

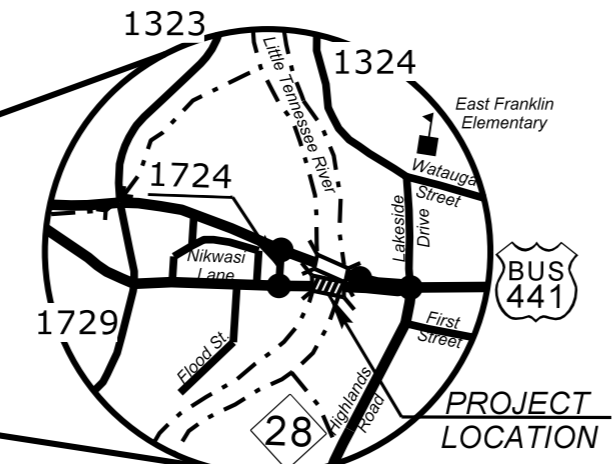
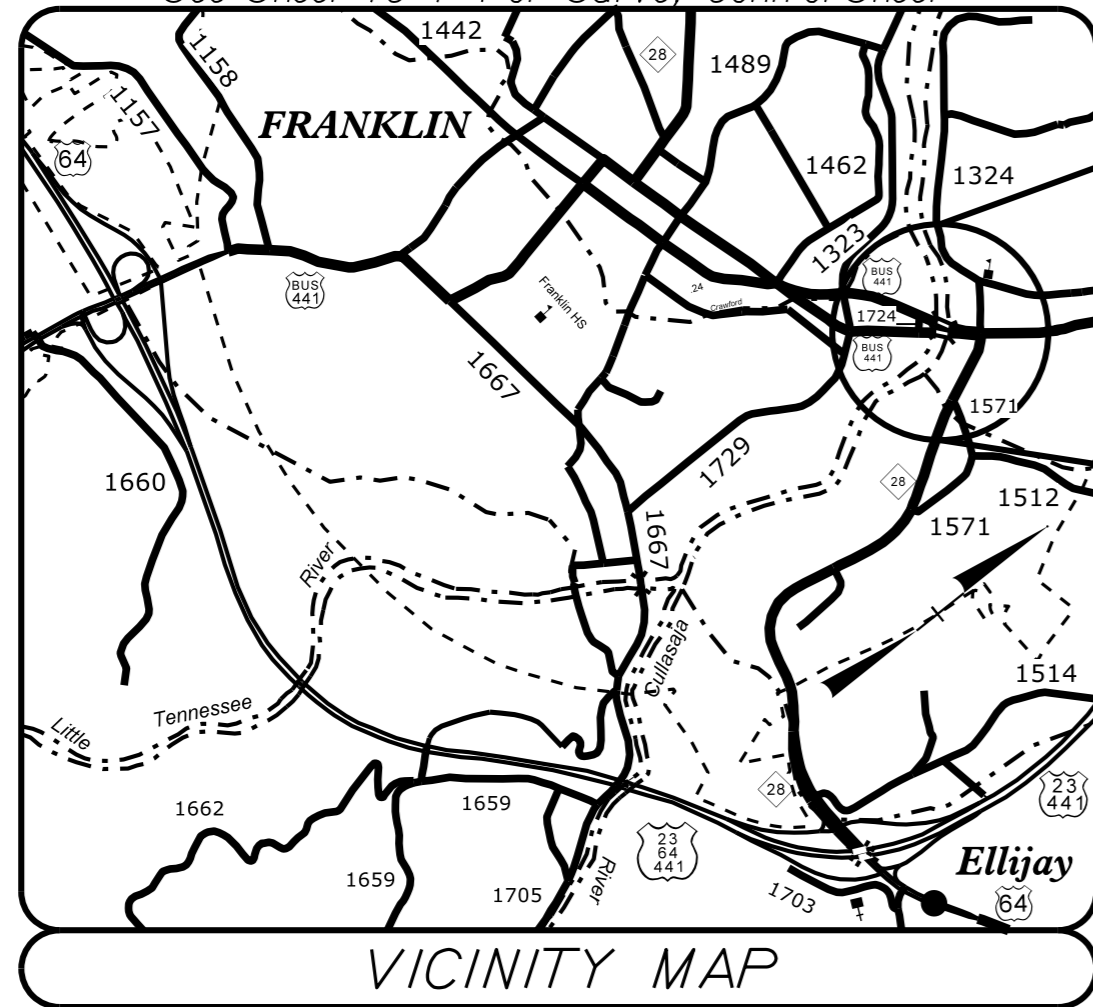
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09/08/99

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols
See Sheet 1C-1 For Survey Control Sheet



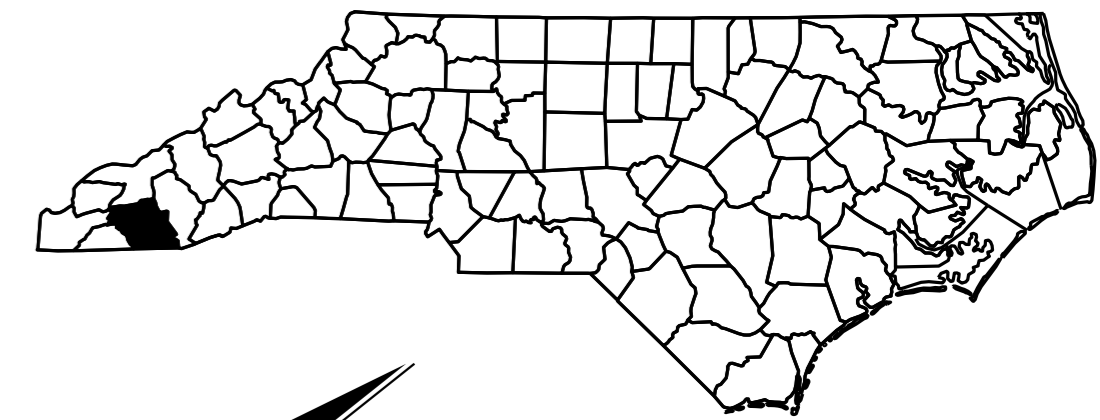
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

MACON COUNTY

**LOCATION: BRIDGE No. 22 OVER LITTLE TENNESSEE RIVER
ON US 441 BUSINESS**

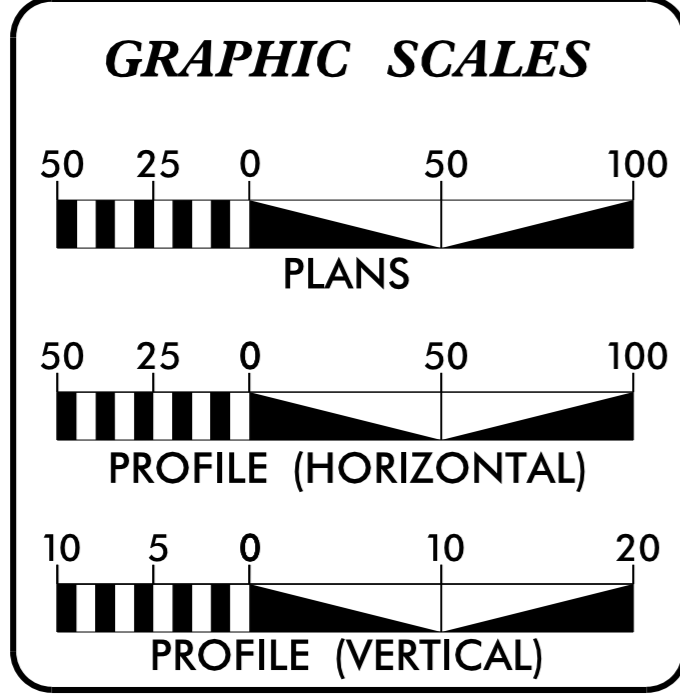
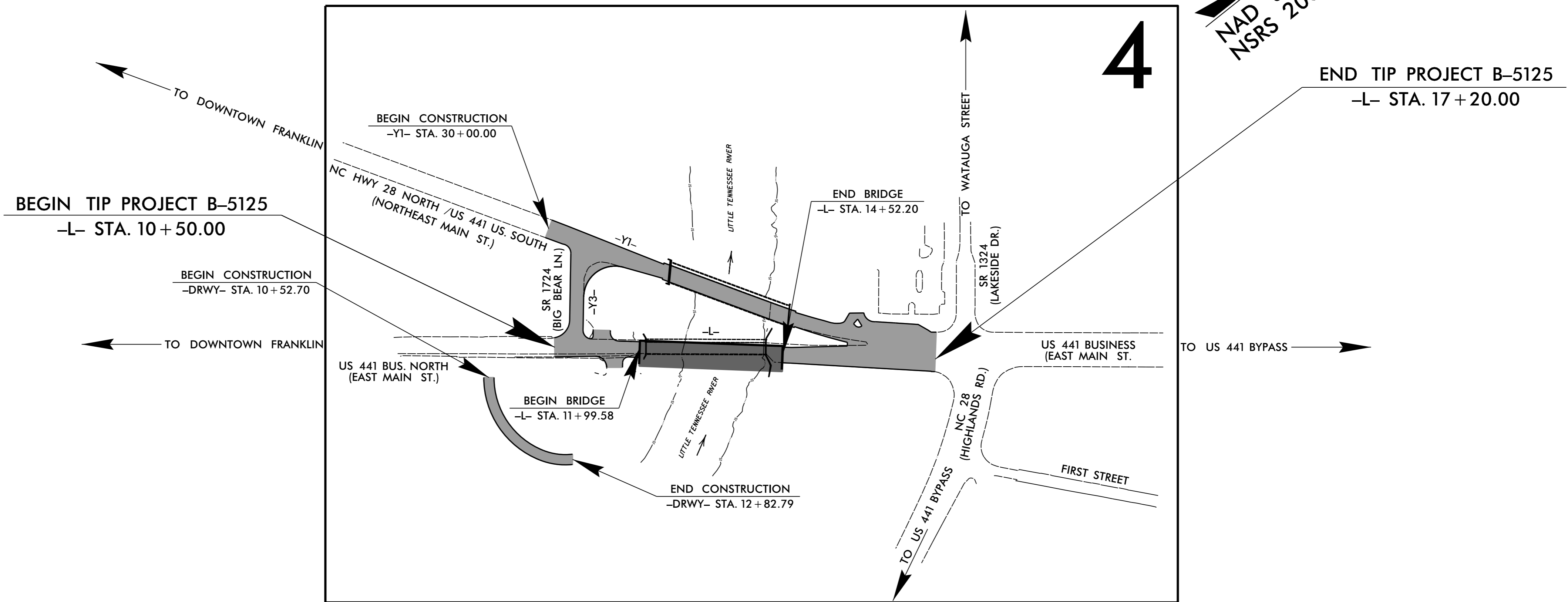
TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNAL & STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5125	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
42271.1.1	BRNHS-0441(8)	P.E.	
42271.2.FR1	BRNHS-0441(8)	RW & UTILITIES	
42271.3.2		CONSTRUCTION	



TIP PROJECT: B-5125

CONTRACT: C203667



DESIGN DATA

ADT 2013 =	13,200
ADT 2035 =	17,000
K =	11 %
D =	100 %
T =	6 % *
V =	45 MPH
* TTST =	1% DUAL 5%
FUNC. CLASS = COLLECTOR	
REGIONAL TIER	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT No. B-5125	=	0.079 Miles.
LENGTH STRUCTURE TIP PROJECT No. B-5125	=	0.048 Miles.
TOTAL LENGTH TIP PROJECT No. B-5125	=	0.127 Miles.

Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS	
RIGHT OF WAY DATE: JANUARY 16, 2015	KEVIN E. MOORE, PE PROJECT ENGINEER
LETTING DATE: OCTOBER 18, 2016	STEVEN D. KENDALL, PE PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

DocuSigned by:
Elizabeth G. Dinicola
SIGNATURE: 8/11/2016 P.E.

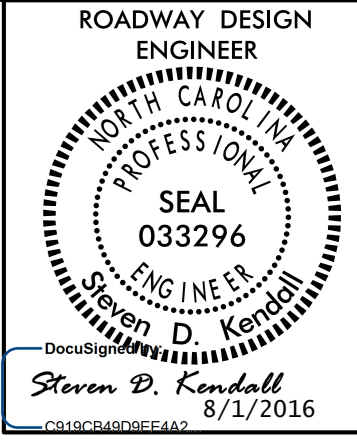
ROADWAY DESIGN ENGINEER

DocuSigned by:
Steven D. Kendall
SIGNATURE: 8/11/2016 P.E.

