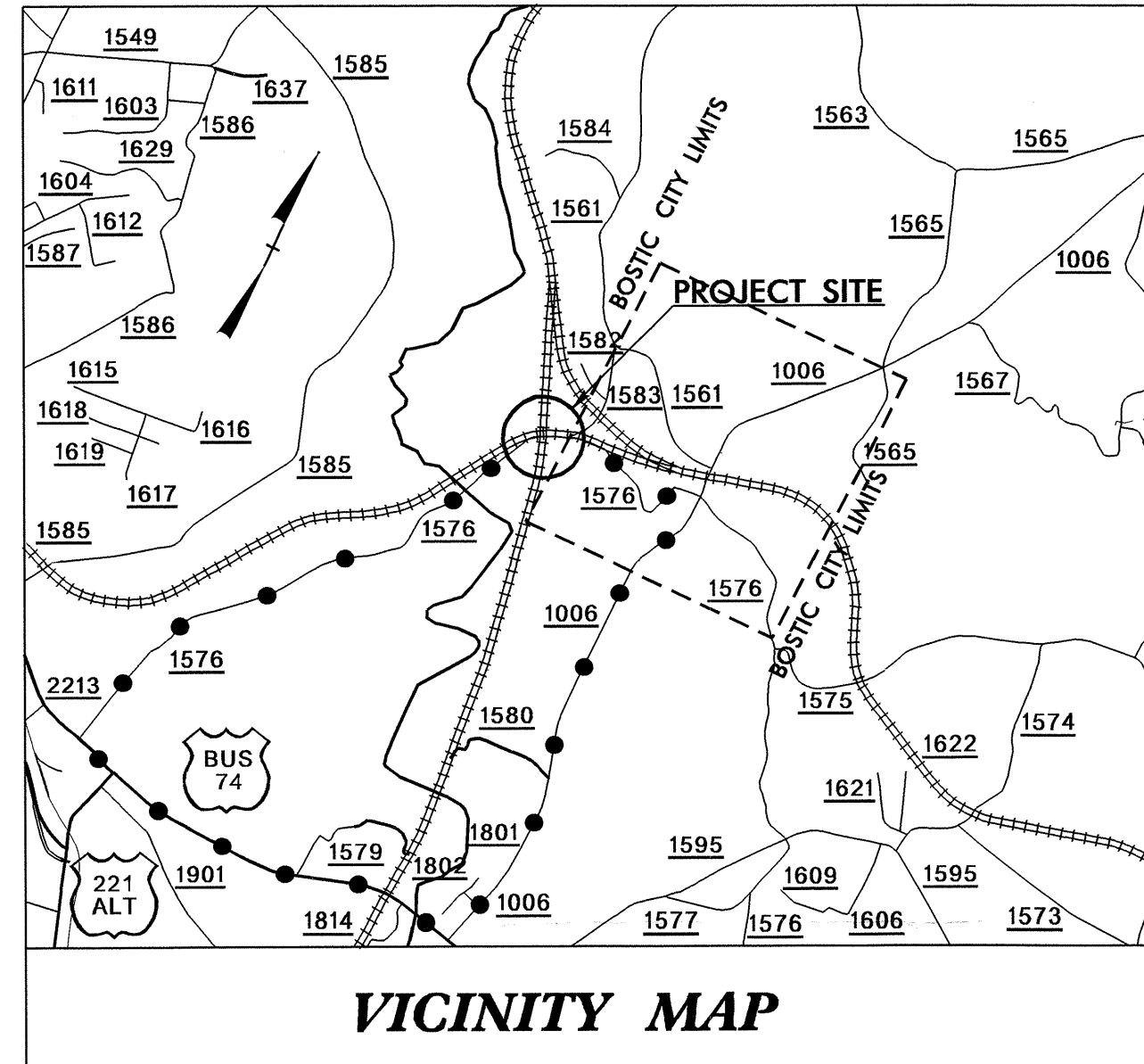


05/08/19

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



VICINITY MAP

●●●●● OFFSITE DETOUR

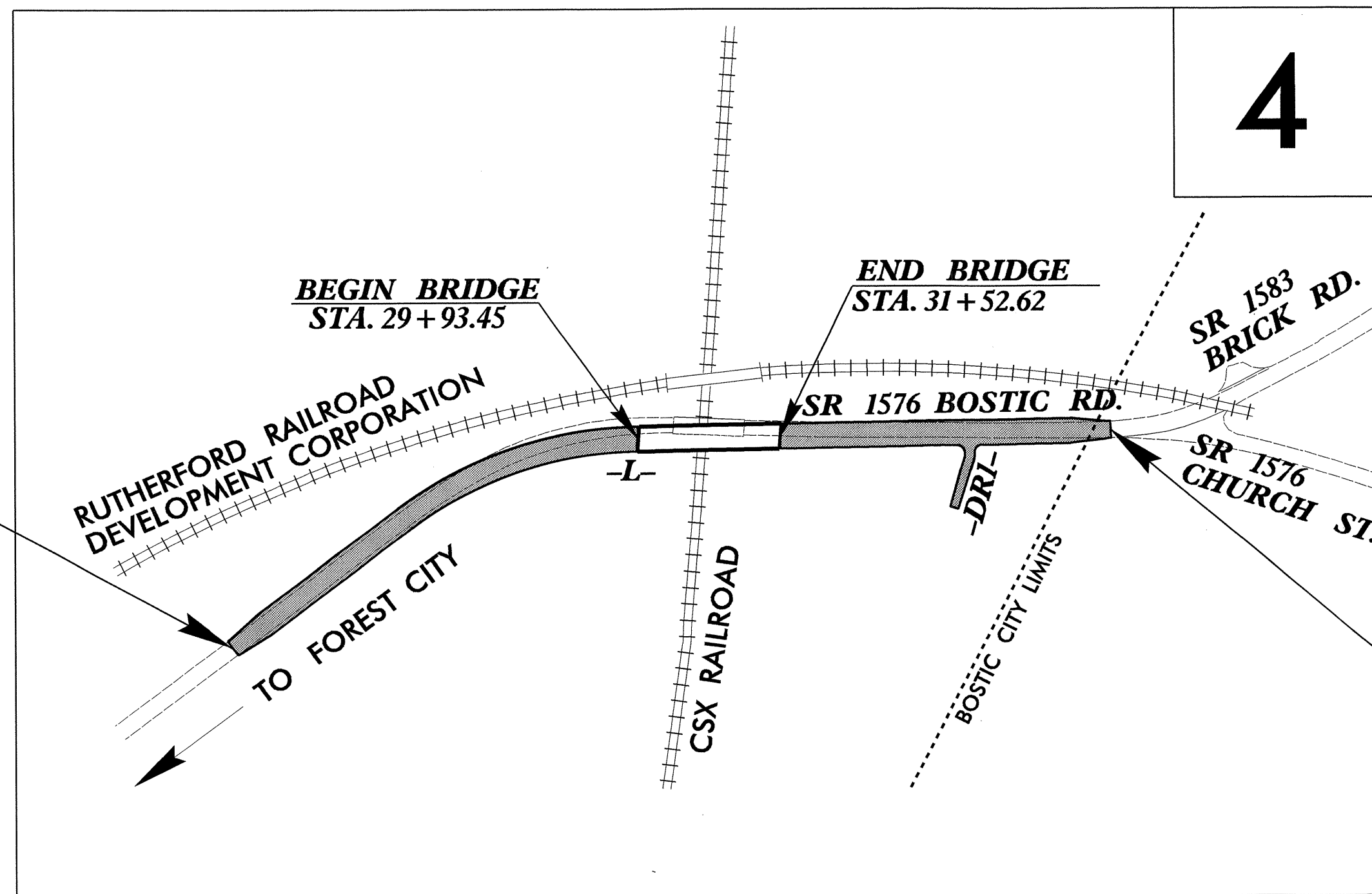
STA 24+15.00
-L- BEGIN TIP PROJECT B-4632

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

RUTHERFORD COUNTY

LOCATION: BRIDGE NO. 69 OVER CSX RAILROAD ON
SR 1576

TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND STRUCTURE



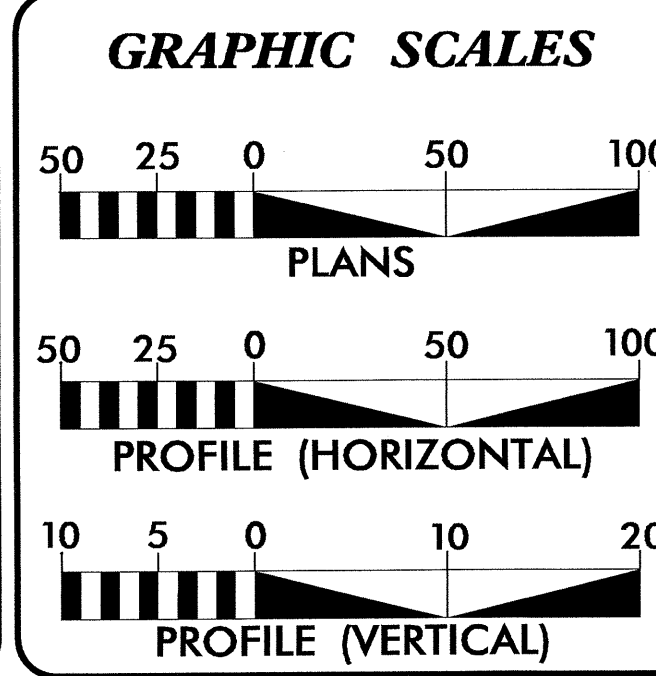
STA. 35+70.00
-L- END TIP PROJECT B-4632

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4632	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33806.1.1	BRSTP-1576(1)	P.E.	
33806.2.1	BRSTP-1576(1)	ROW/UTIL.	
33806.3.1	BRSTP-1576(1)	CONST.	

