

PROJECT: TIP:SM-6110E

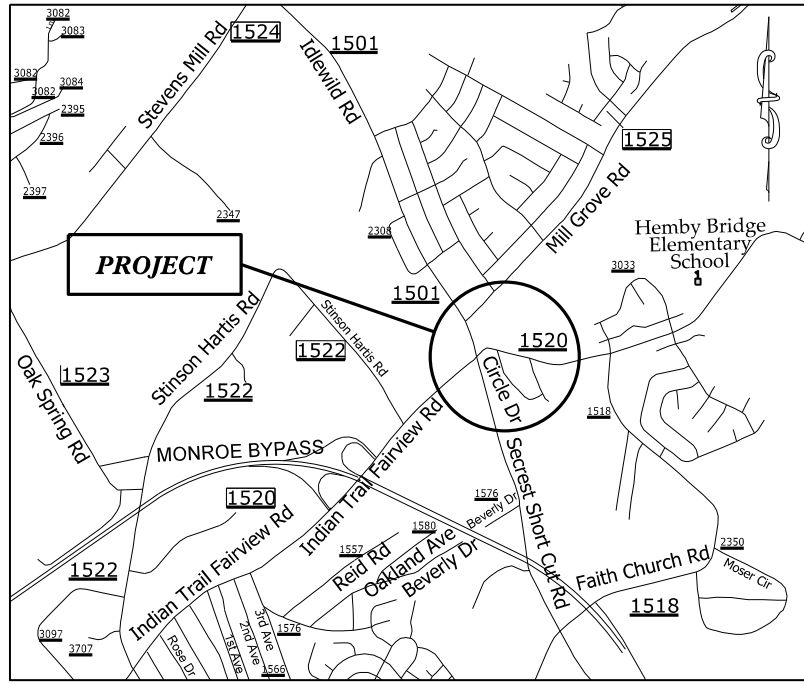
PROJECT: 50565

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	50565	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
50565		P.E.	
50565		R/W	
50565		CONST.	

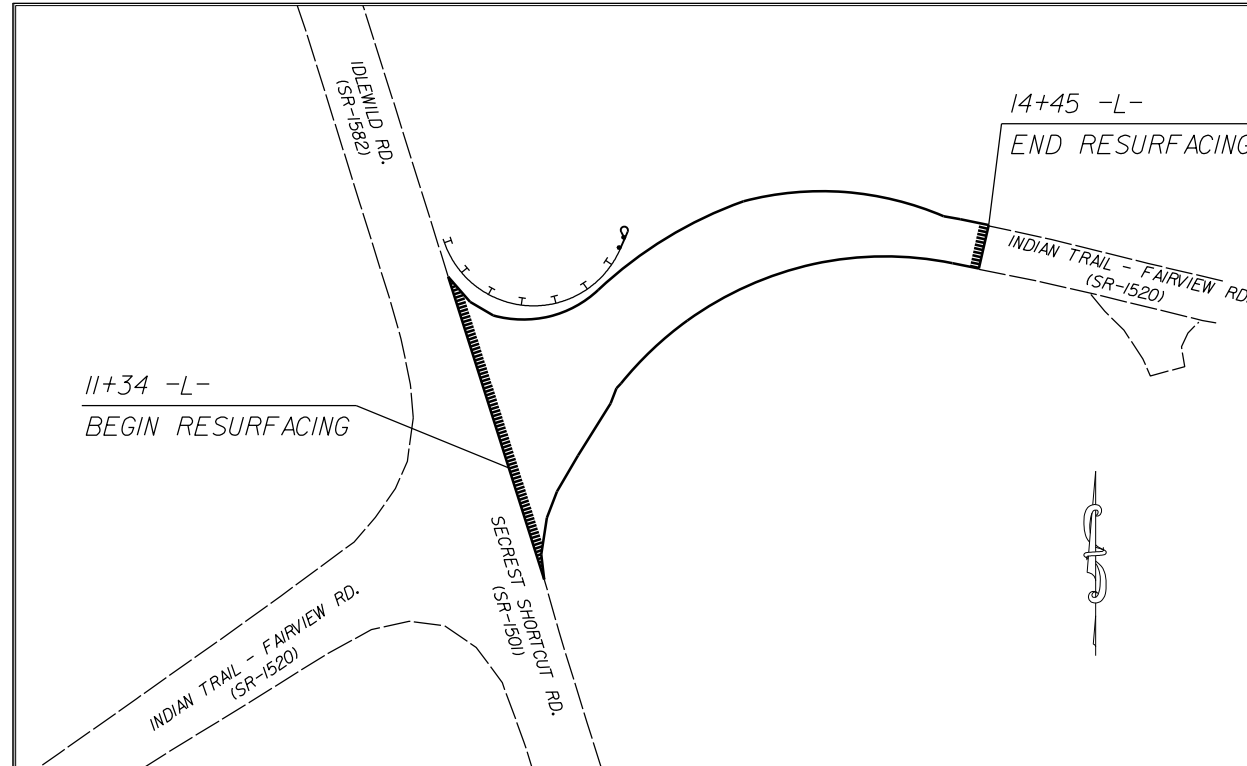
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
**UNION COUNTY**

**LOCATION:** INTERSECTION OF INDIAN TRAIL-FAIRVIEW RD. (SR-1520) AND  
IDLEWILD RD. (SR-1582) AND SECREST SHORTCUT RD. (SR-1501)

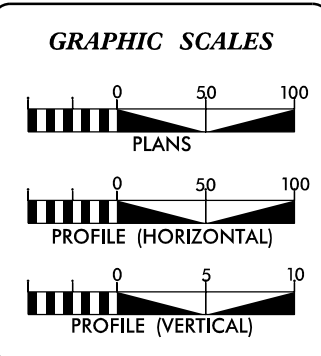
**TYPE OF WORK:** GRADING, PAVING, MILLING, GUARDRAIL, AND THERMOPLASTIC PAVEMENT MARKINGS



VICINITY MAP NOT TO SCALE



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



**DESIGN DATA**

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

**PROJECT LENGTH**

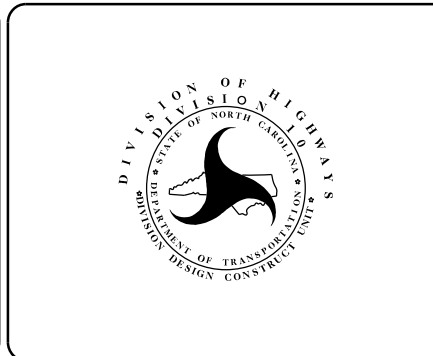
LENGTH OF ROADWAY PROJECT 50565	=	0.06	MILES
TOTAL LENGTH OF STATE PROJECT 50565	=	0.06	MILES

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

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2024 STANDARD SPECIFICATIONS

<b>RIGHT OF WAY DATE:</b> _____	<b>DONALD HARWARD</b> PROJECT ENGINEER
<b>LETTING DATE:</b> JUNE 19, 2024	<b>TRAVIS LOWDER</b> PROJECT DESIGN ENGINEER





















**ROADWAY DESIGN ENGINEER**  
05/03/2024

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	----- 
Existing Fence Line	----- 
Proposed Woven Wire Fence	----- 
Proposed Chain Link Fence	----- 
Proposed Barbed Wire Fence	----- 
Existing Wetland Boundary	----- 
Proposed Wetland Boundary	----- 
Existing Endangered Animal Boundary	----- 
Existing Endangered Plant Boundary	----- 
Existing Historic Property Boundary	----- 
Known Contamination Area: Soil	----- 
Potential Contamination Area: Soil	----- 
Known Contamination Area: Water	----- 
Potential Contamination Area: Water	----- 
Contaminated Site: Known or Potential	----- 

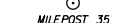
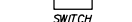
## BUILDINGS AND OTHER CULTURE:

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	----- 
Buffer Zone 1	----- 
Buffer Zone 2	----- 
Flow Arrow	----- 
Disappearing Stream	----- 
Spring	----- 
Wetland	----- 
Proposed Lateral, Tail, Head Ditch	----- 
False Sump	----- 













## RAILROADS:

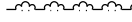


Standard Gauge	----- 
RR Signal Milepost	----- 
Switch	----- 
RR Abandoned	----- 
RR Dismantled	----- 

## RIGHT OF WAY & PROJECT CONTROL:


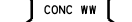
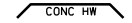


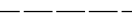
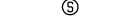
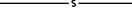

Primary Horiz Control Point	----- 
Primary Horiz and Vert Control Point	----- 
Secondary Horiz and Vert Control Point	----- 
Vertical Benchmark	----- 
Existing Right of Way Monument	----- 
Proposed Right of Way Monument (Rebar and Cap)	----- 
Proposed Right of Way Monument (Concrete)	----- 
Existing 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	----- 
Proposed Slope Stakes Fill	----- 
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	----- 
Bridge Wing Wall, Head Wall and End Wall	----- 
MINOR:	
Head and End Wall	----- 
Pipe Culvert	----- 
Footbridge	----- 
Drainage Box: Catch Basin, DI or JB	----- 
Paved Ditch Gutter	----- 
Storm Sewer Manhole	----- 
Storm Sewer	----- 

