

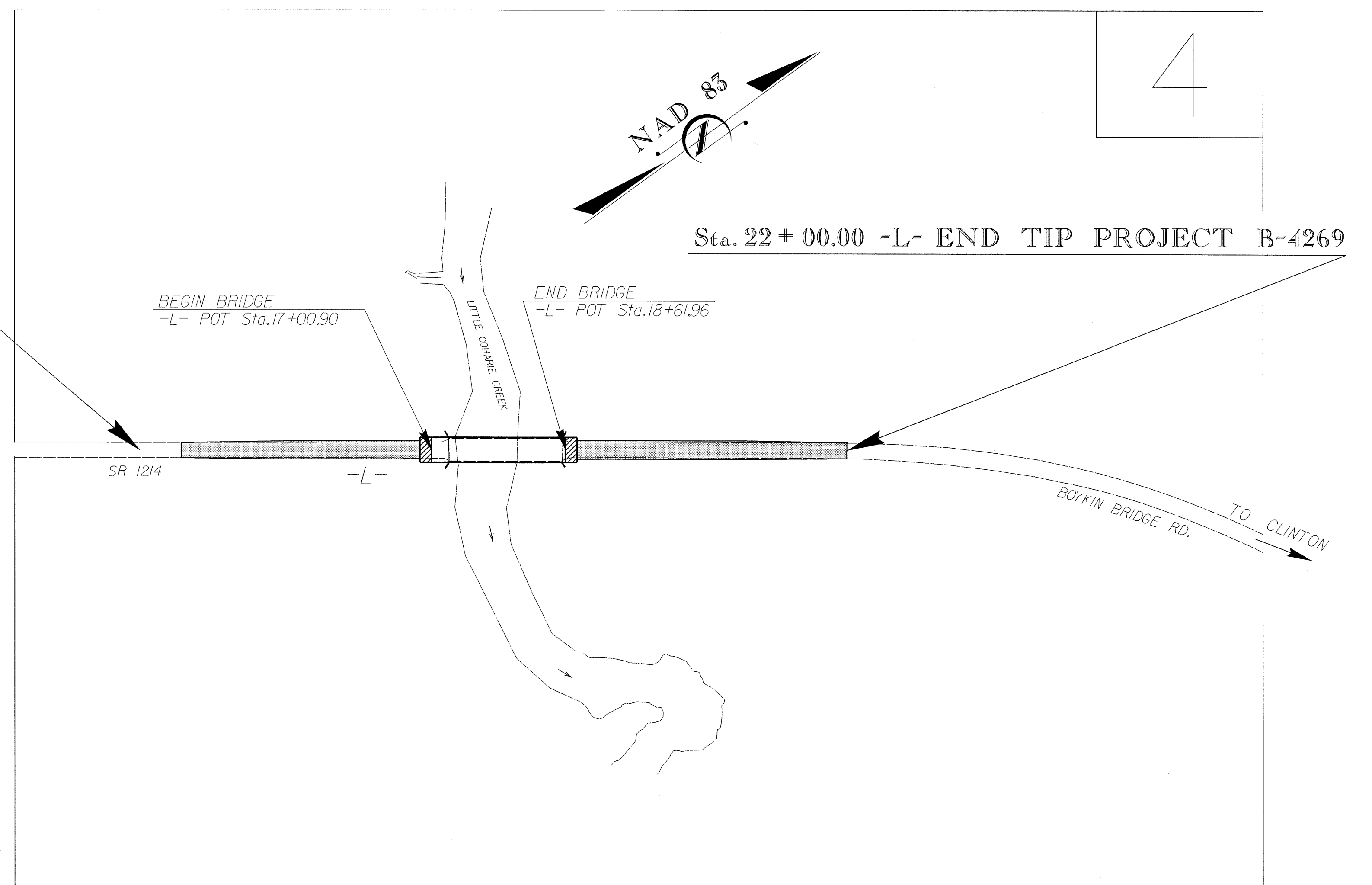
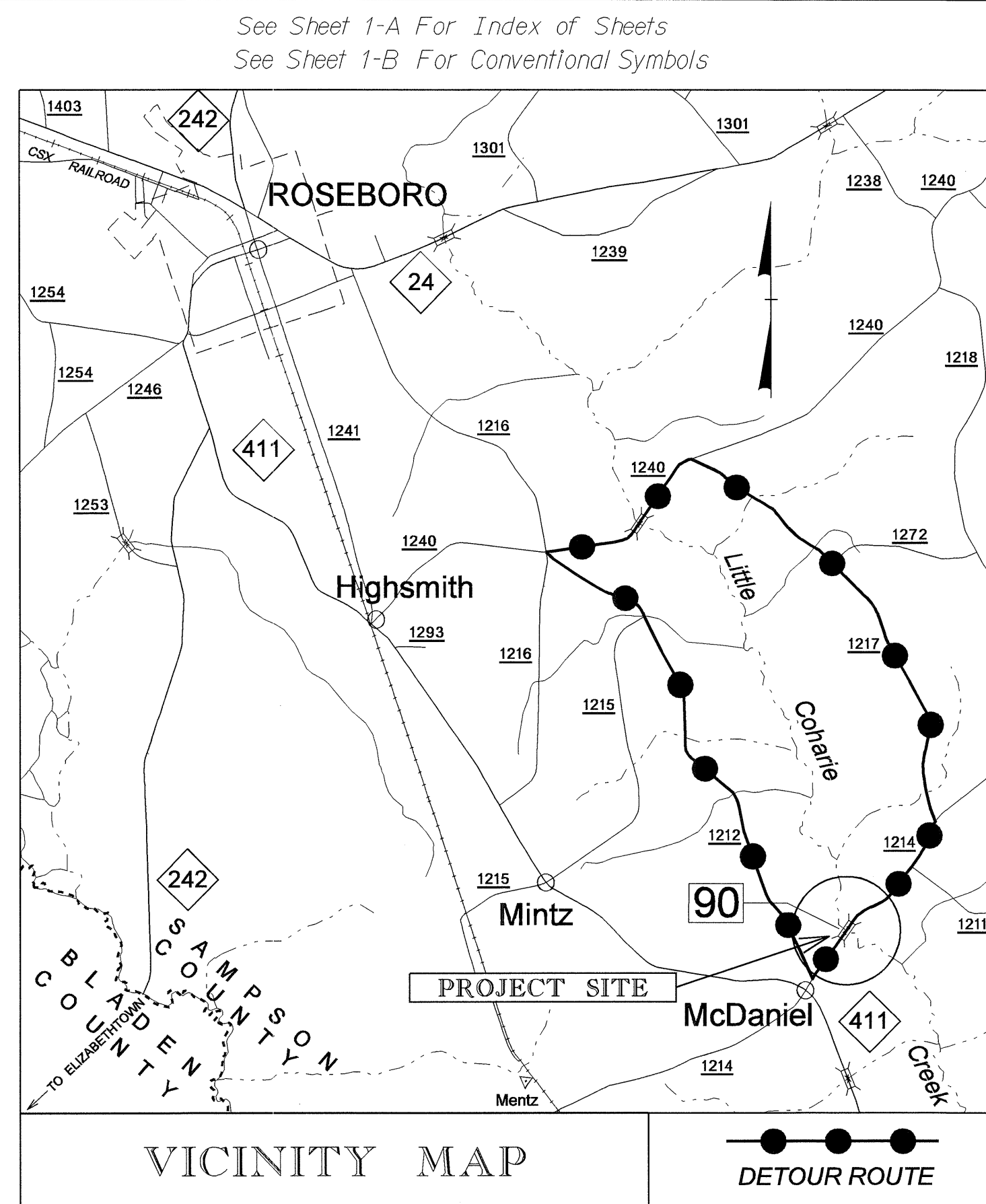
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4269	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33610.1.1	BRZ-1214(4)	PE	
33610.2.1	BRZ-1214(4)	RW & UTL	
33610.3.1	BRZ-1214(4)	CONST.	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SAMPSON COUNTY

