



Advanced Communications & Data

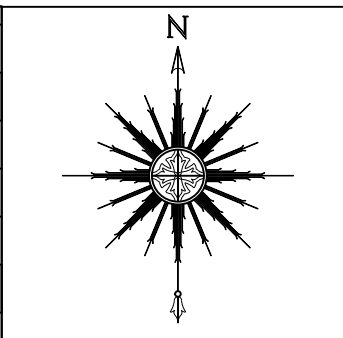
KEPS Technologies, Inc. d/b/a ACD.net
FIBER OPTIC CABLE ROUTE

Project Number
VBTOLD045FO19225_AB

[517-999-9999](tel:517-999-9999)

1800 Grand River Ave
Lansing MI 48906

Proposed Anchor Distance and Direction	Reg Sidewalk	Fiber Count W/ Segment Number	Man Hole	Typical Line Types	
Proposed ACD Communications Poles	WOOD METAL	Fiber Termination Point	Storm Drain	Rail Road Tracks	
Proposed ACD NON Communications Pole		ACD Splice Case Six Way	ACD Regen Cabinet	Proposed Underground Fiber	
Colocation Poles (ACD Communication Equipment on Existing Poles)		ACD Splice Case Four Way	TRS Section Corner	Existing Underground Fiber	
Joint Use Pole NON Transformer		ACD Splice Case Three Way	Fire Hydrant	Right Of Way Boundary	
Joint Use Pole Transformer		ACD Splice Case Two Way	Location Address	Side Walk and Driveway	
Foreign Pole Indicator	FP	ACD Fiber Tap Capsule	Foliage	Fiber Design Line	
Joint Use Pole NON Transformer- UNUSED		ACD RE-Box	Centerline Marker	Aerial Fiber	
Joint Use Pole Transformer- UNUSED		Foreign Splice Case	Station Marker	Center Line	
Street Light		Storage Loop w/ Footage and Segment	Use of Double Dead End	Water Main	
Existing Traffic Signal Pole		ACD Buried Cable Marker		Forced Water Main	
Pole Number Marker	1	ACD Hand Hole 17" x 12"		Storm Sewer	
Proposed Riser	R ²⁵	ACD Hand Hole 24" x 13"		Sanitary Sewer	
Make Ready Symbol w/ Attachment and Sag Heights	MR Attach At: Midspan At:	ACD Hand Hole 24" x 36"		Gas Main	
Down Ground		ACD Hand Hole 30" x 48"		Foreign UG Fiber	
Bonding Clamp		Foreign Hand Hole		AT&T UG Fiber	
Fiber Overlash		Proposed Bore Pit Location		UG Electric	
Overhead Guy Marker		Communications Tower		Oil Line	
Span Length and Segment ID	100'			Fence	



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Contact the Local ONE CALL AGENCY 72 HOURS PRIOR TO CONSTRUCTION FOR EXACT UTILITY LOCATIONS AT:
MISS DIG
1-800-482-7171

Project Manager
Brian Dietrich
CAD Engineer
386 Carlos Gascon
Permitting Engineer
Unassigned
Surveyor

Revisions			
REV #	DESCRIPTION	BY	DATE
1	First Route Design		
2	Revise Fiber Counts & Segments	A.P.	10-25-6
3	As Built	TH	2-21-18
4	Forced Relocate Revisions	DW	3-14-23
5	Added infrastructure and adjusted fiber line	KN	3-21-23
6	Forced Relocate and Grassy Creek Elevation	KN	4-3-23

Our Match Lines can be found in the lower right hand corner and represents the neighboring page numbers.

WEST PAGE	NORTH PAGE	EAST PAGE
	PAGE	
	SOUTH PAGE	

Remarks: PEACHTREE ID: PERB0045

SCALE: 1" = NTS	TRIS:		
COUNTY: Wood	TOWNSHIP: N/A	CITY: Perrysburg	PROJECT ID: VBTOLD045FO19225_AB
			CUSTOMER NUMBER: 90096

Exhibit: N/A

SYMBOLS
LEGEND

General Site Preparation For Installing Hand Holes (All Sizes)

These guidelines for installing ACD Hand holes are provided as a general guide and actual site conditions may warrant the use of additional installations procedures not covered here. Follow all project specifications when installing ACD Hand holes.

