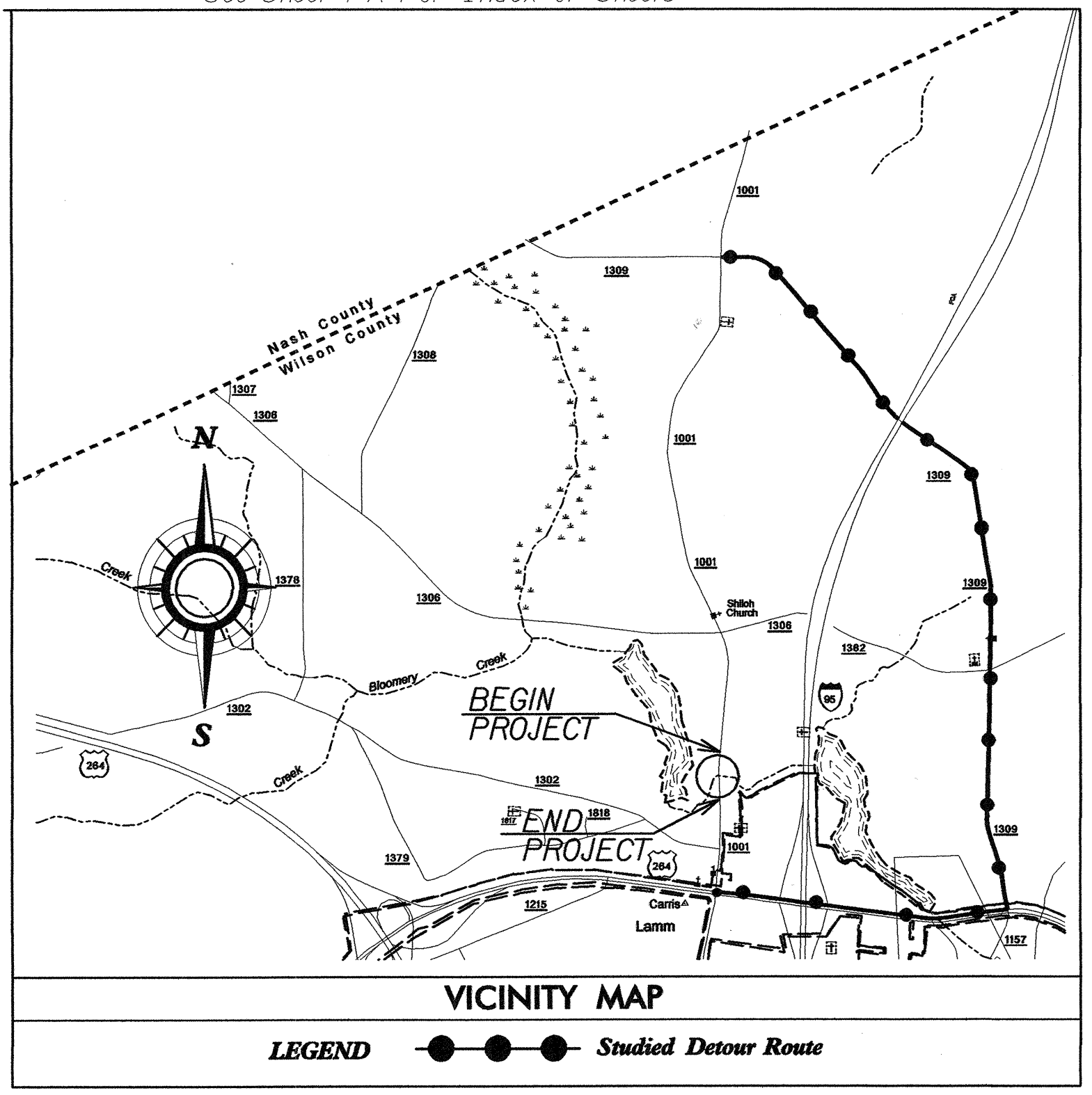


**CONTRACT: C201714 TIP PROJECT: B-4326**

See Sheet 1-A For Index of Sheets



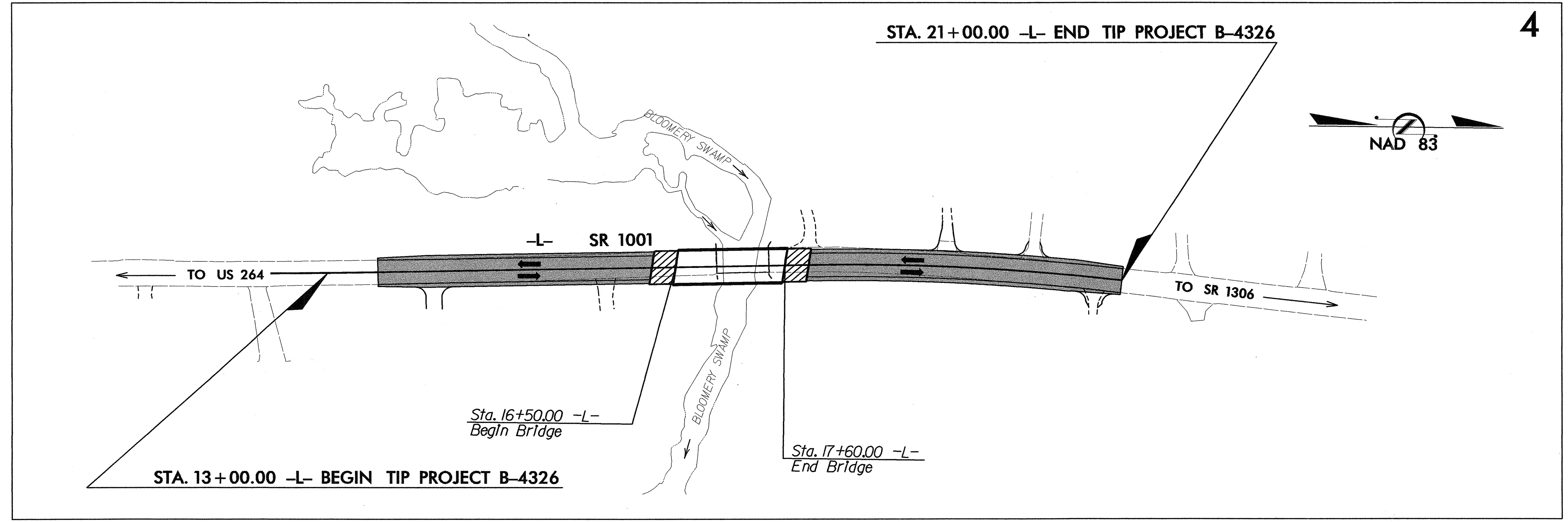
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**WILSON COUNTY**

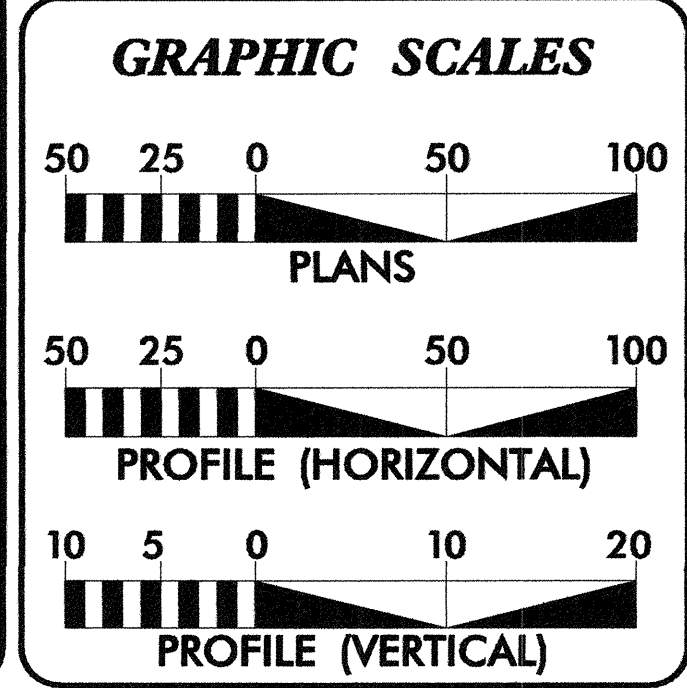
**LOCATION: BRIDGE NO. 79 OVER BLOOMERY SWAMP ON SR 1001**

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4326	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33663.1.1	BRZ-1001(27)	P.E.	
33663.2.1	BRZ-1001(27)	RW	
33663.3.1	BRZ-1001(27)	CONST.	