## 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)*	----- 
U/G Power Line (SUE - LOS C)*	----- 
U/G Power Line (SUE - LOS D)*	----- 











## 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)*	----- 
U/G Telephone Cable (SUE - LOS C)*	----- 
U/G Telephone Cable (SUE - LOS D)*	----- 
U/G Telephone Conduit (SUE - LOS B)*	----- 
U/G Telephone Conduit (SUE - LOS C)*	----- 
U/G Telephone Conduit (SUE - LOS D)*	----- 
U/G Fiber Optics Cable (SUE - LOS B)*	----- 
U/G Fiber Optics Cable (SUE - LOS C)*	----- 
U/G Fiber Optics Cable (SUE - LOS D)*	----- 








## 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)*	----- 
U/G Water Line (SUE - LOS C)*	----- 
U/G Water Line (SUE - LOS D)*	----- 
Above Ground Water Line	----- 









## 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)*	----- 
U/G TV Cable (SUE - LOS C)*	----- 
U/G TV Cable (SUE - LOS D)*	----- 
U/G Fiber Optic Cable (SUE - LOS B)*	----- 
U/G Fiber Optic Cable (SUE - LOS C)*	----- 
U/G Fiber Optic Cable (SUE - LOS D)*	----- 












## GAS:

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

## SANITARY SEWER:

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

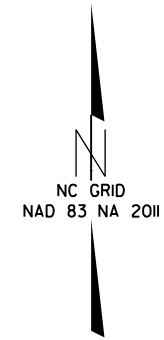
## MISCELLANEOUS:

Utility Pole	----- 
Utility Pole with Base	----- 
Utility Located Object	----- 
Utility Traffic Signal Box	----- 
Utility Unknown U/G Line (SUE - LOS B)*	----- 
U/G Tank; Water, Gas, Oil	----- 
Underground Storage Tank, Approx. Loc.	----- 
A/G Tank; Water, Gas, Oil	----- 
Geoenvironmental Boring	----- 
Abandoned According to Utility Records	----- 
End of Information	----- 

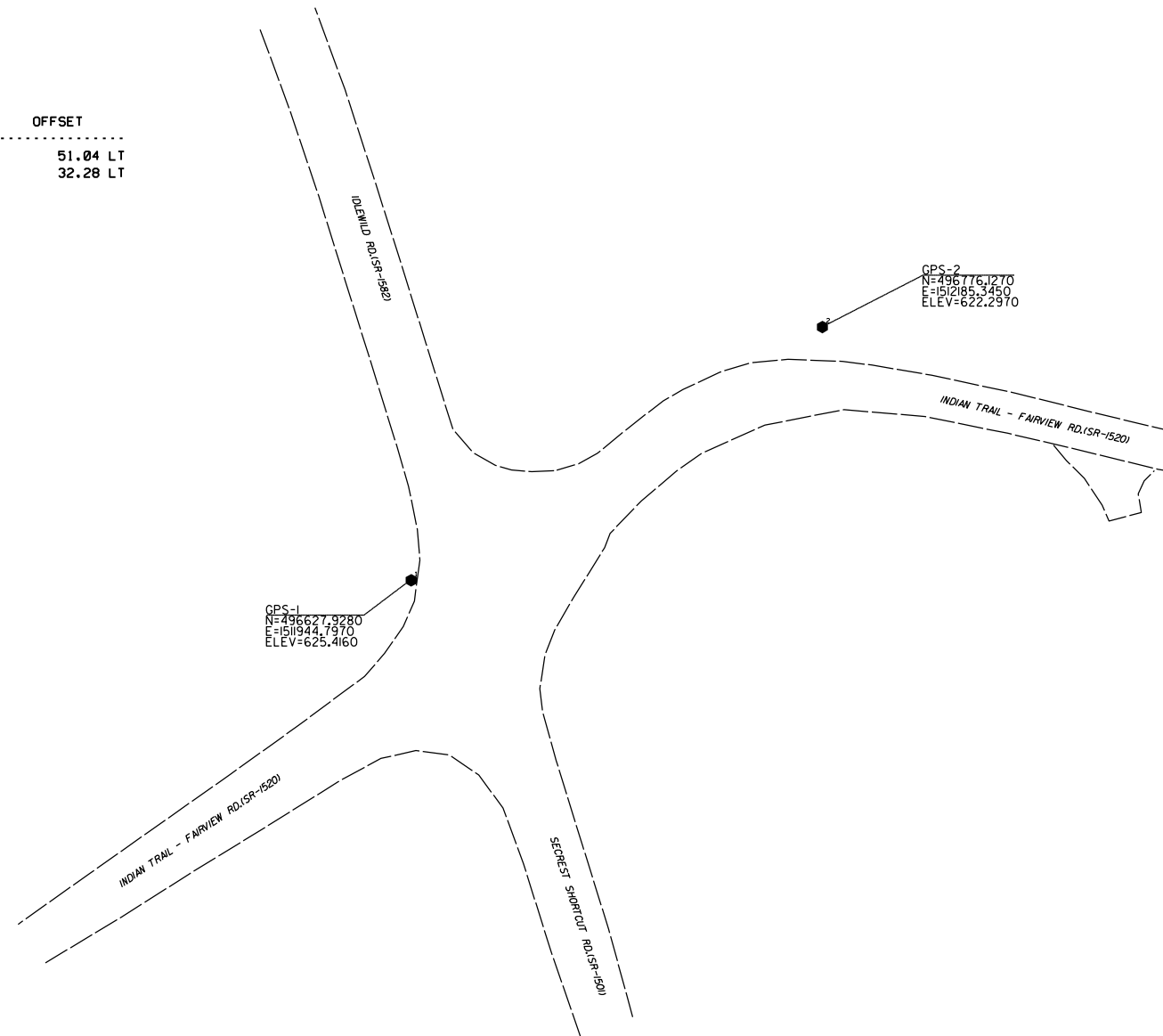
AATUR  
E.O.I.

# SURVEY CONTROL SHEET

PROJECT NO.	SHEET NO.
50565	1B
F.A. PROJECT NO. _____	



BL	POINT	DESC.	NORTH	EAST	ELEVATION	L. STATION	OFFSET
1			496627.9280	1511944.7970	625.42	11+02.08	51.04 LT
2			496776.1270	1512185.3450	622.30	13+68.35	32.28 LT



**DATUM DESCRIPTION**

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "BL-1" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 496627.928(ft) EASTING: 1511944.797(ft) ELEVATION: 625.416(ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99987592

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "BL-1" TO -L- STATION 10+00 IS  
S 25° 09' 28" W 110.75'

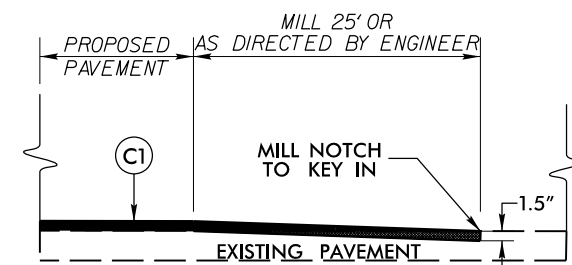
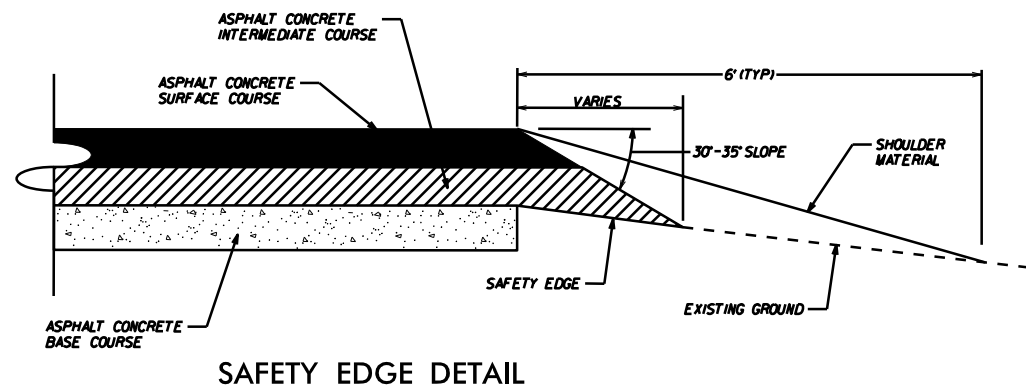
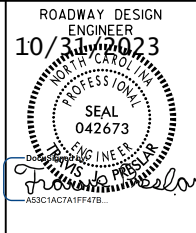
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES  
VERTICAL DATUM USED IS NAVD 88

**NOTES :**

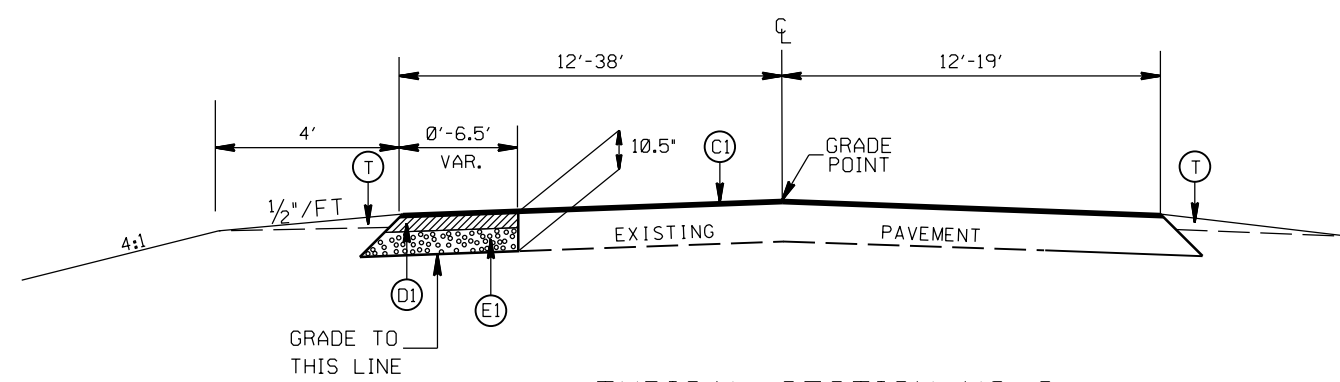
1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED BY THE DIVISION IO DDC UNIT. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE DIVISION IO DDC UNIT.

