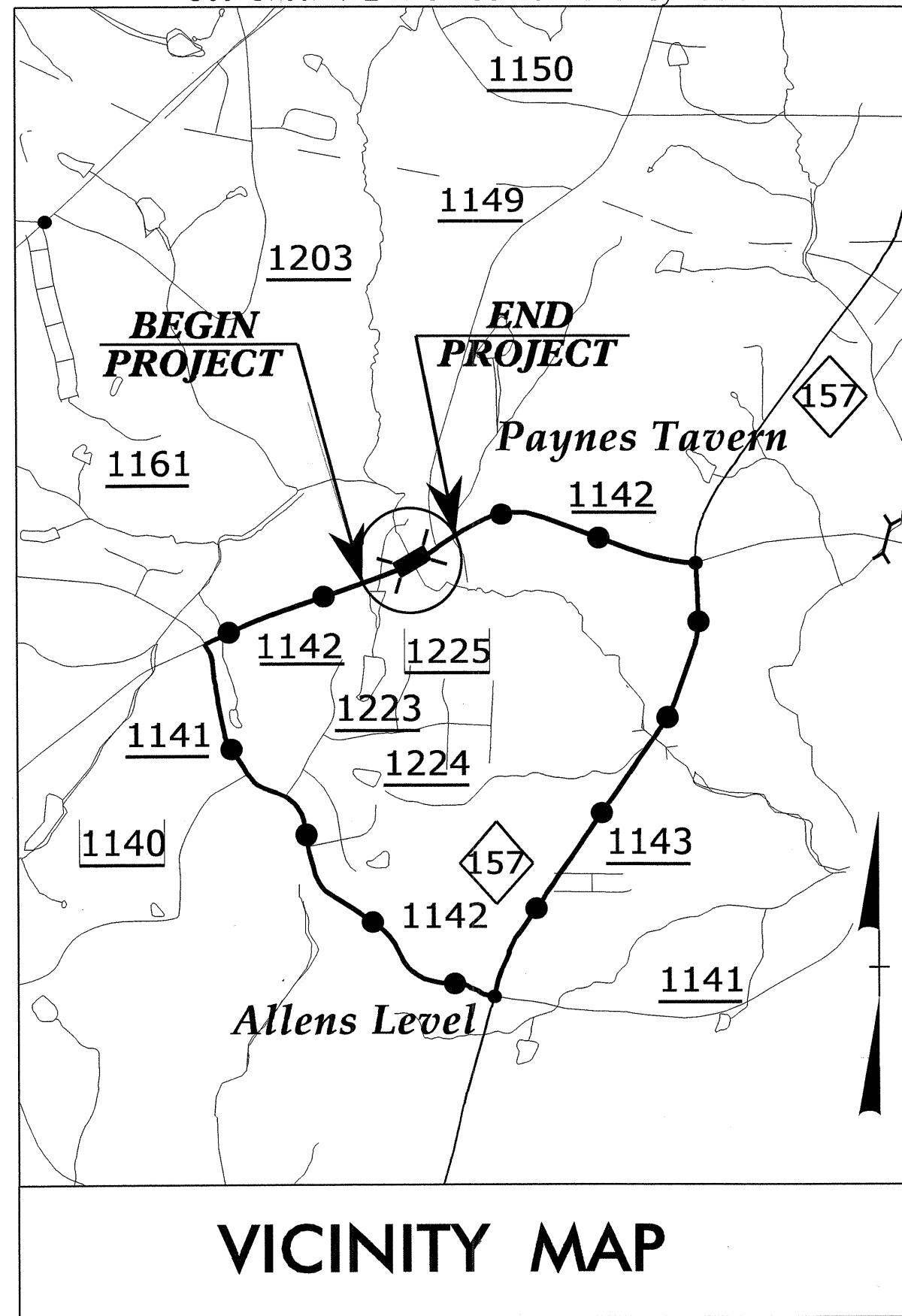


09/08/09

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



VICINITY MAP

●-●-● OFF-SITE DETOUR

-L- STA. 12+15.00

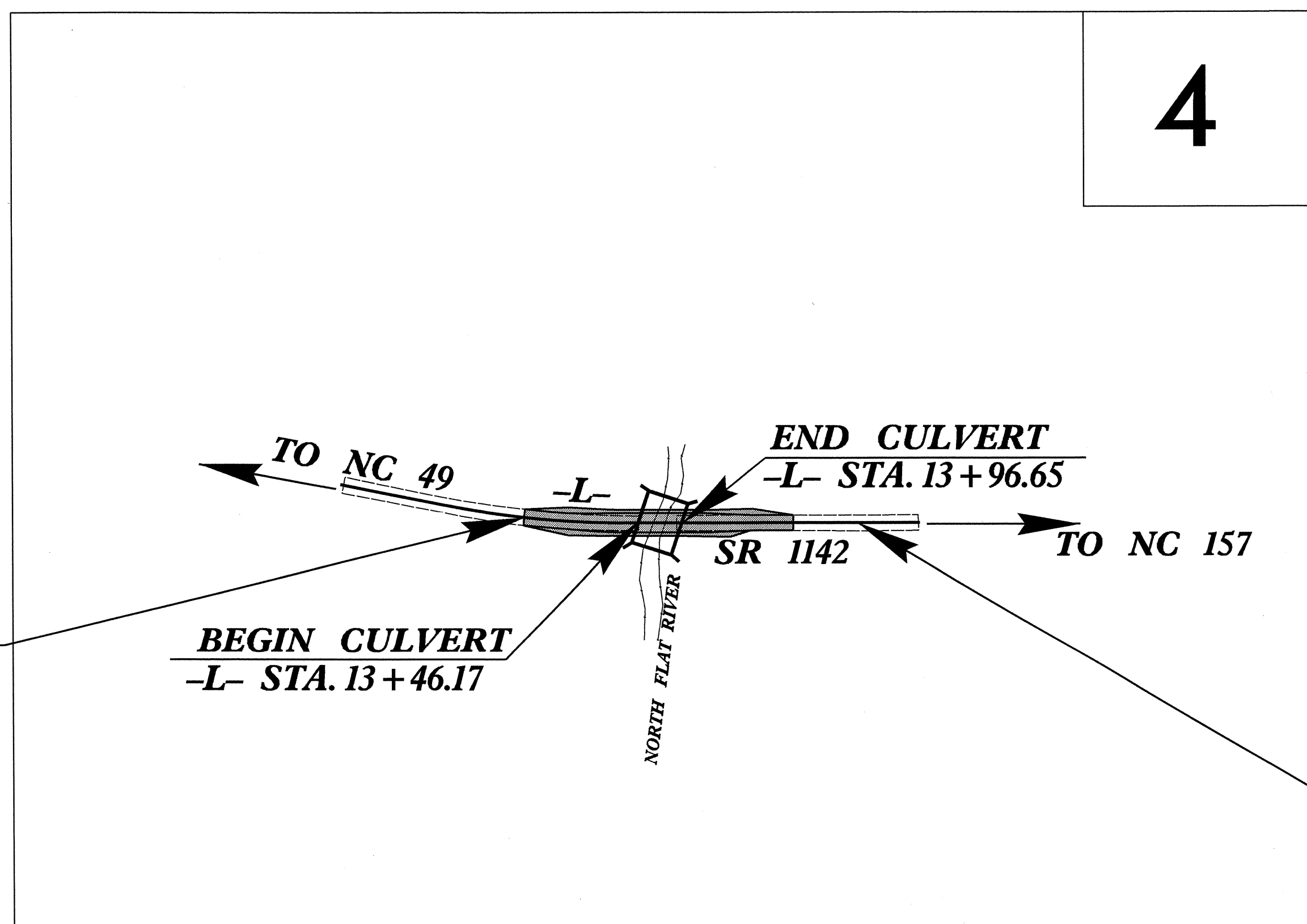
BEGIN TIP PROJECT B-4785

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PERSON COUNTY

LOCATION: BRIDGE NO. 24 OVER NORTH FLAT RIVER ON
SR 1142 (PAYNES TAVERN RD.)

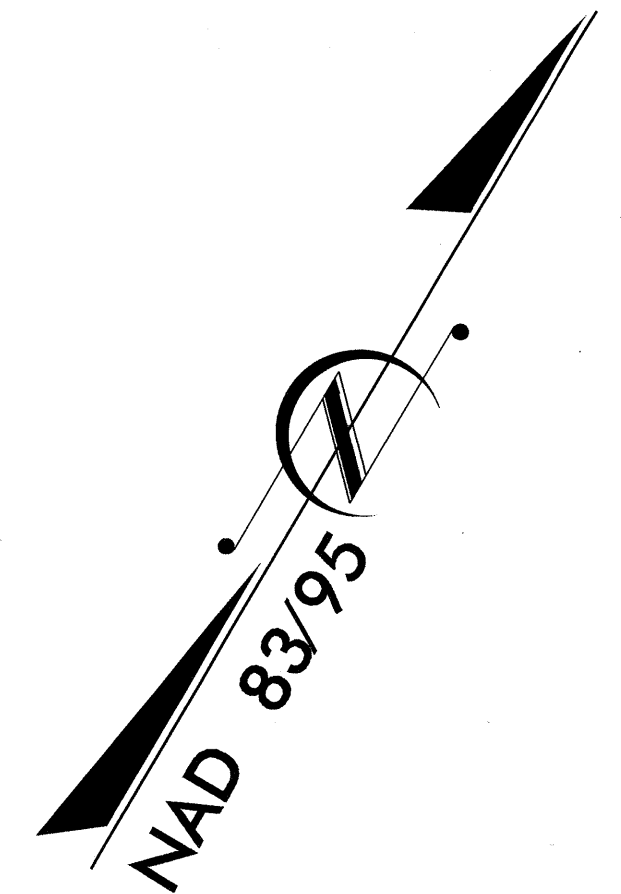
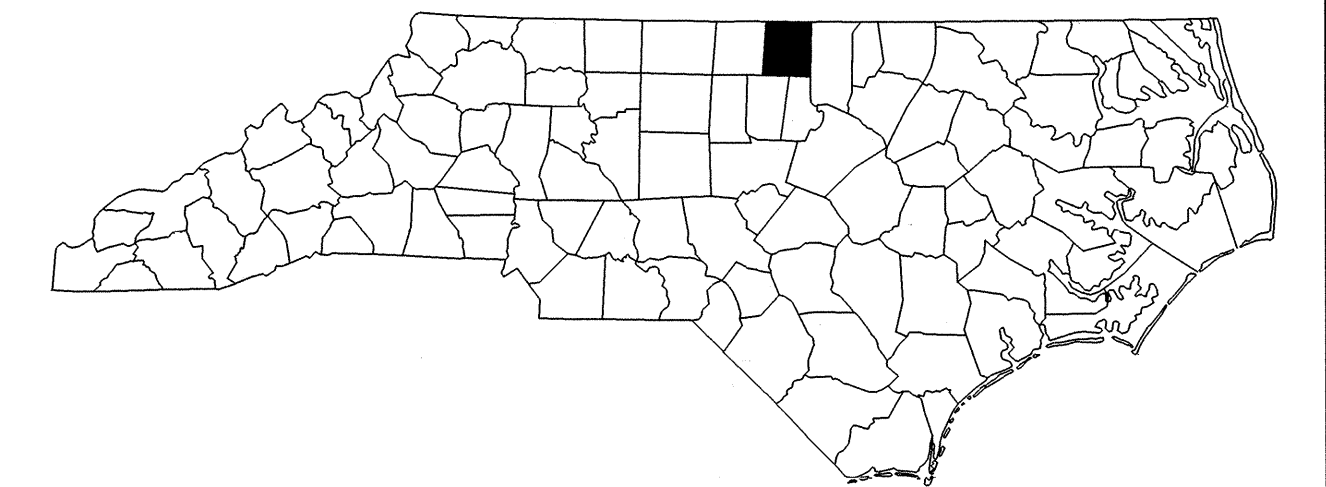
TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND CULVERT



-L- STA. 16+00.00

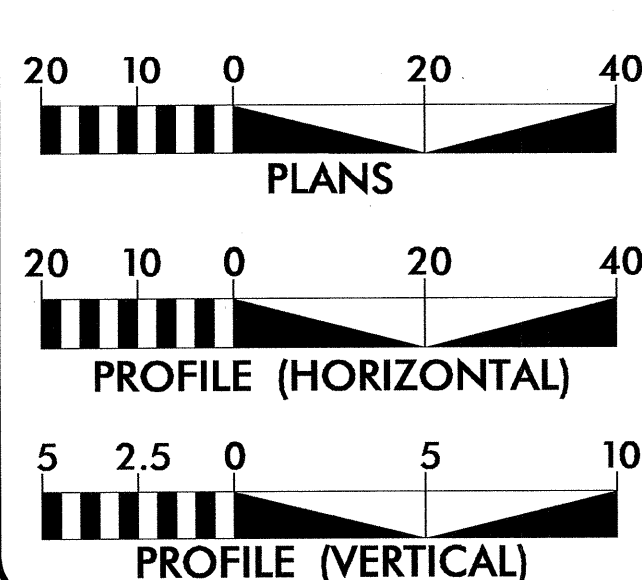
END TIP PROJECT B-4785

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4785	1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
38556.1.1	BRZ-1142(7)	P.E.	
38556.2.1	BRZ-1142(7)	RW & UTL.	
38556.3.FD1	BRZ-1142(7)	CONST.	



** DESIGN EXCEPTIONS FOR VERTICAL ALIGNMENT AND VERTICAL STOPPING SIGHT DISTANCE ARE REQUIRED.

GRAPHIC SCALES



DESIGN DATA

ADT 2013 = 780 VPD
 ADT 2033 = 1,170 VPD
 DHV = 10 %
 D = 60 %
 *T = 6 %
 **V = 55 MPH
 * (TTST 1% + DUAL 5%)
 FUNC. CLASS. = RURAL LOCAL
 SUBREGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4785 = 0.063 MILE
 LENGTH STRUCTURE TIP PROJECT B-4785 = 0.010 MILE
 TOTAL LENGTH TIP PROJECT B-4785 = 0.073 MILE

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

2012 STANDARD SPECIFICATIONS

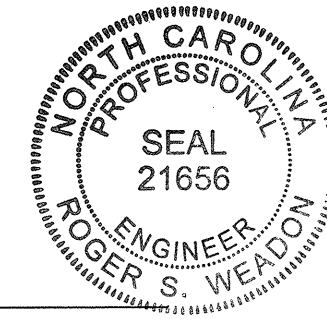
RIGHT OF WAY DATE:
OCTOBER 19, 2012

LETTING DATE:
MARCH 18, 2014

TONY HOUSER, PE
PROJECT ENGINEER

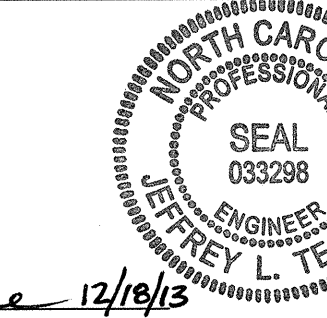
JEFFREY L. TEAGUE, PE
PROJECT DESIGN ENGINEER

HYDRAULICS
ENGINEER

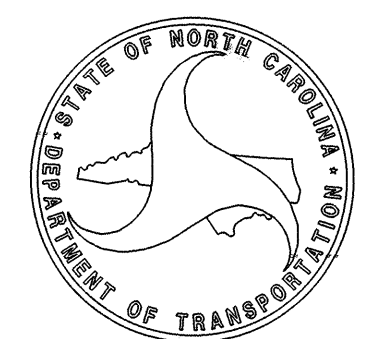


Signature: [Handwritten Signature] 12/19/13

ROADWAY
DESIGN
ENGINEER



Signature: [Handwritten Signature] 12/19/13



18-DEC-2013 14:28
R:\Roadway\Projects\B4785_RdV_t.sh.dgn
\$\$\$\$\$USERNAME\$\$\$\$\$

TIP PROJECT: B-4785

CONTRACT: C203366

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	----- 
Property Corner	----- 
Property Monument	----- 
Parcel/Sequence Number	----- 
Existing Fence Line	----- 
Proposed Woven Wire Fence	----- 
Proposed Chain Link Fence	----- 
Proposed Barbed Wire Fence	----- 
Existing Wetland Boundary	----- 
Proposed Wetland Boundary	----- 
Existing Endangered Animal Boundary	----- 
Existing Endangered Plant Boundary	----- 
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	----- 
Small Mine	----- 
Foundation	----- 
Area Outline	----- 
Cemetery	----- 
Building	----- 
School	----- 
Church	----- 
Dam	----- 

















HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	----- 
Top of Bank	----- 
Jurisdictional Stream	----- 
Buffer Zone 1	----- 
Buffer Zone 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	----- 
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	----- 



ROADS AND RELATED FEATURES:

Existing Edge of Pavement	----- 
Existing Curb	----- 
Proposed Slope Stakes Cut	----- 
Proposed Slope Stakes Fill	----- 
Proposed Curb Ramp	----- 










Existing Metal Guardrail	----- 
Proposed Guardrail	----- 
Existing Cable Guiderail	----- 
Proposed Cable Guiderail	----- 
Equality Symbol	----- 

VEGETATION:












Pavement Removal	----- 
Single Tree	----- 
Single Shrub	----- 
Hedge	----- 
Woods Line	----- 

Orchard	----- 
Vineyard	----- 














EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	----- 
Bridge Wing Wall, Head Wall and End Wall	----- 
MINOR:	
Head and End Wall	----- 
Pipe Culvert	----- 
Footbridge	----- 
Drainage Box: Catch Basin, DI or JB	----- 
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.*)	----- 

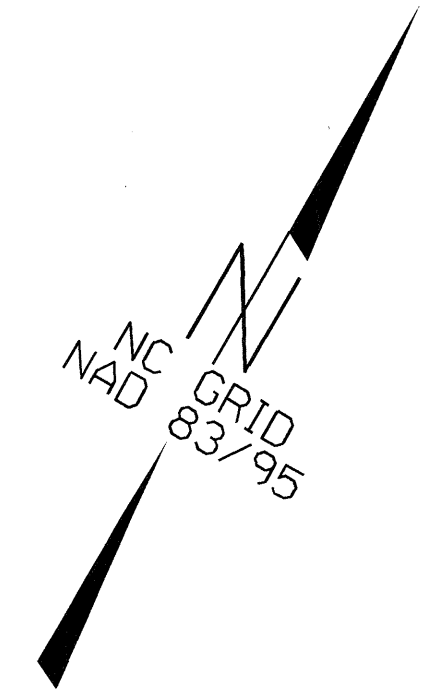
MISCELLANEOUS:

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	----- 
End of Information	----- 

SURVEY CONTROL SHEET B-4785

PERSON COUNTY

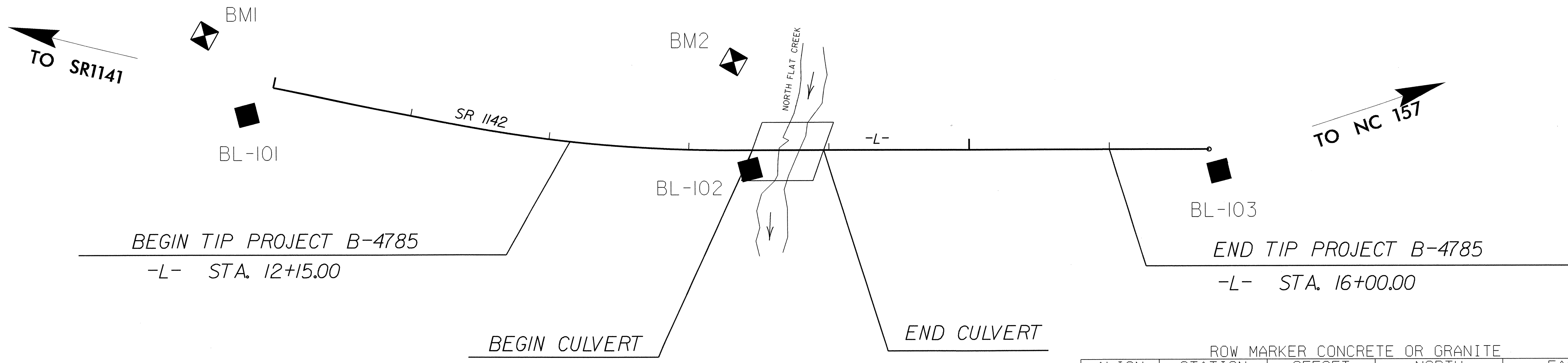
BRIDGE #24 OVER THE NORTH FLAT RIVER ON SR1142



NCDOT GPS STATION "B4785-1"
LOCALIZED PROJECT COORDINATES
N = 942640.943
E = 1990972.652

ALIGNMENT DATA

TYPE	STATION	NORTH	EAST
POT	10+00.00	943164.4870	1992498.8650
PC	11+24.55	943205.9378	1992616.3121
PT	13+30.88	943293.2210	1992802.9048
POT	16+71.15	943466.9375	1993095.4950



ROW MARKER PERMANENT EASEMENT

ALIGN	STATION	OFFSET	NORTH	EAST
L	13+30.88	65.00	943237.3297	1992836.0886
L	13+30.88	-65.00	943349.1124	1992769.7211
L	13+75.00	75.00	943251.2567	1992879.1336
L	14+20.00	75.00	943274.2301	1992917.8276
L	14+25.00	-65.00	943397.1639	1992850.6542
L	14+25.00	-50.00	943384.2651	1992858.3106

ROW MARKER CONCRETE OR GRANITE

ALIGN	STATION	OFFSET	NORTH	EAST
L	12+65.00	50.00	943216.8788	1992768.0220
L	12+65.00	29.62	943235.0252	1992758.7345
L	12+65.00	-50.00	943305.8972	1992722.4618
L	12+65.00	-30.39	943288.4364	1992731.3983
L	13+30.88	-50.00	943336.2144	1992777.3789
L	13+30.88	50.00	943250.2277	1992828.4308
L	14+20.00	50.00	943295.7267	1992905.0646
L	14+65.00	30.00	943335.8974	1992933.5482
L	15+85.00	-50.00	943465.9490	1992995.8906
L	15+85.00	-30.00	943448.7517	1993006.1010

CONTROL DATA

POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
101	BL-101	943138.5510	1992492.2420	616.29	OUTSIDE PROJECT LIMITS	
102	BL-102	943287.9260	1992820.8300	601.14	13+43.59	13.70 RT
103	BL-103	943457.2620	1993109.3480	614.29	OUTSIDE PROJECT LIMITS	

BENCHMARK DATA

.....