NC DOT CONTACT: CATHY HOUSER, P.E., PROJECT ENGINEER - ROADWAY DESIGN



**DESIGN DATA**

ADT 2007 = 3100  
ADT 2030 = 5400

DHV = 10 %  
D = 60 %  
T = 5 % \*  
V = 50 MPH

FUNC. CLASS =  
RURAL MINOR COLLECTOR  
\* TTST 3 % DUAL 2 %

**PROJECT LENGTH**

LENGTH ROADWAY TIP PROJECT B-4326 = 0.131 mi.

LENGTH STRUCTURE TIP PROJECT B-4326 = 0.021 mi.

TOTAL LENGTH TIP PROJECT B-4326 = 0.152 mi.

Prepared in the Office of:  
**WANG ENGINEERING COMPANY, INC.**  
CARY, N.C.  
FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2006 STANDARD SPECIFICATIONS

**RIGHT OF WAY DATE:** June 21, 2006

**LETTING DATE:** November 20, 2007

**GREG S. PURVIS, P. E.**  
PROJECT ENGINEER

**SCOTT L. KENNEDY**  
PROJECT DESIGN ENGINEER

**HYDRAULICS ENGINEER**  
SUNGATE DESIGN GROUP, PA

8/02/07

**SEAL 9334**  
HENRY WELLS  
P.E.

SIGNATURE:

**ROADWAY DESIGN ENGINEER**  
WANG ENGINEERING

7/31/07

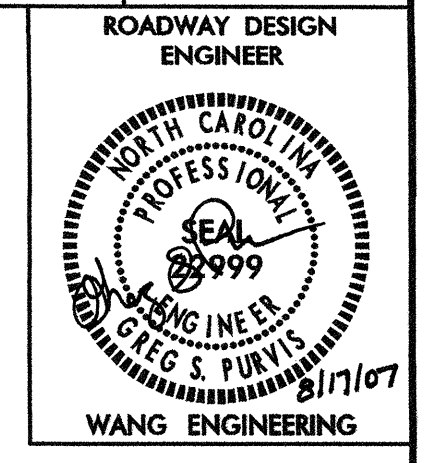
**SEAL 28994**  
GREG S. PURVIS  
P.E.

SIGNATURE:

**DIVISION OF HIGHWAYS**  
STATE OF NORTH CAROLINA

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

**art millan**  
P.E.  
STATE HIGHWAY DESIGN ENGINEER



INDEX OF SHEETS	
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 AND PAVEMENT SCHEDULE
2-A	ANCHORAGE FOR FRAMES - BRICK/CONCRETE/PRECAST CONCRETE
3	SUMMARY OF QUANTITIES
3A	SUMMARY OF EARTHWORK SUMMARY OF GUARDRAIL, LIST OF PIPES, ENDWALLS, ETC., AND ASPHALT PAVEMENT REMOVAL SUMMARY
4	PLAN/PROFILE SHEET
TCP-1 THRU TCP-4	TRAFFIC CONTROL PLANS
EC-1 THRU EC-5	EROSION CONTROL PLANS
RF-1	REFORESTATION PLAN
UD-1 THRU UD-2	UTILITY BY OTHERS PLANS
X-1	CROSS SECTION INDEX AND SUMMARY SHEET
X-2 THRU X-4	CROSS-SECTIONS
S-1 THRU S- 28	STRUCTURE PLANS

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'
310.10	Driveway Pipe Construction
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	
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
840.29	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
862.01	Guardrail Placement
862.02	Guardrail Installation
862.03	Structure Anchor Units
876.02	Guide for Rip Rap at Pipe Outlets

<p><b>GENERAL NOTES:</b> 2006 SPECIFICATIONS EFFECTIVE: 07-18-06</p> <p><b>GRADE LINE:</b> REVISD: 07-18-06</p> <p><b>GRADING AND SURFACING:</b> 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.</p> <p><b>CLEARING:</b> CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.</p> <p><b>SUPERELEVATION:</b> 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.</p> <p><b>SHOULDER CONSTRUCTION:</b> ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01.</p> <p><b>SIDE ROADS:</b> 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.</p> <p><b>UNDERDRAINS:</b> UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.03 AT LOCATIONS DIRECTED BY THE ENGINEER.</p>	<p><b>GUARDRAIL:</b> 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.</p> <p><b>TEMPORARY SHORING:</b> SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.</p> <p><b>SUBSURFACE PLANS:</b> NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.</p> <p><b>UTILITIES:</b> UTILITY OWNERS ON THIS PROJECT ARE Telephone - Embarq Cable Television - Time Warner Electric - City of Wilson Gas - City of Wilson ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.</p> <p><b>RIGHT-OF-WAY MARKERS:</b> ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY CONTRACT.</p>
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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	_____ EP
Property Corner	_____ X
Property Monument	_____ ECM
Parcel/Sequence Number	_____ (123)
Existing Fence Line	_____ X-X-X-X
Proposed Woven Wire Fence	_____ O
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	_____ O
Sign	_____ S
Well	_____ W
Small Mine	_____ M
Foundation	_____ F
Area Outline	_____ AO
Cemetery	_____ C
Building	_____ B
School	_____ S
Church	_____ CH
Dam	_____ D

### HYDROLOGY:

Stream or Body of Water	_____
Hydro, Pool or Reservoir	_____ JS
Jurisdictional Stream	_____ JS
Buffer Zone 1	_____ BZ 1
Buffer Zone 2	_____ BZ 2
Flow Arrow	_____ ←
Disappearing Stream	_____ >
Spring	_____ S
Wetland	_____ W
Proposed Lateral, Tail, Head Ditch	_____ FLOW
False Sump	_____ S

### RAILROADS:

Standard Gauge	_____ CSX TRANSPORTATION
RR Signal Milepost	_____ 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	_____ CA
Proposed Control of Access	_____ CA
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
Proposed Wheel Chair Ramp Curb Cut	_____ WCC
Curb Cut for Future Wheel Chair Ramp	_____ CCFR
Existing Metal Guardrail	_____ T
Proposed Guardrail	_____ T
Existing Cable Guiderail	_____ G
Proposed Cable Guiderail	_____ G
Equality Symbol	_____ ⊕
Pavement Removal	_____ X

### VEGETATION:

Single Tree	_____ T
Single Shrub	_____ S
Hedge	_____ H
Woods Line	_____ W
Orchard	_____ O
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	_____ S
Storm Sewer Manhole	_____ S
Storm Sewer	_____ S

