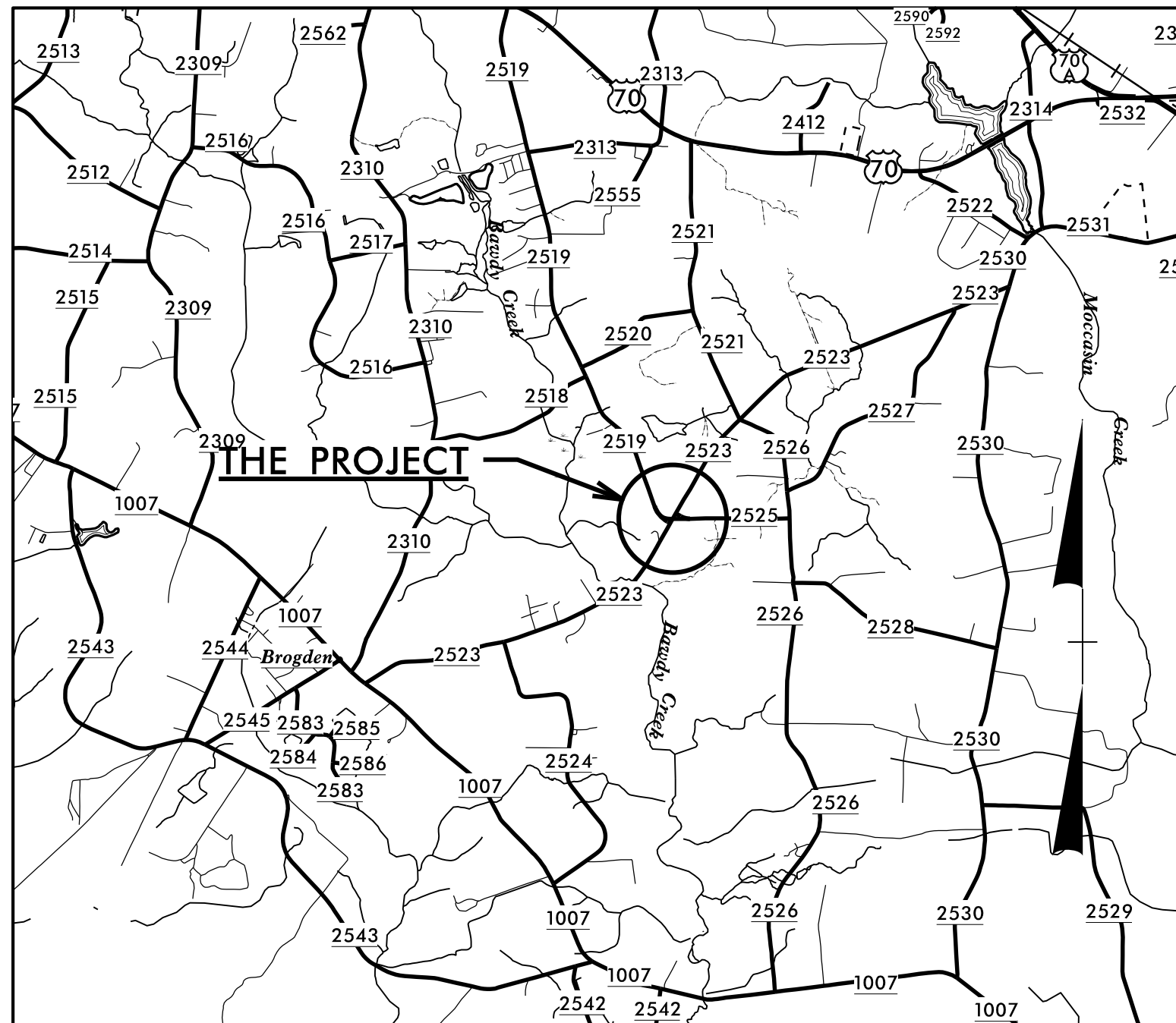


**This electronic collection of documents is provided  
for the convenience of the user  
and is Not a Certified Document –**

**The documents contained herein were originally issued  
and sealed by the individuals whose names and license  
numbers appear on each page, on the dates appearing  
with their signature on that page.**

**This file or an individual page  
shall not be considered a certified document.**

See Sheet 1-A For Index of Sheets



VICINITY MAP

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**JOHNSTON COUNTY**

LOCATION: REALIGN INTERSECTION OF SR-2519 (BRASWELL ROAD) &  
SR-2525 (ORMOND ROAD) AT SR-2523 (BAKERS CHAPEL ROAD)

TYPE OF WORK: GRADING, DRAINAGE AND PAVING

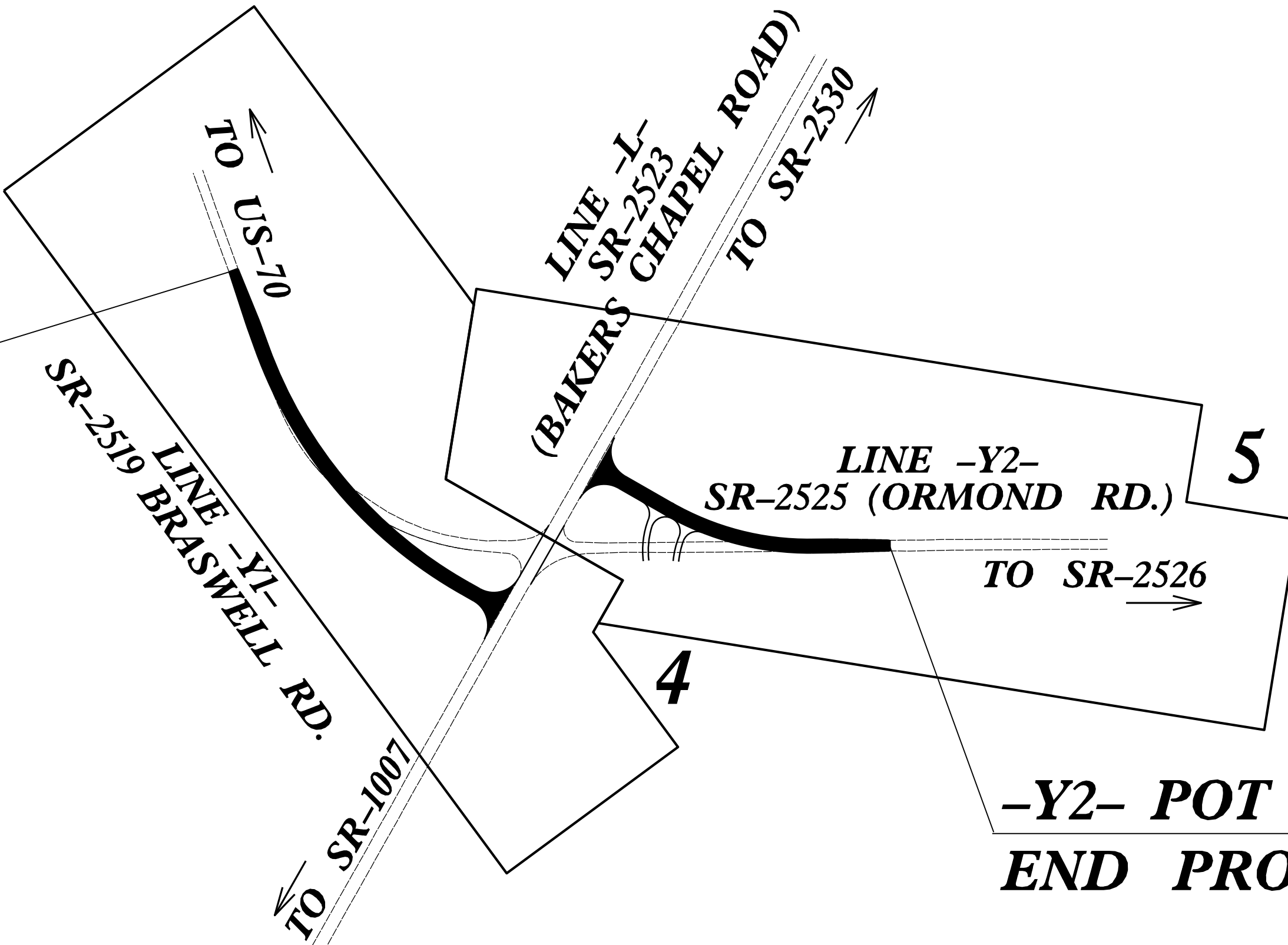
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	80073	1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
80073		PE	
80073		RW	
80073		CONST.	

PROJECT: 80073

PROJECT: 80073

CONTRACT: DD00400

-Y1- POT 11+00.00  
BEGIN PROJECT 80073

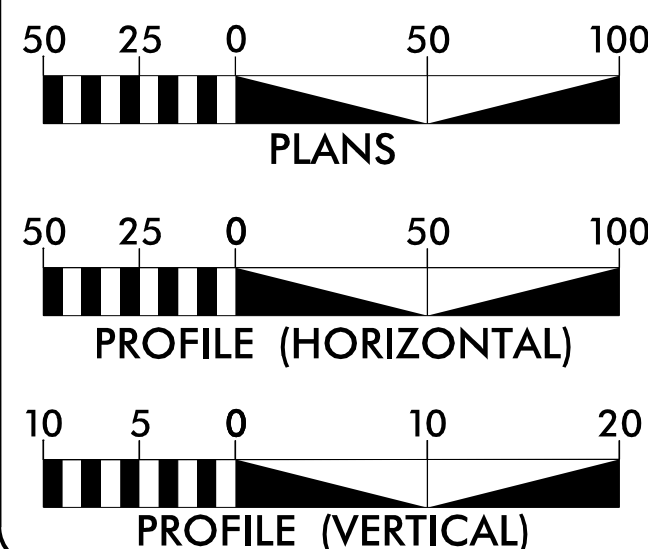


-Y2- POT 15+60.00  
END PROJECT 80073



DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2016 = 860  
  
V = 50 MPH  
  
FUNCTIONAL CLASS  
SUBREGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY PROJECT 80073 LINE -Y1- = 0.152 MILES  
LENGTH ROADWAY PROJECT 80073 LINE -Y2- = 0.106 MILES  
TOTAL LENGTH PROJECT 80073 = 0.258 MILES

Prepared in the Office of:  
**DIVISION OF HIGHWAYS**

Division 4 DDC  
509 Ward Blvd., Wilson NC, 27895

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
MARCH, 1 2019

LETTING DATE:  
OCTOBER 11, 2022

KEVIN BOWEN, PE  
PROJECT ENGINEER

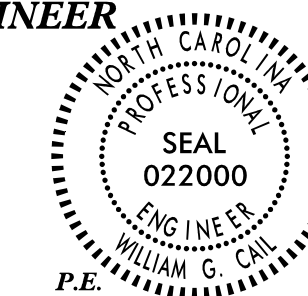
D. R. ETHRIDGE  
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

09/12/2022

DocuSigned by:  
William G. Chitt  
09/12/2022 14:05

SIGNATURE:

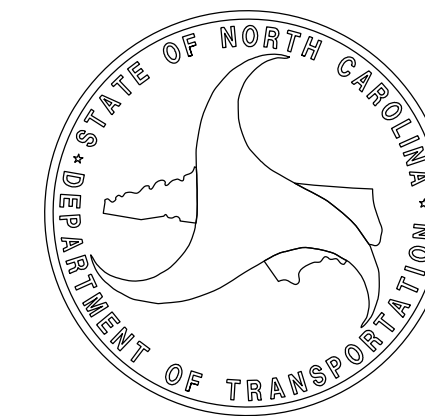
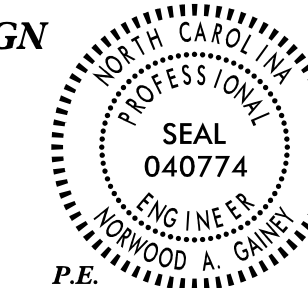


ROADWAY DESIGN ENGINEER

09/06/2022

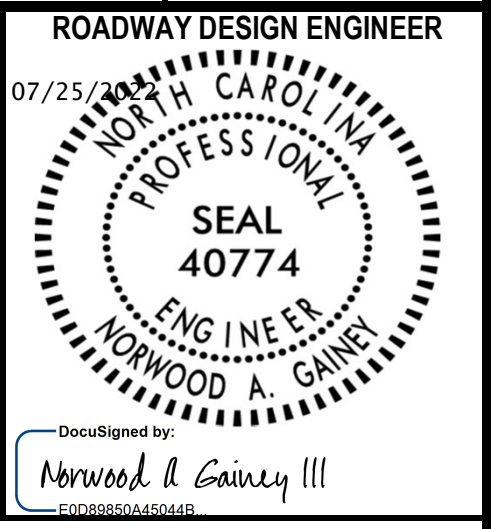
DocuSigned by:  
Norwood A. Gentry III  
09/06/2022 14:05

SIGNATURE:



# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

PROJ. REFERENCE NO. 80073	SHEET NO. 1-A
------------------------------	------------------



SHEET NUMBER	INDEX OF SHEETS SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
2A-1	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
3B-1	ROADWAY SUMMARIES - EARTHWORK, PAVEMENT REMOVAL, RIP RAP & GEOTEXTILE FOR DRAINAGE, DRAINAGE AND PARCEL INDEX.
4 THRU 5	PLAN & PROFILE SHEETS
RW-1 THRU RW-5	SURVEY CONTROL, EXISTING CENTERLINES RIGHT OF WAY, EASEMENTS AND PROPERTY TIES
TMP-1	TRANSPORTATION MANAGEMENT PLANS
EC-1 THRU EC-7	EROSION CONTROL PLANS
RF-1	REFORESTATION PLANS
SIGN-1	SIGNING PLANS
UBO-1 THRU UBO-5	UTILITIES BY OTHERS PLANS
X-1	CROSS-SECTION INDEX
X-1	CROSS-SECTION SUMMARY
X-2 THRU X-8	CROSS-SECTIONS

**2018 ROADWAY ENGLISH STANDARD DRAWINGS**

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:

- DIVISION 2 - EARTHWORK
  - 200.03 METHOD OF CLEARING - METHOD III
  - 225.02 GUIDE FOR GRADING SUBGRADE - SECONDARY AND LOCAL
  - 225.04 METHOD OF OBTAINING SUPERELEVATION - TWO LANE PAVEMENT
  - 225.06 METHOD OF GRADING SIGHT DISTANCE AT INTERSECTIONS
- DIVISION 3 - PIPE CULVERTS
  - 300.01 METHOD OF PIPE INSTALLATION
  - 310.10 DRIVEWAY PIPE CONSTRUCTION
- DIVISION 5 - SUBGRADE, BASES AND SHOULDERS
  - 560.01 METHOD OF SHOULDER CONSTRUCTION - HIGH SIDE OF SUPERELEVATED CURVE - METHOD I
- DIVISION 6 - ASPHALT BASES AND PAVEMENTS
  - 654.01 PAVEMENT REPAIRS
- DIVISION 8 - INCIDENTALS
  - 838.01 CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS - 15" THRU 48" PIPE 90 SKEW
  - 838.11 BRICK ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS - 15" THRU 48" PIPE 90 SKEW
  - 840.71 CONCRETE AND BRICK PIPE PLUG
  - 840.72 PIPE COLLAR
  - 876.02 GUIDE FOR RIP RAP AT PIPE OUTLETS
  - 876.04 DRAINAGE DITCHES WITH CLASS 'B' RIP RAP

**GENERAL NOTES: 2018 SPECIFICATIONS**

**GRADE LINE:**  
**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 III.

**SUPERELEVATION:**  
 ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04. USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

**SHOULDER CONSTRUCTION:**  
 ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01

**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.

**TEMPORARY SHORING:**  
 SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.

**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:  
 JOHNSTON CO. WATER, SPECTRUM, DUKE ENERGY AND AT&T.

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

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

# 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	○ EIP
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	----- WLB
Proposed Wetland Boundary	----- WLB
Existing Endangered Animal Boundary	----- EAB
Existing Endangered Plant Boundary	----- EPB
Existing Historic Property Boundary	----- HPB
Known Contamination Area: Soil	☠ -s- ☠
Potential Contamination Area: Soil	?? -s- ??
Known Contamination Area: Water	☠ -w- ☠
Potential Contamination Area: Water	?? -w- ??
Contaminated Site: Known or Potential	☠ ??

## BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○
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	-----

Note: Not to Scale

\*S.U.E. = Subsurface Utility Engineering

## 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	----- R/W
New Right of Way Line with Pin and Cap	----- R/W
New Right of Way Line with Concrete or Granite RW Marker	----- R/W
New Control of Access Line with Concrete CA Marker	----- C/A
Existing Control of Access	-----
New Control of Access	-----
Existing Easement Line	----- E
New Temporary Construction Easement	----- E
New Temporary Drainage Easement	----- TDE
New Permanent Drainage Easement	----- PDE
New Permanent Drainage / Utility Easement	----- DUE
New Permanent Utility Easement	----- PUE
New Temporary Utility Easement	----- TUE
New Aerial Utility Easement	----- AUE

## 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	○

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	⊙
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

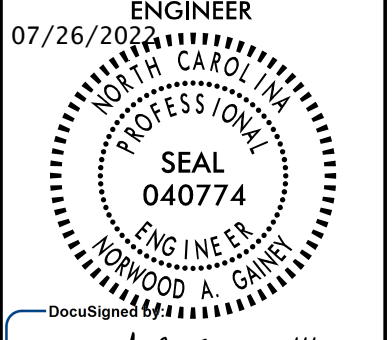
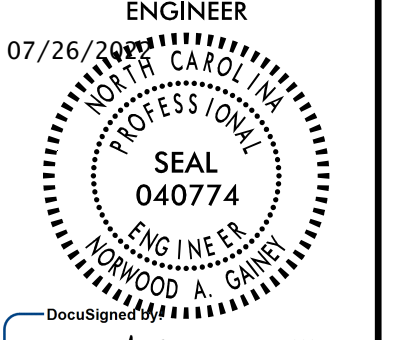
## MISCELLANEOUS:

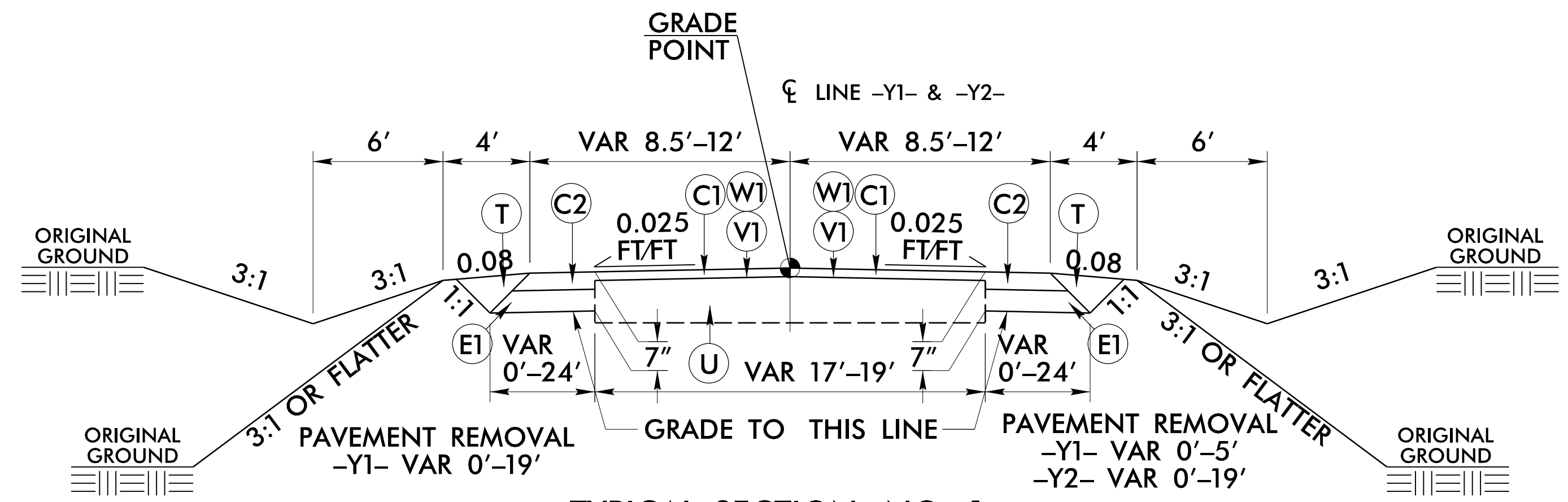
Utility Pole	●
Utility Pole with Base	⊠
Utility Located Object	○
Utility Traffic Signal Box	⊠
Utility Unknown U/G Line LOS B (S.U.E.*)	----- 70TL
U/G Tank; Water, Gas, Oil	-----
Underground Storage Tank, Approx. Loc.	⊠ UST
A/G Tank; Water, Gas, Oil	-----
Geoenvironmental Boring	⊕
U/G Test Hole LOS A (S.U.E.*)	⊕
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

# PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YARD.	E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YARD.	U	EXISTING PAVEMENT.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YARD. IN EACH OF TWO LAYERS.	E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YARD PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 3" OR GREATER THAN 5.5" IN DEPTH.	V1	MILLING BITUMINOUS PAVEMENT. 1.5" DEPTH.
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YARD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT TO EXCEED 1.5" DEPTH.	T	EARTH MATERIAL.	W1	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL)

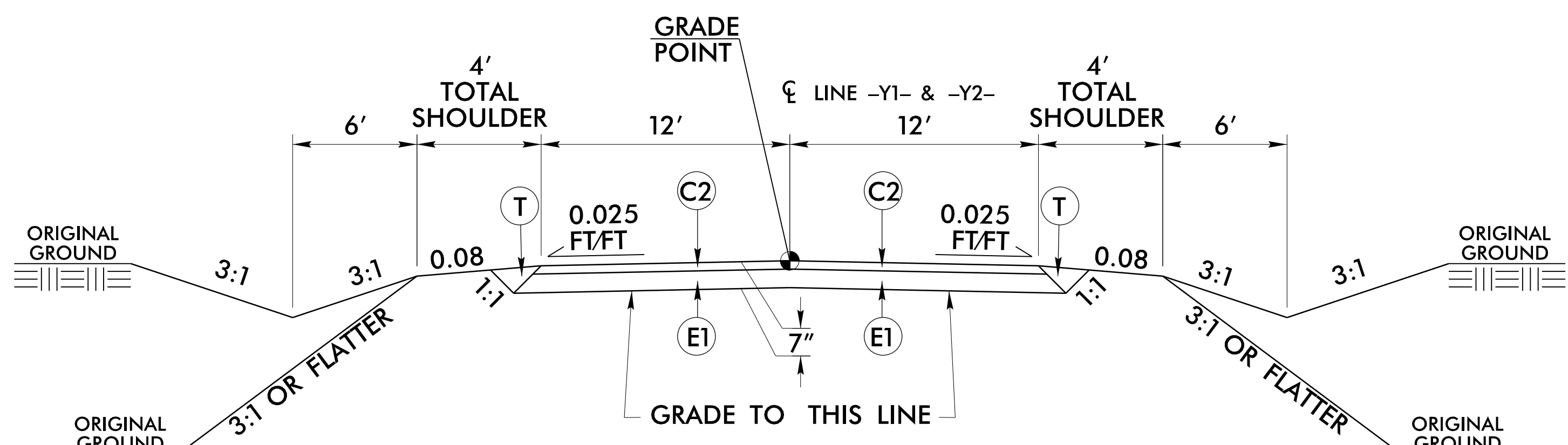
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

PROJECT REFERENCE NO. <b>80073</b>	SHEET NO. <b>2A-1</b>
ROADWAY DESIGN ENGINEER 07/26/2022  Norwood A. Gaine III	PAVEMENT DESIGN ENGINEER 07/26/2022  Norwood A. Gaine III
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



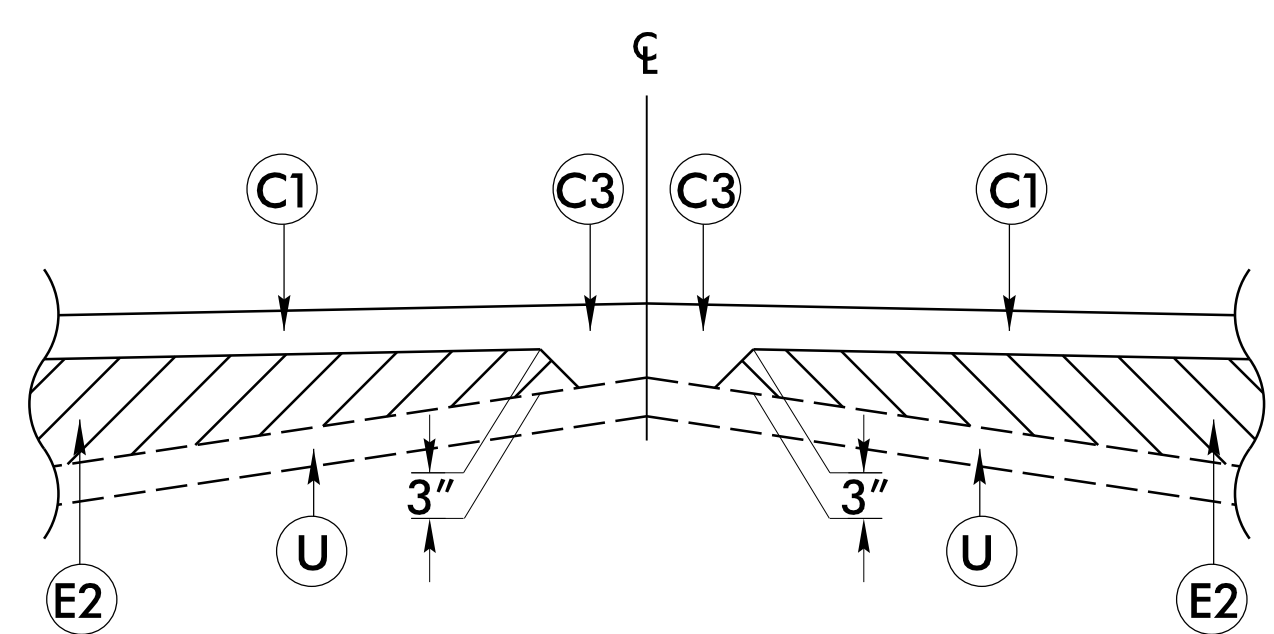
**USE TYPICAL SECTION NO. 1**

-Y1- STA 11+00 TO -Y1- STA 16+35  
-Y2- STA 12+77 TO -Y2- STA 15+60



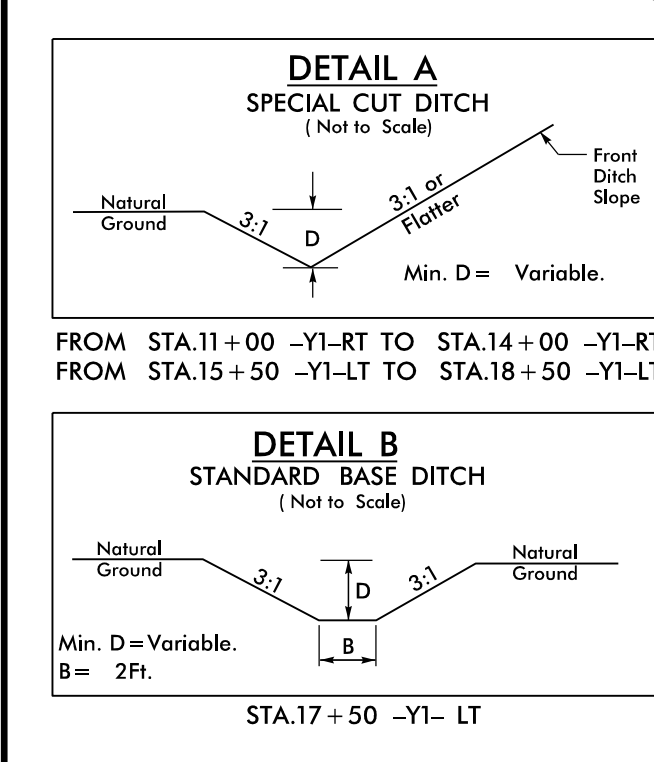
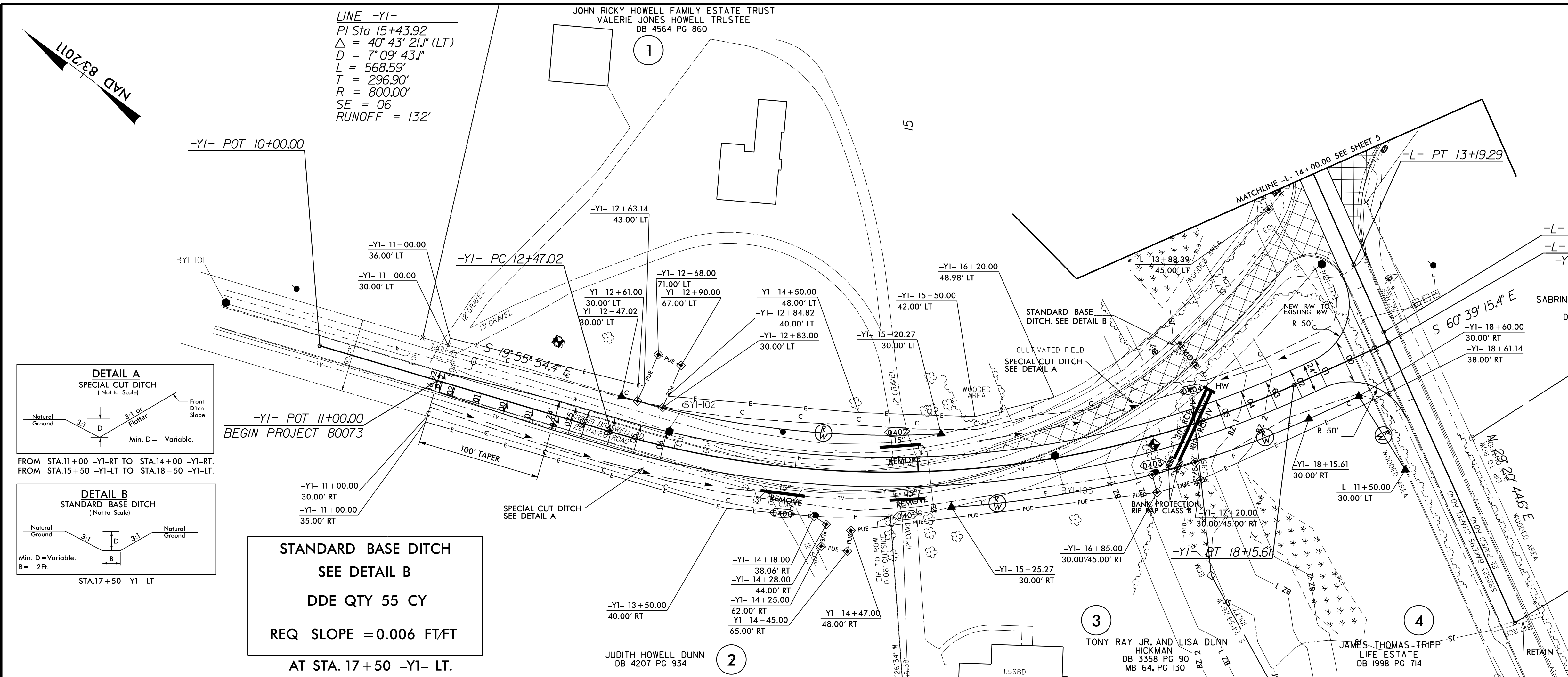
**USE TYPICAL SECTION NO. 2**

-Y1- STA 16+35 TO -Y1- STA 18+88  
-Y2- STA 10+11 TO -Y2- STA 12+77

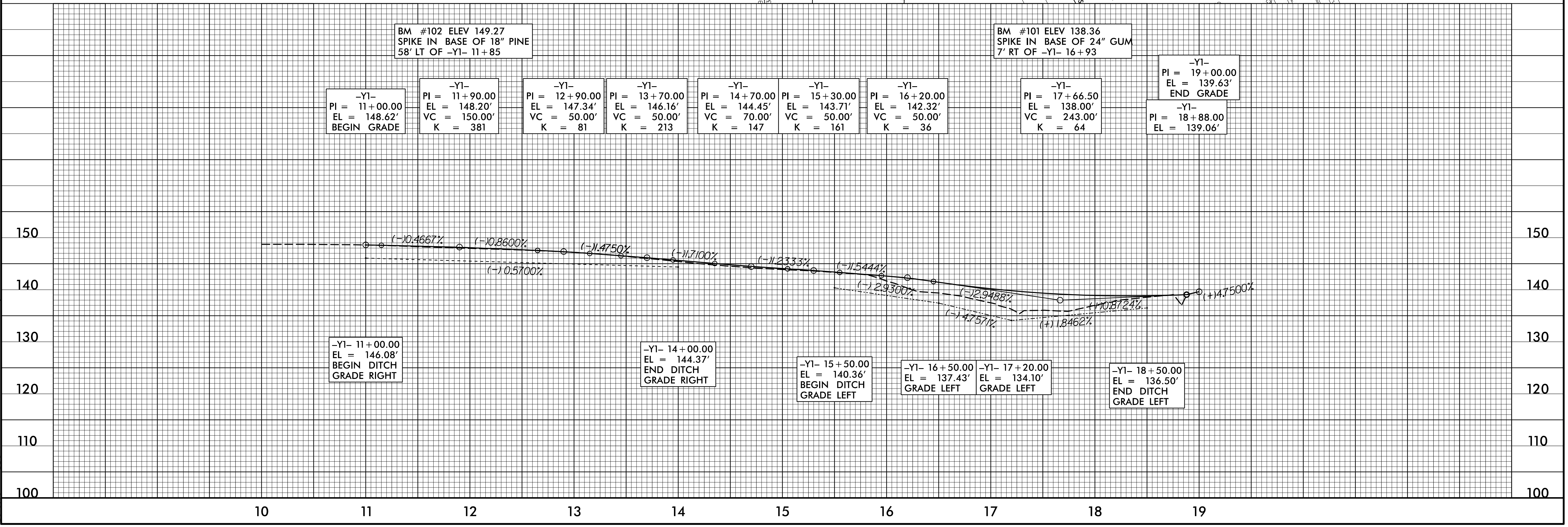


6/22/99  
26-JUL-2022 08:15  
R:\Roadway\Proc\80073\_DDC4\_TYP.dgn  
Division 4 DDC





**STANDARD BASE DITCH**  
SEE DETAIL B  
DDE QTY 55 CY  
REQ SLOPE = 0.006 FT/FT  
AT STA. 17+50 -Y1- LT.



REVISIONS

8/17/99

1L-JUL-2022 15:09  
R:\Roadway\PC\80073.DOC4\_IPSH04.dgn  
Division 4, DDC





07/26/2019

TIP PROJECT: SR 2519

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	SR 2519	RW01	

STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS

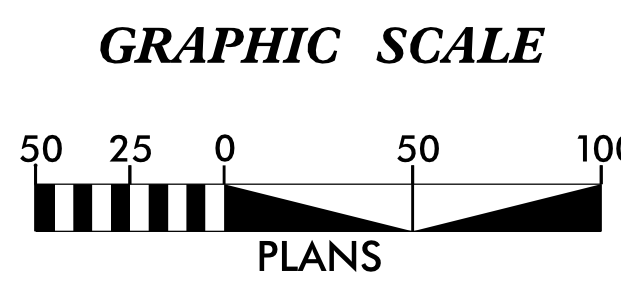
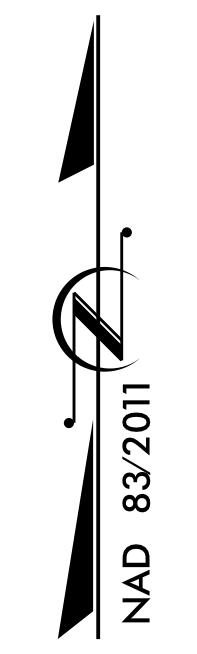
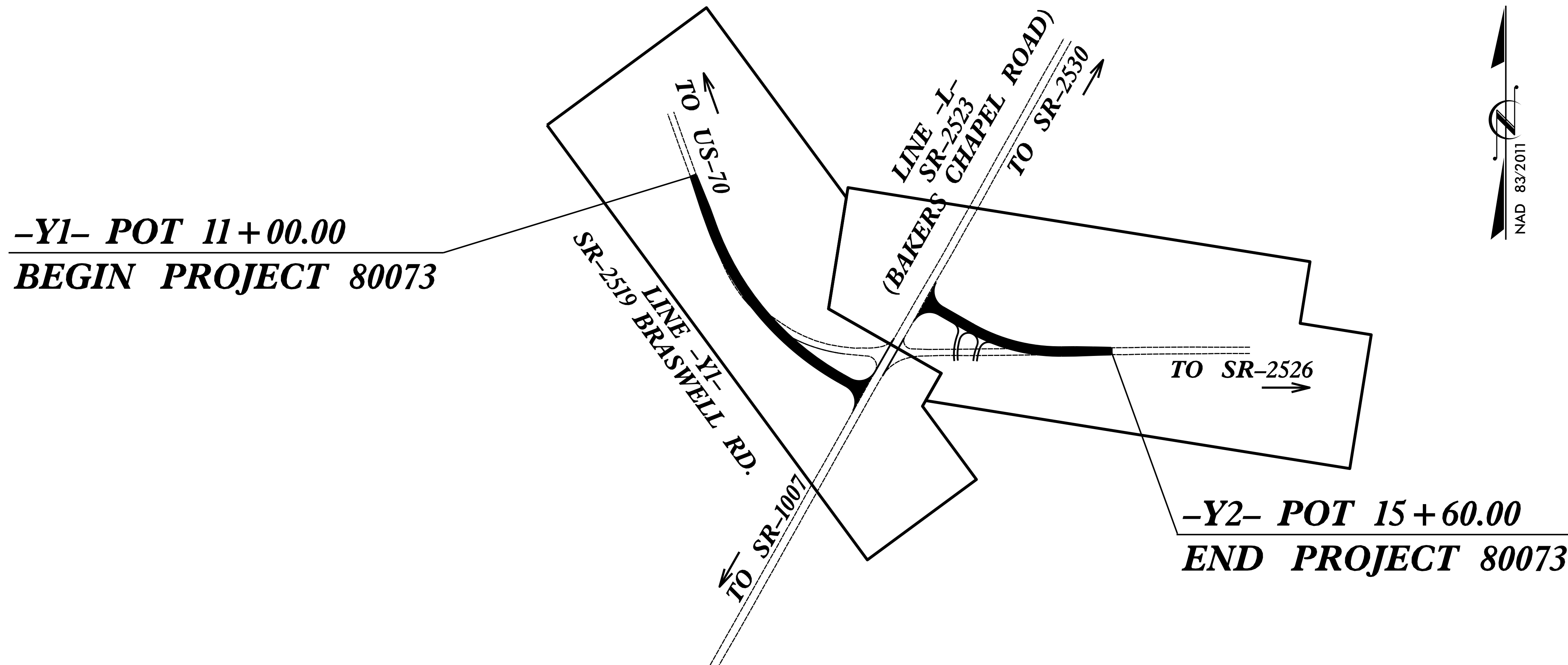
---

SURVEY CONTROL, EXISTING CENTERLINES,  
 RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

---

**JOHNSTON COUNTY**

---



**DATUM DESCRIPTION**

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "SR2519-2" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 616,726.120(ft) EASTING: 2,235,046.496(ft) ELEVATION: 148.149(ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99987641

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "SR2519-2" TO -L- STATION 10+00.00 IS S 82-38°02.3" W 2,479.73(ft)

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

Prepared in the Office of:

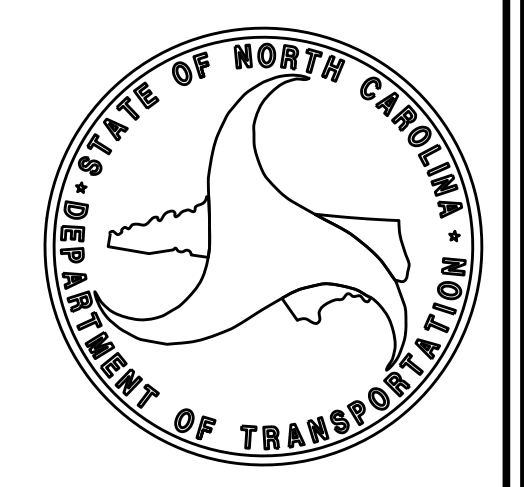
SO-DEEP | SAM NC

2018 STANDARD SPECIFICATIONS

**RIGHT OF WAY DATE:**  
 MARCH, 1 2019

**LETTING DATE:**  
 JUNE 2019

PROFESSIONAL LAND SURVEYOR



DocuSigned by:  
 Jason C. Hedley  
 408CE025283344E...

