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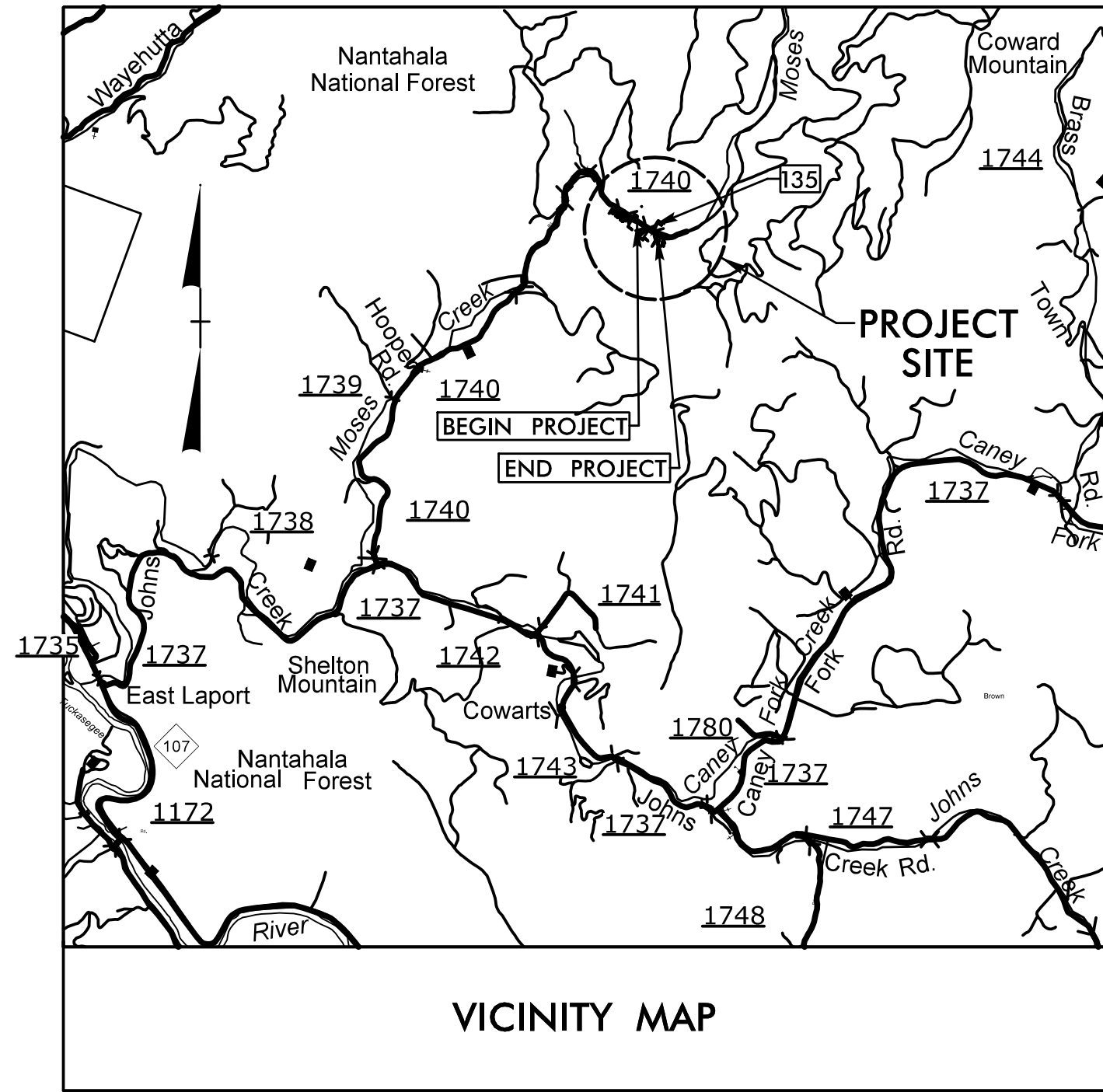
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DobsonJ2

TIP PROJECT: 17BP.14.R.62

CONTRACT: DN00185

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



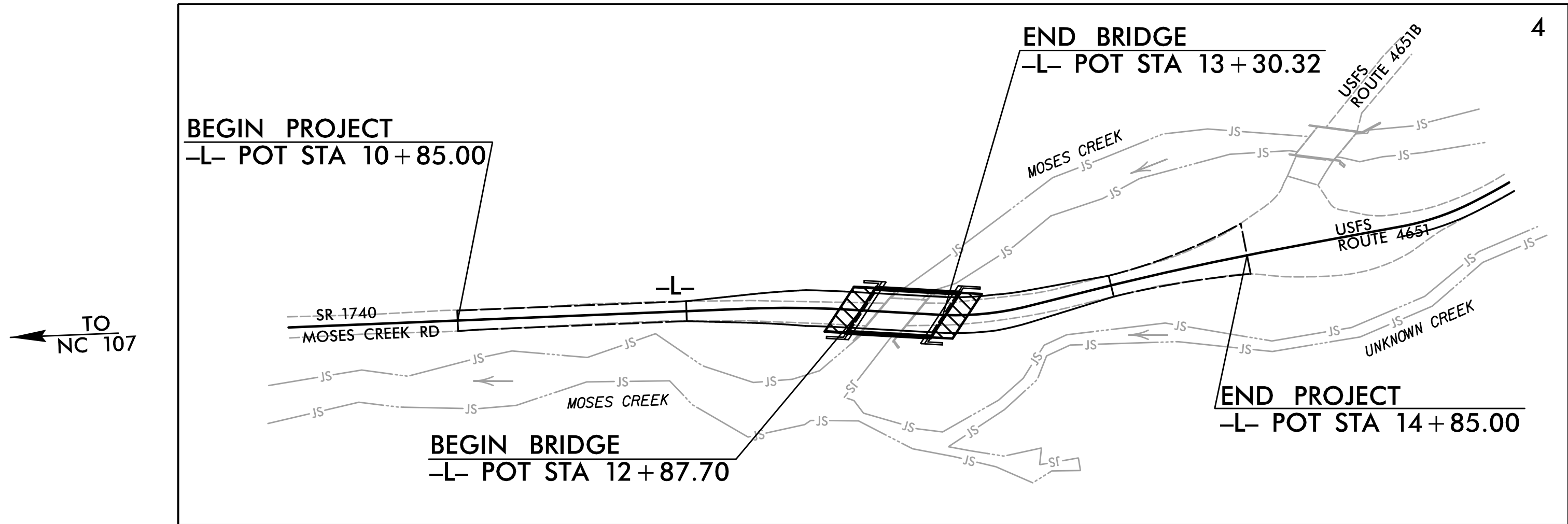
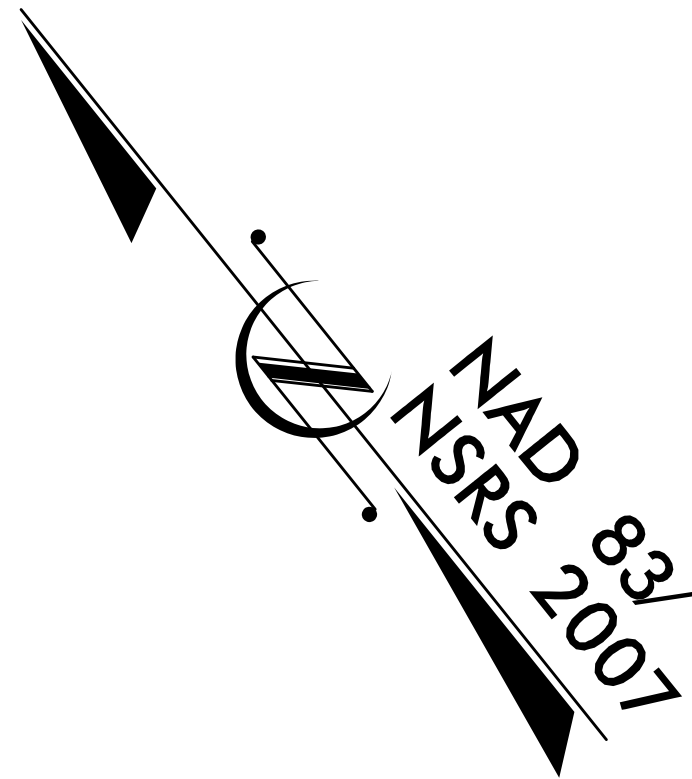
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

JACKSON COUNTY

LOCATION: BRIDGE NO.135 OVER MOSES CREEK
ON SR 1740 (MOSES CREEK RD)

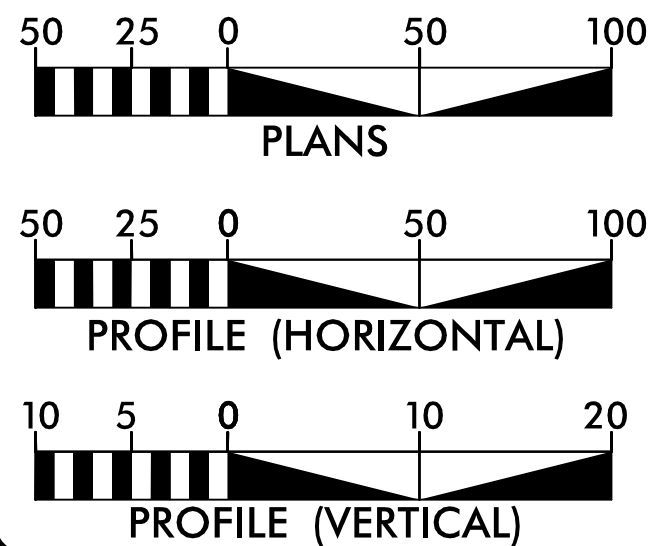
TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	17BP.14.R.62	1	
STATE PROJ.NO.	P.A.PROJ.NO.	DESCRIPTION	
17BP.14.R.62		PE, R/W	
17BP.14.R.62		CONST	



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT XXXX = XXX
V = 20 MPH
FUNC CLASS = LOCAL
SUB-REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY STATE PROJECT 17BP.14.R.62 = 0.068 MILES
LENGTH STRUCTURES STATE PROJECT 17BP.14.R.62 = 0.008 MILES
TOTAL LENGTH STATE PROJECT 17BP.14.R.62 = 0.076 MILES

NCDOT CONTACT: JOSHUA DEYTON, PE
PROJECT ENGINEER

Prepared In the Office of:

AECOM
NC FIRM LICENSE No: F-0342
701 Corporate Center Drive, Suite 475
Raleigh, NC 27607
(919) 854-6200 - (919) 854-6259(FAX)

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
AUGUST 2, 2012

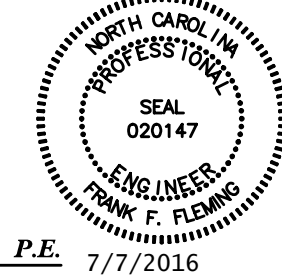
LETTING DATE:
JULY, 2016

LEN HILL, PE
PROJECT ENGINEER

LEN HILL, PE
PROJECT DESIGN ENGINEER

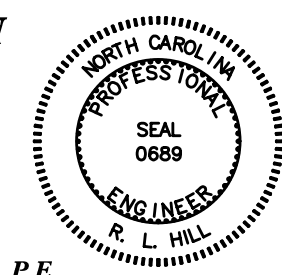
HYDRAULICS ENGINEER

DocuSigned by:
Frank F. Fleming
SIGNATURE:

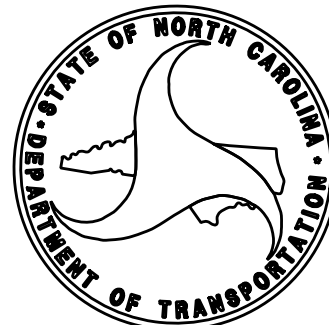


ROADWAY DESIGN
ENGINEER

DocuSigned by:
R. Len Hill, P.E.
SIGNATURE:



DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA



STATE HIGHWAY DESIGN ENGINEER

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

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

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.

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

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.

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.

SUBSURFACE PLANS ARE AVAILABLE UPON REQUEST.

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.