### UTILITIES:

POWER:	
Existing Power Pole	_____ ●
Proposed Power Pole	_____ ○
Existing Joint Use Pole	_____ ●
Proposed Joint Use Pole	_____ ○
Power Manhole	_____ P
Power Line Tower	_____ T
Power Transformer	_____ T
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	_____ T
Telephone Booth	_____ T
Telephone Pedestal	_____ T
Telephone Cell Tower	_____ T
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	_____ W
Water Meter	_____ W
Water Valve	_____ W
Water Hydrant	_____ W
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
TV Pedestal	_____ TV
TV Tower	_____ TV
UG TV Cable Hand Hole	_____ TV
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	_____ G
Gas Meter	_____ G
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	_____ SS
Sanitary Sewer Cleanout	_____ SS
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	_____ TS
Utility Unknown U/G Line	_____ ?UTL
UG Tank; Water, Gas, Oil	_____ T
A/G Tank; Water, Gas, Oil	_____ T
UG Test Hole (S.U.E.*)	_____ T
Abandoned According to Utility Records	_____ AATUR
End of Information	_____ E.O.I.

# SURVEY CONTROL SHEET B-4326

WBS REFERENCE NO. B-4326	SHEET NO. 1C
Location and Surveys	

## BENCHMARK DATA

```

*****
BM #1      ELEVATION = 144.04
N 735790   E 2293968
L STATION 11+14 32 LEFT
RR SPIKE IN BASE OF 8" HICKORY

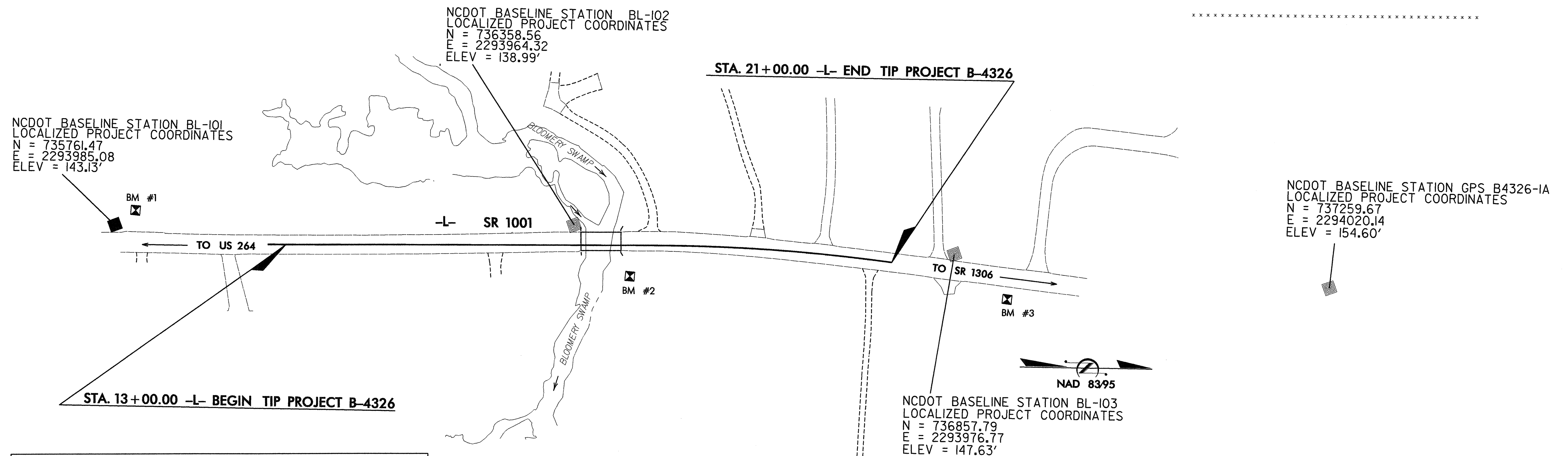
*****
BM#2      ELEVATION = 136.52
N 736428   E 2294035
L STATION 17+50 51 RIGHT
RR SPIKE IN BASE OF 20" GUM

*****
BM#3      ELEVATION = 152.47
N 736937   E 2294039
L STATION 22+65 27 RIGHT
RR SPIKE IN BASE OF 20" PINE

*****
    
```

## CONTROL DATA

BL POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
101	BL-101	735761.4690	2293985.0810	143.13	10+85.11	15.16 LT
102	BL-102	736358.5590	2293964.3220	138.99	16+82.82	21.89 LT
103	BL-103	736857.7850	2293976.7680	147.63	21+79.69	26.66 LT
1	GPS B4326-1A	737259.6700	2294020.1400	154.60	OUTSIDE PROJECT LIMITS	



### DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "GPS B4326-1A" WITH NAD 83/95 STATE PLANE GRID COORDINATES OF NORTHING: 737259.67 (1ft) EASTING: 2294020.140 (1ft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99991190 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS B4326-1A" TO -L- STATION (13+00) IS S 1° 01' 57.93" W 1283.36' ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

### NOTES:

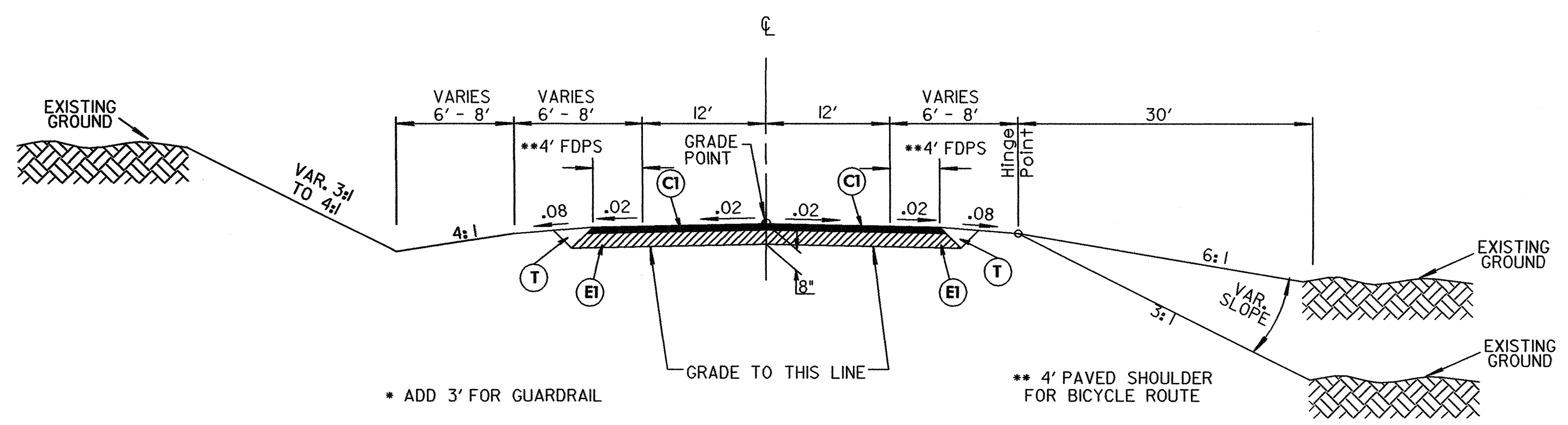
THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:  
[HTTP://WWW.DOH.DOT.STATE.NC.US/PRECONSTRUCT/HIGHWAY/LOCATIONPROJECT](http://www.doh.dot.state.nc.us/preconstruct/highway/locationproject)  
 FILE : B4326\_LS\_CONTROL\_050817.TXT