07-15-2019  
 Date:

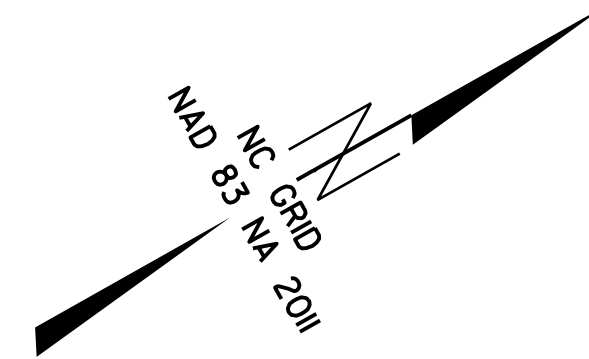
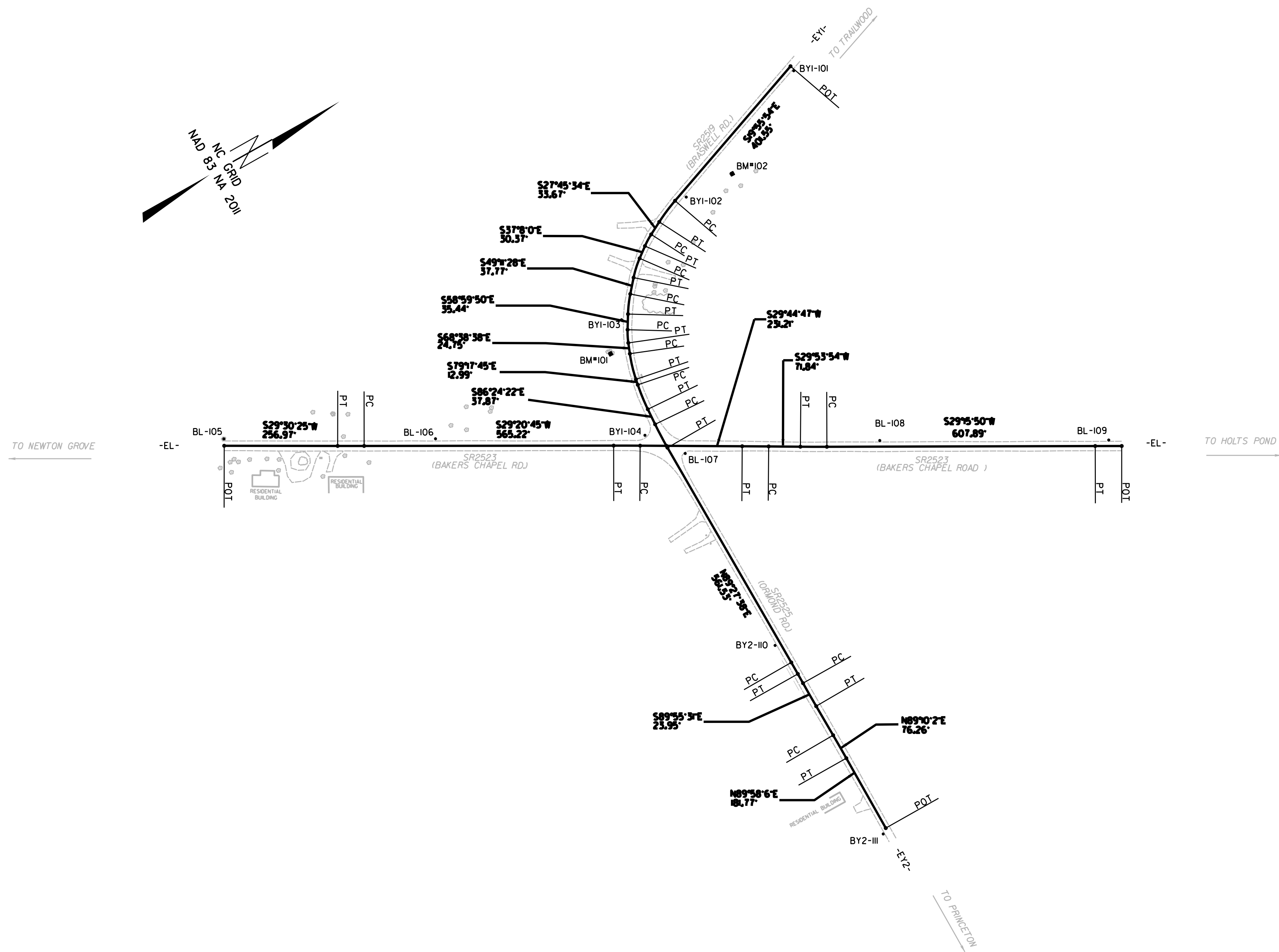
\$\$\$\$\$ SYSTEM\$\$\$\$\$  
 \$\$\$ DDN\$\$\$\$\$  
 \$\$\$ USERNAME\$\$\$\$\$

6/2/09

PROJECT REFERENCE NO.	SHEET NO.
SR 2519	RW02C-1
Location and Surveys	
SO-DEEP   SAM NC	

# SURVEY CONTROL SHEET

## W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



REVISIONS

07-JUL-2019 18:55  
 \\seminc\RAL\FPROJECTS\1318044177\HH\03Ref\Dr14\Surveys\Cop1\SR2519-RW02C-1.dgn  
 Jason.Hedley AT RAL-L-GDC02G2

- NOTES:
1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
  2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

SR2519-2

6/2/09

PROJECT REFERENCE NO.	SHEET NO.
SR 2519	RW02C-2
Location and Surveys	
SO-DEEP   SAM NC	

# SURVEY CONTROL SHEET

W/EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

BL	POINT	DESC.	NORTH	EAST	ELEVATION
105		BL - 105	615872.5440	2232267.2990	142.8760
106		BL - 106	616290.3520	2232502.5020	137.5270
107		BL - 107	616766.6920	2232809.3540	140.9200
108		BL - 108	617165.0200	2233000.3820	141.5030
109		BL - 109	617617.3640	2233254.1430	145.8580

BY1	POINT	DESC.	NORTH	EAST	ELEVATION
101		BY1 - 101	617406.6530	2232174.9910	148.1660
102		BY1 - 102	617054.0240	2232304.6690	145.9150
103		BY1 - 103	616789.8310	2232474.7530	141.4970
104		BY1 - 104	616707.4740	2232728.7910	139.4700

BY2	POINT	DESC.	NORTH	EAST	ELEVATION
110		BY2 - 110	616730.4020	2233288.2330	148.5870
111		BY2 - 111	616733.9580	2233780.5820	152.4730
1		SR2519-1	616731.2950	2234323.7060	152.5930
2		SR2519-2	616726.1200	2235046.4960	148.1490

\*\*\*\*\*  
 BM101 ELEVATION = 138.36  
 N 616730 E 2232530  
 SPIKE IN BASE OF 24" GUM TREE  
 \*\*\*\*\*

\*\*\*\*\*  
 BM102 ELEVATION = 149.27  
 N 617171 E 2232310  
 SPIKE IN BASE OF 18" PINE TREE  
 \*\*\*\*\*

NOTES:

- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
- THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

REVISIONS

07-JUL-2019 10:03  
 \\samingo\RAL\PROJECTS\1318044177AH\03Ref\Dr14\Surveys\Cop1\SR2519-RW02C-2.dgn  
 Jason.Hedley AT RAL-L-GDC02G2

# SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
SR 2519	RW02C-3
Location and Surveys	
SO-DEEP   SAM NC	

REVISIONS

EL		N	E	BEARING	DIST	DELTA	D	L	T	R
PC	POINT	617636.269	2233280.442							
CURVE				S 29°21'13.0" W	60.00	00°10'45.9"(LT)	00°17'56.6"	60.00	30.00	19159.10
PT		617583.973	2233251.031							
LINE				S 29°15'50.0" W	607.89					
PC	POINT	617053.668	2232953.877							
CURVE				S 29°34'52.0" W	60.00	00°38'04.1"(RT)	01°03'26.9"	60.00	30.00	5418.18
PT		617001.490	2232924.259							
LINE				S 29°53'54.0" W	71.84					
PC	POINT	616939.209	2232888.448							
CURVE				S 29°49'20.3" W	60.00	00°09'07.3"(LT)	00°15'12.2"	60.00	30.00	22610.58
PT		616887.155	2232858.609							
LINE				S 29°44'46.7" W	231.21					
PC	POINT	616686.413	2232743.893							
CURVE				S 29°32'45.6" W	60.00	00°24'02.1"(LT)	00°40'03.5"	60.00	30.00	8581.73
PT		616634.216	2232714.306							
LINE				S 29°20'44.6" W	565.22					
PC	POINT	616141.527	2232437.305							
CURVE				S 29°25'35.0" W	60.00	00°09'40.8"(RT)	00°16'08.1"	60.00	30.00	21306.65
PT		616089.271	2232407.828							
LINE				S 29°30'25.4" W	256.97					
POT		615865.631	2232281.263							

EY1		N	E	BEARING	DIST	DELTA	D	L	T	R
POT	POINT	617405.364	2232162.581							
LINE				S 19°55'54.4" E	401.55					
PC	POINT	617027.869	2232299.469							
CURVE				S 23°50'44.1" E	59.86	07°49'39.3"(LT)	13°03'58.7"	59.91	30.00	438.50
PT		616973.119	2232323.669							
LINE				S 27°45'33.8" E	33.67					
PC	POINT	616943.326	2232339.350							
CURVE				S 32°26'46.7" E	29.90	09°22'25.8"(LT)	31°18'57.7"	29.93	15.00	182.96
PT		616918.094	2232355.392							
LINE				S 37°07'59.7" E	30.37					
PC	POINT	616893.878	2232373.728							
CURVE				S 43°09'43.9" E	45.75	12°03'28.8"(LT)	26°18'36.8"	45.83	23.00	217.77
PT		616860.511	2232405.021							
LINE				S 49°11'28.1" E	37.77					
PC	POINT	616835.827	2232433.608							
CURVE				S 54°05'39.0" E	45.83	09°48'21.4"(LT)	21°22'10.0"	45.89	23.00	268.12
PT		616808.949	2232470.731							
LINE				S 58°59'50.0" E	35.44					
PC	POINT	616790.695	2232501.107							
CURVE				S 63°49'13.9" E	29.89	09°38'48.4"(LT)	32°13'55.6"	29.93	15.00	177.76
PT		616777.507	2232527.934							
LINE				S 68°38'37.8" E	24.75					
PC	POINT	616768.493	2232550.987							
CURVE				S 73°58'11.4" E	59.74	10°39'07.5"(LT)	17°48'17.2"	59.83	30.00	321.80
PT		616751.995	2232600.405							
LINE				S 79°17'45.0" E	12.99					
PC	POINT	616749.583	2232621.166							
CURVE				S 82°51'03.7" E	59.88	07°06'37.5"(LT)	11°51'57.3"	59.92	30.00	482.86
PT		616742.131	2232680.585							
LINE				S 86°24'22.4" E	37.87					
PC	POINT	616739.757	2232718.377							
CURVE				S 88°18'18.5" E	55.09	03°47'52.2"(LT)	06°53'32.0"	55.10	27.56	831.31
PT		616739.757	2232718.377							

EY2		N	E	BEARING	DIST	DELTA	D	L	T	R
PC	POINT	616738.128	2232773.446							
CURVE				N 89°37'42.0" E	4.86	00°20'06.8"(LT)	06°53'32.0"	4.86	2.43	831.31
PT		616738.159	2232778.310							
LINE				N 89°27'38.4" E	561.53					
PC	POINT	616743.445	2233339.810							
CURVE				N 89°46'03.5" E	30.00	00°36'50.3"(RT)	02°02'47.6"	30.00	15.00	2799.61
PT		616743.567	2233369.809							
LINE				S 89°55'31.4" E	23.95					
PC	POINT	616743.535	2233393.757							
CURVE				N 89°37'15.1" E	60.00	00°54'27.0"(LT)	01°30'45.2"	60.00	30.00	3788.02
PT		616743.932	2233453.754							
LINE				N 89°10'01.6" E	76.26					
PC	POINT	616745.041	2233530.010							
CURVE				N 89°34'03.9" E	60.00	00°48'04.6"(RT)	01°20'07.7"	60.00	30.00	4290.26
PT		616745.494	2233590.007							
LINE				N 89°58'06.2" E	181.77					
POT		616745.594	2233771.774							

NOTES:

- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
- THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

# PROPOSED ALIGNMENT CONTROL SHEET

PROJECT REFERENCE NO.	SHEET NO.
SR 2519	RW02D-1
Location and Surveys	
So-Deep   SAM NC	

REVISIONS

L

TYPE	STATION	NORTH	EAST
POT	10+00.00	616408.1995	2232587.2342
PC	12+59.29	616634.2155	2232714.3057
PT	13+19.29	616686.4128	2232743.8929
PC	15+50.50	616887.1549	2232858.6092
PT	16+10.50	616939.2092	2232888.4479
PC	16+82.34	617001.4909	2232924.2591
PT	17+42.34	617053.6675	2232953.8768
POT	18+00.00	617103.9719	2232982.0646

Y1

TYPE	STATION	NORTH	EAST
POT	10+00.00	617324.3205	2232191.9696
PC	12+47.02	617092.0972	2232276.1790
PT	18+15.61	616667.4751	2232636.1959
POT	19+00.00	616626.1192	2232709.7538

T1

TYPE	STATION	NORTH	EAST
POT	0+00.00	616816.9716	2232666.1436
POT	1+79.45	616704.7661	2232526.0987
POT	3+10.31	616595.1938	2232454.5497

Y2

TYPE	STATION	NORTH	EAST
POT	10+00.00	616886.7241	2232858.3630
PC	11+57.77	616808.4443	2232995.3448
PT	14+22.06	616742.5819	2233248.1316
PC	15+13.75	616743.4449	2233339.8100
PT	15+43.75	616743.5666	2233369.8093
PC	15+67.69	616743.5354	2233393.7575
PT	16+27.69	616743.9324	2233453.7543
PC	17+03.96	616745.0410	2233530.0100
PT	17+63.96	616745.4937	2233590.0068
POT	19+00.00	616745.5687	2233726.0517


**NOTES:**

1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE PROPOSED ALIGNMENT CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATINO REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

 6/2/19  
 Q:\juli\_2019\_18\25\PROJECTS\13180441774H\03Ref\0r1\Surveys\Copj\sr2519\_1s.rw02d-1.dgn  
 10:50:00 AM 6/2/2019

6/2/19

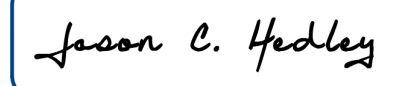
# RIGHT OF WAY CONTROL SHEET

PROJECT REFERENCE NO. SR 2519	SHEET NO. RW03E-1
Location and Surveys	
Se-Deep   SAM NC	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, Jason C. Hedly, 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 13th day of May, 2019.

DocuSigned by:  
  
 406CE025263344E... L-4964  
 Professional Land Surveyor PLS # Seal

## ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	11+50.00	-30.00	616553.6536	2232634.5956
L	16+50.00	30.00	616958.5016	2232934.1464

## ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y1	12+47.02	-30.00	617102.3243	2232304.3819
Y1	15+20.27	-30.00	616875.0167	2232434.1248
Y1	15+25.27	30.00	616832.8637	2232391.1362
Y1	18+15.61	30.00	616641.3247	2232621.4936
Y1	18+60.00	30.00	616619.5719	2232660.1843

## ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y2	10+60.00	-30.00	616883.0014	2232925.3417
Y2	11+57.77	-30.00	616834.4912	2233010.2296
Y2	14+22.06	-30.00	616772.5806	2233247.8492

### NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.


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

REVISIONS

05-JUL-2019 10:05 AM  
 Q:\sum\c\VR6\PROJECTS\13180441774H\03Ref\0r1\Surveys\Cop\sr2519\_1.s\_rw03e-1.dgn  
 Jason Hedley

6/2/19

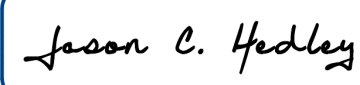
# PERMANENT EASEMENT CONTROL SHEET

PROJECT REFERENCE NO. SR 2519	SHEET NO. RW03E-2
Location and Surveys	
Se-Deep   SAM NC	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, Jason C. Hedley, 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 13th day of May, 2019.