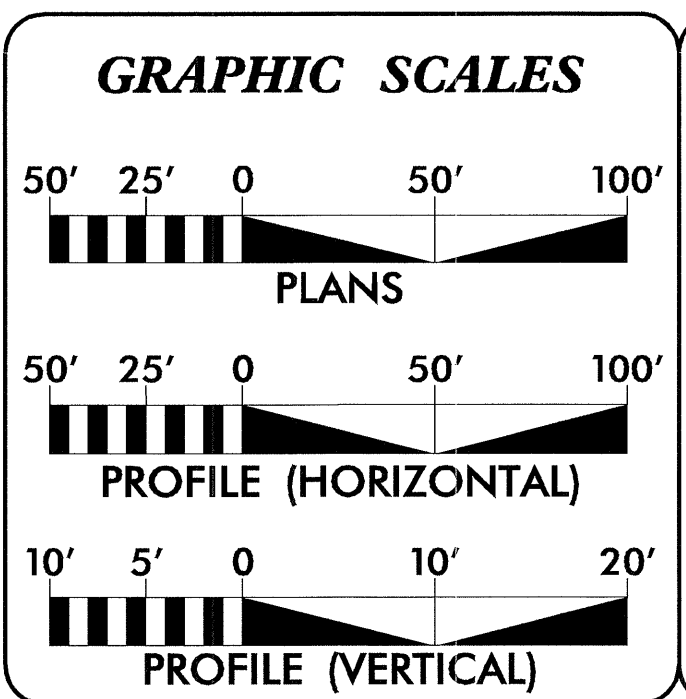
LOCATION: BRIDGE NO. 90 OVER LITTLE COHARIE CREEK ON SR 1214

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



TIP PROJECT: B-4269

CONTRACT: C201640



DESIGN DATA

ADT 2007 =	1626
ADT 2025 =	2800
DHV =	60 %
D =	10 %
T =	6 % *
V =	60 MPH
* TTST 2%	DUAL 4%

PROJECT LENGTH

LENGTH ROADWAY	TIP PROJECT B-4269 =	0.130 MI.
LENGTH STRUCTURE	TIP PROJECT B-4269 =	0.031 MI.
TOTAL LENGTH OF	TIP PROJECT B-4269 =	0.161 MI.

Prepared in the Office of:

DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
APRIL 21, 2006

LETTING DATE:
MAY 15, 2007

ROGER THOMAS, PE
PROJECT ENGINEER

MICHAEL W. LITTLE, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

ROADWAY DESIGN ENGINEER

SEAL 20870

SEAL 22557

2-12-07

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

STATE HIGHWAY DESIGN ENGINEER

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01-FEB-2007 11:33
F:\Roadway\proj\11b4269_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	SURVEY CONTROL SHEET
2	TYPICAL SECTIONS
2-A	DETAIL OF ANCHORAGE FOR FRAMES - BRICK/CONCRETE/PRECAST CONCRETE
3	SUMMARY OF QUANTITIES
3-A	LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER) GUARDRAIL SUMMARY
3-B	SUMMARIES OF EARTHWORK, SHOULDER BERM GUTTER, AND PAVEMENT REMOVAL
4	PLAN SHEET
5	PROFILE SHEET
TCP-1 THRU TCP-3	TRAFFIC CONTROL PLANS
EC-1 THRU EC-5	EROSION CONTROL PLANS
UD-1 THRU UD-2	UTILITIES BY OTHERS PLANS
X-1A	CROSS-SECTION SUMMARY
X-1 THRU X-4	CROSS-SECTIONS
S-1 THRU S-20	STRUCTURE PLANS

GENERAL NOTES: 2006 SPECIFICATIONS
EFFECTIVE: 01-15-02
REVISED: 05-14-03

**GRADE LINE:
GRADING AND SURFACING:**
THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED 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.

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
PROGRESS ENERGY & STAR TELEPHONE MEMBERSHIP CORP.
ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

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

2006 ROADWAY STANDARD DRAWINGS
The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated July 18, 2006 are applicable to this project and by reference hereby are considered a part of these plans:

STD. NO.	TITLE
	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
	DIVISION 3 - PIPE CULVERTS
300.01	Method of Pipe Installation - Method 'A'
	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 8 - INCIDENTALS
815.03	Pipe Underdrain and Blind Drain
816.04	Markers for Drainage Structure and Concrete Pad
840.00	Concrete Base Pad for Drainage Structures
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
862.01	Guardrail Placement
862.02	Guardrail Installation
862.03	Structure Anchor Units
876.02	Guide for Rip Rap at Pipe Outlets
876.04	Drainage Ditches with Class 'B' Rip Rap

EFF. 07-18-06

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	(23)
Existing Fence Line	✕-✕-✕-✕
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	--- WLB ---
Proposed Wetland Boundary	--- WLB ---
Existing High Quality Wetland Boundary	--- HD WLB ---
Existing Endangered Animal Boundary	--- EAB ---
Existing Endangered Plant Boundary	--- EPB ---

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○ S
Well	○ W
Small Mine	✕
Foundation	□
Area Outline	□
Cemetery	□ †
Building	□
School	□
Church	□
Dam	□

HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	□
River Basin Buffer	--- RBB ---
Flow Arrow	←
Disappearing Stream	→
Spring	○
Swamp Marsh	✕
Proposed Lateral, Tail, Head Ditch	--- FDM ---
False Sump	◇

RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○ CSX TRANSPORTATION MILEPOST 35
Switch	□ 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	○ R W
Proposed Right of Way Line with Iron Pin and Cap Marker	○ R W ▲
Proposed Right of Way Line with Concrete or Granite Marker	○ R W ▲
Existing Control of Access	○ C A
Proposed Control of Access	○ C A
Existing Easement Line	E
Proposed Temporary Construction Easement	E
Proposed Temporary Drainage Easement	TDE
Proposed Permanent Drainage Easement	PDE
Proposed Permanent Utility Easement	PUE

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
Curb Cut for Future Wheel Chair Ramp	○ CCFR
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	○ S
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	□ 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	⊙
U/G 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	⊗
U/G 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 ---

