

Index Of Sheets  
SEE SHEET IA

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING

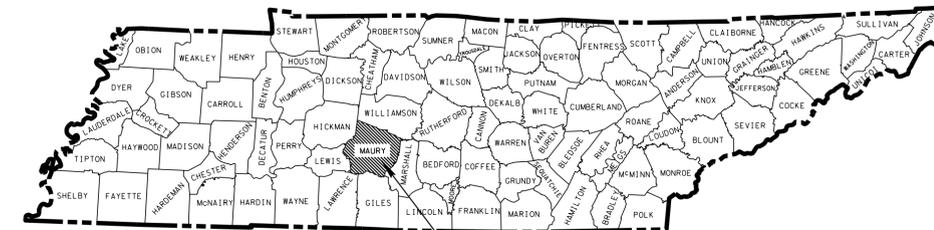
TENN.	YEAR	SHEET NO.
	2015	1
FED. AID PROJ. NO.	HSIP/STP-H-NH-99(43)	
STATE PROJ. NO.	60010-3216-94	

**MAURY COUNTY**

SR-99  
INTERSECTION AT PATTERSON DRIVE IN COLUMBIA

**CONSTRUCTION**

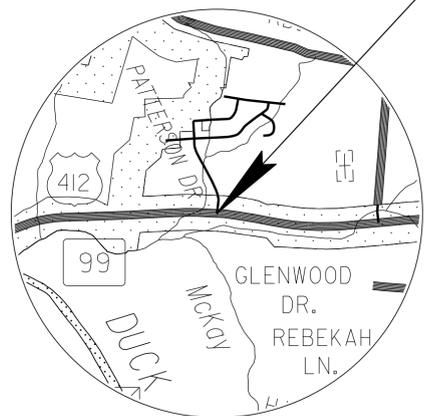
STATE HIGHWAY NO. 99 F.A.H.S. NO. 412



PROJECT LOCATION

**NO R.O.W. OR EASEMENT  
ACQUISITION IS REQUIRED**

INSERT OF  
PROJECT LOCATION



**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 JANUARY 1, 2015 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT C.E. MANAGER 1 ROBERT BRAUN, P.E.  
DESIGNER KHUZAIMA MAHDI, P.E. CHECKED BY REUBEN BOWMAN  
P.E. NO. 60010-1216-94 (DESIGN)  
PIN NO. 119066.00

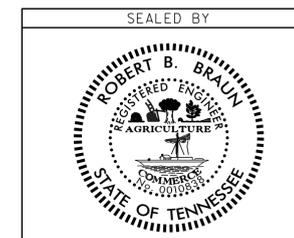


SCALE: 1" = 1 MILE

ROADWAY LENGTH	0.218 MILES
BRIDGE LENGTH	0.000 MILES
BOX BRIDGE LENGTH	0.000 MILES
PROJECT LENGTH	0.218 MILES

60010-3216-94  
PROJECT NO. HSIP/STP-H-NH-99(43)  
BEGIN PROJECT STA. 65+85.00(SR-99)  
N 475917.5542  
E 1672729.8802  
END PROJECT STA. 77+40.00(SR-99)  
N 475834.2069  
E 1673879.9553

**UNOFFICIAL  
SET  
NOT FOR  
BIDDING**



"RSAR PROJECT-PROJECT OF LIMITED SCOPE"

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

DATE: \_\_\_\_\_

APPROVED: John Schroer  
JOHN SCHROER, COMMISSIONER

**NO EXCLUSIONS  
NO EQUATIONS**

TRAFFIC DATA	
ADT (2015)	12690
ADT (2035)	13960
DHV (2035)	1431
D	55 - 45
T (ADT)	6 %
T (DHV)	4 %
V	55 MPH

SURVEY DATES:  
ORIGINAL 01/22/2014  
UPDATES 07/21/2015

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: \_\_\_\_\_  
DIVISION ADMINISTRATOR DATE

# Index Of Sheets

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS
3, 3A	PROPERTY MAP AND RIGHT-OF-WAY ACQUISITION TABLE
4	PRESENT LAYOUT
4A	PROPOSED LAYOUT
4B	PROPOSED PROFILE
5	PROFILE OF SIDE ROADS AND STREETS
6	PRIVATE DRIVE PROFILES
7	DRAINAGE MAP
8	CULVERT CROSS-SECTIONS
9	EROSION PREVENTION AND SEDIMENT CONTROL NOTES
10-11	EROSION PREVENTION AND SEDIMENT CONTROL PLANS
12-21	ROADWAY CROSS SECTIONS
22-23	SIDE ROAD CROSS SECTIONS

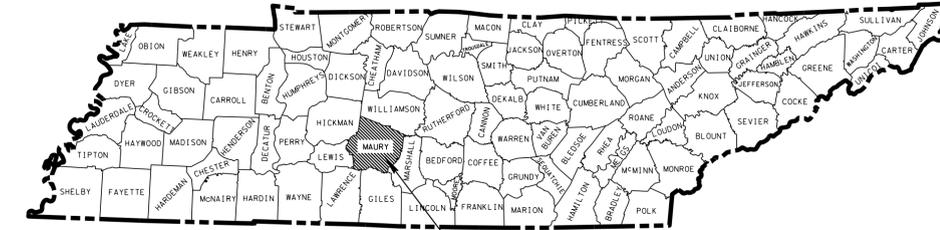
# STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING

## MAURY COUNTY

SR-99  
INTERSECTION AT PATTERSON DRIVE IN COLUMBIA

**R.O.W.**  
(UTILITIES ONLY)  
STATE HIGHWAY NO. 99 F.A.H.S. NO. 412

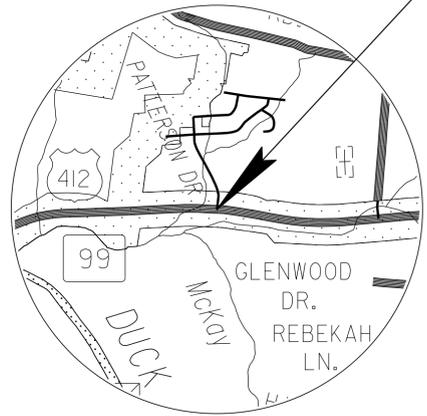
TENN.	YEAR	SHEET NO.
	2015	1
FED. AID PROJ. NO.	HSIP/STP-H-NH-99(43)	
STATE PROJ. NO.	60010-2216-94	



PROJECT LOCATION

**NO R.O.W. OR EASEMENT  
ACQUISITION IS REQUIRED**

INSERT OF  
PROJECT LOCATION



### SPECIAL NOTES

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TDOT ROAD SP. SV. 2 ROBERT BRAUN, P.E.

DESIGNER KHUZAIMA MAHDI, P.E. CHECKED BY WAYNE HALL

P.E. NO. 60010-1216-94 (DESIGN)

PIN NO. 119066.00

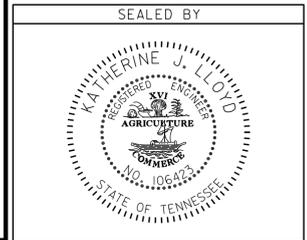


**PROJECT LENGTH 0.218 MILES**

60010-2216-94  
PROJECT NO. HSIP/STP-H-NH-99(43)  
BEGIN PROJECT STA. 65+85.00(SR-99)  
N 475917.5542  
E 1672729.8802  
END PROJECT STA. 77+40.00(SR-99)  
N 475834.2069  
E 1673879.9553

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**R.O.W.  
PLANS  
(UTILITIES ONLY)**



"RSAR PROJECT-PROJECT OF LIMITED SCOPE"

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

DATE: \_\_\_\_\_

APPROVED: John Schroer  
JOHN SCHROER, COMMISSIONER

**NO EXCLUSIONS  
NO EQUATIONS**

TRAFFIC DATA	
ADT (2015)	12690
ADT (2035)	13960
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SURVEY DATES:  
ORIGINAL 01/22/2014  
UPDATES

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: \_\_\_\_\_  
DIVISION ADMINISTRATOR DATE



TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	HSIP/STP-H-NH-99(43)	2

### ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
201-01	CLEARING AND GRUBBING	LS	1
202-02.01	REMOVAL OF PIPE (SIZE 24" ,STA. 71+01.03, OFFSET 57.63' LT.)	L.F.	37
1.) 203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	3299
10.) 203-02.01	BORROW EXCAVATION (GRADED SOLID ROCK)	TON	4
203-04	PLACING AND SPREADING TOPSOIL	C.Y.	270
203-06	WATER	M.G.	31
9.) 204-06.01	FLOWABLE FILL (GENERAL)	C.Y.	5
209-05	SEDIMENT REMOVAL	C.Y.	38
2.) 209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	1730
2.) 209-08.07	ROCK CHECK DAM PER	EACH	16
2.) 209-08.08	ENHANCED ROCK CHECK DAM	EACH	3
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	1841
11.) 303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	17
307-02.01	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A	TON	244
307-02.08	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2	TON	135
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	6
402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	22
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	3
411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	202
411-01.10	ACS MIX(PG64-22) GRADING D	TON	62
411-02.10	ACS MIX(PG70-22) GRADING D	TON	306
411-12.02	SCORING SHOULDERS (NON-CONTINUOUS) (16IN WIDTH)	L.M.	1
415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	4585
607-05.02	24" CONCRETE PIPE CULVERT (CLASS III)	L.F.	60
607-39.02	18" PIPE CULVERT (SIDE DRAIN)	L.F.	18
611-07.58	24IN ENDWALL (CROSS DRAIN) 4:1	EACH	2
705-01.04	METAL BEAM GUARD FENCE	L.F.	50
705-02.02	SINGLE GUARDRAIL (TYPE 2)	L.F.	325
705-04.07	TAN ENERGY ABSORBING TERM (NCHRP 350, TL3)	EACH	4
3.) 705-08.51	PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3	EACH	3
707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	950
4.) 709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	100
5.) 709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	76
712-01	TRAFFIC CONTROL	LS	1
6.) 712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	2800
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	34
712-04.50	PORTABLE BARRIER RAIL DELINEATOR	EACH	140
712-06	SIGNS (CONSTRUCTION)	S.F.	192
712-08.03	ARROW BOARD (TYPE C)	EACH	2
712-09.02	REMOVABLE PAVEMENT MARKING (8" BARRIER LINE)	L.F.	3660
716-01.21	Snwplwble Pvmt Mrks (Bi-Dir)(1 Color)	EACH	84
716-01.22	Snwplwble Pvmt Mrks (Mono-Dir)(1 Color)	EACH	10
716-02.04	PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING)	S.Y.	115
716-04.03	PLASTIC PAVEMENT MARKING (4" DOTTED LINE)	L.F.	110

### ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	1
716-05.05	PAINTED PAVEMENT MARKING (STOP LINE)	L.F.	40
716-05.06	PAINTED PAVEMENT MARKING (TURN LANE ARROW)	EACH	2
716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	1
717-01	MOBILIZATION	LS	1
7.) 740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	332
10.) 740-10.04	GEOTEXTILE (TYPE IV)(STABILIZATION)	S.Y.	8
740-11.03	TEMPORARY SEDIMENT TUBE 18IN (DESCRIPTION)	L.F.	850
801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	15
8.) 801-03	WATER (SEEDING & SODDING)	M.G.	19
803-01	SODDING (NEW SOD)	S.Y.	1700
805-12.01	EROSION CONTROL BLANKET (TYPE I)	S.Y.	900

- 1.) 15 C.Y. TO BE USED WITH TWO TEMPORARY CONSTRUCTION EXITS.
- 2.) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
- 3.) THIS ITEM SHALL BE A PORTABLE ENERGY ABSORBING TERMINAL MEETING THE REQUIREMENTS OF NCHRP 350 FOR TEST LEVEL 3. EXAMPLE WOULD BE A QUAD-GUARD OR A REACT 350 OR A TRACC. THE PAY ITEM WILL INCLUDE FURNISHING AND INSTALLING ALL COMPONENTS AS SHOWN ON THE MANUFACTURER'S DRAWING.
- 4.) TO BE USED WITH TWO TEMPORARY CONSTRUCTION EXITS.
- 5.) 69 TONS TO BE USED WITH CULVERT PROTECTION TYPE I, 7 TONS TO BE USED AT THE OUTLET OF SPECIAL DITCH STA. 69+01.00
- 6.) REMOVING AND RELOCATING PORTABLE BARRIER RAIL WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE PAYMENT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS.
- 7.) 161.4 S.Y. WITH CULVERT PROTECTION TYPE I, 171.6 S.Y. WITH TWO TEMPORARY CONSTRUCTION EXITS.
- 8.) INCLUDES 1.5 M.G. FOR EROSION PREVENTION SEDIMENT CONTROL.
- 9.) TO BE USED WITH EXISTING PIPE (SIZE 24", STA. 12+42.25 PATTERSON DR.)
- 10.) TO BE USED WITH SINKHOLE TREATMENT (SNK-2).
- 11.) 13 TONS TO BE USED WITH CULVERT PROTECTION TYPE I, AND 4 TONS WITH SINKHOLE TREATMENT (SNK-2).

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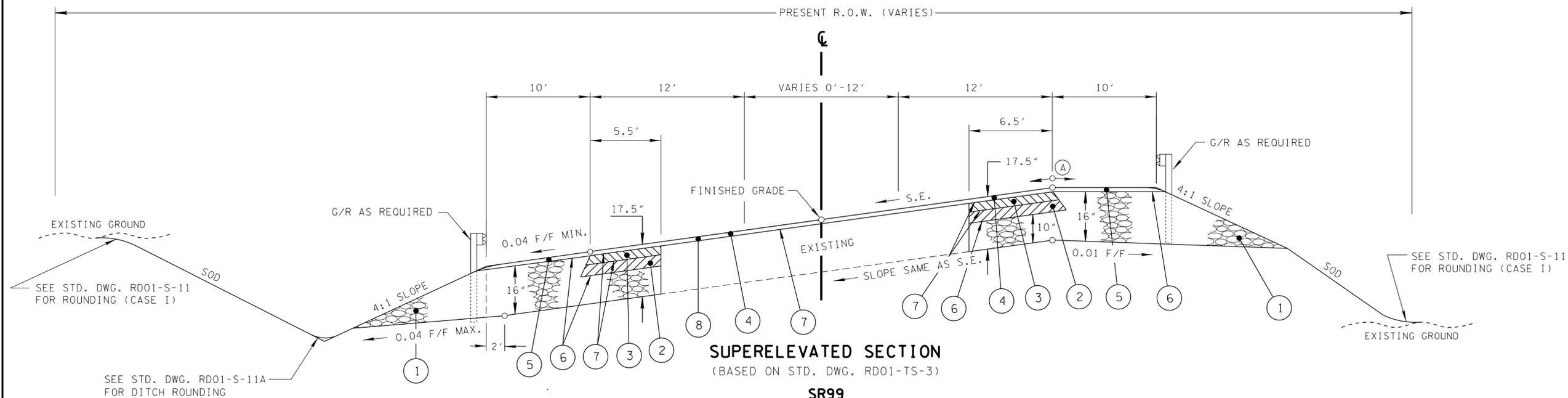
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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

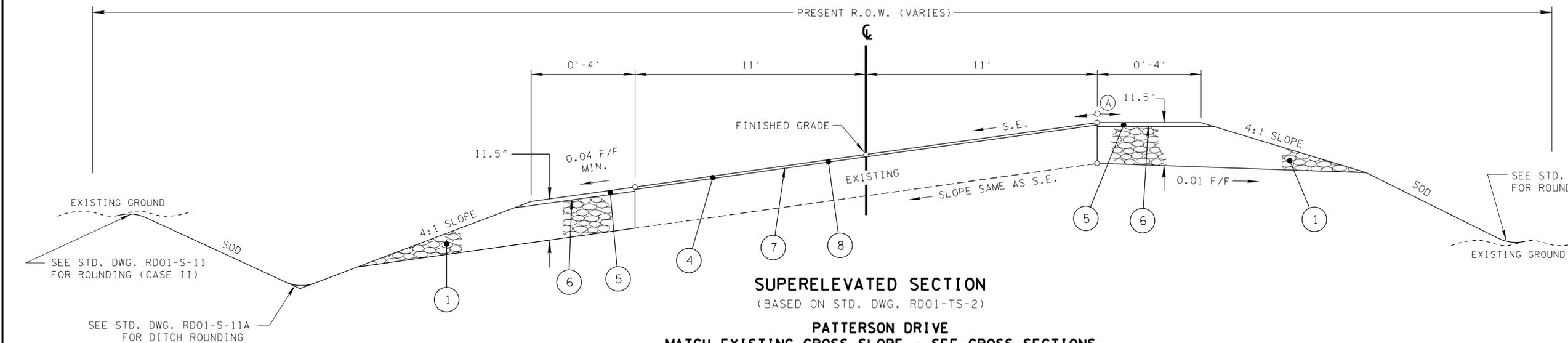
**ESTIMATED  
ROADWAY  
QUANTITIES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	2
CONST.	2015	HSIP/STP-H-NH-99(43)	2A



**SUPERELEVATED SECTION**  
(BASED ON STD. DWG. RD01-TS-3)  
**SR99**  
**MATCH EXISTING CROSS SLOPE - SEE CROSS SECTIONS**  
STA. 65+85.00 TO STA. 77+40.00

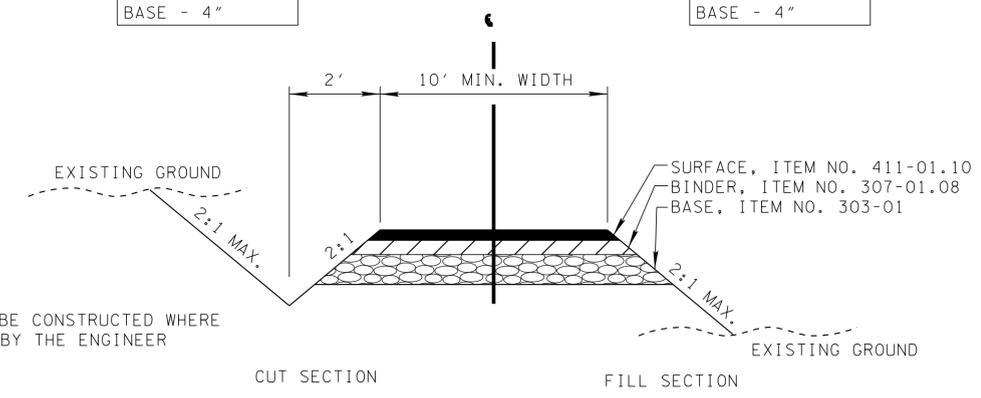
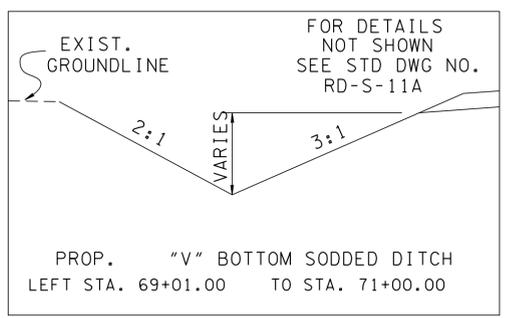
(A) THE SLOPES OF THE SHOULDER AND ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 0.07.