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. CONTROL NETWORK FOR B4326 ESTABLISHED FROM NGS ONLINE POSITIONING USER SERVICE (OPUS)

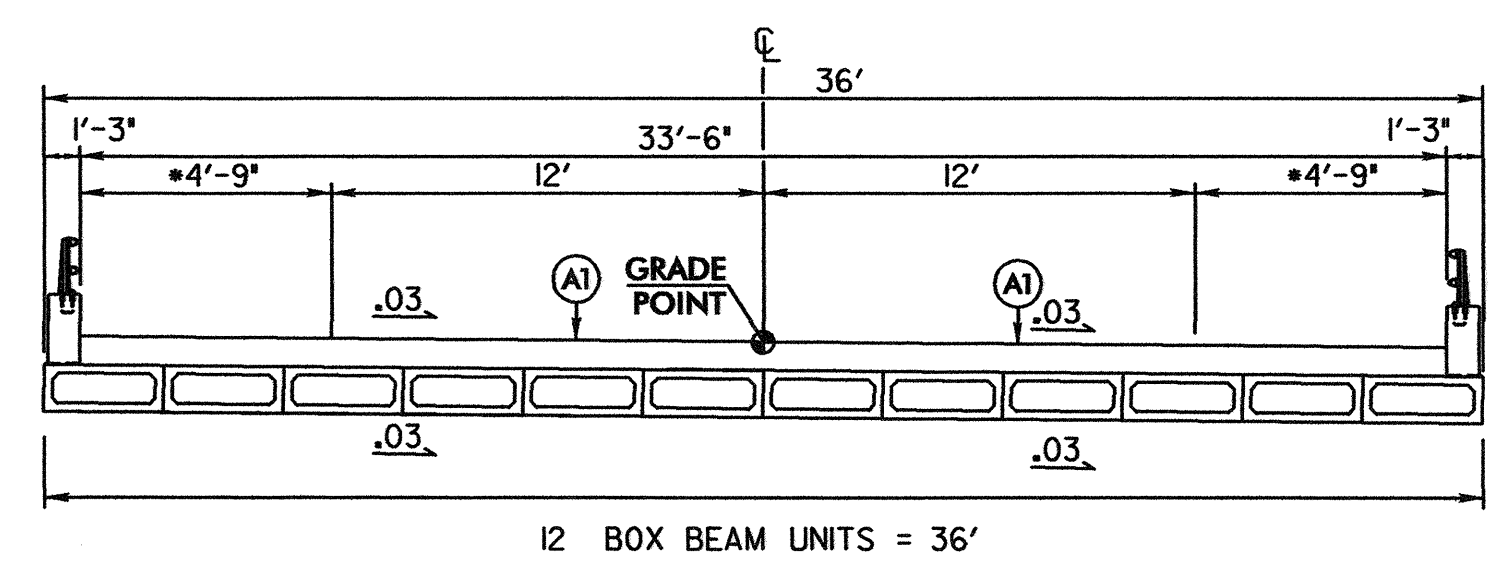
**NOTE: DRAWING NOT TO SCALE**



**TYPICAL SECTION NO. 1**  
 USE TYPICAL SECTION NO. 1 AS FOLLOWS  
 -L- Sta. 13+50.00 to Sta. 16+50.00 (BEGIN BRIDGE)  
 -L- Sta. 17+60.00 (END BRIDGE) to Sta. 21+00.00

PAVEMENT SCHEDULE	
A1	PROP. PORTLAND CEMENT CONCRETE PAVEMENT
C1	PROP. APPROX. 3" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS PER SQ. YD. IN EACH OF TWO LAYERS.
E1	PROP. APPROX. 5" ASPHALT CONC. BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 570 LBS PER SQ. YD.
T	EARTH MATERIAL

NOTE: ALL SLOPES 1:1 UNLESS OTHERWISE SPECIFIED



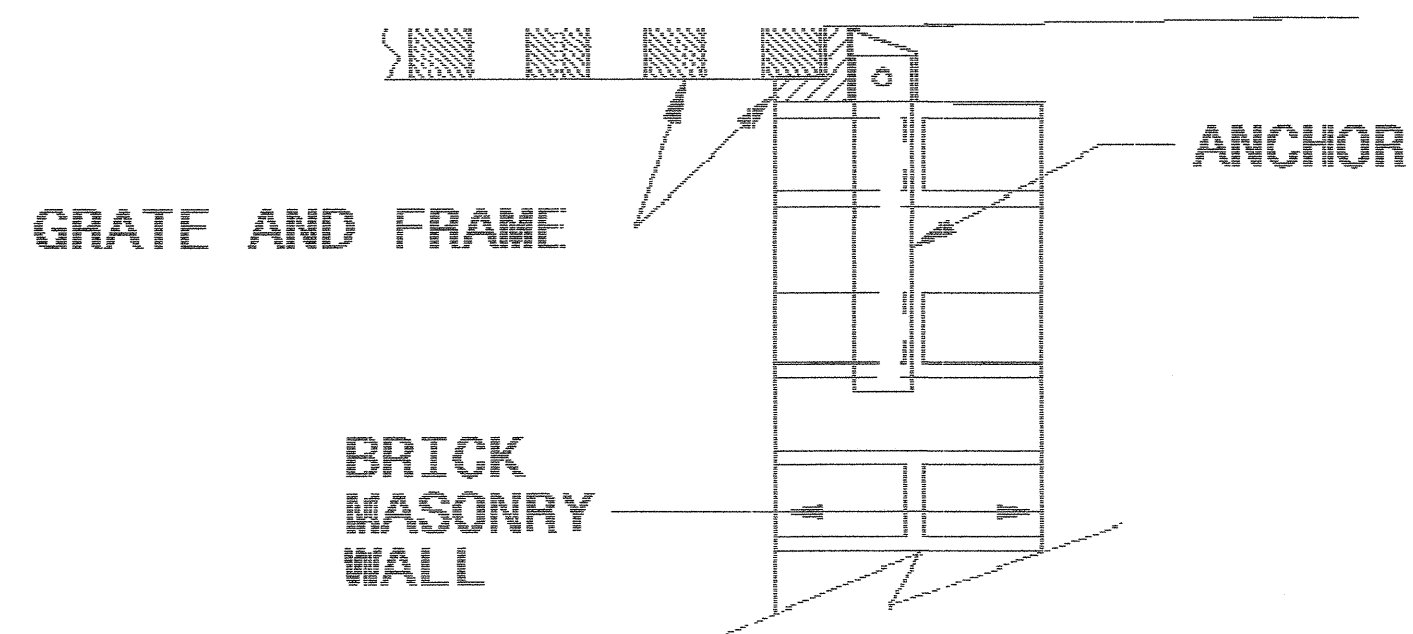
12 BOX BEAM UNITS = 36'  
**TYPICAL BRIDGE SECTION**  
 -L- Sta. 16+50.00 to Sta. 17+60.00  
 \* ADDITIONAL WIDTH FOR BICYCLE ROUTE