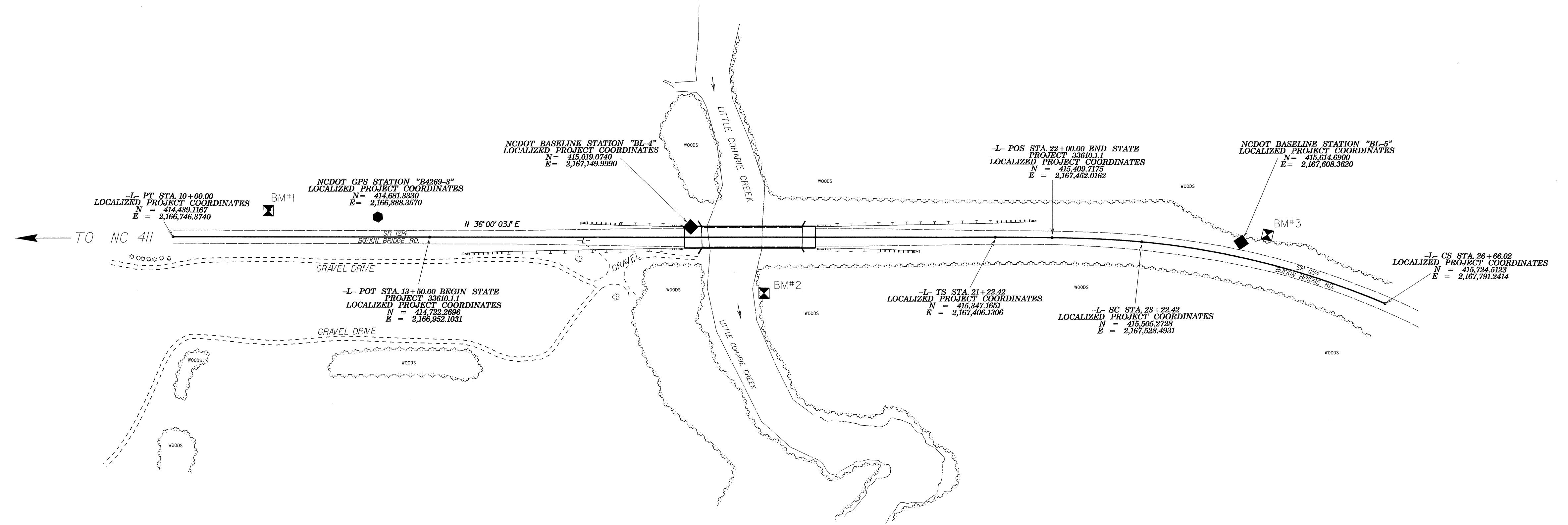
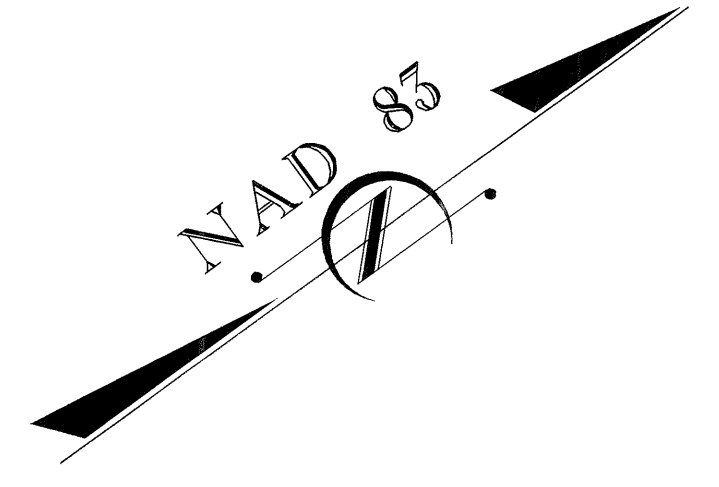
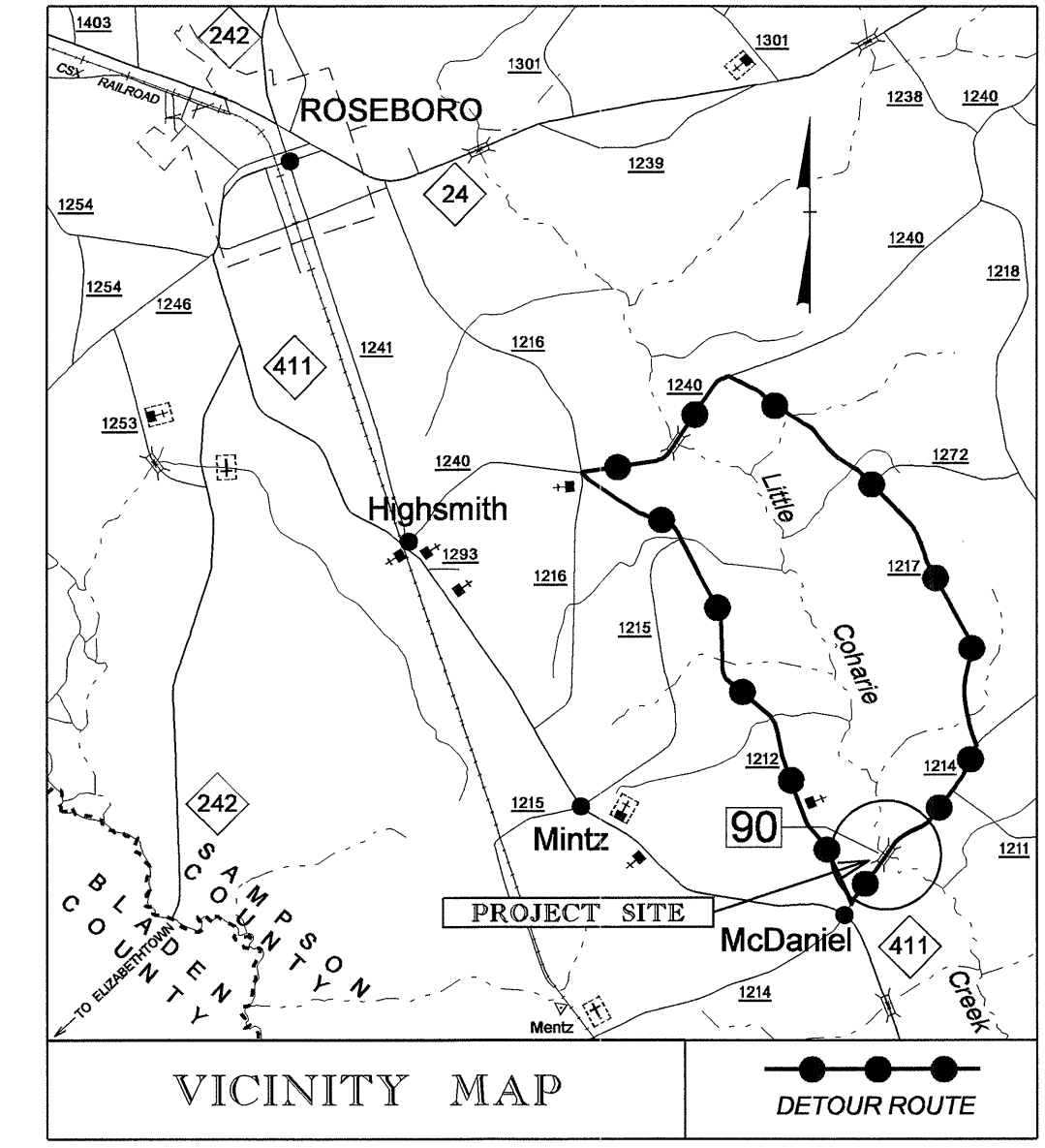
SANITARY SEWER:

Sanitary Sewer Manhole	⊙
Sanitary Sewer Cleanout	⊙
U/G 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	--- 2UTL ---
U/G Tank; Water, Gas, Oil	□
A/G Tank; Water, Gas, Oil	□
U/G Test Hole (S.U.E.*)	⊙
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

SURVEY CONTROL SHEET



CONTROL DATA

-BL-	POINT	DESC.	NORTH	EAST	ELEVATION	-L- STATION	OFFSET
	2	B4269-2 *GPS MON*	413741.8520	2166207.0830	97.26	OUTSIDE PROJECT LIMITS	
	3	B4269-3 *GPS MON*	414681.3330	2166888.3570	81.12	12+79.41	27.51 LT
	4	BL-4	415019.0740	2167149.9990	76.11	17+06.44	14.36 LT
	5	BL-5	415614.6900	2167608.3620	76.90	24+55.25	20.16 LT

BENCHMARK DATA

.....
 BM1 ELEVATION = 83.79'
 N 414565 E 2166794
 L STATION 11+30 36' LEFT
 R/R SPIKE SET IN CP&L POWER POLE (*2FX88)

 BM2 ELEVATION = 73.05'
 N 415047 E 2167282
 L STATION 18+07 76' RIGHT
 R/R SPIKE SET IN BASE OF A 22' TWIN CYPRESS

 BM3 ELEVATION = 74.78'
 N 415650 E 2167621
 L STATION 24+87 38' LEFT
 R/R SPIKE SET IN BASE OF A 14' POPLAR

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "B4269-3" WITH NAD 1983 STATE PLANE GRID COORDINATES OF NORTHING: 414681.333(FT) EASTING: 2166888.357(FT) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99989000 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B4269-3" TO -L- STATION 10+00.00 IS S 30°22'41" W 280.7630' ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

NOTES:

1. THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTP://WWW.DOHDOT.STATE.NC.US/PRCONSTRUC/HIGHWAY/LOCATION/PROJECT/](http://www.doh.dot.state.nc.us/prconstruc/highway/location/project/)
 THE FILES TO BE FOUND ARE AS FOLLOWS:
 TIP B4269_LS_CONTROL_05215.TXT
 SITE CALIBRATION INFORMATION HAS NOT BEEN PROVIDED FOR THIS PROJECT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

© INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.
 PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.
 NETWORK ESTABLISHED FROM EXISTING HARD MONUMENTATION
 SEE GPS CALIBRATION SHEET FOR HORIZONTAL AND VERTICAL COORDINATE VALUES.

