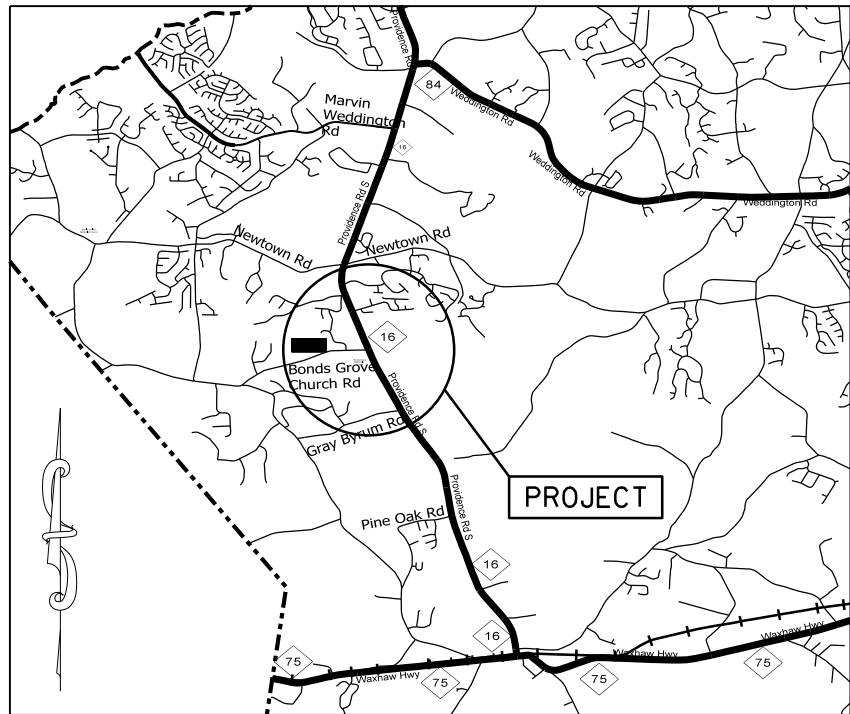


PROJECT: 50182.3.3 TIP: U-5769AA

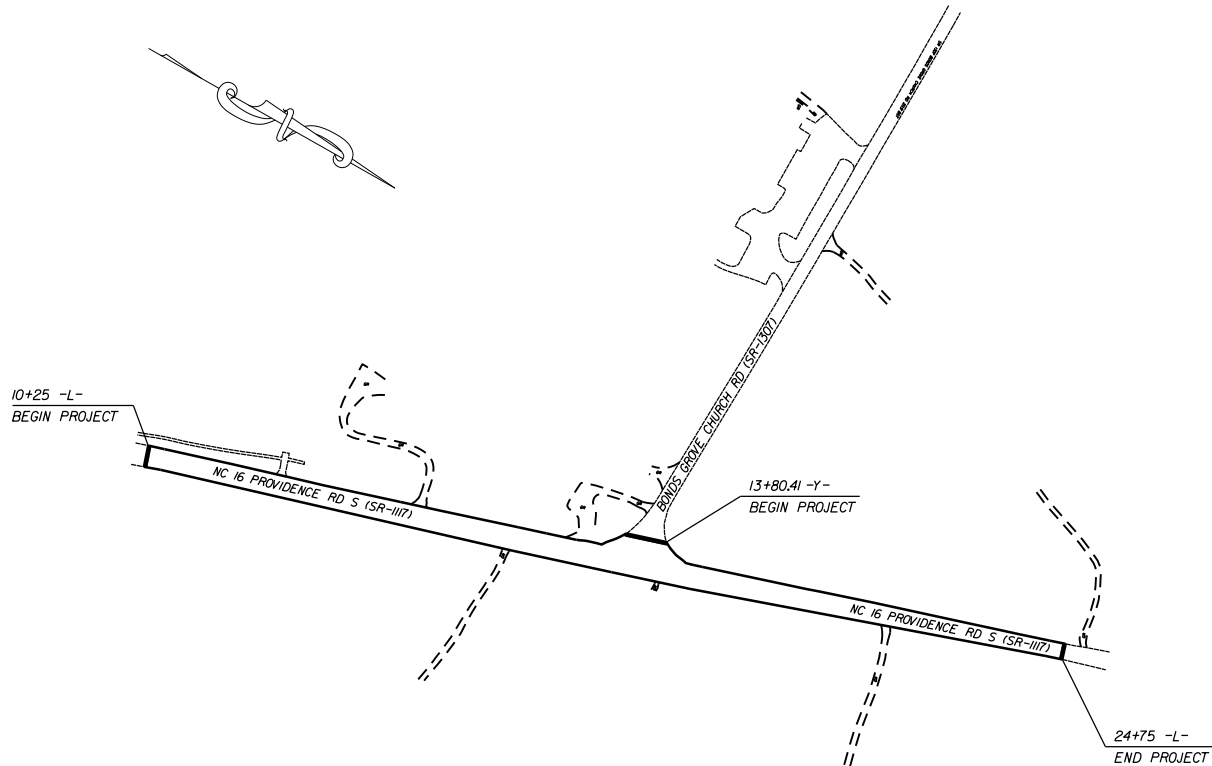


VICINITY MAP NOT TO SCALE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
UNION COUNTY

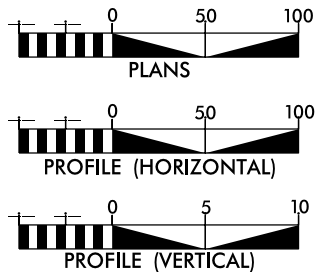
LOCATION: INTERSECTION OF NC 16 PROVIDENCE RD. S. (SR-1117) AND
BONDS GROVE CHURCH RD. (SR-1307)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, THERMOPLASTIC PAVEMENT MARKINGS, AND SIGNALS.



CLEARING ON THIS PROJECT SHALL BE TO
THE LIMITS ESTABLISHED BY METHOD III AS
DESCRIBED IN THE NCDOT STANDARD DRAWINGS

GRAPHIC SCALES



DESIGN DATA

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

PROJECT LENGTH

LENGTH OF ROADWAY PROJECT 50182.3.3 = 0.30 MILES
TOTAL LENGTH OF STATE PROJECT 50182.3.3 = 0.30 MILES

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

RIGHT OF WAY DATE:
10/28/2025

LETTING DATE:
8/19/2026

DONALD HARWARD
PROJECT ENGINEER

DONALD HARWARD
PROJECT DESIGN ENGINEER



ROADWAY DESIGN
ENGINEER
07/15/2026



DocuSigned by:

Travis Preslar
A53C1AC7A1FF47B...
SIGNATURE

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin (EIP)	○
Computed Property Corner	×
Existing Concrete Monument (ECM)	□
Parcel/Sequence Number	②3
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	---WLB---
Proposed Wetland Boundary	WLB
Existing Endangered Animal Boundary	---EAB---
Existing Endangered Plant Boundary	---EPB---
Existing Historic Property Boundary	---HPB---
Known Contamination Area: Soil	-S-S-S-
Potential Contamination Area: Soil	-S-S-S-
Known Contamination Area: Water	-W-W-W-
Potential Contamination Area: Water	-W-W-W-
Contaminated Site: Known or Potential	☠ ☹

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○
Well	○
Small Mine	✕
Foundation	□
Area Outline	□
Cemetery	+
Building	□
School	□
Church	□
Dam	—

HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	□
Jurisdictional Stream	JS
Buffer Zone 1	BZ 1
Buffer Zone 2	BZ 2
Flow Arrow	←
Disappearing Stream	→
Spring	○
Wetland	⬇
Proposed Lateral, Tail, Head Ditch	→
False Sump	◁

RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○
Switch	□
RR Abandoned	-----
RR Dismantled	-----

RIGHT OF WAY & PROJECT CONTROL:

Primary Horiz Control Point	○
Primary Horiz and Vert Control Point	●
Secondary Horiz and Vert Control Point	◆
Vertical Benchmark	⊠
Existing Right of Way Monument	△
Proposed Right of Way Monument (Rebar and Cap)	▲
Proposed Right of Way Monument (Concrete)	⊙
Existing Permanent Easement Monument	◇
Proposed Permanent Easement Monument (Rebar and Cap)	◆
Existing C/A Monument	△
Proposed C/A Monument (Rebar and Cap)	▲
Proposed C/A Monument (Concrete)	⊙
Existing Right of Way Line	—
Proposed Right of Way Line	—
Existing Control of Access Line	—
Proposed Control of Access Line	—
Proposed ROW and CA Line	—
Existing Easement Line	—
Proposed Temporary Construction Easement	—
Proposed Temporary Drainage Easement	—
Proposed Permanent Drainage Easement	—
Proposed Permanent Drainage/Utility Easement	—
Proposed Permanent Utility Easement	—
Proposed Temporary Utility Easement	—
Proposed Aerial Utility Easement	—

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	---C---
Proposed Slope Stakes Fill	---F---
Proposed Curb Ramp	○
Existing Metal Guardrail	—
Proposed Guardrail	—
Existing Cable Guiderail	—
Proposed Cable Guiderail	—
Equality Symbol	⊕
Pavement Removal	⊗
VEGETATION:	
Single Tree	✿
Single Shrub	✿
Hedge	-----

Woods Line	-----
Orchard	✿
Vineyard	□

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	CONC
Bridge Wing Wall, Head Wall and End Wall	CONC WW
MINOR:	
Head and End Wall	CONC HW
Pipe Culvert	—
Footbridge	—
Drainage Box: Catch Basin, DI or JB	CB
Paved Ditch Gutter	—
Storm Sewer Manhole	Ⓢ
Storm Sewer	S

UTILITIES:

* SUE – Subsurface Utility Engineering
LOS – Level of Service – A,B,C or D (Accuracy)

POWER:	
Existing Power Pole	●
Proposed Power Pole	○
Existing Joint Use Pole	●
Proposed Joint Use Pole	○
Power Manhole	Ⓟ
Power Line Tower	⊠
Power Transformer	⊞
U/G Power Cable Hand Hole	Ⓜ
H-Frame Pole	—
U/G Power Line Test Hole (SUE – LOS A)*	⊗
U/G Power Line (SUE – LOS B)*	---P---
U/G Power Line (SUE – LOS C)*	---P---
U/G Power Line (SUE – LOS D)*	—P—

TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	Ⓟ
Telephone Pedestal	⊠
Telephone Cell Tower	Ⓜ
U/G Telephone Cable Hand Hole	Ⓜ
U/G Telephone Test Hole (SUE – LOS A)*	⊗
U/G Telephone Cable (SUE – LOS B)*	---T---
U/G Telephone Cable (SUE – LOS C)*	---T---
U/G Telephone Cable (SUE – LOS D)*	—T—
U/G Telephone Conduit (SUE – LOS B)*	---TC---
U/G Telephone Conduit (SUE – LOS C)*	---TC---
U/G Telephone Conduit (SUE – LOS D)*	—TC—
U/G Fiber Optics Cable (SUE – LOS B)*	---TFO---
U/G Fiber Optics Cable (SUE – LOS C)*	---TFO---
U/G Fiber Optics Cable (SUE – LOS D)*	—TFO—

WATER:

Water Manhole	Ⓜ
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
U/G Water Line Test Hole (SUE – LOS A)*	⊗
U/G Water Line (SUE – LOS B)*	---W---
U/G Water Line (SUE – LOS C)*	---W---
U/G Water Line (SUE – LOS D)*	—W—
Above Ground Water Line	A/G Water

TV:

TV Pedestal	Ⓜ
TV Tower	⊗
U/G TV Cable Hand Hole	Ⓜ
U/G TV Test Hole (SUE – LOS A)*	⊗
U/G TV Cable (SUE – LOS B)*	---TV---
U/G TV Cable (SUE – LOS C)*	---TV---
U/G TV Cable (SUE – LOS D)*	—TV—
U/G Fiber Optic Cable (SUE – LOS B)*	---TVFO---
U/G Fiber Optic Cable (SUE – LOS C)*	---TVFO---
U/G Fiber Optic Cable (SUE – LOS D)*	—TVFO—

GAS:

Gas Valve	◇
Gas Meter	⊕
U/G Gas Line Test Hole (SUE – LOS A)*	⊗
U/G Gas Line (SUE – LOS B)*	---G---
U/G Gas Line (SUE – LOS C)*	---G---
U/G Gas Line (SUE – LOS D)*	—G—
Above Ground Gas Line	A/G Gas

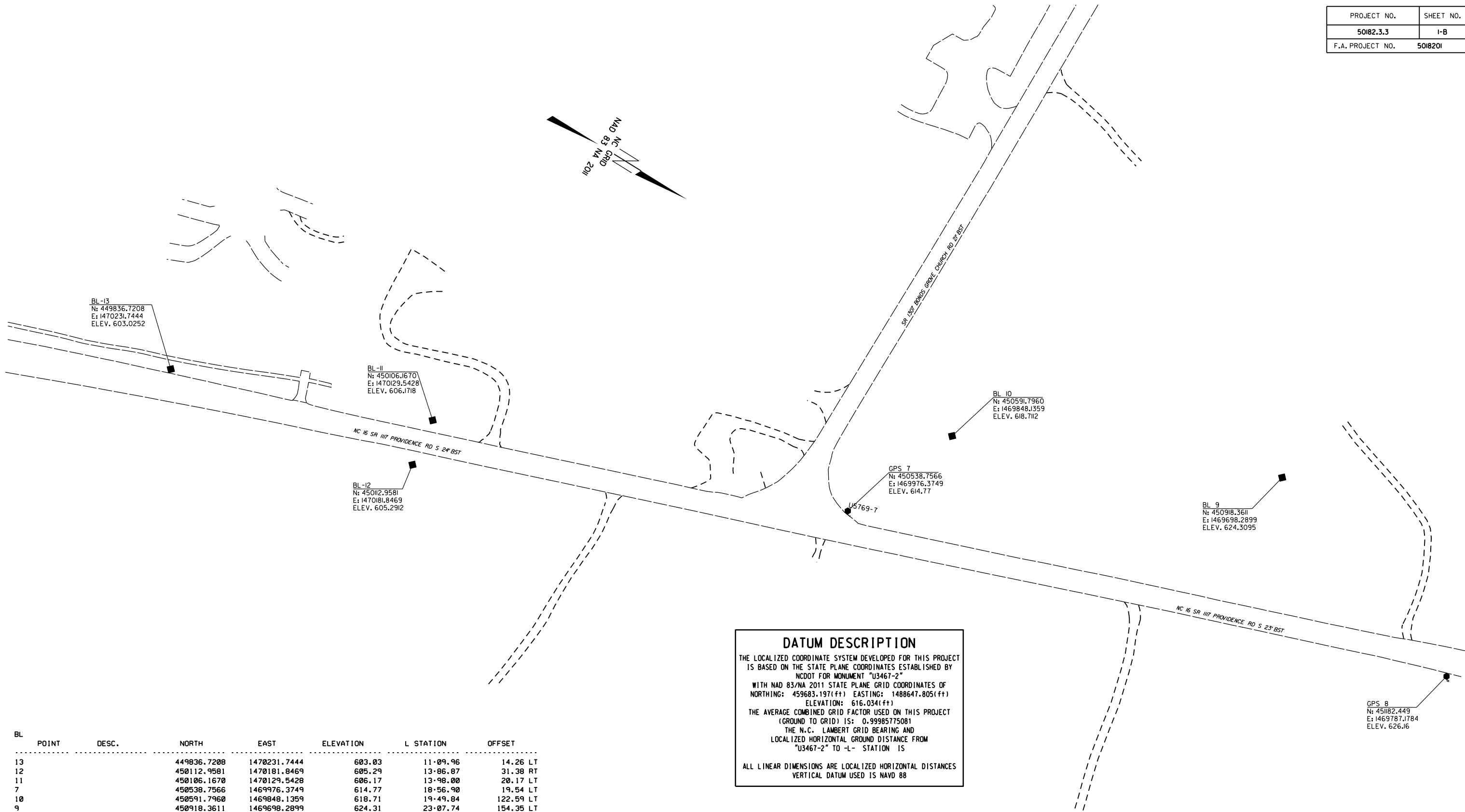
SANITARY SEWER:

Sanitary Sewer Manhole	Ⓜ
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	SS
Above Ground Sanitary Sewer	A/G Sanitary Sewer
SS Force Main Line Test Hole (SUE – LOS A)*	⊗
SS Force Main Line (SUE – LOS B)*	---FSS---
SS Force Main Line (SUE – LOS C)*	---FSS---
SS Force Main Line (SUE – LOS D)*	—FSS—

MISCELLANEOUS:

Utility Pole	●
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	Ⓜ
Utility Unknown U/G Line (SUE – LOS B)*	---UTL---
U/G Tank; Water, Gas, Oil	□
Underground Storage Tank, Approx. Loc.	UST
A/G Tank; Water, Gas, Oil	□
Geoenvironmental Boring	⊕
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

PROJECT NO.	SHEET NO.
50182.3.3	I-B
F.A. PROJECT NO.	5018201



BL	POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
13			449836.7208	1470231.7444	603.03	11+09.96	14.26 LT
12			450112.9581	1470181.8469	605.29	13+86.87	31.38 RT
11			450106.1670	1470129.5428	606.17	13+98.00	20.17 LT
7			450538.7566	1469976.3749	614.77	18+56.90	19.54 LT
10			450591.7960	1469848.1359	618.71	19+49.84	122.59 LT
9			450918.3611	1469698.2899	624.31	23+07.74	154.35 LT
8			451182.4490	1469787.1784	626.16	25+26.78	17.89 RT

BY	POINT	DESC.	NORTH	EAST	ELEVATION	Y STATION	OFFSET
10			450591.7960	1469848.1359	618.71	12+58.83	114.18 LT
7			450538.7566	1469976.3749	614.77	13+86.52	59.84 LT

NOTES:

1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED BY THE DIVISION IO DDC UNIT. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE DIVISION IO DDC UNIT.

