

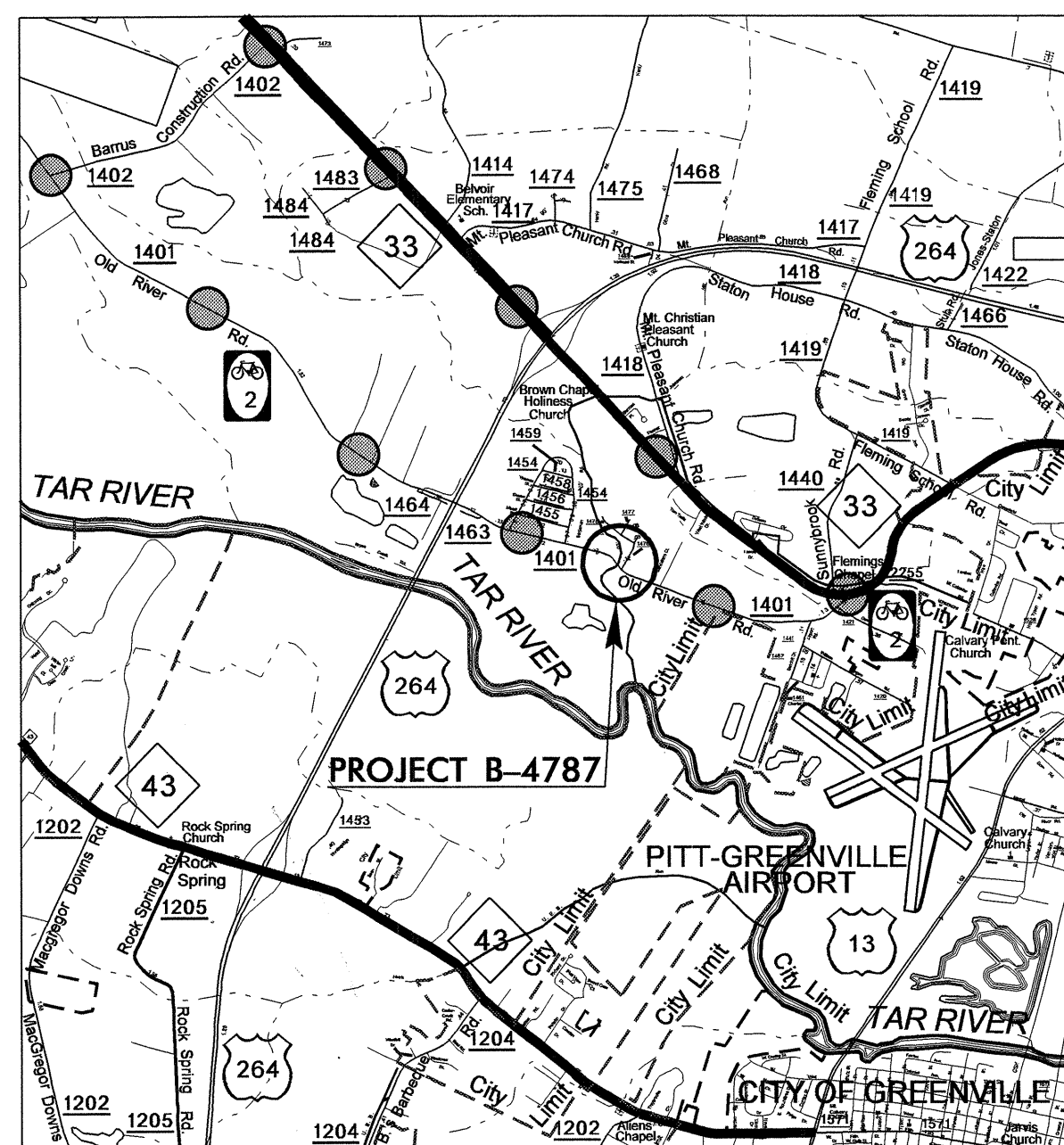
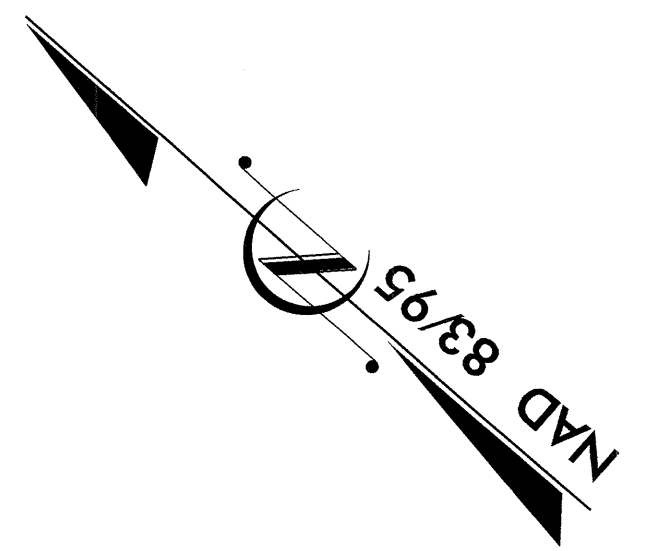
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4787	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
38557.1.1	BRZ-1401(4)	PE	
38557.2.1	BRZ-1401(4)	RW & UTILITIES	
38557.3.1	BRZ-1401(4)	CONST.	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PITT COUNTY

