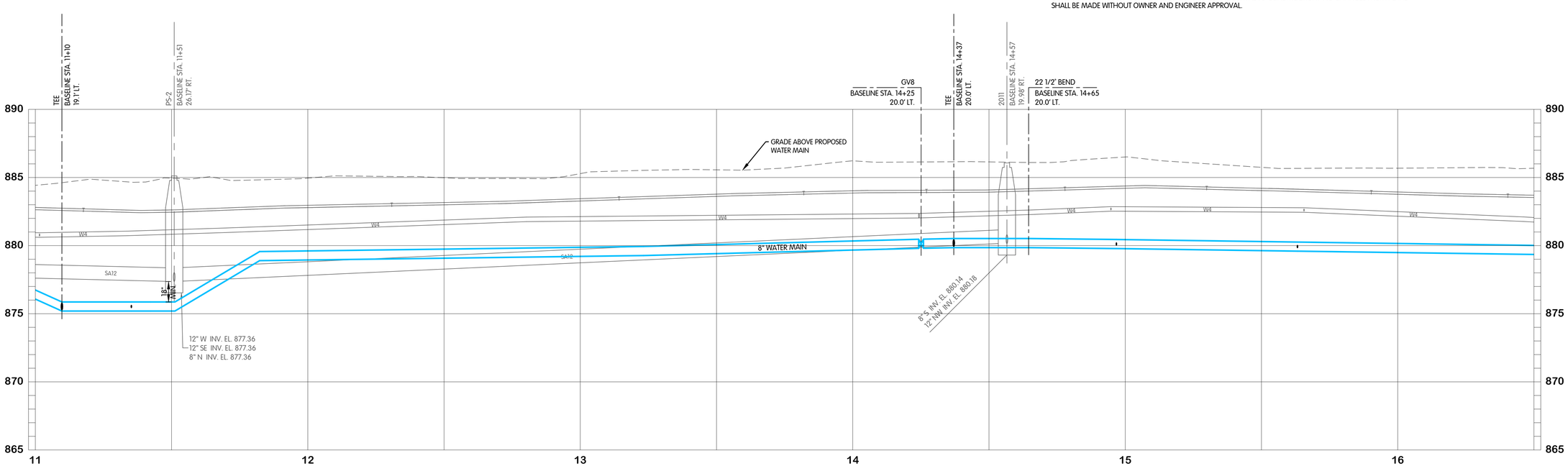

KING ARTHUR TRAIL
WATER
PLAN AND PROFILE
STA. 11+00 TO 16+50

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-28-2026	ADDENDUM 2	JPM
1			

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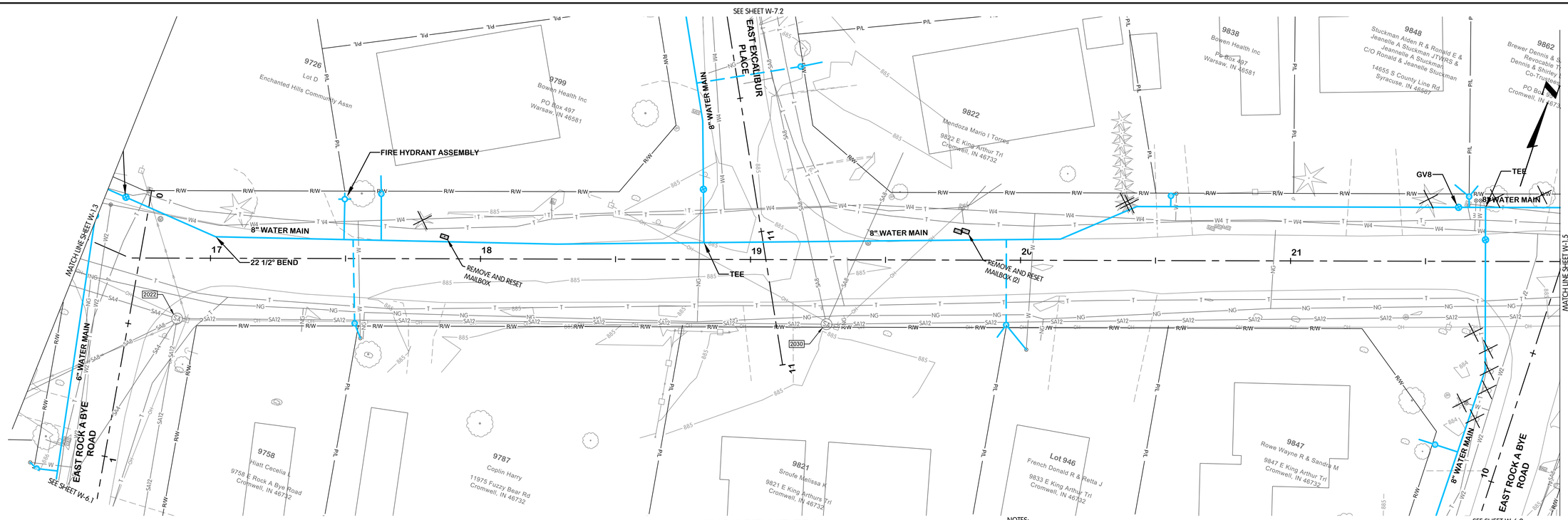
JOB NO. 868-8305.400
SCALE 1"=20' HOR. 1"=4' VERT.
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
DESIGNED JPM | DRAWN AJB | CHECKED MSH
STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO. W-1.3
8 OF 48

FTW-8305.400W1-W1.5 KING ARTHUR STA. 11+00 TO 16+50
FTW-8305.400W1-W1.3.dwg - ABLANSING
1/29/2026 11:38 AM



KING ARTHUR TRAIL

EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2022	SANITARY MANHOLE	CASTING EL. 885.63 12" S INV. EL. 879.78 12" E INV. EL. 879.68 8" SW INV. EL. 879.78 4" W INV. EL. 880.33 4" S INV. EL. 880.73
2030	SANITARY MANHOLE	CASTING EL. 885.12 8" NW INV. EL. 879.27 12" W INV. EL. 879.27 12" E INV. EL. 879.24 8" N INV. EL. 879.27

NOTES:

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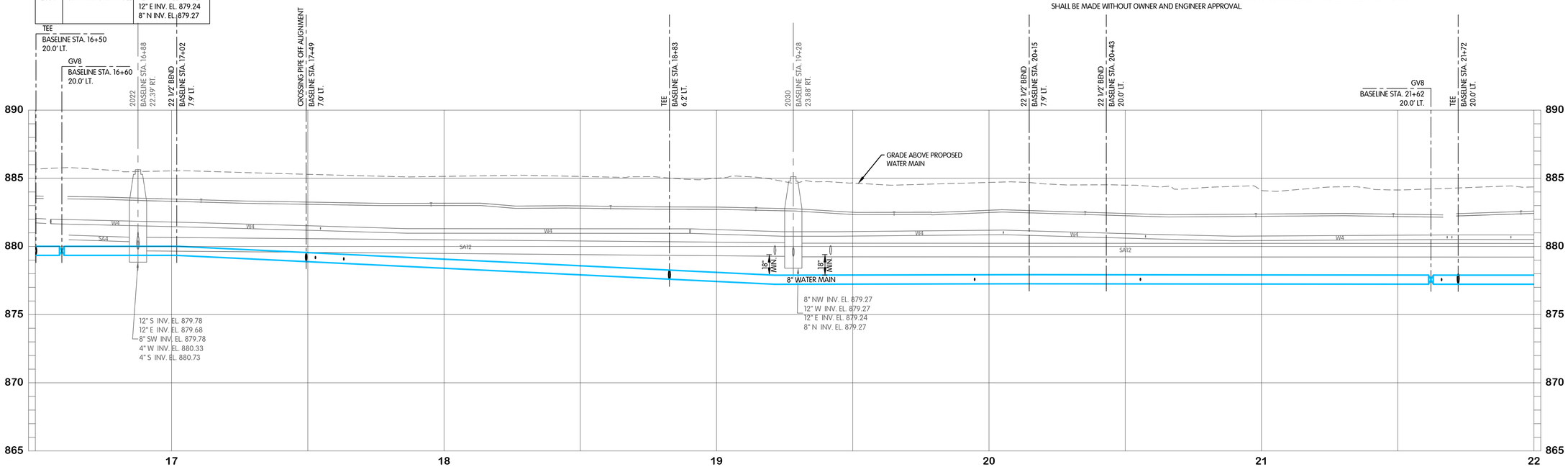

MICHAEL S. HARKNESS REGISTERED No. 19900563 STATE OF INDIANA PROFESSIONAL ENGINEER

01-13-2025

TCRSD

KING ARTHUR TRAIL WATER PLAN AND PROFILE STA. 16+50 TO 22+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			JPM
4			
3			
2	01-28-2026	ADDENDUM 2	
1			

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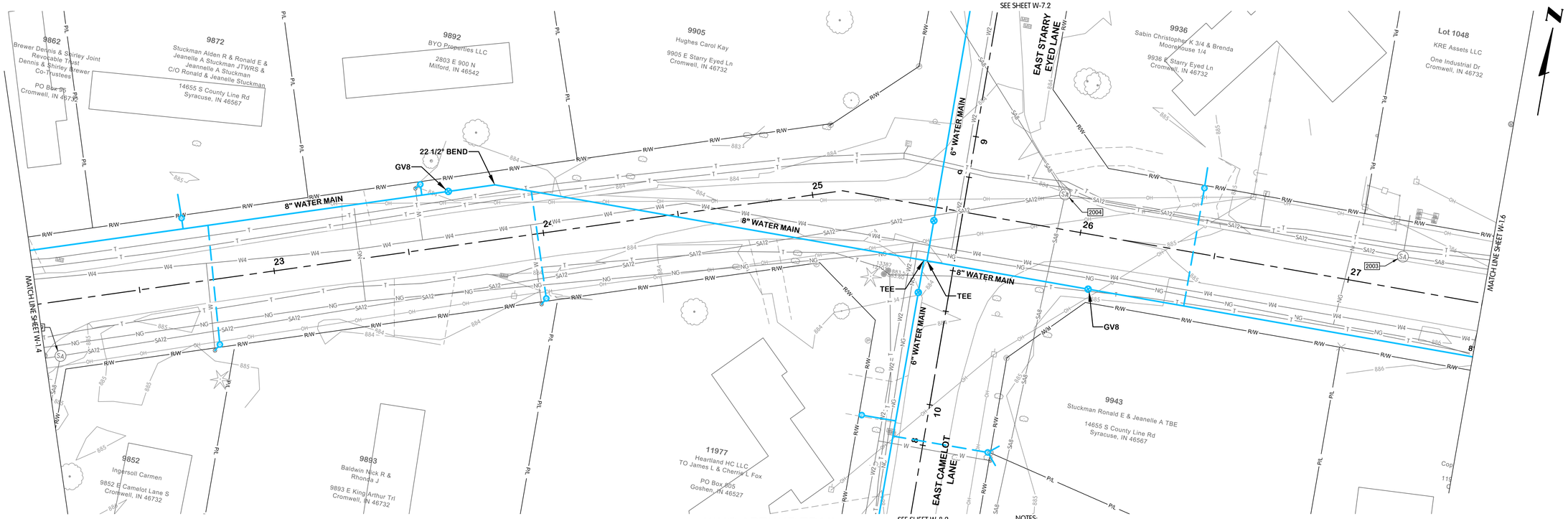
JOB NO.	868-8305.400
SCALE	1"=20' HOR. 1"=4' VERT.
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE	
DESIGNED JPM	DRAWN AJB / CHECKED MSH
STATUS:	ISSUED FOR BID
DATE:	2026
SHEET NO.	W-1.4
	9 OF 48

FTW-8305.400W-W1.4 KING ARTHUR STA. 16+50 TO 22+00
(7)2026 11 13 - JAMES PRUSSING
1/29/2026 11:39 AM - ABLANSING



EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2003	SANITARY MANHOLE	CASTING EL. 885.51 12" W INV. EL. 878.32 8" E INV. EL. 878.08 10" N INV. EL. 878.08
2004	SANITARY MANHOLE	CASTING EL. 883.79 8" NW INV. EL. 878.27 12" W INV. EL. 878.47 12" E INV. EL. 876.88 8" S INV. EL. 878.27
2029	SANITARY MANHOLE	CASTING EL. 885.27 8" S INV. EL. 880.22 12" W INV. EL. 879.22 12" E INV. EL. 879.20

NOTES:

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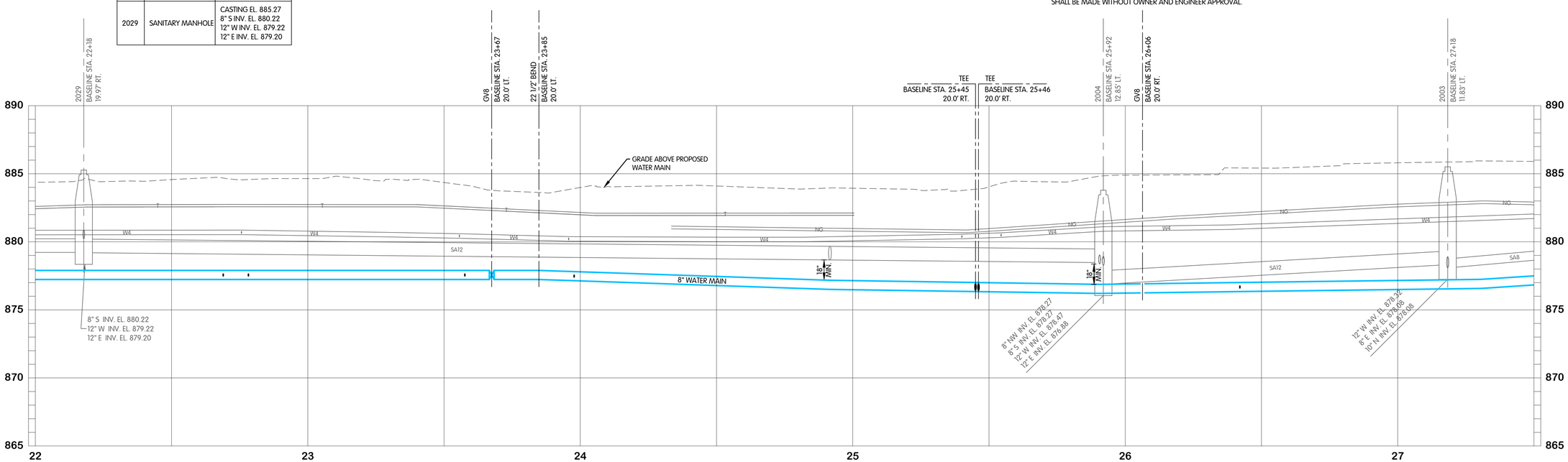


MICHAEL S. HARKNESS REGISTERED No. 19900563 STATE OF INDIANA PROFESSIONAL ENGINEER

01-13-2025

TCRSD

KING ARTHUR TRAIL
WATER
PLAN AND PROFILE
STA. 22+00 TO 27+50

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-28-2026	ADDENDUM 2	JPM
1			

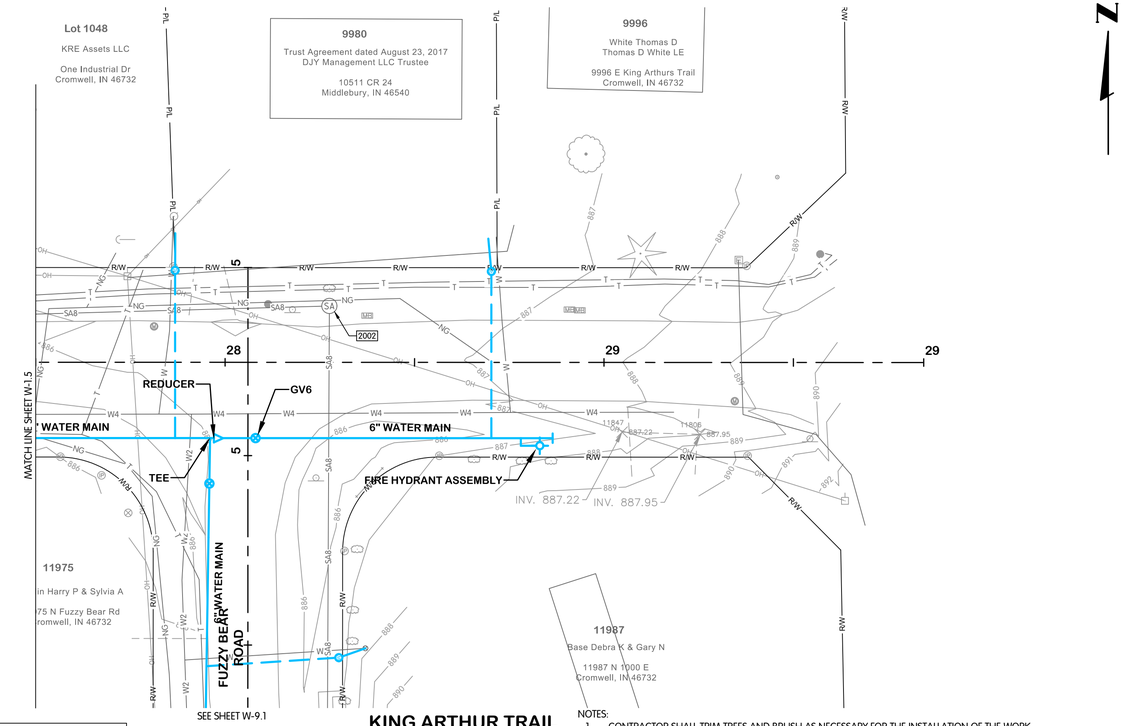
Jones & Henry Engineers, Ltd.
Fluid thinking®
www.JHeng.com

JOB NO. 868-8305.400
SCALE 1"=20' HOR. 1"=4' VERT.
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO. 2
W-1.5
10 OF 48

FTW-8305.400W-W1.5 KING ARTHUR STA. 22+00 TO 27+50
(2) 20x36 (1) 11x17 W-1.5 - ABLANSING
1/29/2026 11:39 AM



KING ARTHUR TRAIL

EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2003	SANITARY MANHOLE	CASTING EL. 885.51 12" W INV. EL. 878.32 8" E INV. EL. 878.08 10" N INV. EL. 878.08
2004	SANITARY MANHOLE	CASTING EL. 883.79 8" NW INV. EL. 878.27 12" W INV. EL. 878.47 12" E INV. EL. 876.88 8" S INV. EL. 878.27
2029	SANITARY MANHOLE	CASTING EL. 885.27 8" S INV. EL. 880.22 12" W INV. EL. 879.22 12" E INV. EL. 879.20

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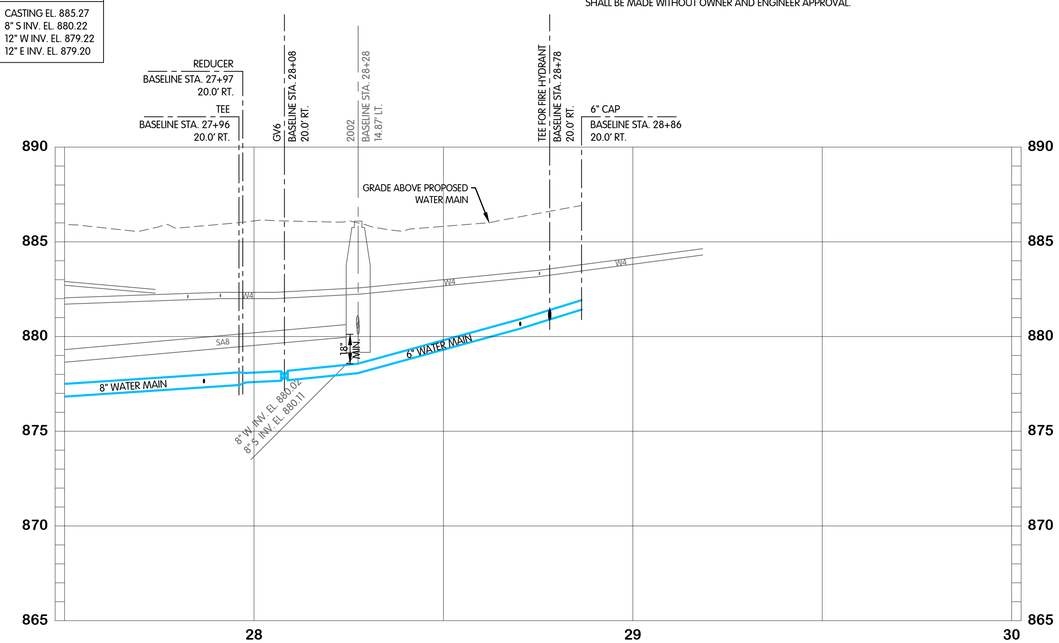

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF
INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

KING ARTHUR TRAIL
WATER
PLAN AND PROFILE
STA. 27+50 TO 30+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-28-2026	ADDENDUM 2	JPM
1			

Jones & Henry Engineers, Ltd.
Fluid thinking℠
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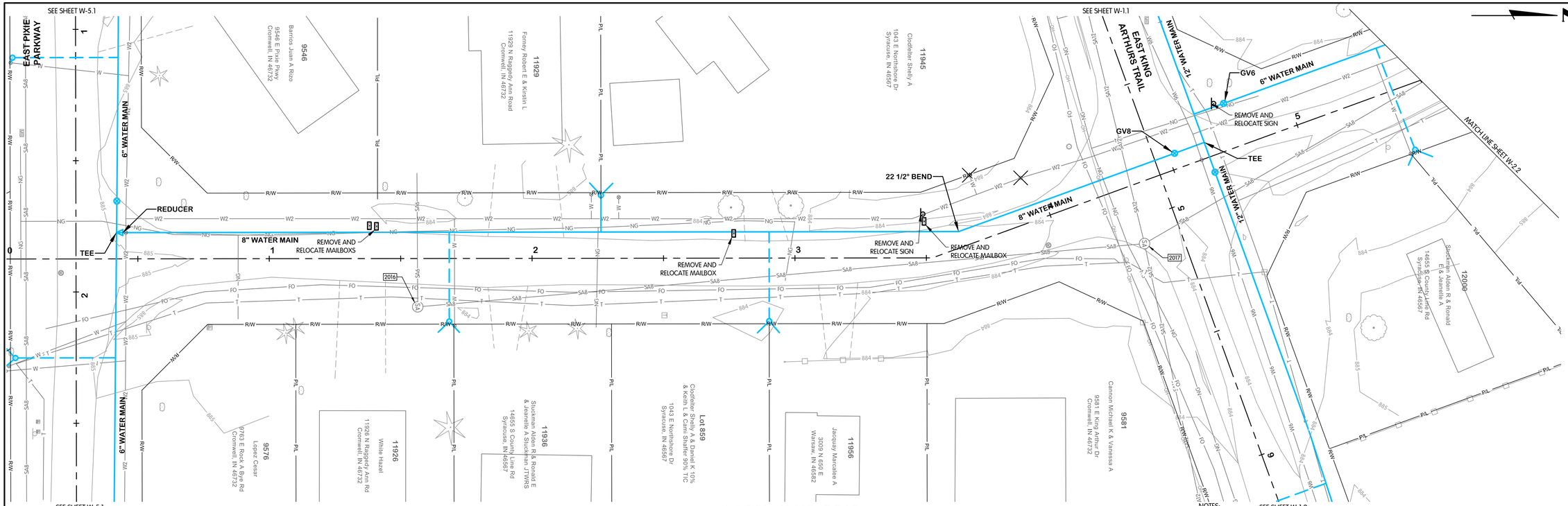
JOB NO. 868-8305.400
SCALE 1"=20' HOR. 1"=4' VERT.
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO. 2
W-1.6
11 OF 48

FTW-8305.400W1-W1.6 KING ARTHUR STA. 27+50 TO 30+00
FTW-8305.400 1/27/2026 11:17 AM - ABLANSING
1/29/2026 11:40 AM



EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2014	SANITARY MANHOLE	CASTING EL. 885.71 8" W INV. EL. 879.91 8" E INV. EL. 880.91 8" N INV. EL. 880.11
2019	SANITARY MANHOLE	CASTING EL. 884.79 8" S INV. EL. 878.88 12" W INV. EL. 878.84 12" E INV. EL. 878.83 8" N INV. EL. 878.90
4559	SANITARY MANHOLE	CASTING EL. 884.99 8" S INV. EL. 878.99 8" N INV. EL. 878.99

NOTES:

SEE SHEET W-1.2

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3. WATER SERVICES ARE SHOWN OFFSET FROM THE EXISTING WATER SERVICES FOR CLARITY AND SHALL BE INSTALLED ALONG THE SAME ALIGNMENT.
4. NOT ALL CONSTRUCTION NOTES ARE APPLICABLE TO EVERY SHEET.
5. RIGHT-OF-WAY LIMITS SHOWN ARE APPROXIMATE.
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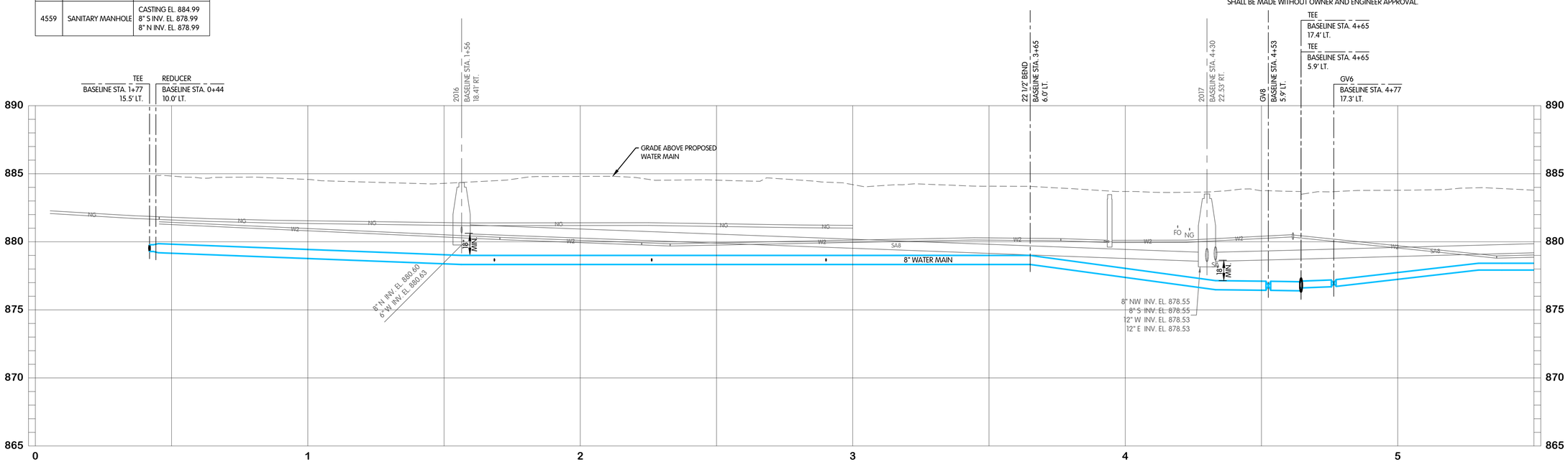

RAGGEDY ANN ROAD
WATER
PLAN AND PROFILE
STA. 0+00 TO 5+50

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

MICHAEL S. HARKNESS REGISTERED No. 19900563 STATE OF INDIANA PROFESSIONAL ENGINEER
01-13-2025

TCRSD

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-28-2026	ADDENDUM 2	JPM
1			

Jones & Henry Engineers, Ltd.
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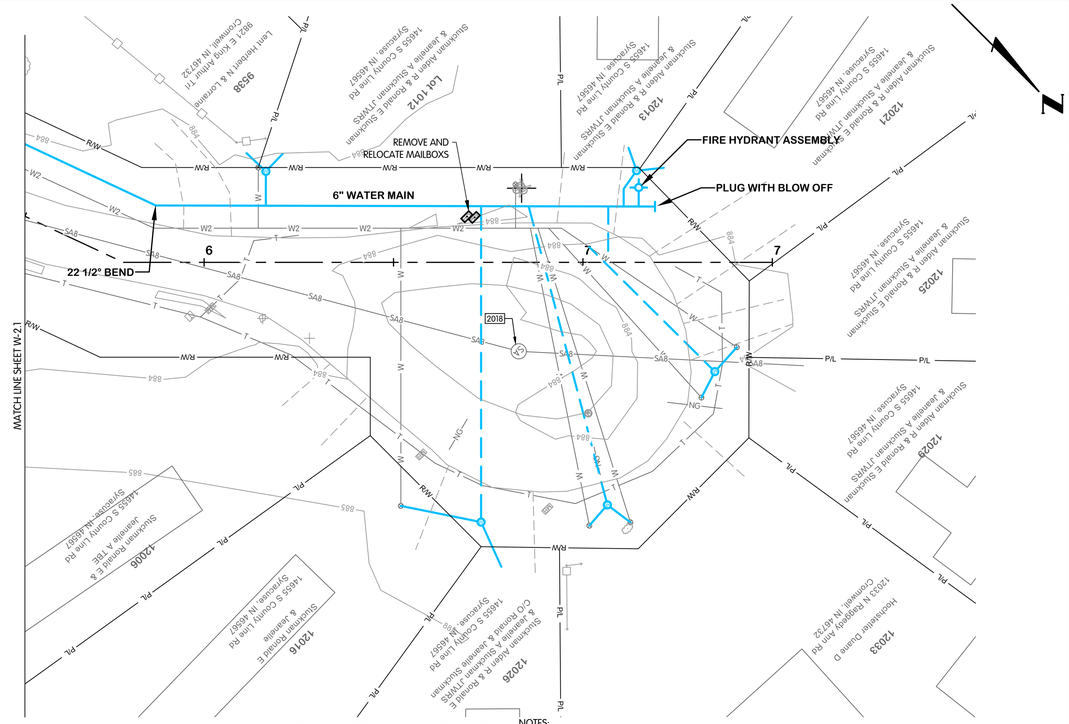
JOB NO. 868-8305.400
SCALE 1"=20' HOR. 1"=4' VERT.
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
DESIGNED JPM | DRAWN AJB | CHECKED MSH
STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO. W-2.1
12 OF 48

FTW-8305-400W2-W-2.1 RAGGEDY ANN STA. 0+00 TO 5+50
FS 20 x 20 x 4 - 2 PW - ABLASING
1/29/2026 11:40 AM



RAGGEDY ANN ROAD

EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2018	SANITARY MANHOLE	CASTING EL. 884.04 8" SE INV. EL. 879.91 8" NW INV. EL. 879.91

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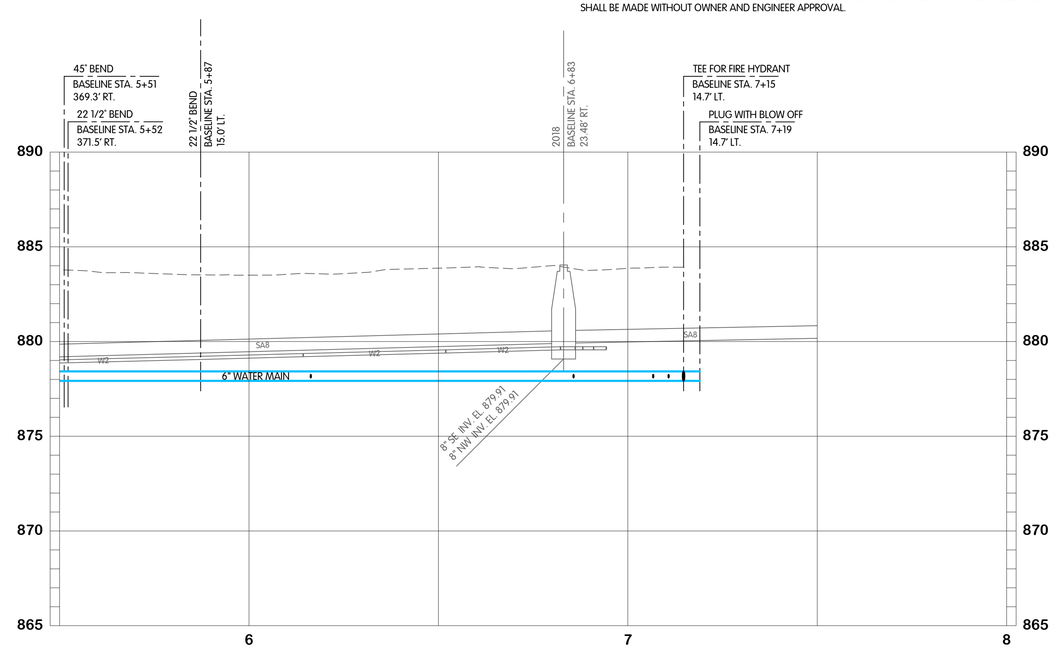

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF
INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

RAGGEDY ANN ROAD
WATER
PLAN AND PROFILE
STA. 5+50 TO 7+50

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-28-2026	ADDENDUM 2	JPM
1			

Jones & Henry Engineers, Ltd.

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JOB NO. 868-8305.400

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

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID

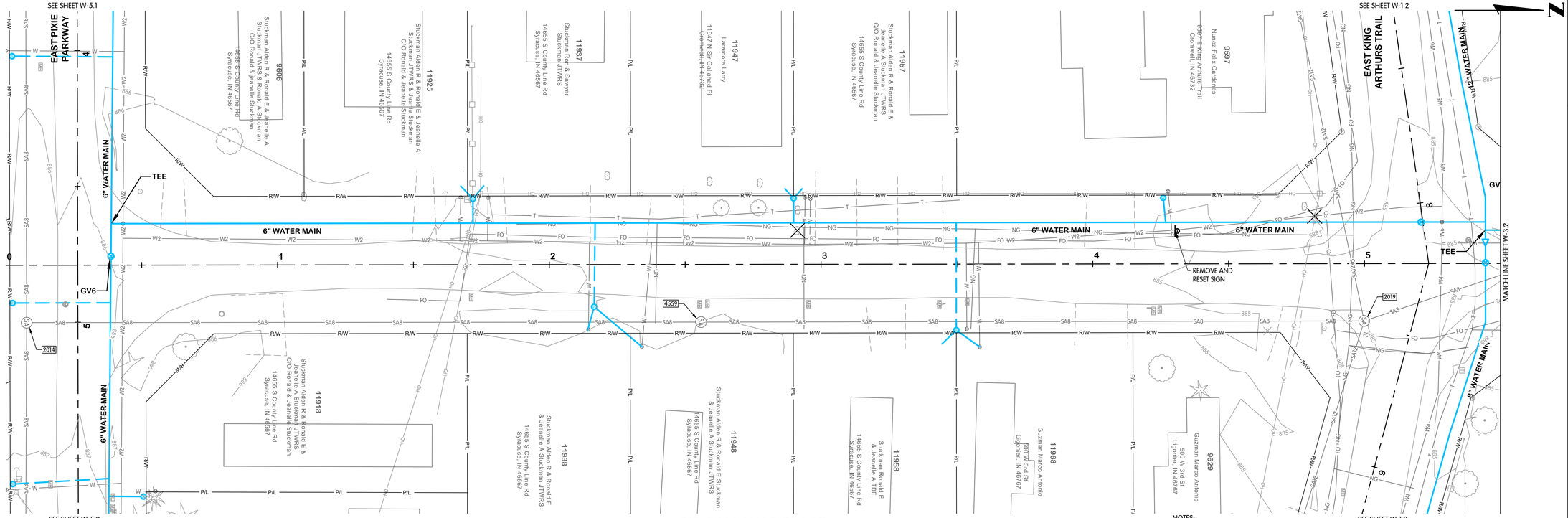
DATE: 2026

SHEET NO.

W2.2

13 OF 48

FTW-8305.00W2-W-2 RAGGEDY ANN STA. 5+50 TO 7+50
1/29/2026 2:27 PM - ABLAISING
1/29/2026 11:12 AM



EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2014	SANITARY MANHOLE	CASTING EL. 885.71 8" W INV. EL. 879.91 8" E INV. EL. 880.91 8" N INV. EL. 880.11
2019	SANITARY MANHOLE	CASTING EL. 884.79 8" S INV. EL. 878.88 12" W INV. EL. 878.84 12" E INV. EL. 878.83 8" N INV. EL. 878.90
4559	SANITARY MANHOLE	CASTING EL. 884.99 8" S INV. EL. 878.99 8" N INV. EL. 878.99

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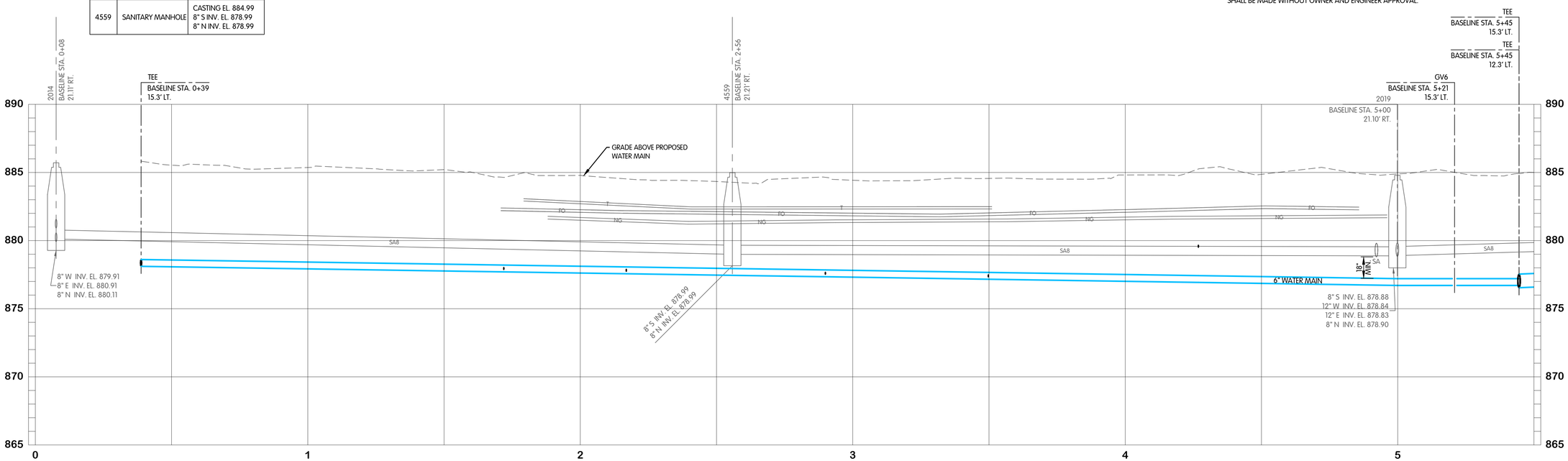

SIR GALLAHAD PLACE
WATER
PLAN AND PROFILE
STA. 0+00 TO 5+50

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			JPM
4			
3			
2	01-28-2029	ADDENDUM 2	
1			

Jones & Henry Engineers, Ltd.
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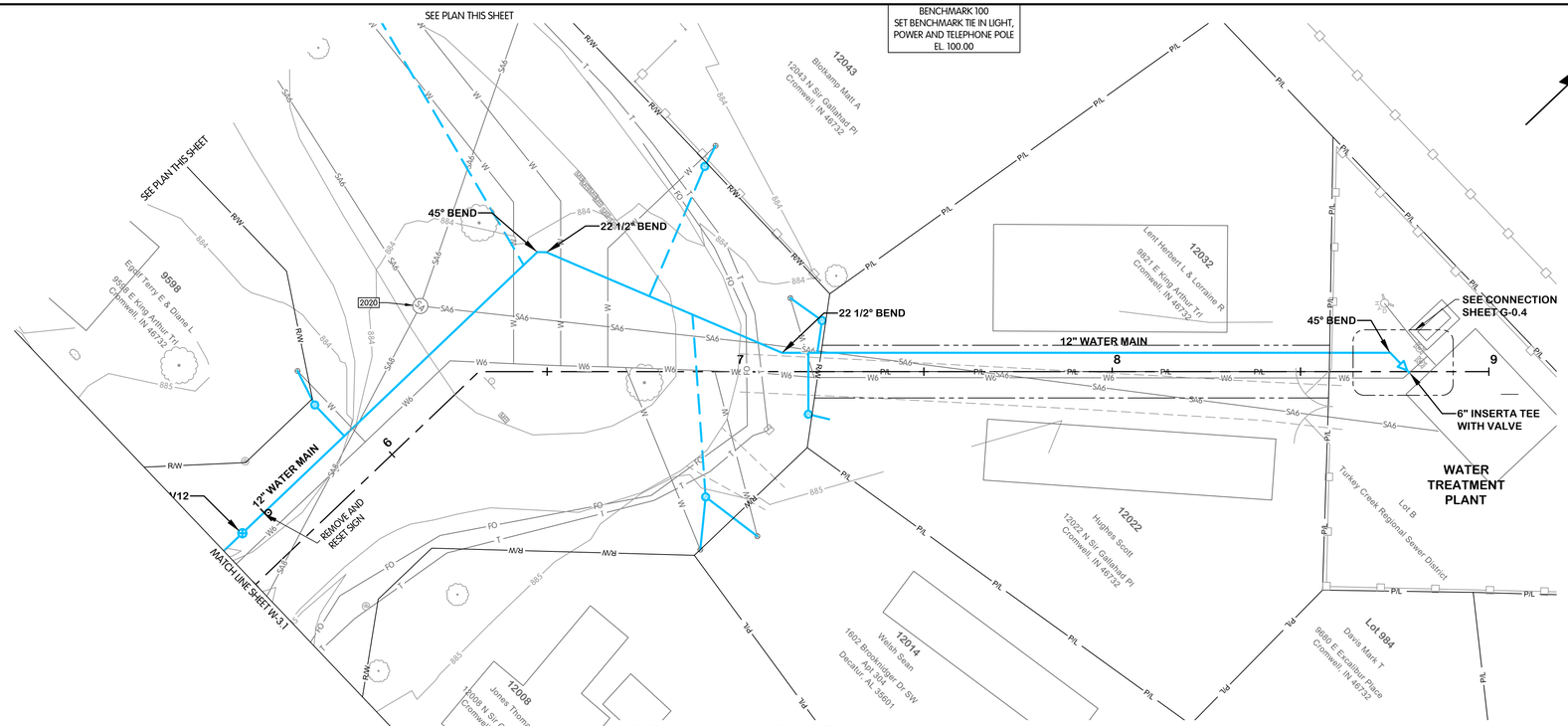
JOB NO. 868-8305.400
SCALE 1"=20' HOR. 1"=4' VERT.
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