1. Excavate the earth approximately 12" wider and longer than the hand hole as well as 6" deeper than the depth of the hand hole. Fill the excavation with a 6" base of pea stone or crushed rock to ensure proper drainage. Tamping is recommended to provide a compact and level surface for the hand hole to be placed upon.
2. Wood bracing should be used inside the hand hole to ensure minimal sidewall deflection when backfilling. Temporary bracing can be constructed out of construction grade lumber. Start by using (1) 2x4 to brace the end walls and (2) 2x4s to brace the side walls, finish with (1) 2x4 from one side of the ring to the other. Do not install the bracing too tight to prevent damage.
3. Lift the Hand hole into the excavation using the lifting bolts or lifting wires. Check the top of the box is flush with the finished grade. Any necessary adjustments should be made to bring it to finished grade.
4. Backfill with clean, loose soil and compact to a minimum of 90%-95% compaction. Remove bracing materials and secure cover using included hardware.

General Hand Hole Notes (All Sizes)

1. All Hand holes are to contain 150' of coiled up storage.
2. All Conduits are to be brought up through the bottom of the hand hole. No Conduits are to penetrate the sides of the enclosure. All conduits are to be tagged with the colored zip ties following this system:
Red= Riser
Blue= North
Yellow= West
Green= South
Black= East
3. All Hand holes are to contain a 5/8" DIA x 8' grounding rod to be placed in a corner 3" away from each side and 18" above tamped earth.

Restoration Notes

1. All backfill material within the road right of way or near sidewalks and pathways shall meet the requirements of MDOT Class II material, compacted to 95% of its maximum density in successive layers that are no more than 12" thick, unless otherwise authorized
2. All sodded areas that may be disturbed during construction are to be restored with 3" quality top soil, seed and mulch
3. All Concrete/Sidewalk areas that may be disturbed are to be restored to a like or better condition.

Underground Coupler Detail

PUSH2CONNECT™ Coupler

Do Not Unscrew!



Push-On-Only!

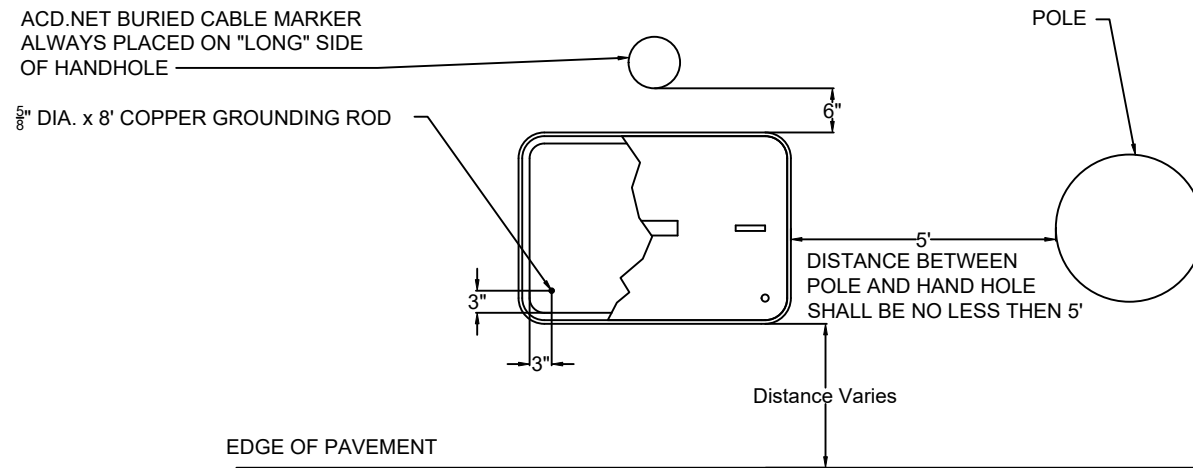
(Loosening collars prior to installing can cause improper installation, create air loss, or coupler failure)

Air Tight - Water Tight
Tested to **GREATER THAN 1500#**
Pull-Out
GREATER THAN 450 (psi) air pass-through