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

11-AUG-2016 13:52
Z:\Roadway\Proj\B5125_Rdy_Tsh.dgn
\$\$\$\$\$USERNAME\$\$\$\$\$

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



EFF. 01-17-2012
REV. 10-30-2012

2012 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, 2012 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
225.04	Method of Obtaining Superelevation - Two Lane Pavement
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
DIVISION 4 - MAJOR STRUCTURES	
422.10	Reinforced Bridge Approach Fills
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	
815.02	Subsurface Drain
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
838.80	Precast Endwalls - 12" thru 72" Pipe 90 Skew
840.00	Concrete Base Pad for Drainage Structures
840.01	Brick Catch Basin - 12" thru 54" Pipe
840.02	Concrete Catch Basin - 12" thru 54" Pipe
840.03	Frame, Grates and Hood - for Use on Standard Catch Basin
840.14	Concrete Drop Inlet - 12" thru 30" Pipe
840.15	Brick Drop Inlet - 12" thru 30" Pipe
840.16	Drop Inlet Frame and Grates - for use with Std. Dwg 840.14 and 840.15
840.17	Concrete Grated Drop Inlet Type 'A' - 12" thru 72" Pipe
840.24	Frames and Narrow Slot Sag Grates
840.25	Anchorage for Frames - Brick or Concrete or Precast
840.26	Brick Grated Drop Inlet Type 'A' - 12" thru 72" Pipe
840.29	Frames and Narrow Slot Flat Grates
840.34	Traffic Bearing Junction Box - for Use with Pipes 42" and Under
840.35	Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and Grates
840.46	Traffic Bearing Precast Drainage Structure
840.54	Manhole Frame and Cover
840.66	Drainage Structure Steps
846.01	Concrete Curb, Gutter and Curb & Gutter
848.01	Concrete Sidewalk
848.02	Driveway Turnout - Radius Type
848.04	Street Turnout
848.05	Curb Ramp - Proposed Curb & Gutter
852.01	Concrete Islands
852.06	Method for Placement of Drop Inlets in Concrete Islands
862.01	Guardrail Placement
862.02	Guardrail Installation
862.03	Structure Anchor Units (Beg. March 2013 Letting use detail in lieu of Standard)
876.01	Rip Rap in Channels
876.02	Guide for Rip Rap at Pipe Outlets
876.04	Drainage Ditches with Class 'B' Rip Rap

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
1C-1	SURVEY CONTROL SHEETS
2A-1 THRU 2A-4	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2C-1	DETAIL OF BIKE/PED. SAFETY RAIL
2H-1	DETAIL FOR TEMPORARY CONTAINMENT OF CONTAMINATED SOIL
3B-1	ROADWAY SUMMARIES
3D-1	DRAINAGE SUMMARY
3G-1	GEOTECHNICAL SUMMARIES
4 THRU 6	PLAN AND PROFILE SHEETS
TMP-1 THRU TMP-8	TRAFFIC MANAGEMENT PLANS
PMP-1 THRU PMP-2	PAVEMENT MARKING PLANS
EC-1 THRU EC-5	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-5	SIGNING PLANS
SIG-1.0 THRU SIG-3.1	SIGNAL PLANS
SCP-1 THRU SCP-4	SIGNAL COMMUNICATION PLANS
UC-1 THRU UC-5	UTILITIES CONSTRUCTION PLANS
UO-1 THRU UO-4	UTILITIES BY OTHERS PLANS
X-1	CROSS-SECTION SUMMARY SHEET
X-2 THRU X-13	CROSS-SECTIONS
S-1 THRU S-45	STRUCTURE PLANS

GENERAL NOTES:

2012 SPECIFICATIONS
EFFECTIVE: 01-17-2012
REVISED: 10-31-2014

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.

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.

SUBSURFACE DRAINS:
SUBSURFACE DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.02 AT LOCATIONS DIRECTED BY THE ENGINEER.

DRIVEWAYS:
DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 USING 900 MM RADIUS OR RADIUS AS SHOWN ON THE PLANS. LOCATIONS OF DRIVES WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

STREET TURNOUT:
STREET RETURNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 848.04 USING THE RADIUS NOTED ON PLANS.

GUARDRAIL:
THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

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 ROADWAY SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

END BENTS:
THE ENGINEER SHALL CHECK THE STRUCTURE END BENT PLANS, DETAILS, AND CROSS-SECTION PRIOR TO SETTING OF THE SLOPE STAKES FOR THE EMBANKMENT OR EXCAVATION APPROACHING A BRIDGE.

UTILITIES:
UTILITY OWNERS ON THIS PROJECT ARE DUKE ENERGY - POWER (DISTRIBUTION), DUKE ENERGY - POWER (TRANSMISSION), FRONTIER COMMUNICATIONS (COMMUNICATIONS), MORRIS BROADBAND (COMMUNICATIONS) TOCCOA NATURAL GAS (GAS DISTRIBUTION) WATER: TOWN OF FRANKLIN AND SANITARY SEWER: TOWN OF FRANKLIN 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.

CURB RAMPS
CURB RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS.
CONSTRUCT ALL CURB RAMPS ACCORDANCE WITH STD 848.05 and/or 848.06.

8/17/16

01-AUG-2016 10:09 AM B:\125.Rdy.-tsh.dgn
S:\PROJECTS\125.Rdy.-tsh.dgn

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale *S.U.E. = Subsurface Utility Engineering

04/06/15

BOUNDARIES AND PROPERTY:

- State Line _____
- County Line _____
- Township Line _____
- City Line _____
- Reservation Line _____
- Property Line _____
- Existing Iron Pin _____
- Property Corner _____
- Property Monument _____
- Parcel/Sequence Number _____
- Existing Fence Line _____
- Proposed Woven Wire Fence _____
- Proposed Chain Link Fence _____
- Proposed Barbed Wire Fence _____
- Existing Wetland Boundary _____
- Proposed Wetland Boundary _____
- Existing Endangered Animal Boundary _____
- Existing Endangered Plant Boundary _____
- Existing Historic Property Boundary _____
- Known Contamination Area: Soil _____
- Potential Contamination Area: Soil _____
- Known Contamination Area: Water _____
- Potential Contamination Area: Water _____
- Contaminated Site: Known or Potential _____

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap _____
- Sign _____
- Well _____
- Small Mine _____
- Foundation _____
- Area Outline _____
- Cemetery _____
- Building _____
- School _____
- Church _____
- Dam _____

HYDROLOGY:

- Stream or Body of Water _____
- Hydro, Pool or Reservoir _____
- Jurisdictional Stream _____
- Buffer Zone 1 _____
- Buffer Zone 2 _____
- Flow Arrow _____
- Disappearing Stream _____
- Spring _____
- Wetland _____
- Proposed Lateral, Tail, Head Ditch _____
- False Sump _____

RAILROADS:

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

RIGHT OF WAY:

- Baseline Control Point _____
- Existing Right of Way Marker _____
- Existing Right of Way Line _____
- Proposed Right of Way Line _____
- Proposed Right of Way Line with Iron Pin and Cap Marker _____
- Proposed Right of Way Line with Concrete or Granite R/W Marker _____
- Proposed Control of Access Line with Concrete CA Marker _____

- Existing Control of Access _____
- Proposed Control of Access _____
- Existing Easement Line _____
- Proposed Temporary Construction Easement _____
- Proposed Temporary Drainage Easement _____
- Proposed Permanent Drainage Easement _____
- Proposed Permanent Drainage / Utility Easement _____
- Proposed Permanent Utility Easement _____
- Proposed Temporary Utility Easement _____
- Proposed Aerial Utility Easement _____
- Proposed Permanent Easement with Iron Pin and Cap Marker _____

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement _____
- Existing Curb _____
- Proposed Slope Stakes Cut _____
- Proposed Slope Stakes Fill _____
- Proposed Curb Ramp _____
- Existing Metal Guardrail _____
- Proposed Guardrail _____
- Existing Cable Guiderail _____
- Proposed Cable Guiderail _____
- Equality Symbol _____
- Pavement Removal _____

VEGETATION:

- Single Tree _____
- Single Shrub _____
- Hedge _____
- Woods Line _____

- Orchard _____
- Vineyard _____

EXISTING STRUCTURES:

- MAJOR: Bridge, Tunnel or Box Culvert _____
- Bridge Wing Wall, Head Wall and End Wall _____

- MINOR: Head and End Wall _____
- Pipe Culvert _____
- Footbridge _____

- Drainage Box: Catch Basin, DI or JB _____
- Paved Ditch Gutter _____
- Storm Sewer Manhole _____
- Storm Sewer _____

UTILITIES:

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

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.*) _____
- U/G Telephone Cable LOS C (S.U.E.*) _____
- U/G Telephone Cable LOS D (S.U.E.*) _____
- U/G Telephone Conduit LOS B (S.U.E.*) _____
- U/G Telephone Conduit LOS C (S.U.E.*) _____
- U/G Telephone Conduit LOS D (S.U.E.*) _____
- U/G Fiber Optics Cable LOS B (S.U.E.*) _____
- U/G Fiber Optics Cable LOS C (S.U.E.*) _____
- U/G Fiber Optics Cable LOS D (S.U.E.*) _____

WATER:

- Water Manhole _____
- Water Meter _____
- Water Valve _____
- Water Hydrant _____
- U/G Water Line LOS B (S.U.E.*) _____
- U/G Water Line LOS C (S.U.E.*) _____
- U/G Water Line LOS D (S.U.E.*) _____
- Above Ground Water Line _____

TV:

- TV Pedestal _____
- TV Tower _____
- U/G TV Cable Hand Hole _____
- U/G TV Cable LOS B (S.U.E.*) _____
- U/G TV Cable LOS C (S.U.E.*) _____
- U/G TV Cable LOS D (S.U.E.*) _____
- U/G Fiber Optic Cable LOS B (S.U.E.*) _____
- U/G Fiber Optic Cable LOS C (S.U.E.*) _____
- U/G Fiber Optic Cable LOS D (S.U.E.*) _____

GAS:

- Gas Valve _____
- Gas Meter _____
- U/G Gas Line LOS B (S.U.E.*) _____
- U/G Gas Line LOS C (S.U.E.*) _____
- U/G Gas Line LOS D (S.U.E.*) _____
- Above Ground Gas Line _____

SANITARY SEWER:

- Sanitary Sewer Manhole _____
- Sanitary Sewer Cleanout _____
- U/G Sanitary Sewer Line _____
- Above Ground Sanitary Sewer _____
- SS Forced Main Line LOS B (S.U.E.*) _____
- SS Forced Main Line LOS C (S.U.E.*) _____
- SS Forced Main Line LOS D (S.U.E.*) _____

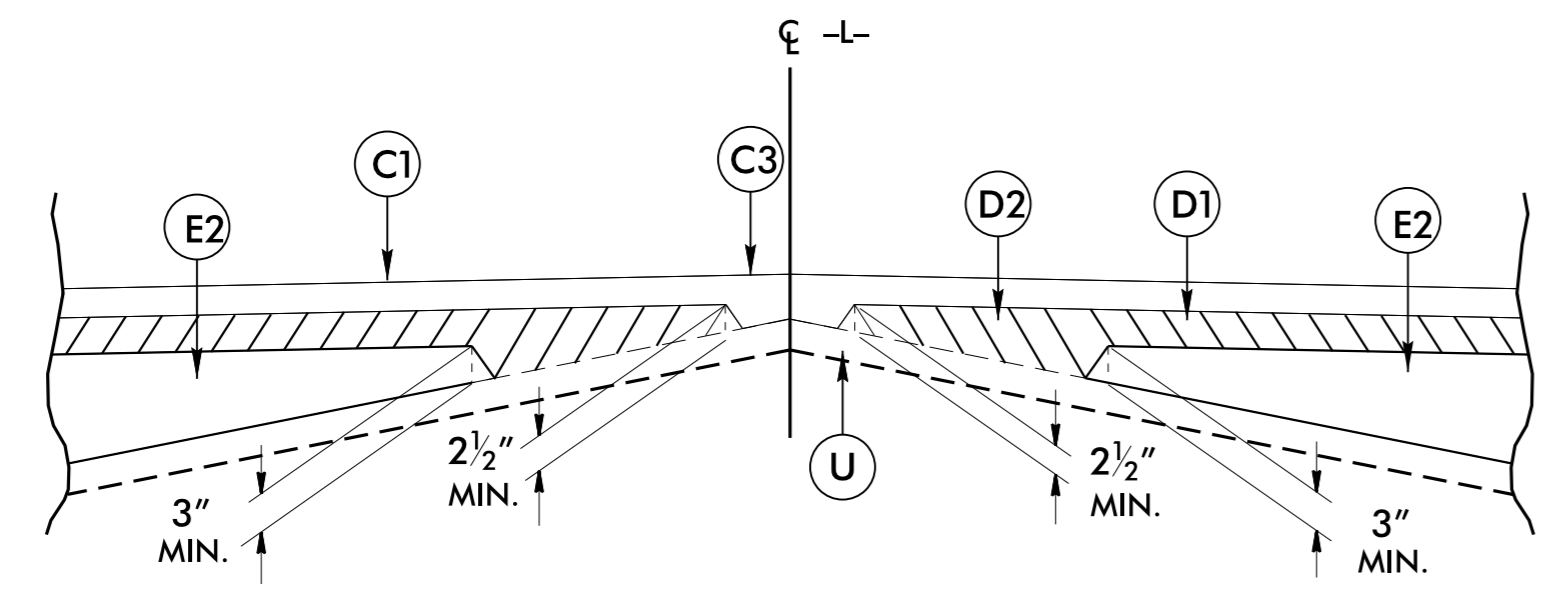
MISCELLANEOUS:

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

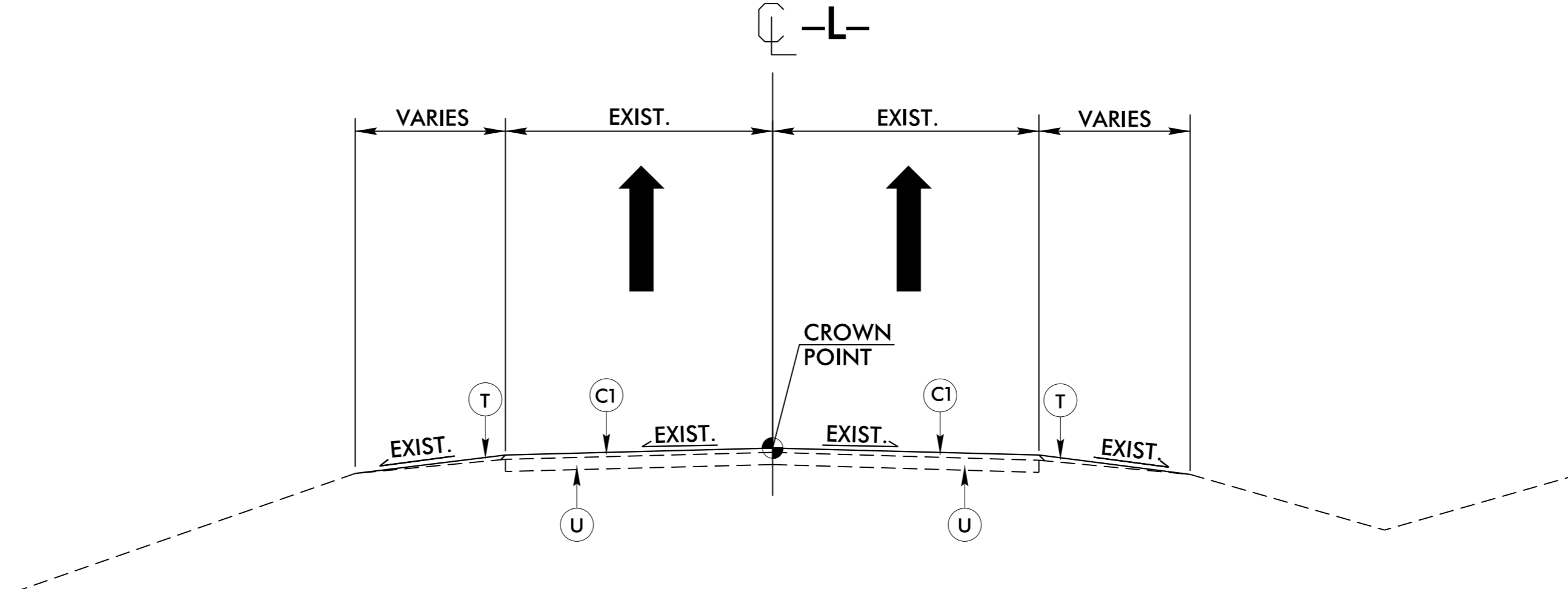
PROJECT REFERENCE NO. B-5125	SHEET NO. 2A-1
ROADWAY DESIGN ENGINEER SEAL 033296 Steven D. Kendall 5/17/2016	PAVEMENT DESIGN ENGINEER SEAL 022896 Clark S. Morrison 5/16/2016
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PAVEMENT SCHEDULE	
FINAL PAVEMENT DESIGN	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.
D1	PROP. APPROX. 4" ASPHALT CONCRETE SURFACE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2½" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5½" IN DEPTH.
J	6" ABC
R1	2'-6" CONCRETE CURB & GUTTER
R2	EXISTING 2'-6" CONCRETE CURB & GUTTER
R3	5" MONOLITHIC CONCRETE ISLAND (KEYED IN)
S1	4" CONCRETE SIDEWALK
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V	1½" MILLING.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL).

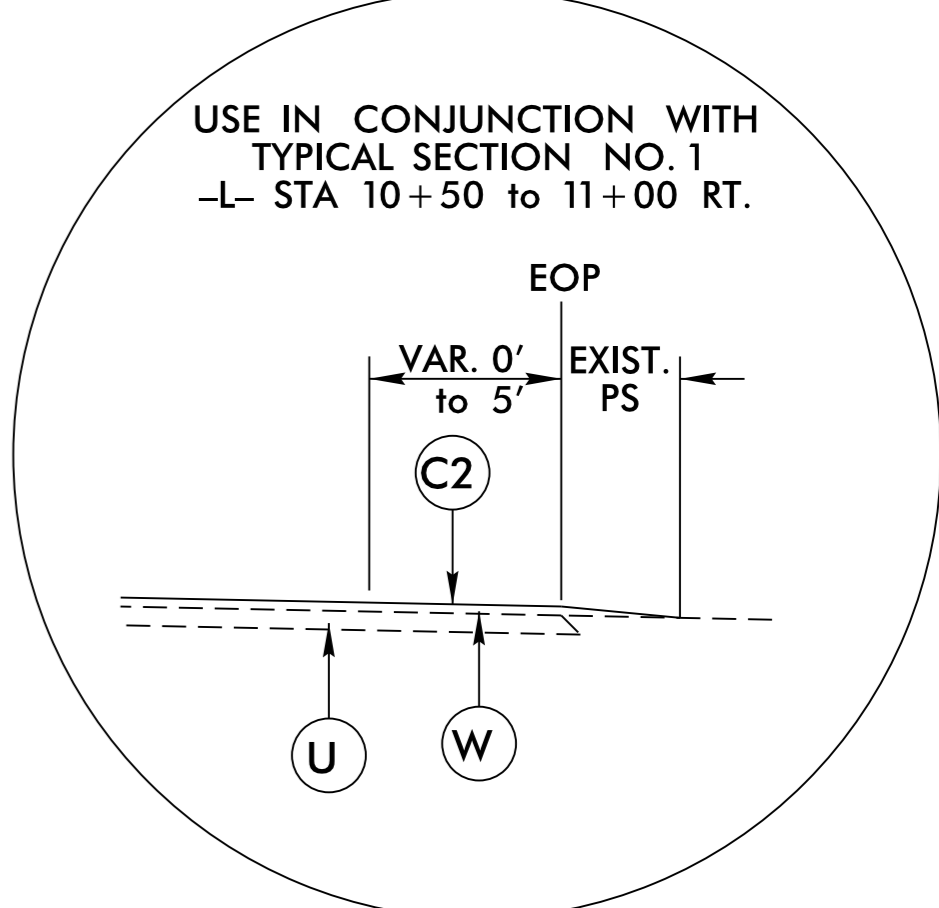
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



Detail Showing Method of Wedging

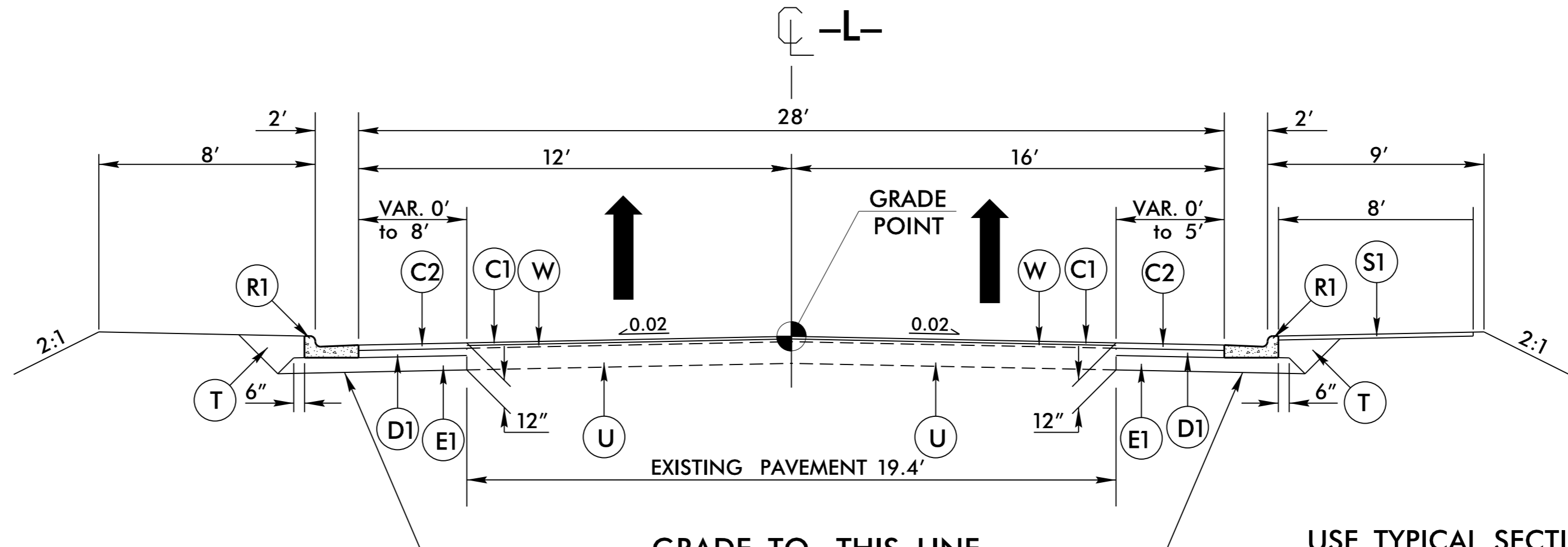


TYPICAL SECTION NO. 1



USE TYPICAL SECTION NO. 1 AS FOLLOWS

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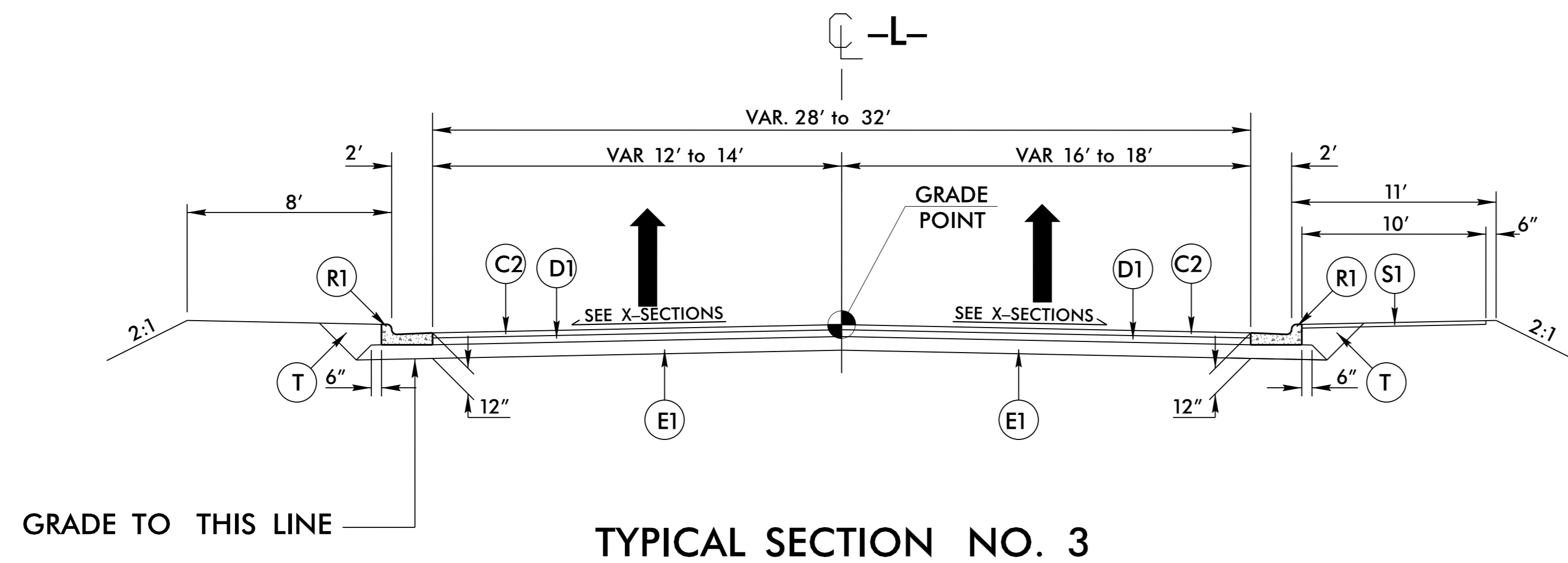


