



ADDENDUM #2

To: Prospective Bidders
From: Porter Co. Dept. of Development & Storm Water Management
Date: February 11, 2022
Subject: Kemper Ditch, Arm 15 – Drain Tile Reconstruction
Construction Services

The attention of all prospective bidders is called to the following Addendum.

This Addendum, designated as Addendum #2, is hereby included in and made a part of the bidding documents, whether or not attached thereto. Except as modified by this Addendum, all requirements of the bidding documents shall remain in full force and effect.

Bidder shall acknowledge the receipt of this Addendum #2 on his or her bid form.

Clarifications & Modifications

The following clarifications and/or modifications to the bidding documents are being provided or are being made by the Department in response to questions posed and/or as determined necessary by the Department and are hereby included in and made a part of the bidding documents.

PRE-BID MEETING MINUTES & SIGN-IN SHEET

1. The pre-bid meeting minutes and sign-in sheet are attached to this Addendum. Please note that the meeting minutes may contain additional information related to the various items of work that should be considered when preparing bids for this project.

INVITATION TO BID

2. Bidding Period & Public Opening of Bids
The Department has extended the bidding period for the project until 10:00 a.m. local time on Thursday, February 24, 2022.

Delete Article 8 of the Invitation to Bid, “Bid Opening” (pp. 3), and **replace** with the following:

“The Porter County Department of Development & Storm Water Management will receive bids for the project until 10:00 a.m. local time on Thursday, February 24, 2022, at the issuing office, the Porter County Department of Development & Storm Water Management, 155 Indiana Ave., Ste. 311, Valparaiso, Indiana 46383. Bids will be opened and read aloud on Thursday, February 24, 2022, at a public opening of bids, to be held at 10:00 a.m. local time, or as soon as possible thereafter, at the Porter County Department of Development & Storm Water Management, 155 Indiana Ave., Ste. 311, Valparaiso, Indiana 46383. In accordance with the Department’s COVID-19 Safety & Action Plan, the public opening of bids will also be conducted live via videoconference. All bidders, as well as members of the public, are welcome to attend the opening of bids, either in person or via videoconference.

An abstract of the amounts of the base bid items, items “as ordered by Engineer,” if any, additive bid items, if any, alternate bid items, if any, and total bids will be made available to bidders after the opening of bids.”



The following information may be used to access and participate in the videoconference.

Join Zoom Meeting:

<https://us02web.zoom.us/j/84706530001?pwd=WEpPSWZyOVl3ekUvTkpWMkhobFhjdz09>

Meeting ID: 847 0653 0001

Passcode: N14ff7

At the meeting, bids will be opened and, unless obviously non-responsive, read aloud publicly. Respondents are invited to be present at the opening of bids. An abstract of the total bids will be made available to respondents after the opening of bids.

RESPONSIBLE BIDDERS SUBMITTAL REQUIREMENTS FORM

3. Due to a change in the scope, extent, and character of the project, as described further below, and, based on the Department's opinion of probable cost for such revised project, the Porter Co. Responsible Bidders Responsible Bidding Practices and Submission Requirements Ordinance (Ord. 18-02) now applies to the project. Consequently, **the Responsible Bidding Submittal Requirements Form has been added to the bidding requirements for the project.**

Delete Article 20 of the Instructions to Bidders, "Submittal of Bid" (pp. 11), and **replace** with the following:

"Bids shall consist of properly prepared and signed Bid Forms, complete with an acknowledgement of the receipt of all Addenda issued by Owner, if any, and all of the following attachments thereto:

- (a) Basis of Bid Form;
- (b) Responsible Bidding Submittal Requirements Form;
- (c) Bidder's Work History Form;
- (d) Bidder's Organizational Experience and Workload Form;
- (e) Bidder's Subcontractor and Supplier Form; and,
- (f) Bid Security

Each bid shall include all of the bidding requirements named above and shall be enclosed in a sealed package, plainly marked with the project title, the name and address of bidder, and the notation "BID ENCLOSED." Bids shall be submitted no later than the date and time prescribed and at the place indicated in the Invitation to Bid. If a bid is sent by mail or other delivery system, the sealed envelope containing the bid shall be enclosed in a separate package and plainly marked on the outside as described above. "

CONSTRUCTION PLANS

4. Construction Plans

The construction plans have been revised to account for the location of the septic system serving the property commonly known as 1315 N 375 E, Chesterton, Indiana 46304. Changes in the scope, extent, and character of the project include a revised drain tile alignment, along with associated adjustments to quantities of the various items of work involved, in order to avoid such septic system.



BASIS OF BID FORM

5. Basis of Bid Form

The Basis of Bid Form has been revised, as summarized below, to reflect the changes in the scope, extent, and character of the project described above

- WORK ITEM #7, "TEMPORARY PERIMETER SEDIMENT CONTROL"
The quantity of Work Item #7 "Temporary Perimeter Sediment Control" has decreased from 1480 LF to 1320 LF, as shown on the revised construction plans.
- WORK ITEM #10, "TIMBER ACCESS MATS"
The quantity of Work Item #10 "Timber Access Mats" has increased from 427 SY to 786 SY, as shown on the revised construction plans.
- WORK ITEM #11A, "DRAIN TILE, 12" RCP, CLASS III"
The quantity of Work Item #11A "Drain Tile, 12" RCP, Class III" has increased from 1325 LF to 1345 LF, as shown on the revised construction plans.
- WORK ITEM #11B, "EXCAVATION FOR DRAIN TILE, 12" RCP"
The quantity of Work Item #11B "Excavation for Drain Tile, 12" RCP" has increased from 512 CY to 522 CY, as shown on the revised construction plans.
- WORK ITEM #11D, "BEDDING & INITIAL BACKFILL FOR DRAIN TILE, 12" RCP"
The quantity of Work Item #11D "Bedding & Initial Backfill for Drain Tile, 12" RCP" has increased from 171 CY to 174 CY, as shown on the revised construction plans.
- WORK ITEM #11E, "FINAL BACKFILL FOR DRAIN TILE, 12" RCP"
Work Item #11E was previously only partially described as "Backfill for Drain Tile" on the Basis of Bid Form. To clearly distinguish between the bedding & initial backfill and final backfill work associated with the installation of the drain tile, **the Basis of Bid Form has been revised to more fully describe Work Item #11E as "Final Backfill for Drain Tile, 12" RCP". The quantity of Work Item #11E "Final Backfill for Drain Tile, 12" RCP" has increased from 255 CY to 260 CY, as shown on the revised construction plans.**
- WORK ITEM #18, "REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL, EXCESS EXCAVATED MATERIAL"
The quantity of this Work Item #18 "Removal and Disposal of Unsuitable Material, Excess Excavated Material" has increased from 308 CY and 313 CY, as shown on the revised construction plans.
- WORK ITEM #20, "DRAIN TILE INVESTIGATION"
Add Work Item #20 "Drain Tile Investigation" at a quantity of 1 EA, to confirm the location, size, and depth of the existing curtain drain outlet and connect to ST-02, as shown on the revised construction plans.

ATTACHMENTS

- PRE-BID MEETING MINUTES & SIGN-IN SHEET
- RESPONSIBLE BIDDERS SUBMITTAL REQUIREMENTS FORM
- REVISED CONSTRUCTION PLANS
- REVISED BASIS OF BID FORM

MEETING MINUTES

February 3, 2022, 10:00 am

Video Conference

Pre-Bid Meeting

Kemper Ditch, Arm 15 – Drain Tile Reconstruction

1. Sign-in and Introductions

2. Project Overview

The project is located within the drainage easement associated with Kemper Ditch, Arm 15, primarily on the parcel commonly known as 1315 N 375 E, Chesterton, IN 46304. The project consists of the installation of a new drain tile system to replace a failed drain tile system. The overall purpose of the project is to enhance the drainage and storm water management services provided to the surrounding property owners by improving the area's storm water infrastructure.

