

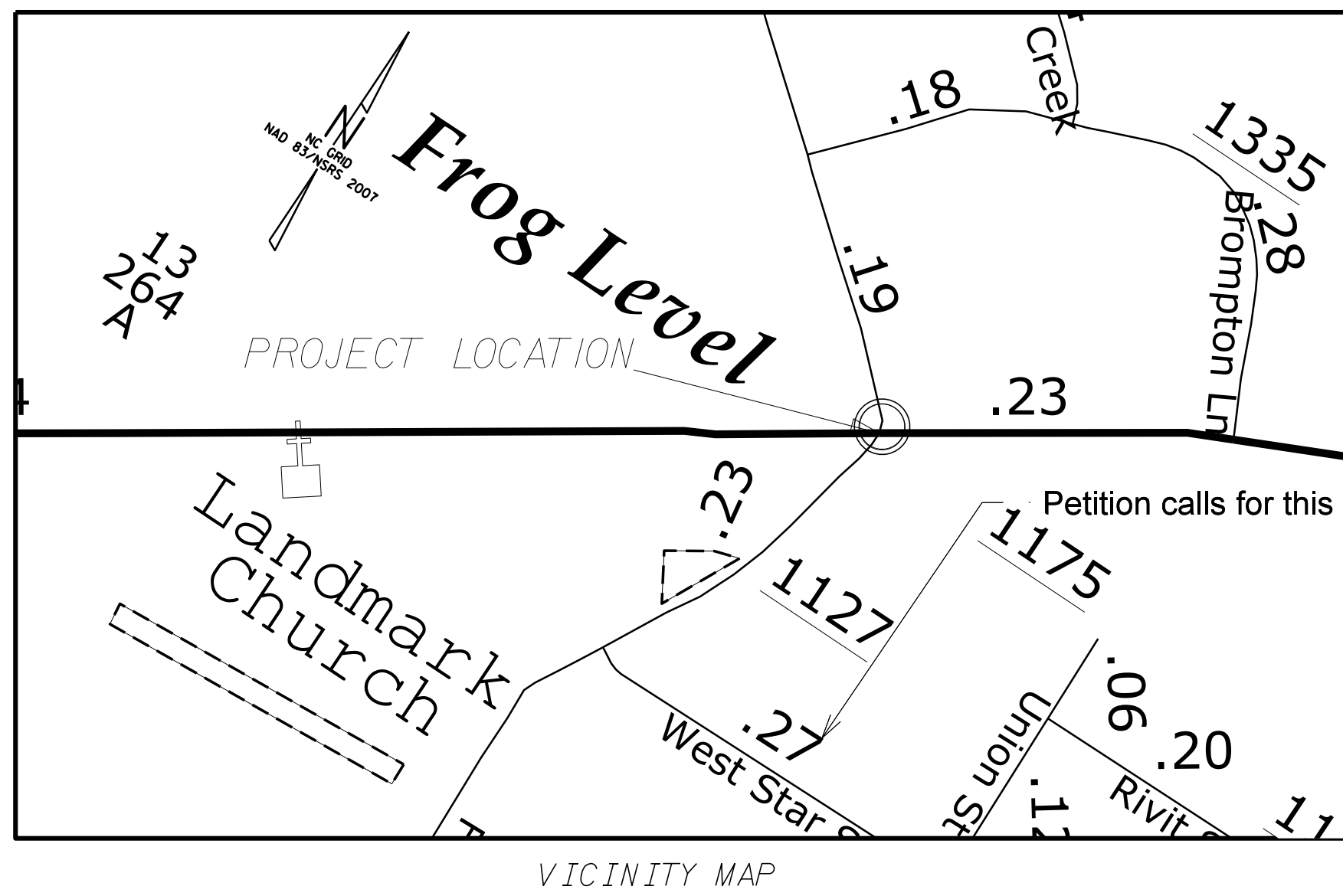
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2250	1	32
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34411.1.2		PE	
34411.2.5		RW-UTILITY	
34411.3.7		CONST	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

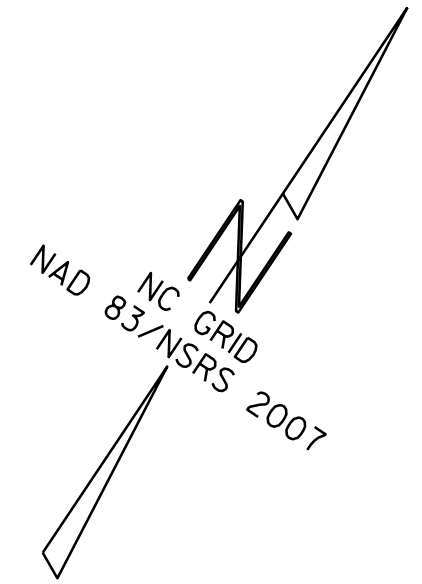
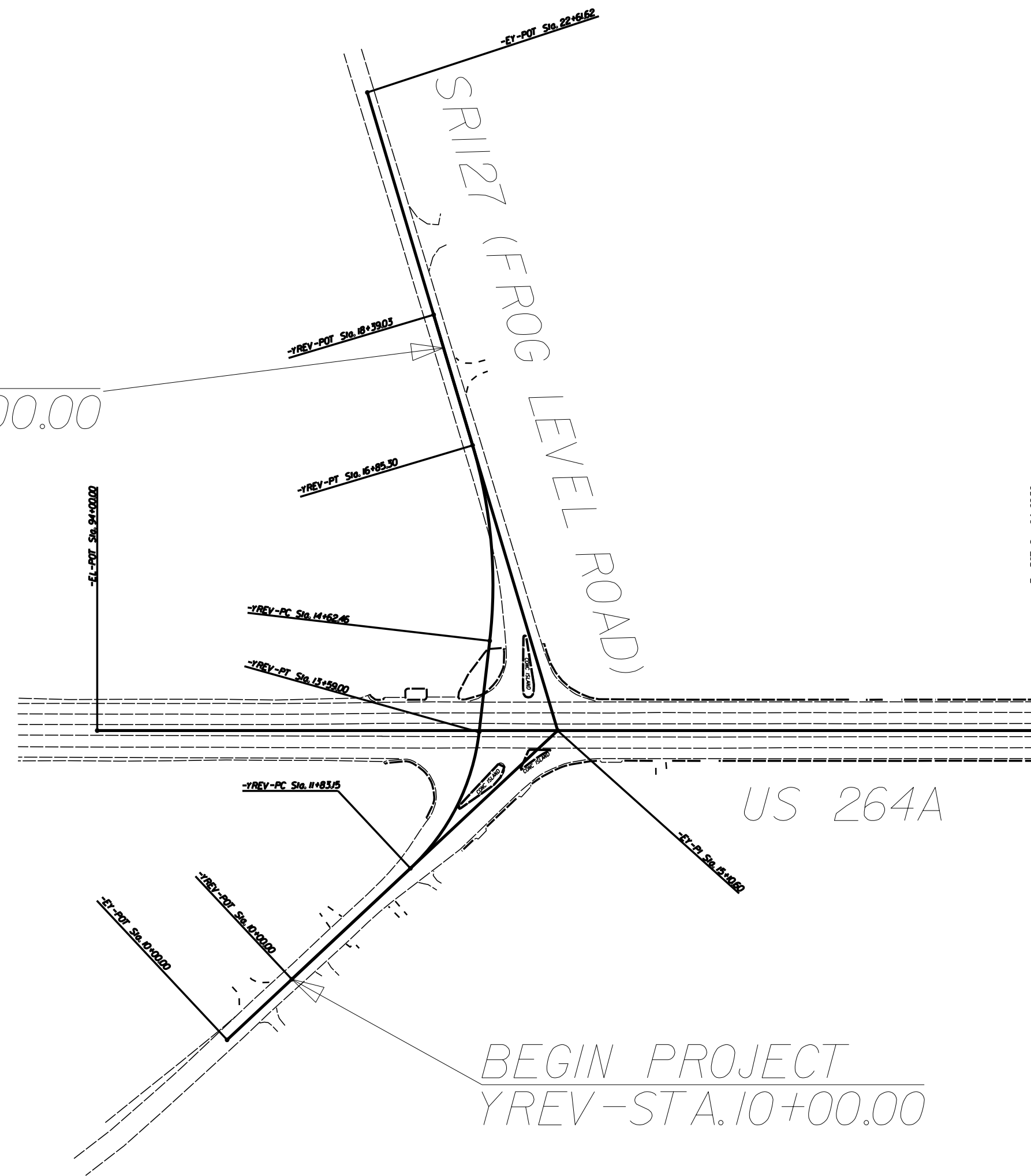
PITT COUNTY

LOCATION: US264A AT SR 1127 (FROG LEVEL ROAD)

TYPE OF WORK: INSTALL NEW SIGNAL
CONSTRUCT TURN LANES ON NEW LOCATION



VICINITY MAP



TIP PROJECT: R-2250

CONTRACT: DB00526

See Sheet 1A For Index of Sheets

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

<p>GRAPHIC SCALES</p> <p>50 25 0 50 100 PLANS</p> <p>50 25 0 50 100 PROFILE (HORIZONTAL)</p> <p>10 5 0 10 20 PROFILE (VERTICAL)</p>	<p>DESIGN DATA</p> <p>ADT 2014 = 19,700 ADT 2040 = 34,000 DHV = 10 % D = 60 % T = 8 % * V = 70 MPH * TTST = 3% DUAL 5% FUNC CLASS = FREEWAY STATEWIDE TIER</p>	<p>PROJECT LENGTH</p> <p>R-2250 INTERSECTION IMPROVEMENT PROJECT LENGTH = 0.151 MI</p>	<p>Prepared in the Office of: DIVISION OF HIGHWAYS 1037 WH SMITH BLVD., GREENVILLE, NC 27835</p> <p>2018 STANDARD SPECIFICATIONS</p> <p>RIGHT OF WAY DATE: JANUARY 2021</p> <p>LETTING DATE: DECEMBER 2021</p> <p>JEFFREY D. CABANISS, PE PROJECT ENGINEER</p> <p>RICH GODLEY PROJECT DESIGN ENGINEER</p>	<p>HYDRAULICS ENGINEER</p> <p>Documented by: Jeffrey D. Cabaniss SIGNATURE: 11/2/2021</p> <p>ROADWAY DESIGN ENGINEER</p> <p>Documented by: Jeffrey D. Cabaniss SIGNATURE: 11/2/2021</p>	
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09/08/99 G:\NOV-2021\16413 G:\PROJECTS\PITT\US264A_SRI127\Frog Level Road\264A_1127_pshl.dgn \$\$\$USERNAME\$\$\$

SHEET NUMBER	INDEX OF SHEETS SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
RW01 THRU RW04	SURVEY CONTROL SHEETS
2	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
3	SUMMARY OF QUANTITIES
3A	SUMMARY OF EARTHWORK/PIPES/GUARDRAIL
4 THRU 5	PLAN SHEET AND PROFILES
PM-1	PAVEMENT MARKING
EC-1 THRU EC-3	EROSION CONTROL PLANS
SIG-17.0 THRU SIG-17.4	SIGNAL PLANS
UC-1 THRU UC-5	UTILITY CONSTRUCTION PLANS
UD-1 THRU UD-2	UTILITY BY OTHERS PLANS
X-1A	CROSS-SECTION SUMMARY SHEET
X-1	CROSS-SECTIONS

GENERAL NOTES: 2018 SPECIFICATIONS
EFFECTIVE: 01-16-2018
REVISED:

GRADING AND SURFACING OR RESURFACING AND WIDENING:
THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

SIDE ROADS:
THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

DRIVEWAYS:
DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 USING 3 FOOT RADII OR RADII AS SHOWN ON THE PLANS. LOCATIONS OF DRIVES WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

SUBSURFACE PLANS:
NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

UTILITIES:
UTILITY OWNERS ON THIS PROJECT ARE:
AT&T (TRANSMISSION)
BELL ARTHUR WATER CORPORATION
CENTURYLINK
PIEDMONT NATURAL GAS COMPANY
TOWN OF FARMVILLE
GREENE COUNTY REGIONAL WATER SYSTEM
GREENVILLE UTILITIES
SUDDENLINK COMMUNICATIONS

ALL UNDER GROUND FACILITIES WERE LOCATED WITH MARKINGS BY FACILITY OWNERS, DEPTHS ARE UNKNOWN

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE UTILITY CONSTRUCTION PLANS.

RIGHT-OF-WAY MARKERS:
ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY OTHERS.

2018 ROADWAY ENGLISH STANDARD DRAWINGS
EFF. 01-16-2018
REV.

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2018 are applicable to this project and by reference hereby are considered a part of these plans:

STD. NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
225.02	Guide for Grading Subgrade - Secondary and Local
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
310.10	Driveway Pipe Construction
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 - INCIDENTALS	
840.00	Concrete Base Pad for Drainage Structures
840.01	Brick Catch Basin - 12" thru 54" Pipe
840.03	Frame, Grates and Hood - for Use on Standard Catch Basin
840.15	Brick Drop Inlet - 12" thru 30" Pipe
840.71	Concrete and Brick Pipe Plug
846.01	Concrete Curb, Gutter and Curb & Gutter
848.02	Driveway Turnout - Radius Type

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○ _{EP}
Computed Property Corner	----->
Property Monument	□ _{EDM}
Parcel/Sequence Number	⑫③
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	----- _{MLB}
Proposed Wetland Boundary	----- _{MLB}
Existing Endangered Animal Boundary	----- _{EAB}
Existing Endangered Plant Boundary	----- _{EPB}
Existing Historic Property Boundary	----- _{HPB}
Known Contamination Area: Soil	---S---S---
Potential Contamination Area: Soil	---S---S---
Known Contamination Area: Water	---W---W---
Potential Contamination Area: Water	---W---W---
Contaminated Site: Known or Potential	☠️ ?

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○ _S
Well	○ _W
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	○ _{MILEPOST 35}
Switch	□ _{SWITCH}
RR Abandoned	-----
RR Dismantled	-----

RIGHT OF WAY & PROJECT CONTROL:

Secondary Horiz and Vert Control Point	◆
Primary Horiz Control Point	○
Primary Horiz and Vert Control Point	●
Exist Permanent Easement Pin and Cap	◇
New Permanent Easement Pin and Cap	◆
Vertical Benchmark	⊠
Existing Right of Way Marker	△
Existing Right of Way Line	-----
New Right of Way Line	-----
New Right of Way Line with Pin and Cap	-----
New Right of Way Line with Concrete or Granite RW Marker	-----
New Control of Access Line with Concrete C/A Marker	-----
Existing Control of Access	-----
New Control of Access	-----
Existing Easement Line	-----
New Temporary Construction Easement	-----
New Temporary Drainage Easement	-----
New Permanent Drainage Easement	-----
New Permanent Drainage / Utility Easement	-----
New Permanent Utility Easement	-----
New Temporary Utility Easement	-----
New 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	----- _{CR}
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	⊕
Pavement Removal	-----

VEGETATION:

Single Tree	☼
Single Shrub	☼

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

Hedge	-----
Woods Line	-----
Orchard	-----
Vineyard	----- _{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	○ _S
Storm Sewer	----- _S

UTILITIES:

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 LOS B (S.U.E.*)	----- _P
U/G Power Line LOS C (S.U.E.*)	----- _P
U/G Power Line LOS D (S.U.E.*)	----- _P

TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	⊕
Telephone Pedestal	⊠
Telephone Cell Tower	⊠
U/G Telephone Cable Hand Hole	○
U/G Telephone Cable LOS B (S.U.E.*)	----- _T
U/G Telephone Cable LOS C (S.U.E.*)	----- _T
U/G Telephone Cable LOS D (S.U.E.*)	----- _T
U/G Telephone Conduit LOS B (S.U.E.*)	----- _{TC}
U/G Telephone Conduit LOS C (S.U.E.*)	----- _{TC}
U/G Telephone Conduit LOS D (S.U.E.*)	----- _{TC}
U/G Fiber Optics Cable LOS B (S.U.E.*)	----- _{T FO}
U/G Fiber Optics Cable LOS C (S.U.E.*)	----- _{T FO}
U/G Fiber Optics Cable LOS D (S.U.E.*)	----- _{T FO}

WATER:

Water Manhole	⊕
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
U/G Water Line LOS B (S.U.E.*)	----- _W
U/G Water Line LOS C (S.U.E.*)	----- _W
U/G Water Line LOS D (S.U.E.*)	----- _W
Above Ground Water Line	----- _{A/G Water}

TV:

TV Pedestal	⊠
TV Tower	⊗
U/G TV Cable Hand Hole	○
U/G TV Cable LOS B (S.U.E.*)	----- _{TV}
U/G TV Cable LOS C (S.U.E.*)	----- _{TV}
U/G TV Cable LOS D (S.U.E.*)	----- _{TV}
U/G Fiber Optic Cable LOS B (S.U.E.*)	----- _{TV FO}
U/G Fiber Optic Cable LOS C (S.U.E.*)	----- _{TV FO}
U/G Fiber Optic Cable LOS D (S.U.E.*)	----- _{TV FO}

GAS:

Gas Valve	◇
Gas Meter	◇
U/G Gas Line LOS B (S.U.E.*)	----- _G
U/G Gas Line LOS C (S.U.E.*)	----- _G
U/G Gas Line LOS D (S.U.E.*)	----- _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 Forced Main Line LOS B (S.U.E.*)	----- _{FSS}
SS Forced Main Line LOS C (S.U.E.*)	----- _{FSS}
SS Forced Main Line LOS D (S.U.E.*)	----- _{FSS}

MISCELLANEOUS:

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

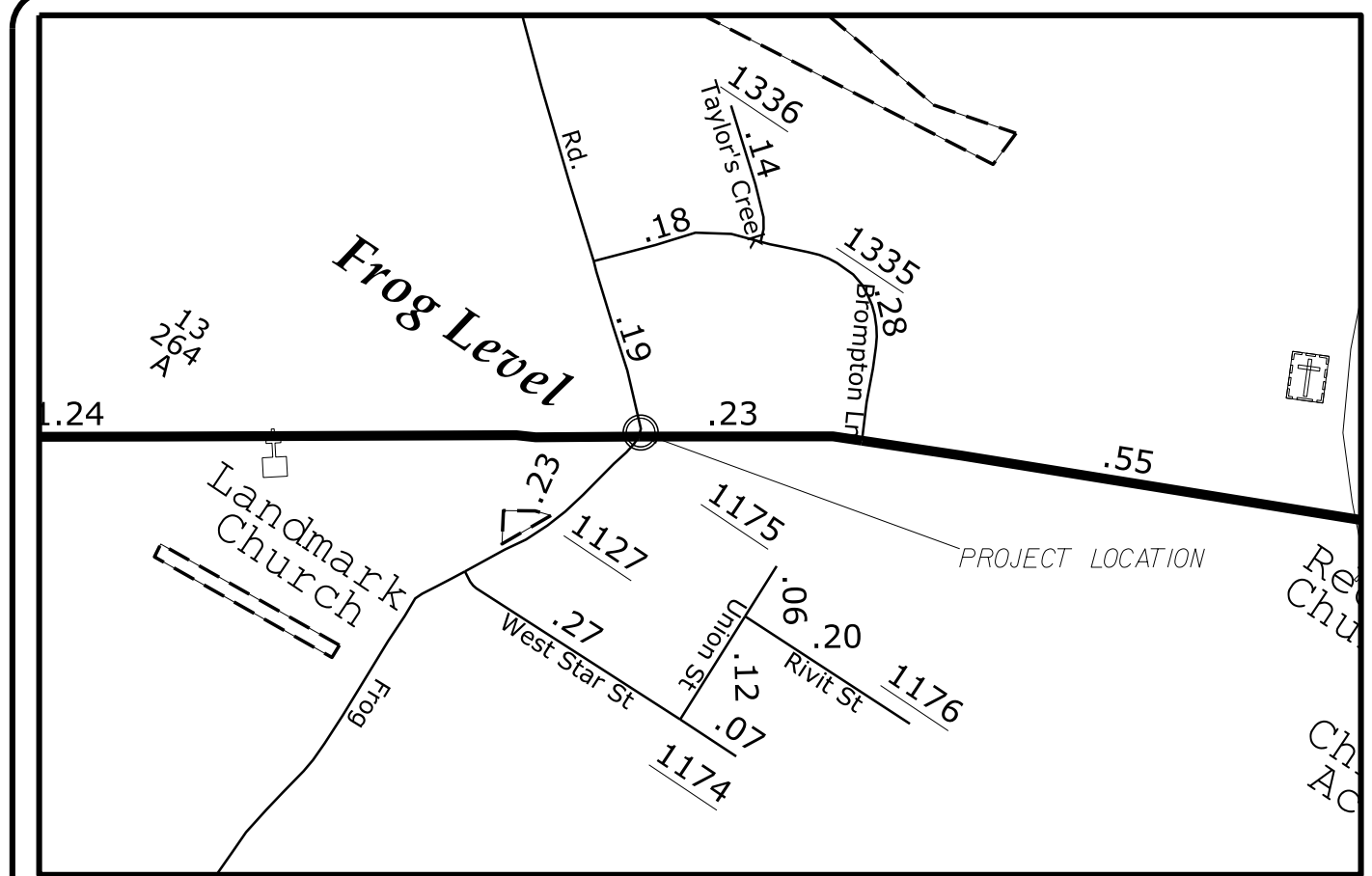
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2250	RW01	6

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
 SURVEY CONTROL, EXISTING CENTERLINES,
 RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

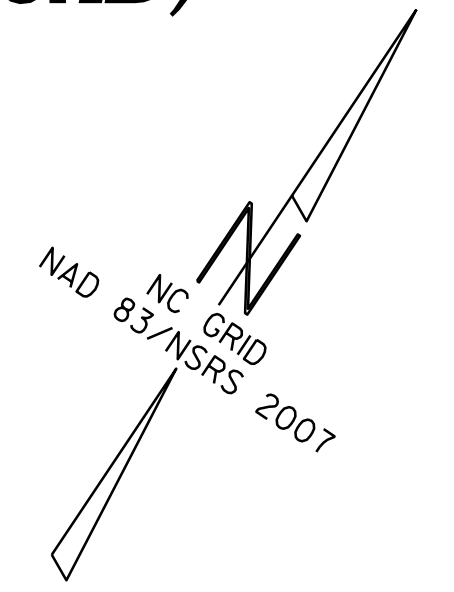
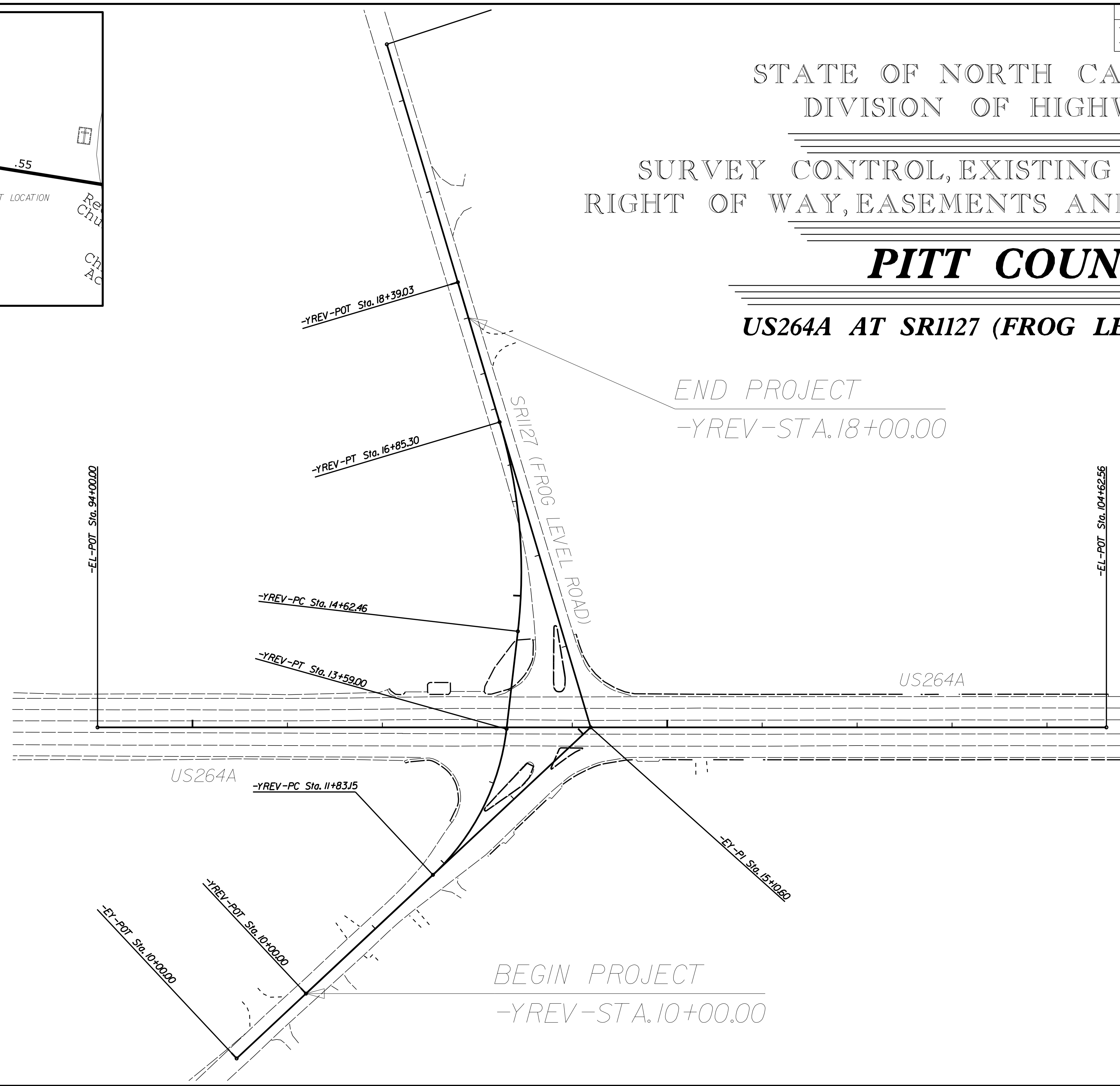
PITT COUNTY

US264A AT SRI127 (FROG LEVEL ROAD)

TIP PROJECT: R-2250

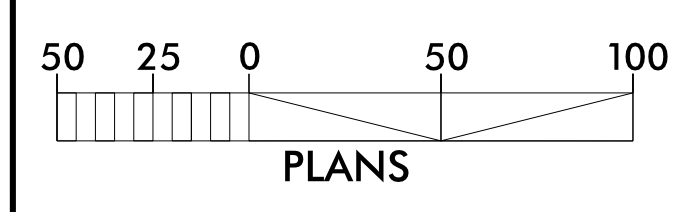


VICINITY MAP



DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT LOCATED EIP "BY-3" WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF NORTHING: 667,006.912(ft) EASTING: 2,462,612.498(ft) ELEVATION: 79.183(ft)
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999889766
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "BY-3" TO -YREV- STATION 10+00.00 IS S 12°-32'-04" E 656.01(ft)
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88

Prepared in the Office of:
DIVISION OF HIGHWAYS
 1037 WH SMITH BLVD., GREENVILLE, NC 27835
 2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
 JANUARY 2021

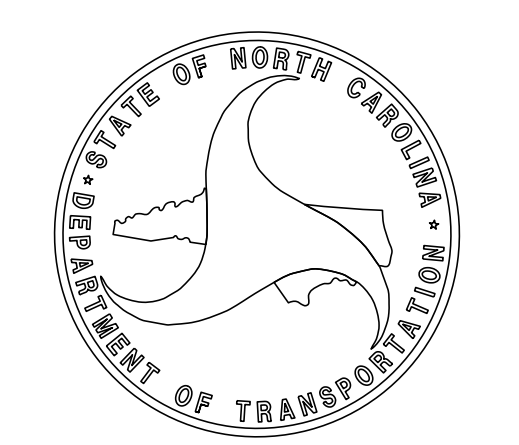
LETTING DATE:
 DECEMBER 2021

PROFESSIONAL LAND SURVEYOR



DocuSigned by:
 Kenneth White
 SIGNATURE:

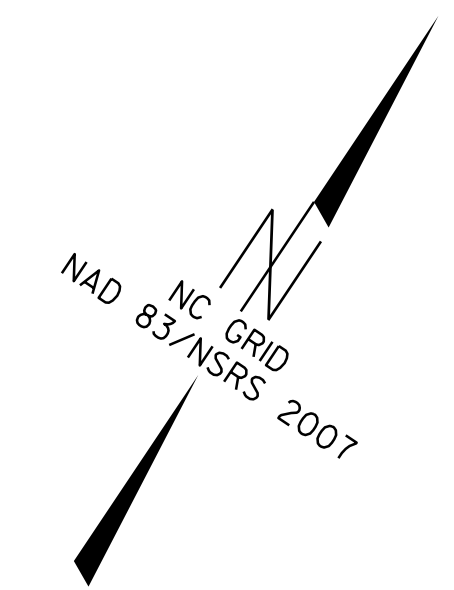
Date:
 11/1/2021



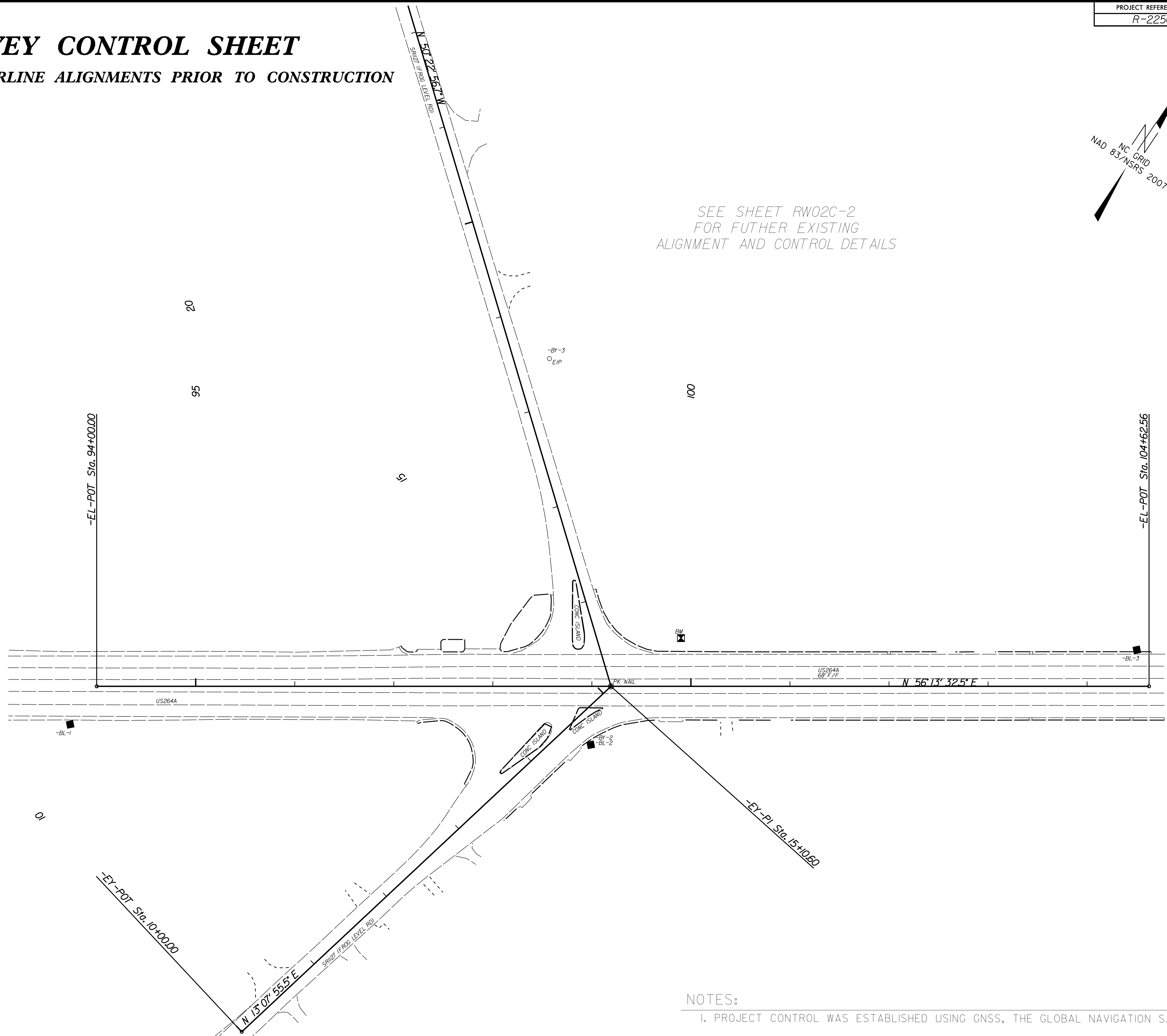
01-NOV-2021 16:01 G:\PROJECTS\PITT\US264A_SRI127\Frog Level Road\264A_1127_psh_r_w01.dgn \$\$\$USERNAME\$\$\$