*EXTEND RIGHT TURN LANE ON  
INDIAN TRAIL-FAIRVIEW RD.(SR-1520) AT  
IDLEWILD RD.(SR-1582) AND  
SECREST SHORTCUT RD.(SR-1501)*

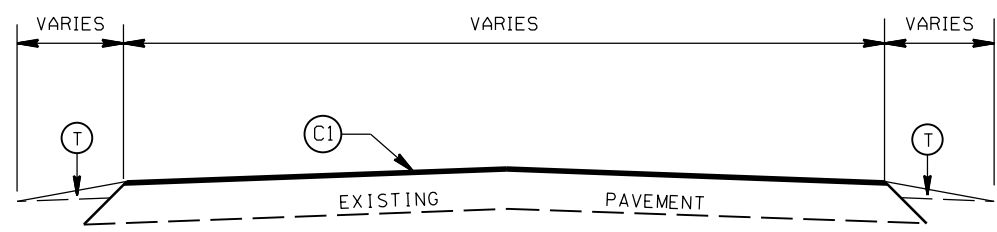
SCALE	1"=50'		REVISIONS
DATE	9-2023		
DWG. BY	VSC		
DESIGN BY	TBL		
APPROVED	JDH		



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



TYPICAL SECTION NO. 2  
STA. 11+89.80 TO 14+20 -L-



TYPICAL SECTION NO. 1  
STA. 11+34 TO 11+89.80 -L-  
STA. 14+20 TO 14+45 -L-

PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 1½" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(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

EXTEND RIGHT TURN LANE ON  
INDIAN TRAIL-FAIRVIEW RD.(SR-1520) AT  
IDLEWILD RD.(SR-1582) AND  
SECRET SHORTCUT RD.(SR-1501)

SCALE	1"=50'		REVISIONS
DATE	10-2023		
DWG. BY	VSC		
DESIGN BY	TBL		
APPROVED	JDH		

PROJECT NO.	SHEET NO.
50565	2A
F.A. PROJECT NO.	


ROADWAY DESIGN  
ENGINEER  
10/31/2023  
NORTH CAROLINA  
PROFESSIONAL  
SEAL  
042673  
J. PRESLEY  
AS3C1ACTA1FF47B...

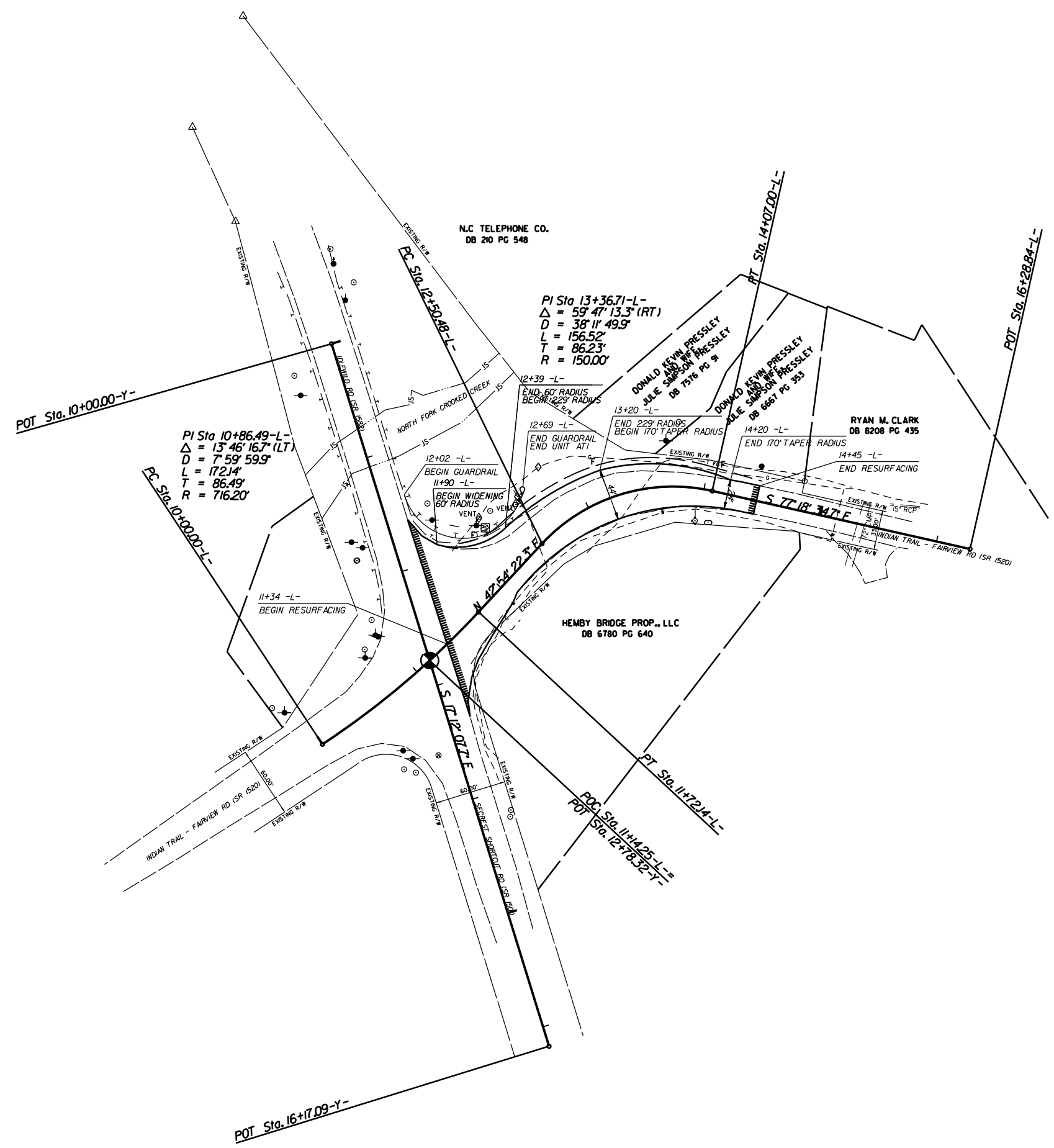
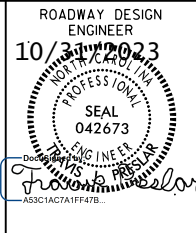
"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.  
TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.  
FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.  
W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.  
G = GATING IMPACT ATTENUATOR TYPE 350  
NG = NON-GATING IMPACT ATTENUATOR TYPE 350

**GUARDRAIL SUMMARY**


SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH		W		ANCHORS										IMPACT ATTENUATOR TYPE 350			SINGLE FACED GUARDRAIL	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS							
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	XI MOD	XI	GRAU 350	M-350	XIII	CAT-1	VI MOD	BIC	AT-1	EA	G	NG												
-L-	12+02	12+69	LT		125'				3'-6" to 9'-0"																										145'			TIE TO EXISTING GUARDRAIL

EXTEND RIGHT TURN LANE ON  
INDIAN TRAIL-FAIRVIEW RD.(SR-1520) AT  
IDLEWILD RD.(SR-1582) AND  
SECRET SHORTCUT RD.(SR-1501)

