TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

Index Of Sheets
CONST.
See Sheet No. IA

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

TENN.	YEAR	SHEET NO.
	2014	1
FED. AID PROJ. NO.	PHSIP/STP-SIP-NH-109(30)	
STATE PROJ. NO.	83011-3232-94	

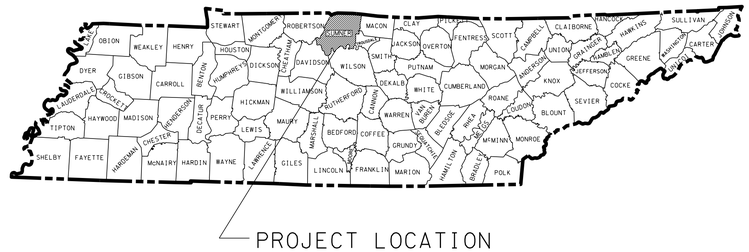
SUMNER COUNTY

STATE ROUTE NO. 109

(NORTH BROADWAY) AT
DONOHO BRANCH CULVERT (L.M. 18.75)
IN PORTLAND

CONSTRUCTION

STATE HIGHWAY NO. 109 F.A.H.S. NO. 109



83011-1231-94
ADJACENT PROJECT NO. STP-NH-SIP-109(29)
S.R. 109 (NORTH BROADWAY) FROM
S.R. 52 (MAPLE STREET), TO MCGOTHLIN STREET
IN PORTLAND

SCALE: 1"= 1 MILE

N

NO EQUATIONS

NO EXCLUSIONS

83011-3232-94(CONST.)
BEGIN PROJ. NO. PHSIP/STP-SIP-NH-109(30)(CONST.)
STA. 100+85.49± DONOHO BRANCH CULVERT
N 817459.1615
E 1817150.2456

83011-3232-94(CONST.)
END PROJ. NO. PHSIP/STP-SIP-NH-109(30)(CONST.)
STA. 102+45.33± DONOHO BRANCH CULVERT
N 817605.1383
E 1817085.9588

UNOFFICIAL SET
NOT FOR BIDDING

SURVEY DATE: 09-12-11

SEALED BY

APPROVED: Paul D. Degges
PAUL D. DEGGES, CHIEF ENGINEER

DATE:

APPROVED:
JOHN SCHROER, COMMISSIONER

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED MARCH 1, 2006 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT ROAD SP. SV. 2 BILLY BINION

DESIGNER ALVIN R. WHITE CHECKED BY TERRY ARNOLD

P.E. NO. 83011-1232-94

PIN NO. 114367.01

ROADWAY LENGTH ..... 0.030 MILE
BRIDGE LENGTH ..... 0.000 MILE
*BOX BRIDGE LENGTH ... 0.004 MILE
PROJECT LENGTH ..... 0.030 MILE

* DENOTES: NOT INCLUDED IN PROJECT LENGTH

TRAFFIC DATA	
ADT (2014)	19,090
V	30 MPH

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	1A

INDEX

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GENERAL NOTES AND SPECIAL NOTES	2B – 2C
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STANDARD BRIDGE DRAWINGS

DWG. NO.	REV.	DESCRIPTION
BRIDGE APPURTENANCES ENGLISH (LRFD BOX CULVERTS)		
STD-10-1	04-08-05	MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS
STD-11-1	05-01-14	BRIDGE RAILING W/ STRUCTURAL TUBING
STD-17-1		INDEX OF DRAWINGS
STD-17-2		TERMINOLOGY
STD-17-3		GENERAL NOTES
STD-17-4		DESIGN SECTION LIMITS
STD-17-5		TYPICAL SECTION AND DETAILS
STD-17-6		TYPICAL ELEVATIONS
STD-17-7		CURB, RAIL & EDGE BEAM DETAILS - SKEW NOT LESS THAN 45 DEG
STD-17-9		INTERIOR WALL END TREATMENTS
STD-17-10		TYPICAL WINGWALL DETAILS AND NOTES
STD-17-11		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-12		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-13		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-14		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-15		WINGWALL & SPECIAL RETAINING WALL DESIGN SECTIONS
STD-17-16		WINGWALL DESIGN SECTION
STD-17-17	06-01-11	BACKFILL AND DRAINAGE DETAILS

STANDARD ROADWAY DRAWINGS

DWG. NO	REV.	DESCRIPTION
STD-17-18		BACKFILL DETAILS
STD-17-23		SIDEWALK AND MISCELLANEOUS DETAILS
STD-17-24		WARPED SLOPE DETAIL
STD-17-26		EXTENSION DETAILS
STD-17-29		PRECAST BOX CULVERT DETAILS
STD-17-74		BOX BRIDGE, 2 BARRELS AT 10', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-17-75		BOX BRIDGE, 2 BARRELS AT 10', CLEAR HTS. 7' - 10', 0 - 60' FILL
ROADWAY DESIGN STANDARDS		
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD-L-5	05-01-08	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-6	03-30-10	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-7	05-24-12	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD01-TS-6A	07-31-13	TYPICAL CURB AND GUTTER SECTIONS WITHOUT SHOULDER
DRAINAGE - CULVERTS AND ENDWALL		
D-FLU-1		FLUME DETAILS
D-PB-1	01-02-13	STANDARD DETAILS CLASS "B" BEDDING AND CULVERT EXCAVATION
D-PG-3	04-15-97	FERROUS AND ALUMINUM CORRUGATED METAL PIPE
TRAFFIC CONTROL APPURTENANCES		
T-FAB-1	05-27-97	FLASHING YELLOW ARROW BOARD
T-M-1	11-01-11	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	01-15-13	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-3	09-19-91	MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS & PAVED SHOULDERS ON CONVENTIONAL ROADS
T-M-4	11-01-11	STANDARD INTERSECTION PAVEMENT MARKINGS
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-55		SIDEWALK TRAFFIC CONTROL
T-PBR-1	06-30-09	INTERCONNECTED PORTABLE BARRIER RAIL
T-PBR-2	11-01-11	DETAIL FOR VERTICAL PANELS AND FLEXIBLE DELINEATORS
EROSION PREVENTION AND SEDIMENT CONTROL		
EC-STR-2	08-01-12	SEDIMENT FILTER BAG
EC-STR-3C	08-01-12	SILT FENCE WITH WIRE BACKING
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-19	04-01-08	CATCH BASIN PROTECTION
EC-STR-25	08-01-12	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD
EC-STR-30		INSTREAM DIVERSION (WITHOUT TRAFFIC)
EC-STR-30A		INSTREAM DIVERSION (WITH TRAFFIC)
EC-STR-37	08-01-12	SEDIMENT TUBE
ROADWAY AND PAVEMENT APPURTENANCES		
RP-NMC-10	07-29-03	STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
RP-NMC-11	02-28-02	STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
RP-D-15	07-15-08	DETAILS OF STANDARD CONCRETE DRIVEWAYS
RP-S-7	06-04-13	DETAILS FOR STANDARD CONCRETE SIDEWALKS
RP-D-16	07-15-08	DETAILS OF LOWERED STANDARD CONCRETE DRIVEWAYS
RP-R-1	05-27-01	STANDARD RAMPS TO SIDE ROADS

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DEPARTMENT OF TRANSPORTATION

INDEX AND STANDARD DRAWINGS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	18

PROJECT COMMITMENTS

COMMITMENT ID	SOURCE DIVISON	DESCRIPTION	STA. / LOCATION
EDHZ002	Environmental Division, Hazardous Materials	1.Underground storage tanks (USTs) were abandoned in place on Tract 3 due to telephone and gas utility lines that were on top of the USTs. The abandoned USTs are most likely buried at a depth of between 2 and 4 feet below ground surface (bgs). 2.Contaminated soil is likely to be encountered throughout the project. Any soil that is discolored or exhibits a strong odor should be stockpiled on 3-mil plastic and covered with plastic until characterized. TDOT Environmental Division will be responsible for coordinating the sampling and disposition of the excavated material. Notify the TDOT Hazardous Materials Manager at 615-532-8684 at least two business days prior to beginning excavation. 3.Groundwater is expected to be shallow (less than 5 ft. bgs) and may be contaminated. If groundwater is removed it should be characterized and disposed of properly.	Approx. Sta. 101+15.00± to 101+40.00± Rt.
EDHZ003	Environmental Division, Hazardous Materials	4.Concrete and PVC may be encountered in the vicinity of the former monitoring wells and remediation system wells that were abandoned in place. These may extend down to depths of 10 to 20 feet bgs. 5.It is recommended that all personnel use engineering controls (rubber boots, gloves) and good hygienic practices if they must come into contact with the soil. Contractors should follow their company health and safety plan if contacting potentially contaminated soil.	Approx. Sta. 101+15.00± to 101+40.00± Rt.

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DEPARTMENT OF TRANSPORTATION

PROJECT COMMITMENTS

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-109(30)	2A
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	2

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
	105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
	202-03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	71
	202-08.15	REMOVAL OF CURB AND GUTTER (TYPE 6-30)	L.F.	160
(13)	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	14
	204-08	FOUNDATION FILL MATERIAL	C.Y.	3
(15)	209-05	SEDIMENT REMOVAL	C.Y.	85
(1)(5)(6)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	144
(6)	209-09.01	SANDBAGS	BAG	100
(5)	209-09.04	SEDIMENT FILTER BAG(15' X 10')	EACH	2
(2)	209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	59
(5)	209-40.33	CATCH BASIN PROTECTION (TYPE D)	EACH	1
(3)(4)(6)	209-65.04	TEMPORARY IN STREAM DIVERSION	L.F.	50
(7)	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	100
	303-01.01	GRANULAR BACKFILL (ROADWAY)	TON	13
(2)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	10
(11)	307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	17
	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	1
(11)	411-01.10	ACS MIX(PG64-22) GRADING D	TON	10
	411-02.10	ACS MIX(PG70-22) GRADING D	TON	18
	415-01.01	COLD PLANING BITUMINOUS PAVEMENT	TON	14
(6)	607-03.02	18" CONCRETE PIPE CULVERT (CLASS III)	L.F.	5
	611-09.01	ADJUSTMENT OF EXISTING CATCHBASIN	EACH	1
	701-01.02	CONCRETE SIDEWALK (6 ")	S.F.	360
	701-02	CONCRETE DRIVEWAY	S.F.	360
	702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	11
	705-08.51	PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3	EACH	2
(13)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	100
(14)	709-05.08	MACHINED RIP-RAP (CLASS B)	TON	82
	712-01	TRAFFIC CONTROL	LS	1
	712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	160
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	17
	712-04.50	PORTABLE BARRIER RAIL DELINEATOR	EACH	8
	712-05.01	WARNING LIGHTS (TYPE A)	EACH	12
	712-05.03	WARNING LIGHTS (TYPE C)	EACH	6
(6)	712-06	SIGNS (CONSTRUCTION)	S.F.	208
	712-06.01	VERTICAL PANELS	S.F.	5
	712-07.02	TEMPORARY BARRICADES (TYPE II)	L.F.	10
	712-08.03	ARROW BOARD (TYPE C)	EACH	1
(18)	713-15.41	SIGN REMOVAL (R9-11L-MOD, R9-11R-MOD, R9-9L AND R9-9R)	LS	1
(18)(19)	713-16.21	SIGNS (OM3-L AND OM3-R OBJECT MARKERS)	EACH	2
	716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	0.06
	716-12.01	ENHANCED FLATLINE THERMO PVMT MRKNG (4IN LINE)	L.M.	0.06
	717-01	MOBILIZATION	LS	1
(2)(12)	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	199
(3)(5)	740-11.01	TEMPORARY SEDIMENT TUBE 8IN (DESCRIPTION)	L.F.	50
(6)	801-01	SEEDING (WITH MULCH)	UNIT	1
(6)	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	1
(6)	801-03	WATER (SEEDING & SODDING)	M.G.	1
(6)	803-01	SODDING (NEW SOD)	S.Y.	1000

ESTIMATED BRIDGE QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
(10)(17)	604-02.01	CLASS A CONCRETE (BOX BRIDGES)	C.Y.	17
(8)(9)(10)(17)	604-02.02	STEEL BAR REINFORCEMENT (BOX BRIDGES)	LB.	3133
(16)	620-05	CONCRETE PARAPET WITH STRUCTURAL TUBING	L.F.	25

FOOTNOTES

(1) INCLUDES 94 L.F. FOR SEDIMENT FILTER BAGS.

(2) FOR SEDIMENT FILTER BAGS.

(3) TO BE USED AS DIRECTED BY THE ENGINEER.

(4) OPTIONAL EXCAVATION, GEOTEXTILE AND RIP RAP SHALL BE INCLUDED IN THE COST OF THIS ITEM.

(5) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.

(6) QUANTITIES MAY BE INCREASED OR DECREASED AS DIRECTED BY THE PROJECT ENGINEER.

(7) INCLUDES 3.25 C.Y. FOR WING WALLS, AND 33 TONS FOR BUSINESS ENTRANCES.

(8) INCLUDES 365 LB. FOR WING WALLS.

(9) ANY REBAR COUPLINGS NEEDED WILL BE INCLUDED IN THE COST OF ITEM 604-02.02 STEEL BAR REINFORCEMENT (BOX BRIDGES) PER LB.

(10) CULVERT EXCAVATION FOR CONCRETE BOX OR SLAB TYPE CULVERT OR BRIDGES WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

(11) TO BE USED FOR BUSINESS ENTRANCES.

(12) INCLUDES 172 S.Y. FOR TEMPORARY CONSTRUCTION EXITS.

(13) TO BE USED FOR TEMPORARY CONSTRUCTION EXITS.

(14) TO BE USED AT WINGWALLS.

(15) NO ROCK PAD OR HAUL ROAD REQUIRED.

(16) COST TO REMOVE EXISTING PARAPET TO BE INCLUDED IN THIS ITEM. (SEE STD. DWG. STD-11-1.)

(17) COST OF CONNECTING TO EXISTING TO BE INCLUDED IN THESE ITEMS. SEE STANDARD DRAWING STD-17-26 FOR DETAILS.

(18) SEE SHEET 2D FOR DETAILS.

(19) SEE SHEET 4B FOR DETAILS.

