PEASE TOWNSHIP TOWNSHIP ROAD 580, CROSLEY ROAD **SLIP REPAIR**

PEASE TOWNSHIP, BELMONT COUNTY, OHIO

PROJECT DESCRIPTION

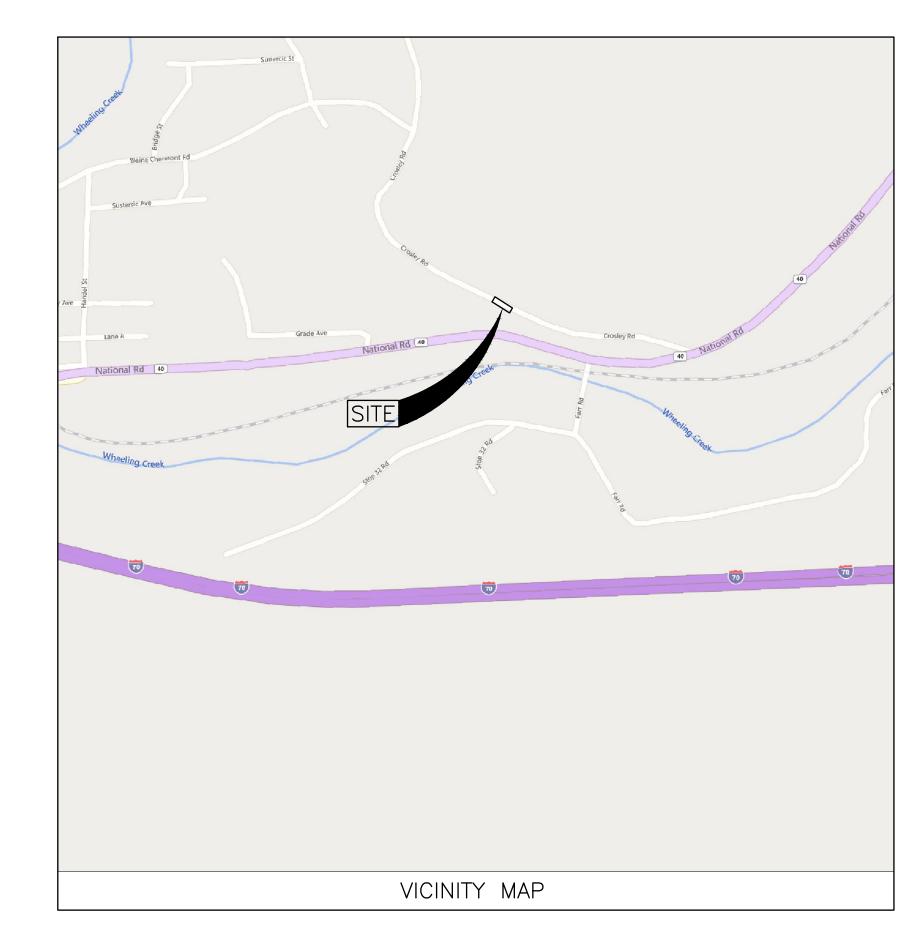
THIS PROJECT CONSISTS OF THE INSTALLATION OF A SOLDIER PILE RETAINING WALL WITH CONCRETE LAGGING ALONG A PORTION OF TOWNSHIP ROAD 580 (CROSLEY ROAD) WHERE SLOPE FAILURE HAS OCCURRED.

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.



SHEET TITLE	SHEET NO
TITLE SHEET GENERAL NOTES & SUMMARY OVERALL SITE PLAN PLAN & PROFILE RETAINING WALL DETAILS PILE TABLE	1 2 3 4 5 6



SCALE IN FEET

SCALE IN FEET

THE STANDARD DRAWINGS LISTED ON THESE PLANS SHALL BE CONSIDERED A PART THEREOF

STANDARD CONSTR	RUCTION DRAY	VV VI X Z Z Z Z Z Z Z Z Z	SUPPLEMENTAL SPECIFICATIONS
ODOT STANDARD		ION	
DRAW	/INGS		
MT-101.60 1/20/17			
MT-105.10 7/19/13			
MGS-2.1 1/9/18			
MGS-4.1 1/20/17			

PLANS PREPARED BY:



APPLICATION NO.

