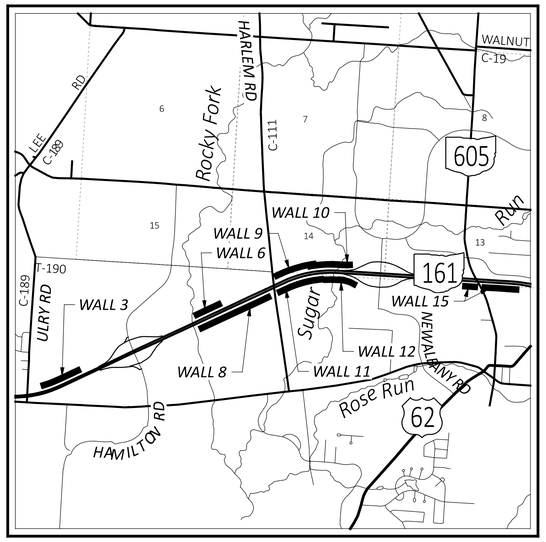
# STATE OF OHIO
# DEPARTMENT OF TRANSPORTATION

# *FRA-161-15.80*
# *NOISE ABATEMENT*

## *CITY OF COLUMBUS AND NEW ALBANY*
## *PLAIN TOWNSHIP*
## *FRANKLIN COUNTY*




***LOCATION MAP***

*LATITUDE: N 40°05'29" LONGITUDE: W 82°49'56"*

*PORTION TO BE IMPROVED*
*INTERSTATE HIGHWAY*
*FEDERAL ROUTES*
*STATE ROUTES*
*COUNTY & TOWNSHIP ROADS*
*OTHER ROADS*

### *DESIGN DESIGNATION*

| | |
|---|---|
| *CURRENT ADT (2024)* | *64,716* |
| *DESIGN YEAR ADT (2045)* | *86,550* |
| *DESIGN HOURLY VOLUME (2045)* | *9,080* |
| *DIRECTIONAL DISTRIBUTION* | *50%* |
| *TRUCKS (24 HOUR B&C)* | *8%* |
| *DESIGN SPEED* | *70 MPH* |
| *LEGAL SPEED* | *65 MPH* |

*DESIGN FUNCTIONAL CLASSIFICATION:*
*02 OTHER FREEWAY & EXPRESSWAY (URBAN)*
*NHS PROJECT* — *YES*

### *DESIGN EXCEPTIONS*

*NONE REQUIRED*

### *ADA DESIGN WAIVERS*

*NONE REQUIRED*

**UNDERGROUND UTILITIES**
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811. 8-1-1. or 1-800-362-2764
(Non members must be called directly)


*PLAN PREPARED BY:*
*ARCADIS - IBI GROUP*
*8101 North High Street*
*Columbus, OH 43235*
*tel 614 818 4900 fax 614 818 4901*


*FIRM PANELS: 39049C0203K*
*MAP EFFECTIVE DATE: JUNE 17, 2008*
*BFE: 957.40*
*FLOOD ZONES AE & X*

*FIRM PANELS: 39049C0204K*
*MAP EFFECTIVE DATE: JUNE 17, 2008*
*BFE: 974*
*FLOOD ZONES AE & X*

*NO FILL WILL BE ADDED IN THE 100-YEAR FLOOD PLAIN.*

### *INDEX OF SHEETS:*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*NOTE:*
*FOR CITY OF COLUMBUS AND CITY OF NEW ALBANY SIGNATURES, SEE SEPARATE SIGNATURE PAGE*

### *FEDERAL PROJECT NUMBER*

NON-FEDERAL

### *RAILROAD INVOLVEMENT*

NONE

### *PROJECT DESCRIPTION*

*INSTALLATION OF 8,406 FEET OF NOISE WALL AND 4,836 FEET OF 81" SINGLE SLOPE BARRIER AT VARIOUS LOCATIONS ALONG STATE ROUTE 161 BETWEEN ULRY ROAD AND US 62. THIS PROJECT SUPPLEMENTS THE FRA-161-15.80 WIDENING PROJECT.*

### *EARTH DISTURBED AREAS*

| | |
|---|---|
| *PROJECT EARTH DISTURBED AREA:* | *7.95 ACRES* |
| *ESTIMATED CONTRACTOR EARTH DISTURBED AREA:* | *0.25 ACRES* |
| *NOTICE OF INTENT EARTH DISTURBED AREA:* | *8.20 ACRES* |

### *LIMITED ACCESS*

*THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.*

### *2023 SPECIFICATIONS*

*THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.*

*I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.*

Anthony C. Turowski, P.E.
District 06 Deputy Director

Jack Marchbanks, PhD
Director, Department of Transportation

### *STANDARD CONSTRUCTION DRAWINGS*

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *BP-3.1* | *1/19/24* | *NBS-1-09* | *7/15/22* | *TC-41.10* | *7/19/13* | | | *800-2023* | *1/19/24* |
| *BP-5.1* | *7/15/22* | | | *TC-41.20* | *10/18/13* | | | *821* | *4/20/12* |
| | | *MT-95.30* | *7/19/19* | *TC-42.10* | *10/18/13* | | | *832* | *7/21/23* |
| *DM-1.1* | *7/17/20* | *MT-95.40* | *7/21/23* | *TC-42.20* | *10/18/13* | | | *878* | *1/21/22* |
| *DM-1.2* | *7/16/21* | *MT-95.45* | *7/21/23* | *TC-51.11* | *1/15/16* | | | *921* | *4/20/12* |
| *DM-4.1* | *7/17/20* | *MT-95.50* | *7/21/17* | *TC-61.30* | *7/19/19* | | | | |
| | | | | | | | | | |
| *F-1.1* | *7/19/13* | *MT-98.10* | *1/17/20* | *HL-30.31* | *1/19/24* | | | | |
| *F-3.3* | *7/19/13* | *MT-98.11* | *1/17/20* | | | | | | |
| *F-3.4* | *7/19/13* | *MT-98.21* | *7/21/23* | *BR-1 REV.* | *4/03/90* | | | | |
| | | *MT-98.22* | *1/17/20* | | | | | | |
| *MGS-1.1* | *7/16/21* | | | *RM-4.3* | *1/21/22* | | | | |
| *MGS-2.1* | *1/19/18* | *MT-98.29* | *1/17/20* | *RM-4.5* | *7/21/17* | | | | |
| *MGS-3.1* | *1/19/18* | *MT-99.20* | *4/19/19* | *RM-4.6* | *7/19/13* | | | | |
| *MGS-5.3* | *7/15/16* | *MT-101.70* | *4/21/23* | | | | | | |
| | | *MT-101.75* | *7/21/23* | | | | | | |

### *SUPPLEMENTAL SPECIFICATIONS*

### *SPECIAL PROVISIONS*

*ENGINEER'S SEAL*

STATE OF OHIO
JEFFREY D. HACKENBRACHT
E-56364
REGISTERED PROFESSIONAL ENGINEER

Digitally signed by Jeffrey Hackenbracht
Date: 2024.10.24 06:18:35 -04'00'

*ENGINEER'S SEAL*
*FOR WALL 11*

STATE OF OHIO
RAVINDER GUPTA
E-70880
REGISTERED PROFESSIONAL ENGINEER

*3973-E*
*DOW#23-107*

FRA-161-15.80 NOISE ABATEMENT


DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 818-4900
www.arcadis.com


DESIGNER: JMK
REVIEWER: JDH 05-22-24
PROJECT ID: 117607
SHEET: P.1 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-08-13 TIME: 2:42:43 PM USER: danny.tran
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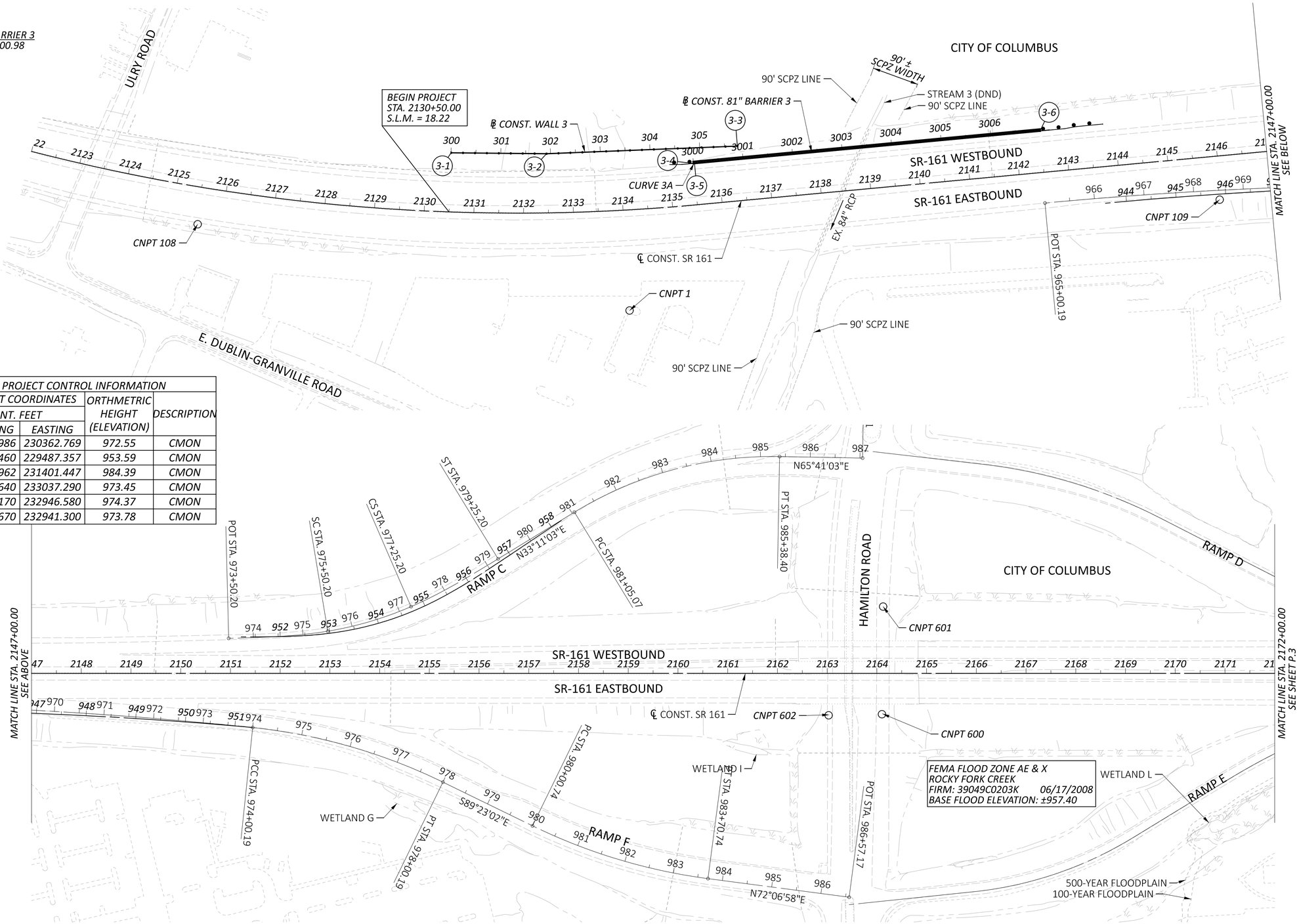
| BASELINE GEOMETRY - NOISE WALL 3 | | | | | | |
|---|---|---|---|---|---|---|
| P.I. NUMBER | NOISE BARRIER STATION | SR-161 STATIONING | | NORTHING | EASTING | BEARING |
| | | STATION | OFFSET | | | |
| 3-1 | 300+00.00 | 2130+50.00 | 119.00' LT | 612183.0140 | 229916.9520 | N 70°31'40" E |
| 3-2 | 301+92.00 | 2132+48.06 | 119.00' LT | 612247.0170 | 230097.9700 | N 67°40'14" E |
| 3-3 | 305+76.00 | 2136+41.07 | 110.00' LT | 612392.9100 | 230453.1760 | N/A |

| BASELINE GEOMETRY - 81" BARRIER 3 | | | | | | |
|---|---|---|---|---|---|---|
| P.I. NUMBER | 81" BARRIER STATION | SR-161 STATIONING | | NORTHING | EASTING | BEARING |
| | | STATION | OFFSET | | | |
| 3-4 | 3000+00.00 | 2135+50.00 | 83.50' LT | 612329.9490 | 230382.2990 | CURVE 3A |
| 3-5 | 3000+01.96 | 2135+52.00 | 83.50' LT | 612330.7890 | 230384.0710 | N 64°36'58" E |
| 3-6 | 3006+99.96 | 2142+50.00 | 83.50' LT | 612630.0060 | 231014.6800 | N/A |

3A CURVE DATA
℄ CONST. 81" BARRIER 3
P.I. = STA. 3000+00.98
Δ = 00°01'46" LT
Dc = 01°29'57"
R = 3,822.15'
T = 0.98'
L = 1.96'
E = 0.00'




FEMA FLOOD ZONE AE & X
ROCKY FORK CREEK
FIRM: 39049C0203K 06/17/2008
BASE FLOOD ELEVATION: ±957.40

| PRIMARY PROJECT CONTROL INFORMATION | | | | |
|---|---|---|---|---|
| POINT NUMBER | PROJECT COORDINATES INT. FEET | | ORTHMETRIC HEIGHT (ELEVATION) | DESCRIPTION |
| | NORTHING | EASTING | | |
| CNPT 1 | 612007.986 | 230362.769 | 972.55 | CMON |
| CNPT 108 | 611873.460 | 229487.357 | 953.59 | CMON |
| CNPT 109 | 612623.962 | 231401.447 | 984.39 | CMON |
| CNPT 600 | 613406.640 | 233037.290 | 973.45 | CMON |
| CNPT 601 | 613603.170 | 232946.580 | 974.37 | CMON |
| CNPT 602 | 613358.670 | 232941.300 | 973.78 | CMON |

HORIZONTAL SCALE IN FEET
0 50 100 200

# SCHEMATIC PLAN
## STA. 2122+00.00 TO STA. 2172+00.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: CLD_SR161 - Plan 1 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 11:52:10 PM USER: jennifer.kelley
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DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 318-4000
www.arcadis.com

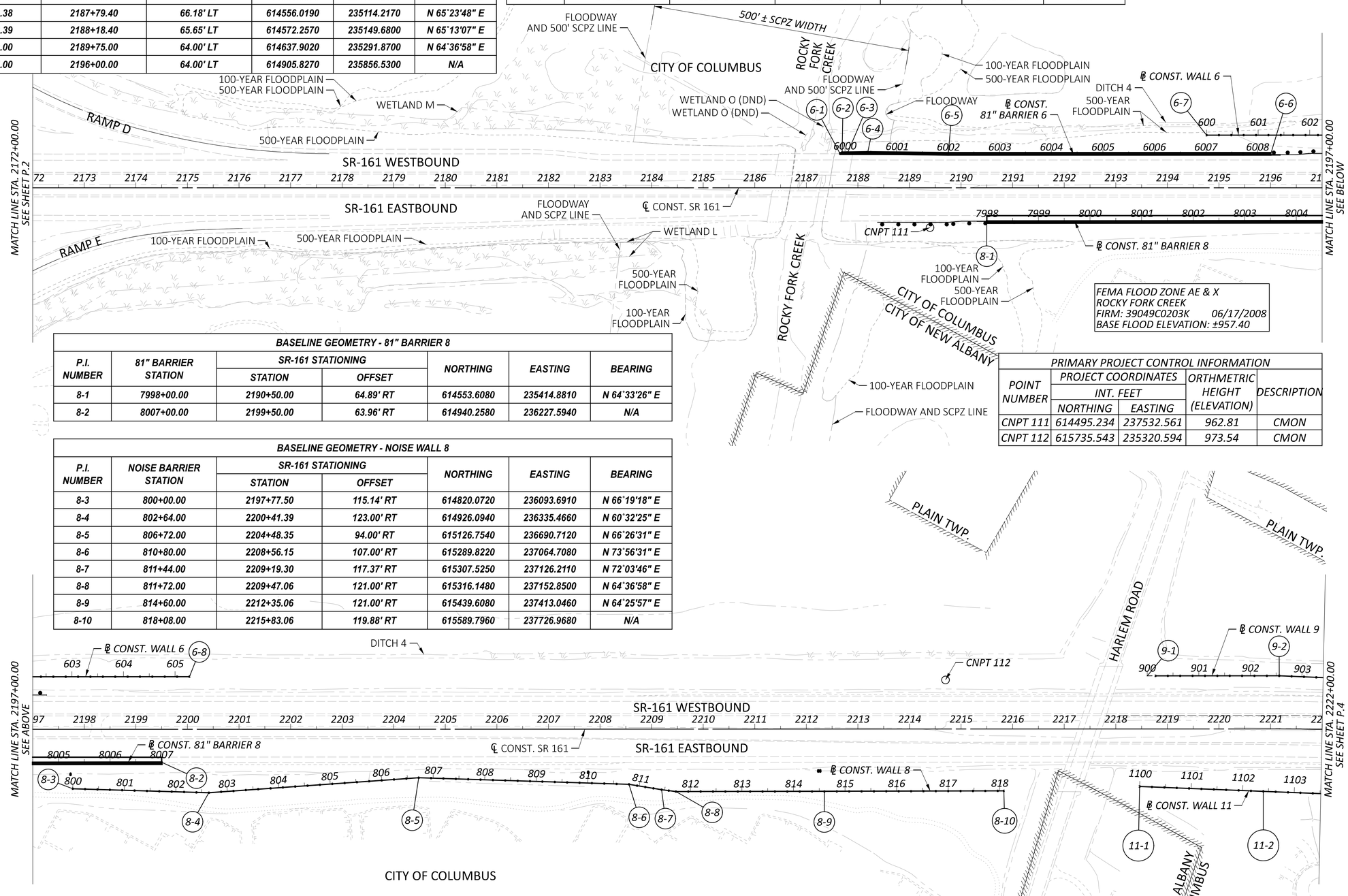

DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.2 TOTAL P.297

**BASELINE GEOMETRY - 81" BARRIER 6**

| P.I. NUMBER | 81" BARRIER STATION | SR-161 STATIONING | | NORTHING | EASTING | BEARING |
|---|---|---|---|---|---|---|
| | | STATION | OFFSET | | | |
| 6-1 | 5999+90.38 | 2187+65.40 | 66.09' LT | 614549.9420 | 235101.6040 | N 64°36'58" E |
| 6-2 | 5999+94.38 | 2187+69.40 | 66.09' LT | 614551.6570 | 235105.2180 | N 64°08'19" E |
| 6-3 | 6000+04.38 | 2187+79.40 | 66.18' LT | 614556.0190 | 235114.2170 | N 65°23'48" E |
| 6-4 | 6000+43.39 | 2188+18.40 | 65.65' LT | 614572.2570 | 235149.6800 | N 65°13'07" E |
| 6-5 | 6002+00.00 | 2189+75.00 | 64.00' LT | 614637.9020 | 235291.8700 | N 64°36'58" E |
| 6-6 | 6008+25.00 | 2196+00.00 | 64.00' LT | 614905.8270 | 235856.5300 | N/A |

**BASELINE GEOMETRY - NOISE WALL 6**

| P.I. NUMBER | NOISE BARRIER STATION | SR-161 STATIONING | | NORTHING | EASTING | BEARING |
|---|---|---|---|---|---|---|
| | | STATION | OFFSET | | | |
| 6-7 | 600+00.00 | 2194+76.00 | 102.00' LT | 614887.0020 | 235728.2120 | N 64°36'58" E |
| 6-8 | 605+28.00 | 2200+04.00 | 102.00' LT | 615113.3450 | 236205.2370 | N/A |




**BASELINE GEOMETRY - 81" BARRIER 8**

| P.I. NUMBER | 81" BARRIER STATION | SR-161 STATIONING | | NORTHING | EASTING | BEARING |
|---|---|---|---|---|---|---|
| | | STATION | OFFSET | | | |
| 8-1 | 7998+00.00 | 2190+50.00 | 64.89' RT | 614553.6080 | 235414.8810 | N 64°33'26" E |
| 8-2 | 8007+00.00 | 2199+50.00 | 63.96' RT | 614940.2580 | 236227.5940 | N/A |

**BASELINE GEOMETRY - NOISE WALL 8**

| P.I. NUMBER | NOISE BARRIER STATION | SR-161 STATIONING | | NORTHING | EASTING | BEARING |
|---|---|---|---|---|---|---|
| | | STATION | OFFSET | | | |
| 8-3 | 800+00.00 | 2197+77.50 | 115.14' RT | 614820.0720 | 236093.6910 | N 66°19'18" E |
| 8-4 | 802+64.00 | 2200+41.39 | 123.00' RT | 614926.0940 | 236335.4660 | N 60°32'25" E |
| 8-5 | 806+72.00 | 2204+48.35 | 94.00' RT | 615126.7540 | 236690.7120 | N 66°26'31" E |
| 8-6 | 810+80.00 | 2208+56.15 | 107.00' RT | 615289.8220 | 237064.7080 | N 73°56'31" E |
| 8-7 | 811+44.00 | 2209+19.30 | 117.37' RT | 615307.5250 | 237126.2110 | N 72°03'46" E |
| 8-8 | 811+72.00 | 2209+47.06 | 121.00' RT | 615316.1480 | 237152.8500 | N 64°36'58" E |
| 8-9 | 814+60.00 | 2212+35.06 | 121.00' RT | 615439.6080 | 237413.0460 | N 64°25'57" E |
| 8-10 | 818+08.00 | 2215+83.06 | 119.88' RT | 615589.7960 | 237726.9680 | N/A |

**PRIMARY PROJECT CONTROL INFORMATION**

| POINT NUMBER | PROJECT COORDINATES (INT. FEET) NORTHING | PROJECT COORDINATES (INT. FEET) EASTING | ORTHMETRIC HEIGHT (ELEVATION) | DESCRIPTION |
|---|---|---|---|---|
| CNPT 111 | 614495.234 | 237532.561 | 962.81 | CMON |
| CNPT 112 | 615735.543 | 235320.594 | 973.54 | CMON |




**BASELINE GEOMETRY - NOISE WALL 9**

| P.I. NUMBER | NOISE BARRIER STATION | SR-161 STATIONING | | NORTHING | EASTING | BEARING |
|---|---|---|---|---|---|---|
| | | STATION | OFFSET | | | |
| 9-1 | 900+00.00 | 2218+61.00 | 103.00' LT | 615910.3080 | 237882.5260 | N 64°36'58" E |
| 9-2 | 902+56.00 | 2221+17.00 | 103.00' LT | 616020.0500 | 238113.8110 | N 67°00'42" E |

