

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

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

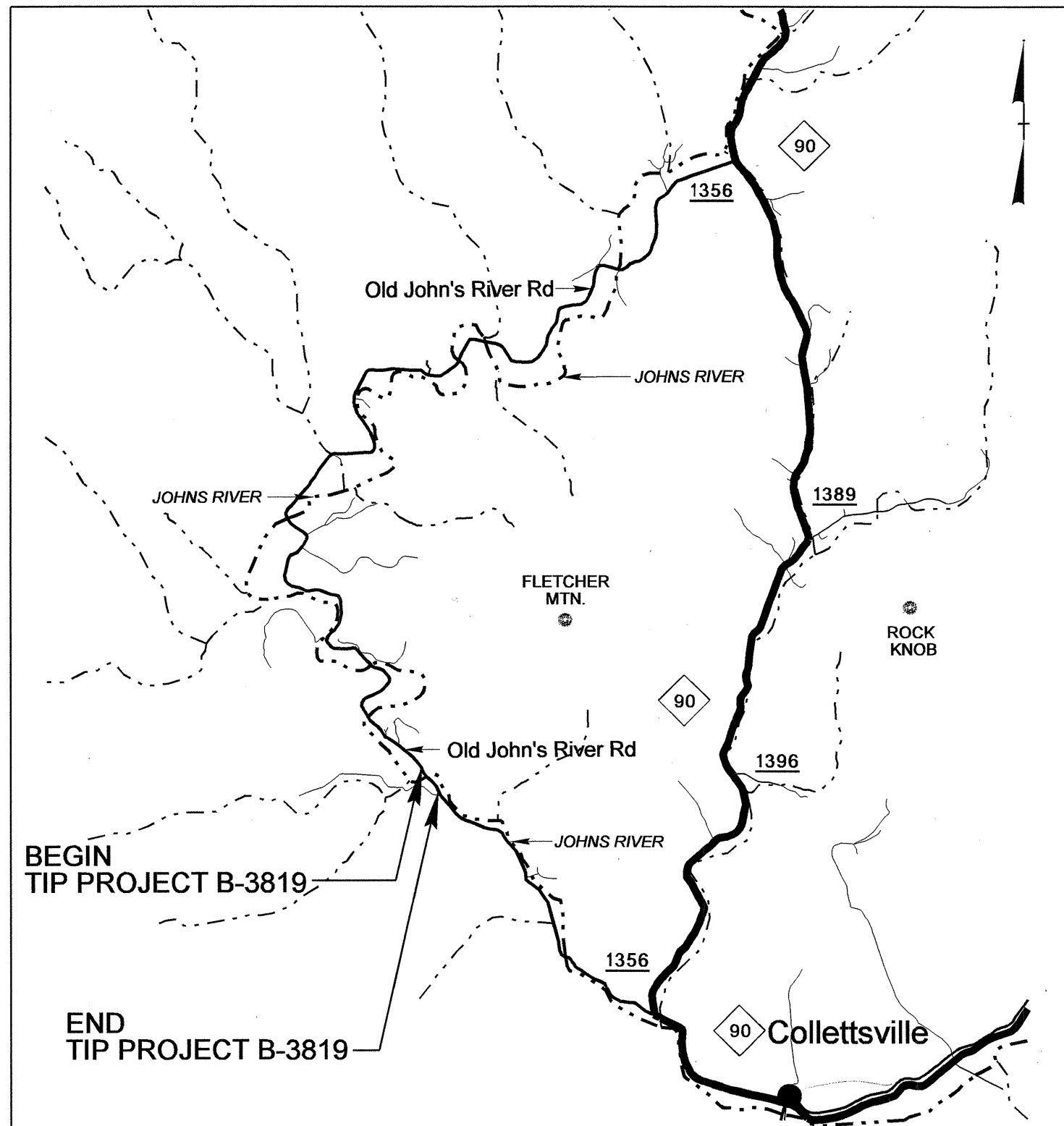
CALDWELL COUNTY

**LOCATION: BRIDGE NO. 184 OVER THE JOHNS RIVER
ON SR 1356 (OLD JOHNS RIVER ROAD)**

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

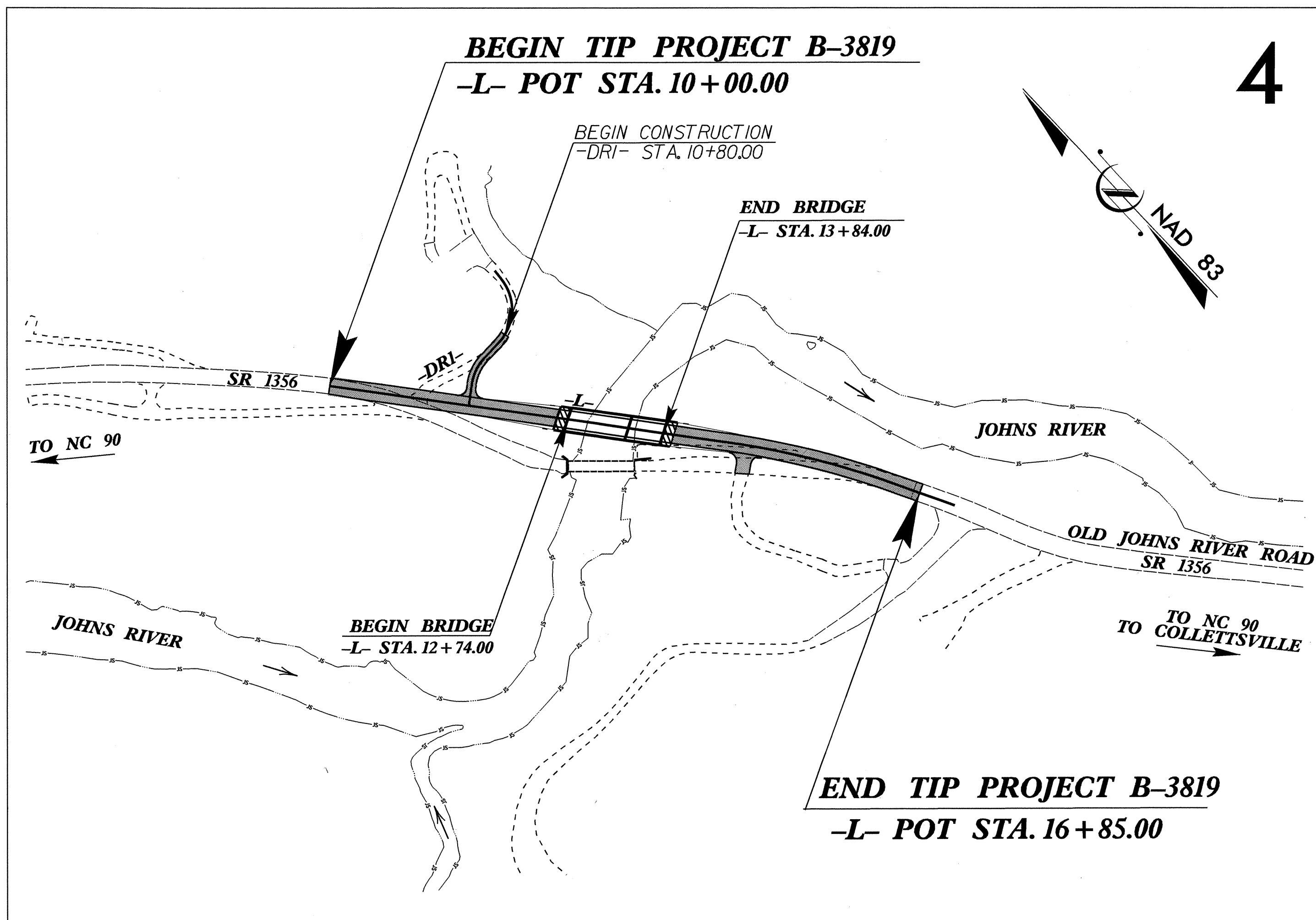
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3819	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33272.1.1	BRZ-1356 (1)	PE	
33272.2.1	BRZ-1356 (1)	ROW & UTIL	
33272.3.1	BRZ-1356 (1)	CONST	

