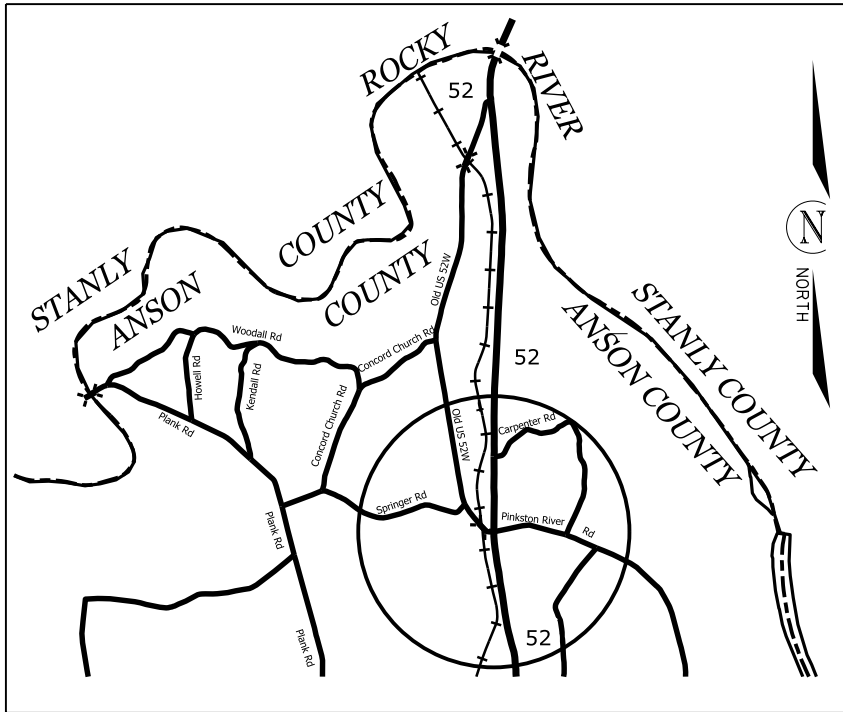


TIP: B-4410A

PROJECT: 33688.3.2



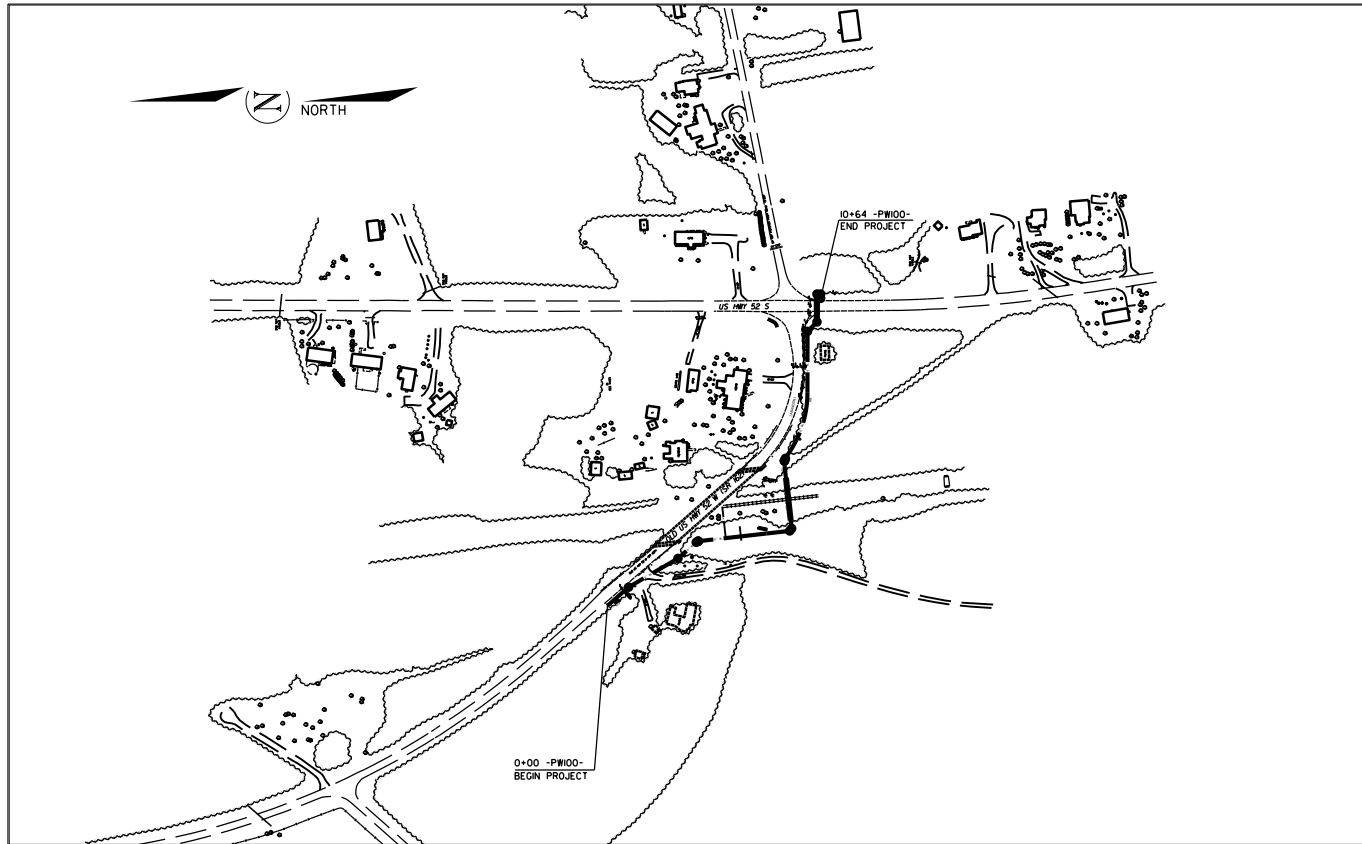
VICINITY MAP NOT TO SCALE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
ANSON COUNTY

LOCATION: INTERSECTION OF US HIGHWAY 52S
AND OLD US HIGHWAY 52W (SR-1627)

TYPE OF WORK: WATERLINE INSTALLATION

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	33688.3.2	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
33688.1.2		P.E.	
33688.2.2		R/W	
33688.3.2		CONST.	



GRAPHIC SCALES



DESIGN DATA

ADT =
ADT =
DHV = %
D = %
T = %
V = MPH

PROJECT LENGTH

LENGTH OF ROADWAY PROJECT 33688.3.2 = 0.02 MILES
TOTAL LENGTH OF ROADWAY PROJECT 33688.3.2 = 0.02 MILES

Prepared in the Office of:
DIVISION OF HIGHWAYS
DIVISION TEN
DIVISION DESIGN / CONSTRUCT UNIT