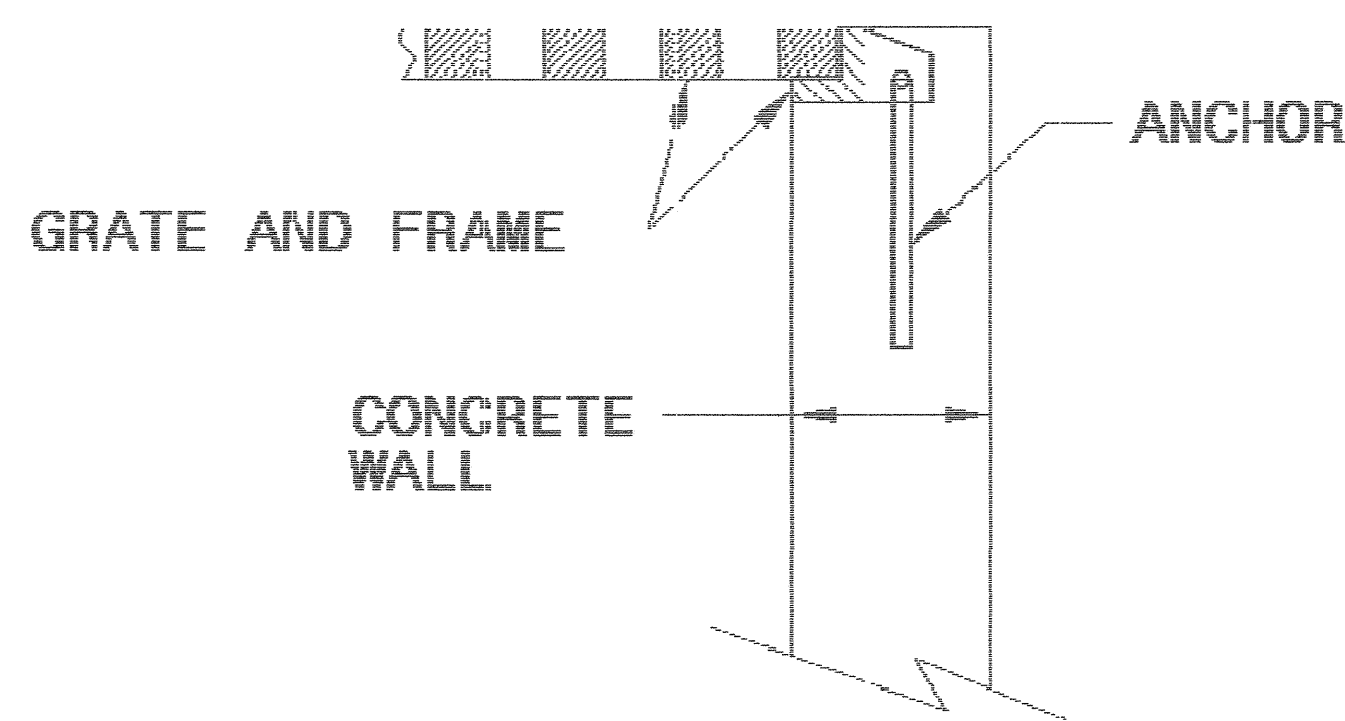
STATE OF  
NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