TIP PROJECT: B-3819



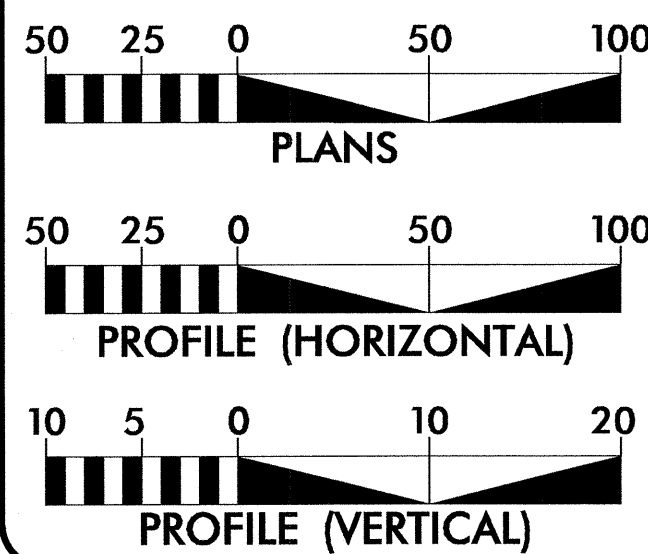
**VICINITY MAP SHOWING LOCATION
OF PROJECT B-3819**

THIS PROJECT WAS DESIGNED USING
THE SUB REGIONAL TIER DESIGN GUIDELINES
FOR BRIDGE PROJECTS



THERE IS NO CONTROL OF ACCESS ON THIS PROJECT

GRAPHIC SCALES



DESIGN DATA

ADT 2012 = 515
ADT 2032 = 800
DHV = 12 %
D = 60 %
T = 3 % *
V = 35 MPH
* TTST 1 % DUAL 2 %
FUNC. CLASS = RURAL LOCAL

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-3819 = 0.109 MILES
LENGTH OF STRUCTURE TIP PROJECT B-3819 = 0.021 MILES
TOTAL LENGTH OF TIP PROJECT B-3819 = 0.130 MILES

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

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MARCH 14, 2011

LETTING DATE:
MARCH 20, 2012

TONY HOUSER, PE
PROJECT ENGINEER

LEE ANN MOORE
PROJECT DESIGN ENGINEER

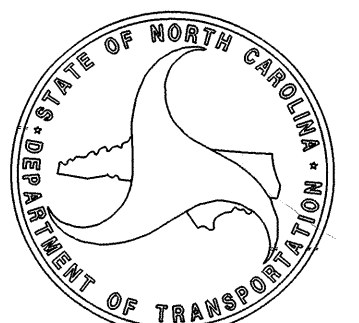
HYDRAULICS ENGINEER

SIGNATURE:

ROADWAY DESIGN
ENGINEER

SIGNATURE:

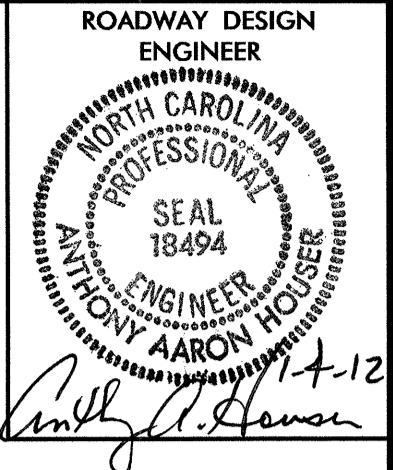
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA



STATE HIGHWAY DESIGN ENGINEER

06-DEC-2011 12:56
R:\Roadway\Proj\1356\B3819_rdy_tsh.dgn
\$\$\$\$\$USERNAME\$\$\$\$\$

CONTRACT: C202782



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	PAVEMENT SCHEDULE, TYPICAL SECTIONS AND WEDGING DETAIL
3	SUMMARY OF QUANTITIES
3A	SUMMARY OF DRAINAGE QUANTITIES, SUMMARY OF GUARDRAIL, EARTHWORK SUMMARY, AND ASPHALT PAVEMENT REMOVAL SUMMARY
4	PLAN SHEET
5	PROFILE SHEET
TMP-1 THRU TMP-02B	TRAFFIC MANAGEMENT PLANS
PMP-1 THRU PMP-2	PAVEMENT MARKING PLANS
EC-1 THRU EC-05	EROSION CONTROL PLANS
UD-1 THRU UD-2	UTILITIES BY OTHERS
X-A	CROSS-SECTION INDEX OF SHEETS
X-B	CROSS-SECTION SUMMARY
X-1 THRU X-9	CROSS-SECTIONS
S-1 THRU S-27	STRUCTURE PLANS

GENERAL NOTES

GENERAL NOTES: 2012 SPECIFICATIONS
EFFECTIVE: 01-17-12
REVISED: 08/31/11

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.

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.

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
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 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	
200.03	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
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 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
862.01	Guardrail Placement
862.02	Guardrail Installation
862.03	Structure Anchor Units
876.04	Drainage Ditches with Class 'B' Rip Rap

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

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	Ⓣ
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	○
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	-----
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 Aerial Utility Easement	AUE
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 Curb Ramp	Ⓡ
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	⊕
Pavement Removal	⊗

VEGETATION:

Single Tree	⊕
Single Shrub	⊕
Hedge	-----
Woods Line	-----

Orchard	⊕
Vineyard	⊕

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	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	S

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	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	Ⓢ
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	Ⓢ
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:

