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

TENN.	YEAR	SHEET NO.
	2013	1
FED. AID PROJ. NO.	NHTSA-HE-345(1)	
STATE PROJ. NO.	97013-2205-04	

CLAIBORNE CO. S.R.345

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

CLAIBORNE COUNTY

S.R.345: INTERSECTION AT S.R.32(US 25E) IN TAZEWELL

R.O.W. (RSAR)

STATE HIGHWAY NO. 345 F.A.H.S. NO.

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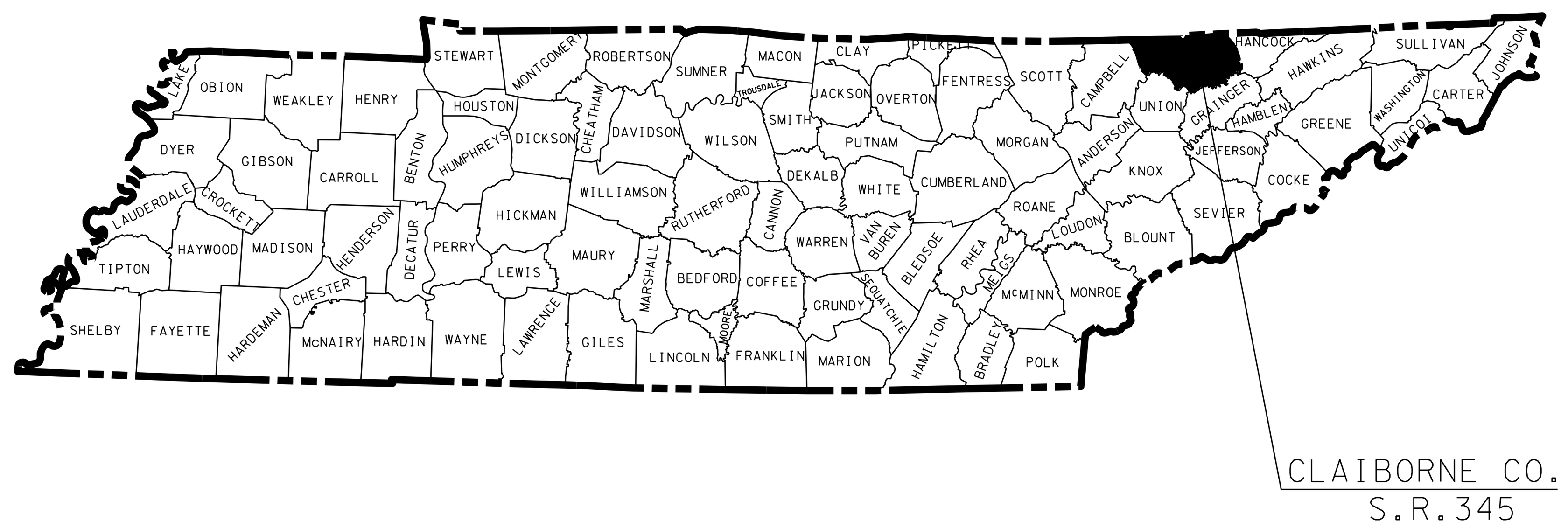
ROADWAY CROSS-SECTIONS______10-18



NO EXCLUSIONS
NO EQUATIONS

UNOFFICIAL SET
NOT FOR BIDDING

RSAR PROJECT:
PROJECT OF LIMITED SCOPE

97013-2205-04
END PROJECT NHTSA-HE-345(1)
STA. 60+41.57(R.O.W.)

97013-2205-04
BEGIN PROJECT NHTSA-HE-345(1)
STA. 52+50.00(R.O.W.)

N

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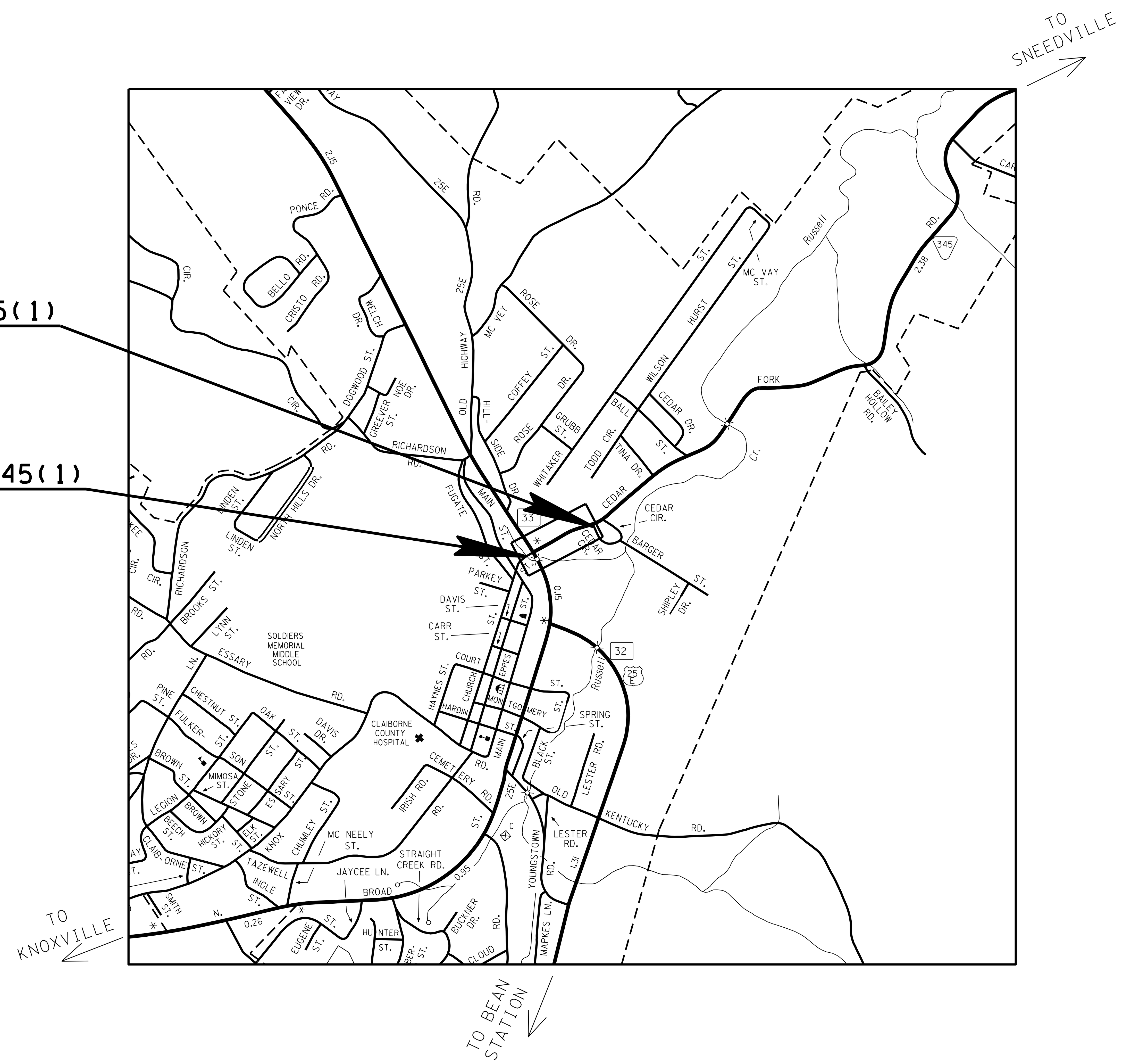
SCALE: 1"= 1000 FEET



SEALED BY

APPROVED: 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 TRAN. SP. SV. 2 MAYSOON HADDAD

DESIGNER LOUNA KOEUT

P.E. NO. 97013-1205-04(DESIGN)

P.I.N. 115669.00

R.O.W. PROJECT LENGTH 0.150 MILES

ORIGINAL SURVEY AUGUST 2011

TRAFFIC DATA	
ADT (2013)	4610
ADT (2033)	5070
DHV (2033)	624
D	55 - 45
T (ADT)	6 %
T (DHV)	4 %
V	35 MPH

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

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

SEE SHEET No. IA FOR INDEX

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

TENN.	YEAR	SHEET NO.
	2014	1
FED. AID PROJ. NO.	PHSIP-345(11)	
STATE PROJ. NO.	13061-3206-94	

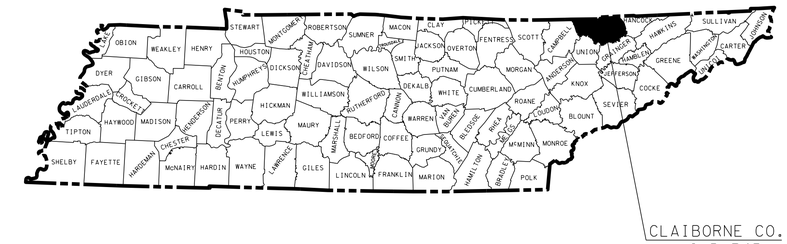
CLAIBORNE CO. S.R.345

CLAIBORNE COUNTY

SR-345: INTERSECTION AT SR-32(US-25E), LM 0.00 TO LM 0.06
IN TAZEWELL

GRADE, DRAIN, BASE, PAVE, GUARDRAIL AND SIGNAL

STATE HIGHWAY NO. 345 F.A.H.S. NO.



NO EXCLUSIONS
NO EQUATIONS

13061-3206-94
END PROJECT PHSIP-345(11)
STA. 60+50.00(CONST.)

13061-3206-94
BEGIN PROJECT PHSIP-345(11)
STA. 51+80.00(CONST.)

N

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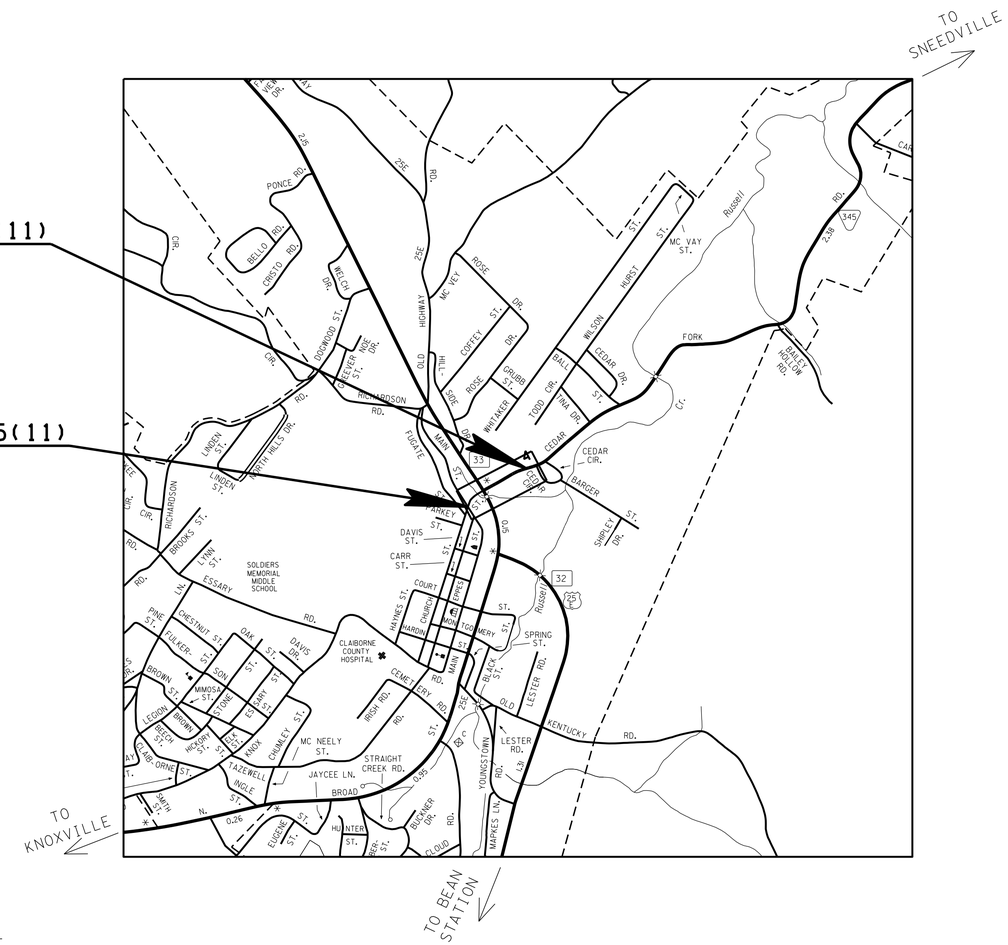

RSAR PROJECT:
PROJECT OF LIMITED SCOPE

UNOFFICIAL SET
NOT FOR BIDDING

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.

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TDOT TRANSPORTATION PROJECT SPEC. SV. 2 MAYSOON HADDAD

DESIGNER LOUNA KOEUT CHECKED BY PAUL BEEBE

P.E. NO. 97013-1205-04(DESIGN)

P.I.N. 115669.00

ROADWAY LENGTH	0.165	MILE
BRIDGE LENGTH	0.000	MILE
BOX BRIDGE LENGTH	0.000	MILE
PROJECT LENGTH	0.165	MILE

ORIGINAL SURVEY AUGUST 2011

TRAFFIC DATA	
ADT (2014)	4633
ADT (2034)	5093
DHV (2034)	627
D	55 - 45
T (ADT)	6 %
T (DHV)	4 %
V	35 MPH

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	PHSIP-345(11)	1A

CLAIBORNE CO. S.R. 345
13061-3206-94 (CONST.)

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ROADWAY DESIGN STANDARDS

DWG. NO	REV.	DESCRIPTION
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD-L-2	09-05-01	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-3	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-4	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
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
RD01-S-11	04-04-03	DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT
RD01-S-11A	10-15-02	ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION
RD01-SD-1		INTERSECTION SIGHT DISTANCE DESIGN AND GENERAL NOTES

STANDARD ROADWAY DRAWINGS

DWG. NO	REV.	DESCRIPTION
RD01-SD-2		INTERSECTION SIGHT DISTANCE LANDSCAPE AND OBSTRUCTION
RD01-SD-3		INTERSECTION SIGHT DISTANCE 2-LANE ROADWAYS
RD01-TS-3	10-15-02	DESIGN STANDARD FOR 2-LANE ARTERIAL HIGHWAYS

DRAINAGE - CULVERTS AND ENDWALL

DWG. NO	REV.	DESCRIPTION
D-PB-1	01-02-13	STANDARD DETAILS FOR CONCRETE PIPE INSTALLATION
D-PE-7A	05-27-01	STANDARD WINGWALLS FLATBASE CONCRETE PIPES
D-PE-9	04-25-90	CONCRETE ENDWALLS TYPE “B” (FOR ROUND & SIDE TAPERED INLETS, PIPE SIZES 15” TO 78”, ALL SKEW, 2:1 AND 4:1 SLOPES) 1976
D-PE-9A	10-25-82	GENERAL DIMENSION QUANTITIES ROUND PIPE CONCRETE ENDWALLS TYPE "B" (PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 AND 4:1 SLOPES)
D-PE-9C		BILL OF STEEL (SHEET 1 OF 4) CONCRETE ENDWALLS TYPE “B” (FOR CONCRETE ROUND AND SIDE TAPERED INLETS, PIPE SIZE 15” TO 78”, ALL SKEW, 2:1 SLOPE) 1976

CATCH BASINS AND MANHOLES

DWG. NO	REV.	DESCRIPTION
D-CB-12P	03-11-14	STANDARD PRECAST RECTANGULAR CONCRETE NO. 12 CATCH BASIN
D-CB-12S	03-11-14	STANDARD RECTANGULAR CONCRETE NO. 12 CATCH BASIN
D-CB-42RB	03-11-14	STANDARD PRECAST CIRCULAR NO. 42 CATCH BASIN
D-CB-99	06-07-13	MISCELLANEOUS DETAILS FOR RECTANGULAR STRUCTURES
D-MH-5	04-01-14	STANDARD 5’2”X5’2” SQUARE CONCRETE NO.3 MANHOLE

ROADWAY AND PAVEMENT APPURTENANCES

DWG. NO	REV.	DESCRIPTION
RP-MC-1	02-28-02	STANDARD 4” SLOPING (MOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTER
RP-NMC-10	07-29-03	STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
RP-R-1	05-27-01	STANDARD RAMPS TO SIDE ROADS

SAFETY DEVICES AND FENCES

DWG. NO	REV.	DESCRIPTION
S-CZ-1		CLEAR ZONE CRITERIA
S-PL-1		SAFETY PLAN AT ROADSIDE HAZARDS
S-PL-2		SAFETY PLAN AT SIDE ROADS OR PRIVATE DRIVES
S-PL-6		SAFETY PANS: SAFETY HARDWARE PLACEMENT
S-GRT-2		TYPE 38 GUARDRAIL TERMINAL
S-GRT-2P		EARTH PAD FOR TYPE 38
S-GR31-1		W-BEAM GUARDRAIL

TRAFFIC CONTROL

DWG. NO	REV.	DESCRIPTION
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-4	11-01-11	STANDARD INTERSECTION PAVEMENT MARKINGS
T-S-10	04-04-12	STANDARD MOUNTING DETAILS FLAT SHEET SIGNS ALUMINUM-STEEL DESIGN
T-S-16	11-01-11	GROUND MOUNTED ROADSIDE SIGN AND DETAILS
T-S-17	07-19-13	STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOOUT SQUARE TUBE
T-S-19	07-19-13	STANDARD STEEL SIGN SUPPORTS
T-SG-2	07-29-04	LOOP LEAD-INS, CONDUIT AND PULL BOXES
T-SG-3	11-11-04	STANDARD NOTES AND DETAILS OF INDUCTIVE LOOPS
T-SG-4		SPAN WIRE AND MESSENGER CABLE DETAILS
T-SG-5	12-04-13	CONTROLLER CABINET DETAILS
T-SG-7	11-01-11	SIGNAL HEAD ASSEMBLIES AND PEDESTRIAN PUSH BUTTON SIGNS
T-SG-7A	11-01-11	TYPICAL SIGNAL HEAD PLACEMENT
T-SG-8	12-04-13	STRAIN POLE DETAILS FOR SPAN MOUNTED SIGNALS
T-SG-9A	12-04-13	MISCELLANEOUS SIGNAL DETAILS
T-SG-10	12-04-13	MAST ARM POLE AND STRAIN POLES FOUNDATION DETAILS
T-SG-11	07-29-04	MAINTENANCE OF EXISTING SIGNALS DURING HIGHWAY CONSTRUCTION
T-SG-12	11-01-11	TYPICAL WIRING FOR SIGNAL HEADS AND DETECTION LOOPS
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-21	03-15-11	LANE CLOSURE WITH LEFT HAND MERGE AND LANE SHIFT

EROSION PREVENTION AND SEDIMENT CONTROL

DWG. NO	REV.	DESCRIPTION
EC-STR-3B	08-01-12	SILT FENCE
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-6	08-01-12	ROCK CHECK DAM
EC-STR-6A	08-01-12	ENHANCED ROCK CHECK DAM
EC-STR-8	08-01-12	FILTER SOCK
EC-STR-11A	08-01-12	CULVERT PROCTECTION TYPE 2
EC-STR-19	04-01-08	CATCH BASIN PROTECTION
EC-STR-25	08-01-12	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD
EC-STR-34	08-01-12	EROSION CONTROL BLANKET FOR SLOPE INSTALLATION
EC-STR-37	08-01-12	SEDIMENT TUBE
EC-STR-39A	08-01-12	CURB INLET PROTECTION TYPE 3 & 4

NO PROJECT COMMITMENTS SHEET INCLUDED IN THIS SET OF PLANS.

UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INDEX AND STANDARD DRAWINGS

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	PHSIP-345(11)	2

CLAIBORNE CO. S.R. 345
13061-3206-94 (CONST.)

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
	105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
	203-30.01	ROADWAY APPROACHES	LS	1
	209-03.20	FILTER SOCK (8 INCH)	L.F.	100
	209-05	SEDIMENT REMOVAL	C.Y.	32
	209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	1080
)(2)	209-08.08	ENHANCED ROCK CHECK DAM	EACH	1
	209-09.43	CURB INLET PROTECTION (TYPE 4)	EACH	2
	209-40.30	CATCH BASIN PROTECTION (TYPE A)	EACH	2
	209-40.33	CATCH BASIN PROTECTION (TYPE D)	EACH	4
(9)	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	1351
	307-01.01	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	TON	296
	307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	156
	402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	3
	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	2
	411-01.10	ACS MIX(PG64-22) GRADING D	TON	474
(8)	415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	2337
	611-01.04	MANHOLES, > 12' - 16' DEPTH	EACH	1
	611-01.20	ADJUSTMENT OF EXISTING MANHOLE	EACH	2
	607-03.02	18" CONCRETE PIPE CULVERT (CLASS III)	L.F.	357
	611-07.01	CLASS A CONCRETE (PIPE ENDWALLS)	C.Y.	2
	611-07.02	STEEL BAR REINFORCEMENT (PIPE ENDWALLS)	LB.	306
	611-12.02	CATCH BASINS, TYPE 12, > 4' - 8' DEPTH	EACH	3
	611-12.04	CATCH BASINS, TYPE 12, > 12' - 16' DEPTH	EACH	1
	611-42.01	CATCH BASINS, TYPE 42, 0' - 4' DEPTH	EACH	1
	702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	55
	705-02.02	SINGLE GUARDRAIL (TYPE 2)	L.F.	476
	705-04.07	TAN ENERGY ABSORBING TERM (NCHRP 350, TL3)	EACH	2
(2)	705-04.50	PORTABLE BARRIER RAIL DELINEATOR	EACH	20
(1)(4)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	40
	712-01	TRAFFIC CONTROL	LS	1
(2)	712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	300
(2)	712-04.02	FLEXIBLE DRUMS (CHANNELIZATION)	EACH	60
	712-06	SIGNS (CONSTRUCTION)	S.F.	351
	713-11.01	"U" SECTION STEEL POSTS	LB.	18
	713-11.02	PERFORATED/KNOCKOUT SQUARE TUBE POST	LB.	264
	713-13.02	FLAT SHEET ALUMINUM SIGNS (0.080" THICK)	S.F.	52
	713-13.03	FLAT SHEET ALUMINUM SIGNS (0.100" THICK)	S.F.	18
(5)	713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	LS	1
	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	166
(7)	716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	8
	716-04.01	PLASTIC PAVEMENT MARKING (STRAIGHT-TURN ARROW)	EACH	4
(6)	716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	0.5
(3)	716-12.04	ENHANCED FLATLINE THERMO PVMT MRKNG (4IN DOTTED LINE)	L.F.	130
	716-13.01	SPRAY THERMO PVMT MRKNG (60 mil) (4IN LINE)	L.M.	1
	717-01	MOBILIZATION	LS	1
(1)(4)	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	70
(1)(2)	740-11.01	TEMPORARY SEDIMENT TUBE 8IN (DESCRIPTION)	L.F.	200

(1) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
(2) MAY BE INCREASED OR DECREASED AS DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER.
(3) INCLUDES 36 LF OF 8" DOTTED LINE TO BE USED AT INTERSECTION.
(4) FOR TEMPORARY CONSTRUCTION ENTRANCE\EXIT.
(5) REMOVE SIGN & SUPPORT (NO FOOTINGS ON THESE SIGNS) ON APPROXIMATELY TWENTY (20) SIGNS WITHIN THE GRADING LIMITS OR AS DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER.
(6) TO BE USED FOR TEMPORARY MARKING.
(7) THE CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE BID FOR THERMOPLASTIC.
(8) TO BE USED TO ACHIEVE PROPER SUPERELEVATION OR AS DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER. SEE CROSS SECTIONS.
(9) INCLUDES 60 TONS FOR MAINTENANCE OF TRAFFIC.

PROPOSED GUARDRAIL

SHEET NO.	SIDE LT	SIDE RT	STATION FROM	STATION TO	GUARDRAIL SINGLE TYPE 2 705-02.02 (L.F.)	TERMINAL ANCHORS TYPE 38 705-04.07 (EACH)	REMARKS
4B		X	12+36(S.R. 32)	60+00(S.R. 345)	476	2	
TOTALS					476	2	

NOTE: GUARDRAIL LENGTHS ARE APPROXIMATE AND MAY BE ADJUSTED BY THE TDOT DISTRICT OPERATIONS ENGINEER PRIOR TO ERECTION.

DRAINAGE STRUCTURES

SHEET NO.	LOC.	STATION	OFFSET (FT.)	DRAINAGE CODE	GRATE/TOP ELEV.	STRUCTURE TYPE	SIZE	DEPTH (FT.)	STANDARD DRAWING	MH 611-01.04 12' - 16'	TYPE 12 611-12.02 4' - 8'	TYPE 12 611-12.04 12' - 16'	TYPE 42 611-42.01 0' - 4'	CLASS A CONC. 611-07.01 (C.Y)	REINF. STEEL 611-07.02 (LB.)
4B	RT	53+54.08	22.00	1	1366.17	#12 CB	36"	14.35	D-CB-12P			1			
4B	LT	55+25.62	30.41	2	1365.20	#42	60"	2.83	C-CB-42RB				1		
4B	LT	56+10.00	23.65	3	1358.54	#12 CB	36"	4.42	D-CB-12P		1				
4B	RT	56+10.00	35.85	4		"B"			D-PE-9					1.07	153
4B	LT	56+24.00	59.03	5	1370.68	MH	62"	14.39	D-MH-5	1					
4B	LT	57+40.00	17.32	6	1350.01	#12 CB	36"	4.42	D-CB-12P		1				
4B	LT	58+80.00	13.06	7	1346.54	#12 CB	36"	4.17	D-CB-12P		1				
4B	RT	58+80.00	34.81	8		"B"			D-PE-9					1.07	153
TOTALS										1	3	1	1	2.14	306

ALL COSTS OF THESE ESTIMATED QUANTITIES TO BE INCLUDED IN PRICE BID FOR ROADWAY APPROACHES ITEM NO. 203-30.01

CLEARING & GRUBBING L.S.	ROAD & DRAIN. EXC.(UNCL.) C.Y.	BORROW EXCAVATION (UNCL.) C.Y.	BORROW EXCAVATION GRADED SOLID ROCK TON	WATER M.G.	FURNISHING & SPREADING TOPSOIL C.Y.	SODDING (NEW SOD) S.Y	WATER SEEDING & SODDING M.G.
1	907	1107	682	5	192	2302	1

NOTE: NO CHANGE IN COMPENSATION WILL BE MADE FOR NORMAL VARIATIONS IN ESTIMATED QUANTITIES.

ESTIMATED GRADING QUANTITIES

STATION TO STATION	ROAD & DRAINAGE EXC. (UNCL.) EXC. COMMON - C.Y.	EXC. TOPSOIL-C.Y	BORROW EXCAVATION UNCL. - C.Y.	GRADED SOLID ROCK TON	TOPSOIL-C.Y	EMB. C.Y.
52+50 TO 60+50(S.R. 345\CHURCH)	809	0	992	682	0	1716
11+50 TO 13+00(S.R. 32)	98	0	115	0	0	202
TOTALS	907	0	1107	682	0	1918

NOTE: QUANTITIES INCLUDE PRIVATE DRIVES

STORM DRAINAGE PIPES

SHEET NO.	FROM CODE	FROM OUTLET ELEV.	TO CODE	TO INLET ELEV.	% GRADE	REINFORCED CONC. PIPE - CLASS III SIZE & LENGTH (L.F.) 18"
4B	2	1362.37	3	1354.29	9.6	84.40
4B	3	1354.12	4	1353.13	1.7	57.00
4B	5	1356.29	3	1354.29	4.5	33.00
4B	6	1345.59	7	1342.29	2.4	137.00
4B	7	1342.12	8	1340.05	4.5	46.00
TOTALS						357.4

SEE SHT 2A FOR ESTIMATED SIGNAL QUANTITIES

UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

PAUL THOMAS BEEBE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 102266
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES AND TABULATED QUANTITIES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	PHSIP-345(11)	2A

S.R. 345 CLAIBORNE CO.
13061-3206-94 (CONST.)

ESTIMATED SIGNAL QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1	713-15.07	SUSPENDED FLAT SHEET ALUMINUM SIGN (0.080" THICK)	EACH	1
2	713-15.40	SIGN INSTALLATION (SUSPENDED STREET NAME SIGNS)	LS	1
3	730-01.02	REMOVAL OF SIGNAL EQUIPMENT	EACH	1
4	730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	6
4	730-02.17	SIGNAL HEAD ASSEMBLY (150 A2H WITH BACKPLATE)	EACH	2
4	730-02.30	SIGNAL HEAD ASSEMBLY (130A3 WITH BACKPLATE)	EACH	2
4	730-02.31	SIGNAL HEAD ASSEMBLY (140A1 WITH BACKPLATE)	EACH	1
	730-03.20	INSTALL PULL BOX (TYPE A)	EACH	7
	730-03.21	INSTALL PULL BOX (TYPE B)	EACH	3
5	730-05.01	ELECTRICAL SERVICE CONNECTION	EACH	1
	730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	287
	730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	655
	730-09.01	SPAN WIRE ASSEMBLY(19,401 LBS.MIN.BRK STRENGTH)	L.F.	406
	730-10.01	TETHER WIRE ASSEMBLY - 1/4" DIAMETER	L.F.	406
	730-12.01	CONDUIT 1" DIAMETER (PVC)	L.F.	692
	730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	91
	730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	81
	730-13.03	VEHICLE DETECTOR (4 - CHANNEL, RACK MOUNT)	EACH	3
10	730-13.07	VEHICLE DETECTOR (SIREN ACTIVATED PRIORITY CONTROL)	EACH	4
	730-14.01	SHIELDED DETECTOR CABLE	L.F.	2261
	730-14.02	SAW SLOT	L.F.	1542
	730-14.03	LOOP WIRE	L.F.	4114
	730-15.32	CABINET (EIGHT PHASE BASE MOUNTED)	EACH	1
	730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	1
6,11	730-23.01	STEEL STRAIN POLE (SIGNAL SUPPORT)	EACH	1
7,11	730-23.02	STEEL STRAIN POLE (SIGNAL SUPPORT)	EACH	2
8,11	730-23.03	STEEL STRAIN POLE (SIGNAL SUPPORT)	EACH	1
9	730-40	TEMPORARY TRAFFIC SIGNAL SYSTEM	EACH	1

FOOTNOTES

1. FOR R10-12 SIGN

2. TO INCLUDE FIVE (5) STREET NAME SIGNS AND ALL NECESSARY HARDWARE. SIGNS TO BE INSTALLED ON THE SPAN WIRE, AS SHOWN ON SHEET 13, BY THE CONTRACTOR. SEE DETAILS OF SIGNS ON SHEET 12.

3. INCLUDES THE REMOVAL OF ALL SIGNAL POLES, SIGNAL HEADS, SIGNAL CABLES, CONTROLLER, AND ANY OTHER SIGNAL RELATED EQUIPMENT . ALSO TO INCLUDE THE ADJUSTMENT OF SIGNAL HEADS AS NEEDED FOR THE TRAFFIC CONTROL PLANS. (FOR USE AT SR-345/CHURCH ST AND SR-32 INTERSECTION)

4. SIGNAL HEADS SHALL INCLUDE LOUVERED BACKPLATES WITH A 1" MINIMUM YELLOW RETRO REFLECTIVE BORDER AROUND THE PERIMETER OF THE FACE OF THE BACKPLATE. THE RETRO REFLECTIVE BORDER TO BE MADE OF A TYPE III PRISMATIC OR BETTER MATERIAL.

5. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING THE LOCAL UTILITY TO OBTAIN THE ESTIMATE FOR ANY CHARGES BY THE UTILITY FOR PROVIDING ELECTRICAL SERVICE TO THE SIGNAL CONTROLLER. THESE CHARGES SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 730-05.01 FOR PAYMENT BY THE CONTRACTOR.

6. FOR SIGNAL POLE 1
   MOMENT CAPACITY: 307,000 FT-LBS.
   FOOTING DIAMETER: 4'-0"
   FOOTING DEPTH: 20'-0"

FOOTNOTES CONTINUED

7. FOR SIGNAL POLES 2 & 4
   MOMENT CAPACITY: 349,500 FT-LBS.
   FOOTING DIAMETER: 4'-0"
   FOOTING DEPTH: 22'-0"

8. FOR SIGNAL POLE 3
   MOMENT CAPACITY: 371,900 FT-LBS.
   FOOTING DIAMETER: 4'-0"
   FOOTING DEPTH: 22'-0"

9. INCLUDES WOOD POLES, GUYING DEVICES, SPAN WIRE, CONDUIT RISERS, AND ANY OTHER SIGNAL EQUIPMENT NEEDED FOR A FULLY OPERATIONAL TRAFFIC SIGNAL SYSTEM.

10. THE EMERGENCY PRE-EMPTION UNIT TO BE SONEM 2000 OR APPROVED EQUIVALENT. ITEM INCLUDES ALL MATERIALS REQUIRED TO IMPLEMENT EMERGENCY EPS CONTROL INCLUDES PROCESSOR UNIT,POWER SUPPLY, PHASE SELECTORS, AND ALL OTHER ITEMS TO HAVE A FULL AND OPERATIONAL SYSTEM AS REQUIRED BY THE MANUFACTURER. INCLUDES 555 FT. OF DETECTOR CABLE.

11. MAXIMUM SPACING FOR A700 REINFORCING BARS TO BE 1'-6".

SPECIAL NOTES REGARDING SIGNAL HEADS

(1) ALL CIRCULAR AND ARROW INDICATIONS WITHIN ALL VEHICULAR SIGNAL HEADS PROPOSED FOR THIS PROJECT SHALL CONSIST OF AN LED (LIGHT EMITTING DIODE) SIGNAL MODULE UNLESS OTHERWISE NOTED IN THE PLANS.

(2) CIRCULAR INDICATIONS SHALL MEET “ITE VTCSH-LED CIRCULAR SIGNAL SUPPLEMENT” FOR EXPANDED/EXTENDED VIEW.

(3) ARROW INDICATIONS SHALL MEET “ITE VTCSH-3 LED ARROW SPECIFICATON” FOR EXPANDED/EXTENDED VIEW.

(4) INCANDESCENT OR SCREW-IN MODULES ARE NOT ACCEPTABLE.

(5) COMPATABILITY WITH CONFLICT MONITORS AND LOAD SWITCHES SHALL BE TESTED AND CONFIRMED.

(6) MANUFACTURER SHALL PROVIDE A MINIMUM FIVE-YEAR WARRANTY FOR OPERATION OF THE UNIT.

(7) ALL SIGNAL HEADS WITH LED LENSES SHALL INCLUDE SWIVEL BALANCE ADJUSTERS TO MAINTAIN THE PROPER VISIBILITY. COSTS OF ADJUSTERS TO BE INCLUDED IN COSTS OF SIGNAL HEADS.

(8) THE ATTACHMENT OF THE TETHER WIRE TO THE POLE SHALL BE LOCATED BELOW THE LOWEST ELEVATION OF THE SIGNAL HEADS.

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ESTIMATED SIGNAL QUANTITIES AND SPECIAL NOTES

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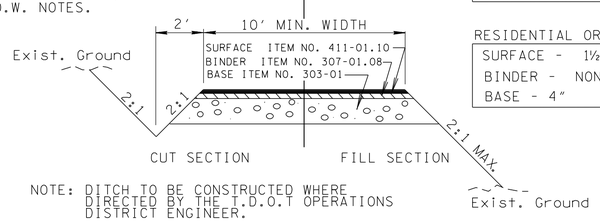
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	2
CONST.	2014	PHSIP-345(11)	2B

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)

NOTE: COLD PLANING MAY BE REQUIRED IN SOME AREAS TO ACHIEVE PROPER SUPERELEVATION. SEE CROSS SECTIONS.

IF EXISTING DRIVE IS CONCRETE, SUBSTITUTE 6" CONCRETE FOR BASE & SURFACE. IF EXISTING DRIVE IS GRAVEL, SEE R.O.W. NOTES.



NOTE: DITCH TO BE CONSTRUCTED WHERE DIRECTED BY THE T.D.O.T OPERATIONS DISTRICT ENGINEER.