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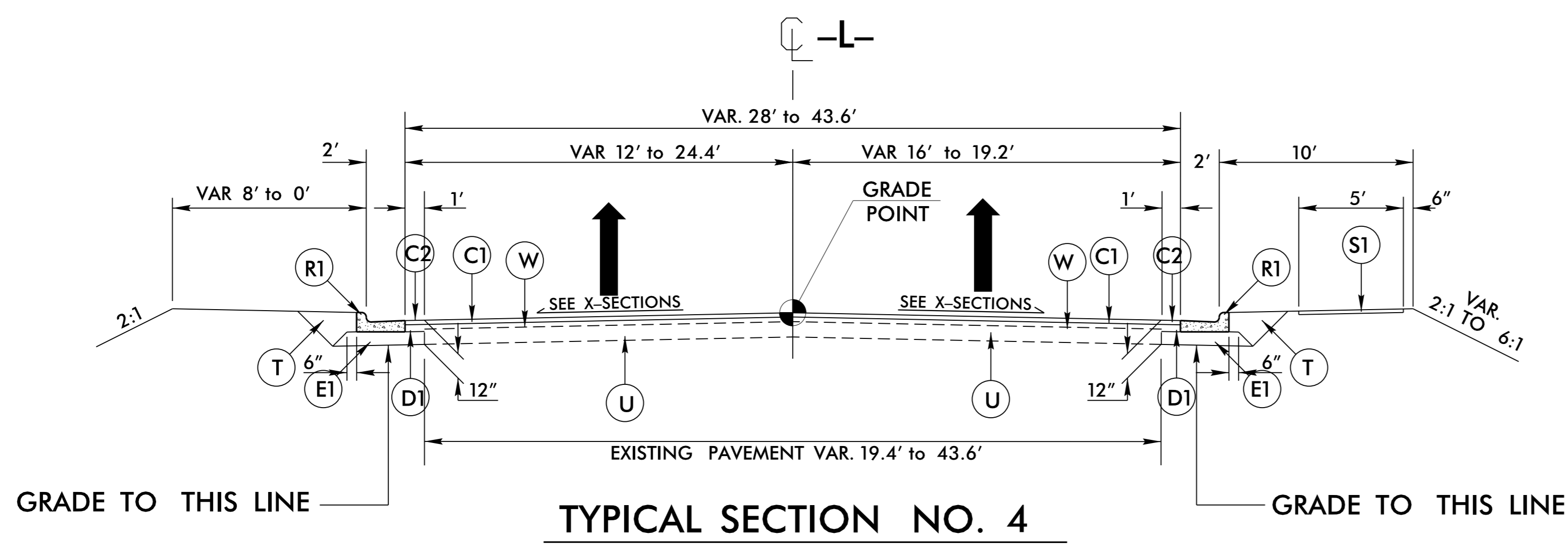
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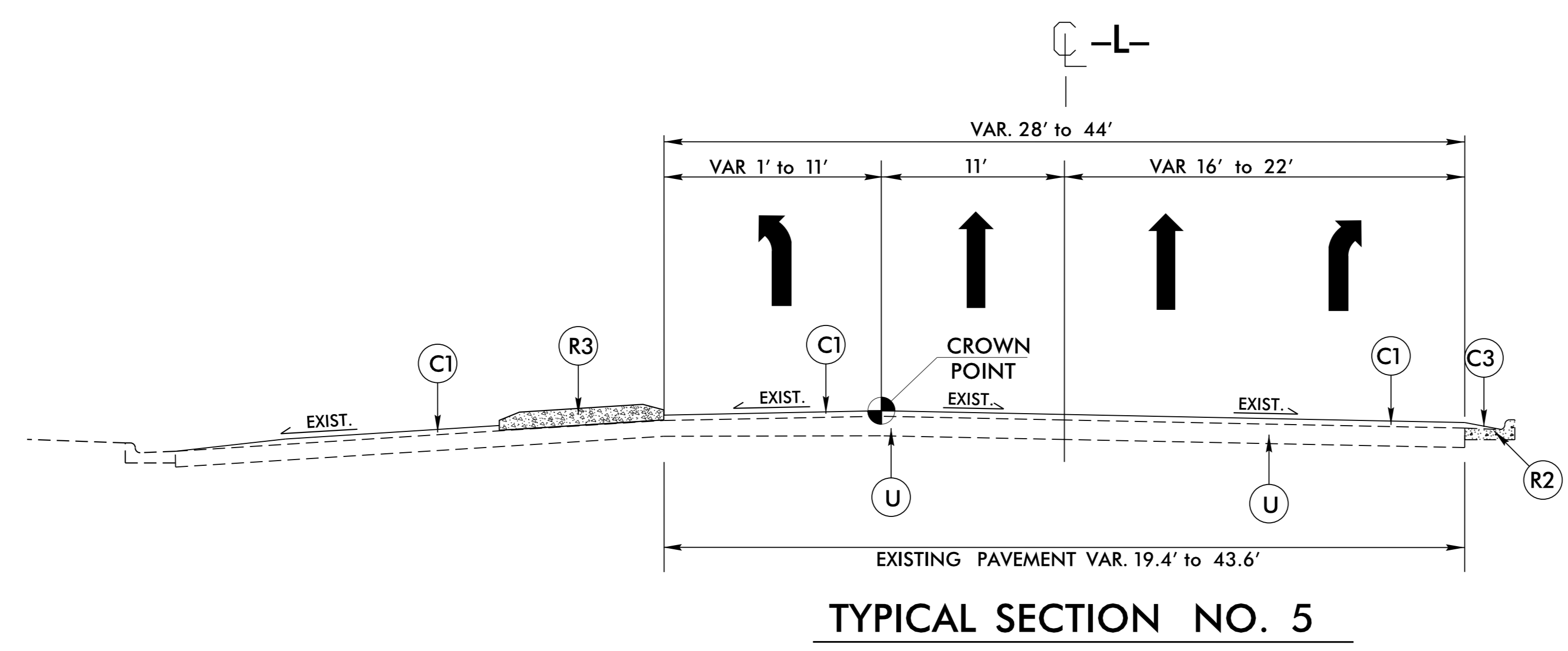
PROJECT REFERENCE NO. B-5125		SHEET NO. 2A-2	
ROADWAY DESIGN ENGINEER SEAL 033296 Steven D. Kendall 5/17/2016		PAVEMENT DESIGN ENGINEER SEAL 022896 Clark S. Morrison 5/16/2016	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			
C1	1 1/2" TYPE S9.5B		
C2	3" TYPE S9.5B		
C3	VAR. DEPTH TYPE S9.5B		
D1	4" TYPE I19.0B		
D2	VAR. DEPTH TYPE I19.0B		
E1	5" TYPE B25.0B		
E2	VAR. DEPTH TYPE B25.0B		
J	6" ABC		
R1	2'-6" CONC. CURB & GUTTER		
R2	EXIST. 2'-6" CONC. CURB & GUTTER		
R3	5" CONC. MONOLITHIC ISLAND		
S1	4" CONC. SIDEWALK		
T	EARTH MATERIAL		
U	EXISTING PAVEMENT		
V	1 1/2" MILLING		
W	WEDGING		



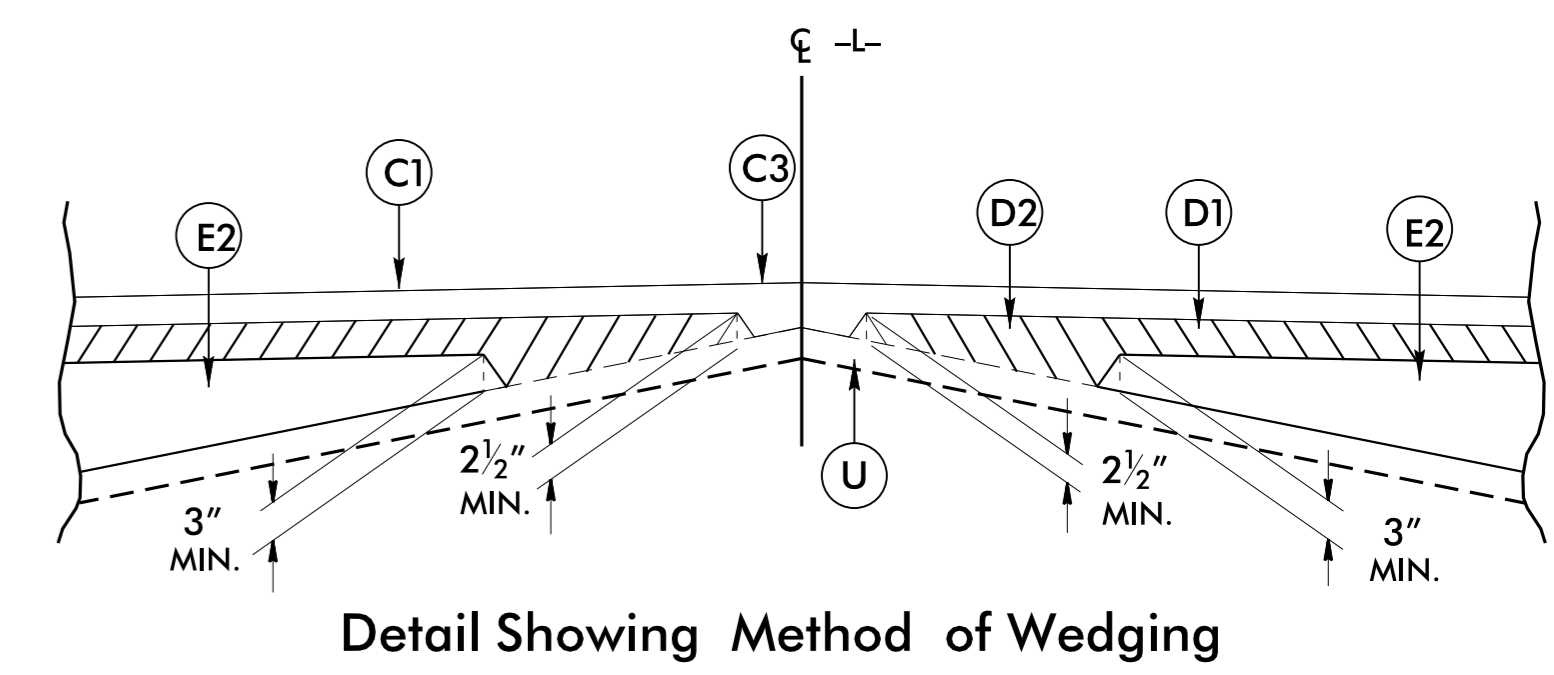
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 -L- STA 11+85.71 TO STA 11+99.58 (BEGIN BRIDGE)
 -L- STA 14+52.20 (END BRIDGE) TO STA 14+75.00



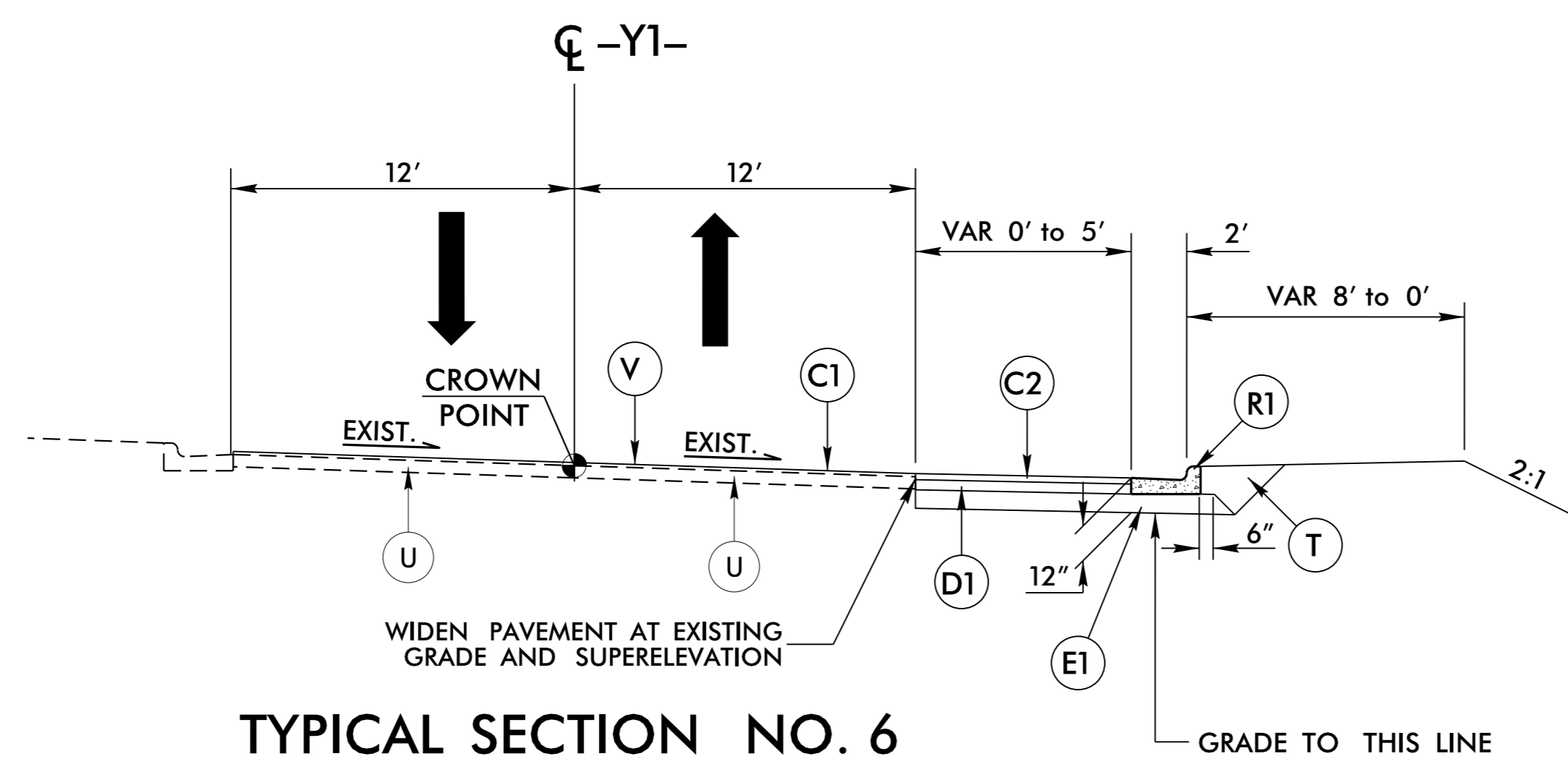
USE TYPICAL SECTION NO. 4 AS FOLLOWS
 -L- STA 14+75.00 TO STA 16+75.00
 (LT PROP C&G END 16+10.00 and
 RT PROP C&G END 16+44.00)