SCALE	r=50'		REVISIONS
DATE	9-2023		
DWG. BY	TBL		
DESIGN BY	TBL		
APPROVED	JDH		

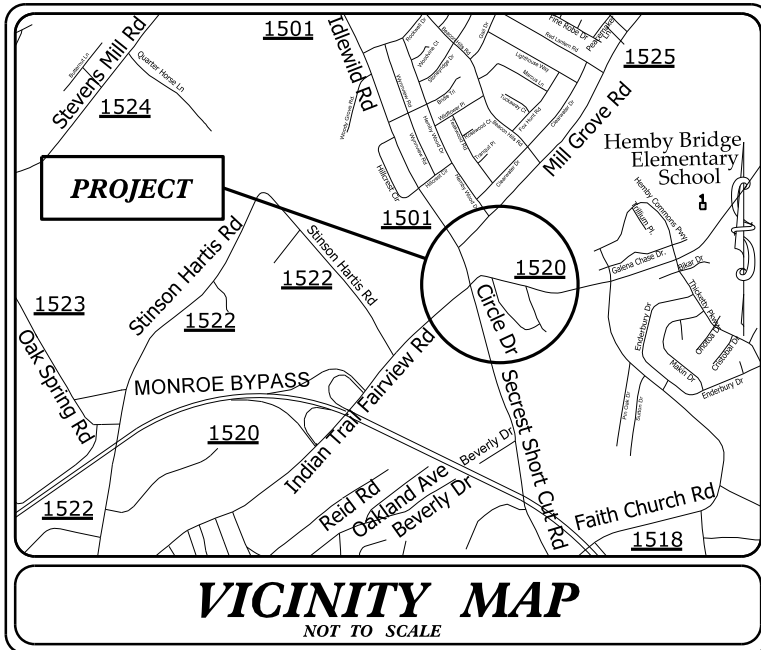


NOTE: INCIDENTAL MILL APPROX. 25' AT EACH TIE IN TO PROVIDE A SMOOTH TRANSITION TO THE EXISTING ASPHALT PAVEMENT.

EXTEND RIGHT TURN LANE ON INDIAN TRAIL - FAIRVIEW RD. (SR-1520) AT IDLEWILD RD. (SR-1582) AND SECREST SHORTCUT RD. (SR-1501)			REVISIONS
SCALE	r=50'		
DATE	9-2023		
DWG. BY	TBL		
DESIGN BY	TBL		
APPROVED	JDH		

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	50565	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
50565		P.E.	
50565		R.W.	
50565		CONST.	

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



**EROSION AND SEDIMENT CONTROL MEASURES**

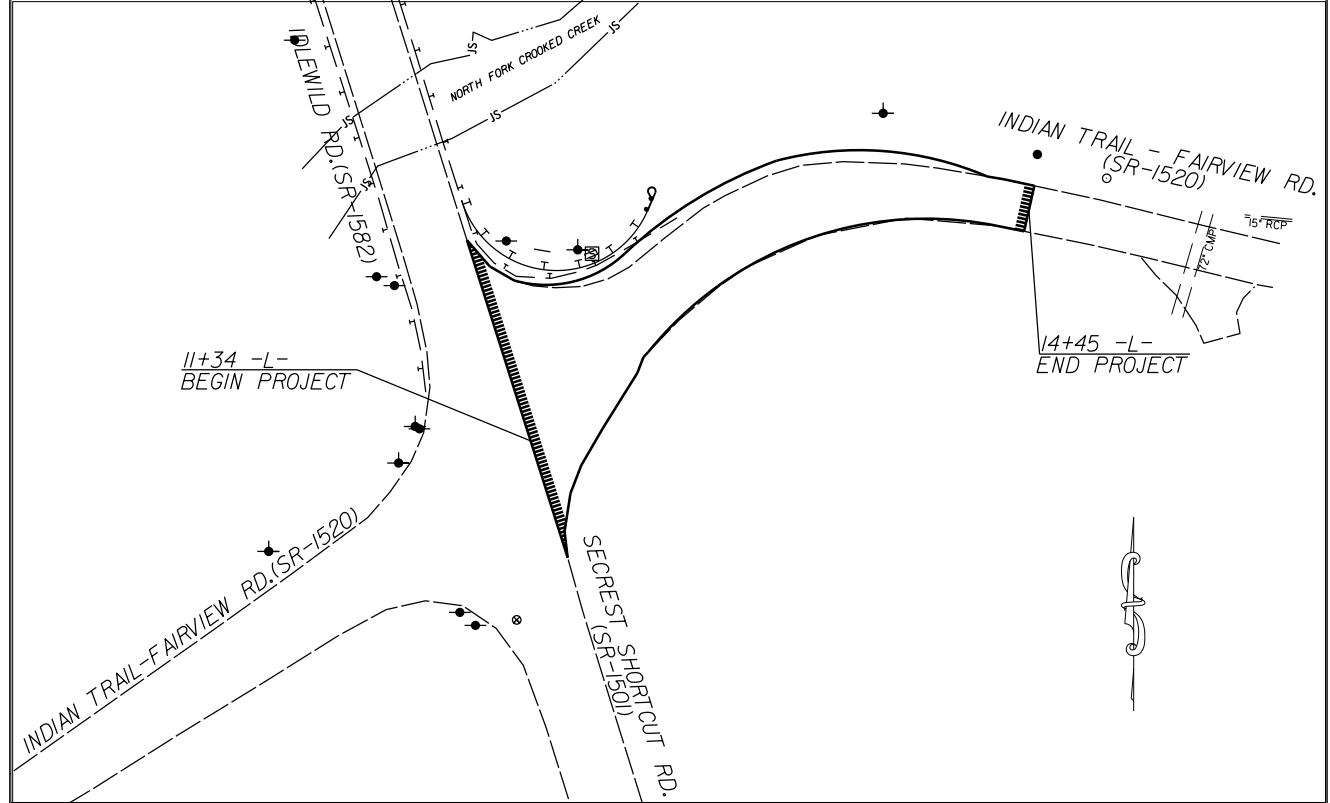
Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	---
1630.05	Temporary Diversion	--->
1605.01	Temporary Silt Fence	--- --- ---
1606.01	Special Sediment Control Fence	--- --- --- --- ---
1622.01	Temporary Berms and Slope Drains	--- --- --- --- ---
1630.02	Silt Basin Type B	--- --- --- --- ---
1633.01	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	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	--- --- --- --- ---
	Tiered Skimmer Basin	--- --- --- --- ---
	Infiltration Basin	--- --- --- --- ---

TIP: SM-6110E

PROJECT: 50565

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

**-INSTALL PERIMETER EROSION CONTROL MEASURES DURING INITIAL CLEARING PHASE**



**HIGH QUALITY WATER(S) EXIST ON THIS PROJECT**

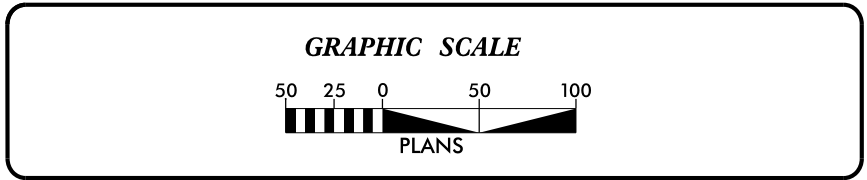
High Quality Water Zone(s) Exist  
From Sta. -L- 11+34  
to Sta. -L- 14+45  
Refer To E. C. Special Provisions for Special Considerations.

**ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT**

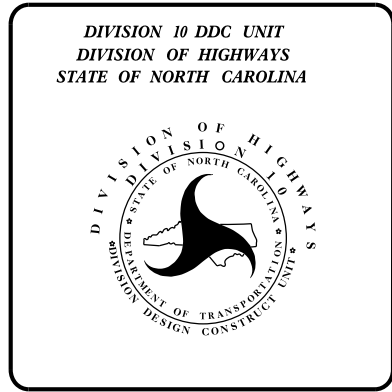
Refer To E. C. Special Provisions for Special Considerations.

**303(d) IMPAIRED WATER(S) EXIST ON THIS PROJECT**

303(d) Impaired Water Zone(s) Exist  
From Sta. -L- 11+34  
to Sta. -L- 14+45  
Refer To E. C. Special Provisions for Special Considerations.



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

**2024 STANDARD SPECIFICATIONS**

Designed by:  
**TRAVIS LOWDER** 4395  
NAME LEVEL III CERTIFICATION NO.