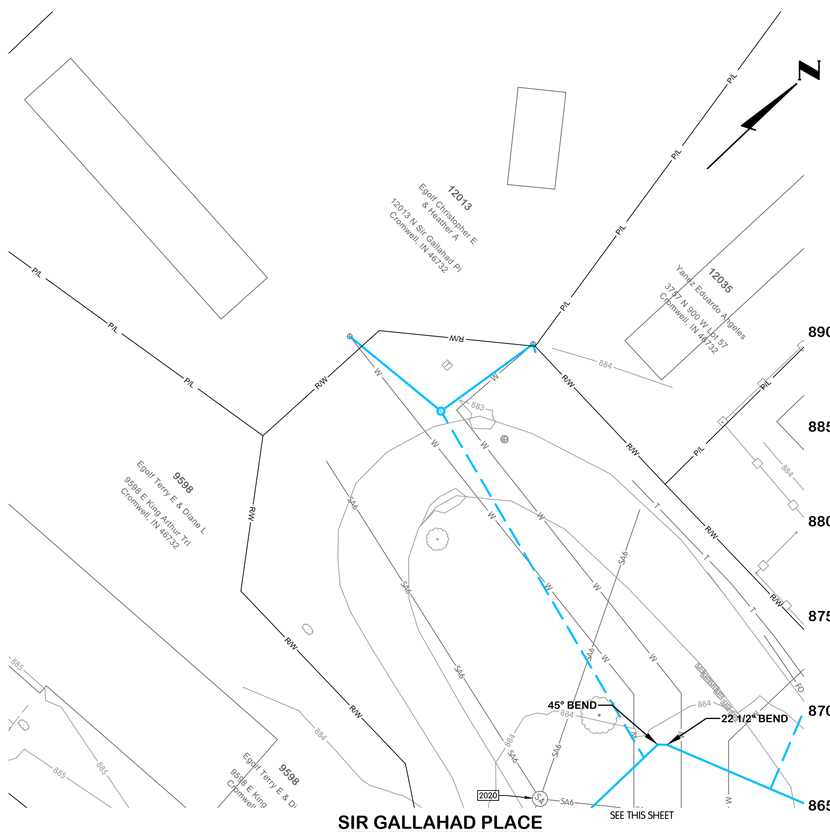
DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

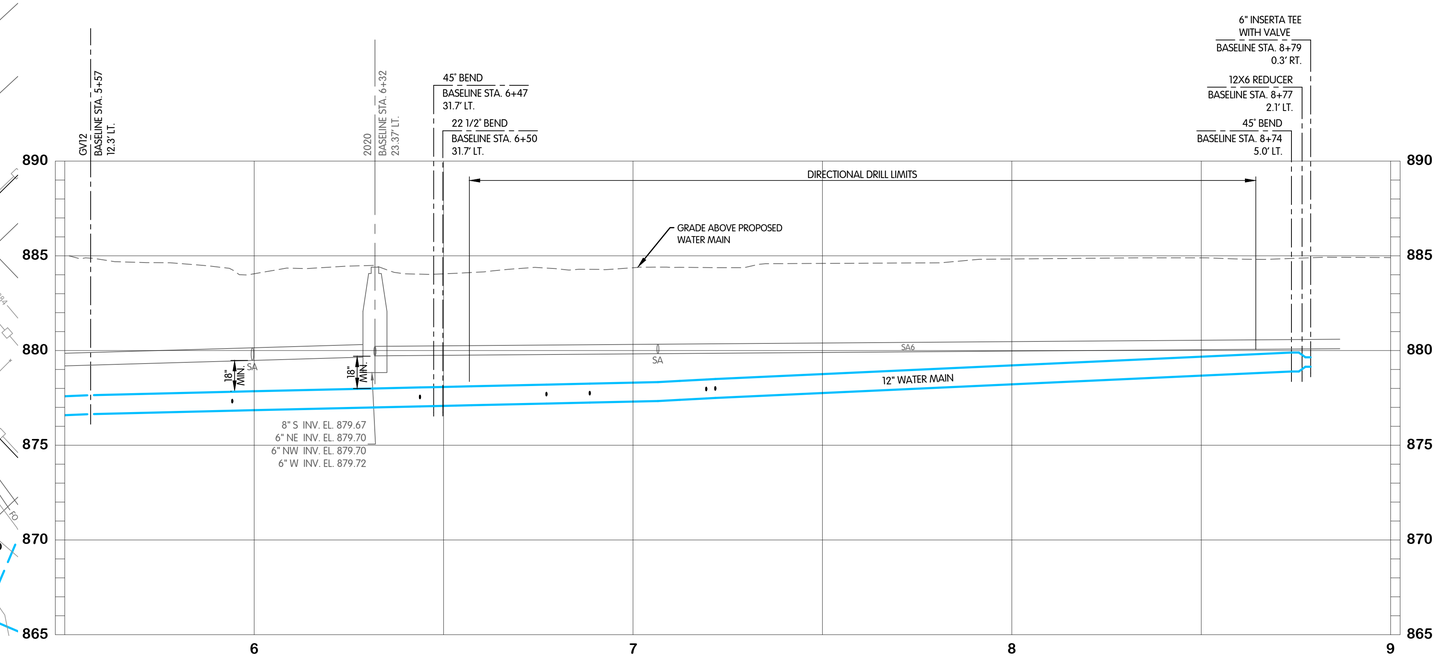
STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO. 2
W-3.1
14 OF 48

FTW-8305400W5-W-3.1 SIR GALLAHAD STA. 0+00 TO 5+50
FTW-8305400W5-W-3.1.dwg
1/29/2026 11:41 AM - ABLASING
1/29/2026 11:41 AM



EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2020	SANITARY MANHOLE	CASTING EL. 884.40 8" S INV. EL. 879.67 6" NE INV. EL. 879.70 6" NW INV. EL. 879.70 6" W INV. EL. 879.72





TCRSD

SIR GALLAHAD PLACE
WATER
PLAN AND PROFILE
STA. 0+00 TO 9+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-29-2026	ADDENDUM 2	JPM
1			

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JOB NO. 868-8305.400
SCALE 1"=20' HOR. 1"=4' VERT.
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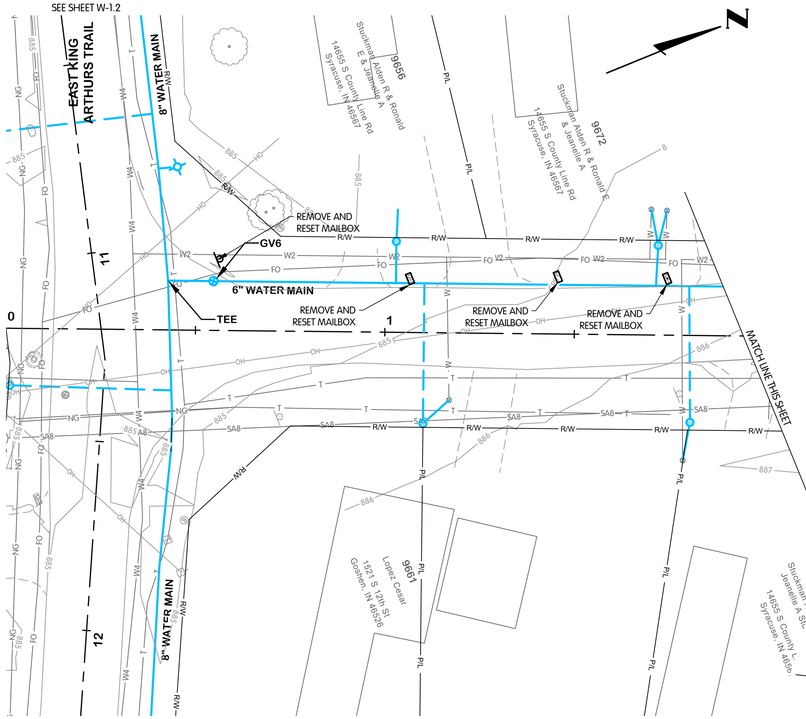
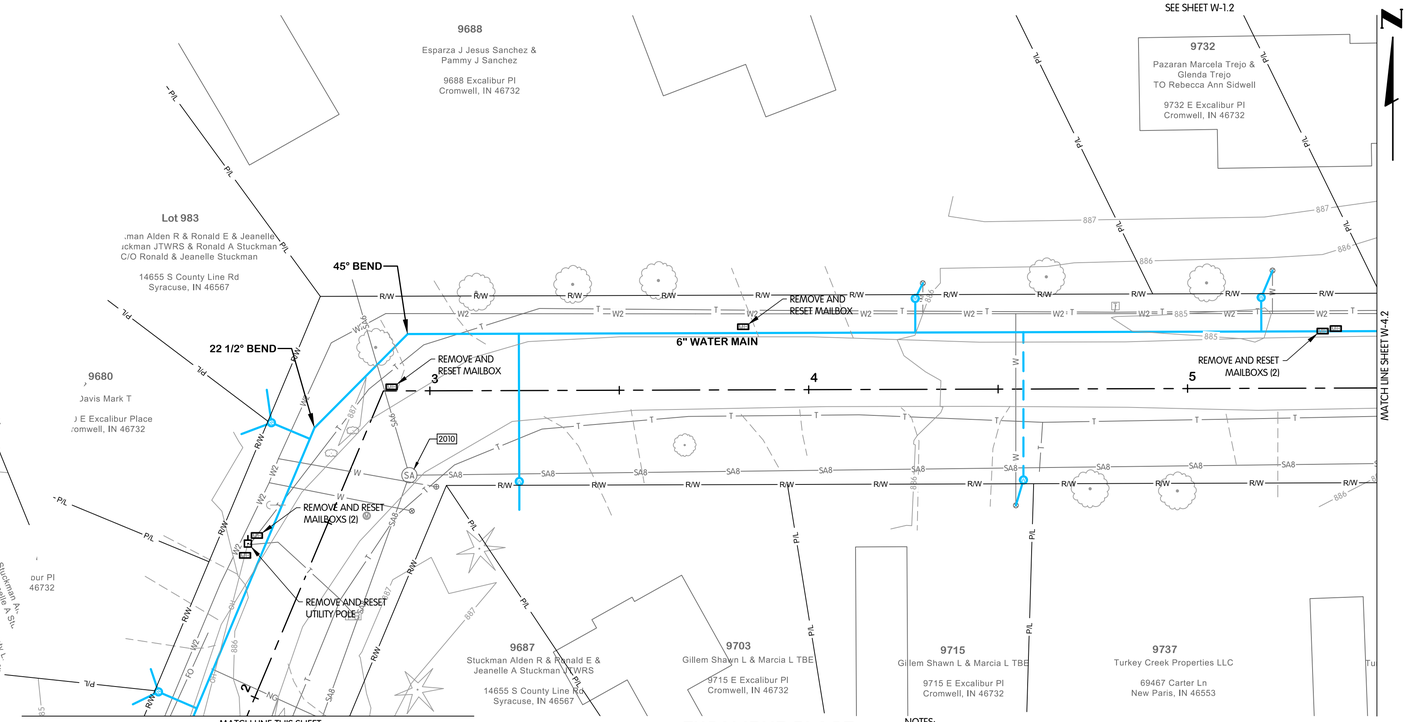
DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE 2026

SHEET NO.
W-3.2
15 OF 48

FTW-8305.00W3-W-3.2 SIR GALLAHAD STA. 5+50 TO 9+00
1/29/2026 11:42 AM - ABLAISING
1/29/2026 11:42 AM





EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2010	SANITARY MANHOLE	CASTING EL. 885.90 8" S INV. EL. 879.76 8" E INV. EL. 879.78 6" N INV. EL. 879.79
PS-2	SANITARY MANHOLE	CASTING EL. 885.12 12" W INV. EL. 877.36 12" SE INV. EL. 877.36 8" N INV. EL. 877.36

NOTES:

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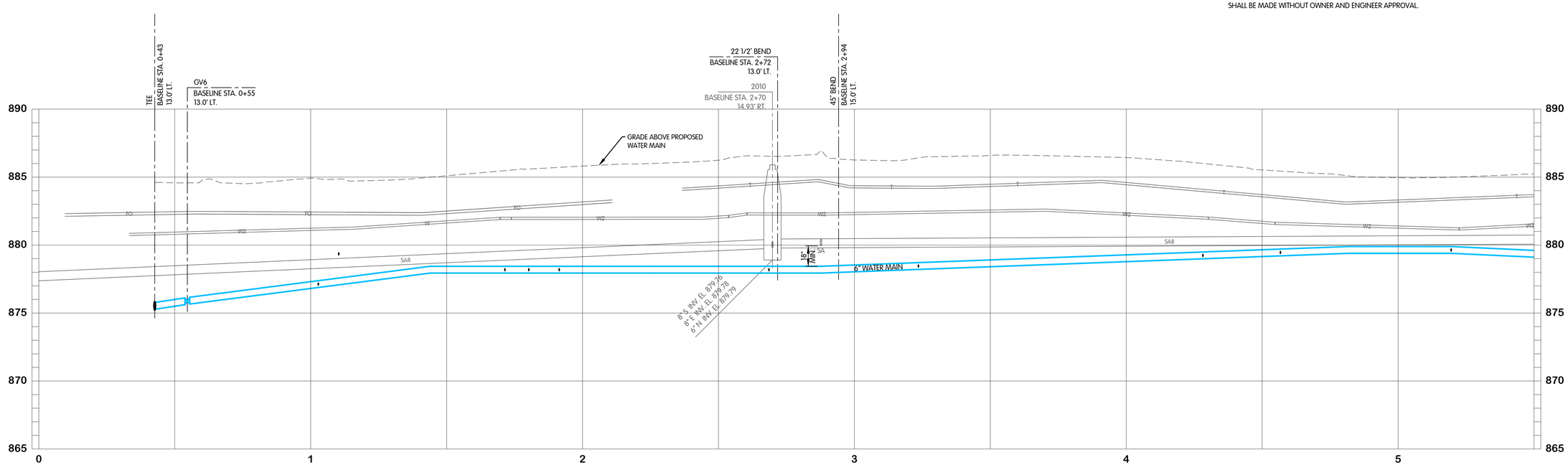

MICHAEL S. HARKNESS REGISTERED No. 19900563 STATE OF INDIANA PROFESSIONAL ENGINEER

01-13-2025

TCRSD

EXCALIBUR PLACE
WATER
PLAN AND PROFILE
STA. 0+00 TO 5+50

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-28-2026	ADDENDUM 2	JPM
1			

Jones & Henry Engineers, Ltd.
Fluid thinking℠
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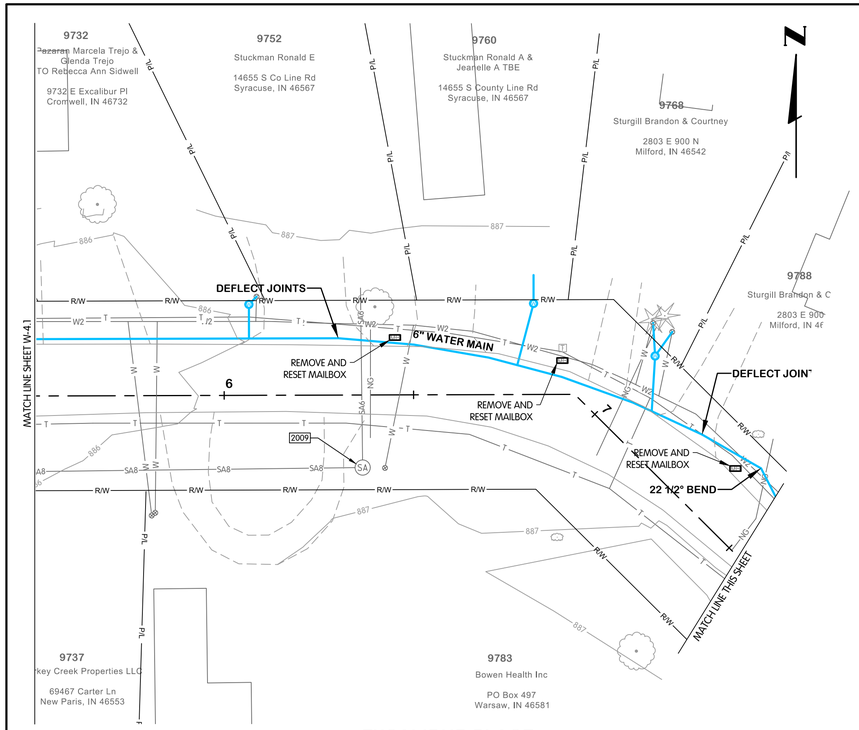
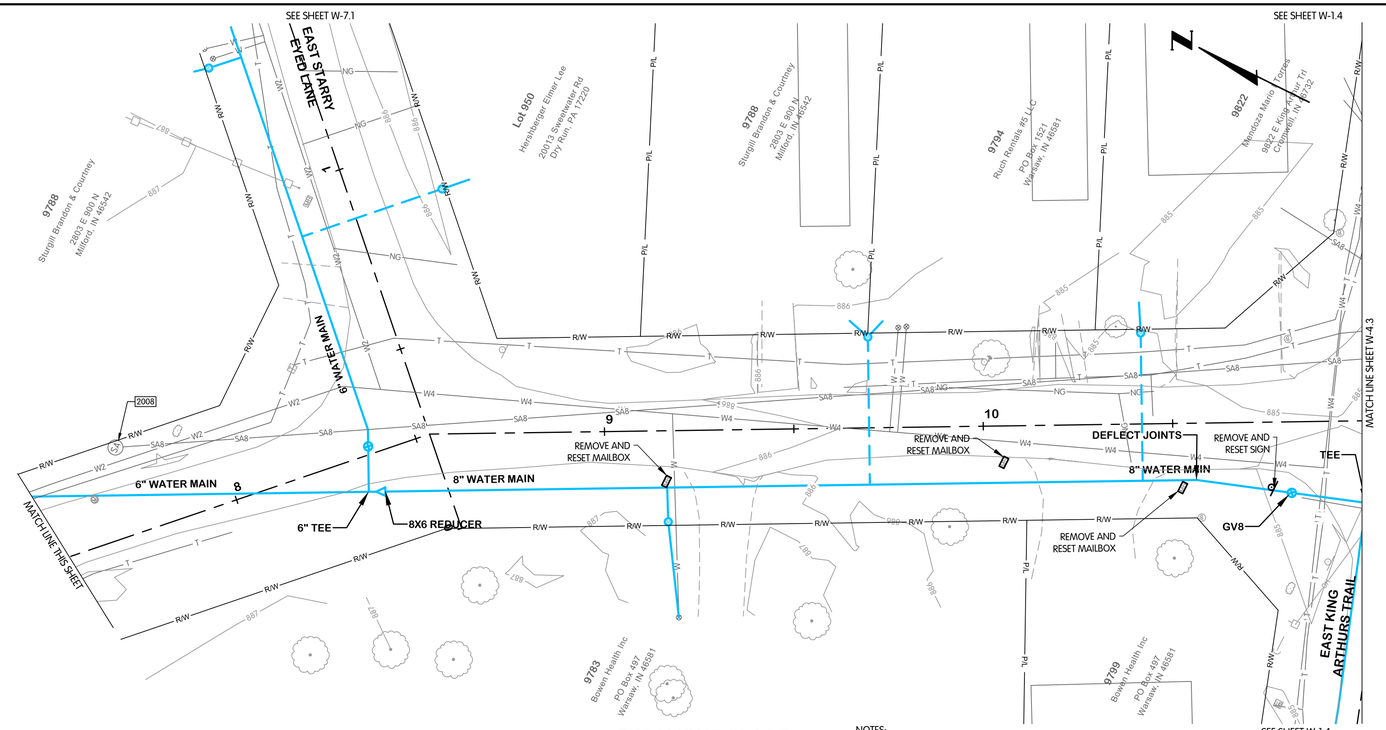
JOB NO. 868-8305.400
SCALE 1"=20' HOR. 1"=4' VERT.
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
DESIGNED JPM | DRAWN AJB | CHECKED MSH
STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO. W-4.1
16 OF 48

FTW-8305.400WL-W4.1 EXCALIBUR STA. 0+00 TO 5+50
JPM
1/29/2026 11:44 AM - ABLASING
1/29/2026 11:43 AM



EXCALIBUR PLACE

EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2008	SANITARY MANHOLE	CASTING EL. 886.66 8" SE INV. EL. 880.72
2009	SANITARY MANHOLE	CASTING EL. 886.59 8" W INV. EL. 880.16 6" N INV. EL. 880.20



EXCALIBUR PLACE

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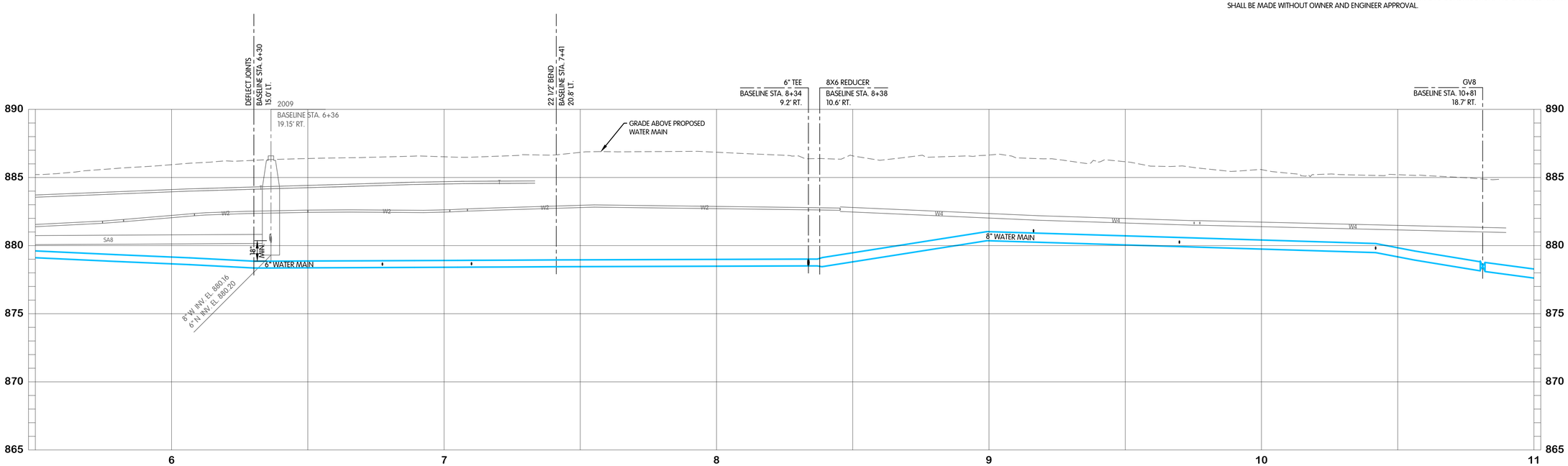

EXCALIBUR PLACE
WATER
PLAN AND PROFILE
STA. 5+50 TO 11+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-28-2026	ADDENDUM 2	JPM
1			

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JOB NO.	868-8305.400
SCALE	1"=20' HOR. 1"=4' VERT.

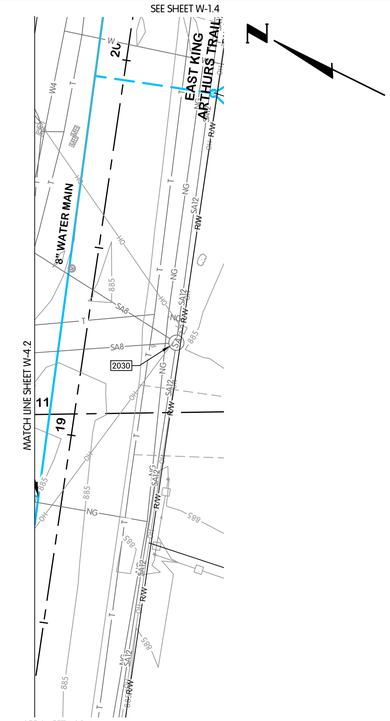
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE: 2026

SHEET NO.
W-4.2
17 OF 48

FTW-8305400W4-W-4.2 EXCALIBUR STA. 5+50 TO 11+00
01/29/2026 11:45 AM ABLASING
1/29/2026 11:45 AM



EXCALIBUR PLACE

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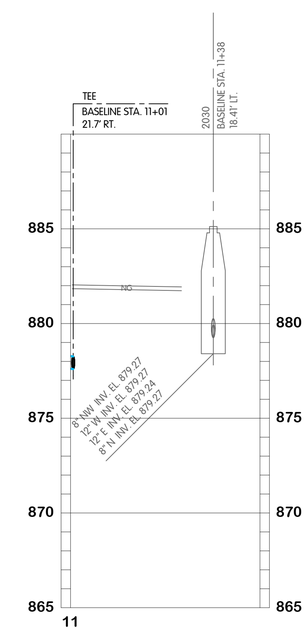
EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2030	SANITARY MANHOLE	CASTING EL. 885.12 8" NW INV. EL. 879.27 12" W INV. EL. 879.27 12" E INV. EL. 879.24 8" N INV. EL. 879.27



MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF
INDIANA
PROFESSIONAL ENGINEER

01-13-2025

TCRSD

EXCALIBUR PLACE
WATER
PLAN AND PROFILE
STA. 11+00 TO 11+50

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-29-2026	ADDENDUM 2	JPM
1			

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

JOB NO. 868-8305.400
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DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

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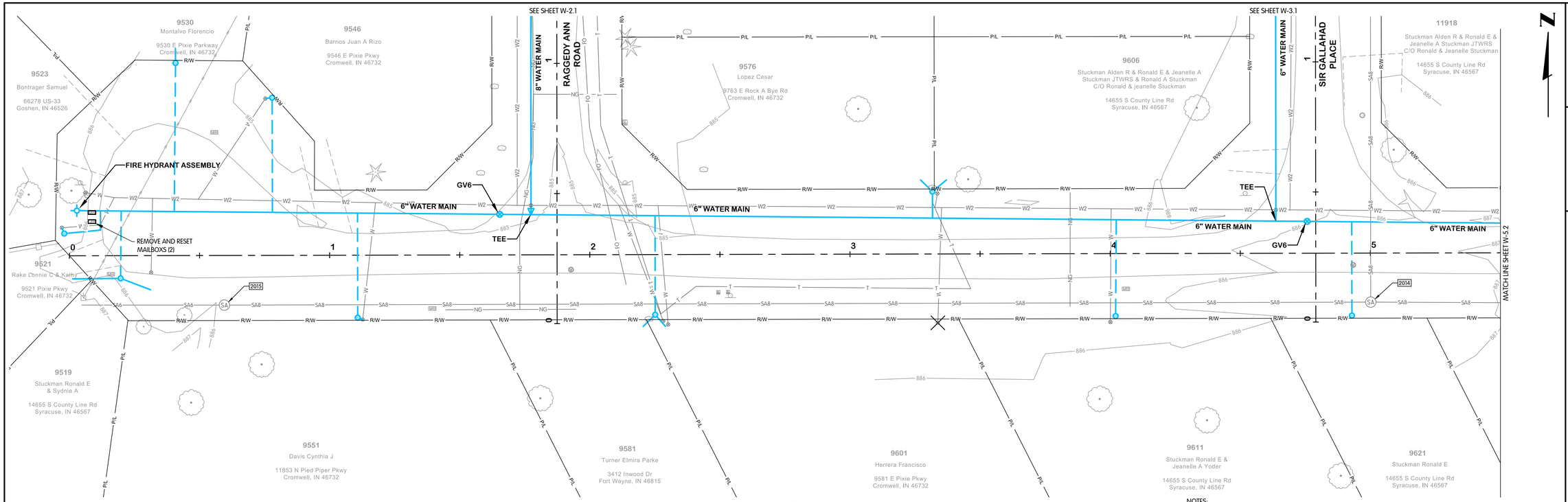
DATE: 2026
SHEET NO. W-4.3
18 OF 48

FTW-8305400W4-W-4.3 EXCALIBUR STA. 11+00 TO 11+50
1/29/2026 11:44 AM - JBLAISING
1/29/2026 11:43 AM



EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2014	SANITARY MANHOLE	CASTING EL. 885.71 8" W INV. EL. 879.91 8" E INV. EL. 880.91 8" N INV. EL. 880.11
2015	SANITARY MANHOLE	CASTING EL. 885.65 8" E INV. EL. 881.15 6" W INV. EL. 881.15

NOTES:

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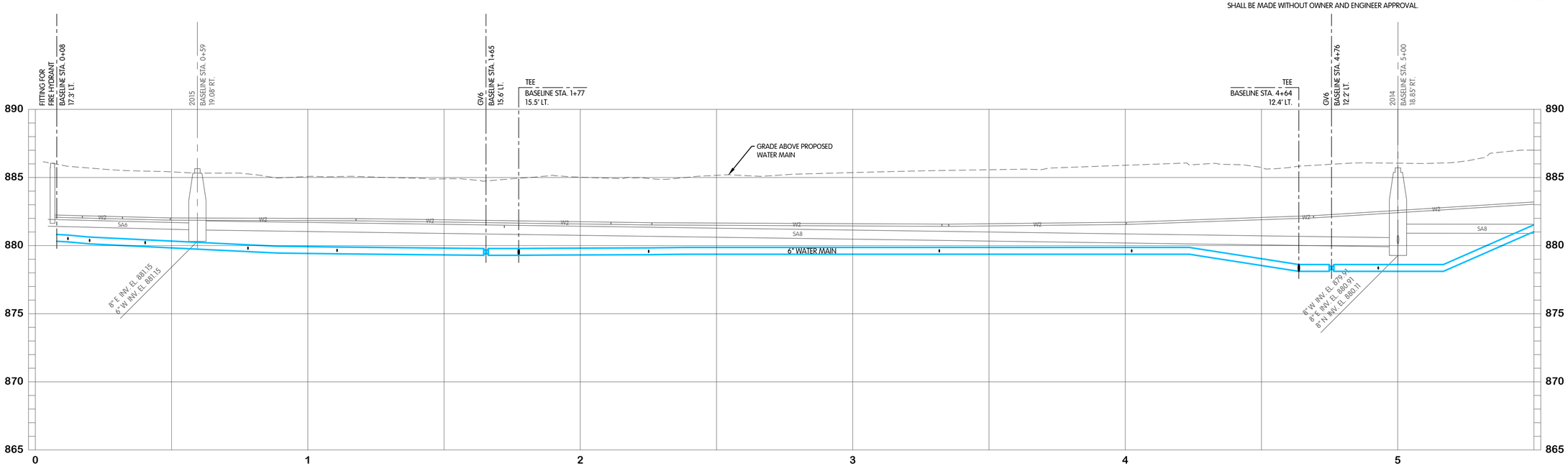


PIXIE PARKWAY
WATER
PLAN AND PROFILE
STA. 0+00 TO 5+50

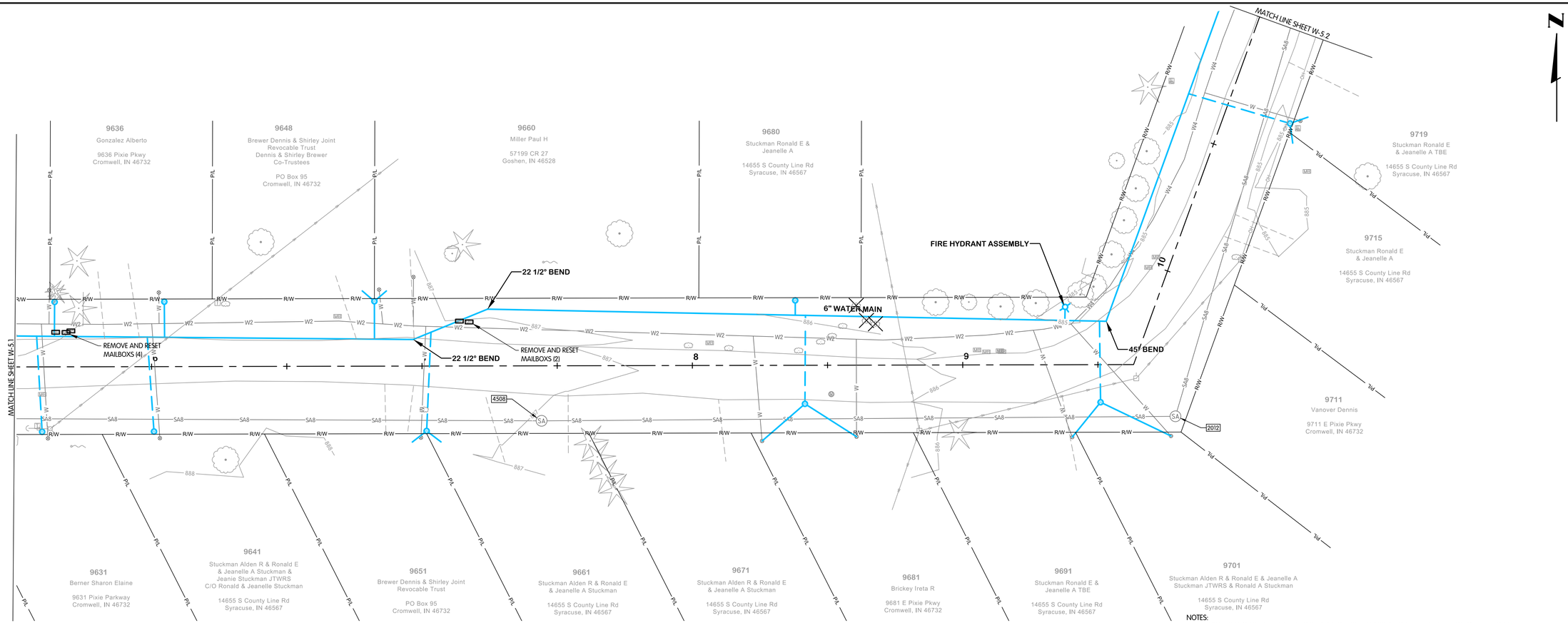
TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			JPM
4			
3			
2	01-28-2026	ADDENDUM 2	
1			

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

JOB NO. 868-8305.400
SCALE 1"=20' HOR. 1"=4' VERT.
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
DESIGNED JPM | DRAWN AJB | CHECKED MSH
STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO. W-5.1
19 OF 48

FTW-8305.400WS-W-5.1 PIXIE STA. 0+00 TO 5+50
JPM
1/29/2026 12:02 PM
AJB-ALASING
1/29/2026 11:44 AM



PIXIE PARKWAY

EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2012	SANITARY MANHOLE	CASTING EL. 885.68 8" W INV. EL. 880.79 8" N INV. EL. 880.78
4508	SANITARY MANHOLE	CASTING EL. 886.53 8" W INV. EL. 880.86 8" E INV. EL. 880.83

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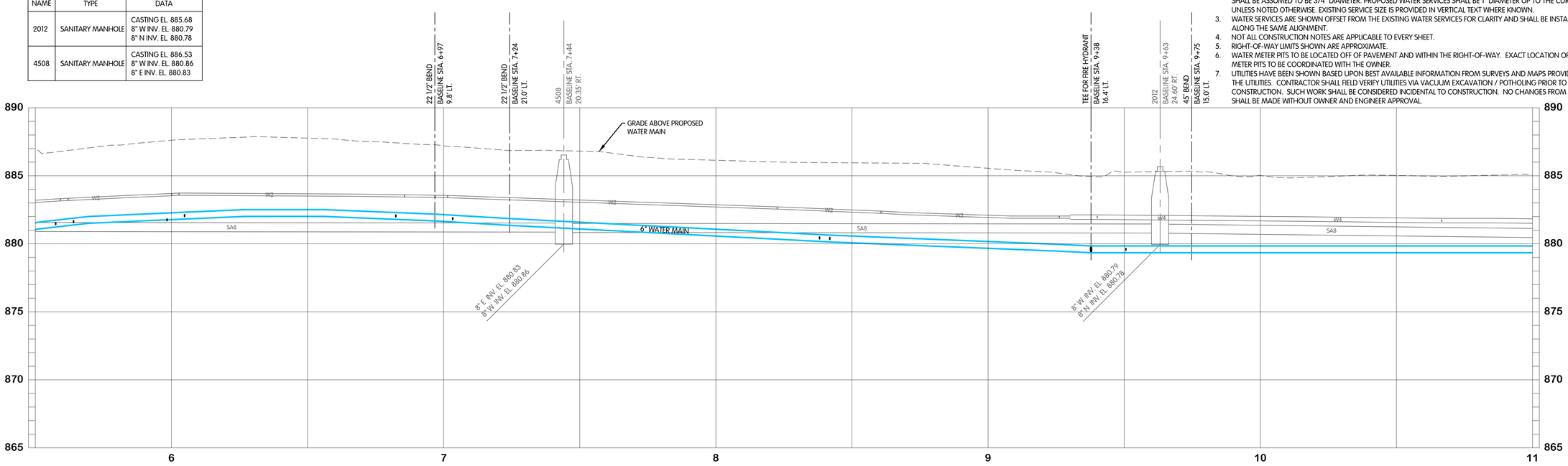

MICHAEL S. HARKNESS REGISTERED No. 19900563 STATE OF INDIANA PROFESSIONAL ENGINEER
01-13-2025

TCRSD

PIXIE PARKWAY WATER PLAN AND PROFILE STA. 5+50 TO 11+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-28-2026	ADDENDUM 2	JPM
1			

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JOB NO. 868-8305.400
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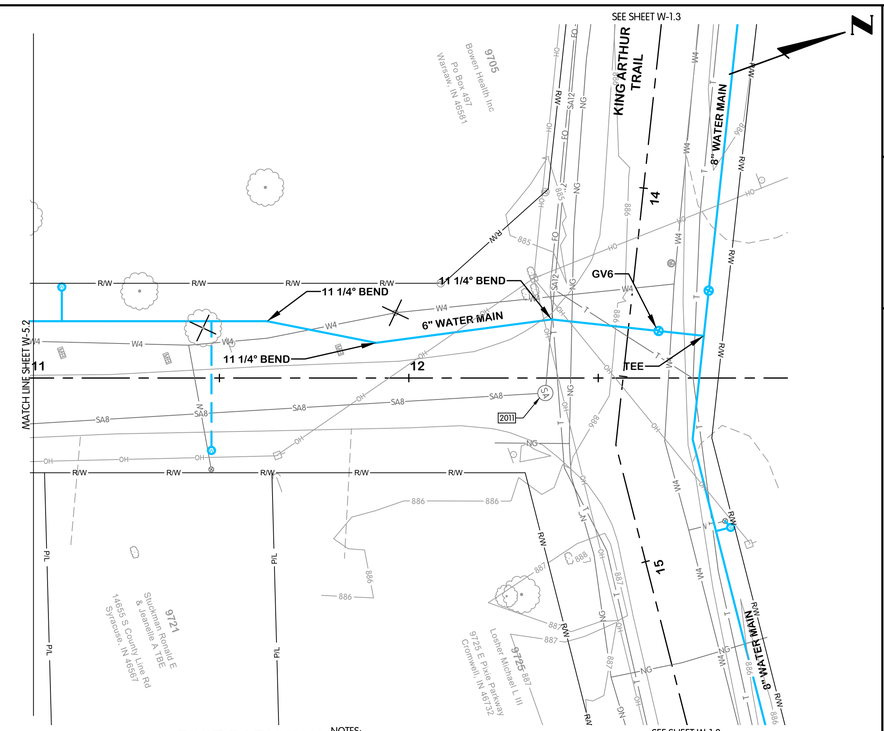
DESIGNED JPM | DRAWN AJB | CHECKED MSH
STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO. W-5.2
20 OF 48

FTW-8305.00WS-W-5.2 PIXIE STA. 5+50 TO 11+00
JTW 2026 LTW4 - ABLASING
1/29/2026 11:44 AM



PIXIE PARKWAY

EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2011	SANITARY MANHOLE	CASTING EL. 886.07 8" S INV. EL. 880.14 12" NW INV. EL. 880.18

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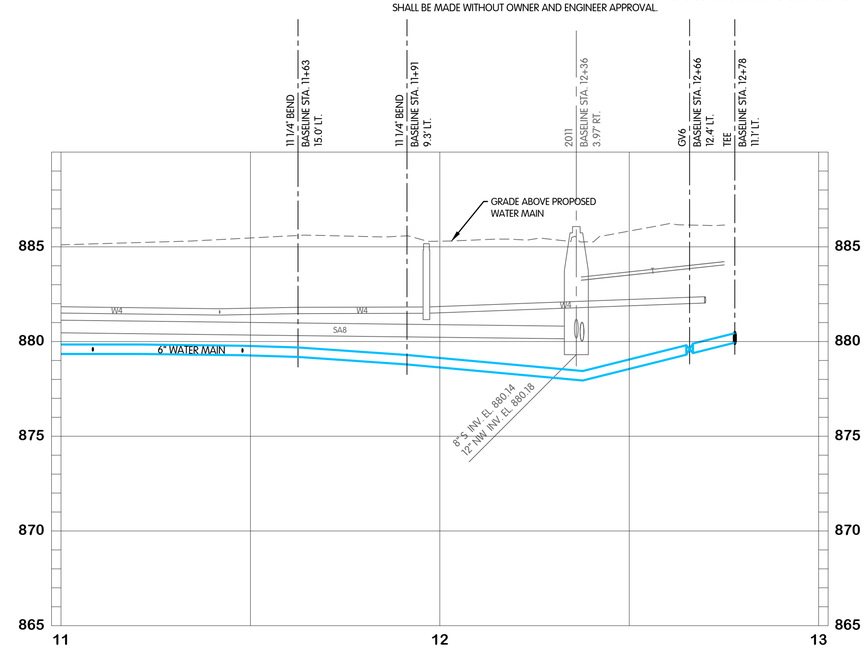

PIXIE PARKWAY
WATER
PLAN AND PROFILE
STA. 11+00 TO 13+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
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3			
2	01-28-2026	ADDENDUM 2	JPM
1			

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JOB NO. 868-8305.400

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

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID

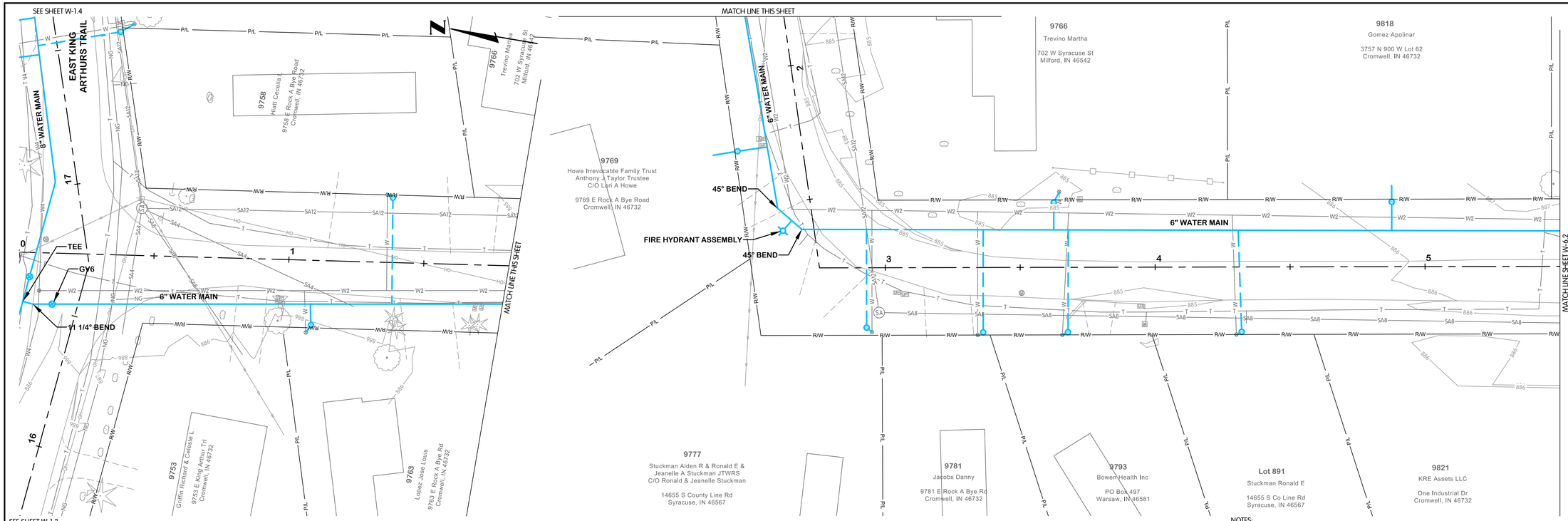
DATE: 2026

SHEET NO. 2

W-5.3

21 OF 48

FTW-8305.00W5-W-5.3 PIXIE STA. 11+00 TO 13+00
1/29/2026 JPM
1/29/2026 11:45 AM



EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2022	SANITARY MANHOLE	CASTING EL. 885.63 12" S INV. EL. 879.78 12" E INV. EL. 879.68 8" SW INV. EL. 879.78 4" W INV. EL. 880.33 4" S INV. EL. 880.73
2023	SANITARY MANHOLE	CASTING EL. 885.42 8" E INV. EL. 880.05 12" N INV. EL. 880.02