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

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
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 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 - INCIDENTALS	
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


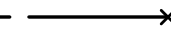


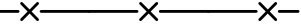








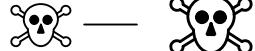
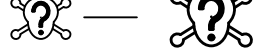
**S.U.E. = Subsurface Utility Engineering*

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS







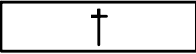
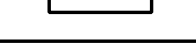
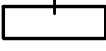
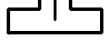

PROJECT REFERENCE NO.	SHEET NO.
17BP.14.R.62	1-B

CONVENTIONAL PLAN SHEET SYMBOLS

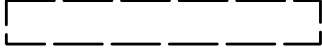



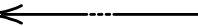





BOUNDARIES AND PROPERTY:

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	
Existing Historic Property 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	





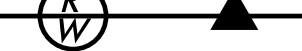





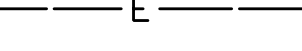






HYDROLOGY:

Stream or Body of Water	
Hydro, Pool or Reservoir	
Jurisdictional Stream	
Buffer Zone 1	
Buffer Zone 2	
Flow Arrow	
Disappearing Stream	
Spring	
Wetland	
Proposed Lateral, Tail, Head Ditch	
False Sump	

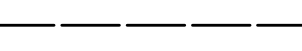
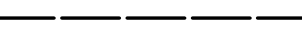
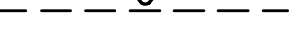




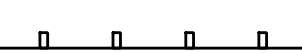

RAILROADS:



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 RW Marker	
Proposed Control of Access Line with Concrete CA 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	

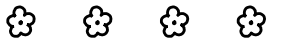

ROADS AND RELATED FEATURES:

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	



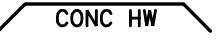
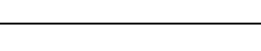

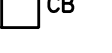



Equality Symbol	
Pavement Removal	

VEGETATION:








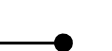
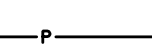
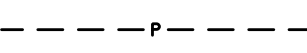

Single Tree	
Single Shrub	
Hedge	
Woods Line	

Orchard	
Vineyard	





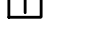
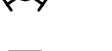


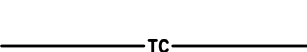
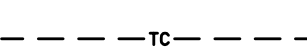
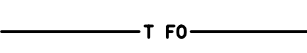
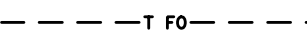

EXISTING STRUCTURES:

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.*)	



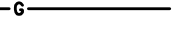


WATER:

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	



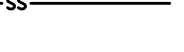
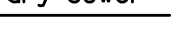


TV:

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	

6/2/99

2:07:06 PM
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Robert

PROJECT REFERENCE NO.	SHEET NO.
49-0135	1C-1
Location and Surveys	

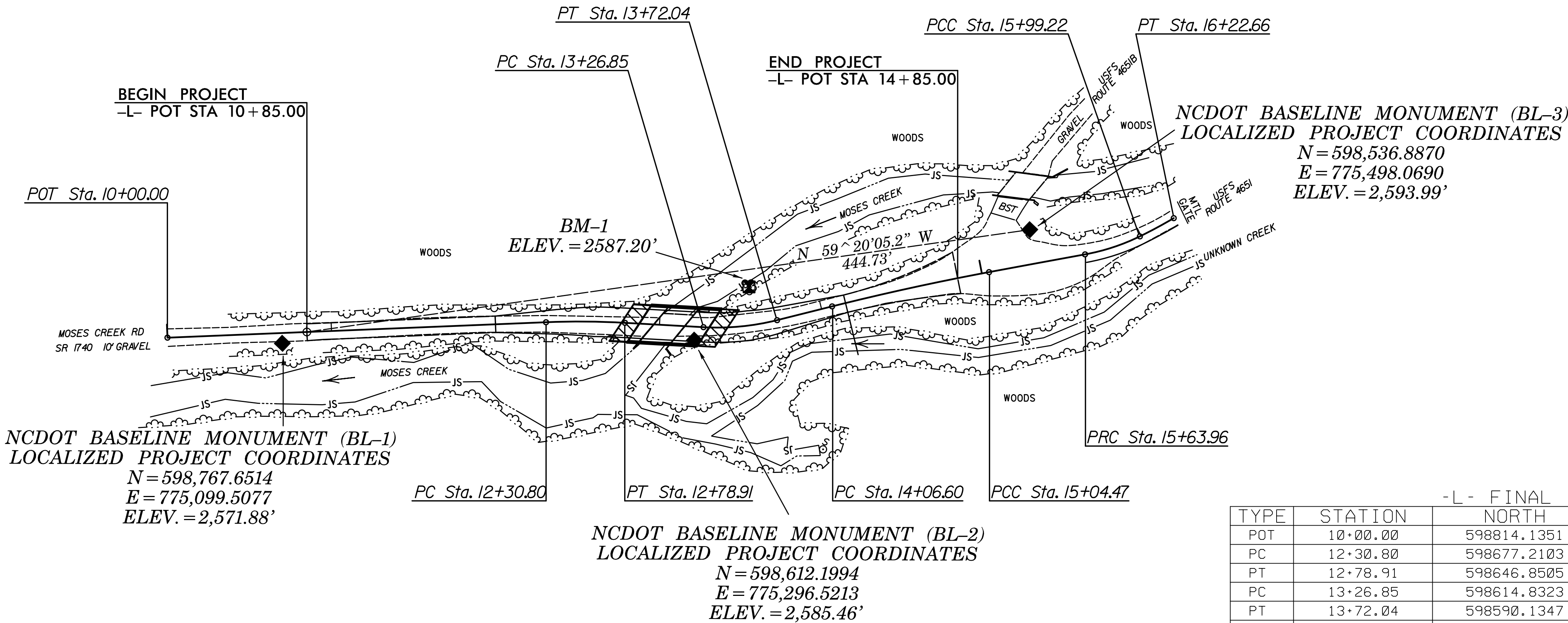
SURVEY CONTROL SHEET 49-0135

-FINAL-

BL	POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
1		BL-1	598767.6514	775099.5077	2571.88	10+69.76	6.33 RT
2		BL-2	598612.1994	775296.5213	2585.46	13+21.64	8.21 RT
3		BL-3	598536.8870	775498.0690	2593.99	15+33.53	20.90 LT

BM1 ELEVATION = 2587.20'
N 598616.61 E 775342.88
L STATION 13+58.27 23.27' LEFT
RR SPIKE IN 2" HICKORY TREE

-FINAL- ROW MARKER IRON PIN AND CAP-E				
ALIGN	STATION	OFFSET	NORTH	EAST
L	11+80.00	-8.99	598714.5812	775197.3389
L	12+30.80	-20.00	598693.3111	775244.7646
L	12+78.91	-25.00	598665.4583	775286.8924
L	13+72.04	-20.00	598608.3141	775351.8552
L	14+85.00	-20.00	598559.0380	775454.5827
L	14+85.00	-9.00	598549.2780	775449.5090
L	14+85.00	9.00	598533.3071	775441.2065
L	14+85.00	18.00	598525.3217	775437.0553
L	14+06.60	18.00	598559.3651	775367.4245
L	13+26.85	25.00	598596.2258	775289.1812
L	12+78.91	25.00	598628.2441	775253.4993
L	12+30.80	20.00	598661.1109	775221.0338
L	11+80.00	9.09	598700.0301	775186.6151



-L- FINAL			
TYPE	STATION	NORTH	EAST
POT	10+00.00	598814.1351	775047.1064
PC	12+30.80	598677.2103	775232.8987
PT	12+78.91	598646.8505	775270.1953
PC	13+26.85	598614.8323	775305.8773
PT	13+72.04	598590.1347	775343.5160
PC	14+06.60	598575.7252	775374.9289
PCC	15+04.47	598532.2043	775462.5798
PRC	15+63.96	598504.0660	775514.9855
PCC	15+99.22	598491.7310	775547.9117
PT	16+22.66	598487.4889	775570.9496

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "49-0135 BL-3" WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF NORTHING: 598536.8870(+) EASTING: 775498.0690(+) ELEVATION: 2593.99(++)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99975402

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "49-0135 BL-3" TO -L- STATION 10+85.00 IS N 59° 20' 05.2" W 444.73'

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES

VERTICAL DATUM USED IS NAVD 88

GEOID MODEL - G09NC
NOTE: DRAWING NOT TO SCALE

NOTES:

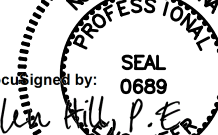


1. THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTPS://CONNECT.NCDOT.GOV/RESOURCES/LOCATION/](https://connect.ncdot.gov/resources/location/)

THE FILES TO BE FOUND ARE AS FOLLOWS:
49-0135_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.

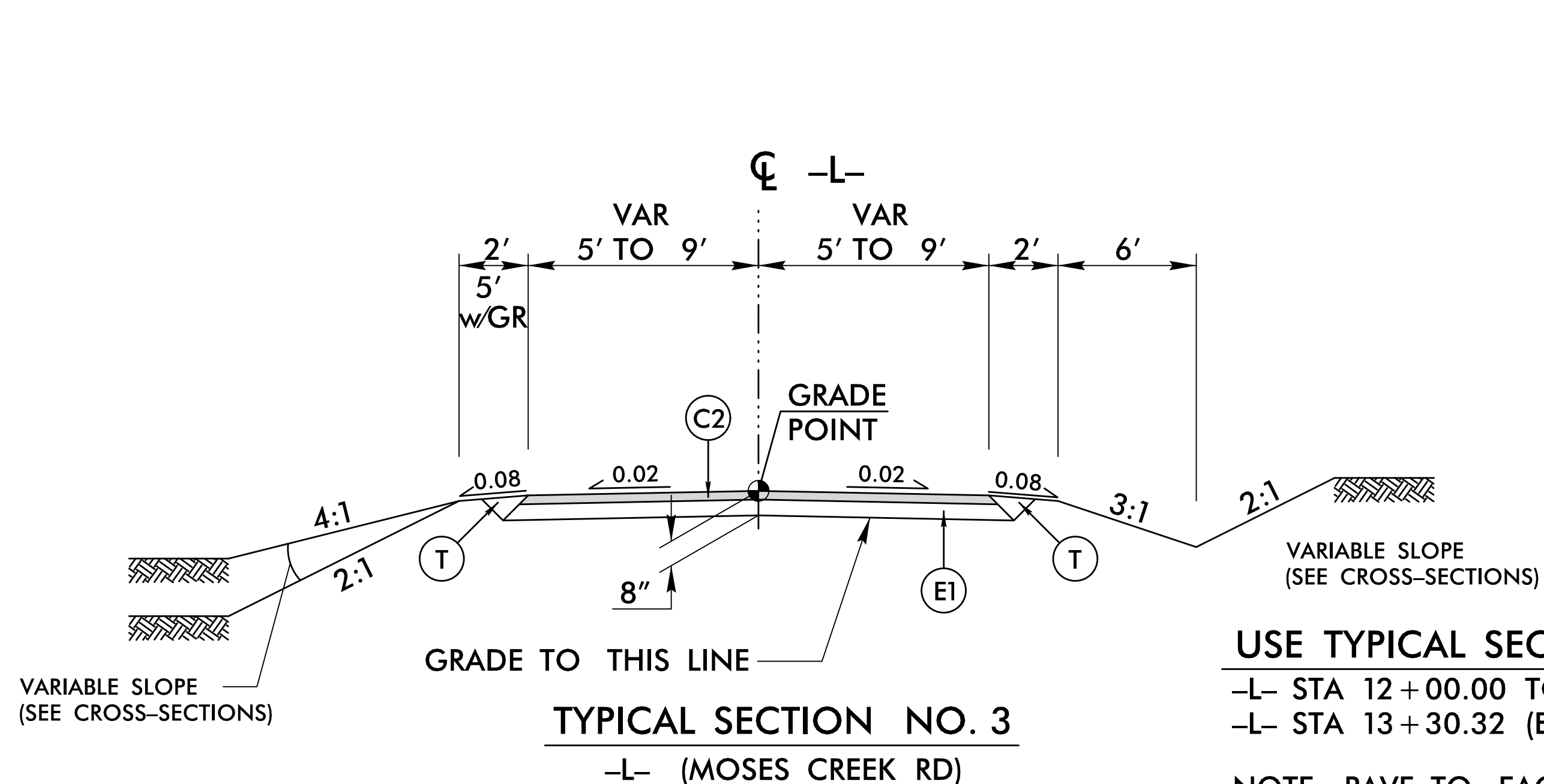
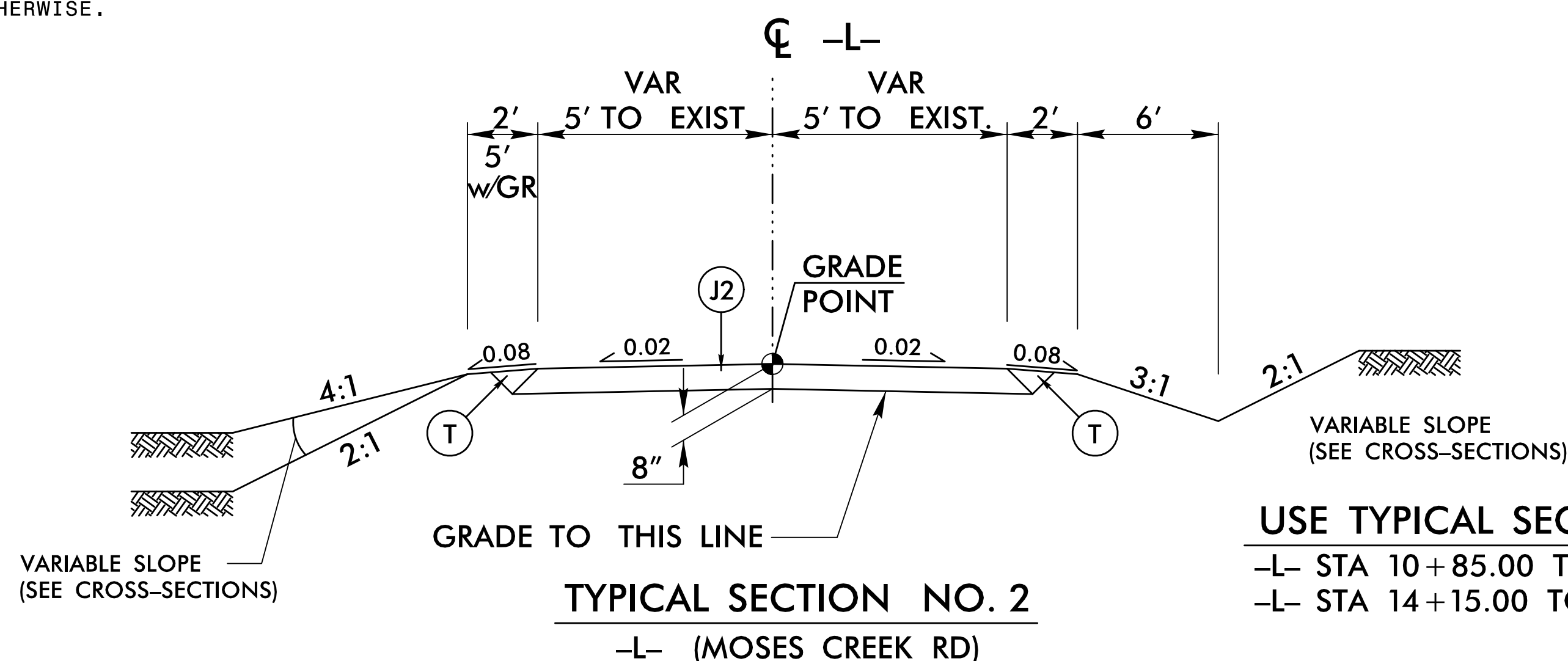
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PROJECT REFERENCE NO.	SHEET NO.
17BP.14.R.62	1-D
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
 <p>Document by: SEAL 0689 <i>R. Lee Hill, Jr.</i> 2007 EDITION 7/7/2016</p>	 <p>Designed by: SEAL 020147 <i>Frank J. Fleming</i> 7/7/2016</p>
Prepared in the Office of: 	NC FROM LICENSE NO. F-0342 701 Corporate Center Drive, Suite #175 Raleigh, NC 27601 (919) 854-6600 (919) 854-6259/FAJO
<p align="center">DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	