3. Overview of Bidding Documents & Bidding Requirements

- A. Bid Form
- B. Basis of Bid Form
 - i. Base Bid
- C. Bidders Work History Form
- D. Bidders Organizational Experience and Workload Form
- E. Bidders Subcontractor and Supplier Form
 - i. List entities comprising 10% or more of the bidder's total cost.
- F. Bid Security
 - i. 10% of total bid.
 - ii. Certified check, bank money order, or Bid Bond issued by acceptable surety.

4. Project Description

- A. 0.5 AC of Mowing
- B. 0.3 AC of Clearing & Tree Removal
- C. 427 SY of Timber Mats
 - i. 2 tracks of 8 ft wide Timber Mats to straddle drain tile trench through delineated wetland area.
- D. 1,325 LF of 12" RCP, Class III
 - i. 1 12" Flap Gate
 - ii. Bedding and initial backfill to crown of pipe.
- E. 3 Storm Sewer Structure, 4 ft. diameter (Type 1)
- F. 1 Storm Sewer Structure, Inlet Type 3
- G. 40 LF of Ex. Culvert, Remove
- H. 2 Ex. Storm Sewer Structure, Remove
- I. A temporary access easement can be obtained from the property owner to provide additional room for access and staging to the downstream portion of the project.

5. Other Items

- A. Overview of important General Conditions.
- B. Questions during Bidding.
- C. Copies of bidding documents are fully downloadable on the Department's website at <https://portercountystormwater.org/>.
- D. Bids will remain open for 60 calendar days.
- E. Lowest, responsive bidder will be awarded contract.
- F. Acknowledgement of Addenda
- G. Successful Bidder to provide the following within 10 days of NOA
 - i. Executed Contract, Performance Bond – 100%, Payment Bond – 100%, and Certificates of Insurance.
 - ii. E-Verify Affidavit and Certification Regarding Investment in Iran.
- H. Maintenance Bond will be required upon final acceptance of work as guarantee.
 - i. 10% of contract price for 1 year.
- I. Bidders shall inform themselves of existing site conditions.
- J. Minority and Women's Business Enterprises
 - i. Goals for this project are 7% MBE and 5% WBE participation.
 - ii. MBEs and WBEs must be certified.
- K. Owner is exempt from State Sales Tax on materials to be incorporated into the work. Sales and use tax shall not be included in the bid.
- L. Utility Coordination
 - i. Contractor shall confirm location and depth of utilities prior to start of work.
 - ii. Gas main on the east side of CR 375 E was unable to be located to determine the elevation of the utility. The assumption is that the gas main is either above or below the existing 12" CMP culvert. The Contractor shall locate the utility prior the start of work.

6. Notable Dates

- A. Pre-Bid Meeting: Thu., Feb. 3, 2022, 10:00 am, local time.
- B. Last Day for Questions: Thu., Feb. 10, 2022, 12:00 pm local time. Final addendum to be issued by 12:00 pm local time, Fri., Feb. 11.
- C. Bid Due Date: Tue., Feb. 15, 2022, 10:00 am local time, Porter Co. Dept. Development & Storm Water Management. 155 Indiana Ave., Ste. 311, Valparaiso, Indiana 46383.
- D. Bid Opening: Tue., Feb. 15, 2022, 10:00 am local time, at a public opening of bids, 155 Indiana Ave., Ste. 311, Valparaiso, Indiana 46383.
- E. Substantial & Final Completion:
 - i. Substantial Completion – Oct. 31, 2022.
 - ii. Final Completion – Nov. 30, 2022.

7. Questions

Q1: Is there a septic system located on site?

A1: Yes, there is a septic system on site; however, the Department believes it is located on the north side of the existing accessory structure and not within the regulated drainage easement associated with Kemper Ditch, Arm 18 and/or the project reach. The Department will provide additional information regarding the location of the septic system as part of Addendum #2.

KEMPER DITCH, ARM 15 - DRAIN TILE RECONSTRUCTION

PRE-BID MEETING

February 3, 2022 (10:00 AM CST)

NAME	COMPANY	ADDRESS	OFFICE/CELL/FAX	EMAIL
Michael Novotney	Porter Co. Dept. of Development and Storm Water Management	155 Indiana Ave., Ste. 311 Valparaiso, IN 46383	Office: (219) 465-3507 Cell: (219) 307-3311 Fax: (219) 465-3543	mnovotney@porterco.org
Chelsey Gordon	Porter Co. Dept. of Development and Storm Water Management	155 Indiana Ave., Ste. 311 Valparaiso, IN 46383	Office: (219) 465-3652 Cell: (219) 252-7499 Fax:	chelsey.gordon@porterco.org
Meredith Phillis	Porter Co. Dept. of Development and Storm Water Management	155 Indiana Ave., Ste. 311 Valparaiso, IN 46383	Office: (219) 465-3632 Cell: Fax:	meredith.phillis@porterco.org
Jakob Goodan	Egolf Coates Excavation	5772 Melton Rd. Portage, IN 46368	Office: Cell: 219-246-8532 Fax:	jgoodan@egolfcoates.com
Steve	N/A		Office: Cell: Fax:	
			Office: Cell: Fax:	

RESPONSIBLE BIDDING SUBMITTAL REQUIREMENTS FORM

This Responsible Bidding Submittal Requirements Form is to be submitted by Bidder, as an attachment to the Bid Form, for the project designated as **Kemper Ditch, Arm 15 – Drain Tile Reconstruction**.

[IF NECESSARY, ATTACH ADDITIONAL RESPONSIBLE BIDDING SUBMITTAL REQUIREMENTS FORMS]

1. BIDDER

This form is submitted by:

Full Name of Bidder: _____

Principal Business Address: _____

2. EVIDENCE OF EXISTENCE & GOOD STANDING

Bidder shall attach a Certificate of Existence, formerly known as a Certificate of Good Standing, issued by the Indiana Secretary of State, showing that the Bidder is in existence and that it has complied with all requirements to operate in the state of Indiana. If the Bidder is an individual, partnership, or joint venture, this requirement shall not apply.

3. FORMER BUSINESS NAMES

Bidder shall list any former business names:

Name	Address	Years

4. DISCLOSURE OF VIOLATIONS OF FEDERAL, STATE, OR LOCAL LAWS

Bidder shall disclose any determinations by a court or governmental agency for violations of federal, state, or local laws including, but not limited to, violations of contracting or anti-trust laws, tax or licensing laws, environmental laws, the Occupational Safety and Health Act (OSHA), or the Davis-Bacon Act or related Acts:

5. STAFFING CAPABILITIES & LABOR SOURCES

Bidder shall provide a statement regarding staffing capabilities, including labor sources:

6. EVIDENCE OF PARTICIPATION IN APPRENTICESHIP & TRAINING PROGRAMS

Bidder shall attach evidence of participation in apprenticeship and training programs, applicable to the work to be performed on the project, which are approved by and registered with the United States Department of Labor’s Office of Apprenticeship, or its successor organization. Such evidence shall include a copy of all applicable apprenticeship certificates and standards for applicable training programs.

7. EMPLOYEE DRUG TESTING PLAN

Bidder shall attach a copy of a written plan for employee drug testing that: (i) covers all employees of the bidder who will perform work on the project; and, (ii) meets, or exceeds, the requirements set forth in IC 4-13-18-5 or IC 4-13-18-6.

8. PROJECT MANAGER & SUPERINTENDENT EXPERIENCE

Bidder shall, on the Bidder’s Organizational Experience and Workload Form, provide information regarding the experience of the Bidder’s designated project manager and superintendent.

9. EVIDENCE OF PROFESSIONAL & TRADE LICENSES

Bidder shall attach evidence of any professional and/or trade licenses required by law for any trade or specialty area that is applicable to the project. Bidder shall also disclose any suspension or revocation within the previous five years of any professional and/or trade licenses held by the Bidder or by any office, director, or manager of the Bidder:

10. EVIDENCE OF APPROVED SURETY

Bidder shall attach evidence that it is utilizing and will utilize a surety company which appears on the United States Department of the Treasury’s Listing of Approved Sureties to furnish all required bid and contract securities.