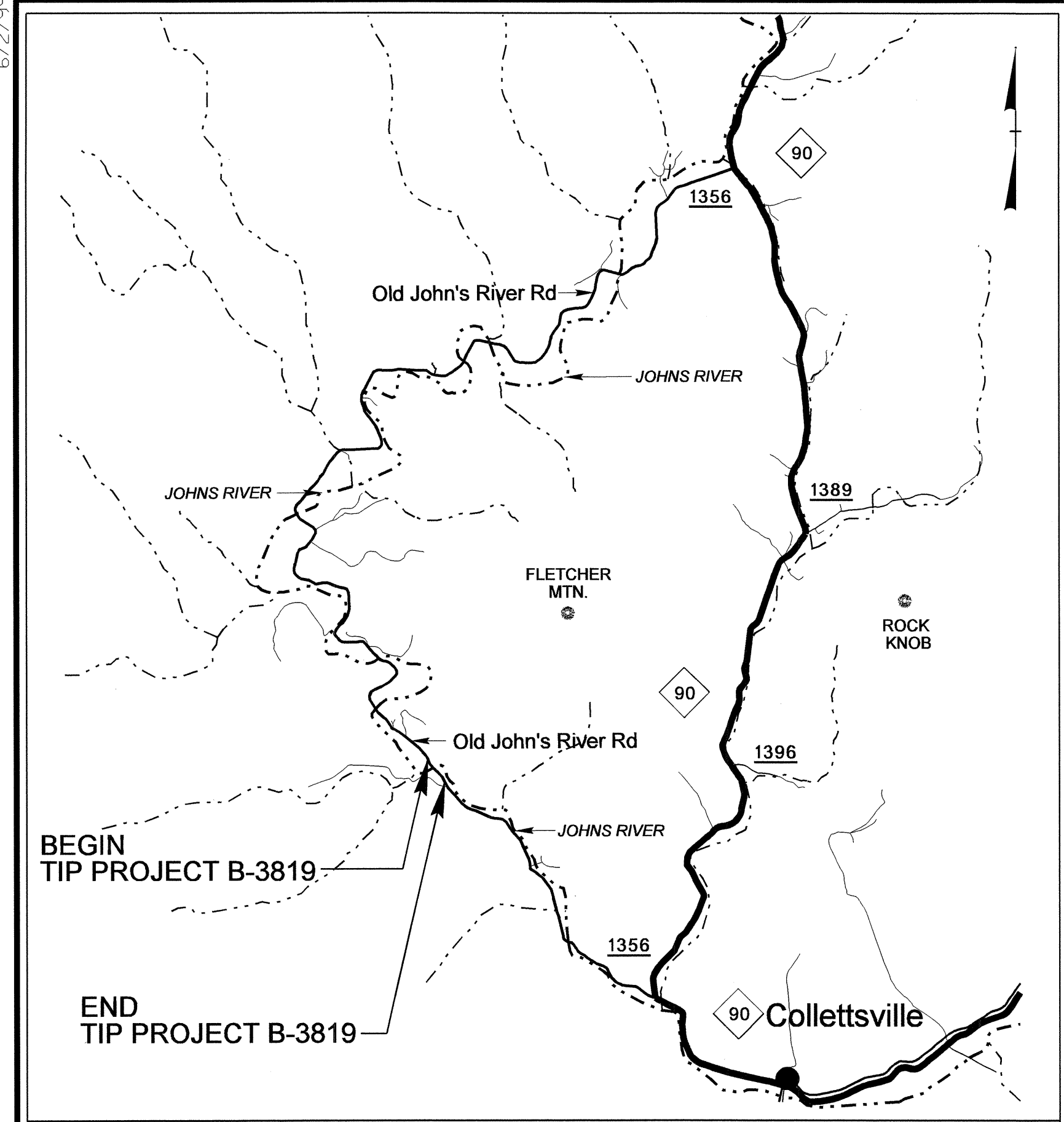
Utility Pole	●
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	Ⓢ
Utility Unknown U/G Line	7UTL
U/G Tank; Water, Gas, Oil	□
Underground Storage Tank, Approx. Loc.	UST
A/G Tank; Water, Gas, Oil	□
Geoenvironmental Boring	⊕
U/G Test Hole (S.U.E.*)	⊕
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

SURVEY CONTROL SHEET B-3819

BL	POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
BL3		BL-3	810032.3143	1200110.1584	1127.84	OUTSIDE PROJECT LIMITS	
BL4		BL-4	809845.9717	1200368.4105	1127.12	OUTSIDE PROJECT LIMITS	
BL5		BL-5	809448.6747	1200591.1041	1113.13	12+70.92	75.24 RT
BL6		BL-6	809247.2850	1200855.3162	1109.53	15+91.92	14.14 LT
BL7		BL-7	809039.3537	1200931.0405	1115.21	OUTSIDE PROJECT LIMITS	
B38191		GPS 3819-1	808549.4380	1201337.6750	1117.35	OUTSIDE PROJECT LIMITS	

 BM1 ELEVATION = 1117.77'
 N 809676. E 1200381.
 L STATION 10+00
 S 72° 54' 46.8" W DIST 103.93'
 8" SPIKE IN BASE OF 8" WALNUT

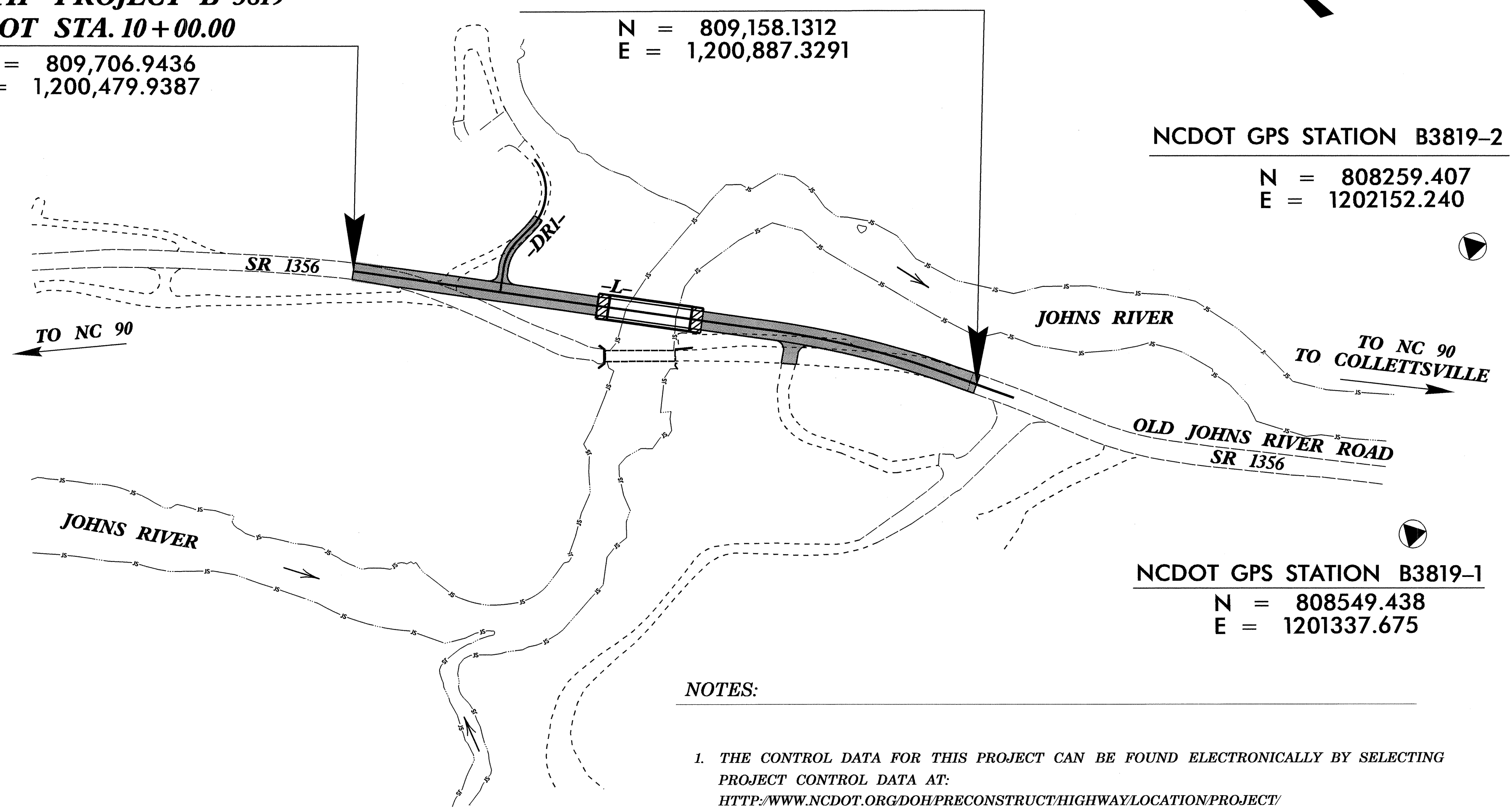
 BM2 ELEVATION = 1110.37'
 N 809264. E 1200763.
 L STATION 15+27 54' RIGHT
 8" SPIKE IN BASE OF 24" SYCAMORE