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



USE TYPICAL SECTION NO. 1
-DET- STA 9+96.72 TO STA 12+35.12

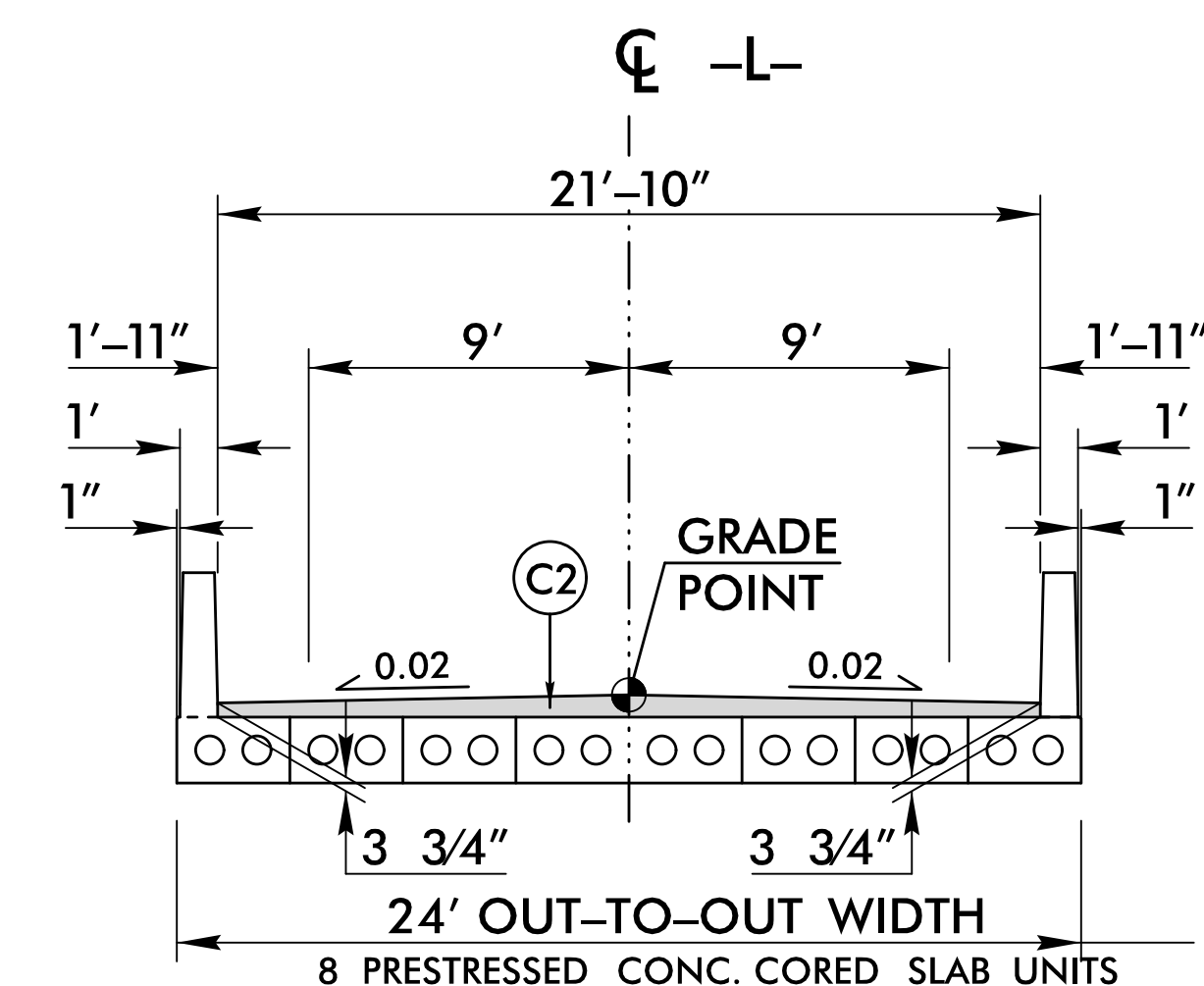


USE TYPICAL SECTION NO.3

—L— STA 12+00.00 TO STA 12+87.70 (BEG BRIDGE)


—L— STA 13+30.32 (END BRIDGE) TO STA 14+15.00

NOTE: PAVE TO FACE OF GUARDRAIL



BRIDGE TYPICAL SECTION

USE BRIDGE TYPICAL SECTION
 -L- STA 12+87.70 (BEG BRIDGE) TO STA 13+30.32 (END BRIDGE)

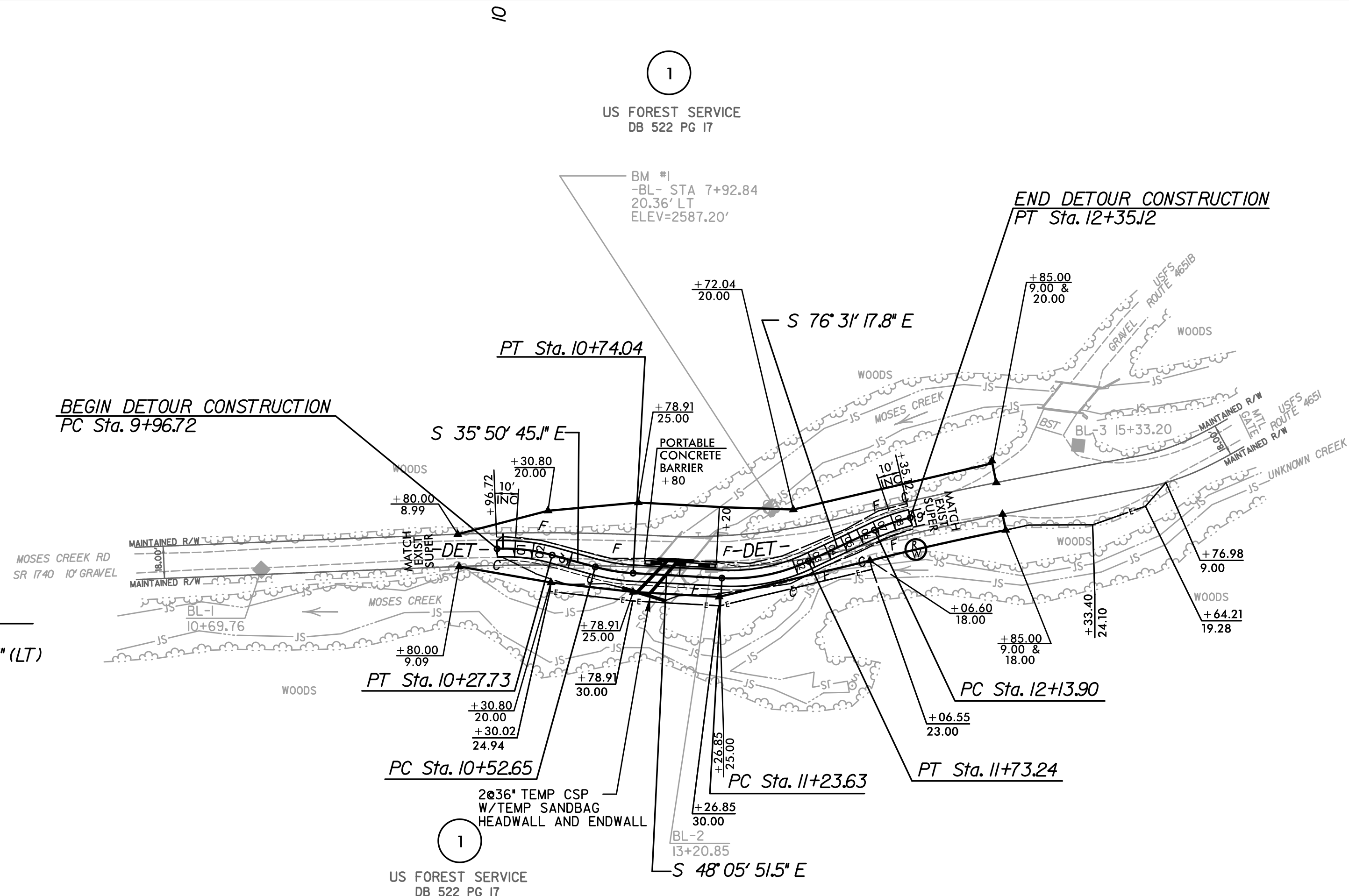
PROJECT REFERENCE NO.	SHEET NO.
17BP.14.R.62	2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
 <p> NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 0889 R. Williams 2016 EXPIRATION DATE 7/7/2016 GARY L. HILL </p>	
Drawn by _____ Prepared in the Office of:	NC FIRM LICENSE No F-0342 70 Corporate Center Drive, Suite 1000, NC 27627 (919) 854-5200 (919) 854-9259(FAX)
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

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TIME: 5:40:00 PM
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8/17/99