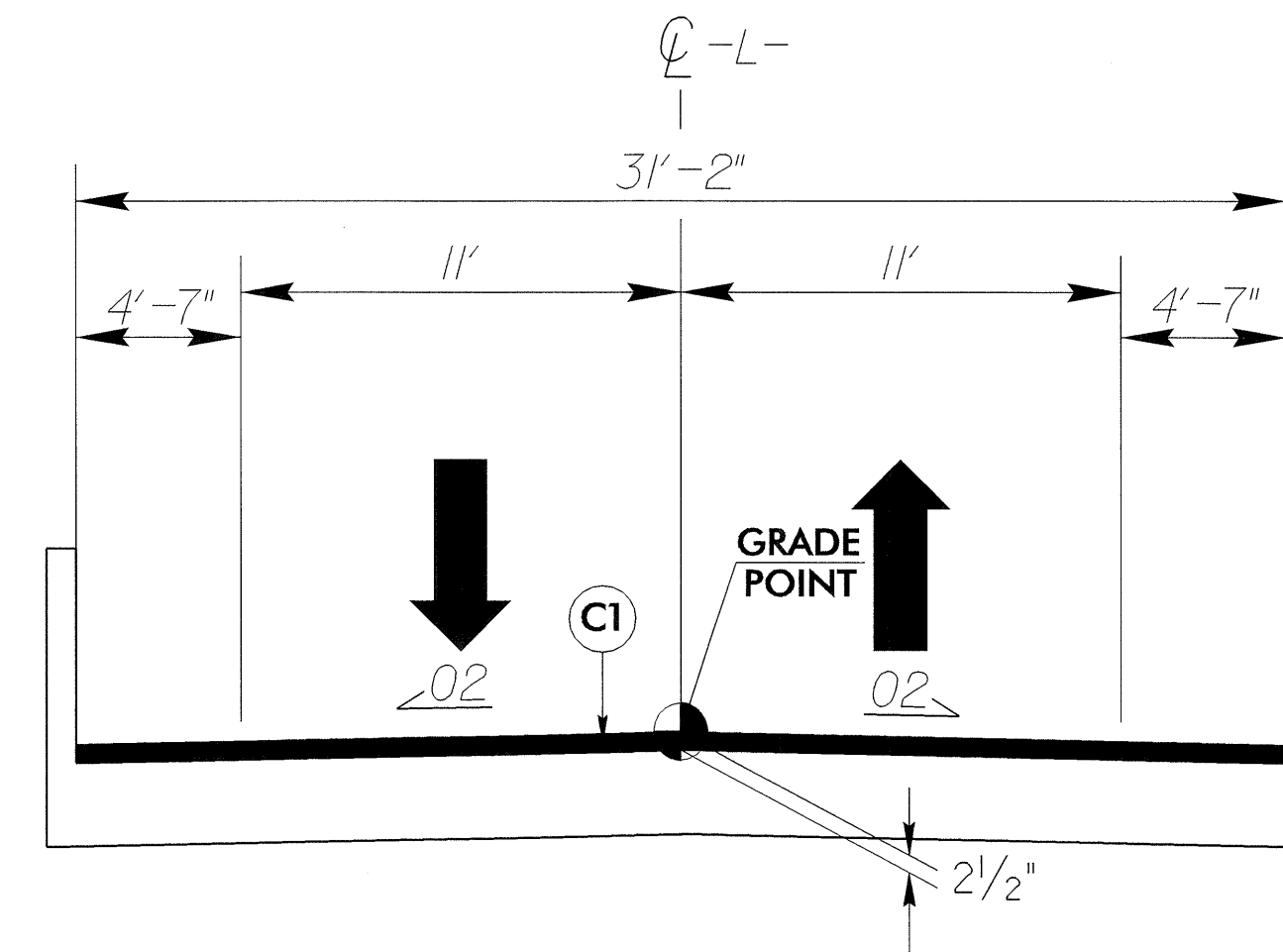
NOTE: DRAWING NOT TO SCALE

6/2/99
09-JAN-2007 08:10 4269_rdy_1c.dgn

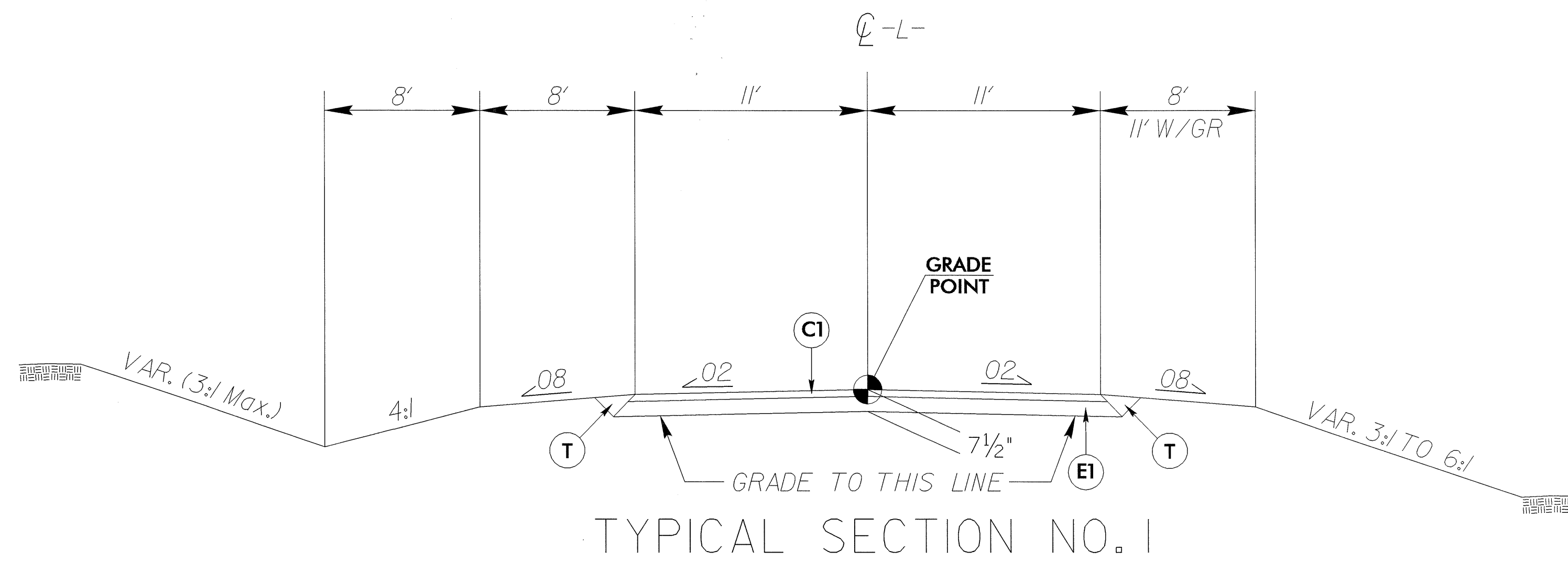
PAVEMENT SCHEDULE

C1	PROP. APPROX. 2½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
E1	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
T	EARTH MATERIAL