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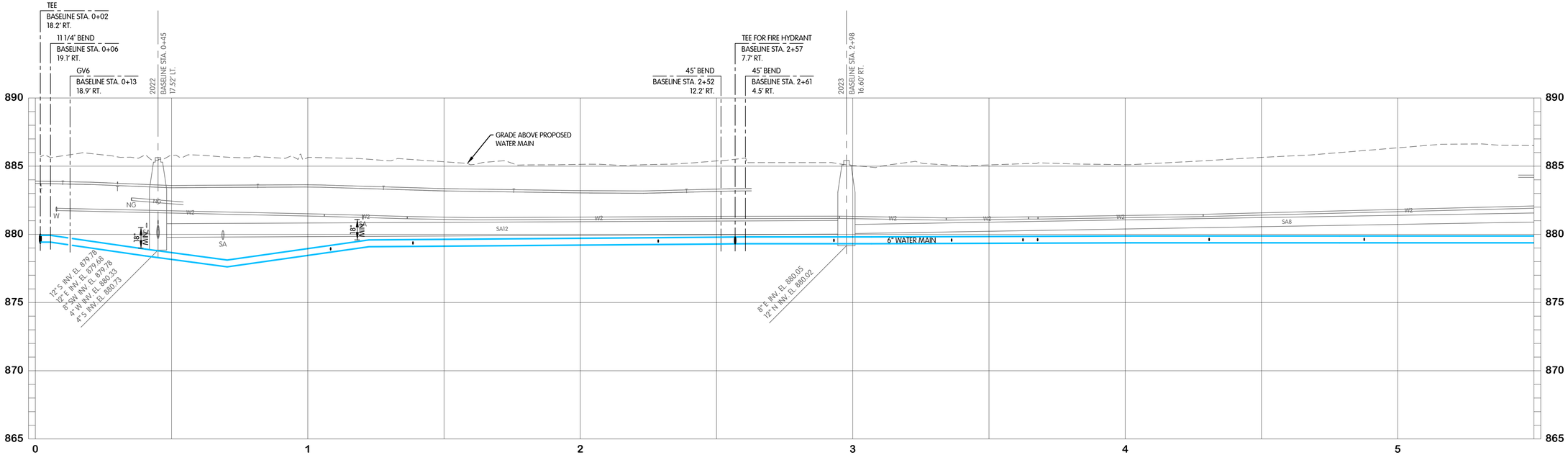

ROCK-A-BYE ROAD
WATER
PLAN AND PROFILE
STA. 0+00 TO 5+50

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
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2			
1	01-28-2025	ADDENDUM 2	JPM

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JOB NO. 868-8305.400
SCALE 1"=20' HOR. 1"=4' VERT.
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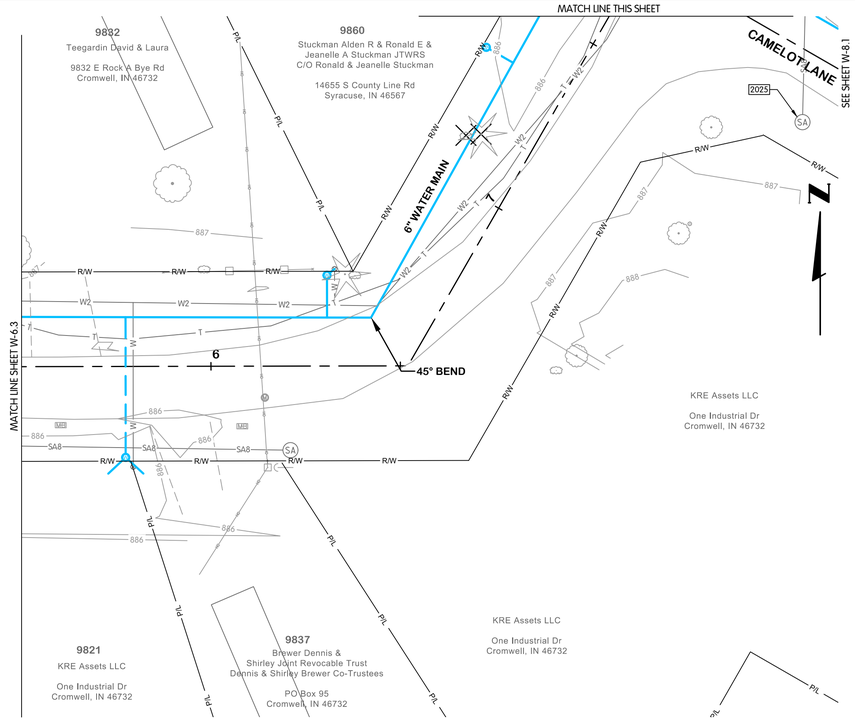
DESIGNED JPM | DRAWN AJB | CHECKED MSH
STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO. W-6.1
22 OF 48

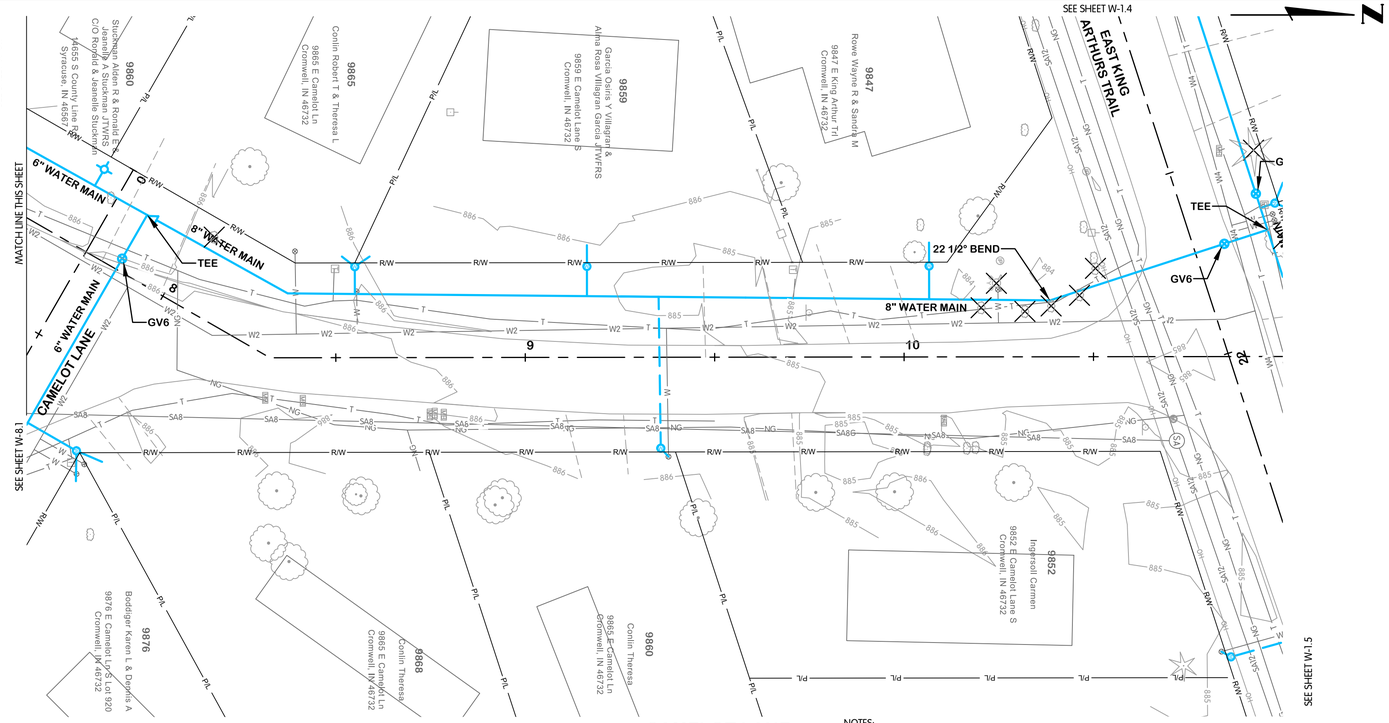
MICHAEL S. HARKNESS REGISTERED No. 19900563 STATE OF INDIANA PROFESSIONAL ENGINEER
01-13-2025

TCRSD

FTW-8305.400W6-W-6.1 ROCK A BYE STA. 0+00 TO 5+50
JPM
1/29/2026 11:45 AM
1/29/2026 11:45 AM - ABLAISING



ROCK-A-BYE ROAD



CAMELOT LANE

EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2024	SANITARY MANHOLE	CASTING EL. 886.39 8" W INV. EL. 881.14
2025	SANITARY MANHOLE	CASTING EL. 886.12 8" N INV. EL. 880.40
2029	SANITARY MANHOLE	CASTING EL. 885.27 8" S INV. EL. 880.22 12" W INV. EL. 879.22 12" E INV. EL. 879.20

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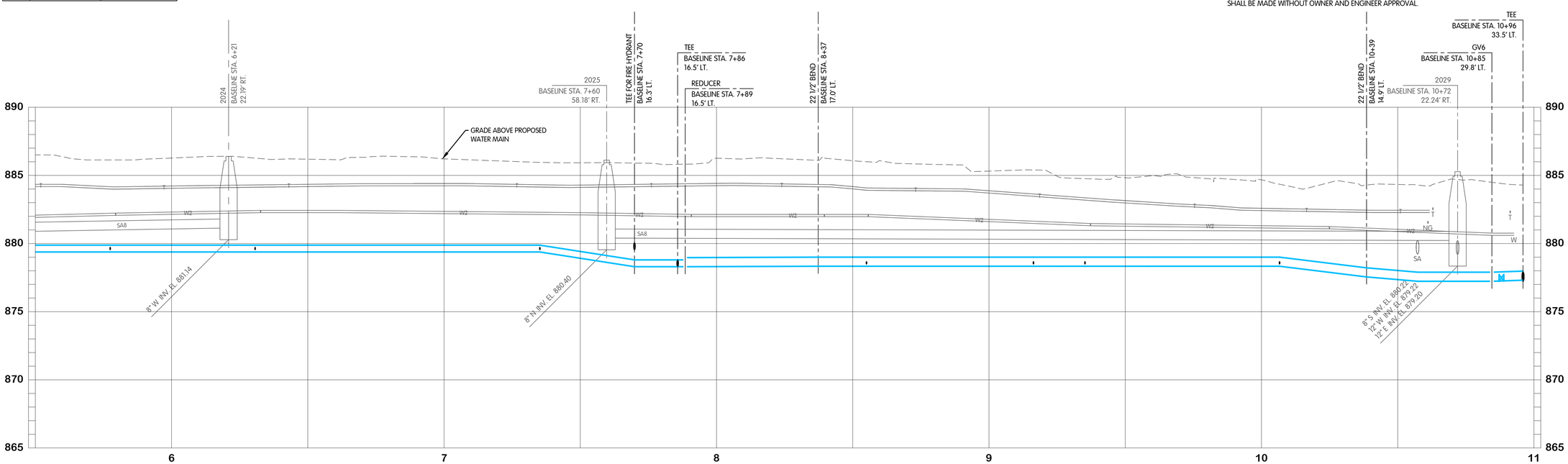

MICHAEL S. HARKNESS REGISTERED No. 19900563 STATE OF INDIANA PROFESSIONAL ENGINEER

01-13-2025

TCRSD

ROCK-A-BYE ROAD
WATER
PLAN AND PROFILE
STA. 5+50 TO 11+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2			
1	01-28-2026	ADDENDUM	JPM

Jones & Henry Engineers, Ltd.

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JOB NO. 868-8305.400

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

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

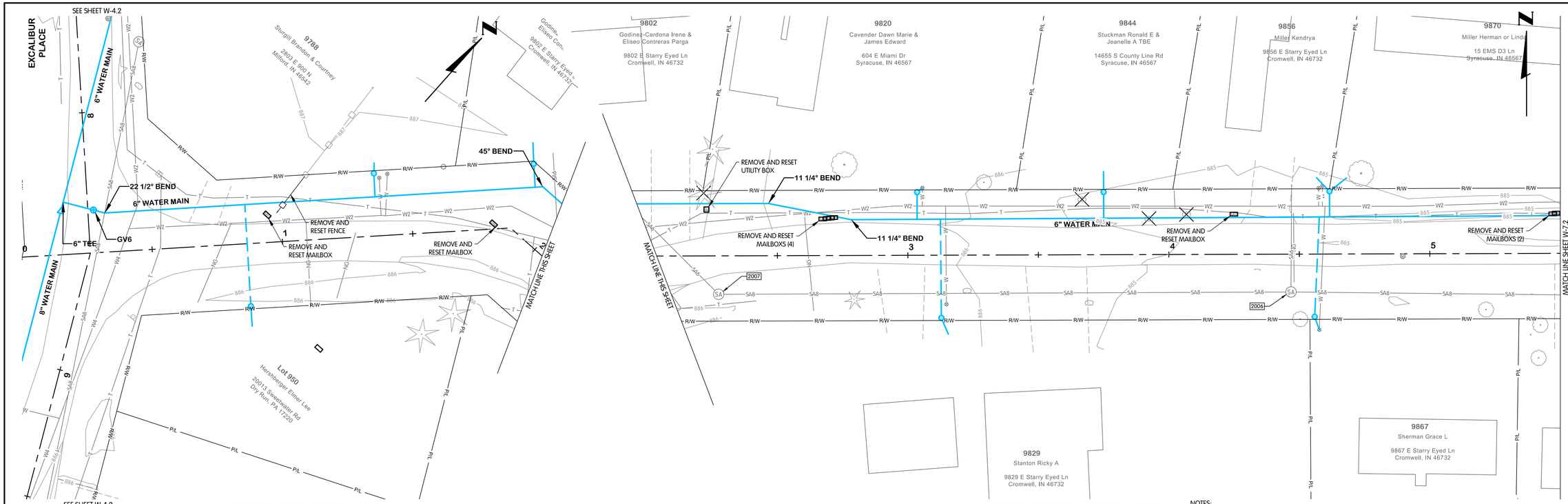
DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID

DATE: 2026

SHEET NO. W-6.2

FTW-8305400W6-W-6.2 ROCK A BYE STA. 5+50 TO 11+00
01/28/2026 11:25 AM JPMARKS
1/29/2026 11:06 AM ABLAISING



EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2006	SANITARY MANHOLE	CASTING EL. 884.44 8" W INV. EL. 880.24 8" E INV. EL. 880.21 6" N INV. EL. 880.24
2007	SANITARY MANHOLE	CASTING EL. 886.13 8" E INV. EL. 881.57 6" NW INV. EL. 881.73

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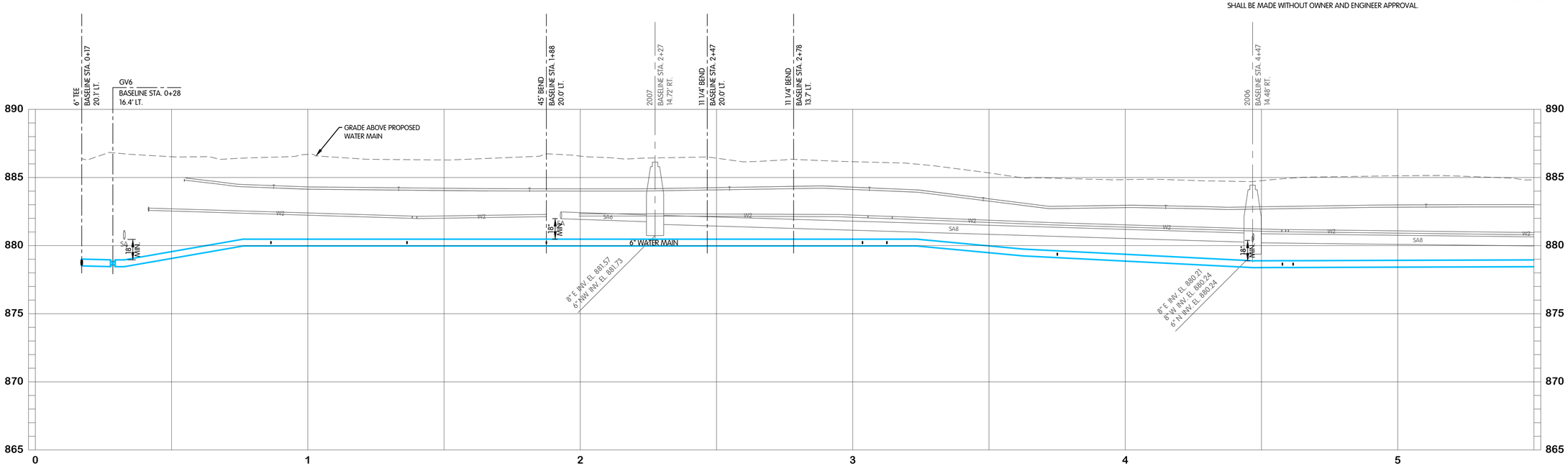

EAST STARRY EYED LANE
WATER
PLAN AND PROFILE
STA. 0+00 TO 5+50

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-28-2026	ADDENDUM 2	JPM
1			

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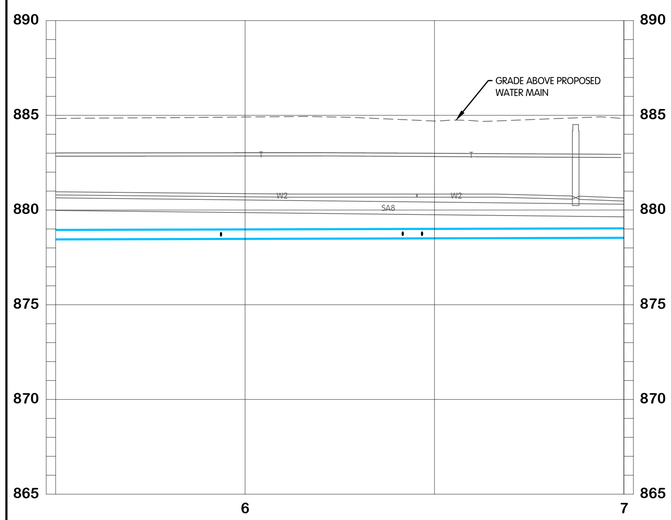
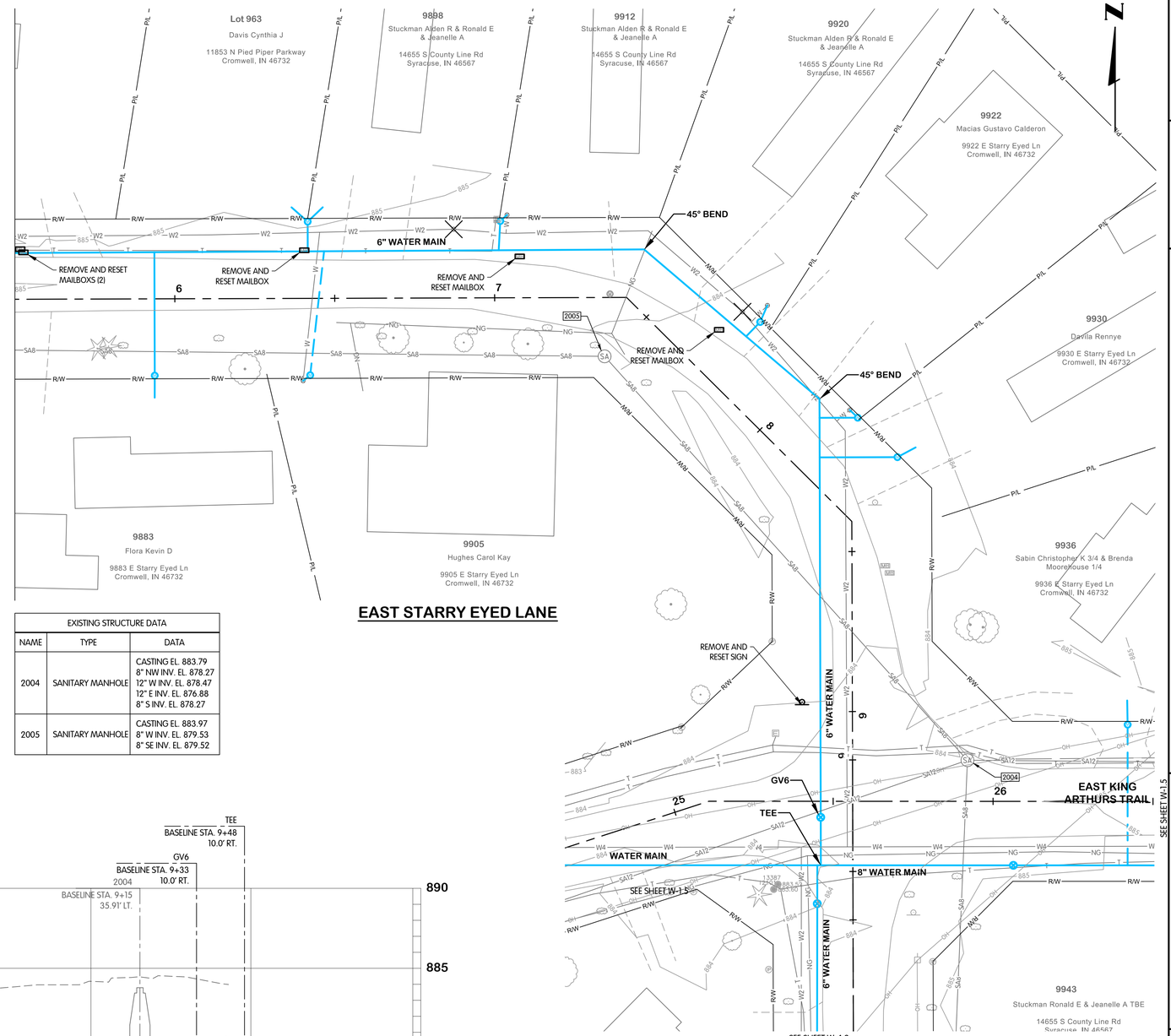
DESIGNED JPM | DRAWN AJB | CHECKED MSH
STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO. 2
W-7.1
24 OF 48

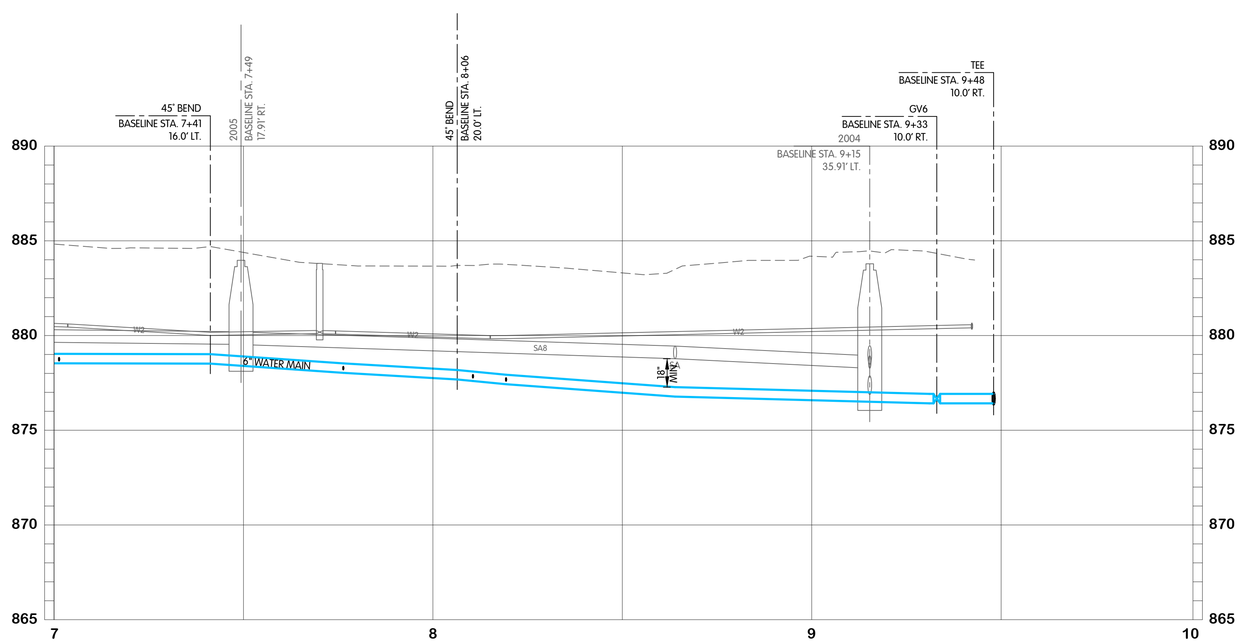
FTW-8305.400W7-W-7.1 STARRY EYED STA. 0+00 TO 5+50
PLOTTED BY: Jeffrey A. ABLASINO
1/29/2026 11:46 AM





EAST STARRY EYED LANE

EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2004	SANITARY MANHOLE	CASTING EL. 883.79 8" NW INV. EL. 878.27 12" W INV. EL. 878.47 12" E INV. EL. 876.88 8" S INV. EL. 878.27
2005	SANITARY MANHOLE	CASTING EL. 883.97 8" W INV. EL. 879.53 8" SE INV. EL. 879.52



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MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

EAST STARRY EYED LANE
WATER
PLAN AND PROFILE
STA. 5+50 TO 10+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
2	01-26-2026	ADDENDUM 2	JPM

Jones & Henry Engineers, Ltd.

Fluid thinking℠
www.JHeng.com

JOB NO. 868-8305.400

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

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

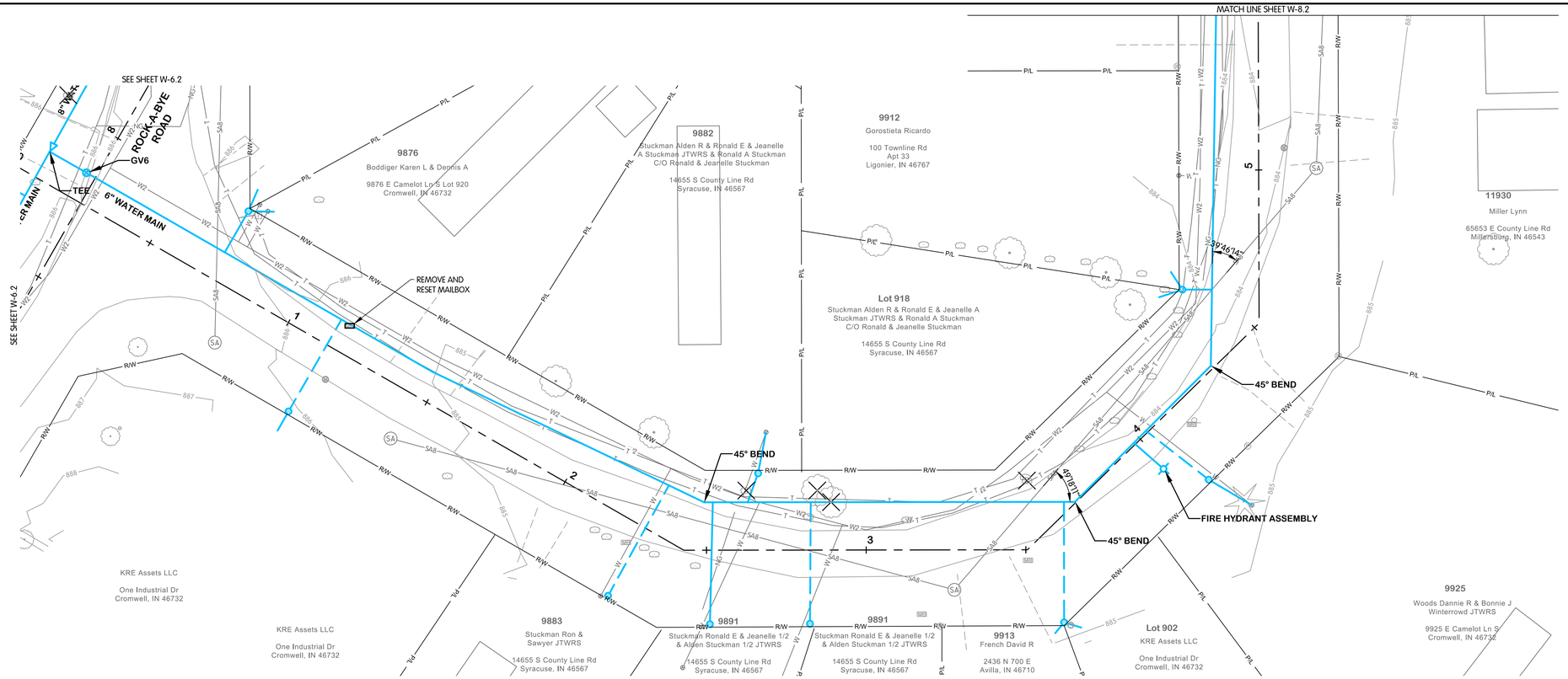
STATUS: ISSUED FOR BID

DATE: 2026

SHEET NO. W-7.2

25 OF 48

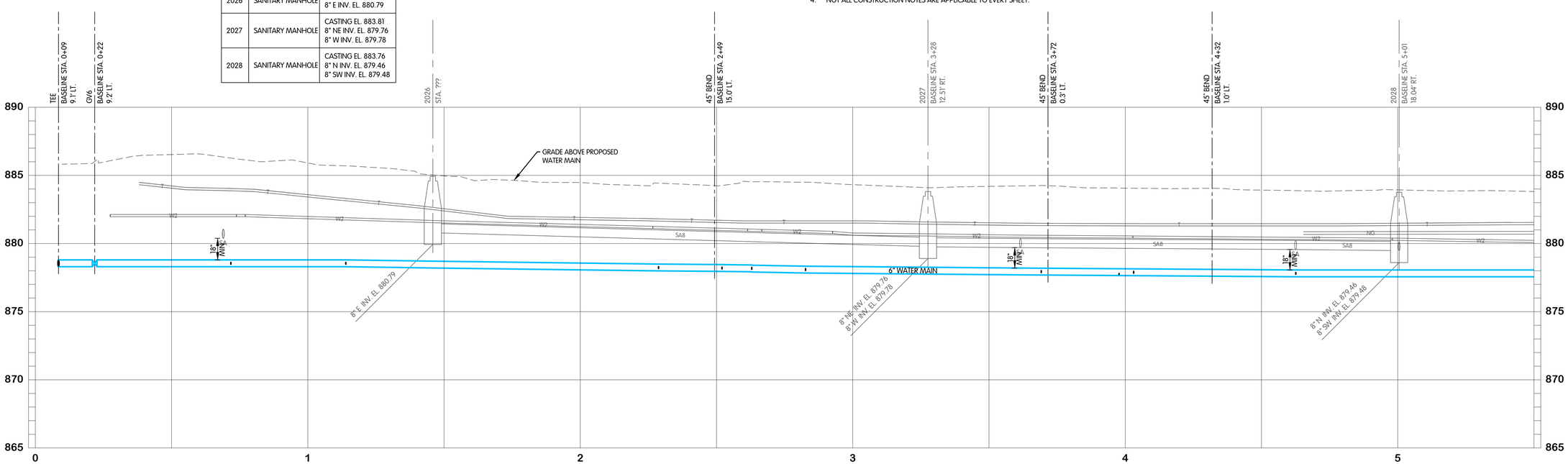
FTW-8305x00W7-W-7.2 STARRY EYED STA. 5+50 TO 11+00
1/29/2026 11:07 AM - ABLASING
1/29/2026 11:47 AM



EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2025	SANITARY MANHOLE	CASTING EL. 886.12 8" N INV. EL. 880.40
2026	SANITARY MANHOLE	CASTING EL. 884.92 8" E INV. EL. 880.79
2027	SANITARY MANHOLE	CASTING EL. 883.81 8" NE INV. EL. 879.76 8" W INV. EL. 879.78
2028	SANITARY MANHOLE	CASTING EL. 883.76 8" N INV. EL. 879.46 8" SW INV. EL. 879.48

NOTES:

1. CONTRACTOR SHALL TRIM TREES AND BRUSH AS NECESSARY FOR THE INSTALLATION OF THE WORK.
2. THE CONTRACTOR SHALL PROVIDE WATER SERVICE CONNECTIONS OF A DIAMETER TO MATCH THE ORIGINAL NOMINAL DIAMETER OF THE SERVICE. THE MINIMUM SERVICE DIAMETER SHALL BE 3/4". WATER SERVICE WITH NO SIZE SHOWN SHALL BE ASSUMED TO BE 3/4" DIAMETER. PROPOSED WATER SERVICES SHALL BE 1" DIAMETER UP TO THE CURB BOX, UNLESS NOTED OTHERWISE. EXISTING SERVICE SIZE IS PROVIDED IN VERTICAL TEXT WHERE KNOWN.
3. WATER SERVICES ARE SHOWN OFFSET FROM THE EXISTING WATER SERVICES FOR CLARITY AND SHALL BE INSTALLED ALONG THE SAME ALIGNMENT.
4. NOT ALL CONSTRUCTION NOTES ARE APPLICABLE TO EVERY SHEET.
5. RIGHT-OF-WAY LIMITS SHOWN ARE APPROXIMATE.
   WATER METER PITS TO BE LOCATED OFF OF PAVEMENT AND WITHIN THE RIGHT-OF-WAY. EXACT LOCATION OF THE METER PITS TO BE COORDINATED WITH THE OWNER.
6. UTILITIES HAVE BEEN SHOWN BASED UPON BEST AVAILABLE INFORMATION FROM SURVEYS AND MAPS PROVIDED BY THE UTILITIES. CONTRACTOR SHALL FIELD VERIFY UTILITIES VIA VACUUM EXCAVATION / POTHOLING PRIOR TO CONSTRUCTION. SUCH WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION. NO CHANGES FROM PLANS SHALL BE MADE WITHOUT OWNER AND ENGINEER APPROVAL.



MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

CAMELOT LANE
WATER
PLAN AND PROFILE
STA. 0+00 TO 5+50

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
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3			
2	01-28-2026	ADDENDUM 2	JPM
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JOB NO.	868-8305.400
SCALE	1"=20' HOR. 1"=4' VERT.
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE	
DESIGNED JPM	DRAWN AJB / CHECKED MSH
STATUS:	ISSUED FOR BID
DATE	2026
SHEET NO.	W-8.1
	26 OF 48

FTW-8305-00W8-W-8.1 CAMELOT STA. 0+00 TO 5+50
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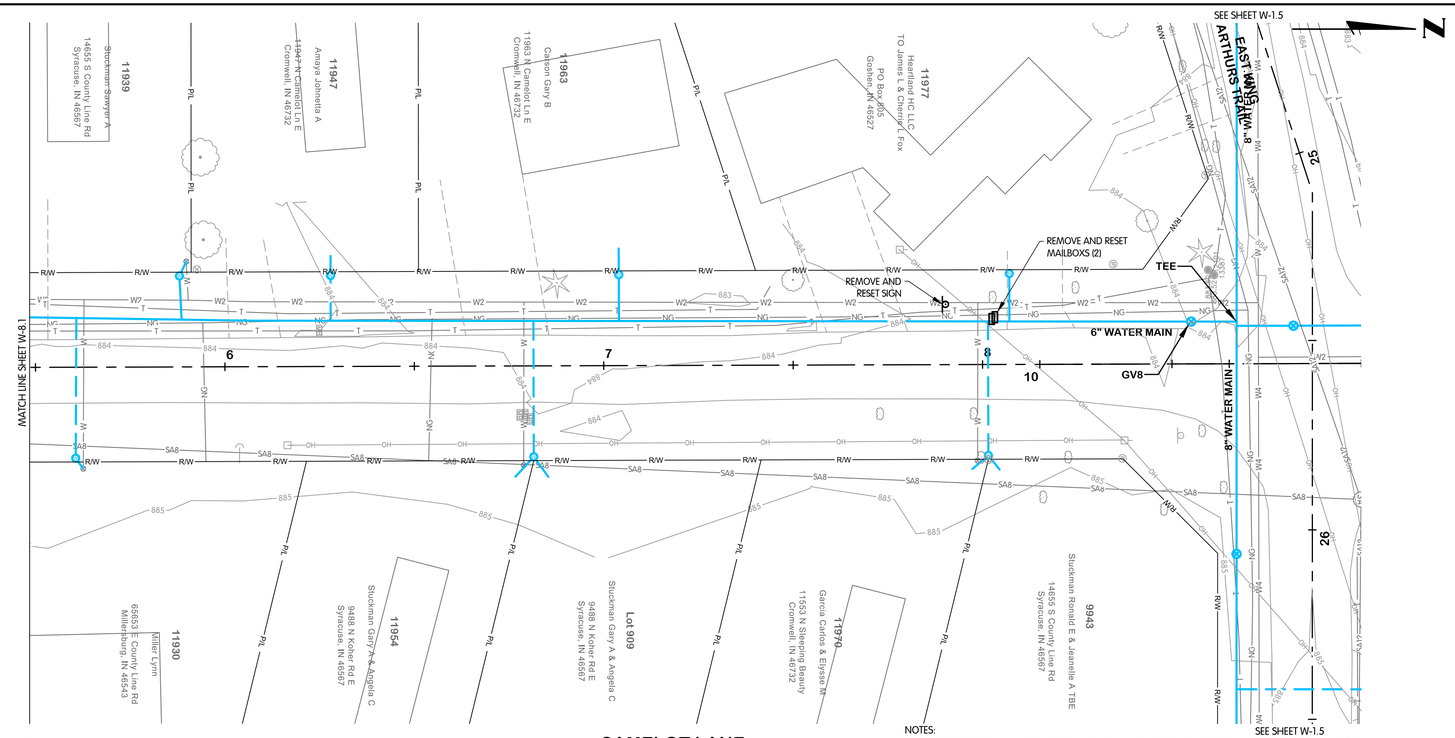
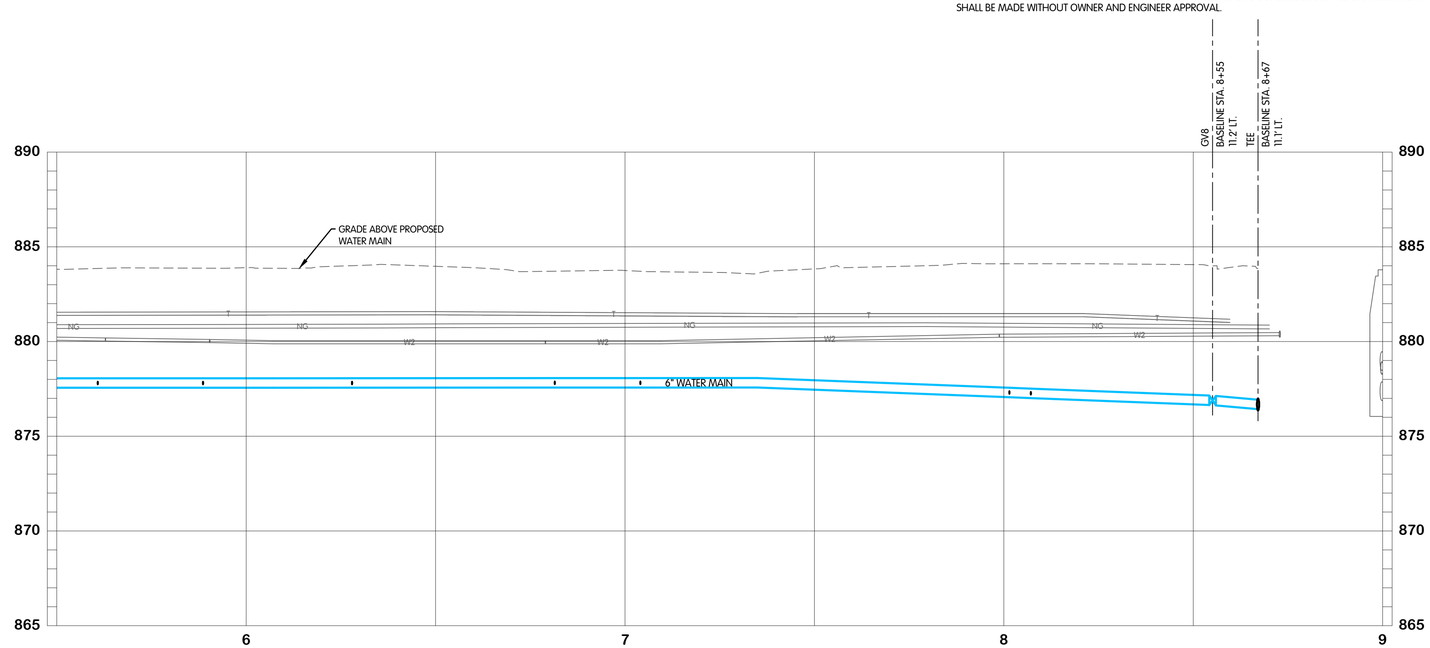


CAMELOT LANE

EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2004	SANITARY MANHOLE	CASTING EL. 883.79 8" NW INV. EL. 878.27 12" W INV. EL. 878.47 12" E INV. EL. 876.88 8" S INV. EL. 878.27

NOTES:

1. CONTRACTOR SHALL TRIM TREES AND BRUSH AS NECESSARY FOR THE INSTALLATION OF THE WORK.
2. THE CONTRACTOR SHALL PROVIDE WATER SERVICE CONNECTIONS OF A DIAMETER TO MATCH THE ORIGINAL NOMINAL DIAMETER OF THE SERVICE. THE MINIMUM SERVICE DIAMETER SHALL BE 3/4". WATER SERVICE WITH NO SIZE SHOWN SHALL BE ASSUMED TO BE 3/4" DIAMETER. PROPOSED WATER SERVICES SHALL BE 1" DIAMETER UP TO THE CURB BOX, UNLESS NOTED OTHERWISE. EXISTING SERVICE SIZE IS PROVIDED IN VERTICAL TEXT WHERE KNOWN.
3. WATER SERVICES ARE SHOWN OFFSET FROM THE EXISTING WATER SERVICES FOR CLARITY AND SHALL BE INSTALLED ALONG THE SAME ALIGNMENT.
4. NOT ALL CONSTRUCTION NOTES ARE APPLICABLE TO EVERY SHEET.
5. RIGHT-OF-WAY LIMITS SHOWN ARE APPROXIMATE.
6. WATER METER PITS TO BE LOCATED OFF OF PAVEMENT AND WITHIN THE RIGHT-OF-WAY. EXACT LOCATION OF THE METER PITS TO BE COORDINATED WITH THE OWNER.
7. UTILITIES HAVE BEEN SHOWN BASED UPON BEST AVAILABLE INFORMATION FROM SURVEYS AND MAPS PROVIDED BY THE UTILITIES. CONTRACTOR SHALL FIELD VERIFY UTILITIES VIA VACUUM EXCAVATION / POTHOLING PRIOR TO CONSTRUCTION. SUCH WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION. NO CHANGES FROM PLANS SHALL BE MADE WITHOUT OWNER AND ENGINEER APPROVAL.



MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF INDIANA
PROFESSIONAL ENGINEER

01-13-2025

TCRSD

CAMELOT LANE
WATER
PLAN AND PROFILE
STA. 5+50 TO 9+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			JPM
4			
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2			
1	01-29-2026	ADDENDUM 2	

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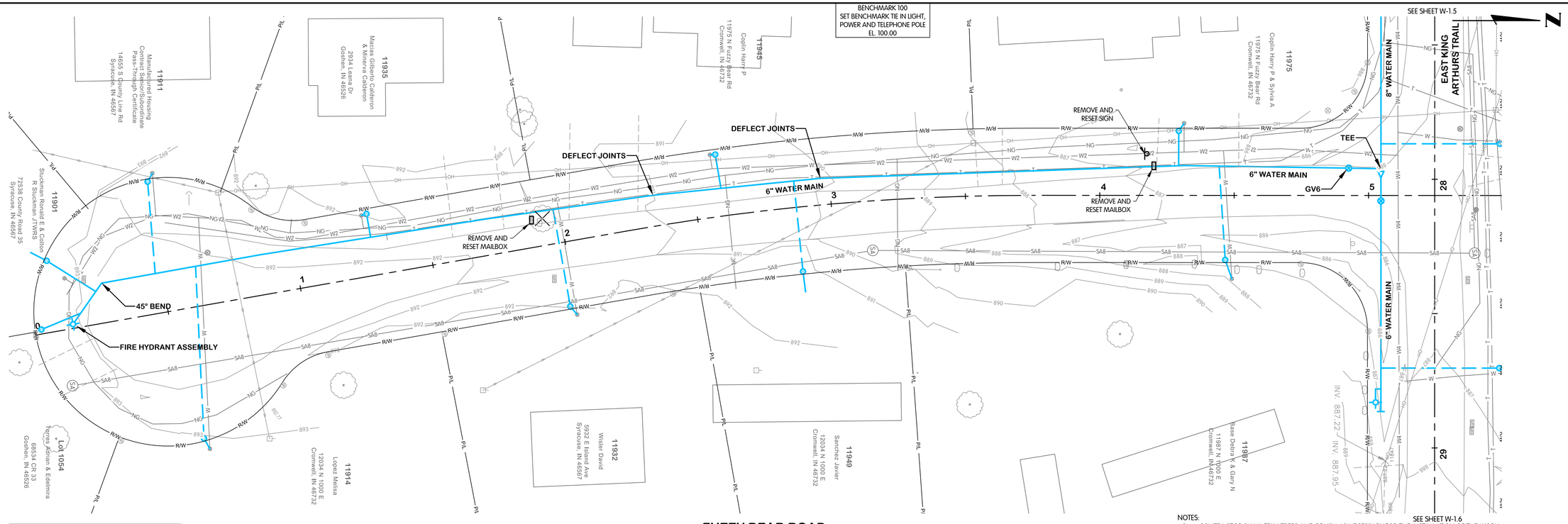
DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO. W-8.2
27 OF 48

FTW-8305400W-W-8.2 CAMELOT STA. 5+50 TO 9+00
1/29/2026 2:09pm - AJBLANSING
1/29/2026 11:48 AM



EXISTING STRUCTURE DATA		
NAME	TYPE	DATA
2000	SANITARY MANHOLE	CASTING EL. 892.88 8" N INV. EL. 885.75
2001	SANITARY MANHOLE	CASTING EL. 889.68 8" N INV. EL. 882.55 8" S INV. EL. 883.55
2002	SANITARY MANHOLE	CASTING EL. 886.09 8" W INV. EL. 880.02 8" S INV. EL. 880.11

NOTES:

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2. THE CONTRACTOR SHALL PROVIDE WATER SERVICE CONNECTIONS OF A DIAMETER TO MATCH THE ORIGINAL NOMINAL DIAMETER OF THE SERVICE. THE MINIMUM SERVICE DIAMETER SHALL BE 3/4". WATER SERVICE WITH NO SIZE SHOWN SHALL BE ASSUMED TO BE 3/4" DIAMETER. PROPOSED WATER SERVICES SHALL BE 1" DIAMETER UP TO THE CURB BOX, UNLESS NOTED OTHERWISE. EXISTING SERVICE SIZE IS PROVIDED IN VERTICAL TEXT WHERE KNOWN.
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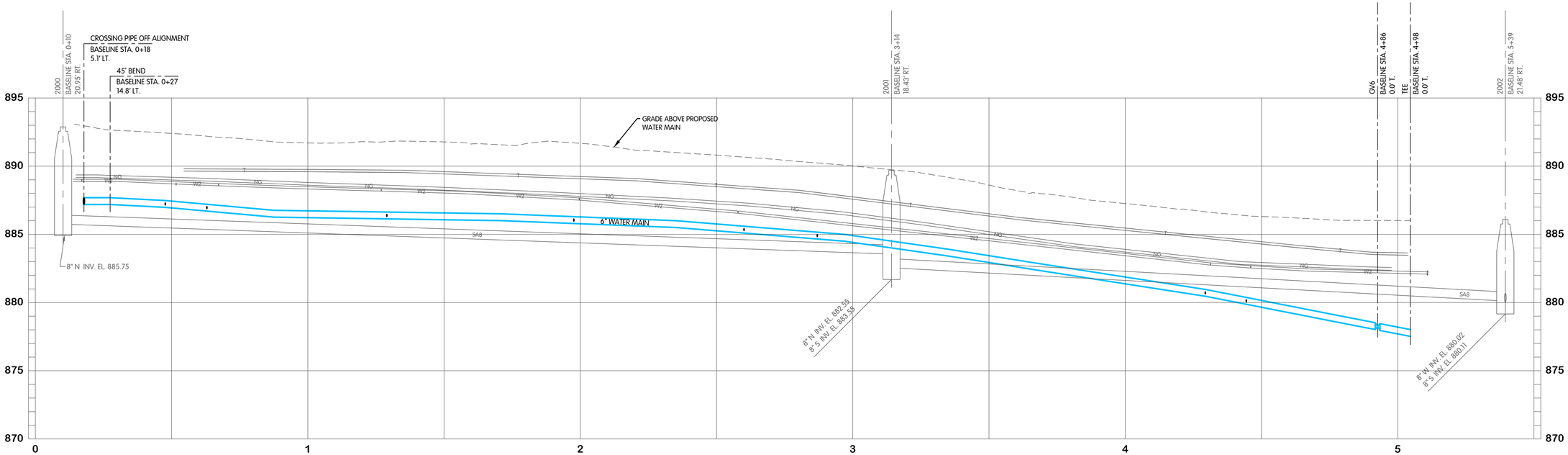

FTW-8305400W9-W-9.1 FUZZY BEAR STA. 0+00 TO 5+50
01/29/2026 2:10 PM JPMAHONEY
1/29/2026 11:48 AM ABLASING

MICHAEL S. HARKNESS REGISTERED No. 19900563 STATE OF INDIANA PROFESSIONAL ENGINEER
01-13-2025

TCRSD

FUZZY BEAR ROAD WATER PLAN AND PROFILE STA. 0+00 TO 5+50

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

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5			
4			
3			
2	01-28-2026	ADDENDUM	JPM
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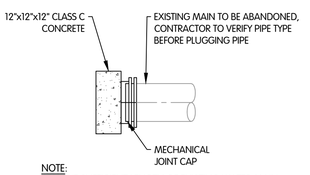
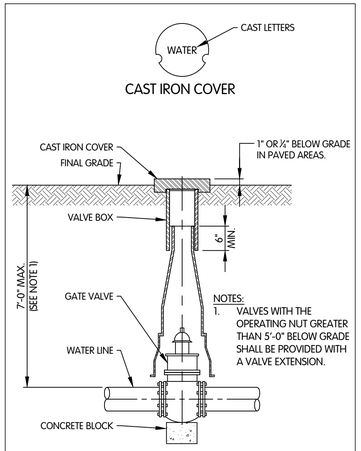
DESIGNED JPM DRAWN AJB CHECKED MSH
STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO. W-9.1
28 OF 48



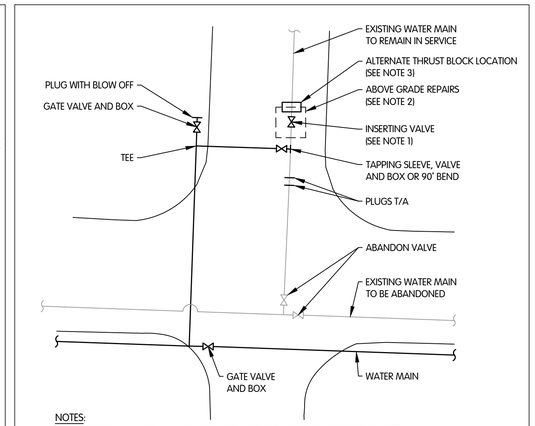
NOTE:
REMOVE SUFFICIENT LENGTH OF EXISTING WATER MAIN PIPE (2' MIN.) TO PERMIT THE INSTALLATION OF THE PLUG.

WATER MAIN PLUG DETAIL
NTS



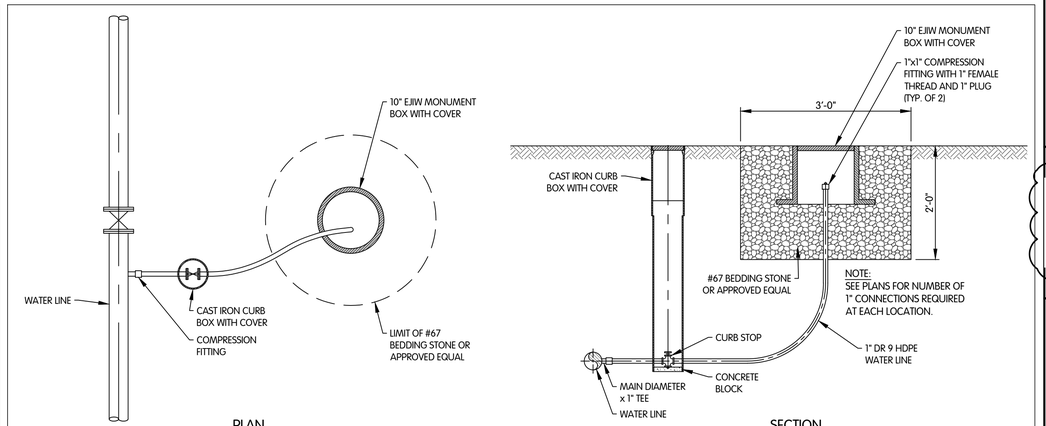
NOTES:
1. VALVES WITH THE OPERATING NUT GREATER THAN 5'-0" BELOW GRADE SHALL BE PROVIDED WITH A VALVE EXTENSION.

GATE VALVE DETAIL FOR 12" AND SMALLER WATER MAINS
NTS



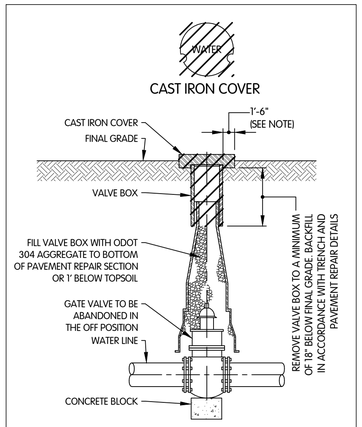
NOTES:
1. INSERTING VALVES MAY BE INSTALLED AT THE DISCRETION OF THE ENGINEER IN LOCATIONS DESIGNATED BY THE OWNER. THE INSERTING VALVES SHALL SERVE TO ASSIST IN CONNECTING NEW WATER MAINS TO EXISTING WATER MAINS.
2. RESTORATION AND REPAIR OF EXISTING ABOVE GRADE FACILITIES SHALL BE INCLUDED UNDER OTHER PAY ITEMS.
3. THE CONTRACTOR MAY INSTALL THE THRUST BLOCK AS SHOWN IN THE DETAIL TITLED "WATER MAIN ABANDONMENT AND TERMINATION DETAIL" AT THE ALTERNATE LOCATION SHOWN ON THE PLANS WITH THE APPROVAL OF THE ENGINEER.

TYPICAL INSERTING VALVE INSTALLATION
NTS

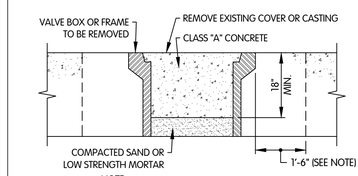


NOTE:
SEE PLANS FOR NUMBER OF 1" CONNECTIONS REQUIRED AT EACH LOCATION.

WATER BLOW-OFF ASSEMBLY
NTS

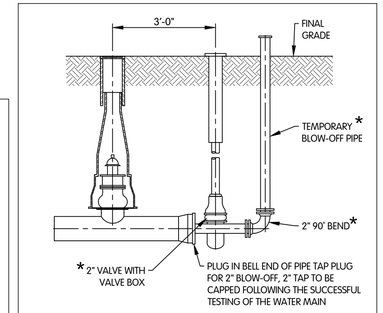


VALVE ABANDONMENT DETAIL
NTS



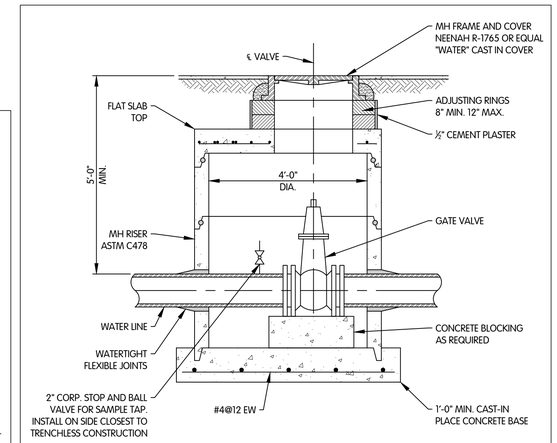
NOTE:
THE EXISTING PAVEMENT SURROUNDING THE COVER OR CASTING SHALL BE REMOVED AND REPAIRED IN ACCORDANCE WITH THE PAVEMENT REPAIR DETAILS.

ABANDONMENT DETAIL FOR WATER VALVE BOX AND MANHOLES IN PAVED AREA
NTS

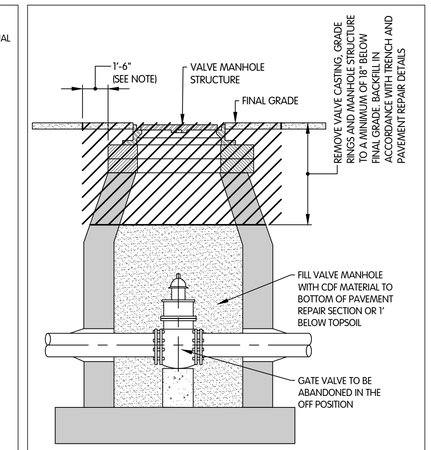


* TO BE REMOVED FOLLOWING THE SUCCESSFUL TESTING OF THE WATER MAIN.

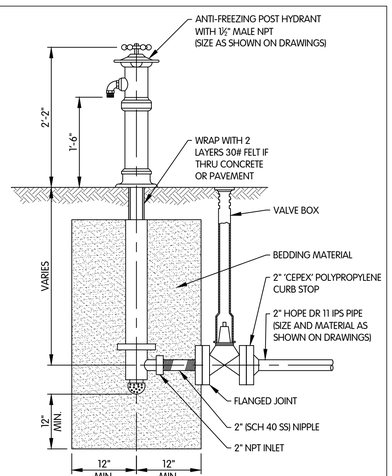
STANDARD DETAIL FOR WATER MAIN PLUG WITH 2" BLOW-OFF
NTS



WATER VALVE MANHOLE
NTS

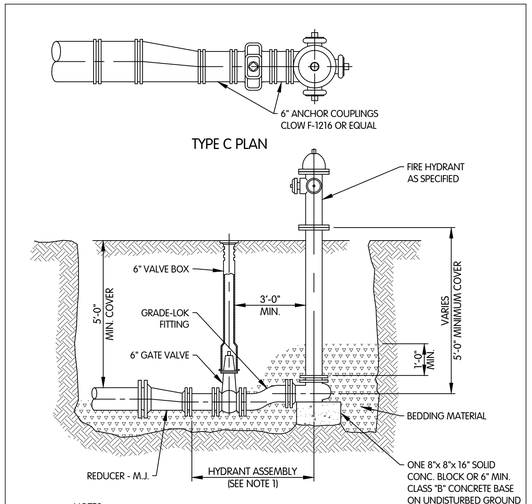


VALVE MANHOLE ABANDONMENT DETAIL
NTS



NOTE:
COAT ALL SURFACES BELOW GROUND WITH BITUMINOUS PAINT.

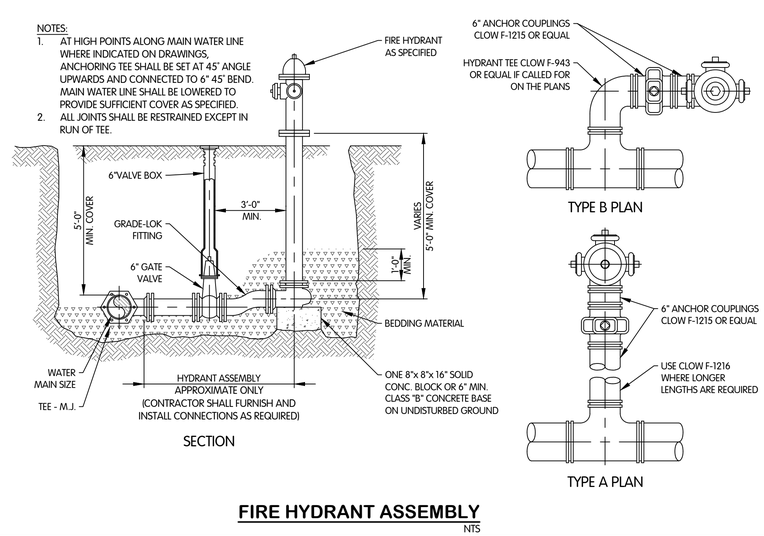
POST HYDRANT DETAIL
NTS



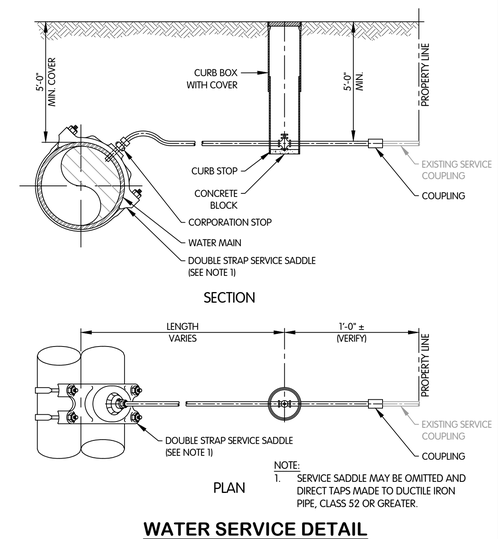
NOTES:
1. APPROXIMATE ONLY, CONTRACTOR SHALL FURNISH AND INSTALL CONNECTIONS AS REQUIRED.
2. ALL JOINTS SHALL BE RESTRAINED.

FIRE HYDRANT ASSEMBLY
NTS

NOTES:
1. AT HIGH POINTS ALONG MAIN WATER LINE WHERE INDICATED ON DRAWINGS, ANCHORING TEE SHALL BE SET AT 45° ANGLE UPWARDS AND CONNECTED TO 6" 45° BEND. MAIN WATER LINE SHALL BE LOWERED TO PROVIDE SUFFICIENT COVER AS SPECIFIED.
2. ALL JOINTS SHALL BE RESTRAINED EXCEPT IN RUN OF TEE.



FIRE HYDRANT ASSEMBLY
NTS



NOTE:
1. SERVICE SADDLE MAY BE OMITTED AND DIRECT TAPS MADE TO DUCTILE IRON PIPE, CLASS 52 OR GREATER.

WATER SERVICE DETAIL
NTS

MICHAEL S. HARKNESS REGISTERED No. 19900565 STATE OF INDIANA PROFESSIONAL ENGINEER
01-13-2025

TCRSD 2

CIVIL
WATER - MANHOLE, FIRE HYDRANT, WATER SERVICE, VALVE AND BLOWOFF DETAILS STANDARDS

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

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3			
2	01-28-2026	ADDENDUM # 2	JPM
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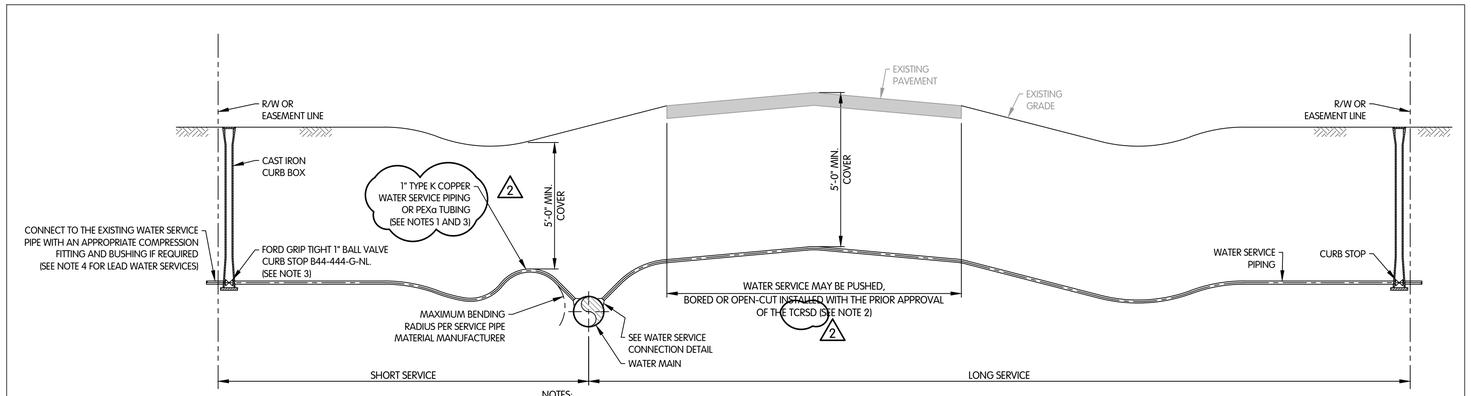
JOB NO. 868-8305.400
SCALE AS INDICATED
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO. W-0.1
29 OF 48

FTW-8305400W01-W-0.1 WATER DETAILS
01/29/2026 11:14 AM - ABLASING
1/29/2026 11:18 AM

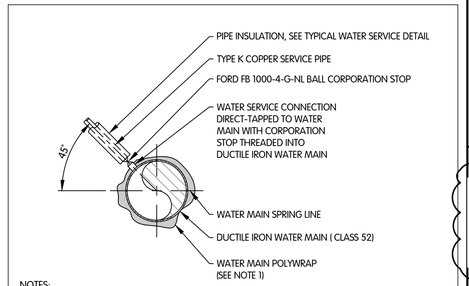


NOTES:
1. PIPE INSTALLED BY OPEN-CUT CONSTRUCTION SHALL BE PROVIDED WITH WITH THERMA-CEL SELF-SEALING OR APPROVED EQUAL PIPE INSULATION.
2. INSULATION SHALL BE TAPED TO THE WATER SERVICE PIPE DURING BACKFILLING.
3. IF THE EXISTING SERVICE PIPE HAS LESS THAN 5-FEET OF COVER, PULLING OF THE WATER SERVICE SHALL NOT BE PERMITTED.
4. DETAILS ARE PROVIDED FOR 1-INCH DIAMETER SERVICES. SERVICES UP TO 2-INCH DIAMETER SHALL USE EQUIVALENT PIPE MATERIALS AND PARTS. SERVICES 4-INCHES AND LARGER SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS FOR WATER MAINS.
5. IF LEAD WATER SERVICE MATERIAL IS DISCOVERED, SEE SPECIFICATIONS FOR MORE INFORMATION.
6. SERVICE LEADS SHALL HAVE TRACER WIRE.

2

TYPICAL WATER SERVICE DETAIL

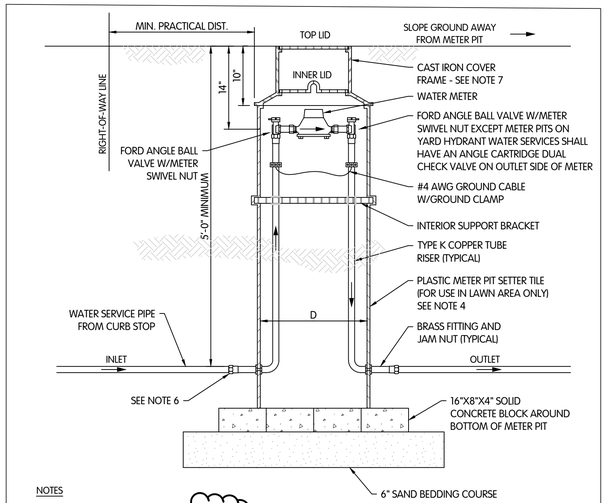
NTS



NOTES:
1. REPAIR ANY DAMAGE TO EXISTING POLYWRAP FOR DUCTILE IRON WATER MAINS AS REQUIRED.
2. DETAILS ARE PROVIDED FOR 1-INCH DIAMETER SERVICES. SERVICES UP TO 2-INCH DIAMETER SHALL USE EQUIVALENT PIPE MATERIALS AND PARTS. SERVICES 4-INCHES AND LARGER SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS FOR WATER MAINS.

WATER MAIN SERVICE CONNECTION DETAIL

NTS



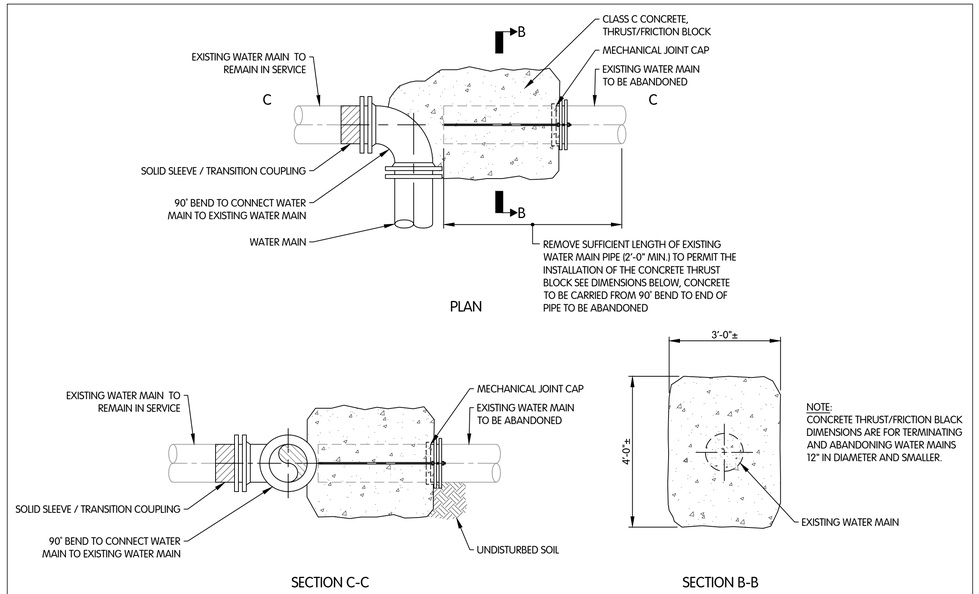
NOTES

1. WATER METER WILL BE FURNISHED BY OWNER.
2. ELECTRONIC READ DEVICE WILL BE INSTALLED BY CONTRACTOR.
3. WATER PIPE, VALVES AND FITTINGS (EXCLUDING WATER METER) ARE TO BE ASSEMBLED INSIDE METER PIT AT FACTORY.
4. WHEN INSTALLED IN PAVED AREA, WATER METER PIT IS TO BE DESIGNED TO SUPPORT AASHTO HS-20-44 WHEEL LOADING. SUBMIT SHOP DRAWINGS OF METER PIT TO CONTRACTOR FOR APPROVAL PRIOR TO FABRICATION.
5. SAND BACKFILL AROUND EXTERIOR WALLS OF METER PIT IS TO BE CAREFULLY PLACED AND COMPACTED.
6. BOTTOM INLET AND OUTLET CONNECTIONS ARE TO ACCOMMODATE EITHER FLARED COPPER JOINT OR PLASTIC CTS "QUICK" COMPRESSION JOINT, DEPENDING ON WATER SERVICE PIPE MATERIAL.
7. TOP LID IS TO BE 11½ INCH DIAMETER LOCKING CAST IRON WITH HOLE AND PLUG FOR ELECTRONIC METER READ MODULE. INNER LID IS TO BE PLASTIC. COVER FRAME IS TO BE SIZED TO FIT REQUIRED DIAMETER OF METER PIT SETTER TILE.

METER SIZE (INCHES)	"L" (INCHES)	"D" (INCHES) MINIMUM
⅝"	7½"	18"
⅝"×¾"	7½"	18"
¾"	9"	20"
1"	10¼"	20"
SEE NOTE 7 FOR COVER TYPE		

WATER METER PIT

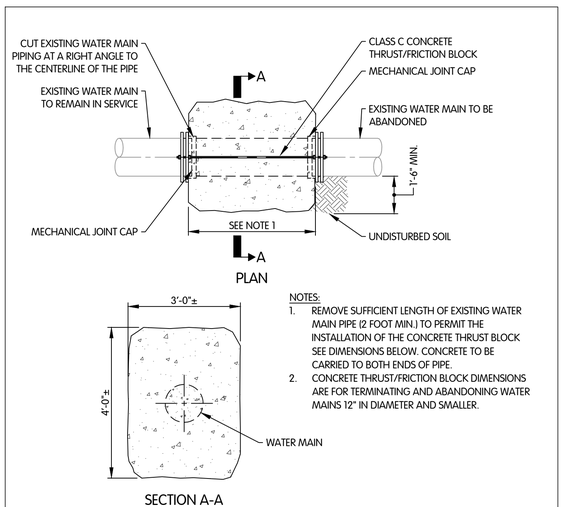
NTS



NOTE:
CONCRETE THRUST/FRICTION BLACK DIMENSIONS ARE FOR TERMINATING AND ABANDONING WATER MAINS 12" IN DIAMETER AND SMALLER.

WATER MAIN ABANDONMENT & TERMINATION DETAIL (90° BEND ALTERNATIVE)

NTS



NOTES:
1. REMOVE SUFFICIENT LENGTH OF EXISTING WATER MAIN PIPE (2 FOOT MIN.) TO PERMIT THE INSTALLATION OF THE CONCRETE THRUST BLOCK SEE DIMENSIONS BELOW. CONCRETE TO BE CARRIED TO BOTH ENDS OF PIPE.
2. CONCRETE THRUST/FRICTION BLOCK DIMENSIONS ARE FOR TERMINATING AND ABANDONING WATER MAINS 12" IN DIAMETER AND SMALLER.

WATER MAIN TERMINATION AND ABANDONMENT DETAIL

NTS

MICHAEL S. HARKNESS REGISTERED No. 19900563 STATE OF INDIANA PROFESSIONAL ENGINEER
01-13-2025

TCRSD 2

CIVIL
WATER
SERVICE AND ABANDONMENT DETAILS
STANDARDS

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
2	01-28-2026	ADDENDUM 2	JPM

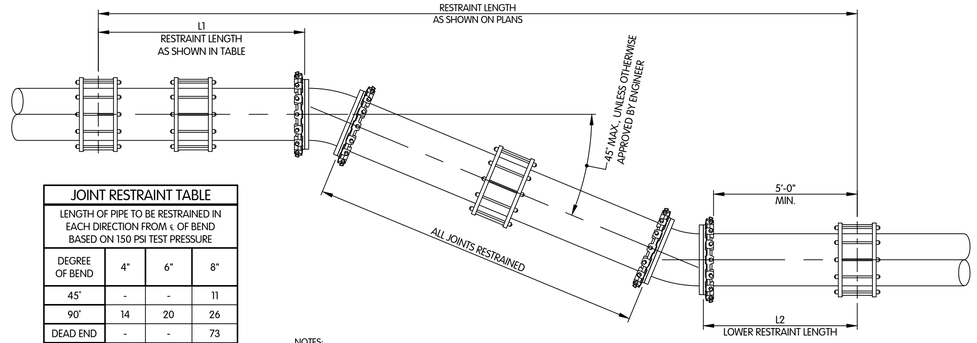
Jones & Henry Engineers, Ltd.
Fluid thinking™
www.JHeng.com

JOB NO. 868-8305.400
SCALE AS INDICATED
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE 2026
SHEET NO. W-0.2
30 OF 48

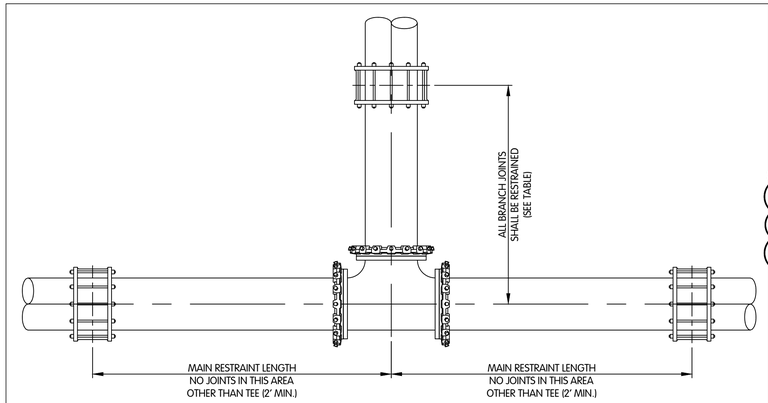
FTW-8305400W01-W-0.2 WATER DETAILS
1/29/2026 11:47 AM - ABLAISING
1/29/2026 11:48 AM



JOINT RESTRAINT TABLE			
LENGTH OF PIPE TO BE RESTRAINED IN EACH DIRECTION FROM ℄ OF BEND BASED ON 150 PSI TEST PRESSURE			
DEGREE OF BEND	4"	6"	8"
45°	-	-	11
90°	14	20	26
DEAD END	-	-	73
MAIN x 4"	-	-	18
MAIN x 6"	-	-	41
MAIN x 8"	-	-	62
L1	17	23	31
L2	5	6	8

NOTES:
1. THE RESTRAINED PIPE LENGTHS SHOWN ABOVE ARE FOR DUCTILE IRON PIPE WITH POLYWRAP COATING INSTALLED IN A TYPE 3 TRENCH IN TYPE CL, GRANULAR FILL SOIL WITH 5'-0" OF COVER, TEST PRESSURE 150 PSI., AND A SAFETY FACTOR OF 1.5. OTHER SITUATIONS MAY REQUIRE ADDITIONAL RESTRAINT LENGTHS. CONSULT THE ENGINEER FOR SITUATIONS NOT PROVIDED.
2. RESTRAINED LENGTH FOR REDUCERS MEASURED ALONG LARGER DIAMETER PIPE.
3. ALL JOINTS BETWEEN UPPER AND LOWER PIPE SHALL BE RESTRAINED. LOWER PIPE ASSUMED AT 7'-0" DEPTH.

TYPICAL VERTICAL BEND RESTRAINT
NTS



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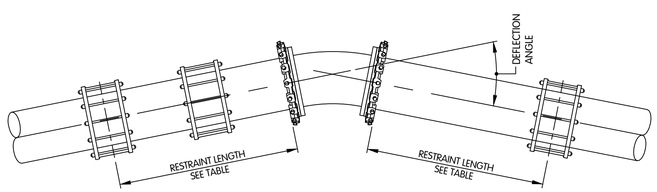
2. RESTRAINED LENGTH FOR REDUCERS MEASURED ALONG LARGER DIAMETER PIPE.
3. RESTRAINED LENGTH MEASURED ALONG BRANCH CONNECTION SHALL MEASURE 2'-0".

TYPICAL HORIZONTAL TEE RESTRAINT
NTS



JOINT RESTRAINT TABLE			
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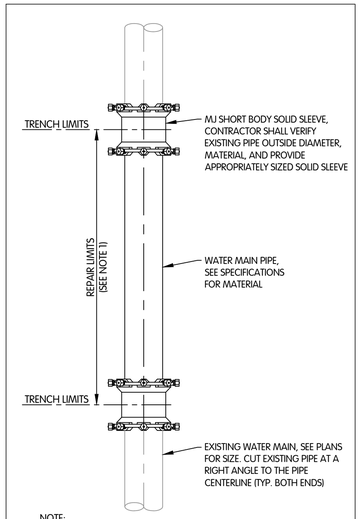
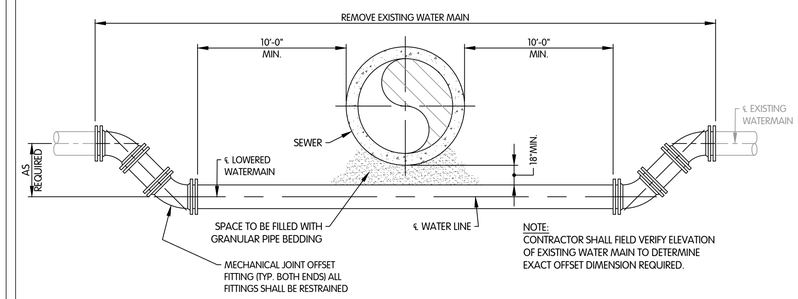
2. RESTRAINED LENGTH FOR REDUCERS MEASURED ALONG LARGER DIAMETER PIPE.

TYPICAL HORIZONTAL BEND RESTRAINT
NTS



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

WATER MAIN REPAIR DETAIL
NTS



NOTE:
CONTRACTOR SHALL FIELD VERIFY ELEVATION OF EXISTING WATER MAIN TO DETERMINE EXACT OFFSET DIMENSION REQUIRED.

WATER MAIN/SEWER CROSSING
NTS

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF
INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

CIVIL
WATER
JOINT RESTRAINT AND SEWER CROSSING DETAILS
STANDARDS

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-28-2026	ADDENDUM 2	JPM
1			

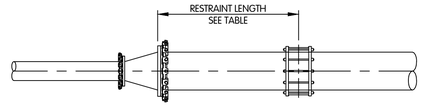
Jones & Henry Engineers, Ltd.
Fluid thinking℠
www.JHeng.com

JOB NO. 868-8305.400
SCALE AS INDICATED
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO.
W-0.3
31 OF 48

FTW-8305400W01-W-0.3 WATER DETAILS
1/29/2026 11:07AM - ABLANSING
1/29/2026 11:48 AM



JOINT RESTRAINT TABLE			
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NOTES:
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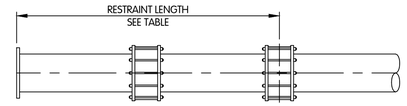
2. RESTRAINED LENGTH FOR REDUCERS MEASURED ALONG LARGER DIAMETER PIPE.

TYPICAL REDUCER RESTRAINT
NTS



JOINT RESTRAINT TABLE			
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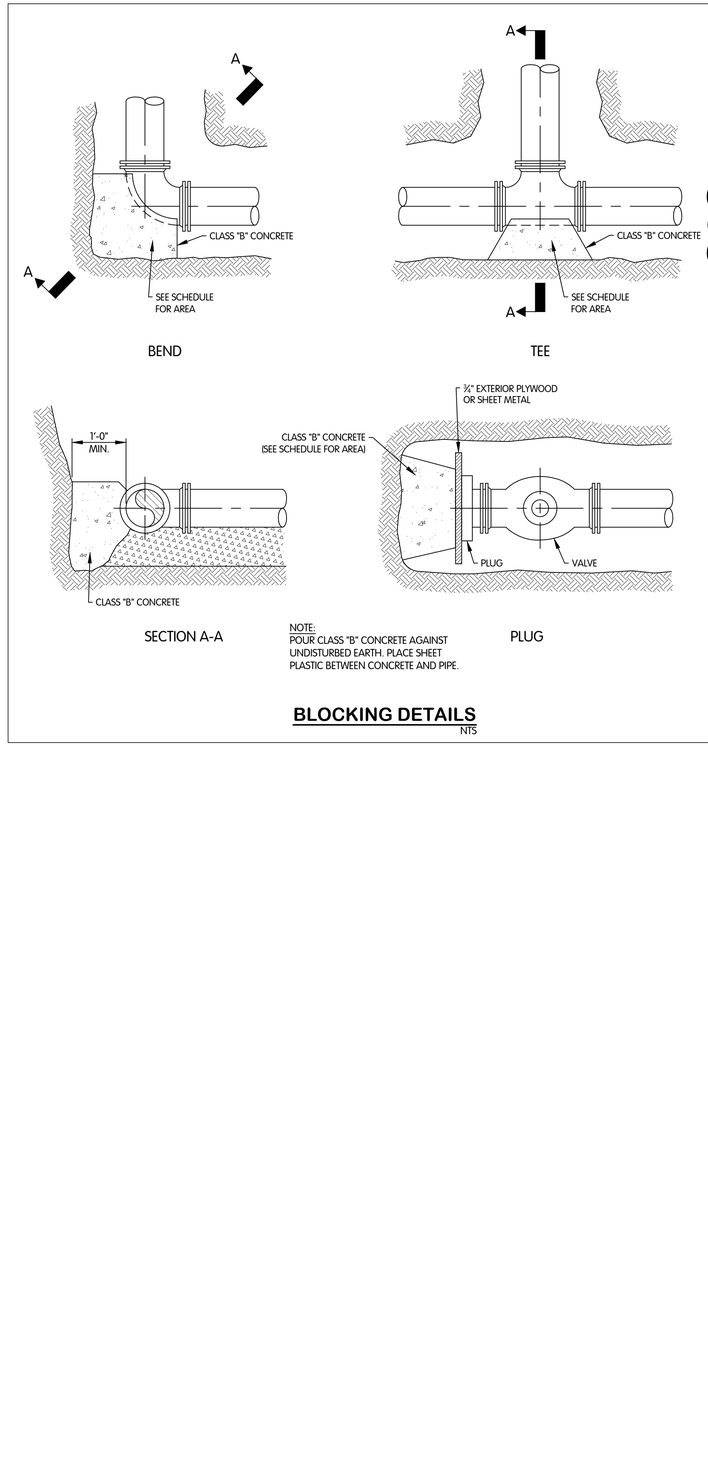
2. RESTRAINED LENGTH FOR REDUCERS MEASURED ALONG LARGER DIAMETER PIPE.

TYPICAL DEAD END RESTRAINT
NTS



NOTE:
POUR CLASS "B" CONCRETE AGAINST UNDISTURBED EARTH. PLACE SHEET PLASTIC BETWEEN CONCRETE AND PIPE.