SHEET:

2025-05-19

AS NOTED

Verdantas, LLC. Phone: (740) 217-7685 156 Woodrow Avenue, St. 3 Fax: (614) 793-9070 St. Clairsville, OH 43950 www.verdantas.com

GENERAL NOTES:

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR THE PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK PROTECTION OF UNATTENDED OPEN SHAFTS:

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 7:00PM AND 7:00AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE ESTIMATED QUANTITIES FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201 - CLEARING AND GRUBBING.

SURVEYS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING ALL DETAIL SURVEYS NEEDED FOR CONSTRUCTION.

SEQUENCE OF CONSTRUCTION

THE FOLLOWING GENERAL SEQUENCE SHALL BE USED TO CONSTRUCT THE PROPOSED RETAINING WALLS:

- 1. CLOSE A PORTION OF CROSLEY ROAD.
- 2. INSTALL SOLDIER PILES FROM 1 TO 11.
- 3. INSTALL CONCRETE LAGGING.
- 4. BACKFILL AREAS INDICATED IN PLANS.
- 5. RECONSTRUCT ROADWAY SURFACE TO THE LIMITS SHOWN ON THE PLANS.
- 6. OPEN CROSLEY ROAD TO TRAFFIC.

DESIGN SPECIFICATIONS:

ITEM 524 - DRILLED SHAFTS, 30" DIAMETER, INTO BEDROCK, AS PER PLAN ITEM 524 - DRILLED SHAFTS, 30" DIAMETER, ABOVE BEDROCK, AS PER PLAN

THIS WORK CONSISTS OF FURNISHING AND INSTALLING DRILLED SHAFTS FOR SOLDIER PILES AND PLUG PILES. THE SOLDIER PILES ARE REINFORCED WITH STEEL H-PILES INSTEAD OF REINFORCING STEEL CAGES. FURNISH AND INSTALL DRILLED SHAFTS IN ACCORDANCE WITH ODOT CMS ITEM 524 EXCEPT AS MODIFIED AND SUPPLEMENTED BELOW.

EXCAVATE THE HOLE FOR THE DRILLED SHAFTS WITHIN 3 INCHES OF THE PLAN LOCATION. IF FIELD CONDITIONS INDICATE GREATER DEPTHS, NOTIFY THE ENGINEER FOR FURTHER EVALUATION.

PLACE THE STEEL H-PILE WITHIN THE HOLE SO IT IS VERTICAL AND NOT INCLINED MORE THAN 1" BETWEEN THE TOP AND BOTTOM. PLACE THE STEEL H-PILE SO THAT THE FLANGES ARE PARALLEL TO THE CENTERLINE OF CONSTRUCTION. DO NOT ALLOW THE ORIENTATION OF THE FLANGES TO VARY BY MORE THAN 10 DEGREES. SUPPORT THE STEEL H-PILE SO THAT IT DOES NOT MOVE DURING CONCRETE PLACEMENT.

USE CLASS S CONCRETE ACCORDING TO ODOT CMS ITEM 511. PLACE CONCRETE TO THE ELEVATION SHOWN ON THE PLANS. THE CONTRACTOR MAY CONTROL DEVICES AND PER STD DWG MT-101.60 AT THE POINT OF CLOSURE. PLACE CONCRETE USING THE FREE FALL METHOD PROVIDED THE DEPTH OF WATER IS LESS THAN 6 INCHES AND THE CONCRETE FALLS WITHOUT STRIKING THE SIDES OF THE HOLE. POURING CONCRETE ALONG THE WEB OF THE STEEL H-PILE IS ACCEPTABLE.

CHECK THE POSITION, VERTICAL ALIGNMENT AND ORIENTATION OF THE STEEL H-PILE IMMEDIATELY AFTER CONCRETE PLACEMENT. MAKE CORRECTIONS AS NECESSARY TO MEET THE ABOVE TOLERANCES.

PAYMENT FOR THIS ITEM INCLUDES CONSTRUCTING THE DRILLED SHAFTS, INCLUDING FURNISHING AND PLACING CONCRETE.

METHOD OF MEASUREMENT: THE ENGINEER WILL MEASURE DRILLED SHAFTS INTO BEDROCK, AS PER PLAN, AND DRILLED SHAFTS ABOVE BEDROCK, AS PER PLAN, ALONG THE AXIS OF THE DRILLED SHAFT FROM THE TOP OF THE SHAFT TO THE TOP OF BEDROCK AND FROM THE TOP OF BEDROCK TO THE BOTTOM OF THE DRILLED SHAFT, AS DETERMINED BY THE ENGINEER.