11. DISCLOSURE OF TAX LIENS & DELINQUENCIES

Bidder shall disclose any federal, state, or local tax liens or tax delinquencies owed to any federal, state, or local taxing body in the last five years:

12. CLASSIFICATION OF INDIVIDUALS PERFORMING WORK

Bidder shall provide a statement regarding the proper classification of individuals who will perform work on the project as either: (i) an employee; or (ii) an independent contractor, under all applicable federal and state laws and local ordinances:

13. RELATED EXPERIENCE

In order to demonstrate its capability and qualifications to perform the work generally described in the bidding documents and described in detail in the contract documents, Bidder shall, on the Bidder’s Work History Form, provide information regarding at least three recently (i.e., within last 3 years) and satisfactorily completed projects of similar size and scope in the state of Indiana.

14. EVIDENCE OF PREQUALIFICATION

Bidder shall provide evidence that it appears on the Indiana Department of Administration’s or Indiana Department of Transportation’s List of Prequalified Contractors for at least one similar work type.

15. FORM SUBMITTAL

This form is submitted by _____, who hereby certifies under penalty of law that: (1) he or she has carefully prepared, reviewed, and checked this form; (2) that the statements made on this form are true and correct; and, (3) that all statements made herein have been made on behalf of and with the authorization of the Bidder in support of this bid.

SIGNED AND SUBMITTED ON: _____, 20_____, BY:

By: _____
(Signature)

Printed Name: _____

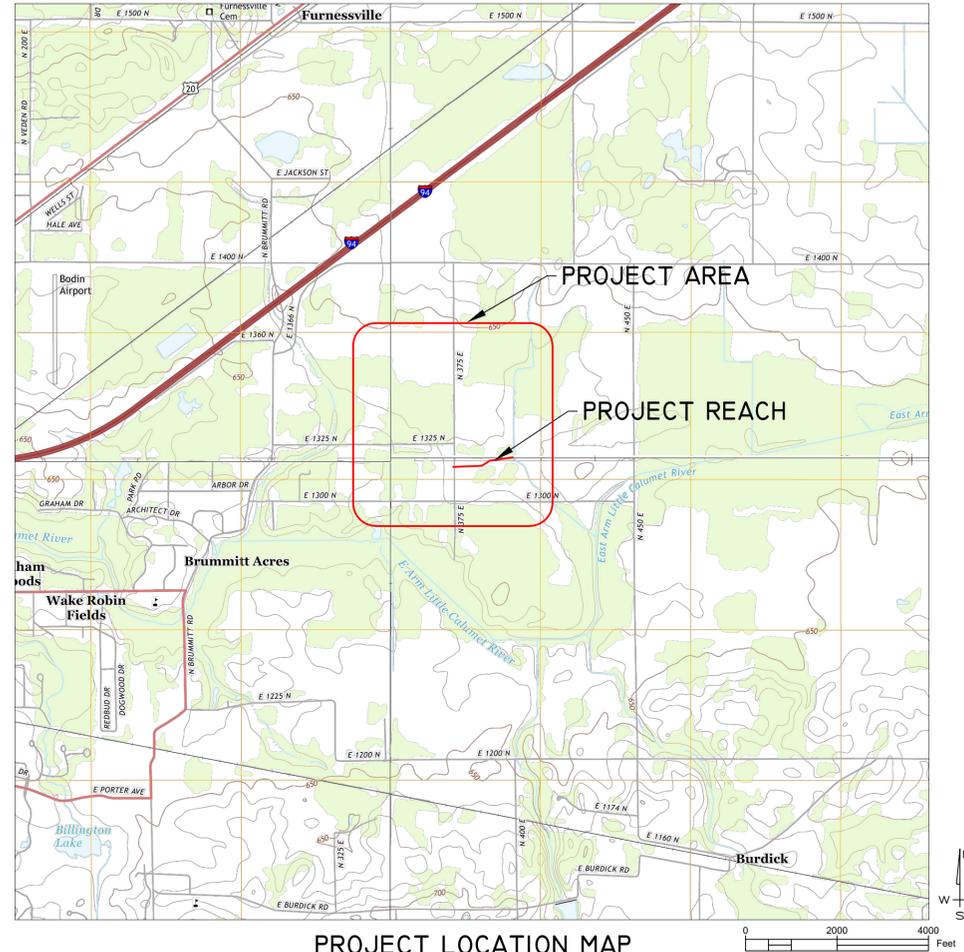
Title: _____

PORTER CO. DEPT. OF DEVELOPMENT & STORM WATER MANAGEMENT

KEMPER DITCH, ARM 15 DRAIN TILE RECONSTRUCTION PORTER COUNTY, IN

OWNER:
 PORTER CO. DEPT. OF DEVELOPMENT &
 STORM WATER MANAGEMENT
 ATTN: MICHAEL E. NOVOTNEY, P.E.
 155 INDIANA AVE. STE. 311
 VALPARAISO, IN 46383
 P: (219) 465-3530

ENGINEER:
 PORTER CO. DEPT. OF DEVELOPMENT &
 STORM WATER MANAGEMENT
 ATTN: MICHAEL E. NOVOTNEY, P.E.
 155 INDIANA AVE. STE. 311
 VALPARAISO, IN 46383
 P: (219) 465-3530



PROJECT LOCATION MAP

SHEET INDEX:

1. COVER
2. PLAN STA. 0+00 TO STA. 7+00
3. PLAN STA. 7+00 TO STA. 13+50
4. PROFILE & STORM SEWER STRUCTURE SCHEDULE
5. DETAILS
6. EROSION & SEDIMENT CONTROL PLAN & DETAILS AND RESTORATION PLAN

NO.	DATE	REVISION	BY
1	1/12/22	INTERNAL REVIEW	CRG
2	1/25/22	FOR BIDDING	CRG
3	2/11/22	ADDENDUM #2	CRG

DESIGNED:	CRG
DRAWN:	CRG
CHECKED:	MEN
DATE:	1/4/22
PROJECT NO.:	P21-040



**The Department of
 STORM WATER
 MANAGEMENT**
 Porter County, Indiana

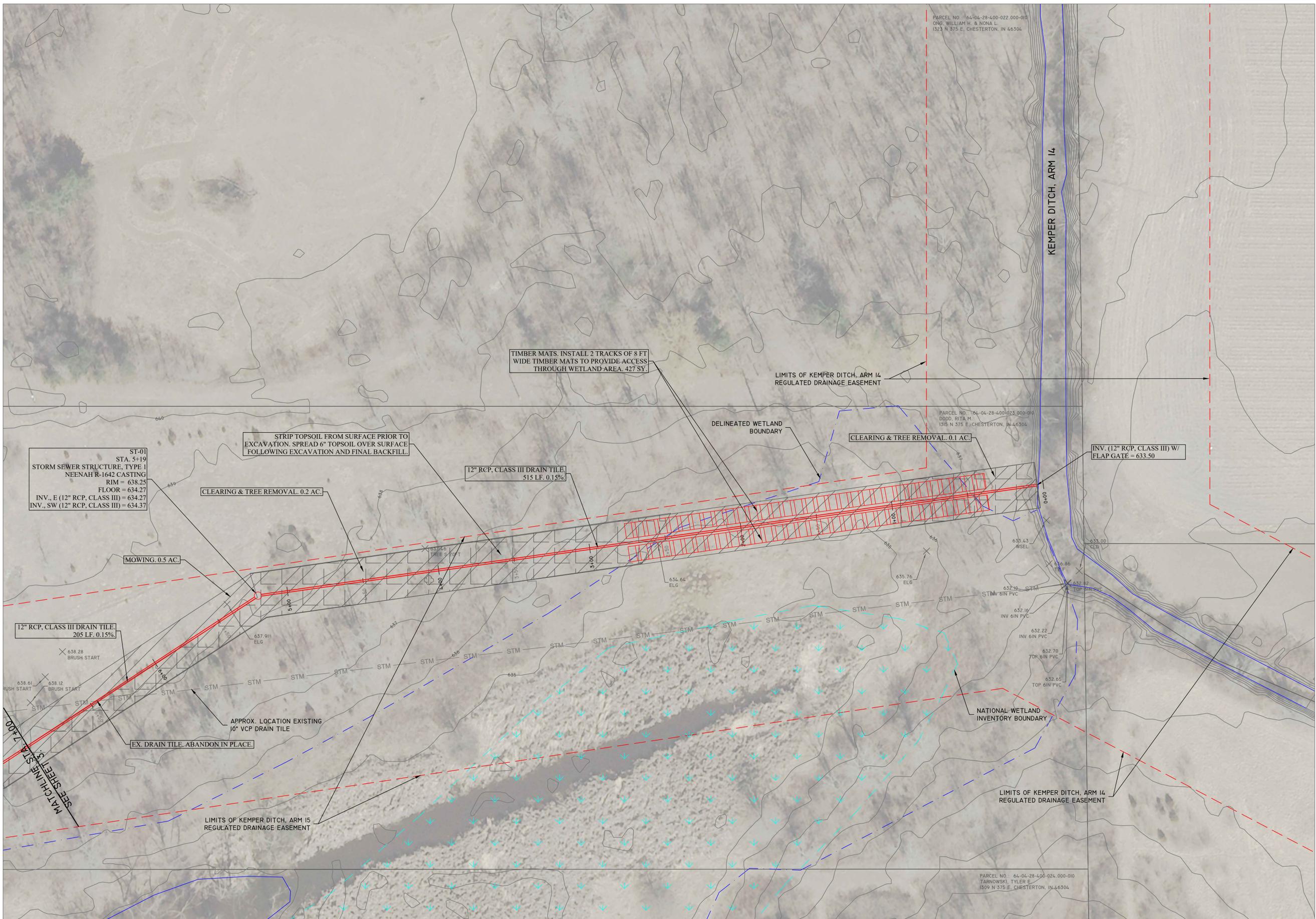
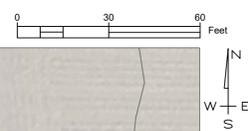
PROJECT:	KEMPER DITCH - ARM 15-DRAIN TILE RECONSTRUCTION
LOCATION:	1315 N 375 E
SHEET TITLE:	SHEET 1-COVER