TIP PROJECT: B-4632

CONTRACT: C203004

** DESIGN EXCEPTION REQUIRED FOR THE DESIGN SPEED FROM 50 MPH TO 35 MPH.



DESIGN DATA

ADT 2012 =	3,470
ADT 2032 =	4,949
DHV =	10 %
D =	60 %
T =	4 % *
V =	50 MPH**

*(TTST 1% + DUAL 3%)
FUNC. CLASS = RURAL COLLECTOR
SUBREGIONAL TIER

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-4632	=	0.189 MILES
LENGTH OF STRUCTURE TIP PROJECT B-4632	=	0.030 MILES
TOTAL LENGTH STATE TIP PROJECT B-4632	=	0.219 MILES

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

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
OCTOBER 4, 2010

LETTING DATE:
OCTOBER 16, 2012

G. E. BREW, P.E.
PROJECT ENGINEER

THAD F. DUNCAN, P.E.
PROJECT DESIGN ENGINEER

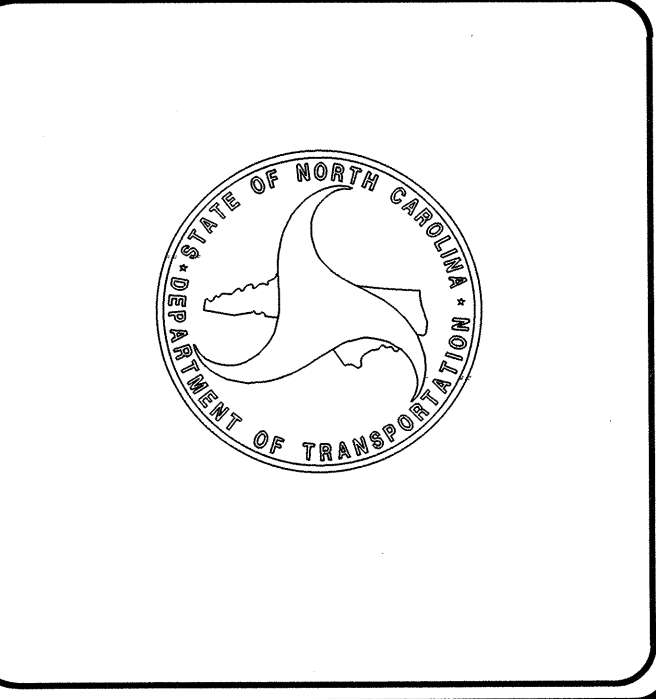
HYDRAULICS ENGINEER

Karen H. Sullidge 7/10/12
SIGNATURE: _____

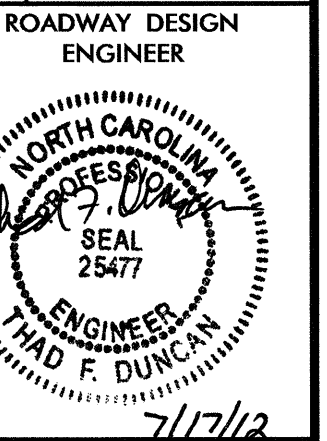
ROADWAY DESIGN ENGINEER

Thad F. Duncan 7/17/12
SIGNATURE: _____

Professional Engineer Seals for Karen H. Sullidge (Seal 31025) and Thad F. Duncan (Seal 25477).



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R:\Roadway\Project\B4632_rdy_tsh.dgn
\$\$\$\$\$USERNAME\$\$\$\$\$



SHEET NUMBER	SHEET
1	TITLE SHEET
1-A	INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS
1-B	CONVENTIONAL SYMBOLS
1-C THRU 1-D	SURVEY CONTROL SHEET
2	PAVEMENT SCHEDULE, TYPICAL SECTIONS, AND WEDGING DETAILS
3	SUMMARY OF QUANTITIES
3-A	SUMMARY OF DRAINAGE QUANTITIES
3-B	SUMMARY OF GUARDRAIL, EARTHWORK SUMMARY, AND ASPHALT PAVEMENT REMOVAL/BREAKUP SUMMARY
4	PLAN SHEET
5	PROFILE SHEET
TMP-1 THRU TMP-4	TRANSPORTATION MANAGEMENT PLANS
PMP-1 THRU PMP-3	PAVEMENT MARKING PLANS
EC-1 THRU EC-5	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-2	SIGNING PLANS
UO-1 THRU UO-2	UTILITIES BY OTHERS
X-1 THRU X-7	CROSS-SECTIONS
S-1 THRU S-34	STRUCTURE PLANS

GENERAL NOTES:

2012 SPECIFICATIONS
EFFECTIVE: 01-17-12
REVISED: 11/01/11

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.

UNDERDRAINS:

UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.03 AT LOCATIONS DIRECTED BY THE ENGINEER.

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 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 AT&T (Telephone) and Rutherford EMC (Power).

RIGHT-OF-WAY MARKERS:

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

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 Super-elevation - Two Lane Pavement
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
310.10	Driveway Pipe Construction
DIVISION 4 - MAJOR STRUCTURES	
422.11	Reinforced Bridge Approach Fills - Sub Regional Tier
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Super-elevated Curve - Method I
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 - INCIDENTALS	
806.01	Concrete Right-of-Way Marker
806.02	Granite Right-of-Way Marker
815.03	Pipe Underdrain and Blind Drain
840.00	Concrete Base Pad for Drainage Structures
840.18	Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.27	Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.29	Frames and Narrow Slot Flat Grates
840.35	Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and Grates
840.46	Traffic Bearing Precast Drainage Structure
840.66	Drainage Structure Steps
846.01	Concrete Curb, Gutter and Curb & Gutter
846.04	Drop Inlet Installation in Shoulder Berm Gutter
862.01	Guardrail Placement
862.02	Guardrail Installation
862.03	Structure Anchor Units
862.04	Anchoring End of Guardrail - B-77 and B-83 Anchor Units
876.02	Guide for Rip Rap at Pipe Outlets

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

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
Property Corner	-----
Property Monument	□ ECM
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-

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or UG 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	○
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 Marker	-----
Existing Control of Access	⊗
Proposed Control of Access	⊗
Existing Easement Line	-E-
Proposed Temporary Construction Easement	E
Proposed Temporary Drainage Easement	TDE
Proposed Permanent Drainage Easement	PDE
Proposed Permanent Drainage / Utility Easement	DUE
Proposed Permanent Utility Easement	PUE
Proposed Temporary Utility Easement	TUE
Proposed Permanent Easement with Iron Pin and Cap Marker	◆

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	-C-
Proposed Slope Stakes Fill	-F-
Proposed Wheel Chair Ramp	WCR
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	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	⊗
UG Power Cable Hand Hole	PH
H-Frame Pole	●
Recorded U/G Power Line	P
Designated U/G Power Line (S.U.E.*)	P

TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	⊕
Telephone Booth	⊕
Telephone Pedestal	⊕
Telephone Cell Tower	⊕
UG Telephone Cable Hand Hole	PH
Recorded U/G Telephone Cable	T
Designated U/G Telephone Cable (S.U.E.*)	T
Recorded U/G Telephone Conduit	TC
Designated U/G Telephone Conduit (S.U.E.*)	TC
Recorded U/G Fiber Optics Cable	T FO
Designated U/G Fiber Optics Cable (S.U.E.*)	T FO

WATER:

Water Manhole	⊕
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
Recorded U/G Water Line	W
Designated U/G Water Line (S.U.E.*)	W
Above Ground Water Line	A/G Water

TV:

TV Satellite Dish	⊕
TV Pedestal	⊕
TV Tower	⊗
UG TV Cable Hand Hole	PH
Recorded U/G TV Cable	TV
Designated U/G TV Cable (S.U.E.*)	TV
Recorded U/G Fiber Optic Cable	TV FO
Designated U/G Fiber Optic Cable (S.U.E.*)	TV FO

GAS:

Gas Valve	◇
Gas Meter	◇
Recorded U/G Gas Line	G
Designated U/G Gas Line (S.U.E.*)	G
Above Ground Gas Line	A/G Gas

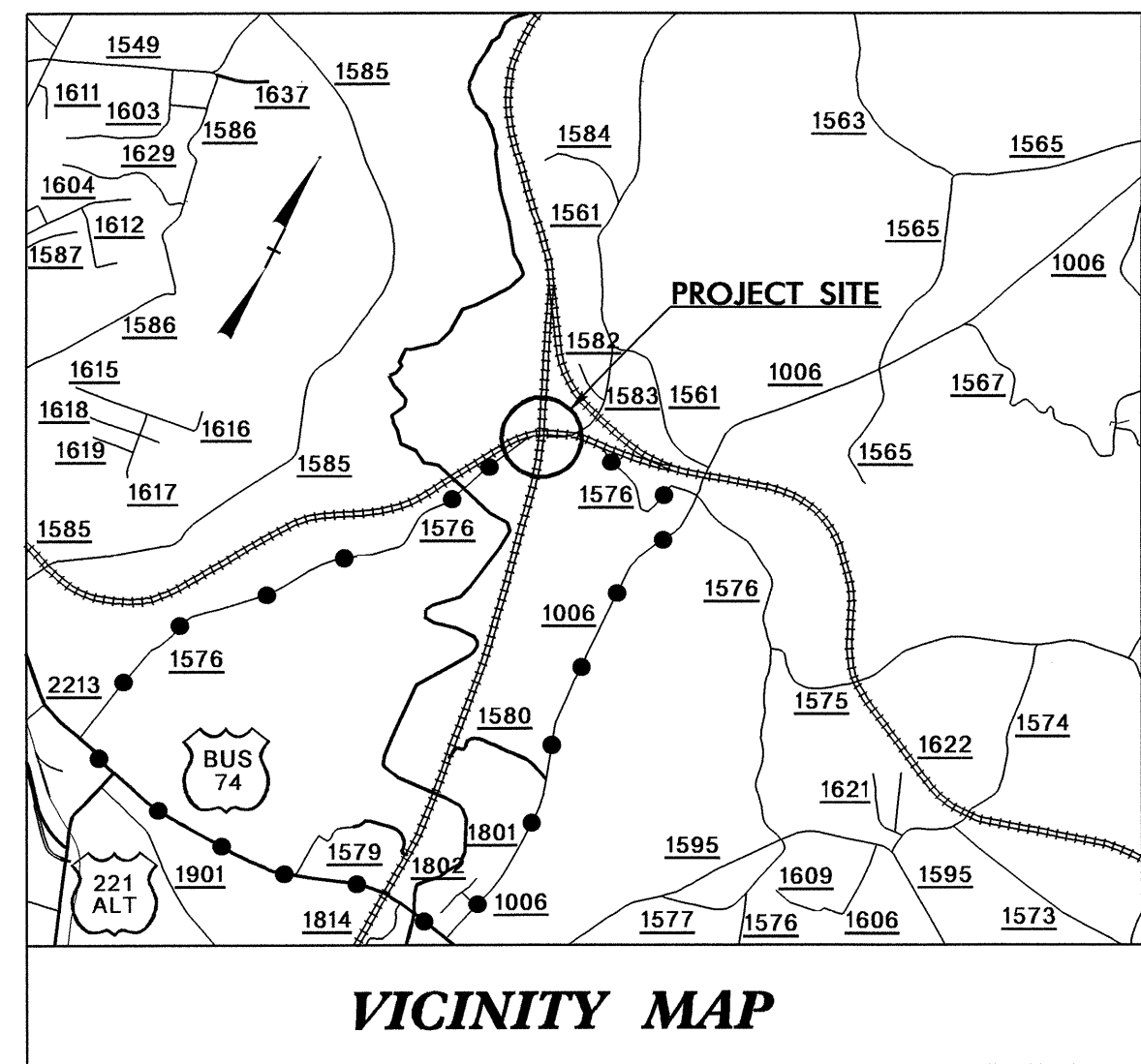
SANITARY SEWER:

Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
UG Sanitary Sewer Line	SS
Above Ground Sanitary Sewer	A/G Sanitary Sewer
Recorded SS Forced Main Line	FSS
Designated SS Forced Main Line (S.U.E.*)	FSS

MISCELLANEOUS:

Utility Pole	●
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	⊕
Utility Unknown U/G Line	UTIL
UG Tank; Water, Gas, Oil	□
A/G Tank; Water, Gas, Oil	□
UG Test Hole (S.U.E.*)	⊕
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

SURVEY CONTROL SHEET B-4632

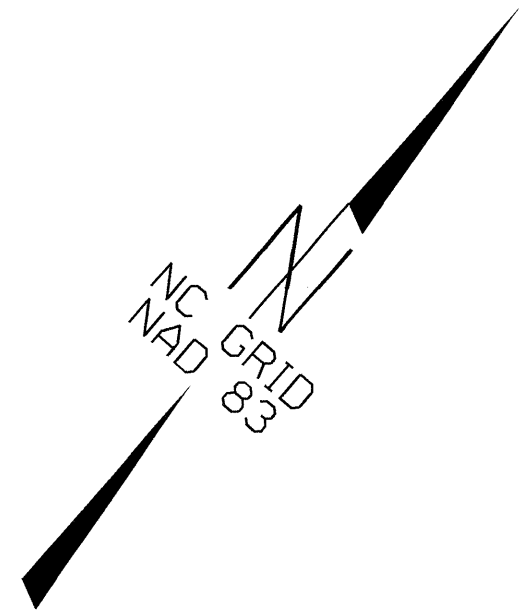


BL POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
3	BL-3	597382.4920	1150753.1070	881.47	20+39.48	18.21 LT
4	BL-4	597926.6340	1151030.9450	867.58	26+50.44	22.35 LT
5	BL-5	598154.5170	1151282.8140	877.44	29+89.62	0.21 RT
GPS1	B4632-1	598518.0490	1151939.8090	886.16	37+39.97	14.56 RT

 BM1 ELEVATION = 883.68
 N 597451 E 1150864
 L STATION 21+51.00 49 RIGHT
 RR SPIKE IN BASE OF 8 INCH PINE

 BM2 ELEVATION = 882.57
 N 598372 E 1151417
 L STATION 32+07.00 134 LEFT
 RR SPIKE IN BASE OF 18 INCH PINE

 BM3 ELEVATION = 889.87
 N 598707 E 1151988
 L STATION 39+23.00 51 LEFT
 RR SPIKE IN BASE OF 24 INCH OAK

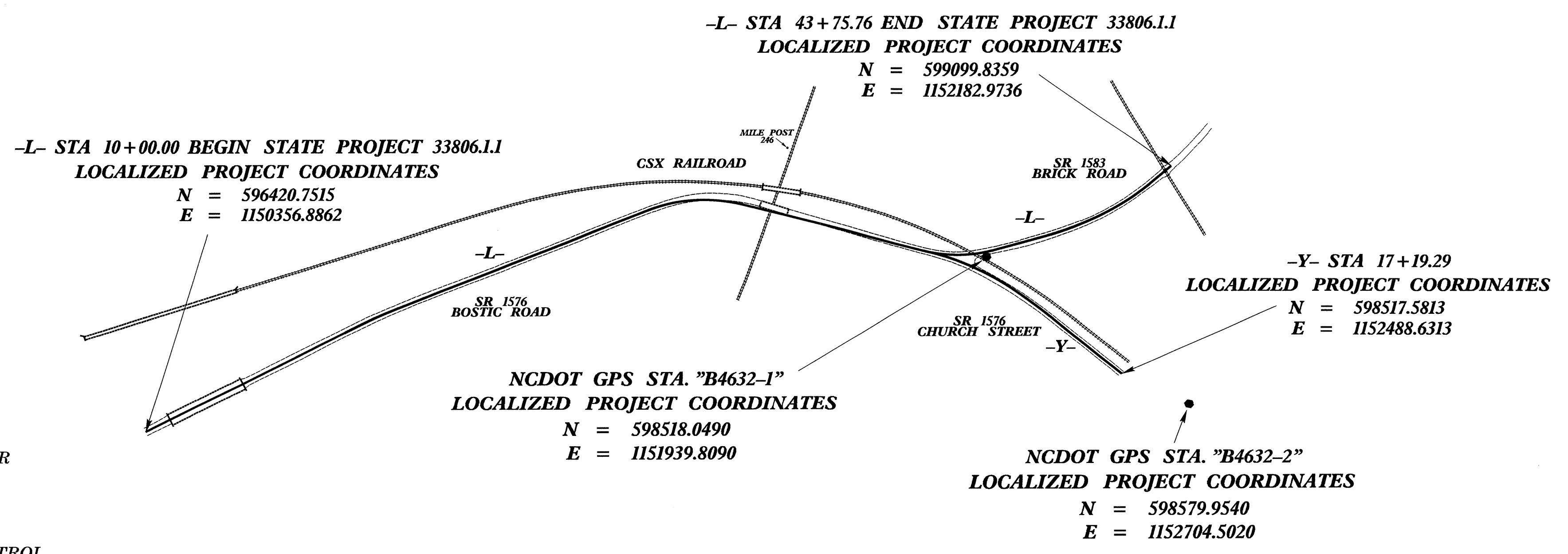


DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "B4632-1" WITH NAD 83 STATE PLANE GRID COORDINATES OF NORTHING: 598518.0490(fft) EASTING: 1151939.8090(fft) ELEVATION: 886.16(fft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99983696 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B4632-1" TO -L- STATION 10+00.00 IS S 37°02'36" W 2627.60' ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