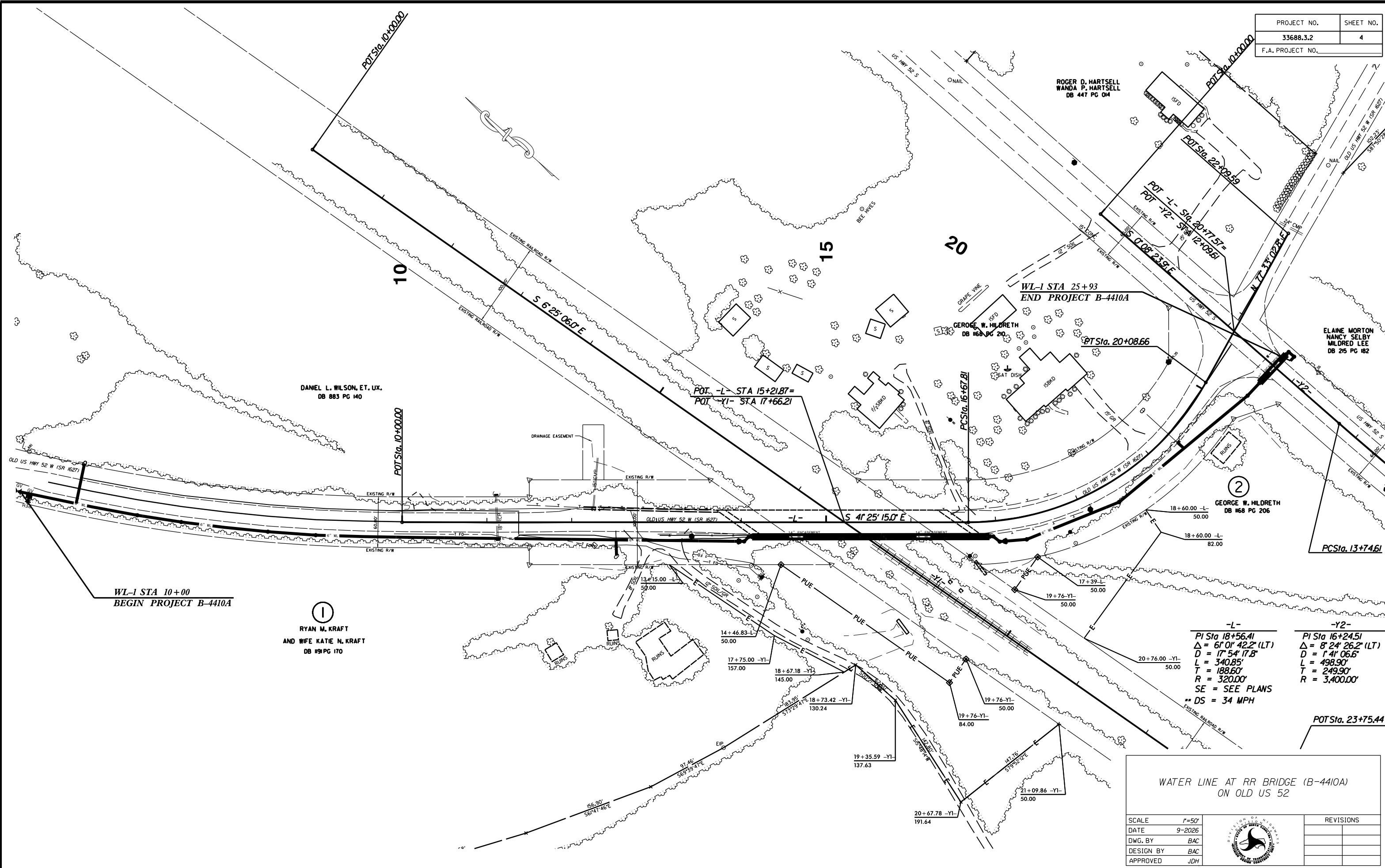
RIGHT OF WAY DATE:
JULY 10, 2023

LETTING DATE:
OCTOBER 21, 2026

DONALD HARWARD
PROJECT ENGINEER

BRADLEY COLEY
PROJECT DESIGN ENGINEER



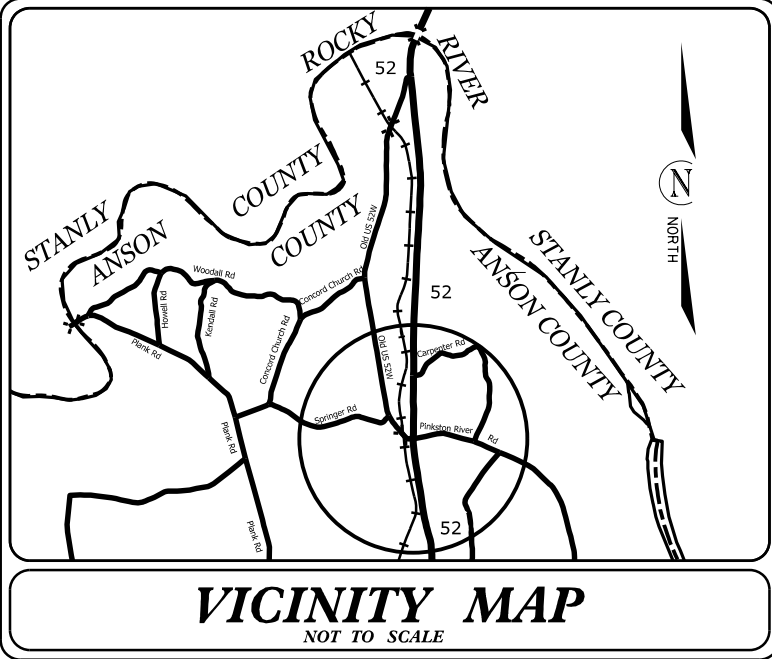


WATER LINE AT RR BRIDGE (B-4410A)
ON OLD US 52

SCALE	1"=50'
DATE	9-2026
DWG. BY	BAC
DESIGN BY	BAC
APPROVED	JDH

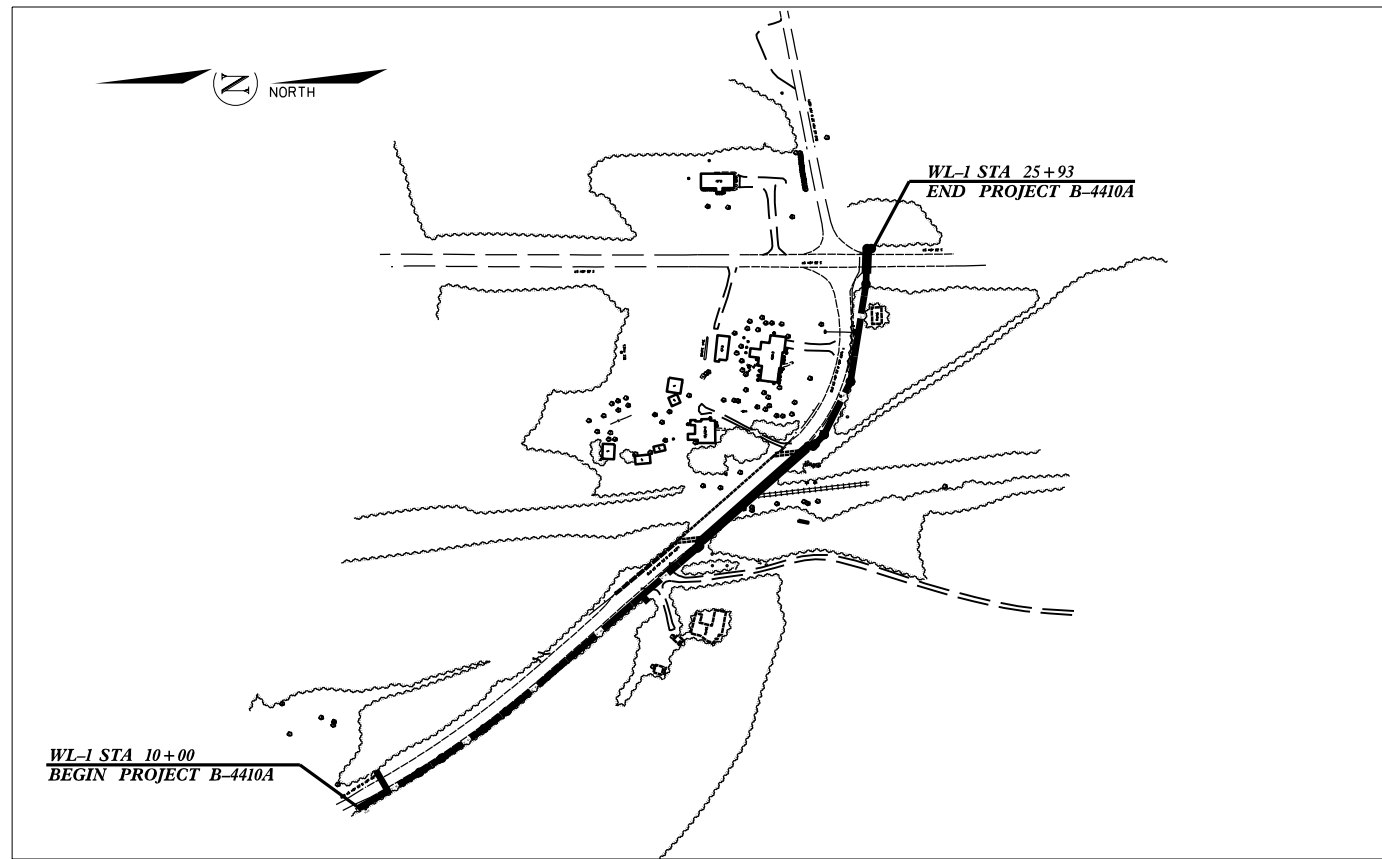
REVISIONS	

PROJECT: 33688.3.2 TIP: B-4410A

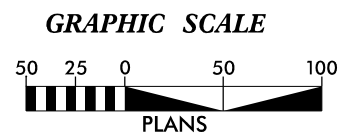


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL
ANSON COUNTY

LOCATION: INTERSECTION OF US HIGHWAY 52S
AND OLD US HIGHWAY 52W (SR-1627)



INSTALL PERIMETER EROSION CONTROL
MEASURES DURING INITIAL CLEARING PHASE



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH
THE APPLICABLE REGULATIONS SET FORTH BY THE NCG-010000
GENERAL CONSTRUCTION PERMIT EFFECTIVE APRIL 1, 2019
AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF
ENVIRONMENTAL QUALITY DIVISION OF WATER RESOURCES.



Prepared in the Office of:
DDC UNIT DIVISION 10
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Designed by:
BRADLEY COLEY 4929
NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2018 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type J
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A
1622.01 Temporary Berms and Slope Drains	1633.02 Temporary Rock Silt Check Type J
1630.01 Riser Basin	1633.02 Temporary Rock Silt Check Type J
1630.02 Silt Basin Type J	1634.01 Temporary Rock Sediment Dam Type A
1630.03 Temporary Silt Ditch	1634.02 Temporary Rock Sediment Dam Type J
1630.04 Stilling Basin	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.05 Temporary Diversion	1635.02 Rock Pipe Inlet Sediment Trap Type J
1630.06 Special Stilling Basin	1640.01 Coir Fiber Jaffle
1631.01 Matting Installation	1645.01 Temporary Stream Crossing

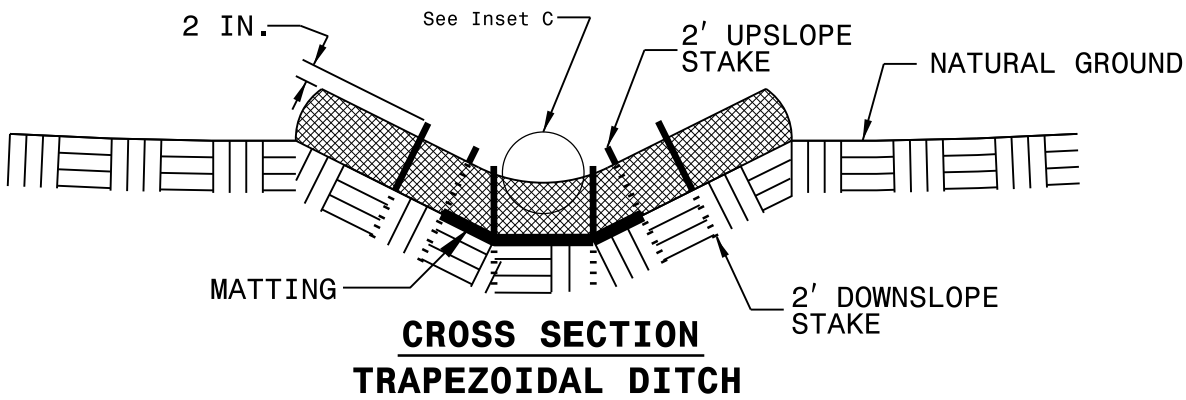
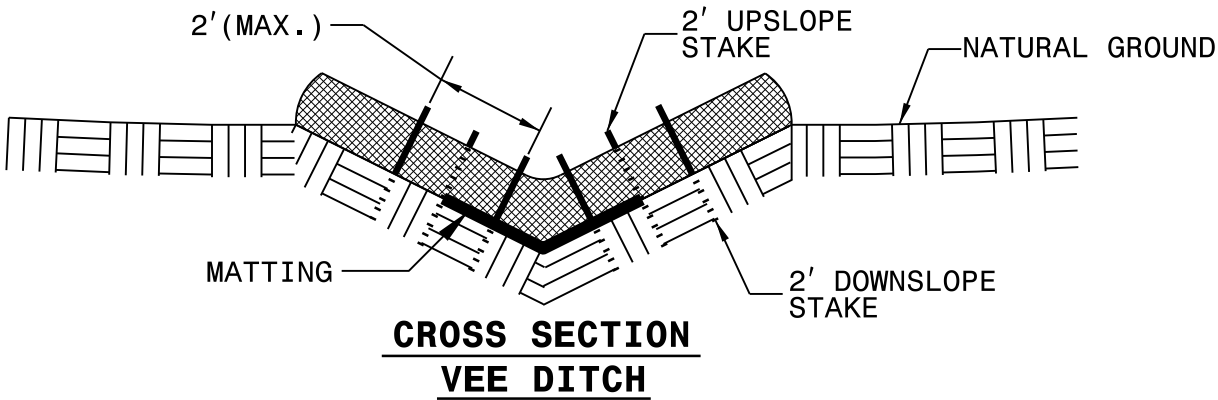
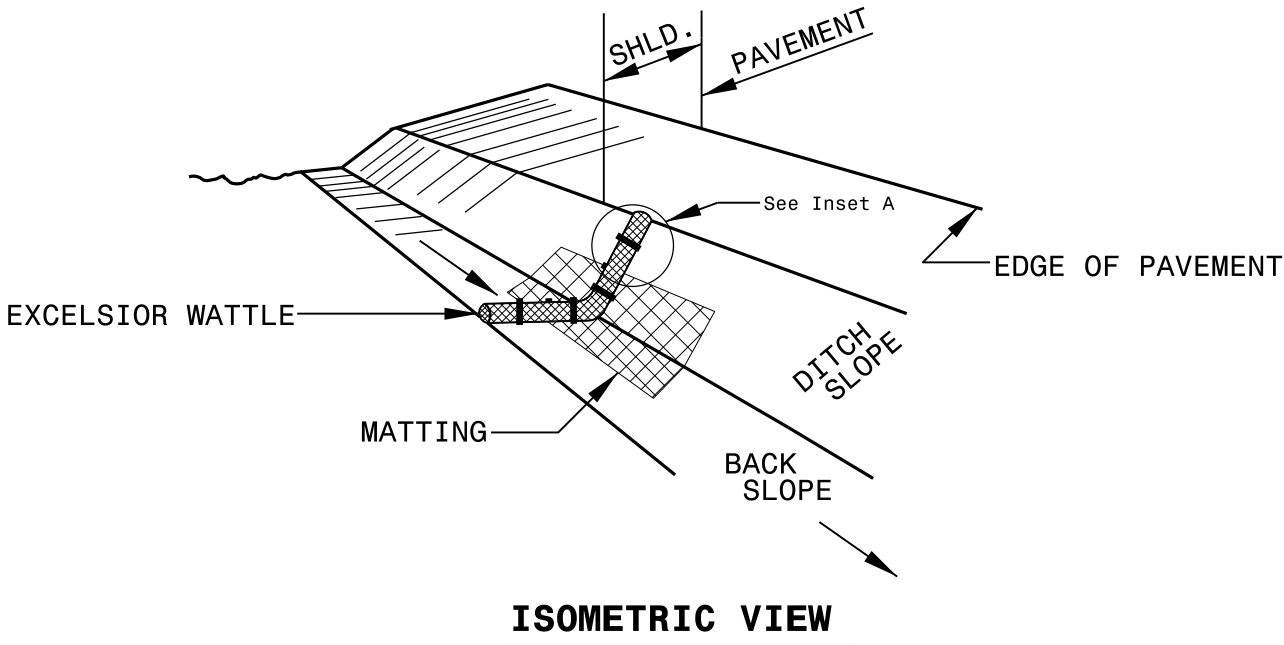
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	33688.3.2	EC-1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
33688.1.2		P.E.	
33688.2.2		R/W	
33688.3.2		CONST.	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	---
1630.05	Temporary Diversion	---
1605.01	Temporary Silt Fence	---
1606.01	Special Sediment Control Fence	---
1622.01	Temporary Berms and Slope Drains	---
1630.02	Silt Basin Type B	---
1633.01	Temporary Rock Silt Check Type-A	---
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	---
1633.02	Temporary Rock Silt Check Type-B	---
	Wattle/Coir Fiber Wattle	---
	Wattle/Coir Fiber Wattle with Polyacrylamide (PAM)	---
1634.01	Temporary Rock Sediment Dam Type-A	---
1634.02	Temporary Rock Sediment Dam Type-B	---
1635.01	Rock Pipe Inlet Sediment Trap Type-A	---
1635.02	Rock Pipe Inlet Sediment Trap Type-B	---
1630.04	Stilling Basin	---
1630.06	Special Stilling Basin	---
	Rock Inlet Sediment Trap:	
1632.01	Type A	---
1632.02	Type B	---
1632.03	Type C	---
	Skimmer Basin	---
	Tiered Skimmer Basin	---
	Infiltration Basin	---

THIS PROJECT CONTAINS
EROSION CONTROL PLANS
FOR CLEARING AND
GRUBBING PHASE OF
CONSTRUCTION.

WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

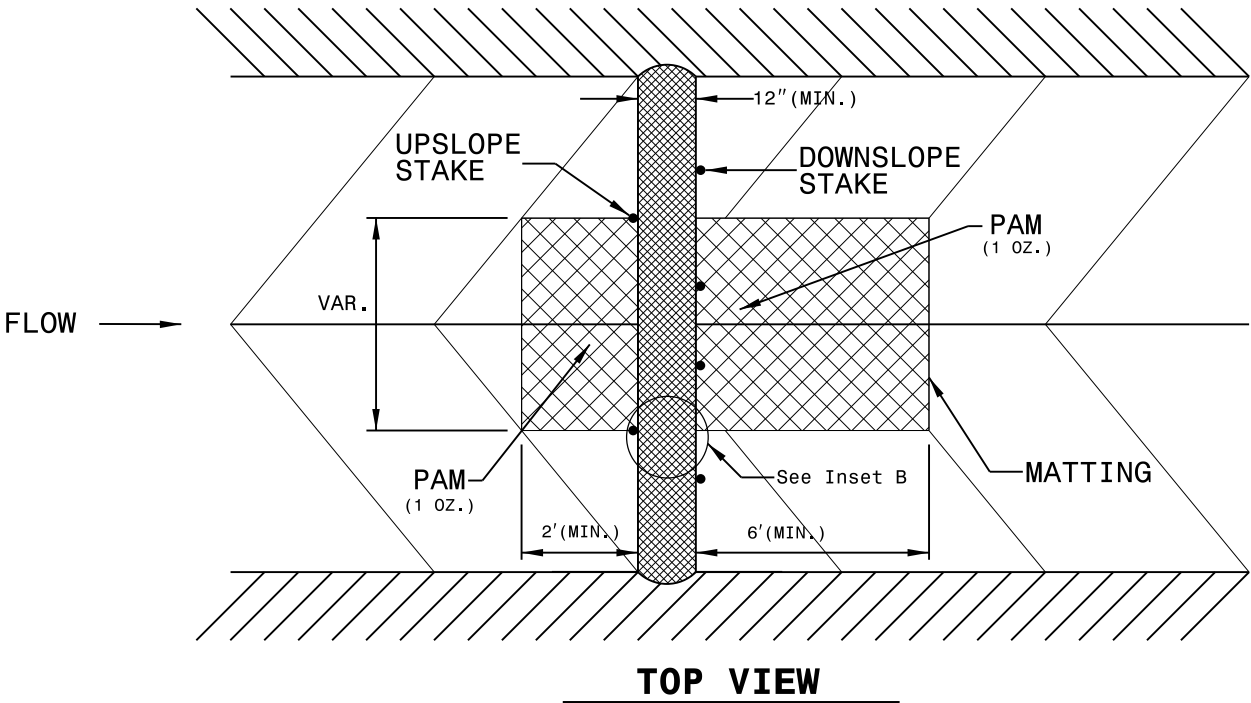
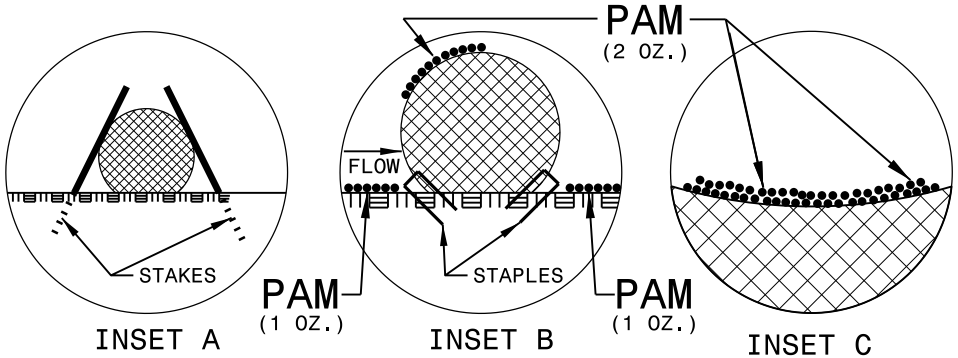
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

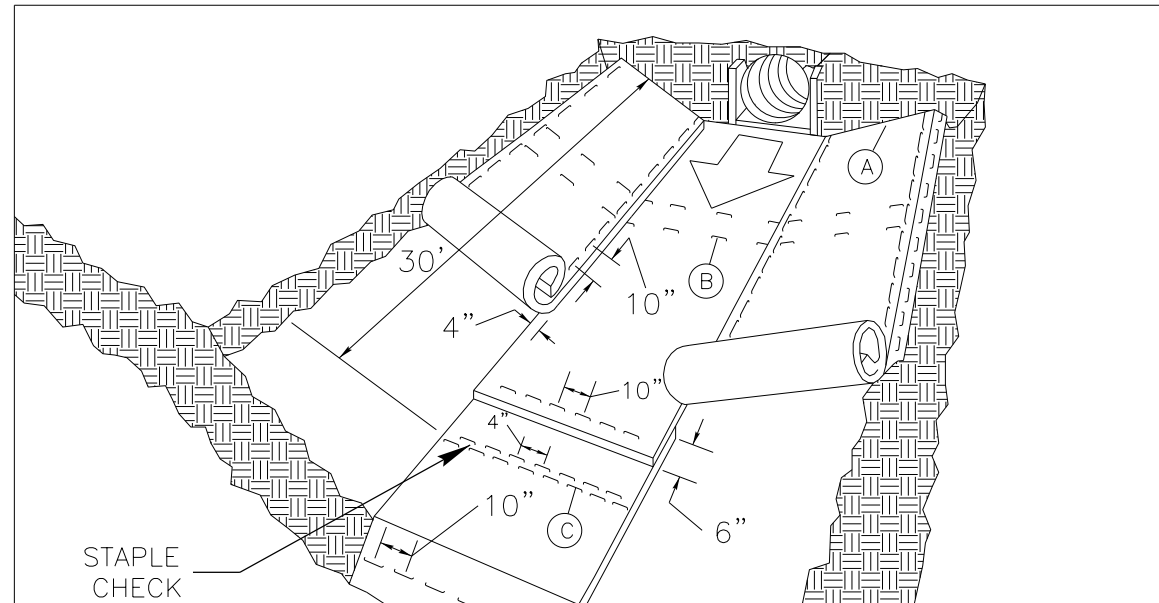
INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



MATTING INSTALLATION DETAIL



MATTING IN DITCHES

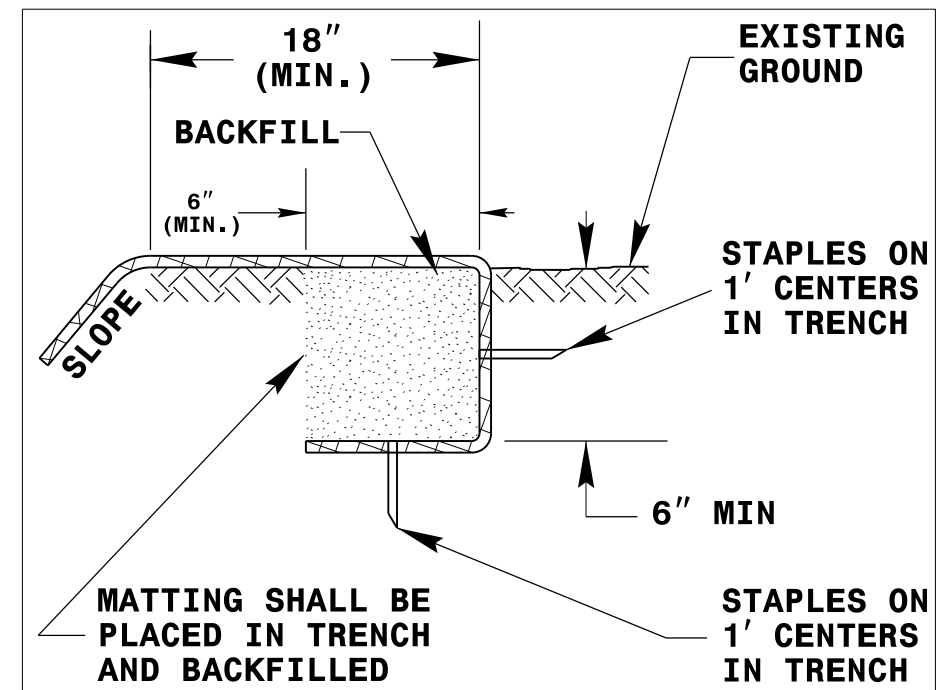
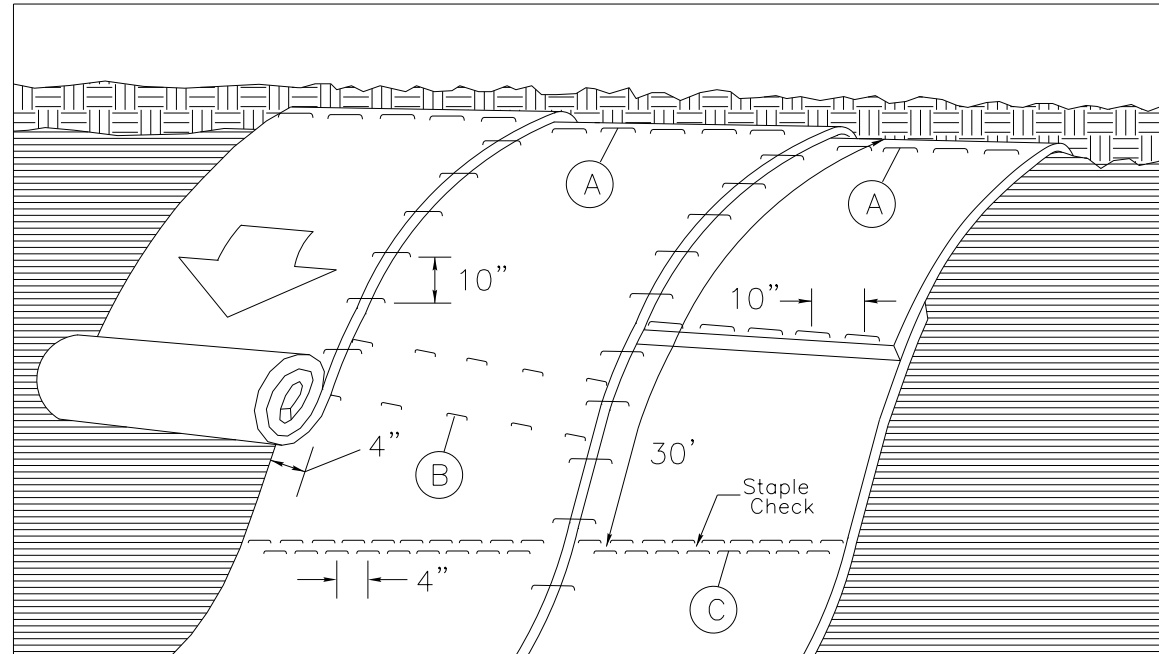