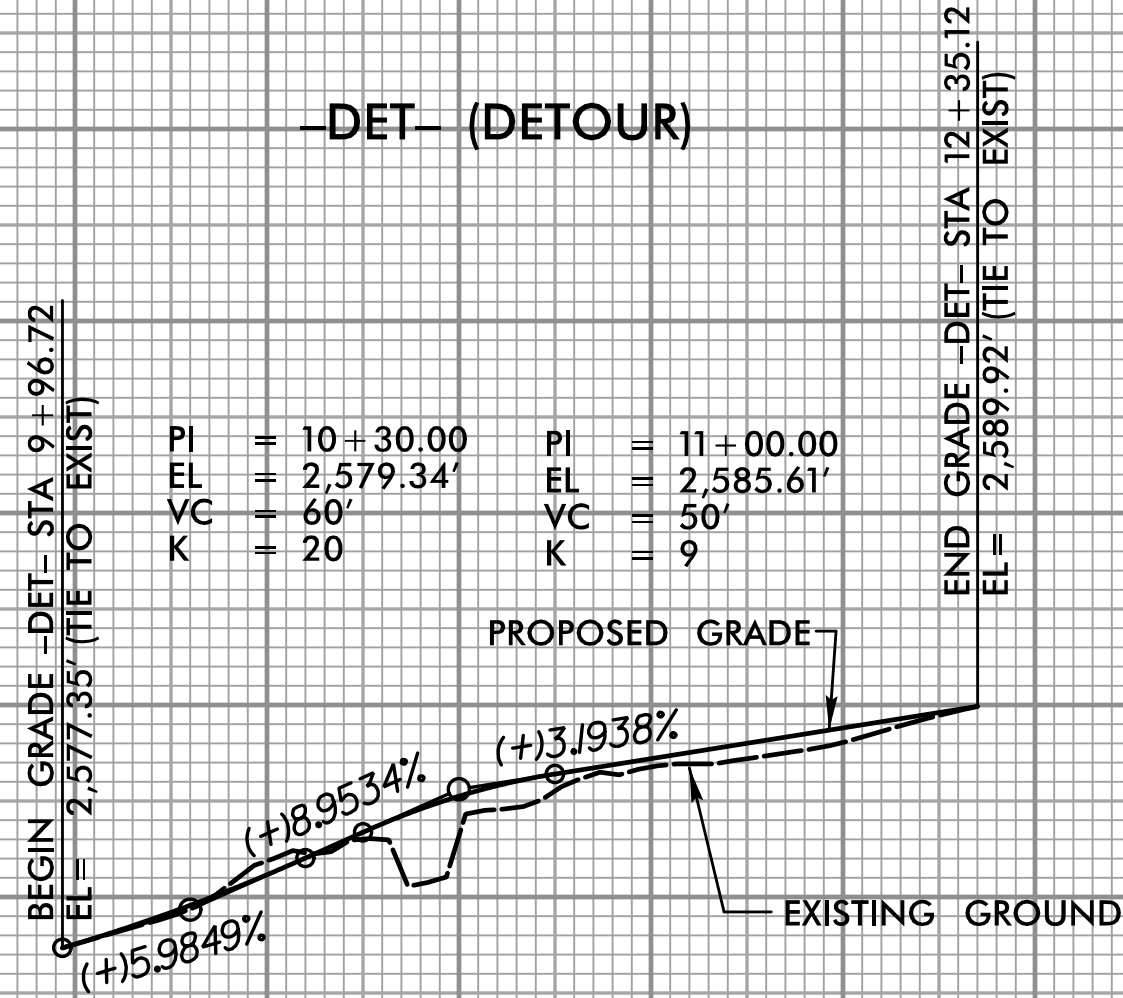
REVISIONS

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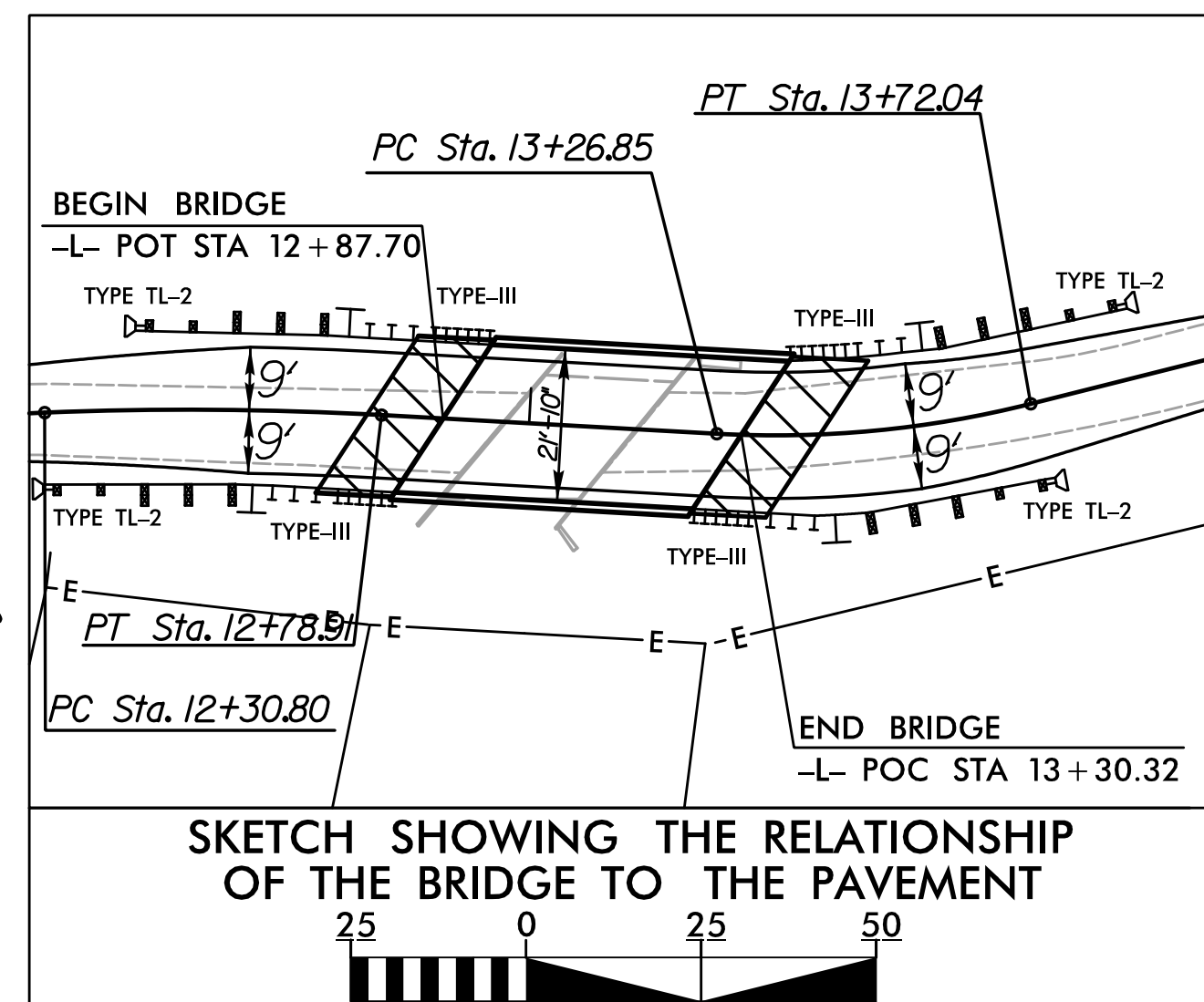
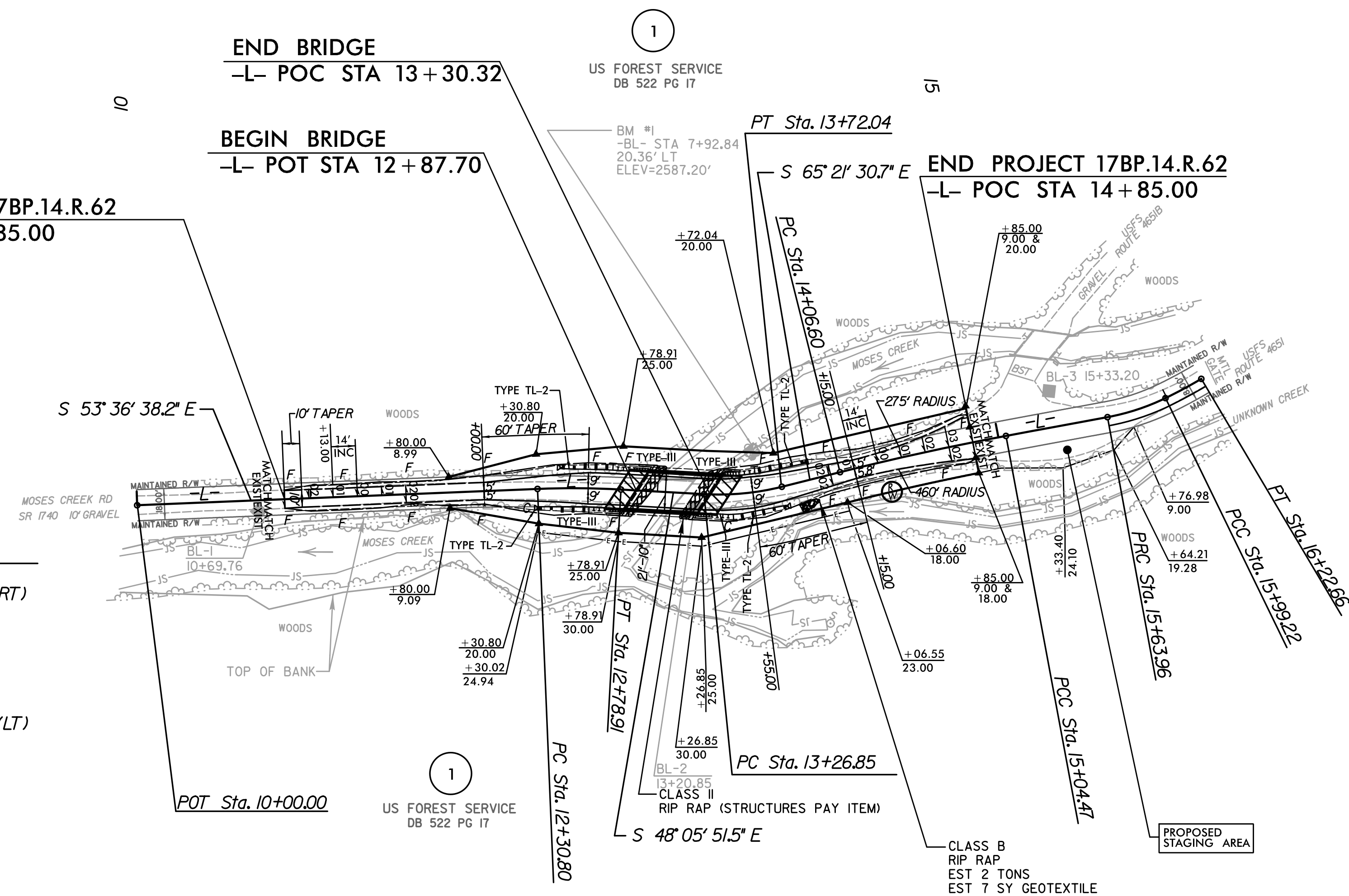


-DET-		
PI Sta 10+12.35 Δ = 17° 45' 53.1" (RT) D = 57° 17' 44.8" L = 31.01' T = 15.63' R = 100.00'	PI Sta 10+63.38 Δ = 12° 15' 06.4" (LT) D = 57° 17' 44.8" L = 21.38' T = 10.73' R = 100.00'	PI Sta 11+48.96 Δ = 28° 25' 26.3" (LT) D = 57° 17' 44.8" L = 49.61' T = 25.33' R = 100.00'
PI Sta 12+24.55 Δ = 12° 09' 23.7" (RT) D = 57° 17' 44.8" L = 21.22' T = 10.65' R = 100.00'		

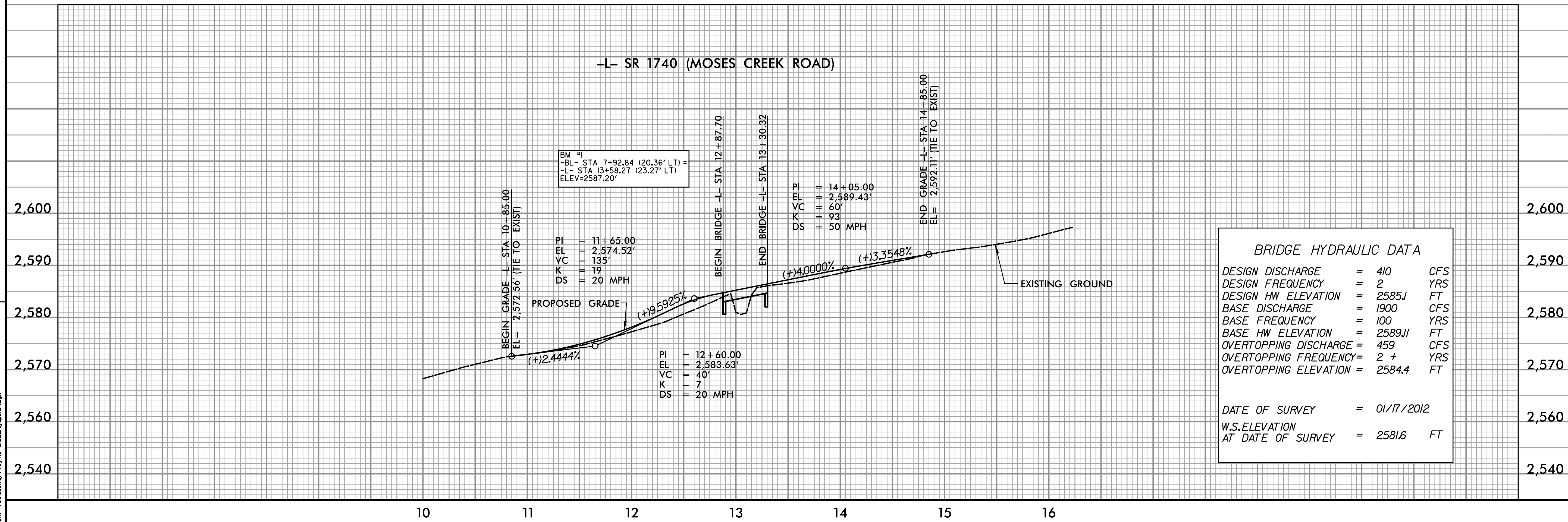
TEMPORARY DETOUR

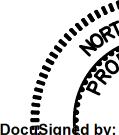




PROJECT REFERENCE NO. 17BP.14.R.62		SHEET NO. 2-A	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER R. W. KILPATRICK SEAL 0689 7/7/2016		HYDRAULICS ENGINEER FRANK P. HANSEN SEAL 020147 7/7/2016	
Prepared in the Office of: AECOM 701 Corporate Center Drive, Suite 475 Raleigh, NC 27601 (919) 854-6200 • (919) 854-6259(FAX)			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