BM1 ELEVATION = 614.74
N 943172 E 1992438
L STATION 10+00.00
N 83°15'3.50" W DIST 61.41
RR SPIKE IN 19' TWIN MAPLE

.....

BM2 ELEVATION = 595.11
N 943348 E 1992772
L STATION 13+32.00 63 LEFT
RR SPIKE IN 26' RIVER BIRCH

.....

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "B4785-1" WITH NAD 83/95 STATE PLANE GRID COORDINATES OF NORTHING: 942640.9431(ft) EASTING: 1990972.652(ft) ELEVATION: 637.33(ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 1.00002722

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B4785-1" TO -L- 10+00.00 IS N 71° 03' 59" E 1613.51'

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

NOTES:

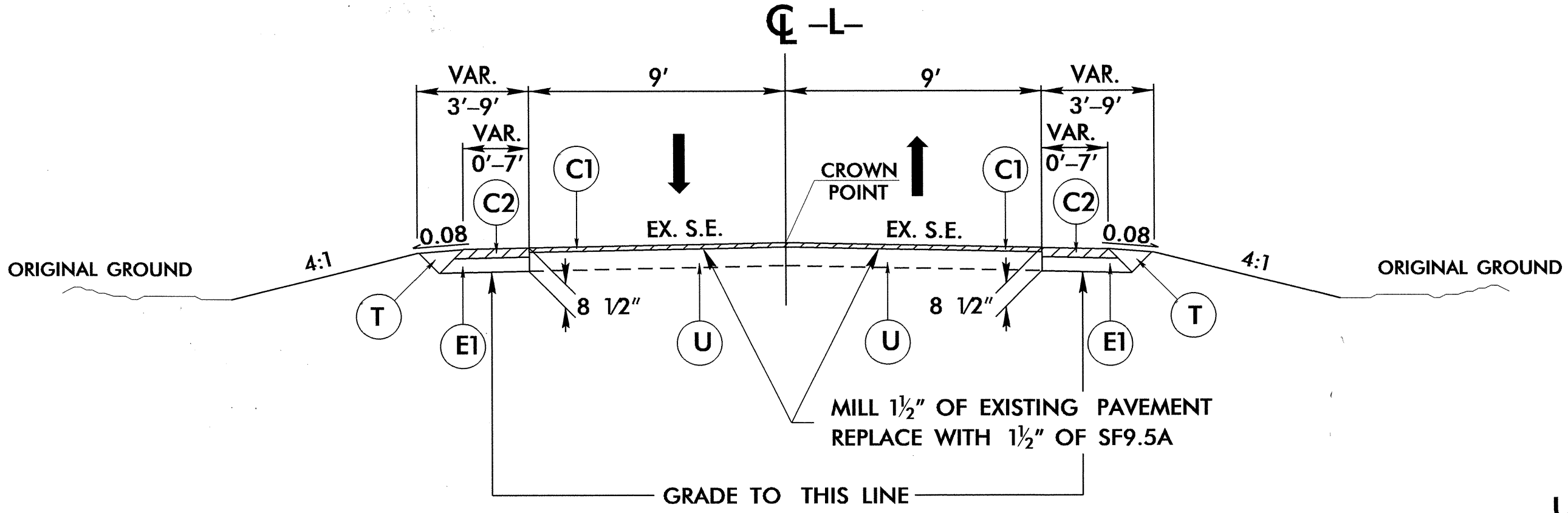
- THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTP://WWW.NCDOT.ORG/DOH/RECONSTRUCTHIGHWAYLOCATIONPROJECT/](http://www.ncdot.org/DOH/RECONSTRUCTHIGHWAYLOCATIONPROJECT/)
THE FILES TO BE FOUND ARE AS FOLLOWS:
B4785_LS_CONTROL.TXT
- SITE CALIBRATION 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.

NOTE: DRAWING NOT TO SCALE

1/13/12
15-JAN-2014 10:21
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PAVEMENT SCHEDULE (FINAL PAVEMENT DESIGN)	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
E1	PROP. APPROX. 5½" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.

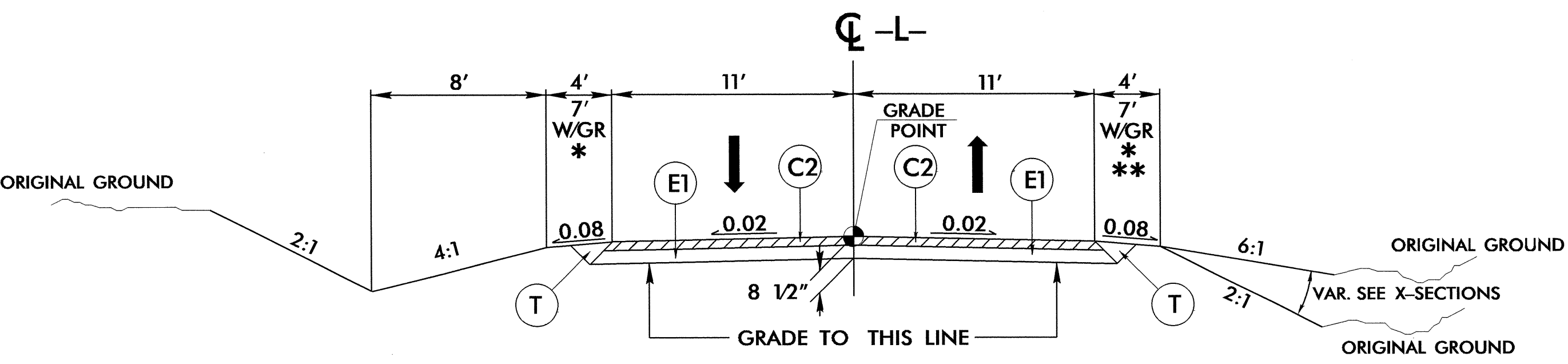
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1
AT THE FOLLOWING LOCATION:

-L- STA. 12+15.00 TO STA. 12+65.00



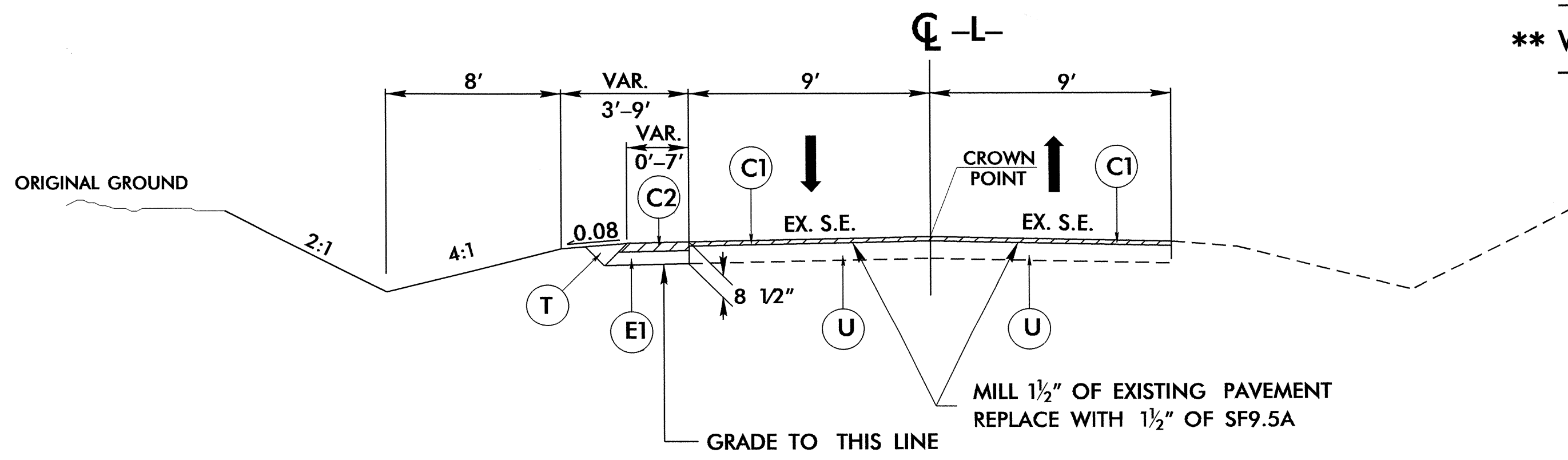
TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2
AT THE FOLLOWING LOCATION:

-L- STA. 12+65.00 TO STA. 14+75.00

* WIDEN SHOULDER TO 9' WITH GUARDRAIL AT:
-L- STA. 12+65.00 LT. & RT.
-L- STA. 14+75.00 LT.

** WIDEN SHOULDER TO 8' WITH GUARDRAIL AT:
-L- STA. 14+50.00 RT.



TYPICAL SECTION NO. 3

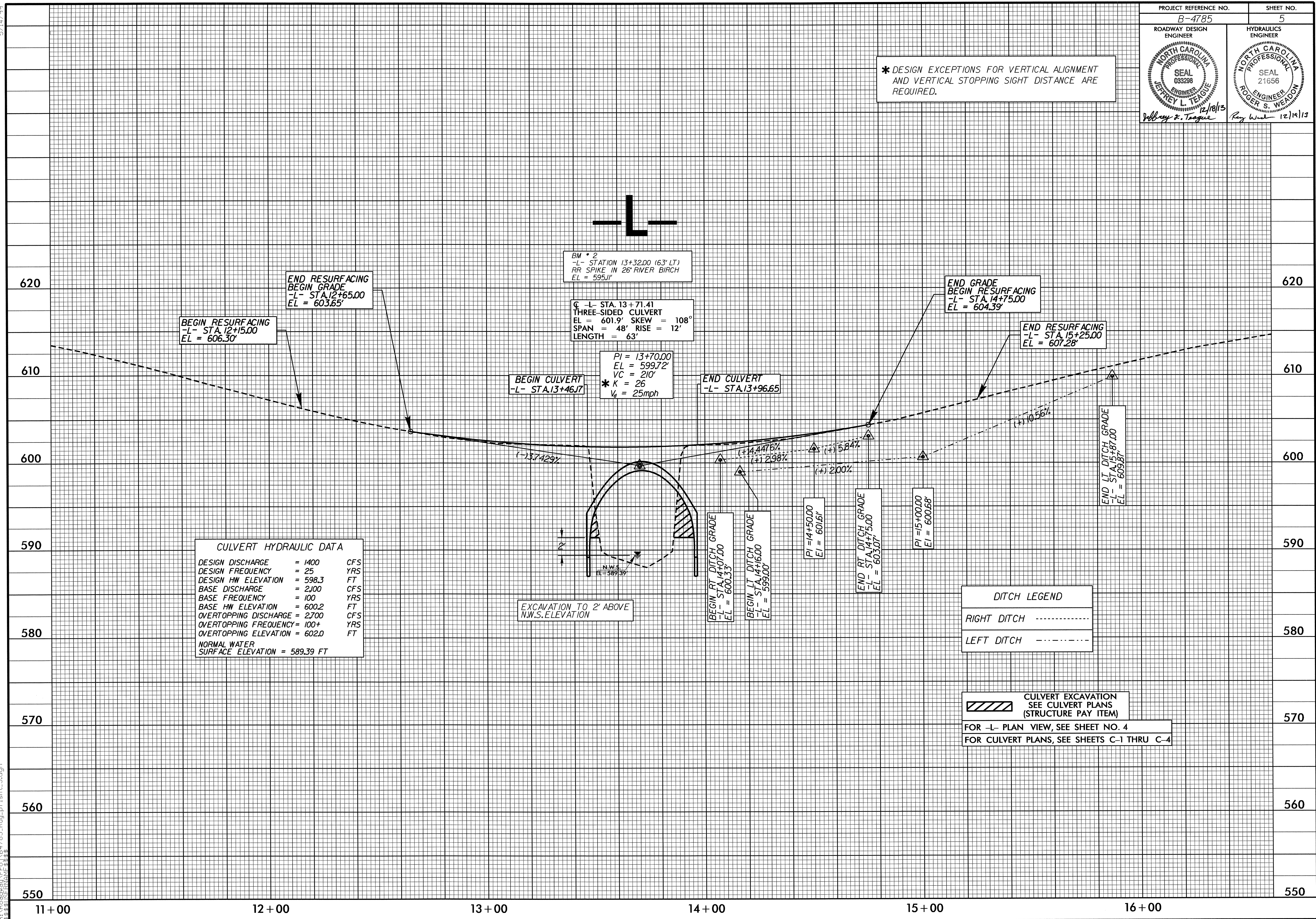
USE TYPICAL SECTION NO. 3
AT THE FOLLOWING LOCATION:

-L- STA. 14+75.00 TO STA. 15+25.00

5/14/99

PROJECT REFERENCE NO. B-4785	SHEET NO. 5
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 033298 JEFFREY L. TERPILG 12/18/13	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 21656 ROGER S. WEADON 12/18/13

* DESIGN EXCEPTIONS FOR VERTICAL ALIGNMENT AND VERTICAL STOPPING SIGHT DISTANCE ARE REQUIRED.



CULVERT HYDRAULIC DATA	
DESIGN DISCHARGE	= 1400 CFS
DESIGN FREQUENCY	= 25 YRS
DESIGN HW ELEVATION	= 598.3 FT
BASE DISCHARGE	= 2100 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 600.2 FT
OVERTOPPING DISCHARGE	= 2700 CFS
OVERTOPPING FREQUENCY	= 100+ YRS
OVERTOPPING ELEVATION	= 602.0 FT
NORMAL WATER SURFACE ELEVATION	= 589.39 FT

EXCAVATION TO 2' ABOVE N.W.S. ELEVATION

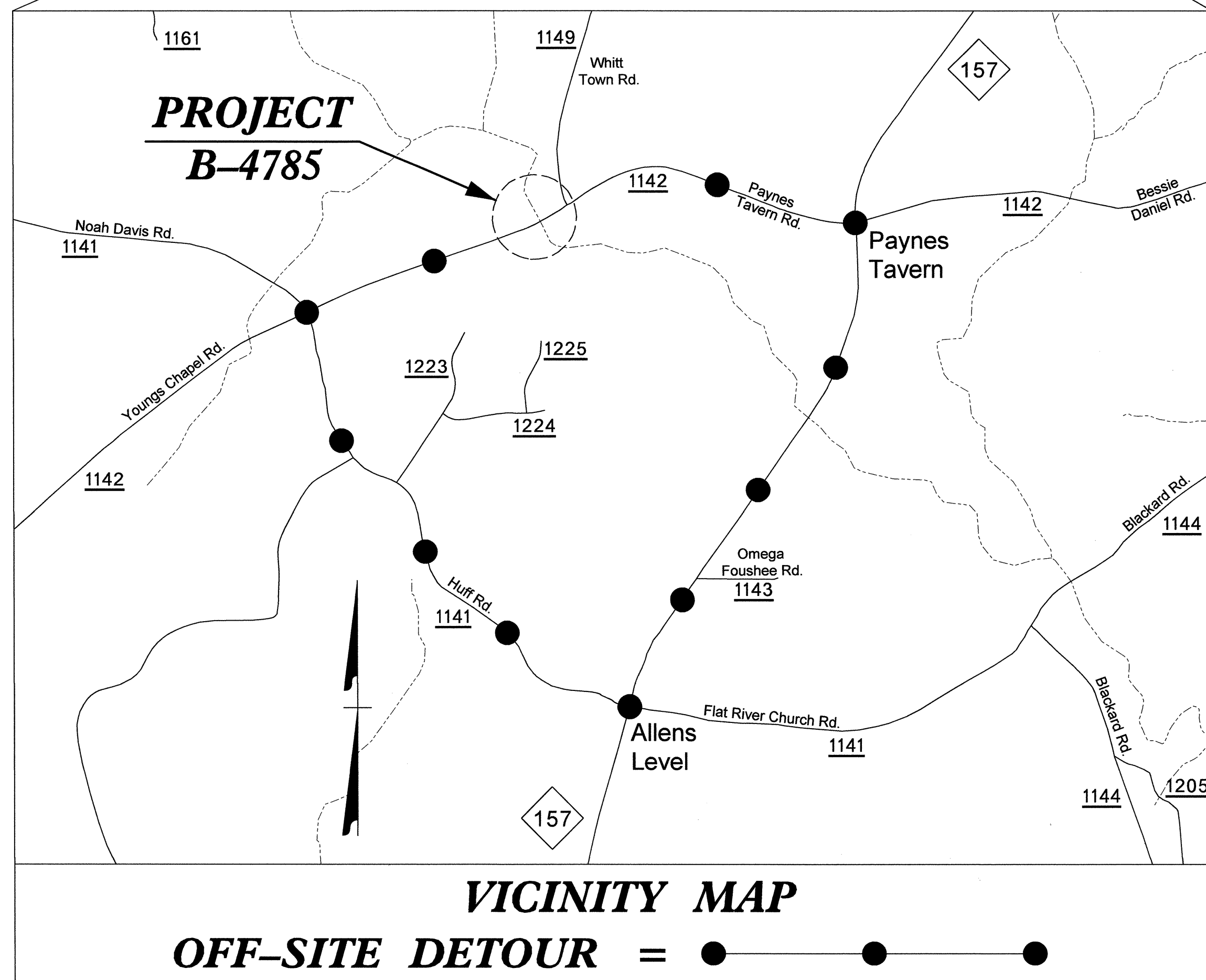
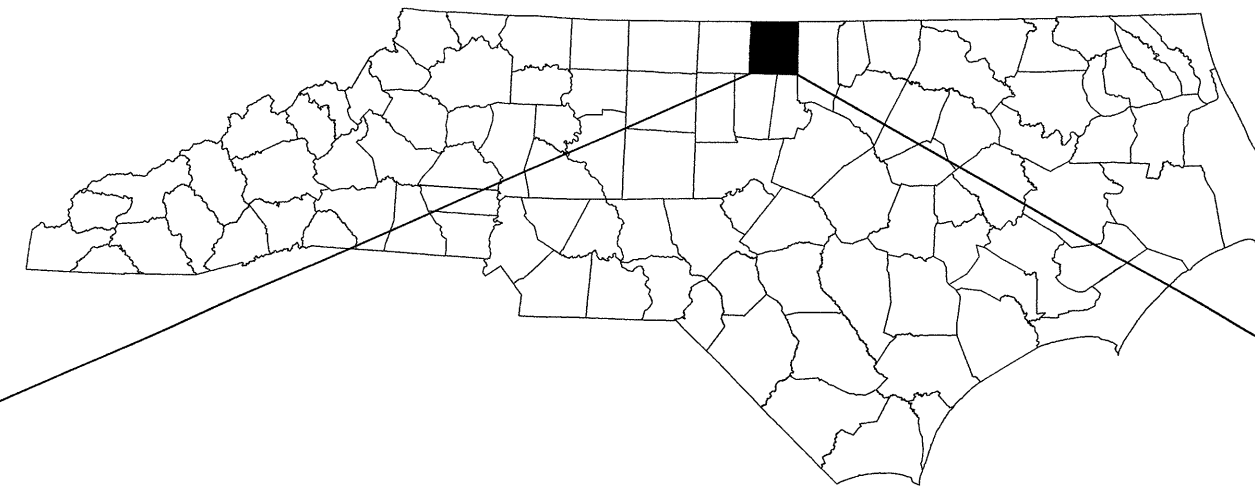
DITCH LEGEND	
RIGHT DITCH	-----
LEFT DITCH	-----

