Index Of Sheets
(SEE SHEET NO. 1A)

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

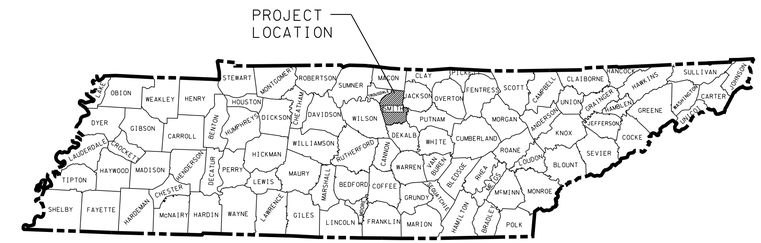
| TENN. | YEAR | SHEET NO. |
|---|---|---|
| | 2016 | 1 |
| FED. AID PROJ. NO. | | |
| STATE PROJ. NO. | 80003-4260-04 | |

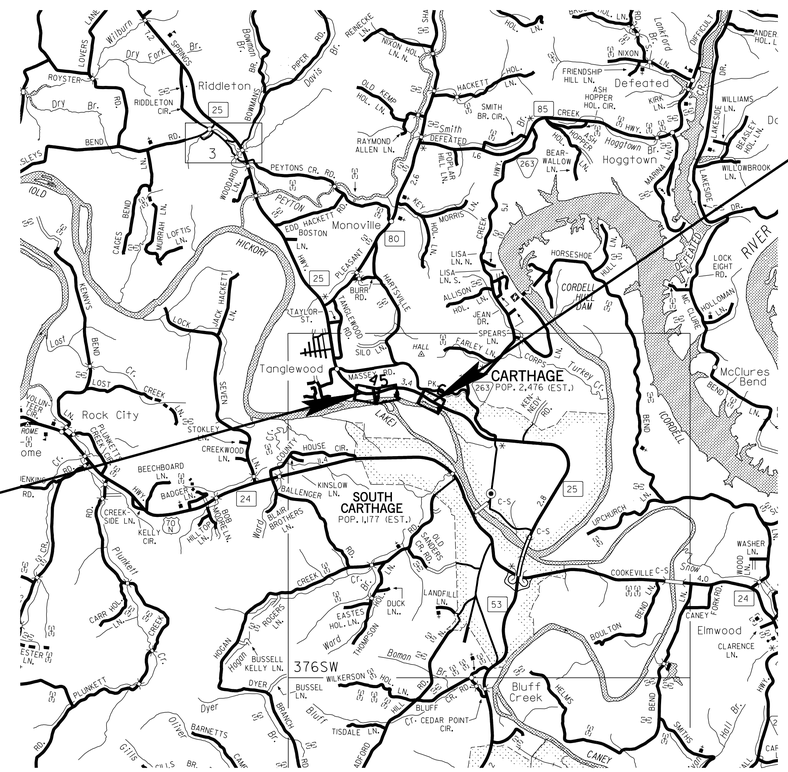
# SMITH COUNTY

S.R. 25 ROCKFALL & LANDSLIDE MITIGATION FROM L.M. 8.5 TO L.M. 9.6

CONSTRUCTION
GRADE, DRAIN, PAVE, SIGN, STRIPE

STATE HIGHWAY NO. 25 F.A.H.S. NO. 25




END PROJECT 80003-4260-04 CONST.
STA. 503+50.00

BEGIN PROJECT 80003-4260-04 CONST.
STA. 453+00.00

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

NO EQUATIONS

| EXCLUSIONS | |
|---|---|
| STATION TO STATION | LENGTH (FT.) |
| 474+00.00 - 499+80.00 | 2580.00 |
| T O T A L = | 2580.00 |

SEALED BY
KEVIN S. CAGLE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 102663
STATE OF TENNESSEE

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

DATE:

APPROVED:
JOHN SCHROER, COMMISSIONER

## SPECIAL NOTES

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

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2015 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT TRANS. MANAGER 1 ALAN DURHAM
DESIGNED BY HDR|ICA
DESIGNER ANDY GROSSON, P.E. CHECKED BY KEVIN CAGLE, P.E.
P.E. NO. 80003-4258-04
PIN NO. 118714.00

SCALE: 1" = 1 MILE
0 1mi 2mi 3mi

| | |
|---|---|
| ROADWAY LENGTH | 0.468 MILES |
| BRIDGE LENGTH | 0.000 MILES |
| BOX BRIDGE LENGTH | 0.000 MILES |
| PROJECT LENGTH | 0.468 MILES |

ORIGINAL SURVEY DATE: MAY 2013
UPDATED SURVEY DATE: MARCH 2014

| TRAFFIC DATA | |
|---|---|
| ADT (2016) | 8240 |
| ADT (2036) | 9840 |
| DHV (2036) | 984 |
| D | 65 - 35 |
| T (ADT) | 4 % |
| T (DHV) | 2 % |
| V | 45 MPH |

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

9/14/2016
H:\119605\dgn\SMSR25-001.sht

[ Includes IB-14-24, IB-15-08, IB-15-12, IB-15-13 & IB-16-02 ]

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2016 | 80003-4260-04 | 1A |

# ROADWAY INDEX


| SHEET NAME | SHEET NO. |
|---|---|
| TITLE SHEET | 1 |
| ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS | 1A |
| STANDARD TRAFFIC OPERATIONS DRAWINGS | 1A1 |
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| ESTIMATED BRIDGE QUANTITIES AND BRIDGE INDEX | 2 (NOT USED) |
| ESTIMATED ROADWAY QUANTITIES | 2A |
| TYPICAL SECTIONS AND PAVING SCHEDULE | 2B – 2B2 |
| GENERAL NOTES | 2C – 2C1 |
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| TABULATED QUANTITIES | 2E |
| DETAIL SHEETS | 2F |
| RIGHT-OF-WAY NOTES, UTILITY NOTES and UTILITY OWNERS | 3 |
| PROPERTY MAP(S) AND RIGHT-OF-WAY ACQUISITION TABLE(S) | 3A |
| PRESENT LAYOUT(S) | 4 – 6 |
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| PROPOSED PROFILE(S) | 4B – 6B |
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| DRAINAGE MAP(S) | 8 |
| EROSION PREVENTION & SEDIMENT CONTROL (EPSC) NOTES | 9 |
| EROSION PREVENTION & SEDIMENT CONTROL (EPSC) LEGEND & TABULATION | 9A |
| EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS | 10, 10A – 11B |
| TRAFFIC CONTROL PAVEMENT EDGE DROP-OFF NOTES | 12 |
| TRAFFIC CONTROL PHASING NOTES, LEGEND & TABULATION | 12A |
| TRAFFIC CONTROL PLANS | 13, 13A – 14B |
| SOILS SHEET(S) | 15 THRU 15-34 |
| ROADWAY CROSS SECTIONS | 16 – 53 |
| STORM WATER POLLUTION PREVENTION PLAN (SWPPP) INDEX | S-1 |
| UTILITIES INDEX | U1-1 |


# STANDARD ROADWAY DRAWINGS

| DWG. | REV. | DESCRIPTION |
|---|---|---|
| **ROADWAY DESIGN STANDARDS** | | |
| 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 |
| RD01-TS-3 | 10-15-02 | DESIGN STANDARD FOR 2-LANE ARTERIAL HIGHWAYS |
| RD01-SE-3 | 10-15-02 | RURAL SUPERELEVATION DETAILS |
| 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-S-11B | 10-15-02 | DESIGN AND CONSTRUCTION DETAILS FOR ROCK CUT SLOPE AND CATCHMENT |
| **PIPE CULVERTS AND ENDWALLS** | | |
| D-PB-1 | 01-02-13 | STANDARD DETAILS FOR CONCRETE PIPE INSTALLATION |
| D-PB-2 | 01-29-14 | STANDARD DETAILS FOR FLEXIBLE PIPE INSTALLATION |
| D-PG-3 | 04-15-97 | FERROUS AND ALUMINUM CORRUGATED METAL PIPE |
| **ROADWAY AND PAVEMENT APPURTENANCES** | | |
| RP-R-1 | 05-27-01 | STANDARD RAMPS TO SIDE ROADS |
| **SAFETY DEVICES AND FENCES** | | |
| S-CZ-1 | | CLEAR ZONE CRITERIA |
| S-PL-1 | | SAFETY PLAN AT ROADSIDE HAZARDS |
| S-PL-6 | 02-08-16 | SAFETY PLAN: SAFETY HARDWARE PLACEMENT |
| S-GR31-1 | 04-04-16 | W-BEAM GUARDRAIL |
| S-GR31-1A | | W-BEAM BARRIER FASTENING HARDWARE |
| S-RP-2 | 02-08-16 | STANDARD CONCRETE RIGHT-OF-WAY MARKERS |
| **DESIGN - TRAFFIC CONTROL** | | |
| T-M-1 | 07-24-14 | DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS |
| T-M-2 | 07-24-14 | DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS |
| T-M-3 | 07-24-14 | MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS & PAVED SHOULDERS ON CONVENTIONAL ROADS |
| T-M-16 | 01-30-15 | ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED ROUTES |
| T-PBR-1 | 06-30-09 | INTERCONNECTED PORTABLE BARRIER RAIL |
| T-PBR-2 | 11-01-11 | DETAIL FOR VERTICAL PANELS AND FLEXIBLE DELINEATORS |

| DWG. | REV. | DESCRIPTION |
|---|---|---|
| T-WZ-10 | 04-02-12 | ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS |
| T-WZ-32 | 10-29-13 | TRAFFIC CONTROL PLAN SIGNAL LAYOUT FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE |
| T-WZ-34 | 09-01-05 | TRAFFIC CONTROL PLAN GENERAL NOTES FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE |
| T-WZ-35 | 04-02-12 | TRAFFIC CONTROL PLAN PAY ITEM AND SIGN DETAILS FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE |
| **EROSION PREVENTION AND SEDIMENT CONTROL** | | |
| EC-STR-3C | 08-01-12 | SILT FENCE WITH WIRE BACKING |
| EC-STR-3E | 04-01-08 | SILT FENCE FABRIC JOINING DETAILS |
| EC-STR-27 | 08-01-12 | TEMPORARY SLOPE DRAIN AND BERM |
| EC-STR-34 | 08-01-12 | EROSION CONTROL BLANKET FOR SLOPE INSTALLATION |
| EC-STR-6 | 05-06-16 | ROCK CHECK DAM |
| EC-STR-6A | 05-06-16 | ENHANCED ROCK CHECK DAM |
| EC-STR-11A | 08-01-12 | CULVERT PROTECTION TYPE 2 |
| EC-STR-25 | 08-01-12 | TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD |

**UNOFFICIAL SET**

**NOT FOR BIDDING**

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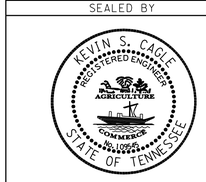


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS

9/14/2016
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2016 | 80003-4260-04 | 1A1 |
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| | | | |
| | | | |

# STANDARD TRAFFIC OPERATIONS DRAWINGS

| DWG. | REV. | DESCRIPTION |
|---|---|---|
| **SIGNS** | | |
| T-S-10 | 04-04-12 | STANDARD MOUNTING DETAILS - FLAT SHEET SIGNS, ALUMINUM-STEEL DESIGN |
| T-S-11 | 06-06-11 | DELINEATOR AND MILEPOST DETAILS |
| T-S-17 | 07-02-15 | STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE |
| T-S-19 | 07-19-15 | STANDARD STEEL SIGN SUPPORTS |
| T-S-20 | 11-01-11 | SIGN DETAILS |
| T-S-23C | 07-02-15 | BREAKAWAY U-POST SIGN SUPPORTS |
| **SIGNALS** | | |
| T-SG-1 | 11-01-11 | WOOD POLE, DETAILS FOR SPAN MOUNTED SIGNALS |
| 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-4 | | SPAN WIRE AND MESSENGER CABLE DETAILS |
| T-SG-5 | 12-04-13 | CONTROLLER CABINET DETAILS |
| T-SG-7 | 11-01-11 | SIGNAL HEAD ASSEMBLIES AND PEDESTRIAN PUSH BUTTON SIGNS |
| T-SG-7A | 11-01-11 | TYPICAL SIGNAL HEAD PLACEMENT |

**UNOFFICIAL SET**

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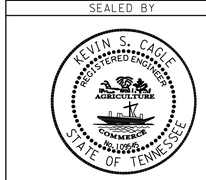


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD TRAFFIC OPERATIONS DRAWINGS

9/14/2016
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2016 | 80003-4260-04 | 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)(2) | 203-01 | ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED) | C.Y. | 286762 |
| | 203-01.11 | PRESPLITTING OF ROCK EXCAVATION | S.Y. | 20579 |
| | 203-02.01 | BORROW EXCAVATION (GRADED SOLID ROCK) | TON | 8833 |
| | 203-06 | WATER | M.G. | 7 |
| | 203-07 | FURNISHING & SPREADING TOPSOIL | C.Y. | 1120 |
| (3) | 209-02.05 | 12" TEMPORARY SLOPE DRAIN | L.F. | 608 |
| (3) | 209-05 | SEDIMENT REMOVAL | C.Y. | 262 |
| (3) | 209-08.02 | TEMPORARY SILT FENCE (WITH BACKING) | L.F. | 380 |
| (3) | 209-08.07 | ROCK CHECK DAM | EACH | 13 |
| (3) | 209-08.08 | ENHANCED ROCK CHECK DAM | EACH | 3 |
| | 303-01 | MINERAL AGGREGATE, TYPE A BASE, GRADING D | TON | 272 |
| (3)(4) | 303-10.01 | MINERAL AGGREGATE (SIZE 57) | TON | 409 |
| | 307-02.01 | ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A | TON | 27 |
| | 307-02.08 | ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2 | TON | 17 |
| | 402-01 | BITUMINOUS MATERIAL FOR PRIME COAT (PC) | TON | 1 |
| | 402-02 | AGGREGATE FOR COVER MATERIAL (PC) | TON | 2 |
| | 403-01 | BITUMINOUS MATERIAL FOR TACK COAT (TC) | TON | 5 |
| | 407-20.05 | SAW CUTTING ASPHALT PAVEMENT | L.F. | 300 |
| | 411-02.10 | ACS MIX(PG70-22) GRADING D | TON | 732 |
| | 411-12.03 | SCORING FOR RUMBLE STRIPE (NON-CONTINUOUS) (8IN WIDTH) | L.M. | 1 |
| | 415-01.02 | COLD PLANING BITUMINOUS PAVEMENT | S.Y. | 10740 |
| | 607-39.02 | 18" PIPE CULVERT (SIDE DRAIN) | L.F. | 36 |
| (5) | 621-03.02 | 18" TEMPORARY DRAINAGE PIPE | L.F. | 32 |
| | 701-02 | CONCRETE DRIVEWAY | S.F. | 1332 |
| (6) | 705-02.03 | SINGLE GUARDRAIL (TYPE 2) LONG POST | L.F. | 375 |
| (7) | 705-08.51 | PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3 | EACH | 4 |
| | 706-01 | GUARDRAIL REMOVED | L.F. | 375 |
| | 708-02.01 | MARKERS (CONCRETE R.O.W. POSTS) | EACH | 14 |
| (3) | 709-05.05 | MACHINED RIP-RAP (CLASS A-3) | TON | 133 |
| (3) | 709-05.06 | MACHINED RIP-RAP (CLASS A-1) | TON | 63 |
| | 712-01 | TRAFFIC CONTROL | LS | 1 |
| (8) | 712-02.02 | INTERCONNECTED PORTABLE BARRIER RAIL | L.F. | 3230 |
| | 712-04.01 | FLEXIBLE DRUMS (CHANNELIZING) | EACH | 35 |
| | 712-04.50 | PORTABLE BARRIER RAIL DELINEATOR | EACH | 127 |
| | 712-05.01 | WARNING LIGHTS (TYPE A) | EACH | 28 |
| | 712-05.03 | WARNING LIGHTS (TYPE C) | EACH | 13 |
| | 712-06 | SIGNS (CONSTRUCTION) | S.F. | 509 |
| | 712-07.03 | TEMPORARY BARRICADES (TYPE III) | L.F. | 120 |
| (9) | 712-09.01 | REMOVABLE PAVEMENT MARKING LINE | L.F. | 6610 |
| | 712-09.04 | REMOVABLE PAVEMENT MARKING (STOP LINE) | L.F. | 60 |

## ESTIMATED ROADWAY QUANTITIES (CONT'D)

| | ITEM NO. | DESCRIPTION | UNIT | QUANTITY |
|---|---|---|---|---|
| (10) | 713-15 | REMOVAL OF SIGNS, POSTS AND FOOTINGS | LS | 1 |
| | 713-16.01 | CHANGEABLE MESSAGE SIGN UNIT | EACH | 2 |
| | 713-16.20 | SIGNS (DO NOT PASS, R4-1) | EACH | 1 |
| | 713-16.21 | SIGNS (FALLING ROCK, TN-15) | EACH | 2 |
| | 713-16.22 | SIGNS (CARTHAGE CITY LIMIT, TN-3) | EACH | 1 |
| | 716-01.07 | TEMPORARY RAISED PAVEMENT MARKER,YELLOW | EACH | 124 |
| | 716-01.21 | Snwplwble Pvmt Mrkrs (Bi-Dir)(1 Color) | EACH | 128 |
| (11) | 716-02.04 | PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING) | S.Y. | 10 |
| (11) | 716-02.06 | PLASTIC PAVEMENT MARKING (TURN LANE ARROW) | EACH | 4 |
| (12) | 716-05.20 | PAINTED PAVEMENT MARKING (6" LINE) | L.M. | 1.7 |
| | 716-12.02 | ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE) | L.M. | 2.1 |
| | 716-13.02 | SPRAY THERMO PVMT MRKNG (60 mil) (6IN LINE) | L.M. | 1.7 |
| | 717-01 | MOBILIZATION | LS | 1 |
| | 730-40 | TEMPORARY TRAFFIC SIGNAL SYSTEM | EACH | 1 |
| (3) | 740-10.03 | GEOTEXTILE (TYPE III)(EROSION CONTROL) | S.Y. | 557 |
| | 740-10.04 | GEOTEXTILE (TYPE IV)(STABILIZATION) | S.Y. | 1627 |
| (3) | 801-01.07 | TEMPORARY SEEDING (WITH MULCH) | UNIT | 121 |
| | 801-02.01 | CROWN VETCH MIXTURE (WITHOUT MULCH) | UNIT | 121 |
| | 801-02.15 | FERTILIZER | TON | 3 |
| (13) | 801-03 | WATER (SEEDING & SODDING) | M.G. | 25 |
| | 805-12.02 | EROSION CONTROL BLANKET (TYPE II) | S.Y. | 13381 |

(1) REFER TO SPECIAL NOTES, SHEET 2D.
(2) INCLUDES 721 CY FOR EPSC MEASURES.
(3) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT. ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.
(4) INCLUDES 6 TONS FOR EPSC MEASURES.
(5) TO BE USED AS DIRECTED BY THE ENGINEER WITH EPSC MEASURE EC-STR-25 AT STA. 453+00.
(6) POST LENGTH SHALL BE 9 LF.
(7) THIS ITEM SHALL BE A PORTABLE ENERGY ABSORBING TERMINAL MEETING THE REQUIREMENTS OF NCHRP 350 FOR TEST LEVEL 3. EXAMPLES WOULD BE A QUAD-GUARD, A REACT 350 OR A TRACC. THE PAY ITEM WILL INCLUDE FURNISHING AND INSTALLING ALL COMPONENTS AS SHOWN ON THE MANUFACTURER'S DRAWING.
(8) INCLUDES 580 LF NEEDED PHASE 1 MOT, 380 LF NEEDED PHASE 1 EPSC, AND 2270 LF NEEDED PHASE 2 MOT.
(9) USED ON AREAS OUTSIDE OF PAVING LIMITS SHOWN ON TYPICAL SECTIONS.
(10) REMOVE SIGN, SUPPORT AND FOOTINGS ON EXISTING SIGNS WITHIN PROJECT LIMITS.
(11) CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
(12) USED ON AREAS WITHIN PAVING LIMITS SHOWN ON TYPICAL SECTIONS.
(13) INCLUDES 13 MG FOR EROSION PREVENTION AND SEDIMENT CONTROL.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

9/14/2016
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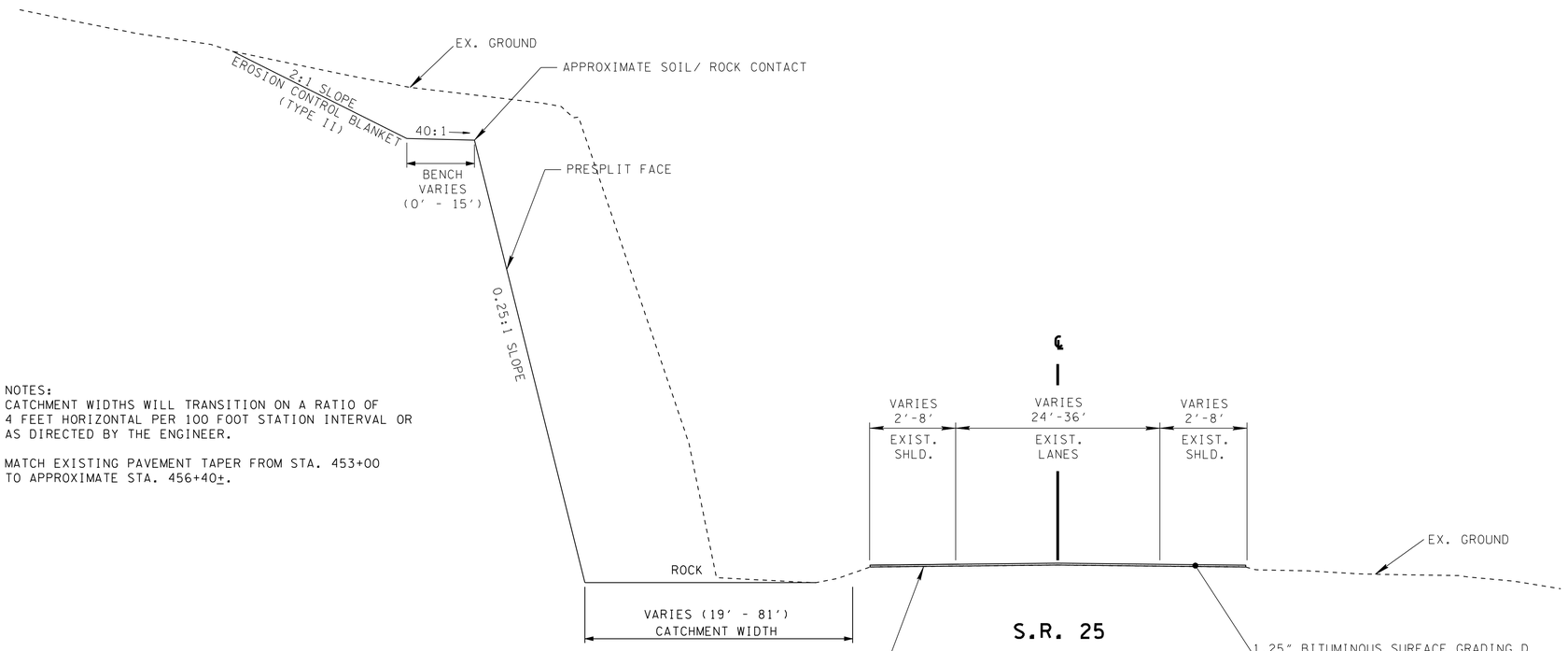
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 2 |
| CONST. | 2016 | 80003-4260-04 | 2B |
| | | | |
| | | | |

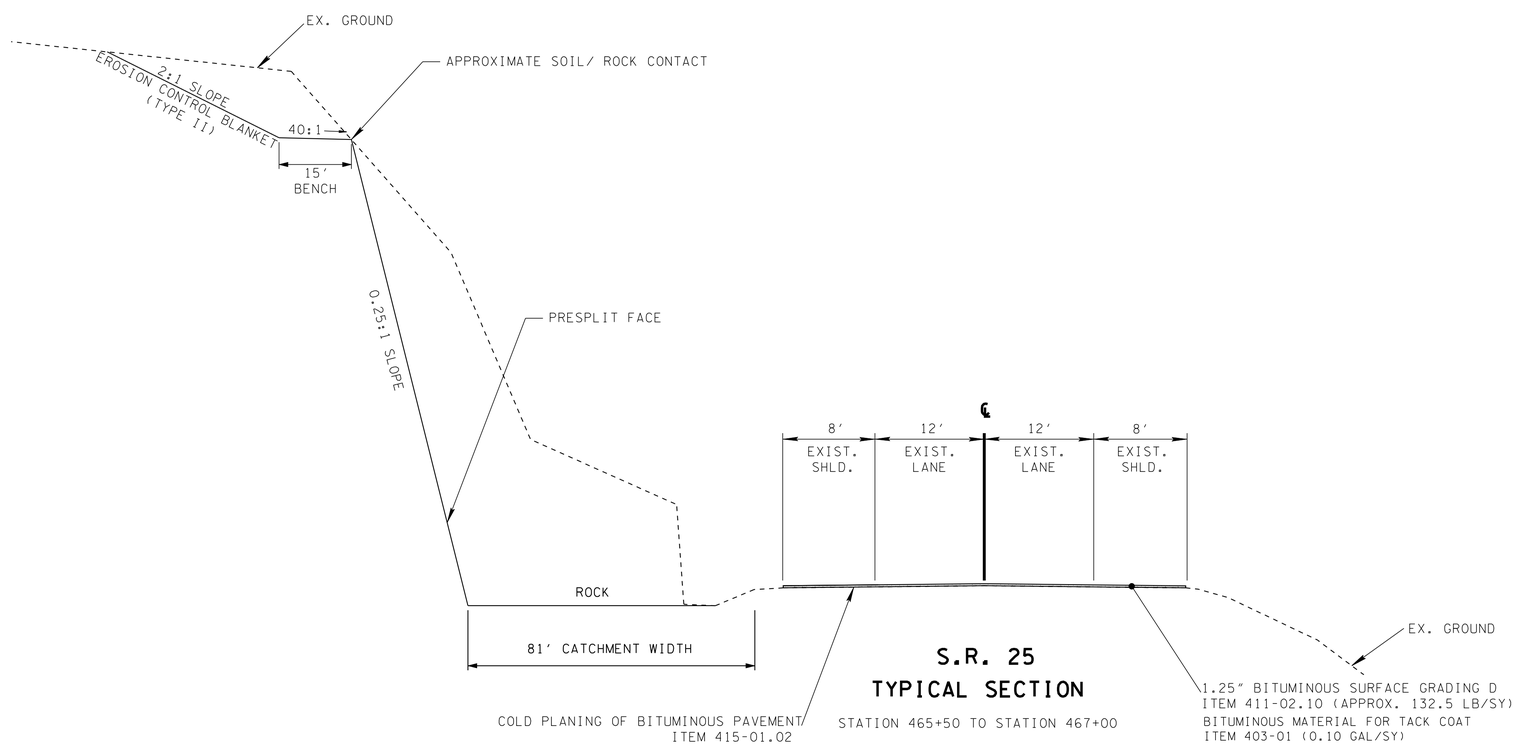
REV. 05-12-16: REVISED CATCHMENT AND BENCH WIDTHS FOR STA. 453+00 TO STA. 465+50.




NOTES:
CATCHMENT WIDTHS WILL TRANSITION ON A RATIO OF 4 FEET HORIZONTAL PER 100 FOOT STATION INTERVAL OR AS DIRECTED BY THE ENGINEER.

MATCH EXISTING PAVEMENT TAPER FROM STA. 453+00 TO APPROXIMATE STA. 456+40±.

**S.R. 25**
**TYPICAL SECTION**
STATION 453+00 TO STATION 465+50




**S.R. 25**
**TYPICAL SECTION**
STATION 465+50 TO STATION 467+00

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

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS AND PAVEMENT SCHEDULE

9/14/2016
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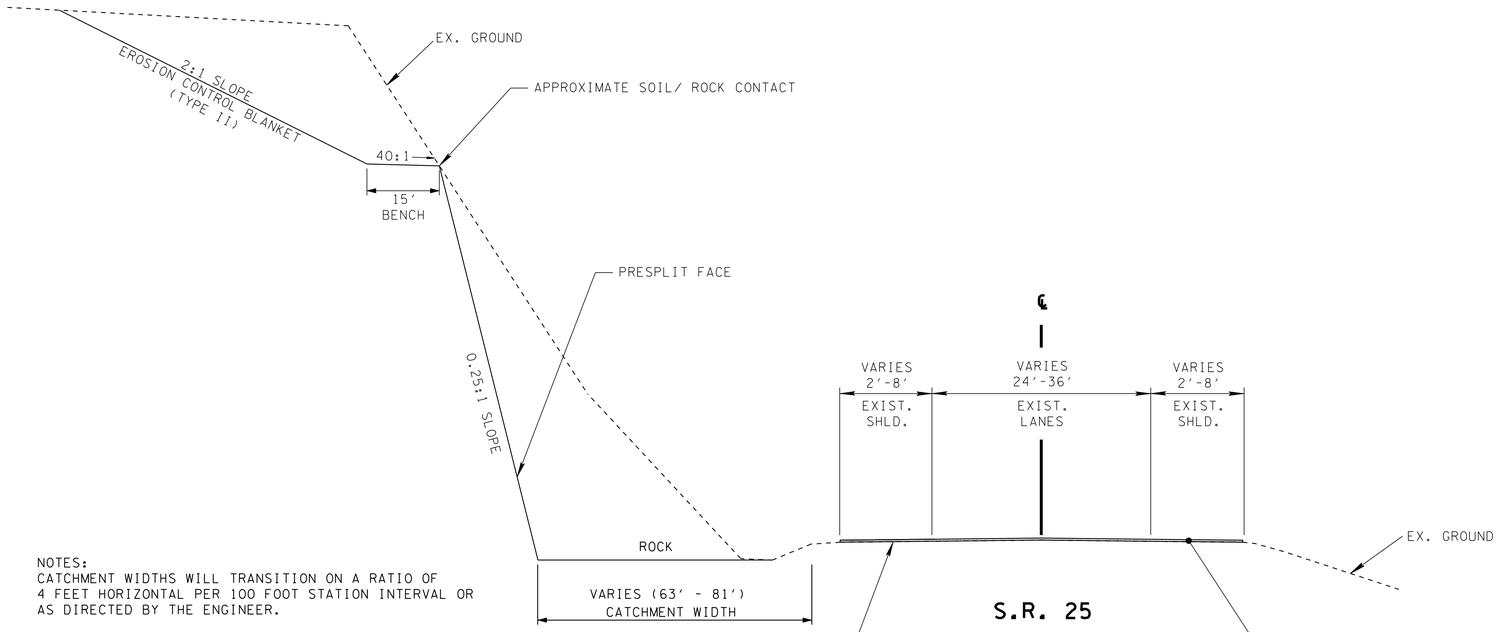
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 2A |
| CONST. | 2016 | 80003-4260-04 | 2B1 |
| | | | |
| | | | |

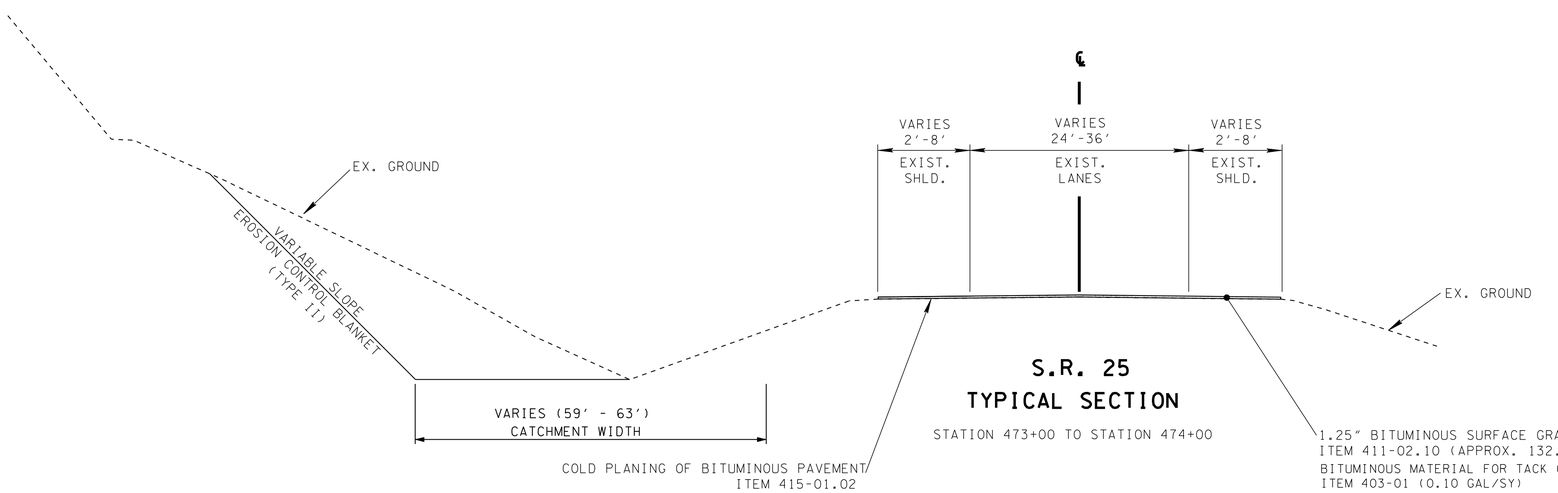



NOTES:
CATCHMENT WIDTHS WILL TRANSITION ON A RATIO OF 4 FEET HORIZONTAL PER 100 FOOT STATION INTERVAL OR AS DIRECTED BY THE ENGINEER.

MATCH EXISTING PAVEMENT TAPER FROM APPROXIMATE STA. 470+40± TO STA. 472+10±.

## S.R. 25
## TYPICAL SECTION

STATION 467+00 TO STATION 473+00




## S.R. 25
## TYPICAL SECTION

STATION 473+00 TO STATION 474+00

**UNOFFICIAL SET**

**NOT FOR BIDDING**

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS AND PAVEMENT SCHEDULE

9/14/2016
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 2B |
| CONST. | 2016 | 80003-4260-04 | 2B2 |
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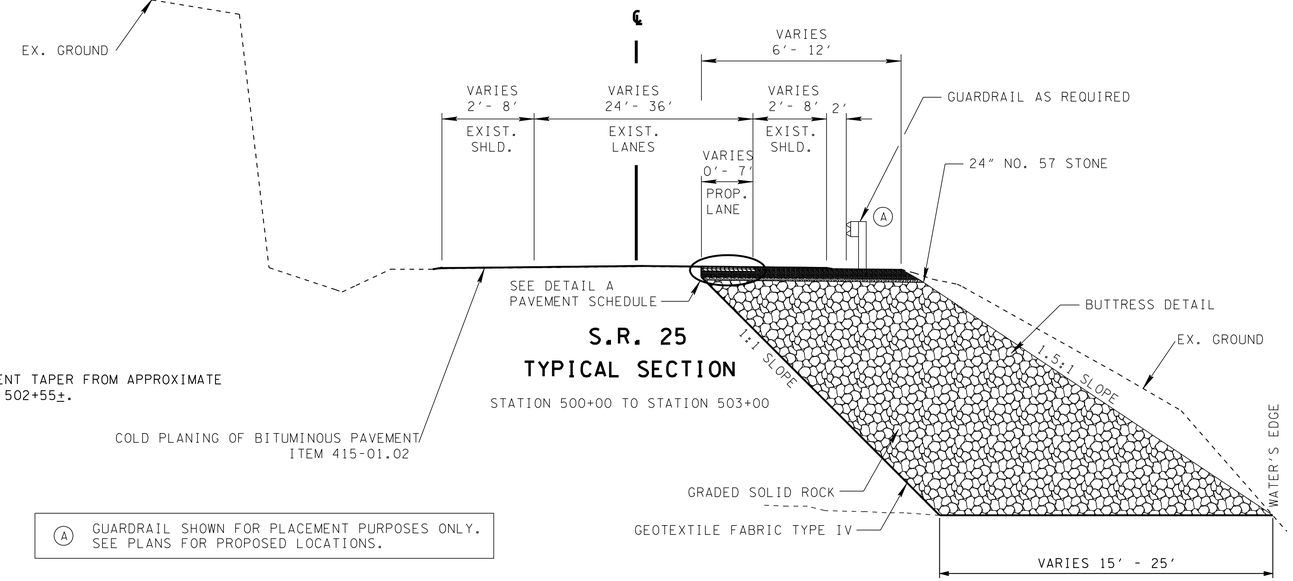


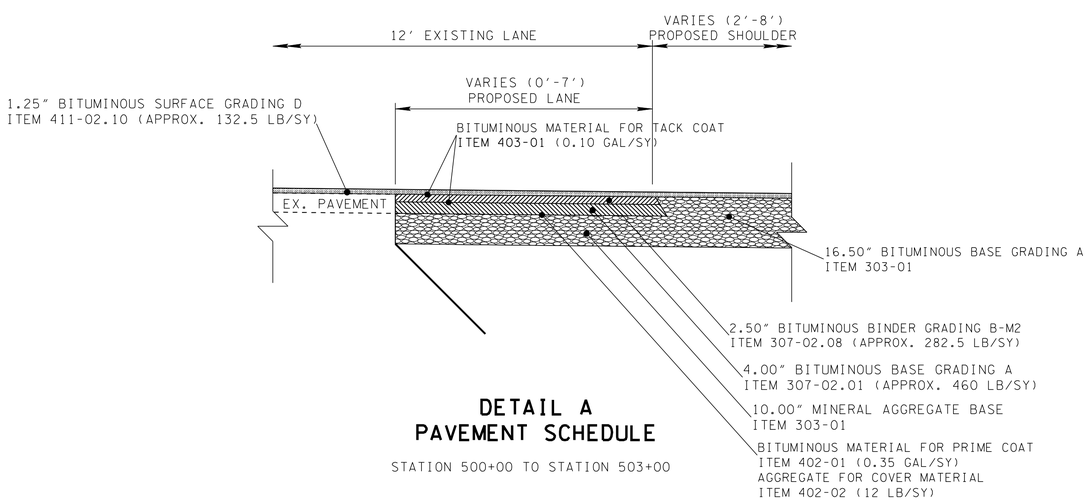

NOTES:
MATCH EXISTING PAVEMENT TAPER FROM APPROXIMATE STA. 500+40± TO STA. 502+55±.

COLD PLANING OF BITUMINOUS PAVEMENT
ITEM 415-01.02

(A) GUARDRAIL SHOWN FOR PLACEMENT PURPOSES ONLY. SEE PLANS FOR PROPOSED LOCATIONS.

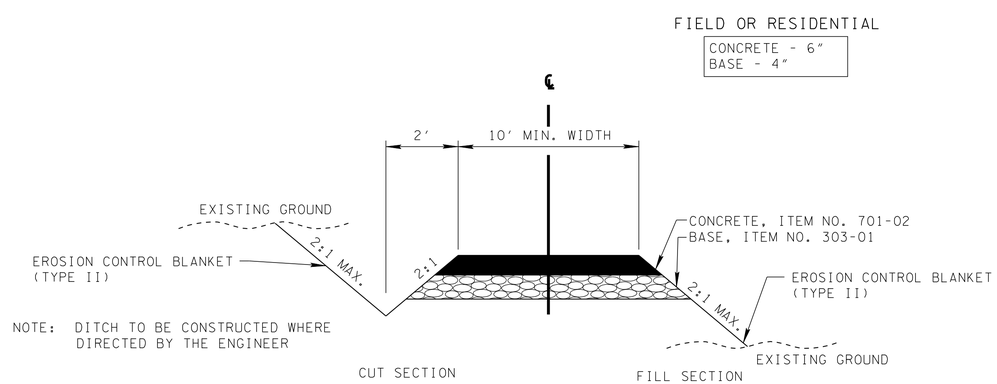
## S.R. 25
## TYPICAL SECTION

STATION 500+00 TO STATION 503+00




## DETAIL A
## PAVEMENT SCHEDULE

STATION 500+00 TO STATION 503+00




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**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS AND PAVEMENT SCHEDULE

9/14/2016
h:\ll9605\dgn\SMSR25-002B2.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2016 | 80003-4260-04 | 2C |
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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) THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY SAME. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.