ITEM 507 - STEEL PILES. MISC.: HP14X89

THIS WORK CONSISTS OF FURNISHING AND PLACING STEEL SOLDIER PILES INTO DRILLED HOLES. FURNISH STEEL H-PILES CONSISTING OF STRUCTURAL STEEL MEMBERS THAT MEET THE PLAN REQUIREMENTS AND CONFORM TO ASTM A572, GRADE 50. DO NOT FIELD WELD OR SPLICE STEEL H-PILES.

MEASUREMENT FOR PAYMENT WILL BE LIMITED TO THE DISTANCE BETWEEN THE TOP AND BOTTOM OF STEEL MEMBER, AS DETERMINED BY THE ENGINEER. PAYMENT WILL BE MADE FOR STEEL H-PILES AT THE CONTRACT UNIT PRICE PER FT OF ITEM 507 STEEL PILES MISC.: SOLDIER PILES -

DRILLED SHAFT SEQUENCE OF INSTALLATION

THE INSTALLATION SEQUENCE SHALL BE SUCH THAT NO DRILLED SHAFT IS INSTALLED ADJACENT TO EITHER AN OPEN DRILLED SHAFT EXCAVATION OR A DRILLED SHAFT IN WHICH THE CONCRETE HAS LESS THAN A 48 HOUR CURE. INSTALLING THE SHAFTS IN AN ALTERNATING SEQUENCE OR ANY OTHER SEQUENCE THAT MEETS THE CRITERIA IS PERMISSIBLE.

CARE SHALL BE EXERCISED AS TO COVER UNATTENDED OPEN SHAFTS. TEMPORARY COVERS SHALL BE OF ADEQUATE STRENGTH TO PREVENT A PERSON OR ANIMAL FROM FALLING IN. NO DRILLED SHAFT EXCAVATION SHALL BE LEFT UN-POURED OVERNIGHT.

ANY TEMPORARY GRADING, AGGREGATE, DRAINAGE, ETC. NEEDED FOR ACCESS TO THE WORK AREA SHALL BE INCLUDED IN THE BID PRICE FOR THE DRILLED SHAFTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS USED TO CONSTRUCT THE DRILLED SHAFTS. THE COST OF ANY EXCAVATION AND ANY SUBSEQUENT REPLACEMENT OF EMBANKMENT (PER ITEM 203 EMBANKMENT) SHALL BE INCLUDED IN THE VARIOUS BID ITEMS FOR THE DRILLED SHAFTS. NO SEPARATE PAYMENT WILL BE MADE.

UTILITY NOTES

THE CONTRACTOR SHALL EXPOSE ALL UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL EFFECT ON THE PROPOSED CONSTRUCTION.

THE CONTRACTOR SHALL GIVE NOTICE OF INTENT TO CONSTRUCT TO OHIO 811 (TELEPHONE NUMBER 800-362-2764), AND TO THE OWNER OF THE UNDERGROUND UTILITIES THAT ARE NOT MEMBERS OF A REGISTERED UNDERGROUND PROTECTION SERVICE. NOTICE SHALL BE GIVEN AT LEAST 2 WORKING DAYS BEFORE START OF CONSTRUCTION.

THE LOCATION OF UTILITIES AND STRUCTURES ARE SHOWN FROM DATA PROVIDED BY THE SURVEYOR (BASED ON DATA AVAILABLE AT THE TIME OF SURVEY) AND ARE NOT NECESSARILY COMPLETE OR CORRECT. THE NOTIFICATION OF AFFECTED UTILITY OWNERS IN ADVANCE OF CONSTRUCTION AND THE EXACT LOCATION AND PROTECTION OF UTILITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. IF DAMAGE IS CAUSED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF SAME AND FOR ANY RESULTING CONTINGENT DAMAGE OR COSTS. THE COUNTY, OWNER, AND/OR ENGINEER ASSUME NO RESPONSIBILITY AS TO THE ACCURACY OR DEPTHS OF THE UNDERGROUND FACILITIES SHOWN ON THE PLANS.

ITEM 614, MAINTAINING TRAFFIC

NOTICE OF CLOSURE SIGNS, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED ROAD CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT THE POINT OF CLOSURE.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGN AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 30 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$600 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

LOCAL ACCESS SHALL BE MAINTAINED FROM ONE DIRECTION AT ALL TIMES, INCLUDING THE PROPERTIES BEYOND THE PROJECT.