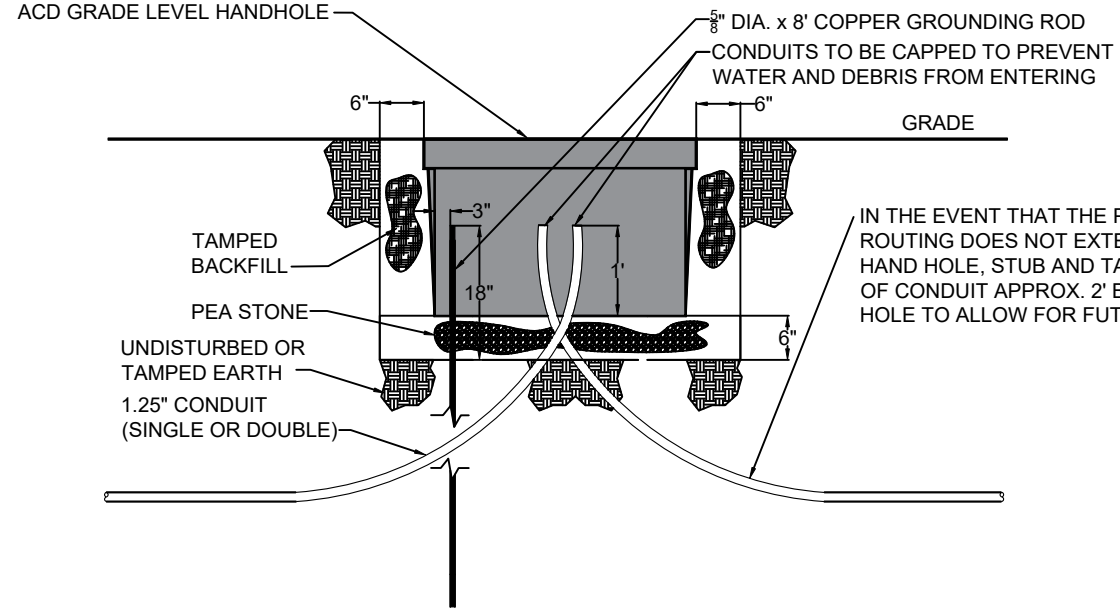
Couplers for the Following Sizes	Duct OD	Color	Box Qty	Part Number
1" Smoothwall HDPE	1.315	Yellow	85	P2C-1.315
1.25" Smoothwall HDPE	1.56"	Blue	100	P2C-1.56
1.25" Smoothwall HDPE True Sized	1.58"	Black	100	P2C-1.58
2" Smoothwall HDPE	2.375"	Orange	24	P2C-2.375
Transition Coupler 1.25" to 1.25"	1.58" to 1.56"	Black AND Blue	100	P2C-1.56-1.58trans

ACD.NET BURIED CABLE MARKER ALWAYS PLACED ON "LONG" SIDE OF HANDHOLE

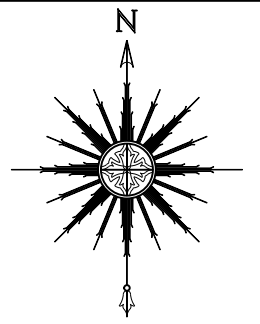
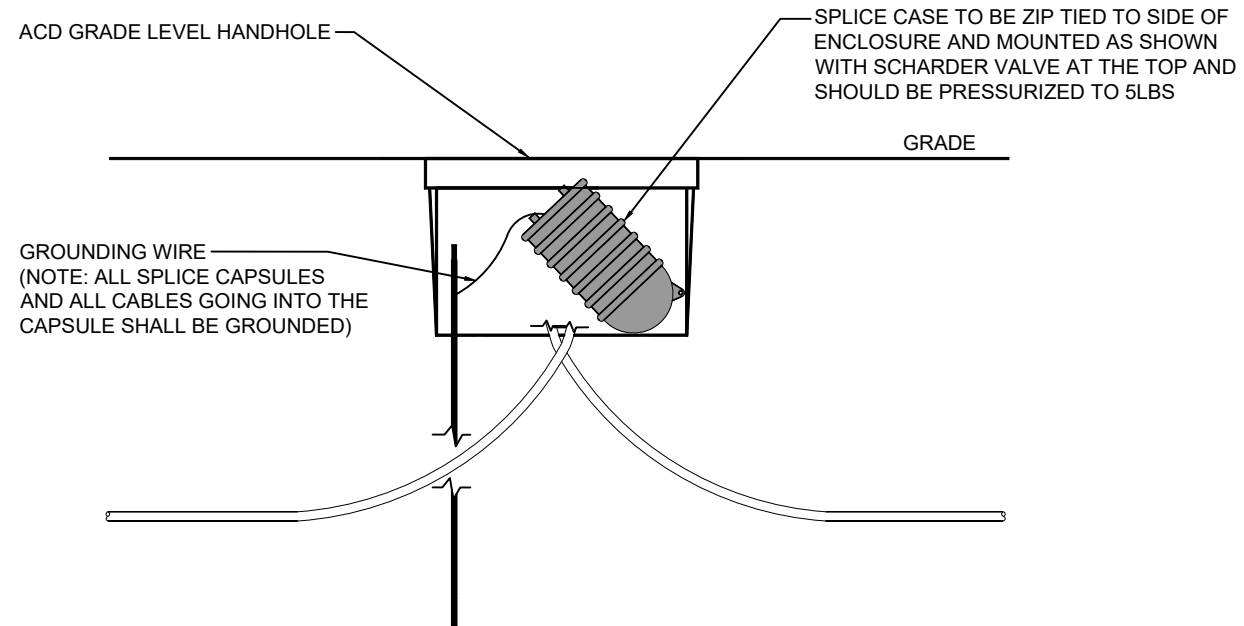
5/8" DIA. x 8' COPPER GROUNDING ROD