CULVERT EXCAVATION SEE CULVERT PLANS (STRUCTURE PAY ITEM)
FOR -L- PLAN VIEW, SEE SHEET NO. 4
FOR CULVERT PLANS, SEE SHEETS C-1 THRU C-4

10-DEC-2013 15:16
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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN
PERSON COUNTY



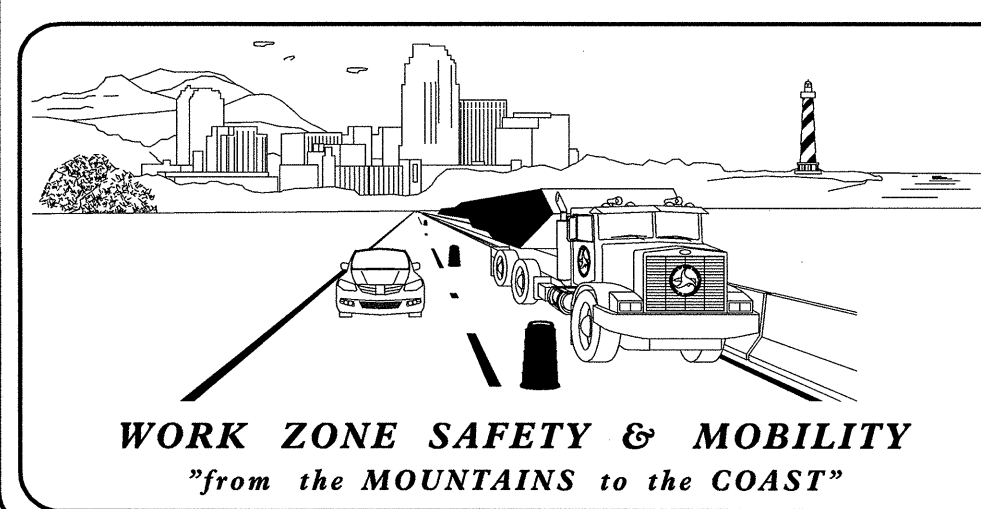
SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS AND LEGEND
TMP-1B	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES AND PHASING)
TMP-2	OFF-SITE DETOUR ROUTE AND BARRICADE PLACEMENT
TMP-3	SPECIAL SIGN DESIGN

SHEET NO.
TMP-1

TIP PROJECT: B-4785

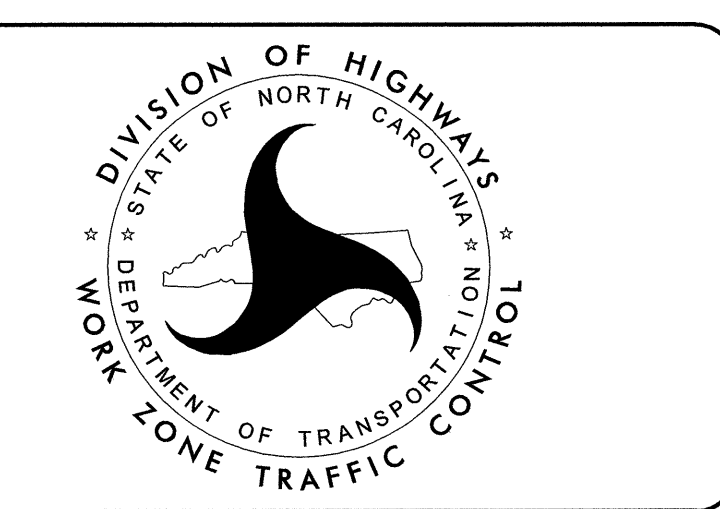
TIP PROJECT: B-4785

11/9/2013
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User:dkennedy



N.C.D.O.T. WORK ZONE TRAFFIC CONTROL
1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561
750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773-2800 FAX: (919) 771-2745

J. S. BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER
JOSEPH ISHAK, P.E. TRAFFIC CONTROL PROJECT ENGINEER
MICHAEL STEELMAN TRAFFIC CONTROL PROJECT DESIGN ENGINEER
DURWOOD KENNEDY, P.E. TRAFFIC CONTROL DESIGN ENGINEER



APPROVED: _____
DATE: _____

SEAL

11/27/2013

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - 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:

<u>STD. NO.</u>	<u>TITLE</u>
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.06	WARNING SIGNS FOR BLASTING ZONES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1170.01	POSITIVE PROTECTION
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.03	PAVEMENT MARKINGS - EXITS AND ENTRANCE RAMPS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.10	PAVEMENT MARKINGS - SCHOOL AREAS
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1205.12	PAVEMENT MARKINGS - BRIDGES
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)
- WORK AREA

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM SKINNY DRUM TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

11/9/2013 10:11:11 AM I:\Projects\B4785\TrafficControl\TCP\B-4785_TC_TMP.dgn User:rkennedy

APPROVED: _____ DATE: _____ 		<h2 style="margin: 0;">ROADWAY STANDARD DRAWINGS & LEGEND</h2>
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MANAGEMENT STRATEGIES

DURING REPLACEMENT OF THE EXISTING BRIDGE NO. 24 OVER NORTH FLAT RIVER, SR-1142 (PAYNES TAVERN ROAD) WILL BE CLOSED TO THROUGH TRAFFIC. THE PAYNES TAVERN ROAD TRAFFIC WILL BE DETOURED OFF-SITE.

PHASING

STEP 1:
 PROVIDE AND MAINTAIN CHANGEABLE MESSAGE SIGNS AT EACH END OF SR-1142 (PAYNES TAVERN ROAD) OR AS DIRECTED BY THE ENGINEER FOR FOURTEEN (14) CALENDAR DAYS PRIOR TO ROAD CLOSURE, AS SHOWN ON SHEET TMP-2.

USING ROADWAY STANDARD DRAWING (RSD) 1101.03, SHEET 1 OF 9, SHEETS TMP-2 AND TMP-3, MAY BEGIN INSTALLATION OF ROAD CLOSURE AND DETOUR SIGNS. COVER SIGNS UNTIL READY TO CLOSE THE ROAD.

STEP 2:
 USING RSD 1101.03, SHEET 1 OF 9, SHEETS TMP-2 AND TMP-3, INSTALL / UNCOVER ROAD CLOSURE AND DETOUR SIGNS. PLACE TYPE III BARRICADES TO CLOSE SR-1142 (PAYNES TAVERN ROAD) TO THROUGH TRAFFIC, AND DETOUR TRAFFIC OFF-SITE. CHANGEABLE MESSAGE SIGNS MAY BE REMOVED.

MAINTAIN ACCESS TO ALL PARCELS, AS DIRECTED BY THE ENGINEER.

STEP 3:
 AWAY FROM TRAFFIC, COMPLETE THE FOLLOWING:

SEE ROADWAY AND STRUCTURE PLANS.

- REMOVE EXISTING STRUCTURE No. 24, AND CONSTRUCT THE PROPOSED STRUCTURE.
- CONSTRUCT PROPOSED ROADWAY UP THROUGH THE FINAL LAYER OF SURFACE COURSE FROM -L- STA.12+15+/- TO -L- STA.15+25+/- . USING FINAL PAVEMENT MARKING PLAN, PLACE FINAL PAVEMENT MARKINGS AND MARKERS FROM -L- STA.12+15+/- TO -L- STA.15+25+/- AND TIE INTO EXISTING PAVEMENT MARKINGS.

STEP 4:
 REMOVE ALL ROAD CLOSURE SIGNING / DEVICES AND DETOUR SIGNING. OPEN SR-1142 (PAYNES TAVERN ROAD) TO PROPOSED TRAFFIC PATTERN.

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVELAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES, AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

TRAFFIC PATTERN ALTERATIONS

A) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

THE NCDOT RESIDENT ENGINEER WILL NOTIFY THE PERSON COUNTY SCHOOLS TRANSPORTATION DIRECTOR AT (336) 599-2191 AND THE DIRECTOR OF THE PERSON COUNTY EMERGENCY MANAGEMENT SERVICES (EMS) AT (336) 597-4262 OF THE BRIDGE REMOVAL THIRTY (30) CALENDAR DAYS PRIOR TO THE ROAD CLOSURE.

SIGNING

B) PROVIDE PERMANENT SIGNING.

C) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRANSPORTATION MANAGEMENT PLAN.

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRANSPORTATION MANAGEMENT PLANS.

D) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

E) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

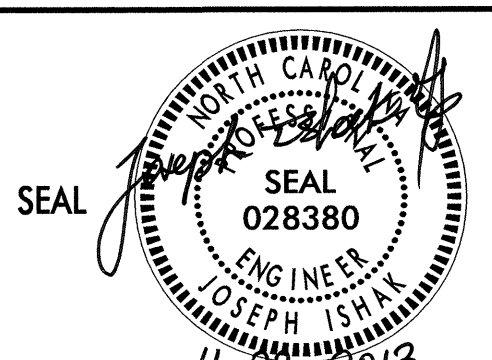
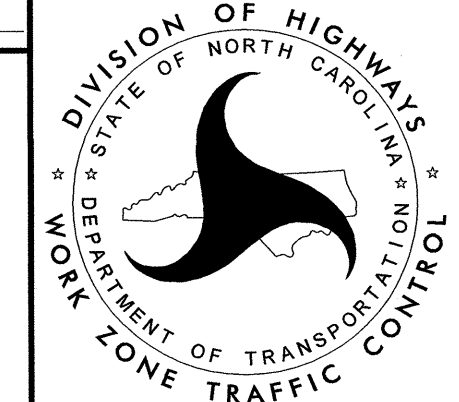
F) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

PAVEMENT MARKINGS AND MARKERS

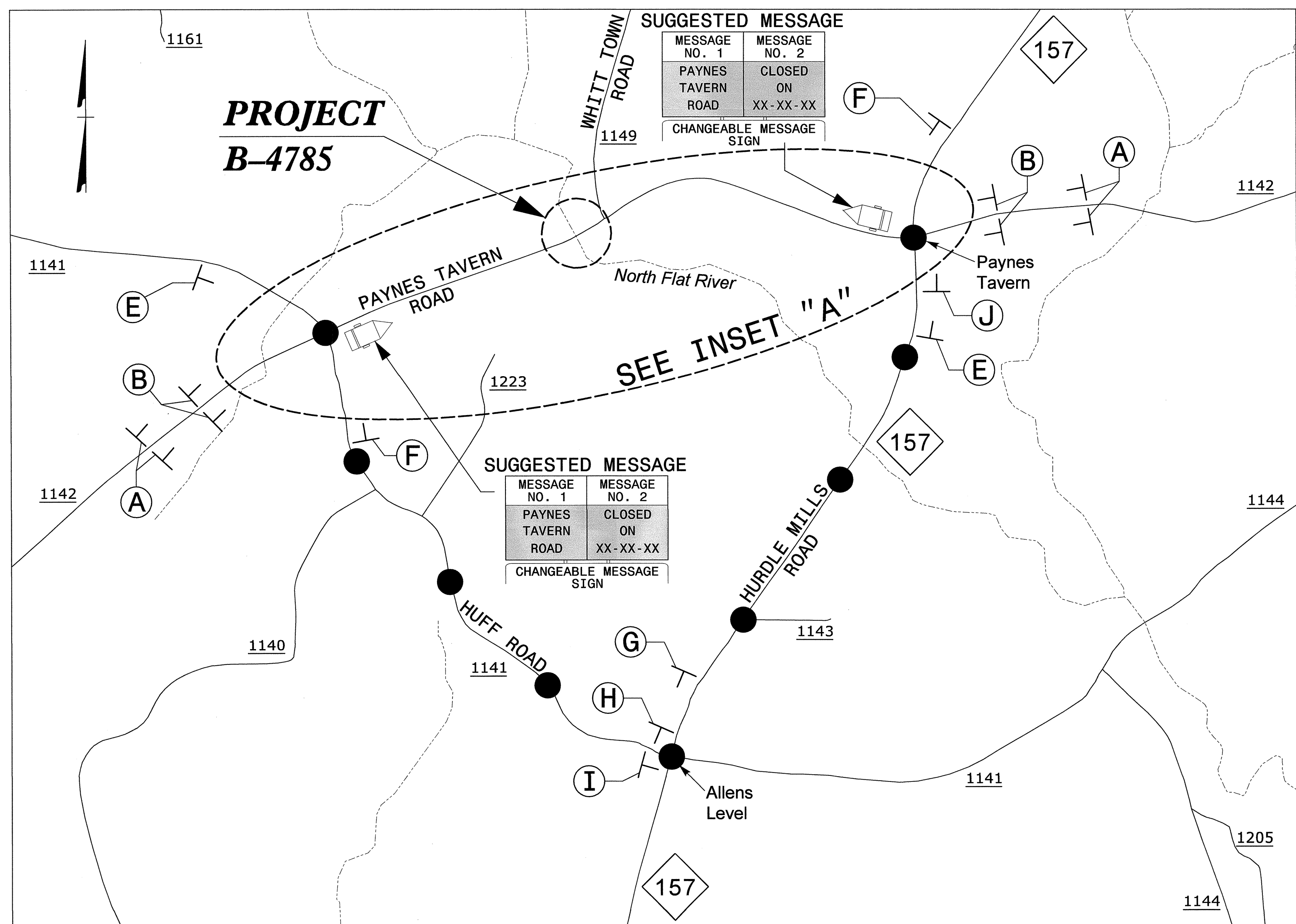
G) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS SHOWN IN THE PAVEMENT MARKING PLAN.

H) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

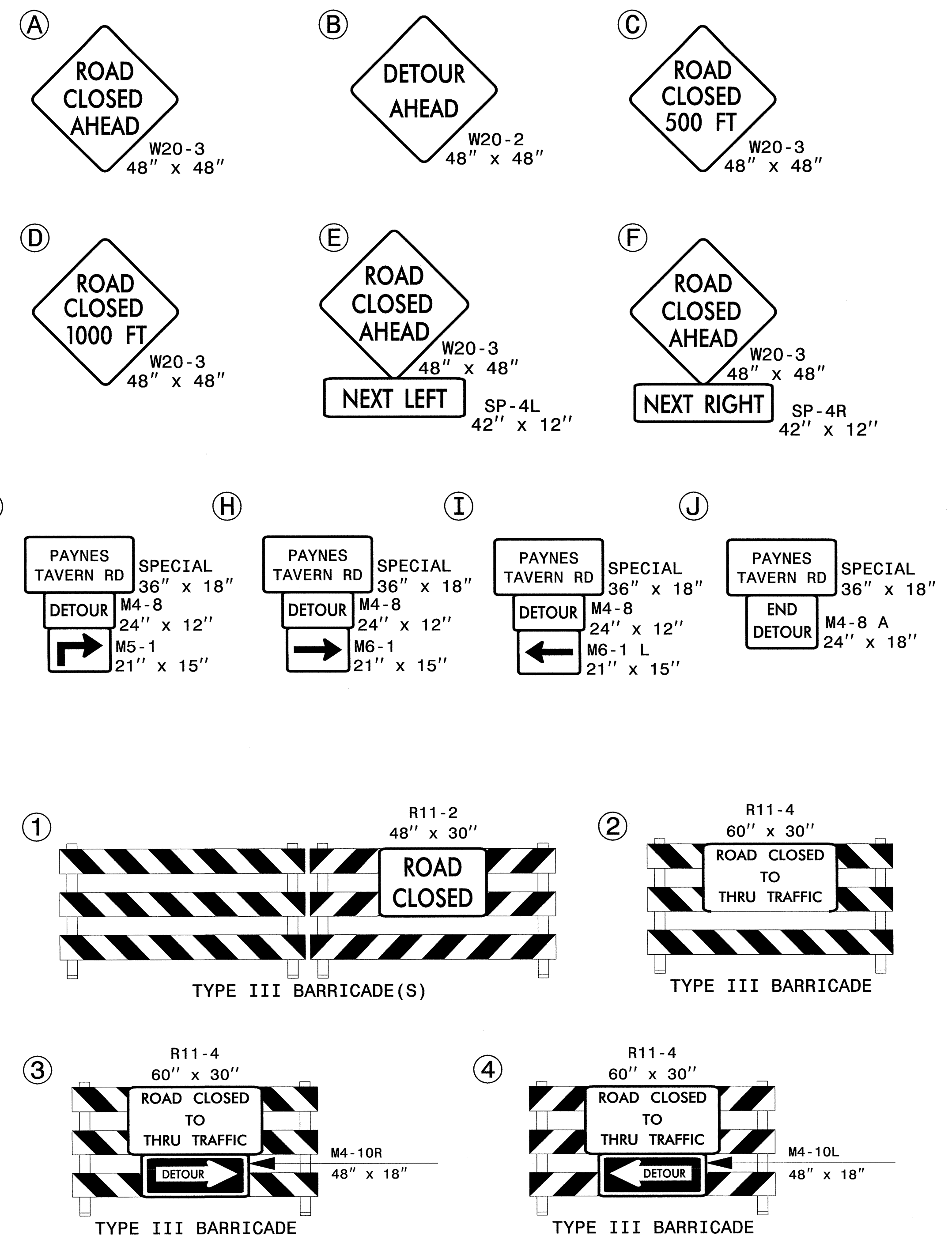
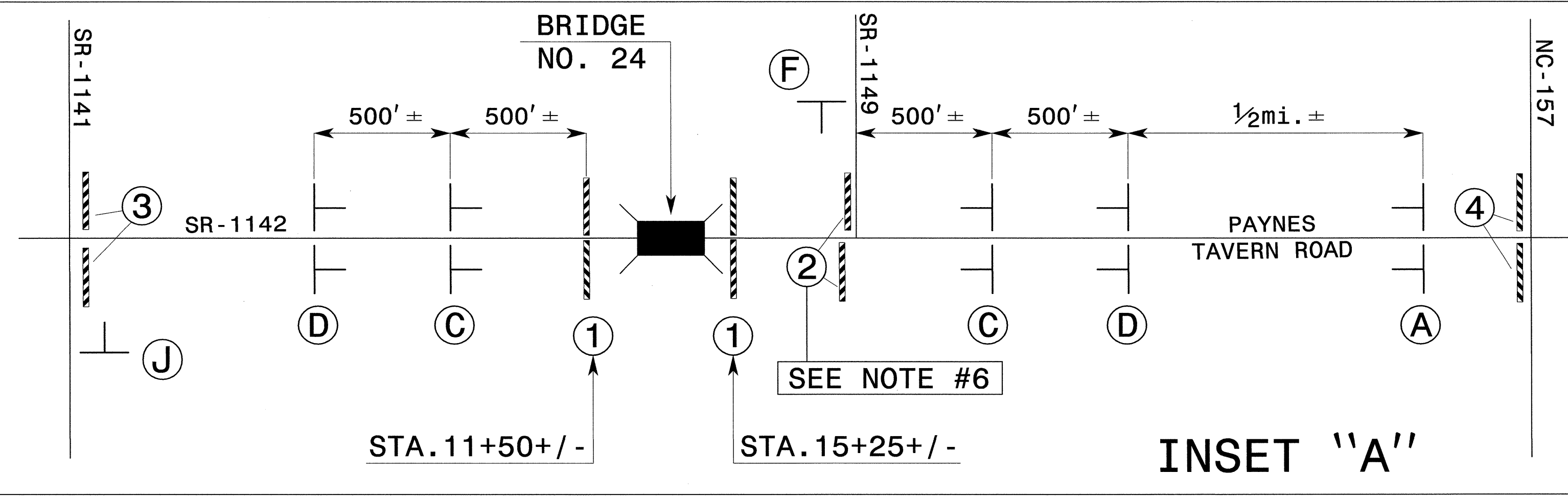
11/19/2013
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 User:rkennedy

APPROVED: _____ DATE: _____ 		<h1 style="margin: 0;">TRANSPORTATION OPERATIONS PLAN</h1>
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VICINITY MAP: PERSON COUNTY



- NOTES:**
- REFER TO SHEET TMP-3 FOR SIGN DESIGN.
 - REFER TO STANDARD RSD 1101.03, SHEET 1 OF 9, FOR ROAD CLOSURE SIGN DISTANCES AND APPLICABLE NOTES.
 - INSTALL DETOUR SIGNS AS DIRECTED BY THE ENGINEER.
 - LOCATE AND INSTALL CMS TO BE LEVEL AS DIRECTED BY THE ENGINEER.
 - CMS(S) SHALL BE USED TO PROVIDE FOURTEEN (14) CALENDAR DAYS OF ADVANCE WARNING PRIOR TO ROAD CLOSURE. CMS(S) SHOULD BE REMOVED AFTER ROAD IS CLOSED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 - AT STA. 17+00+/-, STAGGER BARRICADES IN ROAD TO ALLOW ACCESS TO THE EXISTING DRIVEWAY DURING CONSTRUCTION, AS DIRECTED BY THE ENGINEER.