USE TYPICAL SECTION NO. 5 AS FOLLOWS
 -L- STA 16+75.00 TO STA 17+20.00

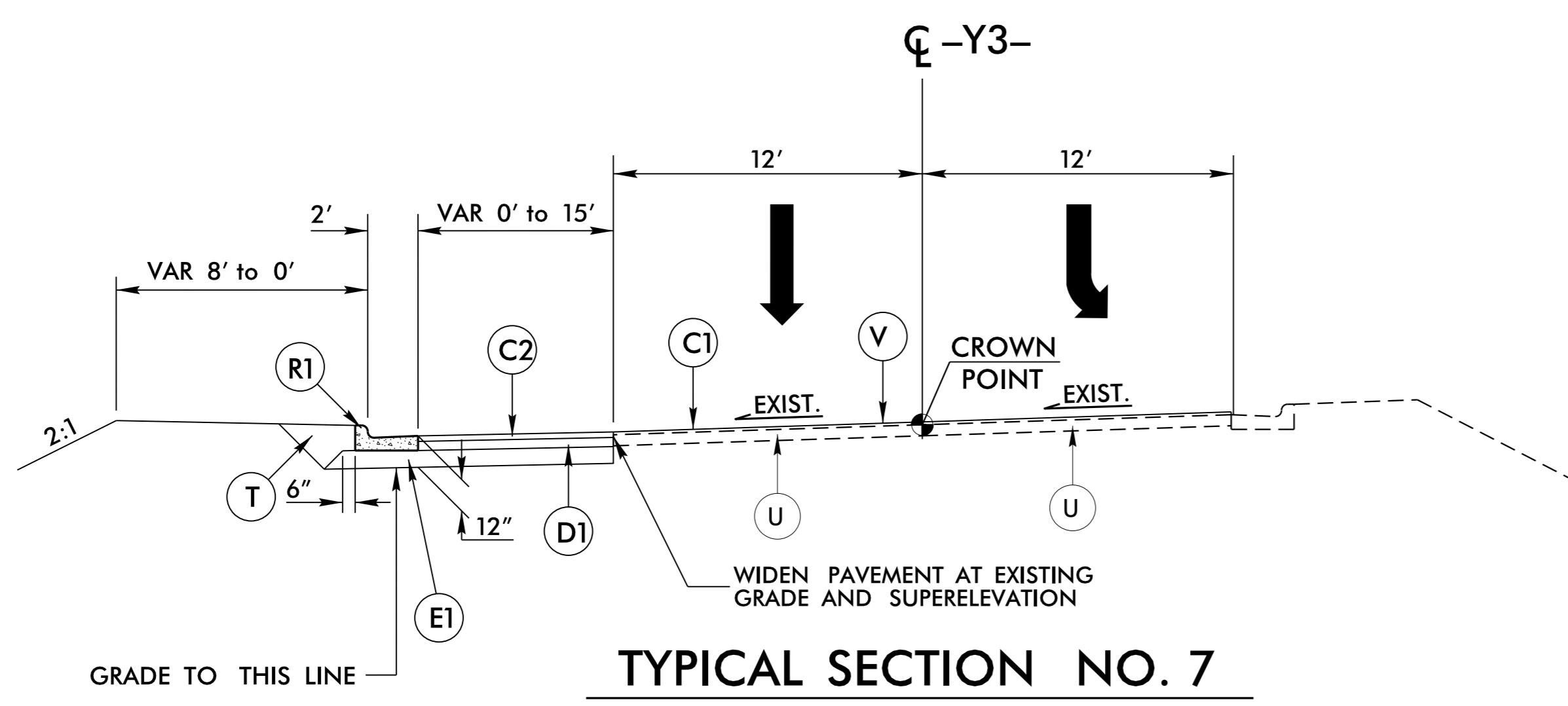


5/28/99



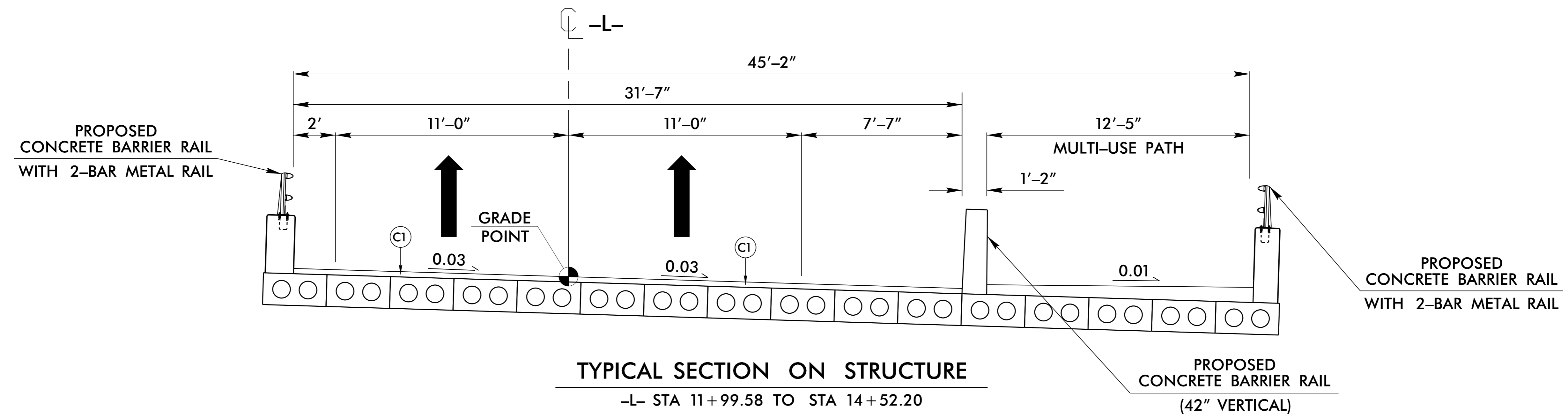
TYPICAL SECTION NO. 6

USE TYPICAL SECTION NO. 6 AS FOLLOWS
 -Y1- STA 30+00.00 TO STA 35+60.17 RT.



TYPICAL SECTION NO. 7

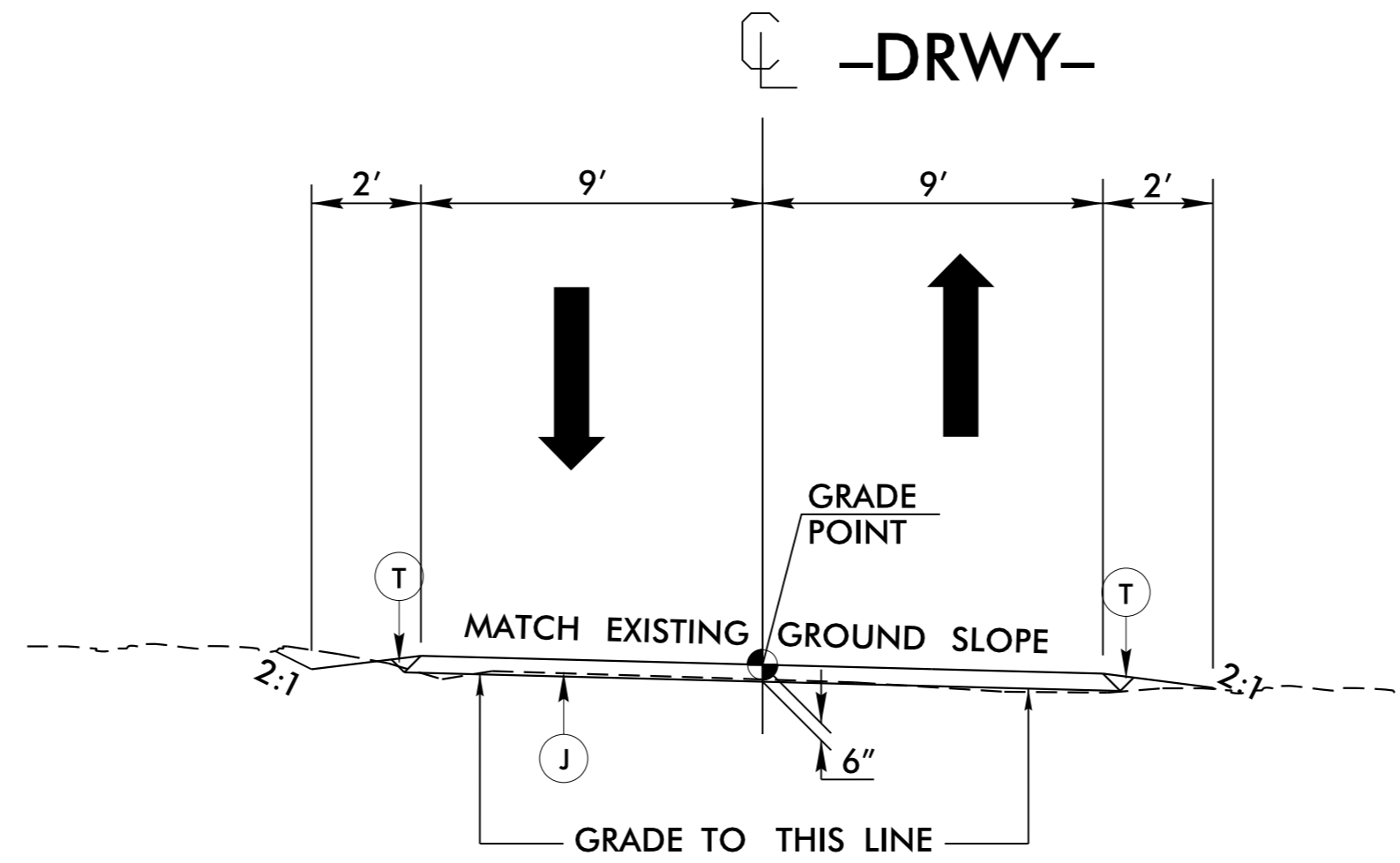
USE TYPICAL SECTION NO. 7 AS FOLLOWS
 -Y3- STA 10+24.00 TO STA 11+41.00



TYPICAL SECTION ON STRUCTURE
 -L- STA 11+99.58 TO STA 14+52.20

PROJECT REFERENCE NO.	SHEET NO.
B-5125	2A-3
ROADWAY DESIGN ENGINEER SEAL 033296 Steven D. Kendall 5/17/2016	PAVEMENT DESIGN ENGINEER SEAL 022896 Clark S. Morrison 5/15/2016
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
C1	1 1/2" TYPE S9.5B
C2	3" TYPE S9.5B
C3	VAR. DEPTH TYPE S9.5B
D1	4" TYPE I19.0B
D2	VAR. DEPTH TYPE I19.0B
E1	5" TYPE B25.0B
E2	VAR. DEPTH TYPE B25.0B
J	6" ABC
R1	2'-6" CONC. CURB & GUTTER
R2	EXIST. 2'-6" CONC. CURB & GUTTER
R3	5" CONC. MONOLITHIC ISLAND
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	1 1/2" MILLING
W	WEDGING