ITEM NO.	UNIT	ITEM DESCRIPTION	QUANTITY
ROADWAY			<u> </u>
204	SY	SUBGRADE COMPACTION AND PROOF ROLL	77
304	СҮ	AGGREGATE BASE	8.5
211	LF	15" CORRUGATED PLASTIC PIPE	20
606	LF	GUARDRAIL TYPE MGS, AS PER PLAN	38
611	EA	ANCHOR ASSEMBLY, MGS TYPE A	2
209	LF	DITCH CLEANOUT	85
670	SY	DITCH EROSION PROTECTION	42
DRILLED SHAF	TS		
507	FT	STEEL PILES, MISC.: HP14X89	269.7
524	FT	DRILLED SHAFT, 30" DIAMETER, ABOVE BEDROCK, AS PER PLAN	129.7
524	FT	DRILLED SHAFT, 30" DIAMETER, INTO BEDROCK, AS PER PLAN	132
511	EA	CONCRETE MISC.: 8" X 24" X 54" PRECAST CONCRETE LAGGING	30
518	СҮ	POROUS BACKFILL WITH GEOTEXTILE FABRIC, AS PER PLAN	39
518	LF	6" PERFORATED PLASTIC PIPE	50
518	LF	6" SOLID PLASTIC PIPE	5
511	СҮ	CLASS QC1 CONCRETE FOOTING, AS PER PLAN	7
601	СҮ	ROCK CHANNEL PROTECTION TYPE D, WITH GEOTEXTILE FABRIC	2
EROSION CON	TROL		•
659	SY	SEEDING AND MULCHING, CLASS 2	133
832	LUMP	EROSION CONTROL	LUMP
MAINTENANC	E OF TRAFFIC		
614	LUMP	DETOUR SIGNING/MAINTAINING TRAFFIC	LUMP
INCIDENTALS			
201	LUMP	CLEARING AND GRUBBING	LUMP
103	LUMP	PREMIUM FOR CONTRACT PERFORMANCE BOND AND PAYMENT	LUMP
623	LUMP	CONSTRUCTION LAYOUT STAKES AND SURVEYING	LUMP
624	LUMP	MOBILIZATION	LUMP

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APPLICATION NO.

SLIP

DATE: 2025-05-19

SCALE: AS NOTED

SHEET:





SURVEYOR NOTES:

THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON ABOVE GROUND STRUCTURES AND RECORD DRAWINGS PROVIDED TO THE SURVEYOR. LOCATIONS OF UNDERGROUND UTILITIES/STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/STRUCTURES.

DATES OF FIELD WORK: 12/02/2024

EVERY DOCUMENT OF RECORD REVIEWED AND CONSIDERED AS A PART OF THIS SURVEY IS NOTED HEREON.

SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT.

BASIS OF BEARINGS:

THE BEARINGS SHOWN HEREIN ARE BASED ON OHIO STATE PLANE COORDINATE SYSTEM. SOUTH SYSTEM, NAD83, GEOID12A.

BENCHMARKS:

AS PER THE TOPOGRAPHIC SURVEY PREPARED BY VERDANTAS THE CONTRACTOR AND/OR HIS SURVEYOR SHALL BE RESPONSIBLE TO CROSS CHECK ALL CONTROL FOR DISTURBANCE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