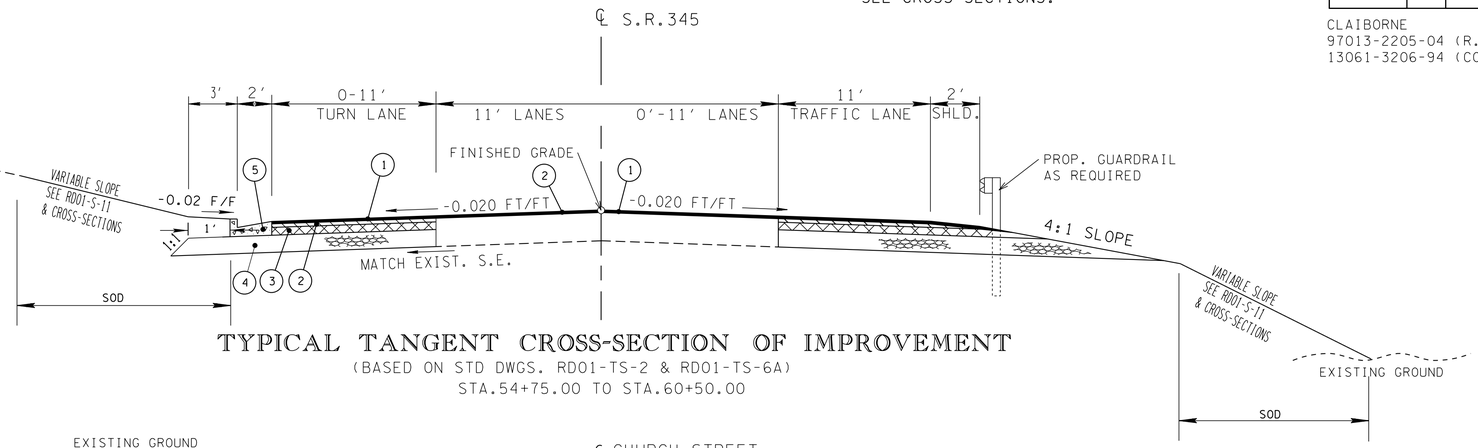
TYPICAL SECTION

PRIVATE DRIVE TO BUSINESS, FIELD OR RESIDENTIAL PROPERTY

EXISTING GROUND

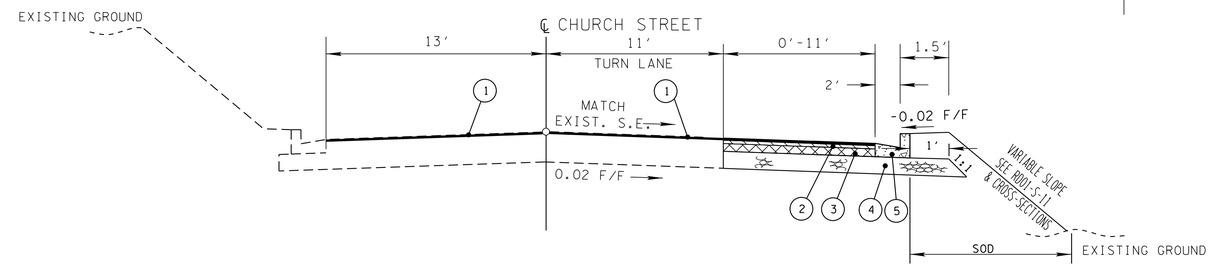
BUSINESS
SURFACE - 1¼"
BINDER - 1¾"
BASE - 4"

RESIDENTIAL OR FIELD
SURFACE - 1½"
BINDER - NONE
BASE - 4"



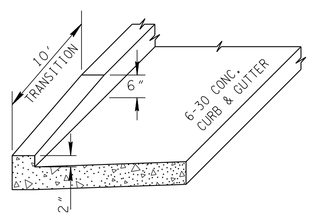
TYPICAL TANGENT CROSS-SECTION OF IMPROVEMENT

(BASED ON STD DWGS. RD01-TS-2 & RD01-TS-6A)
STA.54+75.00 TO STA.60+50.00



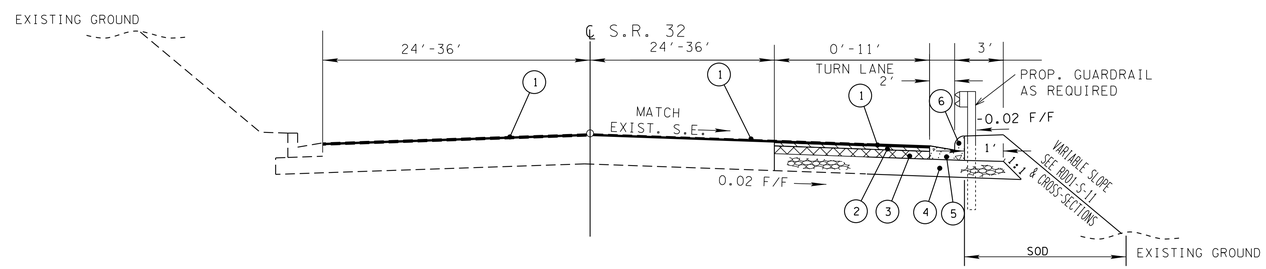
TYPICAL CROSS-SECTION OF IMPROVEMENT

(BASED ON STD. DWG. RD01-TS-6A)
51+80.00 TO 52+50.00 (PAVE WITH (1) ONLY)
STA. 52+50.00 TO 54+20.00



DETAIL OF CURB TRANSITION AT END OF CURB & GUTTER

SEE STD. DWG. RP-NMC-10 & RP-NMC-11 FOR OTHER DETAILS



TYPICAL CROSS-SECTION OF IMPROVEMENT

(BASED ON STD. DWG. RD01-TS-6A)
10+20.00 TO 11+15.00 (PAVE WITH (1) ONLY)
STA. 11+15.00 TO 13+00.00
13+00.00 TO 16+20.00 PAVE WITH (1) ONLY)

PROPOSED PAVEMENT SCHEDULE

(1) ASPHALT CONCRETE SURFACE (HOT MIX) @ 1¼" THICK (APPROX. 132.5 LBS/SQ YD) 411-01.10 ACS MIX (PG64-22) GRADING "D" 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) (RATE 0.07 GAL/SQ. YD)	(3) BITUMINOUS PLANT MIX BASE (HOT MIX) @ 3" THICK (APPROX. 345 LBS/SQ YD) 307-01.01 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "A" 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) (RATE 0.35 GAL/SQ. YD)	(5) CONCRETE COMBINED CURB AND GUTTER TYPE 6-30 DEPTH 6" 702-3 CONCRETE COMBINED CURB AND GUTTER DWD. NO. RP-NMC-11
(2) BITUMINOUS PLANT MIX BASE (HOT MIX) @ 2" THICK (APPROX. 226 LBS/SQ YD) 307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "B-M2" 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) (RATE 0.07 GAL/SQ. YD)	(4) MINERAL AGGREGATE BASE @ 10" THICK (ROADWAY) AND FULL DEPTH (SHOULDER) 303-01 MINERAL AGGREGATE, TYPE A BASE GRADING "D"	(6) CONCRETE COMBINED CURB AND GUTTER TYPE 6-30 DEPTH 4" 702-3 CONCRETE COMBINED CURB AND GUTTER DWD. NO. RP-MC-1

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TYPICAL SECTIONS, PROPOSED PAVEMENT SCHEDULE AND DETAILS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	PHSIP-345(11)	2C

CLAIBORNE CO. S.R. 345
13061-3206-94 (CONST.)

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) 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.

GUARDRAIL

(1) THE PROPOSED GUARDRAIL, INCLUDING ANY ANCHOR SYSTEM, SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD. NO PAYMENT WILL BE MADE FOR A SECTION OF PROPOSED GUARDRAIL, INCLUDING ANCHORS, UNTIL IT IS COMPLETE IN PLACE

DRAINAGE

(1) THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

(2) EXCAVATION FOR PIPE CULVERTS, ENDWALLS AND CATCH BASINS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PIPE (PIPE CULVERTS, STORM SEWERS, CONDUITS, ALL OTHER CULVERTS AND MINOR STRUCTURES).

(3) 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.

MISCELLANEOUS

(1) THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES WHERE AND AS DIRECTED BY THE ENGINEER.

(2) 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

PAVEMENT MARKINGS

(1) **TE**MPORARY 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.

(2) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 4" SPRAY THERMOPLASTIC (60 mil) 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. 716-13.01, SPRAY THERMO PVMT MRKNG (60 mil) (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.

SIGNING

(1) 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.

(2) ALL SIGNS MARKED "TO BE REMOVED" ARE TO BE REMOVED BY THE CONTRACTOR AND PAID FOR UNDER ITEM 713-15 AND BECOME THE PROPERTY OF THE CONTRACTOR.

(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.

(4) THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ERECTION.

SIGNALIZATION

(1) EQUIPMENT AND INSTALLATION OF TRAFFIC SIGNALS SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS, SECTION 730.

(2) SALVAGEABLE EQUIPMENT SHALL BECOME THE PROPERTY OF THE CITY OF TAZEWELL AND SHALL BE STOCKPILED AT A LOCATION DESIGNATED BY THE ENGINEER FOR PICKUP BY THE CITY OF TAZEWELL.

(3) IF RESURFACING IS INCLUDED IN THE PROJECT, SIGNAL DETECTION LOOPS SHALL BE INSTALLED BEFORE THE FINAL SURFACE IS APPLIED.

(4) ANY SIGNAL HEADS, WHEN VISIBLE TO DRIVERS BUT NOT OPERATIONAL, SHALL BE COMPLETELY COVERED.

(5) THE PROJECT ENGINEER SHALL NOTIFY THE LOCAL GOVERNMENTAL AGENCY RESPONSIBLE FOR TRAFFIC CONTROL MAINTENANCE AT LEAST ONE DAY IN ADVANCE OF THE COLD PLANING ACTIVITY AT SIGNALIZED INTERSECTIONS WHERE DETECTOR LOOPS ARE ON THE PAVEMENT. THE MAINTAINING AGENCY WILL THEN BE RESPONSIBLE FOR DISCONNECTING THE LOOP DETECTORS AND MAKING ANY NECESSARY TIMING ADJUSTMENTS IN THE SIGNAL CONTROLLER PRIOR TO THE CONSTRUCTION.

(6) LOOPS SHALL BE INSTALLED IN THE LEVELING COURSE IF A LEVELING COURSE IS PROVIDED.

(7) LOOP REPLACEMENT SHALL BE IN ACCORDANCE WITH SECTION 730 OF THE STANDARD SPECIFICATIONS.

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 10 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. 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 TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS AND SHALL BE PHASED FOR PROJECTS THAT HAVE OVER 50 ACRES OF SOIL DISTURBANCE. NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION PROJECT, UNLESS APPROVED IN WRITING BY THE ENVIRONMENTAL DIVISION.

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 PRIOR TO ITS DISCHARGE INTO SURFACE WATERS. 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.

(9) 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.

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DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	PHSIP-345(11)	2D

GENERAL NOTES (CONTINUED)

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

STREAM/WETLAND

(11) 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.

(12) 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.

(13) 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.

INSPECTION, MAINTENANCE, REPAIR

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

(15) 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.

(16) 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.

(17) 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.

MATERIALS

(18) 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

(19) 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.

(20) 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, 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.

(21) IF A CHANGE IN THE 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 DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.

(22) 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 I - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY REFRESHER COURSE AS REQUIRED TO MAINTAIN CERTIFICATION. A COPY OF CERTIFICATION RECORDS FOR THE COURSE SHALL BE KEPT ON SITE AND AVAILABLE UPON REQUEST.

LITTER, DEBRIS, WASTE, PETROLEUM

(23) 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 ANTICIPATED STORM EVENTS. AFTER USE, MATERIALS USED FOR EPSC WILL BE REMOVED FROM THE SITE.

(24) 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

SPECIAL NOTES

GRADING

(1) THE GRADING TABULATIONS AND RESULTING EARTHWORK ASSOCIATED BID QUANTITIES WERE PREPARED UTILIZING AVAILABLE GEOTECHNICAL INFORMATION AND/OR REPORTS PREPARED FOR THIS PROJECT. THIS INFORMATION IS PROVIDED FOR GENERAL INFORMATION AND ESTIMATION GUIDANCE ONLY.

(2) BORING DEPICTIONS SHOWN ON THE FOUNDATION DATA SHEETS, SOILS SHEETS, PLANS, AND CROSS-SECTIONS INDICATE SOIL AND ROCK CONDITIONS AT THE SPECIFIC BORING LOCATIONS. ANY SOIL PROFILE AND/OR ROCK LINE IS INTERPRETIVE BASED ON THE JUDGMENT OF THE GEOTECHNICAL ENGINEER/GEOLOGIST. THE TRANSITION BETWEEN BORINGS AND LAYERS MAY VARY SIGNIFICANTLY DEPENDING ON THE GEOLOGIC FORMATIONS ENCOUNTERED.

(3) TO ASSIST IN BID PREPARATION FOR EARTHWORK AND FOUNDATION CONSTRUCTION, DETAIL ROCK AND SOIL DESCRIPTION AND ON SOME PROJECTS, ROCK CORE SAMPLES ARE AVAILABLE FOR INSPECTION AT THE MATERIALS AND TESTS HEADQUARTERS AT 6601 CENTENNIAL BOULEVARD, NASHVILLE, TN OR AT THE TDOT REGION 1 BUILDING IN KNOXVILLE, TN.

(4) THE CONTRACTOR SHALL UTILIZE ALL INFORMATION PROVIDED IN THE PLANS, CROSS-SECTIONS AND CONTRACT DOCUMENTS INCLUDING ANY SPECIAL PROVISIONS AS WELL AS UTILIZING HIS PAST EXPERIENCE WITH PROJECTS OF SIMILAR NATURE, SCOPE AND LOCATION IN PREPARATION OF HIS BID FOR EARTHWORK ITEMS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE AND PROVIDE EQUIPMENT AND MEANS NECESSARY TO CONDUCT THE EXCAVATION ACTIVITIES IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.

(5) EARTHWORK IS PAID FOR UNDER ITEM 203-30.01, ROADWAY APPROACHES, LUMP SUM. NO ADDITIONAL PAYMENT WILL BE MADE FOR EARTHWORK QUANTITIES BASED SOLELY ON A CLAIM THAT THE QUANTITIES SHOWN IN THE GRADING TABULATION OR ELSEWHERE IN THE PLANS ARE INACCURATE WITH RESPECT TO THE TYPE OF MATERIALS ENCOUNTERED DURING CONSTRUCTION EXCEPT AS PROVIDED FOR BY SECTION 104.02 IN THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OR AS AMENDED IN SUPPLEMENTAL SPECIFICATIONS.

SEEDING AND SODDING

(1) EROSION CONTROL BLANKET (TYPE II), SEEDING WITHOUT MULCH, AND\OR SOD SHALL BE USED ON ALL ROADWAY SLOPES AND SHALL BE PAID FOR UNDER ITEM NO. 203-30.01, ROADWAY APPROACHES, LUMP SUM.

SIGNALIZATION

(1) THE DESIGN OF TRAFFIC SIGNAL SUPPORT POLES, MAST ARMS, STRAIN POLES, ETC. SHALL BE IN CONFORMANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, CURRENT EDITION. OVERHEAD CANTILEVERED TRAFFIC SIGNAL STRUCTURES SHALL BE DESIGNED FOR FATIQUE CATEGORY 1.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

(1) ANY WORK REQUIRING LANE CLOSURES SHALL BE PERFORMED MONDAY THROUGH FRIDAY BETWEEN THE HOURS OF 9:00 AM AND 3:00 PM UNLESS OTHERWISE DIRECTED BY THE TDOT REGIONAL CONSTRUCTION SUPERVISOR.

(2) THE DEPARTMENT SHALL RESERVE THE RIGHT TO REOPEN LANES AS NECESSARY WHEN TRAFFIC CONDITIONS ARE DEEMED UNACCEPTABLE (EXCESSIVE QUEUE LENGTHS AND DELAY TIMES) AND FOR SPECIAL EVENTS OR ANY UNEXPECTED OCCURRENCE THAT CREATES HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE TDOT PROJECT SUPERVISOR. THE CONTRACTOR SHALL BE REQUIRED TO FULLY COOPERATE WITH THE TDOT PROJECT SUPERVISOR WHEN REQUESTED TO MAKE CHANGES TO TRAFFIC CONTROL.

SCOPE OF WORK

(1) THIS PROJECT INCLUDES THE GRADING, DRAINAGE, BASE, PAVEMENT AND GUARDRAIL ON S.R. 345, CHURCH STREET AND S.R. 32 TO LINES AND GRADES AS INDICATED ON THE PLANS OR AS DIRECTED BY THE T.D.O.T. OPERATATIONS DISTRICT ENGINEER.

(2) THIS PROJECT INCLUDES THE INSTALLATION OF A COMPLETE NEW SIGNAL SYSTEM AT THE INTERSECTION OF S.R. 345 AND S.R. 32, INSTALLING, REMOVAL, AND RELOCATION OF SIGNS AS INDICATED ON PLANS, OR AS DIRECTED BY T.D.O.T. OPERATIONS DISTRICT ENGINEER.

(3) THIS PROJECT INCLUDES THE APPLICATION OF EPSC DEVICES, SEEDING, SODDING, PAVEMENT MARKING, SIGNING, TRAFFIC CONTROL DEVICES, AND OTHER DESIGN FEATURES AS INDICATED ON THE PLANS OR AS DIRECTED BY THE T.D.O.T. OPERATION DISTRICT ENGINEER.

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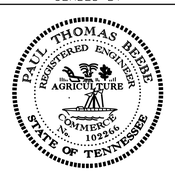

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, SPECIAL NOTES & SCOPE OF WORK

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	3
CONST.	2014	PHSIP-345(11)	3

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)

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.

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 SUFFICENT 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) 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.

(8) 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.

(8) 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.