**BASELINE GEOMETRY - NOISE WALL 11**

| P.I. NUMBER | NOISE BARRIER STATION | SR-161 STATIONING | | NORTHING | EASTING | BEARING |
|---|---|---|---|---|---|---|
| | | STATION | OFFSET | | | |
| 11-1 | 1100+00.00 | 2218+46.22 | 111.43' RT | 615710.2410 | 237961.0980 | N 66°54'02" E |
| 11-2 | 1102+40.00 | 2220+86.03 | 121.00' RT | 615804.4000 | 238181.8560 | N 66°54'02" E |

HORIZONTAL SCALE IN FEET
0 50 100 200

# SCHEMATIC PLAN
## STA. 2172+00.00 TO STA. 2222+00.00

FRA-161-15.80 NOISE ABATEMENT

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 818-4900
www.arcadis.com

DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.3 TOTAL P.297

MODEL: CLP_SR161 - Plan 3 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 11:52:22 PM USER: jennifer.kelley
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## BASELINE GEOMETRY - NOISE WALL 9

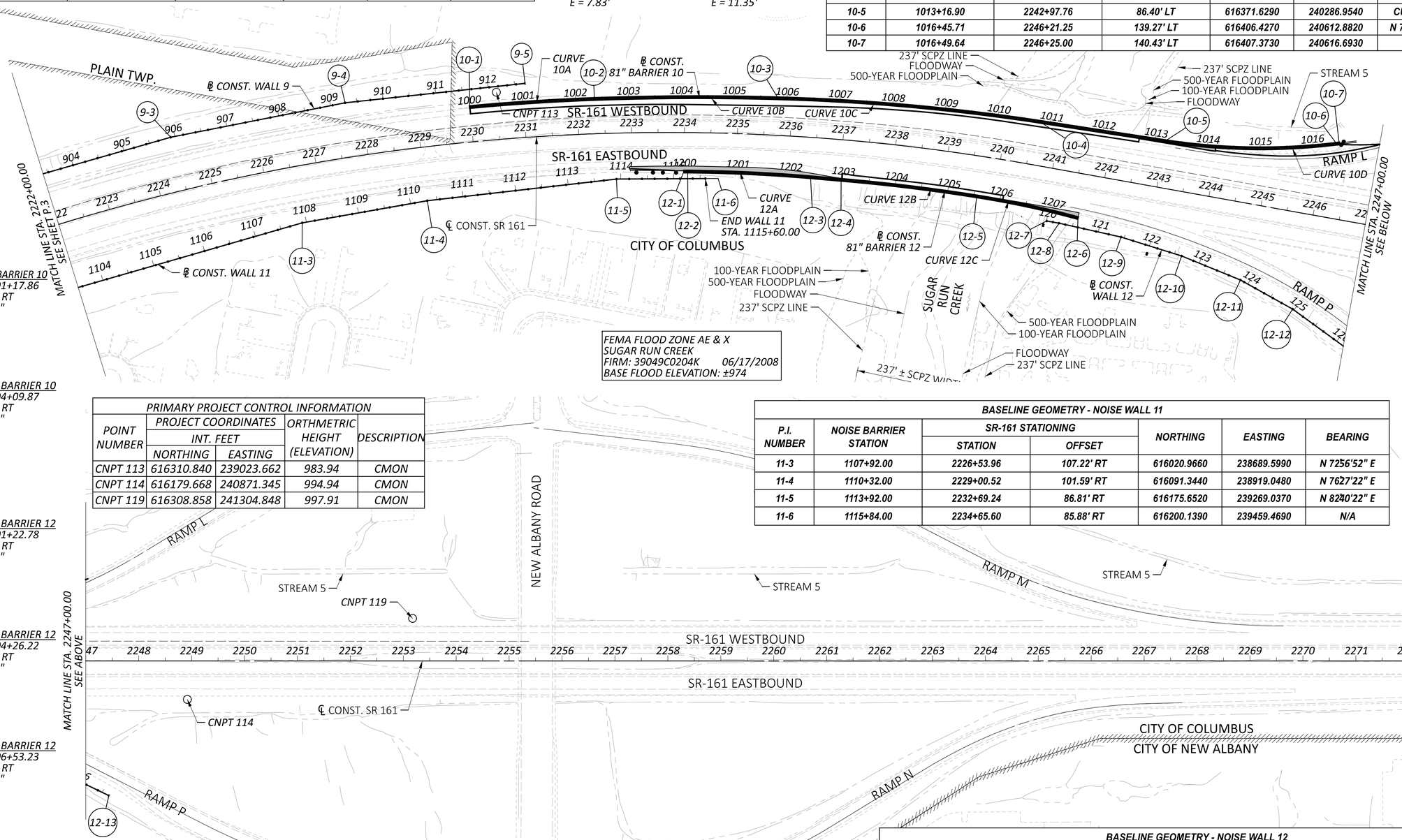
| P.I. NUMBER | NOISE BARRIER STATION | SR-161 STATIONING | | NORTHING | EASTING | BEARING |
|---|---|---|---|---|---|---|
| | | STATION | OFFSET | | | |
| 9-3 | 905+92.00 | 2224+44.48 | 103.00' LT | 616151.2730 | 238423.1270 | N 71°48'52" E |
| 9-4 | 909+28.00 | 2227+71.94 | 103.00' LT | 616256.1370 | 238742.3440 | N 76°49'40" E |
| 9-5 | 912+70.00 | 2231+05.30 | 102.00' LT | 616334.0720 | 239075.3460 | N/A |

**10C CURVE DATA**
℄ CONST. 81" BARRIER 10
P.I. = STA. 1008+34.43
Δ = 07°09'57" RT
Dc = 01°25'57"
R = 4,000.00'
T = 250.46'
L = 500.27'
E = 7.83'

**10D CURVE DATA**
℄ CONST. 81" BARRIER 10
P.I. = STA. 1014+82.35
Δ = 15°41'58" LT
Dc = 04°46'29"
R = 1,200.00'
T = 165.44'
L = 328.81'
E = 11.35'

## BASELINE GEOMETRY - 81" BARRIER 10

| P.I. NUMBER | 81" BARRIER STATION | SR-161 STATIONING | | NORTHING | EASTING | BEARING |
|---|---|---|---|---|---|---|
| | | STATION | OFFSET | | | |
| 10-1 | 1000+00.00 | 2230+00.00 | 64.00' LT | 616275.1150 | 238977.7230 | CURVE 10A |
| 10-2 | 1002+35.65 | 2232+31.85 | 64.00' LT | 616319.0190 | 239209.2100 | CURVE 10B |
| 10-3 | 1005+83.97 | 2235+74.40 | 68.24' LT | 616362.8150 | 239554.7080 | CURVE 10C |
| 10-4 | 1010+84.24 | 2240+65.17 | 80.58' LT | 616378.7570 | 240054.3970 | S 88°14'40" E |
| 10-5 | 1013+16.90 | 2242+97.76 | 86.40' LT | 616371.6290 | 240286.9540 | CURVE 10D |
| 10-6 | 1016+45.71 | 2246+21.25 | 139.27' LT | 616406.4270 | 240612.8820 | N 76°03'22" E |
| 10-7 | 1016+49.64 | 2246+25.00 | 140.43' LT | 616407.3730 | 240616.6930 | N/A |




**10A CURVE DATA**
℄ CONST. 81" BARRIER 10
P.I. = STA. 1001+17.86
Δ = 03°24'02" RT
Dc = 01°26'35"
R = 3,970.53'
T = 117.86'
L = 235.65'
E = 1.75'

**10B CURVE DATA**
℄ CONST. 81" BARRIER 10
P.I. = STA. 1004+09.87
Δ = 03°37'43" RT
Dc = 01°02'30"
R = 5,500.00'
T = 174.22'
L = 348.32'
E = 2.76'

FEMA FLOOD ZONE AE & X
SUGAR RUN CREEK
FIRM: 39049C0204K 06/17/2008
BASE FLOOD ELEVATION: ±974

### PRIMARY PROJECT CONTROL INFORMATION

| POINT NUMBER | PROJECT COORDINATES (INT. FEET) NORTHING | PROJECT COORDINATES (INT. FEET) EASTING | ORTHMETRIC HEIGHT (ELEVATION) | DESCRIPTION |
|---|---|---|---|---|
| CNPT 113 | 616310.840 | 239023.662 | 983.94 | CMON |
| CNPT 114 | 616179.668 | 240871.345 | 994.94 | CMON |
| CNPT 119 | 616308.858 | 241304.848 | 997.91 | CMON |

## BASELINE GEOMETRY - NOISE WALL 11

| P.I. NUMBER | NOISE BARRIER STATION | SR-161 STATIONING | | NORTHING | EASTING | BEARING |
|---|---|---|---|---|---|---|
| | | STATION | OFFSET | | | |
| 11-3 | 1107+92.00 | 2226+53.96 | 107.22' RT | 616020.9660 | 238689.5990 | N 72°56'52" E |
| 11-4 | 1110+32.00 | 2229+00.52 | 101.59' RT | 616091.3440 | 238919.0480 | N 76°27'22" E |
| 11-5 | 1113+92.00 | 2232+69.24 | 86.81' RT | 616175.6520 | 239269.0370 | N 82°40'22" E |
| 11-6 | 1115+84.00 | 2234+65.60 | 85.88' RT | 616200.1390 | 239459.4690 | N/A |




**12A CURVE DATA**
℄ CONST. 81" BARRIER 12
P.I. = STA. 1201+22.78
Δ = 04°26'21" RT
Dc = 01°54'36"
R = 3,000.00'
T = 116.28'
L = 232.44'
E = 2.25'

**12B CURVE DATA**
℄ CONST. 81" BARRIER 12
P.I. = STA. 1204+26.22
Δ = 04°06'38" RT
Dc = 01°35'30"
R = 3,600.00'
T = 129.19'
L = 258.27'
E = 2.32'

**12C CURVE DATA**
℄ CONST. 81" BARRIER 12
P.I. = STA. 1206+53.23
Δ = 06°13'43" RT
Dc = 03°10'59"
R = 1,800.00'
T = 97.93'
L = 195.68'
E = 2.66'

## BASELINE GEOMETRY - 81" BARRIER 12

| P.I. NUMBER | 81" BARRIER STATION | SR-161 STATIONING | | NORTHING | EASTING | BEARING |
|---|---|---|---|---|---|---|
| | | STATION | OFFSET | | | |
| 12-1 | 1200+00.00 | 2234+00.00 | 72.00' RT | 616207.1220 | 239394.0850 | N 83°25'39" E |
| 12-2 | 1200+06.51 | 2234+06.63 | 71.99' RT | 616207.8670 | 239400.5490 | CURVE 12A |
| 12-3 | 1202+38.95 | 2236+43.45 | 73.56' RT | 616225.5050 | 239632.2600 | N 87°52'00" E |
| 12-4 | 1202+97.02 | 2237+02.65 | 74.00' RT | 616227.6670 | 239690.2970 | CURVE 12B |
| 12-5 | 1205+55.30 | 2239+65.92 | 74.56' RT | 616228.0190 | 239948.5140 | CURVE 12C |
| 12-6 | 1207+50.97 | 2241+63.30 | 82.30' RT | 616210.6620 | 240143.3220 | N/A |

## BASELINE GEOMETRY - NOISE WALL 12

| P.I. NUMBER | NOISE BARRIER STATION | SR-161 STATIONING | | NORTHING | EASTING | BEARING |
|---|---|---|---|---|---|---|
| | | STATION | OFFSET | | | |
| 12-7 | 120+00.00 | 2241+06.19 | 100.00' RT | 616196.1680 | 240085.3170 | S 86°49'03" E |
| 12-8 | 120+24.00 | 2241+30.19 | 100.00' RT | 616194.8350 | 240109.2800 | S 84°25'26" E |
| 12-9 | 121+44.00 | 2242+50.09 | 105.00' RT | 616183.1750 | 240228.7120 | S 79°37'52" E |
| 12-10 | 122+64.00 | 2243+69.15 | 120.00' RT | 616161.5770 | 240346.7530 | S 74°47'14" E |
| 12-11 | 123+84.00 | 2244+86.51 | 145.00' RT | 616130.0880 | 240462.5480 | S 67°50'46" E |
| 12-12 | 124+97.00 | 2245+93.38 | 181.72' RT | 616087.4760 | 240567.2050 | S 60°56'13" E |
| 12-13 | 126+64.00 | 2247+43.64 | 254.60' RT | 616006.3520 | 240713.1780 | N/A |

HORIZONTAL SCALE IN FEET
0 50 100 200

# SCHEMATIC PLAN
# STA. 2222+00.00 TO STA. 2272+00.00

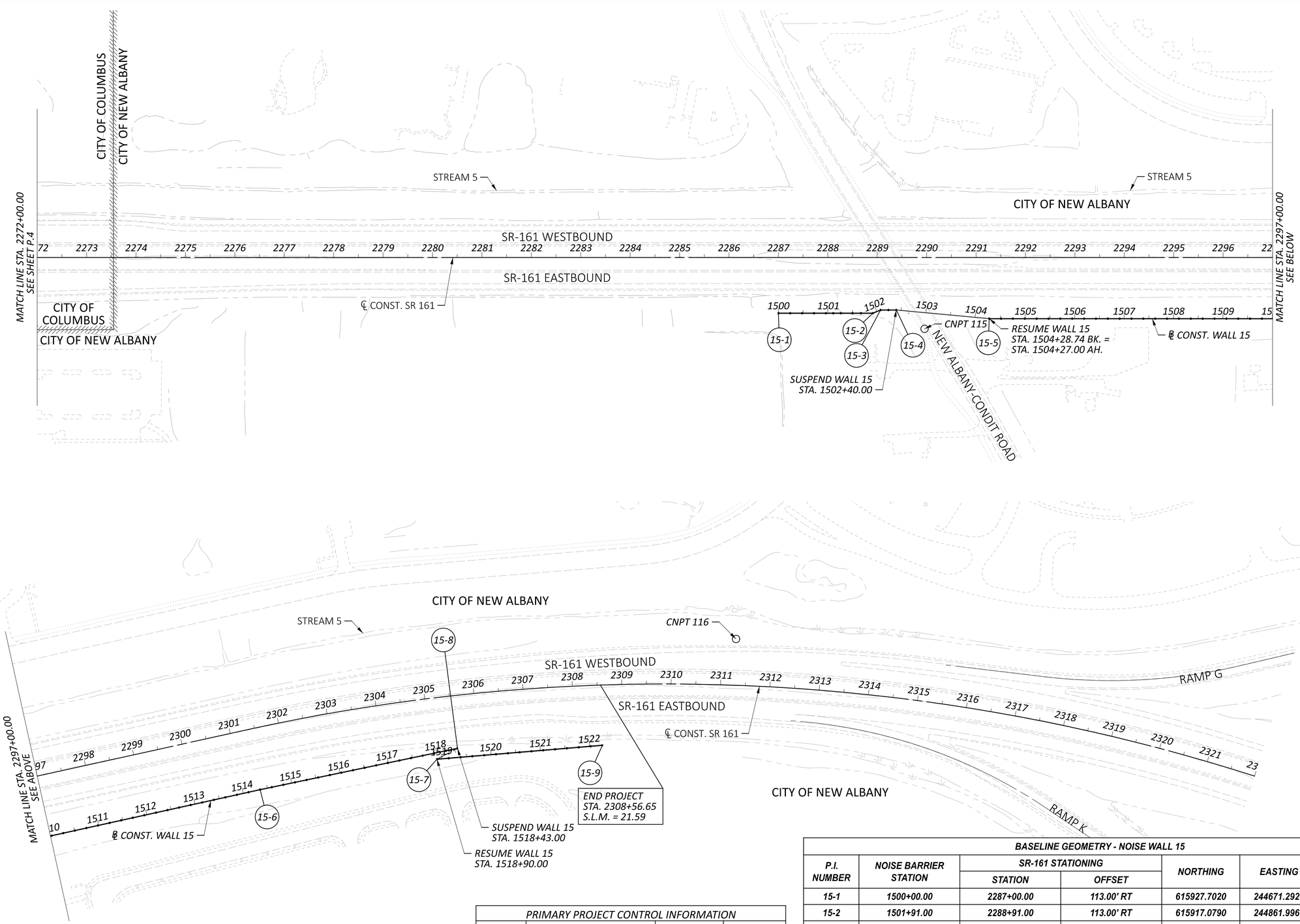
FRA-161-15.80 NOISE ABATEMENT


MODEL: CLP_SR161 - Plan 5 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 2:42:33 PM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GB001.dgn



DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4500
www.arcadis.com


DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.4 TOTAL P.297




# SCHEMATIC PLAN
## STA. 2272+00.00 TO STA. 2322+00.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: CLP_SR161 - Plan 7 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 9:56:58 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GB001.dgn


| PRIMARY PROJECT CONTROL INFORMATION | | | | |
|---|---|---|---|---|
| POINT NUMBER | PROJECT COORDINATES (INT. FEET) NORTHING | PROJECT COORDINATES (INT. FEET) EASTING | ORTHMETRIC HEIGHT (ELEVATION) | DESCRIPTION |
| CNPT 115 | 615879.718 | 244964.871 | 1045.73 | CMON |
| CNPT 116 | 615870.875 | 247112.825 | 1043.63 | CMON |

**BASELINE GEOMETRY - NOISE WALL 15**

| P.I. NUMBER | NOISE BARRIER STATION | SR-161 STATIONING | | NORTHING | EASTING | BEARING |
|---|---|---|---|---|---|---|
| | | STATION | OFFSET | | | |
| 15-1 | 1500+00.00 | 2287+00.00 | 113.00' RT | 615927.7020 | 244671.2920 | S 86°48'42" E |
| 15-2 | 1501+91.00 | 2288+91.00 | 113.00' RT | 615917.0790 | 244861.9960 | N 70°41'18" E |
| 15-3 | 1502+08.00 | 2289+06.71 | 106.49' RT | 615922.7010 | 244878.0390 | S 86°48'42" E |
| 15-4 | 1502+40.00 | 2289+38.71 | 106.49' RT | 615920.9220 | 244909.9900 | S 81°29'24" E |
| 15-5 | 1504+27.00 | 2291+26.63 | 124.00' RT | 615892.9920 | 245096.6480 | S 86°48'42" E |
| 15-6 | 1514+35.00 | 2301+34.63 | 124.00' RT | 615836.9310 | 246103.0880 | S 86°10'26" E |
| 15-7 | 1518+43.00 | 2305+54.77 | 107.00' RT | 615809.7050 | 246510.1780 | S 77°45'25" W |
| 15-8 | 1518+90.00 | 2305+09.61 | 124.00' RT | 615799.7390 | 246464.2470 | S 79°09'57" E |
| 15-9 | 1522+26.00 | 2308+56.65 | 122.00' RT | 615736.5810 | 246794.2580 | N/A |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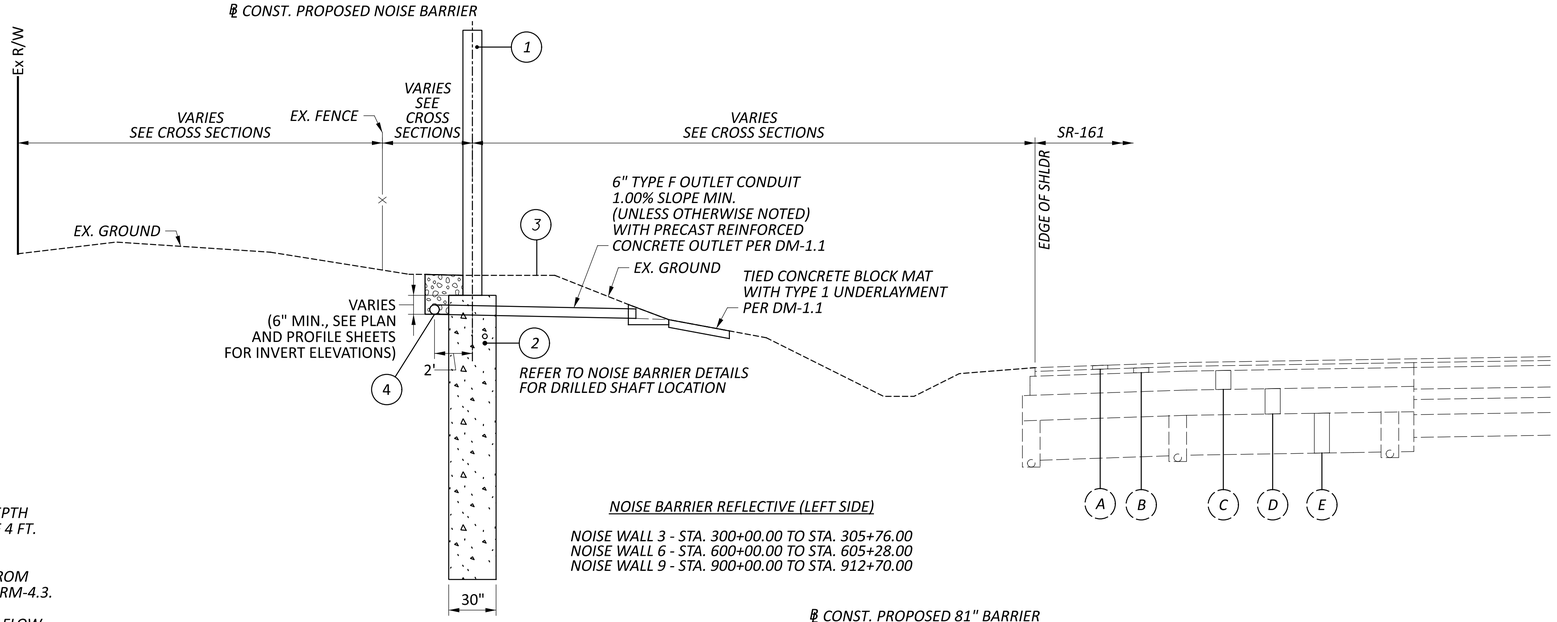
DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.5 | TOTAL P.297



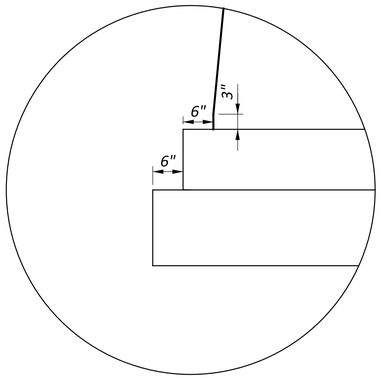

NOTES:
1.) AT LOCATIONS OF BARRIER INLETS, 81" SSB, THE FULL DEPTH WIDTH WILL BE 4 FT. REFER TO SHEET P.226 FOR LIMITS OF 4 FT. DEPRESSED APRON.