DIAGRAM (A)



MATTING ON SLOPES

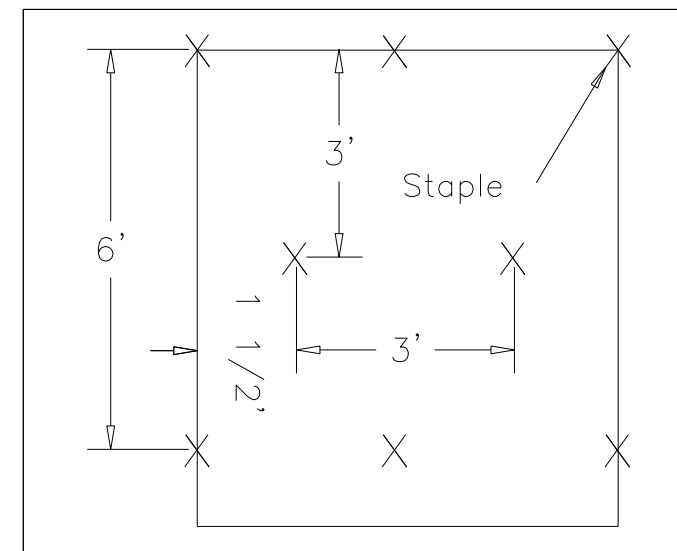


DIAGRAM (B)

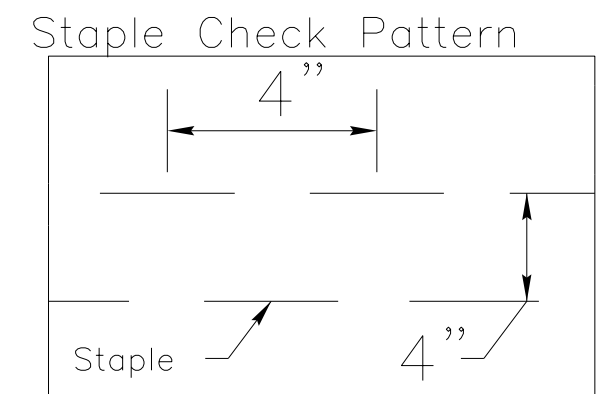


DIAGRAM (C)

NOTES:

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.

STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

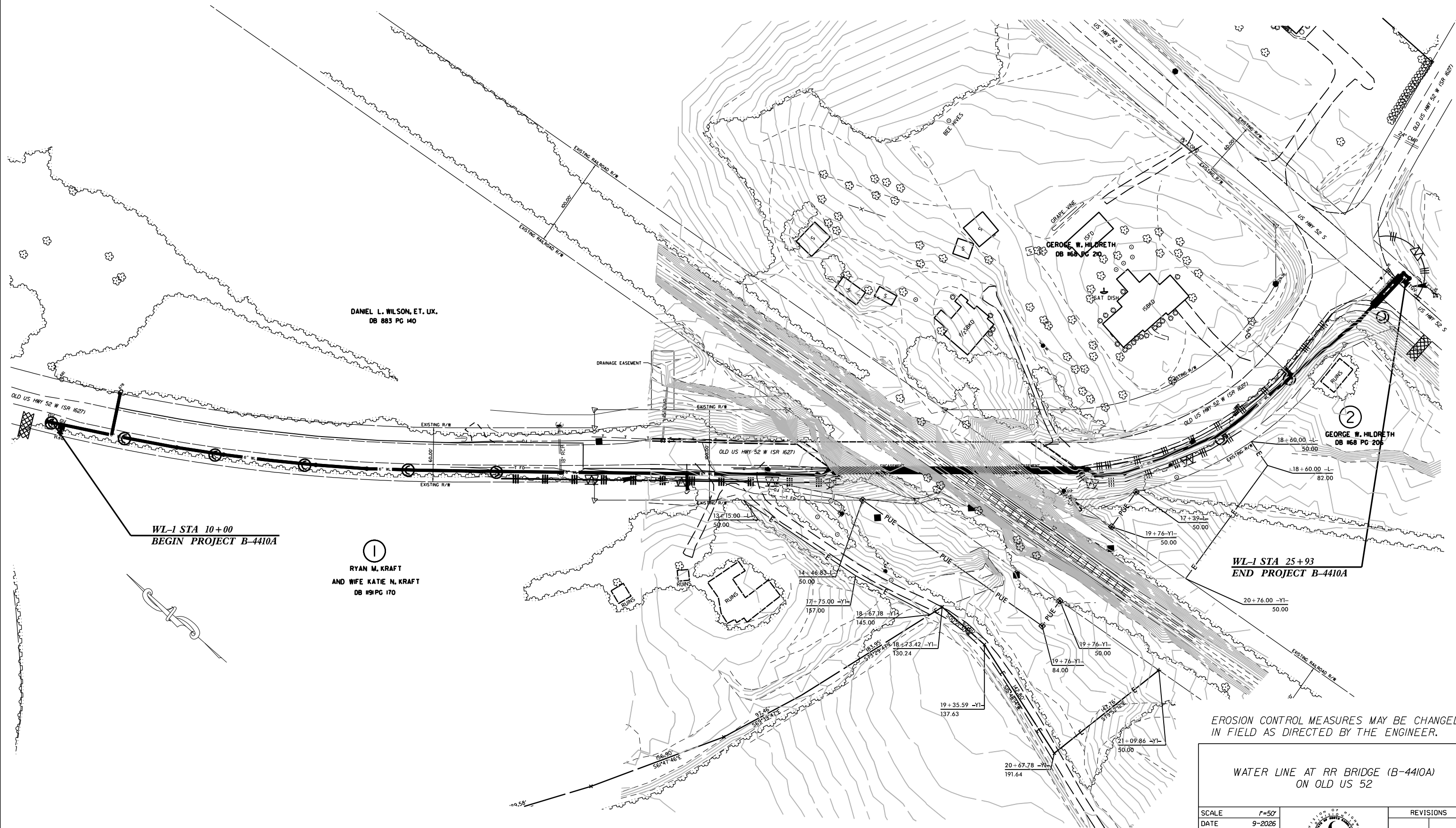
NOT TO SCALE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

PROJECT NO.	SHEET NO.
33688.3.2	EC-4
F.A. PROJECT NO.	

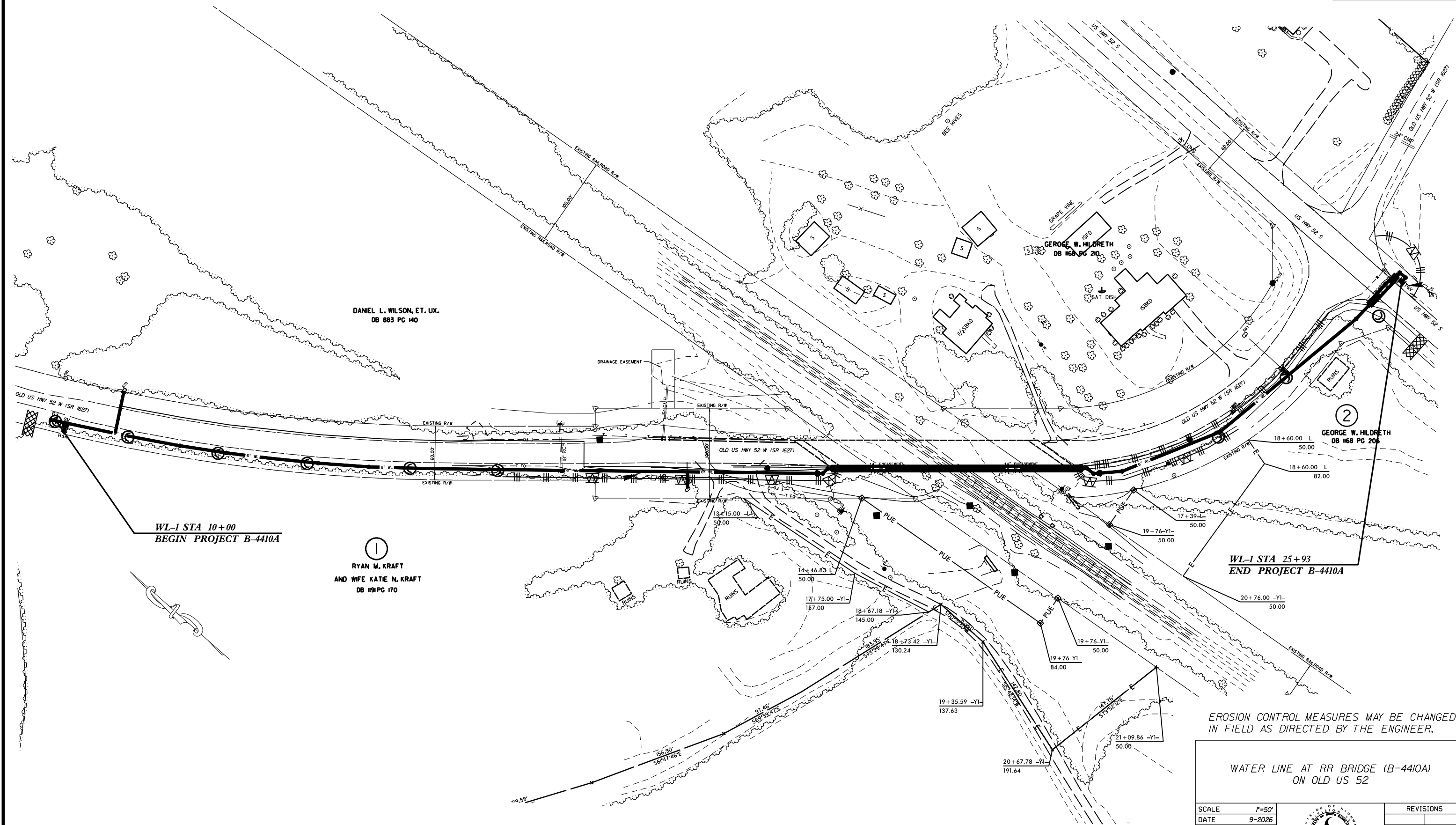


EROSION CONTROL MEASURES MAY BE CHANGED,
IN FIELD AS DIRECTED BY THE ENGINEER.

WATER LINE AT RR BRIDGE (B-4410A)
ON OLD US 52

SCALE	1"=50'		REVISIONS	
DATE	9-2026			
DWG. BY	BAC			
DESIGN BY	BAC			
APPROVED	JDH			

PROJECT NO.	SHEET NO.
33688.3.2	EC-4A
F.A. PROJECT NO.	