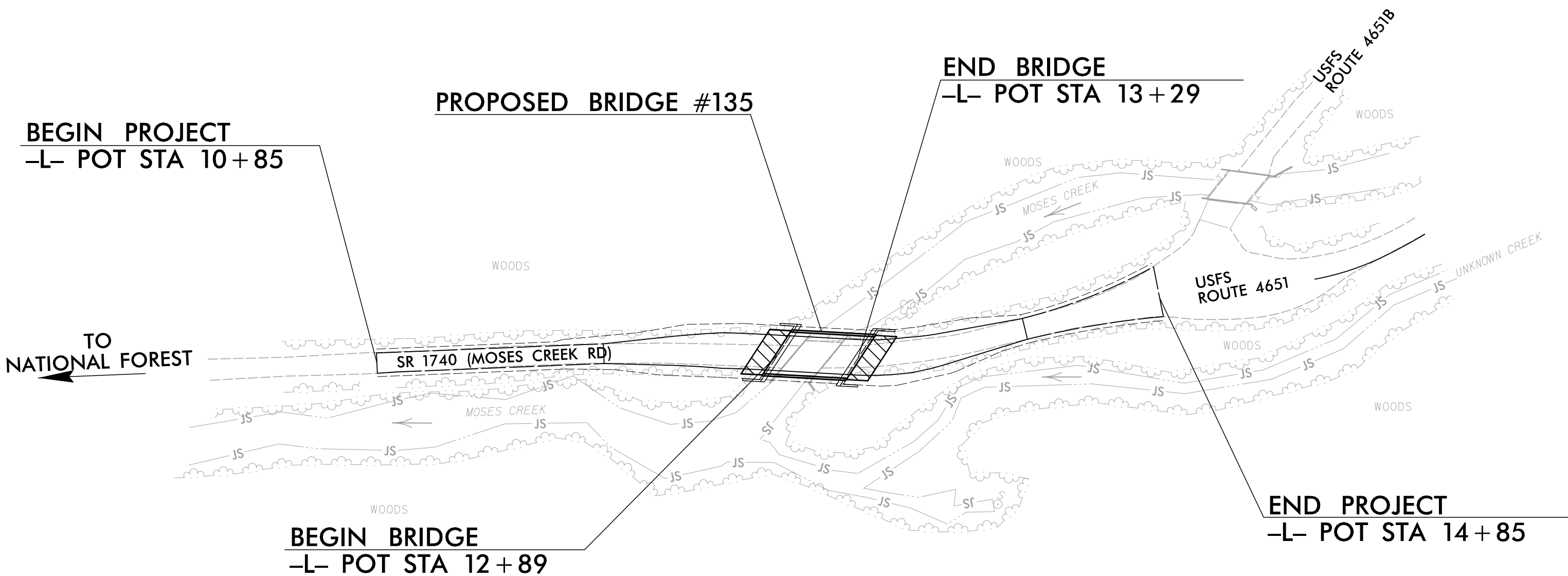
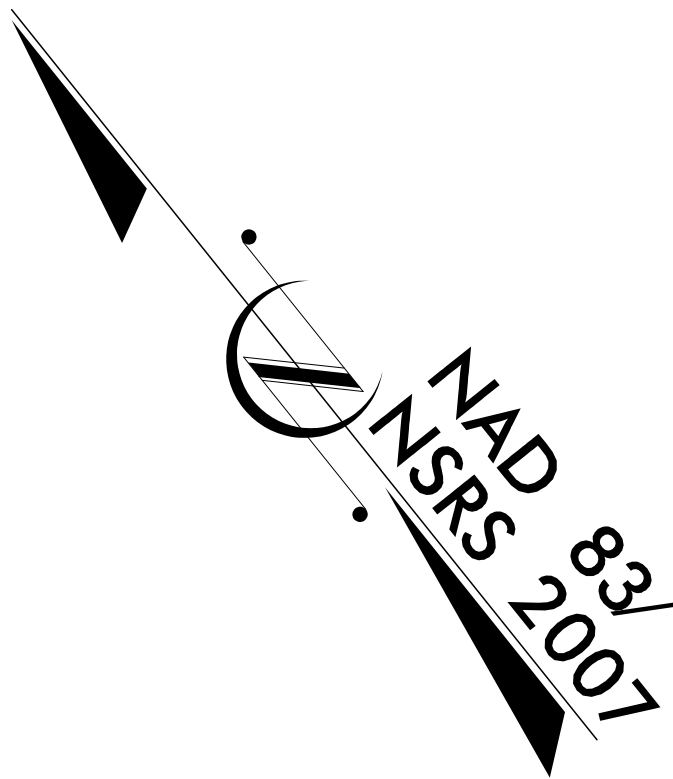
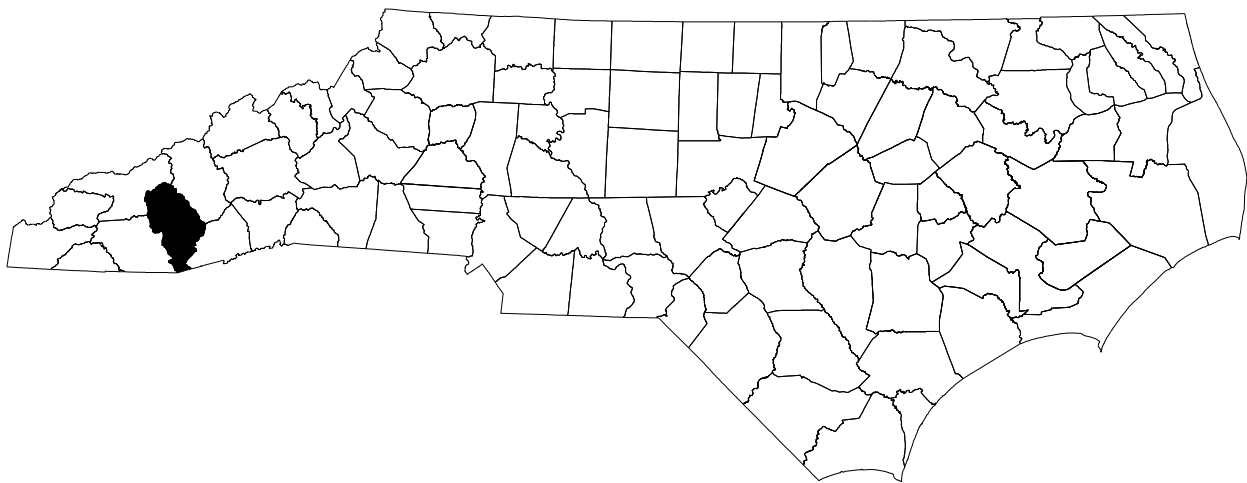
FOR STRUCTURE PLANS, SEE SHEETS S-1 THRU S-18



PROJECT REFERENCE NO.	SHEET NO.
17BP.14.R.62	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER  Discussed by: <i>R. L. Venable</i> 7/7/2016	HYDRAULICS ENGINEER  Discussed by: <i>Frank J. Fleming</i> 7/7/2016
Prepared in the Office of: 	NC FIRM LICENSE NO. F-0342 701 Corporate Center Drive, Suite 475 Raleigh, NC 27603 (919) 854-8200 (919) 844-6259(FAX)
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN
JACKSON COUNTY

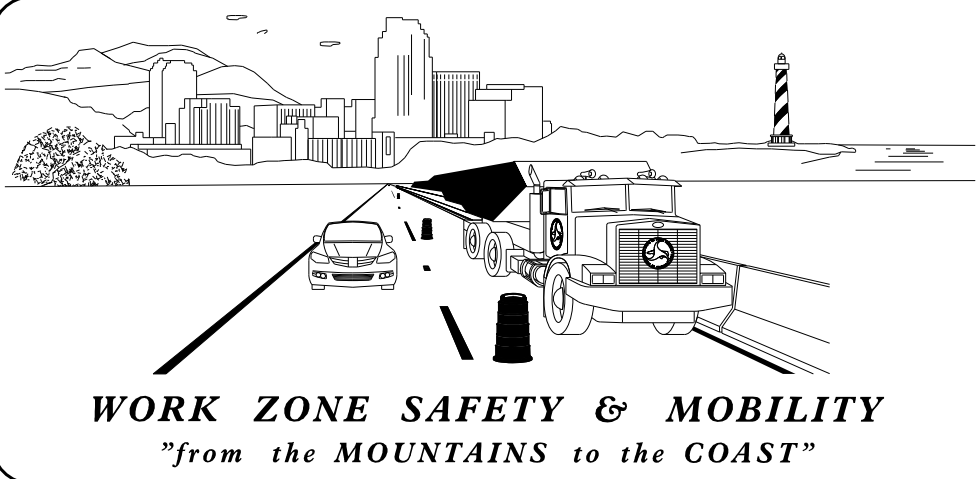


INDEX OF SHEETS	
SHEET NO.	TITLE
TMP-1	TITLE SHEET, AND INDEX OF SHEETS
TMP-1A	GENERAL NOTES
TMP-2	TEMPORARY TRAFFIC CONTROL PHASE I DETAIL
TMP-3	TEMPORARY TRAFFIC CONTROL PHASE II DETAIL
TMP-4	TEMPORARY TRAFFIC CONTROL PHASE III DETAIL
NOTE:	WRITTEN PHASING FOR THE TRAFFIC CONTROL PLAN APPEARS ON THE OVERVIEW SHEETS

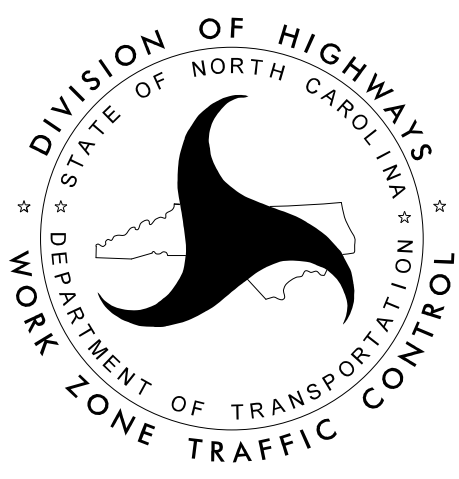
ROADWAY STANDARD
DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR 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:

STD.NO.	TITLE
1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUMS
1160.01	TEMPORARY CRASH CUSHION
1170.01	PORTABLE CONCRETE BARRIER
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES



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
K.J. VAN METRE, PE	TRAFFIC CONTROL PROJECT ENGINEER
T.E. HILDEBRAND, PE	TRAFFIC CONTROL PROJECT DESIGN ENGINEER
	TRAFFIC CONTROL DESIGN ENGINEER



AECOM
NC Firm License No.: F-0342
701 Corporate Center Drive
Suite 475 Raleigh, NC 27607
Phone: 919-854-6200

APPROVED: Kevin J. VanMetre, P.E.
DATE: 7/7/2016

SEAL

SHEET NO.

TMP-1

17BP.14.R.62

TIP PROJECT:

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 OVERLAPPING 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.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
MOSES CREEK RD	7:00AM - 9:00AM AND 4:00PM - 6:00PM, MONDAY THRU FRIDAY.

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

MOSES CREEK RD
TO BE DETERMINED BY DIVISION PERSONNEL.

LANE AND SHOULDER CLOSURE REQUIREMENTS

C) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

F) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

G) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

PAVEMENT EDGE DROP OFF REQUIREMENTS

H) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

I) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 100 FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

J) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

K) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

L) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

M) 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.

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

O) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

P) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE / RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.

INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

Q) PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS: (SEE ALSO 1101.05)

POSTED SPEED LIMIT	MINIMUM OFFSET
40 OR LESS	15 FT
45 - 50	20 FT
55	25 FT
60 MPH or HIGHER	30 FT

TRAFFIC CONTROL DEVICES

R) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

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

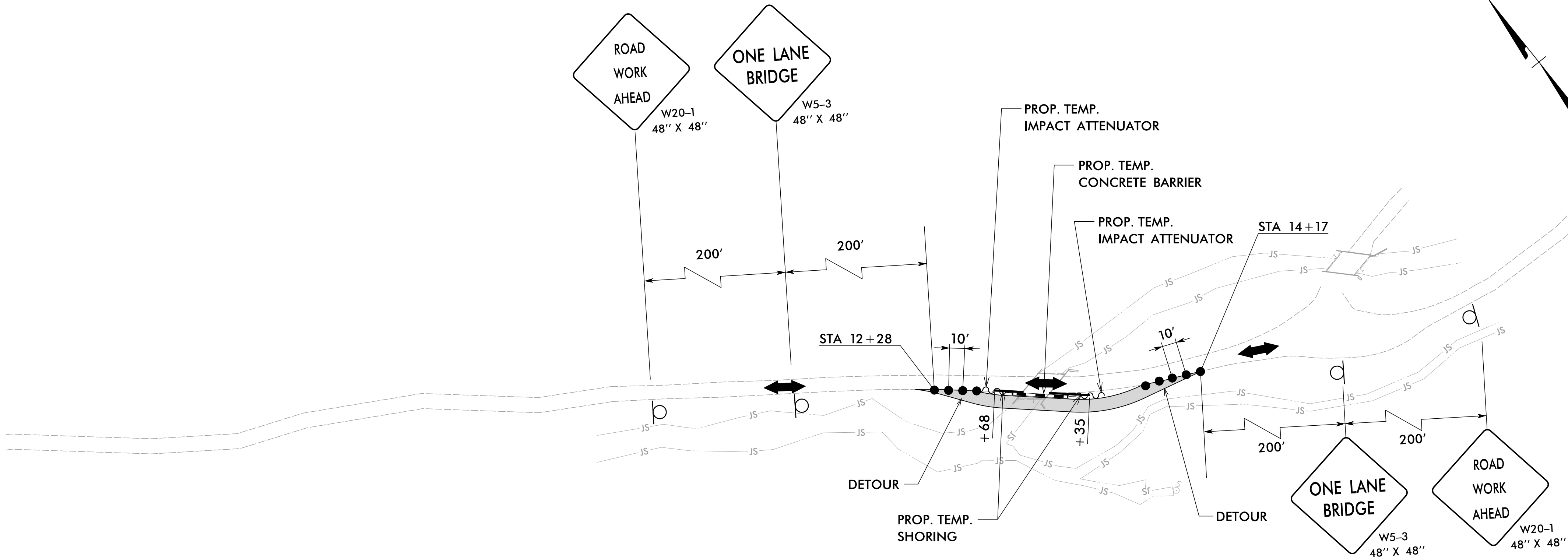
T) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