2.) FOOTER FOR 81" BARRIER WILL BE POURED SEPARATE FROM 81" BARRIER. PROVIDE DOWELS PER DOWELING DETAIL OF RM-4.3.

3.) DO NOT DISTURB EXISTING UNDERDRAINS AND ENSURE FLOW IS MAINTAINED TO THE EXISTING UNDERDRAINS.

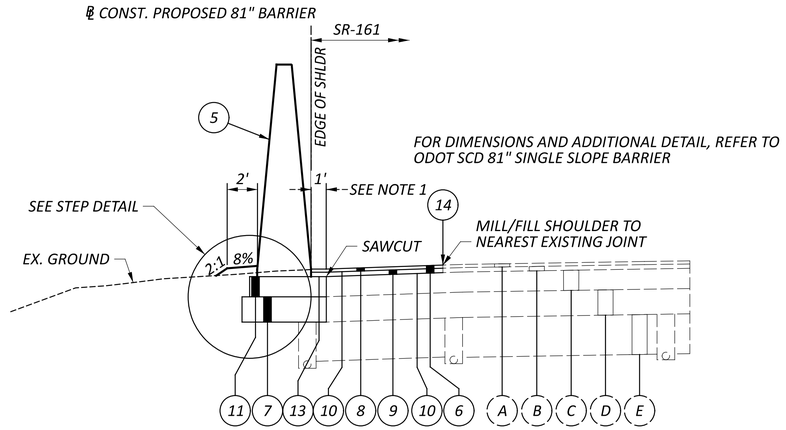
<u>NOISE BARRIER REFLECTIVE (LEFT SIDE)</u>

NOISE WALL 3 - STA. 300+00.00 TO STA. 305+76.00
NOISE WALL 6 - STA. 600+00.00 TO STA. 605+28.00
NOISE WALL 9 - STA. 900+00.00 TO STA. 912+70.00




<u>STEP DETAIL</u>

81" BARRIERS 8, 10, 12




<u>BARRIER, MISC.: 81" SINGLE SLOPE BARRIER (LEFT SIDE)</u>

81" BARRIER 3 - STA. 3000+00.00 TO STA. 3006+99.96

## LEGEND

1. ITEM 606 - SPECIAL - NOISE BARRIER (REFLECTIVE)
2. ITEM 524 - DRILLED SHAFTS (TO BE PAID WITH ITEM 606 - SPECIAL - NOISE BARRIER)
3. ITEM 659 - SEEDING AND MULCHING
4. ITEM 605 - 6" UNCLASSIFIED UNDERDRAIN AND GRANULAR MATERIAL PER CMS 605.02 (GRANULAR MATERIAL INCLUDED WITH NOISE BARRIER FOR PAYMENT)
5. ITEM 622 - BARRIER, MISC.: 81" SINGLE SLOPE BARRIER
6. ITEM 254 - 3" PAVEMENT PLANING, ASPHALT CONCRETE
7. ITEM 304 - 10" AGGREGATE BASE
8. ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG70-22M
9. ITEM 442 - 1.5" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (449)
10. ITEM 407 - NON-TRACKING TACK COAT (RATE AS PER C&MS TABLE 407.06-1)
11. ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P
12. ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P
13. ITEM 407 - TACK COAT (RATE AS PER C&MS TABLE 407.06-1)
14. ITEM 872 - VOID REDUCING ASPHALT MEMBRANE (AT ALLOWABLE COLD JOINT)
15. ITEM 304 - 7" AGGREGATE BASE
16. ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS
17. ITEM 606 - GUARDRAIL, TYPE MGS

A. 1.5"± EX. ASPHALT CONCRETE SURFACE COURSE
B. 1.75"± EX. ASPHALT CONCRETE INTERMEDIATE COURSE
C. 7.5"± EX. ASPHALT CONCRETE BASE
D. 10"± EX. AGGREGATE BASE
E. EX. SUBBASE (DEPTH VARIES)
F. 3" ASPHALT ON 9" CONCRETE BASE ON 10" STONE BASE
G. 3" ASPHALT ON 8" CONCRETE BASE ON 10" AGGREGATE BASE WITH 9" LIME SOIL STABILIZED SUBGRADE

TYPICAL SECTIONS

FRA-161-15.80 NOISE ABATEMENT

MODEL: GY001 PAPERSIZE: 34x22 (in.) DATE: 2024-09-04 TIME: 2:22:17 PM USER: danny.tran
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GY000.dgn

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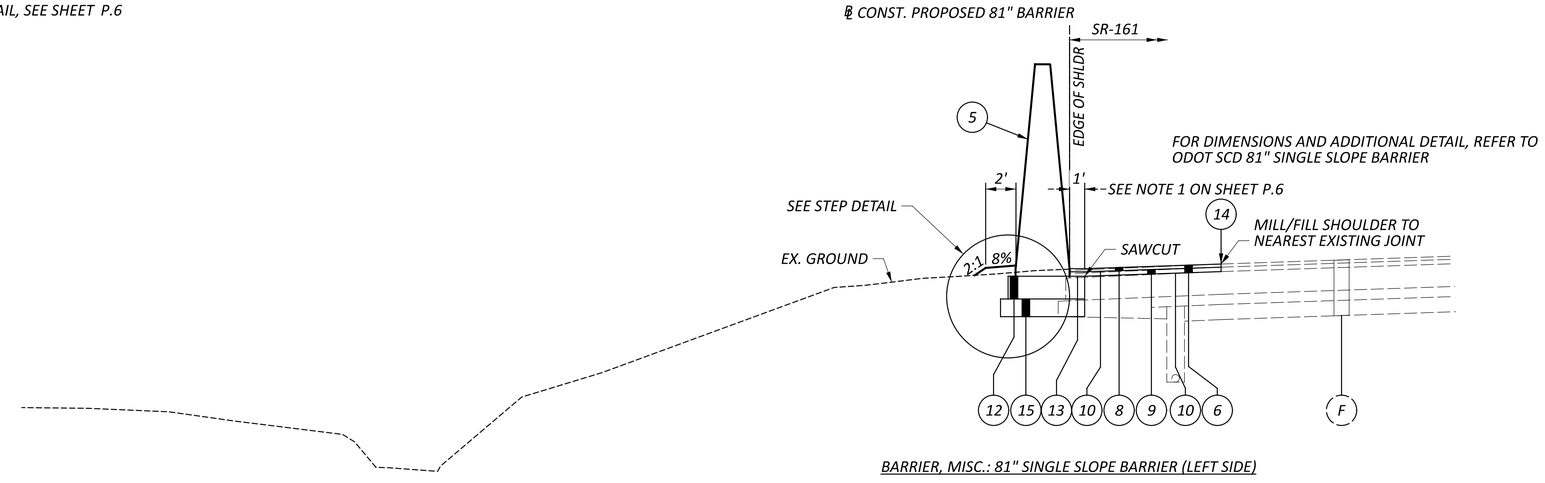
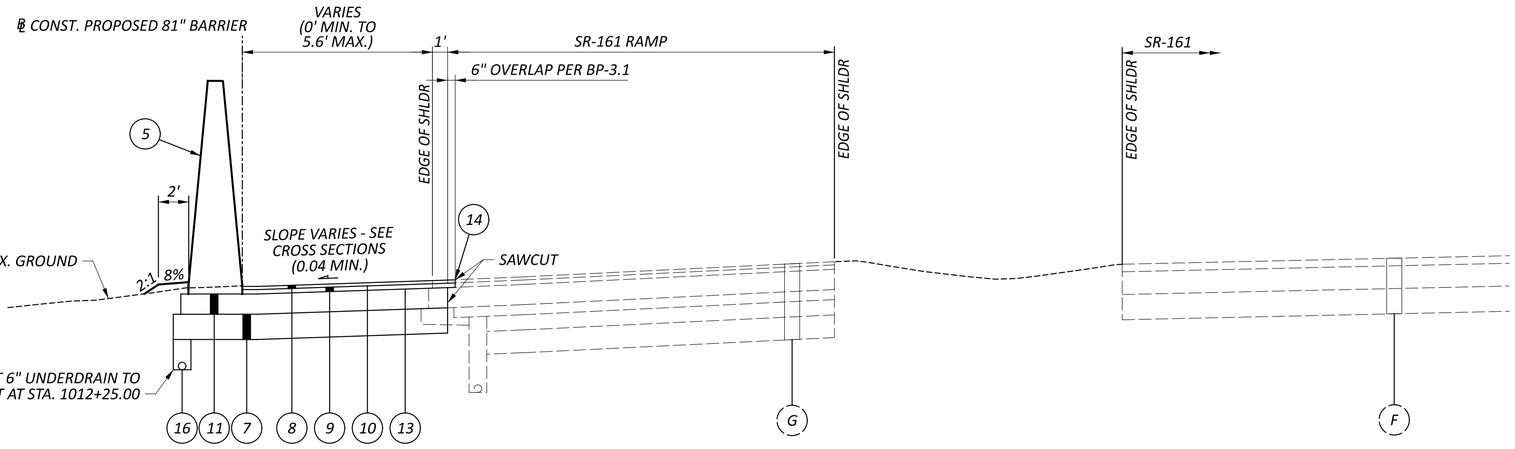
DESIGNER NRS
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.6 TOTAL P.297

FOR LEGEND AND STEP DETAIL, SEE SHEET P.6



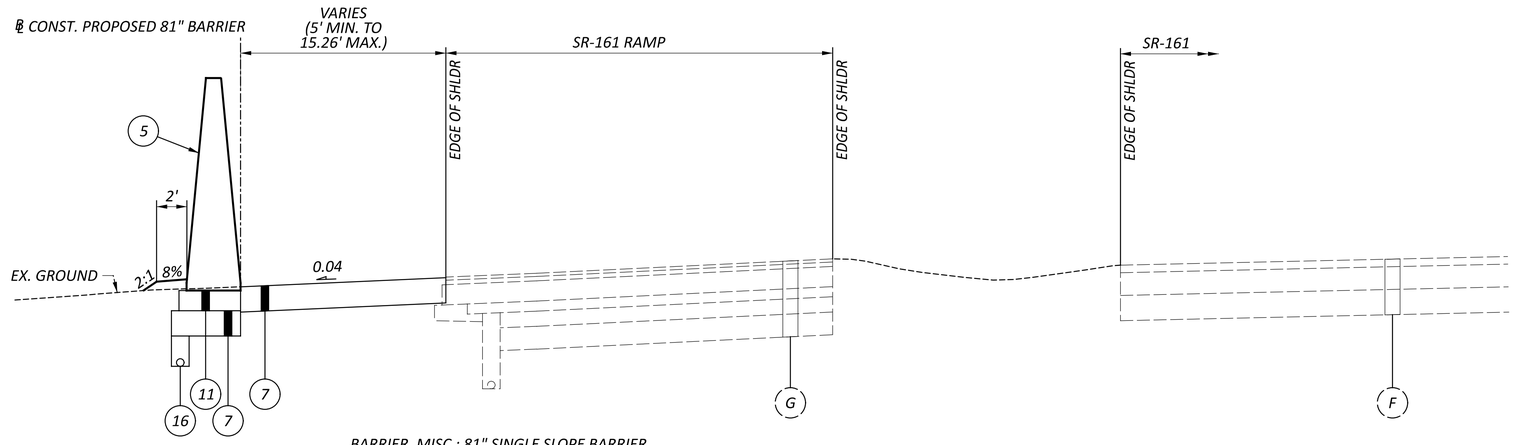

BARRIER, MISC.: 81" SINGLE SLOPE BARRIER (LEFT SIDE)

81" BARRIER 6 - STA. 5999+90.38 TO STA. 6008+25.00
81" BARRIER 10 - STA. 1000+00.00 TO STA. 1012+70.07




BARRIER, MISC.: 81" SINGLE SLOPE BARRIER
(LEFT SIDE SHIFTED FROM EXISTING PAVEMENT EDGE)

81" BARRIER 10 - STA. 1012+70.07 TO STA. 1014+15.44




BARRIER, MISC.: 81" SINGLE SLOPE BARRIER
(LEFT SIDE SHIFTED FROM EXISTING PAVEMENT EDGE)

81" BARRIER 10 - STA. 1014+15.44 TO STA. 1016+49.64

# TYPICAL SECTIONS

FRA-161-15.80 NOISE ABATEMENT


MODEL: GY002 PAPERSIZE: 34x22 (in.) DATE: 2024-07-08 TIME: 3:44:08 PM USER: danny.tran
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GY000.dgn



DESIGN AGENCY
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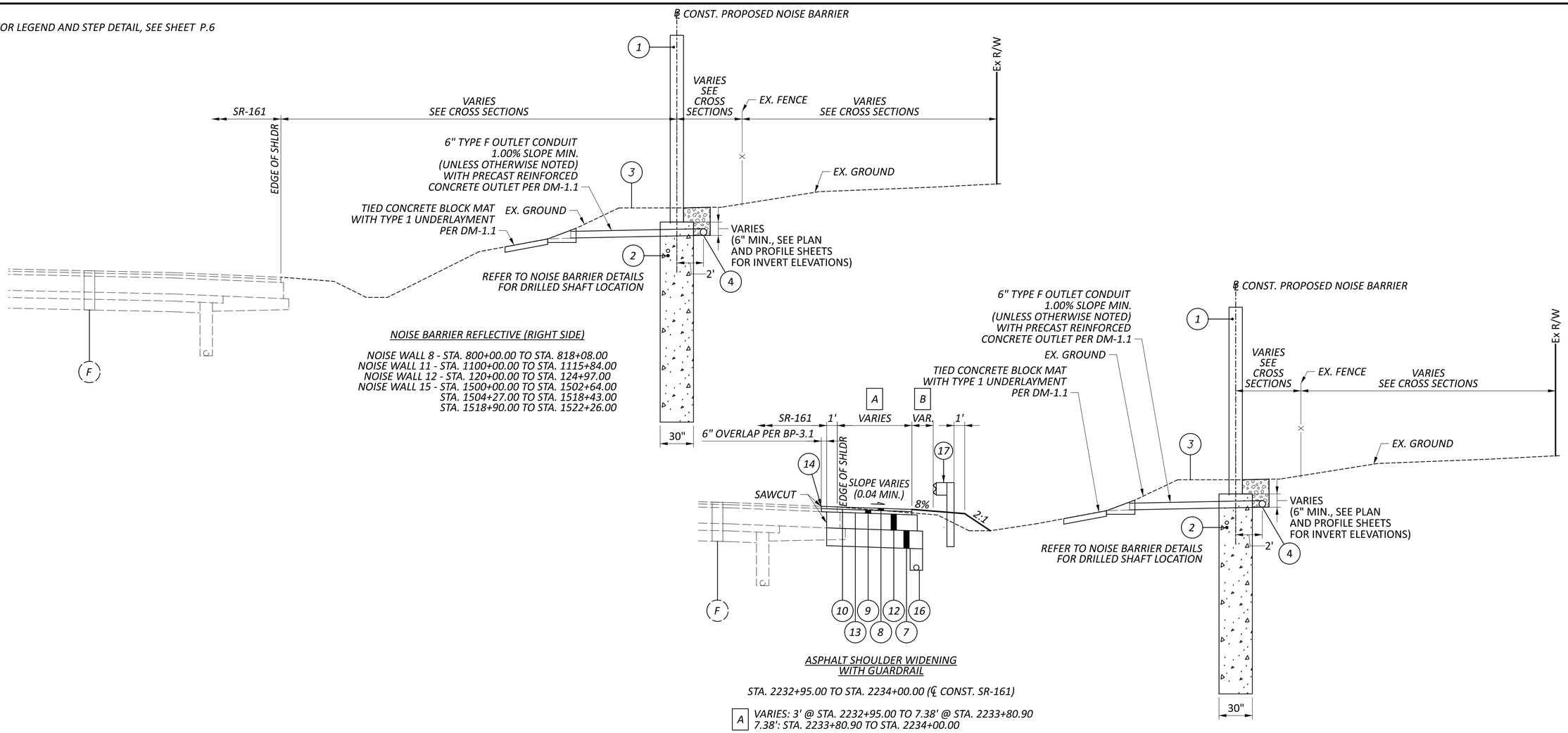
DESIGNER NRS

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.7 TOTAL P.297

FOR LEGEND AND STEP DETAIL, SEE SHEET P.6




*NOISE BARRIER REFLECTIVE (RIGHT SIDE)*

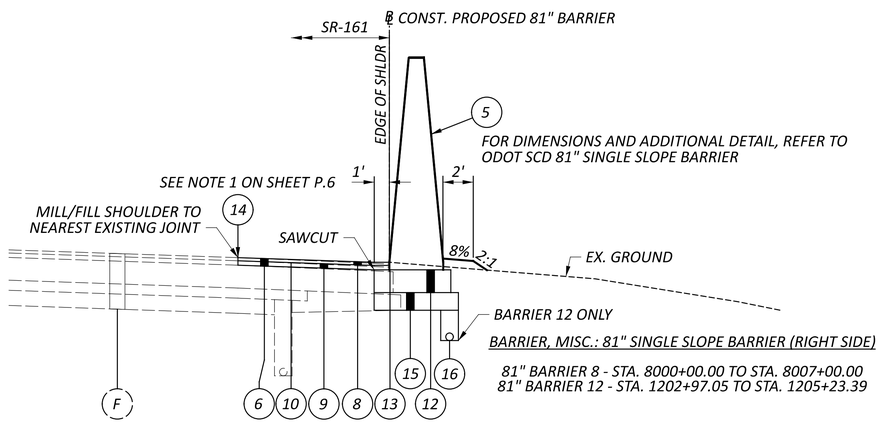
*NOISE WALL 8 - STA. 800+00.00 TO STA. 818+08.00*
*NOISE WALL 11 - STA. 1100+00.00 TO STA. 1115+84.00*
*NOISE WALL 12 - STA. 120+00.00 TO STA. 124+97.00*
*NOISE WALL 15 - STA. 1500+00.00 TO STA. 1502+64.00*
*STA. 1504+27.00 TO STA. 1518+43.00*
*STA. 1518+90.00 TO STA. 1522+26.00*

*ASPHALT SHOULDER WIDENING WITH GUARDRAIL*

*STA. 2232+95.00 TO STA. 2234+00.00 (℄ CONST. SR-161)*

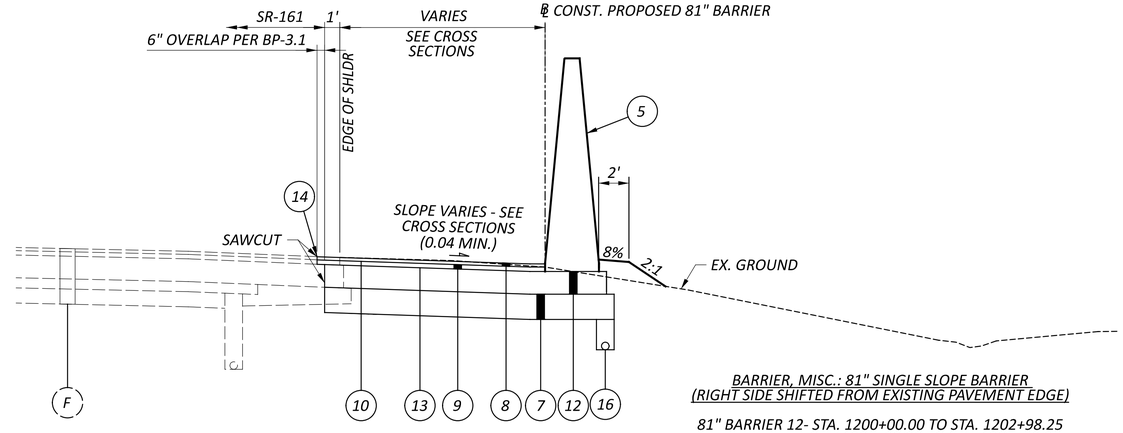
A *VARIES: 3' @ STA. 2232+95.00 TO 7.38' @ STA. 2233+80.90*
*7.38': STA. 2233+80.90 TO STA. 2234+00.00*

B *VARIES: 3.18' @ STA. 2232+95.00 TO 0' @ STA. 2233+80.90*
*0': STA. 2233+80.90 TO STA. 2234+00.00*




*BARRIER, MISC.: 81" SINGLE SLOPE BARRIER (RIGHT SIDE)*

*81" BARRIER 8 - STA. 8000+00.00 TO STA. 8007+00.00*
*81" BARRIER 12 - STA. 1202+97.05 TO STA. 1205+23.39*




*BARRIER, MISC.: 81" SINGLE SLOPE BARRIER (RIGHT SIDE SHIFTED FROM EXISTING PAVEMENT EDGE)*

*81" BARRIER 12- STA. 1200+00.00 TO STA. 1202+98.25*
*STA. 1205+23.39 TO STA. 1207+50.97*




TYPICAL SECTIONS

FRA-161-15.80 NOISE ABATEMENT

MODEL: GY003 PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 11:52:44 PM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GY000.dgn

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COLUMBUS, OHIO 43235
(614) 844-3600
www.arcadis.com

DESIGNER NRS
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.8 TOTAL P.297

**UTILITIES**
LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

GAS
COLUMBIA GAS OF OHIO
3550 JOHNNY APPLESEED COURT
COLUMBUS, OH 43231
ATTN: ROB CALDWELL
OFFICE: 614-818-2104
CELL: 614-370-1906
CUSTOMER SERVICE: 1-800-344-4077
DAMAGE PREVENTION: 1-866-632-6243
COLUMBIAGAS_COLUMBUSENG@NISOURCE.COM
RCALDWELL@NISOURCE.COM

COLUMBIA GAS OF OHIO
TRANSMISSION
1600 EASTGATE PKWY
GAHANNA, OH 43230
ATTN: ROBERT REED
PHONE: 740-279-0870
ROBERT1_REED@TCENERGY.COM