## SEEDING AND SODDING

(1) ITEM NO. 801-02.01, CROWN VETCH MIXTURE (WITHOUT MULCH), SHALL BE USED ON SLOPES 3:1 OR STEEPER AND OTHER AREAS AS INDICATED IN THE PLANS THAT ARE INACCESSIBLE FOR MOWING.

## GUARDRAIL

(1) THE CONTRACTOR SHALL NOT REMOVE ANY SECTIONS OF EXISTING GUARDRAIL TO REWORK SHOULDERS OR FLATTEN SLOPES UNTIL THE ENGINEER CONCURS IN THE NECESSITY OF REMOVAL DUE TO CONSTRUCTION REQUIREMENTS AND THE APPROPRIATE WARNING DEVICES ARE INSTALLED. THE PROPOSED GUARDRAIL, INCLUDING ANY ANCHOR SYSTEM, SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD. NO PAYMENT WILL BE MADE FOR A SECTION OF PROPOSED GUARDRAIL, INCLUDING ANCHORS, UNTIL IT IS COMPLETE IN PLACE.

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

## DRAINAGE

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

(2) EXCAVATION FOR SIDE DRAINS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PIPE.

## FENCING

(1) THE CONTRACTOR SHALL GIVE THE AFFECTED PROPERTY OWNERS TWO WEEKS NOTICE PRIOR TO CUTTING FENCES.

## MISCELLANEOUS

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

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

## PAVEMENT MARKINGS

## TEMPORARY PAVEMENT MARKING ON INTERMEDIATE LAYERS

(1) TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAYS WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.20, PAINTED PAVEMENT MARKING (6" LINE), L.M.

## FINAL PAVEMENT MARKING

(2) 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.

(3) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 6" SPRAY THERMOPLASTIC (60 mil) INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-13.02, SPRAY THERMO PVMT MRKNG (60 mil) (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

(4) THE PAVEMENT MARKING ON THE LANE SHIFT FORLANE LINES 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. 716-05.20 PAINTED PAVEMENT MARKING (6IN LINE), LIN. MI.

(5) BEFORE OPENING THE LANE SHIFT TO TRAFFIC, THE TRANSITIONAL MARKINGS ON THE EXISTING ROADWAY MUST BE IN PLACE. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 712-09.01, REMOVABLE PAVEMENT MARKING LINE, LIN. FT. 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

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

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

(3) 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.

## RESURFACING

(4) WHERE DIRECTED BY THE TDOT ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO SHAPE PUBLIC SIDE ROADS, BUSINESS ENTRANCES, AND PRIVATE DRIVES, AS WELL AS CLEANING OF EXISTING DRAINS BEFORE PLACING MATERIALS. ALL COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

(5) ALL PUBLIC SIDE ROADS SHALL BE PAVED ONE PAVER WIDTH THROUGH THE INTERSECTION AS A MINIMUM. A SATISFACTORY TRANSITION FROM THE NEW PAVEMENT TO THE EXISTING GRADE OF THE INTERSECTING PUBLIC ROAD OR BUSINESS ENTRANCE SHALL BE PROVIDED. SHOULD THE PAVEMENT OF THE INTERSECTING PUBLIC ROAD BE DISTRESSED, THE RESURFACING WIDTH MAY BE INCREASED TO THE NORMAL RIGHT OF WAY LINE.

(6) PRIVATE DRIVEWAYS, FIELD ENTRANCES, AND BUSINESS ENTRANCES WILL BE RESURFACED A PAVER WIDTH (LANE WIDTH) AS A MINIMUM. A PAVEMENT TAPER TO TRANSITION THE NEW PAVEMENT SHALL BE REQUIRED, IT SHALL BE BASED ON AN ADDITIONAL ONE FOOT OF WIDTH PER ONE INCH DEPTH OF PAVEMENT. IF THE SHOULDER IS NARROW ENOUGH THAT THE SUM OF THE SHOULDER AND THE TRANSITION ARE LESS THAN A PAVER WIDTH, THE TRANSITION SHALL OCCUR WITHIN THE PAVER WIDTH. IF THE SUM OF THE SHOULDER AND THE TRANSITION IS GREATER THAN A PAVER WIDTH (LANE WIDTH), THE TRANSITION SHALL OCCUR OUTSIDE OF THE PAVER WIDTH.

(7) IN ALL CASES, THE LENGTH OF THE PAVEMENT TRANSITION, THE THICKNESS AND WIDTH OF THE RESURFACING AND ANY ADDITIONAL PAVEMENT MATERIALS SHALL BE AS DIRECTED BY THE TDOT ENGINEER.

## GRADED SOLID ROCK

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

## SIGNING

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

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

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

## SIGNALIZATION

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

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

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

## CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

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

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

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

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

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

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

9/14/2016
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2016 | 80003-4260-04 | 2C1 |
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# GENERAL NOTES (CONT'D)

(6) THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF AN 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.

## EROSION PREVENTION AND SEDIMENT CONTROL

### NATURAL RESOURCES

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

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

(3) INSTREAM EPSC DEVICES REQUIRE THE TDOT ENVIRONMENTAL DIVISION, PERMITS SECTION REVIEW AND MUST BE PROCESSED BY THE PERMITS SECTION TO OBTAIN WATER QUALITY PERMITS.

(4) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS AND EPHEMERAL, INTERMITTENT, AND PERENNIAL STREAMS, SHALL BE ONLY AS DEPICTED ON THE CONSTRUCTION PLANS AND/OR AS SO SPECIFIED IN THE WATER QUALITY PERMITS, IF APPLICABLE. ANY DISCREPANCIES BETWEEN PLANS AND PERMITS SHALL BE BROUGHT TO THE ATTENTION OF THE TDOT RESPONSIBLE PARTY AS SOON AS POSSIBLE. ADDITIONAL PERMITS REQUIRED BY THE CONTRACTOR'S METHOD OF OPERATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN AFTER RECEIVING THE APPROVAL OF THE TDOT ENVIRONMENTAL DIVISION, PERMITS SECTION.

(5) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING, NOT TO EXCEED THE WIDTH SPECIFIED IN THE STANDARD DRAWING.

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

(7) HEAVY EQUIPMENT WORKING IN WETLANDS WITH PERMITTED TEMPORARY IMPACTS SHALL BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE AND COMPACTION UNLESS SPECIFICALLY ADDRESSED IN THE CONSTRUCTION PLANS. ANY MATS AND OTHER MEASURES USED FOR HEAVY EQUIPMENT SHALL BE REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED. ALL AFFECTED AREAS SHOULD BE RETURNED TO PRE-EXISTING CONDITIONS.

(8) WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS SPECIFICALLY PROVIDED FOR IN THE CONSTRUCTION PLANS AND PERMITS.

(9) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS BEFORE ALL CONSTRUCTION AND MAINTENANCE ACTIVITIES TO ENSURE THAT ENVIRONMENTAL FEATURES (E.G., STREAMS, WETLANDS, SPRINGS, ETC.) ARE NOT IMPACTED BEYOND PERMITTED LOCATIONS. IF THE CONTRACTOR OR TDOT INSPECTOR IS UNSURE OF THE IDENTITY OF AN ENVIRONMENTAL FEATURE, THE INSPECTOR SHALL CONTACT THE TDOT REGION ENVIRONMENTAL TECH GROUP IMMEDIATELY.

### SPECIES

(10) NO ACTIVITY MAY SUBSTANTIALLY DISRUPT THE MOVEMENT OF THOSE SPECIES OF AQUATIC LIFE INDIGENOUS TO THE WATER BODY, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA.

### INSPECTION, MAINTENANCE & REPAIR

(11) REFER TO THE STORM WATER POLLUTION AND PREVENTION PLAN SHEETS (S-1) FOR SWPPP, PERMITS, AND RECORDS NOTES.

### PERMITS, PLANS & RECORDS

(12) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO ARCHAEOLOGY, ECOLOGY, HISTORICAL, HAZARDOUS MATERIALS, AIR AND NOISE, TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING ANY MATERIAL AND STAGING AREAS AND THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS TO BE USED. ANY SUCH PERMITS SHALL BE SUPPLIED TO THE TDOT PROJECT RESPONSIBLE PARTY PRIOR TO THE USE OF THE PERMITTED AREA(S).

(13) ANY DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE TDOT PROJECT RESPONSIBLE PARTY. 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.

(14) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE TDOT PERMIT SECTION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS ARE NEEDED. THE ROADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.

(15) THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATE. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE TDOT PROJECT RESPONSIBLE PARTY TO COMMENCE PERMIT RENEWAL PROCESS

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

### GOOD HOUSEKEEPING MEASURES & WASTE DISPOSAL

(17) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS SHALL BE REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFFSITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EPSC SHALL BE REMOVED FROM THE SITE.

(18) 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. APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED.

(19) CONTRACTORS SHALL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED, NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE, AND PROPERLY SIGNED. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS SHALL NOT BE PERMITTED ONSITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.

(20) WHEEL WASH WATER SHALL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER SHALL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM.

(21) IF PORTABLE SANITARY FACILITIES ARE PROVIDED ON CONSTRUCTION SITES, SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY REGULATIONS. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.

(22) ONLY CONSTRUCTION PRODUCTS NEEDED SHALL BE STORED ONSITE BY THE CONTRACTOR. THE CONTRACTOR SHALL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING SHALL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR'S RESPONSIBLE PARTY SHALL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL.

(23) WHEN POSSIBLE, ALL PRODUCTS SHALL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFFSITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS SHALL BE FOLLOWED.

(24) ALL PAINT CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.

(25) ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.

(26) OPEN BURNING IS PROHIBITED UNLESS IT IS SPECIFICALLY ALLOWED BY LAW. IF ALLOWED, NATURAL VEGETATION, TREES, AND UNTREATED LUMBER SHALL BE THE ONLY MATERIALS THAT CAN BE OPEN BURNED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE STATE AND LOCAL PERMITS PRIOR TO ANY BURNING.

(27) DISPOSAL OF ONSITE VEGETATION AND TREES BY CHIPPING THEM INTO MULCH IS PREFERABLE TO OPEN BURNING. THIS MULCH MAY BE USED AS AN ONSITE SOIL STABILIZATION MEASURE WHERE APPROPRIATE.

(28) WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR. IMPACTS TO WATERS OF THE STATE/U.S. SHALL BE AVOIDED IF POSSIBLE. IF UNAVOIDABLE, THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S), CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

### SUPPORT ACTIVITIES

(29) MATERIALS AND STAGING AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY ENVIRONMENTAL PERMITS, OBTAINED SOLELY BY THE CONTRACTOR. THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATES. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE TDOT PROJECT RESPONSIBLE PARTY TO COMMENCE PERMIT RENEWAL PROCESS.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

9/14/2016
h:\11960\5\dgn\SMSR25-002C1.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2016 | 80003-4260-04 | 2D |
| | | | |
| | | | |
| | | | |

# 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.

## GRADED SOLID ROCK

(1) 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 USING AN ACCEPTABLE METHOD THAT PRODUCES THE REQUIRED GRADATION. WHEN THE MATERIAL IS SUBJECTED TO FIVE ALTERATIONS OF THE SODIUM SULFATE SOUNDNESS TEST ACCORDING TO AASHTO T 104, THE WEIGHTED PERCENTAGE OF LOSS SHALL BE NOT MORE THAN 12. THE ROCK SHALL BE APPROVED BY A REPRESENTATIVE OF THE DIVISION OF MATERIALS AND TESTS BEFORE USE.

## SIGNALIZATION

(1) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INTIAL SIGNAL TIMINGS.

## EROSION PREVENTION AND SEDIMENT CONTROL

## ENVIRONMENTAL

(1) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES OFFICE SHALL BE INVITED TO ALL PRE-CONSTRUCTION MEETINGS.

## ECOLOGY

(1) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE WILL ADVISE THE CONTRACTOR DURING THE PRE-CONSTRUCTION MEETING CONCERNING WHEN ENVIRONMENTAL DIVISION PERSONNEL OR DESIGNATED CONSULTANT WILL NEED TO BE ON-SITE FOR WORK BEING DONE WHICH COULD AFFECT THE STREAM OR SPECIES.

(2) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE SHALL ADVISE THE CONTRACTOR DURING THE PRE-CONSTRUCTION MEETING WHEN ENVIRONMENTAL DIVISION PERSONNEL OR A DESIGNATED CONSULTANT WILL NEED TO BE ONSITE FOR WORK BEING DONE WHICH COULD AFFECT WATERS OF THE STATE/U.S. OR SPECIES.

(3) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE SHALL ATTEND THE PRE-CONSTRUCTION MEETING FOR ALL PROJECTS WHICH HAVE THREATENED OR ENDANGERED SPECIES OR CRITICAL HABITAT PROXIMAL TO SCHEDULED WORK. THIS WILL PROVIDE THE OPPORTUNITY TO ENSURE THAT PERSONNEL INCLUDING THE CONTRACTOR'S PERSONNEL AND SUBCONTRACTORS ARE MADE AWARE OF THE NECESSARY PRECAUTIONS THAT MUST BE FOLLOWED.

(4) ALL PROJECTS WITH LEGALLY PROTECTED SPECIES OR CRITICAL HABITAT IDENTIFIED SHALL HAVE MEASURES IN PLACE TO CONTAIN CONCRETE DUST, CEMENT DUST AND ALL OTHER MATERIALS. THESE MATERIALS ARE NOT ALLOWED TO ENTER WATERS OF THE STATE/U.S.

# SCOPE OF WORK

THE WORK FOR THIS PROJECT CONSISTS OF THE PRE-SPLITTING, DRILLING, BLASTING AND REMOVAL OF THE ROCK CUT SECTION ALONG SR 25 EAST OF THE NORTHBOUND LANES FROM APPROXIMATE LM 8.5 TO LM 8.9. IN ADDITION, THE WORK FOR THIS PROJECT CONSISTS OF CONSTRUCTING A ROCK BUTTRESS ALONG SR 25 WEST OF THE SOUTHBOUND LANES AT APPROXIMATE LM 9.6.

THE PROJECT INCLUDES THE GRADING, DRAINAGE, PAVING, SIGNING AND STRIPING FOR BOTH THE ROCKFALL MITIGATION AND SLIDE MITIGATION SITES ALONG SR 25 AS INDICATED ON THE TYPICAL CROSS-SECTIONS AND PLAN SHEETS OR AS DIRECTED BY THE TDOT SUPERVISOR.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SPECIAL NOTES

9/14/2016
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2016 | 80003-4260-04 | 2E |
| | | | |
| | | | |
| | | | |

## ESTIMATED GRADING QUANTITIES

| STATION TO STATION | ROAD & DRAINAGE EXC. (UNCL.) | BORROW EXCAVATION | | EXCESS EXC. WASTE |
|---|---|---|---|---|
| | C.Y. | GSR - C.Y. | #57 STONE - C.Y. | C.Y. |
| | | | | |
| 453+00 TO 474+00 | 280161.53 | | | |
| 500+00 TO 503+00 | 5879.36 | 5008.18 | 269.88 | |
| ENTIRE PROJECT | | | | 323582.46 |
| | | | | |
| **TOTALS** | **286040.89** | **5008.18** | **269.88** | **323582.46** |

## PROPOSED GUARDRAIL

| SHEET NO. | LOCATION | SIDE | | STATION | | GUARDRAIL SINGLE TYPE 2 705-02.03 (L.F.) | REMARKS |
|---|---|---|---|---|---|---|---|
| | | LT | RT | FROM | TO | | |
| 6A | SR 25 | | X | 499+80 | 503+50 | 375 | |
| | | | | | | | |
| **TOTALS** | | | | | | **375** | |

## PAVEMENT QUANTITIES

| LOCATION | PAY ITEMS | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 303-01 (TON) | 307-02.01 (TON) | 307-02.08 (TON) | 402-01 (TON) | 402-02 (TON) | 403-01 (TON) | 411-02.10 (TON) | 415-01.02 (SY) |
| STA. 453+00 TO STA. 465+50 | | | | | | 2.5 | 382.3 | 5770.1 |
| STA. 465+50 TO STA. 467+00 | | | | | | 0.3 | 46.2 | 697.3 |
| STA. 467+00 TO STA. 474+00 | | | | | | 1.4 | 213.3 | 3220.4 |
| STA. 500+00 TO STA. 503+00 | 238.5 | 26.8 | 16.5 | 0.5 | 1.8 | 0.5 | 89.7 | 1051.6 |
| PRIVATE DRIVES | 33.4 | | | | | | | |
| | | | | | | | | |
| **TOTALS** | **271.9** | **26.8** | **16.5** | **0.5** | **1.8** | **4.7** | **731.5** | **10739.4** |

## SIDE DRAIN TABULATION

| STATION | LOCATION | | DESCRIPTION | SURFACE WIDTH | 18" SIDE DRAIN (RCP CLASS III OR CMP 16 GA. OR HDPE OR PVC OR SRTRP FILL HEIGHT < OR = 10 FT. | REMARKS |
|---|---|---|---|---|---|---|
| | LT | RT | | (L.F.) | (L.F.) | |
| 453+80 | X | | PRIVATE | 10 | 36 | |
| **TOTALS** | | | | | **36** | |

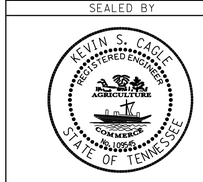
## R.O.W. MARKERS

| SHEET NO. | QUANTITIES | | | |
|---|---|---|---|---|
| | "A" | "B" | "C" | TOTALS |
| 4 | 6 | 0 | 0 | **6** |
| 5 | 6 | 1 | 1 | **8** |
| | | | | |
| **TOTALS** | **12** | **1** | **1** | **14** |

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY




STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES

9/14/2016
h:\ll9605\dgn\SMSR25-002E.sht

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

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 3 |
| CONST. | 2016 | 80003-4260-04 | 3 |
| | | | |
| | | | |

## RIGHT – OF – WAY

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

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

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

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

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

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

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

## 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

TELEPHONE

AT&T
333 COMMERCE STREET ROOM 23C 142
NASHVILLE, TN 37201
KIM BEAN
KB1078@ATT.COM
PHONE: 615-214-8814

WATER

TOWN OF CARTHAGE
314 SPRING STREET
CARTHAGE, TN 37030
CHARLES MASSEY
CHARLESMASSEY36@GMAIL.COM
PHONE: 615-735-1882

WATER

25 UTILITY DISTRICT
122 DIXON SPRINGS HWY #2
CARTHAGE, TN 37030
PHILLIP HESSON
25UTILITY@GMAIL.COM
PHONE: 615-735-9895

GAS

SPECTRA ENERGY
555 MARRIOT DRIVE
SUITE 600
NASHVILLE, TN 37214
ERIC MCNEELY
EMCNEELY@SPECTRAENERGY.COM
PHONE: 615-872-5182
CELL: 615-852-9967

GAS

MIDDLE TENNESSEE NATURAL GAS
1036 W. BROAD STREET
SMITHVILLE, TN 37166
MATT STENNETT, PE
MSTENNETT@MTNG.COM
PHONE: 615-597-0515
CELL: 931-239-9111

CABLE

COMCAST
2501 MCGAVOCK PIKE
NASHVILLE, TN 37214
LARRY K. WINBURN
LARRY_WINBURN@CABLE.COMCAST.COM
PHONE: 615-244-7462 X1115140
CELL: 615-295-9069

ELECTRIC

UPPER CUMBERLAND ELECTRIC MEMBERSHIP CORP.
138 GORDONSVILLE HIGHWAY
CARTHAGE, TN 37030
ROGER WILLIAMS
RWILLIAMS@UCEMC.COM
PHONE: 615-735-2909
CELL: 931-364-4370

**UNOFFICIAL SET**

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DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY NOTES, UTILITY NOTES AND UTILITY OWNERS

9/14/2016
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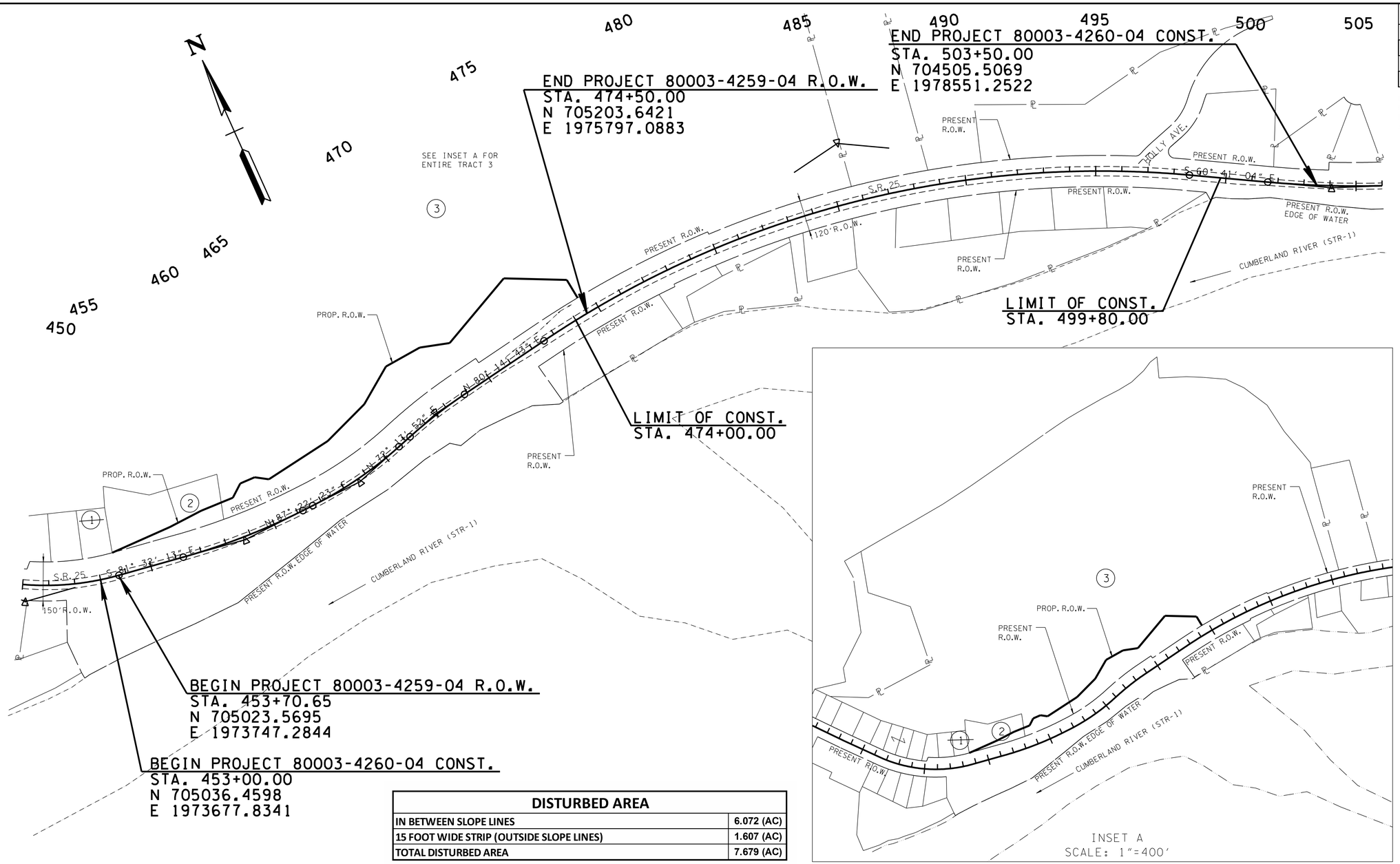
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 3A |
| CONST. | 2016 | 80003-4260-04 | 3A |
| | | | |
| | | | |

REV. 05-12-16: REVISED R.O.W. PROJECT LIMITS FOR TRACT 2. ELIMINATED R.O.W. PROJECT LIMITS FOR TRACT 1. UPDATED R.O.W. ACQUISITION TABLE AND DISTURBED AREA DATA.




| DISTURBED AREA | |
|---|---|
| IN BETWEEN SLOPE LINES | 6.072 (AC) |
| 15 FOOT WIDE STRIP (OUTSIDE SLOPE LINES) | 1.607 (AC) |
| TOTAL DISTURBED AREA | 7.679 (AC) |

## 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 | JONATHAN G. DUGDALE | 046 | 077.00 | 233 | 710 | 0.472 | | 0.472 | | | | 0.472 | | | | |
| 2 | BILLY T. ANDERSON | 046 | 078.00 | 18 | 426 | 2.340 | | 2.340 | 0.355 | | 0.355 | 1.985 | | | | |
| 3 | MID-SOUTH STONE, INC. | 046 | 042.01 | 270 | 459 | 150.370 | | 150.370 | 4.702 | | 4.702 | 145.668 | | | | |
| | | | | | | | | | | | | | | | | |
| ACQUISITION TOTALS | | | | | | | | | 5.057 | | 5.057 | | | | | |

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

KEVIN S. CAGLE REGISTERED ENGINEER AGRICULTURE COMMERCE No. 109545 STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00004 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY MAP AND RIGHT-OF-WAY ACQUISITION TABLE

9/14/2016
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| REFERENCE POINTS INFORMATION | | | | | |
|---|---|---|---|---|---|
| POINT NAME | STATION | OFFSET | NORTHING | EASTING | ELEVATION |
| S7 | 451+51.97 | 31.83'RT | 705048.7440 | 1973524.8450 | 565.89 |
| S8 | 456+99.41 | 26.90'RT | 704949.4410 | 1974069.3810 | 553.96 |

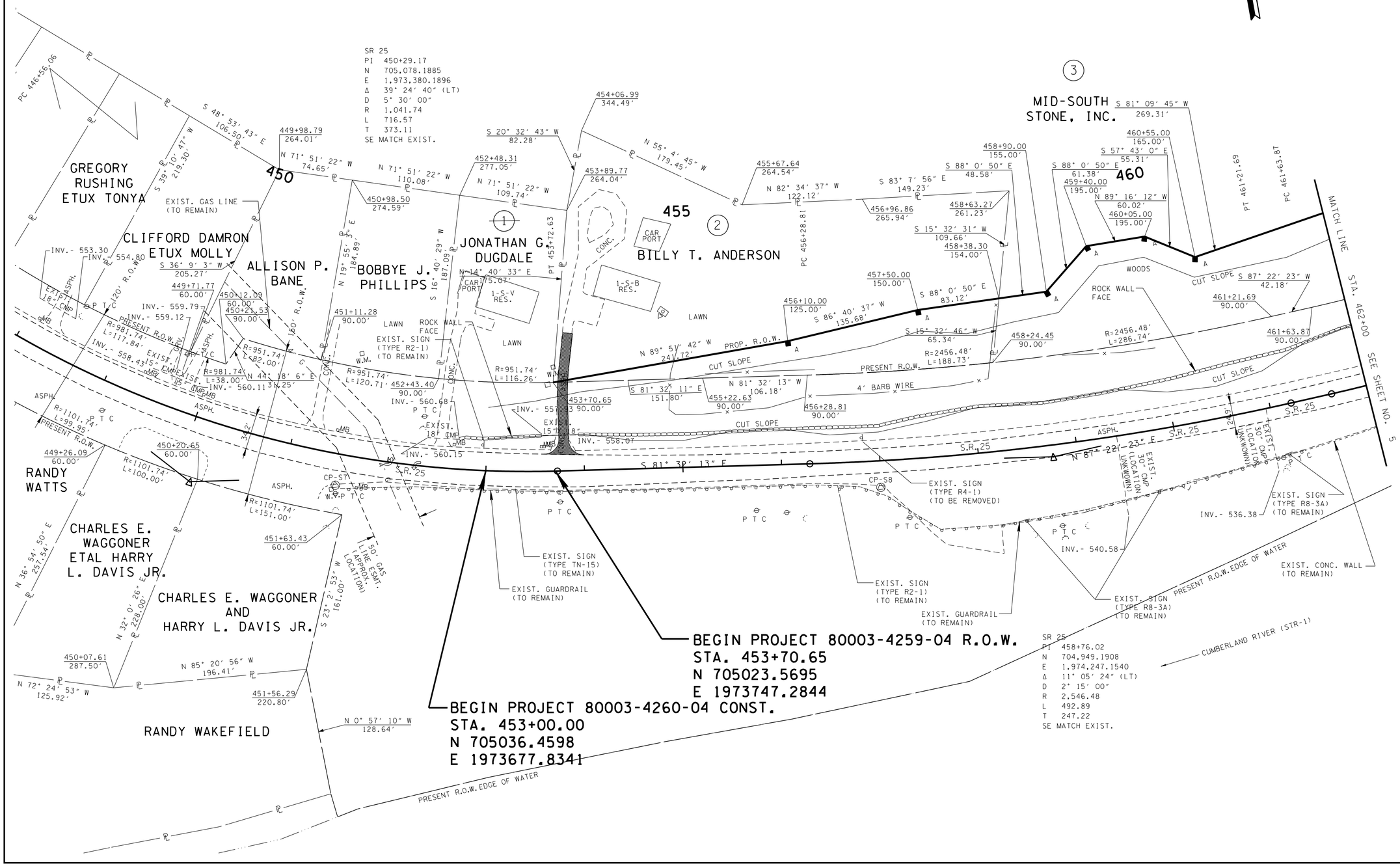
NOTES:

THE CONTRACTOR IS TO CONTACT SPECTRA ENERGY PRIOR TO ANY BLASTING OPERATIONS IN THE VICINITY OF THE 4" GAS LINE LOCATED AT APPROXIMATE STA. 451+92. SEE SHEET 3 FOR ADDITIONAL INFORMATION.

THERE IS A WATER LINE MISSING FROM THE PLANS THIS SHEET. SIZE AND LOCATION COULD NOT BE VERIFIED BY UTILITY OWNER. THE CONTRACTOR IS TO CONTACT 25 UTILITY DISTRICT PRIOR TO COMMENCING WORK. SEE SHEET 3 FOR ADDITIONAL INFORMATION.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 4 |
| CONST. | 2016 | 80003-4260-04 | 4 |
| | | | |
| | | | |

REV. 05-12-16: REVISED SLOPE LIMITS FROM STA. 453+70.65 TO STA. 456+00. REVISED R.O.W. PROJECT LIMITS FOR TRACT 2, ELIMINATED R.O.W. PROJECT LIMITS AND PROPOSED DRIVEWAY FOR TRACT 1. REVISED NOTES.




**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

KEVIN S. CAGLE REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 109665 STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00004 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

BEGIN PROJ. TO STA. 462+00

SCALE: 1"=50'

9/14/2016
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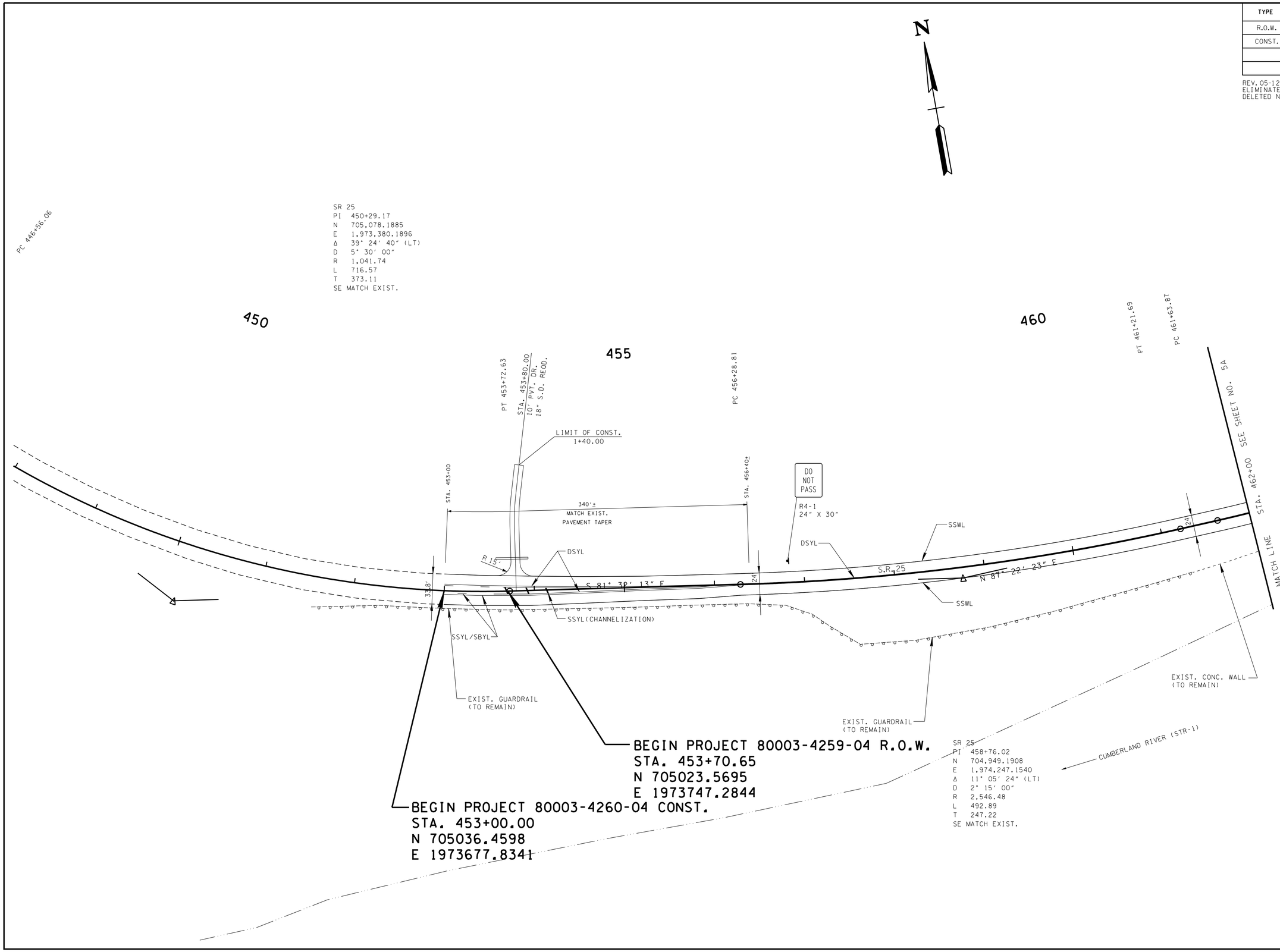
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 4A |
| CONST. | 2016 | 80003-4260-04 | 4A |
| | | | |
| | | | |

REV. 05-12-16: REVISED R.O.W. PROJECT LIMITS. ELIMINATED PROPOSED DRIVEWAY FOR TRACT 1. DELETED NOTES.




SR 25
PI 450+29.17
N 705,078.1885
E 1,973,380.1896
Δ 39° 24' 40" (LT)
D 5° 30' 00"
R 1,041.74
L 716.57
T 373.11
SE MATCH EXIST.

SR 25
PI 458+76.02
N 704,949.1908
E 1,974,247.1540
Δ 11° 05' 24" (LT)
D 2° 15' 00"
R 2,546.48
L 492.89
T 247.22
SE MATCH EXIST.

# UNOFFICIAL SET

## NOT FOR BIDDING

SEALED BY

KEVIN S. CAGLE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 102545
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00004 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

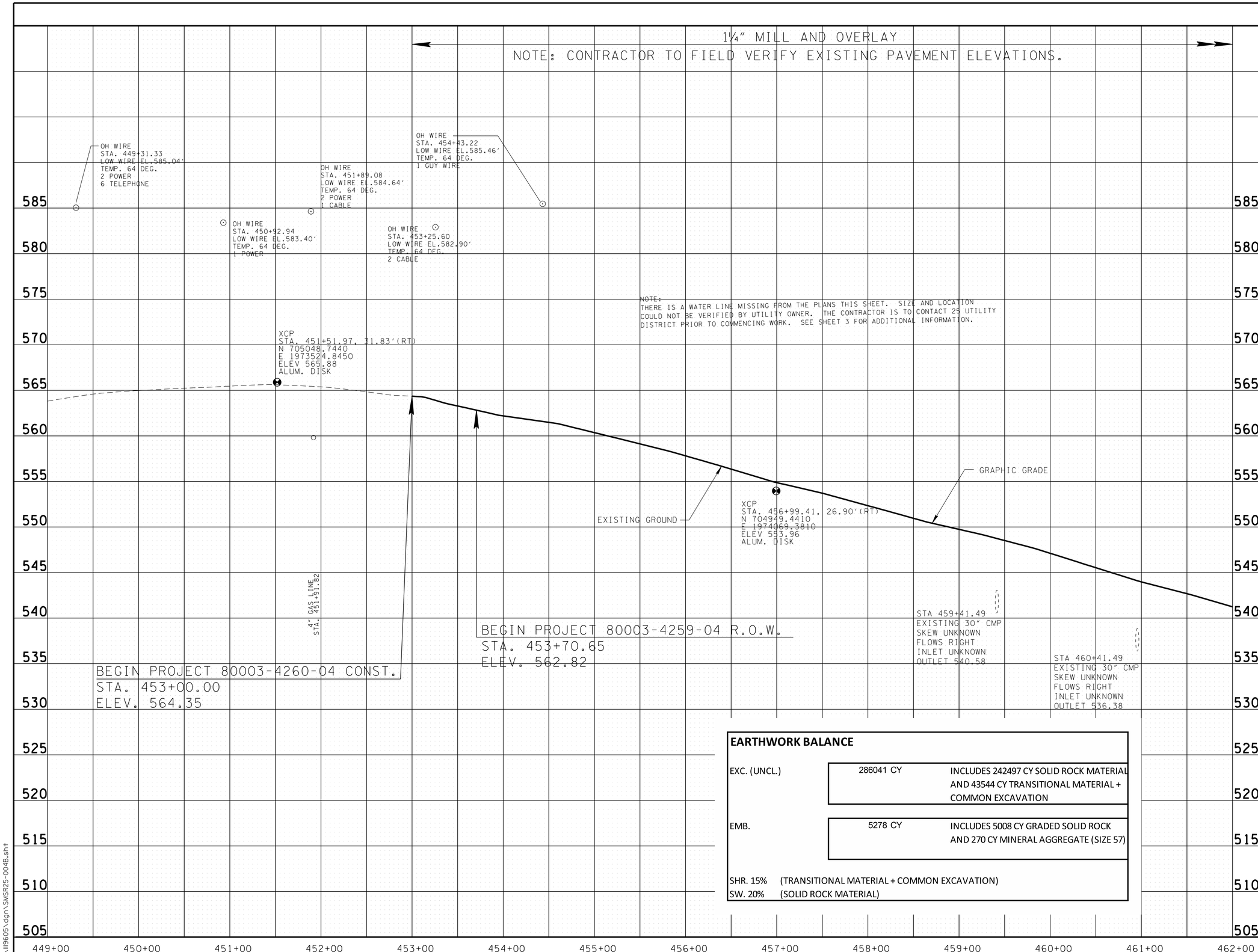
BEGIN PROJ. TO STA. 462+00

SCALE: 1"=50'

9/14/2016
h:\ll9605\dgn\SMSR25-004A.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 4B |
| CONST. | 2016 | 80003-4260-04 | 4B |
| | | | |
| | | | |

REV. 05-12-16: REVISED R.O.W. PROJECT LIMITS. UPDATED EARTHWORK BALANCE DATA.