LEFT TURN LANE AND SIGNAL INSTALLATION ON NC 16/PROVIDENCE RD.S.(SR-1117) ONTO BONDS GROVE CHURCH RD.(SR-1307)			REVISIONS	
SCALE	1"=50'			
DATE	2-2026			
DWG. BY	CEB			
DESIGN BY	JDH			
APPROVED	JDH			

RIGHT OF WAY, EASEMENT AND
PROPOSED ALIGNMENT SHEET

ROW MARKER URON PIN & CAP

ALIGN	STATION	OFFSET	NORTH	EAST
L	10+20.48	65.79	449780.9748	1470337.7522
L	10+19.58	35.68	449769.4691	1470309.9140
L	13+47.02	112.13	450102.4657	1470271.2828
L	16+15.09	86.19	450346.3519	1470157.0088
L	16+15.74	84.63	450346.4420	1470155.3233
L	18+38.13	83.19	450555.4871	1470079.4537
L	18+37.48	85.67	450555.7075	1470082.0059
L	21+55.34	77.49	450852.4537	1469967.7988
L	11+55.17	73.67	449908.8231	1470299.3259
L	12+14.23	128.35	449982.7933	1470331.0534
L	12+57.45	134.08	450025.4319	1470321.9713
L	14+34.35	83.45	450175.1378	1470214.9980
L	16+32.16	84.50	450361.8678	1470149.7029
L	16+89.25	84.09	450415.5177	1470130.1849
L	17+39.07	83.97	450462.4184	1470113.3814
L	17+30.39	83.99	450454.2470	1470116.3090
L	23+57.26	67.75	451039.4365	1469890.9613
L	24+00.00	65.44	451078.9347	1469874.4621
L	24+00.00	31.43	451067.5391	1469842.4185
L	24+94.78	-43.86	451131.6143	1469739.7265
L	24+66.09	-42.73	451104.9603	1469750.4049
L	23+93.96	-93.46	451020.0009	1469726.7732
L	23+46.35	-91.89	450975.6709	1469744.2057
L	22+15.72	-41.17	450869.5885	1469835.7650
L	19+14.47	-31.53	450588.9760	1469945.7871
L	24+94.78	-28.86	451136.6385	1469753.8542

ROW MARKER IRON PIN & CAP

ALIGN	STATION	OFFSET	NORTH	EAST
Y	13+35.50	-52.55	450530.9480	1469925.4276
Y	12+74.26	-30.76	450508.5342	1469864.4134

L

TYPE	STATION	NORTH	EAST
PC	9+00.00	449645.4352	1470320.0432
PT	11+43.58	449873.2211	1470233.7943
POT	26+00.00	451245.4468	1469745.7923

Y

TYPE	STATION	NORTH	EAST
PC	9+00.00	450472.2682	1469490.5146
PT	11+84.76	450476.8636	1469775.2394
POT	14+27.78	450479.3438	1470018.2400

ROW MARKER PERMANENT EASEMENT

ALIGN	STATION	OFFSET	NORTH	EAST
Y	9+64.27	-31.11	450504.7041	1469554.1671
Y	9+64.27	-36.86	450510.4571	1469554.0556
Y	12+60.83	-45.25	450522.8839	1469850.8376

ROW MARKER PERMANENT EASEMENT

ALIGN	STATION	OFFSET	NORTH	EAST
L	11+66.26	120.37	449934.9189	1470339.6036
L	11+86.20	194.97	449978.7016	1470403.2155
L	12+44.41	195.62	450033.7607	1470384.3228
L	13+95.99	137.69	450157.1749	1470278.9513
L	14+08.97	135.16	450168.5519	1470272.2165
L	14+29.12	130.90	450186.1109	1470261.4496
L	14+28.23	157.81	450194.2900	1470287.1011
L	14+08.24	157.15	450175.2351	1470293.1768
L	15+98.58	125.79	450344.0607	1470199.8628
L	18+29.64	115.69	450558.3769	1470112.9168
L	18+86.96	113.11	450611.5233	1470091.2851
L	18+86.78	102.02	450607.6380	1470080.8962
L	18+86.50	84.98	450601.6667	1470064.9292
L	21+54.27	90.01	450855.6415	1469979.9537
L	10+71.75	103.13	449841.4035	1470355.0177
L	10+61.94	68.41	449820.2789	1470325.8066
L	11+28.84	106.44	449895.2422	1470338.9496
L	24+00.00	78.98	451083.4724	1469887.2218
L	19+09.05	-55.43	450575.8657	1469925.0794
L	23+62.54	-110.82	450984.5758	1469720.9410
L	24+00.30	-108.80	451020.8377	1469710.1963
L	24+01.33	-88.28	451028.6769	1469729.1865
L	22+33.57	-64.01	450878.7536	1469808.2594
L	24+86.21	-43.53	451123.6460	1469742.9062
L	24+85.21	-69.51	451113.9958	1469718.7634
L	24+94.23	-69.80	451122.4009	1469715.4703

I, Barry D. Davis, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item, R/W and Easement Staking, was performed under my responsible charge meeting NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures as of 2017. Those standards can be found at <https://connect.ncdot.gov/resources/Location/Pages/>.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from survey control established under my supervision; that the depicted property data shown herein were surveyed under my supervision; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (see deeds for final determination).

Witness my signature, registration number and seal this 8th day of July 2026

Barry D. Davis, Professional Land Surveyor
DocuSigned by: Barry D. Davis
PLS# L-4384
0E2AAE4F48174DC...



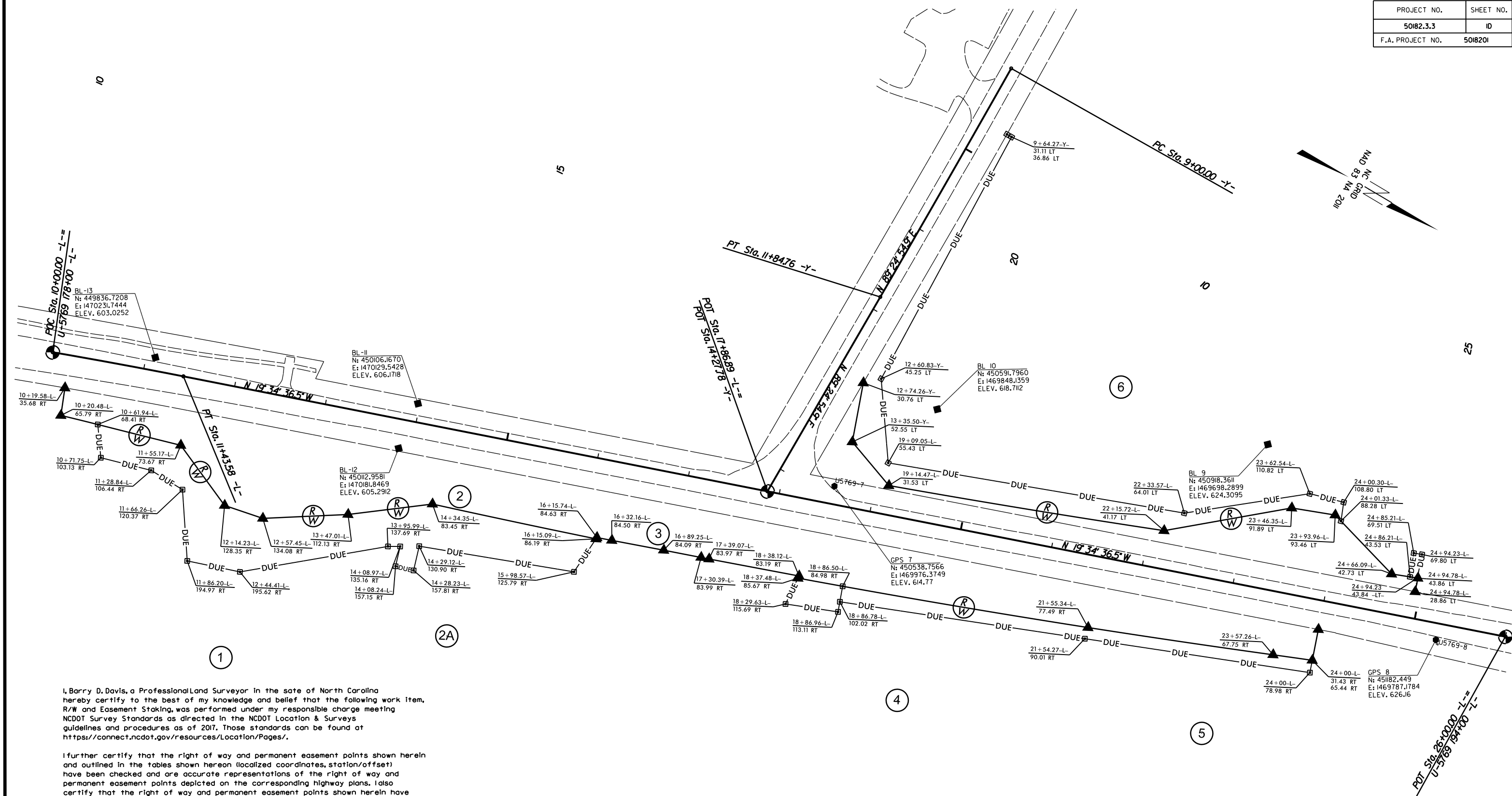
NOTES:

- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
- THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED BY THE DIVISION IO DDC UNIT. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE DIVISION IO DDC UNIT.

LEFT TURN LANE AND SIGNAL INSTALLATION
ON NC 16 / PROVIDENCE RD.S.(SR-1117)
ONTO BONDS GROVE CHURCH RD.(SR-1307)

SCALE	1"=50'		REVISIONS	
DATE	02-2026			
DWG. BY	CEB			
DESIGN BY	JDH			
APPROVED	JDH			

PROJECT NO.	SHEET NO.
50182.3.3	10
F.A. PROJECT NO.	5018201



I, Barry D. Davis, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item, R/W and Easement Staking, was performed under my responsible charge meeting NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures as of 2017. Those standards can be found at <https://connect.ncdot.gov/resources/Location/Pages/>.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from survey control established under my supervision; that the depicted property data shown herein were surveyed under my supervision; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (see deeds for final determination).

Witness my signature, registration number and seal this 8th day of July 2026

Barry D. Davis, Professional Land Surveyor

DocuSigned by:
Barry Davis
0E2AAE4F48174DC...



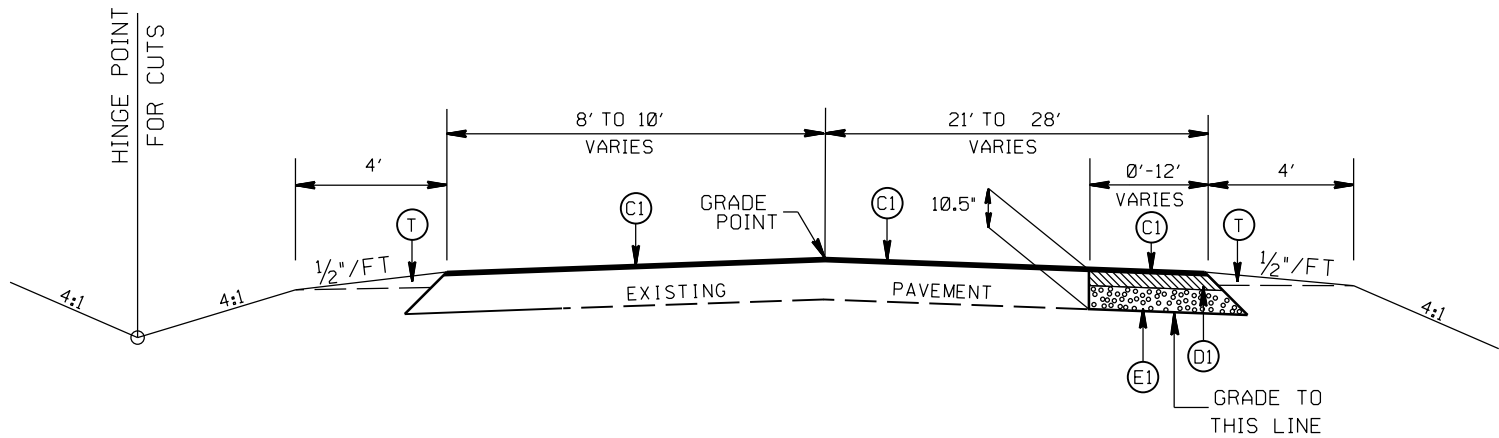
PI Sta 10+71.80 -L-
 $\Delta = 1^{\circ}22'11.7''$ (RT)
 $D = 0^{\circ}57'14.3''$
 $L = 143.58'$
 $T = 71.80'$
 $R = 6,006.00'$

PI Sta 10+42.38
 $\Delta = 0^{\circ}40'47.4''$ (RT)
 $D = 0^{\circ}14'19.4''$
 $L = 284.76'$
 $T = 142.38'$
 $R = 24,000.00'$

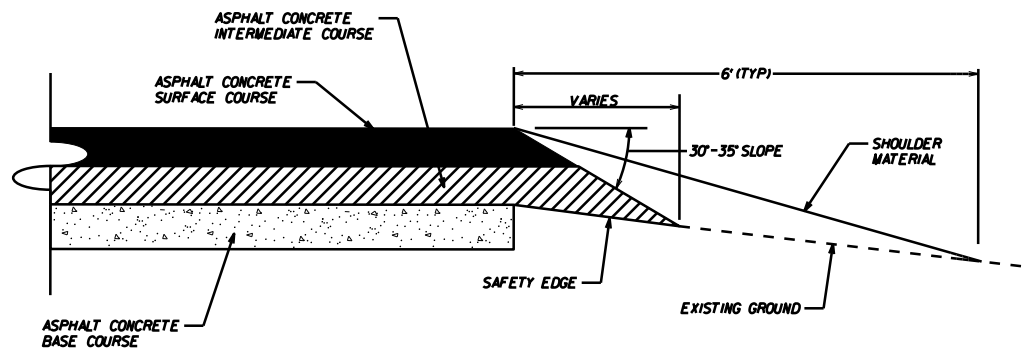
LEFT TURN LANE AND SIGNAL INSTALLATION
ON NC 16/PROVIDENCE RD.S. (SR-117)
ONTO BONDS GROVE CHURCH RD. (SR-1307)

SCALE	1"=50'	REVISIONS
DATE	2-2026	
DWG. BY	CEB	
DESIGN BY	JDH	
APPROVED	JDH	

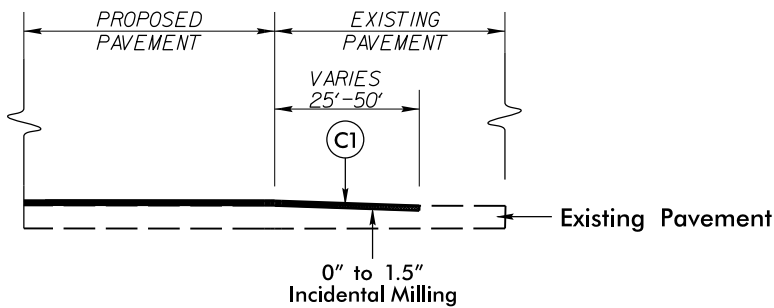




TYPICAL SECTION NO. 1
STA. 10+75 TO 24+25 -L-



SAFETY EDGE DETAIL



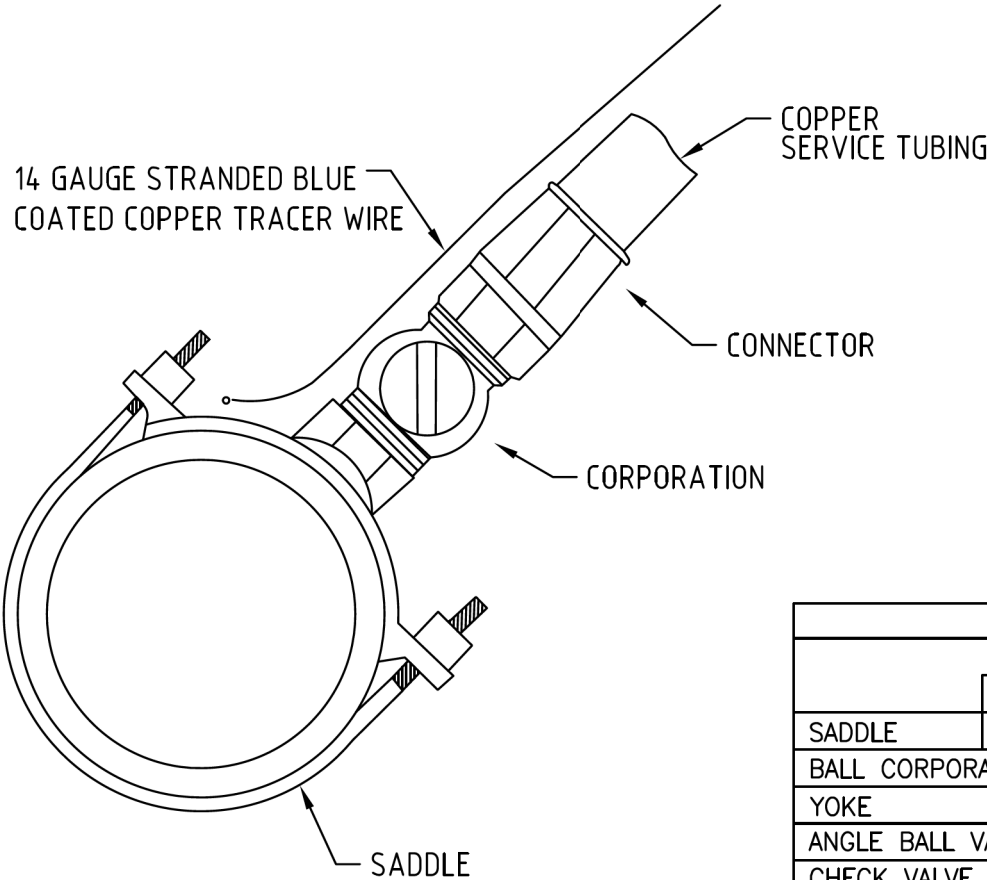
INCIDENTAL MILLING DETAIL
EXISTING ROAD TIE-IN
PROJECT TIE-INS

PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
D1	PROP. APPROX. 4" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E1	PROP. APPROX. 5" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
T	EARTH MATERIAL

LEFT TURN LANE AND SIGNAL INSTALLATION ON
NC 16/PROVIDENCE RD.S.(SR-1117)
ONTO BONDS GROVE CHURCH RD.(SR-1307)