NOTES:

- THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTP://WWW.NCDOT.ORG/DOH/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT/](http://www.ncdot.org/DOH/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT/)
 THE FILES TO BE FOUND ARE AS FOLLOWS:
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 PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.
 NETWORK ESTABLISHED FROM NGS ONLINE POSITIONING SERVICE (OPUS)



NOTE: DRAWING NOT TO SCALE

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SURVEY CONTROL SHEET B-4632 -L- & -Y- DESIGN ALIGNMENTS FINAL RW PLANS

L			
TYPE	STATION	NORTH	EAST
POT	10+00.00	596420.7515	1150356.8862
PC	16+81.76	597052.9067	1150612.1761
PT	18+62.35	597216.8992	1150687.6522
PC	26+79.08	597941.7635	1151063.9776
PT	29+82.55	598151.5278	1151276.4111
PC	35+52.18	598407.5818	1151785.2436
PT	37+62.54	598545.2011	1151941.2839
PC	39+38.78	598691.4995	1152039.5596
PT	42+92.39	599017.6026	1152169.2404
POT	43+75.76	599099.8359	1152182.9736

Y			
TYPE	STATION	NORTH	EAST
POT	10+00.00	598407.5818	1151785.2436
PC	10+19.86	598416.5091	1151802.9841
PCC	13+06.85	598497.2733	1152076.7748
PT	14+36.74	598506.7365	1152206.2913
POT	17+19.29	598517.5813	1152488.6313

SURVEY CONTROL SHEET B-4632 -L- & -Y- RW & PERMANENT EASEMENT POINTS FINAL RW PLANS

DATUM DESCRIPTION

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THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99983696

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B4632-1" TO -L- STATION 10+00.00 IS
S 37°02'36" W 2627.60'

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

ROW MARKER CONCRETE OR GRANITE-E				
ALIGN	STATION	OFFSET	NORTH	EAST
L	24+15.00	-30.00	597721.2074	1150915.6701
L	24+15.00	-17.82	597715.5954	1150926.4796
L	24+15.00	18.18	597699.0077	1150958.4303
L	24+15.01	28.37	597694.3210	1150967.4767
L	24+39.62	-47.59	597751.1612	1150911.4066
L	24+50.00	-55.00	597763.7898	1150909.6091
L	24+57.00	44.00	597724.3862	1151000.6989
L	24+95.95	-54.40	597804.2905	1150931.3143
L	25+19.49	-82.76	597838.2551	1150916.9964
L	25+95.00	57.00	597840.8738	1151075.8230
L	26+39.86	-52.51	597931.1440	1150999.2980
L	26+92.00	-52.00	597978.3270	1151024.5844
L	27+35.00	-40.00	598012.1893	1151059.3979
L	27+78.00	-44.00	598052.0777	1151084.0263
L	28+13.00	50.00	598016.3839	1151177.6202
L	28+87.00	-42.00	598133.5668	1151169.9649
L	29+55.01	76.89	598071.8462	1151290.5773
L	29+72.59	-45.57	598187.2285	1151246.2392
L	31+60.30	79.51	598160.3986	1151470.9270
L	31+73.28	-55.36	598286.7134	1151421.8974
L	32+10.00	80.00	598182.3052	1151515.5429
L	34+60.00	-40.00	598401.8762	1151684.9200
L	34+66.00	43.00	598330.4315	1151727.5892
L	35+70.00	-17.56	598431.2596	1151792.4160
L	35+70.00	-40.00	598450.8509	1151781.4657

NOTES:

1. THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
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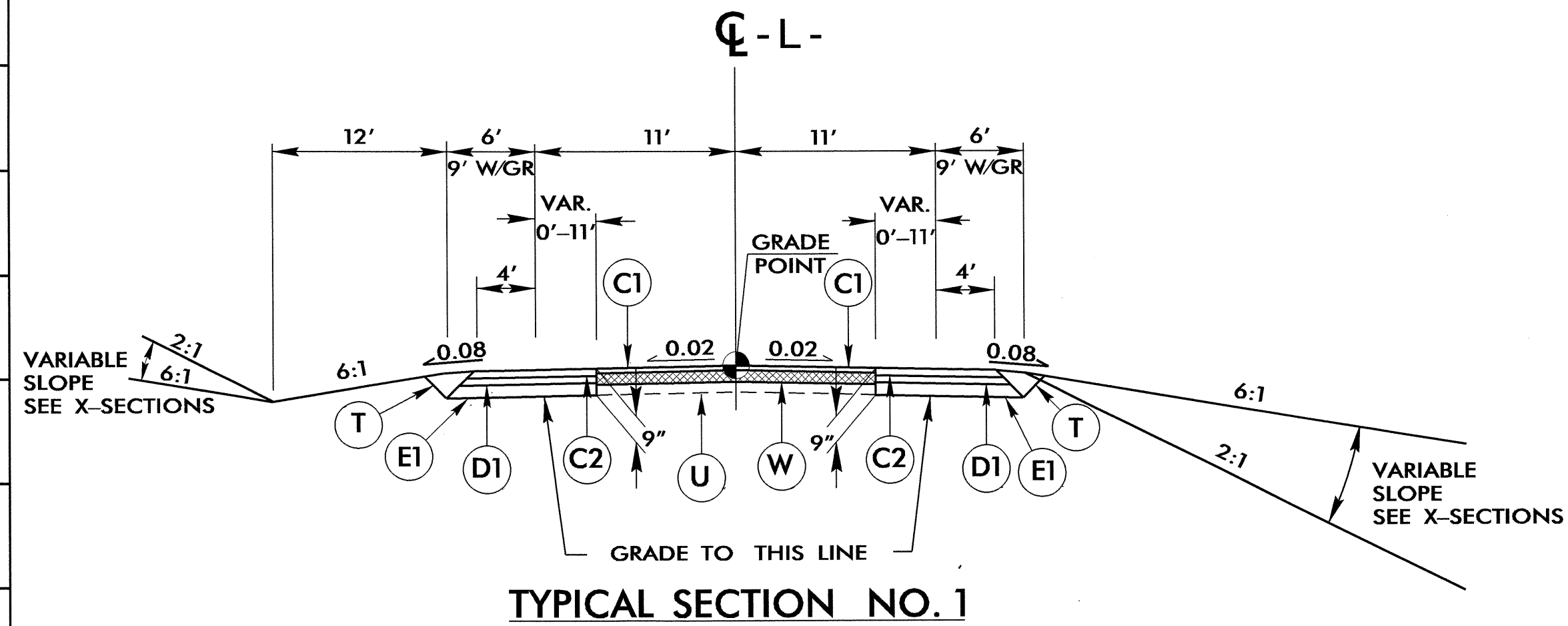
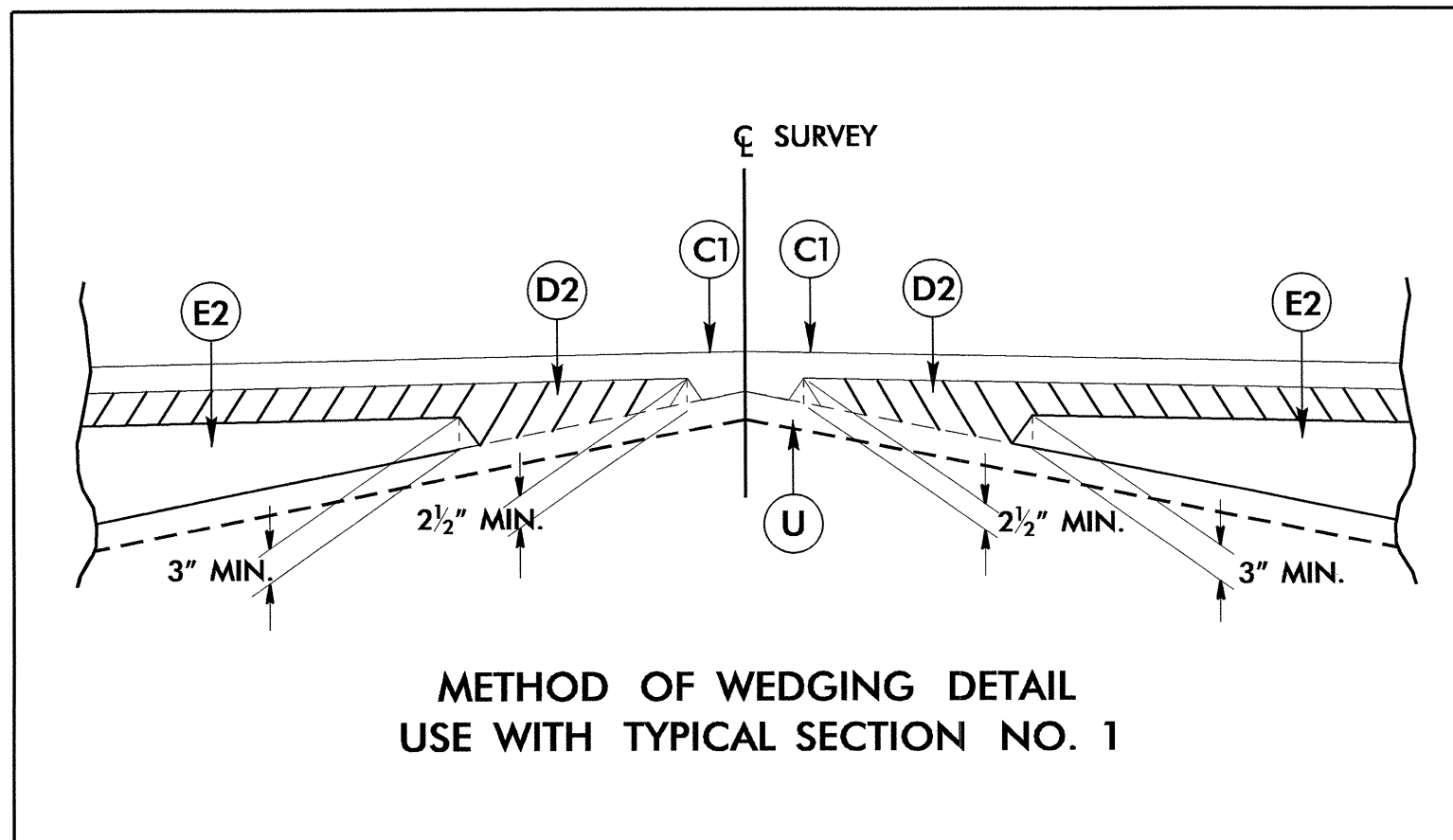
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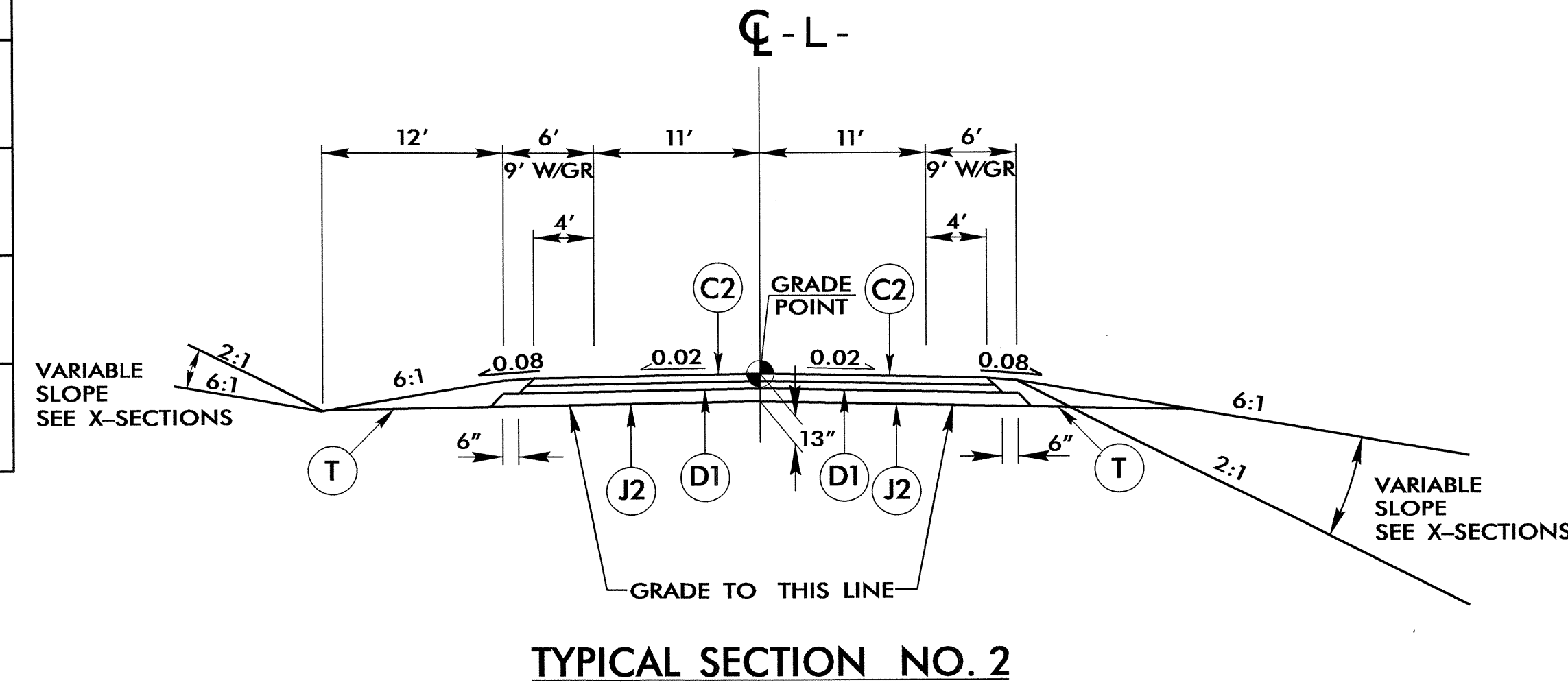
6/2/09

PAVEMENT SCHEDULE (FINAL PAVEMENT DESIGN)	
C1	PROP. APPROX. 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
C2	PROP. APPROX. 2 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 1 1/2" IN DEPTH.
D1	PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2 1/2" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 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 5 1/2" IN DEPTH.
J1	PROP. 6" AGGREGATE BASE COURSE.
J2	PROP. 8" AGGREGATE BASE COURSE.
P	PRIME COAT AT THE RATE OF 0.35 GAL PER SQ. YD.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAIL)