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

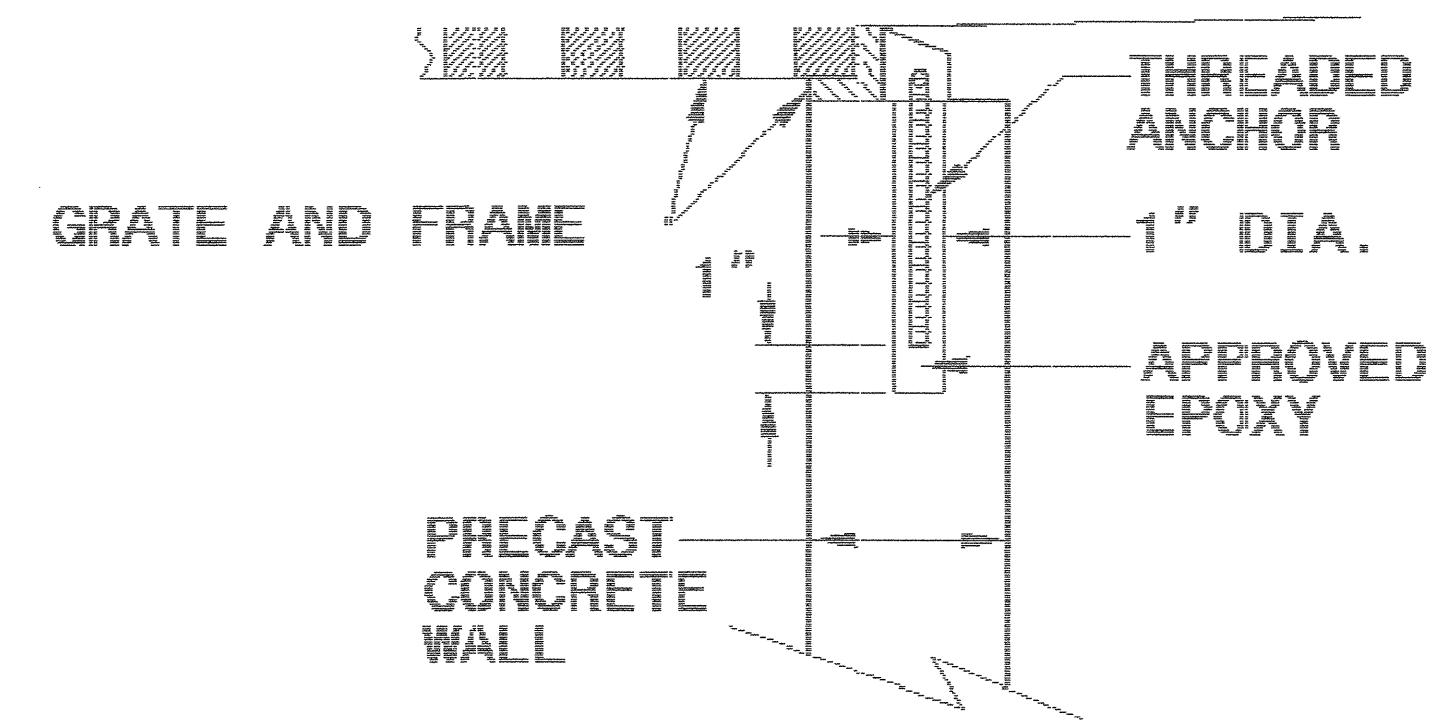
SHEET 1 OF 1  
**840D25**



**BRICK MASONRY  
CONSTRUCTION**



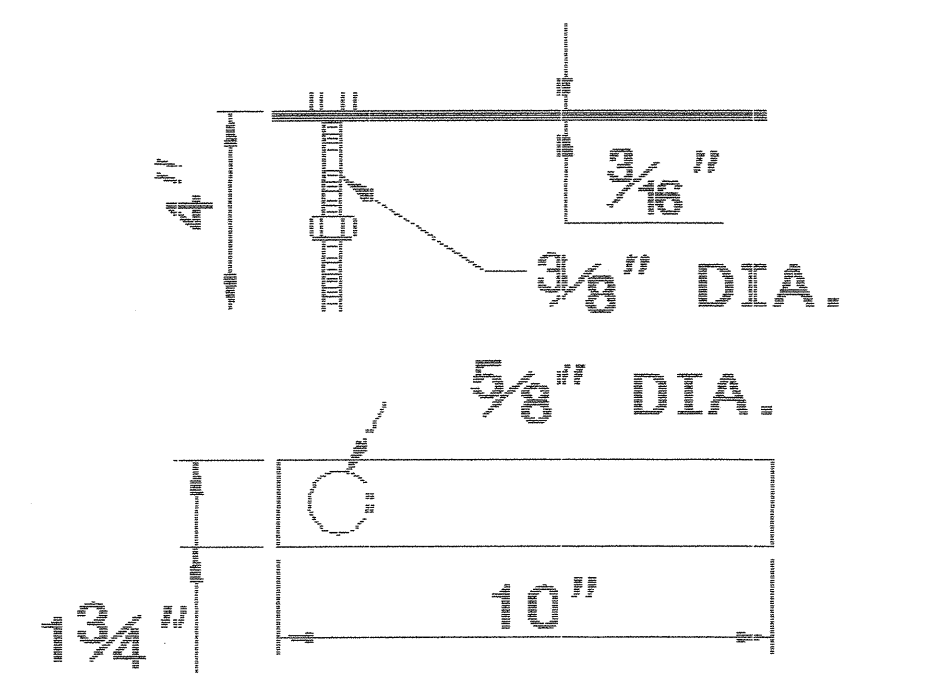
**CONCRETE  
CONSTRUCTION**



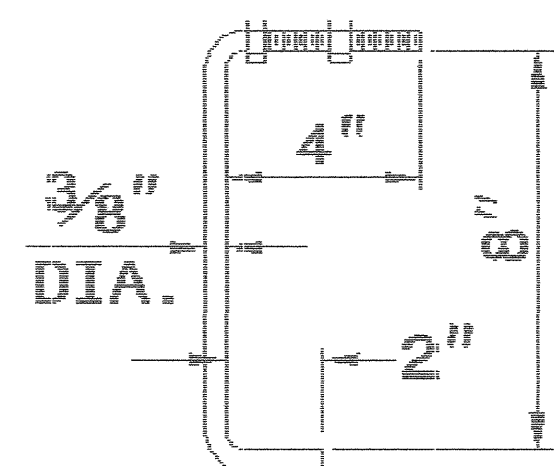
**PRECAST CONCRETE  
CONSTRUCTION**

**DETAIL SHOWING ANCHORAGE OF  
FRAME FOR GRATED DROP INLET**

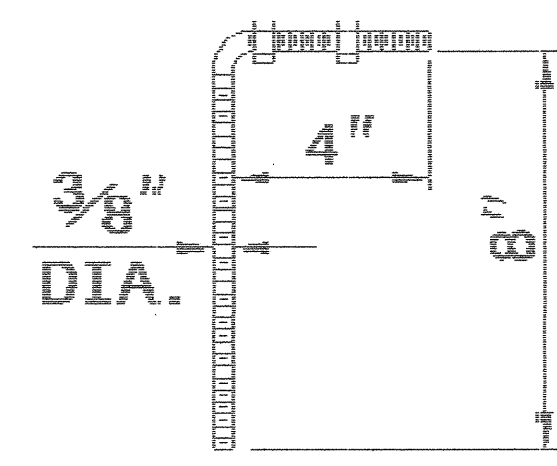
NOTE:  
CONSTRUCT GRATED DROP INLET TO COINCIDE WITH NORMAL  
OR SUPERELEVATED SHOULDER OR PAVEMENT SLOPE.



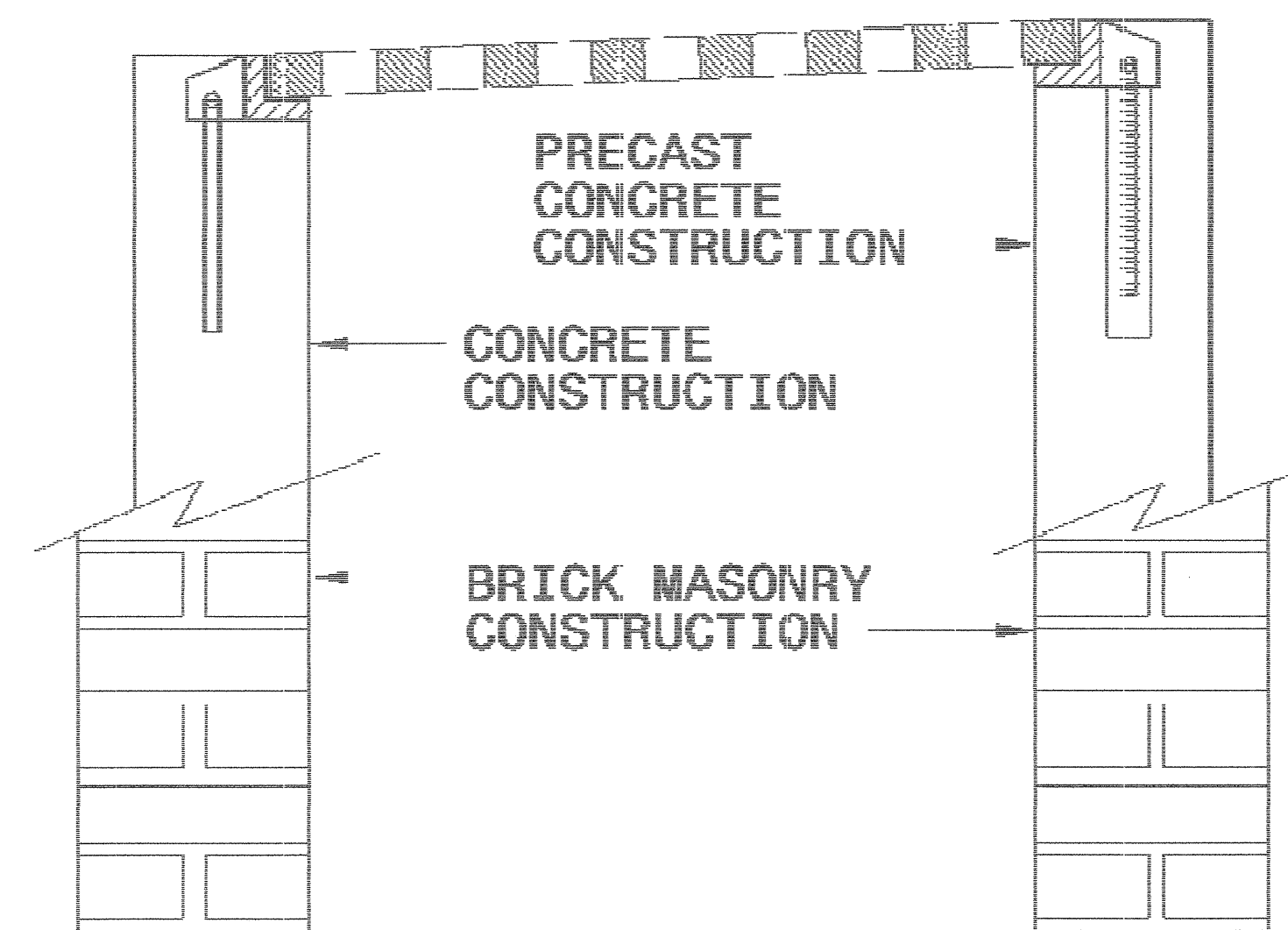
**MASONRY ANCHOR**  
3/8" DIA. BOLT WITH PLATE