SCALE	1"=50'		REVISIONS
DATE	12-2022		
DWG. BY	JCB		
DESIGN BY	JCB		
APPROVED	JDH		



APPROVED SERVICE HARDWARE			
		MUELLER	FORD
	2"PVC	H-13420	S70
SADDLE	UP TO 8"	SEE NOTE	FC 101
BALL CORPORATION		B-25008	FB1000G
YOKE		H-5020	Y 502
ANGLE BALL VALVE		B-24273	BA94-323WG
CHECK VALVE		H-14247-A	HHS91-323
CONNECTORS	COPPER	STYLE 110	GRIP JOINT
EXPANSION CONNECTION			EC 23

NOTE:
ROMAC 101N SHALL REPLACE MUELLER FOR PIPE
DIAMETER UP TO 8"

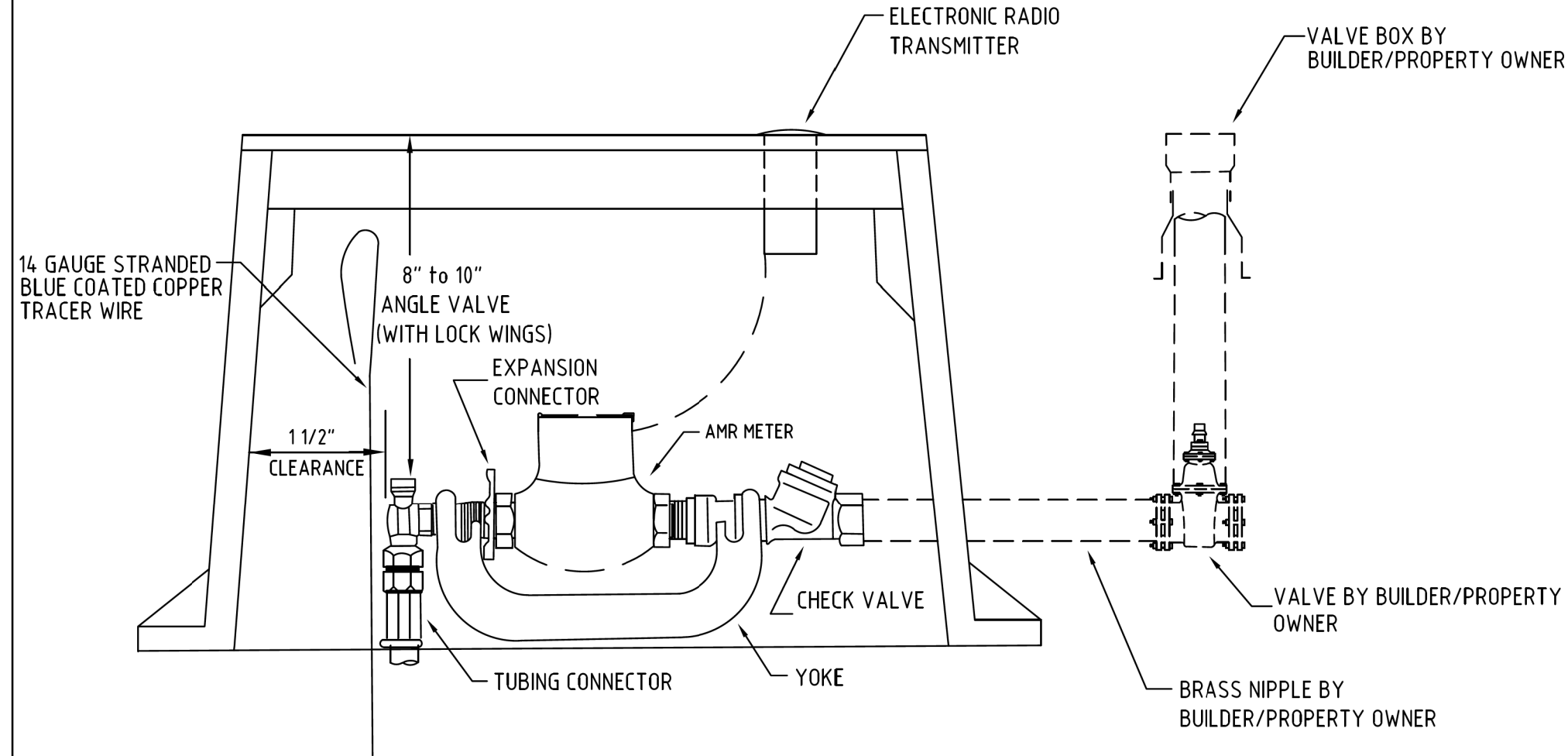
SMITH BLAIR 317, FORD FC 202 OR ROMAC 202N SHALL
REPLACE MUELLER FOR PIPE DIA. 12" AND UP

UNION COUNTY PUBLIC WORKS DEPARTMENT UNION COUNTY, N.C.	STANDARD DETAIL		5	
	SERVICE CONNECTION			
		SCALE: N.T.S. DATE: 10-4-11		

LEFT TURN LANE AND SIGNAL INSTALLATION ON NC 16/PROVIDENCE RD.S.(SR-1117) ONTO BONDS GROVE CHURCH RD.(SR-1307)		
SCALE	N/A	
DATE	1-2025	
DWG. BY	BAC	
DESIGN BY	JDH	
APPROVED	JDH	
REVISIONS		

PROJECT NO.	SHEET NO.
50182.3.3	2-B
F.A. PROJECT NO.	5018201

- GENERAL NOTES:**
- 1) SEE DETAIL 6A FOR METER BOX LID
 - 2) BUILDER/PROPERTY OWNER TO INSTALL NIPPLE, VALVE AND VALVE BOX BEFORE METER WILL BE SET.
 - 3) METER AND ERT BY UNION COUNTY @ PREVAILING RATE



UNION COUNTY PUBLIC WORKS DEPARTMENT
UNION COUNTY, N.C.

STANDARD DETAIL
METER INSTALLATION FOR 3/4" AND 1" METERS

SCALE:
N.T.S.
DATE:
2/6/2020

6

LEFT TURN LANE AND SIGNAL INSTALLATION ON
NC 16/PROVIDENCE RD.S.(SR-1117)
ONTO BONDS GROVE CHURCH RD.(SR-1307)

SCALE	N/A
DATE	1-2025
DWG. BY	BAC
DESIGN BY	JDH
APPROVED	JDH



REVISIONS	

SUB-REGIONAL & REGIONAL

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

[illegible]

PROJECT NO.
50182.3.3

SHEET NO.
4

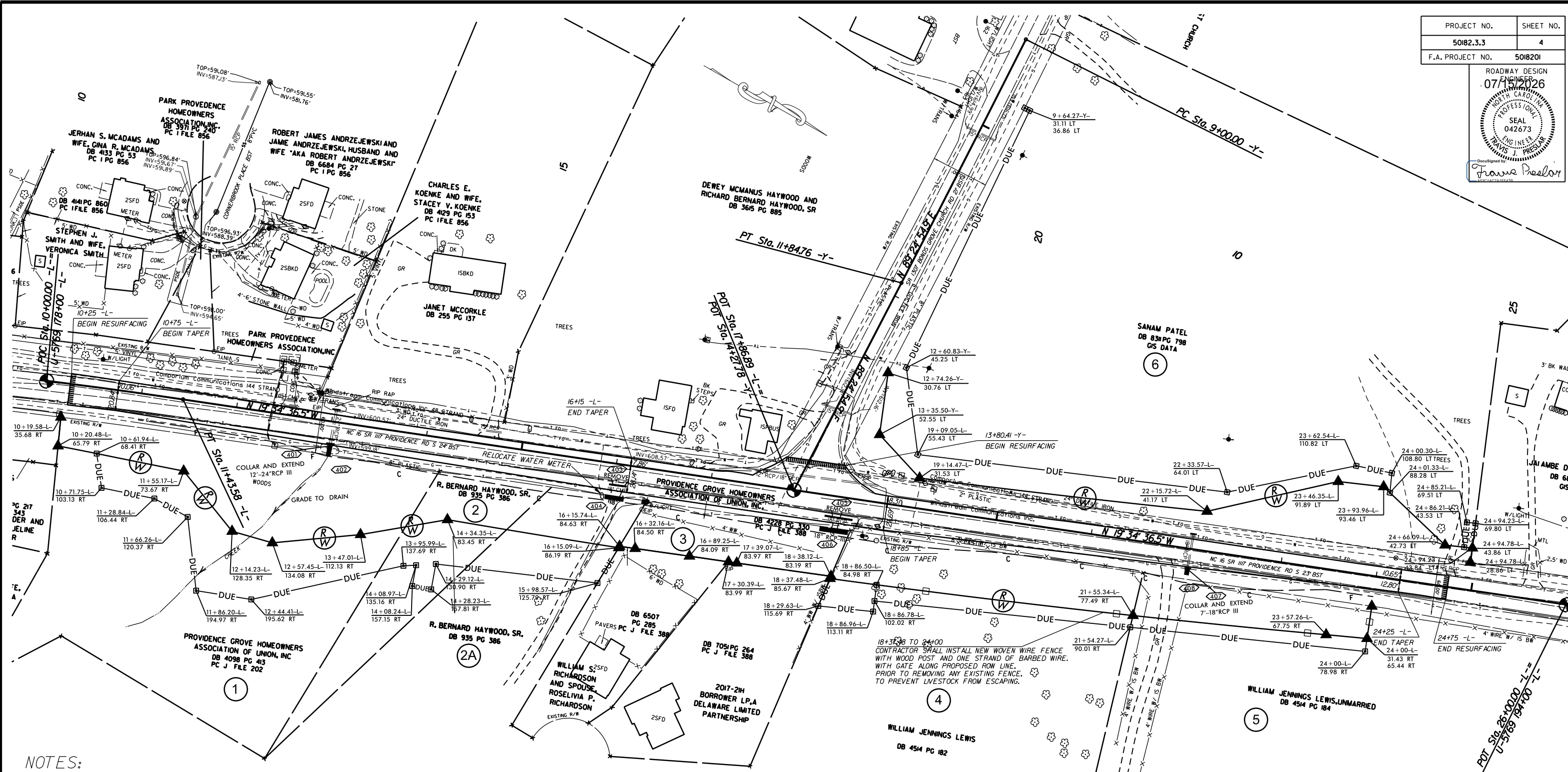
F.A. PROJECT NO.
5018201

ROADWAY DESIGN
07/15/2026

SEAL
042673

ENGINEER
PAVIS J. PRESLAR

DocuSigned by
Travis Preslar



NOTES:

PRIOR TO START OF CONSTRUCTION, CONTRACTOR MUST CONTACT UNION COUNTY CIP PROGRAM MANAGER, THOMAS MANN, AT 704-292-2560

EXISTING WATER UTILITIES BELONG TO UNION COUNTY

EXISTING WATER VALVES ARE TO BE OPERATED ONLY BY UNION COUNTY WATER OPERATIONS STAFF

PROPOSED WATER SERVICE LINE SHALL BE TYPE "K" COPPER TUBING WITH COMPRESSION FITTINGS. SPLICING OF COPPER SERVICE BETWEEN THE EXISTING WATER LINE AND NEW WATER METER LOCATION WILL NOT BE ALLOWED FOR ANY CASE. PROVIDE AND INSTALL A CONTINUOUS SEGMENT OF COPPER WATER SERVICE LINE BETWEEN THE CORPORATION STOP AND WATER METER. IN THE EVENT A SERVICE PIPE IS DAMAGED DURING THE COURSE OF CONSTRUCTION, A NEW REPLACEMENT COPPER SERVICE LINE IS TO BE INSTALLED BETWEEN THE WATER LINE AND WATER METER AT NO COST TO THE DEPARTMENT.

THE EXISTING CORPORATION MAY BE USED FOR THE NEW WATER SERVICE LINE.

CONTRACTOR IS RESPONSIBLE FOR NOTIFYING INDIVIDUAL UNION COUNTY WATER CUSTOMERS FOR SERVICE INTERRUPTIONS PERTAINING TO WATER SERVICE TRANSFERS AND SERVICE REPAIRS. SERVICE TRANSFERS SHALL BE PERFORMED DURING PERIODS OF CONVENIENCE FOR INDIVIDUAL WATER CUSTOMERS.

PI Sta 10+71.80 -L-

$\Delta = 1^{\circ}22'11.1"$ (RT)

D = 0'57'14.3"

L = 143.58'

T = 71.80'

R = 6,006.00'

PI Sta 10+42.38

$\Delta = 0^{\circ}40'47.4"$ (RT)

D = 0'14'19.4"

L = 284.76'

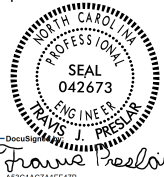
T = 142.38'

R = 24,000.00'

NOTE: INCIDENTAL MILL APPROXIMATELY 50' AT EACH TIE IN TO PROVIDE A SMOOTH TRANSITION TO THE EXISTING ASPHALT PAVEMENT.

LEFT TURN LANE AND SIGNAL INSTALLATION ON NC 16/PROVIDENCE RD.S.(SR-117) ONTO BONDS GROVE CHURCH RD.(SR-1307)	
SCALE	1"=50'
DATE	2-2026
DWG. BY	JCB
DESIGN BY	JCB
APPROVED	JDH
REVISIONS	

ROADWAY DESIGN
ENGINEER
07/15/2026



PAVEMENT MARKING LINES

- ## PAVEMENT MARKING SYMBOLS

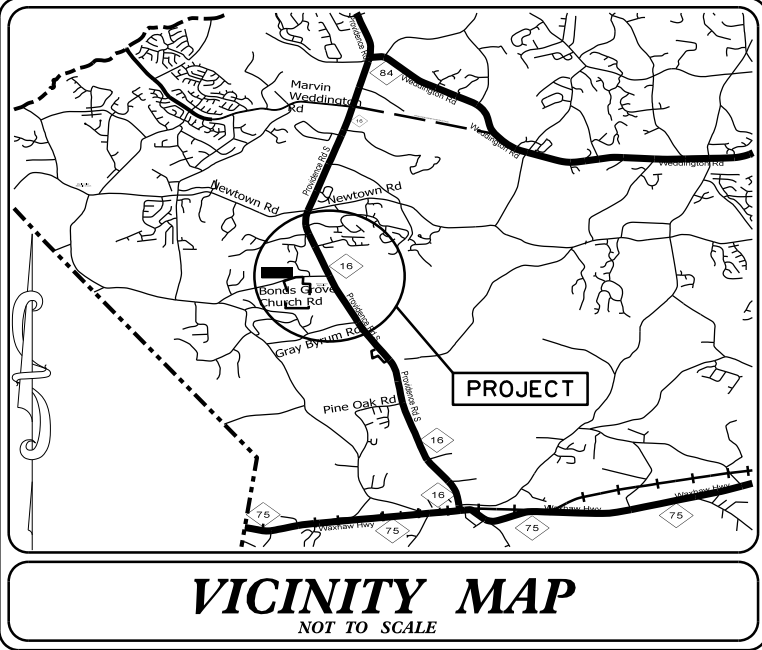
- PAVEMENT MARKERS

- LEFT TURN LANE AND SIGNAL INSTALLATION
ON NC 16/PROVIDENCE RD.S.(SR-1117)
ONTO BONDS GROVE CHURCH RD.(SR-1307)

SCALE	$1"=50'$		REVISIONS	
DATE	9-2024			
DWG. BY	BAC			
DESIGN BY	JCB			
APPROVED	JDH			

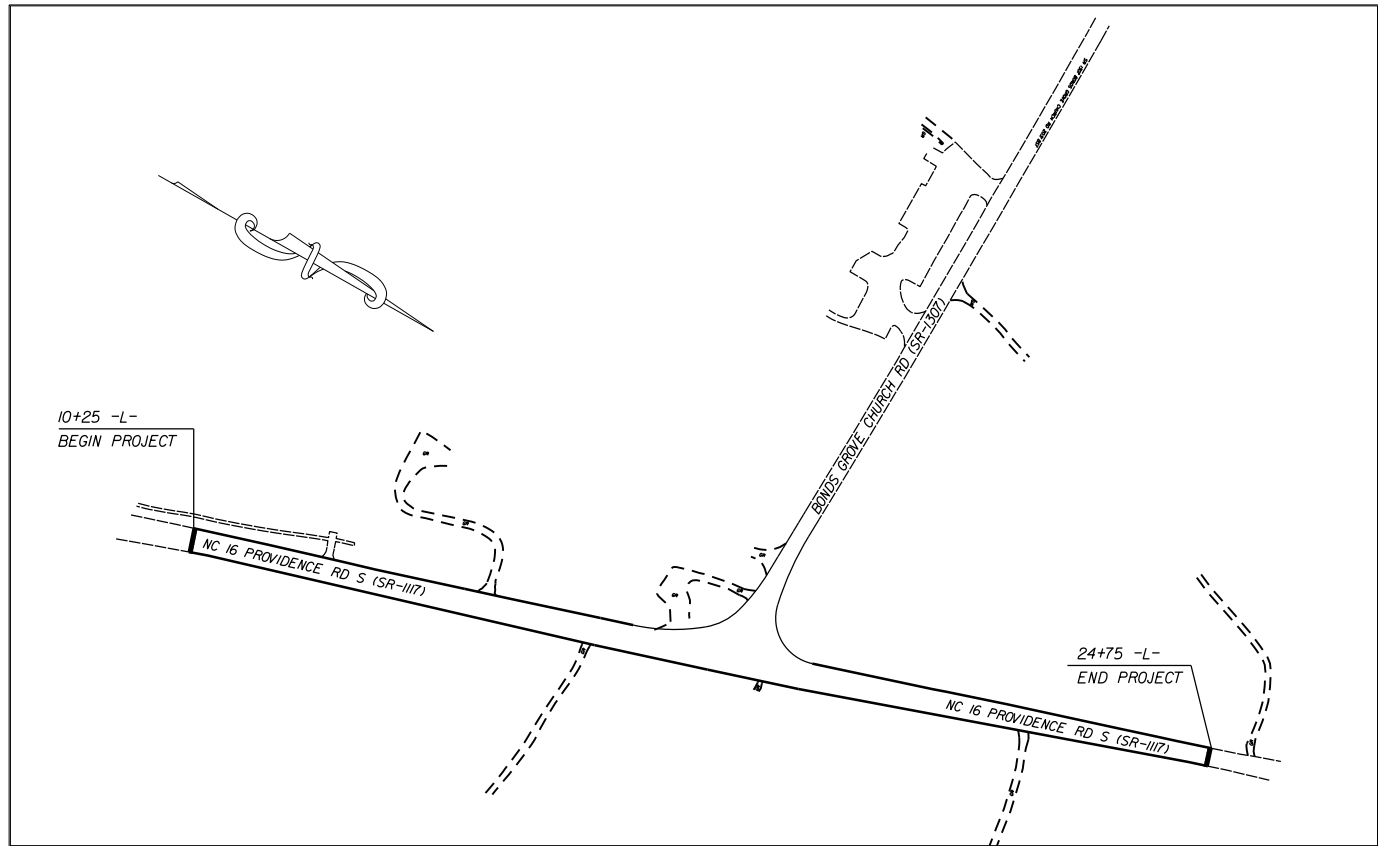
08 JUL 2025 09:30
AA, NC 16 Bonds Grove Church Rd SR-1307
U-5769AA

TIP PROJECT: U-5769AA



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

LOCATION: INTERSECTION OF NC 16/PROVIDENCE RD. S. (SR-1117) AND
BONDS GROVE CHURCH RD. (SR-1307)



INSTALL PERIMETER EROSION CONTROL
MEASURES DURING INITIAL CLEARING PHASE

GRAPHIC SCALE



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:

CHAD BURRIS
NAME

4159
LEVEL III CERTIFICATION NO.

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5769AA	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
50182.1.4	5018201	P.E.	
50182.2.5	5018201	R/W	
50182.3.3	5018201	CONST.	