**EARTHWORK BALANCE**

| | | |
|---|---|---|
| EXC. (UNCL.) | 286041 CY | INCLUDES 242497 CY SOLID ROCK MATERIAL AND 43544 CY TRANSITIONAL MATERIAL + COMMON EXCAVATION |
| EMB. | 5278 CY | INCLUDES 5008 CY GRADED SOLID ROCK AND 270 CY MINERAL AGGREGATE (SIZE 57) |

SHR. 15% (TRANSITIONAL MATERIAL + COMMON EXCAVATION)
SW. 20% (SOLID ROCK MATERIAL)

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

KEVIN S. CAGLE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 109848
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE

BEGIN PROJ. TO STA. 462+00

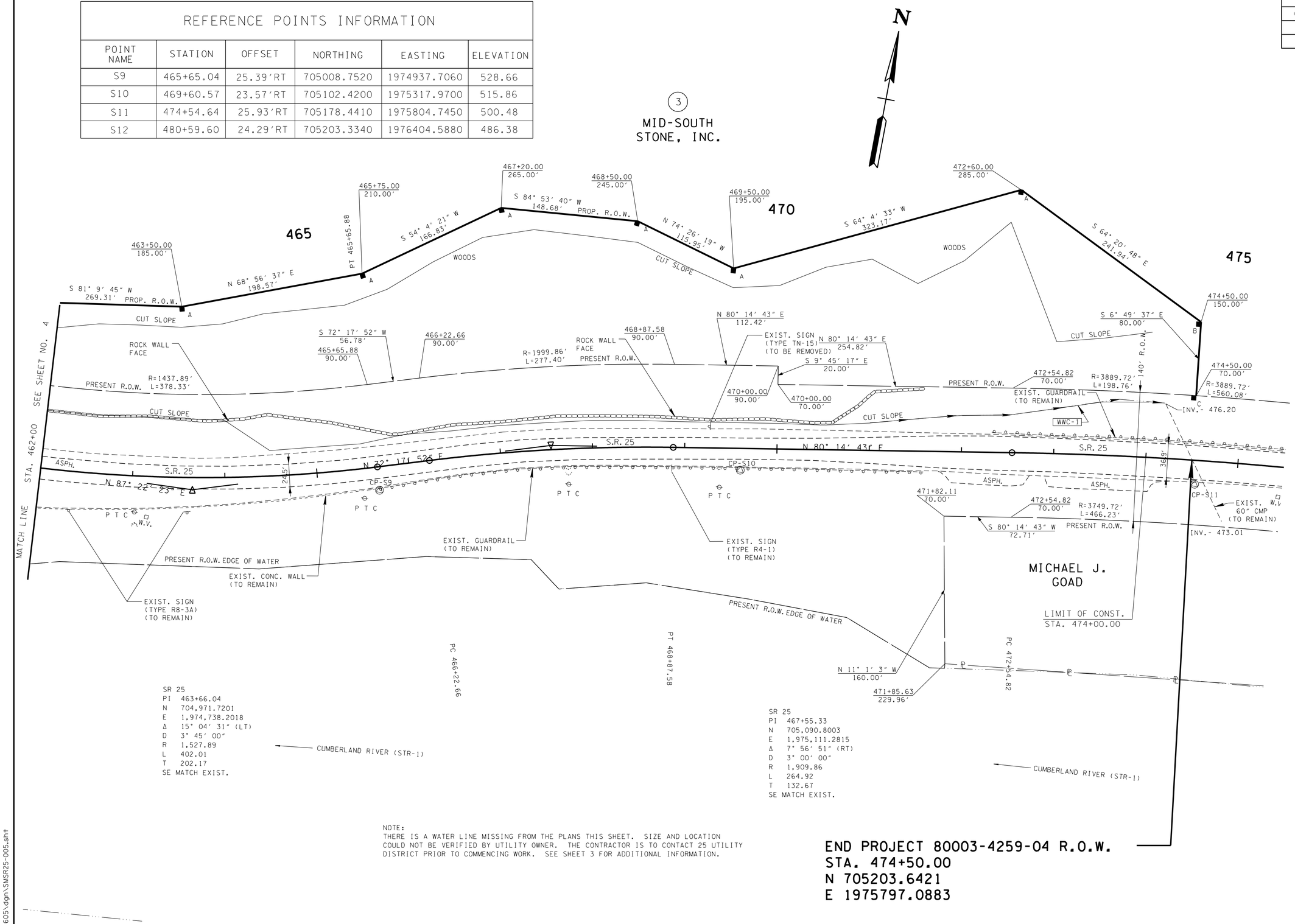
SCALE: 1"=50' HORIZ.
1"=5' VERT.

9/14/2016
h:\ll9605\dgn\SMSR25-004B.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 5 |
| CONST. | 2016 | 80003-4260-04 | 5 |
| | | | |
| | | | |

## REFERENCE POINTS INFORMATION

| POINT NAME | STATION | OFFSET | NORTHING | EASTING | ELEVATION |
|---|---|---|---|---|---|
| S9 | 465+65.04 | 25.39'RT | 705008.7520 | 1974937.7060 | 528.66 |
| S10 | 469+60.57 | 23.57'RT | 705102.4200 | 1975317.9700 | 515.86 |
| S11 | 474+54.64 | 25.93'RT | 705178.4410 | 1975804.7450 | 500.48 |
| S12 | 480+59.60 | 24.29'RT | 705203.3340 | 1976404.5880 | 486.38 |




NOTE:
THERE IS A WATER LINE MISSING FROM THE PLANS THIS SHEET. SIZE AND LOCATION COULD NOT BE VERIFIED BY UTILITY OWNER. THE CONTRACTOR IS TO CONTACT 25 UTILITY DISTRICT PRIOR TO COMMENCING WORK. SEE SHEET 3 FOR ADDITIONAL INFORMATION.

END PROJECT 80003-4259-04 R.O.W.
STA. 474+50.00
N 705203.6421
E 1975797.0883

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

KEVIN S. CAGLE REGISTERED ENGINEER AGRICULTURE COMMERCE STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA. 462+00 TO STA. 475+00

SCALE: 1"=50'

9/14/2016
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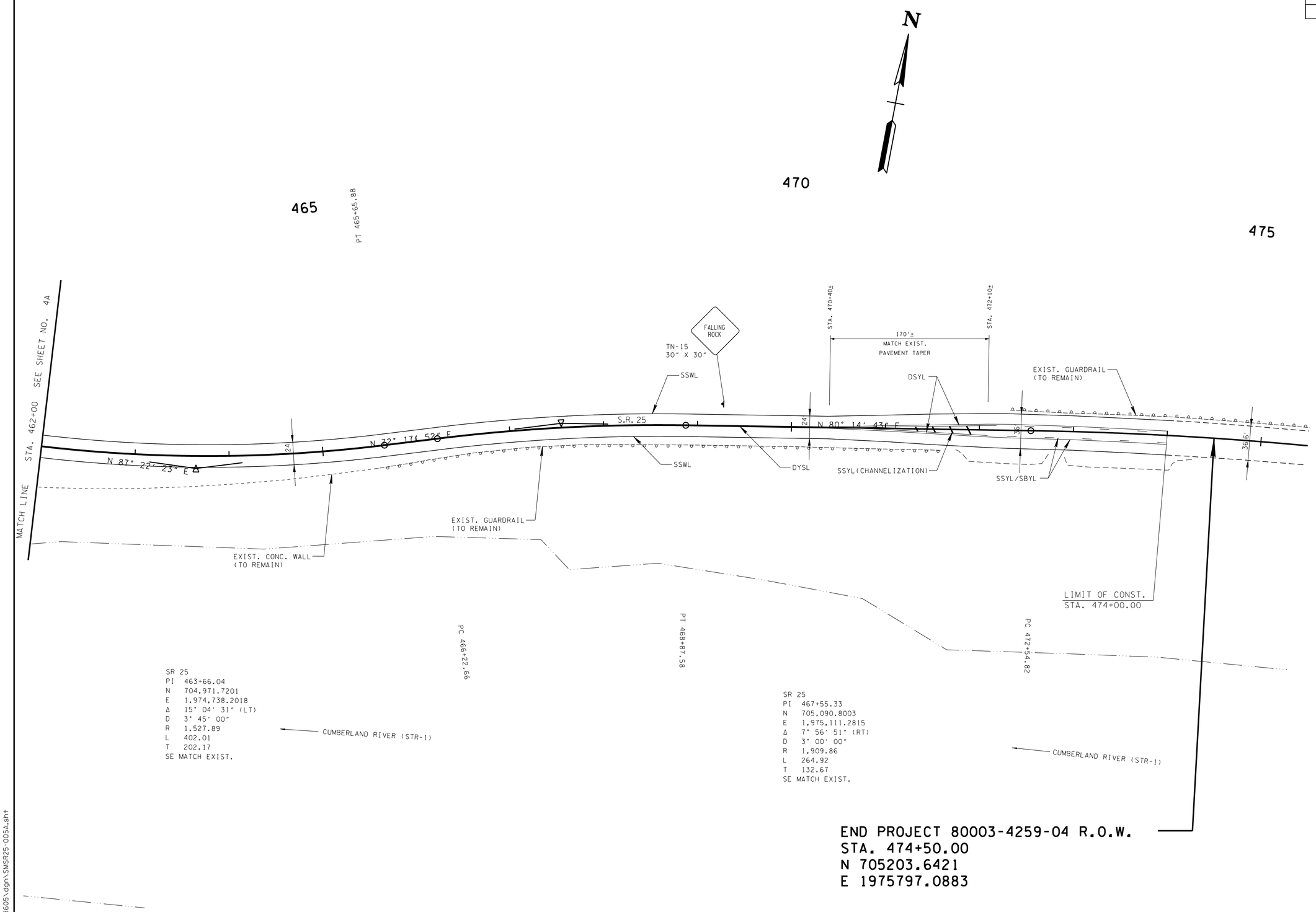
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 5A |
| CONST. | 2016 | 80003-4260-04 | 5A |
| | | | |
| | | | |




END PROJECT 80003-4259-04 R.O.W.
STA. 474+50.00
N 705203.6421
E 1975797.0883

**UNOFFICIAL SET**

**NOT FOR BIDDING**

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REGISTERED ENGINEER
AGRICULTURE
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STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

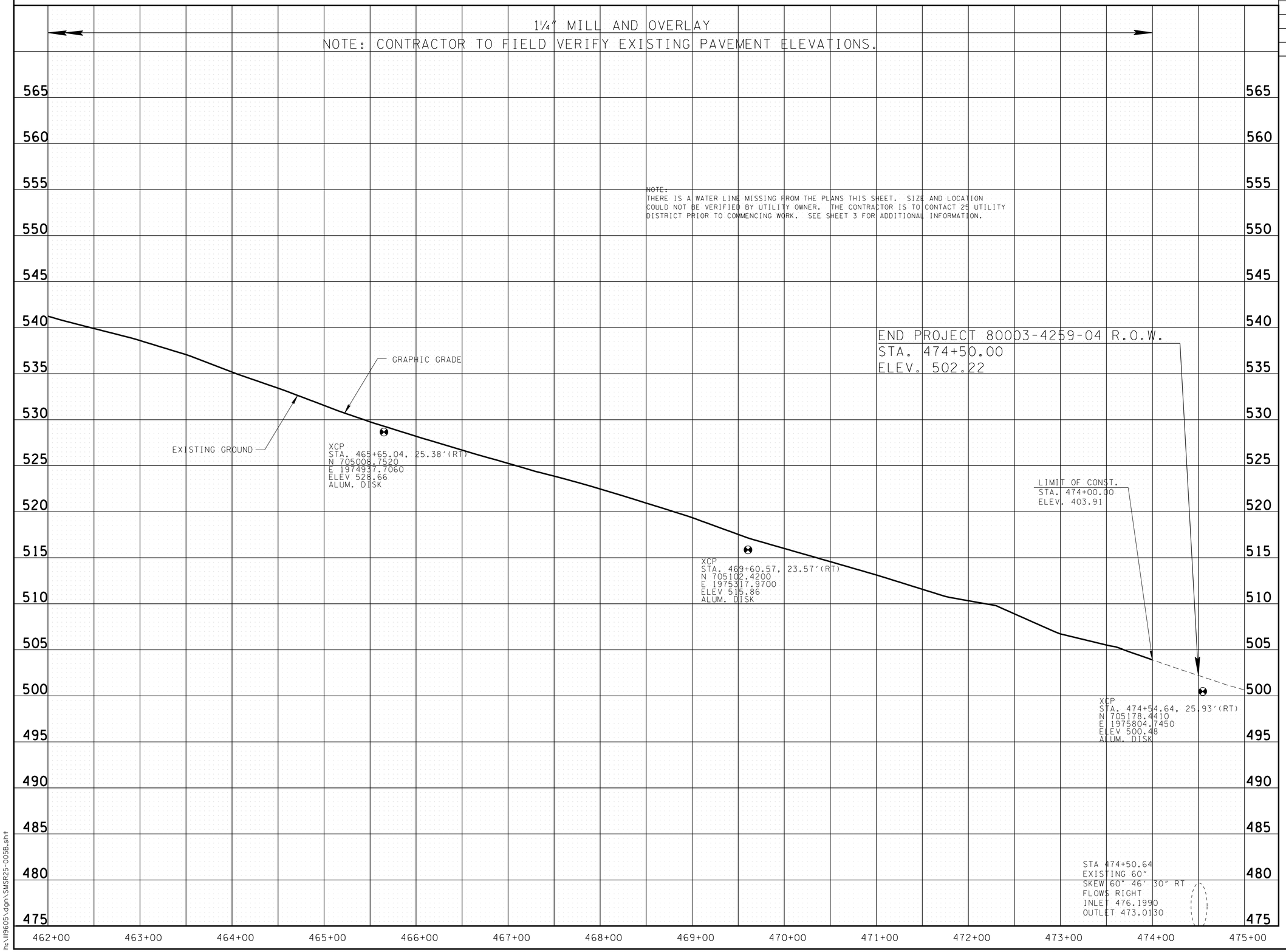
PROPOSED LAYOUT

STA. 462+00 TO STA. 475+00

SCALE: 1"=50'

9/14/2016
h:\119605\dgn\SMSR25-005A.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W | 2015 | 80003-4259-04 | 5B |
| CONST. | 2016 | 80003-4260-04 | 5B |
| | | | |
| | | | |




**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

## PROFILE

STA. 462+00 TO STA. 475+00

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

9/14/2016
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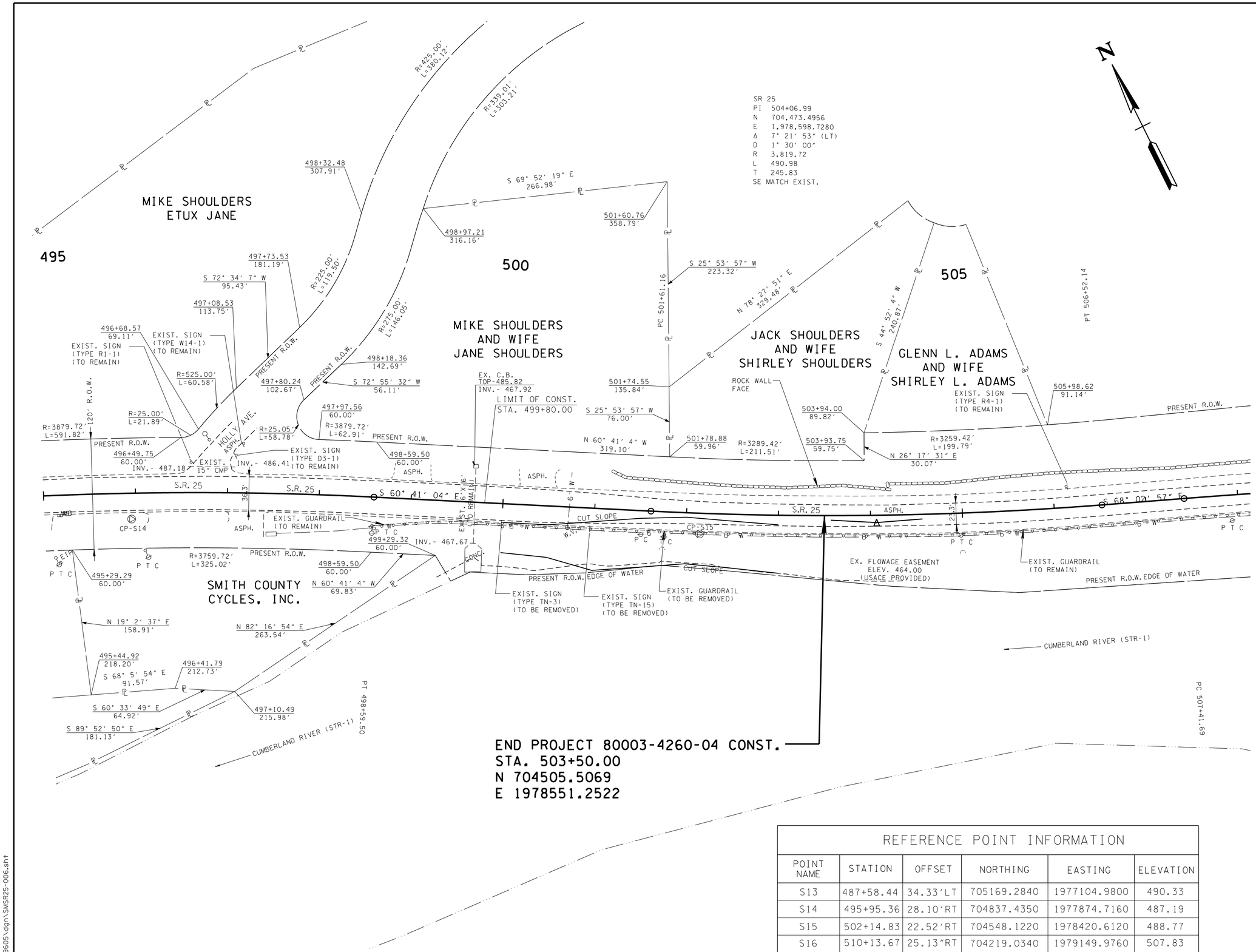
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 6 |
| CONST. | 2016 | 80003-4260-04 | 6 |
| | | | |
| | | | |




| REFERENCE POINT INFORMATION | | | | | |
|---|---|---|---|---|---|
| POINT NAME | STATION | OFFSET | NORTHING | EASTING | ELEVATION |
| S13 | 487+58.44 | 34.33′LT | 705169.2840 | 1977104.9800 | 490.33 |
| S14 | 495+95.36 | 28.10′RT | 704837.4350 | 1977874.7160 | 487.19 |
| S15 | 502+14.83 | 22.52′RT | 704548.1220 | 1978420.6120 | 488.77 |
| S16 | 510+13.67 | 25.13″RT | 704219.0340 | 1979149.9760 | 507.83 |

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SEALED BY

KEVIN S. CAGLE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 102825
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

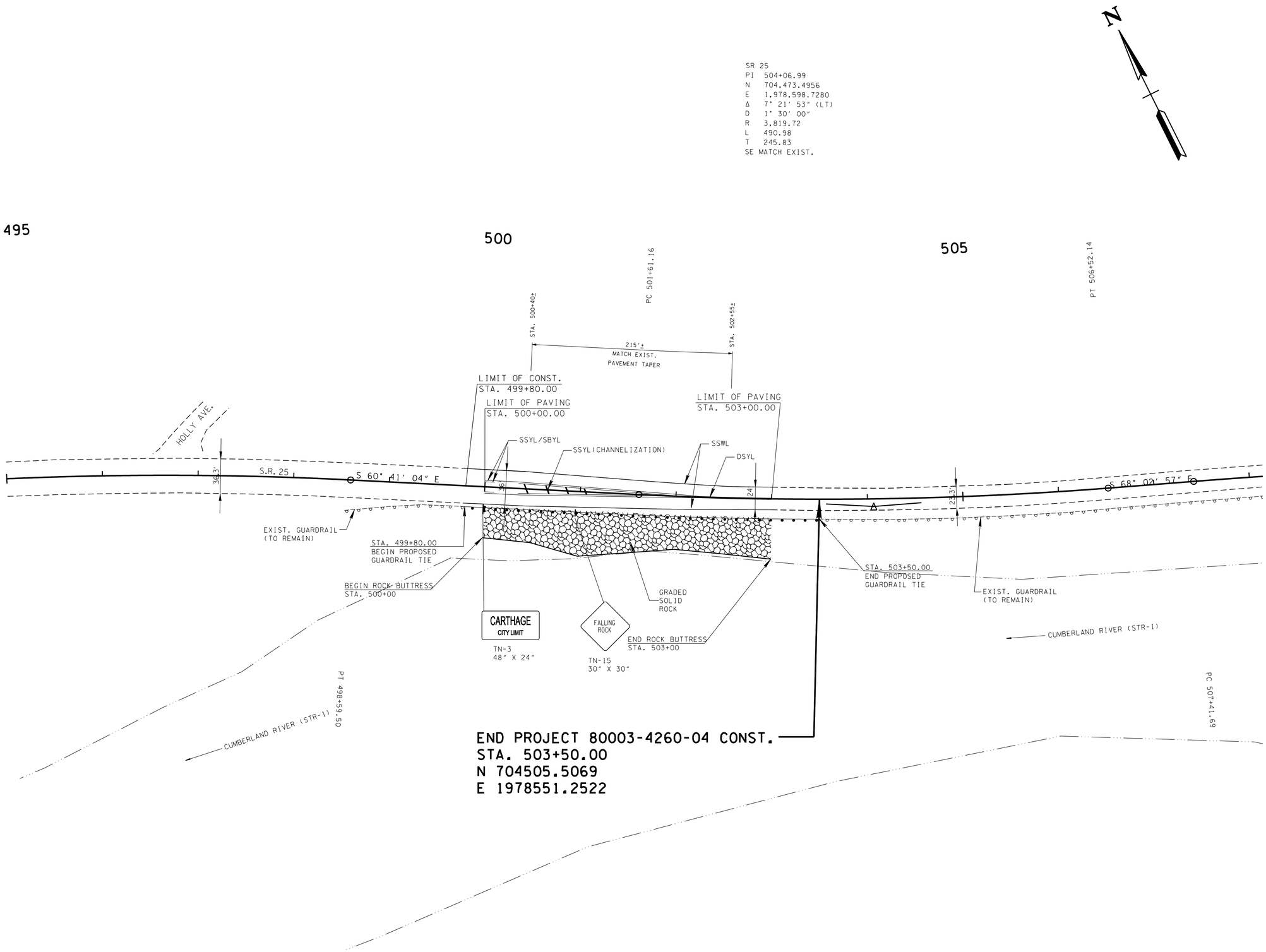
STA. 495+00 TO END PROJ.

SCALE: 1"=50'

9/14/2016
h:\119605\dgn\SMSR25-006.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W | 2015 | 80003-4259-04 | 6A |
| CONST. | 2016 | 80003-4260-04 | 6A |
| | | | |
| | | | |

SR 25
PI 504+06.99
N 704,473.4956
E 1,978,598.7280
Δ 7° 21′ 53″ (LT)
D 1° 30′ 00″
R 3,819.72
L 490.98
T 245.83
SE MATCH EXIST.




**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

KEVIN S. CAGLE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 102540
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA. 495+00 TO END PROJ.

SCALE: 1"=50'

9/14/2016
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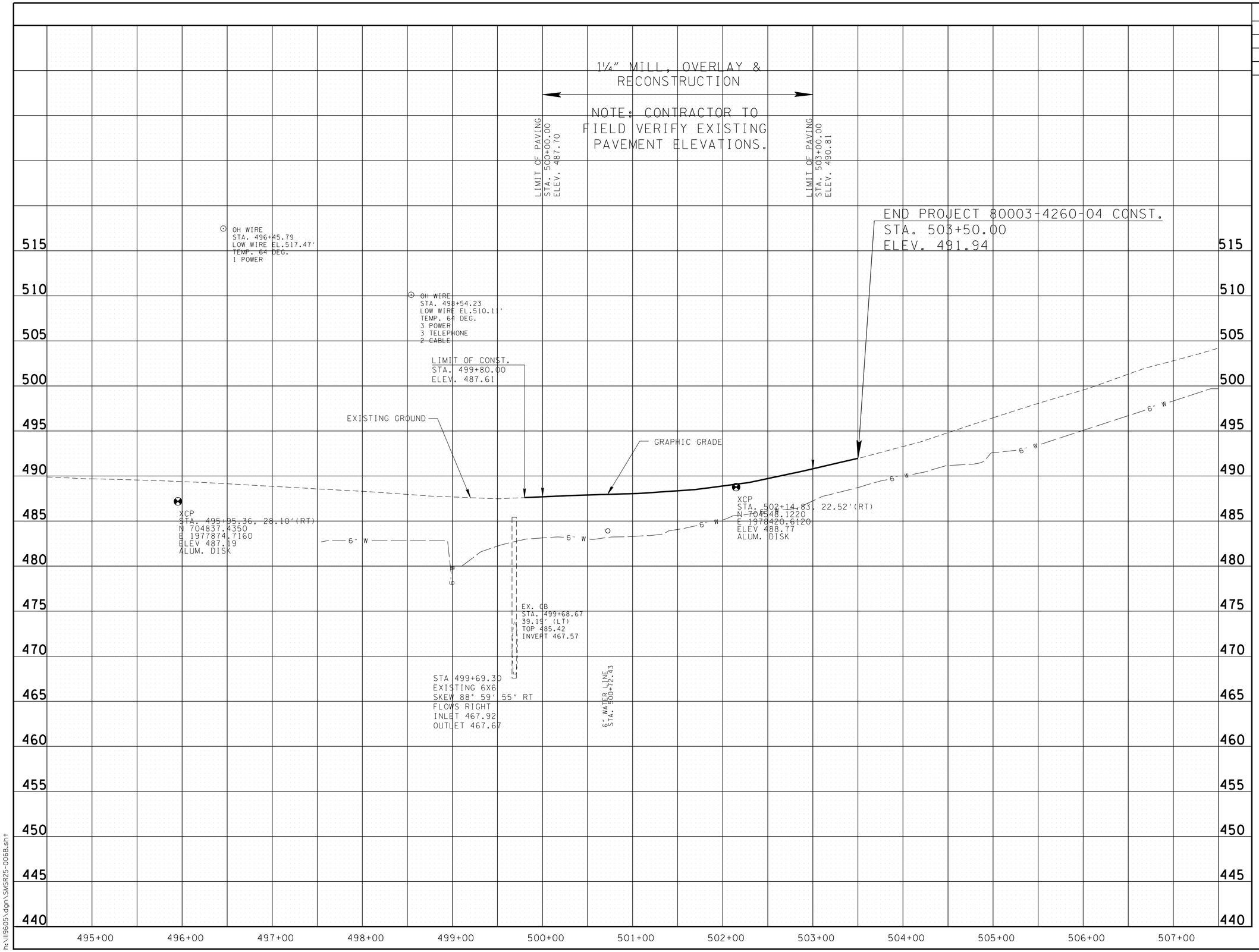
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 6B |
| CONST. | 2016 | 80003-4260-04 | 6B |
| | | | |
| | | | |




**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

KEVIN S. CAGLE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 110545
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

## PROFILE

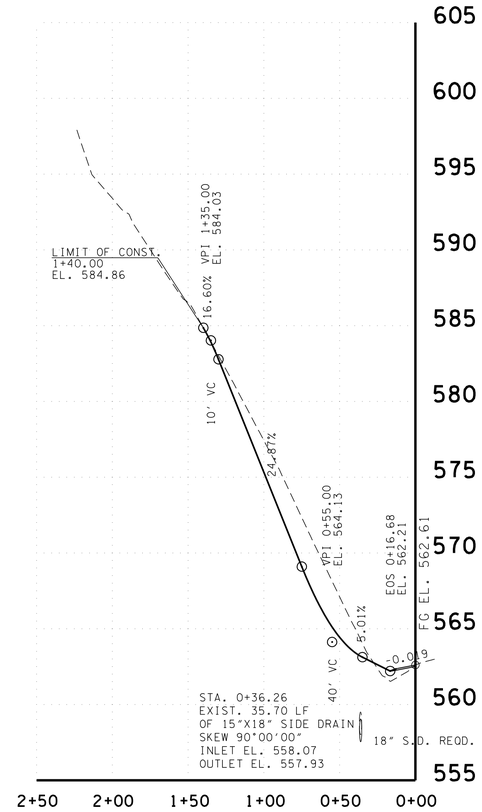
STA. 495+00 TO END PROJ.

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

9/14/2016
h:\lll9605\dgn\SMSR25-006B.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 7 |
| CONST. | 2016 | 80003-4260-04 | 7 |
| | | | |
| | | | |

REV. 05-12-16: ELIMINATED PROPOSED DRIVEWAY PROFILE FOR TRACT 1. DELETED NOTES.




PVT. DR. LT. 453+80.00
TRACT NO. 2
(CONC.)

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRIVATE DRIVE
AND
FIELD ENTRANCE
PROFILES

9/14/2016
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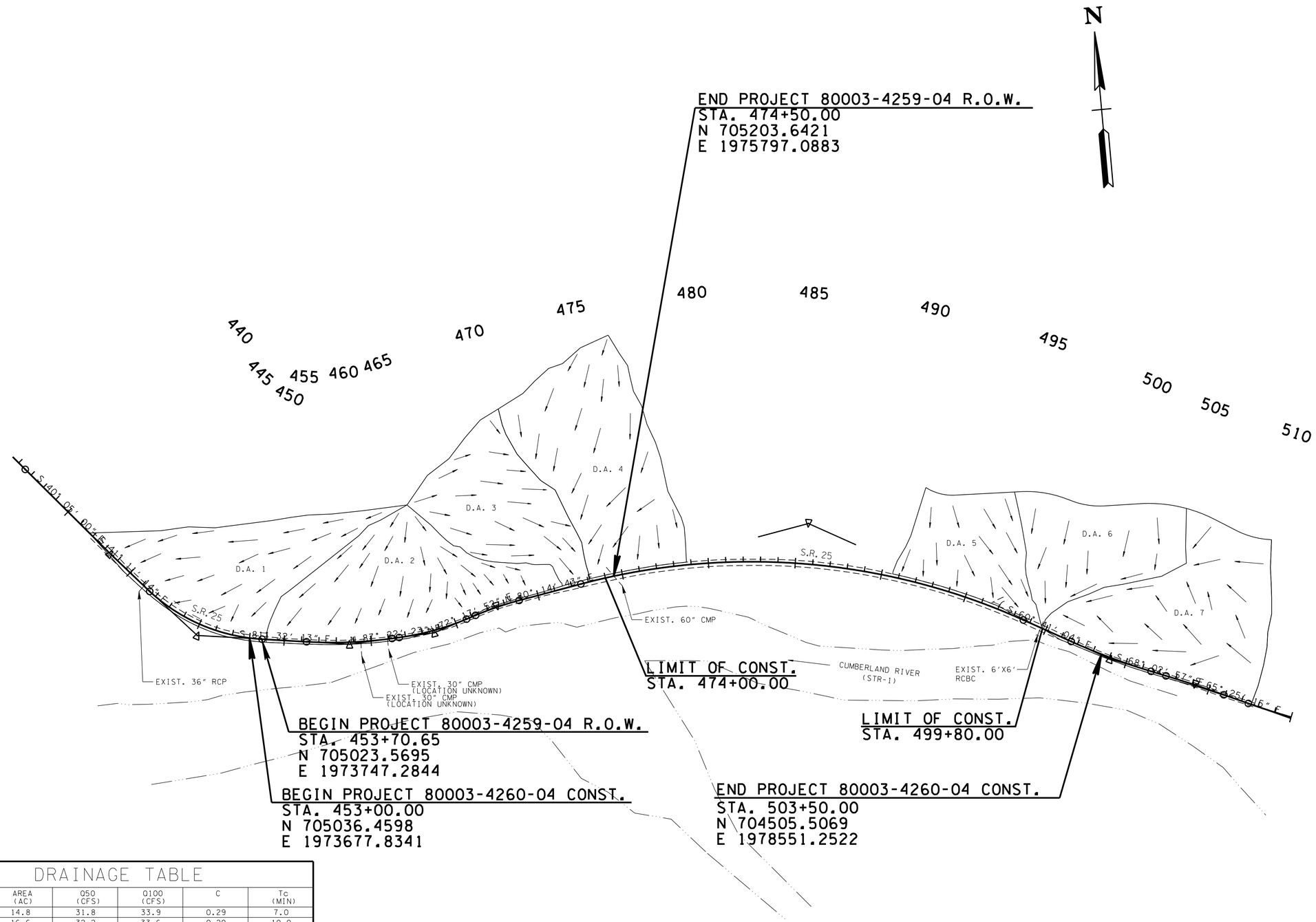
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 8 |
| CONST. | 2016 | 80003-4260-04 | 8 |
| | | | |
| | | | |

REV. 05-12-16: REVISED R.O.W. PROJECT LIMITS.




## DRAINAGE TABLE

| DRAINAGE AREA | AREA (AC) | Q50 (CFS) | Q100 (CFS) | C | Tc (MIN) |
|---|---|---|---|---|---|
| 1 | 14.8 | 31.8 | 33.9 | 0.29 | 7.0 |
| 2 | 16.6 | 32.2 | 33.6 | 0.29 | 10.0 |
| 3 | 12.0 | 28.7 | 30.7 | 0.29 | 5.0 |
| 4 | 19.4 | 46.4 | 49.7 | 0.29 | 5.0 |
| 5 | 9.2 | 21.9 | 23.5 | 0.29 | 5.0 |
| 6 | 11.0 | 26.2 | 28.1 | 0.29 | 5.0 |
| 7 | 18.3 | 43.8 | 46.9 | 0.29 | 5.0 |

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**NOT FOR BIDDING**

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KEVIN S. CAGLE REGISTERED ENGINEER AGRICULTURE COMMERCE No. 100925 STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# DRAINAGE MAPS

BEGIN PROJ. TO END PROJ.

SCALE: 1"=300'

9/14/2016
h:\119605\dgn\SMSR25-008.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 9 |
| CONST. | 2016 | 80003-4260-04 | 9 |
| | | | |
| | | | |

# EPSC NOTES

## STREAMS, WETLANDS & BUFFER ZONES

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

## ENVIRONMENTAL

(1) 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.

**UNOFFICIAL SET**

**NOT FOR BIDDING**

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) NOTES

9/14/2016
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2016 | 80003-4260-04 | 9A |
| | | | |
| | | | |
| | | | |

## EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES

| ITEM NO. | DESCRIPTION | UNIT | QUANTITY |
|---|---|---|---|
| | | | |
| 203-01 | ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED) | C.Y. | 721 |
| 209-02.05 | 12" TEMPORARY SLOPE DRAIN | L.F. | 608 |
| 209-05 | SEDIMENT REMOVAL | C.Y. | 262 |
| 209-08.02 | TEMPORARY SILT FENCE (WITH BACKING) | L.F. | 380 |
| 209-08.07 | ROCK CHECK DAM | EACH | 13 |
| 209-08.08 | ENHANCED ROCK CHECK DAM | EACH | 3 |
| 303-10.01 | MINERAL AGGREGATE (SIZE 57) | TON | 6 |
| 621-03.02 | 18" TEMPORARY DRAINAGE PIPE | L.F. | 32 |
| 709-05.05 | MACHINED RIP-RAP (CLASS A-3) | TON | 133 |
| 709-05.06 | MACHINED RIP-RAP (CLASS A-1) | TON | 63 |
| 712-02.02 | INTERCONNECTED PORTABLE BARRIER RAIL | L.F. | 380 |
| 740-10.03 | GEOTEXTILE (TYPE III) (EROSION CONTROL) | S.Y. | 557 |
| 801-01.07 | TEMPORARY SEEDING (WITH MULCH) | UNIT | 121 |
| 801-02.01 | CROWN VETCH MIXTURE (WITHOUT MULCH) | UNIT | 121 |
| 801-02.15 | FERTILIZER | TON | 3 |
| 801-03 | WATER (SEEDING & SODDING) | M.G. | 25 |
| 805-12.02 | EROSION CONTROL BLANKET (TYPE II) | S.Y. | 13381 |

## EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

| SYMBOL | ITEM | STD. DWG. |
|---|---|---|
| | PORTABLE BARRIER RAIL | |
| * SFB * SFB * SFB * | SILT FENCE WITH WIRE BACKING | EC-STR-3C |
| | ROCK CHECK DAM (V-DITCH) | EC-STR-6 |
| | ENHANCED ROCK CHECK DAM (V-DITCH) | EC-STR-6A |
| | ENHANCED ROCK CHECK DAM (TRAPEZOIDAL DITCH) | EC-STR-6A |
| | CULVERT PROTECTION (TYPE 2) | EC-STR-11A |
| TCE | TEMPORARY CONSTRUCTION EXIT | EC-STR-25 |
| | TEMPORARY BERM | EC-STR-27 |
| | TEMPORARY SLOPE DRAIN | EC-STR-27 |
| | EROSION CONTROL BLANKET | EC-STR-34 |
| OUT - * | OUTFALL LABEL | |

## OUTFALL DRAINAGE AREAS STAGE 1 & 2

| OUTFALL | AREA (AC) | SLOPE (%) |
|---|---|---|
| 1 | 48.0 | 17.2% |

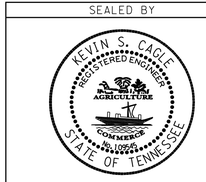
## TOTAL DISTURBANCE

7.679 AC

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY




STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) LEGEND & TABULATION

9/14/2016
h:\ll9605\dgn\SMSR25-009a.sht

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 9A |
| CONST. | 2016 | 80003-4260-04 | 10 |
| | | | |
| | | | |

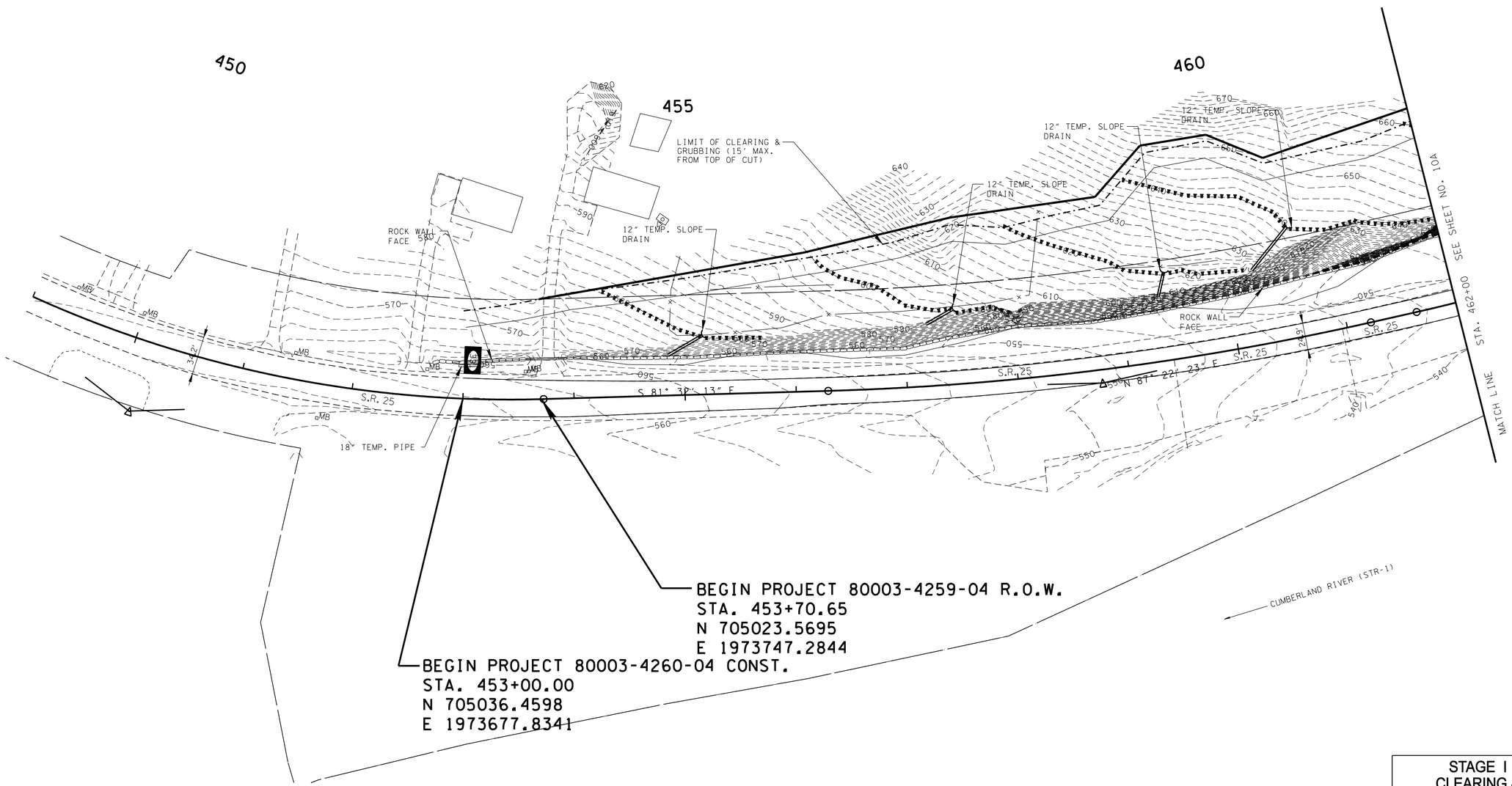
REV. 05-12-16: REVISED SLOPE LIMITS FROM STA. 453+70.65 TO STA. 456+00. REVISED R.O.W. PROJECT LIMITS. REVISED EROSION CONTROL MEASURES. UPDATED DISTURBED AREA DATA.