**CONCRETE ANCHOR**  
3/8" DIA. BENT BAR



**PRECAST  
CONCRETE ANCHOR**  
3/8" DIA. BENT BAR

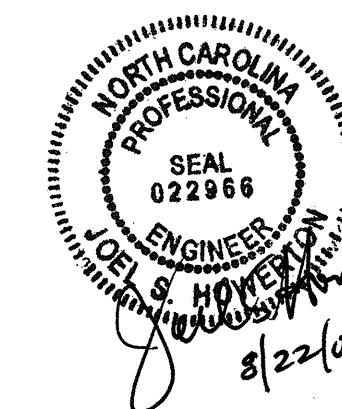


**FRAME AND GRATE INSTALLATION  
FOR NORMAL CROWN AND  
SUPERELEVATED SECTIONS**

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

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

SHEET 1 OF 1  
**840D25**



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

**SEE PLATE FOR TITLE**

ORIGINAL BY: 2008 STD 840.25 DATE: 07/18/06  
MODIFIED BY: E.E. WARD DATE: 9/25/06  
CHECKED BY: DATE:  
FILE SPEC.:

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
**SUMMARY OF QUANTITIES**

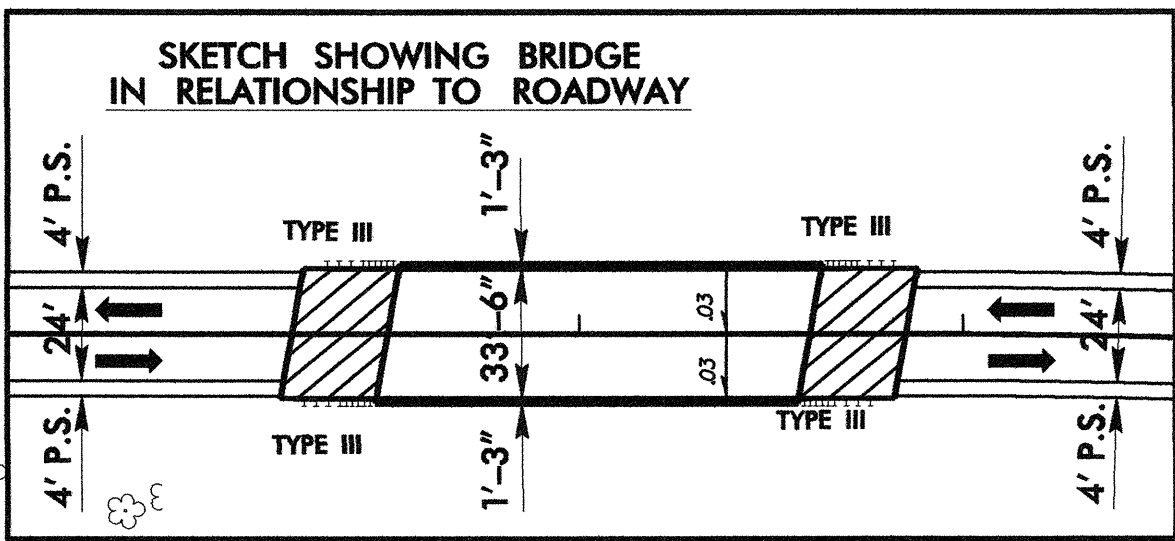
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C201714														
ItemNumber	Sec #	Quantity	Unit	Description	ItemNumber	Sec #	Quantity	Unit	Description	ItemNumber	Sec #	Quantity	Unit	Description
000100000-N	800	Lump Sum		MOBILIZATION	236700000-N	840	1	EA	FRAME WITH TWO GRATES, STD 840.29	603000000-E	1630	475	CY	SILT EXCAVATION
002900000-N	SP	Lump Sum		REINFORCED BRIDGE APPROACH FILL, STATION ***** (17+05.00)	261200000-E	848	85	SY	6" CONCRETE DRIVEWAY	603600000-E	1631	850	SY	MATTING FOR EROSION CONTROL
004300000-N	226	Lump Sum		GRADING	303000000-E	862	250	LF	STEEL BM GUARDRAIL	607000000-N	SP	8	EA	SPECIAL STILLING BASINS
005000000-E	226	1	ACR	SUPPLEMENTARY CLEARING & GRUB-BING	315000000-N	862	5	EA	ADDITIONAL GUARDRAIL POSTS	6071030000-E	SP	150	LF	COIR FIBER BAFFLES
005700000-E	226	100	CY	UNDERCUT EXCAVATION	321500000-N	862	4	EA	GUARDRAIL ANCHOR UNITS, TYPE III	608400000-E	1660	1.5	ACR	SEEDING & MULCHING
013400000-E	240	62	CY	DRAINAGE DITCH EXCAVATION	327000000-N	SP	4	EA	GUARDRAIL ANCHOR UNITS, TYPE 350	608700000-E	1660	1	ACR	MOWING
019500000-E	265	100	CY	SELECT GRANULAR MATERIAL	364900000-E	876	2	TON	RIP RAP, CLASS B	609000000-E	1661	50	LB	SEED FOR REPAIR SEEDING
019600000-E	270	100	SY	FABRIC FOR SOIL STABILIZATION	365600000-E	876	517	SY	FILTER FABRIC FOR DRAINAGE	609300000-E	1661	0.25	TON	FERTILIZER FOR REPAIR SEEDING
031800000-E	300	10	TON	FOUNDATION CONDITIONING MATERIAL, MINOR STRS	440000000-E	1110	332	SF	WORK ZONE SIGNS (STATIONARY)	609600000-E	1662	50	LB	SEED FOR SUPPLEMENTAL SEEDING
034300000-E	310	20	LF	15" SIDE DRAIN PIPE	441000000-E	1110	144	SF	WORK ZONE SIGNS (BARRICADE MOUNTED)	610800000-E	1665	1	TON	FERTILIZER TOPDRESSING
034400000-E	310	56	LF	18" SIDE DRAIN PIPE	444500000-E	1145	96	LF	BARRICADES (TYPE III)	611400000-N	SP	2	HR	SPECIALIZED HAND MOWING
036600000-E	310	16	LF	15" RC PIPE CULVERTS, CLASS III	468500000-E	1205	1,500	LF	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)	611700000-N	SP	8	EA	RESPONSE FOR EROSION CONTROL
099500000-E	340	129	LF	PIPE REMOVAL	468600000-E	1205	1,500	LF	THERMOPLASTIC PAVEMENT MARKING LINES (4", 120 MILS)	612300000-E	1670	0.1	ACR	REFORESTATION
122000000-E	545	100	TON	INCIDENTAL STONE BASE	490000000-N	1251	9	EA	PERMANENT RAISED PAVEMENT MARKERS					
148900000-E	610	598	TON	ASPHALT CONC BASE COURSE, TYPE B25.0B	600000000-E	1605	960	LF	TEMPORARY SILT FENCE					
151900000-E	610	352	TON	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	606000000-E	1610	90	TON	STONE FOR EROSION CONTROL, CLASS A					
156000000-E	620	47	TON	ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22	609000000-E	1610	150	TON	STONE FOR EROSION CONTROL, CLASS B					
200000000-N	806	14	EA	RIGHT OF WAY MARKERS	601200000-E	1610	235	TON	SEDIMENT CONTROL STONE					
202200000-E	815	23	CY	SUBDRAIN EXCAVATION	601500000-E	1615	1.5	ACR	TEMPORARY MULCHING					
203300000-E	815	17	CY	SUBDRAIN FINE AGGREGATE	601800000-E	1620	50	LB	SEED FOR TEMPORARY SEEDING					
204400000-E	815	100	LF	6" PERFORATED SUBDRAIN PIPE	602100000-E	1620	0.25	TON	FERTILIZER FOR TEMPORARY SEEDING					
205500000-E	815	3	EA	6" SUBDRAIN PIPE WYES, TEES, & ELBOWS	602400000-E	1622	50	LF	TEMPORARY SLOPE DRAINS					
206600000-N	815	1	EA	CONCRETE PAD FOR SUBDRAIN PIPE OUTLET	602700000-N	1622	2	EA	INLET PROTECTION AT TEMPORARY SLOPE DRAINS					
207700000-E	815	6	LF	6" OUTLET PIPE (SUBDRAINS)	602900000-E	SP	150	LF	SAFETY FENCE					
228600000-N	840	1	EA	MASONRY DRAINAGE STRUCTURES										