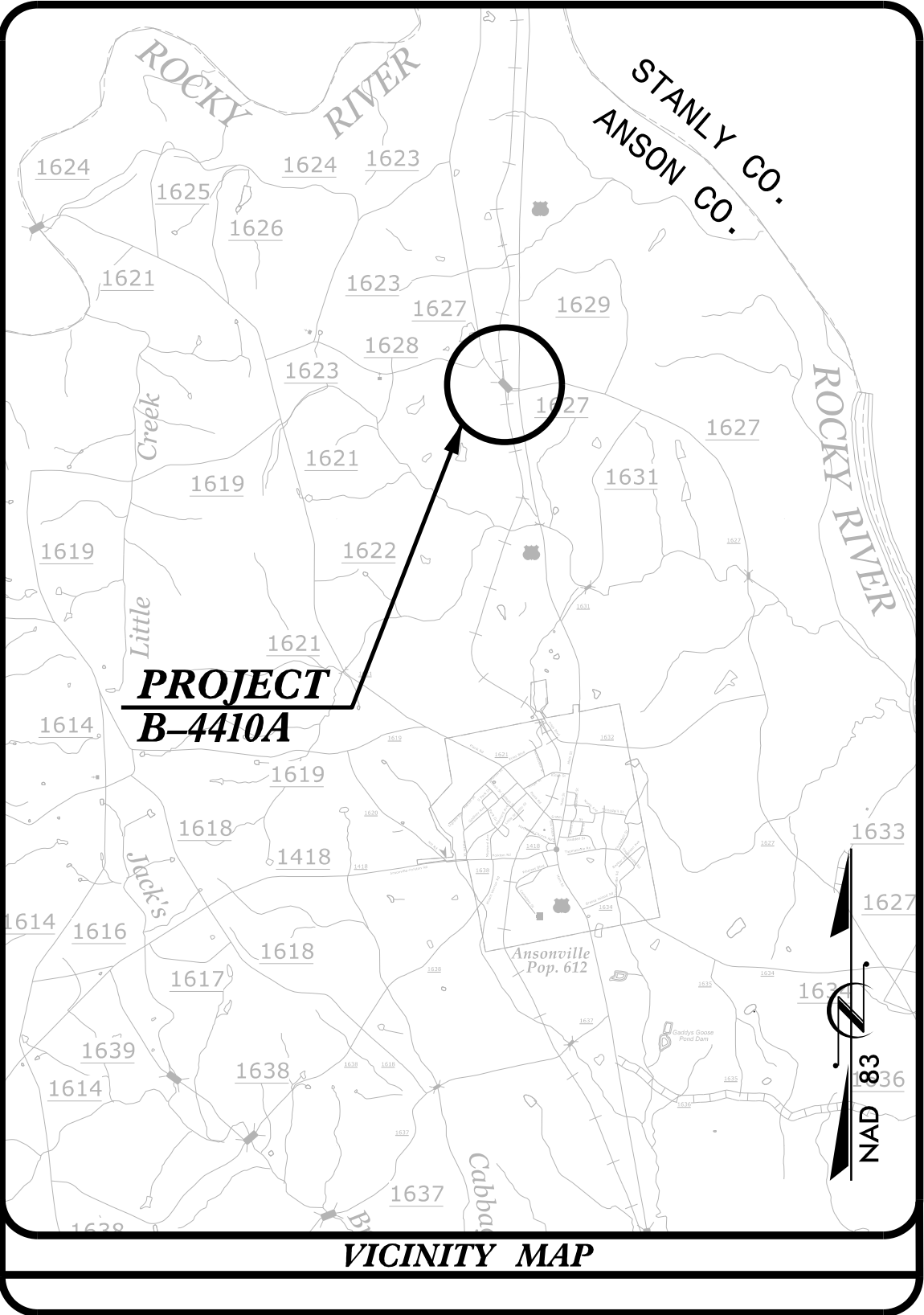
EROSION CONTROL MEASURES MAY BE CHANGED,
IN FIELD AS DIRECTED BY THE ENGINEER.

WATER LINE AT RR BRIDGE (B-4410A) ON OLD US 52		REVISIONS	
SCALE	1"=50'		
DATE	9-2026		
DWG. BY	BAC		
DESIGN BY	BAC		
APPROVED	JDH		



09.08/24

TIP PROJECT: B-4410A



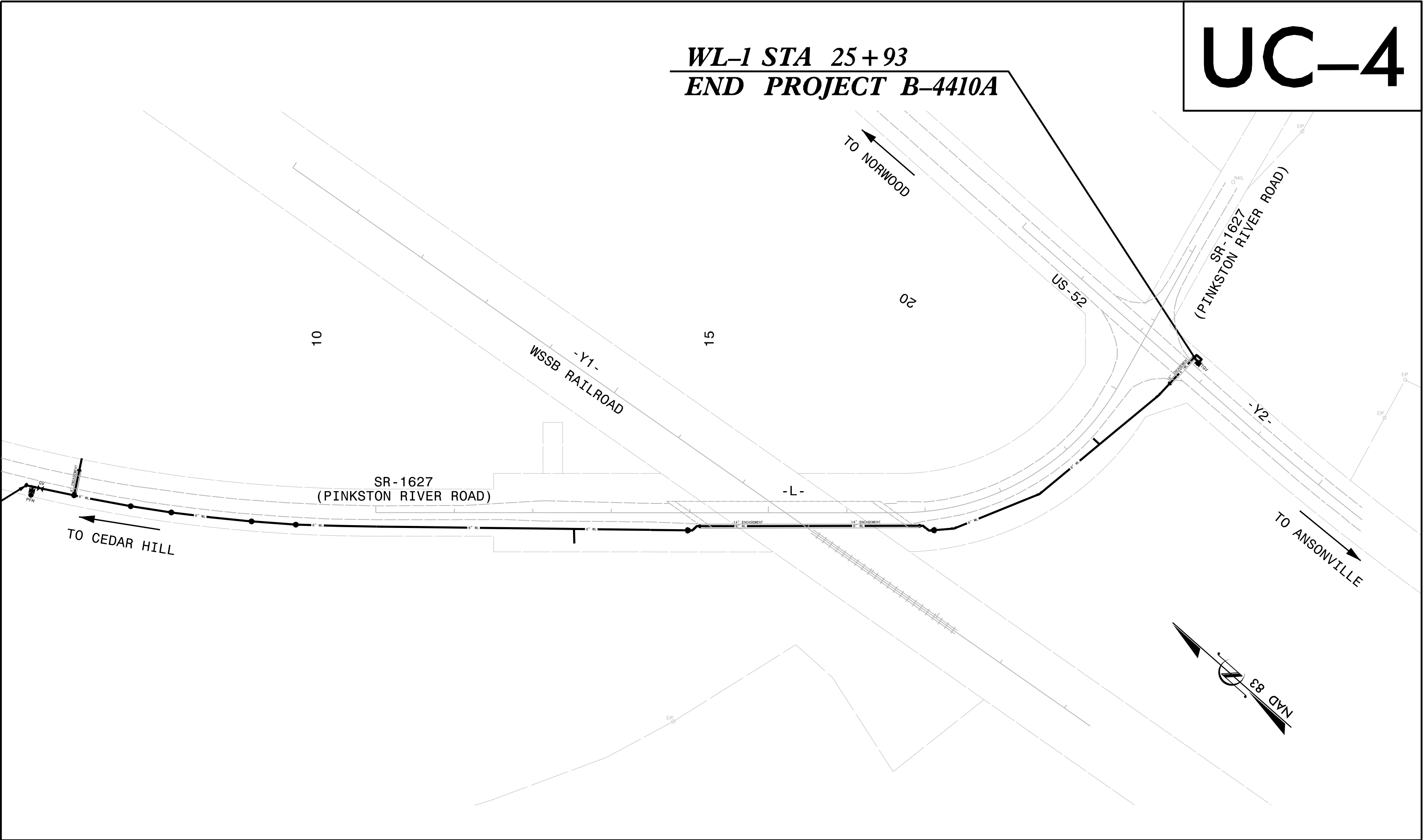
VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITY CONSTRUCTION PLANS
ANSON COUNTY

LOCATION: PINKSTON RIVER ROAD (SR-1627) FROM 200' WEST OF BRIDGE NO. 307
OVER THE WINSTON SALEM BOUND RAILROAD TO US-52

TYPE OF WORK: WATER LINE INSTALLATION



UC-4

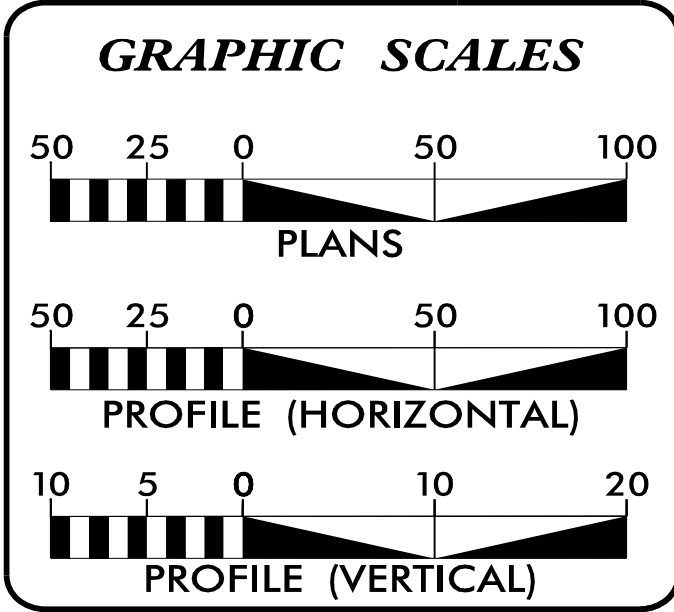
WL-1 STA 10+00
BEGIN PROJECT B-4410A

WL-1 STA 25+93
END PROJECT B-4410A

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

*SHEETS FOLLOWING UTILITY CONSTRUCTION PLANS ARE AS FOLLOWS:
- STRUCTURAL UTILITY CONSTRUCTION DETAILS (SHEETS 1-3)
- GEOTECHNICAL BORING REPORT BORE LOG (B-3)

DOCUMENT NOT CONSIDERED FINAL
UNTIL ALL SIGNATURES ARE COMPLETED



INDEX OF SHEETS	
SHEET NO.:	DESCRIPTION:
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY
UC-3	NOTES
UC-3A THRU 3B	DETAILS
UC-4	UTILITY CONSTRUCTION SHEET
UC-5	PROFILE SHEET

WATER OWNERS ON PROJECT

(A) WATER - TOWN OF ANSONVILLE

PREPARED IN THE OFFICE OF

WETHERILL ENGINEERING

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - SURVEY/SUE - UTILITIES - CONSTRUCTION OBSERVATION

1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

PANKIL K. PATEL UTILITY PROJECT MANAGER
TREVER REEVES SENIOR UTILITY COORDINATOR

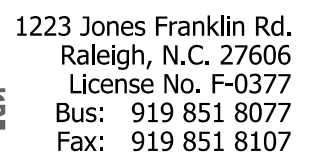
SEAL

NORTH CAROLINA
PROFESSIONAL
SEAL
JORDAN J. BOGGESS
7/1/2025

**DIVISION OF HIGHWAYS
DIVISION 10**
716 WEST MAIN STREET
ALBEMARLE, NC 28001
PHONE (704) 983-4400
FAX (704) 982-3146

DONALD HARWARD, PLS
JARED MATHIS, PE

**DIVISION DESIGN
CONSTRUCT ENGINEER**
**SENIOR ASST. DIVISION
DESIGN CONSTRUCT ENGINEER**



UTILITIES PLAN SHEET SYMBOLS

```

*For Existing Utilities
Utility Line Drawn from Record ..... P .....
(Type as Shown)
Designated Utility Line ..... P .....
(Type as Shown)

```

5/14/25

UTILITY CONSTRUCTION

GENERAL NOTES:

1.

THE PROPOSED UTILITY CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATIONS "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2024.
2.

THE EXISTING UTILITIES BELONG TO TOWN OF ANSONVILLE. CONTACT JASON MULLIS, TOWN OF ANSONVILLE PUBLIC WORKS DIRECTOR, AT (704) 320-5232 OR JMULLISTOWNOFANSONVILLE@YAHOO.COM.
3.

ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER RESOURCES, PUBLIC WATER SUPPLY SECTION.
4.

THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNER AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.
5.

PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND ONE WEEK PRIOR TO SERVICE INTERRUPTION. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPORTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.
6.

THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE DEPARTMENT.
7.

MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.
8.

MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY.
9.

ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, "SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.

PROJECT SPECIFIC NOTES:

1.