BENCHMARK #1 - VDT CONTROL POINT PINS #1 ELEVATION = 817.83 BENCHMARK #2 - VDT CONTROL POINT PINS #2 ELEVATION =817.52

CONTROL POINTS

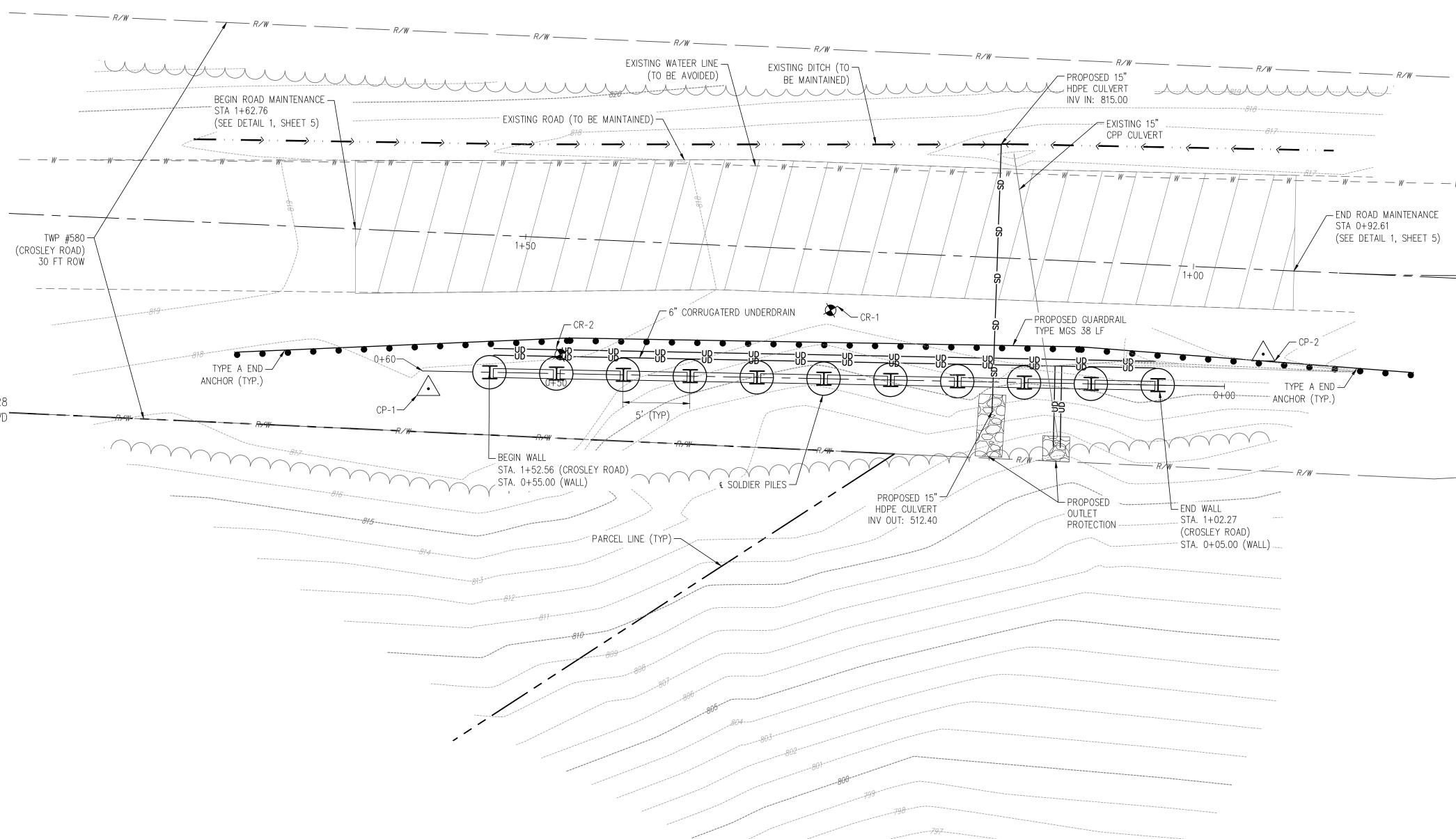
BASIS OF BEARING: TRUE NORTH, BASED ON OBSERVATIONS, GPS DATA COLLECTED WITH TRIMBLER8 UNIT VRS CORRECTION ON OHIO STATE PLANE SOUTH ZONE COORDINATE SYSTEM, NAD 1983, NAVD 1988, GEOID 12A.

POINT #	NORTHING	EASTING	STATION AND OFFSET	DESCRIPTION
CP-1	757610.6720	2441522.5630	STA. 1+56.76, 11.07' LT.	CONTROL POINT PIN
CP-2	757581.6900	2441577.9390	STA. 0+94.54, 6.32' LT.	CONTROL POINT PIN

ALIGNMENT DETAILS

BASIS OF BEARING: TRUE NORTH, BASED ON OBSERVATIONS, GPS DATA COLLECTED WITH TRIMBLE 8 UNIT VRS CORRECTION ON OHIO STATE PLANE SOUTH ZONE COORDINATE SYSTEM, NAD 1983, NAVD 1988, GEOID 12A.