APPROVED: _____ DATE: _____

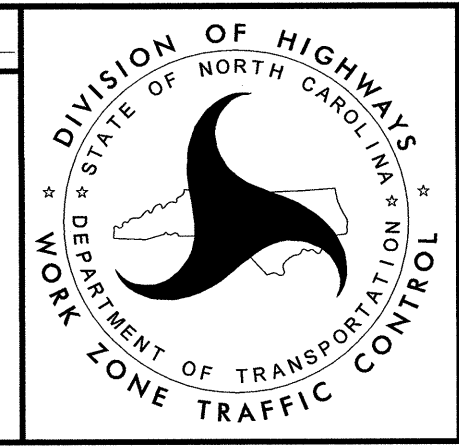
SEAL

SEAL 028380

ENGINEER

JOSEPH ISHAK

11/27/2013



OFF-SITE DETOUR AND BARRICADE PLACEMENT

11/19/2013 10:05:00 AM C:\Users\jishak\Documents\Projects\B-4785-TMP-2.dgn User: jishak

SIGN NUMBER: WORKZONE
 TYPE: STATIONARY
 QUANTITY: SEE PLANS

BACKG COLOR: Fluorescent Orange
 COPY COLOR: Black

DESIGN BY: S.JOHNS
 PROJECT ID: B-4785

CHECKED BY: S.KUNZ
 DIV: 5

DATE: Jul 25, 2013

SIGN WIDTH: 3'-0"
 HEIGHT: 1'-6"
 TOTAL AREA: 4.5 Sq.Ft.

BORDER TYPE: INSET
 RECESS: 0.38"
 WIDTH: 0.63"
 RADII: 1.5"

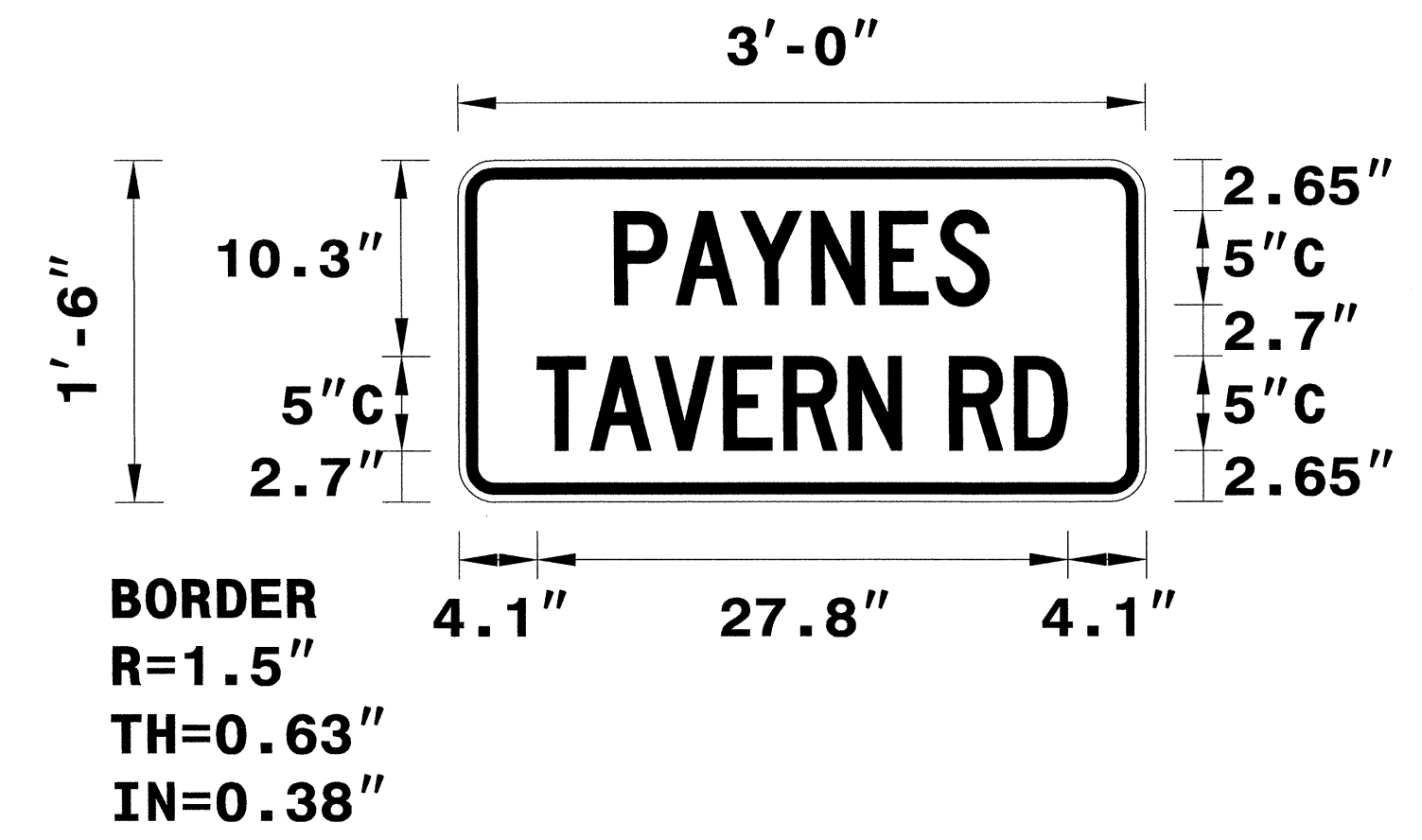
NO. Z BARS:
 LENGTH:

SYMBOL	X	Y	WID	HT

MAT'L: 0.080" (2.0 mm) ALUMINUM

USE NOTES: 1,2

- Legend and border shall be direct applied black non-reflective sheeting.
- Background shall be NC GRADE B fluorescent orange retroreflective sheeting.



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter												Series/Size Text Length	
	P	A	Y	N	E	S							C 2000
8.2	3.2	3.4	3.7	3.6	3	2.8	8.2						19.7
	T	A	V	E	R	N		R	D				C 2000
4.1	2.8	3.4	3.6	3.1	3.4	2.8	2.5	3.4	2.8	4.1			27.8

FILENAME: B-4785_workzoneSign

NORTH CAROLINA D.O.T. SIGN DETAIL

1/19/2013
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 User: rick.kennedy

APPROVED: <i>[Signature]</i> DATE: 11/20/13 		<p style="text-align: center;">SPECIAL SIGN DESIGN</p>
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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

TIP NO. B-4785	SHEET NO. PMP-1
APPROVED: <i>[Signature]</i>	
DATE: 11/26/13	
SEAL	

PAVEMENT MARKING PLAN
PERSON COUNTY

LOCATION: BRIDGE No. 24 OVER NORTH FLAT RIVER ON SR 1142 (PAYNES TAVERN ROAD)

T.I.P.: B-4785

CONTRACT: C203366

ROADWAY STANDARD DRAWING

STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTILANE ROADWAYS
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION

PAVEMENT MARKING SCHEDULE

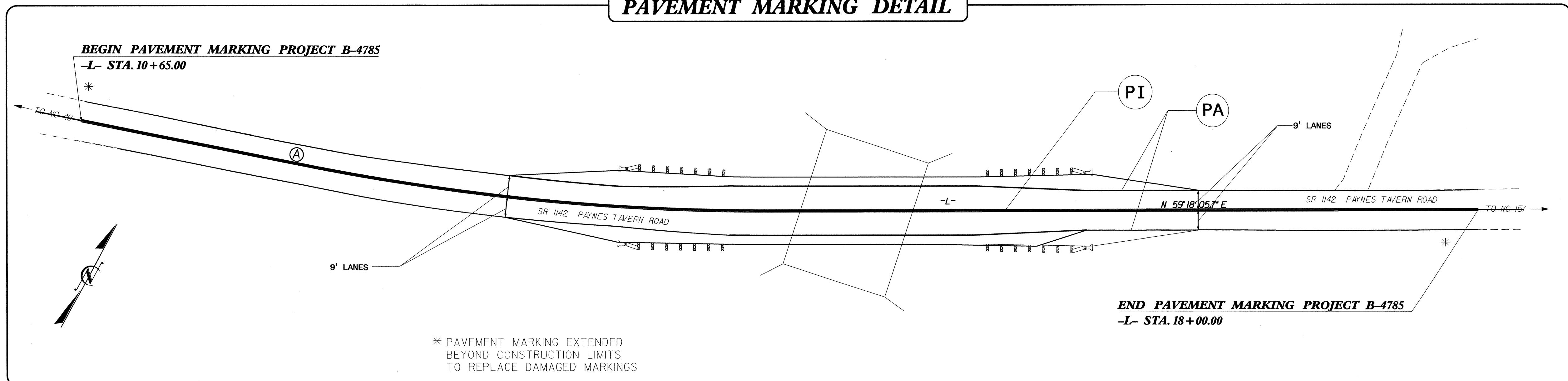
SYMBOL	DESCRIPTION
	PAINT (4")
PI	YELLOW DOUBLE CENTER
PA	WHITE EDGELINE

GENERAL NOTES

- THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.
- INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

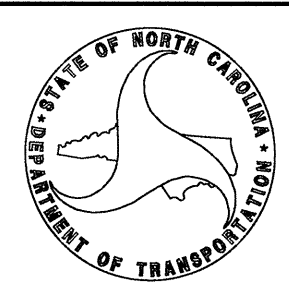
ROAD NAME	MARKING	MARKER
ALL	PAINT	NONE
 - PLACE TWO APPLICATIONS OF PAINT PAVEMENT MARKINGS ON THE FINAL WEARING SURFACE. PLACE THE SECOND APPLICATION OF PAINT UPON SUFFICIENT DRYING TIME OF THE FIRST.
 - TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
 - REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.
 - PASSING ZONES WILL BE DETERMINED IN THE FIELD AND MUST BE APPROVED BY THE ENGINEER.

PAVEMENT MARKING DETAIL



PLAN PREPARED BY: N.C.D.O.T. SIGNING AND DELINEATION UNIT

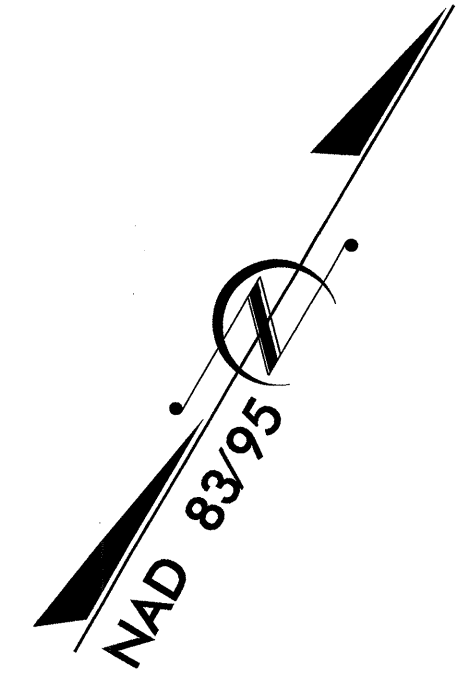
SUSAN B. KUNZ SIGNING & DELINEATION REGIONAL ENGINEER
STACEY W. JOHNS SIGNING & DELINEATION PROJECT DESIGN ENGINEER/TECHNICIAN



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4785	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

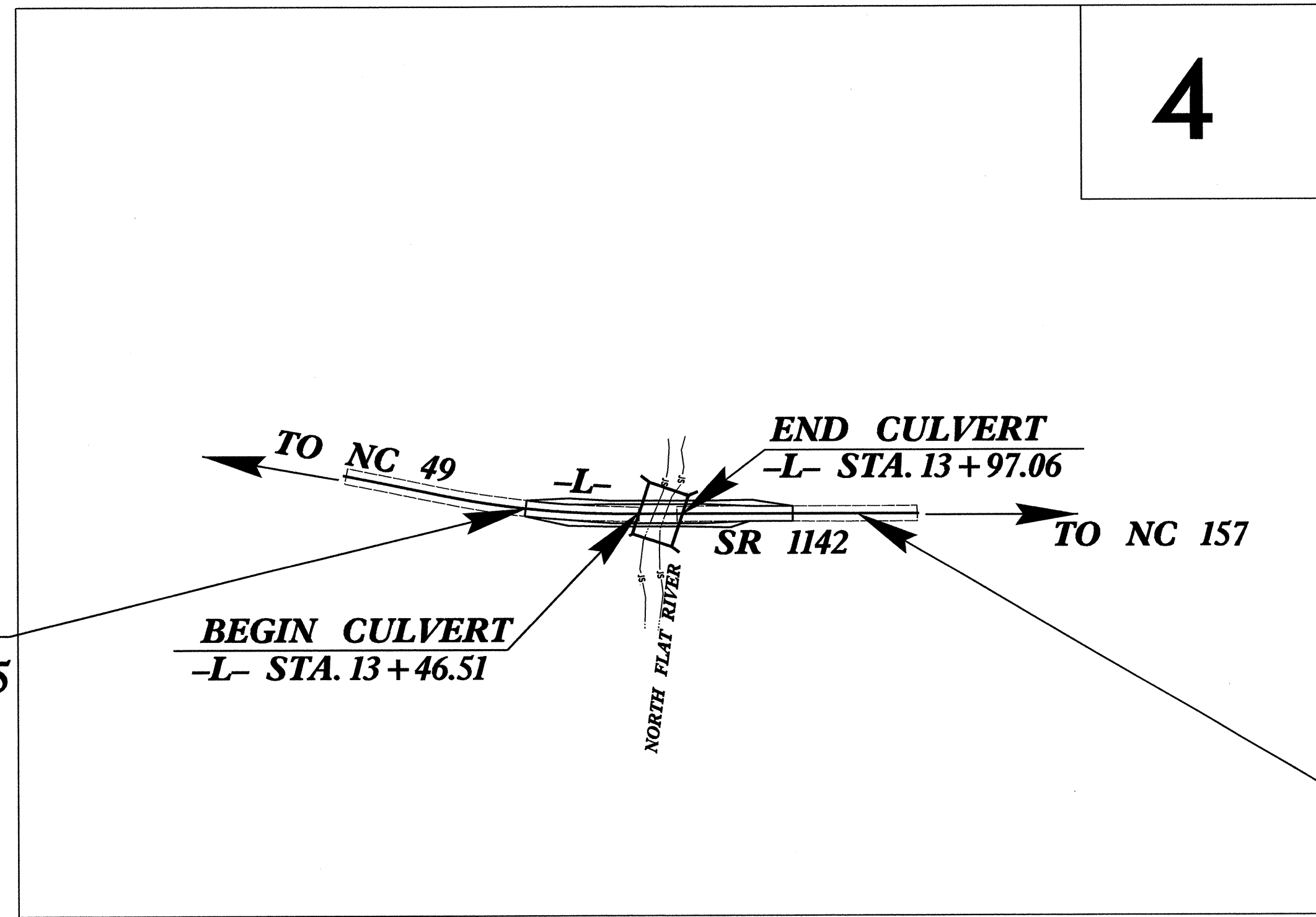
TIP PROJECT: B-4785

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
 PLAN FOR PROPOSED
 HIGHWAY EROSION CONTROL
PERSON COUNTY



**LOCATION: BRIDGE NO. 24 OVER NORTH FLAT RIVER ON
 SR 1142 (PAYNES TAVERN RD.)**

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



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch.....	
1630.05	Temporary Diversion.....	
1605.01	Temporary Silt Fence.....	
1606.01	Special Sediment Control Fence.....	
1622.01	Temporary Berms and Slope Drains.....	
1630.02	Silt Basin Type B.....	
1633.01	Temporary Rock Silt Check Type-A.....	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM).....	
1633.02	Temporary Rock Silt Check Type-B.....	
	Wattle / Coir Fiber Wattle.....	
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM).....	
1634.01	Temporary Rock Sediment Dam Type-A.....	
1634.02	Temporary Rock Sediment Dam Type-B.....	
1635.01	Rock Pipe Inlet Sediment Trap Type-A.....	
1635.02	Rock Pipe Inlet Sediment Trap Type-B.....	
1630.04	Stilling Basin.....	
1630.06	Special Stilling Basin.....	
	Rock Inlet Sediment Trap:	
1632.01	Type A.....	
1632.02	Type B.....	
1632.03	Type C.....	
	Skimmer Basin.....	
	Tiered Skimmer Basin.....	
	Infiltration Basin.....	

THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT
 Refer To E. C. Special Provisions for Special Considerations.

GRAPHIC SCALE

0

PLANS

0

PROFILE (HORIZONTAL)

0

PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT
 DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared in the Office of:
ROADSIDE ENVIRONMENTAL UNIT
 1 South Wilmington St.
 Raleigh, NC 27611
2012 STANDARD SPECIFICATIONS