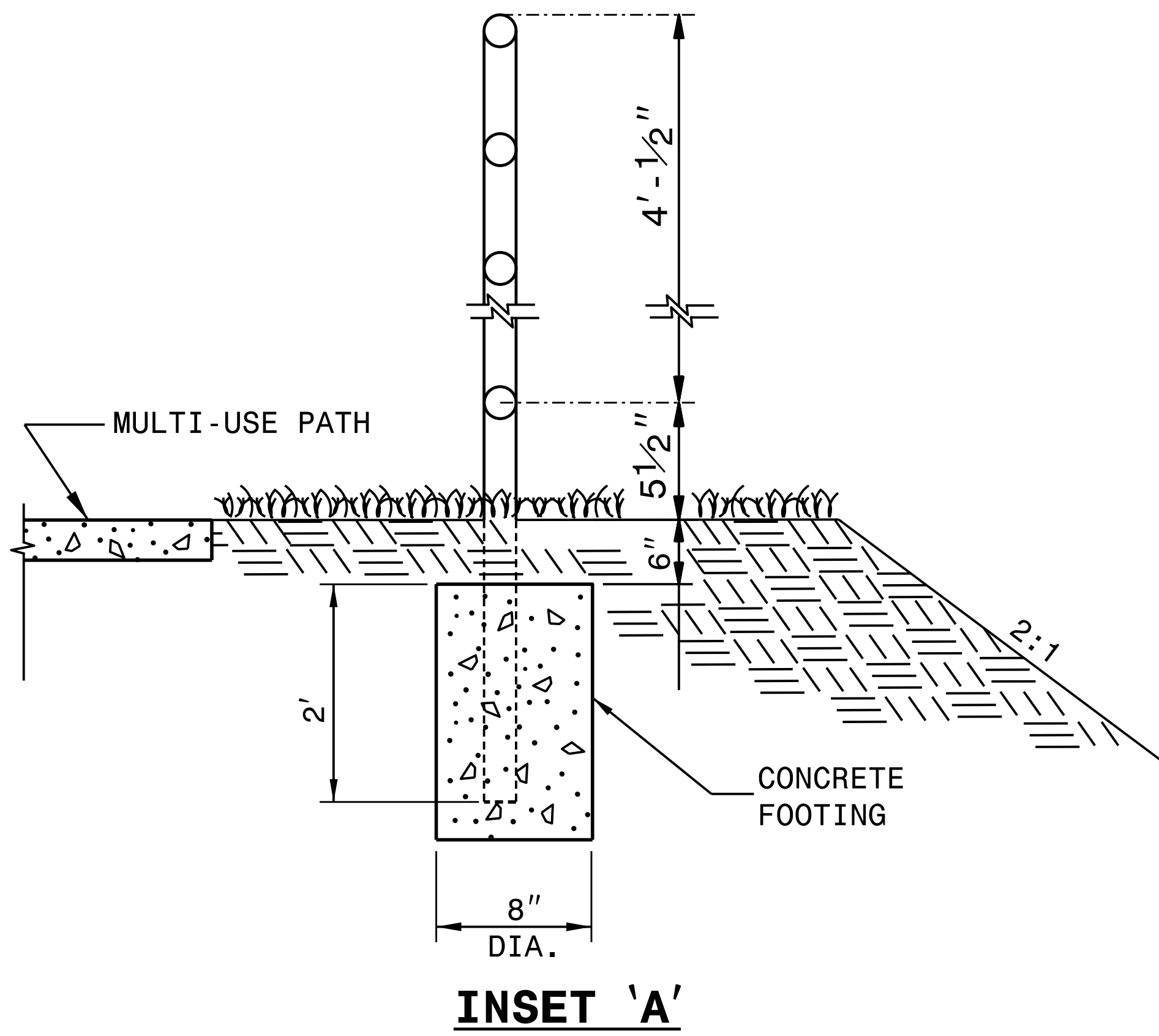
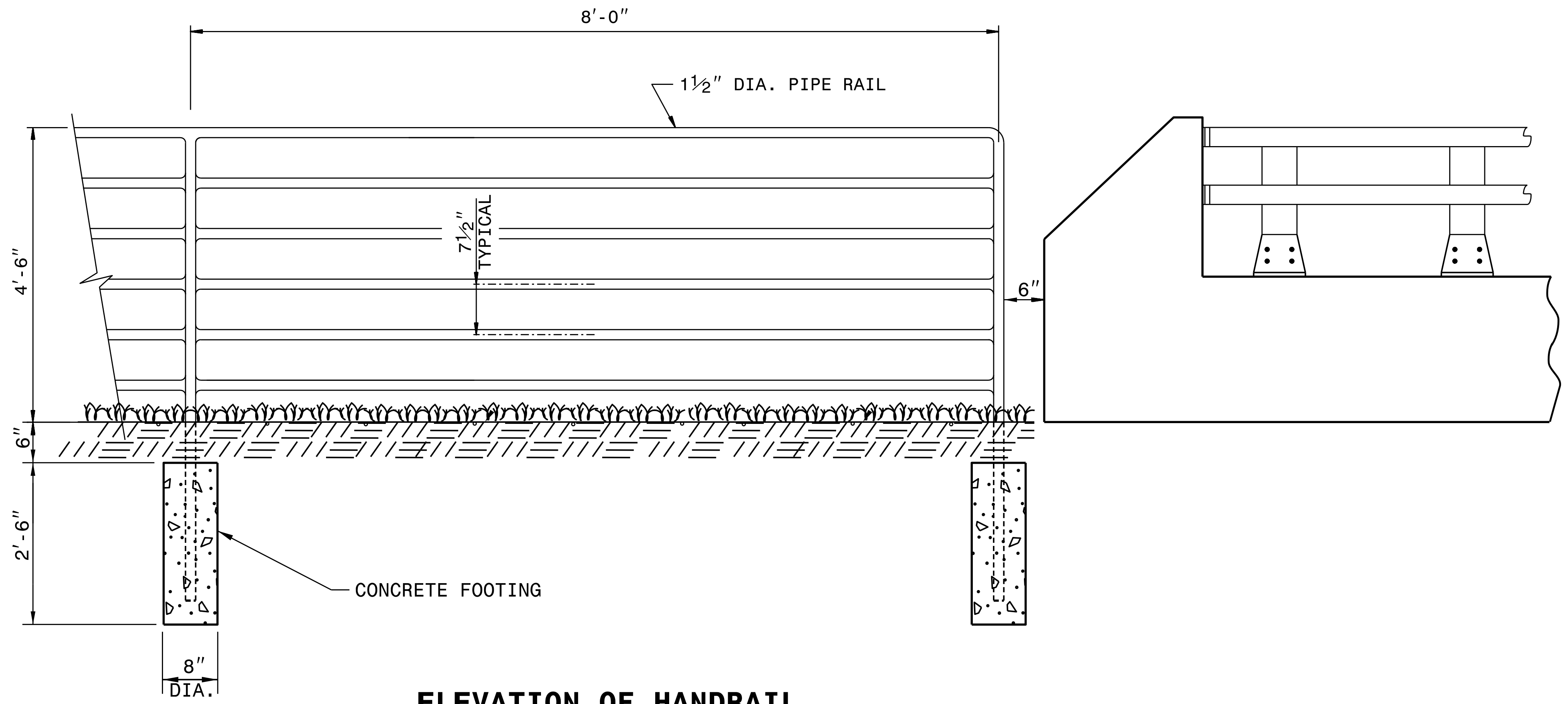
16-MAY-2016 11:05 AM B5125_Rdy_typ.dgn



TYPICAL SECTION NO. 8

USE TYPICAL SECTION NO. 8 AS FOLLOWS
 -DRWY- STA 10+52.70 TO STA 12+82.79

PROJECT REFERENCE NO. B-5125		SHEET NO. 2A-4	
ROADWAY DESIGN ENGINEER SEVEN D. KERR SEAL 033296 PROFESSIONAL ENGINEER NORTH CAROLINA 5/17/2016 Steven D. Kerr		PAVEMENT DESIGN ENGINEER CLARK S. MORRISON SEAL 022896 PROFESSIONAL ENGINEER NORTH CAROLINA 5/16/2016 Clark S. Morrison	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			
C1	1 1/2" TYPE S9.5B		
C2	3" TYPE S9.5B		
C3	VAR. DEPTH TYPE S9.5B		
D1	4" TYPE I19.0B		
D2	VAR. DEPTH TYPE I19.0B		
E1	5" TYPE B25.0B		
E2	VAR. DEPTH TYPE B25.0B		
J	6" ABC		
R1	2'-6" CONC. CURB & GUTTER		
R2	EXIST. 2'-6" CONC. CURB & GUTTER		
R3	5" CONC. MONOLITHIC ISLAND		
T	EARTH MATERIAL		
U	EXISTING PAVEMENT		
V	1 1/2" MILLING		
W	WEDGING		



NOTES:

CONSTRUCT PROPOSED STEEL PIPE RAIL OF 1 1/2" DIAMETER SCHEDULE 40 PLAIN END GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A53.

REPAIR GALVANIZING IN ACCORDANCE WITH SECTION 1076 OF THE NCDOT STANDARD SPECIFICATIONS.

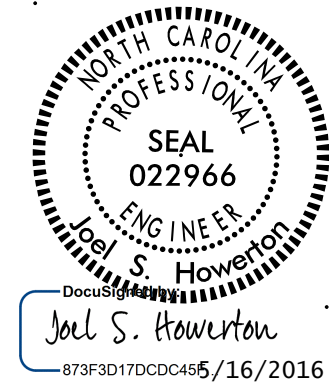
PAINT, IF REQUIRED BY THE ENGINEER, IN ACCORDANCE WITH SECTION 1080 OF THE STANDARD SPECIFICATIONS.

WELD IN ACCORDANCE WITH ARTICLE 1072-18 OF THE STANDARD SPECIFICATIONS.

USE CLASS 'B' CONCRETE FOR HANDRAIL FOOTINGS.

PLACEMENT OF HANDRAIL IN RELATION TO 2-BAR METAL BRIDGE RAIL AND PATH MAY BE MODIFIED AS DIRECTED BY THE ENGINEER.

SYSTEMS DESIGN USER NAME
 11/16/2016 10:00 AM

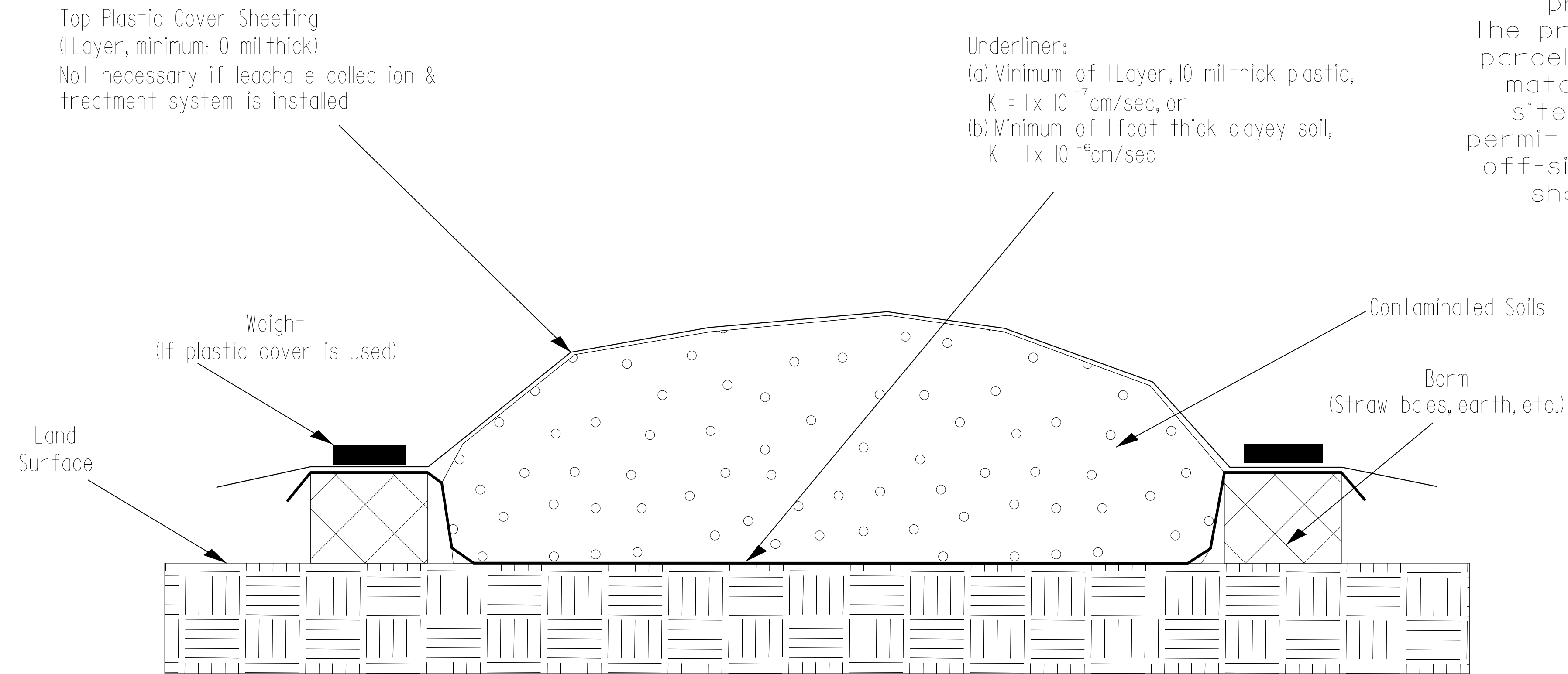


Joel S. Howerton
 8732017000045/16/2016
 DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT Office 919-707-6950 FAX 919-250-4119	
PROPOSED BIKE / PED SAFETY RAIL	
ORIGINAL BY: E.E. WARD	DATE: 12-99
MODIFIED BY: K.A. KEMPF	DATE: 5-16
CHECKED BY:	DATE:
FILE SPEC.: jhowerton/handrail adjacent to sidewalk.dgn	