**SUPERELEVATED SECTION**  
(BASED ON STD. DWG. RD01-TS-2)  
**PATTERSON DRIVE**  
**MATCH EXISTING CROSS SLOPE - SEE CROSS SECTIONS**  
STA. 12+30.00 TO STA. 12+82.00

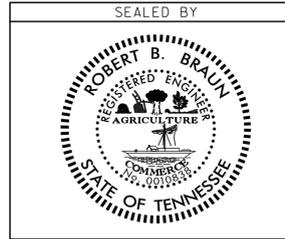
**BUSINESS**  
SURFACE - 1 1/4"  
BINDER - 1 1/4"  
BASE - 4"

**FIELD OR RESIDENTIAL**  
SURFACE - 1 1/2"  
BINDER - NONE  
BASE - 4"



**TYPICAL SECTION**  
PRIVATE DRIVE TO BUSINESS,  
FIELD, OR RESIDENTIAL PROPERTY

**UNOFFICIAL SET**  
**NOT FOR BIDDING**

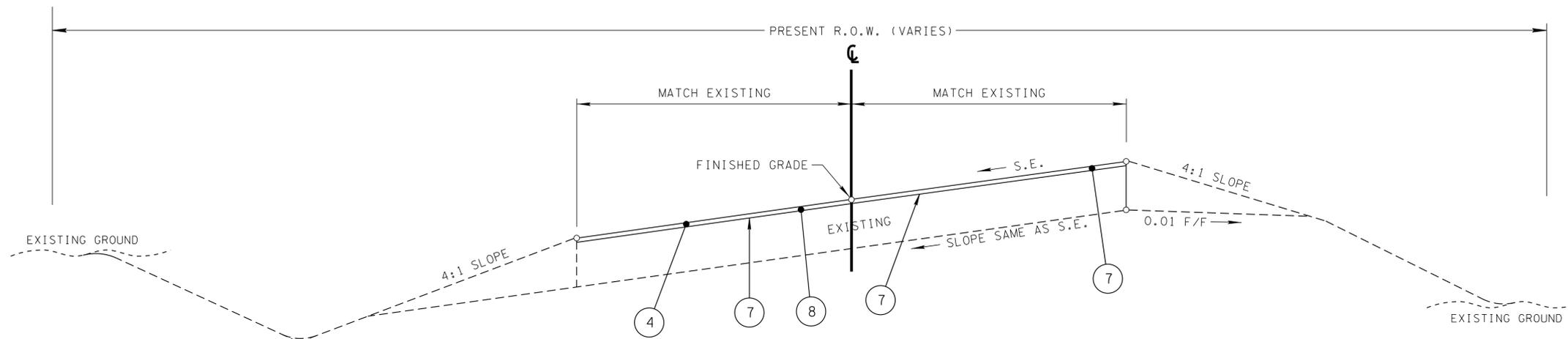


STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**TYPICAL SECTIONS**

22-SEP-2015 11:49 C:\Projects\Maury County\SR-99atPatterson Drive\SR99atPattersonDrive-8-11-15\GradingQuantities&Const.Plans\19066-00-Const\uction\MUSR99\_02A\Typical-Const.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	HSIP/STP-H-NH-99(43)	2B

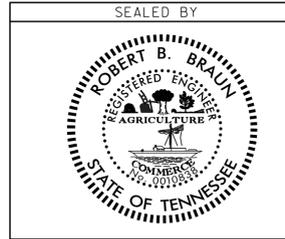


**SUPERELEVATED SECTION**  
 (BASED ON STD. DWG. RD01-TS-2)  
**PATTERSON DRIVE**  
**MATCH EXISTING CROSS SLOPE - SEE CROSS SECTIONS**  
 OVERLAY SECTIONS  
 STA. 11+50.00 TO STA. 12+30.00

PROPOSED PAVEMENT SCHEDULE FOR SR99	
<b>① BASE STONE - 10" THICK (FULL DEPTH UNDER SHLDR'S)</b> <small>303-01 MINERAL AGGREGATE . TYPE A BASE. GRADING "D"</small>	<b>⑤ SURFACE - 1.5" THICK (APPROX. 154.50 LB/SQ.YD.)</b> <small>411-01.07 ASPHALT CEMENT (PG64-22) (ACS) GRADING "E" SHOULDERS</small>
<b>② BLACK BASE - 4" THICK (APPROX. 460 LB/SQ.YD)</b> <small>307-02.01 ASPHALT CONCRETE MIX (PG70-22) GRADING "A"</small>	<b>⑥ PRIME COAT</b> <small>402-01 BIT. MATERIAL FOR PRIME COAT (PC) (0.30-0.35 GAL/SQ.YD.)            402-02 AGGREGATE FOR COVER MATERIAL (PC) (8-12 LB/SQ.YD.)</small>
<b>③ BINDER - 2.25" THICK (APPROX. 254.25 LB/SQ.YD.)</b> <small>307-02.08 ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING "B-M2"</small>	<b>⑦ TACK COAT</b> <small>403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) (0.07 GAL/SQ.YD.)</small>
<b>④ SURFACE - 1.25" THICK (APPROX. 132.50 LB/SQ.YD.)</b> <small>411-02.10 ASPHALT CEMENT (PG70-22) (ACS) GRADING D</small>	<b>⑧ COLD PLANING - 1.25" ±</b> <small>415-01.02 COLD PLANING BITUMINOUS PAVEMENT (S.Y.)</small>

PROPOSED PAVEMENT SCHEDULE FOR PATTERSON DRIVE	
<b>① BASE STONE - 10" THICK (FULL DEPTH UNDER SHLDR'S)</b> <small>303-01 MINERAL AGGREGATE . TYPE A BASE. GRADING "D"</small>	<b>⑥ PRIME COAT</b> <small>402-01 BIT. MATERIAL FOR PRIME COAT (PC) (0.30-0.35 GAL/SQ.YD.)            402-02 AGGREGATE FOR COVER MATERIAL (PC) (8-12 LB/SQ.YD.)</small>
<b>④ SURFACE - 1.25" THICK (APPROX. 132.50 LB/SQ.YD.)</b> <small>411-01.10 ASPHALT CEMENT (PG64-22) (ACS) GRADING "D"</small>	<b>⑦ TACK COAT</b> <small>403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) (0.07 GAL/SQ.YD.)</small>
<b>⑤ SURFACE - 1.5" THICK (APPROX. 154.50 LB/SQ.YD.)</b> <small>411-01.07 ASPHALT CEMENT (PG64-22) (ACS) GRADING "E" SHOULDERS</small>	<b>⑧ COLD PLANING - 1.25" ±</b> <small>415-01.02 COLD PLANING BITUMINOUS PAVEMENT (S.Y.)</small>

**UNOFFICIAL**  
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**BIDDING**



STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION

**TYPICAL**  
**SECTIONS**  
**AND**  
**PAVEMENT**  
**SCHEDULE**

C:\Projects\Maury County\SR-99atPatterson Drive\SR99atPatterson Drive\8-11-15\GradingQuantities&Const.Plans\19066-00-Const\Construction\MUSR99\_02BTypicalPavementSchedule-Const.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	HS1P/STP-H-NH-99(43)	2C

# GENERAL NOTES

## GRADING

- ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.
- 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

- 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.
- ITEM NO. 803-01, SODDING (NEW SOD) SHALL BE USED ON SLOPES 3:1 OR STEEPER AND OTHER AREAS AS INDICATED IN THE PLANS THAT ARE INACCESSIBLE FOR MOWING.

## GUARDRAIL

- 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
- IF ANY APPROACH END OF A SECTION OF GUARDRAIL OR BRIDGE RAIL MUST TEMPORARILY BE LEFT INCOMPLETE AND EXPOSED TO TRAFFIC, THE CONTRACTOR SHALL USE TWO (2) TEMPORARY BARRICADES OR DRUMS WITH TYPE A LIGHTS AND ROUNDED END ELEMENTS AS MINIMUM MEASURES TO PROTECT TRAFFIC FROM THE HAZARD OF AN EXPOSED END. ALL COST OF FURNISHING AND INSTALLING A TEMPORARY ROUNDED END ELEMENT SHALL BE INCLUDED IN THE COST OF THE PROPOSED GUARDRAIL.

## DRAINAGE

- 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.
- EXCAVATION FOR PIPE CULVERTS 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).
- 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).
- 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.
- 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 NO. 3A)

## MISCELLANEOUS

- THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES WHERE AND AS DIRECTED BY THE ENGINEER.
- 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 NO. 3A)

## PAVEMENT MARKINGS

### FINAL PAVEMENT MARKING IF 6" ENHANCED FLATLINE THERMOPLASTIC IS USED

- PERMANENT PAVEMENT LINE MARKINGS SHALL BE 6" 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. 716-12.02, ENHANCED FLATLINE THERMO PAVMT MRKNG (6IN 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.

### FINAL PAVEMENT MARKING IF REFLECTORIZED PAINT IS USED

- PERMANENT PAVEMENT LINE MARKINGS SHALL BE REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S 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 (4IN LINE), L.M.

## PAVEMENT

### PAVING

- THE CONTRACTOR SHALL BE REQUIRED TO COLD PLANE AND PAVE IN THE DIRECTION OF TRAFFIC.
- THE CONTRACTOR SHALL ATTACH A DEVICE TO THE SCREED OF THE PAVER SUCH THAT MATERIAL IS CONFINED AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A CONSOLIDATED WEDGE-SHAPE PAVEMENT EDGE OF APPROXIMATELY 25 TO 30 DEGREES AS IT LEAVES THE PAVER (MEASURED FROM A LINE PARALLEL TO THE PAVEMENT SURFACE.) THE DEVICE SHALL MEET THE REQUIREMENTS THAT ARE CURRENTLY SET FORTH IN SPECIAL PROVISION 407SE.

## SIGNING

- 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.
- 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.
- 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.
- 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.

## CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- 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.
- 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.
- 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.

- TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
- 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.
- 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.
- ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED AND THE VERTICAL PANELS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.

## EROSION PREVENTION AND SEDIMENT CONTROL

### DISTURBED AREA

- AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.
- 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.
- 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.
- 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.
- CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION.
- NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION OF THE PROJECT. OFF-SITE BORROW OR WASTE AREAS ARE TO BE INCLUDED IN THE TOTAL DISTURBED AREA IF THE BORROW OR WASTE AREA IS EXCLUSIVE TO THE PROJECT PER TDOT'S WASTE AND BORROW MANUAL.

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**SEDIMENT CONTROL**

- (7) EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- (8) 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.
- (9) 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.
- (10) CHECK DAMS SHALL BE USED WHERE RUNOFF IS CONCENTRATED. CLEAN ROCK, BRUSH, GABION, OR SANDBAG CHECK DAMS SHALL BE PROPERLY CONSTRUCTED TO REDUCE VELOCITY AND CONTROL EROSION.
- (11) FOR AN OUTFALL IN A DRAINAGE AREA OF 10 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN OR EQUIVALENT CONTROL MEASURES THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A MINIMUM 2-YEAR/ 24-HOUR STORM EVENT, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.
- (12) 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.
- (13) 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.
- (14) TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY.

**STREAM/WETLAND**

- (15) 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.
- (16) NEW CHANNEL CONSTRUCTION SHALL BE COMPLETED IN THE DRY AND STABILIZED FOR AT LEAST 72 HOURS PRIOR TO DIVERTING WATER FROM THE EXISTING AND/OR TEMPORARY CHANNEL.
- (17) 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.
- (18) 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.

- (19) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING.
- (20) 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**

- (21) 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**

- (22) EPSC CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES.
- (23) 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.
- (24) 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.
- (25) 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.
- (26) 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.
- (27) 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.

- (28) 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.
- (29) 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.

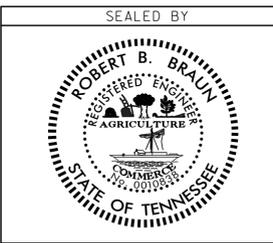
**MATERIALS**

- (30) 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**

- (31) 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.
- (32) 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, ROADWAY 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.
- (33) 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.
- (34) 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 BRIEF 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.
- (35) 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 ROADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.
- (36) 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

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THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS SHALL BE RETAINED IN THE SWPPP.

- (37) 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.
- (38) 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.
- (39) 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**

- (40) 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.
- (41) 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 203-01, ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED). 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.

**EROSION PREVENTION AND SEDIMENT CONTROL**

**NPDES**

- (1) REFER TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN, SHEET 9 , FOR NOTES REGARDING SEASONAL WORK LIMITATION OR LIMITATION ON THE TOTAL AREA OF EXPOSED SOIL.

**ENVIRONMENTAL**

**ECOLOGY**

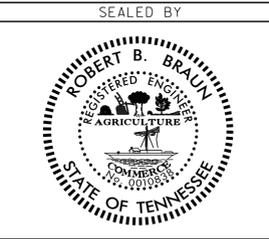
- (1) ANY MAJOR CHANGES TO THE PLANS, CONSTRUCTION METHODOLOGY, OR ROW WILL VOID TWRA'S COMMENTS AND REQUIRE ANOTHER REVIEW OF THE CHANGES BY THE AGENCY

**GEOTECH**

THE PRESENT LAYOUT SHEET OF THE ROW PLANS SHOW THAT A POTENTIAL SINKHOLE IS LOCATED WITHIN THE TOE OF THE CUT SLOPE NEAR STATION 69+30, APPROXIMATELY 50 FEET LEFT OF CENTERLINE. HOWEVER THIS DEPRESSION IS DIRECTLY ABOVE SEWER LINE. THIS DROPOUT MAY BE RESULT OF A DAMAGED UTILITY PIPE. IT IS RECOMMENDED TO CAREFULLY EXCAVATE THE DROPOUT AREA TO DETERMINE THE TRUE SOURCE OF THIS DEPRESSION. IF THE SEWER PIPE IS DAMAGED, IT IS RECOMMENDED THAT THE PIPE BE PROPERLY REPAIRED OR REPLACE THEN THE EXCAVATION CAN BE BACKFILLED WITH COMMON ROADWAY EMBANKMENT. IF THE DEPRESSION IS INDEED A SINKHOLE, USING A TEMPORARAY CONSTRUCTION SLOPE OF 1:1, IT IS RECOMMENDED THAT THIS SINKHOLE BE EXCAVATED TO A DEFINED OPENING IN BEDROCK, MAKING SURE TO REMOVE ALL SOIL AND DEBRIS FROM THE OPENING OR THROAT OF THE SINKHOLE. TO MAINTAIN VENTILATION, THE THROAT SHALL BE PARTIALLY BLOCKED WITH LARGE KEYSTONE ROCKS. THESE ROCKS SHALL BE LARGE ENOUGH TO LOCK IN PLACE, BUT SHALL NOT PROVIDE AN AIRLOCK THAT WOULD PREVENT SUBSURFACE DRAINAGE. A LAYER OF GEOTEXTILE FABRIC (TYPE IV, ITEM NO. 740-10.04) SHALL THEN LINE THE EXCAVATED SURFACE. FOLLOWING THE PLACEMENT OF THE GEOTEXTILE FABRIC, GRADED SOLID ROCK SHALL BE BACKFILLED TO A MAXIMUM OF ONE FOOT OF THE EXISTING GROUNDLINE. NO. 57 STONE OR RIP RAP SHALL BE USED TO BRING THE EXCAVATED UP TO GRADE. REFER TO THE ATTACHED SOIL SHEETS FOR FURTHER INFORMATION ON THIS REPAIR. FOR QUANTITY ESTIMATION AND BIDDING PURPOSES, IT IS RECOMMENDED THAT THIS DEPRESSION BE ASSUMED TO BE A SINKHOLE AND REQUIRE REPAIR UTILIZING SINKHOLE TREATMENT 1, ACTIVE. THIS REPAIR MAY REQUIRE THE RELOCATION OF THE SEWER LINE THROUGH THIS AREA.

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NOT FOR  
BIDDING**



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**GENERAL NOTES  
AND  
SPECIAL NOTES**



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	3
CONST.	2015	HSIP/STP-H-NH-99(43)	3



65

**BEGIN PROJECT (CONST.)  
HSIP/STP-H-NH-99(43)**

**60010-3216-94  
STA. 65+85.00**  
N 475917.5542  
E 1672729.8802

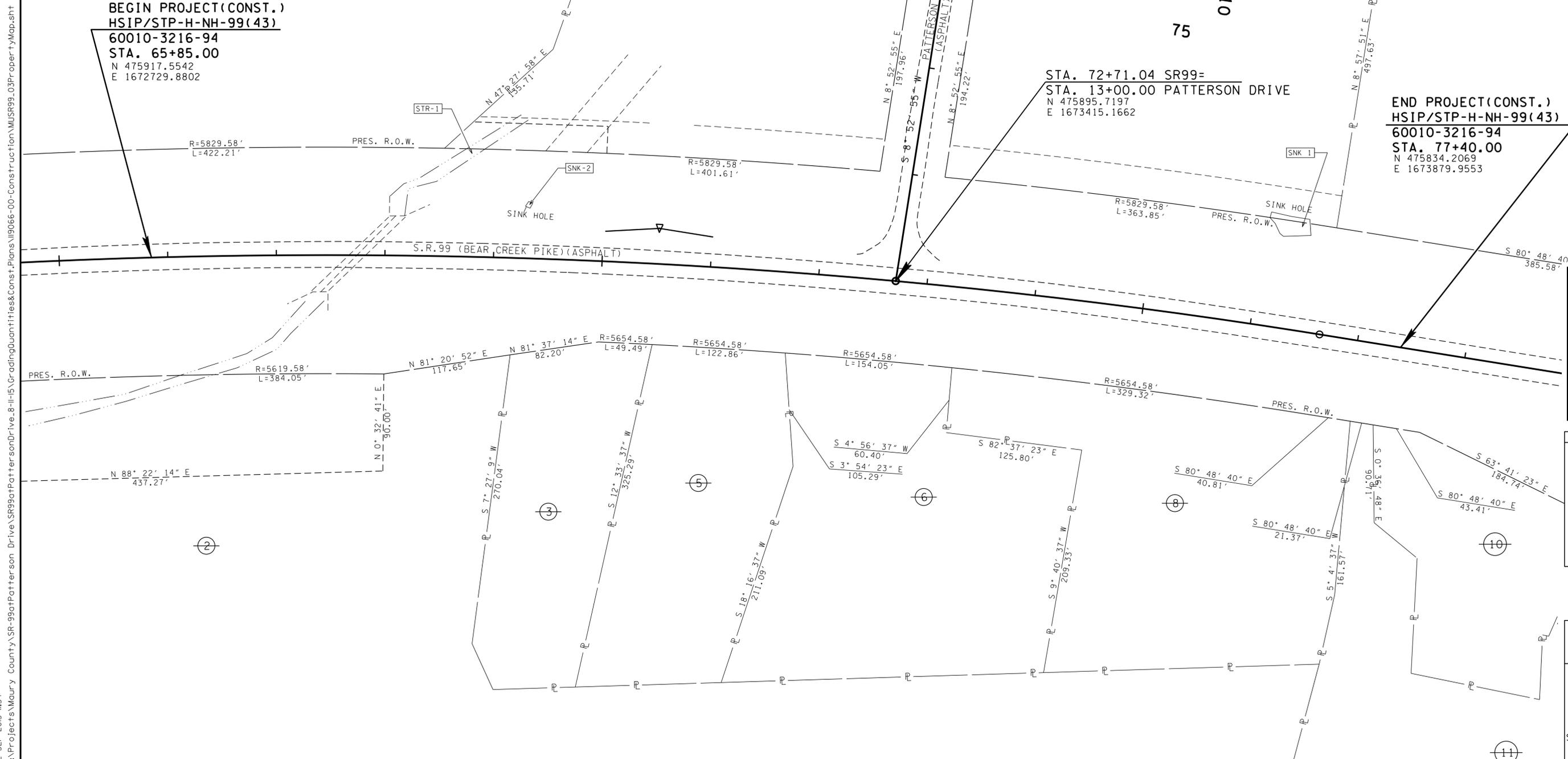
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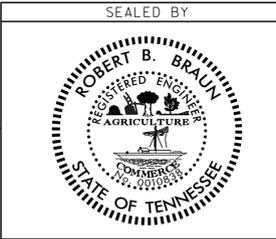
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**STA. 72+71.04 SR99=  
STA. 13+00.00 PATTERSON DRIVE**  
N 475895.7197  
E 1673415.1662

**END PROJECT (CONST.)  
HSIP/STP-H-NH-99(43)**  
**60010-3216-94  
STA. 77+40.00**  
N 475834.2069  
E 1673879.9553



**UNOFFICIAL  
SET  
NOT FOR  
BIDDING**



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00007 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**PROPERTY  
MAP**

STA. 65+85 TO STA. 77+40  
SCALE: 1" = 50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	3A
CONST.	2015	HSIP/STP-H-NH-99(43)	3A

**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		LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERM. DRAINAGE	SLOPE	CONST.
				BK.	PAGE											
1	JOHN CHADWELL JR	090	12.04	1120	93	5.804		5.804				5.804				
2	BIG BEAR BLUFFS LLC	090	12.01	R2051	792		395.941	395.941				395.941				
3	KARIN & BLAKE OSBORNE	090	17.01	R2182	1461		0.824	0.824				0.824				
4	STEVE L HILL	090	14.06	R2175	1456	3.606		3.606				3.606				
5	ROBERT MCGOWAN	090	17.02	R1780	727		1.018	1.018				1.018				
6	LENA ELLEN CRAIG	090	17.03	R1445	168		1.651	1.651				1.651				
7	STEVE L HILL	090	14.06	R2175	1456	6.408		6.408				6.408				
8	M D HENSLEE	090	17.04	R1940	178		1.601	1.601				1.601				
9	WILLIAM H MCCURDY	090	14.02	R1946	1485	20.136		20.136				20.136				
10	DEBRA JEAN PARKS	090	15.00	R2215	933		0.741	0.741				0.741				
11	BIG BEAR BLUFFS LLC	090	16.00	R2060	129		21.251	21.251				21.251				
12	SANDRA S CHAPPELL	090	14.01	R1983	11	1.335		1.335				1.335				
13	JEFFREY L HEAD	090	32.00	R2230	388		23.861	23.861				23.861				
14	STEVE EDWARD BARNHILL	091	44.03	R2177	165	1.837		1.837				1.837				
15	PHYLLIS E BALTZER	091	44.02	R1606	156	1.230		1.230				1.230				
<b>ACQUISITION TOTALS (ACRES)</b>									<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

DISTURBED AREA		
IN BETWEEN SLOPE LINES		<b>1.780 (AC)</b>
15 FOOT WIDE STRIP (OUTSIDE SLOPE LINES)		<b>0.872 (AC)</b>
<b>TOTAL DISTURBED AREA</b>		<b>2.652 (AC)</b>

**UTILITIES**

- 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.
- 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.
- 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.
- 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.
- 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**

- 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, ROADWAY DESIGN DIVISION IS TO BE NOTIFIED IN SUFFICIENT TIME TO PERMIT HAVING SUCH REMOVALS DESIGNATED AS A PART OF THE CONSTRUCTION CONTRACT.
- 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.
- EXISTING PAVED DRIVEWAY PER TRACT REMAINDER WILL BE REPLACED IN KIND TO A TOUCHDOWN POINT.
- 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.
- 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.
- ANY NECESSARY PAVING OF DRIVEWAYS WILL BE DONE DURING PAVING OPERATIONS ON THE MAIN ROADWAY.
- 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.
- 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.