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


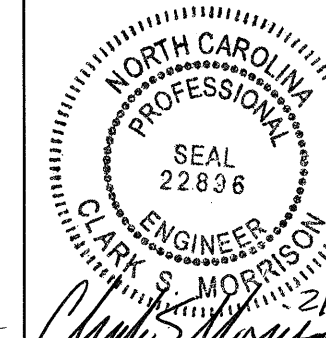


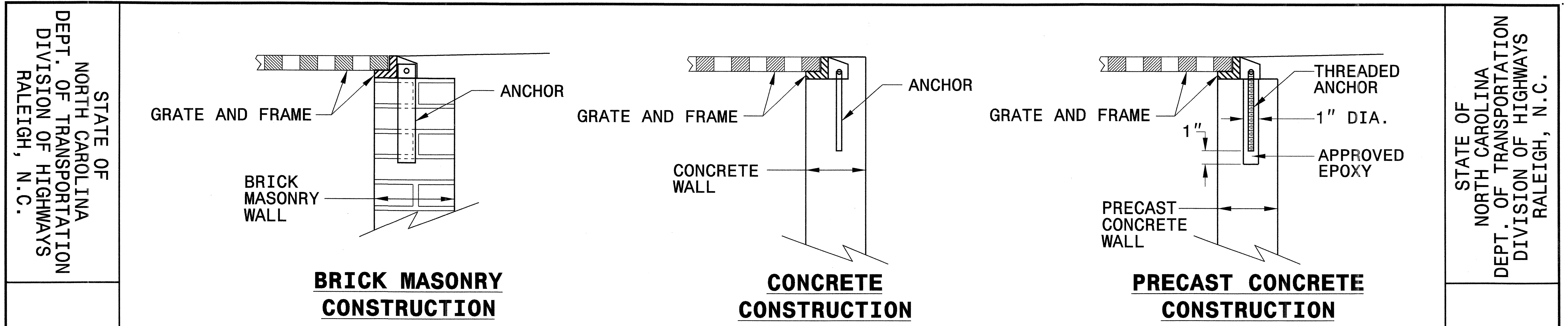
Detail Showing Asphalt Wearing Surface On Cored Slab Bridge



USE TYPICAL SECTION NO. 1
 -L- STA. 15+20.00 TO -L- STA. 17+00.90 (BEGIN BRIDGE)
 -L- STA. 18+61.96 (END BRIDGE) TO -L- STA. 20+80.00

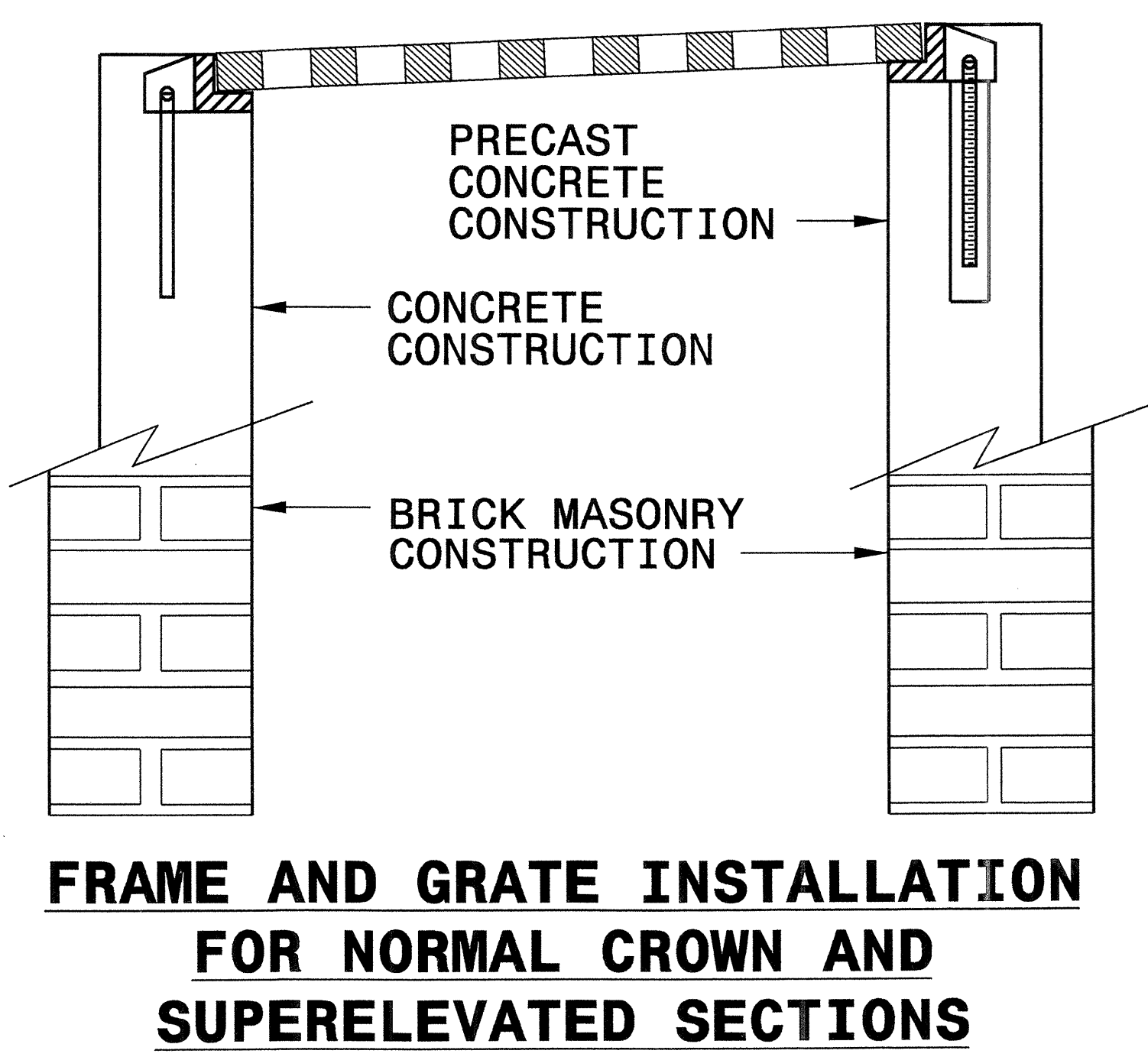
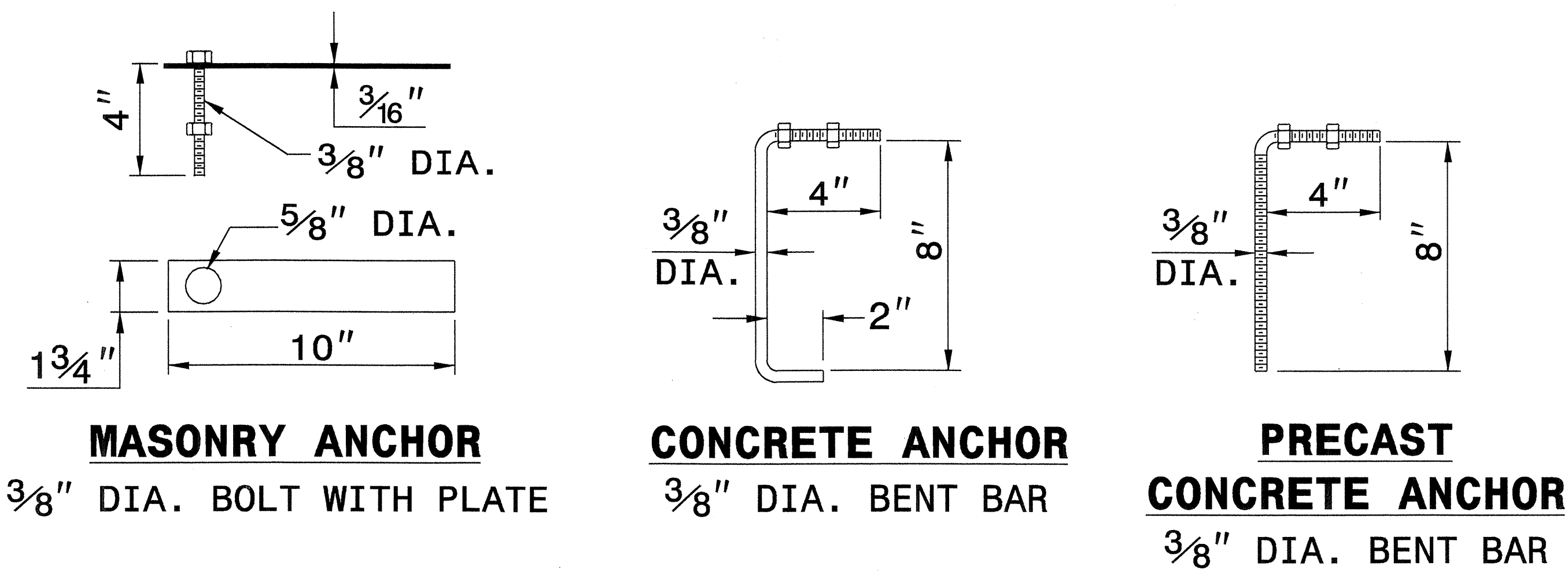
NOTES:
 TRANSITION FROM EXISTING TO T. S. NO. 1
 -L- STA. 13+50.00 TO -L- STA. 15+20.00
 TRANSITION FROM T. S. NO. 1 TO EXISTING
 -L- STA. 20+80.00 TO -L- STA. 22+00.00