EROSION AND SEDIMENT CONTROL MEASURES

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

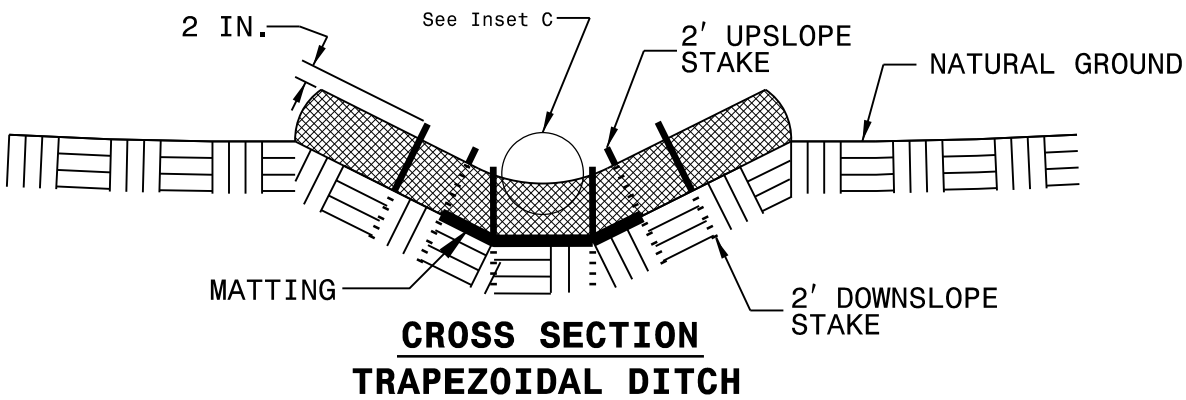
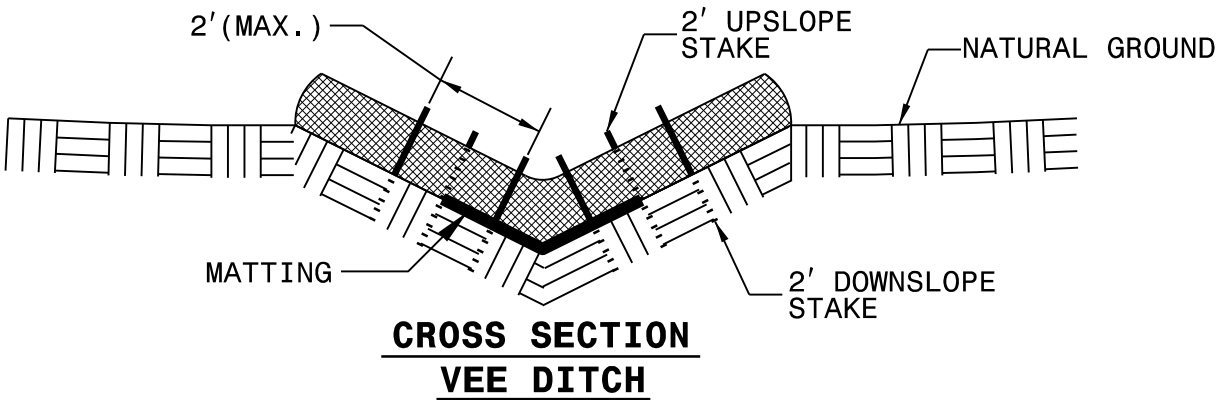
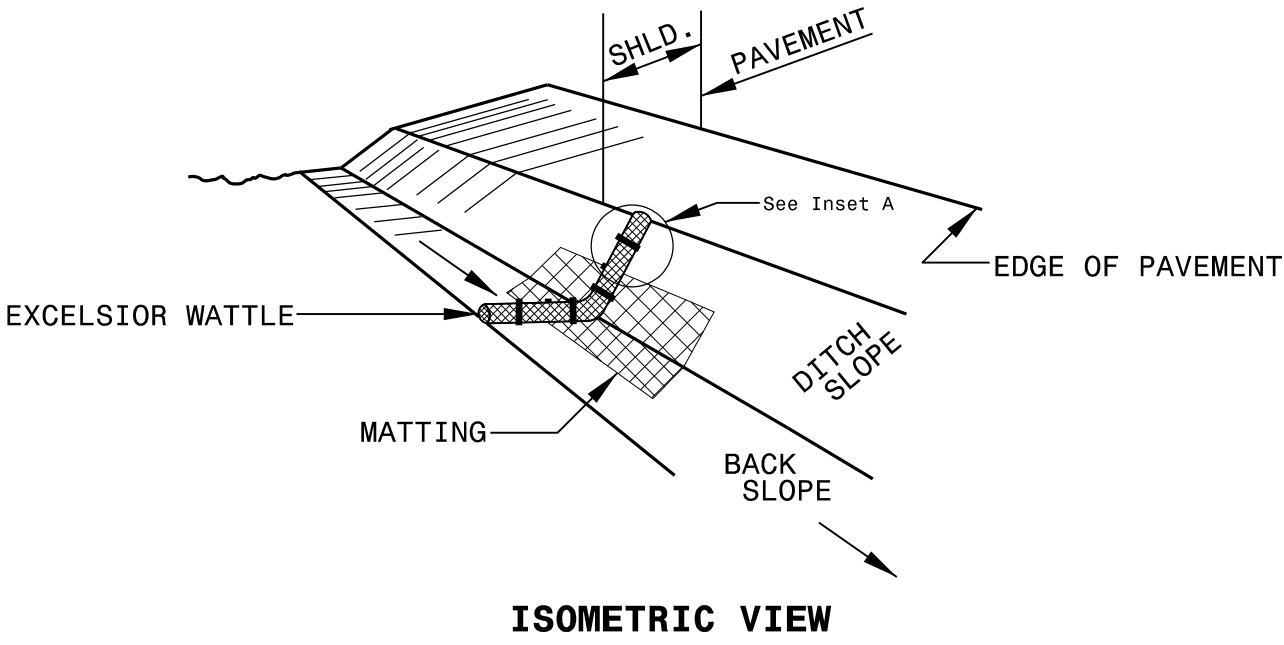
THIS PROJECT CONTAINS
EROSION CONTROL PLANS
FOR CLEARING AND
GRUBBING PHASE OF
CONSTRUCTION.

Roadway Standard Drawings

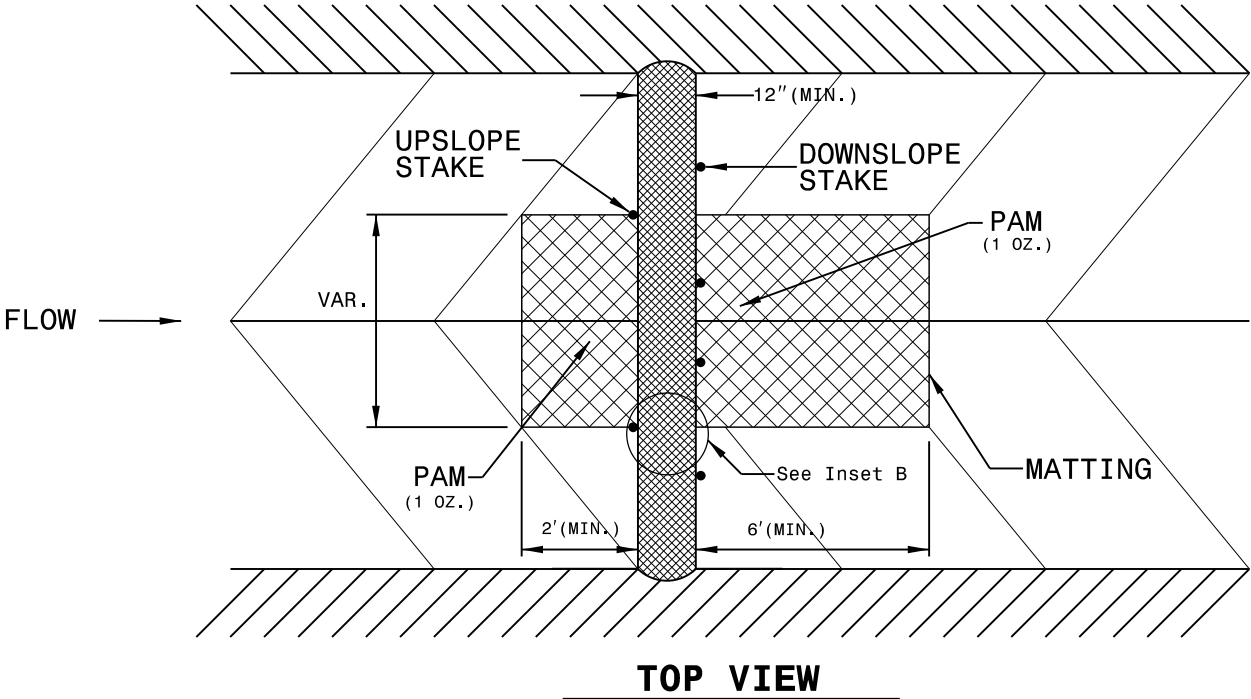
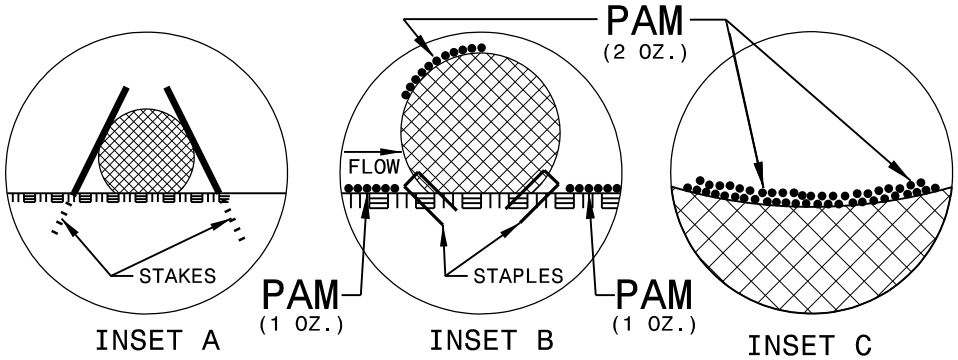
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

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 B
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 B
1630.01	Riser Basin	1633.03	Temporary Rock Silt Check Type C
1630.02	Silt Basin Type A	1634.01	Temporary Rock Sediment Dam Type A
1630.03	Temporary Silt Ditch	1634.02	Temporary Rock Sediment Dam Type B
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 B
1630.06	Special Stilling Basin	1640.01	Coir Fiber Jaffle
1631.01	Matting Installation	1645.01	Temporary Stream Crossing

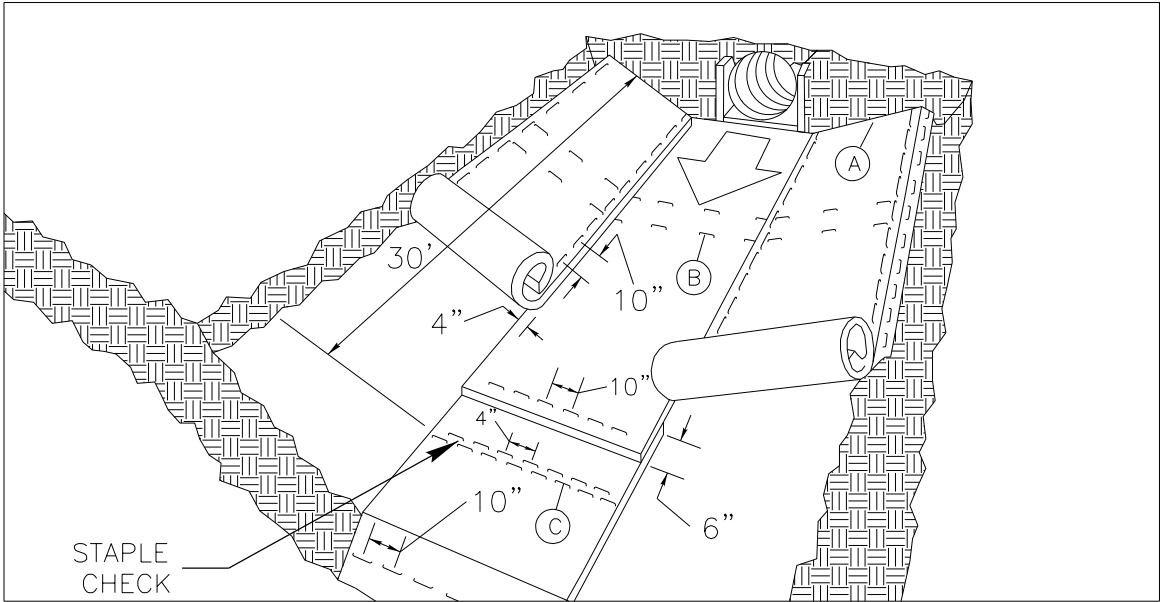
WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



- 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

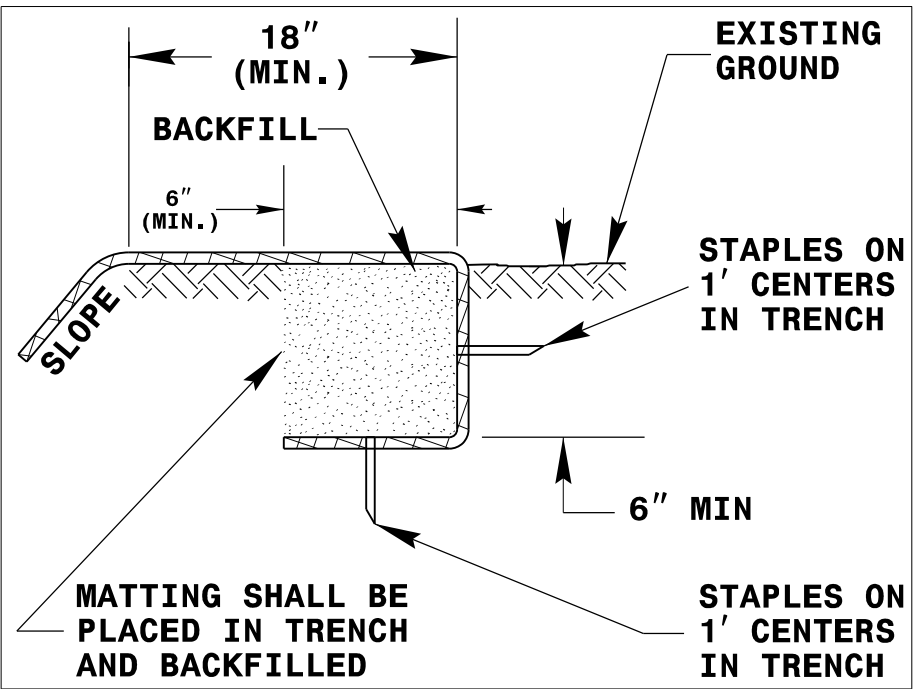
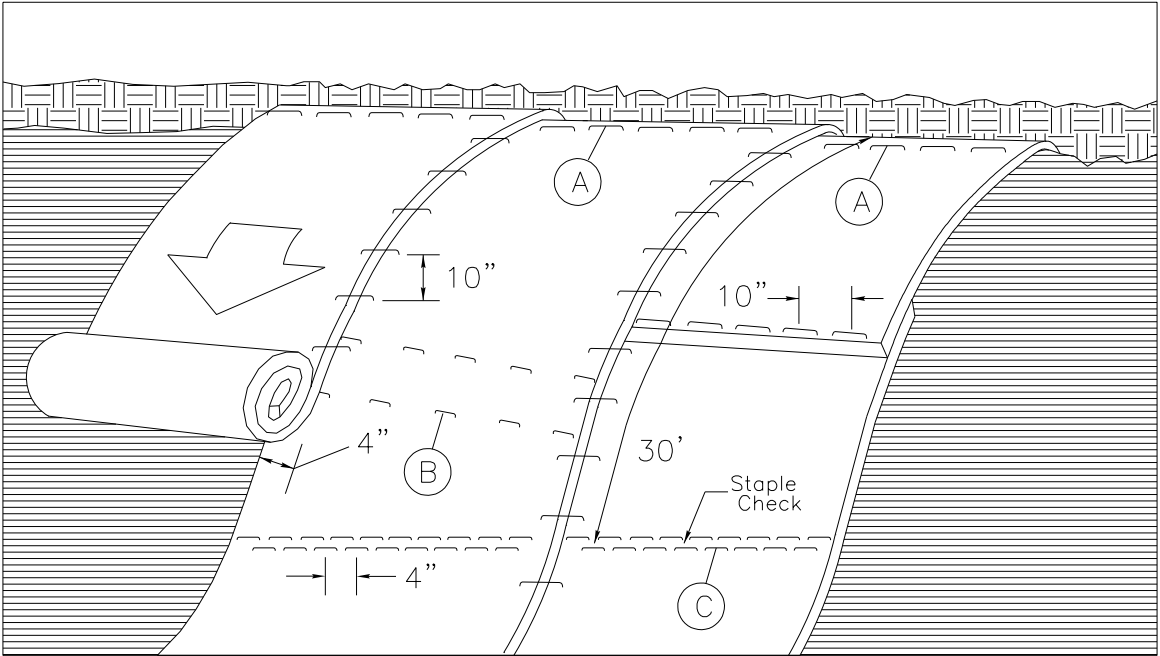