STATION	NORTHING	EASTING	ALIGNMENT
0+92.61	757585.9302	2441583.0370	TWP 580 (CROSLEY ROAD)
1+62.76	757623.7568	2441523.8089	TWP 580 (CROSLEY ROAD)
1+02.27	757583.6284	2441569.9456	© DRILLED SHAFTS
1+52.26	757609.4586	2441527.1343	& DRILLED SHAFTS



VECAIRSVILE, OH 43950-1187
TEL. 740,217,7685



No. REVISION CHK'D BY DESIGNED BY:

DATE

CJG

CJG/LAF

CHECKED BY:

CHECKED BY:

AJS

PROJECT NO.

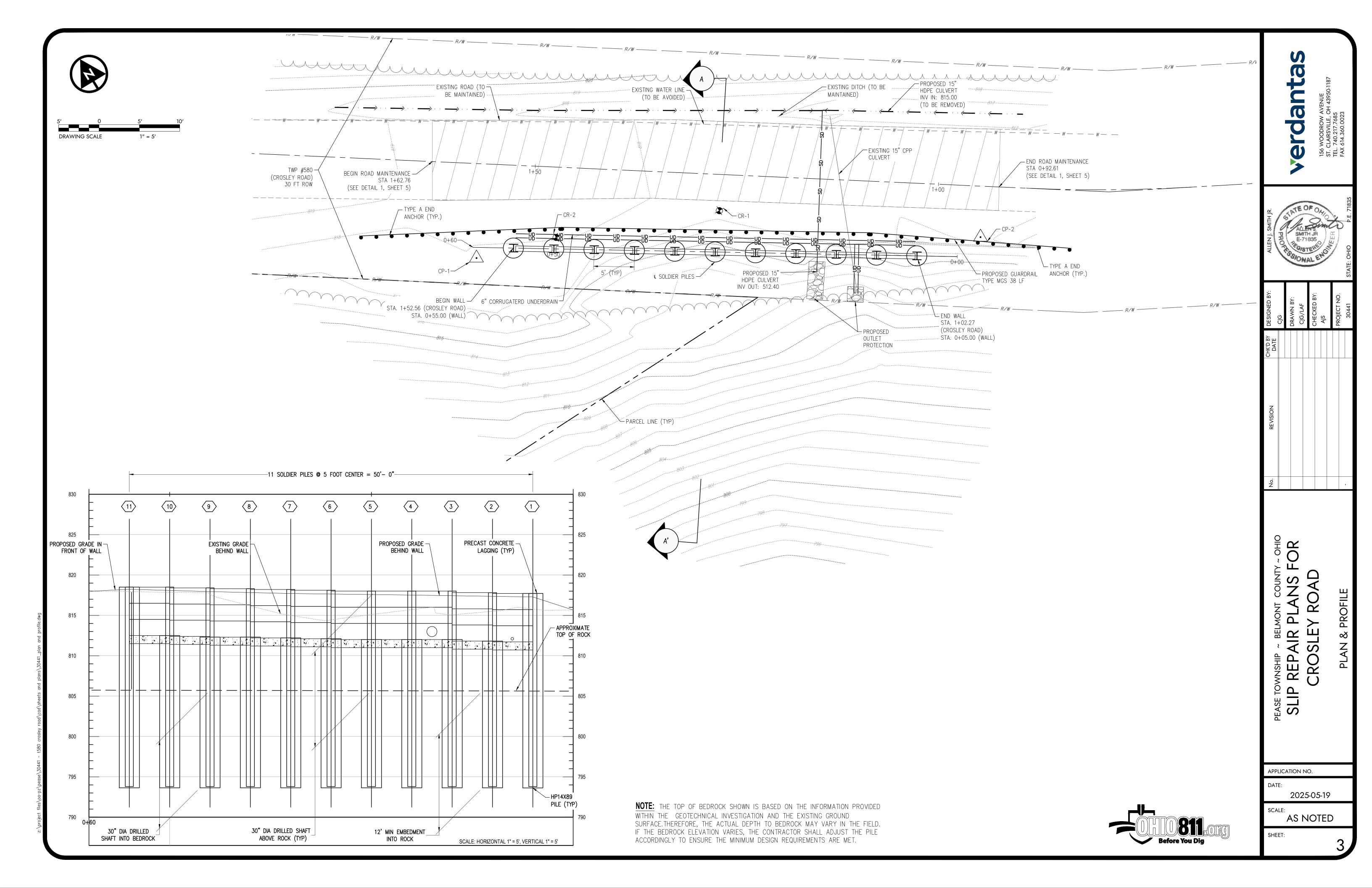
TOWNSHIP ~ BELMONT COUNTY ~ OHIO
P REPAIR PLANS FOR
CROSLEY ROAD

APPLICATION NO.