Detail for Temporary Containment of Contaminated Soil

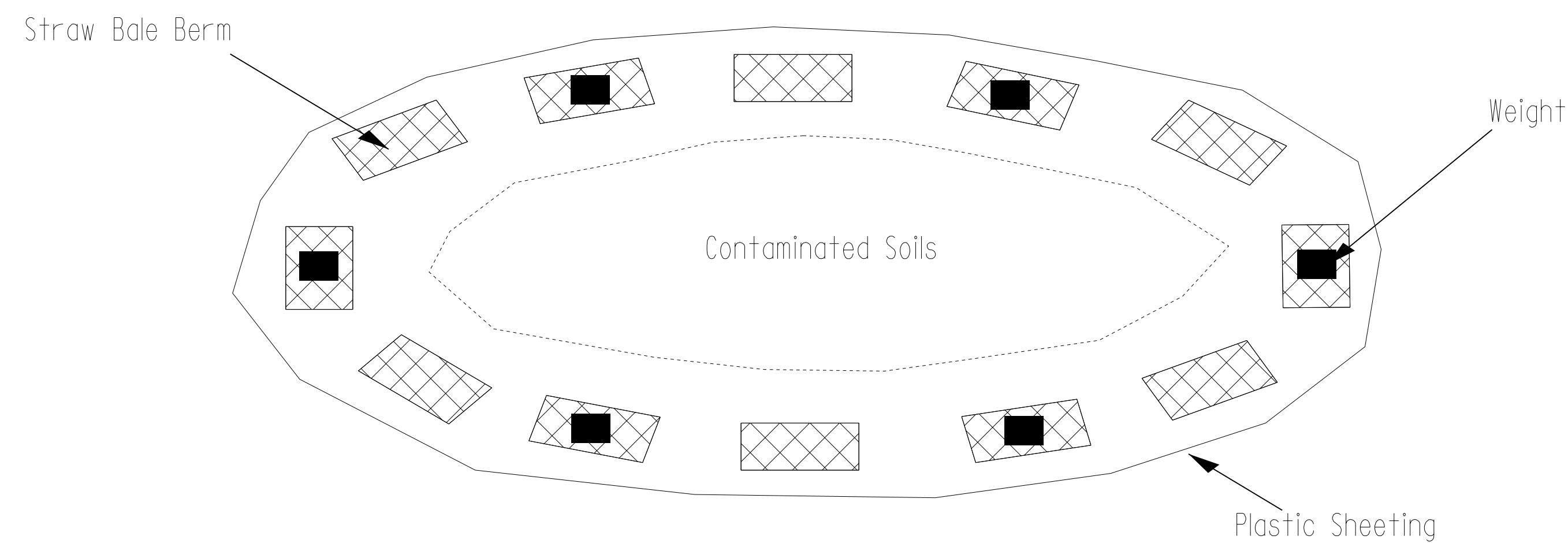
Cross-Section View



NOTE:

The Contractor shall stockpile all contaminated soil excavated from a property in a location within the property boundaries of the source parcel. If the volume of contaminated material exceeds available space on site, the Contractor shall obtain a permit from the NCDEQ UST Section for off-site temporary storage. Stockpile shall be removed within 45 days.

Map View



GEOTECHNICAL ENGINEERING UNIT

EASTERN REGIONAL OFFICE
 WESTERN REGIONAL OFFICE
 CONTRACT OFFICE

**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH**

STOCKPILE CONTAINMENT DETAIL

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

PREPARED BY:	DATE:
REVIEWED BY:	DATE:

12/06/07

COMPUTED BY: I.A. HARRIS DATE: 02/09/2016
CHECKED BY: T.R. MEADOWS DATE: 02/09/2016

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO. SHEET NO.
B-5125 3D-1

NOTE: Invert Elevations are for Bid Purposes only and shall not be used for project construction stakeout.
See "Standard Specifications For Roads and Structures, Section 300-5".

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

Table with columns for Station, Structure No., Invert Elevation, Slope Critical, Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC), C.S. Pipe, R.C. Pipe (Class III), R.C. Pipe (Class IV), Endwalls, Quantities for Drainage Structures, Frame, Grates and Hood Standard 840.03, Concrete Transitional Section, Pipe Removal Linft., and Remarks. Includes a 'TOTALS' row at the bottom of the main data section.

33.0

20-MAY-2016 15:38 B5125_Rcdy_sum.dgn

COMPUTED BY: J.W. Mann DATE: 4/10/14
 CHECKED BY: S.C. Clark DATE: 4/10/14

PROJECT NO. B-5125 SHEET NO. 3G-1

**STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS**

SUMMARY OF SUBSURFACE DRAINAGE

LINE	Station	Station	Location LT/RT/CL	Drain Type* UD/BD/SD	LF
	CONTINGENCY			SD	150
				TOTAL LF:	150

*UD = Underdrain
 *BD = Blind Drain
 *SD = Subsurface Drain

SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION

LINE	Station	Station	Aggregate Type* ASU/AST	Aggregate Thickness INCHES	Shallow Undercut CY	Class IV Subgrade Stabilization TONS	Geotextile for Soil Stabilization SY	Stabilizer Aggregate TONS	Class IV Aggregate Stabilization TONS
	CONTINGENCY		ASU		100	190	150		
			TOTAL CY/TONS/SY:		100	190	150	0	0

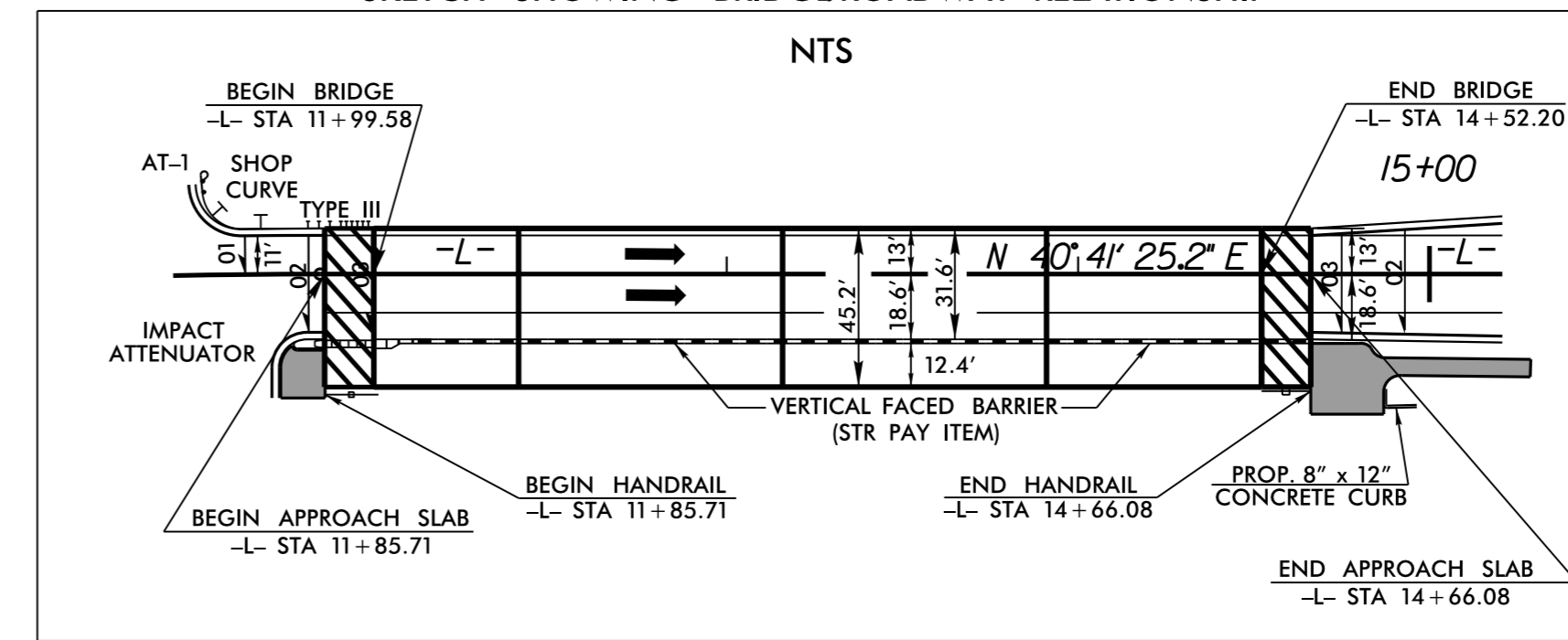
*ASU = Aggregate Subgrade
 *AST = Aggregate Stabilization

*Total square yards of Geotextile for Soil Stabilization is only the estimated quantity for ASU/AST and may only represent a portion of the geotextile quantity shown in the Item Sheets of the Proposal.

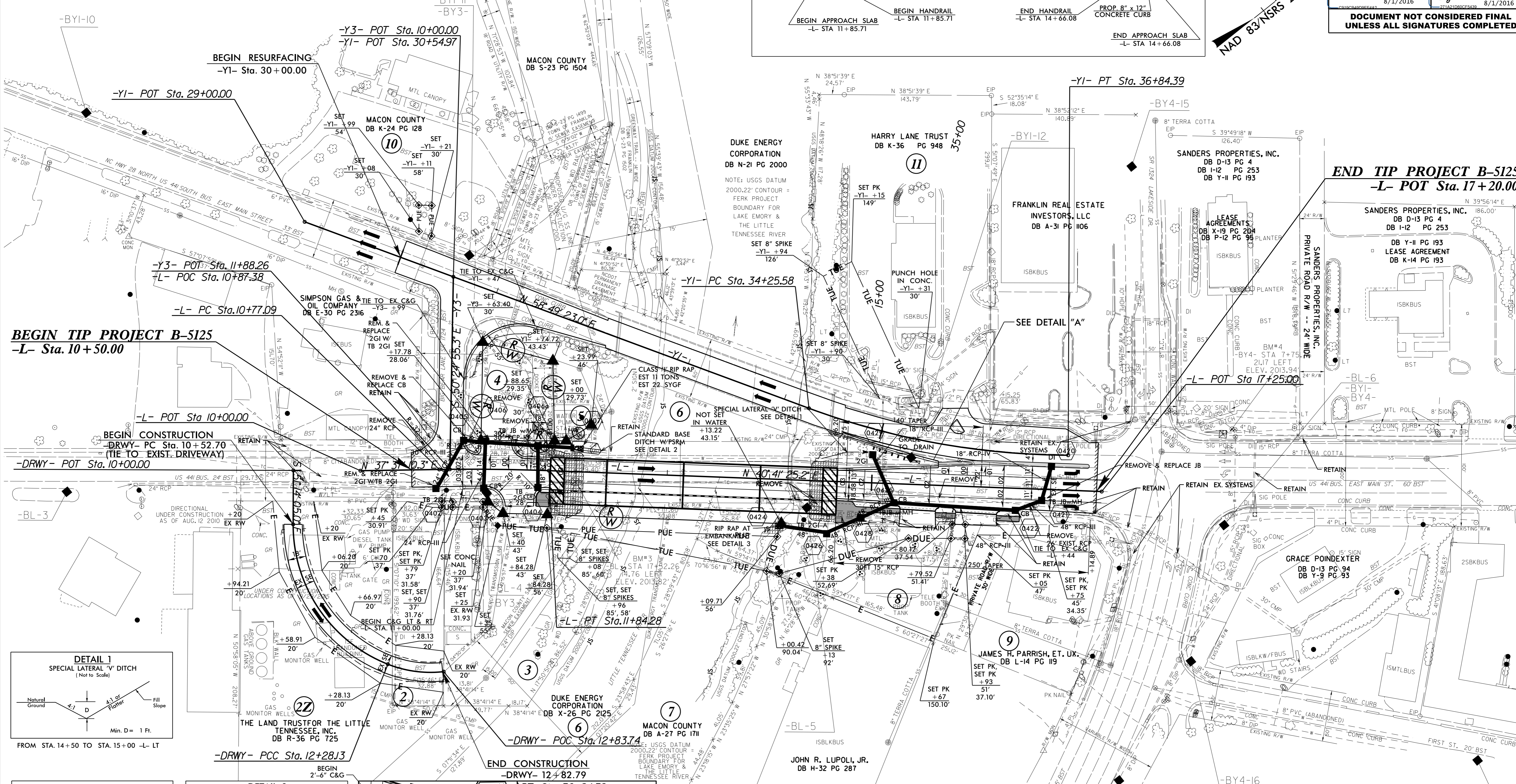
PROPERTY OWNERS

2 THE LAND TRUST FOR THE LITTLE TENNESSEE RIVER, INC. DB T-36 PG 259	4 ABDUL M. WALIANY, ET. UX. DB G-14 PG 163	8 JESSIE M. REVIS DB T-29 PG 2040
3 MACON COUNTY DB Y-26 PG 1219 PLAT CARD #3811	5 'NOW OR FORMERLY' TOWN OF FRANKLIN DB K-8 PG 306	