DIAGRAM (A)



MATTING ON SLOPES

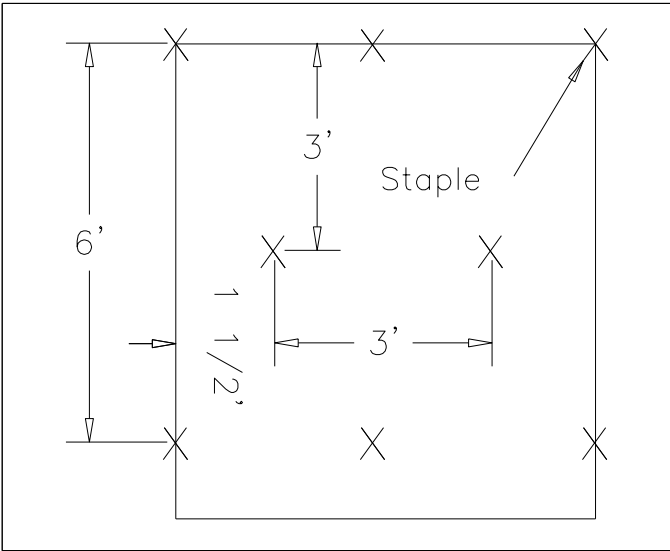


DIAGRAM (B)

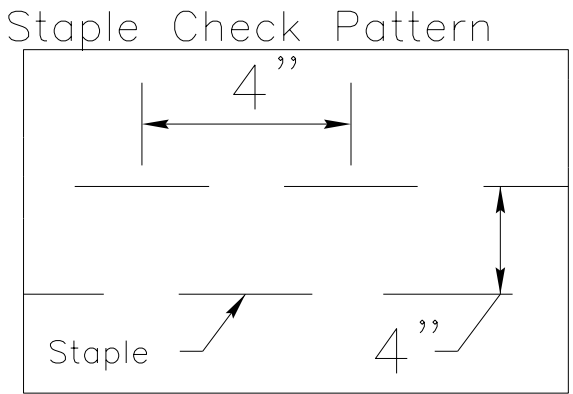


DIAGRAM (C)

NOTES:

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

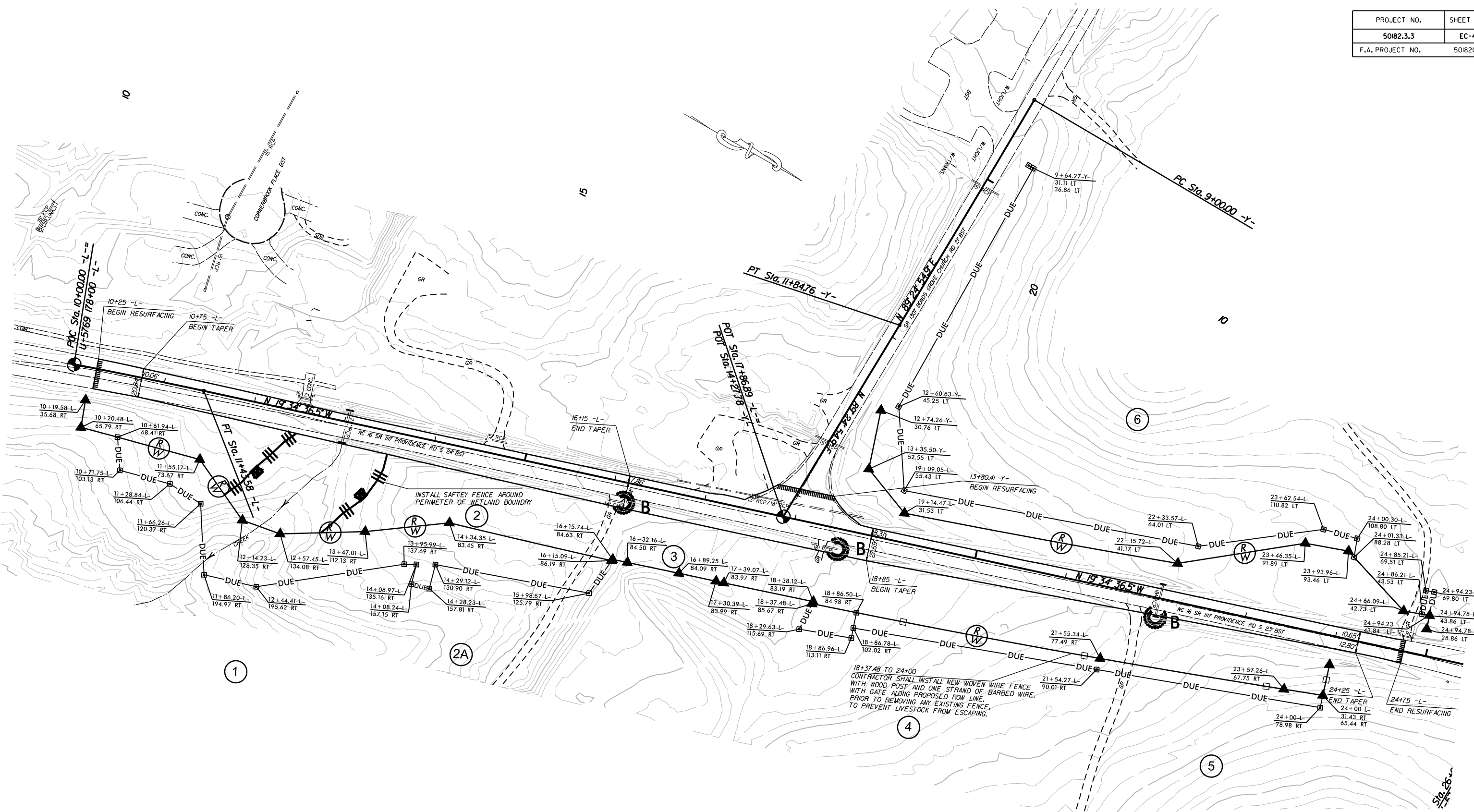
STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

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.



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

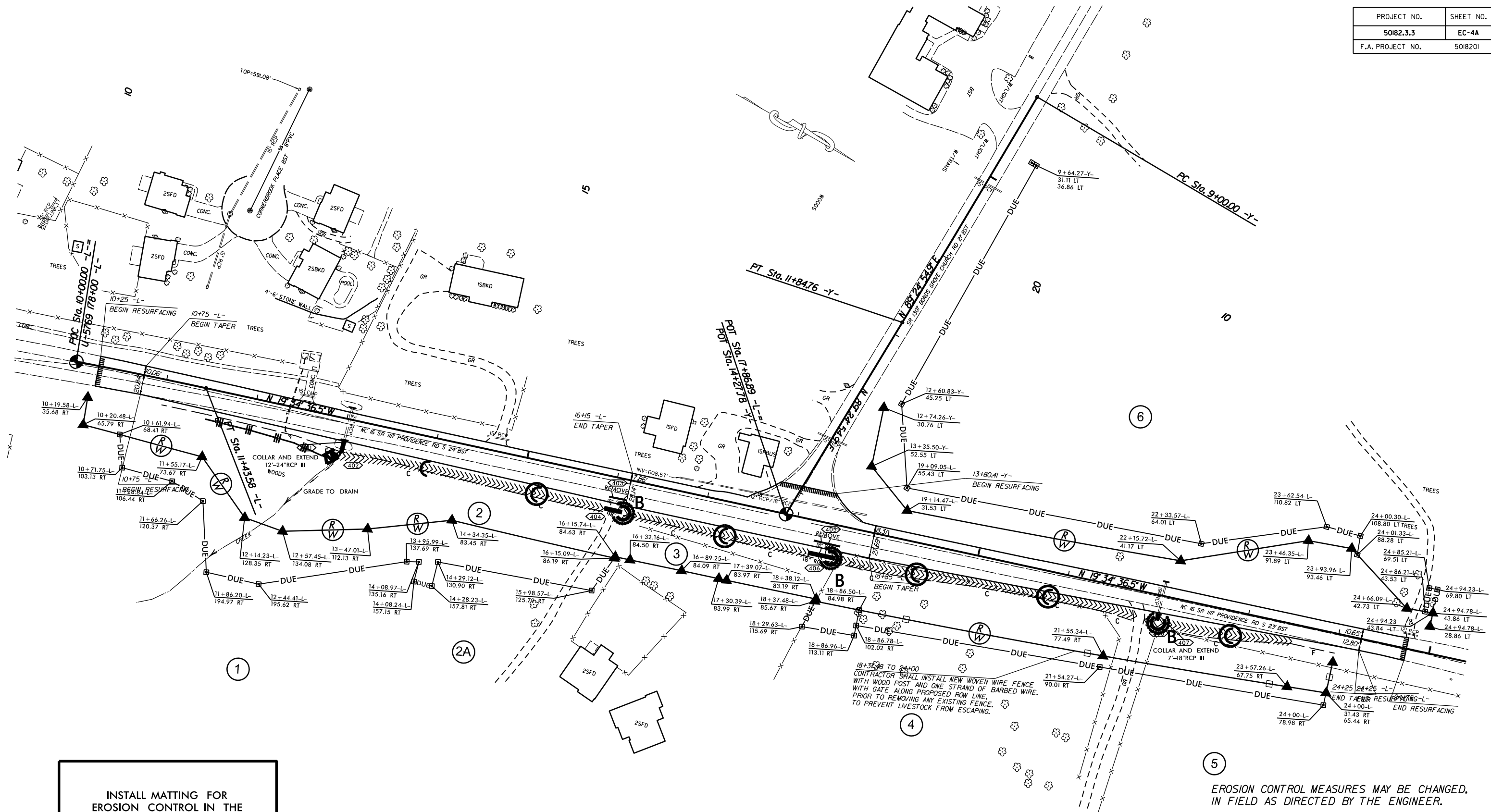
PI Sta 10+71.80 -L-
Δ = 1°22'11.1" (RT)
D = 0°57'14.3"
L = 143.58'
T = 71.80'
R = 6,006.00'

PI Sta 10+42.38
Δ = 0°40'47.4" (RT)
D = 0°14'19.4"
L = 284.76'
T = 142.38'
R = 24,000.00'

LEFT TURN LANE AND SIGNAL INSTALLATION ON
NC 16/PROVIDENCE RD. S. (SR-1117)
ONTO BONDS GROVE CHURCH RD. (SR-1307)

SCALE	1"=50'
DATE	1-2024
DWG. BY	JCB
DESIGN BY	JCB
APPROVED	JDH

REVISIONS



INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.
SEE SHEET 2A
13+00 TO 23+50 -L- RT

PI Sta 10+71.80 -L-
Δ = 1° 22' 11.2" (RT)
D = 0° 57' 14.3"
L = 143.58'
T = 71.80'
R = 6,006.00'

PI Sta 10+42.38
Δ = 0° 40' 47.4" (RT)
D = 0° 14' 19.4"
L = 284.76'
T = 142.38'
R = 24,000.00'

LEFT TURN LANE AND SIGNAL INSTALLATION ON NC 16/PROVIDENCE RD.S.(SR-117) ONTO BONDS GROVE CHURCH RD.(SR-1307)	
SCALE	1"=50'
DATE	1-2024
DWG. BY	JCB
DESIGN BY	JCB
APPROVED	JDH
REVISIONS	

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

SIGNING PLAN
UNION COUNTY

LOCATION: Left Turn Lane on NC 16 onto Bonds Grove Church Rd (SR-1307)

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS

SUMMARY OF QUANTITIES

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4025000000	901	CONTRACTOR FURNISHED, TYPE D SIGN	3.75	S.F.
4025000000	901	CONTRACTOR FURNISHED, TYPE E SIGN	28.75	S.F.
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	97	L.F.
4096000000	904	SIGN ERECTION, TYPE D	1	EA.
4102000000	904	SIGN ERECTION, TYPE E	5	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	7	EA.

GENERAL NOTES

- . SIGNS FURNISHED BY CONTRACTOR.
- . CONFIRM IN WRITING AT LEAST 4 MONTHS IN ADVANCE, THE ACTUAL DATE THE DEPARTMENT FURNISHED SIGNS WILL BE REQUIRED.
- . ALL TYPE 'D' SIGNS SHALL BE MOUNTED ON TWO U-CHANNEL POSTS UNLESS OTHERWISE INDICATED ON THE PLANS.
- . IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.
- . WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER
- . ALL EXISTING SIGNS ON "U" CHANNEL POST WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS.
- . WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.
- . THE BACKGROUND FOR TYPE E & F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.

INDEX

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-2	E AND F SHEETS
SIGN-3	SIGNING PLAN SHEET

PLAN PREPARED BY: N.C.D.O.T. SIGNING AND DELINEATION UNIT

Kelvin Jordan SIGNING & DELINEATION REGIONAL ENGINEER
Ashley Matthews, PE SIGNING & DELINEATION PROJECT DESIGN ENGINEER

U-5769AA

SIGN

001

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

DocuSigned by:
Ashley Matthews
40171A416D8MGO

APPROVED:
3/25/2026 | 11:53 AM EDT

SEAL:

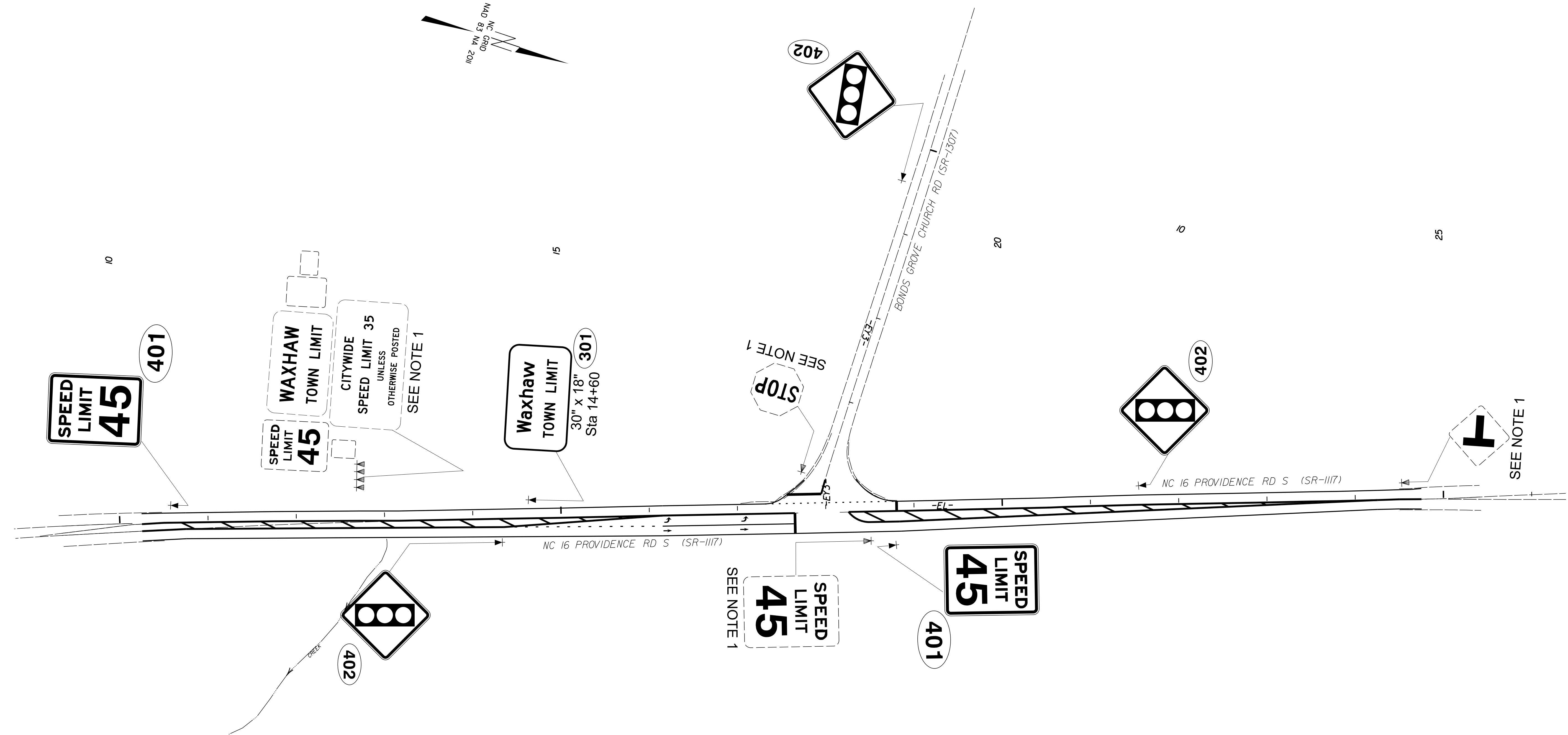
NORTH CAROLINA
PROFESSIONAL
SEAL
048105
ENGINEER
ASHLEY K. MATTHEWS

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

T.I.P.: U-5769AA

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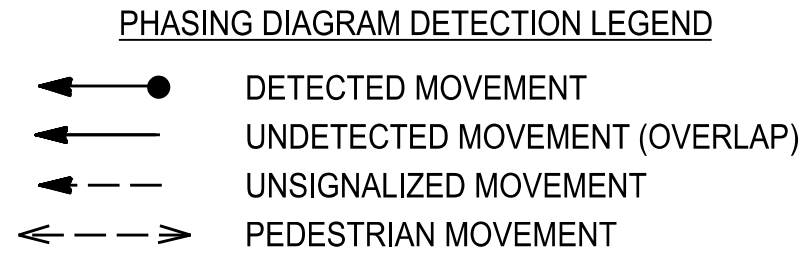
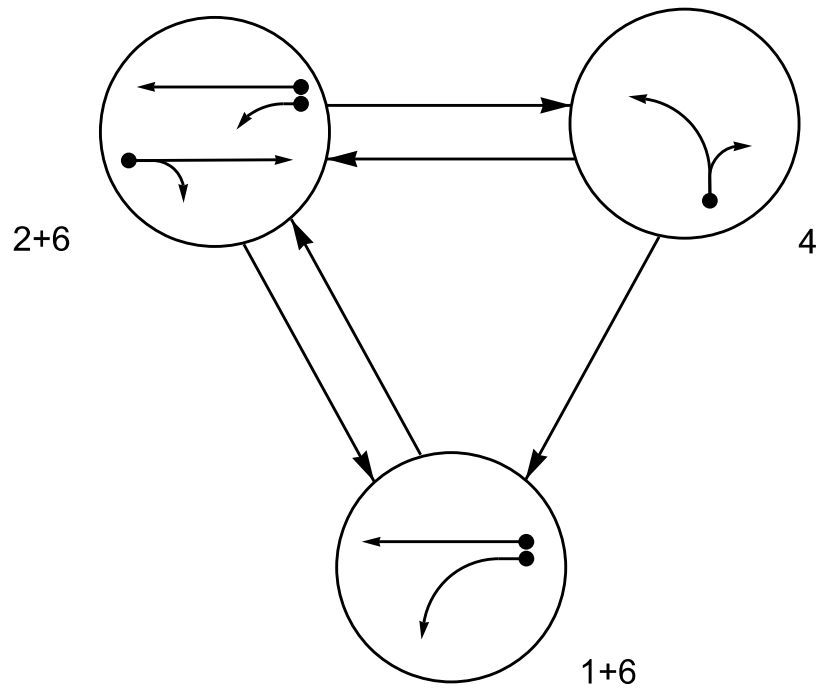
NOTES