DocuSigned by:  
  
 406CE025263344E... L-4964  
 Professional Land Surveyor PLS # Seal

### ROW MARKER PERMANENT EASEMENT - E

ALIGN	STATION	OFFSET	NORTH	EAST
L	14+10.00	-30.00	616780.0566	2232762.8536
L	14+10.00	-45.00	616787.4990	2232749.8302
L	13+88.39	-45.00	616768.7369	2232739.1084

### ROW MARKER PERMANENT EASEMENT - E

ALIGN	STATION	OFFSET	NORTH	EAST
Y1	12+61.00	-30.00	617089.7152	2232309.0793
Y1	12+68.00	-71.00	617098.4158	2232349.6783
Y1	12+83.00	-30.00	617070.0443	2232316.9156
Y1	12+90.00	-67.00	617078.2944	2232353.5782
Y1	14+18.00	38.06	616918.5149	2232318.9185
Y1	14+25.00	62.00	616899.4011	2232302.7026
Y1	14+28.00	44.00	616906.4590	2232319.5673
Y1	14+45.00	65.00	616879.7271	2232312.0797
Y1	14+47.00	48.00	616887.5069	2232327.3460
Y1	16+85.00	45.00	616705.3563	2232499.9258
Y1	16+85.00	30.00	616717.0627	2232509.3045
Y1	17+20.00	45.00	616682.8801	2232529.2736
Y1	17+20.00	30.00	616694.9866	2232538.1321

**NOTES:**

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

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

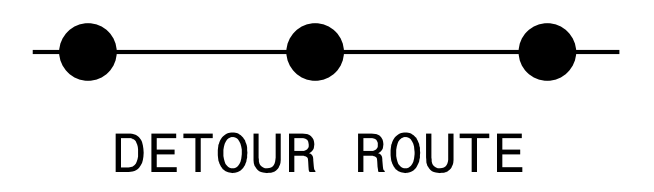
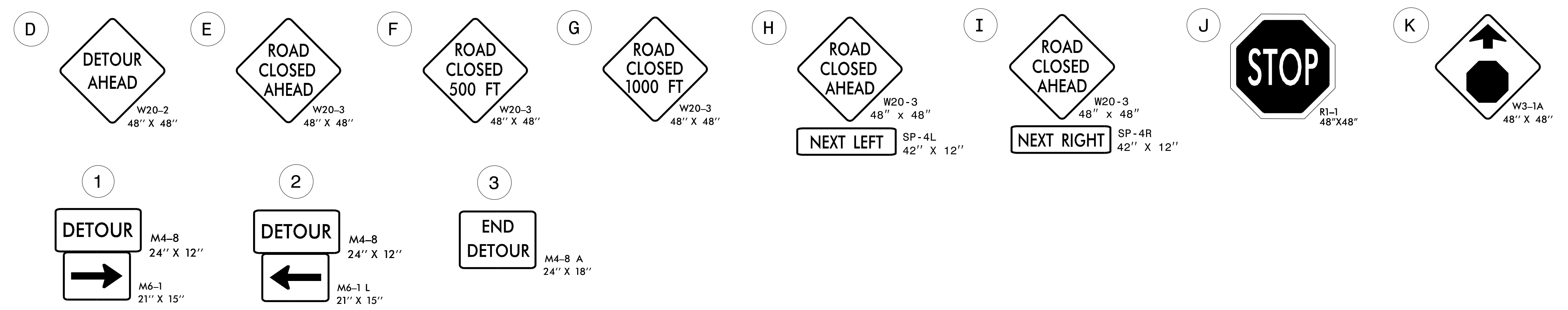
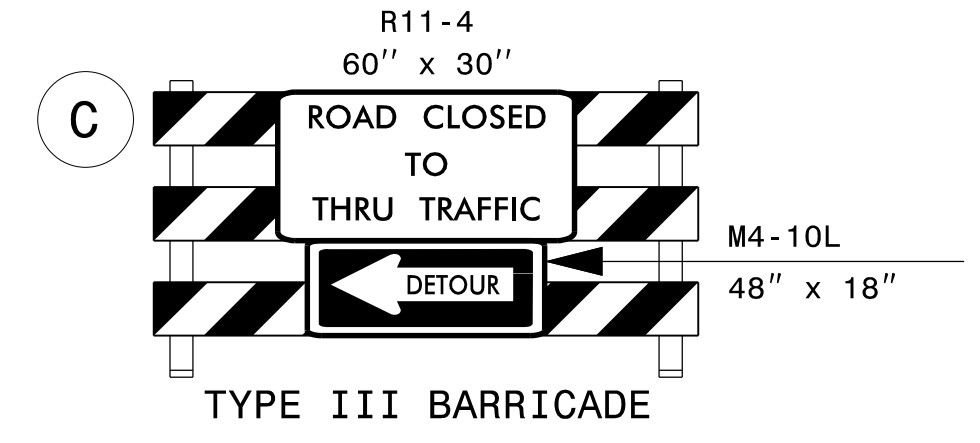
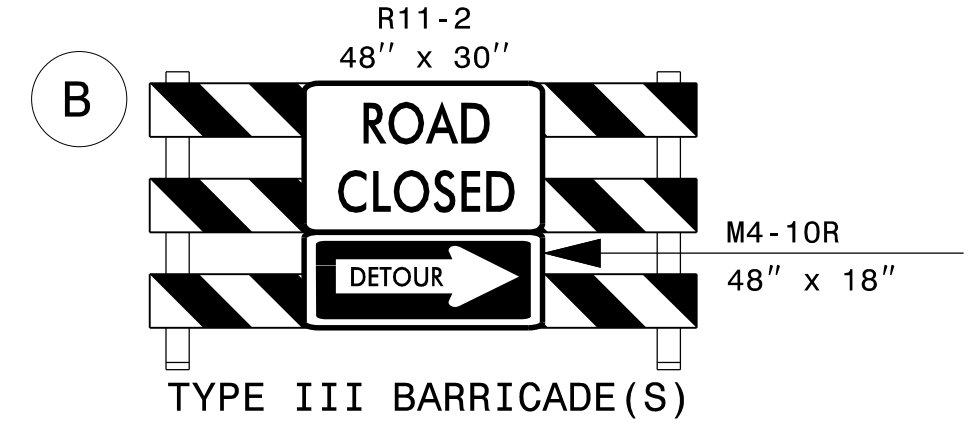
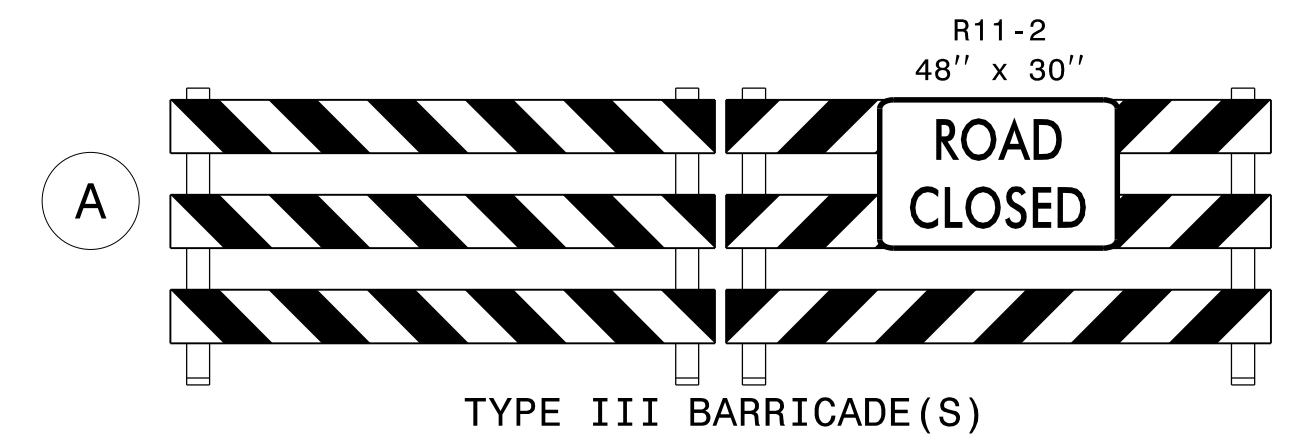
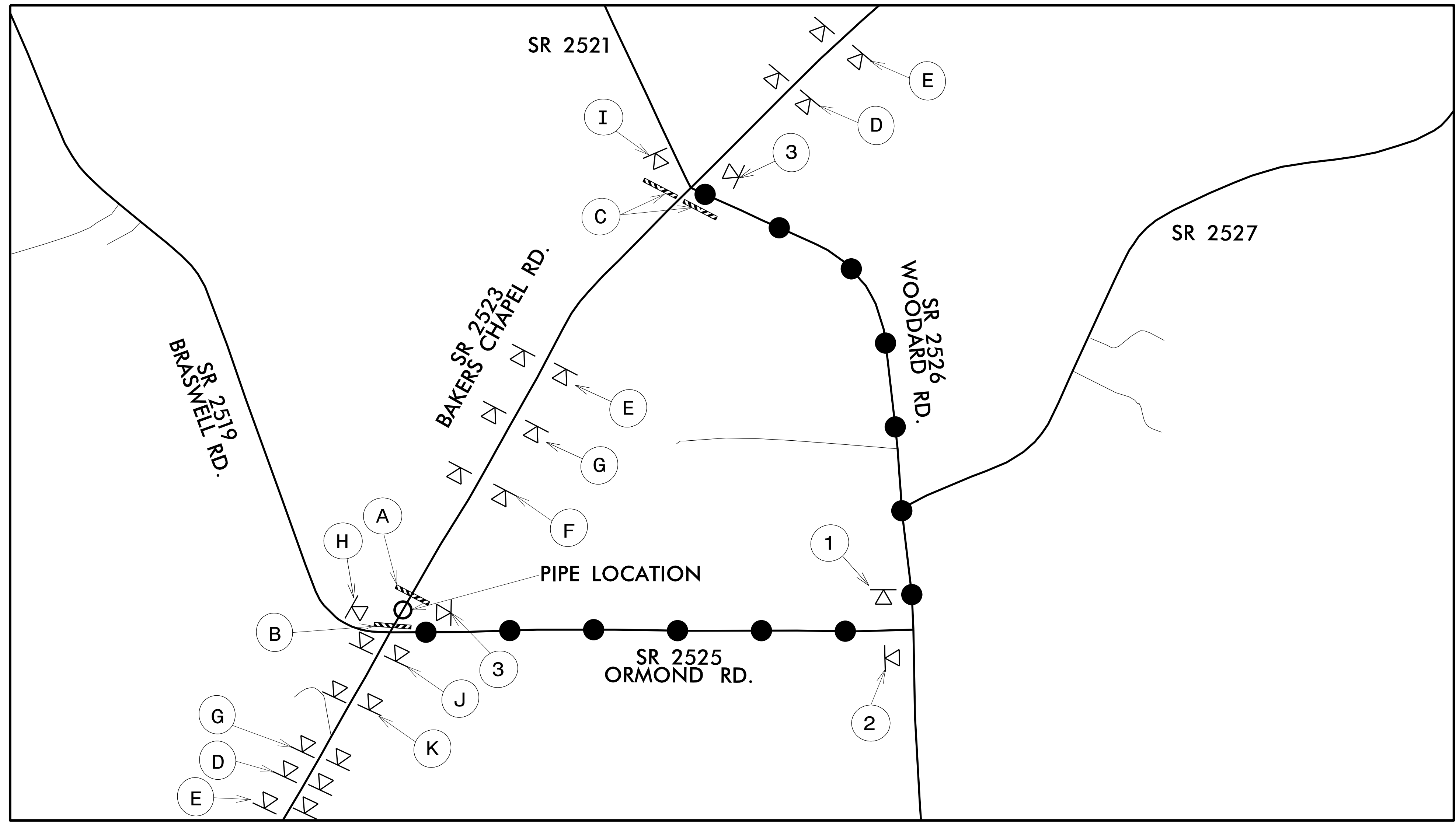
REVISIONS

Q:\JUL-2019\1817\PROJECTS\13180441774H\03Ref\0r1\1\Surveys\Copj\sr2519\_1s\_rw03e-2.dgn  
 Jason Hedley









**LEGEND**

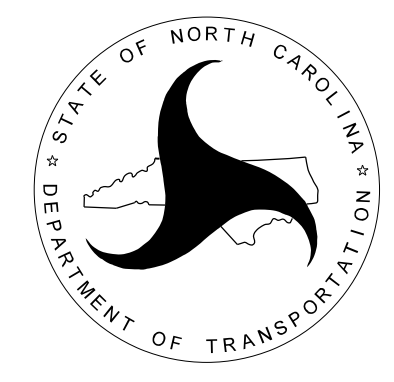
**TRAFFIC CONTROL DEVICES**

BARRICADE (TYPE III)

**TEMPORARY SIGNING**

PORTABLE SIGN

NOTES:  
 TRAFFIC CONTROL DEVICES A THROUGH K SHALL BE INSTALLED ACCORDING TO RSD 1101.03, SHEETS 1 & 2 OF 9.  
 TRAFFIC CONTROL DEVICES 1 THROUGH 3 SHALL BE INSTALLED AS SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER.



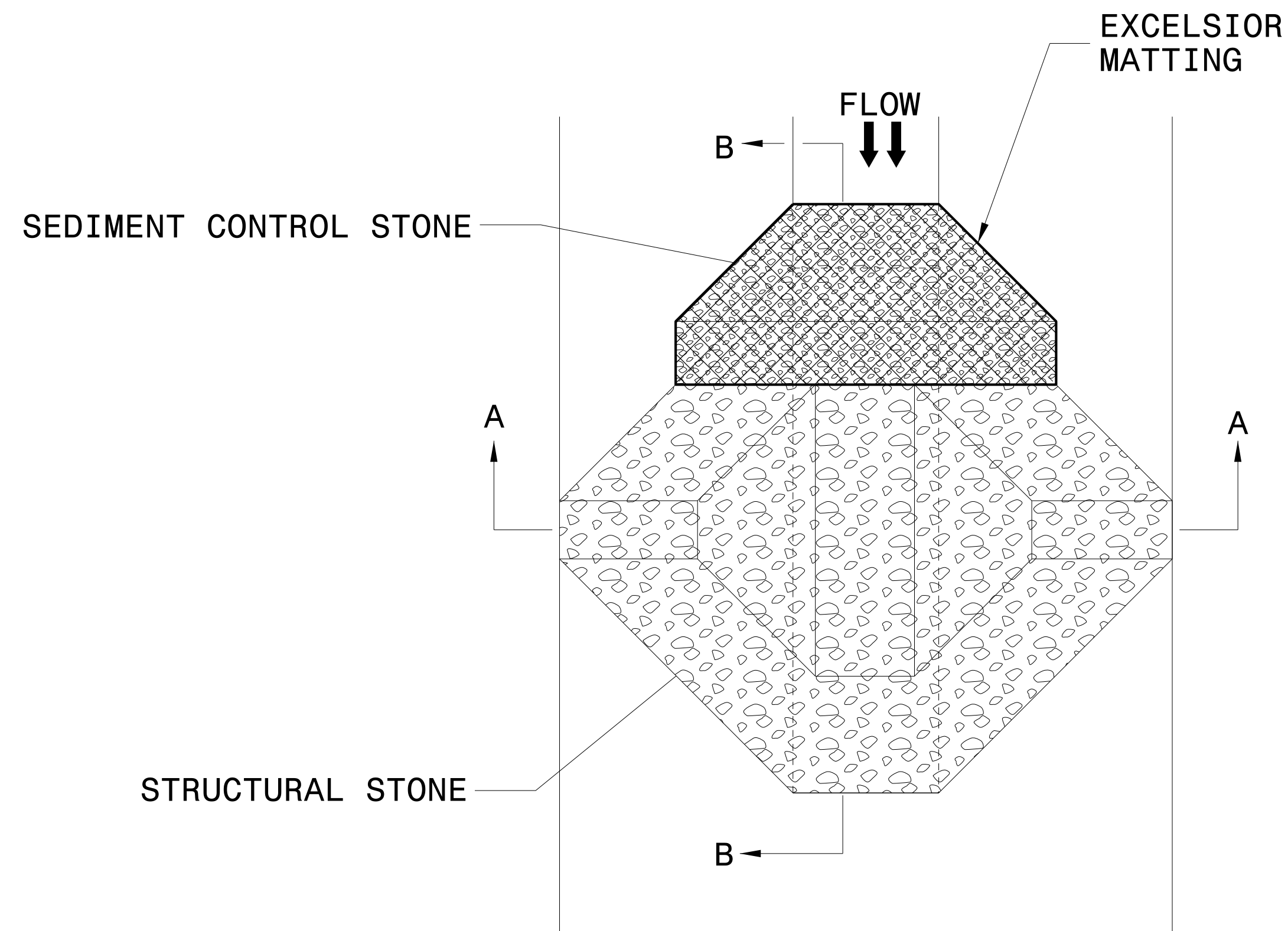
**SR 2523  
 BAKERS CHAPEL RD.  
 DETOUR**

I:\JUL-2022\12402  
 R:\Traffic\TFCG\ficContra\TCP\80073.TC.TMP.dgn  
 Division 4 DDC

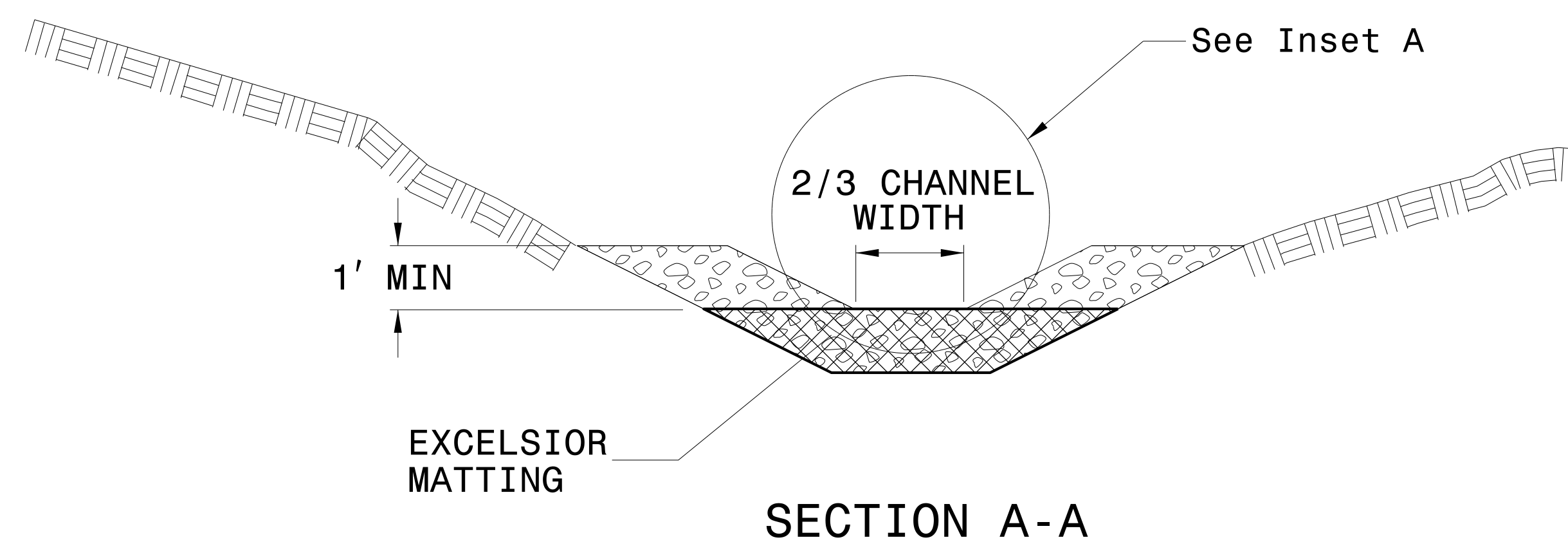


PROJECT REFERENCE NO. 80073	SHEET NO. EC-02
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM)



PLAN



SECTION A-A

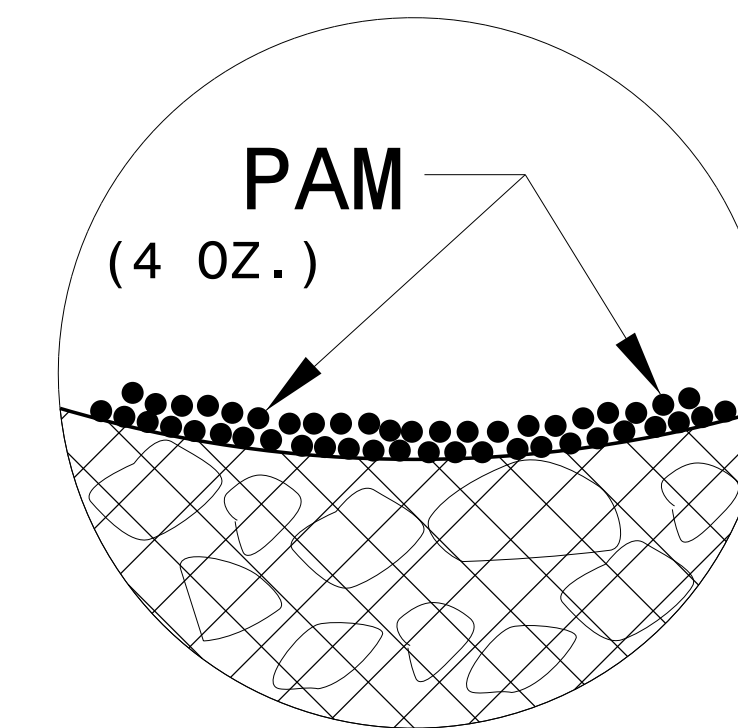
## NOTES:

INSTALL TEMPORARY ROCK SILT CHECK TYPE A IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1633.01.