UTILITY OWNERS

TELEPHONE  
AT&T  
116 SOUTH CANON AVENUE  
MURFREESBORO, TN 37129  
KENNETH LEE KORNEGAY  
0:615-848-2082

SANITARY SEWER  
CITY OF COLUMBIA  
1244 TREATMAENT PLANT ROAD  
COLUMBIA, TN 38401  
MARK WILLIAMS  
0:931-560-1013

CABLE  
CHARTER COMMUNICATIONS  
215 INDUSTRIAL BLVD  
TULAHOMA, TN 37388  
RICHARD RIDDLE  
0:931-461-4315

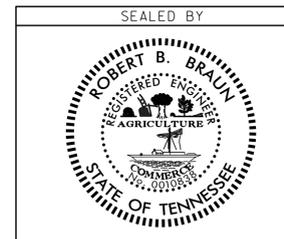
ELECTRIC  
COLUMBIA POWER  
201 PICKENS LANE  
COLUMBIA, TN 38401  
DOUG BURGESS  
0:931-375-7740

GAS  
ATMOS GAS  
810 CRESCENT CENTRE DRIVE  
FRANKLIN, TN 37067  
ROBERT ARNOLD  
0:615-771-8311  
C:615-310-3020

MERIWETHER LEWIS ELECTRIC  
1625 HIGHWAY 100  
CENTERVILLE, TN 37033  
STEVE SKELTON  
0:931-623-1636

WATER  
CPWS  
201 PICKENS LANE  
COLUMBIA, TN 38401  
JONATHAN HARDIN  
0:931-375-7646

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NOT FOR  
BIDDING**



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**RIGHT-OF-WAY  
ACQUISITION  
TABLE**

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	4
CONST.	2015	HSIP/STP-H-NH-99(43)	4



STEVE L HILL

STEVE L HILL

JOHN CHADWELL JR

65

70

75

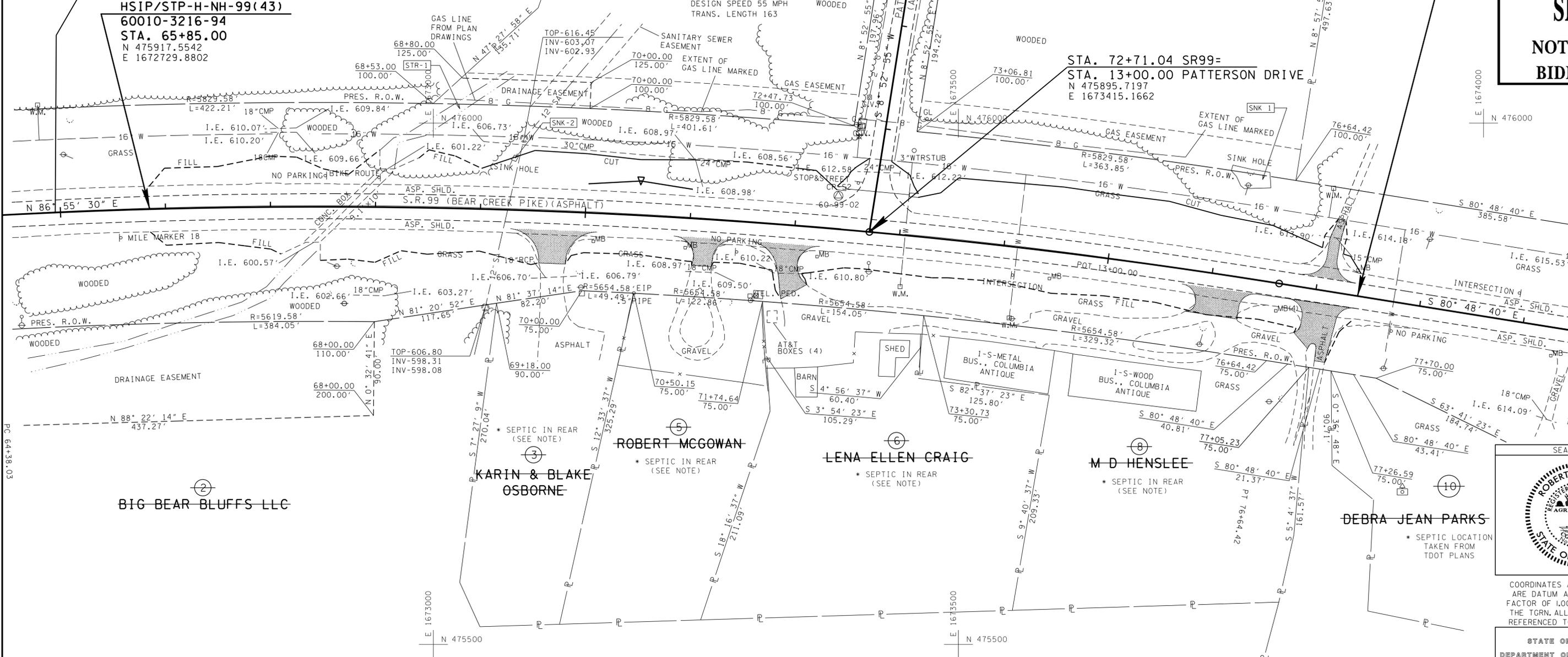
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**HSIP/STP-H-NH-99(43)**  
**60010-3216-94**  
**STA. 65+85.00**  
 N 475917.5542  
 E 1672729.8802

CURVE SR99  
 PI 70+53.58  
 N 475,944.5731  
 E 1,673,197.6953  
 Δ 12° 15' 50" (RT)  
 D 1° 00' 00"  
 R 5,729.58  
 L 1,226.39  
 T 615.55  
 SE MATCH EXIST. FT/FT  
 DESIGN SPEED 55 MPH  
 TRANS. LENGTH 163

**END PROJECT (CONST.)**  
**HSIP/STP-H-NH-99(43)**  
**60010-3216-94**  
**STA. 77+40.00**  
 N 475834.2069  
 E 1673879.9553

**UNOFFICIAL SET**  
**NOT FOR BIDDING**

**STA. 72+71.04 SR99=**  
**STA. 13+00.00 PATTERSON DRIVE**  
 N 475895.7197  
 E 1673415.1662



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BIG BEAR BLUFFS LLC

KARIN & BLAKE OSBORNE

ROBERT MCGOWAN

LENA ELLEN CRAIG

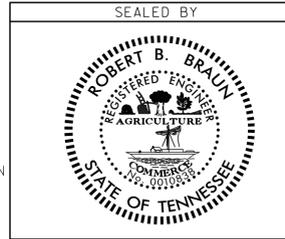
M D HENSLEE

DEBRA JEAN PARKS

\* SEPTIC TANK LOCATION IS FROM BEST AVAILABLE EVIDENCE AND HAS NOT BEEN PHYSICALLY LOCATED.

**CONTROL POINTS**

POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S01	475881.9630	1672583.7580	613.83	64+37	29.59' (RT)
S02	475930.3440	1673385.6740	614.44	72+39	31.87' (LT)
S03	475743.1530	1674254.4660	618.05	81+24	30.08' (RT)



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00007 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION

**PRESENT LAYOUT**  
 STA. 65+85 TO STA. 77+40

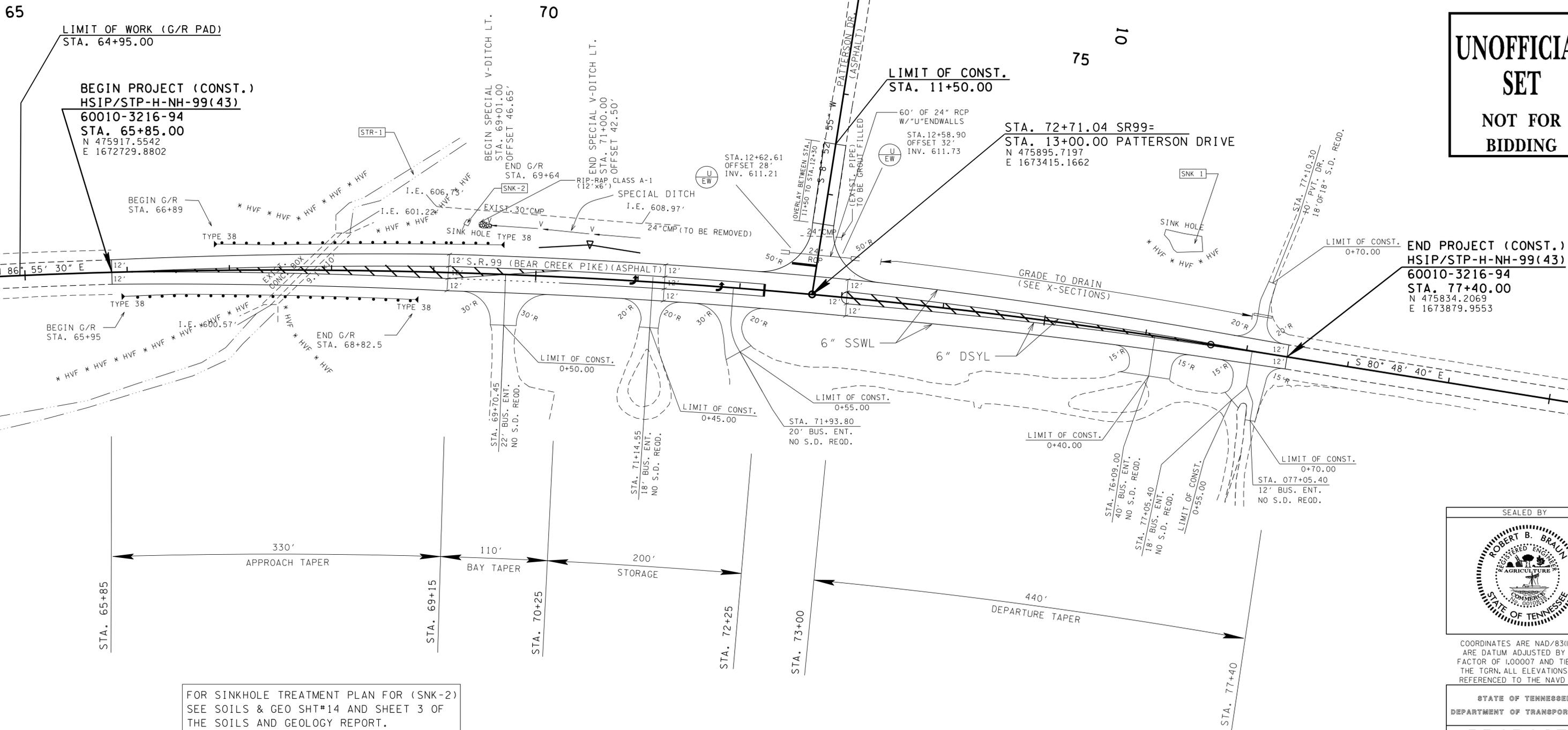
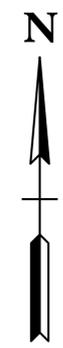
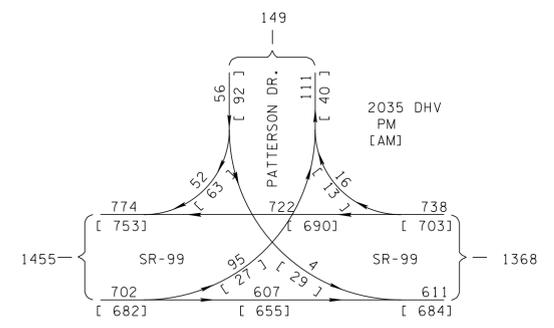
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	4A
CONST.	2015	HSIP/STP-H-NH-99(43)	4A

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THE CONSTRUCTION AND CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF STREAM STR-1 AND THAT THE CREEK AND THR SURROUNDING VEGETATION WILL NOT BE DISTURBED.

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THE CONSTRUCTION AND CONSTRUCTION EQUIPMENT WILL NOT DISTURB SINKHOLE # 1.

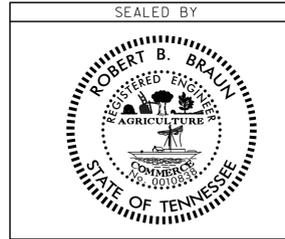
NOTE:  
EXISTING PATTERSON DRIVE SIGN & POST AND EXISTING BIKE ROUTE SIGN & POST MAY BE UTILIZED AND RELOCATED IF NECESSARY, COST TO BE INCLUDED IN THE COST OF OTHER ITEMS OF CONSTRUCTION.



**UNOFFICIAL SET**  
**NOT FOR BIDDING**

END PROJECT (CONST.)  
HSIP/STP-H-NH-99(43)  
60010-3216-94  
STA. 77+40.00  
N 475834.2069  
E 1673879.9553

FOR SINKHOLE TREATMENT PLAN FOR (SNK-2) SEE SOILS & GEO SHT#14 AND SHEET 3 OF THE SOILS AND GEOLOGY REPORT.



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00007 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**PROPOSED LAYOUT**

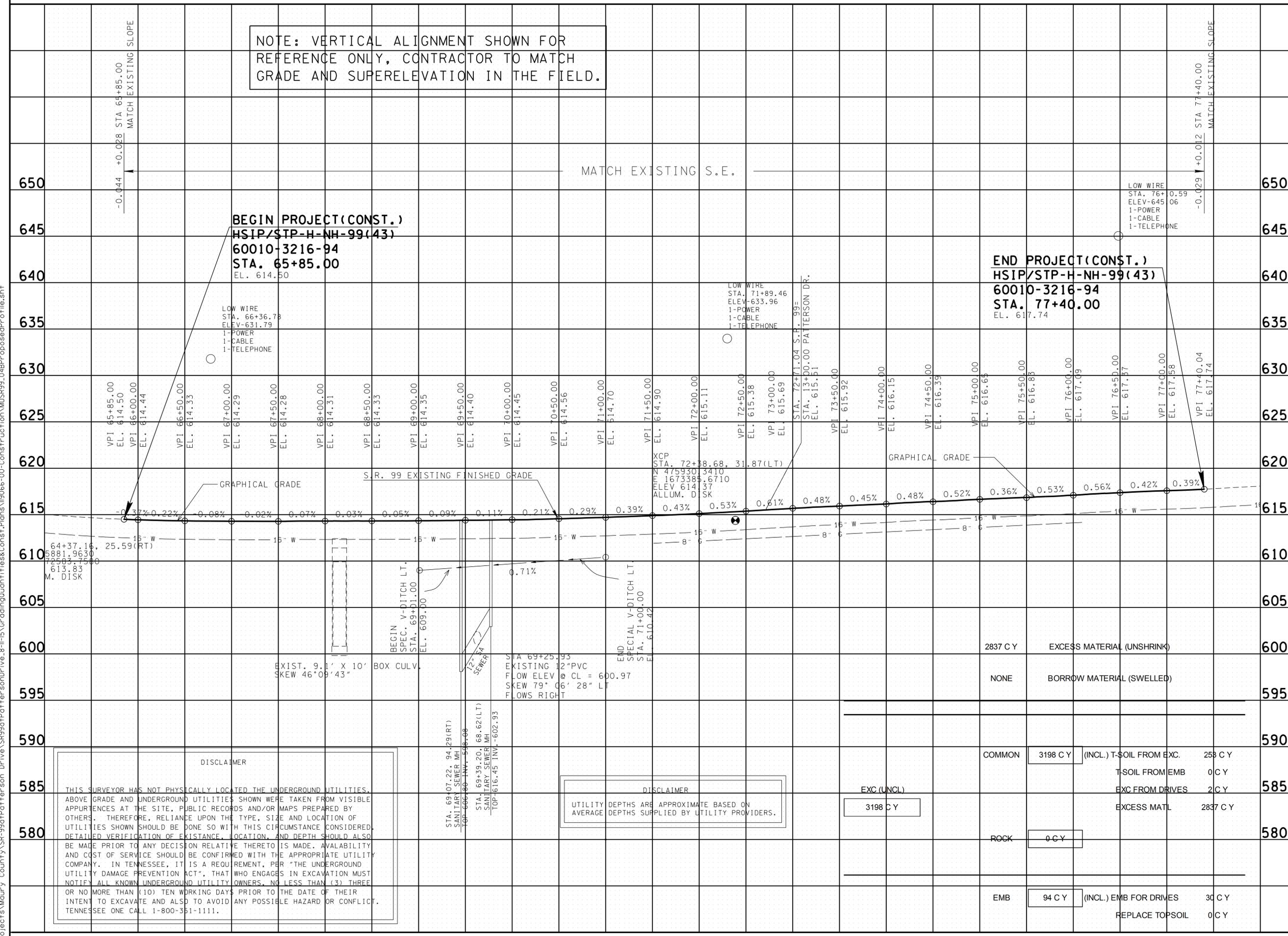
STA. 65+85 TO STA. 77+40

SCALE: 1" = 50'

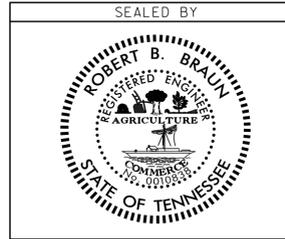
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	4B
CONST.	2015	HSIP/STP-H-NH-99(43)	4B

NOTE: VERTICAL ALIGNMENT SHOWN FOR REFERENCE ONLY, CONTRACTOR TO MATCH GRADE AND SUPERELEVATION IN THE FIELD.



**UNOFFICIAL SET**  
**NOT FOR BIDDING**



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**PROFILE**

STA. 65+85 TO STA. 77+40  
SCALE: 1" = 50' HORIZ.  
1" = 5' VERT.

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**DISCLAIMER**

THIS SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES 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 EXISTENCE, LOCATION, AND DEPTH SHOULD ALSO BE MADE PRIOR TO ANY DECISION RELATIVE THERETO IS MADE. AVAILABILITY 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.