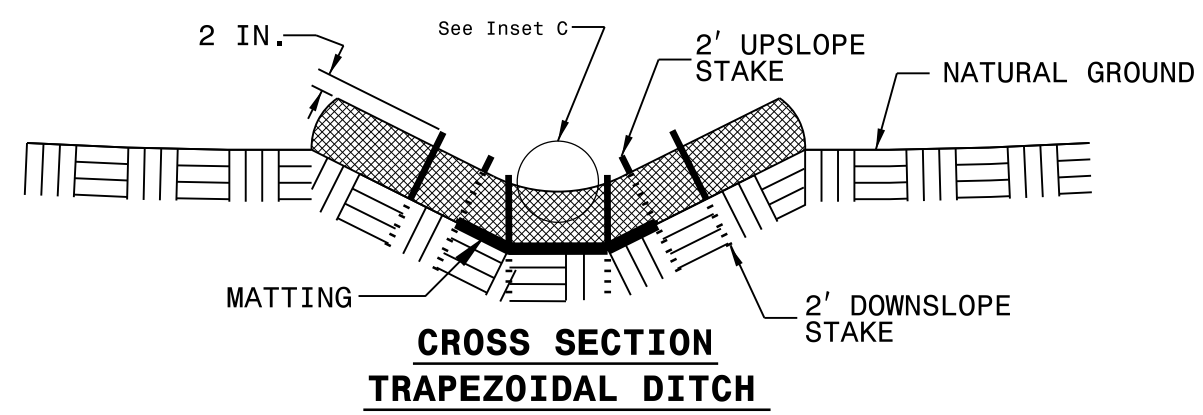
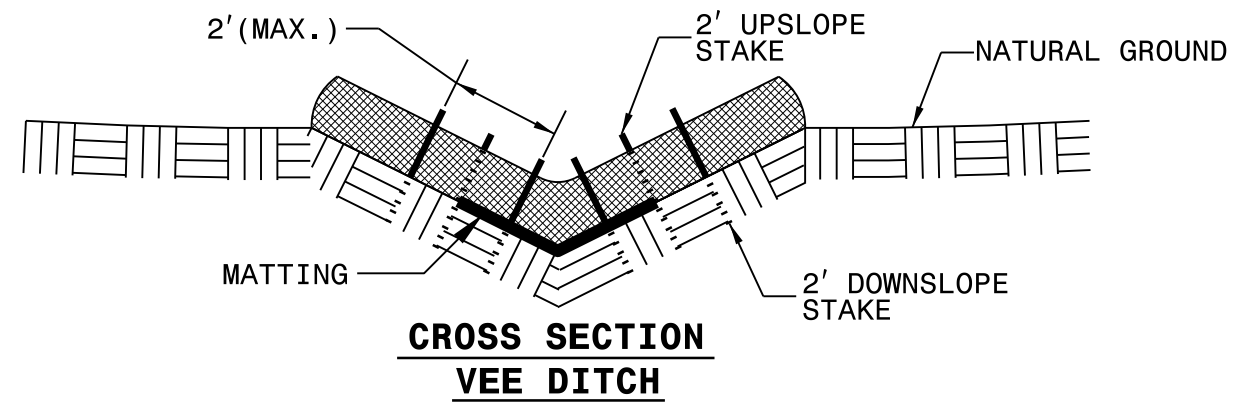
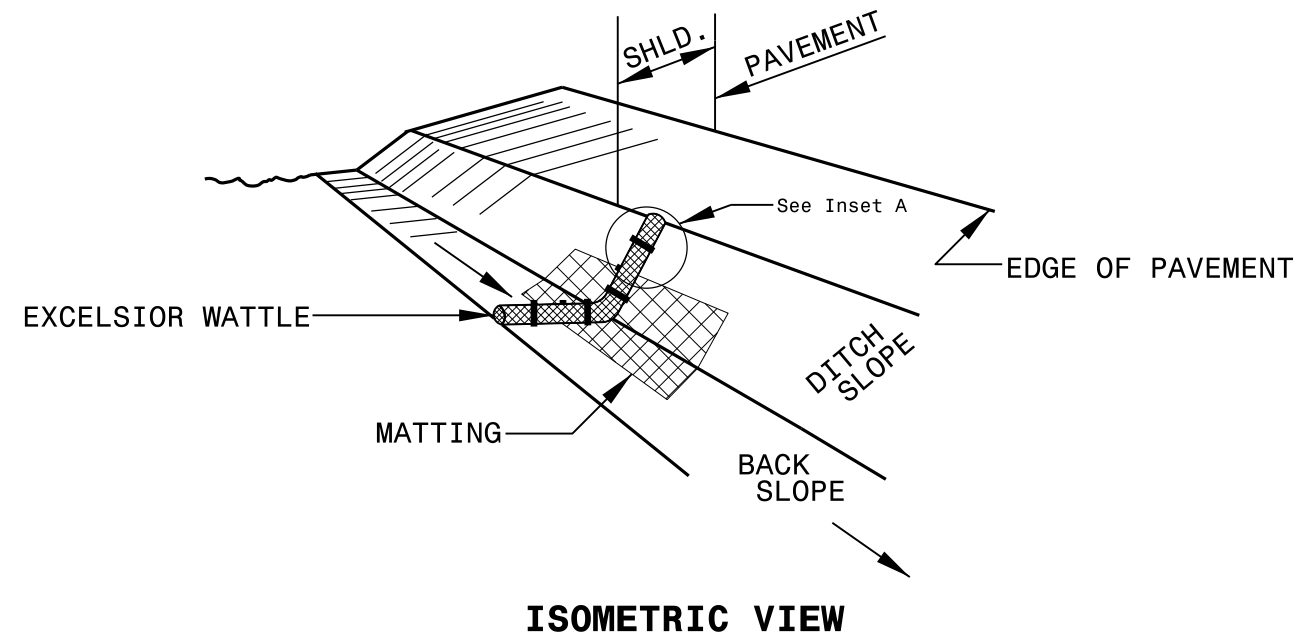
Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 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 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	1634.01 Temporary Rock Sediment Dam Type A
1630.02 Silt Basin Type J	1634.02 Temporary Rock Sediment Dam Type J
1630.03 Temporary Silt Ditch	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.04 Stilling Basin	1635.02 Rock Pipe Inlet Sediment Trap Type J
1630.05 Temporary Diversion	1640.01 Coir Fiber Jaffle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

15 SEP 2023 10:48 S:\projects\50565\10\eroseon\SM-6110E\Indian Trail\Fairview\ddc\Secret Short Cut EC.tsh.dgn

# 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.

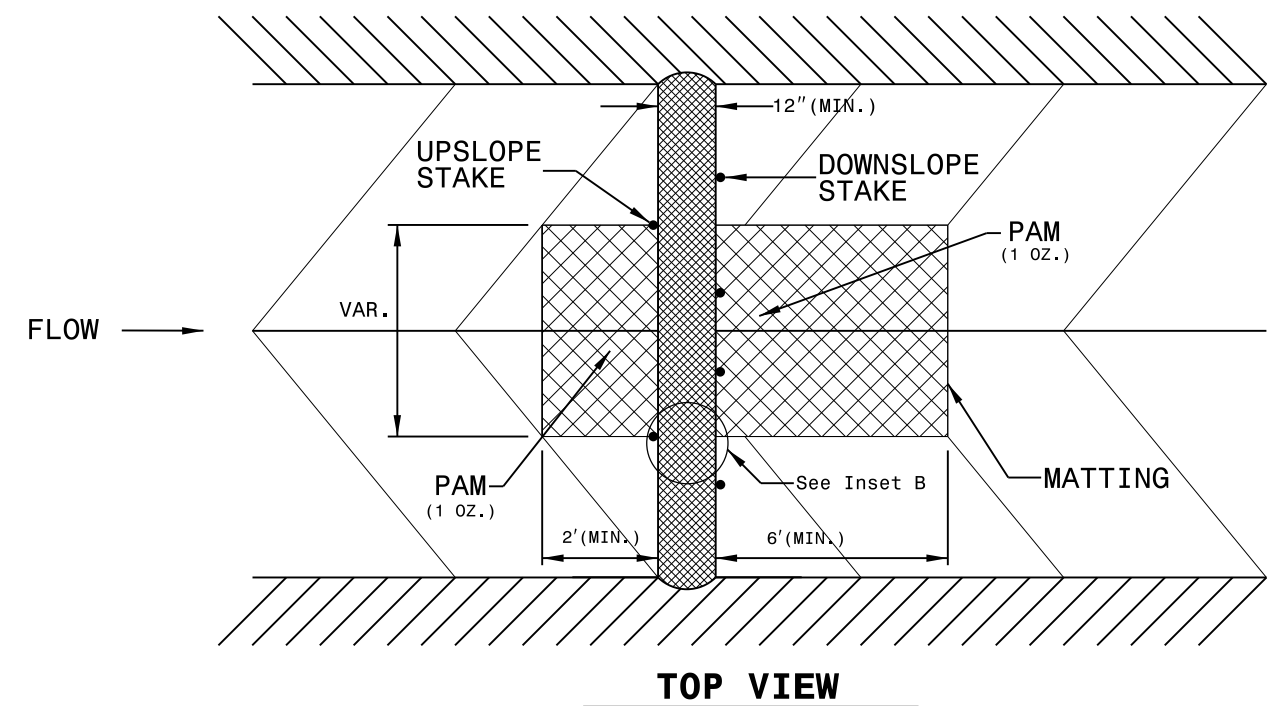
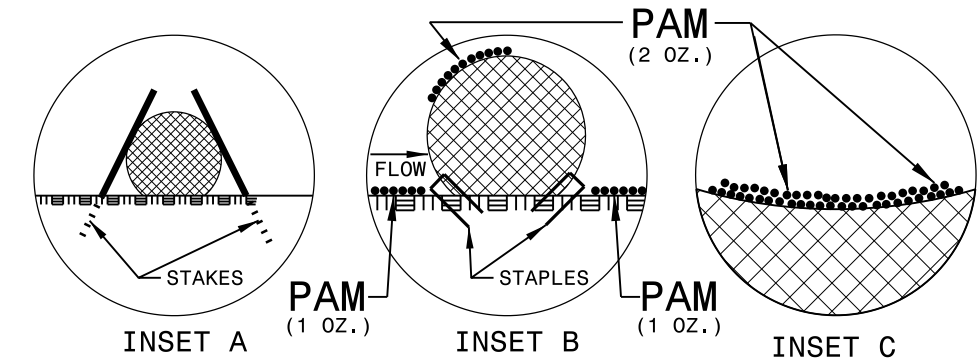
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.