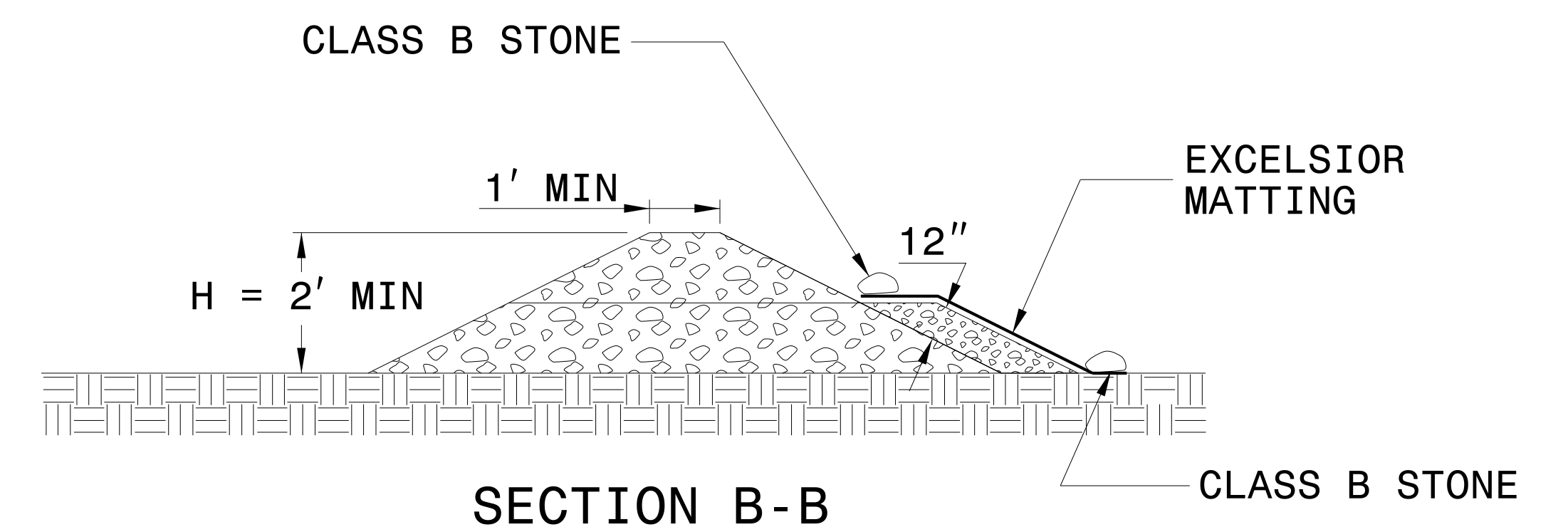
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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 ROCK SILT CHECK.

INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION B-B

NOT TO SCALE

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

---



---

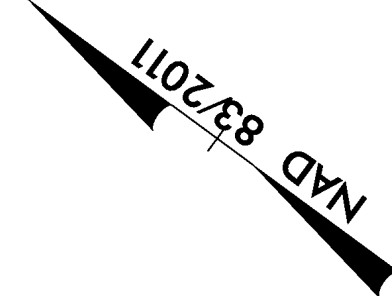
PROJECT REFERENCE NO. <i>80073</i>	SHEET NO. <i>EC-3</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# ***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.



8/17/99



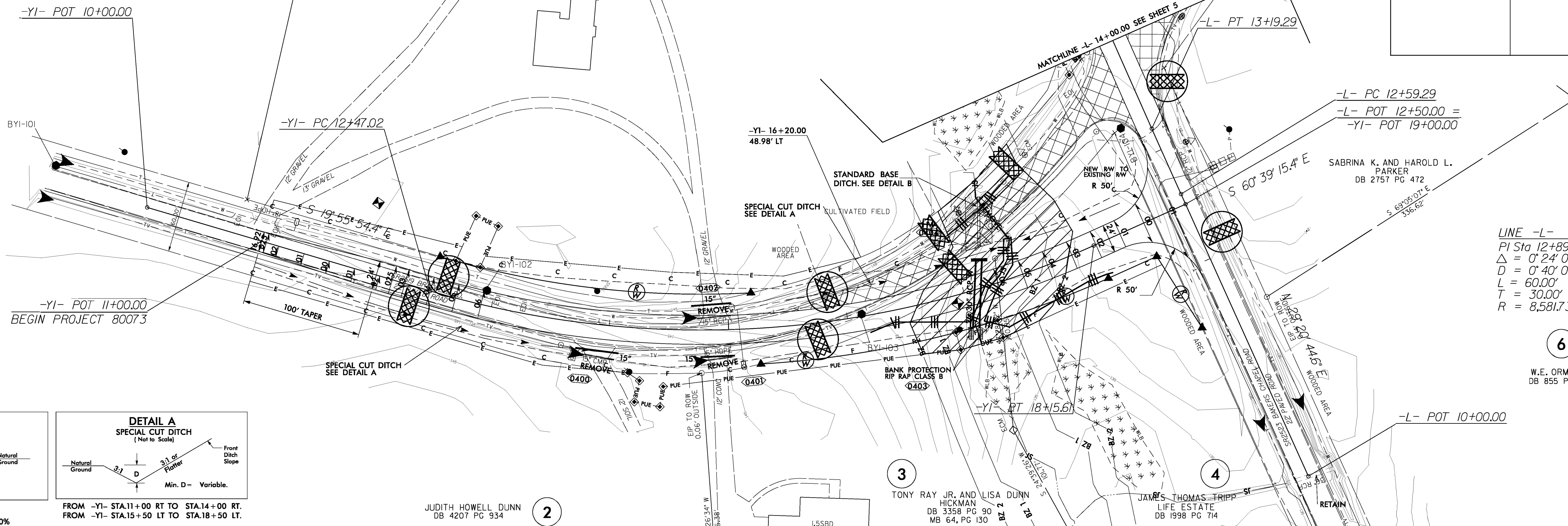
LINE -Y1-  
 PI Sta 15+43.92  
 $\Delta = 40' 43" 21"$  (LT)  
 $D = 7' 09" 43"$   
 $L = 568.59'$   
 $T = 296.90'$   
 $R = 800.00'$   
 $SE = 06$   
 $RUNOFF = 132'$

ENVIRONMENTALLY SENSITIVE AREA  
 SEE PROJECT SPECIAL PROVISIONS

NOTE:  
 PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B  
 AND TEMPORARY ROCK SILT CHECKS TYPE - A AT  
 DRAINAGE OUTLETS.

CLEARING AND GRUBBING  
 EROSION CONTROL FOR  
 CONSTRUCTION SHEET 4

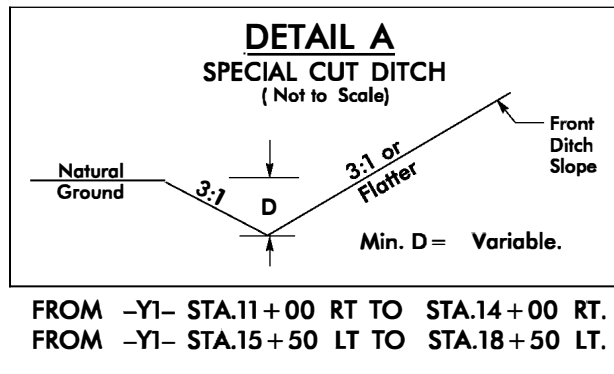
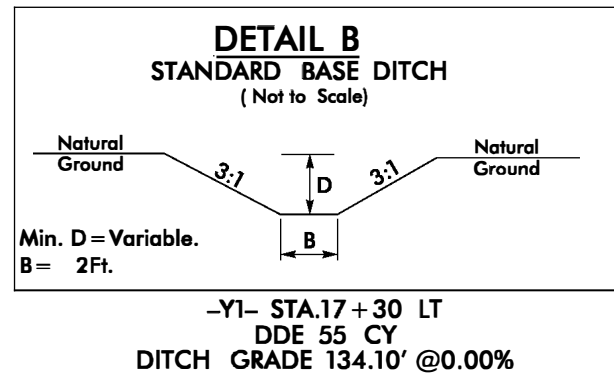
PROJECT REFERENCE NO. 80073	SHEET NO. EC-04/CONST.04
RW SHEET NO. 04	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	



LINE -L-  
 PI Sta 12+89.29  
 $\Delta = 0' 24' 02"$  (RT)  
 $D = 0' 40' 03.5"$   
 $L = 60.00'$   
 $T = 30.00'$   
 $R = 8,581.73'$

6  
 W.E. ORMOND  
 DB 855 PG 178

REVISIONS

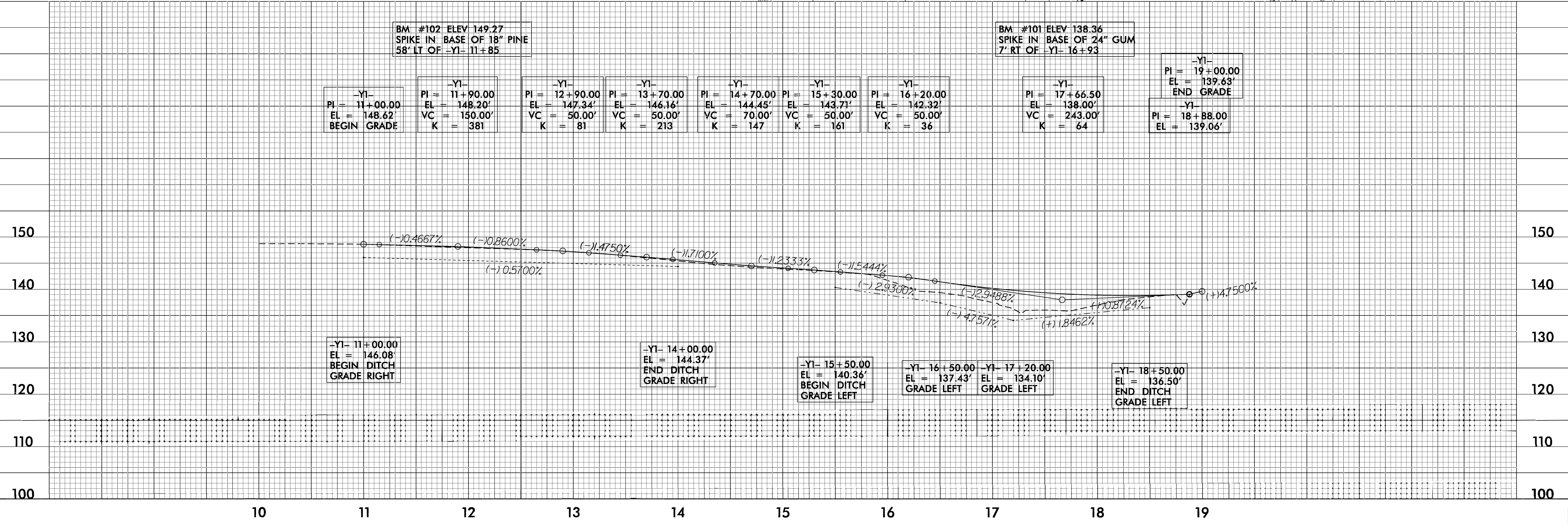


JUDITH HOWELL DUNN  
 DB 4207 PG 934

BM #102 ELEV 149.27  
 SPIKE IN BASE OF 18" PINE  
 58' LT OF -Y1- 11+85

BM #101 ELEV 138.36  
 SPIKE IN BASE OF 24" GUM  
 7' RT OF -Y1- 16+93

-Y1- PI = 11+00.00 EL = 148.62 BEGIN GRADE	-Y1- PI = 11+90.00 EL = 148.20' VC = 150.00' K = 381	-Y1- PI = 12+90.00 EL = 147.34' VC = 50.00' K = 81	-Y1- PI = 13+70.00 EL = 146.16' VC = 50.00' K = 213	-Y1- PI = 14+70.00 EL = 144.45' VC = 70.00' K = 147	-Y1- PI = 15+30.00 EL = 143.71' VC = 50.00' K = 161	-Y1- PI = 16+20.00 EL = 142.32' VC = 50.00' K = 36	-Y1- PI = 17+66.50 EL = 138.00' VC = 243.00' K = 64	-Y1- PI = 19+00.00 EL = 139.63' END GRADE
---	--	--	---	---	---	--	---	--



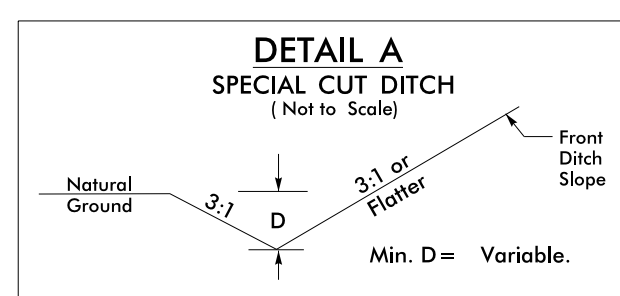
8/17/99  
 W.E. ORMOND  
 DB 855 PG 178

PROJECT REFERENCE NO.	SHEET NO.
80073	EC-05/CONST.04
RW SHEET NO.	05
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:  
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

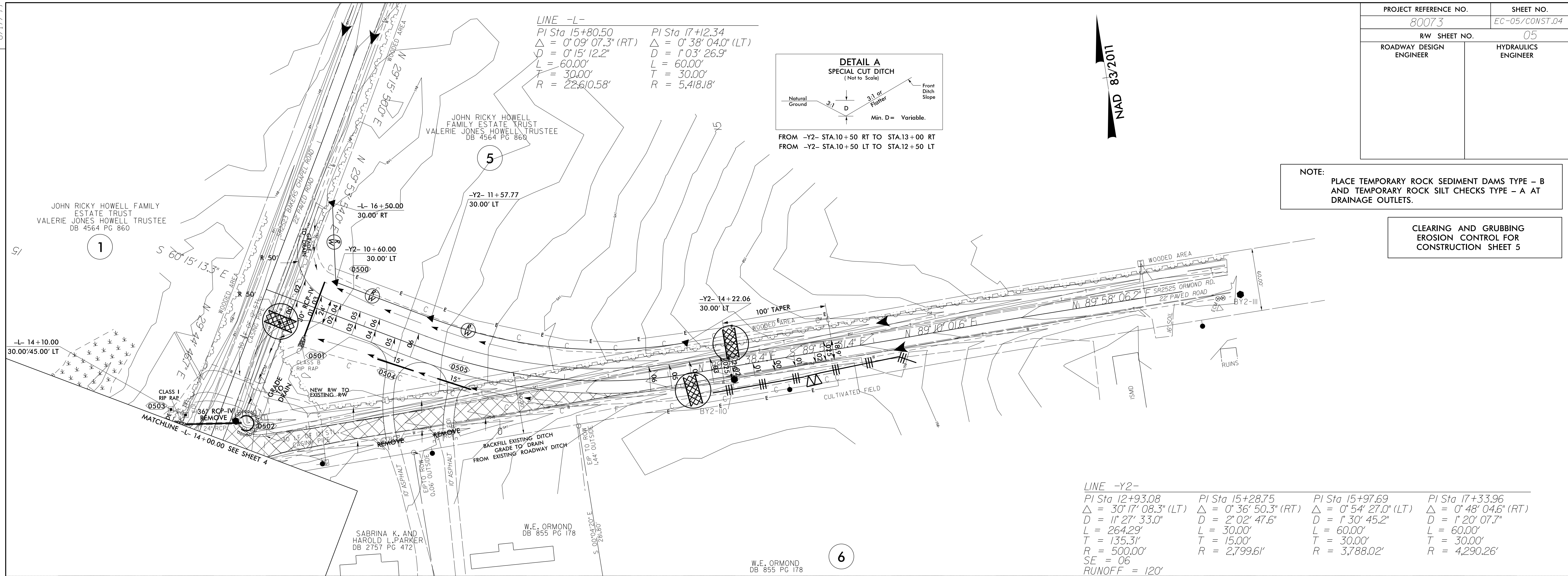
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 5

LINE -L-  
 PI Sta 15+80.50 PI Sta 17+12.34  
 $\Delta = 0^{\circ} 09' 07.3''$  (RT)  $\Delta = 0^{\circ} 38' 04.0''$  (LT)  
 $D = 0' 15' 12.2''$   $D = 1' 03' 26.9''$   
 $L = 60.00'$   $L = 60.00'$   
 $T = 30.00'$   $T = 30.00'$   
 $R = 22,610.58'$   $R = 5,418.18'$



FROM -Y2- STA.10+50 RT TO STA.13+00 RT  
 FROM -Y2- STA.10+50 LT TO STA.12+50 LT

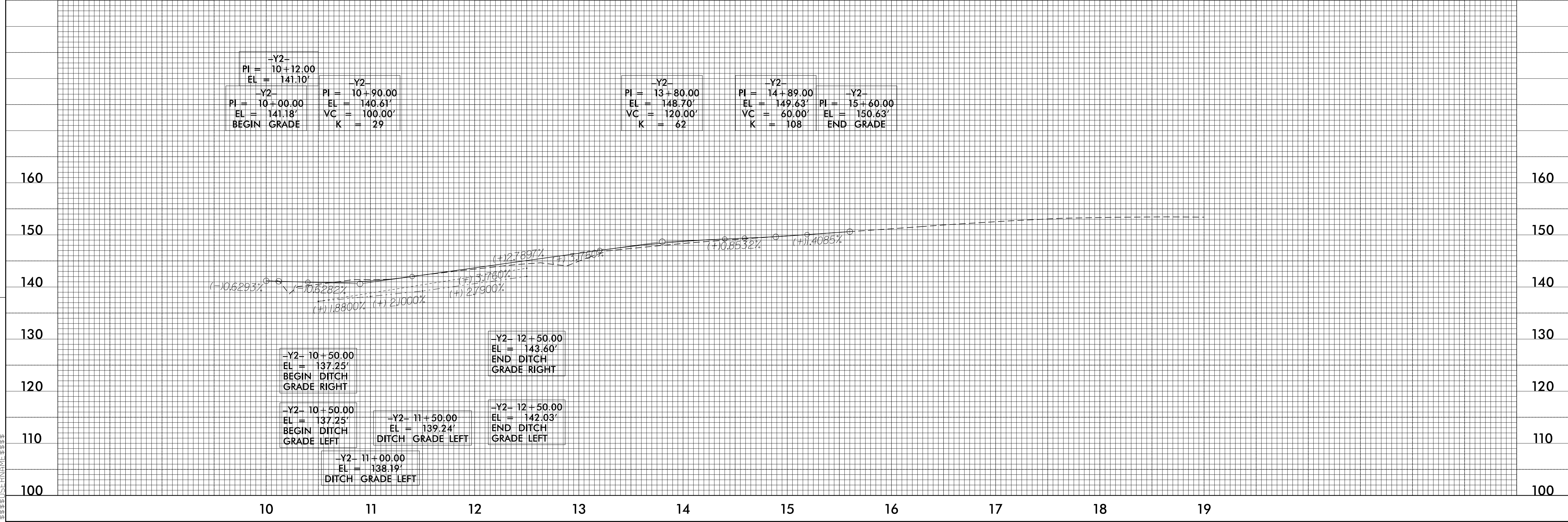
NAD 83/2011



LINE -Y2-  
 PI Sta 12+93.08 PI Sta 15+28.75 PI Sta 15+97.69 PI Sta 17+33.96  
 $\Delta = 30^{\circ} 17' 08.3''$  (LT)  $\Delta = 0^{\circ} 36' 50.3''$  (RT)  $\Delta = 0^{\circ} 54' 27.0''$  (LT)  $\Delta = 0^{\circ} 48' 04.6''$  (RT)  
 $D = 1' 27' 33.0''$   $D = 2' 02' 47.6''$   $D = 1' 30' 45.2''$   $D = 1' 20' 07.7''$   
 $L = 264.29'$   $L = 30.00'$   $L = 60.00'$   $L = 60.00'$   
 $T = 135.31'$   $T = 15.00'$   $T = 30.00'$   $T = 30.00'$   
 $R = 500.00'$   $R = 2,799.61'$   $R = 3,788.02'$   $R = 4,290.26'$   
 $SE = 06$   
 $RUNOFF = 120'$

REVISIONS

-Y2- PI = 10+12.00 EL = 141.10'	-Y2- PI = 10+90.00 EL = 140.61' VC = 100.00' K = 29	-Y2- PI = 13+80.00 EL = 148.70' VC = 120.00' K = 62	-Y2- PI = 14+89.00 EL = 149.63' VC = 60.00' K = 108	-Y2- PI = 15+60.00 EL = 150.63'
---------------------------------------	---	---	---	---------------------------------------