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

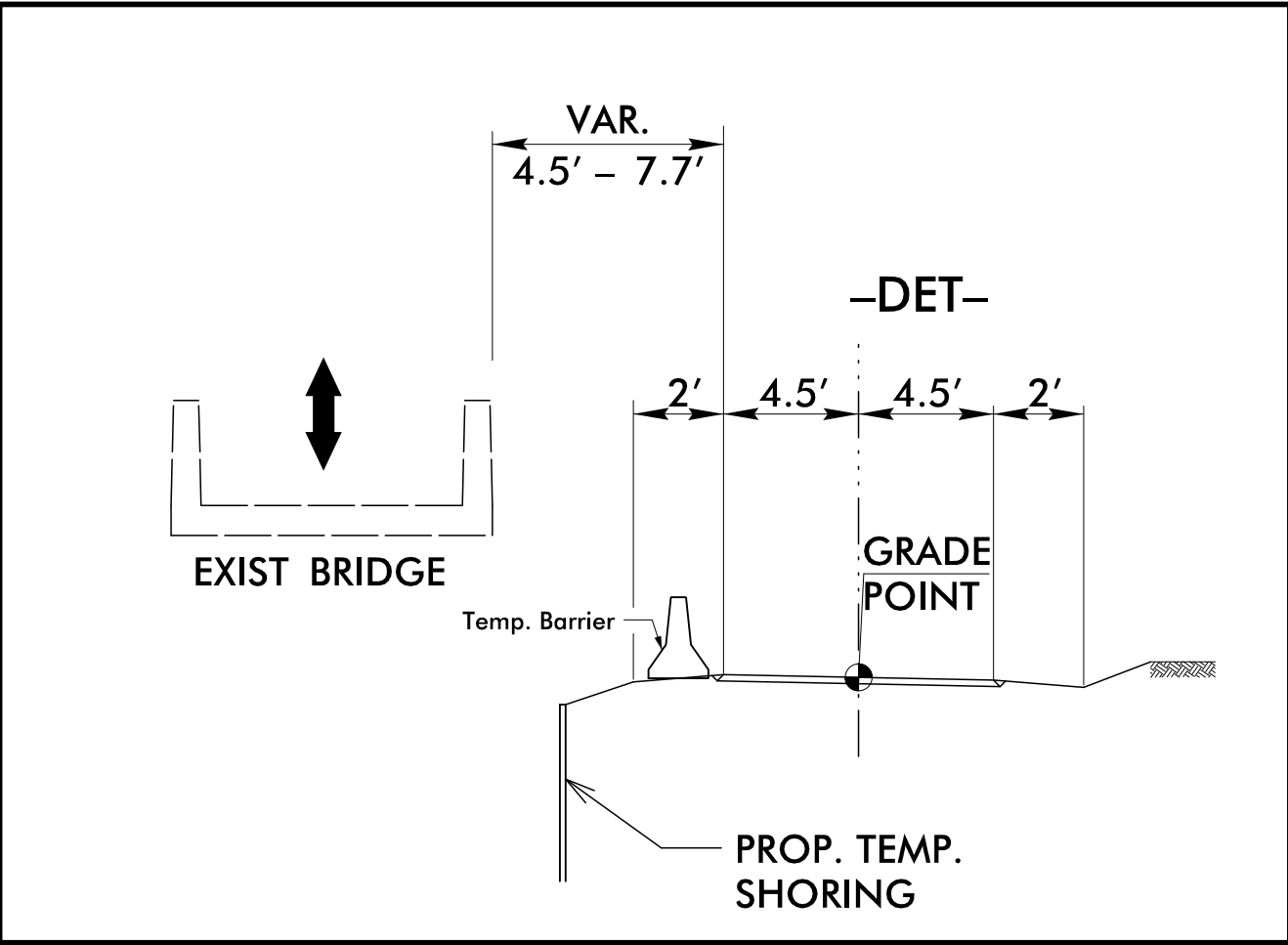
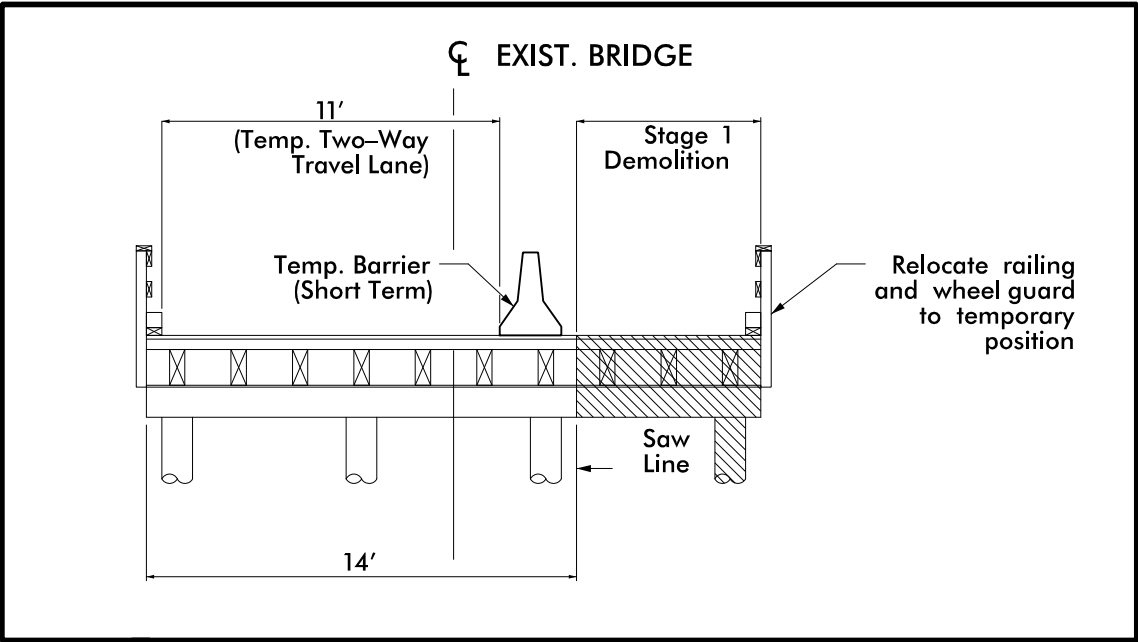
MISCELLANEOUS

V) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 50 FT AND 100 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

PROJ. REFERENCE NO.	SHEET NO.
17BP.14.R.62	TMP-2



TYPICAL SECTION VIEW

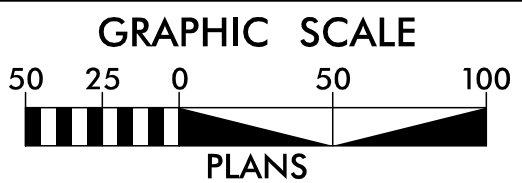


PHASING NOTES

- STAGE 1: INSTALL ADVANCED WARNING SIGNS AND TRAFFIC CONTROL DEVICES.
- STAGE 2: REMOVE PART OF EXISTING BRIDGE, RELOCATE RAILING, AND PLACE TEMP. BARRIER.
- STAGE 3: CONSTRUCT DETOUR AND INSTALL TEMP. SHORING.

LEGEND

	EXISTING ROADWAY
	PROPOSED CONSTRUCTION
	COMPLETED ROADWAY



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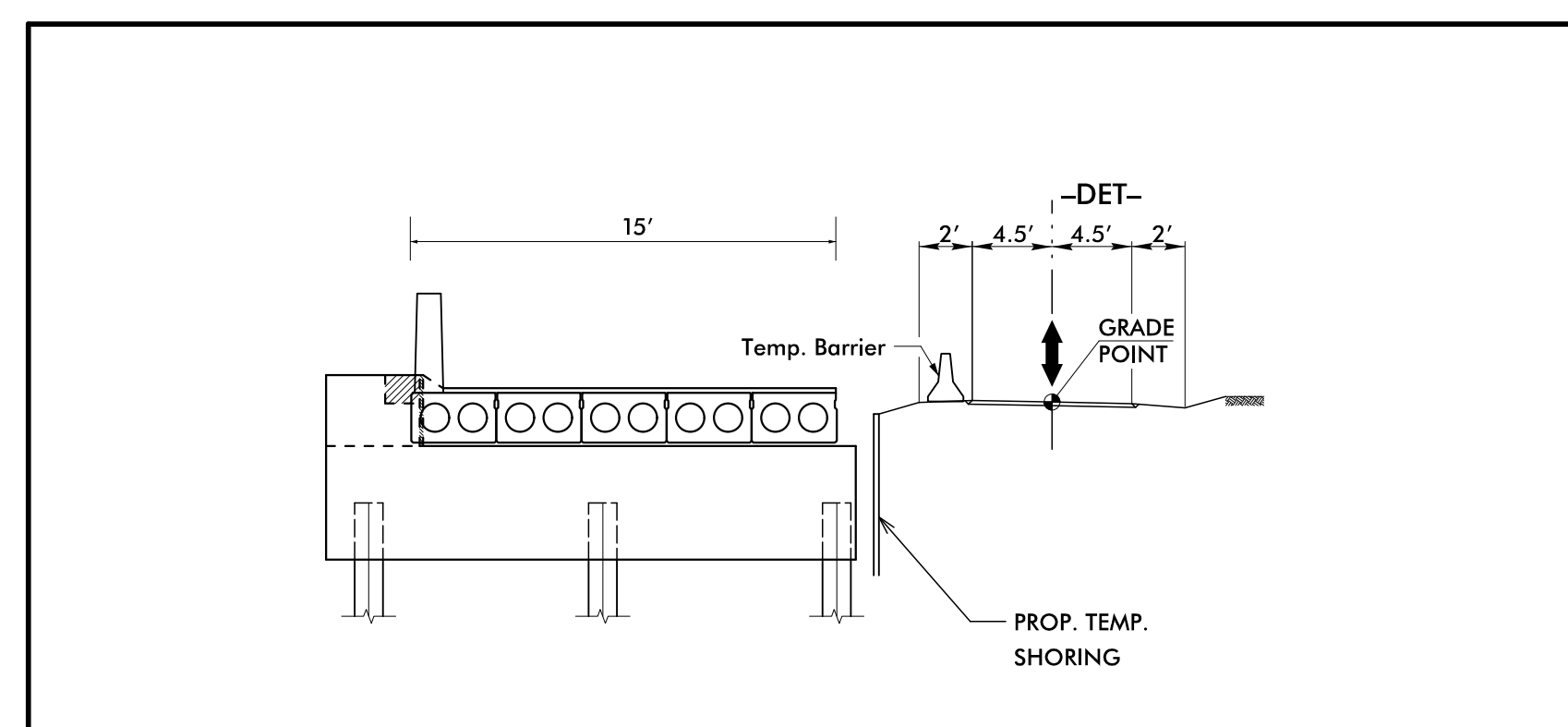
APPROVED: *Kevin J. Van Meter* 7/7/2016

DIVISION OF HIGHWAY TRAFFIC CONTROL

PHASE I DETAIL

SCALE: 7/6/2016	REVISIONS
DWG. BY: TEH	
DESIGN BY: KJV	
REVIEWED BY:	

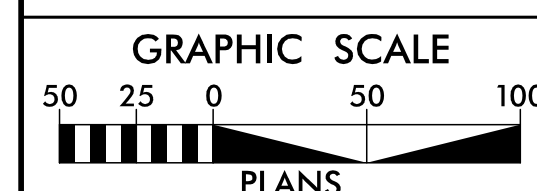
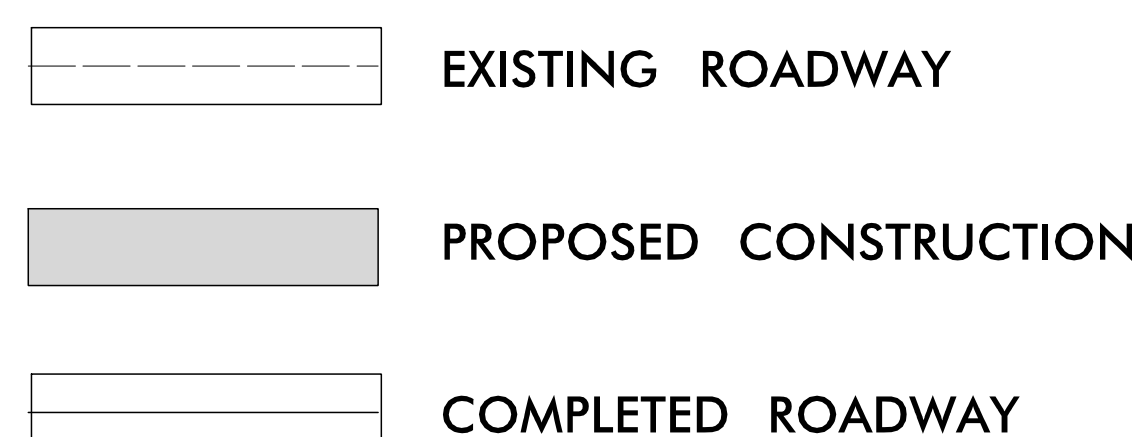
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VanMeter