VICINITY MAP SHOWING LOCATION OF PROJECT B-3819

BEGIN TIP PROJECT B-3819
-L- POT STA. 10+00.00
 N = 809,706.9436
 E = 1,200,479.9387

END TIP PROJECT B-3819
-L- POT STA. 16+85.00
 N = 809,158.1312
 E = 1,200,887.3291



DATUM DESCRIPTION
 THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "B3819-1"
 WITH NAD 83 STATE PLANE GRID COORDINATES OF
 NORTHING: 808549.4380(ft) EASTING: 1201337.6750(ft)
 ELEVATION: 1117.35'(ft)
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99989678
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B3819-1" TO -L- STATION 10+00 IS
 N 36°32'21" W 1440.67
 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:
 B3819_LS_CONTROL_HTML
 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 NGS ONLINE POSITIONING SERVICE (OPUS)
 SEE GPS CALIBRATION SHEET FOR HORIZONTAL AND VERTICAL COORDINATE VALUES.

NOTE: DRAWING NOT TO SCALE

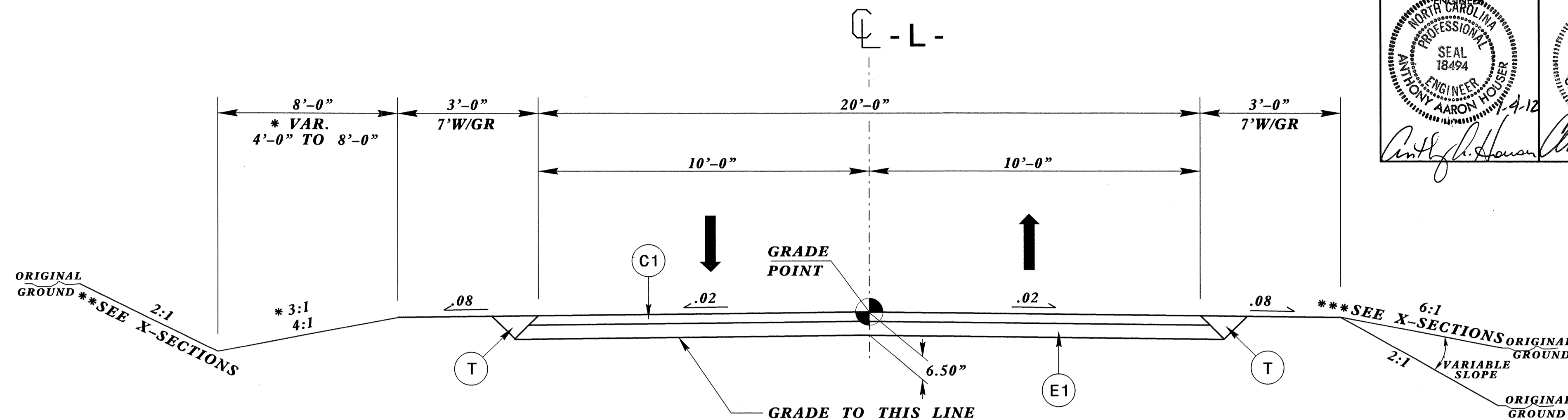
6/22/99
 01-NOV-2011 10:22
 B3819_LS_CONTROL_HTML.dgn

6/2/99

PROJECT REFERENCE NO. B-3819	SHEET NO. 2
ROADWAY DESIGN NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 18494 ANTHONY AARON FOLBERG	PAVEMENT DESIGN NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 22996 CLARK S. MORRISON

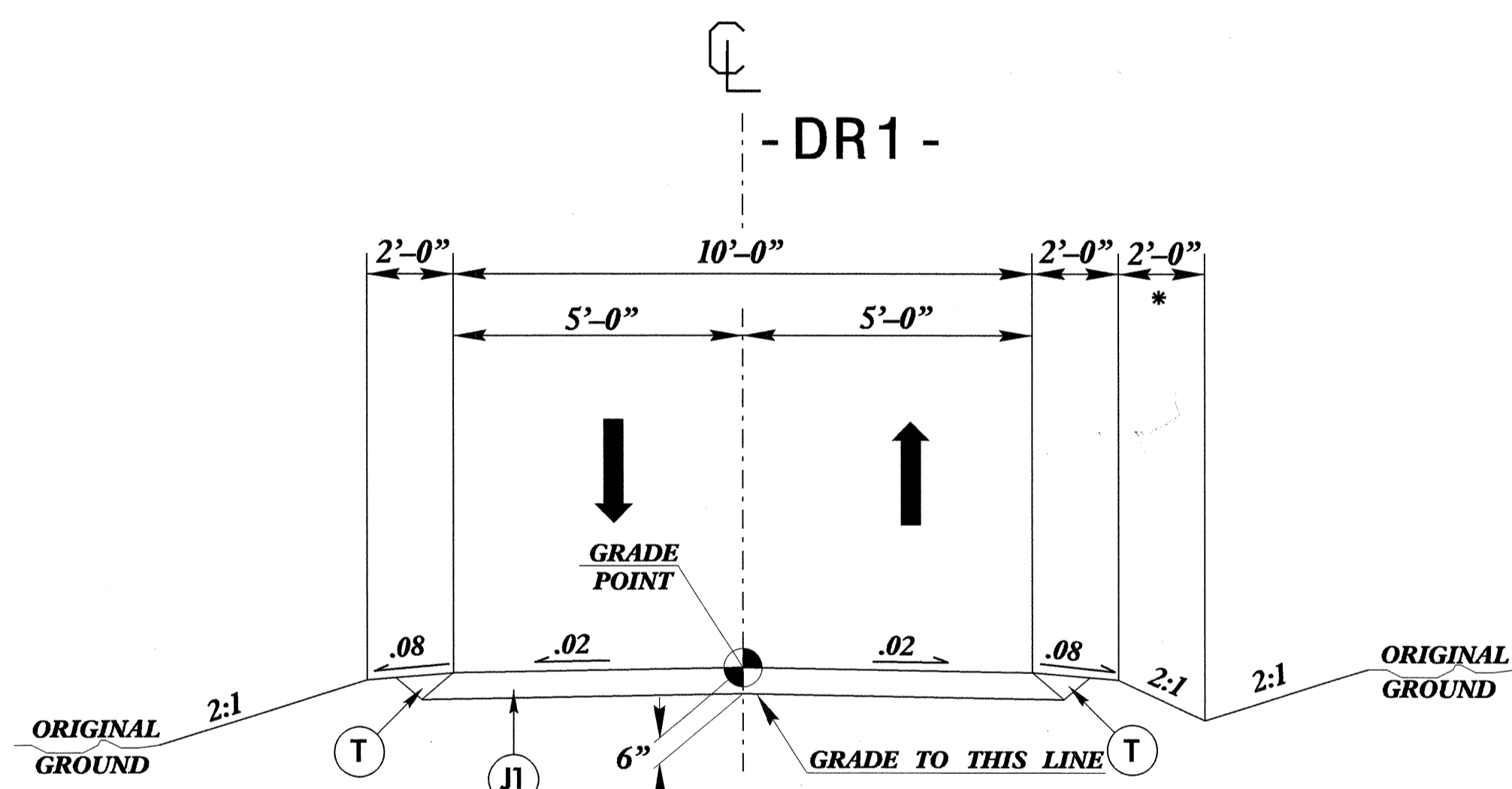
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 2.5" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
E1	PROP. APPROX. 4.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
J1	PROP. 6" AGGREGATE BASE COURSE
T	EARTH MATERIAL.

