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

Index Of Sheets
(SEE SHT. 1A FOR INDEX)

# STATE OF TENNESSEE
# DEPARTMENT OF TRANSPORTATION
# BUREAU OF ENGINEERING

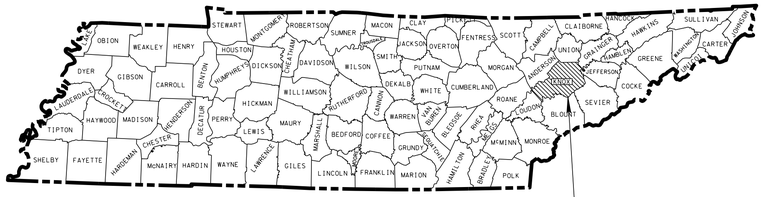
| TENN. | YEAR | SHEET NO. |
|---|---|---|
| | 2014 | 1 |
| FED. AID PROJ. NO. | STP-331(6) | |
| STATE PROJ. NO. | 47186-3211-14 | |

# KNOX COUNTY

## SR-331 (TAZEWELL PIKE), INTERSECTION AT SR-131 (EMORY ROAD)

## CONSTRUCTION

STATE HIGHWAY NO. 331 F.A.H.S. NO. N/A




PROJECT LOCATION

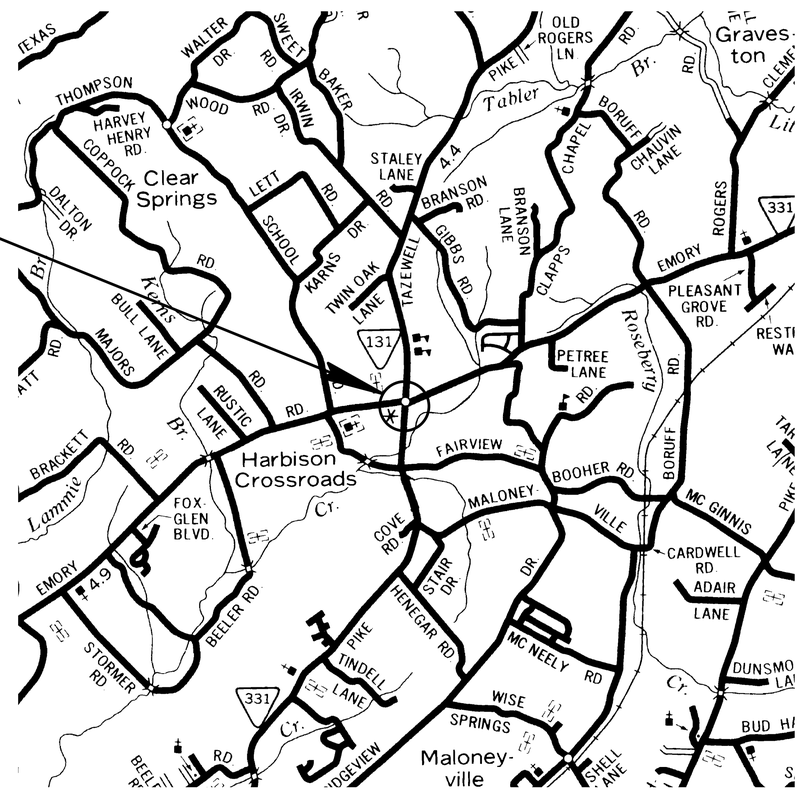
STP-331(6)
PROJECT NO. 47186-3211-14 (CONST.)

EMORY ROAD
-BEGIN PROJ. STA. 102+75.00
N 657610.3921
E 2601741.8144

EMORY ROAD
-END PROJ. STA. 121+75.00
N 658086.9799
E 2603560.3167

TAZEWELL PIKE
-BEGIN PROJ. STA. 501+25.00
N 656828.1911
E 2602571.0833

-END PROJ. STA. 519+25.00
N 658621.8176
E 2602709.7794




SCALE: 1"= 0.5 MILES

N

NO EXCLUSIONS
NO EQUATIONS

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

SEALED BY
SHANE M. HESTER
REGISTERED ENGINEER
XVI
AGRICULTURE
COMMERCE
NO. 110114
STATE OF TENNESSEE

| | |
|---|---|
| (EMORY RD.) ROADWAY LENGTH | 0.359 MILES |
| (TAZEWELL PIKE) ROADWAY LENGTH | 0.340 MILES |
| BRIDGE LENGTH | 0.000 MILES |
| * BOX BRIDGE LENGTH | 0.034 MILES |
| PROJECT LENGTH | 0.699 MILES |

• BOX BRIDGE LENGTH NOT INCLUDED IN PROJECT LENGTH

**TRAFFIC DATA (S.R. 131)**

| | |
|---|---|
| ADT (2014) | 9710 |
| ADT (2034) | 17,490 |
| DHV (2034) | 2,148 |
| D | 55 - 45 |
| T (ADT) | 5 % |
| T (DHV) | 3 % |
| V | 45 MPH |

**TRAFFIC DATA (S.R. 331)**

| | |
|---|---|
| ADT (2014) | 9,350 |
| ADT (2034) | 16,840 |
| DHV (2034) | 1,870 |
| D | 55 - 45 |
| T (ADT) | 4 % |
| T (DHV) | 3 % |
| V | 45 MPH |

**Survey:**
**8-13-2009**
**9-28-2010**
**8-20-2012**
**5-07-2013**
**8-15-2013**

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

DATE:

APPROVED:
JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

## SPECIAL NOTES

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

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

TDOT C.E. MANAGER 1 SHANE HESTER, PE

DESIGNER FRANK RAINEAR CHECKED BY CINDY WILLIAMS

P.E. NO. 47186-1211-04 (DESIGN)

PIN NO. 109612.00

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

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 1A |

# INDEX

| SHEET NAME | SHEET NO. |
|---|---|
| TITLE SHEET | 1 |
| ROADWAY INDEX AND STANDARD DRAWINGS INDEX | 1A -1B |
| PROJECT COMMITMENTS | 1C |
| ESTIMATED BRIDGE QUANTITIES | 2 |
| ESTIMATED ROADWAY QUANTITIES | 2A, 2AA |
| ESTIMATED SIGNAL QUANTITIES | 2AB |
| ESTIMATED UTILITIES QUANTITIES | 2AC |
| TYPICAL SECTIONS AND PAVEMENT SCHEDULE | 2B - 2D |
| GENERAL NOTES AND SPECIAL NOTES | 2E – 2H |
| TABULATED QUANTITIES | 2J – 2L |
| PROPERTY MAPS AND RIGHT-OF-WAY ACQUISITION TABLES | 3, 3A - 3B |
| PRESENT LAYOUTS | 4 – 8 |
| R.O.W. DETAILS LAYOUT | 4A - 8A |
| PROPOSED LAYOUTS | 4B - 8B |
| PROPOSED PROFILES | 4C – 8C, 8D |
| PROFILE WILDERNESS PATH ROAD | 9 |
| PRIVATE DRIVE AND FIELD RAMP PROFILES | 10 - 14 |
| DRAINAGE MAPS | 15 - 19 |
| CULVERT CROSS SECTIONS | 20 |
| EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) NOTES | 21 - 22 |
| EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS | 23-32, 27A-27E |
| PROPOSED CONTOUR | 33 - 33D |
| TRAFFIC CONTROL PLANS WITH CONSTRUCTION | |
| PHASING NOTES | 34 – 34K |
| SIGNING AND PAVEMENT MARKING PLANS | 35 – 35D |
| SIGN SCHEDULE SHEETS | 36, 36A, 36B |
| SIGNAL SHEETS | 37, 37A, 37B |
| SOILS SHEET | 38 |
| EMORY ROAD CROSS SECTIONS | 39 - 50 |
| TAZEWELL PIKE CROSS SECTIONS | 51 - 62 |
| WILDERNESS PATH ROAD CROSS SECTIONS | 63 - 67 |
| TRAFFIC CONTROL CROSS SECTIONS | 68 – 94 |
| UTILITIES INDEX, UTILITY OWNERS, AND UTILITY SHEETS | U1-1 |
| STORM WATER POLLUTION PREVENTION PLAN (SWPPP) | S1 – S __ |

Note: Sheet No. 2"I" and 34"I" not used in this Index.

# STANDARD ROADWAY DRAWINGS

## STANDARD BRIDGE DRAWINGS

| DWG. NO. | REV. | DESCRIPTION |
|---|---|---|
| STD-9-1 | 10-07-08 | REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLABS |

## BRIDGE APPURTENANCES ENGLISH (BOX CULVERTS)

| DWG. NO | REV. | DESCRIPTION |
|---|---|---|
| STD-15-1 | 11-06-08 | INDEX OF DRAWINGS AND TERMINOLOGY |
| STD-15-2 | 3-28-08 | GENERAL NOTES |
| STD-15-3 | 2-28-03 | DESIGN SECTION LIMITS |
| STD-15-4 | 12-07-01 | TYPICAL SECTION AND DETAILS |
| STD-15-5 | 2-28-03 | TYPICAL ELEVATION |
| STD-15-6 | 3-28-08 | CURB AND RAIL DETAILS - SKEW NOT LESS THAN 45 DEG. |
| STD-15-7 | 3-02-02 | CURB RAIL DETAILS FOR FILLS UP TO 1'-6" |
| STD-15-8 | 12-07-01 | INTERIOR WALL END TREATMENTS |
| STD-15-9 | 2-28-03 | TYPICAL WINGWALL DETAILS AND NOTES |
| STD-15-10 | 11-06-08 | WINGWALL DIMENSIONS AND QUANTITIES |
| STD-15-11 | | WINGWALL DIMENSIONS AND QUANTITIES |
| STD-15-12 | 3-28-08 | WINGWALL DESIGN SECTION |
| STD-15-13 | | WINGWALL DESIGN SECTION |
| STD-15-14 | 2-28-03 | BACKFILL AND DRAINAGE DETAILS |
| STD-15-15 | | BACKFILL AND DRAINAGE DETAILS |
| STD-15-21 | 3-02-02 | STAGE CONSTRUCTION JOINT DETAILS |
| STD-15-37 | | BOX BRIDGE, 1 BARREL AT 8', CLEAR HTS. 5' - 8', 0 - 60' FILL |
| STD-15-36 | | BOX BRIDGE, 1 BARREL AT 8', CLEAR HTS. 3' - 4', 0 - 60' FILL |

## ROADWAY DESIGN STANDARDS

| DWG. NO | REV. | DESCRIPTION |
|---|---|---|
| RD-A-1 | 12-18-99 | STANDARD ABBREVIATIONS |
| RD-L-1 | 10-26-94 | STANDARD LEGEND |
| RD-L-2 | 09-05-01 | STANDARD LEGEND FOR UTILITY INSTALLATIONS |
| RD-L-3 | 04-15-04 | STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING |
| RD-L-4 | 04-15-04 | STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING |
| RD-L-5 | 05-01-08 | STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL |
| RD-L-6 | 03-30-10 | STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL |
| RD-L-7 | 05-24-12 | STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL |
| RD-UD-3 | 09-05-96 | UNDERDRAIN DETAILS |
| RD-UD-4 | 05-27-01 | UNDERDRAIN LATERAL DETAILS |
| RD-UD-6 | 12-18-94 | LATERAL UNDERDRAIN ENDWALL DETAIL FOR 1:1 & 2:1 SLOPES |
| RD-UD-7 | 12-18-94 | LATERAL UNDERDRAIN ENDWALL DETAIL FOR 3:1 & 4:1 SLOPES |
| RD01-S-11 | 04-04-03 | DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT |
| RD01-S-11A | 10-15-02 | ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION |
| RD01-SD-1 | | INTERSECTION SIGHT DISTANCE DESIGN AND GENERAL NOTES |
| RD01-SD-2 | | INTERSECTION SIGHT DISTANCE LANDSCAPE AND OBSTRUCTION |
| RD01-SD-3 | | INTERSECTION SIGHT DISTANCE 2-LANE ROADWAYS |
| RD01-SD-4 | | INTERSECTION SIGHT DISTANCE 5-LANE AND 4-LANE UNDIVIDED ROADWAYS |
| RD01-SE-2 | 10-15-02 | URBAN SUPERELEVATION DETAILS |
| RD01-SE-3 | 10-15-02 | RURAL SUPERELEVATION DETAILS |
| RD01-TS-1 | 10-15-02 | DESIGN STANDARDS FOR LOCAL ROADS AND STREETS |
| RD01-TS-3 | 10-15-02 | DESIGN STANDARD FOR 2-LANE ARTERIAL HIGHWAYS |
| RD01-TS-6A | 07-31-13 | TYPICAL CURB AND GUTTER SECTIONS WITHOUT SHOULDER |

## DRAINAGE - CULVERTS AND ENDWALL

| DWG. NO | REV. | DESCRIPTION |
|---|---|---|
| D-PB-1 | 01-02-13 | STANDARD DETAILS CLASS "B" BEDDING AND CULVERT EXCAVATION |
| D-PB-2 | 01-29-14 | STANDARD DETAILS FOR FLEXIBLE PIPE INSTALLATION |
| D-PE-4 | 01-15-13 | STRAIGHT CONCRETE ENDWALL |
| D-PE-18A | 06-14-13 | 18" CONCRRETE ENDWALL CROSS DRAIN |
| D-PE-18B | | 18" CONCRRETE ENDWALL CROSS DRAIN |
| D-PE-42A | 06-14-13 | 42" CONCRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE |
| D-PE-42B | | 42" CONCRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE |
| D-PG-3 | 04-15-97 | FERROUS AND ALUMINUM CORRUGATED METAL PIPE |
| D-PO-1 | 05-27-01 | STANDARD OVAL & FLAT BASE CONCRETE CULVERT PIPE |

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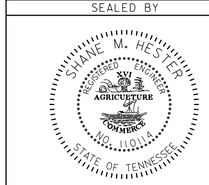


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INDEX AND STANDARD DRAWINGS

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 1B |
| | | | |
| | | | |
| | | | |

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

# STANDARD ROADWAY DRAWINGS (CONT'D.)

| DWG. NO | REV. | DESCRIPTION |
|---|---|---|
| **DRAINAGE-CATCH BASINS AND MANHOLES** | | |
| D-CB-12B | 03-11-14 | STANDARD RECTANGULAR BRICK NO. 12 CATCH BASIN |
| D-CB-12LP | 08-01-12 | LOW PROFILE 32" X 32" SQUARE CONCRETE NO. 12LP CATCH BASIN |
| D-CB-12P | 03-11-14 | STANDARD PRECAST RECTANGULAR CONCRETE NO. 12 CATCH BASIN |
| D-CB-12RA | 03-11-14 | STANDARD PRECAST 48" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB) |
| D-CB-12RB | 03-11-14 | STANDARD PRECAST 60" AND 72" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB) |
| D-CB-12RC | 03-11-14 | STANDARD PRECAST 84" THRU 120" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB) |
| D-CB-12S | 03-11-14 | STANDARD RECTANGULAR CONCRETE NO. 12 CATCH BASIN |
| D-CB-12SB | 03-11-14 | STANDARD 4' X 4' SQUARE CONCRETE NO. 12 CATCH BASIN |
| D-CB-12SC | 03-11-14 | STANDARD 5'2" X 5'2" SQUARE CONCRETE NO. 12 CATCH BASIN |
| D-CB-12SD | 03-11-14 | STANDARD 7' X 7' SQUARE CONCRETE NO. 12 CATCH BASIN |
| D-CB-12SE | 03-11-14 | STANDARD 9' X 9' SQUARE CONCRETE NO. 12 CATCH BASIN |
| D-CB-14B | 03-11-14 | STANDARD RECTANGULAR BRICK NO. 14 CATCH BASIN |
| D-CB-14P | 03-11-14 | STANDARD PRECAST RECTANGULAR CONCRETE NO. 14 CATCH BASIN |
| D-CB-14RB | 08-15-12 | STANDARD PRECAST CIRCULAR NO. 14RB CATCH BASIN |
| D-CB-14S | 03-11-14 | STANDARD RECTANGULAR CONCRETE NO. 14 CATCH BASIN |
| D-CB-14SE | 03-11-14 | STANDARD 9' X 9' SQUARE CONCRETE NO. 14 CATCH BASIN |
| D-CB-42RB | 03-11-14 | STANDARD PRECAST CIRCULAR NO. 42 CATCH BASIN |
| D-CB-42S | 08-01-12 | STANDARD 32" X 32" SQUARE CONCRETE NO. 42 CATCH BASIN |
| D-CB-42SB | 03-11-14 | STANDARD 4' X 4' SQUARE CONCRETE NO. 42 CATCH BASIN |
| D-CB-42SC | 03-11-14 | STANDARD 5'2" X 5'2" SQUARE CONCRETE NO. 42 CATCH BASIN |
| D-CB-42SD | 03-11-14 | STANDARD 7' X 7' SQUARE CONCRETE NO. 42 CATCH BASIN |
| D-CB-43R | 03-11-14 | STANDARD PRECAST CIRCULAR NO. 43R CATCH BASIN |
| D-CB-43SB | 03-11-14 | STANDARD 8' X 4' RECTANGULAR CONCRETE NO. 43SB CATCH BASIN |
| D-CB-43SC | 03-11-14 | STANDARD 8' X 5'2" RECTANGULAR CONCRETE NO. 43SC CATCH BASIN |
| D-CBB-12A | 05-27-01 | TYPE "B" CAST IRON FRAME, GRATE & NONMOUNTABLE INLET DETAILS FOR NOS. 10, 12, 14, 16, & 17 TYPE CATCH BASINS |
| D-CBB-12B | 05-27-01 | TYPE "B" CAST IRON FRAME, GRATE & 6" MOUNTABLE INLET DETAILS FOR NOS. 25, 26 & 27 TYPE CATCH BASINS |
| D-CBB-12C | 05-27-01 | TYPE "B" CAST IRON FRAME, GRATE & 4" MOUNTABLE INLET DETAILS FOR NOS. 28 & 29 TYPE CATCH BASINS |
| D-CBB-13 | 05-27-01 | TYPE "B" CAST IRON FRAME, GRATE & NONM0UNTABLE INLET DETAILS FOR NO. 13 TYPE CATCH BASINS |
| D-CBB-31 | 05-27-01 | TYPE "B" CAST IRON FRAME, GRATE & INLET DETAILS FOR NOS. 31, 41, 45, 46, & 51 TYPE CATCH BASINS |
| D-CBB-42 | 05-27-01 | CAST IRON GRATE DETAILS FOR NOS. 42, 43 & 44 TYPE CATCH BASINS |
| D-JBS-1 | 08-01-12 | STANDARD 32" X 32" SQUARE CONCRETE NO. 1 JUNCTION BOX |
| D-SLD-1 | 05-27-01 | SLOTTED DRAINS |
| D-SLD-2 | 05-27-01 | SLOTTED DRAINS |
| D-SLD-3 | 05-27-01 | SLOTTED DRAINS |
| D-TD-1 | | TRENCH DRAIN |
| **ROADWAY AND PAVEMENT APPURTENANCES** | | |
| RP-D-15 | 07-15-08 | DETAILS OF STANDARD CONCRETE DRIVEWAYS |
| RP-D-16 | 07-15-08 | DETAILS OF LOWERED STANDARD CONCRETE DRIVEWAYS |
| RP-I-5 | 12-18-96 | EXAMPLES OF STREET AND ALLEY INTERSECTIONS |
| RP-MC-2 | 02-28-02 | STANDARD 6" SLOPING (MOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS |
| RP-NMC-10 | 07-29-03 | STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS |
| RP-NMC-11 | 02-28-02 | STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS |
| RP-R-1 | 05-27-01 | STANDARD RAMPS TO SIDE ROADS |
| **SAFETY APPURTENANCES AND FENCE** | | |
| S-CZ-1 | | CLEAR ZONE CRITERIA |
| S-F-1 | 05-24-12 | HIGH VISIBILITY FENCE |
| **TRAFFIC CONTROL APPURTENANCES** | | |
| T-FAB-1 | 05-27-97 | FLASHING YELLOW ARROW BOARD |
| T-M-1 | 11-01-11 | DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS |
| T-M-2 | 01-15-13 | DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS |
| T-M-3 | 09-19-91 | MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS & PAVED SHOULDERS ON CONVENTIONAL ROADS |
| T-M-4 | 11-01-11 | STANDARD INTERSECTION PAVEMENT MARKINGS |
| T-M-11 | 10-24-13 | SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES AND ROUTES ON RURAL ROADS |
| T-M-12 | 10-10-13 | SIGNING AND PAVEMENT MARKINGS FOR URBAN BICYCLE LANES |
| T-M-13 | | SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES |
| T-M-14 | 11-01-11 | SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES AT INTERSECTIONS |
| T-PBR-1 | 06-30-09 | INTERCONNECTED PORTABLE BARRIER RAIL |
| T-PBR-2 | 11-01-11 | DETAIL FOR VERTICAL PANELS AND FLEXIBLE DELINEATORS |
| T-S-8 | 07-15-91 | HIGHWAY SHIELDS USED ON STATE NUMBERED ROUTES AND ARROWS |
| T-S-10 | 04-04-12 | STANDARD MOUNTING DETAILS FLAT SHEET SIGNS ALUMINUM-STEEL DESIGN |
| T-S-16 | 11-01-11 | GROUND MOUNTED ROADSIDE SIGN AND DETAILS |
| T-S-17 | 07-19-13 | STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE |
| T-S-19 | 07-19-13 | STANDARD STEEL SIGN SUPPORTS |
| T-S-23A | 07-19-13 | MULTI-DIRECTIONAL SLIP BASE BREAKAWAY SQUARE TUBE SIGN SUPPORT |
| T-SG-2 | 07-29-04 | LOOP LEAD-INS, CONDUIT AND PULL BOXES |
| T-SG-3 | 11-11-04 | STANDARD NOTES AND DETAILS OF INDUCTIVE LOOPS |
| T-SG-3A | | ALTERNATE DETECTION DETAILS |
| T-SG-5 | 12-04-13 | CONTROLLER CABINET DETAILS |
| T-SG-7 | 11-01-11 | SIGNAL HEAD ASSEMBLIES AND PEDESTRIAN PUSH BUTTON SIGNS |
| T-SG-7A | 11-01-11 | TYPICAL SIGNAL HEAD PLACEMENT |
| T-SG-9 | 12-04-13 | DETAILS OF CANTILEVER SIGNAL SUPPORT |
| T-SG-10 | 12-04-13 | MAST ARM POLE AND STRAIN POLES FOUNDATION DETAILS |
| T-SG-12 | 11-01-11 | TYPICAL WIRING FOR SIGNAL HEADS AND DETECTION LOOPS |
| T-WZ-10 | 04-02-12 | ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS |
| T-WZ-40 | 04-02-12 | RIGHT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS |
| T-WZ-41 | 04-02-12 | LEFT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS |
| T-WZ-42 | 04-02-12 | CENTER LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS |
| **EROSION PREVENTION AND SEDIMENT CONTROL** | | |
| EC-STR-2 | 08-01-12 | SEDIMENT FILTER BAG |
| EC-STR-3B | 08-01-12 | SILT FENCE |
| EC-STR-3C | 08-01-12 | SILT FENCE WITH WIRE BACKING |
| EC-STR-6 | 08-01-12 | ROCK CHECK DAM |
| EC-STR-11 | 08-01-12 | CULVERT PROTECTION TYPE 1 |
| EC-STR-11A | 08-01-12 | CULVERT PROTECTION TYPE 2 |
| EC-STR-25 | 08-01-12 | TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD |
| EC-STR-27 | 08-01-12 | TEMPORARY SLOPE DRAIN AND BERM |
| EC-STR-30A | | INSTREAM DIVERSION (WITH TRAFFIC) |
| EC-STR-37 | 08-01-12 | SEDIMENT TUBE |
| EC-STR-39 | 08-01-12 | CURB INLET PROTECTION TYPE 1 & 2 |
| EC-STR-39A | 08-01-12 | CURB INLET PROTECTION TYPE 3 & 4 |
| EC-STR-43 | | CATCH BASIN FILTER ASSEMBLY (TYPE 3) |
| EC-STR-48 | | CATCH BASIN FILTER ASSEMBLY (TYPE 8) |

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DEPARTMENT OF TRANSPORTATION

INDEX AND STANDARD DRAWINGS

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 1C |

# PROJECT COMMITMENTS

| COMMITMENT ID | SOURCE DIVISION | DESCRIPTION | STA. / LOCATION | Complete |
|---|---|---|---|---|
| | | | | |
| EDHZ001 | Environmental Division, Hazardous Materials | Due to the proximity of undrground storage tanks to the proposed ROW acquisition line, the following notes should be placed on the plans: 1. If soil is encountered that is discolored or exhibits an odor. Work in that area should be stopped and the TDOT Hazardous Materials Manager should be notified at 615-532-8684. 2. Any soil that is discolored or exhibits an odor should be stockpiled on 6-mil. plastic and covered with plastic until characterized. 3. The TDOT Environmental Division will be responsible for coordinating the sampling and disposition of the excavated material. 4. Contractors should follow their company health and safety plan if contacting potentially contaminated soil or water. | Emory Road Sta. 113+40(+/-) / Tr. No. 19 and Emory Road Sta. 11+50(+/-) Tazewell Pike Sta. 510+80(+/-) / Tr. No. 20 | |

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DEPARTMENT OF TRANSPORTATION

PROJECT COMMITMENTS

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 2A |

## ESTIMATED ROADWAY QUANTITIES

| | ITEM NO. | DESCRIPTION | UNIT | QUANTITY |
|---|---|---|---|---|
| | 105-01 | CONSTRUCTION STAKES, LINES AND GRADES | LS | 1 |
| | 201-01 | CLEARING AND GRUBBING | LS | 1 |
| 1 | 202-01.50 | REMOVAL OF STRUCTURES AND OBSTRUCTIONS | EACH | 1 |
| 2 | 202-01.51 | REMOVAL OF STRUCTURES AND OBSTRUCTIONS | EACH | 1 |
| 3 | 202-01.52 | REMOVAL OF STRUCTURES AND OBSTRUCTIONS | EACH | 1 |
| 4 | 202-01.56 | REMOVAL OF STRUCTURES & OBSTRUCTIONS (FOOTNOTE 15) | LS | 1 |
| 5 | 202-01.57 | REMOVAL OF STRUCTURES & OBSTRUCTIONS (FOOTNOTE 16) | LS | 1 |
| 6 | 202-02.01 | REMOVAL OF PIPE (15" CMP, STA. 106+80.74, LEFT) | L.F. | 140 |
| | 202-02.02 | REMOVAL OF PIPE (15" ST, STA. 109+29.37, RIGHT) | L.F. | 73 |
| | 202-02.03 | REMOVAL OF PIPE (SLOTTED RAIN, STA. 115+32.03, LEFT) | L.F. | 60 |
| | 202-02.04 | REMOVAL OF PIPE (24" CMP ,STA.115+57.64, LEFT) | L.F. | 21 |
| | 202-02.05 | REMOVAL OF PIPE (30" RCP, STA. 116+20.89) | L.F. | 41 |
| | 202-02.06 | REMOVAL OF PIPE (OVAL RCP, STA. 116+42.47, LEFT) | L.F. | 42 |
| | 202-02.07 | REMOVAL OF PIPE (4" PVC, STA. 116+71.89, LEFT) | L.F. | 25 |
| | 202-02.08 | REMOVAL OF PIPE (8" PVC, STA. 116+88.85, LEFT) | L.F. | 109 |
| | 202-02.09 | REMOVAL OF PIPE (8" PVC, STA. 116+88.85 LEFT) | L.F. | 78 |
| 7 | 203-01 | ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED) | C.Y. | 12596 |
| | 203-02.01 | BORROW EXCAVATION (GRADED SOLID ROCK) | TON | 2159 |
| | 203-03 | BORROW EXCAVATION (UNCLASSIFIED) | C.Y. | 25263 |
| | 203-06 | WATER | M.G. | 213 |
| 9 | 204-08 | FOUNDATION FILL MATERIAL | C.Y. | 89 |
| | 209-02.05 | 12" TEMPORARY SLOPE DRAIN | L.F. | 26 |
| | 209-05 | SEDIMENT REMOVAL | C.Y. | 136 |
| | 209-02.07 | 18" TEMPORARY SLOPE DRAIN | L.F. | 12 |
| | 209-08.02 | TEMPORARY SILT FENCE (WITH BACKING) | L.F. | 700 |
| | 209-08.03 | TEMPORARY SILT FENCE (WITHOUT BACKING) | L.F. | 3240 |
| | 209-08.07 | ROCK CHECK DAM PER | EACH | 43 |
| | 209-08.08 | ENHANCED ROCK CHECK DAM | EACH | 2 |
| | 209-09.03 | SEDIMENT FILTER BAG (15' X 15') | EACH | 2 |
| | 209-09.40 | CURB INLET PROTECTION (TYPE 1) | EACH | 8 |
| | 209-09.41 | CURB INLET PROTECTION (TYPE 2) | EACH | 2 |
| | 209-09.43 | CURB INLET PROTECTION (TYPE 4) | EACH | 12 |
| | 209-40.43 | CATCH BASIN FILTER ASSEMBLY(TYPE 3) | EACH | 1 |
| | 209-40.48 | CATCH BASIN FILTER ASSEMBLY(TYPE 8) | EACH | 2 |
| 8 | 303-01 | MINERAL AGGREGATE, TYPE A BASE, GRADING D | TON | 15690 |
| | 303-01.01 | GRANULAR BACKFILL (ROADWAY) | TON | 942 |
| 9 | 303-10.01 | MINERAL AGGREGATE (SIZE 57) | TON | 65 |
| | 307-01.08 | ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2 | TON | 320 |
| | 307-02.01 | ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A | TON | 3046 |
| | 307-02.02 | ASPHALT CEMENT (PG70-22)(BPMB-HM) GRADING A-S | TON | 68 |
| | 307-02.03 | AGGREGATE (BPMB-HM) GRADING A-S MIX | TON | 2007 |
| | 307-02.08 | ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2 | TON | 3126 |
| | 402-01 | BITUMINOUS MATERIAL FOR PRIME COAT (PC) | TON | 27 |
| | 402-02 | AGGREGATE FOR COVER MATERIAL (PC) | TON | 105 |
| | 403-01 | BITUMINOUS MATERIAL FOR TACK COAT (TC) | TON | 15 |
| | 411-01.10 | ACS MIX(PG64-22) GRADING D | TON | 240 |
| | 411-02.10 | ACS MIX(PG70-22) GRADING D | TON | 2023 |

## ESTIMATED ROADWAY QUANTITIES

| ITEM NO. | DESCRIPTION | UNIT | QUANTITY |
|---|---|---|---|
| 604-01.01 | CLASS A CONCRETE (ROADWAY) | C.Y. | 194 |
| 604-01.02 | STEEL BAR REINFORCEMENT (ROADWAY) | LB. | 40454 |
| 607-03.02 | 18" CONCRETE PIPE CULVERT (CLASS III) | L.F. | 1836 |
| 607-05.02 | 24" CONCRETE PIPE CULVERT (CLASS III) | L.F. | 20 |
| 607-06.02 | 30" CONCRETE PIPE CULVERT (CLASS III) | L.F. | 208 |
| 607-07.02 | 36" CONCRETE PIPE CULVERT (CLASS III) | L.F. | 32 |
| 607-08.02 | 42" CONCRETE PIPE CULVERT (CLASS III) | L.F. | 124 |
| 607-16.01 | 23"X 14" HORIZONTAL OVAL CONCRETE PIPE CULVERT | L.F. | 27 |
| 607-39.02 | 18" PIPE CULVERT (SIDE DRAIN) | L.F. | 287 |
| 607-45.02 | 18" SLOTTED DRAIN PIPE | L.F. | 147 |
| 611-02.10 | JUNCTION BOX, TYPE 1 | EACH | 1 |
| 611-07.01 | CLASS A CONCRETE (PIPE ENDWALLS) | C.Y. | 3 |
| 611-07.54 | 18IN ENDWALL (CROSS DRAIN) 3:1 | EACH | 4 |
| 611-07.66 | 42IN ENDWALL (CROSS DRAIN) 3:1 | EACH | 2 |
| 611-12.01 | CATCH BASINS, TYPE 12, 0' - 4' DEPTH | EACH | 2 |
| 611-12.02 | CATCH BASINS, TYPE 12, > 4' - 8' DEPTH | EACH | 18 |
| 611-12.04 | CATCH BASINS, TYPE 12, > 12' - 16' DEPTH | EACH | 1 |
| 611-14.02 | CATCH BASINS, TYPE 14, > 4' - 8' DEPTH | EACH | 5 |
| 611-14.04 | CATCH BASINS, TYPE 14, > 12' - 16' DEPTH | EACH | 4 |
| 611-42.02 | CATCH BASINS, TYPE 42, > 4' - 8' DEPTH | EACH | 1 |

FOOTNOTES

1. EXISTING 8.70' X 6.88' CONC. SPAN BRIDGE STA. 108+45.70 EMORY ROAD.
2. 1 1/2 STORY FRAME HOUSE ON TR. NO. 11. ASBESTOS INSPECTION AND ABATEMENT HAS BEEN COMPLETED.
3. FRAME AND STONE RANCHER W/ 3 CAR GARAGE W/ APARTMENT AND SITE IMPROVEMENTS. IT WILL BE NECESSARY TO HAVE AN ASBESTOS SURVEY AND TESTING AND ANY REQUIRED ABATEMENT PRIOR TO THE REMOVAL OF THESE IMPROVEMENTS. THESE IMPROVEMENTS MAY NOT BE REMOVED UNTIL THE PROPERTY IS VACATED.
4. TR. NO. 10: BRICK SUBDIVISION SIGN (NICHOLAS CROSSING). TR. NO. 15: WOODEN SIGN (CORRYTON CHURCH). TR. NO. 19: ILLUMINATED SIGN (WEIGLES). TR. NO. 36: 21' X 20' METAL CARPORT.
5. TR. NO. 18: TWO POLES W/ LIGHTS. TR. NO. 20: FOUR POLES W/ LIGHTS. TR. NO. 21: ONE POLE W/ LIGHTS AND BRICK SIGN (HARBISON CROSSROADS).
6. INCLUDES REMOVAL OF 5 SLOTTED DRAINS (TOTAL LENGTH HDPE, 63' OF 15" PVC FROM STA. 108+89.90+/-(LT.) TO STA. 110+99.90+/-(LT.).
7. INCLUDES 175 C.Y. FOR EROSION AND SEDIMENT PREVENTION CONTROL.
8. INCLUDES 703 TONS FOR PVT. DRIVE AND BUSINESS ENTRANCES.
9. SEE SUBSECTION 209.07 OF THE STD. SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.

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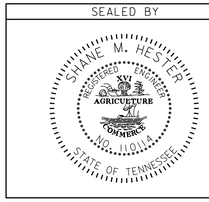


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 2AA |

REV. 7-09-2014: ADDED ITEM NO. 712-01.

## ESTIMATED ROADWAY QUANTITIES

| | ITEM NO. | DESCRIPTION | UNIT | QUANTITY |
|---|---|---|---|---|
| | | | | |
| | 701-02 | CONCRETE DRIVEWAY | S.F. | 11760 |
| | 702-01 | CONCRETE CURB | C.Y. | 51 |
| | 702-03 | CONCRETE COMBINED CURB & GUTTER | C.Y. | 465 |
| | 705-08.51 | PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3 | EACH | 4 |
| | 706-01 | GUARDRAIL REMOVED | L.F. | 246 |
| 10 | 709-05.05 | MACHINED RIP-RAP (CLASS A-3) | TON | 78 |
| 9 | 709-05.06 | MACHINED RIP-RAP (CLASS A-1) | TON | 23 |
| | 709-05.09 | MACHINED RIP-RAP (CLASS C) | TON | 24 |
| | 710-02 | AGGREGATE UNDERDRAINS (WITH PIPE) | L.F. | 7400 |
| | 710-05 | LATERAL UNDERDRAIN | L.F. | 74 |
| | 710-06.12 | LATERAL UNDERDRAIN ENDWALL (3:1) | EACH | 37 |
| | 712-01 | TRAFFIC CONTROL | LS | 1 |
| | 712-02.02 | INTERCONNECTED PORTABLE BARRIER RAIL | L.F. | 1200 |
| | 712-04.01 | FLEXIBLE DRUMS (CHANNELIZING) | EACH | 168 |
| | 712-05.01 | WARNING LIGHTS (TYPE A) | EACH | 20 |
| | 712-06 | SIGNS (CONSTRUCTION) | S.F. | 191 |
| | 712-07.03 | TEMPORARY BARRICADES (TYPE III) | L.F. | 216 |
| | | | | |
| | 713-11.01 | "U" SECTION STEEL POSTS | LB. | 462 |
| | 713-11.02 | PERFORATED/KNOCKOUT SQUARE TUBE POST | LB. | 1022 |
| | 713-11.21 | P POST SLIP BASE | EACH | 4 |
| | 713-13.02 | FLAT SHEET ALUMINUM SIGNS (0.080" THICK) | S.F. | 268 |
| | 713-13.03 | FLAT SHEET ALUMINUM SIGNS (0.100" THICK) | S.F. | 72 |
| 11 | 713-15 | REMOVAL OF SIGNS, POSTS AND FOOTINGS | LS | 1 |
| | 716-01.21 | Snwplwble Pvmt Mrkrs (Bi-Dir)(1 Color) | EACH | 68 |
| | 716-01.22 | Snwplwble Pvmt Mrkrs (Mono-Dir)(1 Color) | EACH | 12 |
| 12 | 716-01.05 | TEMPORARY RAISED PAVEMENT MARKER | EACH | 95 |
| | 716-02.04 | PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING) | S.Y. | 82 |
| | 716-02.05 | PLASTIC PAVEMENT MARKING (STOP LINE) | L.F. | 162 |
| | 716-02.06 | PLASTIC PAVEMENT MARKING (TURN LANE ARROW) | EACH | 21 |
| | 716-04.13 | PLASTIC PAVEMENT MARKING (BIKELANE SYMBOL & ARROW) | EACH | 11 |
| | 716-05.01 | PAINTED PAVEMENT MARKING (4" LINE) | L.M. | 6 |
| | 716-05.02 | PAINTED PAVEMENT MARKING (8" BARRIER LINE) | L.F. | 900 |
| | | | | |
| 13 | 716-12.01 | ENHANCED FLATLINE THERMO PVMT MRKNG (4IN LINE) | L.M. | 2.5 |
| 13 | 716-12.02 | ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE) | L.M. | 1 |
| 13 | 716-12.03 | ENHANCED FLATLINE THERMO PVMT MRKNG (8IN BARRIER LINE) | L.F. | 6000 |
| | | | | |
| | 717-01 | MOBILIZATION | LS | 1 |
| | | | | |
| 14 | 740-10.03 | GEOTEXTILE (TYPE III)(EROSION CONTROL) | S.Y. | 368 |
| 9 | 740-11.02 | TEMPORARY SEDIMENT TUBE 12IN (DESCRIPTION) | L.F. | 2400 |
| | 801-01.07 | TEMPORARY SEEDING (WITH MULCH) | UNIT | 128 |
| 15 | 801-03 | WATER (SEEDING & SODDING) | M.G. | 155 |
| | 803-01 | SODDING (NEW SOD) | S.Y. | 14206 |
| | | | | |

FOOTNOTES

9. SEE SUBSECTION 209.07 OF THE STD. SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
10. USED FOR TEMORARY CONSTRUCTION EXITS.
11. REMOVE SIGNS AND SUPPORTS (NO FOOTINGS ON THESE SIGNS) ON APPROXIMATELY 25 SIGNS, REMOVE SUPPORTS ONLY ON SIGNS NO. 5,7,13 AND 14. ALL OF THESE SIGNS ARE LOCATED WITHIN THE GRADING LIMITS OF THIS PROJECT AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
12. RAISED PAVEMENT MARKERS ARE TO BE PLACED IN ASINGLE ROW, NOT STAGGERED, UNDR ALL APPLICATIONS. MISSING RAISED PAVEMENT MARKERS SHALL BE RPLACED: a) AT LEAST MONTHLY OR, b) AT THE INSTRUCTION OF THE ENGINEER. ALL RAISED PAVEMENT MARKERS SHALL BE REMOVED BEFOR PLACEMENT OF THE FINAL SURFACE. THE COST OF REMOVAL SHALL BE INCLUDED IN THE PRICE BID FOR RAISED PAVEMENT MARKERS.
13. "THE CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR FOR THERMOPLASTIC."
14. INCLUDES 134 S.Y. FOR TEMP. CONST. EXITS AND 234 S.Y. FOROTHER E.C. ITEMS..
15. INCLUDES THIRTEEN THOUSAND GALLONS FOR EROSION PREVENTION AND SEDIMENT CONTROL.

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DEPARTMENT OF TRANSPORTATION

# ESTIMATED ROADWAY QUANTITIES

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 2AB |

S.R. 331 KNOX COUNTY
47186-3211-14(CONST.)

## ESTIMATED SIGNAL QUANTITIES

| | ITEM NO. | DESCRIPTION | UNIT | QUANTITY |
|---|---|---|---|---|
| 1 | 713-15.07 | SUSPENDED FLAT SHEET ALUMINUM SIGN (0.080" THICK) | EACH | 4 |
| 2 | 713-15.40 | SIGN INSTALLATION (SUSPENDED STREET NAME SIGN) | LS | 1 |
| 3 | 730-02.09 | SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE) | EACH | 4 |
| 3 | 730-02.17 | SIGNAL HEAD ASSEMBLY (150 A2H WITH BACKPLATE) | EACH | 10 |
| 3 | 730-02.30 | SIGNAL HEAD ASSEMBLY (POLE MOUNTED 150 A2V) | EACH | 2 |
| | 730-03.20 | INSTALL PULL BOX (TYPE A) | EACH | 4 |
| | 730-03.21 | INSTALL PULL BOX (TYPE B) | EACH | 8 |
| 4 | 730-05.01 | ELECTRICAL SERVICE CONNECTION | EACH | 1 |
| | 730-08.03 | SIGNAL CABLE - 7 CONDUCTOR | L.F. | 2432 |
| | 730-12.01 | CONDUIT 1" DIAMETER (PVC) | L.F. | 1241 |
| | 730-12.02 | CONDUIT 2" DIAMETER (PVC) | L.F. | 327 |
| | 730-12.16 | CONDUIT (2" SCHEDULE 80) | L.F. | 1014 |
| | 730-13.03 | VEHICLE DETECTOR (4 - CHANNEL, RACK MOUNT) | EACH | 4 |
| | 730-14.01 | SHIELDED DETECTOR CABLE | L.F. | 3448 |
| | 730-14.02 | SAW SLOT | L.F. | 1994 |
| | 730-14.03 | LOOP WIRE | L.F. | 4758 |
| | 730-15.32 | CABINET (EIGHT PHASE BASE MOUNTED) | EACH | 1 |
| 5 | 730-16.02 | EIGHT PHASE ACTUATED CONTROLLER | EACH | 1 |
| 6 | 730-23.31 | PEDESTAL POLE (20' PEDESTAL POLE) | EACH | 1 |
| 7 | 730-23.36 | CANTILEVER SIGNAL SUPPORT (1 @ 55') | EACH | 2 |
| 8 | 730-23.37 | CANTILEVER SIGNAL SUPPORT (1 @ 60') | EACH | 2 |
| 9 | 730-35.06 | BATTERY BACK-UP AND POWER CONDITIONER | EACH | 1 |

### FOOTNOTES

1 FOR FOUR (4) R10-12 SIGNS.

2 INCLUDES FOUR (4) 24" X 66" STREET NAME SIGNS TO BE FURNISHED BY KNOX COUNTY. COST OF INSTALLATION AND HARDWARE TO BE INCLUDED IN ITEM 713-15.40 FOR PAYMENT BY THE CONTRACTOR.

3 ALL SIGNAL HEADS SHALL HAVE BLACK ALUMINUM HOUSINGS WITH 5-INCH LOUVERED BLACK ALUMINUM BACKPLATES (NOT POLYCARBONATE) WITH COLOR LENSES INSTEAD OF CLEAR LENSES AND COLOR LEDS. SIGNAL HEADS MOUNTED ON CANTILEVER ARMS SHALL BE ATTACHED USING ASTRO-BRAC SUPPORTS OR APPROVED EQUAL.

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

### FOOTNOTES CONTINUES

5 THE CONTROLLER SHALL BE A PEEK 3000E OR APPROVED EQUAL.

6 TO BE USED AT STA. 111+24.00 OFFSET 50.20' RT.
FOOTING DEPTH = 6 FT. AND FOOTING DIAMETER = 2 FT.
PEDESTRIAN POLE TO BE POWDER COATED DURING THE MANUFACTURING PROCESS AND PAINTED BLACK. SEE SHEET 37B FOR DETAILS.

7 TO BE USED AT STA. 111+60.10 OFFSET 47.30' LT. AND STA. 112+81.20 OFFSET 59.90' LT.
FOOTING DEPTH = 15 FT. AND FOOTING DIAMETER = 3 FT.
CANTILEVER SIGNAL POLES TO BE POWDER COATED DURING THE MANUFACTURING PROCESS AND PAINTED BLACK.

8 TO BE USED AT STA. 111+31.70 OFFSET 69.30' RT. AND STA 112+42.40 OFFSET 57.00' RT.
FOOTING DEPTH = 15 FT. AND FOOTING DIAMETER = 3 FT.
CANTILEVER SIGNAL POLES TO BE POWDER COATED DURING THE MANUFACTURING PROCESS AND PAINTED BLACK.

9 TO BE USED IN CABINET AS TYPE UPS BATTERY BACKUP WITH ALL NECESSARY EQUIPMENT TO PROVIDE EMERENCY POWER IN THE EVENT OF POWER OUTAGE.

### *SPECIAL NOTES REGARDING SIGNAL HEADS*

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

(2) CIRCULAR INDICATIONS SHALL MEET "ITE VTCSH-LED CIRCULAR SIGNAL SUPPLEMENT" FOR EXPANDED/EXTENDED VIEW.
ARROW INDICATIONS SHALL MEET "ITE VTCSH-3 LED ARROW SPECIFICATION" FOR EXPANDED/EXTENDED VIEW.

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

(4) COMPATIBILTY WITH CONFLICT MONITORS AND LOAD SWITCHES SHALL BE TESTED AND CONFIRMED.

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

(6) SIGNAL HEADS SHALL INCLUDE SOLID BACKPLATES WITH 2" YELLOW RETRO REFLECTIVE BORDER AROUND THE PERIMETER OF THE FACE OF THE BACKPLATE. THE RETRO REFLECTIVE BORDER TO BE MADE OF A TYPE III PRISMATIC OR BETTER MATERIAL.

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# ESTIMATED SIGNAL QUANTITIES

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 2AC |

## ESTIMATED UTILITY QUANTITIES

K.U.B. ELECTRIC

| ITEM NO. | DESCRIPTION | UNIT | 47186-3211-14 QUANTITY |
|---|---|---|---|
| 790-04.07 | INSTALL 45'-2 DUCTILE IRON DISTRIBUTION POLE | EACH | 2 |
| 790-05.05 | INSTALL 50'-1 DUCTILE IRON DISTRIBUTION POLE | EACH | 4 |
| 790-05.07 | INSTALL 50'-H1 DUCTILE IRON DISTRIBUTION POLE | EACH | 2 |
| 790-06.05 | INSTALL 55'-1 DUCTILE IRON DISTRIBUTION POLE | EACH | 2 |
| 790-07.05 | INSTALL 60'-1 DUCTILE IRON DISTRIBUTION POLE | EACH | 3 |
| 790-07.07 | INSTALL 60'-H1 DUCTILE IRON DISTRIBUTION POLE | EACH | 1 |
| 790-10.05 | INSTALL 75'-H2 STEEL TRANSMISSION POLE | EACH | 1 |
| 790-12.07 | INSTALL 85'-H4 STEEL TRANSMISSION POLE | EACH | 2 |
| 790-13.05 | INSTALL 90'-H2 STEEL TRANSMISSION POLE | EACH | 1 |
| 790-13.07 | INSTALL 90'-H4 STEEL TRANSMISSION POLE | EACH | 3 |
| 790-13.08 | INSTALL 90'-H5 STEEL TRANSMISSION POLE | EACH | 1 |
| 790-14.05 | INSTALL 95'-H2 STEEL TRANSMISSION POLE | EACH | 1 |
| 790-14.07 | INSTALL 95'-H4 STEEL TRANSMISSION POLE | EACH | 2 |
| 790-14.08 | INSTALL 95'-H5 STEEL TRANSMISSION POLE | EACH | 1 |
| 790-15.01 | INSTALL 100'-H4 STEEL TRANSMISSION POLE | EACH | 1 |
| 790-15.03 | INSTALL 100'-H6 STEEL TRANSMISSION POLE | EACH | 1 |
| 790-20.01 | INSTALL 85'-H1 STEEL TRANSMISSION POLE | EACH | 1 |
| 790-20.02 | INSTALL 90'-H1 STEEL TRANSMISSION POLE | EACH | 1 |
| 790-21.09 | INSTALL 1PH PRIMARY TAP 15KV | EACH | 4 |
| 790-25.07 | INSTALL 3PH CROSSARM DBL LRG COND 15KV | EACH | 12 |
| 790-25.15 | INSTALL 3PH VERTICAL 15KV PIN INSULATOR | EACH | 9 |
| 790-25.16 | INSTALL 3PH VERTICAL LRG COND 15KV | EACH | 1 |
| 790-25.19 | INSTALL 3PH VERTICAL DEADEND 15KV | EACH | 4 |
| 790-25.21 | INSTALL 3PH CROSSARM DEADEND 15KV | EACH | 10 |
| 790-25.24 | INSTALL 3PH CROSSARM DDE LRG COND 15KV | EACH | 14 |
| 790-31.02 | INSTALL SERVICE ASSEMBLY - POLE TYPE | EACH | 5 |
| 790-31.03 | INSTALL SERVICE ASSEMBLY 4/0 AL QPLEX | EACH | 1 |
| 790-32.01 | INSTALL DOWN GUY THROUGH BOLT TYPE | EACH | 48 |
| 790-32.02 | INSTALL DOWN GUY THROUGH BOLT TYPE HEAVY DUTY | EACH | 25 |
| 790-32.07 | INSTALL OH GUY THROUGH BOLT TYPE | EACH | 10 |
| 790-32.25 | INSTALL ANCHOR - SCREW TYPE 10" DBL HELIX | EACH | 48 |
| 790-36.04 | TRANSFER SERVICE | EACH | 5 |
| 790-36.06 | TRANSFER LIGHT | EACH | 1 |
| 790-40.03 | INSTALL OH COND 1/0 6/1 ACSR RAVEN | LF | 1376 |
| 790-40.39 | INSTALL OH COND 4/0 7 AAC OXLIP | LF | 4111 |
| 790-40.49 | INSTALL OH COND 795 37 AAC ARBUTUS | LF | 26613 |
| 790-40.76 | INSTALL OH STATIC COND 3/8" H.S. | LF | 3076 |
| 790-41.03 | INSTALL UG PRI COND 1/0 AL 15KV | LF | 918 |
| 790-42.17 | INSTALL 2 DUCT BANK @ 36IN-48IN DEPTH | EACH | 170 |
| 790-43.47 | PRIMARY PULLBOX | EACH | 1 |
| 790-43.55 | INSTALL 2PH PRIMARY RISER W/SPECIFIED CONDUIT | EACH | 1 |
| 790-43.58 | INSTALL 3PH PRIMARY RISER W/SPECIFIED CONDUIT | EACH | 2 |
| 790-46.02 | INSTALL 1PH XFMR CONV W/POLE MTD FUSE & LA | EACH | 8 |
| 790-49.02 | INSTALL 3PH XFMR BNK POLE MTD W/FUSE/ARRESTERS | EACH | 1 |
| 790-58.06 | INSTALL GOAB SWITCH - DISTRIBUTION | EACH | 6 |
| 790-58.09 | 3PH FUSE CUTOUT BRKT MT 15KV | EACH | 1 |
| 790-60.02 | 1PH FUSE CUTOUT BRKT MT 15KV | EACH | 2 |
| 790-68.01 | INSTALL POLE GROUND ROD TYPE | EACH | 30 |
| 790-69.33 | INSTALL DEADEND ASSEMBLY 69KV S7-B795 | EACH | 1 |
| 790-71.17 | INSTALL HOR LN POST NO OHGW 69KV MAX | EACH | 15 |
| 790-71.20 | INSTALL P1-BP-B795 | EACH | 1 |
| 790-71.21 | INSTALL P2-BP-B795 | EACH | 5 |
| 790-71.29 | INSTALL MED VERT ANG 69KV MAX | EACH | 1 |
| 790-71.33 | INSTALL S5-B795 | EACH | 7 |
| 790-71.69 | INSTALL VERTICAL DDE 161KV MAX | EACH | 1 |
| 790-73.15 | INSTALL SWITCH GOAB 69KV TRANSMISSION | EACH | 3 |
| 790-98.01 | REMOVE WIRE | LF | 37843 |

## ESTIMATED UTILITY QUANTITIES

K.U.B. ELECTRIC

| ITEM NO. | DESCRIPTION | UNIT | 47186-3211-14 QUANTITY |
|---|---|---|---|
| 790-98.02 | REMOVE POLES | EACH | 30 |
| 790-98.03 | REMOVE FRAMING/ASSOCIATED APPARATUS | EACH | 130 |

K.U.B. GAS

| ITEM NO. | DESCRIPTION | UNIT | 47186-3211-14 QUANTITY |
|---|---|---|---|
| 791-02.02 | 2IN MDPE GAS MAIN | L.F. | 15 |
| 791-02.06 | 8IN MDPE GAS MAIN | L.F. | 1800 |
| 791-02.26 | 8IN MDPE TEMPORARY GAS BYPASS | LS | 1 |
| 791-06.02 | CONNECT TO 2IN EX. PE MAIN | EACH | 2 |
| 791-06.05 | CONNECT TO 8IN EX. PE MAIN | EACH | 6 |
| 791-07.01 | 2IN PE GAS VALVE ASSEMBLY | EACH | 2 |
| 791-07.04 | 8IN PE GAS VALVE ASSEMBLY | EACH | 5 |
| 791-08.01 | 1/2IN SERVICE ASSEMBLY | EACH | 4 |
| 791-08.03 | 1IN SERVICE ASSEMBLY | EACH | 2 |
| 791-08.06 | 1/2IN PE SERVICE PIPE | L.F. | 60 |
| 791-08.08 | 1IN PE SERVICE PIPE | L.F. | 30 |
| 791-09.05 | RESTORE ASPHALT | S.Y. | 10 |
| 791-09.06 | RESTORE CONCRETE | S.Y. | 30 |
| 791-09.07 | RESTORE GRAVEL | S.Y. | 10 |
| 791-10.10 | RETIRE GAS MAINS | LS | 1 |

K.U.B. WATER

| ITEM NO. | DESCRIPTION | UNIT | 47186-3211-14 QUANTITY |
|---|---|---|---|
| 795-01.02 | 4IN DIP SLIP JOINT WATER LINE | L.F. | 25 |
| 795-01.04 | 6IN DIP SLIP JOINT WATER LINE | L.F. | 200 |
| 795-01.07 | 10IN DIP RESTRAINED JOINT WATER LINE | L.F. | 260 |
| 795-01.08 | 10IN DIP SLIP JOINT WATER LINE | L.F. | 3600 |
| 795-01.47 | 10IN DIP TEMPORARY WATP BYPASS | LS | 1 |
| 795-05.91 | 2IN PVC CASING PIPE OPEN CUT | L.F. | 1100 |
| 795-05.92 | 4IN PVC CASING PIPE OPEN CUT | L.F. | 160 |
| 795-06.03 | CONNECT TO 4IN WATER LINE | EACH | 1 |
| 795-06.04 | CONNECT TO 6IN WATER LINE | EACH | 6 |
| 795-06.05 | CONNECT TO 8IN WATER LINE | EACH | 1 |
| 795-06.06 | CONNECT TO 10IN WATER LINE | EACH | 2 |
| 795-06.32 | CUT & CAP 4IN WATERLINE | EACH | 1 |
| 795-06.33 | CUT AND CAP 6IN WATERLINE | EACH | 5 |
| 795-06.34 | CUT AND CAP 8IN WATERLINE | EACH | 1 |
| 795-06.36 | CUT & CAP 10IN WATERLINE | EACH | 2 |
| 795-07.08 | 10IN X 6IN TAPPING SLEEVE AND VALVE | EACH | 1 |
| 795-08.03 | 4IN GATE VALVE ASSEMBLY | EACH | 1 |
| 795-08.04 | 6IN GATE VALVE ASSEMBLY | EACH | 2 |
| 795-08.06 | 10IN GATE VALVE ASSEMBLY | EACH | 17 |
| 795-09.01 | 3/4IN WATER SERVICE METER ASSEMBLY | EACH | 19 |
| 795-09.02 | 1IN WATER SERVICE METER ASSEMBLY | EACH | 2 |
| 795-09.04 | 2IN WATER SERVICE METER ASSEMBLY | EACH | 3 |
| 795-09.12 | 2IN COPPER SERVICE PIPE | L.F. | 180 |
| 795-09.28 | 3/4IN COPPER SERVICE PIPE | L.F. | 1200 |
| 795-09.29 | 1IN COPPER SERVICE PIPE | L.F. | 100 |
| 795-10.03 | 1IN AUTO AIR RELEASE VALVE ASSEMBLY | EACH | 4 |
| 795-11.02 | FIRE HYDRANT ASSEMBLY | EACH | 6 |
| 795-13.01 | DI FITTINGS | LBS | 8800 |
| 795-15.05 | 20IN STEEL CASING PIPE OPEN CUT METHOD | L.F. | 245 |
| 795-20.01 | RECONNECT SERVICE ASSEMBLY | EACH | 5 |
| 795-21.01 | RETIRE WATER METER ASSEMBLIES | LS | 1 |
| 795-21.02 | RETIRE WATER VALVES AND HYDRANTS | LS | 1 |

**UNOFFICIAL SET**

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DEPARTMENT OF TRANSPORTATION

ESTIMATED UTILITY QUANTITIES

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

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 2 |
| CONST. | 2014 | STP-331(6) | 2B |
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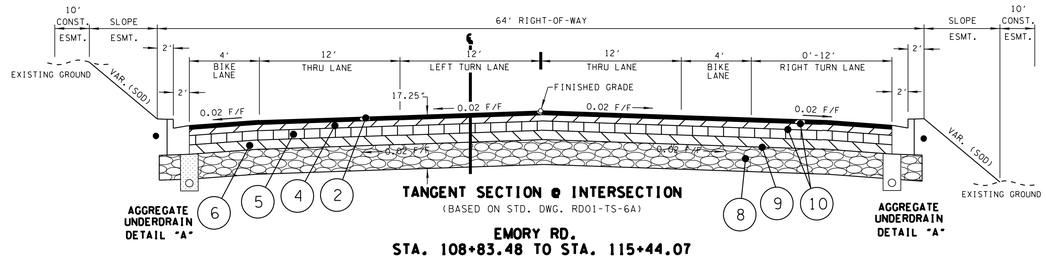
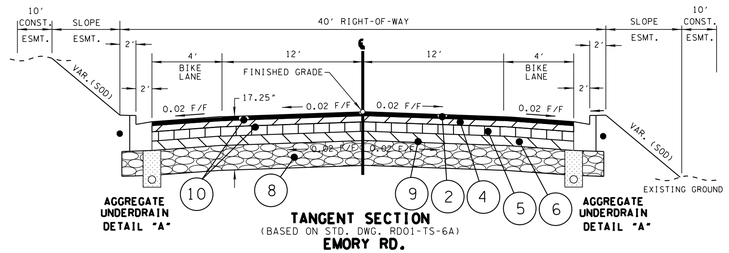



**TANGENT SECTION @ INTERSECTION**
(BASED ON STD. DWG. RD01-TS-6A)

**EMORY RD.**
**STA. 108+83.48 TO STA. 115+44.07**

**TAZEWELL PIKE.**
**STA. 507+41.50 TO STA. 513+06.21**

- **TYPE 6-30 CURB & GUTTER SEE STD. DWG'S. RP-NMC-10 & RP-NMC-11**

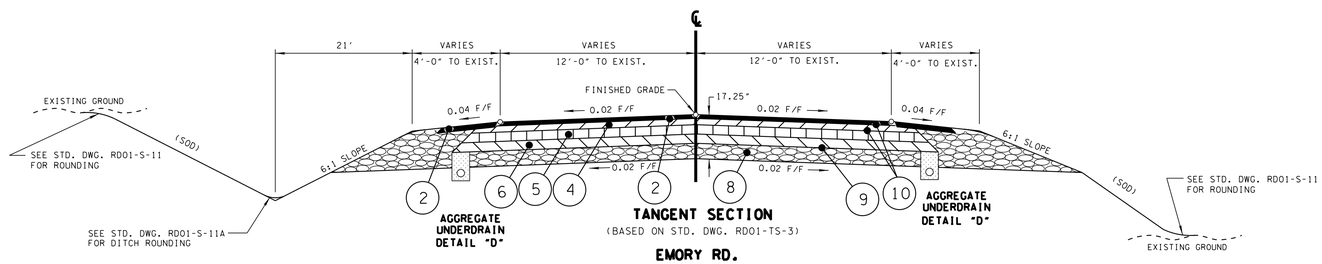



**TANGENT SECTION**
(BASED ON STD. DWG. RD01-TS-6A)

**EMORY RD.**
**STA. 105+00.00 TO STA. 108+83.48**
**STA. 115+44.07 TO STA. 119+50.00**

**TAZEWELL PIKE**
**STA. 503+50.00 TO STA. 507+41.50**
**STA. 513+06.21 TO STA. 517+00.00**

**SEE STANDARD DRAWING RD01-S-11 AND RD01-S-11A (CASE II) FOR DETAILS NOT SHOWN.**




**TANGENT SECTION**
(BASED ON STD. DWG. RD01-TS-3)

**EMORY RD.**
**STA. 102+75.00 TO STA. 105+00.00**
**AND STA. 119+50.00 TO STA. 121+75.00**
**TAZEWELL PIKE**
**STA. 501+25.00 TO STA. 503+50.00**
**STA. 517+00.00 TO STA. 519+25.00**

## PROPOSED PAVEMENT SCHEDULE

| | | |
|---|---|---|
| (1) SURFACE - 1.25" THICK (APPROX. 132.5 LBS/YD²)<br>411-01.10 ACS MIX (PG64-22) GRADING D | (5) BLACK BASE - 3" THICK (APPROX. 345 LBS/YD² )<br>307-02.01 ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A | (9) PRIME COAT<br>402-01 BIT MAT FOR PRIME COAT (PC) @ 0.3-.35 GAL/YD AGG (ACS) GRA D<br>402-02 AGGREGATE FOR COVER MATERIAL (PC) @ 8-12 LBS/YD |
| (2) SURFACE - 1.25" THICK (APPROX. 132.5 LBS/YD²)<br>411-02.10 ACS MIX (PG70-22) GRADING D | (6) BLACK BASE - 3.0" THICK (APPROX. 270.0 LBS/YD² )<br>307-02.02 ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A-S<br>307-02.03 ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A-S | (10) TACK COAT 0.07 GAL/YD²<br>403-01 BITUMINOUS MATERIAL FOR TACK COAT (T.C.) |
| (3) BINDER - 2" THICK (APPROX. 226 LBS/YD² )<br>307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2) | (7) NOT USED | |
| (4) BINDER - 2" THICK (APPROX. 226 LBS/YD² )<br>307-02.08 ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2) | (8) BASE STONE - 8" THICK (FULL DEPTH UNDER SHLD'S.<br>303-01 MINERAL AGGREGATE. TYPE "A" BASE. GRADING D | |

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

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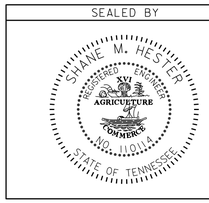


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**TYPICAL SECTIONS AND PAVEMENT SCHEDULE**

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 2C |
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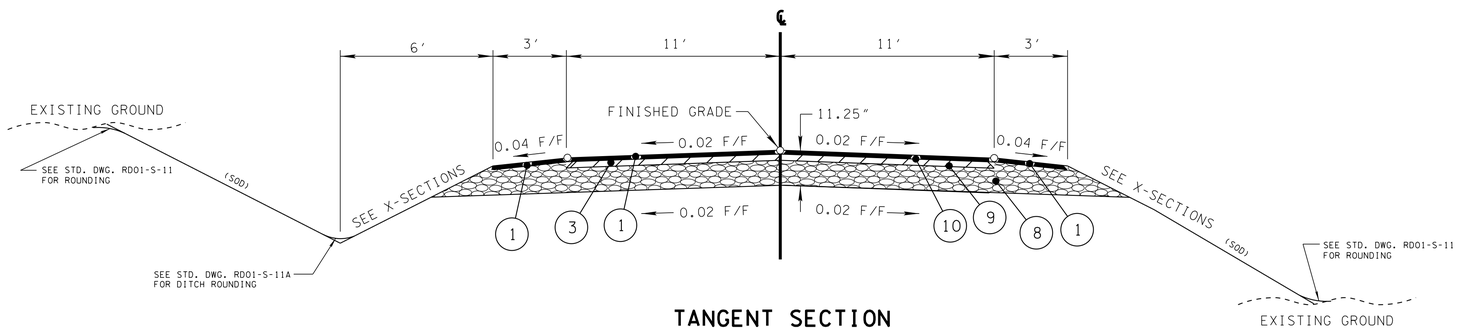
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

SEE SHEET 28 FOR PAVEMENT SCHEDULE.




## TANGENT SECTION

(BASED ON STD. DWG. RD01-TS-1)

**TRAFFIC CONTROL TEMPORARY RUN-AROUND**
**STA. 102+49.25 TO STA. 121+71.24**

**UNOFFICIAL SET**

**NOT FOR BIDDING**

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DEPARTMENT OF TRANSPORTATION

# TYPICAL SECTIONS

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 2D |
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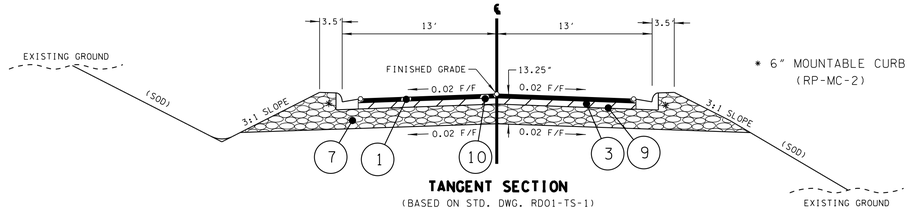
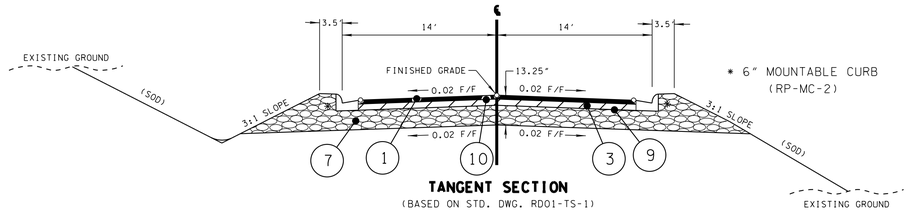
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.




**TANGENT SECTION**
(BASED ON STD. DWG. RD01-TS-1)

**WILDERNESS PATH RD.**
**STA. 301+71.20 TO STA. 303+26.02**




**TANGENT SECTION**
(BASED ON STD. DWG. RD01-TS-1)

**WILDERNESS PATH RD.**
**STA. 304+45.29 TO STA. 307+48.36**

**SEE STANDARD DRAWING RD01-S-11 AND RD01-S-11A (CASE II) FOR DETAILS NOT SHOWN.**

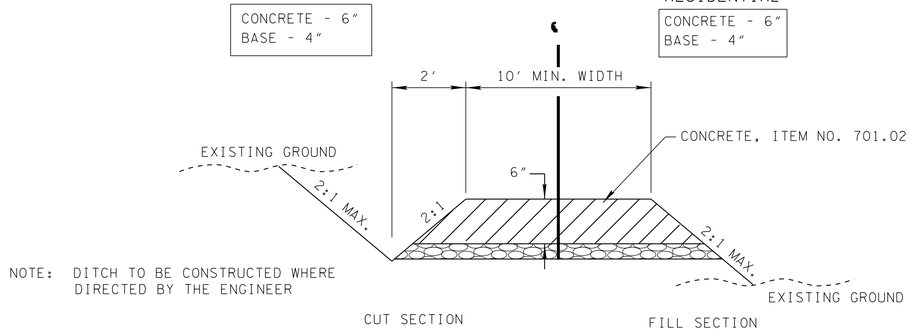
**SEE SHEET 2B FOR PAVEMENT SCHEDULE.**

BUSINESS

CONCRETE - 6"
BASE - 4"

RESIDENTIAL

CONCRETE - 6"
BASE - 4"




NOTE: DITCH TO BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER

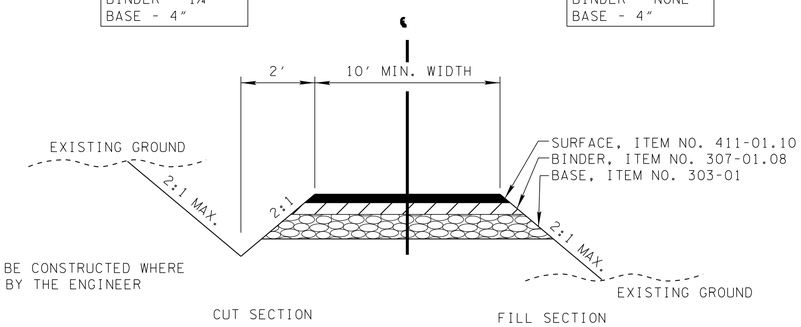
**TYPICAL SECTION**
PRIVATE DRIVE TO BUSINESS, OR RESIDENTIAL PROPERTY

BUSINESS

SURFACE - 1¼"
BINDER - 1¾"
BASE - 4"

FIELD OR RESIDENTIAL

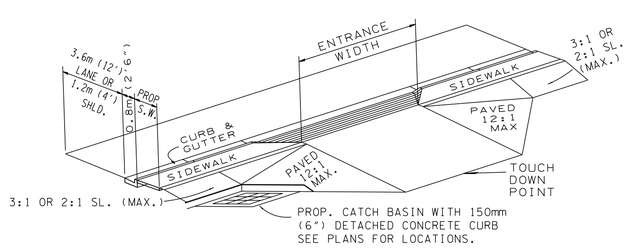
SURFACE - 1½"
BINDER - NONE
BASE - 4"



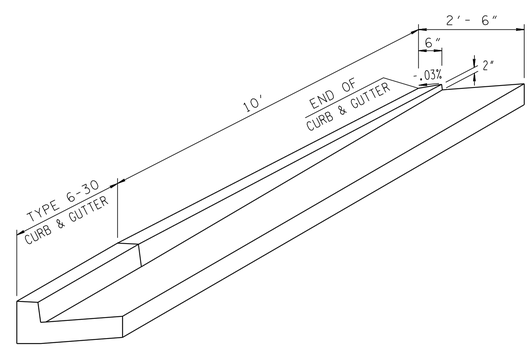

NOTE: DITCH TO BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER

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

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




**BUSINESS ENTRANCE TO PARKING AREAS**
SHOWING FLATTENING OF SIDE SLOPES




**TYPE 6-30 CURB & GUTTER TRANSITION DETAIL**
THIS DETAIL SHALL APPLY TO ALL ENDING SECTIONS OF TYPE 6-30 CURB & GUTTER

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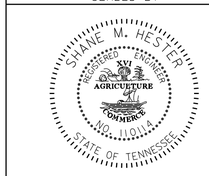


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# TYPICAL SECTIONS

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 2E |
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# GENERAL NOTES

## GRADING

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

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

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

(4) ARCHAEOLOGICAL SITE NO. 40KN275 MUST BE AVOIDED AS A SOURCE OF FILL OR HEAVY MACHINERY STAGING AREA. EARTH FILL WILL BE REQUIRED FROM AREAS OUTSIDE THE PROPOSED RIGHT-OF-WAY. CERTIFICATION MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.

## SEEDING AND SODDING

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

## DRAINAGE

(6) 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.

(7) EXCAVATION FOR THE INSTALATION OF PIPE CULVERTS, SEWERS, CONDUITS, ALL OTHER CULVERTS, ALL MINOR STRUCTURES OF ANY TYPE AND DESCRIPTION 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).

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

(9) 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).

(10) 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.

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

## MISCELLANEOUS

(12) ALL DETOUR, ACCESS, SERVICE AND FRONTAGE ROADS SHALL BE CONSTRUCTED WITH A MINIMUM OF ONE (1) COURSE OF BASE MATERIAL BEFORE TRAFFIC IS INTERRUPTED ON EXISTING ROADS.

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

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

## PAVEMENT MARKINGS

## TEMPORARY PAVEMENT MARKING ON INTERMEDIATE LAYERS

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

(16) WIDE (8 INCH) TEMPORARY PAVEMENT MARKING LINE WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.02 PAINTED PAVEMENT MARKING (8" BARRIER LINE), LIN. FT.

## PAVEMENT MARKINGS

## FINAL PAVEMENT MARKING IF 4" ENHANCED FLATLINE THERMOPLASTIC IS USED

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

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

(18) 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 PVMT 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.

## DETOURS, LANE SHIFTS AND MEDIAN CROSS-OVERS

(19) THE PAVEMENT MARKING ON THE DETOUR FOR CENTERLINE AND EDGELINES WILL BE INSTALLED AND MAINTAINED TO THE SAME STANDARDS AS FOR PERMANENT MARKINGS ON THE MAIN ROADWAY. THESE MARKINGS SHALL BE IN PLACE PRIOR TO ALLOWING TRAFFIC ONTO THE PAVEMENT. THESE PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01 LIN. MI.

(20) BEFORE OPENING THE DETOUR TO TRAFFIC, THE TRANSITIONAL MARKINGS ON THE EXISTING ROADWAY MUST BE IN PLACE. ALL EXISTING MARKINGS IN THE AREA OF THESE TRANSITIONAL MARKINGS SHALL BE OBLITERATED AND ALL EXISTING RAISED PAVEMENT MARKERS SHALL BE REMOVED TO ELIMINATE CONFLICTING MARKINGS. REMOVAL OF THE EXISTING CONFLICTING MARKINGS AND RAISED PAVEMENT MARKERS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN ITEM NO. 712-01 TRAFFIC CONTROL, LUMP SUM.

## PAVEMENT

## PAVING

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

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

(23) 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.

## GRADED SOLID ROCK

(24) THE ROCK FILL (GRADED SOLID ROCK) MATERIAL SHALL CONSIST OF SOUND, NON-DEGRADABLE LIMESTONE OR SANDSTONE WITH A MAXIMUM SIZE OF 3'-0". AT LEAST 50% (BY WEIGHT) OF THE ROCK SHALL BE UNIFORMLY DISTRIBUTED BETWEEN 1'-0" AND 3'-0" IN DIAMETER, AND NO GREATER THAN 10% (BY WEIGHT) SHALL BE LESS THAN 2" IN DIAMETER. THE MATERIAL SHALL BE ROUGHLY EQUIDIMENSIONAL; THIN, SLABBY MATERIALS WILL NOT BE ACCEPTED. THE CONTRACTOR SHALL BE REQUIRED TO PROCESS THE MATERIAL WITH AN ACCEPTABLE MECHANICAL MEANS (A SCREENING PROCESS CAPABLE OF PRODUCING THE REQUIRED GRADATION). THE ROCK SHALL BE APPROVED BY A REPRESENTATIVE OF THE DIVISION OF MATERIALS AND TESTS BEFORE USE.

(25) THIS GRADED SOLID ROCK MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING FIVE FEET IN DEPTH.

## CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

(26) 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.

(27) 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.

(28) 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.

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

(30) 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.

(31) 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.

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

(33) ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED AND THE VERTICAL PANELS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.

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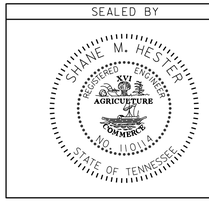


STATE OF TENNESSEE
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GENERAL NOTES

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# GENERAL NOTES

## EROSION PREVENTION AND SEDIMENT CONTROL

## DISTURBED AREA

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

(35) 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.

(36) 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.

(37) 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.

## SEDIMENT CONTROL

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

(39) 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.

(40) 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.

(41) 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.

(42) 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 DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.

(43) 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.

(44) 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.

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

## INSPECTION, MAINTENANCE, REPAIR

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

(47) 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.

(48) 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.

(49) 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.

(50) 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.

(51) 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.

(52) 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.

(53) 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

(54) 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

(55) 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.

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

(57) 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.

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

(59) 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 DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.

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

(61) 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.

(62) 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.

(63) 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.

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GENERAL NOTES

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# GENERAL NOTES (Cont'd.)

## LITTER, DEBRIS, WASTE, PETROLEUM

(64) 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.

(65) 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.

## SIGNING

(66) 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.

(67) 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.

(68) 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.

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

## SIGNALIZATION

(70) EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE TDOT "SPECIAL PROVISIONS REGARDING SECTION 730K-TRAFFIC SIGNALS."

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

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

(73) SIGNAL HEADS SHALL FLASH A MINIMUM OF SEVEN (7) DAYS PRIOR TO ACTIVATION OF THE SIGNAL.\

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

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GENERAL NOTES

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# 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

(6) REFER TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN, SHEET NO. 21, FOR NOTES REGARDING SEASONAL WORK LIMITATION OR LIMITATION ON THE TOTAL AREA OF EXPOSED SOIL.

## GEOLOGY

(7) UNLESS SPECIFICALLY STATED OTHERWISE IN THE CONTRACT PLANS, THE BIDDING FOR, THE DESIGN OF AND THE CONSTRUCTION OF RETAINING WALLS SHOWN IN THE PLANS SHALL BE GOVERNED BY THE TDOT EARTH RETAINING STRUCTURES MANUAL..THIS MANUAL IS AVAILABLE ON THE TDOT WEB SITE UNDER THE INFORMATION FOR CONTRACTORS LINK. THIS MANUAL SHALL BE CONSIDERED AS ONE OF THOSE DOCUMENTS WHICH THE BIDDER/CONTRACTOR HAS EXAMINED AND MADE HIMSELF FAMILIAR WITH AS DESCRIBED IN SECTION **102.04-EXAMINATION OF THE SITE, THE WORK, THE PLANS, AND THE SPECIFICATIONS** IN THE TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

## SIGNALIZATION

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

## HAZARDOUS MATERIALS

(9) IF SOIL IS ENCOUNTERED THAT IS DISCOLORED OR EXHIBITS AN ODOR, WORK IN THAT AREA SHOULD BE STOPPED AND THE TDOT HAZARDOUS MATERIALS MANAGER SHOULD BE NOTIFIED AT 615-532-8684.

(10) ANY SOIL THAT IS DISCOLORED OR EXHIBITS AN ODOR SHOULD BE STOCKPILED ON 6-MIL PLASTIC AND COVERED WITH PLASTIC UNTIL CHARACTERIZED.

(11) THE TDOT ENVIRONMENTAL DIVISION WILL BE RESPONSIBLE FOR COORDINATING THE SAMPLING AND DISPOSITION OF THE EXCAVATED MATERIAL.

(12) CONTRACTORS SHOULD FOLLOW THEIR COMPANY HEALTH AND SAFETY PLAN IF CONTACTING POTENTIALLY CONTAMINATED SOIL OR WATER.

## CONSTRUCTION (NOTES TO CONTRACTOR)

(13) NO WORK OR LANE CLOSURES DURING FRIDAY NIGHT HOME FOOTBALL GAMES FOR NEARBY HIGH SCHOOL.

(14) CONTRACTOR IS NOT ALLOWED TO PARK OFF STATE RIGHT- OF- WAY, INCLUDING ADJACENT BUSINESSES, WITHOUT THE CONSENT OF THE PROPERTY OWNER. ALL DAMAGE OFF STATE RIGHT-OF-WAY SHALL BE AT THE CONTRACTORS EXPENSE.

(15) CONTRACTOR GRADE WORK FOR TAZEWELL PIKE PHASE 2A SHALL BE LIMITED TO WEEKENDS FROM FRIDAY 7 P.M. TO MONDAY 6 A.M., EXCLUDING NIGHTS WITH HOME FOOTBALL GAMES FOR THE NEARBY HIGH SCHOOL.