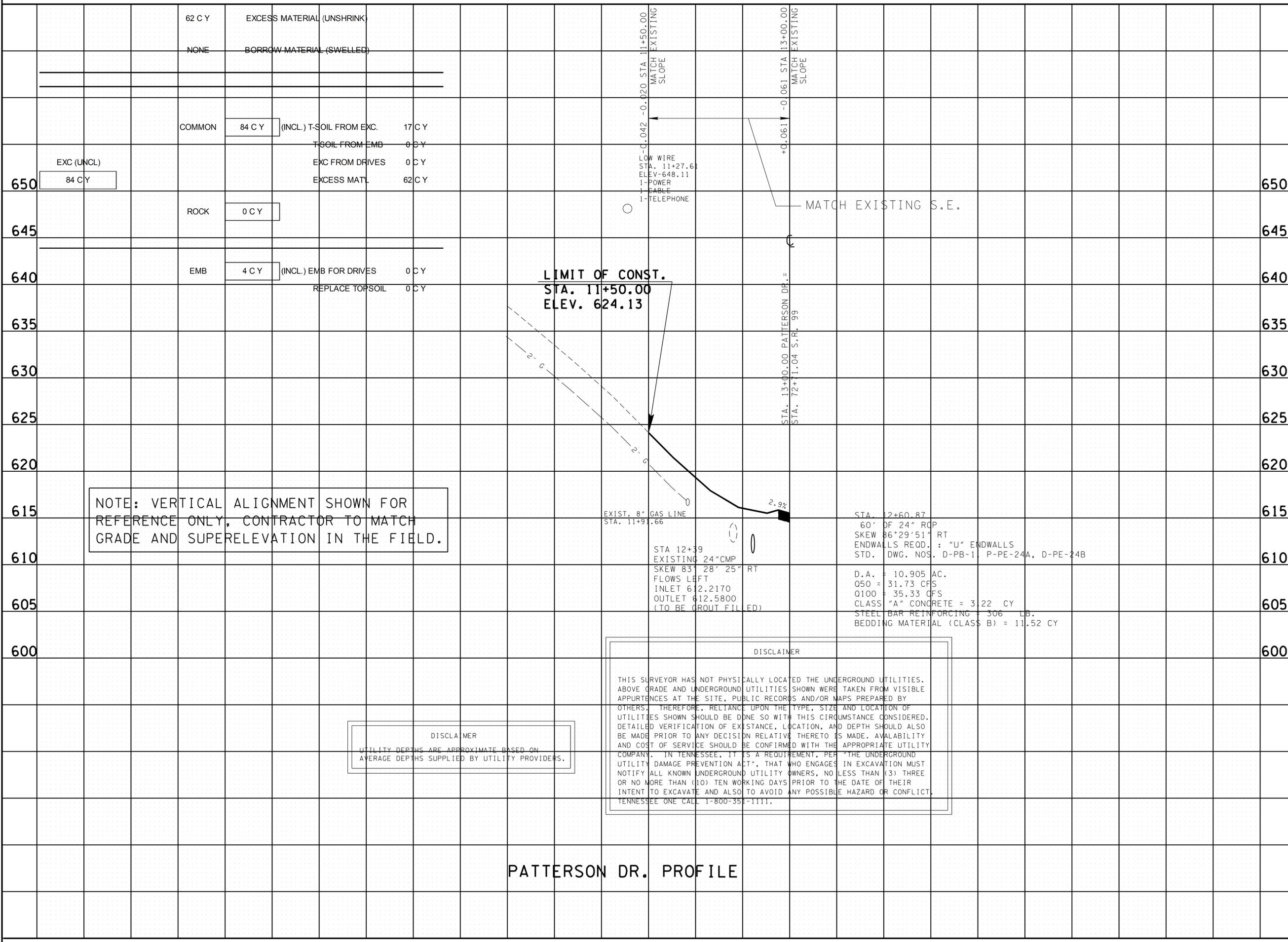
**DISCLAIMER**

UTILITY DEPTHS ARE APPROXIMATE BASED ON AVERAGE DEPTHS SUPPLIED BY UTILITY PROVIDERS.

Material	Quantity	Notes
COMMON	3198 C Y	(INCL.) T-SOIL FROM EXC. 253 C Y
		T-SOIL FROM EMB 0 C Y
		EXC FROM DRIVES 2 C Y
		EXCESS MATL 2837 C Y
ROCK	0 C Y	
EMB	94 C Y	(INCL.) EMB FOR DRIVES 30 C Y
		REPLACE TOPSOIL 0 C Y

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	5
CONST.	2015	HSIP/STP-H-NH-99(43)	5

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NOTE: VERTICAL ALIGNMENT SHOWN FOR REFERENCE ONLY, CONTRACTOR TO MATCH GRADE AND SUPERELEVATION IN THE FIELD.

DISCLAIMER  
UTILITY DEPTHS ARE APPROXIMATE BASED ON AVERAGE DEPTHS SUPPLIED BY UTILITY PROVIDERS.

DISCLAIMER  
THIS SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES 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. AVAILABILITY 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.

STA. 12+60.87  
60' OF 24" RCP  
SKEW 86°29'51" RT  
ENDWALLS REOD. : "U" ENDWALLS  
STD. DWG. NOS. D-PB-1 P-PE-24A, D-PE-24B  
D.A. = 10.905 AC.  
Q50 = 31.73 CFS  
Q100 = 35.33 CFS  
CLASS "A" CONCRETE = 3.22 CY  
STEEL BAR REINFORCING = 306 LB.  
BEDDING MATERIAL (CLASS B) = 11.52 CY

EXIST. 8" GAS LINE  
STA. 11+91.66  
STA 12+39  
EXISTING 24" CMP  
SKEW 83°28'25" RT  
FLOWS LEFT  
INLET 612.2170  
OUTLET 612.5800  
(TO BE GROUT FILLED)

COMMON 84 C Y (INCL.) T-SOIL FROM EXC. 17 C Y  
T-SOIL FROM EMB 0 C Y  
EXC FROM DRIVES 0 C Y  
EXCESS MATL 62 C Y

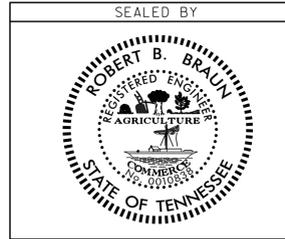
ROCK 0 C Y

EMB 4 C Y (INCL.) EMB FOR DRIVES 0 C Y  
REPLACE TOPSOIL 0 C Y

EXC (UNCL) 84 C Y

PATTERSON DR. PROFILE

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SET  
NOT FOR  
BIDDING**

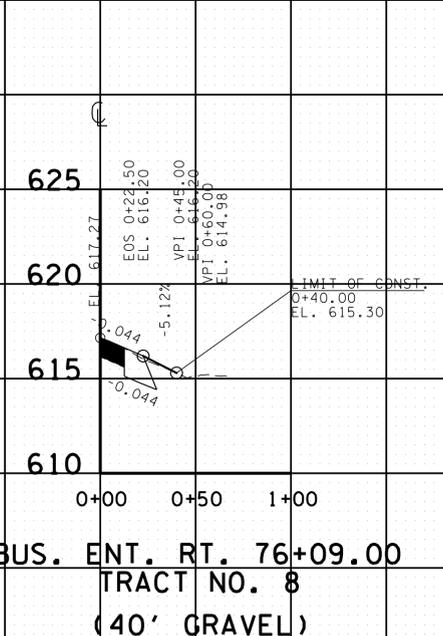
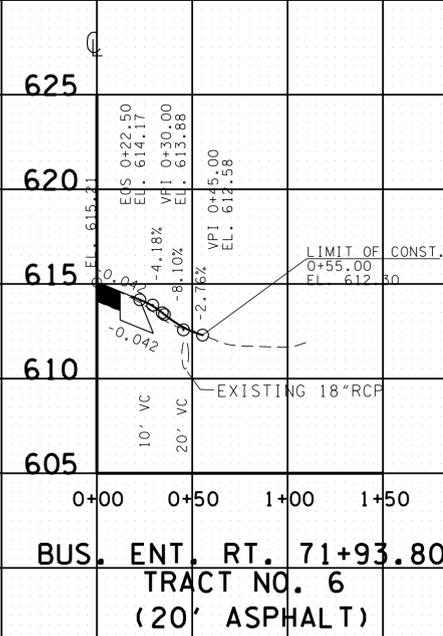
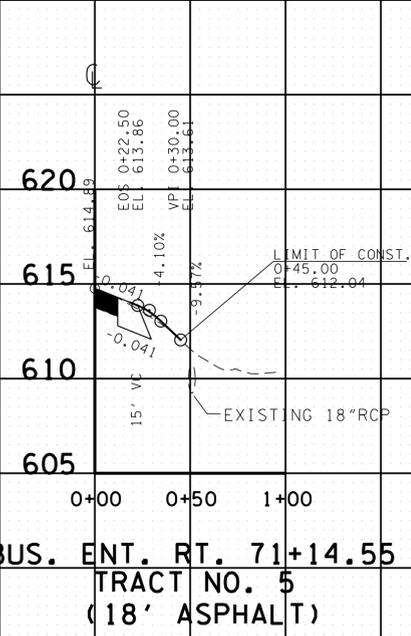
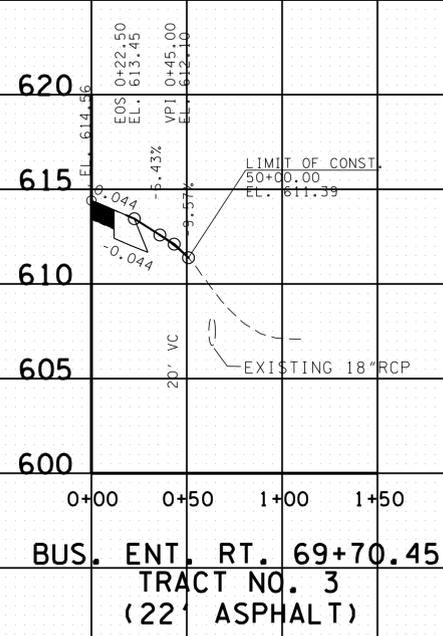
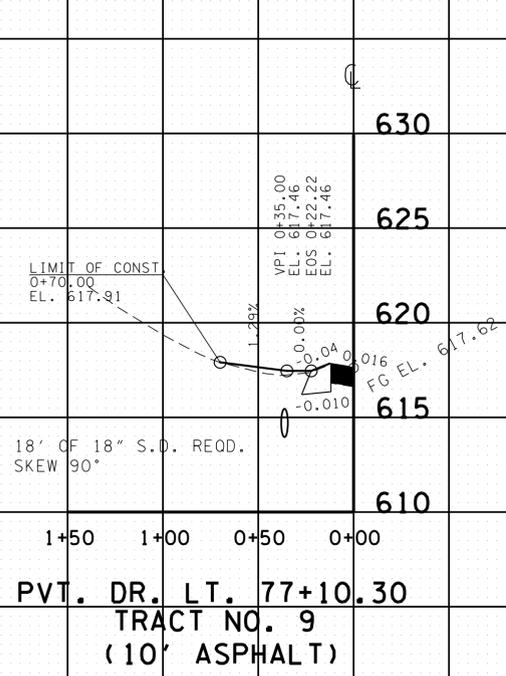
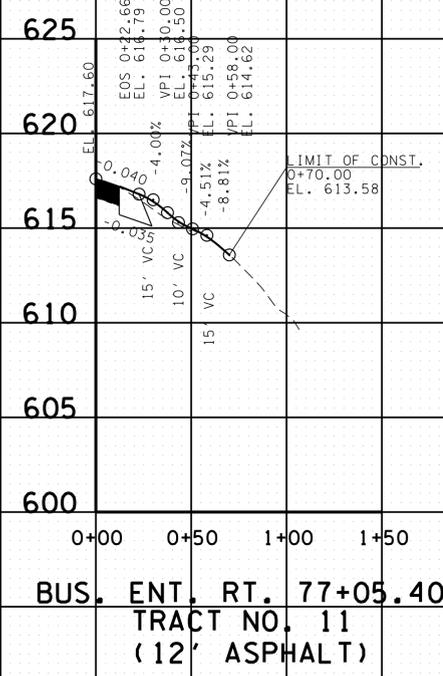
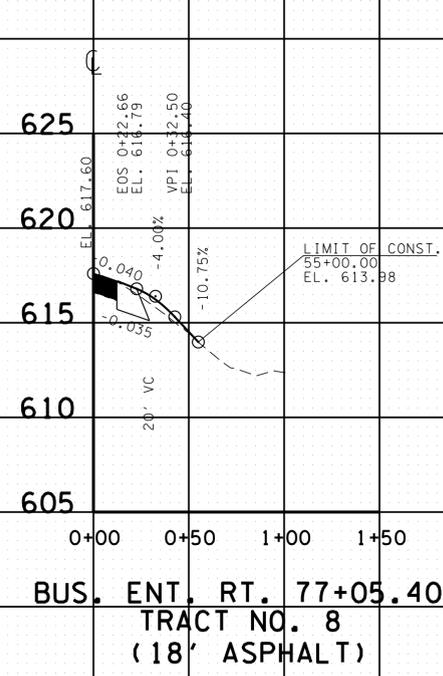


STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

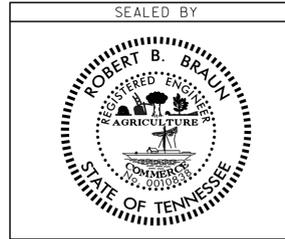
**PROFILE OF  
SIDE ROADS  
AND STREETS**  
SCALE: 1" = 50' HORIZ.  
1" = 5' VERT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	6
CONST.	2015	HSIP/STP-H-NH-99(43)	6

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SET  
NOT FOR  
BIDDING**



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**PROFILE OF  
PRIVATE  
DRIVES**  
 SCALE: 1" = 50' HORIZ.  
 1" = 5' VERT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	7
CONST.	2015	HSIP/STP-H-NH-99(43)	7

# DRAINAGE/ HYDRAULIC DATA FOR BRIDGE STATION 67+74.20 STREAM NAME BEAR CREEK BRANCH

STREAM BED LINING: ROCK/EARTH

DIRECTION OF FLOW RIGHT

DRAINAGE AREA 1.15 SQ MI HILLY

PRESENT STRUCTURE: SPAN 10.0' HEIGHT 9.1' STRUCTURE BOX CULVERT SUPERSTRUCTURE \_\_\_\_\_

BEGIN STATION-OFFSET 67+40.91, 34.06 (RT) END STATION-OFFSET 68+09.56, 36.79 (LT)

LOW BEAM ELEV. 610.32 LOCATION, NW CORNER

INLET INVERT ELEV. 601.22 OUTLET INVERT. 600.57

NORMAL WATER ELEV. \_\_\_\_\_ EXTREME HIGHWATER ELEV. \_\_\_\_\_ DATE. \_\_\_\_\_

HOW OBTAINED. \_\_\_\_\_

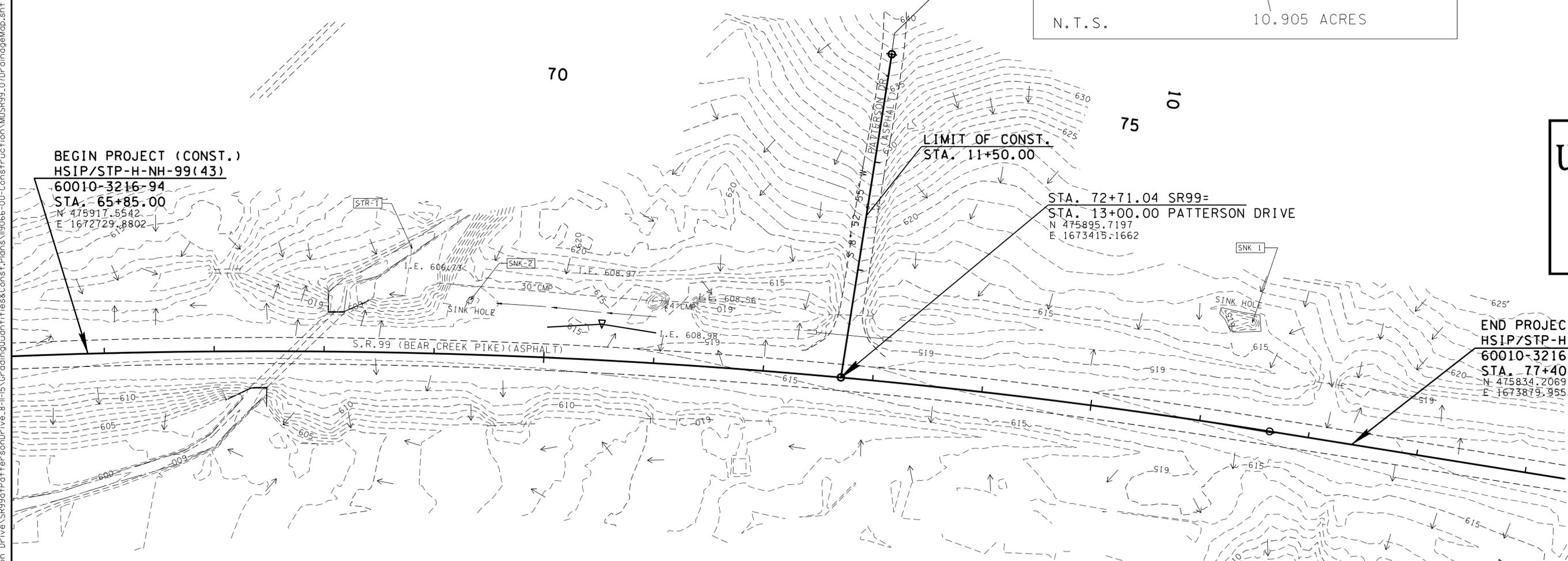
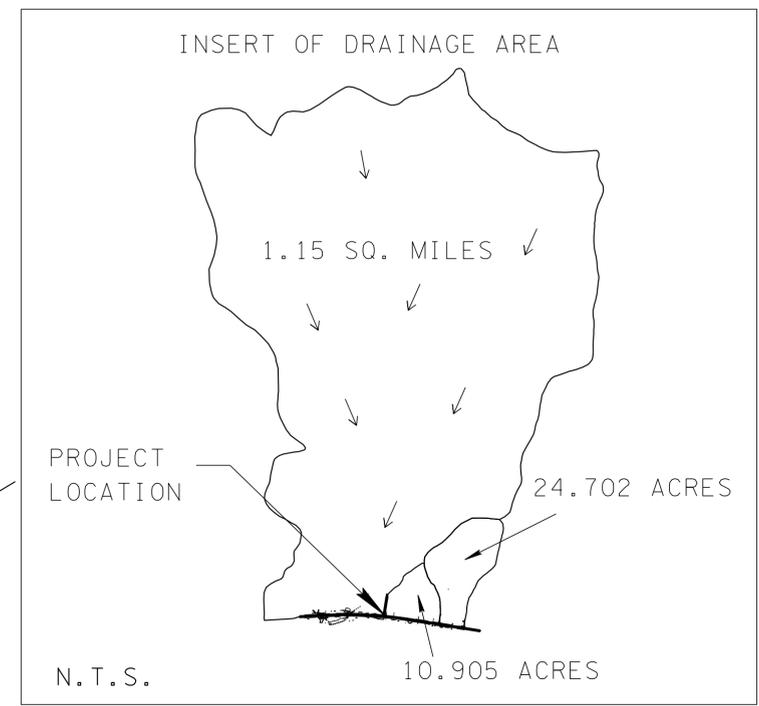
BACKWATER FROM WHAT STREAM (IF APPLICABLE): BEAR CREEK

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: \_\_\_\_\_



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NOT FOR  
BIDDING**

**BEGIN PROJECT (CONST.)  
HSIP/STP-H-NH-99(43)  
60010-3216-94  
STA. 65+85.00**  
N 475917.5542  
E 1672729.8802

**STA. 72+71.04 SR99=  
STA. 13+00.00 PATTERSON DRIVE**  
N 475895.7197  
E 1673415.1662

**END PROJECT (CONST.)  
HSIP/STP-H-NH-99(43)  
60010-3216-94  
STA. 77+40.00**  
N 475834.2069  
E 1673879.9553

## DRAINAGE DATA FOR PIPE STATION 12+39

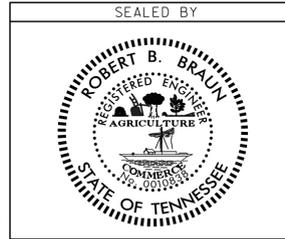
DIRECTION OF FLOW LEFT

DRAINAGE AREA 10.905 AC HILLY

PRESENT STRUCTURE: 24" CMP

EXISTING STRUCTURE CONDITION: GOOD

REMARKS: \_\_\_\_\_



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00007 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