I, THE UNDERSIGNED, A PROFESSIONAL ENGINEER REGISTERED WITH THE STATE OF INDIANA, WHOSE LICENSE IS IN GOOD STANDING, HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

 CHELSEY R. GORDON, PE
 INDIANA LICENSED PROFESSIONAL ENGINEER NO. PEI2100019
 EXPIRES 7/31/2022

APPROVED FOR CONSTRUCTION BY: _____
 MICHAEL E. NOVOTNEY, PE
 COUNTY ENGINEER

G:\SYSTEM ADMIN\2021 STORM WATER MANAGEMENT\2021 PROJECTS\P21-040 KEMPER DITCH ARM 15 DRAIN TILE RECONSTRUCTION



NO.	DATE	REVISION	BY
1	1/12/22	INTERNAL REVIEW	CRG
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3	2/11/22	ADDENDUM #2	CRG

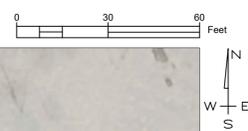
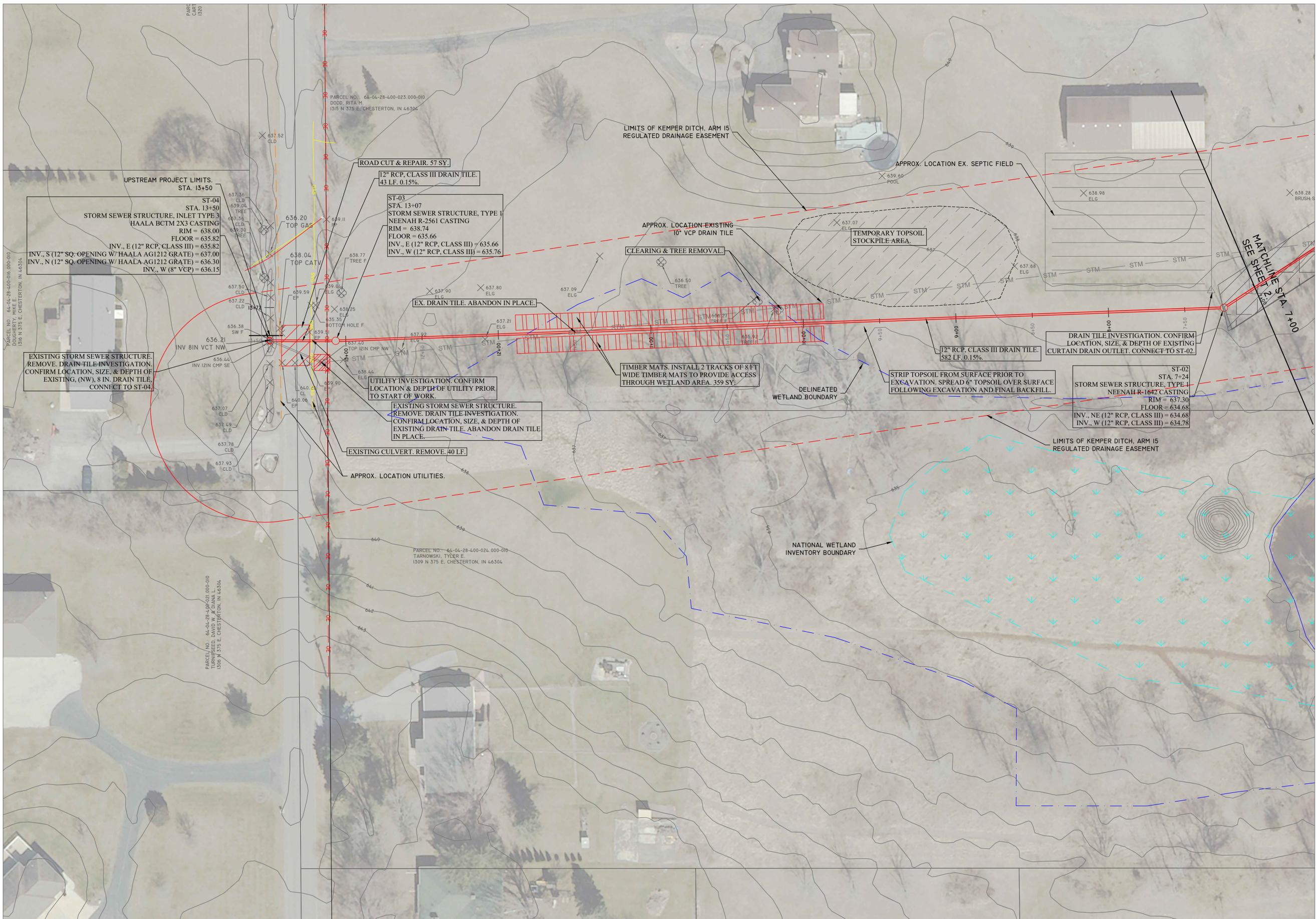
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PROJECT NO.:	P21-040



The Department of
STORM WATER MANAGEMENT
Porter County, Indiana

PROJECT:	KEMPER DITCH, ARM 15-DRAIN TILE RECONSTRUCTION
LOCATION:	1315 N 375 E
SHEET TITLE:	SHEET 2-PLAN STA. 0+00 TO STA. 7+00