NOTES:

AT NO TIME SHALL THE ENTIRE SITE BE CLEARED BUT SHALL BE PROGRESSIVELY CLEARED AS DIRECTED BY THE ENGINEER.

TEMPORARY BERMS AND SLOPE DRAINS INDICATED MAY BE INSTALLED AS NECESSARY TO PROTECT EXCAVATION AREAS FROM OFF-SITE RUNOFF. INSTALLATION SHALL BE AS DIRECTED BY THE ENGINEER.

TEMPORARY CONSTRUCTION EXIT TO BE LOCATED BY THE ENGINEER.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STAGE I
CLEARING & GRUBBING

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

10/7/2016
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 9B |
| CONST. | 2016 | 80003-4260-04 | 10A |
| | | | |
| | | | |

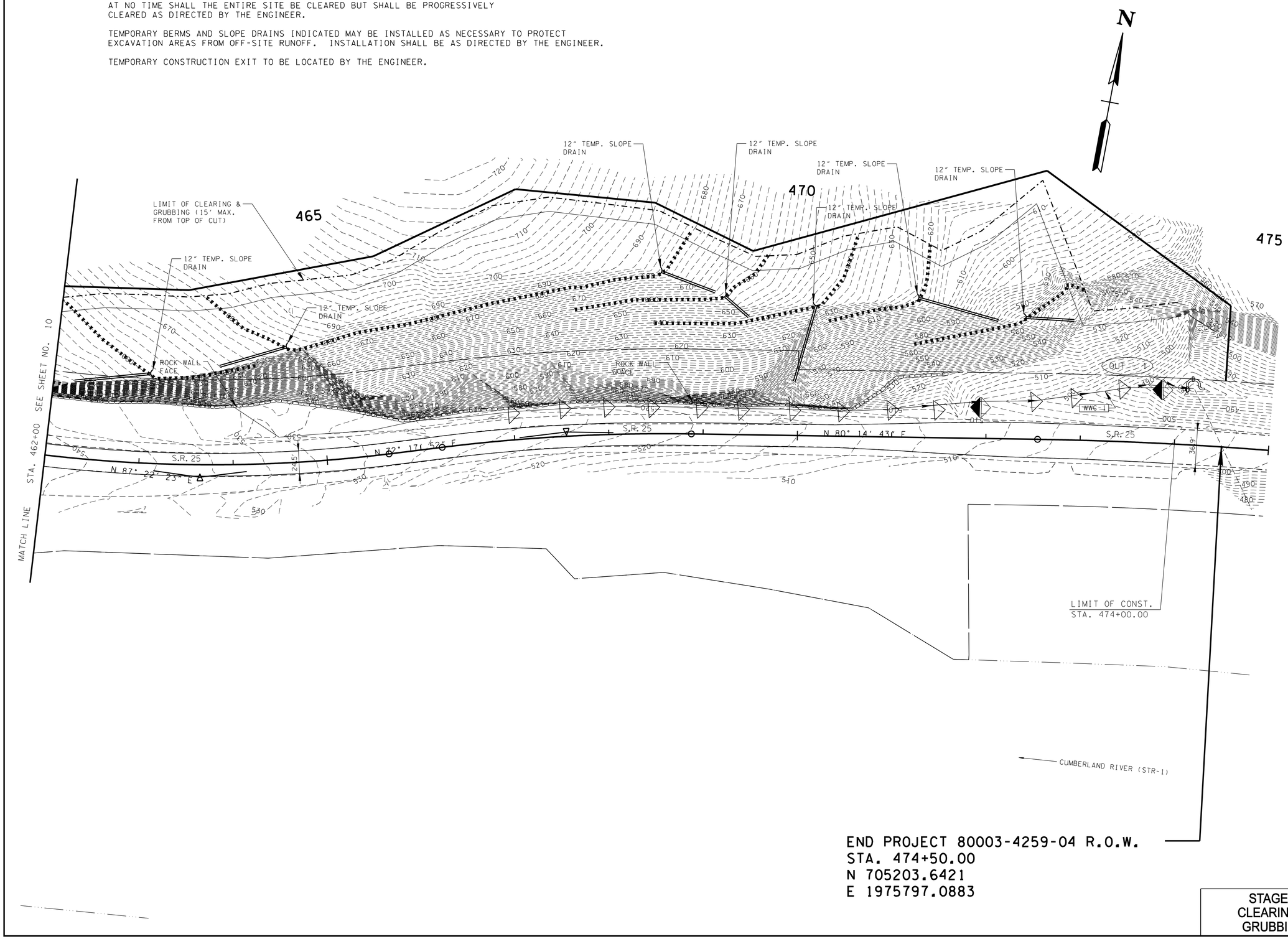
REV. 05-12-16: UPDATED DISTURBED AREA DATA.

NOTES:

AT NO TIME SHALL THE ENTIRE SITE BE CLEARED BUT SHALL BE PROGRESSIVELY CLEARED AS DIRECTED BY THE ENGINEER.

TEMPORARY BERMS AND SLOPE DRAINS INDICATED MAY BE INSTALLED AS NECESSARY TO PROTECT EXCAVATION AREAS FROM OFF-SITE RUNOFF. INSTALLATION SHALL BE AS DIRECTED BY THE ENGINEER.

TEMPORARY CONSTRUCTION EXIT TO BE LOCATED BY THE ENGINEER.




END PROJECT 80003-4259-04 R.O.W.
STA. 474+50.00
N 705203.6421
E 1975797.0883

STAGE I
CLEARING & GRUBBING

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00004 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

10/7/2016
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NOTES:
PORTABLE BARRIER RAIL IS TO BE COVERED WITH GEOTEXTILE (TYPE III)(EROSION CONTROL) ON THE ROADWAY SIDE TO PREVENT SLOPE MATERIAL FROM MIGRATION INTO THE CUMBERLAND RIVER DURING EXCAVATION & EMBANKMENT OPERATIONS.

TEMPORARY SILT FENCE (WITH BACKING) WILL BE PLACED UP GRADIENT FROM THE PORTABLE BARRIER RAIL AS AN ADDITIONAL MEASURE TO CAPTURE LOOSE MATERIAL & POTENTIAL RUNOFF.

ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE UP GRADIENT SIDE OF THE SILT FENCE (WITH BACKING) WHEN THE SEDIMENT DEPTH HAS REACHED ONE-FOURTH THE HEIGHT OF THE BARRIER. THIS MAINTENANCE WILL BE CONDUCTED IN A MANNER THAT WILL NOT DAMAGE THE FENCE. ANY DAMAGED SILT FENCE WILL BE REPLACED IMMEDIATELY UPON DETERMINATION OF NEED.

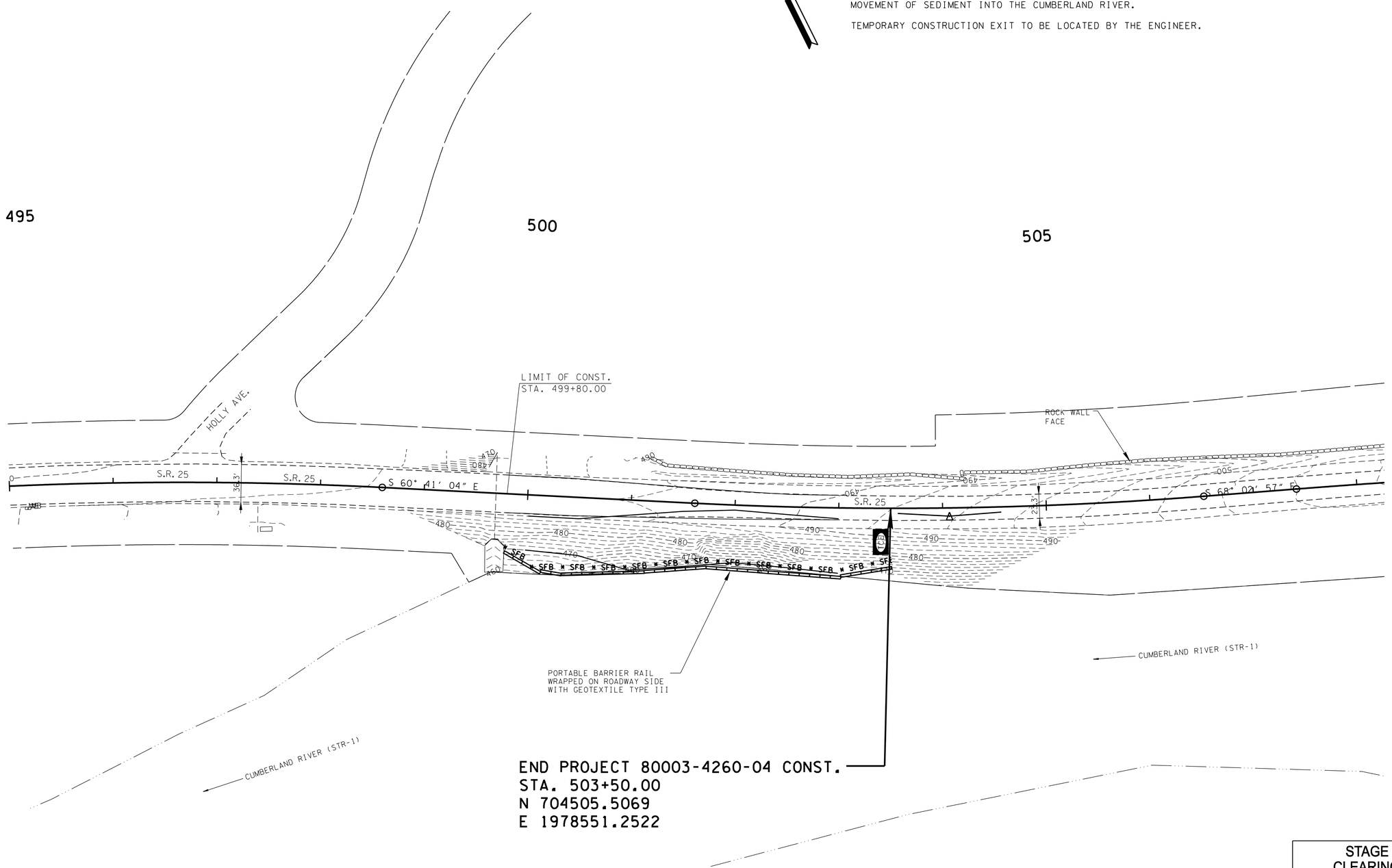
NO CLEARING OF VEGETATION SHALL TAKE PLACE IN THE WORK AREA UNTIL SUCH TIME THAT THESE MEASURES CAN BE SUCCESSFULLY INSTALLED UNLESS DIRECTED BY THE ENGINEER.

THE PORTABLE BARRIER RAIL AND SILT FENCE (WITH BACKING) WILL REMAIN IN PLACE UNTIL THE LAST STAGE OF CONSTRUCTION OF THE ROCK BUTTRESS IN ORDER TO PREVENT THE MOVEMENT OF SEDIMENT INTO THE CUMBERLAND RIVER.

TEMPORARY CONSTRUCTION EXIT TO BE LOCATED BY THE ENGINEER.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 9C |
| CONST. | 2016 | 80003-4260-04 | 10B |
| | | | |
| | | | |

REV. 05-12-16: UPDATED DISTURBED AREA DATA.

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KEVIN S. CAGLE
REGISTERED ENGINEER
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STAGE I
CLEARING & GRUBBING

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

10/7/2016
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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| CONST. | 2016 | 80003-4260-04 | 10C |
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NOTES:

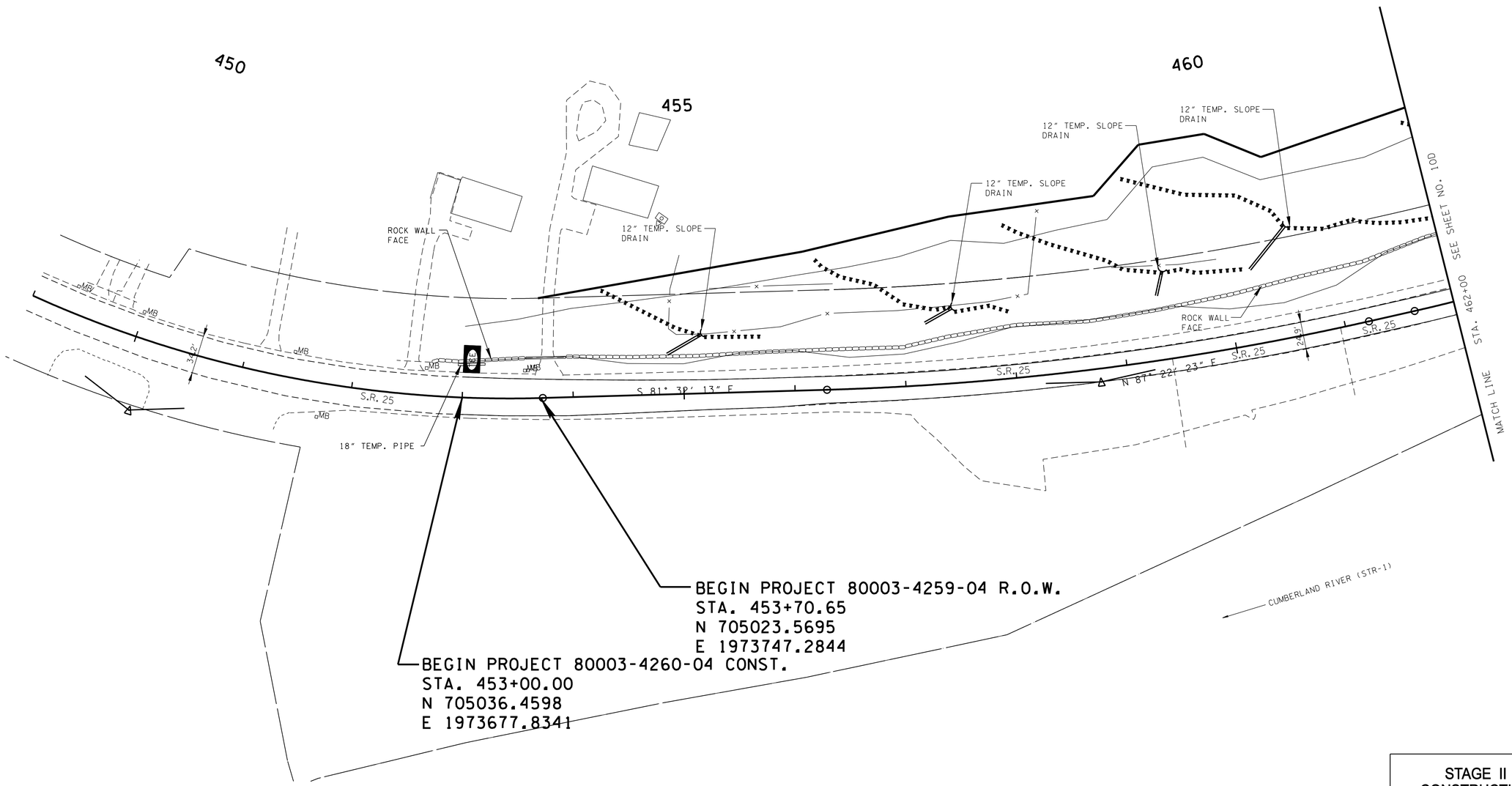
AT NO TIME SHALL THE ENTIRE SITE BE EXCAVATED BUT SHALL BE PROGRESSIVELY EXCAVATED AS DIRECTED BY THE ENGINEER.

TEMPORARY BERMS AND SLOPE DRAINS INDICATED MAY BE REMOVED WHEN CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND FINAL SLOPES HAVE BEEN STABILIZED. REMOVAL SHALL BE AS DIRECTED BY THE ENGINEER.

FINAL SLOPE STABILIZATION ASSUMES THAT ALL MATERIAL ABOVE THE 15' BENCH IS EARTHEN MATERIAL REQUIRING PERMANENT VEGETATIVE COVER. EROSION CONTROL BLANKET (TYPE II) SHALL BE PLACED AT THESE LOCATIONS AND SHALL BE ANCHORED USING AN APPROVED METHOD AS DESCRIBED IN STANDARD SPECIFICATION 805.04.

FINAL STABILIZATION SHALL BE INSTALLED AS CONSTRUCTION IS COMPLETED.

TEMPORARY CONSTRUCTION EXIT TO BE LOCATED BY THE ENGINEER.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STAGE II CONSTRUCTION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

10/7/2016
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NOTES:

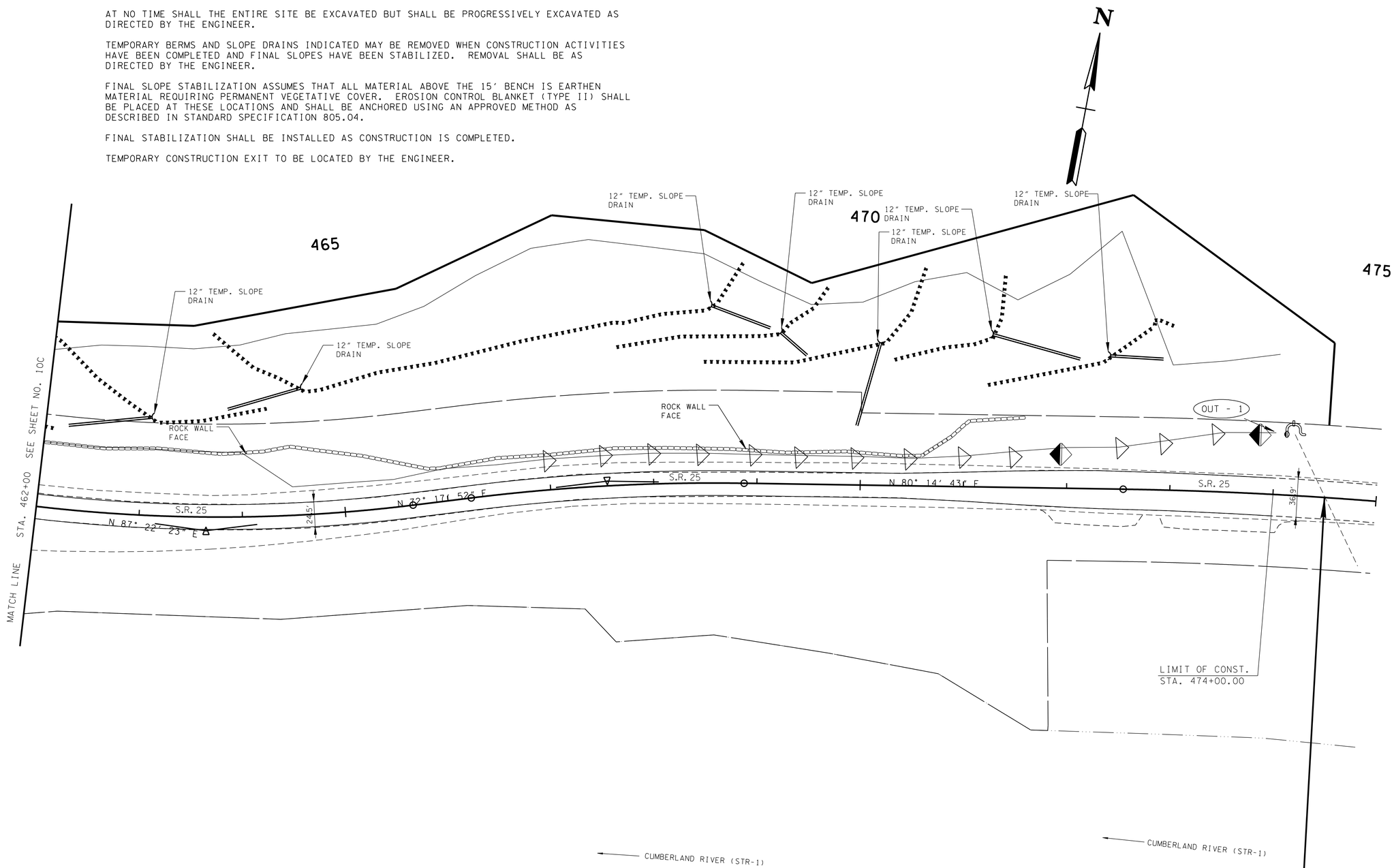
AT NO TIME SHALL THE ENTIRE SITE BE EXCAVATED BUT SHALL BE PROGRESSIVELY EXCAVATED AS DIRECTED BY THE ENGINEER.

TEMPORARY BERMS AND SLOPE DRAINS INDICATED MAY BE REMOVED WHEN CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND FINAL SLOPES HAVE BEEN STABILIZED. REMOVAL SHALL BE AS DIRECTED BY THE ENGINEER.

FINAL SLOPE STABILIZATION ASSUMES THAT ALL MATERIAL ABOVE THE 15' BENCH IS EARTHEN MATERIAL REQUIRING PERMANENT VEGETATIVE COVER. EROSION CONTROL BLANKET (TYPE II) SHALL BE PLACED AT THESE LOCATIONS AND SHALL BE ANCHORED USING AN APPROVED METHOD AS DESCRIBED IN STANDARD SPECIFICATION 805.04.

FINAL STABILIZATION SHALL BE INSTALLED AS CONSTRUCTION IS COMPLETED.

TEMPORARY CONSTRUCTION EXIT TO BE LOCATED BY THE ENGINEER.




END PROJECT 80003-4259-04 R.O.W.
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STAGE II
CONSTRUCTION

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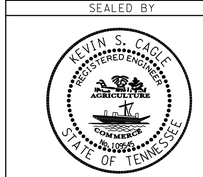


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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

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NOTES:
PORTABLE BARRIER RAIL IS TO BE COVERED WITH GEOTEXTILE (TYPE III)(EROSION CONTROL) ON THE ROADWAY SIDE TO PREVENT SLOPE MATERIAL FROM MIGRATION INTO THE CUMBERLAND RIVER DURING EXCAVATION & EMBANKMENT OPERATIONS.

TEMPORARY SILT FENCE (WITH BACKING) WILL BE PLACED UP GRADIENT FROM THE PORTABLE BARRIER RAIL AS AN ADDITIONAL MEASURE TO CAPTURE LOOSE MATERIAL & POTENTIAL RUNOFF.

ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE UP GRADIENT SIDE OF THE SILT FENCE (WITH BACKING) WHEN THE SEDIMENT DEPTH HAS REACHED ONE-FOURTH THE HEIGHT OF THE BARRIER. THIS MAINTENANCE WILL BE CONDUCTED IN A MANNER THAT WILL NOT DAMAGE THE FENCE. ANY DAMAGED SILT FENCE WILL BE REPLACED IMMEDIATELY UPON DETERMINATION OF NEED.

NO SITE EXCAVATION SHALL TAKE PLACE UNTIL SUCH TIME AS THE CONTRACTOR HAS GRADED SOLID ROCK THAT HAS BEEN TESTED AND APPROVED FOR USE, ALONG WITH GEOTEXTILE FABRIC TYPE IV READILY AVAILABLE.

BACKFILL OPEN AREAS WITH GRADED SOLID ROCK USING A TRACK HOE, CLAMSHELL OR ANY MEANS SUCH THAT THE ROCK DOES NOT FREE FALL DIRECTLY ONTO THE FABRIC. AFTER 5 FEET OF DEPTH HAS BEEN ESTABLISHED, ROCK PLACEMENT BY TRUCK AND DOZER SPREADING OR OTHER MEANS WILL BE ALLOWED.

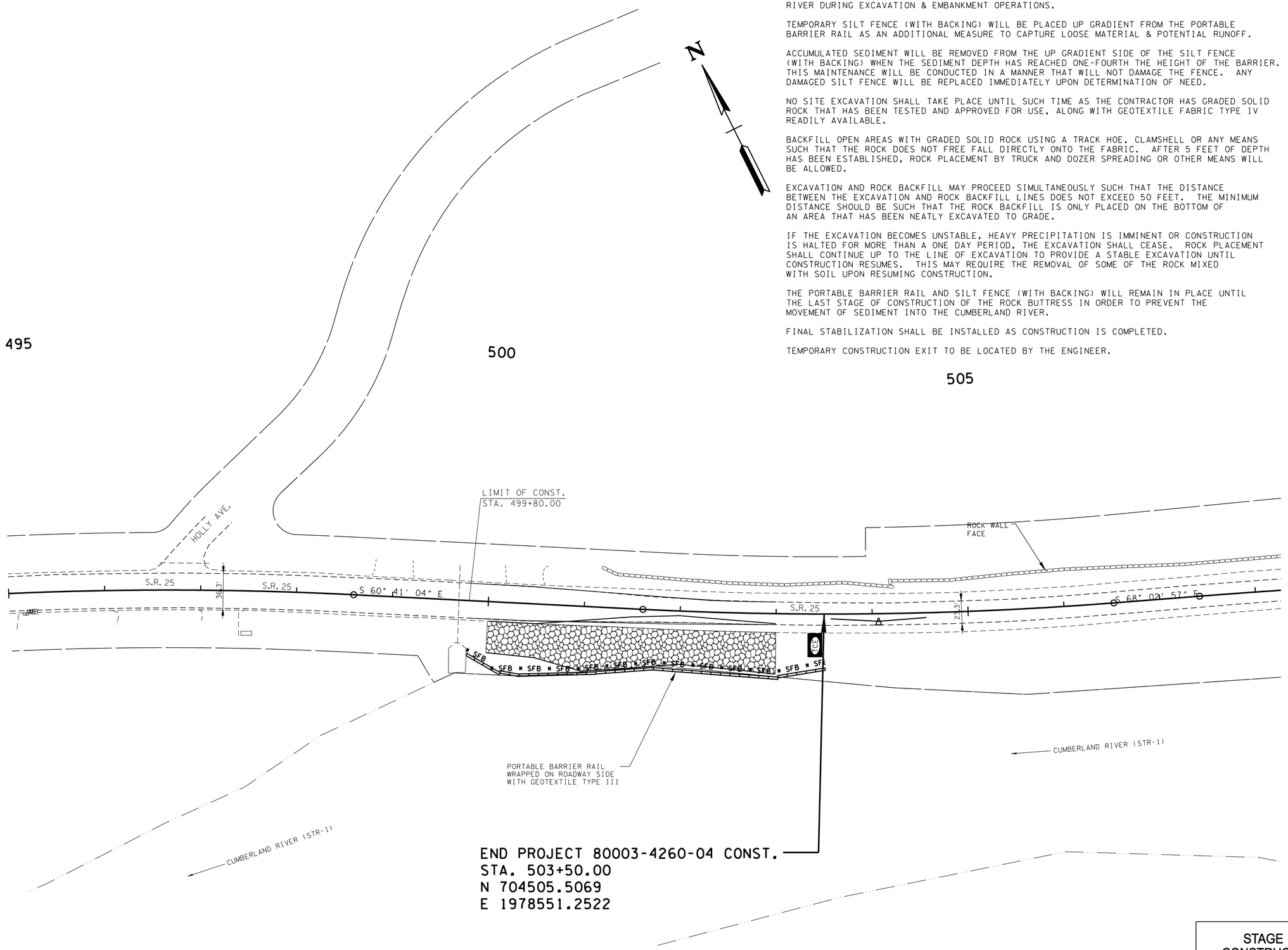
EXCAVATION AND ROCK BACKFILL MAY PROCEED SIMULTANEOUSLY SUCH THAT THE DISTANCE BETWEEN THE EXCAVATION AND ROCK BACKFILL LINES DOES NOT EXCEED 50 FEET. THE MINIMUM DISTANCE SHOULD BE SUCH THAT THE ROCK BACKFILL IS ONLY PLACED ON THE BOTTOM OF AN AREA THAT HAS BEEN NEATLY EXCAVATED TO GRADE.

IF THE EXCAVATION BECOMES UNSTABLE, HEAVY PRECIPITATION IS IMMINENT OR CONSTRUCTION IS HALTED FOR MORE THAN A ONE DAY PERIOD, THE EXCAVATION SHALL CEASE. ROCK PLACEMENT SHALL CONTINUE UP TO THE LINE OF EXCAVATION TO PROVIDE A STABLE EXCAVATION UNTIL CONSTRUCTION RESUMES. THIS MAY REQUIRE THE REMOVAL OF SOME OF THE ROCK MIXED WITH SOIL UPON RESUMING CONSTRUCTION.

THE PORTABLE BARRIER RAIL AND SILT FENCE (WITH BACKING) WILL REMAIN IN PLACE UNTIL THE LAST STAGE OF CONSTRUCTION OF THE ROCK BUTTRESS IN ORDER TO PREVENT THE MOVEMENT OF SEDIMENT INTO THE CUMBERLAND RIVER.

FINAL STABILIZATION SHALL BE INSTALLED AS CONSTRUCTION IS COMPLETED.

TEMPORARY CONSTRUCTION EXIT TO BE LOCATED BY THE ENGINEER.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STAGE II CONSTRUCTION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

10/7/2016
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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| R.O.W. | 2015 | 80003-4259-04 | 9D |
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REV. 05-12-16: REVISED SLOPE LIMITS FROM STA. 453+70.65 TO STA. 456+00. REVISED R.O.W. PROJECT LIMITS. REVISED EROSION CONTROL MEASURES. UPDATED DISTURBED AREA DATA.

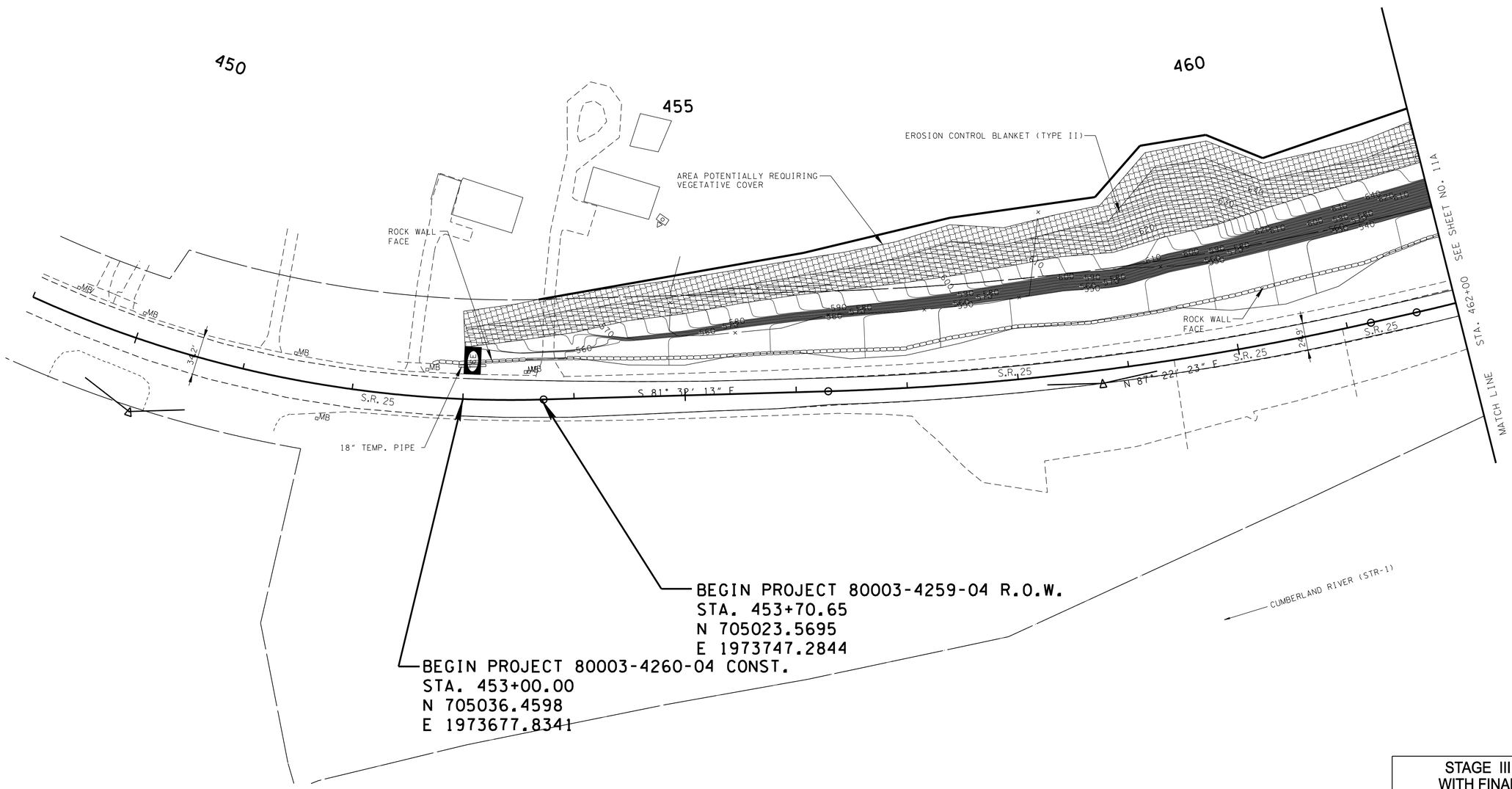
N

NOTES:

FINAL STABILIZATION SHALL BE INSTALLED AS CONSTRUCTION IS COMPLETED.

ANY GROUND REQUIRING VEGETATIVE COVER WITHIN THE LIMITS OF RIGHT OF WAY AND OUTSIDE THE LIMITS OF CONSTRUCTION SHALL BE COVERED IN THE SAME MANNER AS SLOPES REQUIRING VEGETATIVE COVER WITHIN THE LIMITS OF CONSTRUCTION.

TEMPORARY CONSTRUCTION EXIT TO BE LOCATED BY THE ENGINEER.

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KEVIN S. CAGLE REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 109545 STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STAGE III WITH FINAL CONTOURS

10/7/2016
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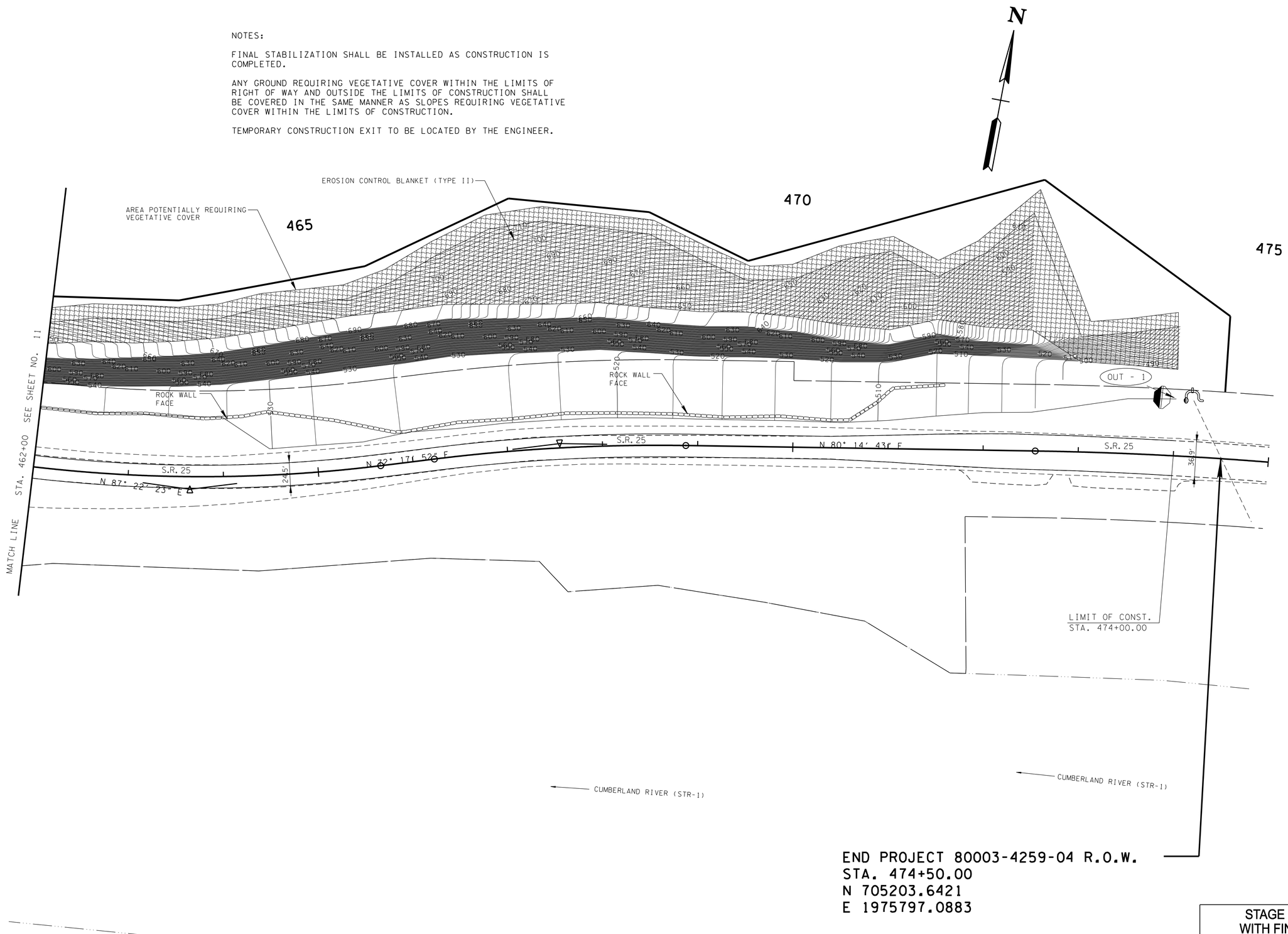
REV. 05-12-16: UPDATED DISTURBED AREA DATA.

NOTES:

FINAL STABILIZATION SHALL BE INSTALLED AS CONSTRUCTION IS COMPLETED.

ANY GROUND REQUIRING VEGETATIVE COVER WITHIN THE LIMITS OF RIGHT OF WAY AND OUTSIDE THE LIMITS OF CONSTRUCTION SHALL BE COVERED IN THE SAME MANNER AS SLOPES REQUIRING VEGETATIVE COVER WITHIN THE LIMITS OF CONSTRUCTION.

TEMPORARY CONSTRUCTION EXIT TO BE LOCATED BY THE ENGINEER.