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ESTIMATED ROADWAY AND BRIDGE QUANTITIES

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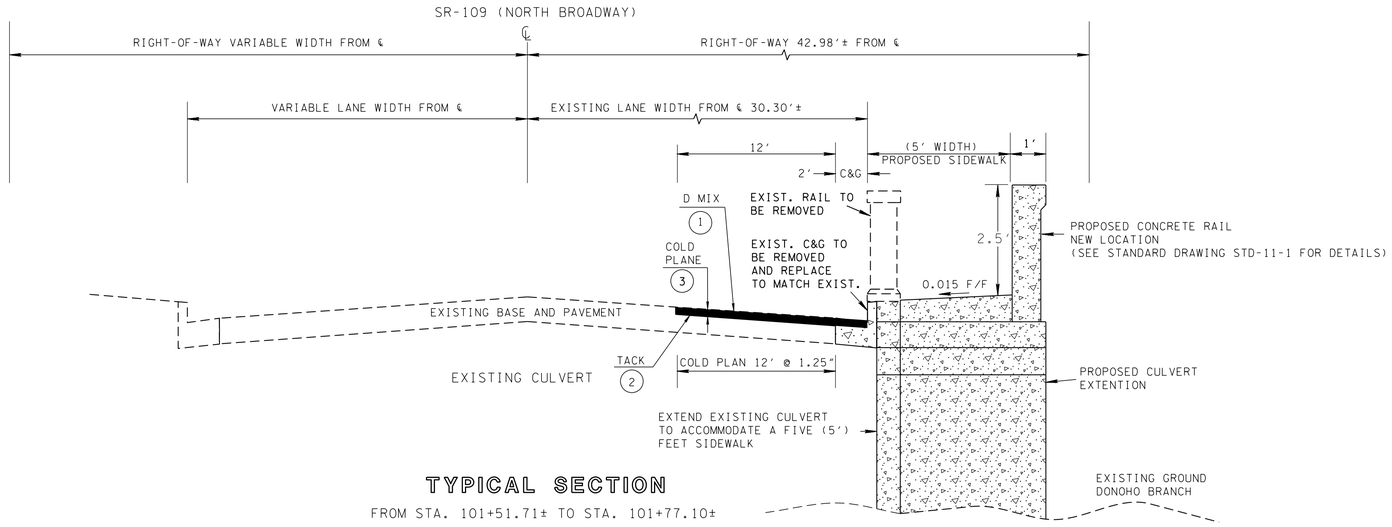
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-109(30)	2
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	2A

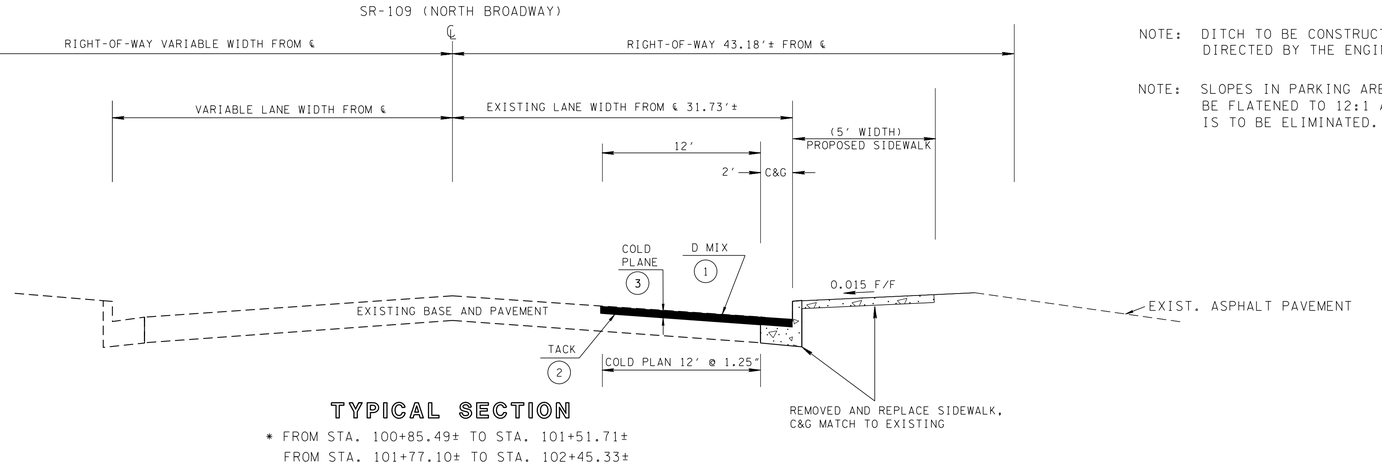
REV. 10-24-13: REMOVED PROPOSED GUARDRAIL FROM TYPICAL SECTION.

REV. 04-03-14: ADDED TYPICAL SECTION FOR BUS. ENT.



TYPICAL SECTION

FROM STA. 101+51.71± TO STA. 101+77.10±

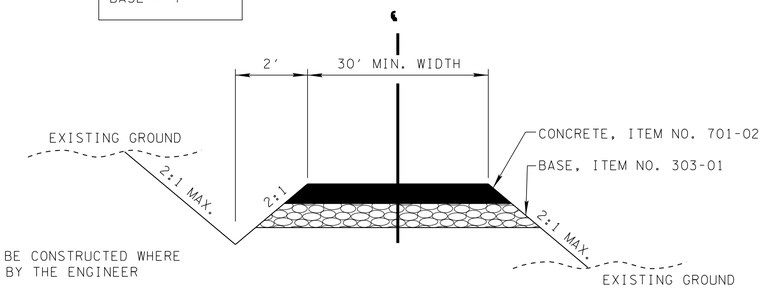


TYPICAL SECTION

* FROM STA. 100+85.49± TO STA. 101+51.71±
FROM STA. 101+77.10± TO STA. 102+45.33±

BUSINESS

CONCRETE - 6"
BASE - 4"



CUT SECTION FILL SECTION

NOTE: DITCH TO BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER

NOTE: SLOPES IN PARKING AREAS SHALL BE FLATENED TO 12:1 AND DITCH IS TO BE ELIMINATED.

TYPICAL SECTION

PRIVATE DRIVE TO BUSINESS, FIELD, OR RESIDENTIAL PROPERTY

PROPOSED PAVEMENT SCHEDULE

(1) SURFACE @ 1.25" THICK (APPROX. 132.5 LBS/SY) 411-02.10 ACS MIX (PG70-22) GRADING "D"	(3) COLD PLANING @ 1.25" 415-01.01 COLD PLANING OF BITUMINOUSE PAVENT NOTE: COLD PLANING DEPTHS HAVE AN ALLOWABLE TOLERANCE OF 0.50"
(2) TACK COAT @ 0.10 GAL/S.Y. 403-01 BITUMINOUS MARTERIAL FOR TACK COAT (TC)	

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TYPICAL SECTIONS, CULVERT AND SIDEWALK EXTENSION DETAIL

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	2B

GENERAL NOTES

GRADING

(1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE 0F THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

(2) CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.

(3) THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY SAME. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.

SEEDING AND SODDING

(4) ITEM NO. 801-01, SEEDING (WITH MULCH), SHALL BE USED WHERE EROSION CONTROL BLANKET OR SOD ARE NOT APPLIED.

(5) SOD SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS TO PREVENT DAMAGE TO ADJACENT FACILITIES AND PROPERTY DUE TO EROSION ON ALL NEWLY GRADED CUT AND FILL SLOPES AS WORK PROGRESSES.

DRAINAGE

(6) CULVERT EXCAVATION FOR CONCRETE BOX OR SLAB TYPE CULVERTS OR BRIDGES WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

(7) THE CUTTING OF INLET AND OUTLET DITCHES WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER WILL BE MEASURED AND PAID FOR AS ITEM NO. 203-01 ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED).

(8) WHERE A CULVERT (PIPE, SLAB OR BOX) IS MOVED TO A NEW LOCATION OTHER THAN THAT SHOWN ON THE PLANS, INCREASING OR DECREASING THE AMOUNT OF CULVERT EXCAVATION, NO INCREASE OR DECREASE IN THE AMOUNT OF PAYMENT WILL BE MADE DUE TO SUCH CHANGE.

(9) DURING CONSTRUCTION OF DRAINAGE STRUCTURES ALL COST ASSOCIATED WITH MAINTAINING THE FLOW OF WATER AND TRAFFIC, AT THESE STRUCTURES, DURING THE PHASED CONSTRUCTION OF THIS PROJECT ARE TO BE INCLUDED IN THE UNIT PRICE OF THE DRAINAGE STRUCTURES AND TRAFFIC CONTROL ITEMS.

UTILITIES

(SEE SHEET 3A)

MISCELLANEOUS

(1) NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA

RIGHT - OF – WAY

(SEE SHEET 3A)

PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKING ON INTERMEDIATE LAYERS

(1) TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAYS WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01, PAINTED PAVEMENT MARKING (4” LINE), L.M.

FINAL PAVEMENT MARKING IF 4” ENHANCED FLATLINE THERMOPLASTIC IS USED

(2) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 4” ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY’S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-12.01, ENHANCED FLATLINE THERMO PVMT MRKNG (4IN LINE), L.M. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY’S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

PAVEMENT

PAVING

(1) THE CONTRACTOR SHALL BE REQUIRED TO PAVE IN THE DIRECTION OF TRAFFIC.

(2) THE CONTRACTOR SHALL BE REQUIRED TO COLD PLANE AND PAVE IN THE DIRECTION OF TRAFFIC.

SIGNING

(1) THE TOP OF THE SIGN FOOTINGS SHALL BE PLACED LEVEL WITH THE GROUND LINE.

(2) AFTER THE SIGN LOCATIONS HAVE BEEN STAKED, BUT PRIOR TO ORDERING ANY MATERIAL FOR THE SUPPORTS, THERE SHALL BE A FIELD INSPECTION AND APPROVAL BY THE REGIONAL CONSTRUCTION OFFICE.

(3) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS, EXCEPT THAT CUT-OUT DIRECT APPLIED COPY SHALL BE USED ON ALL FLAT SHEET SIGNS WITH A GREEN BACKGROUND, OR BROWN BACKGROUND.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

(1) ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.

(2) IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.

(3) A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.

(4) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.

(5) USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT’S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT’S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER’S APPROVAL TO USE THEM.

(6) THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT’S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT’S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF A OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT’S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT’S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE.. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER’S APPROVAL TO USE THEM.

(7) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EROSION PREVENTION AND SEDIMENT CONTROL

DISTURBED AREA

(1) AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.

(2) PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED (I.E. CLEARING AND GRUBBING INITIATED) MORE THAN 15 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS MULCHED, SEEDED WITH MULCH, OR OTHER TEMPORARY COVER IS INSTALLED.

(3) CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. EXISTING VEGETATION SHOULD BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.

(4) ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS.

(5) CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION.

SEDIMENT CONTROL

(6) EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.

(7) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.

(8) WATER PUMPED FROM WORK AREAS AND EXCAVATION MUST BE HELD IN SETTLING BASINS OR TREATED BY FILTRATION OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE INTO SURFACE WATERS. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE APPLIED IN ACCORDANCE WITH MANUFACTURER’S GUIDELINES AND FULLY DESCRIBED IN THE EPSC PLANS. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS SHALL NOT BE LOCATED CLOSER THAN 20 FEET FROM THE TOP BANK OF A STREAM. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL- VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT. DISCHARGES FROM BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. DISCHARGES MUST NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITH THE RECEIVING STREAM.

(9) IF PERMANENT OR TEMPORARY VEGETATION IS TO BE USED AS AN EPSC MEASURE, THEN THE TIMING OF PLANTING OF VEGETATION SHALL BE SHOWN IN THE SWPPP. DELAYING PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED, IF POSSIBLE.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	2C

GENERAL NOTES (CONT.)

(10) OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ACCESS (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED, AS NEEDED, TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.

(11) TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY.

STREAM/WETLAND

(12) SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EPSC MEASURES TO PROTECT WATER QUALITY MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. APPROPRIATE EPSC MEASURES MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG STREAM BANKS IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS IN ACCORDANCE WITH TDOT STANDARDS. THEY MUST BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.

(13) INSTREAM EPSC DEVICES REQUIRE THE ENVIRONMENTAL DIVISION'S PERMITS SECTION REVIEW AND MUST BE PROCESSED BY THE PERMITS SECTION TO OBTAIN TDEC, USACE, AND TVA PERMITS.

(14) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS, SHALL BE ONLY AS SHOWN ON THE PROJECT PLANS AND/OR AS SO SPECIFIED IN THE ARAP/401, SECTION 404 PERMIT(S) AND/OR TVA26(A), IF APPLICABLE. ANY ADDITIONAL PERMITS REQUIRED BY THE CONTRACTOR'S METHOD OF OPERATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN, AFTER RECEIVING THE APPROVAL OF TDOT ENVIRONMENTAL DIVISION.

(15) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING.

(16) STREAM BEDS SHALL NOT BE USED AS TRANSPORTATION ROUTES FOR CONSTRUCTION EQUIPMENT. TEMPORARY CROSSINGS MUST BE LIMITED TO ONE POINT PER STREAM AND EPSC MEASURES MUST BE USED WHERE THE STREAM BANKS ARE DISTURBED. WHERE THE STREAMBED IS NOT COMPOSED OF BEDROCK, A PAD OF CLEAN ROCK MUST BE USED AT THE CROSSING POINT AND CULVERTED TO PREVENT THE IMPOUNDMENT OF WATER FLOW. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION, WHICH CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS. OTHER MATERIALS USED FOR ALL TEMPORARY FILLS MUST BE COMPLETELY REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED AND THE AFFECTED AREAS RETURNED TO THEIR PREEXISTING ELEVATION. ALL TEMPORARY CROSSINGS MUST BE CONSTRUCTED IN ACCORDANCE WITH STD. DWG. EC-STR-25 UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ALTERNATIVELY, PLACING A TEMPORARY BRIDGE (BAILEY BRIDGE OR EQUIVALENT, TIMBERS, ETC.) FROM TOP OF BANK TO TOP OF BANK OR THE APPROPRIATE USE OF BARGES AT THE CROSSING TO AVOID DISTURBANCE OF THE STREAMBED IS AN ACCEPTABLE OPTION.

SPECIES

(17) NO ACTIVITY MAY SUBSTANTIALLY DISRUPT THE MOVEMENT OF THOSE SPECIES OF AQUATIC LIFE INDIGENOUS TO THE WATER BODY, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA. THE SWPPP SHALL BE MODIFIED TO INCLUDE EPSC MEASURES TO PREVENT NEGATIVE IMPACTS TO LEGALLY PROTECTED STATE OR FEDERAL FAUNA OR FLORA OR AS INDICATED IN THE ECOLOGICAL STUDIES OR ON THE PERMIT(S).

INSPECTION, MAINTENANCE, REPAIR

(18) EPSC CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES.

(19) INSPECTION, REPAIR, AND MAINTENANCE OF EPSC MEASURES/STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.

(20) SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND BE TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS AND DOES NOT MIGRATE INTO WATERS OF THE STATE/U.S. COST FOR THIS TREATMENT IS TO BE INCLUDED IN PRICE BID FOR ITEM NO. 209-05 SEDIMENT REMOVAL, C.Y.

(21) THE CONTRACTOR SHALL INSTALL A RAIN GAUGE EVERY LINEAR MILE AT ALL SITES WHERE CLEARING, GRUBBING, EXCAVATION, GRADING CUTTING OR FILLING IS BEING ACTIVELY PERFORMED, OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED. IF THE PROJECT LENGTH IS LESS THAN ONE LINEAR MILE, ONE RAIN GAUGE SHALL BE INSTALLED AT THE CENTER OF THE PROJECT OR AS INDICATED BY THE TDOT EPSC INSPECTOR. THE CONTRACTOR SHALL ENSURE THAT EACH GAUGE IS MAINTAINED IN GOOD WORKING CONDITION. TDOT AND/OR THE CONTRACTOR SHALL RECORD DAILY PRECIPITATION AND FORECASTED PERCENTAGE OF PRECIPITATION IN DETAILED RECORDS OF RAINFALL EVENTS INCLUDING DATES, AMOUNTS OF RAINFALL PER GAUGE, THE ESTIMATED DURATION (OR STARTING AND ENDING TIMES), AND FORECASTED PERCENTAGE OF PRECIPITATION FOR THE PROJECT. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER ON A MONTHLY BASIS. THE COST FOR THE RAIN GAUGES IS TO BE INCLUDED IN THE UNIT BID PRICES FOR OTHER ITEMS. RAIN GAUGES SHALL BE AS SPECIFIED IN THE APPROVED TDOT RAINFALL MONITORING PLAN.

(22) INSPECTION OF EPSC MEASURES SHALL BE DONE AT LEAST TWICE PER CALENDAR WEEK AT LEAST 72 HOURS APART. A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. QUALITY ASSURANCE/QUALITY CONTROL SITE ASSESSMENT OF EPSC SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION'S COMPREHENSIVE INSPECTION OFFICE GUIDELINES.

(23) OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO SURROUNDING WATERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWNSTREAM LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.

(24) UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE MORE THAN 24 HOURS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN THE TIMEFRAME, WRITTEN DOCUMENTATION MUST BE PROVIDED IN THE FIELD BOOK AND AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION.