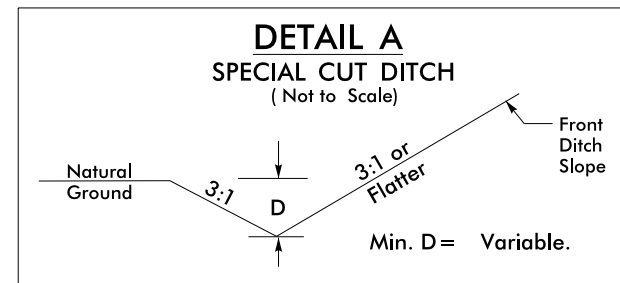






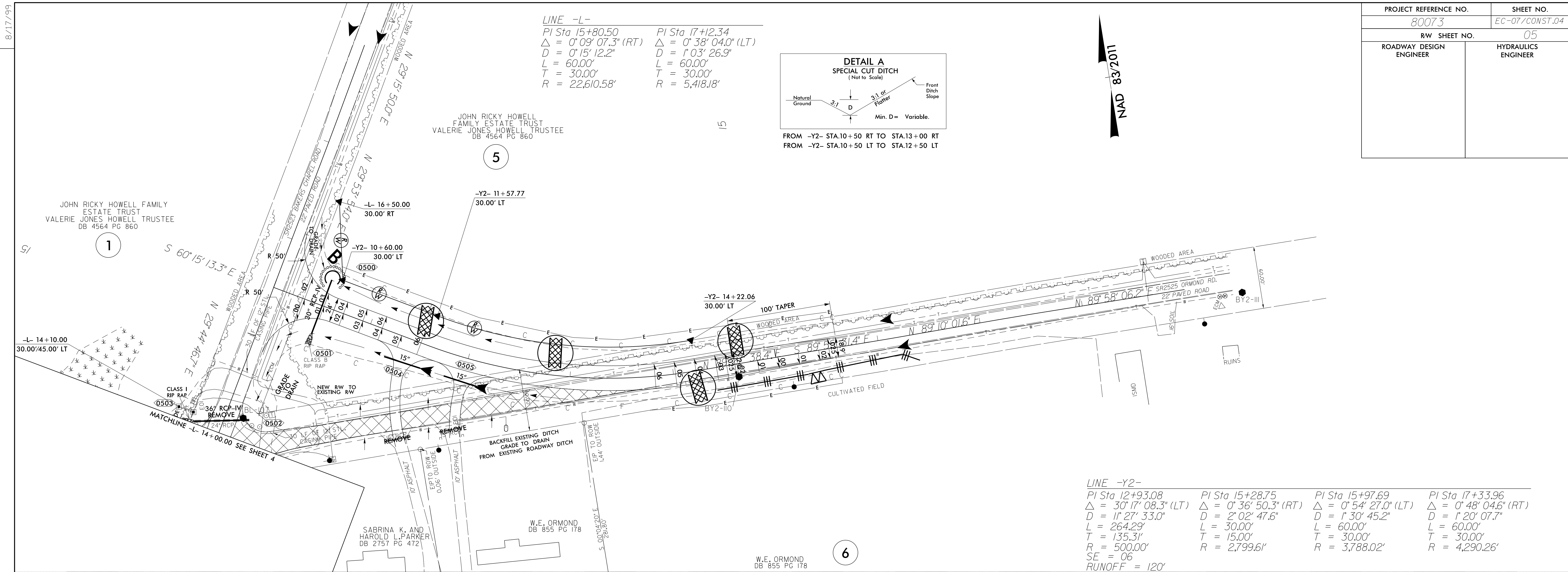
PROJECT REFERENCE NO.	SHEET NO.
80073	EC-07/CONST.04
RW SHEET NO.	05
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

LINE -L-  
 PI Sta 15+80.50 PI Sta 17+12.34  
 $\Delta = 0^{\circ} 09' 07.3''$  (RT)  $\Delta = 0^{\circ} 38' 04.0''$  (LT)  
 $D = 0^{\circ} 15' 12.2''$   $D = 1^{\circ} 03' 26.9''$   
 $L = 60.00'$   $L = 60.00'$   
 $T = 30.00'$   $T = 30.00'$   
 $R = 22,610.58'$   $R = 5,418.18'$



FROM -Y2- STA.10+50 RT TO STA.13+00 RT  
 FROM -Y2- STA.10+50 LT TO STA.12+50 LT

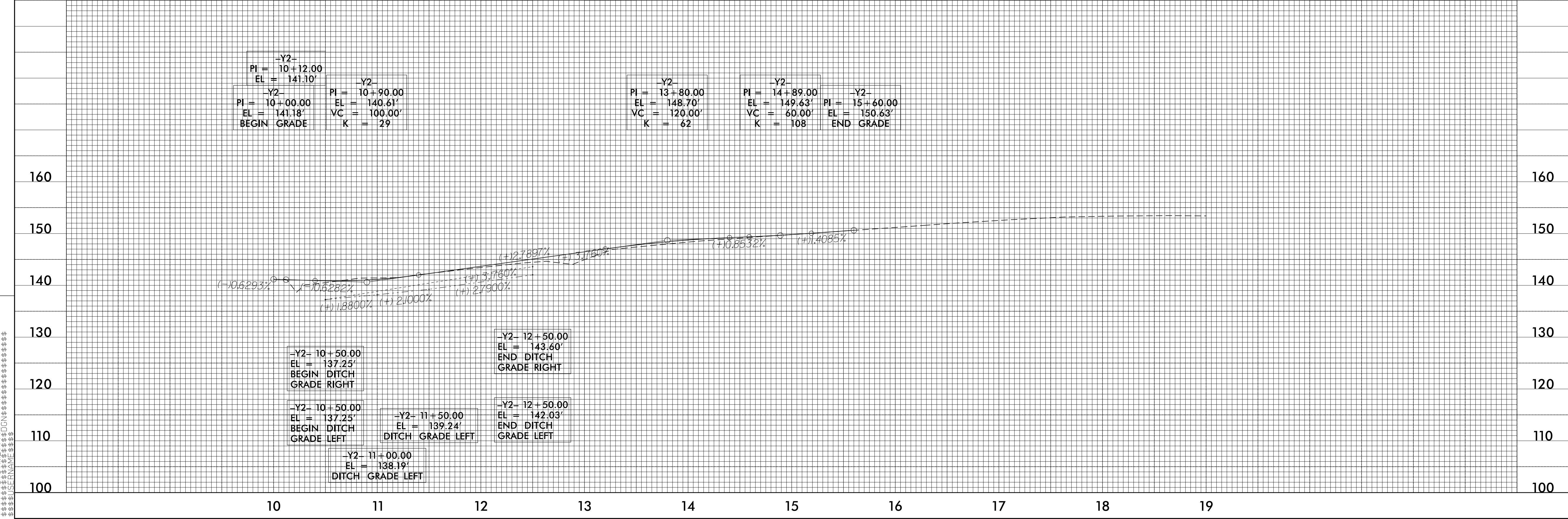
NAD 83/2011



LINE -Y2-  
 PI Sta 12+93.08 PI Sta 15+28.75 PI Sta 15+97.69 PI Sta 17+33.96  
 $\Delta = 30^{\circ} 17' 08.3''$  (LT)  $\Delta = 0^{\circ} 36' 50.3''$  (RT)  $\Delta = 0^{\circ} 54' 27.0''$  (LT)  $\Delta = 0^{\circ} 48' 04.6''$  (RT)  
 $D = 1^{\circ} 27' 33.0''$   $D = 2^{\circ} 02' 47.6''$   $D = 1^{\circ} 30' 45.2''$   $D = 1^{\circ} 20' 07.7''$   
 $L = 264.29'$   $L = 30.00'$   $L = 60.00'$   $L = 60.00'$   
 $T = 135.31'$   $T = 15.00'$   $T = 30.00'$   $T = 30.00'$   
 $R = 500.00'$   $R = 2,799.61'$   $R = 3,788.02'$   $R = 4,290.26'$   
 $SE = 06$   
 $RUNOFF = 120'$

REVISIONS

-Y2- PI = 10+12.00 EL = 141.10'	-Y2- PI = 10+90.00 EL = 140.61' VC = 100.00' K = 29	-Y2- PI = 13+80.00 EL = 148.70' VC = 120.00' K = 62	-Y2- PI = 14+89.00 EL = 149.63' VC = 60.00' K = 108	-Y2- PI = 15+60.00 EL = 150.63'
---------------------------------------	---	---	---	---------------------------------------



8/17/99

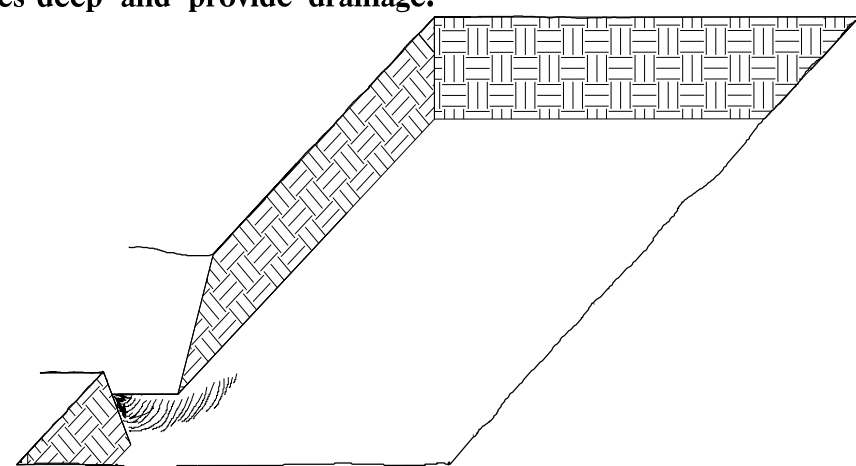
8/17/99

## PLANTING DETAILS

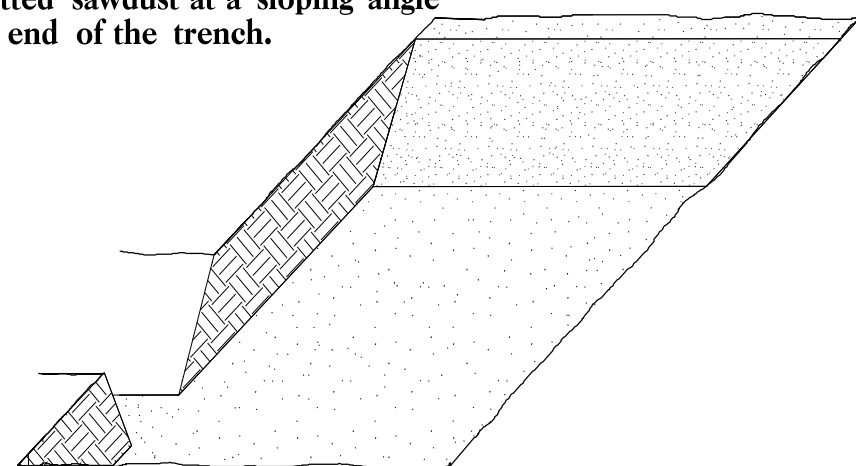
### SEEDLING / LINER BAREROOT PLANTING DETAIL

#### HEALING IN

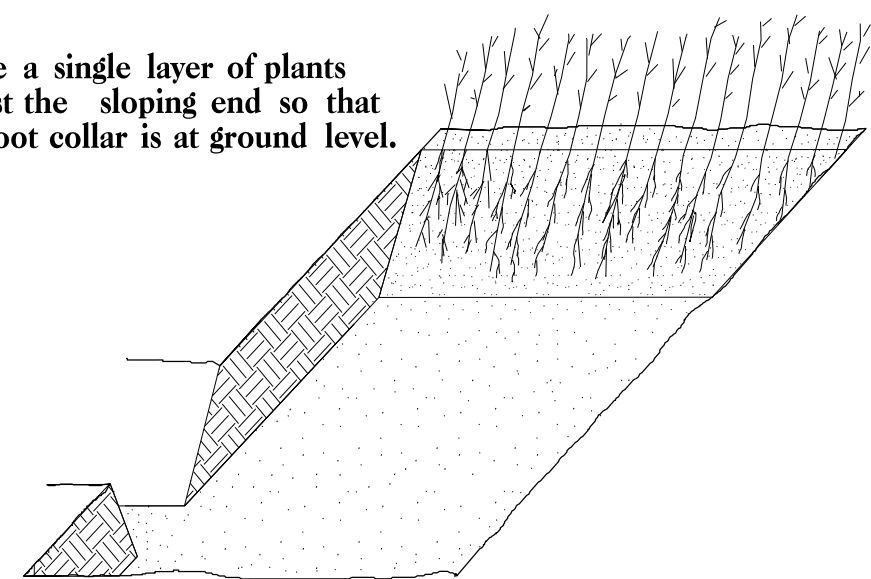
1. Locate a healing-in site in a shady, well protected area.
2. Excavate a flat bottom trench 12 inches deep and provide drainage.



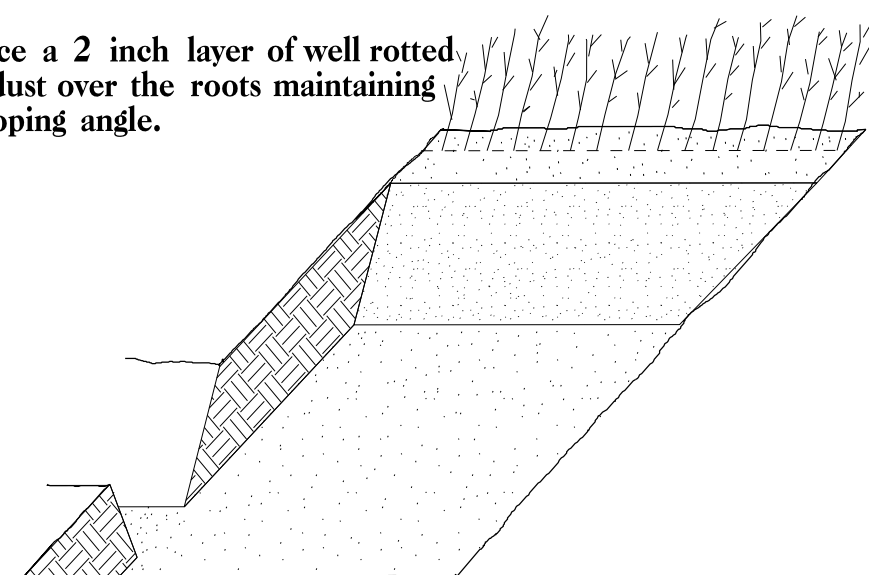
3. Jackfill the trench with 2 inches well rotted sawdust. Place a 2 inch layer of well rotted sawdust at a sloping angle at one end of the trench.



4. Place a single layer of plants against the sloping end so that the root collar is at ground level.

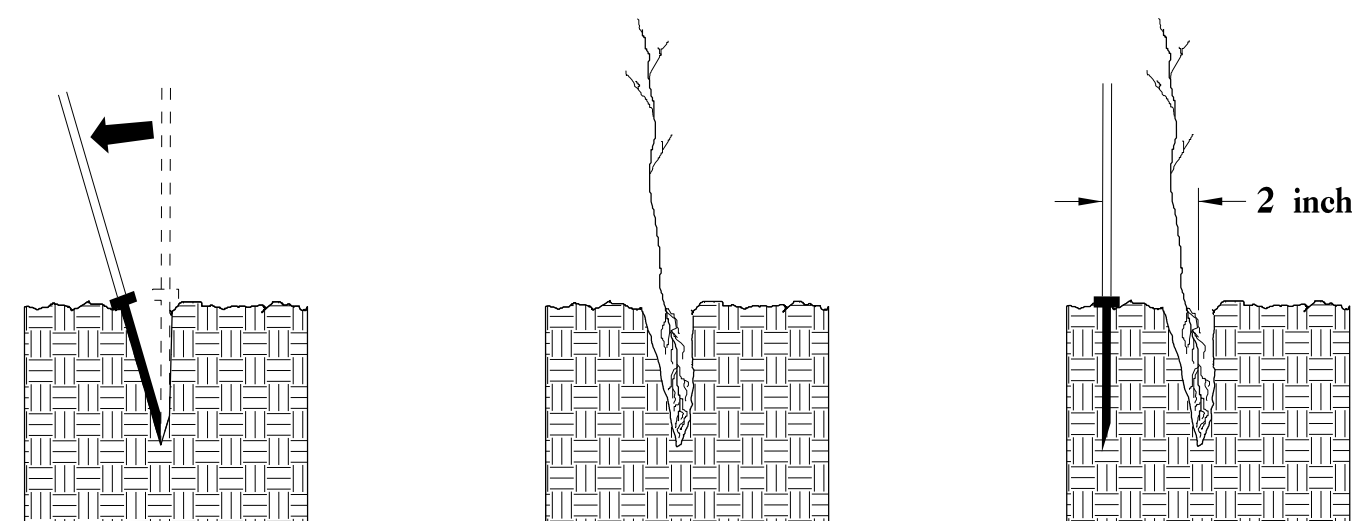


5. Place a 2 inch layer of well rotted sawdust over the roots maintaining a sloping angle.



6. Repeat layers of plants and sawdust as necessary and water thoroughly.

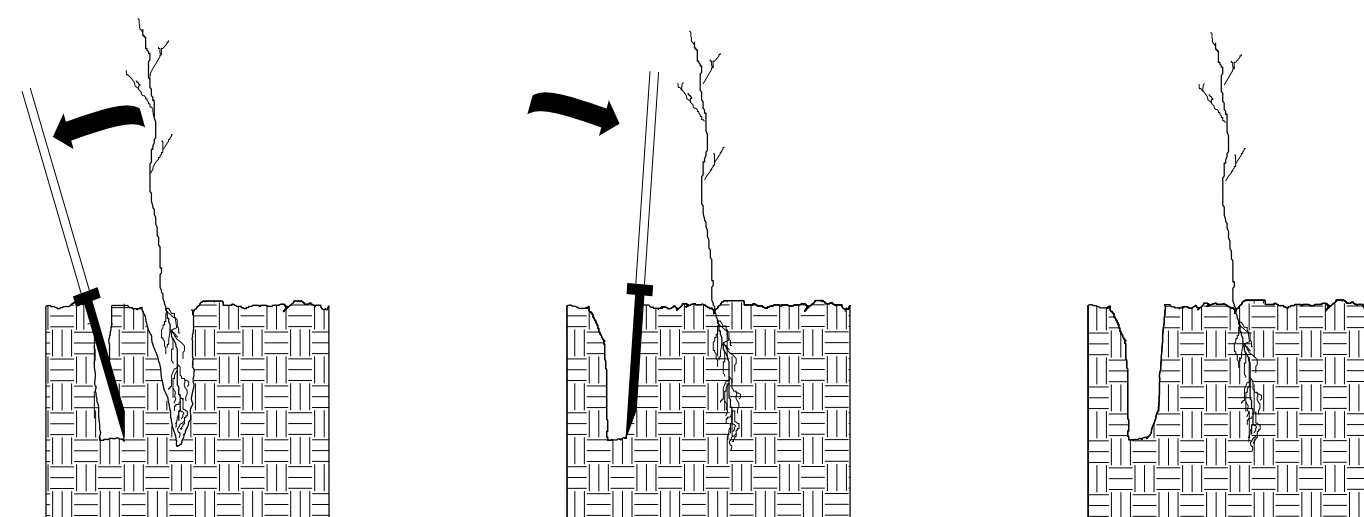
#### DOUBLE PLANTING METHOD USING THE KJC PLANTING BAR



1. Insert planting bar as shown and pull handle toward planter.

2. Remove planting bar and place seedling at correct depth.

3. Insert planting bar 2 inches toward planter from seedling.



4. Pull handle of bar toward planter, firming soil at bottom.

5. Push handle forward firming soil at top.

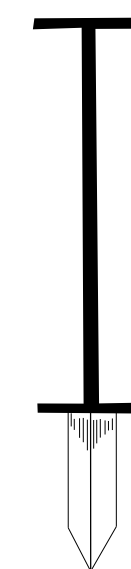
6. Leave compaction hole open. Water thoroughly.

#### PLANTING NOTES:

**PLANTING BAG**  
During planting, seedlings shall be kept in a moist canvas bag or similar container to prevent the root systems from drying.