(9) 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 OWNERS

ELECTRIC
POWELL VALLEY ELECTRIC
P.O. BOX 1528
NEW TAZEWELL, TN 37824
RAYMOND CARTER
PHONE: 423-626-0718
EMAIL: RCARTER@PVE.COOP

WATER
CLAIBORNE COUNTY UTILITY DISTRICT
P.O. BOX 606
NEW TAZEWELL, TN 37825
GEORGE COOTS
CELL: 423-526-7329
PHONE: 423-626-4282
EMAIL: GCOOTS@CUDTN.COM

TELEPHONE
CENTURYTEL TELEPHONE
P.O. BOX 100
NEW TAZEWELL, TN 37824
JIM ARTERBURN
PHONE: 423-626-8219
EMAIL: JIM.ARTERBURN@CENTURYLINK.COM

CABLE
VYVE BROAD BAND
3213 HWY 25E SUITE 1
TAZEWELL, TN 37879
JUSTIN ROBBINS
PHONE: 423-626-0079
EMAIL: JUSTINROBBINS@VYVEBB.COM

SEWER
CLAIBORNE COUNTY UTILITY DISTRICT
P.O. BOX 606
NEW TAZEWELL, TN 37825
GEORGE COOTS
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TELEPHONE
AT&T
9733 PARKSIDE DRIVE
KNOXVILLE, TN 37922
DAVID OVERMAN
PHONE: 865-470-8519
EMAIL: DO5846@ATT.COM

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
~~1~~	~~FIVE STAR PROPERTIES, INC.~~	~~083P A~~	~~7~~	~~1328~~	~~451~~	~~0.396~~		~~0.396~~				~~0.396~~				
2	ROY STEVEN STAPLETON AND WIFE, OPAL ELAINE VENABLE STAPLETON	083P A	14	1058	338		0.850	0.850		2093 S.F.	2093 S.F.		0.802			
3	JOHN ASHER	083I C	59	1305	718	2.666		2.666	3654 S.F.		3654 S.F.	2.582				
4	FIVE STAR PROPERTIES, INC.	083P B	4	1328	451		7.090	7.090		0.143	0.143		6.947	1374	0.136 AC	3427
~~5~~	~~WILLIAM R. CHADWELL AND WIFE, ANN CHADWELL~~	~~083P B~~	~~3~~	~~1001~~	~~530~~		~~2.819~~	~~2.819~~					~~2.819~~			
6	LYNN MCNEELEY BROWN	083I C	56	232	101	0.480		0.480	2292 S.F.		2292 S.F.	0.427				
~~7~~	~~G. HOWARD NEVILS AND WIFE, THELMA NEVILS~~	~~083I C~~	~~55~~	~~79~~	~~372~~	~~1.580~~		~~1.580~~				~~1.580~~				
~~8~~	~~CLARENCE F. OVERTON AND WIFE, JOYCE T. OVERTON~~	~~083I C~~	~~54~~	~~94~~	~~348~~	~~3.490~~		~~3.490~~				~~3.490~~				
~~9~~	~~ROGER BALL~~	~~083P C~~	~~1~~	~~133~~	~~261~~		~~0.775~~	~~0.775~~					~~0.775~~			

① FOR WORKING ROOM AND EPSC DEVICES

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DEPARTMENT OF TRANSPORTATION

R.O.W. ACQUISITION TABLE, R.O.W. NOTES, UTILITY NOTES & OWNERS

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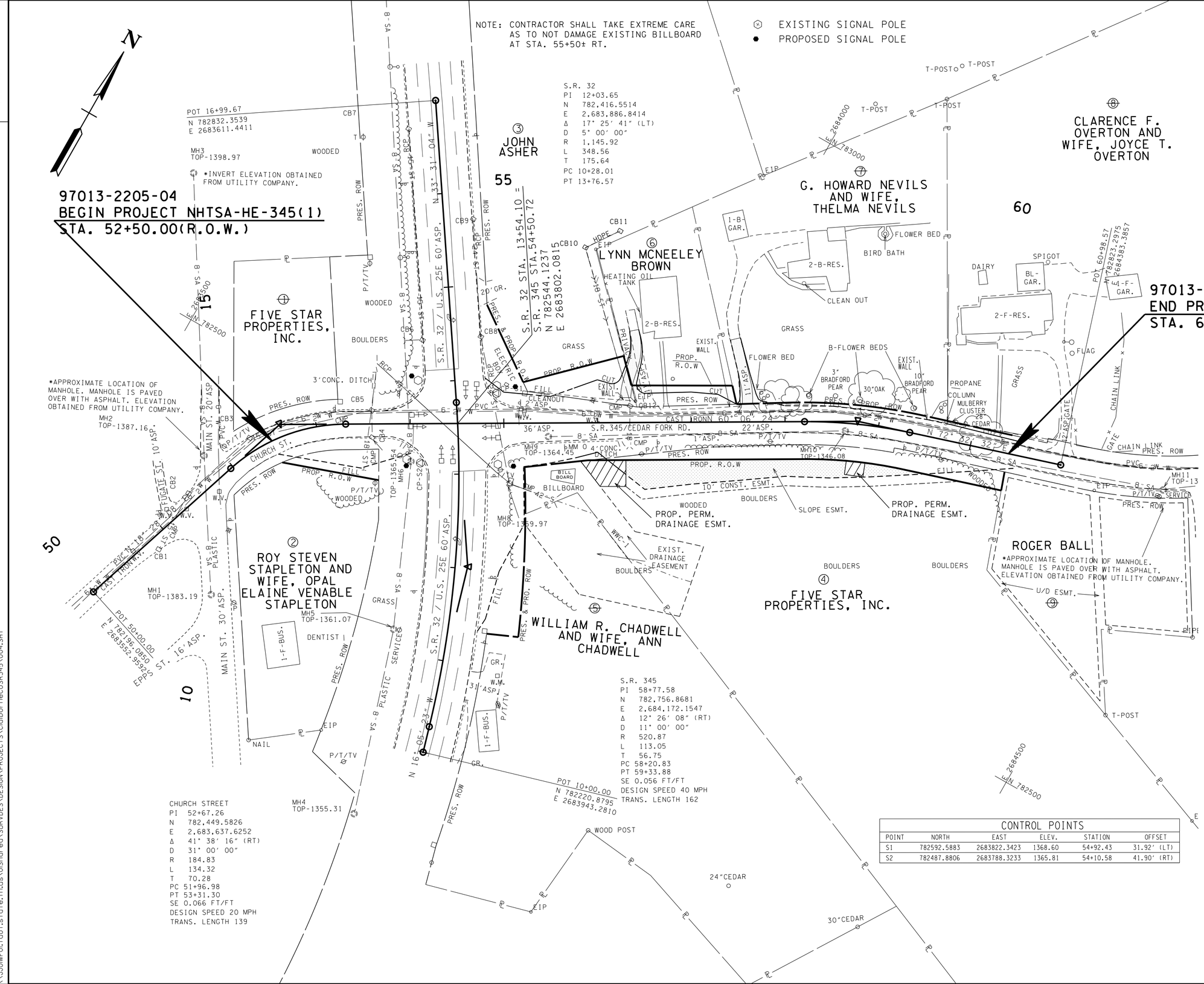
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	4
CONST.	2014	PHSIP-345(11)	4

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)



CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S1	782592.5883	2683822.3423	1368.60	54+92.43	31.92' (LT)
S2	782487.8806	2683788.3233	1365.81	54+10.58	41.90' (RT)

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

PAUL THOMAS BEERE
REGISTERED ENGINEER
No. 102266
DEPT. OF AGRICULTURE
COMMERCE
STATE OF TENNESSEE

COORDINATES ARE NAD/B31(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000050 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.52+50.00 TO STA. 60+41.57

SCALE: 1"= 50'

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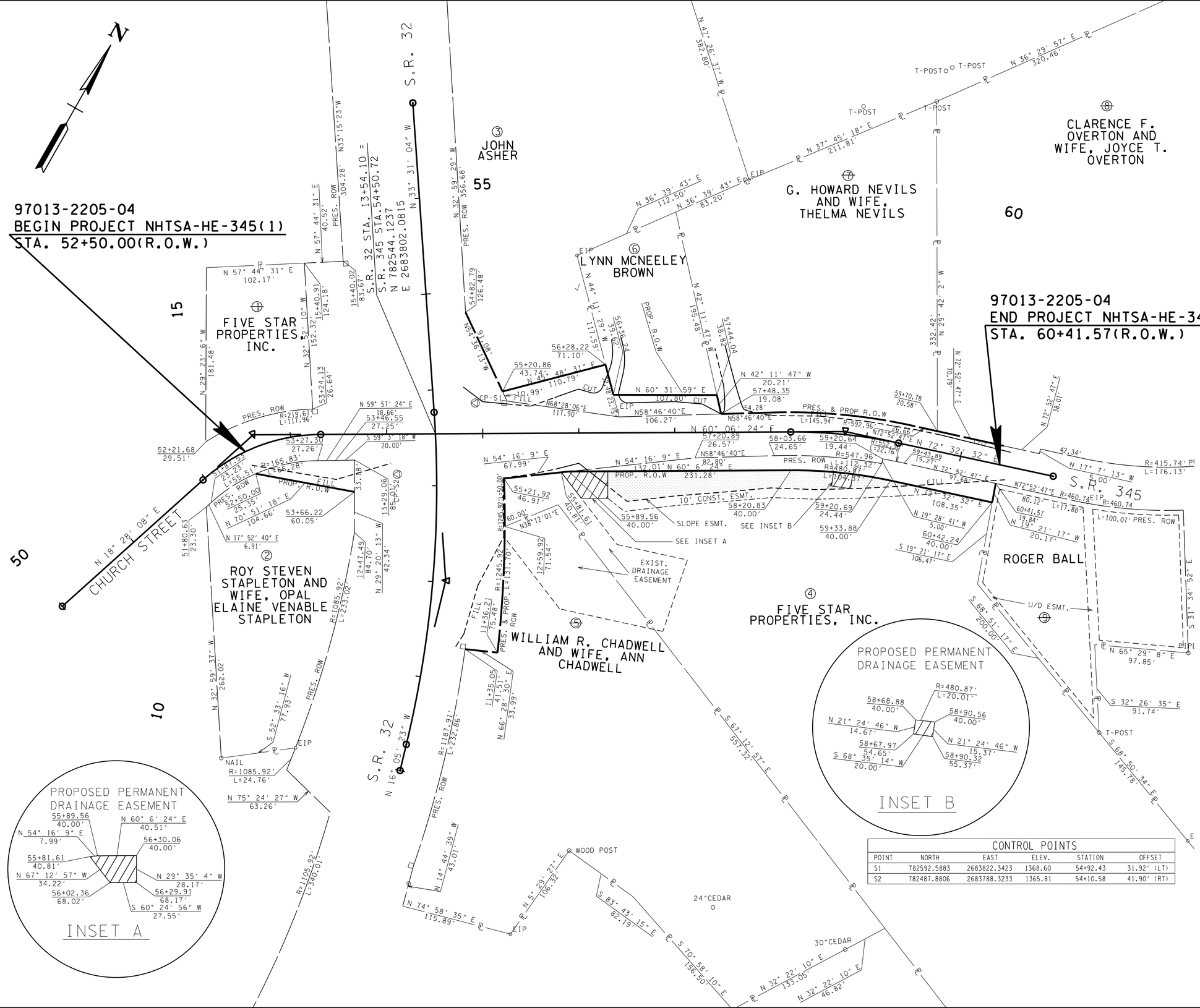
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	4A
CONST.	2014	PHSIP-345(11)	4A

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)



CONTROL POINTS					
POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S1	782592.5883	2683822.3423	1368.60	54+92.43	31.92' (LT)
S2	782487.8806	2683788.3233	1365.81	54+10.58	41.90' (RT)

UNOFFICIAL SET

NOT FOR BIDDING

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COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000050 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

R.O.W. DETAILS

STA.52+50.00 TO STA.60+41.57

SCALE: 1"= 50'

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

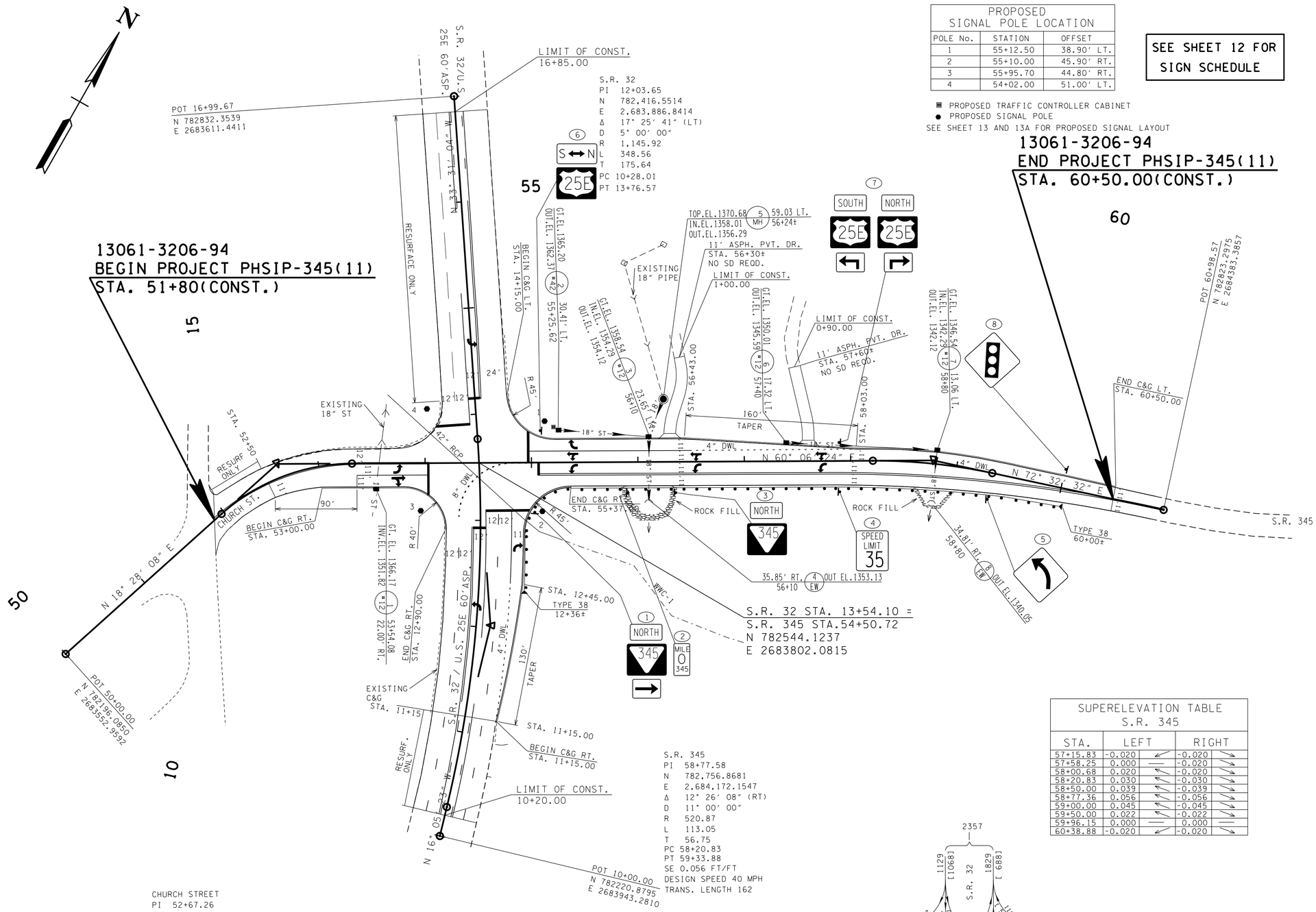
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	4B
CONST.	2014	PHSIP-345(11)	4B

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)

PROPOSED SIGNAL POLE LOCATION		
POLE No.	STATION	OFFSET
1	55+12.50	38.90' LT.
2	55+10.00	45.90' RT.
3	55+95.70	44.80' RT.
4	54+02.00	51.00' LT.

SEE SHEET 12 FOR SIGN SCHEDULE

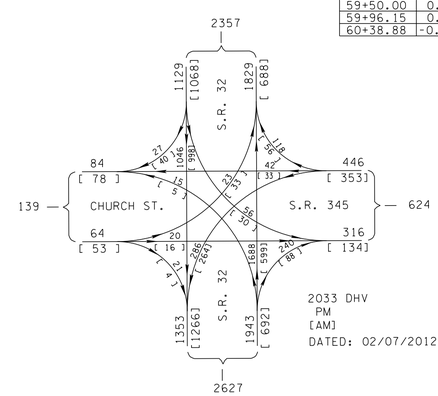
▣ PROPOSED TRAFFIC CONTROLLER CABINET
● PROPOSED SIGNAL POLE
SEE SHEET 13 AND 13A FOR PROPOSED SIGNAL LAYOUT



S.R. 345
PI 58+77.58
N 782,756.8681
E 2,684,172.1547
Δ 12° 26' 08" (RT)
D 11° 00' 00"
R 520.87
L 113.05
T 56.75
PC 58+20.83
PT 59+33.88
SE 0.056 FT/FT
DESIGN SPEED 40 MPH
TRANS. LENGTH 162

CHURCH STREET
PI 52+67.26
N 782,449.5826
E 2,683,637.6252
Δ 41° 38' 16" (RT)
D 31° 00' 00"
R 184.83
L 134.32
T 70.28
PC 51+96.98
PT 53+31.30
SE 0.066 FT/FT
DESIGN SPEED 20 MPH
TRANS. LENGTH 139

SUPERELEVATION TABLE S.R. 345				
STA.	LEFT		RIGHT	
57+15.83	-0.020	↙	-0.020	↘
57+58.25	0.000	—	-0.020	↘
58+00.68	0.020	↖	-0.020	↘
58+20.83	0.030	↖	-0.030	↘
58+50.00	0.039	↖	-0.039	↘
58+77.36	0.056	↖	-0.056	↘
59+00.00	0.045	↖	-0.045	↘
59+50.00	0.022	↖	-0.022	↘
59+96.15	0.000	—	0.000	—
60+38.88	-0.020	↙	-0.020	↘



2033 DHV
PM
[AM]
DATED: 02/07/2012

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

PAUL THOMAS BEDRE
REGISTERED ENGINEER
No. 102265
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000050 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.51+80.00 TO STA.60+50.00

SCALE: 1"= 50'

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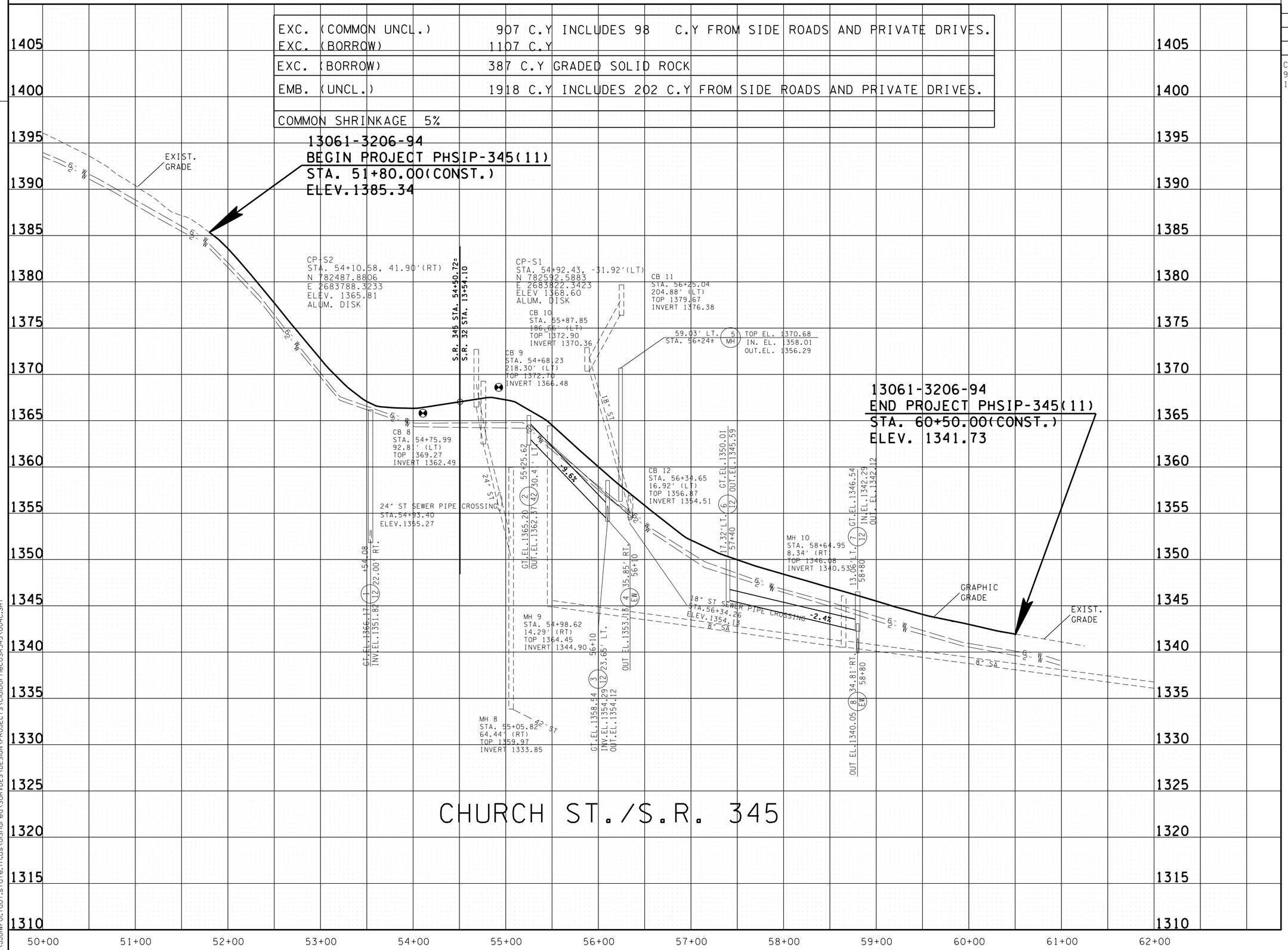
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