NOTE 1
DISPOSAL OF SIGN SYSTEM,
U-CHANNEL

U-5769AA

SIGN	003
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
DocuSigned by: <i>Ashley Matthews</i> 40771A18C84C02	
APPROVED: 3/25/2026 11:53 AM EDT	
SEAL:	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

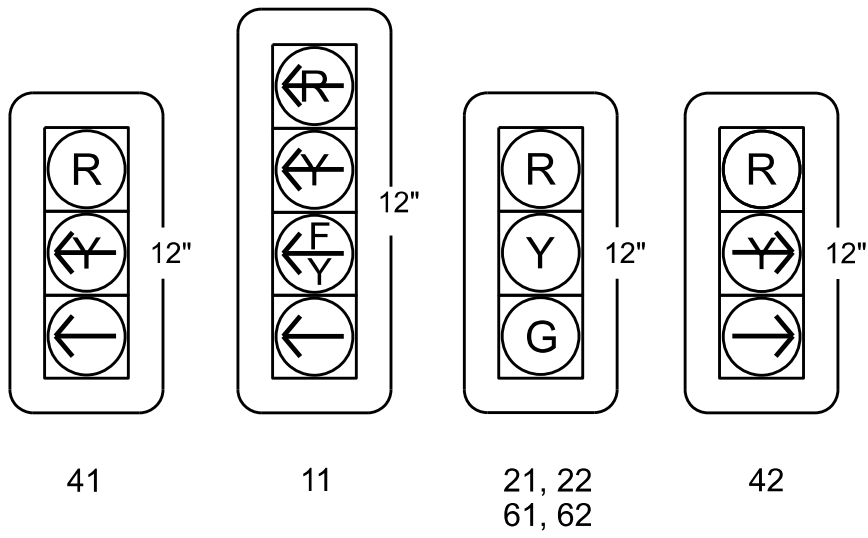
PHASING DIAGRAM



SIGNAL FACE	PHASE				FLASH HORN
	1 + 6	2 + 6	4		
11	←	←	←	←	
21, 22	R	G	R	R	
41	R	R	←	R	
42	R	R	→	R	
61, 62	G	G	R	R	

SIGNAL FACE I.D.

All Heads L.E.D.



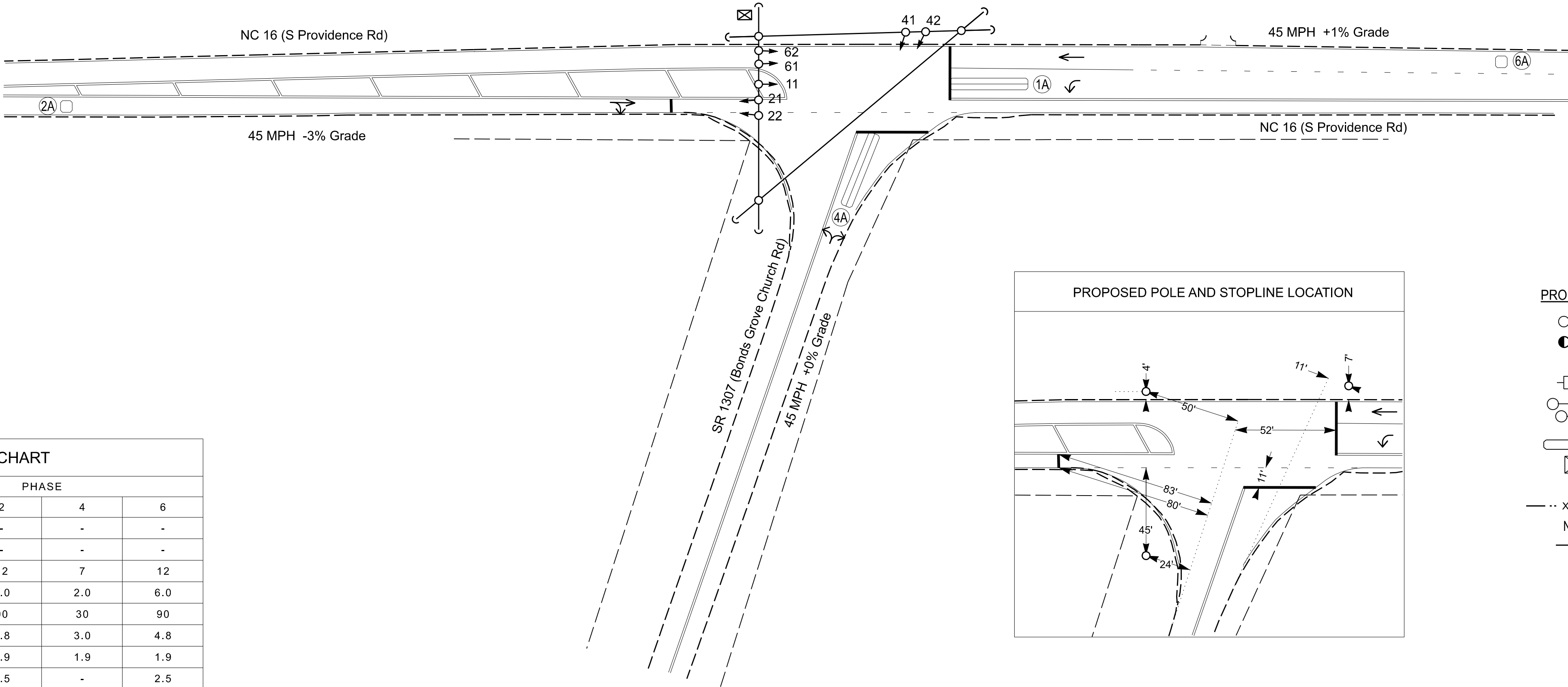
MAXTIME DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOP LINE (FT)	TURNS	NEW LOOP	PROGRAMMING						
					CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL DELAY DURING GREEN	NEW CARD
1A	6 X 40	0	2-4-2	X	1	15.0	-	X	-	X	-
					6	3.0	-	X	-	X	X
2A	6 X 6	300	4	X	2	-	-	X	X	X	-
4A	6 X 40	0	2-4-2	X	4	-	-	X	-	X	-
6A	6 X 6	300	5	X	6	-	-	X	X	X	-

3-Phase
Fully Actuated
Isolated

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 may be lagged.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Install retro-reflective backplates for all signal heads.
- Remove existing "STOP" sign (R1-1) for SR 1307 (Bonds Grove Church Rd).

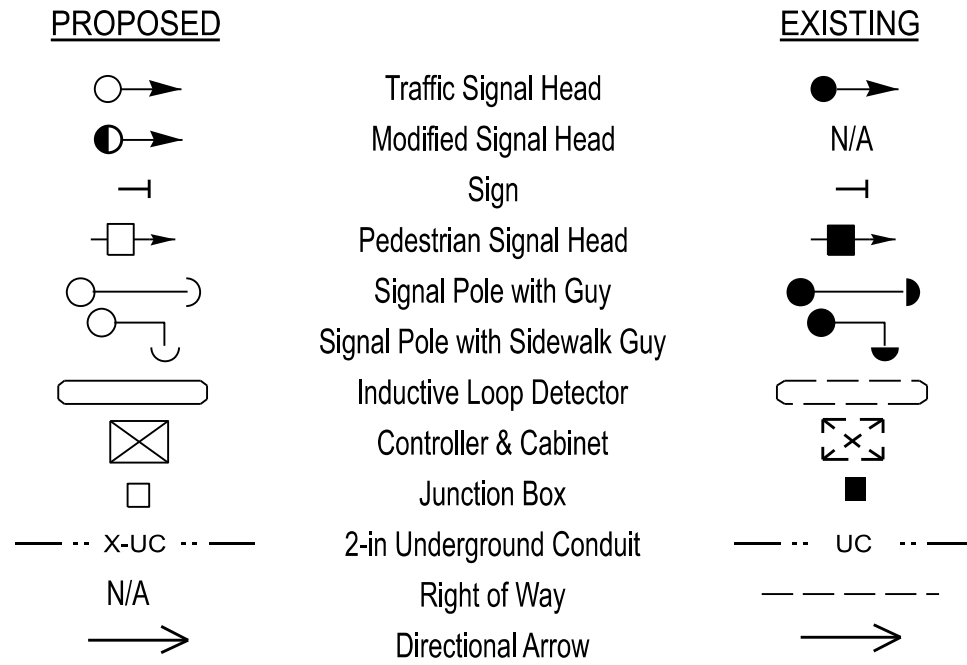


MAXTIME TIMING CHART

FEATURE	PHASE			
	1	2	4	6
Walk *	-	-	-	-
Ped Clear	-	-	-	-
Min Green *	7	12	7	12
Passage *	2.0	6.0	2.0	6.0
Max 1 *	25	90	30	90
Yellow Change	3.0	4.8	3.0	4.8
Red Clear	2.4	1.9	1.9	1.9
Added Initial *	-	2.5	-	2.5
Maximum Initial *	-	34	-	34
Time Before Reduction *	-	30	-	30
Time To Reduce *	-	60	-	60
Minimum Gap	-	3.0	-	3.0
Advance Walk	-	-	-	-
Non Lock Detector	X	-	X	-
Vehicle Recall	-	MIN RECALL	-	MIN RECALL
Dual Entry	-	-	-	-

* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

LEGEND



New Installation

Prepared in the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

NC 16 (Providence Rd S)
at
SR 1307 (Bonds Grove Church Rd)

Division 10 Union County Waxhaw

PLAN DATE: May 2026 REVIEWED BY: M.F. Cowhig

PREPARED BY: K. Singleton REVIEWED BY:

REVISIONS INIT. DATE

SCALE
0 40
1"=40'

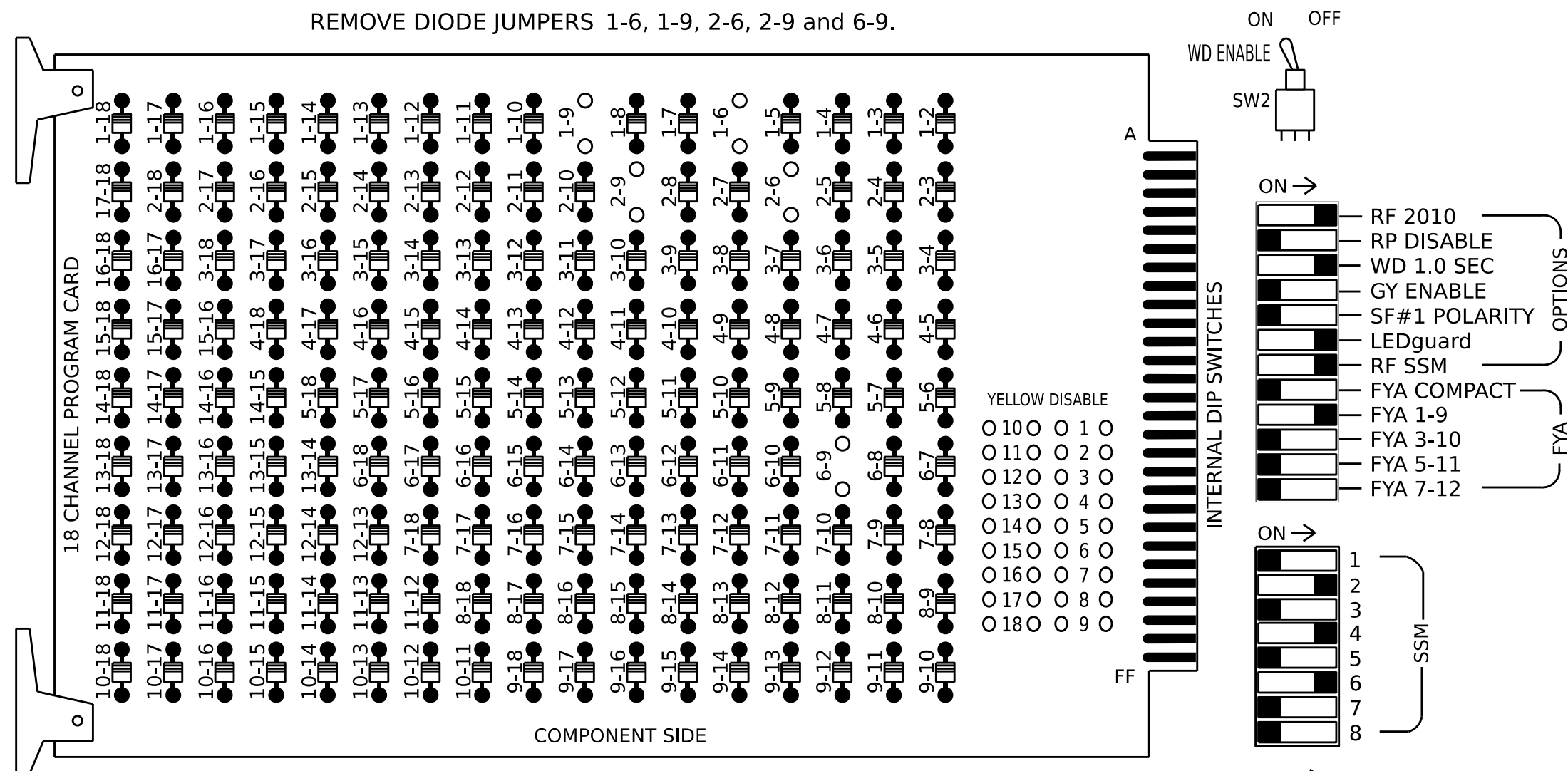
DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

SEAL
NORTH CAROLINA
PROFESSIONAL
SEAL
047223
ENGINEER
MATTHEW F. COWHIG

DocuSigned by:
Matthew F. Cowhig
05/28/2026
DATE
SIG. INVENTORY NO. 10-2629

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-6, 1-9, 2-6, 2-9 and 6-9.



REMOVE JUMPERS AS SHOWN

1. Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
2. Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
3. Ensure that the Red Enable is active at all times during normal operation.
4. Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

(front view)

[illegible]

EX. : 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
ST = STOP TIME

1. To prevent "flash-conflict" problems, insert red flash program blocks for all vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
2. Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
3. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.

Controller.....	2070LX
Cabinet.....	332 w/ Aux
Software.....	Q-Free MAXTIME
Cabinet Mount.....	Base
Output File Positions.....	18 With Aux. Output File
Load Switches Used.....	S1, S2, S5, S8, AUX S1
Phases Used.....	1, 2, 4, 6
Overlap "1".....	*
Overlap "2".....	Not Used
Overlap "3".....	Not Used
Overlap "4".....	Not Used

*See overlap programming detail on sheet 2

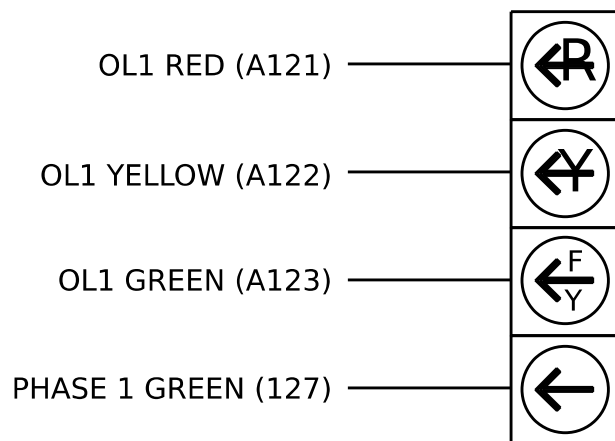
[illegible]

NU = Not Used

*Denotes install load resistor. See LOAD RESISTOR INSTALLATION DETAIL this sheet.

★See pictorial of head wiring in detail this sheet.