(25) THE TDOT PROJECT SUPERVISOR (OR THEIR DESIGNEE) AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE TDOT PROJECT SUPERVISOR OR THEIR DESIGNEE WILL COMPLETE THE INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.

MATERIALS

(26) WASTE AND BORROW AREAS SHALL BE LOCATED IN NON-WETLAND AREAS AND ABOVE THE 100-YEAR, FEDERAL EMERGENCY MANAGEMENT AGENCY FLOODPLAIN. BORROW AND WASTE DISPOSAL AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY AN ARAP, 404, OR NPDES PERMIT, OBTAINED SOLELY BY THE CONTRACTOR.

SWPPP, PERMITS, PLANS, RECORDS

(27) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS.

(28) ANY DISAGREEMENT BETWEEN THE PROJECT PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE TDOT PROJECT ENGINEER. THE ENVIRONMENTAL DIVISION, ROOADWAY DESIGN DIVISION, AND HEADQUARTERS CONSTRUCTION OFFICE SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.

(29) THE FOLLOWING INFORMATION SHALL BE MAINTAINED ON OR NEAR THE SITE: DATES THAT MAJOR GRADING ACTIVITIES OCCUR, DATES WHERE CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, DATES WHEN STABILIZATION MEASURES ARE INITIATED, EPSC INSPECTION RECORDS, QUALITY ASSURANCE SITE ASSESSMENT RECORDS, PRECIPITATION RECORDS, SWPPP, PROJECT ENVIRONMENTAL PERMITS, AND A COPY OF THE PROJECT EPSC INSPECTOR'S TDEC LEVEL 1 CERTIFICATION.

(30) ALL WATER QUALITY AND STORM WATER PERMITS, INCLUDING A COPY OF THE NOC WITH NPDES PERMIT TRACKING NUMBER AND THE LOCATION OF THE SWPPP, SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE ACCESSIBLE TO THE PUBLIC. THE NAME, COMPANY NAME, EMAIL ADDRESS, TELEPHONE NUMBER AND ADDRESS OF THE PROJECT SITE OWNER, OPERATOR, OR A LOCAL CONTACT PERSON WITH A BREIF DESCRIPTION OF THE PROJECT SHALL ALSO BE POSTED. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE, THE INFORMATION SHALL BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION NEAR WHERE THE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY. THIS LOCATION SHALL BE POSTED AT THE CONSTRUCTION SITE. ALL POSTINGS SHALL BE MAINTAINED IN LEGIBLE CONDITION.

(31) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS OR MODIFICATIONS OF THE SWPPP ARE NEEDED. THE ROOADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.

(32) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY. THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED WHEN MAJOR DESIGN REVISIONS ARE REQUESTED BY CONSTRUCTION. THE ENVIRONMENTAL DIVISION MAY BE CONTACTED FOR GUIDANCE ON SPECIFIC SWPPP NEEDS. A COPY OF ANY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS SHALL BE RETAINED IN THE SWPPP.

(33) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER A CHANGE IN CHEMICAL TREATMENT METHODS IS MADE INCLUDING USE OF A DIFFERENT CHEMICAL, DIFFERENT DOSAGE OR APPLICATION RATE, OR A DIFFERENT AREA OF APPLICATION.

(34) IF A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION) THE SWPPP SHALL BE MODIFIED OR UPDATED.

(35) PROJECT INSPECTORS AND SUPERVISORS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF EPSC PLANS SHALL SUCCESSFULLY COMPLETE THE TDEC "LEVEL 1 - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY REFRESHER COURSES AS REQUIRED TO MAINTAIN CERTIFICATION. A COPY OF CERTIFICATION RECORDS FOR THE COURSES SHALL BE KEPT ON SITE AND AVAILABLE UPON REQUEST.

LITTER, DEBRIS, WASTE, PETROLEUM

(36) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS. AFTER USE, MATERIALS USED FOR EPSC WILL BE REMOVED FROM THE SITE.

(37) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.

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GENERAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	2D

BOX BRIDGE TABULATION

STATION	LOCATION	SPAN	HEIGHT	LENGTH	SKEW	DRAINAGE AREA ACRES	BOX BRIDGE BOX CLASS "A" CONC. CU. YD.	BOX BRIDGE BOX REINF. STEEL LBS.	CULVERT EXC. CU. YD.	DRAWING NO.	BACKFILLING ITEM 303-01.01 DWG. STD-10-1 TONS	FOUNDATION FILL MATERIAL CU. YD.
101+82	SR-109	2 @ 10' X 5'	7'	6'	64	719	17	3133	476	STD-17-74	13	3
TOTALS							17	3133	476		13	3

CROSS DRAIN TABULATION

STATION	RCP CLASS III 18"	24"	30"	36"	48"	SKEW	RIP-RAP 709-05.06 (TON)	END TREATMENT INLET TYPE	INLET DRAWING NO.	OUTLET TYPE	OUTLET DRAWING NO.	REMARKS
101+45.32	5					78						STUB 18" RCP THRU PROPOSED WING WALL OF CONCRETE BOX BRIDGE
TOTALS	5	0	0	0	0		0					

PAVEMENT QUANTITIES

LOCATION	PAY ITEMS 403-01 (TON)	411-02.10 (TON)	415-01.01 (TON)
STA. 100+85.49 TO STA. 102+45.33	1.0	18.0	14.0
TOTALS	1.0	18.0	14.0

REMOVAL OF SIGNS

LOCATION	DESCRIPTION	SIGN TEXT
SR-109 @ DONOHO BRANCH CULVERT	R9-9L	SIDEWALK CLOSED
SR-109 @ DONOHO BRANCH CULVERT	R9-9R	SIDEWALK CLOSED
SR-52 @ MAPLE STREET INTERSECTION	R9-11L(MOD)	SIDEWALK CLOSED AT BRIDGE CROSS HERE
@ MARKET STREET INTERSECTION	R9-11R(MOD)	SIDEWALK CLOSED AT BRIDGE CROSS HERE

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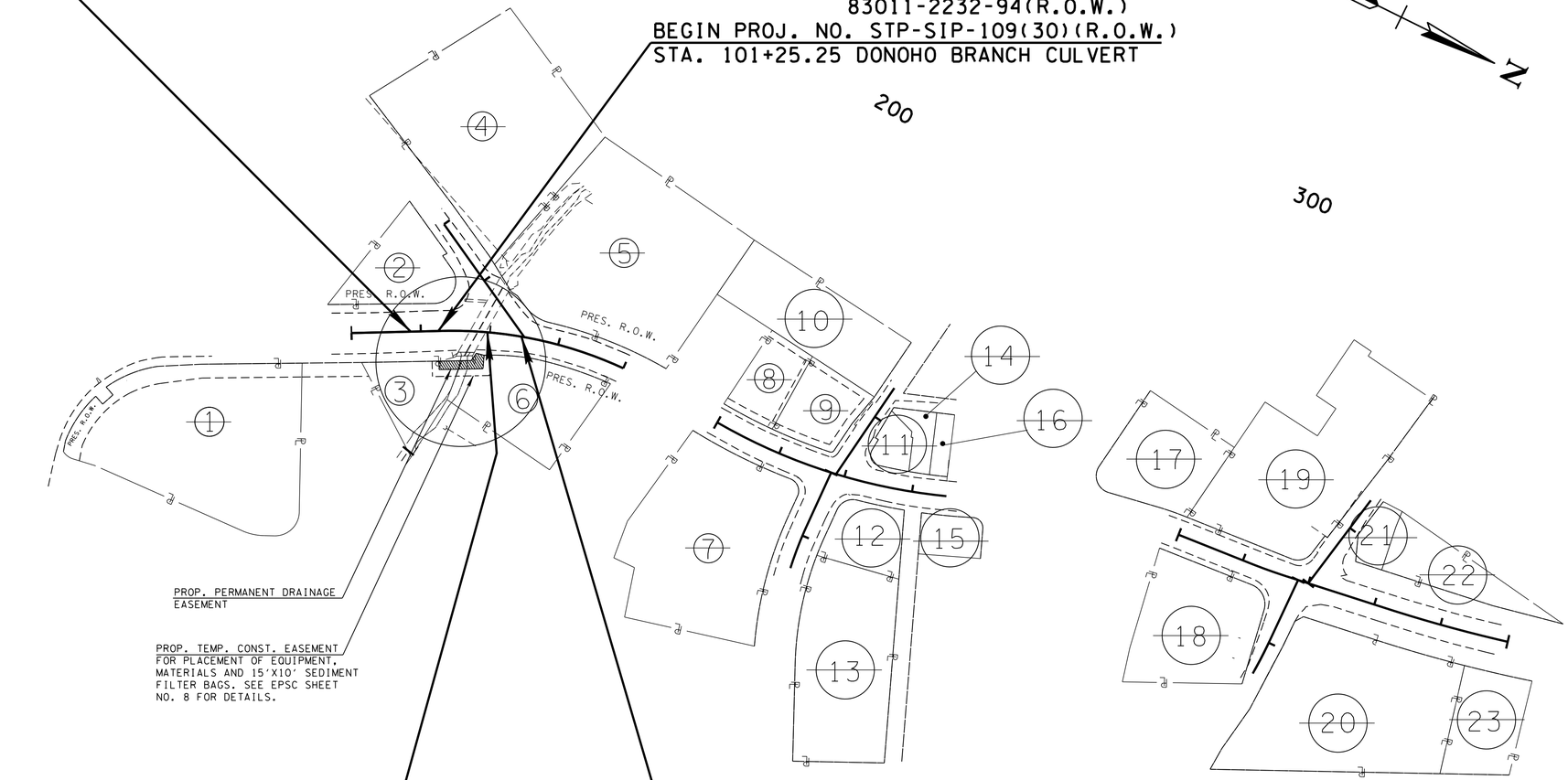
TABULATED QUANTITIES

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-109(30)	3
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	3

SEE SHEET 3A FOR R.O.W. ACQUISITION TABLE AND R.O.W. NOTES



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PROPERTY MAP

STA.100+13.73 TO STA.102+45.33

SCALE: 1"=100'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-109(30)	3A
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	3A

REV. 09-16-13: CORRECTED ROW ACQUISITION AMOUNTS ON CONSTRUCTION EASEMENTS. CORRECTED PROJECT NUMBER.

R.O.W. ACQUISITION TABLE

TRACT NO.	PROPERTY OWNERS	COUNTY RECORDS				TOTAL AREA ACRES			AREA TO BE ACQUIRED ACRES			AREA REMAINING ACRES		EASEMENT (SQUARE FEET)		
		TAX MAP NO.	PARCEL NO.	DEED DOCUMENT REFERENCE BK.	DEED DOCUMENT REFERENCE PAGE	LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERM. DRAINAGE	SLOPE	CONST.
~~1~~	~~AIMEE L. SCHORY~~	~~33I/H H~~	~~32~~	~~2348~~	~~786~~		~~1.430~~	~~1.430~~					~~1.430~~			
~~2~~	~~PORTLAND STATION, LLC~~	~~33H/I C~~	~~1~~	~~1196~~	~~519~~	~~0.347~~		~~0.347~~				~~0.347~~				
3	RODNEY WIMS AND WIFE, TAMMY WIMS	33H H	31	2580	582		0.241	0.241					0.241	367		480
~~4~~	~~CUMBERLAND ELECTRIC MEMBERSHIP CORPORATION~~	~~33I/H H~~	~~23~~	~~162~~	~~126~~	~~1.800~~		~~1.800~~				~~1.800~~				
~~5~~	~~CUMBERLAND ELECTRIC MEMBERSHIP CORPORATION~~	~~33I H~~	~~24~~	~~153~~	~~81~~	~~1.574~~		~~1.574~~				~~1.574~~				
6	DONOVAN, INC.	33H H	29	550	770		0.523	0.523					0.523	540		664
~~7~~	~~JASKA RUSSELL AND MEGAN SHEUCRAFT~~	~~33I H~~	~~26.01~~	~~2086~~	~~603~~		~~1.300~~	~~1.300~~					~~1.300~~			
~~8~~	~~JEWELL J. JONES AND WIFE, FRANCES B. JONES~~	~~33I H~~	~~1.01~~	~~426~~	~~425~~	~~0.210~~		~~0.210~~				~~0.210~~				
~~9~~	~~MARY JESSICA HUNTER AND HUSBAND, DOUGLAS HUNTER~~	~~33I H~~	~~1~~	~~3382~~	~~418~~	~~0.249~~		~~0.249~~				~~0.249~~				
~~10~~	~~FRED GOSSETT~~	~~33I H~~	~~2~~	~~NO RECORD~~	~~NO RECORD~~	~~0.591~~		~~0.591~~				~~0.591~~				
~~11~~	~~LARRY W. WIMS AND WIFE, ELLEN A. WIMS~~	~~33I G~~	~~11,12~~	~~413~~	~~40~~	~~3517 S.F.~~		~~3517 S.F.~~				~~3517 S.F.~~				
~~12~~	~~CITY OF PORTLAND~~	~~33I D~~	~~38~~	~~387~~	~~482~~		~~0.230~~	~~0.230~~					~~0.230~~			
~~13~~	~~CITY OF PORTLAND~~	~~33I D~~	~~39~~	~~1634~~	~~270~~		~~0.881~~	~~0.881~~					~~0.881~~			
~~14~~	~~JOHN ROBERTSON AND WIFE, MARIE ROBERTSON~~	~~33I G~~	~~13~~	~~NO RECORD~~	~~NO RECORD~~	~~3373 S.F.~~		~~3373 S.F.~~				~~3373 S.F.~~				
~~15~~	~~CITY OF PORTLAND~~	~~33I D~~	~~37~~	~~353~~	~~257~~		~~0.119~~	~~0.119~~					~~0.119~~			
~~16~~	~~PORTLAND ROTARY CLUB~~	~~33I G~~	~~14~~	~~348~~	~~852~~	~~2338 S.F.~~		~~2338 S.F.~~				~~2338 S.F.~~				
~~17~~	~~FIRST BAPTIST CHURCH OF PORTLAND, TENNESSEE, INC.~~	~~33I D~~	~~12~~	~~1010~~	~~416~~	~~0.473~~		~~0.473~~				~~0.473~~				
~~18~~	~~THE FARMERS BANK~~	~~33I D~~	~~3~~	~~763~~	~~136~~		~~0.658~~	~~0.658~~					~~0.658~~			
~~19~~	~~FIRST BAPTIST CHURCH OF PORTLAND, TENNESSEE, INC.~~	~~33I D~~	~~4~~	~~1010~~	~~416~~	~~1.200~~		~~1.200~~				~~1.200~~				
~~20~~	~~HAROLD LEE HALL, TRUSTEE OF THE HAROLD LEE HALL LIVING TRUST DATED MAY 5, 1997~~	~~33H/A C~~	~~20~~	~~3160~~	~~216~~		~~1.290~~	~~1.290~~					~~1.290~~			
~~21~~	~~JOHNNY RUSSELL AND JASKA RUSSELL, HUSBAND AND WIFE~~	~~33I C~~	~~21~~	~~3094~~	~~511~~	~~3788 S.F.~~		~~3788 S.F.~~				~~3788 S.F.~~				
~~22~~	~~PAUL ALLEN WEST~~	~~33I C~~	~~22~~	~~1082~~	~~581~~	~~0.293~~		~~0.293~~				~~0.293~~				
~~23~~	~~SAMUEL T. WOOD~~	~~33H/A C~~	~~19~~	~~941~~	~~401~~		~~0.339~~	~~0.339~~					~~0.339~~			

UTILITY CONTACT LIST

WATER:
CITY OF PORTLAND WATER DEPARTMENT
100 SOUTH RUSSELL STREET
PORTLAND, TN. 37148
JIMMY STEWART
JSTEWART@CITYOFPORTLANDTN.GOV
O: 615-325-6776
C: 615-289-3948