ACD GRADE LEVEL HANDHOLE



ACD GRADE LEVEL HANDHOLE



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CAD Engineer

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Permitting Engineer

Unassigned

Surveyor

Revisions

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1	First Route Design		
2	Revise Fiber Counts & Segments	A.P.	10-25-16
3	As Built	TH	2/21/18
4	Forced Relocate Revisions	DW	3-14-23
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6	Forced Relocate and Grassy Creek Elevation	KN	4-3-23

Exhibit: N/A

Remarks: PEACHTREE ID: PERB0045

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TRS:

COUNTY: Wood

TOWNSHIP: N/A

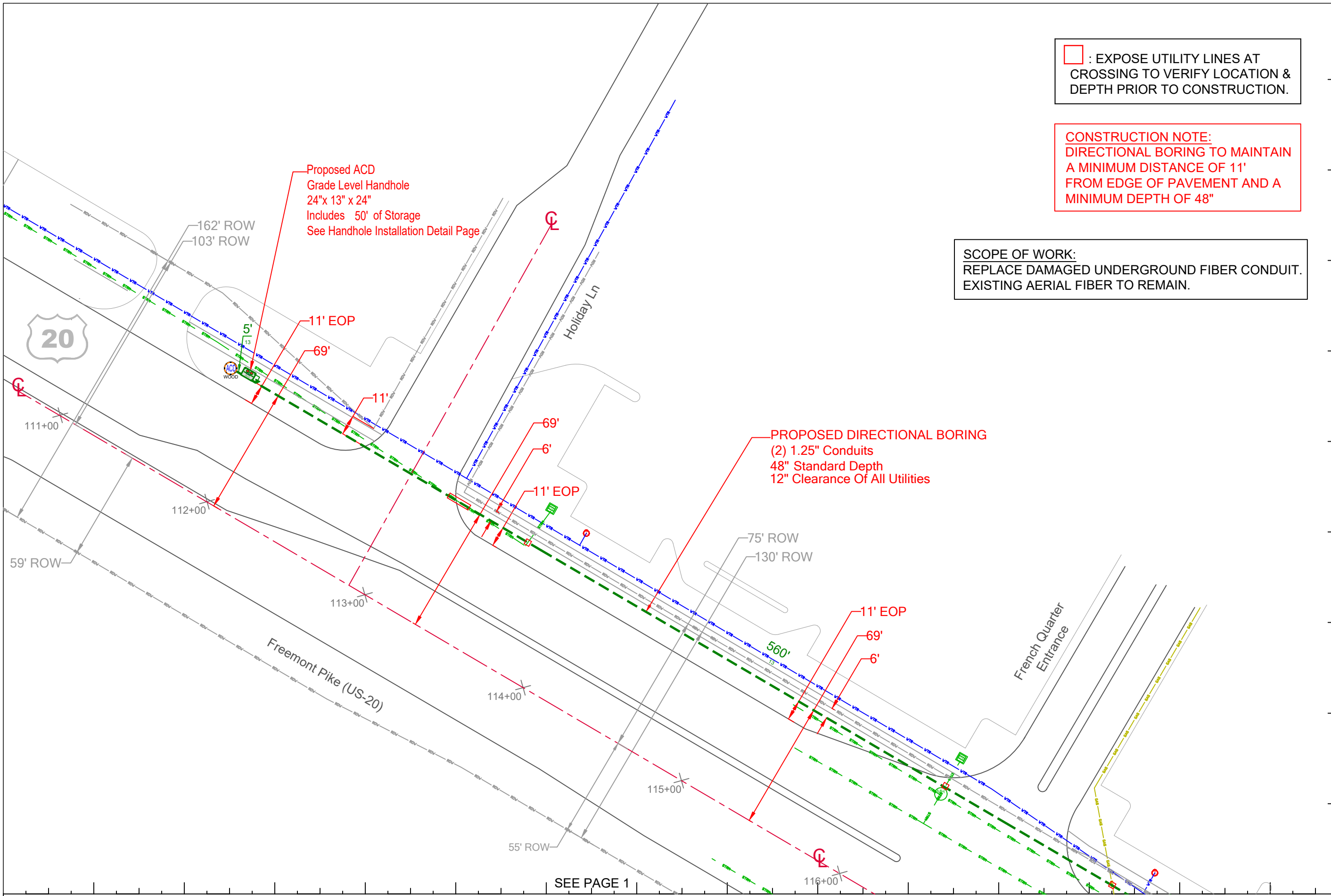