SKETCH SHOWING BRIDGEROADWAY RELATIONSHIP

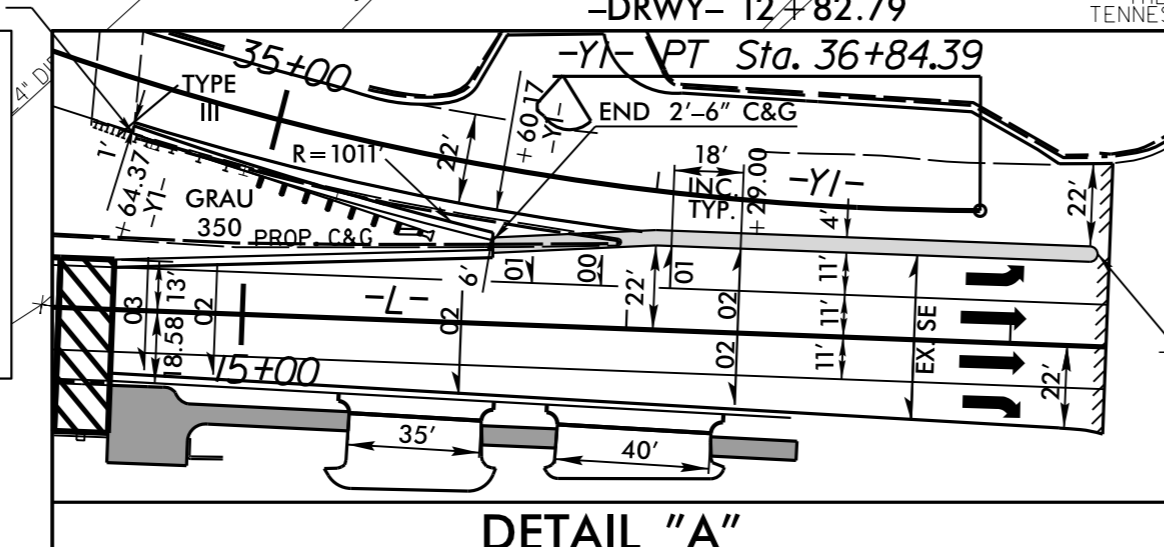
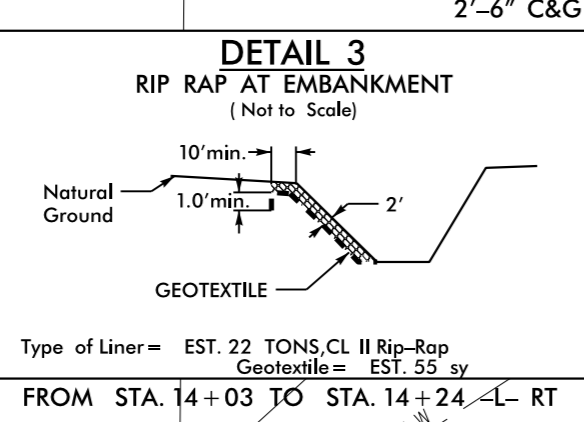
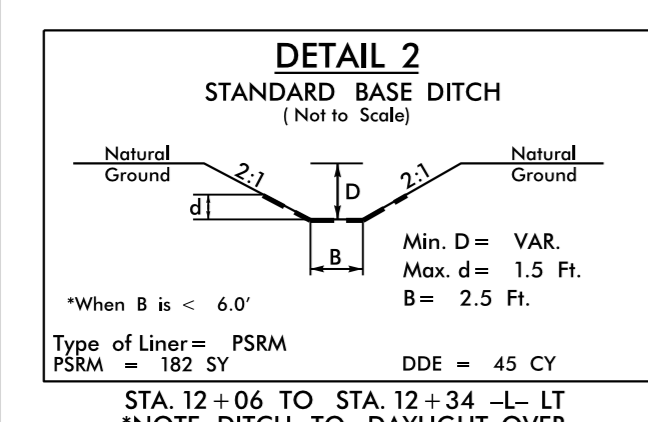
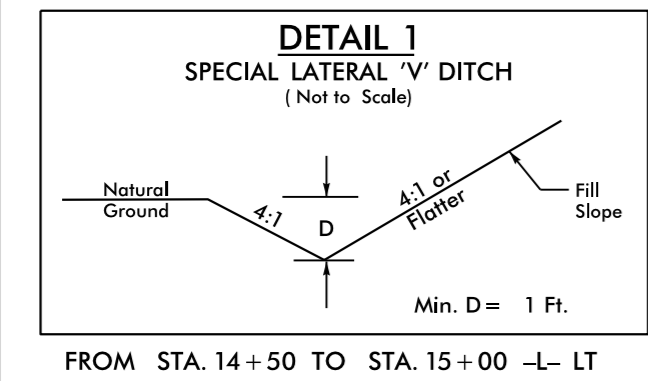


PROJECT REFERENCE NO. B-5125	SHEET NO. 4
ROADWAY DESIGN ENGINEER SEAL 033296 Steven D. Kempf	HYDRAULICS ENGINEER SEAL 040266 Elizabeth G. Dineen
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



BEGIN TIP PROJECT B-5125
-L- Sta. 10+50.00

BEGIN CONSTRUCTION
-DRWY- PC Sta. 10+52.70 (TIE TO EXIST. DRIVEWAY)
-DRWY- POT Sta. 10+00.00



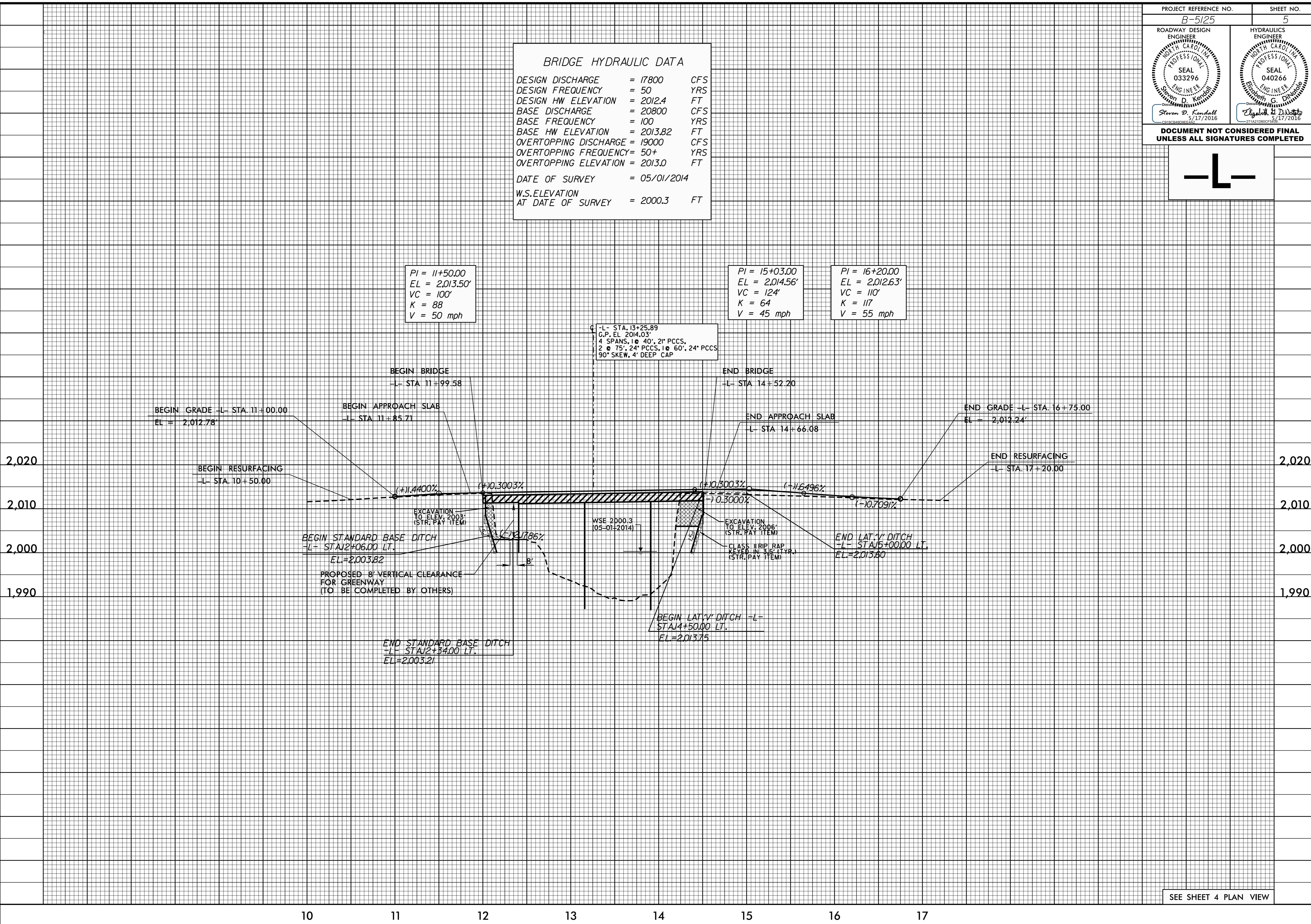
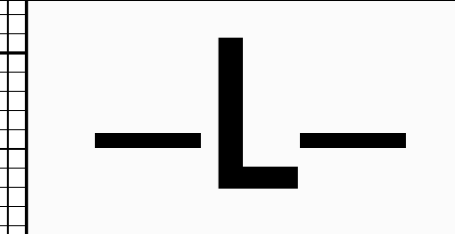
-DRWY-	-L-	-YI-
PI Sta 11+52.68 Δ = 68° 39' 11.4" (LT) D = 39' 08" 01.6" L = 175.43' T = 99.97' R = 146.41'	PI Sta 12+56.50 Δ = 28° 00' 21.6" (LT) D = 50' 22" 11.7" L = 155.60' T = 28.37' R = 113.75'	PI Sta 11+30.70 Δ = 3° 04' 14.9" (RT) D = 2' 51" 53.2" L = 107.19' T = 53.61' R = 2,000.00'
		PI Sta 35+56.33 Δ = 20° 03' 28.0" (LT) D = 7' 45" 00.0" L = 258.81' T = 130.74' R = 739.30'

■ DENOTES SIDEWALK
SEE SHEET 5 FOR -L- PROFILE
SEE SHEET 6 FOR -DRWY- PROFILE
SEE SHEET 2C-1 FOR BIKE/PEP HANDRAIL
SEE SHEETS S-1 THRU S-45 FOR STRUCTURE PLANS

8/17/1991
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BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE = 17800 CFS
 DESIGN FREQUENCY = 50 YRS
 DESIGN HW ELEVATION = 2012.4 FT
 BASE DISCHARGE = 20800 CFS
 BASE FREQUENCY = 100 YRS
 BASE HW ELEVATION = 2013.82 FT
 OVERTOPPING DISCHARGE = 19000 CFS
 OVERTOPPING FREQUENCY = 50+ YRS
 OVERTOPPING ELEVATION = 2013.0 FT
 DATE OF SURVEY = 05/01/2014
 W.S. ELEVATION AT DATE OF SURVEY = 2000.3 FT



SEE SHEET 4 PLAN VIEW

5/14/1999

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5/14/99

ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 033296 ENGINEER Steven D. Kendall 5/17/2016 <small>CS19CB0903E6A2</small>	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 040266 ENGINEER Elizabeth G. Dineale 5/17/2016 <small>271A210003F5A3F</small>
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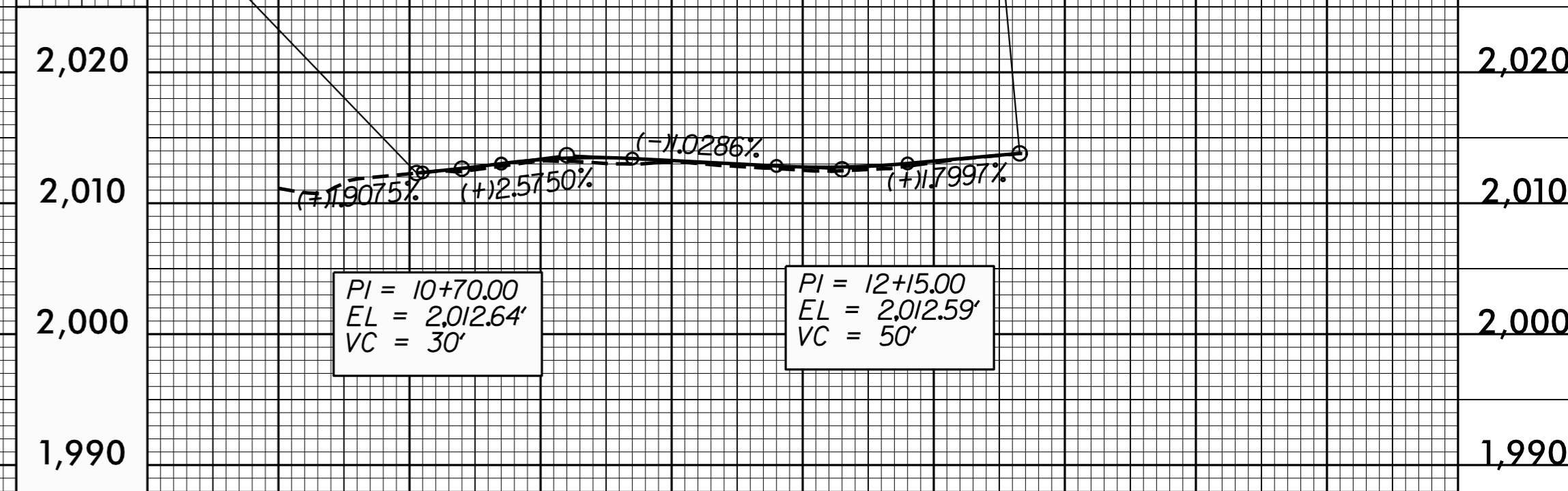
**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

-DRWY-

BEGIN GRADE -DRWY- STA. 10+52.70
EL = 2,012.31'

PI = 11+10.00
EL = 2,013.67'
VC = 50'

END GRADE -DRWY- STA. 12+82.79
EL = 2,013.81'



SEE SHEET 4 PLAN VIEW

16-MAY-2016 11:26 AM B:\5125.rdy.p1.dgn

10 11 12