Roadway Standard Drawings

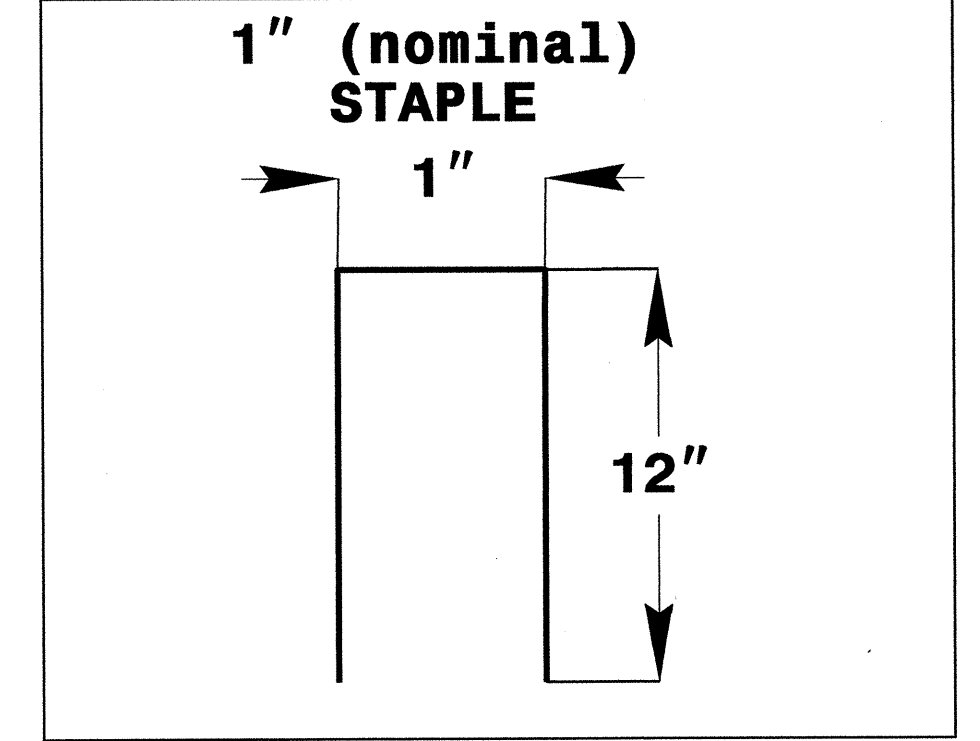
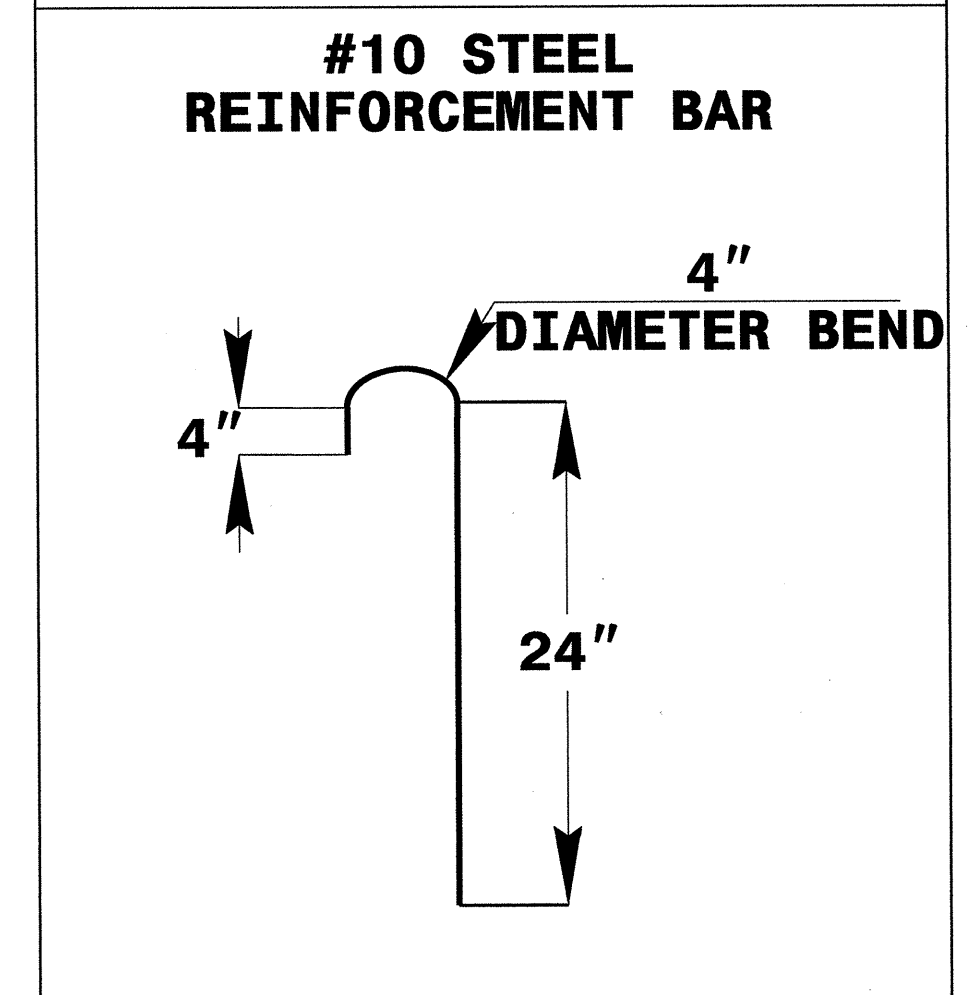
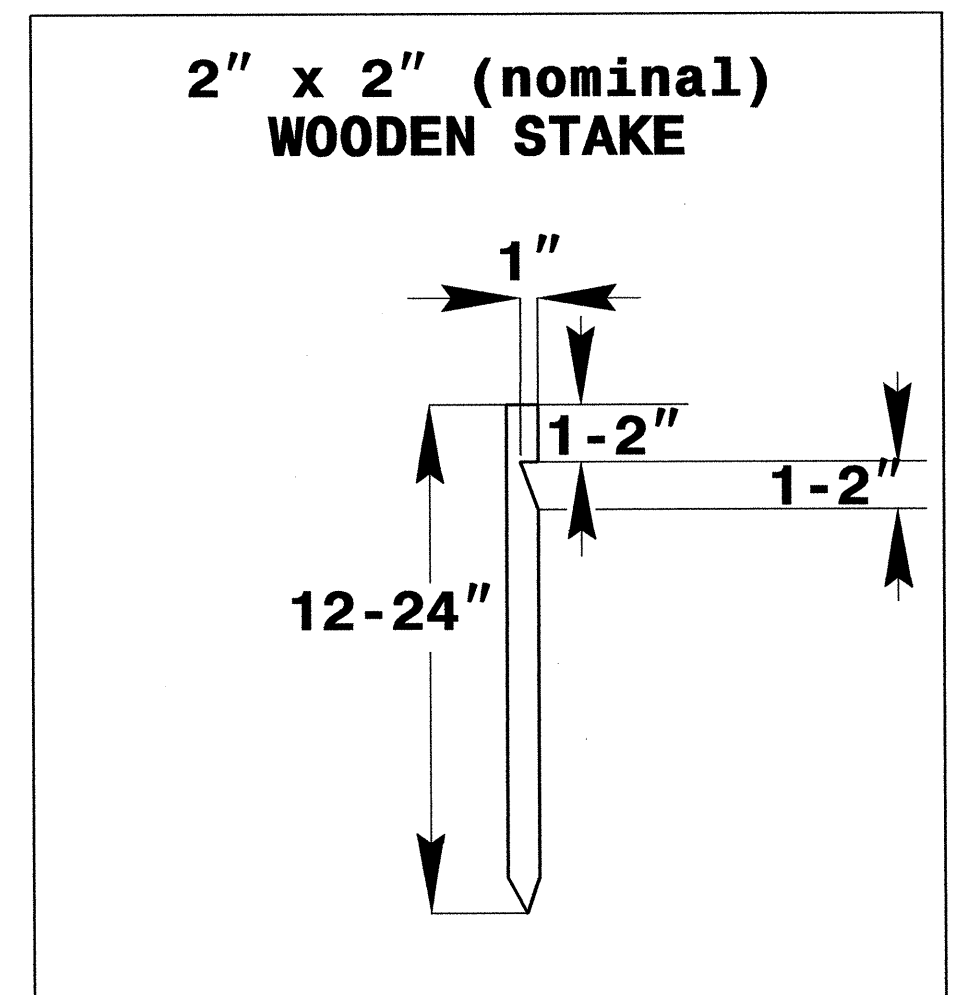
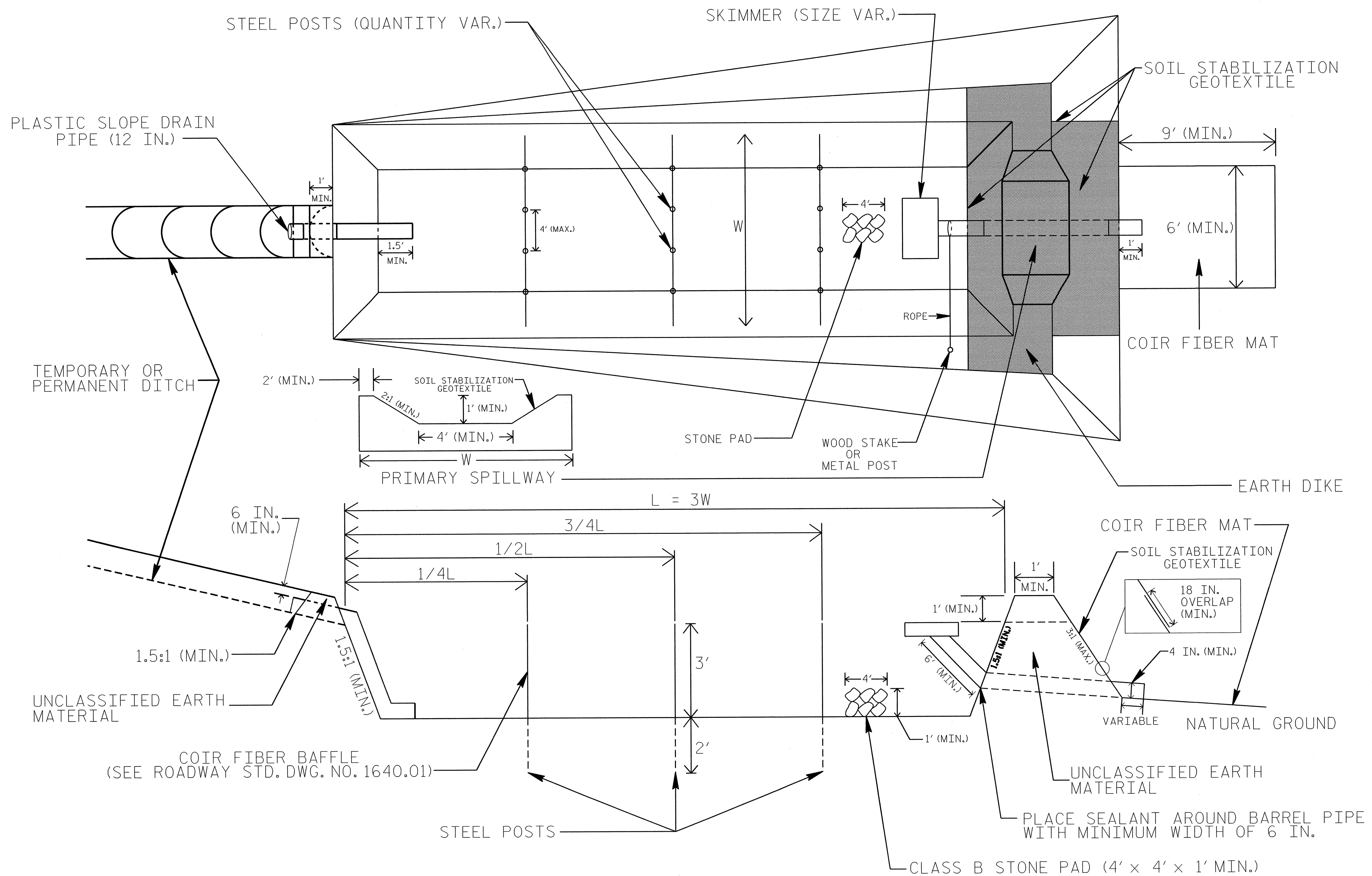
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type B
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A
1622.01 Temporary Berms and Slope Drains	1633.02 Temporary Rock Silt Check Type B
1630.01 Riser Basin	1634.01 Temporary Rock Sediment Dam Type A
1630.02 Silt Basin Type B	1634.02 Temporary Rock Sediment Dam Type B
1630.03 Temporary Silt Ditch	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.04 Stilling Basin	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.05 Temporary Diversion	1640.01 Coir Fiber Wattle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

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PROJECT REFERENCE NO. B-4785	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SKIMMER BASIN WITH BAFFLES DETAIL



COIR FIBER MAT ANCHOR OPTIONS

NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE PRIMARY SPILLWAY WEIR LENGTH (FT.) USING $Q/0.4$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE OR TARP AS DIRECTED.
6. SOIL STABILIZATION GEOTEXTILE FOR PRIMARY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>B-4785</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

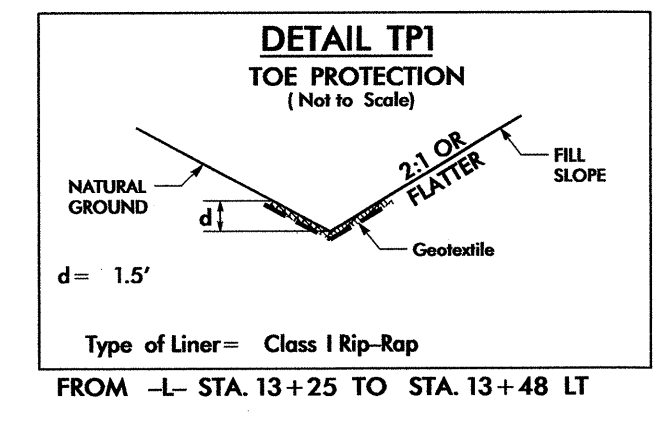
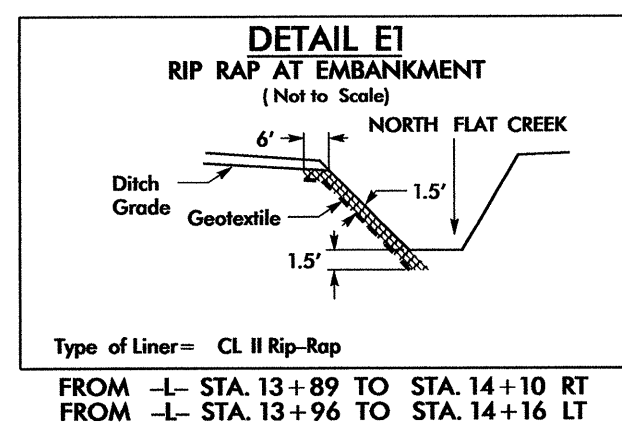
SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

PROJECT REFERENCE NO. B-4785	SHEET NO. EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

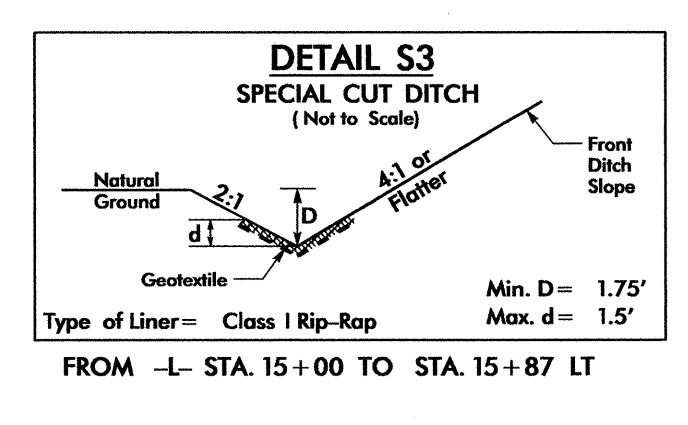
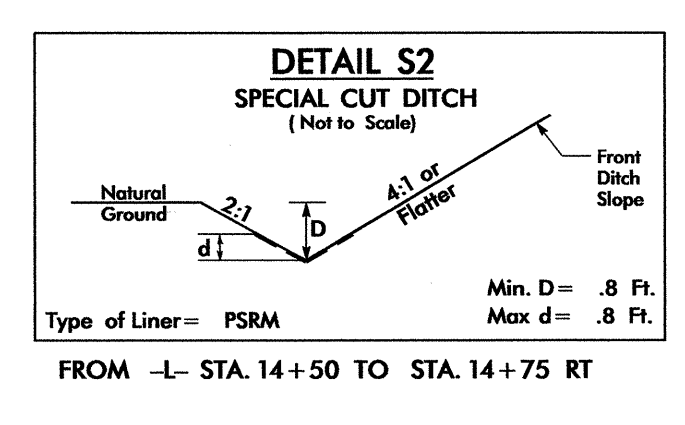
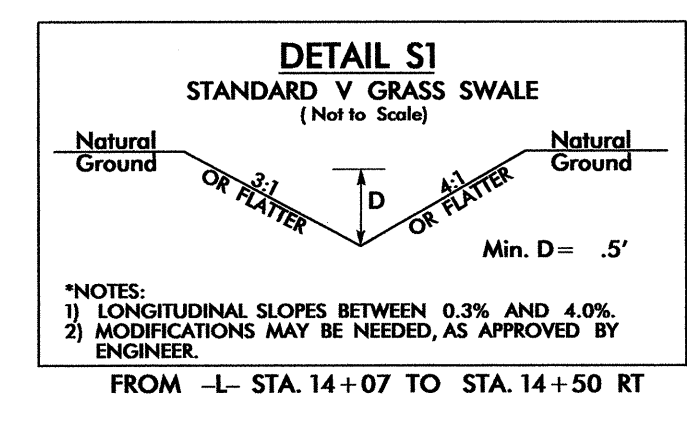
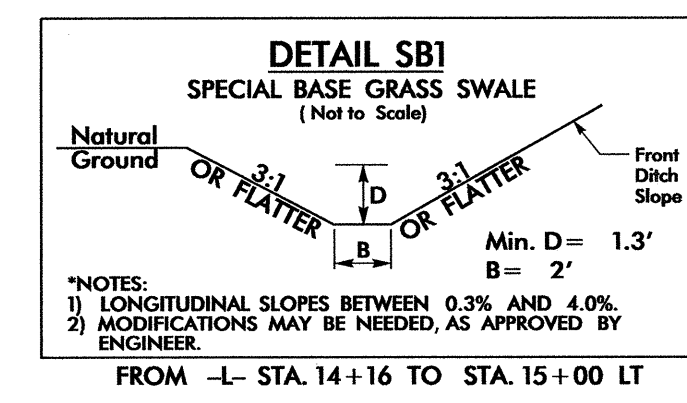
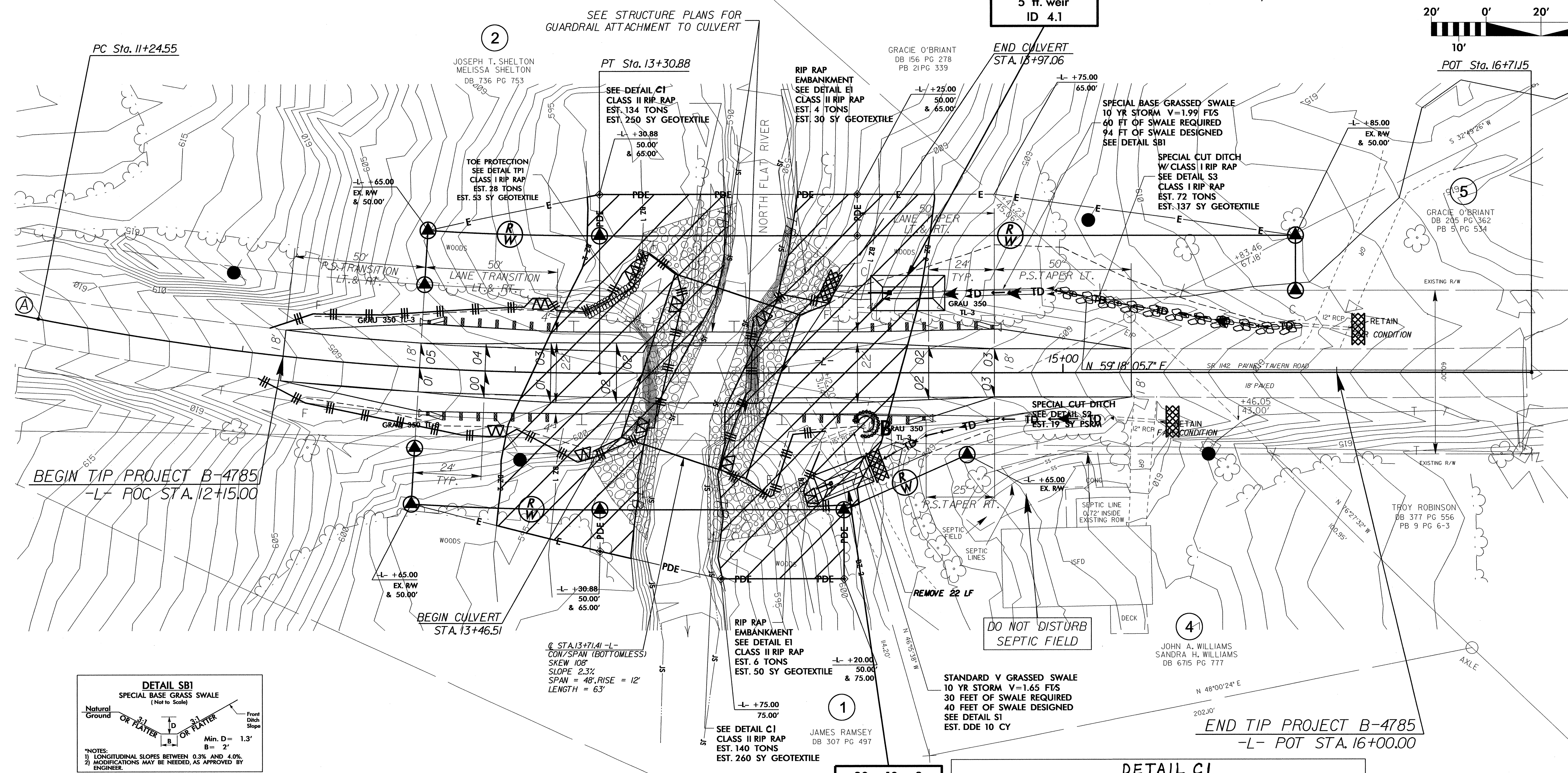
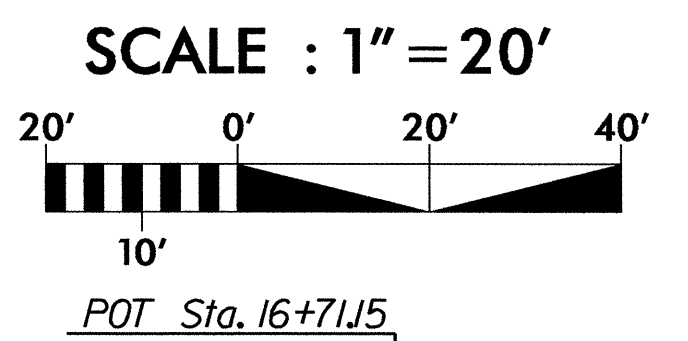
* DESIGN EXCEPTIONS FOR VERTICAL ALIGNMENT AND VERTICAL STOPPING SIGHT DISTANCE ARE REQUIRED.