PROPOSED WATER LINE WL-1 STA. 10+00± TO 18+47± SHALL BE 6" SDR 21 PVC, INSTALLED BY OPEN CUT METHOD, AND FROM WL-1 STA. 18+47± TO STA. 21+65± SHALL BE 6" RJDIP PC350, INSTALLED BY OPEN CUT METHOD AND/OR BRIDGE ATTACHMENT, AND FROM WL-1 STA. 21+65± TO STA. 25+25± SHALL BE 6" SDR 21 PVC, INSTALLED BY OPEN CUT METHOD, AND FROM WL-1 STA 25+25± TO STA 25+71± SHALL BE 6" SDR 21 PVC WITHIN 12" STEEL ENCASEMENT, INSTALLED BY BORE AND JACK, AND FROM WL-1 STA 25+71± TO STA 25+93± SHALL BE 6" SDR 21 PVC, INSTALLED BY OPEN CUT METHOD.
2.

PROPOSED WATER LINE WL-1 STA. 18+64± TO 21+44± SHALL BE 6" RJDIP PC350 WITH INSULATION WITHIN A 14" STEEL ENCASEMENT PIPE, ATTACHED TO THE BRIDGE CROSSING OVER THE CSX RAILROAD RIGHT OF WAY.

WATER INSTALLATION NOTES

1.

CONTRACTOR SHALL FULLY INSTALL, PRESSURE & LEAKAGE TEST, AND CHLORINATE NEW WATER MAIN PRIOR TO CONNECTION TO EXISTING SYSTEM.
2.

CONTRACTOR SHALL PERFORM THE CONNECTION DURING OFF PEAK HOURS WITH A MAXIMUM SHUT DOWN TIME OF FIVE HOURS. (12 PM MIDNIGHT TO 5 AM).
3.

ANY WORK OR TEST PERFORMED WITHOUT NOTIFICATION AND CONTACT WITH TOWN OF ANSONVILLE FIELD INSPECTORS SHALL BE PERFORMED AT THE CONTRACTOR'S RISK. TESTING SHALL BE PERFORMED IN THE PRESENCE OF TOWN OF ANSONVILLE PERSONNEL.
4.

OPERATION OF EXISTING GATE VALVES SHALL BE DONE BY TOWN OF ANSONVILLE OPERATIONS STAFF. CONTACT JASON MULLIS, TOWN OF ANSONVILLE PUBLIC WORKS DIRECTOR, AT (704) 320-5232 OR JMULLISTOWNOFANSONVILLE@YAHOO.COM.
5.

TIE NEW WATER MAIN INTO EXISTING. INSTALL THRUST BLOCKS AND RODDING AS REQUIRED.
6.

NEW WATER MAIN SHALL NOT BE CONNECTED TO EXISTING MAIN WITHOUT PRIOR APPROVAL AND COORDINATION WITH TOWN OF ANSONVILLE.
7.

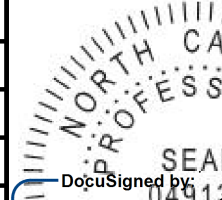
REFER TO THE STRUCTURAL UTILITY CONSTRUCTION DETAILS SHEETS 1-3 FOR THE ENCASEMENT PIPE AND BRIDGE ATTACHMENT SPECIFICATIONS.
8.

CONTRACTOR MUST INSTALL TRACER WIRE FOR THE ENTIRE LENGTH OF THE PROPOSED WATER LINE.

WETHERILL
ENGINEERING

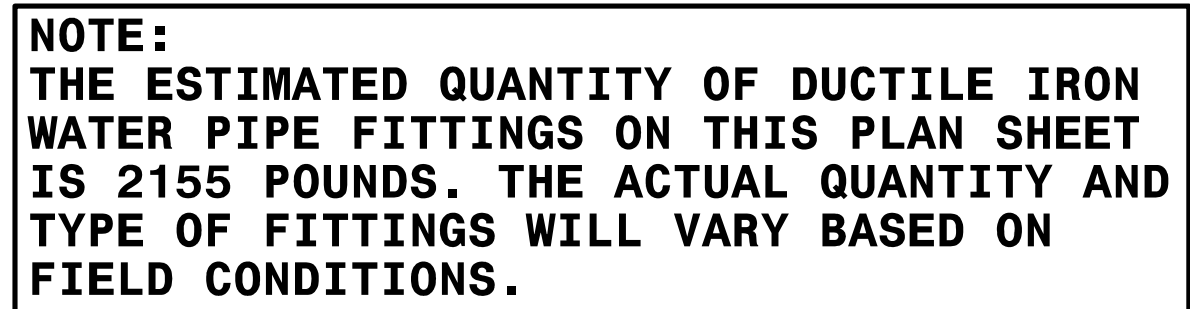
TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - SURVEY/SUE - UTILITIES - CONSTRUCTION OBSERVATION

1223 Jones Franklin Rd.
Raleigh, N.C. 27606
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Bus: 919 851 8077
Fax: 919 851 8107

PROJECT REFERENCE NO.		SHEET NO.
B-4410A		UC-3
DESIGNED BY: TWR		UTILITY CONSTRUCTION PLANS ONLY
DRAWN BY: TWR		
CHECKED BY: PKP		
APPROVED BY: JJB		
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		
UTILITY CONSTRUCTION		

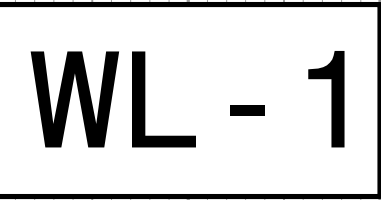
6/13/2025 10:16:21 AM notes-det_UC-3.psh.dgn

1. 6" RJDIP WATER LINE WITH INSULATION IN 14" STEEL ENCASEMENT WILL BE ATTACHED TO THE BRIDGE CROSSING CSX RIGHT OF WAY. SEE STRUCTURAL UTILITY CONSTRUCTION DETAIL SHEETS 1-3 FOR ATTACHMENT SPECIFICATIONS.
2. EXISTING WATER PIPES THAT ARE EXPOSED ON THE BRIDGE AND BEYOND THE BRIDGE MUST BE REMOVED AND DISPOSED.
3. SEE SHEET GEO-3 FOR GEOTECHNICAL BORING REPORT BORE LOG AT THIS LOCATION.
4. PROPOSED BORE AND JACK OF ENCASEMENT PIPES CROSSING UNDER SR 1627 (PINKSTON RIVER ROAD) AND US-HWY 52 SHALL BE A MINIMUM OF 5' BELOW ROADWAY.

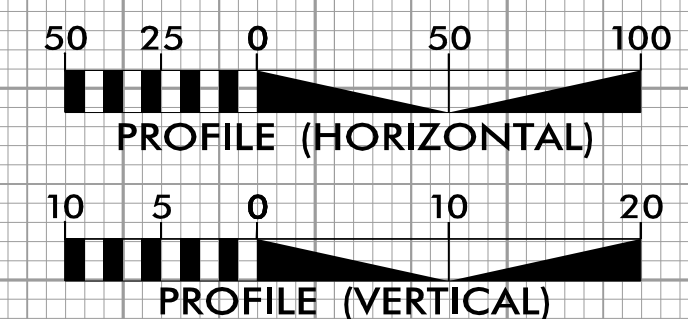


 1223 Jones Franklin Rd. Raleigh, N.C. 27606 License No. F-0377 Bus: 919 851 8077 Fax: 919 851 8107 TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN CIVIL/SITE DESIGN - GIS/GPS - SURVEY/SUE - UTILITIES - CONSTRUCTION OBSERVATION	PROJECT REFERENCE NO. _____ SHEET NO. _____ B-4410A UC-4	
	DESIGNED BY: TWR DRAWN BY: TWR CHECKED BY: PKP APPROVED BY: JJB REVISED: NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	 Doc# 04812 Jordan S. Boggs Professional Engineer No. 04812 State of North Carolina JAN J. BOGGS 1/11/2025 UTILITY CONSTRUCTION PLANS ONLY
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		
UTILITY CONSTRUCTION		

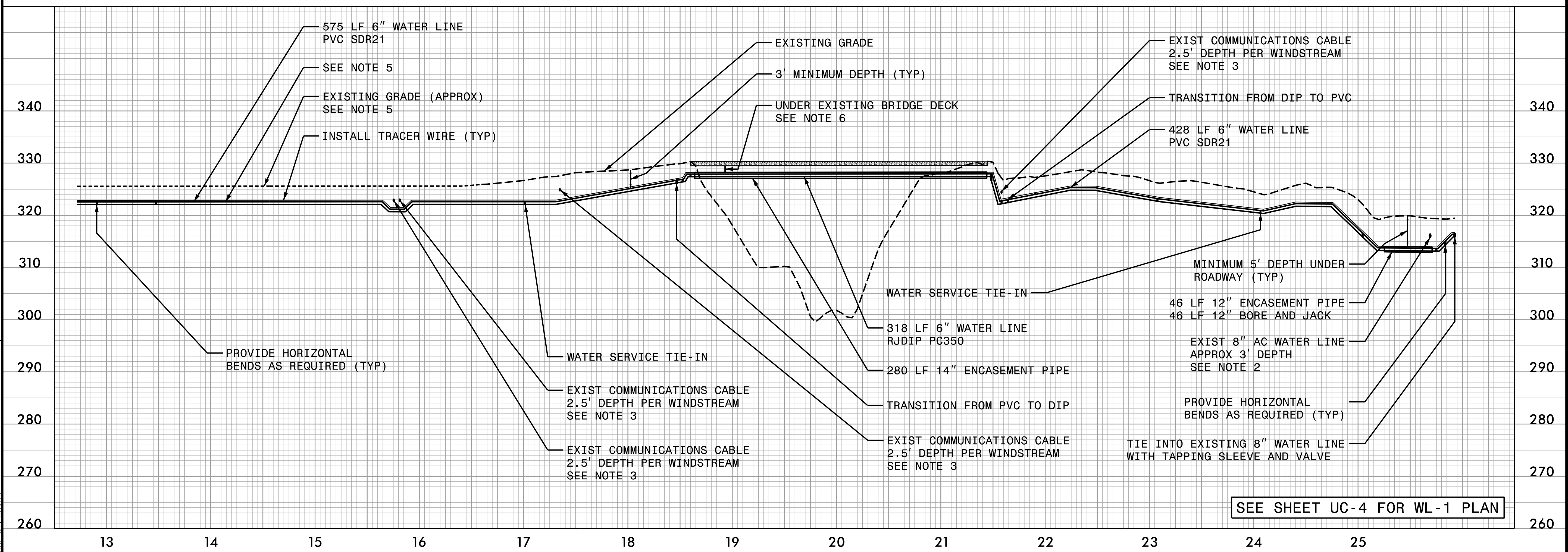
6/20/2025
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JSFR:Reeves