SEWER:
CITY OF PORTLAND SEWER DEPARTMENT
100 SOUTH RUSSELL STREET
PORTLAND, TN. 37148
RICKY KEEN
BLEWIS@CITYOFPORTLANDTN.GOV
O: 615-325-6776

GAS:
CITY OF PORTLAND GAS DEPARTMENT
100 SOUTH RUSSELL STREET
PORTLAND, TN. 37148
RICKY BLACKBURN
RBLACKBURN@CITYOFPORTLANDTN.GOV
O: 615-325-6776
C: 615-323-7016

POWER:
CUMBERLAND ELECTRIC MEMBERSHIP CORPORATION
1940 MADISON EXTENTION
CLARKSVILLE, TN. 37043
MARK COOK
MCOOK@CEMC.ORG
O: 931-645-2481 X1137
C: 931-624-9449

TELEPHONE:
AT&T
333 COMMERCE STREET, RM 23C142
NASHVILLE, TN 37201
KIM BEAN
KB1078@ATT.COM
O: 615-214-7318

FIBER OPTICS:
AT&T
360 GEES MILL BUSINESS PARKWAY
CONYERS, GA 30013
SCOTT LOGEMAN
SL1213@ATT.COM
O:770-335-8255

CABLE:
COMCAST CABLE
660 MAINSTREAM DRIVE
NASHVILLE, TN. 37228
MICKEY BABCOCK
MICKEY_BABCOCK@CABLE.COMCAST.COM
O: 615-244-7462
C: 615-405-9884

SEE SHEET 3 FOR PROPERTY MAP

RIGHT - OF - WAY NOTES

(1) IT IS INTENDED THAT ALL BUILDINGS AND/OR PORTIONS OF BUILDINGS THAT ARE WITHIN THE PROPOSED RIGHT-OF-WAY AND/OR EASEMENT LINES FOR THE PROJECT BE REMOVED THERE FROM IN THE PROCESS OF RIGHT-OF-WAY ACQUISITION. IF ANY SUCH BUILDINGS OR IMPROVEMENTS ARE NOT REMOVED IN THE COURSE OF RIGHT-OF-WAY ACQUISITION, THE CIVIL ENGINEERING MANAGER 2, DESIGN DIVISION AND THE CIVIL ENGINEERING MANAGER 1, REGIONAL DESIGN OFFICE, ARE TO BE NOTIFIED IN SUFFICIENT TIME TO PERMIT HAVING SUCH REMOVALS DESIGNATED AS A PART OF THE CONSTRUCTION CONTRACT.

(2) ALL RAMPS MUST CONFORM TO THE DEPARTMENT'S "POLICY ON FINANCING CONSTRUCTION OF PUBLIC ROAD INTERSECTIONS AND DRIVEWAYS ON HIGHWAY RESURFACING, RECONSTRUCTION AND CONSTRUCTION PROJECTS ON NEW LOCATIONS", THE MANUAL ON RULES AND REGULATIONS FOR CONSTRUCTING DRIVEWAYS ON STATE HIGHWAY RIGHT-OF-WAY, STANDARD DRAWING RP-R-1, AND OTHER ACCEPTED DESIGN AND SAFETY STANDARDS.

(3) EXISTING PAVED DRIVEWAY PER TRACT REMAINDER WILL BE REPLACED IN KIND TO A TOUCHDOWN POINT.

(4) WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY EXCEEDS 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED TO A TOUCHDOWN POINT OR UNTIL THE GRADE IS LESS THAN 7 PERCENT.

(5) WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY IS LESS THAN 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED A SHOULDER WIDTH FROM THE EDGE OF PAVEMENT AND THE REMAINDER OF THAT DRIVEWAY REPLACED IN KIND TO A TOUCHDOWN POINT.

(6) ANY NECESSARY PAVING OF DRIVEWAYS WILL BE DONE DURING PAVING OPERATIONS ON THE MAIN ROADWAY.

(7) TRACT REMAINDERS NOT HAVING AN EXISTING DRIVEWAY WILL BE PROVIDED ONE 50-FOOT OPENING IN THE ACCESS CONTROL FENCE AND A DRIVEWAY WILL BE CONSTRUCTED UNLESS ACCESS IS PROVIDED FROM AN INTERSECTING ROAD OR BASED ON PHYSICAL CONDITIONS AND/OR CONFLICTS WITH OTHER DESIGN CONSIDERATIONS WHICH PREVENT AN ACCESS OPENING. PAVING OF THESE NEW DRIVEWAYS WILL BE IN ACCORDANCE TO THE 7 PERCENT CRITERIA PREVIOUSLY MENTIONED FOR EXISTING DRIVEWAYS.

(8) NEW DRIVEWAYS PROVIDED IN THE PLANS WILL BE PAVED BASED ON THE 7 PERCENT CRITERIA. THOSE 7 PERCENT OR STEEPER IN GRADE WILL BE PAVED AND THOSE FLATTER THAN 7 PERCENT WILL BE COVERED WITH BASE STONE.

(9) ON PROJECTS WITHOUT CURB AND GUTTER THAT ARE ON STATE ROUTES, IT WILL BE THE RESPONSIBILITY OF THE OWNER TO SECURE A PERMIT AND TO CONSTRUCT ADDITIONAL DRIVEWAYS AND FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS.

(10) ON PROJECTS WITH CURB AND GUTTER THAT ARE ON STATE ROUTES, IT WILL BE THE RESPONSIBILITY OF THE OWNER TO SECURE A PERMIT. AFTER THE PERMIT HAS BEEN GRANTED, THE DEPARTMENT WILL CONSTRUCT THE DRIVEWAY OR FIELD ENTRANCE THROUGH THE CURB AND SIDEWALK, PROVIDED THE CURB AND SIDEWALK HAVE NOT BEEN CONSTRUCTED. IT WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER TO CONSTRUCT THE DRIVEWAY OR FIELD ENTRANCE FROM BACK OF SIDEWALK TO TOUCHDOWN POINT FOR ANY ADDITIONAL DRIVEWAYS OR FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS.

(11) ON NON-STATE ROUTES, ADDITIONAL DRIVEWAYS AND FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS SHALL REQUIRE A PERMIT ONLY IF THE LOCAL AGENCY SPECIFIES THE NEED FOR THAT PERMIT.

UTILITY NOTES

(1) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.

(2) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR IT'S REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.

(3) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

(4) PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.

(5) THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106.

DISCLAIMER

THIS SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENCES AT THE SITE, PUBLIC RECORDS AND/OR MAPS PREPARED BY OTHERS. THEREFORE, RELIANCE UPON THE TYPE, SIZE AND LOCATION OF UTILITIES SHOWN SHOULD BE DONE SO WITH THIS CIRCUMSTANCE CONSIDERED. DETAILED VERIFICATION OF EXISTANCE, LOCATION, AND DEPTH SHOULD ALSO BE MADE PRIOR TO ANY DECISION RELATIVE THERETO IS MADE. AVALABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. IN TENNESSEE, IT IS A REQUIREMENT, PER "THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT", THAT WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS, NO LESS THAN (3) THREE OR NO MORE THAN (10) TEN WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE AND ALSO TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. TENNESSEE ONE CALL 1-800-351-1111.

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY ACQUISITION TABLE

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

CONTROL POINTS						
POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S1	817106.1260	1817402.6274	803.76	OffChain	OffChain	IRON PIN
S2	817628.3761	1817048.7736	800.42	102+76.65	-29.87	IRON PIN
S3	818021.9856	1817100.5549	803.635	201+06.51	28.94	IRON PIN
S4	818734.2445	1816876.6549	802.41	301+56.96	-31.77	IRON PIN

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-109(30)	4
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	4

REV. 10-24-13: ADDED 30' BUS. ENT. RT. STA. 101+05.77.

REV. 04-03-14: ADDED 30' BUS. ENT. RT. STA. 102+22.41.

REV. 04-16-14: ADDED NOTE TO PLANS NOT TO DISTURB THE SIGN IN CONSTRUCTION EASEMENT ON TRACT 3.

83011-2232-94(R.O.W.)
BEGIN PROJ. NO. STP-SIP-109(30)(R.O.W.)
STA. 101+25.25 DONOHO BRANCH CULVERT
N 817494.3394
E 1817131.7125

83011-3232-94(CONST.)
BEGIN PROJ. NO. PHSIP/STP-SIP-NH-109(30)(CONST.)
STA. 100+85.49 DONOHO BRANCH CULVERT
N 817459.1615
E 1817150.2456

SR109F2 STA. 100+00.00
N 817383.4070
E 1817189.8662

JACKSON STA. 8+00.00
N 817433.4974
E 1816989.8725

SR109F2 STA. 102+50.00 = JACKSON STA. 10+00.00
N 817609.6188
E 1817084.6420

SR109F2 STA. 104+00.00
N 817757.4355
E 1817061.6401

83011-3232-94(CONST.)
END PROJ. NO. PHSIP/STP-SIP-NH-109(30)(CONST.)
STA. 102+45.33 DONOHO BRANCH CULVERT
N 817605.1383
E 1817085.9588

83011-2232-94(R.O.W.)
END PROJ. NO. STP-SIP-109(30)(R.O.W.)
STA. 101+94.09 DONOHO BRANCH CULVERT
N 817556.7371
E 1817102.7275

SR-109 N 27° 39' 14" W

JACKSON RD. N 28° 17' 04" E

SR-109 N 2° 00' 4

PRESENT R.O.W.

PORTLAND STATION, LLC

METAL SHED

1-S-METAL BP

WOODEN

ASP. DR.

CONCRETE

MONITORING WELL (TYP.)

FUEL PUMP (TYP.)

CONC. PAD W/UG FUEL TANKS

ELEC. SIGN

GRAVEL

CONC.

GRASS

X-TIE

LAND-SCAPED AREA

AIR COM-PRESSOR PAY BOX FOR AIR

ELEC. OUT

3.5'X3.5' BOX

ASP. PARKING

CONC. RW

LANDSCAPED AREA

CONC.DR.

S.W.

TOP-800.77
BOTT-796.64
INV-796.67

TOP-800.54
BOTT.-796.12
INV'S'-796.18
INV-'W'-796.21
INV'N'-796.09

NOTE: ACCORDING TO OWNER UG FUEL TANKS ARE STILL PRESENT ON THIS TRACT. THE LOCATION IS UNKNOWN.

③ RODNEY WIMS AND WIFE, TAMMY WIMS

NOTE: AT TIME OF SURVEY, BOTTOM OF 4"SA SEWER SERVICE LINE RUNS ABOUT 2.7' ABOVE CL OF CREEK BED

NOTE: AT TIME OF SURVEY, BOTTOM OF 6"SA SEWER LINE RUNS ABOUT 5' ABOVE CL OF CREEK BED

D1 TOP-800.33
BOTT-795.44
INV'S'-795.52
INV'E'-795.43

D2 INV-795.61
18"RCP

D3 TOP-799.35
BOTT-793.70
INV-793.67
OUT AT 5'X12' BOX APPROX. 793.0

NOTE TO CONTRACTOR: DO NOT DISTURB THE SIGN IN THE CONSTRUCTION EASEMENT.

LINK & BARBED WIRE

APPROX. LOCATION

P/T/C

GATE

LOOP DETECTOR FOR GATE

GATE CONTROL BOX

DOUBLE 10'X5' BOX INV-792.85 (FILLED W/ ± 1' SEDIMENT)

ASP. PARKING

MOUNTABLE

RIP-RAP

DONOHO BRANCH

STR-1

12" CPP INV-795.15 ORIGIN UNK.

CONC. RW

NOTE: RICKY BLACKBURN W/CITY OF PORTLAND UTILITIES PORTLAND GAS DEPT. IS UNABLE TO FIND ANY RECORD OF GAS LINE EASEMENTS FOR THIS INTERSECTION PROJECT.

36" CPP

INV-794.01

FLOW

CHAIN LINK & BARBED WIRE

INV-795.35 18" RCP ORIGIN UNK.

ASPHALT

GR.

GATE

ASP. PARKING

HC

FLAG

TOP-799.25
BOTT-796.60
INV'N'-796.76
INV'S'-796.45
(18"RCP. DESTINATION UNK.)

AREA DRAIN TOP-799.39 INV-798.01 6" CLAY. DESTINATION UNK.

ELEC. SIGN

GRASS

S.W.

CURB

CONC.DR.

ORIGIN UNK.

EXISTING DOUBLE BOX CULVERT

ABANDONED 1" GAS LINE

CP-S2

EIP

PROPOSED EXTENSION 10'X5'X5.61'

TEL. BOX

OLD FILLER CAP (TYP.)

POLE MOUNTED TEL. BOX

LANDSCAPED AREA

GRASS

GR.DR.

MOUNTABLE

ASP.DR.

ELEC. SIGN

ELEC. OUTLET

GRASS & WEEDS

WHEEL STOP (TYP.)

1-S-METAL GOLD & DIAMOND OUTLET

METAL CANOPY

CLEAN OUT

BILLBOARD
*830396
*830397

STR-1

WOOD RW

C.M.

TEL. BOXES ON CONC. PAD

CONC. PAD

TOP-799.22
INV. UNK.
FULL OF DEBRIS

PRESENT R.O.W.

GRAVEL

W.M.

S.W. W/CANOPY

1-S-METAL CAPTAIN VIDEO AND TANNING

⑥ DONOVAN, INC.