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



SEE SHEET RW02C-2
FOR FUTHER EXISTING
ALIGNMENT AND CONTROL DETAILS



REVISIONS

8/17/99
01-N06-2021501 TT\US264A_SRI127\Frog Level Road\264A_1127_psh_rw02c-1.dgn
\$\$\$\$\$SYTIME\$\$\$\$\$

NOTES:
1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

SURVEY CONTROL SHEET

W/EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

BASELINE

BL	POINT	DESC.	NORTH	EAST	ELEVATION	BL STATION	OFFSET
4		-BL -1	666430.8460	2462415.5460	80.68	5+00.00	0.00
2		-BL -2, -BY -2	666705.9030	2462863.9540	82.27	10+26.05	0.00
1		-BL -3	667092.1090	2463268.9700	79.62	16+72.99	0.00

BY	POINT	DESC.	NORTH	EAST	ELEVATION	BY STATION	OFFSET
3		-BY -1	666125.4690	2462665.7220	79.89	5+00.00	0.00
2		-BL -2, -BY -2	666705.9030	2462863.9540	82.27	11+13.35	0.00
2024		EIP -BY -3	667006.9120	2462612.4980	79.18	15+05.57	0.00

EXISTING ALIGNMENT DESCRIPTION

EL				
POINT	N	E	BEARING	DIST
POT	666477.680	2462416.458		
LINE			N 56°13'32.5" E	1062.56
POT	667068.384	2463299.697		

EY				
POINT	N	E	BEARING	DIST
POT	666269.150	2462732.152		
LINE			N 13°07'55.5" E	510.60
POT	666766.399	2462848.159		
LINE			N 50°22'56.7" W	751.02
POT	667245.293	2462269.637		

BENCHMARK

 715 ELEVATION = 82.80
 N 666846 E 2462880
 EL STATION 99+90.00 49 LEFT
 BM RR SPIKE BASE OF PP

NOTES:

I. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

REVISIONS

8/17/99

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PROPOSED ALIGNMENT CONTROL SHEET

8/17/99

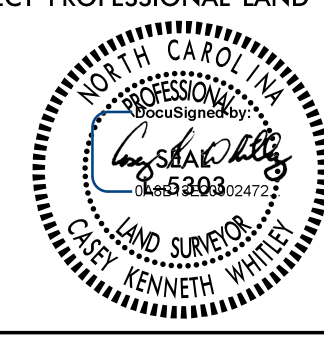
REVISIONS

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 \$\$\$\$SYTIME\$\$\$\$

YREV									
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	666366.535	2462754.872							
LINE			N 13°07'55.5" E	183.15					
PC	666544.900	2462796.484							
CURVE			N 07°01'06.0" W	172.24	40°18'03.1"(LT)	22°55'05.9"	175.85	91.74	250.00
PT	666715.852	2462775.438							
LINE			N 27°10'07.6" W	103.46					
PC	666807.900	2462728.195							
CURVE			N 38°46'32.1" W	221.31	23°12'49.1"(LT)	10°25'02.7"	222.83	112.97	550.00
PT	666980.438	2462589.592							
LINE			N 50°22'56.7" W	153.74					
POT	667078.469	2462471.167							

NOTES:
 1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

RIGHT OF WAY CONTROL SHEET

PROJECT REFERENCE NO.	SHEET NO.
R-2250	RWO3E-1
PROJECT PROFESSIONAL LAND SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, Casey Kenneth Whitley, 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(s) (R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

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 existing survey control provided by others; that the depicted property data shown herein were surveyed by others; 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 original signature, registration number and seal this 21st day of September, 2021.

----- L-5303
 Professional Land Surveyor PLS # Seal

ROW MARKER IRON PIN AND CAP - E

ALIGN	STATION	OFFSET	NORTH	EAST
YREV	16+49.03	-33.88	666931.7887	2462593.4739
YREV	14+62.46	-50.00	666785.0697	2462683.7116
YREV	14+56.06	-50.00	666779.3732	2462686.6353
EL	97+75.06	-85.00	666756.8379	2462680.9641
EL	97+43.68	80.00	666602.2429	2462746.6124
YREV	12+36.34	-50.00	666598.4089	2462752.9944
YREV	11+83.15	-50.00	666556.2595	2462747.7913
YREV	11+00.00	-30.00	666470.7357	2462748.3758

ROW MARKER PERMANENT EASEMENT - E

ALIGN	STATION	OFFSET	NORTH	EAST
EL	96+59.71	96.00	666542.2592	2462685.7038
YREV	11+65.34	-64.91	666542.2974	2462729.2206
EY	10+35.47	-53.36	666315.8113	2462688.2476
EY	9+95.24	-54.05	666276.7938	2462678.4319

NOTES:

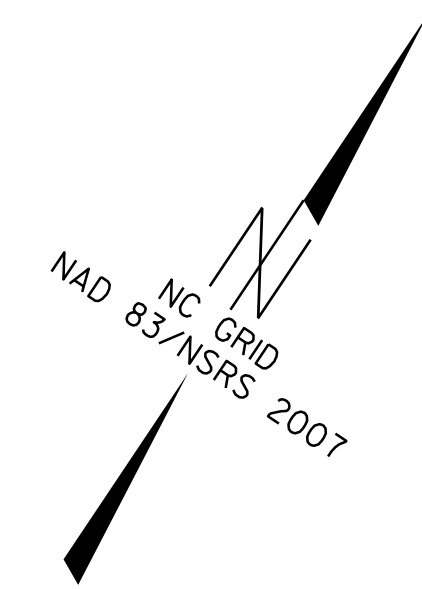
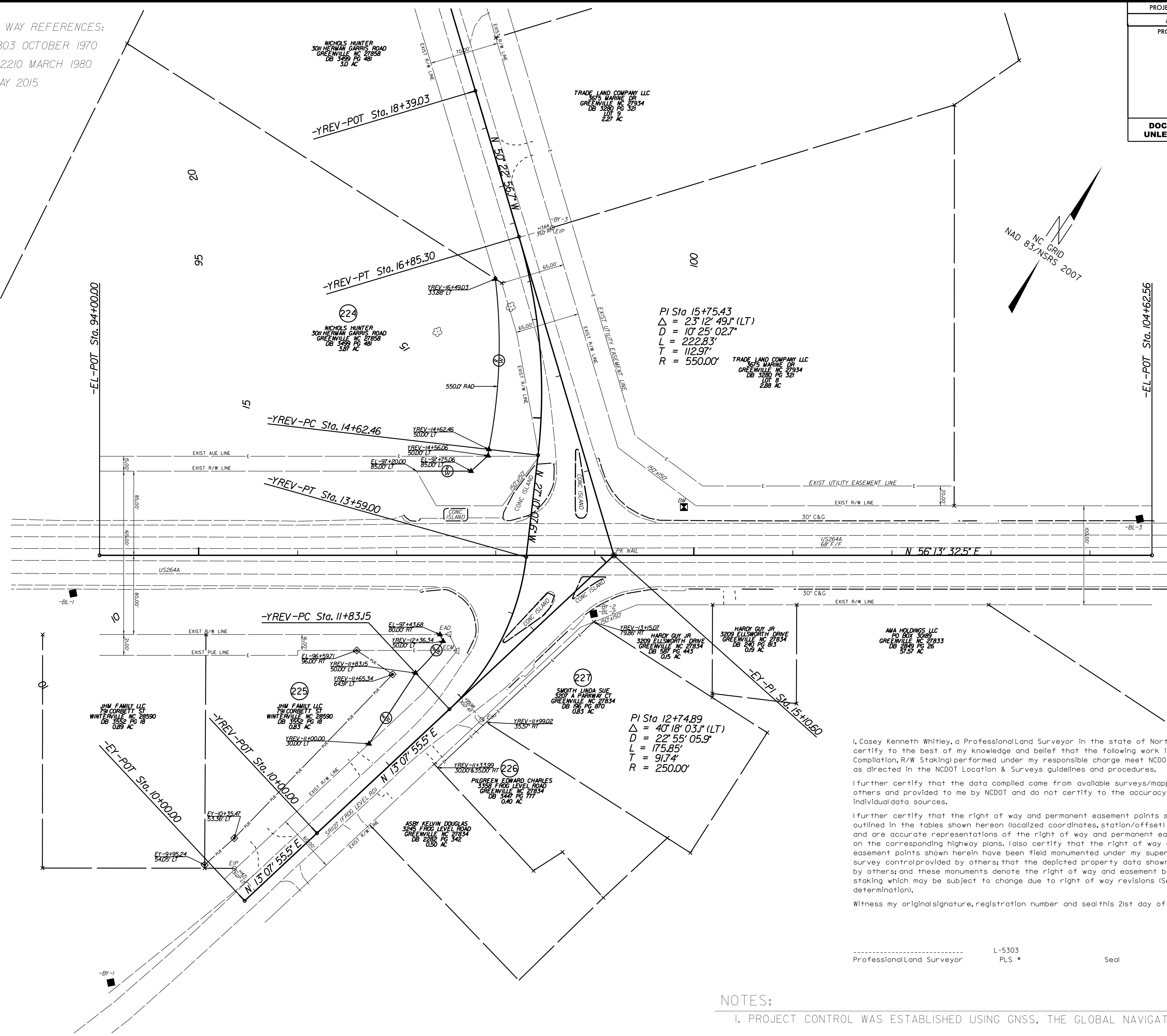
I. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

REVISIONS

8/17/99

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 \$\$\$AUTOCADTIME\$\$\$\$

EXISTING NCDOT RIGHT OF WAY REFERENCES:
 STATE PROJECT NO.6.801803 OCTOBER 1970
 STATE PROJECT NO.6.222210 MARCH 1980
 TIP R-2250 MAY 2015



PI Sta 15+75.43
 $\Delta = 23^{\circ} 12' 49.1''$ (LT)
 $D = 10^{\circ} 25' 02.7''$
 $L = 222.83'$
 $T = 112.97'$
 $R = 550.00'$

PI Sta 12+74.89
 $\Delta = 40^{\circ} 18' 03.1''$ (LT)
 $D = 22^{\circ} 55' 05.9''$
 $L = 175.85'$
 $T = 91.74'$
 $R = 250.00'$

I, Casey Kenneth Whitley, 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(s) (Base map Compilation, R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further certify that the data compiled came from available surveys/mapping performed by others and provided to me by NCDOT and do not certify to the accuracy or quality of the individual data sources.

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 existing survey control provided by others; that the depicted property data shown herein were surveyed by others; 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 original signature, registration number and seal this 21st day of September, 2021.

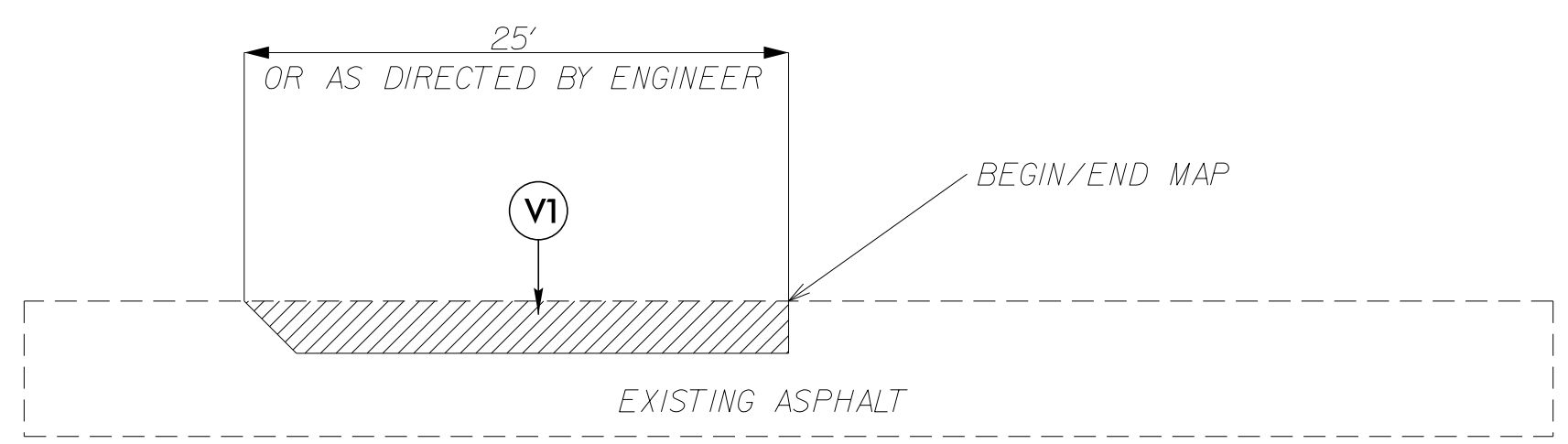
Professional Land Surveyor L-5303 Seal
 PLS #

NOTES:
 1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

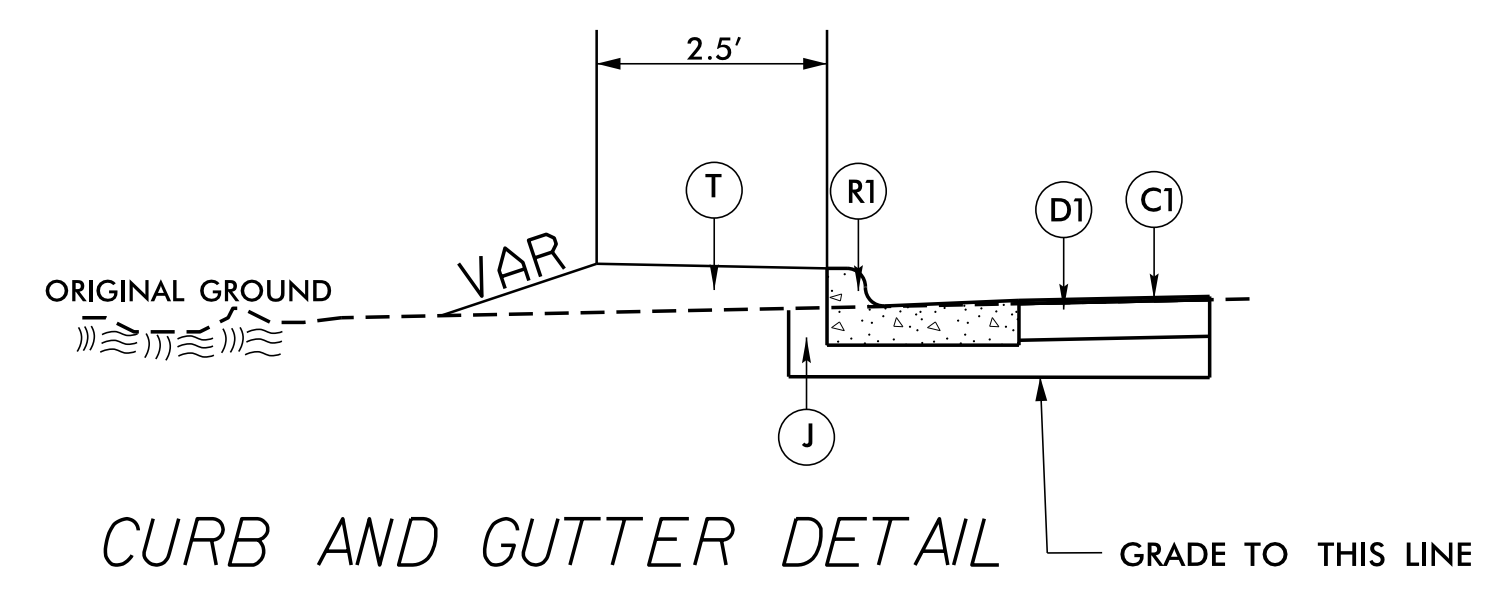
REVISIONS

01-N016-2021-01-IT\US2644_Level1 Road\2644_1127_psh_rw04.dgn
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C1	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ.YD.
D1	PROP. APPROX. 4.0" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
J	PROP. APPROX. 8.0" AGGREGATE BASE COURSE
R1	PROP. 2'-6" CONC. CURB AND GUTTER
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	INCIDENTAL MILLING

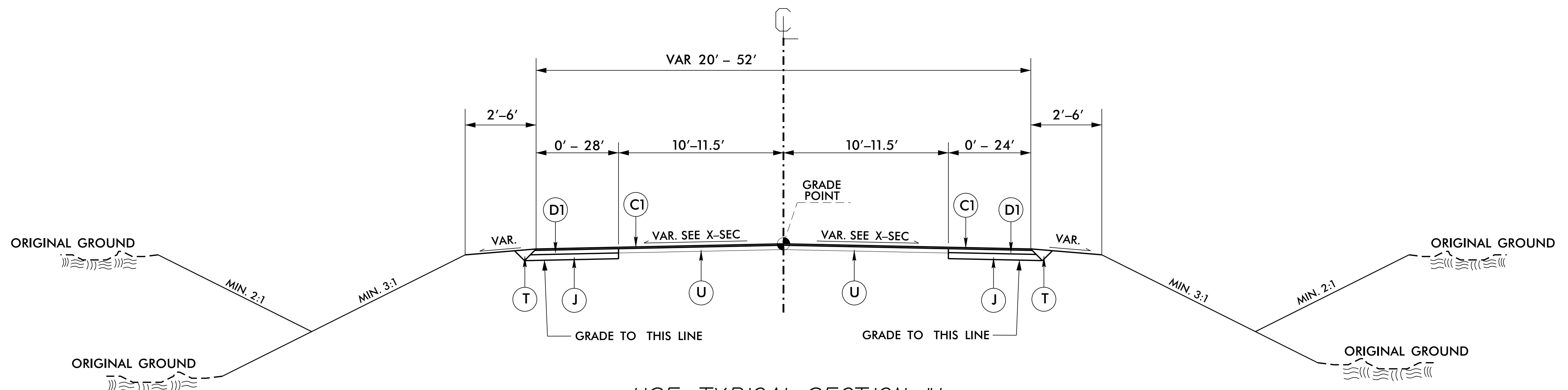


INCIDENTAL MILLING DETAIL



CURB AND GUTTER DETAIL

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



USE TYPICAL SECTION #1

-YREV- 10+00.00 - 18+00.00

REVISIONS

8/17/99

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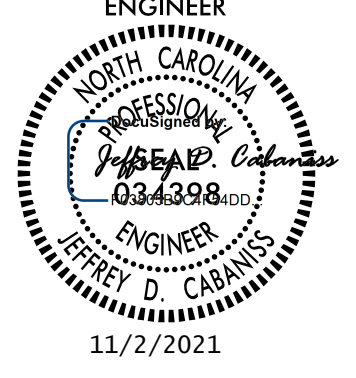
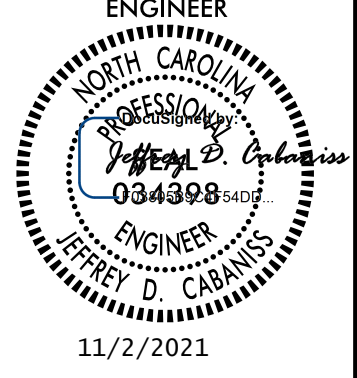
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

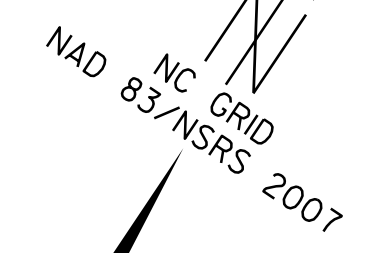
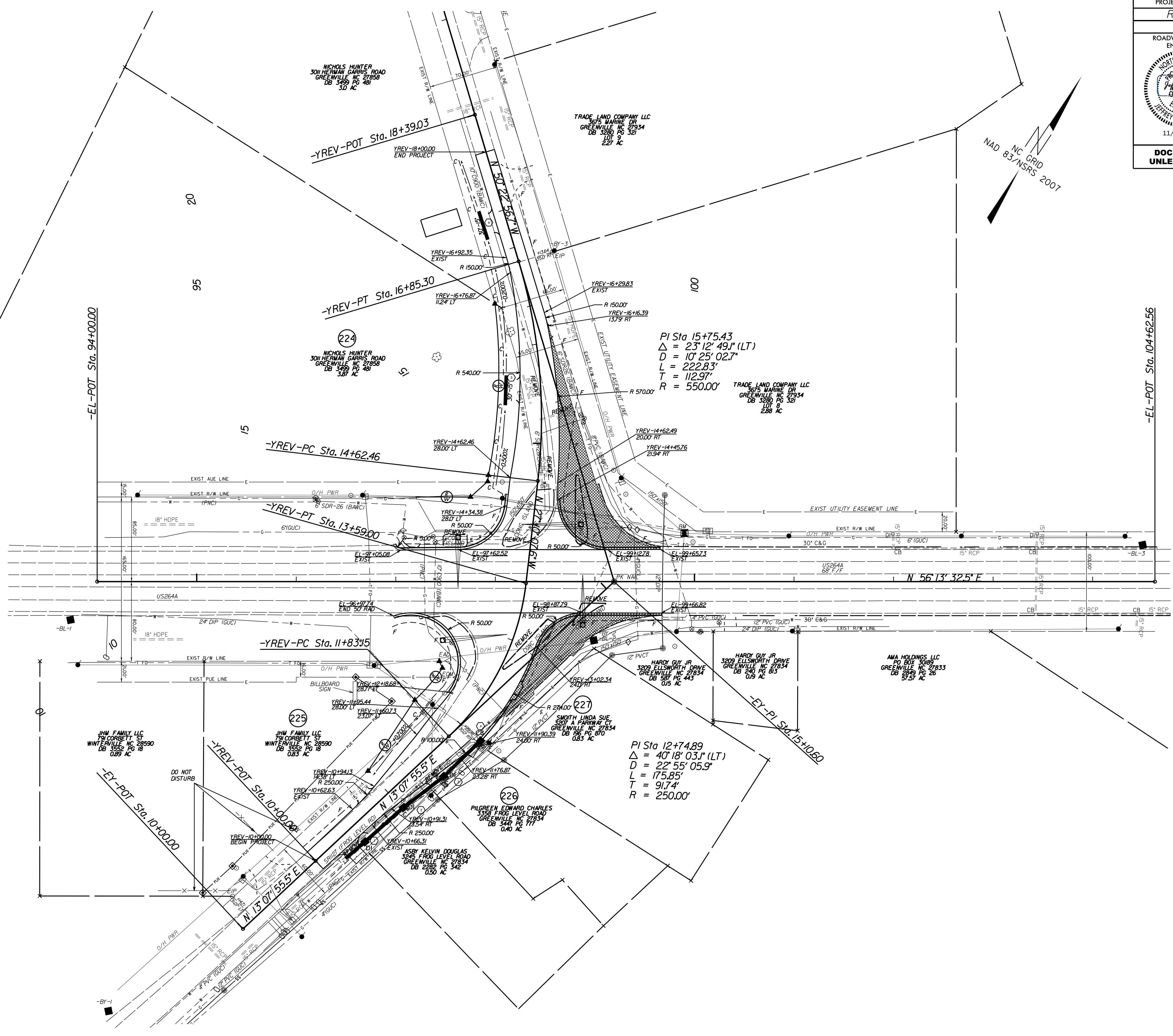
SUMMARY OF QUANTITIES

SECT	QUANTITY	UNIT	ITEM DESCRIPTION	SECT	QUANTITY	UNIT	ITEM DESCRIPTION
800	1	LS	MOBILIZATION	1515	10	LF	3/4" WATER SERVICE LINE
801	1	LS	CONSTRUCTION SURVEYING	1540	45	LF	16" ENCASEMENT PIPE (STEEL)
225	200	CY	UNDERCUT EXCAVATION (CONTINGENCY)	1540	135	LF	20" ENCASEMENT PIPE (STEEL)
226	1	LS	GRADING	1530	580	LF	ABANDON 6" UTILITY PIPE
300	30	TON	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES	1530	788	LF	ABANDON 10" UTILITY PIPE
300	80	SY	FOUNDATION CONDITIONING GEOTEXTILE	1550	45	LF	BORE AND JACK OF 16"
310	60	LF	15" SIDE DRAIN PIPE	1550	135	LF	BORE AND JACK OF 20"
310	168	LF	15" RCP, CLASS III	1605	650	LF	TEMPORARY SILT FENCE
340	244	LF	PIPE REMOVAL	1610	5	TON	SEDIMENT CONTROL STONE
520	614	TON	AGGREGATE BASE COURSE	1630	5	CY	SILT EXCAVATION
560	100	CY	SHOULDER BORROW	1631	100	SY	MATTING FOR EROSION CONTROL
607	685	SY	INCIDENTAL MILLING	1632	50	LF	1/4" HARDWARE CLOTH
610	290	TON	ASPHALT CONCRETE BINDER COURSE, TYPE 119.0C	SP	100	LF	COIR FIBER WATTLE
610	380	TON	ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C	1660	1	ACRE	SEEDING AND MULCHING
620	40	TON	ASPHALT BINDER FOR PLANT MIX	SP	2	EA	RESPONSE FOR EROSION CONTROL
840	4	EA	MASONARY DRAINAGE STRUCTURES	SP	1	EA	CONCRETE WASHOUT STRUCTURE
840	3	EA	FRAME AND GRATE, STD 840J6	1705	2,100	LF	SIGNAL CABLE
840	1	EA	FRAME W/ GRATE AND HOOD, STD 840.03, TYPE E	1705	10	EA	VEHICLE SIGNAL HEAD (12", 3 SECTION)
846	630	LF	2'-6" CONC. CURB AND GUTTER	1705	2	EA	VEHICLE SIGNAL HEAD (12", 4 SECTION)
848	45	SY	6" CONC. DRIVEWAY	1706	12	EA	BACKPLATE
SP	96	SF	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	1715	1,000	LF	UNPAVED TRENCHING (1 CONDUIT, 2 INCH)
SP	40	HRS	LAW ENFORCEMENT	1715	25	LF	UNPAVED TRENCHING (2 CONDUITS, 2 INCH)
SP	1	LS	TEMPORARY TRAFFIC CONTROL	1715	200	LF	DIRECTIONAL DRILL (1 CONDUIT, 2 INCH)
1205	2,891	LF	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90MILS)	1715	90	LF	DIRECTIONAL DRILL (2 CONDUITS, 2 INCH)
1205	350	LF	THERMOPLASTIC PAVEMENT MARKING LINES (6", 90MILS)	1716	16	EA	JUNCTION BOX (STANDARD SIZE)
1205	190	LF	THERMOPLASTIC PAVEMENT MARKING LINES (24", 90MILS)	1725	1,350	LF	INDUCTIVE LOOP SAWCUT
1205	11	EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90MILS)	1726	3,250	LF	LEAD-IN CABLE (14-2)
1205	400	LF	REMOVAL OF PAVEMENT MARKING LINES	SP	4	EA	METAL POLE WITH SINGLE MAST ARM
1205	14	EA	REMOVAL OF PAVEMENT MARKING SYMBOLS & CHARACTERS	SP	4	EA	SOIL TEST
1510	44	LF	6" WATERLINE	SP	36	CY	DRILLED PIER FOUNDATION
1510	253	LF	8" WATERLINE	SP	4	EA	MAST ARM WITH METAL POLE DESIGN
1510	805	LF	10" WATERLINE	1750	1	EA	SIGNAL CABINET FOUNDATION
1510	965	LB	DUCTILE IRON WATER PIPE FITTINGS	1751	14	EA	DETECTOR CARD (TYPE 170)
1515	2	EA	6" VALVE	1751	1	EA	CONTROLLER WITH CABINET (TYPE 2070LX, BASE MOUNTED)
1515	1	EA	8" VALVE	1753	1	EA	CABINET BASE EXTENDER
1515	4	EA	10" VALVE				

5/28/99

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PROJECT REFERENCE NO. R-2250	SHEET NO. 4
R/W SHEET NO. RW04	
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

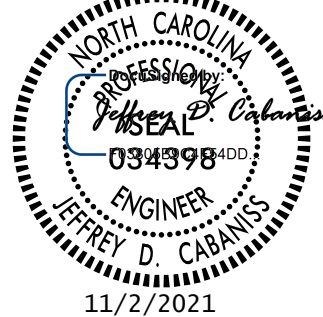
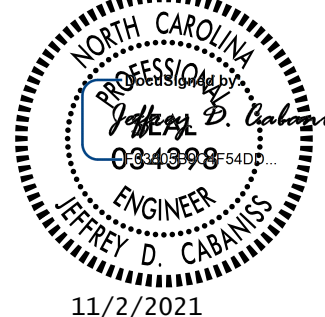