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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| CONST. | 2014 | STP-331(6) | 2J |
| | | | |
| | | | |

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

## CATCH BASINS AND JUNCTION BOXES

| SHEET NO. | LOCATION | STATION | OFFSET (FT.) | DRAINAGE CODE | GRATE/TOP ELEV. | STRUCTURE TYPE | INSIDE DIMENSIONS | DEPTH (FT.) | STANDARD DRAWING | PAY ITEMS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | TYPE 12 611-12.01 0' - 4' | TYPE 12 611-12.02 4' - 8' | TYPE 12 8' - 12' | TYPE 12 611-12.04 12' - 16' | TYPE 14 611-14.02 4' - 8' | TYPE 14 611-14.04 12' - 16' | JB TYPE 1 611-02.11 0' - 4' | TYPE 42 611-42.02 4' - 8' |
| | | | | | | | | | | | | | | | | | |
| 5B | WILD. PTH. RD. | 302+32.76 | -15.00 | CB-1 | 1104.74 | #14 | 8'x3' | 4.42 | D-CB-14S | | | | | 1 | | | |
| 5B | WILD. PTH. RD. | 302+32.76 | 15.00 | CB-2 | 1104.74 | #14 | 8'x3' | 5.13 | D-CB-14S | | | | | 1 | | | |
| 5B | EMORY RD. | 106+29.12 | -27.40 | CB-3 | 1107.71 | #12 | 4'x4' | 12.56 | D-CB-12RA | | | | | | 1 | | |
| | | | | | | | | | | | | | | | | | |
| 5B | EMORY RD. | 106+27.78 | 38.79 | CB-5 | 1107.34 | #12 | 5' CIRC. | 5.38 | D-CB-12RB | | 1 | | | | | | |
| 5B | TAZEWELL PK. | 514+42.00 | -31.00 | JB-1 | 1109.70 | JB | 4'x4' | 3.29 | D-JBS-1 | | | | | | | 1 | |
| 5B | EMORY RD. | 107+83.67 | -22.38 | CB-7 | 1105.99 | #14 | 8'x3' | 4.42 | D-CB-14S | | | | | 1 | | | |
| 5B | EMORY RD. | 107+83.67 | 24.04 | CB-8 | 1105.94 | #14 | 8' CIRC. | 15.89 | D-CB-14RB | | | | | | 1 | | |
| 5B | WILD. PTH. RD. | 306+46.12 | -36.62 | CB-9 | 1094.07 | #42 | 4'x4' | 5.29 | D-CB-42SB | | | | | | | | 1 |
| 5B | WILD. PTH. RD. | 306+86.62 | -16.00 | CB-10 | 1098.77 | #14 | 8'x3' | 4.42 | D-CB-14S | | | | | 1 | | | |
| 5B | WILD. PTH. RD. | 306+86.62 | 28.39 | CB-11 | 1098.96 | #14 | 8'x3' | 5.32 | D-CB-14S | | | | | 1 | | | |
| 5B | EMORY RD. | 111+21.00 | -24.00 | CB-12 | 1111.75 | #12 | 4'x4' | 4.25 | D-CB-12S | | 1 | | | | | | |
| 5B | EMORY RD. | 111+21.00 | 36.08 | CB-13 | 1111.99 | #12 | 5' CIRC. | 7.11 | D-CB-12RB | | 1 | | | | | | |
| 5B | TAZEWELL PK. | 509+24.42 | -24.00 | CB-14 | 1110.49 | #12 | 4'x4' | 5.01 | D-CB-12S | | 1 | | | | | | |
| 5B | TAZEWELL PK. | 509+82.46 | 36.01 | CB-15 | 1111.72 | #12 | 4'x4' | 4.25 | D-CB-12S | | 1 | | | | | | |
| 5B | TAZEWELL PK. | 510+66.21 | -36.00 | CB-16 | 1113.29 | #12 | 4'x4' | 4.25 | D-CB-12S | | 1 | | | | | | |
| 5B | TAZEWELL PK. | 511+21.24 | 24.00 | CB-17 | 1114.31 | #12 | 4'x4' | 6.21 | D-CB-12S | | 1 | | | | | | |
| 5B | EMORY RD. | 113+04.07 | -36.00 | CB-18 | 1111.61 | #12 | 5' CIRC. | 4.56 | D-CB-12RB | | 1 | | | | | | |
| 5B | EMORY RD. | 112+62.12 | 24.00 | CB-19 | 1112.67 | #12 | 4'x4' | 4.25 | D-CB-12S | | 1 | | | | | | |
| 5B | EMORY RD. | 116+35.63 | -25.37 | CB-20 | 1106.53 | #14 | 9'x9' | 12.27 | D-CB-14SE | | | | | | 1 | | |
| 5B | EMORY RD. | 116+35.63 | 24.00 | CB-21 | 1106.50 | #14 | 9'x9' | 12.97 | D-CB-14SE | | | | | | 1 | | |
| 5B | EMORY RD. | 116+62.02 | 23.60 | CB-22 | 1106.53 | #12 | 4'x4' | 4.25 | D-CB-12S | | 1 | | | | | | |
| 7B | TAZEWELL PK. | 503+53.50 | -18.00 | CB-23 | 1094.61 | #12 | 4'x4' | 4.73 | D-CB-12S | 1 | | | | | | | |
| 7B | TAZEWELL PK. | 503+53.50 | 18.00 | CB-24 | 1094.61 | #12 | 4'x4' | 4.25 | D-CB-12S | 1 | | | | | | | |
| 8B | TAZEWELL PK. | 516+96.50 | -18.00 | CB-25 | 1112.39 | #12 | 4'x4' | 4.73 | D-CB-12S | | 1 | | | | | | |
| 8B | TAZEWELL PK. | 516+96.50 | 18.00 | CB-26 | 1112.39 | #12 | 4'x4' | 4.25 | D-CB-12S | | 1 | | | | | | |
| 5B | EMORY RD. | 107+57.30 | -21.95 | CB-27 | 1106.01 | #12 | 4'x4' | 4.25 | D-CB-12S | | 1 | | | | | | |
| 5B | EMORY RD. | 108+10.08 | -22.81 | CB-28 | 1106.00 | #12 | 4'x4' | 4.25 | D-CB-12S | | 1 | | | | | | |
| 5B | EMORY RD. | 107+57.32 | 23.42 | CB-29 | 1105.98 | #12 | 5' CIRC. | 14.80 | D-CB-12RB | | | | 1 | | | | |
| 5B | EMORY RD. | 108+10.16 | 27.22 | CB-30 | 1105.91 | #12 | 4'x4' | 4.25 | D-CB-12S | | 1 | | | | | | |
| 5B | EMORY RD. | 116+09.81 | 24.00 | CB-31 | 1106.54 | #12 | 4'x4' | 4.25 | D-CB-12S | | 1 | | | | | | |
| 5B | EMORY RD. | 116+08.06 | -29.35 | CB-32 | 1106.44 | #12 | 4'x4' | 4.25 | D-CB-12S | | 1 | | | | | | |
| 5B | EMORY RD. | 116+80.00 | -23.12 | CB-33 | 1106.64 | #12 | 4'x4' | 4.25 | D-CB-12S | | 1 | | | | | | |
| | | | | | | | | | | | | | | | | | |
| TOTALS | | | | | | | | | | 2 | 18 | 0 | 1 | 5 | 4 | 1 | 1 |

## STORM DRAINAGE ENDWALLS

| SHEET NO. | LOCATION | STATION | OFFSET (FT.) | DRAINAGE CODE | STRUCTURE TYPE | STANDARD DRAWING | CLASS A CONC. 611-07.01 (C.Y.) | 18" CONC. ENDWALL 611-07.54 (EACH) | 42" CONC. ENDWALL 611-07.66 (EACH) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| 5B | EMORY RD. | 514+42 | -34.00 | 4 E.W. | "U" | D-PE-18A&B | | 1 | |
| 5B | EMORY RD. | 116+35.63 | -61.48 | 5 E.W. | "U" | D-PE-42A&B | | | 1 |
| 5B | EMORY RD. | 116+25.72 | 58.50 | 2 E.W. | "U" | D-PE-42A&B | | | 1 |
| 7B | TAZEWELL PK. | 503+00.00 | -22.84 | 3 E.W. | "U" | D-PE-18A&B | | 1 | |
| 8B | TAZEWELL PK. | 518+88.99 | -19.69 | 6 E.W. | "STR." | D-PE-4 | 1.04 | | |
| 8B | TAZEWELL PK. | 518+88.42 | 16.17 | 7 E.W. | "STR." | D-PE-4 | 1.04 | | |
| 4B&5B | EMORY RD. | 106+00 | -28.15 | 8 E.W. | "U" | D-PE-18A&B | | 1 | |
| 4B&5B | EMORY RD. | 106+00 | 28.77 | 9 E.W. | "U" | D-PE-18A&B | | 1 | |
| | | | | | | | | | |
| TOTALS | | | | | | | 2.08 | 4 | 2 |

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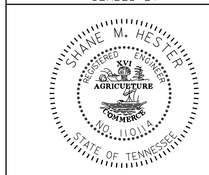


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES

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

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 2K |

## SIDE DRAIN TABULATION

| STATION | LOCATION LT | LOCATION RT | DESCRIPTION | SURFACE WIDTH (L.F.) | SLOTTED DRAIN 18" | RCP CLASS III OR CMP 16 GA. OR HDPE OR PVC (L.F.) FILL HEIGHT < OR = 10 FT. 18" | 23"x14" | 36" | 48" | END TREATMENT TYPE | DRAWING NO. | CLASS A CONC. 611-07.01 (C.Y.) | REINF. STEEL 611-07.02 (LB.) | STRUC. STEEL 611-07.03 (LB.) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 104+51.19 | X | | Oval Side Drain | | | | 27 | | | | | | | | |
| 109+95.02 | X | | Side Drain | | | 88 | | | | | | | | | Emory Road |
| 109+95.02 | X | | Slotted Drain | | 32 | | | | | | | | | | Emory Road |
| 110+68.48 | X | | Side Drain | | | 79 | | | | | | | | | Emory Road |
| 110+68.48 | X | | Slotted Drain | | 40 | | | | | | | | | | Emory Road |
| 115+32.81 | X | | Slotted Drain | | 75 | | | | | | | | | | Emory Road |
| 118+96.40 | X | | Side Drain | | | 24 | | | | | | | | | Emory Road |
| 120+34.54 | | X | Side Drain | | | 45 | | | | | | | | | Emory Road |
| 120+95.06 | X | | Side Drain | | | 30 | | | | | | | | | Emory Road |
| 502+19.50 | X | | Side Drain | | | 21 | | | | | | | | | Tazewell Pk. |
| TOTALS | | | | | 147 | 287 | 27 | 0 | 0 | | | 0 | 0 | 0 | |

## CROSS DRAIN TABULATION

| STATION | RCP CLASS III OR CMP 10 GA. OR HDPE OR PVC (L.F.) FILL HEIGHT < OR = 18 FT. 24" | 42" | | | SKEW | RIP-RAP 709-05.09 (TON) | END TREATMENT INLET TYPE | INLET DRAWING NO. | OUTLET TYPE | OUTLET DRAWING NO. | CLASS A CONC. 611-07.01 (C.Y.) | ENDWALL 42" 3:1 SLOPE 611-07.66 (EACH) | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 116+35.63 | | 124 | | | 90 | 7 | U | D-PE-42A&B | U | D-PE-42A&B | | 2 | | |
| 518+88.68 | 8 | | | | 89 | | STR | D-PE-4 | STR | D-PE-4 | 3.24 | | | |
| TOTALS | 8 | 124 | 0 | 0 | | 7 | | | | | 3.24 | 2 | | |

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SHANE M. HESTER
REGISTERED ENGINEER
XV
AGRICULTURE
COMMERCE
NO. 110114
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 2L |

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

## BOX CULVERT TABULATION

| STATION | LOCATION | SPAN | HEIGHT | LENGTH | SKEW | DRAINAGE AREA ACRES | BOX CULVERT BOX CLASS "A" CONC. CU. YD. | BOX CULVERT BOX REINF. STEEL LBS. | DRAWING NO. | BACKFILLING ITEM 303-01.01 DWG. STD-10-1 TONS | FOUNDATION FILL MATERIAL CU. YD. | RIP-RAP CLASS "C" 709-05.09 TONS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 108+40.18 | Emory Road | 7' | 7' | 180' | 86^39'23" | 104.2 | 194 | 40,454 | STD-15-36,37 | 942 | 89 | 17 |
| TOTALS | | | | | | | 194 | 40454 | | 942 | 89 | 17 |

## STORM DRAINAGE PIPES

| SHEET NO. | FROM CODE | FROM OUTLET ELEV. | TO CODE | TO INLET ELEV. | % GRADE | REINFORCED CONC. PIPE - CLASS III SIZE & LENGTH (L.F.) 18" | 24" | 30" | 36" | 42" | RIP-RAP 709-05.06 (TON) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5B | CB-1 | 1100.32 | CB-2 | 1099.94 | 1.52 | 25.08 | | | | | |
| 5B | CB-2 | 1099.61 | CB-3 | 1096.32 | 3.00 | 109.73 | | | | | |
| 5B | EW-8 | 1106.44 | CB-3 | 1105.00 | 4.97 | 29.00 | | | | | |
| 5B | CB-3 | 1095.15 | CB-5 | 1092.81 | 3.75 | | | 62.39 | | | |
| 5B | CB-5 | 1092.64 | CB-29 | 1091.39 | 1.00 | | | 125.45 | | | |
| 5B | EW-9 | 1106.83 | CB-5 | 1104.84 | 7.11 | 28.00 | | | | | |
| 5B | CB-29 | 1091.18 | CB-8 | 1090.38 | 4.03 | | | 19.86 | | | |
| 5B | CB-27 | 1102.73 | CB-7 | 1102.53 | 0.98 | 20.38 | | | | | |
| 5B | CB-28 | 1102.72 | CB-7 | 1102.52 | 0.98 | 20.41 | | | | | |
| 5B | CB-7 | 1101.57 | CB-8 | 1101.16 | 0.99 | 41.50 | | | | | |
| 5B | CB-30 | 1101.66 | CB-8 | 1101.45 | 1.02 | 20.68 | | | | | |
| 5B | CB-8 | 1090.05 | CB-9 | 1089.57 | 1.50 | 32.00 | | | | | |
| 5B | CB-9 | 1088.78 | OUT-1 | 1088.47 | 0.99 | | | | 31.23 | | |
| 5B | CB-10 | 1094.35 | CB-11 | 1093.97 | 1.00 | 38.10 | | | | | |
| 5B | CB-11 | 1093.64 | OUT-2 | 1090.00 | 15.92 | 22.86 | | | | | |
| 5B | CB-12 | 1107.50 | CB-13 | 1106.40 | 1.96 | 56.08 | | | | | |
| 5B | CB-15 | 1107.47 | CB-14 | 1106.68 | 0.99 | 79.49 | | | | | |
| 5B | CB-14 | 1105.48 | CB-13 | 1104.88 | 1.00 | 60.18 | | | | | |
| 5B | CB-13 | 1104.71 | CB-30 | 1101.83 | 0.94 | 306.47 | | | | | |
| 5B | CB-16 | 1109.04 | CB-17 | 1108.27 | 1.00 | 77.37 | | | | | |
| 5B | CB-17 | 1108.10 | CB-18 | 1107.53 | 0.92 | 61.71 | | | | | |
| 5B | CB-19 | 1108.42 | CB-18 | 1107.22 | 1.74 | 68.80 | | | | | |
| 5B | CB-18 | 1107.05 | CB-32 | 1102.36 | 1.59 | 295.35 | | | | | |
| 5B | CB-32 | 1102.19 | CB-20 | 1101.97 | 0.99 | 22.23 | | | | | |
| 5B | EW-5 | 1094.69 | CB-20 | 1094.51 | 0.52 | | | | | 40.00 | |
| 5B | CB-20 | 1094.26 | CB-21 | 1093.78 | 1.19 | | | | | 46.00 | |
| 5B | CB-21 | 1093.53 | EW-2 | 1192.70 | 2.52 | | | | | 38.00 | |
| 5B | CB-33 | 1102.39 | CB-20 | 1101.96 | 1.00 | 43.00 | | | | | |
| 5B | CB-31 | 1102.29 | CB-21 | 1102.08 | 1.00 | 21.00 | | | | | |
| 5B | CB-22 | 1102.28 | CB-21 | 1102.07 | 1.00 | 21.07 | | | | | |
| 8B | CB-26 | 1108.14 | CB-25 | 1107.83 | 0.97 | 32.00 | | | | | |
| 5B&8B | CB-25 | 1107.66 | JB-1 | 1106.41 | 0.50 | 250.83 | | | | | |
| 8B | JB-1 | 1106.24 | EW-4 | 1106.00 | 12.00 | 2.00 | | | | | |
| 7B | CB-24 | 1090.73 | CB-23 | 1090.57 | 0.50 | 32.00 | | | | | |
| 7B | CB-23 | 1090.40 | EW-3 | 1090.14 | 0.50 | 51.79 | | | | | |
| TOTALS | | | | | | 1869.11 | 0 | 207.70 | 31.23 | 124 | 0 |

## PAVEMENT QUANTITIES

| LOCATION | PAY ITEMS 303-01 (TON) | 307-01.08 (TON) | 307-02.01 (TON) | 307-02.02 (TON) | 307-02.03 (TON) | 307-02.08 (TON) | 402-01 (TON) | 402-02 (TON) | 403-01 (TON) | 411-01.10 (TON) | 411-02.10 (TON) | 701-02 CONC. DR. S.F. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EMORY RD. | 5068.4 | | 1727.1 | 34.0 | 1007.0 | 969.7 | 11.7 | 46.3 | 7.0 | | 568.5 | |
| TAZEWELL PK. | 4033.4 | | 1319.0 | 34.0 | 1000.0 | 967.4 | 11.6 | 45.9 | 7.0 | | 567.2 | |
| WILD. PTH. RD. | 1153.1 | 219.0 | | | | | 3.1 | 12.3 | 0.6 | 128.4 | | |
| PVT. DRIVES | 703.0 | 101.0 | | | | | | | | 111.2 | | 11760.0 |
| RUNAROUND 1 | 2933.0 | | | | | 539.0 | | | | | 402.0 | |
| RUNAROUND 1A | 601.0 | | | | | 110.5 | | | | | 82.4 | |
| PHASE 2 | 2933.0 | | | | | 539.0 | | | | | 402.0 | |
| TOTALS | 17424.9 | 320.0 | 3046.1 | 68.0 | 2007.0 | 3125.6 | 26.4 | 104.5 | 14.6 | 239.6 | 2022.1 | 11760.0 |

## ESTIMATED GRADING QUANTITIES

| STATION TO STATION | ROAD & DRAINAGE EXC. (UNCL.) COMMON - C.Y. | ROAD & DRAINAGE EXC. (UNCL.) S. ROCK - C.Y. | BORROW EXCAVATION UNCL. - C.Y. | BORROW EXCAVATION S. ROCK - C.Y. | CHANNEL EXC. C.Y. | EXCESS EXC. WASTE C.Y. | EMB. C.Y. |
|---|---|---|---|---|---|---|---|
| EMORY ROAD | 2379 | | 25263 | 1224 | | | 21733 |
| TAZEWELL PIKE | 4986 | | | | | | 840 |
| WILDERNESS PATH | 397 | | | | | | 6228 |
| RUNAROUND 1 | 2144 | | | | | | 846 |
| RUNAROUND 1A | 957 | | | | | | 561 |
| PVT. DRIVES | 151 | | | | | | 2561 |
| REMOVE RUNAROUND | 1407 | | | | | | |
| TOTALS | 12421 | 0 | 25263 | 1224 | 0 | 0 | 32769 |

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DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES

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

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 3 |
| CONST. | 2014 | STP-331 (6) | 3 |
| | | | |
| | | | |

# R.O.W. ACQUISITION TABLE

| TRACT NO. | PROPERTY OWNERS | COUNTY RECORDS | | | | TOTAL AREA ACRES | | | AREA TO BE ACQUIRED ACRES | | | AREA REMAINING ACRES | | EASEMENT (SQUARE FEET) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TAX MAP NO. | PARCEL NO. | DEED DOCUMENT REFERENCE BK. | DEED DOCUMENT REFERENCE PAGE | LEFT | RIGHT | TOTAL | LEFT | RIGHT | TOTAL | LEFT | RIGHT | PERM. DRAINAGE | SLOPE | CONST. ① |
| ~~1~~ | ~~MILTON S. STANFORD AND JESSICA A. THOMAS~~ | ~~021-I-D~~ | ~~002~~ | ~~20060301~~ | ~~0072870~~ | | ~~0.249~~ | ~~0.249~~ | | | | | ~~0.249~~ | | | |
| 2 | DUSTIN MCCROSKEY AND STEPHANIE KENNEDY | 021-I-D | 003 | 20080902 | 0015464 | | 0.308 | 0.308 | | | | | 0.308 | | | 2521 |
| 3 | GAIL D. LAY AND PHILLIP H. LAY | 021-I-D | 004 | 20060608 | 103490 | | 0.509 | 0.509 | | | | | 0.509 | | | 0.107 AC |
| 4 | RUSSCO PROPERTIES, INC. | 021 | 023 | 2217 | 1110 | 1.240 | | 1.240 | | | | 1.240 | | | 75 | 965 |
| ~~5~~ | ~~AMELIA SLOAN HATCHER~~ | ~~021-H-A~~ | ~~027~~ | ~~20100225~~ | ~~0054681~~ | ~~0.239~~ | | ~~0.239~~ | | | | ~~0.239~~ | | | | |
| 6 | WILLIAM R. WHEELER AND WIFE, ROSEMARY E. WHEELER | 021-H-A | 028 | 20081022 | 0027113 | 0.250 | | 0.250 | | | | 0.250 | | | | 134 |
| 7 | RUSSCO PROPERTIES, INC. | 021-H-A | 029 | 2217 | 1110 | 0.310 | | 0.310 | | | | 0.310 | | | | 461 |
| ~~8~~ | ~~RUSSCO PROPERTIES, INC.~~ | ~~021-H-A~~ | ~~003~~ | ~~2217~~ | ~~1110~~ | ~~0.320~~ | | ~~0.320~~ | | | | ~~0.320~~ | | | | |
| 9 | RUSSCO PROPERTIES, INC. | 021-H-A | 002 | 2217 | 1110 | 0.315 | | 0.315 | | | | 0.315 | | | | 231 |
| 10 | RUSSCO PROPERTIES, INC. | 021-H-A | 001 | 2217 | 1110 | 0.346 | | 0.346 | | | | 0.346 | | 774 | 743 | 1926 |
| 11 | SHANNON HIGGINS BUCK AND HUSBAND, ZACHARIAH BUCK | 021 | 022.01 | 20041119 | 42201 | | 1.317 | 1.317 | | 0.590 | 0.590 | | 0.727 | | | 2250 |
| ~~12~~ | ~~ANGELA ELIZABETH WILLIS POWELL~~ | ~~021~~ | ~~007.01~~ | ~~20040524~~ | ~~107865~~ | ~~0.498~~ | | ~~0.498~~ | | | | ~~0.498~~ | | | | |
| 13 | CLEAR SPRINGS BAPTIST CHURCH - CORRYTON | 021 | 063 | 20041007 | 0030103 | | 30.449 | 30.449 | | 2027 S.F. | 2027 S.F. | | 30.402 | | 177 | 0.202 AC |
| 14 | EDWARD SANCHEZ AND WIFE, MARGARET SANCHEZ | 021 | 065.02 | 1710 | 214 | | 1.151 | 1.151 | | | | | 1.151 | | 664 | 1118 |
| 15 | LBW PROPERTIES & LKM PROPERTIES, L.P. | 021 | 066.01 | 20080716 | 0003769 | | 7.523 | 7.523 | | 0.184 | 0.184 | | 7.339 | 1641 | 0.278 AC | 0.243 AC |
| ~~16~~ | ~~ALLISON POWELL CORNELL~~ | ~~021~~ | ~~007~~ | ~~20000121~~ | ~~0004535~~ | ~~0.550~~ | | ~~0.550~~ | | | | ~~0.550~~ | | | | |
| ~~17~~ | ~~WILLIAM B. WEIGEL ETAL~~ | ~~021~~ | ~~006~~ | ~~2309~~ | ~~860~~ | ~~0.511~~ | | ~~0.511~~ | | | | ~~0.511~~ | | | | |
| 18 | LKM PROPERTIES, L.P. ETAL | 021 | 005 | 20100225 | 0054753 | 1.661 | | 1.661 | | | | 1.661 | | 937 | 310 | 3302 |
| 19 | LKM PROPERTIES, L.P. | 021 | 066.02 | 20100513 | 0071028 | | 1.001 | 1.001 | | 0.101 | 0.101 | | 0.900 | | 1077 | 0.138 AC |
| 20 | CHRE, LLC | 021 | 004 | 20100225 | 0054753 | 2.666 | | 2.666 | 4273 S.F. | | 4273 S.F. | 2.568 | | 1246 | 2782 | 0.135 AC |
| 21 | HOME FEDERAL BANK OF TENNESSEE | 021 | 068 | 2187 | 564 | | 1.839 | 1.839 | | | | | 1.839 | 377 | | 1320 |
| 22 | DANA C. GENUA | 021 | 104 | 20050311 | 0071487 | 0.949 | | 0.949 | 2508 S.F. | | 2508 S.F. | 0.891 | | 99 | 478 | 960 |
| 23 | DANA CALES GENUA | 021 | 103 | 20091110 | 0032973 | 0.668 | | 0.668 | 3149 S.F. | | 3149 S.F. | 0.596 | | | 57 | 307 |
| 24 | DARRELL W. ATKINS AND WIFE, FRANKIE K. ATKINS | 021 | 003.01 | 20050707 | 2384 | 5.034 | | 5.034 | | | | 5.034 | | | 2110 | 2743 |
| 25 | ZOLA SATTERFIELD | 021 | 069 | NO REF | NO REF | | 0.921 | 0.921 | | 1093 S.F. | 1093 S.F. | | 0.896 | | 87 | 982 |
| 26 | DAVID A. DONALDSON AND WIFE, ELLA O. DONALDSON | 021 | 070 | 2155 | 967 | | 1.961 | 1.961 | | 2003 S.F. | 2003 S.F. | | 1.915 | | 60 | 1791 |
| 27 | JAY B. WORMSLEY AND WIFE, AMY T. WORMSLEY | 021 | 071 | 20030624 | 0119636 | | 0.981 | 0.981 | | 169 S.F. | 169 S.F. | | 0.977 | | | 649 |
| ~~28~~ | ~~VICKIE D. DEVAULT~~ | ~~021-I-D~~ | ~~001~~ | ~~20080604~~ | ~~0091143~~ | | ~~0.265~~ | ~~0.265~~ | | | | | ~~0.265~~ | | | |
| ~~29~~ | ~~DUDLEY J. KARNES AND WIFE FREDA NEAL KARNES~~ | ~~021~~ | ~~025~~ | ~~20050706~~ | ~~0001916~~ | ~~2.983~~ | | ~~2.983~~ | | | | ~~2.983~~ | | | | |
| 30 | GEORGE ALFRED JAMES AND WIFE, WANDA L. JAMES | 021 | 024 | 1364 | 100 | 1.375 | | 1.375 | | | | 1.375 | | | 118 | 766 |
| ~~31~~ | ~~LONGMIRE PROPERTIES, LLC~~ | ~~021~~ | ~~010.03~~ | ~~2206~~ | ~~1092~~ | ~~3.814~~ | | ~~3.814~~ | | | | ~~3.814~~ | | | | |
| ~~32~~ | ~~KALPESH D. PARIKH AND WIFE, JAGRUTI PARIKH~~ | ~~021~~ | ~~010.02~~ | ~~20020628~~ | ~~0106880~~ | ~~9.888~~ | | ~~9.888~~ | | | | ~~9.888~~ | | | | |
| ~~33~~ | ~~CHARLES E. SILCOX ETAL~~ | ~~021~~ | ~~064~~ | ~~2275~~ | ~~720~~ | | ~~1.147~~ | ~~1.147~~ | | | | | ~~1.147~~ | | | |
| ~~34~~ | ~~EDWARD SANCHEZ AND WIFE, MARGARET SANCHEZ~~ | ~~021~~ | ~~010~~ | ~~1804~~ | ~~632~~ | ~~0.934~~ | | ~~0.934~~ | | | | ~~0.934~~ | | | | |
| 35 | JOANNE M. HIBBS | 021 | 065.01 | 20011022 | 0031103 | | 1.363 | 1.363 | | | | | 1.363 | | | |
| 36 | PATRICIA G. LETT | 021 | 009 | 20070306 | 0071829 | 0.492 | | 0.492 | | | | 0.492 | | | 231 | 991 |
| ~~37~~ | ~~SOUTHEASTERN CONSORTIUM PROPERTIES CORRYTON, LLC~~ | ~~021~~ | ~~065~~ | ~~20041119~~ | ~~0042039~~ | | ~~0.996~~ | ~~0.996~~ | | | | | ~~0.996~~ | | | |
| 38 | JAMES HARRY LETT AND WIFE, PATRICIA GRAVES LETT | 021 | 008 | 2237 | 1084 | 0.528 | | 0.528 | | | | 0.528 | | | 101 | 819 |
| 39 | LARRY D. HOWERTON | 021 | 102 | 2060 | 1153 | 1.935 | | 1.935 | 0.109 | | 0.109 | 1.826 | | | | |
| 40 | FRED BRIGHT, JR. | 021 | 066 | WB35 | 995 | | 22.399 | 22.399 | | 616 S.F. | 616 S.F. | | 22.385 | | | 1278 |
| ~~41~~ | ~~CARL E. ROGERS AND WIFE, GEORGIA E. ROGERS~~ | ~~021~~ | ~~101~~ | ~~1351~~ | ~~810~~ | ~~1.420~~ | | ~~1.420~~ | | | | ~~1.420~~ | | | | |
| 42 | THEODORE G. WYRICK AND WIFE DOROTHY JENE WYRICK | 021 | 072 | 984 | 261 | | 1.921 | 1.921 | | | | | 1.921 | | | 499 |
| ~~43~~ | ~~LONGMIRE PROPERTIES, LLC~~ | ~~021~~ | ~~003.03~~ | ~~20090911~~ | ~~0019087~~ | ~~5.258~~ | | ~~5.258~~ | | | | ~~5.258~~ | | | | |
| ~~44~~ | ~~RALPH EDWARD TALLENT AND WIFE, BRENDA M. TALLENT~~ | ~~021~~ | ~~073~~ | ~~1629~~ | ~~449~~ | | ~~2.848~~ | ~~2.848~~ | | | | | ~~2.848~~ | | | |
| ~~45~~ | ~~LONGMIRE PROPERTIES, LLC~~ | ~~021~~ | ~~003.02~~ | ~~20090911~~ | ~~0019088~~ | ~~6.787~~ | | ~~6.787~~ | | | | ~~6.787~~ | | | | |
| ~~46~~ | ~~JAY DIRK WEDDINGTON AND WIFE, DEBRA P. WEDDINGTON~~ | ~~021~~ | ~~074~~ | ~~2052~~ | ~~718~~ | | ~~5.244~~ | ~~5.244~~ | | | | | ~~5.244~~ | | | |
| 39S | LARRY D. HOWERTON | | | | | 1.826 | | 1.826 | 252 S.F. | | 252 S.F. | 1.820 | | | | |

① USED FOR CONSTRUCTION OF SLOPES, TRAFFIC CONTROL RUN-A-ROUND OR FOR EPSC MEASURES

REV. 3-5-2012: CHANGED AREA TO BE ACQUIRED AND AREA REMAINING ON TR. NO. 39.

REV. 4-19-2012: CHANGED CONST. EASEM'T. AND SLOPE EASEM'T. ON TR. NO. 20.

REV. 6-18-2012: CHANGED CONST. EASEM'T. AND SLOPE EASEM'T. ON TR. NO. 15.

REV. 9-19-2012: CHANGED CONST. EASEM'T. ON TR. NO. 19. CHANGED AREA TO BE ACQUIRED, AREA REMAINING, CONST. EASEM'T. AND SLOPE EASEM'T. ON TR. NO. 24.

REV. 9-26-2013: CHANGED AREA TO BE ACQUIRED, AREA REMAINING, SLOPE EASEM'T. AND CONST. EASEM'T. ON TR. NOS. 19,20,22 & 23. CHANGED DRAINAGE EASM'T. ON TR. NO. 22. ADDED TR. NO. 39S.

REV. 1-28-2014: CORRECTED PERMINENT DRAINAGE, SLOPE, AND CONSTRUCTION EASEMENTS ON TR. NO. 22.

REV. 5-09-2014: CORRECTED SLOPE EASEMENTON TR. NO. 20.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

SHANE M. HESTER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 110114
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY ACQUISITION TABLE

6-JUN-2014 17:26
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 3A |
| CONST. | 2014 | STP-331 (6) | 3A |
| | | | |
| | | | |

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

## RIGHT - OF - WAY NOTES

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

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

(3) 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.

(4) 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.

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

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

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

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

## UTILITIES

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

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

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

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

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

UTILITY OWNERS

SEWER
HALLSDALE-POWELL UTILITY DISTRICT
P.O. BOX 5199
KNOXVILLE, TN 37928-0199
DARREN CARDWELL
PHONE: 865-922-7547

WATER
NORTHEAST KNOX UTILITY DISTRICT
7214 WASHINGTON PIKE
CORRYTON, TN 37721
PHONE: 865-607-5957
RONNIE HILLARD

ELECTRIC
K.U.B.
P.O. BOX 59017
KNOXVILLE, TN 37950-9017
GABRIEL BOLAS
PHONE: 865-558-2100

TELEPHONE
AT&T
9733 PARKSIDE DRIVE
KNOXVILLE, TN 37922
J.T. POPE
PHONE: 865-539-8534

CABLE
COMCAST
5720 ASHEVILLE HWY
KNOXVILLE, TN 37924
RICHARD PHILIPS
PHONE: 865-862-5060

GAS
K.U.B.
P.O. BOX 59017
KNOXVILLE, TN 37950-9017
GABRIEL BOLAS
PHONE: 865-558-2100

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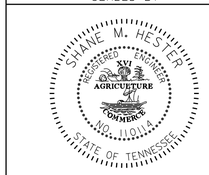


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY ACQUISITION TABLE

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

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 3B |
| CONST. | 2014 | STP-331 (6) | 3B |
| | | | |
| | | | |

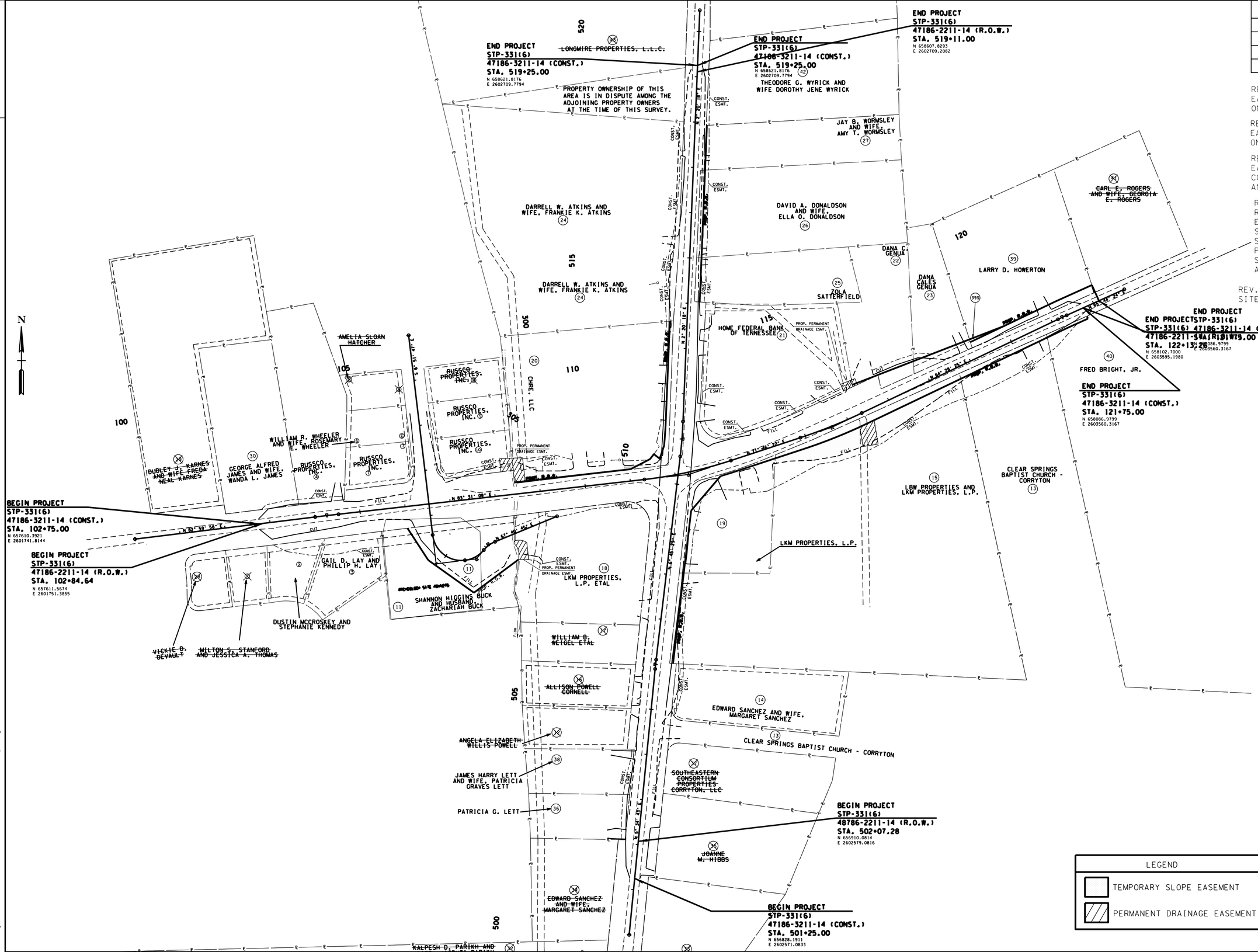
REV. 4-19-2012: CHANGED CONST. EASEM'T. AND SLOPE EASEM'T. ON TR. NO. 20.

REV. 6-18-2012: CHANGED CONST. EASEM'T. AND SLOPE EASEM'T. ON TR. NO. 15.

REV. 9-19-2012: CHANGED CONST. EASEM'T. ON TR. NO. 19. CHANGED CONST. EASM'T., SLOPE EASM'T. AND PROP. R.O.W. ON TR. NO. 24.

REV. 9-26-2013: CHANGED PROPOSED R.O.W., SLOPE EASM'T. AND CONST. EASM'T. IN NORTHWEST CORNER AND SOUTHEAST CORNER OF SR-331 AND SR-131 INTERSECTION. ADJUSTED PROP. R.O.W. STA. 116+42.44 TO STA. 119+99.92(LT). ADDED TR. NO. 39S.

REV. 11-01-2013: ADDED ARCHEOLOGICAL SITE BOUNDARY ON TR. NO. 11.

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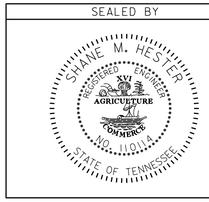


LEGEND

- TEMPORARY SLOPE EASEMENT
- PERMANENT DRAINAGE EASEMENT

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY MAP

SCALE: 1"=100'

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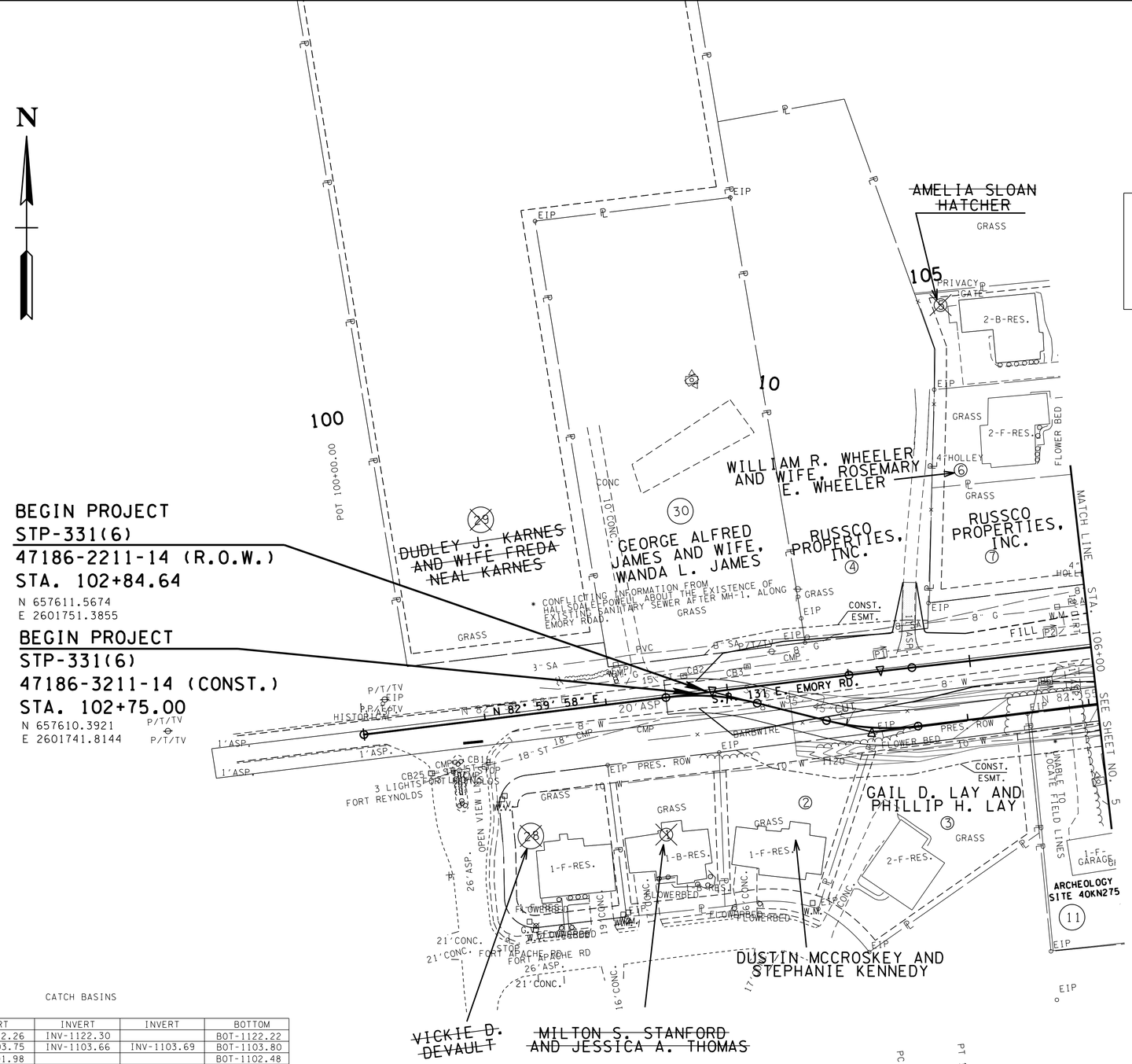
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 4 |
| CONST. | 2014 | STP-331 (6) | 4 |
| | | | |
| | | | |

REV. 11-01-2013: ADDED ARCHEOLOGICAL SITE BOUNDARY ON TR. NO. 11.




Note:
Ground temporarily disturbed for the Traffic Control run-around is to be restored to prior state when temporary run-around is removed. Cost of removal to included in the cost of Road and Drainage excavation.

CATCH BASINS

| CB | TOP | INVERT | INVERT | INVERT | BOTTOM |
|---|---|---|---|---|---|
| B1 | 1125.75 | INV-1122.26 | INV-1122.30 | | BOT-1122.22 |
| B4 | 1107.40 | INV-1103.75 | INV-1103.66 | INV-1103.69 | BOT-1103.80 |
| B5 | 1108.81 | INV-1101.98 | | | BOT-1102.48 |
| B6 | 1107.94 | INV-1105.68 | INV-1105.66 | | BOT-1105.67 |
| B7 | 1108.11 | INV-1106.99 | | | BOT-1106.92 |
| B8 | 1107.95 | INV-1106.18 | | | BOT-1107.88 |
| B9 | 1110.39 | INV-1104.95 | | | BOT-1104.96 |
| B10 | 1111.16 | INV-1109.83 | | | BOT-1109.87 |
| B11 | 1110.72 | INV-1106.62 | INV-1108.42 | | BOT-1106.57 |
| B12 | 1110.56 | INV-1108.40 | INV-1108.51 | | BOT-1108.53 |
| B13 | 1110.85 | INV-1109.29 | | | BOT-1109.58 |
| B14 | 1113.77 | INV-1111.59 | | | BOT-1111.55 |
| B15 | 1098.66 | INV-1096.77 | INV-1096.30 | INV-1096.18 | BOT-1095.55 |
| B16 | 1100.56 | INV-1098.24 | | | BOT-1098.23 |
| B17 | 1099.22 | INV-1094.92 | | | BOT-1095.62 |
| B19 | 1099.37 | INV-1093.88 | | | BOT-1093.83 |
| B20 | 1099.58 | INV-1093.18 | INV-1093.13 | | BOT-1093.15 |
| B21 | 1098.17 | INV-1090.16 | | | BOT-1090.17 |
| B22 | 1099.12 | INV-1090.25 | INV-1090.33 | | BOT-1090.26 |
| B24 | 1082.87 | INV-1081.58 | | | BOT-1081.54 |
| B25 | 1125.69 | INV-1122.66 | | | BOT-1122.77 |

CURVE EMORYCURVE*1
PI 104+26.37
N 657,628.8402
E 2,601,892.0513
Δ 0° 31' 09" (RT)
D 1° 00' 00"
R 5,730.00
L 51.93
T 25.96
SE N.C.
DESIGN SPEED 45 MPH

LEGEND
TEMPORARY SLOPE EASEMENT
PERMANENT DRAINAGE EASEMENT

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

SEALED BY
SHANE M. HESTER
REGISTERED ENGINEER
AGRICULTURE COMMERCE
NO. 110014
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PRESENT LAYOUT
# EMORY ROAD
STA.102+75.00 TO STA.106+00.00
SCALE: 1"= 50'

16-JUN-2014 17:28
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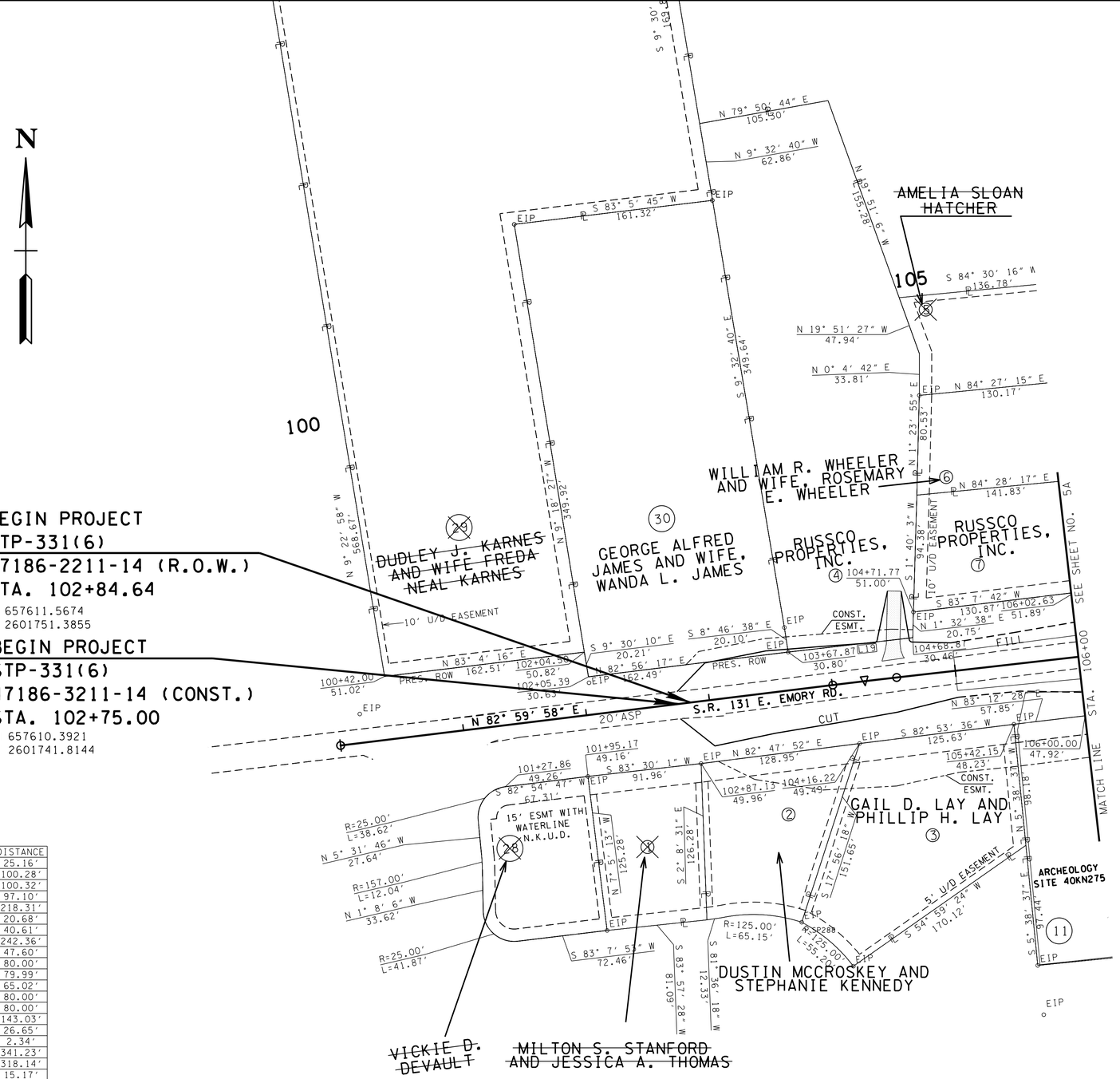
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 4A |
| CONST. | 2014 | STP-331 (6) | 4A |
| | | | |
| | | | |

REV. 11-01-2013: ADDED ARCHEOLOGICAL SITE BOUNDARY ON TR. NO. 11.




| LINE | BEARING | DISTANCE |
|---|---|---|
| L1 | S 5°01'59" W | 25.16' |
| L2 | N 5°40'12" E | 100.28' |
| L3 | S 5°40'12" W | 100.32' |
| L4 | N 5°52'28" E | 97.10' |
| L5 | S 5°46'38" W | 218.31' |
| L6 | N 2°38'36" E | 20.68' |
| L6A | N 2°38'36" E | 40.61' |
| L7 | N 82°54'08" E | 242.36' |
| L8 | N 9°13'07" E | 47.60' |
| L9 | S 6°55'37" E | 80.00' |
| L10 | S 6°55'37" E | 79.99' |
| L11 | S 7°02'07" W | 65.02' |
| L12 | S 7°02'07" W | 80.00' |
| L13 | S 7°02'07" W | 80.00' |
| L14 | N 83°01'02" E | 143.03' |
| L15-A | N 5°34'35" W | 26.65' |
| L15-B | N 5°34'35" W | 2.34' |
| L16 | S 83°08'29" W | 341.23' |
| L17 | S 2°07'17" W | 318.14' |
| L18 | S 89°01'45" E | 15.17' |
| L19 | S 83°24'39" W | 101.27' |
| L20 | S 6°03'27" W | 210.23' |
| L21 | N 82°41'13"W | 13.73' |
| L22 | S 9°55'11" W | 186.96' |
| L23 | S 6°07'22" W | 88.81' |
| L24 | N 67°55'56" E | 86.66' |
| L25 | N 65°40'56" E | 357.55' |
| L26-A | N 86°36'28" W | 11.70' |
| L26-B | N 86°36'28" W | 13.99' |
| L27 | S 70°36'15" W | 43.65' |
| L28 | S 65°10'39" W | 94.90' |
| L29 | S 65°09'44" W | 61.54' |
| L30-A | S 12°23'34" E | 18.07' |
| L30-B | S 12°23'34" E | 12.99' |
| L31 | N 65°41'20" E | 79.97' |
| L32 | N 65°51'55" E | 140.54' |
| L33 | N 2°54'54" E | 96.81' |

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

LEGEND

- TEMPORARY SLOPE EASEMENT
- PERMANENT DRAINAGE EASEMENT

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# R.O.W. DETAILS EMORY ROAD

STA.102+75.00 TO STA.106+00.00

SCALE: 1"= 50'

16-JUN-2014 17:28
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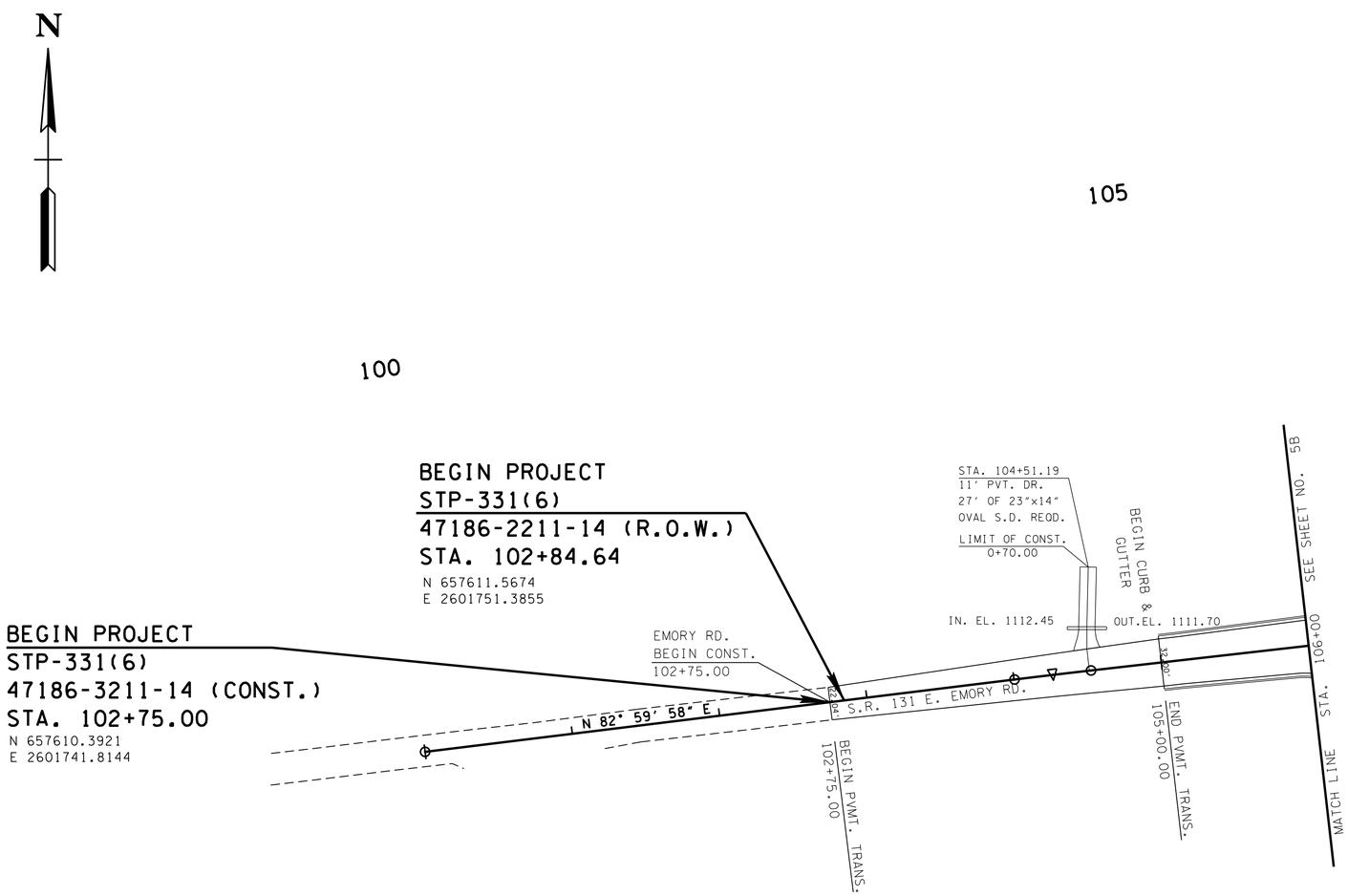
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 4B |
| CONST. | 2014 | STP-331 (6) | 4B |
| | | | |
| | | | |

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




**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PROPOSED LAYOUT EMORY ROAD

STA.102+75.00 TO STA.106+00.00

SCALE: 1"= 50'

6-JUN-2014 17:28
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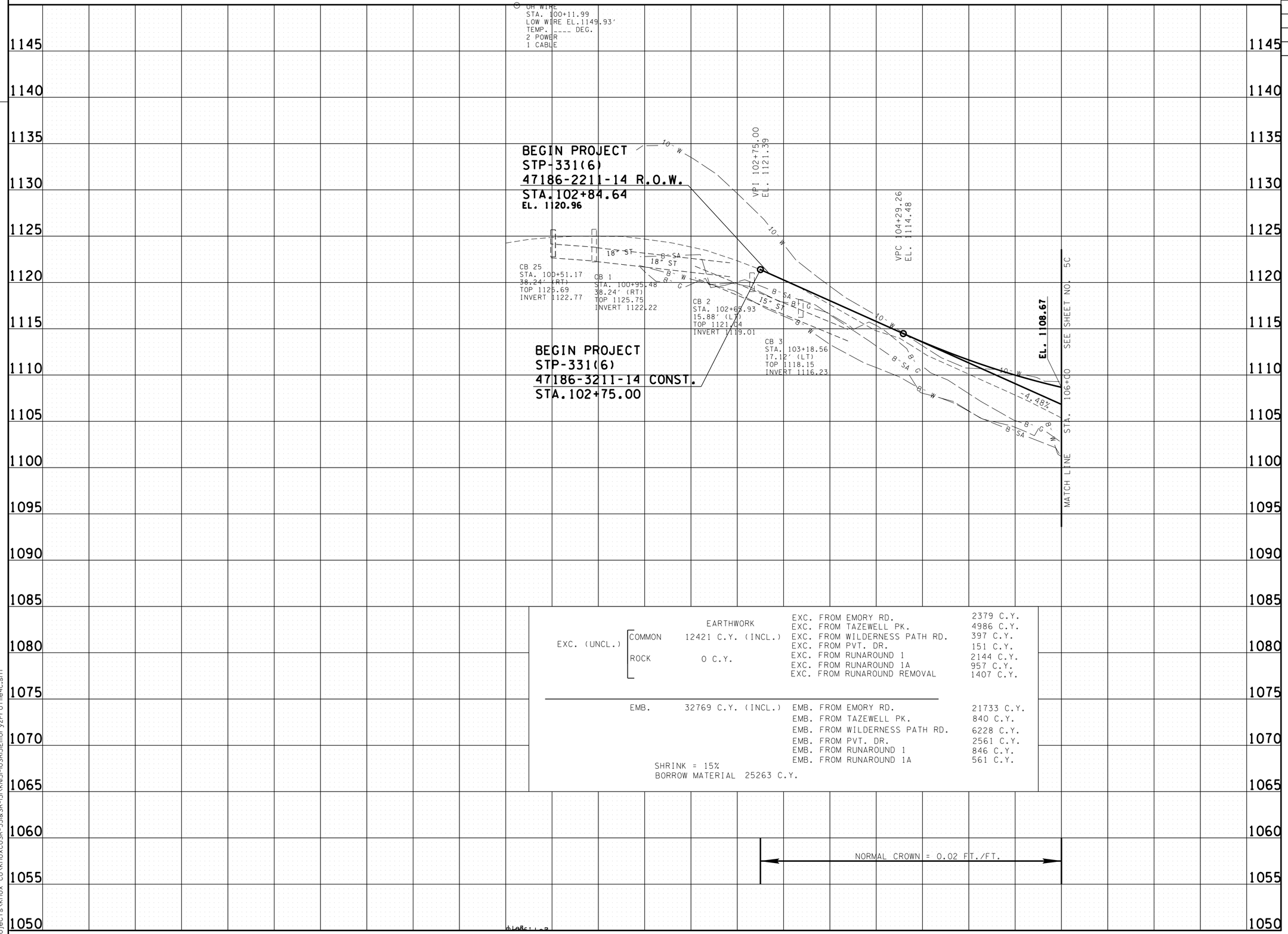
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 4C |
| CONST. | 2014 | STP-331 (6) | 4C |



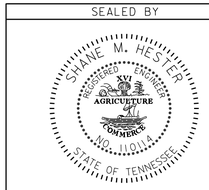

| | | | | |
|---|---|---|---|---|
| EXC. (UNCL.) | COMMON | EARTHWORK 12421 C.Y. (INCL.) | EXC. FROM EMORY RD. | 2379 C.Y. |
| | | | EXC. FROM TAZEWELL PK. | 4986 C.Y. |
| | | | EXC. FROM WILDERNESS PATH RD. | 397 C.Y. |
| | | | EXC. FROM PVT. DR. | 151 C.Y. |
| | ROCK | 0 C.Y. | EXC. FROM RUNAROUND 1 | 2144 C.Y. |
| | | | EXC. FROM RUNAROUND 1A | 957 C.Y. |
| | | | EXC. FROM RUNAROUND REMOVAL | 1407 C.Y. |
| EMB. | | 32769 C.Y. (INCL.) | EMB. FROM EMORY RD. | 21733 C.Y. |
| | | | EMB. FROM TAZEWELL PK. | 840 C.Y. |
| | | | EMB. FROM WILDERNESS PATH RD. | 6228 C.Y. |
| | | | EMB. FROM PVT. DR. | 2561 C.Y. |
| | | | EMB. FROM RUNAROUND 1 | 846 C.Y. |
| | | | EMB. FROM RUNAROUND 1A | 561 C.Y. |

SHRINK = 15%
BORROW MATERIAL 25263 C.Y.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY




STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PROFILE
# EMORY ROAD

STA.102+75.00 TO
STA.106+00.00

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

6-JUN-2014 17:28
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 5 |
| CONST. | 2014 | STP-331 (6) | 5 |
| | | | |
| | | | |

REV. 3-5-2012: REMOVED PVT. DR. TO TR. NO. 22.

REV. 4-20-2012: ADJUSTED SLOPE EASEM'T. AND CONST. EASEM'T. ON TR. NO. 20.

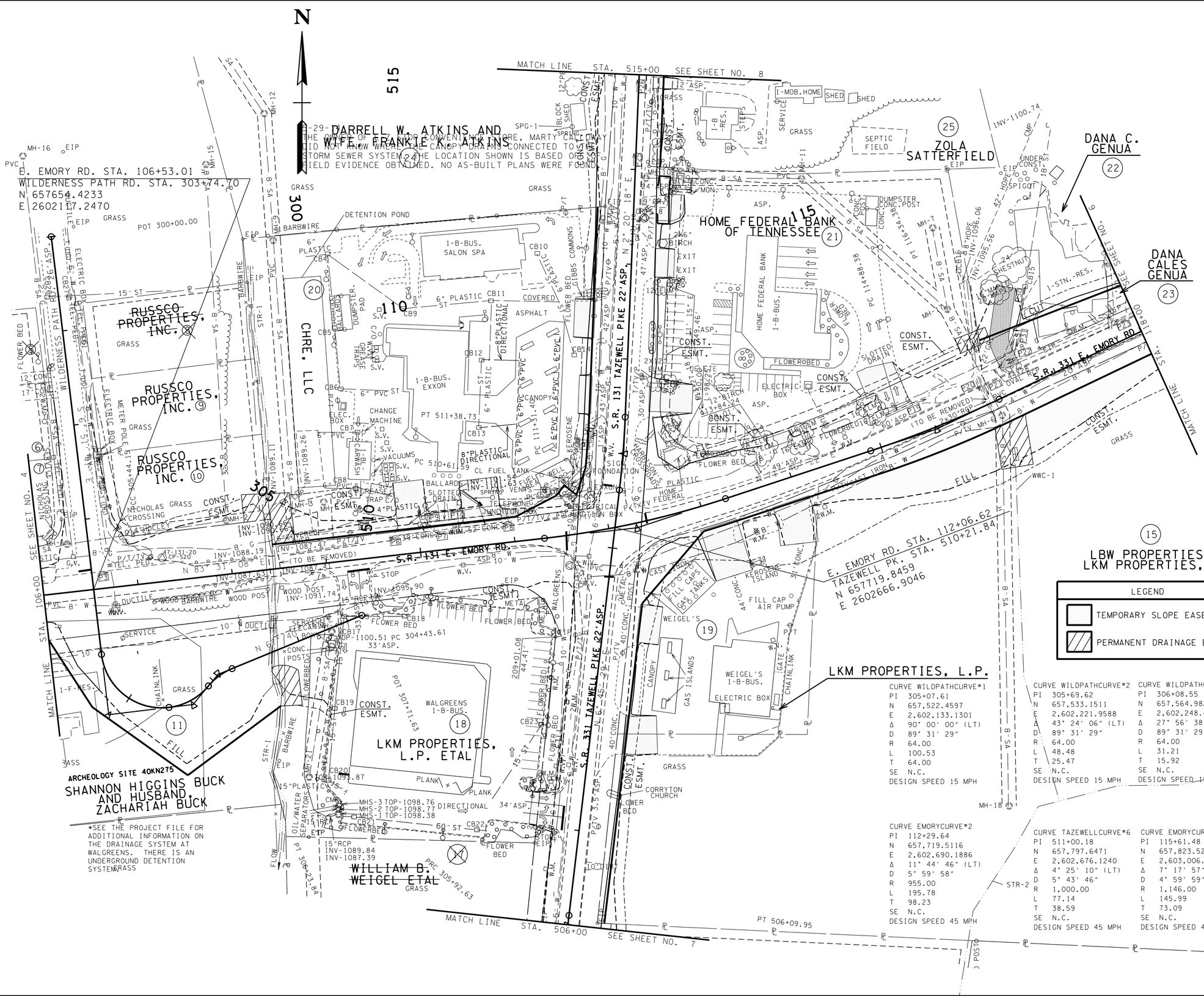
REV. 6-18-2012: ADJUSTED SLOPE EASEM'T. AND CONST. EASEM'T. ON TR. NO. 15.

REV. 9-19-2012: ADJUSTED CONST. EASEM'T. ON TR. NO. 19. TIED BUSINESS ENT. INTO CAR WASH ON TR. NO. 20. CHANGED CONST. EASM'T., SLOPE EASM'T. AND PROP. R.O.W. ON TR. NO. 24. ADDED ADDITIONAL SURVEY INFO. ADJUSTED WIDTH OF PVT. DRIVE STA. 113+91.51.

REV. 10-31-2012: MOVED BUSINESS ENTRANCE STA. 511+71.24 TO STA. 511+60.85.

REV. 9-26-2013: CORRECTED LABEL OF 8" GAS LINE ON NORTH SIDE OF EMORY ROAD. CHANGED PROPOSED R.O.W., SLOPE EASM'T. AND CONST. EASM'T. IN NORTHWEST CORNER AND SOUTHEAST CORNER OF SR-331 AND SR-131 INTERSECTION. ADJUSTED PROP. R.O.W. STA. 116+42.44 TO STA. 118+00(LT). ADDED PVT. DRIVE TO TR. NO. 22.

REV. 11-01-2013: ADDED ARCHEOLOGICAL SITE BOUNDARY TO TR. NO. 11.




15

LBW PROPERTIES AN LKM PROPERTIES, L.

| LEGEND |
|---|
| TEMPORARY SLOPE EASEMENT |
| PERMANENT DRAINAGE EASEMENT |

**UNOFFICIAL SET**

**NOT FOR BIDDING**

CURVE WILDPATHCURVE"1
PI 305+07.61
N 657,522.4597
E 2,602,133.1301
Δ 90° 00′ 00″ (LT)
D 89° 31′ 29″
R 64.00
L 100.53
T 64.00
SE N.C.
DESIGN SPEED 15 MPH

CURVE WILDPATHCURVE"2
PI 305+69.62
N 657,533.1511
E 2,602,221.9588
Δ 43° 24′ 06″ (LT)
D 89° 31′ 29″
R 64.00
L 48.48
T 25.47
SE N.C.
DESIGN SPEED 15 MPH

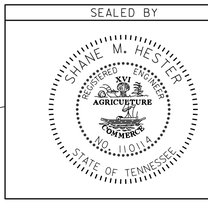
CURVE WILDPATHCURVE'
PI 306+08.55
N 657,564.9829
E 2,602,248.4192
Δ 27° 56′ 38″ (RT)
D 89° 31′ 29″
R 64.00
L 31.21
T 15.92
SE N.C.
DESIGN SPEED 15 MPH

CURVE EMORYCURVE"2
PI 112+29.64
N 657,719.5116
E 2,602,690.1886
Δ 11° 44′ 46″ (LT)
D 5° 59′ 58″
R 955.00
L 195.78
T 98.23
SE N.C.
DESIGN SPEED 45 MPH

CURVE TAZEWELLCURVE"6
PI 511+00.18
N 657,797.6471
E 2,602,676.1240
Δ 4° 25′ 10″ (LT)
D 5° 43′ 46″
R 1,000.00
L 77.14
T 38.59
SE N.C.
DESIGN SPEED 45 MPH

CURVE EMORYCURVE"3
PI 115+61.48
N 657,823.5230
E 2,603,006.0346
Δ 7° 17′ 57″ (LT)
D 4° 59′ 59″
R 1,146.00
L 145.99
T 73.09
SE N.C.
DESIGN SPEED 45 MPH

SEALED BY




COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PRESENT LAYOUT
# SR-331 @ SR-131

SCALE: 1"= 50'

06-JUN-2014 17:28
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 5A |
| CONST. | 2014 | STP-331 (6) | 5A |
| | | | |
| | | | |

REV. 3-5-2012: REMOVED PVT. DR. TO TR. NO. 22

REV. 4-20-2012: ADDED BEARING AND DISTANCE ON PROPERTY LINE IN DRAINAGE EASM'T. BETWEEN TR. NOS. 10 & 20 ALSO ON DRAINAGE EASM'T. BETWEEN TR. NOS. 11 & 18. ADJUSTED SLOPE EASEM'T. AND CONST. EASEM'T. ON TR. NO. 20.

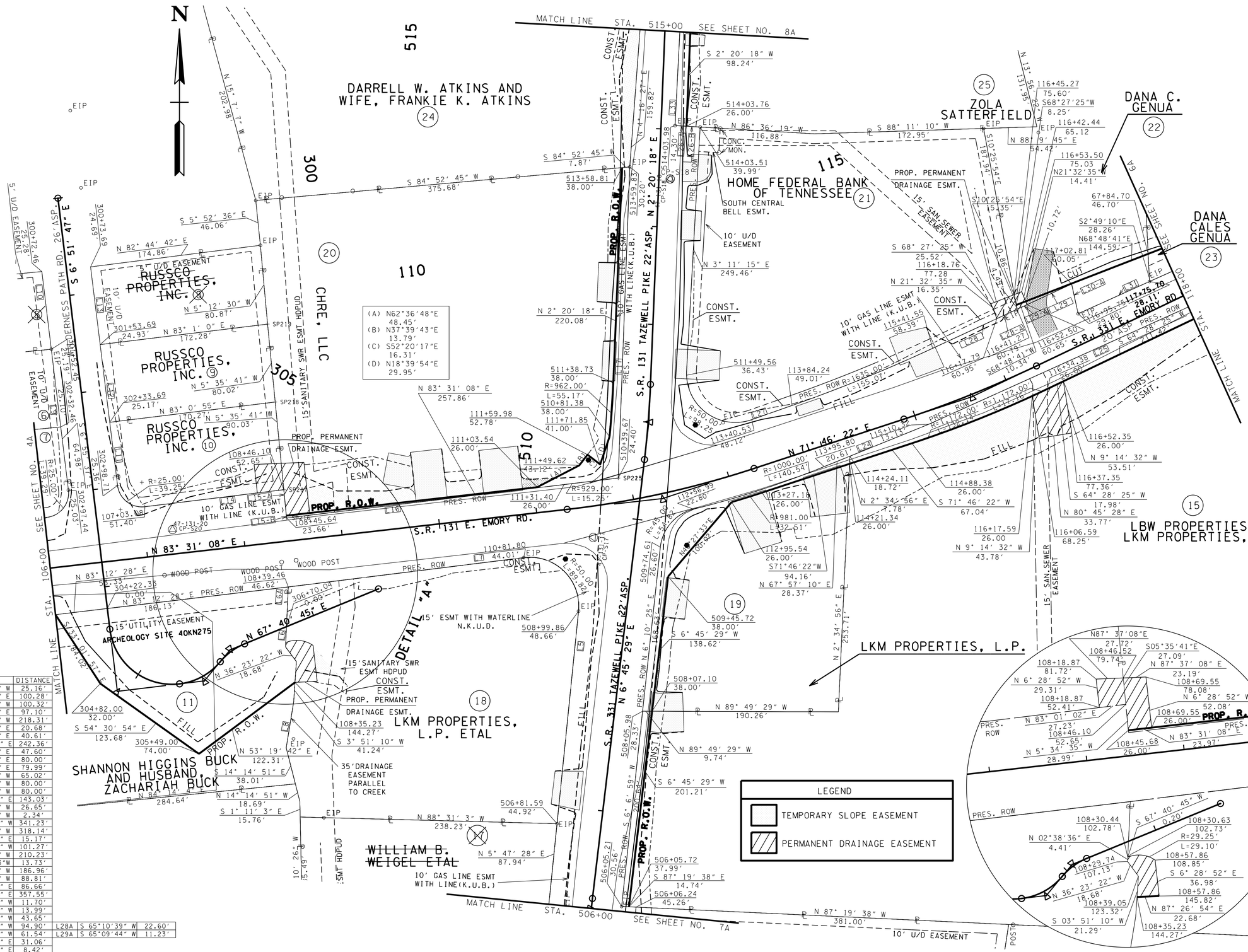
REV. 6-18-2012: CHANGED CONST EASM'T. AND SLOPE EASEM'T. ON TR. NO. 15.

REV. 9-19-2012: CORECTED BEARING ON PROPERTY LINE BETWEEN TR. NOS. 22 & 23. TIED BUSINESS ENTRANCE INTO CAR WASH ON TR. NO. 20. CHANGED CONST. EASM'T., SLOPE EASM'T. AND PROP. R.O.W. ON TR. NO. 24. ADJUSTED WIDTH OF PRIVATE DRIVE STA. 113+91.51.

REV. 10-31-2012: MOVED BUSINESS ENTRANCE STA. 511+71.24 TO STA. 511+60.85.

REV. 9-26-2013: CHANGED PROPOSED R.O.W., SLOPE EASM'T. AND CONST. EASM'T. IN NORTHWEST CORNER AND SOUTHEAST CORNER OF SR-331 AND SR-131 INTERSECTION. CORRECTED LABEL STA. 116+18.76 OFFSET 77.28' ON PROP. DRAINAGE EASM'T. ADJUSTED PROP. R.O.W. STA. 116+42.44 TO STA. 118+00(LT). ADDED PVT. DRIVE TO TR. NO. 22.

REV. 11-01-2013: ADDED DISTANCES ON TR. NO. 22 PROP.DRAINAGE EASEM'T. AND CHANGED LENGTH ON LINE L30-A TO 31.06. ADDED ARCHEOLOGICAL SITE BOUNDARY ON TR. NO. 11.




| LINE | BEARING | DISTANCE |
|---|---|---|
| L1 | S 5°01'59" W | 25.16' |
| L2 | N 5°40'12" E | 100.28' |
| L3 | S 5°40'12" W | 100.32' |
| L4 | N 5°52'28" E | 97.10' |
| L5 | S 5°46'38" W | 218.31' |
| L6 | N 2°38'36" E | 20.68' |
| L6A | N 2°38'36" E | 40.61' |
| L7 | N 82°54'08" E | 242.36' |
| L8 | N 9°13'07" E | 47.60' |
| L9 | S 6°55'37" E | 80.00' |
| L10 | S 6°55'37" E | 79.99' |
| L11 | S 7°02'07" W | 65.02' |
| L12 | S 7°02'07" W | 80.00' |
| L13 | S 7°02'07" W | 80.00' |
| L14 | N 83°01'02" E | 143.03' |
| L15-A | N 5°34'35" W | 26.65' |
| L15-B | N 5°34'35" W | 2.34' |
| L16 | S 83°08'29" W | 341.23' |
| L17 | S 2°07'17" W | 318.14' |
| L18 | S 89°01'45" E | 15.17' |
| L19 | S 83°24'39" W | 101.27' |
| L20 | S 6°03'27" W | 210.23' |
| L21 | N 82°41'13"W | 13.73' |
| L22 | S 9°55'11" W | 186.96' |
| L23 | S 6°07'22" W | 88.81' |
| L24 | N 67°55'56" E | 86.66' |
| L25 | N 65°40'56" E | 357.55' |
| L26-A | N 86°36'28" W | 11.70' |
| L26-B | N 86°36'28" W | 13.99' |
| L27 | S 70°36'15" W | 43.65' |
| L28 | S 65°10'39" W | 94.90' |
| L29 | S 65°09'44" W | 61.54' |
| L30-A | S 12°23'34" E | 31.06' |
| L30-B | S 12°23'34" E | 8.42' |
| L31 | N 65°41'20" E | 79.97' |
| L32 | N 65°51'55" E | 140.54' |
| L33 | N 2°54'54" E | 96.81' |
| L28A | S 65°10'39" W | 22.60' |
| L29A | S 65°09'44" W | 11.23' |

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

SHANE M. HESTER
REGISTERED ENGINEER
XVI
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COMMERCE
NO. 110014
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# RIGHT-OF-WAY DETAILS
# SR-331 @ SR-131

16-JUN-2014 17:28
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 5B |
| CONST. | 2014 | STP-331 (6) | 5B |
| | | | |
| | | | |

NOTE:
1) GRADE AREA BETWEEN BUSINESS ENTRANCES EMORY ROAD STA. 109+95.02 AND 110+68.48 TO LEVEL WITH DRIVEWAY ELEVATIONS.
2) CONTRACTOR NOT TO DISTURB PARKING AREA LIGHT STA. 113+20 (LT.) OF TAZEWELL PIKE DURING CONSTRUCTION OPERATIONS.
3) CONTRACTOR TO USE EXTREME CARE WHEN WORKING IN THE AREA OF FUEL DISPENSERS.
4) WORK IN THE VICINITY OF CAR WASH TO BE NIGHT WORK 9:00 PM TO 6:00 AM AND OPERATION OF CAR WASH TO NOT BE INTERUPTED.

NOTE:
RIP-RAP SHALL BE PLACED AS TO MIMIC THE EXISTING STREAM CHANNEL. THE TOP OF THE PROPOSED RIP-RAP SHALL BE AT GRADE WITH THE BOTTOM OF THE EXISTING STREAM CHANNEL. VOIDS WITHIN THE RIP-RAP SHALL BE FILLED WITH CREEK GRAVEL TO PREVENT LOSS OF STREAM WITHIN THE RIP-RAP AREAS. CREEK GRAVEL CAN BE REMOVED FROM THE CULVERT EXCAVATION AREA.

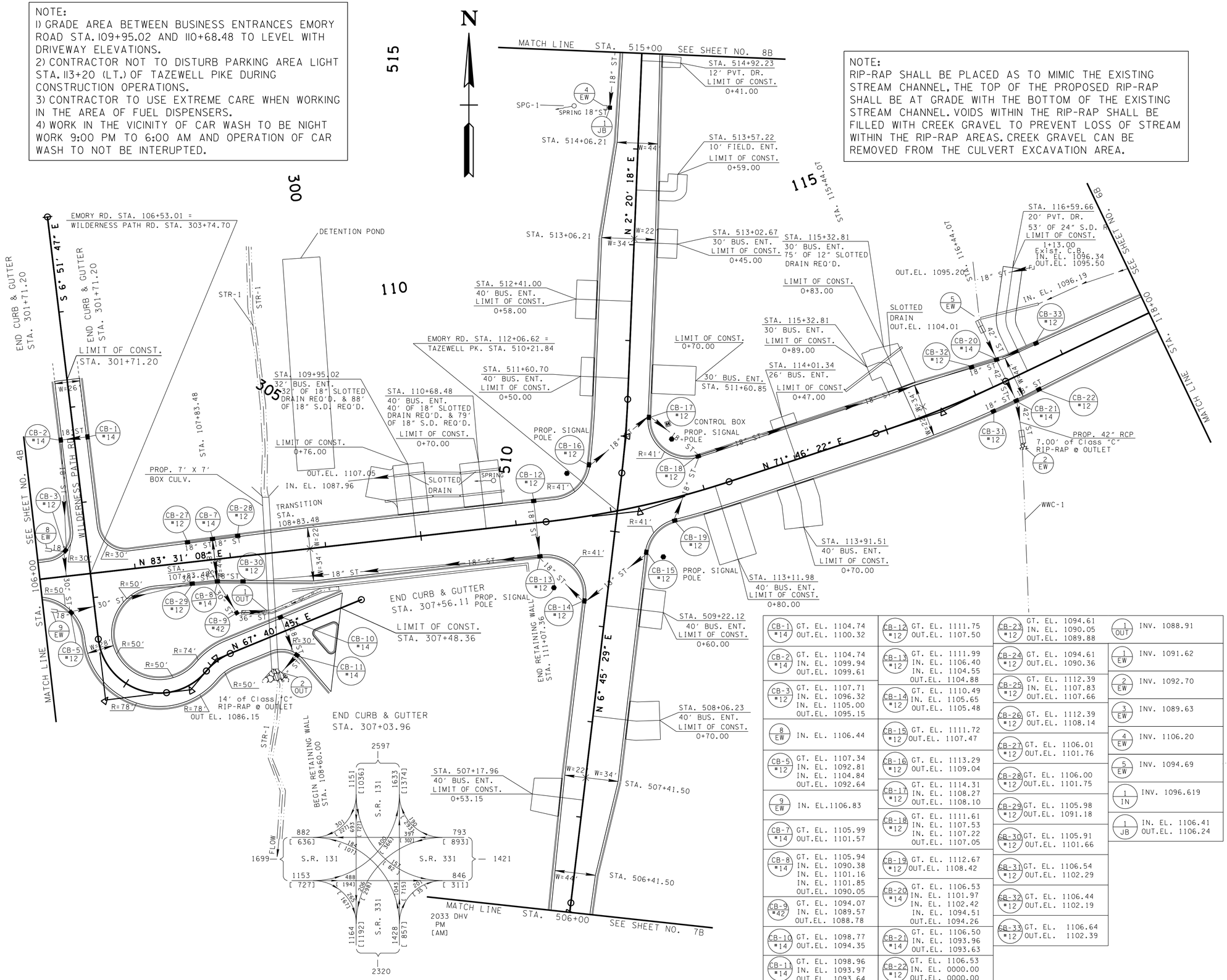
REV. 3-5-2012: REMOVED PVT. DRIVE STA. 116+59.66(LT.).

REV. 8-15-2012: TIED BUSINESS ENT. INTO CAR WASH STA. 109+95.02 (LT.). ADDED 18" S.D. TO BUSINESS ENT. STA'S. 109+95.02 & 110+68.48. ADDED NOTE CONCERNING NIGHT WORK. CHANGED WIDTH OF PVT. DRIVE STA. 113+91.51.

REV. 10-31-2012: MOVED BUSINESS ENTRANCE STA. 511+71.24 TO STA. 511+60.85.

REV. 9-26-2013: ADDED PVT. DRIVE STA. 116+59.66. ADDED FLANKING CB NOS. 22 AND 27 THRU 33.

REV. 11-01-2013: LABELED RIP-RAP @ CULVERT OUTLET AND REMOVED RIP-RAP AT INLET CULVERT STA. 108+40.18 AND STA. 116+35.63.




| | | | |
|---|---|---|---|
| CB-1 #14 | GT. EL. 1104.74 OUT.EL. 1100.32 | CB-12 #12 | GT. EL. 1111.75 OUT.EL. 1107.50 |
| CB-2 #14 | GT. EL. 1104.74 IN. EL. 1099.94 OUT.EL. 1099.61 | CB-13 #12 | GT. EL. 1111.99 IN. EL. 1106.40 IN. EL. 1104.55 OUT.EL. 1104.88 |
| CB-3 #12 | GT. EL. 1107.71 IN. EL. 1096.32 IN. EL. 1105.00 OUT.EL. 1095.15 | CB-14 #12 | GT. EL. 1110.49 IN. EL. 1105.65 OUT.EL. 1105.48 |
| 8 EW | IN. EL. 1106.44 | CB-15 #12 | GT. EL. 1111.72 OUT.EL. 1107.47 |
| CB-5 #12 | GT. EL. 1107.34 IN. EL. 1092.81 IN. EL. 1104.84 OUT.EL. 1092.64 | CB-16 #12 | GT. EL. 1113.29 OUT.EL. 1109.04 |
| 9 EW | IN. EL.1106.83 | CB-17 #12 | GT. EL. 1114.31 IN. EL. 1108.27 OUT.EL. 1108.10 |
| CB-7 #14 | GT. EL. 1105.99 OUT.EL. 1101.57 | CB-18 #12 | GT. EL. 1111.61 IN. EL. 1107.53 IN. EL. 1107.22 OUT.EL. 1107.05 |
| CB-8 #14 | GT. EL. 1105.94 IN. EL. 1090.38 IN. EL. 1101.16 IN. EL. 1101.85 OUT.EL. 1090.05 | CB-19 #12 | GT. EL. 1112.67 OUT.EL. 1108.42 |
| CB-9 #42 | GT. EL. 1094.07 IN. EL. 1089.57 OUT.EL. 1088.78 | CB-20 #14 | GT. EL. 1106.53 IN. EL. 1101.97 IN. EL. 1102.42 IN. EL. 1094.51 OUT.EL. 1094.26 |
| CB-10 #14 | GT. EL. 1098.77 OUT.EL. 1094.35 | CB-21 #14 | GT. EL. 1106.50 IN. EL. 1093.96 OUT.EL. 1093.63 |
| CB-11 #14 | GT. EL. 1098.96 IN. EL. 1093.97 OUT.EL. 1093.64 | CB-22 #12 | GT. EL. 1106.53 IN. EL. 0000.00 OUT.EL. 0000.00 |

| | | | |
|---|---|---|---|
| CB-23 #12 | GT. EL. 1094.61 IN. EL. 1090.05 OUT.EL. 1089.88 | 1 OUT | INV. 1088.91 |
| CB-24 #12 | GT. EL. 1094.61 OUT.EL. 1090.36 | 1 EW | INV. 1091.62 |
| CB-25 #12 | GT. EL. 1112.39 IN. EL. 1107.83 OUT.EL. 1107.66 | 2 EW | INV. 1092.70 |
| CB-26 #12 | GT. EL. 1112.39 OUT.EL. 1108.14 | 3 EW | INV. 1089.63 |
| CB-27 #12 | GT. EL. 1106.01 OUT.EL. 1101.76 | 4 EW | INV. 1106.20 |
| CB-28 #12 | GT. EL. 1106.00 OUT.EL. 1101.75 | 5 EW | INV. 1094.69 |
| CB-29 #12 | GT. EL. 1105.98 OUT.EL. 1091.18 | 1 IN | INV. 1096.619 |
| CB-30 #12 | GT. EL. 1105.91 OUT.EL. 1101.66 | 1 JB | IN. EL. 1106.41 OUT.EL. 1106.24 |
| CB-31 #12 | GT. EL. 1106.54 OUT.EL. 1102.29 | | |
| CB-32 #12 | GT. EL. 1106.44 OUT.EL. 1102.19 | | |
| CB-33 #12 | GT. EL. 1106.64 OUT.EL. 1102.39 | | |

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

SHANE M. HESTER
REGISTERED ENGINEER
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No. 116014
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PROPOSED LAYOUT SR-331 @ SR-131

SCALE: 1"= 50'

26-JUN-2014 17:28
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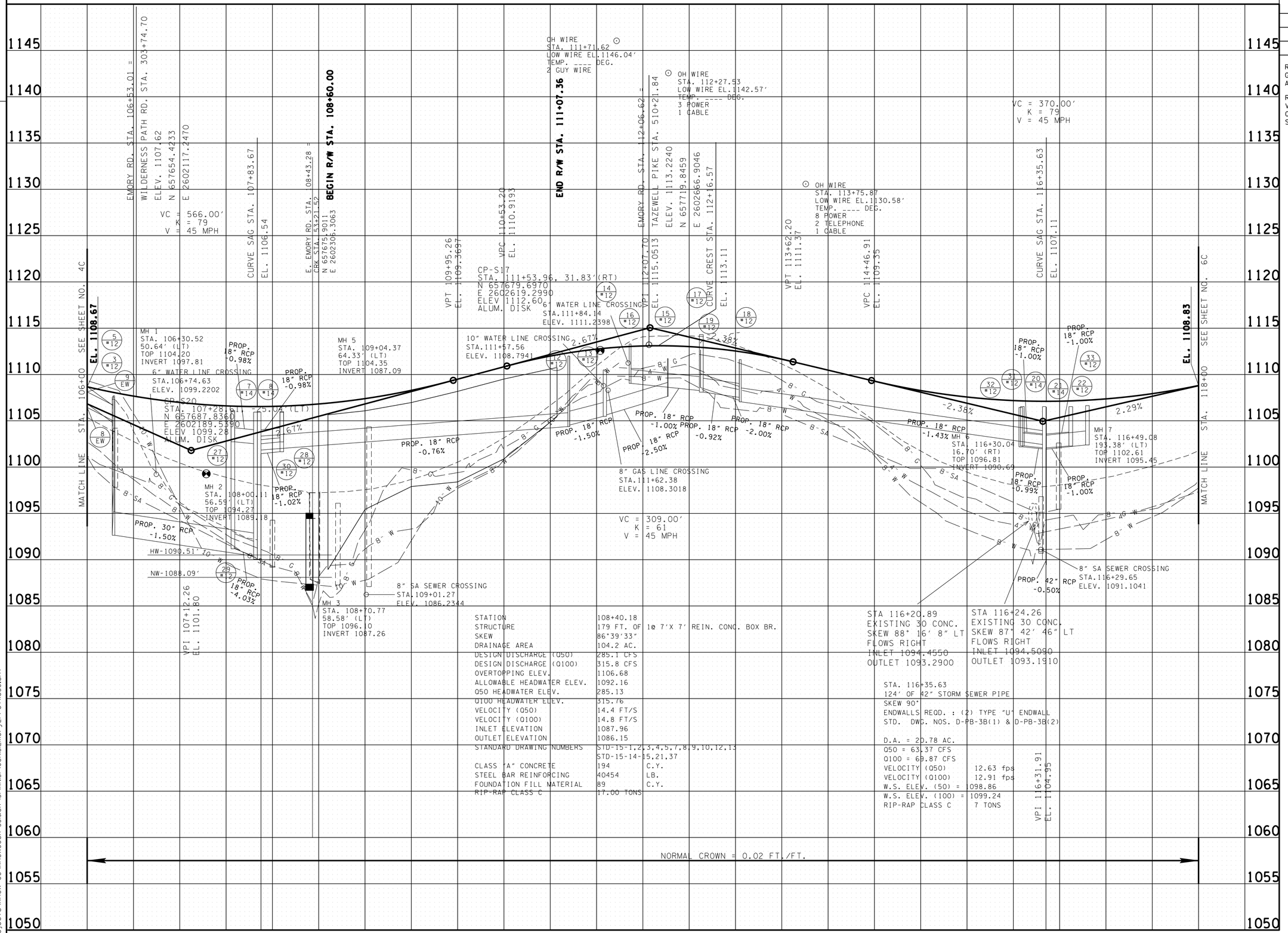
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 5C |
| CONST. | 2014 | STP-331(6) | 5C |

REV. 9-26-2013: CORRECTED LABEL OF 8" GAS LINE. ADDED FLANKER CB NOS. 22 AND 27 THRU 33.

REV. 11-01-2013: CORRECTED LENGTH AND VELOCITY STA. 108+40.18 AND RIP-RAP QUANTITY CULVERT STA. 108+40.18 AND STA. 116+35.65.




| STATION | 108+40.18 | |
|---|---|---|
| STRUCTURE | 179 FT. OF 10 7'X 7' REIN. CONC. BOX BR. | |
| SKEW | 86°39'33" | |
| DRAINAGE AREA | 104.2 AC. | |
| DESIGN DISCHARGE (Q50) | 285.1 CFS | |
| DESIGN DISCHARGE (Q100) | 315.8 CFS | |
| OVERTOPPING ELEV. | 1106.68 | |
| ALLOWABLE HEADWATER ELEV. | 1092.16 | |
| Q50 HEADWATER ELEV. | 285.13 | |
| Q100 HEADWATER ELEV. | 315.76 | |
| VELOCITY (Q50) | 14.4 FT/S | |
| VELOCITY (Q100) | 14.8 FT/S | |
| INLET ELEVATION | 1087.96 | |
| OUTLET ELEVATION | 1086.15 | |
| STANDARD DRAWING NUMBERS | STD-15-1,2,3,4,5,7,8,9,10,12,13 | |
| | STD-15-14-15,21,37 | |
| CLASS "A" CONCRETE | 194 | C.Y. |
| STEEL BAR REINFORCING | 40454 | LB. |
| FOUNDATION FILL MATERIAL | 89 | C.Y. |
| RIP-RAP CLASS C | 17.00 TONS | |

UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PROFILE
# EMORY ROAD

STA.106+00.00 TO
STA.118+00.00

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

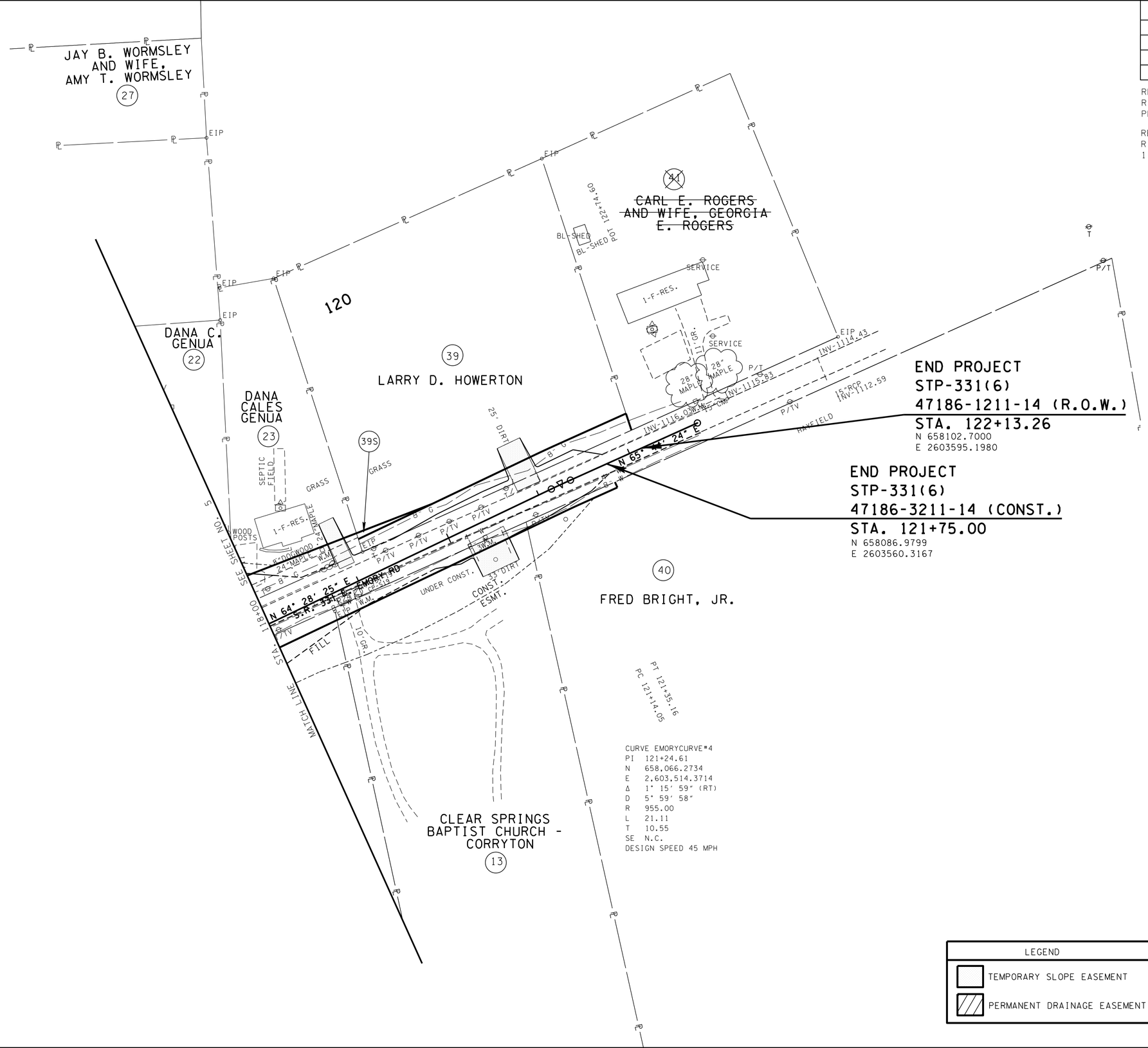
6-JUN-2014 17:28
C:\Projects\Knox Co\KnoxCoSR-33&SR-131\KN131-IOSR131Emory2Profile5C.sht

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

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 6 |
| CONST. | 2014 | STP-331 (6) | 6 |
| | | | |
| | | | |

REV. 3-5-2012: ADJUSTED PROP. R.O.W. ON TR. NO. 39. CHANGED END PROJ. (R.O.W.) TO STA. 122+13.26.