2025-05-1 scale: AS NOTED

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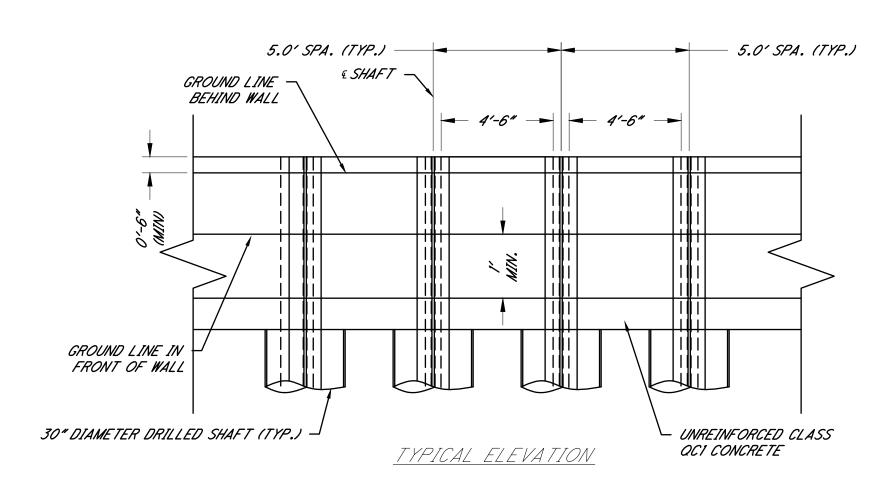
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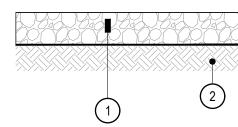
TYPICAL REPAIR SECTION A-A'

HORIZONTAL SCALE: 1" = 10'

VERTICAL SCALE: 1" = 10'



- 1. PROVIDE FILTER FABRIC ON ALL SIDES OF POROUS STONE BACKFILL, INCLUDING BACK SIDE OF PRECAST WALL PANELS. SLAG IS NOT PERMITTED FOR POROUS BACKFILL.
- 2. THE SOLDIER PILES SHALL BE ASTM A572, GRADE 50.
- 3. THE CONCRETE FOR PRECAST PANELS SHALL BE CLASS QCI, f'c = 4000 PSI.
- 4. ALL REINFORCING STEEL FOR THE CONCRETE PANELS SHALL BE EPOXY COATED.
- 5. PREFORMED BEARING PADS SHALL BE PROVIDED AT ALL PANEL BEARINGS. PREFORMED BEARING PADS SHALL BE PLACED BETWEEN FRONT FACE OF CONCRETE PANEL AND BACK FACE OF PILE FLANGE AND SHALL BE ADHESIVELY BONDED TO THE FLANGE.
- 6. PREFORMED BEARING PADS SHALL BE PROVIDED BENEATH THE BOTTOM PANELS, BETWEEN THE PANEL AND THE CONCRETE FOOTER AND/OR PLUG PILE.
- 7. PREFORMED BEARING PADS SHALL BE NEOPRENE ELASTOMERIC PADS HAVING A DUROMETER HARD-NESS OF 55 +/- 5, HIGH DENSITY POLYETHYLENE PADS WITH A MINIMUM DENSITY OF 59 LB/CFT OR EQUIVALENT. SUPPLY CERTIFIED TEST DATA TO THE ENGINEER UPON DELIVERY OF THE MATERIAL TO THE PROJECT.
- 8. PRECAST PANELS ARE TO BE FABRICATED BY AN ODOT 1073 CERTIFIED FABRICATOR.
- 9. LIFT HOOKS ON TOP PANELS TO BE GROUTED AFTER SETTING.