CITY: Perrysburg

PROJECT ID: VBTOLD045FO19225_AB

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HANDHOLE INSTALL

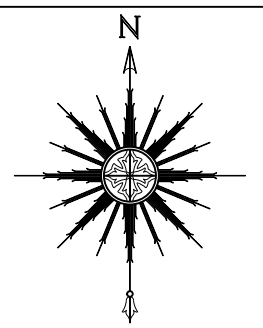
DETAIL



☐ : EXPOSE UTILITY LINES AT CROSSING TO VERIFY LOCATION & DEPTH PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTE:
 DIRECTIONAL BORING TO MAINTAIN A MINIMUM DISTANCE OF 11' FROM EDGE OF PAVEMENT AND A MINIMUM DEPTH OF 48"

SCOPE OF WORK:
 REPLACE DAMAGED UNDERGROUND FIBER CONDUIT. EXISTING AERIAL FIBER TO REMAIN.



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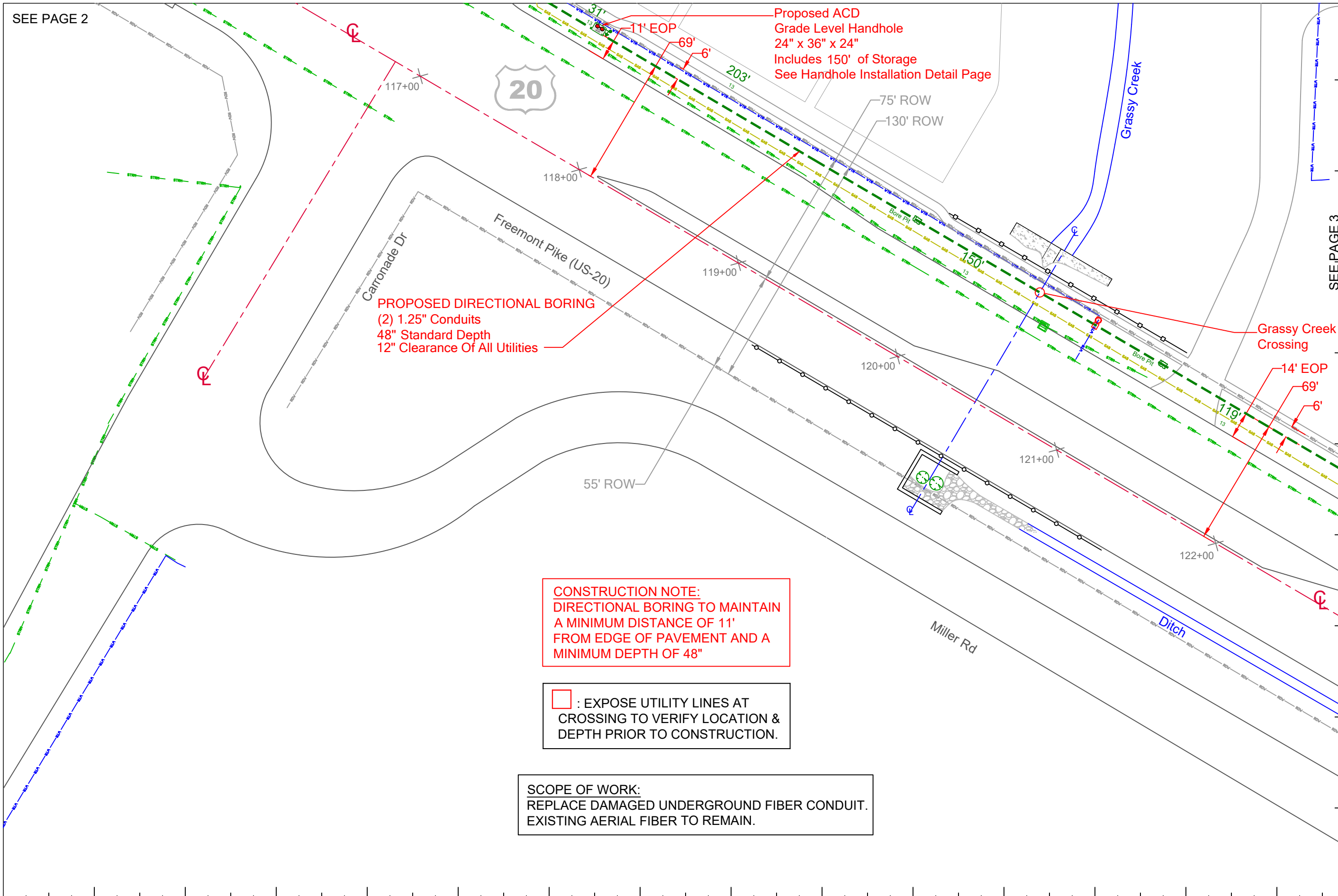
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Forced Relocate
PAGE 1