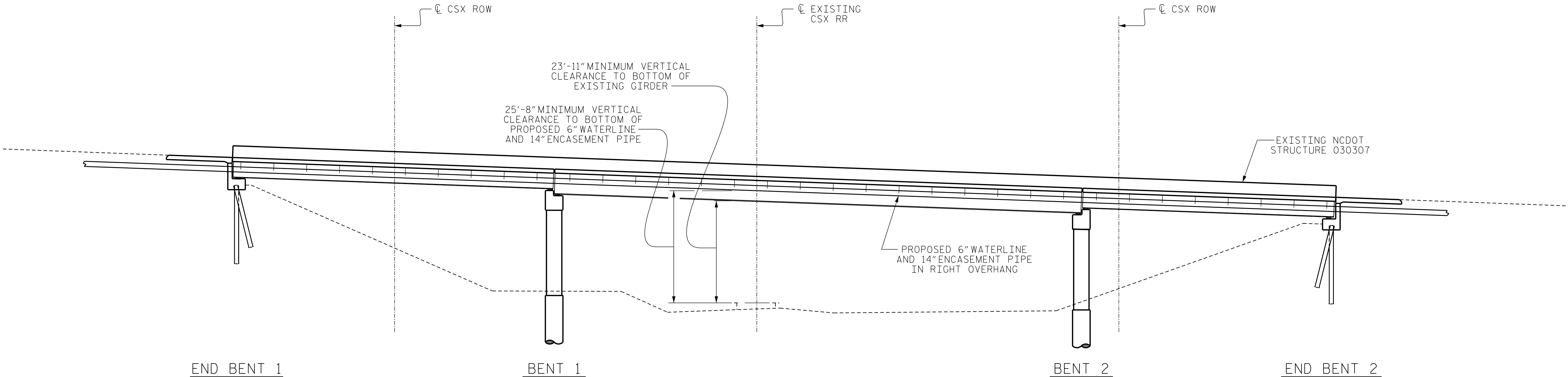


- UTILITY CONSTRUCTION

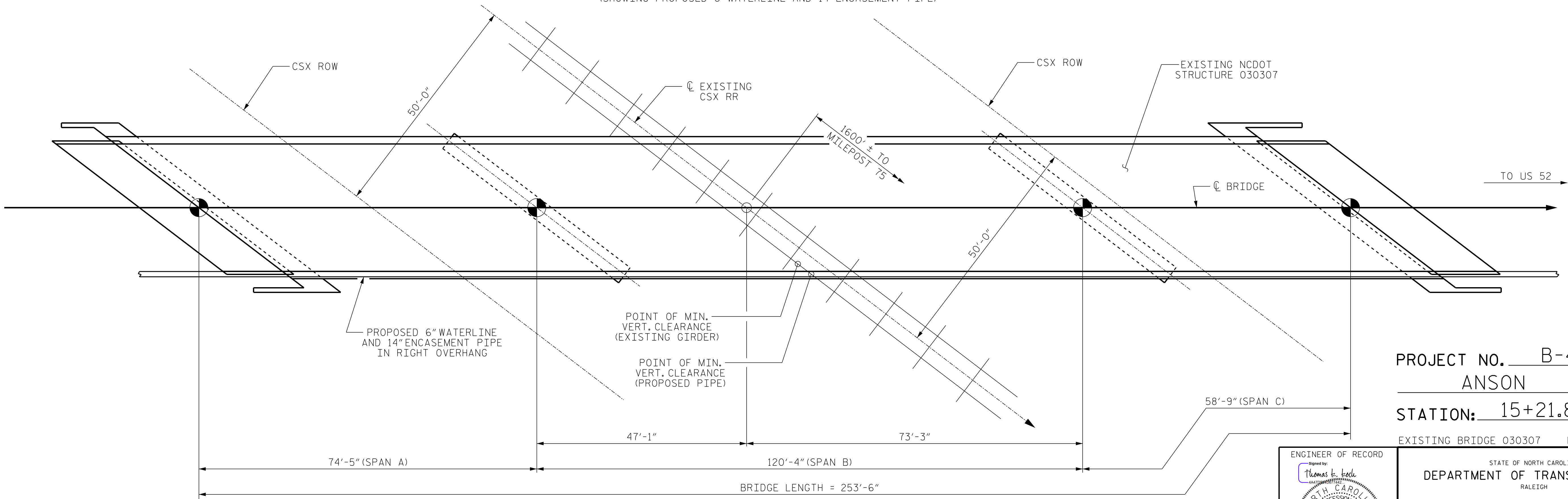


SEE SHEET UC-4 "INSET A" FOR WL-1 PLAN





ELEVATION OF EXISTING BRIDGE
(SHOWING PROPOSED 6" WATERLINE AND 14" ENCASEMENT PIPE)



PLAN

PROJECT NO. B-4410A
ANSON COUNTY
STATION: 15+21.87 -L-
EXISTING BRIDGE 030307 MILEPOST W-74.70

ENGINEER OF RECORD

Signed by: *Thomas E. Koch*

1223 Jones Franklin Rd.
Raleigh, N.C. 27606
Bus: 919 851 8077
Fax: 919 851 8107
LICENSE NO. F-0377

6/18/2025

WETHERILL ENGINEERING

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

**PLAN AND ELEVATION
FOR STRUCTURAL
UTILITY
CONSTRUCTION**

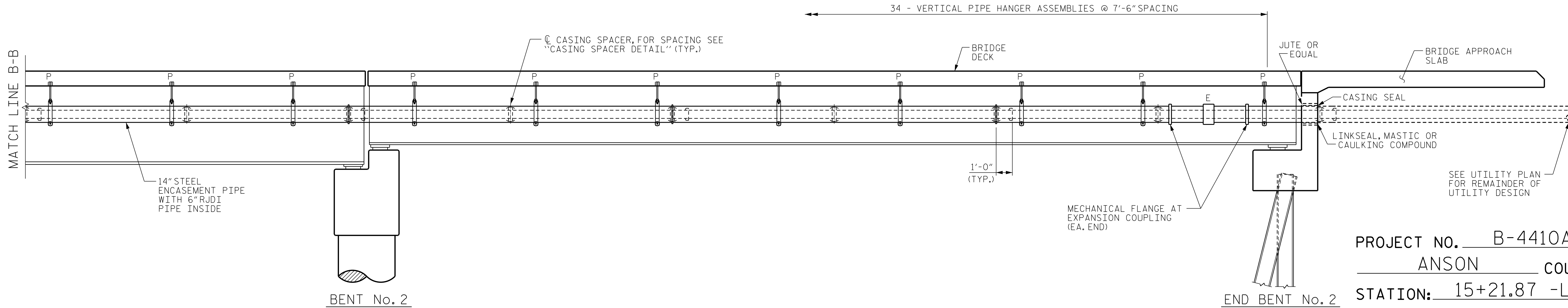
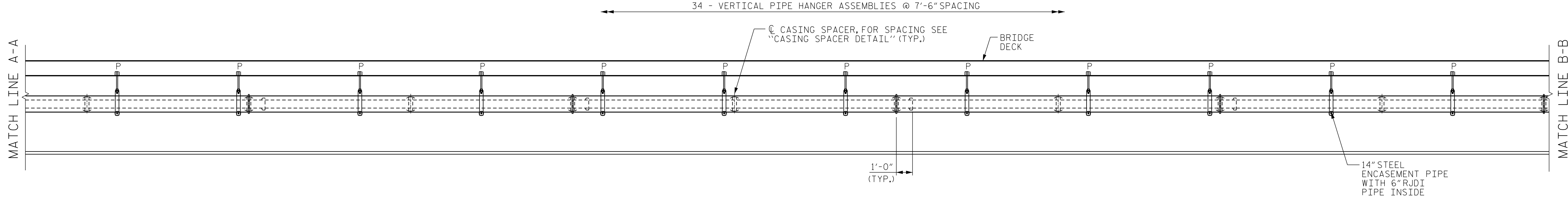
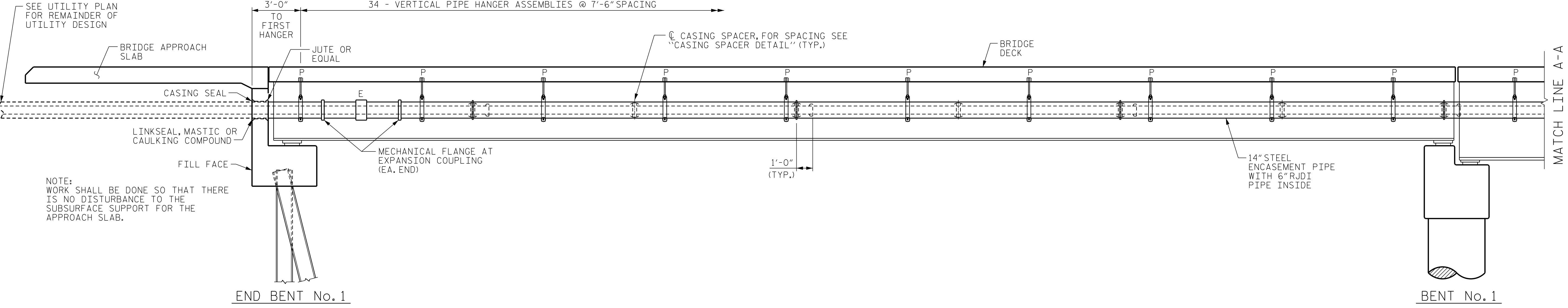
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NO.	BY:	DATE:	NO.	BY:	DATE:	1
1			3			TOTAL SHEETS
2			4			3

DRAWN BY : G. GILLAND DATE : 10/24
CHECKED BY : T. KOCH DATE : 10/24

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PA:2024\24160\25 B-4410A 1/2
6/18/2025 6:51:55 AM SR 1657, Pinkston Road Structures Restored.DGN\WATERLINE.dgn

SR 1657, Pinkston Road Structures Restored.DGN\\WATER\\LINE.dgn
6/18/2025 6:43:37 AM
PA\\2024\\2416025 B-4410A 1/2



UTILITY ATTACHMENT (WATER)
(PERMANENT 14"ENCASEMENT PIPE PROFILE SUPPORT DETAIL)

LEGEND
P = PIPE HANGER ASSEMBLY
E = EXPANSION COUPLING ASSEMBLY

ESTIMATED BILL OF MATERIAL		
No.	UNITS	ITEMS
1	34 EA.	PIPE HANGER ASSEMBLY
3	2 EA.	EXPANSION COUPLING ASSEMBLY
4	4 EA.	LINK SEAL OR EQUAL
5	254 L.F.	14" DIA. STEEL ENCASEMENT
6	254 L.F.	6"RJDI WATER PIPE
7	12 EA.	MECHANICAL JOINT RESTRAINT

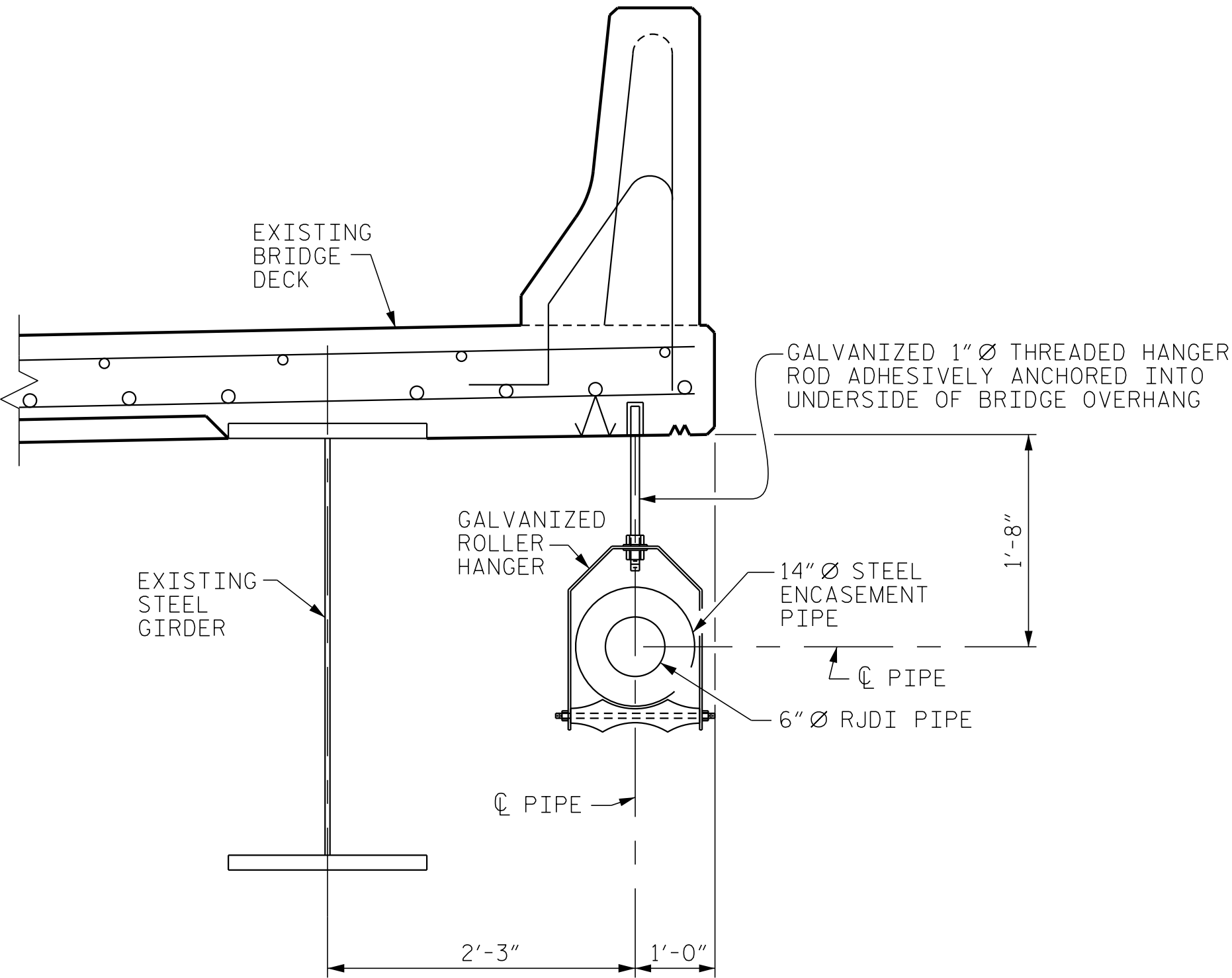
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PROJECT NO. B-4410A
ANSON COUNTY
STATION: 15+21.87 -L-