TELEPHONE/CABLE/FIBER
AMERICAN ELECTRIC POWER (TELECOM)
777 HOPEWELL DRIVE
HEATH, OHIO 43056
ATTN: UNA BLANUSA
AEP SOLUTION CENTER: 800-277-2177
OHFIBERRELOCATE@AEP.COM

AT&T - OHIO
111 N. 4TH STREET
COLUMBUS, OH 43215
ATTN: DONALD G. MARSHALL, JR.
CELL: 614-216-2396
AT&T REPAIR SERVICE: 888-611-4466
DAMAGE PREVENTION: 937-296-3929
G01553@ATT.COM

AT&T (TRANSMISSION)
METROPOLITAN COMM. GROUP OHIO (MCG)
155 COMMERCE PARK DRIVE, SUITE 1
WESTERVILLE, OH 43082
ATTN: JAMES SCHNEIDER (PROJECT MANAGER)
CELL: 440-525-4322
JAMES.SCHNEIDER@MCGFIBER.COM
ATTN: WILLIAM TAGGART (FIELD ENGINEER)
CELL: 614-370-5414

CHARTER COMMUNICATIONS / SPECTRUM
3760 INTERCHANGE ROAD
COLUMBUS, OH 43204
DL-MOH-CONSTRUCTION-FRELO-TEAM@CHARTER.COM

COLUMBUS FIBERNET
1600 WALCUTT ROAD
COLUMBUS, OH 43228
PHONE: 614-921-8524
ATTN: MATT BLACKSTONE
MABLACKSTONE@COLUMBUSFIBER.NET
CFNINFO@COLUMBUSFIBER.NET

LUMEN
250 W. OLD WILSON BRIDGE, SUITE 130
WORTHINGTON, OH 43085
ATTN: HALEY WOOD
RELOCATIONS@LUMEN.COM
RELOCATIONS@BRIGHTSPEED.COM
HALEY.WOOD@LUMEN.COM

CROWN CASTLE FIBER
2 EASTON OVAL, SUITE 425
COLUMBUS, OH 43219
ATTN: JON TARNOWSKI
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CELL: 614-940-2462
JON.TARNOWSKI@CROWNCASTLE.COM

VERIZON BUSINESS (AKA MCI/XO)
757 COMMERCE CT.
LEWIS CENTER, OH 43035
CELL: 614-593-6685 (MAURICE JONES)
CELL: 614-816-0361 (BOB DILLOW)
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DARRYL H. JOYCE, DHJOYCE@COLUMBUS.GOV
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CITY OF COLUMBUS DIV. OF WATER
910 DUBLIN RD.
COLUMBUS, OH 43215
PHONE: 614-645-7788

AQUA OHIO - WATER
5481 BUENOS AIRES BLVD.
WESTERVILLE, OH 43081
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PHONE: 614-882-6586 X50559
JELOGAN@AQUAAMERICA.COM

CITY OF NEW ALBANY
PUBLIC SERVICE
7800 BEVELHYMER ROAD
NEW ALBANY, OH 43054
PHONE: 614-855-0076
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AMERICAN ELECTRIC POWER (DISTRIBUTION)
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PHONE: 740-348-5322
AEP SOLUTION CENTER: 800-277-2177
PTPAXTON@AEP.COM

AMERICAN ELECTRIC POWER (TRANSMISSION)
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NEW ALBANY, OH 43054
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PHONE: 380-205-5072
TL_PUBLICPROJECTS@AEP.COM

CITY OF COLUMBUS
DIVISION OF POWER
3500 INDIANOLA AVE.
COLUMBUS, OH 43214
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PHONE: 614-645-7569
DISPATCH CENTER: 614-645-7627
CRHORNER@COLUMBUS.GOV

SANITARY & STORMWATER:
CITY OF COLUMBUS DPU
DIVISION OF SEWERAGE & DRAINAGE
1250 FAIRWOOD AVENUE
COLUMBUS, OH 43206
PHONE: 614-645-7102

AQUA OHIO - SEWER
5481 BUENOS AIRES BLVD.
WESTERVILLE, OH 43081
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PHONE: 614-882-6586 X50559
JELOGAN@AQUAAMERICA.COM

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7800 BEVELHYMER ROAD
NEW ALBANY, OH 43054
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ITS/CTSS/TRAFFIC
ODOT CENTRAL OFFICE ITS
929 EASTWIND DRIVE
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WESTERVILLE, OH 43081
ATTN: EVAN KRAUS
PHONE: 614-948-0537
EVAN.KRAUS@SAM.BIZ

CITY OF COLUMBUS
TRAFFIC SIGNALS
1820 E. 17TH AVENUE
COLUMBUS, OH 43219
ATTN: BRAD HEGWOOD
PHONE: 614-560-0839
BDHEGWOOD@COLUMBUS.GOV

ODOT DISTRICT 6 TRAFFIC
400 E. WILLIAM STREET
DELAWARE, OH 43015
PHONE: 740-833-8000
ATTN: TROY BRYANT

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PUBLIC SERVICE
7800 BEVELHYMER ROAD
NEW ALBANY, OH 43054
PHONE: 614-855-0076
PUBLICSERVICE@NEWALBANYOHIO.ORG

**SURVEYING PARAMETERS**
PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET P.2 - P.5 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.
USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL
POSITIONING METHOD: ODOT VRS
MONUMENT TYPE: CLASS A

VERTICAL POSITIONING
ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID 18

HORIZONTAL POSITIONING
REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: FRANKLIN COUNTY LDP
COMBINED FACTOR SCALE: 1.00000000
ORIGIN OF COORDINATE SYSTEM: 0,0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN INTERNATIONAL FT (ft).

**ITEM 524 - DRILLED SHAFTS**
FOLLOW STANDARD DRAWING NBS-1-09 AND THE DETAILS OF THESE PLANS.

PAYMENT FOR THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE FOOT FOR ITEM 606 - SPECIAL - NOISE BARRIER (REFLECTIVE) UNLESS OTHERWISE NOTED, AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

**ITEM 606 - SPECIAL - NOISE BARRIER (REFLECTIVE)**
THIS ITEM WILL BE USED TO INSTALL REFLECTIVE FIBERGLASS NOISE PANELS. SEE SHEET P.217 FOR COLOR, TEXTURE, AND LOCATION OF INSTALLATION.

NOISE WALL CONSTRUCTION SHALL ADHERE TO NBS-1-09.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE FOOT FOR ITEM 606 - SPECIAL - NOISE BARRIER (REFLECTIVE) UNLESS OTHERWISE NOTED, AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

**ITEM 607 - FENCE, MISC.: TEMPORARY FENCE**
INSTALL TEMPORARY FENCE WHEN THE TIME BETWEEN THE REMOVAL OF THE EXISTING FENCE AND INSTALLATION OF THE PROPOSED FENCE OR NOISE BARRIER WILL EXCEED ONE DAY. INSTALL THIS FENCE IMMEDIATELY AFTER THE EXISTING FENCE IS REMOVED. THE TEMPORARY FENCE SHALL BE A WOOD SNOW FENCE, PLASTIC NYLON CONSTRUCTION FENCE OR EXISTING FENCE FABRIC MOUNTED ON DRIVEN POSTS. FOR EACH NOISE BARRIER SECTION, DO NOT REMOVE THE EXISTING FENCE EARLIER THAN 3 MONTHS PRIOR TO THE COMPLETED INSTALLATION OF THE NOISE BARRIER PANELS.

THE DEPARTMENT WILL PAY FOR FURNISHING, ERECTING, MAINTAINING, AND REMOVING TEMPORARY FENCE UNDER ITEM 607 - FENCE, MISC.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
ITEM 607 - FENCE, MISC.: TEMPORARY FENCE 4,202 FT

**ITEM SPECIAL - SURVEY CONTROL VERIFICATION**
THE CONTRACTOR SHALL PERFORM THIS WORK TO VERIFY THE PROVIDED SURVEY CONTROL. THE CONTRACTOR WILL PERFORM THE VERIFICATION USING ONE OF THE TWO METHODS BELOW DEPENDENT UPON THE CONTRACTOR'S CHOSEN MEANS OF SURVEY CONTROL TO BE USED ON THE PROJECT. THE WORK SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF AN OHIO LICENSED SURVEYOR.

1) IF USING GPS DEVICES TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL:
- A. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
- B. PERFORM A SITE CALIBRATION UTILIZING THE AVAILABLE HORIZONTAL AND VERTICAL CONTROL POINTS PROVIDED IN THE PLAN.
- C. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.

2) IF USING CONVENTIONAL SURVEY INSTRUMENTATION TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL:
- A. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
- B. LOCATE AND OBSERVE ANGLE AND DISTANCE TO ALL AVAILABLE HORIZONTAL CONTROL POINTS PROVIDED IN THE PLAN.
- C. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID ITEM.

A LUMP SUM QUANTITY FOR ITEM SPECIAL - SURVEY CONTROL VERIFICATION HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE WORK DESCRIBED ABOVE.

**CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES**
WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, NOTIFY THE ENGINEER BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, NOTIFY THE ENGINEER BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

**ENDANGERED BAT HABITAT REMOVAL**
THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

**REVIEW OF DRAINAGE FACILITIES**
PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT, CONTRACTOR AND LOCALS OF ALL EXISTING DRAINAGE FACILITIES THAT ARE TO REMAIN IN SERVICE WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES IS DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

CONFIRM ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES ARE MAINTAINED AND LEFT IN A CONDITION COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THEIR OPERATIONS AS DIRECTED AND APPROVED BY THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

**BENCHING OF FOUNDATION SLOPES**
ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS). NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF SECTION 203.05.

**SEEDING AND MULCHING**
THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

| | |
|---|---|
| 659, SOIL ANALYSIS TEST | 1 EACH |
| 659, TOPSOIL | 887 CU. YD. |
| 659, SEEDING AND MULCHING | 7985 SQ. YD. |
| 659, REPAIR SEEDING AND MULCHING | 400 SQ. YD. |
| 659, INTER-SEEDING | 400 SQ. YD. |
| 659, COMMERCIAL FERTILIZER | 1.08 TON |
| 659, LIME | 1.65 ACRES |
| 659, WATER | 45 M. GAL. |

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS AND HAVE BEEN DETERMINED USING CAD GENERATED AREAS. FOR AREAS ADJACENT TO A RESIDENTIAL PROPERTY, USE CMS 659 LAWN MIXTURE.

**CLEARING AND GRUBBING, AS PER PLAN**
THIS LUMP SUM ITEM SHALL BE USED TO CLEAR BRUSH AND THE NEAT TRIMMING AND/OR REMOVAL OF TREES IN CONFLICT WITH THE PROPOSED NOISE WALL LOCATIONS. TREES SCHEDULED TO BE TRIMMED OR REMOVED SHALL BE MARKED AND APPROVED BY THE PROJECT ENGINEER PRIOR TO THE WORK BEING PERFORMED.

ON THE FREEWAY SIDE OF THE NOISE WALL, THE CONTRACTOR SHALL PERFORM CLEARING AND GRUBBING IN THE AREA BETWEEN THE FACE OF THE NOISE WALL AND THE EDGE OF SHOULDER OF SR-161. THIS WORK AREA SHALL BE USED BY THE CONTRACTOR'S EQUIPMENT TO PERFORM WORK NECESSARY TO INSTALL THE NOISE WALL.

FOR CLARIFICATION, TREES SHALL BE INTERPRETED AS ANY GROWTH WITH A TRUNK DIAMETER OF AT LEAST THREE (3) INCHES.

IN THE AREA BETWEEN THE BACK OF THE NOISE WALL AND EXISTING FENCE, WHERE THE FENCE IS TO BE REMOVED, AND THE ADJOINING PROPERTY IS RESIDENTIAL, THE AREA SHALL BE RESTORED TO A STATE COMPARABLE TO THE ADJOINING PROPERTY.

**AS-BUILT DRAWINGS**
PROVIDE AS-BUILT DRAWINGS FOR UNDERDRAIN OUTLETS AND VEGETATED FILTER STRIPS THAT INCLUDE S.R. 161 STATION AND OFFSET AND LATITUDE AND LONGITUDE.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 203, 611, 659, AND 670 ITEMS.

GENERAL NOTES

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 818-4900
www.arcadis.com
DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.9 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT
MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-09-03 TIME: 1:11:55 PM USER: danny.tran
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\14372\0400_CAD\400-Engineering\Roadway\Sheets\117607_GN001.dgn

***EXISTING SUBSURFACE DRAINAGE***
*PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.*

*PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE. UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.*

*THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:*

| | |
|---|---|
| *ITEM 601, TIED CONCRETE BLOCK MAT, TYPE 1* | *10 SQ. YD.* |
| *ITEM 605, AGGREGATE DRAINS* | *50 FT.* |
| *ITEM 611, 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS* | *25 FT.* |
| *ITEM 611, PRECAST REINFORCED CONCRETE OUTLET* | *5 EACH* |
| *ITEM 605, 6" UNCLASSIFIED PIPE UNDERDRAINS* | *50 FT.* |

***SPECIFIC SERVICE AND TOURIST-ORIENTED DIRECTIONAL SIGNS REMOVAL AND RELOCATION***
*PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT KEVIN MCDERMOTT AT OHIO LOGOS, INC. AT (800) 860-5646 TO COORDINATE THE REMOVAL AND RELOCATION OF THE SPECIFIC SERVICE SIGNS (LOGO) AND TOURIST-ORIENTED DIRECTIONAL SIGNS (TODS) LOCATED NEAR STA. 2238+00, AS SHOWN ON PLAN SHEET P.48 . OHIO LOGOS, INC. WILL RELOCATE THE SIGN UPON COMPLETION OF CONSTRUCTION.*

***ITEM 203 - ROADWAY, MISC.: TEMPORARY OVER-STEEPENED FILL***
*TEMPORARY OVER-STEEPENED FILL WILL BE NEEDED TO CONSTRUCT PROPOSED BENCHING IN CERTAIN AREAS, AS SHOWN ON THE CROSS SECTIONS. TEMPORARY OVER-STEEPENED FILL SHALL BE CONSTRUCTED AS SET FORTH IN THE GEOTECHNICAL DESIGN MANUAL AND SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS).*

*ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 203, ROADWAY, MISC.: TEMPORARY OVER-STEEPENED FILL.*

***ITEM 606 - IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL)***
*THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE TYPE 2 IMPACT ATTENUATORS AS LISTED ON THE OFFICE OF ROADWAY ENGINEERING'S WEB PAGE (REFER TO THE POSTED SHOP DRAWINGS FOR THE MOST CURRENT APPROVED PRODUCT MODELS). WHEN BI-DIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.*

*PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL), EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS/BACKSTOPS, TRANSITIONS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.*

***ITEM 630 - OVERHEAD SIGN SUPPORT, INSTALLATION ONLY, AS PER PLAN***
*THIS ITEM SHALL CONSIST OF THE INSTALLATION OF A SIGN SUPPORT, S-4, ON A NEW FOUNDATION. THE CONTRACTOR SHALL PICK UP FROM ODOT'S MAINTENANCE FACILITY AT 4730 E. DUBLIN GRANVILLE ROAD WESTERVILLE OHIO 43081 THE PROPOSED OVERHEAD SIGN SUPPORT TO BE INSTALLED AT THE LOCATION SHOWN IN THE PLANS. THE SIGN SUPPORT (TYPE TC-12.31, DESIGN 10) SHALL BE INSTALLED ON A NEW SIGN SUPPORT FOUNDATION. THE SIZE OF THE PROPOSED BOLT CIRCLE ON THE SIGN SUPPORT SHALL BE VERIFIED FOR COMPATABILITY PRIOR TO INSTALLATION ON THE SIGN FOUNDATION. THIS ITEM ALSO INCLUDES PICK UP AND INSTALLATION OF THE OVERHEAD SIGN ONTO THE SUPPORT.*

*PAYMENT FOR ALL OF THE ABOVE WORK SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR ITEM 630, OVERHEAD SIGN SUPPORT, INSTALLATION ONLY, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO INSTALL THE ITEM.*

***ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)***
*THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.*

*THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.*

*REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.*

*ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.*

*PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016), EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.*

***ITEM 633 - CONTROLLER WORK PAD, AS PER PLAN***
*IF NECESSARY, THE CONTRACTOR SHALL REPAIR THE CONCRETE WORK PAD LOCATED AT SR-161 STA. 2219+37.32, OFFSET 90.38' LT / NOISE WALL 9 STA. 900+76.32, OFFSET 12.62' RT (SHEET P.44 ) IF DAMAGED DURING THE INSTALLATION OF THE NOISE WALL AND DRILLED SHAFTS. IF NECESSARY, THE CONTRACTOR SHALL GRADE THE SURROUNDING AREA SLIGHTLY IN ORDER TO INSTALL A LEVEL WORK PAD AND RESTORE SITE CONDITIONS AS APPROVED BY THE PROJECT ENGINEER. PAYMENT FOR ALL OF THE ABOVE WORK SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR ITEM 633, CONTROLLER WORK PAD, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO CONSTRUCT THE ITEM.*

*THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY: ITEM 633, CONTROLLER WORK PAD, AS PER PLAN 1 EACH*

***ITEM 690 - SPECIAL - UTILITY TEST HOLE (COLUMBIA GAS)***
*THE CONTRACTOR SHALL BE REQUIRED TO CONFIRM (SUE LEVEL QUALITY A) THE FOLLOWING EXISTING UTILITY LOCATIONS:*
*1. WALL 8 AT APPROXIMATE STA. 817+88 (SEE SHEET P.43 )*
*2. WALL 15 AT APPROXIMATE STA. 1501+78 (SEE SHEET P.58 )*

*THE FOLLOWING PROVISIONS MUST BE FOLLOWED:*
*1. THE SUE COMPANY UTILIZED BY THE CONTRACTOR SHALL BE REQUIRED TO BE PRE-QUALIFIED WITH THE ODOT.*
*2. THE SUE LOCATES SHALL BE PERFOMED PRIOR TO ORDERING WALL PANELS BETWEEN DRILLED SHAFT 75 TO 79 (WALL 8) AND DRILLED SHAFT 8 TO 13 (WALL 15).*
*3. THE SUE LOCATE CONFIRMATION DATA SHALL BE PROVIDED TO ODOT 21 DAYS PRIOR TO ORDERING MATERIALS AND COMMENCING WORK.*
*4. ALL REQUIREMENTS OF THE RESPECTIVE UTILITY COMPANY AND THE OHIO UTILITY PROTECTION SERVICES MUST BE FOLLOWED DURING THE LOCATION PROCESS.*
*5. REFER TO THE PROJECT UTILITY NOTE FOR PRELIMINARY LOCATE INFORMATION AT THESE LOCATIONS.*

*ALL LABOR, MATERIAL, AND INCIDENTALS FOR THE ABOVE WORK SHALL BE PAID FOR EACH LOCATE BY ITEM 690 SPECIAL, UTILITY TEST HOLE (COLUMBIA GAS). A TOTAL OF 2 LOCATES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.*

***VEGETATED FILTER STRIP***
*THIS PLAN UTILIZES VEGETATED FILTER STRIPS FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 - SODDING OR ITEM 659 - SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670 - SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS. UNLESS DISTURBED DURING CONSTRUCTION, AREAS OUTSIDE OF THE CONSTRUCTION LIMITS DO NOT REQUIRE PLACEMENT OF ITEM 660 OR 659/670. TREATMENT WILL BE CLAIMED USING THE ESTABLISHED EXISTING VEGETATION.*

***FOR THE CITY OF COLUMBUS DIVISION OF POWER***
*THE DIVISION OF POWER (DOP) MAY HAVE UNDERGROUND OR OVERHEAD PRIMARY POWER, SECONDARY POWER, CONDUIT SYSTEMS AND STREET LIGHTING AT THIS WORK LOCATION. THE CONTRACTOR IS HEREBY REQUIRED TO CONTACT OUPS AT 811 OR 1-800-362-2764 FORTY EIGHT HOURS PRIOR TO CONDUCTING ANY ACTIVITY WITHIN THE CONSTRUCTION AREA.*

*ANY REQUIRED RELOCATION, SUPPORT, PROTECTION, OR ANY OTHER ACTIVITY CONCERNED WITH THE CITY'S ELECTRICAL FACILITIES IN THE CONSTRUCTION AREA IS TO BE PERFORMED BY THE CONTRACTOR UNDER THE DIRECTION OF DOP PERSONNEL AND AT THE EXPENSE OF THE PROJECT. DOP SHALL MAKE ALL FINAL CONNECTIONS TO DOP'S EXISTING ELECTRICAL SYSTEM AT THE EXPENSE OF THE PROJECT. THE CONTRACTOR SHALL USE MATERIAL AND MAKE REPAIRS TO A CITY OF COLUMBUS STREET LIGHTING SYSTEM BY FOLLOWING DOP'S "MATERIAL AND INSTALLATION SPECIFICATIONS" (MIS) AND THE CITY OF COLUMBUS "CONSTRUCTION AND MATERIAL SPECIFICATIONS" (CMSC). ANY NEW OR RE-INSTALLED UNDERGROUND STREETLIGHT SYSTEM SHALL REQUIRE TESTING AS REFERRED TO IN SECTION 1001.18 OF THE CMSC MANUAL. THE CONTRACTOR SHALL CONFORM TO DOP'S EXISTING STREET LIGHTING LOCKOUT/TAGOUT (LOTO) PROCEDURE, MIS-01, COPIES OF WHICH ARE AVAILABLE AT: https://www.columbus.gov/WorkArea/DownloadAsset.aspx?id=2147503200*

*IF ANY ELECTRIC FACILITY BELONGING TO DOP IS DAMAGED IN ANY MANNER BY THE CONTRACTOR, ITS AGENTS, SERVANTS, OR EMPLOYEES, AND REQUIRES EMERGENCY REPAIRS, THE DOP DISPATCH OFFICE SHOULD BE CONTACTED IMMEDIATELY AT (614) 645-7627. DOP SHALL MAKE ALL NECESSARY REPAIRS, AND THE EXPENSE OF SUCH REPAIRS AND OTHER RELATED COSTS SHALL BE PAID BY THE CONTRACTOR TO THE DIVISION OF POWER, CITY OF COLUMBUS, OHIO.*

***ITEM 690 SPECIAL, UTILITY TEST HOLE (CITY OF COLUMBUS DIVISION OF WATER)***
*THE CONTRACTOR SHALL BE REQUIRED TO CONFIRM (SUE LEVEL QUALITY A) THE FOLLOWING EXISTING UTILITY LOCATION:*
*1. WALL 15 AT APPROXIMATE STA. 1502+12 (SEE SHEET P.58 ).*