SEE PAGE 2



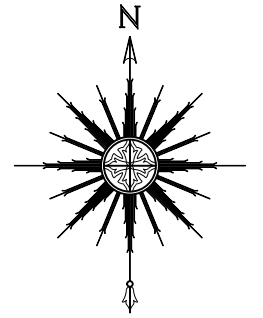
Proposed ACD
 Grade Level Handhole
 24" x 36" x 24"
 Includes 150' of Storage
 See Handhole Installation Detail Page

PROPOSED DIRECTIONAL BORING
 (2) 1.25" Conduits
 48" Standard Depth
 12" Clearance Of All Utilities

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Forced Relocate

PAGE 2

SEE PAGE 3

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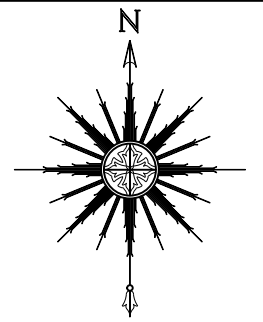
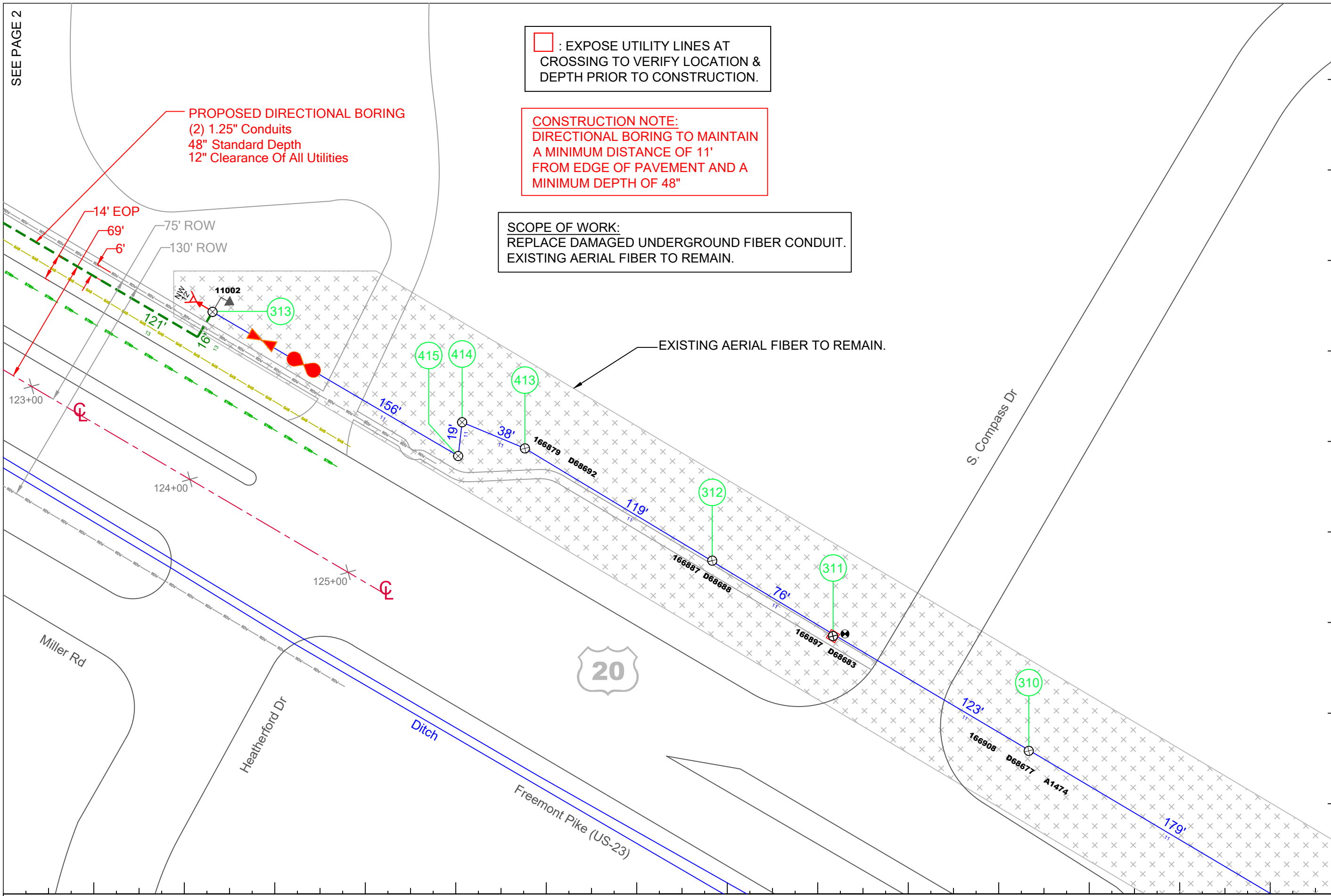
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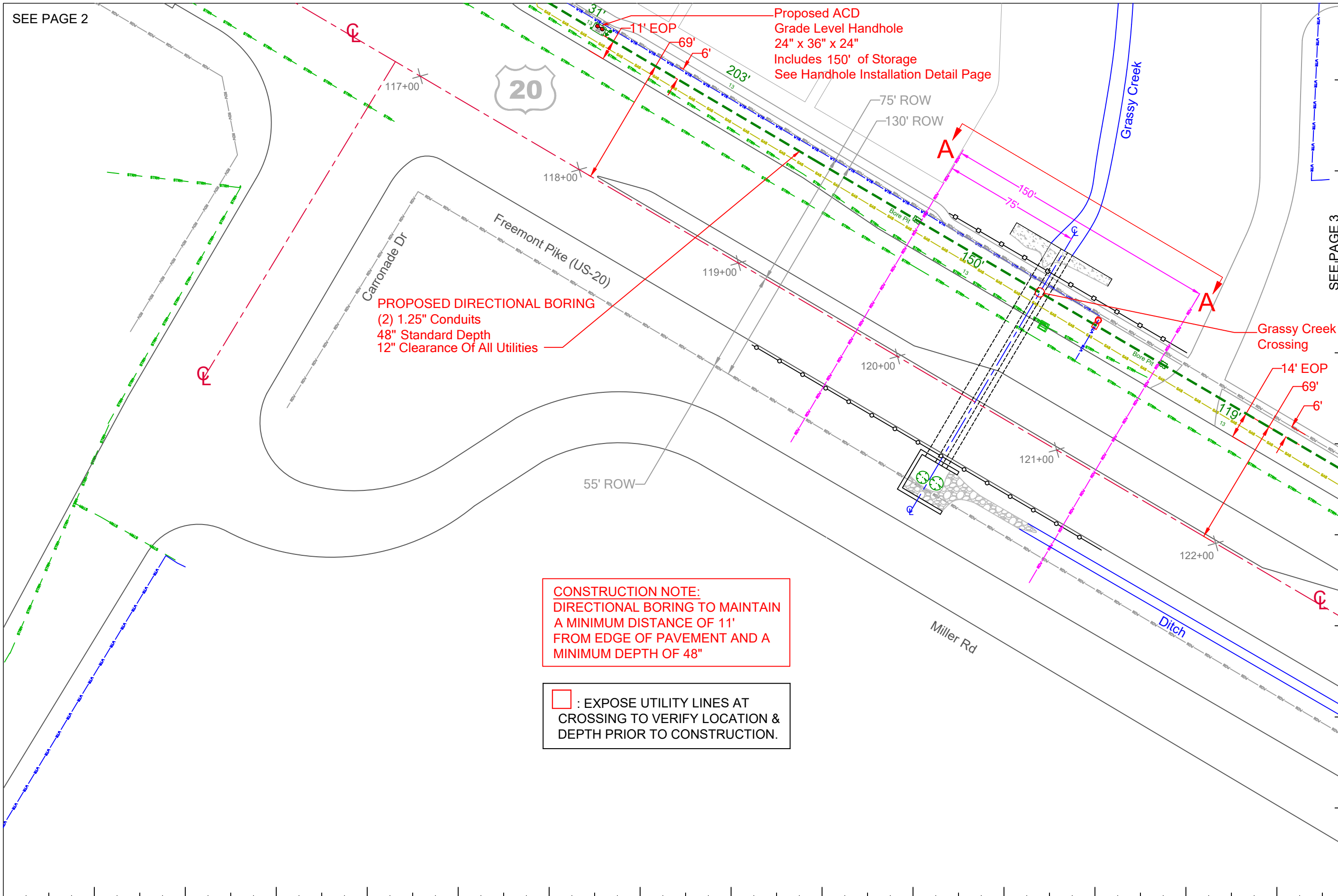
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Forced Relocate
PAGE 3