EXC. (COMMON UNCL.)	907 C.Y	INCLUDES 98 C.Y FROM SIDE ROADS AND PRIVATE DRIVES.
EXC. (BORROW)	1107 C.Y	
EXC. (BORROW)	387 C.Y	GRADED SOLID ROCK
EMB. (UNCL.)	1918 C.Y	INCLUDES 202 C.Y FROM SIDE ROADS AND PRIVATE DRIVES.
COMMON SHRINKAGE 5%		



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	4C
CONST.	2014	PHSIP-345(11)	4C

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)

NOTE:
FINISHED GRADE IS 1¼" ABOVE EXISTING GRADE

NOTE:
SEE SHEET NO. 5 FOR PROFILE OF SIDE ROADS AND PRIVATE DRIVEWAY

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

PAUL THOMAS BREEDEN
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 102366
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE

STA. 51+80 TO STA. 60+50
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

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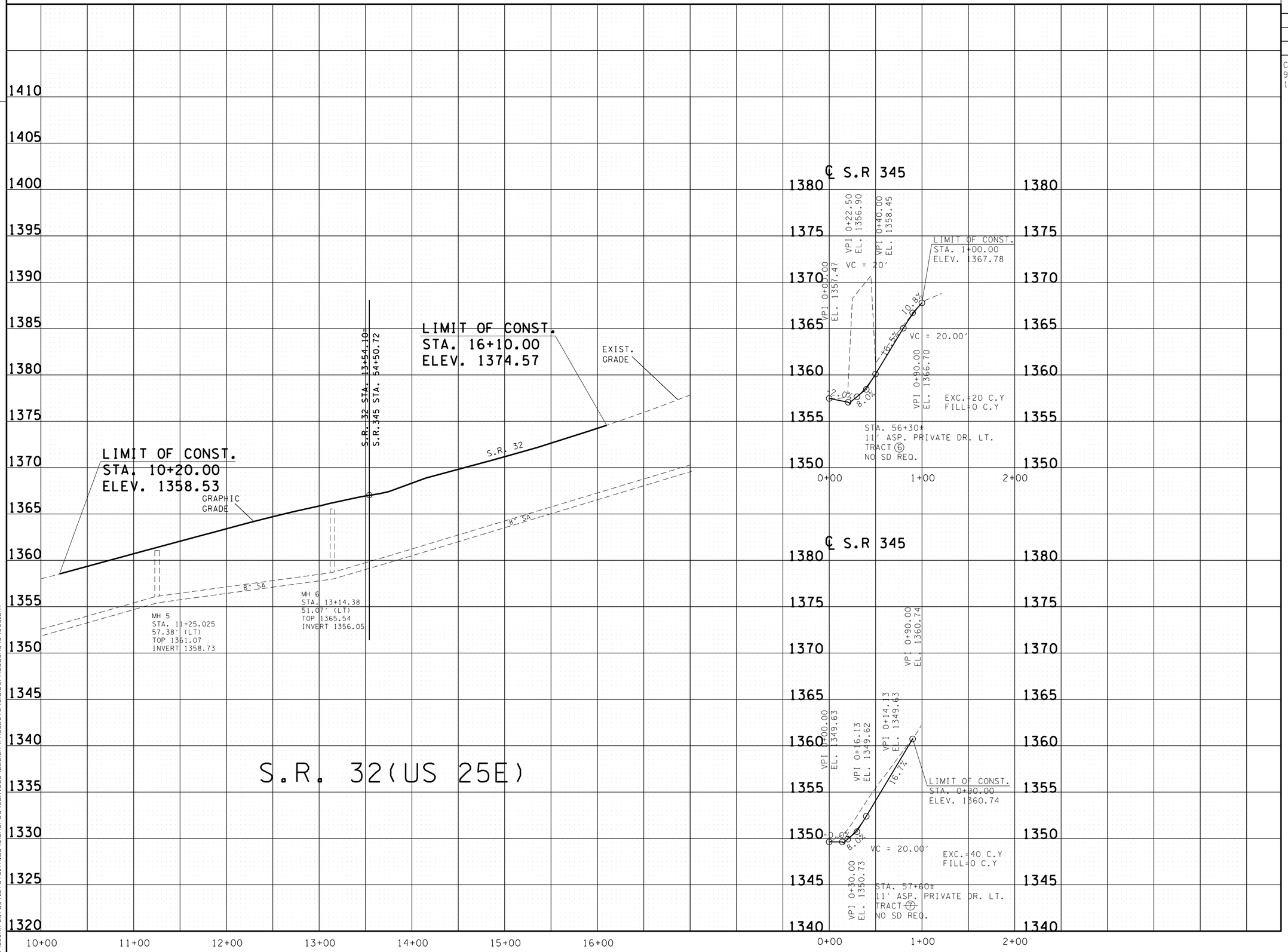
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	5
CONST.	2014	PHSIP-345(11)	5

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)



NOTE:
FINISHED GRADE IS 1¼"
ABOVE EXISTING GRADE

UNOFFICIAL SET

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PROFILE OF SIDE ROAD AND PRIVATE DRIVES

SCALE: 1"= 50' 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	NHTSA-HE-345(1)	7
CONST.	2014	PHSIP-345(11)	7

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

NPDES

(1) 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.

(2) 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.

(3) 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.

(4) PERMANENT EPSC MEASURES SHALL BE INITIATED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OF ANY SEQUENCE OR PHASE. TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED WITHIN 14 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 14 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-RUN WILL NOT BE CONSIDERED A NON-ERODIBLE SURFACE.

(5) STEEP SLOPES (A NATURAL OR CREATED SLOPE OF 35% GRADE (2.8H:1V) OR GREATER REGARDLESS OF HEIGHT) SHALL BE TEMPORARILY STABILIZED NO LATER THAN 7 CALENDAR DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED.

(6) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SUPPORT ACTIVITIES; TDOT PROJECTS ARE COVERED UNDER THE "WASTE AND BORROW" MANUAL PER THE SSWMP.

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EROSION PREVENTION AND SEDIMENT CONTROL NOTES

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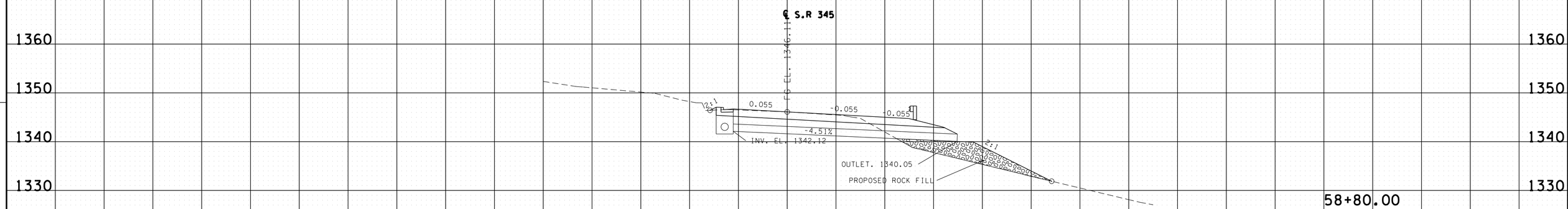
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	6
CONST.	2014	PHSIP-345(11)	6

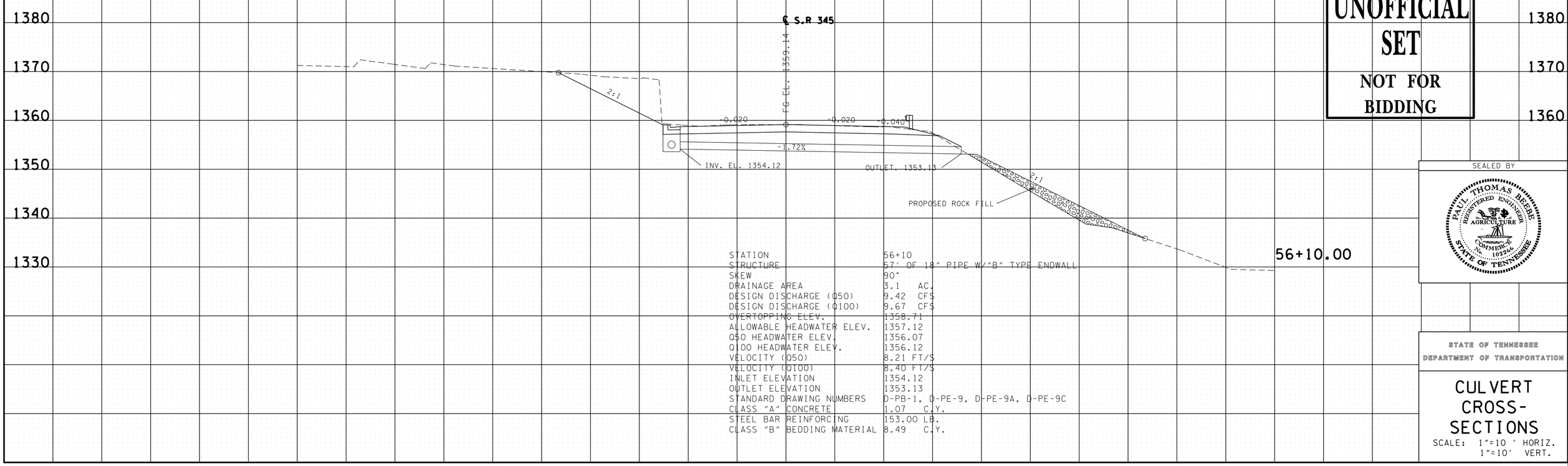
CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



STATION	58+80
STRUCTURE	46' OF 18" PIPE W/"B" TYPE ENDWALL
SKEW	90°
DRAINAGE AREA	1.6 AC.
DESIGN DISCHARGE (Q50)	4.86 CFS
DESIGN DISCHARGE (Q100)	4.99 CFS
OVERTOPPING ELEV.	1346.71
ALLOWABLE HEADWATER ELEV.	1345.12
Q50 HEADWATER ELEV.	1343.38
Q100 HEADWATER ELEV.	1343.40
VELOCITY (Q50)	9.19 FT/S
VELOCITY (Q100)	9.81 FT/S
INLET ELEVATION	1342.12
OUTLET ELEVATION	1340.05
STANDARD DRAWING NUMBERS	D-PB-1, D-PE-9, D-PE-9A, D-PE-9C
CLASS "A" CONCRETE	1.07 C.Y.
STEEL BAR REINFORCING	153.00 LB.
CLASS "B" BEDDING MATERIAL	6.85 C.Y.



STATION	56+10
STRUCTURE	57' OF 18" PIPE W/"B" TYPE ENDWALL
SKEW	90°
DRAINAGE AREA	3.1 AC.
DESIGN DISCHARGE (Q50)	9.42 CFS
DESIGN DISCHARGE (Q100)	9.67 CFS
OVERTOPPING ELEV.	1358.71
ALLOWABLE HEADWATER ELEV.	1357.12
Q50 HEADWATER ELEV.	1356.07
Q100 HEADWATER ELEV.	1356.12
VELOCITY (Q50)	8.21 FT/S
VELOCITY (Q100)	8.40 FT/S
INLET ELEVATION	1354.12
OUTLET ELEVATION	1353.13
STANDARD DRAWING NUMBERS	D-PB-1, D-PE-9, D-PE-9A, D-PE-9C
CLASS "A" CONCRETE	1.07 C.Y.
STEEL BAR REINFORCING	153.00 LB.
CLASS "B" BEDDING MATERIAL	8.49 C.Y.

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DEPARTMENT OF TRANSPORTATION

CULVERT CROSS-SECTIONS

SCALE: 1"=10' HORIZ.
1"=10' VERT.

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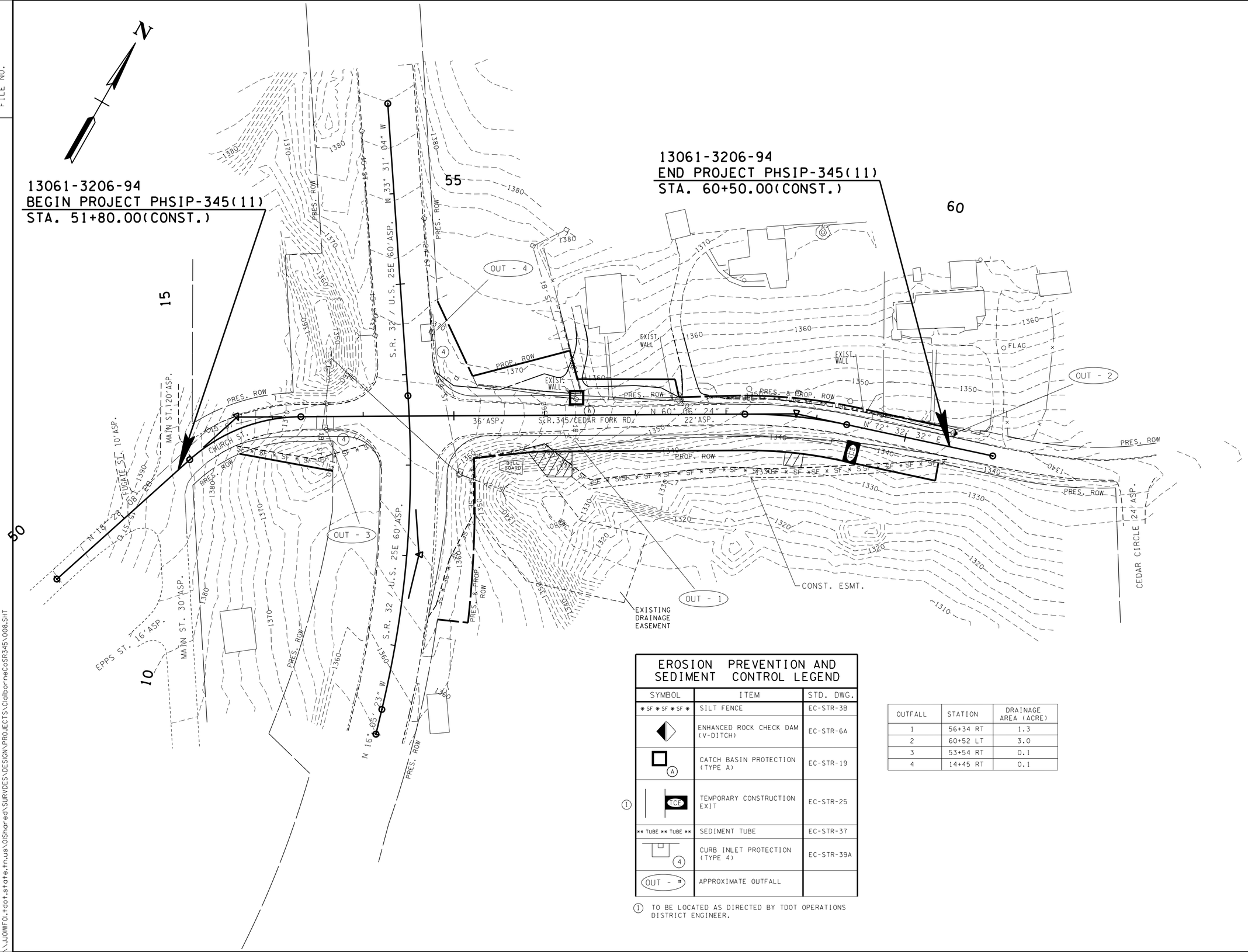
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	8
CONST.	2014	PHSIP-345(11)	8

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)



EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
* SF * SF * SF *	SILT FENCE	EC-STR-3B
	ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A
A	CATCH BASIN PROTECTION (TYPE A)	EC-STR-19
(1) TCE	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
** TUBE ** TUBE **	SEDIMENT TUBE	EC-STR-37
4	CURB INLET PROTECTION (TYPE 4)	EC-STR-39A
OUT - #	APPROXIMATE OUTFALL	

(1) TO BE LOCATED AS DIRECTED BY TDOT OPERATIONS DISTRICT ENGINEER.