BLOCKING DETAILS
NTS

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF
INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD
2

CIVIL
WATER
JOINT RESTRAINT AND BLOCKING DETAILS
TRENCH DETAILS STANDARDS

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
1	01-28-2026	ADDENDUM 2	JPM
2			
3			
4			
5			

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

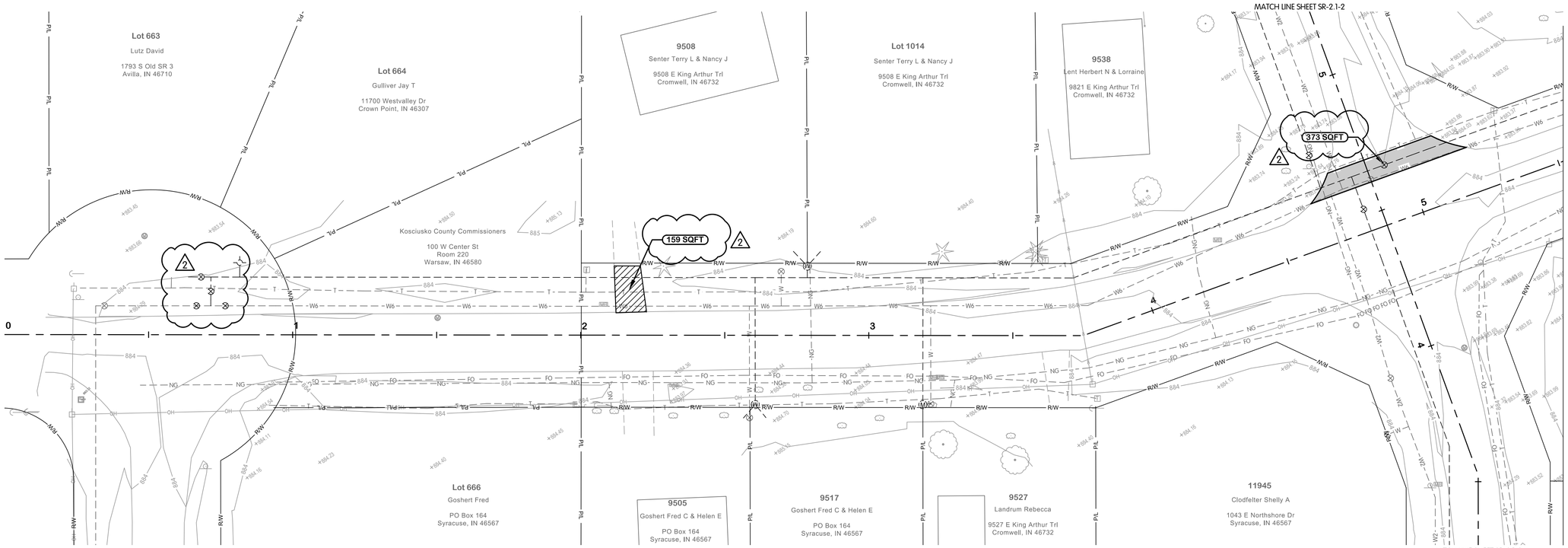
JOB NO. 868-8305.400
SCALE AS INDICATED
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE: 2026
2

SHEET NO.
W-0.4
32 OF 48

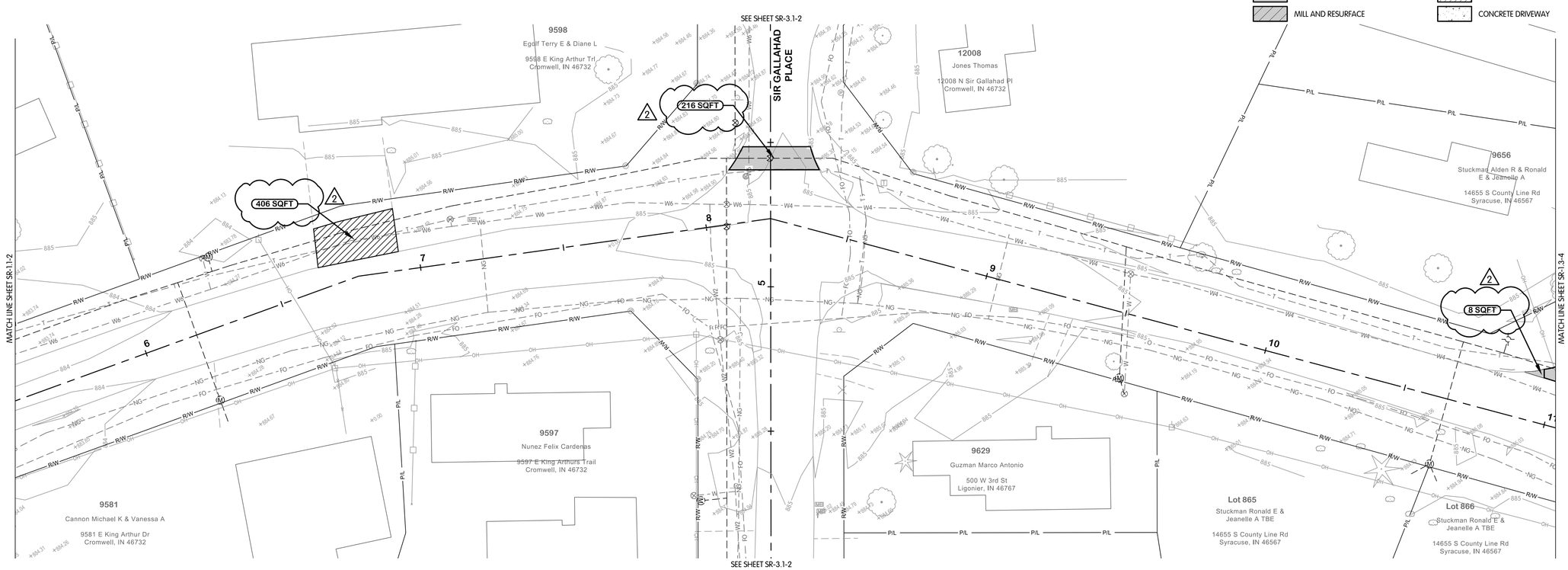
FTW-8305\400W01-W-0.4 WATER DETAILS
1/09/2026 10:24 AM - AJBLAISING
1/29/2026 11:18 AM



KING ARTHUR TRAIL

SURFACE RESTORATION LEGEND

- ASPHALT PAVEMENT
- MILL AND RESURFACE
- GRAVEL DRIVEWAY
- CONCRETE DRIVEWAY



KING ARTHUR TRAIL

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD 2

KING ARTHUR TRAIL
SURFACE RESTORATION
PLAN
STA. 0+00 TO 11+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
2	01-28-2026	ADDENDUM 2	JPM

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

JOB NO.	868-8305.400
SCALE	1"=20'

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE: 2026

SHEET NO.
SR1.1-2
33 OF 48

FTW-8305400SR1-SR-1.1-2
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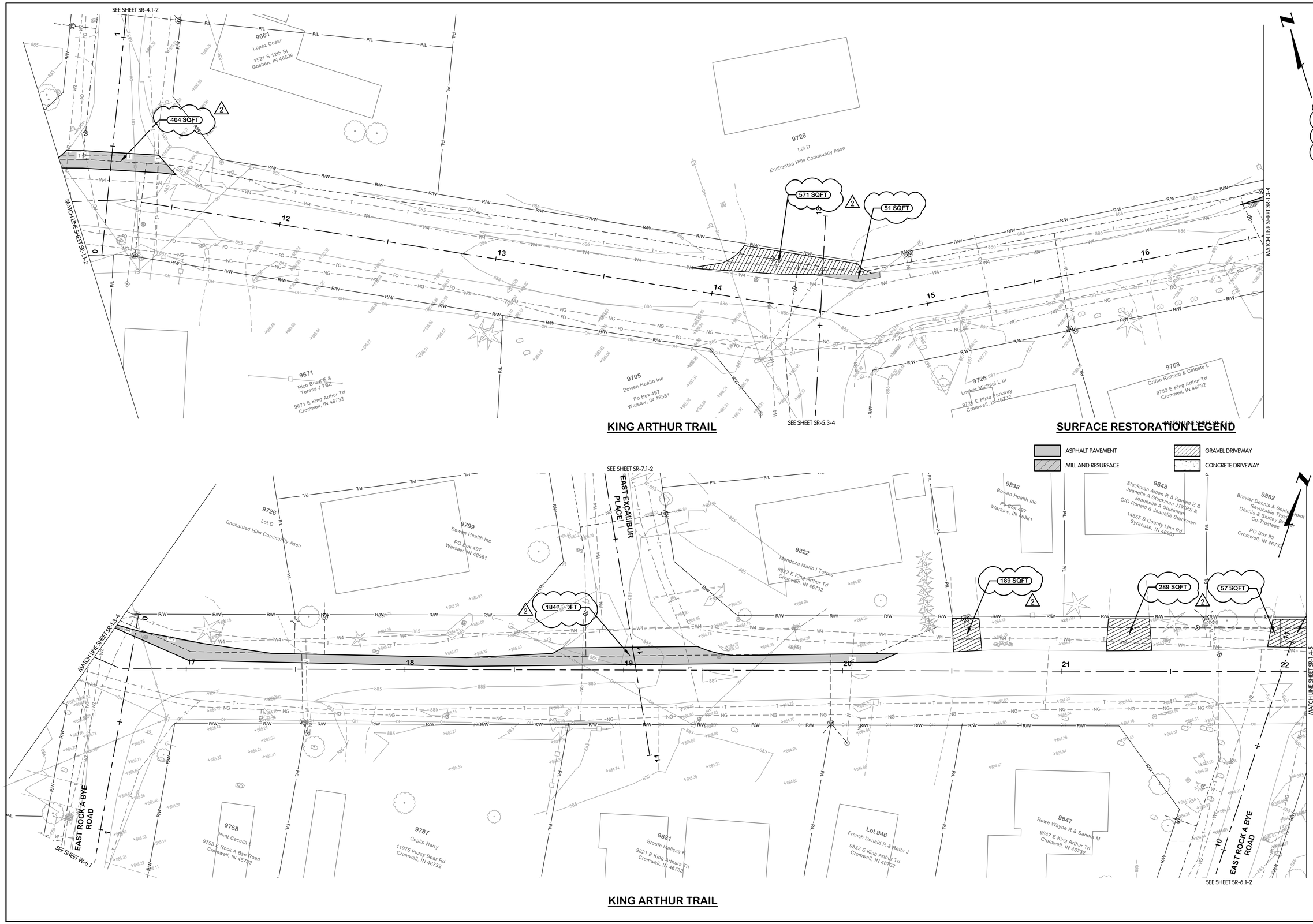
1/29/2026 11:49 AM



MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF
INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

KING ARTHUR TRAIL
SURFACE RESTORATION PLAN
STA. 11+00 TO 22+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
1	01-28-2026	ADDENDUM 2	JPM

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

JOB NO.	868-8305.400
SCALE	1"=20'

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE: 2026

SHEET NO.
SR-1.3-4
34 OF 48

FTW-8305.400SR-SR-1.3-4
JTHOMPSON - JPM
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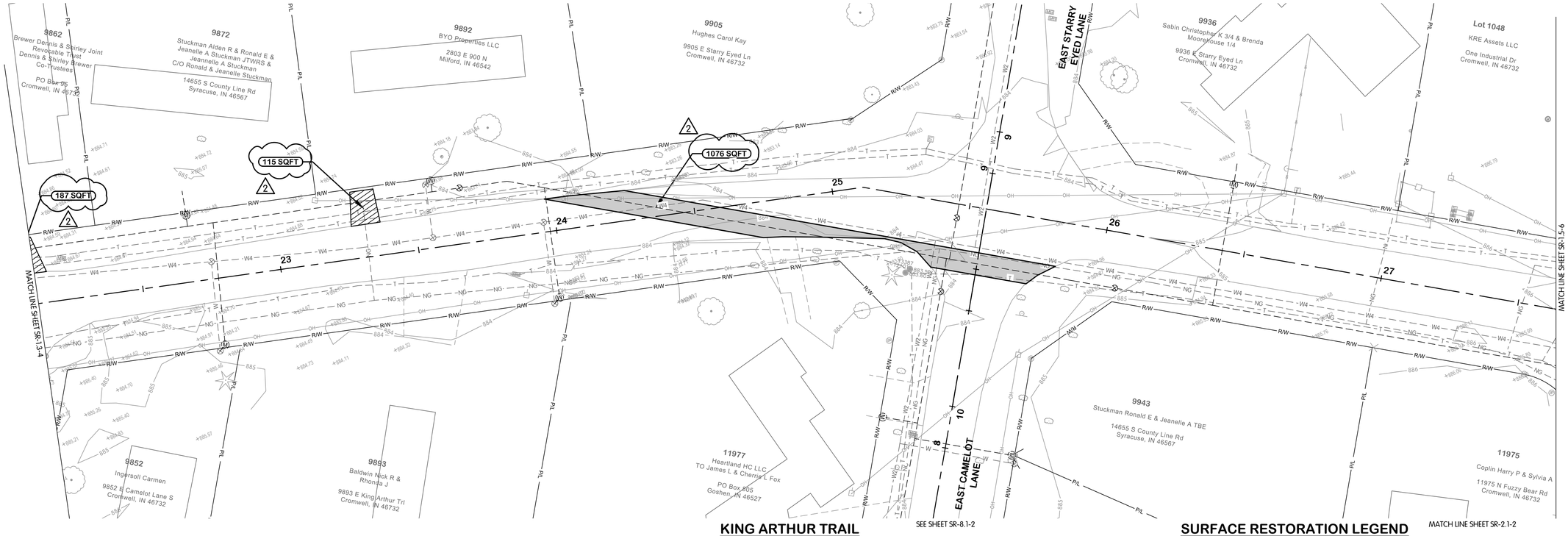
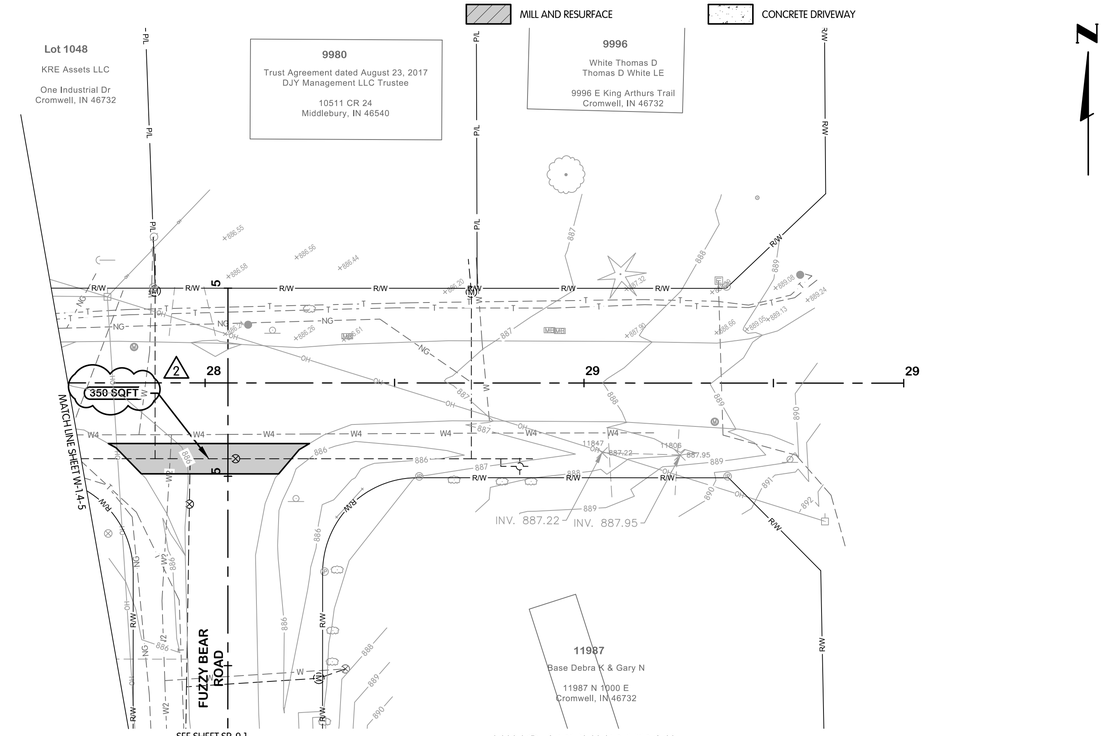
1/29/2026 11:50 AM - ABLAISING



SURFACE RESTORATION LEGEND

- ASPHALT PAVEMENT
- MILL AND RESURFACE
- GRAVEL DRIVEWAY
- CONCRETE DRIVEWAY



MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

KING ARTHUR TRAIL
SURFACE RESTORATION PLAN
STA. 22+00 TO 30+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2			
1	01-28-2026	ADDENDUM 2	JPM

Jones & Henry Engineers, Ltd.
Fluid thinking
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JOB NO. 868-8305.400
SCALE 1"=20'
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE: 2026

SHEET NO.
SR-1.5-6
35 OF 48

FTW-8305\400SR1-SR-1.5-6
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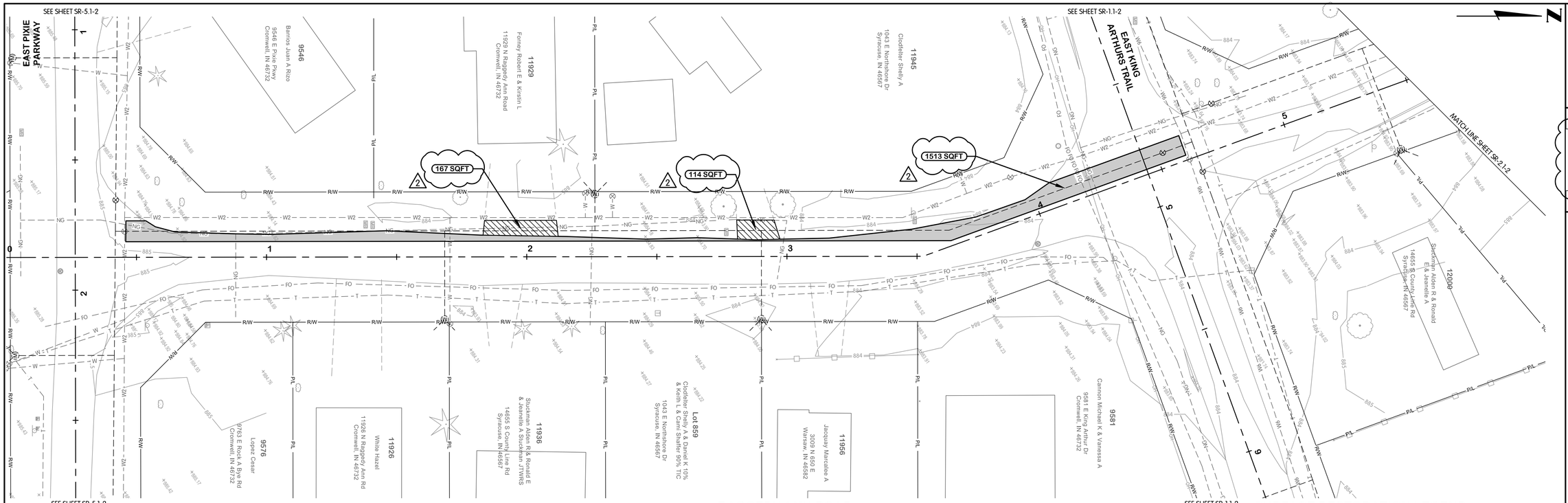
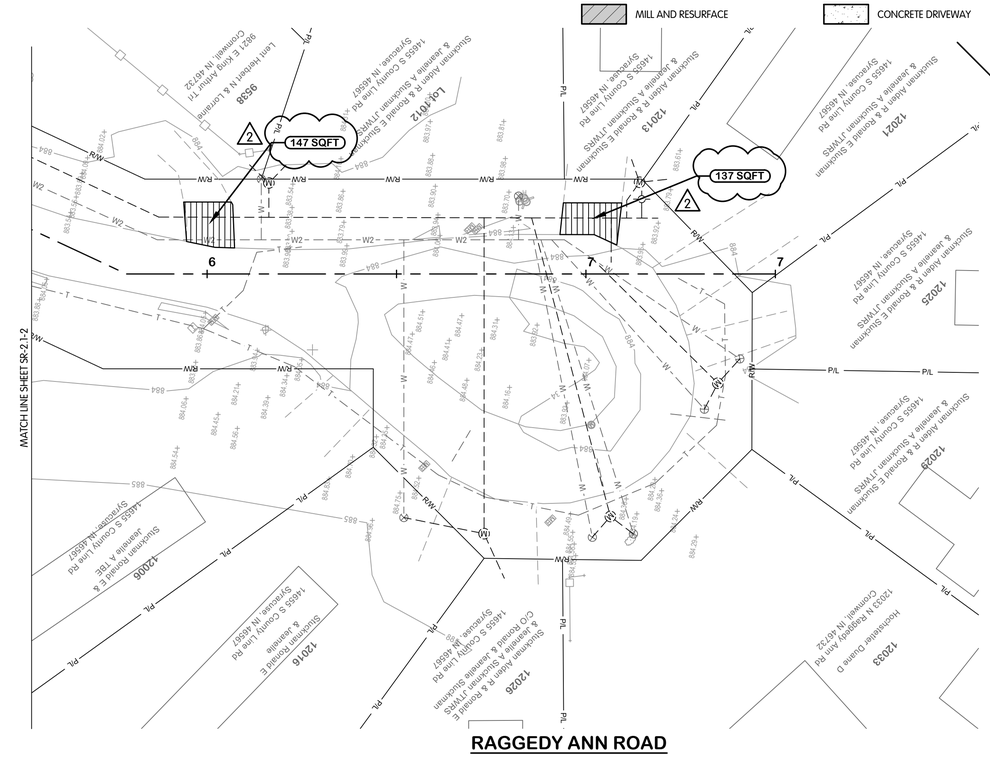
1/29/2026 11:50 AM



SURFACE RESTORATION LEGEND

- ASPHALT PAVEMENT
- MILL AND RESURFACE
- GRAVEL DRIVEWAY
- CONCRETE DRIVEWAY



RAGGEDY ANN ROAD
SURFACE RESTORATION
PLAN
STA. 0+00 TH 7+50

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-28-2026	ADDENDUM 2	JPM
1			

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

JOB NO. 868-8305.400

SCALE 1"=20'

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

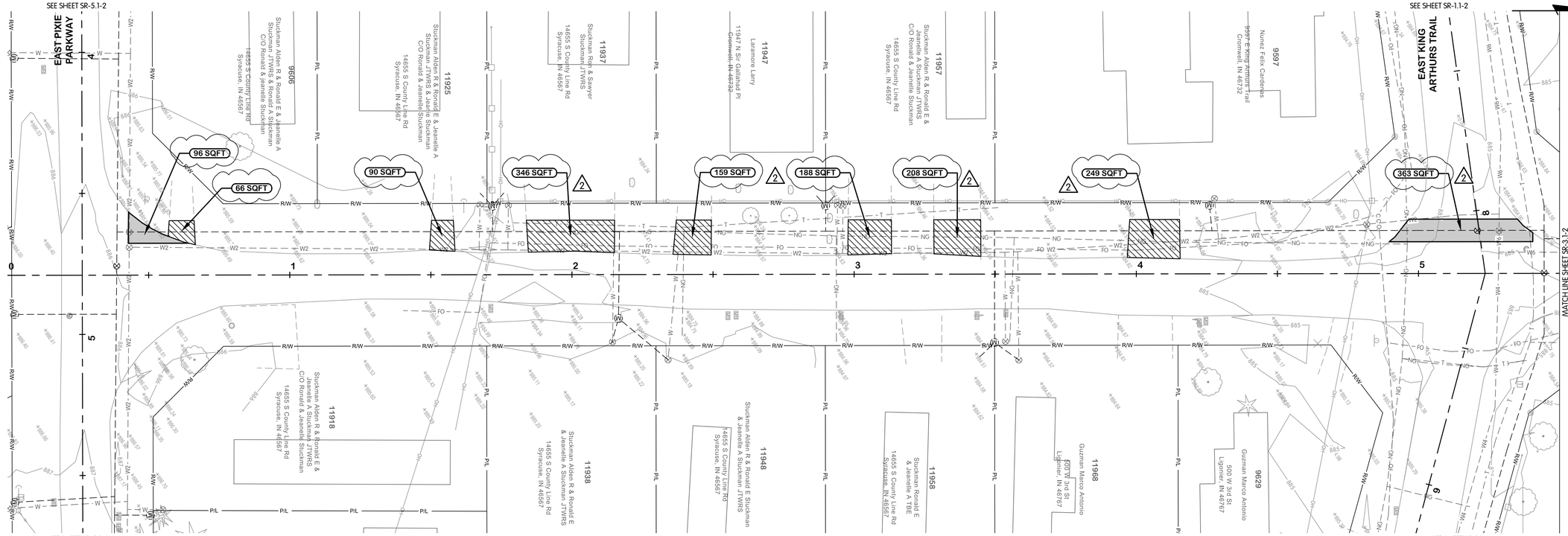
DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID

DATE: 2026

SHEET NO.
SR.1.1-2
36 OF 48

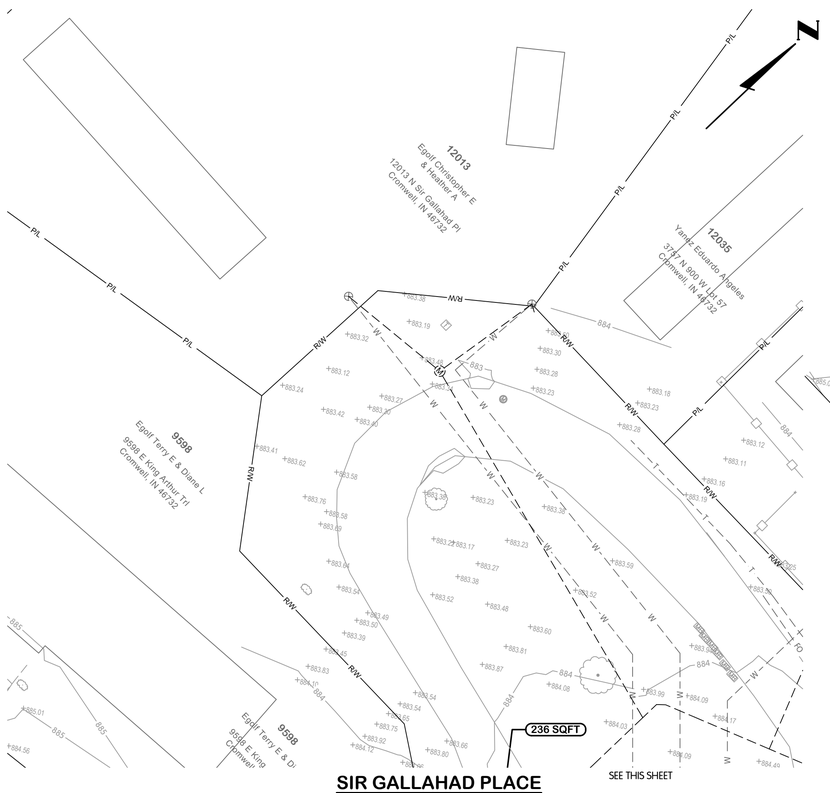
FTW-8305.00SR2-SR-2.1-2
JPM 01/29/2026 11:29 AM
AJB 01/29/2026 11:51 AM - ABLAISING



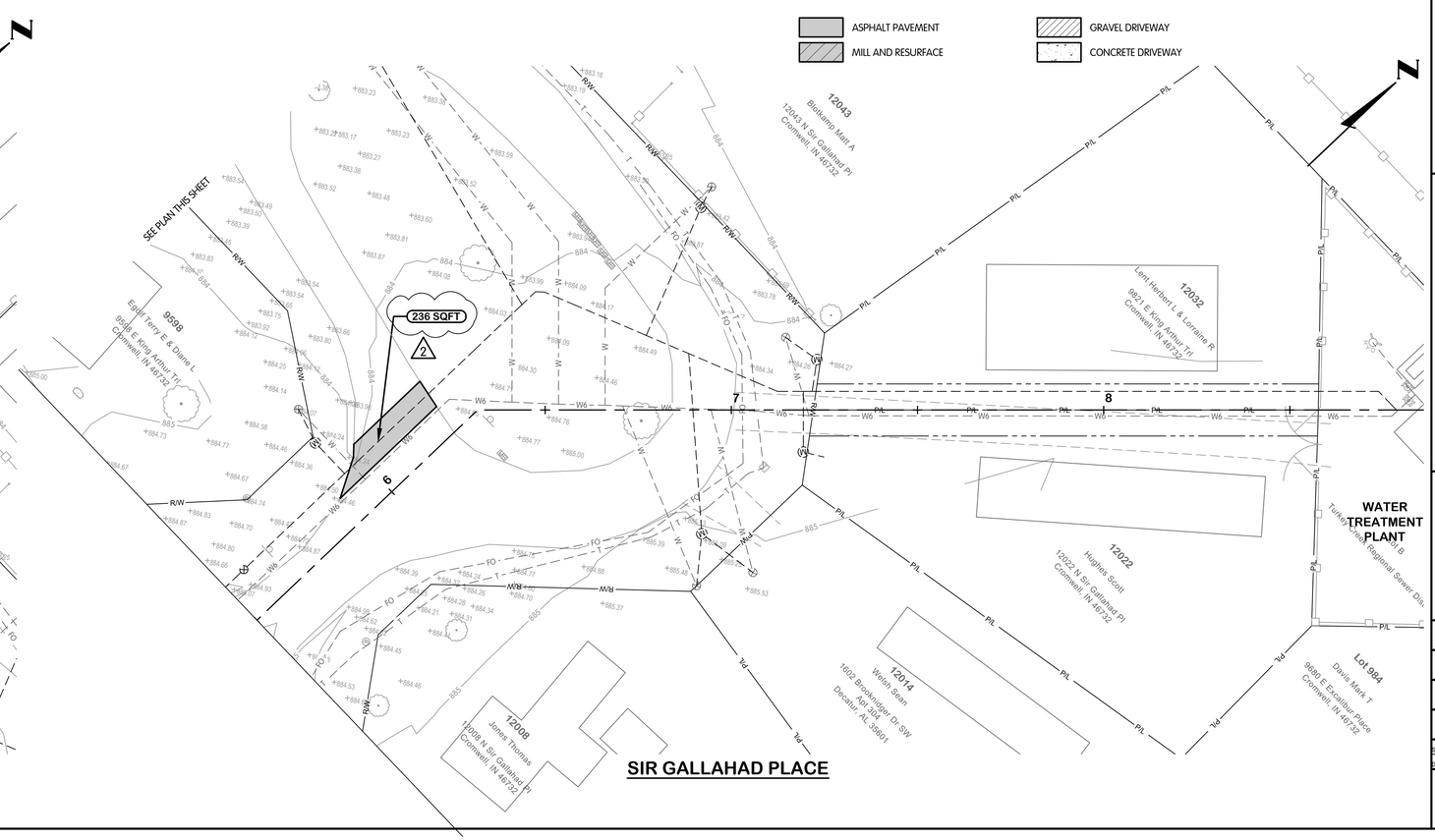
SIR GALLAHAD PLACE

SURFACE RESTORATION LEGEND

- ASPHALT PAVEMENT
- MILL AND RESURFACE
- GRAVEL DRIVEWAY
- CONCRETE DRIVEWAY



SIR GALLAHAD PLACE



SIR GALLAHAD PLACE

MICHAEL S. HARKNESS REGISTERED No. 19900563 STATE OF INDIANA PROFESSIONAL ENGINEER

01-13-2025

TCRSD

SIR GALLAHAD PLACE SURFACE RESTORATION PLAN STA. 0+00 TO 9+00

TURKEY CREEK REGIONAL SEWER DISTRICT FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
2	01-29-2026	ADDENDUM 2	JPM

Jones & Henry Engineers, Ltd.

Fluid thinking®
www.JHeng.com

JOB NO. 868-8305.400

SCALE 1"=20'

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID

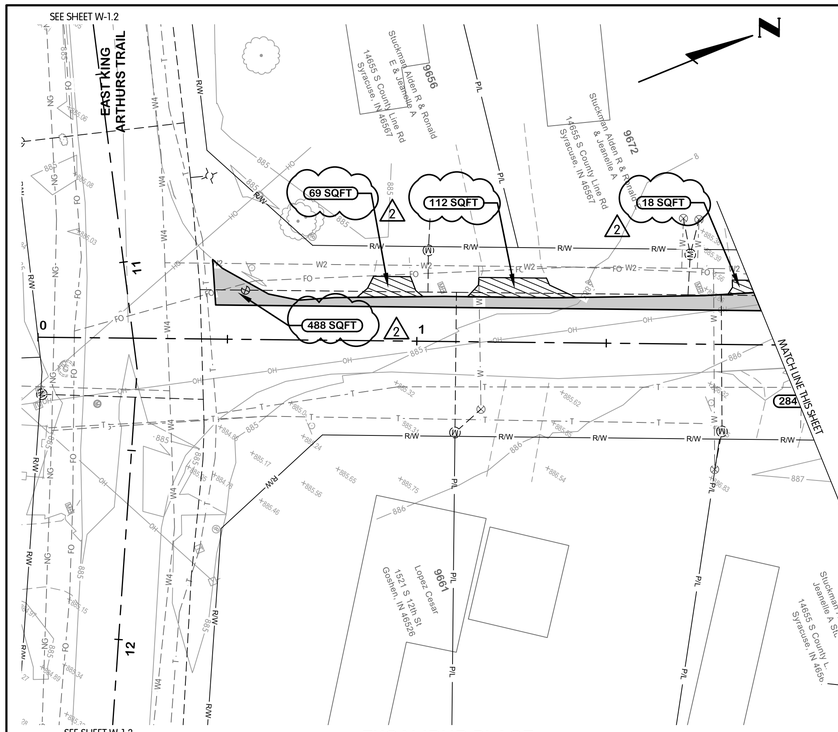
DATE: 2026

SHEET NO.

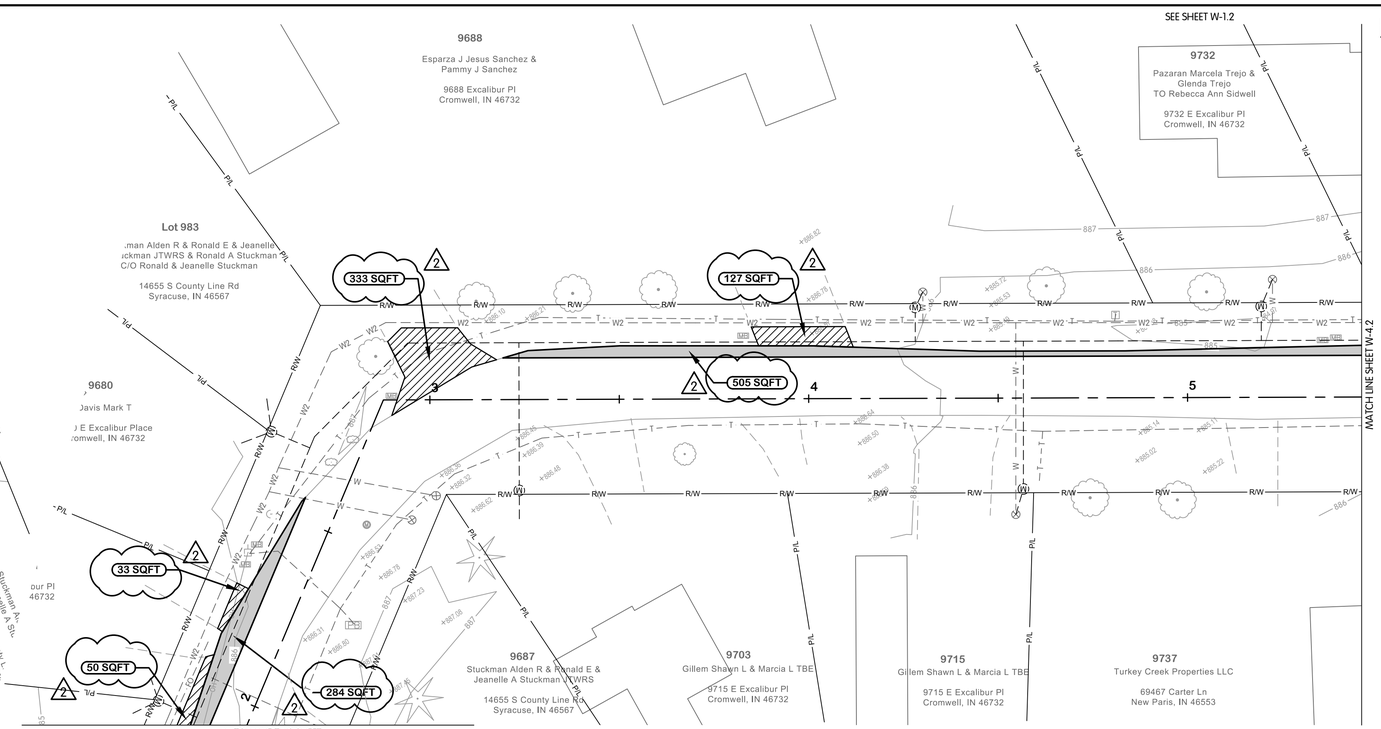
SR-3.1-2

37 OF 48

FTW-8305&0505-SR-3.1-2
1/29/2026 11:52 AM - ABLASING
1/29/2026 11:52 AM



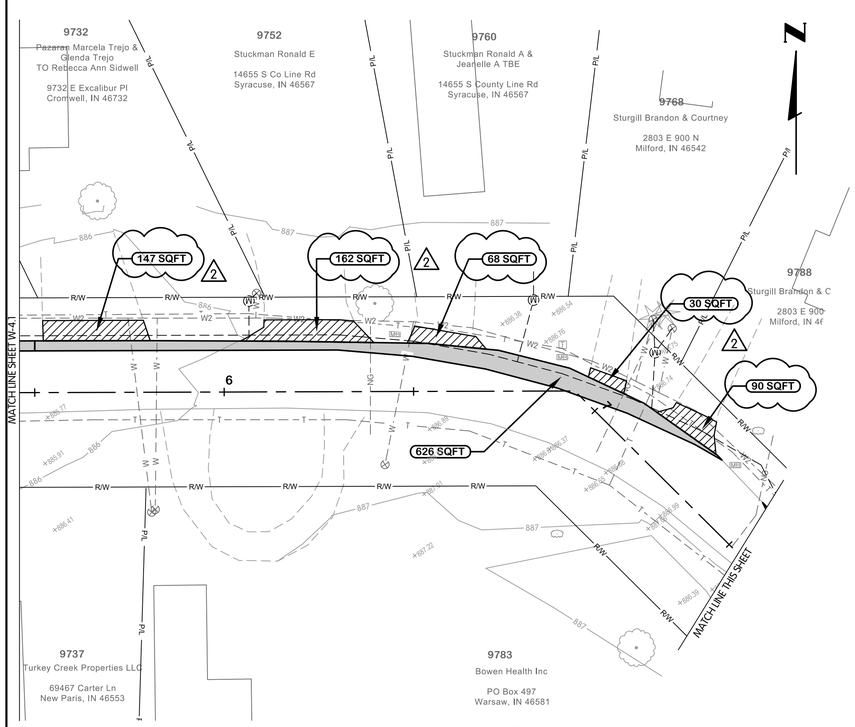
EXCALIBUR PLACE



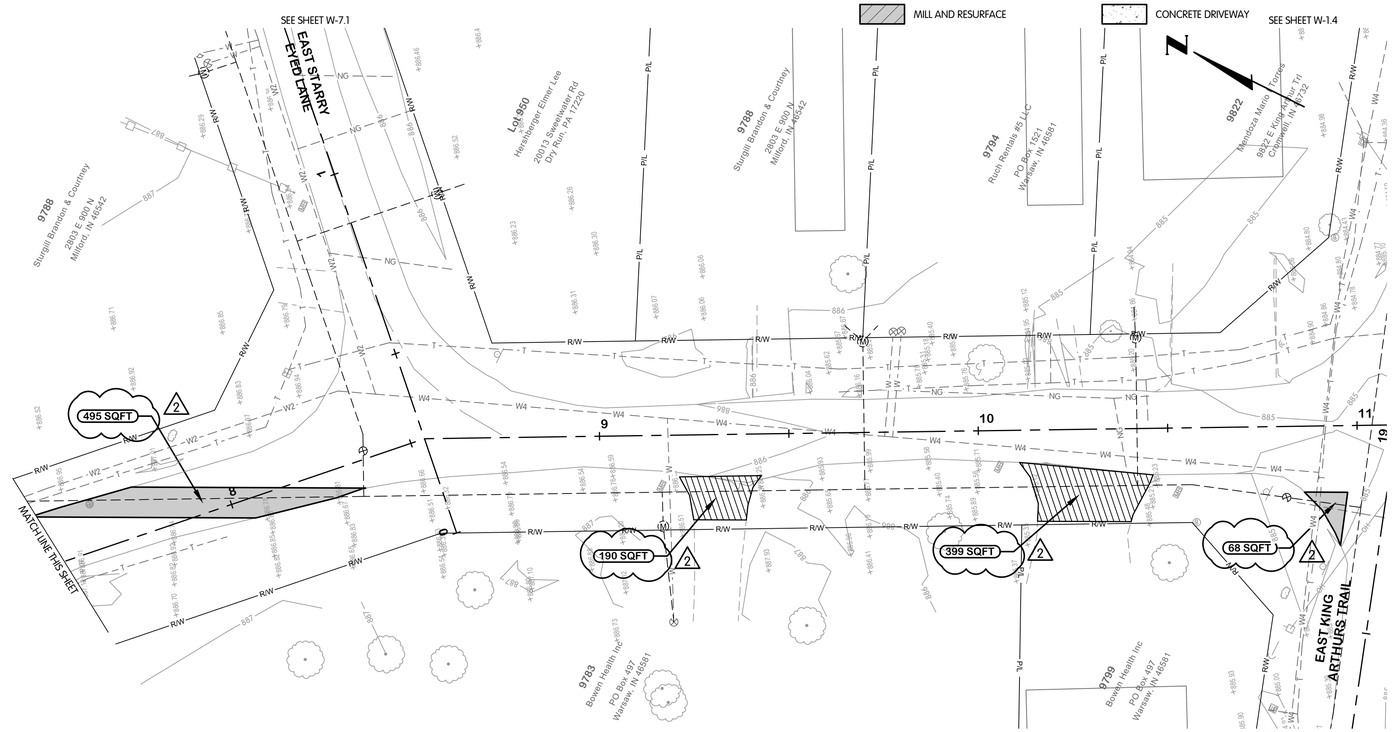
EXCALIBUR PLACE

SURFACE RESTORATION LEGEND

- ASPHALT PAVEMENT
- MILL AND RESURFACE
- GRAVEL DRIVEWAY
- CONCRETE DRIVEWAY



EXCALIBUR PLACE



EXCALIBUR PLACE

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

EXCALIBUR PLACE
SURFACE RESTORATION PLAN
STA. 0+00 TO 5+50

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-28-2026	ADDENDUM 2	JPM
1			

Jones & Henry Engineers, Ltd.
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JOB NO.	868-8305.400
SCALE	1"=20'

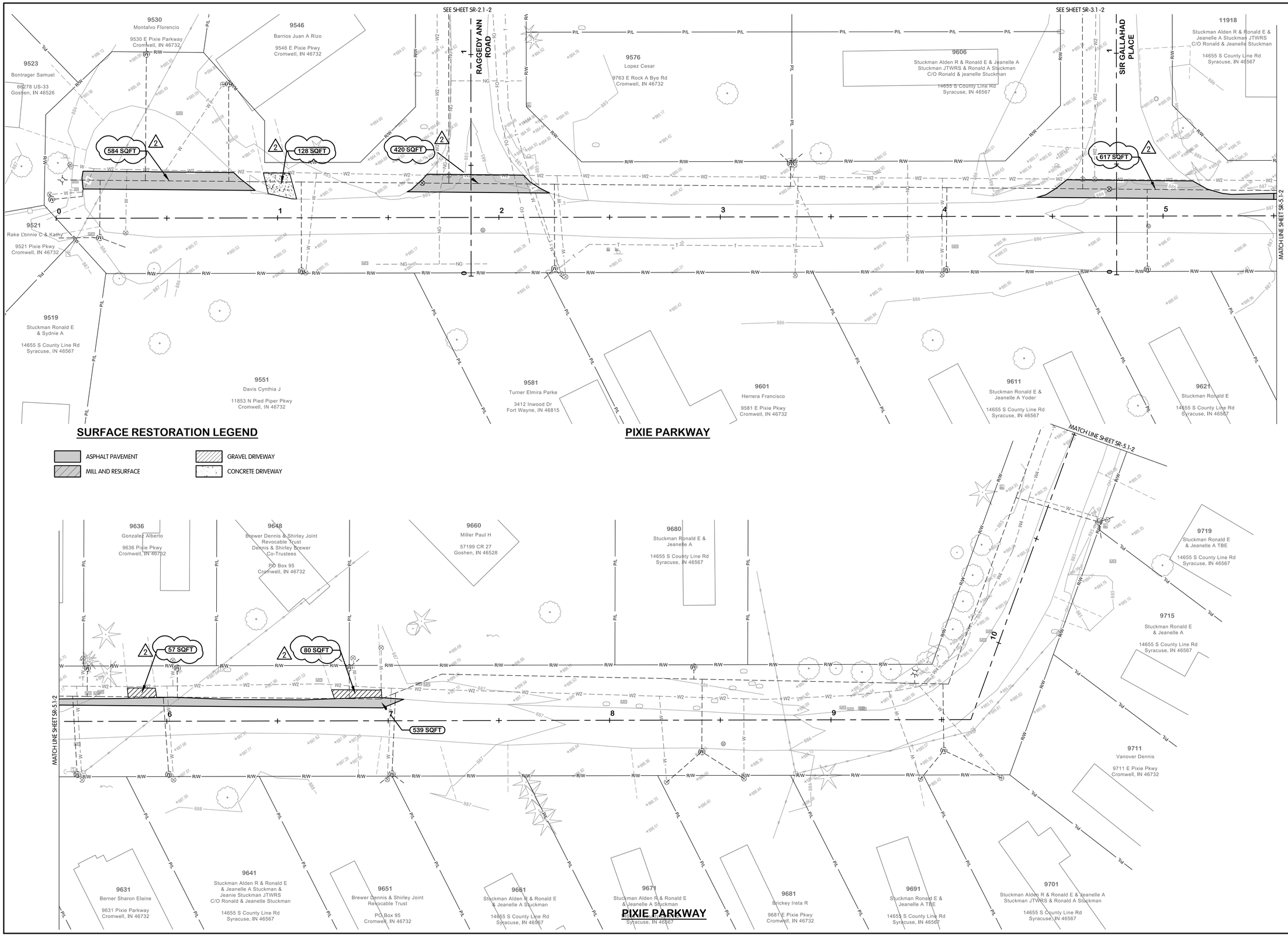
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE: 2026

SHEET NO.
SR-4.1-2
38 OF 48

FTW-8305.005Rx-SR-4.1-2
JPM 01/29/2026 11:53 AM - ABLASING
1/29/2026 11:53 AM



FTW-8305400SR5-SR-5.1-2
JPM
01/29/2026 11:53 AM - ABLASING
1/29/2026 11:53 AM

MICHAEL S. HARKNESS REGISTERED No. 19900563 STATE OF INDIANA PROFESSIONAL ENGINEER
01-13-2025

TCRSD 2

PIXIE PARKWAY
SURFACE RESTORATION
PLAN
STA. 0+00 TO 11+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2			
1	01-29-2026	ADDENDUM 2	JPM

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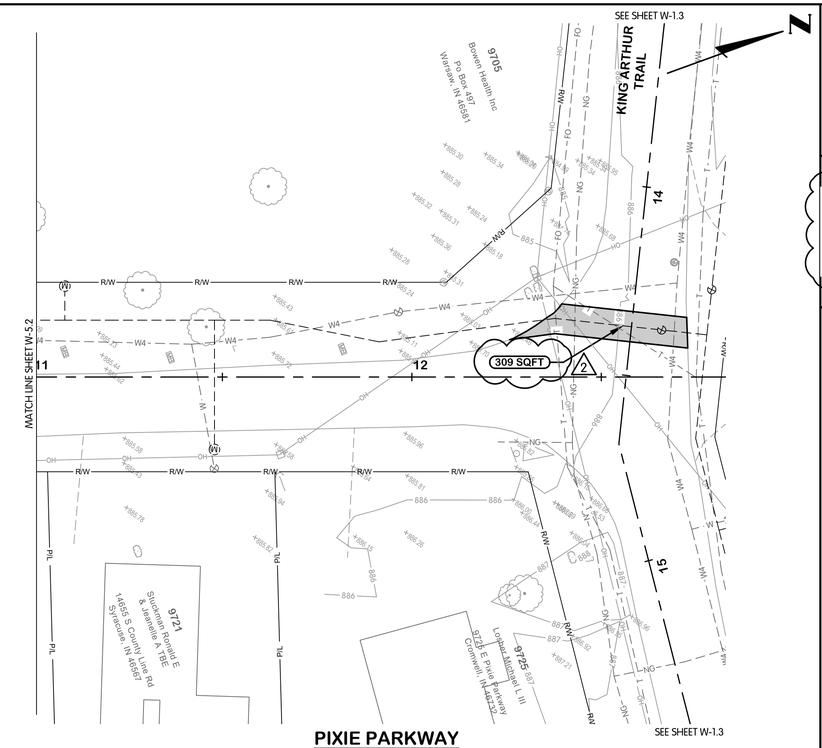
JOB NO. 868-8305.400
SCALE 1"=20'
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO.
SR-5.1-2
39 OF 48



MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF
INDIANA
PROFESSIONAL ENGINEER

01-13-2025

TCRSD

PIXIE PARKWAY
SURFACE RESTORATION
PLAN
STA. 11+00 TO 13+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-28-2026	ADENDUM 2	JPM
1			

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JOB NO. 868-8305.400

SCALE 1"=20'

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID

DATE: 2026

SHEET NO.