SEE PAGE 2

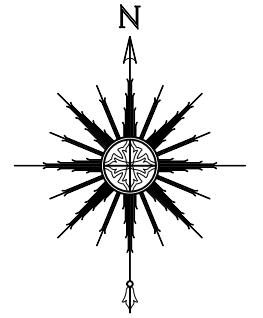


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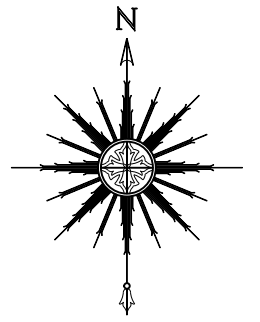
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Forced Relocate
AERIAL VIEW
Grassy Creek Crossing

GRASSY CREEK CROSSING

VIEW IS LOOKING SOUTH WEST



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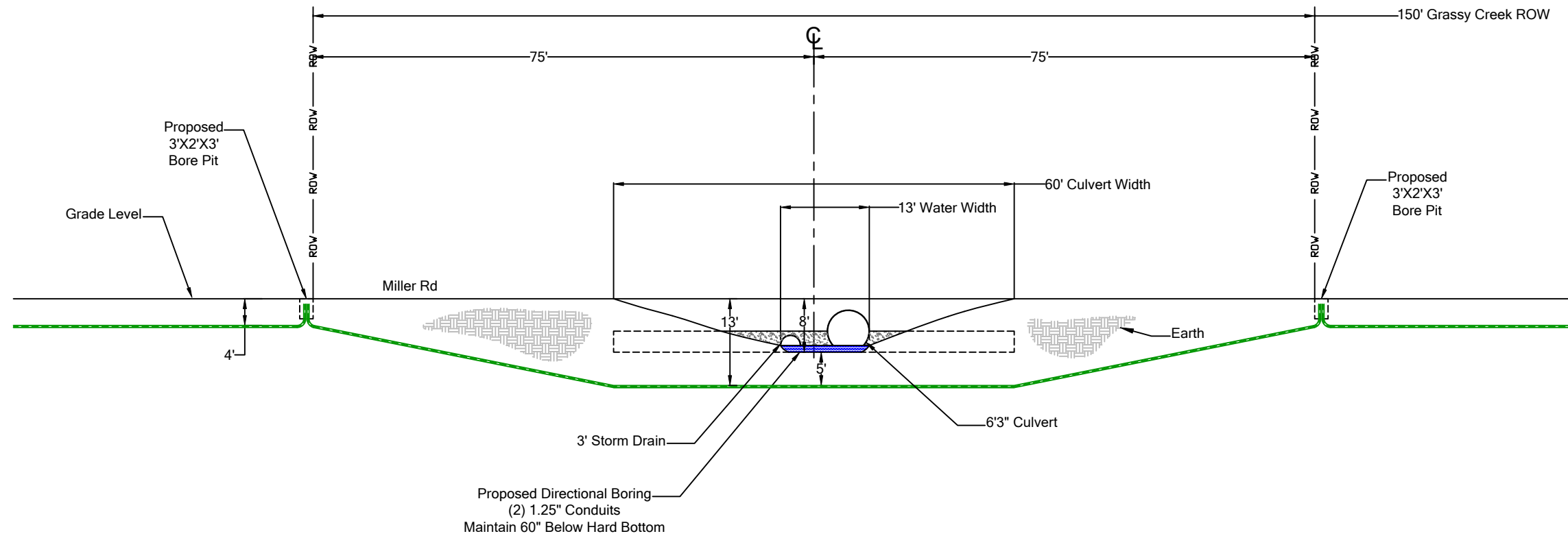
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Exhibit: N/A



A-A ELEVATION VIEW

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Forced Relocate
ELEVATION VIEW
Grassy Creek Crossing