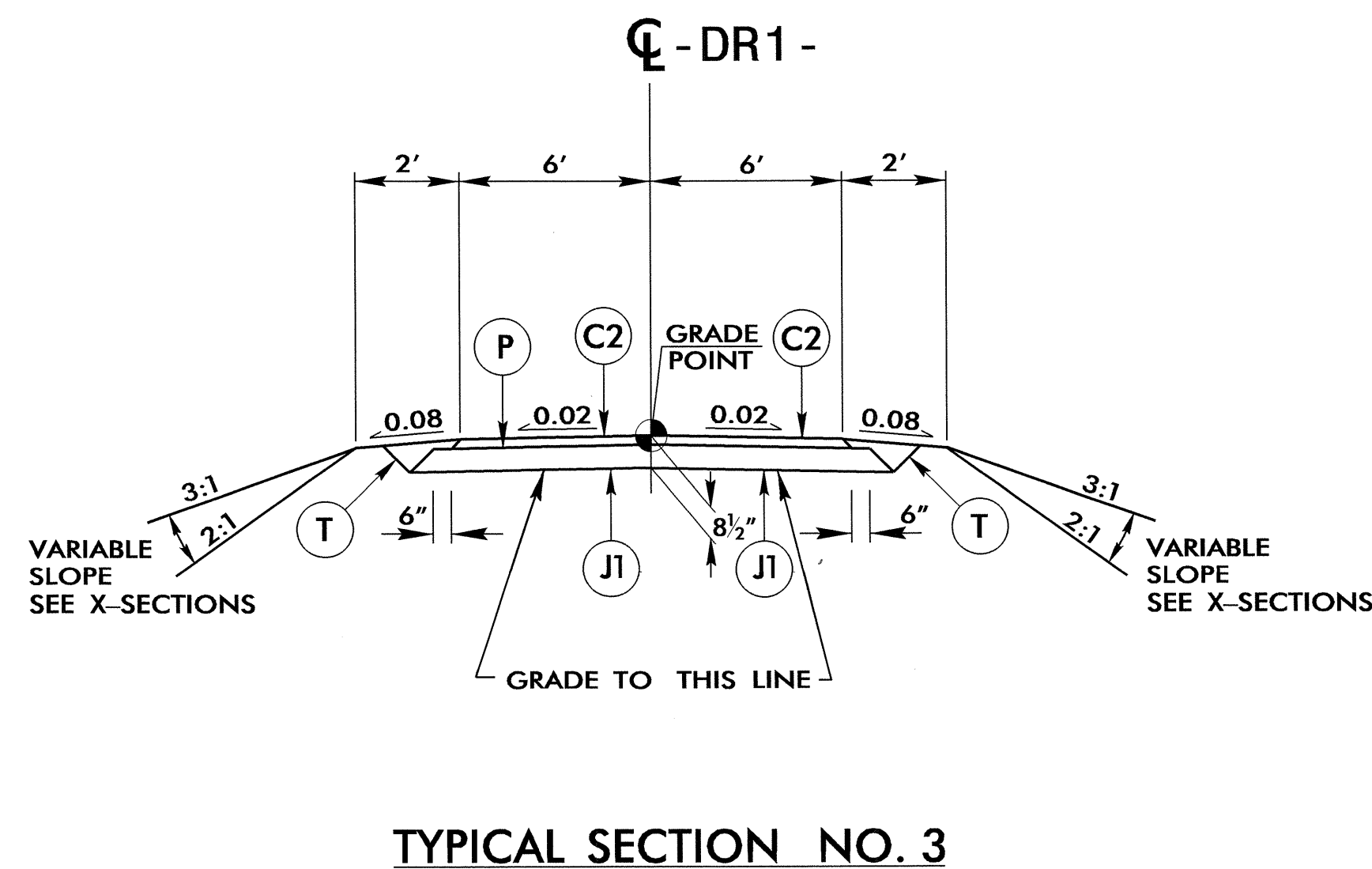
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



USE TYPICAL SECTION NO. 1
 STA. 24+15.00 TO STA. 24+65.00 TRANSITION FROM EXIST.
 STA. 24+65.00 TO STA. 25+00.00
 STA. 34+75.00 TO STA. 35+20.00
 STA. 35+20.00 TO STA. 35+70.00 TRANSITION TO EXIST.



USE TYPICAL SECTION NO. 2
 STA. 25+00.00 TO STA. 29+93.45 (BEGIN BRIDGE)
 STA. 31+52.62 (END BRIDGE) TO STA. 34+75.00



USE TYPICAL SECTION NO. 3
 STA. 10+15.00 TO STA. 10+95.00

PROJECT REFERENCE NO. B-4632	SHEET NO. 2
ROADWAY DESIGN ENGINEER HAD F. DUNCAN 7/17/12	PAVEMENT DESIGN ENGINEER CLARK S. MORRISON 7/18/12

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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C203004

ItemNumber	Sec #	Quantity	Unit	Description
000100000-N	800	Lump Sum		MOBILIZATION
003000000-N	SP	Lump Sum		BRIDGE APPROACH FILL - SUB REGIONAL TIER, STATION ***** (30+66.99)
004300000-N	226	Lump Sum		GRADING
005000000-E	226	1	ACR	SUPPLEMENTARY CLEARING & GRUBBING
005700000-E	226	150	CY	UNDERCUT EXCAVATION
013400000-E	240	42	CY	DRAINAGE DITCH EXCAVATION
019500000-E	265	100	CY	SELECT GRANULAR MATERIAL
019600000-E	270	200	SY	GEOTEXTILE FOR SOIL STABILIZATION
031800000-E	300	40	TON	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES
032000000-E	300	120	SY	FOUNDATION CONDITIONING GEOTEXTILE
033520000-E	305	104	LF	15" DRAINAGE PIPE
033530000-E	305	96	LF	18" DRAINAGE PIPE
033550000-E	305	88	LF	30" DRAINAGE PIPE
033585000-E	305	6	EA	*** DRAINAGE PIPE ELBOWS (15")
034300000-E	310	56	LF	15" SIDE DRAIN PIPE
099500000-E	340	100	LF	PIPE REMOVAL
109950000-E	505	70	CY	SHALLOW UNDERCUT
109970000-E	505	125	TON	CLASS IV SUBGRADE STABILIZATION
112100000-E	520	1,446	TON	AGGREGATE BASE COURSE
122000000-E	545	50	TON	INCIDENTAL STONE BASE
127500000-E	600	40.25	GAL	PRIME COAT
148900000-E	610	45	TON	ASPHALT CONC BASE COURSE, TYPE B25.0B
149800000-E	610	560	TON	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B
152500000-E	610	440	TON	ASPHALT CONC SURFACE COURSE, TYPE SF9.5A

Summary of Quantities - B-4632

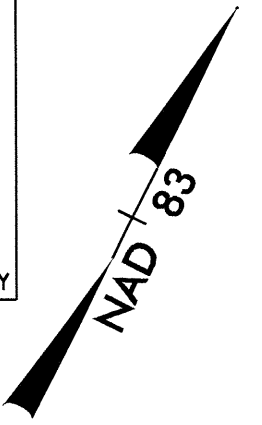
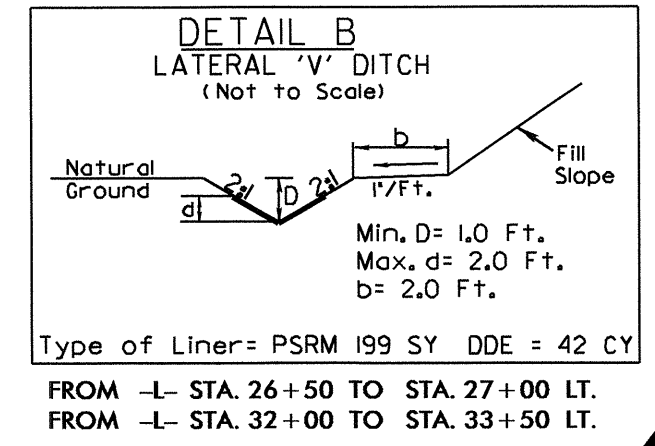
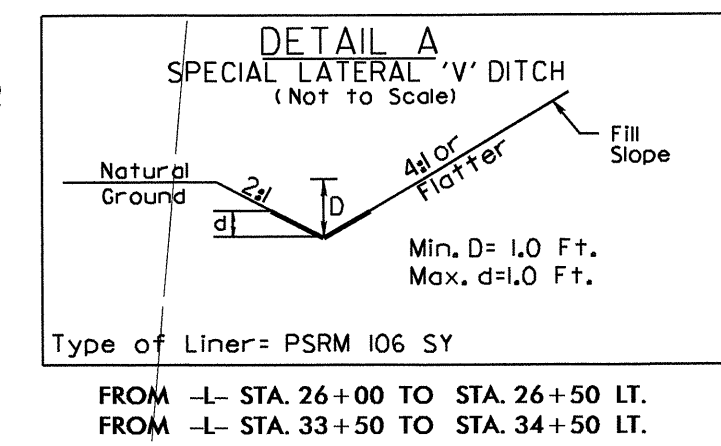
ItemNumber	Sec #	Quantity	Unit	Description
157500000-E	620	60	TON	ASPHALT BINDER FOR PLANT MIX
169300000-E	654	10	TON	ASPHALT PLANT MIX, PAVEMENT REPAIR
200000000-N	806	27	EA	RIGHT OF WAY MARKERS
202200000-E	815	22.4	CY	SUBDRAIN EXCAVATION
203300000-E	815	16.8	CY	SUBDRAIN FINE AGGREGATE
204400000-E	815	100	LF	6" PERFORATED SUBDRAIN PIPE
207000000-N	815	1	EA	SUBDRAIN PIPE OUTLET
207700000-E	815	6	LF	6" OUTLET PIPE
228600000-N	840	4	EA	MASONRY DRAINAGE STRUCTURES
236700000-N	840	4	EA	FRAME WITH TWO GRATES, STD 840.29
255600000-E	846	480	LF	SHOULDER BERM GUTTER
303000000-E	862	987.5	LF	STEEL BM GUARDRAIL
315000000-N	862	5	EA	ADDITIONAL GUARDRAIL POSTS
327000000-N	SP	3	EA	GUARDRAIL ANCHOR UNITS, TYPE 350
328500000-N	SP	1	EA	GUARDRAIL ANCHOR UNITS, TYPE M-350
331700000-N	862	4	EA	GUARDRAIL ANCHOR UNITS, TYPE B-77
336000000-E	863	114	LF	REMOVE EXISTING GUARDRAIL
362800000-E	876	7	TON	RIP RAP, CLASS 1
364900000-E	876	5	TON	RIP RAP, CLASS B
365600000-E	876	875	SY	GEOTEXTILE FOR DRAINAGE
407200000-E	903	14	LF	SUPPORTS, 3-LB STEEL U-CHANNEL
410200000-N	904	1	EA	SIGN ERECTION, TYPE E
411610000-N	904	1	EA	SIGN ERECTION, RELOCATE, TYPE **** (GROUND MOUNTED) (E)
415500000-N	907	10	EA	DISPOSAL OF SIGN SYSTEM, U-CHANNEL
419200000-N	907	1	EA	DISPOSAL OF SUPPORT, U-CHANNEL
440000000-E	1110	642	SF	WORK ZONE SIGNS (STATIONARY)