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NO.	DATE	REVISION	BY
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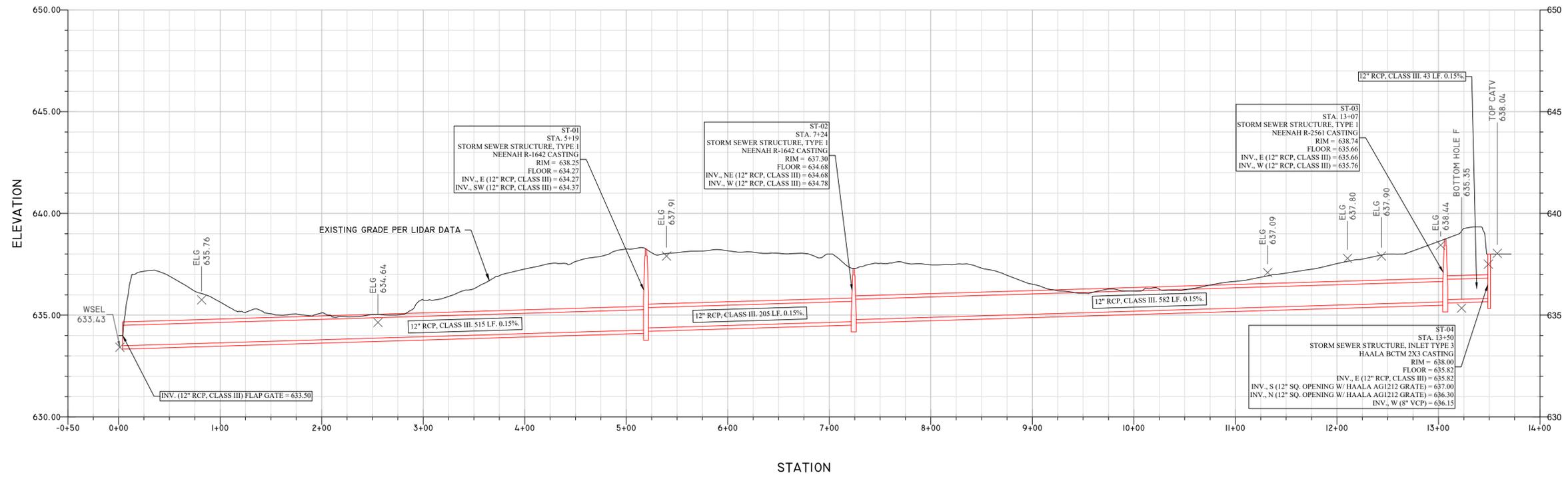
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The Department of
DEVELOPMENT & STORM WATER MANAGEMENT
 Porter County, Indiana

PROJECT:	KEMPER DITCH - ARM 15-DRAIN TILE RECONSTRUCTION
LOCATION:	1315 N 375 E
SHEET TITLE:	SHEET 3-PLAN STA. 7+00 TO STA. 13+50

PROFILE VIEW OF KEMPER DITCH ARM 15 DRAIN TILE RECONSTRUCTION



KEMPER DITCH ARM 15 STORM SEWER STRUCTURE SCHEDULE								
STRUCTURE NO.	STATION	NORTHING	EASTING	RIM ELEV.	FLOOR ELEV.	PIPE OUT, INVERT(S)	PIPE IN, INVERT(S) AND ANGLE(S) (FROM OUT)	CASTINGS
ST-01	5+19	2322683.65	2977711.94	638.25	634.27	E 12" RCP, CLASS III 634.27	SW 12" RCP, CLASS III 634.37, 155°	NEENAH R-1642
ST-02	7+24	2322571.80	2977540.68	637.30	634.68	NE 12" RCP, CLASS III 634.68	W 12" RCP, CLASS III 634.78, 211°	NEENAH R-1642
ST-03	13+07	2322550.20	2976958.67	638.74	635.66	E 12" RCP, CLASS III 635.66	W 12" RCP, CLASS III 635.76, 180°	NEENAH R-2561
ST-04	13+50	2322550.28	2976915.42	638.00	635.82	E 12" RCP, CLASS III 635.82	S 12" SQ. OPENING W/ HAALA AG1212 GRATE 637.00 N 12" SQ. OPENING W/ HAALA AG1212 GRATE 636.30 W 8" VCP 636.15	HAALA BCTM 2X3

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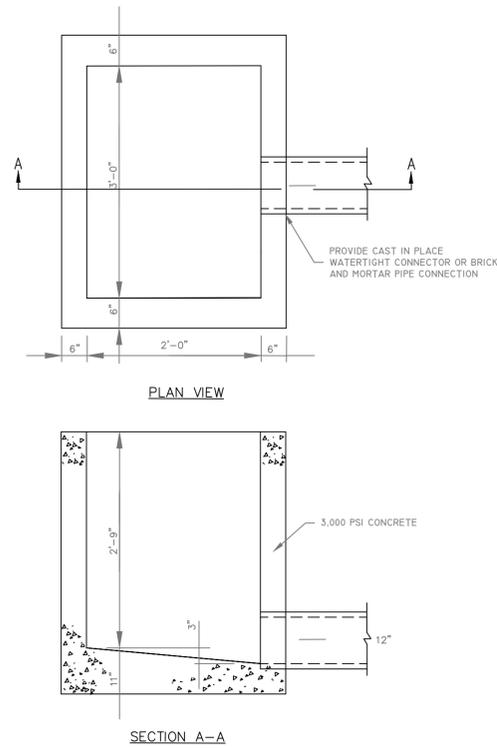


The Department of
DEVELOPMENT & STORM WATER MANAGEMENT
Porter County, Indiana

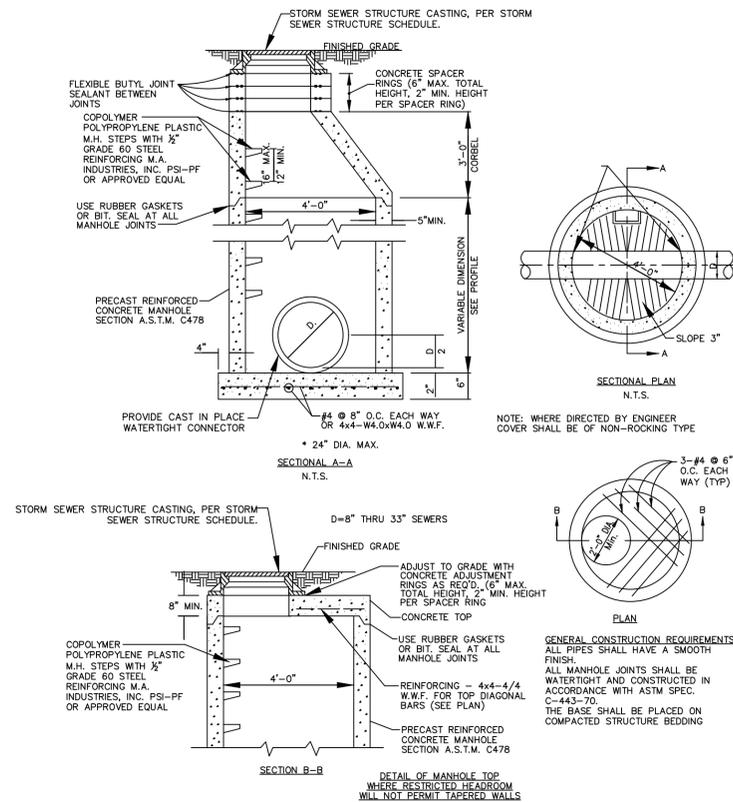
PROJECT:	KEMPER DITCH - ARM 15-DRAIN TILE RECONSTRUCTION
LOCATION:	1315 N 375 E
SHEET TITLE:	SHEET 4-PROFILE & STORM SEWER STRUCTURE SCHEDULE

SHEET NO.:

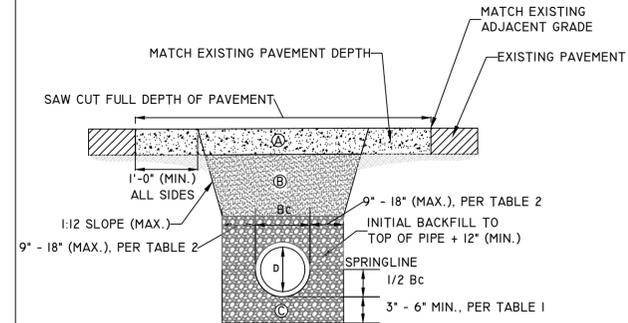
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INLET, TYPE 3

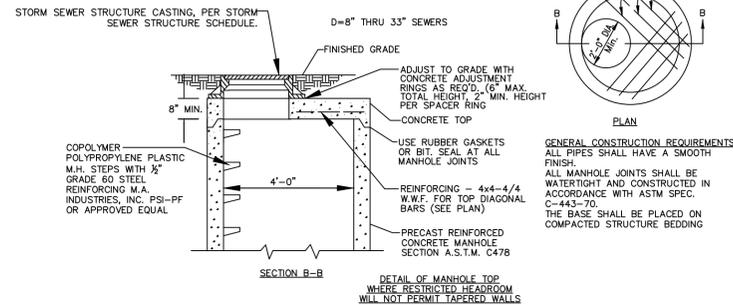


STORM SEWER STRUCTURE, TYPE 1



ROAD CUT & REPAIR

NOTE:
1. PIPE SHALL BE REINFORCED CONCRETE PIPE (RCP), CLASS III IN ACCORDANCE WITH ASTM C76/AASHTO M170
2. CASTING SHALL BE HAALA BCTM 2X3, OR APPROVED EQUAL.