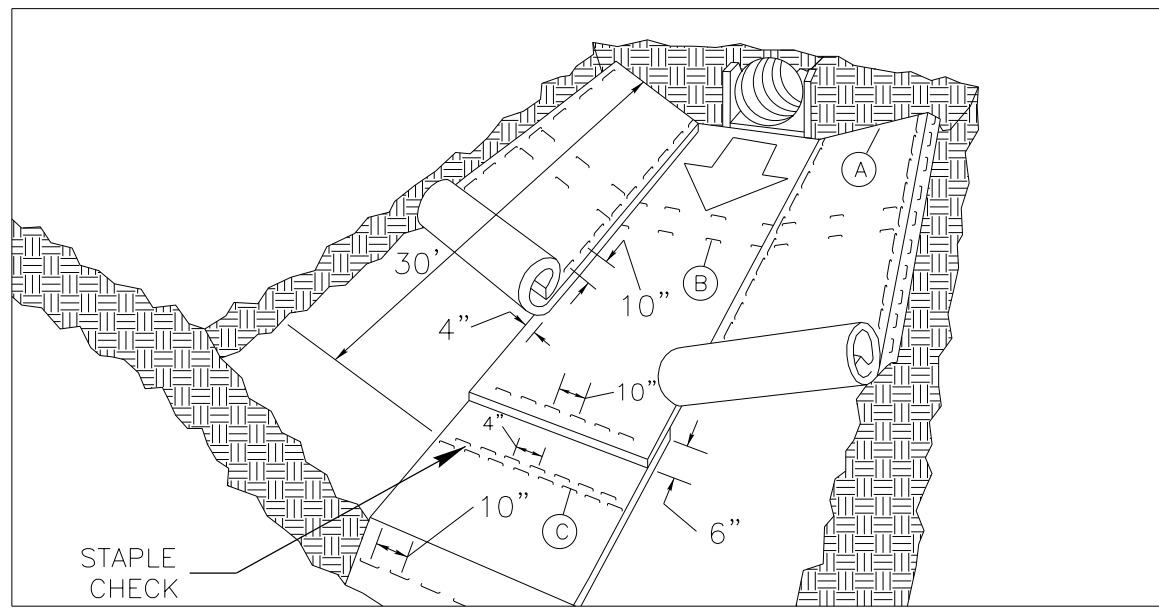
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

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**

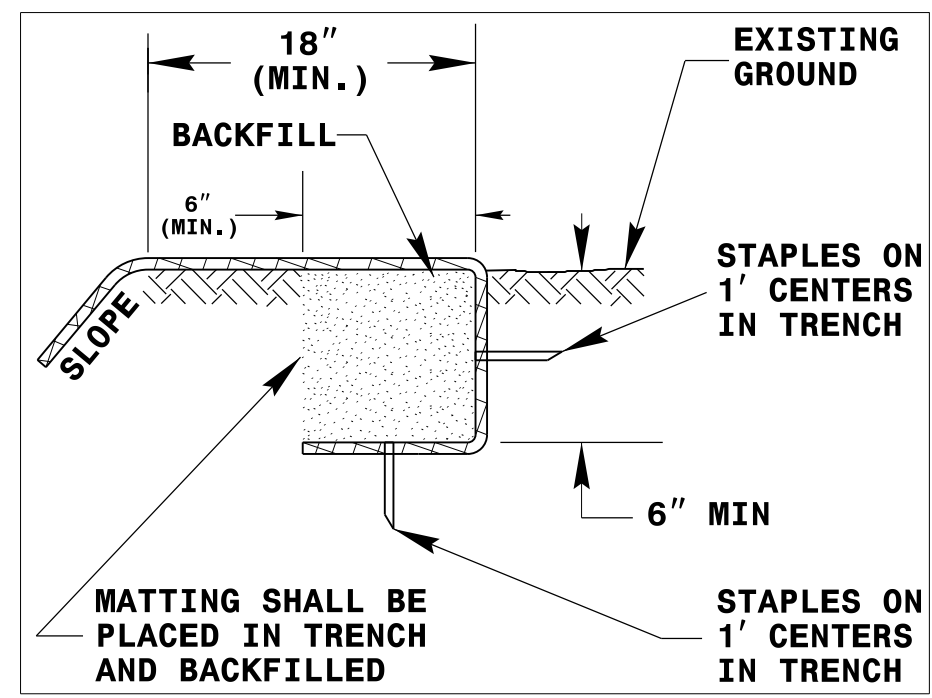
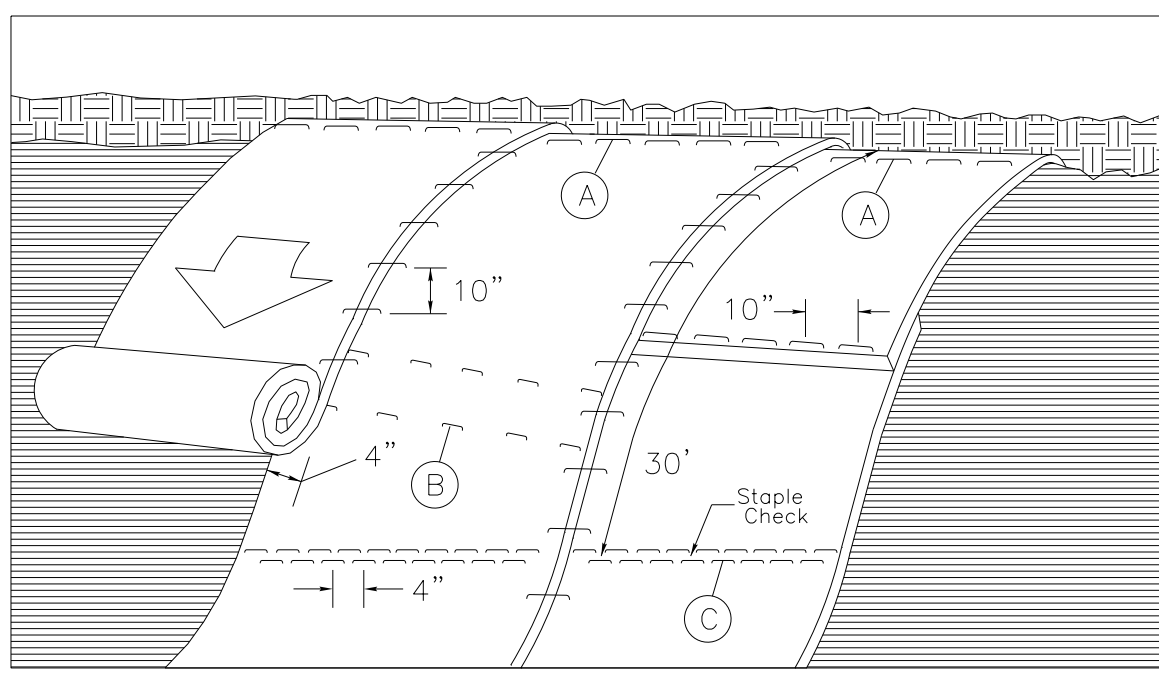


DIAGRAM (A)



**MATTING ON SLOPES**

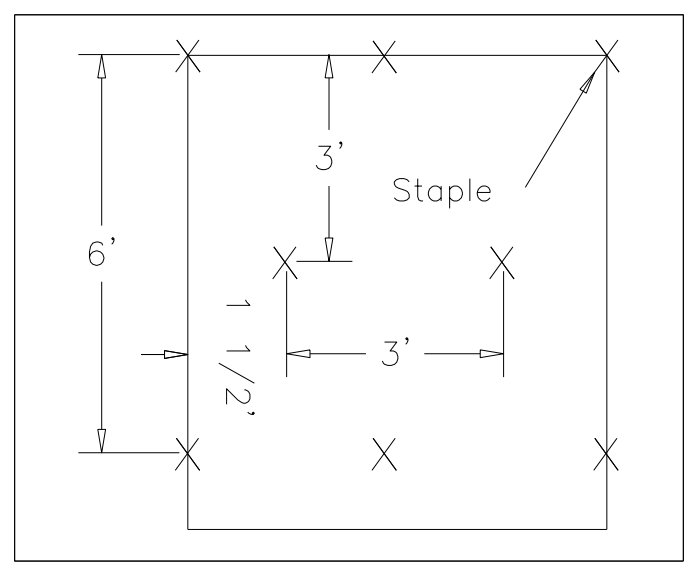


DIAGRAM (B)