## DRAINAGE MAP

STA. 65+85 TO STA. 77+40  
SCALE: 1" = 50'

22-SEP-2015 11:57 C:\Projects\Maury County\SR-99atPatterson Drive\SR99atPatterson Drive\I-15\GradingQuantities\Const.Plans\19066-00-Const\Construction\MUSR99\_07DrainageMap.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	8
CONST.	2015	HSIP/STP-H-NH-99(43)	8

STA. 12+60.87  
 60' OF 30" RCP ITEM NO. 607-05.02  
 SKEW 86° 29' 51" RT  
 ENDWALLS RECD. : "U" ENDWALLS  
 STD. DWG. NOS. D-PB-1, P-PE-24A, D-PE-24B  
  
 D.A. = 10.905 AC.  
 OSO = 31.73 CFS  
 Q100 = 35.33 CFS  
 CLASS "A" CONCRETE 3.22 CY  
 STEEL BAR REINFORCING 306 LB.  
 BEDDING MATERIAL (CLASS B) 11.52 CY

630

620

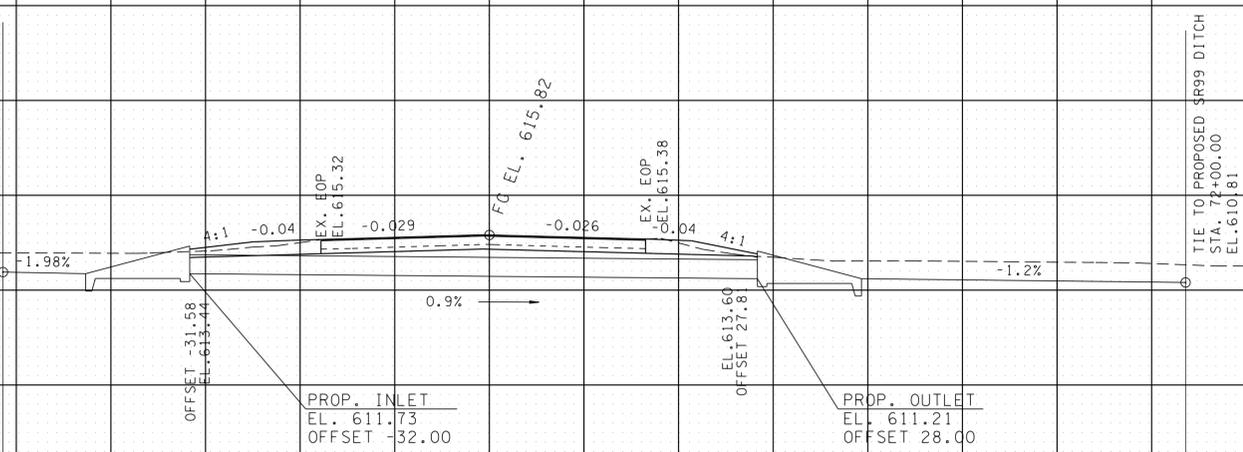
610

630

620

610

TIE TO PROPOSED SR99 DITCH  
 STA. 73+25.00  
 EL. 611.91



PATTERSON DR.  
 12+60.87

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 SET  
 NOT FOR  
 BIDDING**

620

610

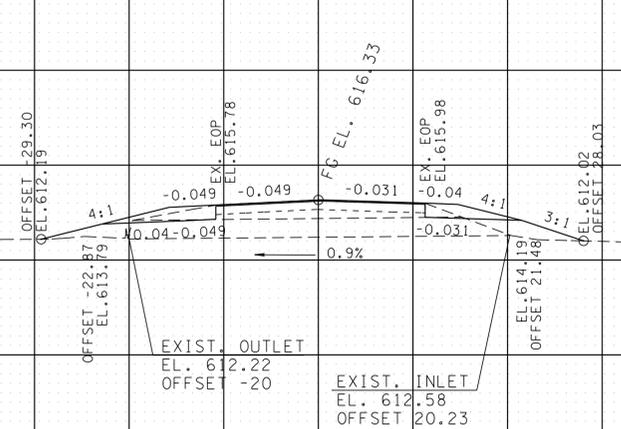
600

620

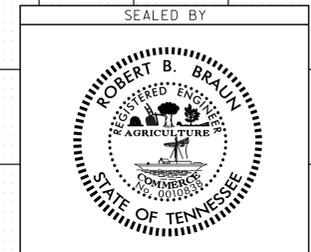
610

600

STA 12+39.94  
 EXISTING 24" CMP  
 SKEW 83° 28' 25" RT  
 FLOWS LEFT  
 INLET 612.2170  
 OUTLET 612.5800



PATTERSON DR.  
 12+39.94  
 EXISTING 24" CMP  
 TO BE GROUT FILLED



STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
  
**CULVERT  
 CROSS-  
 SECTIONS**  
 SCALE: 1"=10' HORIZ.  
 1"=10' VERT.

22-SEP-2015 11:57 C:\Projects\Moory County\SR-99a+Patterson Drive\SR99a+Patterson Drive\15\GradingQuantities&Const.\Plans\19066-00-Construction\MUSR99\_08CulvertXS.sht

100 80 60 40 20 0 20 40 60 80 100

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	9
CONST.	2015	HSIP/STP-H-NH-99(43)	9

# 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.
- (2) A 30 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM SHALL BE PRESERVED, TO THE MAXIMUM EXTENT PRACTICABLE, DURING CONSTRUCTION ACTIVITIES AT THE SITE. BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA. THE 30 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 15 FEET AT ANY MEASURED LOCATION. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES. BEST MANAGEMENT PRACTICES (BMPs) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MAY BE USED. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

## NPDES

- (3) 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.
- (4) 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.
- (5) 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.
- (6) 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.

- (7) 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.
- (8) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SUPPORT ACTIVITIES; TDOT PROJECTS ARE COVERED UNDER THE "WASTE AND BORROW" MANUAL PER THE SSWMP.
- (9) EXCEPT AS OTHERWISE SPECIFIED, THERE ARE NO KNOWN SPECIAL ENVIRONMENTAL FACTORS PRESENT ON THIS PROJECT THAT INDICATE A NEED FOR SEASONAL LIMITATIONS ON THE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OPERATIONS OR ON THE TOTAL AREA OF EXPOSED SOIL.

## UTILITY RELOCATION

- (10) RAIN WATER WHICH COLLECTS IN THE UTILITY TRENCH SHALL BE PUMPED INTO A DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND MAINTAINED.
- (11) SILT FENCE SHALL BE INSTALLED ON THE DOWNSTREAM SIDE OF STOCKPILED SOIL. TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING NO FLOW CONDITIONS AND STABILIZED BY THE END OF THE WORK DAY
- (12) UTILITY CROSSINGS FOR PERENNIAL STREAMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TDOT STANDARDS AND NO WORK SHALL BE CONDUCTED IN FLOWING WATERS. TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) REGULATIONS APPLY TO UTILITIES IN THIS PROJECT IN REGARD TO EROSION PREVENTION AND SEDIMENT CONTROL (EPSC). THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE STORM WATER POLLUTION PREVENTION PLANS (SWPPP).
- (13) IT IS THE RESPONSIBILITY OF THE STATE UTILITY CONTRACTOR INSTALLER TO PROTECT FROM EROSION EXPOSED EARTH RESULTING FROM THEIR OPERATIONS AND TO PROVIDE FOR CONTAINMENT OF SEDIMENT THAT MAY RESULT FROM THEIR WORK. PRIOR TO BEGINNING WORK, ADEQUATE MEASURES MUST BE IN PLACE TO TRAP ANY SEDIMENT THAT MAY TRAVEL OFF-SITE IN THE EVENT OF RAIN. DURING THE PROGRESSION OF THEIR WORK, EXPOSED EARTH AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE TO PREVENT EROSION. AT NO TIME SHALL EXPOSED EARTH RESULTING FROM THEIR OPERATIONS HAVE UNPROTECTED ACCESS TO FLOWING OFF-SITE AND ENTERING WATERS OF THE STATE/U.S.
- (14) FOR THE INSTALLATION OF BURIED UTILITIES (PIPES AND CABLES), TRENCHES SHALL BE BACKFILLED DAILY AS CONSTRUCTION PROCEEDS. BACKFILLED TRENCHES SHALL BE SEEDED AND MULCHED OR SODDED DAILY IF POSSIBLE, BUT NO LATER THAN SEVEN DAYS AFTER BEING BACKFILLED. ANY TEMPORARY SPOIL OF EXCAVATED EARTH SHALL BE LOCATED WITHIN TDOT EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES OR RECEIVE SEPARATE EPSC MEASURES. IF TRENCHES ARE NOT BACKFILLED OVERNIGHT, APPROPRIATE EPSC MEASURES WILL BE INSTALLED BY THE STATE UTILITY CONTRACTOR UNTIL SUCH TIME AS THE TRENCH IS BACKFILLED.
- (15) IN REGARD TO EROSION PREVENTION AND SEDIMENT CONTROL (EPSC), TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) REGULATIONS APPLY TO THE STATE UTILITY CONTRACTORS IN THIS PROJECT, THEREFORE, THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE STORM WATER POLLUTIONS PREVENTION PLANS (SWPPP). THE STATE CONTRACTOR IS RESPONSIBLE FOR EPSC MEASURES RELATED TO UTILITY CONSTRUCTION INCLUDED IN THE STATE CONTRACT WORK.
- (16) TRENCHES FORMED FOR THE INSTALLATION OF BURIED UTILITIES MAY CAUSE STORM WATER RUNOFF TO CONCENTRATE AT THE TRENCH LINE. ADDITIONAL EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES MAY BE REQUIRED TO BE INSTALLED AS APPROVED BY THE TDOT PROJECT ENGINEER.
- (17) FOR THE INSTALLATION OF UNDERGROUND UTILITIES OUTSIDE OF THE TDOT RIGHT-OF-WAY, EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) SHALL BE INSTALLED PRIOR TO CLEARING (TRENCHING AND ASSOCIATED BLASTING) IN THOSE AREAS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA. THESE EPSC MEASURES SHALL REMAIN UNTIL THE BACKFILLED TRENCH IS STABILIZED WITH FINAL VEGETATIVE COVER.

- (18) THE UTILITY CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS (AS APPROVED BY THE TDOT PROJECT ENGINEER).
- (19) THE UTILITY CONTRACTOR WILL PROVIDE APPROPRIATE EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES TO REPLACE IN-PLACE EPSC MEASURES REMOVED TO FACILITATE THE INSTALLATION OF UTILITIES. REPLACEMENT OF EPSC MEASURES WILL BE COORDINATED WITH THE TDOT PROJECT ENGINEER BEFORE COMMENCING WORK.

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND		
SYMBOL	ITEM	STD. DWG.
* HVF * HVF	HIGH VISIBILITY FENCE	S-F-1
* SFB * SFB * SFB *	SILT FENCE WITH WIRE BACKING	EC-STR-3C
	ROCK CHECK DAM (V-DITCH)	EC-STR-6
	ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A
	CULVERT PROTECTION (TYPE 1)	EC-STR-11
*  *	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
	EROSION CONTROL BLANKET	EC-STR-34
** TUBE ** TUBE **	SEDIMENT TUBE	EC-STR-37

\* LOCATION TO BE DETERMINED BY PROJECT ENGINEER.

EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1.)	203-01 ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	14.3
	209-05 SEDIMENT REMOVAL	C.Y.	38
2.)	209-08.02 TEMPORARY SILT FENCE (WITH BACKING)	L.F.	1730
2.)	209-08.07 ROCK CHECK DAM PER	EACH	11
2.)	209-08.08 ENHANCED ROCK CHECK DAM	EACH	3
3.)	303-10.01 MINERAL AGGREGATE (SIZE 57)	TON	12.6
	707-08.11 HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	950
4.)	709-05.05 MACHINED RIP-RAP (CLASS A-3)	TON	100
3.)	709-05.06 MACHINED RIP-RAP (CLASS A-1)	TON	68.1
5.)	740-10.03 GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	333
	740-11.03 TEMPORARY SEDIMENT TUBE 18IN (DESCRIPTION)	L.F.	850
	801-01.07 TEMPORARY SEEDING (WITH MULCH)	UNIT	15
6.)	801-03 WATER (SEEDING & SODDING)	M.G.	18
	803-01 SODDING (NEW SOD)	S.Y.	1700
	805-12.01 EROSION CONTROL BLANKET (TYPE I)	S.Y.	900

- 1.) TO BE USED WITH TWO TEMPORARY CONSTRUCTION EXITS.
- 2.) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
- 3.) TO BE USED WITH CULVERT PROTECTION TYPE I.
- 4.) TO BE USED WITH TWO TEMPORARY CONSTRUCTION EXITS.
- 5.) 161.4 S.Y. WITH CULVERT PROTECTION TYPE I, 171.6 S.Y. WITH TWO TEMPORARY CONSTRUCTION EXITS.
- 6.) INCLUDES 1.5 M.G. FOR EROSION PREVENTION SEDIMENT CONTROL.

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SET  
NOT FOR  
BIDDING**

SEALED BY



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**EROSION  
PREVENTION  
AND SEDIMENT  
CONTROL NOTES**



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	11
CONST.	2015	HSIP/STP-H-NH-99(43)	11

OUTFALL NO.	DISTURBED DRAINAGE AREA AC.	TOTAL DRAINAGE AREA AC.	AVG. SLOPE OF D.A. %
1	0.3	11	4.3
2	0.5	14	5
3	1.0	13	3.5



65

70

75

10

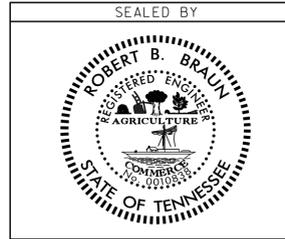
**BEGIN PROJECT (CONST.)**  
**HSIP/STP-H-NH-99(43)**  
**60010-3216-94**  
**STA. 65+85.00**  
 N 475917.5542  
 E 1672729.8802

**LIMIT OF CONST.**  
**STA. 11+50.00**

**STA. 72+71.04 SR99=**  
**STA. 13+00.00 PATTERSON DRIVE**  
 N 475895.7197  
 E 1673415.1662

**END PROJECT (CONST.)**  
**HSIP/STP-H-NH-99(43)**  
**60010-3216-94**  
**STA. 77+40.00**  
 N 475834.0616  
 E 1673879.9551

**UNOFFICIAL**  
**SET**  
**NOT FOR**  
**BIDDING**



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00007 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 II  
 SCALE: 1" = 50'

NOTE: SILT FENCE TO HAVE J-HOOKS ACROSS CONTOURS.

NOTE: PROPOSED CONTOURS SHOWN

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22-SEP-2015 11:59



- 1- CONSTRUCT RIGHT SIDE OF SR-99 AS SHOWN IN PLANS.
- 2- MAINTAIN TRAFFIC IN BOTH DIRECTIONS OF EXISTING LANES OF SR-99.
- 3- ACCESS TO SIDE ROADS AND PROPERTIES MUST BE MAINTAINED AT ALL TIMES.

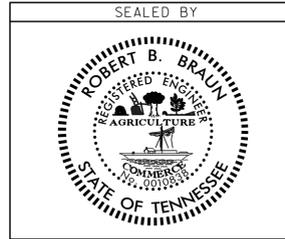
TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	TRAFFIC FLOW
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	ARROW BOARD TYPE C

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	HSIP/STP-H-NH-99(43)	12A

TRAFFIC CONTROL QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
705-08.51	PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3	EACH	3
712-01	TRAFFIC CONTROL	LS	1
712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	2800
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	34
712-04.50	PORTABLE BARRIER RAIL DELINEATOR	EACH	125
712-06	SIGNS (CONSTRUCTION)	S.F.	192
712-08.03	ARROW BOARD (TYPE C)	EACH	2
712-09.02	REMOVABLE PAVEMENT MARKING (8" BARRIER LINE)	L.F.	3660

712-06 SIGNS (CONSTRUCTION)				
M.U.T.C.D. NO.	DESCRIPTION	SIZE	QUANTITY	(S.F.)
G20-2	END ROAD WORK	48" X 24"	4	32
W20-1	ROAD WORK AHEAD	48" X 48"	2	32
W20-1	ROAD WORK 1/2 MILE	48" X 48"	2	32
W20-1	ROAD WORK 1 MILE	48" X 48"	2	32
W21-5R	RIGHT SHOULDER CLOSED 1500 FT	48" X 48"	2	32
W21-5R	RIGHT SHOULDER CLOSED AHEAD	48" X 48"	2	32
TOTAL 712-06 SIGNS (CONSTRUCTION) S.F.				192

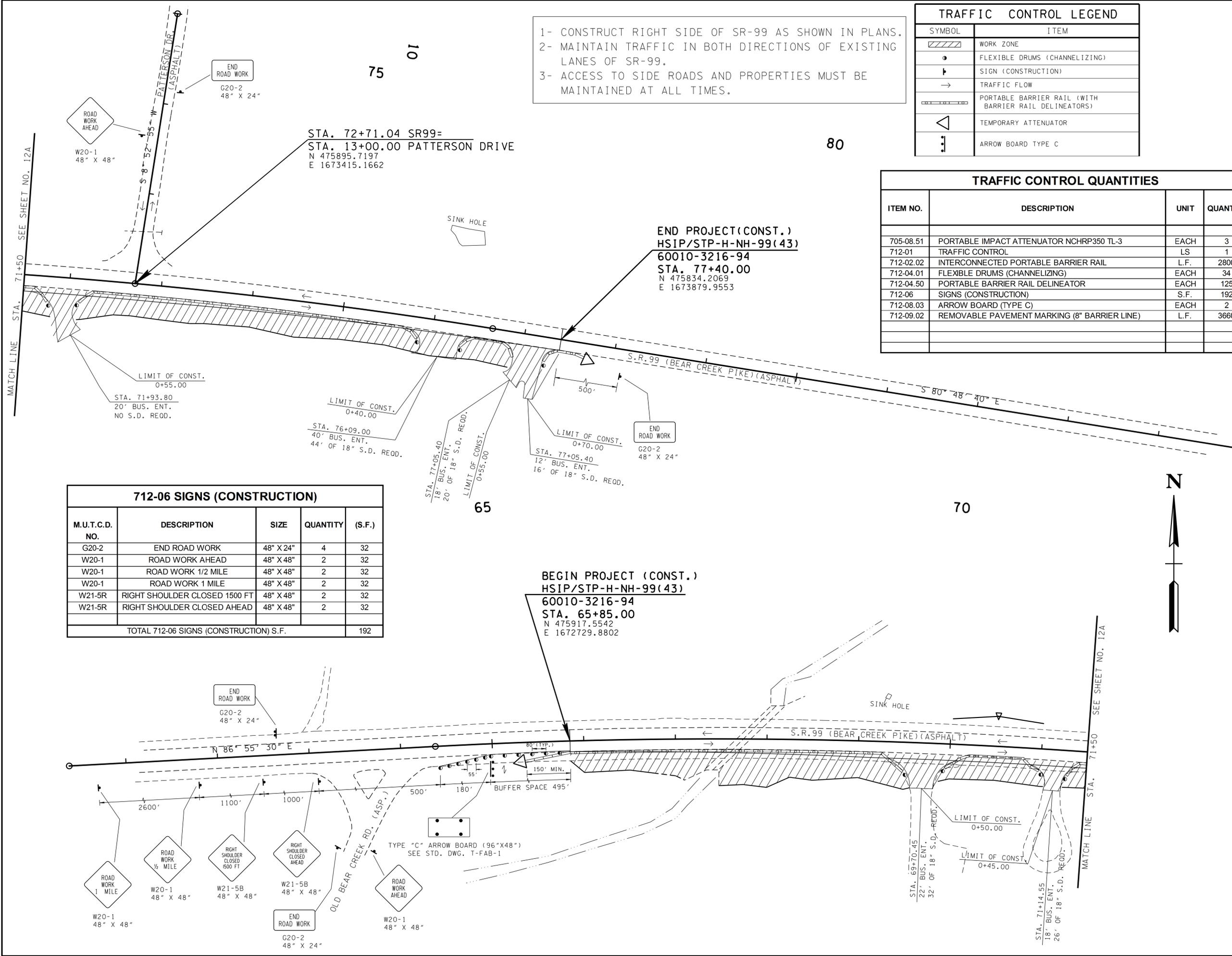
**UNOFFICIAL SET**  
**NOT FOR BIDDING**