REVISIONS

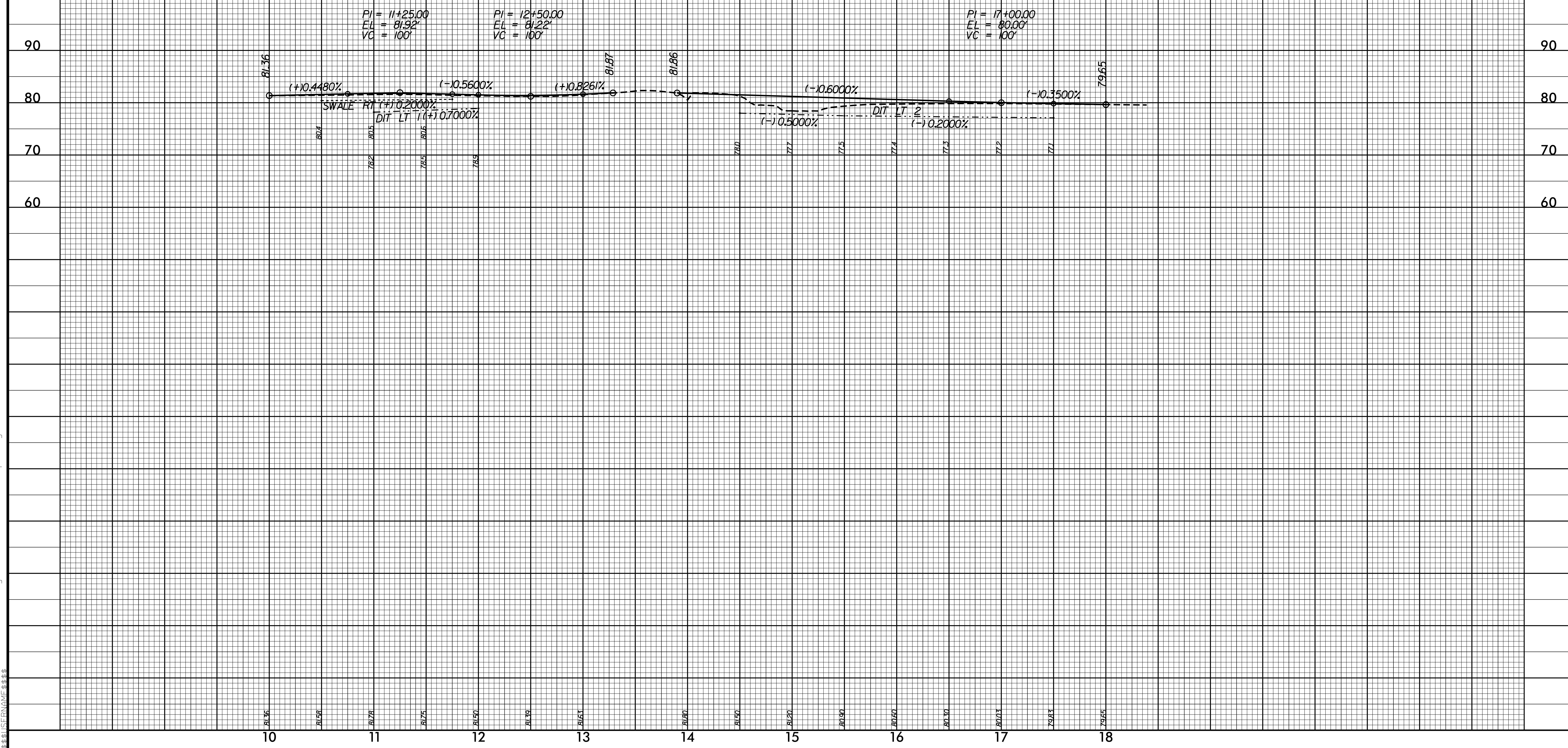
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PROJECT REFERENCE NO. R-2250	SHEET NO. 5
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
11/2/2021	11/2/2021

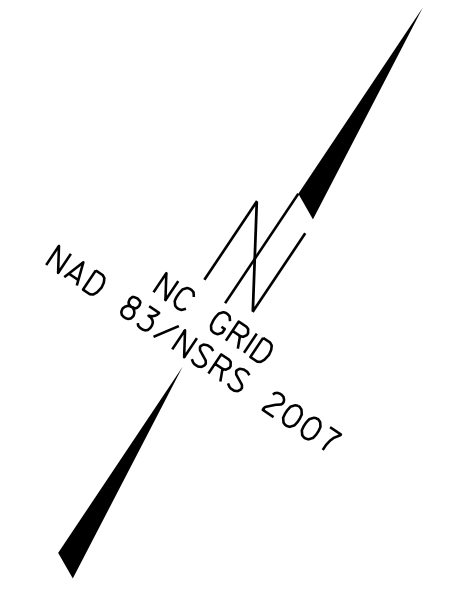
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UNLESS ALL SIGNATURES COMPLETED**



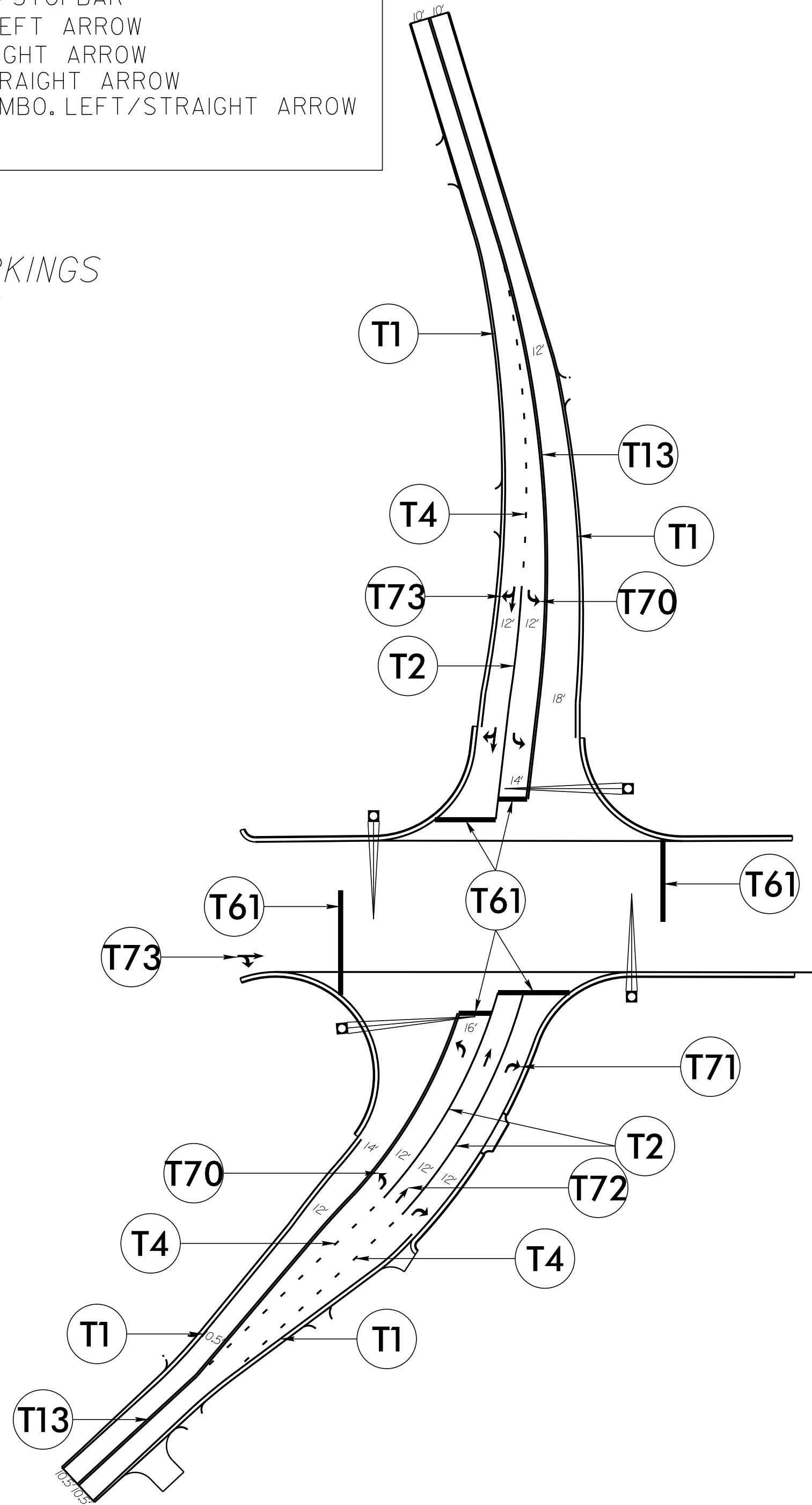
PAVEMENT MARKING SCHEDULE

PAVEMENT MARKING LINES AND SYMBOLS

T1-THERMOPLASTIC PAVEMENT MARKING	(4" WHITE, 90MILS) EDGE LINE
T2-THERMOPLASTIC PAVEMENT MARKING	(4" WHITE, 90MILS) SOLID LANE LINE
T4-THERMOPLASTIC PAVEMENT MARKING	(4" WHITE, 90MILS) 3'-9"/SP MINISKIP LINE
T13-THERMOPLASTIC PAVEMENT MARKING	(4" YELLOW, 90MILS) DOUBLE CENTER LINE
T61-THERMOPLASTIC PAVEMENT MARKING	(24" WHITE, 90MILS) STOPBAR
T70-THERMOPLASTIC PAVEMENT SYMBOL	(WHITE, 90MILS) LEFT ARROW
T71-THERMOPLASTIC PAVEMENT SYMBOL	(WHITE, 90MILS) RIGHT ARROW
T72-THERMOPLASTIC PAVEMENT SYMBOL	(WHITE, 90MILS) STRAIGHT ARROW
T73-THERMOPLASTIC PAVEMENT SYMBOL	(WHITE, 90MILS) COMBO. LEFT/STRAIGHT ARROW



NOTE: REVISE THERMOPLASTIC PAVEMENT MARKINGS ALONG US 264 ALT APPROACH IN ACCORDANCE WITH THE 2018 STANDARD DRAWINGS
 QUANTITIES HAVE BEEN ACCOUNTED FOR IN THE CONTRACT BID FORM



NOTE

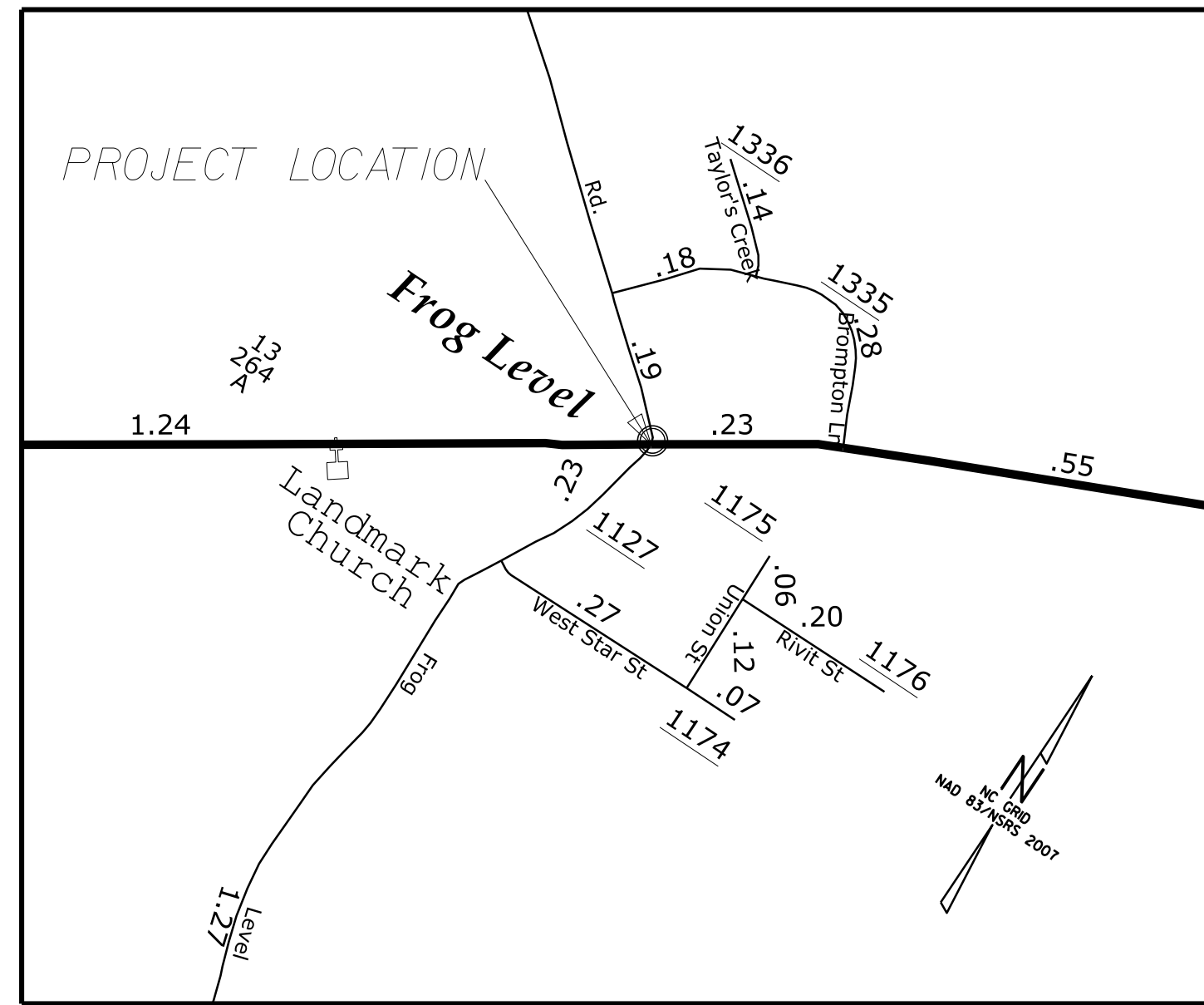
PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, NCDOT ROADWAY STANDARD DRAWINGS, AND THE CURRENT EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). QUANTITIES FOR THESE ITEMS HAVE BEEN ACCOUNTED FOR IN THE CONTRACT BID FORM.

REVISIONS

8/17/99

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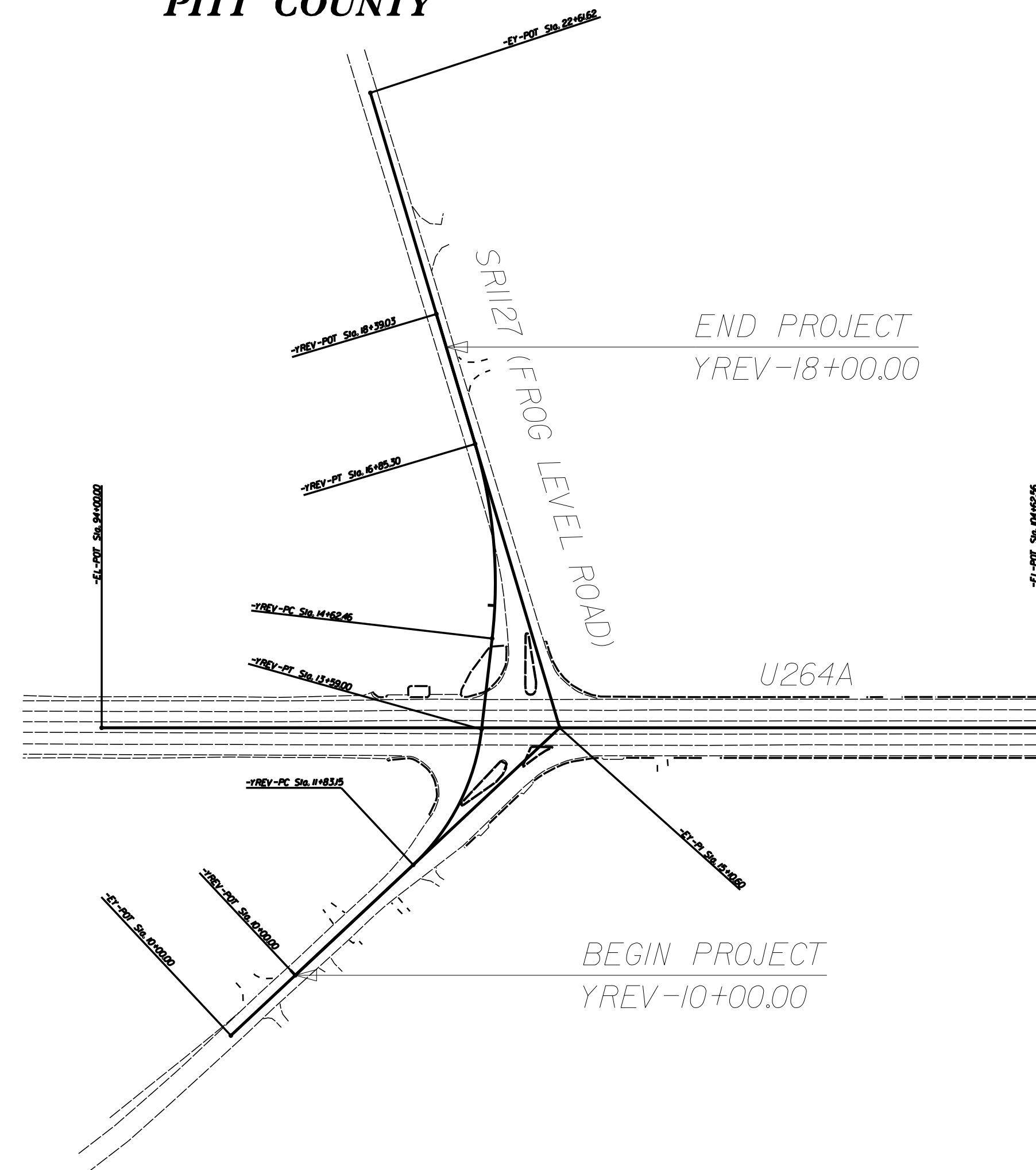
TIP PROJECT: R-2250



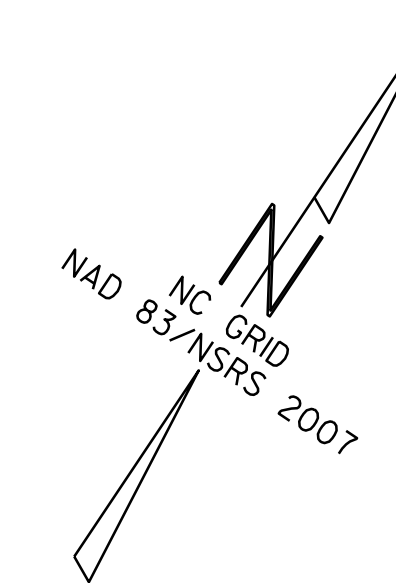
VICINITY MAP

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

LOCATION: US264A AT SR 1127 (FROG LEVEL ROAD)
PITT COUNTY



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

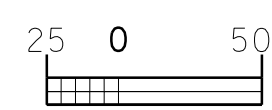


STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2250	EC-1	3
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34411.1.2		PE	
34411.2.5		RW	
34411.3.7		CONST	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	— TSD —
1630.05	Temporary Diversion	→ TD →
1605.01	Temporary Silt Fence	— — — —
1606.01	Special Sediment Control Fence	—▲▲▲▲▲▲—
1622.01	Temporary Berms and Slope Drains	— T —
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	— EW —
	Wattle/Coir Fiber Wattle with Polyacrylamide (PAM)	— CFW —
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	▭

GRAPHIC SCALE



PLANS

ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

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

2018 STANDARD SPECIFICATIONS

Prepared in the Office of:
DIVISION OF HIGHWAYS
1037 WH SMITH BLVD
GREENVILLE, NC 27835

Rich Godley
Level III
Certification #3559

Roadway Standard Drawings

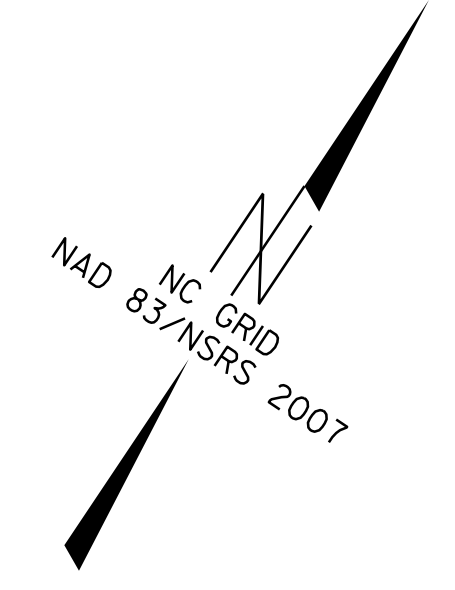
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2018 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

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	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	

SOIL STABILIZATION TIMEFRAMES

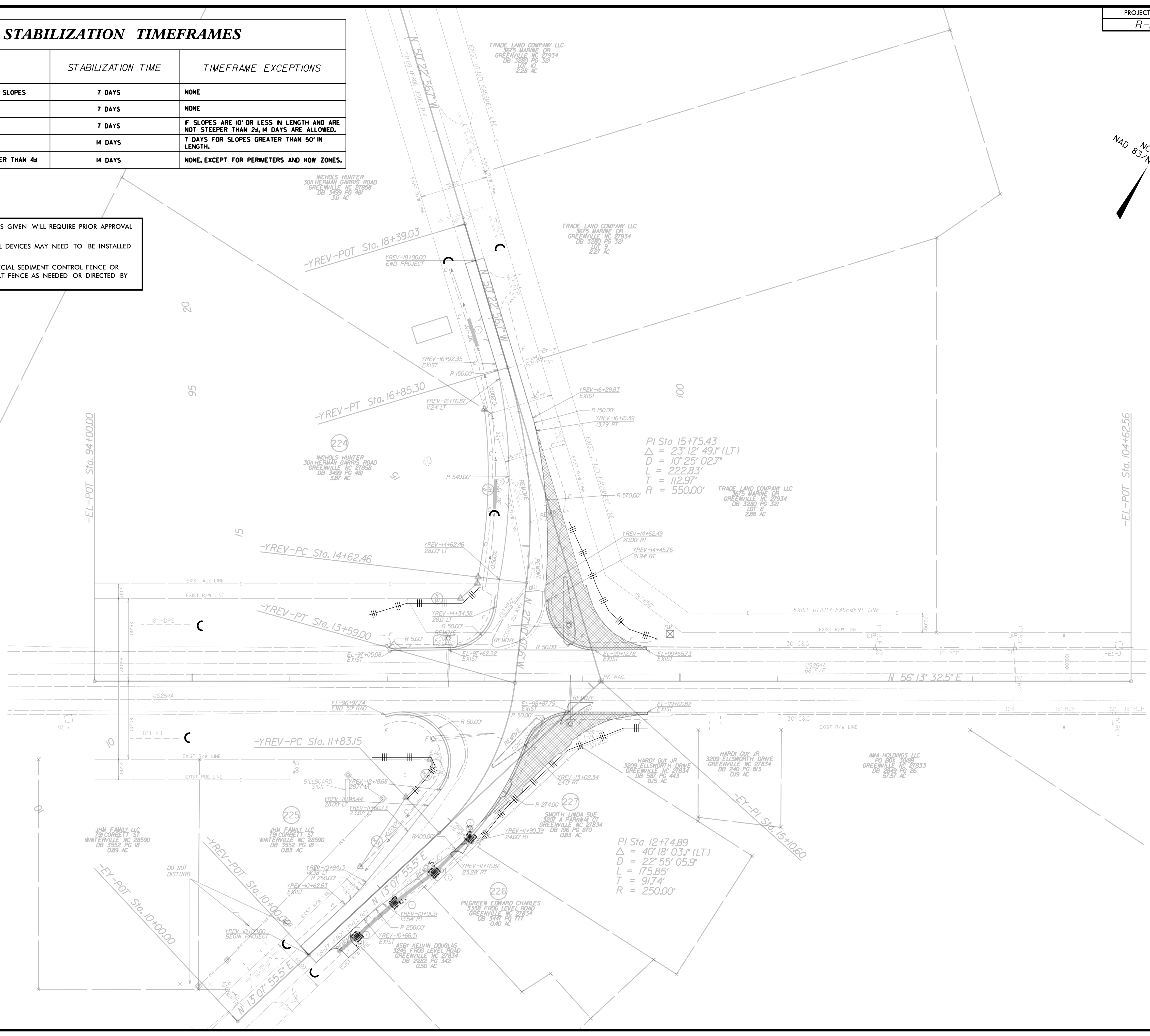
SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS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

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.
ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.
CONTRACTOR SHALL INSTALL SPECIAL SEDIMENT CONTROL FENCE OR WATTLES IN LOW AREAS OF SILT FENCE AS NEEDED OR DIRECTED BY THE ENGINEER.



REVISIONS

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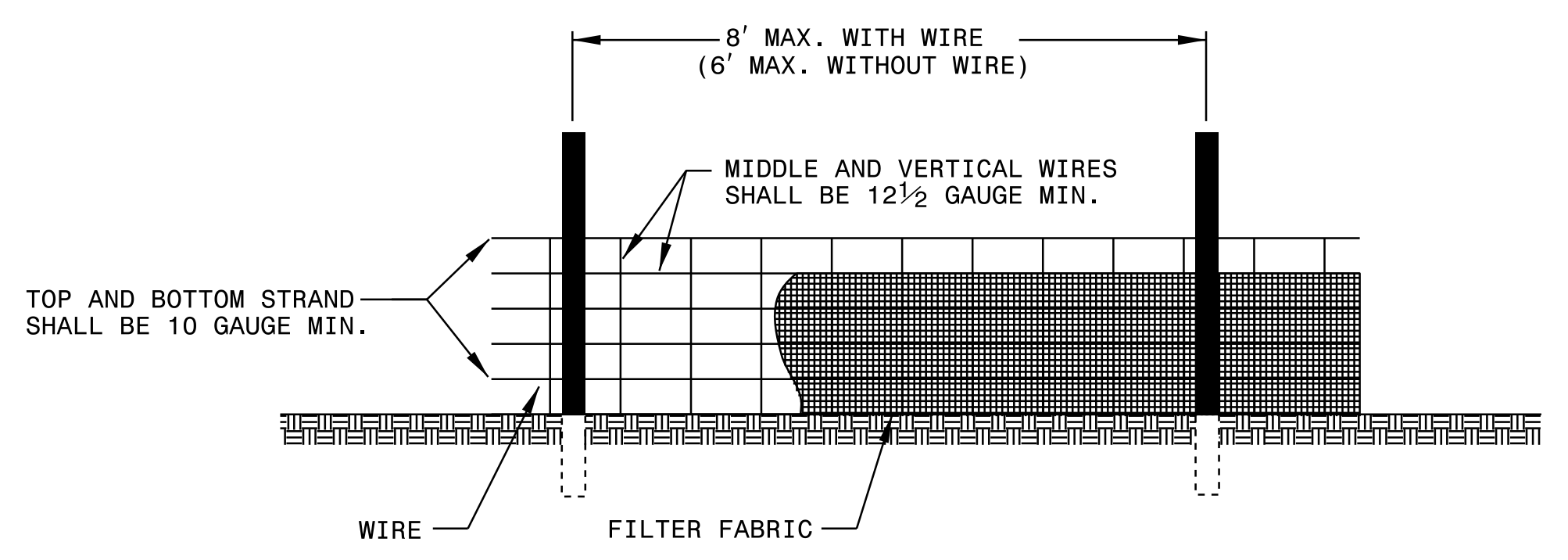


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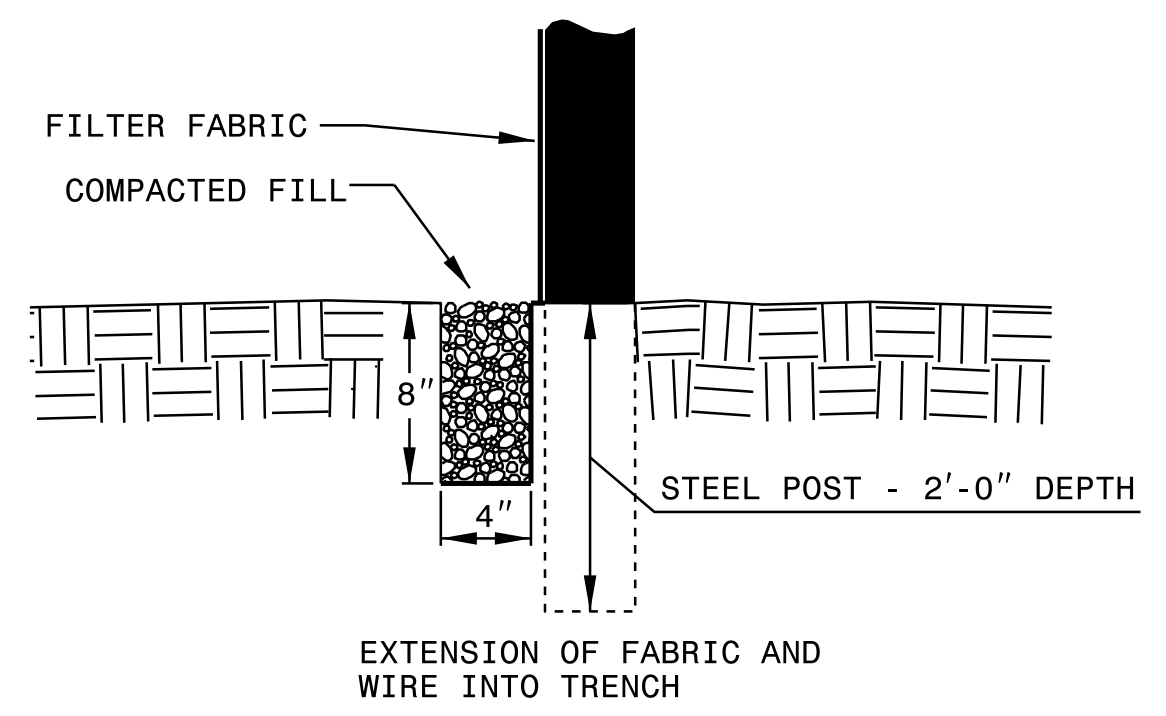
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR TEMPORARY SILT FENCE

SHEET 1 OF 1 1605.01



NOTES
 USE WIRE A MINIMUM OF 32" IN WIDTH AND WITH A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
 USE FILTER FABRIC A MINIMUM OF 36" IN WIDTH AND FASTEN ADEQUATELY TO THE WIRE AS DIRECTED BY THE ENGINEER.
 PROVIDE 5'-0" STEEL POST OF THE SELF-FASTENER ANGLE STEEL TYPE.



STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR TEMPORARY SILT FENCE

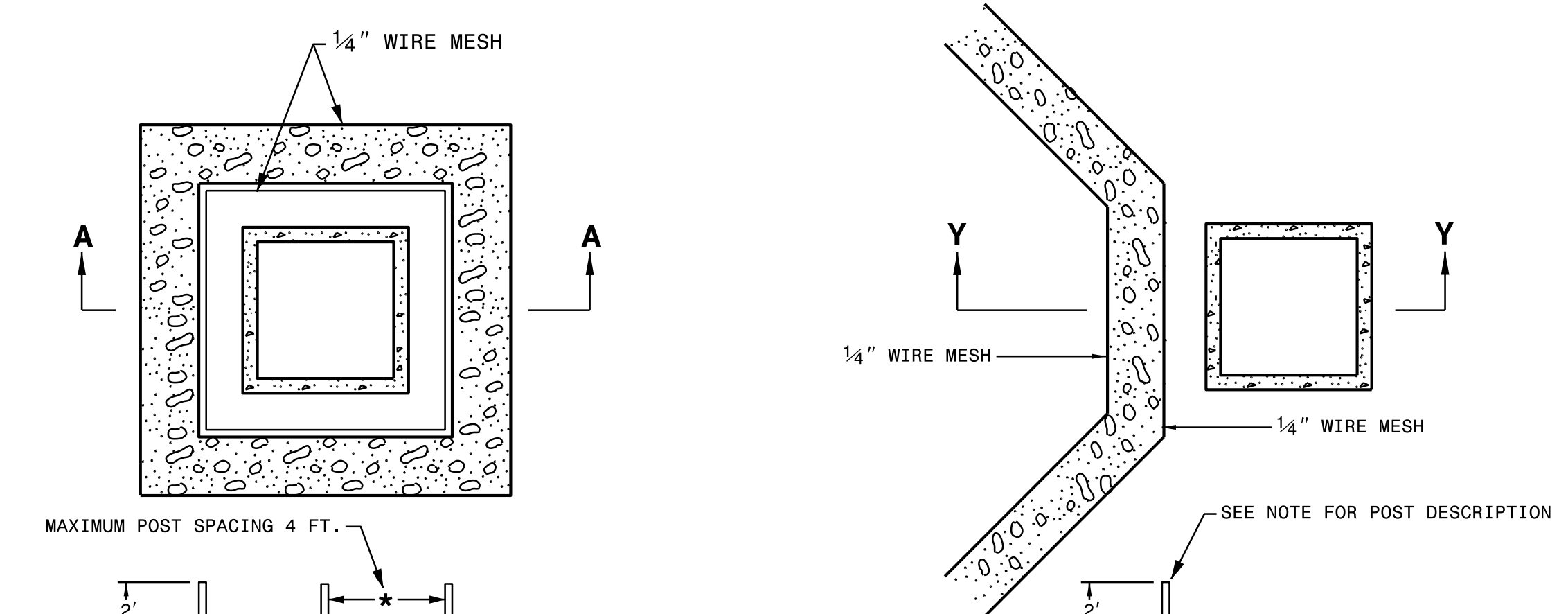
SHEET 1 OF 1 1605.01

REVISIONS

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR ROCK INLET SEDIMENT TRAP TYPE 'C'

SHEET 1 OF 1 1632.03



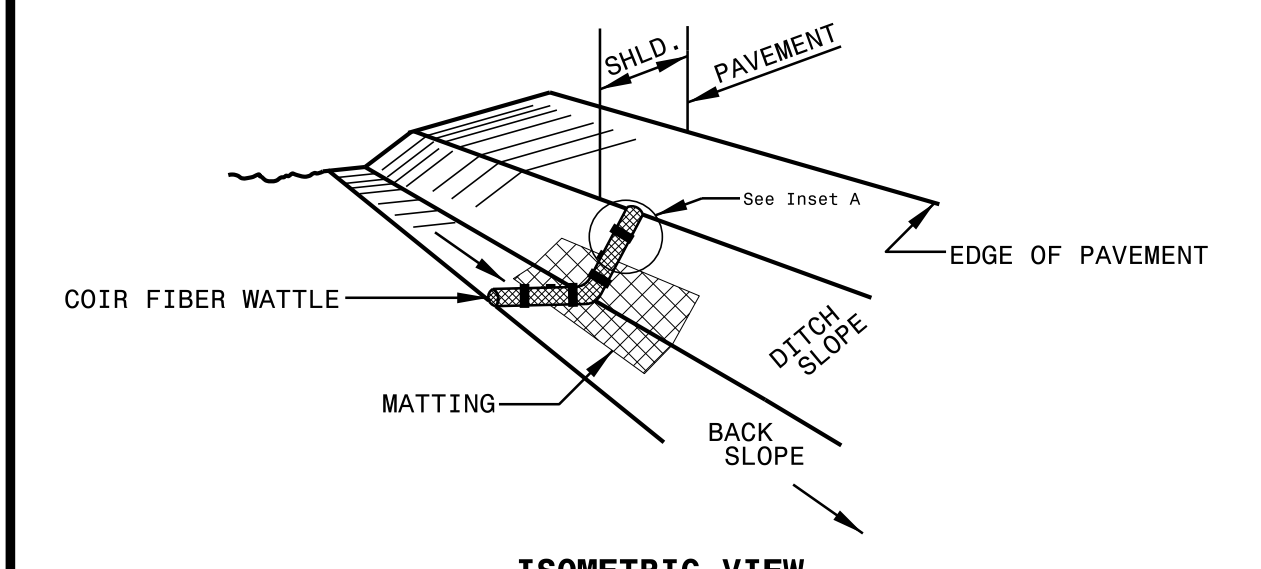
NOTE
 USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.
 USE 24 GAUGE MINIMUM WIRE MESH HARDWARE CLOTH WITH 1/4 INCH MESH OPENINGS.
 PLACE TOP OF WIRE MESH A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.
 INSTALL WIRE MESH UNDER SEDIMENT CONTROL STONE.
 USE 5" STEEL POST, INSTALLED 1.5' DEEP MINIMUM, AND OF THE SELF-FASTENER ANGLE STEEL TYPE.
 SPACE POST A MAXIMUM OF 4'.

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

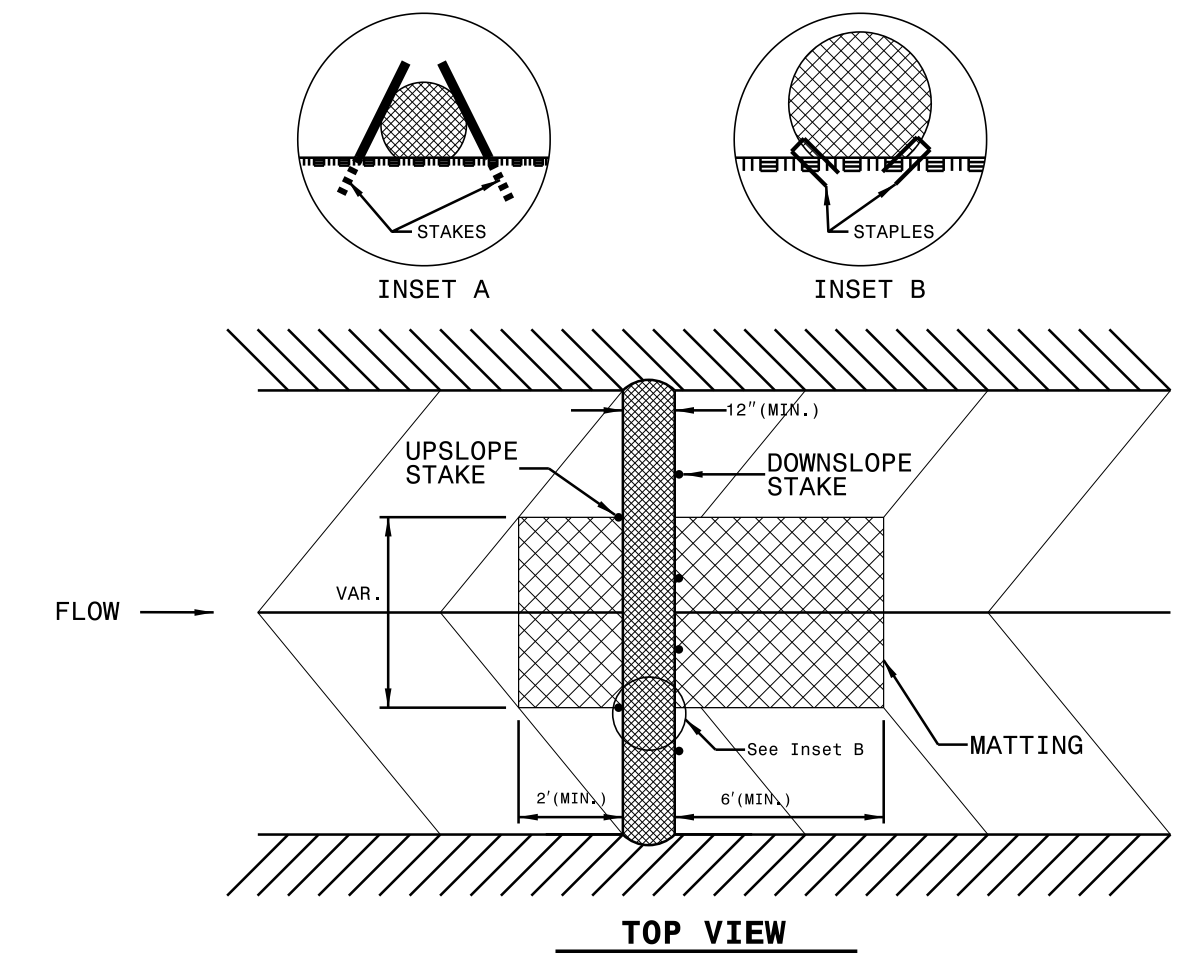
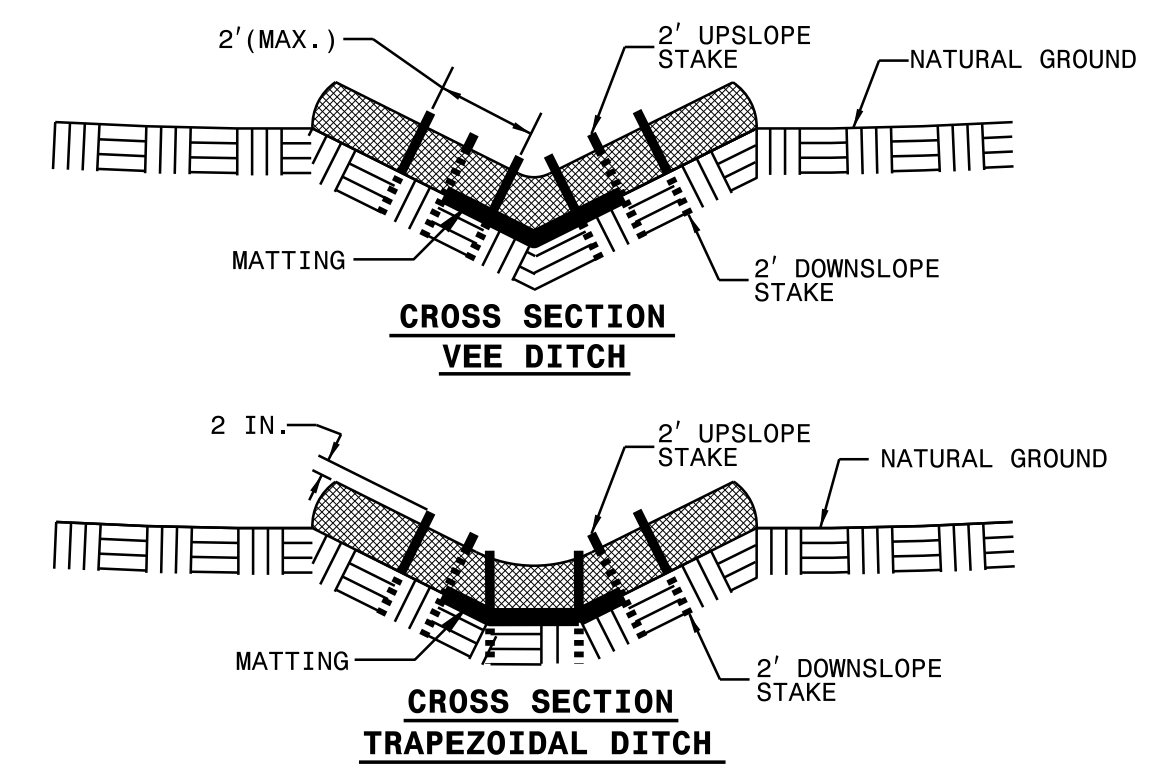
ENGLISH STANDARD DRAWING FOR ROCK INLET SEDIMENT TRAP TYPE 'C'

SHEET 1 OF 1 1632.03

COIR FIBER WATTLE DETAIL



NOTES:
 USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) 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.



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PHASING DIAGRAM

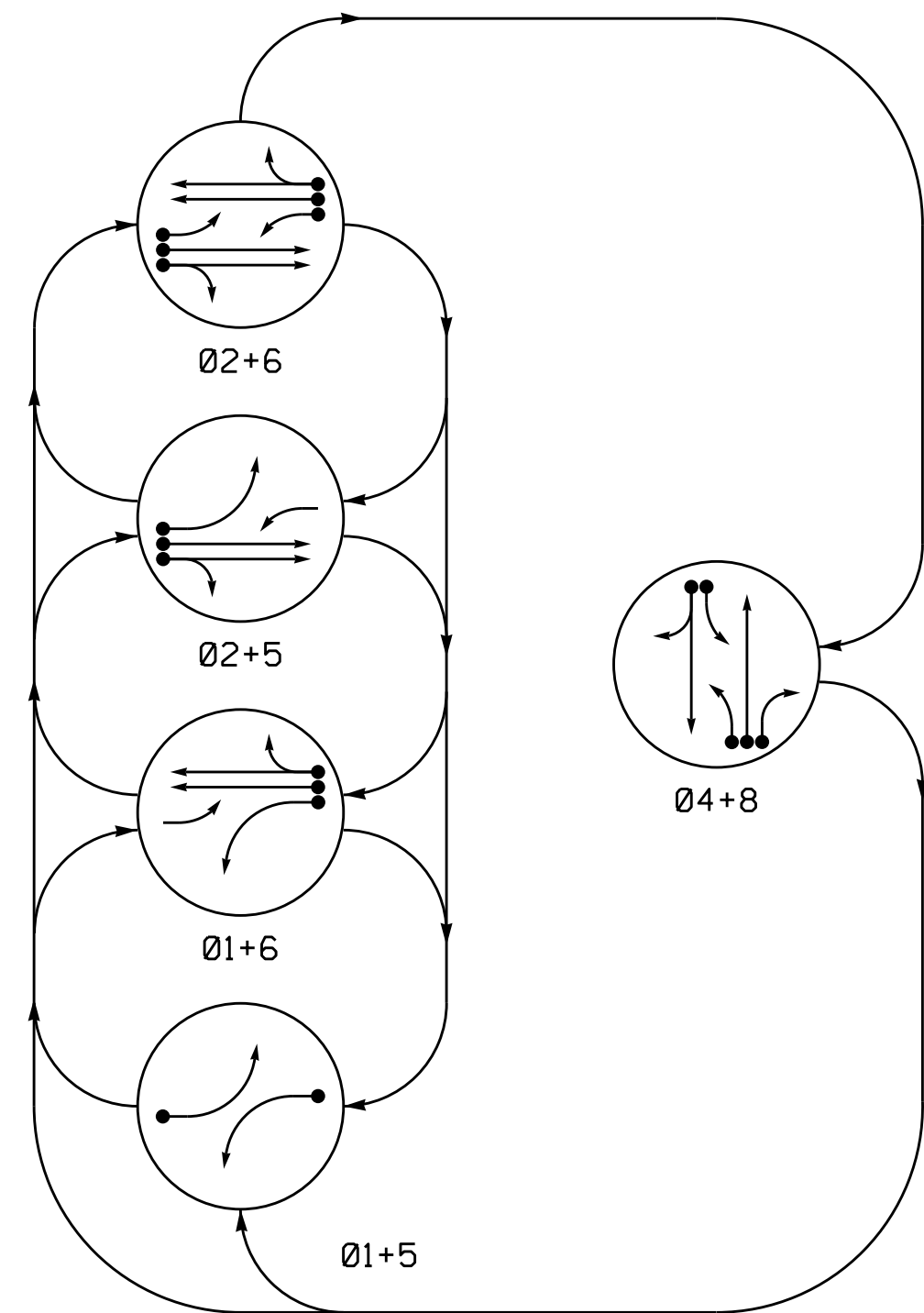
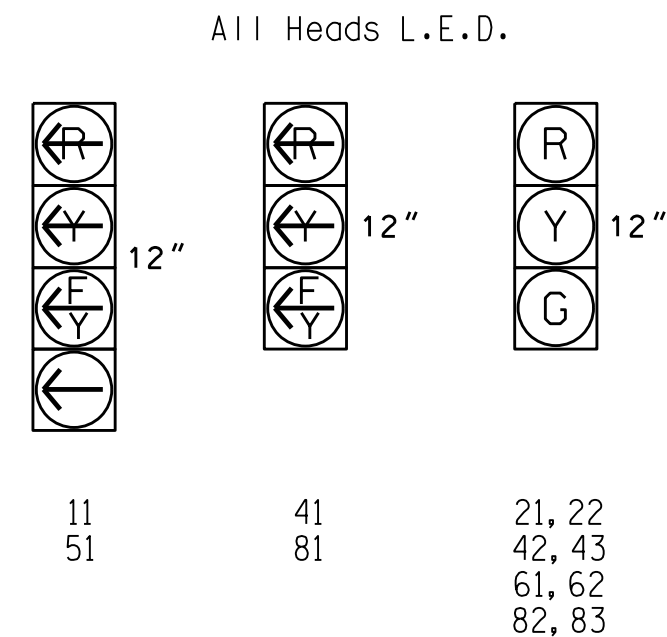


TABLE OF OPERATION

SIGNAL FACE	PHASE				
	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø4+8
11	←	←	←	←	←
21, 22	R	R	G	G	Y
41	←	←	←	←	←
42, 43	R	R	R	R	G
51	←	←	←	←	←
61, 62	R	G	R	G	Y
81	←	←	←	←	←
82, 83	R	R	R	R	G

SIGNAL FACE I.D.



OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

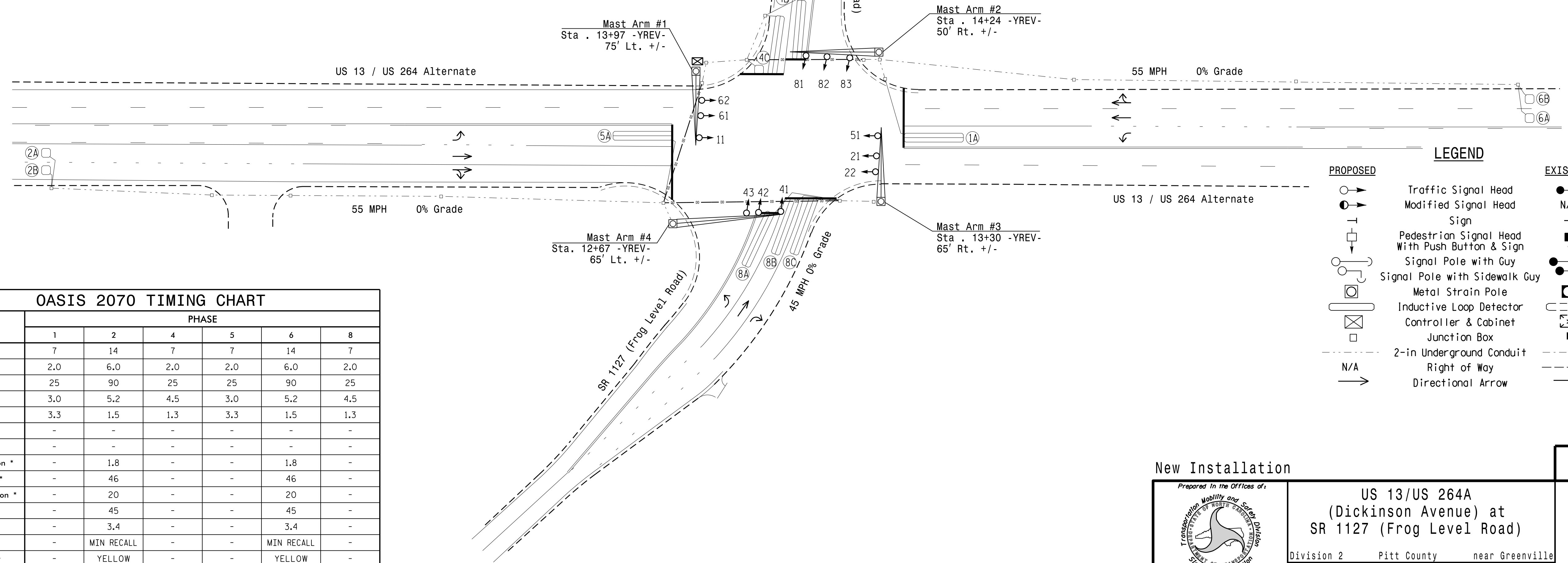
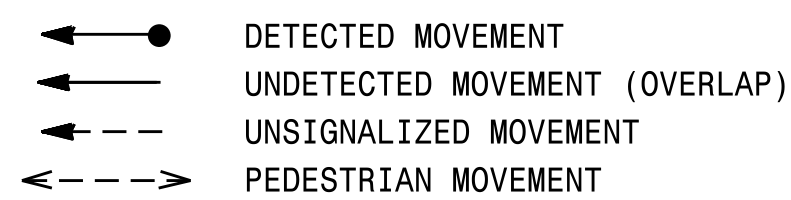
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING						
					PHASE	CALLING	EXTENSION	STRETCH TIME	DELAY TIME		
1A	6X40	0	2-4-2	Y	1	Y	Y	-	15	-	Y
2A	6X6	420	6	Y	2	Y	Y	-	-	-	Y
2B	6X6	420	6	Y	2	Y	Y	-	-	-	Y
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	3	Y
4B	6X40	0	2-4-2	Y	4	Y	Y	-	-	10	Y
4C	6X6	0	3	Y	4	Y	Y	-	-	15	Y
5A	6X40	0	2-4-2	Y	5	Y	Y	-	-	15	Y
6A	6X6	420	6	Y	6	Y	Y	-	-	-	Y
6B	6X6	420	6	Y	6	Y	Y	-	-	-	Y
8A	6X40	0	2-4-2	Y	8	Y	Y	-	-	3	Y
8B	6X40	0	2-4-2	Y	8	Y	Y	-	-	-	Y
8C	6X40	0	2-4-2	Y	8	Y	Y	-	-	15	Y

5 Phase Fully Actuated Isolated

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Set all detector units to presence mode.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.

PHASING DIAGRAM DETECTION LEGEND



LEGEND

PROPOSED	EXISTING
	N/A

OASIS 2070 TIMING CHART

FEATURE	PHASE					
	1	2	4	5	6	8
Min Green 1 *	7	14	7	7	14	7
Extension 1 *	2.0	6.0	2.0	2.0	6.0	2.0
Max Green 1 *	25	90	25	25	90	25
Yellow Clearance	3.0	5.2	4.5	3.0	5.2	4.5
Red Clearance	3.3	1.5	1.3	3.3	1.5	1.3
Walk 1 *	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-
Seconds Per Actuation *	-	1.8	-	-	1.8	-
Max Variable Initial *	-	46	-	-	46	-
Time Before Reduction *	-	20	-	-	20	-
Time To Reduce *	-	45	-	-	45	-
Minimum Gap	-	3.4	-	-	3.4	-
Recall Mode	-	MIN RECALL	-	-	MIN RECALL	-
Vehicle Call Memory	-	YELLOW	-	-	YELLOW	-
Dual Entry	-	-	ON	-	-	ON
Simultaneous Gap	ON	ON	ON	ON	ON	ON

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

New Installation

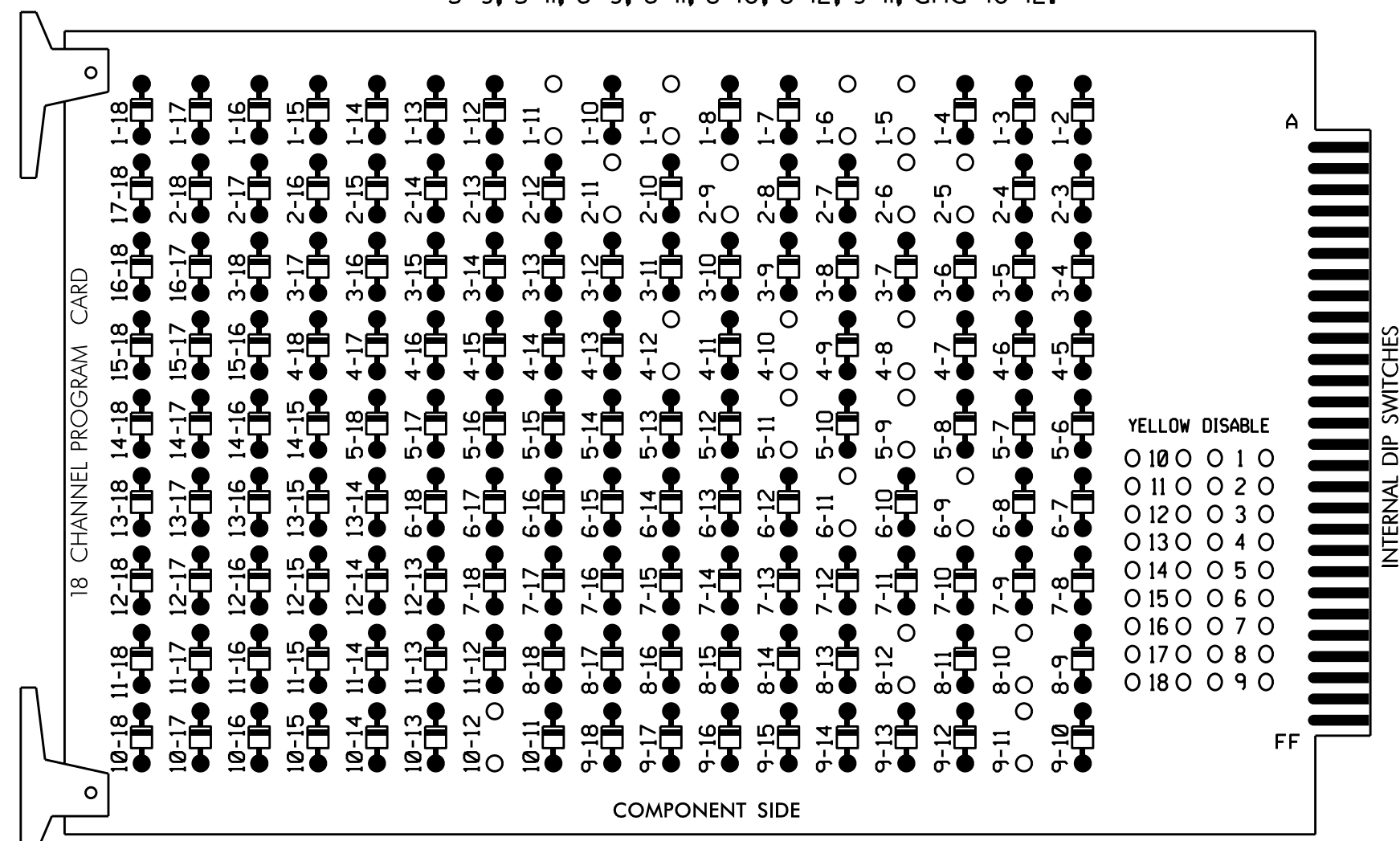
Prepared in the Offices of:

 US 13/US 264A (Dickinson Avenue) at SR 1127 (Frog Level Road)
 Division 2 Pitt County near Greenville
 PLAN DATE: March 2021 REVIEWED BY: ZML
 PREPARED BY: MEL REVIEWED BY:
 SCALE: 1" = 40'
 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
 Date: 5/11/2021
 Signature: Megan E. LeBlanc
 S.I.G. INVENTORY NO. 02-0946

EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

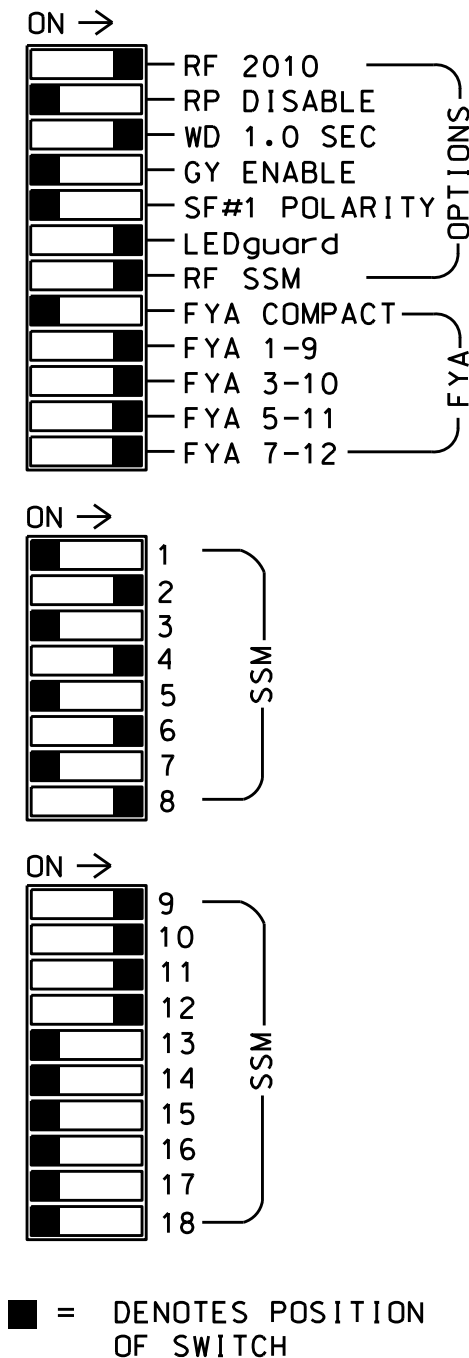
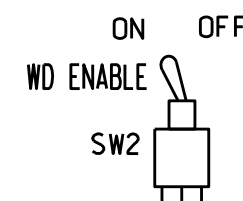
REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-11, 2-5, 2-6, 2-9, 2-11, 4-8, 4-10, 4-12, 5-9, 5-11, 6-9, 6-11, 8-10, 8-12, 9-11, and 10-12.