DRAIN TILE BEDDING AND BACKFILL

LEGEND
 (A) FULL DEPTH HMA REPAIR, SEE DETAIL.
 (B) TRENCH BACKFILL. BACKFILL IN 8" LIFTS (MAX.) & COMPACT IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS.
 (C) CRUSHED STONE OR GRAVEL INDOT NO. 5, NO. 8, OR NO. 9 COARSE AGGREGATE WITH A 50% MECHANICAL CRUSH COUNT.
 Bc PIPE OUTSIDE DIAMETER

NOTES:
 1. ALL BEDDING, INITIAL BACKFILL, & FINAL BACKFILL SHALL BE INSTALLED IN 8" LIFTS (MAX.) & COMPACTED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS. BEDDING & INITIAL BACKFILL MATERIAL SHALL BE HAND PLACED AROUND THE HAUNCH AND SIDES OF THE PIPE TO ENSURE PROPER COMPACTION AND COMPLETE FILLING OF ALL VOIDS.

TABLE 1
DEPTH OF BEDDING BELOW PIPE

D	BEDDING (MIN.)
D < 24IN.	3 IN.
24 IN. ≤ D ≤ 60 IN.	4 IN.
D > 60 IN.	6 IN.

TABLE 2
WIDTH OF TRENCH, EACH SIDE OF PIPE

D	WIDTH (MAX.)
D < 24IN.	9 IN.
24 IN. ≤ D ≤ 60 IN.	12 IN.
D > 60 IN.	18 IN.

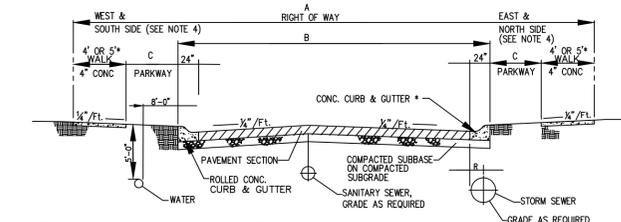
LEGEND
 (A) UNDER PAVEMENT AND/OR WITHIN 2 FT OF PAVEMENT, TRENCH BACKFILL SHALL BE USED. ELSEWHERE, SUITABLE EXCAVATED MATERIAL MAY BE USED. INSTALL FINAL BACKFILL & COMPACT IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS.
 (B) CRUSHED STONE OR GRAVEL INDOT NO. 5, NO. 8, OR NO. 9 COARSE AGGREGATE WITH A 50% MECHANICAL CRUSH COUNT.
 Bc PIPE OUTSIDE DIAMETER
 NOTES:
 1. ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 8" LIFTS (MAX.) & COMPACTED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS. BEDDING & INITIAL BACKFILL MATERIAL SHALL BE HAND PLACED AROUND THE HAUNCH AND SIDES OF THE PIPE TO ENSURE PROPER COMPACTION AND COMPLETE FILLING OF ALL VOIDS.

TABLE 1.
DEPTH OF BEDDING BELOW PIPE

D	BEDDING (MIN.)
D < 24IN.	3 IN.
24 IN. ≤ D ≤ 60 IN.	4 IN.
D > 60 IN.	6 IN.

TABLE 2.
WIDTH OF TRENCH, EACH SIDE OF PIPE

D	WIDTH (MAX.)
D < 24IN.	9 IN.
24 IN. ≤ D ≤ 60 IN.	12 IN.
D > 60 IN.	18 IN.



* EXTERNAL ROADWAYS SHALL HAVE 5' SIDEWALKS, INTERNAL ROADWAYS SHALL HAVE 4' SIDEWALKS UNLESS IT IS PART OF A MAJOR PATHWAY OR PEDESTRIAN NETWORK.

MINIMUM PAVEMENT THICKNESS

CLASSIFICATION	HMA SURFACE	HMA BASE (SUBBASE)	AGG. BASE (SUBBASE)	SECOND REFD
ARTERIAL	1 1/2"	3"	20"	YES
COLLECTOR STREET	1 1/2"	3"	12"	YES
LOCAL STREET, BOULEVARD	1 1/2"	2 1/2"	10"	YES
ALLEY	1 1/2"	2 1/2"	8"	YES

* OR CALCULATED STOPPING SIGHT DISTANCE PER AASHTO IF GREATER

MINIMUM TANGENT

CLASSIFICATION	A	B	C	MIN. CURVE RADIUS	MIN. TANGENT	NOTES
ARTERIAL	80'	*	*	500**	100'	SIDEWALKS MAY BE REQUIRED*
COLLECTOR	80'	* 17.5'	*	300**	60'	SIDEWALKS REQUIRED
BOULEVARD (ONE WAY)	*	20'	0-11	200**	40'	SIDEWALKS REQUIRED
LOCAL (RESIDENTIAL)	60'	30'	0-11	100**	40'	SIDEWALKS REQUIRED
ALLEY	16.5'	12'	N/A	N/A	N/A	NO SIDEWALK
FRONTAGE	40'	24'	*	100**	40'	SIDEWALKS MAY BE REQUIRED* 4' SHLDR., NO PARKING
FRONTAGE	40'	28'	*	100**	40'	SIDEWALKS MAY BE REQUIRED* 4' SHLDR., ONE SIDE PARKING

* PORTER COUNTY ENGINEERING DEPARTMENT DETERMINATION
 ** MINIMUM TANGENT OF 100' SHALL SEPARATE ALL REVERSE CURVES.

NOTES:

- UNDERDRAINS SHALL BE PROVIDED AT LOW POINTS.
- INDUSTRIAL STREETS SHALL HAVE MINIMUM ROADWAY DIMENSIONS AS LOCAL STREETS. MINIMUM PAVEMENT SECTION SHALL BE SAME AS LOCAL STREETS, BUT A THICKER SECTION SHALL BE USED IF TRAFFIC NEEDS AND SOIL CONDITIONS WARRANT. DESIGN AND CALCULATIONS SHALL BE PROVIDED BY REGISTERED PROFESSIONAL ENGINEER.
- FRONTAGE ROADS SHALL HAVE MINIMUM R/W WIDTH OF 40'.
- VARIATIONS TO THE EAST, WEST, NORTH, SOUTH RULE MAY BE APPROVED ON CASE-BY-CASE BASIS.
- HOUSE TELEPHONE DROPS SHALL BE 24" DEEP.

FULL DEPTH HMA REPAIR

NO.	DATE	REVISION
1	1/12/22	INTERNAL REVIEW
2	1/25/22	FOR BIDDING
3	2/11/22	ADDENDUM #2

DESIGNED: CRG
 DRAWN: CRG
 CHECKED: MEN
 DATE: 1/4/22
 PROJECT NO.: P21-040



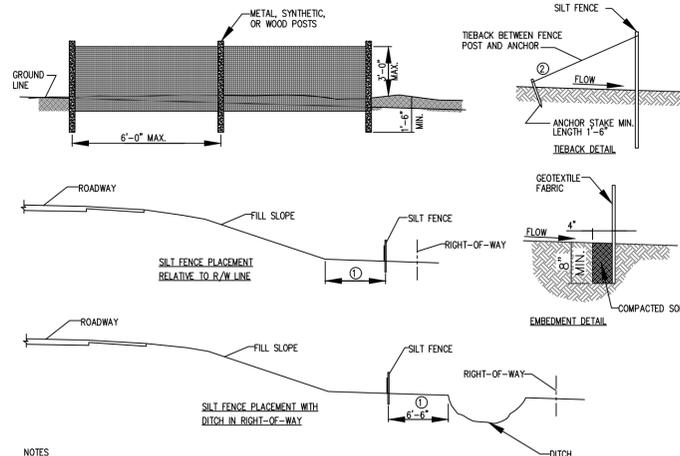
The Department of
STORM WATER MANAGEMENT
 Porter County, Indiana

PROJECT: KEMPER DITCH - ARM 15-DRAIN TILE RECONSTRUCTION

LOCATION: 1315 N 375 E

SHEET TITLE: SHEET 5-DETAILS

SHEET NO.:



- NOTES**
- DIMENSIONS WILL VARY BASED ON RIGHT-OF-WAY AVAILABILITY. SILT FENCE SHALL BE PLACED AS CLOSE AS POSSIBLE TO EDGE OF CONSTRUCTION LIMITS.
 - THE SPACING OF THE TIEBACKS SHALL EQUAL THE SPACING OF THE POSTS. ADDITIONAL POST DEPTH OR TIEBACKS MAY BE REQUIRED IN UNSTABLE SOILS.