4"SA

P/C

CONC.EW

DOUBLE 8'X4' BOX CULVERT

DOUBLE 10'X5' BOX INV-793.29 (FILLED W/ ± 1' SEDIMENT)

INV-794.1 APPROX. FULL OF DEBRIS

30"RCP

ORIGIN NOT LOCATED

PC 101+31.92

CURVE SR109F2-1
PI 10+265.70
N 817,618.7390
E 1,817,066.5122
Δ 25° 39' 01" (RT)
D 9° 45' 00"
R 587.65
L 263.08
T 133.78
SE 0.024 FT/FT
DESIGN SPEED 30 MPH
TRANS. LENGTH 145

PT 103+95.00

UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.100+13.73 TO STA.102+45.33

SCALE: 1"=20'

8-JUN-2014 09:58
\\JJ03WF01.tdot.state.tn.us\03Shared\SURVEY\DESIGN\PIN 114367.01 Sumner Co SR-109 (Donoho Branch)\004_PresentLayout.sht

TENNESSEE D.O.T.
DESIGN DIVISION

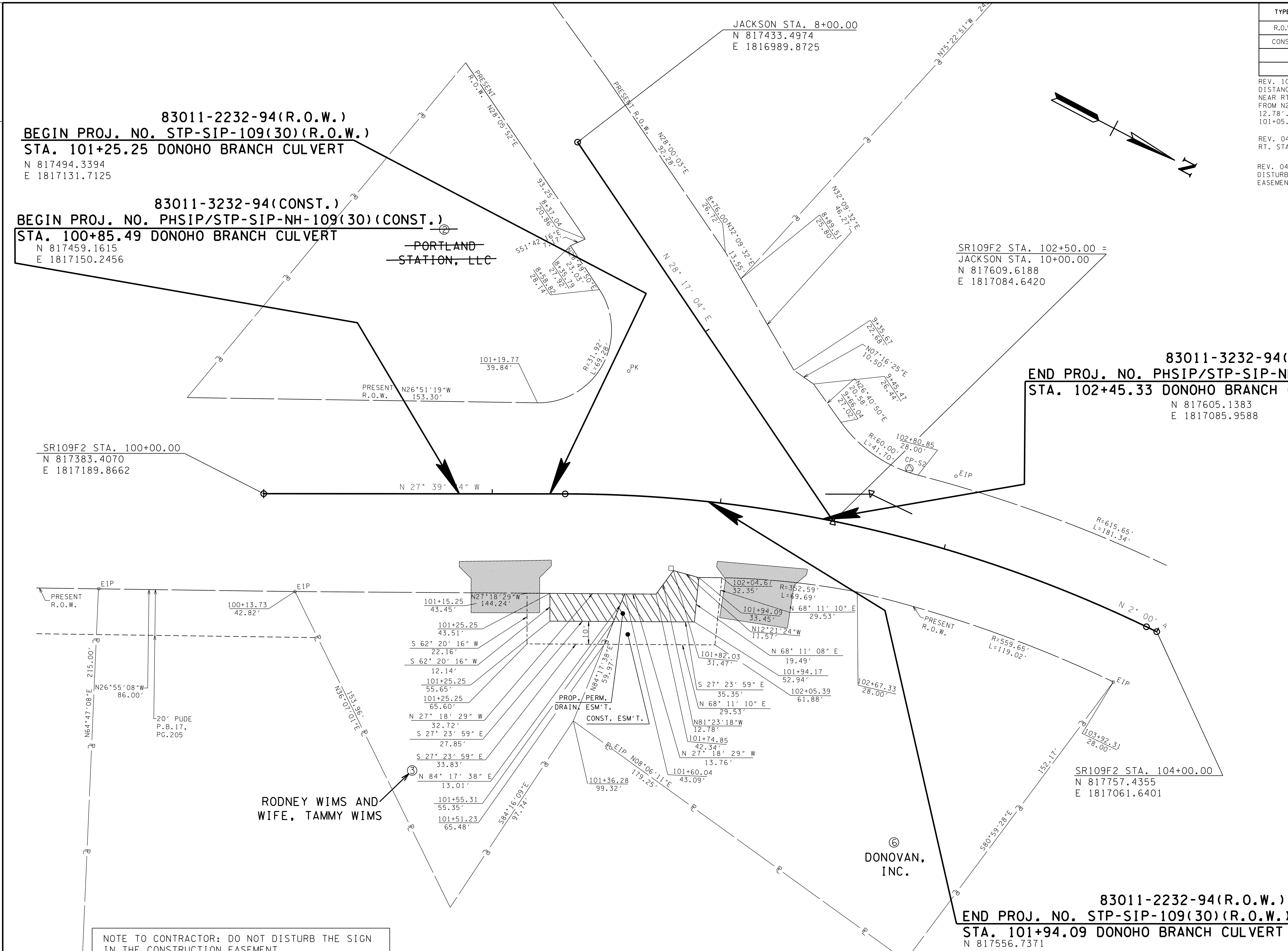
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-109(30)	4A
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	4A

REV. 10-24-13: CORRECTED BEARING AND DISTANCE FOR PRESENT RIGHT-OF-WAY NEAR RT. STA.101+77.92 TRACT NO. 6 FROM N27°18'29"W, 13.76' TO N81°23'18"W, 12.78'. ADDED 30' BUS. ENT. AT RT. STA. 101+05.77.

REV. 04-03-14: ADDED 30' BUS. ENT. AT RT. STA. 102+22.41.

REV. 04-16-14: ADDED NOTE TO PLANS NOT TO DISTURB THE SIGN IN CONSTRUCTION EASEMENT ON TRACT 3.



NOTE TO CONTRACTOR: DO NOT DISTURB THE SIGN IN THE CONSTRUCTION EASEMENT.

8-JUN-2014 09:58

UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

R.O.W. DETAILS

STA.100+13.73 TO STA.102+45.33

SCALE: 1"=20'

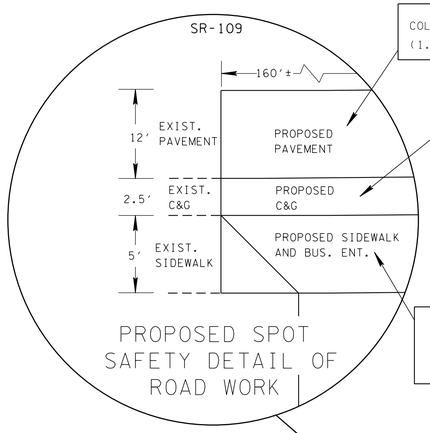
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-109(30)	4B
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	4B

REV. 10-24-13: REMOVED PROPOSED GUARDRAIL, REMOVED GUARDRAIL TEXT AND NOTES. ADDED SPECIAL ENVIRONMENTAL NOTES. ADDED 30' BUS. ENT. AT RT. STA. 101+05.77. UPDATED PROPOSED SPOT SAFETY DETAIL AND NOTES. MODIFIED CONSTRUCTION LIMITS.

REV. 04-03-14: ADDED 30' BUS. ENT. AT RT. STA. 102+22.41.

REV. 04-16-14: ADDED NOTE TO PLANS NOT TO DISTURB THE SIGN IN CONSTRUCTION EASEMENT ON TRACT 3.



COLD PLAN AND RESURFACE A 12' WIDE BY 160'± LENGHT SECTION OF ASPHALT PAVEMENT (1.25" DEPTH BELOW EXISTING PAVEMENT GRADE AND REPLACE WITH 1.25" "D" MIX.)

REMOVE AND REPLACE 160'± OF 6" COMBINED C&G (TYPE 6-30) MATCH EXISTING. ADJUST EXISTING CATCH BASIN TO MATCH GUTTER GRADE AND EXTEND DRAINAGE OUTLET PIPE AS NECESSARY TO MATCH NEW CULVERT EXTENSION IMPROVEMENT

REMOVE AND REPLACE 113'± OF 5' SIDEWALK (EXCLUDING THE CULVERT AREA) MATCH EXISTING SIDEWALK

JACKSON STA. 8+00.00
N 817433.4974
E 1816989.8725

DONOHO BRANCH

83011-3232-94(CONST.)
BEGIN PROJ. NO. PHSIP/STP-SIP-NH-109(30)(CONST.)
STA. 100+85.49 DONOHO BRANCH CULVERT

83011-2232-94(R.O.W.)
BEGIN PROJ. NO. STP-SIP-109(30)(R.O.W.)
STA. 101+25.25 DONOHO BRANCH CULVERT

SR109F2 STA. 102+50.00 =
JACKSON STA. 10+00.00
N 817609.6188
E 1817084.6420

JACKSON RD.
N 28° 17' 04" E
FLOW
N
CONC.DR.
S.W.
C&G
EXISTING 18"X 5'± TO BE EXTENDED THUR PROPOSED WINGWALL
EXISTING C.B. TO BE ADJUSTED
EXISTING DOUBLE 10'X5'X112.82' BOX CULVERT
2 STA. 100+00.00
83.4070
189.8662
SR-109
N 27° 39' 44" W
160'±
SIGN 1
SIGN 2
BEGIN CONSTRUCTION
STA. 100+85.49±
MATCH EXIST.
CLASS "B" RIP RAP
PROPOSED EXTENSION
RCP 18" X 5'± STUB
THROUGH WINGWALL
LIMIT OF CONST.
0+50.00
STA. 101+05.77
30' BUS. ENT.
STR-1
PROPOSED BOX BRIDGE
EXTENSION 10'X 5'X 5.61'
STA. 102+22.41
30' BUS. ENT.
END CONSTRUCTION
STA. 102+45.33
MATCH EXIST.
LIMIT OF CONST.
0+50.00
SR109F2 STA. 104+00.00
N 817757.4355
E 1817061.6401
CURB
GRAVEL
CONC.
N 2° 00' 43" W

NOTE TO CONTRACTOR: DO NOT DISTURB THE SIGN IN THE CONSTRUCTION EASEMENT.

SIGNS

1	2
OM3-R	OM3-L

REMOVE THE EXISTING BRIDGE RAILS FOR DONOHO BRANCH CULVERT.
EXTEND THE EXISTING CULVERT TO ACCOMMODATE A 5' SIDEWALK ACROSS THE DONOHO BRANCH ALONG THE EAST SIDE OF SR-109 (NORTH BROADWAY) AS SHOWN. RELOCATE UTILITIES INCLUDING THE WOODEN UTILITY POLE ON THE NORTH SIDE OF THE DONOHO BRANCH CULVERT.
ADD BRIDGE RAILING CONCRETE PARAPET WITH STRUCTURAL TUBING.

SPECIAL ENVIRONMENTAL NOTES

UNDERGROUND STORAGE TANKS (UST'S) WERE ABANDONED IN PLACE ON TRACT 3 DUE TO TELEPHONE AND GAS UTILITY LINES THAT WERE ON TOP OF THE UST'S. THE ABANDONED UST'S ARE MOST LIKELY BURIED AT A DEPTH OF BETWEEN 2 AND 4 FEET BELOW GROUND SURFACE (BGS).

CONTAMINATED SOIL IS LIKELY TO BE ENCOUNTERED THROUGHOUT THE PROJECT. ANY SOIL THAT IS DISCOLORED OR EXHIBITS A STRONG ODOR SHOULD BE STOCKPILED ON 3-MIL PLASTIC AND COVERED WITH PLASTIC UNTIL CHARACTERIZED. TDOT ENVIRONMENTAL DIVISION WILL BE RESPONSIBLE FOR COORDINATING THE SAMPLING AND DISPOSITION OF THE EXCAVATED MATERIAL. NOTIFY THE TDOT HAZARDOUS MATERIALS MANAGER AT 615-532-8684 AT LEAST TWO BUSINESS DAYS PRIOR TO BEGINNING EXCAVATION.

GROUNDWATER IS EXPECTED TO BE SHALLOW (LESS THAN 5 FT. BGS) AND MAY BE CONTAMINATED. IF GROUNDWATER IS REMOVED IT SHOULD BE CHARACTERIZED AND DISPOSED OF PROPERLY.

CONCRETE AND PVC MAY BE ENCOUNTERED IN THE VICINITY OF THE FORMER MONITORING WELLS AND REMEDIATION SYSTEM WELLS THAT WERE ABANDONED IN PLACE. THESE MAY EXTEND DOWN TO DEPTHS OF 10 TO 20 FEET BGS.

IT IS RECOMMENDED THAT ALL PERSONNEL USE ENGINEERED CONTROLS (RUBBER BOOTS, GLOVES) AND GOOD HYGIENIC PRACTICES IF THEY MUST COME INTO CONTACT WITH THE SOIL. CONTRACTORS SHOULD FOLLOW THEIR COMPANY HEALTH AND SAFETY PLAN IF CONTACTING POTENTIALLY CONTAMINATED SOIL.

83011-3232-94(CONST.)
END PROJ. NO. PHSIP/STP-SIP-NH-109(30)(CONST.)
STA. 102+45.33 DONOHO BRANCH CULVERT

83011-2232-94(R.O.W.)
END PROJ. NO. STP-SIP-109(30)(R.O.W.)
STA. 101+94.09 DONOHO BRANCH CULVERT

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DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA. 100+13.73 TO STA. 102+45.33

SCALE: 1"=20'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-109(30)	4C
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	4C

DRAINAGE/ HYDRAULIC DATA FOR BRIDGE

STATION 101+82.63 STREAM NAME DONOHO BRANCH

STREAM BED LINING: MUD

DIRECTION OF FLOW LEFT

DRAINAGE AREA 719± AC. ; (X) FLAT ( ) ROLLING ( ) HILLY ( ) MTNS.

PRESENT STRUCTURE: SPAN 113.34' HEIGHT 5' STRUCTURE DOUBLE 10' X 5' BOX

BEGIN STATION-OFFSET 101+70.11 END STATION-OFFSET 101+95.14

LOW BEAM ELEV. 798.32' LOCATION. NE CORNER

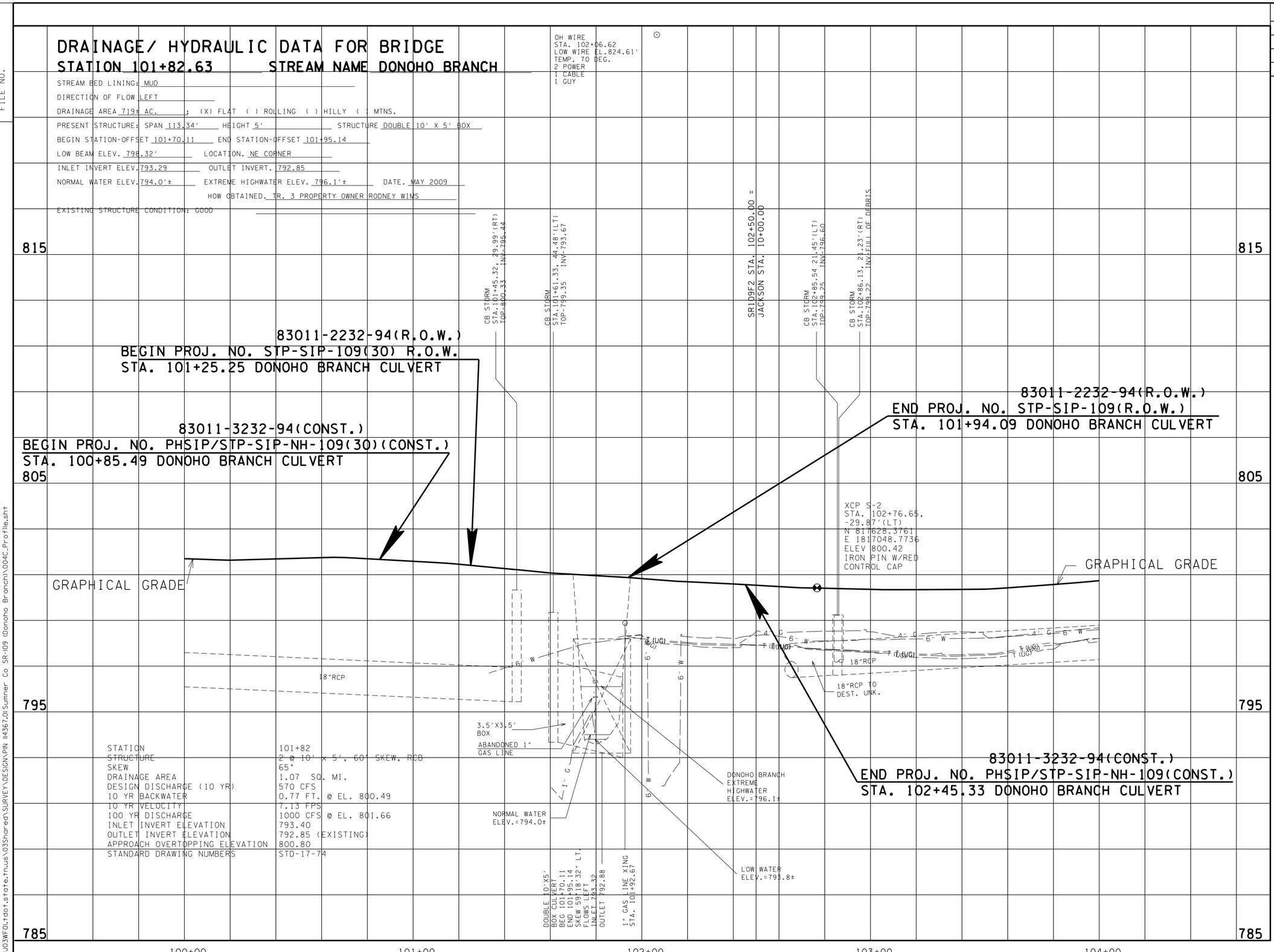
INLET INVERT ELEV. 793.29 OUTLET INVERT. 792.85

NORMAL WATER ELEV. 794.0'± EXTREME HIGHWATER ELEV. 796.1'± DATE. MAY 2009

HOW OBTAINED. TR. 3 PROPERTY OWNER RODNEY WIMS

EXISTING STRUCTURE CONDITION: GOOD

OH WIRE
STA. 102+06.62
LOW WIRE EL.824.61'
TEMP. 70 DEG.
2 POWER
1 CABLE
1 GUY



STATION	101+82
STRUCTURE	2 @ 10' x 5', 60° SKEW, RCB
SKEW	65°
DRAINAGE AREA	1.07 SQ. MI.
DESIGN DISCHARGE (10 YR)	570 CFS
10 YR BACKWATER	0.77 FT. @ EL. 800.49
10 YR VELOCITY	7.13 FPS
100 YR DISCHARGE	1000 CFS @ EL. 801.66
INLET INVERT ELEVATION	793.40
OUTLET INVERT ELEVATION	792.85 (EXISTING)
APPROACH OVERTOPPING ELEVATION	800.80
STANDARD DRAWING NUMBERS	STD-17-74

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PROFILE

STA.100+13.73 TO STA.102+45.33
SCALE: 1"= 20' HORIZ.
1"= 2' VERT.