REMOVE JUMPERS AS SHOWN

NOTES:

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



NOTES

- To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the Signal Plans.
- Program phases 4 and 8 for Dual Entry.
- Enable Simultaneous Gap-Out for all Phases.
- Program phases 2 and 6 for Variable Initial and Gap Reduction.
- Program phases 2 and 6 for Startup In Green.
- Program phases 2 and 6 for Yellow Flash, and overlaps 1 and 2 as Wag Overlaps.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.

EQUIPMENT INFORMATION

CONTROLLER.....2070
 CABINET.....332 W/ AUX
 SOFTWARE.....ECONOLITE OASIS
 CABINET MOUNT.....BASE
 OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE
 LOAD SWITCHES USED.....S1,S2,S5,S7,S8,S11,AUX S1,
 AUX S2,AUX S4,AUX S5
 PHASES USED.....1,2,4,5,6,8
 OVERLAP "A".....1+2
 OVERLAP "B".....4
 OVERLAP "C".....5+6
 OVERLAP "D".....8

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OLA	OLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	11	21,22	NU	NU	42,43	NU	51	61,62	NU	NU	82,83	NU	11	81	NU	51	41	NU
RED		128			101			134			107							
YELLOW	*	129			102		*	135			108							
GREEN		130			103			136			109							
RED ARROW													A121	A124		A114	A101	
YELLOW ARROW													A122	A125		A115	A102	
FLASHING YELLOW ARROW													A123	A126		A116	A103	
GREEN ARROW	127																	

NU = Not Used
 * Denotes install load resistor. See load resistor installation detail this sheet.
 ★ See pictorial of head wiring in detail this sheet.

INPUT FILE POSITION LAYOUT

(front view)

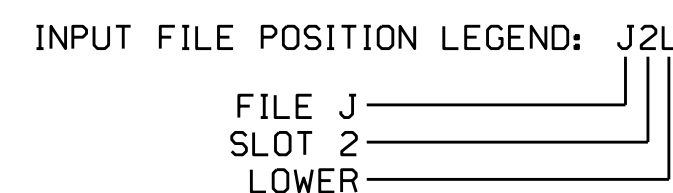
FILE "I"	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	∅ 1	∅ 2	∅ 3	∅ 4	∅ 5	∅ 6	∅ 7	∅ 8	∅ 9	∅ 10	∅ 11	∅ 12	∅ 13	∅ 14
L	1A	2A	3A	4A	5A	6A	7A	8A	9A	10A	11A	12A	13A	14A
U	NOT USED	∅ 2	∅ 3	∅ 4	∅ 5	∅ 6	∅ 7	∅ 8	∅ 9	∅ 10	∅ 11	∅ 12	∅ 13	∅ 14
L	2B	3B	4B	5B	6B	7B	8B	9B	10B	11B	12B	13B	14B	FS
U	∅ 5	∅ 6	∅ 7	∅ 8	∅ 9	∅ 10	∅ 11	∅ 12	∅ 13	∅ 14	∅ 15	∅ 16	∅ 17	DC ISOLATOR
L	5A	6A	7A	8A	9A	10A	11A	12A	13A	14A	15A	16A	17A	ST
U	NOT USED	∅ 6	∅ 7	∅ 8	∅ 9	∅ 10	∅ 11	∅ 12	∅ 13	∅ 14	∅ 15	∅ 16	∅ 17	DC ISOLATOR
L	6B	7B	8B	9B	10B	11B	12B	13B	14B	15B	16B	17B	18B	

EX.: 1A, 2A, ETC. = LOOP NO.'S
 FS = FLASH SENSE
 ST = STOP TIME
 ⊗ Wired Input - Do not populate slot with detector card

INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A ¹	TB2-1,2	I1U	56	18	1	1	Y	Y			15
	-	J4U	48	10	26	6	Y	Y	Y		3
2A	TB2-5,6	I2U	39	1	2	2	Y	Y			
2B	TB2-7,8	I2L	43	5	12	2	Y	Y			
4A	TB4-9,10	I6U	41	3	4	4	Y	Y			3
4B	TB4-11,12	I6L	45	7	14	4	Y	Y			10
4C	TB6-1,2	I7U	65	27	34	4	Y	Y			15
5A ²	TB3-1,2	J1U	55	17	5	5	Y	Y			15
	-	I4U	47	9	22	2	Y	Y	Y		3
6A	TB3-5,6	J2U	40	2	6	6	Y	Y			
6B	TB3-7,8	J2L	44	6	16	6	Y	Y			
8A	TB5-9,10	J6U	42	4	8	8	Y	Y			3
8B	TB5-11,12	J6L	46	8	18	8	Y	Y			
8C	TB7-1,2	J7U	66	28	38	8	Y	Y			15

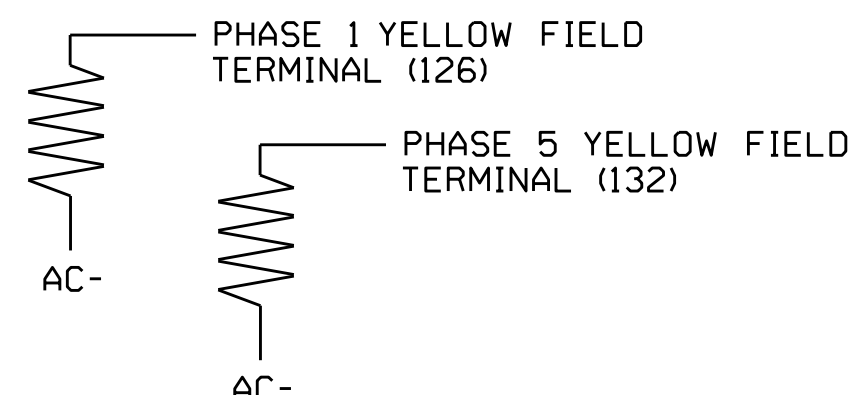
- Add jumper from I1-W to J4-W. on rear of input file.
- Add jumper from J1-W to I4-W. on rear of input file.



LOAD RESISTOR INSTALLATION DETAIL

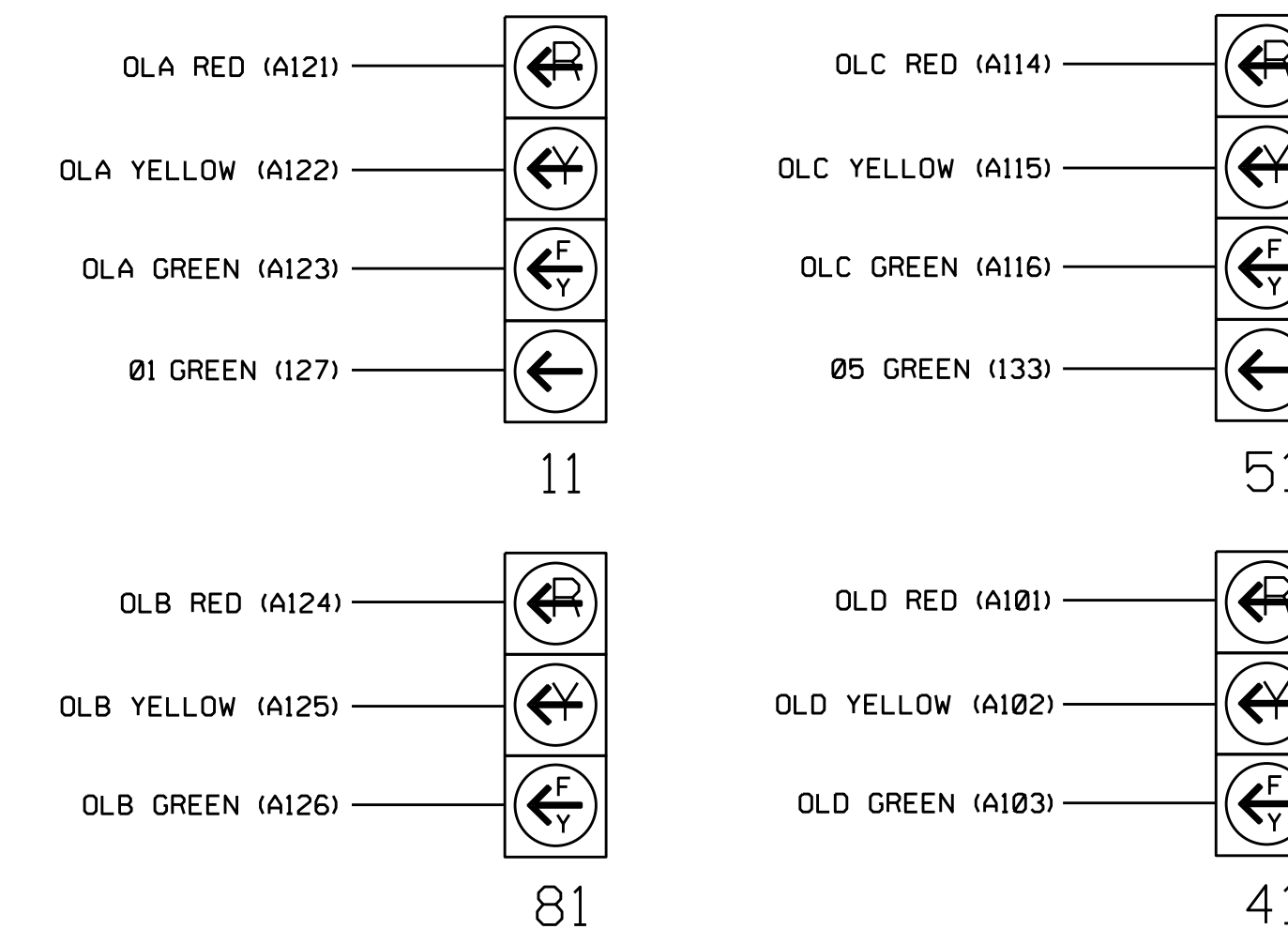
(install resistors as shown below)

VALUE (ohms)	WATTAGE
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)



FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



NOTE

The sequence display for signal heads 11 and 51 requires special logic programming. See sheet 2 for programming instructions.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 02-0946
 DESIGNED: March 2021
 SEALED: 5/11/2021
 REVISED: N/A

Electrical Detail - Sheet 1 of 2

ELECTRICAL AND PROGRAMMING DETAILS FOR:

US 13/US 264A (Dickinson Ave.) at SR 1127 (Frog Level Road)



Division 2 Pitt County near Greenville

PLAN DATE: March 2021 REVIEWED BY:
 PREPARED BY: S. Armstrong REVIEWED BY:

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

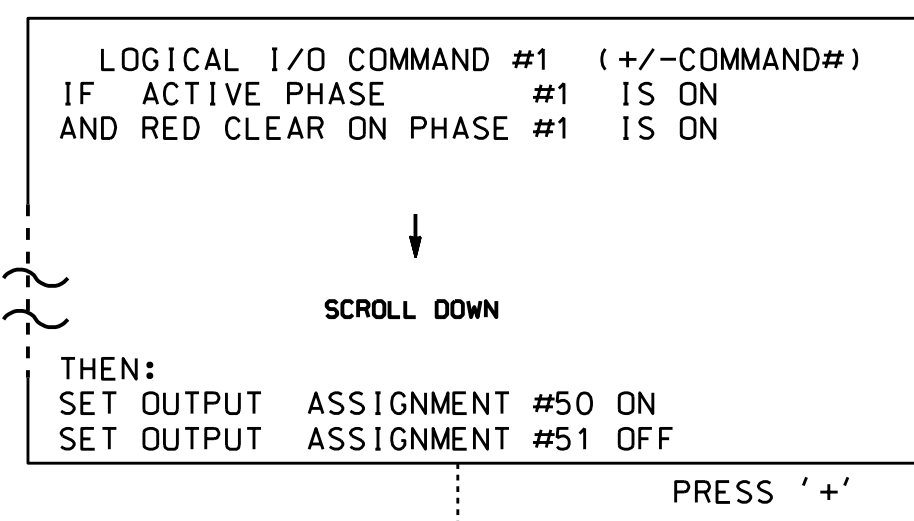
SEAL
 Ryan W. Hough
 PROFESSIONAL ENGINEER
 STATE OF NORTH CAROLINA
 License No. 036833
 Date: 5/12/2021

SIG. INVENTORY NO. 02-0946

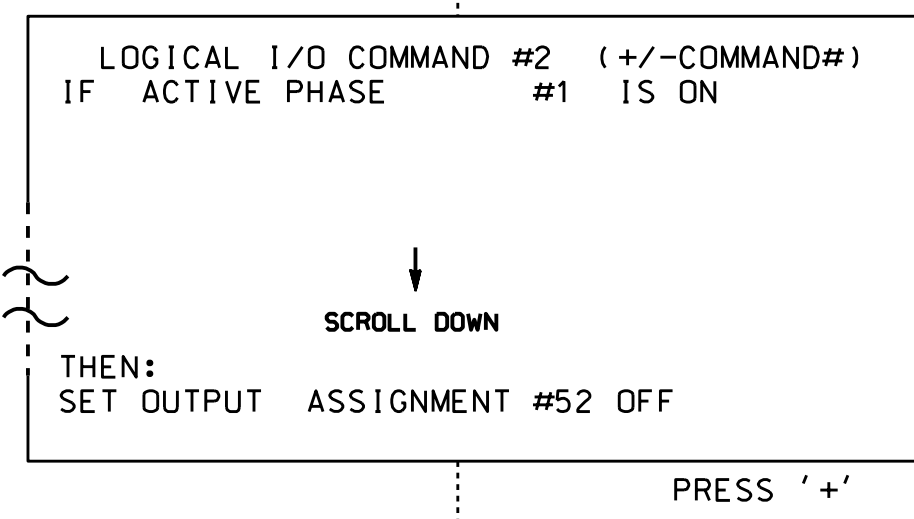
LOGICAL I/O PROCESSOR PROGRAMMING DETAIL TO PRODUCE SPECIAL FYA-PPLT SIGNAL SEQUENCE

(program controller as shown below)

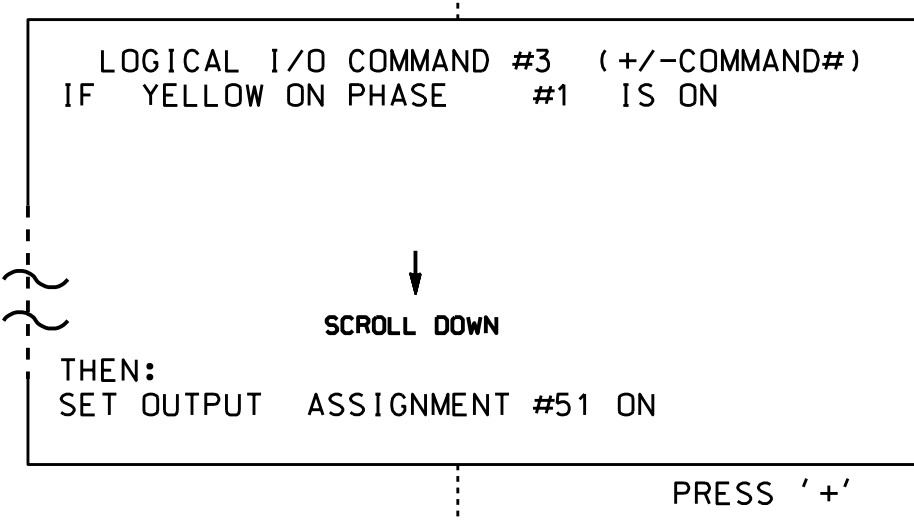
1. FROM MAIN MENU PRESS '2' (PHASE CONTROL), THEN '1' (PHASE CONTROL FUNCTIONS). SCROLL TO THE BOTTOM OF THE MENU AND ENABLE ACT LOGIC COMMANDS 1, 2, 3, 4, 5 AND 6.
2. FROM MAIN MENU PRESS '6' (OUTPUTS), THEN '3' (LOGICAL I/O PROCESSOR).



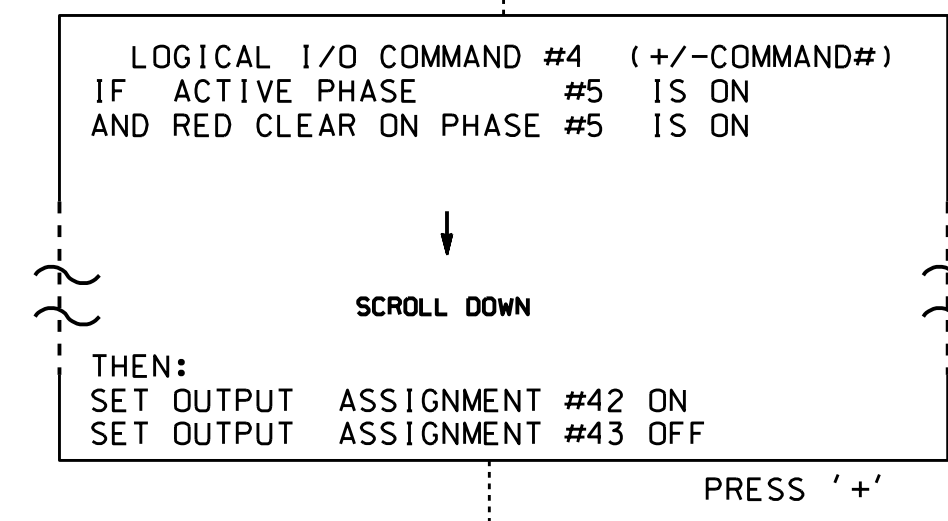
NOTE: LOGIC FOR PHASE 1 RED CLEAR WHEN TRANSITIONING FROM PHASE 1 TO PHASE 2 (HEAD 11).



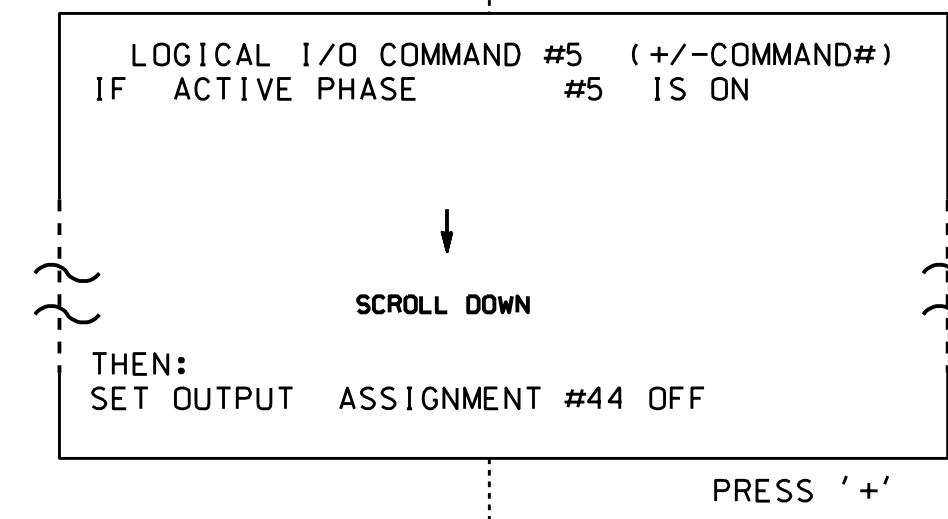
NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW OFF DURING PHASE 1 (HEAD 11).



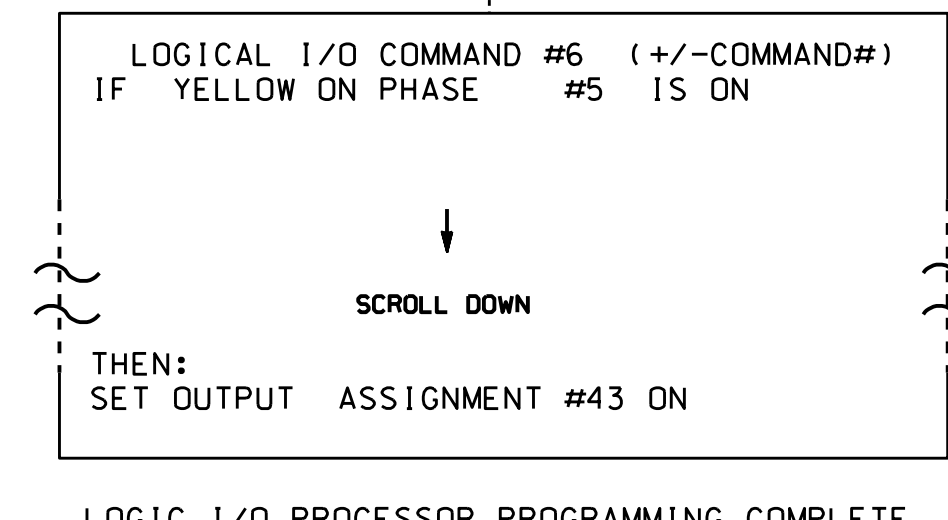
NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 1 (HEAD 11).



NOTE: LOGIC FOR PHASE 5 RED CLEAR WHEN TRANSITIONING FROM PHASE 5 TO PHASE 6 (HEAD 51).



NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW OFF DURING PHASE 5 (HEAD 51).



NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 5 (HEAD 51).

LOGIC I/O PROCESSOR PROGRAMMING COMPLETE

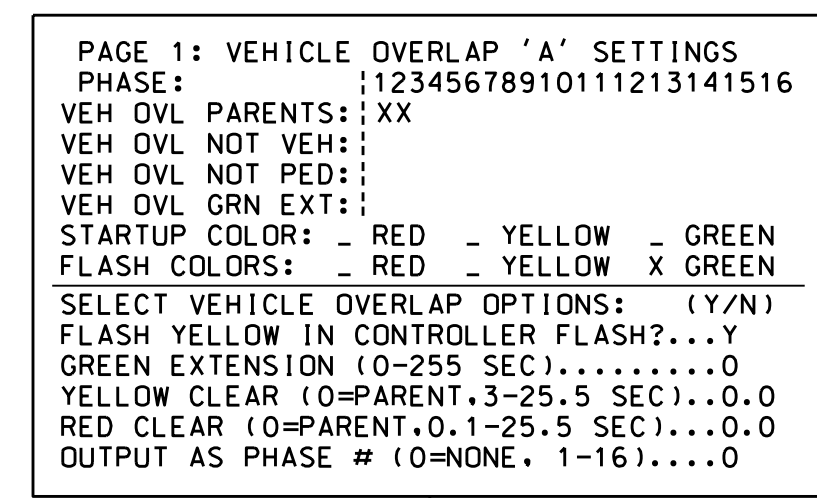
OUTPUT REFERENCE SCHEDULE

- OUTPUT 42 = Overlap C Red
- OUTPUT 43 = Overlap C Yellow
- OUTPUT 44 = Overlap C Green
- OUTPUT 50 = Overlap A Red
- OUTPUT 51 = Overlap A Yellow
- OUTPUT 52 = Overlap A Green

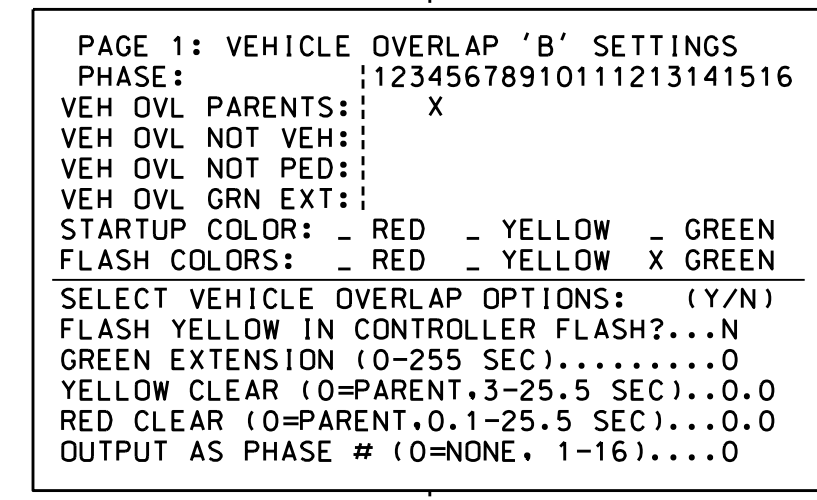
OVERLAP PROGRAMMING DETAIL

(program controller as shown below)

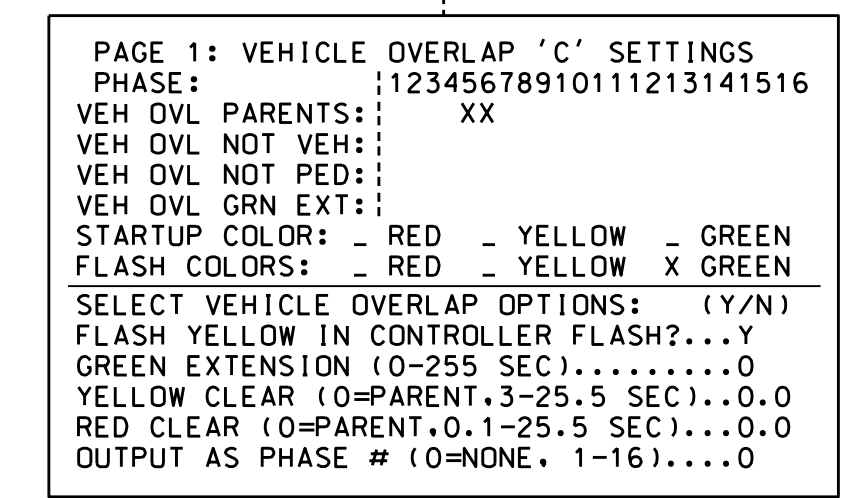
FROM MAIN MENU PRESS '8' (OVERLAPS), THEN '1' (VEHICLE OVERLAP SETTINGS).



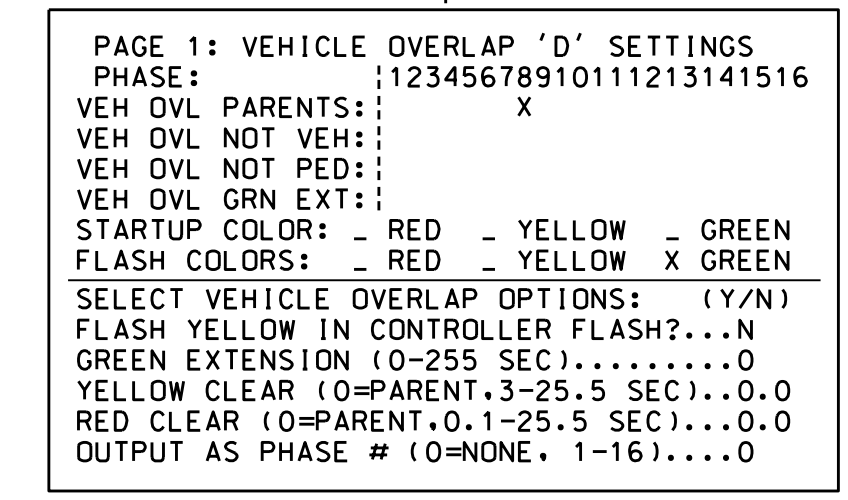
← NOTICE GREEN FLASH



← NOTICE GREEN FLASH



← NOTICE GREEN FLASH



← NOTICE GREEN FLASH

OVERLAP PROGRAMMING COMPLETE

FLASHER CIRCUIT MODIFICATION DETAIL

IN ORDER TO INSURE THAT SIGNALS FLASH CONCURRENTLY ON THE SAME APPROACH, MAKE THE FOLLOWING FLASHER CIRCUIT CHANGES:

1. ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-4 AND TERMINATE ON T2-2.
2. ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-5 AND TERMINATE ON T2-3.
3. REMOVE FLASHER UNIT 2.

THE CHANGES LISTED ABOVE TIES ALL PHASES AND OVERLAPS TO FLASHER UNIT 1.