ItemNumber	Sec #	Quantity	Unit	Description
441000000-E	1110	104	SF	WORK ZONE SIGNS (BARRICADE MOUNTED)
443000000-N	1130	38	EA	DRUMS
444500000-E	1145	96	LF	BARRICADES (TYPE III)
481000000-E	1205	9,240	LF	PAINT PAVEMENT MARKING LINES (4")
483000000-E	1205	88	LF	PAINT PAVEMENT MARKING LINES (16")
483500000-E	1205	44	LF	PAINT PAVEMENT MARKING LINES (24")
484000000-N	1205	4	EA	PAINT PAVEMENT MARKING CHARACTER
600000000-E	1605	1,950	LF	TEMPORARY SILT FENCE
606000000-E	1610	300	TON	STONE FOR EROSION CONTROL, CLASS A
609000000-E	1610	225	TON	STONE FOR EROSION CONTROL, CLASS B
601200000-E	1610	160	TON	SEDIMENT CONTROL STONE
601500000-E	1615	1.5	ACR	TEMPORARY MULCHING
601800000-E	1620	50	LB	SEED FOR TEMPORARY SEEDING
602100000-E	1620	1.25	TON	FERTILIZER FOR TEMPORARY SEEDING
602400000-E	1622	260	LF	TEMPORARY SLOPE DRAINS
603000000-E	1630	500	CY	SILT EXCAVATION
603600000-E	1631	3,000	SY	MATting FOR EROSION CONTROL
603700000-E	SP	10	SY	COIR FIBER MAT
603800000-E	SP	305	SY	PERMANENT SOIL REINFORCEMENT MAT
604200000-E	1632	280	LF	1/4" HARDWARE CLOTH
607101000-E	SP	230	LF	WATTLE
607102000-E	SP	60	LB	POLYACRYLAMIDE (PAM)
607103000-E	1640	350	LF	COIR FIBER BAFFLE
607105000-E	SP	1	EA	*** SKIMMER (1-1/2")
608400000-E	1660	1	ACR	SEEDING & MULCHING

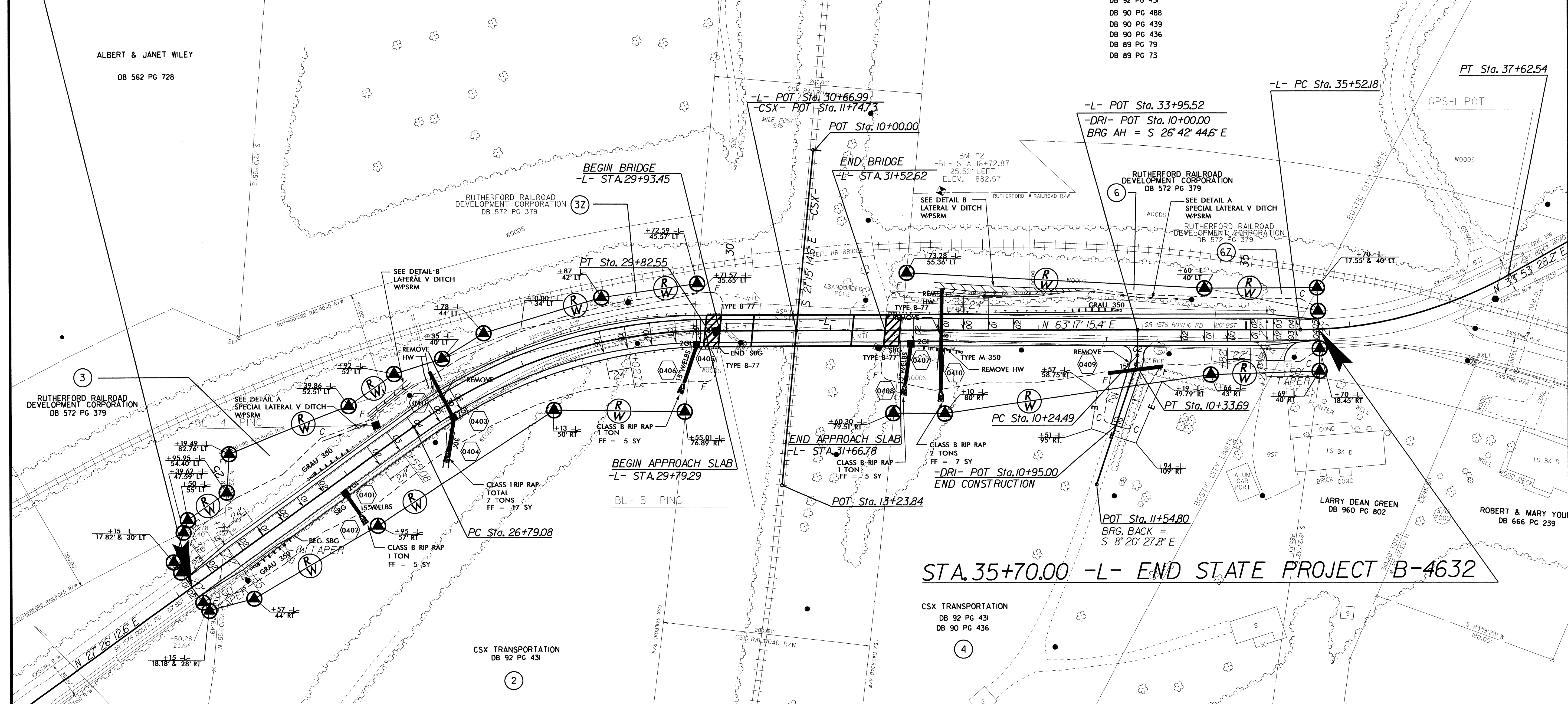
ItemNumber	Sec #	Quantity	Unit	Description
608700000-E	1660	0.6	ACR	MOWING
609000000-E	1661	50	LB	SEED FOR REPAIR SEEDING
609300000-E	1661	0.25	TON	FERTILIZER FOR REPAIR SEEDING
609600000-E	1662	50	LB	SEED FOR SUPPLEMENTAL SEEDING
610800000-E	1665	1.25	TON	FERTILIZER TOPDRESSING
611450000-N	1667	10	MHR	SPECIALIZED HAND MOWING
611700000-N	SP	18	EA	RESPONSE FOR EROSION CONTROL

-L-
 PI Sta 28+35.97 Δ = 35° 51' 02.8" (RT) L = 303.47' T = 156.89' R = 485.00' SE = 0.06 RO = 144'
 PI Sta 36+59.73 Δ = 29° 23' 47.2" (LT) L = 210.36' T = 107.55' R = 410.00' RO = SEE PLANS