SR-5.3

40 OF 48

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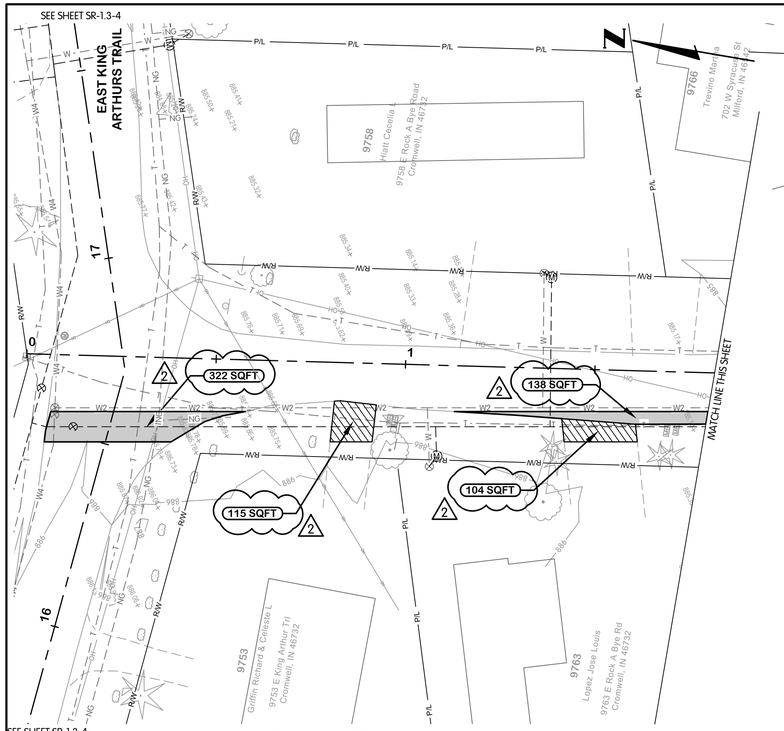
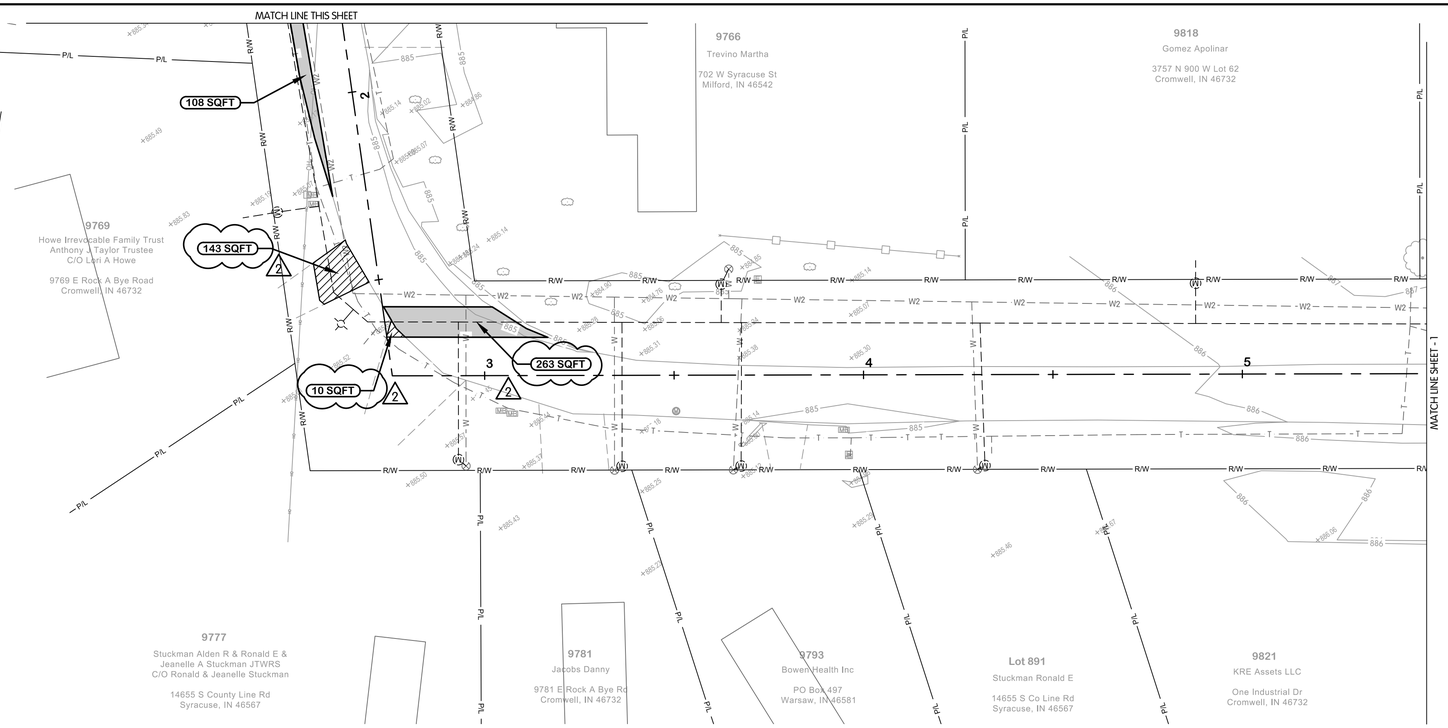
1/29/2026 11:53 AM



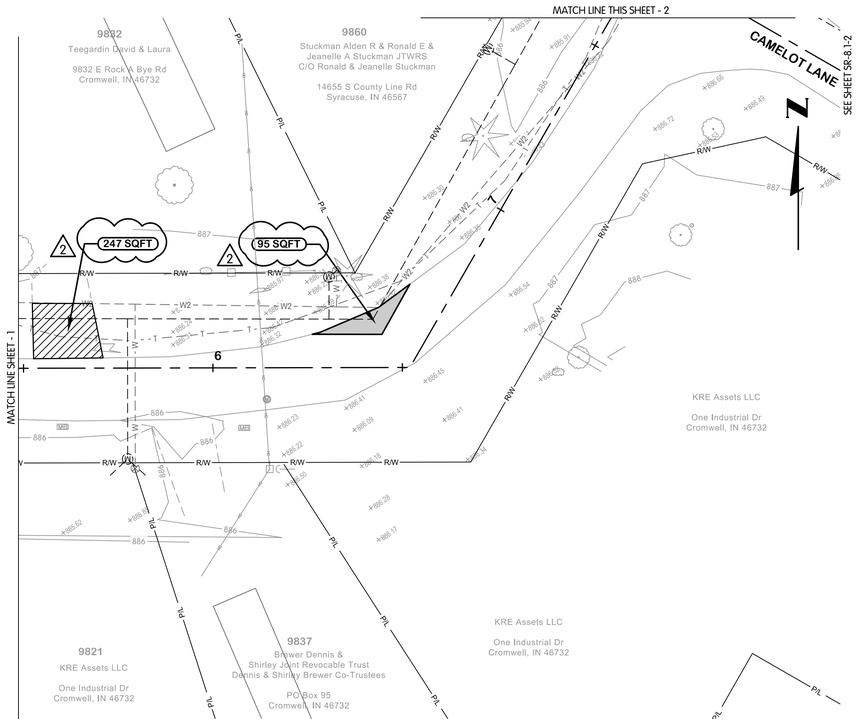
ROCK-A-BYE ROAD



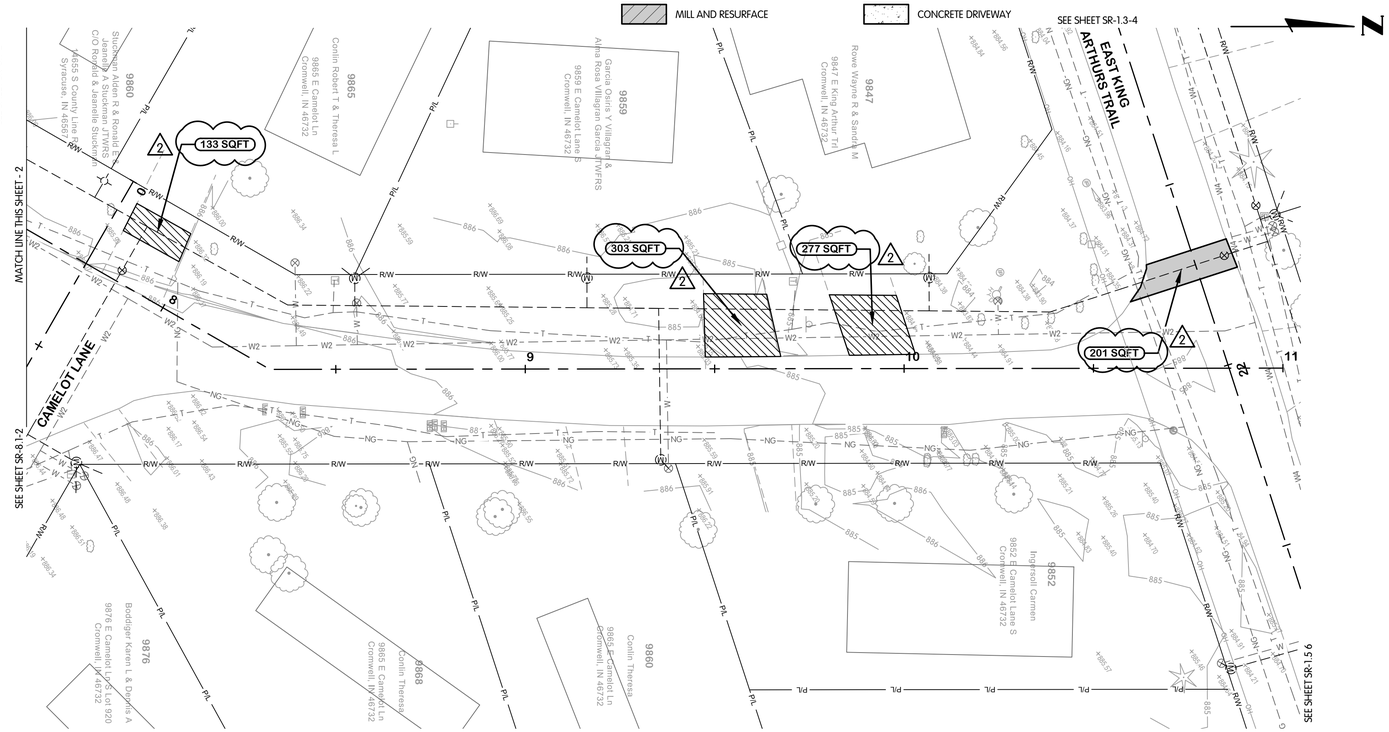
ROCK-A-BYE ROAD

SURFACE RESTORATION LEGEND

- ASPHALT PAVEMENT
- MILL AND RESURFACE
- GRAVEL DRIVEWAY
- CONCRETE DRIVEWAY



ROCK-A-BYE ROAD



CAMELOT LANE

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

ROCK-A-BYE ROAD SURFACE RESTORATION PLAN STA. 0+00 TO 11+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-29-2026	ADDENDUM 2	JPM
1			

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www.JHeng.com

JOB NO.	868-8305.400
SCALE	1"=20'

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE: 2026

SHEET NO.
SR-6.1-2
41 OF 48

FTW-8305\400SR6-SR-6.1-2
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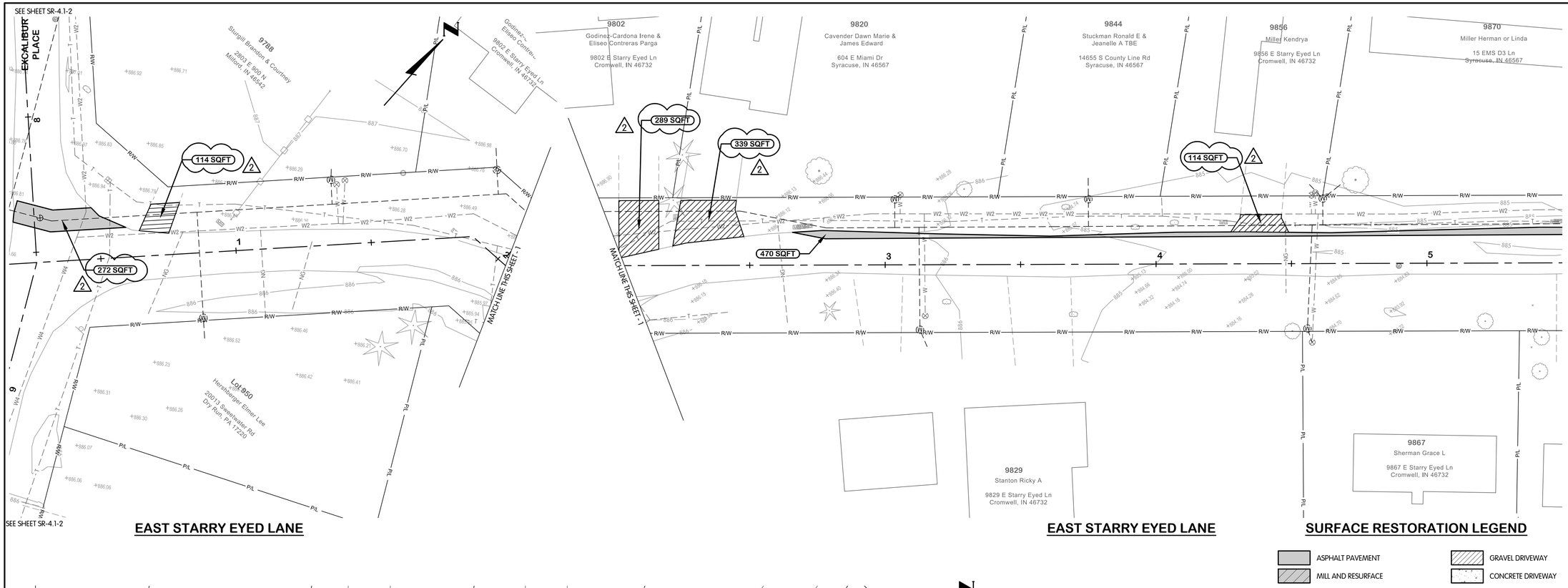
1/29/2026 11:54 AM

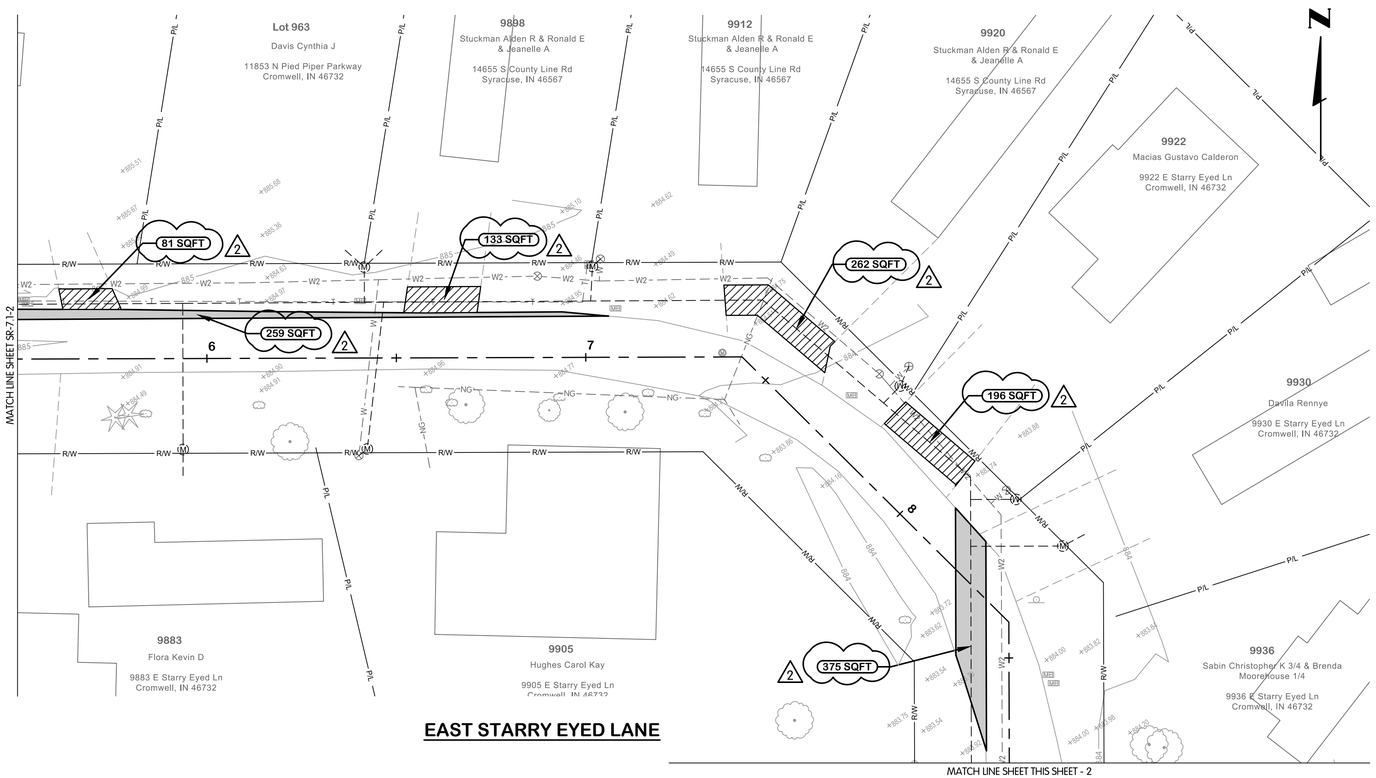


EAST STARRY EYED LANE

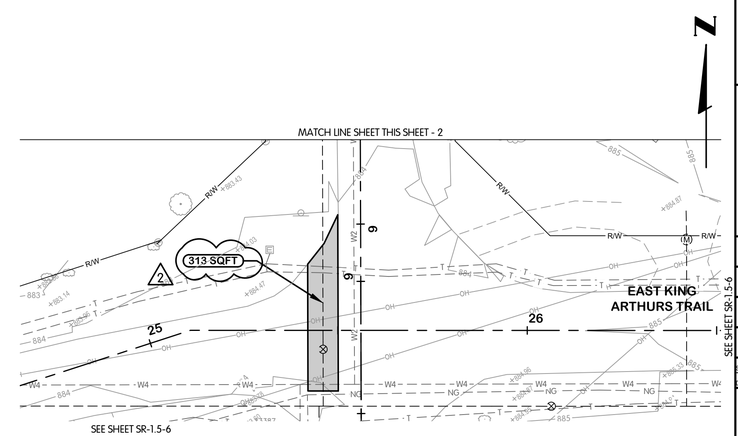
EAST STARRY EYED LANE

SURFACE RESTORATION LEGEND

- ASPHALT PAVEMENT
- MILL AND RESURFACE
- GRAVEL DRIVEWAY
- CONCRETE DRIVEWAY



EAST STARRY EYED LANE



MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

STARRY EYED LANE
SURFACE RESTORATION
PLAN
STA. 0+00 TO 9+50

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-28-2026	ADDENDUM 2	JPM
1			

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JOB NO. 868-8305.400
SCALE 1"=20'
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE: 2026

SHEET NO.
SR-7.1-2
42 OF 48

FTW-8305x00SR7-SR-7.1-2
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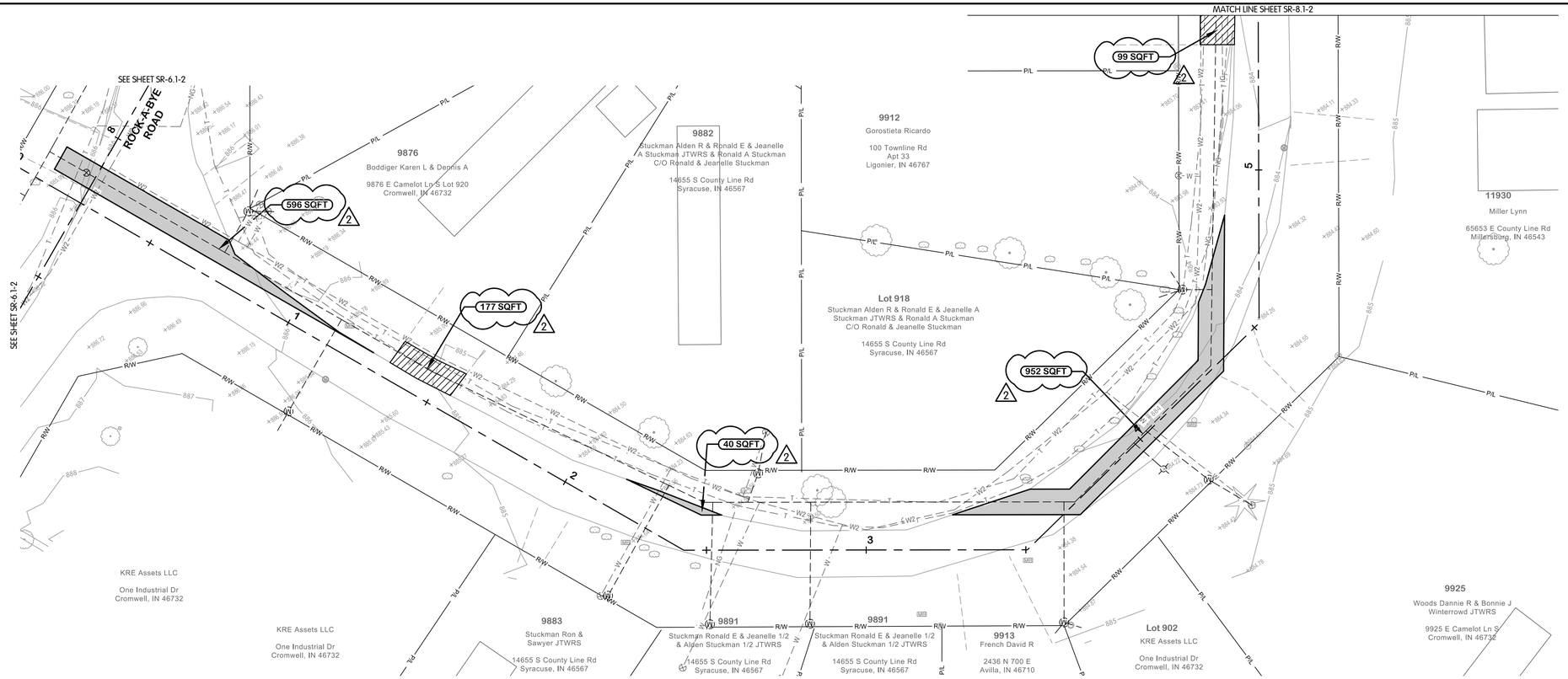
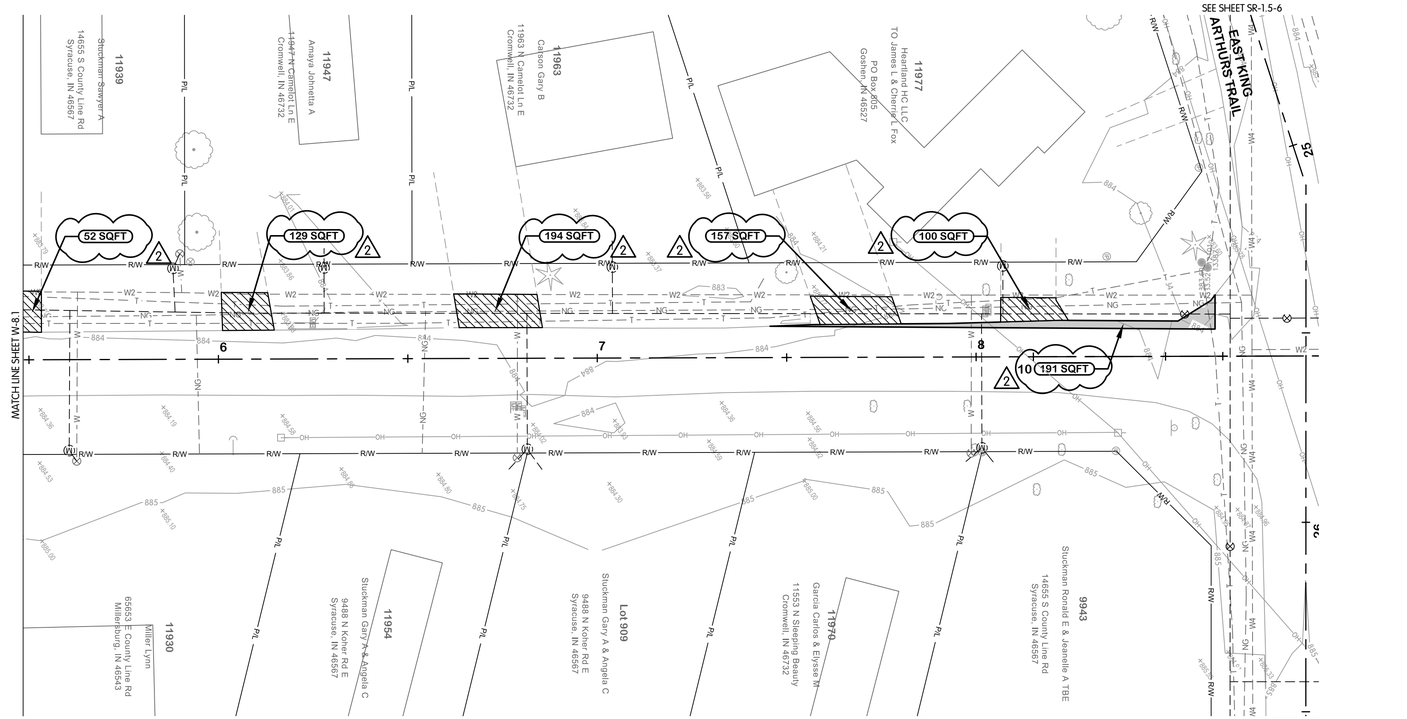
1/29/2026 11:55 AM



SURFACE RESTORATION LEGEND

- ASPHALT PAVEMENT
- MILL AND RESURFACE
- GRAVEL DRIVEWAY
- CONCRETE DRIVEWAY

CAMELOT LANE



CAMELOT LANE

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF
INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD 2

CAMELOT LANE
SURFACE RESTORATION PLAN
STA. 0+00 TO 9+00

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	02-28-2026	ADDENDUM 2	JPM
1			AB

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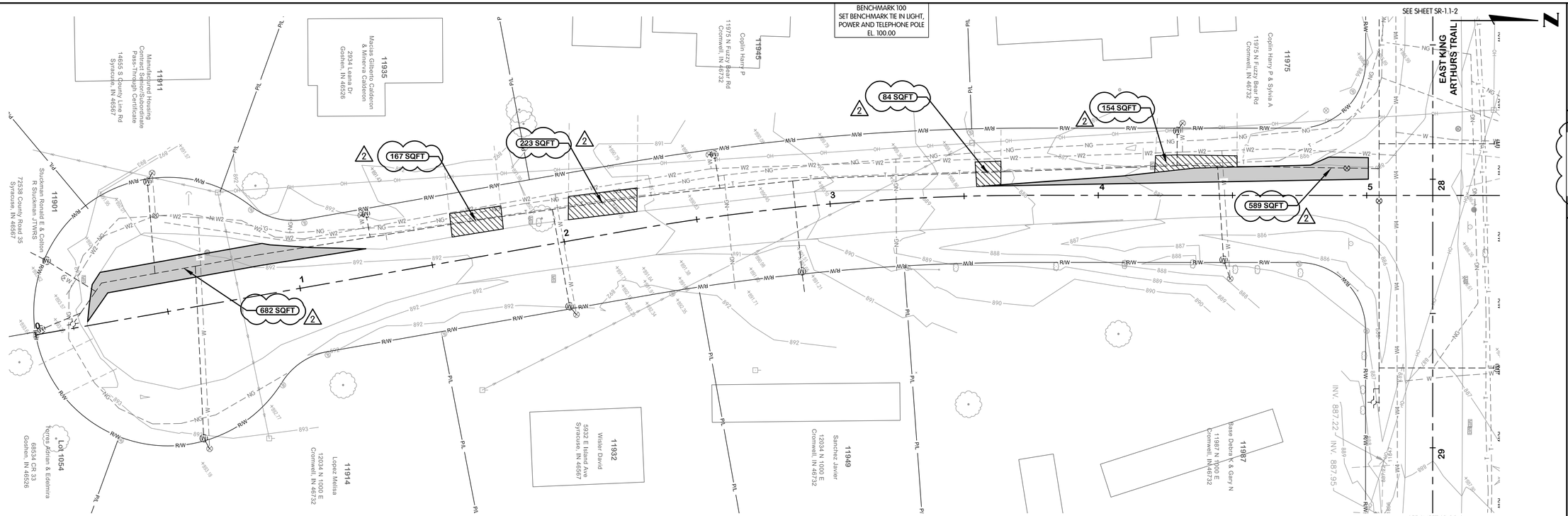
JOB NO.	868-8305.400
SCALE	1"=20'
	THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
DESIGNED	JPM
DRAWN	AJB
CHECKED	MSH
STATUS	ISSUED FOR BID
DATE	2026
SHEET NO.	SR-8.1-2
	43 OF 48

FTW-8305\005R8-SR-8.1-2
02/28/2026 11:06 AM - ABLASING
1/29/2026 11:56 AM



FUZZY BEAR ROAD

SURFACE RESTORATION LEGEND

- ASPHALT PAVEMENT
- MILL AND RESURFACE
- GRAVEL DRIVEWAY
- CONCRETE DRIVEWAY

MICHAEL S. HARKNESS REGISTERED No. 19900563 STATE OF INDIANA PROFESSIONAL ENGINEER

01-13-2025

TCRSD

FUZZY BEAR ROAD SURFACE RESTORATION PLAN STA. 0+00 TO 5+50

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2	01-28-2026	ADDENDUM 2	JPM
1			

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JOB NO. 868-8305.400

SCALE 1"=20'

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

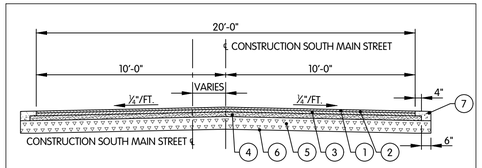
STATUS: ISSUED FOR BID

DATE: 2026

SHEET NO.

SR-9.1

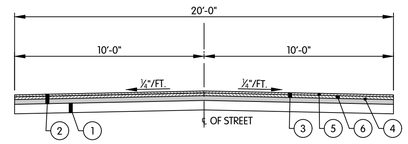
FTW-8305.005R9-SR-9.1
jtw\jpm2\ 1/29/2026 11:46 AM - ABLAISING
1/29/2026 11:56 AM



1. 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE I (448)
2. TACK COAT ITEM 407 0.05 GAL/SQ.YD.
3. 1¼" ASPHALT CONCRETE INTERMEDIATE COURSE TYPE II (448)
4. 3" ASPHALT CONCRETE BASE
5. 8" AGGREGATE BASE
6. COMPACT SUBGRADE
7. 6" STABILIZED CRUSHED AGGREGATE

TYPICAL UNCURBED PAVEMENT SECTION

NTS

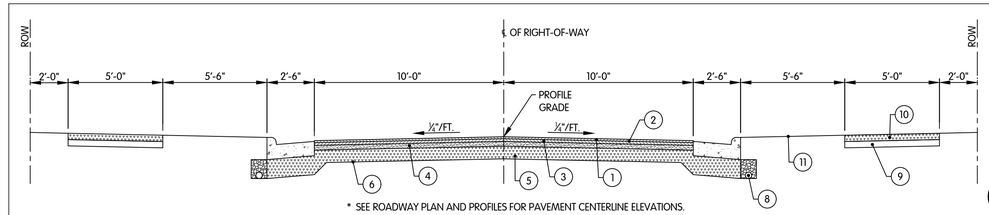


STA. X+XX TO X+XX

1. EXISTING AGGREGATE BASE, VARIES
2. EXISTING ASPHALT CONCRETE PAVEMENT (4"-5")
3. PAVEMENT PLANING, ASPHALT CONCRETE, VARIABLE
4. TACK COAT ITEM 407 0.08 GAL/SQ.YD.
5. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE I (448)
6. ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, VARIABLE

TYPICAL PLANING PAVEMENT SECTION

NTS

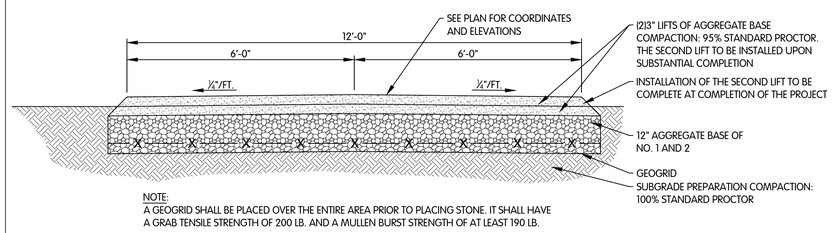


* SEE ROADWAY PLAN AND PROFILES FOR PAVEMENT CENTERLINE ELEVATIONS.
** CROSS SECTIONS AT DRIVEWAYS SHOW TOP OF DRIVEWAY SURFACE. CROSS SECTIONS NOT AT DRIVEWAYS SHOW CUT SECTION.

1. ASPHALT CONCRETE SURFACE COURSE, TYPE I (448)
2. TACK COAT ITEM 407 0.05 GAL/SQ.YD.
3. 1¼" ASPHALT CONCRETE INTERMEDIATE COURSE TYPE II (448)
4. 3" ASPHALT CONCRETE BASE COURSE
5. 8" AGGREGATE BASE
6. COMPACTED SUBGRADE
7. CURB AND GUTTER
8. 4" UNDERDRAIN
9. 4" AGGREGATE BASE
10. 4" CONCRETE SIDEWALK
11. SEEDING AND MULCHING

TYPICAL PAVEMENT SECTION

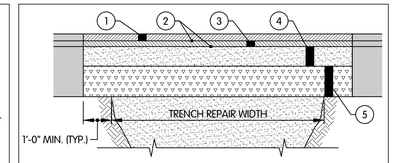
NTS



NOTE:
A GEOGRID SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL HAVE A GRAB TENSILE STRENGTH OF 200 LB. AND A MULLEN BURST STRENGTH OF AT LEAST 190 LB.

ACCESS ROAD DETAIL

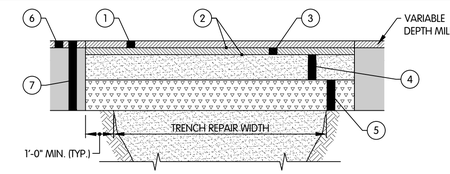
NTS



1. 1½" ASPHALT CONCRETE SURFACE COURSE TYPE I (448)
2. TACK COAT ITEM 407 0.05 GAL/SQ.YD.
3. 1¼" ASPHALT CONCRETE INTERMEDIATE COURSE TYPE II (448)
4. 3" ASPHALT CONCRETE BASE COURSE
5. 8" AGGREGATE BASE

TYPICAL LOCAL STREETS TRENCH PAVEMENT REPAIR DETAIL

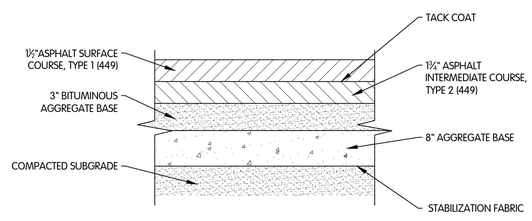
NTS



1. 1½" ASPHALT CONCRETE SURFACE COURSE TYPE I (448)
2. TACK COAT ITEM 407 0.05 GAL/SQ.YD.
3. 1¼" ASPHALT CONCRETE INTERMEDIATE COURSE TYPE II (448) UP TO EXISTING PAVEMENT SURFACE
4. 8" ASPHALT CONCRETE BASE COURSE
5. 8" AGGREGATE BASE
6. PAVEMENT PLANNING, 1.5'
7. EXISTING PAVEMENT

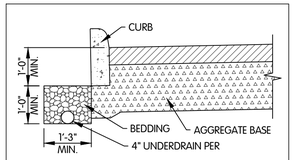
STATE ROUTE TRENCH PAVEMENT REPAIR DETAIL

NTS



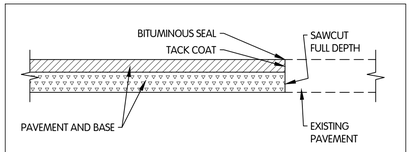
ASPHALT PAVEMENT SECTION

NTS



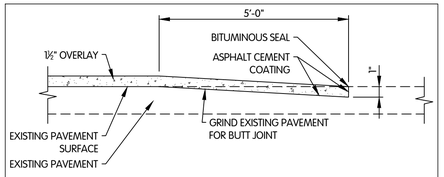
UNDERDRAIN DETAIL

NTS



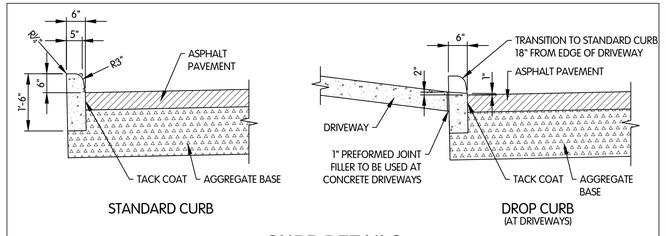
BUTT JOINT FOR FULL-DEPTH PAVEMENT REPLACEMENT

NTS



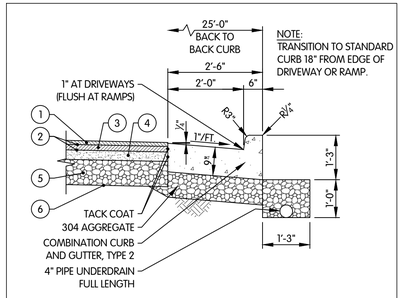
BUTT JOINT FOR PAVEMENT PLANING

NTS



CURB DETAILS

NTS



NOTE:
TRANSITION TO STANDARD CURB 18" FROM EDGE OF DRIVEWAY OR RAMP.