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 02-0946
DESIGNED: March 2021
SEALED: 5/11/2021
REVISED: N/A

Electrical Detail - Sheet 2 of 2

ELECTRICAL AND PROGRAMMING DETAILS FOR:



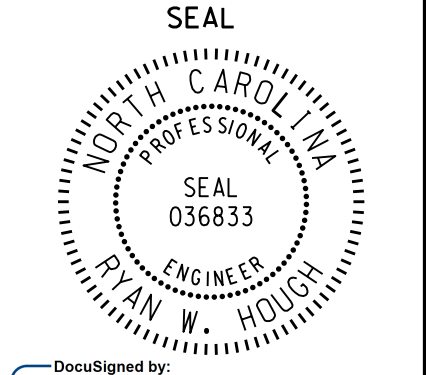
US 13/US 264A (Dickinson Ave.)
at
SR 1127 (Frog Level Road)

Division 2 Pitt County near Greenville

PLAN DATE: March 2021 REVIEWED BY:
PREPARED BY: S. Armstrong REVIEWED BY:

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

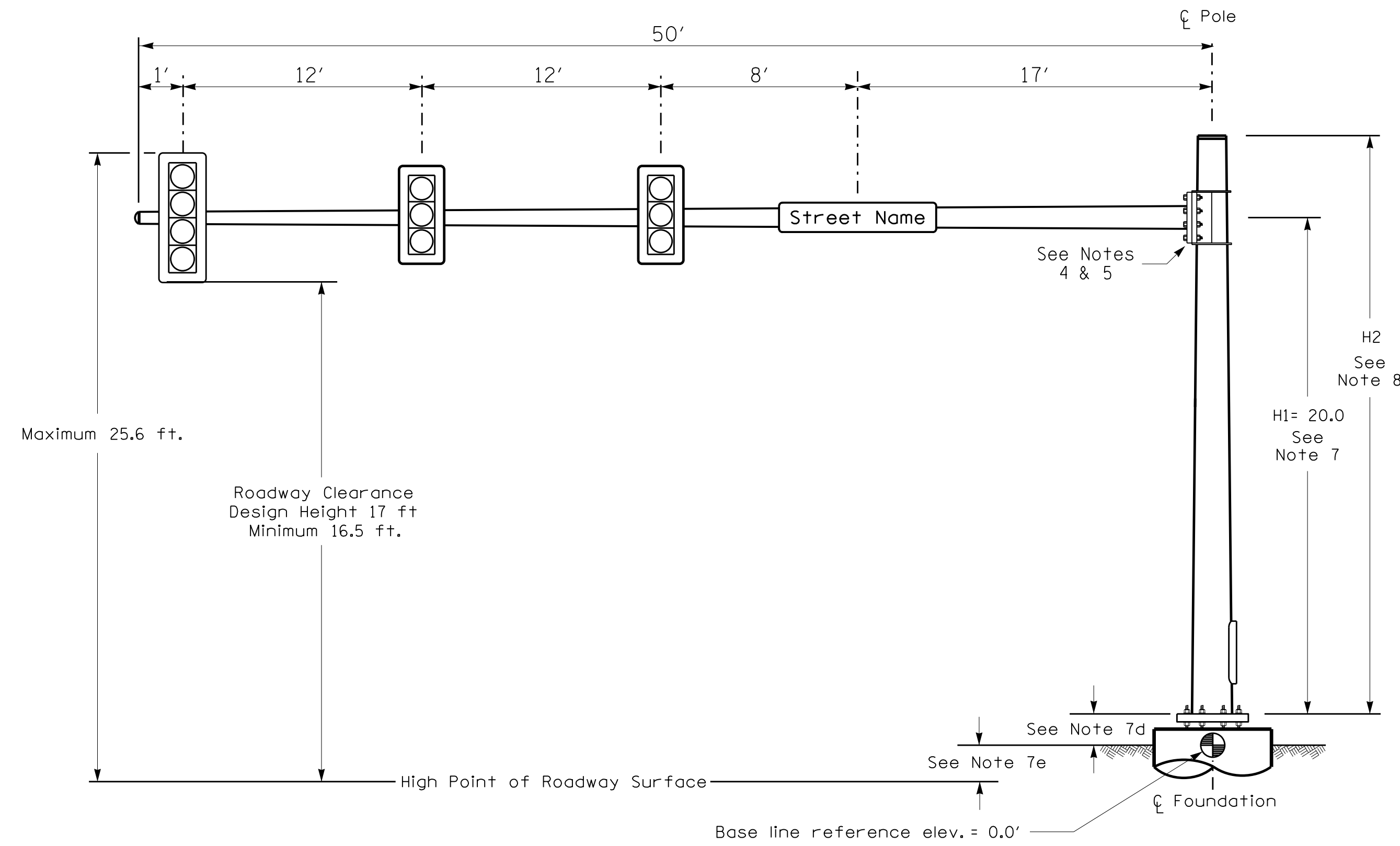


DocuSigned by: Ryan W. Hough 5/12/2021
430330FAA266453 DATE

SIG. INVENTORY NO. 02-0946

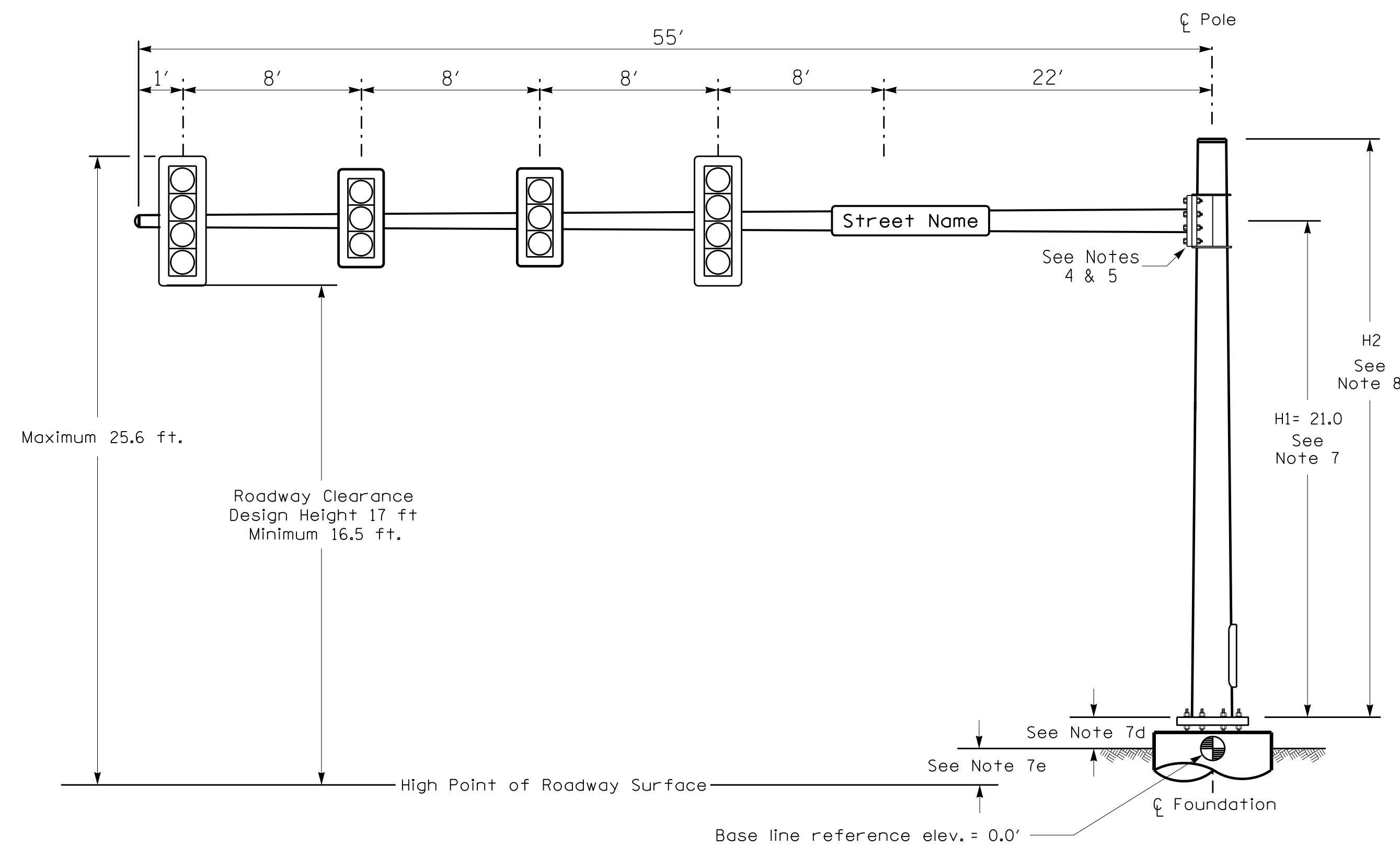
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Design Loading for METAL POLE NO. 1



Elevation View

Design Loading for METAL POLE NO. 2



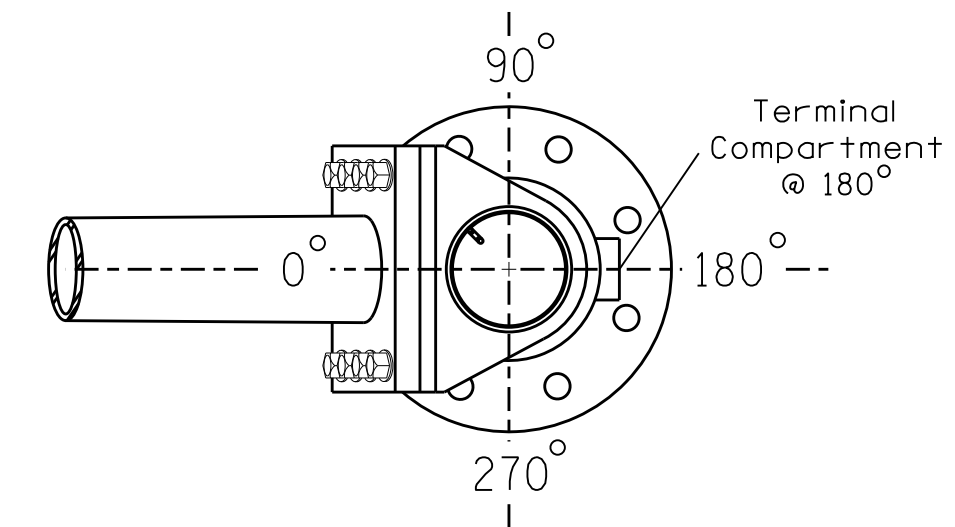
Elevation View

SPECIAL NOTE

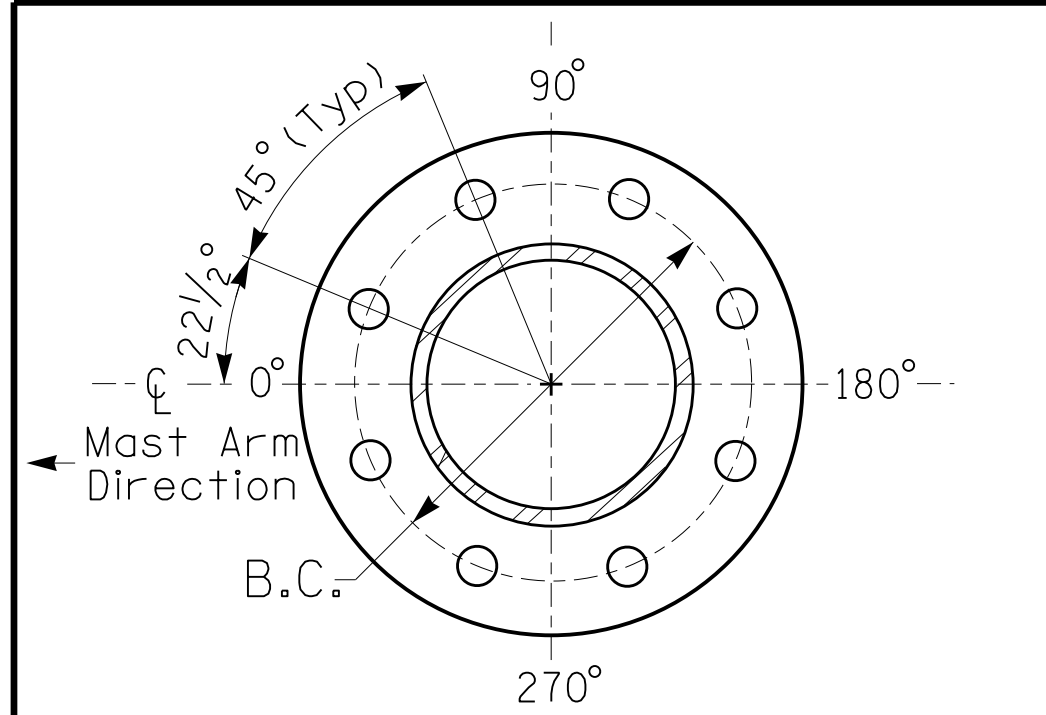
The contractor is responsible for verifying that the mast arm attachment height (H1) will provide the "Design Height" clearance from the roadway before submitting final shop drawings for approval. Verify elevation data below which was obtained by field measurement or from available project survey data.

Elevation Data for Mast Arm Attachment (H1)

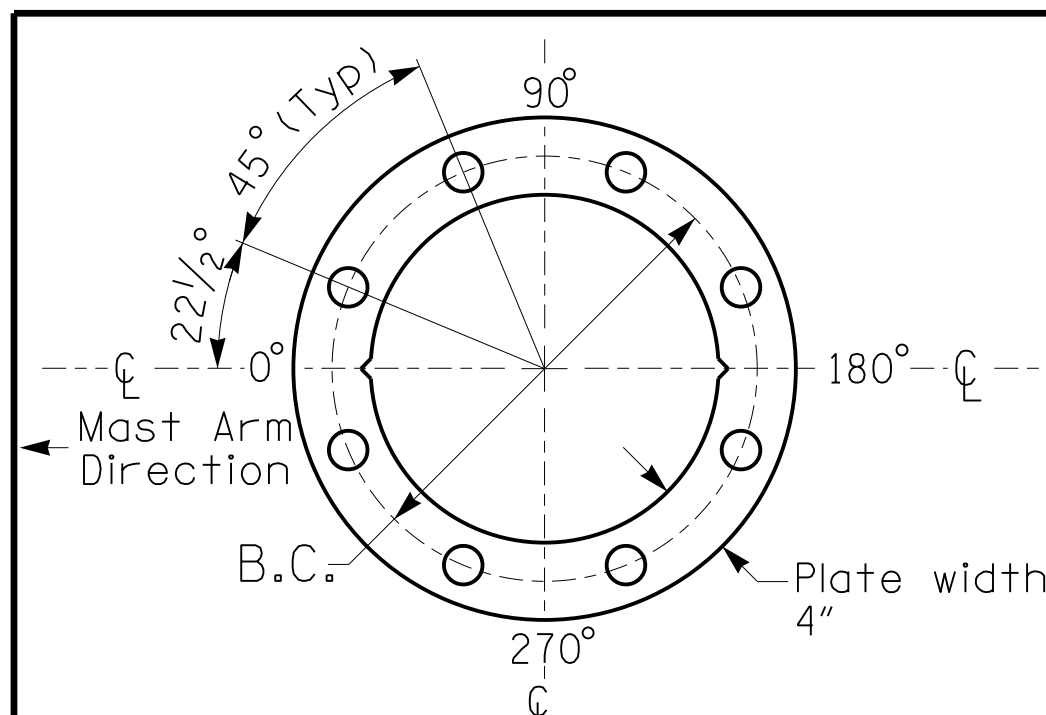
Elevation Differences for:	Pole 1	Pole 2
Baseline reference point at ϕ Foundation @ ground level	0.0 ft.	0.0 ft.
Elevation difference at High point of roadway surface	+0.6 ft.	-0.1 ft.
Elevation difference at Edge of travelway or face of curb	+/-0.0 ft.	-0.5 ft.



POLE RADIAL ORIENTATION



8 BOLT BASE PLATE DETAIL



BASE PLATE TEMPLATE & ANCHOR BOLT LOCK PLATE DETAIL For 8 Bolt Base Plate

MAST ARM LOADING SCHEDULE

LOADING SYMBOL	DESCRIPTION	AREA	SIZE	WEIGHT
	RIGID MOUNTED SIGNAL HEAD 12"-4 SECTION-WITH BACKPLATE	11.5 S.F.	25.5" W X 66.0" L	74 LBS
	RIGID MOUNTED SIGNAL HEAD 12"-3 SECTION-WITH BACKPLATE	9.3 S.F.	25.5" W X 52.5" L	60 LBS
	STREET NAME SIGN RIGID MOUNTED	16.0 S.F.	24.0" W X 96.0" L	36 LBS

NOTES

DESIGN REFERENCE MATERIAL

- Design the traffic signal structure and foundation in accordance with:
 - The 6th Edition 2013 AASHTO "Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, including all of the latest interim revisions.
 - The 2018 NCDOT "Standard Specifications for Roads and Structures." The latest addenda to the specifications can be found in the traffic signal project special provisions.
 - The 2018 NCDOT Roadway Standard Drawings.
 - The traffic signal project plans and special provisions.
 - The NCDOT "Metal Pole Standards" located at the following NCDOT website: <https://connect.ncdot.gov/resources/safety/Pages/ITS-Design-Resources.aspx>

DESIGN REQUIREMENTS

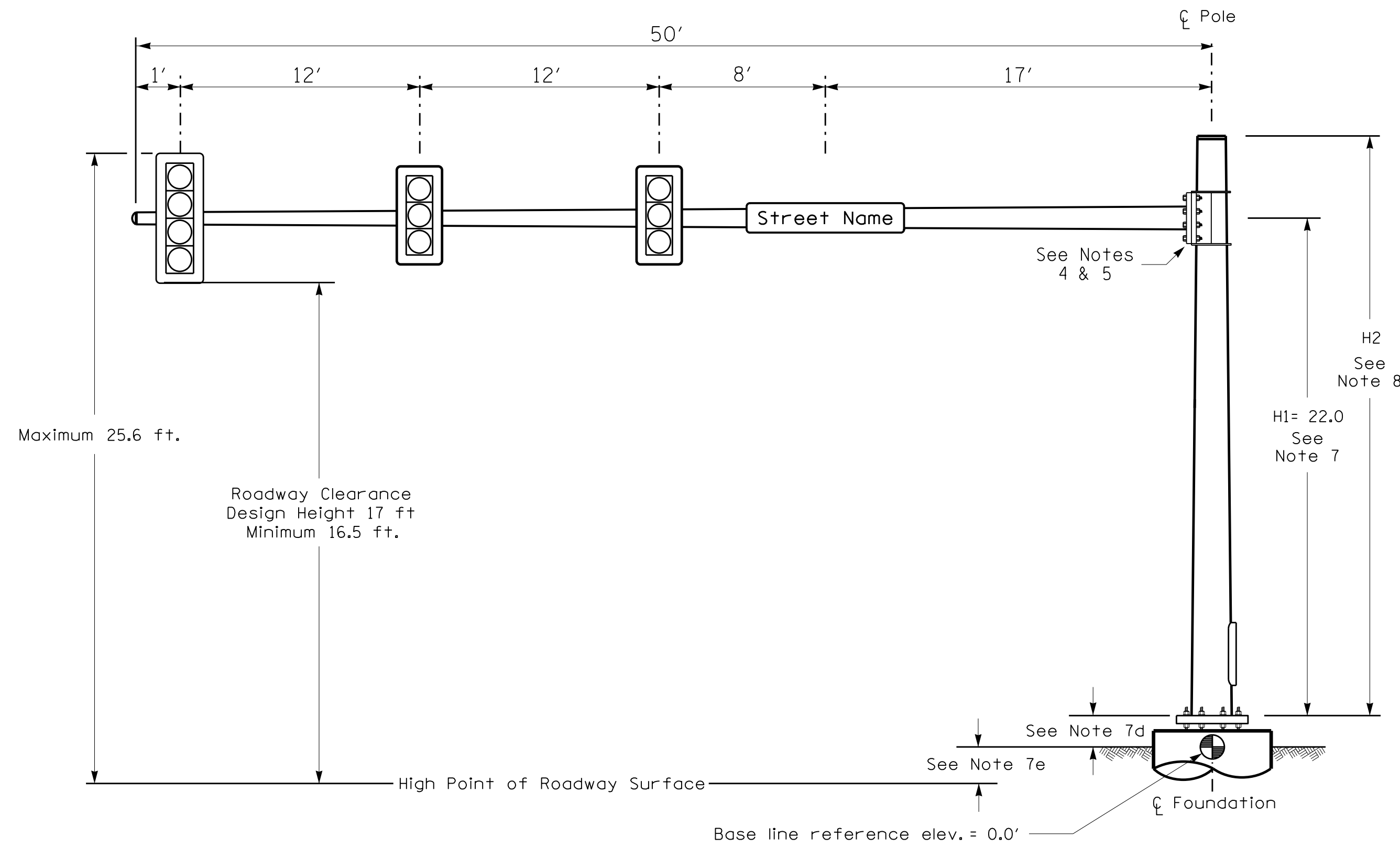
- Design the traffic signal structure using the loading conditions shown in the elevation views. These are anticipated worst case "design loads" and may not represent the actual loads that will be applied at the time of the installation. The contractor should refer to the traffic signal plans for the actual loads that will be applied at the time of the installation.
- Design all signal supports using stress ratios that do not exceed 0.9.
- The camber design for the mast arm deflection should provide an appearance of a low pitched arch where the tip or the free end of the mast arm does not deflect below horizontal when fully loaded.
- A clamp-type bolted mast arm-to-pole connection may be used instead of the welded ring stiffened box connection shown as long as the connection meets all of the design requirements.
- Design base plate with 8 anchor bolt holes. Provide 2 inch x 60 inch anchor bolts.
- The mast arm attachment height (H1) shown is based on the following design assumptions:
 - Mast arm slope and deflection are not considered in determining the arm attachment height as they are assumed to offset each other.
 - Signal heads are rigidly mounted and vertically centered on the mast arm.
 - The roadway clearance height for design is as shown in the elevation views.
 - The top of the pole base plate is 0.75 feet above the ground elevation.
 - Refer to the Elevation Data Chart for the elevation differences between the proposed foundation ground level and the high point of the roadway.
- The pole manufacturer will determine the total height (H2) of each pole using the greater of the following:
 - Mast arm attachment height (H1) plus 2 feet, or
 - H1 plus 1/2 of the total height of the mast arm attachment assembly plus 1 foot.
- If pole location adjustments are required, the contractor must gain approval from the Engineer as this may affect the mast arm lengths and arm attachment heights. The contractor may contact the Signal Design Section Senior Structural Engineer for assistance at (919) 814-5000.
- The contractor is responsible for verifying that the mast arm length shown will allow proper positioning of the signal heads over the roadway.
- The contractor is responsible for providing soil penetration testing data (SPT) to the pole manufacturer so site specific foundations can be designed.

NCDOT Wind Zone 2 (130 mph)

<p>Prepared in the Offices of: TRANSPORTATION MOBILITY AND SAFETY DIVISION SIGNAL DESIGN SECTION 750 N. Greenfield Pkwy, Garner, NC 27529</p>	<p>US 13/US 264A (Dickinson Ave.) at SR 1127 (Frog Level Road)</p>	<p>SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MICHAEL E. LEBLANC 042608</p>
	<p>Division 2 Pitt County near Greenville</p> <p>PLAN DATE: March 2021 REVIEWED BY: ZML</p> <p>PREPARED BY: MEL REVIEWED BY:</p>	<p>REVISIONS</p> <p>INIT. DATE</p>

13-0418-2021_13-210
R-2250_020946.dgn
mel/eb/lancc
5/13/2021

Design Loading for METAL POLE NO. 3



Elevation View

SPECIAL NOTE
The contractor is responsible for verifying that the mast arm attachment height (H1) will provide the "Design Height" clearance from the roadway before submitting final shop drawings for approval. Verify elevation data below which was obtained by field measurement or from available project survey data.

Elevation Data for Mast Arm Attachment (H1)

Elevation Differences for:	Pole 3	Pole 4
Baseline reference point at ϕ Foundation @ ground level	0.0 ft.	0.0 ft.
Elevation difference at High point of roadway surface	+0.5 ft.	+0.4 ft.
Elevation difference at Edge of travelway or face of curb	+0.5 ft.	+0.5 ft.

MAST ARM LOADING SCHEDULE

LOADING SYMBOL	DESCRIPTION	AREA	SIZE	WEIGHT
	RIGID MOUNTED SIGNAL HEAD 12"-4 SECTION-WITH BACKPLATE	11.5 S.F.	25.5" W X 66.0" L	74 LBS
	RIGID MOUNTED SIGNAL HEAD 12"-3 SECTION-WITH BACKPLATE	9.3 S.F.	25.5" W X 52.5" L	60 LBS
	STREET NAME SIGN RIGID MOUNTED	16.0 S.F.	24.0" W X 96.0" L	36 LBS

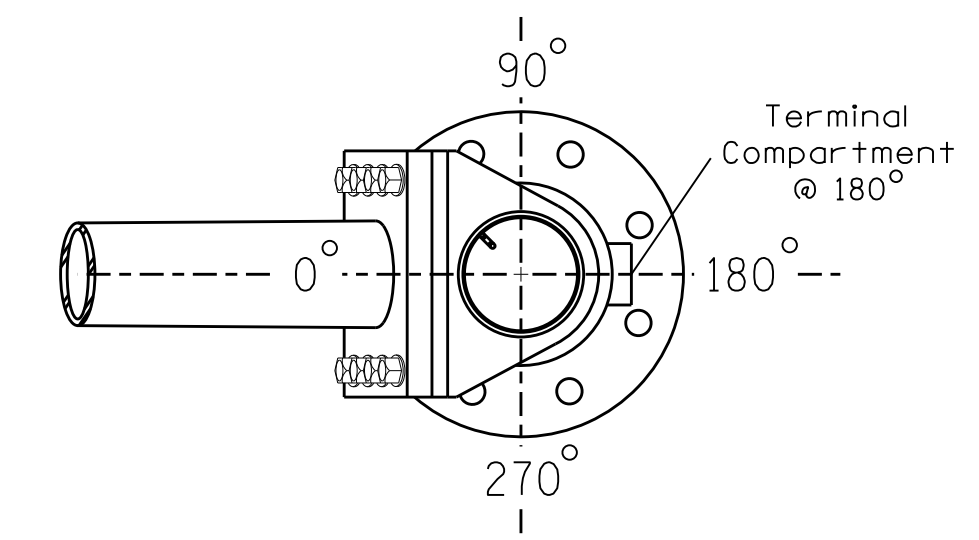
NOTES

DESIGN REFERENCE MATERIAL

- Design the traffic signal structure and foundation in accordance with:
 - The 6th Edition 2013 AASHTO "Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, including all of the latest interim revisions.
 - The 2018 NCDOT "Standard Specifications for Roads and Structures." The latest addenda to the specifications can be found in the traffic signal project special provisions.
 - The 2018 NCDOT Roadway Standard Drawings.
 - The traffic signal project plans and special provisions.
 - The NCDOT "Metal Pole Standards" located at the following NCDOT website: <https://connect.ncdot.gov/resources/safety/Pages/ITS-Design-Resources.aspx>

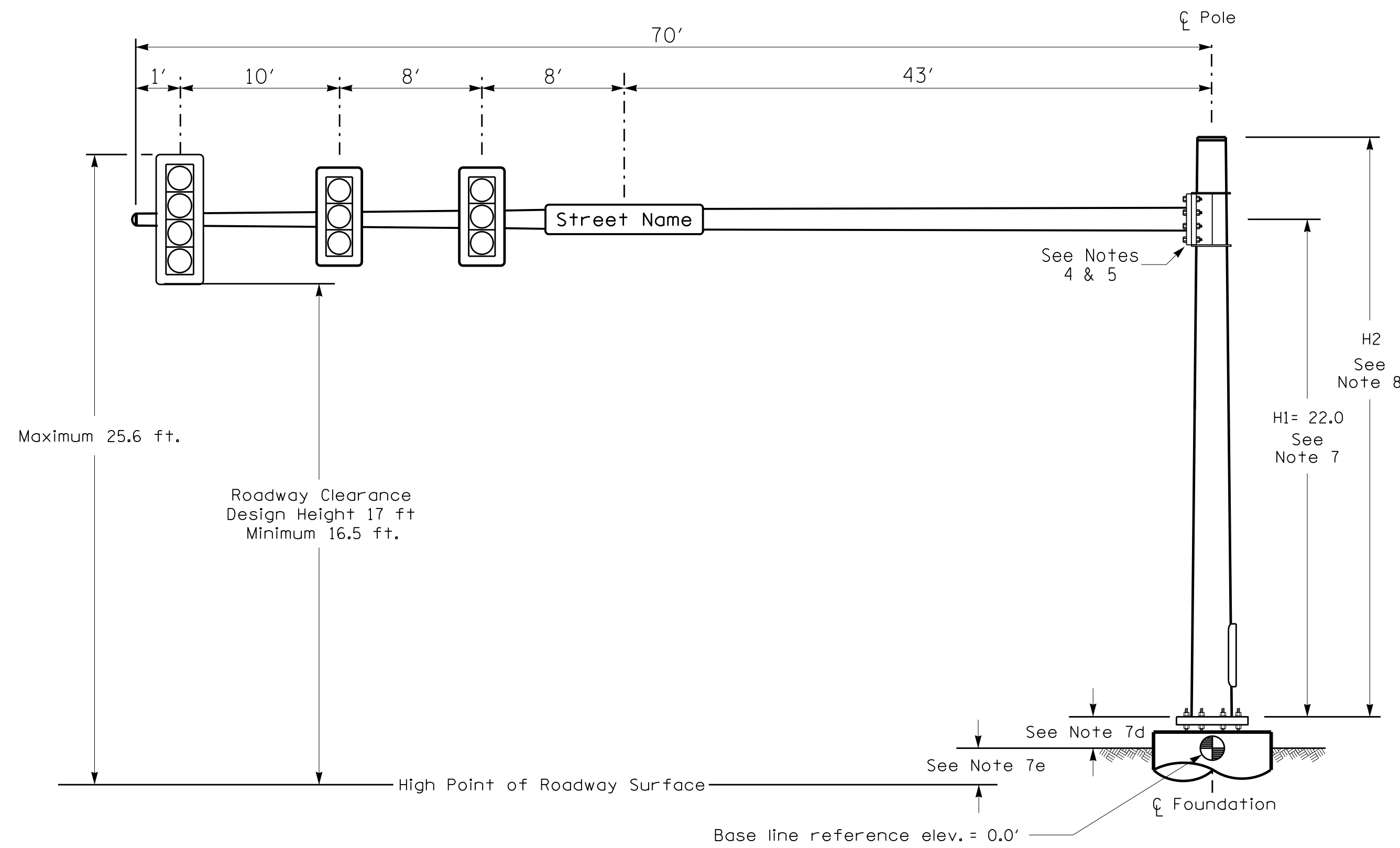
DESIGN REQUIREMENTS

- Design the traffic signal structure using the loading conditions shown in the elevation views. These are anticipated worst case "design loads" and may not represent the actual loads that will be applied at the time of the installation. The contractor should refer to the traffic signal plans for the actual loads that will be applied at the time of the installation.
- Design all signal supports using stress ratios that do not exceed 0.9.
- The camber design for the mast arm deflection should provide an appearance of a low pitched arch where the tip or the free end of the mast arm does not deflect below horizontal when fully loaded.
- A clamp-type bolted mast arm-to-pole connection may be used instead of the welded ring stiffened box connection shown as long as the connection meets all of the design requirements.
- Design base plate with 8 anchor bolt holes. Provide 2 inch x 60 inch anchor bolts.
 - Mast arm slope and deflection are not considered in determining the arm attachment height as they are assumed to offset each other.
 - Signal heads are rigidly mounted and vertically centered on the mast arm.
 - The roadway clearance height for design is as shown in the elevation views.
 - The top of the pole base plate is 0.75 feet above the ground elevation.
 - Refer to the Elevation Data Chart for the elevation differences between the proposed foundation ground level and the high point of the roadway.
- The pole manufacturer will determine the total height (H2) of each pole using the greater of the following:
 - Mast arm attachment height (H1) plus 2 feet, or
 - H1 plus 1/2 of the total height of the mast arm attachment assembly plus 1 foot.
- If pole location adjustments are required, the contractor must gain approval from the Engineer as this may affect the mast arm lengths and arm attachment heights. The contractor may contact the Signal Design Section Senior Structural Engineer for assistance at (919) 814-5000.
- The contractor is responsible for verifying that the mast arm length shown will allow proper positioning of the signal heads over the roadway.
- The contractor is responsible for providing soil penetration testing data (SPT) to the pole manufacturer so site specific foundations can be designed.