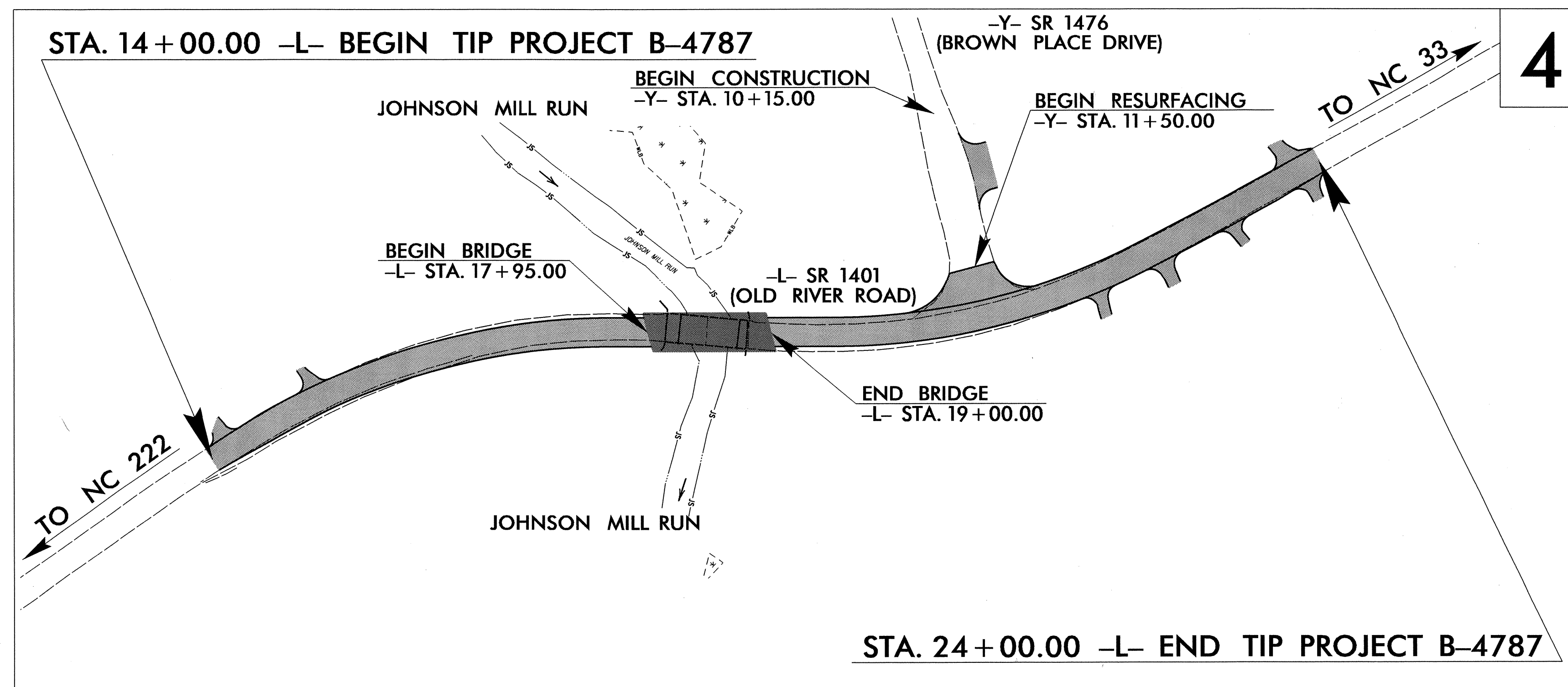
**LOCATION: BRIDGE NO. 95 ON SR 1401 (OLD RIVER ROAD)
OVER JOHNSON MILL RUN**

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



VICINITY MAP

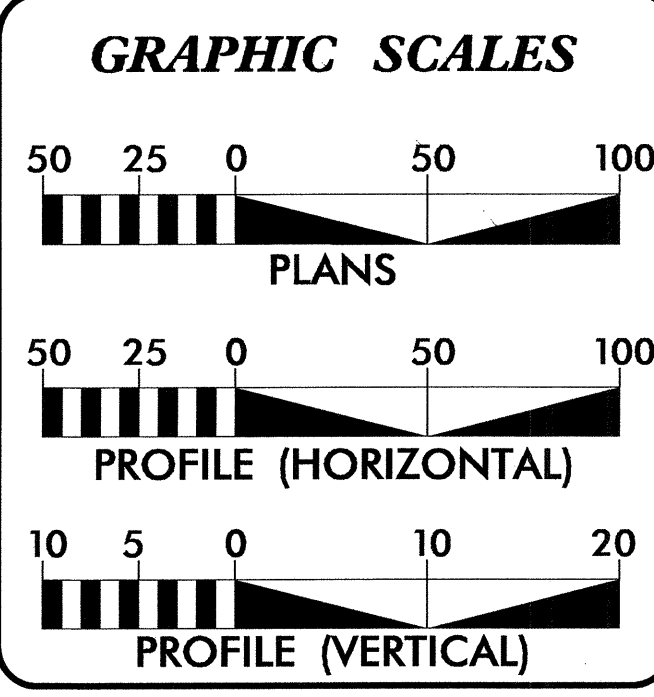
● — OFFSITE DETOUR ROUTE



4

TIP PROJECT: B-4787

CONTRACT: C202957



DESIGN DATA

ADT 2012 =	7900
ADT 2035 =	13400
DHV =	10 %
D =	60 %
T =	15 % *
V =	50 MPH
* TTST =	5% DUAL = 10%
FUNC CLASS =	MINOR COLLECTOR
"SUB-REGIONAL TIER"	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4787 =	0.169 MILES
LENGTH STRUCTURE TIP PROJECT B-4787 =	0.020 MILES
TOTAL LENGTH OF TIP PROJECT B-4787 =	0.189 MILES

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

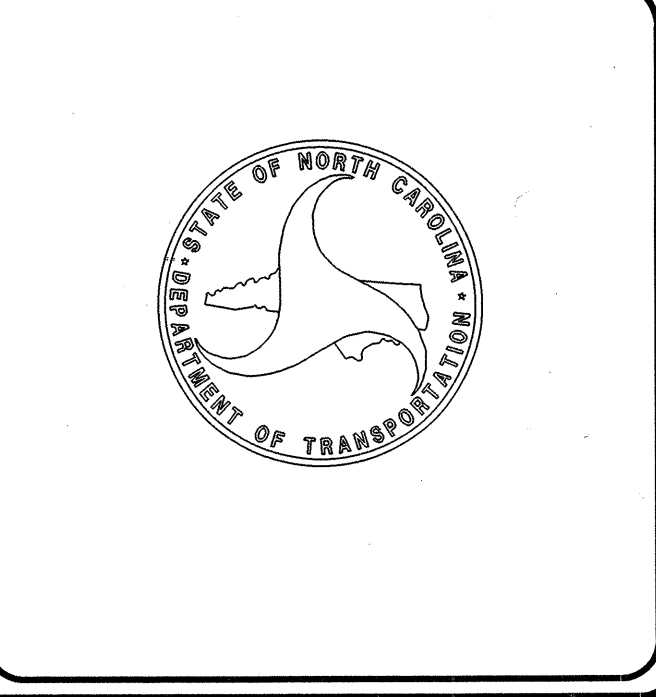
2012 STANDARD SPECIFICATIONS	
RIGHT OF WAY DATE: NOVEMBER 28, 2011	JAMES A. SPEER, PE PROJECT ENGINEER
LETTING DATE: NOVEMBER 20, 2012	DANIEL W. GARDNER, JR., PE PROJECT DESIGN ENGINEER

HYDRAULIC ENGINEER

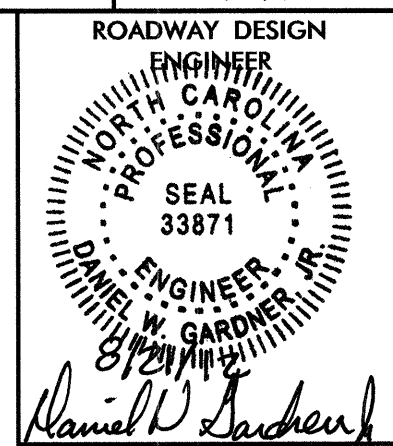
SIGNATURE: *Joseph W. Dunnington* P.E. 8/20/12