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



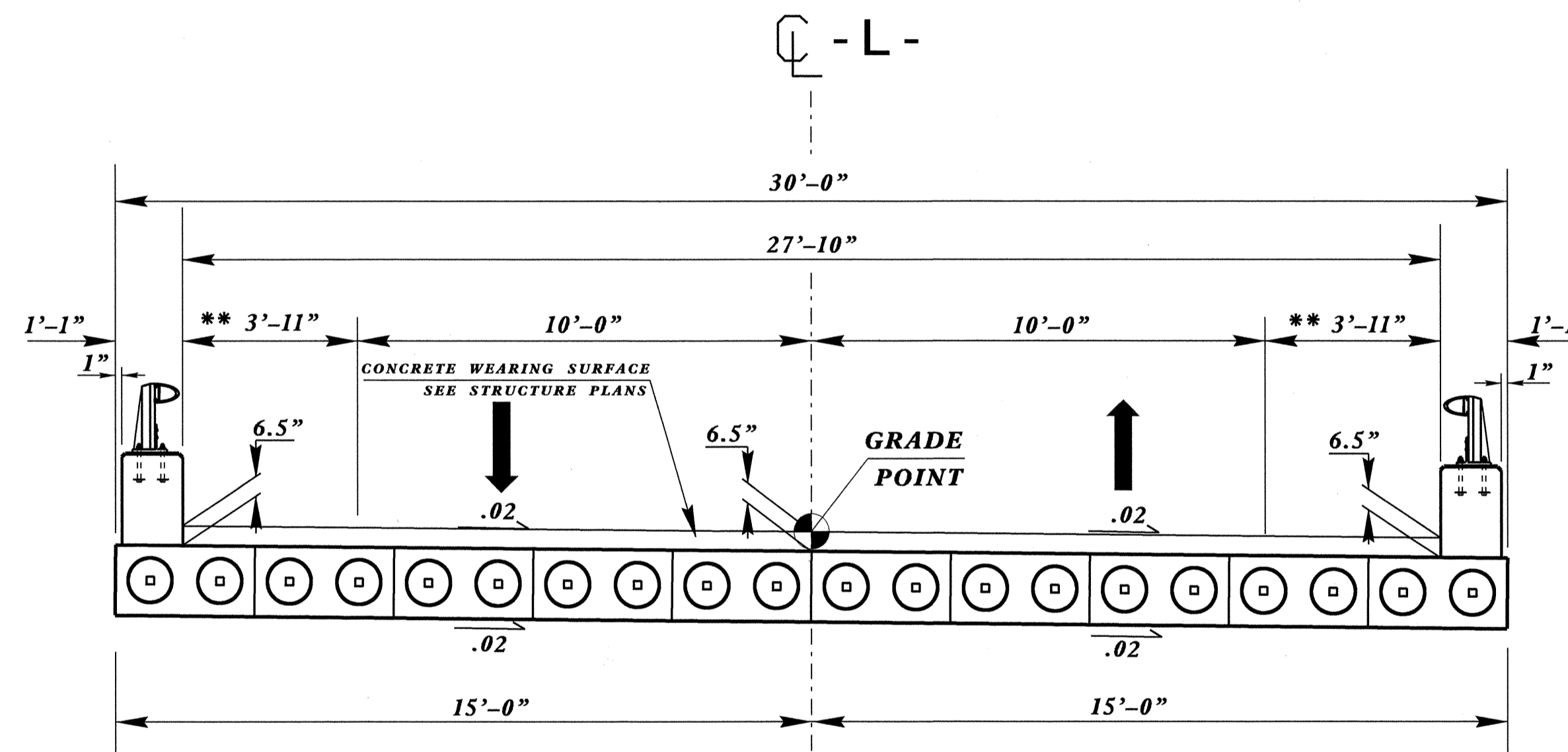
TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1:
 -L- STA. 10+00.00 TO 12+74.00 (BEG. BRIDGE)
 -L- STA. 13+84.00 (END BRIDGE) TO 16+85.00
 * -L- STA. 10+25.00 TO 12+74.00 (LEFT)
 ** -L- STA. 10+50.00 (LEFT)
 *** -L- STA. 12+50.00 (RIGHT)



TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2 :
 -DR1- STA. 10+80.00 TO 11+63.75
 * -DR1- STA. 10+80.00 TO 11+20.00
 (NO DITCH, TIE TO EXIST. SLOPE)



TYPICAL SECTION ON BRIDGE

USE BRIDGE TYPICAL:
 -L- STA. 12+74.00 (BEG. BRIDGE) TO STA. 13+84.00 (END BRIDGE)
 ** BRIDGE SHOULDER WIDTH REQUIRED FOR HYDRAULIC SPREAD

06-DEC-2011 12:56
 P:\Roadway\Projects\B3819_rdy_typ.dgn
 SUNFRAMES

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C202782

ItemNumber	Sec #	Quantity	Unit	Description
0000100000-N	800	Lump Sum		MOBILIZATION
0022000000-E	225	1,350	CY	UNCLASSIFIED EXCAVATION
0030000000-N	SP	Lump Sum		BRIDGE APPROACH FILL - SUB REGIONAL TIER, STATION ***** (13+29.00)
0050000000-E	226	1	ACR	SUPPLEMENTARY CLEARING & GRUB-BING
0057000000-E	226	220	CY	UNDERCUT EXCAVATION
0063000000-N	SP	Lump Sum		GRADING
0196000000-E	270	200	SY	GEOTEXTILE FOR SOIL STABILIZATION
0314000000-E	SP	200	TON	SELECT MATERIAL, CLASS ***** (II)
0318000000-E	300	10	TON	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES
0320000000-E	300	20	SY	FOUNDATION CONDITIONING GEOTEXTILE
0343000000-E	310	24	LF	15" SIDE DRAIN PIPE
0344000000-E	310	32	LF	18" SIDE DRAIN PIPE
0995000000-E	340	24	LF	PIPE REMOVAL
0996000000-N	350	1	EA	PIPE CLEAN-OUT
1099500000-E	505	50	CY	SHALLOW UNDERCUT
1099700000-E	505	100	TON	CLASS IV SUBGRADE STABILIZATION
1121000000-E	520	36	TON	AGGREGATE BASE COURSE
1220000000-E	545	100	TON	INCIDENTAL STONE BASE
1489000000-E	610	290	TON	ASPHALT CONC BASE COURSE, TYPE B25.0B
1525000000-E	610	180	TON	ASPHALT CONC SURFACE COURSE, TYPE SF9.5A
1575000000-E	620	25	TON	ASPHALT BINDER FOR PLANT MIX
2000000000-N	806	12	EA	RIGHT OF WAY MARKERS
2022000000-E	815	44.8	CY	SUBDRAIN EXCAVATION
2033000000-E	815	33.6	CY	SUBDRAIN FINE AGGREGATE
2044000000-E	815	200	LF	6" PERFORATED SUBDRAIN PIPE