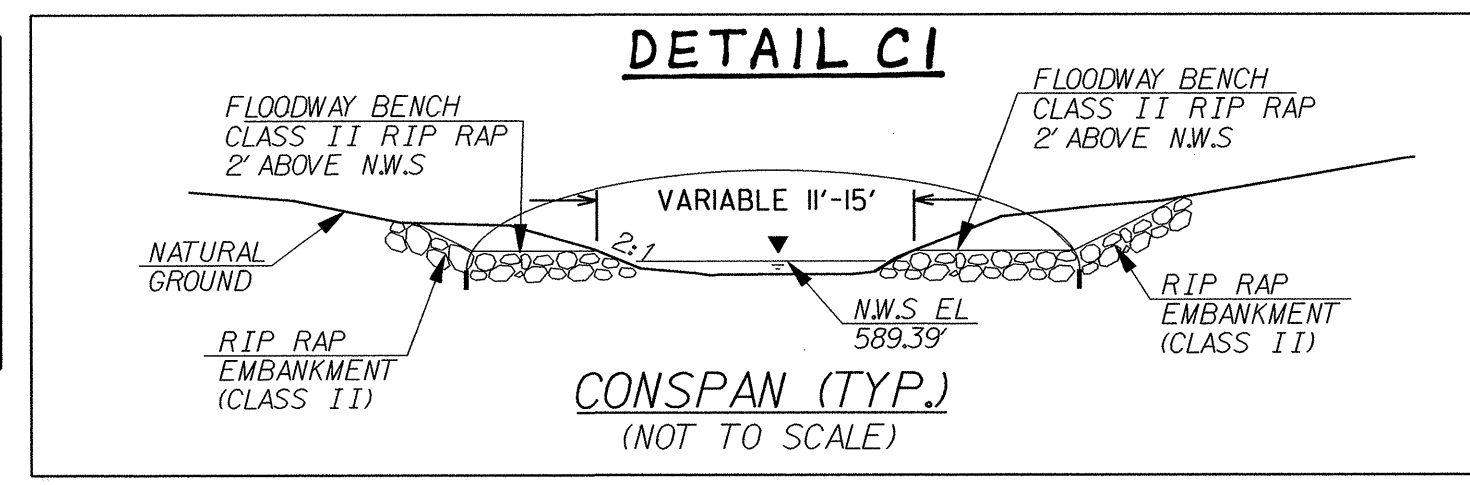
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4

27 x 13 x 3
1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
5 ft. weir
ID 4.1



20 x 10 x 3
1.5 inch Skimmer
with 0.25 inch
Orifice Diameter
4 ft. weir
ID 4.2



NOTE: LEVEL SPREADERS NOT AN OPTION AT END OF GRASS SWALES DUE TO TOPOGRAPHIC CONSTRAINTS

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micahandall BT 11/27/16

PROJECT REFERENCE NO. B-4785	SHEET NO. EC-5/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

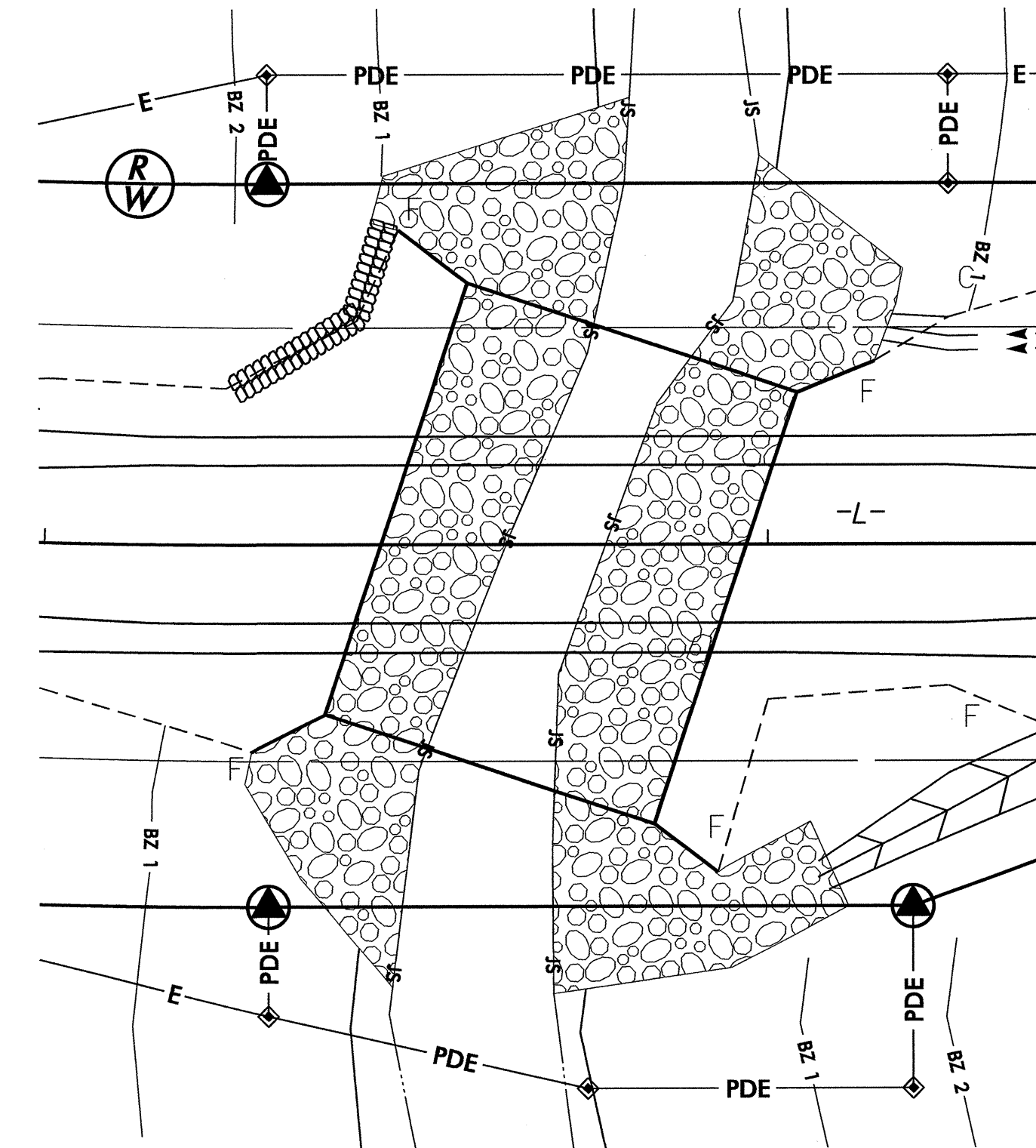
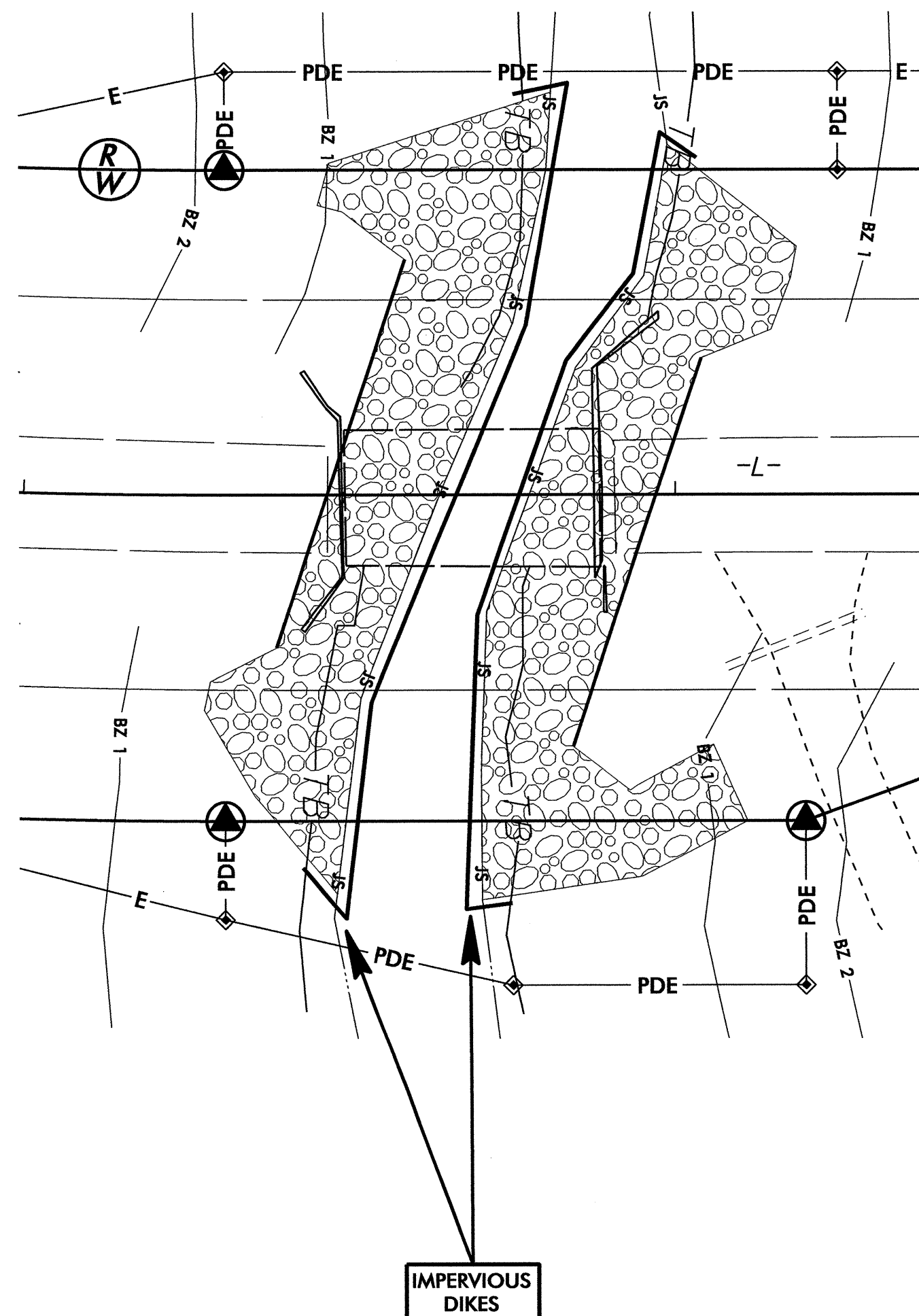
CULVERT CONSTRUCTION SEQUENCE STA. 13+71 -L-

PHASE I

1. UTILIZE SPECIAL STILLING BASIN(S) AS NEEDED THROUGHOUT CONSPAN CULVERT CONSTRUCTION.
2. CONSTRUCT IMPERVIOUS DIKES.
3. REMOVE EXISTING BRIDGE.
4. CONSTRUCT FOOTINGS FOR CONSPAN CULVERT.
5. CONSTRUCT FLOODPLAIN BENCHES WITH RIP RAP EMBANKMENTS.

PHASE II

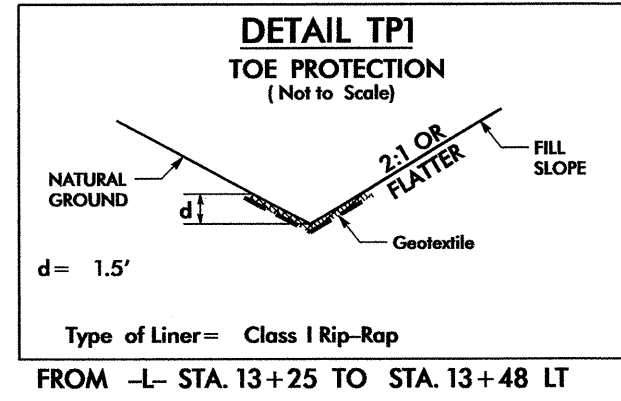
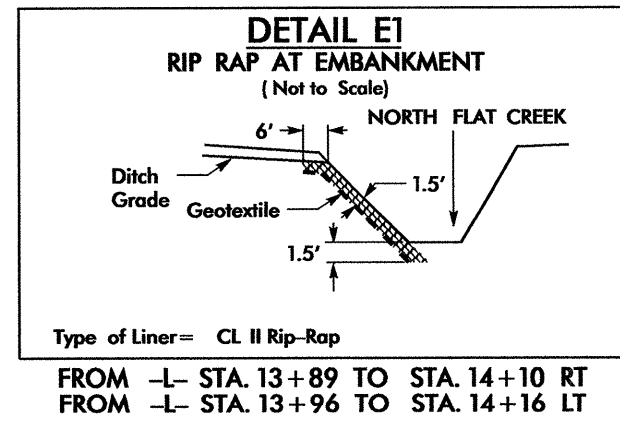
6. CONSTRUCT CONSPAN CULVERT.
7. REMOVE IMPERVIOUS DIKES.
8. REMOVE ANY REMAINING SPECIAL STILLING BASIN(S).
9. COMPLETE ROADWAY.



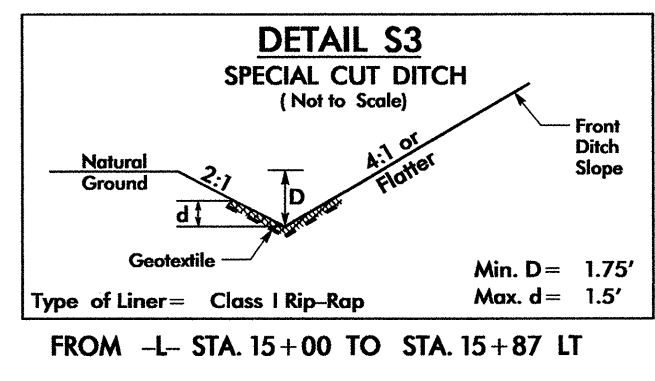
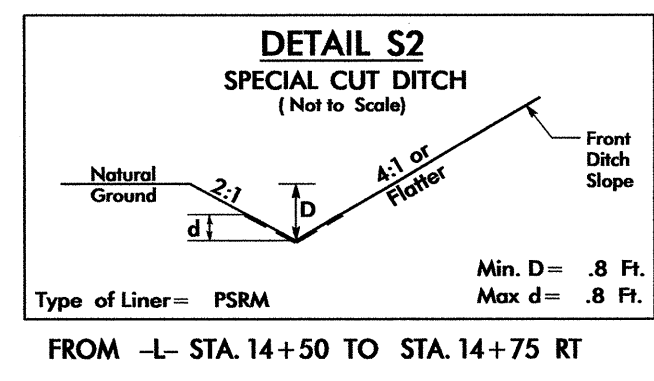
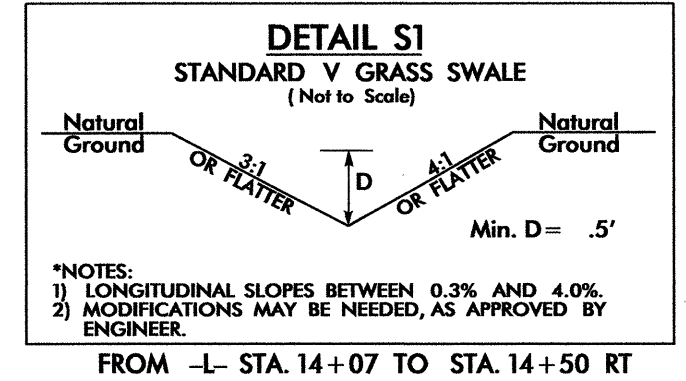
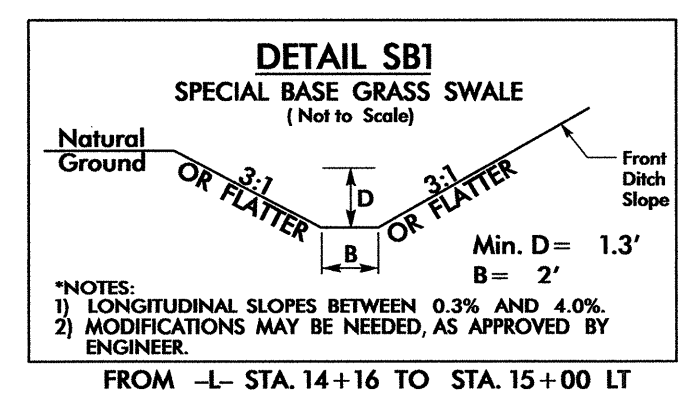
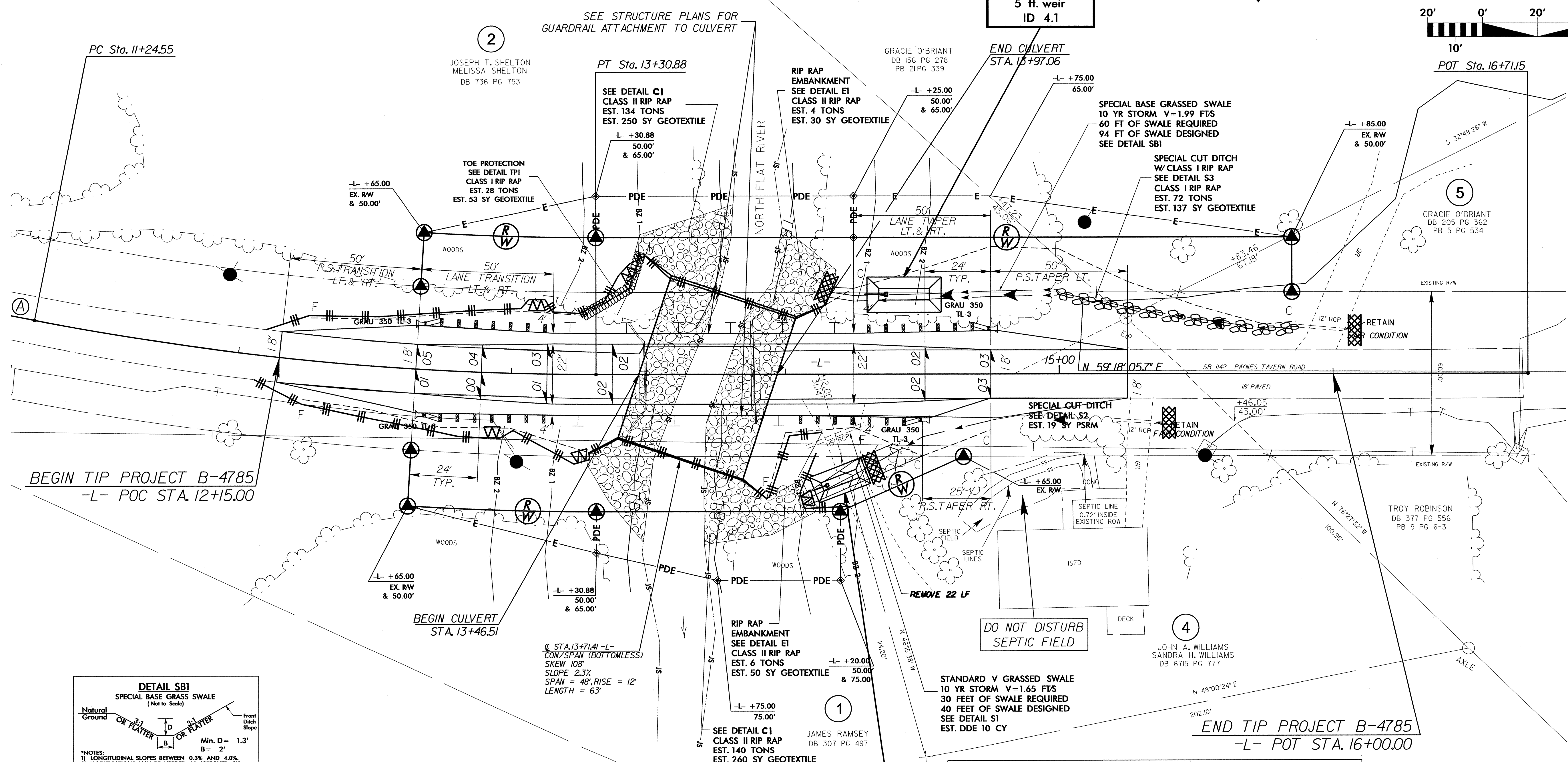
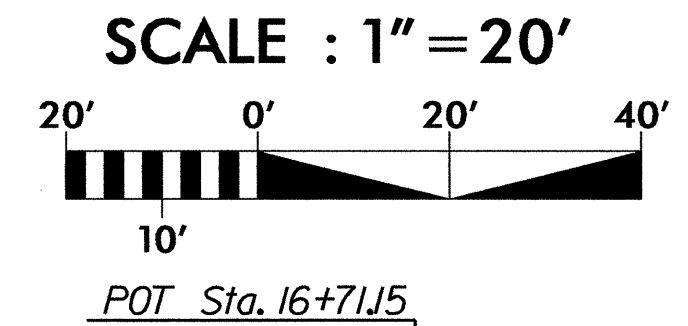
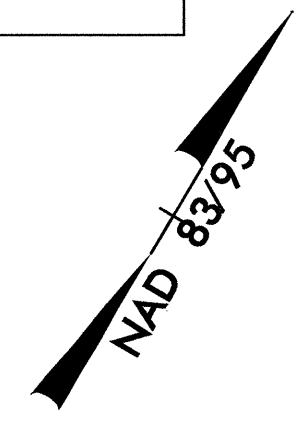
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PROJECT REFERENCE NO.		SHEET NO.	
B-4785		EC-6/CONST.4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

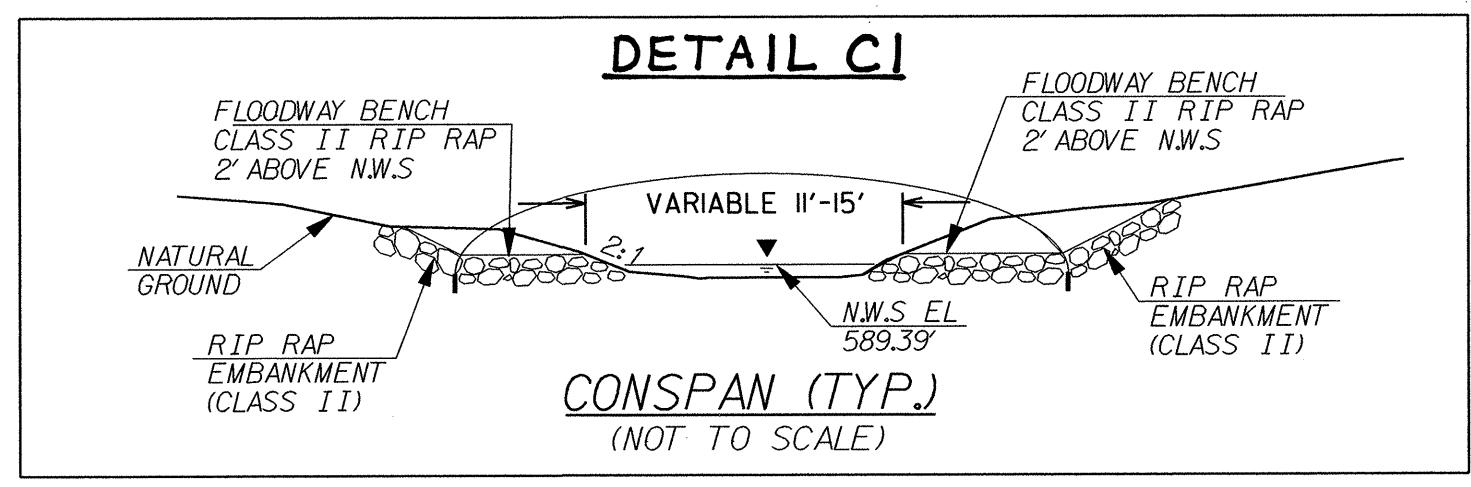
* DESIGN EXCEPTIONS FOR VERTICAL ALIGNMENT AND VERTICAL STOPPING SIGHT DISTANCE ARE REQUIRED.