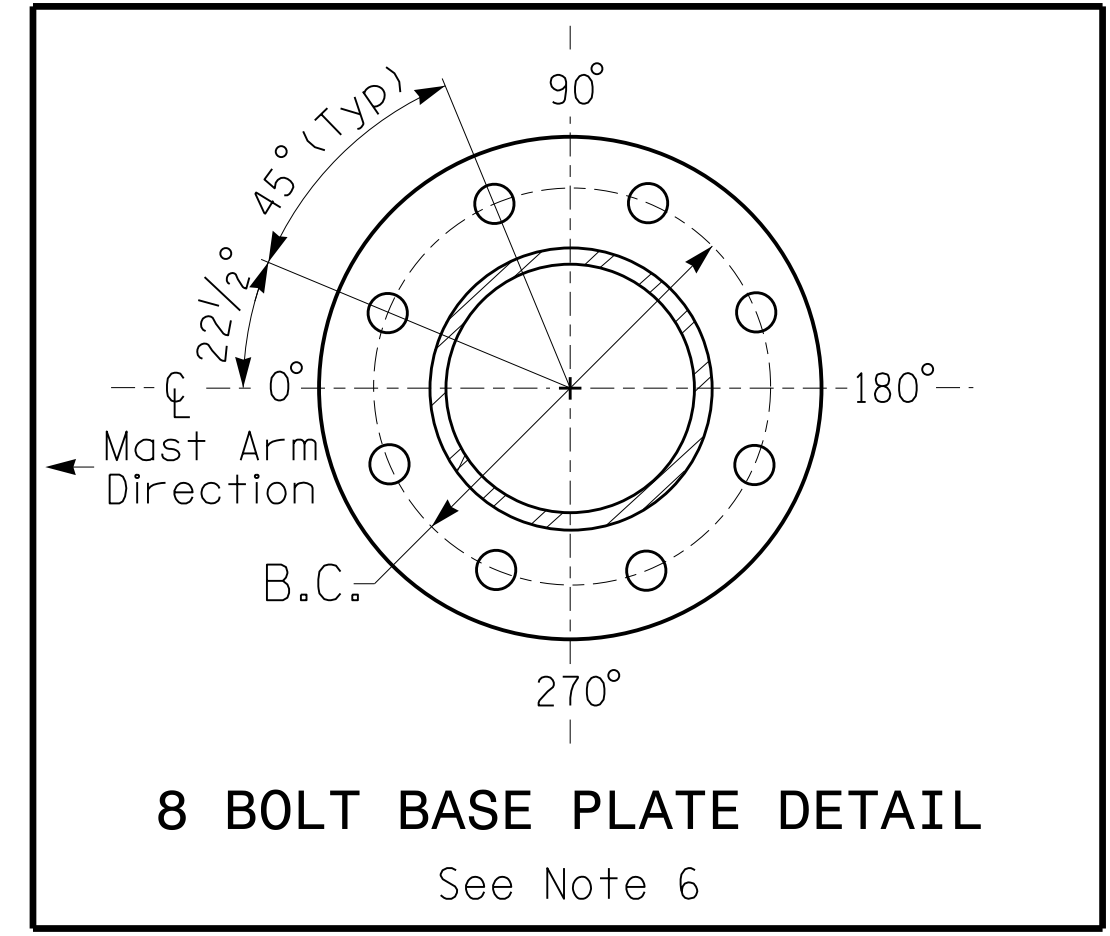


POLE RADIAL ORIENTATION

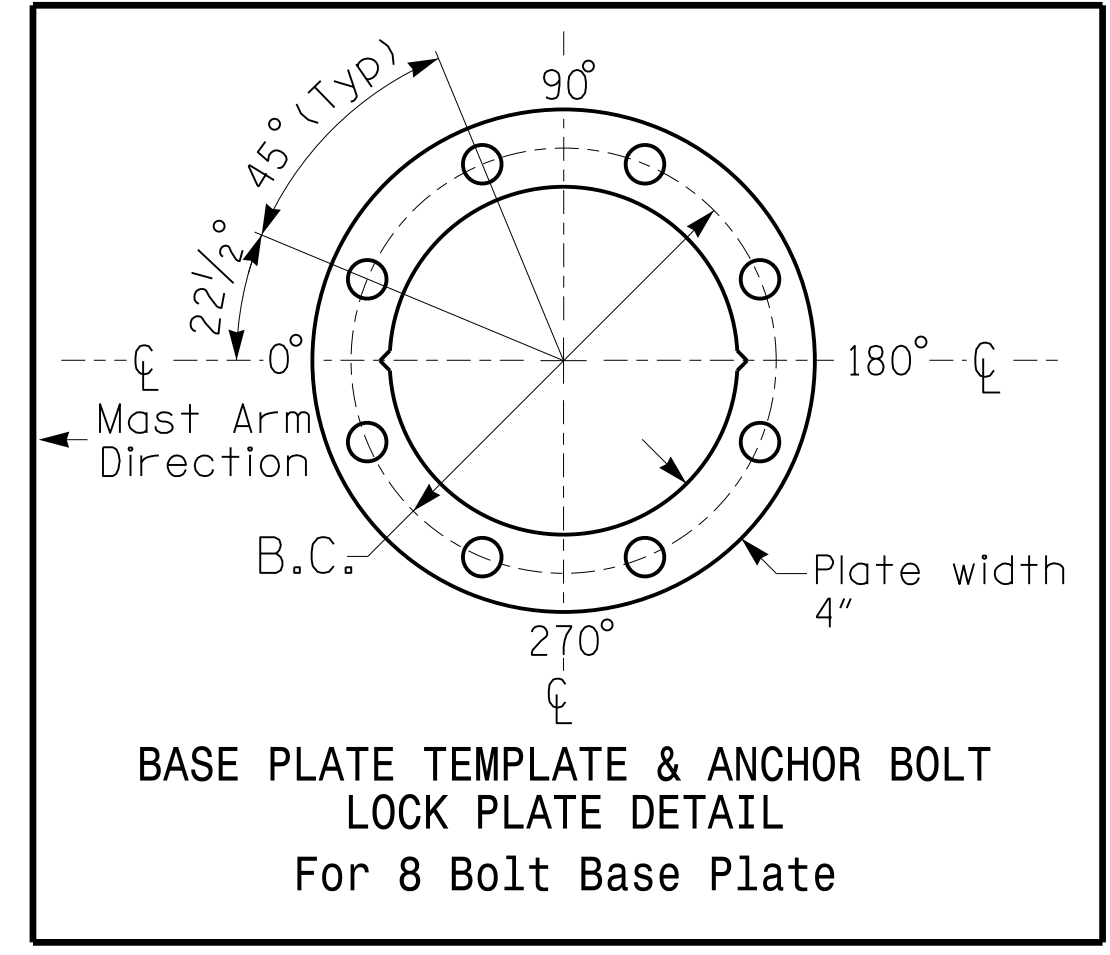
Design Loading for METAL POLE NO. 4



Elevation View



8 BOLT BASE PLATE DETAIL



BASE PLATE TEMPLATE & ANCHOR BOLT LOCK PLATE DETAIL For 8 Bolt Base Plate

NCDOT Wind Zone 2 (130 mph)

	US 13/US 264A (Dickinson Ave.) at SR 1127 (Frog Level Road)	SEAL NICHOLAS E. LEBLANC PROFESSIONAL ENGINEER 042608
	Division 2 Pitt County near Greenville PLAN DATE: March 2021 REVIEWED BY: ZML PREPARED BY: MEL REVIEWED BY:	

13-MAY-2021 13:59
R2240_020946.dgn
mel/ab/anc

09/08/09

TIP PROJECT: R-2250

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

UTILITY CONSTRUCTION PLANS PITT COUNTY

LOCATION: US264A/SR1127 (FROG LEVEL ROAD)

TYPE OF WORK: WATERMAIN RELOCATION

T.I.P. NO.	SHEET NO.
R-2250	UC-1

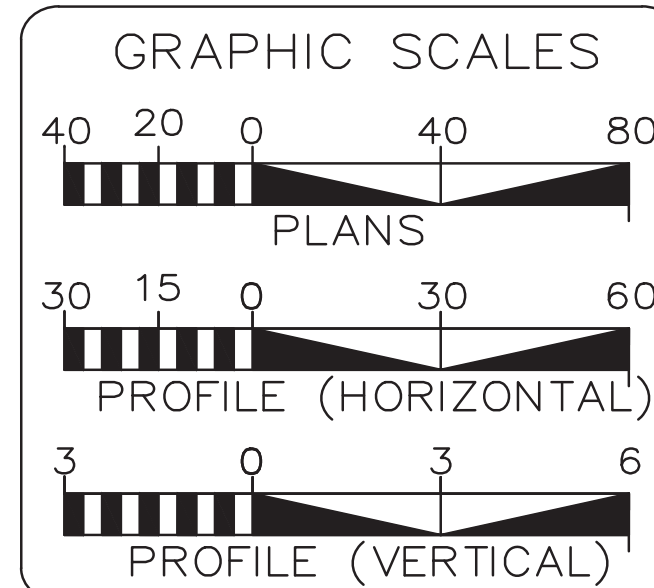
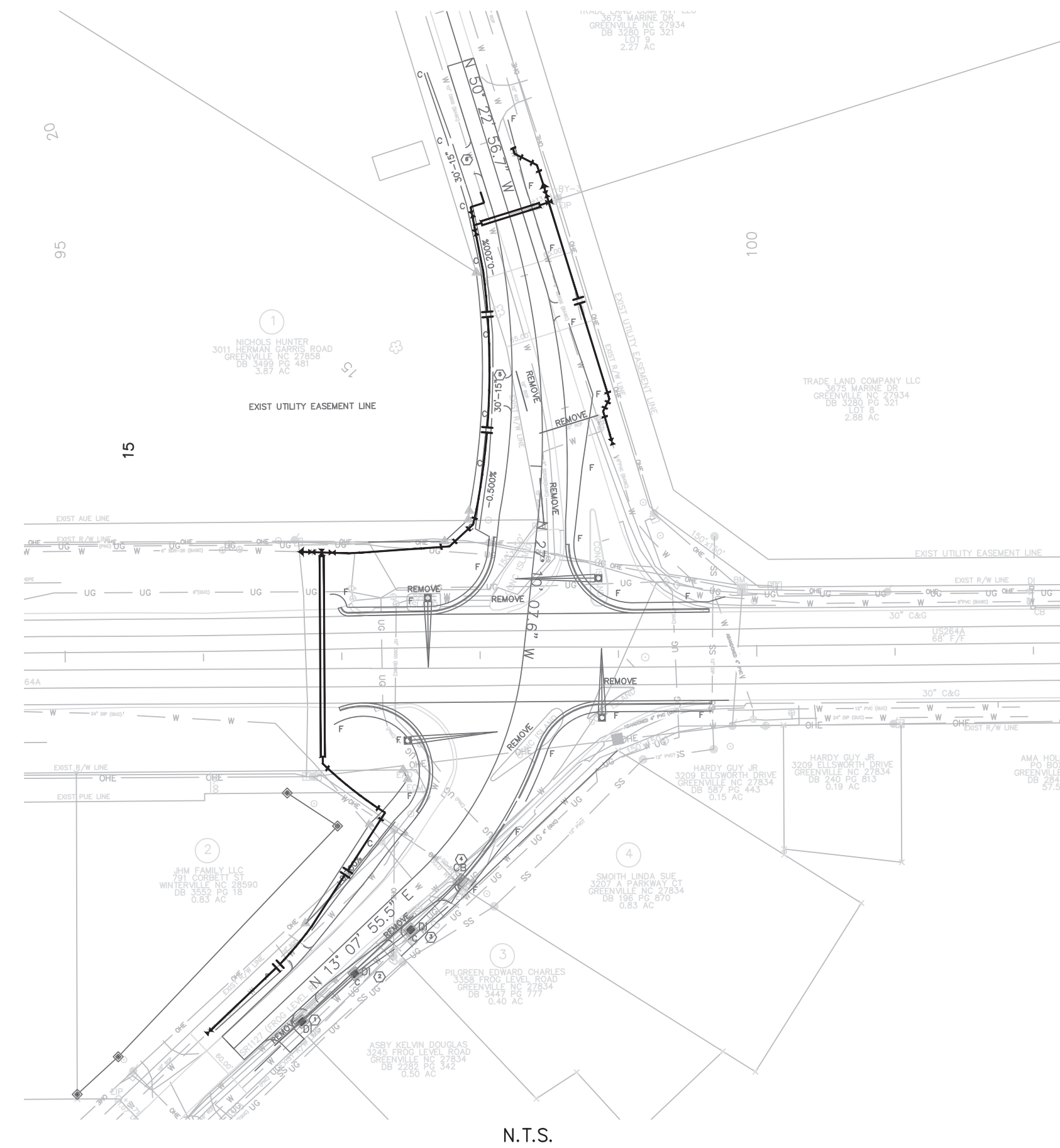


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Surveying Technology

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www.eastgroup.com

Branch Office
4325 Lake Boone Trail, Suite 311
Raleigh, NC 27607
Tel 919.784.9330 Fax 252.830.3954

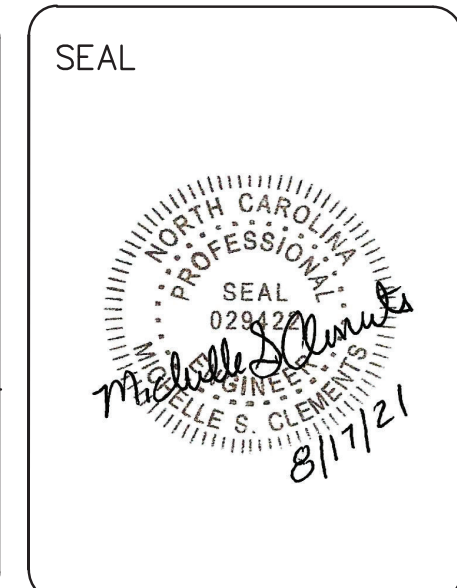
NC Engineering License No. C-0206
NC Architectural License No. 50213
NC Landscape Architectural License No. C-427



SHEET NO.:	INDEX OF SHEETS DESCRIPTION:
UC-1	TITLE SHEET
UC-2	UTILITY PLAN
UC-3	DETAILS
UC-4	WATERLINE PROFILE
UC-5	QUANTITIES SUMMARY

WATER AND SEWER OWNERS ON PROJECT
(A) BELL ARTHUR WATER CORPORATION
(B) SANITARY SEWER - GUC
(C) XXXXX
(D) XXXXX
(E) XXXXX

PREPARED IN THE OFFICE OF	CONSULTANT INFO
	CONSULTANT ADDRESS AND PHONE NUMBERS
XXXX	CONSULTANT CONTACT #1
XXXX	CONSULTANT CONTACT #2
XXXX	CONSULTANT CONTACT #3



DIVISION OF HIGHWAYS UTILITIES UNIT	
1555 MAIL SERVICES CENTER RALEIGH NC 27699-1555 PHONE (919) 707-6690 FAX (919) 250-4151	
XXXX	UTILITIES REGIONAL ENGINEER
XXXX	UTILITIES ENGINEER
XXXX	UTILITIES AREA COORDINATOR
XXXX	UTILITIES COORDINATOR

05/07/21

PROJECT REFERENCE NO. R-2250	SHEET NO. UC-2
UTILITY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

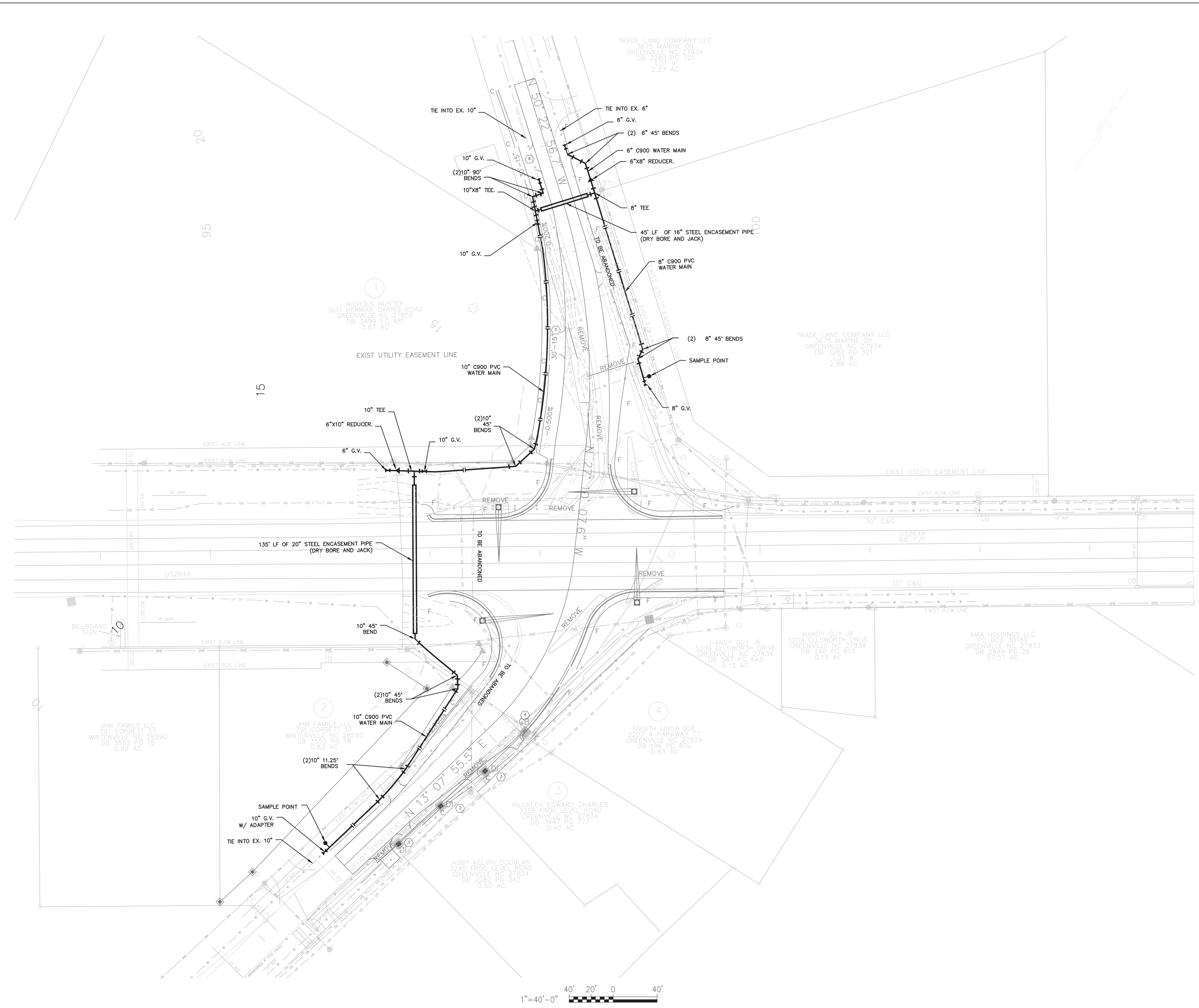


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- UTILITY NOTES:**
- ALL WATER MAIN CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES.
 - LOCATIONS OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND COORDINATE CONNECTION WITH PROPER AUTHORITIES. CALL NC ONE-CALL CENTER, INC. AT 811 72 HOURS BEFORE ANY EXCAVATION IS BEGUN.
 - AS OF JAN. 1, 1986, ANYONE DIGGING WITH MECHANIZED EQUIPMENT IN HIGHWAY RIGHT-OF-WAY, PRIVATE UTILITY EASEMENTS, OR PUBLIC SPACES WILL BE REQUIRED BY NORTH CAROLINA LAW TO GIVE NOTICE OF THE PROPOSED EXCAVATION TO ALL EXISTING AREA UTILITIES AT LEAST 3 WORKING DAYS BEFORE STARTING TO DIG. THE UTILITY OWNER IS TO LOCATE ITS FACILITIES IN THE AREA OF THE PROPOSED EXCAVATION. UTILITY MEMBERS OF NC ONECALL CAN BE CONTACTED AT 811.
 - CONTRACTOR SHALL NOTIFY ENGINEER 72 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION. CONTRACTOR TO COORDINATE ALL EXISTING UTILITY TIE INS.
 - WATER MAINS SHALL BE BURIED A DEPTH OF 42 INCHES UNLESS NOTED OTHERWISE.
 - CONTRACTOR SHALL MAINTAIN COMPREHENSIVE (DEPTH AND HORIZONTAL LOCATIONS) FIELD "AS-BUILTS" FOR ALL INSTALLATIONS AND SUBMIT TO THE ENGINEER.
 - CONTRACTOR TO CONTACT BELL ARTHUR WATER CORPORATION TO COORDINATE CONNECTION TO WATER SYSTEM AND ANY OPERATION OF EXISTING SYSTEM VALVES OR HYDRANTS.

LEGEND

EX.	=	EXISTING
FH	=	FIRE HYDRANT
GW	=	GUY WIRE
INV.	=	INVERT
OT	=	OAK TREE
PT	=	PINE TREE
PP	=	POWER POLE
RCP	=	REINFORCED CONCRETE PIPE
SI	=	SIGN
TB	=	TELEPHONE BOX
TYP.	=	TYPICAL
WM	=	WATER METER
WV	=	WATER VALVE
- - -	=	EXISTING CONTOUR
- - -	=	EXIST. SPOT ELEVATION
- - -	=	EX. STORM PIPE
- - -	=	EX. WATER MAIN
- - -	=	PROPOSED WATER MAIN
- - -	=	EX. OVERHEAD ELECTRIC



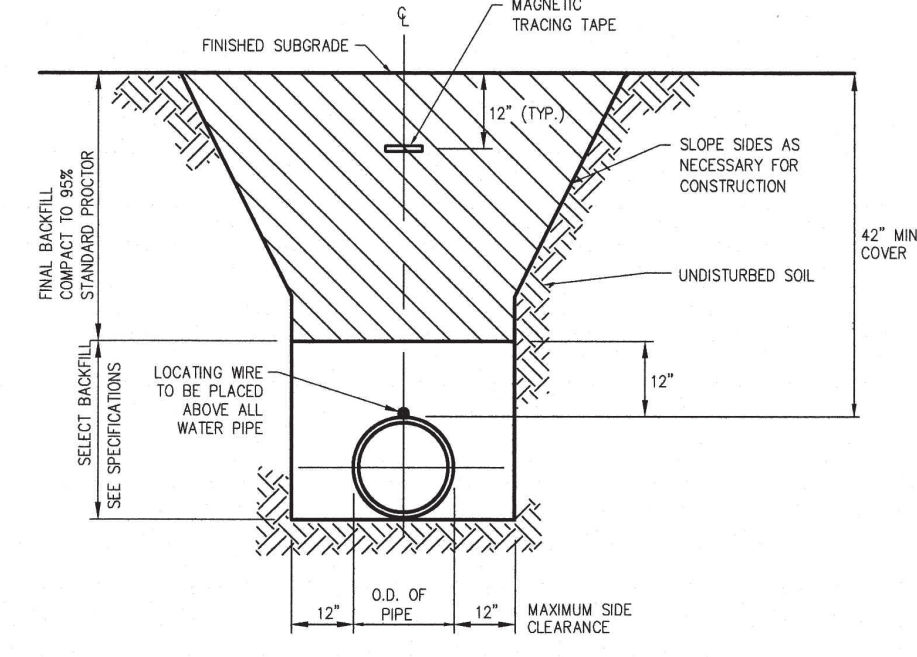


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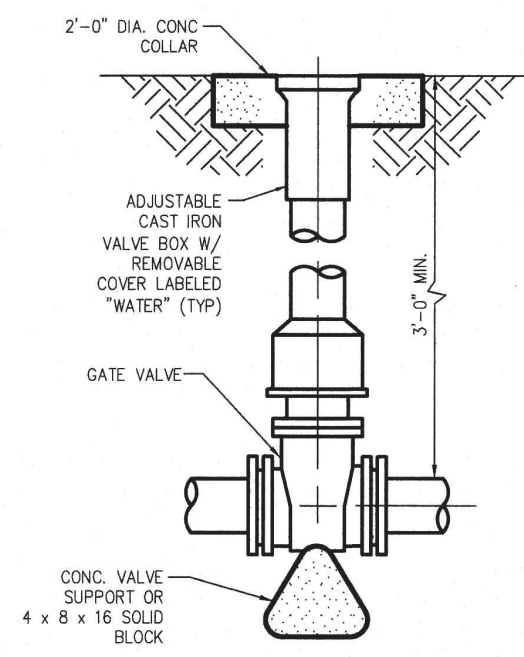
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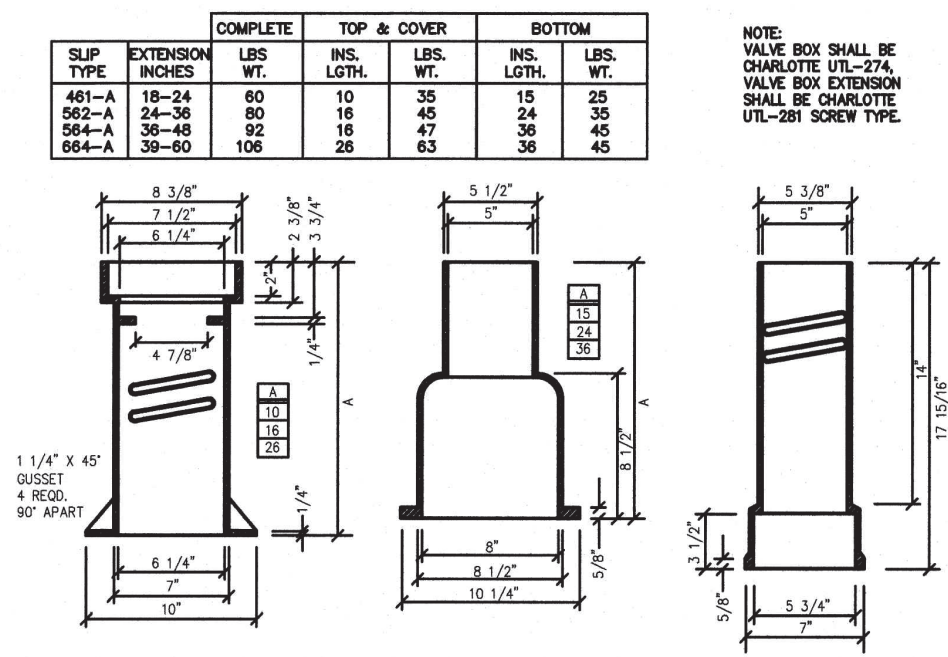
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NC Architectural License No. 50213
NC Landscape Architectural License No. C-427



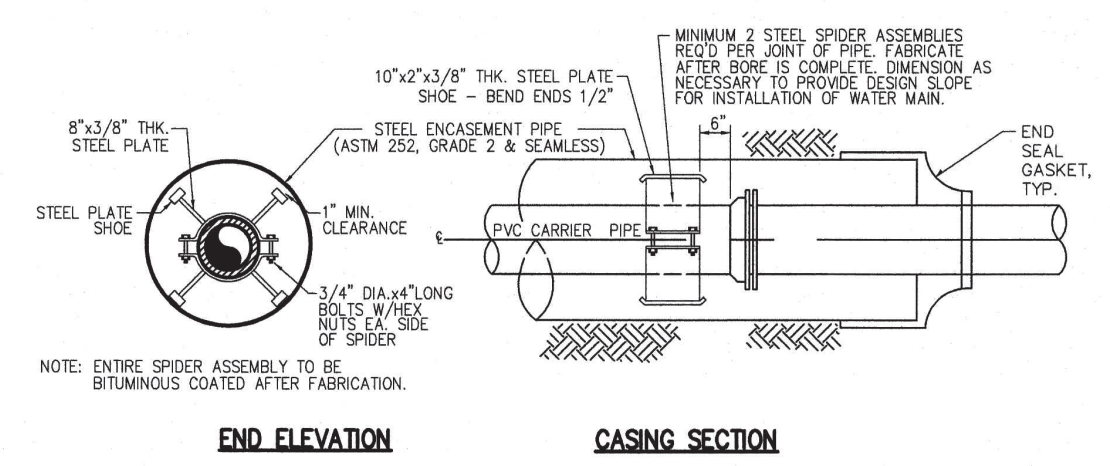
1 WATER PIPE TRENCH DETAIL
C4.1 N.T.S.



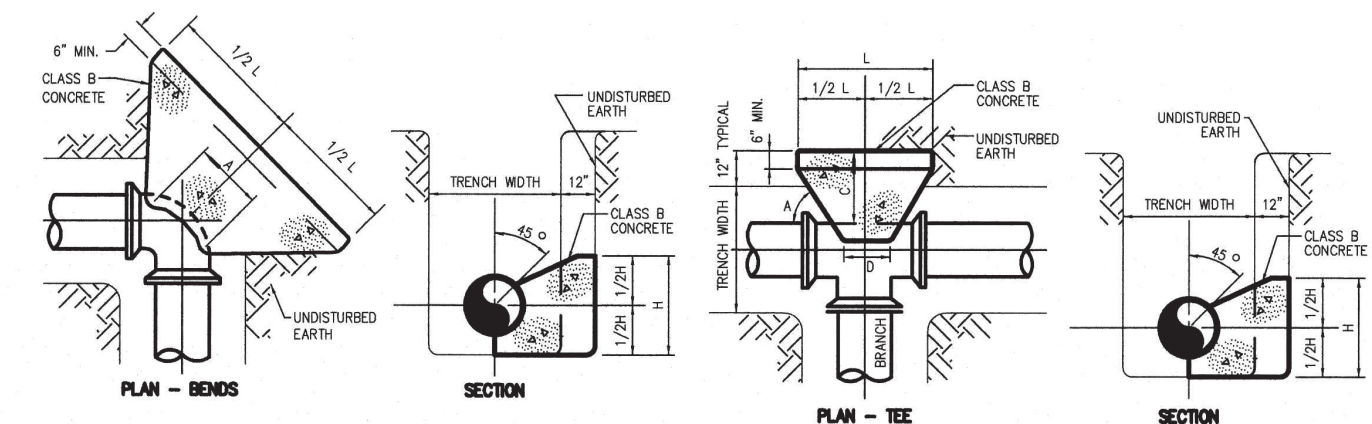
2 GATE VALVE DETAIL
C4.1 N.T.S.