SUMMARY OF QUANTITIES

ItemNumber	Sec #	Quantity	Unit	Description
2070000000-N	815	1	EA	SUBDRAIN PIPE OUTLET
2077000000-E	815	6	LF	6" OUTLET PIPE
3030000000-E	862	25	LF	STEEL BM GUARDRAIL
3150000000-N	862	2	EA	ADDITIONAL GUARDRAIL POSTS
3165000000-N	SP	4	EA	GUARDRAIL ANCHOR UNITS, TYPE ***** (350 TL-2)
3215000000-N	862	4	EA	GUARDRAIL ANCHOR UNITS, TYPE III
3574000000-E	867	60	LF	GENERIC FENCING ITEM RESET EXISTING FENCE
3649000000-E	876	8	TON	RIP RAP, CLASS B
3656000000-E	876	745	SY	GEOTEXTILE FOR DRAINAGE
4400000000-E	1110	260	SF	WORK ZONE SIGNS (STATIONARY)
4405000000-E	1110	304	SF	WORK ZONE SIGNS (PORTABLE)
4410000000-E	1110	72	SF	WORK ZONE SIGNS (BARRICADE MOUNTED)
4430000000-N	1130	56	EA	DRUMS
4445000000-E	1145	32	LF	BARRICADES (TYPE III)
4516000000-N	1180	12	EA	SKINNY DRUM
4810000000-E	1205	5,480	LF	PAINT PAVEMENT MARKING LINES (4")
4905000000-N	1253	9	EA	SNOWPLOWABLE PAVEMENT MARKERS
6000000000-E	1605	950	LF	TEMPORARY SILT FENCE
6006000000-E	1610	170	TON	STONE FOR EROSION CONTROL, CLASS A
6009000000-E	1610	150	TON	STONE FOR EROSION CONTROL, CLASS B
6012000000-E	1610	145	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

ItemNumber	Sec #	Quantity	Unit	Description
6029000000-E	SP	100	LF	SAFETY FENCE
6030000000-E	1630	270	CY	SILT EXCAVATION
6036000000-E	1631	1,400	SY	MATTING FOR EROSION CONTROL
6037000000-E	SP	400	SY	COIR FIBER MAT
6038000000-E	SP	30	SY	PERMANENT SOIL REINFORCEMENT MAT
6042000000-E	1632	70	LF	1/4" HARDWARE CLOTH
6070000000-N	1639	4	EA	SPECIAL STILLING BASINS
6071010000-E	SP	450	LF	WATTLE
6071020000-E	SP	115	LB	POLYACRYLAMIDE (PAM)
6071030000-E	1640	40	LF	COIR FIBER BAFFLE
6071050000-E	SP	1	EA	*** SKIMMER (1-1/2")
6084000000-E	1660	1.5	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
6108000000-E	1665	0.75	TON	FERTILIZER TOPDRESSING
6114500000-N	1667	15	MHR	SPECIALIZED HAND MOWING
6117000000-N	SP	25	EA	RESPONSE FOR EROSION CONTROL

12/06/07

COMPUTED BY: T.V.CAO DATE: 6-24-2009
CHECKED BY: J.W.BRAXTON DATE: 6-25-2011

PROJECT REFERENCE NO. B-3819 SHEET NO. 3-A

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

Table with columns: STATION, UNCL. EXCAV., EMBANK. +%, BORROW, WASTE. Includes subtotals for clearing & grubbing, and grand totals.

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.

Note: Approximate quantities only. Fine Grading, Clearing and Grubbing, and Removal of Existing Pavement will be paid for at the contract lump sum price for "Grading."

PAVEMENT REMOVAL SUMMARY

Table with columns: SURVEY LINE, STATION, LOCATION (LT/RT/CL), YD². Shows removal at station 10+00.00 to 12+81.00 on the right side (RT).