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000 07 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

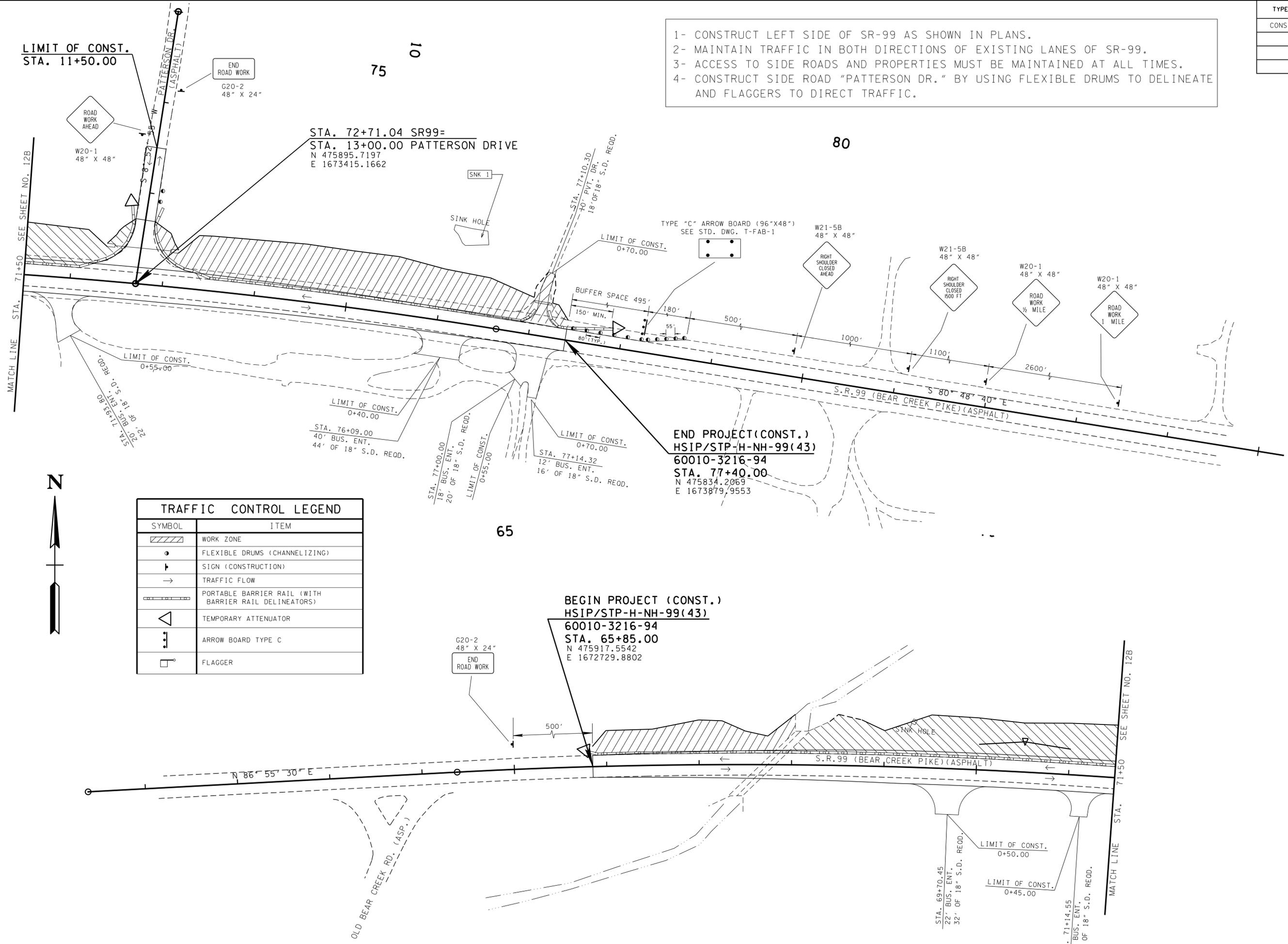
**TRAFFIC CONTROL PLAN**  
**PHASE 1**  
STA. 65+85 TO STA. 77+40  
SCALE: 1" = 50'



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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	HSIP/STP-H-NH-99(43)	12B

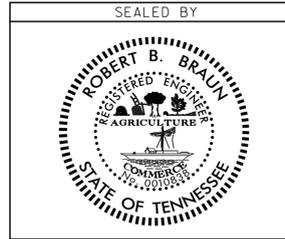
- 1- CONSTRUCT LEFT SIDE OF SR-99 AS SHOWN IN PLANS.
- 2- MAINTAIN TRAFFIC IN BOTH DIRECTIONS OF EXISTING LANES OF SR-99.
- 3- ACCESS TO SIDE ROADS AND PROPERTIES MUST BE MAINTAINED AT ALL TIMES.
- 4- CONSTRUCT SIDE ROAD "PATTERSON DR." BY USING FLEXIBLE DRUMS TO DELINEATE AND FLAGGERS TO DIRECT TRAFFIC.



TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	TRAFFIC FLOW
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	ARROW BOARD TYPE C
	FLAGGER

85

**UNOFFICIAL SET**  
**NOT FOR BIDDING**



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000 07 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL PLAN**  
**PHASE 2**  
STA. 65+85 TO STA. 77+40  
SCALE: 1" = 50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	HSIP/STP-H-NH-99(43)	14



65

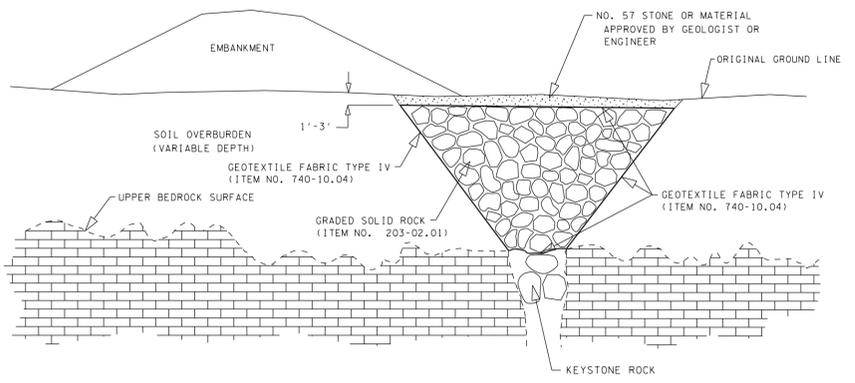
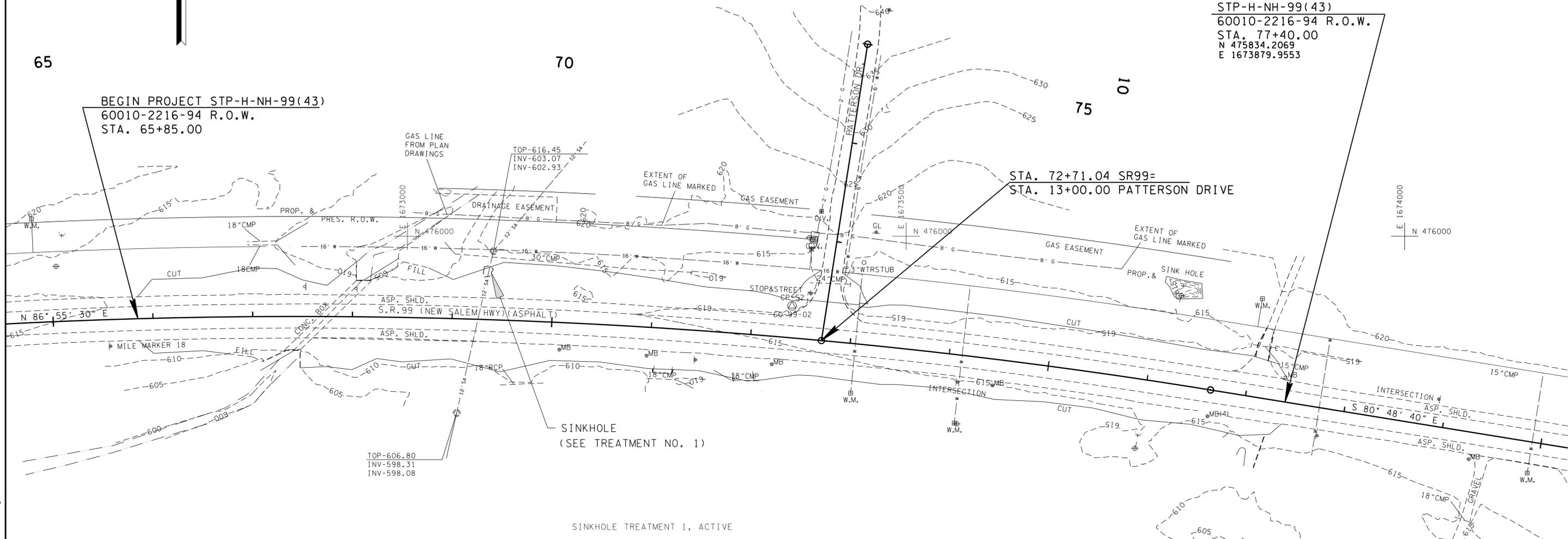
70

75

10

BEGIN PROJECT STP-H-NH-99(43)  
60010-2216-94 R.O.W.  
STA. 65+85.00

END PROJECT  
STP-H-NH-99(43)  
60010-2216-94 R.O.W.  
STA. 77+40.00  
N 475834.2069  
E 1673879.9553



SINKHOLE TREATMENT 1  
STATION 69+30  
APPROXIMATE 50' LEFT OF CENTERLINE

SINKHOLE TREATMENT 1, ACTIVE

NOTE: AFTER EXCAVATION IS COMPLETE AND ROCK OPENING IS EXPOSED, THE SITE AND TREATMENT METHOD SHALL BE APPROVED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEERING SECTION OF THE DIVISION OF MATERIALS AND TESTS. THE TOP 1-3 FT. OF MATERIAL SHALL BE APPROVED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEERING SECTION OF THE DIVISION OF MATERIALS AND TESTS.

SEQUENCE OF CONSTRUCTION:

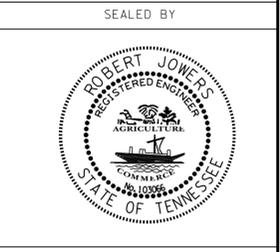
1. EXCAVATE SINKHOLE TO DEFINE OPENING IN BEDROCK MAKING SURE TO REMOVE ALL SOIL AND DEBRIS.
2. FIT THE OPENING WITH KEYSTONE ROCK, WHICH SHALL BE OF SUFFICIENT SIZE TO LOCK IN PLACE WITHOUT CREATING AN AIRBLOCK TO SUBSURFACE DRAINAGE.
3. PLACE THE GEOTEXTILE FABRIC TYPE IV ON EXCAVATED SLOPES AND BASE OF SINKHOLE.
4. BACKFILL TO A MAXIMUM OF 1 FT. OF THE SPECIFIED GRADE WITH GRADED SOLID ROCK (CLASSIFICATION 203-02.01, BORROW EXCAVATION).
5. BACKFILL TO GRADE WITH A MINIMUM OF 1 FT. OF NO.57 STONE ON TOP OF THE GRADED SOLID ROCK AND GEOTEXTILE FABRIC TYPE IV.

EQUATION FOR ESTIMATING SINKHOLE VOLUME, WHERE THE SIDES OF THE SINKHOLE ARE AT 1:1 SLOPES.

$$VOL. 1:1 \approx 0.13D^3 - (0.5D - h)^3$$



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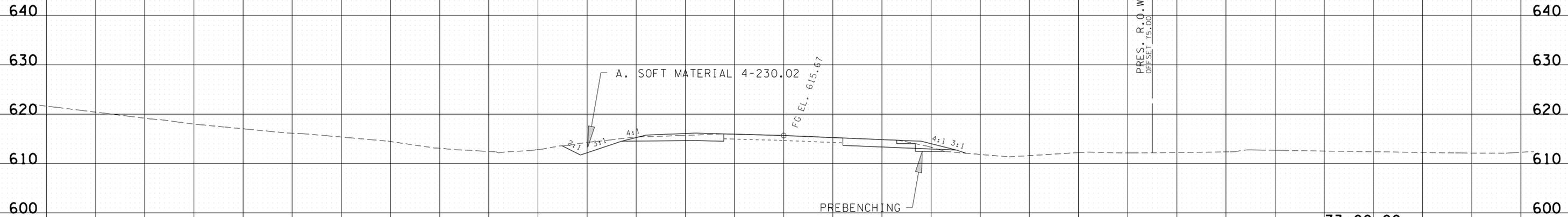


STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**SOILS**  
STATE ROUTE 99  
SINKHOLE AREA  
MAURY COUNTY

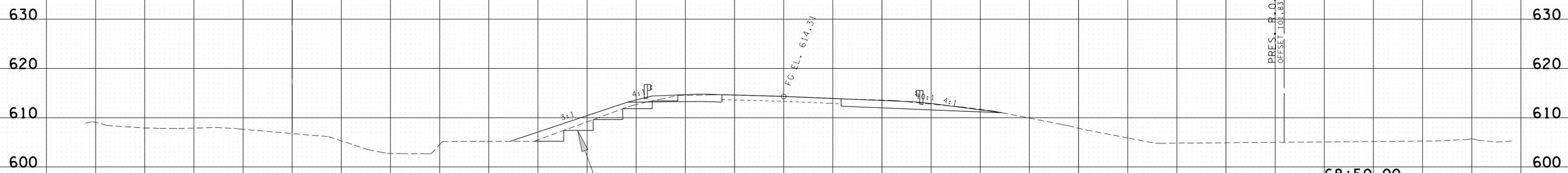
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	HSIP/STP-H-NH-99(43)	14A

REPRESENTATIVE OF STATION 72+50.00 TO STATION 75+00.00

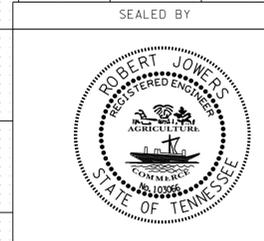


NOTE:  
EXISTING EMBANKMENT TO BE PREBENCHED ACCORDING TO TDOT  
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION  
SUB SECTION 205.03 PARAGRAPH 7 (JANUARY 1, 2015).

REPRESENTATIVE OF STATION 68+50.00 TO STATION 69+00.00



4-203.02  
A. SOIL MATERIAL  
SOIL MATERIAL IS MATERIAL THAT IS PREDOMINANTLY MADE UP OF NATURALLY OCCURRING MINERAL PARTICLES WHICH ARE FAIRLY READILY SEPARATED INTO RELATIVELY SMALL PIECES, AND IN WHICH THE MASS MAY CONTAIN AIR, OR ORGANIC MATERIALS. THIS MATERIAL MAY CONTAIN ROCK PIECES IN THE FORM OF DISCONNECTED SLABS, LENSES, OR BOULDERS OF LESS THAN APPROXIMATELY 0.5 CUBIC YARDS. THE MAIN SOIL GROUPS CONSIST OF CLAY, SILT, SAND, GRAVEL, COBBLES, BOULDERS (LESS THAN 0.5 CUBIC YARD VOLUME) OR A COMBINATION OF ANY OF THE CONSTITUENTS. FOR CONSTRUCTION PURPOSES, THIS MATERIAL WOULD TYPICALLY BE CONSIDERED TO BE EXCAVATABLE BY CONVENTIONAL EXCAVATION MACHINERY SUCH AS PANS, TRACK HOES, OR FRONT END EXCAVATORS/LOADERS. THIS MATERIAL WOULD HAVE A SHRINK FACTOR AS GIVEN IN THE SHRINK FACTORS SHOWN IN SECTION 2-145.10 OF THE DESIGN GUIDELINES OR AS RECOMMENDED BY THE GEOTECHNICAL ENGINEERING SECTION OF THE MATERIALS AND TESTS DIVISION.



SOILS  
STATE ROUTE 99  
MAURY COUNTY

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TENNESSEE D.O.T.  
DESIGN DIVISION

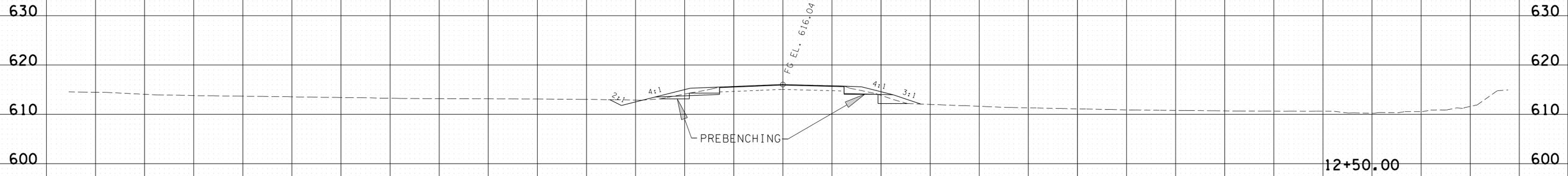
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	HSIP/STP-H-NH-99(43)	14B

TENNESSEE D.O.T.  
DESIGN DIVISION

FILE NO.

REPRESENTATIVE OF STATION 12+40.00 TO STATION 12+60.00



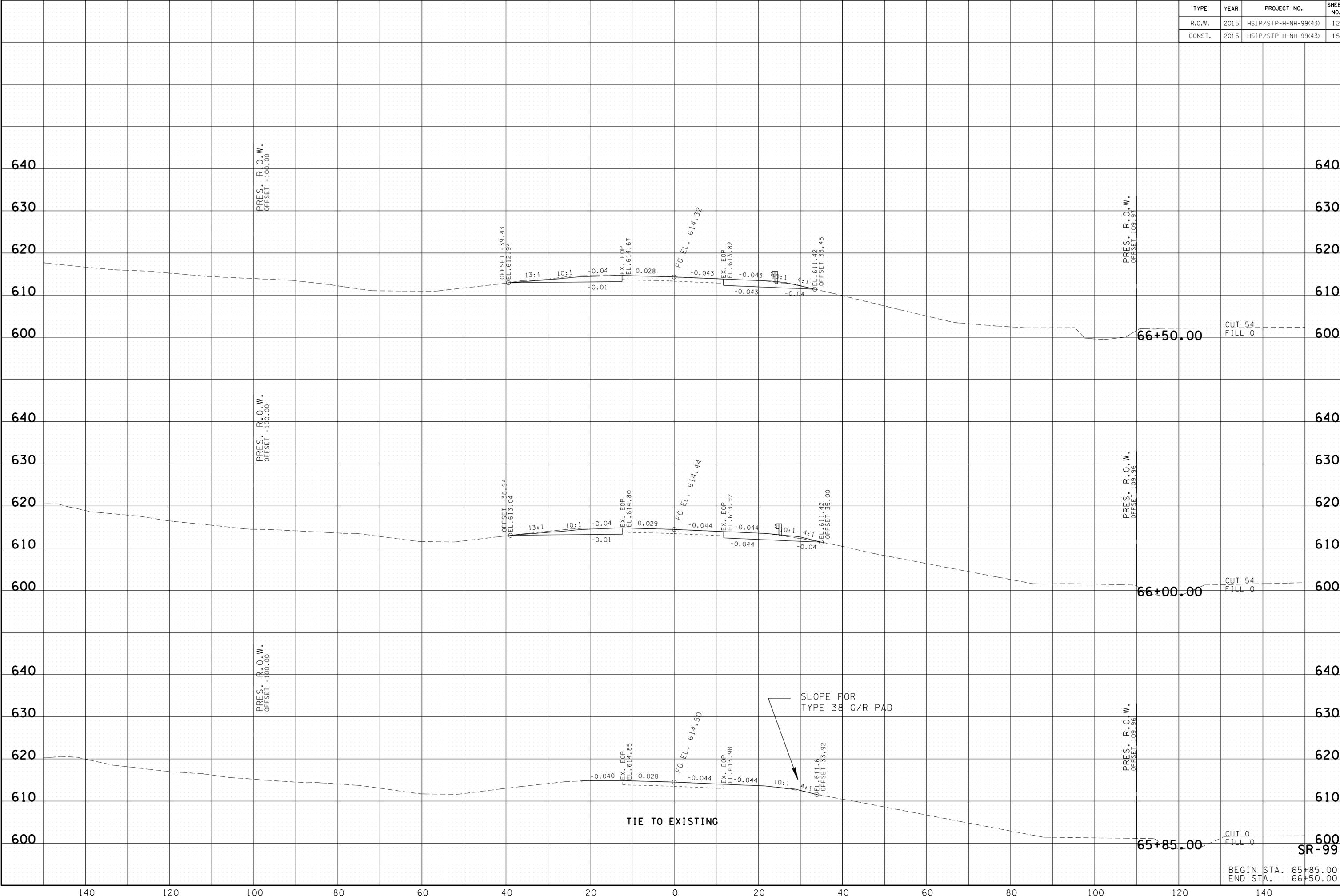
NOTE:  
EXISTING EMBANKMENT TO BE PREBENCHED ACCORDING TO TDOT  
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION  
SUB SECTION 205.03 PARAGRAPH 7 (JANUARY 1, 2015).