1 ITEM 304 - 3" AGGREGATE BASE
2 ITEM 204 - SUBGRADE COMPACTION

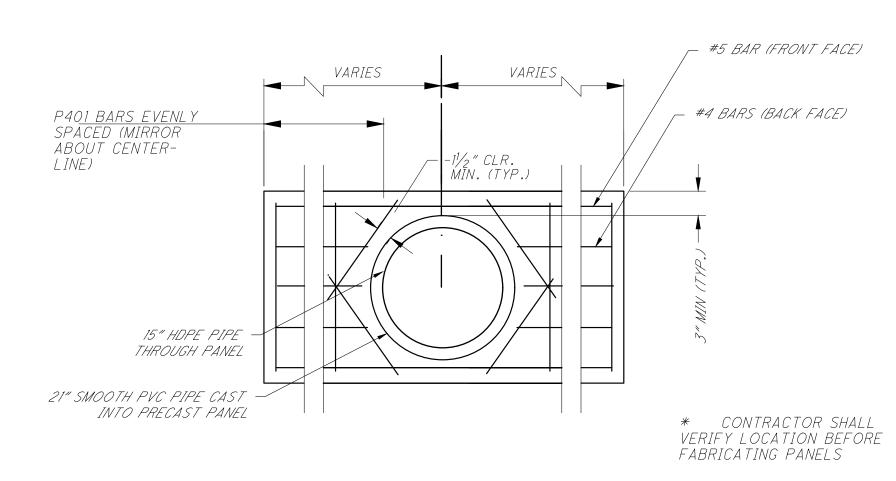


ROADWAY MAINTENANCE

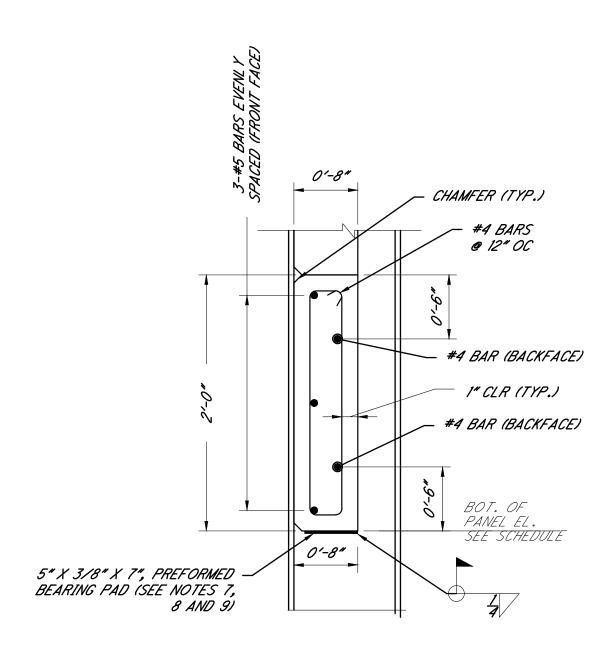
Not to Scale

NOTES:

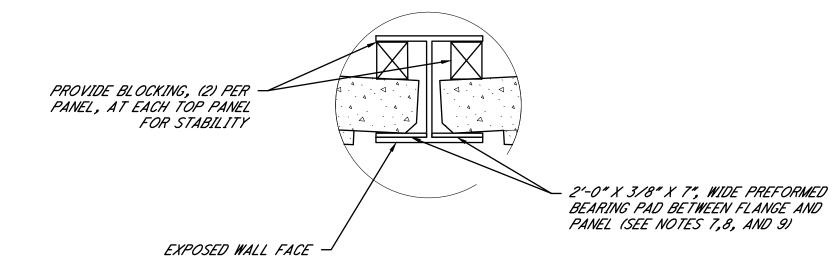
1. ALL MATERIALS SHALL CONFORM TO THE CURRENT ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS.



5'-0" BAY



<u>SECTION A—A</u> 5'-0" BAY



BEARING DETAIL
5'-0" BAY

Se woodrow avenue

156 WOODROW AVE ST. CLAIRSVILLE, O TEL. 740.217.7685 FAX 614.360.0023



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TOWNSHIP ~ BELMONT COUNTY ~ OHIG PREPAIR PLANS FOR CROSLEY ROAD

APPLICATION NO.

DATE:

2025-05-1

scale: AS NOTED

SHEET:

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Verdantas

156 WOODROW AVENUE
ST. CLAIRSVILLE, OH 43950–1187

SMITH JR E-71835 PARTIES SIONAL ENGINEERS											***************************************	STATE: OHIO
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PEASE TOWNSHIP ~ BELMONT COUNTY ~ OHIC SLIP REPAIR PLANS FOR CROSLEY ROAD

APPLICATION NO.

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