ROADWAY DESIGN ENGINEER

SIGNATURE: *Daniel W. Gardner, Jr.* P.E. 8/21/12



07-MAY-2012 15:28 P:\PROJECTS\PROJ\B4787_rdy_tsh.dgn \$\$\$USERNAME\$\$\$



8/17/99

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	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
3	SUMMARY OF QUANTITIES
3-A	SUMMARY OF DRAINAGE QUANTITIES, SUMMARY OF GUARDRAIL, EARTHWORK SUMMARY, ASPHALT PAVEMENT REMOVAL SUMMARY, AND SHOULDER BERM GUTTER SUMMARY
4	PLAN SHEET
5	PROFILE SHEET
TMP-1 THRU TMP-2	TRANSPORTATION MANAGEMENT PLANS
EC-1 THRU EC-5	EROSION CONTROL PLANS
RF-1	REFORESTATION PLANS
SIGN-1 THRU SIGN-3	SIGNING PLANS
UC-1 THRU UC-8	UTILITY CONSTRUCTION PLANS
UD-1 THRU UD-2	UTILITY BY OTHERS
X-1	CROSS-SECTION SUMMARY
X-2 THRU X-12	CROSS-SECTIONS
S-1 THRU S-30	STRUCTURE PLANS

GENERAL NOTES: 2012 SPECIFICATIONS
EFFECTIVE: 01-17-12
REVISED: 07/30/12

GRADING AND SURFACING OR RESURFACING AND WIDENING:
THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

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

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

SIDE ROADS:
THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

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

DRIVEWAYS:
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 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 Greenville Utilities Commission (Water), Greenville Utilities Commission (Gas), Greenville Utilities Commission (Power), Centurylink Telephone, Suddenlink CATV, and Edgecombe Martin EMC Power. 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.

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	
200.03	Method of Clearing - Method III
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Superelevation - Two Lane Pavement
225.06	Method of Grading Sight Distance at Intersections
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
310.10	Driveway Pipe Construction
DIVISION 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	
815.02	Subsurface Drain
840.00	Concrete Base Pad for Drainage Structures
840.25	Anchorage for Frames - Brick or Concrete or Precast
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
848.04	Street Turnout
862.01	Guardrail Placement
862.02	Guardrail Installation
862.03	Structure Anchor Units
866.01	Chain Link Fence - 4', 5' and 6' High Fence
876.01	Rip Rap in Channels

04/16/11

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	✕
Property Monument	□ ECM
Parcel/Sequence Number	②③
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
Known Soil Contamination: Area or Site	☠ ☠
Potential Soil Contamination: Area or Site	☠? ☠?

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	□
Jurisdictional Stream	---JS---
Buffer Zone 1	---BZ 1---
Buffer Zone 2	---BZ 2---
Flow Arrow	←
Disappearing Stream	→
Spring	○
Wetland	✕
Proposed Lateral, Tail, Head Ditch	← FLM
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	-----
Proposed Right of Way Line with Iron Pin and Cap Marker	○ R/W ▲
Proposed Right of Way Line with Concrete or Granite R/W Marker	○ R/W
Proposed Control of Access Line with Concrete CA Marker	○ CA
Existing Control of Access	○ CA
Proposed Control of Access	○ CA
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	○ CR
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	⊕
Pavement Removal	⊗

VEGETATION:

Single Tree	○
Single Shrub	○
Hedge	-----
Woods Line	-----

Orchard	-----
Vineyard	□ Vineyard

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	□ CONC
Bridge Wing Wall, Head Wall and End Wall	} CONC WW {
MINOR:	
Head and End Wall	--- CONC HW ---
Pipe Culvert	-----
Footbridge	-----
Drainage Box: Catch Basin, DI or JB	□ CB
Paved Ditch Gutter	-----
Storm Sewer Manhole	○
Storm Sewer	-----

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	●
Recorded U/G Power Line	-----
Designated U/G Power Line (S.U.E.*)	-----

TELEPHONE:

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

WATER:

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

TV:

TV Satellite Dish	☾
TV Pedestal	□
TV Tower	⊗
U/G TV Cable Hand Hole	□
Recorded U/G TV Cable	-----
Designated U/G TV Cable (S.U.E.*)	-----
Recorded U/G Fiber Optic Cable	-----
Designated U/G Fiber Optic Cable (S.U.E.*)	-----

GAS:

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

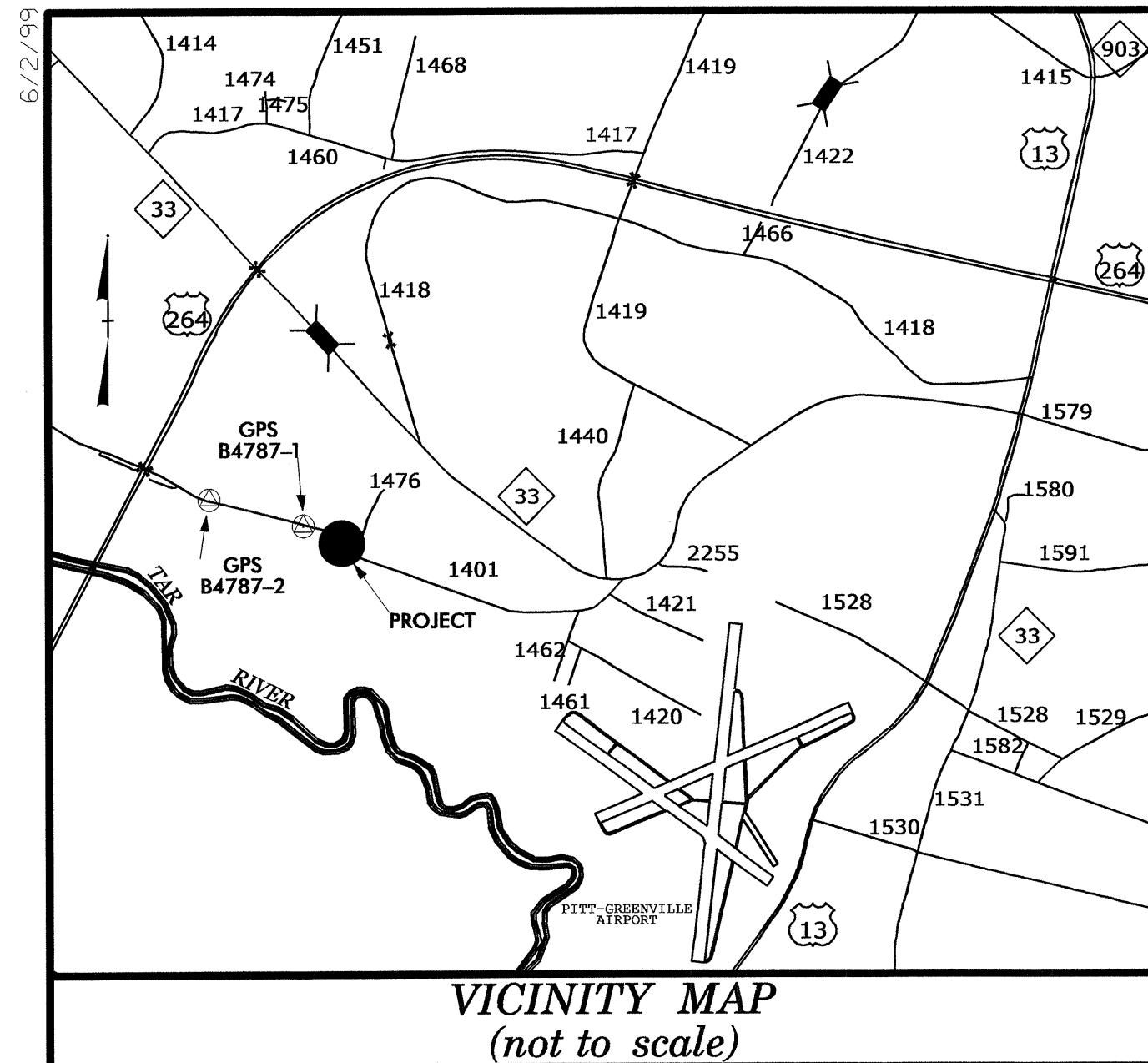
SANITARY SEWER:

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

MISCELLANEOUS:

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

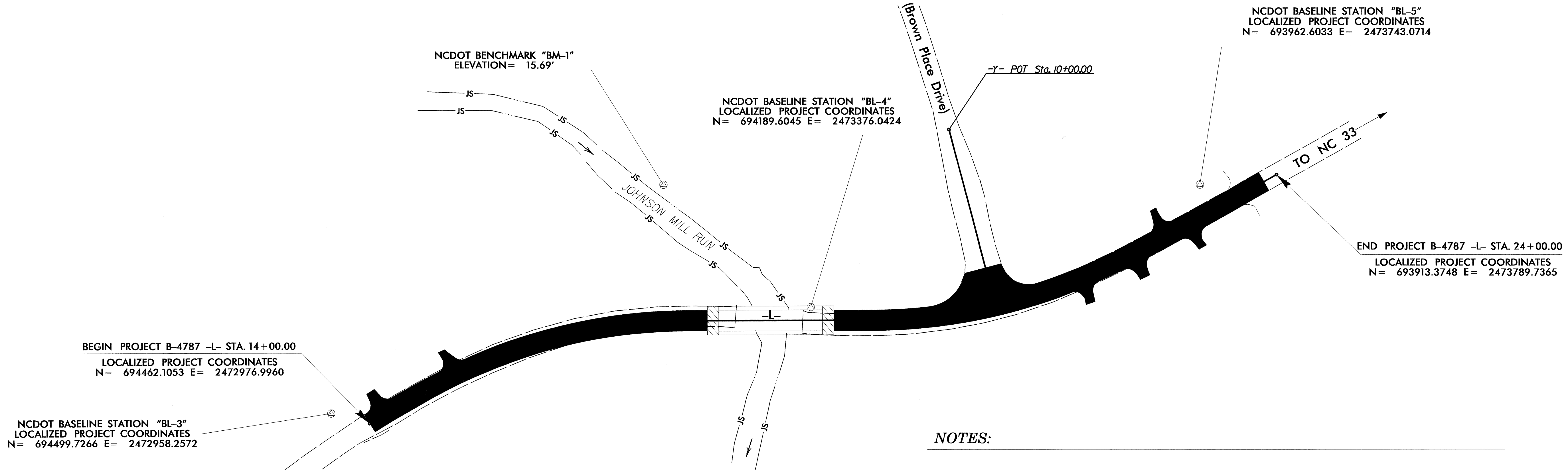
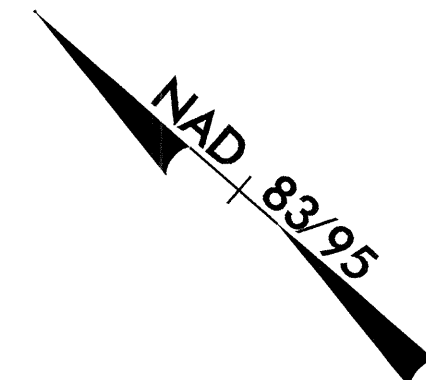
SURVEY CONTROL SHEET B-4787



VICINITY MAP
(not to scale)

BL	POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
3	BL-3		694499.7266	2472958.2572	25.41	13+72.19	31.12 LT
4	BL-4		694189.6045	2473376.0424	21.20	18+89.64	14.08 LT
5	BL-5		693962.6033	2473743.0714	25.75	23+39.15	30.44 LT

.....
 BM1 ELEVATION = 15.69
 N 694392 E 2473371
 L STATION 17+40.00 143 LEFT
 RR SPIKE SET IN 12" GUM



NOTES:

1. THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTP://WWW.NCDOT.ORG/DOH/PRECONSTRUCT/HIGHWAY/LOCATIONPROJECT/](http://www.ncdot.org/doh/preconstruct/highway/locationproject/)
 THE FILES TO BE FOUND ARE AS FOLLOWS:
 b4787_ls_control.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 HARN MONUMENTATION
 SEE GPS CALIBRATION SHEET FOR HORIZONTAL AND VERTICAL COORDINATE VALUES.

DATUM DESCRIPTION
 THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "GPS B4787-1"
 WITH NAD 83/95 STATE PLANE GRID COORDINATES OF
 NORTHING: 694525.1330(ft) EASTING: 2472639.1920(ft)
 ELEVATION: 26.68(ft)
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99990075
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS B4787-1" TO -L- STATION 14+00.00 IS
 S 79°25'52.5" E 343.63
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88