REV. 9-26-2013: ADJUSTED PROP. R.O.W. STA. 118+00 TO STA. 119+99.92(LT). ADDED TR. NO. 39S.




CURVE EMORYCURVE#4
PI 121+24.61
N 658,066.2734
E 2,603,514.3714
Δ 1° 15′ 59″ (RT)
D 5° 59′ 58″
R 955.00
L 21.11
T 10.55
SE N.C.
DESIGN SPEED 45 MPH

LEGEND
- TEMPORARY SLOPE EASEMENT
- PERMANENT DRAINAGE EASEMENT

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

SEALED BY
SHANE M. HESTER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 110114
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PRESENT LAYOUT EMORY ROAD

STA.118+00.00 TO STA.121+75.00

SCALE: 1"= 50'

06-JUN-2014 17:28
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

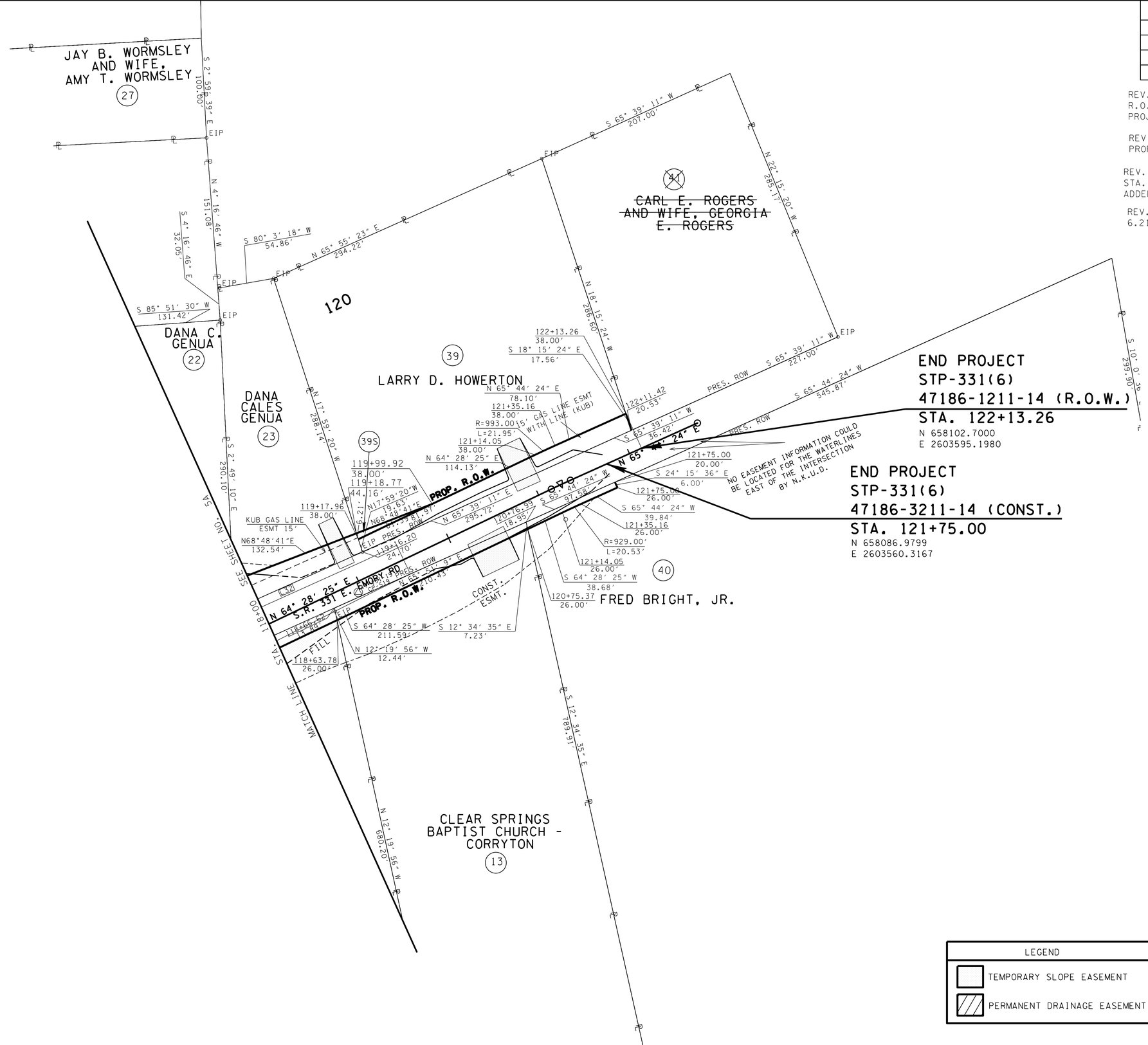
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 6A |
| CONST. | 2014 | STP-331 (6) | 6A |
| | | | |
| | | | |

REV. 3-5-2012: ADJUSTED PROP. R.O.W. ON TR. NO. 39. CHANGED END PROJ. (R.O.W.) TO STA. 122+13.26.

REV. 9-19-2012: CORECTED BEARING ON PROPOSED R.O.W. STA. 122+13.26(LT.).

REV. 9-26-2013: ADJUSTED PROP. R.O.W. STA. 118+00 TO STA. 119+99.92(LT). ADDED TR. NO. 39S.

REV. 11-01-2013: ADDED DISTANCE 6.21' ON TR. NO. 39S.




| LINE | BEARING | DISTANCE |
|---|---|---|
| L1 | S 5°01'59" W | 25.16' |
| L2 | N 5°40'12" E | 100.28' |
| L3 | S 5°40'12" W | 100.32' |
| L4 | N 5°52'28" E | 97.10' |
| L5 | S 5°46'38" W | 218.31' |
| L6 | N 2°38'36" E | 20.68' |
| L6A | N 2°38'36" E | 40.61' |
| L7 | N 82°54'08" E | 242.36' |
| L8 | N 9°13'07" E | 47.60' |
| L9 | S 6°55'37" E | 80.00' |
| L10 | S 6°55'37" E | 79.99' |
| L11 | S 7°02'07" W | 65.02' |
| L12 | S 7°02'07" W | 80.00' |
| L13 | S 7°02'07" W | 80.00' |
| L14 | N 83°01'02" E | 143.03' |
| L15-A | N 5°34'35" W | 26.65' |
| L15-B | N 5°34'35" W | 2.34' |
| L16 | S 83°08'29" W | 341.23' |
| L17 | S 2°07'17" W | 318.14' |
| L18 | S 89°01'45" E | 15.17' |
| L19 | S 83°24'39" W | 101.27' |
| L20 | S 6°03'27" W | 210.23' |
| L21 | N 82°41'13"W | 13.73' |
| L22 | S 9°55'11" W | 186.96' |
| L23 | S 6°07'22" W | 88.81' |
| L24 | N 67°55'56" E | 86.66' |
| L25 | N 65°40'56" E | 357.55' |
| L26-A | N 86°36'28" W | 11.70' |
| L26-B | N 86°36'28" W | 13.99' |
| L27 | S 70°36'15" W | 43.65' |
| L28 | S 65°10'39" W | 94.90' |
| L29 | S 65°09'44" W | 61.54' |
| L30-A | S 12°23'34" E | 18.07' |
| L30-B | S 12°23'34" E | 12.99' |
| L31 | N 65°41'20" E | 79.97' |
| L32 | N 65°51'55" E | 140.54' |
| L33 | N 2°54'54" E | 96.81' |

**UNOFFICIAL SET**

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SEALED BY

SHANE M. HESTER
REGISTERED ENGINEER
XVI
AGRICULTURE
COMMERCE
NO. 110111
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

LEGEND

TEMPORARY SLOPE EASEMENT

PERMANENT DRAINAGE EASEMENT

# R.O.W. DETAILS

STA.118+00.00 TO STA.121+75.00

SCALE: 1"= 50'

16-JUN-2014 17:28
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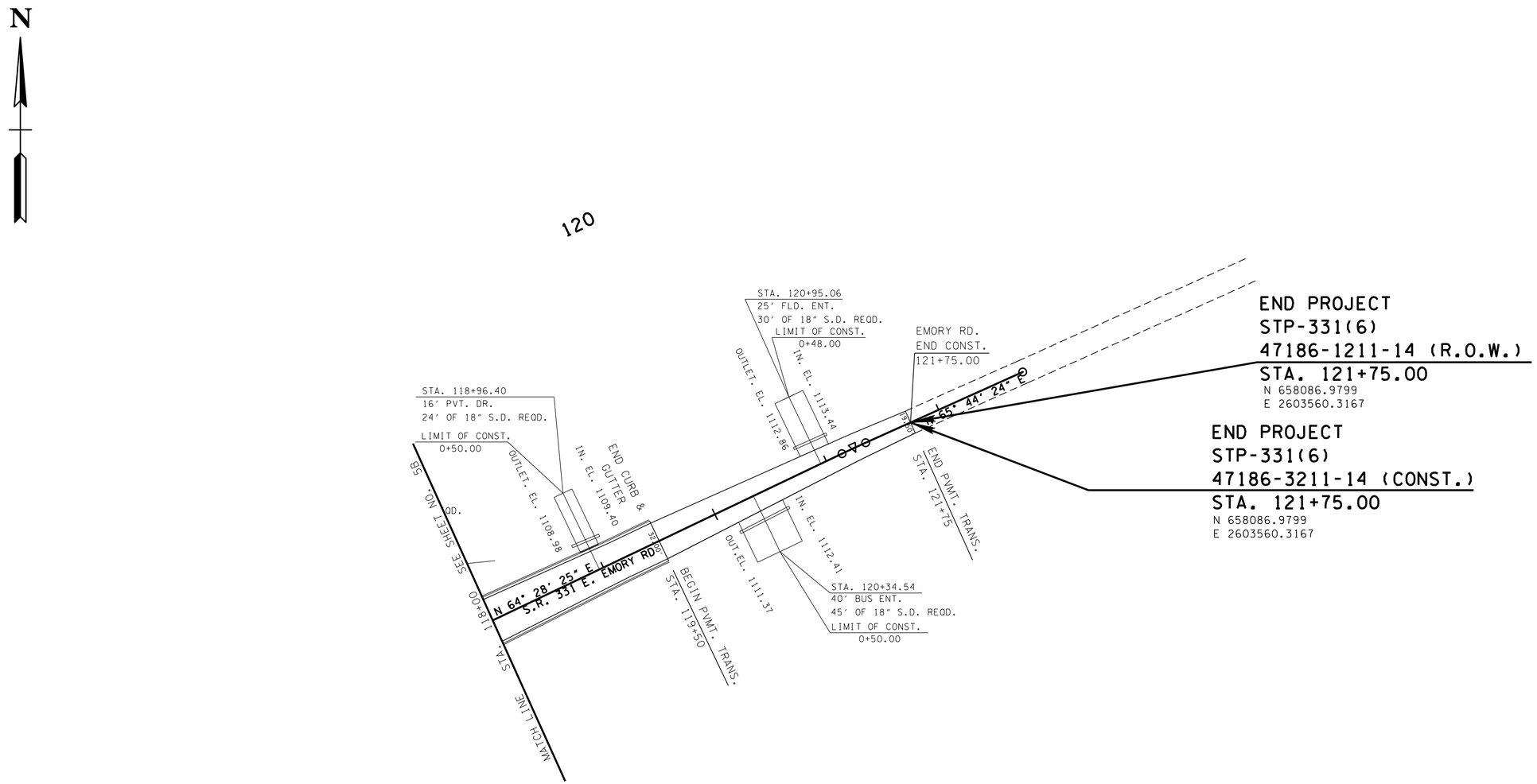
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 6B |
| CONST. | 2014 | STP-331 (6) | 6B |
| | | | |
| | | | |

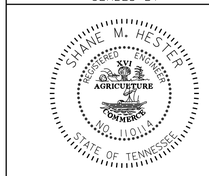
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.




**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PROPOSED LAYOUT EMORY ROAD

STA.118+00.00 TO
STA.121+75.00

SCALE: 1"= 50'

6-JUN-2014 17:28
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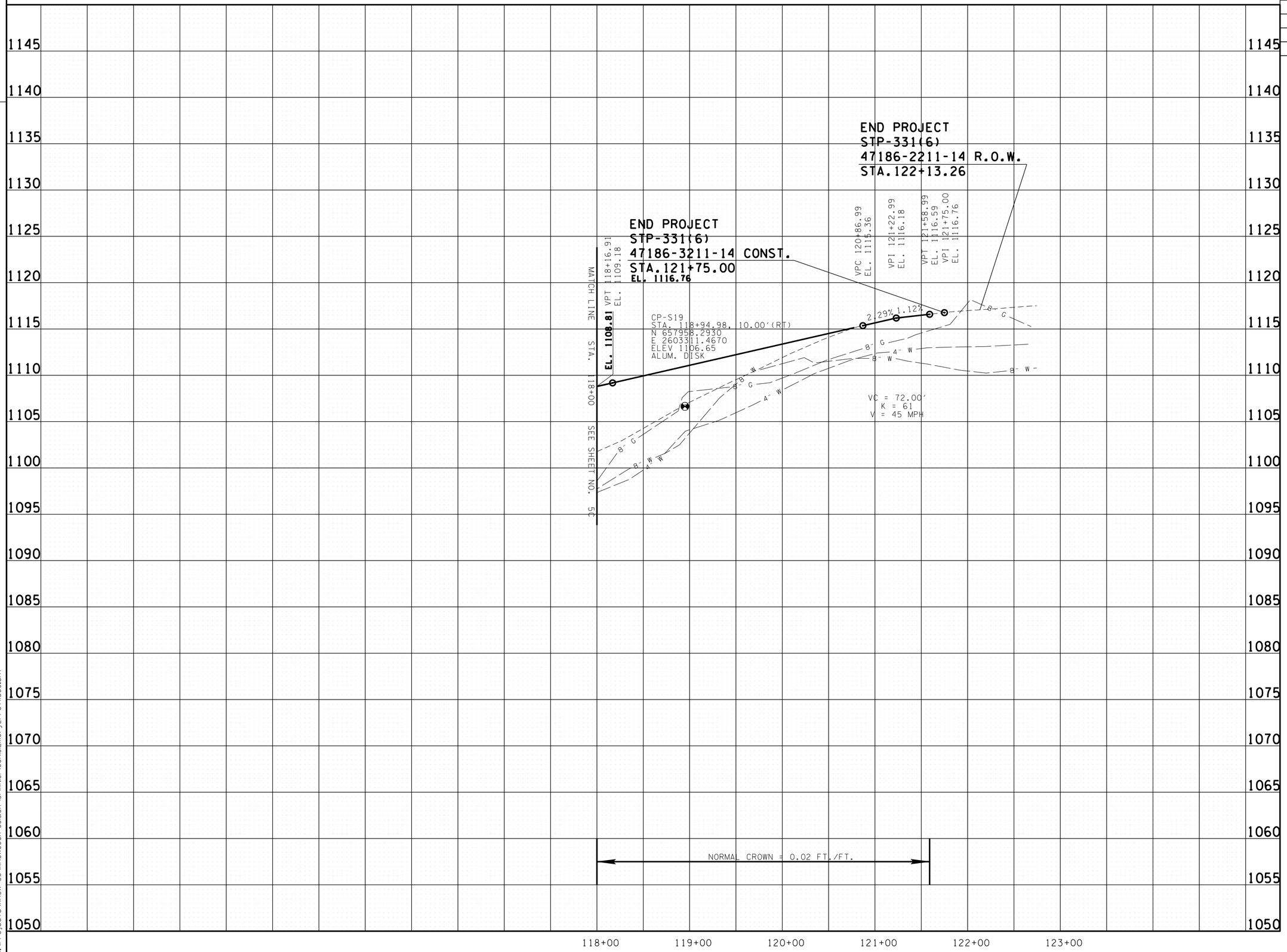
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

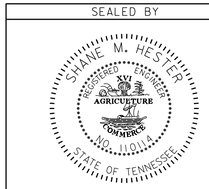
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 6C |
| CONST. | 2014 | STP-331(6) | 6C |




UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY




STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE
EMORY ROAD
STA.118+00.00 TO
STA.121+75.00
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

6-JUN-2014 17:28
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| TENNESSEE D.O.T. | DESIGN DIVISION | FILE NO. |
|---|---|---|

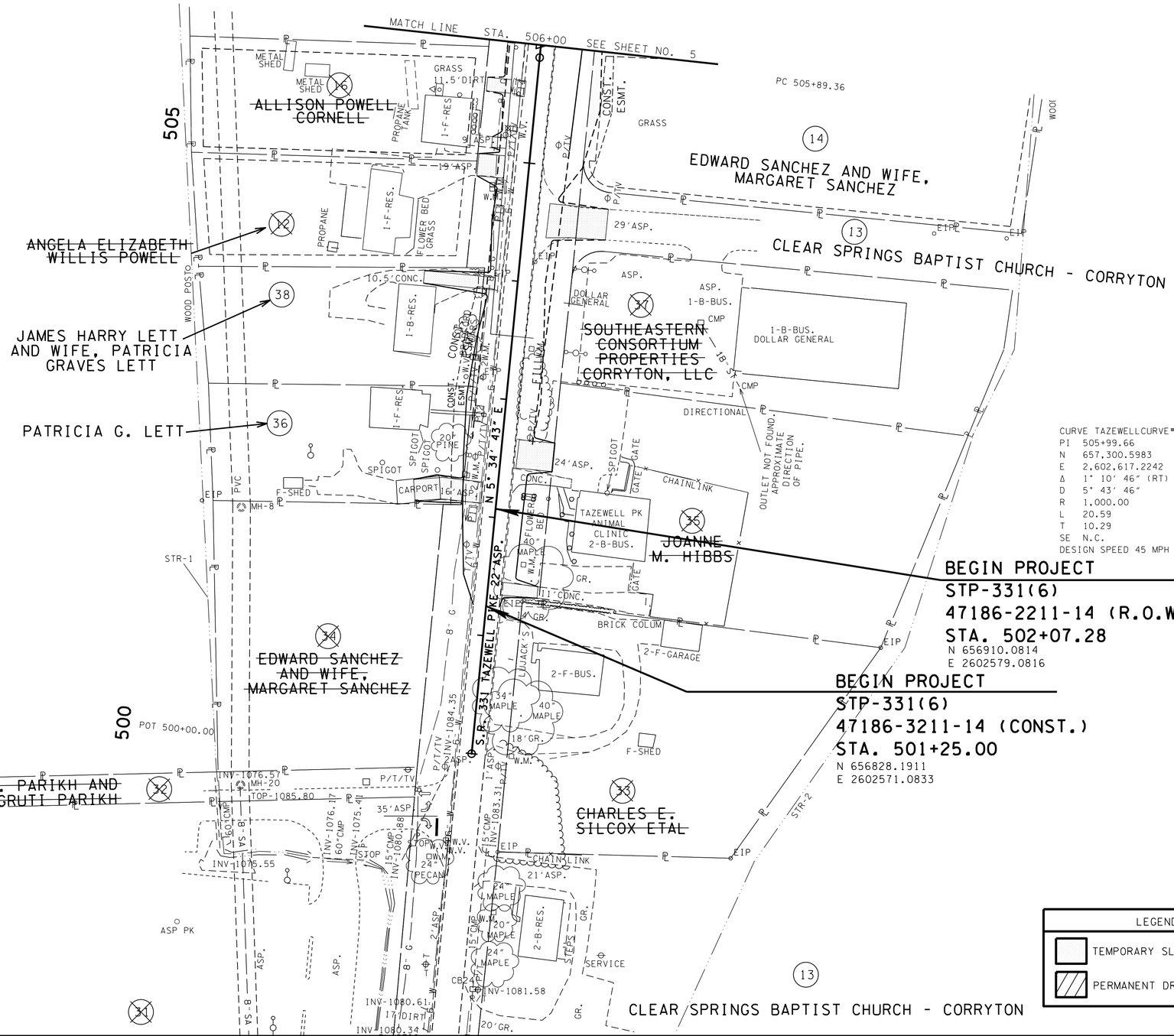
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 7 |
| CONST. | 2014 | STP-331 (6) | 7 |
| | | | |
| | | | |

PC 104+00.40

PT 104+52.33

CURVE EMORYCURVE*1
PI 104+26.37
N 657,628.8402
E 2,601,892.0513
Δ 0° 31′ 09″ (RT)
D 1° 00′ 00″
R 5,730.00
L 51.93
T 25.96
SE N.C.
DESIGN SPEED 45 MPH

N




CURVE TAZEWELLCURVE*5
PI 505+99.66
N 657,300.5983
E 2,602,617.2242
Δ 1° 10′ 46″ (RT)
D 5° 43′ 46″
R 1,000.00
L 20.59
T 10.29
SE N.C.
DESIGN SPEED 45 MPH

BEGIN PROJECT
STP-331(6)
47186-2211-14 (R.O.W.)
STA. 502+07.28
N 656910.0814
E 2602579.0816

BEGIN PROJECT
STP-331(6)
47186-3211-14 (CONST.)
STA. 501+25.00
N 656828.1911
E 2602571.0833

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**NOT FOR BIDDING**

SEALED BY

SHANE M. HESTER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 110114
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

LEGEND

TEMPORARY SLOPE EASEMENT

PERMANENT DRAINAGE EASEMENT

# PRESENT LAYOUT
## TAZEWELL PIKE
STA.501+25.00 TO STA.506+00.00

SCALE: 1″= 50′

16-JUN-2014 17:28
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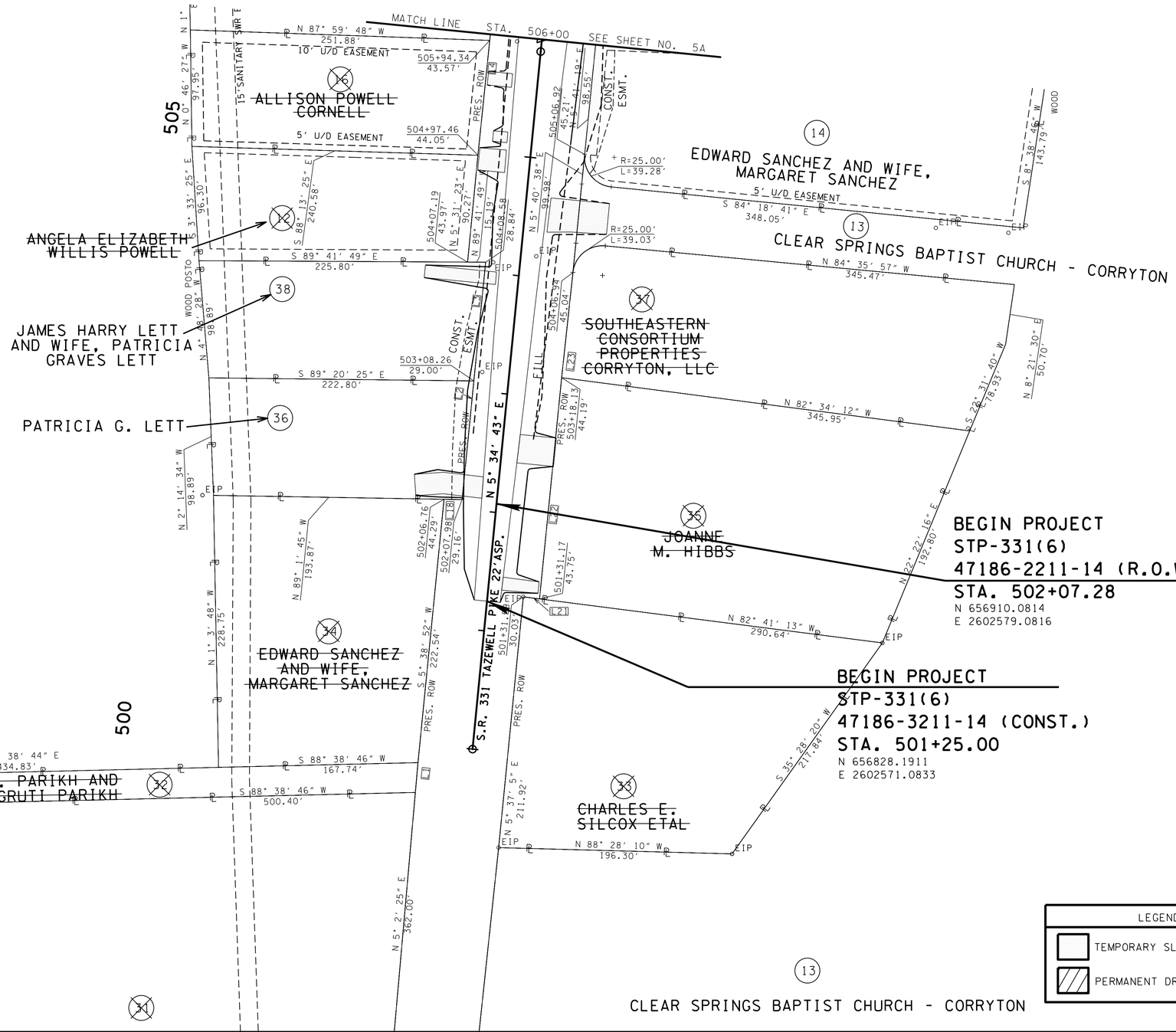
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 7A |
| CONST. | 2014 | STP-331 (6) | 7A |
| | | | |
| | | | |

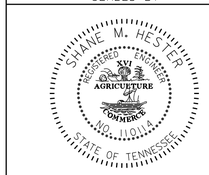



| LINE | BEARING | DISTANCE |
|---|---|---|
| L1 | S 5°01'59" W | 25.16' |
| L2 | N 5°40'12" E | 100.28' |
| L3 | S 5°40'12" W | 100.32' |
| L4 | N 5°52'28" E | 97.10' |
| L5 | S 5°46'38" W | 218.31' |
| L6 | N 2°38'36" E | 20.68' |
| L6A | N 2°38'36" E | 40.61' |
| L7 | N 82°54'08" E | 242.36' |
| L8 | N 9°13'07" E | 47.60' |
| L9 | S 6°55'37" E | 80.00' |
| L10 | S 6°55'37" E | 79.99' |
| L11 | S 7°02'07" W | 65.02' |
| L12 | S 7°02'07" W | 80.00' |
| L13 | S 7°02'07" W | 80.00' |
| L14 | N 83°01'02" E | 143.03' |
| L15-A | N 5°34'35" W | 26.65' |
| L15-B | N 5°34'35" W | 2.34' |
| L16 | S 83°08'29" W | 341.23' |
| L17 | S 2°07'17" W | 318.14' |
| L18 | S 89°01'45" E | 15.17' |
| L19 | S 83°24'39" W | 101.27' |
| L20 | S 6°03'27" W | 210.23' |
| L21 | N 82°41'13"W | 13.73' |
| L22 | S 9°55'11" W | 186.96' |
| L23 | S 6°07'22" W | 88.81' |
| L24 | N 67°55'56" E | 86.66' |
| L25 | N 65°40'56" E | 357.55' |
| L26-A | N 86°36'28" W | 11.70' |
| L26-B | N 86°36'28" W | 13.99' |
| L27 | S 70°36'15" W | 43.65' |
| L28 | S 65°10'39" W | 94.90' |
| L29 | S 65°09'44" W | 61.54' |
| L30-A | S 12°23'34" E | 18.07' |
| L30-B | S 12°23'34" E | 12.99' |
| L31 | N 65°41'20" E | 79.97' |
| L32 | N 65°51'55" E | 140.54' |
| L33 | N 2°54'54" E | 96.81' |

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

LEGEND

- TEMPORARY SLOPE EASEMENT
- PERMANENT DRAINAGE EASEMENT

# R.O.W. DETAILS TAZEWELL PIKE

STA.501+25.00 TO STA.506+00.00

SCALE: 1"= 50'

16-JUN-2014 17:28
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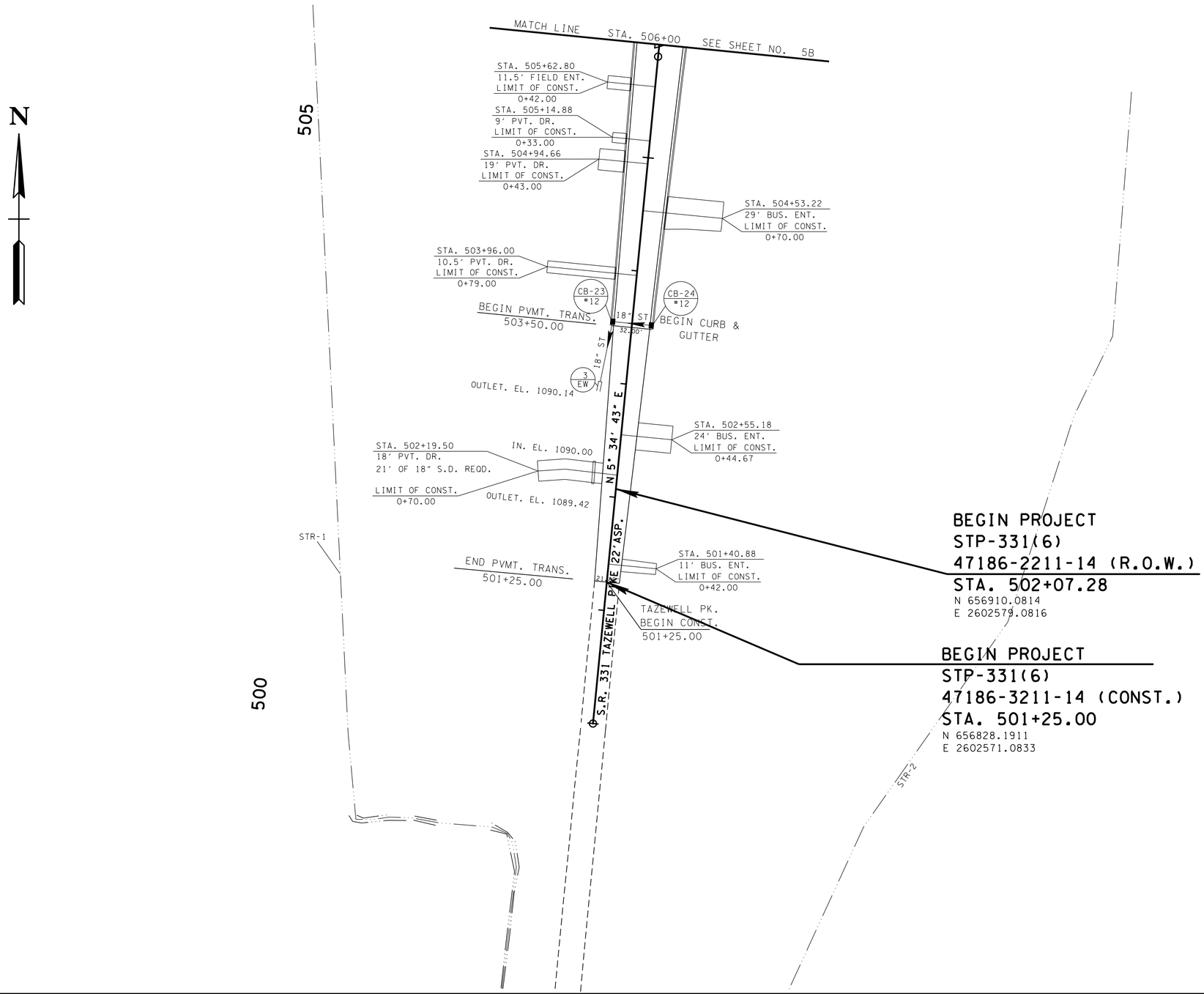
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 7B |
| CONST. | 2014 | STP-331 (6) | 7B |
| | | | |
| | | | |

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




**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

SHANE M. HESTER
REGISTERED ENGINEER
XV
AGRICULTURE
COMMERCE
NO. 110114
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PROPOSED LAYOUT TAZEWELL PIKE

STA.501+25.00 TO
STA.506+00.00
SCALE: 1"= 50'

6-JUN-2014 17:28
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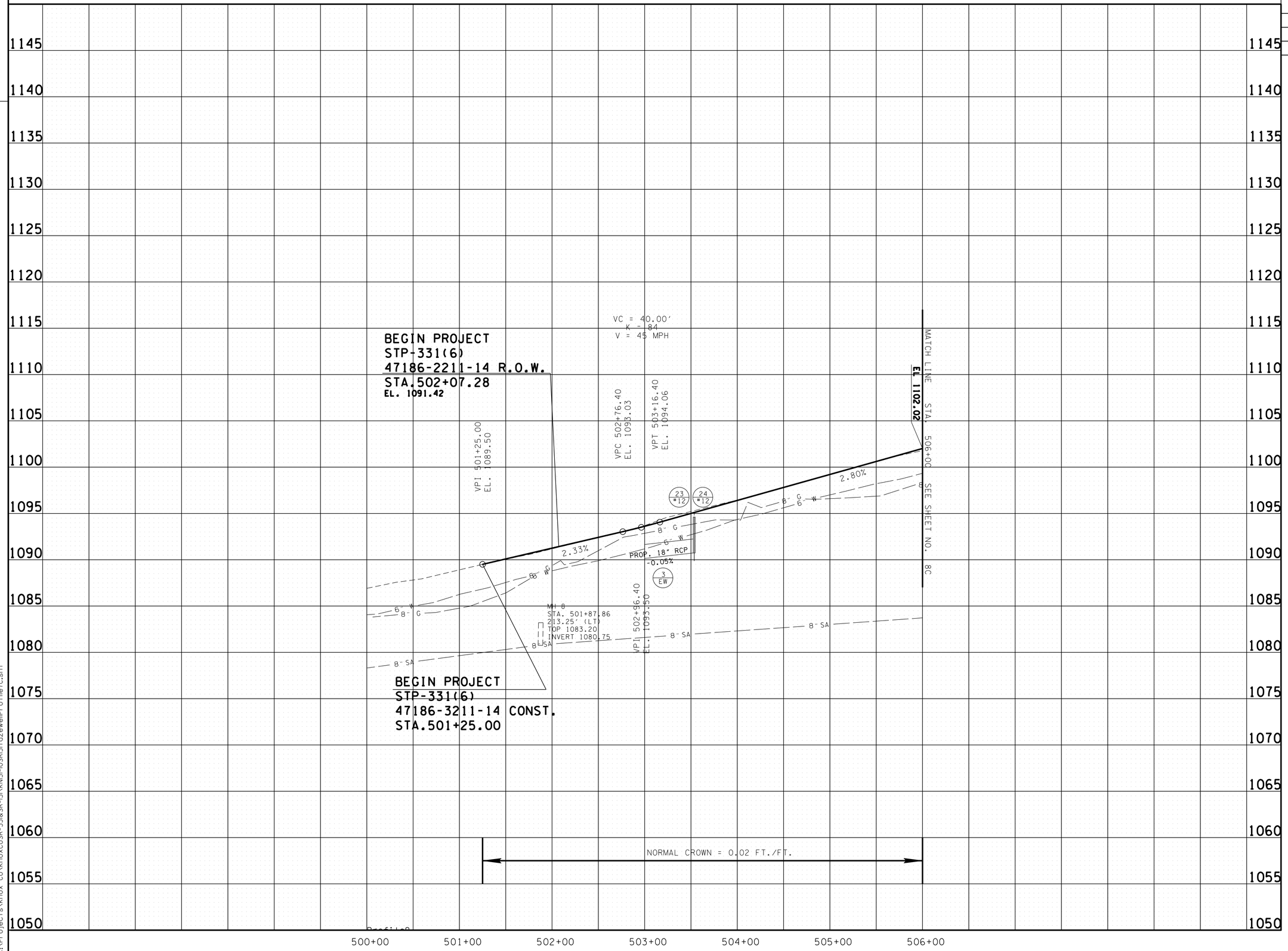
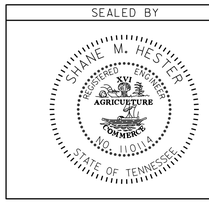
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 7C |
| CONST. | 2014 | STP-331(6) | 7C |
| | | | |
| | | | |




UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY




STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE
TAZEWELL PIKE
STA.501+25.00 TO
STA.506+00.00
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

6-JUN-2014 17:28
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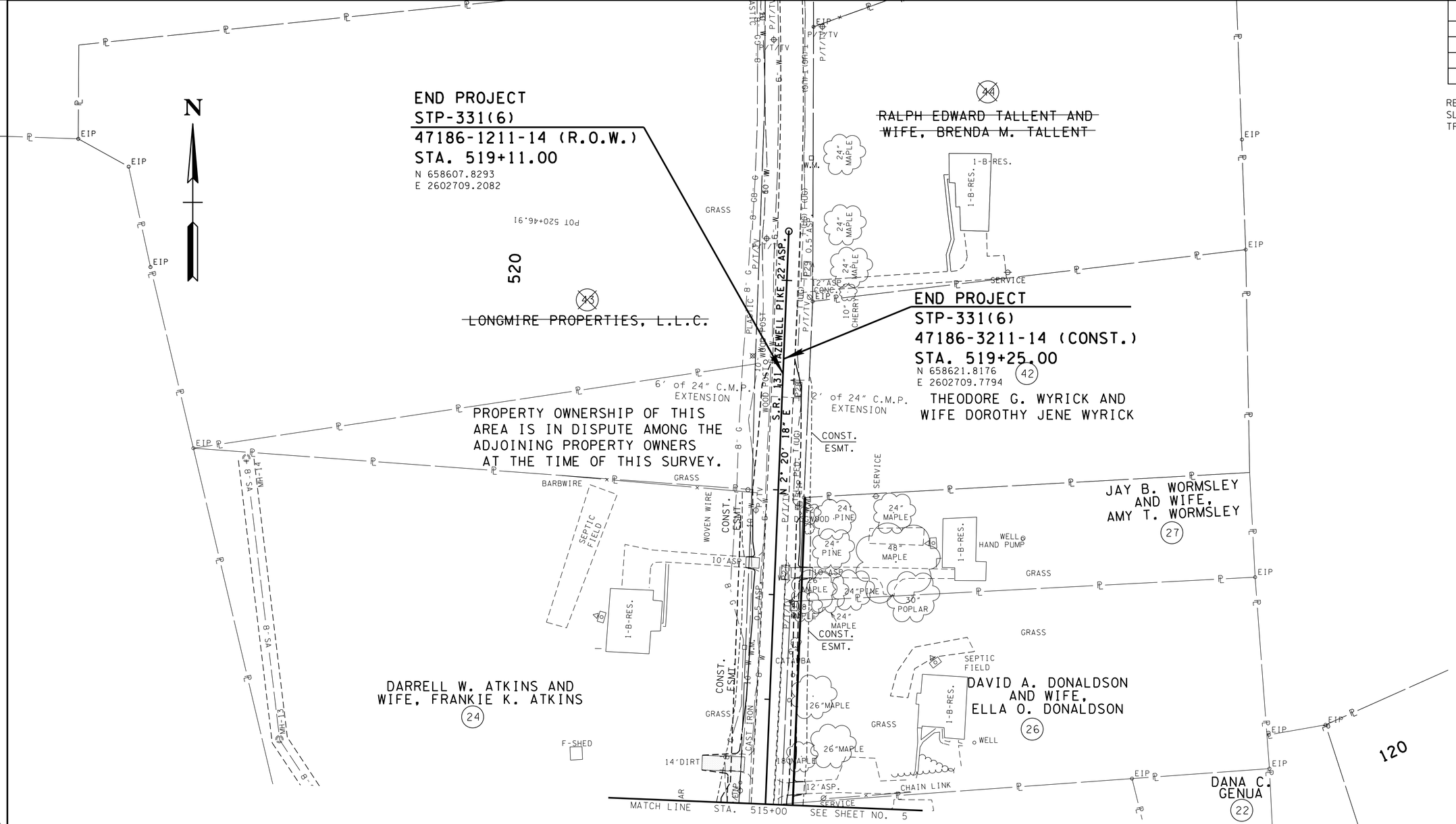
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 8 |
| CONST. | 2014 | STP-331 (6) | 8 |
| | | | |
| | | | |

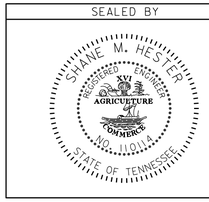
REV. 9-19-2012: CHANGED CONST. EASM'T., SLOPE EASM'T. AND PROP. R.O.W. ON TR. NO. 24.




# UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

## PRESENT LAYOUT TAZEWELL PIKE

STA.515+00.00 TO STA.519+25.00

SCALE: 1"= 50'

LEGEND

- TEMPORARY SLOPE EASEMENT
- PERMANENT DRAINAGE EASEMENT

16-JUN-2014 17:28
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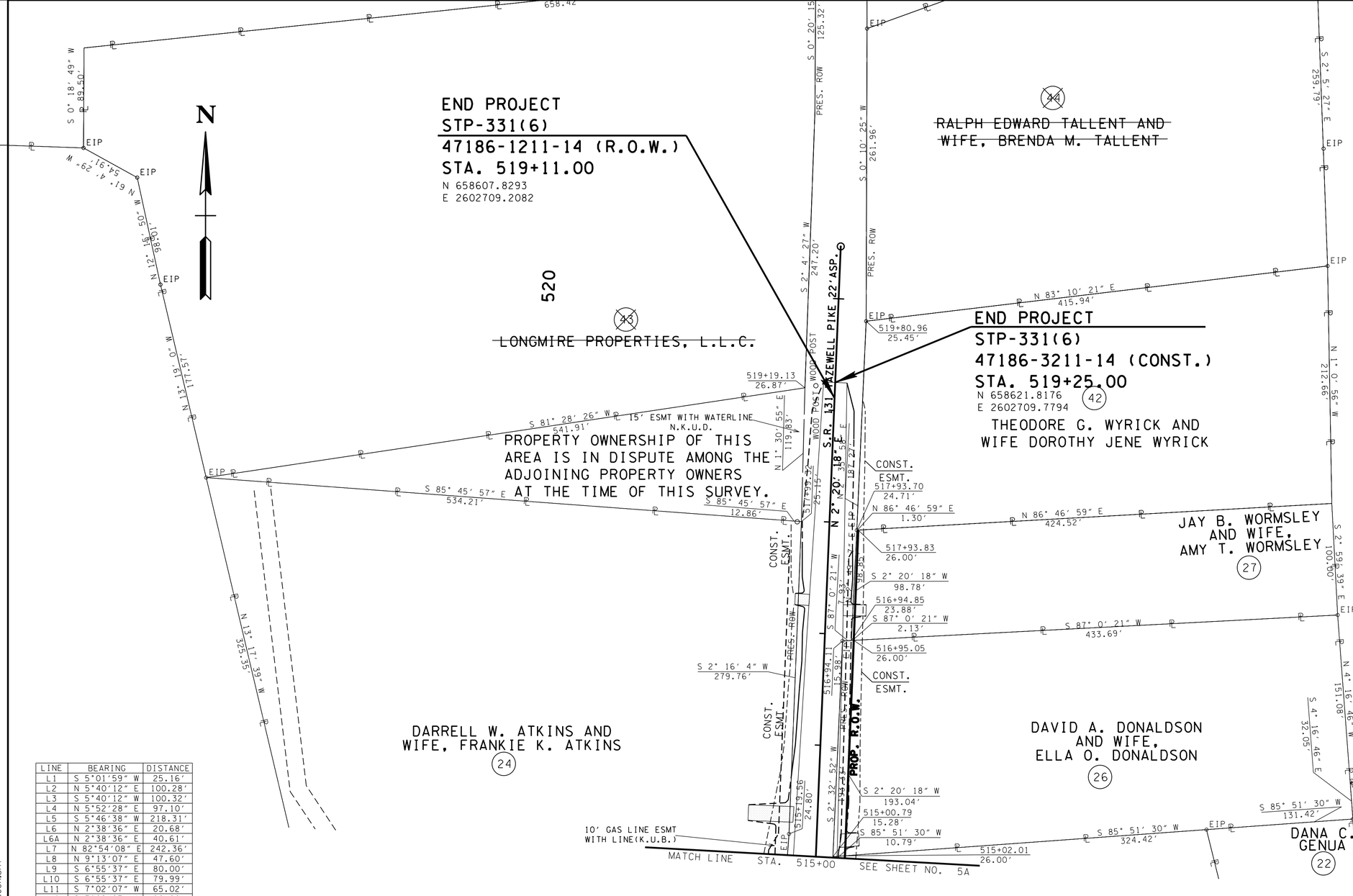
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 8A |
| CONST. | 2014 | STP-331 (6) | 8A |
| | | | |
| | | | |

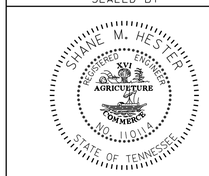
REV. 9-19-2012: CHANGED CONST. EASM'T., SLOPE EASM'T. AND PROP. R.O.W. ON TR. NO. 24.




| LINE | BEARING | DISTANCE |
|---|---|---|
| L1 | S 5°01'59" W | 25.16' |
| L2 | N 5°40'12" E | 100.28' |
| L3 | S 5°40'12" W | 100.32' |
| L4 | N 5°52'28" E | 97.10' |
| L5 | S 5°46'38" W | 218.31' |
| L6 | N 2°38'36" E | 20.68' |
| L6A | N 2°38'36" E | 40.61' |
| L7 | N 82°54'08" E | 242.36' |
| L8 | N 9°13'07" E | 47.60' |
| L9 | S 6°55'37" E | 80.00' |
| L10 | S 6°55'37" E | 79.99' |
| L11 | S 7°02'07" W | 65.02' |
| L12 | S 7°02'07" W | 80.00' |
| L13 | S 7°02'07" W | 80.00' |
| L14 | N 83°01'02" E | 143.03' |
| L15-A | N 5°34'35" W | 26.65' |
| L15-B | N 5°34'35" W | 2.34' |
| L16 | S 83°08'29" W | 341.23' |
| L17 | S 2°07'17" W | 318.14' |
| L18 | S 89°01'45" E | 15.17' |
| L19 | S 83°24'39" W | 101.27' |
| L20 | S 6°03'27" W | 210.23' |
| L21 | N 82°41'13"W | 13.73' |
| L22 | S 9°55'11" W | 186.96' |
| L23 | S 6°07'22" W | 88.81' |
| L24 | N 67°55'56" E | 86.66' |
| L25 | N 65°40'56" E | 357.55' |
| L26-A | N 86°36'28" W | 11.70' |
| L26-B | N 86°36'28" W | 13.99' |
| L27 | S 70°36'15" W | 43.65' |
| L28 | S 65°10'39" W | 94.90' |
| L29 | S 65°09'44" W | 61.54' |
| L30-A | S 12°23'34" E | 18.07' |
| L30-B | S 12°23'34" E | 12.99' |
| L31 | N 65°41'20" E | 79.97' |
| L32 | N 65°51'55" E | 140.54' |
| L33 | N 2°54'54" E | 96.81' |

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

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# R.O.W. DETAILS TAZEWELL PIKE

STA.515+00.00 TO STA.519+25.00

SCALE: 1"= 50'

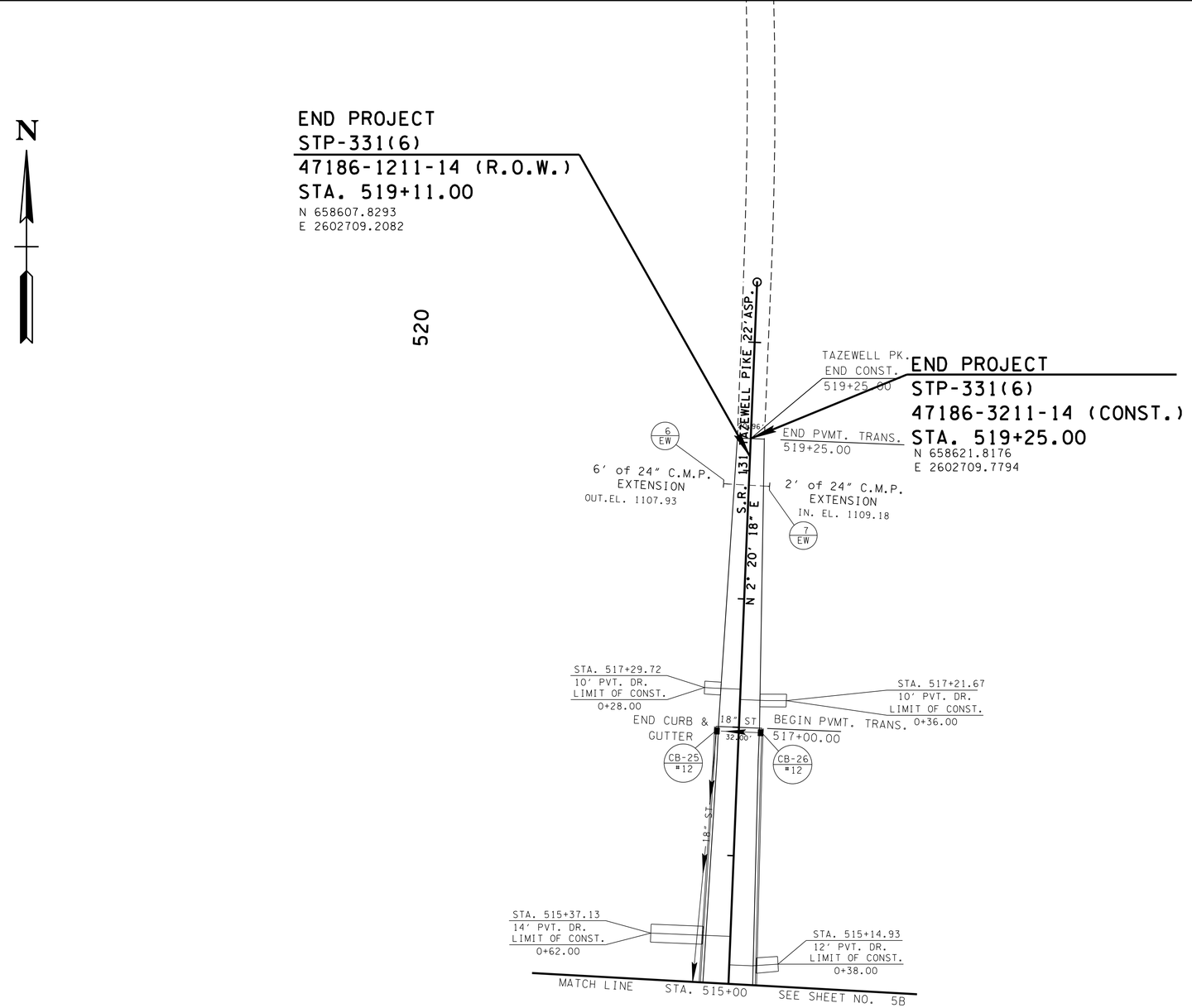
LEGEND

- TEMPORARY SLOPE EASEMENT
- PERMANENT DRAINAGE EASEMENT

16-JUN-2014 17:28
C:\Projects\Knox Co\KnoxCoSR-331&SR-131\KN131-10ROWDetails08A.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 8B |
| CONST. | 2014 | STP-331(6) | 8B |
| | | | |
| | | | |

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




120

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PROPOSED LAYOUT TAZEWELL PIKE

STA.515+00.00 TO
STA.519+25.00
SCALE: 1"= 50'

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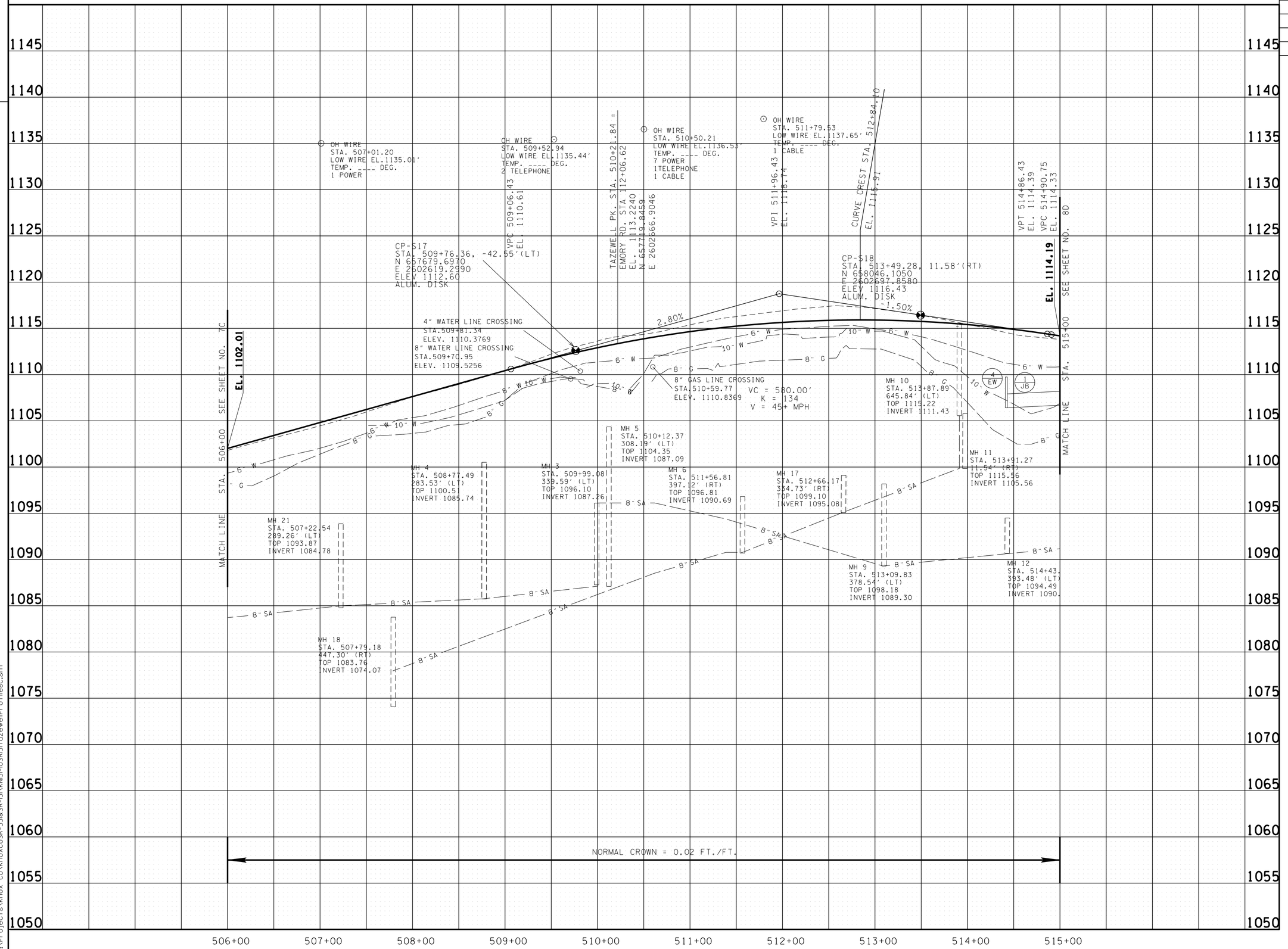
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 8C |
| CONST. | 2014 | STP-333(6) | 8C |




**UNOFFICIAL SET**

**NOT FOR BIDDING**

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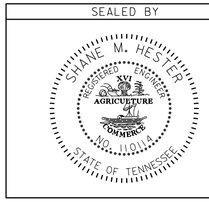


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE
TAZEWELL PIKE
STA.506+00.00 TO
STA.515+00.00
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

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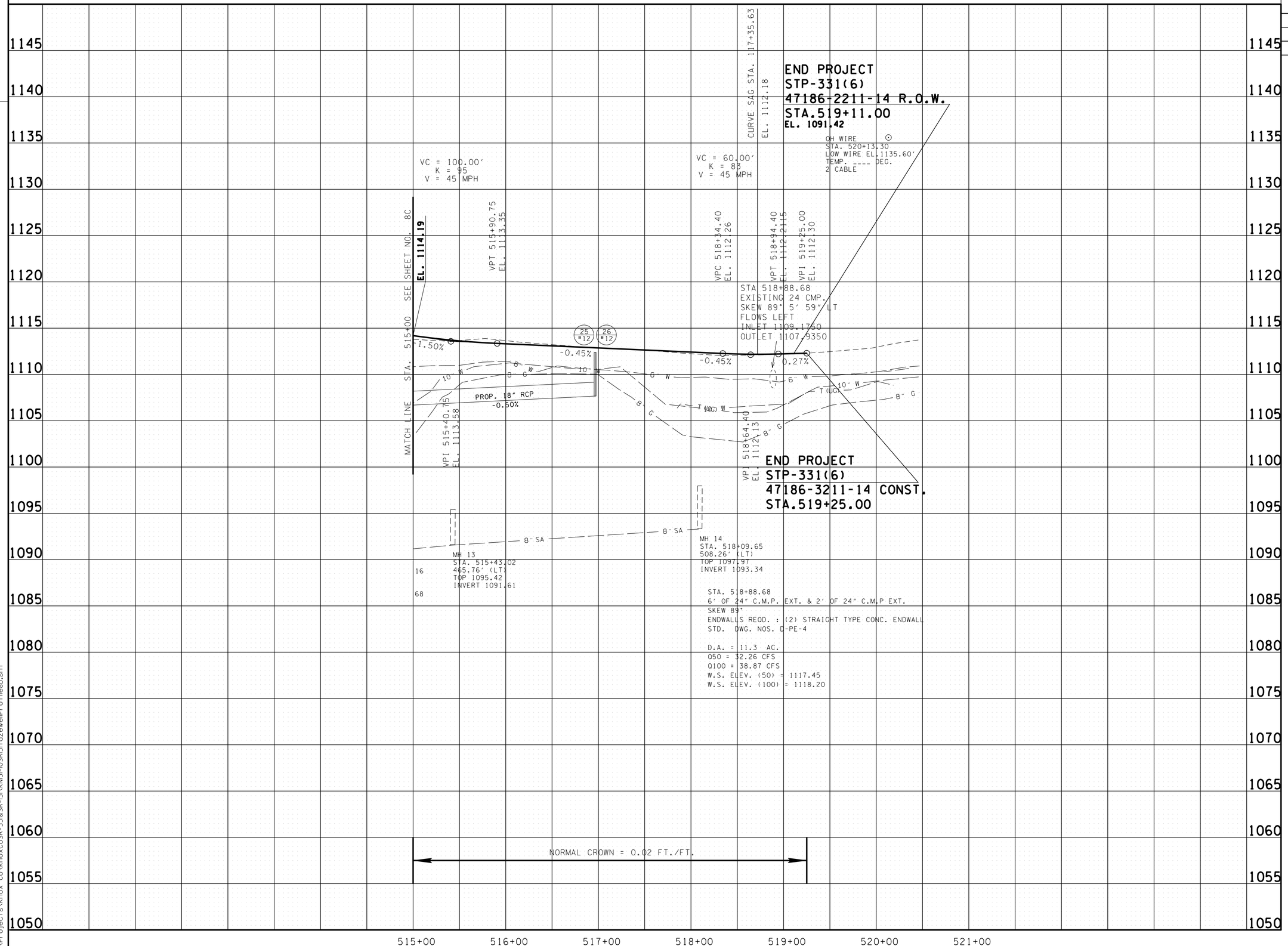
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 8D |
| CONST. | 2014 | STP-331(6) | 8D |




**UNOFFICIAL SET**

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SHANE M. HESTER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 110114
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PROFILE
# TAZEWELL PIKE

STA.515+00.00 TO
STA.519+25.00

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

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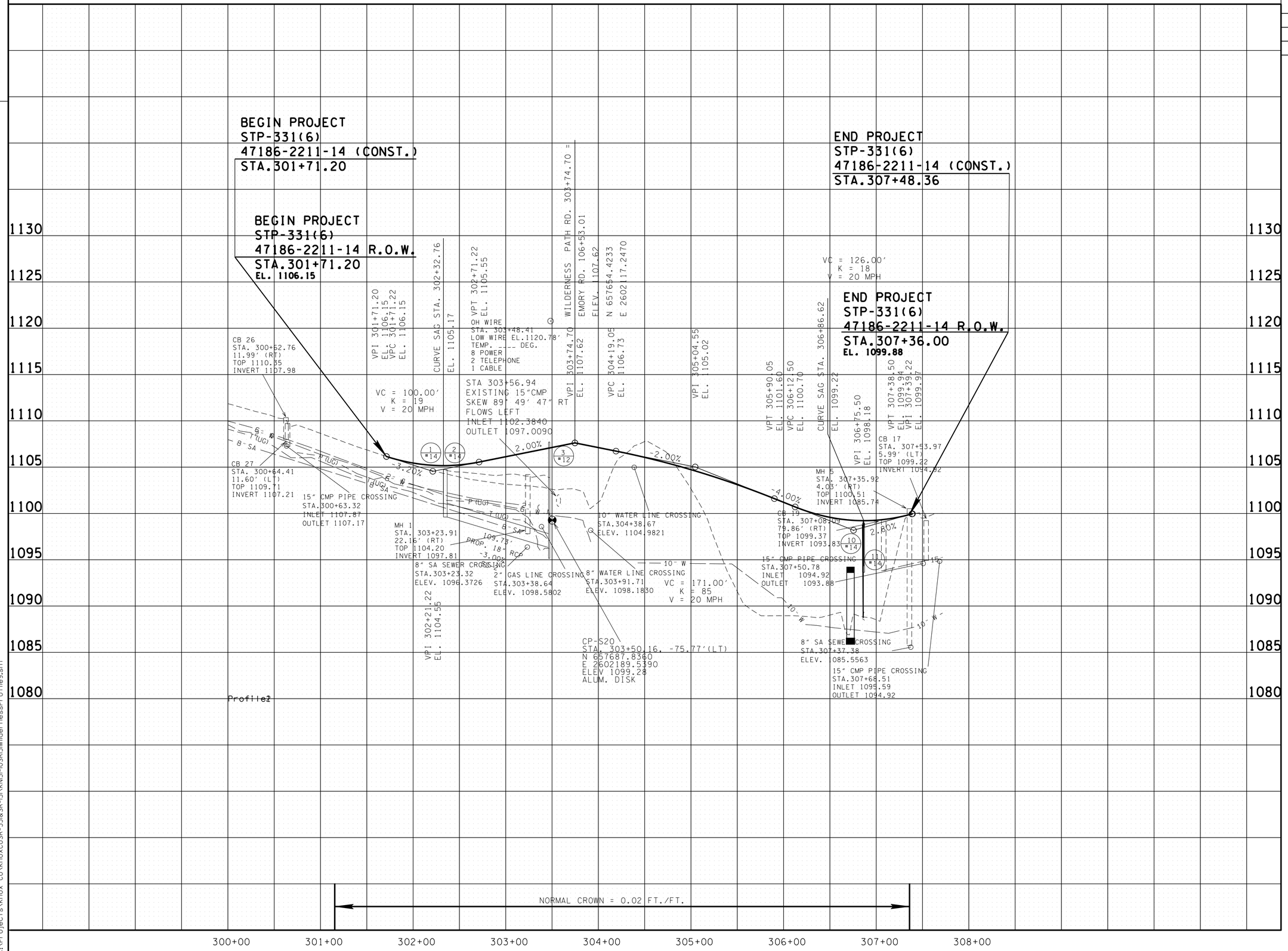
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 9 |
| CONST. | 2014 | STP-331(6) | 9 |

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REGISTERED ENGINEER
XV AGRICULTURE COMMERCE
NO. 110114
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE
WILDERNESS
PATH ROAD

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

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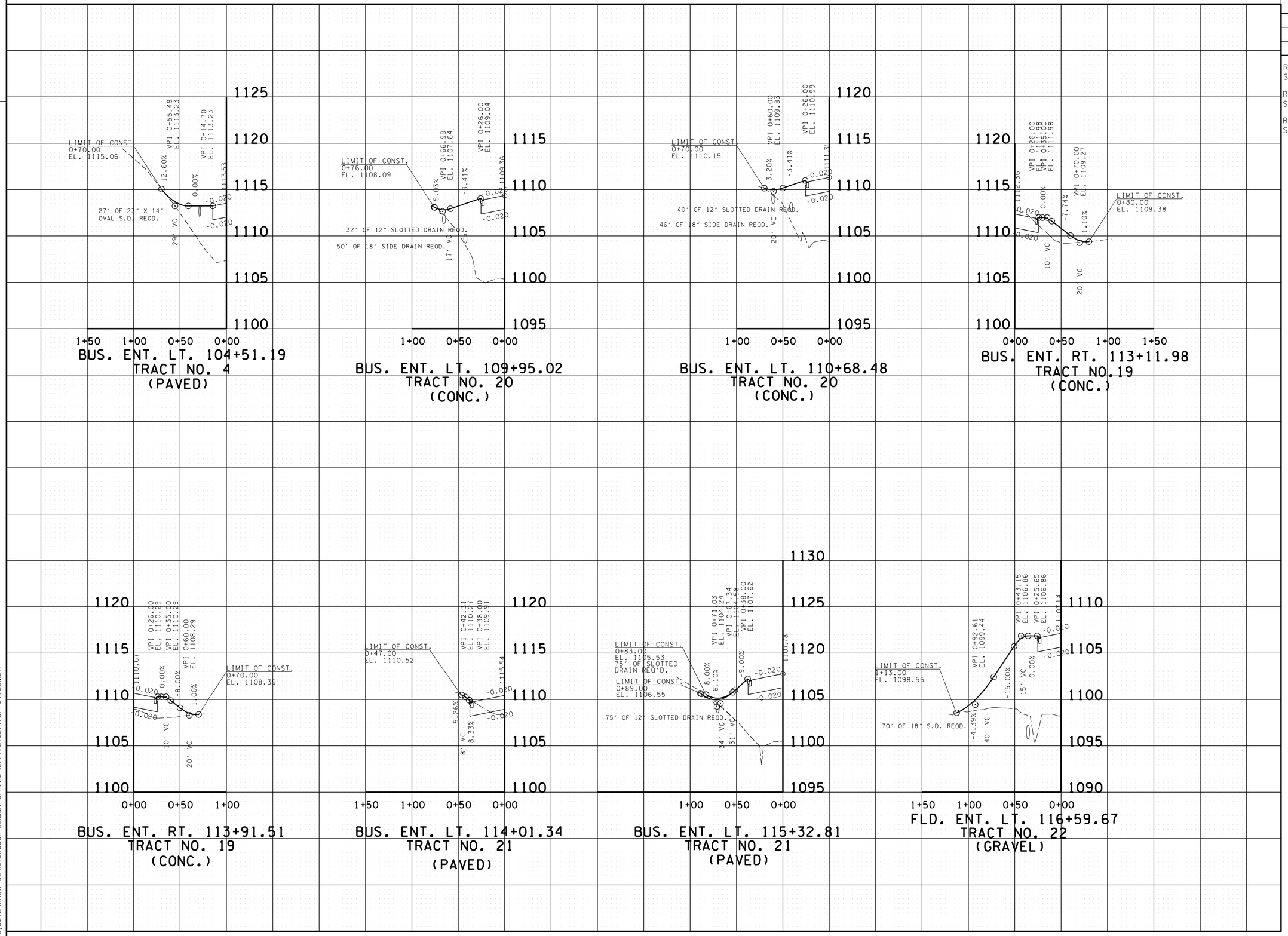
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 10 |
| CONST. | 2014 | STP-331(6) | 10 |

REV. 3-5-2012: DELETED PVT. DRIVE STA. 116+59(LT.).

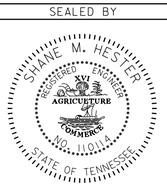
REV. 9-19-2012: ADDED SIDE DRAIN STA. 109+95.02 AND STA. 110+68.48.

REV. 9-26-2013: ADDED PVT. DRIVE STA. 116+59.67(LT.).




UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY




STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE OF PRIVATE DRIVES (EMORY RD.)

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

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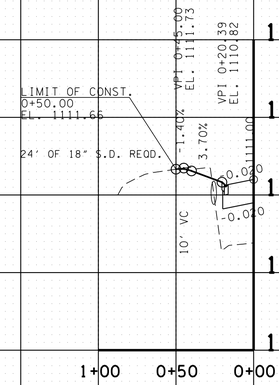
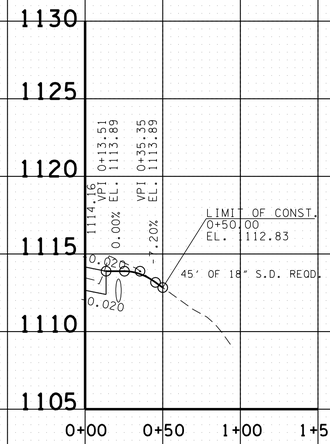
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

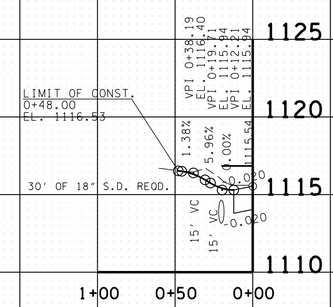
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 11 |
| CONST. | 2014 | STP-331(6) | 11 |
| | | | |
| | | | |




PVT. DR. LT. 118+96.40
TRACT NO. 23
(GRAVEL)




BUS. ENT. RT. 120+34.54
TRACT NO. 13
(GRAVEL)




FLD. ENT. LT. 120+95.06
TRACT NO. 39
(GRAVEL)

**UNOFFICIAL SET**

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE OF PRIVATE DRIVES (EMORY RD.)

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

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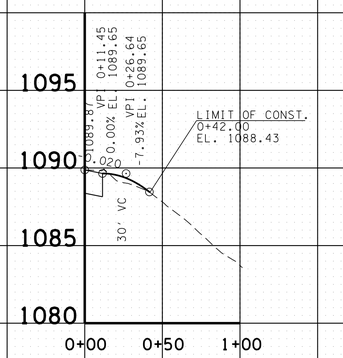
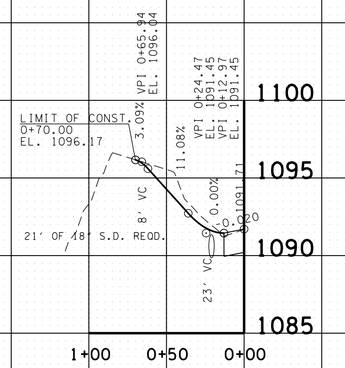
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

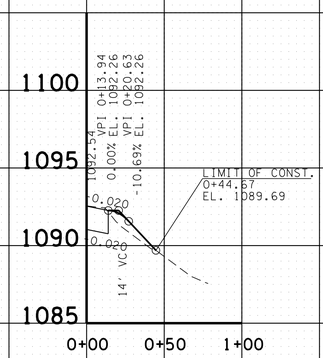
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 12 |
| CONST. | 2014 | STP-331(6) | 12 |
| | | | |
| | | | |



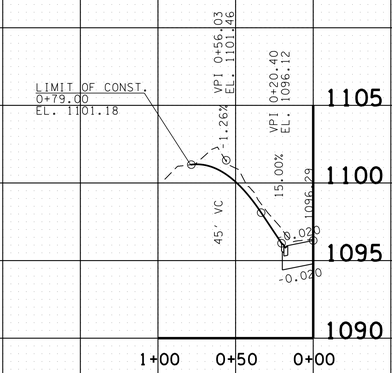

BUS. ENT. RT. 501+40.88
TRACT NO. 35
CONC. (BUS.)



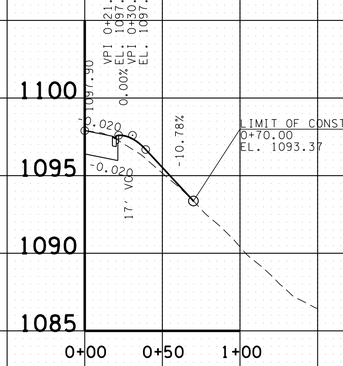

PVT. DR. LT. 502+19.50
TRACT NO. 36
(PAVED)



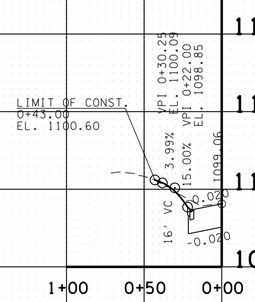

BUS. ENT. RT. 502+55.18
TRACT NO. 35
PAVED (BUS.)



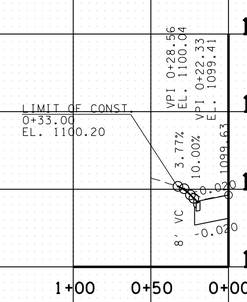

PVT. DR. LT. 503+96.00
TRACT NO. 38
(CONC.)



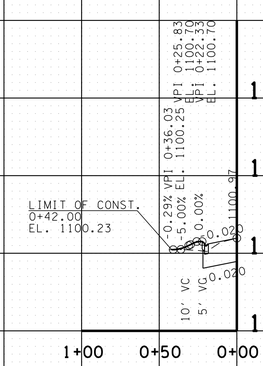

BUS. ENT. RT. 504+53.22
TRACT NO. 13
(PAVED)




PVT. DR. LT. 504+94.66
TRACT NO. 12
(PAVED)




PVT. DR. LT. 505+14.88
TRACT NO. 16
(PAVED)




PVT. DR. LT. 505+62.80
TRACT NO. 16
(GRAVEL)

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE OF PRIVATE DRIVES (TAZEWELL PK.)

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

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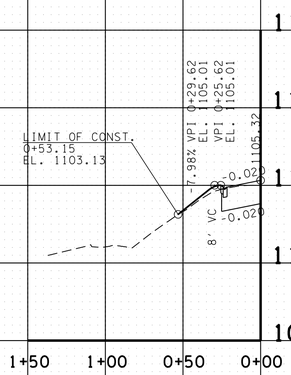
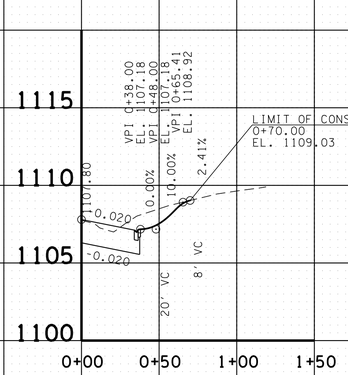
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 13 |
| CONST. | 2014 | STP-331(6) | 13 |

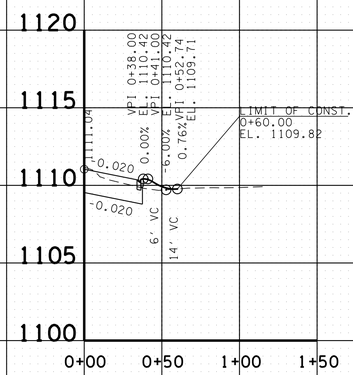
REV. 10-31-2012: MOVED BUSINESS ENTRANCE STA. 511+71.24 TO STA. 511+60.85.



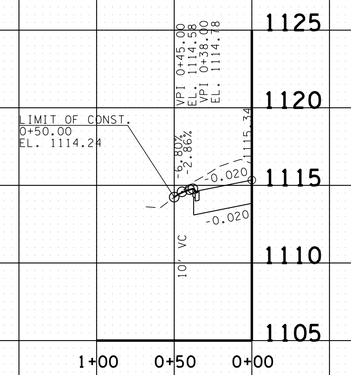

PVT. DR. LT. 507+17.96
TRACT NO. 18
PAVED (BUS.)




BUS. ENT. RT. 508+06.23
TRACT NO. 19
CONC. (BUS.)




BUS. ENT. RT. 509+22.12
TRACT NO. 19
CONC. (BUS.)




BUS. ENT. LT. 511+60.70
TRACT NO. 20
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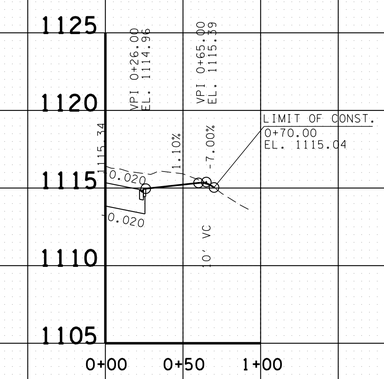


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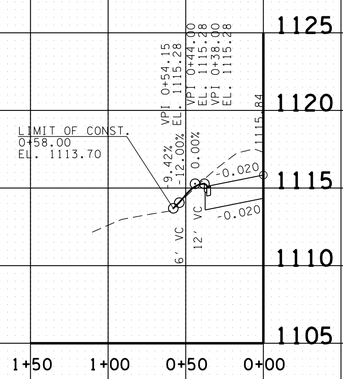
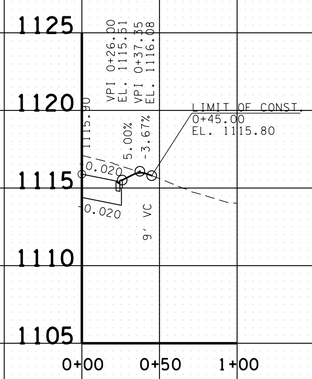
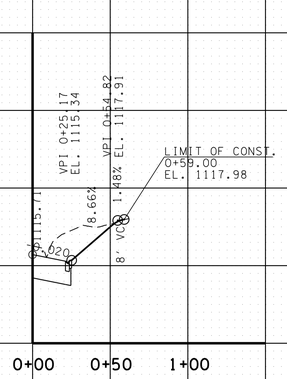
PAVED (BUS.)




BUS. ENT. LT. 512+41.00
TRACT NO. 20
PAVED (BUS.)




BUS. ENT. RT. 513+02.67
TRACT NO. 21
PAVED (BUS.)




BUS. ENT. RT. 513+57.22
TRACT NO. 21

UNOFFICIAL SET
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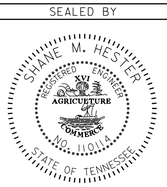


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE OF PRIVATE DRIVES (TAZEWELL PK.)

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

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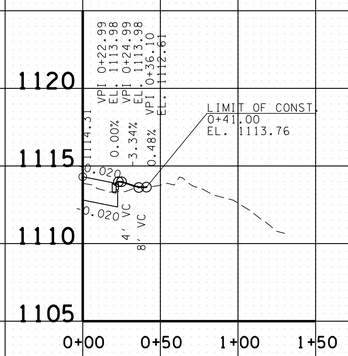
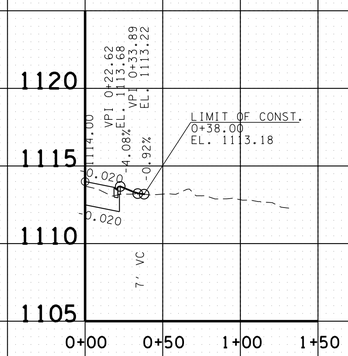
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

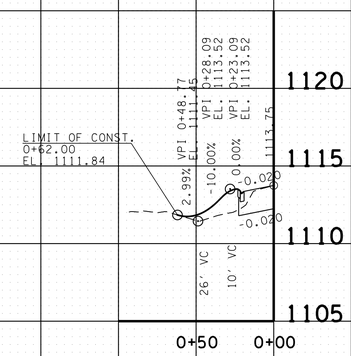
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 14 |
| CONST. | 2014 | STP-331(6) | 14 |
| | | | |
| | | | |



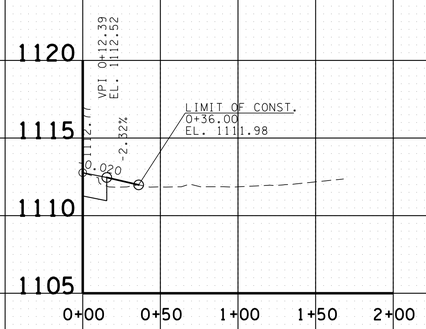

PVT. DR. RT. 514+92.23
TRACT NO. 25
(PAVED)



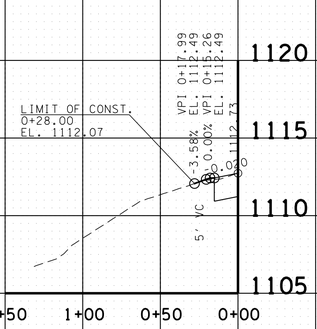

PVT. DR. RT. 515+14.93
TRACT NO. 26
(PAVED)




PVT. DR. LT. 515+37.13
TRACT NO. 24
(GRAVEL)




PVT. DR. RT. 517+21.67
TRACT NO. 27
(PAVED)




PVT. DR. LT. 517+29.72
TRACT NO. 24
(PAVED)

**UNOFFICIAL SET**

**NOT FOR BIDDING**

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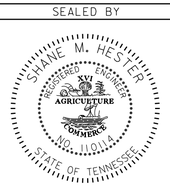


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE OF PRIVATE DRIVES (TAZEWELL PK.)