END PROJECT 80003-4259-04 R.O.W.
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STAGE III
WITH FINAL
CONTOURS

**UNOFFICIAL SET**

**NOT FOR BIDDING**

SEALED BY

KEVIN S. CAGLE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 109640
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

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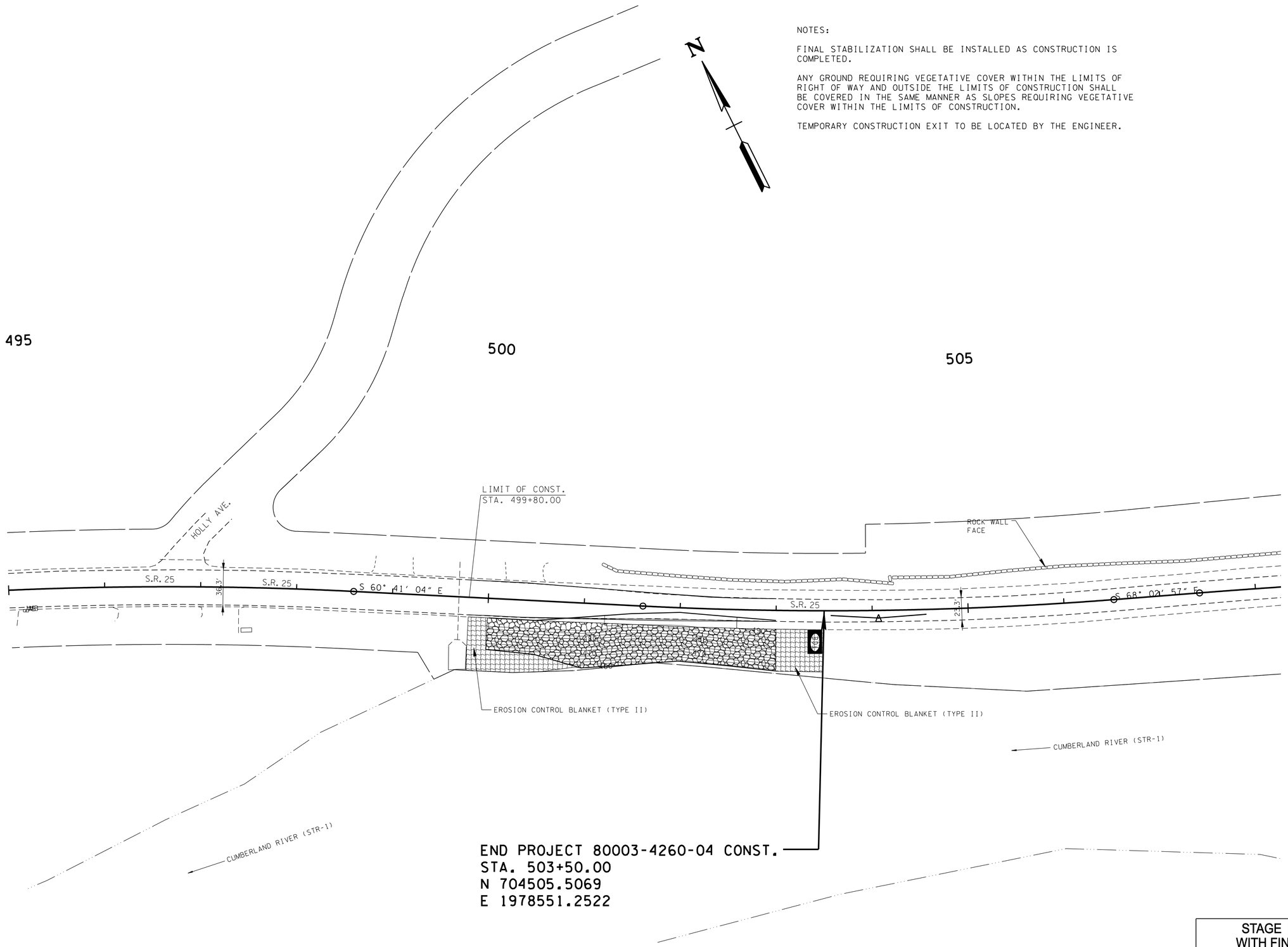
REV. 05-12-16: UPDATED DISTURBED AREA DATA.

NOTES:

FINAL STABILIZATION SHALL BE INSTALLED AS CONSTRUCTION IS COMPLETED.

ANY GROUND REQUIRING VEGETATIVE COVER WITHIN THE LIMITS OF RIGHT OF WAY AND OUTSIDE THE LIMITS OF CONSTRUCTION SHALL BE COVERED IN THE SAME MANNER AS SLOPES REQUIRING VEGETATIVE COVER WITHIN THE LIMITS OF CONSTRUCTION.

TEMPORARY CONSTRUCTION EXIT TO BE LOCATED BY THE ENGINEER.

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STATE OF TENNESSEE
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STAGE III WITH FINAL CONTOURS

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

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# PAVEMENT EDGE DROP-OFF 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.

   a. 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.

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PAVEMENT EDGE DROP-OFF NOTES FOR TRAFFIC CONTROL

9/14/2016
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| CONST. | 2016 | 80003-4260-04 | 12A |
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## TRAFFIC CONTROL CONSTRUCTION PHASING NOTES: SR-25

PHASE 1 – LANDSLIDE SITE

1. USING TEMPORARY LANE CLOSURES AND FLAGGING OPERATIONS, INSTALL TEMPORARY TRAFFIC SIGNAL, SIGNAL POLES AND SIGNAL APPURTENANCES.

2. REMOVE THE EXISTING PAVEMENT MARKINGS AS NECESSARY FOR SR-25 NORTHBOUND AND SOUTHBOUND TRAFFIC.

3. INSTALL TEMPORARY PAVEMENT MARKINGS FOR 1 @ 10' LANE, ALLOWING THE SR-25 NORTHBOUND TRAFFIC TO REMAIN IN THE EXISTING TRAVEL LANE.

4. INSTALL PORTABLE BARRIER RAIL AS SHOWN ON THE TRAFFIC CONTROL PLAN – PHASE 1, ASSURING 2' OFFSET FROM THE ADJACENT SR-25 NORTHBOUND/SOUTHBOUND TRAFFIC EDGE OF TEMPORARY TRAVEL LANE.

5. ACTIVATE THE TEMPORARY TRAFFIC SIGNAL AND IMPLEMENT ONE (1) LANE TRAFFIC THROUGH THE WORK ZONE FROM APPROXIMATELY STA. 495+65 TO STA. 505+90 AND COMPLETE THE IMPROVED SECTION ALONG SR-25 SOUTHBOUND FROM STA. 499+80 TO STA. 503+50, INCLUDING EXCAVATION, ROCK BACKFILL, BASE, BINDER, SURFACE, PERMANENT PAVEMENT MARKINGS, AND GUARDRAIL (MATCHING EXISTING MARKINGS AND GUARDRAIL AS NECESSARY).

PHASE 2 – ROCKFALL SITE

1. REMOVE THE EXISTING PAVEMENT MARKINGS AS NECESSARY FOR SR-25 NORTHBOUND AND SOUTHBOUND TRAFFIC.

2. INSTALL TEMPORARY PAVEMENT MARKINGS FOR 2 @ 10' LANES, ALLOWING THE SR-25 SOUTHBOUND TRAFFIC TO UTILIZE THE EXISTING SHOULDER, WHICH IS STRUCTURALLY ADEQUATE FOR TRAFFIC CONTROL.

3. INSTALL PORTABLE BARRIER RAIL AS SHOWN ON THE TRAFFIC CONTROL PLAN – PHASE 2, ASSURING 2' OFFSET FROM THE ADJACENT SR-25 NORTHBOUND TRAFFIC EDGE OF TEMPORARY TRAVEL LANE.

4. IMPLEMENT TWO (2) LANE TRAFFIC THROUGH THE WORK ZONE FROM APPROXIMATELY STA. 448+40 TO STA. 481+85 AND COMPLETE ALL NECESSARY ROCK EXCAVATION ADJACENT TO SR-25 NORTHBOUND FROM STA. 453+00 TO STA. 474+00.

PHASE 4 (NOT SHOWN)

1. MILL AND OVERLAY EXISTING PAVEMENT FROM STA. 453+00 TO STA. 474+00.

2. INSTALL PERMANENT PAVEMENT MARKINGS, MATCHING EXISTING MARKINGS AS NECESSARY, FROM STA. 448+40 TO STA. 481+85.

## SIGNS (CONSTRUCTION)

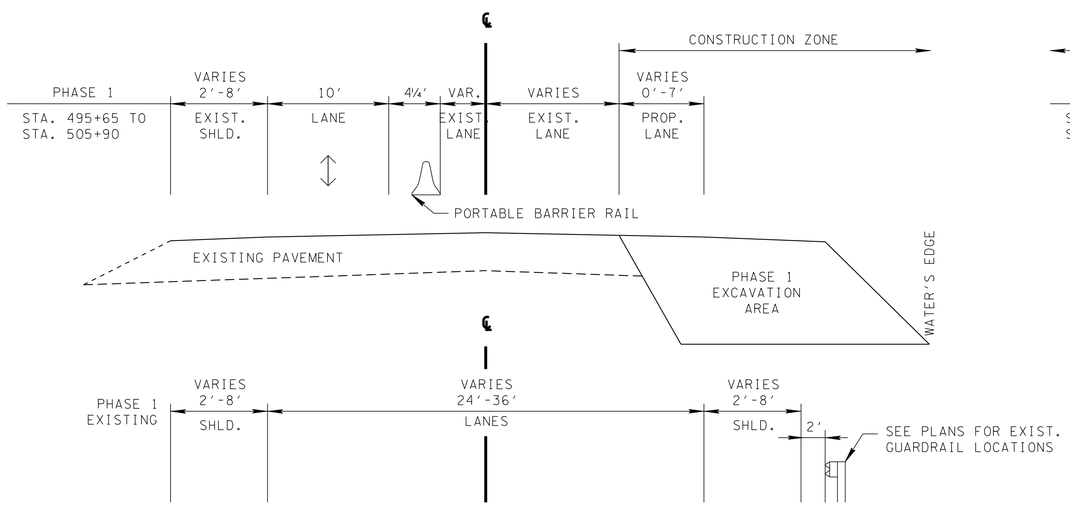
| DESCRIPTION | UNIT | TOTAL | ITEM NO. 712-06 (S.F.) | SIZE | M.U.T.C.D. NO. | REMARKS |
|---|---|---|---|---|---|---|
| END ROAD WORK | S.F. | 3 | 13.50 | 36"X18" | G20-2 | |
| STOP HERE ON RED | S.F. | 3 | 18.00 | 24"X36" | R10-6 | |
| STAY IN LANE TO EXTEND GREEN | S.F. | 3 | 26.25 | 30"X42" | R10-6 (MOD) | |
| NO TURN ON RED | S.F. | 1 | 7.50 | 30"X36" | R10-11A | |
| ROAD CLOSED | S.F. | 3 | 30.00 | 48"X30" | R11-2 | |
| MAXIMUM X MINUTE RED | S.F. | 4 | 56.00 | 42"X48" | SP-1 | |
| MAINTAIN XX MPH SPEED | S.F. | 2 | 21.00 | 42"X36" | SP-2 | |
| LANE SHIFT (SYMBOL) | S.F. | 1 | 9.00 | 36"X36" | W1-4R | |
| LANE SHIFT (SYMBOL) | S.F. | 1 | 9.00 | 36"X36" | W1-4L | |
| LANE SHIFT 1/2 MILE | S.F. | 1 | 9.00 | 36"X36" | W1-4B (MOD) | |
| SIGNAL AHEAD (SYMBOL) | S.F. | 3 | 27.00 | 36"X36" | W3-3 | |
| BE PREPARED TO STOP | S.F. | 3 | 27.00 | 36"X36" | W3-4 | |
| SHOULDER DROP OFF (SYMBOL) | S.F. | 2 | 18.00 | 36"X36" | W8-17 | |
| SHOULDER DROP OFF (PLAQUE) | S.F. | 2 | 6.00 | 24"X18" | W8-17P | |
| ROAD WORK 1 MILE | S.F. | 2 | 18.00 | 36"X36" | W20-1 | |
| ROAD WORK 1/2 MILE | S.F. | 2 | 18.00 | 36"X36" | W20-1 | |
| ROAD WORK 1500 FT | S.F. | 3 | 27.00 | 36"X36" | W20-1 | |
| ROAD WORK 1000 FT | S.F. | 3 | 27.00 | 36"X36" | W20-1 | |
| ROAD WORK 500 FT | S.F. | 3 | 27.00 | 36"X36" | W20-1 | |
| ONE LANE ROAD 1500 FT | S.F. | 3 | 27.00 | 36"X36" | W20-4 | |
| FLAGGER (SYMBOL) | S.F. | 3 | 27.00 | 36"X36" | W20-7 | |
| BLASTING ZONE AHEAD | S.F. | 2 | 18.00 | 36"X36" | W22-1 | |
| TURN OFF 2-WAY RADIO AND CELL PHONE | S.F. | 2 | 21.00 | 42"X36" | W22-2 | |
| END BLASTING ZONE | S.F. | 2 | 21.00 | 42"X36" | W22-3 | |
| **TOTAL** | | | **508.25** | | | |

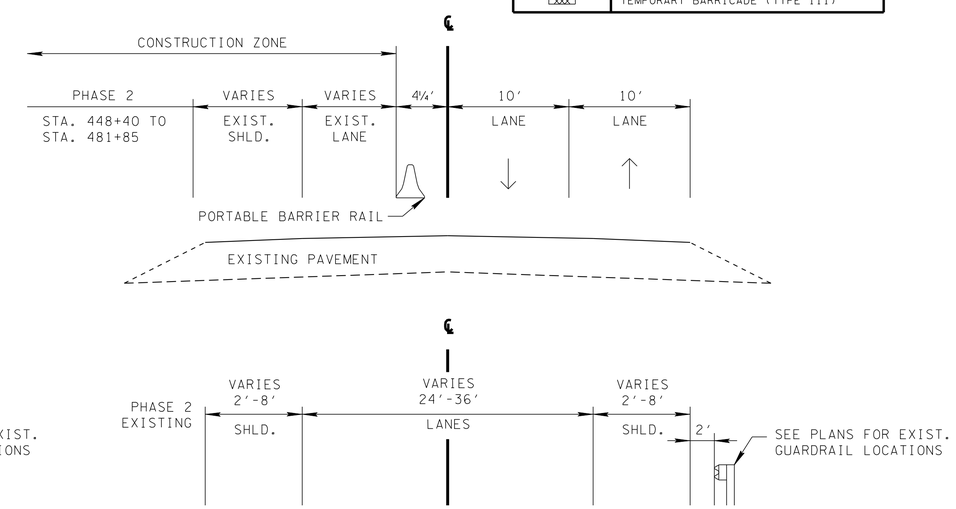
## TRAFFIC CONTROL QUANTITIES

| ITEM NO. | DESCRIPTION | UNIT | QUANTITY |
|---|---|---|---|
| 705-08.51 | PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3 | EACH | 4 |
| 712-01 | TRAFFIC CONTROL | LS | 1 |
| 712-02.02 | INTERCONNECTED PORTABLE BARRIER RAIL | L.F. | 2850 |
| 712-04.01 | FLEXIBLE DRUMS (CHANNELIZING) | EACH | 35 |
| 712-04.50 | PORTABLE BARRIER RAIL DELINEATOR | EACH | 127 |
| 712-05.01 | WARNING LIGHTS (TYPE A) | EACH | 28 |
| 712-05.03 | WARNING LIGHTS (TYPE C) | EACH | 13 |
| 712-06 | SIGNS (CONSTRUCTION) | S.F. | 509 |
| 712-07.03 | TEMPORARY BARRICADES (TYPE III) | L.F. | 120 |
| 712-09.01 | REMOVABLE PAVEMENT MARKING LINE | L.F. | 6610 |
| 712-09.04 | REMOVABLE PAVEMENT MARKING (STOP LINE) | L.F. | 60 |
| 713-16.01 | CHANGEABLE MESSAGE SIGN UNIT | EACH | 2 |
| 716-01.07 | TEMPORARY RAISED PAVEMENT MARKER, YELLOW | EACH | 124 |
| 716-05.20 | PAINTED PAVEMENT MARKING (6" LINE) | L.M. | 1.7 |
| 730-40 | TEMPORARY TRAFFIC SIGNAL SYSTEM | EACH | 1 |

## TRAFFIC CONTROL LEGEND

| SYMBOL | ITEM |
|---|---|
| | WORK ZONE |
| | FLEXIBLE DRUMS (CHANNELIZING) |
| | SIGN (CONSTRUCTION) |
| | SIGN (CONSTRUCTION) (2-SIDED) |
| → | TRAFFIC FLOW |
| | PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS) |
| | TEMPORARY ATTENUATOR |
| | CHANGEABLE MESSAGE SIGN |
| A | WARNING LIGHT (TYPE A) (LOW-INTENSITY FLASHING) |
| C | WARNING LIGHT (TYPE C) (STEADY) |
| | TEMPORARY BARRICADE (TYPE III) |




**UNOFFICIAL SET**

**NOT FOR BIDDING**

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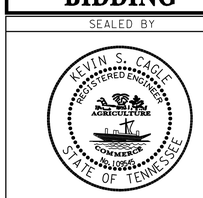


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DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL PHASING NOTES, LEGEND AND TABULATION**

9/14/2016
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2016 | 80003-4260-04 | 13 |
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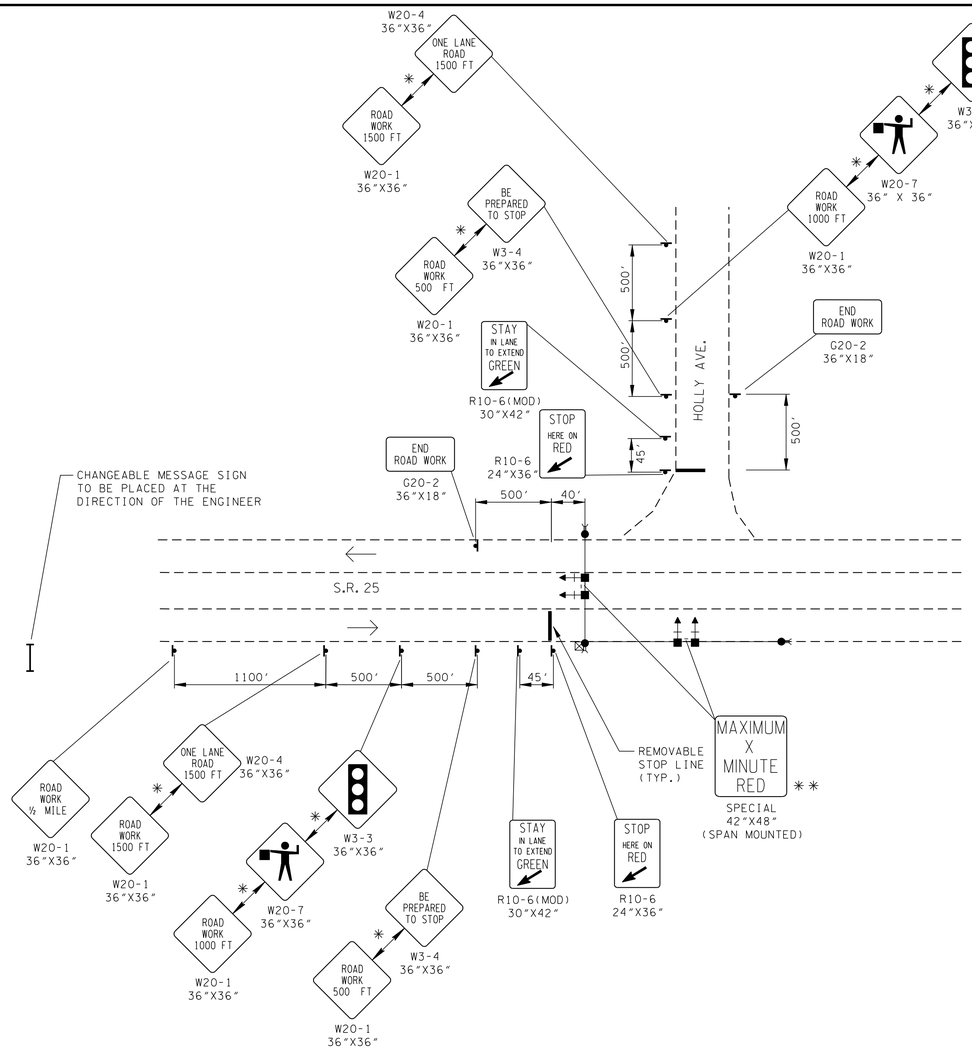
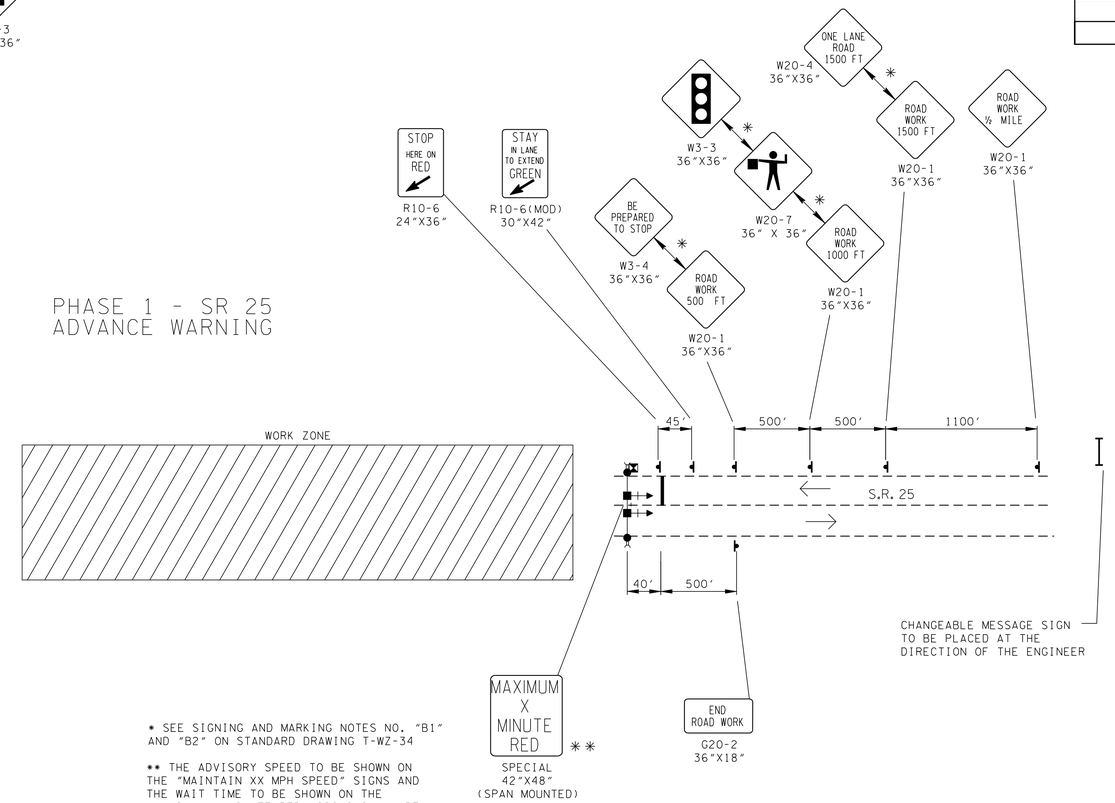



PHASE 1 - SR 25
ADVANCE WARNING




* SEE SIGNING AND MARKING NOTES NO. "B1" AND "B2" ON STANDARD DRAWING T-WZ-34

** THE ADVISORY SPEED TO BE SHOWN ON THE "MAINTAIN XX MPH SPEED" SIGNS AND THE WAIT TIME TO BE SHOWN ON THE "MAXIMUM X MINUTE RED" SIGNS SHALL BE DETERMINED IN THE FIELD BY TEST RUNS AND FIELD OBSERVATIONS OF TRAFFIC FLOW AND SHALL BE APPROPRIATE FOR THE SLOWER MOVING TRUCKS.

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DEPARTMENT OF TRANSPORTATION

PHASE I

TRAFFIC CONTROL PLANS

9/14/2016
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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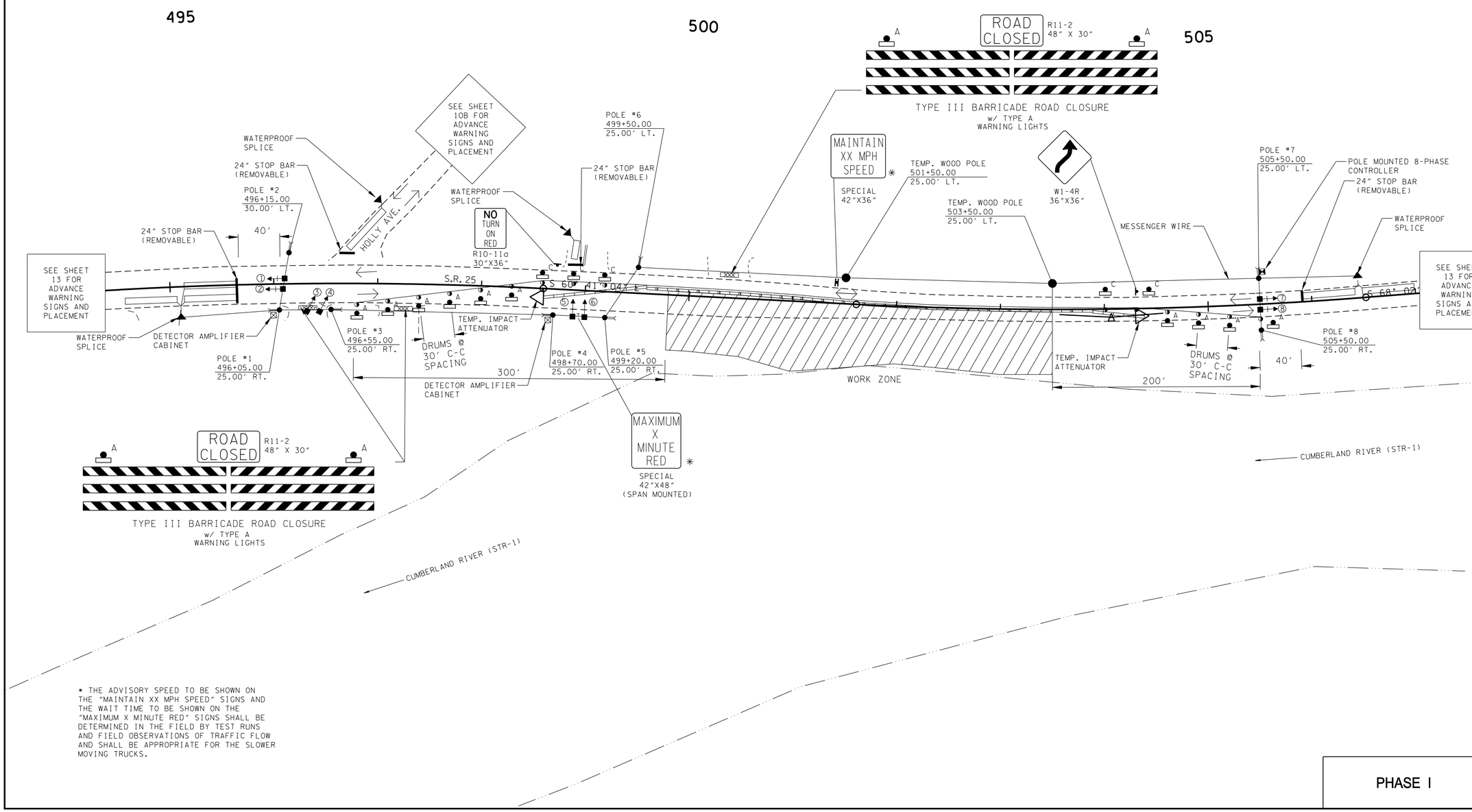


* THE ADVISORY SPEED TO BE SHOWN ON THE "MAINTAIN XX MPH SPEED" SIGNS AND THE WAIT TIME TO BE SHOWN ON THE "MAXIMUM X MINUTE RED" SIGNS SHALL BE DETERMINED IN THE FIELD BY TEST RUNS AND FIELD OBSERVATIONS OF TRAFFIC FLOW AND SHALL BE APPROPRIATE FOR THE SLOWER MOVING TRUCKS.

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SEALED BY

KEVIN S. CAGLE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 102605
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

PHASE I

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
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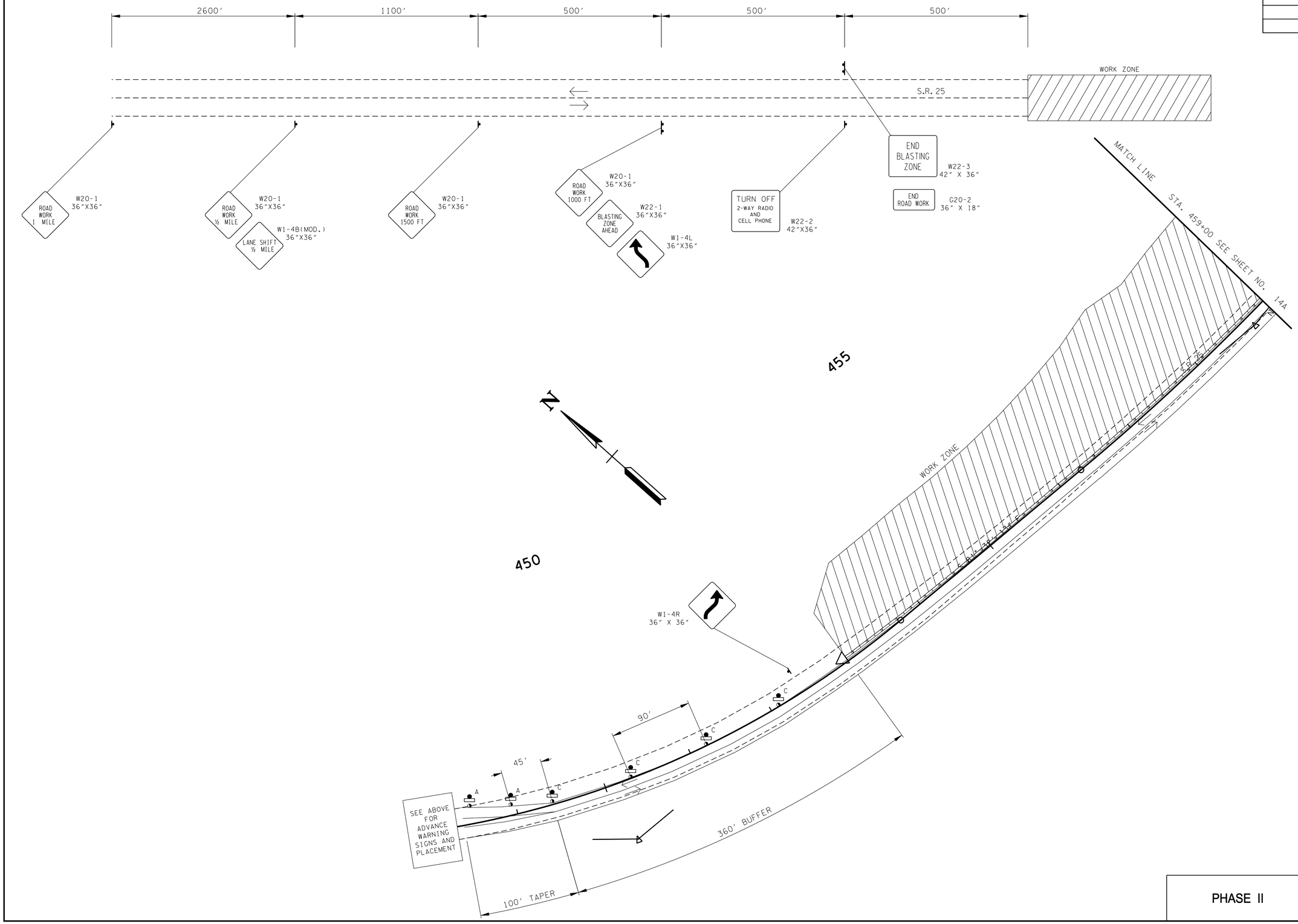
# PHASE 2 - SR 25
## ADVANCE WARNING

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COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00004 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

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DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

PHASE II

9/14/2016
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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
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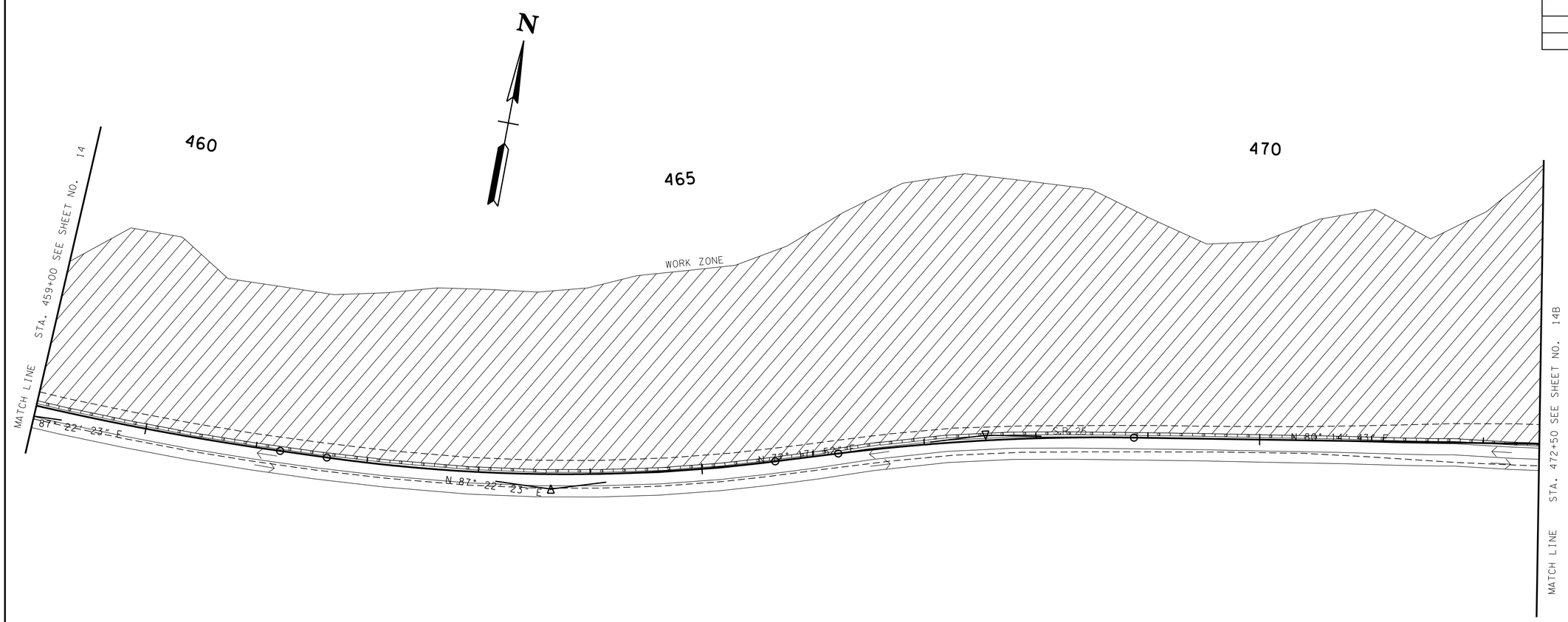


**UNOFFICIAL SET**

**NOT FOR BIDDING**

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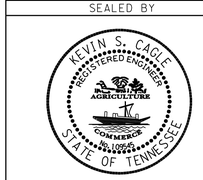


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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PHASE II

TRAFFIC CONTROL PLANS

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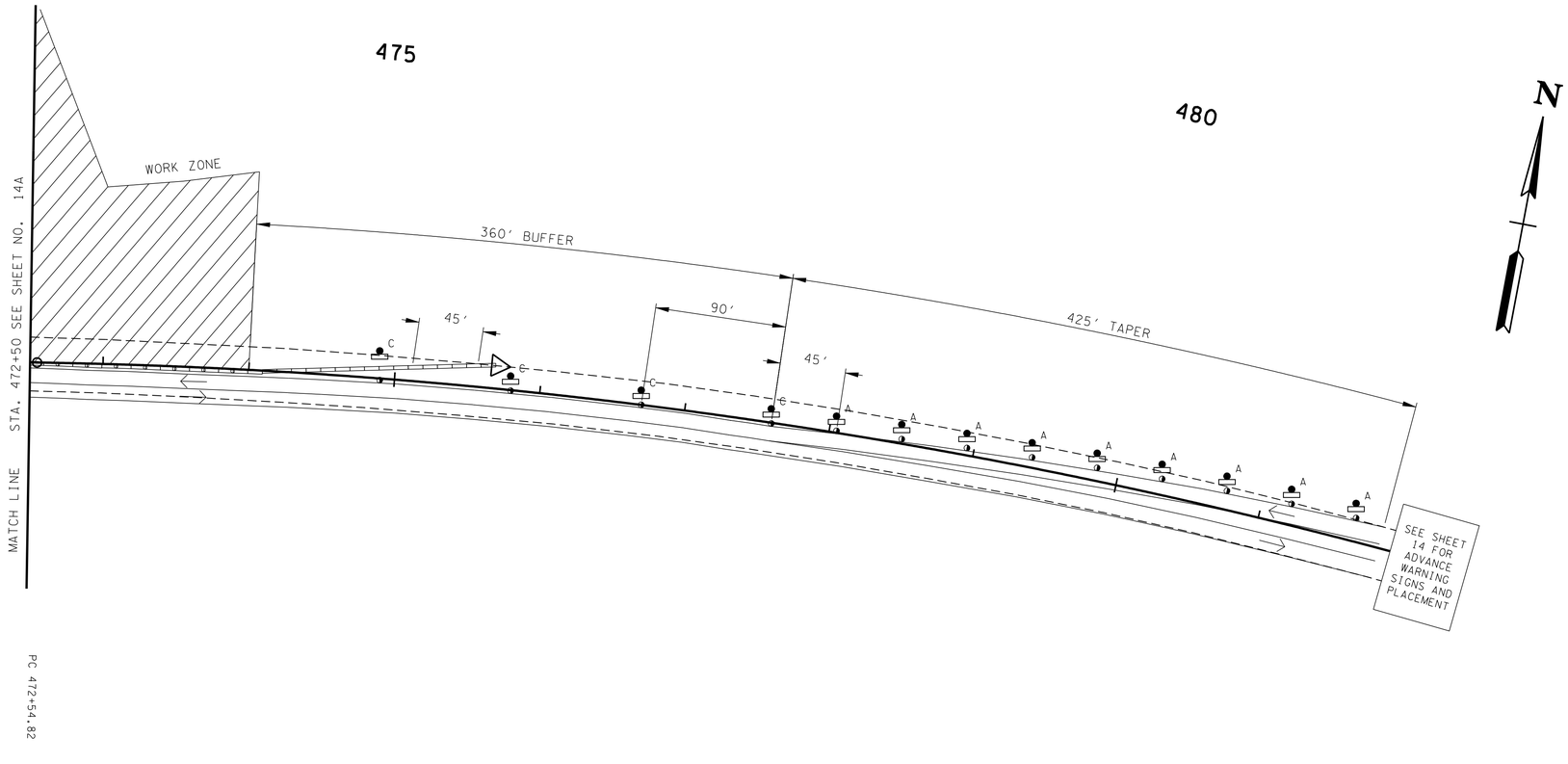


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DEPARTMENT OF TRANSPORTATION

PHASE II

TRAFFIC CONTROL PLANS

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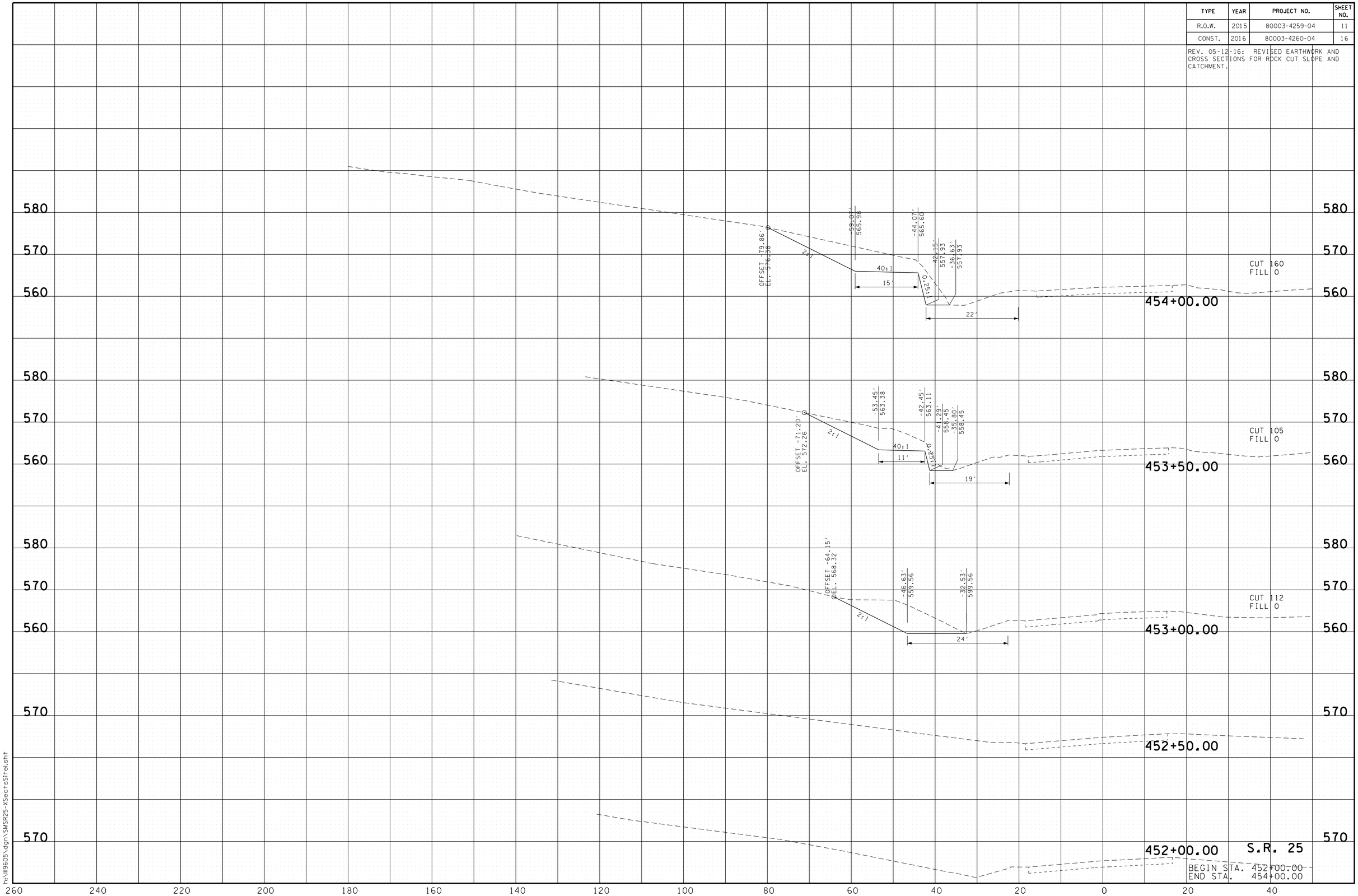
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 11 |
| CONST. | 2016 | 80003-4260-04 | 16 |

REV. 05-12-16: REVISED EARTHWORK AND CROSS SECTIONS FOR ROCK CUT SLOPE AND CATCHMENT.