**KJC PLANTING BAR**  
Planting bar shall have a blade with a triangular cross section, and shall be 12 inches long, 4 inches wide and 1 inch thick at center.



**ROOT PRUNING**  
All seedlings shall be root pruned, if necessary, so that no roots extend more than 10 inches below the root collar.

## REFORESTATION

- TREE REFORESTATION SHALL BE PLANTED 6 FT. TO 10 FT. ON CENTER, RANDOM SPACING, AVERAGING 8 FT. ON CENTER, APPROXIMATELY 680 PLANTS PER ACRE.

#### REFORESTATION

MIXTURE, TYPE, SIZE, AND FURNISH SHALL CONFORM TO THE FOLLOWING:

34% PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	12 in - 18 in 3R
33% LIRIODENDRON TULIPIFERA	YELLOW POPLAR	12 in - 18 in 3R
33% FRAXINUS PENNSYLVANICA	GREEN ASH	12 in - 18 in 3R

## REFORESTATION DETAIL SHEET

N.C.D.O.T. - ROADSIDE ENVIRONMENTAL UNIT

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**SIGNING PLAN**  
**JOHNSTON COUNTY**

**LOCATION: REALIGN INTERSECTION OF SR-2519 (BRASWELL ROAD) &  
SR-2525 (ORMOND ROAD) AT SR-2523 (BAKERS CHAPEL ROAD)**

PROJECT: 80073

PROJECT: 80073

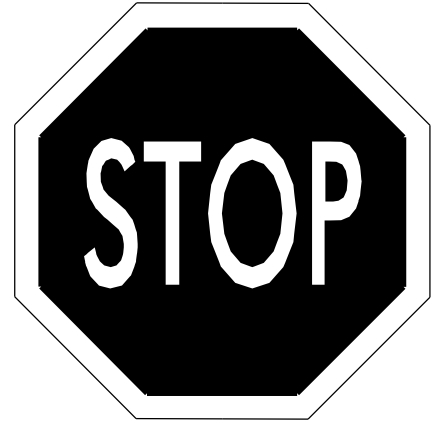
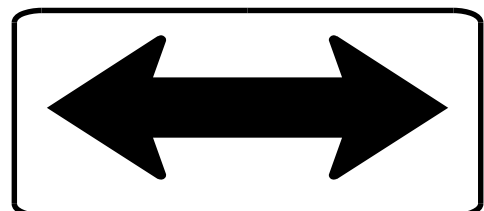
**ROADWAY STANDARD DRAWING**

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION -RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

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

**SUMMARY OF QUANTITIES**

ITEM NUMBER	SECTION NUMBER	ITEM DESCRIPTION	QUANTITY
4025000000-E	901	CONTRACTOR FURNISHED, TYPE "E" SIGN	42.5 SF
4072000000-E	903	SUPPORTS, 3-LB STEEL U-CHANNEL	54 LF
4102000000-N	904	SIGN ERECTION, TYPE E	4 EA
4155000000-N	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	2 EA

<p>QUANTITY REQ'D <u>2</u></p>  <p>R1-1 48" X 48"</p> <p>ONE "U" POST PER SIGN</p>	<p>QUANTITY REQ'D <u>2</u></p>  <p>W1-7 48" X 24"</p> <p>TWO "U" POST PER SIGN</p>
<b>TYPE "E" SIGNS</b>	

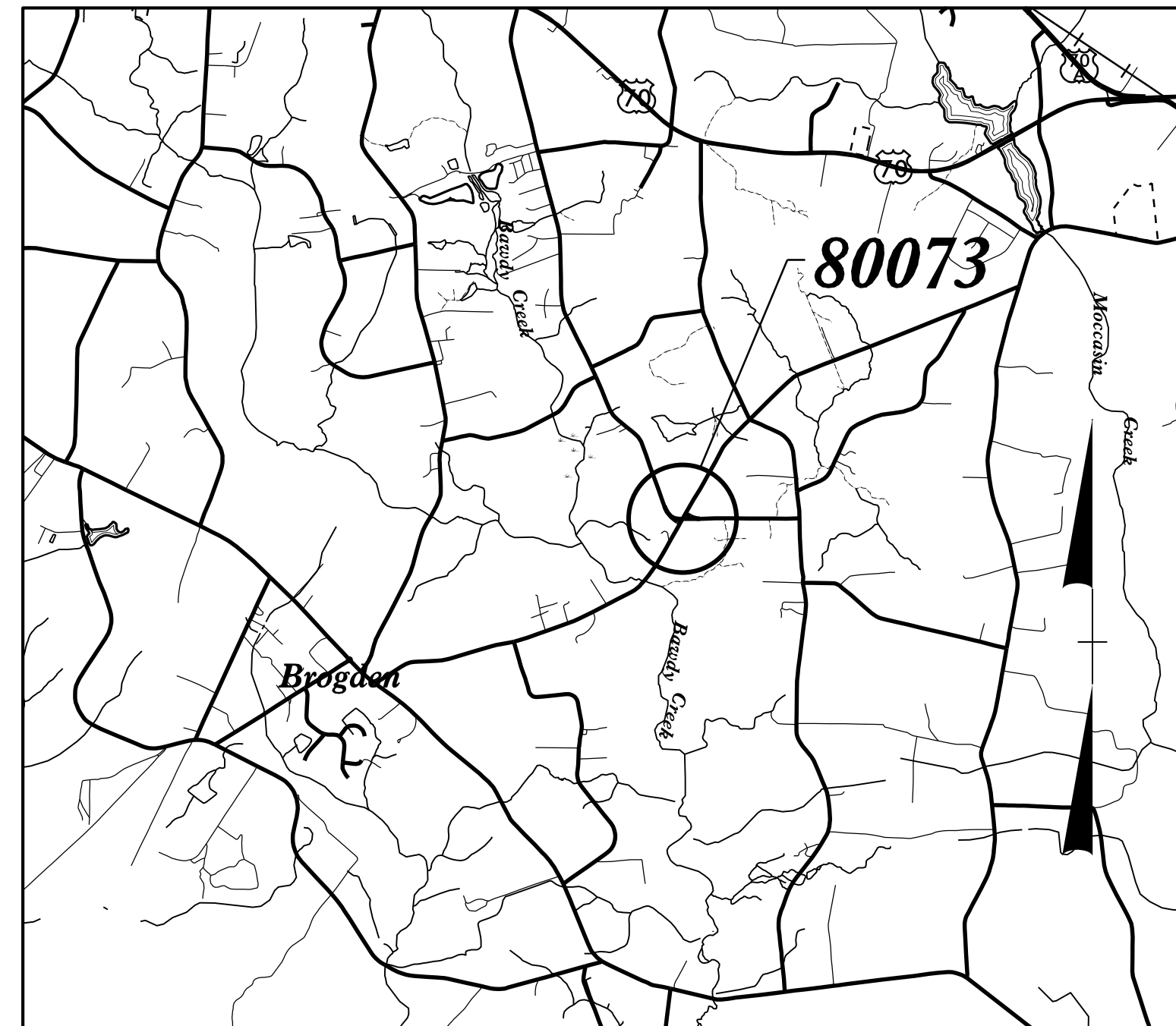
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	80073	1	

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**UTILITIES BY OTHERS PLANS  
JOHNSTON COUNTY**

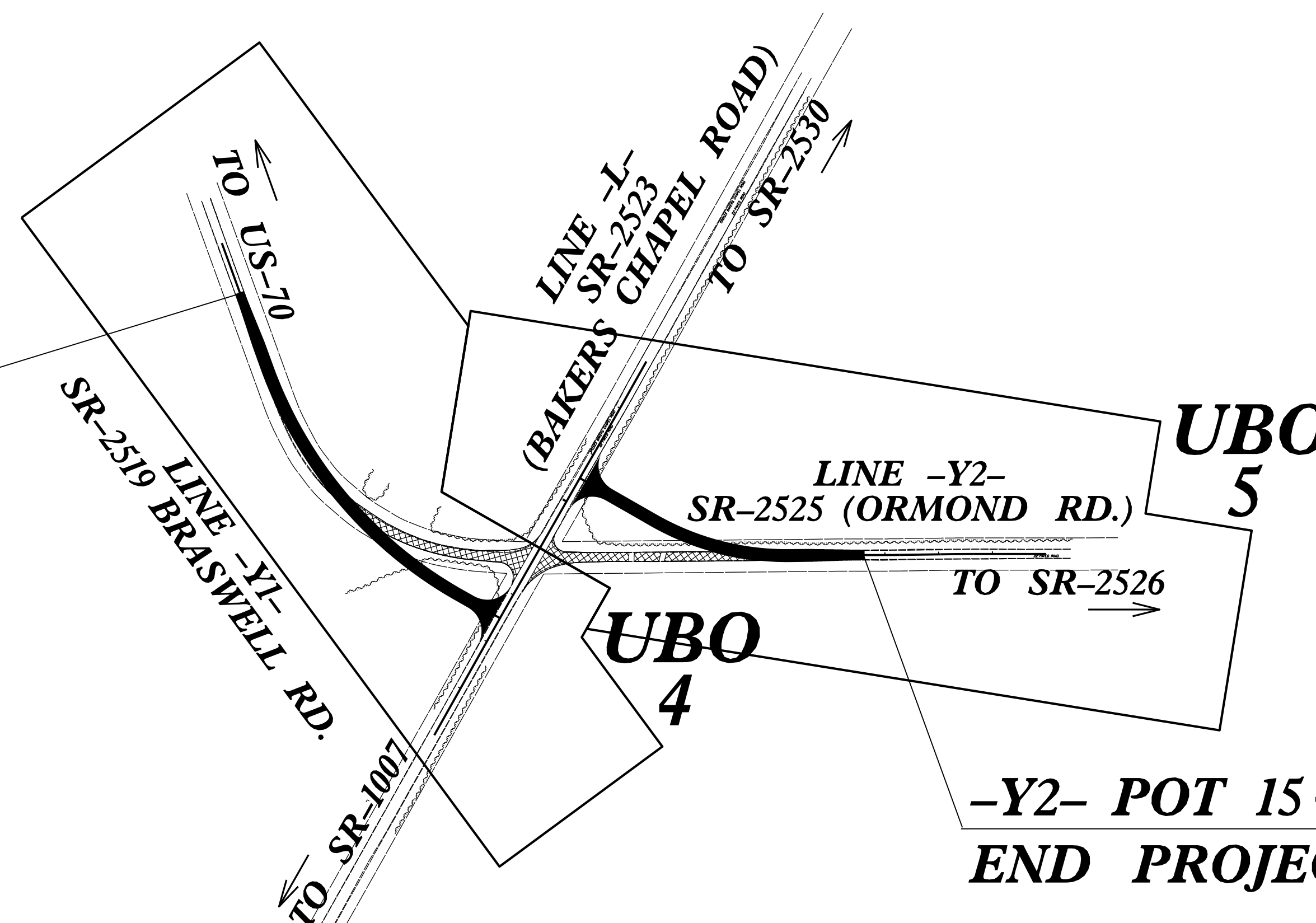
LOCATION: REALIGN INTERSECTION OF SR-2519 (BRASWELL ROAD) &  
SR-2525 (ORMOND ROAD) AT SR-2523 (BAKERS CHAPEL ROAD)

TYPE OF WORK: UTILITY BY OTHERS



**VICINITY MAP**

**-Y1- POT 11+00.00  
BEGIN PROJECT 80073**

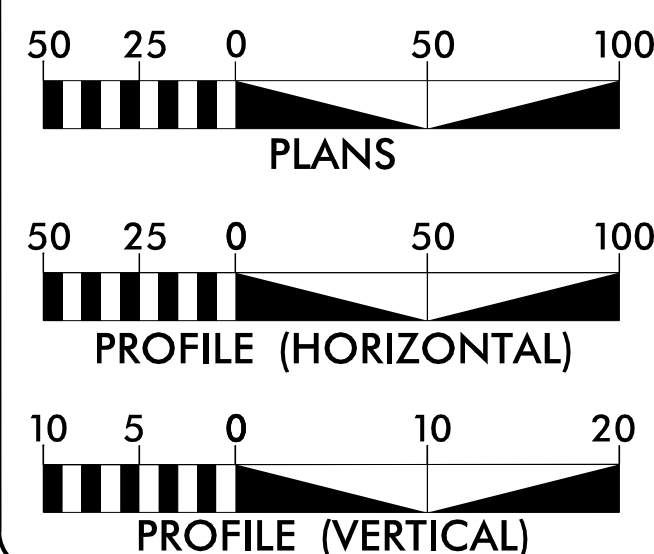


**-Y2- POT 15+60.00  
END PROJECT 80073**

**TIP PROJECT: 80073**

**CONTRACT:**

**GRAPHIC SCALES**



**INDEX OF SHEETS**

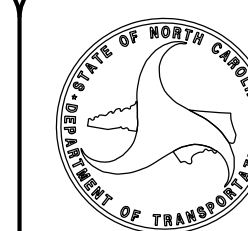
SHEET NO.	DESCRIPTION
UBO-01	TITLE SHEET
UBO-04	UBO PLAN SHEET

**UTILITY OWNERS WITH CONFLICTS**

- A. ELECTRIC - DUKE
- B. TELECOMMUNICATION - AT&T

Prepared in the Office of  
**DIVISION OF HIGHWAYS**

Division 4  
509 Ward Blvd.  
Wilson NC, 27895



**DIVISION OF HIGHWAYS  
DIVISION 4**

509 Ward Blvd. Wilson NC, 27895

**ADDISON GAINES, PE** DIVISION CONTACT #1

**KYLE PLEASANT** PROJECT UTILITIES ENGINEER

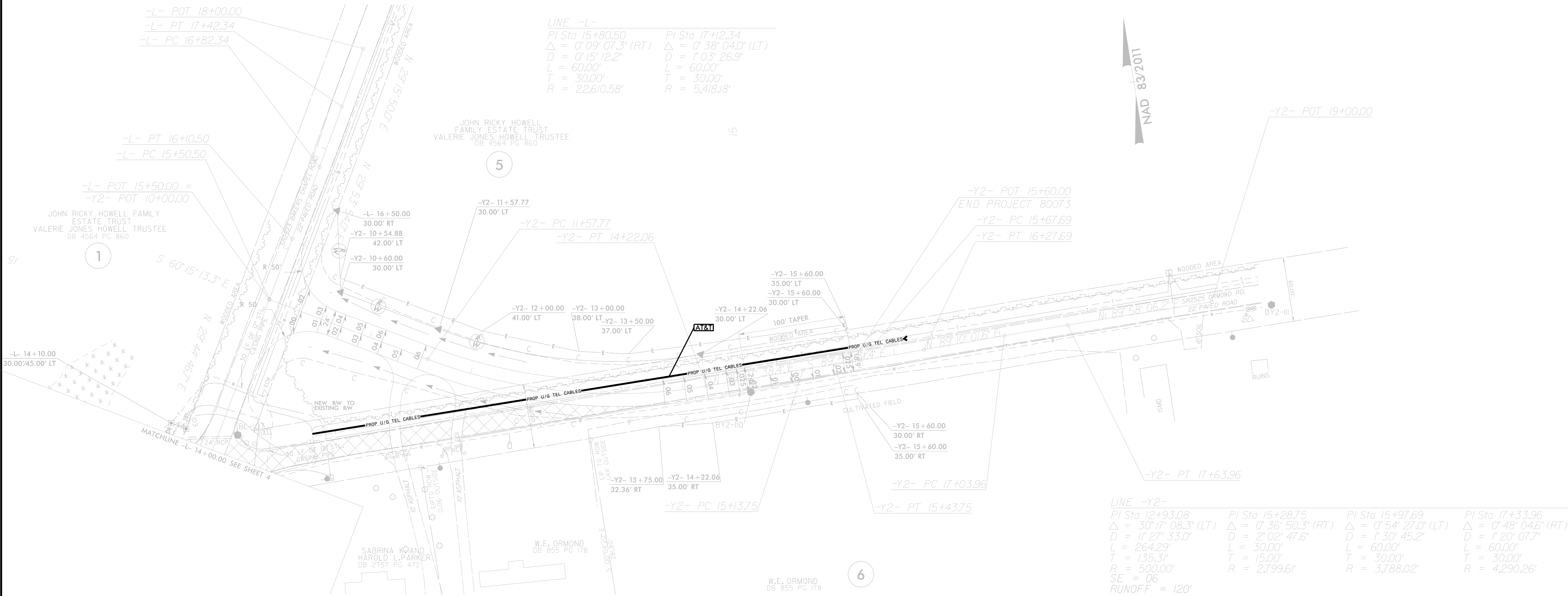
**FRANK ZDELAR** PROJECT UTILITIES COORDINATOR



# UTILITIES BY OTHERS

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

8/17/99  
 05-JUL-2022 22:54  
 C:\User\...  
 \$\$\$



LINE -L-

PI Sta 15+80.50	PI Sta 17+12.34
$\Delta = 0^{\circ}09'07.3"$ (RT)	$\Delta = 0^{\circ}38'04.0"$ (LT)
D = 0'15'12.2"	D = 1'03'26.9"
L = 60.00'	L = 60.00'
T = 30.00'	T = 30.00'
R = 22,610.58'	R = 5,418.18'

LINE -Y2-

PI Sta 12+93.08	PI Sta 15+28.75	PI Sta 15+97.69	PI Sta 17+33.96
$\Delta = 30^{\circ}17'08.3"$ (LT)	$\Delta = 0^{\circ}36'50.3"$ (RT)	$\Delta = 0^{\circ}54'27.0"$ (LT)	$\Delta = 0^{\circ}48'04.6"$ (RT)
D = 1'27'33.0"	D = 2'02'47.6"	D = 1'30'45.2"	D = 1'20'07.7"
L = 264.29'	L = 30.00'	L = 60.00'	L = 60.00'
T = 135.31'	T = 15.00'	T = 30.00'	T = 30.00'
R = 500.00'	R = 2,799.61'	R = 3,788.02'	R = 4,290.26'
SE = 06			
RUNOFF = 120'			

# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

PROJ. REFERENCE NO. 80073	SHEET NO. X-1
------------------------------	------------------

Approximate quantities only. Unclassified excavation, shoulder borrow, fine grading, clearing and grubbing, breaking of existing pavement and removal of existing pavement will be paid for at the contract lump sum price

NOTE: EMBANKMENT COLUMN DOES NOT INCLUDE  
BACKFILL FOR UNDERCUT

## CROSS-SECTION SUMMARY

STATION Y1	UNCLASSIFIED EXCAVATION (CU YD)	EMBANKMENT (CU YD)	STATION Y2	UNCLASSIFIED EXCAVATION (CU YD)	EMBANKMENT (CU YD)	STATION	UNCLASSIFIED EXCAVATION (CU YD)	EMBANKMENT (CU YD)	STATION	UNCLASSIFIED EXCAVATION (CU YD)	EMBANKMENT (CU YD)
11+00.00			10+00.00								
11+50.00	31	11	10+50.00	75							
12+00.00	21	24	11+00.00	160							
12+50.00	22	35	11+50.00	136	3						
13+00.00	32	32	12+00.00	88	9						
13+50.00	58	14	12+50.00	68	24						
14+00.00	106	2	13+00.00	43	32						
14+50.00	130	5	13+50.00	18	32						
15+00.00	110	4	14+00.00	11	38						
15+50.00	57	19	14+50.00	11	36						
16+00.00	19	57	15+00.00	16	23						
16+50.00	41	89	15+50.00	15	14						
17+00.00	88	143	15+60.00	2	2						
17+50.00	64	209									
18+00.00	14	166									
18+50.00	35	52									
19+00.00	56	5									