SEALED BY



SOILS  
PATTERSON DR.  
MAURY COUNTY

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	12
CONST.	2015	HSIP/STP-H-NH-99(43)	15

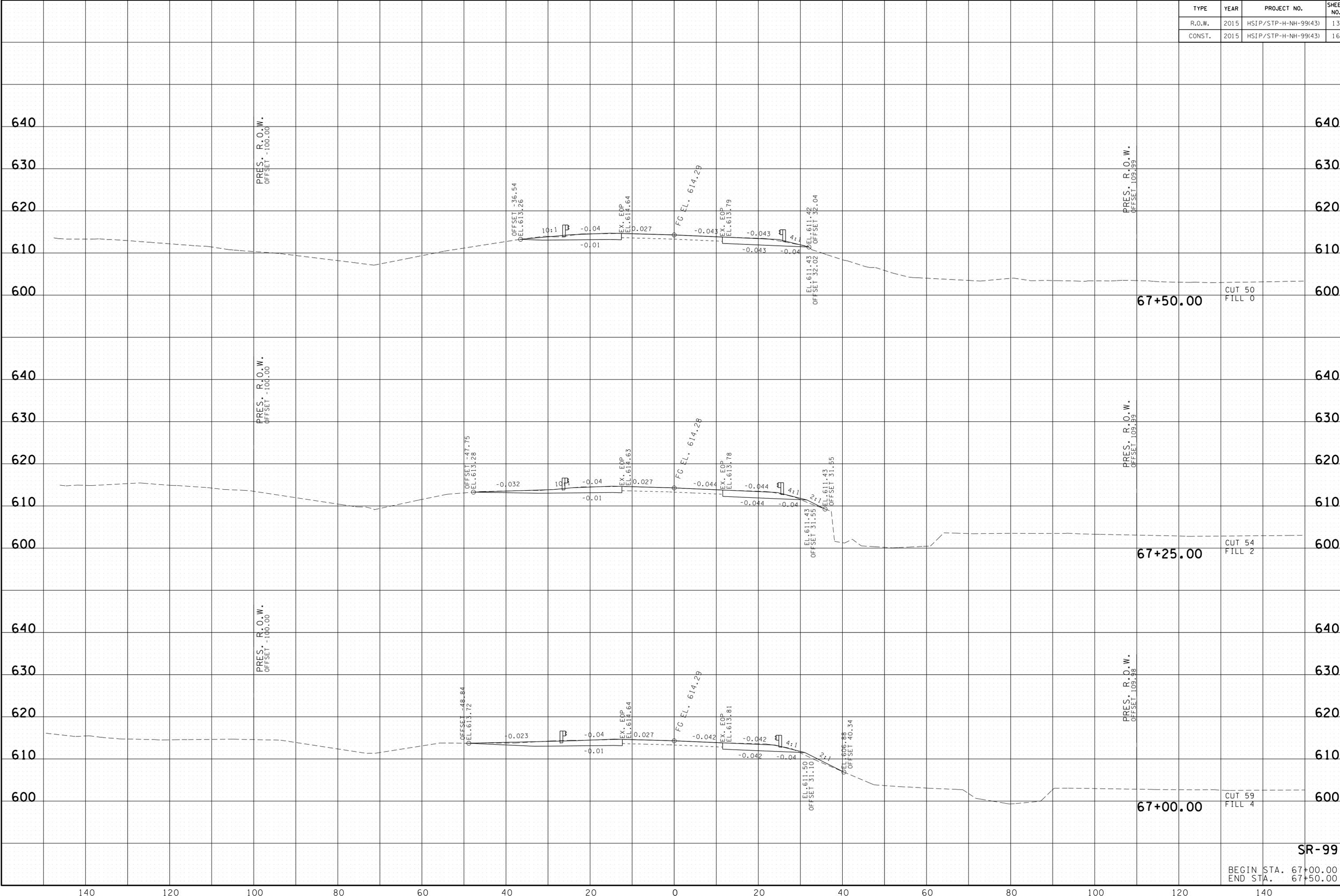


SR-99

BEGIN STA. 65+85.00  
END STA. 66+50.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	13
CONST.	2015	HSIP/STP-H-NH-99(43)	16



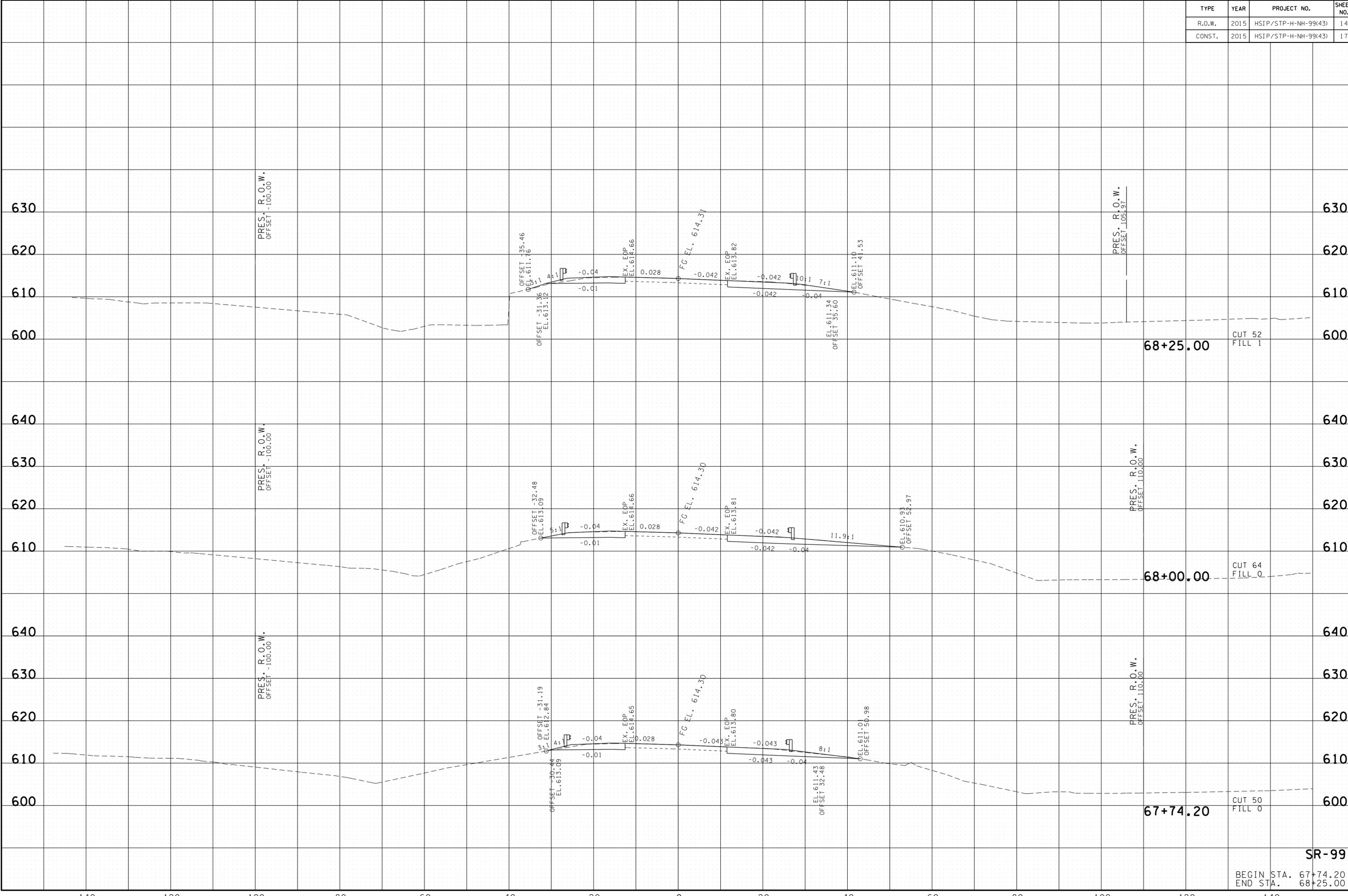
SR-99

BEGIN STA. 67+00.00  
END STA. 67+50.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	14
CONST.	2015	HSIP/STP-H-NH-99(43)	17

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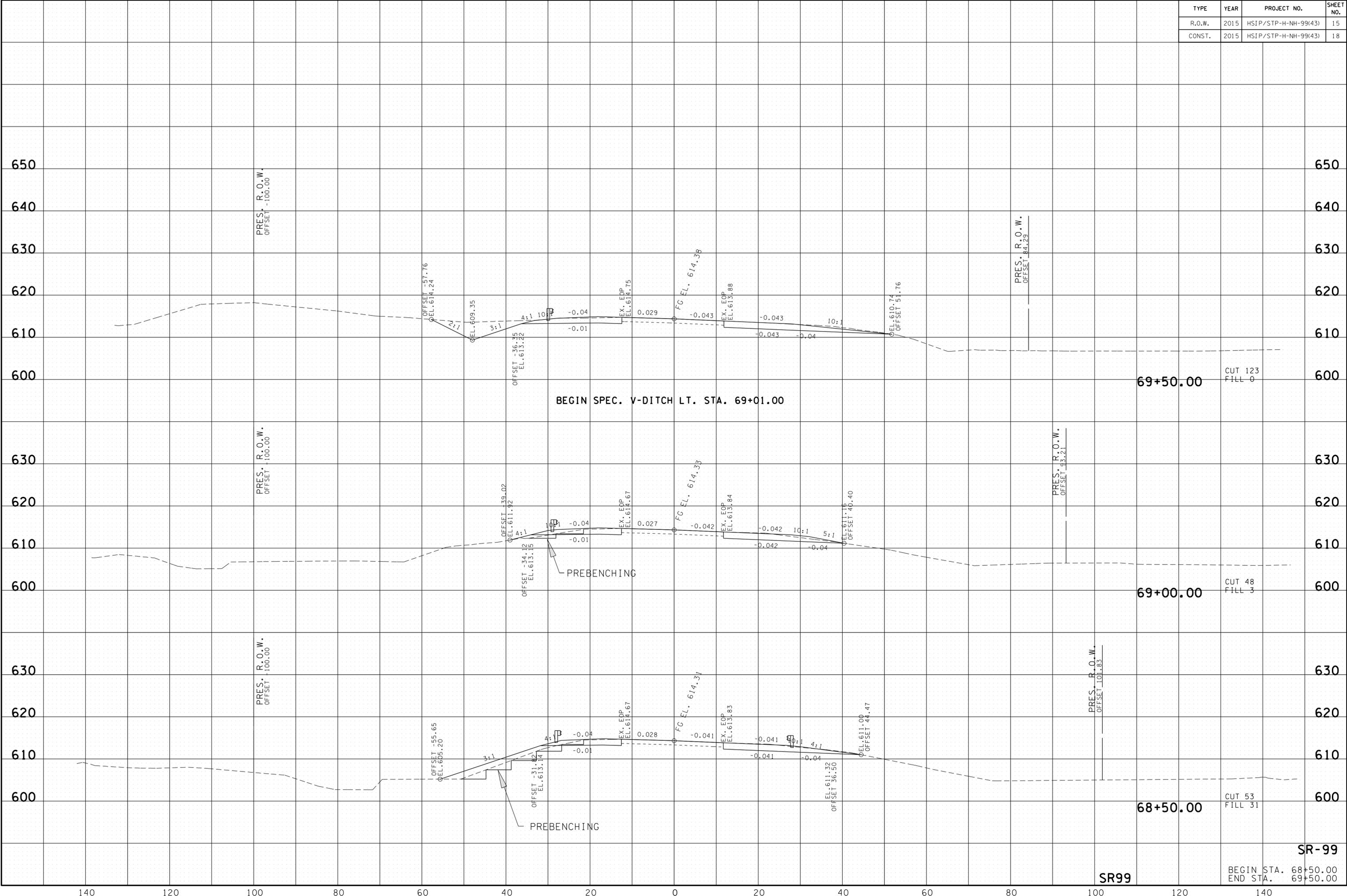


SR-99

BEGIN STA. 67+74.20  
 END STA. 68+25.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	15
CONST.	2015	HSIP/STP-H-NH-99(43)	18

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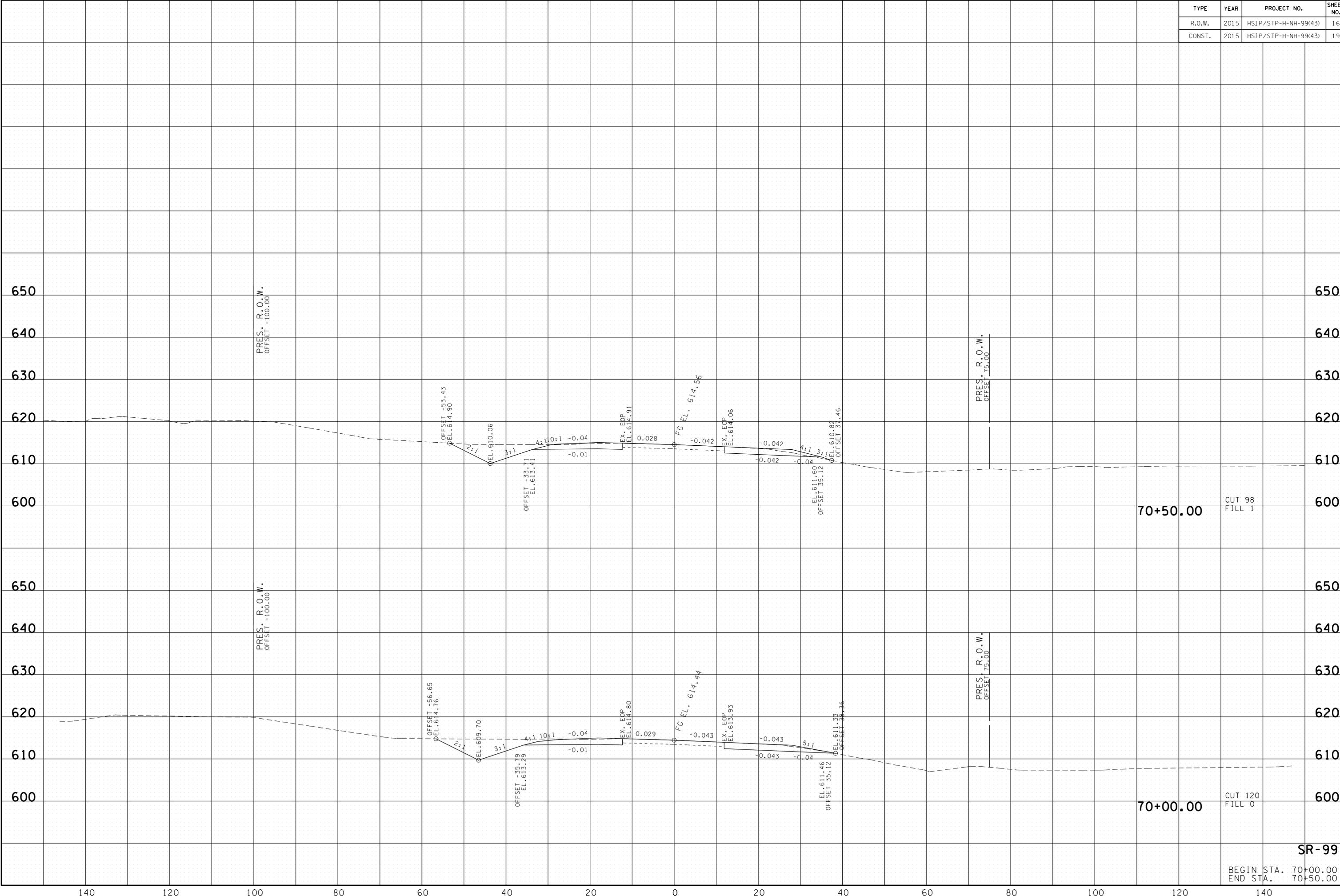
SR-99

BEGIN STA. 68+50.00  
END STA. 69+50.00

SR99

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	16
CONST.	2015	HSIP/STP-H-NH-99(43)	19

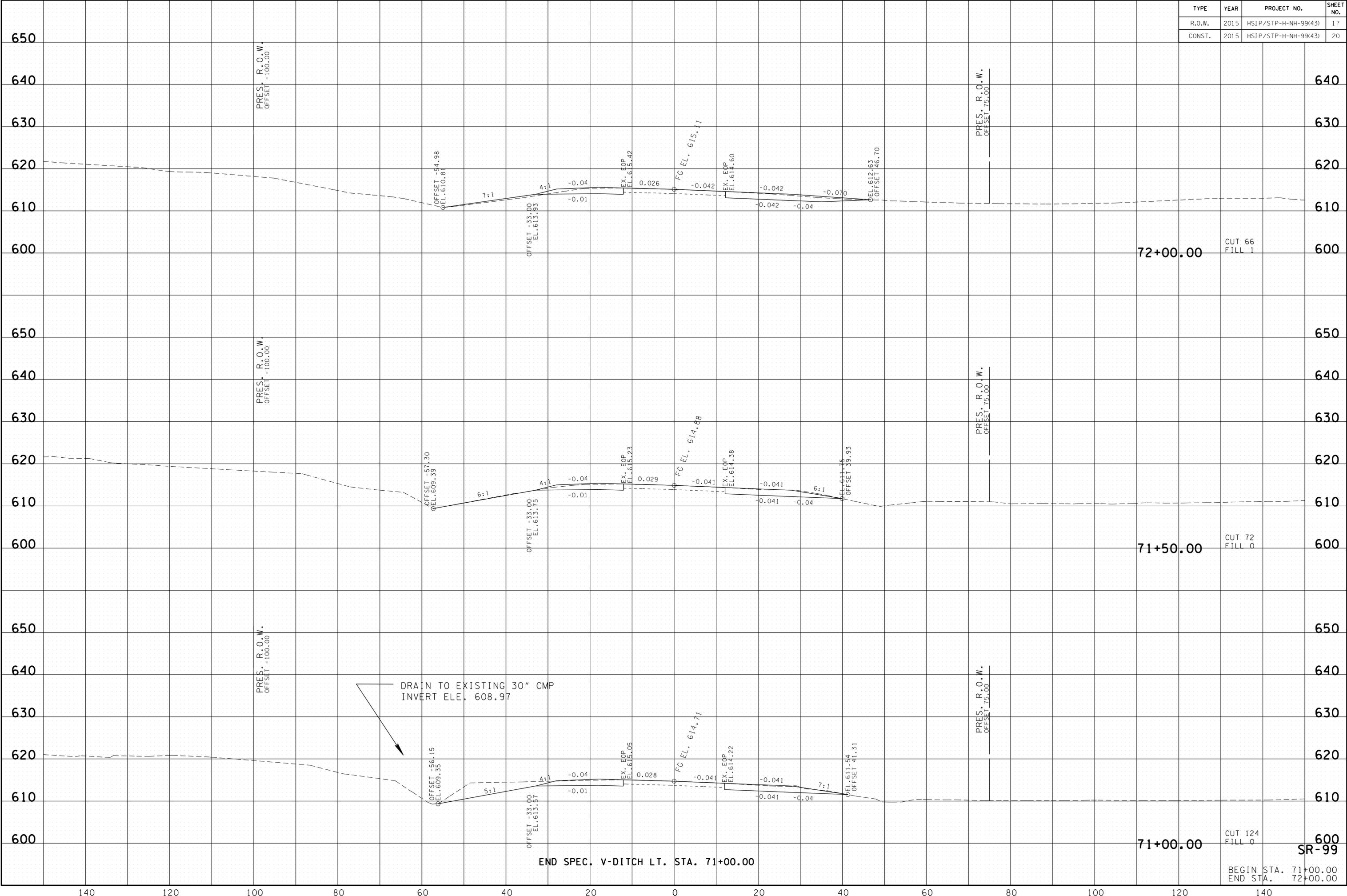
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**SR-99**