PROJECT REFERENCE NO. B-4269	SHEET NO. 2
ROADWAY DESIGN ENGINEER 	PAVEMENT DESIGN ENGINEER 



DETAIL SHOWING ANCHORAGE OF FRAME FOR GRATED DROP INLET

NOTE:
 CONSTRUCT GRATED DROP INLET TO COINCIDE WITH NORMAL OR SUPERELEVATED SHOULDER OR PAVEMENT SLOPE.



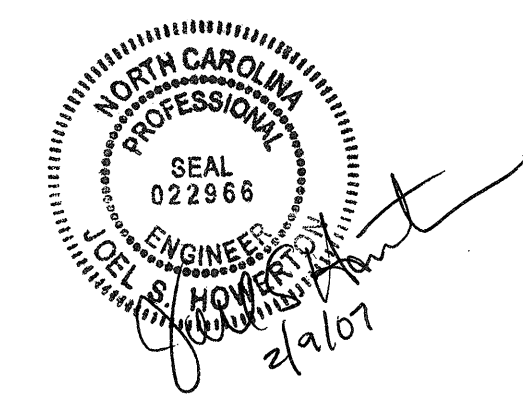
STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
ANCHORAGE FOR FRAMES
 BRICK/CONCRETE/PRECAST CONCRETE

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

ENGLISH DETAIL DRAWING FOR
ANCHORAGE FOR FRAMES
 BRICK/CONCRETE/PRECAST CONCRETE

27-SEP-2006 09:01
 S:\Contracts\Standards\Stand\stds\06\stds to Special Details\stand\stds\06\stds to Special Details for Frames\0840d25.dgn
 erickward AT P522223



PROJECT SERVICES UNIT
STANDARDS AND SPECIAL DESIGN
 Office 919-250-4128 FAX 919-250-4119

SEE PLATE FOR TITLE

ORIGINAL BY: 2006 STD 840.25 DATE: 07/18/06
 MODIFIED BY: E.E. WARD DATE: 9/25/06
 CHECKED BY: [Signature] DATE: 9/27/06
 FILE SPEC.: [Signature]

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
SUMMARY OF QUANTITIES

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C201640

ItemNumber	Sec #	Quantity	Unit	Description
0000100000-N	800	Lump Sum		MOBILIZATION
0029000000-N	SP	Lump Sum		REINFORCED BRIDGE APPROACH FILL, STATION ***** (17+81.43-L-)
0043000000-N	226	Lump Sum		GRADING
0050000000-E	226	1	ACR	SUPPLEMENTARY CLEARING & GRUB- BING
0057000000-E	226	200	CY	UNDERCUT EXCAVATION
0134000000-E	240	25	CY	DRAINAGE DITCH EXCAVATION
0195000000-E	265	100	CY	SELECT GRANULAR MATERIAL
0196000000-E	270	100	SY	FABRIC FOR SOIL STABILIZATION
0366000000-E	310	52	LF	15" RC PIPE CULVERTS, CLASS III
1489000000-E	610	680	TON	ASPHALT CONC BASE COURSE, TYPE B25.0B
1525000000-E	610	410	TON	ASPHALT CONC SURFACE COURSE, TYPE SF9.5A
1560000000-E	620	60	TON	ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22
2022000000-E	815	22.4	CY	SUBDRAIN EXCAVATION
2033000000-E	815	16.8	CY	SUBDRAIN FINE AGGREGATE
2044000000-E	815	100	LF	6" PERFORATED SUBDRAIN PIPE
2055000000-E	815	3	EA	6" SUBDRAIN PIPE WYES, TEES, & ELBOWS
2066000000-N	815	1	EA	CONCRETE PAD FOR SUBDRAIN PIPE OUTLET
2077000000-E	815	6	LF	6" OUTLET PIPE (SUBDRAINS)
2286000000-N	840	2	EA	MASONRY DRAINAGE STRUCTURES
2355000000-N	840	2	EA	FRAME WITH GRATE, STD 840.29
2556000000-E	846	60	LF	SHOULDER BERM GUTTER
3030000000-E	862	600	LF	STEEL BM GUARDRAIL
3150000000-N	862	5	EA	ADDITIONAL GUARDRAIL POSTS
3215000000-N	862	4	EA	GUARDRAIL ANCHOR UNITS, TYPE III
3270000000-N	SP	4	EA	GUARDRAIL ANCHOR UNITS, TYPE 350

ItemNumber	Sec #	Quantity	Unit	Description
3649000000-E	876	35	TON	RIP RAP, CLASS B
3656000000-E	876	240	SY	FILTER FABRIC FOR DRAINAGE
4400000000-E	1110	256	SF	WORK ZONE SIGNS (STATIONARY)
4410000000-E	1110	94	SF	WORK ZONE SIGNS (BARRICADE MOUNTED)
4445000000-E	1145	64	LF	BARRICADES (TYPE III)
4810000000-E	1205	7,200	LF	PAINT PAVEMENT MARKING LINES (4")
4900000000-N	1251	20	EA	PERMANENT RAISED PAVEMENT MARKERS
6000000000-E	1605	985	LF	TEMPORARY SILT FENCE
6006000000-E	1610	50	TON	STONE FOR EROSION CONTROL, CLASS A
6009000000-E	1610	90	TON	STONE FOR EROSION CONTROL, CLASS B
6012000000-E	1610	40	TON	SEDIMENT CONTROL STONE
6015000000-E	1615	1	ACR	TEMPORARY MULCHING
6018000000-E	1620	50	LB	SEED FOR TEMPORARY SEEDING
6021000000-E	1620	0.25	TON	FERTILIZER FOR TEMPORARY SEED- ING
6024000000-E	1622	50	LF	TEMPORARY SLOPE DRAINS
6027000000-N	1622	2	EA	INLET PROTECTION AT TEMPORARY SLOPE DRAINS
6029000000-E	SP	250	LF	SAFETY FENCE
6030000000-E	1630	320	CY	SILT EXCAVATION
6036000000-E	1631	455	SY	MATTING FOR EROSION CONTROL
6042000000-E	1632	40	LF	1/4" HARDWARE CLOTH
6071030000-E	SP	230	LF	COIR FIBER BAFFLES
6084000000-E	1660	1	ACR	SEEDING & MULCHING
6087000000-E	1660	0.5	ACR	MOWING
6090000000-E	1661	50	LB	SEED FOR REPAIR SEEDING
6093000000-E	1661	0.25	TON	FERTILIZER FOR REPAIR SEEDING
6096000000-E	1662	50	LB	SEED FOR SUPPLEMENTAL SEEDING

ItemNumber	Sec #	Quantity	Unit	Description
6108000000-E	1665	0.75	TON	FERTILIZER TOPDRESSING
6114000000-N	SP	2	HR	SPECIALIZED HAND MOWING
6117000000-N	SP	8	EA	RESPONSE FOR EROSION CONTROL

COMPUTED BY: PWR DATE: 12/6/06
 CHECKED BY: MWL DATE: 1/22/07

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

PROJECT REFERENCE NO. <i>B-4269</i>	SHEET NO. 3-A
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LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