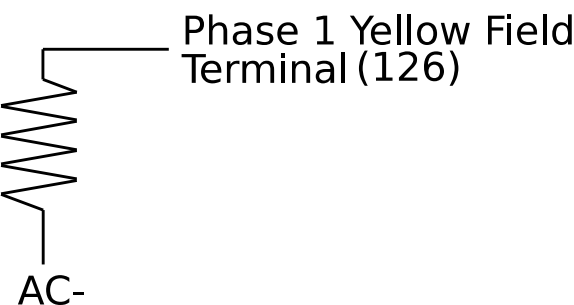
(wire signal head as shown)



11

(install resistor as shown)

ACCEPTABLE VALUES	
Value (ohms)	Wattage
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)

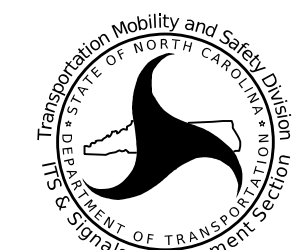


Electrical Detail - Sheet 1 of 2

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

Electrical and Programming

Prepared in the Offices of:



750 N. Greenfield Pkwy, Garner, NC 27529

NC 16 (Providence Rd S)
at
307 (Bonds Grove Church Rd)

Division 10 Union County Waxhaw

PLAN DATE:	May 2026
------------	----------

PREPARED BY: Tim Langston

REVISIONS

REVISIONS

No.	DATE

DATE

SIG INVENTORY NO 10-2629

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 10-2629
DESIGNED: May 2026
SEALED: 05/28/2026
REVISED: N/A

MAXTIME OVERLAP PROGRAMMING DETAIL
FOR DEFAULT PHASING

Front Panel
Main Menu >Controller >Overlap >Overlap Parameters/Overlap Timings

Web Interface
Home >Controller >Overlap Configuration >Overlaps

Overlap Plan 1

Overlap (Signal Head No.)	1 (11)
Type	FYA 4 - Section
Included Phases	2
Modifier Phases	1
Modifier Overlaps	-
Trail Green	0
Trail Yellow	0.0
Trail Red	0.0

OUTPUT CHANNEL CONFIGURATION

Front Panel
Main Menu >Controller >More>Channels>Channels Config

Web Interface
Home >Controller >Advanced IO>Channels>Channel Configuration

Channel Configuration

Channel	Control Type	Control Source	Flash Yellow	Flash Red	Flash Alt	MMU Channel
1	Phase Vehicle	1		X	X	1
2	Phase Vehicle	2		X		2
3	Phase Vehicle	3		X	X	3
4	Phase Vehicle	4		X		4
5	Phase Vehicle	5		X		5
6	Phase Vehicle	6		X	X	6
7	Phase Vehicle	7		X		7
8	Phase Vehicle	8		X	X	8
9	Overlap	1		X	X	9
10	Overlap	2		X	X	10
11	Overlap	3		X		11
12	Overlap	4		X		12
13	Phase Ped	2				13
14	Phase Ped	4				14
15	Phase Ped	6				15
16	Phase Ped	8				16
17	Overlap	5		X	X	17
18	Overlap	6		X		18

MAXTIME STARTUP AND SOFTWARE FLASH
PROGRAMMING DETAIL

Front Panel
Main Menu >Controller >Unit

Web Interface
Home >Controller >Unit

Modify parameters as shown below and save changes.

Start Up Parameters

StartUp Clearance Hold
6

Unit Flash Parameters

All Red Flash Exit Time
6

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 10-2629
DESIGNED: May 2026
SEALED: 05/28/2026
REVISED: N/A

Electrical Detail - Sheet 2 of 2

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

Electrical and Programming
Details For:

Prepared in the Offices of:

TRANSPORTATION MOBILITY AND SAFETY DIVISION

DEPARTMENT OF TRANSPORTATION

STATE OF NORTH CAROLINA

Signal Management Section

750 N. Greenfield Pkwy, Garner, NC 27529

NC 16 (Providence Rd S)
at
SR 1307 (Bonds Grove Church Rd)

Division 10Union CountyWaxhaw

PLAN DATE: May 2026REVIEWED BY:

PREPARED BY: Tim LangstonREVIEWED BY:

REVISIONSINIT.DATE

SEAL
NORTH CAROLINA
PROFESSIONAL
SEAL
031001
ENGINEER
D. TODD JOYCE

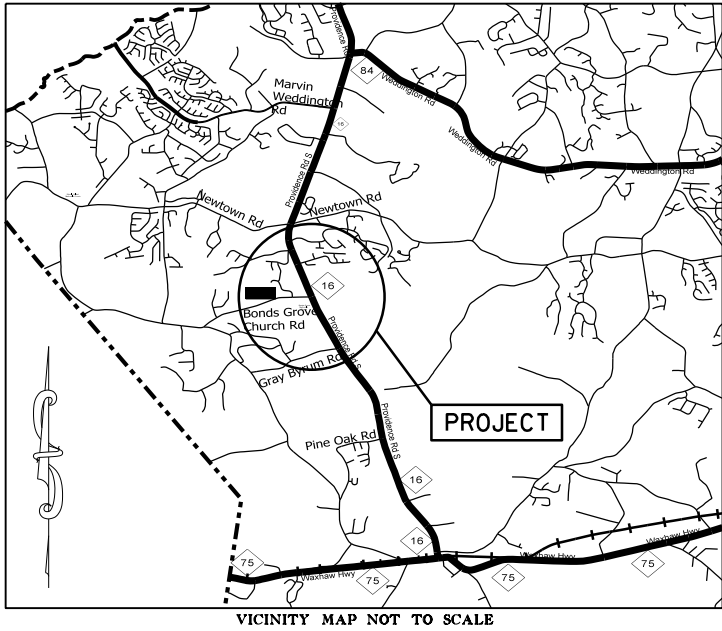
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D. Todd Joyce05/29/2026

SIG. INVENTORY NO. 10-2629

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TIP PROJECT: U-5769AA

PROJECT: 50182.3.3



VICINITY MAP NOT TO SCALE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

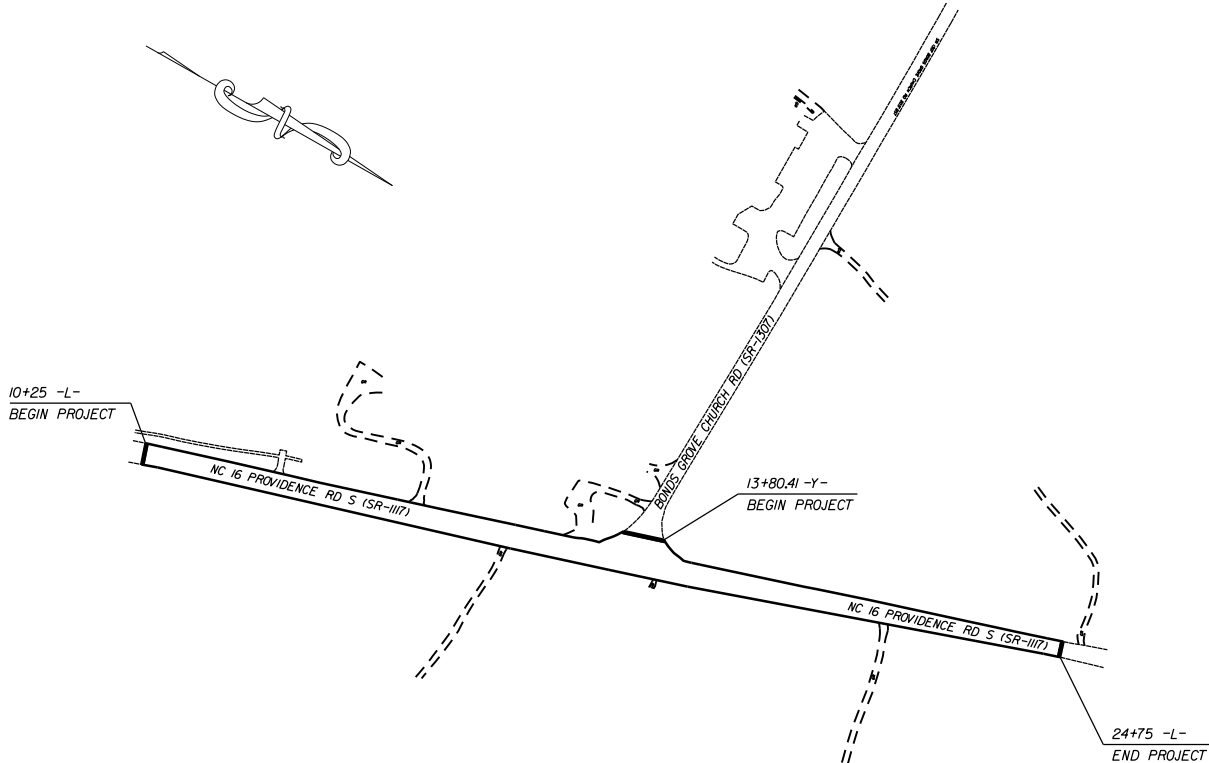
UTILITIES BY OTHERS PLANS
UNION COUNTY

LOCATION: INTERSECTION OF NC 16 PROVIDENCE RD. S. (SR-1117) AND
BONDS GROVE CHURCH RD. (SR-1307)

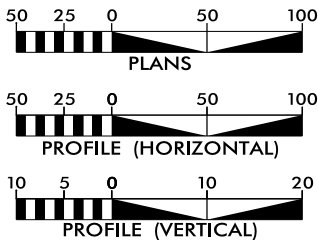
TYPE OF WORK: POWER, COMMUNICATIONS, AND GAS RELOCATION.

T.I.P. NO.	SHEET NO.
50182.3.3	UO-1

NOTE:
ALL UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS.
NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THIS SHEET.



GRAPHIC SCALES



INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
UO-1	TITLE SHEET
UO-2	UBO PLAN SHEETS

UTILITY OWNERS WITH CONFLICTS

- (A) POWER TRANSMISSION - UION POWER
(B) GAS TRANSMISSION- PIEDMONT NATURAL GAS

PREPARED IN THE OFFICE OF:

DDC UNIT DIVISION 10
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS



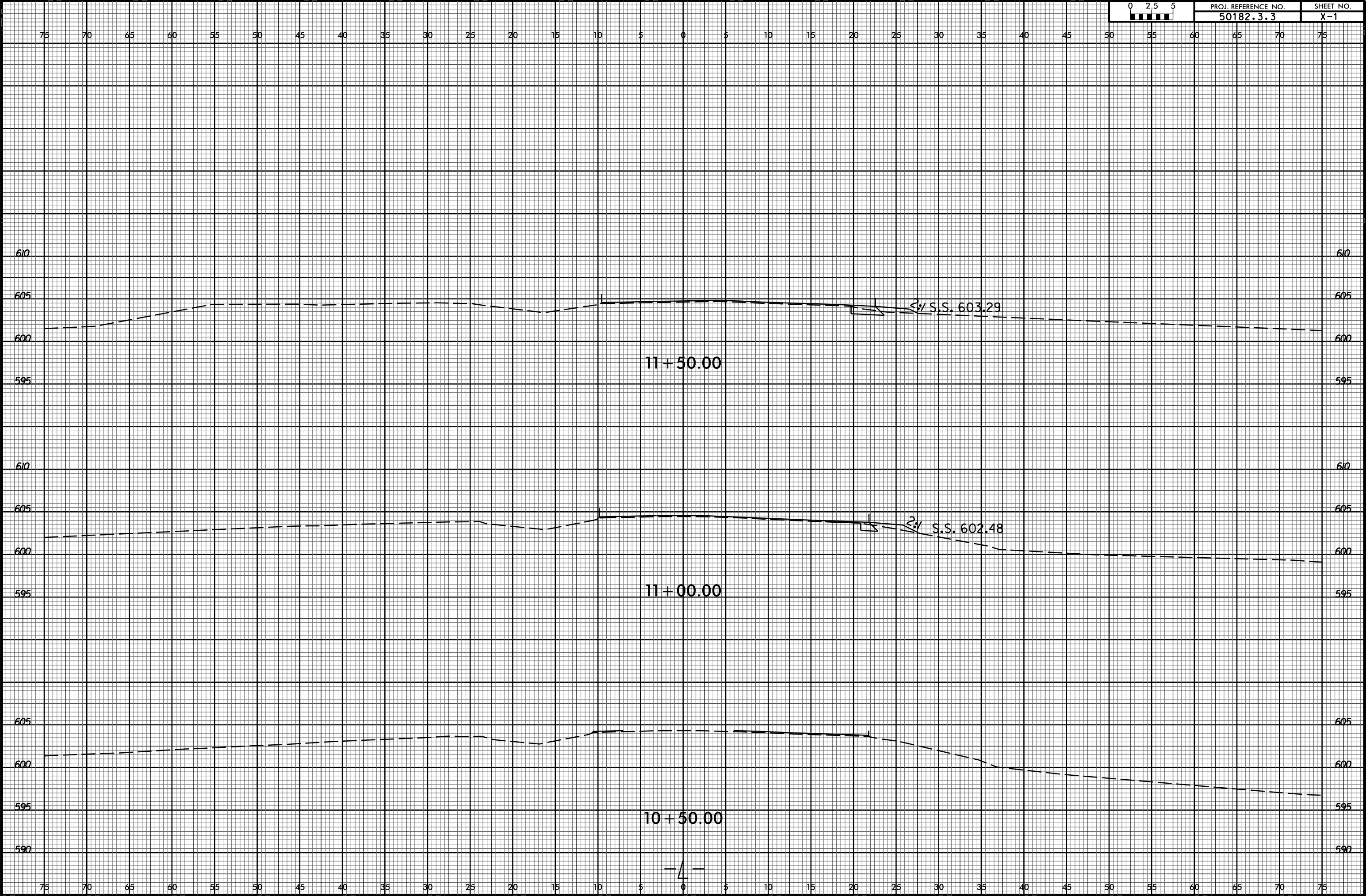
DIVISION 10
UTILITIES UNIT
716 W. MAIN ST.
ALBEMARLE, NC 28001
PHONE (704) 983-4400