BEGIN STA. 70+00.00  
END STA. 70+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	17
CONST.	2015	HSIP/STP-H-NH-99(43)	20

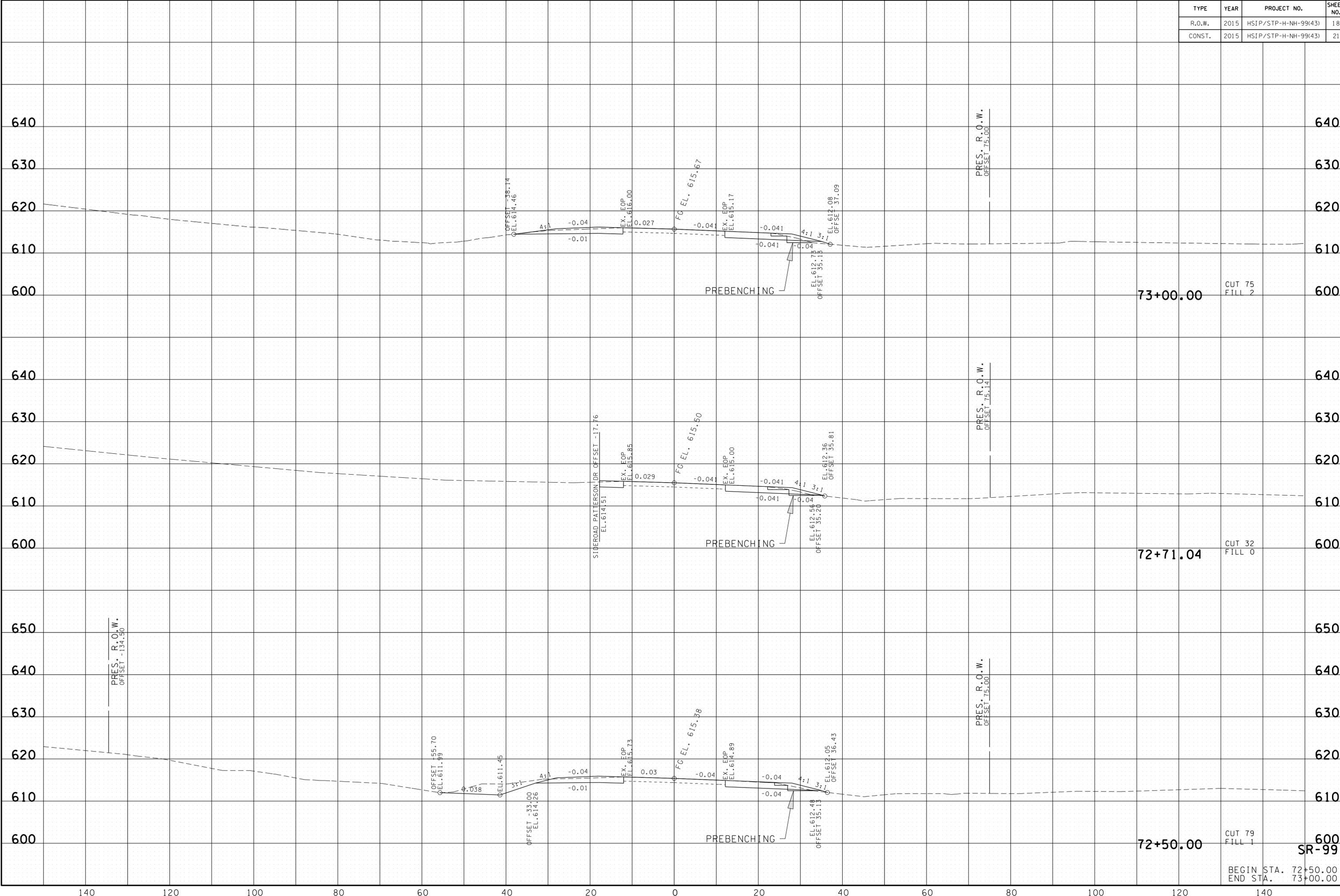


END SPEC. V-DITCH LT. STA. 71+00.00

BEGIN STA. 71+00.00  
 END STA. 72+00.00  
 SR-99

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	18
CONST.	2015	HSIP/STP-H-NH-99(43)	21

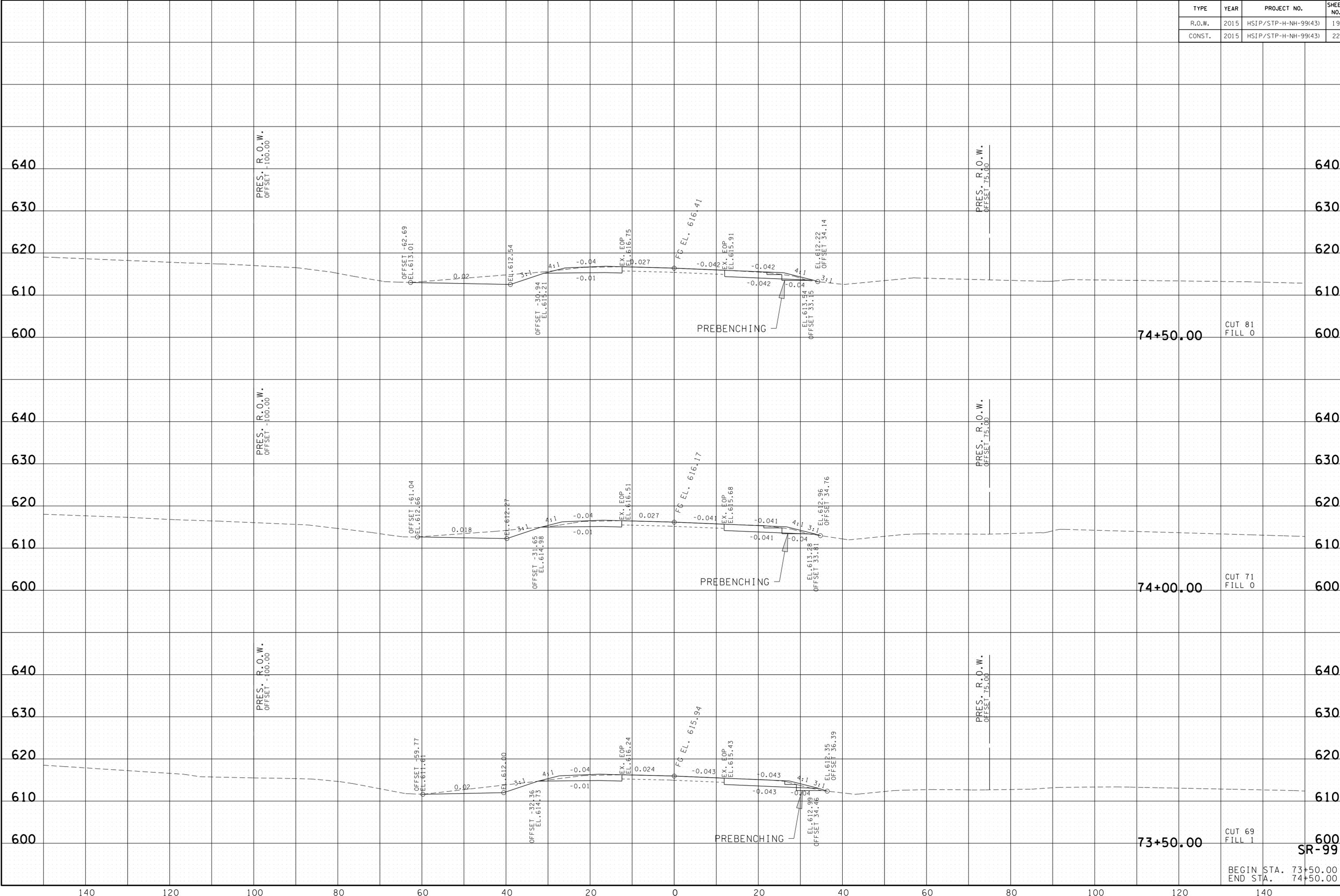


BEGIN STA. 72+50.00  
 END STA. 73+00.00

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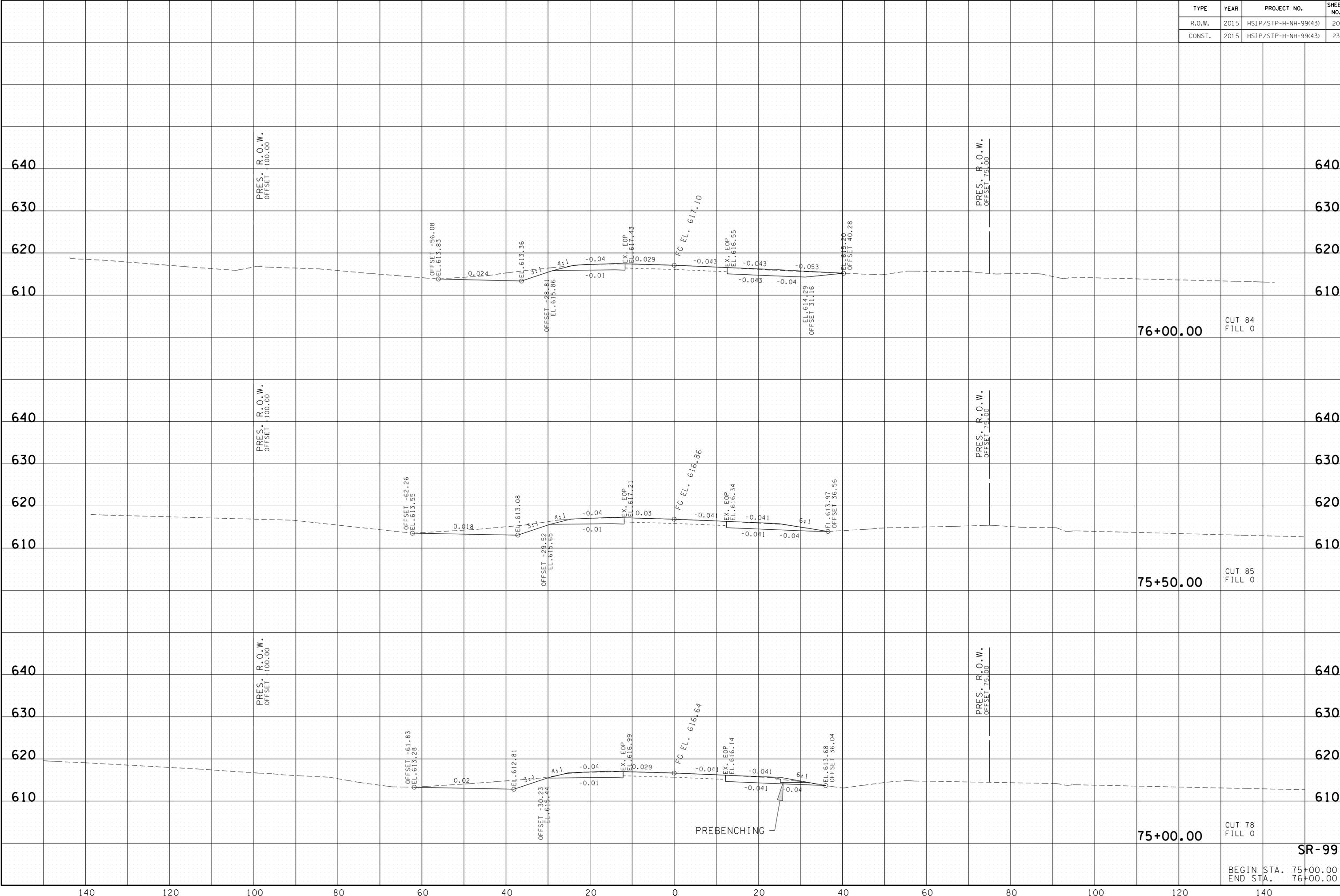
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	19
CONST.	2015	HSIP/STP-H-NH-99(43)	22



BEGIN STA. 73+50.00  
 END STA. 74+50.00  
 SR-99

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	20
CONST.	2015	HSIP/STP-H-NH-99(43)	23



SR-99

BEGIN STA. 75+00.00  
END STA. 76+00.00

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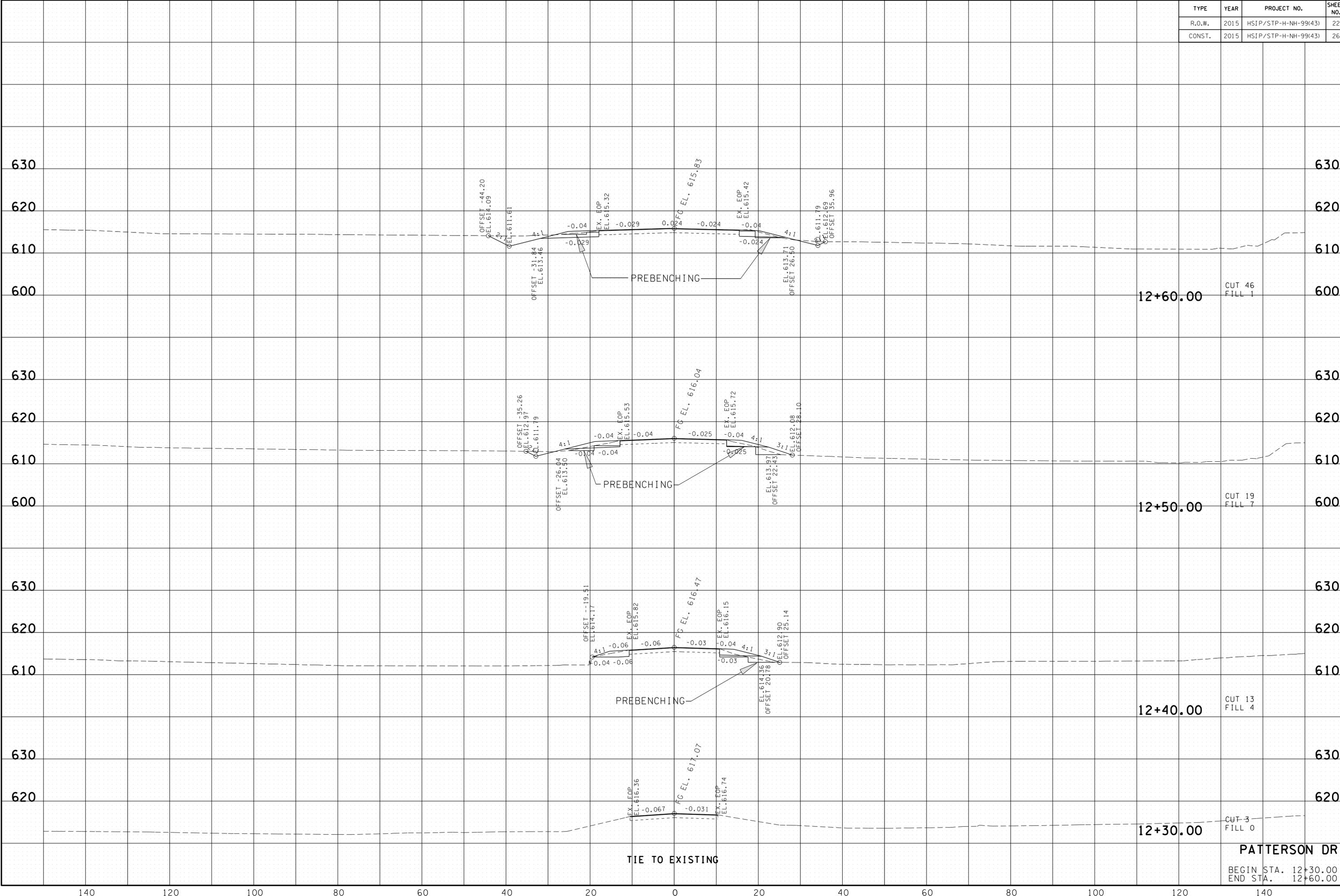
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	22
CONST.	2015	HSIP/STP-H-NH-99(43)	26

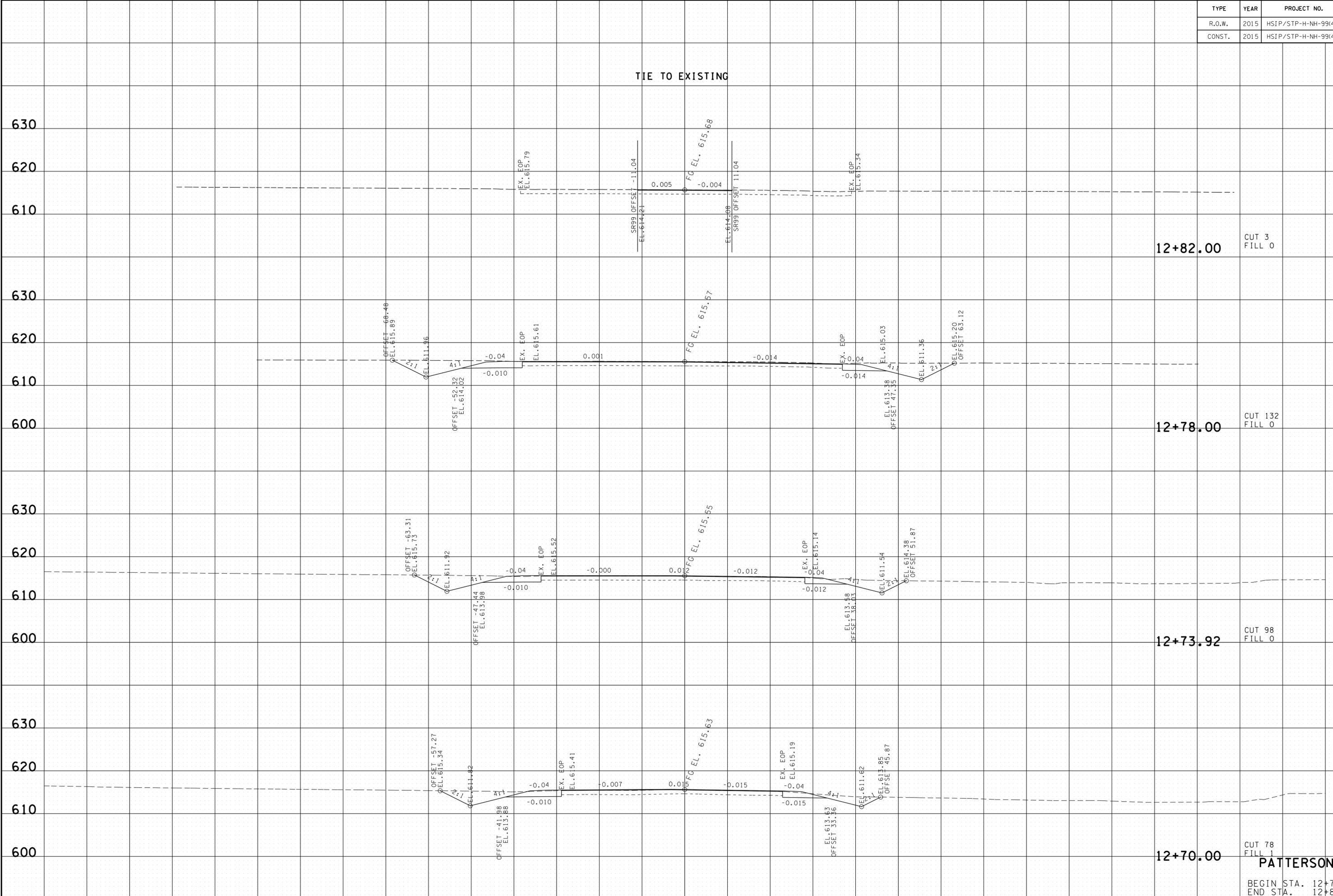
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**PATTERSON DR**  
 BEGIN STA. 12+30.00  
 END STA. 12+60.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	HSIP/STP-H-NH-99(43)	23
CONST.	2015	HSIP/STP-H-NH-99(43)	27

TIE TO EXISTING



PATTERSON DR  
 BEGIN STA. 12+70.00  
 END STA. 12+82.00

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