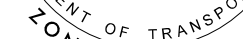
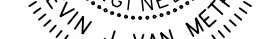


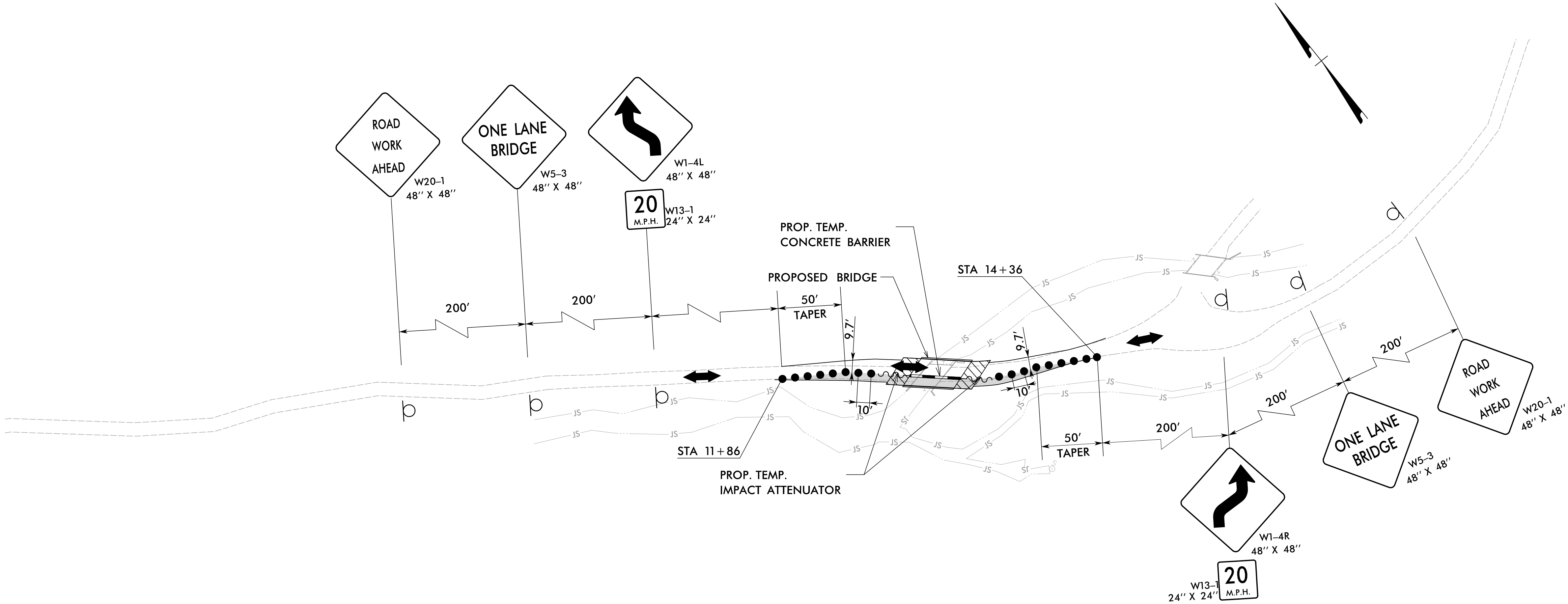
PHASING NOTES

- | | |
|----------|--|
| STAGE 1: | RELOCATE ADVANCED WARNING SIGNS,
TRAFFIC CONTROL DEVICES AND INSTALL SHIFT SIGNS. |
| STAGE 2: | SHIFT TRAFFIC TO DETOUR CONSTRUCTED
DURING PHASE I. |
| STAGE 3: | DEMOLISH EXISTING BRIDGE. |
| STAGE 4: | CONSTRUCT PART OF PROPOSED ROADWAY AND
BRIDGE AS SHOWN. |

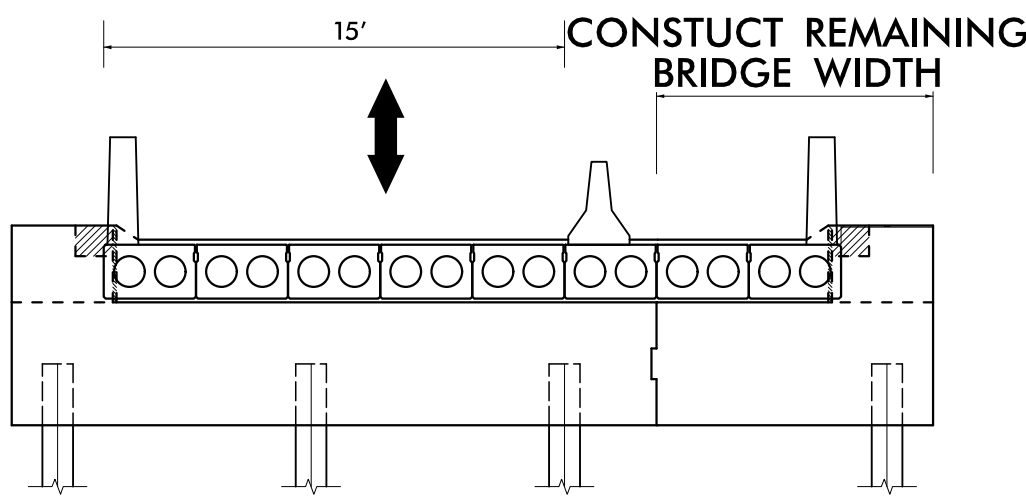
LEGEND



Desiged by:		
APPROVED:	<u>Kevin J. Van Meter</u>	DATE: 7/7/2016
FIDELITY+THATCHER INCORPORATED		<h1 style="margin: 0;">PHASE II DETAIL</h1>
		
	SCALE:	
	DATE:	7/6/2016
	DWG. BY:	TEH
	DESIGN BY:	KJV
	REVIEWED BY:	
CADD FILE		
	REVISIONS	



TYPICAL SECTION VIEW

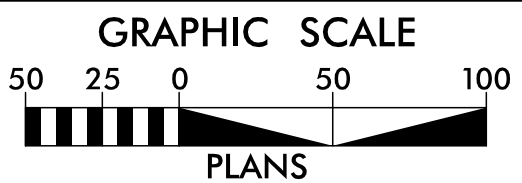


PHASING NOTES

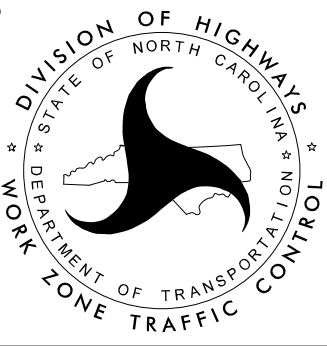
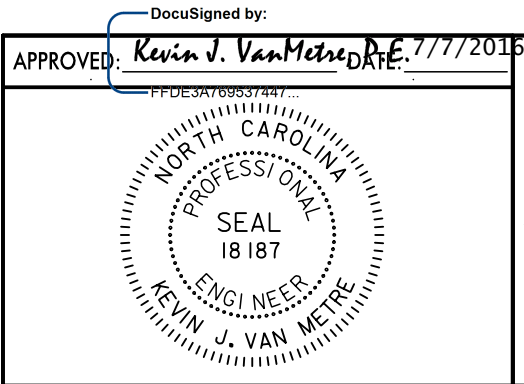
- STAGE 1: SHIFT TRAFFIC FROM DETOUR TO ROADWAY AND BRIDGE CONSTRUCTED DURING PHASE II.
- STAGE 2: CONSTRUCT REMAINING BRIDGE WIDTH.
- STAGE 3: REMOVE DETOUR AND CONSTRUCT REMAINING ROADWAY.
- STAGE 4: REMOVE ADVANCED WARNING SIGNS AND TRAFFIC CONTROL DEVICES.
- STAGE 5: OPEN PROJECT TO FINAL TRAFFIC PATTERN.

LEGEND

- | | |
|--|-----------------------|
| | EXISTING ROADWAY |
| | PROPOSED CONSTRUCTION |
| | COMPLETED ROADWAY |



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PHASE III DETAIL		REVISIONS	
SCALE: DATE: 7/6/2016 DWG. BY: TEH DESIGN BY: KJV REVIEWED BY:			

EROSION CONTROL PLAN

ROADSIDE ENVIRONMENTAL UNIT
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

2012 STANDARD SPECIFICATIONS

INSTALL CONCRETE WASHOUT STRUCTURES.
LOCATION TO BE DETERMINED IN THE FIELD.

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.

THIS PROJECT HAS
BEEN DESIGNED TO
SENSITIVE WATERSHED
STANDARDS.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL
REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY
NEED TO BE INSTALLED AS DIRECTED BY THE
ENGINEER.

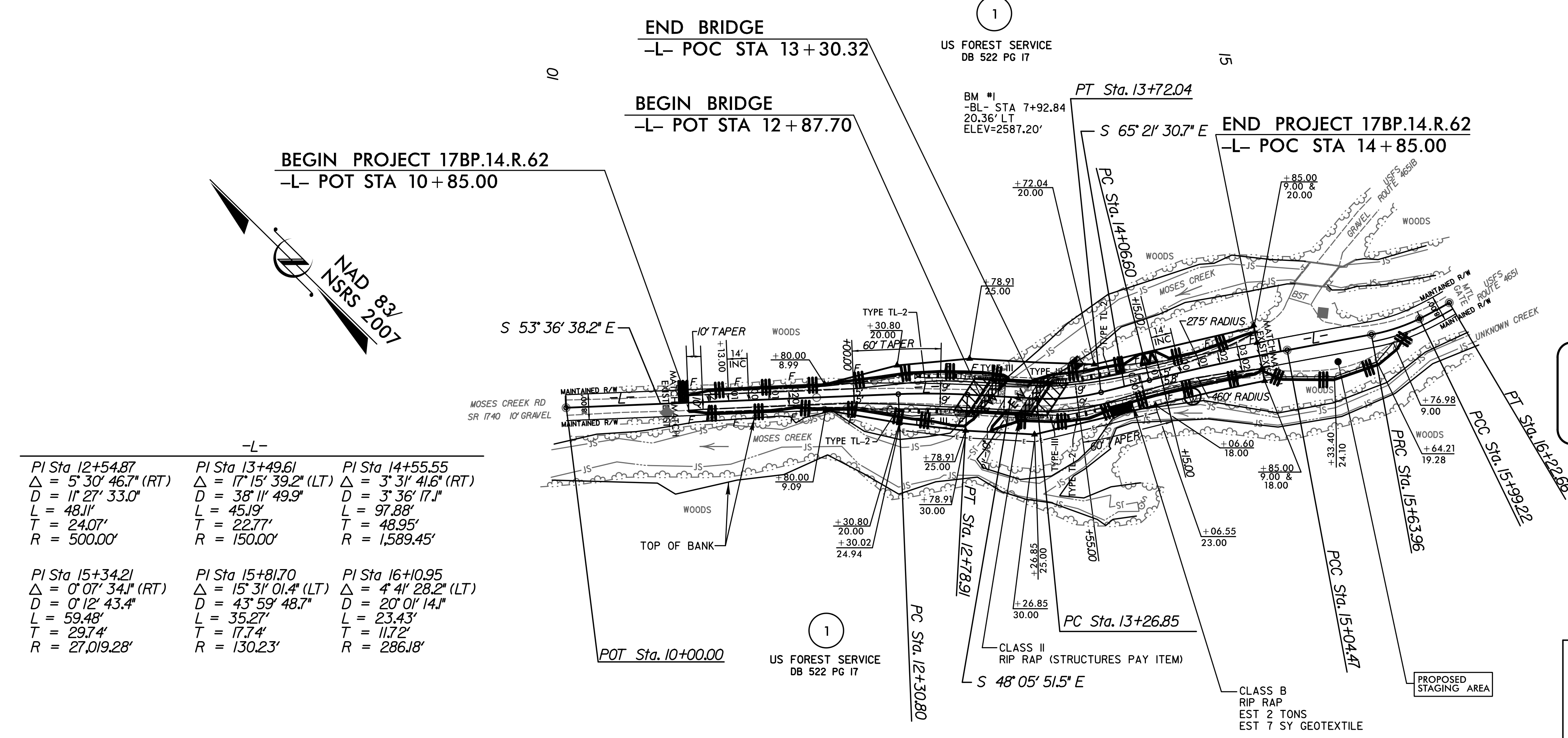
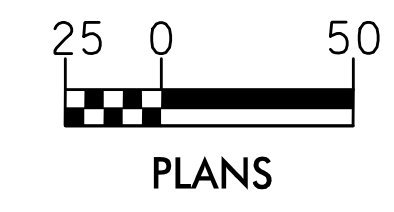
Rene Remy CPESC, CPSWQ
LEVEL III NAME

3135
LEVEL III CERTIFICATION NO.

2012 STANDARD DRAWINGS

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	Coin Fiber Baffle
1630.06	Special Stilling Basin	1645.01	Temporary Stream Crossing
1631.01	Matting Installation		