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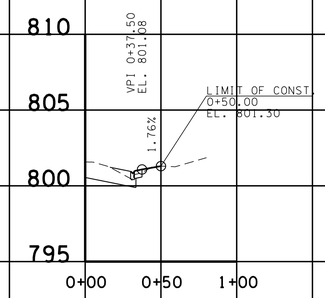
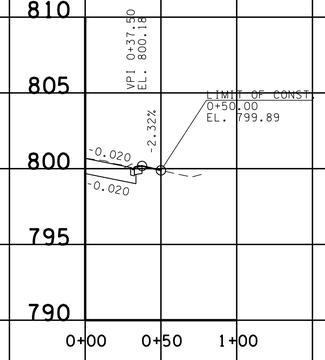


BUS. ENT. RT. 101+05.77
TRACT NO. 3



BUS. ENT. RT. 102+22.41
TRACT NO. 6

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-109(30)	5
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	5

REV. 10-24-13: ADDED THIS SHEET TO PLANS.
REV. 04-03-14: ADDED 30' BUS. ENT. RT. STA. 102+22.41

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PROFILES OF BUS. ENT.

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

DRAINAGE/ HYDRAULIC DATA FOR BRIDGE

STATION 101+82.63 STREAM NAME DONOHO BRANCH

STREAM BED LINING: MUD

DIRECTION OF FLOW LEFT

DRAINAGE AREA 719± AC. ; (X) FLAT ( ) ROLLING ( ) HILLY ( ) MTNS.

PRESENT STRUCTURE: SPAN 113.34' HEIGHT 5' STRUCTURE DOUBLE 10' X 5' BOX SUPERSTRUCTURE

BEGIN STATION-OFFSET 101+70.11 END STATION-OFFSET 101+95.14

LOW BEAM ELEV. 798.32' LOCATION. NE CORNER

INLET INVERT ELEV. 793.29 OUTLET INVERT. 792.85

NORMAL WATER ELEV. 794.0'± EXTREME HIGHWATER ELEV. 796.1'± DATE. MAY 2009

HOW OBTAINED. TR. 3 PROPERTY OWNER RODNEY WIMS

BACKWATER FROM WHAT STREAM (IF APPLICABLE):

EXISTING STRUCTURE CONDITION: GOOD

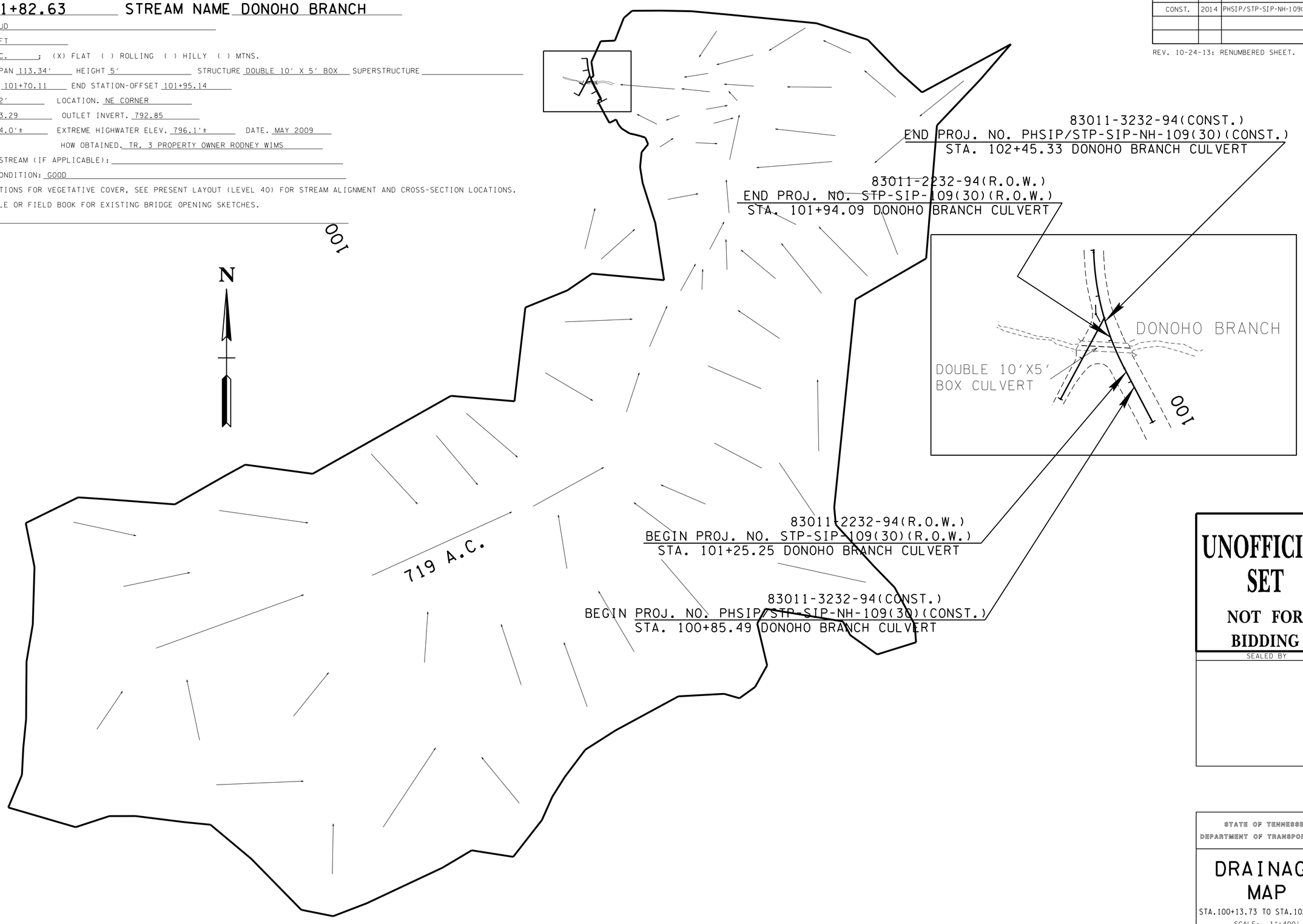
SEE STREAM CROSS-SECTIONS FOR VEGETATIVE COVER, SEE PRESENT LAYOUT (LEVEL 40) FOR STREAM ALIGNMENT AND CROSS-SECTION LOCATIONS.

SEE CENTERLINE PROFILE OR FIELD BOOK FOR EXISTING BRIDGE OPENING SKETCHES.

REMARKS:

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2012	STP-SIP-109(30)	6
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	6

REV. 10-24-13: RENUMBERED SHEET.



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DRAINAGE MAP

STA.100+13.73 TO STA.102+45.33

SCALE: 1"=400'

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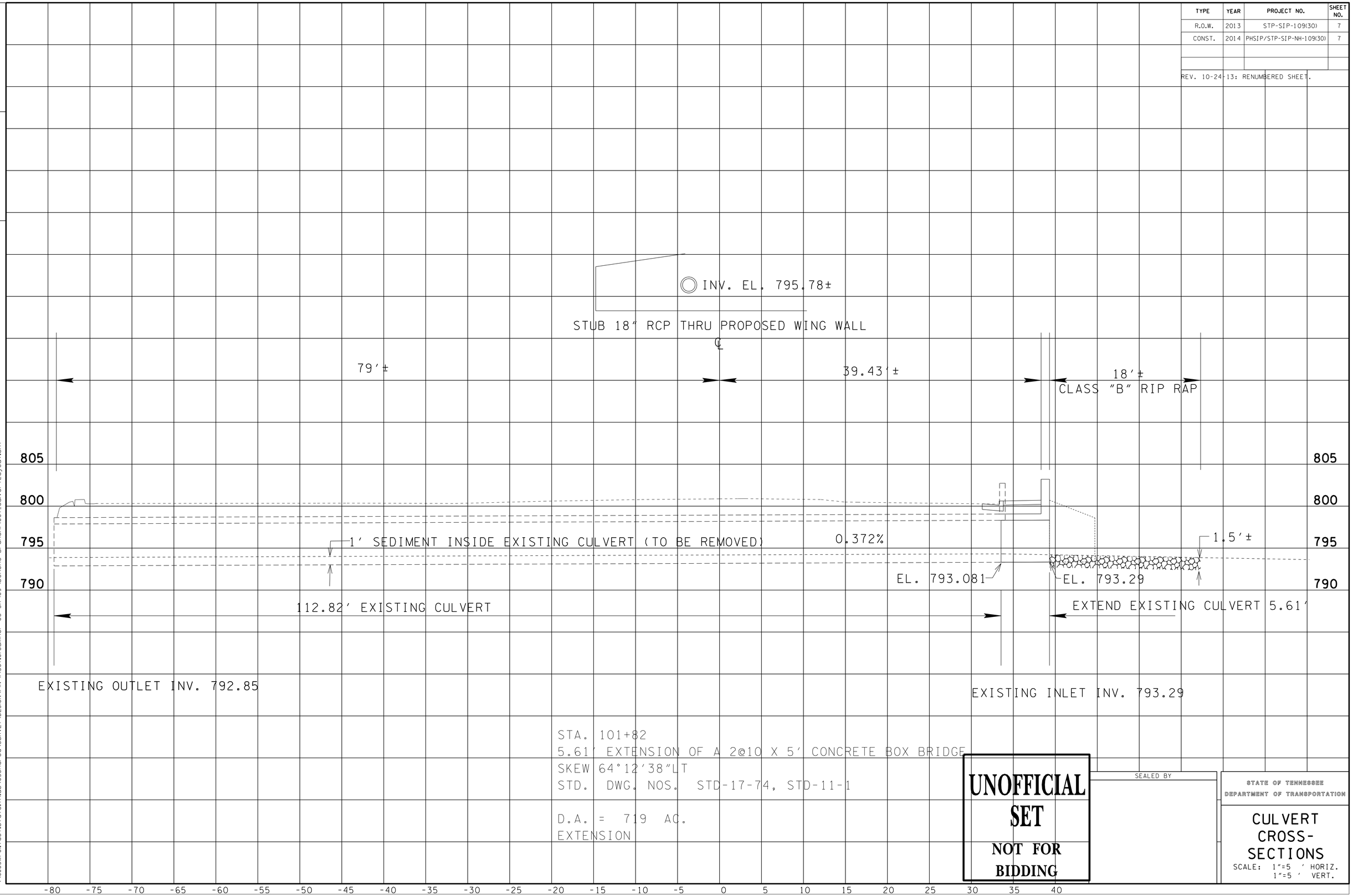
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-109(30)	7
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	7

REV. 10-24-13: RENUMBERED SHEET.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.



STA. 101+82
5.61' EXTENSION OF A 2@10 X 5' CONCRETE BOX BRIDGE
SKEW 64°12'38"LT
STD. DWG. NOS. STD-17-74, STD-11-1

D.A. = 719 AC.
EXTENSION

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CULVERT CROSS-SECTIONS

SCALE: 1"=5 ' HORIZ.
1"=5 ' VERT.

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TENNESSEE D.O.T. | DESIGN DIVISION | FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-109(30)	8
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	8

REV. 10-24-13: RENUMBERED SHEET.

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

STREAM/WETLAND

(1) ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G., FOR PIER FOOTING, RIP-RAP PLACEMENT, MULTI-BARREL CULVERT/BRIDGE CONSTRUCTION, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS, EC-STR-31 AND TEMPORARY DIVERSION CULVERTS, EC-STR-32 FOR SINGLE BARREL CULVERT CONSTRUCTION.

NPDES

(2) NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF THEIR OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE BASIC EPSC DEVICES ON THE EPSC PLAN CONTAINED IN THE APPROVED SWPPP.

(3) THE EPSC MEASURES AND/OR PLAN SHALL BE MODIFIED AS NECESSARY SO THAT THEY ARE EFFECTIVE AT ALL TIMES THROUGHOUT THE COURSE OF THE PROJECT.

(4) THE ACCEPTED EPSC PLAN SHALL REQUIRE THAT EPSC MEASURES BE IN PLACE BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES, INCLUDING WITHOUT LIMITATION AS FOLLOWS:

A. INITIAL CLEARING AND GRUBBING SHALL BE LIMITED TO THAT NECESSARY FOR THE INSTALLATION OF APPLICABLE EPSC MEASURES IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

B. NO OTHER CLEARING AND GRUBBING OPERATIONS SHALL BE STARTED BEFORE APPLICABLE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

C. NO CULVERT OR BRIDGE CONSTRUCTION SHALL BE STARTED BEFORE APPLICABLE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

D. NO GRADING, EXCAVATION, CUTTING, FILLING, OR OTHER EARTHWORK SHALL BE STARTED BEFORE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

(5) PERMANENT EPSC MEASURES SHALL BE INITIATED WITHIN 15 CALENDAR DAYS AFTER FINAL GRADING OF ANY SEQUENCE OR PHASE. TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED WITHIN 15 CALENDAR DAYS AFTER FINAL GRADING OR WHEN CONSTRUCTION ACTIVITIES ON A PORTION OF THE SITE ARE TEMPORARILY CEASED AND EARTH DISTURBING ACTIVITIES WILL NOT RESUME UNTIL AFTER 15 CALENDAR DAYS. PERMANENT STABILIZATION WITH PERENNIAL VEGETATION OR OTHER PERMANENTLY STABLE NON-ERODING SURFACE SHALL REPLACE ANY TEMPORARY MEASURES AS SOON AS PRACTICABLE. UNPACKED GRAVEL CONTAINING FINES (SILT AND CLAY SIZED PARTICLES) OR CRUSHER RUNS WILL NOT BE CONSIDERED A NON-ERODIBLE SURFACE.

EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
(6)	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	14
	209-05	SEDIMENT REMOVAL	C.Y.	85
(1)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	144
	209-09.01	SANDBAGS	BAG	100
	209-09.04	SEDIMENT FILTER BAG(15' X 10')	EACH	2
(5)	209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	59
	209-40.33	CATCH BASIN PROTECTION (TYPE D)	EACH	1
(3)(4)	209-65.04	TEMPORARY IN STREAM DIVERSION	L.F.	50
(5)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	10
(6)(7)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	100
(2)(7)	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	199
(3)	740-11.01	TEMPORARY SEDIMENT TUBE 8IN	L.F.	50
	801-01	SEEDING (WITH MULCH)	UNIT	1
	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	1
	801-03	WATER (SEEDING & SODDING)	M.G.	1
	803-01	SODDING (NEW SOD)	S.Y.	1000

FOOTNOTES

(1) INCLUDES 94 L.F. FOR SEDIMENT FILTER BAGS.

(2) INCLUDES 27 S.Y. FOR SEDIMENT FILTER BAGS AND 172 S.Y. FOR TEMPORARY CONSTRUCTION EXITS.

(3) TO BE USED AS DIRECTED BY THE ENGINEER.

(4) OPTIONAL EXCAVATION, GEOTEXTILE AND RIPRAP SHALL BE INCLUDED IN THE COST OF THIS ITEM.