*THE FOLLOWING PROVISIONS MUST BE FOLLOWED:*
*1. THE SUE COMPANY UTILIZED BY THE CONTRACTOR SHALL BE REQUIRED TO BE PRE-QUALIFIED WITH THE ODOT.*
*2. THE SUE LOCATES SHALL BE PERFOMED PRIOR TO ORDERING WALL PANELS BETWEEN DRILLED SHAFT 8 TO 13 (WALL 15).*
*3. THE SUE LOCATE CONFIRMATION DATA SHALL BE PROVIDED TO ODOT 21 DAYS PRIOR TO ORDERING MATERIALS AND COMMENCING WORK.*
*4. ALL REQUIREMENTS OF THE RESPECTIVE UTILITY COMPANY AND THE OHIO UTILITY PROTECTION SERVICES MUST BE FOLLOWED DURING THE LOCATION PROCESS.*
*5. REFER TO THE PROJECT UTILITY NOTE FOR PRELIMINARY LOCATE INFORMATION AT THIS LOCATION.*

*ALL LABOR, MATERIAL, AND INCIDENTALS TO COMPLETE THE ABOVE WORK SHALL BE PAID FOR EACH LOCATE BY ITEM 690 SPECIAL, UTILITY TEST HOLE (CITY OF COLUMBUS DIVISION OF WATER). A TOTAL OF 1 LOCATE HAS BEEN CARRIED TO THE GENERAL SUMMARY.*

***ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG70-22M***
*LOCATE LOGITUDINAL JOINTS IN THE SURFACE COURSE SUBJECT TO THE FOLLOWING REQUIREMENTS:*

*FOR PAVEMENT SECTIONS WITH 2 LANES IN A SINGLE DIRECTION, PLACE A SINGLE COLD LOGITUDINAL JOINT BETWEEN THE 2 LANES.*

*FOR PAVEMENT SECTIONS WITH 3 OR 4 LANES IN A SINGLE DIRECTION, (PG 70-22M ONLY) PLACE A SINGLE COLD LOGITUDINAL JOINT BETWEEN THE SECOND AND THIRD LANE FROM THE MEDIAN.*

*FOR PAVEMENT SECTIONS WITH 5 OR 6 LANES IN A SINGLE DIRECTION, (PG 70-22M ONLY) PLACE 2 COLD LOGITUDINAL JOINTS. THE FIRST WILL BE PLACED BETWEEN THE SECOND AND THIRD LANE FROM THE MEDIAN. THE SECOND WILL BE PLACED BETWEEN THE FOURTH AND FIFTH LANE FROM THE MEDIAN.*

*WHEN LANES BECOME IN CONTACT WITH THE STRIPED GORE, THEY ARE CONSIDERED TO BE ON THE RAMP AND COUNTED SEPARATELY FROM THE MAINLINE.*

*A COLD LOGITUDINAL JOINT IS PERMITTED BETWEEN THE MAINLINE AND SHOULDER FOR THIS PROJECT. THIS INCLUDES ONE JOINT ALONG ONE OF THE TWO LINES THAT MAKE UP THE STRIPED GORE. ITEM 872 VRAM QUANTITIES DO NOT INCLUDE THE STRIPED GORE LOCATIONS AND IS NOT TO BE PLACED THERE.*

***CITY OF COLUMBUS DIVISION OF WATER GENERAL NOTES***
*THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS, 2018 EDITION AND ALL REVISIONS, INCLUDING ALL SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN, UNLESS OTHERWISE NOTED.*

*ALL WATER MAIN MATERIALS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CURRENT RULES AND REGULATIONS OF THE CITY OF COLUMBUS, DIVISION OF WATER. ALL CITY OF COLUMBUS, DIVISION OF WATER STANDARD DRAWINGS SHALL APPLY TO THE PROJECT, UNLESS OTHERWISE NOTED.*

*FOR ANY EMERGENCIES INVOLVING THE WATER DISTRIBUTION SYSTEM, PLEASE CONTACT THE DIVISION OF WATER DISTRIBUTION MAINTENANCE OFFICE AT 614-645-7788.*

*ALL BRASS FITTINGS ASSOCIATED WITH WATER WORK, INCLUDING REPAIRS TO THE EXISTING SYSTEM, SHALL CONFORM TO THE REVISED ALLOWABLE LEAD EXTRACTION LIMIT PER THE UPDATED NSF/ANSI 61 STANDARD. THE DIVISION OF WATER'S APPROVED MATERIALS LIST HAS BEEN UPDATED TO REFLECT THIS REQUIREMENT.*

*IT SHALL BE UNLAWFUL FOR ANY PERSON TO PERFORM ANY WORK ON CITY OF COLUMBUS WATER MAIN SYSTEMS WITHOUT FIRST SECURING LICENSE TO ENGAGE IN SUCH WORK, AS INDICATED IN COLUMBUS CITY CODE SECTION 1103.02 AND 1103.06. THIS WORK INCLUDES ANY ATTACHMENTS, ADDITIONS TO OR ALTERATIONS IN ANY CITY SERVICE PIPE OR APPURTENANCES (INCLUDING WATER SERVICE LINES AND TAPS). THIS REQUIREMENT MAY BE MET BY UTILIZATION OF A SUBCONTRACTOR WHO HOLDS A CITY OF COLUMBUS WATER CONTRACTOR LICENSE OR A COMBINED WATER/SEWER CONTRACTOR LICENSE TO PERFORM THIS WORK. UTILIZATION OF A SUBCONTRACTOR MUST MEET THE LICENSING REQUIREMENTS OF CITY OF COLUMBUS BUILDING CODE, IN PARTICULAR SECTION 4114.119 AND 4114.529.*

*NO PERSON SHALL BEGIN CONSTRUCTION OR INSTALLATION OF A PUBLIC WATER MAIN UNTIL PLANS HAVE BEEN APPROVED BY THE STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA).*

*THE CONTRACTOR SHALL OBTAIN THE PROPER HYDRANT PERMIT(S), AND PAY ANY APPLICABLE FEES, FOR ANY APPROVED HYDRANT USAGE DEEMED NECESSARY FOR WORK UNDER THIS IMPROVEMENT. PERMITS MAY BE OBTAINED THROUGH THE DIVISION OF WATER PERMIT OFFICE (645-7330). THE CONTRACTOR SHALL ADHERE TO ALL RULES & REGULATIONS GOVERNING SAID PERMIT AND MUST HAVE THE ORIGINAL PERMIT ON SITE ANYTIME IN WHICH THE HYDRANT IS IN USE. PERMITS MAY BE OBTAINED BY ACCESSING HTTP://PORTAL.COLUMBUS.GOV/PERMITS/. COST TO BE INCLUDED IN THE VARIOUS BID ITEMS.*

*WHERE NEW CONDUIT IS PROPOSED TO CROSS AN EXISTING OR PROPOSED WATER MAIN OR WATER TAP/SERVICE LINE, A MINIMUM OF 12-INCHES OF VERTICAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE CONDUIT AND THE WATER MAIN OR TAP/SERVICE LINE. A MINIMUM OF 3-FEET OF HORIZONTAL CLEARANCE (OUT TO OUT) IS REQUIRED AT LOCATIONS WHERE THE CONDUIT IS PARALLEL TO THE WATER MAIN AND AT LOCATIONS OF WATER MAIN THRUST BLOCKS.*

*A MINIMUM OF 3 FEET OF HORIZONTAL CLEARANCE (OUT TO OUT) SHALL BE MAINTAINED BETWEEN ALL EXISTING WATER MAINS AND FOUNDATIONS FOR POLES, PULL BOXES, PUSH BUTTON PEDESTALS, AND ANY OTHER MISCELLANEOUS ELECTRICAL STRUCTURE.*

***CITY OF COLUMBUS DEPARTMENT OF TECHNOLOGY FIBER WORK***
*IF THE PROJECT INCLUDES ANY FIBER OPTIC CABLE INSTALLATION - OR MAINTENANCE - THE FIBER WORK MUST ADHERE TO THE DEPARTMENT OF TECHNOLOGY FIBER SPECIFICATIONS DOCUMENT. (LATEST EDITION)*

***ITEM 607 - FENCE, MISC.: WHITE SPLIT RAIL FENCE***
*THE CONTRACTOR SHALL BE REQUIRED TO INSTALL PROPOSED FENCE THAT MATCHES THE EXISTING SPLIT RAIL FENCE STYLE, MATERIAL, AND COLOR THAT CURRENTLY EXISTS ON THE PROJECT SITE.*

GENERAL NOTES

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REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.10 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-09-04 TIME: 5:21:30 PM USER: danny.tran
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**TC ENERGY GENERAL NOTES AND REQUIREMENTS**

INVOLVEMENT STATUS RELATES SOLELY TO FACILITIES OWNED AND/OR OPERATED BY TC ENERGY. WORK WITHIN THE TC ENERGY'S RIGHT-OF-WAY WILL BE PERFORMED IN ACCORDANCE WITH TC ENERGY PROCEDURES TO PROTECT THE SAFETY OF TC ENERGY'S FACILITIES. THE FOLLOWING GUIDELINES, ALTHOUGH NOT INCLUSIVE, ARE PROVIDED TO ACCOMMODATE YOUR REQUEST AND PROTECT OUR PIPELINES AND FACILITIES.

1. FOLLOW ALL APPLICABLE FEDERAL AND STATE SAFETY REQUIREMENTS AT ALL TIMES.

2. BEFORE ANY PRELIMINARY FIELD WORK OR CONSTRUCTION BEGINS IN THE VICINITY OF TC ENERGY PIPELINE FACILITIES THE APPROXIMATE LOCATION AND ELEVATION OF THE PIPELINE SHALL BE INVESTIGATED. BEGIN WITH A CALL TO 811 OR APPROPRIATE STATE "ONE CALL" NOTIFICATION NUMBER. REQUEST BOTH THE APPROXIMATE LOCATION AND DEPTH OF THE PIPELINE TO BE DETERMINED IN ANY AREA OF PROPOSED CONSTRUCTION. THE AREA OF PROPOSED CONSTRUCTION SHALL BE MARKED WITH WHITE PAINT, FLAGS, OR OTHERWISE AS REQUIRED BY STATE LAW.

3. WHEN CONDUCTING CONSTRUCTION ACTIVITIES IN OR AROUND TC ENERGY PIPELINE FACILITIES OR RIGHTS-OF-WAY, A TC ENERGY ON-SITE COMPANY REPRESENTATIVE SHALL BE PRESENT UNLESS OTHERWISE PERMITTED BY TC ENERGY. A TC ENERGY REPRESENTATIVE WILL REVIEW THE LOCATION OF PIPELINE FACILITIES PRIOR TO STARTING WORK.

4. NOTICE OF AT LEAST SEVENTY-TWO (72) HOURS IN ADVANCE OF CONSTRUCTION MUST BE PROVIDED.

5. PERMITTEE SHALL NOTIFY THE RESPONSIBLE STATE "ONE CALL" CENTER TO REQUEST THAT TC ENERGY RE-MARK A PIPELINE IF THE EXISTING MARKERS ARE INADEQUATE OR NO LONGER VISIBLE FOR ANY REASON, INCLUDING DISTURBANCE DUE TO CONSTRUCTION ACTIVITIES.

6. PERMITTEE SHALL NOT BURN OR BURY TRASH, BRUSH, OR OTHER ITEMS OR SUBSTANCES WITHIN TC ENERGY PIPELINE RIGHTS-OF-WAY.

7. PERMITTEE SHALL NOT PARK EQUIPMENT OR STORE MATERIALS ON THE TC ENERGY RIGHT-OF-WAY.

8. USE OF VIBRATORY EQUIPMENT LARGER THAN WALK-BEHIND UNITS SHALL NOT BE PERMITTED WITHIN TWENTY-FIVE (25) FEET OF THE PIPELINE OR RELATED FACILITY.

9. THE PERMITTEE SHALL MARK ANY EXCAVATION AREA WITH WHITE PAINT, FLAGS, OR AS REQUIRED BY APPLICABLE STATE LAW WITHIN TC ENERGY RIGHT-OF-WAY.

10. THE FOLLOWING ITEMS, BUT NOT LIMITED TO, ARE NOT PERMITTED WITHIN THE ROW; VALVES, CURB BOXES, MANHOLES, SPRINKLER HEADS, SPLICE BOXES, SERVICE RISERS, ENERGIZED EQUIPMENT, POLES, TOWERS, GUY WIRES, MECHANICAL SUPPORTS, GROUND RODS, ANCHORS, SIGNS, BOLLARDS, AND SIMILAR STRUCTURES.

11. BEFORE EXCAVATION CAN BEGIN NEAR A TC ENERGY RIGHT-OF-WAY, THE EXCAVATION AREA MUST BE LOCATED AND MARKED IN ACCORDING TO THE APPROPRIATE STATE ONE CALL REGULATION. SAFE DIGGING IS NO ACCIDENT. KNOW WHAT'S BELOW. CALL 811 BEFORE YOU DIG. TC ENERGY OR ITS REPRESENTATIVE SHALL LOCATE THE PIPELINE AND DETERMINE THE APPROXIMATE DEPTH OF COVER BEFORE THE PERMITTEE CAN BEGIN EXCAVATION.

12. TC ENERGY SHALL HAVE A COMPANY REPRESENTATIVE PRESENT DURING ALL EXCAVATION ACTIVITIES. THE COMPANY REPRESENTATIVE SHALL HAVE FULL AUTHORITY TO STOP THE WORK IF IT IS DETERMINED THAT THE WORK IS BEING PERFORMED IN AN UNSAFE MANNER RELATIVE TO TC ENERGY FACILITIES OR PERSONNEL.

**TC ENERGY GENERAL NOTES AND REQUIREMENTS (CONT.)**

13. SHOULD IT BE NECESSARY FOR A TC ENERGY EMPLOYEE/REPRESENTATIVE TO ENTER THE EXCAVATION TO INSPECT ITS PIPELINE(S), THE EXCAVATION AT THE CROSSING SHALL BE SLOPED, PERMITTED SAFE WITH TRENCH BOXES, OR SHORED IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.

14. NO EQUIPMENT SHALL WORK DIRECTLY OVER THE PIPELINE, UNLESS TC ENERGY GRANTS SPECIFIC WRITTEN PERMISSION. THE PERMITTEE SHALL INSTALL TEMPORARY FENCING ALONG THE TC ENERGY RIGHT-OF-WAY BOUNDARIES SO EQUIPMENT SHALL NOT INADVERTENTLY PASS OVER THE PIPELINE AT LOCATIONS OTHER THAN THOSE ESTABLISHED FOR THE CROSSING.

15. WHEN EXCAVATING WITHIN A TC ENERGY RIGHT-OF-WAY, IN THE PRESENCE OF A LOADED PIPELINE, THE PERMITTEE'S EXCAVATION EQUIPMENT SHALL HAVE A PLATE WELDED OR ATTACHED OVER THE TEETH OF THE EXCAVATOR BUCKET.

16. NO SIDE CUTTERS SHALL BE USED DURING ANY EXCAVATION WITHIN A TC ENERGY ROW.

17. NO PART OF POWERED EQUIPMENT SHALL COME WITHIN TWO (2) FEET OF TC ENERGY'S PIPELINES, OR ACCORDING TO APPLICABLE STATE OR FEDERAL REQUIREMENTS.

18. NO BUCKET, ANY ATTACHMENT OR LOAD MAY BE SWUNG OVER TC ENERGY'S PIPELINE(S) WHERE THERE IS LESS THAN TWO (2) FEET OF COVER.

19. TC ENERGY REQUIRES POTHOLING TECHNIQUES TO BE USED WHEN DIGGING WITHIN TWO (2) FEET OF THE OUTER EDGE OF THE PIPE, UNLESS REQUIREMENTS THAT ARE MORE STRINGENT ARE SET FORTH BY THE APPLICABLE STATE'S ONE CALL SYSTEM. WITHIN THIS "TOLERANCE ZONE"ONLY HAND EXCAVATION, AIR CUTTING, VACUUM EXCAVATION OR OTHER TC ENERGY APPROVED TECHNIQUES ARE PERMITTED.

20. NO EXCAVATION SHALL BE MADE ON LAND ADJACENT TO THE PIPELINE THAT SHALL IN ANY WAY IMPAIR, WITHDRAW LATERAL SUPPORT, CAUSE SUBSIDENCE, CREATE THE ACCUMULATION OF WATER, OR CAUSE DAMAGE TO THE PIPELINE OR RIGHT-OF-WAY.

21. THE PERMITTEE SHALL ENSURE ALL EXCAVATION WORK COMPLIES WITH OSHA'S EXCAVATION STANDARDS OUTLINED IN 29 CFR 1926 AND CORRECT ANY NONCOMPLIANT EXCAVATION SITE BEFORE WORK WITHIN TC ENERGY RIGHT-OF-WAY CONTINUES.

22. AT ANY LOCATION WHERE THE PIPELINE IS EXPOSED, THE PERMITTEE SHALL PROVIDE TC ENERGY THE OPPORTUNITY TO INSPECT THE PIPELINE CONDITION, INSTALL CATHODIC PROTECTION EQUIPMENT, REPAIR ANY PIPE COATING IMPERFECTIONS, AND/OR INSTALL UNDERGROUND WARNING MATERIALS.

23. NO TC ENERGY BURIED PIPELINE SHALL BE LEFT EXPOSED FOR ANY DURATION OF TIME, UNLESS OTHERWISE PERMITTED BY TC ENERGY.

24. BACKFILL AND COMPACTION SHALL BE PERFORMED TO THE SATISFACTION AND IN THE PRESENCE OF A COMPANY REPRESENTATIVE. AT LEAST 6 INCHES OF FINE, LOOSE EARTH OR OTHER PERMITTED BACKFILL MATERIAL WITH NO SHARP GRAVEL, ROCK, HARD CLODS, VEGETATION, OR OTHER DEBRIS SHALL BE ADDED ON ALL SIDES OF ANY PIPELINE, AND REMAINING BACKFILL SHALL BE PLACED SO AS NOT TO DISTURB THIS PADDING MATERIAL OR DAMAGE THE PIPELINE AND ITS COATING. BACKFILL OVER THE PIPE SHALL BE COMPACTED BY HAND UNTIL EIGHTEEN (18) INCHES OF COVER IS ACHIEVED.

25. IF A FLOWABLE FILL IS REQUIRED BY TC ENERGY TO ACHIEVE NECESSARY COMPACTION AND SUPPORT UNDER AND AROUND THE PIPE, SPECIFICATIONS WILL BE PROVIDED AFTER DRAWING REVIEW AND APPROVAL.

**TC ENERGY GENERAL NOTES AND REQUIREMENTS (CONT.)**

26. DISTURBED GROUND SHALL BE COMPACTED TO AT LEAST THE SAME DEGREE OF COMPACTION AS SURROUNDING AREAS.

27. THE PERMITTEE SHALL RESTORE THE SITE TO ITS ORIGINAL CONDITION UNLESS OTHERWISE PERMITTED BY TC ENERGY.

28. CONTINUOUSLY POURED, STEEL REINFORCED CONCRETE IS NOT PERMITTED WITHIN TC ENERGY RIGHT-OF-WAY.

29. THERE SHALL BE NO WORK OR SPOIL STORAGE ON THE TC ENERGY RIGHT-OF-WAY, NOR SHALL THERE BE ANY UNAUTHORIZED EQUIPMENT CROSSING(S) ON THE TC ENERGY RIGHT-OF-WAY.

30. THE PERMITTEE MAY BE CROSSING ONE OR MORE OF TC ENERGY'S TRANSMISSION PIPELINE(S). THESE PIPELINE(S) MAY BE COATED WITH A MATERIAL TO PROTECT THEM FROM CORROSION. THE COATING MAY CONTAIN ASBESTOS. IF THE EXCAVATION RESULTS IN EXPOSING TC ENERGY'S PIPELINE(S) AND THERE IS ANY DAMAGE TO THE COATING, YOU WILL BE RESPONSIBLE FOR ALL COSTS, INCLUDING ANY DISPOSAL COSTS, ASSOCIATED WITH THE COATING REPAIR. IF NECESSARY, YOU WILL ALSO BE REQUIRED, TO HALT ALL WORK ACTIVITY WHILE THE COATING MATERIAL IS BEING ANALYZED. THE COATING REPAIR, INCLUDING THE REMOVAL OF THE ORIGINAL MATERIAL, WILL BE PERFORMED BY TC ENERGY PERSONNEL OR A QUALIFIED THIRD-PARTY CONTRACTOR SELECTED BY TC ENERGY. ALL WORK WILL BE DONE IN ACCORDANCE WITH TC ENERGY'S CURRENT ENGINEERING AND ENVIRONMENTAL STANDARDS. DURING THE COURSE OF THE EXCAVATION WORK, CONTRACTOR AGREES TO COOPERATE WITH TC ENERGY TO ENSURE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL AND SAFETY REGULATIONS ARE FOLLOWED.

31. THE PERMITTEE SHALL SUBMIT A HEAVY EQUIPMENT CROSSING INFORMATION FORM FOR ALL ADDITIONAL EQUIPMENT THAT WILL OPERATE WITHIN THE TC ENERGY RIGHT-OF-WAY. NO ADDITIONAL EQUIPMENT WILL BE PERMITTED WITHIN THE RIGHT-OF-WAY WITHOUT PRIOR APPROVAL FROM TC ENERGY. THE PERMITTEE WILL WORK WITH THE ON-SITE REPRESENTATIVE TO COMPLETE THE HEAVY EQUIPMENT CROSSING INFORMATION FORM.

32. WHILE USING THE PERMITTED CROSSING AREA(S) WITH HEAVY EQUIPMENT, IF RUTTING, ANY FORM OF GROUND DECAY, OR GROUND PUMPING OCCURS, ADDITIONAL MEASURES WILL BE REQUIRED. THE ADDITIONAL MEASURES WILL INCLUDE BUT ARE NOT LIMITED TO: LOAD CALCULATION REASSESSMENT, MATTING/AIR BRIDGE INSTALLMENT, ADDITIONAL COVER, CONCRETE RELIEF SLABS, ETC.