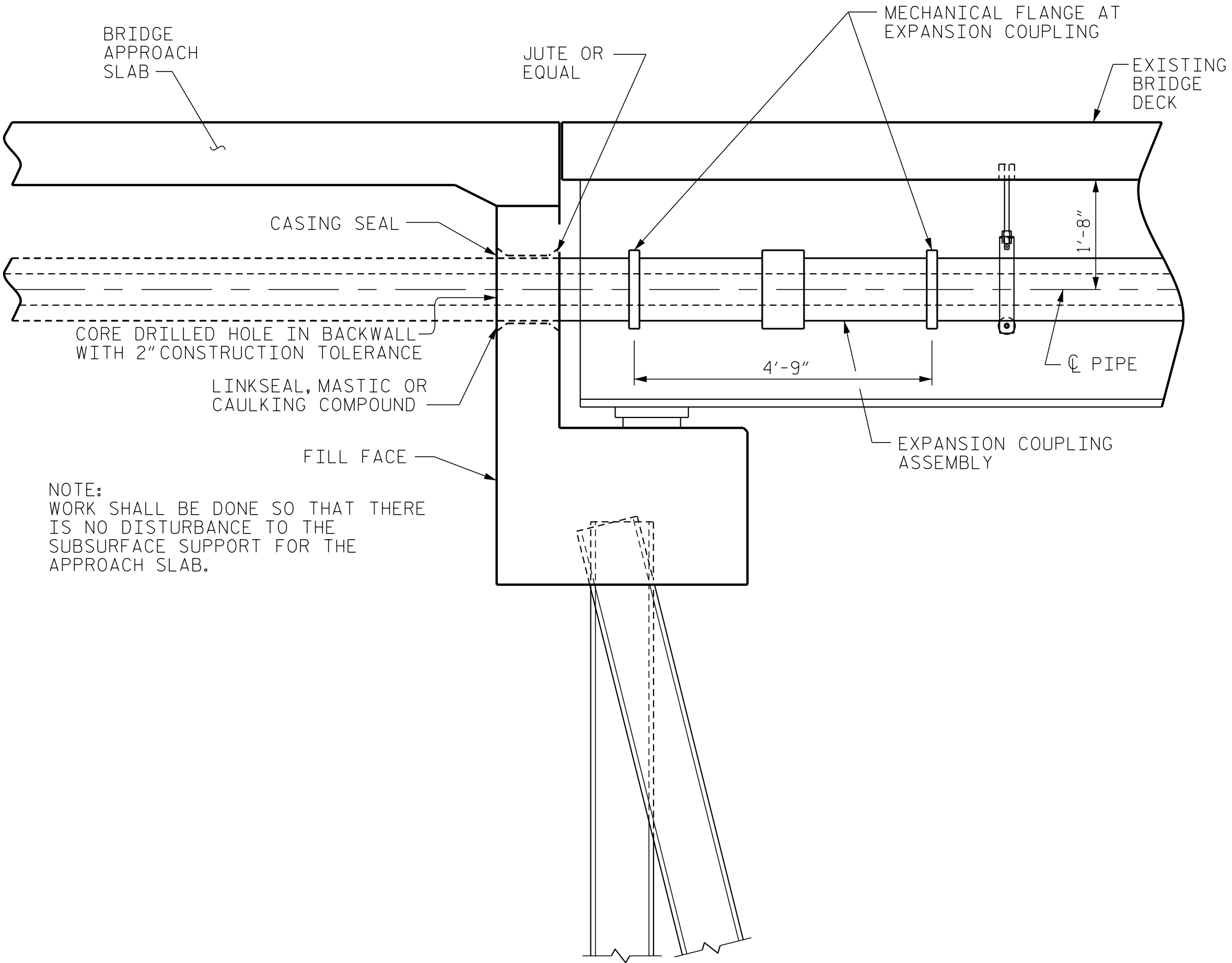
ENGINEER OF RECORD
Signed by:
Thomas K. Koch
NORTH CAROLINA
PROFESSIONAL
SEAL
15431
ENGINEER
THOMAS K. KOCH
6/18/2025
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STATE OF NORTH CAROLINA
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RALEIGH
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REVISIONS						SHEET NO. 2
NO.	BY:	DATE:	NO.	BY:	DATE:	
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2			4			

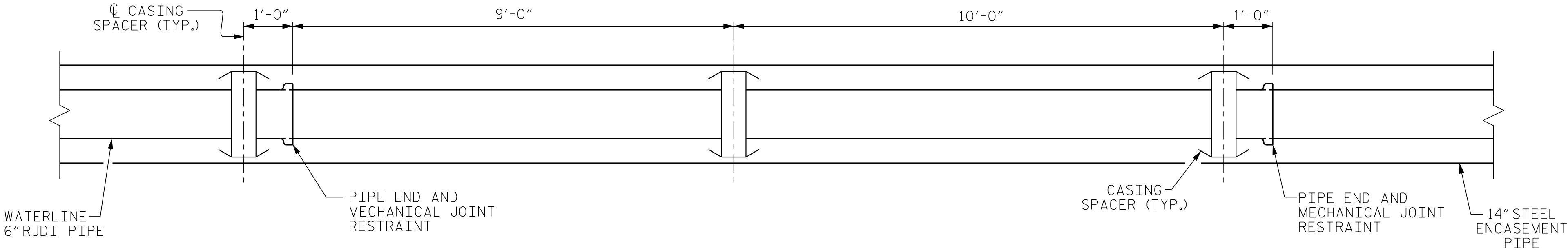


HANGER AND ASSEMBLY DETAIL



SECTION THRU BACKWALL AT END BENTS

(END BENT No. 1 SHOWN, END BENT No. 2 SIMILAR)



CASING SPACER DETAIL

NOTES

PIPING SHALL BE DUCTILE IRON PIPE, CLASS 350, RESTRAINT JOINTS.

PIPE INSULATION SHALL BE OWENS-CORNING, OR EQUAL, 2" THICK FIBERGLASS WITH SERVICE VAPOR RETARDING JACKET.

INSULATION SHALL BE PROTECTED FROM WEATHER BY APPLYING OVER THE INSTALLED INSULATION ONE COAT OF WEATHERPROOF MASTIC COATING, 550 VI-AC MASTIC BY MARATHON INDUSTRIES, INC. OR EQUAL.

PROVIDE ADDITIONAL PROTECTION OF INSULATION BY COVERING WITH 0.016-INCH THICK ALUMINUM JACKET WITH ALUMINUM STRAPS AND WING SEALS.

PROVIDE FLANGE-BY-FLANGE EXPANSION JOINT, DESSER STYLE 63, FORD STYLE FEJ, OR EQUAL.

1" Ø THREADED HANGER ROD SHALL BE ASTM A307 OR GREATER AND SHALL BE GALVANIZED.

INSTALLATION OF ADHESIVE ANCHOR SYSTEM SHALL BE IN ACCORDANCE WITH SECTION 420 AND 1081 OF THE STANDARD SPECIFICATIONS. LEVEL 2 FIELD TESTING IS REQUIRED.

THE YIELD LOAD FOR THE ADHESIVE ANCHOR FIELD TESTING SHALL BE 21,800 LBS.

INSTALLATION OF THE OVERHEAD ADHESIVE ANCHORS SHALL BE PERFORMED BY AN ACI-CERTIFIED ADHESIVE ANCHOR INSTALLER.

INSTALL A MEGALUG SERIES 1100 MECHANICAL JOINT RESTRAINT OR APPROVED EQUAL AT END OF EVERY 20 FT. SECTION OF 6" RJDI PIPE.

WATER LINE HANGER SYSTEM SUMMARY

HOLES FOR 1" Ø ADHESIVELY ANCHORED RODS MAY BE MOVED 3" LONGITUDINALLY IF NECESSARY. DO NOT DRILL HOLES FOR ADHESIVE ANCHORS WITHIN 12" OF DECK JOINT.

NO BENDS OR FITTINGS ALLOWED ON THE BRIDGE. WEDGE ANCHORS ARE NOT APPROVED FOR ATTACHMENT.

USE A MINIMUM OF TWO (2) ROLLER HANGERS PER 20 FT. PIPE SECTION AT 9'-0" MAX. SPACING.

USE GALVANIZED 1" Ø THREADED HANGER ROD AND GALVANIZED ROLLER HANGER.

1" Ø HANGER ROD SHALL BE ADHESIVELY ANCHORED INTO UNDERSIDE OF BRIDGE DECK AS PER APPROVED MANUFACTURER'S SPECIFICATION.

PROJECT NO. B-4410A
ANSON COUNTY
STATION: 15+21.87 -L-

ENGINEER OF RECORD
Signed by: *Thomas K. Koch*
NORTH CAROLINA PROFESSIONAL ENGINEER
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THOMAS K. KOCH
6/18/2025
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RALEIGH

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NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO. 3
TOTAL SHEETS 3

DRAWN BY : G. GILLAND DATE : 10/24
CHECKED BY : T. KOCH DATE : 10/24

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GEOTECHNICAL BORING REPORT
BORE LOG

WBS 33688.3.2			TIP B-4410A			COUNTY ANSON			GEOLOGIST S N Patterson						
SITE DESCRIPTION Water line installation starting at US 52 going westerly along Pinkston River Road (SR 1627)									GROUND WTR (ft)						
BORING NO. B-3			STATION N/A			OFFSET N/A			ALIGNMENT N/A			0 HR. Dry			
COLLAR ELEV. 319.3 ft			TOTAL DEPTH 14.6 ft			NORTHING 508,767			EASTING 1,667,252			24 HR. Dry			
DRILL RIG/HAMMER EFF./DATE CG24113 CME-550X 81% 05/112021						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic						
DRILLER C. Odom			START DATE 12/02/22			COMP. DATE 12/02/22			SURFACE WATER DEPTH N/A						
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	L O G	SOIL AND ROCK DESCRIPTION	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100				ELEV. (ft)	DEPTH (ft)
320															
	317.3	2.0	23	58	42/3									319.3	GROUND SURFACE 0.0
315	315.1	4.2	37	63/4						100/8				316.8	RESIDUAL Red, brown, gray, very stiff, dry, fine sandy silt (A-4) 2.5
	312.4	6.9	100/4							100/9					
310	310.1	9.2	9	56	44/2					100/4					
									</						

NCDOT BORE DOUBLE B-4410A GEO_WATERLINE_BLOGJ NC_DOT.GDT 1/10/23