CURB AND GUTTER DETAIL (TYPE 2) WITH UNDERDRAIN

NTS

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

SURFACE RESTORATION DETAILS

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			
4			
3			
2			
1	01-28-2026	ADDENDUM 2	JPM

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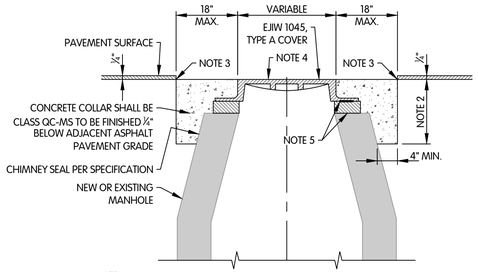
JOB NO. 868-8305.400
SCALE AS INDICATED
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

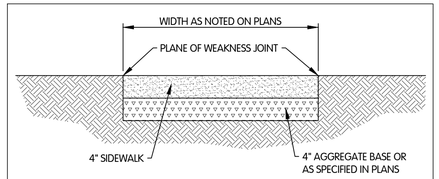
STATUS: ISSUED FOR BID
DATE: 2026
SHEET NO. SR-0.1
45 OF 48

FTW-8305.400SR01-SR-01 SURFACE RESTORATION DETAILS
1/29/2026 11:14 AM - AJBLASING
1/29/2026 11:57 AM



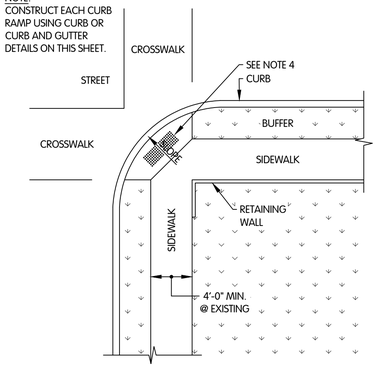
NOTE:
1. TO BE USED ON SURFACE RESTORATION MANHOLES AND MANHOLES ADJUSTED TO GRADE.
2. COLLAR SHALL LOCK IN CASTING, ADJUSTMENT RINGS, AND TOP 4" OF STRUCTURE AROUND ENTIRE PERIMETER OF STRUCTURE.
3. SEAL JOINT WITH AC.
4. SET CASTING TO ¼" BELOW PAVEMENT GRADE ON ADJUSTING RINGS.
5. (2)⅛"x 1⅜" PERFORMED BUTYL RUBBER SEALANT STRIPS, CONCRETE SEALANT INC. TYPE CS-202 OR EQUAL IN EACH JOINT.

MANHOLES CONCRETE COLLAR DETAIL
NTS

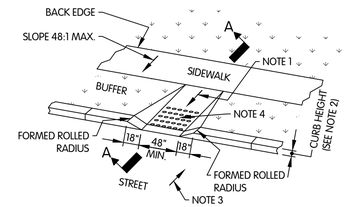


4" CONCRETE SIDEWALK
NTS

NOTE:
CONSTRUCT EACH CURB RAMP USING CURB OR CURB AND GUTTER DETAILS ON THIS SHEET.

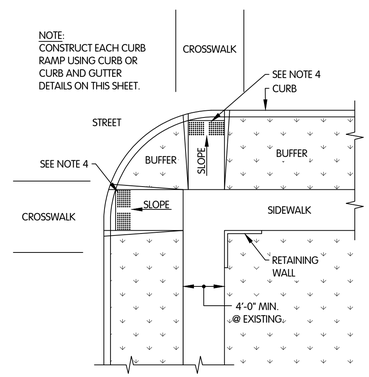


COMBINED RAMPS AT INTERSECTION

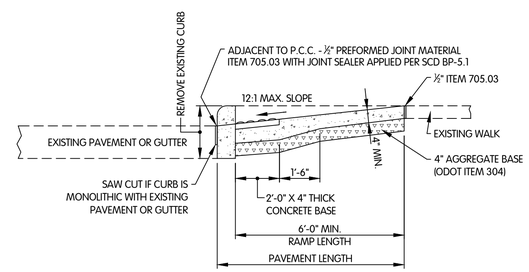


PERPENDICULAR RAMPS

NOTE:
CONSTRUCT EACH CURB RAMP USING CURB OR CURB AND GUTTER DETAILS ON THIS SHEET.



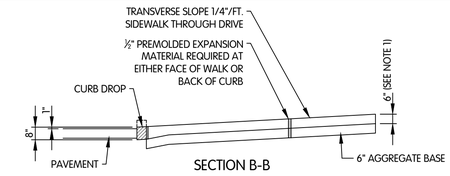
SEPARATE RAMPS AT INTERSECTION



SECTION A-A
CURB RAMP DETAIL

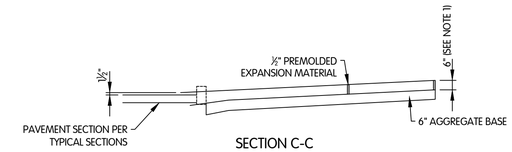
NOTES:
1. THE SLOPE OF THE RAMP TOWARD THE CURB IS PREFERRED TO BE 12:1 OR FLATTER RELATED TO THE HORIZONTAL. IN EXISTING SIDEWALKS, IT MAY BE REDUCED AS FOLLOWS:
   A) 10:1 FOR A MAXIMUM RISE OF 6"
   B) 8:1 FOR A MAXIMUM RISE OF 3"
   C) 6:1 OVER A MAXIMUM 2'-0" FOR HISTORICAL AREAS WHERE A FLATTER SLOPE IS NOT FEASIBLE.
2. THE MINIMUM LENGTH OF PERPENDICULAR RAMP IS 6' FROM THE BACK OF A 6" CURB AND MAY BE INCREASED WHERE FEASIBLE TO OBTAIN A FLATTER RAMP SLOPE OR TO BETTER BLEND WITH THE WALK CONFIGURATION.
3. GUTTER COUNTER SLOPES AT THE FOOT OF PERPENDICULAR CURB RAMPS SHOULD NOT EXCEED 20:1 OVER A DISTANCE OF 2'-0" FROM THE CURB.
4. DETECTABLE WARNINGS (TRUNCATED DOMES) ARE TO BE INSTALLED IN THE LOCATION SHOWN. DIMENSIONS OF THE DOMES ARE 24" FROM THE BACK OF THE CURB BY THE WIDTH OF THE RAMP.
5. DETECTABLE WARNING DEVICES SHALL BE A CAST-IN-PLACE SYSTEM AS MANUFACTURED BY ARMOR-TILE TACTILE SYSTEMS, ADA SOLUTIONS OR APPROVED EQUAL. COLOR SHALL BE RED BRICK.

CURB RAMP DETAILS
NTS



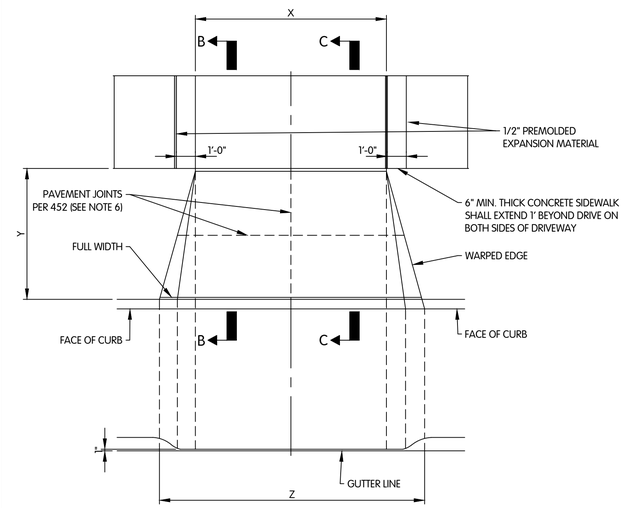
SECTION B-B

CURBED STREET DRIVE
NTS



SECTION C-C

UNCURBED STREET DRIVE
NTS



CURB DROP
1/4"=1'-0"

NOTES:
1. DRIVEWAY TYPICAL SECTION:
   6" MINIMUM CONCRETE
   8" MINIMUM CONCRETE FOR COMMERCIAL DRIVES
   3" ASPHALT SURFACE ON 6" AGGREGATE BASE
   6" STABILIZED CRUSHED AGGREGATE
2. IF THE DRIVEWAY THROAT OR THE TREE LAWN WIDTH IS >10'-0" PROVIDE EVENLY SPACED PAVEMENT JOINTS AS SHOWN OR AS DIRECTED BY THE ENGINEER.
3. WALKS SHALL BE POURED SEPARATE FROM DRIVES AND SHALL INCLUDE ½" EXPANSION JOINT.

MICHAEL S. HARKNESS REGISTERED No. 19900563 STATE OF INDIANA PROFESSIONAL ENGINEER
01-13-2025

TCRSD 2

SURFACE RESTORATION DETAILS

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
5			JPM
4			
3			
2	01-28-2026	ADDENDUM 2	
1			

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Fluid thinking®.
www.JHeng.com

JOB NO. 868-8305.400
SCALE AS INDICATED
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

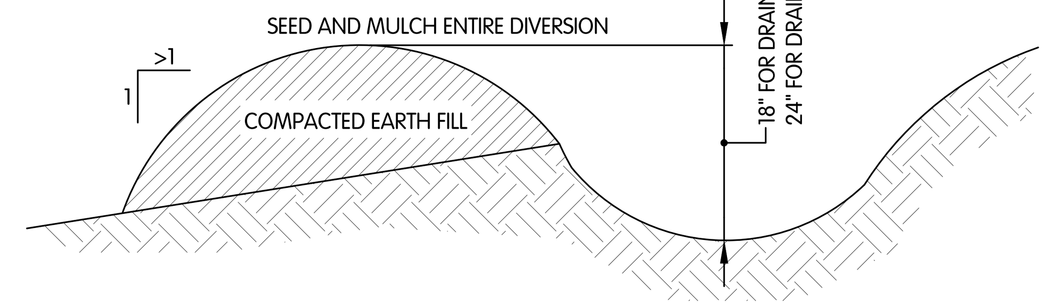
STATUS: ISSUED FOR BID
DATE: 2026
2

SHEET NO.
SR-0.2
46 OF 48

FTW-8305\ODSR01-SR-0.2 SURFACE RESTORATION DETAILS
1/29/2026 11:34 AM - ABLASING
1/29/2026 11:57 AM

TEMPORARY DIVERSION

NOTE:
DIVERSION SLOPES SHALL NOT BE STEEPER THAN 1:1.



SECTION

NOTES:
1. DIVERSION SHALL BE COMPACTED BY TRAVERSING WITH TRACKED EARTH MOVING EQUIPMENT.
2. DIVERSIONS SHALL NOT BE BREACHED OR LOWERED TO ALLOW CONSTRUCTION TRAFFIC TO CROSS; INSTEAD THE TOP WIDTH MAY BE MADE WIDER AND SIDE SLOPES MADE FLATTER THAN SPECIFIED ABOVE.
3. DIVERSIONS SHALL BE STABILIZED WITH VEGETATION AND CHECK DAMS OR THE FOLLOWING TREATMENTS.

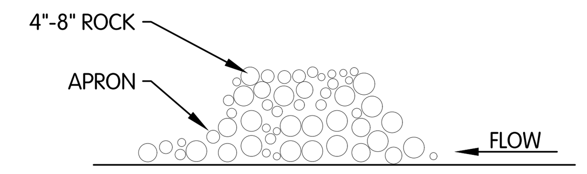
TEMPORARY DIVERSION STABILIZATION TREATMENT

DIVERSION SLOPE	< 2 ACRES	2-5 ACRES	5-10 ACRES
0-3%	SEED AND STRAW	SEED AND STRAW	SEED AND STRAW
3-5%	SEED AND STRAW	SEED AND STRAW	MATING
5-8%	SEED AND STRAW	MATING	MATING
8-20%	SEED AND STRAW	MATING	ENGINEERED

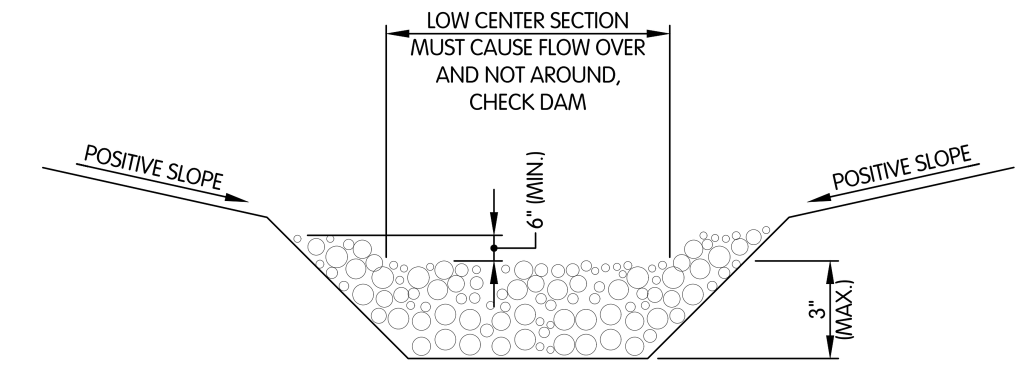
NOTE:
DIVERSIONS WITH STEEPER SLOPES OR GREATER DRAINAGE AREAS ARE BEYOND THE SCOPE OF THIS STANDARD AND MUST BE DESIGNED FOR STABILITY. SEED, STRAW AND MATTING USED SHALL MEET THE SPECIFICATIONS FOR TEMPORARY SEEDING, MULCHING AND MATTING.

TEMPORARY DIVERSION (TD)
NTS

CHECK DAM



PROFILE



CROSS SECTION

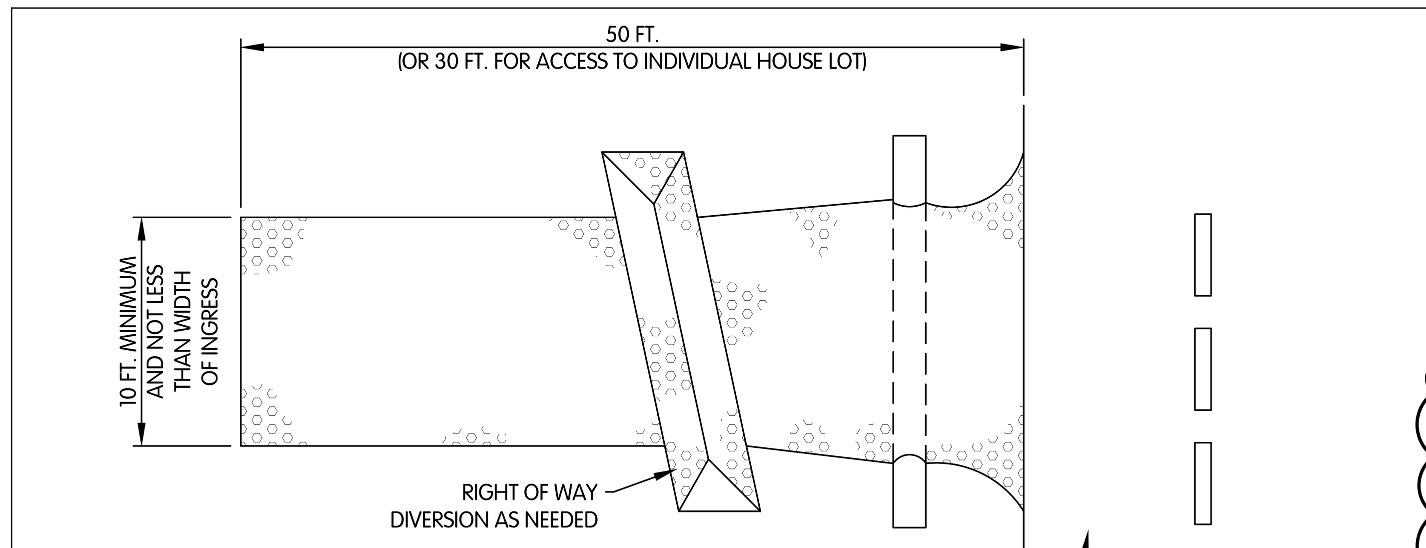
NOTES:
1. THE CHECK DAM SHALL BE CONSTRUCTED OF 4" TO 8" DIAMETER STONE, PLACED SO THAT IT COMPLETELY COVERS THE WIDTH OF THE CHANNEL
2. THE TOP OF THE CHECK DAM SHALL BE CONSTRUCTED SO THAT THE CENTER IS APPROXIMATELY 6" LOWER THAN THE OUTER EDGES, SO WATER WILL FLOW ACROSS THE CENTER AND NOT AROUND THE ENDS.
3. THE MAXIMUM HEIGHT OF THE CHECK DAM AT THE CENTER OF THE WEIR SHALL NOT EXCEED 3'-0"
4. SPACING BETWEEN DAMS SHALL BE AS SHOWN IN THE PLANS OR BY THE FOLLOWING TABLE:

CHECK DAM SPACING

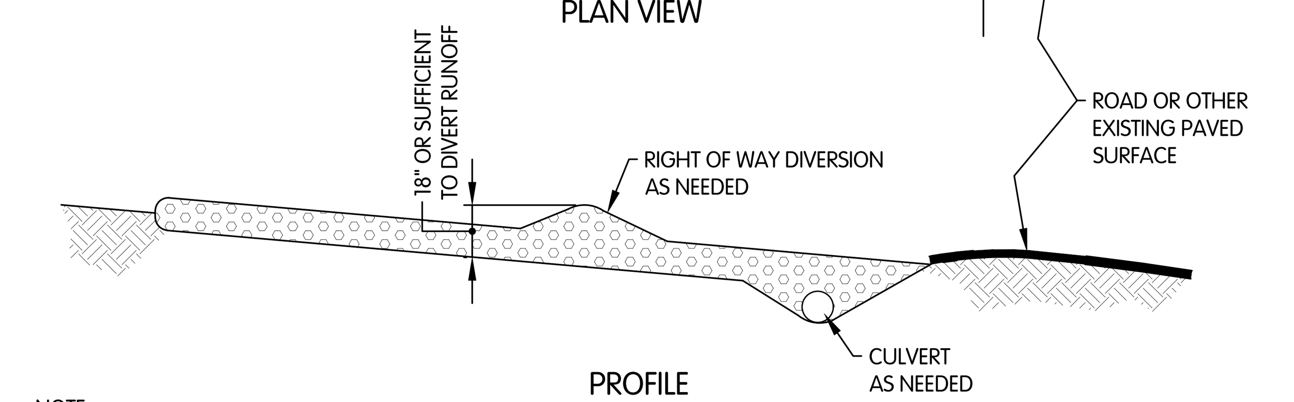
DAM HEIGHT (FT.)	CHANNEL SLOPE < 5%	5-10%	10-15%	15-20%
1	65'-0"	30'-0"	20'-0"	15'-0"
2	130'-0"	65'-0"	40'-0"	30'-0"
3	200'-0"	100'-0"	65'-0"	50'-0"

CHECK DAM
NTS

CONSTRUCTION ENTRANCE



PLAN VIEW



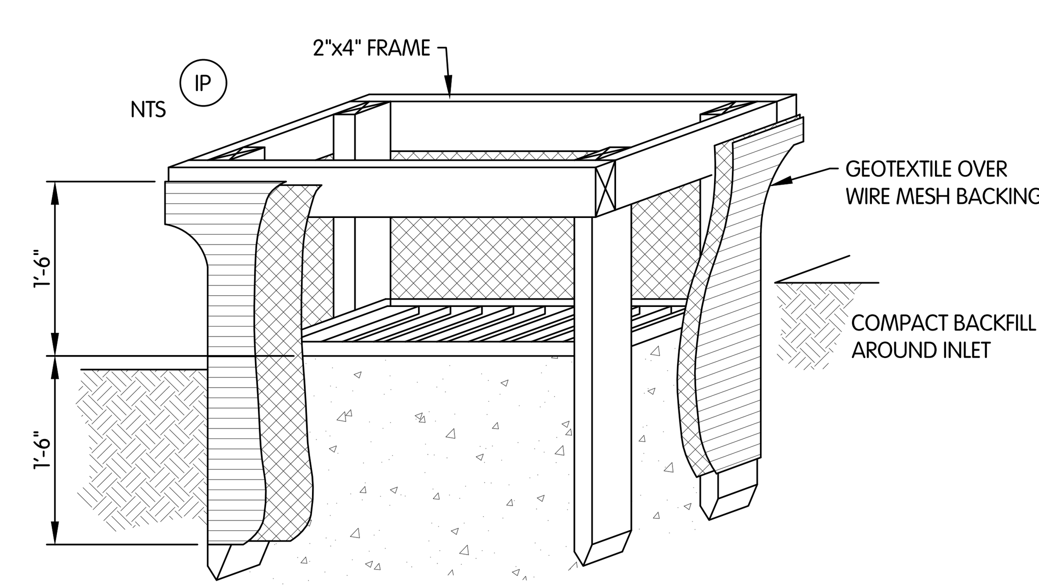
PROFILE

NOTE:
1. STONE SIZE - TWO-INCH STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 50 FT. (EXCEPT ON SINGLE RESIDENCE LOT WHERE A 30 FT. MINIMUM LENGTH APPLIES.
3. THICKNESS - THE STONE LAYER SHALL BE AT LEAST 6 IN. THICK.
4. WIDTH - THE ENTRANCE SHALL BE AT LEAST 10 FT. WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. BEDDING - A GEOTEXTILE SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL HAVE A GRAB TENSILE STRENGTH OF AT LEAST 200 LB. AND A MULLEN BURST STRENGTH OF AT LEAST 190 LB.
6. CULVERT - A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FLOWING ACROSS THE ENTRANCE FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
7. WATER BAR - A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
8. MAINTENANCE - TOP DRESSING OF ADDITIONAL STONE WALL SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
9. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF SITE TRACKING.VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION SITE SHALL BE RESTRICTED FROM MUDDY AREAS.

CONSTRUCTION ENTRANCE (RCE)
NTS

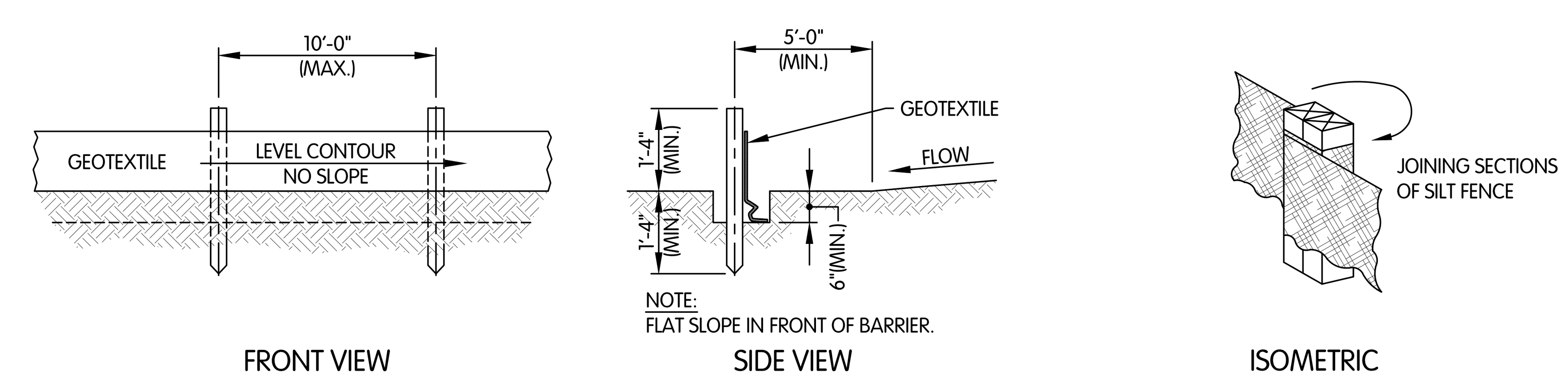
WITHOUT HOODS

NTS (IP)



NOTES:
1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
2. THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH AT LEAST 18".
3. THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2 x 4 CONSTRUCTION GRADE LUMBER. THE 2 x 4 POSTS

SILT FENCE



FABRIC PROPERTIES	VALUES	TEST METHOD
GRAB TENSILE STRENGTH	90 LB. MINIMUM	ASTM D 1682
MULLEN BURST STRENGTH	190 P.S.I. MINIMUM	ASTM D 3786
SLURRY FLOW RATE	0.3 GAL./MIN./FT.^{2} MAX.	-
EQUIVALENT OPENING SIZE	40-80	US STD. SIEVE CW-02215
ULTRAVIOLET RADIATION STABILITY	90% MINIMUM	ASTM-G-26

NOTES:
1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION.
4. WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FT. (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE FENCE.
6. SOIL STOCKPILES OR OTHER SOURCES OF SEDIMENT SHALL HAVE SILT FENCE PROTECTION.
7. THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM OF 6" DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICE WHICH WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWN SLOPE SIDE OF THE GEOTEXTILE AND SO THAT 8" OF CLOTH ARE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6" DEEP TRENCH. THE TRENCH SHALL BE BACK FILLED AND COMPACTED.
9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.
10. MAINTENANCE-- SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVER TOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE:

   A. THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED.
   B. ACCUMULATED SEDIMENT SHALL BE REMOVED.
   C. OTHER PRACTICES SHALL BE INSTALLED.

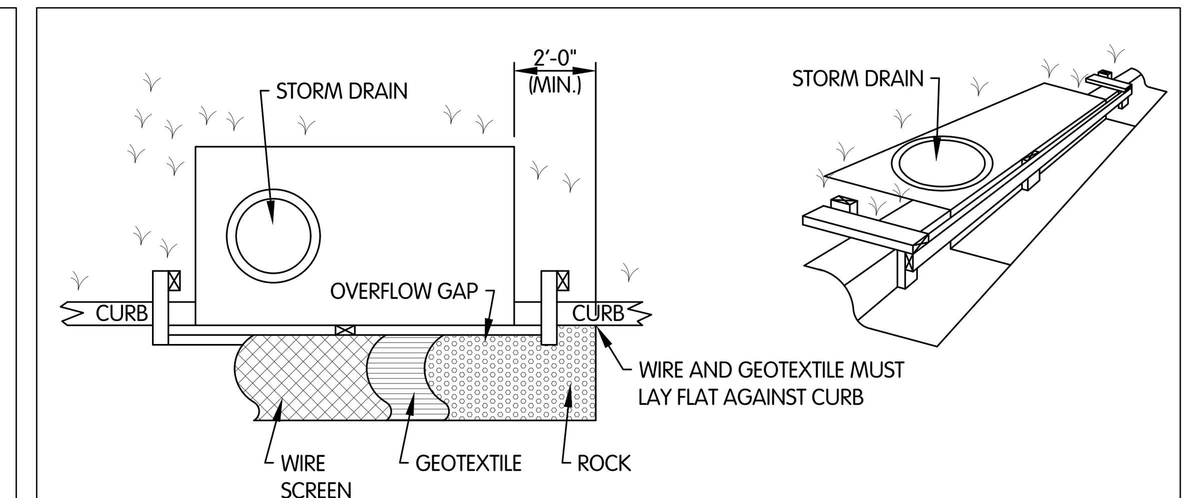
CRITERIA FOR SILT FENCE MATERIALS:

1. FENCE POSTS - THE LENGTH SHALL BE A MINIMUM OF 32" LONG. WOOD POST WILL BE 2" X 2" HARDWOOD OF SOUND QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT.

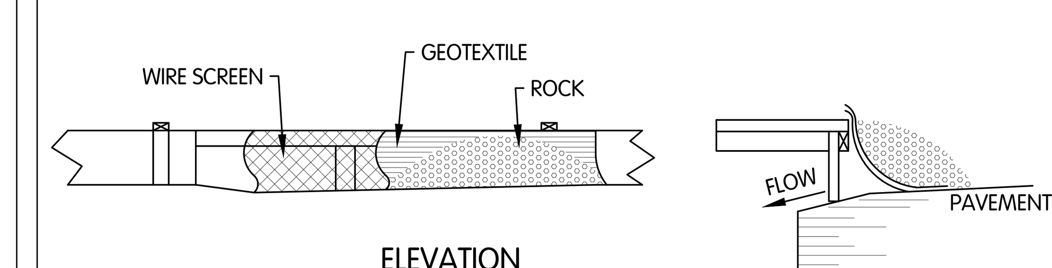
2. SILT FENCE FABRIC (SEE CHART BELOW):

SILT FENCE (SF)
NTS

CURB INLET PROTECTION



PLAN



ELEVATION

SECTION

NOTES:
1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
2. THE WOODEN FRAME IS TO BE CONSTRUCTED OF 2x4 CONSTRUCTION GRADE LUMBER. THE END SPACERS SHALL BE A MINIMUM OF 1 FT. BEYOND BOTH ENDS OF THE THROAT OPENING. THE ANCHORS SHALL BE NAILED TO 2x4 STAKES DRIVEN ON THE OPPOSITE SIDE OF THE CURB.
3. THE WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC AND STONE. IT SHALL BE A CONTINUOUS PIECE WITH A MINIMUM WIDTH OF 30" AND 4'-0" LONGER THAN THE THROAT LENGTH OF THE INLET, 2'-0" ON EACH SIDE.
4. GEOTEXTILE CLOTH SHALL HAVE AN EQUIVALENT OPENING SIZE (EOS) OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE AT LEAST THE SAME SIZE AS THE WIRE MESH
5. THE WIRE MESH AND GEOTEXTILE CLOTH SHALL BE FORMED TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET AND SECURELY FASTENED TO THE 2x4 FRAME.
6. 2" STONE SHALL BE PLACED OVER THE WIRE MESH AND GEOTEXTILE IN SUCH A MANNER AS TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE CLOTH.

CURB INLET PROTECTION
NTS

MICHAEL S. HARKNESS REGISTERED No. 19900563 STATE OF INDIANA PROFESSIONAL ENGINEER
01-13-2025

TCRSD 2

SURFACE RESTORATION DETAILS

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS	BY
5			
4			
3			
2	01-28-2026	ADDENDUM 2	
1		REVISIONS AFTER ISSUED FOR BID	JPM

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JOB NO. 868-8305.400
SCALE AS INDICATED
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
JPM	AJB	MSH

STATUS: ISSUED FOR BID
DATE: 2026 2
SHEET NO.
SR-0.3
47 OF 48

FTW-83054005R01-SR-0.3 SURFACE RESTORATION DETAILS
1/29/2026 11:34 AM - ABLAISING
1/29/2026 11:57 AM

ASSESMENT OF CONSTRUCTION PLAN ELEMENTS (SECTION A)

A 1 PLAN INDEX
SEE COVER SHEET OF ATTACHED PLANS.

A 2 11X17 PLAT
SEE COVER SHEET OF ATTACHED PLANS.

A 3 NARRATIVE
THE TURKEY CREEK REGIONAL SEWER DISTRICT IS PROPOSED TO CONSTRUCT APPROXIMATELY 10,800 LF OF 6 TO 12-INCH WATER MAINS. THE PROJECT IS ENTIRELY OF A LINEAL NATURE.

A 4 VICINITY MAP
SEE COVER SHEET OF ATTACHED PLANS.

A 5 LEGAL DESCRIPTION
THE PROJECT IS IN SECTION 13; TURKEY CREEK TWP., KOSCIUSKO CO., INDIANA, 12T34N, R7E:
THE APPROXIMATE CENTER OF THE SITE DESCRIBED IS:

NORTHSHORE - EASTSHORE COLLECTION SYSTEM
LATITUDE (NORTH) 41.408925° N - LONGITUDE (WEST) -85.658619° W

A 6 LOCATIONS OF LOTS
NO INDIVIDUAL LOTS ARE PROPOSED.

A 7 HYDROLOGIC UNIT CODE
THE HUC 14 NUMBER IS 04050001200020

A 8 NOTIFICATION OF STATE OR FEDERAL PERMITS
NONE

A 9 SPECIFIC STORM WATER DISCHARGE POINTS
SEVERAL POINTS OF EXISTING OVERLAND FLOW PATTERNS ARE ADDRESSED WITHIN THE ATTACHED EROSION PLAN AND CONSTRUCTION PLANS.

A 10 LOCATION AND NAMES OF WETLANDS, LAKES AND WATER COURSES.
AS SHOWN ON ATTACHED EROSION CONTROL PLANS THERE ARE COUNTY STORM SEWERS ALONG THE ROUTE.

A 11 RECEIVING WATERS
RUNOFF FLOWS TO THE COUNTY STORM SEWERS.

A 12 POTENTIAL DISCHARGES TO GROUNDWATER
THE PROJECT HAS NO SOURCES OF DISCHARGE TO GROUNDWATER.

A 13 100-YEAR FLOODPLAIN, FLOODWAY AND FRINGES
FEMA'S FIRM MAP PANEL FOR THE PROJECT IS AS FOLLOWS:18085C0095D SEE ATTACHED.

A 14 PRE AND POST CONSTRUCTION PEAK DISCHARGE.
THIS PROJECT WILL RESTORE TOPOLOGY TO PRECONSTRUCTION STATE AND THEREFORE NO CALCULATIONS ARE SUBMITTED.

A 15 ADJACENT LAND USE
ADJACENT LAND IS MAINTAINED ROADSIDE SWALES RESIDENTIAL AND BUSINESS.

A 16 LOCATIONS AND APPROXIMATE BOUNDARIES OF DISTURBED AREAS
THE NOMINAL WIDTH OF CONSTRUCTION ACTIVITIES WILL BE APPROXIMATELY 10 FEET; HOWEVER, 20 FEET IS ALLOCATED FOR PROJECTS OF THIS NATURE.

A 17 IDENTIFICATION OF EXISTING VEGETATIVE COVER
THE SITE CONSISTS OF A MIXTURE OF DEWATERING SEDIMENTS FROM QUARRY ACTIVITIES WITH WASTE MATERIAL FROM CONCRETE OPERATIONS. LIGHT BRUSH AND GRASSES ARE PRESENT AROUND THE PERIMETER ON OVERBURDEN MATERIAL.

A 18 SOILS MAP INCLUDING DESCRIPTIONS AND LIMITATIONS
SOIL TYPES ARE IDENTIFIED ON SOILS MAP ATTACHED.

A 19 LOCATION, SIZE AND DIMENSIONS OF PROPOSED STORM WATER SYSTEMS
NONE PROPOSED FOR THIS PROJECT.

A 20 PLAN FOR ANY OFF-SITE CONSTRUCTION ACTIVITIES
NONE PROPOSED FOR THIS PROJECT.

A 21 LOCATIONS OF PROPOSED SOIL STOCKPILES, BORROW AND/OR DISPOSAL AREAS.
NO STOCKPILES ARE PROPOSED AS SPECIAL BEDDING AND FILL WILL BE DELIVERED AND USED AS NEEDED. UPON ACCEPTANCE OF SUCCESSFUL BIDDER, CONTRACTOR MUST IDENTIFY WHERE EXCESS SPOIL IS DEPOSITED AND THAT ALL NECESSARY PERMITS TO DEPOSIT SPOIL HAVE BEEN ACQUIRED.

A 22 EXISTING SITE TOPOGRAPHY
SEE ATTACHED PLAN & PROFILE SHEETS.

A 23 PROPOSED FINAL TOPOGRAPHY
NO CHANGES WILL OCCUR.

ASSESMENT OF CONSTRUCTION PLAN ELEMENTS (SECTION B)
CONSTRUCTION COMPONENT

B1 DESCRIPTION OF POTENTIAL POLLUTANTS
POTENTIAL SOURCES DURING CONSTRUCTION INCLUDE DISTURBED SOILS, ASPHALT, STORED MATERIALS AND FUELS, MULCH, CONCRETE WASH-OUT, GENERAL TRASH, HUMAN WASTE, FERTILIZERS, PESTICIDES AND HERBICIDES. FUEL WILL NOT BE STORED ON SITE, BUT SOME LUBRICANTS MAY BE KEPT WITH EQUIPMENT. NO BULK POLLUTANTS WILL BE KEPT ON SITE; ALL TRASH AND CHEMICALS WILL BE STORED OFF SITE (EXCEPT FOR AN APPROVED SANITARY FACILITY).

B2 SEQUENCE DESCRIBING STORM WATER QUALITY MEASURE IMPLEMENTATION
1. A PRE-CONSTRUCTION MEETING INCLUDING THE KOSCIUSKO COUNTY SOIL AND WATER CONSERVATION DISTRICT MUST BE HELD PRIOR TO ANY LAND DISTURBANCE.
2. PLEASE NOTIFY THE KOSCIUSKO COUNTY SOIL AND WATER CONSERVATION DISTRICT 48 HOURS PRIOR TO THE BEGINNING OF LAND DISTURBANCE.
3. INSTALLATION OF GRAVEL CONSTRUCTION ENTRANCES.
4. INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES, E.G. SILT FENCE, CURB TRENCHES, STRAW WATTLES, INLET PROTECTIVE MEASURES, CONCRETE WASHOUT PIT, ETC.
5. EXCAVATION OF RETENTION/DETENTION/TEMPORARY SEDIMENT BASINS AND OF BUILDING SITES.
6. TEMPORARY STABILIZATION OF ANY DISTURBED AREA THAT IS SCHEDULED TO BE LEFT INACTIVE FOR 15 DAYS OR MORE (THROUGH THE ENTIRE CONSTRUCTION PERIOD).
7. CONSTRUCTION OF BUILDINGS, ROADS, ETC AND INSTALLATION OF UTILITIES.
8. FINAL GRADING AND PERMANENT STABILIZATION.
9. REMOVAL OF ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ONCE ALL DISTURBED AREAS ARE STABILIZED.
10. ALL EROSION AND SEDIMENT CONTROL DEVICES ARE TO BE CHECKED, MAINTAINED, AND REPLACED WHEN NEEDED THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS.
11. NOTIFY SOIL AND WATER OFFICE 48 HOURS BEFORE WORK BEGINS AND SET TIME FOR NOT FINAL INSPECTION.
12. A FINAL SITE INSPECTION WILL TAKE PLACE TO ENSURE THAT ALL REQUIREMENTS OF THE SWPPP, CONSTRUCTION PLANS, AND SUPPORTING DOCUMENTS HAVE BEEN FULFILLED. THEN A NOTICE OF TERMINATION (NOT) MUST BE SUBMITTED TO AND APPROVED BY THE KOSCIUSKO COUNTY SWCD OFFICE IN WARSAW, INDIANA. THE NOT FORM CAN BE FOUND AT THE FOLLOWING WEBSITE: *HTTP://WWW.IN.GOV/IDEM/5157.HTM#OWQ_STORMWATER* (THE FORM IS CALLED "RULE 5: NOTICE OF TERMINATION (NOT) STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITY - 51514).

B3 STABLE CONSTRUCTION ENTRANCE LOCATIONS AND SPECIFICATIONS
THIS PROJECT IS LINEAR AND DYNAMIC IN NATURE AND THEREFORE WILL NOT PREDETERMINE STATIC INGRESS/EGRESS LOCATIONS. THE CONTRACTOR IS HOWEVER, RESPONSIBLE FOR TRACKING AND SEDIMENTS DEPOSITED ON PUBLIC THOROUGHFARES. DAILY SWEEPING AND REMOVAL OF ALL SAID DEPOSITS WILL TAKE PLACE INCLUDING ADDITIONAL SWEEPING AS DEEMED APPROPRIATE BY OWNER OR SITE ENGINEER. THE OWNER MAY, AT HIS DISCRETION, ORDER SPECIAL ENTRANCE DEVICES IF CONTRACTOR'S PERFORMANCE IS DEEMED UNSATISFACTORY.

B4 SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS
SEE ATTACHED EROSION CONTROL PLAN SHEETS.

B5 SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS
SEE ATTACHED EROSION CONTROL PLAN SHEETS

B6 STORM SEWER INLET PROTECTION MEASURE LOCATIONS AND SPECIFICATIONS
SEE ATTACHED EROSION CONTROL PLAN SHEETS

B7 RUNOFF CONTROL MEASURES
NO SPECIAL STRUCTURES ARE DEEMED NECESSARY FOR THIS PROJECT, EXCEPT AS DISCOVERED IN THE CONSTRUCTION PHASE AND WILL BE ADDRESSED DURING NORMAL EROSION AND CONSTRUCTION REVIEWS.

B8 STORM WATER OUTLET PROTECTION SPECIFICATIONS
SEE ATTACHED EROSION CONTROL PLAN SHEETS (PRIMARILY EXISTING CULVERTS).

B10 LOCATION, DIMENSION, SPECIFICATIONS AND CONSTRUCTION DETAILS OF MEASURES
NO ADDITIONAL OR NEW (PERMANENT) STRUCTURES ARE CALLED FOR ON THIS PROJECT.

B11 TEMPORARY SURFACE STABILIZATION METHODS APPROPRIATE FOR EACH SEASON:
SEE EROSION AND SEDIMENT CONTROL SEQUENCE AND GENERAL NOTES ON THIS SHEET. IT IS ALSO CALLED FOR THAT FINAL GRADING AND SEEDING SHALL BE KEPT WITHIN 200 FEET OF EXCAVATION. SHOULD AN EXTENDED BREAK IN CONSTRUCTION OCCUR (OVER 15 CALENDAR DAYS) THE CONTRACTOR SHALL COVER AND STABILIZE ALL EXPOSED SOILS AS IN A FINISHED STATE

B12 PERMANENT SURFACE STABILIZATION SPECIFICATIONS
ALL AREAS DISTURBED DURING CONSTRUCTION WILL BE REPAVED OR SEEDED. ONCE THE BACK FILL IS PLACED THE AREAS WILL BE COVERED WITH AGGREGATE UNTIL IT IS PAVED OR SEEDED. DURING WINTER AND SPRING EXPOSED AREAS WILL BE MULCHED COVERED UNTIL SEEDING CAN BE DONE.

B13 MATERIAL HANDLING AND SPILL PREVENTION PLAN
SOURCES DURING CONSTRUCTION INCLUDE DISTURBED SOILS, STORED MATERIALS AND FUELS, MULCH, CONCRETE WASH-OUT, GENERAL TRASH, HUMAN WASTE, FERTILIZERS, PESTICIDES AND HERBICIDES. FUEL WILL NOT BE STORED ON SITE, BUT SOME LUBRICANTS MAY BE KEPT WITH EQUIPMENT. NO BULK POLLUTANTS WILL BE KEPT ON SITE; ALL TRASH AND CHEMICALS WILL BE STORED OFF SITE (EXCEPT FOR AN APPROVED SANITARY FACILITY).