3 VALVE BOX DETAIL
C4.1 N.T.S.



4 STEEL ENCASEMENT DETAIL
C4.1 N.T.S.



PLAN - BENDS

PIPE SIZE	1/2 BEND	45 BEND	90 BEND	MIN. DIMENS.
4"	1'-0"	1'-0"	1'-0"	1'-0"
6"	1'-0"	1'-0"	1'-0"	1'-6"
8"	1'-4"	1'-4"	1'-4"	2'-0"
12"	2'-0"	2'-0"	2'-0"	4'-4"

PLAN - TEE

PIPE SIZE	B. D.	L	H	C	D
4"	4"	1'-0"	1'-0"	1'-0"	1'-0"
6"	6"	1'-4"	1'-4"	1'-4"	1'-4"
8"	8"	2'-0"	2'-0"	2'-0"	2'-0"
12"	12"	4'-6"	3'-0"	3'-0"	3'-0"

NOTES:
1. DIMENSION "A" SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH THE BENT JOINT BOLL.
2. THE SHAPE OF THE BACK OF THE BUTTRESS MAY VARY AS LONG AS THE CONCRETE IS BARGE FROM UNDISTURBED EARTH.
3. BUTTRESS DIMENSIONS ARE BASED UPON A SOIL RESISTANCE OF 2000 LBS. PER SQ. FT. AND A WATER PRESSURE OF 150 P.S.I.

5 THRUST BLOCKING
C4.1 N.T.S.

05/07/21

PROJECT REFERENCE NO. R-2250	SHEET NO. UC-4
UTILITY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

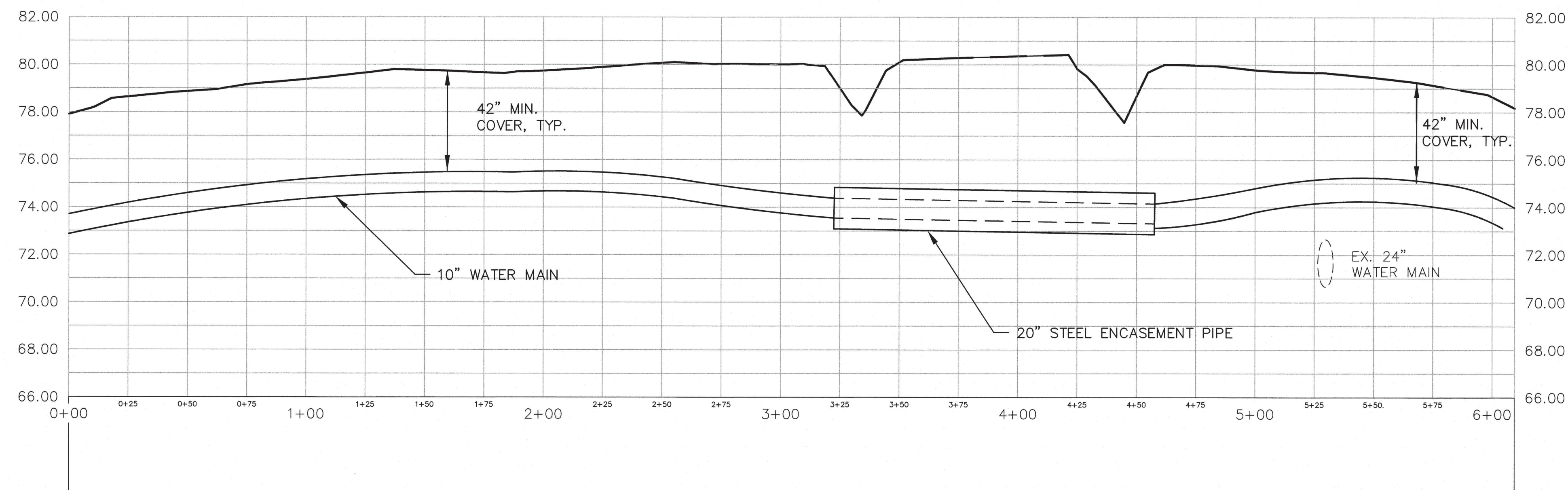
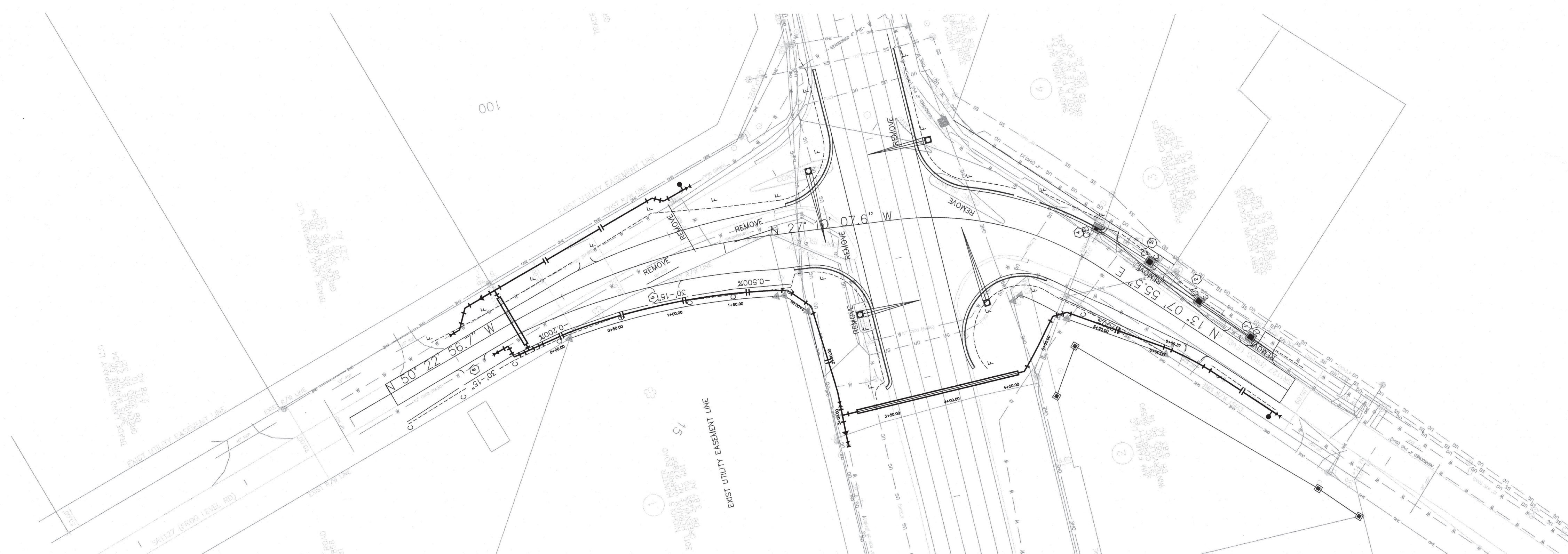


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■ NC Architectural License No. 50213
■ NC Landscape Architectural License No. C-427



UTILITY NOTES:

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- CONTRACTOR SHALL MAINTAIN COMPREHENSIVE (DEPTH AND HORIZONTAL LOCATIONS) FIELD "AS-BUILTS" FOR ALL INSTALLATIONS AND SUBMIT TO THE ENGINEER.
- ALL PERMITS AND FEES REQUIRED FOR CONSTRUCTION OF IMPROVEMENTS ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- CONTRACTOR TO CONTACT BELL ARTHUR WATER CORPORATION TO COORDINATE CONNECTION TO WATER SYSTEM AND ANY OPERATION OF EXISTING SYSTEM VALVES OR HYDRANTS.

LEGEND

- EX. = EXISTING
- FH = FIRE HYDRANT
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- SI = SIGN
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- TYP. = TYPICAL
- WM = WATER METER
- WV = WATER VALVE
- EXISTING CONTOUR
- EX. SPOT ELEVATION
- EX. STORM PIPE
- EX. WATER MAIN
- PROPOSED WATER MAIN
- EX. OVERHEAD ELECTRIC


FROG LEVEL RD.

(PUBLIC R/W VARIES)

HORIZONTAL SCALE: 1" = 30'

VERTICAL SCALE: 1" = 3'

05/07/21

PROJECT REFERENCE NO. R-2250	SHEET NO. UC-5
UTILITY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
	

Quantities - Pay Item List

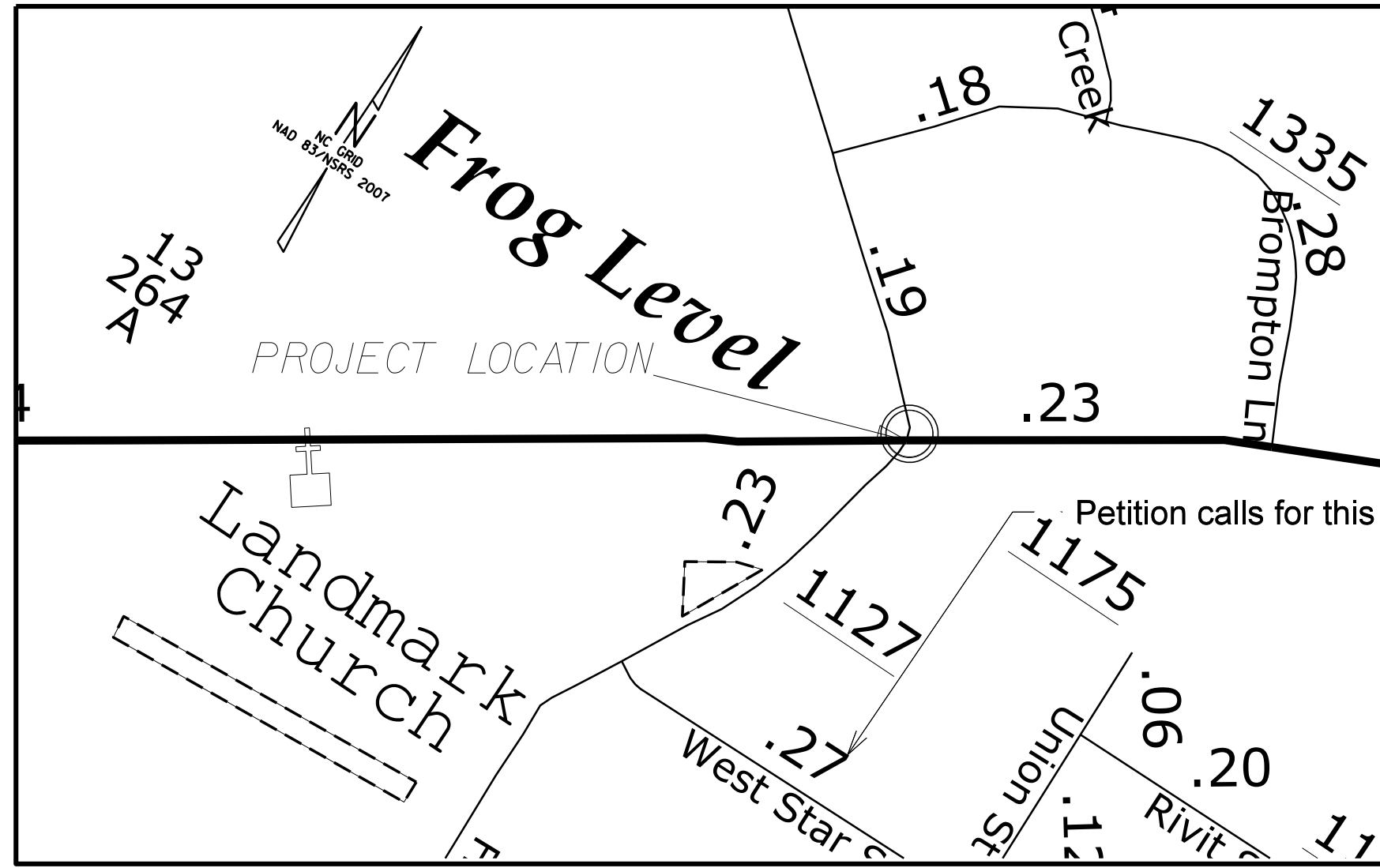
Quantity	Units	Description	Type	Item Number	Section
44	LF	6" WATER LINE	U	5325600000-E	1510
253	LF	8" WATER LINE	U	5325800000-E	1510
805	LF	10" WATER LINE	U	5326000000-E	1510
965	LB	DUCTILE IRON WATER PIPE FITTINGS			
1		6"X8" Reducer			
1		6"x10" Reducer			
2		8" 45 degree bend			
2		6" 45 degree bend			
5		10" 45 degree bend	U	5329000000-E	1510
2		10" 90 degree bend			
2		10" 11.25 degree bend			
1		10"x8" Tee			
1		8" Tee			
1		10" Tee			
2	EA	6" VALVE	U	5540000000-E	1515
1	EA	8" VALVE	U	5546000000-E	1515
4	EA	10" VALVE	U	5552000000-E	1515
10	LF	3/4" WATER SERVICE LINE	U	5686000000-E	1515
45	LF	16" ENCASEMENT PIPE	U	5835700000-E	1540
135	LF	20" ENCASEMENT PIPE	U	5835800000-E	1540
45	LF	BORE AND JACK OF 16"	U	5872500000-E	1550
135	LF	BORE AND JACK OF 20"	U	5872500000-E	1550
580	LF	ABANDON 6" UTILITY PIPE	U	5800000000-E	1530
788	LF	ABANDON 10" UTILITY PIPE	U	5802000000-E	1530



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09/08/99

TIP PROJECT: R-2250



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

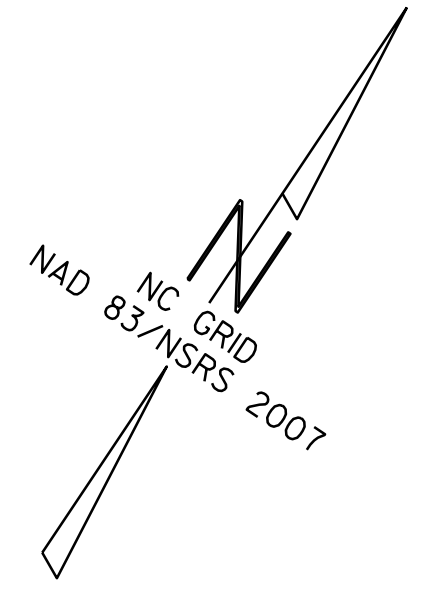
**UTILITIES BY OTHERS PLANS
PITT COUNTY**

LOCATION: US264A/SR1127 (FROG LEVEL ROAD)

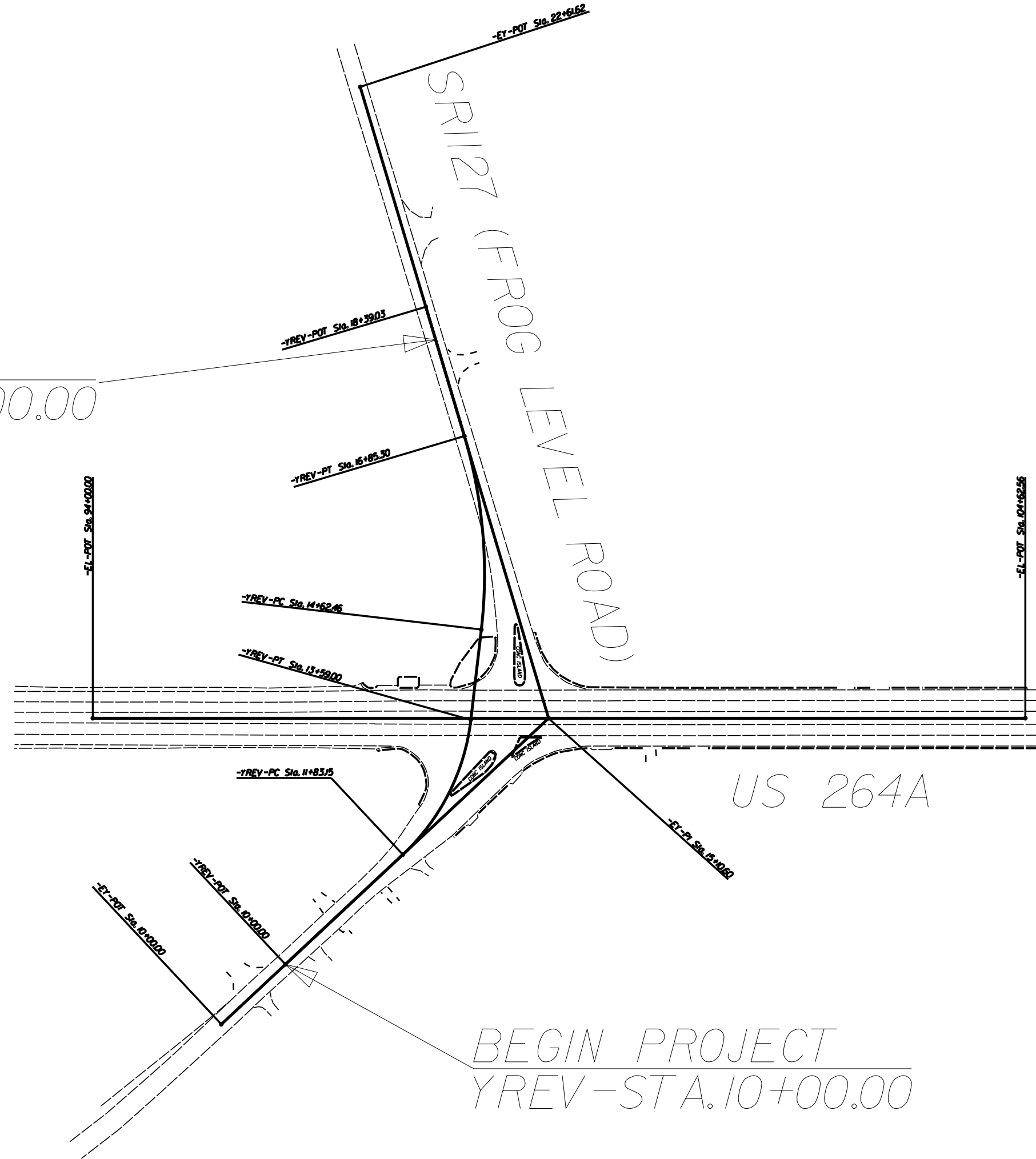
**TYPE OF WORK: INSTALL NEW SIGNAL
CONSTRUCT TURN LANES ON NEW LOCATION**

T.I.P. NO.	SHEET NO.
R-2250	UO-1

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



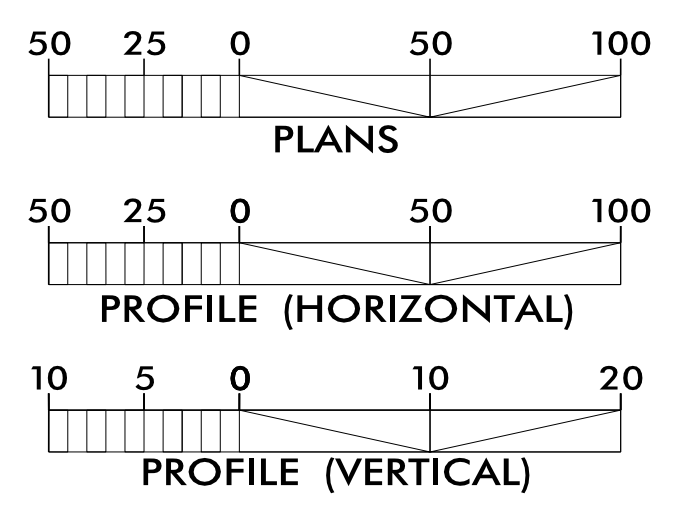
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BEGIN PROJECT
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29-OCT-2021 08:10
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\$\$\$\$\$USERNAME\$\$\$\$\$

GRAPHIC SCALES



INDEX OF SHEETS

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

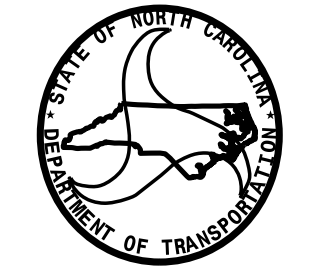
UTILITY OWNERS WITH CONFLICTS

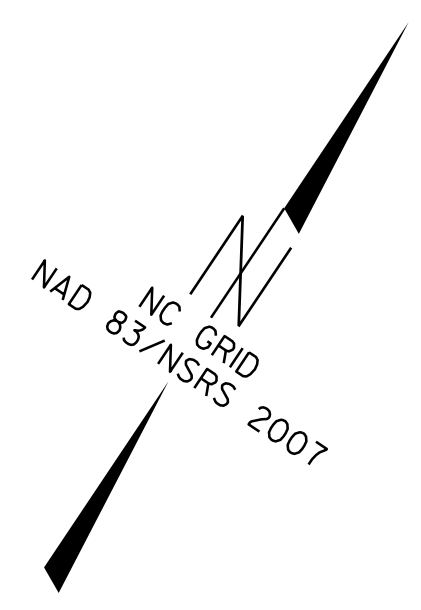
- (1) ELECTRIC - GREENVILLE UTILITIES COMMISSION
- (2) WATER - GREENVILLE UTILITIES COMMISSION
- (3) GAS - GREENVILLE UTILITIES COMMISSION
- (4) GAS - PIEDMONT NATURAL GAS
- (5) COMMUNICATION - CENTURYLINK
- (6) COMMUNICATION - SUDDENLINK

PREPARED IN THE OFFICE OF:

**DIVISION OF HIGHWAYS
1037 WH SMITH BLVD.
GREENVILLE, NC 27835**

DIVISION OF HIGHWAYS
DIVISION 02

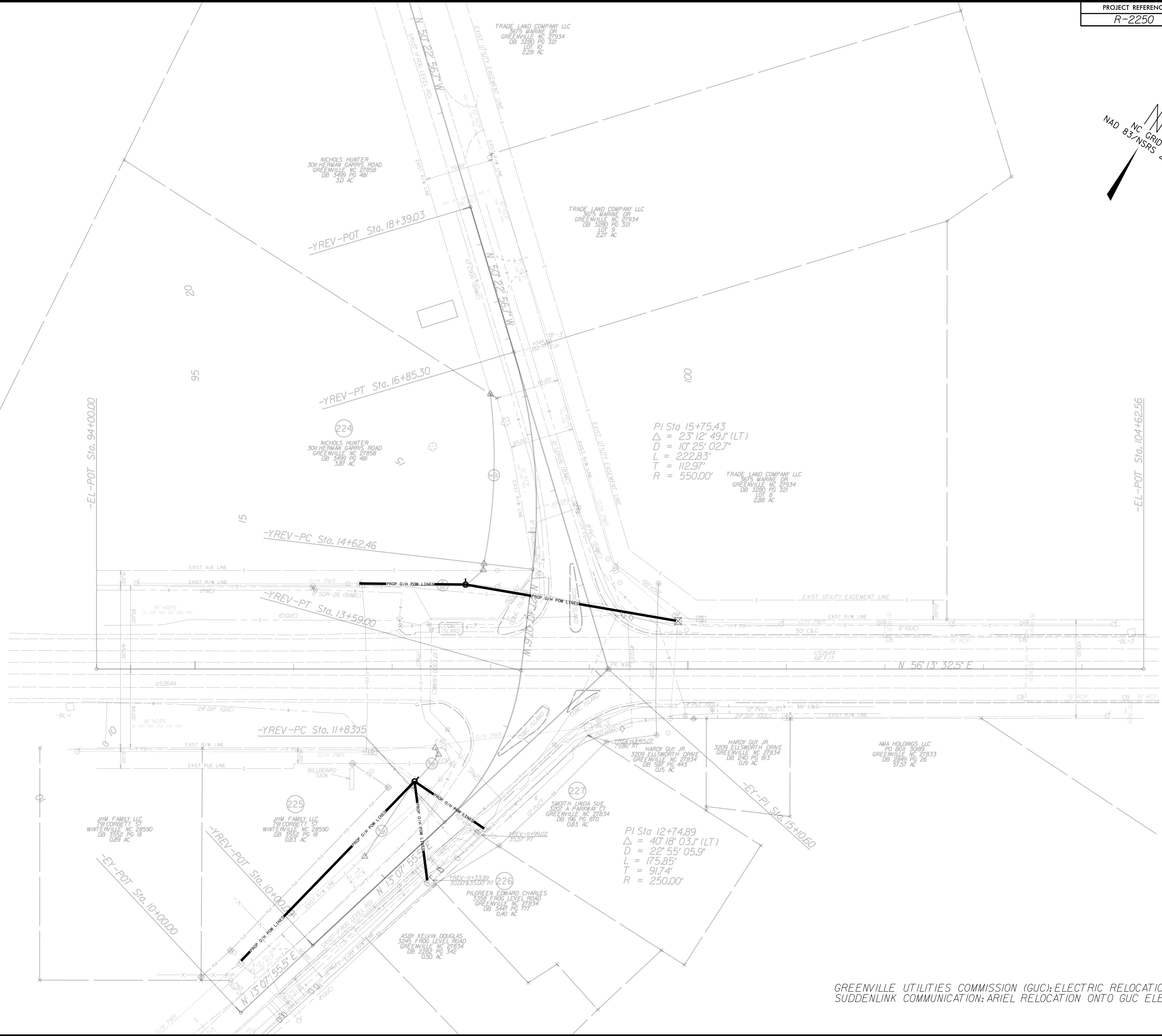




REVISIONS

8/17/99

29-061 209 0810
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GREENVILLE UTILITIES COMMISSION (GUC): ELECTRIC RELOCATION
 SUDDENLINK COMMUNICATION: ARIEL RELOCATION ONTO GUC ELECTRIC POLES

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

CROSS-SECTION SUMMARY

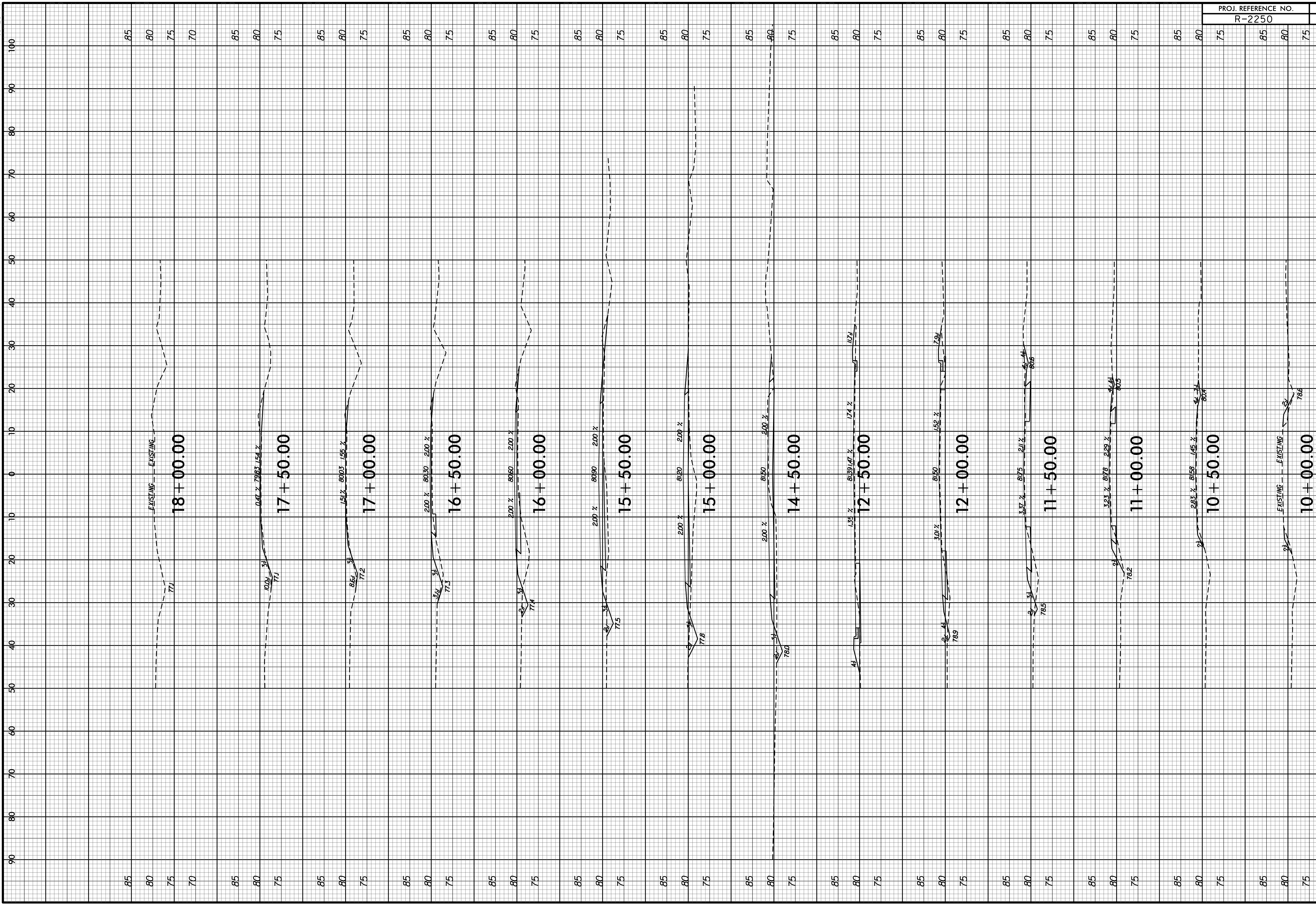
IN CUBIC YARDS

LOCATION (-YREV-)	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBANKMENT
<i>10 + 00.00</i>	<i>0</i>		<i>0</i>
<i>10 + 50.00</i>	<i>2</i>		<i>11</i>
<i>11 + 00.00</i>	<i>8</i>		<i>13</i>
<i>11 + 50.00</i>	<i>22</i>		<i>29</i>
<i>12 + 00.00</i>	<i>23</i>		<i>37</i>
<i>12 + 50.00</i>	<i>18</i>		<i>33</i>

LOCATION (-YREV-)	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBANKMENT
<i>14 + 50.00</i>	<i>0</i>		<i>0</i>
<i>15 + 00.00</i>	<i>41</i>		<i>77</i>
<i>15 + 50.00</i>	<i>19</i>		<i>82</i>
<i>16 + 00.00</i>	<i>16</i>		<i>63</i>
<i>16 + 50.00</i>	<i>11</i>		<i>47</i>
<i>17 + 00.00</i>	<i>7</i>		<i>17</i>
<i>17 + 50.00</i>	<i>10</i>		<i>5</i>

NOTE: EMBANKMENT COLUMN DOES NOT INCLUDE BACKFILL FOR UNDERCUT.

NOTE:
APPROXIMATE QUANTITIES ONLY. UNCLASSIFIED EXCAVATION,
BORROW EXCAVATION, FINE GRADING, CLEARING AND GRUBBING
AND REMOVAL OF EXISTING PAVEMENT WILL BE PAID FOR AT THE
CONTRACT LUMP SUM PRICE FOR "GRADING."



-YREV-

PROJ. REFERENCE NO.	SHEET NO.
R-2250	X-1