**TC ENERGY GENERAL NOTES AND REQUIREMENTS (CONT.)**

33. TC ENERGY SHALL LIMIT THE NUMBER OF TEMPORARY CONSTRUCTION ROADS CONSTRUCTED BY THE PERMITTEE. CROSSINGS SHALL BE LIMITED TO PRE-SELECTED SITES AND SHALL BE CLEARLY DEFINED AND MARKED. RANDOM CROSSINGS ARE NOT PERMITTED.

34. DURING THE USE OF A PERMITTED TEMPORARY CONSTRUCTION ROAD, THE PERMITTEE SHALL TAKE ALL REASONABLE AND NECESSARY STEPS TO MAINTAIN THE INTEGRITY OF THE PERMITTED CROSSING PROTECTION. TC ENERGY PERSONNEL SHOULD INSPECT CROSSINGS PERIODICALLY AND MAY REQUIRE THE PERMITTEE TO PROVIDE ADDITIONAL PROTECTIVE MEASURES DEEMED NECESSARY TO PREVENT DAMAGE TO THE PIPELINE OR RIGHT-OF-WAY.

35. EXCAVATION WITHIN 25' OF TC ENERGY PIPELINES IS FEDERALLY REGULATED. A TC ENERGY REPRESENTATIVE MUST BE PRESENT DURING ANY EXCAVATION. IN THE EVENT TC ENERGY IS NOT PRESENT AND EXCAVATION TAKES PLACE, THE EXCAVATOR WILL BE CHARGED FOR ALL COSTS ASSOCIATED WITH THE EXCAVATION TO EXPOSE THE TC ENERGY PIPELINES TO CONFIRM NO DAMAGE HAS OCCURRED. THIS APPLIES TO ANY EXCAVATION REGARDLESS OF THE DEPTH.

36. PAYMENT FOR THE OPERATIONS AND REQUIREMENTS DESCRIBED ABOVE SHALL BE INCIDENTAL TO THE PROJECT CONSTRUCTION COST AND SHALL NOT BE A SEPARATE PAY ITEM.

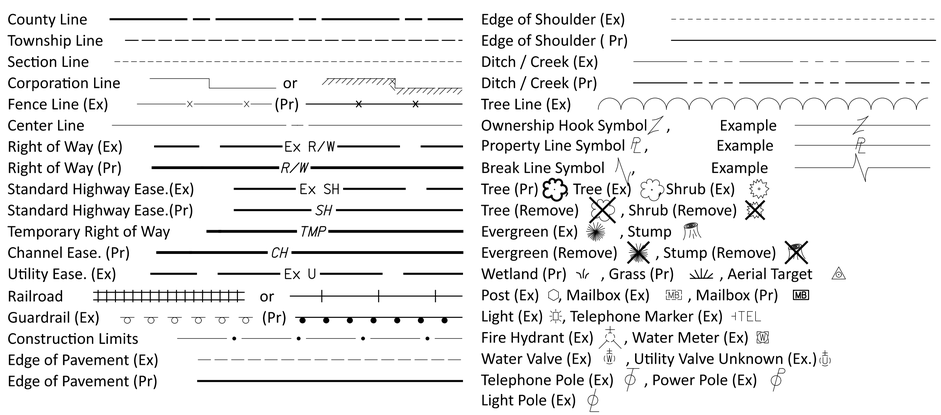
**ITEM 690 SPECIAL, UTILITY TEST HOLE (TC ENERGY)**

THE CONTRACTOR SHALL BE REQUIRED TO CONFIRM (SUE LEVEL QUALITY A) THE FOLLOWING EXISTING UTILITY LOCATIONS:
1. WALL 12 AT APPROXIMATE STA. 124+04 (SEE SHEET P.57 )
2. WALL 12 AT APPROXIMATE STA. 124+87 (SEE SHEET P.57 )

THE FOLLOWING PROVISIONS MUST BE FOLLOWED:
1. THE SUE COMPANY UTILIZED BY THE CONTRACTOR SHALL BE REQUIRED TO BE PRE-QUALIFIED WITH THE ODOT.
2. THE SUE LOCATES SHALL BE PERFOMED PRIOR TO ORDERING WALL PANELS BETWEEN DRILLED SHAFTS 19 TO 28.
3. THE SUE LOCATE CONFIRMATION DATA SHALL BE PROVIDED TO ODOT 21 DAYS PRIOR TO ORDERING MATERIALS AND COMMENCING WORK.
4. ALL REQUIREMENTS OF THE OHIO UTILITY PROTECTION SERVICES AND THE RESPECTIVE UTILITY COMPANY AS LISTED ON P.11 MUST BE FOLLOWED DURING THE LOCATION PROCESS.
5. REFER TO THE PROJECT UTILITY NOTE FOR PRELIMINARY LOCATE INFORMATION AT THESE LOCATIONS.

ALL LABOR, MATERIAL, AND INCIDENTALS FOR THE ABOVE WORK SHALL BE PAID FOR EACH LOCATE BY ITEM 690 SPECIAL, UTILITY TEST HOLE (COLUMBIA GAS). A TOTAL OF 2 LOCATES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

## CONVENTIONAL SYMBOLS




GENERAL NOTES

FRA-161-15.80 NOISE ABATEMENT

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pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GN003.dgn

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REVIEWER
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PROJECT ID
117607

SHEET P.11 | TOTAL P.297

**MAINTENANCE OF TRAFFIC SEQUENCE OF CONSTRUCTION**

LONG TERM SHOULDER CLOSURES USING PORTABLE BARRIER PER MT-95.45 AND SHEETS P.18 TO P.23, MAY BE USED TO CONSTRUCT ASSOCIATED FOUNDATIONS, GRADING, AND PAVEMENT WIDENING REQUIRED TO CONSTRUCT 81 INCH BARRIERS 3, 6, 8, 10 AND 12, AS WELL AS CONSTRUCT 81 INCH BARRIER 3. THE LONG TERM RIGHT LANE WIDTH MAY BE REDUCED TO 11 FT MINIMUM.

PERMITTED LANE CLOSURE MAY BE USED TO CONSTRUCT 81 INCH BARRIERS 6, 8, 10, AND 12 USING SINGLE LANE CLOSURES WITH PORTABLE BARRIER PER MT-94.40 AND SHEETS P.16, P.17, P.19 TO P.23. LANE AND RAMP CLOSURES SHALL BE LIMITED TO HOURS LISTED IN THE LANE VALUE CONTRACT TABLE.

CONSTRUCT NOISE WALLS USING SHOULDER CLOSURES WITH DRUMS. ALL LANES ALONG SR-161 EASTBOUND AND WESTBOUND WILL BE MAINTAINED.

**ITEM 614, MAINTAINING TRAFFIC**

ALL EXISITING LANES ON SR-161 SHALL BE MAINTAINED AT ALL TIMES EXCEPT FOR SHORT TERM SINGLE LANE CLOSURES DURING ALLOWABLE PERIODS PER THE LANE VALUE CONTRACT TABLE. A MINIMUM OF ONE LANE OF TRAFFIC SHALL BE MAINTAINED ON RAMPS AT ALL TIMES EXCEPT THE NEW ALBANY RD TO SR-161 WB RAMP MAY BE CLOSED DURING ALLOWABLE PERIODS PER THE LANE VALUE CONTRACT TABLE.

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

NEW YEAR'S (OBSERVED) GENERAL/REGULAR ELECTION DAY (NOV)
MEMORIAL DAY THANKSGIVING
FOURTH OF JULY (OBSERVED) CHRISTMAS (OBSERVED)
LABOR DAY

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

| DAY OF HOLIDAY OR EVENT | TIME ALL LANES MUST BE OPEN TO TRAFFIC |
|---|---|
| SUNDAY | 12:00 N FRIDAY THROUGH 6:00 AM MONDAY |
| MONDAY | 12:00 N FRIDAY THROUGH 6:00 AM TUESDAY |
| TUESDAY | 12:00 N MONDAY THROUGH 6:00 AM WEDNESDAY |
| TUESDAY (GEN./REG. ELECTION) | 5:00 AM TUESDAY THROUGH 12:00 AM WEDNESDAY |
| WEDNESDAY | 12:00 N TUESDAY THROUGH 6:00 AM THURSDAY |
| THURSDAY | 12:00 N WEDNESDAY THROUGH 6:00 AM FRIDAY |
| THURSDAY (THANKSGIVING ONLY) | 6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY |
| FRIDAY | 12:00 N THURSDAY THROUGH 6:00 AM MONDAY |
| SATURDAY | 12:00 N FRIDAY THROUGH 6:00 AM MONDAY |

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

LANE CLOSURES AND RESTRICTIONS SHALL ADHERE TO THE TIMES LISTED IN THE LANE VALUE CONTRACT TABLES. THE MAXIMUM ALLOWABLE CLOSURE LENGTH IS 2 MILES AT ANY GIVEN TIME. CLOSURES OR RESTRICTIONS SHALL BE REMOVED FROM THE ROADWAY AT THE END OF WORKING HOURS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR APPROVED BY THE ENGINEER. LANES CLOSURES OR RESTRICTIONS SHALL BE LIMITED TO AREAS WHERE WORK IS BEING PERFORMED. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

| NOTICE OF CLOSURE SIGN TIME TABLE | | |
|---|---|---|
| ITEM | DURATION OF CLOSURE | SIGN DISPLAYED TO PUBLIC |
| RAMP & ROAD CLOSURES | >= 2 WEEKS | 14 CALENDAR DAYS PRIOR TO CLOSURE |
| | > 12 HOURS & < 2 WEEKS | 7 CALENDAR DAYS PRIOR TO CLOSURE |
| | < 12 HOURS | 2 BUSINESS DAYS PRIOR TO CLOSURE |

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

**COORDINATION BETWEEN CONTRACTORS**

THE CONTRACTOR SHALL COORDINATE WORK WITH ODOT AND THE CONTRACTORS ON THE ADJACENT PROJECTS. COORDINATION SHALL BE MADE TO PREVENT CONFLICTING ADVANCE WARNING SIGNS, CONFLICTING DETOUR ROUTES, OVERLAPPING/CONFLICTING LANE CLOSURES, AND TO ENSURE THAT A MINIMUM DISTANCE OF 2 MILES BETWEEN ADJACENT LANE CLOSURES IS MAINTAINED. THIS IS NOT AN EXHAUSTIVE LIST OF COORDINATION ITEMS THAT MAY NEED TO BE RESOLVED BETWEEN PROJECTS. THE DEPARTMENT RESERVES THE RIGHT TO DECIDE WHICH PROJECT'S ACTIVITIES TAKE PRECEDENCE. PROJECTS THAT HAVE ACTIVITIES DELAYED DUE TO CONFLICTS WILL CONSIDER THIS AN EXCUSABLE, NON-COMPENSABLE DELAY PER 108.06.B. ON PROJECTS THAT HAVE ACTIVITIES DELAYED DUE TO CONFLICTS WHERE THE CONTRACTOR FAILED TO MEET THE NOTIFICATION REQUIREMENTS, THE DELAYS SHALL NOT BE CONSIDERED EXCUSABLE OR COMPENSABLE.

ATTENDANCE AT DEPARTMENT ORDERED TRAFFIC COORDINATION MEETINGS BETWEEN ADJACENT PROJECTS SHALL BE CONSIDERED MANDATORY FOR EACH PROJECT'S SUPERINTENDENT, AND INCIDENTAL TO THE LUMP SUM MAINTENANCE OF TRAFFIC PAYMENT ITEM.

THE FOLLOWING PROJECTS MAY HAVE CONFLICTS:
FRA-161-15.80, PID 116322
D05/D06-ITS EXPANSION-FY23, PID 117546

**FLOODLIGHTING**

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

**DUST CONTROL**

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 50 M. GAL.

**ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

**DELINEATION OF PORTABLE AND PERMANENT BARRIER AS PER PLAN**

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL AND ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND CONCRETE PERMANENT BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE.

THE INCREASED BARRIER DELINEATION SHALL CONSIST OF THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.

TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT-101.70.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL
SUMMARY:

ITEM 614, INCREASED BARRIER DELINEATION 5,735 FEET

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

MAINTENANCE OF TRAFFIC GENERAL NOTES

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PROJECT ID
117607

SHEET P.12 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

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**ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS**

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

- FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION (OR AT THE POINT OF ROAD CLOSURE), AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 300 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

**ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN**

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 4 HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

**ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN, CONT'D**

(THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.) THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN,
AS PER PLAN 96 SIGN MONTH
ASSUMING 4 PCMS SIGNS FOR 24 MONTHS

**NOTIFICATION OF TRAFFIC RESTRICTIONS**

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE BUT IS NOT LIMITED TO ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION OF TRAFFIC RESTRICTIONS TIME TABLE

| ITEM | DURATION OF CLOSURE | NOTIFICATION DUE TO DISTRICT 4 COMMUNICATIONS OFFICE |
|---|---|---|
| RAMP & ROAD CLOSURES | >= 2 WEEKS | 21 CALENDAR DAYS PRIOR TO CLOSURE |
| | > 12 HOURS & < 2 WEEKS | 14 CALENDAR DAYS PRIOR TO CLOSURE |
| | < 12 HOURS | 4 BUSINESS DAYS PRIOR TO CLOSURE |
| LANE CLOSURES & RESTRICTIONS | >= 2 WEEKS | 14 CALENDAR DAYS PRIOR TO CLOSURE |
| | < 2 WEEKS | 5 BUSINESS DAYS PRIOR TO CLOSURE |
| START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES | N/A | 14 CALENDAR DAYS PRIOR TO IMPLEMENTATION |

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME FRAME TABLE.

# MAINTENANCE OF TRAFFIC GENERAL NOTES

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***LANE AND RAMP CLOSURE TABLES***

*NO ADJACENT RAMP CLOSURES SHALL OCCUR CONCURRENTLY.*

| LANE VALUE CONTRACT TABLE | | | | | | |
|---|---|---|---|---|---|---|
| FRA-161 | | | | | | |
| SECTION (SLM) | EXISTING NUMBER OF LANES PER DIRECTION | LANE CLOSURES NOT PERMITTED | | | | DISINCENTIVE PER MINUTE PER LANE |
| | | LANE REDUCTION | MON TO FRI | SAT | SUN | |
| LITTLE TURTLE WAY (17.31) TO HAMILTON ROAD (18.60) | 4 | 4 TO 3 | 6 AM - 9 AM<br>3 PM - 6 PM | NO RESTRICTION | NO RESTRICTION | $180 |
| | | 4 TO 2 | 5 AM - 9 AM<br>2 PM - 7 PM | 9 AM - 6 PM | 10 AM - 5 PM | |
| | | 4 TO 1 | 5 AM - 9 PM | 6 AM - 7 PM | 8 AM - 7 PM | |
| HAMILTON ROAD (18.60) TO KITZMILLER ROAD (22.40) | 3 | 3 TO 2 | 6 AM - 9 AM<br>3 PM - 6 PM | NO RESTRICTION | NO RESTRICTION | $250 |
| | | 3 TO 1 | 5 AM - 7 PM | 8 AM - 7 PM | 8 AM - 7 PM | |
| SHORT TERM SHOULDER CLOSURES ARE NOT PERMITTED 6 AM - 9 PM & 3 PM - 6 PM MONDAY - FRIDAY | | | | | | |

| RAMP CLOSURE RESTRICTIONS | | | | | |
|---|---|---|---|---|---|
| SR-161 | | | | | |
| SECONDARY ROUTE: NEW ALBANY | | | | | |
| RAMP DESIGNATION | MOVEMENT | NO CLOSURES ALLOWED | | PRIMARY DETOUR ROUTE | SECONDARY DETOUR ROUTE |
| | | MON - FRI | SAT - SUN | | |
| L | NEW ALBANY RD TO SR-161 WB | 5 AM - 9 PM | 8 AM - 8 PM | RAMP N TO SR-161 EB TO RAMP K TO JOHNSTOWN RD NB TO RAMP G TO SR-161 WB | NONE |
| P | SR-161 EB TO NEW ALBANY RD | 5 AM - 9 PM | 8 AM - 8 PM | SR-161 EB TO RAMP K TO JOHNSTOWN RD NB TO RAMP G TO SR-161 WB TO RAMP M TO NEW ALBANY RD | NONE |

***SHORT DURATION RAMP CLOSURES***

*FOR THE PURPOSE OF PERFORMING THE REQUIRED WORK, RAMPS MAY BE CLOSED FOR SHORT DURATIONS AND DETOURED IN ACCORDANCE WITH THE RAMP CLOSURE TABLE IF APPROVED BY THE ENGINEER. RAMP CLOSURES ARE SUBJECT TO DISINCENTIVES.*

*FOR ALL SERVICE RAMP CLOSURES LASTING MORE THAN 12 HOURS BUT LESS THAN 60 HOURS, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING:*

*A MINIMUM OF TWO PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) PLACED, AS DIRECTED BY THE ENGINEER, TO WARN DRIVERS OF THE CLOSURE AND TO PROVIDE THE DESIGNATED DETOUR ROUTE. POSITIVE GUIDANCE ALONG THE DETOUR ROUTE WITH DETOUR SIGNS (M4-9 SERIES) IN ACCORDANCE WITH THE DETOUR SIGNS NOTE.*

*FOR ALL RAMP CLSOURES LASTING LESS THAN 12 HOURS, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING:*

*A MINIMUM OF TWO PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) PLACED, AS DIRECTED BY THE ENGINEER, TO WARN DRIVERS OF THE CLOSURE AND TO PROVIDE THE DESIGNATED DETOUR ROUTE.*

*WHEN CLOSING ENTRAC RAMPS, CORRESPONDING LEAD-IN LANES AND TURN LANES SHALL ALSO BE CLOSED.*

*IF A DESIGNATED DETOUR ROUTE IS NOT PROVIDED IN THE PLANS, TRAFFIC SHALL BE DIRECTED TO THE NEXT INTERCHANGE, IF AVAILABLE, TO TURN AROUND. IF THE USE OF THE NEXT INTERCHANGE IS NOT POSSSIBLE, AN ALTERNATIVE DETOUR ROUTE SHALL BE PROVIDED BY THE ENGINEER.*

***DETOUR SIGNING***

*SIZE AND PLACEMENT OF DETOUR SIGNS (M4-9) SHOULD FOLLOW THE REQUIREMENTS OF THE OMUTCD SECTION 6F.03, SECTION 2A.11 AND TABLE 6F-01.*

*DETOUR SIGNING SHALL PROVIDE DRIVERS ADEQUATE TIME TO CLEARLY READ THE SIGNS AND MAKE THE PROPER DECISIONS AT EACH REQUIRED TURNING MOVEMENT. THE DESIGNATED DETOUR ROUTE SHALL BE SIGNED IN ACCORDANCE WITH THE REQUIREMENTS BELOW:*

- *APPROXIMATELY 1500 FEET PRIOR TO TIP OF THE PAINTED GORE AT AN INTERCHANGE WHEN EXITING A HIGH SPEED (45 MPH OR HIGHER) FACILITY.*
- *AT OR NEAR THE EXISTING SIGN IN THE GORE OF AN INTERCHANGE RAMP.*
- *AT OR NEAR THE FIRST EXISTING LANE ASSIGNMENT SIGN ON AN INTERCHANGE EXIT RAMP.*
- *AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT THE END OF AN EXIT RAMP.*
- *APPROXIMATELY 500 FEET PRIOR TO A REQUIRED TURN AT AN INTERSECTION NOT CONTROLLED BY A STOP SIGN (FOR 45 MPH OR HIGHER ONLY).*
- *AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT AN INTERSECTION.*
- *EVERY TWO MILES ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS OUTSIDE A CITY.*
- *EVERY TWO BLOCKS ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS WITHIN A CITY.*
- *AT ANY OTHER INTERSECTION OR DECISION POINT WHERE THE DETOUR ROUTE IS CONTRARY TO THE NORMAL, EXPECTED TURNING MANEUVER OR OTHERWISE UNCLEAR.*

*DETOUR SIGNS SHALL BE PLACED, WHEN POSSIBLE, NEXT TO BUT NOT BLOCKING EXISTING ROUTE MARKERS OR LANE ASSIGNMENT SIGNS. DETOUR SIGNS SHALL NOT OBSCURE OR BE OBSCURED BY OTHER EXISTING OR TEMPORARY SIGNS.*

*DETOUR SIGNS SHALL BE ERECTED AND/OR UNCOVERED PRIOR TO THE ROAD OR RAMP BEING CLOSED TO TRAFFIC BUT NO EARLIER THAN FOUR HOURS PRIOR TO THE CLOSURE. DETOUR SIGNS SHALL BE COVERED AND/OR REMOVED NO LATER THAN FOUR HOURS FOLLOWING THE ROAD OR RAMP RE-OPENING TO TRAFFIC.*

*PAYMENT FOR ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, PROPER SIGN PLACEMENT AND SIZING, TIMELY ERECTING AND/OR UNCOVERING OF SIGNS, MAINTAINING SIGNS, AND TIMELY COVERING AND/OR REMOVING SIGNS AND SUPPORTS.*

*THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.*
*ITEM 614 - DETOUR SIGNING = LUMP SUM*

MAINTENANCE OF TRAFFIC GENERAL NOTES

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## MAINTENANCE OF TRAFFIC LEGEND

- WE — WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE 1 (WHITE)
- WD — WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE 1 (WHITE)
- PB — PORTABLE BARRIER, UNANCHORED
- DIRECTION OF TRAVEL
- DRUMS
- PORTABLE BARRIER
- WORK ZONE IMPACT ATTENUATOR
- TYPE III BARRICADE
- TYPE A WARNING LIGHT

NOTES:
1. REMOVE CONFLICTING MARKINGS AND RPM REFLECTORS
2. ALL SHOULDERS 2' MIN. UNLESS OTHERWISE NOTED
3. OFFSETS ARE MEASURED TO THE CENTER OF PORTABLE BARRIER

END ROAD WORK
G20-2-48
STA. 2116+70

BEGIN PROP. EDGE LINE
STA. 2126+33, 62.2' LT
℄ CONST. SR 161

WE-1

COVER
LANE ENDS
MERGE LEFT

WEST 161

BEGIN PORTABLE BARRIER
STA. 2135+33, 65.5' LT
℄ CONST. SR 161

PB-1

BEGIN WORK ZONE EDGE LINE TAPER
BEGIN WORK ZONE DOTTED LINE
STA. 2142+70, 61.3' LT
℄ CONST. SR 161 =

BEGIN 18:1 PB TAPER
STA. 2142+50, 64.2' LT
℄ CONST. SR 161

℄ CONST. 81" BARRIER 3

END 18:1 PB TAPER,
END PORTABLE BARRIER
WITH IMPACT ATTENUATOR
STA. 2143+87, 71.9' LT
℄ CONST. SR 161

302 303 304 305 3000 3001 3002 3003 3004 3005 3006

2126 2127 32 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144

SR-161 WESTBOUND
12' 12' 12' 12'