SUCCESSFUL CONTRACTOR SHALL PROVIDE A LIST OF ALL POTENTIAL CONTAMINANTS AND A STORAGE, HANDLING AND SPILL PREVENTION PLAN PRIOR TO COMMENCEMENT OF FIELD ACTIVITIES. THIS WILL COMPLY WITH DIRECTION CONTAINED HEREIN UNDER GENERAL NOTES.

EMERGENCY CONTACT TIM WOODWARD WWTP (260) 856-4341.

B14 MONITORING AND MAINTENANCE GUIDELINES FOR PREVENTION MEASURES
THIS PROJECT INTENDS NO PERMANENT NEW STORM STRUCTURES BUT AS DESCRIBED WITHIN THE EROSION AND SEDIMENT CONTROL SEQUENCE AND GENERAL NOTES (SEE THIS SHEET), A DAILY INSPECTION AND EVALUATION WILL TAKE PLACE, OR PER RAIN OCCURRENCE IF MORE FREQUENT AFTER RAIN EVENT OF ½" OR MORE.

B15 EROSION AND SEDIMENT CONTROL SPECIFICATIONS FOR INDIVIDUAL LOTS
NOT APPLICABLE FOR THIS PROJECT.

ASSESMENT OF CONSTRUCTION PLAN ELEMENTS (SECTION C)
POST CONSTRUCTION COMPONENT

C1 DESCRIPTION OF POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH THE PROPOSED LAND USE.
POTENTIAL SOURCES OF POLLUTANTS INCLUDE AUTOMOTIVE FLUIDS AND DEBRIS, GENERAL TRASH, ASPHALT, FERTILIZERS, PESTICIDES AND HERBICIDES.

C2 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION
THE GOVERNING AGENCY WILL MAINTAIN THE CATCH BASINS PER THEIR MAINTENANCE PROGRAM AFTER CONSTRUCTION. HOMEOWNERS WILL MAINTAIN THE GRASS BUFFER AREAS AND SWALES AS THEIR OWN LAWN CARE PROGRAM AFTER CONSTRUCTION.THE TCRSD WILL MAINTAIN BY GRASS AND CLEANING DEBRIS AT THE PUMP STATION AREA.

C3 DESCRIPTION OF PROPOSED POST CONSTRUCTION STORMWATER QUALITY MEASURES
NONE ARE PROPOSED FOR THE PROJECT

C4 LOCATION, DIMENSIONS, SPECIFICATIONS, AND CONSTRUCTION STORMWATER QUALITY MEASURES
SEE THE EROSION CONTROL SHEETS FOR LOCATION AND CONSTRUCTION OF STORMWATER QUALITY MEASURES.

C5 DESCRIPTION OF MAINTENANCE GUIDELINES FOR POST CONSTRUCTION STORMWATER QUALITY MEASURES

NO STORMWATER MEASURES ARE INCLUDED WITH THIS PROJECT

DESIGNER NOTES

THE DYNAMIC NATURE OF PROJECTS THAT RETRO-FIT OR REPAIR EXISTING UTILITIES CREATE UNIQUE EROSION CONTROL CONSIDERATIONS. SOME ARE POSITIVE DUE TO THE NON-INTRUSIVE NATURE OF A NARROW WORK AREA. THIS RELIEVES THE PROJECT OF MANY CONSIDERATIONS AND REGULATORY REQUIREMENTS AS PRE-EXISTING TOPOGRAPHY IS MAINTAINED. HOWEVER, THE DOWNSIDE IS WE HAVE ONLY PARTIAL CONTAINMENT OF A GIVEN WATERSHED AND MUST ISOLATE OUR CONSTRUCTION RELATED ISSUES FROM THE NEEDS OF THE ENTIRE WATERSHED'S FLOW DYNAMICS, PARTICULARLY AS THEY PASS THOUGH OR OVER OUR LINEAR SCOPE OF WORK. THE FOLLOWING CONCERNS ARE JOB SPECIFIC IN NATURE AND WHILE PARTIALLY ADDRESSED ELSEWHERE, SHOULD BE TAKEN INTO CONSIDERATION THROUGHOUT THIS PROJECT'S EROSION MITIGATION EFFORTS.

VEHICULAR AND MACHINE TRAFFIC WILL HAVE A MAJOR IMPACT ON EROSION ISSUES AND MUST BE CONSTANTLY EVALUATED IN ORDER TO BE MINIMIZED.

TOP SOIL SALVAGING WILL BE A KEY TO SUCCESS IN PERMANENT STABILIZATION AS THIS TYPE OF CONSTRUCTION WILL NOT LEND ITSELF TO STOCKPILING OF THE ENTIRE SITE'S TOPSOIL FOR FINAL PLACEMENT AT THE END OF CONSTRUCTION. THE NATURE OF THESE TRENCHING OPERATIONS WITHIN RIGHT-OF-WAYS WHERE NORMAL SURFACE RUN-OFF IS CHANELIZED PUTS ADDITIONAL STRESS ON FINAL STABILIZATION. THE GREATEST SUCCESS HAS BEEN ACHIEVED BY CONCERTED EFFORTS TO MAXIMIZE SEEDING TECHNIQUES (E.G. TOP SOIL PLACEMENT, AUGMENTING AND WATERING PARTICULARLY DURING DRY SEASONS).

FLOOD ZONE ISSUES WILL BE A "HOT SPOT" FOR POTENTIAL ENVIRONMENTAL RISKS, ENSURE THAT RESPONSIBLE PARTIES UNDERSTAND THE RAMIFICATIONS OF WORKING WITHIN A FLOOD ZONE.

THE ENTIRETY OF THIS PROJECT IS WITHIN PUBLIC VIEW, THEIR PERCEPTION OF THE JOB SITE WILL NOT ONLY REFLECT ON THE SUCCESSFUL MITIGATION OF EROSION EFFORTS, IT WILL ALSO HELP TO INFORM AND EDUCATE THE PUBLIC AT LARGE OF APPROPRIATE MEASURES TO PROTECT THE ENVIRONMENT (YOU WILL BE SETTING AN EXAMPLE).

THE SPIRIT (VS. THE LETTER) OF THIS PLAN IS INTENDED TO PROTECT THE PUBLIC'S WELFARE AND THEREFORE BMP'S AND SPECIFIED EROSION CONTROL MEASURES ARE A MINIMUM GUIDELINE ONLY. YOUR PERSONNEL, PHYSICALLY PRESENT CAN BEST DETERMINE WHAT IS WORKING AND WHAT ISN'T. THE BOTTOM LINE IS A) PROTECTION OF ALL DOWNSTREAM STRUCTURES AND OVERLAND ROUTES THROUGH TO RECEIVING WATERS FROM EROSION AND SEDIMENT AND B) ZERO TOLERANCE OF HAZARDOUS/TOXIC WASTE INCIDENTS.

ANY FEEDBACK, COMMENTS OR SUGGESTIONS CAN BE DIRECTED TO THE SITE ENGINEER OR DIRECTLY TO THE EROSION PLAN DESIGNER (JOHN MAGSAM, JONES & HENRY ENGINEERS, LTD. JMAGSAM@JHENG.COM)

1. EROSION AND SEDIMENT CONTROL SEQUENCE
ASSIGN ON-SITE PERSON RESPONSIBLE FOR DAILY SUPERVISION OF COMPLIANCE WITH THIS PLAN AND REPORTABLE TO SITE ENGINEER FOR SUBMITTALS AND COORDINATION OF THIS PLAN'S REQUIREMENTS. SUBMIT A) EROSION CONTROL LOG B) LIST OF ALL POTENTIAL CONTAMINANTS C) STORAGE, HANDLING AND SPILL PREVENTION PLAN AND D) PROPOSED OFFSITE LOCATION FOR SPOIL.

NOTE: DUE TO THE DYNAMIC NATURE OF THIS PROJECT THE JOB SITE WILL BE BROKEN DOWN INTO CELLS. BASED ON THE CONTRACTOR'S GEOGRAPHICAL SEQUENCING OF ACTIVITY, SUB-CELLS OF THE PROJECT SHALL BE IDENTIFIED. A CELL IS EFFECTIVELY A LOCALIZED WATERSHED WITHIN THE PROJECT LIMITS (USUALLY 10 FT ON EITHER SIDE OF THE PROPOSED ALIGNMENT) AND THE ZONE OF INFLUENCE (USUALLY FROM CENTERLINE OF ROAD TO ITS RESPECTIVE RIGHT-OF-WAY LINE) IN WIDTH AND ALL DOWNSTREAM LANDS (FROM A GIVEN CONSTRUCTION ACTIVITY) WITHIN SAID WIDTH TO THE POINT OF DISCHARGE (STORM STRUCTURE OR OVERLAND EXIT FROM PROJECT). IF A POTENTIAL CELL AREA ABUTS A HIGHLAND SECTION THAT HAS NATURAL DRAINAGE OF LESS THAN 2% SLOPE INTO A CHANNELIZED OVERLAND ROUTE, SAID AREA SHALL BE INCLUDED IN THE ACTIVE CELL AND EVALUATED FOR SHEET EROSION AND PARTICULARLY TO ENSURE THAT ALL SEDIMENTS ARE CONTAINED WITHIN THE PARTICULAR CELL.

2. PRE-CONSTRUCTION - COMPLETE THE FOLLOWING:

FOR ANY EROSION CONTROL APPLICATIONS REQUIRING DIGGING OR STAKING GREATER THAN 12-INCH-DEEP CONTACT INDIANA UNDERGROUND ("HOLEY MOLEY") FOR UTILITY LOCATES.

DOCUMENT (E.G. PICTURES) EXISTING CONDITION OF EXISTING STRUCTURES AND DISCHARGE/EXIT POINTS.

EVALUATE POTENTIAL SOURCES OF OFF-SITE CONTAMINATION (BOTH SEDIMENT AND OTHER HAZARDOUS RUN-OFF) INTO A GIVEN CELL. THIS MAY REQUIRE ADDITIONAL MEASURES TO DIFFERENTIATE CONTRACTOR'S DEPOSITS FROM OUTSIDE INFLUENCES.

EVALUATE, MARK AND PROTECT; 1. IMPORTANT TREES WITH ASSOCIATED ROOT ZONES, 2. UNIQUE AREAS TO BE PRESERVED (E.G. WETLANDS AND LANDSCAPED BEDS), 3. EXISTING VEGETATION SUITABLE FOR USE AS FILTER STRIPS (E.G. EXISTING GRASS AT DISCHARGE POINTS).

IDENTIFY CONSTRUCTION TRAFFIC PATTERNS, MATERIAL DELIVERY COORDINATION, AND STOCKPILES, THEN DEVELOP PLANS TO MINIMIZE NEGATIVE IMPACTS TO EXISTING GROUND COVER.

INSTALL EROSION CONTROL MEASURES WITHIN ACTIVE CELL

TRAIN/INFORM ALL EMPLOYEES AND SUBCONTRACTORS OF EROSION PLAN PARTICULARS.

3. DURING CONSTRUCTION

CONDUCT FINAL GRADING AND SEEDING OPERATIONS AS TIGHT AS PRACTICAL TO ACTUAL EXCAVATION, IN ANY CASE SAID SEEDING SHALL LAG NO MORE THAN 200FT BEHIND CURRENT ACTIVITY (EXCEPT FINAL PAVEMENT PLACEMENT).

MONITOR AND MAINTAIN ALL OFF-SITE AREAS (PARTICULARLY PUBLIC THOROUGHFARES) TO ENSURE NO TRACKING OR SEDIMENTATION DEPOSITS REMAIN BEYOND DAILY CLEAN-UP OPERATIONS.

PERFORM DAILY INSPECTIONS AND EROSION APPLICATION ADJUSTMENTS AND RECORD IN DAILY LOG.

REPAIR/REPLACE ALL EROSION CONTROL APPLICATIONS AS ACTUAL TRENCHING OPERATION BREECHES EACH.

NOTE: REPEAT STEPS 2 AND 3 FOR EACH CELL AS ENCOUNTERED.

4. POST CONSTRUCTION

MONITOR AND MAINTAIN ALL EROSION CONTROL DEVICES UNTIL ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED (TO BE DETERMINED BY OWNER OR HIS REPRESENTATIVE).

CONTINUE LOG (AT WEEKLY INTERVAL OR AFTER EACH 0.5-INCH RAIN) AND COMMUNICATE ITEMS OF CONCERN TO APPROPRIATE SUPERVISORY PERSONNEL.

UPON DOCUMENTED ACCEPTANCE OF PERMANENT STABILIZATION, REMOVE ALL TEMPORARY EROSION CONTROL DEVICES. NOTE: SOME SILT FENCING, PARTICULARLY IN DITCH BOTTOMS MAY BE PARTIALLY REMOVED SO AS NOT TO OVERLY DISTURB GROUND COVER (CONSULT WITH SITE ENGINEER FOR THESE CASES).

DOCUMENT (E.G. PICTURE) POST CONSTRUCTION CONDITION OF PRE-EXISTING STRUCTURES AND DISCHARGE/EXIT POINTS.

SUBMIT FINAL LOGS WITH SUPPORTING DOCUMENTATION (E.G. PICTURES) TO SITE ENGINEER.

GENERAL NOTES - EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR SHALL FOLLOW PERTINENT PROJECT SPECIFIC GUIDELINES AS SPECIFIED WITHIN THE PROJECT PLANS AND SPECIFICATIONS PARTICULARLY NOTE:
   a. SECTION 1510-2.03 TEMPORARY SANITARY FACILITIES
   b. SECTION 01568 POLLUTION CONTROL
   c. SECTION 02800 SODDING, SEEDING, AND MULCHING
2. CONTRACTOR MUST ENSURE THAT THE CONSTRUCTION SITE IS PREPARED PRIOR TO THE ONSET OF ANY STORM. CONTRACTOR SHALL HAVE ALL EROSION AND SEDIMENT CONTROL MEASURES IN PLACE FOR THE WINTER MONTHS PRIOR TO OCTOBER 1.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE DEEMED STABILIZED BY THE OWNER (UTILITY) OR OWNERS REPRESENTATIVE. CHANGES TO THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF A REPRESENTATIVE OF THE DEPARTMENT OF UTILITIES.
4. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THE PLAN IN THE FIELD SUBJECT TO THE APPROVAL OF OR AT THE DIRECTION OF A REPRESENTATIVE OF THE DEPARTMENT OF UTILITIES.
5. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED BEFORE AND AFTER ALL STORMS TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
6. CONTRACTOR SHALL MAINTAIN A LOG AT THE SITE OF ALL INSPECTIONS OR MAINTENANCE OF BMPS, AS WELL AS, ANY CORRECTIVE CHANGES TO THE BMPS OR EROSION AND SEDIMENT CONTROL PLAN.
7. IN AREAS WHERE SOIL IS EXPOSED, PROMPT REPLANTING WITH NATIVE COMPATIBLE OR AS SPECIFIED VEGETATION SHALL BE PERFORMED. NO AREAS WILL BE LEFT EXPOSED FOR MORE THAN 15 CALENDAR DAYS OR OVER THE WINTER SEASON.
8. IF SPECIFIED, THE CONTRACTOR SHALL INSTALL THE STABILIZED CONSTRUCTION ENTRANCE PRIOR TO COMMENCEMENT OF GRADING. LOCATION OF THE ENTRANCE MAY BE ADJUSTED BY THE CONTRACTOR TO FACILITATE GRADING OPERATIONS. ALL CONSTRUCTION TRAFFIC ENTERING THE PAVED ROAD MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCE. THE STABILIZED CONSTRUCTION ENTRANCE SHALL REMAIN IN PLACE UNTIL THE ROAD BASE ROCK COURSE IS COMPLETED.
9. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE SWEPT AT THE END OF EACH WORKING DAY OR AS NECESSARY (PARTICULARLY PRIORTO IMPENDING RAIN).
10. CONTRACTOR SHALL PLACE APPROVED BMP'S AROUND ALL NEW DRAINAGE STRUCTURE OPENINGS IMMEDIATELY AFTER THE STRUCTURE OPENING IS CONSTRUCTED. THESE SHALL BE MAINTAINED AND REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED.
11. CONTRACTOR SHALL IMPLEMENT HOUSEKEEPING PRACTICES AS FOLLOWS:

A. SOLID WASTE MANAGEMENT:
PROVIDE DESIGNATED WASTE COLLECTION AREAS AND COVERED (RAIN PROOF) SEALED CONTAINERS. ARRANGE FOR DAILY REMOVAL AND DISPOSAL. CLEAR SITE OF TRASH INCLUDING ORGANIC DEBRIS, PACKAGING MATERIALS, SCRAP OR SURPLUS BUILDING MATERIALS AND DOMESTIC WASTE DAILY.

B. MATERIAL DELIVERY AND STORAGE:
PROVIDE A DESIGNATED MATERIAL (NON HAZARDOUS OR POLUTANT) STORAGE AREA WITH SECONDARY CONTAINMENT SUCH AS BERMING. STORE MATERIAL ON PALLETS AND PROVIDE COVERING FOR SOLUBLE MATERIALS. RELOCATE STORAGE AREA INTO BUILDING SHELL WHEN POSSIBLE. INSPECT AREA WEEKLY. DYNAMIC JOB SITES (TRENCHING OPERATIONS) SHALL ONLY STORE ON SITE ADEQUATE MATERIAL FOR WEEKLY OPERATIONS. LONGER ON SITE STORAGE SHALL BE ADDRESSED WITH OWNERS REPRESENTATIVE FOR NEGATIVE IMPACTS ON EXISTING GROUND COVER AND IN NO CASE SHALL CREATE A HIGHER RISK OF EROSION CONTROL DUE TO LACK OF DILLIGENT EVALUATION. NO HAZARDOUS WASTE OR PRODUCTS OF A POLUTANT NATURE WILL BE STORED ON SITE.

C. CONCRETE WASTE:
PROVIDE A DESIGNATED AREA FOR A TEMPORARY PIT TO BE USED FOR CONCRETE TRUCK WASH-OUT. DISPOSE OF HARDENED CONCRETE OFFSITE. AT NO TIME SHALL A CONCRETE TRUCK DUMP IT'S WASTE AND CLEAN ITS TRUCK INTO THE CITY STORM DRAINS VIA CURB AND GUTTER. INSPECT DAILY TO CONTROL RUNOFF, AND WEEKLY FOR REMOVAL OF HARDENED CONCRETE.

D. PAINT AND PAINTING SUPPLIES:
PROVIDE INSTRUCTION TO EMPLOYEES AND SUBCONTRACTORS REGARDING REDUCTION OF POLLUTANTS INCLUDING MATERIAL STORAGE, USE, AND CLEAN UP. INSPECT SITE WEEKLY FOR EVIDENCE OF IMPROPER DISPOSAL. NO HAZARDOUS WASTE OR PRODUCTS OF A POLUTANT NATURE WILL BE STORED ON SITE.

E. VEHICLE FUELING, MAINTENANCE AND CLEANING:
NO HAZARDOUS WASTE, FUELS, LUBRICANTS (EXCEPT MINIMAL OPERATOR MAINTENANCE TYPE IN APPROVED SEALED CONTAINER), POLUTING EQUIPMENT OR PRODUCTS OF A POLUTANT NATURE WILL BE STORED ON SITE. PROVIDE A DESIGNATED FUELING AREA WITH SECONDARY CONTAINMENT SUCH AS BERMING. DO NOT ALLOW MOBILE FUELING OF EQUIPMENT. PROVIDE EQUIPMENT WITH DRIP PANS. RESTRICT ONSITE MAINTENANCE AND CLEANING OF EQUIPMENT TO A MINIMUM. INSPECT AREA WEEKLY.

F. HAZARDOUS WASTE MANAGEMENT:
NO HAZARDOUS WASTE OR PRODUCTS OF A POLUTANT NATURE WILL BE STORED ON SITE. PREVENT THE DISCHARGE OF POLLUTANTS FROM HAZARDOUS WASTES TO THE DRAINAGE SYSTEM THROUGH PROPER MATERIAL USE, WASTE DISPOSAL AND TRAINING OF EMPLOYEES. HAZARDOUS WASTE PRODUCTS COMMONLY FOUND ON-SITE INCLUDE BUT ARE NOT LIMITED TO PAINTS & SOLVENTS, PETROLEUM PRODUCTS, FERTILIZERS, HERBICIDES & PESTICIDES, SOIL STABILIZATION PRODUCTS, HUMAN WASTE, ASPHALT PRODUCTS AND CONCRETE CURING PRODUCTS.

12. SPILL PREVENTION AND ACTION PLAN CRITERIA
SMALL SPILLS AND LEAKS OF POLLUTANT MATERIALS ONTO NON-PAVED SURFACES WILL BE SHOVELED INTOCONTAINERS FOR DAILY DISPOSAL. SAID SPILLS SHALL BE MARKED IN THE FIELD AND NOTED IN THE ONGOING EROSION CONTROL LOG.

FUELING TRUCKS WILL BE EQUIPED WITH SPILL PREVENTION KITS FOR SMALLER FUEL SPILLS.

ALL VEHICULAR MAINTENANCE SHALL TAKE PLACE AT THE DESIGNATED FUELING/MAINTENANCE SITE (PER SOIL EROSION PLAN) OR OFF SITE IF NONE ARE SUBMITTED AND APPROVED.

THE LOCAL FIRE DEPARTMENT (911) AND THE INDIANA DEPARTMENT OF ENFIRONMENTAL MANAGEMENT, OFFICE OF EMERGENCY RESPONSE (800-233-7745) SHALL BE NOTIFIED FOR LARGER AND/OR NON-CONTAINED SPILLS. FURTHER THE NATIONAL RESPONSE CENTER (800-424-8802) SHALL BE NOTIFIED FOR SAID NON-CONTAINED SPILLS WITH THE FOLLWING INFORMATION: 1. TIME OF SPILL, 2. LOCATION, 3. MATERIAL, 4. SOURCE OF SPILL, 5. PERSONS PRESENT AT TIME OF SPILL, 6. ALL ACTIONS TAKEN THUS FAR. FINALY THE PROJECT OWNER (CITY UTILITIES) OR DESIGNATED REPRESENTATIVE (PROJECT ENGINEER) WILL BE CONTACTED AND APPRAISED OF SITUATION.

CONTRACTOR SHALL CONTACT A WASTE RECOVERY AGENCY IMMEDIATELY FOR REMOVAL OF CONTAMINATES AND COORDINATION OF SITE MONITORING DURING CLEANUP UNTIL ALL OF THE HAZARDOUS MATERIAL HAS BEEN REMOVED. CONTRACTOR SHALL COOPERATE WITH IDEM AND ALL CONCERNED AGENCIES DURING AND AFTER SPILL CLEANUP TO INSURE ALL REQUIREMENTS AND REPORTS ARE PROPERRLY SUBMITTED.

THE CONTRACTOR SHALL BE CONTINUALLY INFORMED OF ANY CONTAMINATION ISSUES OCCURING ON THE SITE. THE CONSTRUCTION MANAGER SHALL KEEP (ON SITE AND POSTED) A LIST OF QUALIFIED PERSONNEL FOR SPILL REMEDIATION. ALL SITE PERSONNEL SHALL BE TRAINED AND VERIFIED AS TI PERTAINS TO SPILL PREVENTION, SPILL ACTION PLAN AND REMEDIATION (DESIGNATED PERSONNEL).

ALL MANUFACTURER'S INSTRUCTIONS AND DOCUMENTATION PERTAINING TO HAZARDOUS MATERIALS (PARTICULARLY MASTICS, HERBICIDES, PESTICIDES AND FERTILIZERS) SHALL BE ADHERED TO AND A COPY OF SAID DOCUMENTATION SHALL BE KEPT ON SITE FOR REVIEW BY THE OWNER OR HIS REPRESENTATIVE.

13. CONSTRUCTION WITHIN 100 YR FLOODZONE
NO SPOILING OF ANY EXCESS MATERIAL WILL BE ALLOWED WITHIN FLOOD ZONE. AN APPROVED LOCATION OUTSIDE OF FLOOD ZONE WILL BE USED FOR ALL EXCESS MATERIAL. FLOATABLE MATERIALS (E.G.MULCH, EROSION MATTING, PLASTIC PIPE, ETC.) SHALL BE REMOVED DAILY UNLESS AN ACCEPTABLE ANCHORING PLAN IS SUBMITTED AND ACCEPTED. VEHICLES AND TEMPORARY STRUCTURES (INCLUDING SANITARY FACILITY AND WASTE CONTAINERS) WILL BE REMOVED DAILY FROM FLOOD ZONE UNLESS SPECIFICALLY PERMITTED BY OWNER OR HIS REPRESENTATIVE.

GENERAL SEEDING REQUIREMENTS
UNLESS SPECIFICALLY STATED OTHERWISE IN CONTRACT DOCUMENTS THE FOLLOWING GUIDELINES SHALL BE COMPLIED WITH:
PREPARATION OF GROUND BEFORE SEEDING
THE AREA TO BE SEEDED SHALL BE MADE SMOOTH AND UNIFORM AND SHALL BE IN ACCORDANCE WITH THE FINISHED GRADE AND CROSS SECTION SHOWN ON THE PLANS OR AS OTHERWISE DESIGNATED.

THE SEED BED, IF NOT LOOSE, SHALL BE LOOSENED TO A MINIMUM DEPTH OF 3 IN. (75 MM) BEFORE FERTILIZER OR SEED IS APPLIED. IN AREAS OF EXCESSIVE VEHICULAR TRAFFIC, SUCH AS PARKING OF CONSTRUCTION EQUIPMENT NEAR A BRIDGE REPAIR, THE SOIL SHALL BE LOOSENED TO A MINIMUM DEPTH OF 6 IN. (150 MM). AREAS TO BE COVERED WITH TOPSOIL SHALL BE MILLED OR DISKED SLIGHTLY BEFORE THE TOPSOIL IS PLACED. A DISK, SPIKE-TOOTHED HARROW, OR OTHER SIMILAR DEVICE MAY BE USED FOR THIS PURPOSE. SUCH LOOSENING WILL BE REQUIRED TO ENSURE BOND OF THE TOPSOIL WITH THE SURFACE ON WHICH IT IS PUT AND TO FORM A UNIFORM SURFACE. THE TOPSOIL SHALL THEN BE SPREAD TO A SUFFICIENT DEPTH TO PRODUCE THE THICKNESS SPECIFIED AFTER IT HAS BEEN COMPACTED LIGHTLY WITH AN APPROVED ROLLER, TAMPING DEVICE, OR OTHER METHOD.

APPLYING FERTILIZER, SEED, AND MULCH
A) FERTILIZER
FERTILIZER AS SPECIFIED SHALL BE SPREAD UNIFORMLY OVER THE AREA TO BE SEEDED. FERTILIZER SHALL BE SPREAD AT THE RATE OF 800 LB/ACRE (900 KG/HA) UNLESS OTHERWISE SPECIFIED. FERTILIZER SHALL BE STANDARD COMMERCIAL FERTILIZER WITH AN ANALYSIS OF 12-12-12. TESTS WILL NOT BE REQUIRED, BUT FERTILIZER STANDARDS SHALL BE GOVERNED BY THE RULINGS OF THE INDIANA STATE SEED COMMISSIONER.
B) SEED
SEED MAY BE DRILLED IN OR MIXED WITH WATER. THE MIXTURE SHALL BE SPRAYED OVER THE AREA TO BE SEEDED. AN APPROVED MECHANICAL METHOD WHICH SHALL PLACE THE SEED IN DIRECT CONTACT WITH THE SOIL MAY BE USED. IN PLACES INACCESSIBLE TO MECHANICAL EQUIPMENT, OR WHERE THE AREA TO BE SEEDED IS SMALL, A HAND OPERATED CYCLONE SEEDER OR OTHER APPROVED EQUIPMENT MAY BE USED. SEED OF WARM SEASON GRASSES, FORBS, OR AQUATIC SPECIES SHALL NOT BE COVERED MORE THAN 0.125 IN. (3 MM). ALL OTHER SEED SHALL NOT BE COVERED MORE THAN 0.5 IN. (13 MM).

LEGUMINOUS SEEDS, UNLESS OTHERWISE SPECIFIED, SHALL BE INOCULATED WITH A CULTURE IN ACCORDANCE WITH INDOT 914.06. THE CULTURE SHALL BE MIXED WITH SUFFICIENT WATER TO DISTRIBUTE IT THOROUGHLY. THE SEED SHALL BE WETTED THOROUGHLY WITH THE SOLUTION AND ALLOWED TO DRY SUFFICIENTLY TO BE IN CONDITION FOR SOWING. INOCULATED SEED SHALL BE SOWN WITHIN 30 H AFTER TREATMENT. WHERE SEEDING IS TO BE DONE BY HYDRAULIC METHODS, THE INOCULATE MAY BE ADDED TO THE WATER IN THE SPRAY TANK.
C) MULCH
MULCHING MATERIAL, WHEN SPECIFIED, SHALL BE APPLIED UNIFORMLY IN A CONTINUOUS BLANKET AT THE RATE OF 2 TONS/ACRE (4.5 MG/HA). MULCH SHALL BE PLACED WITHIN 24 H AFTER SEEDING. THE PERCENT OF MOISTURE IN THE MULCH SHALL BE DETERMINED IN ACCORDANCE WITH 621.14(C).

MULCHING MATERIAL SHALL BE PUNCHED INTO THE SOIL SO THAT IT IS PARTIALLY COVERED. THE PUNCHING OPERATION SHALL BE PERFORMED LONGITUDINALLY WITH THE MULCH TILLER. THE TOOLS USED FOR PUNCHING PURPOSES SHALL BE DISKS THAT ARE NOTCHED AND HAVE A MINIMUM DIAMETER OF 16 IN. (400 MM). THE DISKS SHALL BE FLAT OR UNCUPPED SUCH AS NOTCHED COULTERS COMMONLY USED ON MOLDBOARD PLOWS. DISKS SHALL BE PLACED A MINIMUM OF 8 IN. (200 MM) APART ALONG THE AXLE OR SHAFT. SHAFT OR AXLE SECTIONS OF DISKS SHALL NOT EXCEED 8 FT (2.5 M) IN LENGTH.

THE MULCH TILLER FOR PUNCHING SHALL BE CONSTRUCTED SO THAT WEIGHT MAY BE ADDED OR HYDRAULIC FORCE FROM THE TRACTOR MAY PUSH THE PUNCHER INTO THE GROUND. IF HEAVY WEIGHTS ARE NOT USED, SEVERAL TRIPS OVER THE AREA MAY BE NECESSARY TO WORK PART OF THE MULCH INTO THE SOIL. CARE SHALL BE EXERCISED TO OBTAIN A REASONABLY EVEN DISTRIBUTION OF MULCH INCORPORATED INTO THE SOIL.

AFTER PROCEDURES FOR HOLDING THE MULCH IN PLACE HAVE BEEN COMPLETED, MULCH, OTHER THAN WHEN APPLIED BY HYDROSEEDER, SHALL BE WATERED THOROUGHLY. THE SEED OR SOIL BENEATH IT SHALL NOT BE DISPLACED. THE MULCHING MATERIAL SHALL BE MAINTAINED IN PLACE SATISFACTORILY UNTIL FINAL COMPLETION AND ACCEPTANCE OF THE CONTRACT EXCEPT AS PROVIDED IN 107.18. WHEN SEEDING IS PERFORMED BETWEEN JUNE 1 AND AUGUST 15, A SECOND THOROUGH WATERING SHALL BE APPLIED APPROXIMATELY 21 DAYS AFTER SEEDING.

ON SLOPES STEEPER THAN 3:1, OR WHEN SPECIFIED, THE FOLLOWING METHODS WILL BE PERMITTED.

1. METHOD A
THE MULCH MAY BE HELD IN PLACE BY MEANS OF A COMMERCIALLY PRODUCED MULCH BINDER WHICH IS IN ACCORDANCE WITH ALL APPLICABLE STATE AND FEDERAL REGULATIONS. SUCH PRODUCT SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS. A COPY OF THE WRITTEN INSTRUCTIONS SHALL BE SUPPLIED TO THE ENGINEER PRIOR TO THE SEEDING WORK. THE PRODUCT SHALL CONTAIN A COVERAGE INDICATOR TO FACILITATE VISUAL INSPECTION FOR EVENNESS OF APPLICATION. IF THE MULCH FAILS TO STAY IN PLACE, THE CONTRACTOR SHALL REPAIR ALL DAMAGED AREAS. A CHANGE IN THE MULCH BINDER MAY BE REQUESTED BY THE ENGINEER.

2. METHOD B
SUBJECT TO ACCEPTANCE BY OWNER OR HIS REPRESENTATIVE THE MULCH MAY BE HELD IN PLACE BY SPRAYING IT WITH A SATISFACTORY LIQUID ASPHALT OR ASPHALT EMULSION. THE BITUMINOUS MATERIAL MAY BE APPLIED IMMEDIATELY AFTER THE MULCH IS IN PLACE OR IT MAY BE INJECTED INTO THE MULCH AS IT LEAVES A POWER DRIVEN MULCH SPREADER. IF APPLIED TO THE SURFACE, THE AMOUNT SHALL BE APPROXIMATELY 0.06 GAL./SQ YD (0.25 L/M2). IF APPLIED AS THE MULCH COMES FROM THE SPREADER, THE AMOUNT SHALL BE APPROXIMATELY 60 GAL./TON (0.25 L/KG) OF MULCH MATERIAL. THE EXACT AMOUNT SHALL BE AS DIRECTED. NOTE: A SPECIFIC REQUEST/SUBMITTAL IS REQUIRED FOR THIS METHOD.

3. METHOD C
THE MULCH MAY BE HELD IN PLACE WITH BINDER TWINE FASTENED DOWN WITH WOODEN PEGS NOT LESS THAN 6 IN.(150 MM) LONG SPACED 4 FT (1.2 M) APART. THE TWINE SHALL BE PLACED PARALLEL TO AND ALSO AT 60° WITH THE PAVEMENT EDGE IN BOTH DIRECTIONS. THE DISTANCE BETWEEN THE INTERSECTIONS OF THE DIAGONAL STRANDS MEASURED ALONG THE STRANDS SHALL BE 12 FT (3.7 M). THE STRAND PARALLEL TO THE PAVEMENT SHALL CROSS THE DIAGONAL STRANDS AT THEIR INTERSECTIONS TO FORM EQUILATERAL TRIANGLES 12 FT (3.7 M) ON A SIDE.

4. METHOD D
THE MULCH MAY BE HELD IN PLACE WITH A POLYMERIC PLASTIC NET. THE PLASTIC NET SHALL BE UNROLLED SUCH THAT IT LAYS OUT FLAT, EVENLY, AND SMOOTHLY, WITHOUT STRETCHING THE MATERIAL. THE PLASTIC NET SHALL BE HELD IN PLACE BY MEANS OF WIRE STAPLES. THE WIRE STAPLES SHALL BE DRIVEN AT A 90° ANGLE TO THE PLANE OF THE SOIL SLOPE. STAPLES SHALL BE SPACED NOT MORE THAN 4 FT. (1.2 M) APART WITH ROWS ALTERNATELY SPACED. THE PLASTIC NET SHALL BE SECURED ALONG THE TOP AND BOTTOM OF THE SOIL SLOPE WITH STAPLES SPACED NOT MORE THAN 1 FT (0.3 M) ON CENTER. THE ENDS AND EDGES OF THE PLASTIC NET SHALL BE OVERLAPPED APPROXIMATELY 4 IN. (100 MM) AND STAPLED. OVERLAPS RUNNING PARALLEL TO THE SLOPE SHALL BE STAPLED 1 FT (0.3 M) ON CENTER AND OVERLAPS RUNNING PERPENDICULAR TO THE SLOPE SHALL BE STAPLED AT LEAST 3 FT (0.9 M) ON CENTER. THE PLASTIC NET SHALL BE PLACED WITH THE LENGTH RUNNING FROM TOP OF SLOPE TO TOE OF SLOPE, OR THE PLASTIC NET SHALL BE PLACED WITH THE LENGTH RUNNING HORIZONTALLY OR PARALLEL TO THE CONTOUR.

5. METHOD E
THE AREA MAY BE COVERED WITH EROSION CONTROL BLANKETS. THE CONTRACTOR WILL BE PERMITTED TO USE EXCELSIOR BLANKET, PAPER MAT, OR STRAW MAT OR APPROVED EQUAL IN ALL CASES MANUFACTURER DOCUMENTATION AND SAMPLE MUST BE SUBMITTED PRIOR TO PLACEMENT. ALL EROSION CONTROL BLANKETSWILL COMPLY WITH INDOT 621.05
SEED MIXTURES
SEED MIXTURE "R" - INDOT ITEM 621.06(A) (GENERAL PURPOSE - FIELDS AND OPEN RIGHT-OF-WAY)
THIS SEED MIXTURE SHALL BE APPLIED AT THE RATE OF 170 LB/ACRE (190 KG/HA). THE MIXTURE SHALL CONSIST OF 95 LB (43 KG) OF LOW ENDOPHYTE KENTUCKY 31 FESCUE OR APPROVED EQUAL, 65 LB (30 KG) PERENNIAL RYEGRASS, AND 10 LB (4.5 KG) JASPER RED FESCUE OR APPROVED EQUAL. FERTILIZER AND MULCHING MATERIAL, WHERE SPECIFIED OR DIRECTED, SHALL BE APPLIED IN ACCORDANCE WITH ABOVE DIRECTIVES

SEED MIXTURE "U" - INDOT ITEM 621.06(B) (SPECIFIC AREAS - LAWNS AND WELL-KEPT AREAS)
THIS SEED MIXTURE SHALL BE APPLIED AT THE RATE OF 150 LB/ACRE (165 KG/HA). THE MIXTURE SHALL CONSIST OF 95 LB (43 KG) OF A 4-WAY BLEND OF TURF TYPE TALL FESCUES SUCH AS TRIBUTE, REBEL II, TRAILBLAZER, OR APPROVE EQUAL; 20 LB (9 KG) JASPER RED FESCUE OR APPROVED EQUAL; AND 35 LB (16 KG) CERTIFIED FINE BLADED PERENNIAL RYEGRASS SUCH AS REGAL, BLAZER, OR APPROVED EQUAL. FERTILIZER AND MULCHING MATERIAL, WHERE SPECIFIED OR DIRECTED, SHALL BE APPLIED IN ACCORDANCE WITH ABOVE DIRECTIVES

SEED MIXTURE "P" - INDOT ITEM 621.06(C) (SHOULDER AND MEDIAN AREAS - GRADING CONTRACTS ONLY)
THIS SEED MIXTURE SHALL BE APPLIED AT THE RATE OF 80 LB/ACRE (90 KG/HA). THE MIXTURE SHALL CONSIST OF 30 LB (14 KG) OF "FULTS" PUCCINELLA DISTANS, 30 LB (14 KG) OF JASPER RED FESCUE, OR APPROVED EQUAL, AND 20 LB (9 KG) OF PERENNIAL RYEGRASS. FERTILIZER SHALL BE APPLIED AT THE RATE OF 400 LB/ACRE (450 KG/HA). FERTILIZER AND MULCHING MATERIAL, WHERE SPECIFIED OR DIRECTED, SHALL BE APPLIED IN ACCORDANCE WITH ABOVE DIRECTIVES.

SEED MIXTURE "D" - INDOT ITEM 621.06(E) (CHRONIC SATURATED SOILS)
THIS SEED MIXTURE IS INTENDED FOR DITCH SITUATIONS WHICH EXPERIENCE SEASONAL TO CHRONIC SATURATED SOILS. THIS SEED MIXTURE SHALL BE USED ON MAINTENANCE CONTRACTS OR WHERE OTHERWISE SPECIFIED. THIS MIXTURE SHALL BE APPLIED AT THE RATE OF 14 LB 12 OZ PER ACRE (16.5 KG/HA). THE MIX SHALL BE COMPOSED OF 1 OZ (28 G) FOWL MANA GRASS, 3 OZ (85 G) WETLAND CAREX SPECIES, 2 OZ (56 G) RICE CUT GRASS, 2 OZ (56 G) BULLRUSH, 2 OZ (56 G) LEPTOCHLOA FASICULARIS, 2 OZ (56 G) BARNYARD GRASS, 2 OZ (56 G) PRAIRIE WILD RYE, 10 LB (4.5 KG) PERENNIAL RYEGRASS, 2 LB (1 KG) JASPER RED FESCUE, 2 OZ (56 G) "FULTS" PUCCINELLA DISTANS, AND 1 LB (0.5 KG) REDTOP. IF CERTAIN SPECIES IN THIS MIX ARE UNAVAILABLE, SUBSTITUTIONS MAY BE SUBMITTED FOR APPROVAL. THE MIX SHALL BE APPLIED AS SPECIFIED PER ACRE (HECTARE). THE METHOD OF PLANTING SHALL BE BY MEANS OF HYDROSEEDING OR BY MEANS OF A HAND METHOD WITH A MINIMAL AMOUNT OF MULCH APPLIED IN A SEPARATE OPERATION. FERTILIZER SHALL NOT BE ADDED TO THIS SEED MIXTURE.

SEED MIXTURE "T" - INDOT ITEM 621.06(F) (TEMPORARY COVER)
THIS SEED MIXTURE SHALL BE USED TO ESTABLISH A TEMPORARY COVER FOR DISTURBED SOIL DURING THE CONSTRUCTION OPERATIONS. SEED MIXTURE T SHALL BE USED FOR SOIL STABILIZATION AND TEMPORARY GROUND COVER. TEMPORARY COVER MIXTURES SHALL BE PLACED AS DIRECTED AND BE SUBJECT TO SEASONAL LIMITATIONS AS DEFINED HEREIN. THIS MIXTURE IS NOT INTENDED TO BE USED AS A PERMANENT SEED MIXTURE. THE MIX SHALL BE MULCHED IN ACCORDANCE WITH ABOVE DIRECTIVES WHEN SLOPES EXCEED 3:1. FROM DECEMBER 1 TO MARCH 14 AND FROM JUNE 16 TO AUGUST 31, MULCHING ALONE SHALL BE USED TO STABILIZE THE SOIL. THIS MIXTURE SHALL NOT BE USED TO SATISFY THE REQUIREMENTS OF THE WARRANTY BOND.

1. SPRING MIX
SPRING MIX SHALL BE USED FROM MARCH 15 THROUGH JUNE 15. THIS MIXTURE SHALL BE APPLIED AT THE RATE OF 150 LB/ACRE (165 KG/HA). THE MIX SHALL CONSIST OF OATS.

2. FALL MIX
FALL MIX SHALL BE USED FROM SEPTEMBER 1 THROUGH NOVEMBER 30. THIS MIXTURE SHALL BE APPLIED AT THE RATE OF 150 LB/ACRE (165 KG/HA). THIS MIX SHALL CONSIST OF WINTER WHEAT.

MICHAEL S. HARKNESS
REGISTERED
No. 19900563
STATE OF
INDIANA
PROFESSIONAL ENGINEER
01-13-2025

TCRSD

SURFACE RESTORATION
EROSION CONTROL NARRATIVE

TURKEY CREEK REGIONAL SEWER DISTRICT
FASCINATION PLACE WATER MAIN IMPROVEMENTS

NO.	DATE	REVISIONS AFTER ISSUED FOR BID	BY
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48 OF 48

FTW-8305400SR01-SR-0.4 SURFACE RESTORATION DETAILS
1/29/2026 11:34 AM - ABLAISING
1/29/2026 11:57 AM