27 x 13 x 3
1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
5 ft. weir
ID 4.1



20 x 10 x 3
1.5 inch Skimmer
with 0.25 inch
Orifice Diameter
4 ft. weir
ID 4.2



NOTE: LEVEL SPREADERS NOT AN OPTION AT END OF GRASS SWALES DUE TO TOPOGRAPHIC CONSTRAINTS

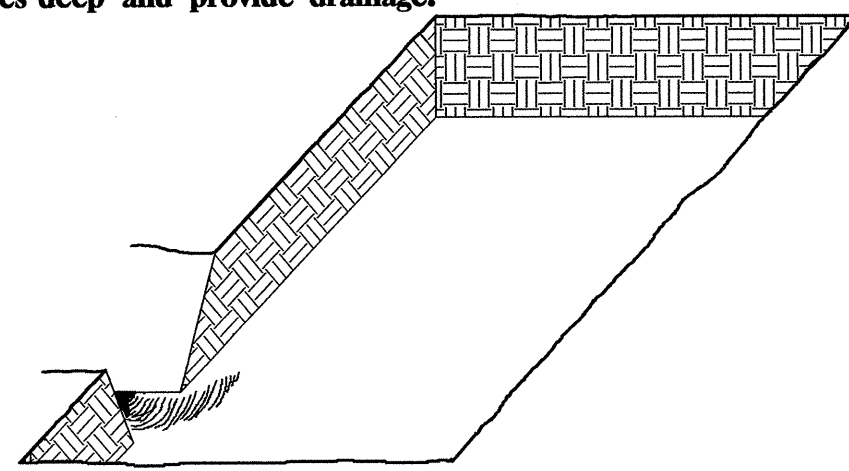
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PLANTING DETAILS

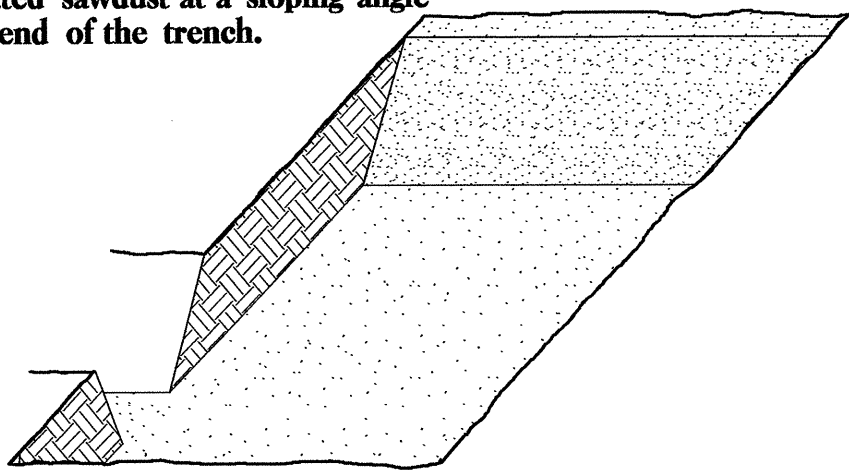
SEEDLING / LINER BAREROOT PLANTING DETAIL

HEALING IN

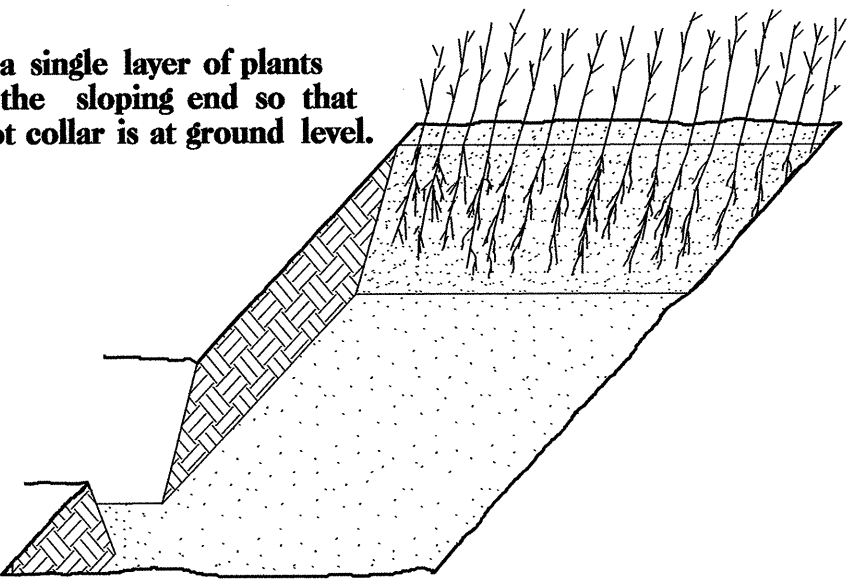
1. Locate a healing-in site in a shady, well protected area.
2. Excavate a flat bottom trench 12 inches deep and provide drainage.



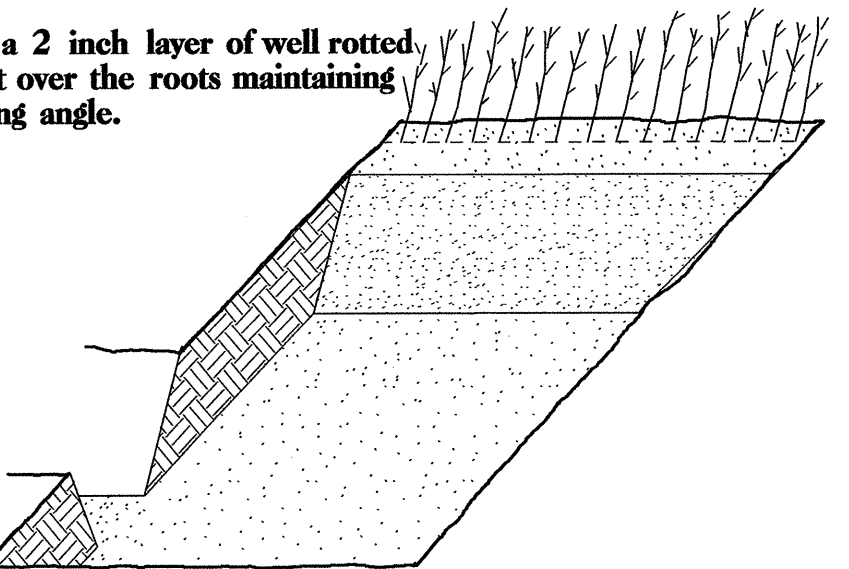
3. Backfill the trench with 2 inches well rotted sawdust. Place a 2 inch layer of well rotted sawdust at a sloping angle at one end of the trench.



4. Place a single layer of plants against the sloping end so that the root collar is at ground level.

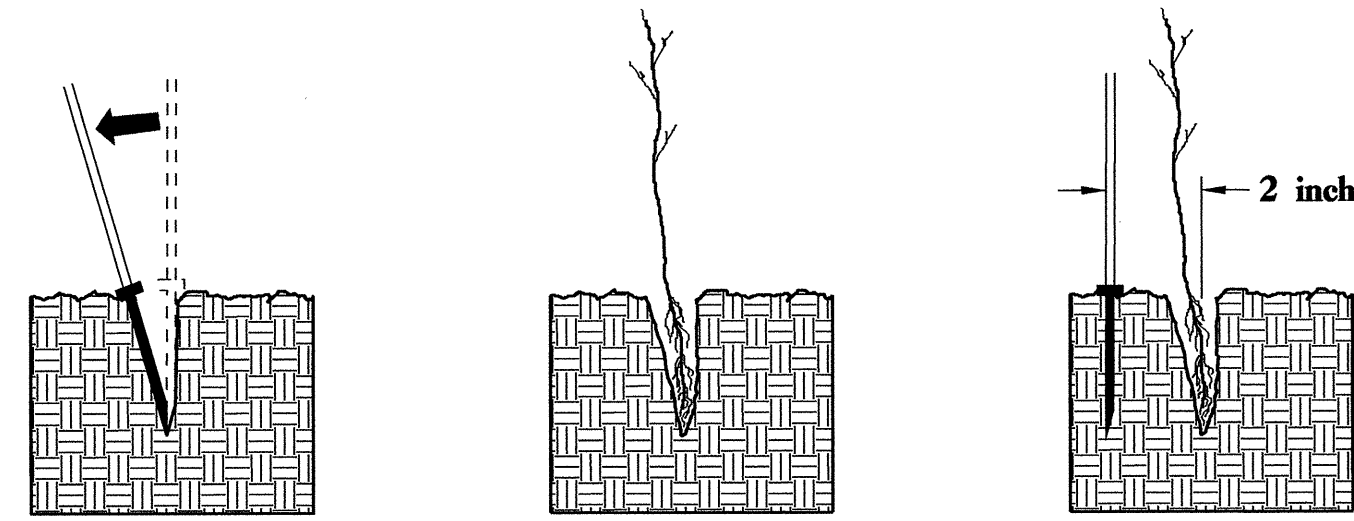


5. Place a 2 inch layer of well rotted sawdust over the roots maintaining a sloping angle.

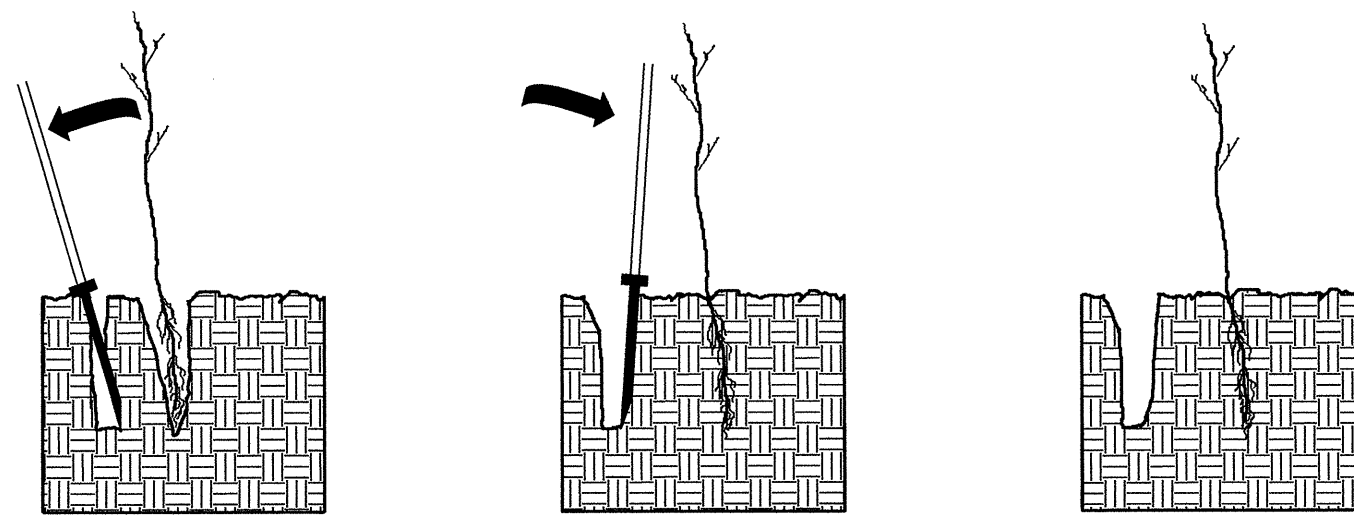


6. Repeat layers of plants and sawdust as necessary and water thoroughly.

DIBBLE PLANTING METHOD USING THE KBC PLANTING BAR



1. Insert planting bar as shown and pull handle toward planter.
2. Remove planting bar and place seedling at correct depth.
3. Insert planting bar 2 inches toward planter from seedling.



4. Pull handle of bar toward planter, firming soil at bottom.
5. Push handle forward firming soil at top.
6. Leave compaction hole open. Water thoroughly.

PLANTING NOTES:

PLANTING BAG
During planting, seedlings shall be kept in a moist canvas bag or similar container to prevent the root systems from drying.



KBC PLANTING BAR
Planting bar shall have a blade with a triangular cross section, and shall be 12 inches long, 4 inches wide and 1 inch thick at center.



ROOT PRUNING
All seedlings shall be root pruned, if necessary, so that no roots extend more than 10 inches below the root collar.

REFORESTATION

- TREE REFORESTATION SHALL BE PLANTED 6 FT. TO 10 FT. ON CENTER, RANDOM SPACING, AVERAGING 8 FT. ON CENTER, APPROXIMATELY 680 PLANTS PER ACRE.

REFORESTATION

MIXTURE, TYPE, SIZE, AND FURNISH SHALL CONFORM TO THE FOLLOWING:

30% PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	12 in - 18 in BR
30% FRAXINUS PENNSYLVANICA	GREEN ASH	12 in - 18 in BR
40% BETULLA NIGRA	RIVER BIRCH	12 in - 18 in BR

REFORESTATION DETAIL SHEET

N.C.D.O.T. - ROADSIDE ENVIRONMENTAL UNIT

09/08/99

T.I.P. NO.	SHEET NO.
B-4785	UO-1

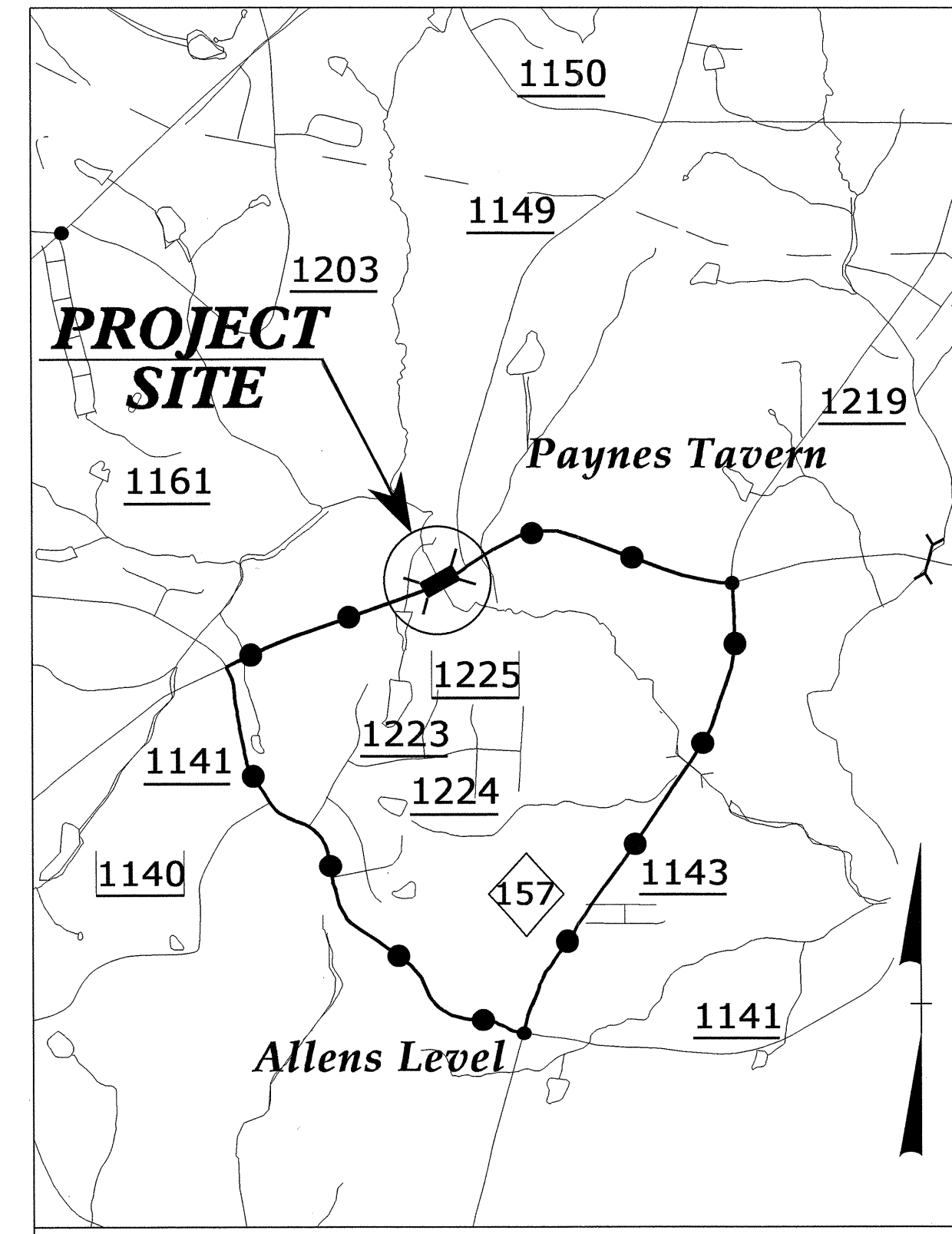
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