NOTE: DRAWING NOT TO SCALE

15-MAR-2012 08:00 B4787-1.S-1.c.dgn

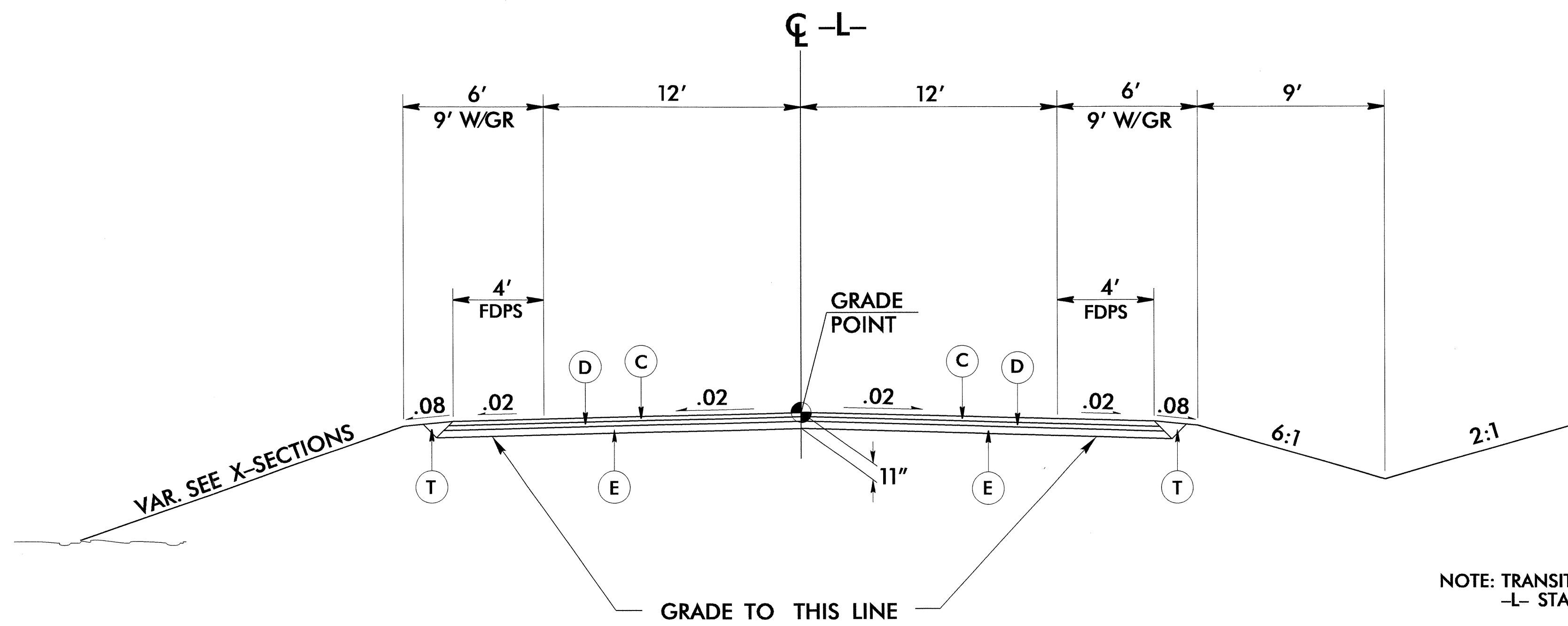
6/2/99

15-MAR-2012 08:00 64787_rdy_typ.dgn
663301581

PROJECT REFERENCE NO. B-4787	SHEET NO. 2
ROADWAY DESIGN ENGINEER DANIEL W. GARDNER SEAL 33871 8/2/12	PAVEMENT DESIGN ENGINEER CHARLES MORRISON SEAL 22888 8/1/12

PAVEMENT SCHEDULE	
C	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.
D	PROP. APPROX. 2½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
E	PROP. APPROX. 5½" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
T	EARTH MATERIAL

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



TYPICAL SECTION NO. 1

NOTE: TRANSITION FROM EXISTING TO TYPICAL SECTION NO. 1
-L- STA 14+00.00 TO STA 14+50.00

USE TYPICAL SECTION NO. 1 AS FOLLOWS

- L- STA 14+50.00 TO STA 17+95.00 (BEGIN BRIDGE)
- L- STA 19+00.00 (END BRIDGE) TO STA 23+50.00

NOTE: TRANSITION FROM TYPICAL SECTION NO. 1 TO EXISTING
-L- STA 23+50.00 TO STA 24+00.00

NOTE: SR 1401 (OLD RIVER ROAD) IS A DESIGNATED BICYCLE ROUTE, NC 2.

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C202957

ItemNumber	Sec #	Quantity	Unit	Description
0000100000-N	800	Lump Sum		MOBILIZATION
0000400000-N	801	Lump Sum		CONSTRUCTION SURVEYING
0029000000-N	SP	Lump Sum		REINFORCED BRIDGE APPROACH FILL, STATION ***** (18+47.50 -L-)
0043000000-N	226	Lump Sum		GRADING
0050000000-E	226	1	ACR	SUPPLEMENTARY CLEARING & GRUB-BING
0057000000-E	226	400	CY	UNDERCUT EXCAVATION
0134000000-E	240	6	CY	DRAINAGE DITCH EXCAVATION
0195000000-E	265	400	CY	SELECT GRANULAR MATERIAL
0196000000-E	270	500	SY	GEOTEXTILE FOR SOIL STABILIZATION
0318000000-E	300	69.96	TON	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES
0320000000-E	300	1,200	SY	FOUNDATION CONDITIONING GEOTEXTILE
0335200000-E	305	16	LF	15" DRAINAGE PIPE
0343000000-E	310	28	LF	15" SIDE DRAIN PIPE
0344000000-E	310	228	LF	18" SIDE DRAIN PIPE
0448200000-E	310	32	LF	15" RC PIPE CULVERTS, CLASS IV
0995000000-E	340	140	LF	PIPE REMOVAL
1220000000-E	545	100	TON	INCIDENTAL STONE BASE
1330000000-E	607	100	SY	INCIDENTAL MILLING
1489000000-E	610	1,120	TON	ASPHALT CONC BASE COURSE, TYPE B25.0B
1498000000-E	610	510	TON	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B
1519000000-E	610	610	TON	ASPHALT CONC SURFACE COURSE, TYPE S9.5B
1575000000-E	620	115	TON	ASPHALT BINDER FOR PLANT MIX
2022000000-E	815	25	CY	SUBDRAIN EXCAVATION
2026000000-E	815	100	SY	GEOTEXTILE FOR SUBSURFACE DRAINS
2036000000-E	815	20	CY	SUBDRAIN COARSE AGGREGATE

SUMMARY OF QUANTITIES - B-4787

ItemNumber	Sec #	Quantity	Unit	Description
2044000000-E	815	100	LF	6" PERFORATED SUBDRAIN PIPE
2070000000-N	815	1	EA	SUBDRAIN PIPE OUTLET
2077000000-E	815	6	LF	6" OUTLET PIPE
2286000000-N	840	2	EA	MASONRY DRAINAGE STRUCTURES
2367000000-N	840	2	EA	FRAME WITH TWO GRATES, STD 840.29
2556000000-E	846	25	LF	SHOULDER BERM GUTTER
2845000000-N	858	8	EA	ADJUSTMENT OF METER BOXES OR VALVE BOXES
3030000000-E	862	50	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
3572000000-E	867	270	LF	CHAIN LINK FENCE RESET
3628000000-E	876	83	TON	RIP RAP, CLASS I
3656000000-E	876	751	SY	GEOTEXTILE FOR DRAINAGE
4072000000-E	903	195	LF	SUPPORTS, 3-LB STEEL U-CHANNEL
4102000000-N	904	15	EA	SIGN ERECTION, TYPE E
4158000000-N	907	15	EA	DISPOSAL OF SIGN SYSTEM, WOOD
4400000000-E	1110	276	SF	WORK ZONE SIGNS (STATIONARY)
4405000000-E	1110	96	SF	WORK ZONE SIGNS (PORTABLE)
4410000000-E	1110	104	SF	WORK ZONE SIGNS (BARRICADE MOUNTED)
4430000000-N	1130	20	EA	DRUMS
4435000000-N	1135	20	EA	CONES
4445000000-E	1145	104	LF	BARRICADES (TYPE III)
4450000000-N	1150	240	HR	FLAGGER
5325600000-E	1510	517	LF	6" WATER LINE
5571600000-E	1515	2	EA	6" TAPPING VALVE
5648000000-N	1515	6	EA	RELOCATE WATER METER