INSTALLATION

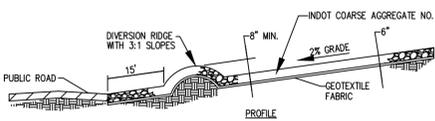
- THE SILT FENCE SHALL BE ATTACHED TO HARDWOOD STAKES WITH HARDWOOD LATHS AND SECURED WITH FIVE 1-1/2" STAPLES. HARDWOOD STAKES SHALL BE 6' ON CENTER. THE BOTTOM 12" OF FABRIC SHALL BE LEFT UNSECURED TO ALLOW FOR ENTRENCHMENT.
- A 6" DEEP TRENCH ALONG PROPOSED FENCE LINE SHALL BE CREATED. DRIVE THE STAKES INTO THE TRENCH 8-12" OR UNTIL SECURE. BE SURE TO STRETCH FABRIC TIGHT WHEN DRIVING STAKES. STAKES MUST BE INSTALLED ON THE DOWNHILL OR DOWNSTREAM SIDE OF FENCE. DRAPE LOOSE END OF GEOTEXTILE INTO TRENCH, THEN BACKFILL AND COMPACT ON BOTH SIDES.
- LIMITED TO 1/4 ACRE PER 100 LINEAR FEET OF FENCE.
- | % SLOPE | MAX DISTANCE |
|-------------|-------------------------------|
| < 5:1 | 100 FEET |
| 5:1 TO 20:1 | 75 FEET |
| > 20:1 | PROVIDE SURFACE STABILIZATION |
- INSTALL PARALLEL TO THE SLOPE CONTOUR.
- DO NOT USE FOR SHALLOW CONCENTRATED OR CHANNEL FLOW.

- MAINTENANCE**
- INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND AT LEAST ONCE EVERY 7 CALENDAR DAYS.
 - IF FENCE FABRIC TEARS, STARTS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED PORTION IMMEDIATELY. NOTE: ALL REPAIRS SHOULD MEET SPECIFICATIONS AS OUTLINED BY THE MANUFACTURER.
 - REMOVE DEPOSITED SEDIMENT WHEN IT IS CAUSING THE FILTER FABRIC TO BULGE OR WHEN IT REACHES ONE-HALF THE HEIGHT OF THE FENCE AT ITS LOWEST POINT. WHEN CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE THE FENCE AND SEDIMENT DEPOSITS, GRADE THE SITE TO BLEND WITH THE SURROUNDING AREA, AND STABILIZE.

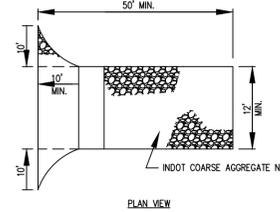
TEMPORARY SILT FENCE

- REQUIREMENTS:**
- MATERIAL: 1-2.5 IN. WASHED STONE (NDOT STONE NO. 2) OVER A STABLE FOUNDATION. THICKNESS: 6 IN. MINIMUM. WIDTH: 12 FT. MINIMUM OR FULL WIDTH OF ENTRANCE/EXIT ROADWAY, WHICHEVER IS GREATER. LENGTH: 50 FT. MINIMUM. THE LENGTH CAN BE SHORTER FOR SMALL SITES SUCH AS FOR AN INDIVIDUAL HOME, BUT SHALL BE OF SUFFICIENT LENGTH TO PREVENT TRACKING. WASHING FACILITY (OPTIONAL): LEVEL AREA WITH 3 IN. WASHED STONE MINIMUM OR A COMMERCIAL RACK, AND WASTE WATER DIVERTED TO A SEDIMENT TRAP OR BASIN. GEOTEXTILE FABRIC UNDERLAYER: REQUIRED TO PROVIDE GREATER BEARING STRENGTH.

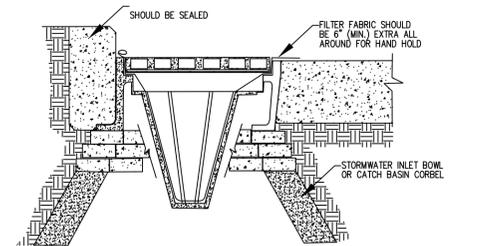
- INSTALLATION:**
- AVOID LOCATING ON STEEP SLOPES OR AT CURVES IN PUBLIC ROADS.
 - REMOVE ALL VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA, AND GRADE AND CROWN FOR POSITIVE DRAINAGE.
 - IF SLOPE TOWARDS THE ROAD EXCEEDS 2%, CONSTRUCT A 6-8 IN.-HIGH WATER BAR (RIDGE) WITH 3:1 SIDE SLOPES ACROSS THE FOUNDATION AREA ABOUT 15 FT. FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE ROAD (SEE PROFILE).
 - INSTALL PIPE UNDER THE PAD IF NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.
 - PLACE STONE TO DIMENSIONS AND GRADE SHOWN IN THE EROSION/SEDIMENT CONTROL PLAN, LEAVING THE SURFACE SMOOTH AND SLOPED FOR DRAINAGE.
 - DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN.



- MAINTENANCE**
- INSPECT ENTRANCE PAD, SEDIMENT DISPOSAL AREA, AND ALL OTHER EROSION CONTROL MEASURES WEEKLY AND AFTER STORM EVENTS OR HEAVY USE. REQUIRED REPAIRS SHOULD BE COMPLETED IMMEDIATELY.
 - RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
 - TOPRESS WITH CLEAN STONE AS NEEDED.
 - IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. FLUSHING SHOULD ONLY BE USED IF THE WATER IS CONVEYED INTO A SEDIMENT TRAP OR BASIN.
 - REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY.



TEMPORARY CONSTRUCTION ENTRANCE



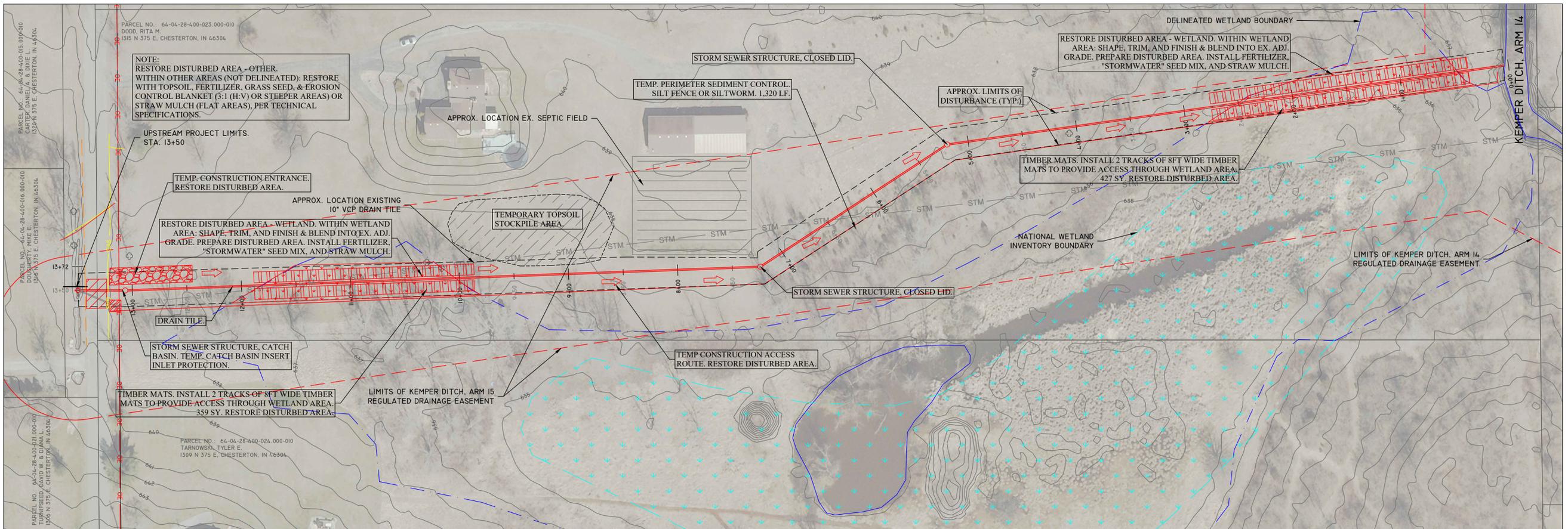
- PURPOSE:**
- TO PREVENT EXCESSIVE SEDIMENT FROM ENTERING STORM SEWERS AT CURB INLETS, ALLOWING FULL USE OF THE STORM DRAIN SYSTEM DURING THE CONSTRUCTION PERIOD.