OUTFALL	STATION	DRAINAGE AREA (ACRE)
1	56+34 RT	1.3
2	60+52 LT	3.0
3	53+54 RT	0.1
4	14+45 RT	0.1

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COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000050 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN (STAGE 1)

STA. 51+80 TO STA. 60+50

SCALE: 1"= 50'

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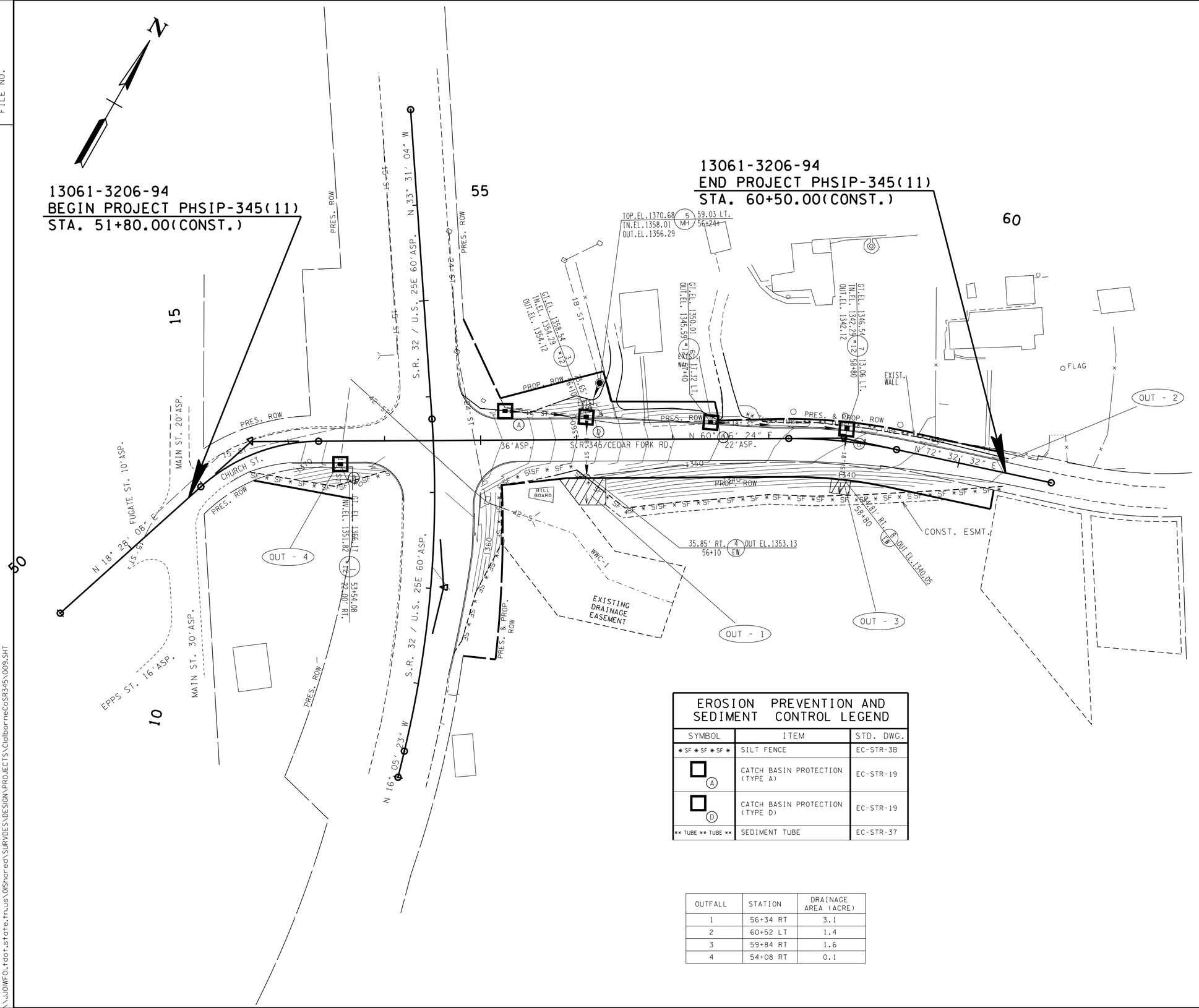
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	9
CONST.	2014	PHSIP-345(11)	9

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)



EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
* SF * SF * SF *	SILT FENCE	EC-STR-3B
(A)	CATCH BASIN PROTECTION (TYPE A)	EC-STR-19
(D)	CATCH BASIN PROTECTION (TYPE D)	EC-STR-19
** TUBE ** TUBE **	SEDIMENT TUBE	EC-STR-37

OUTFALL	STATION	DRAINAGE AREA (ACRE)
1	56+34 RT	3.1
2	60+52 LT	1.4
3	59+84 RT	1.6
4	54+08 RT	0.1

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

PAUL THOMAS BEBBE
REGISTERED ENGINEER
DEPARTMENT OF AGRICULTURE
DEPARTMENT OF COMMERCE
No. 102266
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000050 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN (STAGE 2)

STA. 51+80 TO STA. 60+50

SCALE: 1"= 50'

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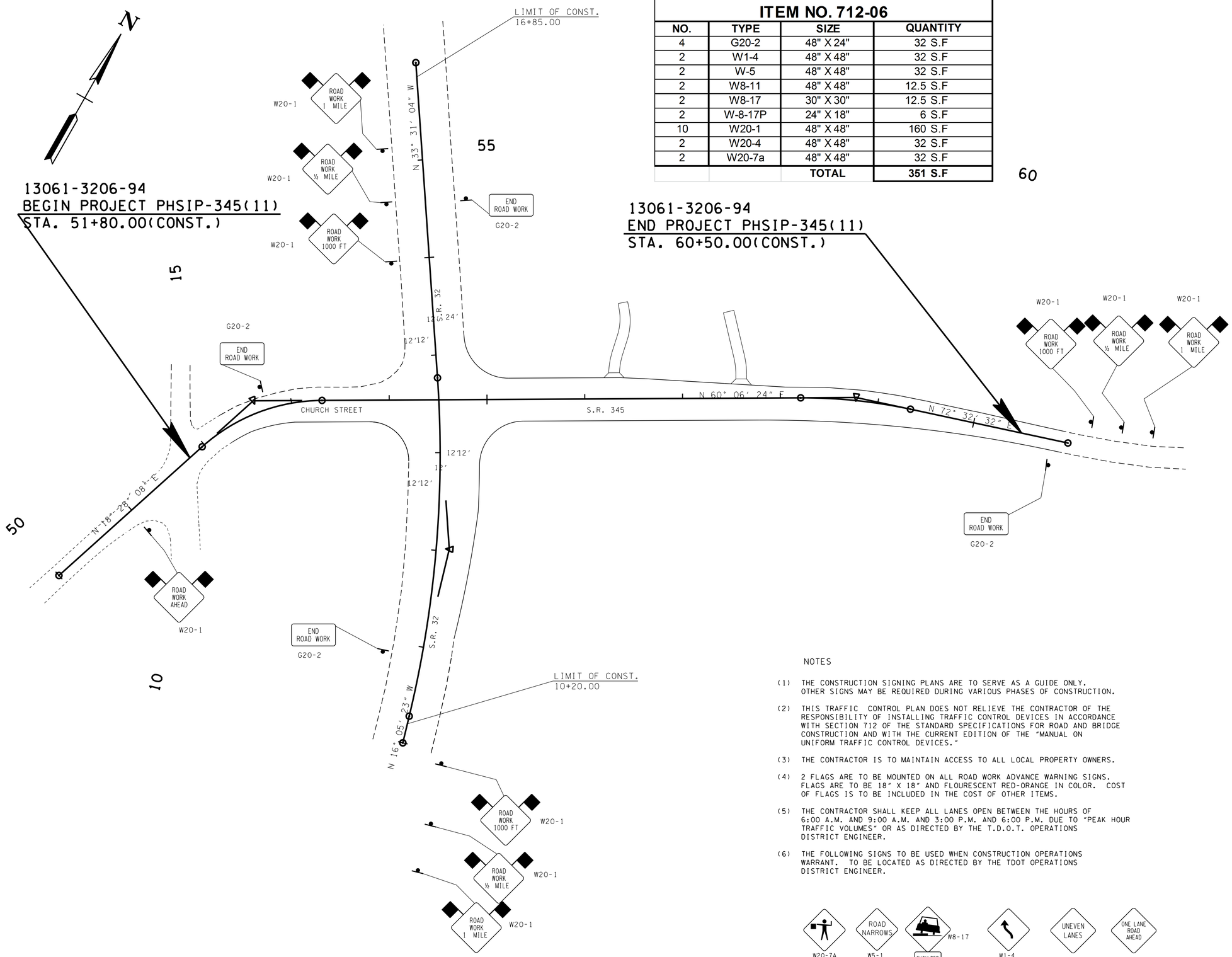
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	PHSIP-345(11)	10

CLAIBORNE CO. S.R. 345
13061-3206-94 (CONST.)

CONSTRUCTION SIGN TABULATION
ITEM NO. 712-06

NO.	TYPE	SIZE	QUANTITY
4	G20-2	48" X 24"	32 S.F
2	W1-4	48" X 48"	32 S.F
2	W-5	48" X 48"	32 S.F
2	W8-11	48" X 48"	12.5 S.F
2	W8-17	30" X 30"	12.5 S.F
2	W-8-17P	24" X 18"	6 S.F
10	W20-1	48" X 48"	160 S.F
2	W20-4	48" X 48"	32 S.F
2	W20-7a	48" X 48"	32 S.F
		TOTAL	351 S.F



NOTES

(1) THE CONSTRUCTION SIGNING PLANS ARE TO SERVE AS A GUIDE ONLY. OTHER SIGNS MAY BE REQUIRED DURING VARIOUS PHASES OF CONSTRUCTION.

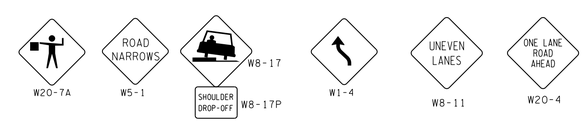
(2) THIS TRAFFIC CONTROL PLAN DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF INSTALLING TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH SECTION 712 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND WITH THE CURRENT EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

(3) THE CONTRACTOR IS TO MAINTAIN ACCESS TO ALL LOCAL PROPERTY OWNERS.

(4) 2 FLAGS ARE TO BE MOUNTED ON ALL ROAD WORK ADVANCE WARNING SIGNS. FLAGS ARE TO BE 18" X 18" AND FLOURESCENT RED-ORANGE IN COLOR. COST OF FLAGS IS TO BE INCLUDED IN THE COST OF OTHER ITEMS.

(5) THE CONTRACTOR SHALL KEEP ALL LANES OPEN BETWEEN THE HOURS OF 6:00 A.M. AND 9:00 A.M. AND 3:00 P.M. AND 6:00 P.M. DUE TO "PEAK HOUR TRAFFIC VOLUMES" OR AS DIRECTED BY THE T.D.O.T. OPERATIONS DISTRICT ENGINEER.

(6) THE FOLLOWING SIGNS TO BE USED WHEN CONSTRUCTION OPERATIONS WARRANT. TO BE LOCATED AS DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER.



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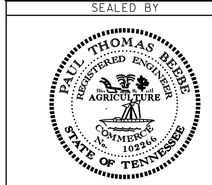

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
STA. 51+80 TO STA. 60+50
SCALE: 1"= 50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	PHSIP-345(11)	11

CLAIBORNE CO. S.R. 345
13061-3206-94 (CONST.)

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

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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PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

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SOUTH M3-1

ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

SEE STD. DWG. NO. T-S-19

SIGN NO	LEGEND	SHEET NO	SIZE				COPY				SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
			LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL	SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU. YD.	REIN STEEL LBS.		
4	SPEED LIMIT 35 R2-1		30"	36"									BLACK	WHITE (REF.)	0.080" SHEET ALUMINUM	P8	h =12'-6"				5'-0"	
8	W3-3		36"	36"									BLACK RED (REF.) GREEN (REF.)	YELLOW (REF.)	0.100" SHEET ALUMINUM	P8	h =13'-6"				5'-0"	
5	W1-2		36"	36"									BLACK	YELLOW (REF.)	0.100" SHEET ALUMINUM	P8	h =13'-6"				5'-0"	
2	TN-17b MILE 0 345 MILE 0 345 TN-17b		6"	19"									WHITE (REF.)	GREEN (REF.)	0.080" SHEET ALUMINUM	U1	h =9"-0"				5'-0"	MOUNT SIGNS BACK TO BACK
3	NORTH M3-3 345 TN-6B		24" 30"	12" 24"									BLACK	(REF.) WHITE	0.080" SHEET ALUMINUM	P8	h =13'-0"				5'-0"	
1	NORTH M3-3 345 TN-6B M6-1		24" 30" 21"	12" 24" 15"									BLACK	(REF.) WHITE	0.080" SHEET ALUMINUM	P8	h =14'-6"				5'-0"	
6	S↔N TN-39 25E M1-4		30" 30"	15" 24"									BLACK	(REF.) WHITE	0.080" SHEET ALUMINUM	P8	h =13'-0"				5'-0"	
7	M3-1 SOUTH NORTH M3-3 M1-4 25E 25E M1-4 M5-1 M5-1		24" 30" 21"	12" 24" 15"									BLACK	(REF.) WHITE	0.080" SHEET ALUMINUM	P8	h_1=14'-6" h_2=15'-0"				5'-0"	
	Hwy 25E D3-1		66"	18"			8"	6"		"D"			WHITE (REF.)	GREEN (REF.)	0.100" SHEET ALUMINUM							SEE SIGNAL SHEETS FOR DETAILS.
	← Church St D3-1 (MOD.)		84"	18"			8"	6"		"D"		TYPE "A"	WHITE (REF.)	GREEN (REF.)	0.100" SHEET ALUMINUM							
	Church St → D3-1 (MOD.)		84"	18"			8"	6"		"D"		TYPE "A"	WHITE (REF.)	GREEN (REF.)	0.100" SHEET ALUMINUM							
	← Cedar Fork Rd D3-1 (MOD.)		96"	18"			8"	6"		"D"		TYPE "A"	WHITE (REF.)	GREEN (REF.)	0.100" SHEET ALUMINUM							
	Cedar Fork Rd → D3-1 (MOD.)		96"	18"			8"	6"		"D"		TYPE "A"	WHITE (REF.)	GREEN (REF.)	0.100" SHEET ALUMINUM							

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014		12

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U-POST SUBSTITUTION TABLE

BID ITEM 713-11.01	SUBSTITUTION ALLOWED
2#/FT. U1	2#/FT. MU1 OR 2#/FT. R1
2.5#/FT. U3	2.5#/FT. MU3 OR 3#/FT. R2*
3#/FT. U6	
4#/FT. U7	NO SUBSTITUTES

* PAID AT A RATE OF 2.5#/FT.

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DEPARTMENT OF TRANSPORTATION

SIGN SCHEDULE

7-JUN-2014 12:22
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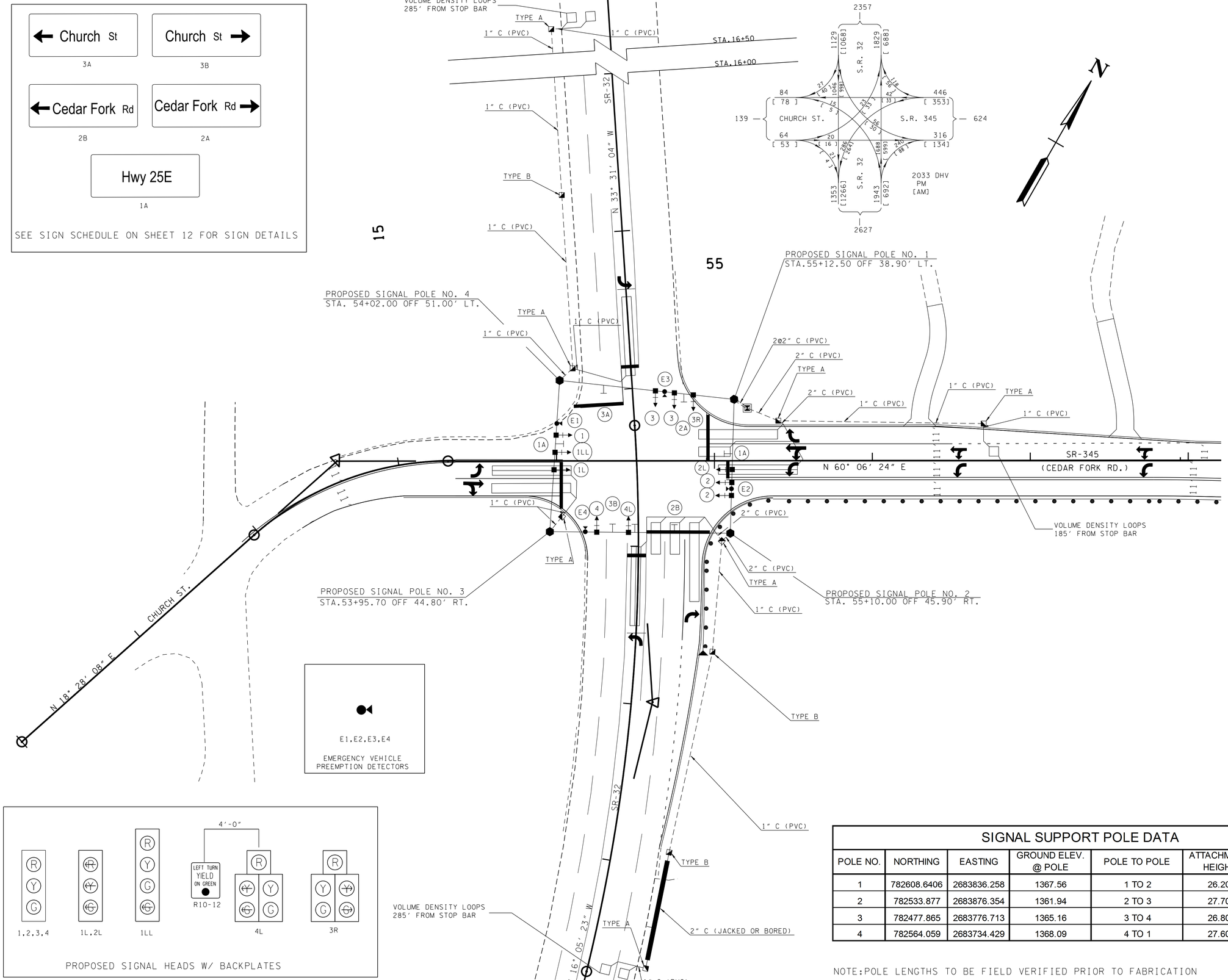
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2014	PHSIP-345(11)	13

13061-3206-94 (CONST.)



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COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000050 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED SIGNAL LAYOUT

S.R. 345/CHURCH ST.
AT
S.R. 32

SCALE: 1"=30 '

SIGNAL SUPPORT POLE DATA

POLE NO.	NORTHING	EASTING	GROUND ELEV. @ POLE	POLE TO POLE	ATTACHMENT HEIGHT	ATTACHMENT ELEV.
1	782608.6406	2683836.258	1367.56	1 TO 2	26.20	1392.83
2	782533.877	2683876.354	1361.94	2 TO 3	27.70	1393.77
3	782477.865	2683776.713	1365.16	3 TO 4	26.80	1393.15
4	782564.059	2683734.429	1368.09	4 TO 1	27.60	1395.91

NOTE:POLE LENGTHS TO BE FIELD VERIFIED PRIOR TO FABRICATION

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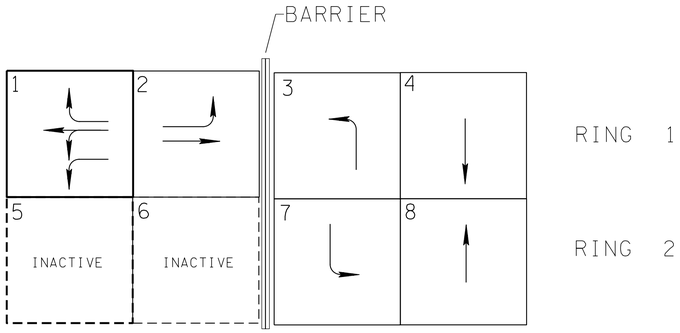
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	PHSIP-345(11)	13A

S.R. 345
13061-3206-94
CLAIBORNE CO.