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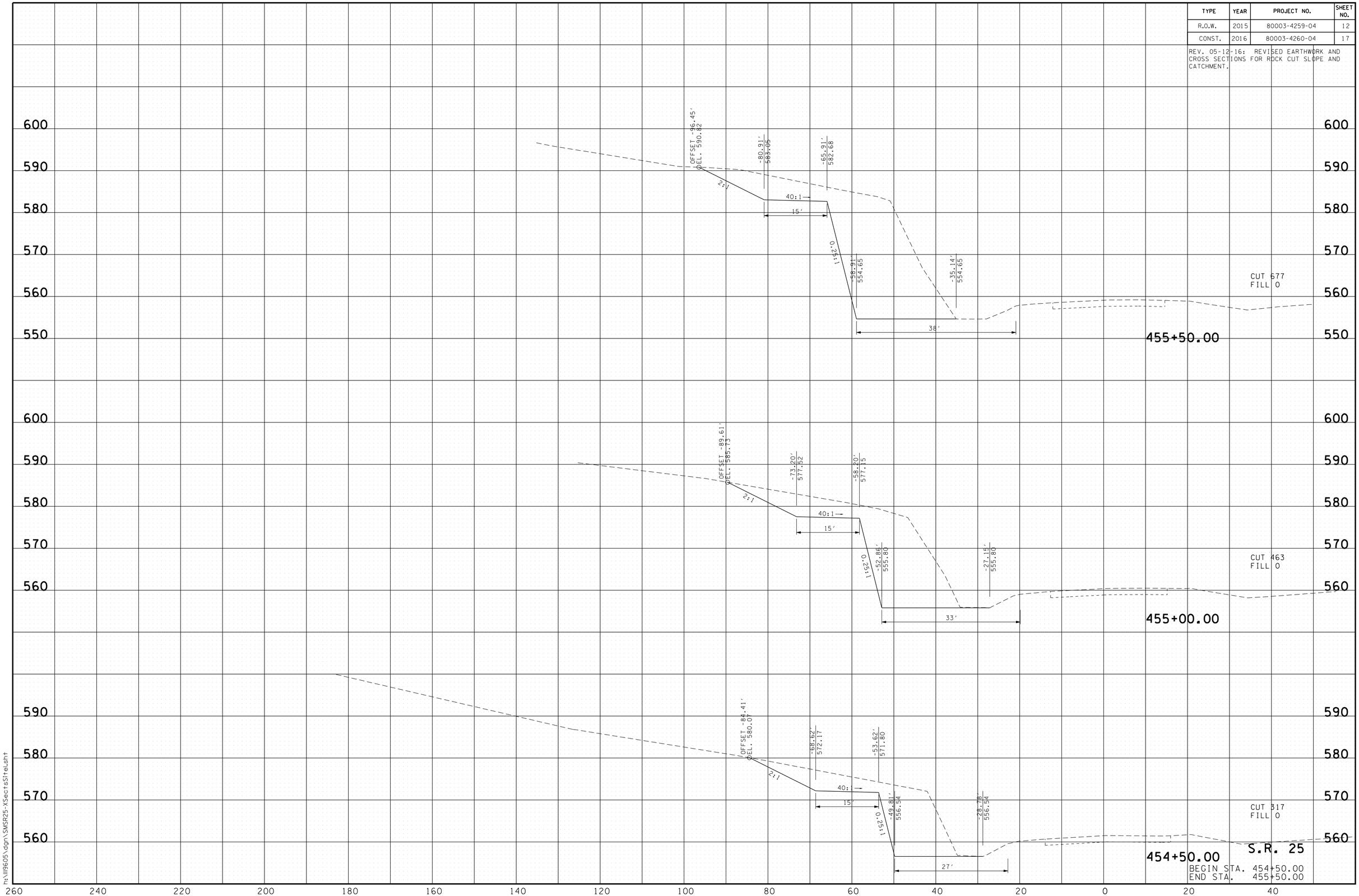
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 12 |
| CONST. | 2016 | 80003-4260-04 | 17 |

REV. 05-12-16: REVISED EARTHWORK AND CROSS SECTIONS FOR ROCK CUT SLOPE AND CATCHMENT.

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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| R.O.W. | 2015 | 80003-4259-04 | 13 |
| CONST. | 2016 | 80003-4260-04 | 18 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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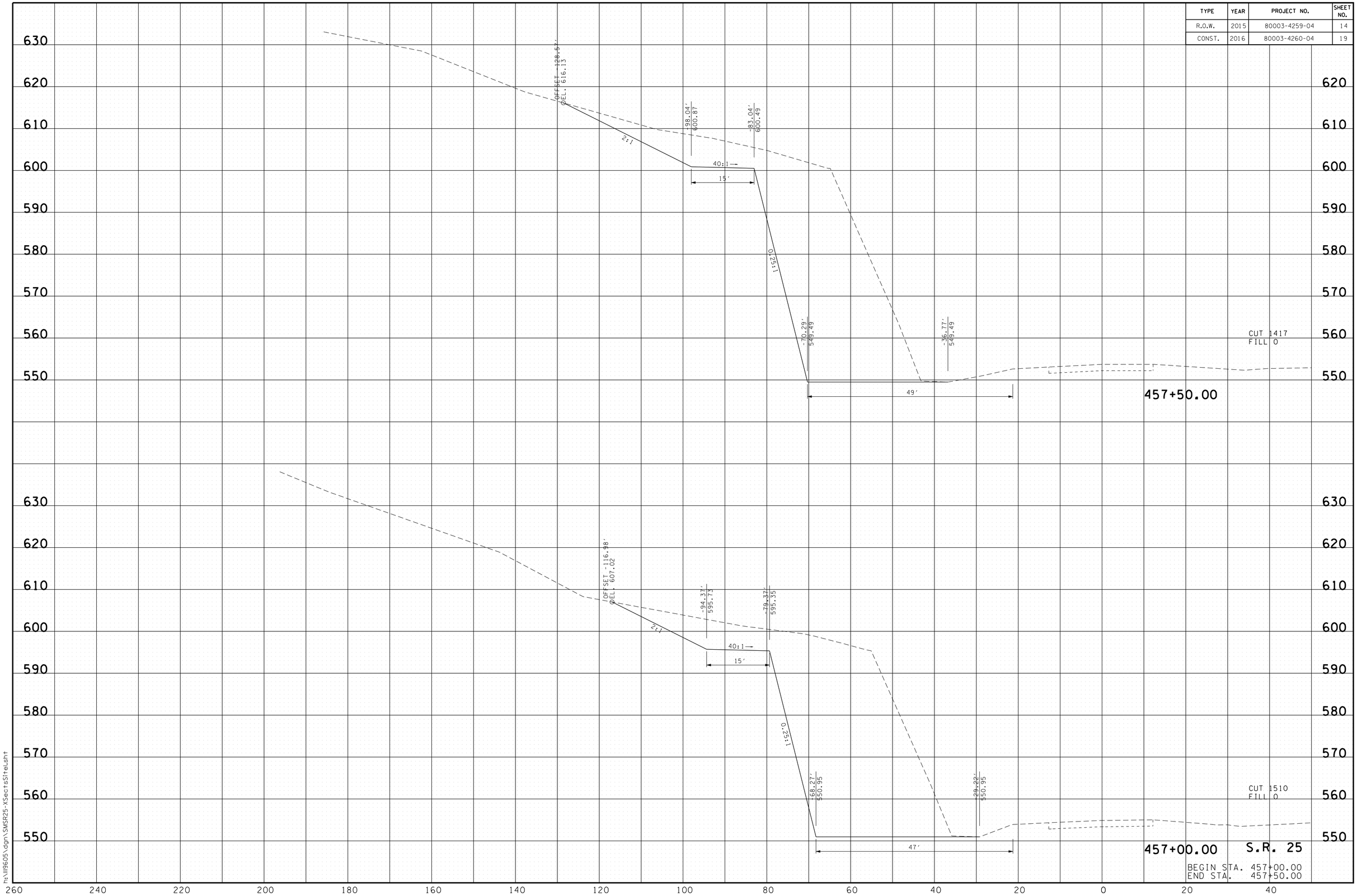
| CONST. | 2016 | 80003-4260-04 | 19 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
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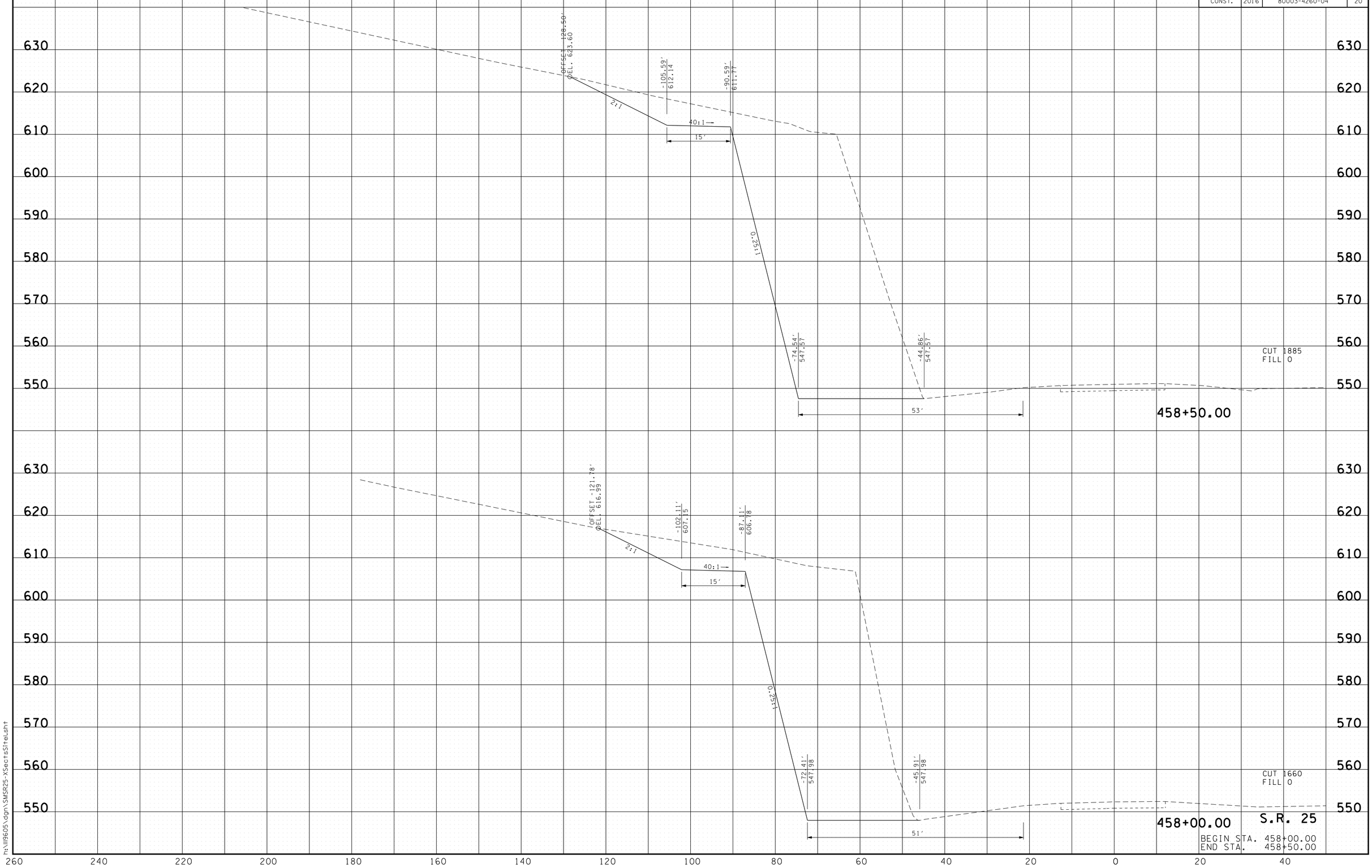
| CONST. | 2016 | 80003-4260-04 | 20 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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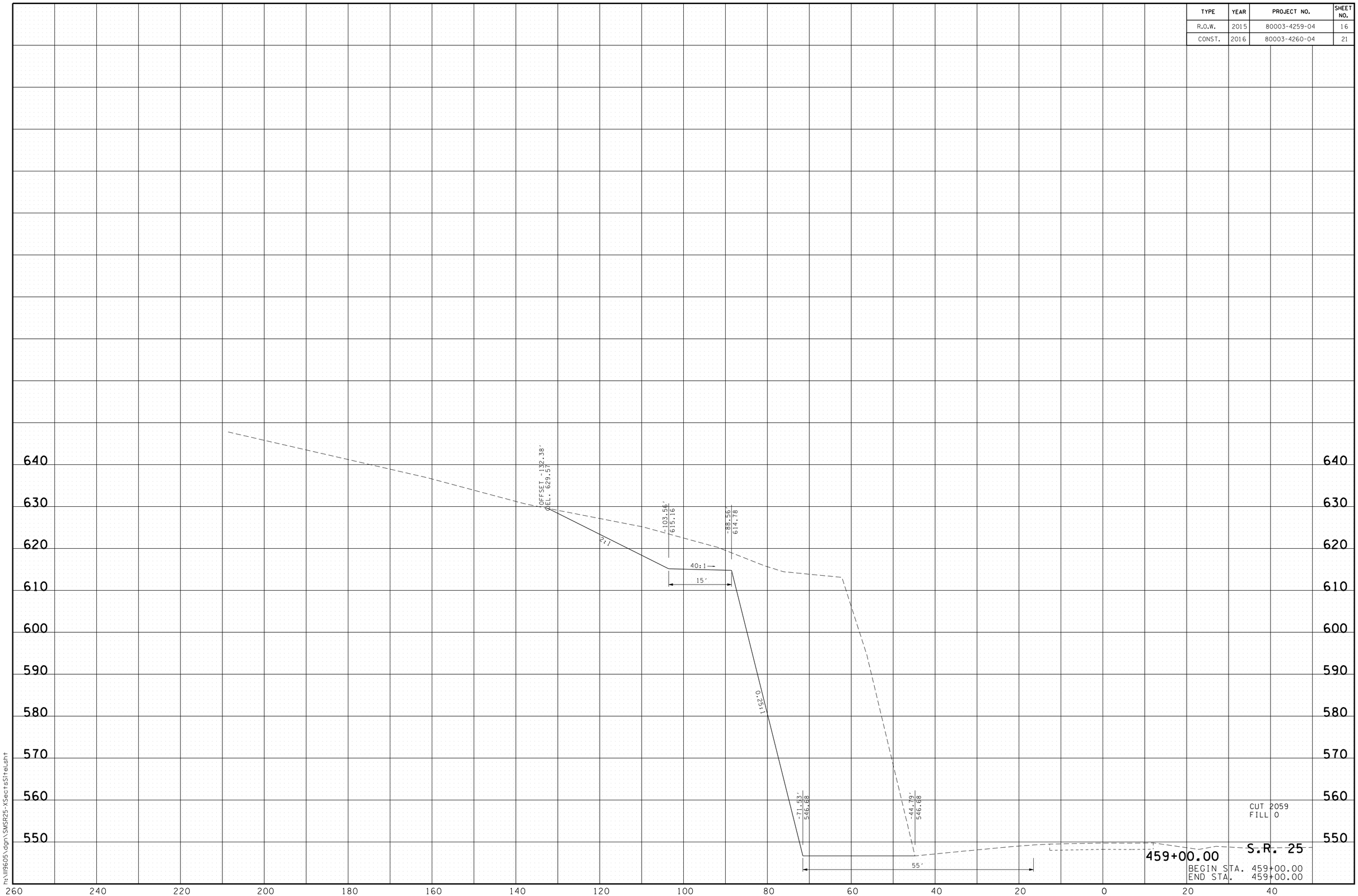
| CONST. | 2016 | 80003-4260-04 | 21 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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| R.O.W. | 2015 | 80003-4259-04 | 17 |
| CONST. | 2016 | 80003-4260-04 | 22 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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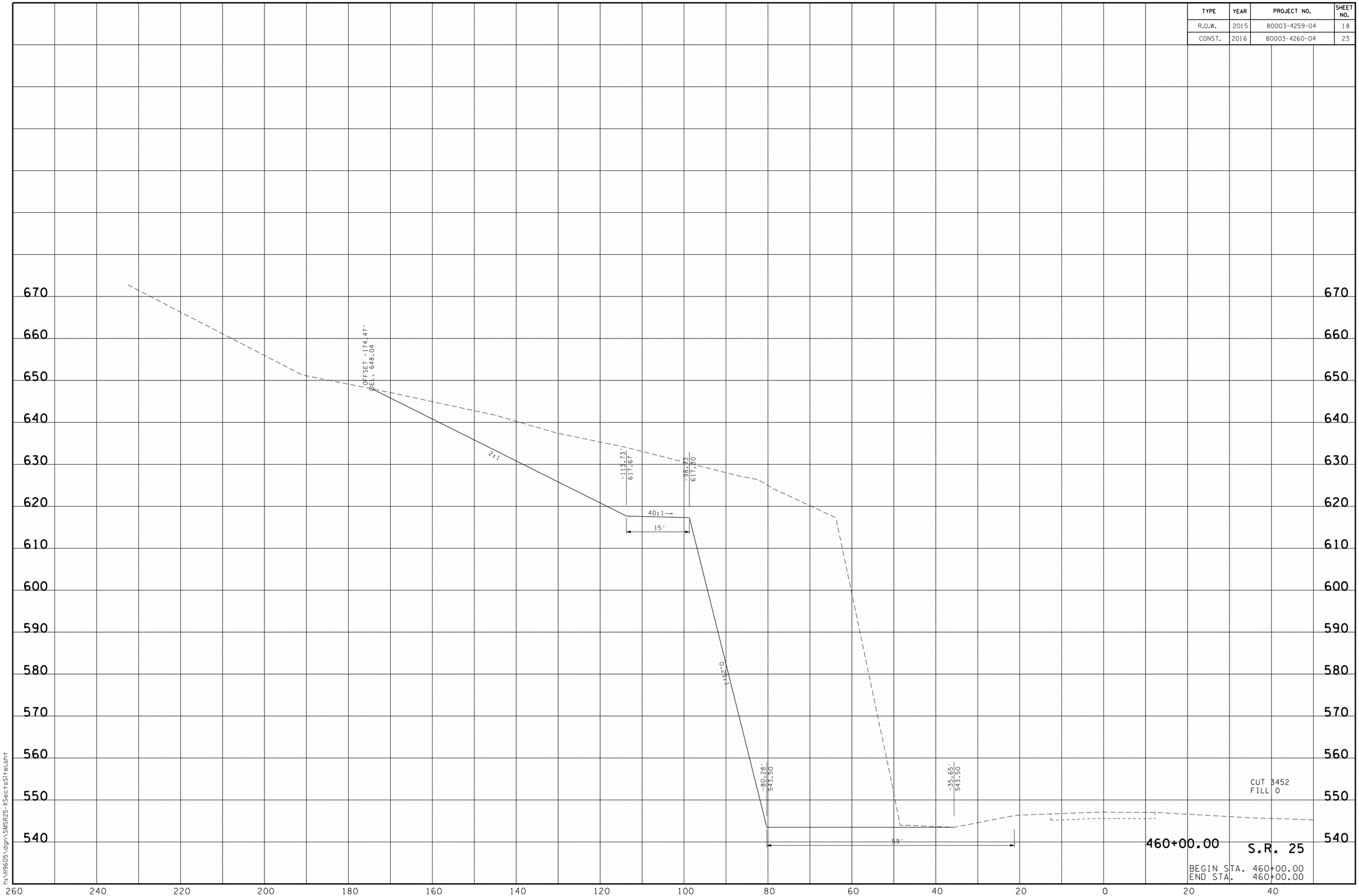
| CONST. | 2016 | 80003-4260-04 | 23 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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| R.O.W. | 2015 | 80003-4259-04 | 19 |
| CONST. | 2016 | 80003-4260-04 | 24 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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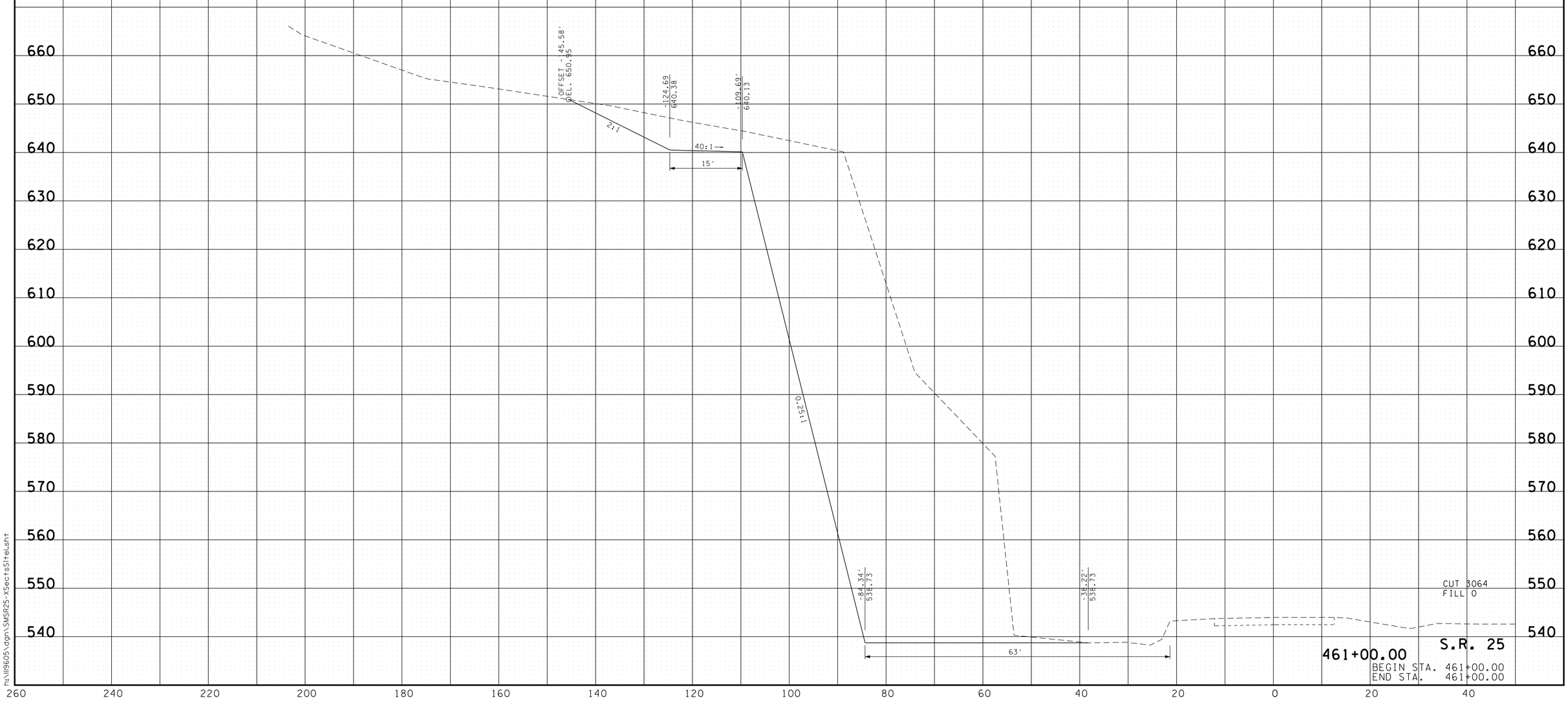
| CONST. | 2016 | 80003-4260-04 | 25 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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| R.O.W. | 2015 | 80003-4259-04 | 21 |
| CONST. | 2016 | 80003-4260-04 | 26 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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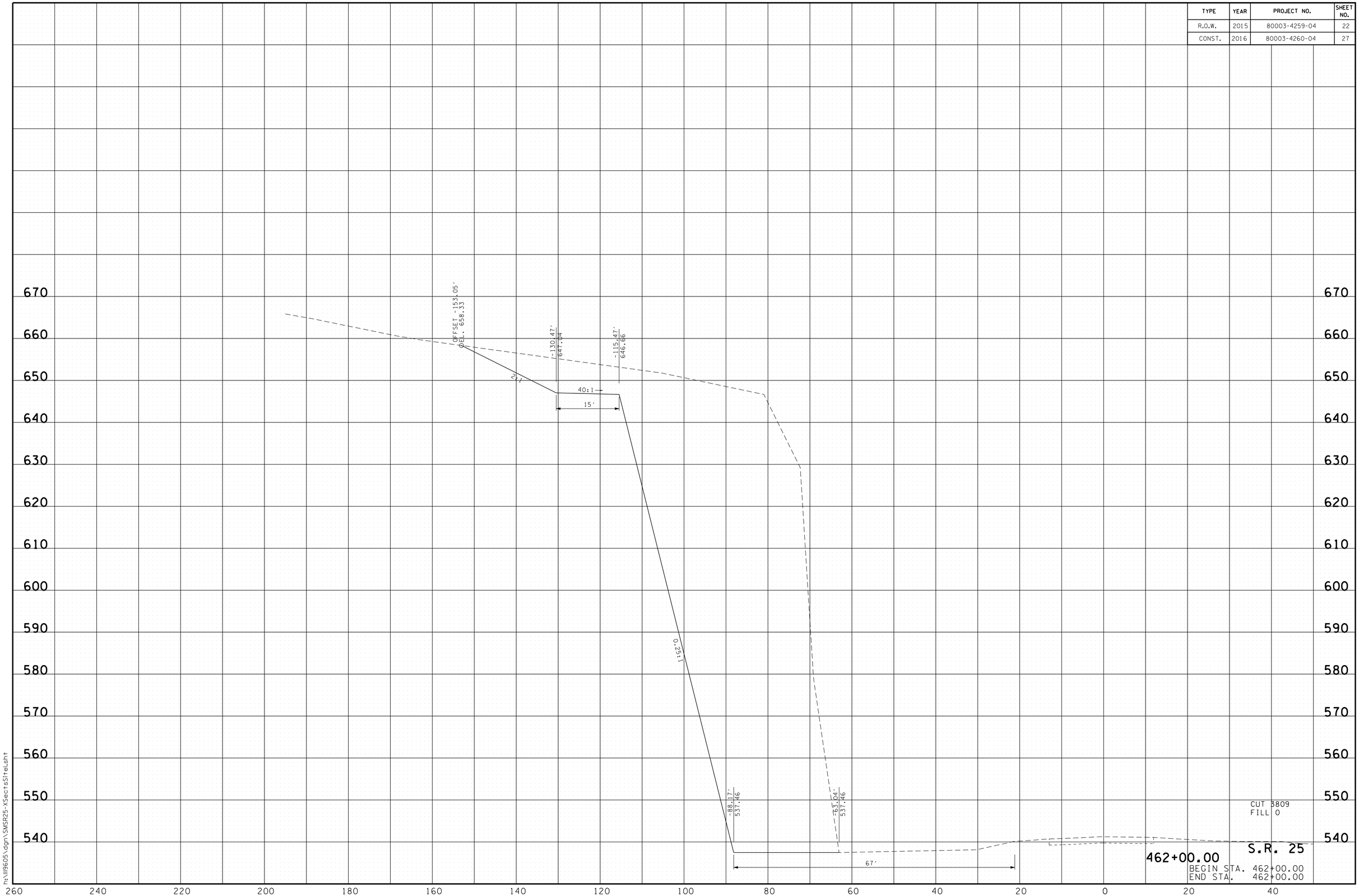
| CONST. | 2016 | 80003-4260-04 | 27 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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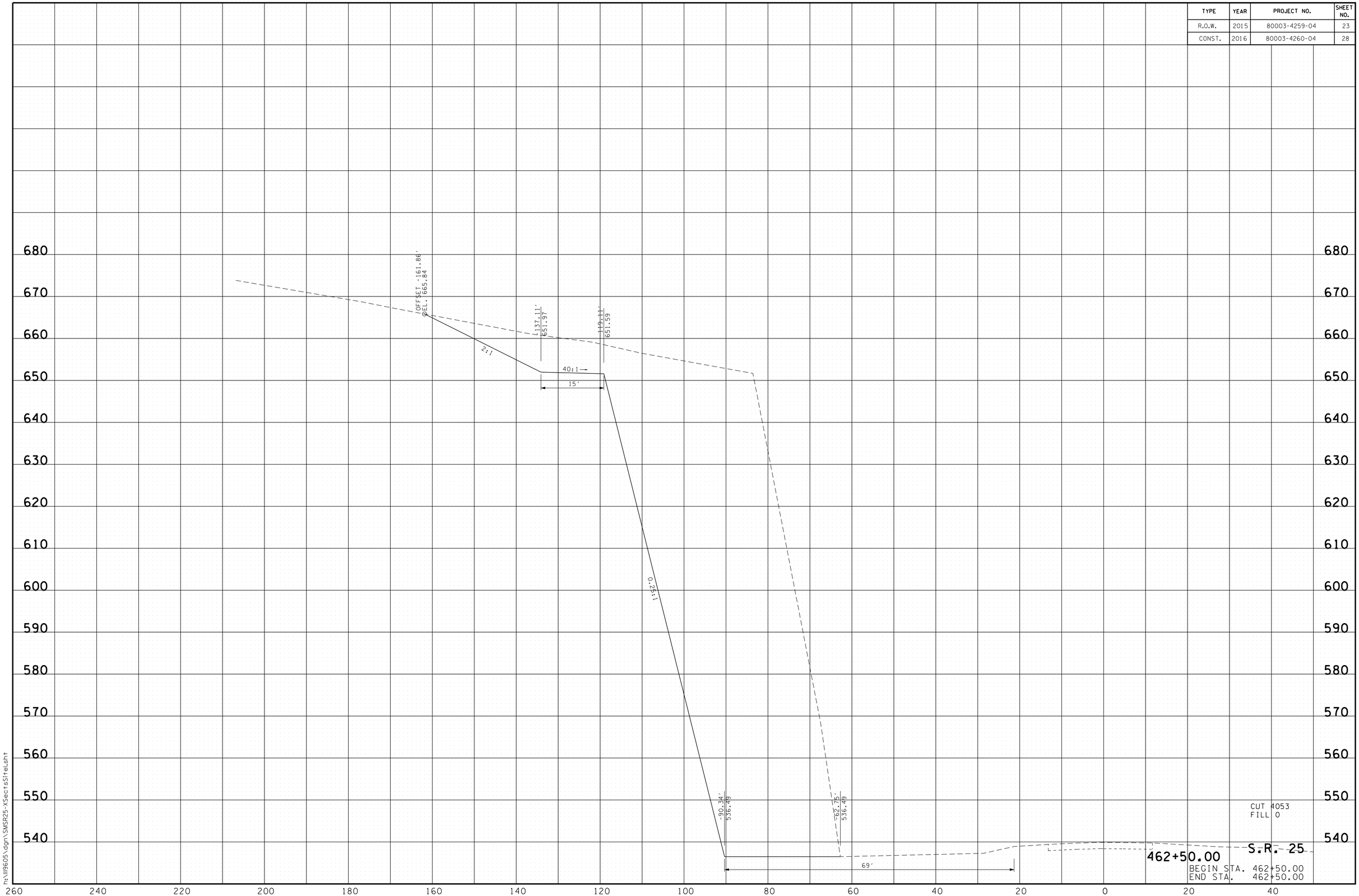
| CONST. | 2016 | 80003-4260-04 | 28 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
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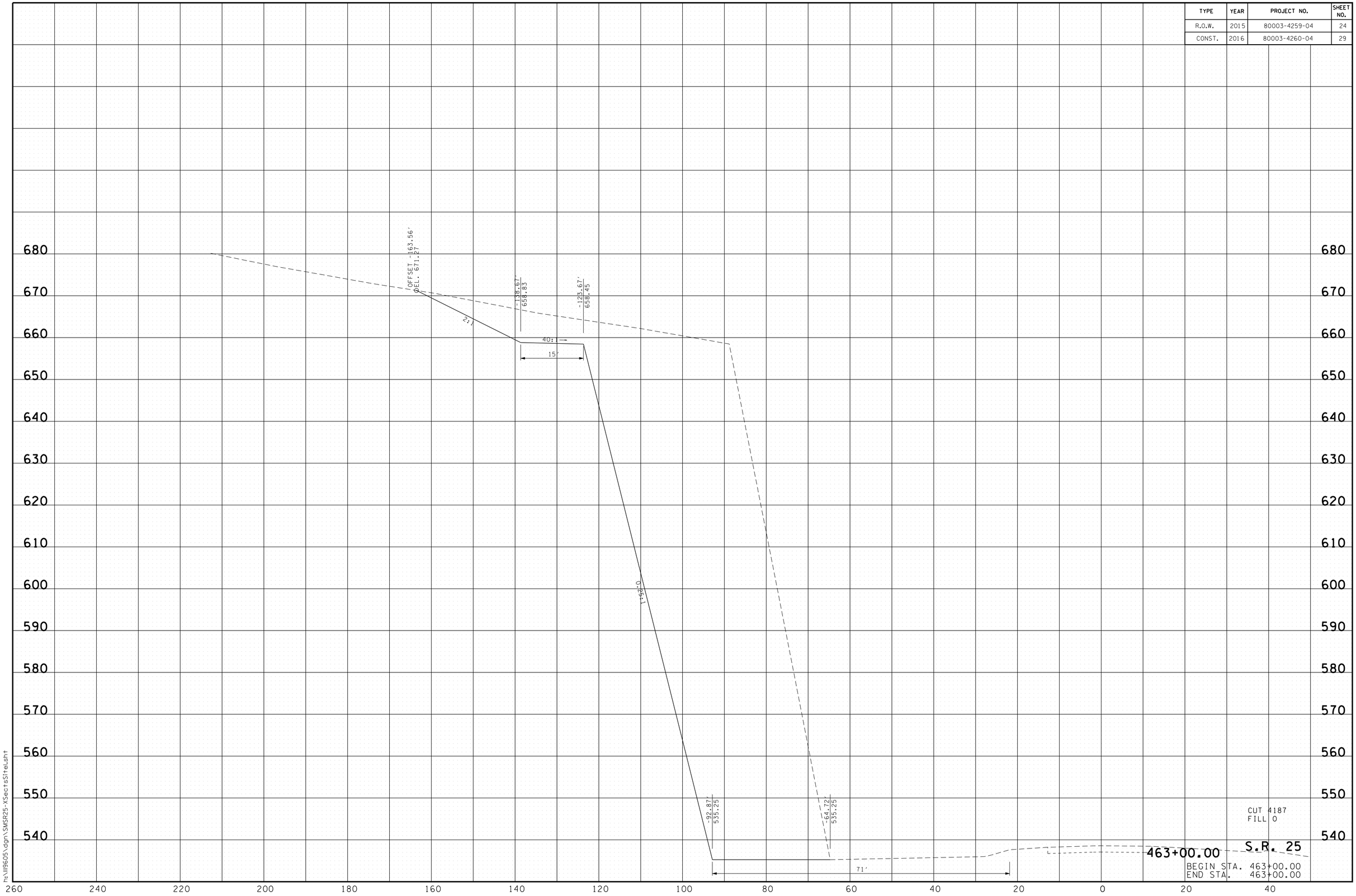
| CONST. | 2016 | 80003-4260-04 | 29 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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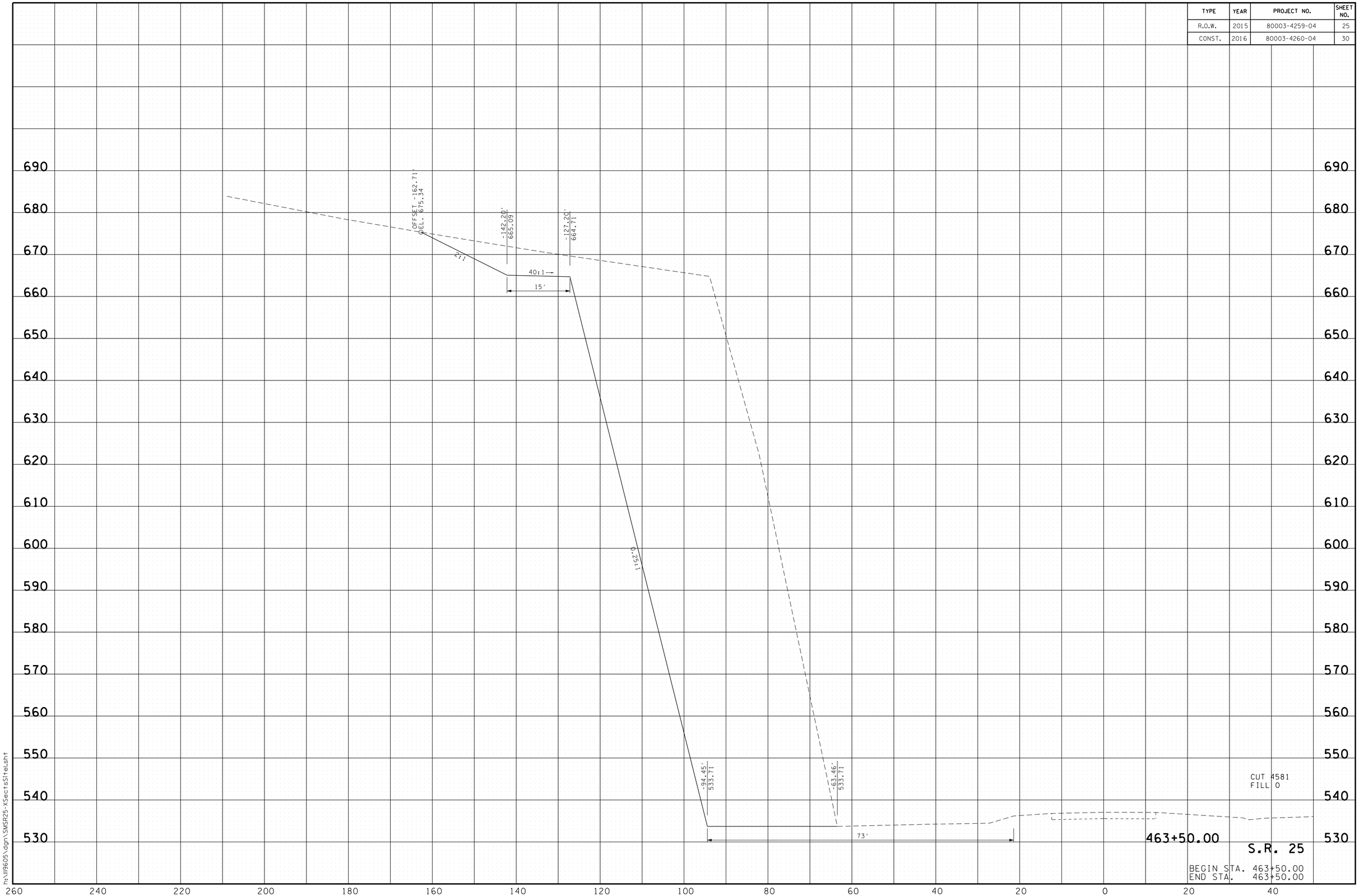
| CONST. | 2016 | 80003-4260-04 | 30 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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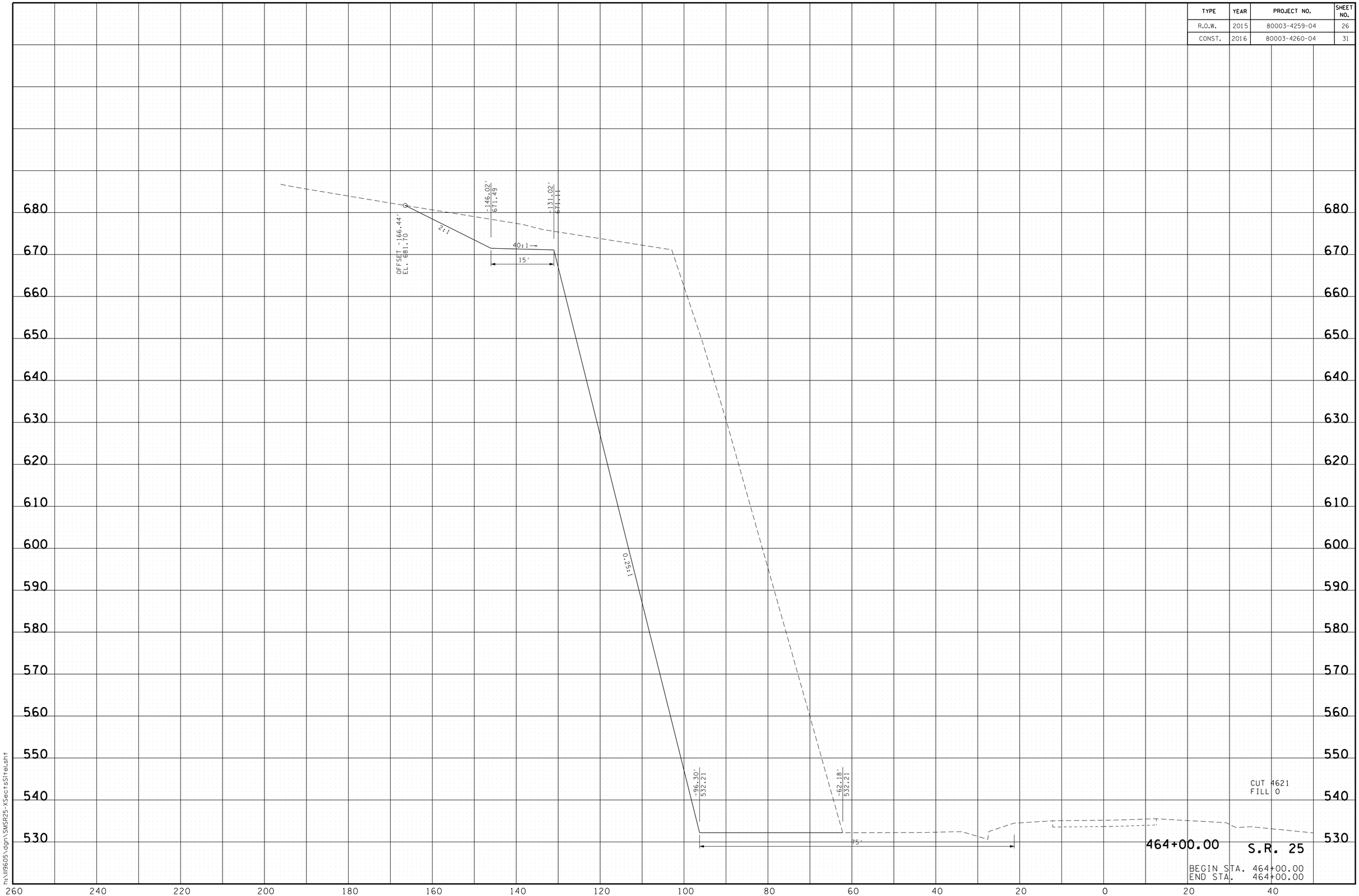
| CONST. | 2016 | 80003-4260-04 | 31 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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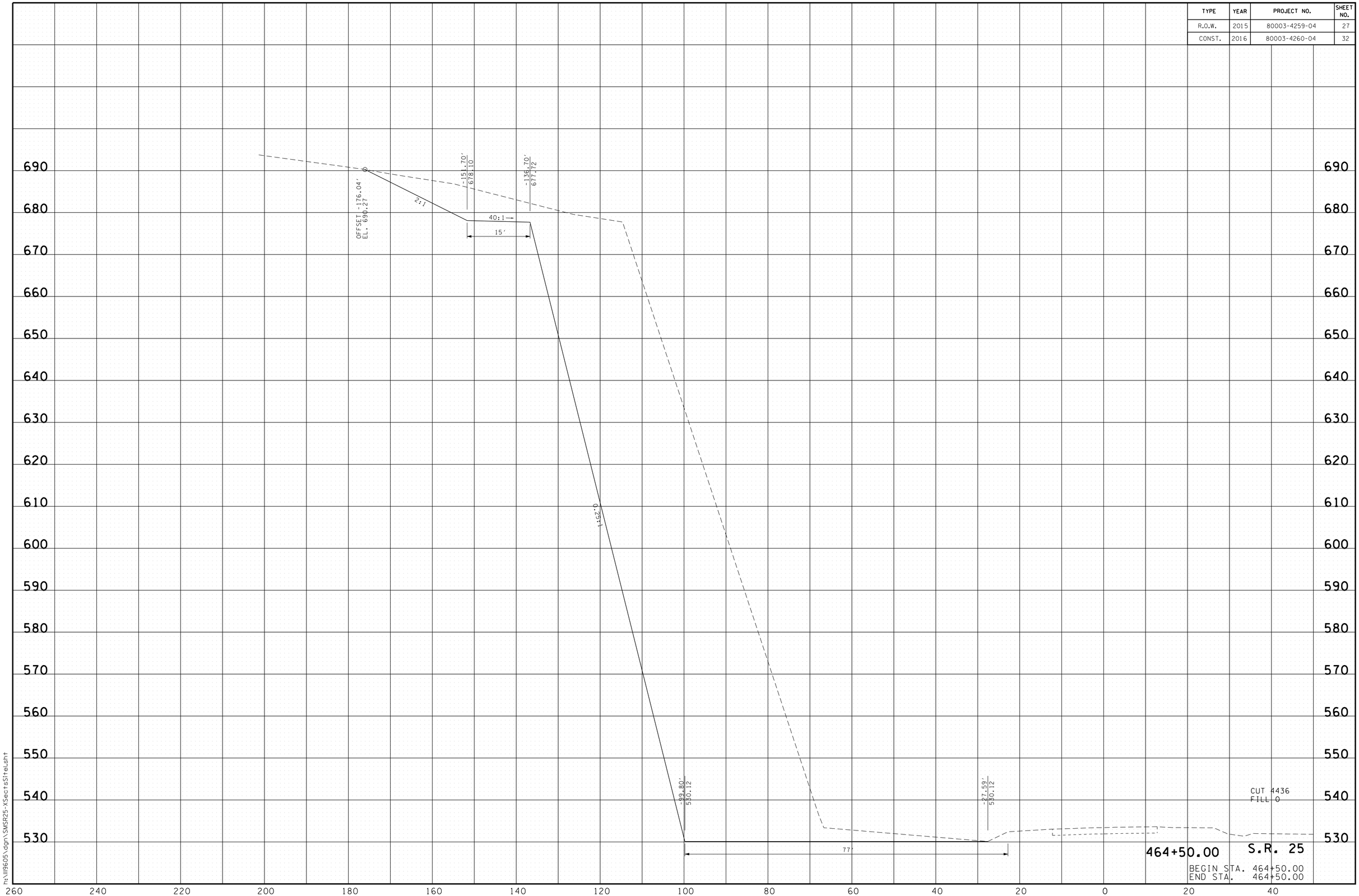
| CONST. | 2016 | 80003-4260-04 | 32 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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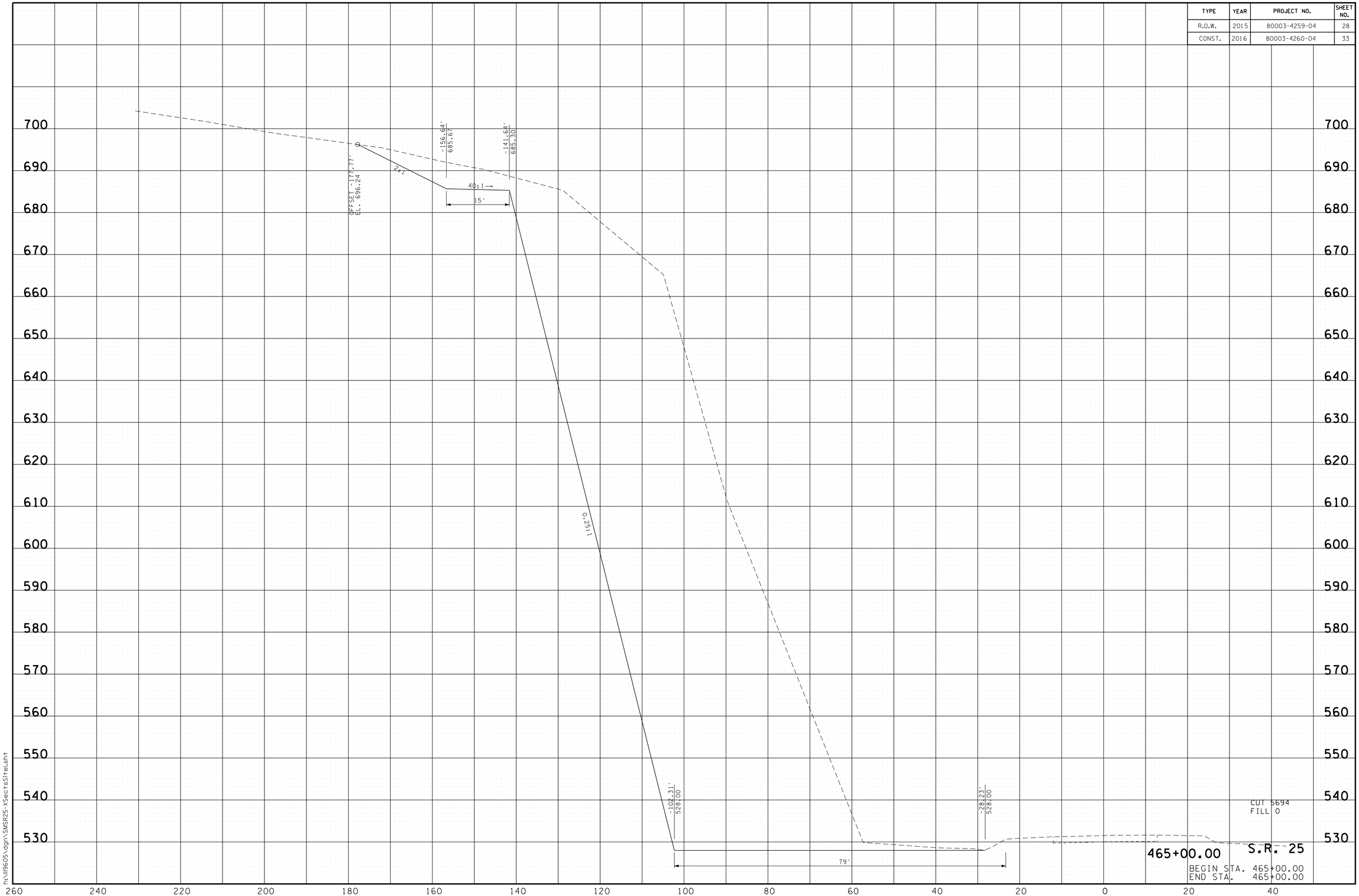
| R.O.W. | 2015 | 80003-4259-04 | 28 |
| CONST. | 2016 | 80003-4260-04 | 33 |