STATION	LOCATION (L, RT, OR CL)	STRUCTURE NO.	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	CLASS III R.C. PIPE (UNLESS NOTED OTHERWISE)								BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHERWISE)								15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	R.C.P.	C.S.P.	PER EACH (0' THRU 5.0')	5.0' THRU 10.0'	10.0' AND ABOVE	TRAFFIC BEARING D.I. STD. 840.35	FRAMES AND NARROW SLOT GRATE STD. 840.29	PIPE REMOVAL (LIN. FT.)	REMARKS											
							THICKNESS OR GAUGE		12"	15"	18"	24"	30"	36"	42"	48"	12"	15"	18"	24"	30"	36"													42"	48"	QUANTITIES: STRUCTURES	FOR DRAINAGE *TOTAL LF. FOR PAY QUANTITY SHALL BE 50% A.P. (OR 2 COL. B)							
-L- 18+91	LT.	1	76.5																																										
		1 TO 2	73.3	73.2					32																																				
-L- 18+91	RT.	2	76.5																																										
		2 TO 3	73.2	71.8					20																																				
SHEET TOTALS									52																																				

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
M.D.I.	MEDIAN DROP INLET
M.D.I. (N.S.)	MEDIAN DROP INLET (NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX

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

GUARDRAIL SUMMARY

BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM EOL (Feet)	SHOULDER WIDTH (Feet)	FLARE LENGTH		W		ANCHORS				REMARKS
			STRAIGHT (Feet)	SHOP CURVED (Feet)	DBL. FACED (Feet)	APPROACH END	TRAILING END			APPROACH END (Ft.)	TRAILING END (Ft.)	APPROACH END (Ft.)	TRAILING END (Ft.)	GRAU 350	TYPE III	IMPACT ATTENUATOR TYPE 350		
													EACH	G	NG			
-L- 14+00.90	-L- 17+00.90	RT.	300.00			17+00.90		4.58	11	281.25		4.42	1	1			TIE TO BRIDGE RAIL	
-L- 15+63.40	-L- 17+00.90	LT.	137.50			17+00.90		4.58	11	118.75		2.38	1	1			TIE TO BRIDGE RAIL	
-L- 18+61.96	-L- 21+61.96	LT.	300.00			18+61.96		4.58	11	281.25		4.42	1	1			TIE TO BRIDGE RAIL	
-L- 18+61.96	-L- 19+99.46	RT.	137.50			18+61.96		4.58	11	118.75		2.38	1	1			TIE TO BRIDGE RAIL	
SUBTOTAL			875.00															
LESS ANCHOR DEDUCTIONS																		
			GRAU-350	4 @ 50 Ft.	200.00													
			TYPE III	4 @ 18.75 Ft.	75.00													
SUBTOTAL			-275.00															
PROJECT TOTAL			600.00															
ADDITIONAL GUARDRAIL POSTS			5 EA.															

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
SUMMARY OF EARTHWORK
 IN CUBIC YARDS

STATION TO STATION	UNCLASSIFIED EXCAVATION	EMBANKMENT + %	BORROW	WASTE
-L- STA. 13+50.00 TO -L- STA. 17+00.90	361	285	0	76
SUBTOTAL 1	361	285	0	76
-L- STA. 18+61.96 TO -L- STA. 22+00.00	211	120	0	91
SUBTOTAL 2	211	120	0	91
PROJECT SUBTOTAL	572	405	0	167
PROJECT TOTAL	572	405	0	167
SAY	600 CY		0 CY	

EST. UNDERCUT EXCAVATION = 200 Cubic Yards
 EST. DDE = 25 Cubic Yards

NOTE: Earthwork quantities are calculated by the Roadway Design Unit. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

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

SUMMARY OF SHOULDER BERM GUTTER
 IN FEET

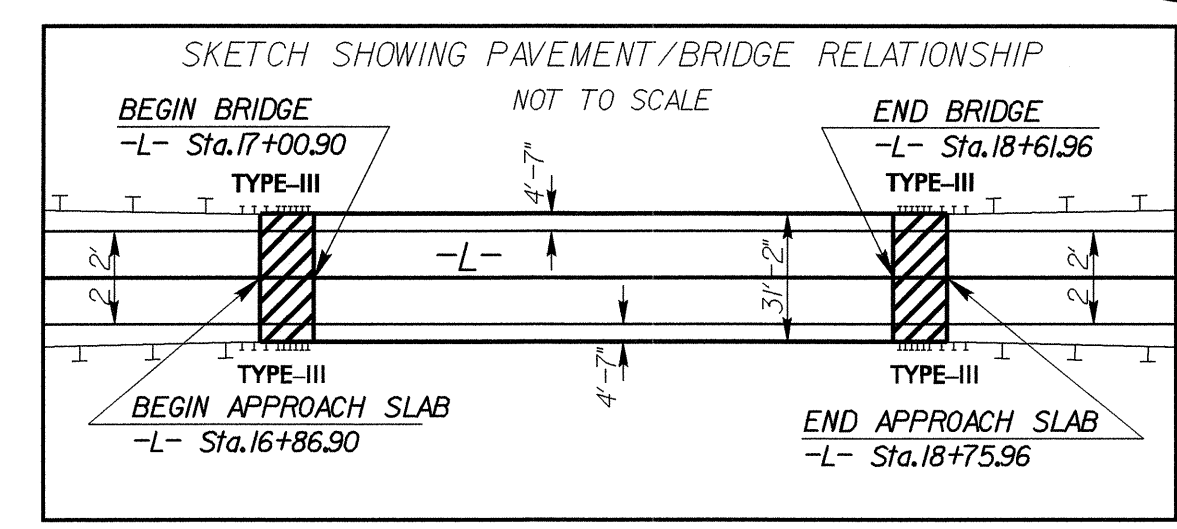
BEGINING STATION	ENDING STATION	LOCATION	LENGTH
-L- STA. 16+82.15	-L- STA. 16+86.90	RT.	4.75
-L- STA. 16+82.15	-L- STA. 16+86.90	LT.	4.75
-L- STA. 18+75.96	-L- STA. 19+00.00	RT.	24.04
-L- STA. 18+75.96	-L- STA. 19+00.00	LT.	24.04
TOTAL			57.58
SAY			60.00