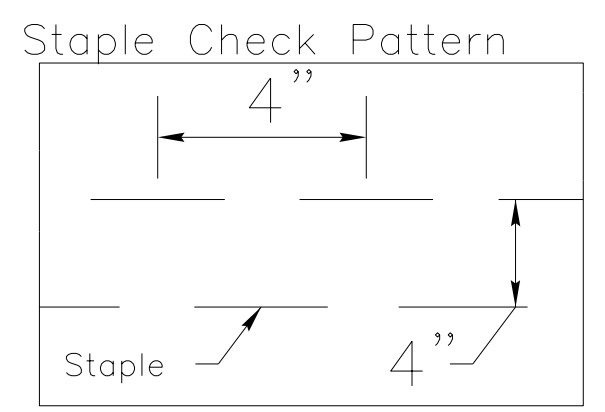


DIAGRAM (C)

**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

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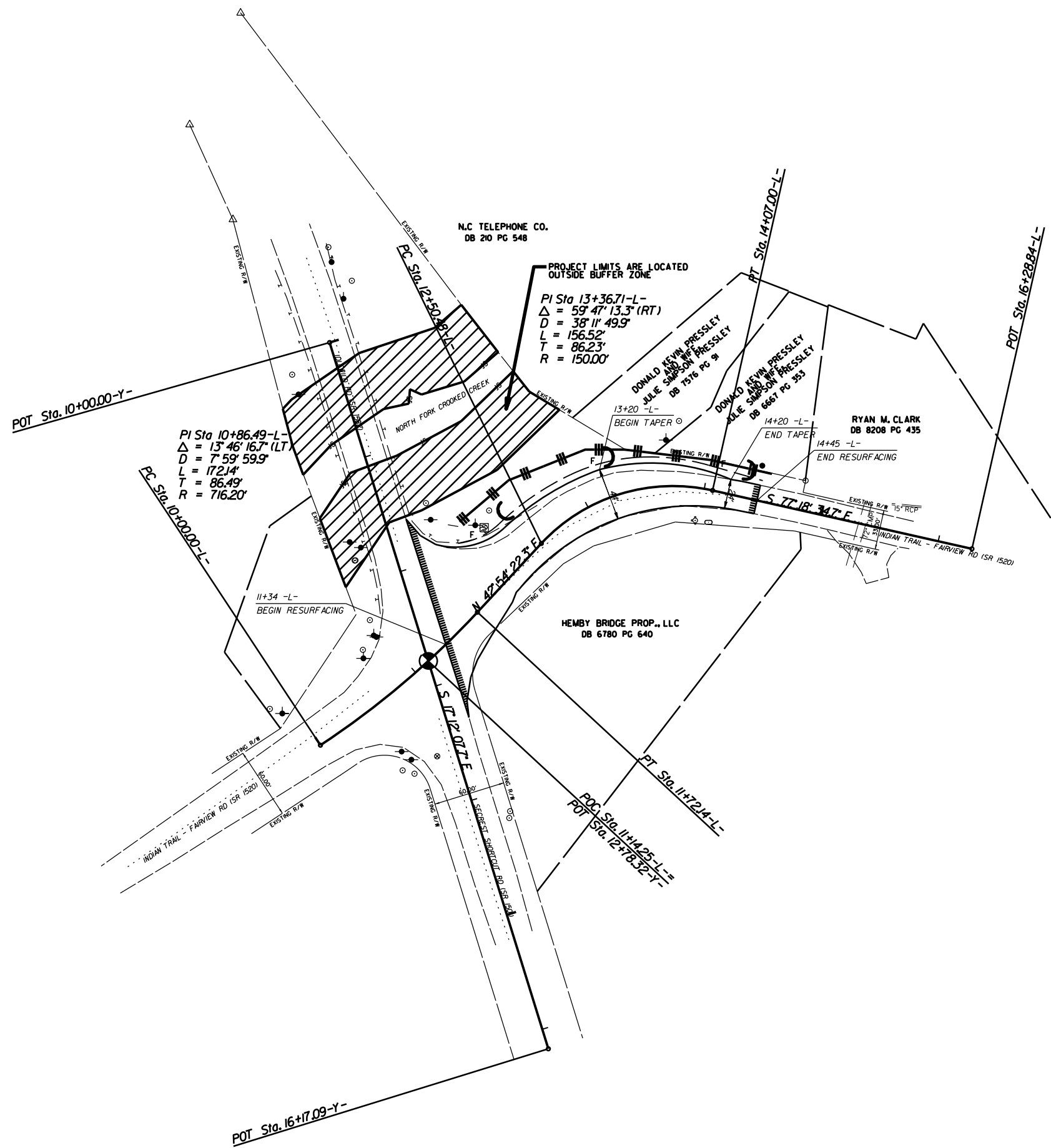


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## ***SOIL STABILIZATION TIMEFRAMES***

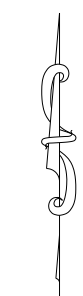
<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 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.

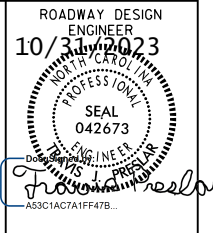
PROJECT NO.	SHEET NO.
50565	EC-4
F.A. PROJECT NO.	



 ENVIROMENTALLY SENSITIVE AREA

EXTEND RIGHT TURN LANE ON  
INDIAN TRAIL - FAIRVIEW RD. (SR-1520) AND  
IDLEWILD RD. (SR-1582) AND  
CECREST SHORTCUT RD. (SR-1501)