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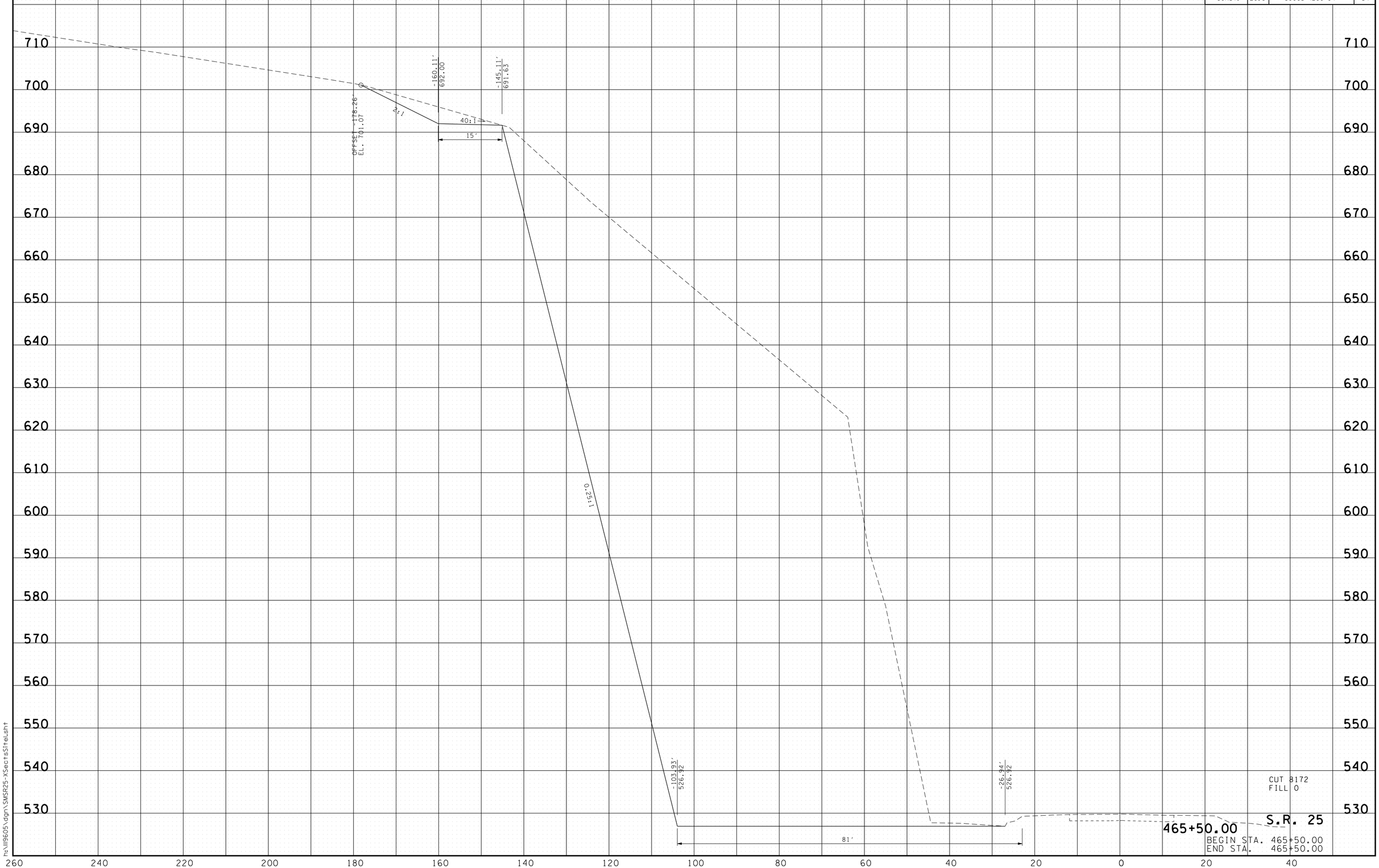
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 29 |
| CONST. | 2016 | 80003-4260-04 | 34 |

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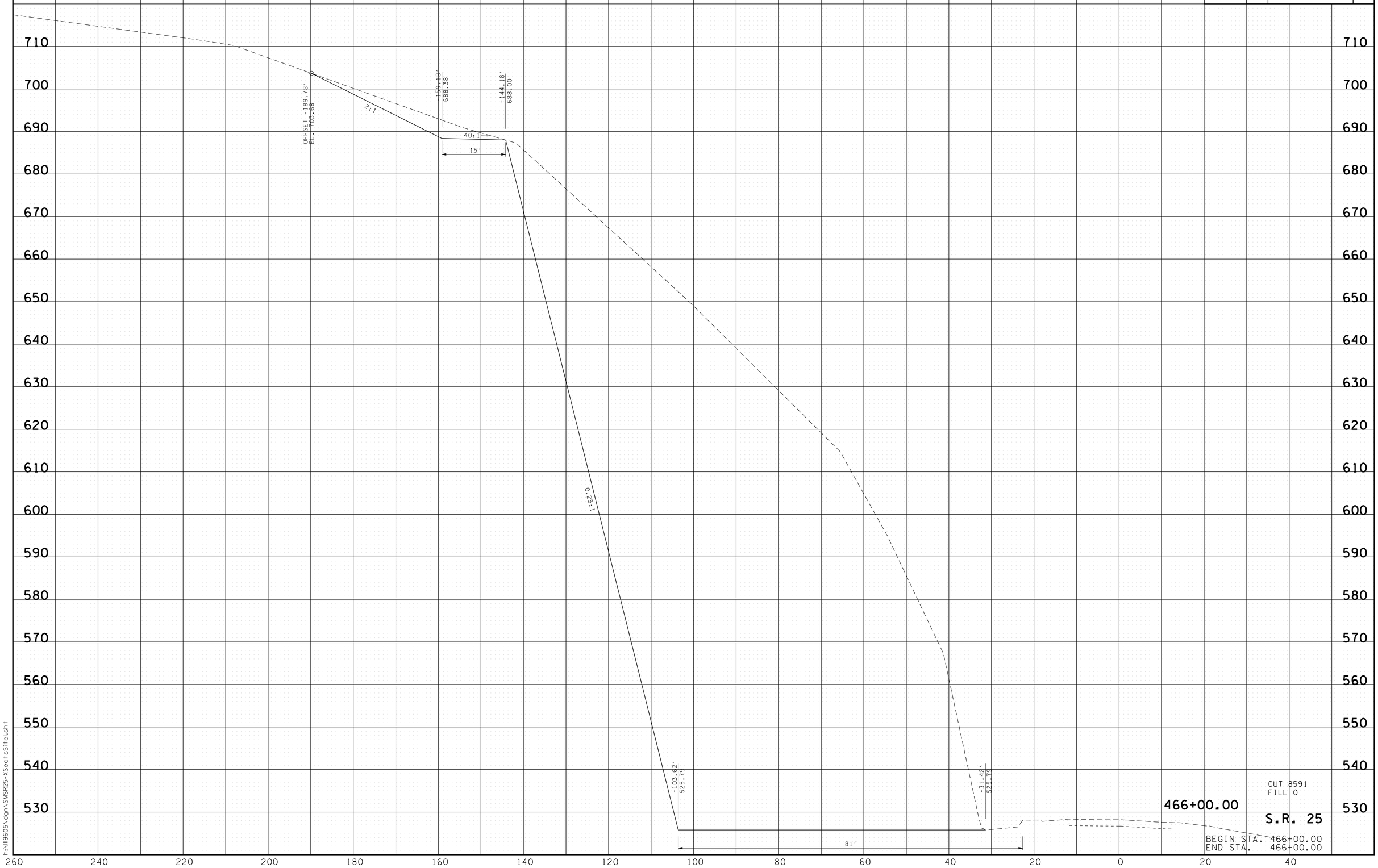
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 30 |
| CONST. | 2016 | 80003-4260-04 | 35 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 31 |
| CONST. | 2016 | 80003-4260-04 | 36 |

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| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 32 |
| CONST. | 2016 | 80003-4260-04 | 37 |

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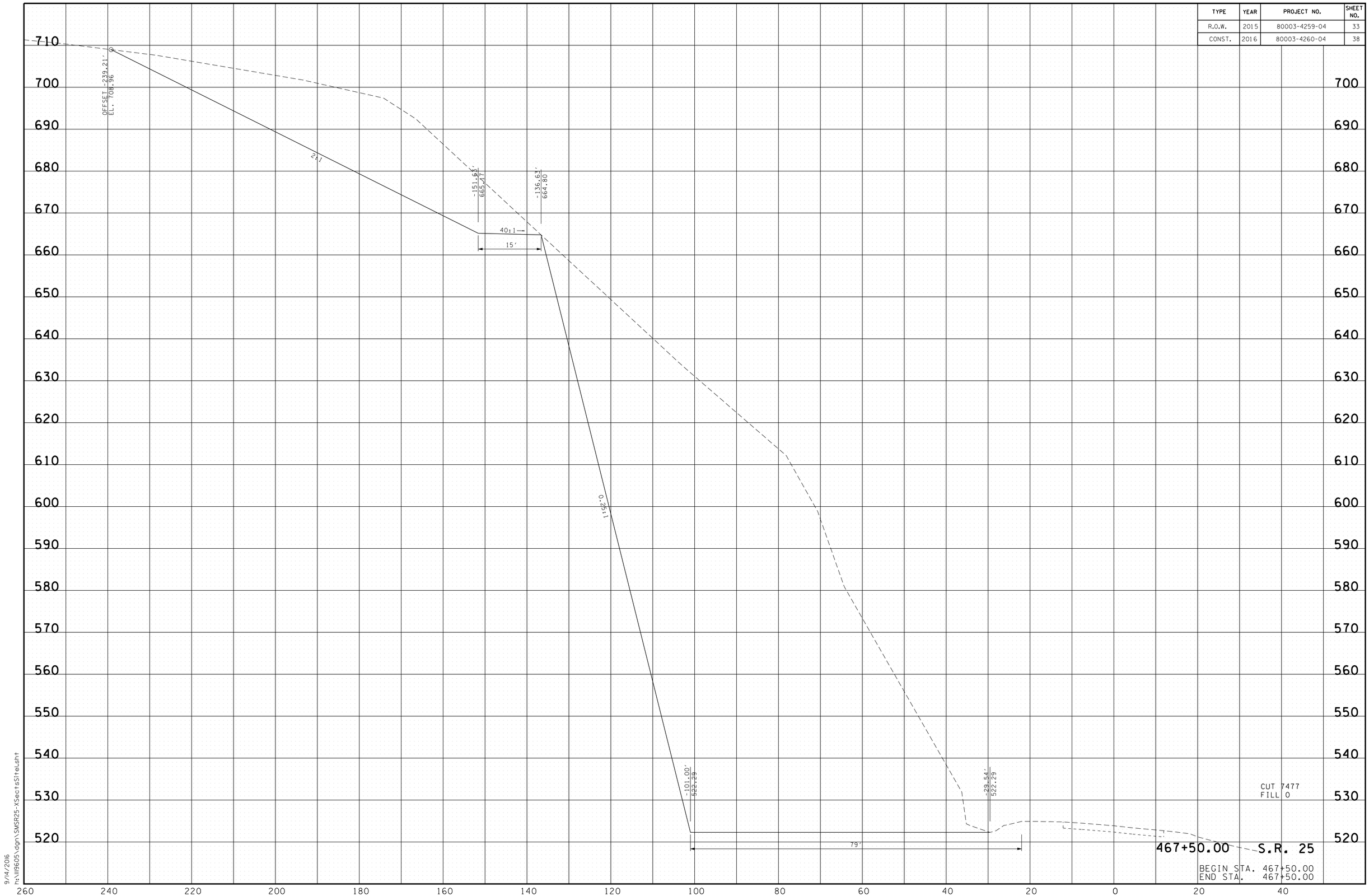
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 33 |
| CONST. | 2016 | 80003-4260-04 | 38 |

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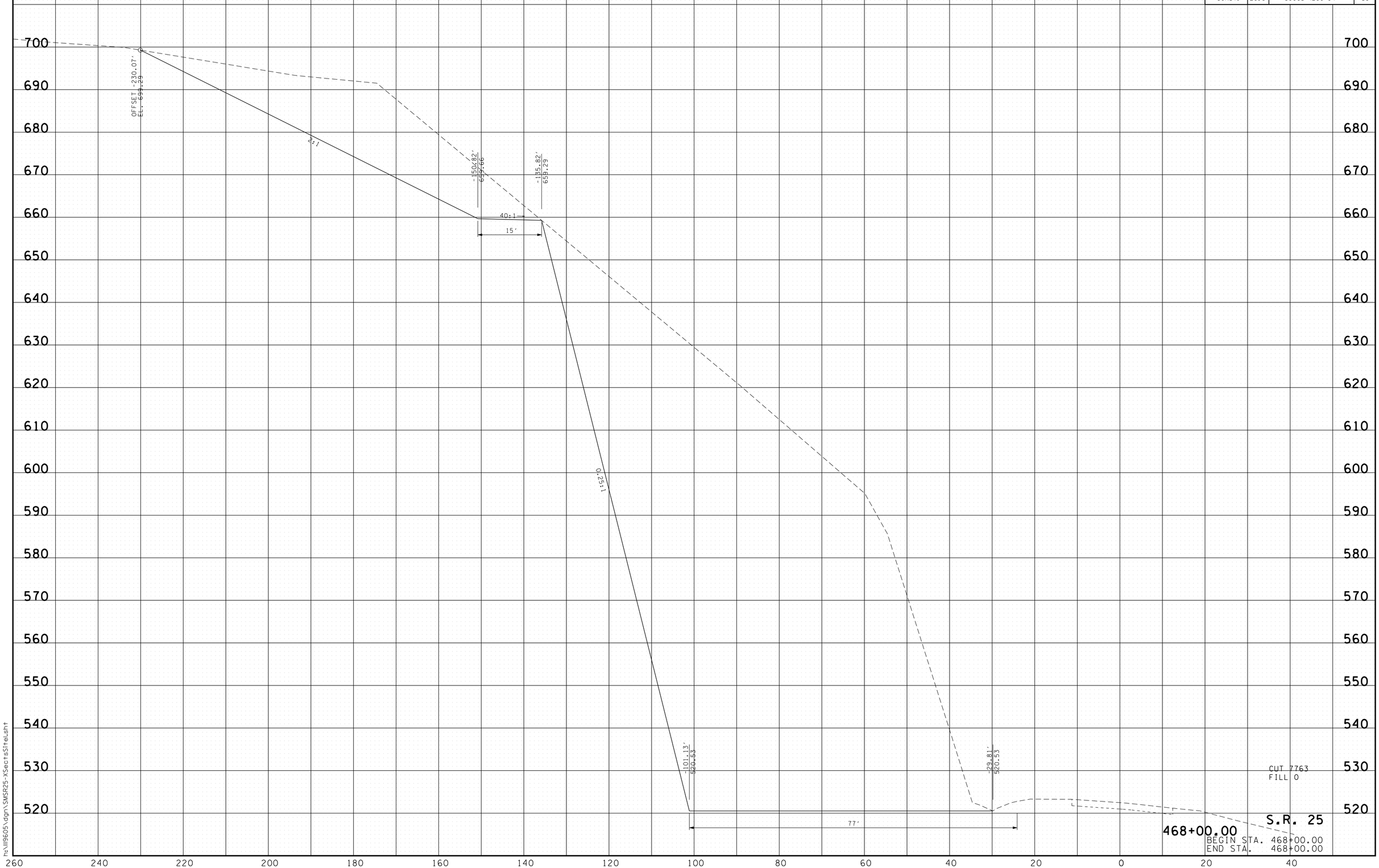
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 34 |
| CONST. | 2016 | 80003-4260-04 | 39 |

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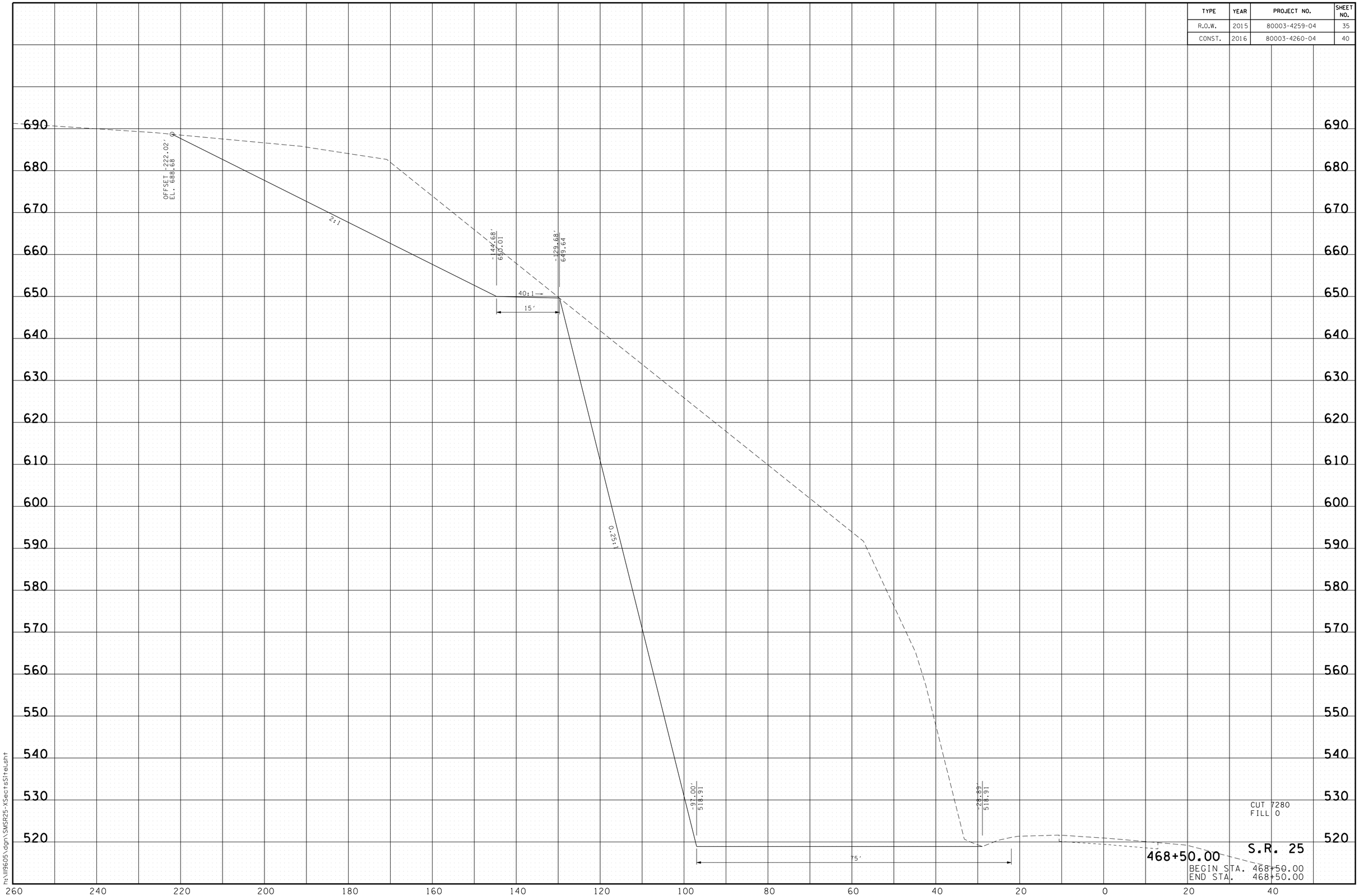
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 35 |
| CONST. | 2016 | 80003-4260-04 | 40 |

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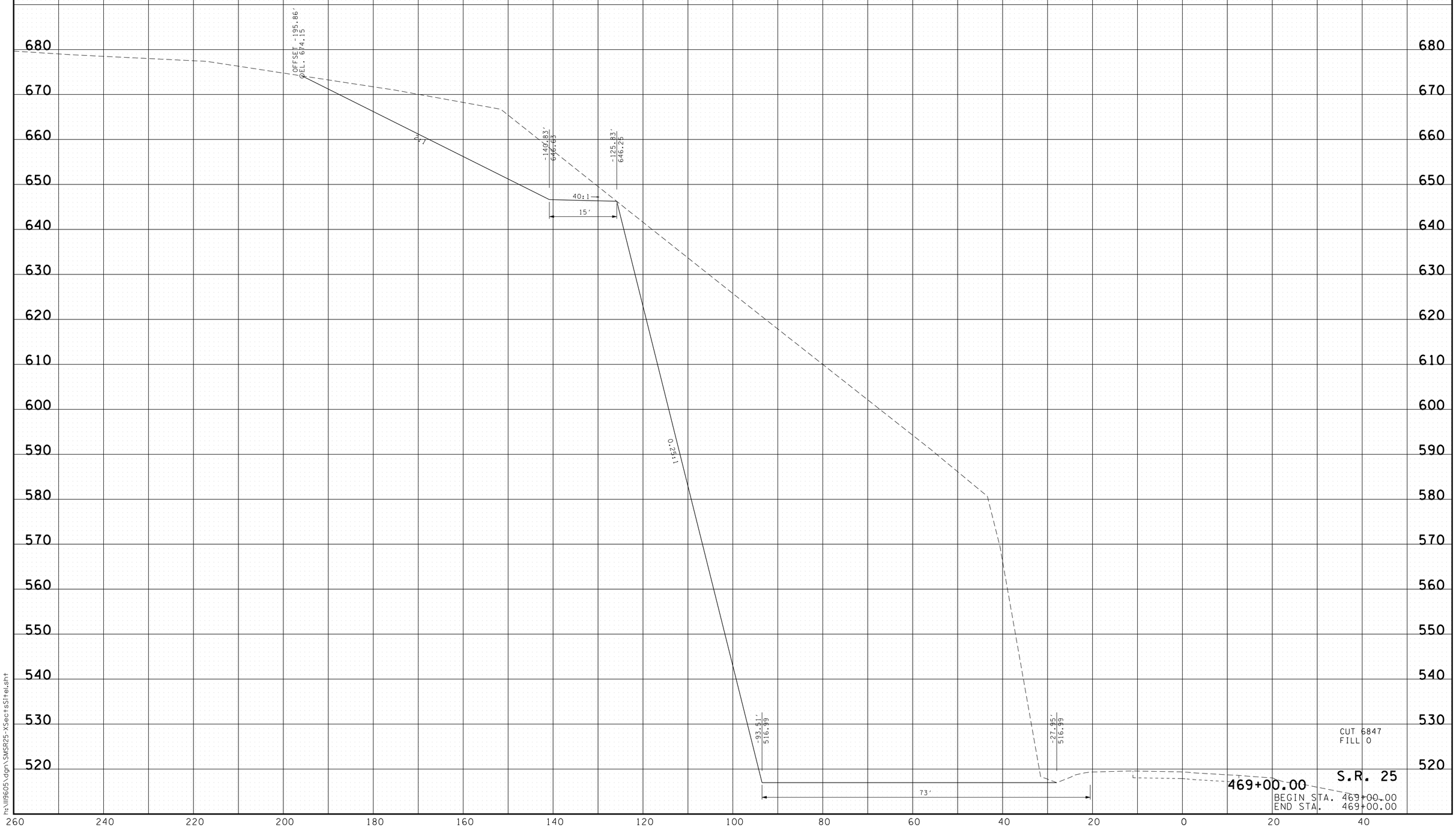
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 36 |
| CONST. | 2016 | 80003-4260-04 | 41 |

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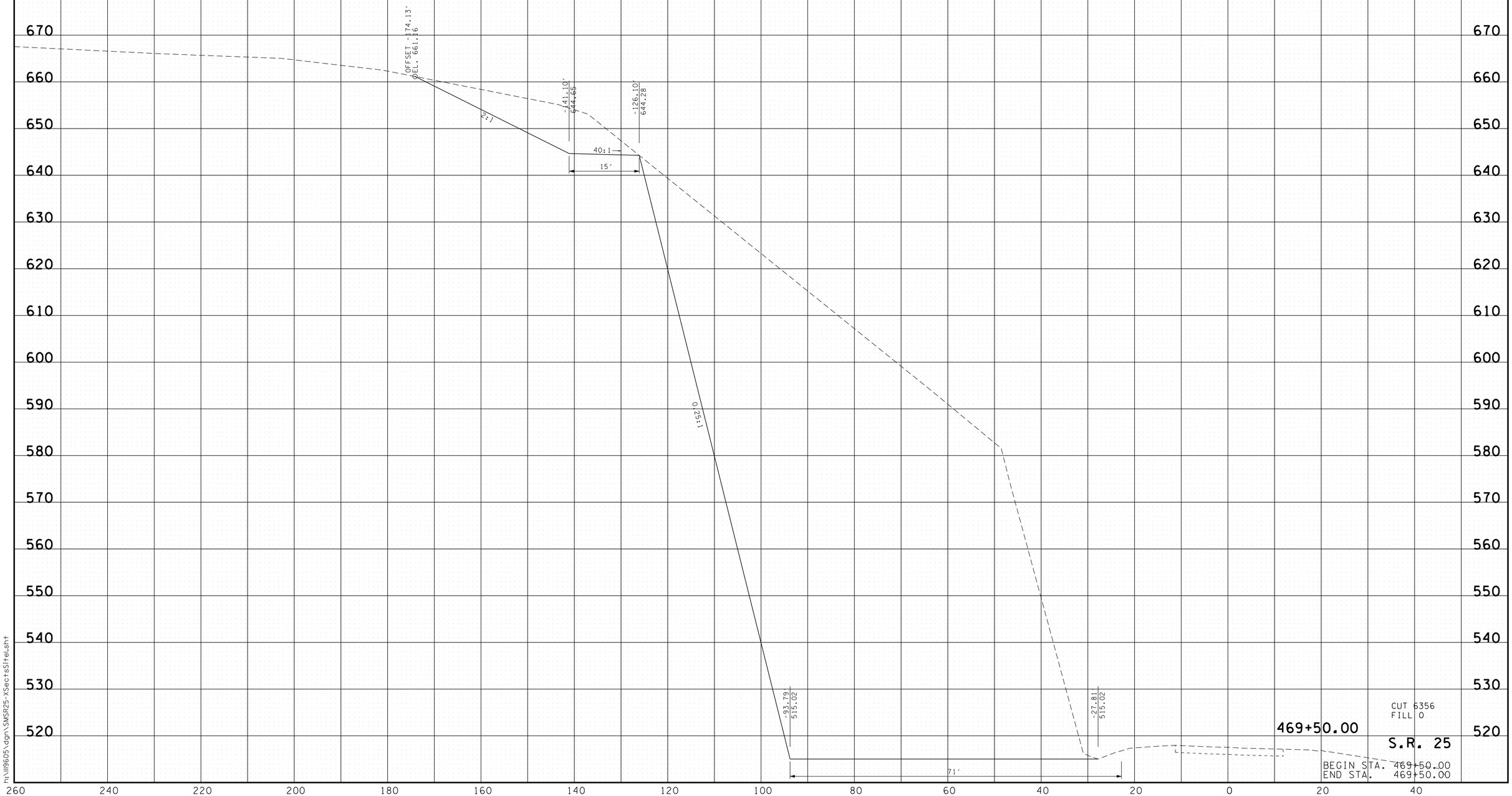
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 37 |
| CONST. | 2016 | 80003-4260-04 | 42 |