SUMMARY OF PAVEMENT REMOVAL
 IN SQUARE YARDS

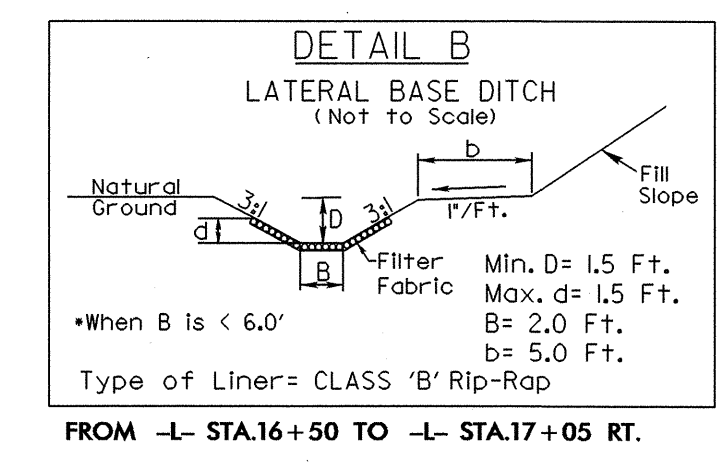
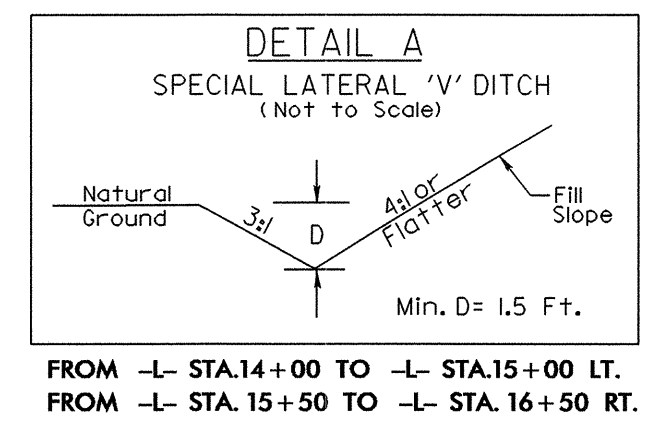
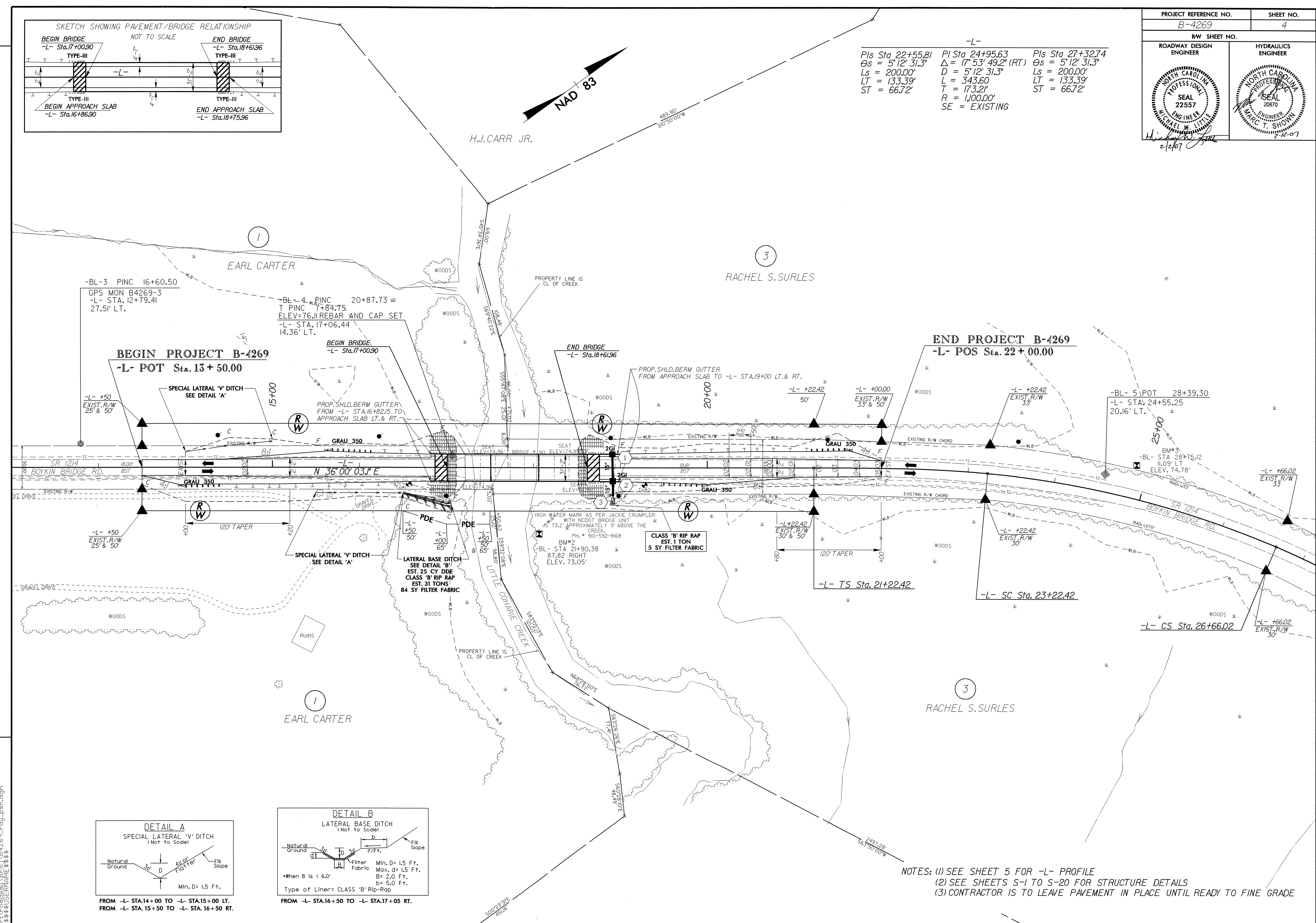
LOCATION	ASPHALT REMOVAL
-L- 13+50.00 TO -L- 17+21.00	764
-L- 18+59.00 TO -L- 22+00.00	709
PROJECT TOTAL	1,473
SAY	1,480

-L-

Pls Sta 22+55.81	PI Sta 24+95.63	Pls Sta 27+32.74
Os = 5'12" 31.3"	Δ = 17'53" 49.2" (RT)	Os = 5'12" 31.3"
LS = 200.00'	D = 5'12" 31.3"	LS = 200.00'
LT = 133.39'	L = 343.60'	LT = 133.39'
ST = 66.72'	T = 173.21'	ST = 66.72'
	R = 1,100.00'	
	SE = EXISTING	



REVISIONS



NOTES: (1) SEE SHEET 5 FOR -L- PROFILE
 (2) SEE SHEETS S-1 TO S-20 FOR STRUCTURE DETAILS
 (3) CONTRACTOR IS TO LEAVE PAVEMENT IN PLACE UNTIL READY TO FINE GRADE

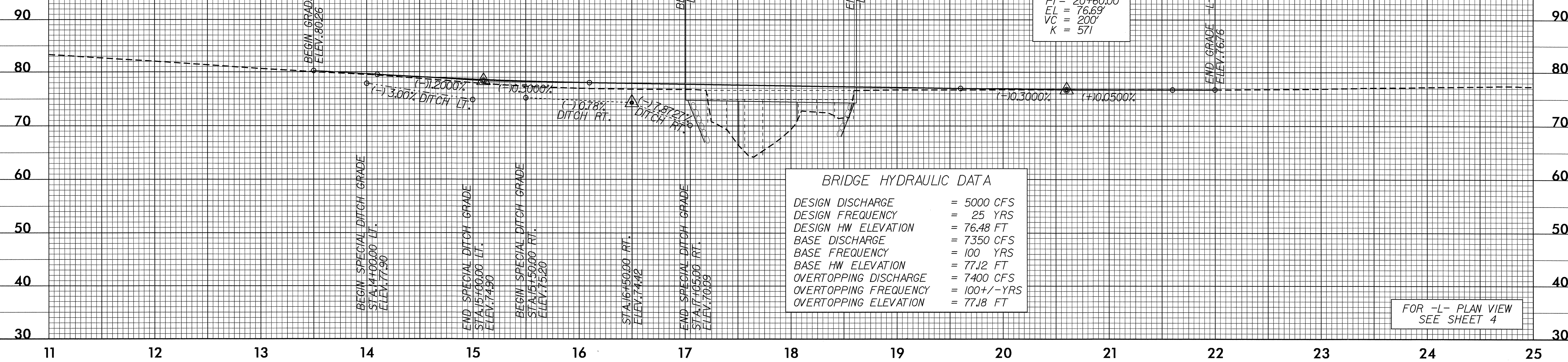
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5/28/99



BM*2 EL 73.05'
RR SPIKE IN 22" TWIN CYPRESS
-BL- STA 21+90.38 (87.82' RT)
-L- STA 18+06.63 (76.26' RT)

PROJECT REFERENCE NO. B-4269	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



PI = 15+10.00
EL = 78.34'
VC = 200'
K = 220

PI = 20+60.00
EL = 76.89'
VC = 200'
K = 571

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 5000 CFS
DESIGN FREQUENCY	= 25 YRS
DESIGN HW ELEVATION	= 76.48 FT
BASE DISCHARGE	= 7350 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 77.12 FT
OVERTOPPING DISCHARGE	= 7400 CFS
OVERTOPPING FREQUENCY	= 100+/- YRS
OVERTOPPING ELEVATION	= 77.18 FT

FOR -L- PLAN VIEW
SEE SHEET 4

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