(5) TO BE USED FOR SEDIMENT FILTER BAGS.

(6) TO BE USED FOR TEMPORARY CONSTRUCTION EXITS.

(7) NOTE: TCE TO BE LOCATED AS DIRECTED BY THE ENGINEER.

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND		
SYMBOL	ITEM	STD. DWG.
D	CATCH BASIN PROTECTION (TYPE D)	EC-STR-19
*SFB*SFB*SFB*	SILT FENCE WITH WIRE BACKING	EC-STR-3C
SFB SFB SFB SFB SFB	SEDIMENT FILTER BAG	EC-STR-2
** TUBE ** TUBE **	SEDIMENT TUBE	EC-STR-37
IN DIV	INSTREAM DIVERSION	EC-STR-30 EC-STR-30A
TCE	TEMPORARY CONSTRUCTION EXIT NOTE: TO BE LOCATED AS DIRECTED BY THE ENGINEER	EC-STR-25

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EROSION PREVENTION AND SEDIMENT CONTROL PLAN NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-109(30)	9
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	9

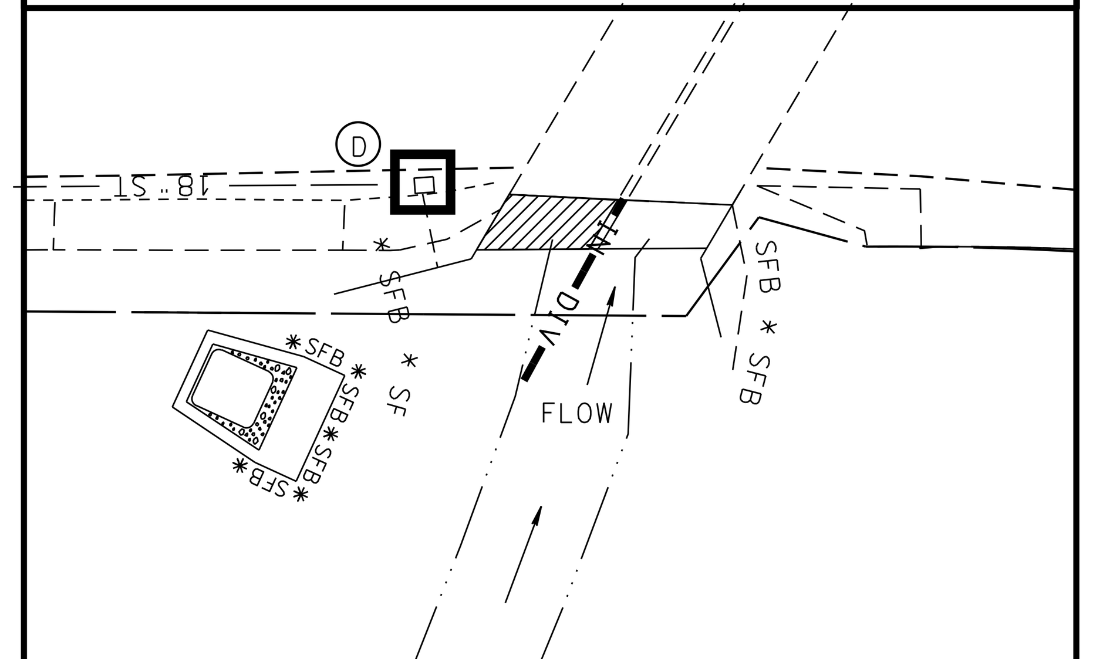
REV. 10-24-13: RENUMBERED SHEET, ADDED 30' BUS. ENT. AT RT. STA. 101+05.77 AND MODIFIED CONSTRUCTION LIMITS.

REV. 04-03-14: ADDED 30' BUS. ENT. AT RT. STA. 102+22.41.

REV. 04-16-14: ADDED NOTE TO PLANS NOT TO DISTURB THE SIGN IN CONSTRUCTION EASEMENT ON TRACT 3.

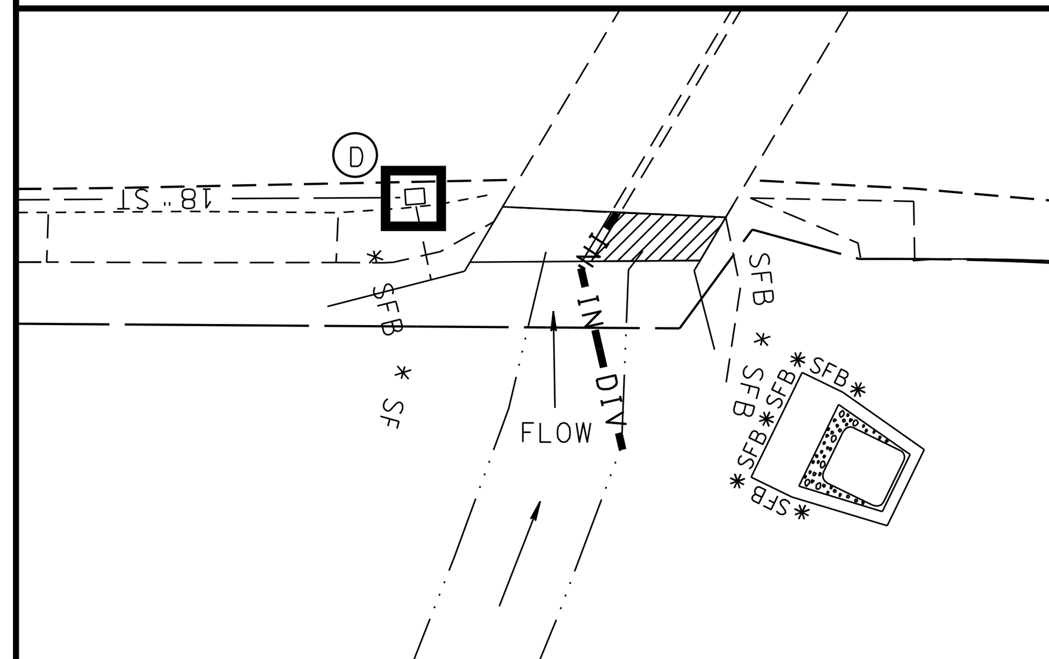
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

PHASE 1 INSTREAM DIVERSION DETAIL

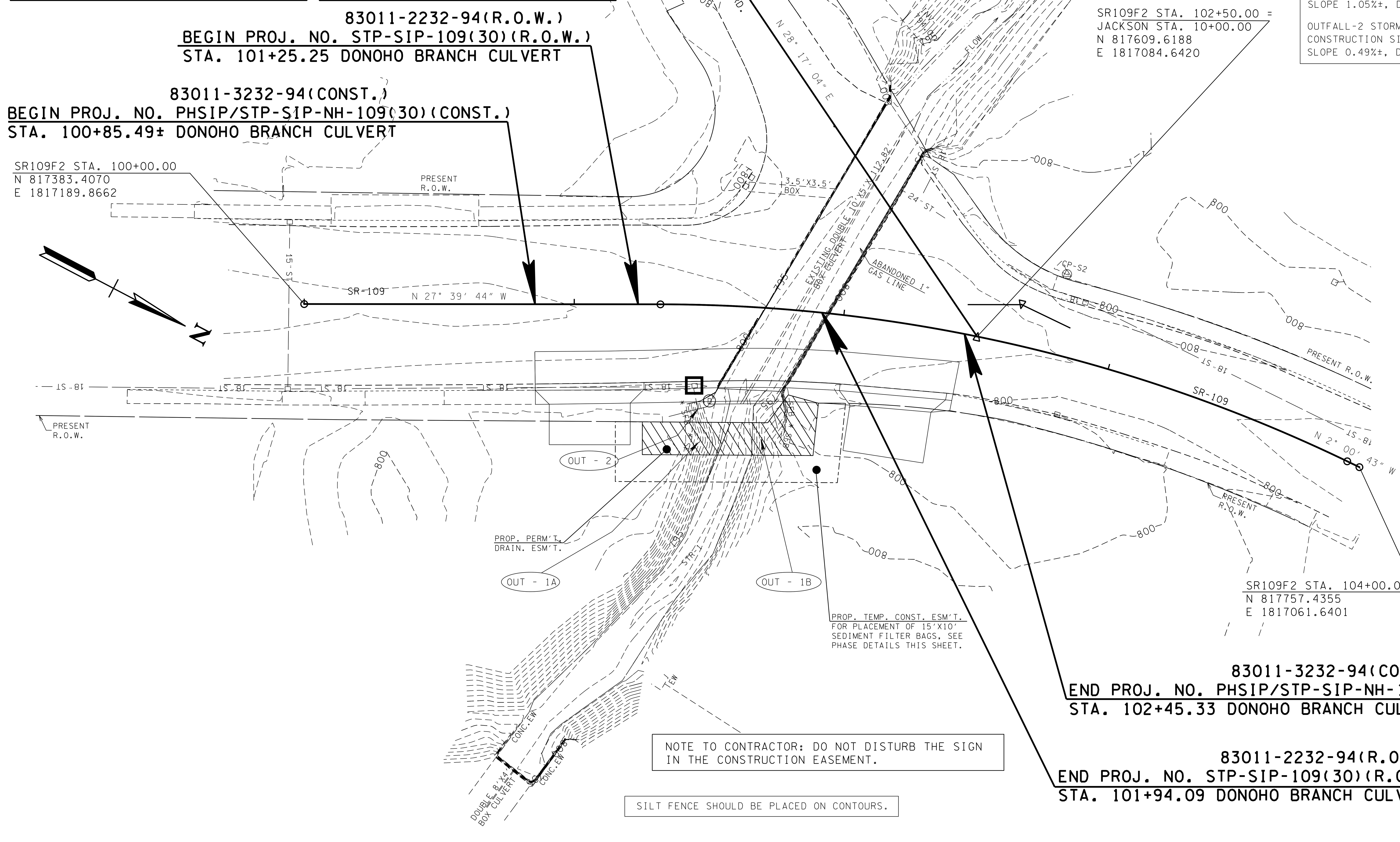


DIVERT FLOW OF STREAM TO EXISTING RIGHT BARREL OF STRUCTURE, WHILE CONSTRUCTING THE PROPOSED LEFT BARREL OF STRUCTURE EXTENSION.

PHASE 2 INSTREAM DIVERSION DETAIL



DIVERT FLOW OF STREAM TO NEWLY CONSTRUCTED PROPOSED LEFT BARREL OF STRUCTURE, WHILE CONSTRUCTING THE REMAINING PROPOSED RIGHT BARREL OF STRUCTURE EXTENSION.



NOTE: EXISTING CONTOURS ARE SHOWN.

OUTFALL-1 IS LOCATED WHERE THE STORM WATER LEAVES THE CONSTRUCTION SITE, HOWEVER, OUTFALL 1 IS SUBDIVIDED INTO OUTFALLS 1A AND 1B AT THIS LOCATIONS STORM WATER FROM THE DISTURBED AREA ON THE CONSTRUCTION SITE ENTERS THE STREAMS. SLOPE 1.05%±, DRAINAGE AREA 0.03± ACRE.

OUTFALL-2 STORM WATER FROM THIS OUTFALL DISCHARGE FROM THE CONSTRUCTION SITE BY MEANS OF A PIPE INTO THE STREAM. SLOPE 0.49%±, DRAINAGE AREA 0.04± ACRE.

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
(D)	CATCH BASIN PROTECTION (TYPE D)	EC-STR-19
*SFB*SFB*SFB*	SILT FENCE WITH WIRE BACKING	EC-STR-3C
*SFB*SFB*	SEDIMENT FILTER BAG	EC-STR-2
** TUBE ** TUBE **	SEDIMENT TUBE	EC-STR-37
—IN— DIV—	INSTREAM DIVERSION	EC-STR-30 EC-STR-30A
TCE	TEMPORARY CONSTRUCTION EXIT NOTE: TO BE LOCATED AS DIRECTED BY THE ENGINEER	EC-STR-25

NOTE TO CONTRACTOR: DO NOT DISTURB THE SIGN IN THE CONSTRUCTION EASEMENT.

SILT FENCE SHOULD BE PLACED ON CONTOURS.

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EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.100+13.75 TO STA.102+45.33

SCALE: 1"=20'

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FILE NO.

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	ARROW BOARD TYPE C
	ARROW BOARD TYPE C (SINGLE ARROW)
	TEMPORARY BARRICADE (TYPE II)
A	WARNING LIGHT (TYPE A) (LOW-INTENSITY FLASHING)
C	WARNING LIGHT (TYPE C) (STEADY)
	SIGN (CONSTRUCTION) (2-POST)
	PORTABLE BARRIER RAIL (WITH DOUBLE VERTICAL PANELS)
	TEMPORARY ATTENUATOR

A
ROAD WORK AHEAD
W20-1

END ROAD WORK
G20-2

NOTE TO CONTRACTOR: DO NOT DISTURB THE SIGN IN THE CONSTRUCTION EASEMENT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-109(30)	10
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	10

REV. 10-24-13: RENUMBERED SHEET, REMOVED PROPOSED GUARDRAIL, ADDED 30' BUS. ENT. AT RT. STA.101+05.77 AND MODIFIED CONSTRUCTION LIMITS.

REV. 04-03-14: ADDED 30' BUS. ENT. AT RT. STA.102+22.41.

REV. 04-16-14: ADDED NOTE TO PLANS NOT TO DISTURB THE SIGN IN CONSTRUCTION EASEMENT ON TRACT 3.

JACKSON STA. 8+00.00
N 817433.4974
E 1816989.8725

500'

JACKSON RD.