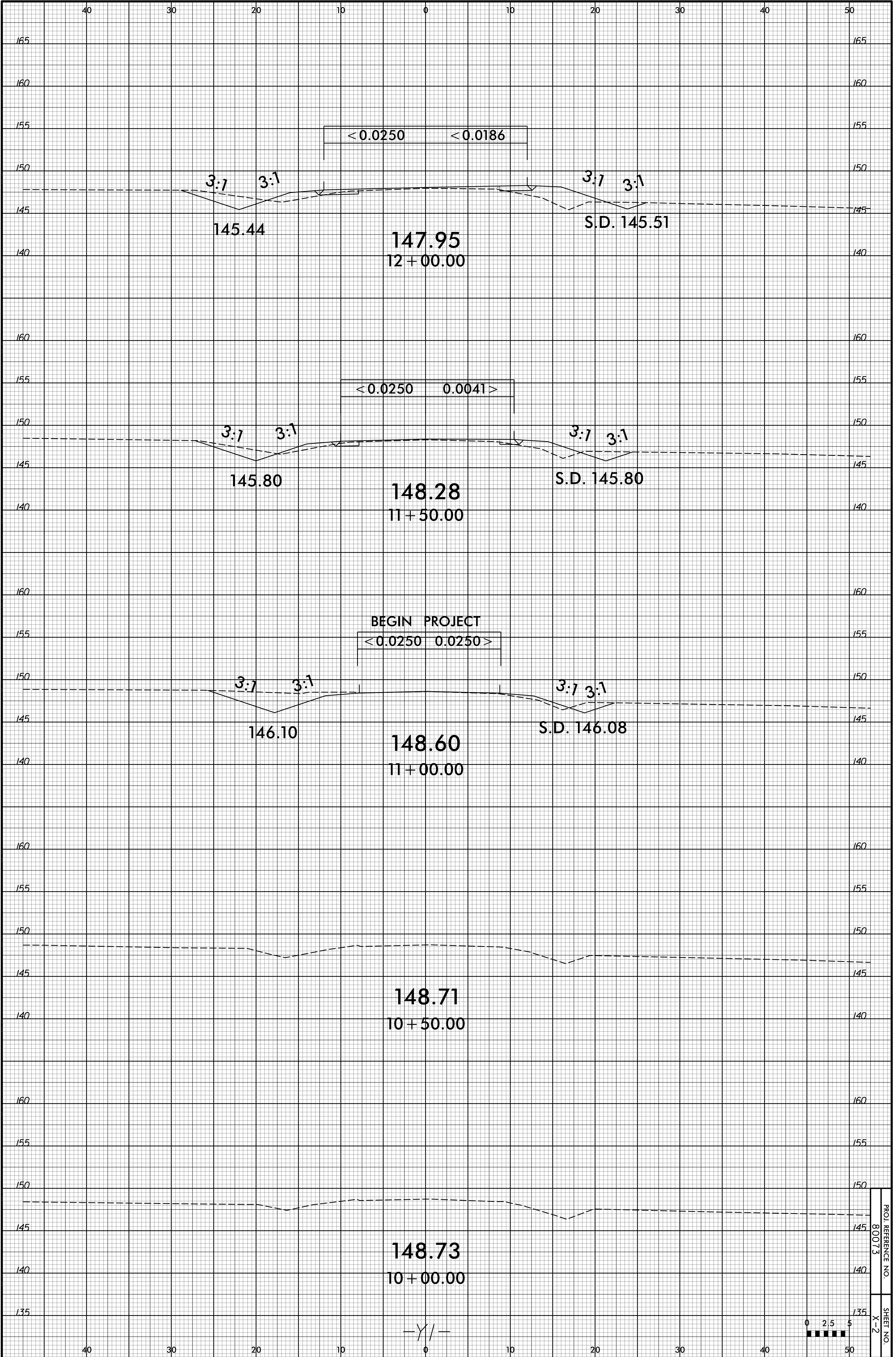
## CROSS-SECTION INDEX

### SHEET NUMBERS

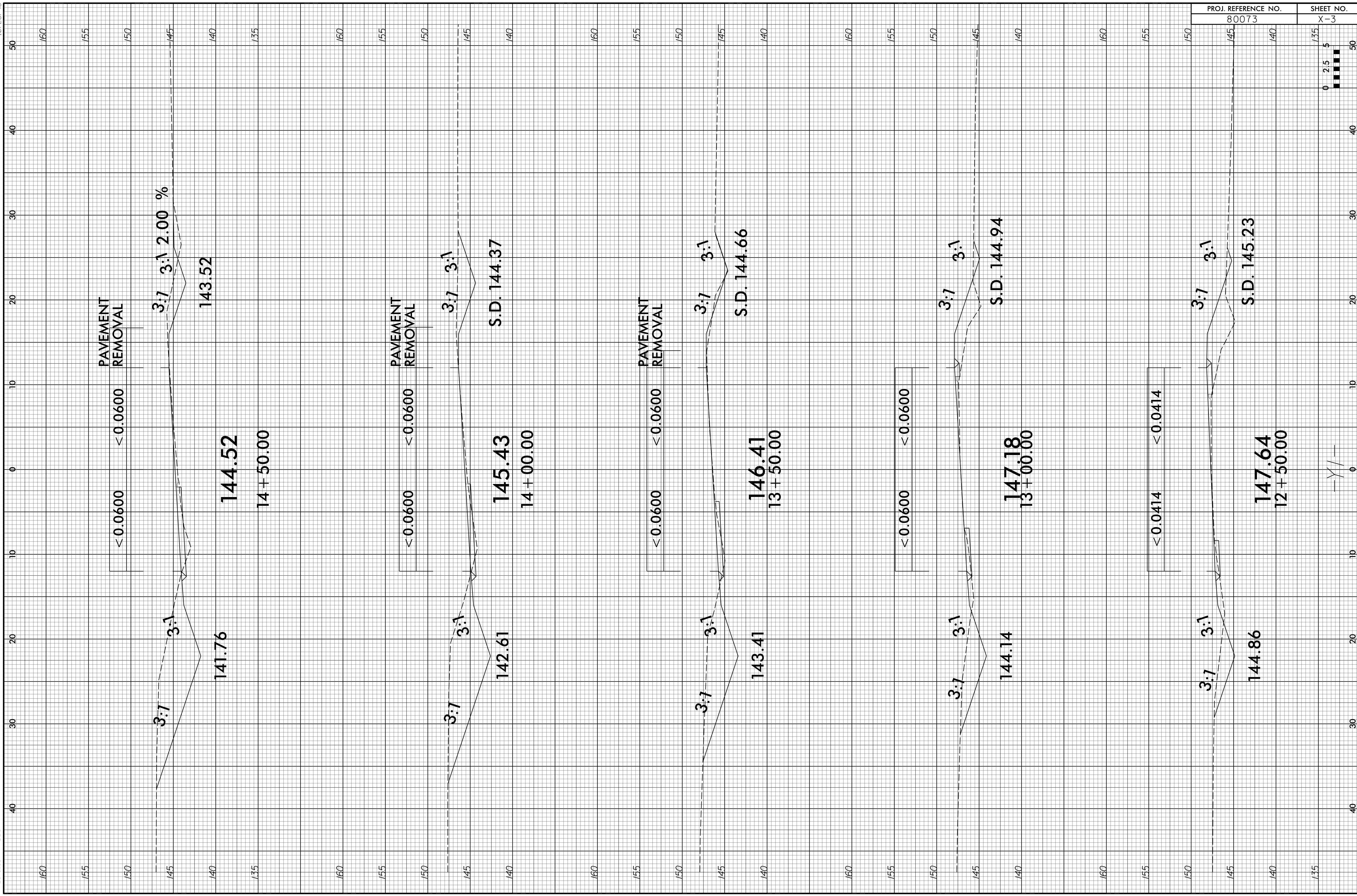
**CROSS SECTION INDEX**  
**CROSS SECTION SUMMARY**  
**LINE -Y1- (10+00 - 19+00)**  
**LINE -Y2- (10+00 - 16+50)**

**X-1**  
**X-1**  
**X-2 THRU X-5**  
**X-6 THRU X-8**



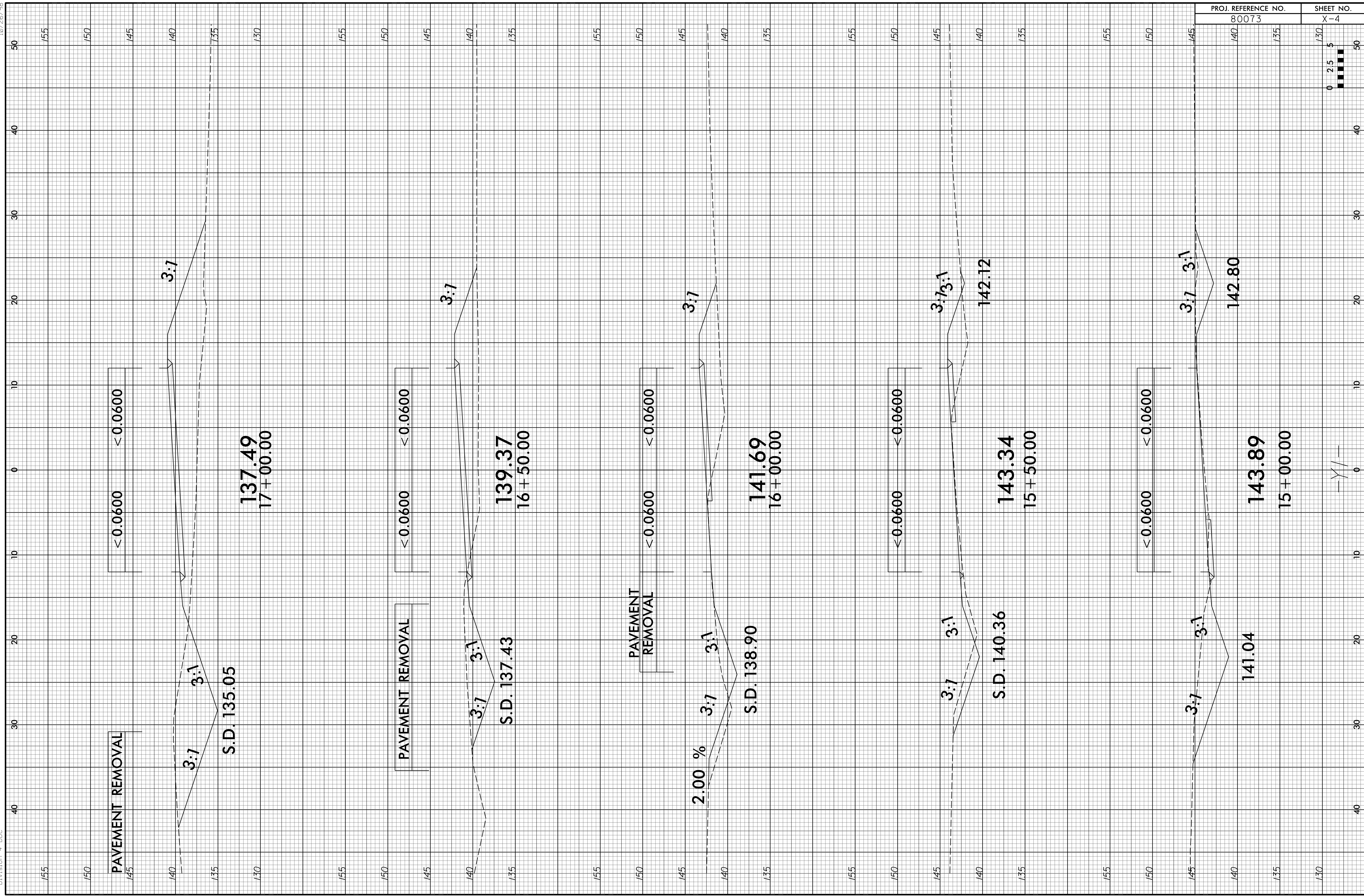


PROJ. REFERENCE NO. 80073  
SHEET NO. X-2

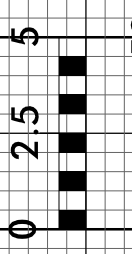


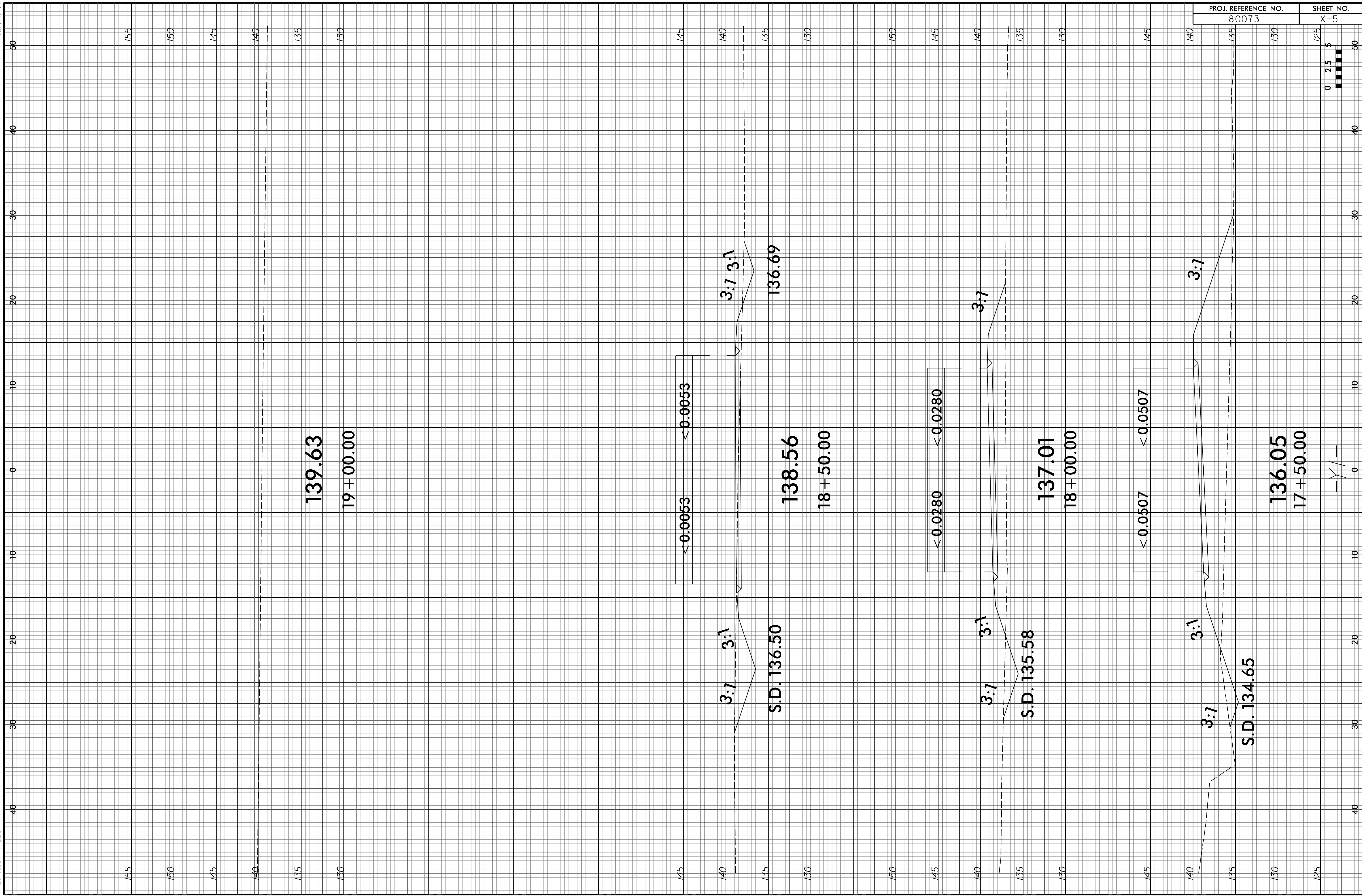
-Y/-

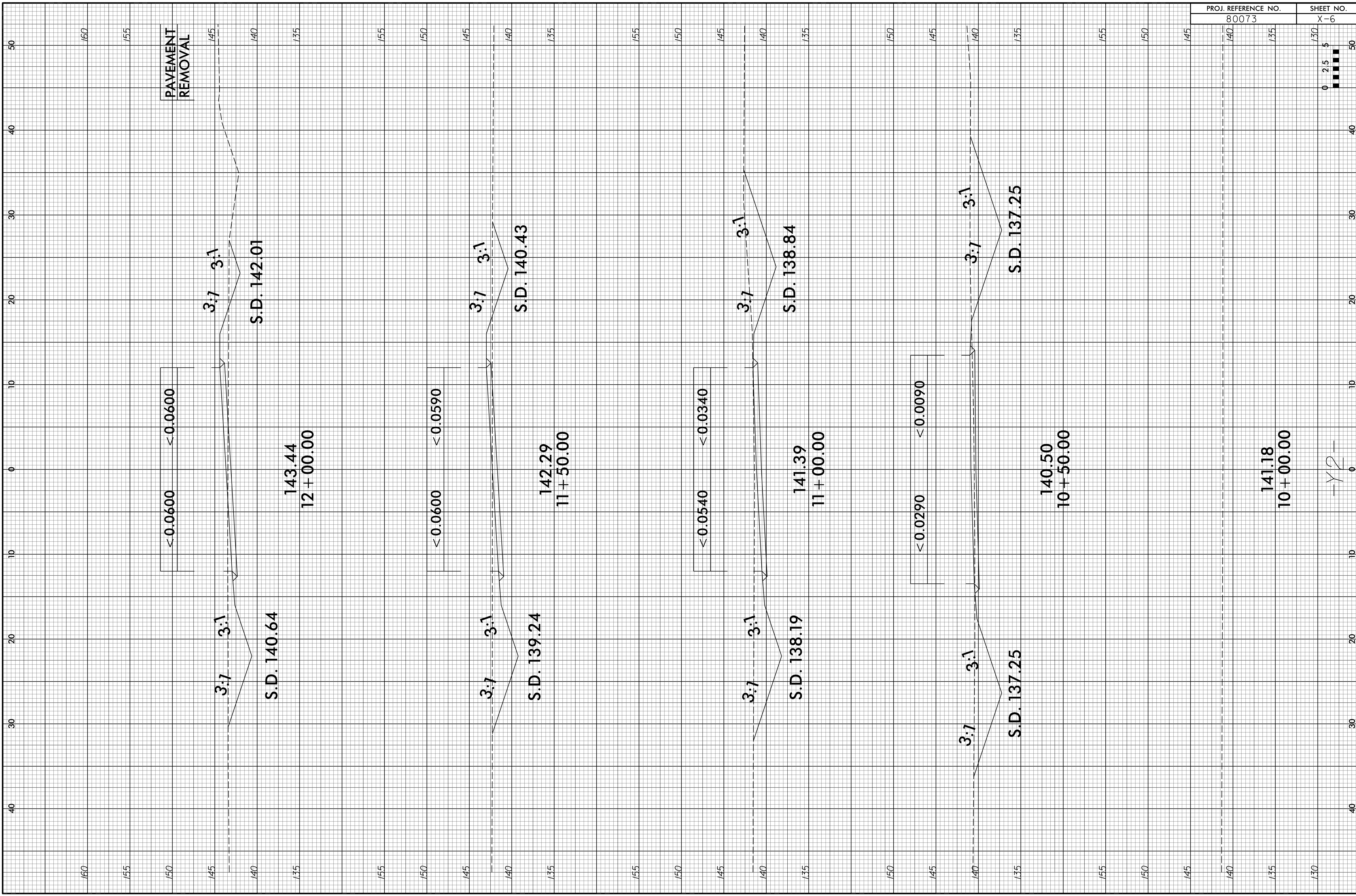




-Y/-







<math>< 0.0600</math>

PAVEMENT  
REMOVAL

3:1

S.D. 142.01

143.44  
12 + 00.00

S.D. 140.64

<math>< 0.0600</math>

3:1

S.D. 140.43

142.29  
11 + 50.00

S.D. 139.24

<math>< 0.0340</math>

3:1

S.D. 138.84

141.39  
11 + 00.00

S.D. 138.19

<math>< 0.0090</math>

3:1

S.D. 137.25

140.50  
10 + 50.00

S.D. 137.25

141.18  
10 + 00.00

-Y2-