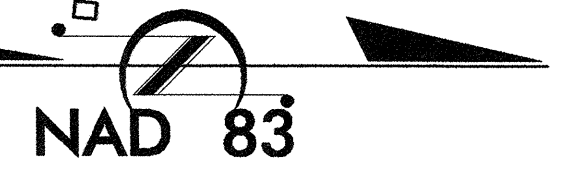


BEGIN TIP PROJECT B-4326  
 BEGIN CONSTRUCTION  
 POC Sta. 13+00.00 -L-

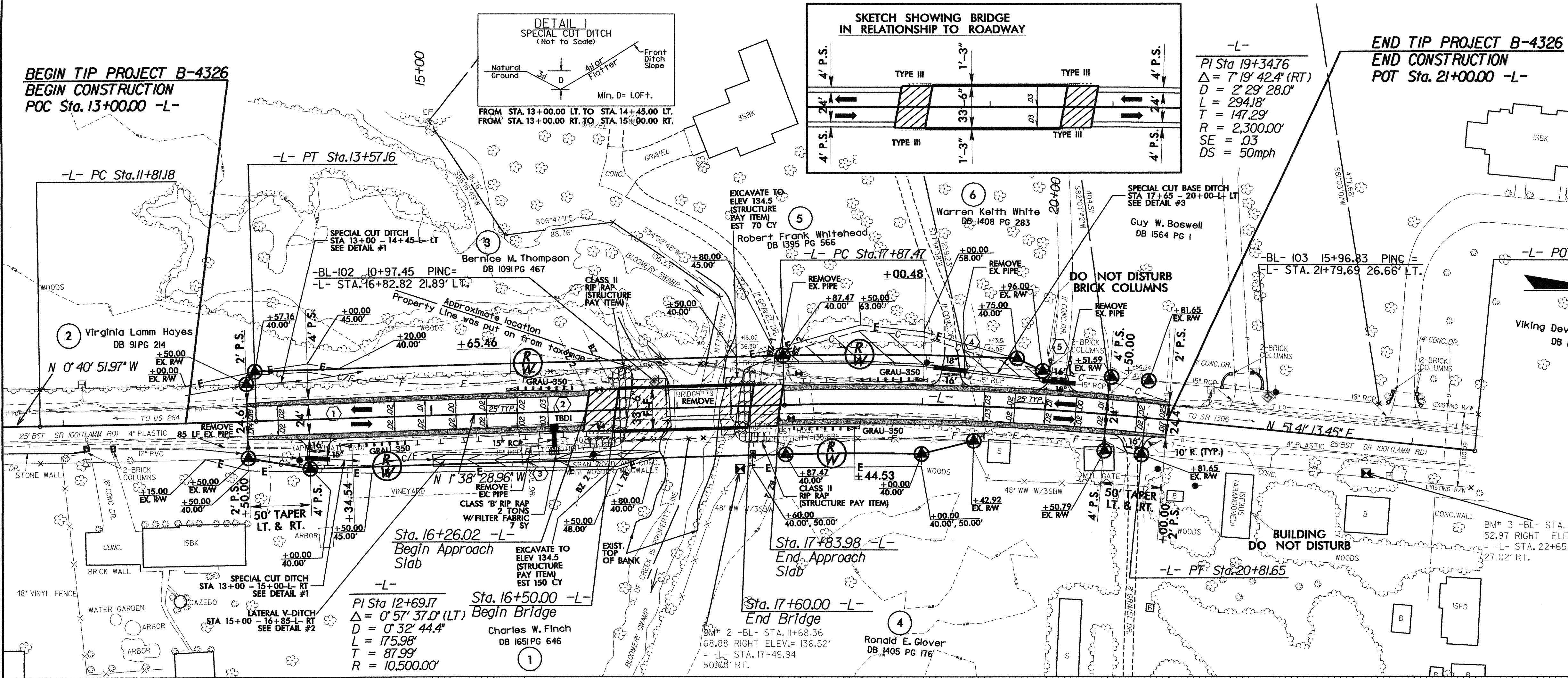
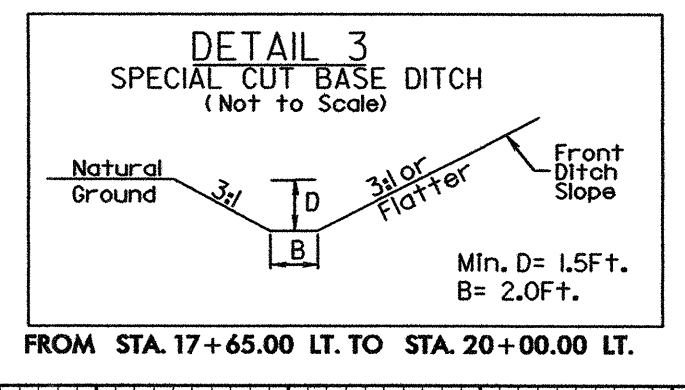
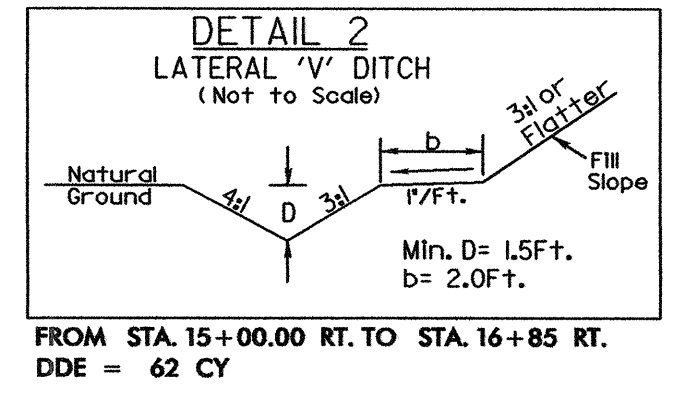


-L-  
 PI Sta 19+34.76  
 $\Delta = 7' 19'' 42.4'' (RT)$   
 $D = 2' 29'' 28.0''$   
 $L = 294.18'$   
 $T = 147.29'$   
 $R = 2,300.00'$   
 $SE = .03$   
 $DS = 50\text{mph}$

END TIP PROJECT B-4326  
 END CONSTRUCTION  
 POT Sta. 21+00.00 -L-



Viking Development Company  
 DB I286 PG 407



**BRIDGE HYDRAULIC DATA**

DESIGN DISCHARGE	= 1990 CFS
DESIGN FREQUENCY	= 25 YR
DESIGN HW ELEVATION	= 106.0'
BASE DISCHARGE	= 3,530 CFS
BASE FREQUENCY	= 100 YR
BASE HW ELEVATION	= 125.0'
OVERTOPPING DISCHARGE	= +/- 4,450 CFS
OVERTOPPING FREQUENCY	= +/- 200 YR
OVERTOPPING ELEVATION	= 131.0'
DATE OF SURVEY	= 3/2/05
W.S. ELEVATION AT DATE OF SURVEY	= 2.90'

SEE STRUCTURE PLANS  
 S-1 THRU S-28