N 28° 17' 04" E

DONOHO BRANCH

FLOW

SR109F2 STA. 102+50.00 =
JACKSON STA. 10+00.00
N 817609.6188
E 1817084.6420

83011-2232-94(R.O.W.)
BEGIN PROJ. NO. STP-SIP-109(30)(R.O.W.)
STA. 101+25.25 DONOHO BRANCH CULVERT

83011-3232-94(CONST.)
BEGIN PROJ. NO. PHSIP/STP-SIP-NH-109(30)(CONST.)
STA. 100+85.49 DONOHO BRANCH CULVERT

END ROAD WORK
G20-2

500'

SR109F2 STA. 100+00.00
N 817383.4070
E 1817189.8662

SR-109

N 27° 39' 44" W

A
SIDEWALK CLOSED
R9-9
24" X 12"

TYPE II BARRICADE
w/ TYPE A
WARNING LIGHT

STR-1

A
RIGHT LANE CLOSED AHEAD
W20-5R
500'

A
RIGHT LANE CLOSED 500 FT
W20-5R
500'

A
RIGHT LANE CLOSED 1000 FT
W20-5R
500'

A
ROAD WORK ½ MILE
W20-5R
500'

TYPE "C" ARROW BOARD
SEE STD. DWG. T-FAB-1

A
ROAD WORK ½ MILE
W20-1
500'

A
ROAD WORK 1000 FT
W20-1
500'

A
ROAD WORK 500 FT
500'

A
ROAD WORK AHEAD
W20-1
500'

500'

SR-109

N 2° 00' 43" W

SR109F2 STA. 104+00.00
N 817757.4355
E 1817061.6401

30'

500'

A
SIDEWALK CLOSED
R9-9
24" X 12"

TYPE II BARRICADE
w/ TYPE A
WARNING LIGHT

END ROAD WORK
G20-2

83011-3232-94(CONST.)
END PROJ. NO. PHSIP/STP-SIP-NH-109(30)(CONST.)
STA. 102+45.33 DONOHO BRANCH CULVERT

83011-2232-94(R.O.W.)
END PROJ. NO. STP-SIP-109(30)(R.O.W.)
STA. 101+94.09 DONOHO BRANCH CULVERT

TRAFFIC CONTROL QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	ITEM NO. 712-06 (S.F.)	SIZE	M.U.T.C.D. NO.
705.08.51	PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3	EACH	2			
712-01	TRAFFIC CONTROL	LS	1			
712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	160			
712-04.01	FLEXIBLE DRUMS (CHANNELIZING	EACH	17			
712-04.50	PORTABLE BARRIER RAIL DELINEATOR	EACH	8			
712-05.01	WARNING LIGHTS (TYPE A)	EACH	12			
712-05.03	WARNING LIGHTS (TYPE C)	EACH	6			
712-06	RIGHT LANE CLOSED 1500 FT	S.F.	1	16	48X48	W20-5R
712-06	RIGHT LANE CLOSED 1000 FT	S.F.	1	16	48X48	W20-5R
712-06	RIGHT LANE CLOSED 500 FT	S.F.	1	16	48X48	W20-5R
712-06	RIGHT LANE CLOSED AHEAD	S.F.	1	16	48X48	W20-5R
712-06	END ROAD WORK	S.F.	3	24	48X24	G20-2
712-06	ROAD WORK 1/2 MILE	S.F.	2	32	48X48	W20-1
712-06	ROAD WORK 1000 F.T.	S.F.	1	16	48X48	W20-1
712-06	ROAD WORK 500 F.T.	S.F.	1	16	48X48	W20-1
712-06	ROAD WORK AHEAD	S.F.	1	16	48X48	W20-1
712-06	SIDEWALK CLOSED	S.F.	2	4	24X12	R9-9
712-06	PEDESTRIAN DETOUR, ARROW - LEFT	S.F.	2	10	30X24	M4-9BL
712-06	PEDESTRIAN DETOUR, ARROW - RIGHT	S.F.	2	10	30X24	M4-9BR
712-06	SW CLOSED AHEAD CROSS HERE - LT	S.F.	1	3	24X18	R9-11L
712-06	SW CLOSED AHEAD CROSS HERE - RT	S.F.	1	3	24X18	R9-11R
712-06.01	VERTICAL PANELS	S.F.	5	10	12X24	VP-1R/1L
712-07.02	TEMPORARY BARRICADES (TYPE II)	L.F	10			
712-08.03	ARROW BOARD (TYPE C)	EACH	1			
TOTAL				208		

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DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-109(30)	11
CONST.	2014	PHSIP/STP-SIP-NH-109(30)	11

REV. 10-24-13: RENUMBERED SHEET.

PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

A. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES OR TRAFFIC LANE AND SHOULDER WHERE THE TRAFFIC LANE IS BEING USED BY TRAFFIC, CAUSED BY BASE, PAVING OR RESURFACING:

1. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 0.75 INCH AND NOT EXCEEDING 2 INCHES:

   a. WARNING SIGNS, UNEVEN PAVEMENT (W8-11) AND/OR SHOULDER DROP-OFF (W8-9A), SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

   b. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY ADDED PAVEMENT SHALL BE ELIMINATED WITHIN THREE WORKDAYS.

   c. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY COLD PLANING SHALL BE ELIMINATED WITHIN THREE WORKDAYS.

   d. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE TRAFFIC LANE BEING UTILIZED BY TRAFFIC AND SHOULDER THE DIFFERENCE IN ELEVATION SHALL BE ELIMINATED WITHIN SEVEN WORKDAYS AFTER THE CONDITION IS CREATED.

2. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 2 INCHES AND NOT EXCEEDING 6 INCHES. TRAFFIC IS NOT TO BE ALLOWED TO TRAVERSE THIS DIFFERENCE IN ELEVATION.

   a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

      (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.

      (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

   b. IF THE DIFFERENCE IN ELEVATION IS ELIMINATED OR DECREASED TO 2 INCHES OR LESS BY THE END OF EACH WORKDAY, CONES MAY BE USED DURING DAYLIGHT HOURS IN LIEU OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES MENTIONED IN PARAGRAPH a, PROVIDED WARNING SIGNS ARE ERECTED. WARNING SIGNS (UNEVEN PAVEMENT AND/OR LOW SHOULDER) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

   c. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE THROUGH TRAFFIC LANE AND THE SHOULDER AND THE ELEVATION DIFFERENCE IS LESS THAN 3.5 INCHES, THE CONTRACTOR MAY USE WARNING SIGNS AND/OR PROTECTIVE DEVICES AS APPLICABLE AND APPROVED BY THE ENGINEER. SEE PARAGRAPH a REGARDING USE OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES. WARNING SIGNS (UNEVEN PAVEMENT AND/OR LOW SHOULDER) WILL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

   IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 2 MILES IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

3. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 6 INCHES BUT NOT EXCEEDING 18 INCHES, THE CONTRACTOR, WITH THE ENGINEER'S APPROVAL, MAY UTILIZE ONE OF THE FOLLOWING:

   a. THE CONTRACTOR SHALL ACCOMPLISH SEPARATION BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

      (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.

      (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

   IN ORDER TO USE THIS METHOD, THE CONTRACTOR MUST REDUCE THE DIFFERENCE IN ELEVATION TO 6 INCHES OR LESS BY THE END OF THE WORKDAY THAT THE CONDITION IS CREATED.

   b. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a, AND CONSTRUCT A STONE WEDGE WITH A 4:1 SLOPE, OR FLATTER, TO ELIMINATE THE VERTICAL OFFSET IF THE LOWER ELEVATION IS AT OR BELOW SUBGRADE AT THE END OF EACH DAY.

   c. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a AND IF THE LOWER ELEVATION IS BASE STONE OR ASPHALT PAVEMENT, PLACEMENT OF SUBSEQUENT LAYERS OF PAVEMENT MUST BEGIN THE NEXT WORK DAY AND PROGRESS CONTINUOUSLY UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED OR REDUCED TO SIX INCHES OR LESS.

   d. THE CONTRACTOR SHALL PROVIDE SEPARATION BY PORTABLE BARRIER RAIL.

   FOR PRECEDING CONDITIONS a, b, AND c, THE CONTRACTOR SHALL USE THE SHOULDER DROP-OFF WARNING SIGN (W8-9A). IT SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN THE SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

4. FOR DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 18 INCHES.

   SEPARATION WILL BE PROVIDED BY USE OF PORTABLE BARRIER RAIL.

   IN THIS SITUATION THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING ONE MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

B. IF THE DIFFERENCE IN ELEVATION IS WITHIN 30 FEET OF THE NEAREST TRAFFIC LANE BEING USED BY TRAFFIC CAUSED BY GRADING, EXCAVATION FOR UTILITIES, DRAINAGE STRUCTURES, UNDERCUTTING, ETC.:

1. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 3/4 INCH AND NOT EXCEEDING 2 INCHES.

   WARNING SIGNS (UNEVEN PAVEMENT AND/OR LOW SHOULDER) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

2. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 2 INCHES AND NOT EXCEEDING 6 INCHES:

   a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

      (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.

      (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

3. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 6 INCHES:

   a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

      (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.

      (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

   b. ELIMINATE VERTICAL OFFSET BY CONSTRUCTING A STONE WEDGE OR GRADING TO A 4:1 SLOPE, OR FLATTER, OR USE PORTABLE BARRIER RAIL.

   THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE WITHIN 8 FEET OF A TRAFFIC LANE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

C. IF THE DIFFERENCE IN ELEVATION IS FARTHER THAN 8 FEET FROM THE NEAREST TRAFFIC LANE BUT NOT MORE THAN 30 FEET FROM THE NEAREST TRAFFIC LANE:

   SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

1. WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.

2. WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

   THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

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TRAFFIC CONTROL NOTES

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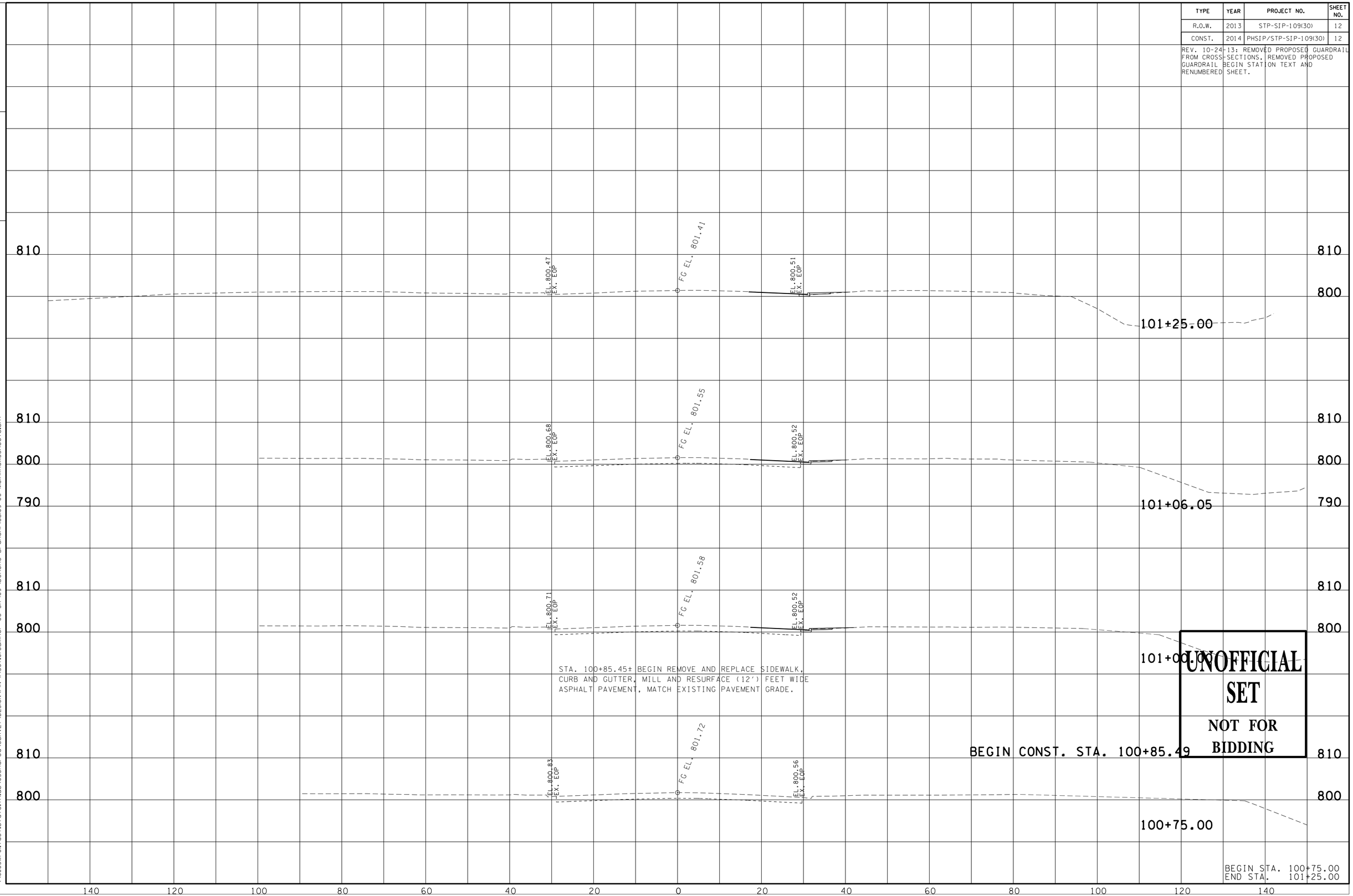
TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-109(30)	12
CONST.	2014	PHSIP/STP-SIP-109(30)	12

REV. 10-24-13: REMOVED PROPOSED GUARDRAIL FROM CROSS-SECTIONS, REMOVED PROPOSED GUARDRAIL BEGIN STATION TEXT AND RENUMBERED SHEET.



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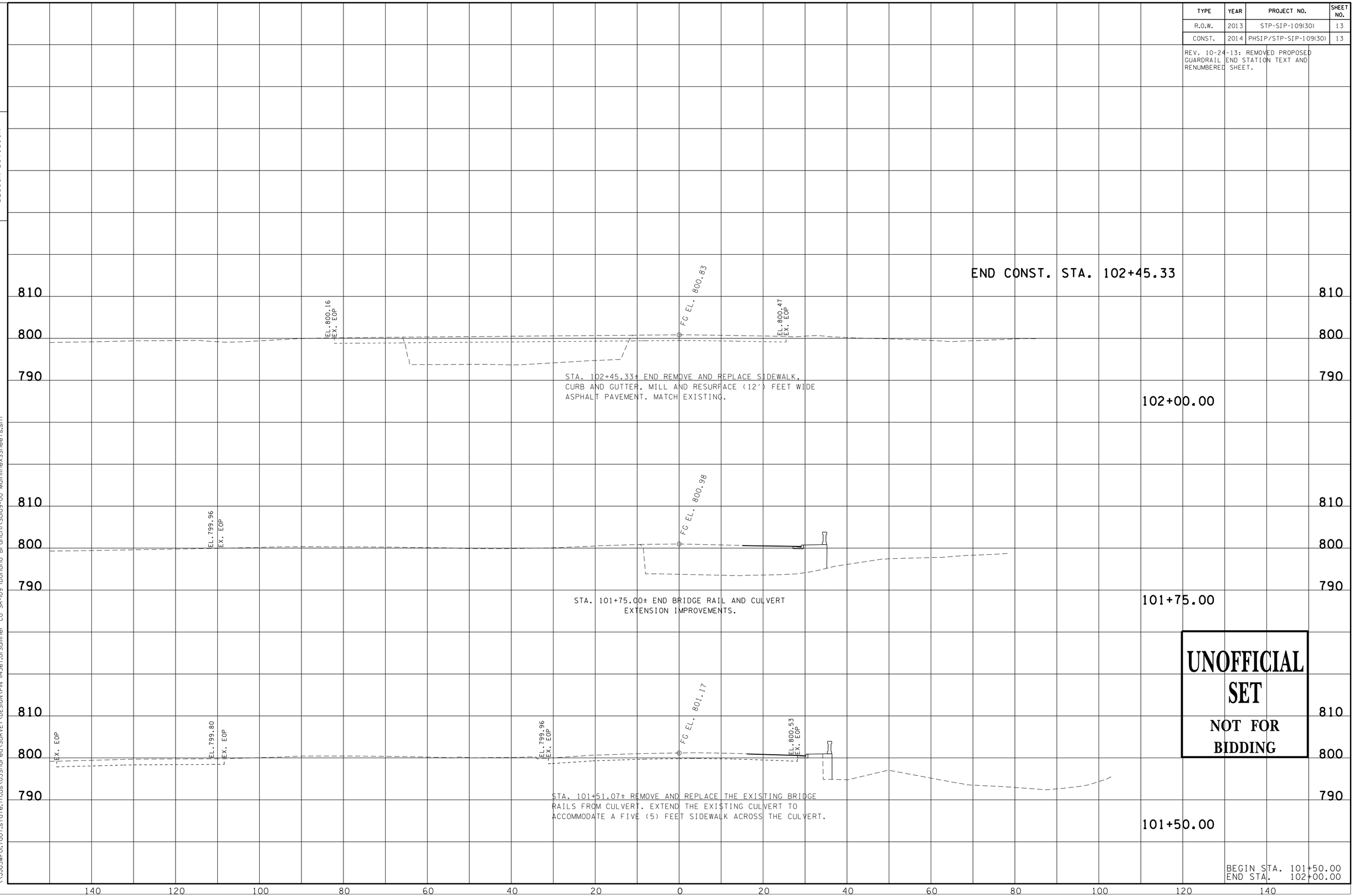
TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-109(30)	13
CONST.	2014	PHSIP/STP-SIP-109(30)	13

REV. 10-24-13: REMOVED PROPOSED GUARDRAIL END STATION TEXT AND RENUMBERED SHEET.



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