ItemNumber	Sec #	Quantity	Unit	Description
5871400000-E	1550	338	LF	TRENCHLESS INSTALLATION OF 6" IN SOIL
5871410000-E	1550	37	LF	TRENCHLESS INSTALLATION OF 6" NOT IN SOIL
5912000000-N	SP	Lump Sum		GENERIC UTILITY ITEM INSTALL 4" & 8" MDPE GAS MAIN
6000000000-E	1605	1,500	LF	TEMPORARY SILT FENCE
6006000000-E	1610	285	TON	STONE FOR EROSION CONTROL, CLASS A
6009000000-E	1610	245	TON	STONE FOR EROSION CONTROL, CLASS B
6012000000-E	1610	75	TON	SEDIMENT CONTROL STONE
6015000000-E	1615	1.5	ACR	TEMPORARY MULCHING
6018000000-E	1620	50	LB	SEED FOR TEMPORARY SEEDING
6021000000-E	1620	1.25	TON	FERTILIZER FOR TEMPORARY SEEDING
6024000000-E	1622	200	LF	TEMPORARY SLOPE DRAINS
6029000000-E	SP	600	LF	SAFETY FENCE
6030000000-E	1630	380	CY	SILT EXCAVATION
6036000000-E	1631	2,000	SY	MATTING FOR EROSION CONTROL
6037000000-E	SP	700	SY	COIR FIBER MAT
6042000000-E	1632	60	LF	1/4" HARDWARE CLOTH
6048000000-E	SP	90	SY	FLOATING TURBIDITY CURTAIN
6071010000-E	SP	210	LF	WATTLE
6071020000-E	SP	60	LB	POLYACRYLAMIDE (PAM)
6071030000-E	1640	110	LF	COIR FIBER BAFFLE
6071050000-E	SP	2	EA	*** SKIMMER (1-1/2")
6084000000-E	1660	1.5	ACR	SEEDING & MULCHING
6087000000-E	1660	1	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	1	TON	FERTILIZER TOPDRESSING
6114500000-N	1667	10	MHR	SPECIALIZED HAND MOWING
6117000000-N	SP	18	EA	RESPONSE FOR EROSION CONTROL
6123000000-E	1670	0.1	ACR	REFORESTATION

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
SUB-REGIONAL

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

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".

Main table listing pipe specifications including Station, Structure No., Drainage Pipe, C.S. Pipe, R.C. Pipe (Class III/IV), Endwalls, Frame, Grates, and Invert Elevations.

"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

Table summarizing guardrail details: Survey Line, Beg. Sta., End Sta., Location, Length (Straight, Shop Curved, Double Faced), Warrant Point (Approach End, Trailing End), Total Shoulder Width, Flare Length, Anchors, Impact Attenuator Type 350 (EA, G, NG), Single Faced Guardrail, Remove Existing Guardrail, and Remove and Stockpile Existing Guardrail.

SUMMARY OF EARTHWORK
IN CUBIC YARDS

Table summarizing earthwork quantities: Location, Uncl. Excav., Embankment, Borrow, Waste. Includes sub-totals for Summary No. 1 and 2, Grand Totals, and material requirements like DDE, Undercut Contingency, Geotextile, Select Granular Material, and Subsurface Drainage.

SUMMARY OF REMOVAL
EXISTING ASPHALT PAVEMENT

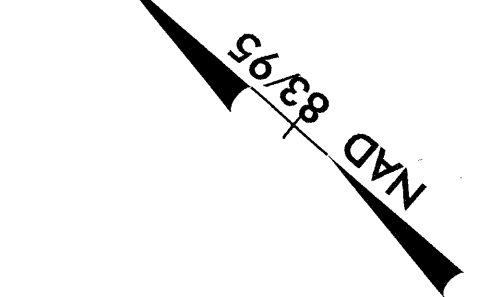
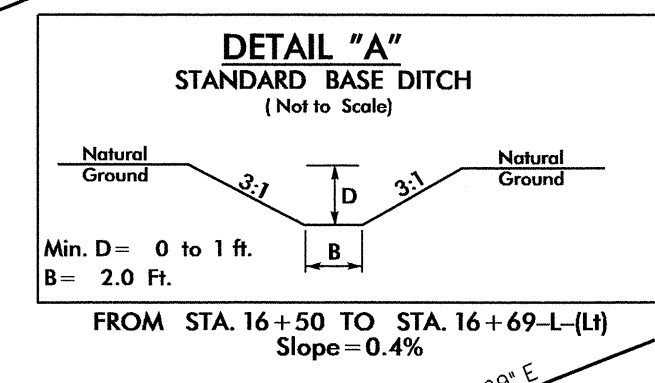
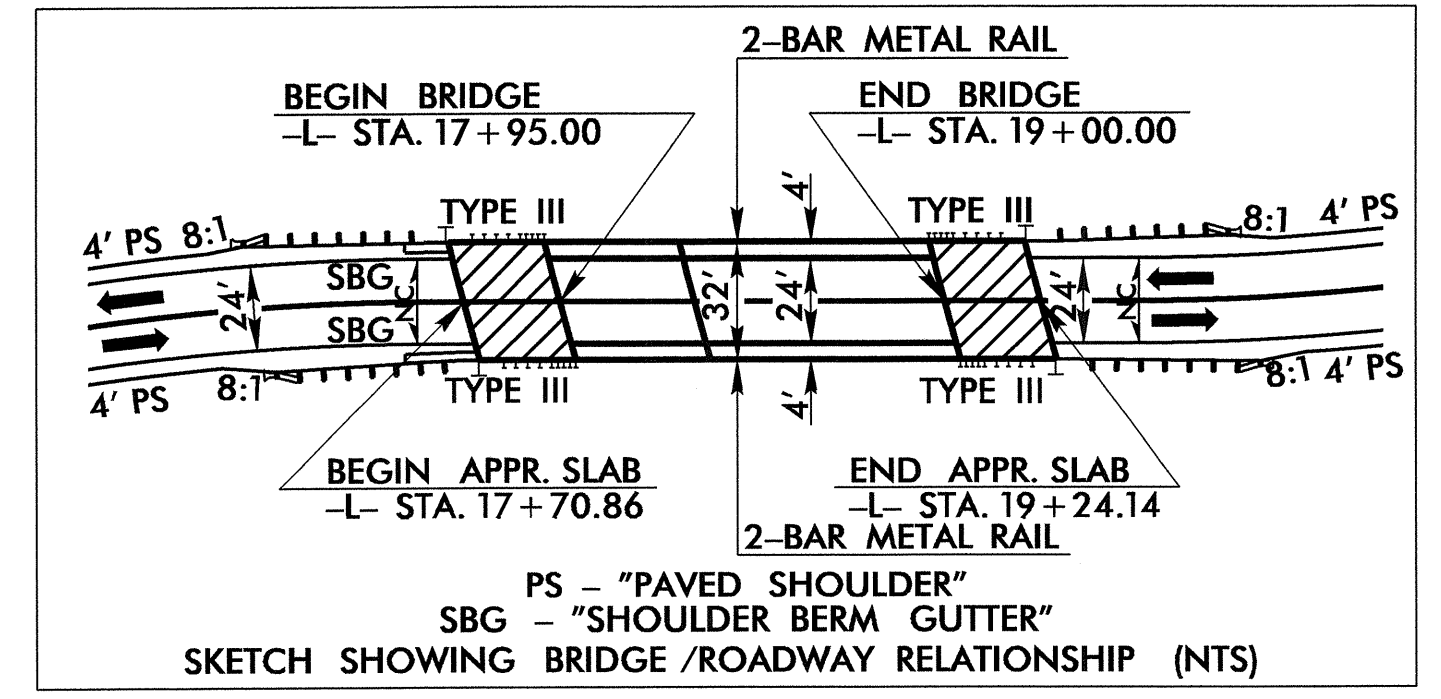
Table summarizing removal of existing asphalt pavement: Survey Line, Station, Station, Location, Square Yards. Includes a total of 2270.89 square yards.