- REQUIREMENTS:**
- BASKET: FABRICATED METAL WITH TOP WIDTH-LENGTH DIMENSIONS SUCH THAT THE BASKET FITS INTO THE INLET WITHOUT CAPS, AND LINE IT WITH GEOTEXTILE FABRIC FOR FILTRATION.

- INSTALLATION:**
- INSTALL BASKET CURB INLET PROTECTIONS AS SOON AS INLET BOXES ARE INSTALLED IN A NEW DEVELOPMENT OR BEFORE LAND DISTURBING ACTIVITIES BEGIN IN A STABILIZED AREA.
 - REMOVE THE GRATE AND PLACE THE BASKET IN THE INLET.
 - CUT AND INSTALL A PIECE OF FILTER FABRIC LARGE ENOUGH TO LINE THE INSIDE OF THE BASKET AND EXTEND AT LEAST 6" BEYOND THE FRAME.
 - REPLACE THE INLET GRATE, WHICH ALSO SERVES TO ANCHOR THE FABRIC.
 - FOLLOW INSTRUCTIONS AS PROVIDED BY MANUFACTURER.

- MAINTENANCE:**
- INSPECT WITHIN 24 HOURS AFTER EACH STORM EVENT.
 - REMOVE BUILD-UP SEDIMENT AND REPLACE THE GEOTEXTILE FABRIC AFTER EACH STORM EVENT.
 - REPLACE BASKET EVERY SIX (6) MONTHS.
 - REPLACE BASKET AFTER ANY OIL, GASOLINE OR SOLVENT SPILL, OR IF THERE IS A HOLE IN THE FABRIC.

CATCH BASIN INSERT INLET PROTECTION



NO.	DATE	REVISION
1	1/12/22	INTERNAL REVIEW
2	1/25/22	FOR BIDDING
3	2/11/22	ADDENDUM #2

DESIGNED:	CRG
DRAWN:	CRG
CHECKED:	MEN
DATE:	1/4/22
PROJECT NO.:	P21-040



The Department of
STORM WATER MANAGEMENT
Porter County, Indiana

PROJECT:	KEMPER DITCH - ARM 15-DRAIN TILE RECONSTRUCTION
LOCATION:	1315 N 375 E
SHEET TITLE:	SHEET 6-ESC PLAN & DETAILS & RESTORATION PLAN
SHEET NO.:	6 OF 6

SECTION II. BASIS OF BID FORM
 (Please type or print)

This Basis of Bid Form is to be submitted by bidder, as an attachment to the Bid Form, for the project designated as **Kemper Ditch, Arm 15 – Drain Tile Reconstruction**. It is to include an entry for each and every work item listed, including all base work items, all items “as ordered by Engineer”, if any, all additive work items, if any, and all alternate work items, if any, as well as a total bid, in both words and figures, as provided for below.

BASE BID

Bidder will perform all work specified or indicated in the contract documents in accordance with terms and conditions of the contract documents for the following price(s):

BASE BID ITEMS

ITEM	DESCRIPTION	UNIT	QTY.	UNIT PRICE	EXT. PRICE
1	MOBILIZATION & DEMOBILIZATION	LS	1		
2	PRE-CONSTRUCTION AUDIO/VIDEO SURVEY	LS	1		
3	CONSTRUCTION LAYOUT & SURVEY	LS	1		
4	AS-BUILT DRAWINGS	LS	1		
5	TEMPORARY CONSTRUCTION ENTRANCE	EA	1		
6	TEMPORARY CATCH BASIN INSERT INLET PROTECTION	EA	1		
7	TEMPORARY PERIMETER SEDIMENT CONTROL	LF	1320		
8	MOWING	AC	0.5		
9	CLEARING & TREE REMOVAL	AC	0.3		
10	TIMBER MATS	SY	786		
11A	DRAIN TILE, 12" RCP, CLASS III	LF	1345		
11B	EXCAVATION FOR DRAIN TILE, 12" RCP	CY	522		
11C	DEWATERING FOR DRAIN TILE, 12" RCP	LS	1		
11D	BEDDING & INITIAL BACKFILL FOR DRAIN TILE, 12" RCP	CY	174		
11E	FINAL BACKFILL FOR DRAIN TILE, 12" RCP	CY	260		
11F	FLAP GATE, 12" RCP	EA	1		
12A	STORM SEWER STRUCTURE, 4 FT. DIA., ≤ 4 FT. DEEP	EA	3		
12B	EXCAVATION FOR STORM SEWER STRUCTURE, 4 FT. DIA., ≤ 4 FT. DEEP	CY	13		

ITEM	DESCRIPTION	UNIT	QTY.	UNIT PRICE	EXT. PRICE
12C	DEWATERING FOR STORM SEWER STRUCTURE, 4 FT. DIA., < 4 FT. DEEP	LS	1		
12D	STRUCTURE BEDDING FOR STORM SEWER STRUCTURE, 4 FT. DIA., < 4 FT. DEEP	CY	2		
12E	STRUCTURE BACKFILL FOR STORM SEWER STRUCTURE, 4 FT. DIA., < 4 FT. DEEP	CY	4		
13A	STORM SEWER STRUCTURE, INLET TYPE 3	EA	1		
13B	EXCAVATION FOR STORM SEWER STRUCTURE, INLET TYPE 3	CY	3		
13C	DEWATERING FOR STORM SEWER STRUCTURE, INLET TYPE 3	LS	1		
13D	STRUCTURE BEDDING FOR STORM SEWER STRUCTURE, INLET TYPE 3	CY	1		
13E	STRUCTURE BACKFILL FOR STORM SEWER STRUCTURE, INLET TYPE 3	CY	2		
14	EX. CULVERT, REMOVE	LF	40		
15	EX. STORM SEWER STRUCTURE, REMOVE	EA	2		
16	ROAD CUT & REPAIR, CR 375 E	SY	57		
17	MAINTENANCE OF TRAFFIC FOR ROAD CUT & REPAIR	LS	1		
18	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL, EXCESS EXCAVATED MATERIAL	CY	313		
19	RESTORE DISTURBED AREA	LS	1		
20	DRAIN TILE INVESTIGATION	EA	1		
TOTAL BID (I.E., TOTAL OF ALL EXTENDED PRICES, ITEMS 1-20):					

Bidder's total bid for the work, which is the sum of the Bidder's extended price(s) for the base bid items, is:

TOTAL BID (IN FIGURES): _____

TOTAL BID (IN WORDS): _____

Bidder acknowledges that the estimated quantities of items of unit price work included on this Basis of Bid Form are not guaranteed and are provided solely for the purposes of comparing bids, establishing pay item unit prices, and determining an initial contract price. In accordance with the contract documents, payment to the successful bidder will be based upon the actual quantities of work performed, the acceptance of such work and the determination of such quantities to be made by the Engineer in accordance with the contract documents.