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

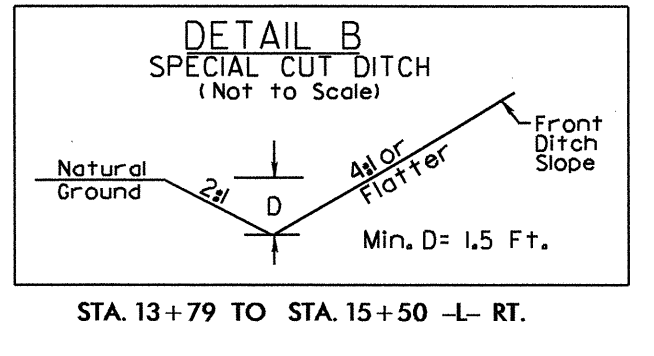
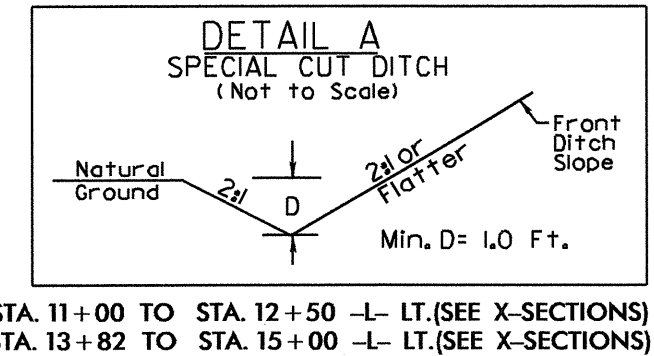
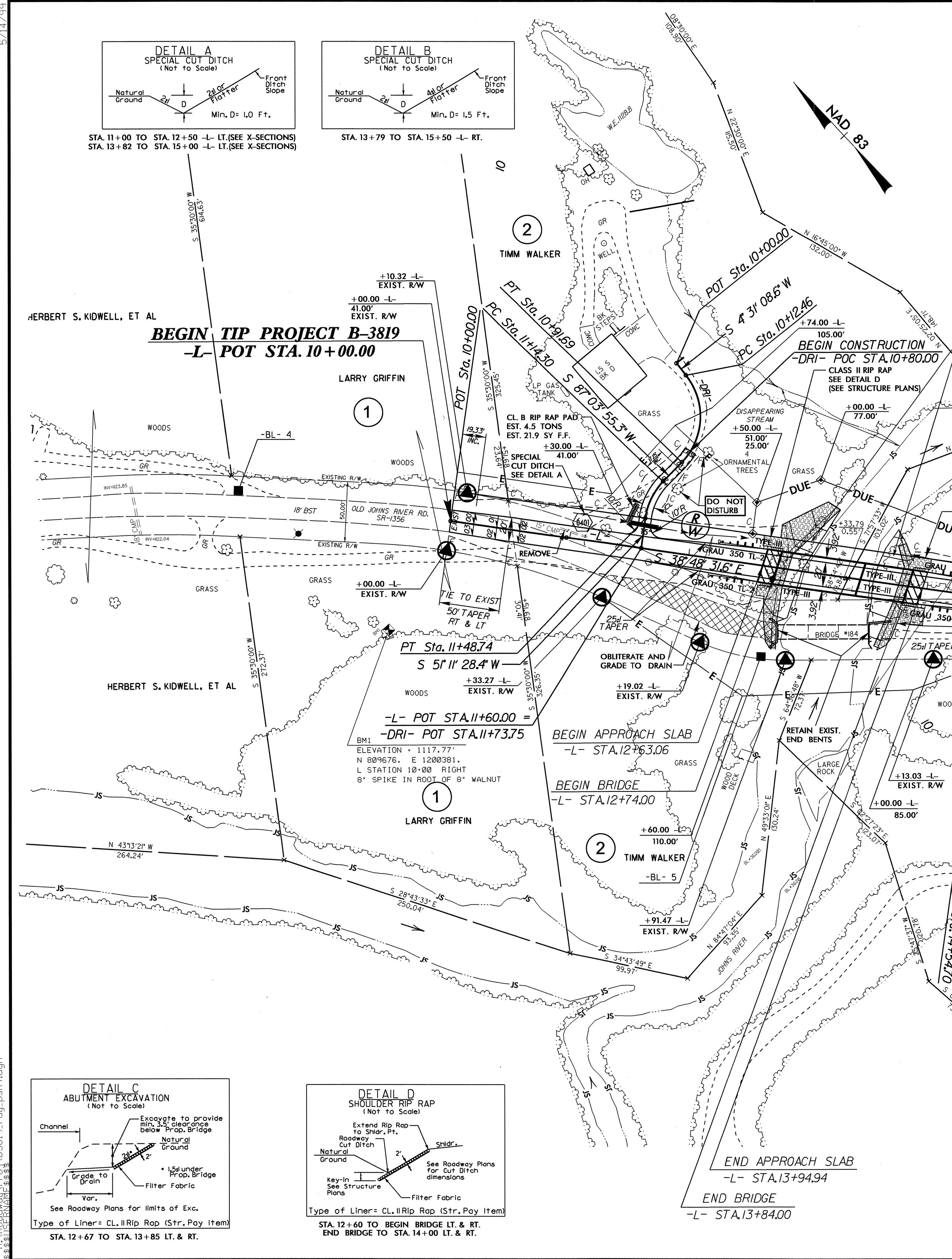
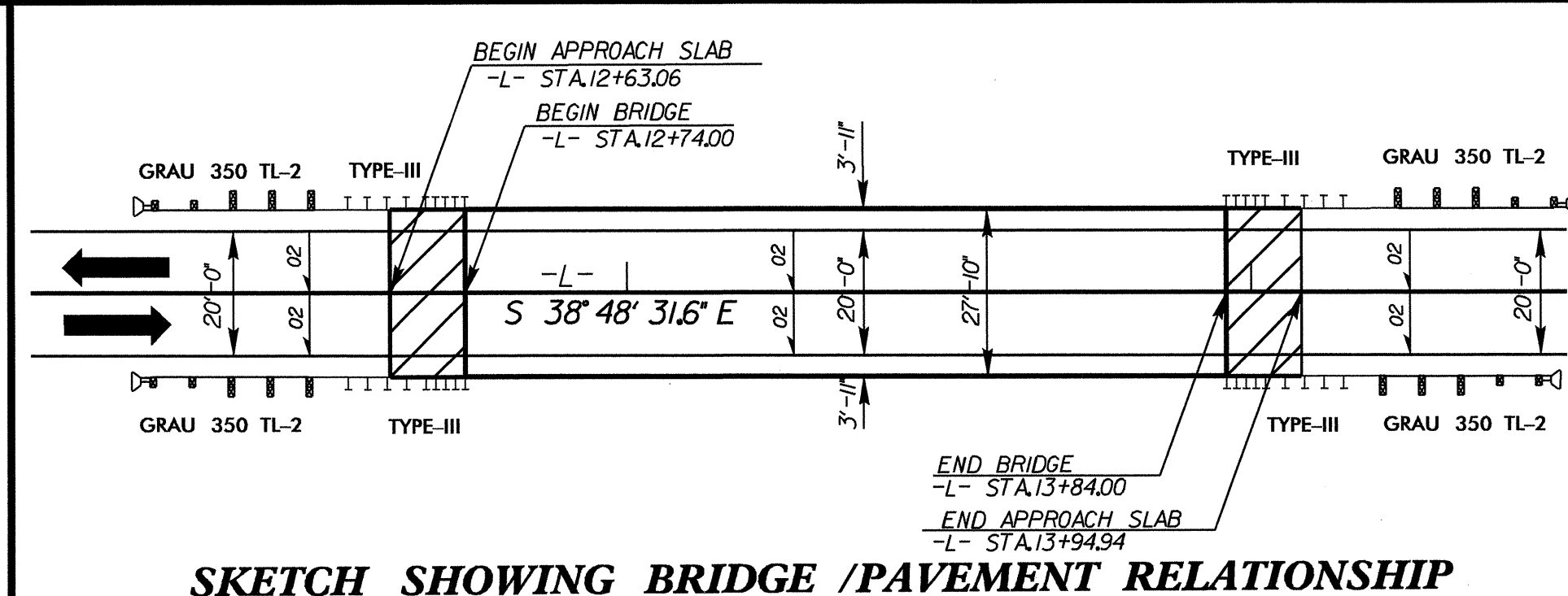
Large table listing pipe details: STATION, DRAINAGE PIPE, C.S. PIPE, CLASS III R.C. PIPE, ENDWALLS, QUANTITIES FOR DRAINAGE STRUCTURES, CONCRETE TRANSITIONAL SECTION, FRAME GRATES AND HOOD, CORROSION ELBOWS, etc.

"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 data: SURVEY LINE, BEG. STA., END STA., LOCATION, LENGTH (STRAIGHT, SHOP CURVED, DOUBLE FACED), WARRANT POINT, ANCHORS (TYPE TL-2, TYPE III), IMPACT ATTENUATOR TYPE 350, SINGLE FACED GUARDRAIL, REMOVE EXISTING GUARDRAIL, REMOVE AND STOCKPILE EXISTING GUARDRAIL, REMARKS.

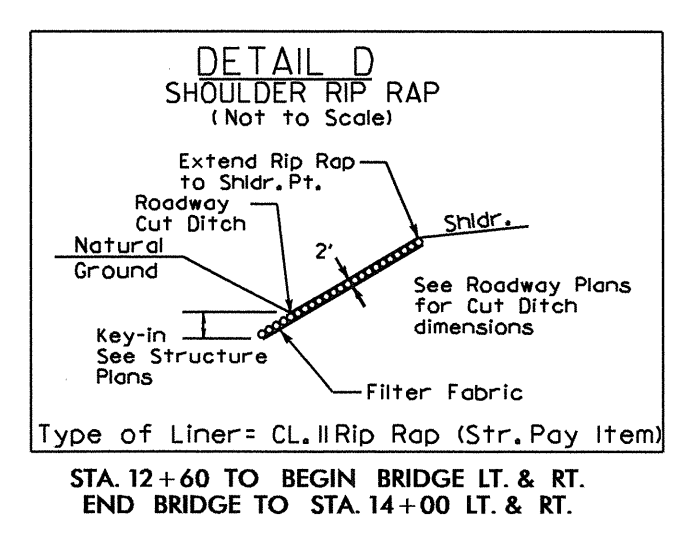
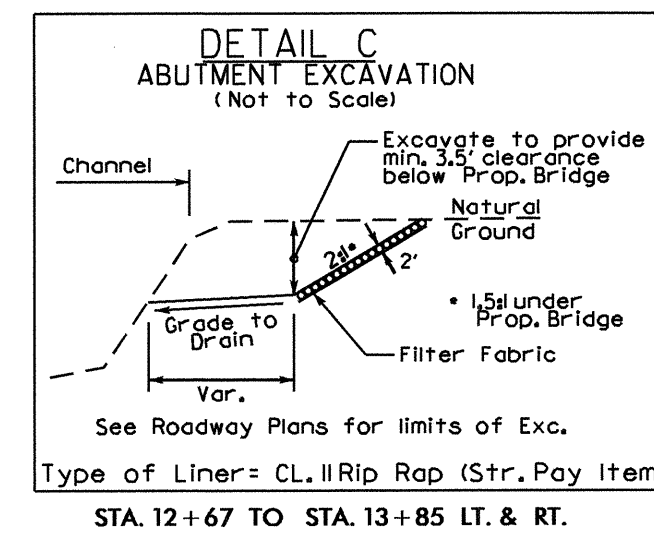
05-JAN-2012 10:06 P:\Roadway\Proj\B3819_rdy_sum.dgn