GRAPHIC SCALE



-L-		
PI Sta 12+54.87 Δ = 5° 30' 46.7" (RT) D = 11° 27' 33.0" L = 48.11' T = 24.07' R = 500.00'	PI Sta 13+49.61 Δ = 17° 15' 39.2" (LT) D = 38° 11' 49.9" L = 45.19' T = 22.77' R = 150.00'	PI Sta 14+55.55 Δ = 3° 31' 41.6" (RT) D = 3° 36' 17.1" L = 97.88' T = 48.95' R = 1,589.45'
PI Sta 15+34.21 Δ = 0° 07' 34.1" (RT) D = 0° 12' 43.4" L = 59.48' T = 29.74' R = 27,019.28'	PI Sta 15+81.70 Δ = 15° 31' 01.4" (LT) D = 43° 59' 48.7" L = 35.27' T = 17.74' R = 130.23'	PI Sta 16+10.95 Δ = 4° 41' 28.2" (LT) D = 20° 01' 14.1" L = 23.43' T = 11.72' R = 286.18'

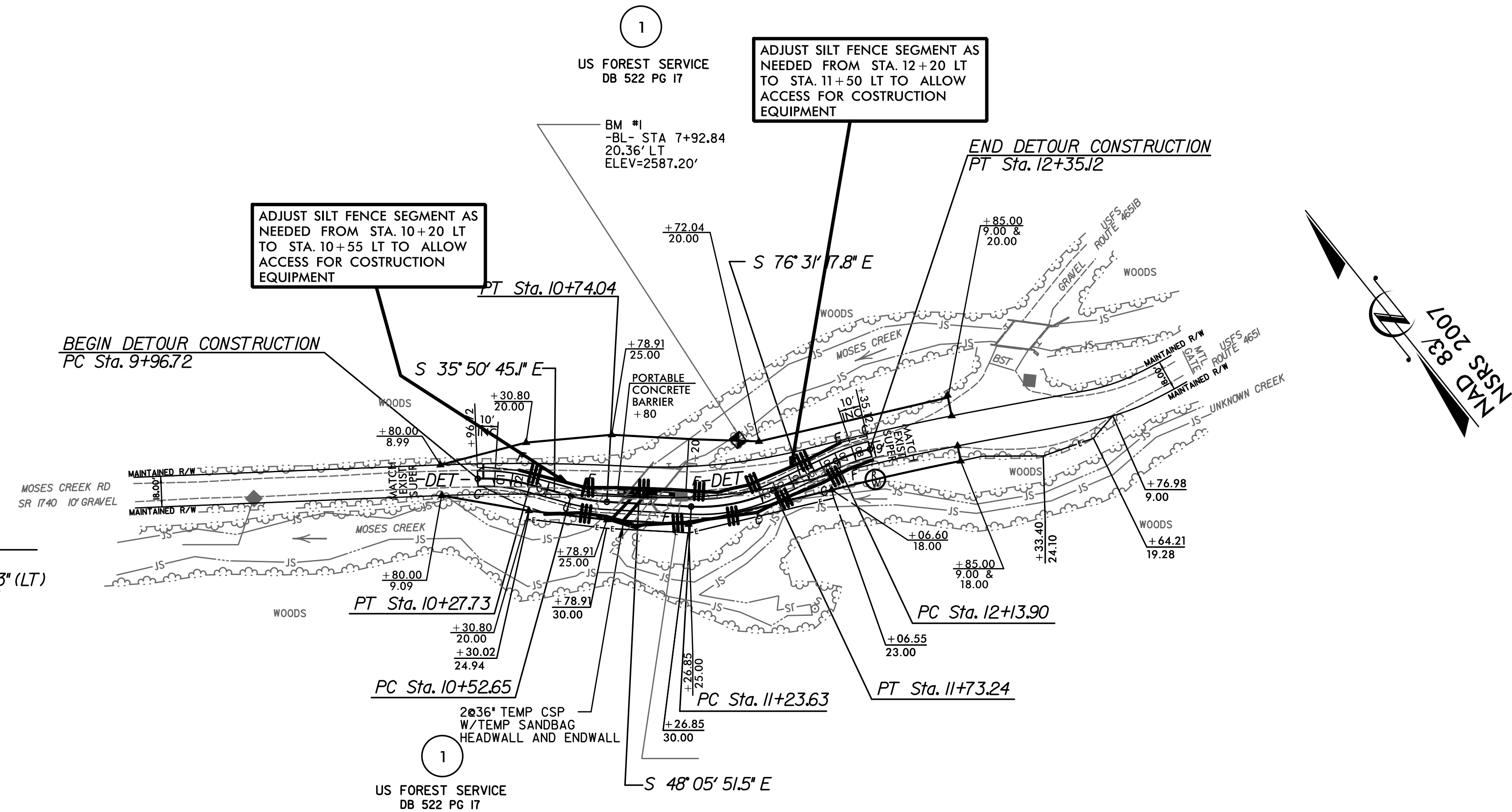
Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	△ △ △ △ △
1622.01	Temporary Berms and Slope Drains	→ → →
1630.02	Silt Basin Type B	▨
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	→ TD →
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	□
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	▶
1635.01	Rock Pipe Inlet Sediment Trap Type-B	U
	Excelsior Wattles	— EW —

8/17/99
REVISIONS
USER: remy
DATE: 6/16/2016
TIME: 9:58 AM
DRA: R. Remy
C:\Users\remy\Documents\17BP.14.R.62\17BP.14.R.62.dgn

DETOUR EROSION CONTROL PLAN

PROJECT REFERENCE NO.	SHEET NO.
17BP.14.R.62	EC-2
Prepared in the Office of: AECOM NC FIRM LICENSE No. F-0342 701 Corporate Center Drive, Suite 475 Raleigh, NC 27607 (919) 854-6200 • (919) 854-6259 FAX	

-DET-		
PI Sta 10+12.35 Δ = 17° 45' 53.1" (RT) D = 57° 17' 44.8" L = 31.01' T = 15.63' R = 100.00'	PI Sta 10+63.38 Δ = 12° 15' 06.4" (LT) D = 57° 17' 44.8" L = 21.38' T = 10.73' R = 100.00'	PI Sta 11+48.96 Δ = 28° 25' 26.3" (LT) D = 57° 17' 44.8" L = 49.61' T = 25.33' R = 100.00'
PI Sta 12+24.55 Δ = 12° 09' 23.7" (RT) D = 57° 17' 44.8" L = 21.22' T = 10.65' R = 100.00'		



Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	△△△
1622.01	Temporary Berms and Slope Drains	→
1630.02	Silt Basin Type B	▨
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	→ TD →
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	□
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	▶
1635.01	Rock Pipe Inlet Sediment Trap Type-B	⌢
	Excelsior Wattles	EW

DIVISION OF HIGHWAYS

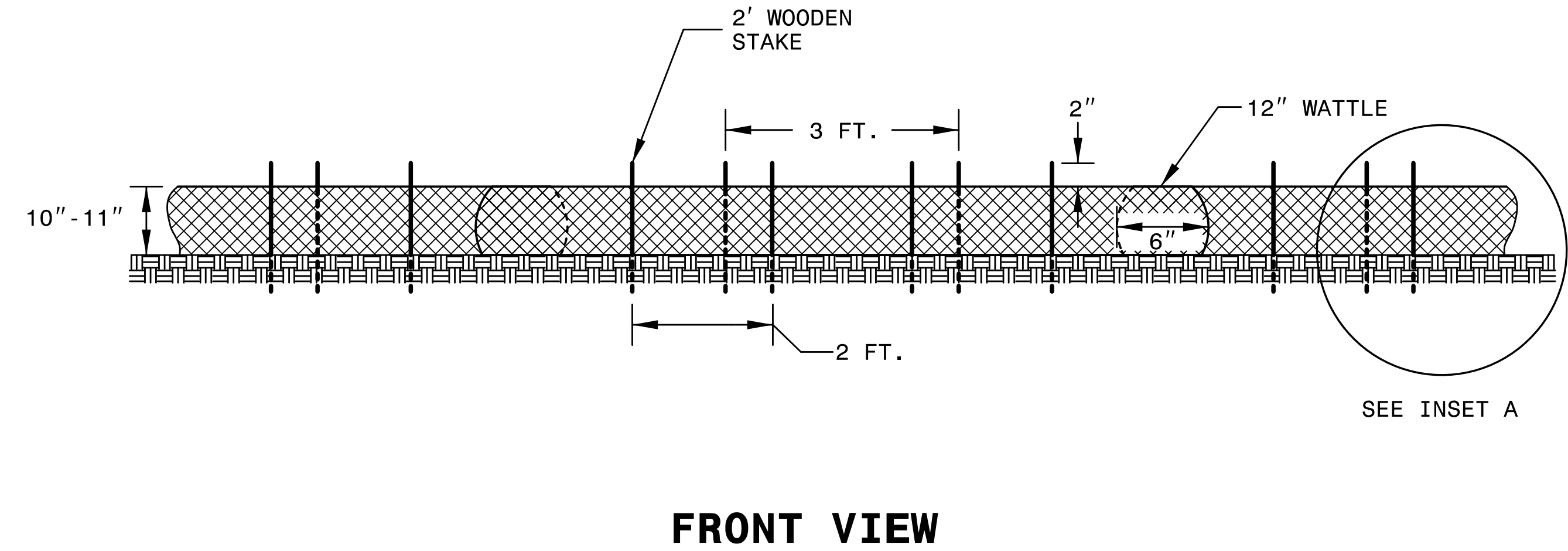
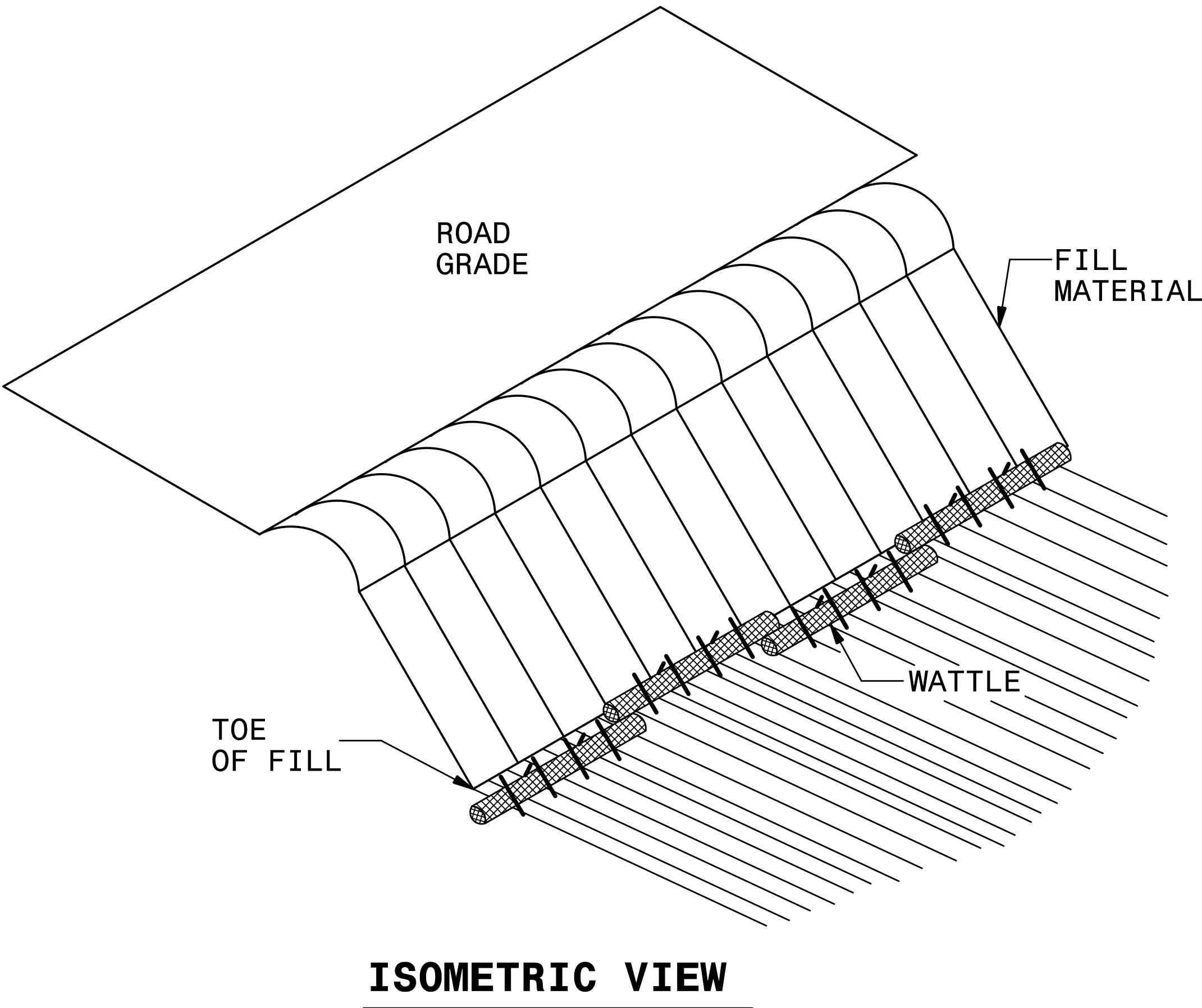
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
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.

REVISIONS

WATTLE BARRIER DETAIL



- NOTES:
- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE AND LENGTH OF 10 FT.
 - EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.
 - DO NOT PLACE WATTLES ON TOE OF SLOPE.
 - USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
 - INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.
 - PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.
 - INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
 - FOR BREAKS ALONG LARGE SLOPES, USE MAXIMUM SPACING OF 20 FT.