SR-161 EASTBOUND
12' 12' 12' 12' 12'

EX. SAN
EX. SAN

944

MATCH LINE STA. 2144+50

PLACED 600 FEET BEFORE W4-2R-48
W20-1-48
ROAD WORK AHEAD

PLACED 300 FEET BEFORE DRUMS
W4-2R-48

END WORK ZONE EDGE LINE
STA. 2150+50, 73.5' LT
℄ CONST. SR 161

END PROP. DOTTED LINE
STA. 2150+50, 61.5' LT
℄ CONST. SR 161

DRUMS
WE-1
WD-1
COVER

℄ CONST. RAMP C

954 952 953 974 975 976

SR-161 WESTBOUND
12' 12' 12' 12'

2145 2146 2147 2148 2149 2150 2151 2152 2153 2154

SR-161 EASTBOUND
12' 12' 12'

945 946 947 948 949 950 951 968 969 970 971 972 973 974 975 976

CURVE DATA
P.I. = STA. 969+50.60
Δ = 06°00'00" RT
Dc = 00°40'00"
R = 8,594.37'
T = 450.41'

MATCH LINE STA. 2144+50

### ADVANCE WARNING SIGNS

RIGHT SHOULDER CLOSED
W21-5a-48
STA. 2162+00

ROAD WORK AHEAD
W20-1-48
STA. 2177+00

HORIZONTAL SCALE IN FEET
0 25 50 100

# MAINTENANCE OF TRAFFIC PLAN
# 81" BARRIER 3


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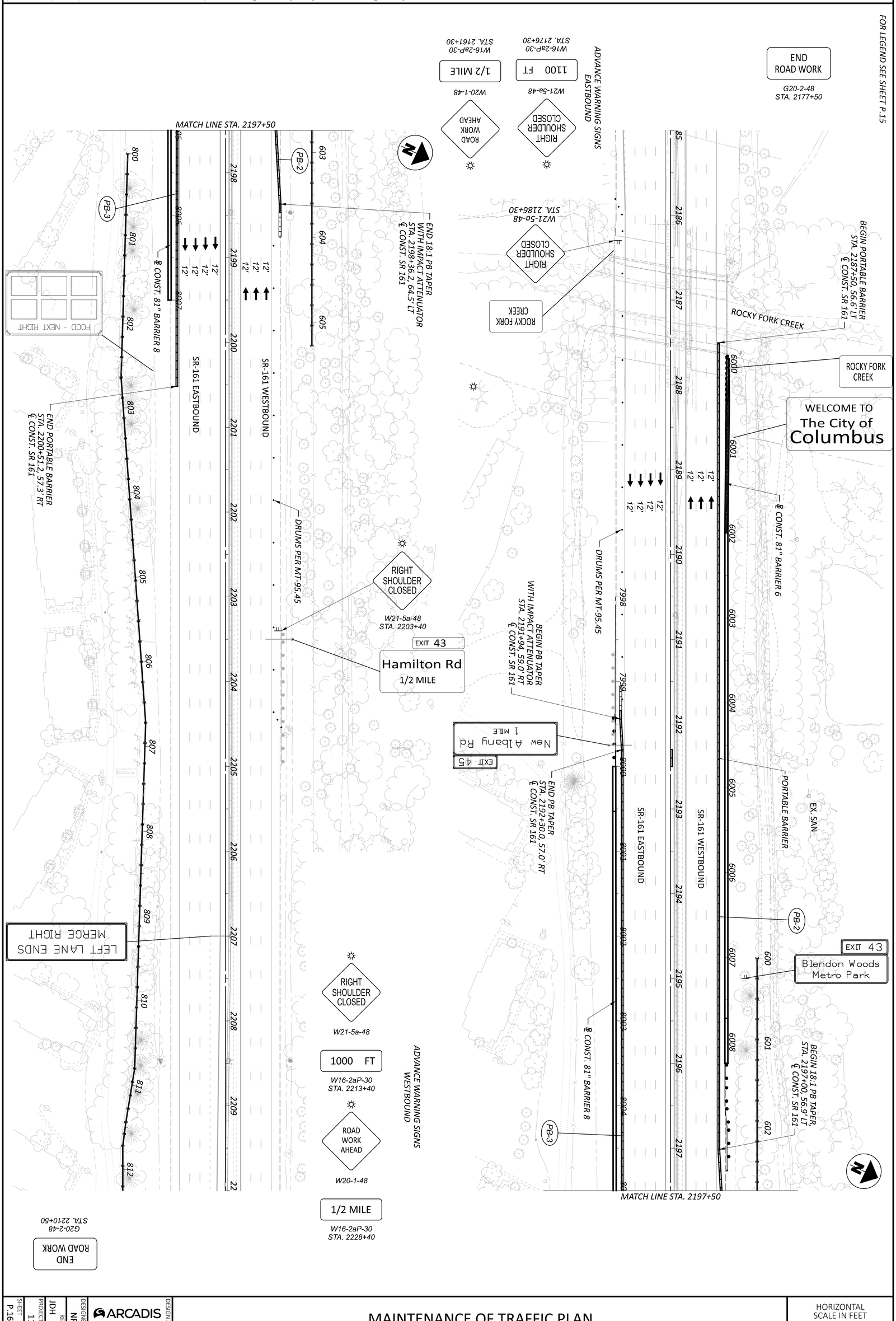
FOR LEGEND SEE SHEET P.15

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## MAINTENANCE OF TRAFFIC PLAN
## 81" BARRIERS 6 AND 8

HORIZONTAL SCALE IN FEET
0 50
25 100

# MAINTENANCE OF TRAFFIC PLAN
# 81" BARRIERS 10 AND 12

HORIZONTAL SCALE IN FEET
0 25 50 100

BEGIN PORTABLE BARRIER
STA. 2229+85, 56.0' LT
℄ CONST. SR 161

℄ CONST. 81" BARRIER 10

BEGIN WORK ZONE EDGE LINE
STA. 2236+68, 59.8' LT
℄ CONST. SR 161

EX. SAN

PB-4

WE-2

FOOD-
NEXT RIGHT

SR-161 WESTBOUND

SR-161 EASTBOUND

MATCH LINE STA. 2242+00

PB-5

℄ CONST. 81" BARRIER 12

END 18:1 PB TAPER
STA. 2231+85, 56.9' RT
℄ CONST. SR 161

BEGIN 18:1 PB TAPER
WITH IMPACT ATTENUATOR
STA. 2230+44, 64.7' RT
℄ CONST. SR 161

DRUMS
PER
MT-95.45

END PORTABLE BARRIER
STA. 2241+78, 71.8' RT
℄ CONST. SR 161

New Albany Rd

EXIT 45

END
ROAD WORK
G20-2-48
STA. 2219+85

ADVANCE WARNING SIGNS
EASTBOUND

RIGHT SHOULDER CLOSED
W21-5a-48
STA. 1191+50

1000 FT
W16-2aP-30
STA. 1181+50

RIGHT SHOULDER CLOSED
W21-5a-48

1/2 MILE
W16-2aP-30
STA. 1166+50

ROAD WORK AHEAD
W20-1-48

FOOD-
NEXT RIGHT

BEGIN WORK ZONE EDGE LINE TAPER
STA. 2243+93, 77.4' LT
℄ CONST. SR 161

END WORK ZONE EDGE LINE TAPER
STA. 2246+05, 112.0' LT
℄ CONST. SR 161

BEGIN PB TAPER
STA. 2247+05, 152.4' LT
℄ CONST. SR 161

DRUMS PER
MT-95.45

END PB TAPER
WITH IMPACT ATTENUATOR
STA. 2247+40, 172.3' LT
℄ CONST. SR 161

RIGHT SHOULDER CLOSED

ROAD WORK AHEAD
W20-1-48

PLACED 600 FEET
BEFORE W21-5a-48

PLACED 300 FEET
ALONG RAMP
BEFORE PB

℄ CONST. 81" BARRIER 10

WE-2

PB-4

SR-161 WESTBOUND

SR-161 EASTBOUND

MATCH LINE STA. 2242+00

FOOD

New Albany Rd

EXIT 45

DO NOT ENTER

END
ROAD WORK
G20-2-48
STA. 2252+00

ADVANCE WARNING SIGNS
WESTBOUND

ROAD WORK AHEAD
W20-1-48

1/2 MILE
W16-2aP-30
STA. 2277+05

FOR LEGEND SEE SHEET P.15

FRA-161-15.80 NOISE ABATEMENT

MODEL: CLP_SR161 - Barrier 10-12 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 11:54:43 PM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\MOT\Sheets\117607_MP001.dgn

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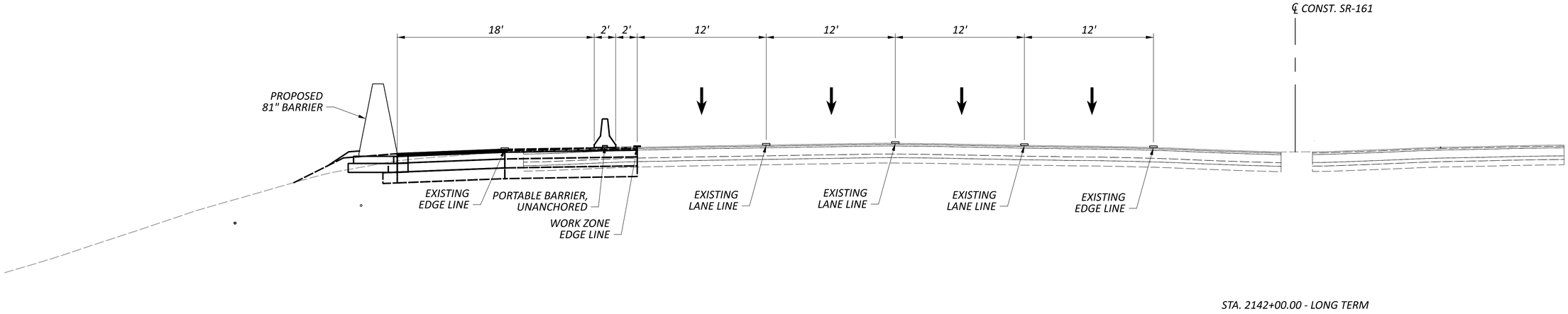
NRS/BSS

REVIEWER
JDH 05-22-24

PROJECT ID
117607

SHEET P.17 | TOTAL P.297




STA. 2142+00.00 - LONG TERM

# MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
# BARRIER 3 - STA. 2142+00 WESTBOUND

FRA-161-15.80 NOISE ABATEMENT

MODEL: CLP_SR161 - 2142+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 11:55:15 PM USER: jennifer.kelley
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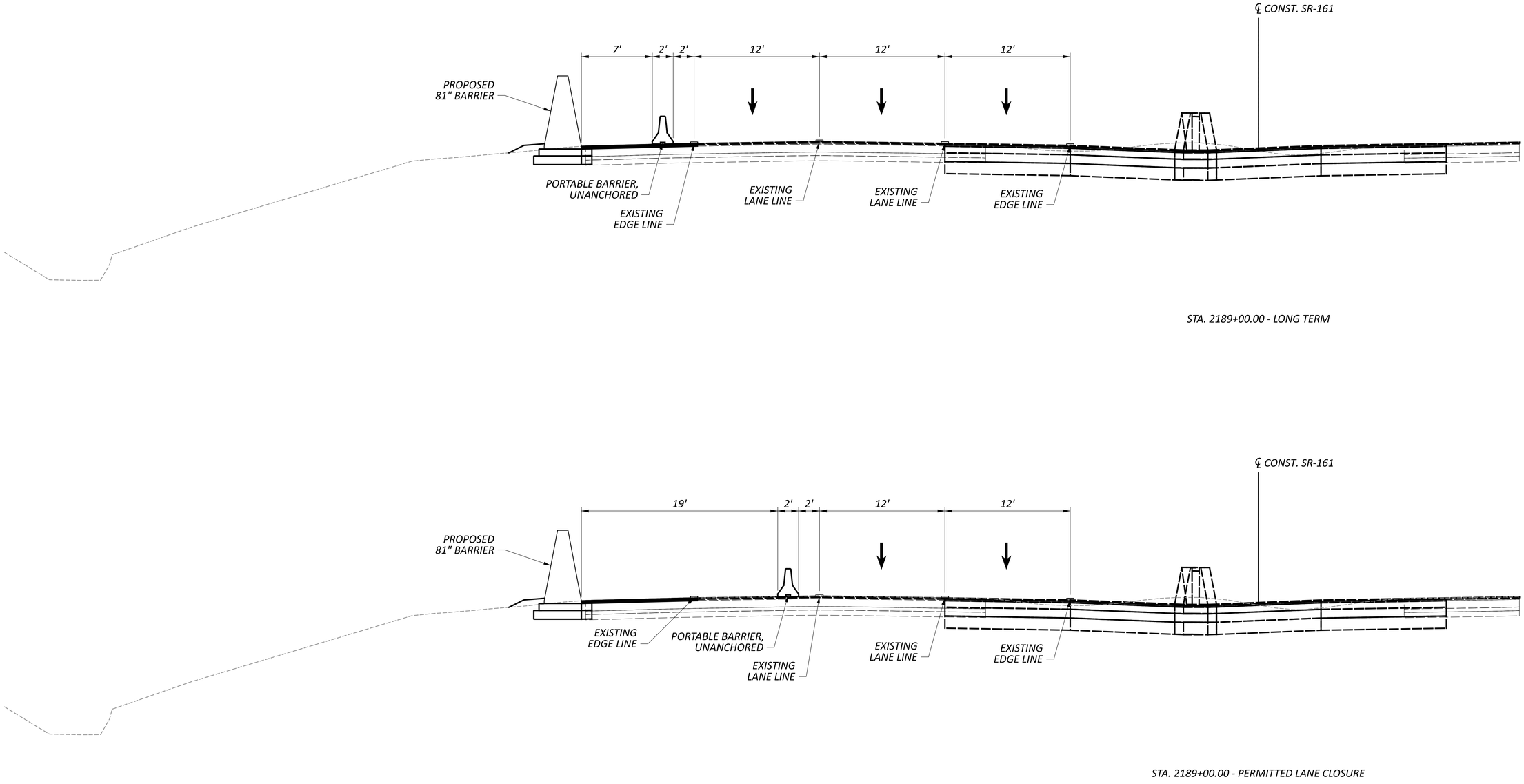
SHEET P.18 TOTAL P.297




# MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
# BARRIER 6 - STA. 2189+00 WESTBOUND

FRA-161-15.80 NOISE ABATEMENT

MODEL: CLP_SR161 - 2189+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 11:55:49 PM USER: jennifer.kelley
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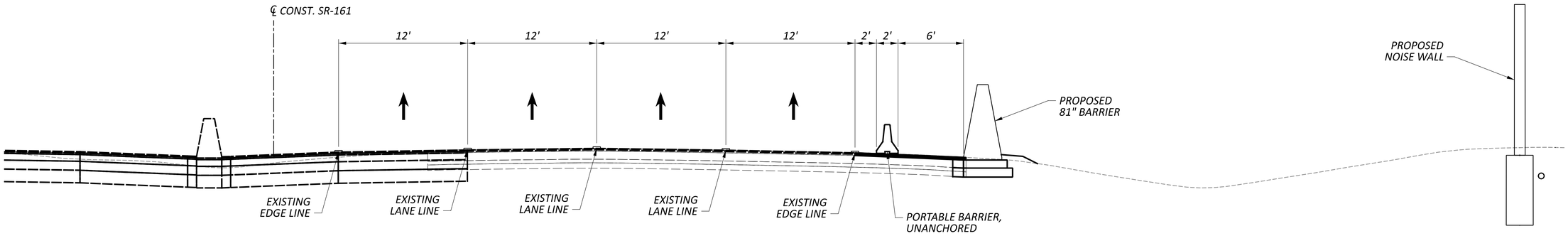
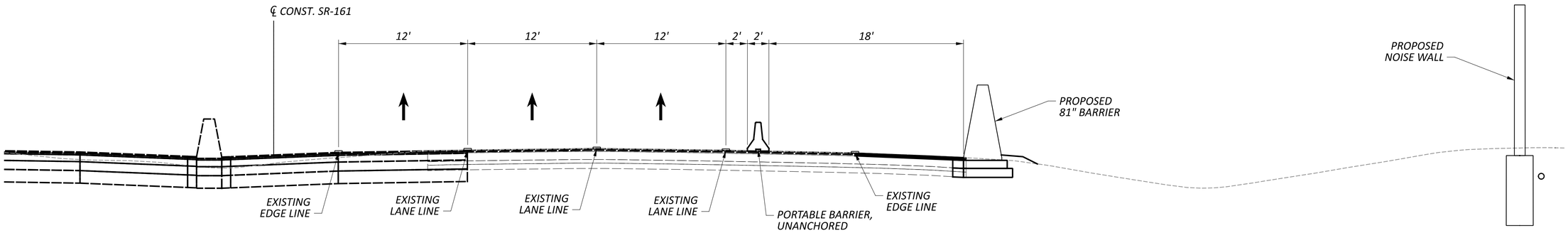
SHEET P.19 TOTAL P.297




STA. 2198+00.00 - LONG TERM




STA. 2198+00.00 - PERMITTED LANE CLOSURE

# MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
# BARRIER 8 - STA. 2198+00 EASTBOUND

FRA-161-15.80 NOISE ABATEMENT

MODEL: CLP_SR161 - 2198+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 11:56:00 PM USER: jennifer.kelley
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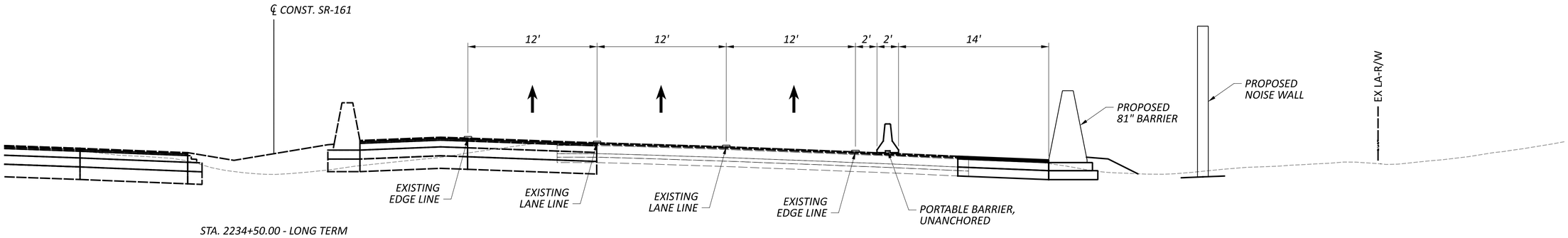
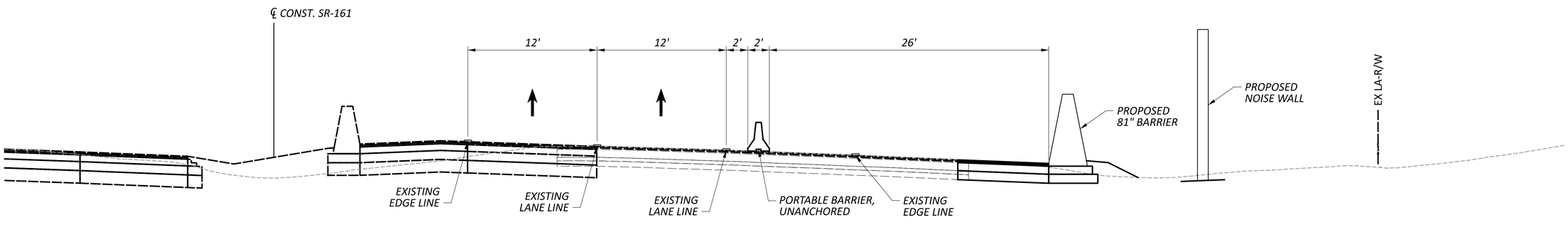
SHEET P.20 TOTAL P.297




STA. 2234+50.00 - LONG TERM




STA. 2234+50.00 - PERMITTED LANE CLOSURE

# MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
# BARRIER 12 - STA. 2234+50 EASTBOUND

FRA-161-15.80 NOISE ABATEMENT

MODEL: CLP_SR161 - 2234+50.00_EB [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 11:56:11 PM USER: jennifer.kelley
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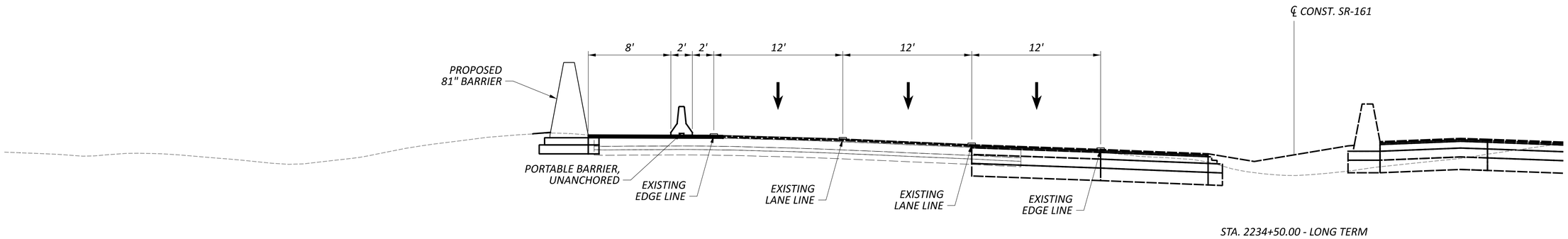
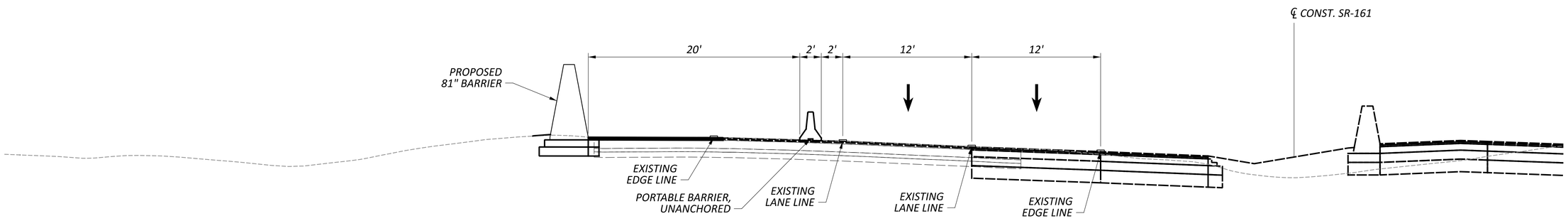
SHEET P.21 | TOTAL P.297