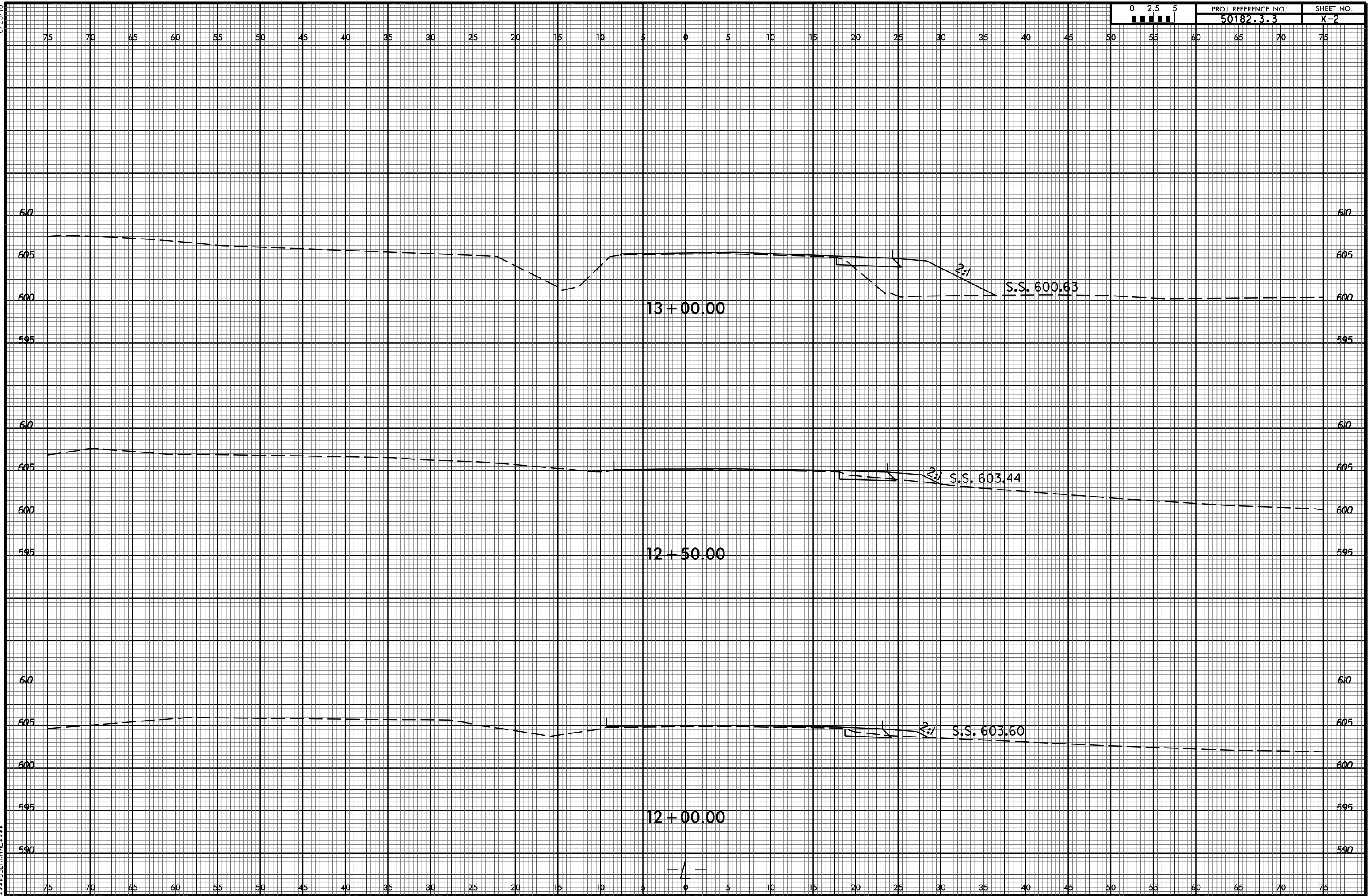
ADAM PRESLAR ASSISTANT UTILITIES ENGINEER
ADAM PRESLAR UTILITIES COORDINATOR

6/23/16

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0 2.5 5 ■■■■■	PROJ. REFERENCE NO. 50182.3.3	SHEET NO. X-1
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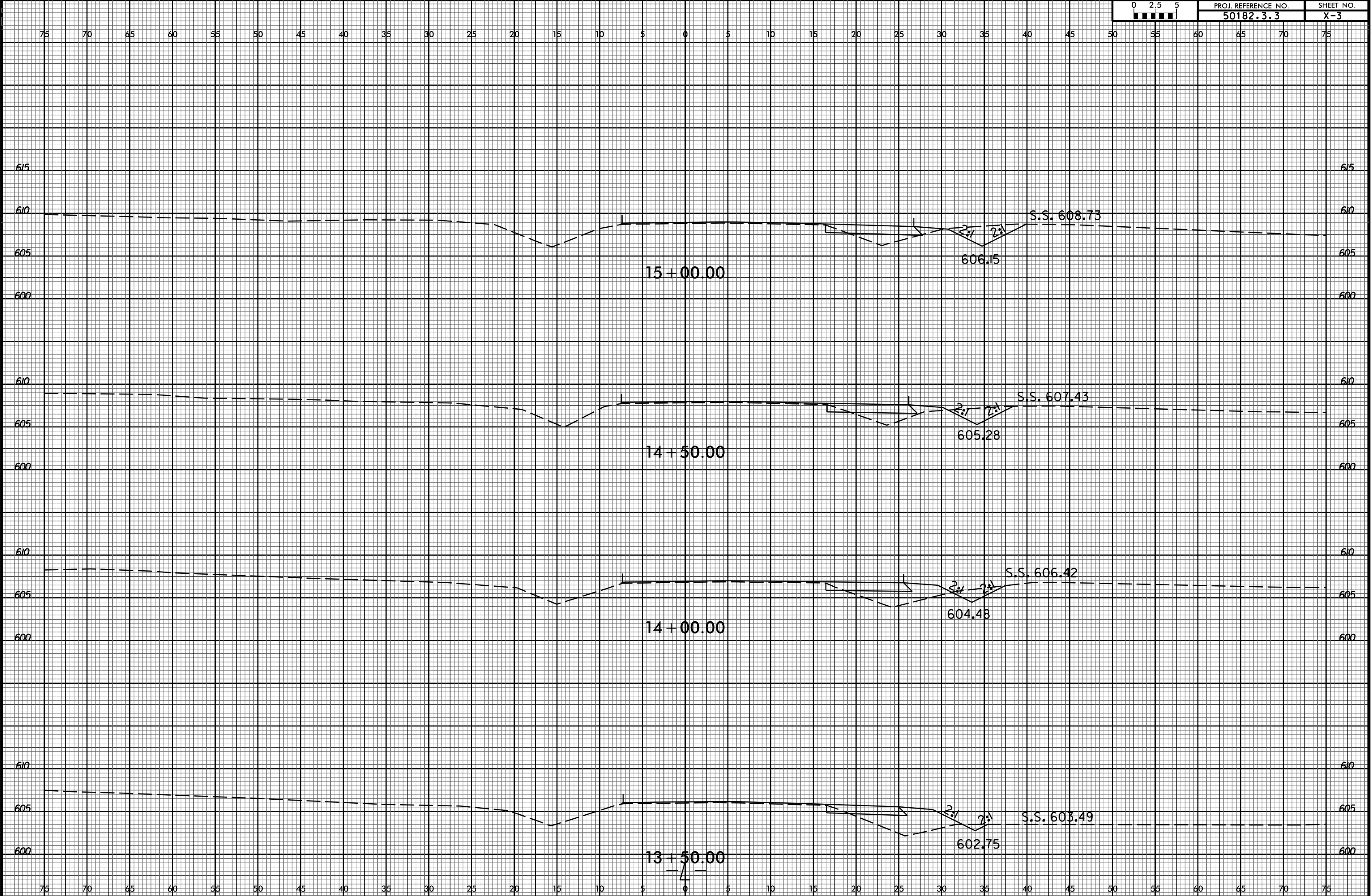




6/23/16

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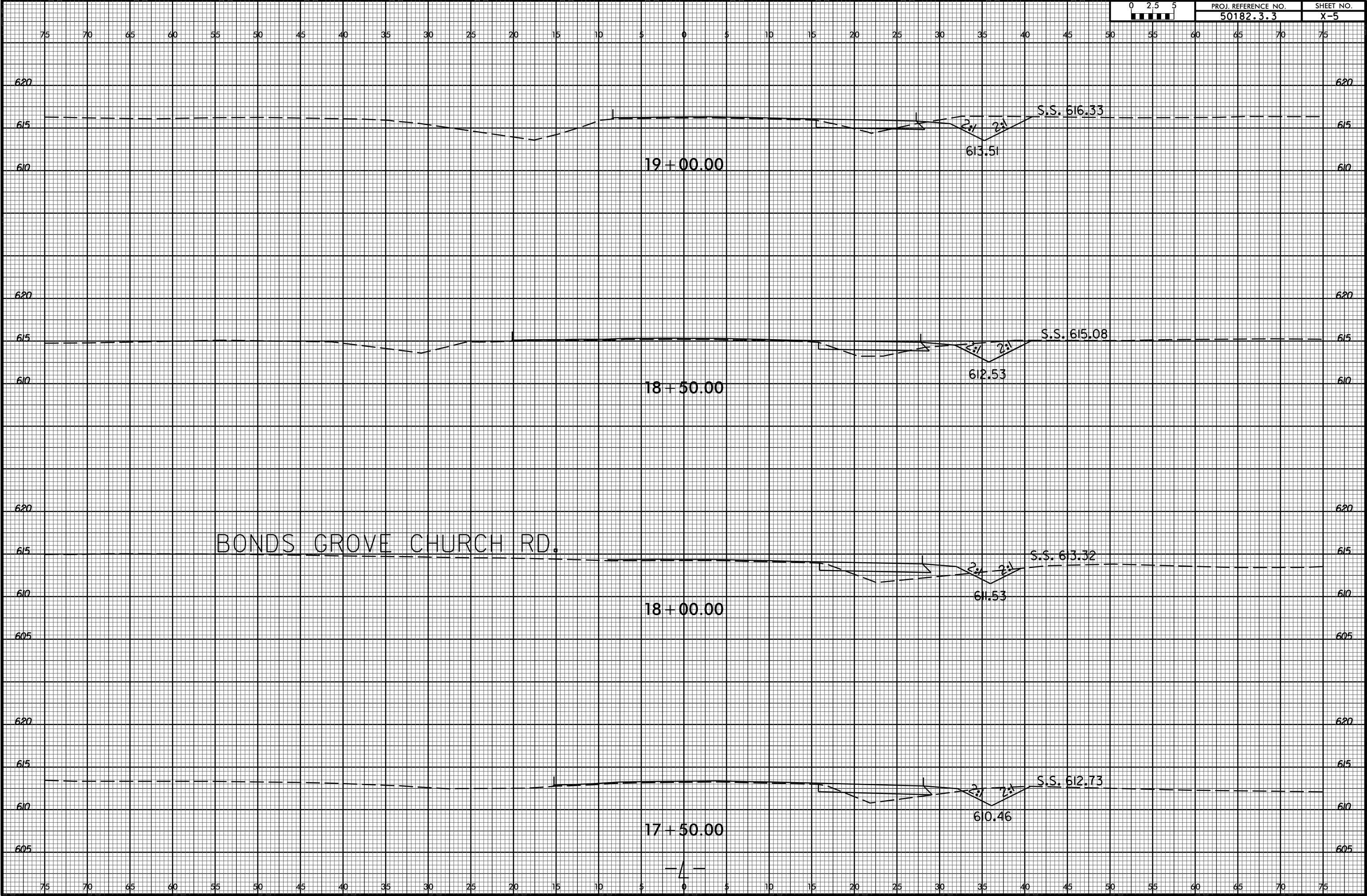
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	50182.3.3	X-3





6/23/16

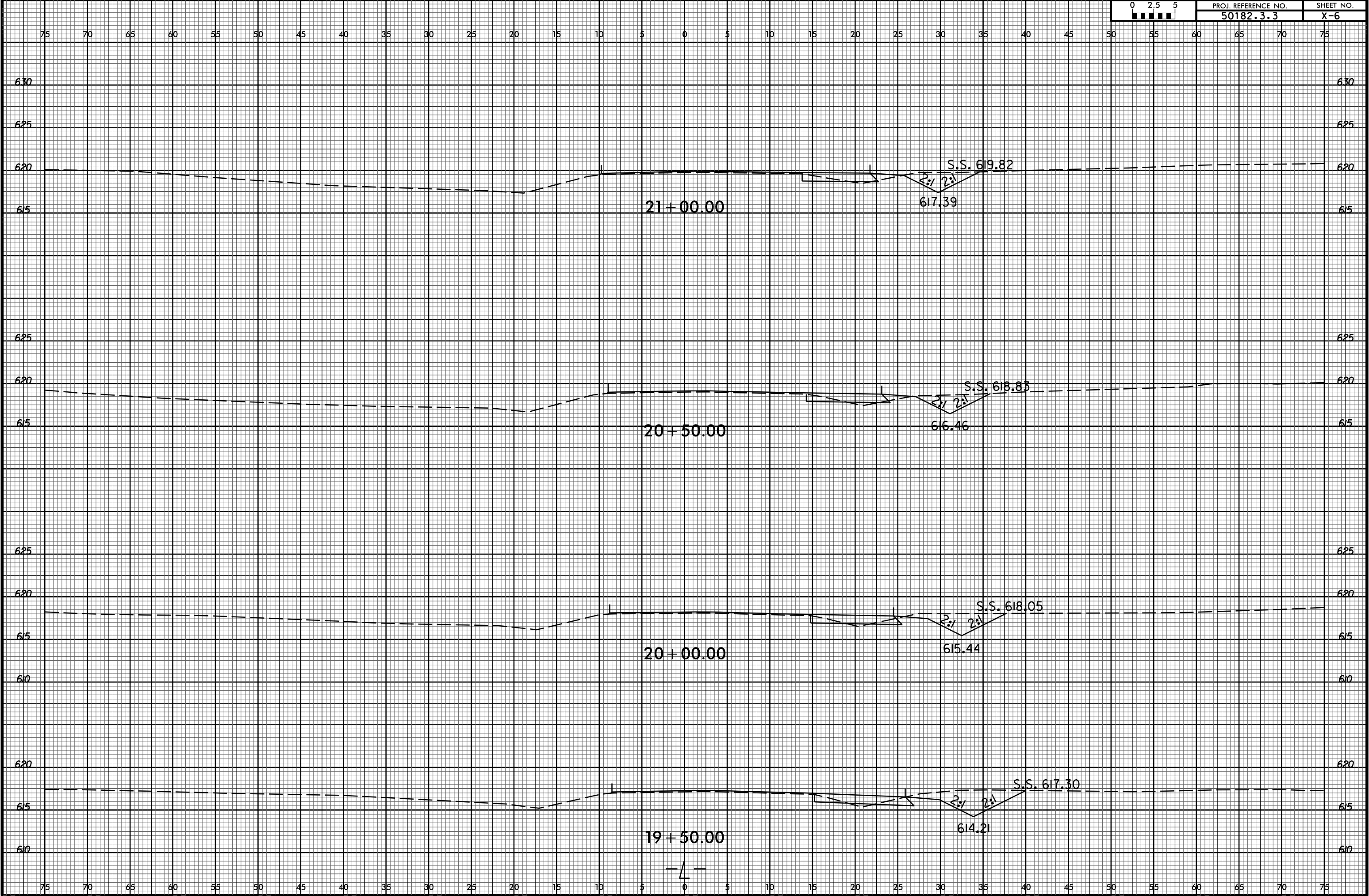
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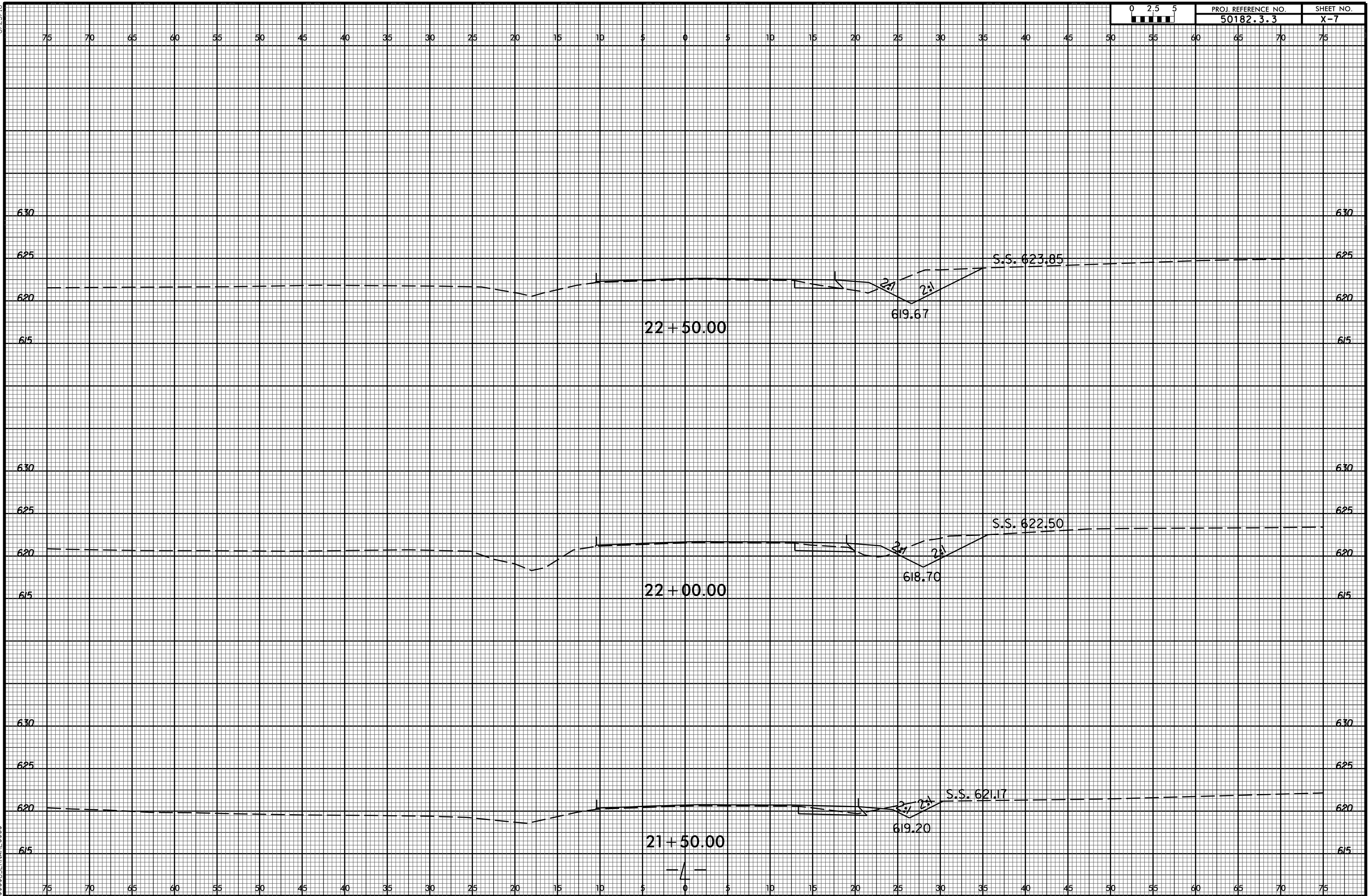


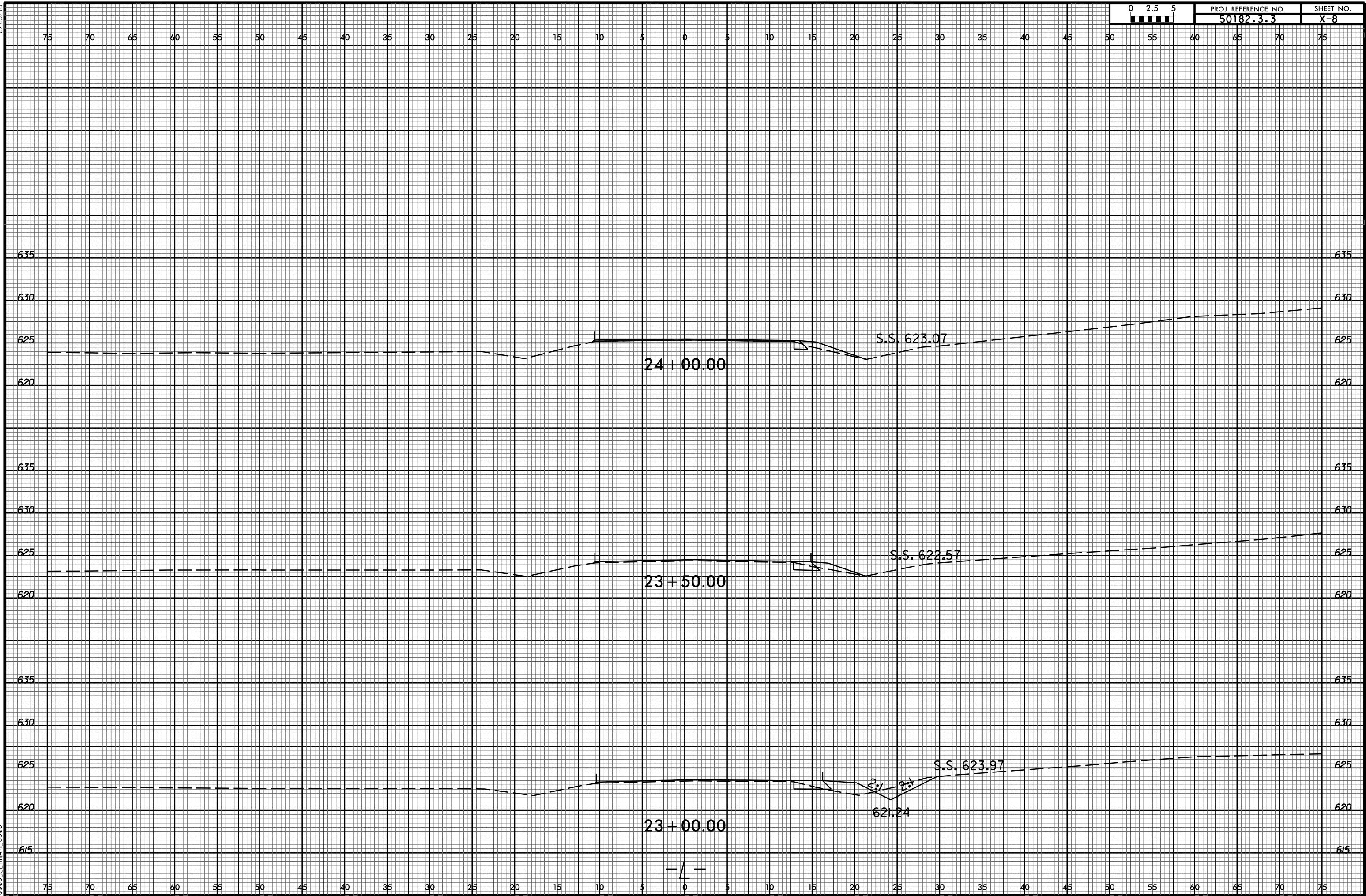
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6/23/16

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	50182.3.3	X-9