HERBERT S. KIDWELL, ET AL

BEGIN TIP PROJECT B-3819
-L- POT STA. 10+00.00

END TIP PROJECT B-3819
-L- POT STA. 16+85.00



-L-
 PI Sta 15+56.33
 $\Delta = 1^\circ 49' 02.8''$ (RT)
 $D = 5^\circ 50' 04.6''$
 $L = 202.54'$
 $T = 101.63'$
 $R = 982.00'$
 SE = See Plans
 RO = See Plans
 -DRI-
 PI Sta 10+60.73
 $\Delta = 82^\circ 32' 46.6''$ (RT)
 $D = 104^\circ 10' 26.9''$
 $L = 79.24'$
 $T = 48.27'$
 $R = 55.00'$
 SE = See Plans
 RO = See Plans
 PI Sta 11+32.10
 $\Delta = 35^\circ 52' 26.8''$ (LT)
 $D = 104^\circ 10' 26.9''$
 $L = 34.44'$
 $T = 17.80'$
 $R = 55.00'$
 SE = See Plans
 RO = See Plans

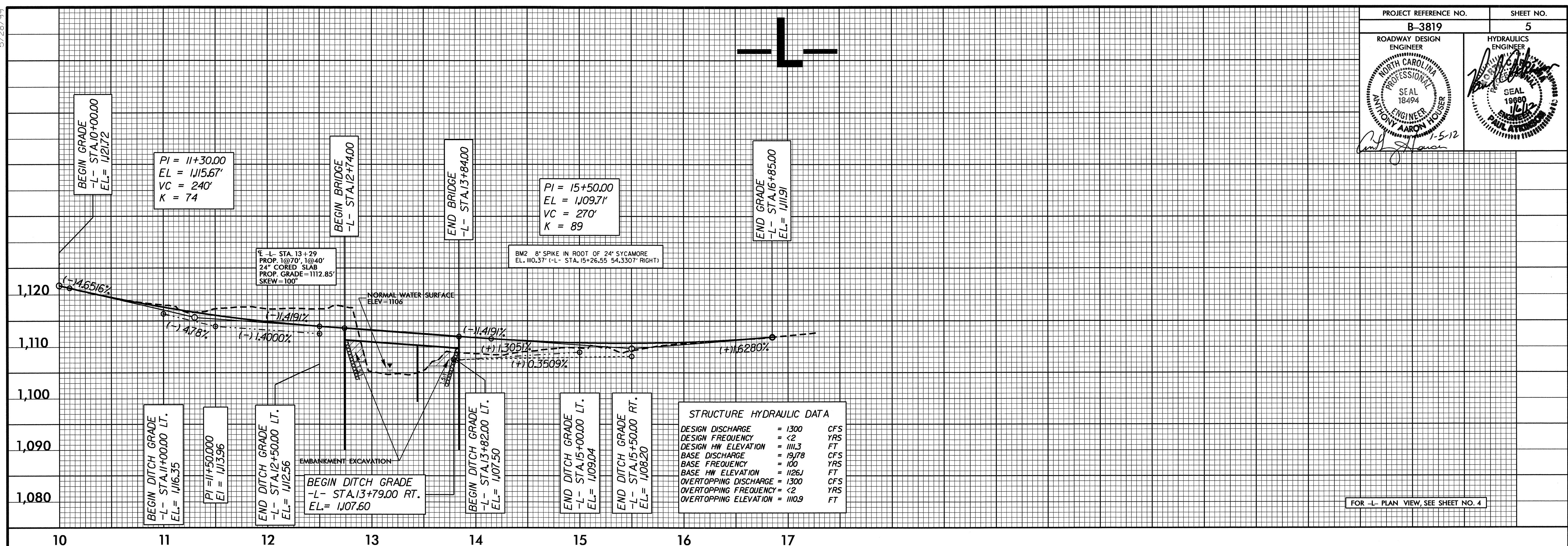
FOR -L- PROFILE, SEE SHEET NO. 5
 FOR STRUCTURE PLANS, SEE SHEET S-1 THRU S-27

05-JAN-2012 14:26 R:\PROJECTS\B3819_rdy_psh4.dgn

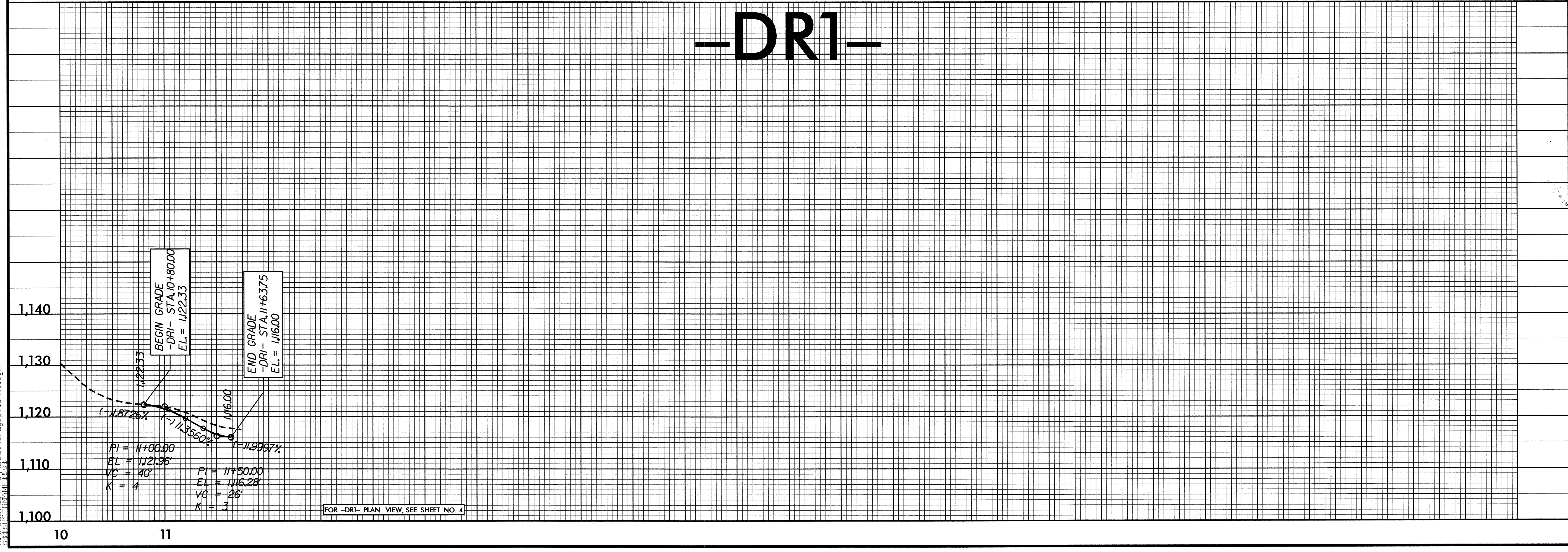
5/28/99

PROJECT REFERENCE NO. B-3819	SHEET NO. 5
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 18494 ANTHONY AARON LOBER	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 18680 PAUL ATWOOD

1-5-12
Anthony A. Lober



-DRI-



05-JAN-2012 14:28 13819_rdy-plsht5.dgn