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

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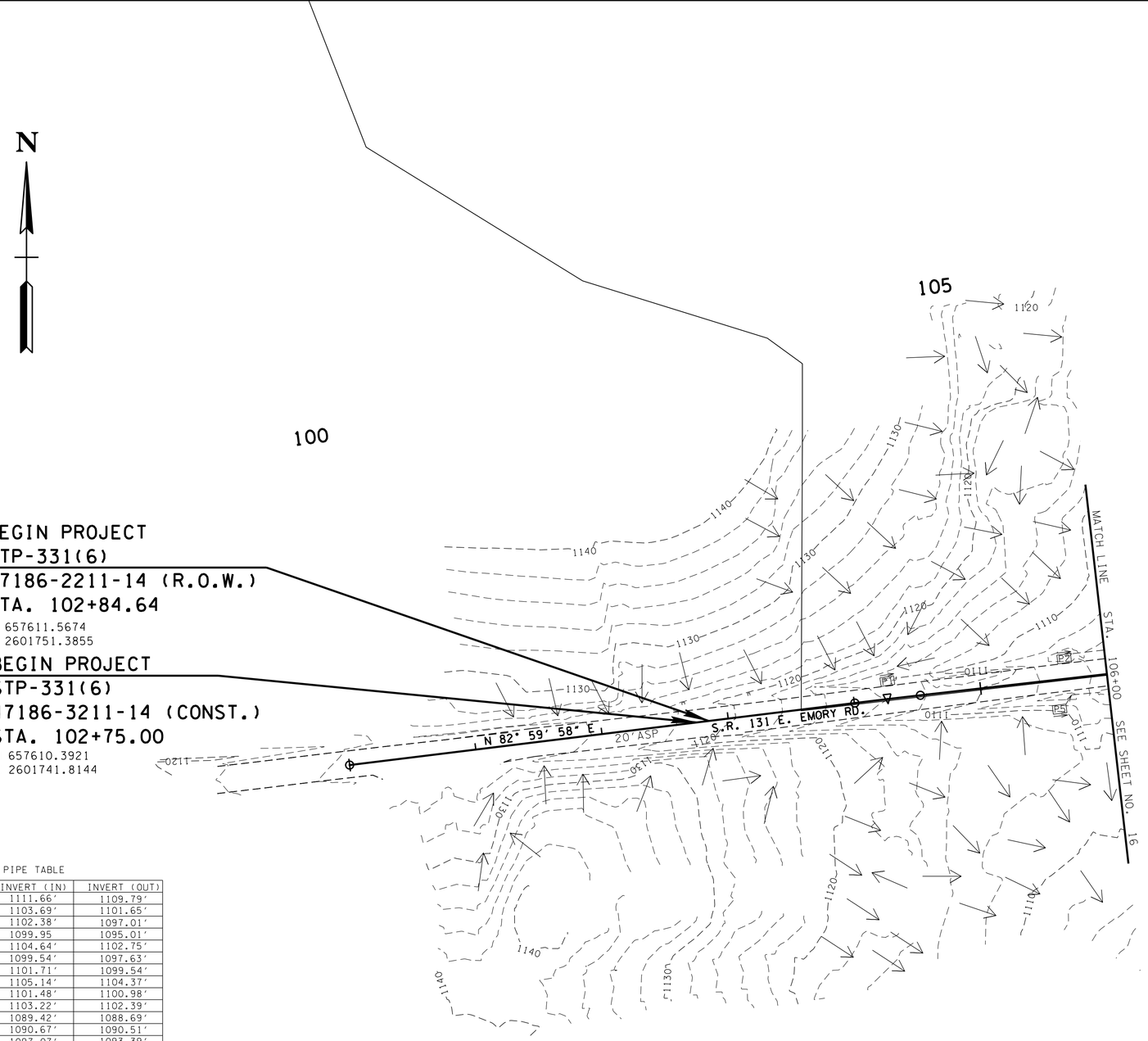
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 15 |
| CONST. | 2014 | STP-331(6) | 15 |
| | | | |
| | | | |




PIPE TABLE

| PIPE | TYPE | INVERT (IN) | INVERT (OUT) |
|---|---|---|---|
| P1 | 15"CMP | 1111.66' | 1109.79' |
| P2 | 18"RCP | 1103.69' | 1101.65' |
| P3 | 15"CMP | 1102.38' | 1097.01' |
| P4 | 12"HDPE | 1099.95 | 1095.01' |
| P5 | 12"RCP | 1104.64' | 1102.75' |
| P6 | 15"CMP | 1099.54' | 1097.63' |
| P7 | 15"CMP | 1101.71' | 1099.54' |
| P8 | 15"CMP | 1105.14' | 1104.37' |
| P9 | 12"PVC | 1101.48' | 1100.98' |
| P10 | 12"PVC | 1103.22' | 1102.39' |
| P11 | 18"CMP | 1089.42' | 1088.69' |
| P12 | 18"CMP | 1090.67' | 1090.51' |
| P13 | 18"CMP | 1097.07' | 1093.39' |
| P14 | 18"CMP | 1098.17' | 1097.49' |
| P19 | 24"CMP | 1097.25' | 1096.36' |
| P20 | 30"RCP | 1094.45' | 1093.29' |
| P21 | 30"RCP | 1094.51' | 1093.19' |
| P22 | OVAL RCP | 1096.03' | 1095.70' |
| P23 | 15" HDPE | 1099.94' | 1098.28' |
| P24 | 15"CMP | 1105.49' | 1103.81' |
| P25 | 15"CMP | 1114.97' | 1113.62' |
| P26 | 12"RCP | 1111.79' | 1110.72' |
| P27 | 15"RCP | 1111.11' | 1110.93' |
| P28 | 24"CMP | 1109.18' | 1107.93' |
| P29 | 15"CMP | 1110.02' | 1109.76' |

NOTE: EXISTING CONTOURS SHOWN

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SEALED BY

SHANE M. HESTER
REGISTERED ENGINEER
XV
AGRICULTURE
COMMERCE
NO. 110114
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# DRAINAGE MAP

STA.102+75.00 TO
STA.106+00.00
SCALE: 1"= 50'

16-JUN-2014 17:29
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

# DRAINAGE/ HYDRAULIC DATA FOR BRIDGE

STATION 108+45.7 STREAM NAME UNNAMED

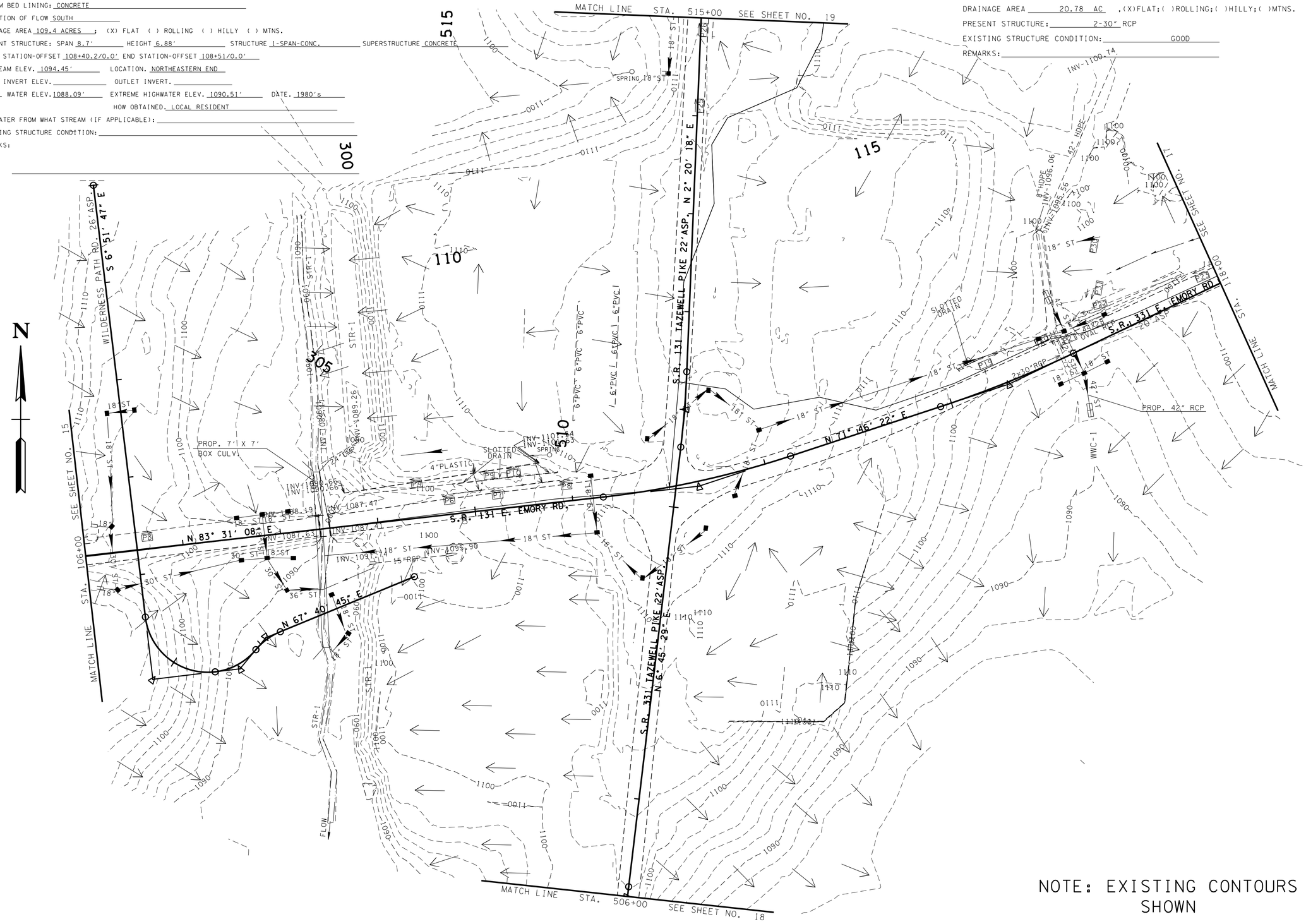
STREAM BED LINING: CONCRETE
DIRECTION OF FLOW SOUTH
DRAINAGE AREA 109.4 ACRES ; (X) FLAT ( ) ROLLING ( ) HILLY ( ) MTNS.
PRESENT STRUCTURE: SPAN 8.7' HEIGHT 6.88' STRUCTURE 1-SPAN-CONC. SUPERSTRUCTURE CONCRETE
BEGIN STATION-OFFSET 108+40.2/0.0' END STATION-OFFSET 108+51/0.0'
LOW BEAM ELEV. 1094.45' LOCATION. NORTHEASTERN END
INLET INVERT ELEV. OUTLET INVERT.
NORMAL WATER ELEV. 1088.09' EXTREME HIGHWATER ELEV. 1090.51' DATE. 1980's
HOW OBTAINED. LOCAL RESIDENT
BACKWATER FROM WHAT STREAM (IF APPLICABLE):
EXISTING STRUCTURE CONDITION:
REMARKS:

# DRAINAGE DATA FOR PIPE

STATION 116+22

DIRECTION OF FLOW SOUTH
DRAINAGE AREA 20.78 AC ,(X)FLAT;( )ROLLING;( )HILLY;( )MTNS.
PRESENT STRUCTURE: 2-30" RCP
EXISTING STRUCTURE CONDITION: GOOD
REMARKS:

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 16 |
| CONST. | 2014 | STP-331(6) | 16 |
| | | | |
| | | | |




NOTE: EXISTING CONTOURS SHOWN

**UNOFFICIAL SET**

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SEALED BY

SHANE M. HESTER
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NO. 110014
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# DRAINAGE MAP

STA. 106+00 TO STA. 118+00
STA. 506+00 TO STA. 515+00
SCALE: 1"= 50'

16-JUN-2014 17:29
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 17 |
| CONST. | 2014 | STP-331(6) | 17 |
| | | | |
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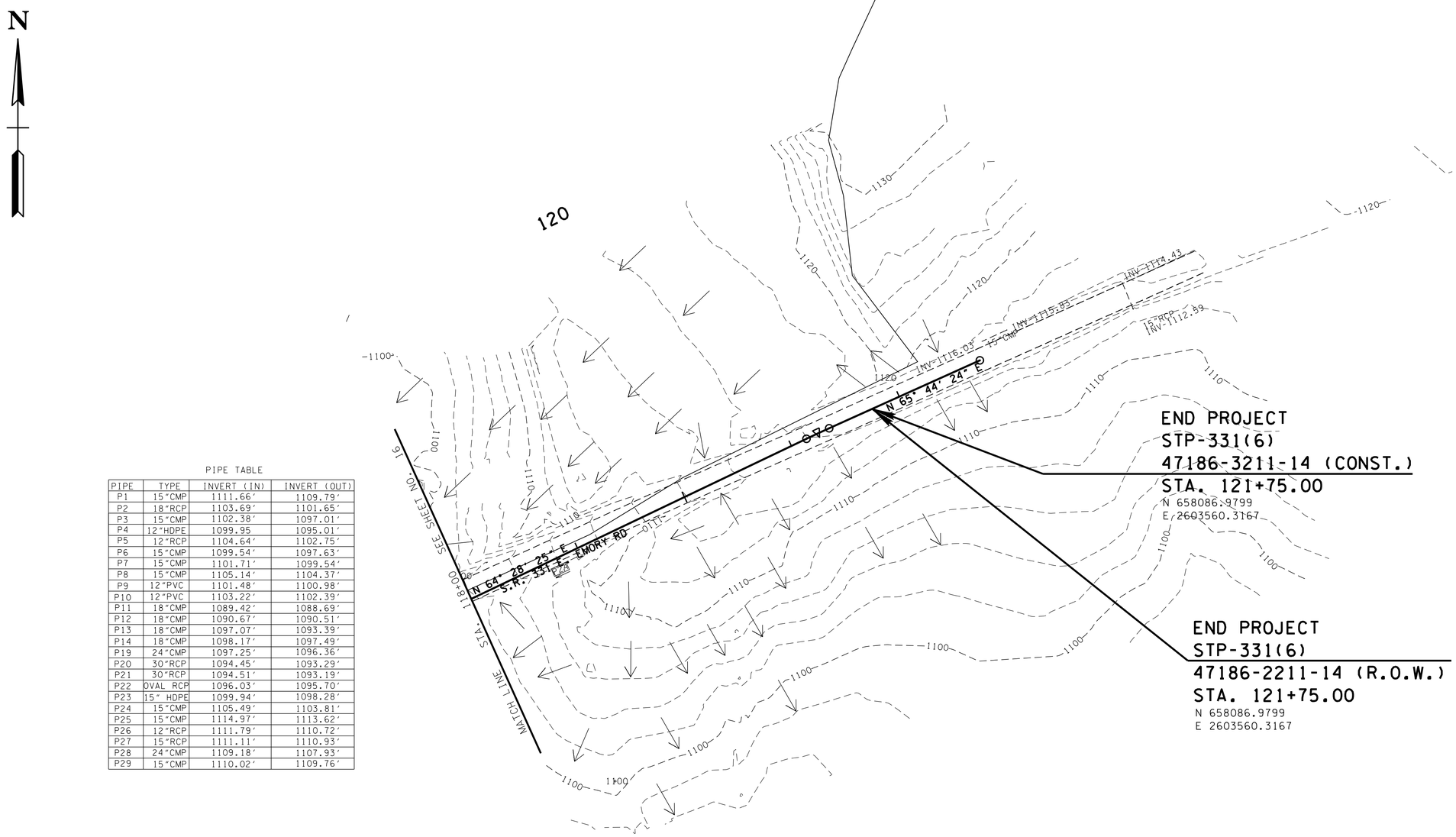


PIPE TABLE

| PIPE | TYPE | INVERT (IN) | INVERT (OUT) |
|---|---|---|---|
| P1 | 15"CMP | 1111.66' | 1109.79' |
| P2 | 18"RCP | 1103.69' | 1101.65' |
| P3 | 15"CMP | 1102.38' | 1097.01' |
| P4 | 12"HDPE | 1099.95 | 1095.01' |
| P5 | 12"RCP | 1104.64' | 1102.75' |
| P6 | 15"CMP | 1099.54' | 1097.63' |
| P7 | 15"CMP | 1101.71' | 1099.54' |
| P8 | 15"CMP | 1105.14' | 1104.37' |
| P9 | 12"PVC | 1101.48' | 1100.98' |
| P10 | 12"PVC | 1103.22' | 1102.39' |
| P11 | 18"CMP | 1089.42' | 1088.69' |
| P12 | 18"CMP | 1090.67' | 1090.51' |
| P13 | 18"CMP | 1097.07' | 1093.39' |
| P14 | 18"CMP | 1098.17' | 1097.49' |
| P19 | 24"CMP | 1097.25' | 1096.36' |
| P20 | 30"RCP | 1094.45' | 1093.29' |
| P21 | 30"RCP | 1094.51' | 1093.19' |
| P22 | OVAL RCP | 1096.03' | 1095.70' |
| P23 | 15" HDPE | 1099.94' | 1098.28' |
| P24 | 15"CMP | 1105.49' | 1103.81' |
| P25 | 15"CMP | 1114.97' | 1113.62' |
| P26 | 12"RCP | 1111.79' | 1110.72' |
| P27 | 15"RCP | 1111.11' | 1110.93' |
| P28 | 24"CMP | 1109.18' | 1107.93' |
| P29 | 15"CMP | 1110.02' | 1109.76' |

NOTE: EXISTING CONTOURS SHOWN

**UNOFFICIAL SET**

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# DRAINAGE MAP

STA.118+00.00 TO STA.121+75.00

SCALE: 1"= 50'

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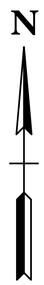
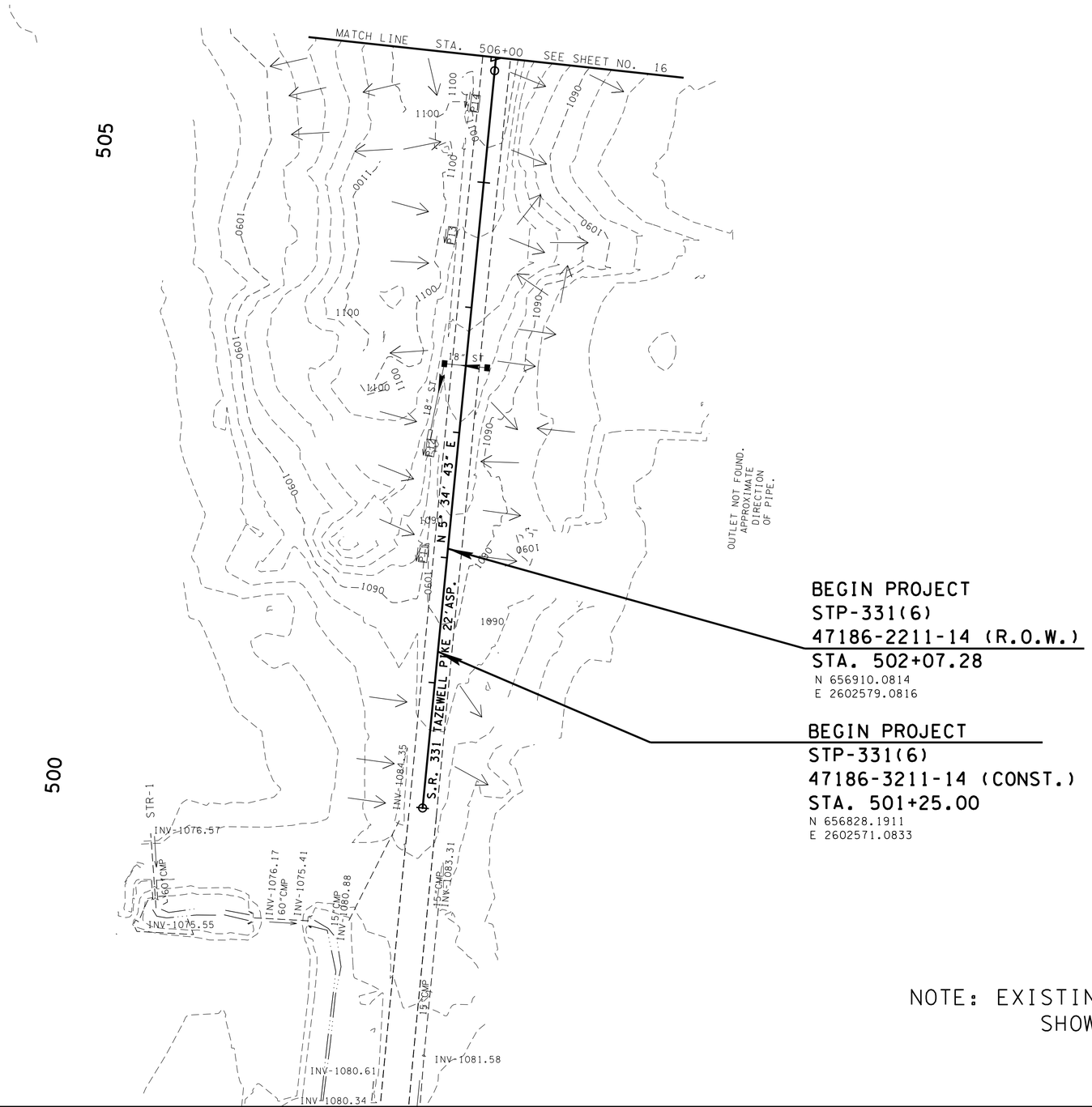
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 18 |
| CONST. | 2014 | STP-331(6) | 18 |
| | | | |
| | | | |




BEGIN PROJECT
STP-331(6)
47186-2211-14 (R.O.W.)
STA. 502+07.28
N 656910.0814
E 2602579.0816

BEGIN PROJECT
STP-331(6)
47186-3211-14 (CONST.)
STA. 501+25.00
N 656828.1911
E 2602571.0833

PIPE TABLE

| PIPE | TYPE | INVERT (IN) | INVERT (OUT) |
|---|---|---|---|
| P1 | 15"CMP | 1111.66' | 1109.79' |
| P2 | 18"RCP | 1103.69' | 1101.65' |
| P3 | 15"CMP | 1102.38' | 1097.01' |
| P4 | 12"HDPE | 1099.95 | 1095.01' |
| P5 | 12"RCP | 1104.64' | 1102.75' |
| P6 | 15"CMP | 1099.54' | 1097.63' |
| P7 | 15"CMP | 1101.71' | 1099.54' |
| P8 | 15"CMP | 1105.14' | 1104.37' |
| P9 | 12"PVC | 1101.48' | 1100.98' |
| P10 | 12"PVC | 1103.22' | 1102.39' |
| P11 | 18"CMP | 1089.42' | 1088.69' |
| P12 | 18"CMP | 1090.67' | 1090.51' |
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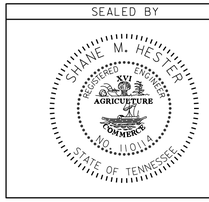
| P14 | 18"CMP | 1098.17' | 1097.49' |
| P19 | 24"CMP | 1097.25' | 1096.36' |
| P20 | 30"RCP | 1094.45' | 1093.29' |
| P21 | 30"RCP | 1094.51' | 1093.19' |
| P22 | OVAL RCP | 1096.03' | 1095.70' |
| P23 | 15" HDPE | 1099.94' | 1098.28' |
| P24 | 15"CMP | 1105.49' | 1103.81' |
| P25 | 15"CMP | 1114.97' | 1113.62' |
| P26 | 12"RCP | 1111.79' | 1110.72' |
| P27 | 15"RCP | 1111.11' | 1110.93' |
| P28 | 24"CMP | 1109.18' | 1107.93' |
| P29 | 15"CMP | 1110.02' | 1109.76' |

NOTE: EXISTING CONTOURS SHOWN

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY




COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# DRAINAGE MAP

STA.501+25.00 TO STA.506+00.00

SCALE: 1"= 50'

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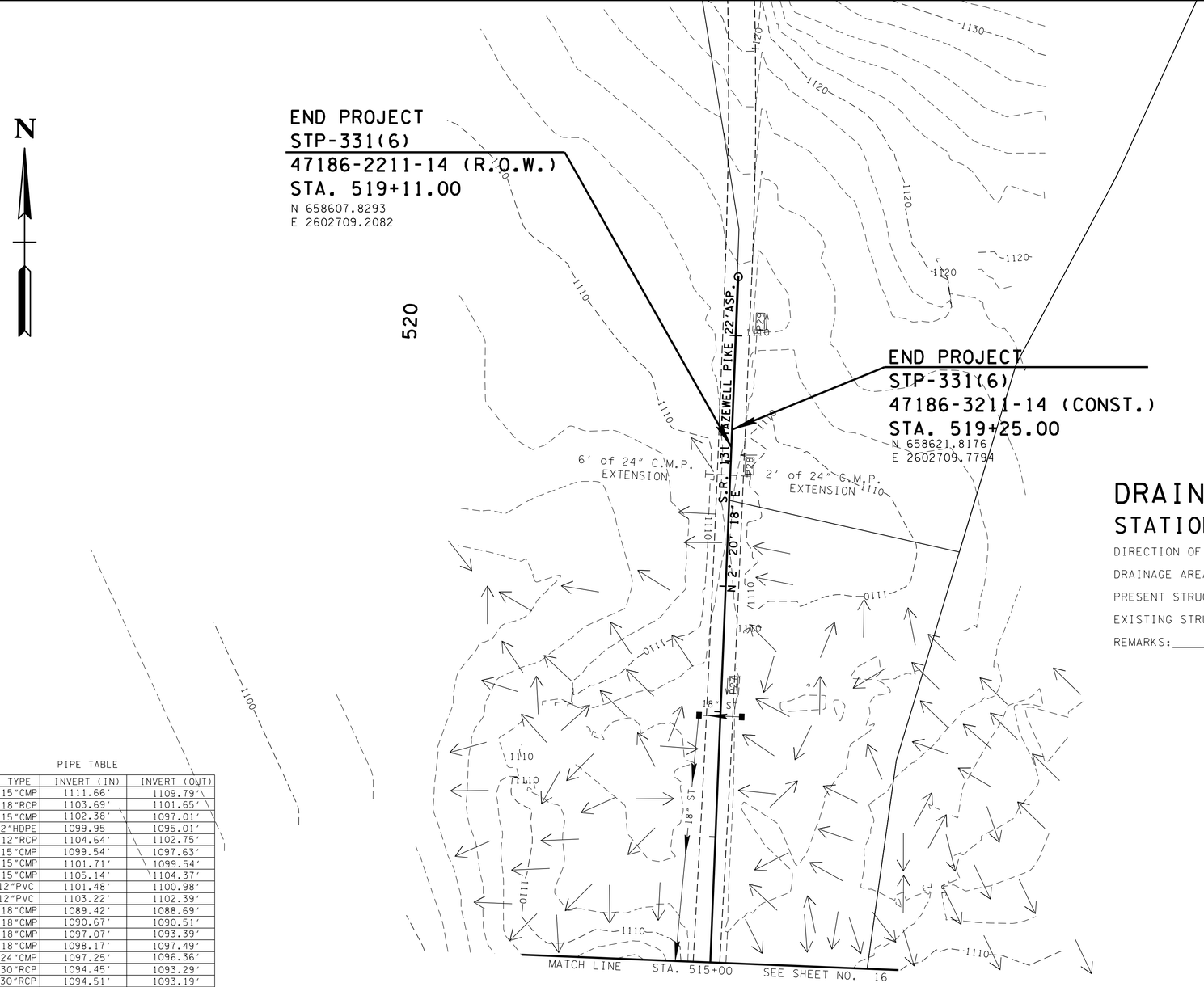
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 19 |
| CONST. | 2014 | STP-331(6) | 19 |
| | | | |
| | | | |




PIPE TABLE

| PIPE | TYPE | INVERT (IN) | INVERT (OUT) |
|---|---|---|---|
| P1 | 15"CMP | 1111.66' | 1109.79' |
| P2 | 18"RCP | 1103.69' | 1101.65' |
| P3 | 15"CMP | 1102.38' | 1097.01' |
| P4 | 12"HDPE | 1099.95 | 1095.01' |
| P5 | 12"RCP | 1104.64' | 1102.75' |
| P6 | 15"CMP | 1099.54' | 1097.63' |
| P7 | 15"CMP | 1101.71' | 1099.54' |
| P8 | 15"CMP | 1105.14' | 1104.37' |
| P9 | 12"PVC | 1101.48' | 1100.98' |
| P10 | 12"PVC | 1103.22' | 1102.39' |
| P11 | 18"CMP | 1089.42' | 1088.69' |
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| P14 | 18"CMP | 1098.17' | 1097.49' |
| P19 | 24"CMP | 1097.25' | 1096.36' |
| P20 | 30"RCP | 1094.45' | 1093.29' |
| P21 | 30"RCP | 1094.51' | 1093.19' |
| P22 | OVAL RCP | 1096.03' | 1095.70' |
| P23 | 15" HDPE | 1099.94' | 1098.28' |
| P24 | 15"CMP | 1105.49' | 1103.81' |
| P25 | 15"CMP | 1114.97' | 1113.62' |
| P26 | 12"RCP | 1111.79' | 1110.72' |
| P27 | 15"RCP | 1111.11' | 1110.93' |
| P28 | 24"CMP | 1109.18' | 1107.93' |
| P29 | 15"CMP | 1110.02' | 1109.76' |

## DRAINAGE DATA FOR PIPE

STATION 518+88.46

DIRECTION OF FLOW LEFT

DRAINAGE AREA 11.3 AC ,(X)FLAT;( )ROLLING;( )HILLY;( )MTNS.

PRESENT STRUCTURE: 24" CMP

EXISTING STRUCTURE CONDITION: GOOD

REMARKS:

NOTE: EXISTING CONTOURS SHOWN

120

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

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COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# DRAINAGE MAP

STA.515+00.00 TO
STA. 519+25.00
SCALE: 1"= 50'

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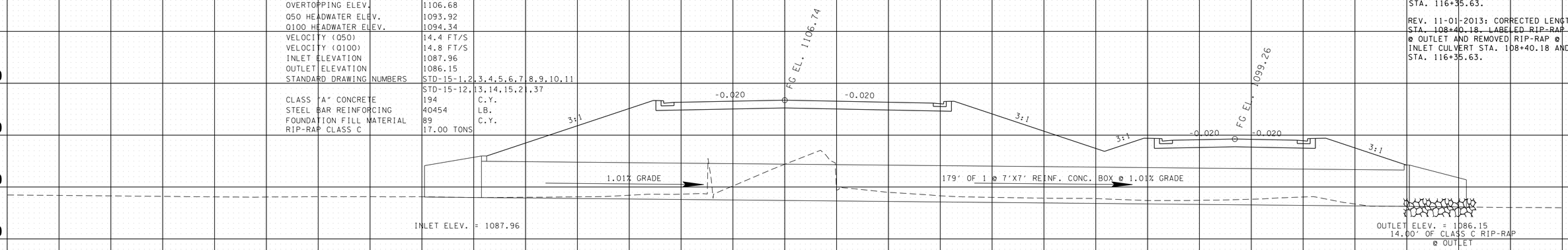
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 20 |
| CONST. | 2014 | STP-331(6) | 20 |

REV. 9-26-2013: CORRECTED CULVERT DATA ADDED RIP-RAP AT STA. 108+40.18 AND STA. 116+35.63.

REV. 11-01-2013: CORRECTED LENGTH STA. 108+40.18. LABELED RIP-RAP @ OUTLET AND REMOVED RIP-RAP @ INLET CULVERT STA. 108+40.18 AND STA. 116+35.63.

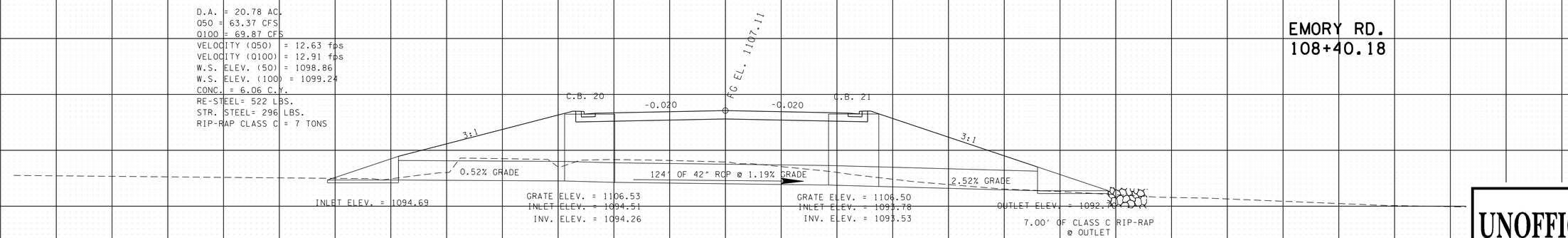
| | |
|---|---|
| STATION | 108+40.18 |
| STRUCTURE | 179' OF 1@ 7'X7' REIN. CONC. BOX. |
| SKEW | 86°39'23" |
| DRAINAGE AREA | 104.2 AC. |
| DESIGN DISCHARGE (Q50) | 285.1 CFS |
| DESIGN DISCHARGE (Q100) | 315.8 CFS |
| OVERTOPPING ELEV. | 1106.68 |
| Q50 HEADWATER ELEV. | 1093.92 |
| Q100 HEADWATER ELEV. | 1094.34 |
| VELOCITY (Q50) | 14.4 FT/S |
| VELOCITY (Q100) | 14.8 FT/S |
| INLET ELEVATION | 1087.96 |
| OUTLET ELEVATION | 1086.15 |
| STANDARD DRAWING NUMBERS | STD-15-1,2,3,4,5,6,7,8,9,10,11 |
| | STD-15-12,13,14,15,21,37 |
| CLASS "A" CONCRETE | 194 C.Y. |
| STEEL BAR REINFORCING | 40454 LB. |
| FOUNDATION FILL MATERIAL | 89 C.Y. |
| RIP-RAP CLASS C | 17.00 TONS |




STA. 116+35.63
124' OF 42" CONC. STORM SEWER PIPE
SKEW 90°
ENDWALLS REQD. : (2) TYPE "U" ENDWALLS
STD. DWG. NOS. D-PE-42A & B, D-PB-1

D.A. = 20.78 AC.
Q50 = 63.37 CFS
Q100 = 69.87 CFS
VELOCITY (Q50) = 12.63 fps
VELOCITY (Q100) = 12.91 fps
W.S. ELEV. (50) = 1098.86
W.S. ELEV. (100) = 1099.24
CONC. = 6.06 C.Y.
RE-STEEL= 522 LBS.
STR. STEEL= 296 LBS.
RIP-RAP CLASS C = 7 TONS

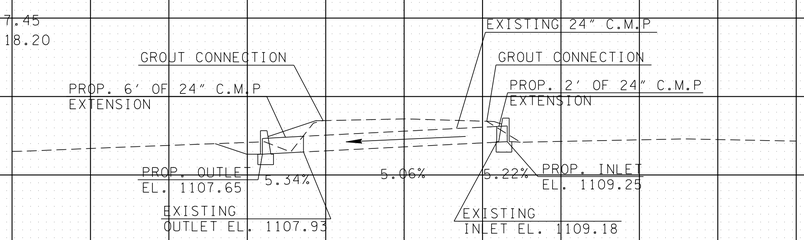
EMORY RD.
108+40.18




STA. 518+88.68
6' OF 24" C.M.P. EXT. & 2' OF 24" C.M.P. EXT.
SKEW 89°
ENDWALLS REQD. : (2) STRAIGHT TYPE CONC. ENDWALL
STD. DWG. NOS. D-PE-4

D.A. = 11.3 AC.
Q50 = 32.26 CFS
Q100 = 38.87 CFS
W.S. ELEV. (50) = 1117.45
W.S. ELEV. (100) = 1118.20
CONC.= 3.24 C.Y.

EMORY RD.
116+35.63




Tazewell Pike
518+88.68

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

CULVERT CROSS-SECTIONS

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

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

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

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 21 |
| CONST. | 2014 | STP-331(6) | 21 |
| | | | |
| | | | |

REV. 9-26-2013:UPDATED NOTES PER SWPPP COMMENTS.

# EROSION PREVENTION AND SEDIMENT CONTROL NOTES

## STREAM/WETLAND

(1) 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

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

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

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

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

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

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

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

(5) PERMANENT EPSC MEASURES SHALL BE INITIATED WITHIN 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.

(6) 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.

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

(8) 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

(9) RAIN WATER WHICH COLLECTS IN THE UTILITY TRENCH SHALL BE PUMPED INTO A DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND MAINTAINED.

(10) 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

(11) 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).

(12) 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.

(13) 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.

(14) 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.

(15) 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.

(16) 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.

(17) THE UTILITY CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS (AS APPROVED BY THE TDOT PROJECT ENGINEER).

(18) 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.

**UNOFFICIAL SET**

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

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

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 22 |
| CONST. | 2014 | STP-331(6) | 22 |
| | | | |
| | | | |

REV. 9-26-2013: ADDED TEMP. CONST. EXIT AND ENHANCED ROCK CHECK DAM TO QUANTITIES AND LEGEND PER SWPPP COMMENTS.

Total project area within R.O.W. and easements: 9.44 Ac.
Total disturbed area within slope lines: 7.31 Ac.

## EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES

| | ITEM NO. | DESCRIPTION | UNIT | QUANTITY |
|---|---|---|---|---|
| | 203-01 | TEMPORARY BERM | CY | 175 |
| | 209-02 | 12" TEMPORARY SLOPE DRAIN | L.F. | 26 |
| | 209-02.07 | 18" TEMPORARY SLOPE DRAIN | L.F. | 12 |
| | 209-05 | SEDIMENT REMOVAL | CY | 136 |
| | 209-08.02 | TEMPORARY SILT FENCE WITH BACKING | L.F. | 700 |
| | 209-08.03 | TEMPORARY SILT FENCE WITHOUT BACKING | L.F. | 3240 |
| | 209-08.07 | ROCK CHECK DAM | EACH | 43 |
| | 209-08.08 | ENHANCED ROCK CHECK DAM | EACH | 2 |
| | | | | |
| 10 | 209-09.03 | SEDIMENT FILTER BAG 15 FT X 15 FT | EACH | 2 |
| | 209-09.40 | CURB INLET PROTECTION (TYPE 1) | EACH | 8 |
| | 209-09.41 | CURB INLET PROTECTION (TYPE 2) | EACH | 2 |
| | 209-09.43 | CURB INLET PROTECTION (TYPE 4) | EACH | 12 |
| | 209-40.43 | CATCH BASIN FILTER ASSEMBLY (TYPE 3) | EACH | 1 |
| | 209-40.48 | CATCH BASIN FILTER ASSEMBLY (TYPE 8) | EACH | 2 |
| | 303-10.01 | MINERAL AGGREGATE (SIZE 57) | TON | 65 |
| 8 | 709-05.05 | MACHINED RIPRAP (CLASS A-3) | TON | 78 |
| | 709-05.06 | MACHINED RIPRAP (CLASS A-1) | TON | 23 |
| 9 | 740-10.03 | GEOTEXTILE (TYPE III) EROSION CONTROL | SY | 368 |
| | 740-11.02 | TEMPORARY SEDIMENT TUBE (12IN) | L.F. | 2400 |
| | | | | |

8. USED FOR TEMPORARY CONSTRUCTION EXITS.
9. INCLUDES 134 S.Y. FOR TEMP. CONST. EXITS AND 234 S.Y. FOR OTHER E.C. ITEMS.
10. SEE SUBSECTION 209.07 OF THE STD. SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.

## EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

| SYMBOL | ITEM | STD. DWG. |
|---|---|---|
| SFB SFB SFB SFB | SEDIMENT FILTER BAG | EC-STR-2 |
| | ROCK CHECK DAM (V-DITCH) | EC-STR-6 |
| * SFB * SFB * SFB * | SILT FENCE WITH WIRE BACKING | EC-STR-3C |
| | CULVERT PROTECTION (TYPE 2) | EC-STR-11A |
| | TEMPORARY BERM | EC-STR-27 |
| | TEMPORARY SLOPE DRAIN | EC-STR-27 |
| ** TUBE ** TUBE ** | SEDIMENT TUBE | EC-STR-37 |
| 1 | CURB INLET PROTECTION (TYPE 1) | EC-STR-39 |
| 2 | CURB INLET PROTECTION (TYPE 2) | EC-STR-39 |
| 4 | CURB INLET PROTECTION (TYPE 4) | EC-STR-39A |
| 3 | CATCH BASIN FILTER ASSEMBLY (TYPE 3) | EC-STR-43 |
| 8 | CATCH BASIN FILTER ASSEMBLY (TYPE 8) | EC-STR-48 |
| * TCE | TEMPORARY CONSTRUCTION EXIT | EC-STR-25 |
| | ENHANCED ROCK CHECK DAM (V-DITCH) | EC-STR-6A |
| * SF * SF * SF * | SILT FENCE | EC-STR-3B |

* TO BE FIELD LOCATED BY CONTRACTOR AND APPROVED BY THE ENGINEER.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

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

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 23 |
| CONST. | 2014 | STP-331(6) | 23 |
| | | | |
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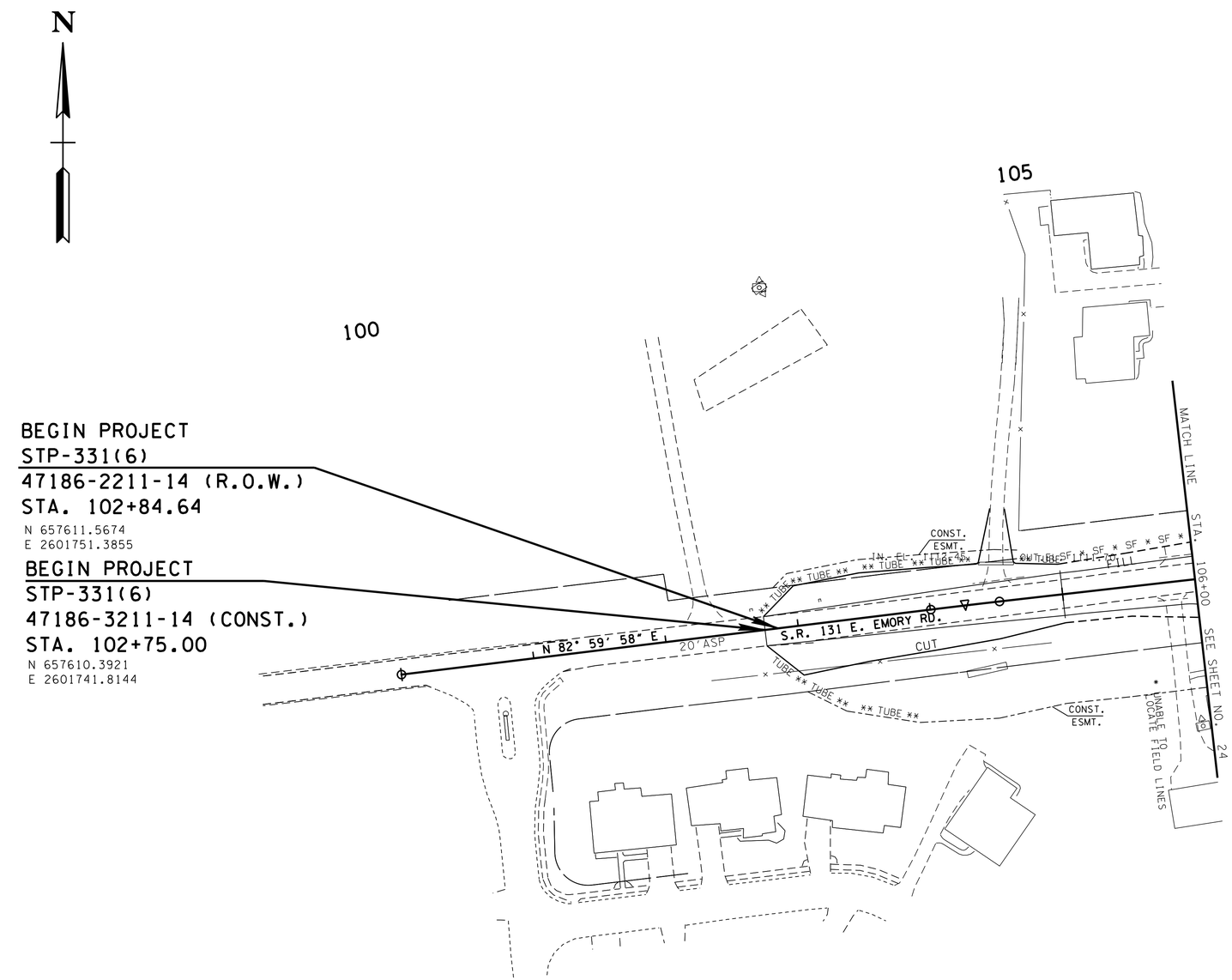
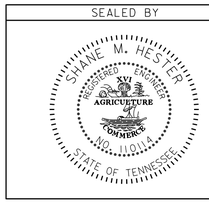
REV. 9-26-2013: CHANGED THIS
SHEET TO CLEARING AND GRUBBING PHASE 1.




# UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY




COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PHASE 1 CLEARING AND GRUBBING

## EROSION PREVENTION AND SEDIMENT CONTROL PLAN

102+75.00 TO 106+00.00

SCALE: 1"= 50'

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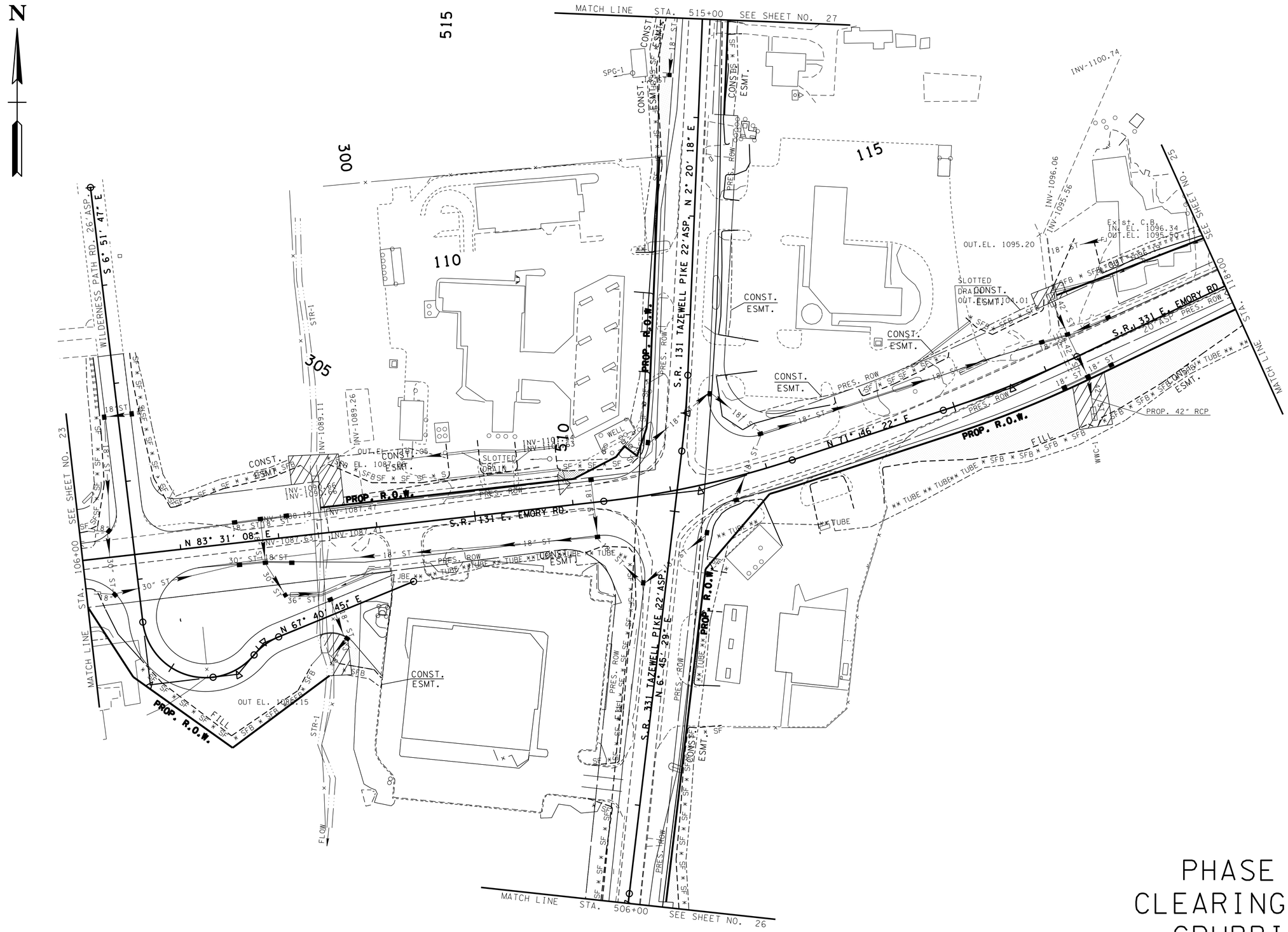
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 24 |
| CONST. | 2014 | STP-331(6) | 24 |
| | | | |
| | | | |

REV. 10-31-2012: MOVED BUSINESS ENTRANCE STA. 511+71.24 TO STA. 511+60.85.

REV. 9-26-2013: CHANGED PROPOSED R.O.W., SLOPE EASM'T. AND CONST. EASM'T. IN NORTHWEST CORNER AND SOUTHEAST CORNER OF SR-331 AND SR-131 INTERSECTION. ADJUSTED PROP. R.O.W. STA. 116+42.44 TO STA. 118+00(LT). CHANGE SHEET TITLE TO CLEARING AND GRUBBING PHASE 1. ADDED FLANKER CB'S. IN SAG'S.




# UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PHASE 1 CLEARING AND GRUBBING

## EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA. 106+00 TO STA. 118+00
STA. 506+00 TO STA. 515+00

SCALE: 1"= 50'

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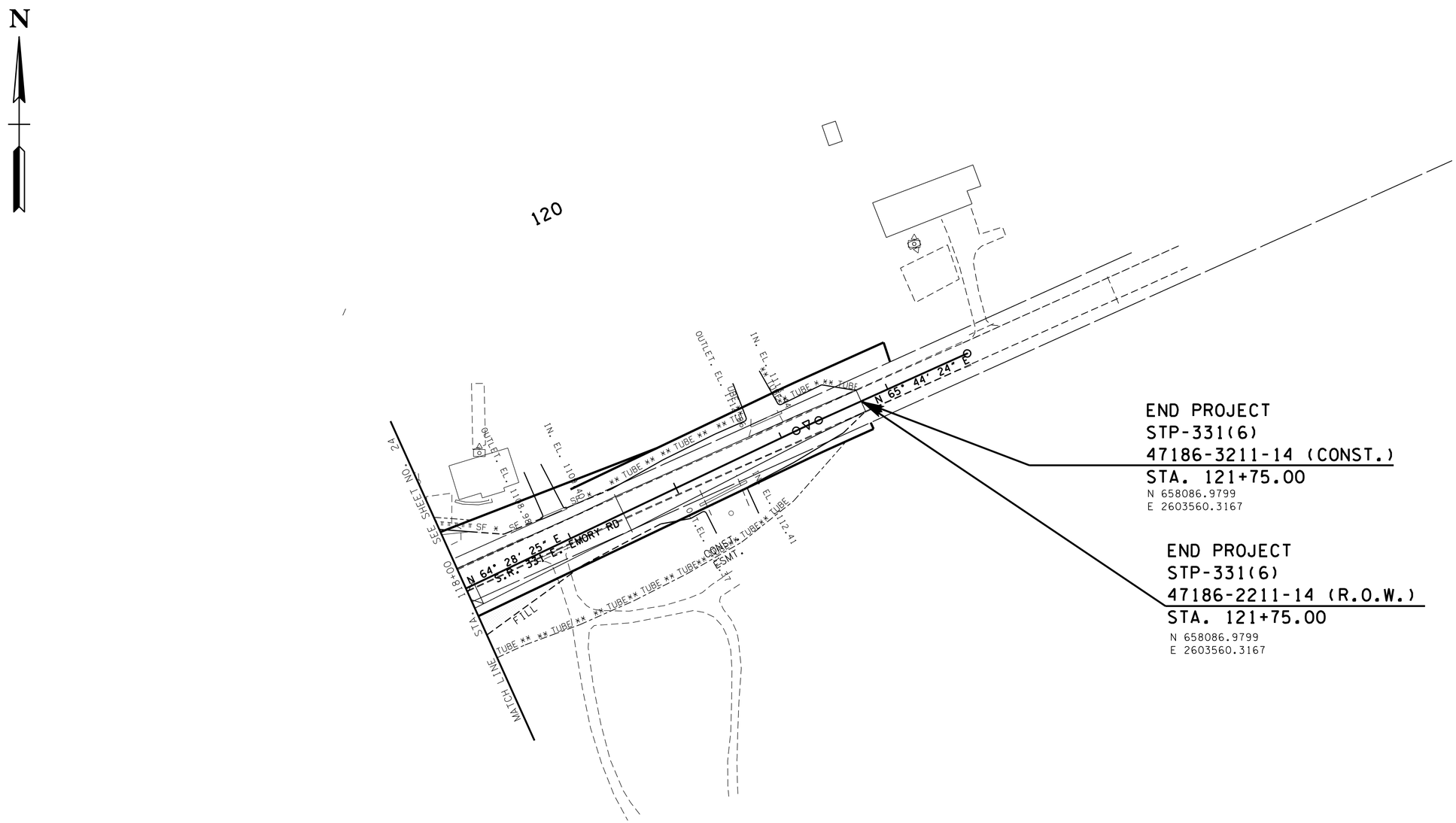
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 25 |
| CONST. | 2014 | STP-331(6) | 25 |
| | | | |
| | | | |

REV. 9-26-2013: ADJUSTED PROP. R.O.W. STA. 118+00 TO STA. 119+99.92 (LT). CHANGED SHEET TITLE TO CLEARING AND GRUBBING PHASE 1.




END PROJECT
STP-331(6)
47186-3211-14 (CONST.)
STA. 121+75.00
N 658086.9799
E 2603560.3167

END PROJECT
STP-331(6)
47186-2211-14 (R.O.W.)
STA. 121+75.00
N 658086.9799
E 2603560.3167

**UNOFFICIAL SET**

**NOT FOR BIDDING**

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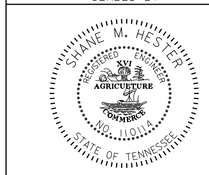


COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PHASE 1 CLEARING AND GRUBBING

## EROSION PREVENTION AND SEDIMENT CONTROL PLAN

118+00.00 TO 121+75.00

SCALE: 1"= 50'

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

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 26 |
| CONST. | 2014 | STP-331(6) | 26 |
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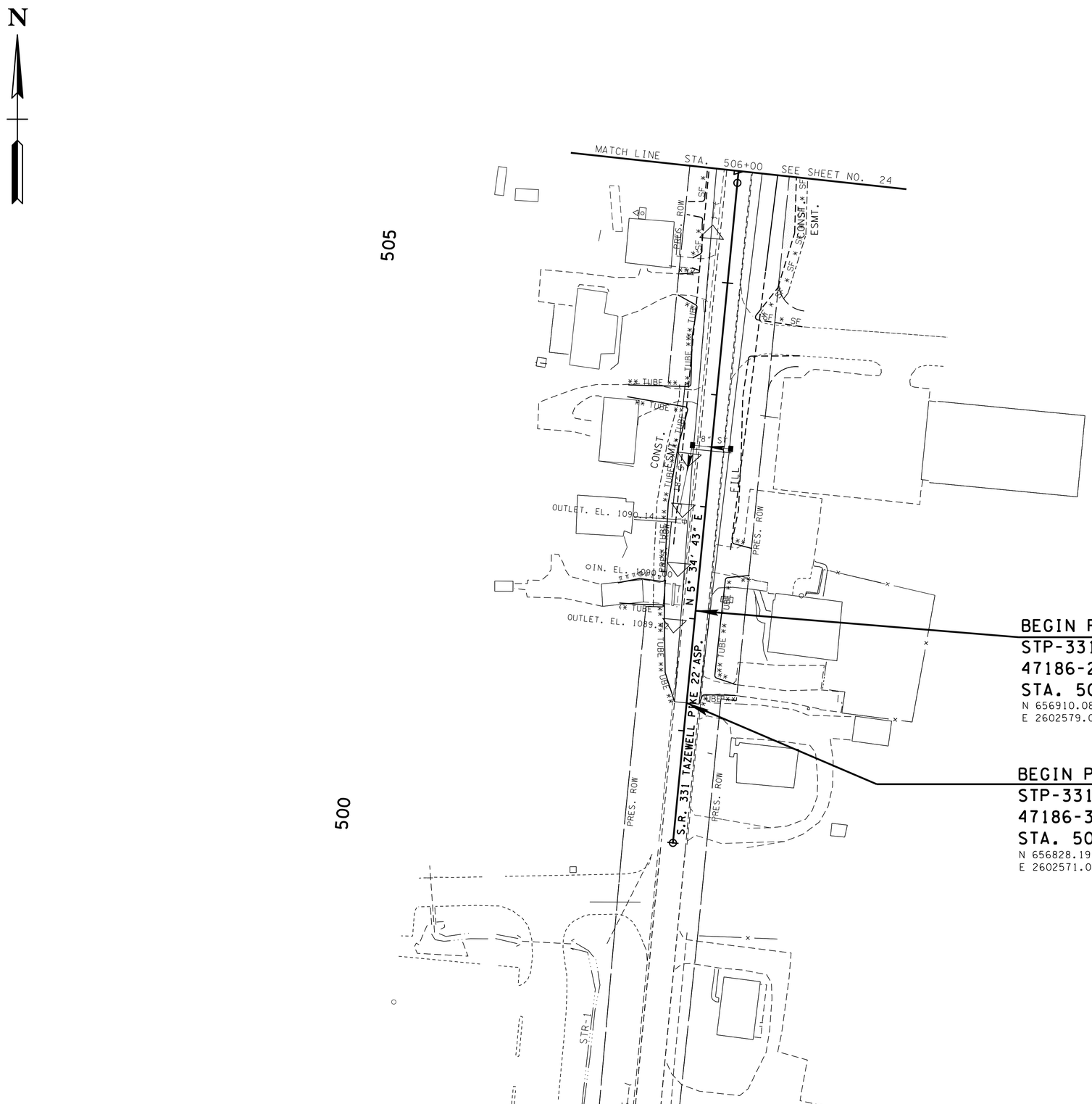
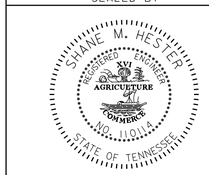
REV. 9-26-2013: CHANGED SHEET TITLE TO CLEARING AND GRUBBING PHASE 1.




UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY




COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PHASE 1 CLEARING AND GRUBBING

## EROSION PREVENTION AND SEDIMENT CONTROL PLAN

501+25.00 TO 506+00.00

SCALE: 1"= 50'

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

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 27 |
| CONST. | 2014 | STP-331(6) | 27 |
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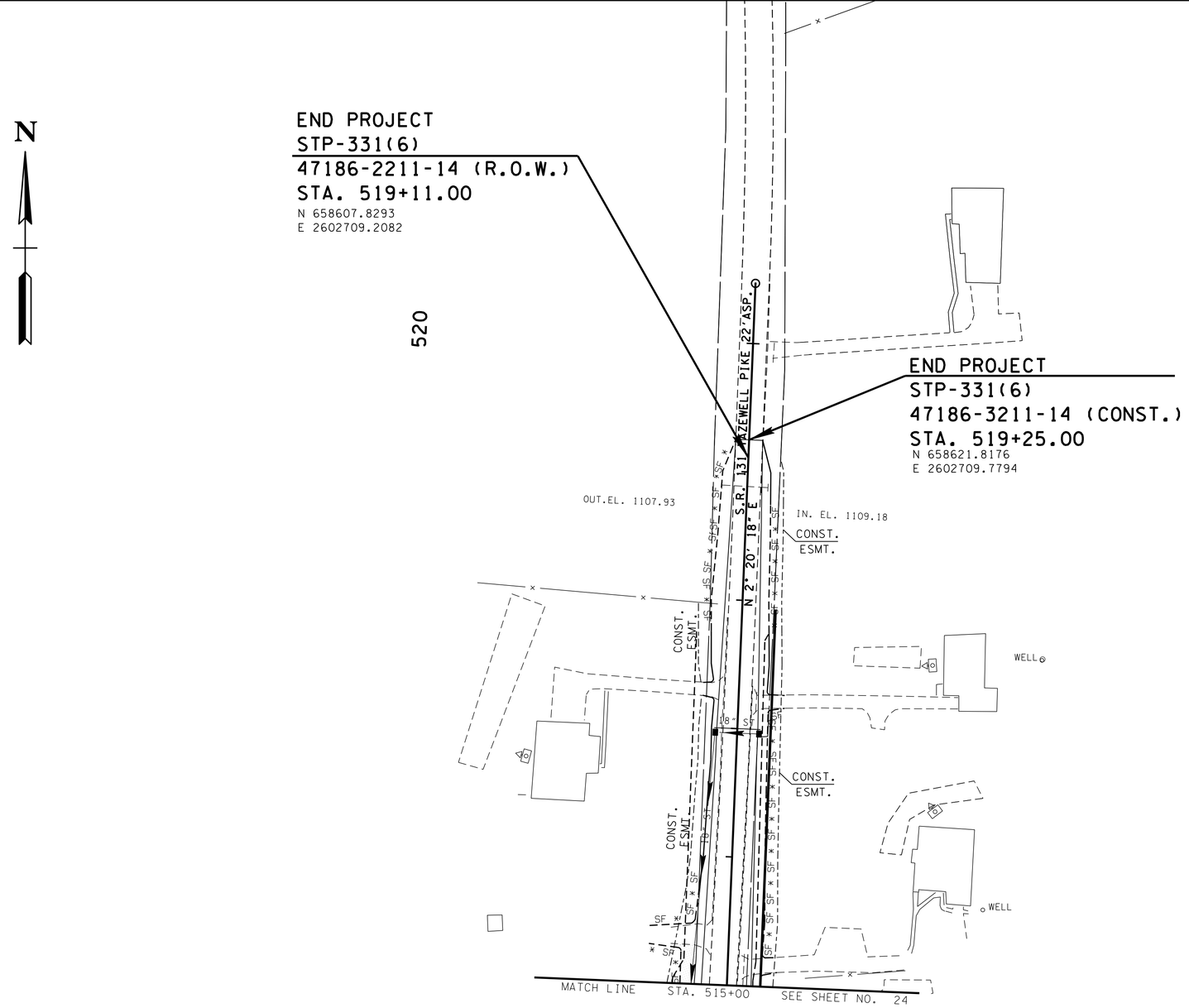
REV. 9-26-2013: CHANGED SHEET TITLE TO CLEARING AND GRUBBING PHASE 1.

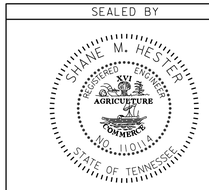



120

# UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PHASE 1 CLEARING AND GRUBBING

## EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.515+00 TO STA.519+25

SCALE: 1"= 50'

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

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 27A |
| CONST. | 2014 | STP-331(6) | 27A |
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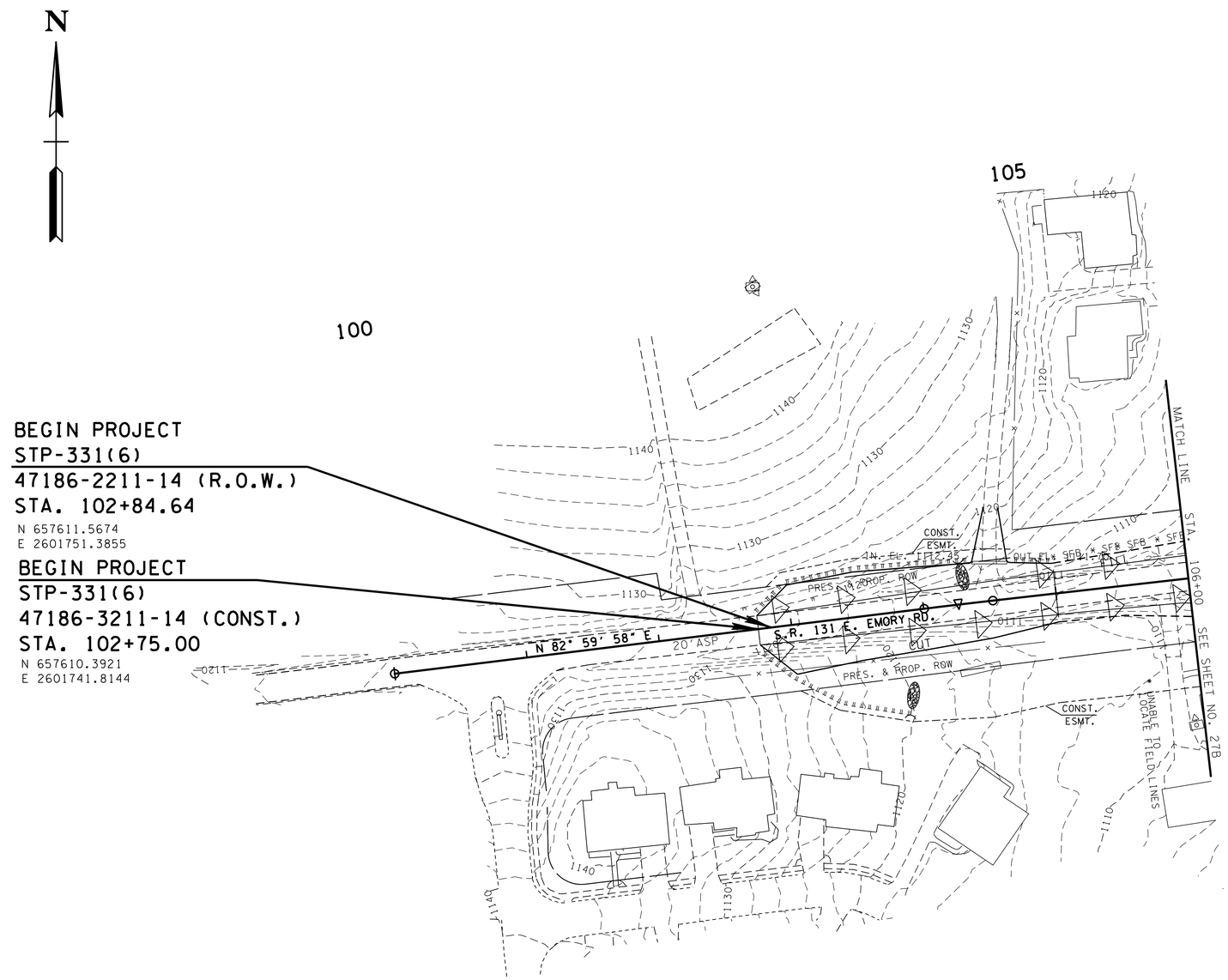
REV. 9-26-2013: ADDED THIS SHEET TO PLANS.

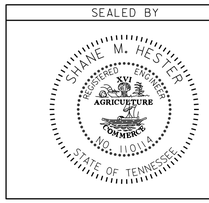



PHASE 2
EXISTING
CONTOURS

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY




COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 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

102+75.00 TO 106+00.00

SCALE: 1"= 50'

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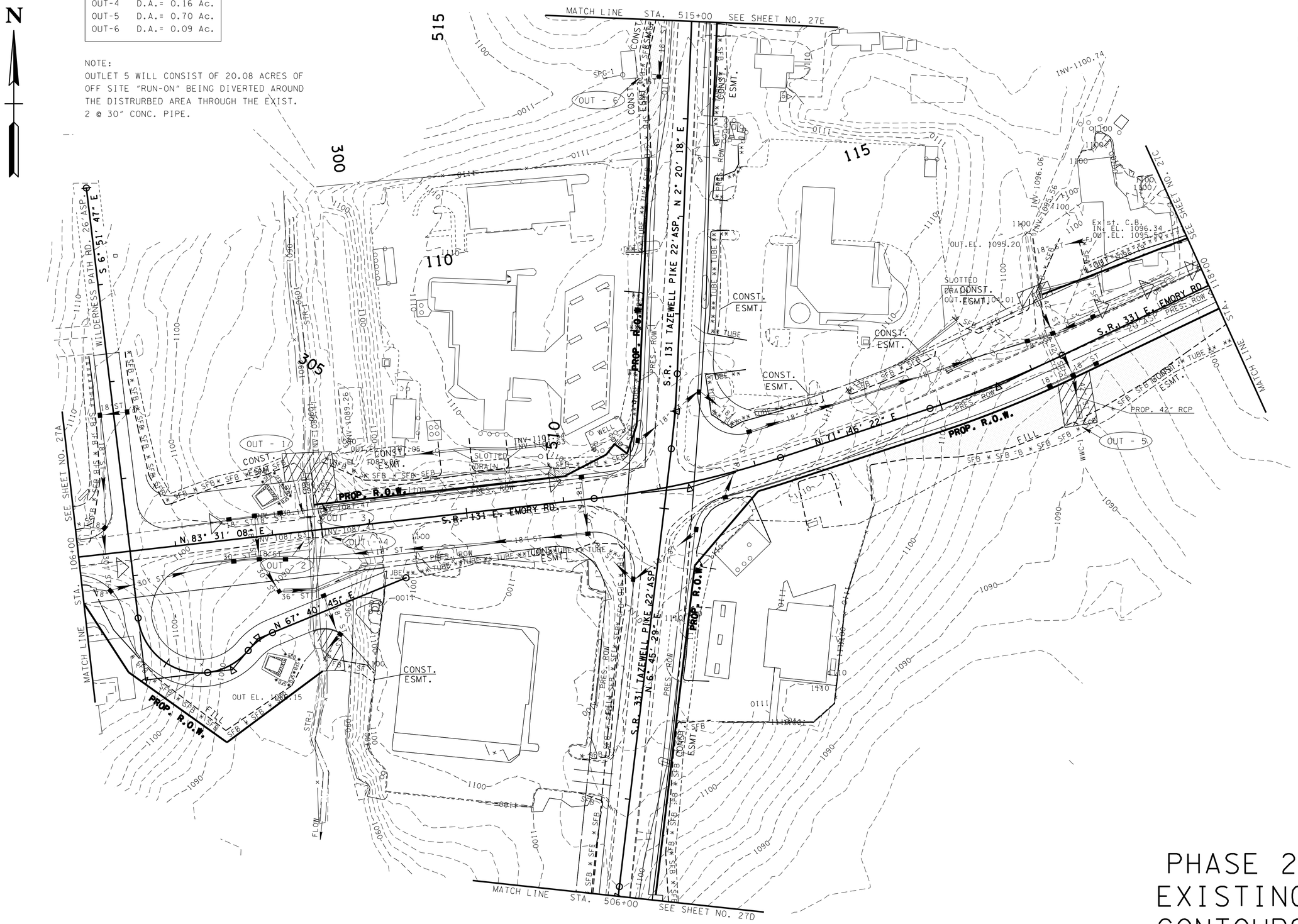
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 27B |
| CONST. | 2014 | STP-331(6) | 27B |
| | | | |
| | | | |

REV. 9-26-2013: THIS SHEET ADDED TO PLANS.

| | | |
|---|---|---|
| OUT-1 | D.A.= | 2.76 Ac. |
| OUT-2 | D.A.= | 1.48 Ac. |
| OUT-3 | D.A.= | 0.52 Ac. |
| OUT-4 | D.A.= | 0.16 Ac. |
| OUT-5 | D.A.= | 0.70 Ac. |
| OUT-6 | D.A.= | 0.09 Ac. |

NOTE:
OUTLET 5 WILL CONSIST OF 20.08 ACRES OF OFF SITE "RUN-ON" BEING DIVERTED AROUND THE DISTRURBED AREA THROUGH THE EXIST. 2 @ 30" CONC. PIPE.




# UNOFFICIAL SET

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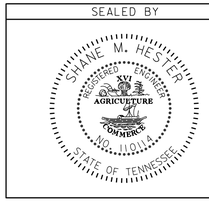


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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PHASE 2 EXISTING CONTOURS

## EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA. 106+00 TO STA. 118+00

SCALE: 1"= 50'

26-JUN-2014 17:30
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 27C |
| CONST. | 2014 | STP-331(6) | 27C |
| | | | |
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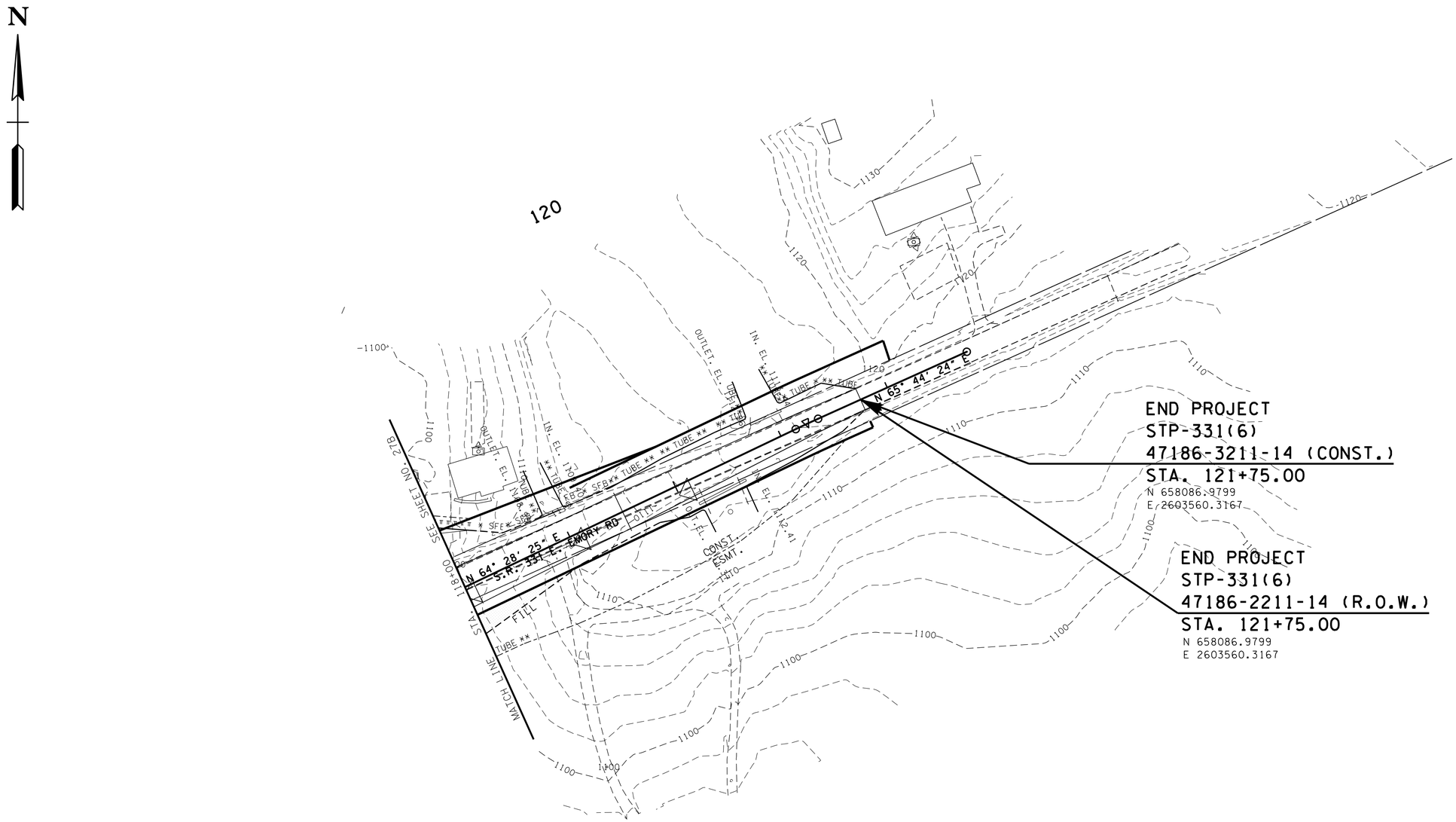
REV. 9-26-2013: THIS SHEET ADDED TO PLANS.




**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PHASE 2 EXISTING CONTOURS

## EROSION PREVENTION AND SEDIMENT CONTROL PLAN

118+00.00 TO 121+75.00

SCALE: 1"= 50'

16-JUN-2014 17:30
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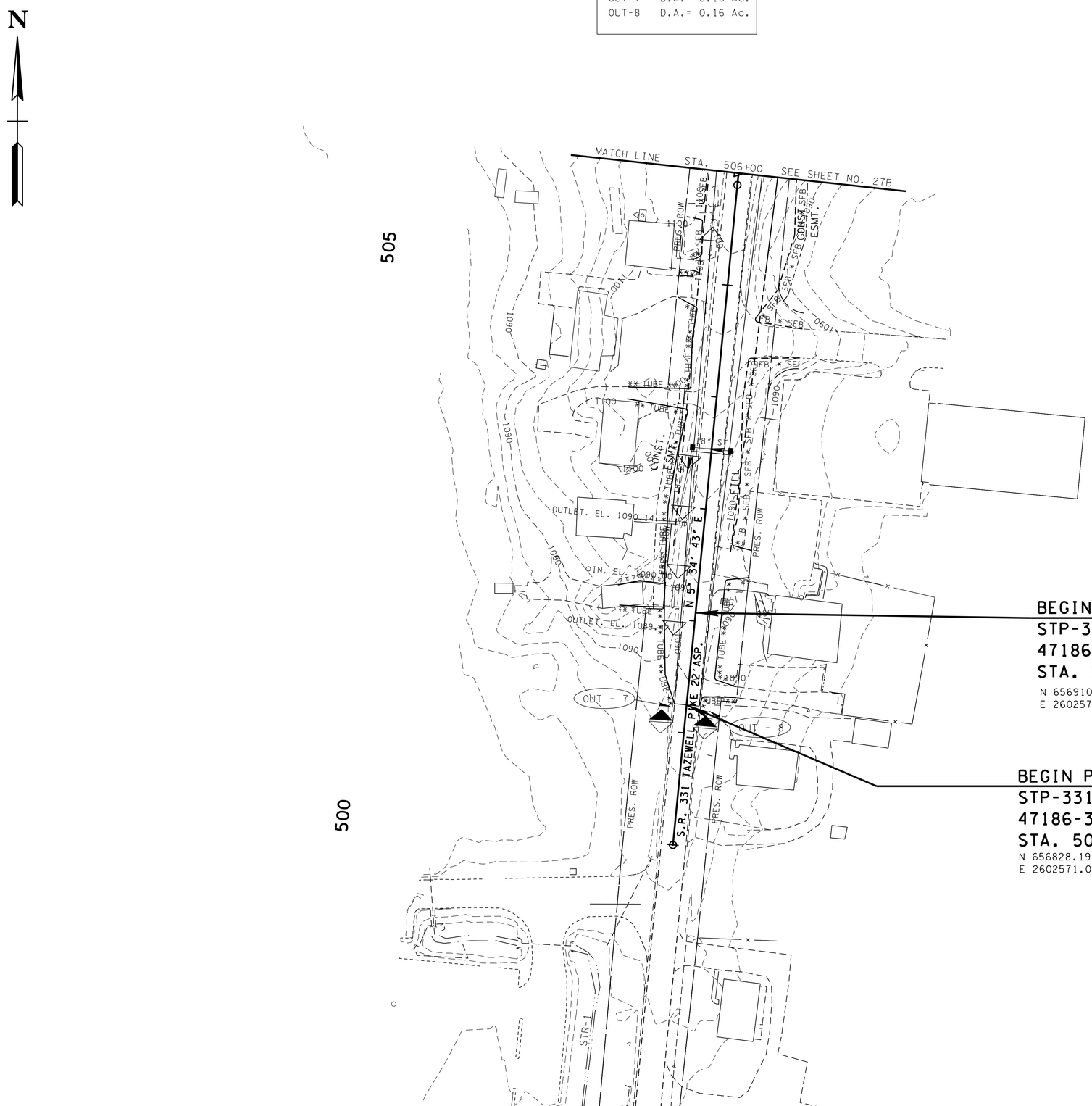
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 27D |
| CONST. | 2014 | STP-331(6) | 27D |
| | | | |
| | | | |

REV. 9-26-2013: THIS SHEET ADDED TO PLANS.

| | |
|---|---|
| OUT-7 | D.A.= 0.16 Ac. |
| OUT-8 | D.A.= 0.16 Ac. |




BEGIN PROJECT
STP-331(6)
47186-2211-14 (R.O.W.)
STA. 502+07.28
N 656910.0814
E 2602579.0816

BEGIN PROJECT
STP-331(6)
47186-3211-14 (CONST.)
STA. 501+25.00
N 656828.1911
E 2602571.0833

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

SEALED BY
SHANE M. HESTER
REGISTERED ENGINEER
AGRICULTURE COMMERCE
NO. 110114
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PHASE 2 EXISTING CONTOURS

## EROSION PREVENTION AND SEDIMENT CONTROL PLAN

501+25.00 TO 506+00.00

SCALE: 1"= 50'

6-JUN-2014 17:30
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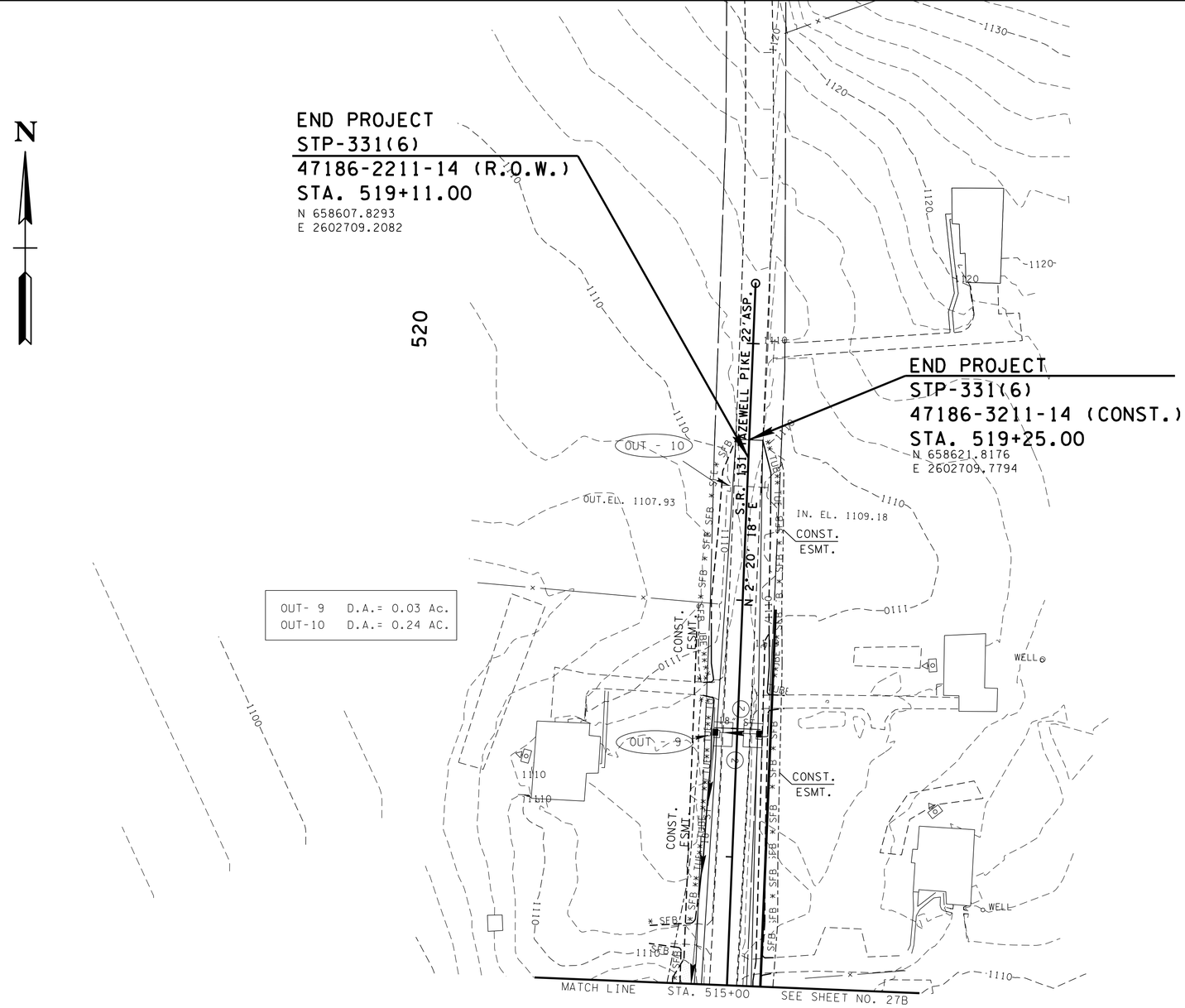
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 27E |
| CONST. | 2014 | STP-331(6) | 27E |
| | | | |
| | | | |

REV. 9-26-2013: THIS SHEET ADDED TO PLANS.




120

PHASE 2
EXISTING
CONTOURS

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 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

STA.515+00 TO STA.519+25

SCALE: 1"= 50'

16-JUN-2014 17:30
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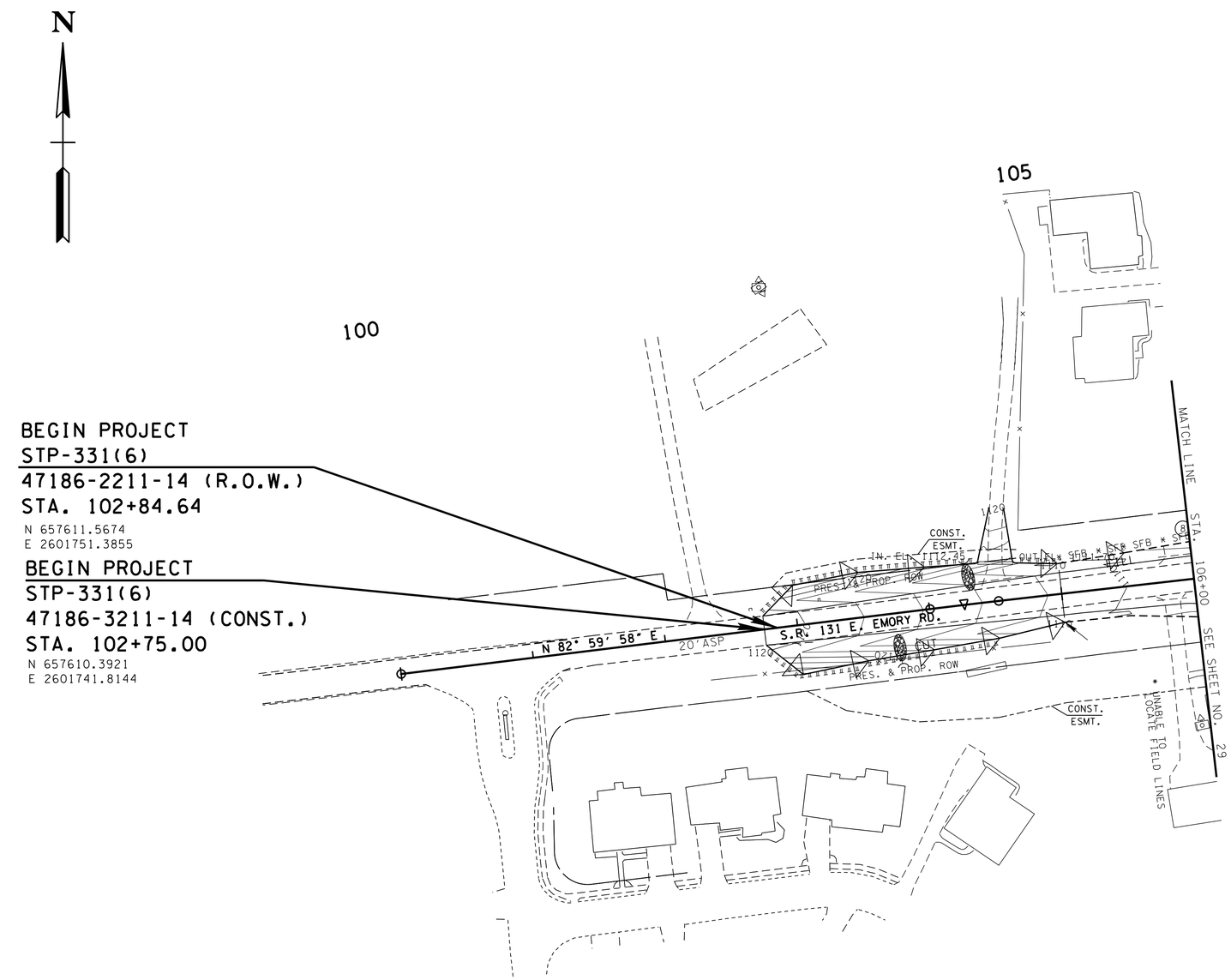
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 28 |
| CONST. | 2014 | STP-331(6) | 28 |
| | | | |
| | | | |

REV. 9-26-2013: CHANGED SHEET TITLE TO PHASE 3.




UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

SHANE M. HESTER
REGISTERED ENGINEER
AGRICULTURE COMMERCE
NO. 110114
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PHASE 3
PROPOSED
CONTOURS

# EROSION PREVENTION AND SEDIMENT CONTROL PLAN

102+75.00 TO 106+00.00

SCALE: 1"= 50'

26-JUN-2014 17:30
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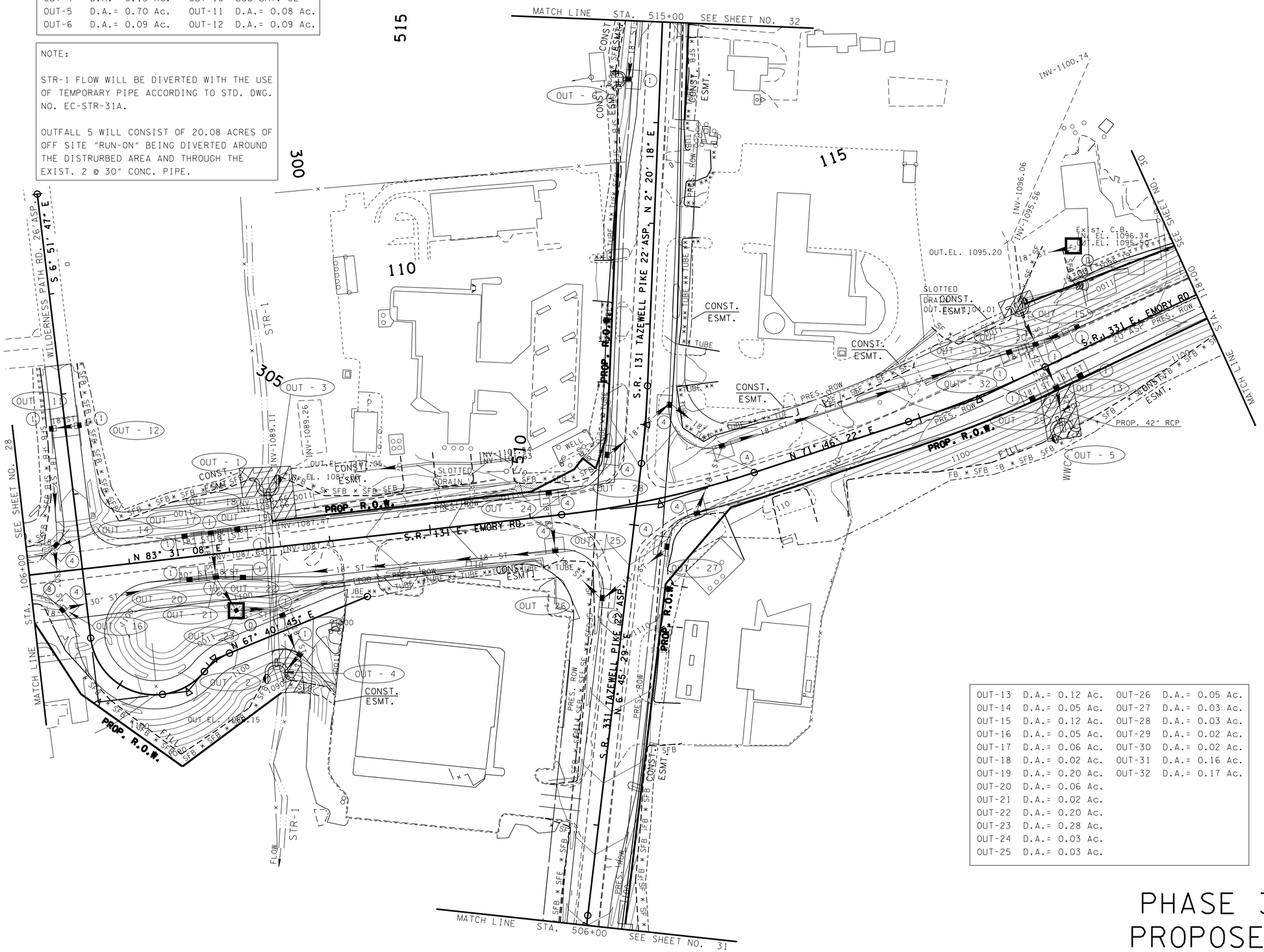
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| | | | |
|---|---|---|---|
| OUT-1 | D.A.= 0.14 Ac. | OUT-7 | see sht. 31 |
| OUT-2 | D.A.= 0.24 Ac. | OUT-8 | see sht. 31 |
| OUT-3 | D.A.= 0.19 Ac. | OUT-9 | see sht. 27 |
| OUT-4 | D.A.= 0.15 Ac. | OUT-10 | see sht. 32 |
| OUT-5 | D.A.= 0.70 Ac. | OUT-11 | D.A.= 0.08 Ac. |
| OUT-6 | D.A.= 0.09 Ac. | OUT-12 | D.A.= 0.09 Ac. |

NOTE:

STR-1 FLOW WILL BE DIVERTED WITH THE USE OF TEMPORARY PIPE ACCORDING TO STD. DWG. NO. EC-STR-31A.

OUTFALL 5 WILL CONSIST OF 20.08 ACRES OF OFF SITE "RUN-ON" BEING DIVERTED AROUND THE DISTRURBED AREA AND THROUGH THE EXIST. 2 @ 30" CONC. PIPE.




| | | | |
|---|---|---|---|
| OUT-13 | D.A.= 0.12 Ac. | OUT-26 | D.A.= 0.05 Ac. |
| OUT-14 | D.A.= 0.05 Ac. | OUT-27 | D.A.= 0.03 Ac. |
| OUT-15 | D.A.= 0.12 Ac. | OUT-28 | D.A.= 0.03 Ac. |
| OUT-16 | D.A.= 0.05 Ac. | OUT-29 | D.A.= 0.02 Ac. |
| OUT-17 | D.A.= 0.06 Ac. | OUT-30 | D.A.= 0.02 Ac. |
| OUT-18 | D.A.= 0.02 Ac. | OUT-31 | D.A.= 0.16 Ac. |
| OUT-19 | D.A.= 0.20 Ac. | OUT-32 | D.A.= 0.17 Ac. |
| OUT-20 | D.A.= 0.06 Ac. | | |
| OUT-21 | D.A.= 0.02 Ac. | | |
| OUT-22 | D.A.= 0.20 Ac. | | |
| OUT-23 | D.A.= 0.28 Ac. | | |
| OUT-24 | D.A.= 0.03 Ac. | | |
| OUT-25 | D.A.= 0.03 Ac. | | |

# PHASE 3 PROPOSED CONTOURS

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 29 |
| CONST. | 2014 | STP-331(6) | 29 |
| | | | |
| | | | |

REV. 10-31-2012: MOVED BUSINESS ENTRANCE STA. 511+71.24 TO STA. 511+60.85.