**UTILITIES BY OTHERS PLANS
PERSON COUNTY**

LOCATION: BRIDGE NO 24 OVER NORTH FLAT RIVER ON SR 1142

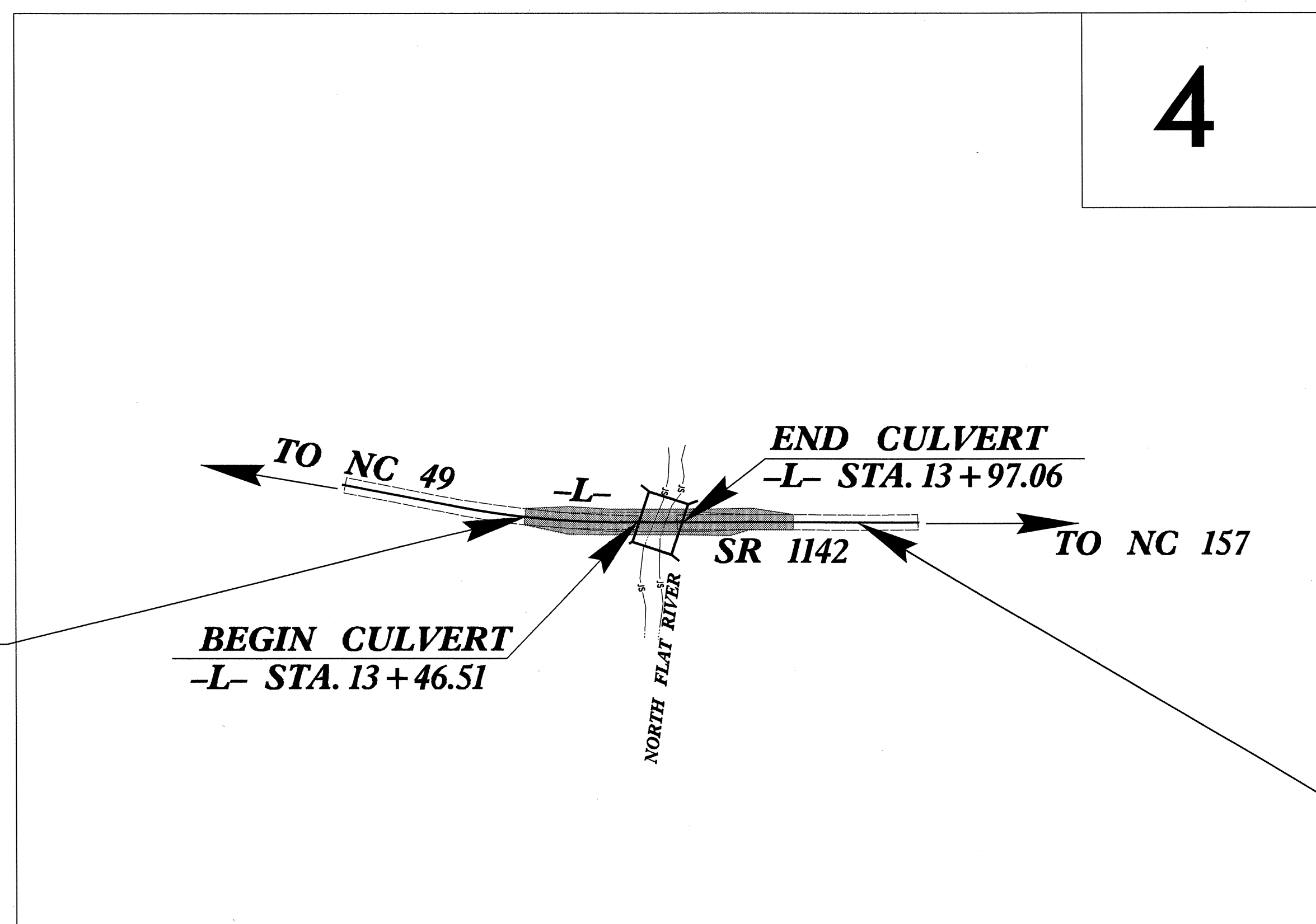
TYPE OF WORK: RELOCATION OF POWER, TELEPHONE AND CABLE TV BY OTHERS

TIP PROJECT: B-4785



VICINITY MAP

●-●-● OFFSITE DETOUR

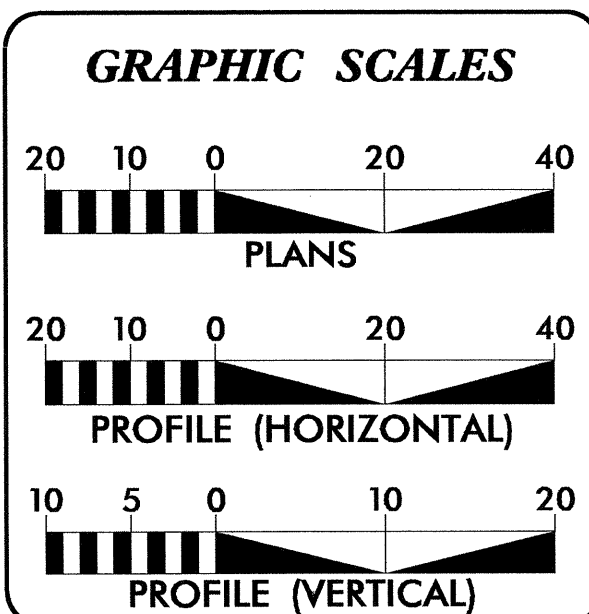


-L- STA. 12+15.00

BEGIN TIP PROJECT B-4785

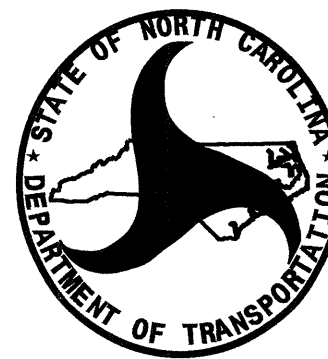
-L- STA. 16+00.00

END TIP PROJECT B-4785



SHEET NO.	DESCRIPTION
UO-1	TITLE SHEET
UO-2	UTILITY BY OTHERS PLAN SHEETS

UTILITY OWNERS ON PROJECT
(A) POWER DISTRIBUTION - DUKE ENERGY PROGRESS
(B) TELEPHONE - CENTURYLINK
(C) CABLE TV - CHARTER COMMUNICATION



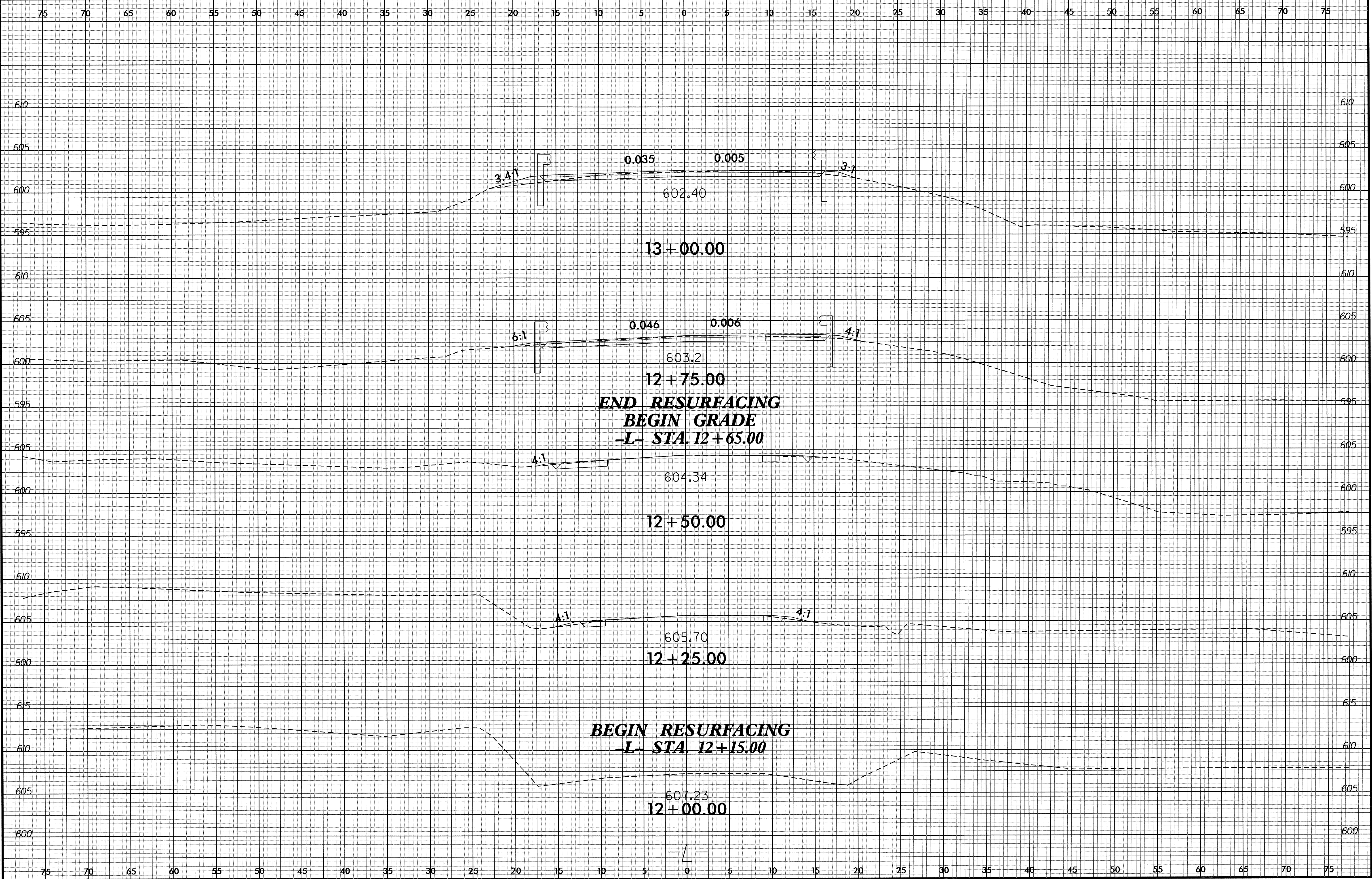
PREPARED IN THE OFFICE OF:
DIVISION OF HIGHWAYS
UTILITIES UNIT
UTILITIES ENGINEERING SECTION

1591 MAIL SERVICES CENTER
RALEIGH NC 27699-1591
PHONE (919) 707-6690
FAX (919) 250-4151

Roger Worthington, P.E. UTILITIES SECTION ENGINEER
Steve McKee, P.E. UTILITIES SQUAD LEADER PROJECT ENGINEER
John A. Nigro, P.E. UTILITIES PROJECT DESIGNER

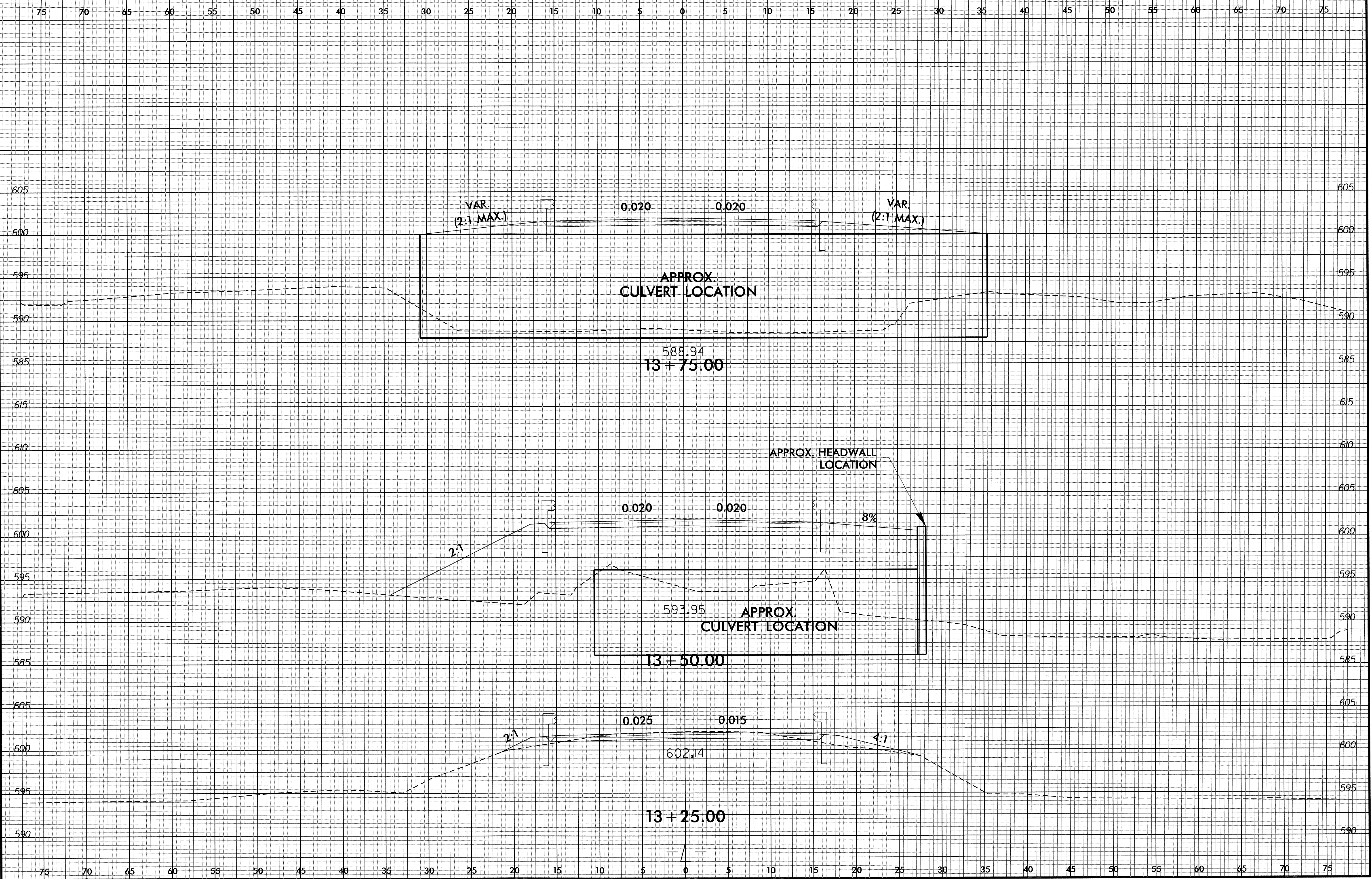
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8/23/99



02-DEC-2013 14:17 R:\Road\04\XSC\B4785_Rdy-xpl.L.dgn

8/23/99



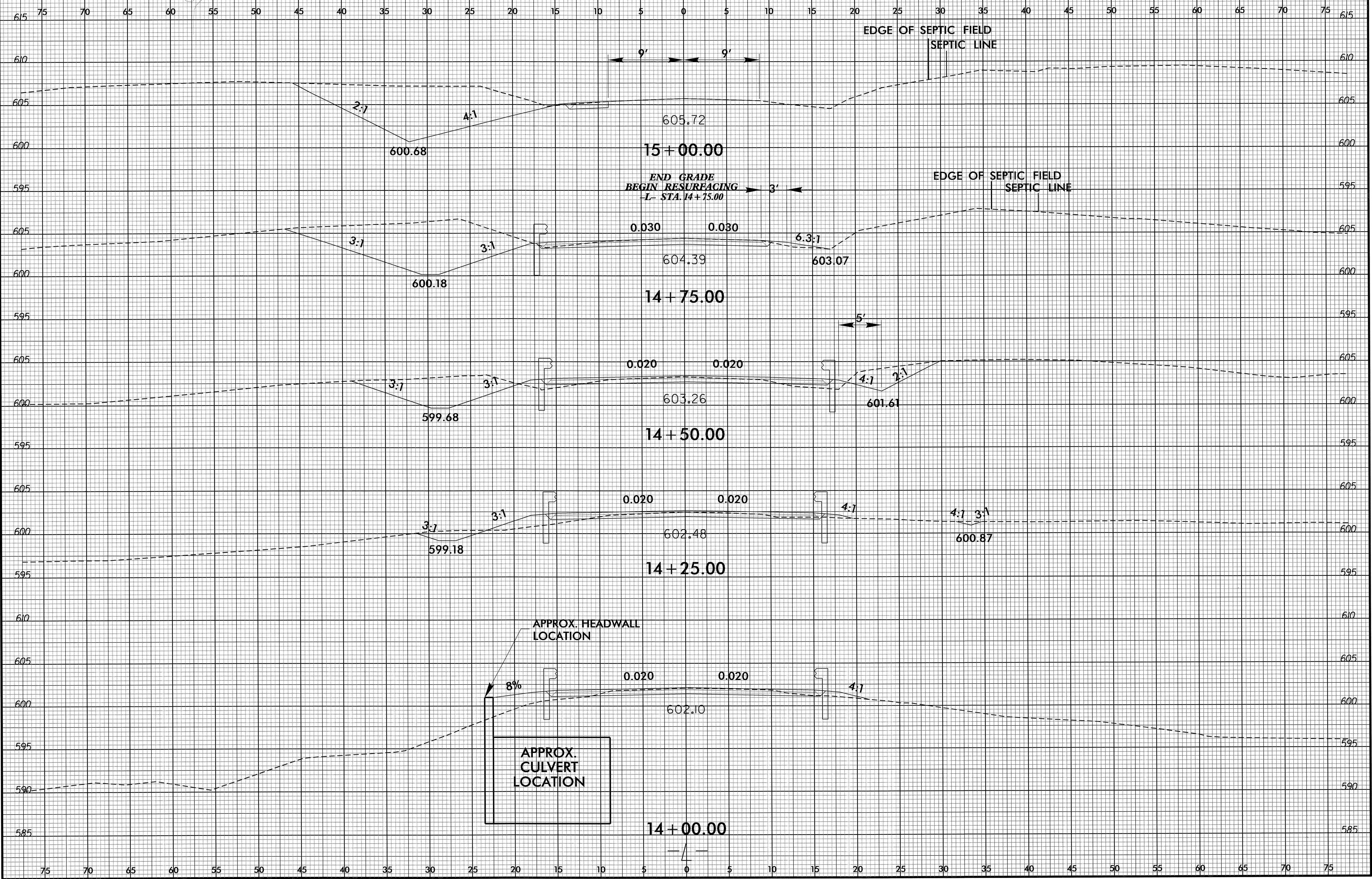
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588.94
13+75.00

593.95
13+50.00

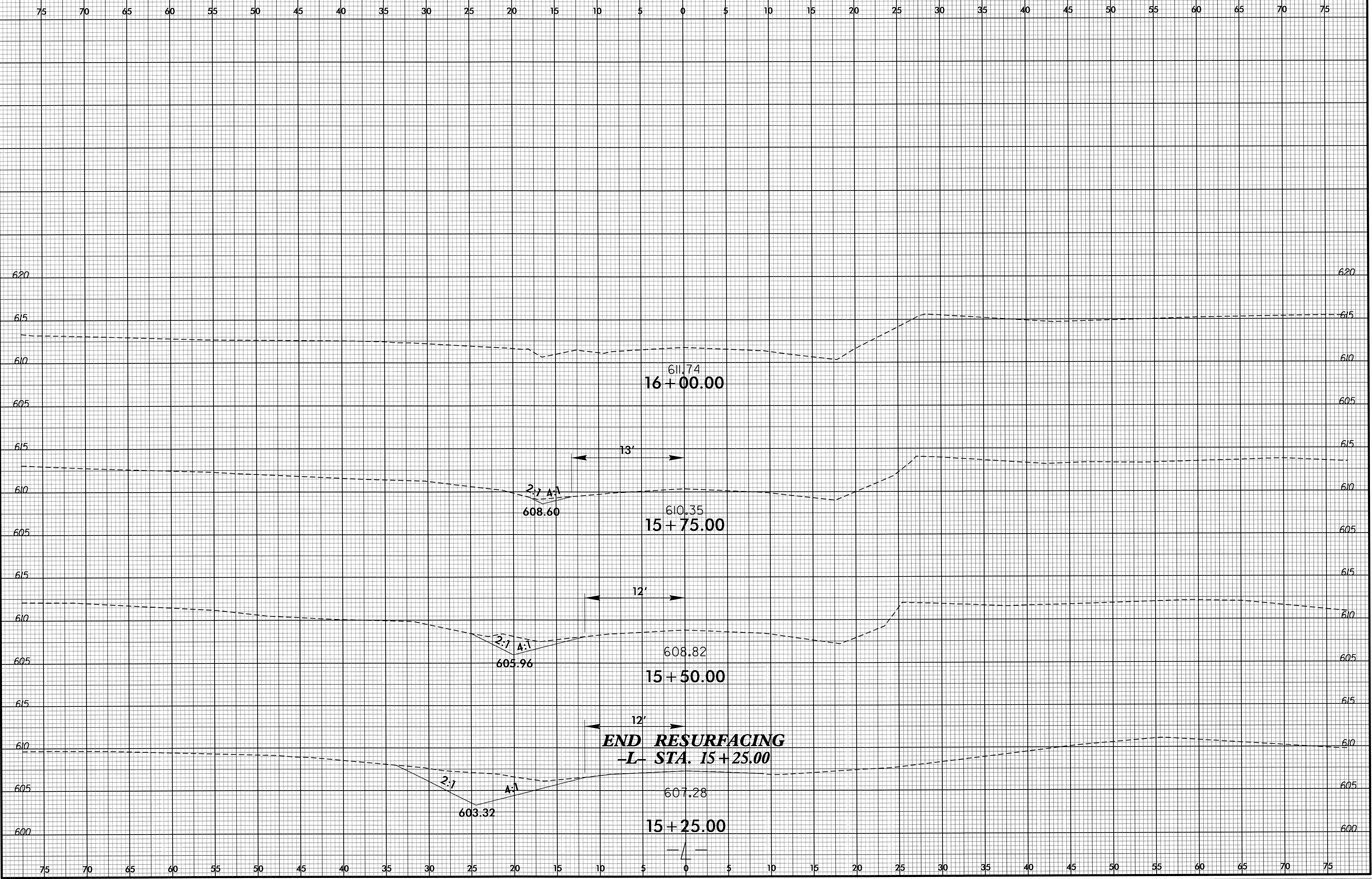
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8/23/99



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8/23/99



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