SHOULDER BERM GUTTER SUMMARY

Table summarizing shoulder berm gutter: Survey Line, Station, Station, Length. Includes a total length of 20.00.

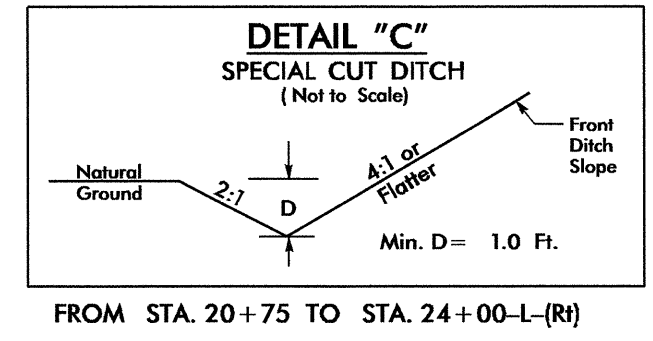
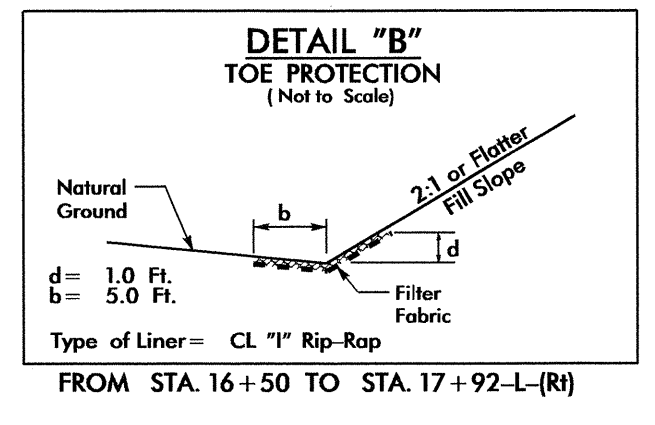
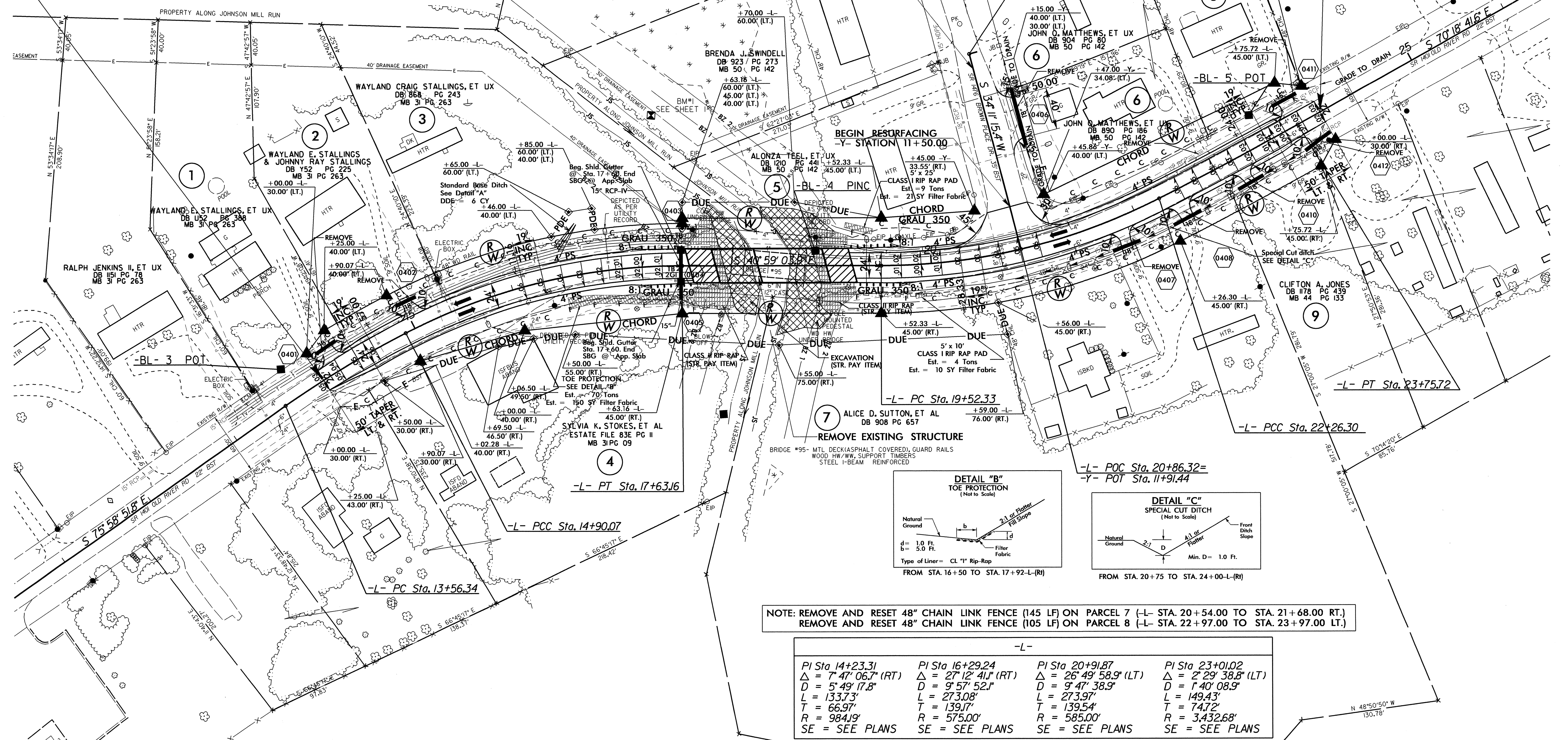
Earthwork quantities are calculated by the Roadway Design Unit. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

Note: 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."