REV. 9-26-2013: CHANGED PROPOSED R.O.W., SLOPE EASM'T. AND CONST. EASM'T. IN NORTHWEST CORNER AND SOUTHEAST CORNER OF SR-331 AND SR-131 INTERSECTION. ADJUSTED PROP. R.O.W. STA. 116+42.44 TO STA. 118+00 (LT). CHANGED TITLE TO PHASE 3. ADDED SWPPP CHANGES. ADDED FLANKER CB'S. IN SAG'S.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

SHANE M. HESTER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 110114
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

## EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA. 106+00 TO STA. 118+00
STA. 506+00 TO STA. 515+00

SCALE: 1"= 50'

16-JUN-2014 17:30
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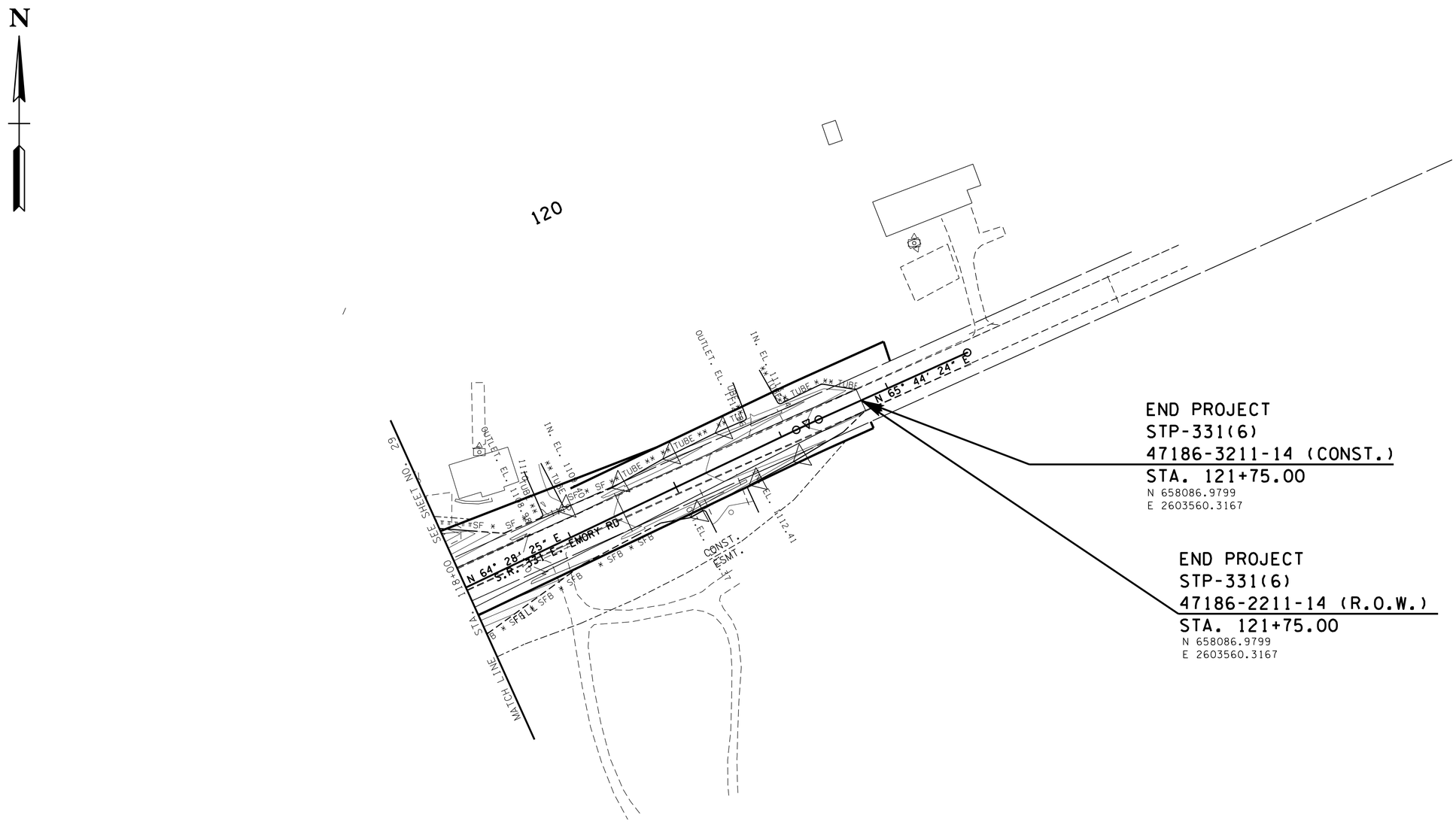
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 30 |
| CONST. | 2014 | STP-331(6) | 30 |
| | | | |
| | | | |

REV. 9-26-2013: ADJUSTED PROP. R.O.W. STA. 118+00 TO STA. 119+99.92 (LT). CHANGED SHEET TITLE TO PHASE 3.




END PROJECT
STP-331(6)
47186-3211-14 (CONST.)
STA. 121+75.00
N 658086.9799
E 2603560.3167

END PROJECT
STP-331(6)
47186-2211-14 (R.O.W.)
STA. 121+75.00
N 658086.9799
E 2603560.3167

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PHASE 3 PROPOSED CONTOURS

## EROSION PREVENTION AND SEDIMENT CONTROL PLAN

118+00.00 TO 121+75.00

SCALE: 1"= 50'

16-JUN-2014 17:30
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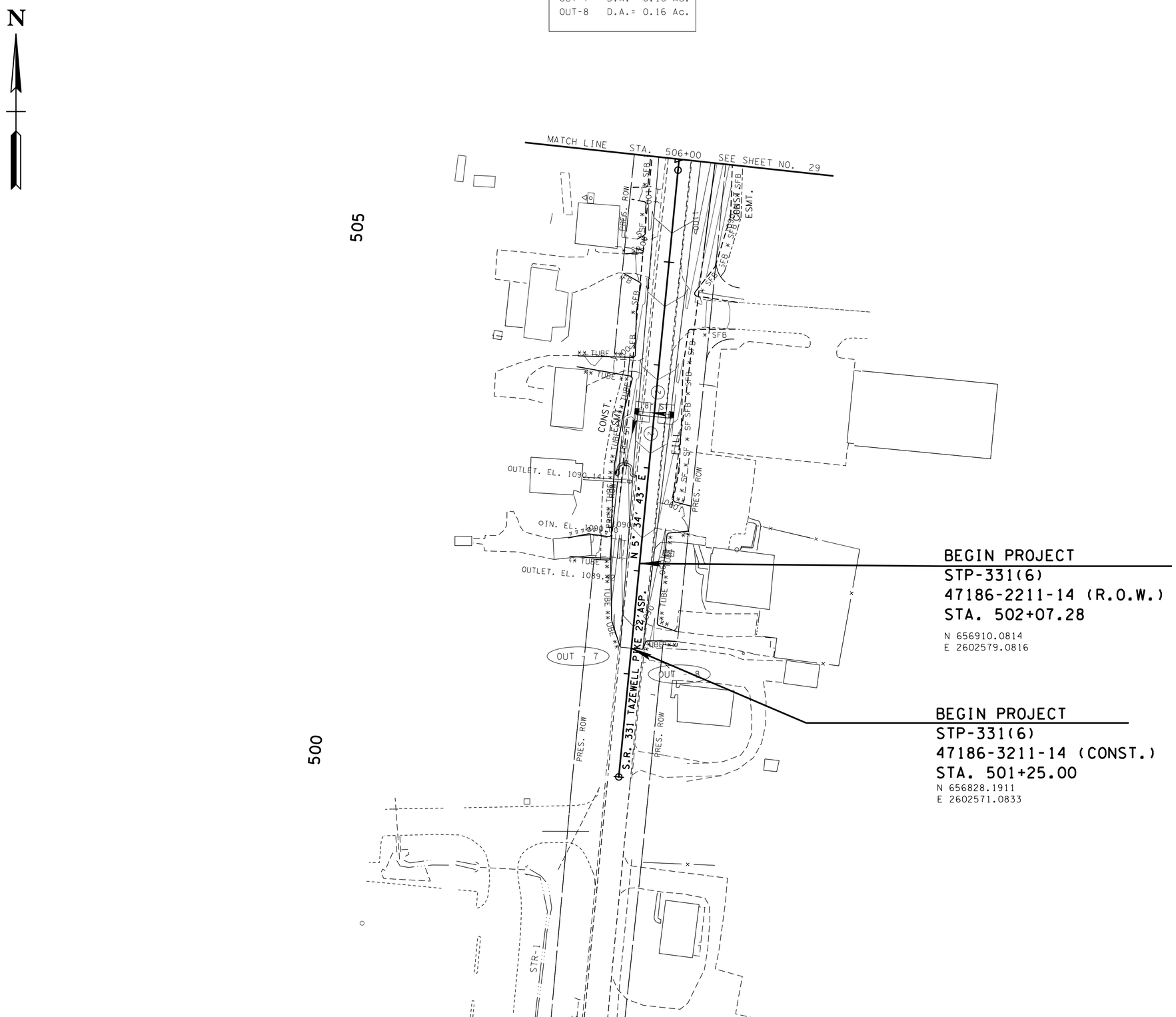
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 31 |
| CONST. | 2014 | STP-331(6) | 31 |
| | | | |
| | | | |

REV. 9-26-2013: CHANGED SHEET TITLE TO PHASE 3. ADDED SWPPP CHANGES.

OUT-7 D.A.= 0.16 Ac.
OUT-8 D.A.= 0.16 Ac.




UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PHASE 3 PROPOSED CONTOURS

## EROSION PREVENTION AND SEDIMENT CONTROL PLAN

501+25.00 TO 506+00.00

SCALE: 1"= 50'

6-JUN-2014 17:30
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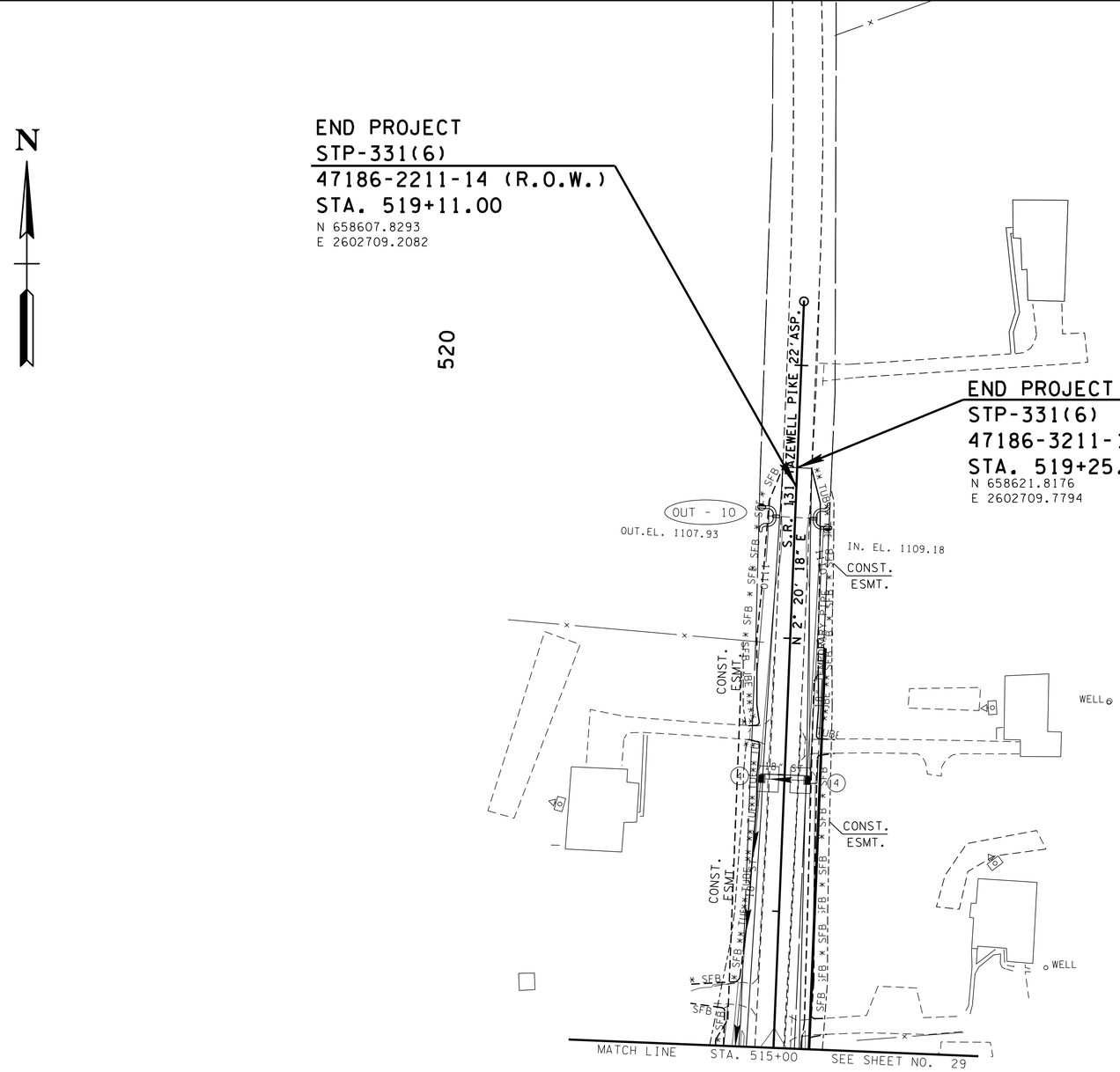
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 32 |
| CONST. | 2014 | STP-331(6) | 32 |
| | | | |
| | | | |

REV. 9-26-2013: CHANGED SHEET TITLE TO PHASE 3. ADDED SWPPP CHANGES.




OUT-10 D.A.= 0.24 Ac.

NOTE:
OUTFALL 10 WILL CONSIST OF 11.3 ACRES OF OFF SITE "RUN-ON" BEING DIVERTED ON THE EAST SIDE OF TAZEWELL PIKE WITH THE USE OF TEMPORARY 190' OF 18" PIPE AROUND THE DISTRURBED AREA TO THE PROP. 18" CONC. PIPE STA. 517+00.

120

# PHASE 3 PROPOSED CONTOURS

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

## EROSION PREVENTION AND SEDIMENT CONTROL PLAN

515+00.00 TO 519+25.00

SCALE: 1"= 50'

16-JUN-2014 17:30
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 33 |
| CONST. | 2014 | STP-331(6) | 33 |
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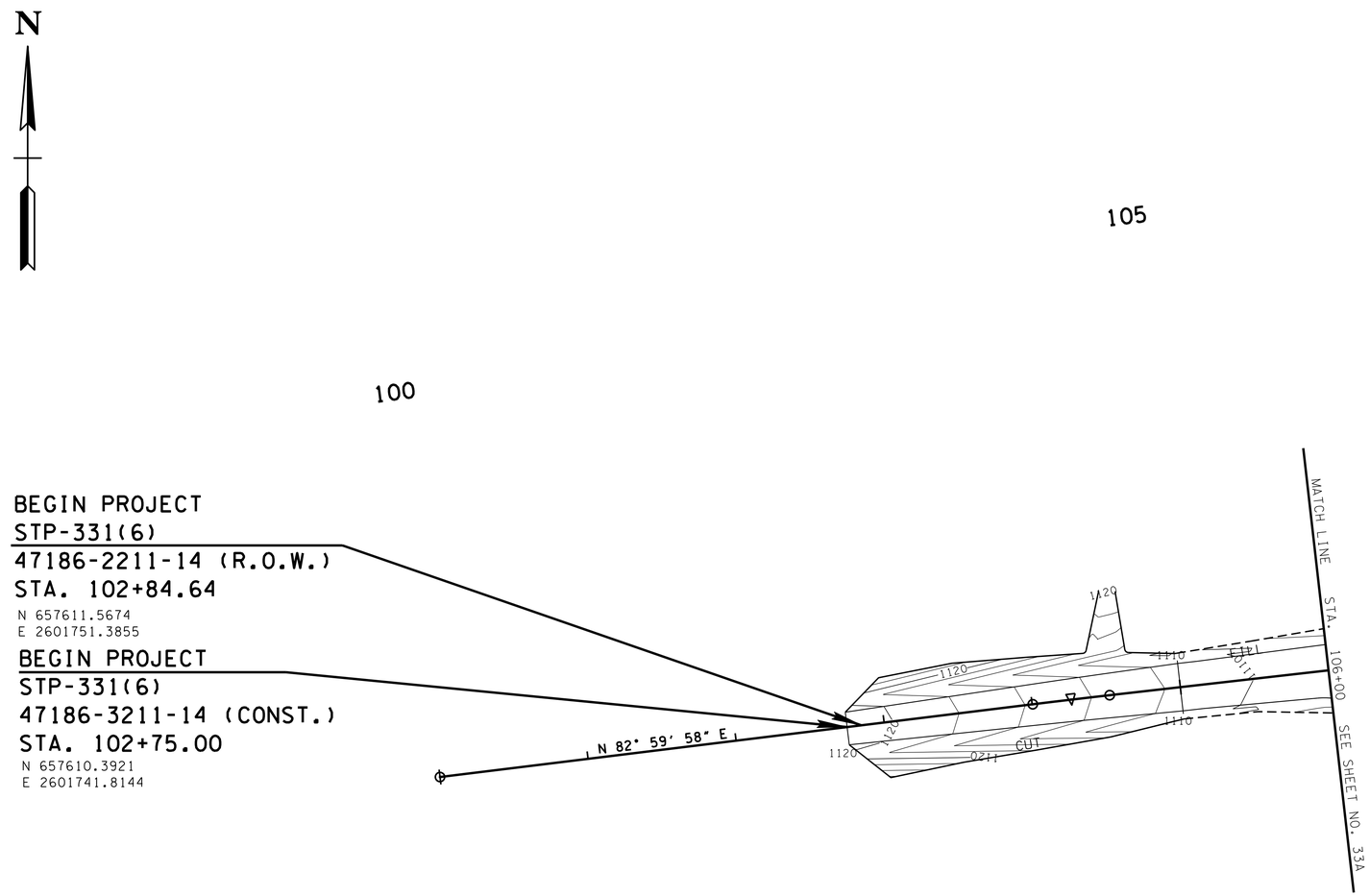
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.




**UNOFFICIAL SET**

**NOT FOR BIDDING**

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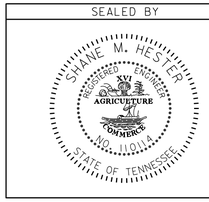


COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PROPOSED CONTOURS

STA. 102+75.00 TO
STA. 106+00.00

SCALE: 1"= 50'

16-JUN-2014 17:30
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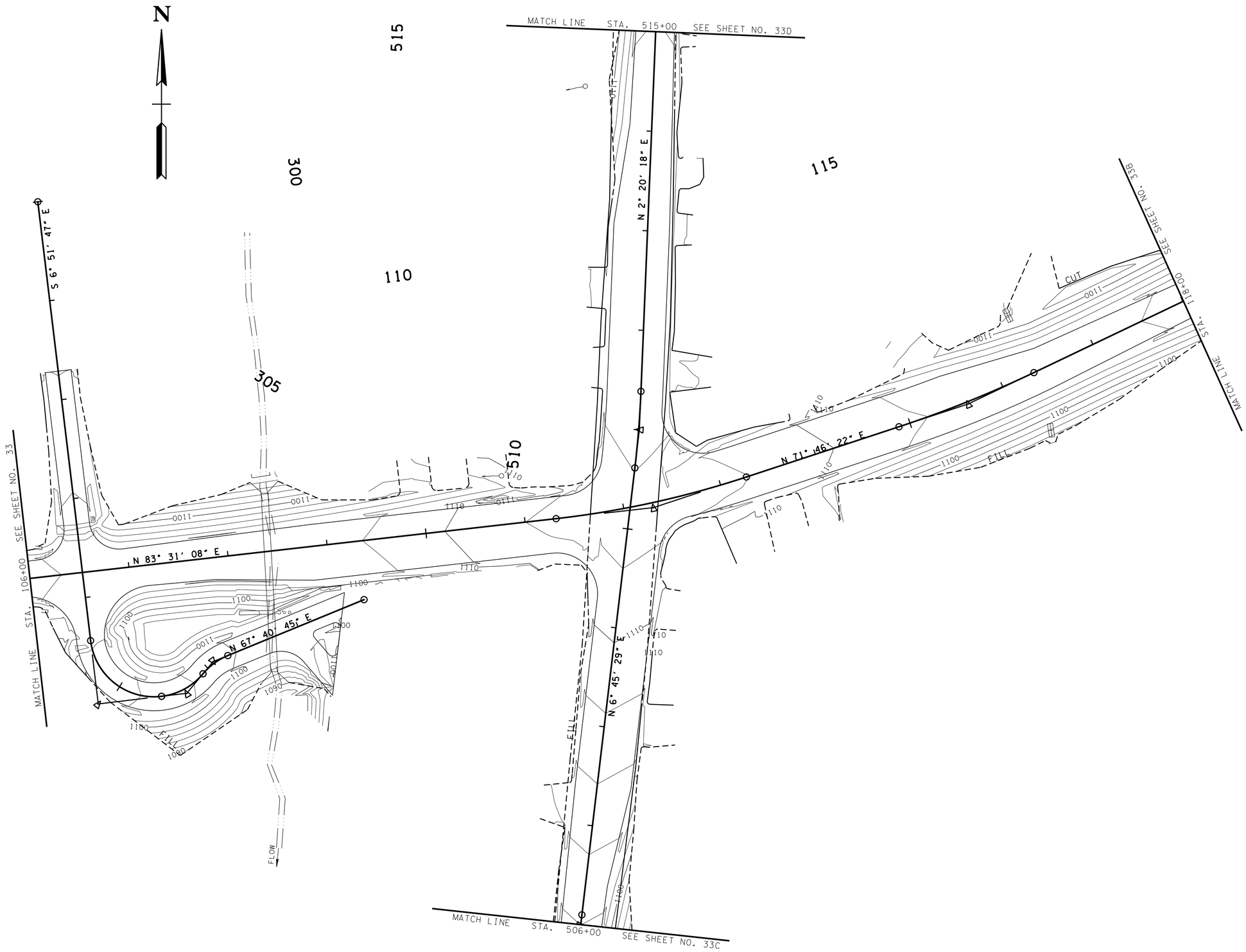
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 33A |
| CONST. | 2014 | STP-331(6) | 33A |
| | | | |
| | | | |

REV. 10-31-2012: MOVED BUSINESS ENTRANCE STA. 511+71.24 TO STA. 511+60.85.

REV. 9-26-2013: CORRECTED CONTOURS BETWEEN WILDRNESS PATH RD. EMORY RD. STA. 108+50(RT).




**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PROPOSED CONTOURS

STA. 106+00 TO STA. 118+00
STA. 506+00 TO STA. 515+00

SCALE: 1"= 50'

16-JUN-2014 17:30
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 33B |
| CONST. | 2014 | STP-331(6) | 33B |
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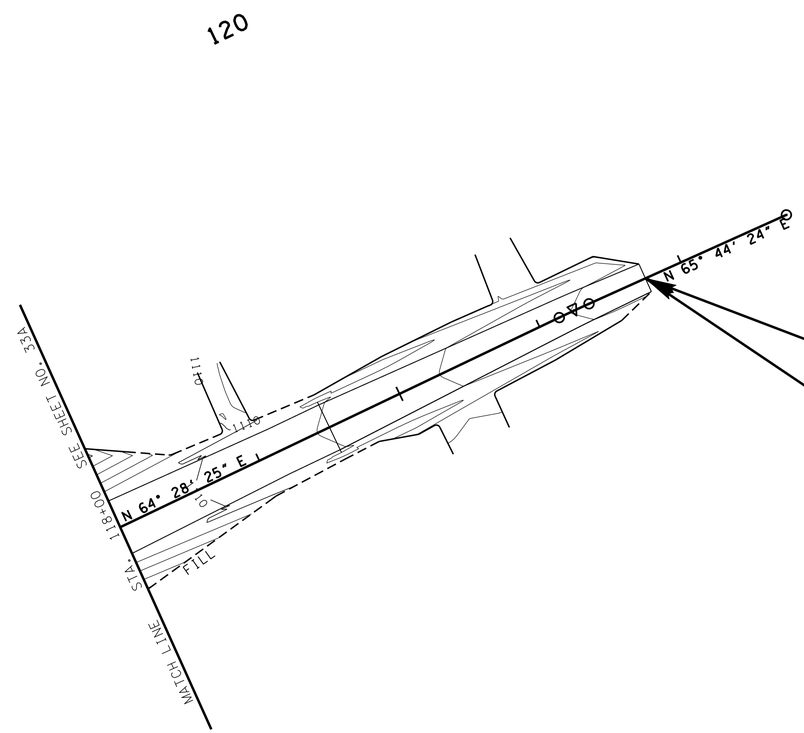
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.



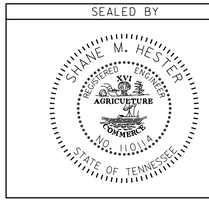

END PROJECT
STP-331(6)
47186-3211-14 (CONST.)
STA. 121+75.00
N 658086.9799
E 2603560.3167

END PROJECT
STP-331(6)
47186-2211-14 (R.O.W.)
STA. 121+75.00
N 658086.9799
E 2603560.3167

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY




COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PROPOSED CONTOURS

STA.118+00.00 TO
STA.121+75.00

SCALE: 1"= 50'

16-JUN-2014 17:30
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 33C |
| CONST. | 2014 | STP-331(6) | 33C |
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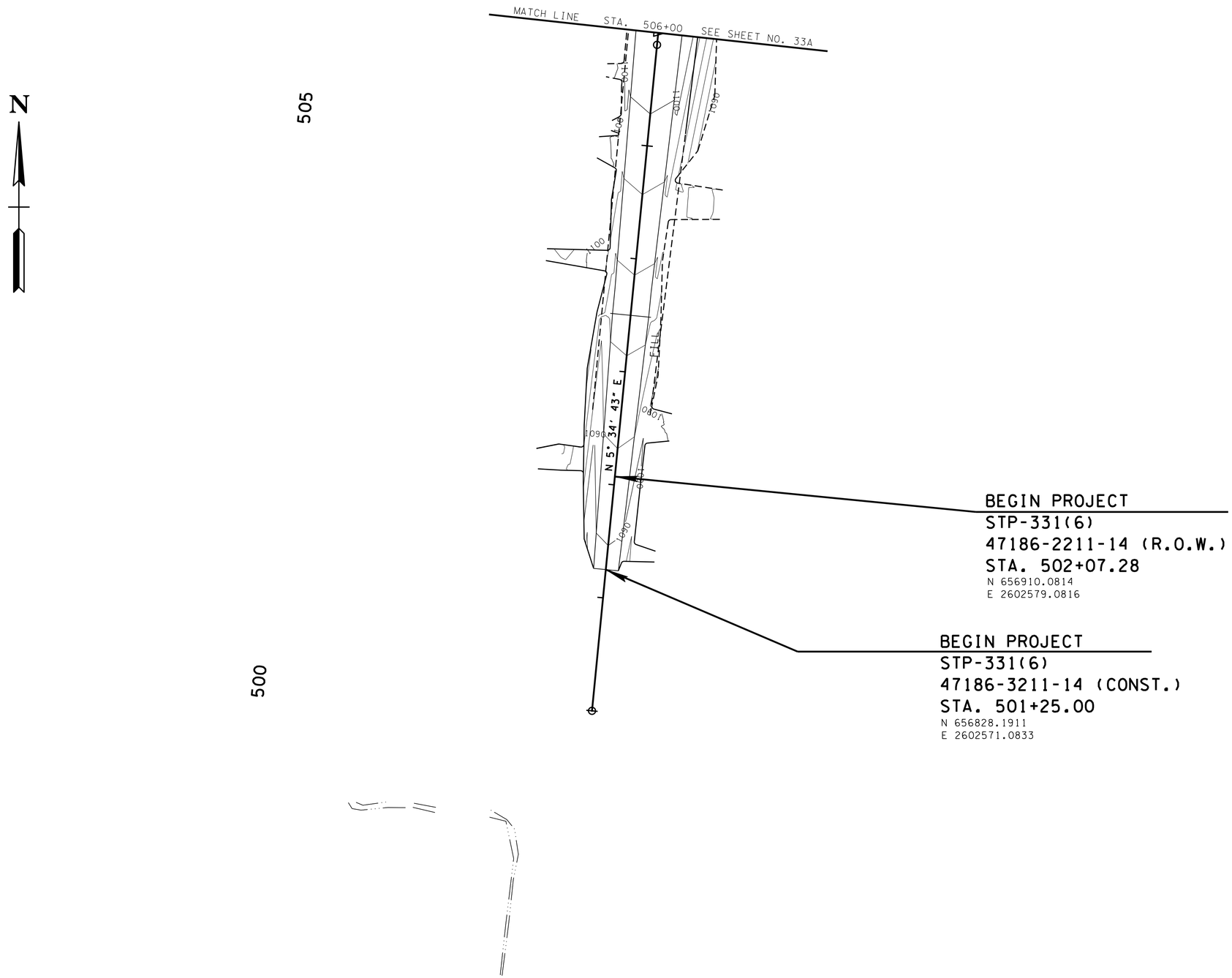
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.




**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PROPOSED CONTOURS

STA.501+25.00 TO
STA.506+00.00

SCALE: 1"= 50'

16-JUN-2014 17:30
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 33D |
| CONST. | 2014 | STP-331(6) | 33D |
| | | | |
| | | | |

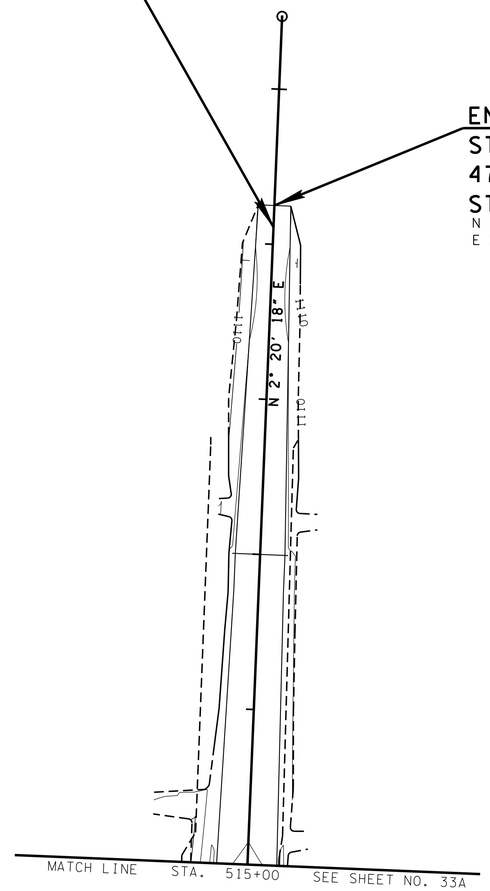
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

N

END PROJECT
STP-331(6)
47186-1211-14 (R.O.W.)
STA. 519+11.00
N 658607.8293
E 2602709.2082

520

END PROJECT
STP-331(6)
47186-3211-14 (CONST.)
STA. 519+25.00
N 658621.8176
E 2602709.7794

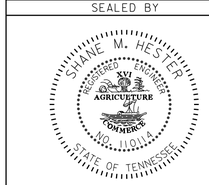



120

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PROPOSED CONTOURS

STA.515+00.00 TO
STA.519+25.00

SCALE: 1"= 50'

6-JUN-2014 17:30
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 34 |
| | | | |
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| | | | |

# PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

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

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

   a. WARNING SIGNS, UNEVEN LANES (W8-11) AND/OR SHOULDER DROP-OFF WITH PLAQUE (W8-17 AND W8-17P), SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

   FOR PRECEDING CONDITIONS a, b, AND c, THE CONTRACTOR SHALL USE THE SHOULDER DROP-OFF WARNING SIGN WITH PLAQUE (W8-17 AND W8-17P). IT SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN THE SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

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

   SEPARATION WILL BE PROVIDED BY USE OF PORTABLE BARRIER RAIL.

IN THIS SITUATION THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**UNOFFICIAL SET**

**NOT FOR BIDDING**

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

6-JUN-2014 17:30
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 34A |
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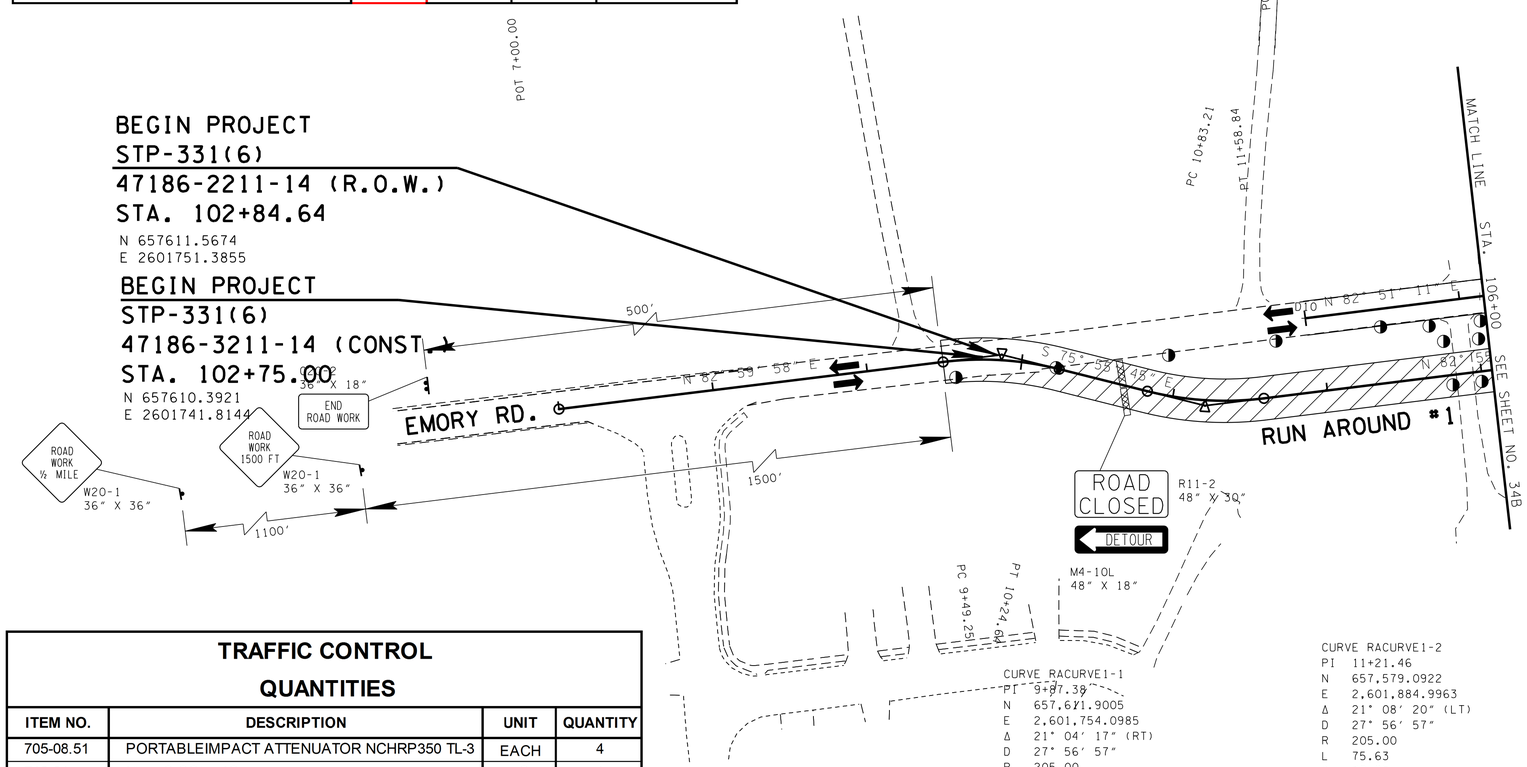
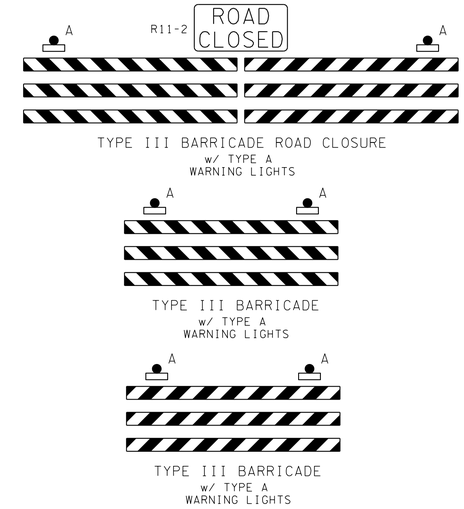
| | | | |

| DESCRIPTION | UNIT | QUANTITY | ITEM NO. 712-06 (S.F.) | M.U.T.C.D. SIZE | M.U.T.C.D. NO. | M.U.T.C.D. REMARKS |
|---|---|---|---|---|---|---|
| | | | | | | |
| ROAD WORK 1/2 MILE | 9 | 4 | 36 | 36" X 36" | W20-1 | |
| ROAD WORK 1500' | 9 | 4 | 36 | 36" X 36" | W20-1 | |
| ROAD CLOSED | 10 | 4 | 40 | 48" X 30" | R11-2 | |
| END ROAD WORK | 4.5 | 5 | 22.5 | 36" X 18" | G20-2 | |
| ROAD WORK AHEAD | 9 | 2 | 18 | 36" X 36" | W20-1 | |
| DETOUR LEFT | 6 | 1 | 6 | 48" X 18" | M4-10L | |
| DETOUR RIGHT | 6 | 1 | 6 | 48" X 18" | M4-10R | |
| LANE SHIFT | 9 | 1 | 9 | 36" X 36" | W1-4AR | |
| LANE SHIFT | 9 | 1 | 9 | 36" X 36" | W1-4LR | |
| SPEED ADVISORY PLATE | 4 | 2 | 8 | 24" X 24" | W13-1P | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| TOTAL | | | 190.5 | | | |




CURVE RACURVE1-1
PI 9+87.39
N 657,671.9005
E 2,601,754.0985
Δ 21° 04' 17" (RT)
D 27° 56' 57"
R 205.00
L 75.39
T 38.13
SE REVERSE CROWN
DESIGN SPEED 15 MPH
TRANS. LENGTH 000

CURVE RACURVE1-2
PI 11+21.46
N 657,579.0922
E 2,601,884.9963
Δ 21° 08' 20" (LT)
D 27° 56' 57"
R 205.00
L 75.63
T 38.25
SE REVERSE CROWN
DESIGN SPEED 15 MPH
TRANS. LENGTH 000




## TRAFFIC CONTROL LEGEND

| SYMBOL | ITEM |
|---|---|
| | WORK ZONE |
| | FLEXIBLE DRUMS (CHANNELIZING) |
| | SIGN (CONSTRUCTION) |
| | SIGN (CONSTRUCTION) (2-POST) |
| | PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS) |
| | TEMPORARY ATTENUATOR |
| | TEMPORARY BARRICADE (TYPE III) |
| A | WARNING LIGHT (TYPE A) (LOW-INTENSITY FLASHING) |

## TRAFFIC CONTROL QUANTITIES

| ITEM NO. | DESCRIPTION | UNIT | QUANTITY |
|---|---|---|---|
| 705-08.51 | PORTABLEIMPACT ATTENUATOR NCHRP350 TL-3 | EACH | 4 |
| 712-01 | TRAFFIC CONTROL | LS | 1 |
| 712-02.02 | INTERCONNECTED PORTABLE BARRIER RAIL | L.F. | 1200 |
| 712-04.01 | FLEXIBLE DRUMS (CHANNELIZING) | EACH | 168 |
| 712-05.01 | WARNING LIGHTS (TYPE A) | EACH | 20 |
| 712-06 | SIGNS (CONSTRUCTION) | S.F. | 191 |
| 712-07.03 | TEMPORARY BARRICADES (TYPE III) | L.F. | 216 |
| 716-01.05 | TEMPORARY RAISED PAVEMENT MARKER | EACH | 95 |
| 716-05.01 | PAINTED PAVEMENT MARKING | L.M. | 6 |
| | | | |
| | | | |

**PHASE 1:**

- ALL TRAFFIC WILL BE MAINTAINED ON EXISTING EMORY ROAD.
- CONSTRUCT RUN AROUND #1 TO ACCOMODATE 2-11' LANES WITH 3' SHOULDERS FOR A TOTAL TRAVEL WIDTH OF 28'.
- INTSTALL ALL DRAINAGE PIPE FOR RIGHT SIDE.
- BUILD CATCH BASINS ON RIGHT SIDE TO RUN AROUND #1 ELEVATION.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

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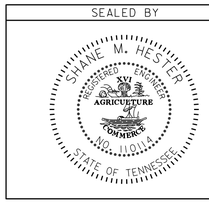


COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN PHASE 1

102+75.00 TO 106+00.00

SCALE: 1"= 50'

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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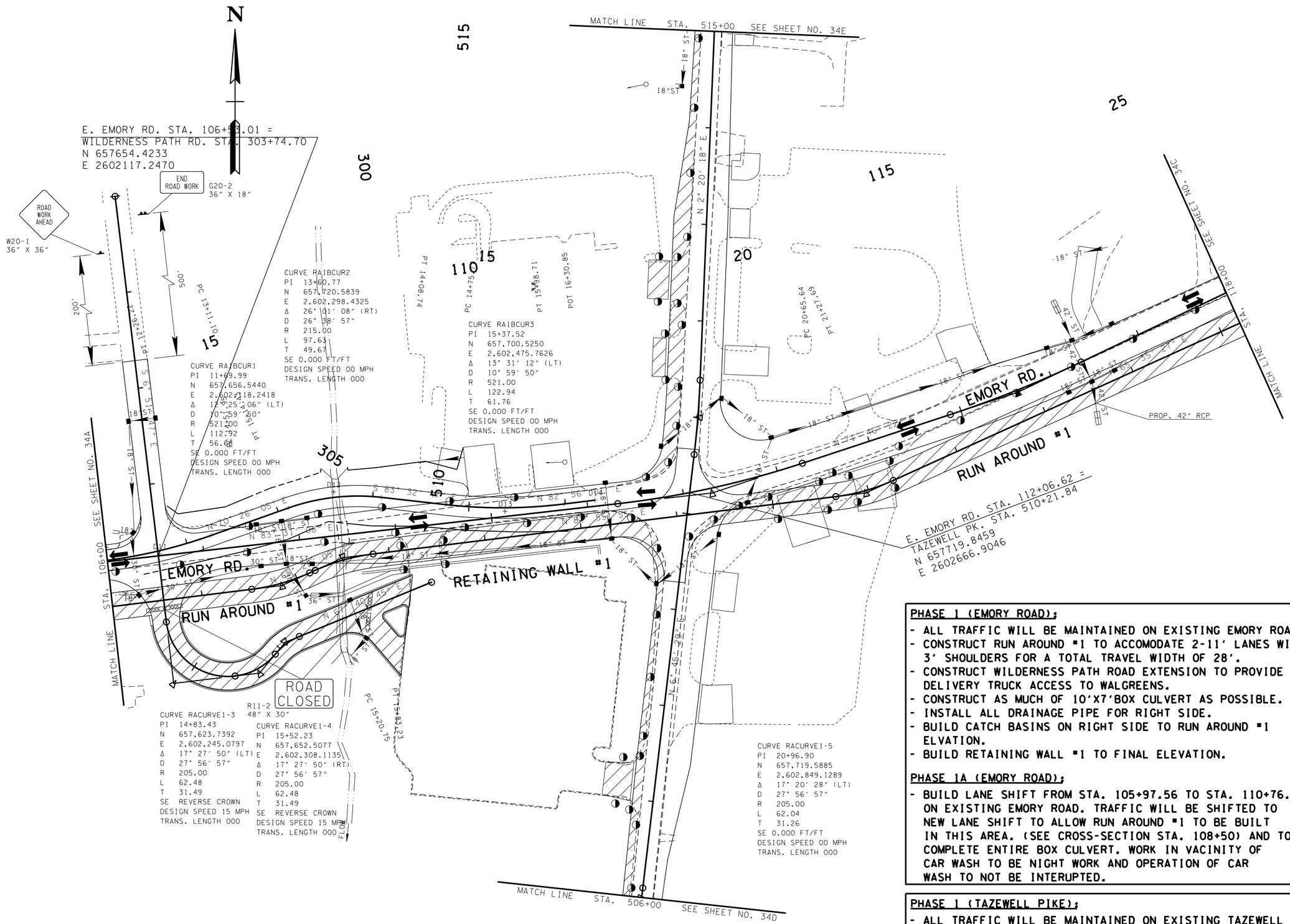


**PHASE 1 (EMORY ROAD):**

- ALL TRAFFIC WILL BE MAINTAINED ON EXISTING EMORY ROAD.
- CONSTRUCT RUN AROUND #1 TO ACCOMODATE 2-11' LANES WITH 3' SHOULDERS FOR A TOTAL TRAVEL WIDTH OF 28'.
- CONSTRUCT WILDERNESS PATH ROAD EXTENSION TO PROVIDE DELIVERY TRUCK ACCESS TO WALGREENS.
- CONSTRUCT AS MUCH OF 10'X7'BOX CULVERT AS POSSIBLE.
- INSTALL ALL DRAINAGE PIPE FOR RIGHT SIDE.
- BUILD CATCH BASINS ON RIGHT SIDE TO RUN AROUND #1 ELVATION.
- BUILD RETAINING WALL #1 TO FINAL ELEVATION.

**PHASE 1A (EMORY ROAD):**

- BUILD LANE SHIFT FROM STA. 105+97.56 TO STA. 110+76.19 ON EXISTING EMORY ROAD. TRAFFIC WILL BE SHIFTED TO NEW LANE SHIFT TO ALLOW RUN AROUND #1 TO BE BUILT IN THIS AREA. (SEE CROSS-SECTION STA. 108+50) AND TO COMPLETE ENTIRE BOX CULVERT. WORK IN VACINITY OF CAR WASH TO BE NIGHT WORK AND OPERATION OF CAR WASH TO NOT BE INTERUPTED.

**PHASE 1 (TAZEWELL PIKE):**

- ALL TRAFFIC WILL BE MAINTAINED ON EXISTING TAZEWELL PIKE.
- BUILD LEFT SIDE INCLUDING ALL DRAINAGE CURB AND GUTTER AND PRIVATE DRIVE AND BUSINESS ENTRANCE TIE-INS.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# TRAFFIC CONTROL PLAN PHASE 1

STA. 106+00 TO STA. 118+00
STA. 506+00 TO STA. 515+00

SCALE: 1"= 50'

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 34C |
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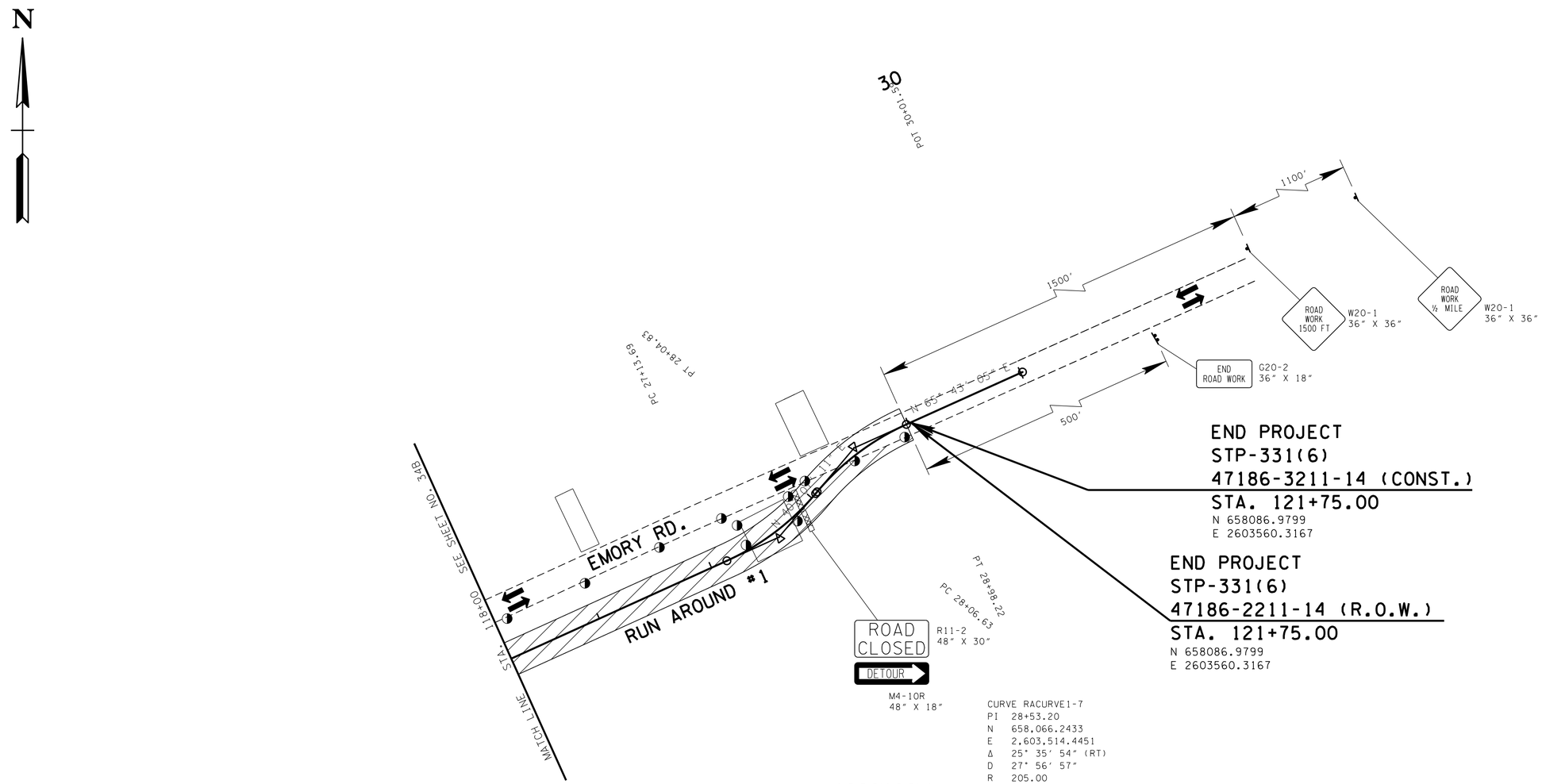


END PROJECT
STP-331(6)
47186-3211-14 (CONST.)
STA. 121+75.00
N 658086.9799
E 2603560.3167

END PROJECT
STP-331(6)
47186-2211-14 (R.O.W.)
STA. 121+75.00
N 658086.9799
E 2603560.3167

CURVE RACURVE1-6
PI 27+60.03
N 657,993.8209
E 2,603,453.4173
Δ 25° 28' 17" (LT)
D 27° 56' 57"
R 205.00
L 91.13
T 46.33
SE REVERSE CROWN
DESIGN SPEED 15 MPH
TRANS. LENGTH 000

CURVE RACURVE1-7
PI 28+53.20
N 658,066.2433
E 2,603,514.4451
Δ 25° 35' 54" (RT)
D 27° 56' 57"
R 205.00
L 91.59
T 46.57
SE REVERSE CROWN
DESIGN SPEED 15 MPH
TRANS. LENGTH 000

**PHASE 1:**

- ALL TRAFFIC WILL BE MAINTAINED ON EXISTING EMORY ROAD.
- CONSTRUCT RUN AROUND #1 TO ACCOMODATE 2-11' LANES WITH 3' SHOULDERS FOR A TOTAL TRAVEL WIDTH OF 28'
- INSTALL DRAINAGE PIPE FOR RIGHT SIDE.
- BUILD CATCH BASINS ON RIGHT SIDE TO RUN AROUND #1 ELEVATION.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

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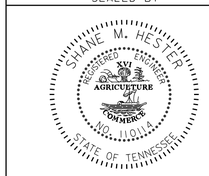


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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# TRAFFIC CONTROL PLAN PHASE 1

118+00.00 TO 121+75.00

SCALE: 1"= 50'

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
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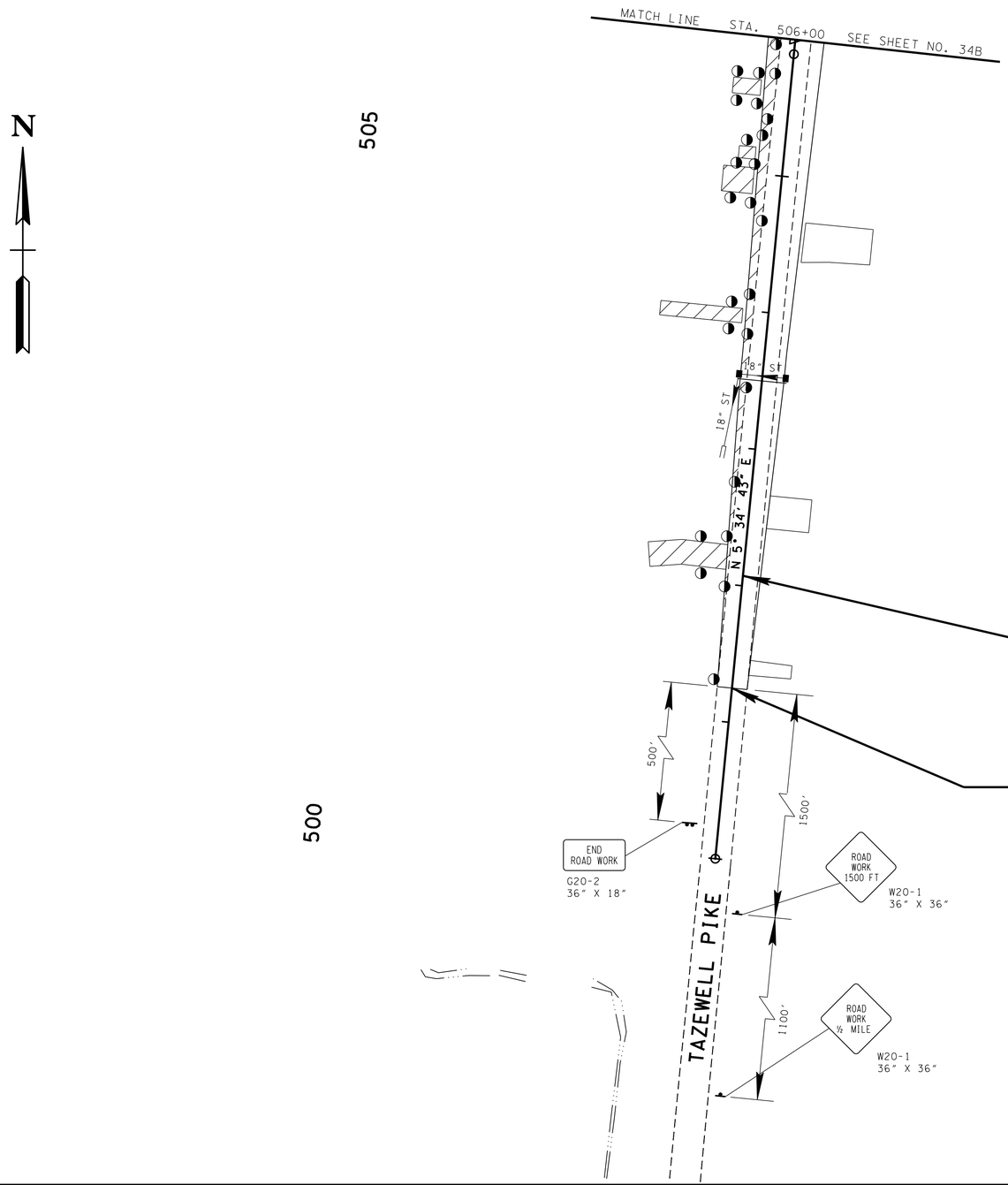


BEGIN PROJECT
STP-331(6)
47186-2211-14 (R.O.W.)
STA. 502+07.28
N 656910.0814
E 2602579.0816

BEGIN PROJECT
STP-331(6)
47186-3211-14 (CONST.)
STA. 501+25.00
N 656828.1911
E 2602571.0833

**PHASE 1:**
- ALL TRAFFIC WILL REMAIN ON EXISTING TAZEWELL PIKE.
- BUILD LEFT SIDE INCLUDING ALL DRAINAGE AND CURB AND GUTTER AND PRIVATE DRIVE AND BUSINESS ENTRANCE TIE-INS.
- FINAL PAVEMENT FOR TAZEWELL PIKE WILL BE DONE IN PHASE 4.

**PHASE 4:**
- PLACE FINAL SURFACE LAYER.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# TRAFFIC CONTROL PLAN PHASE 1

501+25.00 TO 506+00.00

SCALE: 1"= 50'

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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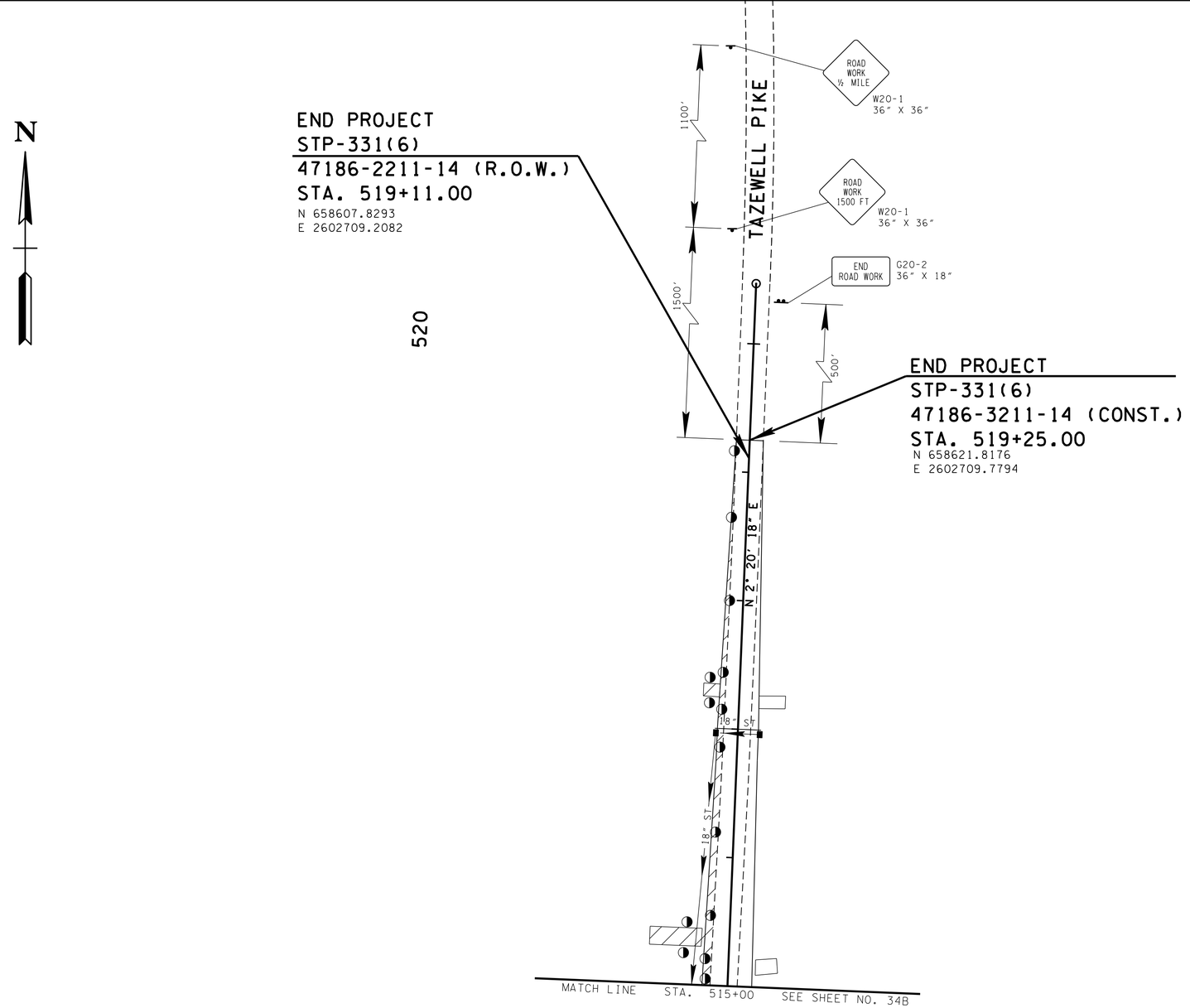


120

**PHASE 1;**

- ALL TRAFFIC WILL REMAIN ON EXISTING TAZEWEL PIKE.
- BUILD LEFT SIDE INCLUDING ALL DRAINAGE CURB AND GUTTER AND PRIVATE DRIVE AND BUSINESS ENTRANCE TIE-INS.

**PHASE 4;**

- PLACE FINAL SURFACE LAYER.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

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# TRAFFIC CONTROL PLAN PHASE 1

STA. 515+00 TO STA. 519+25

SCALE: 1"= 50'

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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| CONST. | 2014 | STP-331(6) | 34F |
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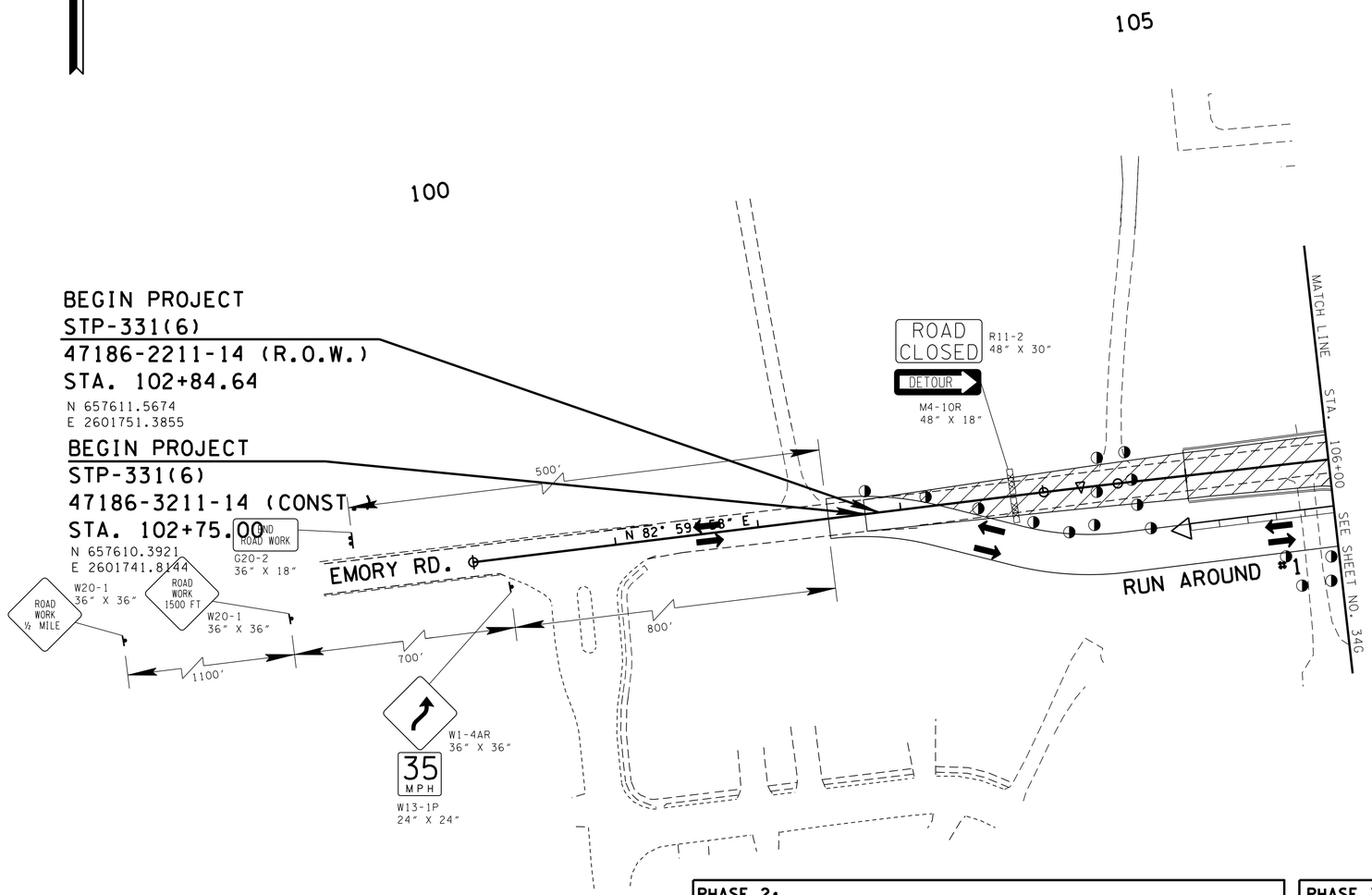
TYPE III BARRICADE ROAD CLOSURE
w/ TYPE A
WARNING LIGHTS




**PHASE 2:**

- INSTALL INTERCONNECTED PORTABLE BARRIER RAIL ON RUN AROUND #1.
- ALL TRAFFIC WILL BE MAINTAINED ON RUN AROUND #1.
- CONSTRUCT RUN AROUND #2 TO ACCOMODATE 2-11' LANES WITH 3' SHOULDERS FOR A TOTAL TRAVEL WIDTH OF 28' EXCEPT IN AREAS TRANSITIONING FROM FULL PROPOSED PAVEMENT WIDTH TO EXISTING PAVEMENT WIDTH.
- INSTALL ALL DRAINAGE PIPE FOR LEFT SIDE.
- BUILD CURB AND GUTTER AND CATCH BASINS AT FINAL ELEVATION ON LEFT SIDE.

**PHASE 3:**

- BUILD ANY UNFINISHED SECTION OF CURB AND GUTTER AND UNFINISHED SLOPES ON RIGHT SIDE OF EMORY ROAD.

**PHASE 3A:**

- REMOVE TEMPORARY PAVEMENT. BUILD ANY UNFINISHED SECTION OF CURB AND GUTTER AND UNFINISHED SLOPES ON LEFT SIDE OF EMORY ROAD.

**PHASE 4:**

- PLACE FINAL SURFACE LAYER.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# TRAFFIC CONTROL PLAN PHASE 2

102+75.00 TO 106+00.00

SCALE: 1"= 50'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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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| CONST. | 2014 | STP-331(6) | 34G |
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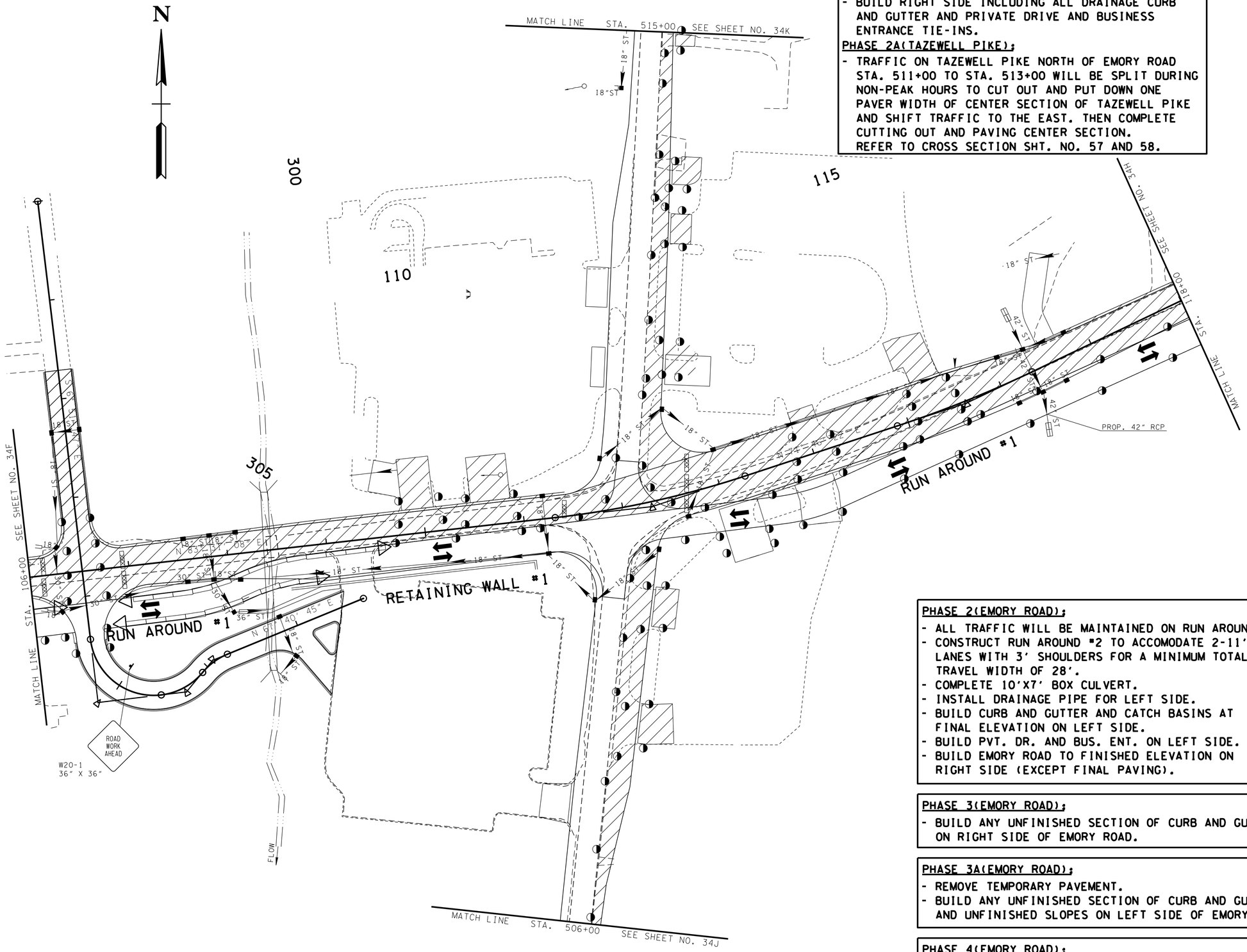
**PHASE 2(TAZEWELL PIKE);**

- SHIFT TRAFFIC LEFT AS FAR AS POSSIBLE.
- BUILD RIGHT SIDE INCLUDING ALL DRAINAGE CURB AND GUTTER AND PRIVATE DRIVE AND BUSINESS ENTRANCE TIE-INS.

**PHASE 2A(TAZEWELL PIKE);**

- TRAFFIC ON TAZEWELL PIKE NORTH OF EMORY ROAD STA. 511+00 TO STA. 513+00 WILL BE SPLIT DURING NON-PEAK HOURS TO CUT OUT AND PUT DOWN ONE PAVER WIDTH OF CENTER SECTION OF TAZEWELL PIKE AND SHIFT TRAFFIC TO THE EAST. THEN COMPLETE CUTTING OUT AND PAVING CENTER SECTION. REFER TO CROSS SECTION SHT. NO. 57 AND 58.




**PHASE 2(EMORY ROAD);**

- ALL TRAFFIC WILL BE MAINTAINED ON RUN AROUND #1.
- CONSTRUCT RUN AROUND #2 TO ACCOMODATE 2-11' LANES WITH 3' SHOULDERS FOR A MINIMUM TOTAL TRAVEL WIDTH OF 28'.
- COMPLETE 10'X7' BOX CULVERT.
- INSTALL DRAINAGE PIPE FOR LEFT SIDE.
- BUILD CURB AND GUTTER AND CATCH BASINS AT FINAL ELEVATION ON LEFT SIDE.
- BUILD PVT. DR. AND BUS. ENT. ON LEFT SIDE.
- BUILD EMORY ROAD TO FINISHED ELEVATION ON RIGHT SIDE (EXCEPT FINAL PAVING).

**PHASE 3(EMORY ROAD);**

- BUILD ANY UNFINISHED SECTION OF CURB AND GUTTER ON RIGHT SIDE OF EMORY ROAD.

**PHASE 3A(EMORY ROAD);**

- REMOVE TEMPORARY PAVEMENT.
- BUILD ANY UNFINISHED SECTION OF CURB AND GUTTER AND UNFINISHED SLOPES ON LEFT SIDE OF EMORY ROAD.

**PHASE 4(EMORY ROAD);**

- PLACE FINAL SURFACE LAYER.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

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COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 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. 106+00 TO STA. 118+00
STA. 506+00 TO STA. 515+00

SCALE: 1"= 50'

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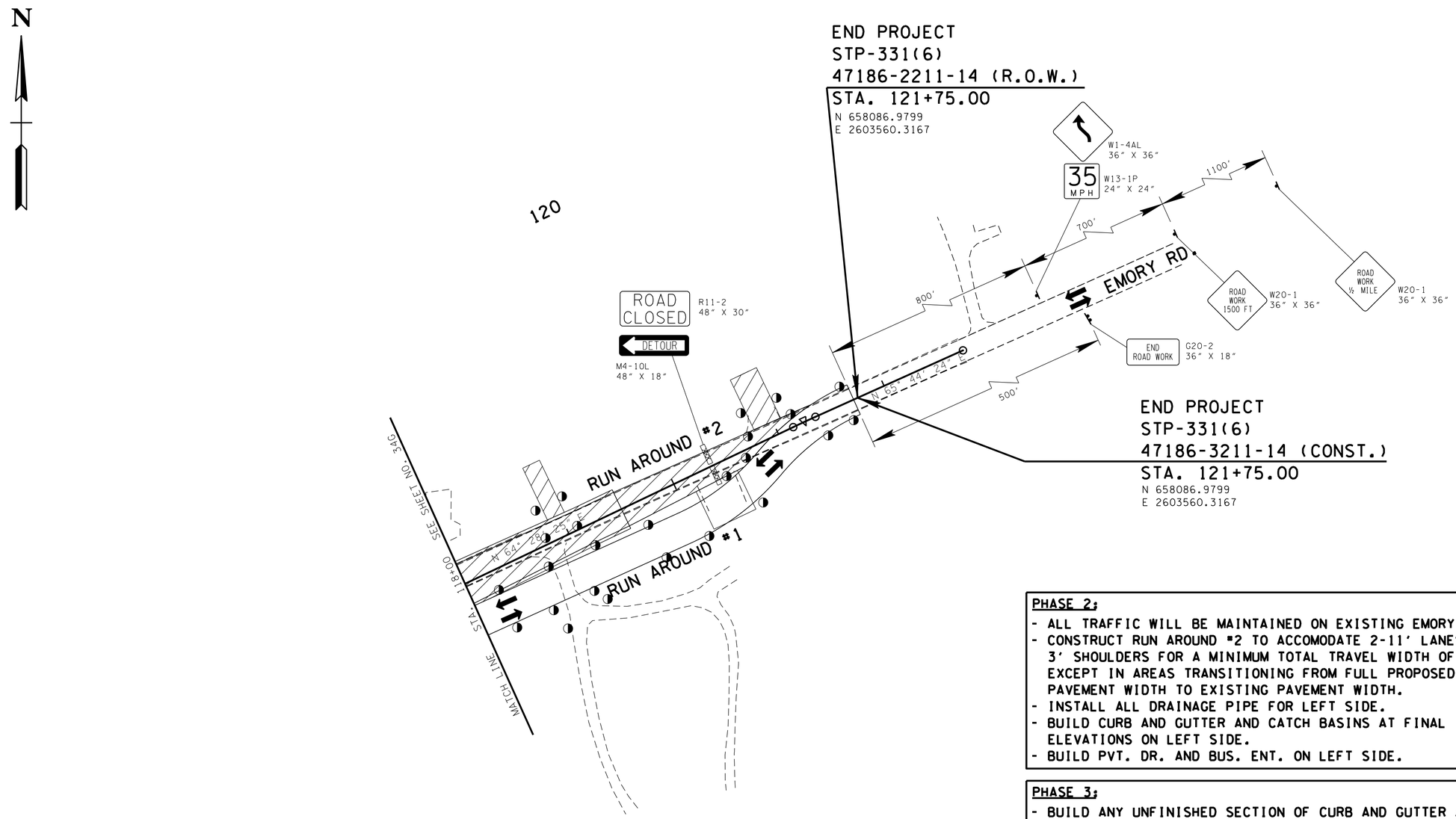


**PHASE 2:**
- ALL TRAFFIC WILL BE MAINTAINED ON EXISTING EMORY ROAD.
- CONSTRUCT RUN AROUND #2 TO ACCOMODATE 2-11' LANES WITH 3' SHOULDERS FOR A MINIMUM TOTAL TRAVEL WIDTH OF 28' EXCEPT IN AREAS TRANSITIONING FROM FULL PROPOSED PAVEMENT WIDTH TO EXISTING PAVEMENT WIDTH.
- INSTALL ALL DRAINAGE PIPE FOR LEFT SIDE.
- BUILD CURB AND GUTTER AND CATCH BASINS AT FINAL ELEVATIONS ON LEFT SIDE.
- BUILD PVT. DR. AND BUS. ENT. ON LEFT SIDE.

**PHASE 3:**
- BUILD ANY UNFINISHED SECTION OF CURB AND GUTTER AND UNFINISHED SLOPES ON RIGHT SIDE OF EMORY ROAD.
- BUILD CATCH BASINS AND CURB AND GUTTER AT FINAL ELEVATIONS ON RIGHT SIDE.
- BUILD EMORY ROAD TO FINISHED ELEVATION ON RIGHT SIDE (EXCEPT FINAL PAVING).

**PHASE 3A:**
- REMOVE TEMPORARY PAVEMENT.
- BUILD ANY UNFINISHED SECTION OF CURB AND GUTTER AND UNFINISHED SLOPES ON LEFT SIDE OF EMORY ROAD.

**PHASE 4:**
- PLACE FINAL SURFACE LAYER.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# TRAFFIC CONTROL PLAN PHASE 2

118+00.00 TO 121+75.00

SCALE: 1"= 50'

16-JUN-2014 17:32
C:\Projects\Knox Co\KnoxCoSR-33&SR-131\KN3H-10TrafficControl34H.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 34J |
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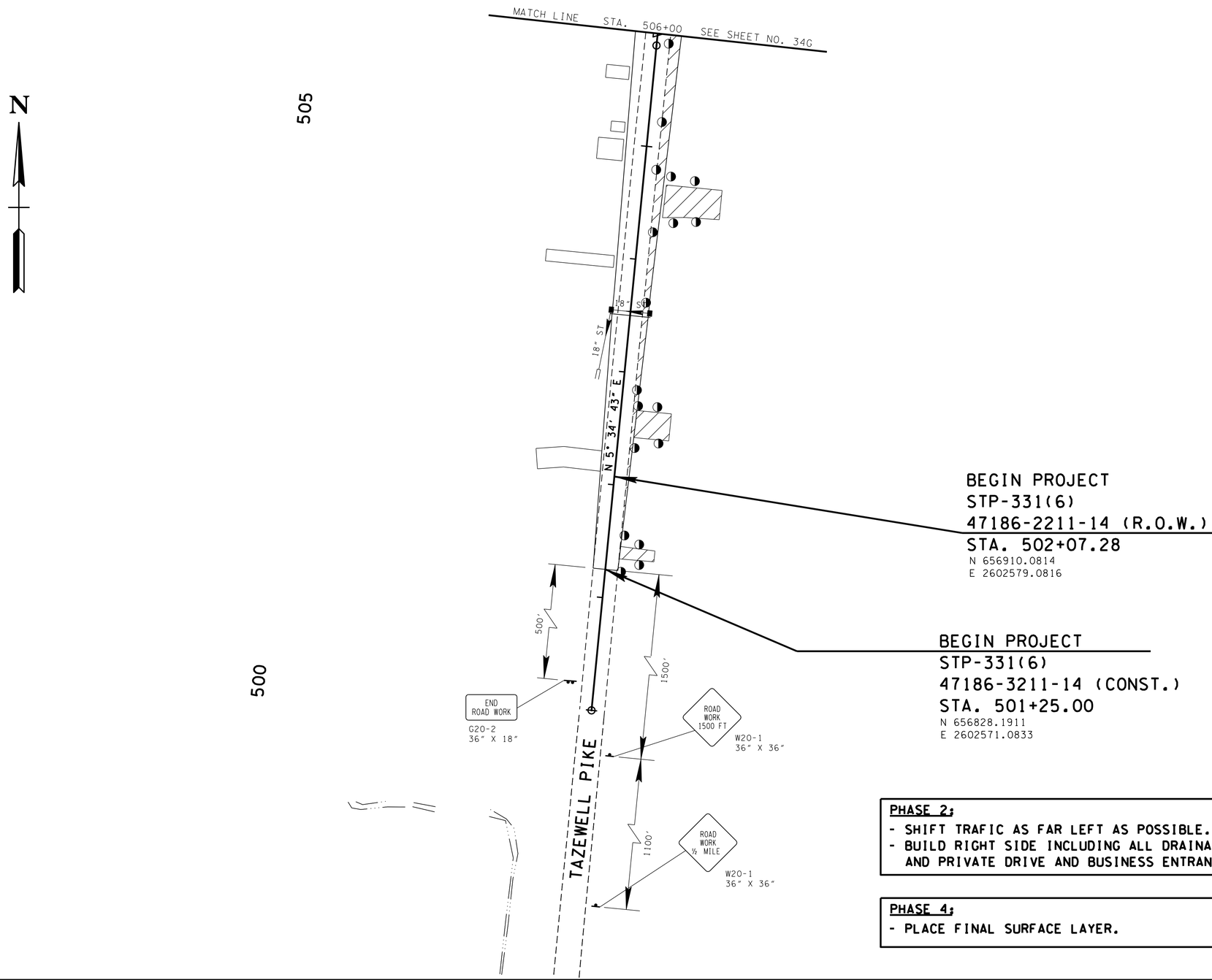


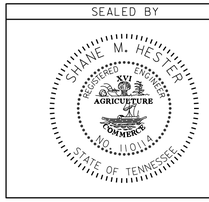

**PHASE 2:**
- SHIFT TRAFIC AS FAR LEFT AS POSSIBLE.
- BUILD RIGHT SIDE INCLUDING ALL DRAINAGE CURB AND GUTTER AND PRIVATE DRIVE AND BUSINESS ENTRANCE TIE-INS.

**PHASE 4:**
- PLACE FINAL SURFACE LAYER.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY




COORDINATES ARE NAD/B31(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# TRAFFIC CONTROL PLAN PHASE 2

501+25.00 TO 506+00.00

SCALE: 1"= 50'

16-JUN-2014 17:32
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 34K |
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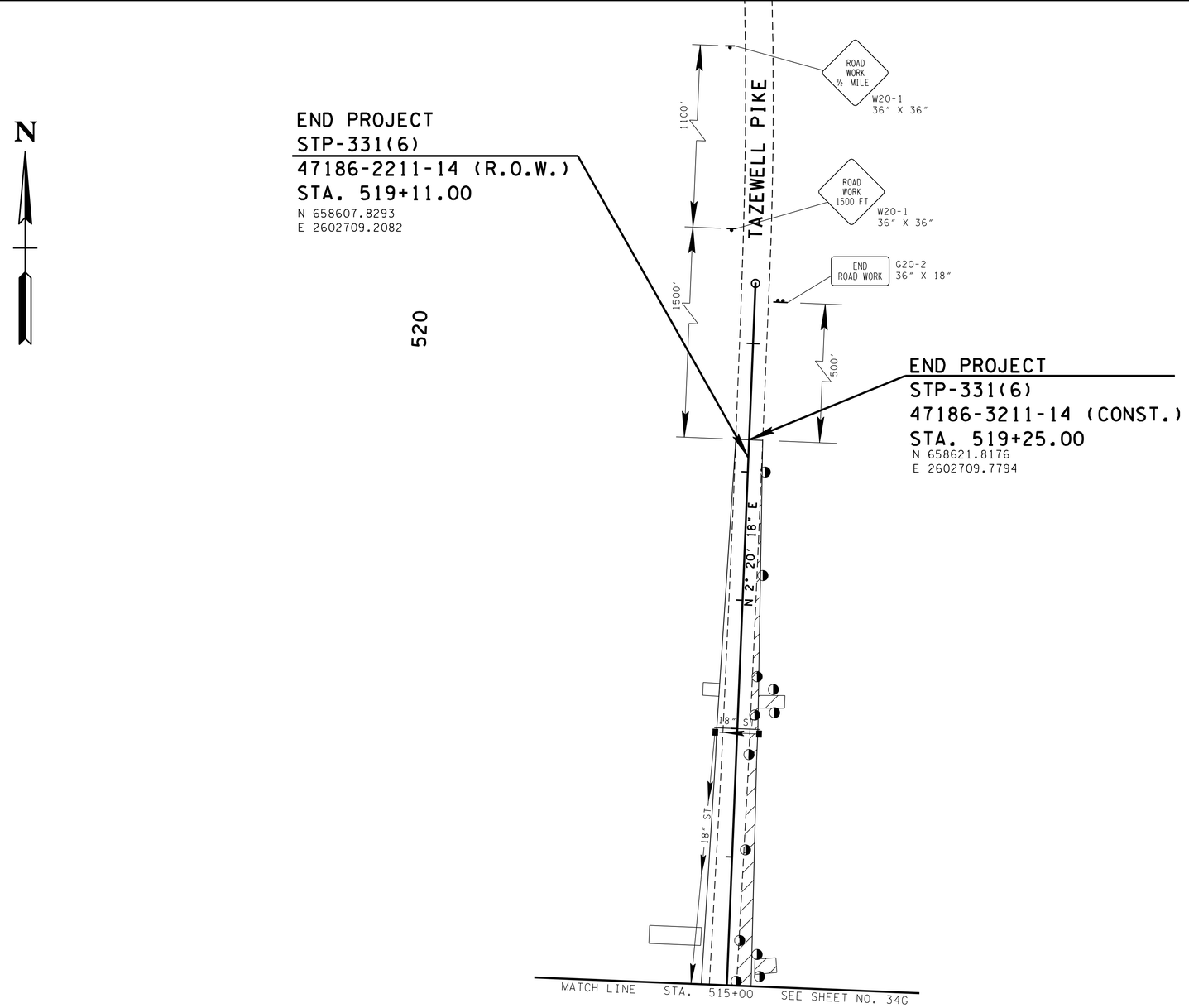



120

**PHASE 2:**

- SHIFT TRAFFIC AS FAR LEFT AS POSSIBLE.
- BUILD RIGHT SIDE INCLUDING ALL DRAINAGE CURB AND GUTTER AND PRIVATE DRIAVE AND BUSINESS ENTRANCE TIE-INS.

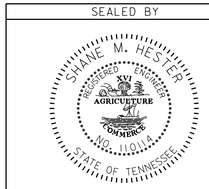
**PHASE 4:**

- PLACE FINAL SURFACE LAYER.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY




COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000090 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# TRAFFIC CONTROL PLAN PHASE 2

515+00.00 TO 519+25.00

SCALE: 1"= 50'

6-JUN-2014 17:32
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 35 |
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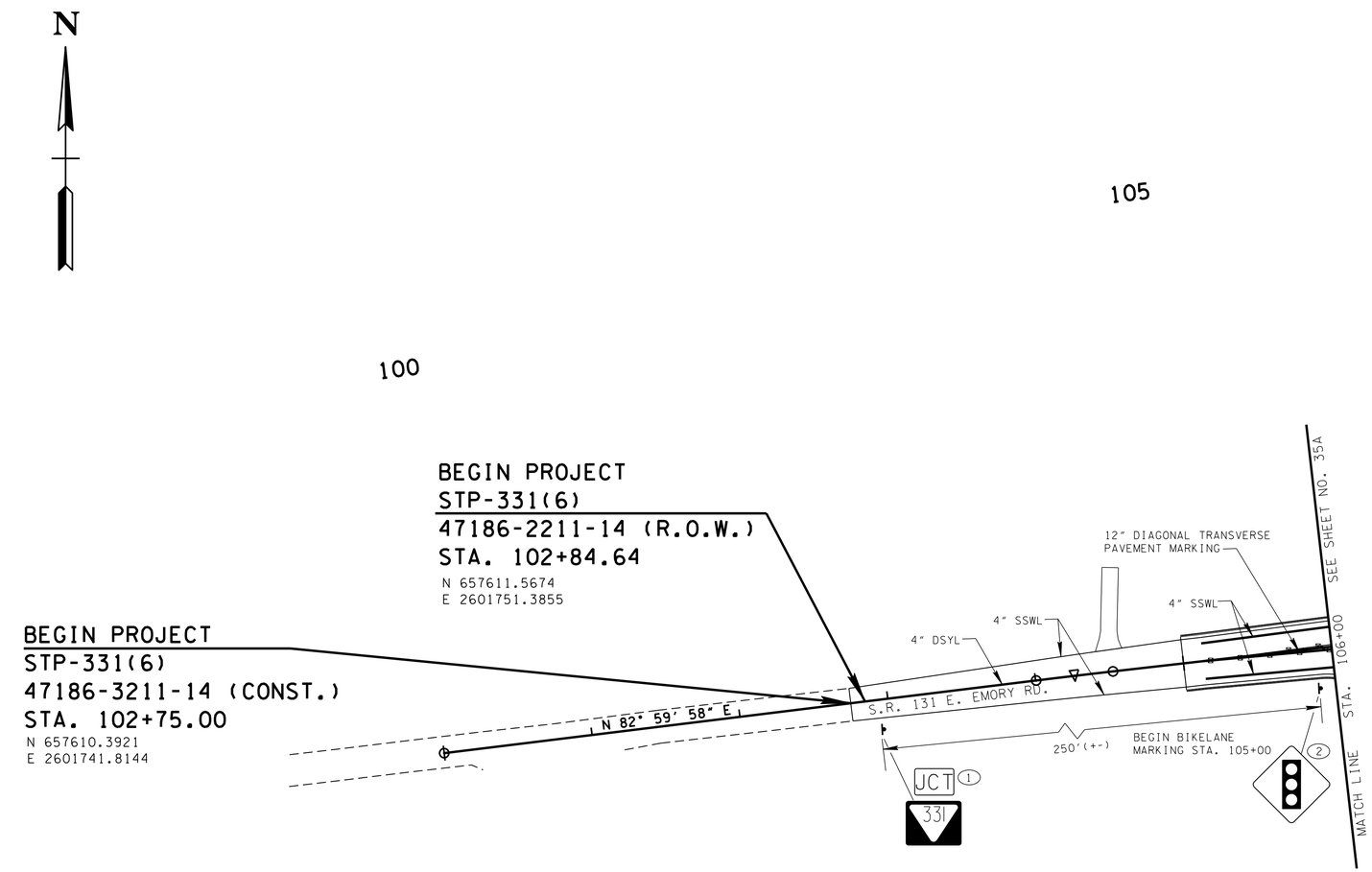
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.