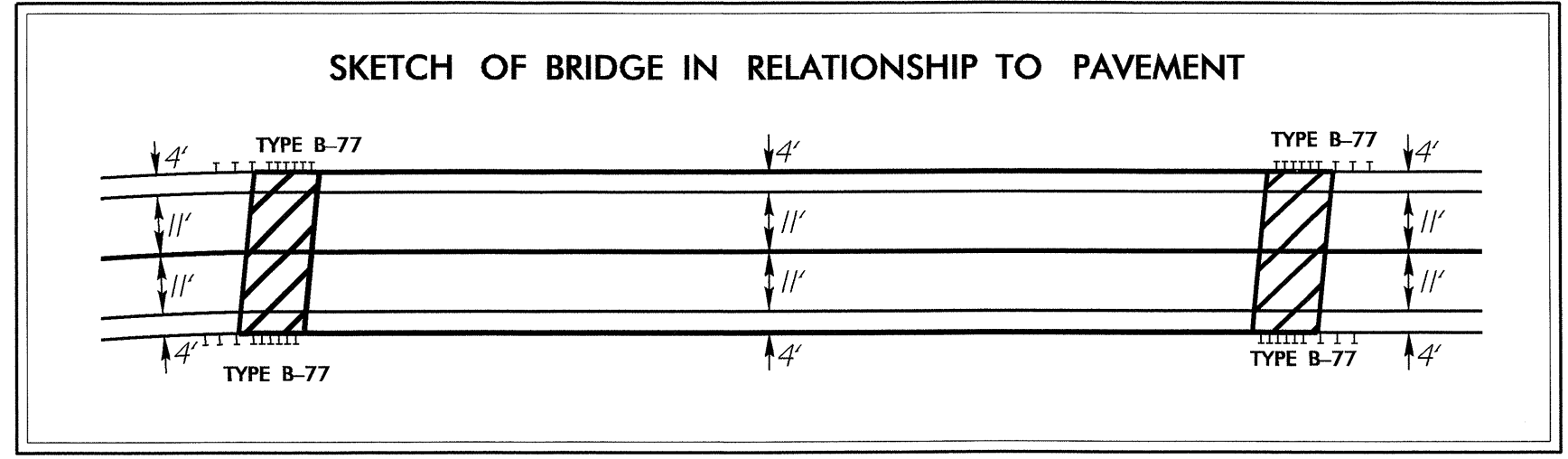
-DRI-
 PI Sta 10+29.13 Δ = 17° 35' 01.7" (RT) L = 190° 59' 09.4" T = 9.21' R = 4.64' R = 30.00'



STA. 24+15.00 -L- BEGIN STATE PROJECT B-4632



- CSX TRANSPORTATION
- DB 96 PG 1
 - DB 95 PG 553
 - DB 92 PG 435
 - DB 92 PG 431
 - DB 90 PG 488
 - DB 90 PG 439
 - DB 90 PG 436
 - DB 89 PG 79
 - DB 89 PG 73

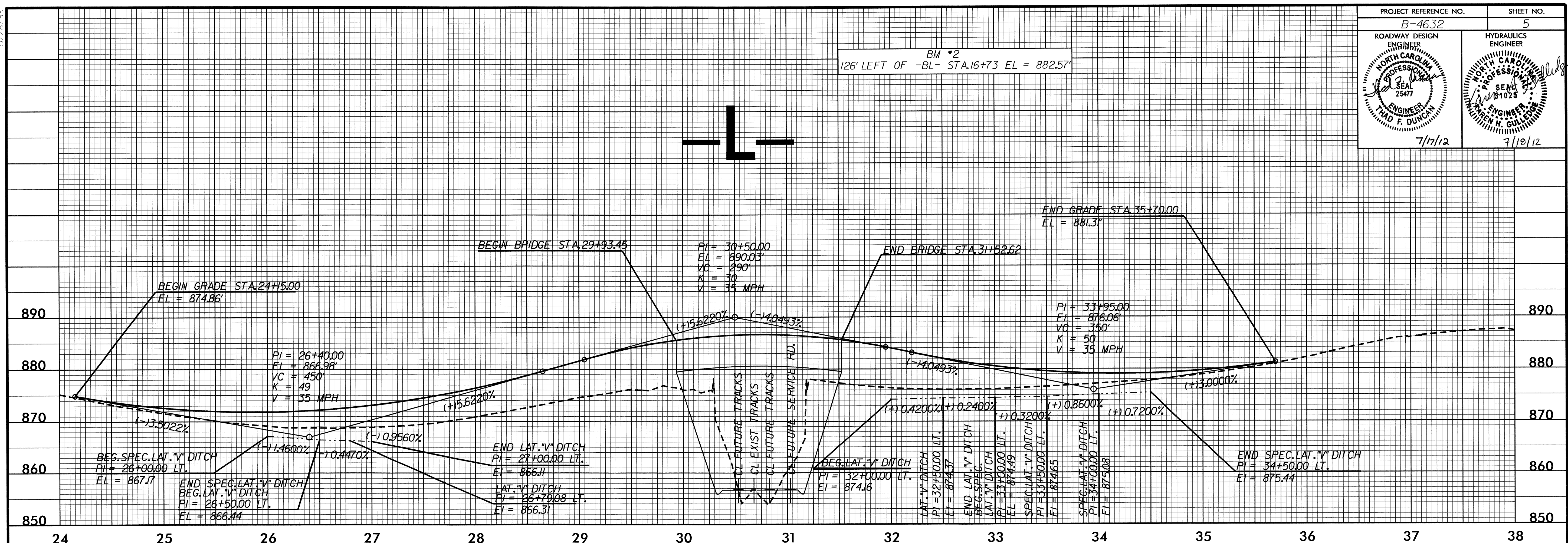


STA. 35+70.00 -L- END STATE PROJECT B-4632

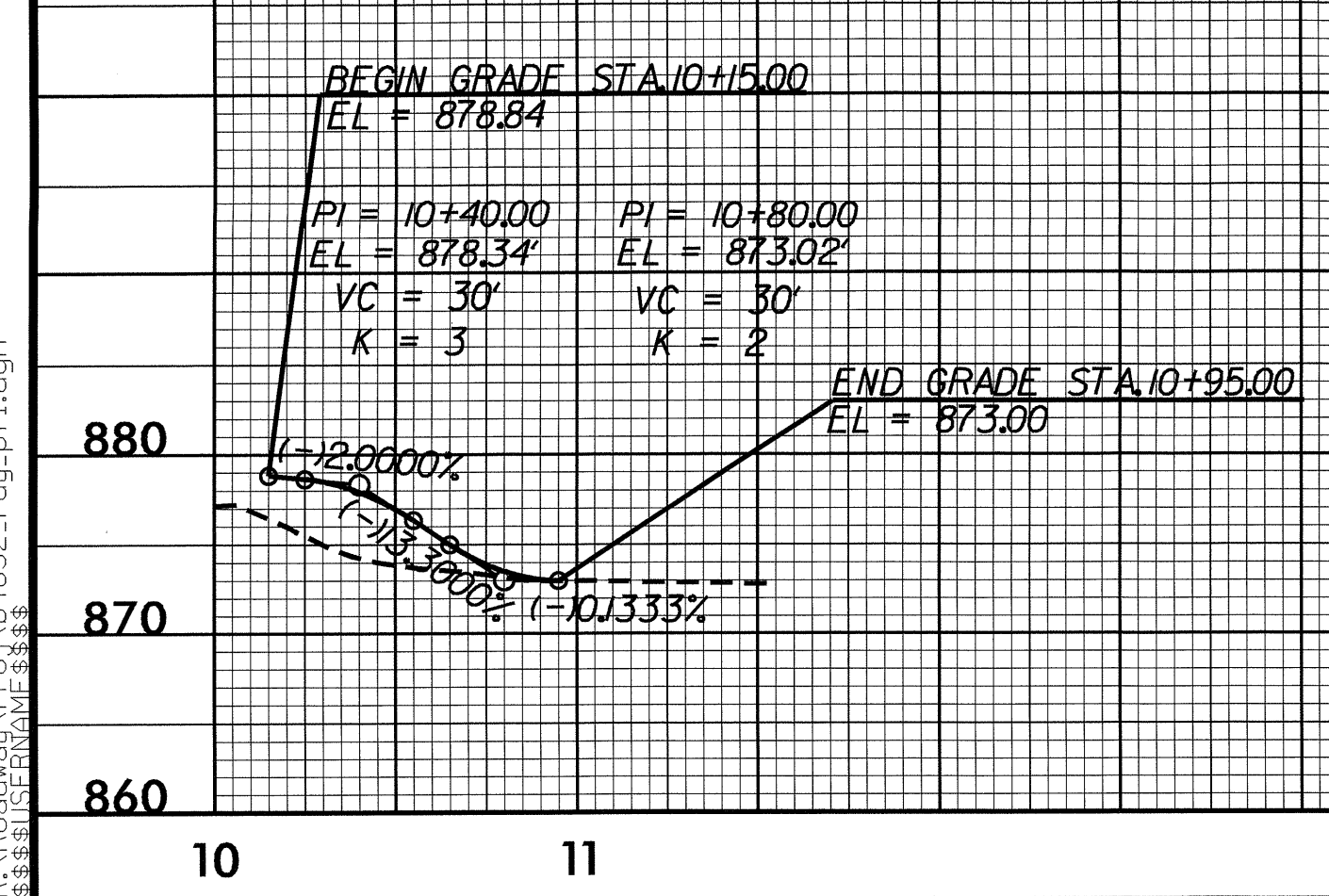
SBG: SHOULDER BERM GUTTER
 -L- STA. 25+24 TO BEGIN BRIDGE RT.
 END BRIDGE TO -L- STA. 31+63 RT.

FOR -L- PROFILE SEE SHEET 5
 FOR -DRI- PROFILE SEE SHEET 5
 FOR STRUCTURE SEE SHEETS S10 S34

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