BEGIN PROJECT B-4787 -L- STA. 14+00.00

END PROJECT B-4787 -L- STA. 24+00.00



**NOTE: REMOVE AND RESET 48" CHAIN LINK FENCE (145 LF) ON PARCEL 7 (-L- STA. 20+54.00 TO STA. 21+68.00 RT.)
 REMOVE AND RESET 48" CHAIN LINK FENCE (105 LF) ON PARCEL 8 (-L- STA. 22+97.00 TO STA. 23+97.00 LT.)**

-L-			
PI Sta 14+23.31	PI Sta 16+29.24	PI Sta 20+91.87	PI Sta 23+01.02
$\Delta = 7' 47" 06.7" (RT)$	$\Delta = 27' 12" 41.1" (RT)$	$\Delta = 26' 49" 58.9" (LT)$	$\Delta = 2' 29" 38.8" (LT)$
D = 5' 49" 17.8"	D = 9' 57" 52.1"	D = 9' 47" 38.9"	D = 1' 40" 08.9"
L = 133.73'	L = 273.08'	L = 273.97'	L = 149.43'
T = 66.97'	T = 139.7'	T = 139.54'	T = 74.72'
R = 984.9'	R = 575.00'	R = 585.00'	R = 3,432.68'
SE = SEE PLANS	SE = SEE PLANS	SE = SEE PLANS	SE = SEE PLANS

TRANSITION FROM EXIST. TO 4' PAVED SHOULDER
 -L- STA. 14+00.00 TO STA. 14+50.00 LT. & RT.
TRANSITION FROM 4' PAVED SHOULDER TO EXIST.
 -L- STA. 23+50.00 TO STA. 24+00.00 LT. & RT.

SBG - "SHOULDER BERM GUTTER"
NOTE: MILL PAVEMENT AT -Y- STA. 11+50.00 TIE-IN

SEE SHEET 5 FOR -L- AND -Y- PROFILES
 SEE SHEET S-1 THRU S-30 FOR STRUCTURE PLANS

8/17/99
 15-AUG-2012 11:42
 R:\Roadway\B4787\rdy-psd.dgn
 8/21/12

5/28/99

I5-MAR-2002_08:00
R:\Roadway\Proj\B4787-rdy-pf1.dgn
3:33:33 PM 3/28/2002

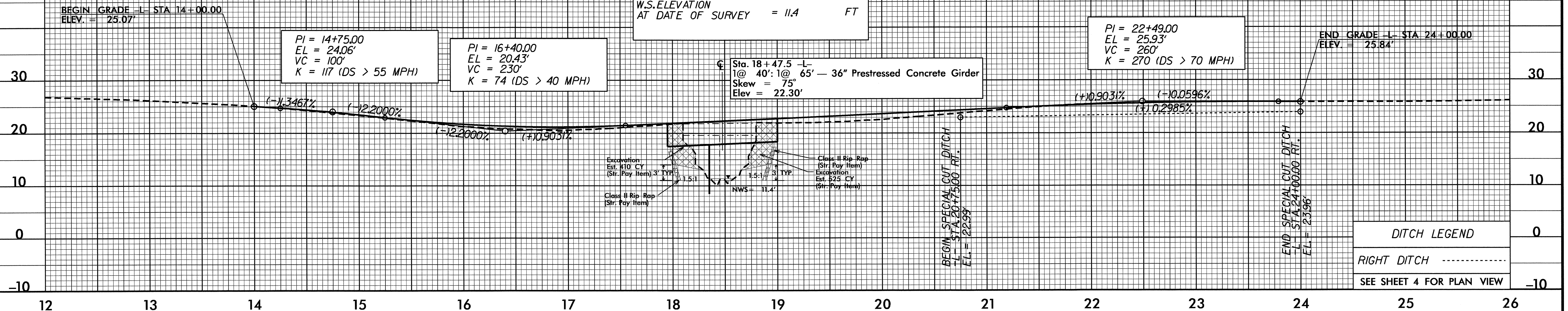
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 33871 DANIEL W. SANDHOFER	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 14682 JOSEPH W. DUNN 8/21/12
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BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE = 2000 CFS
 DESIGN FREQUENCY = 25 YRS
 DESIGN HW ELEVATION = 20.7 FT
 BASE DISCHARGE = 3050 CFS
 BASE FREQUENCY = 100 YRS
 BASE HW ELEVATION = 22.1 FT
 OVERTOPPING DISCHARGE = 3100 +/- CFS
 OVERTOPPING FREQUENCY = 100+ YRS
 OVERTOPPING ELEVATION = 21.3 FT

DATE OF SURVEY = 01/02/04
 W.S. ELEVATION AT DATE OF SURVEY = 11.4 FT

B.M. ELEVATION = 15.69
 N 694392 E 2473371
 -L- STATION 17+40.00 143' LEFT
 RR SPIKE SET IN 12" GUM

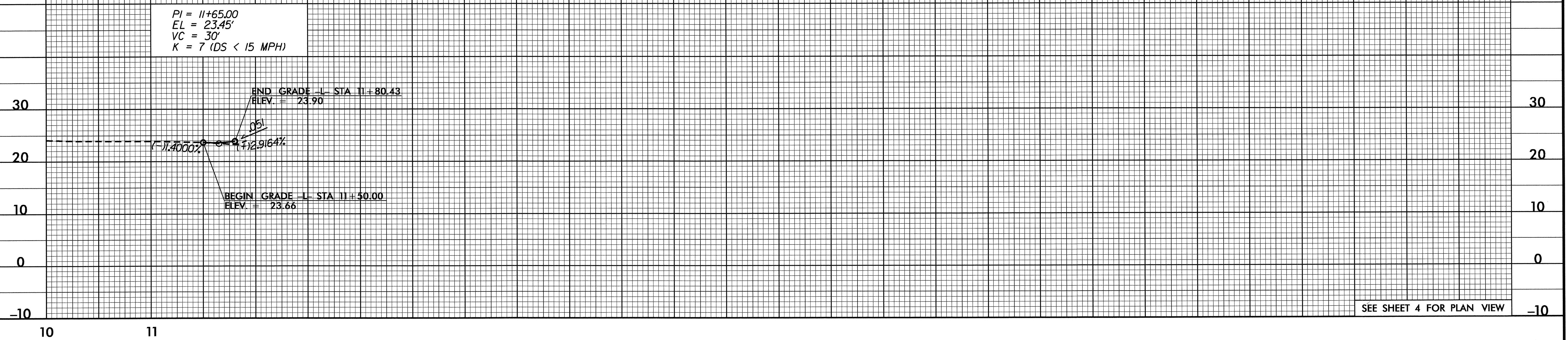


DITCH LEGEND

RIGHT DITCH - - - - -

SEE SHEET 4 FOR PLAN VIEW

-Y-



SEE SHEET 4 FOR PLAN VIEW