**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# SIGNING AND PAVEMENT MARKING PLAN

STA.102+75.00 TO
STA.106+00.00
SCALE: 1"= 50'

6-JUN-2014 17:32
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 35A |
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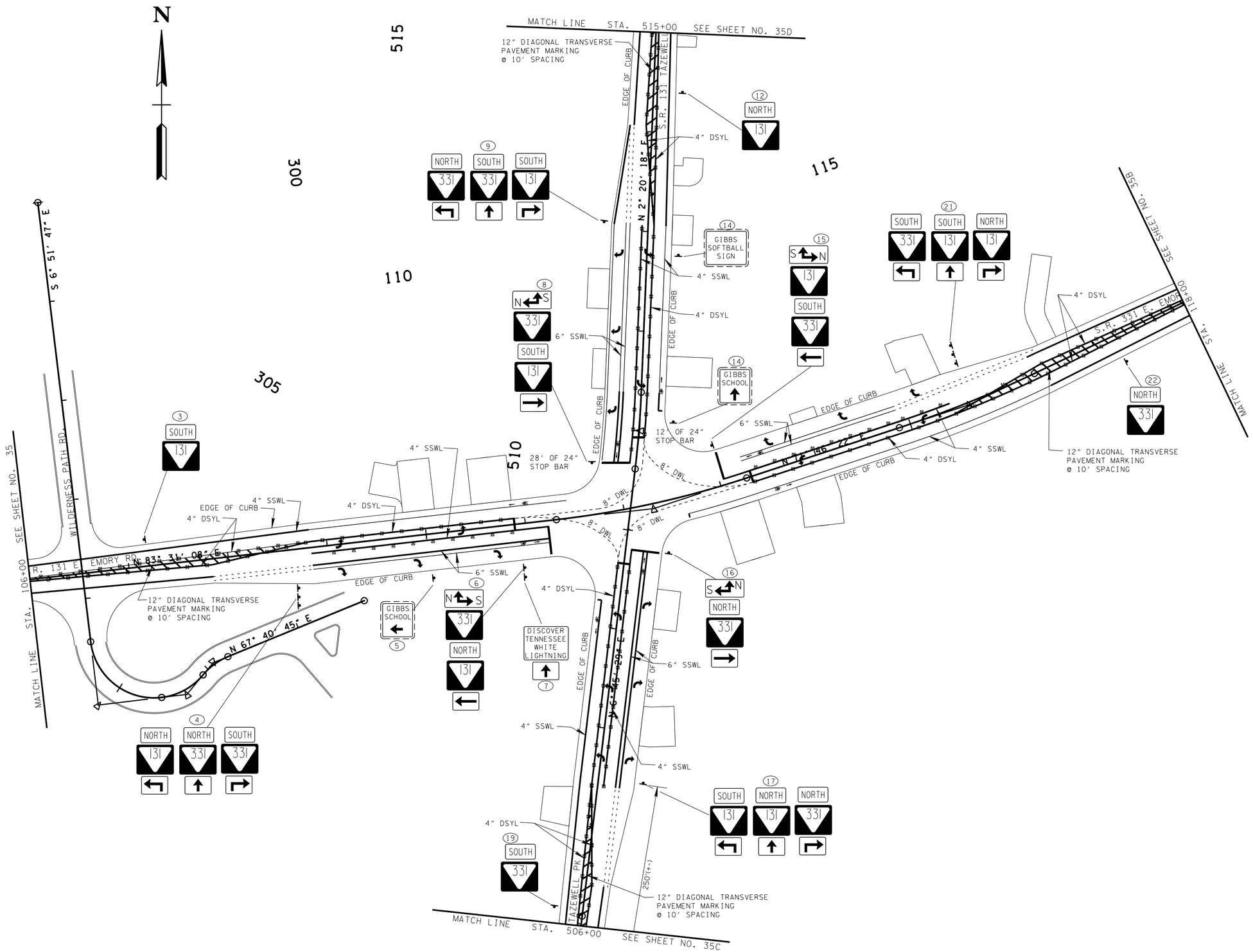
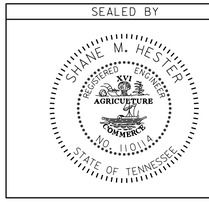
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.




# UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY




COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

## SIGNING AND PAVEMENT MARKING PLAN

STA. 106+00 TO STA. 118+00
STA. 506+00 TO STA. 515+00

SCALE: 1"= 50'

6-JUN-2014 17:32
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 35B |
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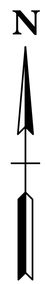
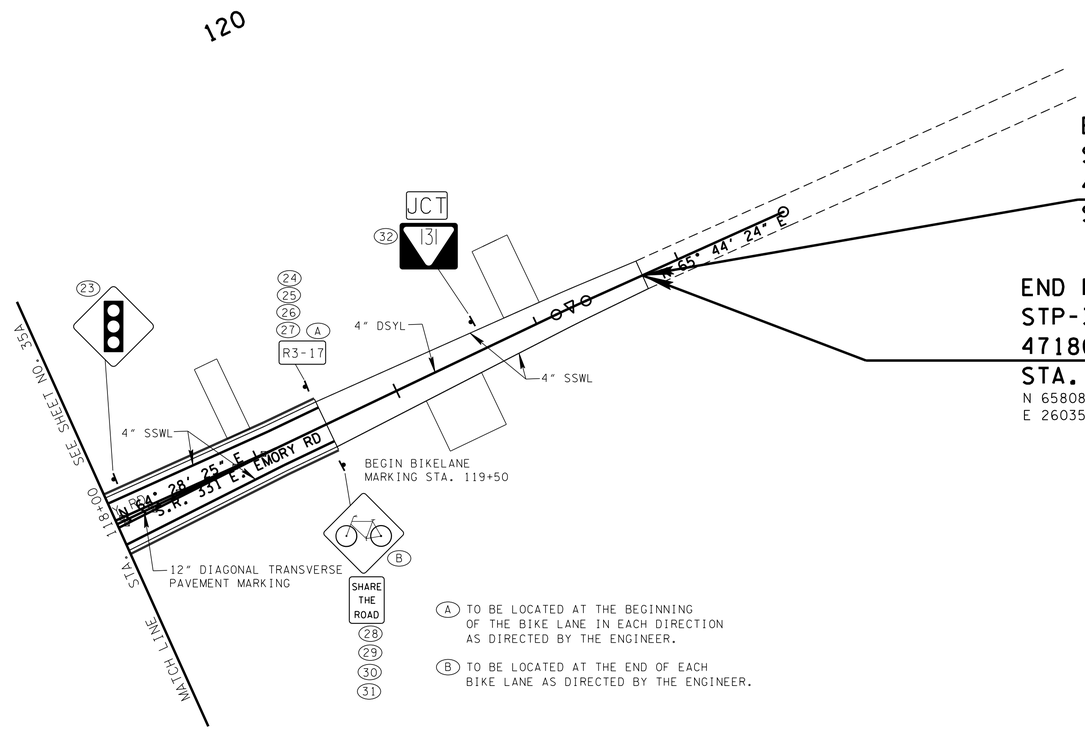
| | | | |

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




END PROJECT
STP-331(6)
47186-1211-14 (R.O.W.)
STA. 121+75.00
N 658086.9799
E 2603560.3167

END PROJECT
STP-331(6)
47186-3211-14 (CONST.)
STA. 121+75.00
N 658086.9799
E 2603560.3167

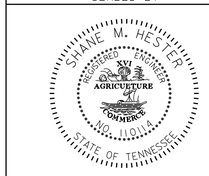
(A) TO BE LOCATED AT THE BEGINNING OF THE BIKE LANE IN EACH DIRECTION AS DIRECTED BY THE ENGINEER.

(B) TO BE LOCATED AT THE END OF EACH BIKE LANE AS DIRECTED BY THE ENGINEER.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# SIGNING AND PAVEMENT MARKING PLAN

STA.118+00.00 TO
STA.121+75.00
SCALE: 1"= 50'

6-JUN-2014 17:32
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 35C |
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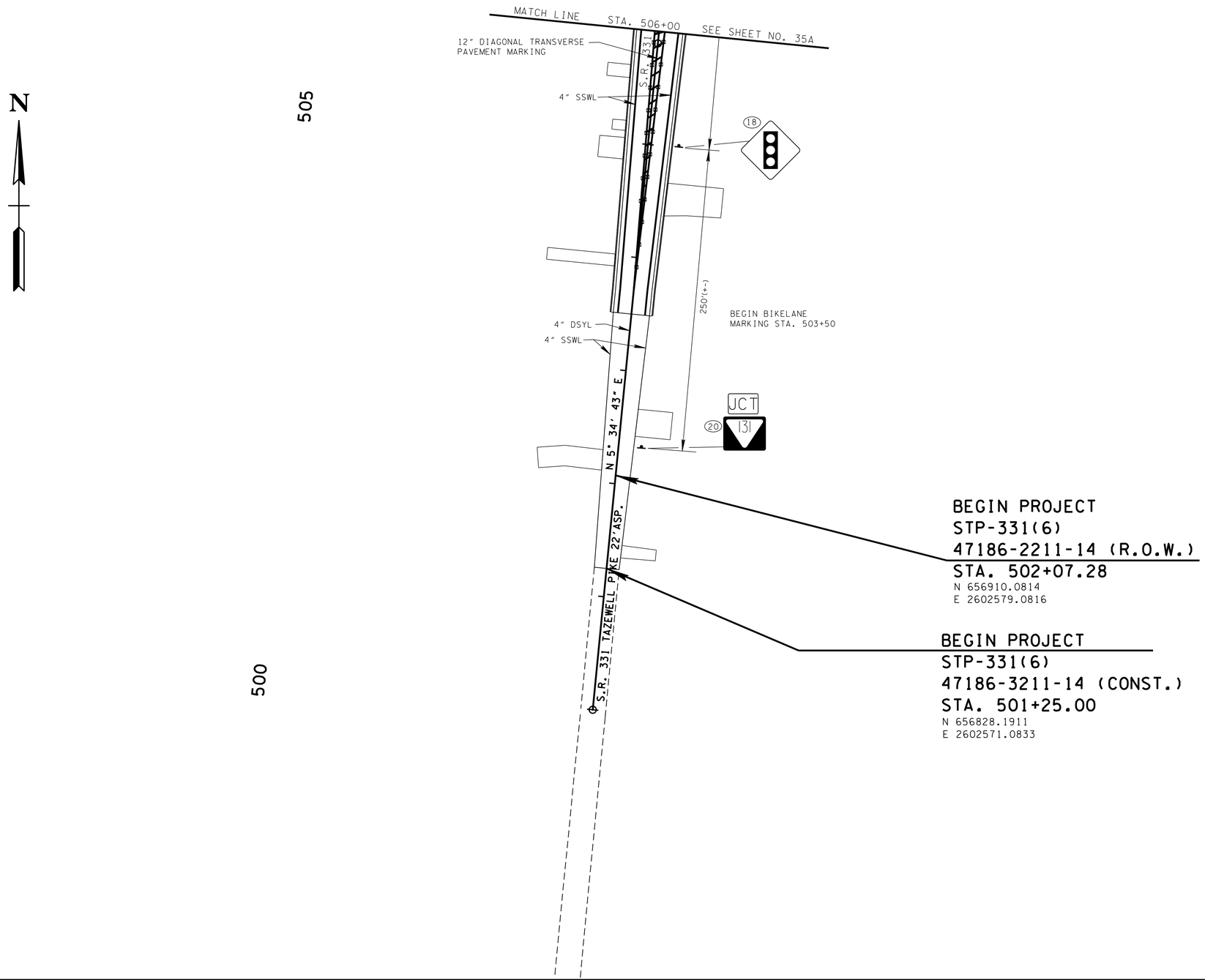
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.




**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

SHANE M. HESTER
REGISTERED ENGINEER
XVI
AGRICULTURE
COMMERCE
NO. 111011A
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# SIGNING AND PAVEMENT MARKING PLAN

STA.501+25.00 TO STA.506+00.00

SCALE: 1"= 50'

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 35D |
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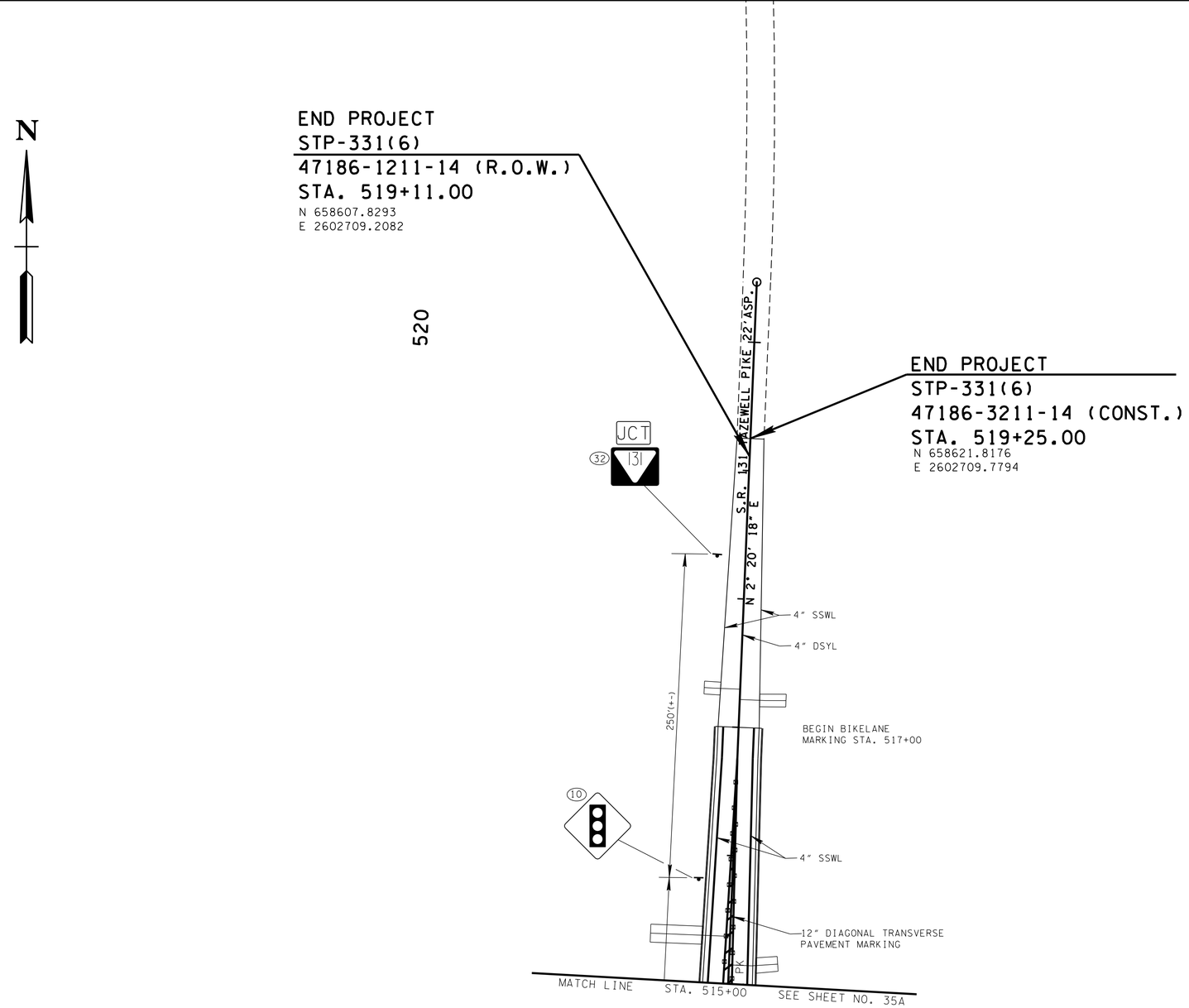
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.




120

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COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# SIGNING AND PAVEMENT MARKING PLAN

STA.515+00.00 TO
STA.519+25.00
SCALE: 1"= 50'

6-JUN-2014 17:32
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONSI. | 2014 | STP-331(6) | 36 |

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

| SIGN NO | LEGEND | SHEET NO | SIZE | | | | COPY | | | | SHIELD | ARROW | SIGN FACE | | | STEEL DESIGN (BREAK-AWAY) | | | | | MINIMUM VERTICAL CLEARANCE | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LENGTH | HEIGHT | RADIUS | BORDER WIDTH | CAPITAL | LOWER CASE | NUMERAL | SERIES | | | COPY | BACKGROUND | MATERIAL | SUPPORT TYPE | SUPPORT LENGTH | FOOTING | CONC. CU. YD. | REIN STEEL LBS. | | |
| 2 | W3-3 | | 36" | 36" | | | | | | | | | BLACK RED (REF.) GREEN (REF.) | YELLOW (REF.) | 0.100" SHEET ALUMINUM | P8 | h =13'-6" | | | | 5'-0" | |
| 10 | | | | | | | | | | | | | | | | | h =13'-6" | | | | | |
| 18 | | | | | | | | | | | | | | | | | h =13'-6" | | | | | |
| 23 | | | | | | | | | | | | | | | | | h =13'-6" | | | | | |
| 24 | BIKE LANE R3-17 | | 30" | 24" | | | | | | | | | BLACK | WHITE (REF.) | 0.080" SHEET ALUMINUM | U3 | h =12'-0" | | | | 5'-0" | TO BE LOCATION AT THE BEGINING OF EACH BIKE LANE AS DIRECTED BY THE ENGINEER. |
| 25 | | | | | | | | | | | | | | | | | h =12'-0" | | | | | |
| 26 | | | | | | | | | | | | | | | | | h =12'-0" | | | | | |
| 27 | | | | | | | | | | | | | | | | | h =12'-0" | | | | | |
| 28 | W11-1 | | 36" | 36" | | | | | | | | | BLACK | YELLOW (REF.) | 0.100" SHEET ALUMINUM | P8 | h =15'-6" | | | | 5'-0" | TO BE LOCATION AT THE END OF EACH BIKE LANE AS DIRECTED BY THE ENGINEER. |
| 29 | | | | | | | | | | | | | | | | | h =15'-6" | | | | | |
| 30 | SHARE THE ROAD W16-1P | | 18" | 24" | | | | | | | | | BLACK | WHITE (REF.) | 0.080" SHEET ALUMINUM | | h =15'-6" | | | | | |
| 31 | | | | | | | | | | | | | | | | | h =15'-6" | | | | | |
| 1 | JCT M2-1 | | 21" | 15" | | | | | | | | | BLACK | WHITE (REF.) | 0.080" SHEET ALUMINUM | U6 | h =13'-6" | | | | 5'-0" | REQUIRES SLIP BASE FOR U6 ITEM NO. 713-11.22 SEE STD. DRAWING T-S-23C |
| 11 | 331 TN-6B | | 30" | 24" | | | | | | | | | | | | | h =13'-6" | | | | | |
| 20 | JCT M2-1 | | 21" | 15" | | | | | | | | | BLACK | WHITE (REF.) | 0.080" SHEET ALUMINUM | U6 | h =13'-6" | | | | 5'-0" | REQUIRES SLIP BASE FOR U6 ITEM NO. 713-11.22 SEE STD. DRAWING T-S-23C |
| 32 | 131 TN-6B | | 30" | 24" | | | | | | | | | | | | | h =13'-6" | | | | | |
| 3 | SOUTH M3-3 131 TN-6B | | 24" 30" | 12" 24" | | | | | | | | | BLACK | WHITE (REF.) | 0.080" SHEET ALUMINUM | U6 | h =13'-0" | | | | 5'-0" | REQUIRES SLIP BASE FOR U6 ITEM NO. 713-11.22 SEE STD. DRAWING T-S-23C |
| 12 | NORTH M3-1 131 TN-6B | | 24" 30" | 12" 24" | | | | | | | | | BLACK | WHITE (REF.) | 0.080" SHEET ALUMINUM | U6 | h =13'-0" | | | | 5'-0" | REQUIRES SLIP BASE FOR U6 ITEM NO. 713-11.22 SEE STD. DRAWING T-S-23C |
| 19 | SOUTH M3-3 331 TN-6B | | 24" 30" | 12" 24" | | | | | | | | | BLACK | WHITE (REF.) | 0.080" SHEET ALUMINUM | U6 | h =13'-0" | | | | 5'-0" | REQUIRES SLIP BASE FOR U6 ITEM NO. 713-11.22 SEE STD. DRAWING T-S-23C |
| 22 | NORTH M3-1 331 TN-6B | | 24" 30" | 12" 24" | | | | | | | | | BLACK | WHITE (REF.) | 0.080" SHEET ALUMINUM | U6 | h =13'-0" | | | | 5'-0" | REQUIRES SLIP BASE FOR U6 ITEM NO. 713-11.22 SEE STD. DRAWING T-S-23C |
| 4 | M3-1 NORTH 131 TN-6B; NORTH M3-1 331 TN-6B; SOUTH M3-3 331 TN-6B; M5-1; M6-3; M5-1 | | 24" 30" 21" | 12" 24" 15" | | | | | | | | | BLACK | WHITE (REF.) | 0.080" SHEET ALUMINUM | P8 | $h_1$ =14'-6" $h_2$ =15'-0" $h_3$ =15'-6" | | | | 5'-0" | |

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

ROLAND LEE JONES REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 17649 STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGN SCHEDULE

6/2/2014 6:34:17 AM
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONSI. | 2014 | STP-331(6) | 36A |

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

| SIGN NO | LEGEND | SHEET NO | SIZE | | | | COPY | | | | SHIELD | ARROW | SIGN FACE | | | STEEL DESIGN (BREAK-AWAY) | | | | | MINIMUM VERTICAL CLEARANCE | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LENGTH | HEIGHT | RADIUS | BORDER WIDTH | CAPITAL | LOWER CASE | NUMERAL | SERIES | | | COPY | BACKGROUND | MATERIAL | SUPPORT TYPE | SUPPORT LENGTH | FOOTING | CONC. CU. YD. | REIN STEEL LBS. | | |
| 9 | M3-1 NORTH<br>TN-6B 331<br>M5-1<br>SOUTH M3-3<br>TN-6B 331<br>M6-3<br>SOUTH M3-3<br>TN-6B 131<br>M5-1 | | 24"<br>30"<br>21" | 12"<br>24"<br>15" | | | | | | | | | BLACK | WHITE (REF.) | 0.080" SHEET ALUMINUM | P8 | $h_1$=14'-6"<br>$h_2$=15'-0"<br>$h_3$=15'-6" | | | | 5'-0" | |
| 17 | M3-3 SOUTH<br>TN-6B 131<br>M5-1<br>NORTH M3-1<br>TN-6B 131<br>M6-3<br>NORTH M3-1<br>TN-6B 331<br>M5-1 | | 24"<br>30"<br>21" | 12"<br>24"<br>15" | | | | | | | | | BLACK | WHITE (REF.) | 0.080" SHEET ALUMINUM | P8 | $h_1$=14'-6"<br>$h_2$=15'-0"<br>$h_3$=15'-6" | | | | 5'-0" | |
| 21 | M3-3 SOUTH<br>TN-6B 331<br>M5-1<br>SOUTH M3-3<br>TN-6B 131<br>M6-3<br>NORTH M3-1<br>TN-6B 131<br>M5-1 | | 24"<br>30"<br>21" | 12"<br>24"<br>15" | | | | | | | | | BLACK | WHITE (REF.) | 0.080" SHEET ALUMINUM | P8 | $h_1$=14'-6"<br>$h_2$=15'-0"<br>$h_3$=15'-6" | | | | 5'-0" | |
| 6 | N S TN-39 (MOD)<br>331 TN-6B<br>NORTH M3-1<br>131 TN-6B<br>M6-1 | | 30"<br>30"<br>24"<br>30"<br>21" | 15"<br>24"<br>12"<br>24"<br>15" | | | | | | | | | BLACK | WHITE (REF.) | 0.080" SHEET ALUMINUM | P5 | h =15'-0" | | | | 5'-0" | REQUIRES SLIP BASE FOR P5.<br>ITEM NO. 713-11.21.<br>SEE STD. DRAWING T-S-23A. |
| 8 | N S TN-39 (MOD)<br>331 TN-6B<br>SOUTH M3-3<br>131 TN-6B<br>M6-1 | | 30"<br>30"<br>24"<br>30"<br>21" | 15"<br>24"<br>12"<br>24"<br>15" | | | | | | | | | BLACK | WHITE (REF.) | 0.080" SHEET ALUMINUM | P5 | h =15'-0" | | | | 5'-0" | REQUIRES SLIP BASE FOR P5.<br>ITEM NO. 713-11.21.<br>SEE STD. DRAWING T-S-23A. |
| 15 | S N TN-39 (MOD)<br>131 TN-6B<br>SOUTH M3-3<br>331 TN-6B<br>M6-1 | | 30"<br>30"<br>24"<br>30"<br>21" | 15"<br>24"<br>12"<br>24"<br>15" | | | | | | | | | BLACK | WHITE (REF.) | 0.080" SHEET ALUMINUM | P5 | h =15'-0" | | | | 5'-0" | REQUIRES SLIP BASE FOR P5.<br>ITEM NO. 713-11.21.<br>SEE STD. DRAWING T-S-23A. |

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

ROLAND LEE JONES
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 17640
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGN SCHEDULE

6/2/2014 6:34:47 AM
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONSI. | 2014 | STP-331(6) | 36B |

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

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

| SIGN NO | LEGEND | SHEET NO | SIZE LENGTH | SIZE HEIGHT | SIZE RADIUS | SIZE BORDER WIDTH | COPY CAPITAL | COPY LOWER CASE | COPY NUMERAL | COPY SERIES | SHIELD | ARROW | SIGN FACE COPY | SIGN FACE BACKGROUND | SIGN FACE MATERIAL | STEEL DESIGN (BREAK-AWAY) SUPPORT TYPE | SUPPORT LENGTH | FOOTING | CONC. CU. YD. | REIN STEEL LBS. | MINIMUM VERTICAL CLEARANCE | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | TN-39 (MOD)<br>TN-6B<br>M3-1<br>TN-6B<br>M6-1 | | 30"<br>30"<br>24"<br>30"<br>21" | 15"<br>24"<br>12"<br>24"<br>15" | | | | | | | | | BLACK | WHITE (REF.) | 0.080" SHEET ALUMINUM | P5 | h =15'-0" | | | | 5'-0" | REQUIRES SLIP BASE FOR P5.<br>ITEM NO. 713-11.21.<br>SEE STD. DRAWING T-S-23A. |
| 5 | GIBBS SCHOOL | | 36"+- | 36"+- | | | | | | | | | | | | P8 | h =13'-0" | | | | 5'-0" | USE EXIST SIGN FACE |
| 14 | GIBBS SCHOOL | | 36"+- | 36"+- | | | | | | | | | | | | P8 | h =13'-0" | | | | 5'-0" | USE EXIST SIGN FACE |
| 13 | GIBBS SOFTBALL SIGN | | 36"+- | 36"+- | | | | | | | | | | | | P8 | h =13'-0" | | | | 5'-0" | USE EXIST SIGN FACE |
| 7 | DISCOVER TENNESSEE WHITE LIGHTNING | | 36"+-<br>21"+- | 36"+-<br>15"+- | | | | | | | | | | | | P8 | h =14'-6" | | | | 5'-0" | USE EXIST SIGN FACE |

U-POST SUBSTITUTION TABLE

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

* PAID AT A RATE OF 2.5#/FT.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGN SCHEDULE

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2013 | STP-331(6) | 33E |
| CONST. | 2014 | STP-331(6) | 37 |
| | | | |
| | | | |

S.R. 331 KNOX COUNTY
47186-3211-14(CONST.)

REV. 9-26-2013: ADDED SHEET TO PLANS.
REV. 11-1-2013: DELETED PEDESTAL POLE NO. 2 AND RELOCATED PEDESTAL POLE NO. 1.

## CANTILEVER SIGNAL SUPPORT POLE DATA

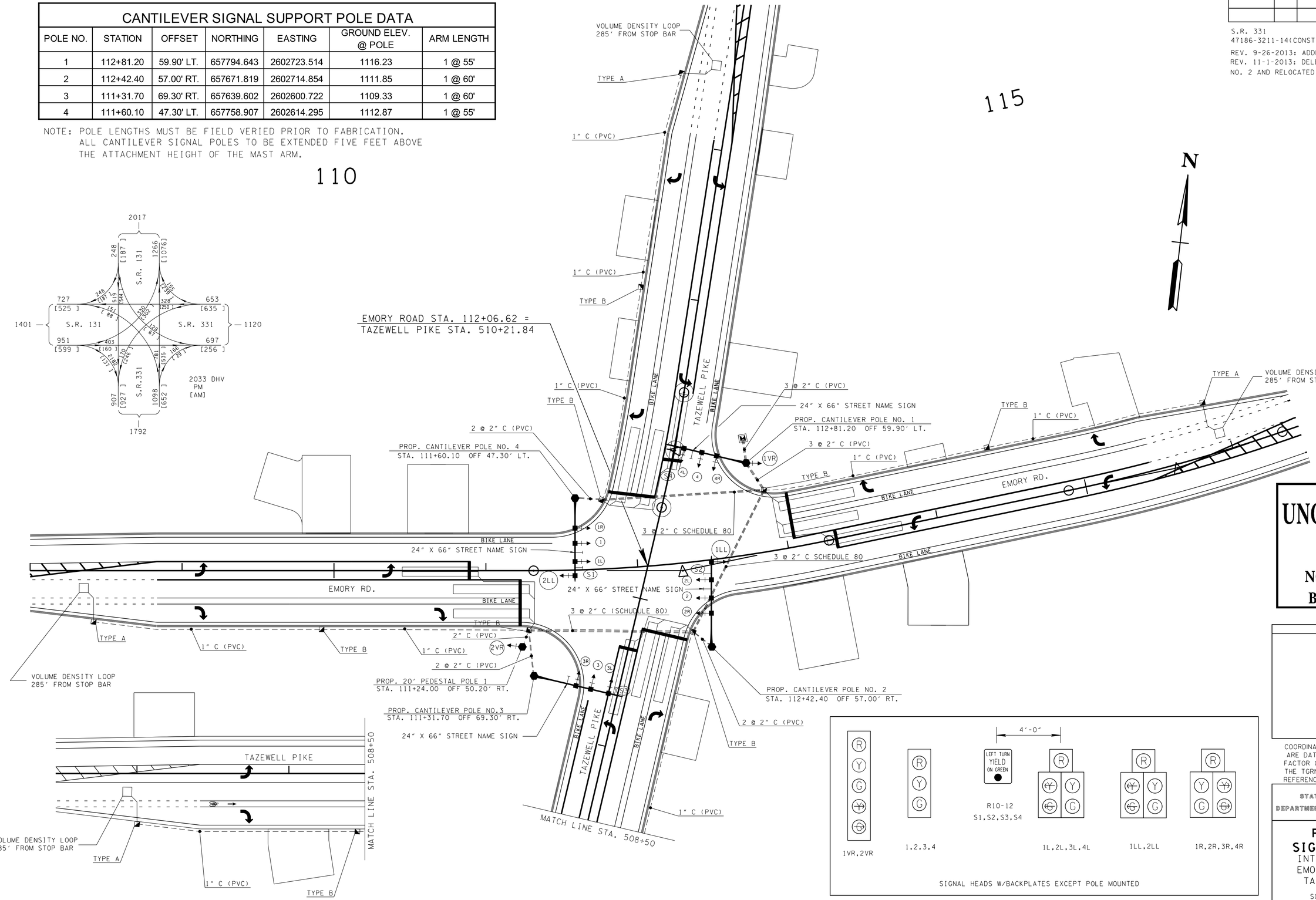
| POLE NO. | STATION | OFFSET | NORTHING | EASTING | GROUND ELEV. @ POLE | ARM LENGTH |
|---|---|---|---|---|---|---|
| 1 | 112+81.20 | 59.90' LT. | 657794.643 | 2602723.514 | 1116.23 | 1 @ 55' |
| 2 | 112+42.40 | 57.00' RT. | 657671.819 | 2602714.854 | 1111.85 | 1 @ 60' |
| 3 | 111+31.70 | 69.30' RT. | 657639.602 | 2602600.722 | 1109.33 | 1 @ 60' |
| 4 | 111+60.10 | 47.30' LT. | 657758.907 | 2602614.295 | 1112.87 | 1 @ 55' |

NOTE: POLE LENGTHS MUST BE FIELD VERIED PRIOR TO FABRICATION. ALL CANTILEVER SIGNAL POLES TO BE EXTENDED FIVE FEET ABOVE THE ATTACHMENT HEIGHT OF THE MAST ARM.

110

115










**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.0009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**PROPOSED SIGNAL LAYOUT**
INTERSECTION OF EMORY ROAD WITH TAZEWELL PIKE

SCALE: 1"=30 '

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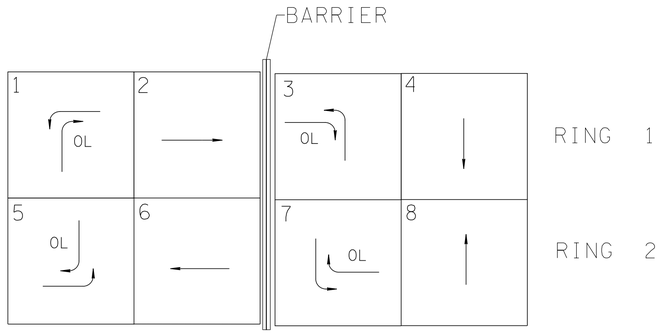
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 37A |

S.R. 331 KNOX COUNTY
47186-3211-14(CONST.)




## BASIC OR SEMI - ACTUATED TIMING (SECS)

| PHASE | INITIAL INTERVAL | VEHICLE INTERVAL | MAX I | MAX II | CLEARANCE | | PEDESTRIAN | | RECALL TO | MEMORY POSITION (1) | LEFT TURN OPERATION (2) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | YELLOW | ALL RED | WALK | FLASHING DONT WALK | | | |
| 1 | 10.0 | 1.0 | 15.0 | | 4.5 | 2.0 | | | NONE | NL | P + P |
| 3 | 10.0 | 1.0 | 10.5 | | 4.5 | 2.0 | | | NONE | NL | P + P |
| 5 | 10.0 | 1.0 | 15.0 | | 4.5 | 2.0 | | | NONE | NL | P + P |
| 7 | 10.0 | 1.0 | 15.0 | | 4.5 | 2.0 | | | NONE | NL | P + P |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

(1) NL = NONLOCK
L = LOCK

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

## NEMA EIGHT PHASE DESIGNATIONS

ACTIVE PHASE

INACTIVE PHASE (NOT USED)

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

## VOLUME - DENSITY TIMING (SECS)

| PHASE | INITIAL INTERVAL | ADDED INITIAL PER ACTUATION | PASSAGE TIME | MINIMUM GAP | TIME BEFORE REDUCTION | TIME TO REDUCE | MAX I | MAX II | CLEARANCE | | PEDESTRIAN | | RECALL TO | MEMORY POSITION (1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | YELLOW | ALL RED | WALK | FLASHING DONT WALK | | |
| 2 | 10.0 | 2.3 | 4.3 | 4.3 | 10.0 | 5.0 | 29.0 | | 4.5 | 2.0 | | | MAX. | L |
| 4 | 10.0 | 2.3 | 4.3 | 4.3 | 10.0 | 5.0 | 20.0 | | 4.5 | 2.0 | | | NONE | L |
| 6 | 10.0 | 2.3 | 4.3 | 4.3 | 10.0 | 5.0 | 29.0 | | 4.5 | 2.0 | | | MAX. | L |
| 8 | 10.0 | 2.3 | 4.3 | 4.3 | 10.0 | 5.0 | 15.0 | | 4.5 | 2.0 | | | NONE | L |

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

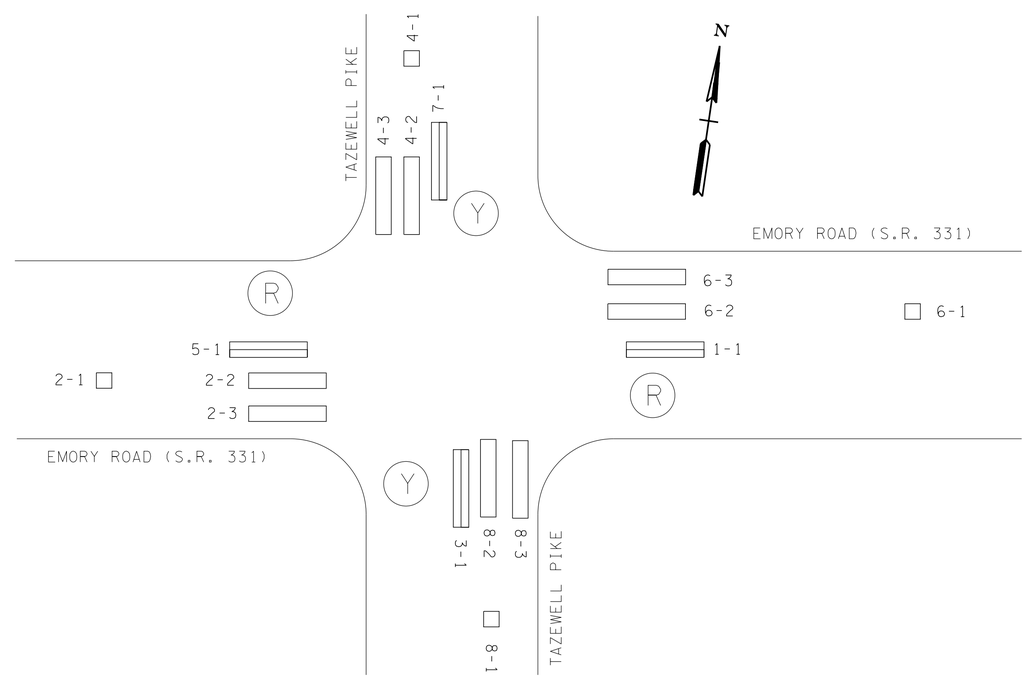
## LOOP AND AMP ASSIGNMENT

| | LOOP # | VEHICLE DETECTOR # | LOOP LENGTH (FT.) | AMP MODE | AMP. FEATURE TIMING (SEC) | ASSOC. PHASE |
|---|---|---|---|---|---|---|
| * | 1-1 | 2 | 1 @ 50' | PRES | | 1 |
| | 2-1 | 1 | 1 @ 6' X 6' | PULSE | | 2 |
| | 2-2 | 1 | 1 @ 50' | PRES | | 2 |
| | 2-3 | 1 | 1 @ 50' | PRES | | 2 |
| * | 3-1 | 4 | 1 @ 50' | PRES | | 3 |
| | 4-1 | 3 | 1 @ 6' X 6' | PULSE | | 4 |
| | 4-2 | 3 | 1 @ 50' | PRES | | 4 |
| | 4-3 | 3 | 1 @ 50' | PRES | | 4 |
| * | 5-1 | 1 | 1 @ 50' | PRES | | 5 |
| | 6-1 | 2 | 1 @ 6' X 6' | PULSE | | 6 |
| | 6-2 | 2 | 1 @ 50' | PRES | | 6 |
| | 6-3 | 2 | 1 @ 50' | PRES | | 6 |
| * | 7-1 | 3 | 1 @ 50' | PRES | | 7 |
| | 8-1 | 4 | 1 @ 6' X 6' | PULSE | | 8 |
| | 8-2 | 4 | 1 @ 50' | PRES | | 8 |
| | 8-3 | 4 | 1 @ 50' | PRES | | 8 |

* QUADROPOLES

- ALL LOOPS ARE 6' IN WIDTH, CENTERED IN TRAFFIC LANE . 6' X 6' LOOPS SHALL HAVE 3 TURNS OF LOOP WIRE. ALL OTHERS HAVE 2 TURNS, UNLESS OTHERWISE NOTED.
- LOOP WIRE CONNECTIONS SHALL BE WIRED TO PROVIDE THE APPROPRIATE INDUCTANCE AS REQUIRED BY STD. DWG T-SG-3.

## DETECTION LOOP DIAGRAM




FLASHING OPERATION (Y) OR (R)

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

SEALED BY

INTERSECTION EMORY RD.
WITH TAZEWELL PIKE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PHASING, TIMING, DETECTOR ASSIGNMENT

EIGHT PHASE

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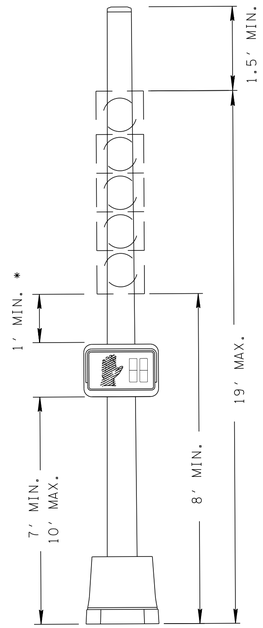
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 37B |
| | | | |
| | | | |
| | | | |

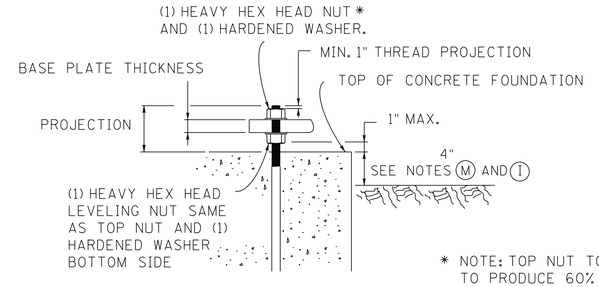
S.R. 331 KNOX COUNTY

47186-3211-14(CONST.)




## PEDESTAL POLE

* IF PEDESTRIAN DISPLAYS ARE PROVIDED ON SAME POLE, THE MINIMUM HEIGHT OF THE VEHICULAR DISPLAY SHALL BE AT LEAST ONE FOOT ABOVE THE TOP OF THE PEDESTRIAN DISPLAY, HOUSING AND BRACKETS.



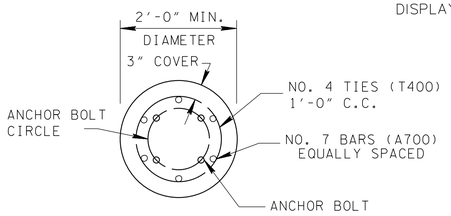

## ANCHOR BOLT DETAIL

UNDER NO CONDITIONS WILL DRILLED AND GROUTED ANCHOR BOLTS BE ALLOWED)
(CANTILEVER AND BUTTERFLY SIGN BASES SHALL REQUIRE A MINIMUM OF 8 ANCHOR BOLTS 1 ½" IN DIAMETER)

* NOTE: TOP NUT TO BE TORQUED TO PRODUCE 60% YIELD STRESS OF ANCHOR BOLT.
NOTE: DO NOT GROUT BETWEEN BOTTOM OF BASE PLATE AND TOP OF CONCRETE FOUNDATION.

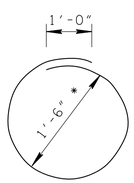
### REQUIRED BEARING AREA FOR ANCHOR BOLT

| ANCHOR BOLT DIA(IN) | HEAD OR NUT AREA (SQ IN) |
|---|---|
| 1" | 1.800 |
| 1¼" | 2.812 |
| 1½" | 4.050 |
| 1¾" | 5.512 |
| 2" | 7.199 |
| 2¼" | 9.122 |
| 2½" | 11.249 |

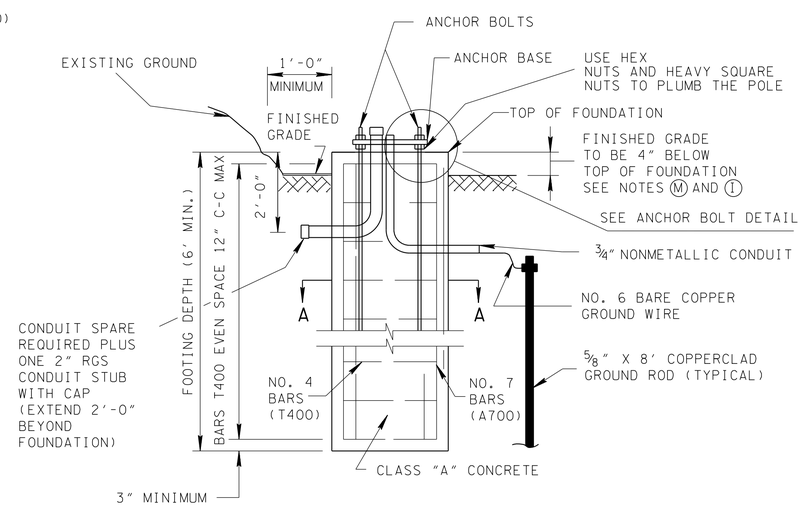



SECTION A-A

## FOUNDATION DETAIL FOR STRAIN OR MAST ARM POLE




T400 BARS SHALL LAP 1'-0"




## ESTIMATED FOUNDATION QUANTITIES

| FOOTING DIAMETER | FOOTING DEPTH | T400 REINFORCING BARS | | | A700 REINFORCING BARS | | | CONCRETE (CUBIC YARDS) | MAXIMUM DESIGN MOMENT (FT-KIP) SERVICE LOAD |
|---|---|---|---|---|---|---|---|---|---|
| | | NUMBER OF BARS | LENGTH OF EACH BAR | TOTAL WEIGHT IN POUNDS | NUMBER OF BARS | LENGTH OF EACH BAR | TOTAL WEIGHT IN POUNDS | | |
| 2'-0" | 6'-0" | 7 | 5'-9" | 27 | 6 | 5'-6" | 67 | 0.7 | (M) |

## GENERAL NOTES

(A) ALL STEEL PEDESTAL POLES SHALL CONFORM TO "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION, SECTION 730 - TRAFFIC SIGNALS.

(B) PEDESTAL POLES SHALL BE DESIGNED ACCORDING TO AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (CURRENT EDITION).

(C) THE CONTRACTOR SHALL FURNISH POLES DESIGNED FOR A WIND VELOCITY ACCORDING TO THE CURRENT STANDARDS AS SPECIFIED IN AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS".

(D) ANCHOR BOLTS SHALL BE DESIGNED BY THE POLE FABRICATOR. THEY SHALL BE CAPABLE OF RESISTING THE FULL BENDING MOMENT OF THE SHAFT AT ITS YIELD STRENGTH STRESS.

MATERIAL SPECIFICATIONS - BOLTS:

1.) ANCHOR BOLTS SHALL BE ASTM F1554 GRADE 55 ksi WITH THREADS CONFORMING TO THE REQUIREMENTS OF ASTM A563.

2.) NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A563.

3.) ALL HARDWARE, EXCEPT STAINLESS STEEL, SHALL BE HOT DIPPED GALVANIZED ACCORDING TO ASTM A153 OR MECHANICALLY GALVANIZED ACCORDING TO ASTM B695.

(E) THE COST OF ALL FOOTING MATERIALS AND INSTALLATION SHALL BE INCLUDED IN THE PRICE BID FOR STEEL POLES

(F) THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND NOTES TO THE ENGINEER OF STRUCTURES FOR APPROVAL PRIOR TO FABRICATION.

(G) THE MOMENT CAPACITY OF THE PEDESTAL POLE AND THE FOOTING DEPTH SHALL BE AS SPECIFIED IN THE PLANS.

(H) TOP OF FOOTING SHALL BE FLUSH IN SIDEWALK OR PAVED ISLANDS. TOP OF FOOTING SHALL NOT EXTEND MORE THAN 4" ABOVE THE GROUND LINE IN OTHER AREAS.

(I) IF ROCK IS ENCOUNTERED WHILE DRILLING FOR FOOTING, AND CORE AND THE DRILLING INDICATES ROCK IS SOLID, THE CONTRACTOR SHALL PROCEED BY ONE OF TWO METHODS. METHOD1: PROVIDE A ROCK SOCKET TWO TIMES THE DIAMETER OF THE POLE FOUNDATION. METHOD 2: DRILL SIX 1⅛" DIAMETER HOLES IN TO ROCK A MIMIMUM DISTANCE OF THREE FEET. FILL HOLES WITH A-B EPOXY MIX AND ROTATE THE A700 BARS UNTIL FULLDEPTH IS ACHIEVED. THE A-B EPOXY MIX SHALL BE APPROVED BY TENNESSE DEPARTMENT OF TRANSPORTATION, MATERIALS AND TEST DIVISION. GROUND ROD MAY BE PLACED HORIZONTALLY, AS DEEP AS ROCK ALLOWS, WITH A 3" MINIMUM SEPARATION FROM ANY CONDUIT. THE CONTRACTOR SHALL CONTACT THE DIVISION OF STRUCTURES TO DETERMINE WHICH METHOD IS APPLICABLE OR WHETHER A SPECIAL SPREAD FOOTING DESIGN MUST BE FURNISHED BT THE DIVISION OF STRUCTURES.

(J) ALL STRAIN POLES AND MAST ARM POLES TO HAVE SPARE 2" RGS CONDUIT STUB EXTENDING 24" BEYOND POLE FOUNDATION.

(K) ALL CONDUIT BENDS IN POLE FOUNDATION TO BE 6" RADIUS.

(L) BASE OF POLE SHALL REMAIN OPEN TO PERMIT DRAINAGE AND AIR CIRCULATION. FINISHED GROUND PROFILE SHOULD DRAIN WATER AWAY FROM FOUNDATION.

(M) 2' DIAMETER FOUNDATION ONLY TO BE USED WITH PEDESTAL POLE (SEE T-SG-9A).

**UNOFFICIAL SET**

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PEDESTAL POLE MOUNTED SIGNAL

SPECIAL DETAIL

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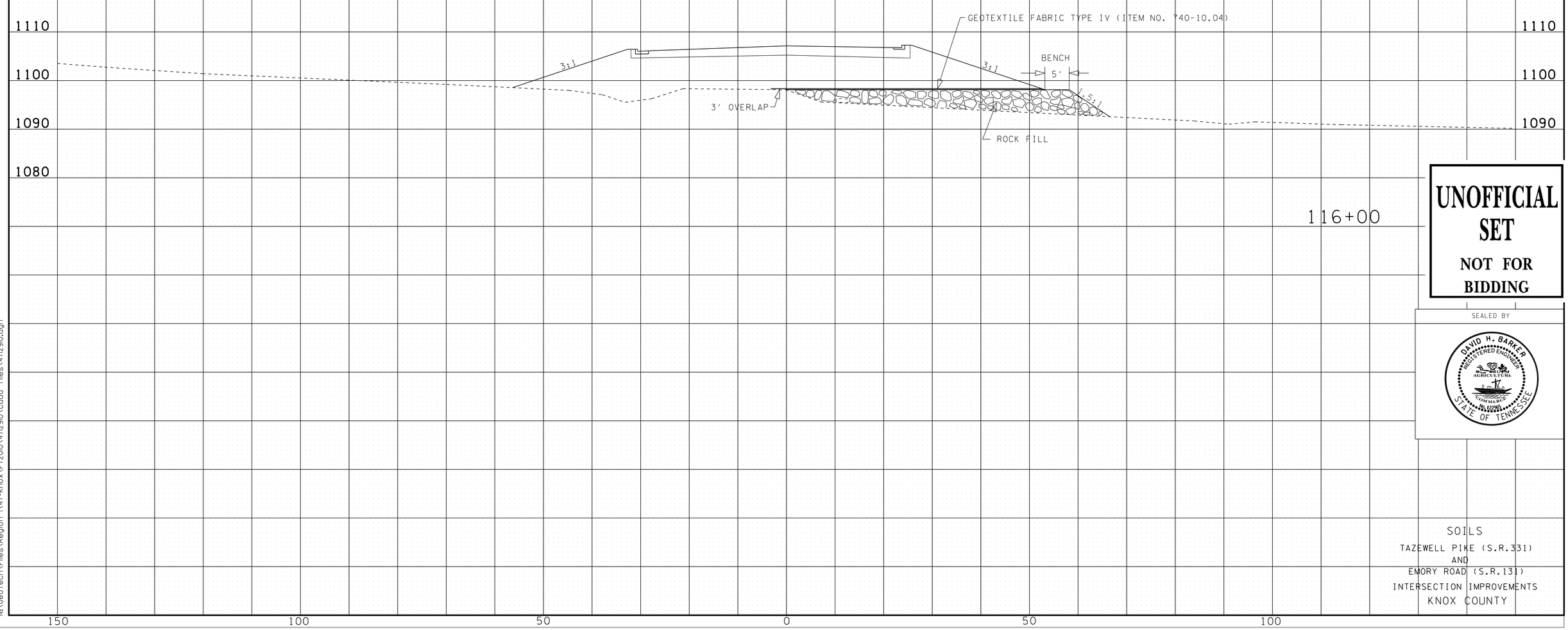
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 38 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

BETWEEN APPROXIMATE STA. 115+25 AND STA. 117+25 RT. OF CL.
CONSTRUCT A ROCKFILL UP TO ELEVATION 1098 RT OF CL. OF EMORY RD.
BETWEEN THE TOP OF THE ROCK FILL AND THE BASE MATERIAL. EXTEND
THE INSIDE EDGE OF THE GEOTEXTILE 3 FEET OVER EXISTING GROUND LINE.




UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

DAVID H. BARKER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
STATE OF TENNESSEE

SOILS
TAZEWELL PIKE (S.R.331)
AND
EMORY ROAD (S.R.131)
INTERSECTION IMPROVEMENTS
KNOX COUNTY

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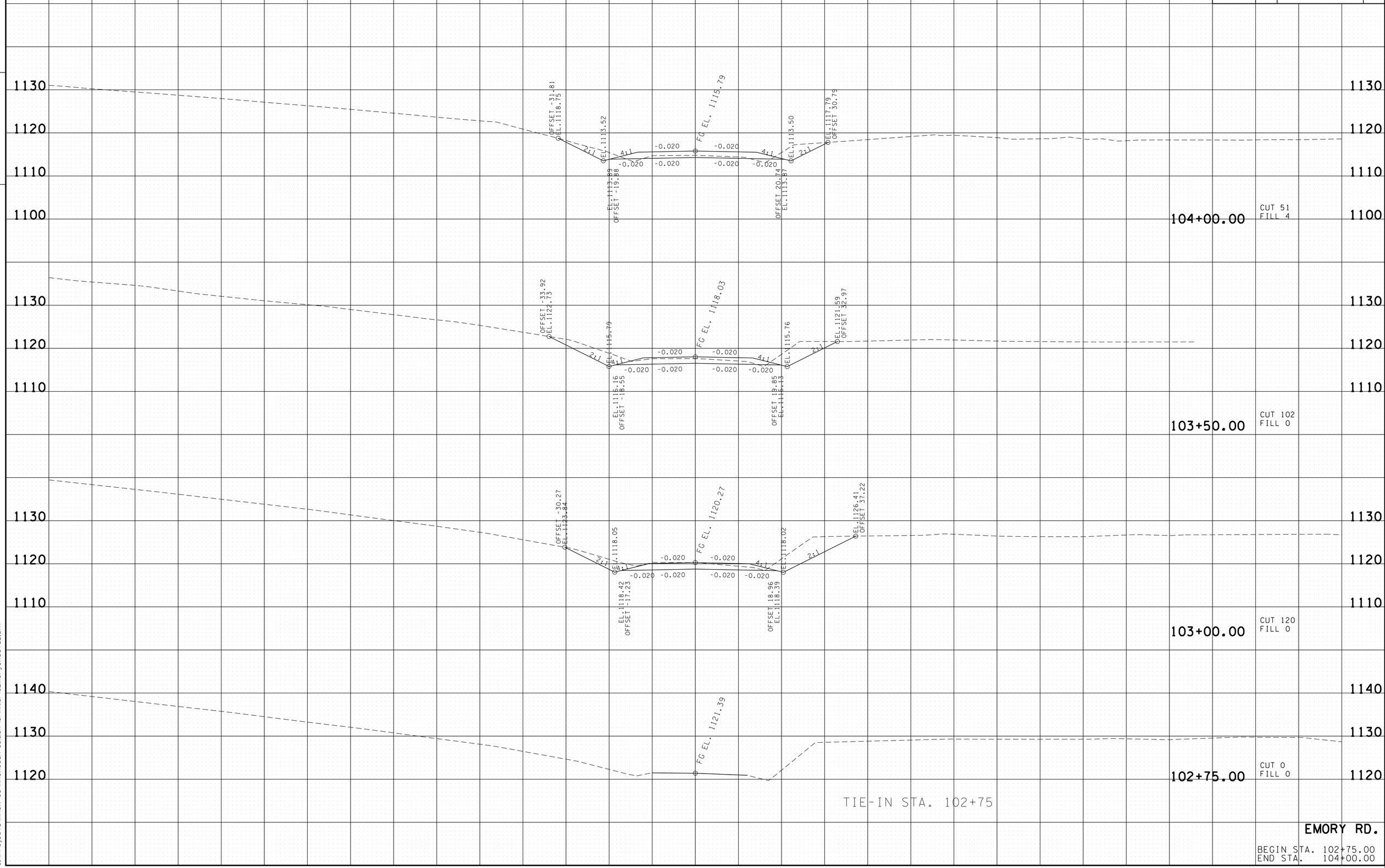
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 35 |
| CONST. | 2014 | STP-331(6) | 39 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




EMORY RD.

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END STA. 104+00.00

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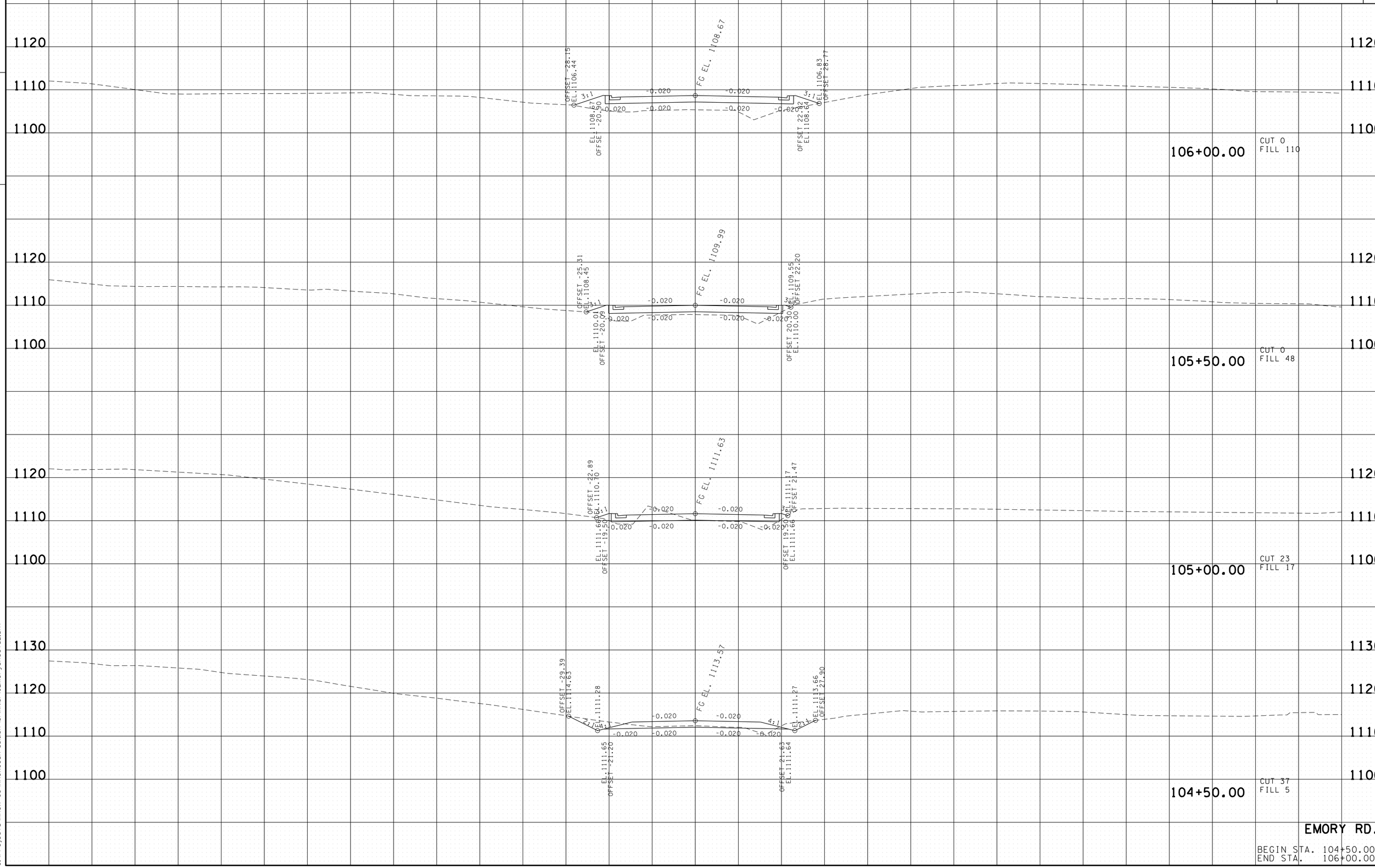
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 36 |
| CONST. | 2014 | STP-331(6) | 40 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

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END STA. 106+00.00

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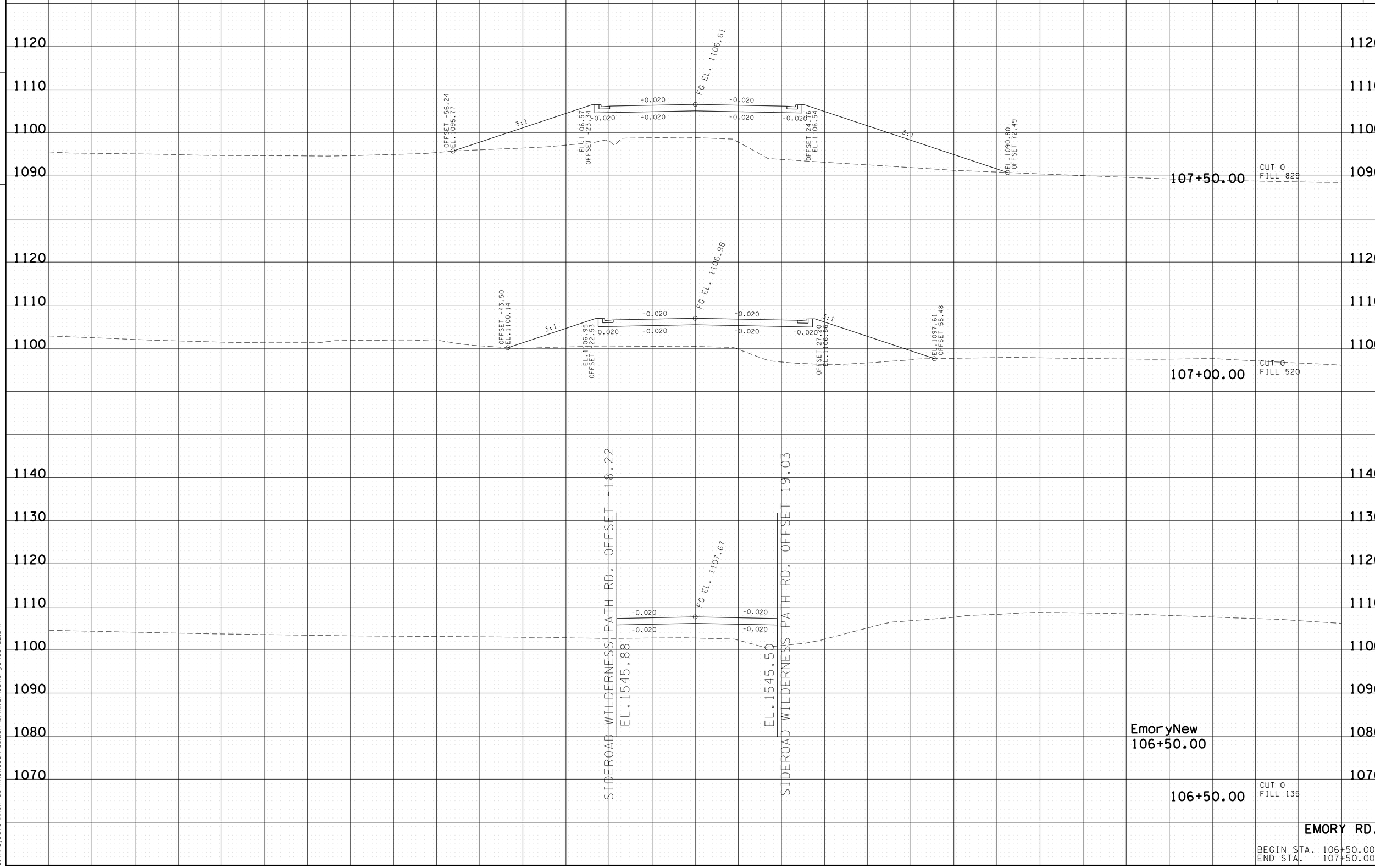
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 37 |
| CONST. | 2014 | STP-331(6) | 41 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

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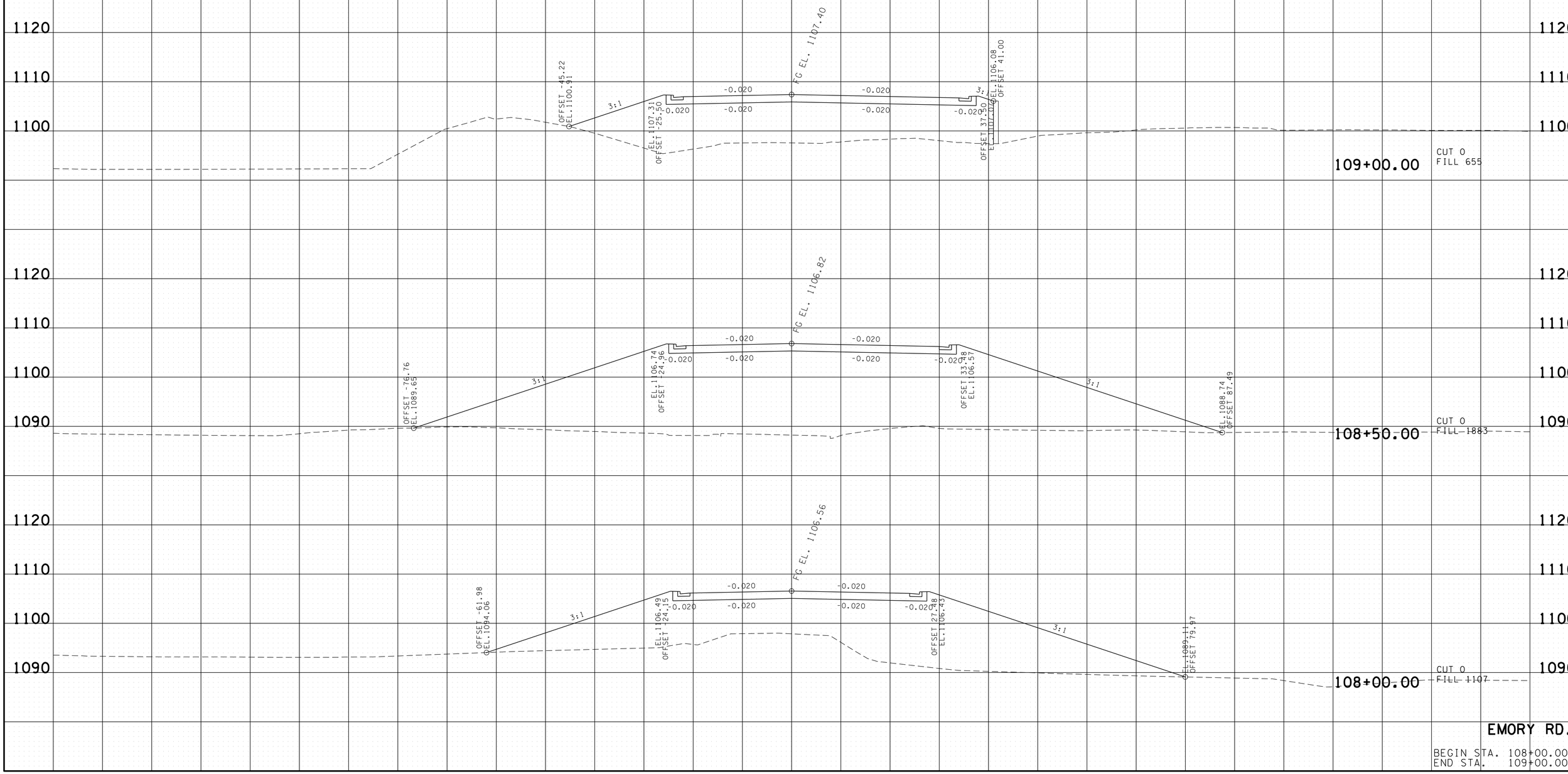
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 38 |
| CONST. | 2014 | STP-331(6) | 42 |

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




**EMORY RD.**

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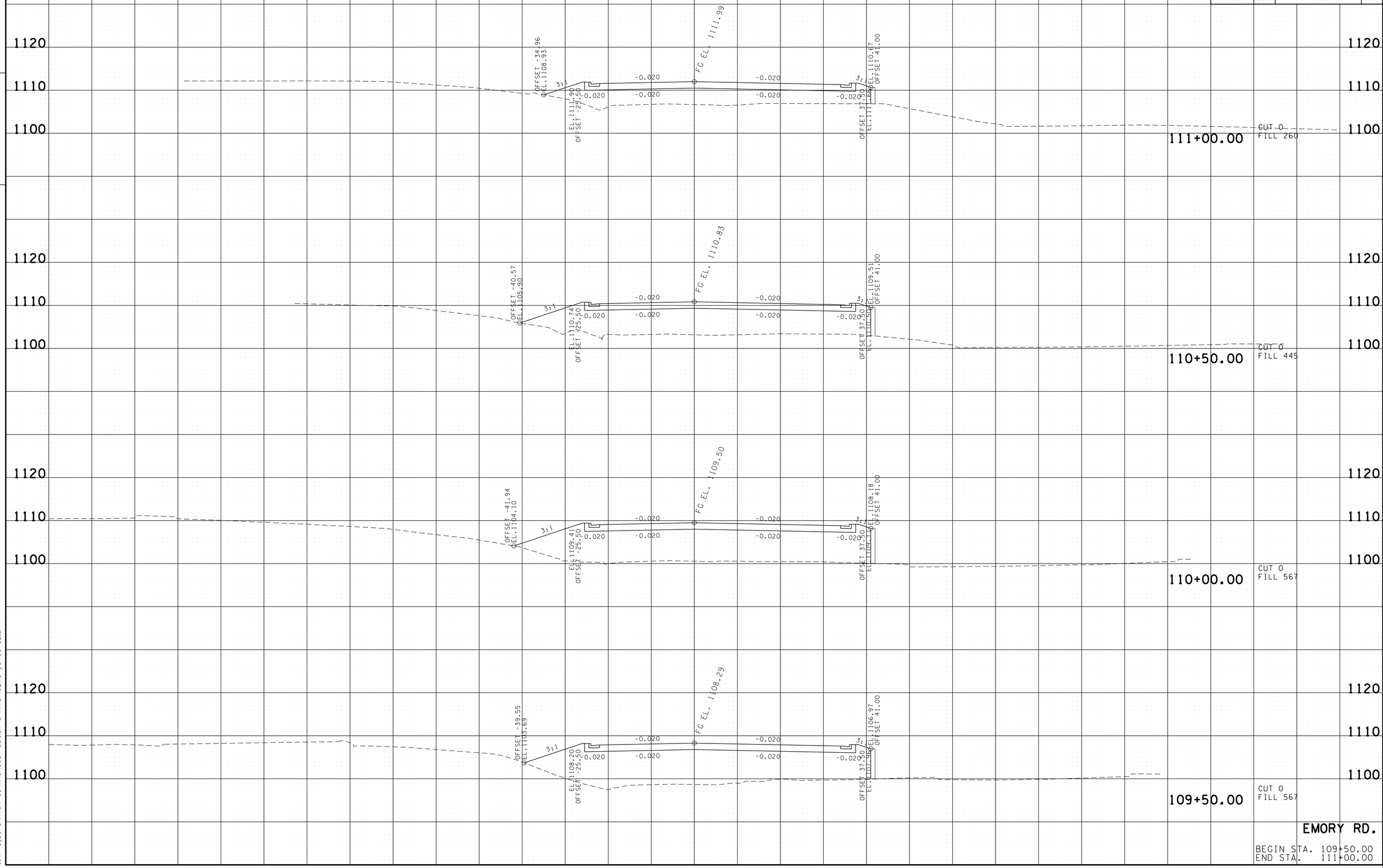
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 39 |
| CONST. | 2014 | STP-331(6) | 43 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
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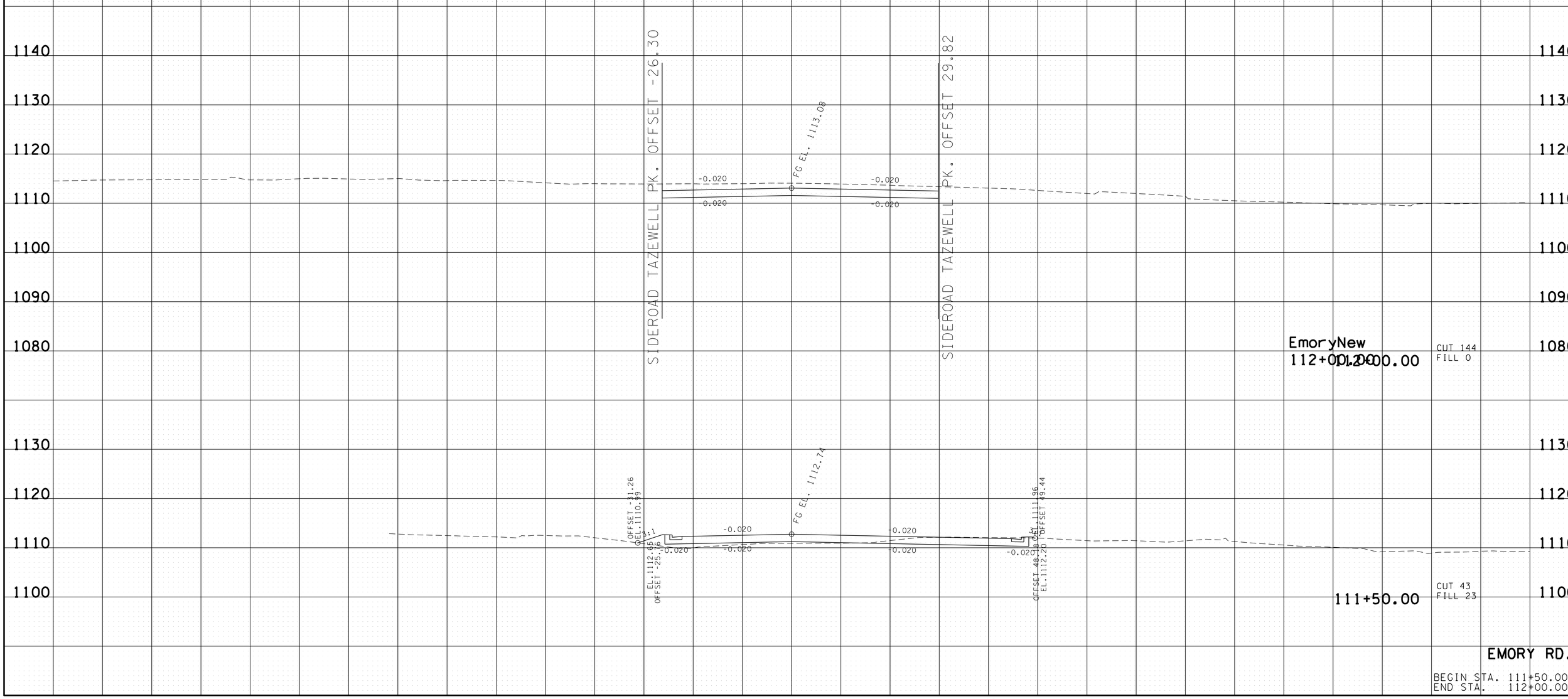
| CONST. | 2014 | STP-331(6) | 44 |




FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

EMORY RD.

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END STA. 112+00.00

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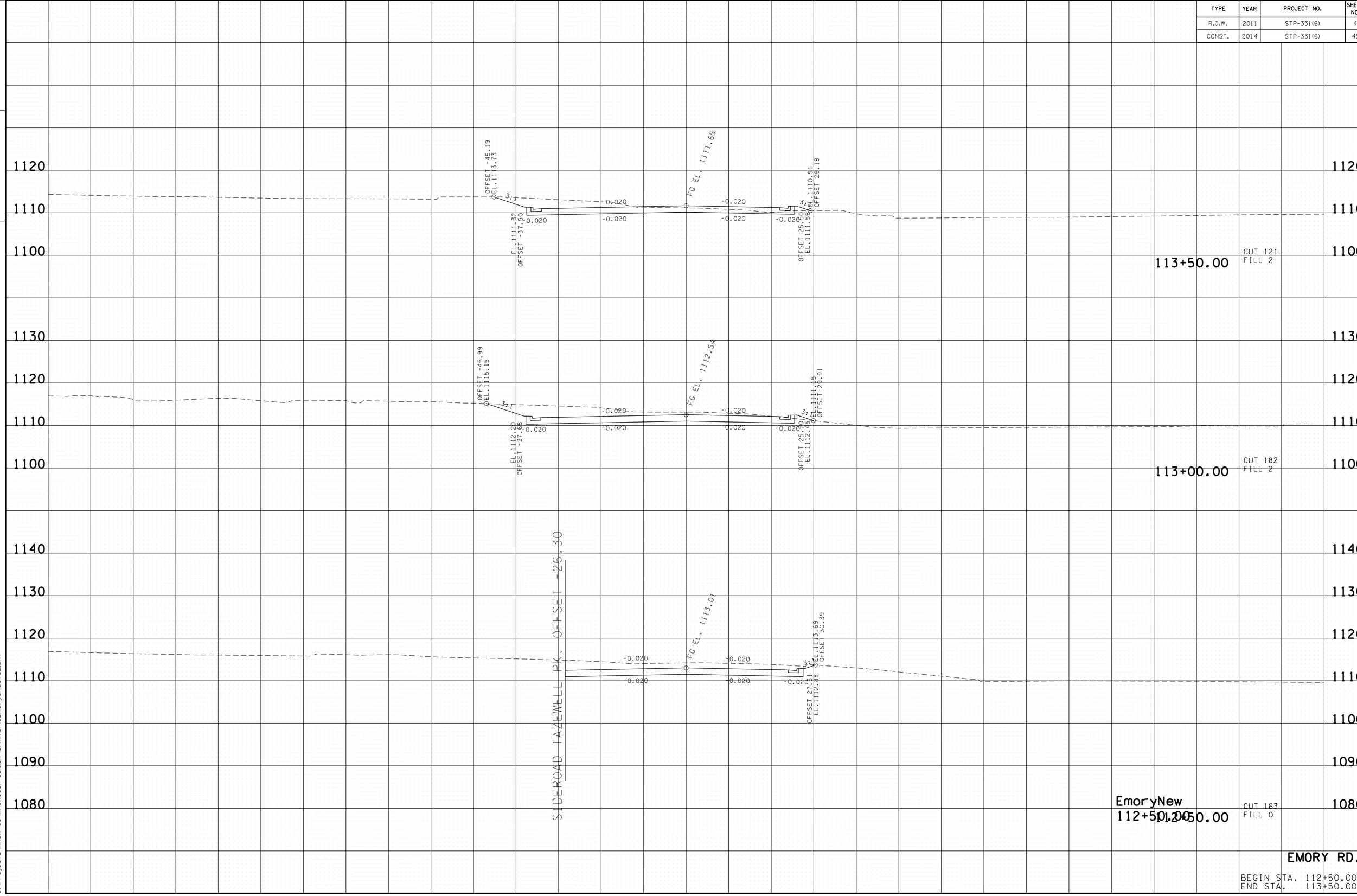
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 41 |
| CONST. | 2014 | STP-331(6) | 45 |




EMORY RD.

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END STA. 113+50.00

TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.

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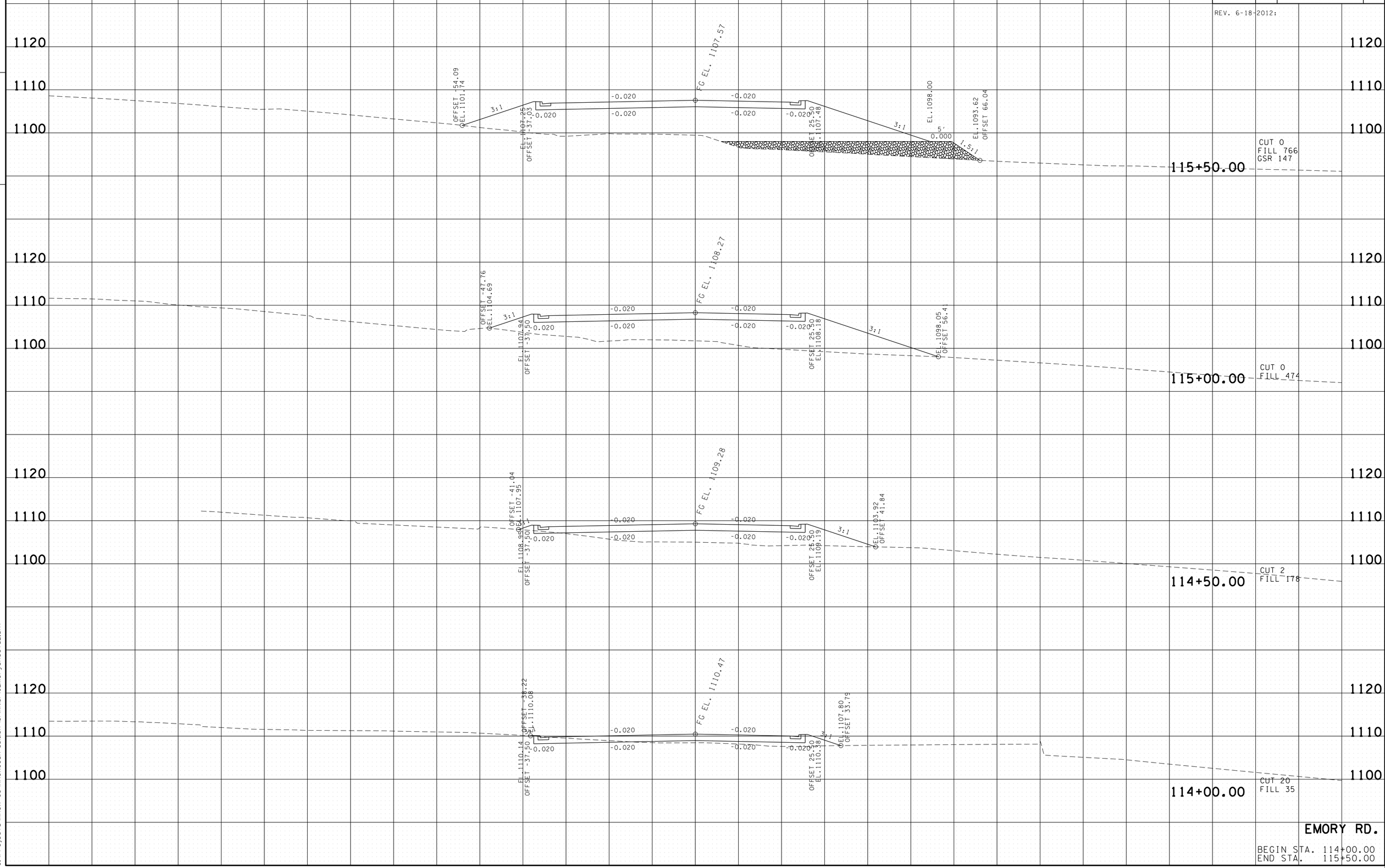
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 42 |
| CONST. | 2014 | STP-331(6) | 46 |

REV. 6-18-2012:

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




EMORY RD.

BEGIN STA. 114+00.00
END STA. 115+50.00

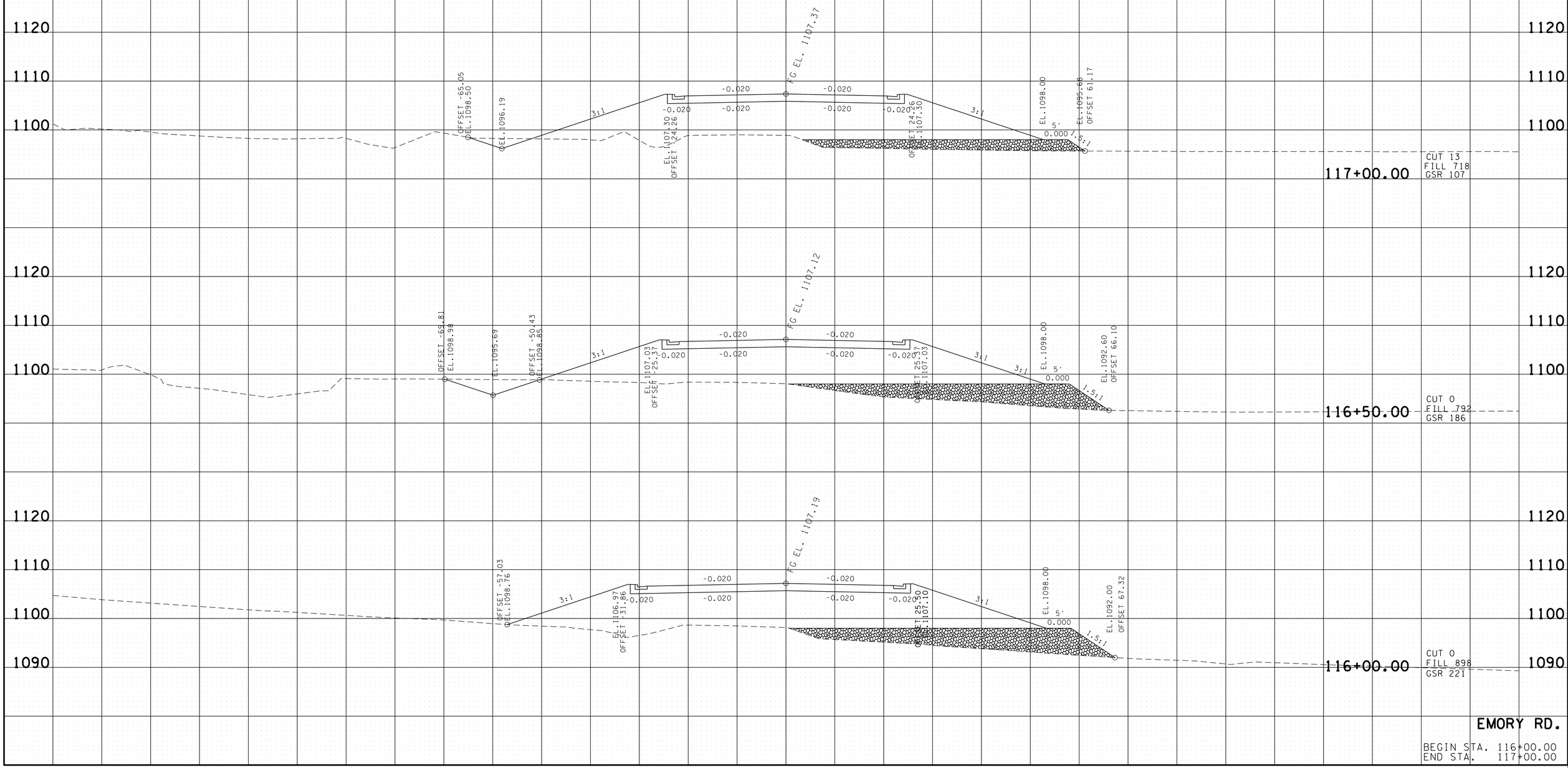
16-JUN-2014 17:32
C:\Projects\Knox Co\KnoxCoSR-331&SR-131\KN131-0Emorysheet&2.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 43 |
| CONST. | 2014 | STP-331(6) | 47 |

REV. 6-18-2012:

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




**EMORY RD.**

BEGIN STA. 116+00.00
END STA. 117+00.00

16-JUN-2014 17:32
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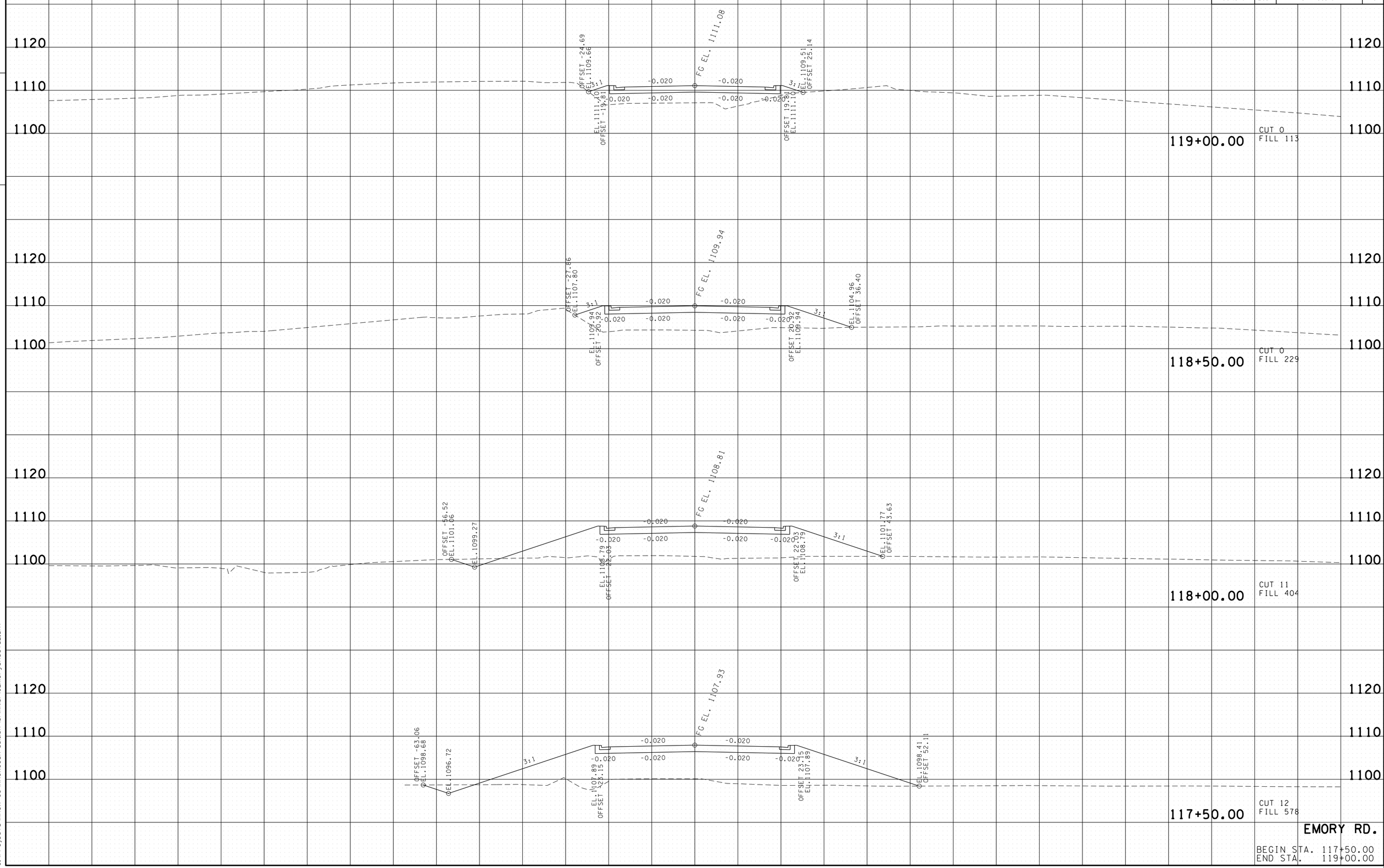
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 44 |
| CONST. | 2014 | STP-331(6) | 48 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




EMORY RD.