NEMA EIGHT PHASE DESIGNATIONS

ACTIVE PHASE

INACTIVE PHASE (NOT USED)

- OPERATION IS DUAL ENTRY MODE, FULL SKIP CAPABILITY
- SINGLE DIRECTION, LAGGING LEFT TURN PHASES ARE NOT ALLOWED
- ALL SIGNAL DISPLAYS AND CLEARANCES SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

BASIC OR SEMI - ACTUATED TIMING (SECS)

PHASE	INITIAL INTERVAL	VEHICLE INTERVAL	MAX I	MAX II	CLEARANCE		PEDESTRIAN		RECALL TO	MEMORY POSITION (1)	LEFT TURN OPERATION (2)
					YELLOW	ALL RED	WALK	FLASHING DONT WALK			
2	6.0	1.5	7.5	---	4.0	2.5				L	PROT
7	6.0	1.5	10.0	---	4.5	2.5				NL	P+P

				---							

(1) NL = NONLOCK
L = LOCK

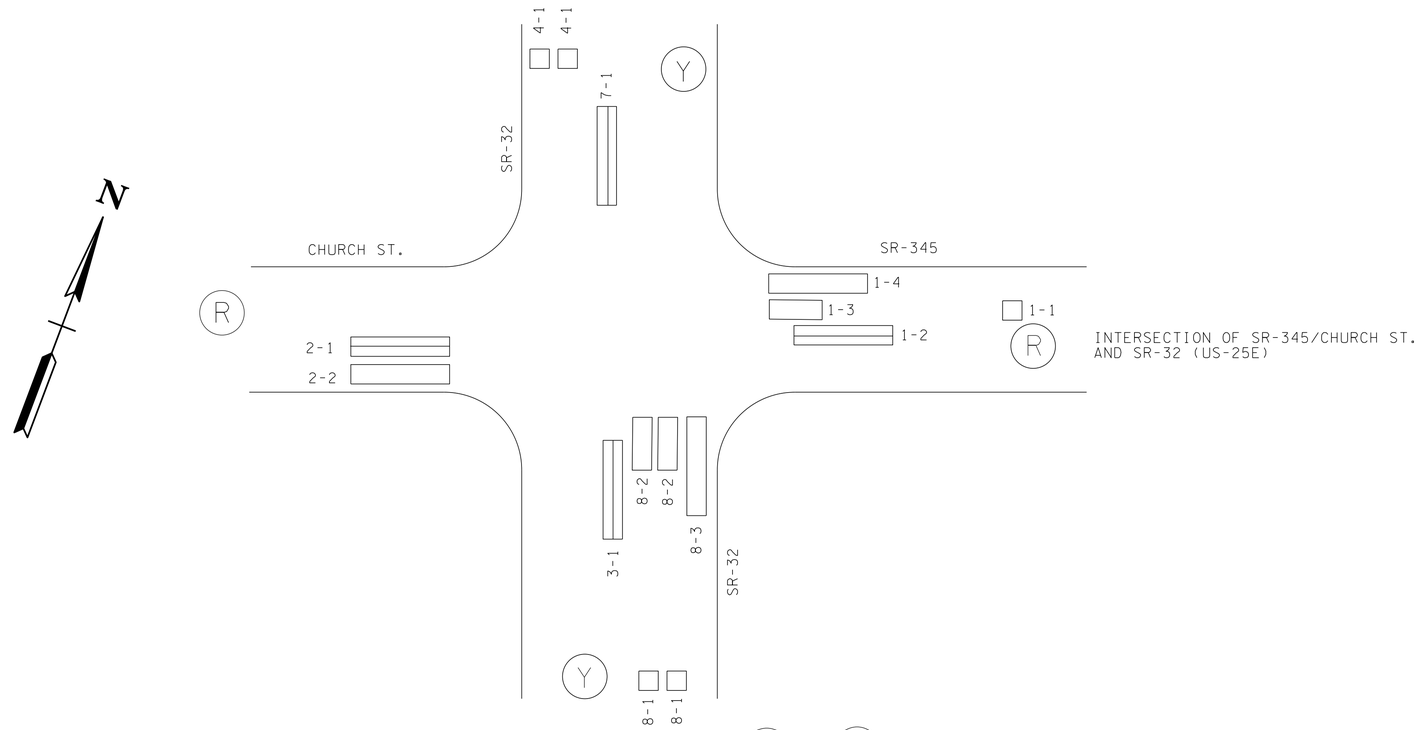
(2) PERM = PERMITTED
PROT = PROTECTED
P + P = PROT/PERM

VOLUME - DENSITY TIMING (SECS)

PHASE	INITIAL INTERVAL	ADDED INITIAL PER ACTUATION	PASSAGE TIME	MINIMUM GAP	TIME BEFORE REDUCTION	TIME TO REDUCE	MAX I	MAX II	CLEARANCE		PEDESTRIAN		RECALL TO	MEMORY POSITION (1)
									YELLOW	ALL RED	WALK	FLASHING DONT WALK		
1	10	2.4	4.0	4.0	10.0	15.0	10.5		4.0	2.5				L
4	15	2.3	4.7	4.7	15.0	23.0	62.0		4.5	2.5				L
8	15	2.3	4.7	4.7	15.0	23.0	45.0		4.5	2.5				L

THESE TIMINGS ARE INITIAL AND MAY BE ADJUSTED BY THE CONTRACTOR BASED ON FIELD OBSERVATIONS TO PROVIDE EFFICIENT OPERATION.

DETECTION LOOP DIAGRAM



FLASHING OPERATION (Y) OR (R)

DETECTION LOOP NUMBERING

LOOP AND AMP ASSIGNMENTS

	LOOP #	VEHICLE DETECT #	LOOP LENGTH	AMP MODE	AMP. FEATURE TIMING(SEC)	ASSOC. Ø
	1-1	1	1@6X6	PULSE		1
*	1-2	1	1@6X50	PRES.		1
	1-3	1	1@6X20	PRES.		1
	1-4	1	1@6X50	PRES.	5 SEC DELAY	1
*	2-1	2	1@6X50	PRES.		2
	2-2	2	1@6X50	PRES.		2
*	3-1	3	1@6X50	PRES.		3
	4-1	2	2@6X6	PULSE		4
*	7-1	2	1@6X50	PRES.		7
	8-1	3	2@6X6	PULSE		8
	8-2	3	2@6X20	PRES.		8
	8-3	3	1@6X50	PRES.	5 SEC DELAY	8

*QUADRAPOLES

- ALL LOOPS ARE 6' IN WIDTH, CENTERED IN TRAFFIC LANE .
- LOOP WIRE CONNECTIONS SHALL BE WIRED TO PROVIDE THE APPROPRIATE INDUCTANCE AS REQUIRED BY STD. DWG. T-SG-3.

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PHASING, TIMING, DETECTOR ASSIGNMENT

EIGHT PHASE

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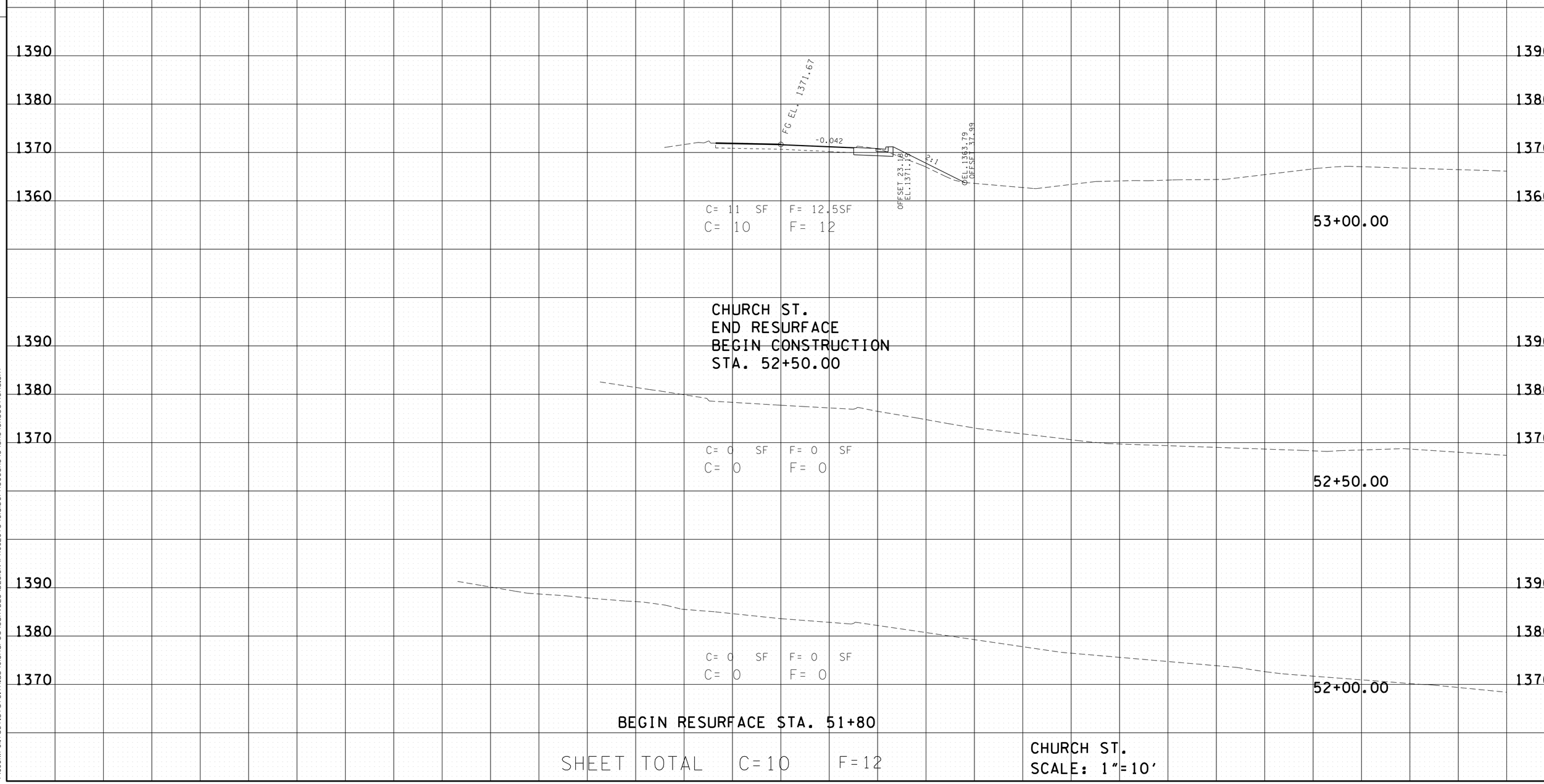
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	10
CONST.	2014	PHSIP-345(11)	14

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)



FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

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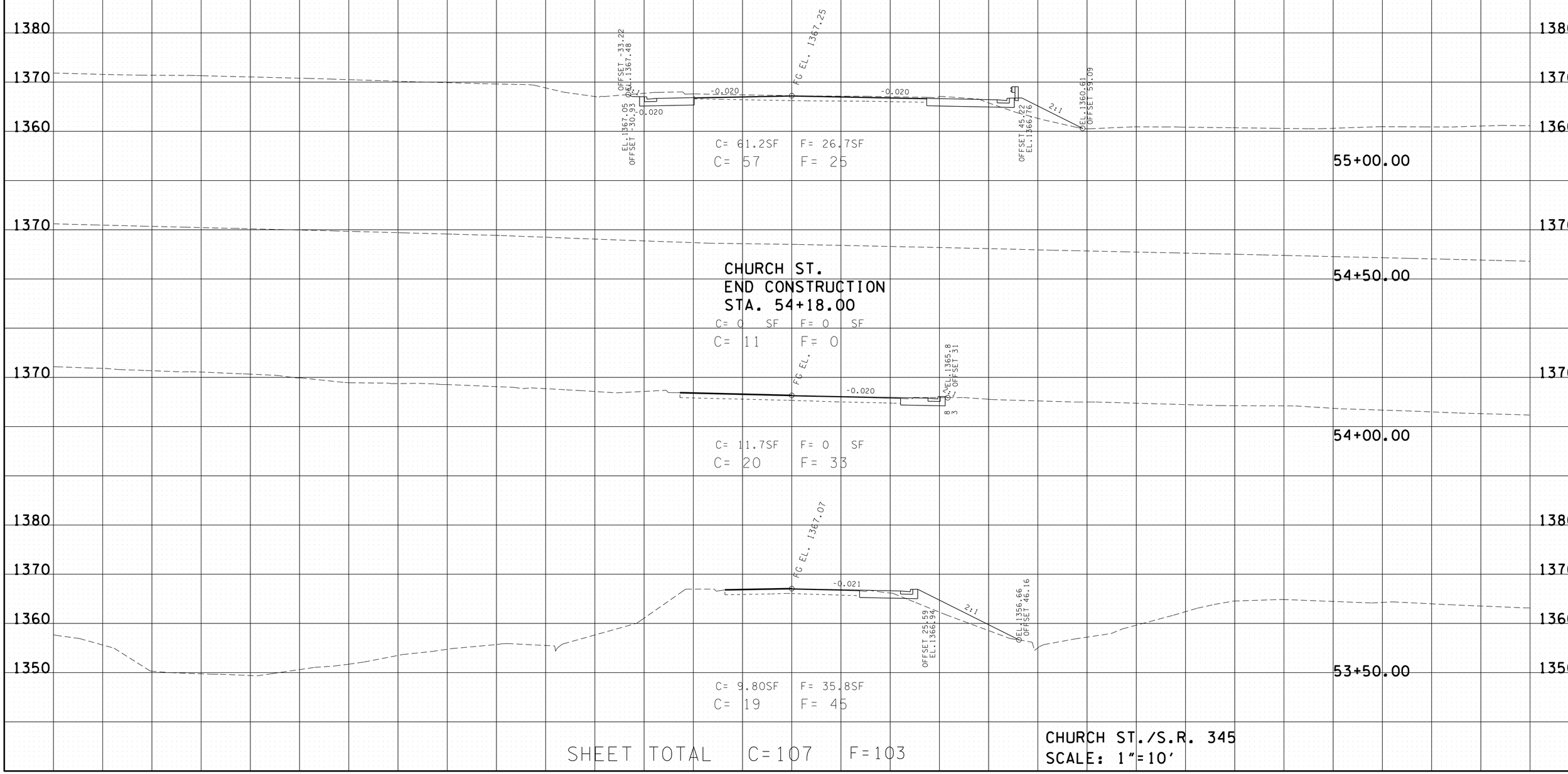
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	11
CONST.	2014	PHSIP-345(11)	15

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



SHEET TOTAL C=107 F=103

CHURCH ST./S.R. 345
SCALE: 1"=10'

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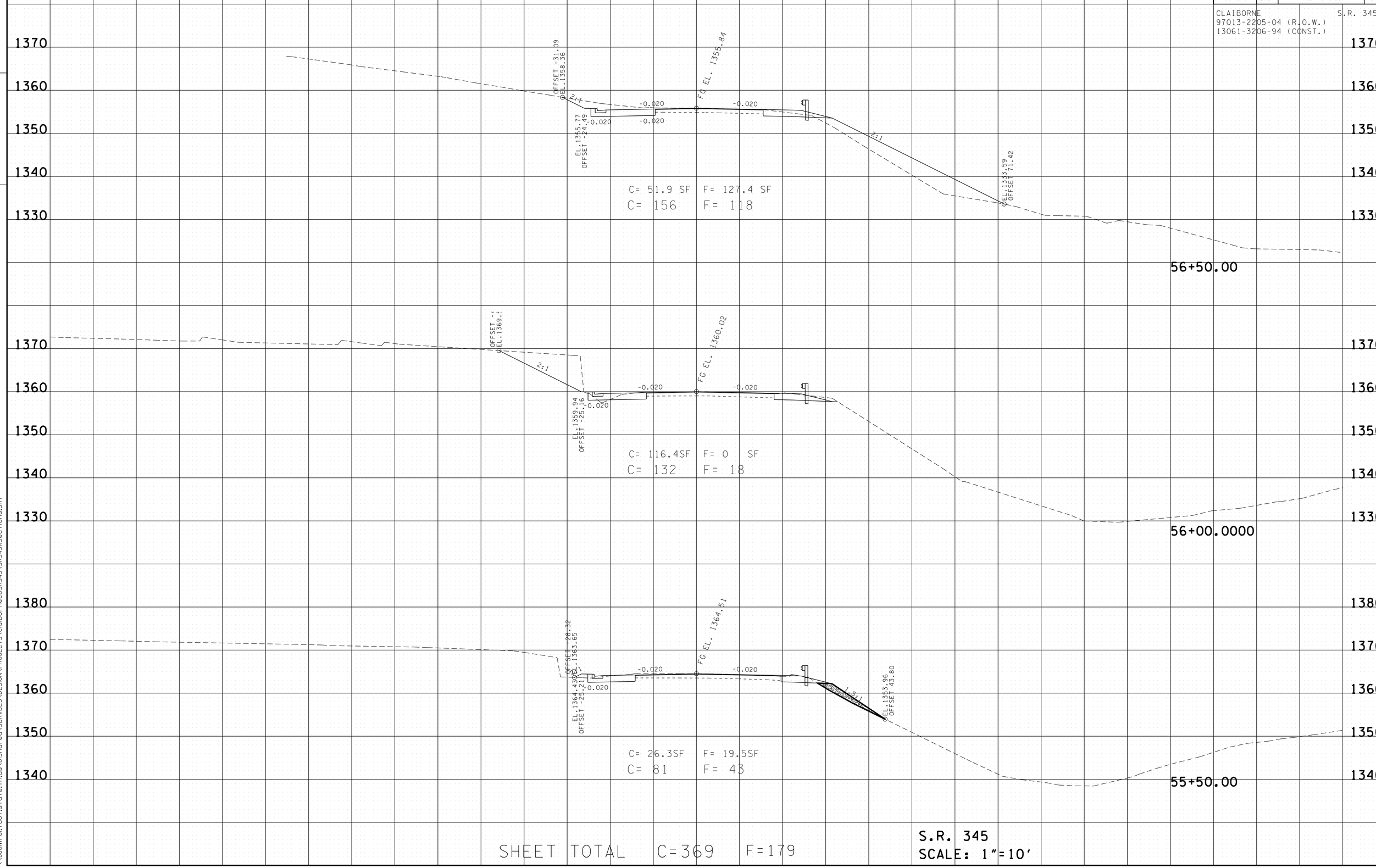
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	12
CONST.	2014	PHSIP-345(11)	16

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)



FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

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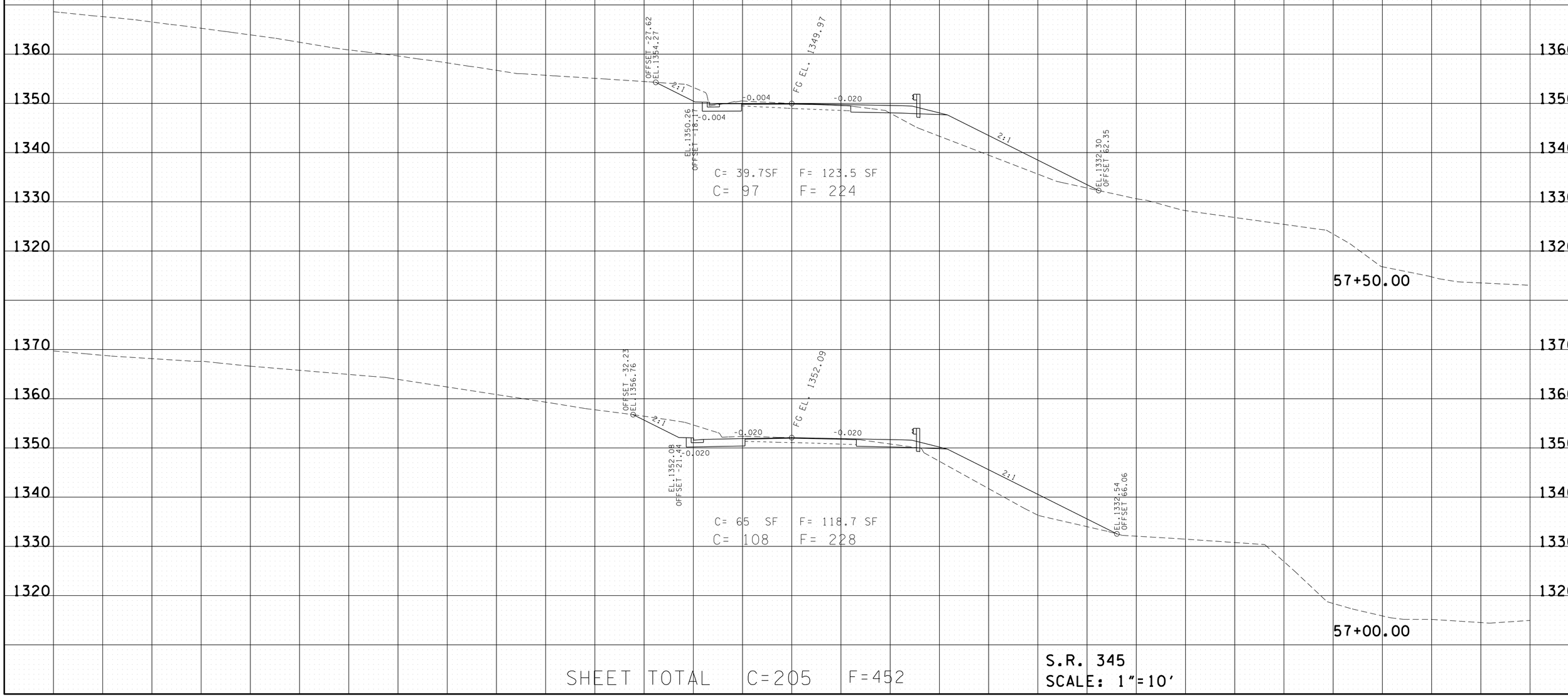
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	13
CONST.	2014	PHSIP-345(11)	17

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



SHEET TOTAL C=205 F=452

S.R. 345
SCALE: 1"=10'

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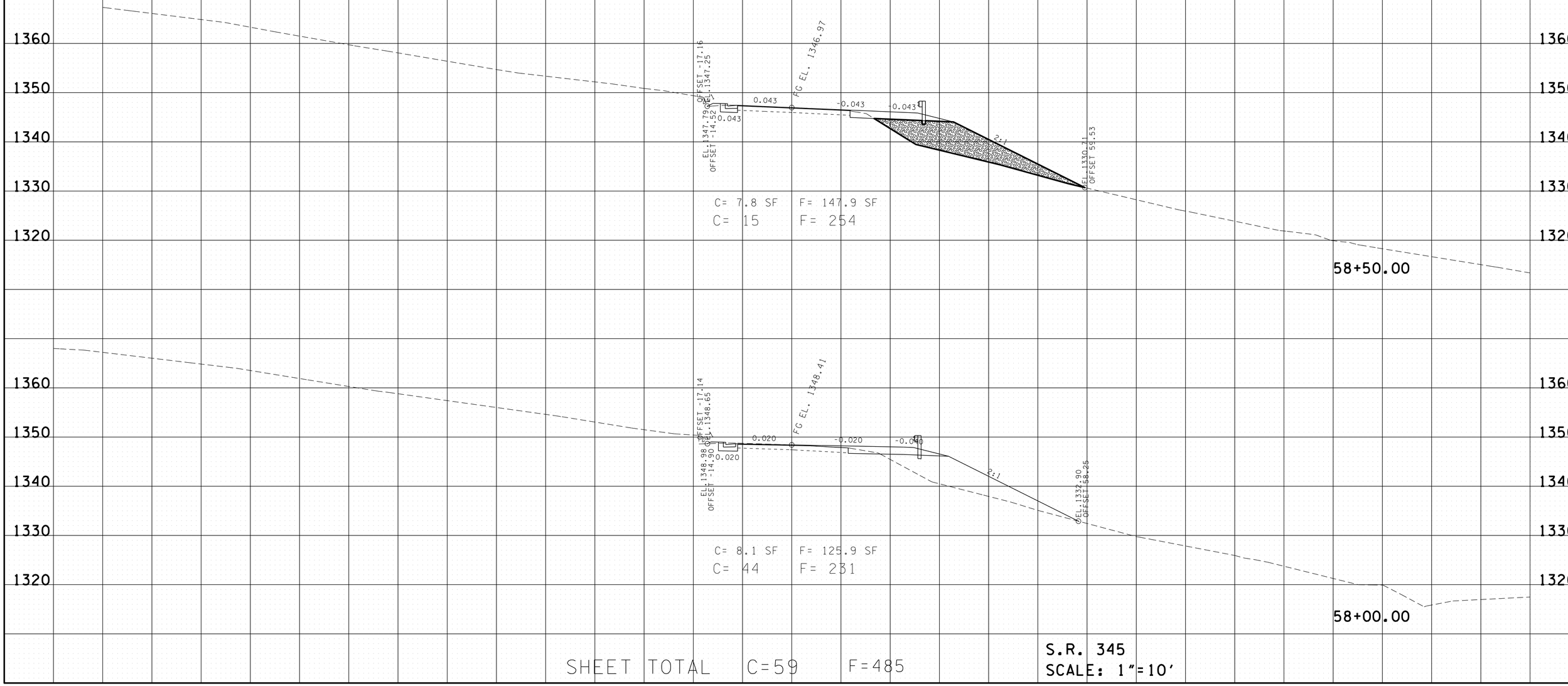
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	14
CONST.	2014	PHSIP-345(11)	18

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)



SHEET TOTAL C=59 F=485

S.R. 345
SCALE: 1"=10'

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

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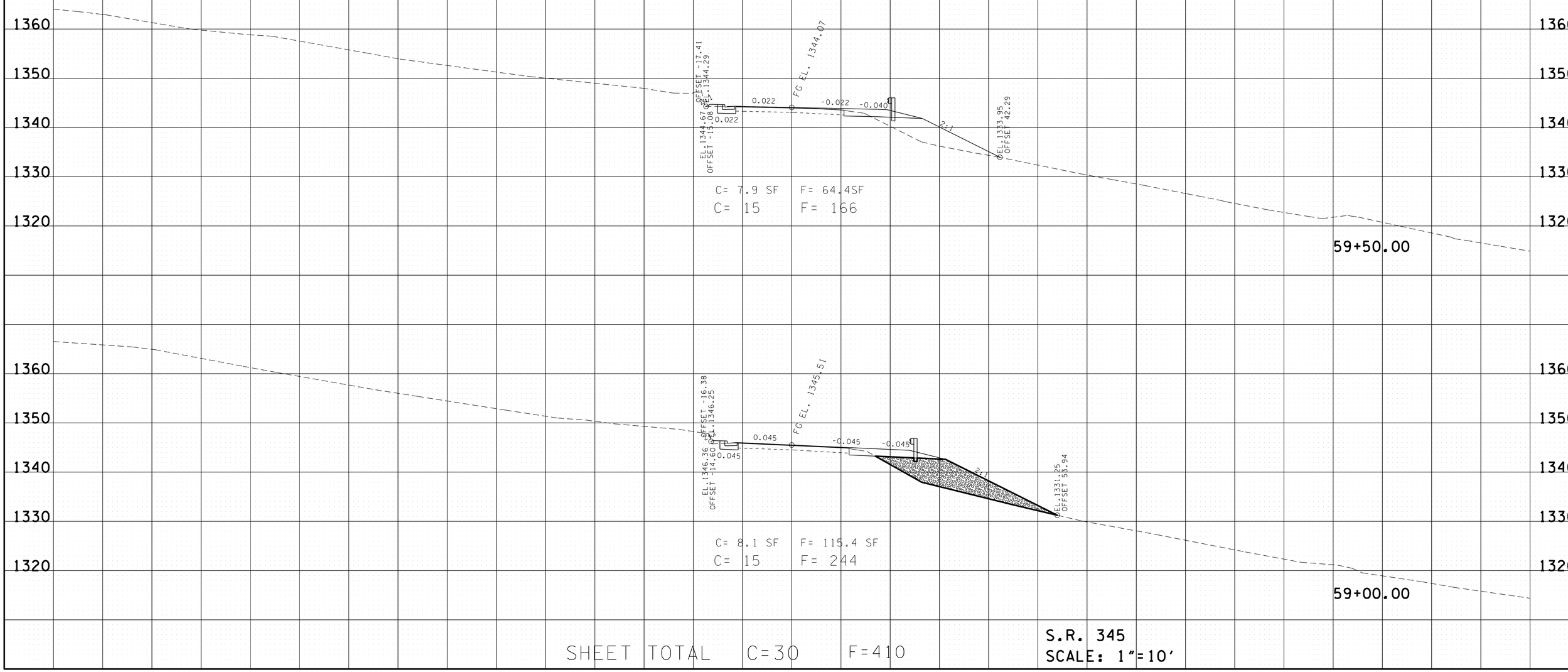
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	15
CONST.	2014	PHSIP-345(11)	19

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



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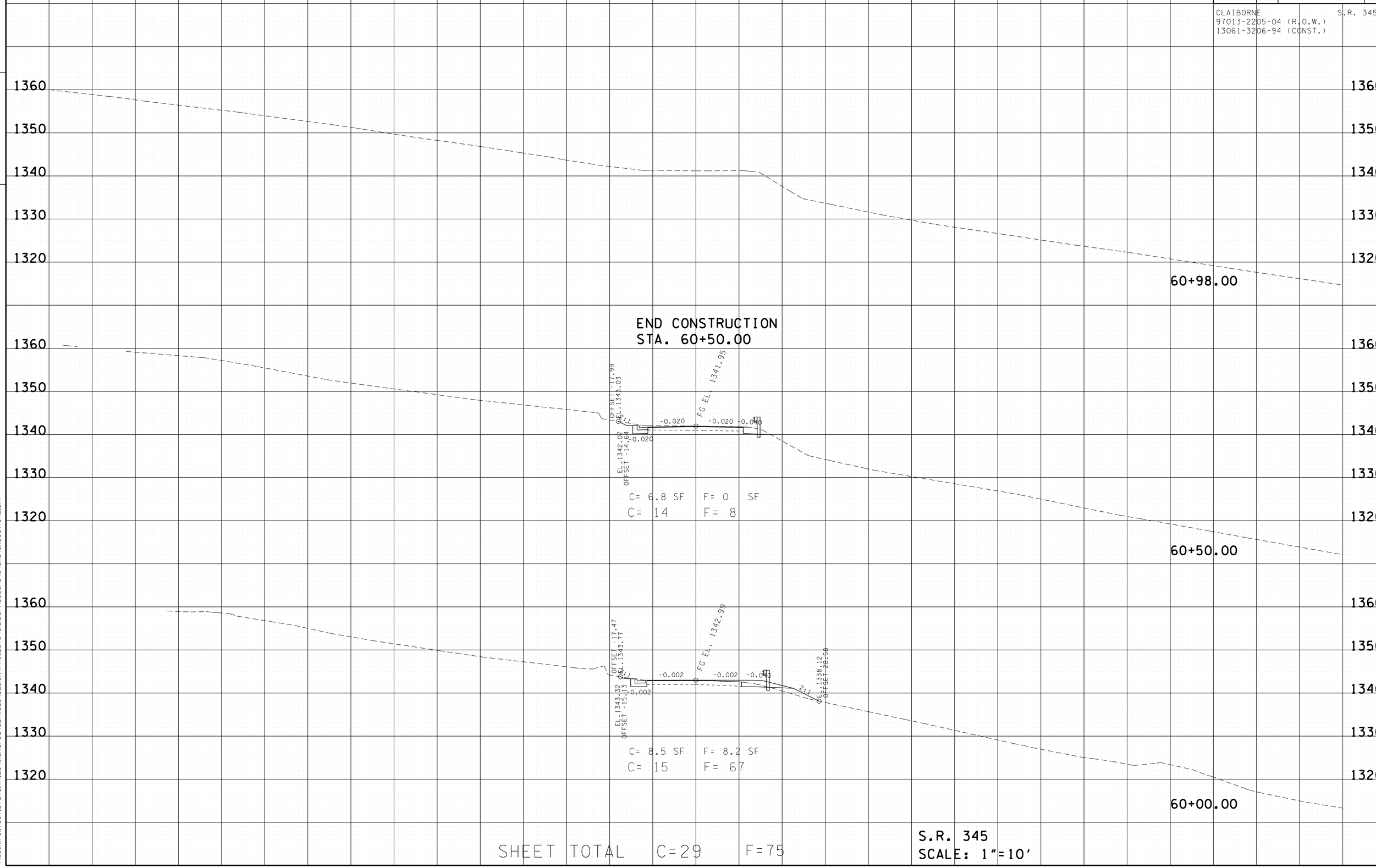
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	16
CONST.	2014	PHSIP-345(11)	20

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



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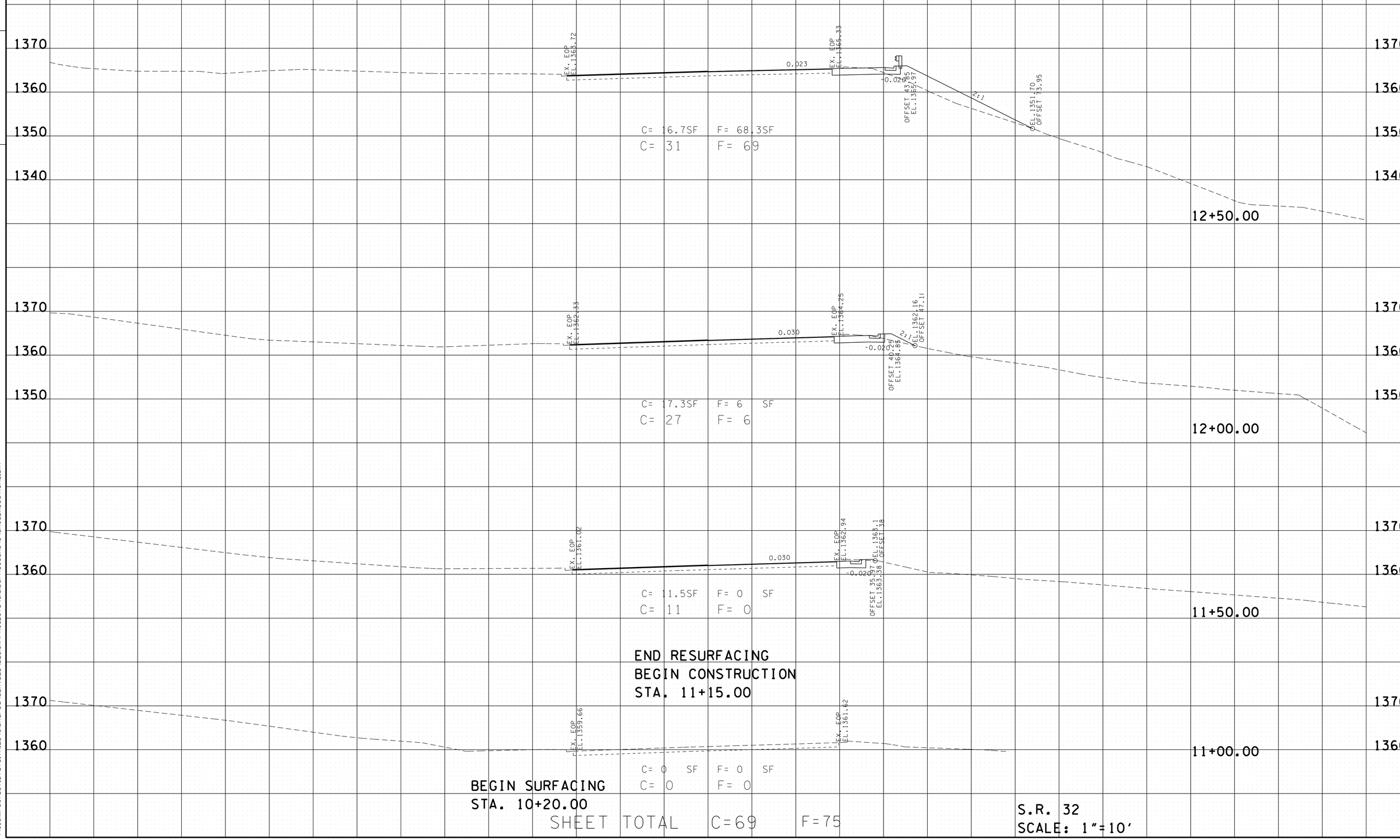
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	17
CONST.	2014	PHSIP-345(11)	21

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



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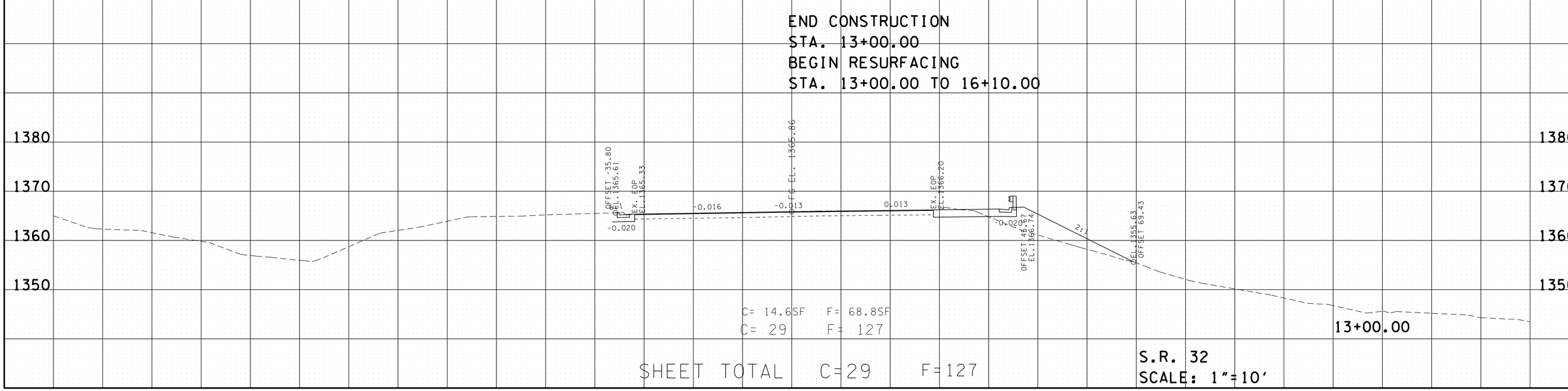
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	NHTSA-HE-345(1)	18
CONST.	2014	PHSIP-345(11)	22

CLAIBORNE S.R. 345
97013-2205-04 (R.O.W.)
13061-3206-94 (CONST.)

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



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