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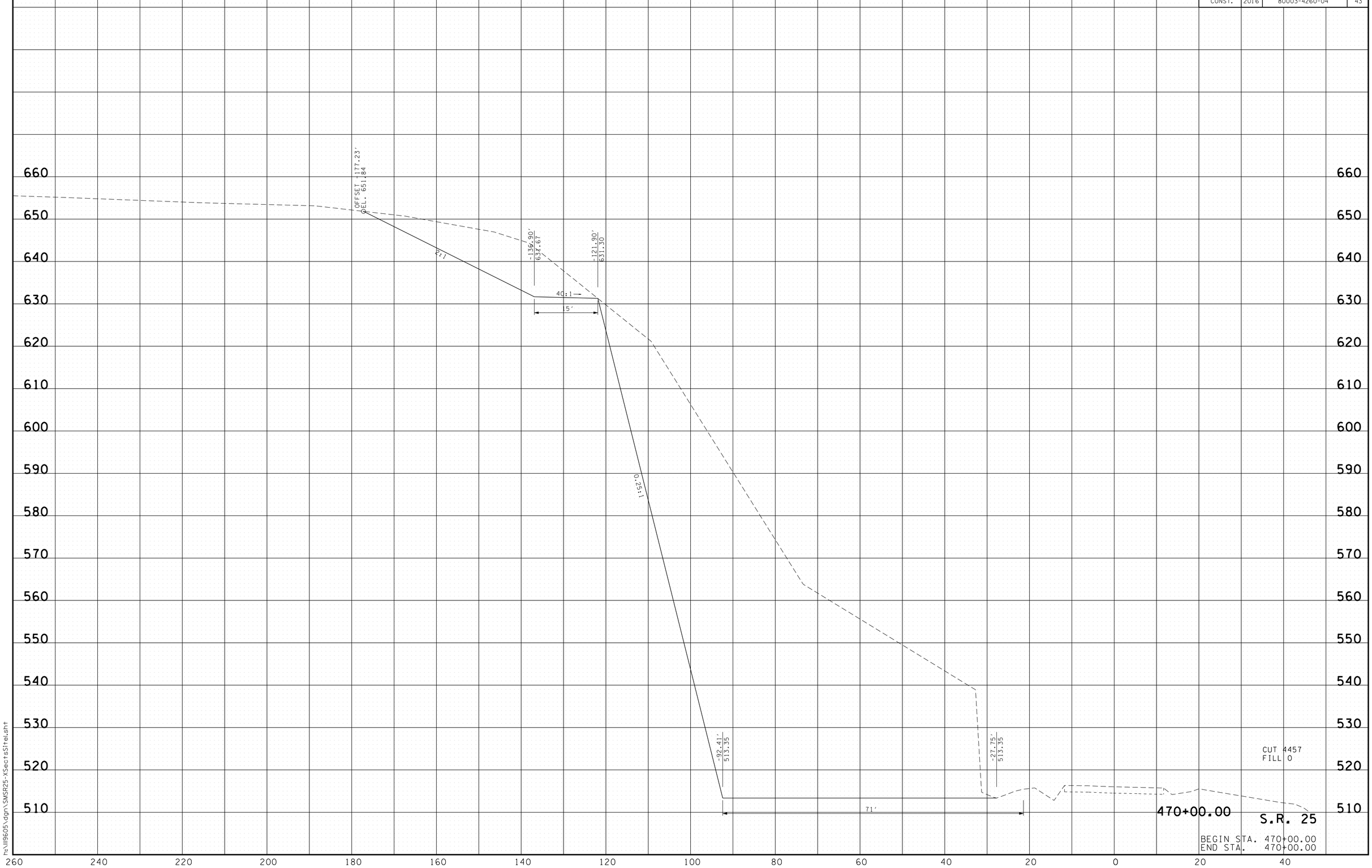
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 38 |
| CONST. | 2016 | 80003-4260-04 | 43 |

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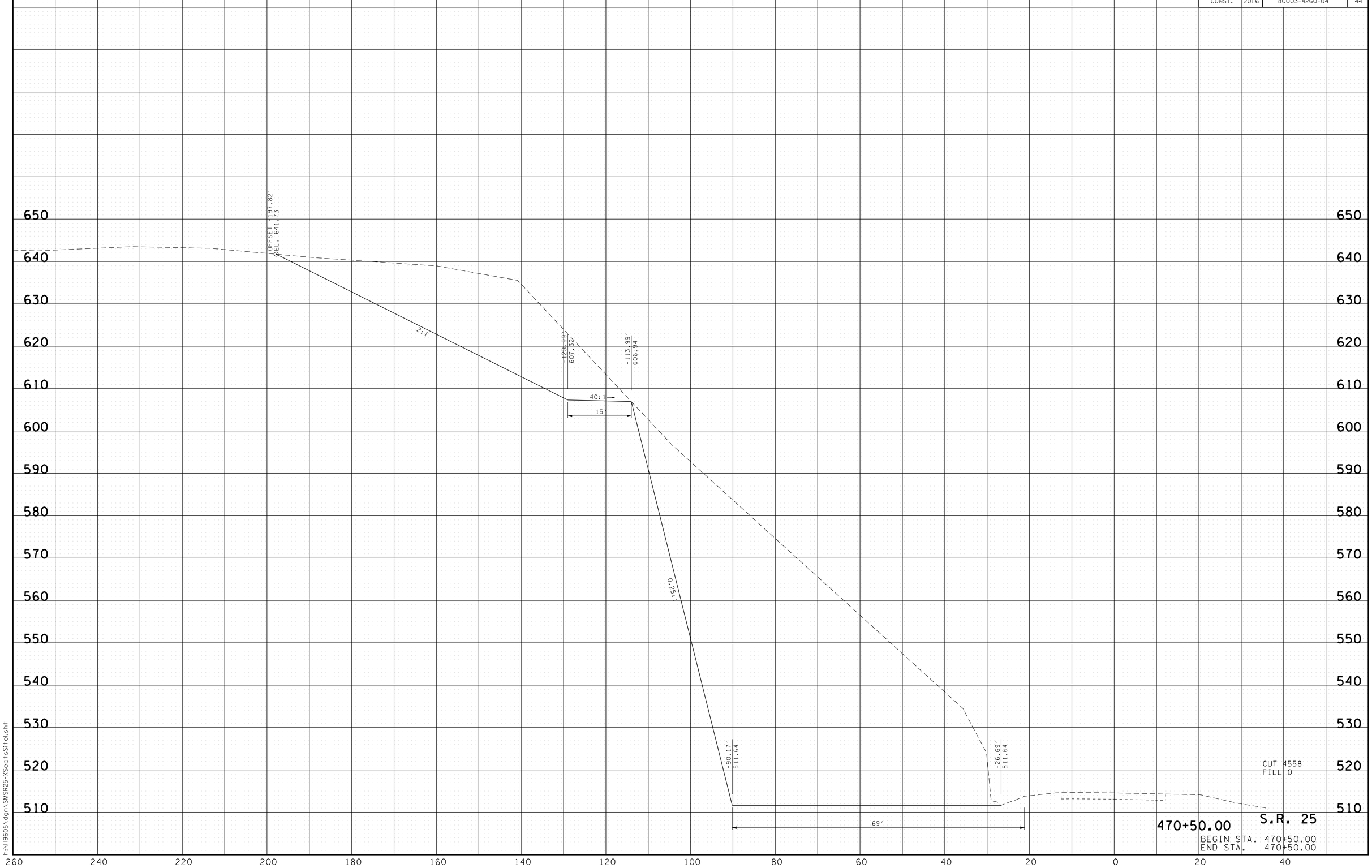
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 39 |
| CONST. | 2016 | 80003-4260-04 | 44 |

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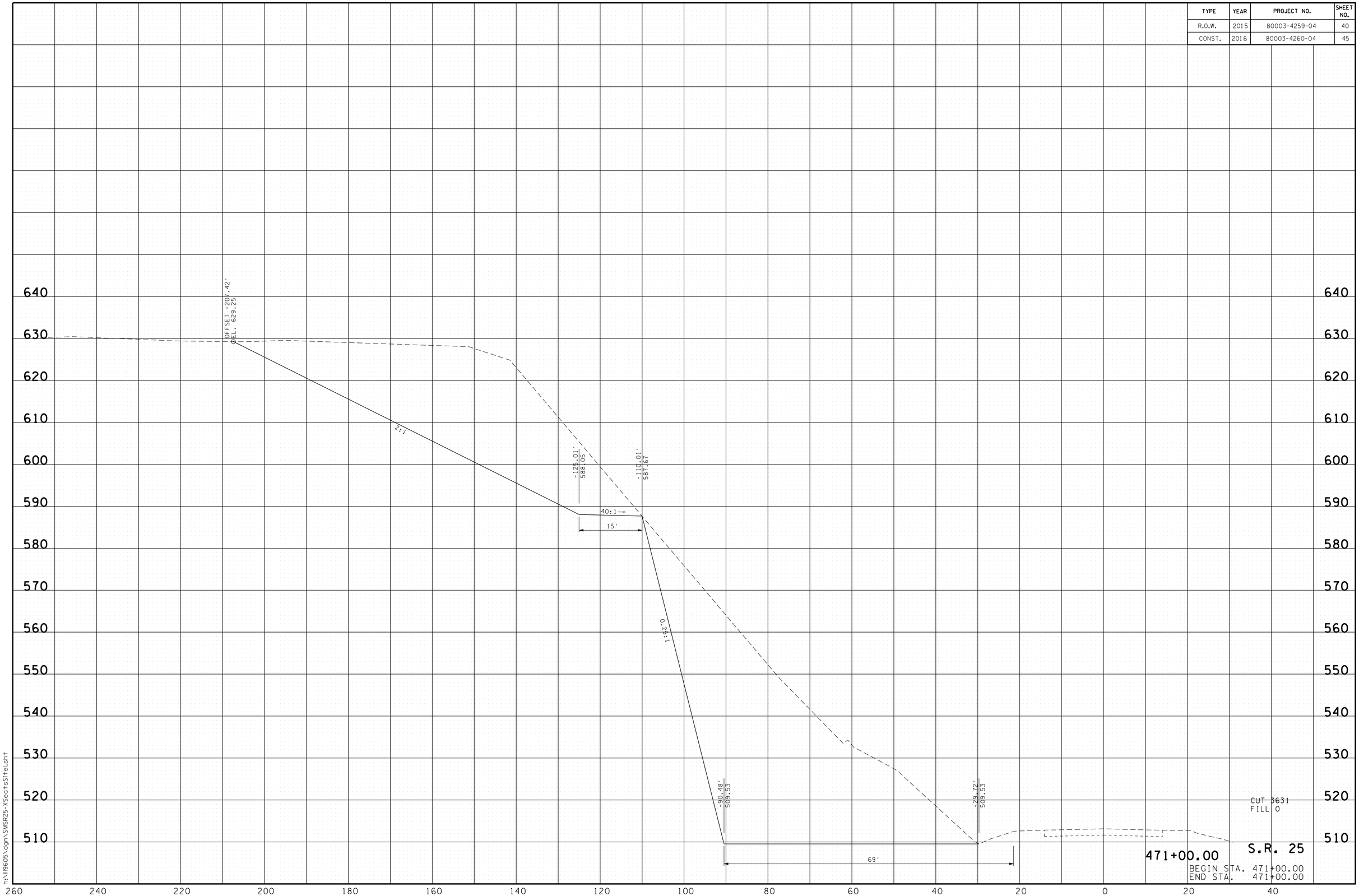
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 40 |
| CONST. | 2016 | 80003-4260-04 | 45 |

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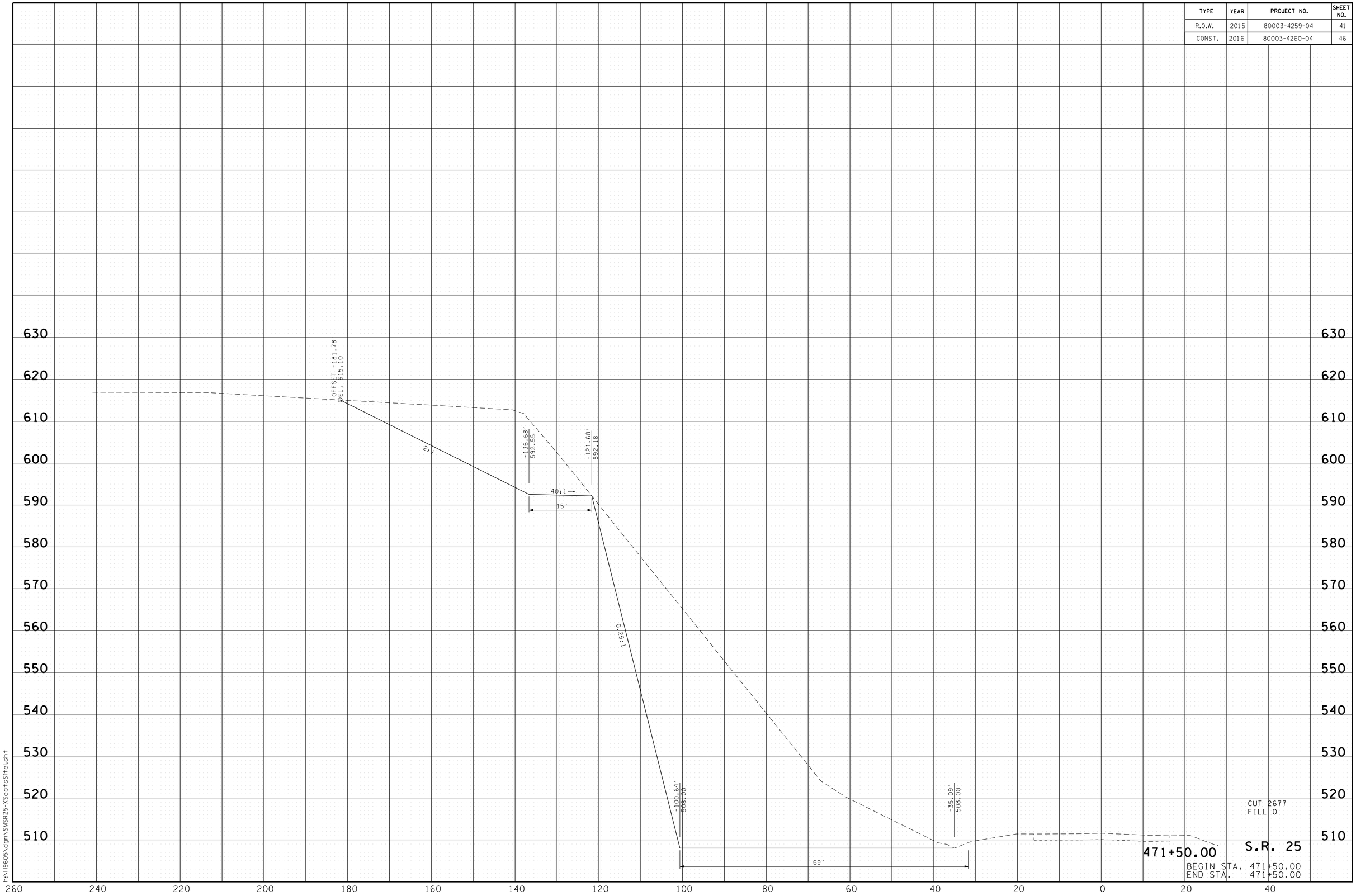
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 41 |
| CONST. | 2016 | 80003-4260-04 | 46 |

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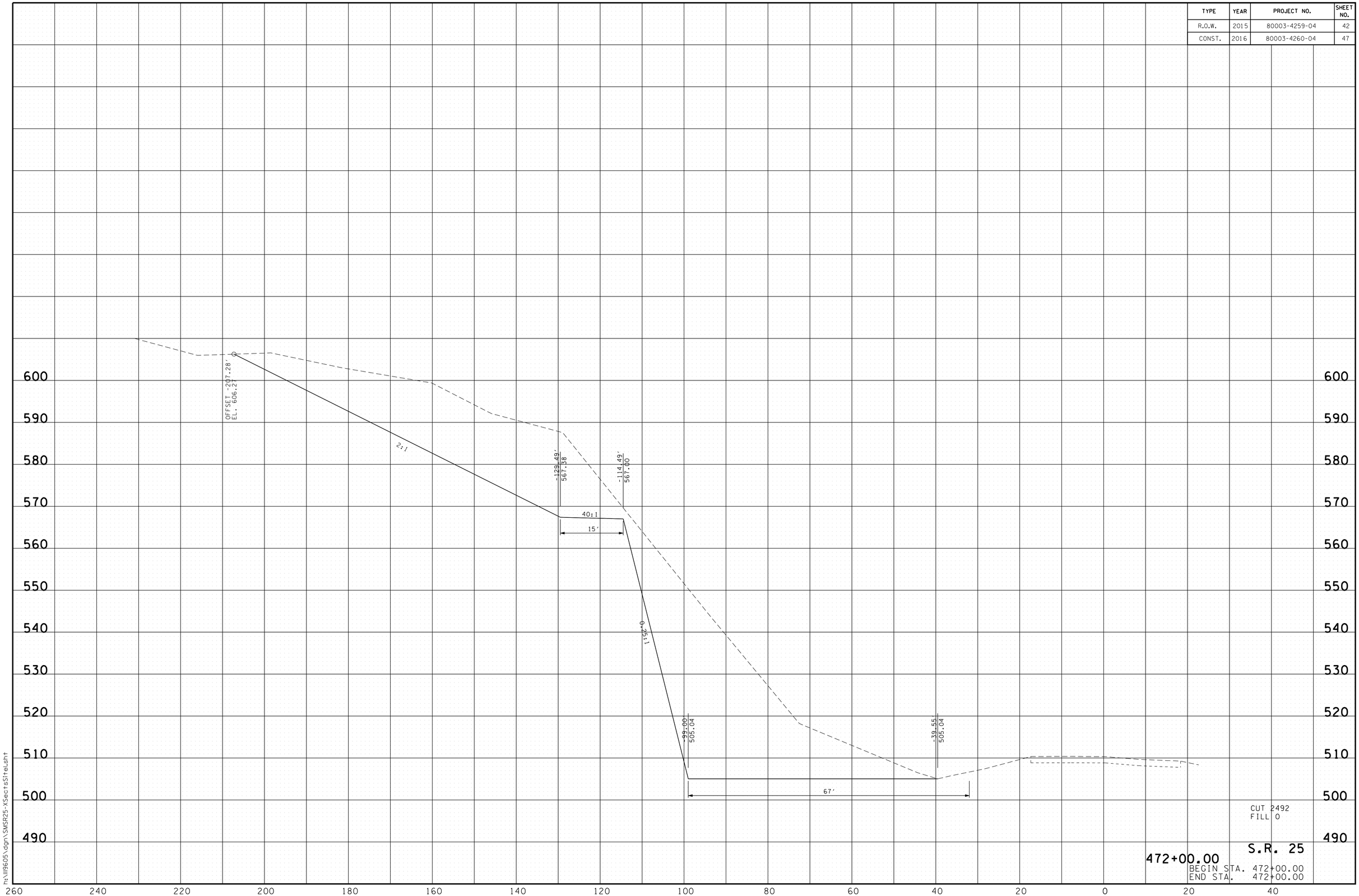
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 42 |
| CONST. | 2016 | 80003-4260-04 | 47 |




CUT 2492
FILL 0

S.R. 25

472+00.00

BEGIN STA. 472+00.00
END STA. 472+00.00

9/14/2016
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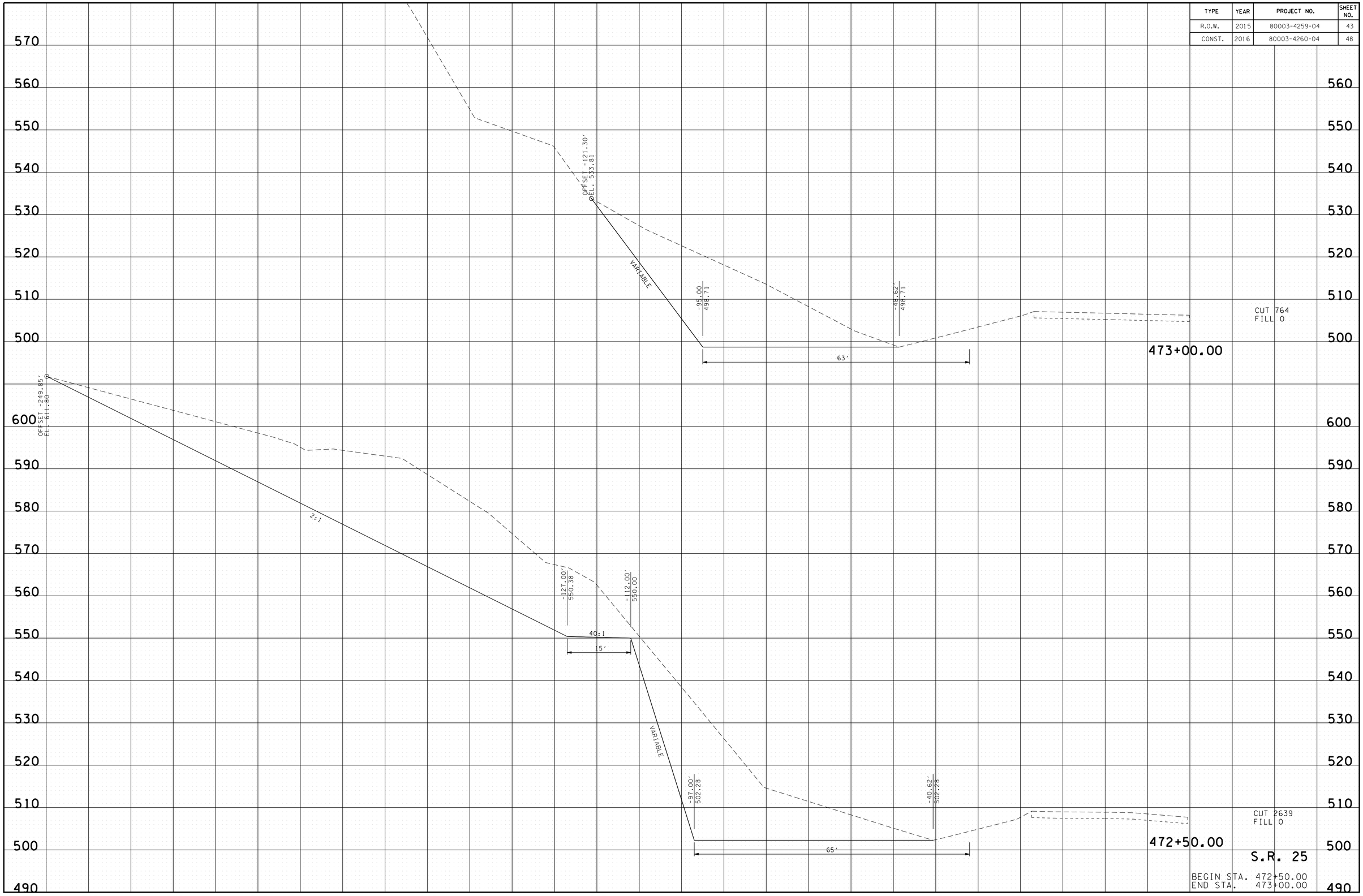
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 43 |
| CONST. | 2016 | 80003-4260-04 | 48 |

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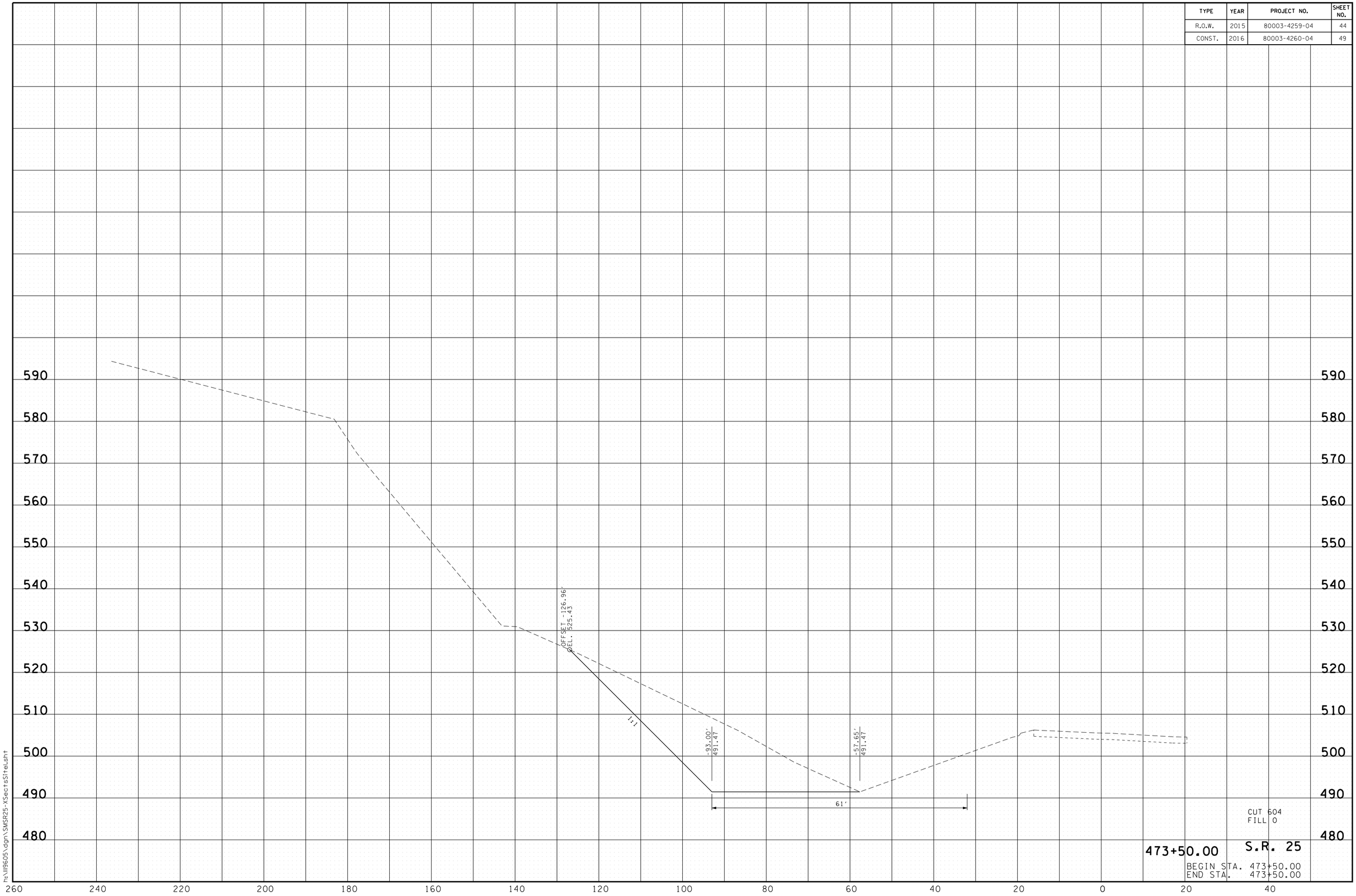
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 44 |
| CONST. | 2016 | 80003-4260-04 | 49 |

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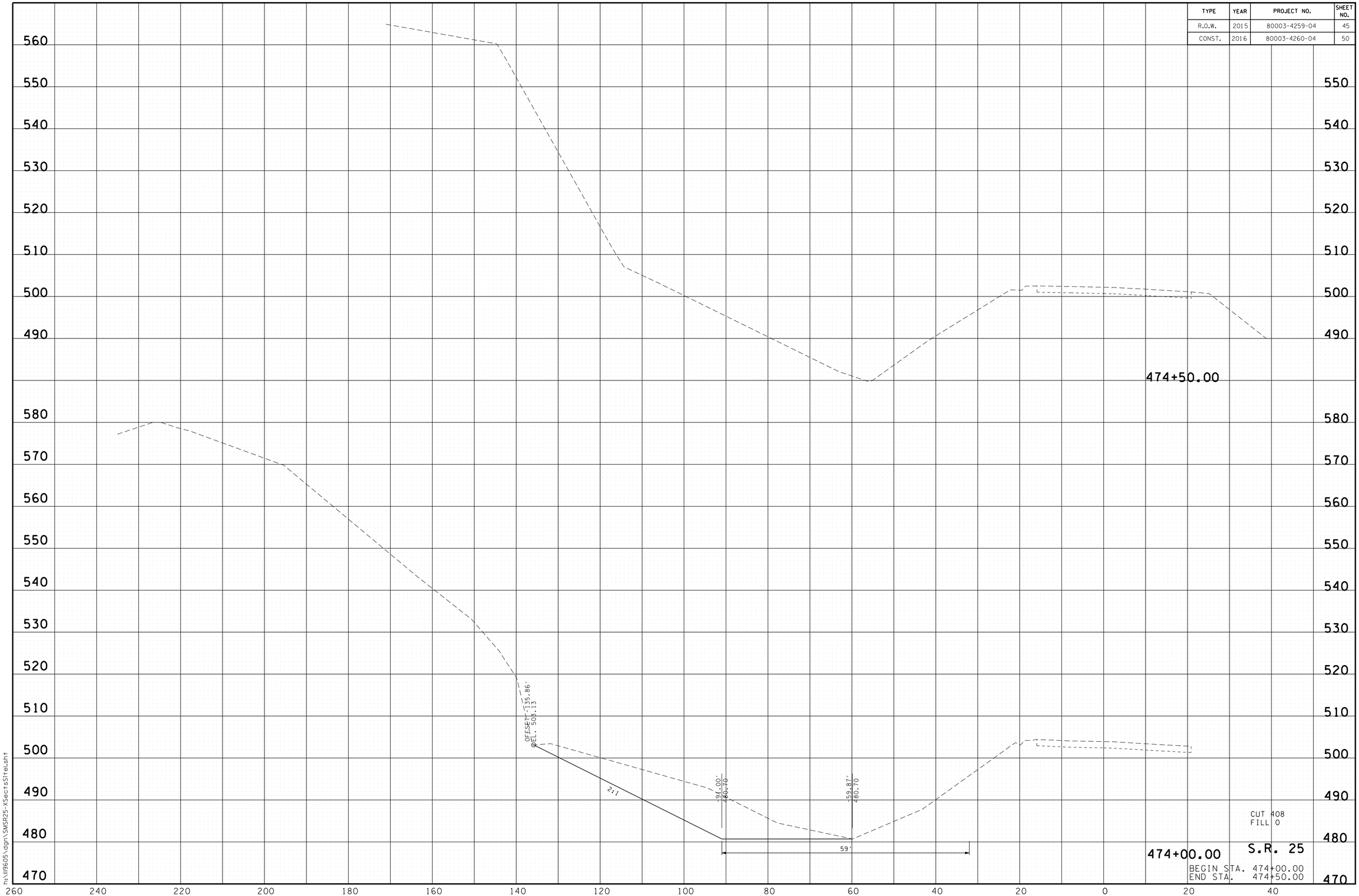
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 45 |
| CONST. | 2016 | 80003-4260-04 | 50 |

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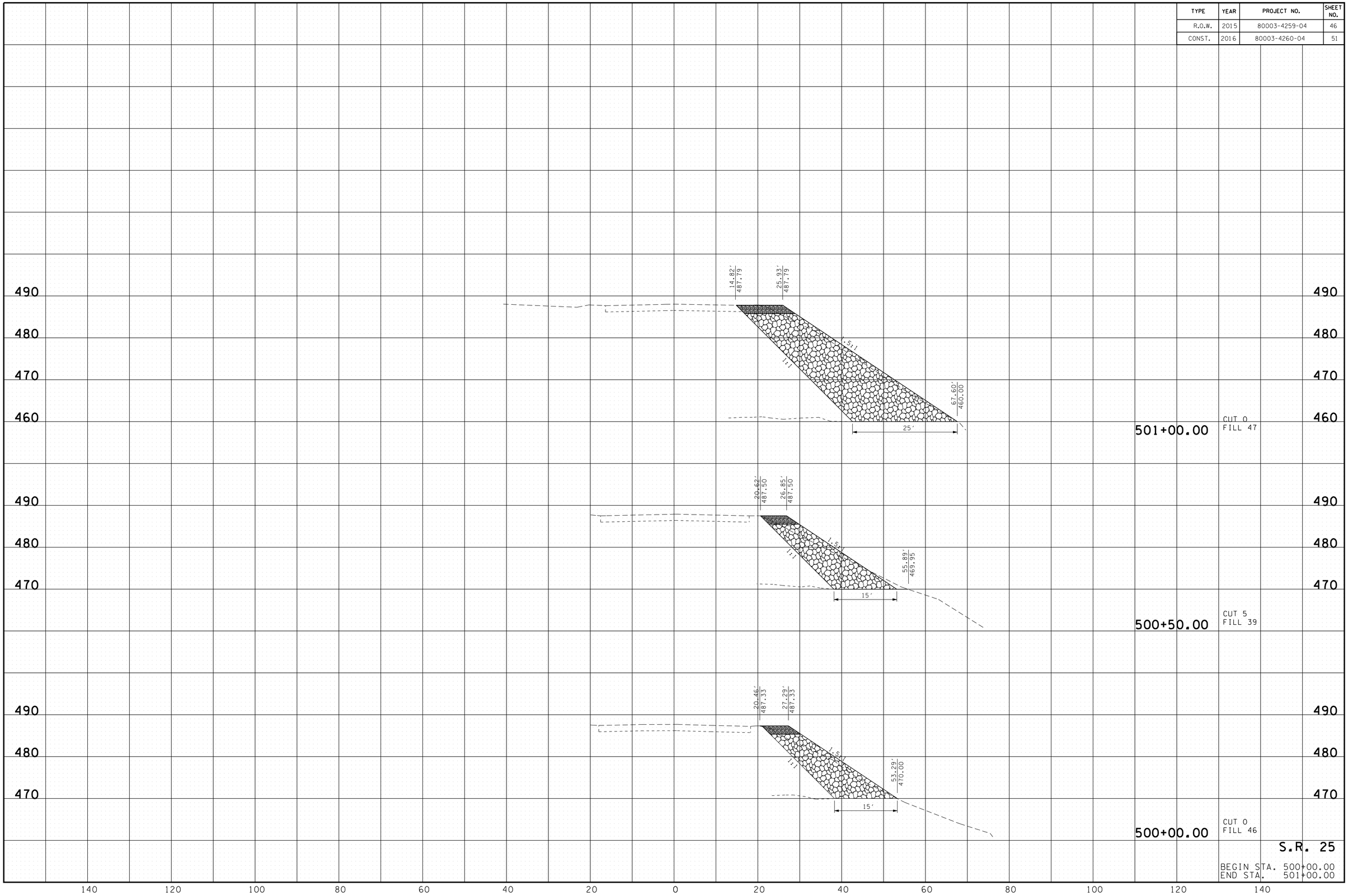
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 46 |
| CONST. | 2016 | 80003-4260-04 | 51 |

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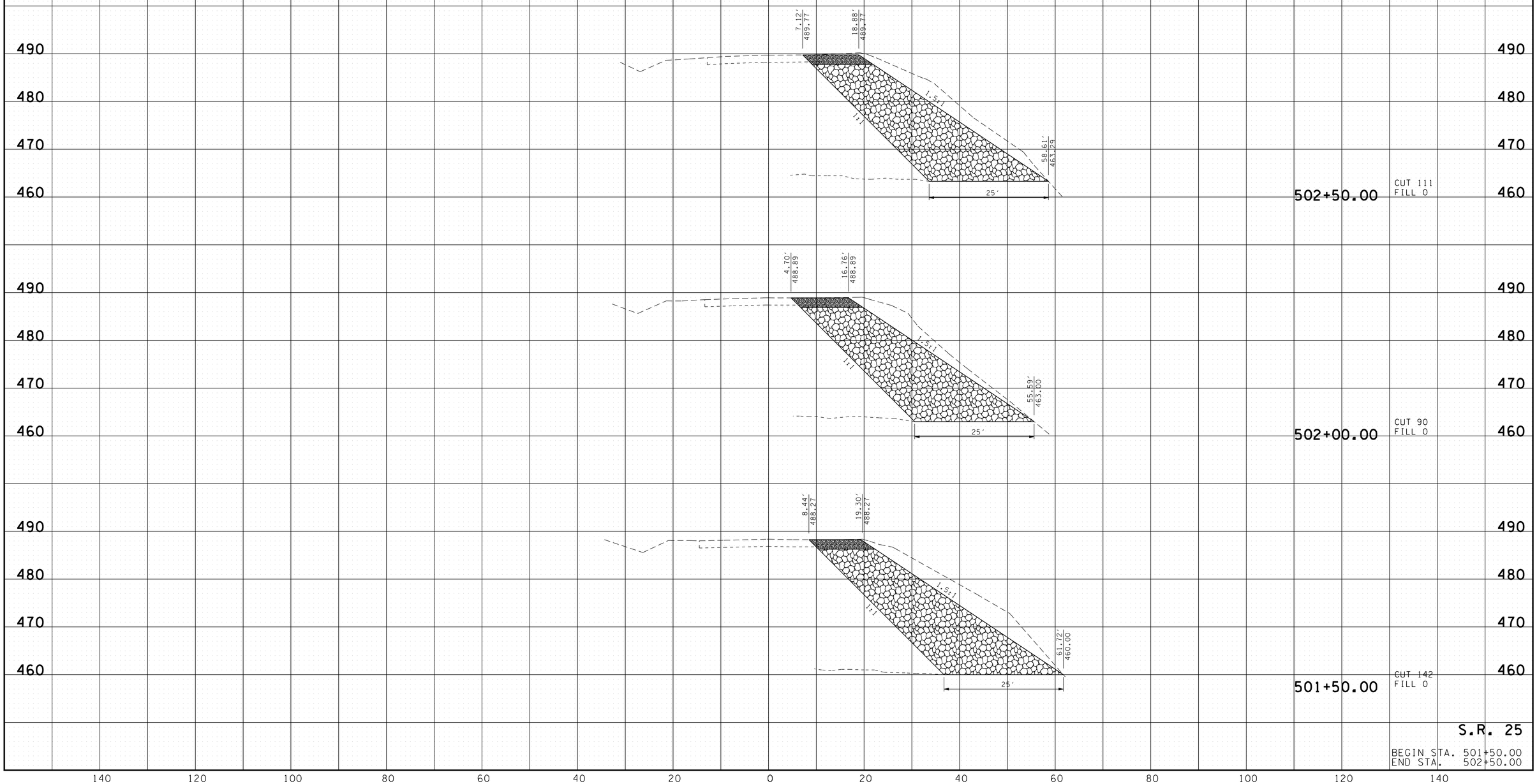
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 47 |
| CONST. | 2016 | 80003-4260-04 | 52 |




S.R. 25

BEGIN STA. 501+50.00
END STA. 502+50.00

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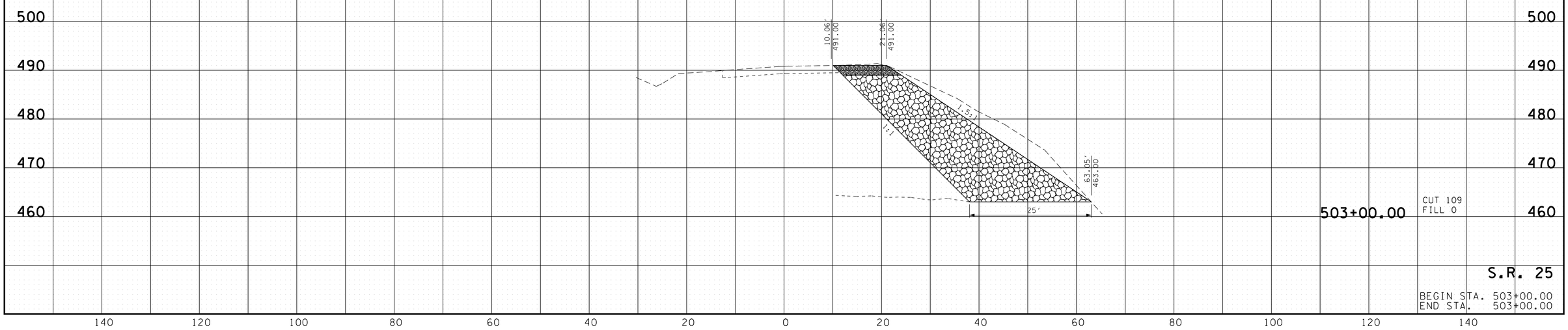
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| R.O.W. | 2015 | 80003-4259-04 | 48 |
| CONST. | 2016 | 80003-4260-04 | 53 |

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