BEGIN STA. 117+50.00
END STA. 119+00.00

16-JUN-2014 17:32
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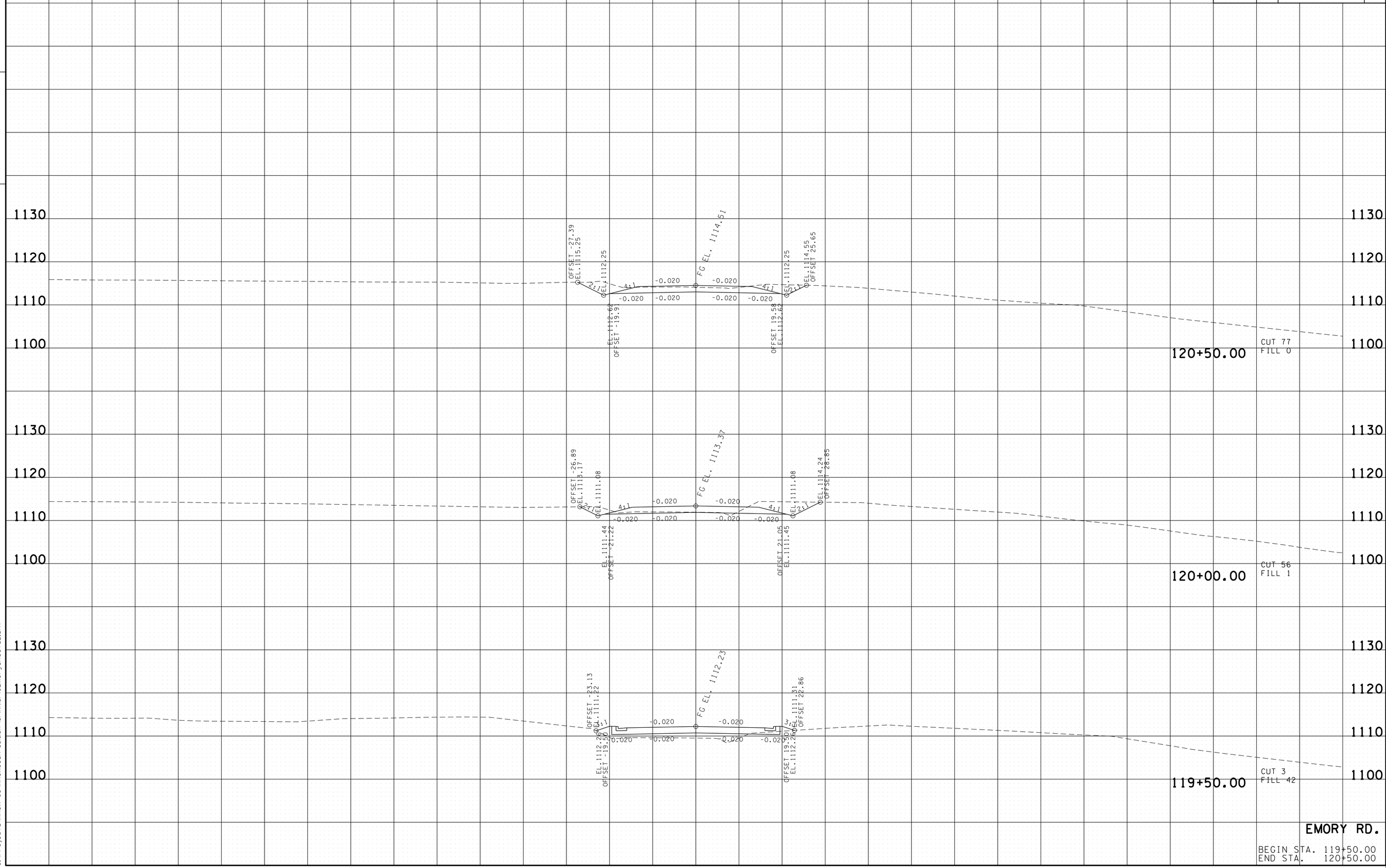
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 45 |
| CONST. | 2014 | STP-331(6) | 49 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




EMORY RD.

BEGIN STA. 119+50.00
END STA. 120+50.00

16-JUN-2014 17:32
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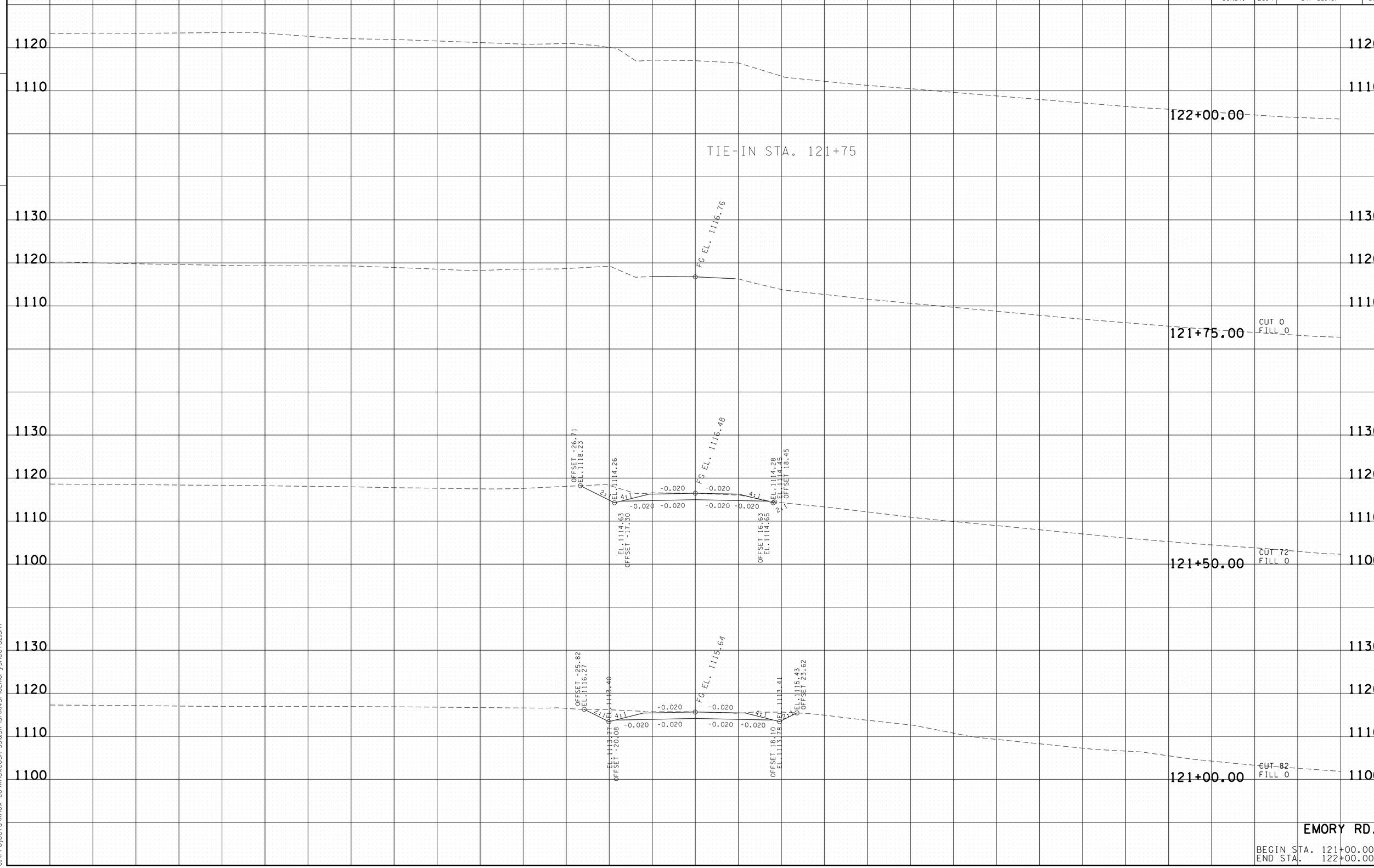
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 46 |
| CONST. | 2014 | STP-331(6) | 50 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

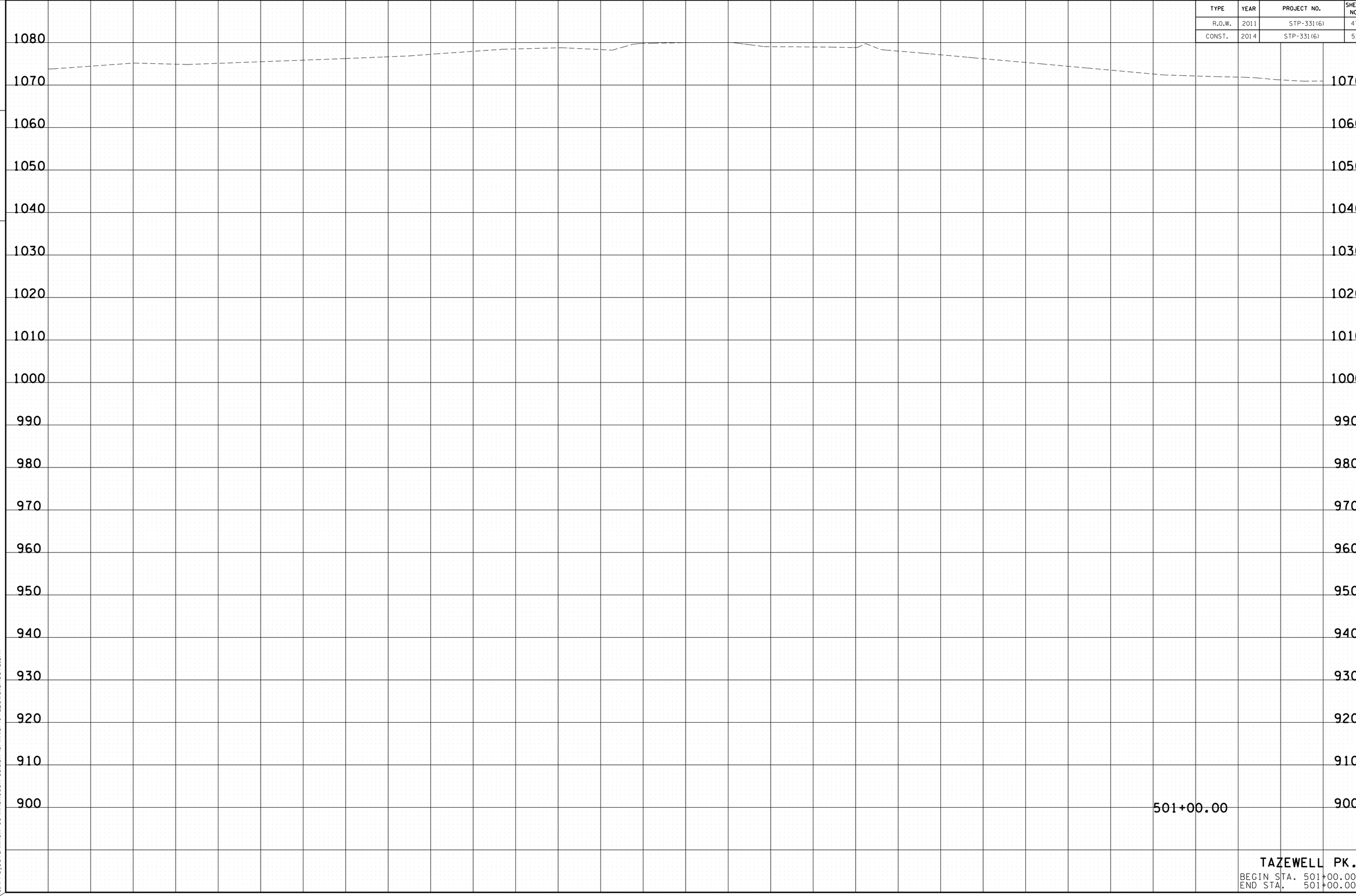



EMORY RD.

BEGIN STA. 121+00.00
END STA. 122+00.00

16-JUN-2014 17:33
C:\Projects\Knox Co\KnoxCoSR-33&SR-131\KN131-10EmorySheet52.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 47 |
| CONST. | 2014 | STP-331(6) | 51 |




**TAZEWELL PK.**

BEGIN STA. 501+00.00
END STA. 501+00.00

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

16-JUN-2014 17:33
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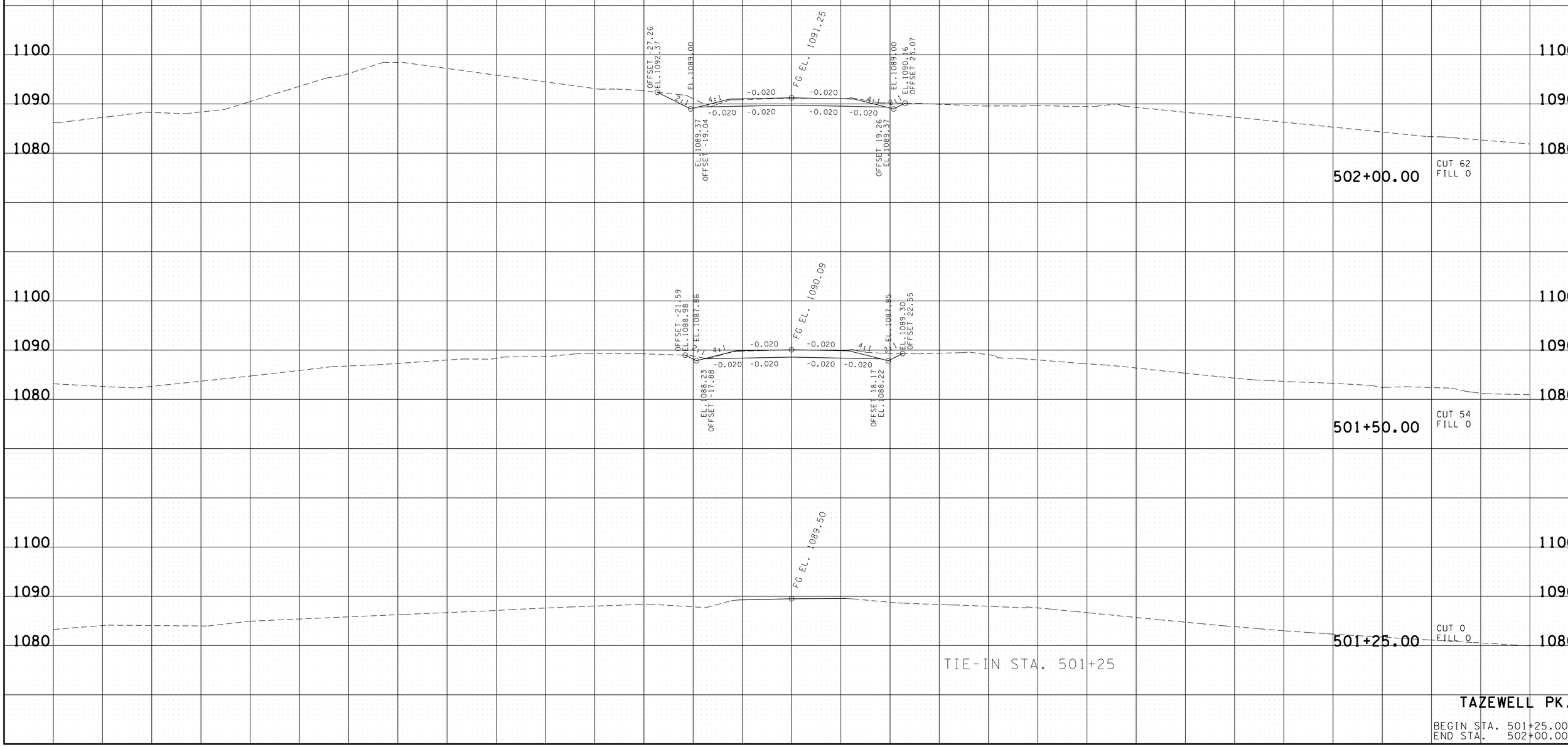
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 48 |
| CONST. | 2014 | STP-331(6) | 52 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




**TAZEWELL PK.**

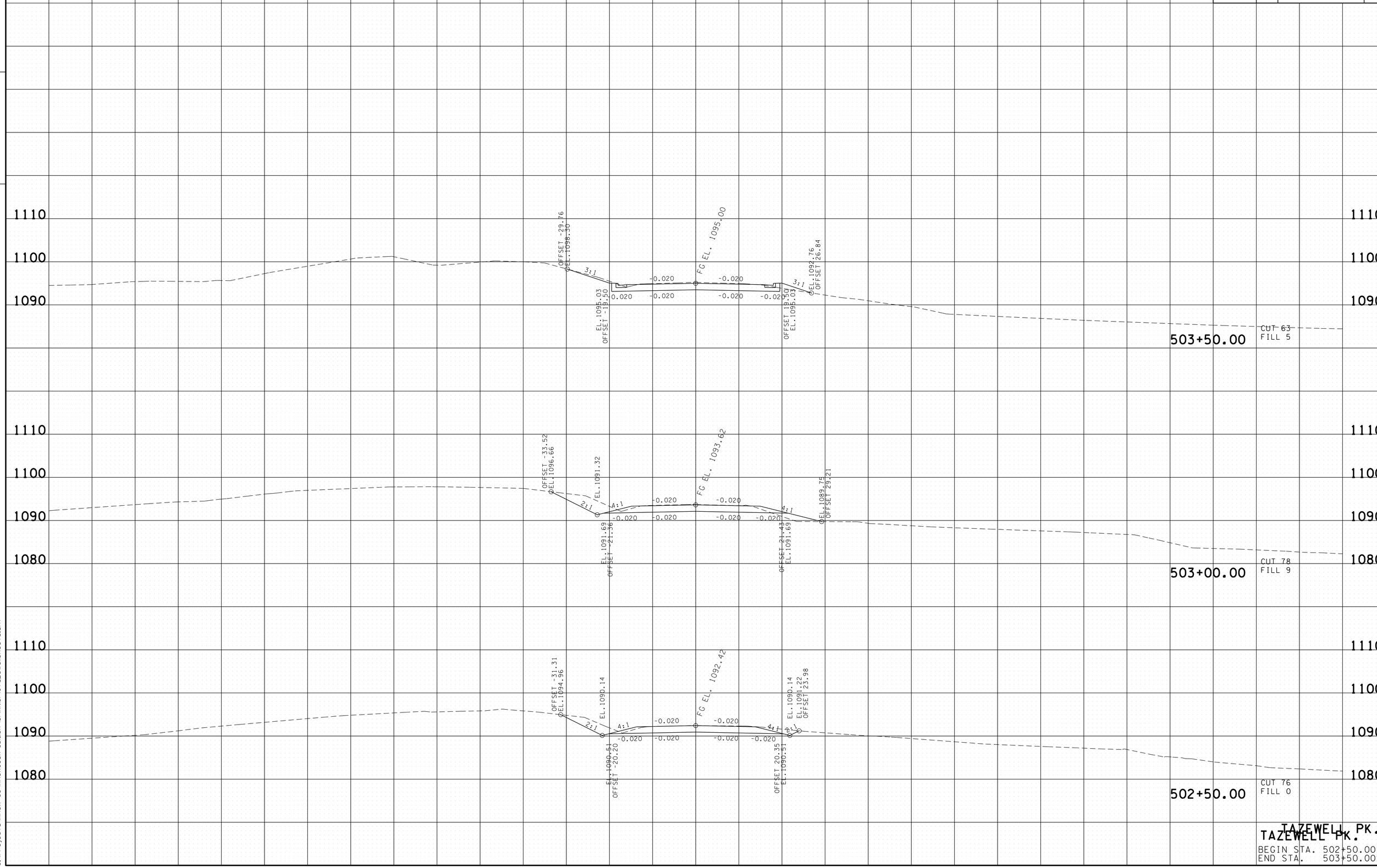
BEGIN STA. 501+25.00
END STA. 502+00.00

16-JUN-2014 17:33
C:\Projects\Knox Co\KnoxCoSR-33&SR-131\KN131-10TazewellSheets.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 49 |
| CONST. | 2014 | STP-331(6) | 53 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




TAZEWELL PK.

BEGIN STA. 502+50.00
END STA. 503+50.00

16-JUN-2014 17:33
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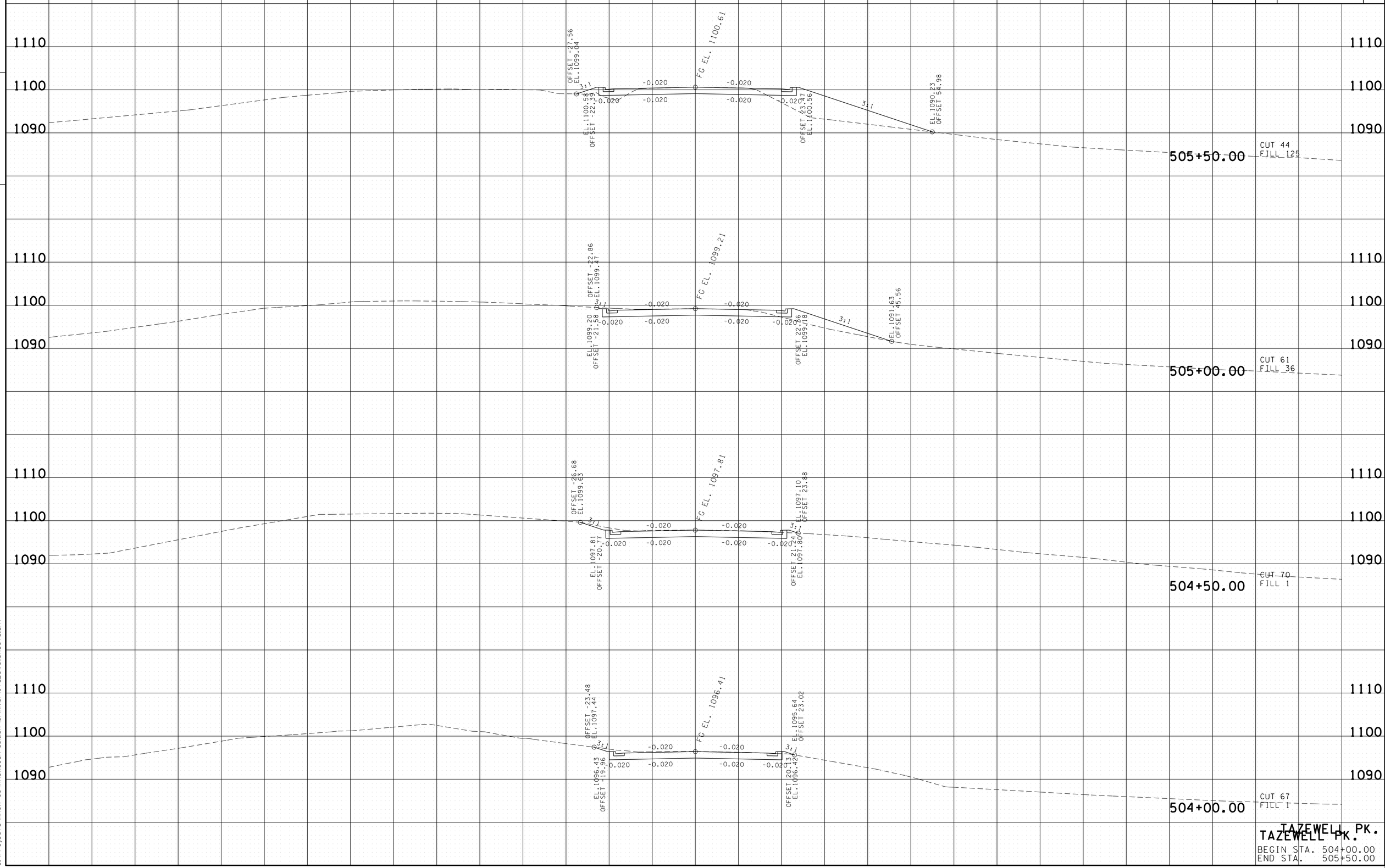
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 50 |
| CONST. | 2014 | STP-331(6) | 54 |

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




TAZEWELL PK.

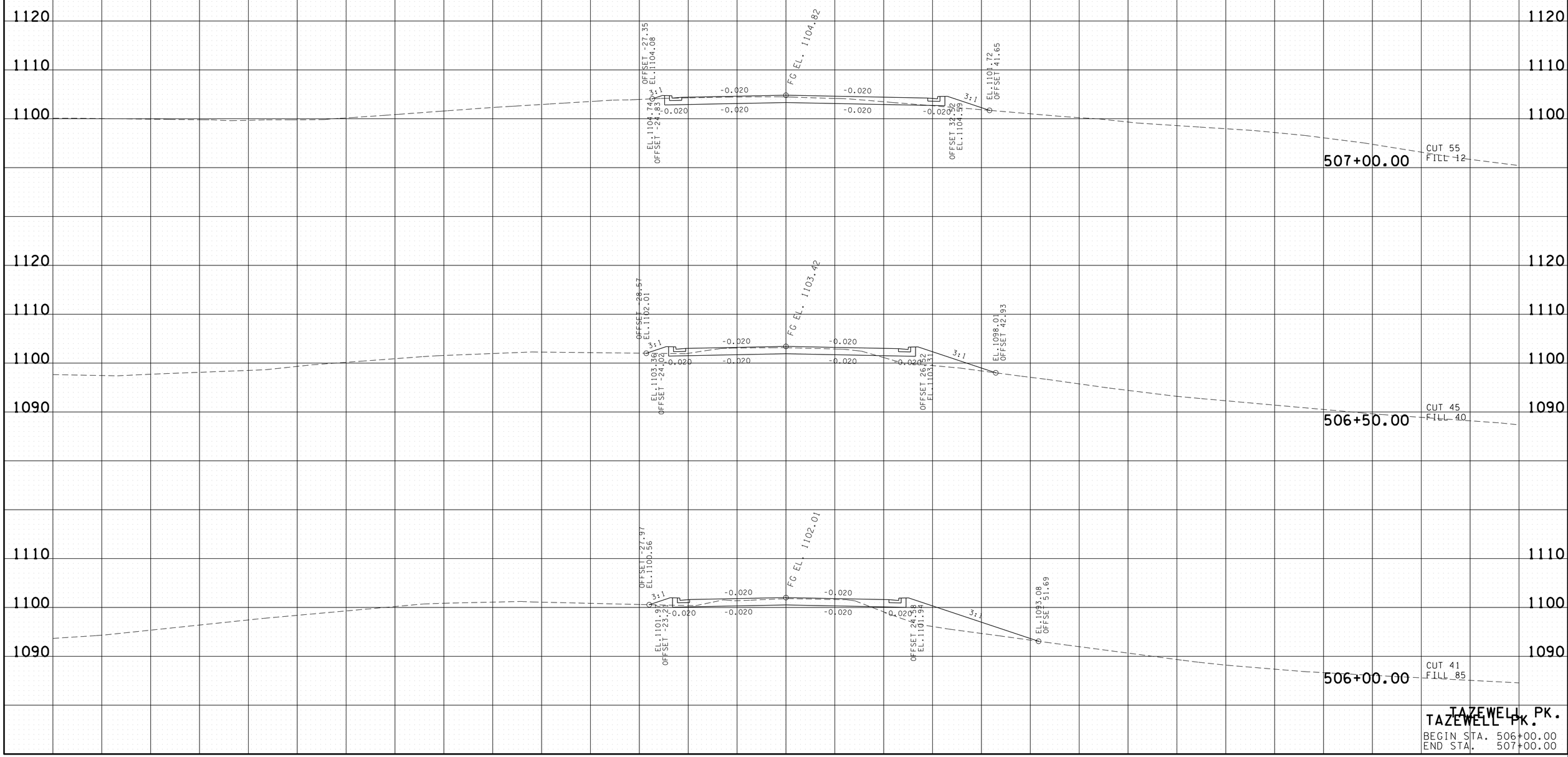
BEGIN STA. 504+00.00
END STA. 505+50.00

16-JUN-2014 17:33
C:\Projects\Knox Co\KnoxCoSR-33&SR-131\KN131-10TazewellSheets.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 51 |
| CONST. | 2014 | STP-331(6) | 55 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




TAZEWELL PK.
BEGIN STA. 506+00.00
END STA. 507+00.00

16-JUN-2014 17:33
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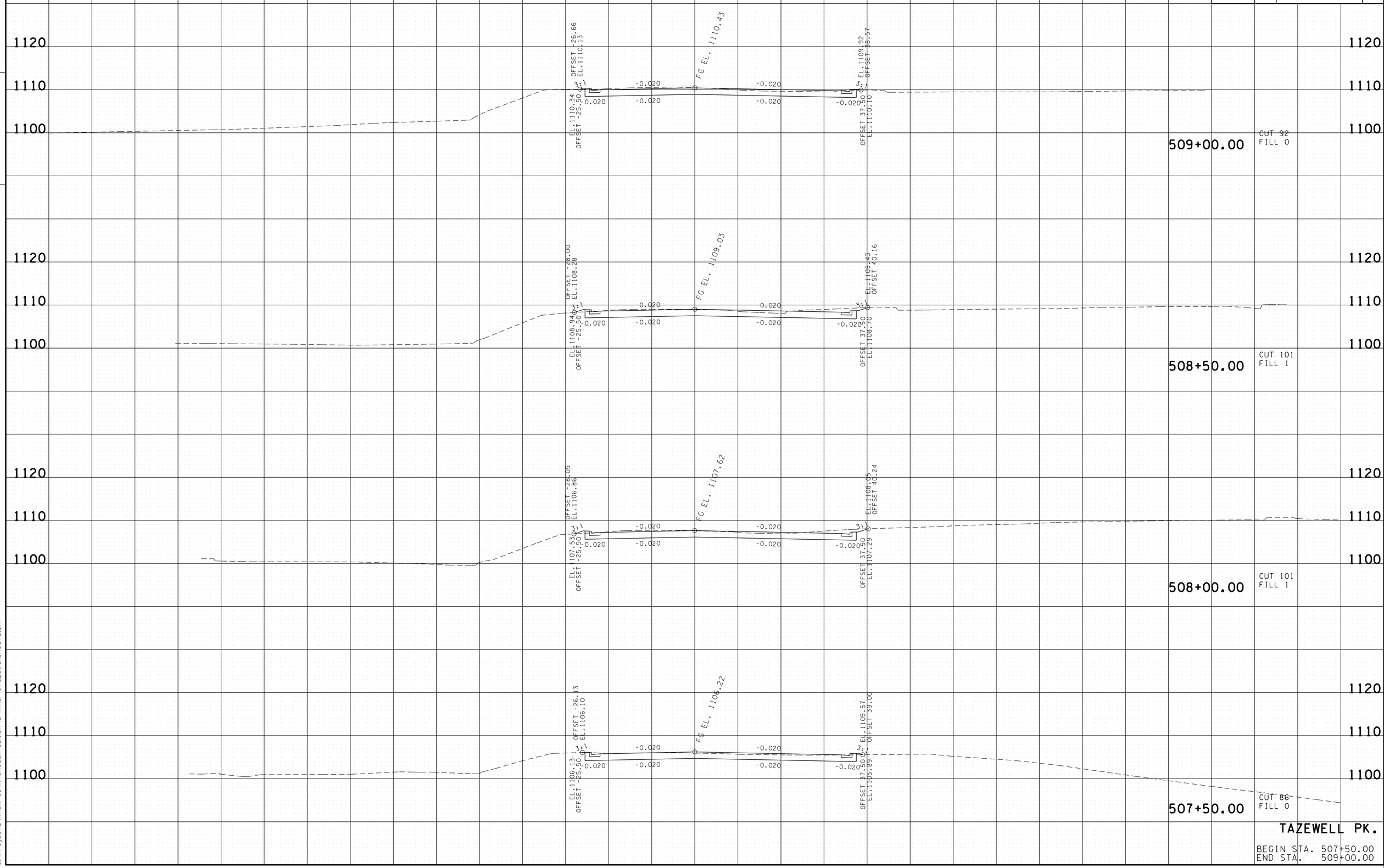
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 52 |
| CONST. | 2014 | STP-331(6) | 56 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




TAZEWELL PK.

BEGIN STA. 507+50.00
END STA. 509+00.00

16-JUN-2014 17:33
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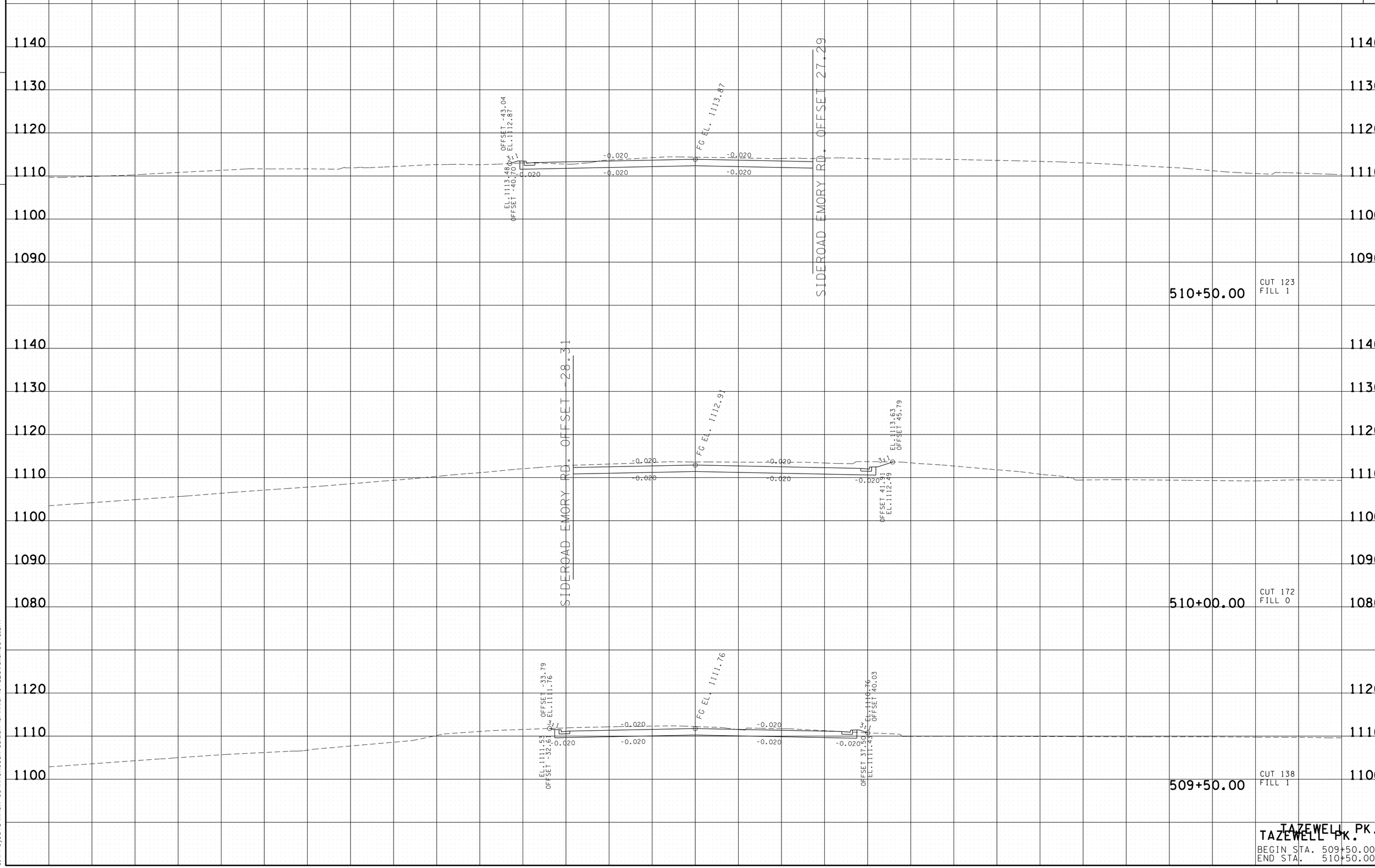
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 53 |
| CONST. | 2014 | STP-331(6) | 57 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



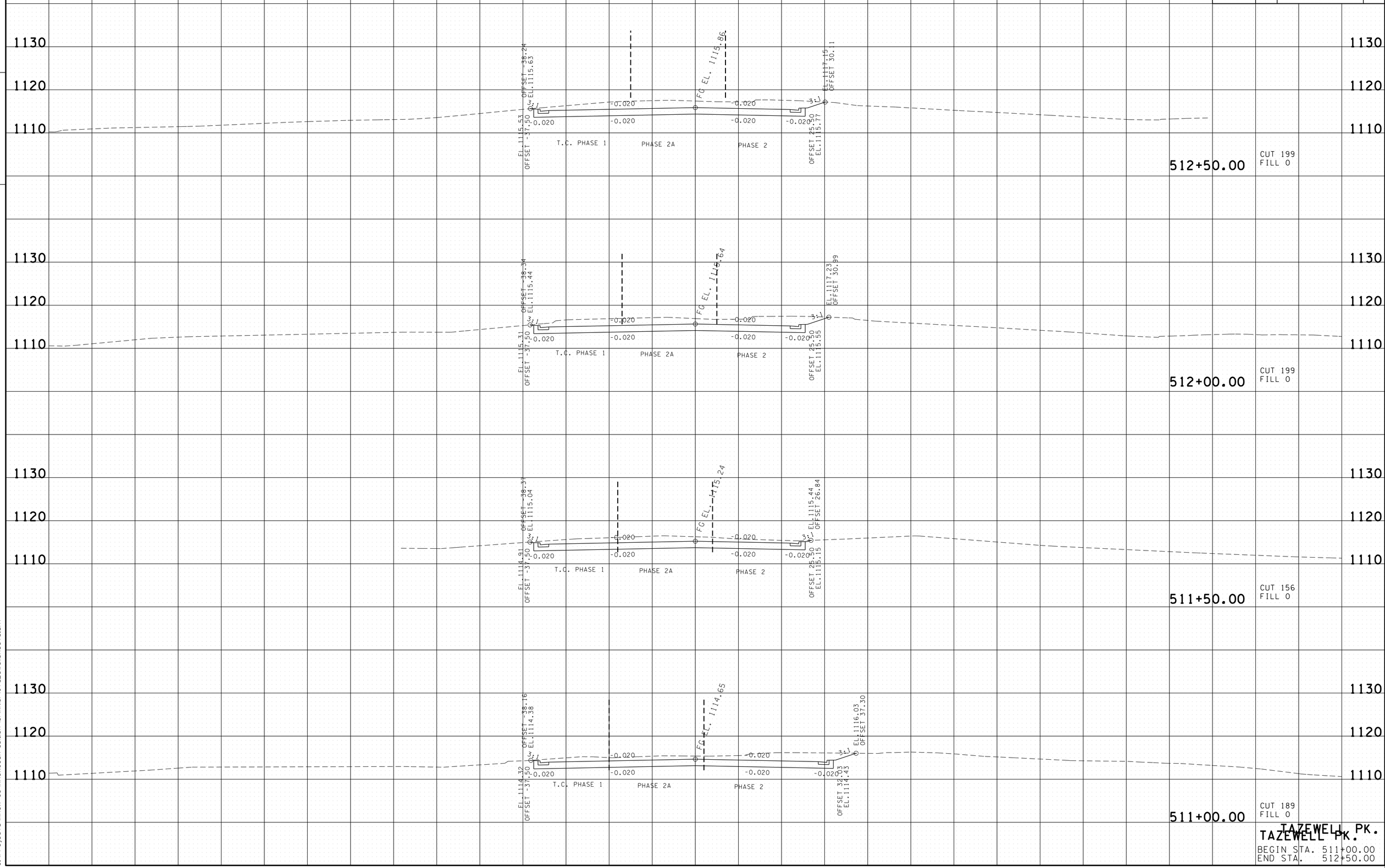

TAZEWELL PK.

TAZEWELL PK.
BEGIN STA. 509+50.00
END STA. 510+50.00

16-JUN-2014 17:33
C:\Projects\Knox Co\KnoxCoSR-331&SR-131\KN31-0TazewellSheets.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 54 |
| CONST. | 2014 | STP-331(6) | 58 |

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




TAZEWELL PK.

TAZEWELL PK.
BEGIN STA. 511+00.00
END STA. 512+50.00

16-JUN-2014 17:33
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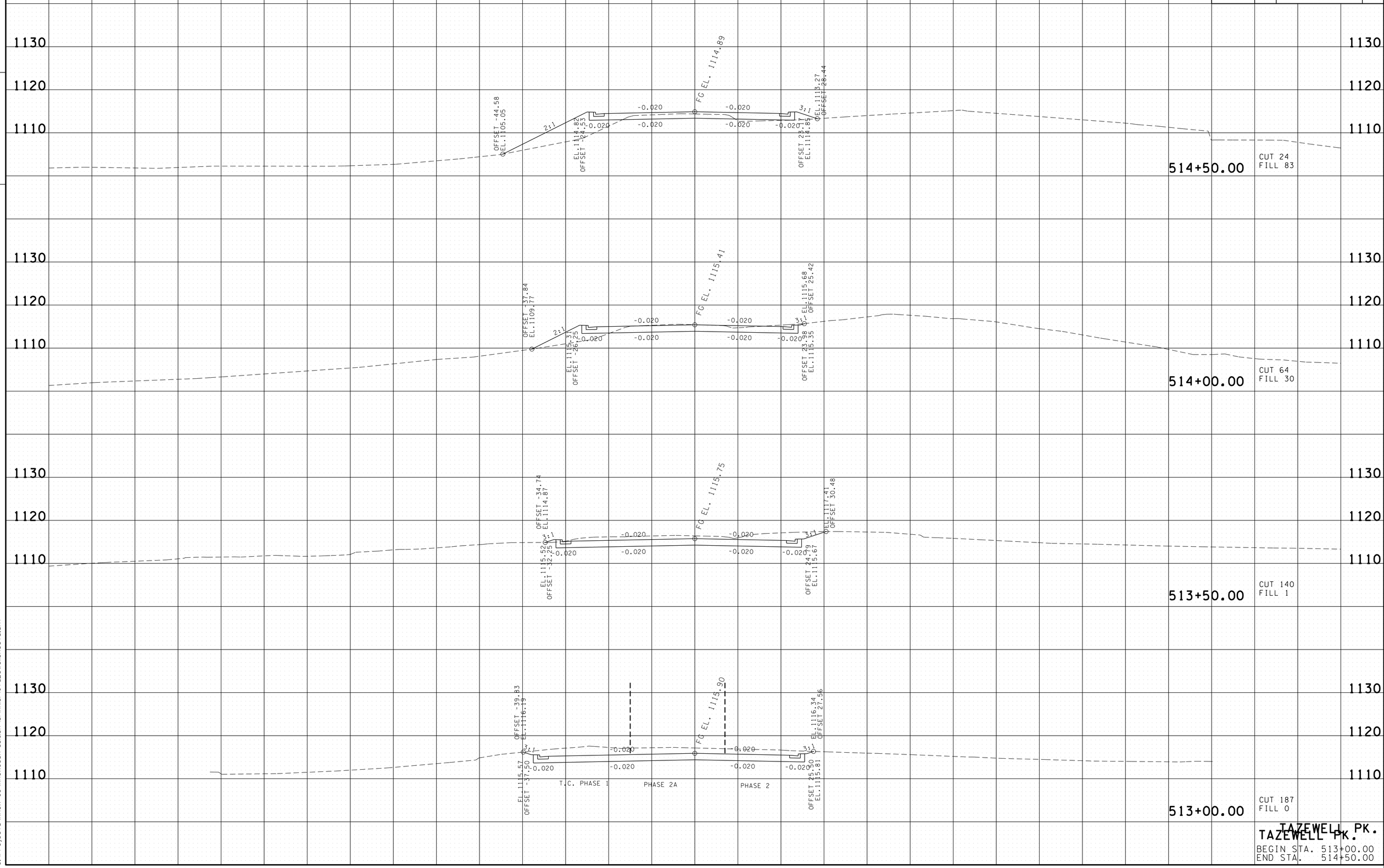
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 55 |
| CONST. | 2014 | STP-331(6) | 59 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




TAZEWELL PK.

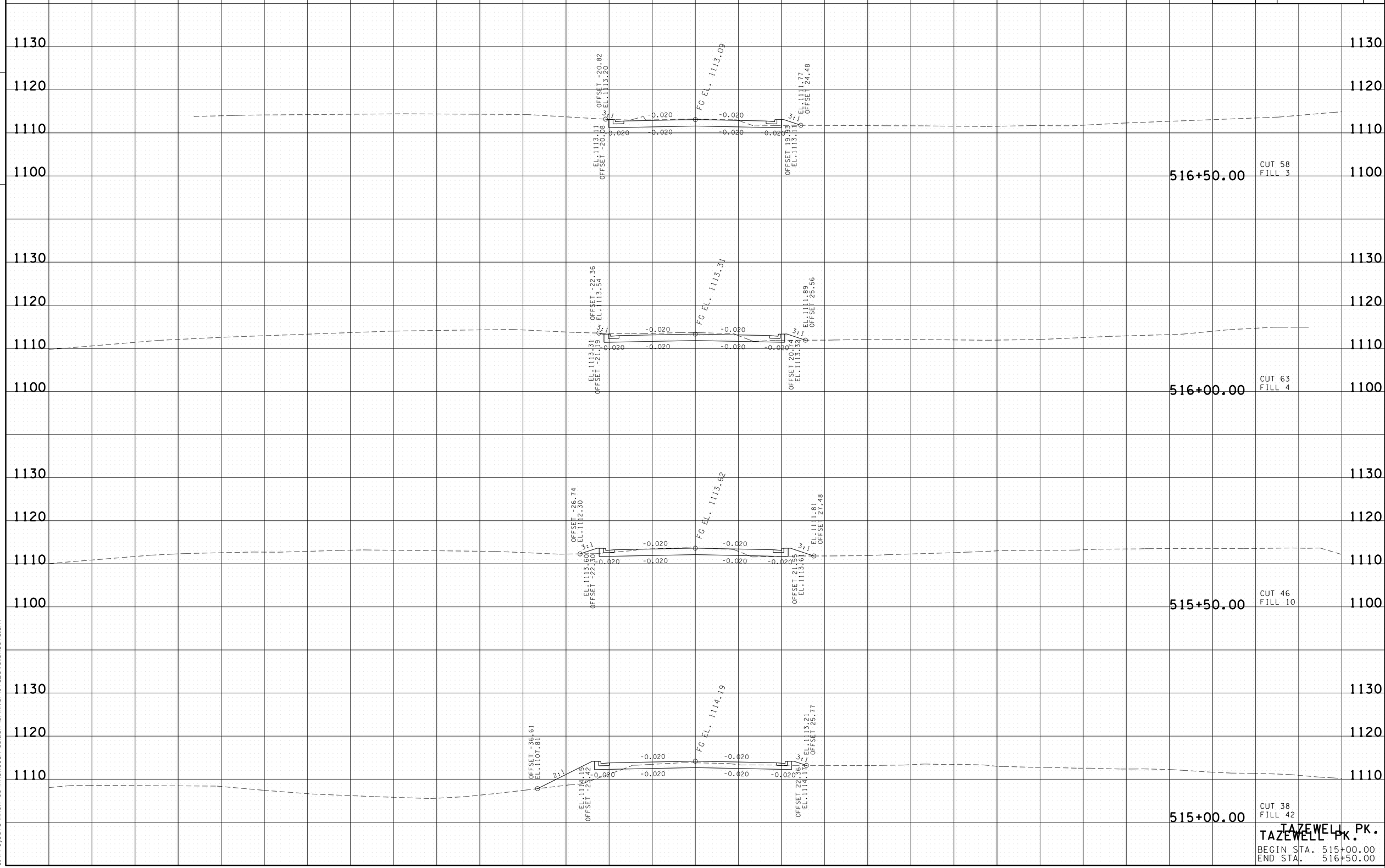
TAZEWELL PK.
BEGIN STA. 513+00.00
END STA. 514+50.00

16-JUN-2014 17:33
C:\Projects\Knox Co\KnoxCoSR-33&SR-131\KN131-10TazewellSheets.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 56 |
| CONST. | 2014 | STP-331(6) | 60 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




TAZEWELL PK.

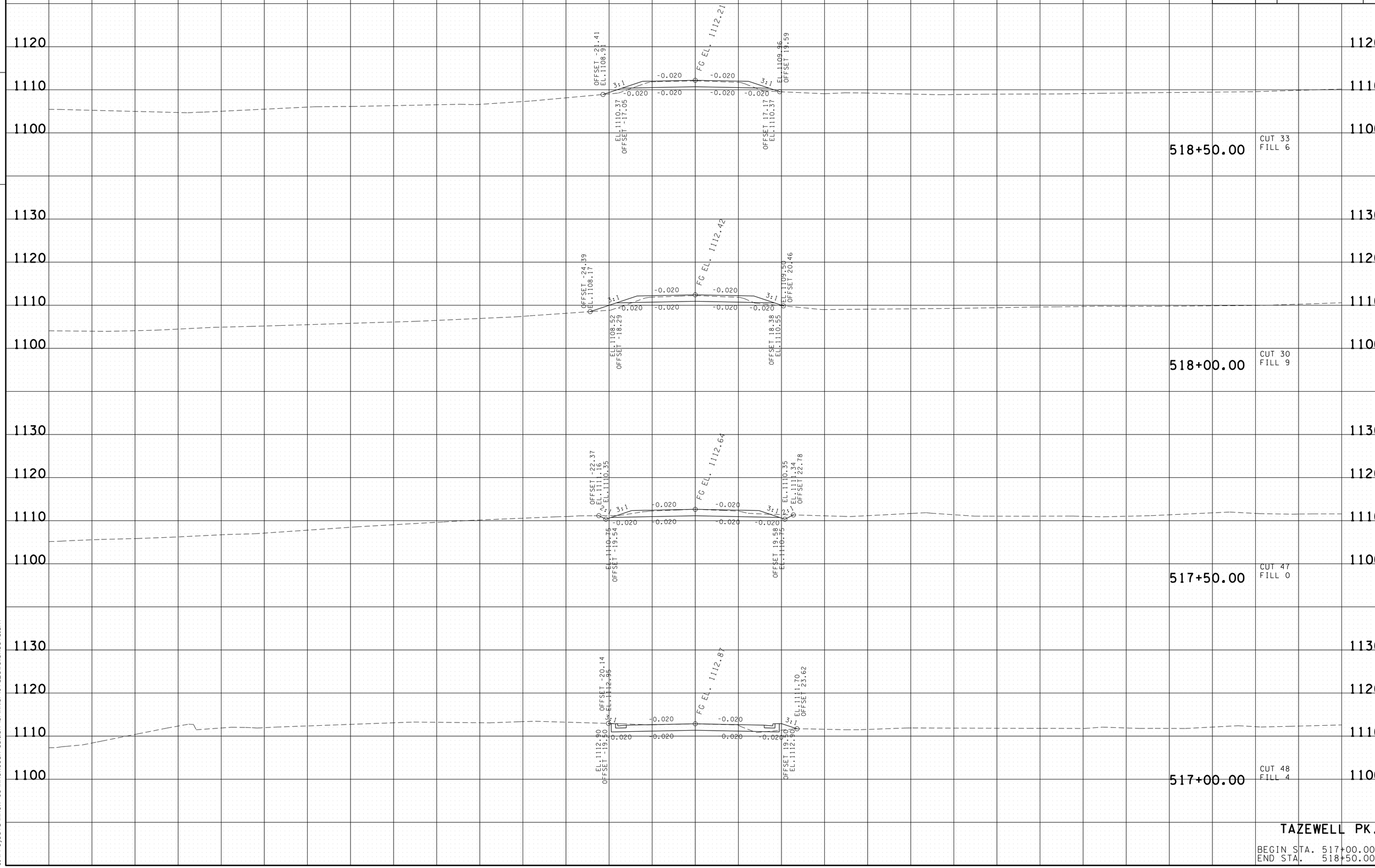
TAZEWELL PK.
BEGIN STA. 515+00.00
END STA. 516+50.00

16-JUN-2014 17:33
C:\Projects\Knox Co\KnoxCoSR-33\&SR-131\KN131-10TazewellSheets.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 57 |
| CONST. | 2014 | STP-331(6) | 61 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




TAZEWELL PK.

BEGIN STA. 517+00.00
END STA. 518+50.00

16-JUN-2014 17:33
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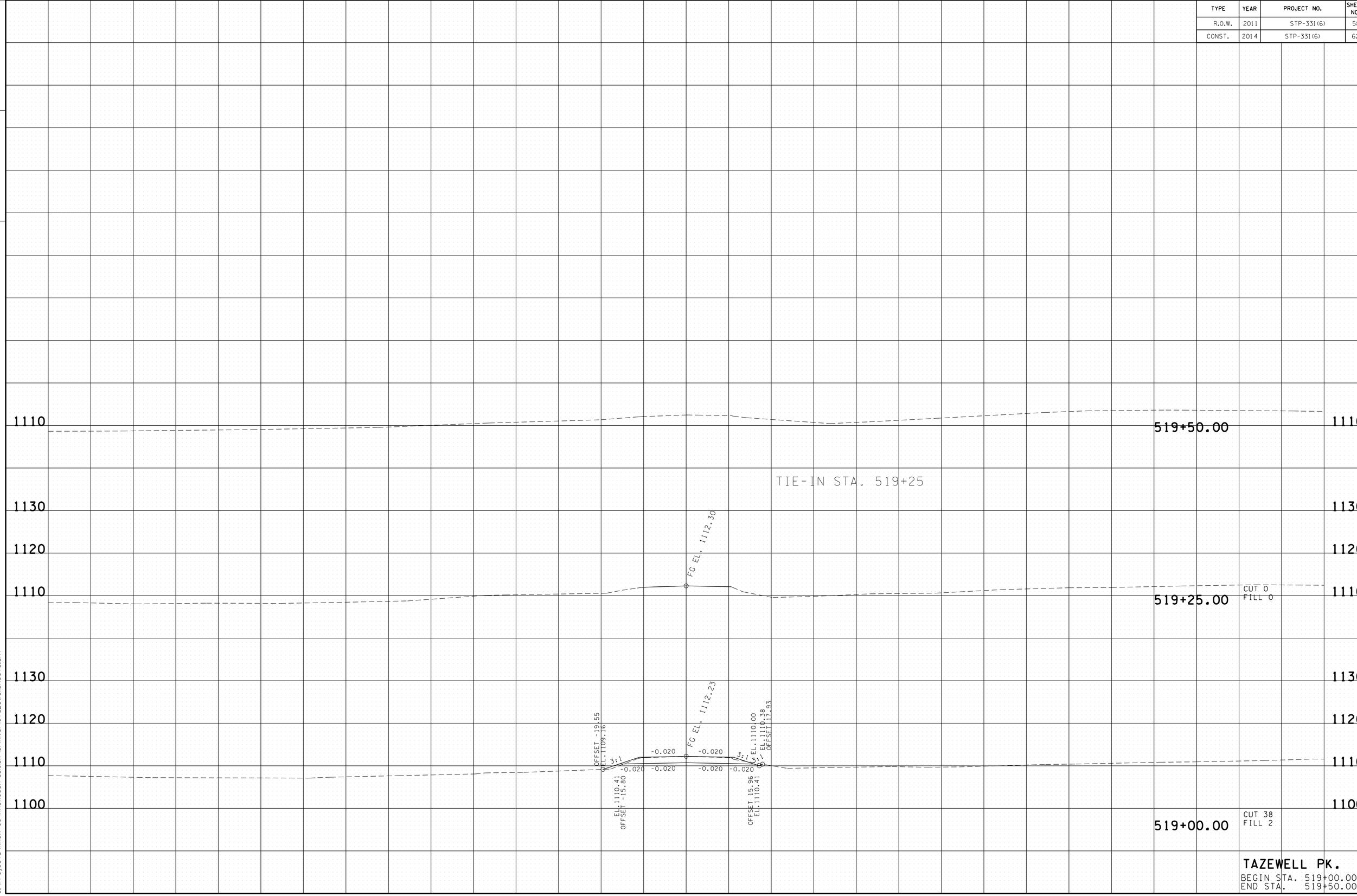
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 58 |
| CONST. | 2014 | STP-331(6) | 62 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




**TAZEWELL PK.**
BEGIN STA. 519+00.00
END STA. 519+50.00

16-JUN-2014 17:33
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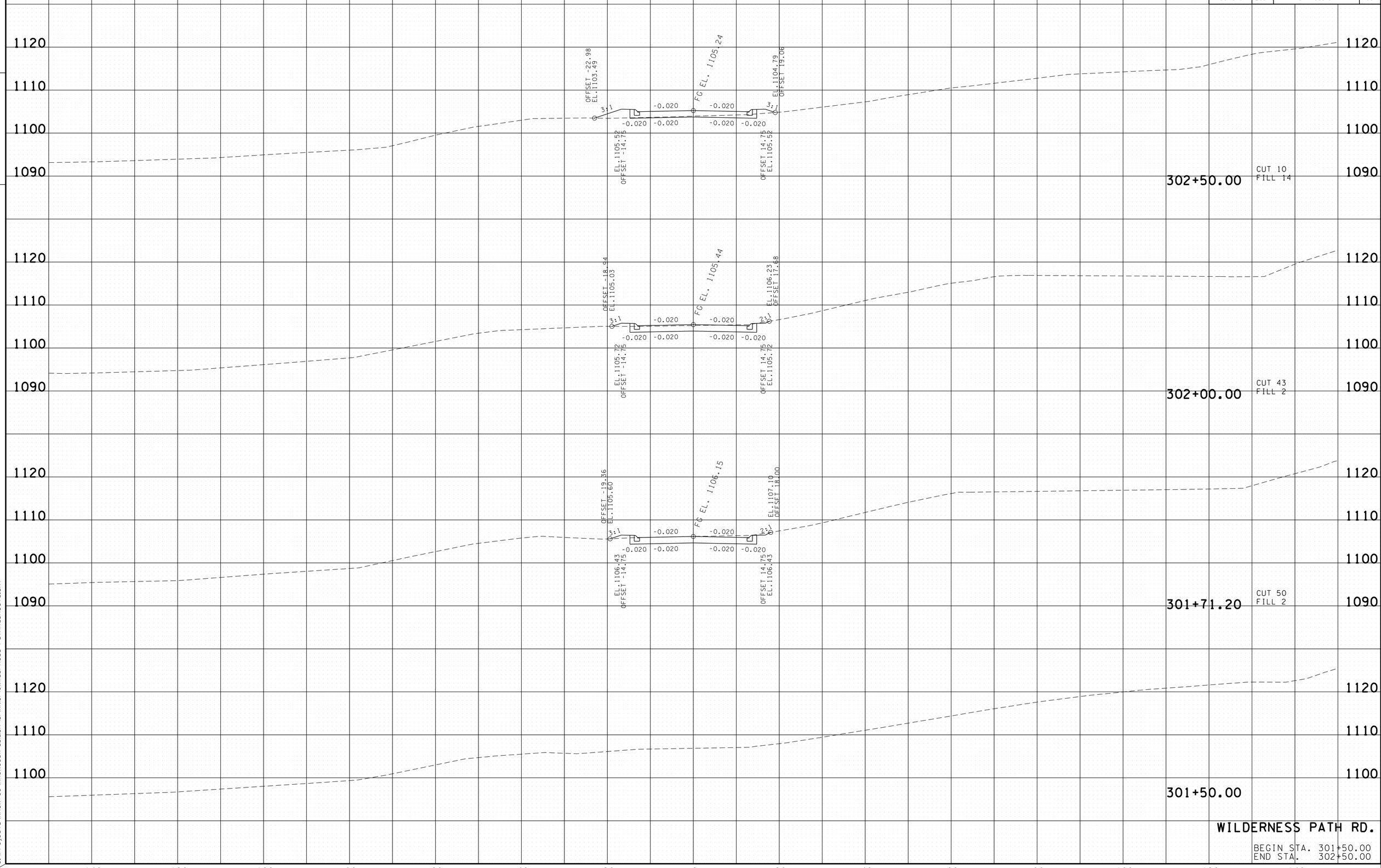
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 59 |
| CONST. | 2014 | STP-331(6) | 63 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




WILDERNESS PATH RD.

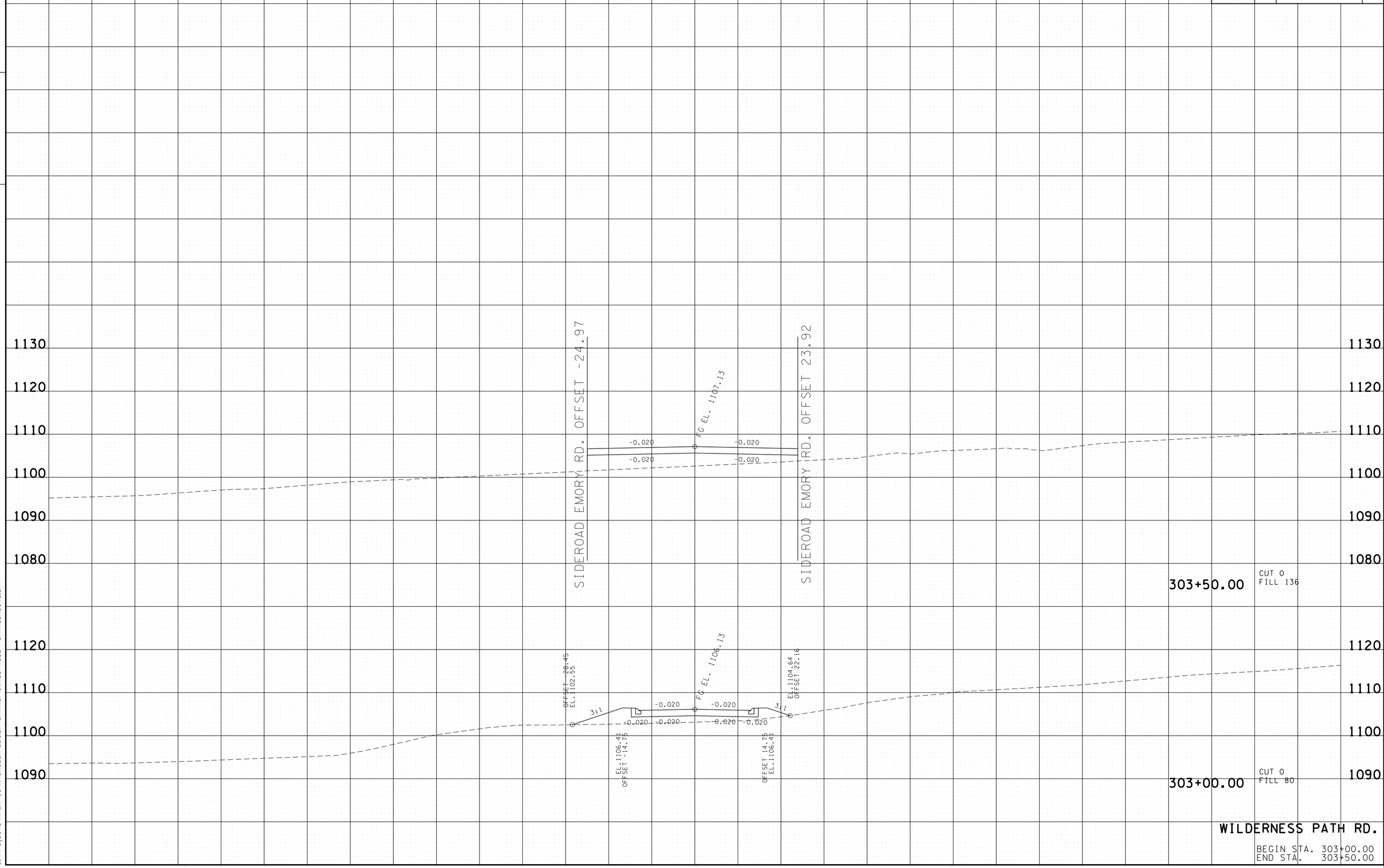
BEGIN STA. 301+50.00
END STA. 302+50.00

16-JUN-2014 17:33
C:\Projects\Knox Co\KnoxCoSR-331&SR-131\KN131-0Wilderness PathRdSheets.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 60 |
| CONST. | 2014 | STP-331(6) | 64 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




WILDERNESS PATH RD.

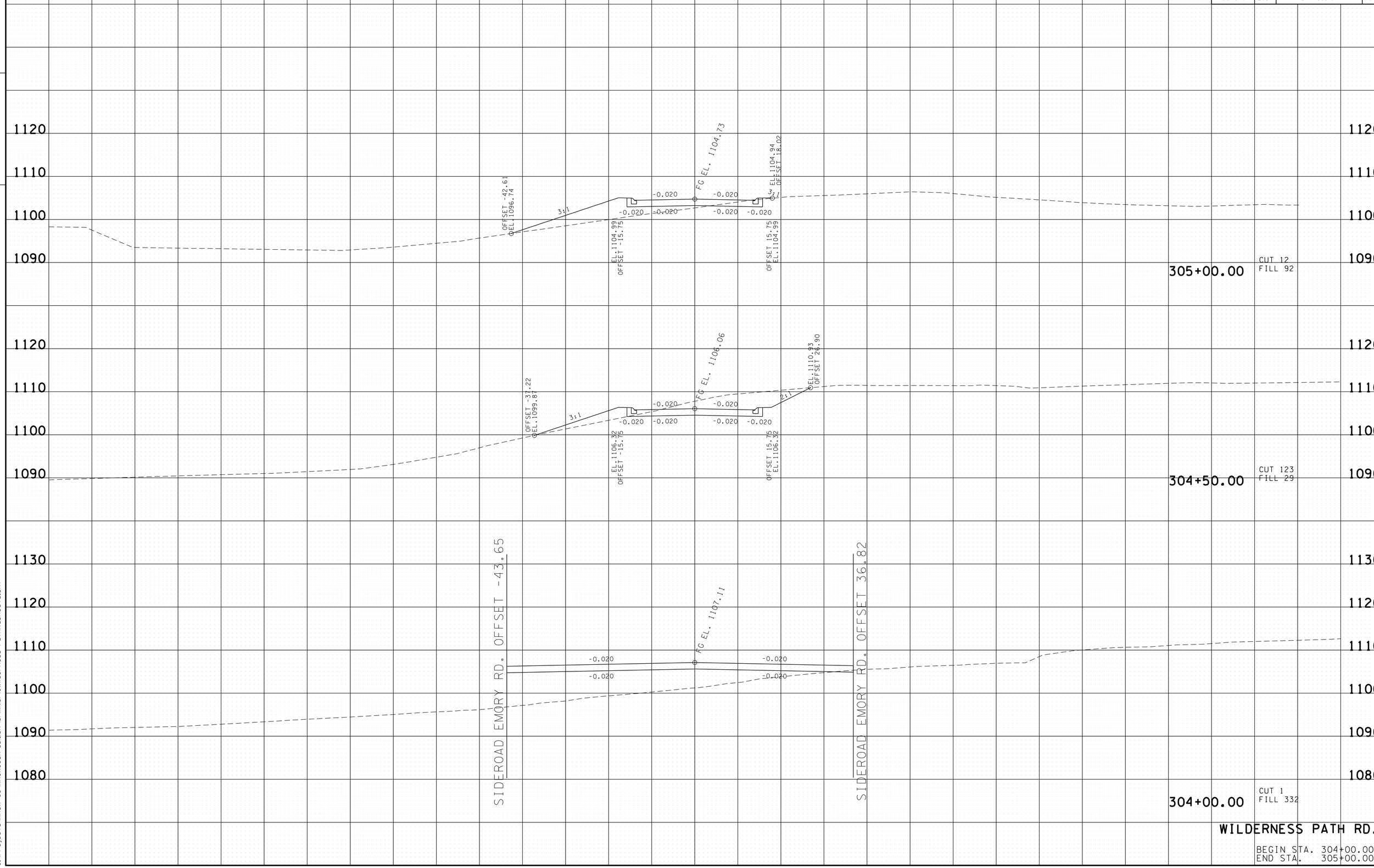
BEGIN STA. 303+00.00
END STA. 303+50.00

16-JUN-2014 17:33
C:\Projects\Knox Co\KnoxCoSR-331&SR-131\KN131-10Wilderness PathRdSheets.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 61 |
| CONST. | 2014 | STP-331(6) | 65 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

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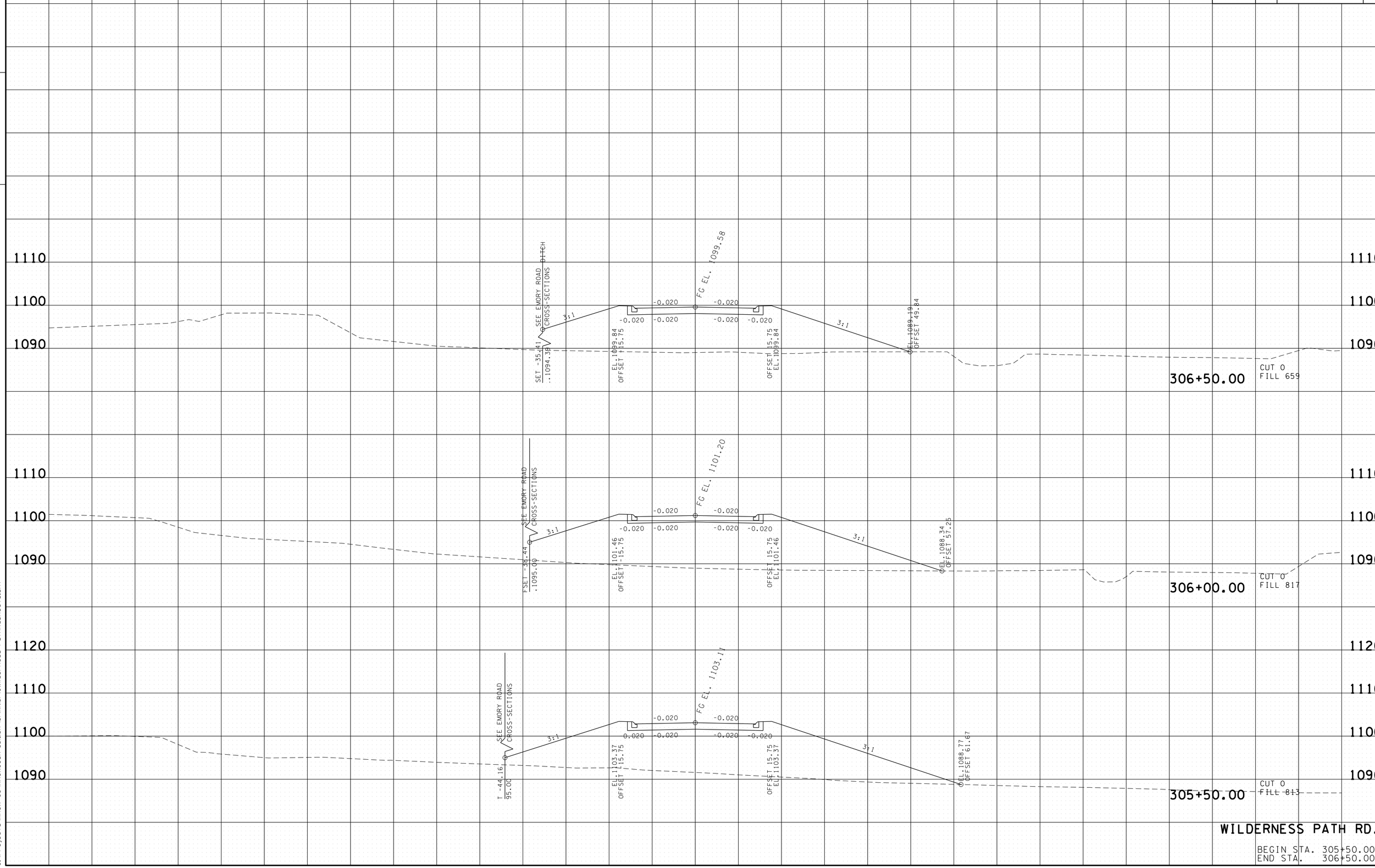
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 62 |
| CONST. | 2014 | STP-331(6) | 66 |

TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.




WILDERNESS PATH RD.

BEGIN STA. 305+50.00
END STA. 306+50.00

16-JUN-2014 17:33
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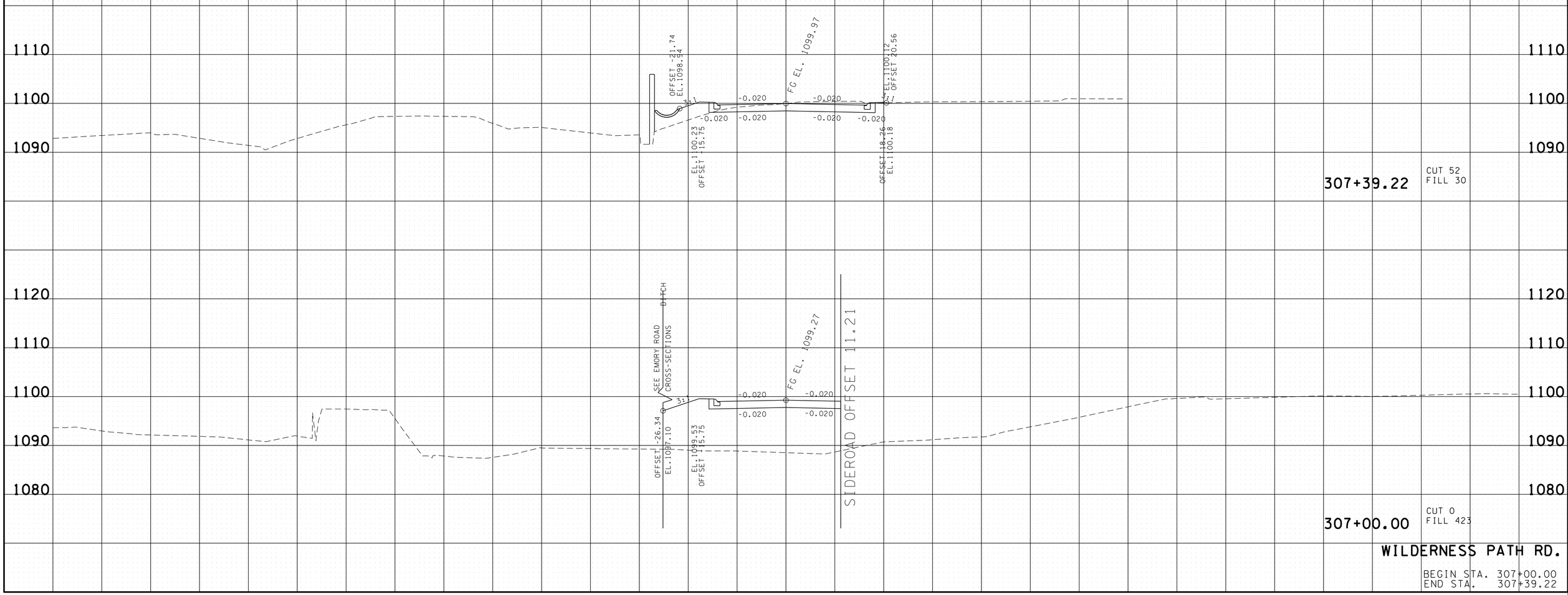
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2011 | STP-331(6) | 63 |
| CONST. | 2014 | STP-331(6) | 67 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




WILDERNESS PATH RD.