SCALE	r=50'		REVISIONS
DATE	9-2023		
DWG. BY	TBL		
DESIGN BY	TBL		
APPROVED	JDH		



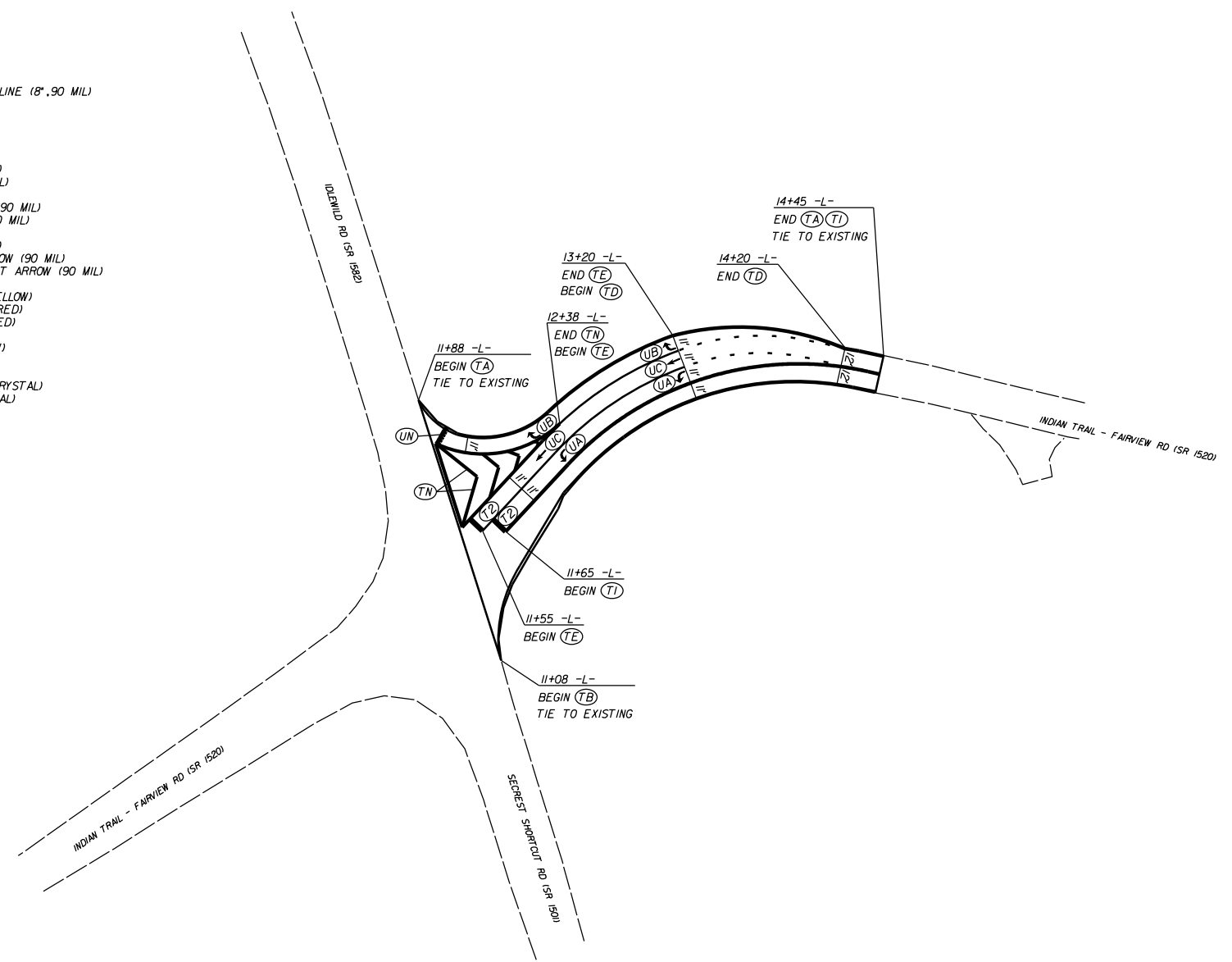
PAVEMENT MARKING SCHEDULE

THERMOPLASTIC MARKING LINES

- |   |   |
|---|---|
| TA - WHITE EDGELINE (4',.90 MIL)              | TU - WHITE DIAGONAL (12',.90 MIL)                             |
| TB - YELLOW EDGELINE (4',.90 MIL)             | TV - YELLOW DIAGONAL (12',.90 MIL)                            |
| TC - 10FT. WHITE SKIP (4',.90 MIL)            | TV - WHITE LINE, RR X (16',.90 MIL)                           |
| TD - 3FT.-9FT./SP WHITE MINISKIP (4',.90 MIL) | T2 - WHITE STOPBAR (24',.90 MIL)                              |
| TE - WHITE SOLID LANE LINE (4',.90 MIL)       | T3 - WHITE CROSSWALK LINE (24',.90 MIL)                       |
| TF - 10FT. YELLOW SKIP (4',.90 MIL)           | T4 - WHITE RUMBLE STRIP (4',.240 MIL)                         |
| TH - YELLOW SINGLE CENTER (4',.90 MIL)        | T5 - YELLOW RUMBLE STRIP (4',.240 MIL)                        |
| TI - YELLOW DOUBLE CENTER (4',.90 MIL)        | T6 - WHITE EDGELINE (6',.90 MIL)                              |
| TJ - 10FT. WHITE SKIP (6',.90 MIL)            | T7 - YELLOW EDGELINE (6',.90 MIL)                             |
| TK - 3FT.-9FT./SP WHITE MINISKIP (6',.90 MIL) | T8 - 2FT.-6FT./SP WHITE MINISKIP (4',.90 MIL)                 |
| TL - WHITE SOLID LANE LINE (6',.90 MIL)       | T9 - 2FT.-6FT./SP YELLOW MINISKIP (4',.90 MIL)                |
| TM - 10FT. YELLOW SKIP (6',.90 MIL)           | T10 - 3FT.-3FT./SP WHITE MINISKIP (12',.90 MIL)               |
| TN - WHITE GORELINE (8',.90 MIL)              | T11 - 2FT.-6FT./SP WHITE MINISKIP (6',.90 MIL)                |
| TO - WHITE DIAGONAL (8',.90 MIL)              | T12 - 2FT.-6FT./SP YELLOW MINISKIP (6',.90 MIL)               |
| TP - YELLOW DIAGONAL (8',.90 MIL)             | T13 - 3FT.-9FT./SP WHITE MINISKIP (18',.90 MIL)               |
| TQ - WHITE CROSSWALK LINE (8',.90 MIL)        | T14 - 3FT.-9FT./SP WHITE MINISKIP (12',.90 MIL)               |
| TR - WHITE SOLID LANE LINE (8',.90 MIL)       | T15 - YELLOW SINGLE CENTER (6',.90 MIL)                       |
| TS - WHITE GORELINE (12',.90 MIL)             | T16 - YELLOW DOUBLE CENTER (6',.90 MIL)                       |
| TT - WHITE SOLID LANE LINE (12',.90 MIL)      | T17 - 3FT.-3FT./SP WHITE MINISKIP ENTRANCE LINE (18',.90 MIL) |

THERMOPLASTIC MARKING SYMBOLS

- |  |  |
|--|--|
| UA - LEFT TURN ARROW (90 MIL)                  | UU - FISH-HOOK STRAIGHT ARROW (90 MIL)                     |
| UB - RIGHT TURN ARROW (90 MIL)                 | UV - FISH-HOOK LEFT/STRAIGHT ARROW (90 MIL)                |
| UC - STRAIGHT ARROW (90 MIL)                   | UW - FISH-HOOK RIGHT/STRAIGHT ARROW (90 MIL)               |
| UD - COMBO. LEFT/STRAIGHT ARROW (90 MIL)       | UX - FISH-HOOK LEFT/RIGHT ARROW (90 MIL)                   |
| UE - COMBO. RIGHT/STRAIGHT ARROW (90 MIL)      | UY - FISH-HOOK LEFT/RIGHT/STRAIGHT ARROW (90 MIL)          |
| UF - COMBO. LEFT/RIGHT ARROW (90 MIL)          | UZ - FISH-HOOK W/CIRCLE STRAIGHT ARROW (90 MIL)            |
| UG - COMBO. LEFT/RIGHT/STRAIGHT ARROW (90 MIL) |  |
| UH - HANDICAP PARKING (90 MIL)                 | YA - FISH-HOOK W/CIRCLE LEFT ARROW (90 MIL)                |
| UI - ALPHANUMERIC CHAR. (90 MIL)               | YB - FISH-HOOK W/CIRCLE LEFT/STRAIGHT ARROW (90 MIL)       |
| UJ - BICYCLE SYMBOL (90 MIL)                   | YC - FISH-HOOK W/CIRCLE LEFT/RIGHT/STRAIGHT ARROW (90 MIL) |
| UK - BICYCLE STRAIGHT ARROW (90 MIL)           | YD - COMBO. LEFT/U-TURN ARROW (90 MIL)                     |
| UL - BICYCLE CHAR. (90 MIL)                    | MA - PERMANENT RAISED MARKER (YELLOW & YELLOW)             |
| UM - 12" YIELD LINE TRIANGLE (90 MIL)          | MB - PERMANENT RAISED MARKER (CRYSTAL & RED)               |
| UN - 24" YIELD LINE TRIANGLE (90 MIL)          | MC - PERMANENT RAISED MARKER (YELLOW & RED)                |
| UO - BICYCLE LEFT ARROW (90 MIL)               | MD - PERMANENT RAISED MARKER (YELLOW)                      |
| UP - MERGE ARROW (90 MIL)                      | ME - SNOWPLOWABLE MARKER (YELLOW & YELLOW)                 |
| UQ - RAMP ARROW SYMBOL (90 MIL)                | MF - SNOWPLOWABLE MARKER (CRYSTAL & RED)                   |
| UR - SHARROW (90 MIL)                          | MG - SNOWPLOWABLE MARKER (YELLOW & RED)                    |
| US - BICYCLE LOOP DETECTOR (90 MIL)            | ML - PERMANENT RAISED MARKER (CRYSTAL & CRYSTAL)           |
| UT - U-TURN ARROW (90 MIL)                     | MO - SNOWPLOWABLE MARKER (CRYSTAL & CRYSTAL)               |

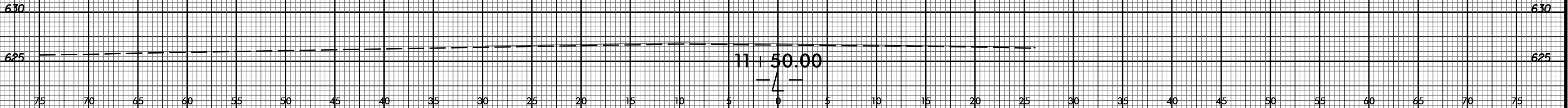
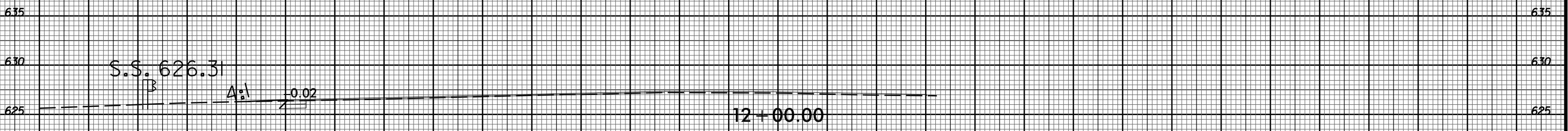
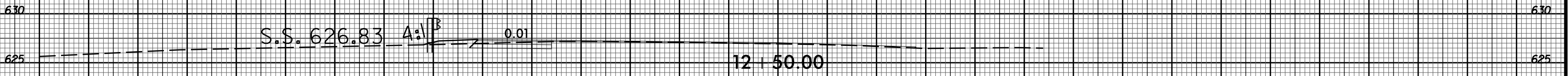
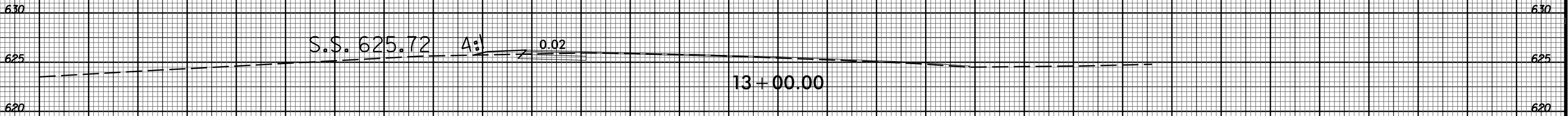


EXTEND RIGHT TURN LANE ON  
INDIAN TRAIL-FAIRVIEW RD.(SR-1520) AT  
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SECRET SHORTCUT RD.(SR-1501)

SCALE	1"=50'		REVISIONS
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APPROVED	JDH		



75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75



75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75



75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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14 + 50.00

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14 + 00.00

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625

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13 + 50.00

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620

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75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75