BEGIN STA. 307+00.00
END STA. 307+39.22

16-JUN-2014 17:33
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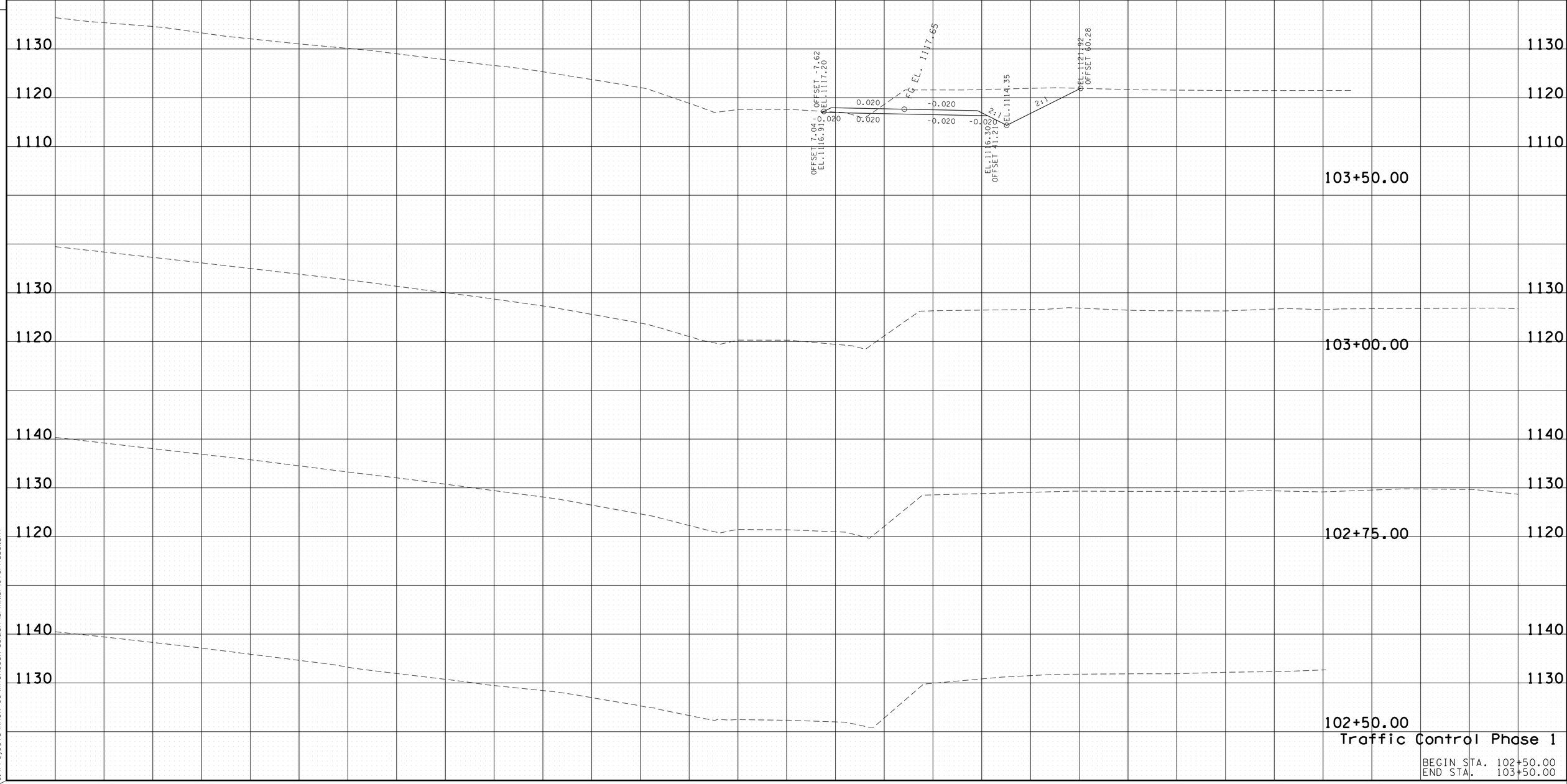
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 68 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




Traffic Control Phase 1

BEGIN STA. 102+50.00
END STA. 103+50.00

16-JUN-2014 17:33
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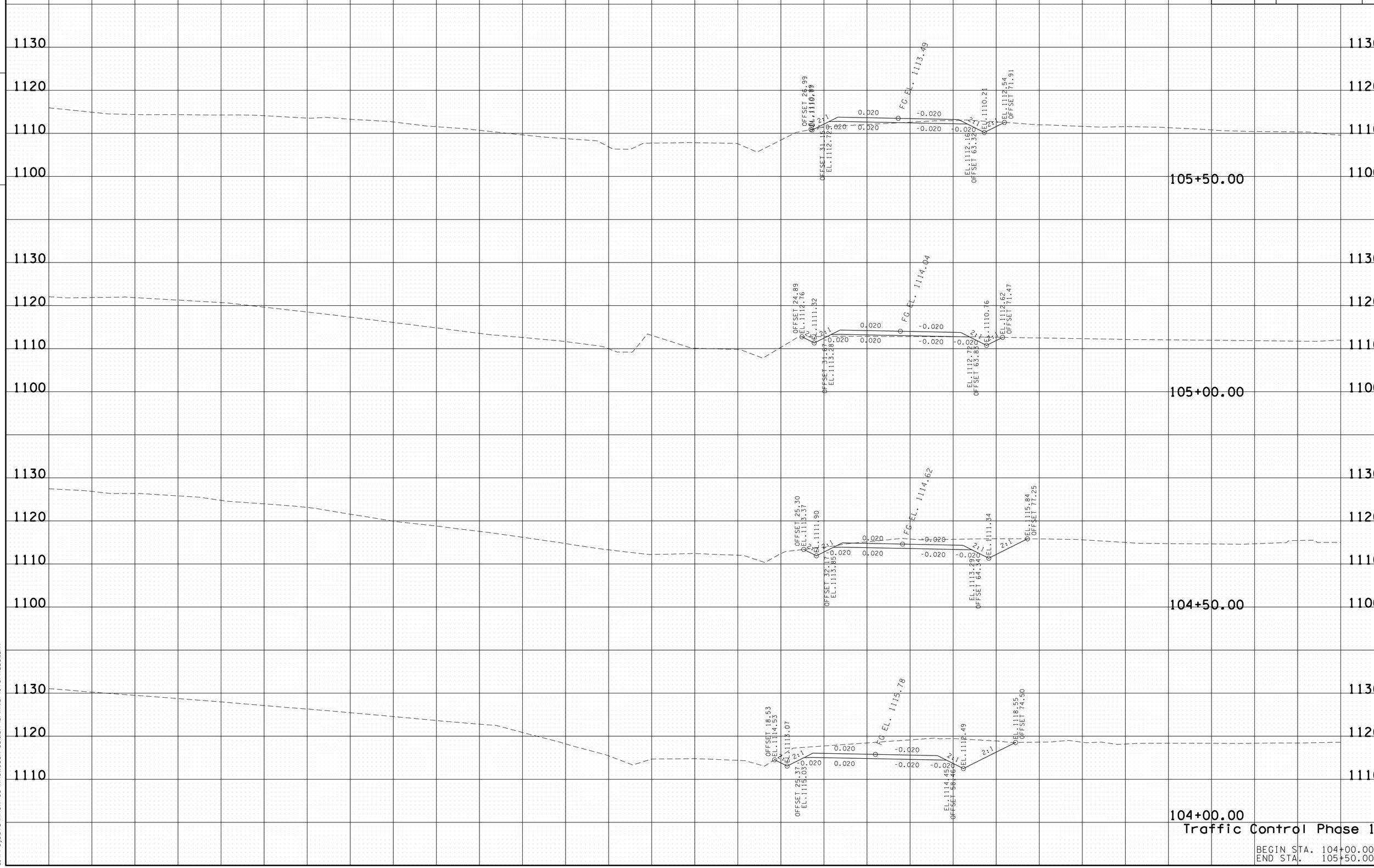
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 69 |

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




Traffic Control Phase 1

BEGIN STA. 104+00.00
END STA. 105+50.00

16-JUN-2014 17:33
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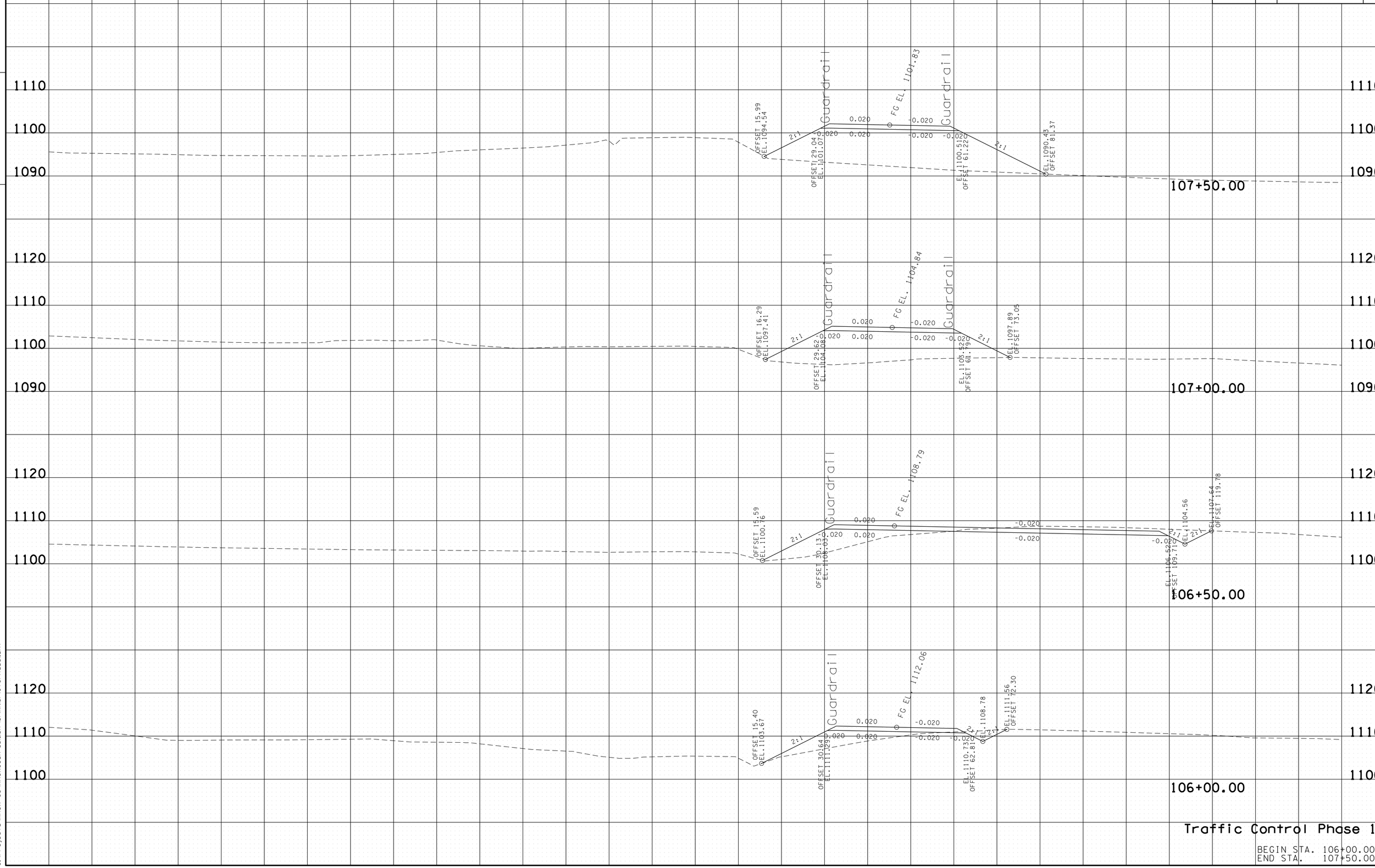
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 70 |

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




Traffic Control Phase 1

BEGIN STA. 106+00.00
END STA. 107+50.00

16-JUN-2014 17:33
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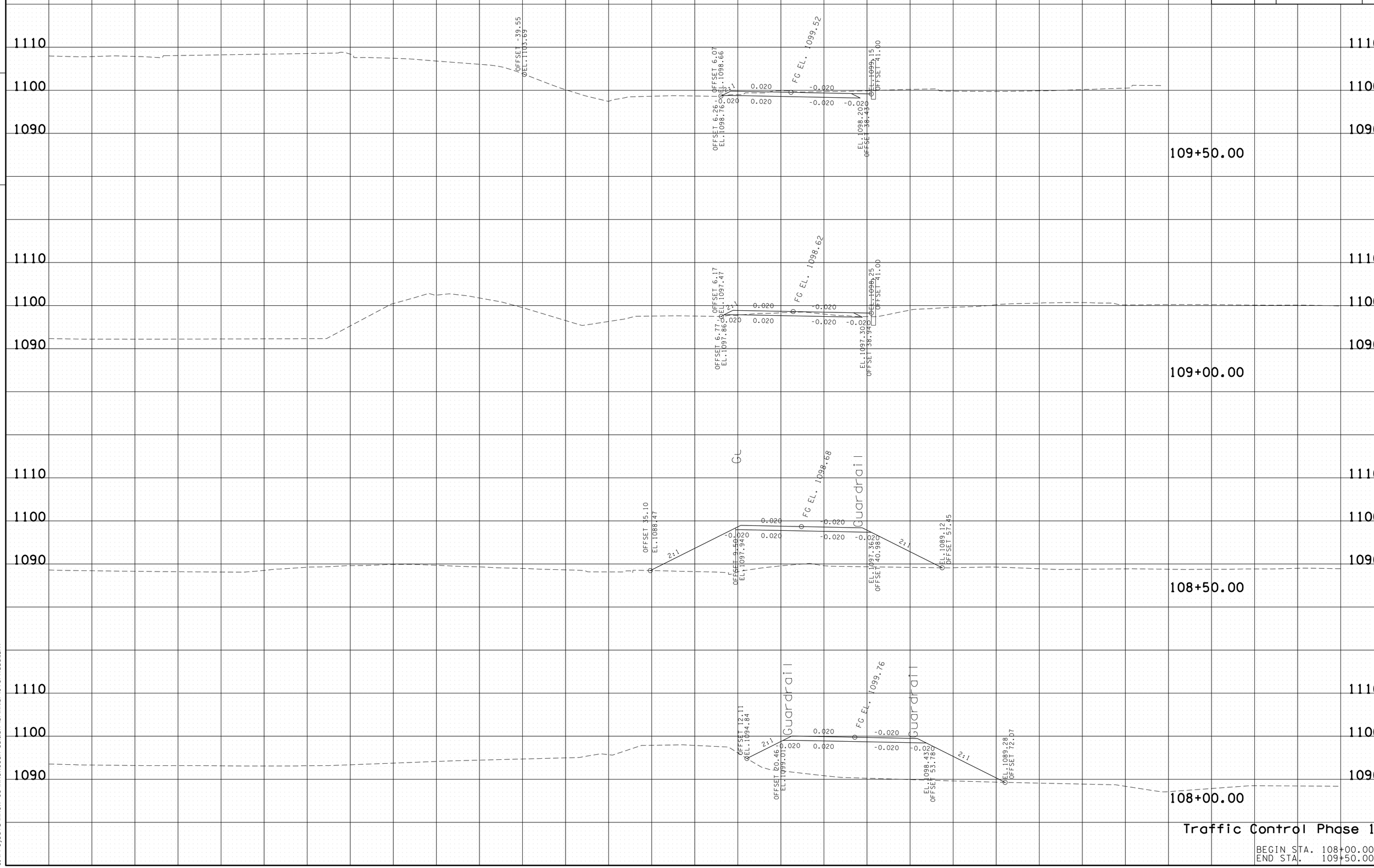
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 71 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




Traffic Control Phase 1

BEGIN STA. 108+00.00
END STA. 109+50.00

16-JUN-2014 17:33
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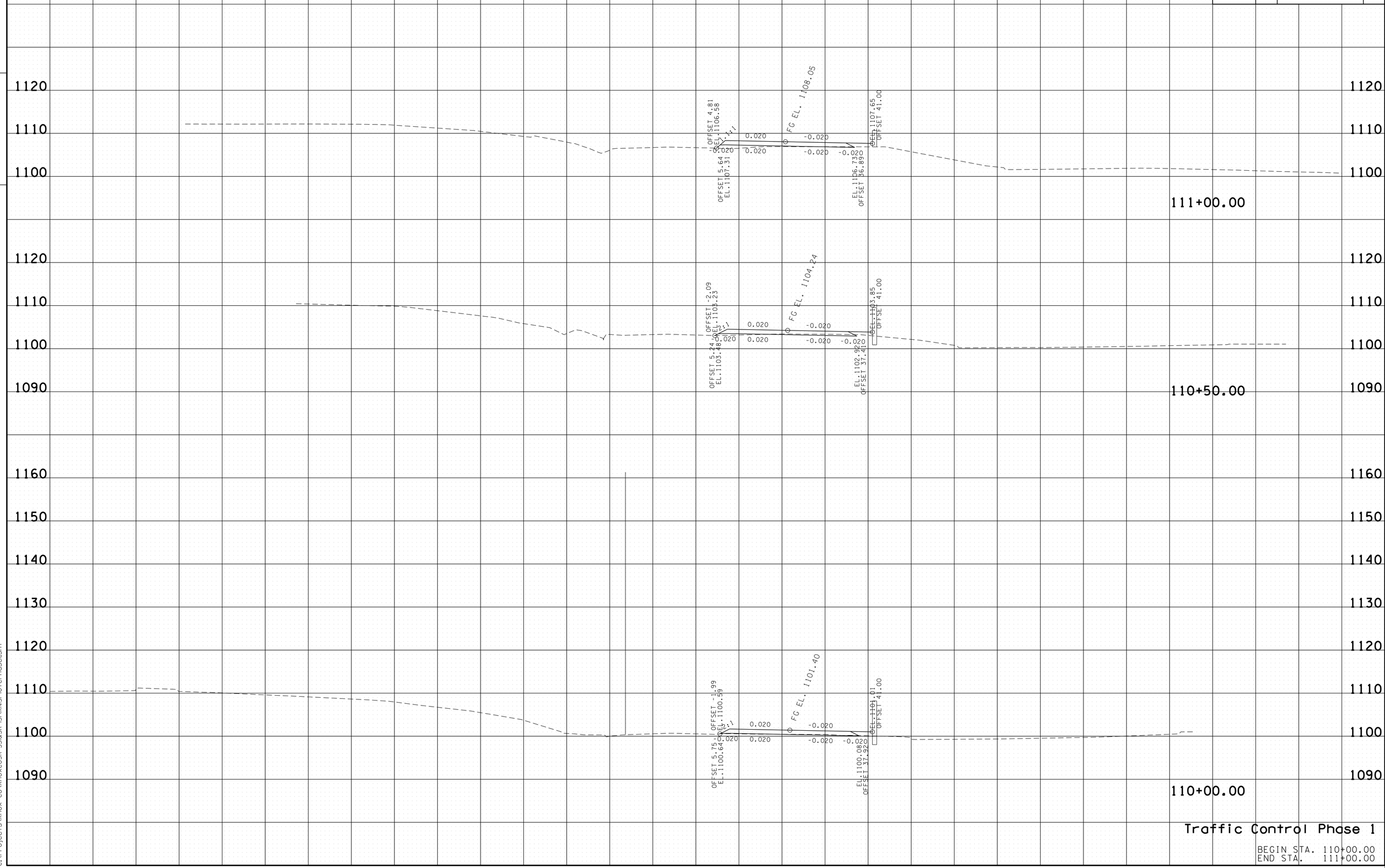
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 72 |

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



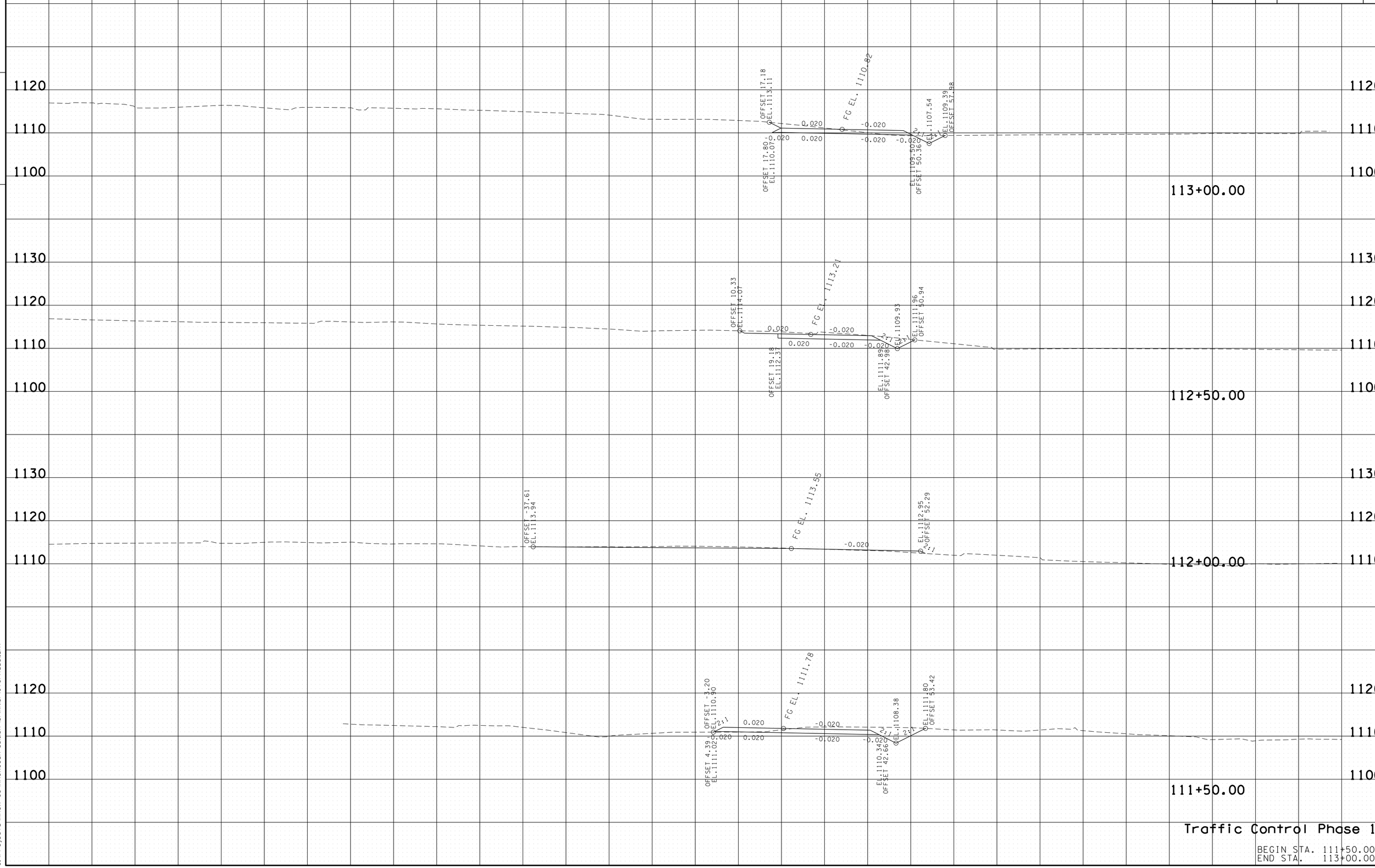

Traffic Control Phase 1

BEGIN STA. 110+00.00
END STA. 111+00.00

16-JUN-2014 17:34
C:\Projects\Knox Co\KnoxCoSR-33&SR-131\KN131-OTCPhase1.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 73 |

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



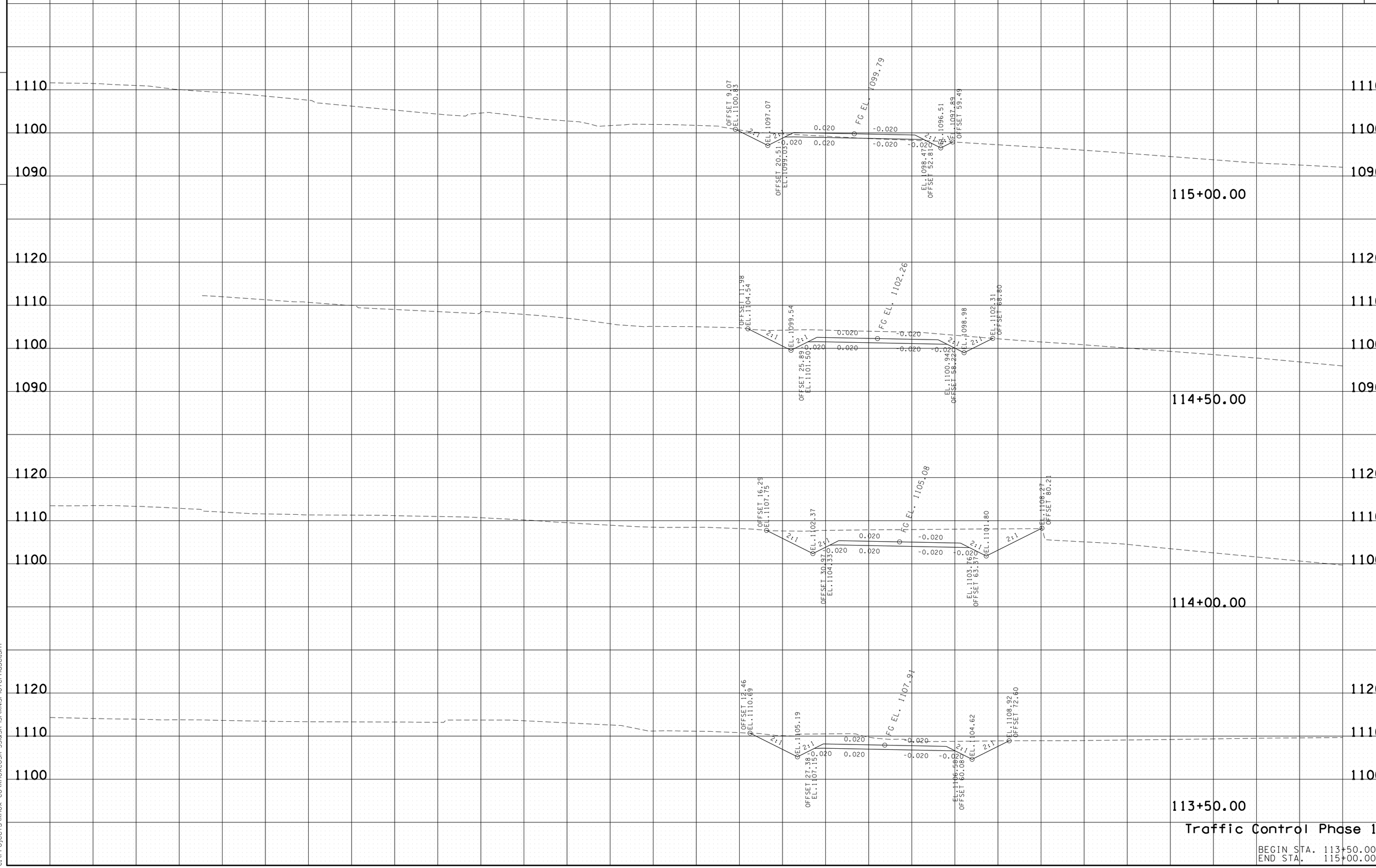

Traffic Control Phase 1

BEGIN STA. 111+50.00
END STA. 113+00.00

16-JUN-2014 17:34
C:\Projects\Knox Co\KnoxCoSR-33&SR-131\KN131-OTCPhase1.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 74 |

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



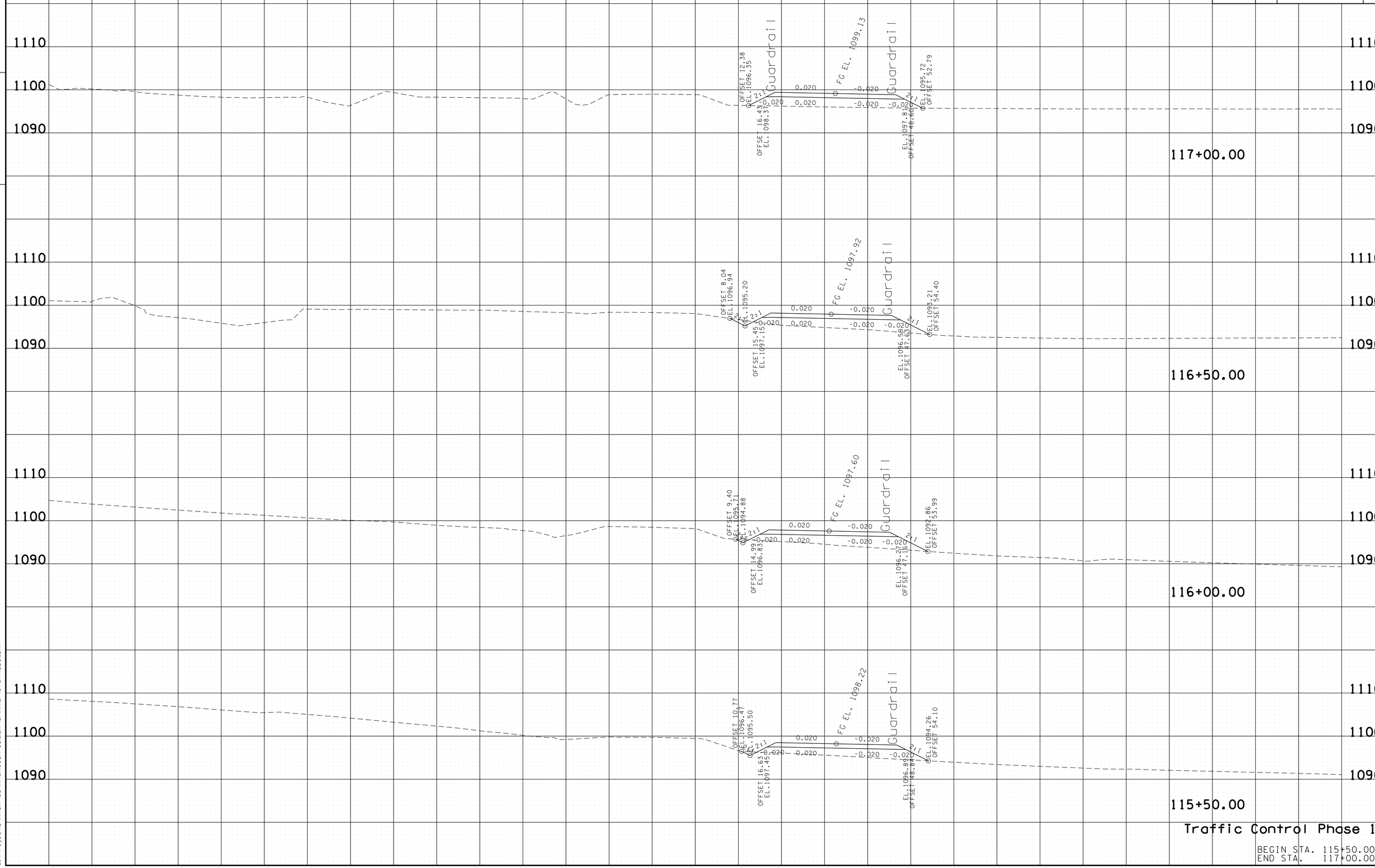

Traffic Control Phase 1

BEGIN STA. 113+50.00
END STA. 115+00.00

16-JUN-2014 17:34
C:\Projects\Knox Co\KnoxCoSR-33\&SR-131\KN131-10TCPhase1.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 75 |

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




Traffic Control Phase 1

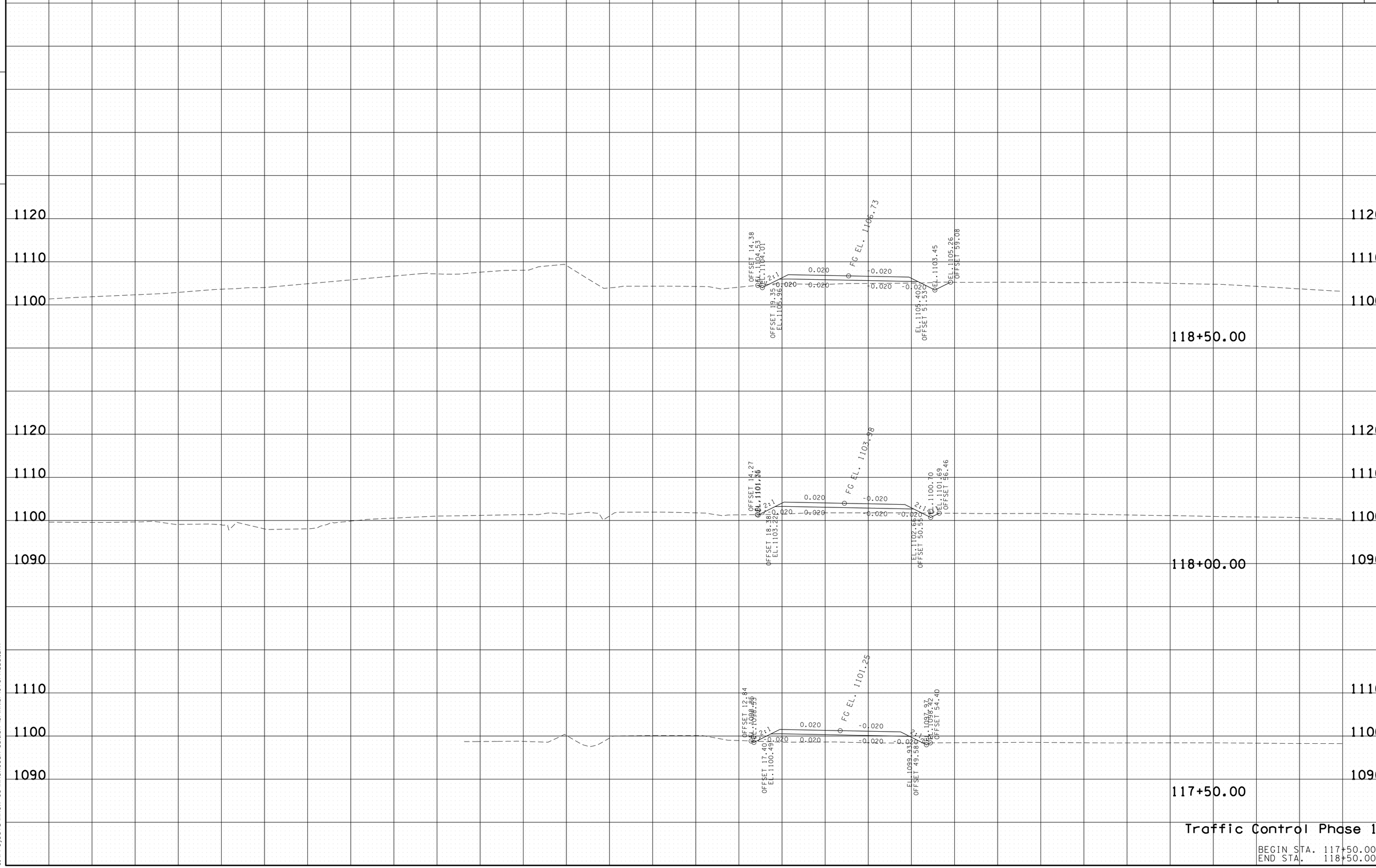
BEGIN STA. 115+50.00
END STA. 117+00.00

16-JUN-2014 17:34
C:\Projects\Knox Co\KnoxCoSR-33&SR-131\KN131-OTCPhase1.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 76 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




Traffic Control Phase 1

BEGIN STA. 117+50.00
END STA. 118+50.00

16-JUN-2014 17:34
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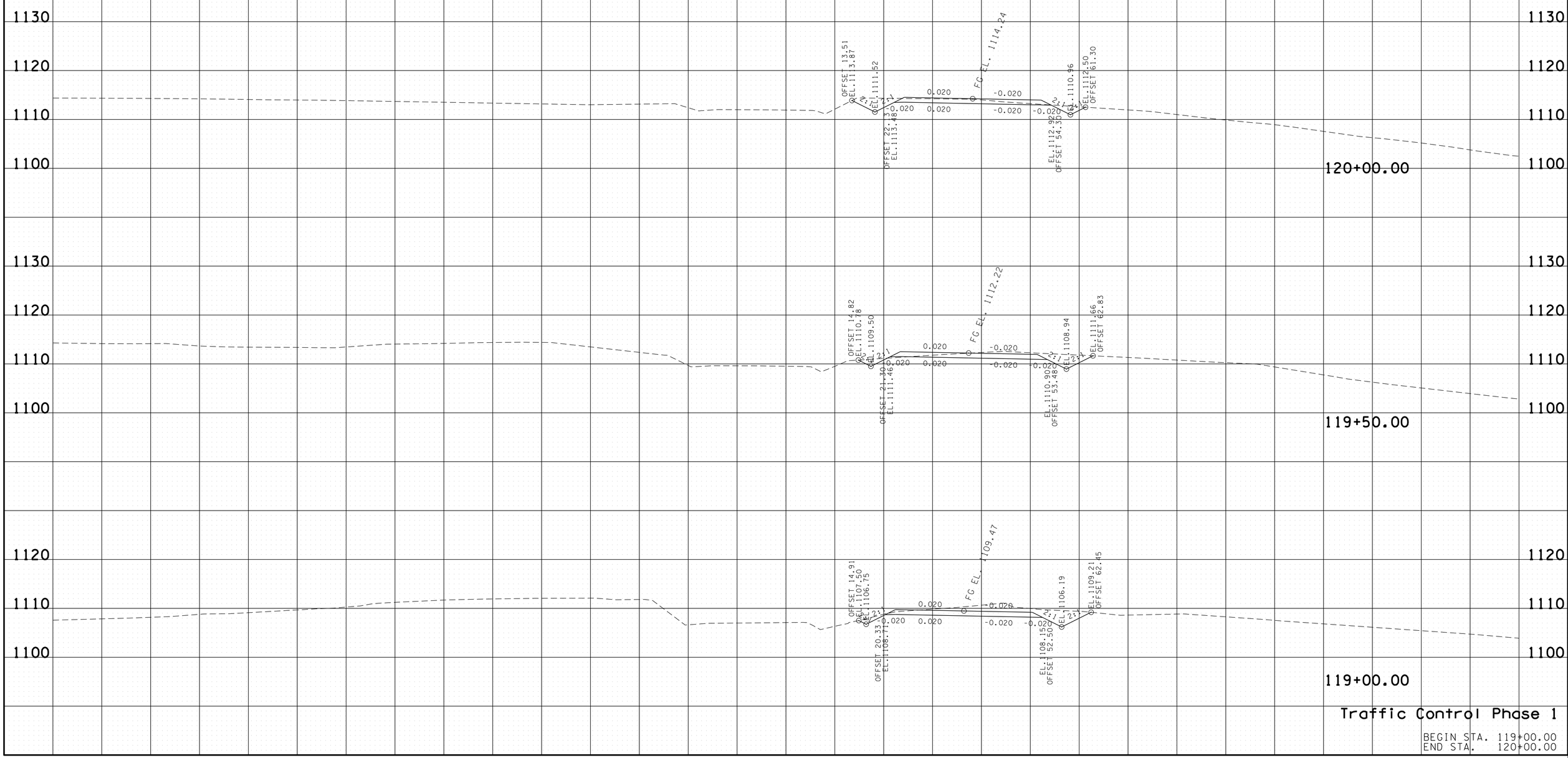
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 77 |

TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.




Traffic Control Phase 1

BEGIN STA. 119+00.00
END STA. 120+00.00

16-JUN-2014 17:34
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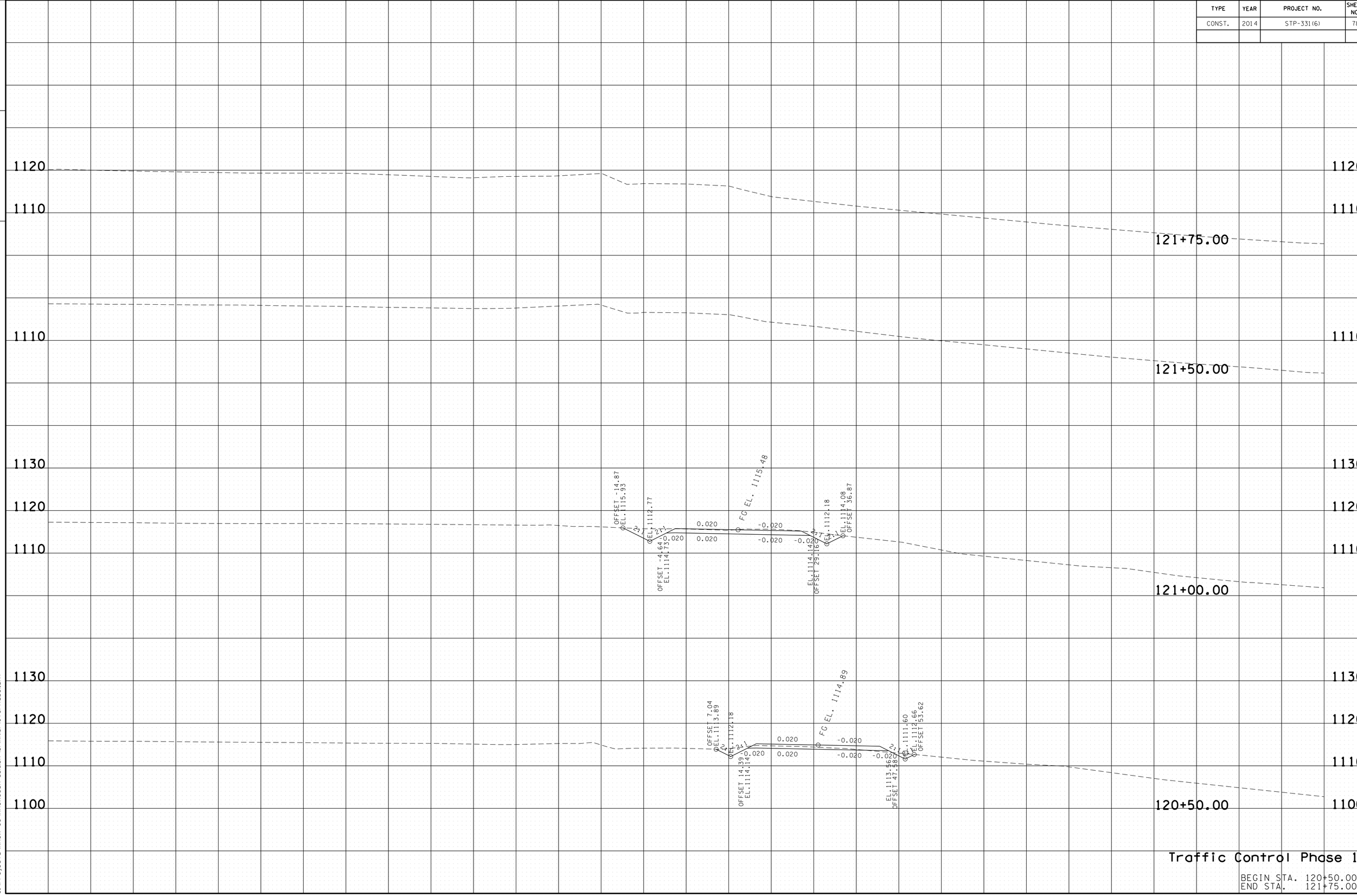
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 78 |




Traffic Control Phase 1

BEGIN STA. 120+50.00
END STA. 121+75.00

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

16-JUN-2014 17:34
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 79 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

Traffic Control Phase 1

BEGIN STA. 122+00.00
END STA. 122+00.00

16-JUN-2014 17:34
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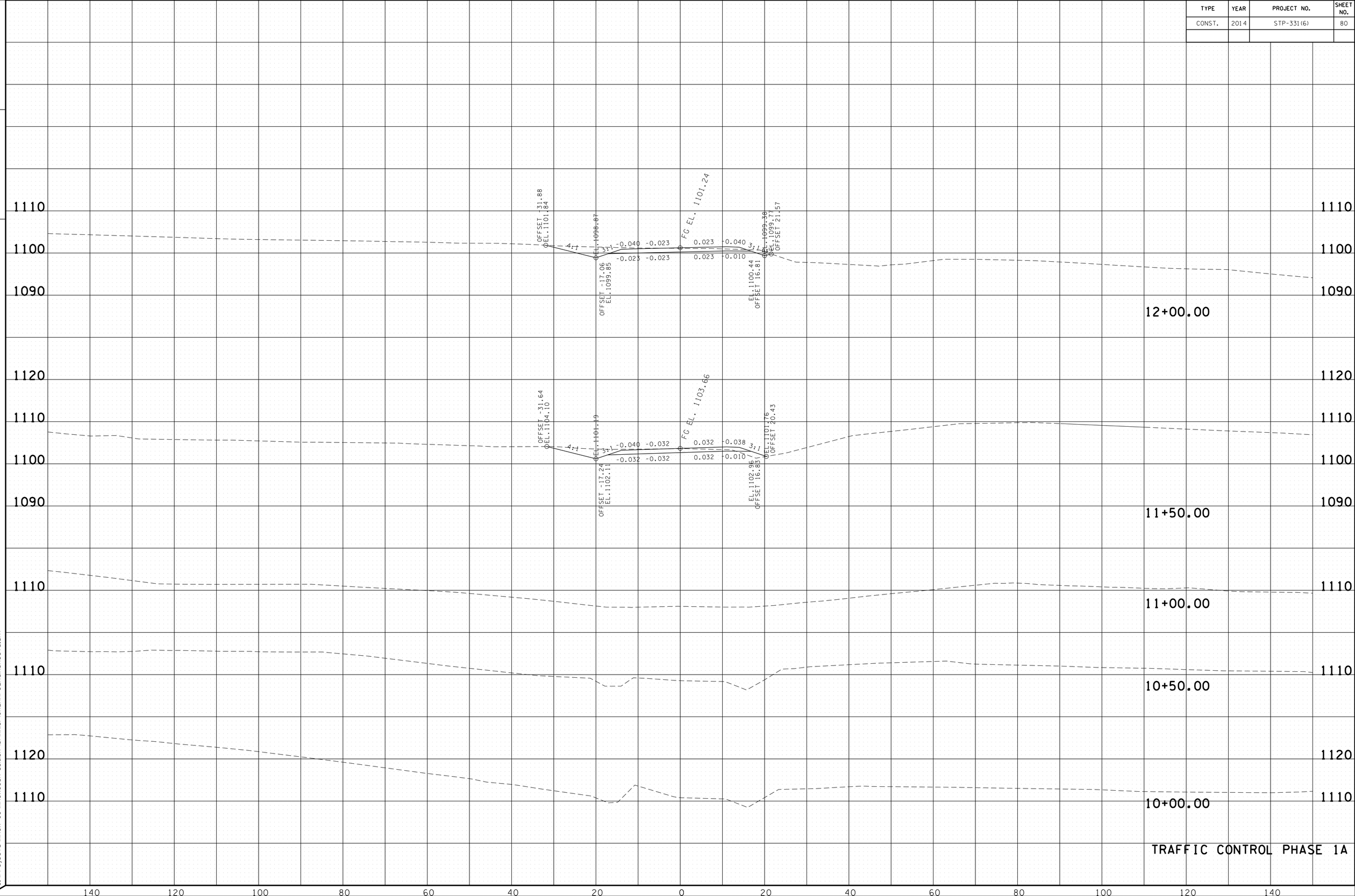
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 80 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

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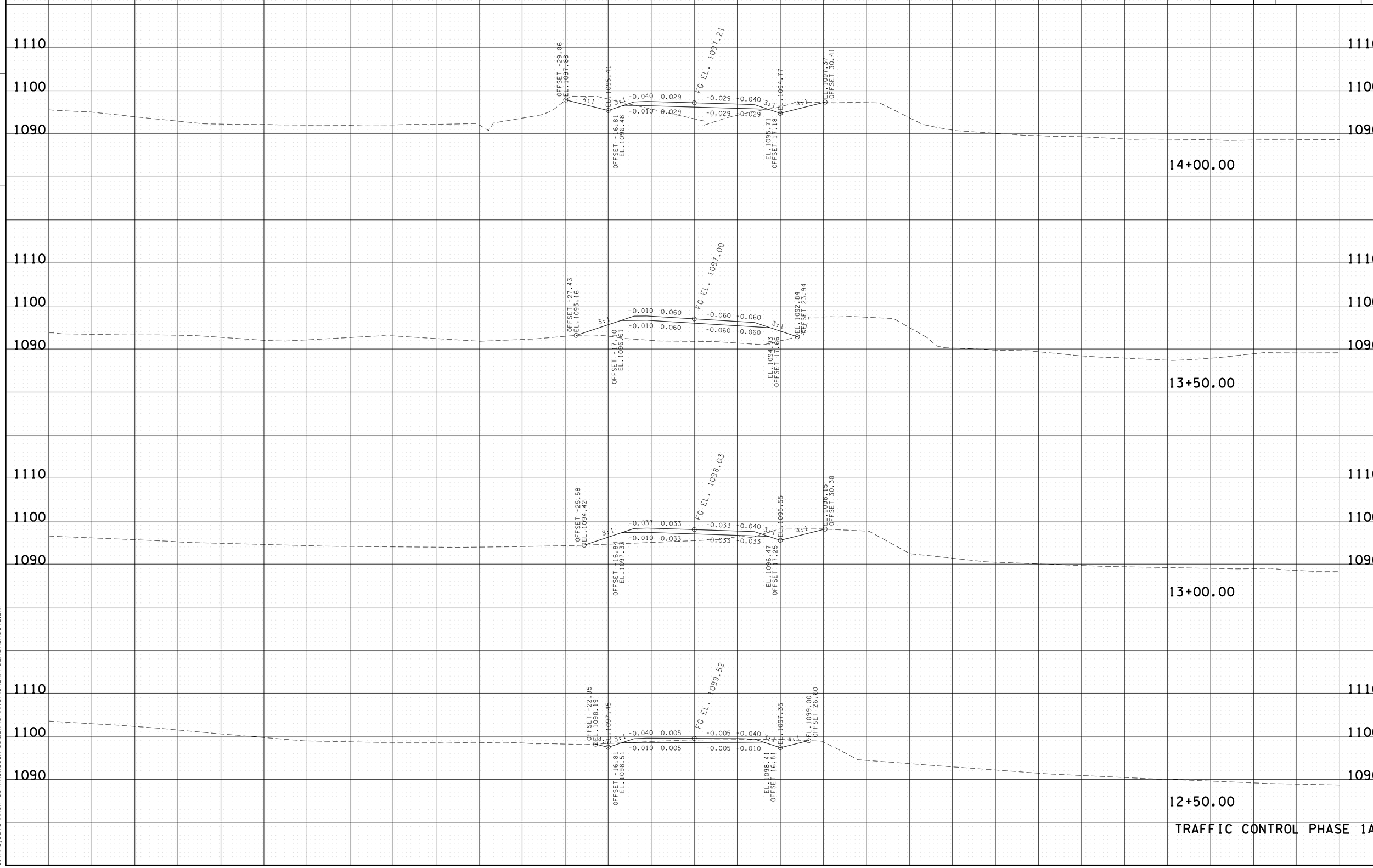
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 81 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




TRAFFIC CONTROL PHASE 1A

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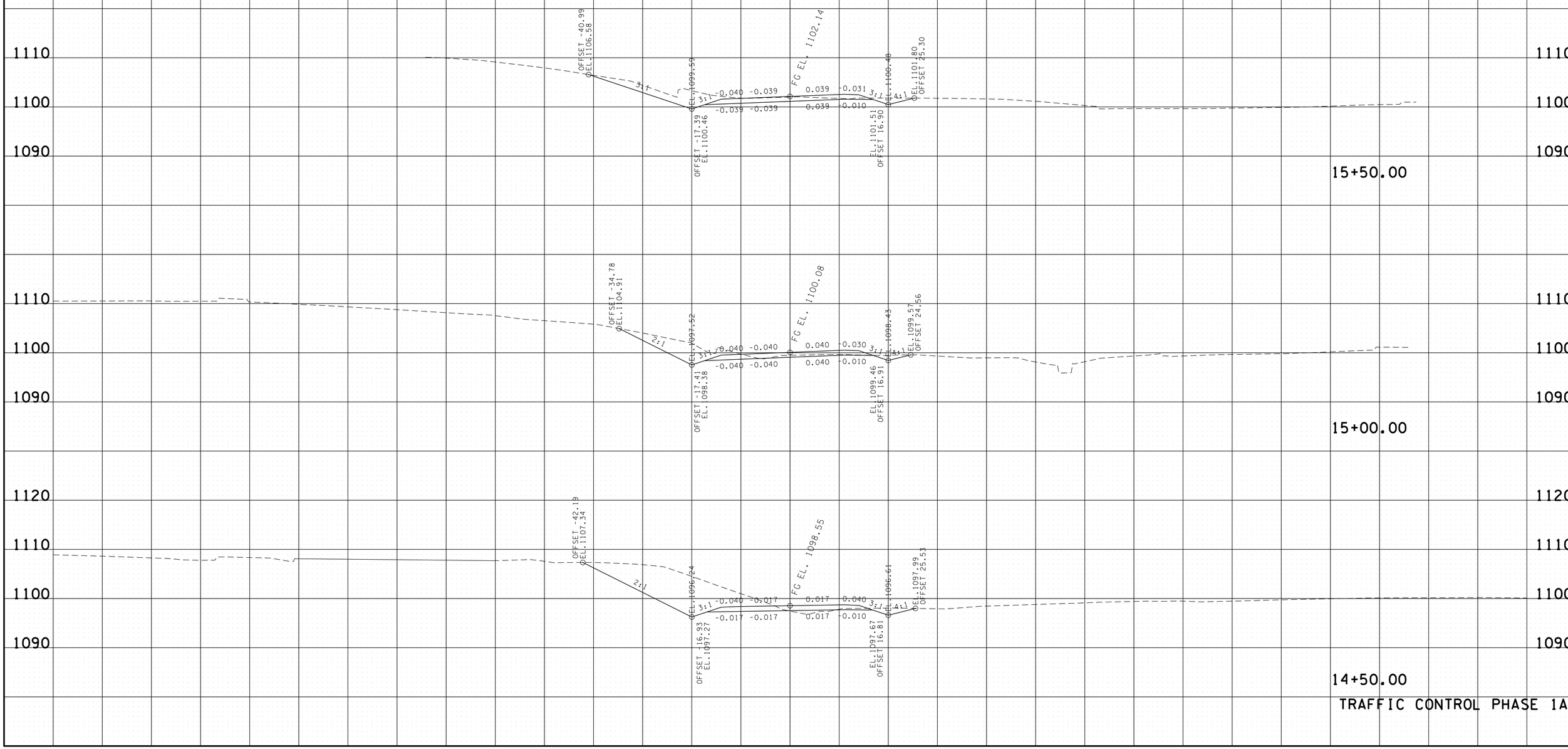
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 82 |




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

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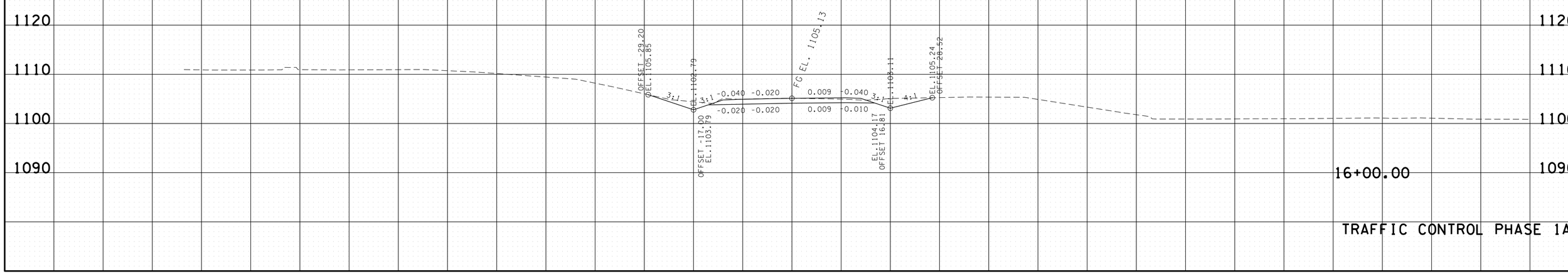
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 83 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




TRAFFIC CONTROL PHASE 1A

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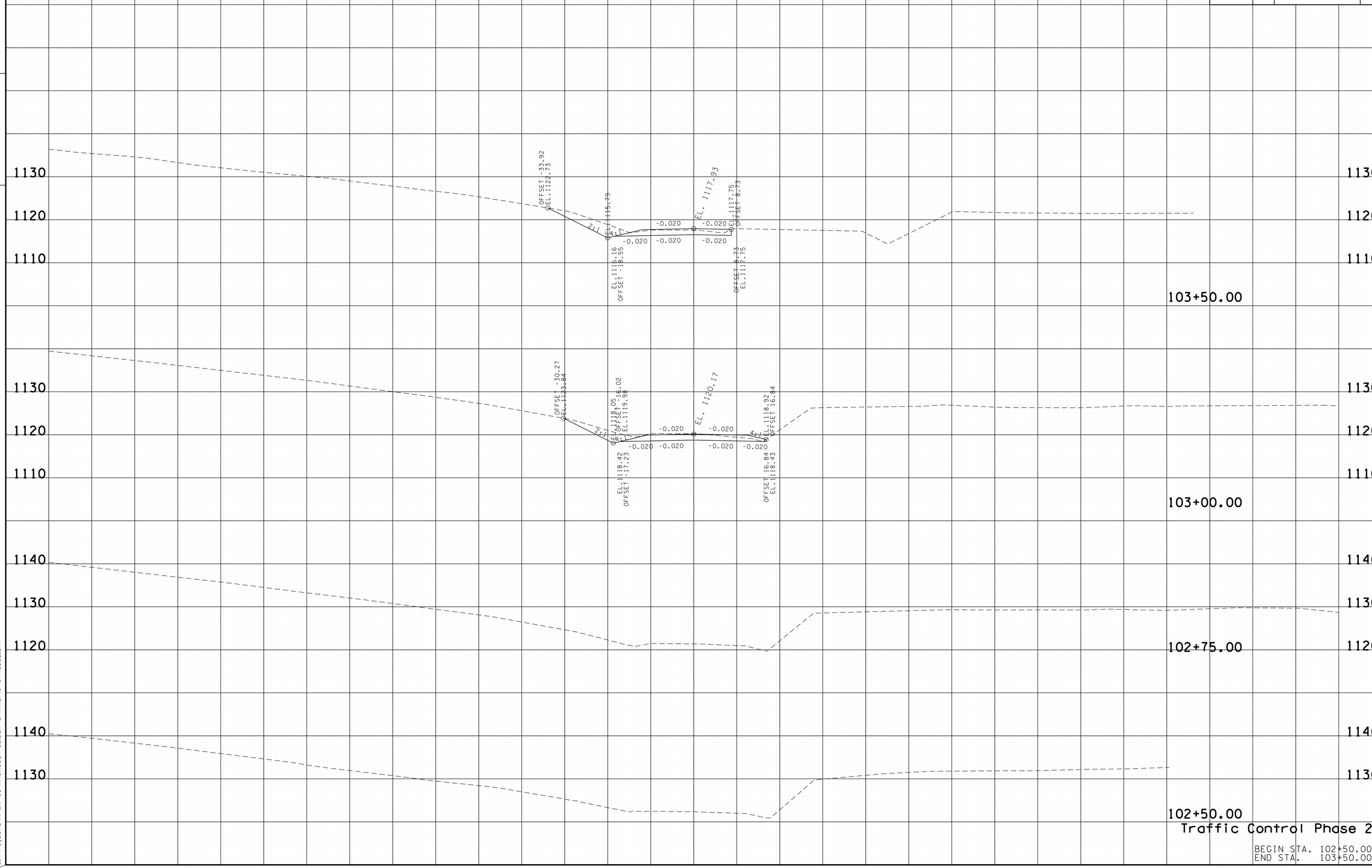
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 84 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




Traffic Control Phase 2

BEGIN STA. 102+50.00
END STA. 103+50.00

16-JUN-2014 17:34
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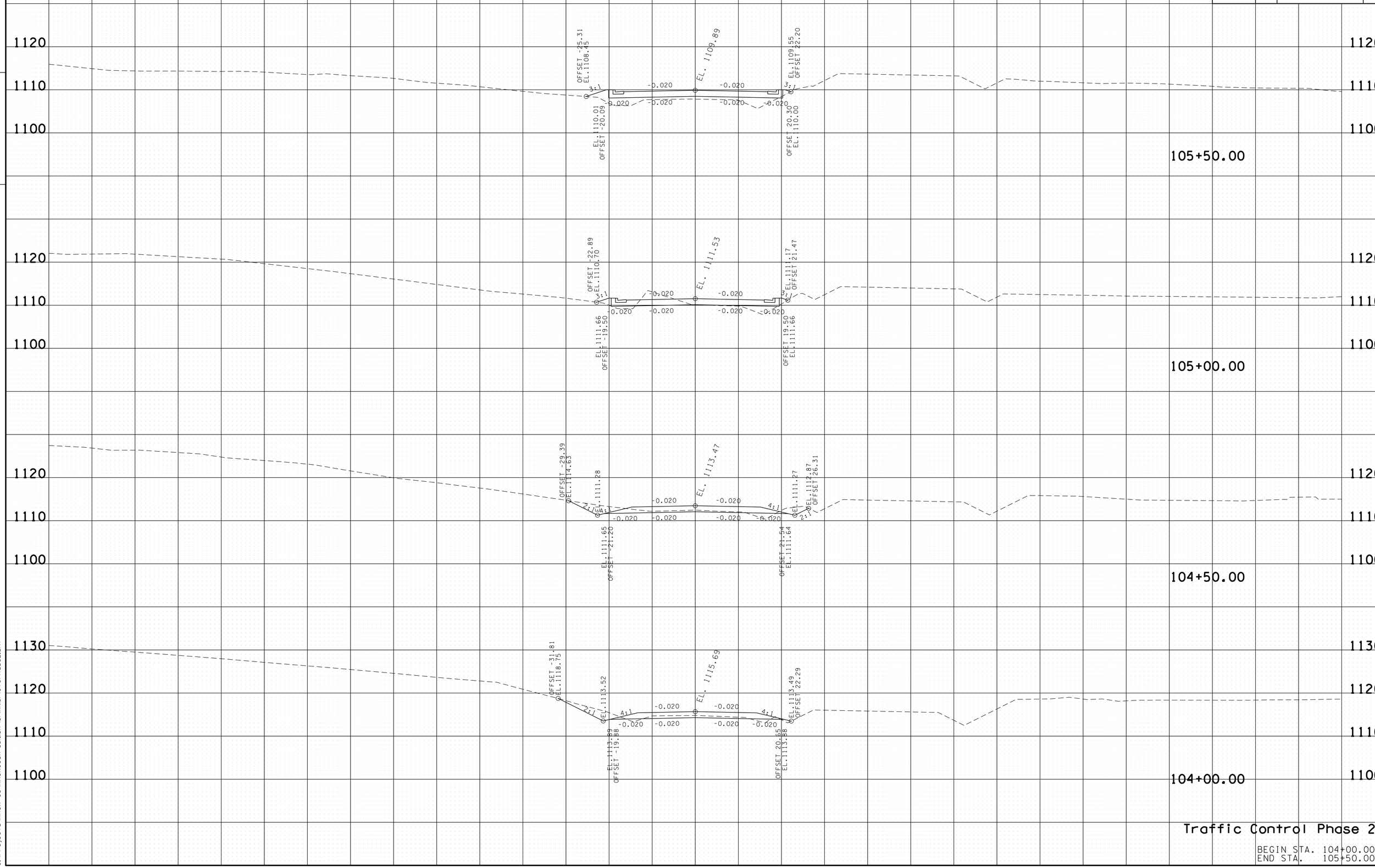
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 85 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




Traffic Control Phase 2

BEGIN STA. 104+00.00
END STA. 105+50.00

16-JUN-2014 17:34
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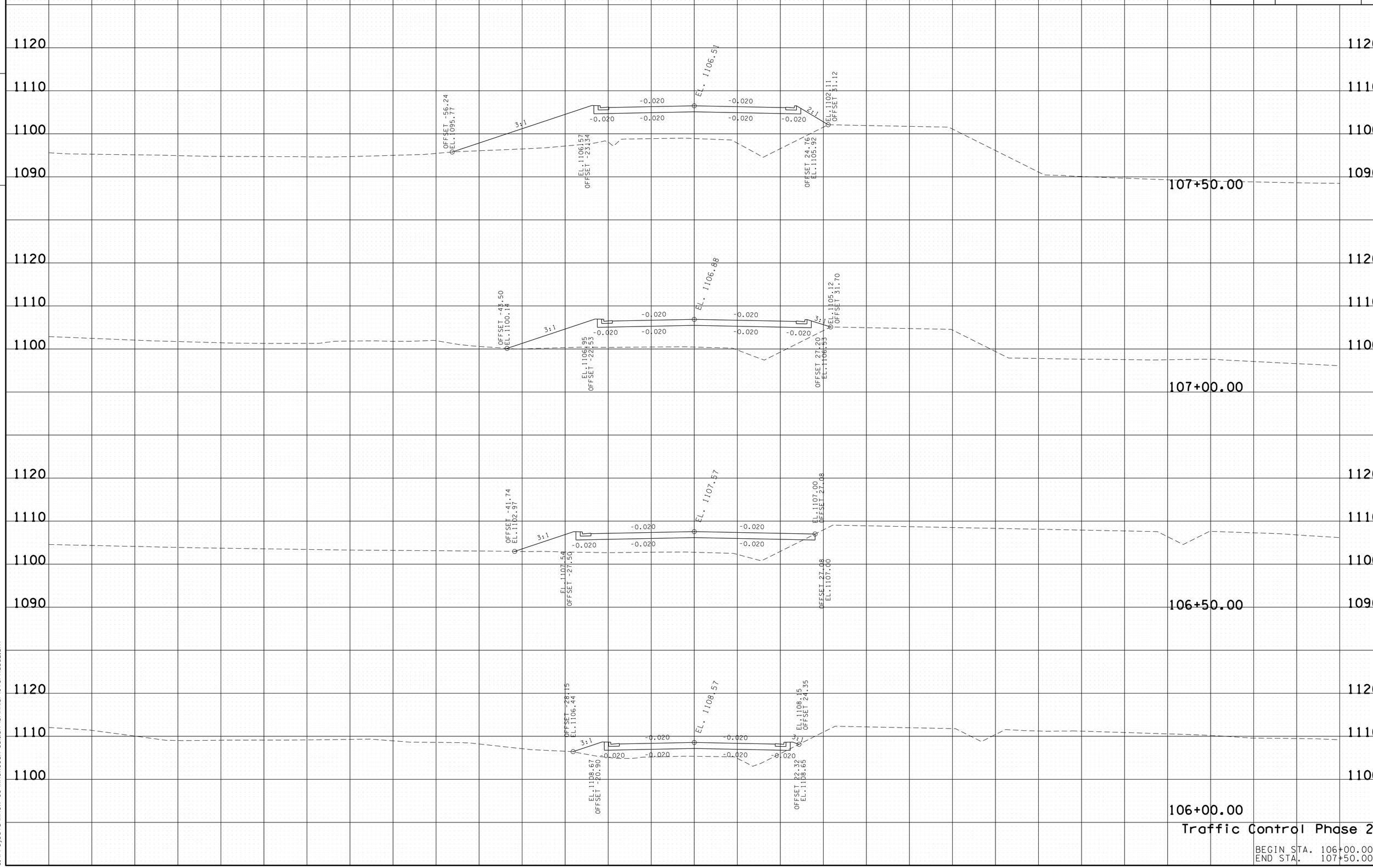
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 86 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




Traffic Control Phase 2

BEGIN STA. 106+00.00
END STA. 107+50.00

16-JUN-2014 17:34
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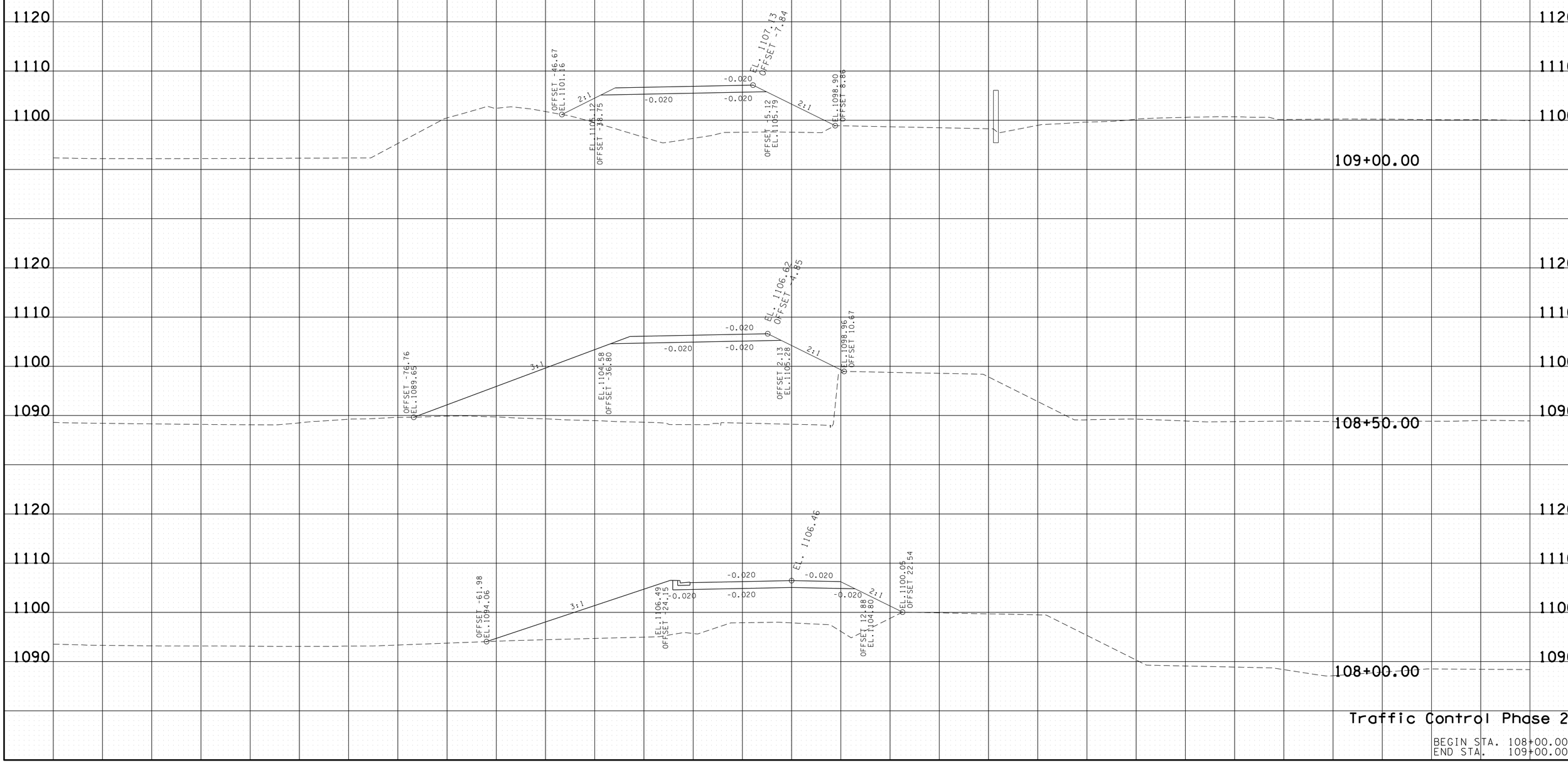
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 87 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




Traffic Control Phase 2

BEGIN STA. 108+00.00
END STA. 109+00.00

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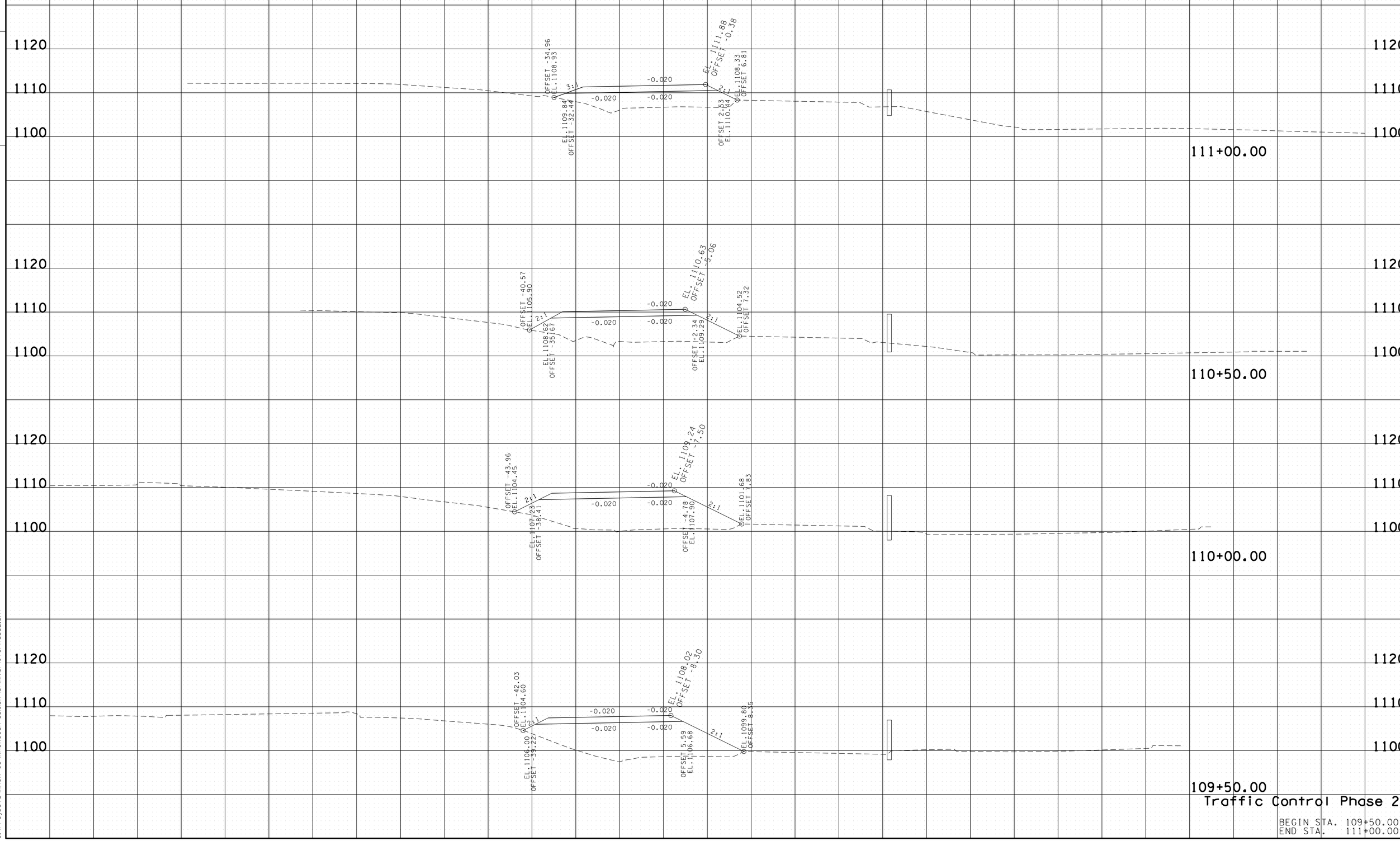
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 88 |

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




Traffic Control Phase 2

BEGIN STA. 109+50.00
END STA. 111+00.00

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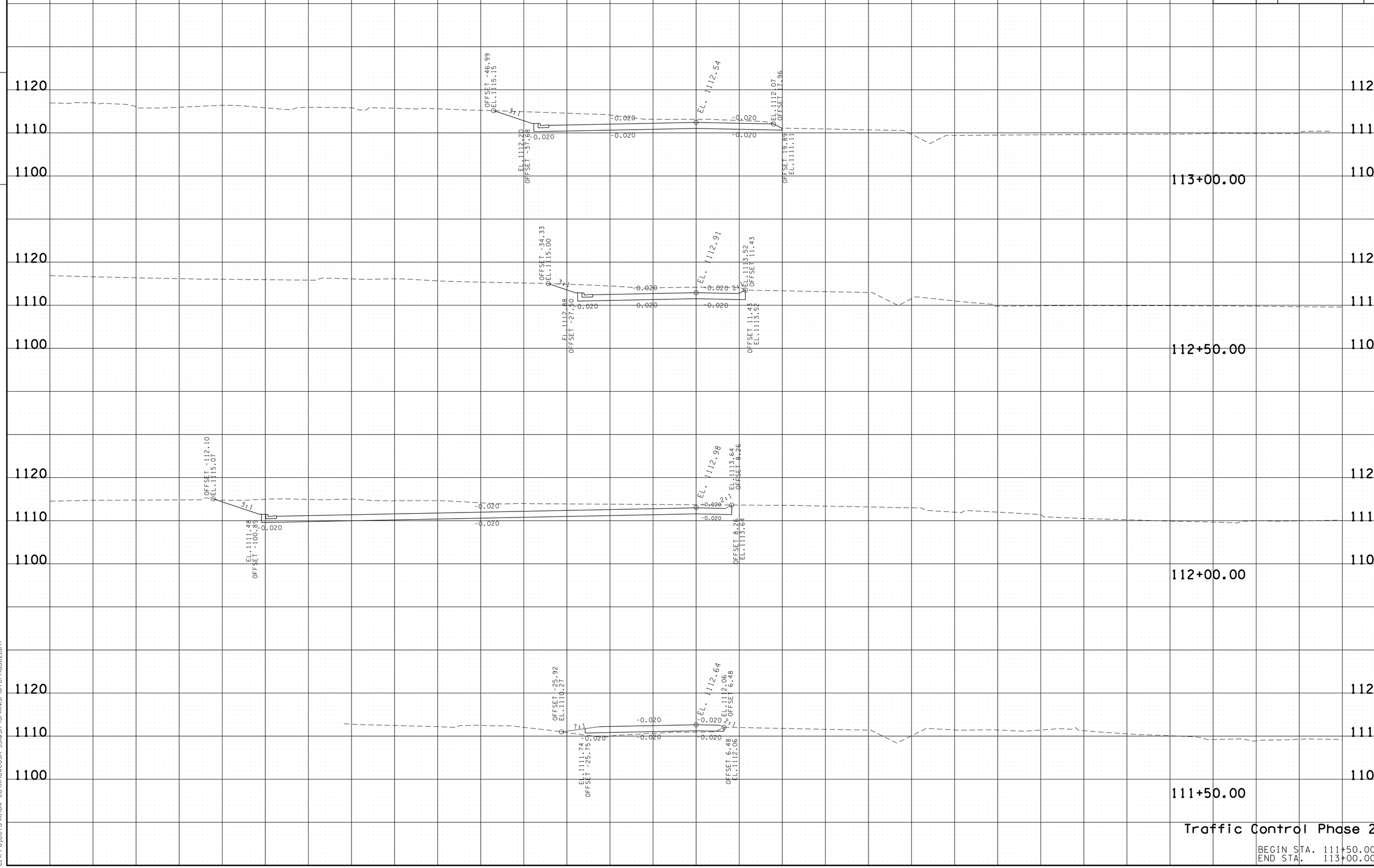
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 89 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




Traffic Control Phase 2

BEGIN STA. 111+50.00
END STA. 113+00.00

16-JUN-2014 17:34
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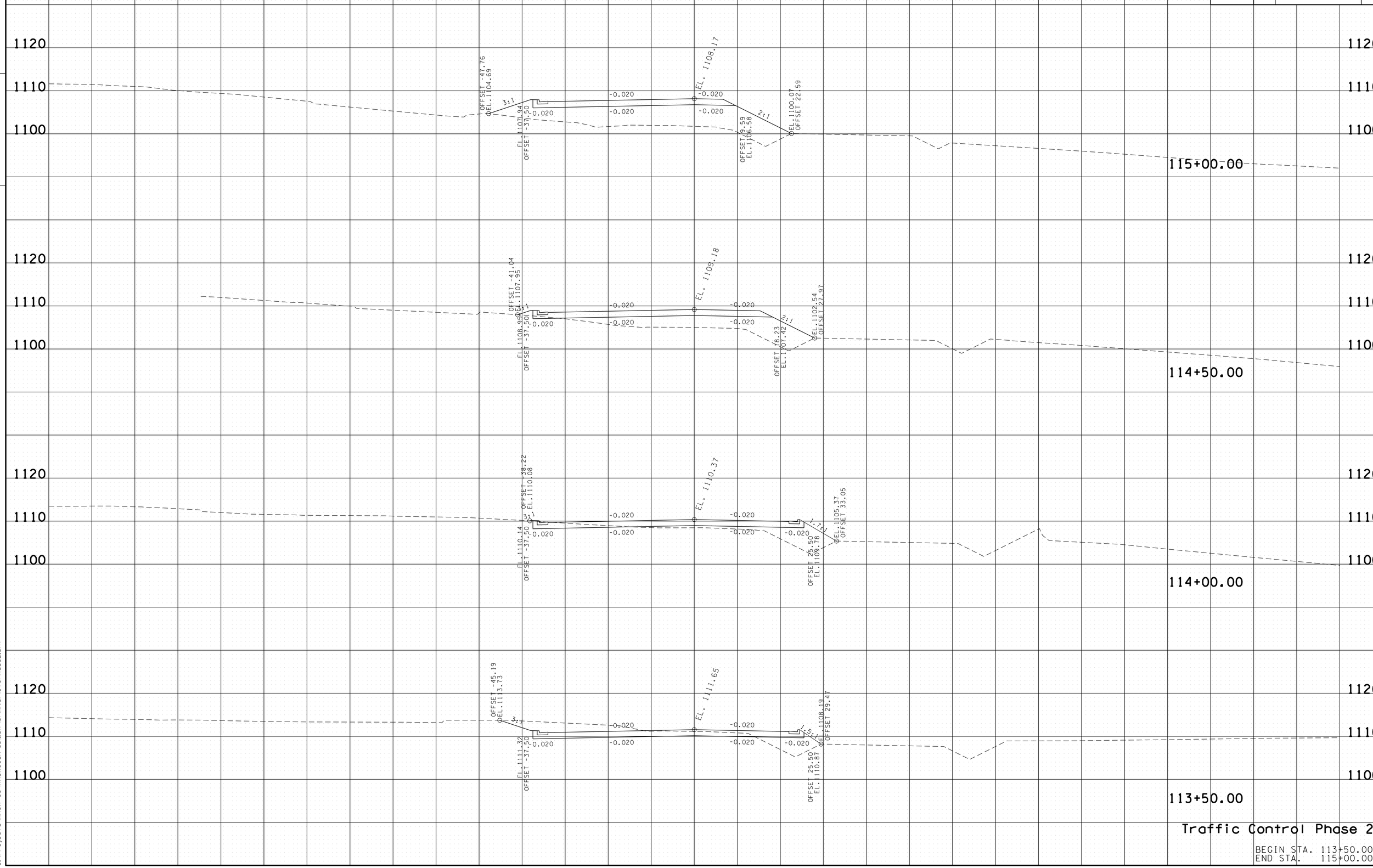
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 90 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




Traffic Control Phase 2

BEGIN STA. 113+50.00
END STA. 115+00.00

16-JUN-2014 17:34
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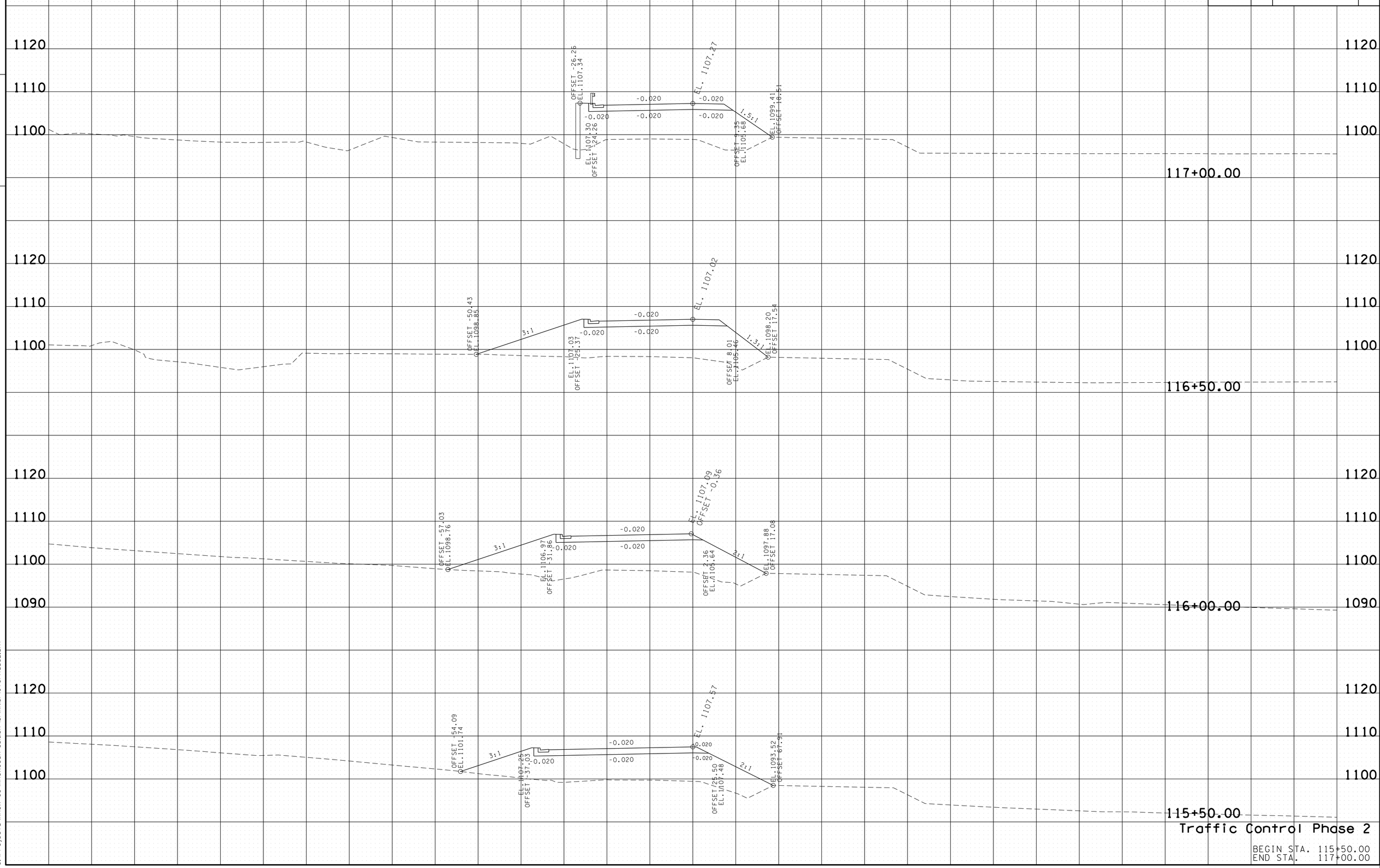
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 91 |

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




Traffic Control Phase 2

BEGIN STA. 115+50.00
END STA. 117+00.00

16-JUN-2014 17:34
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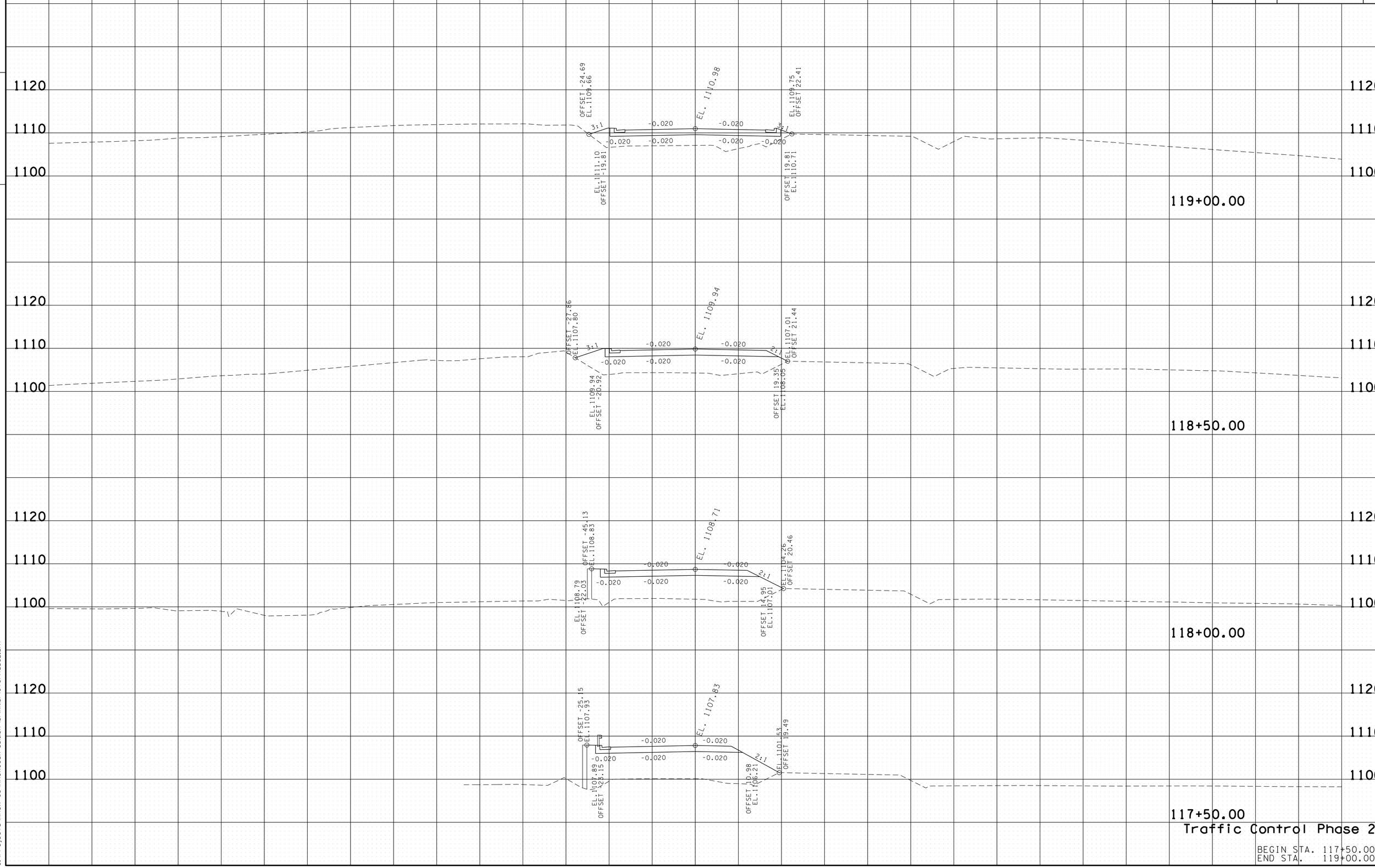
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 92 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




Traffic Control Phase 2

BEGIN STA. 117+50.00
END STA. 119+00.00

16-JUN-2014 17:35
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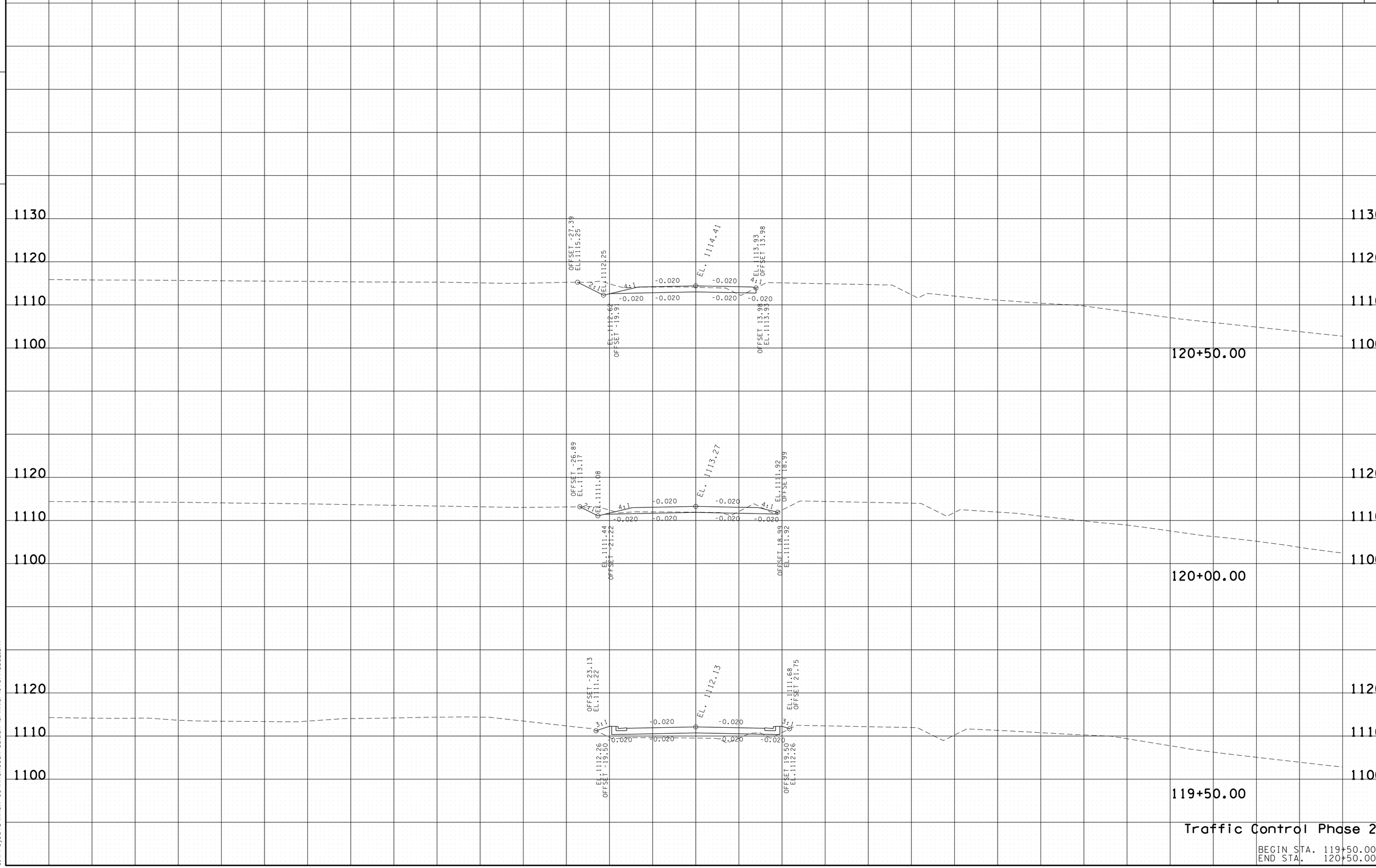
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 93 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




Traffic Control Phase 2

BEGIN STA. 119+50.00
END STA. 120+50.00

16-JUN-2014 17:35
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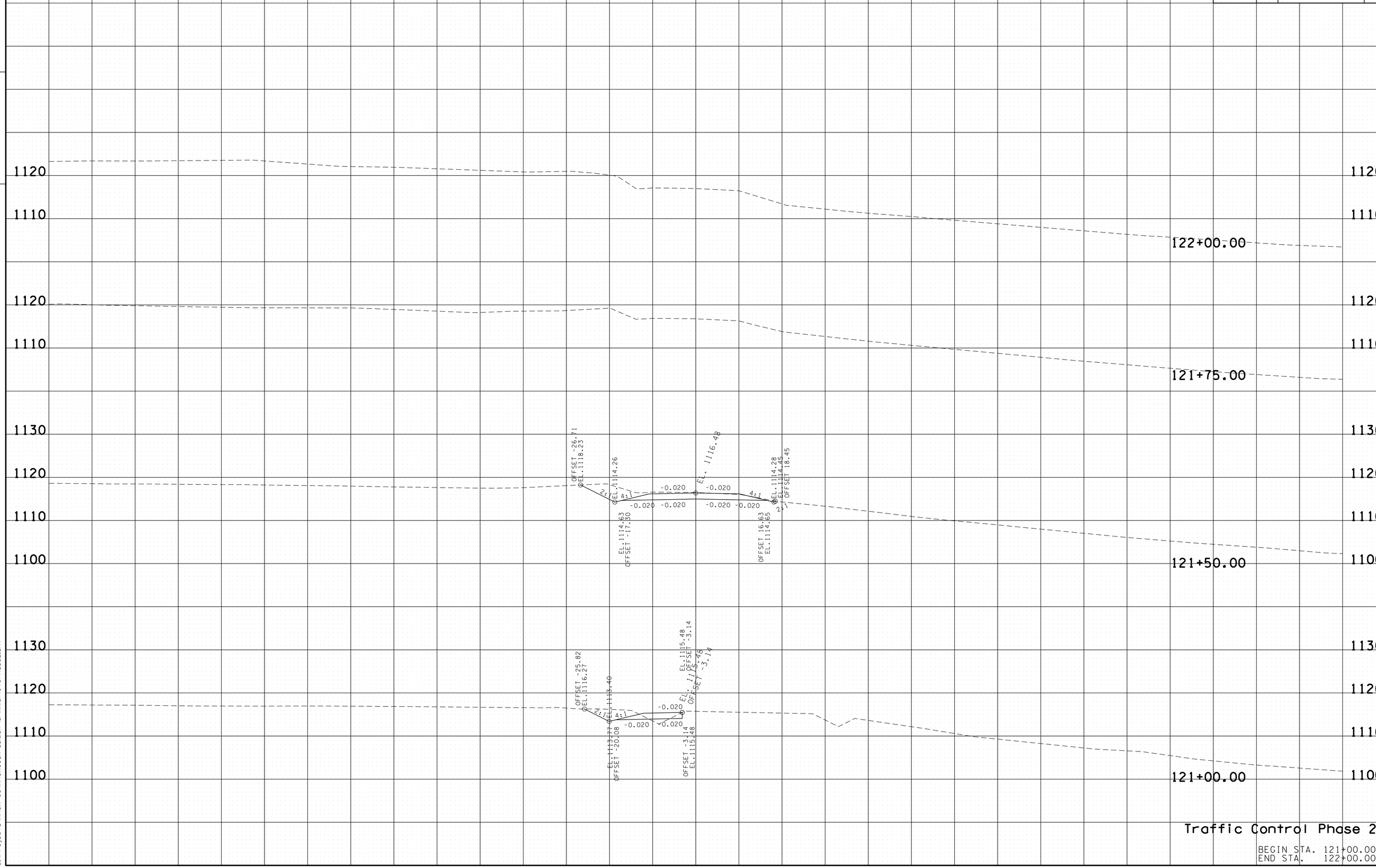
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2014 | STP-331(6) | 94 |

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION




Traffic Control Phase 2

BEGIN STA. 121+00.00
END STA. 122+00.00

16-JUN-2014 17:35
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