STA. 2234+50.00 - LONG TERM




STA. 2234+50.00 - PERMITTED LANE CLOSURE

# MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
# BARRIER 10 - STA. 2234+50 WESTBOUND

FRA-161-15.80 NOISE ABATEMENT

MODEL: CLP_SR161 - 2234+50.00_WB [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 11:56:28 PM USER: jennifer.kelley
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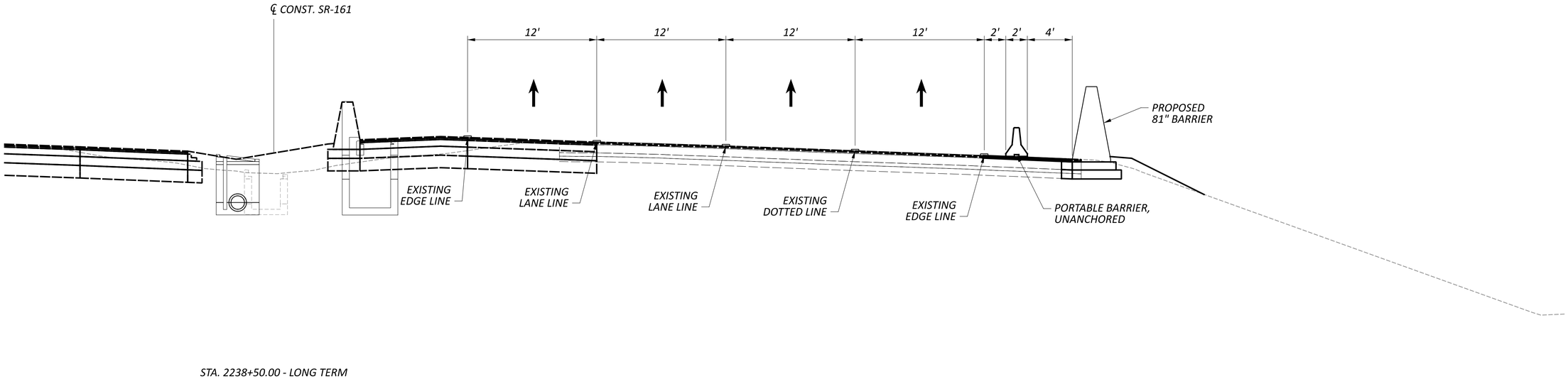
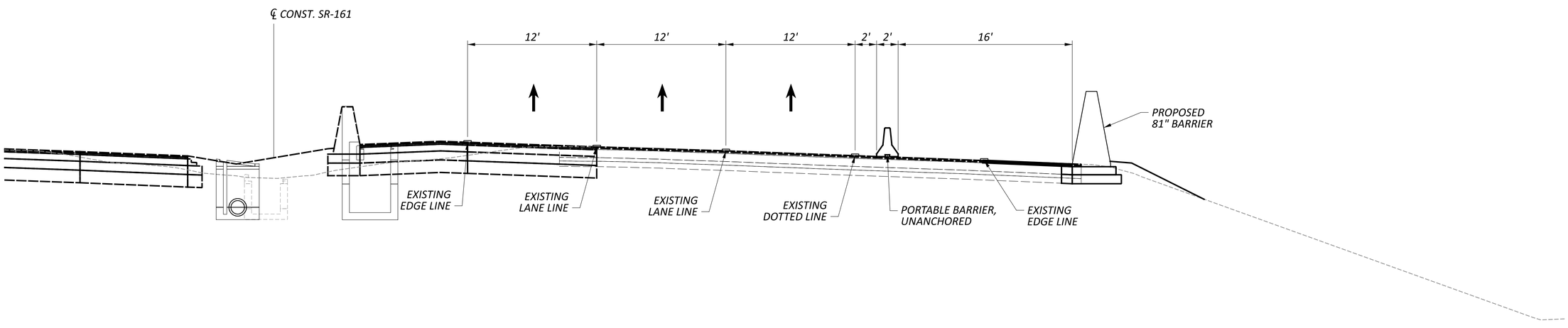
SHEET P.22 | TOTAL P.297




STA. 2238+50.00 - LONG TERM




STA. 2238+50.00 - PERMITTED RAMP/LANE CLOSURE

# MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
# BARRIER 12 - STA. 2238+50 EASTBOUND

FRA-161-15.80 NOISE ABATEMENT

MODEL: CLP_SR161 - 2238+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 11:56:40 PM USER: jennifer.kelley
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117607

SHEET P.23 | TOTAL P.297

| SHEET NUM. | | | | | | | | | | | PART. | | | ITEM | ITEM EXT | GRAND TOTAL | UNIT | DESCRIPTION | SEE SHEET NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P.9 | P.10 | P.26 | P.27 | P.28 | P.222 | | | | | | 01/NHS/20 | | | | | | | | |
| | | | | | | | | | | | | | | | | | | ROADWAY | |
| LS | | | | | | | | | | | LS | | | 201 | 11001 | LS | | CLEARING AND GRUBBING, AS PER PLAN | P.9 |
| | | 3 | | | | | | | | | 3 | | | 202 | 22900 | 3 | SY | APPROACH SLAB REMOVED | |
| | | 486 | | | | | | | | | 486 | | | 202 | 23000 | 486 | SY | PAVEMENT REMOVED | |
| | | | 1,262 | | | | | | | | 1,262 | | | 202 | 38000 | 1,262 | FT | GUARDRAIL REMOVED | |
| | | | 1 | | | | | | | | 1 | | | 202 | 42040 | 1 | EACH | ANCHOR ASSEMBLY REMOVED, TYPE T | |
| | | | 4,001 | | | | | | | | 4,001 | | | 202 | 75000 | 4,001 | FT | FENCE REMOVED | |
| | | | | | | | | | | | | | | | | | | | |
| | | | 1,229 | 2,069 | | | | | | | 3,298 | | | 203 | 10000 | 3,298 | CY | EXCAVATION | |
| | | | | 684 | | | | | | | 684 | | | 203 | 20000 | 684 | CY | EMBANKMENT | |
| | | | | 67 | | | | | | | 67 | | | 203 | 98000 | 67 | CY | ROADWAY, MISC.: TEMPORARY OVER-STEEPENED FILL | P.10 |
| | | 362 | | | | | | | | | 362 | | | 606 | 15050 | 362 | FT | GUARDRAIL, TYPE MGS | |
| | | 3 | | | | | | | | | 3 | | | 606 | 26150 | 3 | EACH | ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016) | |
| | | 4 | | | | | | | | | 4 | | | 606 | 35002 | 4 | EACH | MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 | |
| | | | | | | | | | | | | | | | | | | | |
| | | 1 | | | | | | | | | 1 | | | 606 | 35102 | 1 | EACH | MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2 | |
| | | 1 | | | | | | | | | 1 | | | 606 | 60022 | 1 | EACH | IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL) | |
| | | | 201 | | | | | | | | 201 | | | 607 | 35000 | 201 | FT | FENCE REMOVED AND REBUILT | |
| | | | 80 | | | | | | | | 80 | | | 607 | 98000 | 80 | FT | FENCE, MISC.: WHITE SPLIT RAIL FENCE | P.10 |
| 4,202 | | | | | | | | | | | 4,202 | | | 607 | 98000 | 4,202 | FT | FENCE, MISC.: TEMPORARY FENCE | P.9 |
| | | | | | | | | | | | | | | | | | | | |
| | | 3,743 | | | | | | | | | 3,743 | | | 622 | 90000 | 3,743 | FT | BARRIER, MISC.: 81" SINGLE SLOPE BARRIER | P.224 |
| | | 29 | | | | | | | | | 29 | | | 622 | 90200 | 29 | EACH | BARRIER, MISC.: 81" SINGLE SLOPE BARRIER END ANCHORAGE, REINFORCED | P.224 |
| | | 6 | | | | | | | | | 6 | | | 622 | 90200 | 6 | EACH | BARRIER, MISC.: BARRIER DRAINAGE WINDOW SECTION | P.230 |
| | | 6 | | | | | | | | | 6 | | | 622 | 90200 | 6 | EACH | BARRIER, MISC.: 81" CONCRETE BARRIER END SECTION | P.223 |
| | | | | | | | | | | | LS | | | 878 | 25000 | LS | | INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS | |
| | | | | | | | | | | | | | | | | | | EROSION CONTROL | |
| 1 | | | | | | | | | | | 1 | | | 659 | 00100 | 1 | EACH | SOIL ANALYSIS TEST | |
| 887 | | | 1,012 | | | | | | | | 1,899 | | | 659 | 00300 | 1,899 | CY | TOPSOIL | |
| | | | 955 | | | | | | | | 955 | | | 659 | 00590 | 955 | SY | SEEDING AND MULCHING, CLASS 6 | |
| 7,985 | | | | | | | | | | | 7,985 | | | 659 | 10000 | 7,985 | SY | SEEDING AND MULCHING | |
| 400 | | | | | | | | | | | 400 | | | 659 | 14000 | 400 | SY | REPAIR SEEDING AND MULCHING | |
| 400 | | | | | | | | | | | 400 | | | 659 | 15000 | 400 | SY | INTER-SEEDING | |
| | | | | | | | | | | | | | | | | | | | |
| 1.08 | | | | | | | | | | | 1.08 | | | 659 | 20000 | 1.08 | TON | COMMERCIAL FERTILIZER | |
| 1.65 | | | | | | | | | | | 1.65 | | | 659 | 31000 | 1.65 | ACRE | LIME | |
| 45 | | | | | | | | | | | 45 | | | 659 | 35000 | 45 | MGAL | WATER | |
| | | | 9,090 | | | | | | | | 9,090 | | | 670 | 00500 | 9,090 | SY | SLOPE EROSION PROTECTION | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | LS | | | 832 | 15000 | LS | | STORM WATER POLLUTION PREVENTION PLAN | |
| | | | | | | | | | | | LS | | | 832 | 15002 | LS | | STORM WATER POLLUTION PREVENTION INSPECTIONS | |
| | | | | | | | | | | | LS | | | 832 | 15010 | LS | | STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE | |
| | | | | | | | | | | | 142,257 | | | 832 | 30000 | 142,257 | EACH | EROSION CONTROL | |
| | | | | | | | | | | | | | | | | | | DRAINAGE | |
| | 10 | | 237 | | | | | | | | 247 | | | 601 | 21050 | 247 | SY | TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT | |
| | | 2.43 | | | | | | | | | 2.43 | | | 602 | 20000 | 2.43 | CY | CONCRETE MASONRY | |
| | 50 | | 9,333 | | | | | | | | 9,383 | | | 605 | 13300 | 9,383 | FT | 6" UNCLASSIFIED PIPE UNDERDRAINS | |
| | 50 | | | | | | | | | | 50 | | | 605 | 31100 | 50 | FT | AGGREGATE DRAINS | |
| | 25 | | 532 | | | | | | | | 557 | | | 611 | 00510 | 557 | FT | 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS | |
| | | | | | | | | | | | | | | | | | | | |
| | | 339 | | | | | | | | | 339 | | | 611 | 06100 | 339 | FT | 15" CONDUIT, TYPE C | |
| | | 83 | | | | | | | | | 83 | | | 611 | 06700 | 83 | FT | 15" CONDUIT, TYPE F | |
| | | 11 | | | | | | | | | 11 | | | 611 | 99500 | 11 | EACH | INLET, MISC.: INLET NO. 3 FOR 81" SINGLE SLOPE BARRIER | P.226 |
| | 5 | | 26 | | | | | | | | 31 | | | 611 | 99710 | 31 | EACH | PRECAST REINFORCED CONCRETE OUTLET | |
| | | | | | | | | | | | | | | | | | | PAVEMENT | |
| | | 4,822 | | | | | | | | | 4,822 | | | 254 | 01000 | 4,822 | SY | PAVEMENT PLANING, ASPHALT CONCRETE, 3" | |
| | | 4,401 | | | | | | | | | 4,401 | | | 255 | 20000 | 4,401 | FT | FULL DEPTH PAVEMENT SAWING | |
| | | 998 | | | | | | | | | 998 | | | 304 | 20000 | 998 | CY | AGGREGATE BASE | |
| | | 219 | | | | | | | | | 219 | | | 407 | 10000 | 219 | GAL | TACK COAT | |
| | | 760 | | | | | | | | | 760 | | | 407 | 20000 | 760 | GAL | NON-TRACKING TACK COAT | |
| | | | | | | | | | | | | | | | | | | | |
| | | 189 | | | | | | | | | 189 | | | 442 | 22101 | 189 | CY | ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG70-22M | P.10 |
| | | 189 | | | | | | | | | 189 | | | 442 | 22300 | 189 | CY | ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (449) | |
| | | 430 | | | | | | | | | 430 | | | 452 | 12010 | 430 | SY | 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P | |
| | | 1,915 | | | | | | | | | 1,915 | | | 452 | 13010 | 1,915 | SY | 9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P | |
| | | 108 | | | | | | | | | 108 | | | 609 | 24000 | 108 | FT | CURB, TYPE 4-A | |
| | | 4,401 | | | | | | | | | 4,401 | | | 872 | 10000 | 4,401 | FT | VOID REDUCING ASPHALT MEMBRANE (VRAM) | |
| | | | | | | | | | | | | | | | | | | NOISE BARRIERS | |
| | | | | | 4 | | | | | | 4 | | | 519 | 11101 | 4 | SF | PATCHING CONCRETE STRUCTURE, AS PER PLAN | P.222 |
| | | 115,010 | | | | | | | | | 115,010 | | | SPECIAL | 60610210 | 115,010 | SF | NOISE BARRIER (REFLECTIVE) | P.9 |
| | | | | | | | | | | | | | | | | | | | |

FRA-161-15.80 NOISE ABATEMENT

GENERAL SUMMARY

MODEL: GG001 PAPERSIZE: 34x22 (in.) DATE: 9/20/2024 TIME: 2:51:13 PM USER: watt|4128
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DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.24 TOTAL P.297

| SHEET NUM. | | | | | | | | | | | PART. | | | ITEM | ITEM EXT | GRAND TOTAL | UNIT | DESCRIPTION | SEE SHEET NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P.10 | P.11 | P.12 | P.13 | P.14 | P.26 | | | | | | 01/NHS/20 | | | | | | | | |
| | | | | | | | | | | | | | | | | | | **NOISE BARRIERS (CONT.)** | |
| | 2 | | | | | | | | | | 2 | | | SPECIAL | 69098000 | 2 | EACH | UTILITY TEST HOLE (TC ENERGY) | P.11 |
| 2 | | | | | | | | | | | 2 | | | SPECIAL | 69098000 | 2 | EACH | UTILITY TEST HOLE (COLUMBIA GAS) | P.10 |
| 1 | | | | | | | | | | | 1 | | | SPECIAL | 69098000 | 1 | EACH | UTILITY TEST HOLE (CITY OF COLUMBUS DIVISION OF WATER) | P.10 |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | **TRAFFIC CONTROL** | |
| | | | | | 6.7 | | | | | | 6.7 | | | 630 | 03100 | 6.7 | FT | GROUND MOUNTED SUPPORT, NO. 3 POST | |
| | | | | | 39.9 | | | | | | 39.9 | | | 630 | 07000 | 39.9 | FT | GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W8X18 | |
| | | | | | 1 | | | | | | 1 | | | 630 | 74601 | 1 | EACH | OVERHEAD SIGN SUPPORT, INSTALLATION ONLY, AS PER PLAN | P.10 |
| | | | | | 2 | | | | | | 2 | | | 630 | 81020 | 2 | EACH | CONCRETE MEDIAN BARRIER SIGN BRACKET | |
| | | | | | 1 | | | | | | 1 | | | 630 | 82000 | 1 | EACH | SIGN BACKING ASSEMBLY | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | 2 | | | | | | 2 | | | 630 | 84500 | 2 | EACH | GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION | |
| | | | | | 1 | | | | | | 1 | | | 630 | 84510 | 1 | EACH | RIGID OVERHEAD SIGN SUPPORT FOUNDATION | |
| | | | | | 3 | | | | | | 3 | | | 630 | 85100 | 3 | EACH | REMOVAL OF GROUND MOUNTED SIGN AND REERECTION | |
| | | | | | 1 | | | | | | 1 | | | 630 | 85600 | 1 | EACH | REMOVAL OF GROUND MOUNTED MAJOR SIGN AND REERECTION | |
| | | | | | 2 | | | | | | 2 | | | 630 | 86002 | 2 | EACH | REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | 2 | | | | | | 2 | | | 630 | 86102 | 2 | EACH | REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL | |
| 1 | | | | | | | | | | | 1 | | | 633 | 67201 | 1 | EACH | CONTROLLER WORK PAD, AS PER PLAN | P.10 |
| | | | | | 0.45 | | | | | | 0.45 | | | 807 | 13110 | 0.45 | MILE | WET REFLECTIVE SPRAY THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6" | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | **MAINTENANCE OF TRAFFIC** | |
| | | | 300 | | | | | | | | 300 | | | 614 | 11110 | 300 | HOUR | LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE | |
| | | 5,735 | | | | | | | | | 5,735 | | | 614 | 11630 | 5,735 | FT | INCREASED BARRIER DELINEATION | |
| | | | | | 5 | | | | | | 5 | | | 614 | 12380 | 5 | EACH | WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL) | |
| | | | | LS | | | | | | | LS | | | 614 | 12420 | LS | | DETOUR SIGNING | P.14 |
| | | | | | 119 | | | | | | 119 | | | 614 | 13310 | 119 | EACH | BARRIER REFLECTOR, TYPE 1 (ONE-WAY) | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | 119 | | | | | | 119 | | | 614 | 13350 | 119 | EACH | OBJECT MARKER, ONE WAY | |
| | | | 96 | | | | | | | | 96 | | | 614 | 18601 | 96 | SNMT | PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN | P.13 |
| | | | | | 0.63 | | | | | | 0.63 | | | 614 | 22210 | 0.63 | MILE | WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I | |
| | | | | | 780 | | | | | | 780 | | | 614 | 24402 | 780 | FT | WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I | |
| | | 50 | | | | | | | | | 50 | | | 616 | 10000 | 50 | MGAL | WATER | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | 13,700 | | | | | | 13,700 | | | 622 | 41100 | 13,700 | FT | PORTABLE BARRIER, UNANCHORED | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | **INCIDENTALS** | |
| | | | | | | | | | | | LS | | | 614 | 11000 | LS | | MAINTAINING TRAFFIC | |
| | | | | | | | | | | | 24 | | | 619 | 16010 | 24 | MNTH | FIELD OFFICE, TYPE B | |
| | | | | | | | | | | | LS | | | 623 | 10000 | LS | | CONSTRUCTION LAYOUT STAKES AND SURVEYING | |
| | | | | | | | | | | | LS | | | 624 | 10000 | LS | | MOBILIZATION | |
| | | | | | | | | | | | LS | | | SPECIAL | 69021000 | LS | | SURVEY CONTROL VERIFICATION | P.9 |

GENERAL SUMMARY

FRA-161-15.80 NOISE ABATEMENT

MODEL: GG002 PAPERSIZE: 34x22 (in.) DATE: 2024-06-10 TIME: 5:08:12 PM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GG002.dgn

DESIGN AGENCY
ARCADIS
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DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.25 TOTAL P.297

| SHEET NO. | REF. NO. | STATION FROM | STATION TO | SIDE | 606 GUARDRAIL, TYPE MGS | 606 ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016) | 606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 | 606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2 | 606 IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL) | 622 BARRIER, MISC.: 81" SINGLE SLOPE BARRIER | 622 BARRIER, MISC.: 81" SINGLE SLOPE BARRIER END ANCHORAGE, REINFORCED | 622 BARRIER, MISC.: BARRIER DRAINAGE WINDOW SECTION | 622 BARRIER, MISC.: 81" CONCRETE BARRIER END SECTION | 602 CONCRETE MASONRY | 611 15" CONDUIT, TYPE C | 611 15" CONDUIT, TYPE F | 611 INLET, MISC.: INLET NO. 3 FOR 81" SINGLE SLOPE BARRIER | 202 PAVEMENT REMOVED | 202 APPROACH SLAB REMOVED | 254 PAVEMENT PLANING, ASPHALT CONCRETE, 3" | 255 FULL DEPTH PAVEMENT SAWING | 304 AGGREGATE BASE (10") | 407 TACK COAT (APPLIED AT A RATE 0.055 GAL/SY) | 407 NON-TRACKING TACK COAT (APPLIED AT A RATE 0.085 GAL/SY) | 442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG70-22M (1.5") | 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (449) (1.5") | 452 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P | 452 9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P | 609 CURB, TYPE 4-A | 872 VOID REDUCING ASPHALT MEMBRANE (VRAM) | 606 SPECIAL - NOISE BARRIER (REFLECTIVE) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | FT | EACH | EACH | EACH | EACH | FT | EACH | EACH | EACH | CY | FT | FT | EACH | SY | SY | SY | FT | CY | GAL | GAL | CY | CY | SY | SY | FT | FT | SF |
| WALL 3 / BARRIER 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P.33 - P.34 | NW-3 | 300+00.00 | 305+76.00 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | | 8064 |
| P.34 - P.35 | B-3 | 3000+00.00 | 3006+99.96 | LT | 100 | 1 | 1 | 1 | | 532 | 5 | 1 | 1 | 0.27 | 15 | | 1 | 78 | | | 700 | 120 | 22 | 156 | 32 | 32 | 299 | | 27 | 700 | |
| WALL 6 / BARRIER 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P.36 - P.37 | B-6 | 5999+90.38 | 6008+25.00 | LT | 50 | 1 | 1 | | | 574 | 5 | | 2 | 0.81 | 160 | | 4 | 90 | 3 | 1326 | 835 | 145 | 26 | 189 | 39 | 39 | | 331 | 27 | 835 | |
| P.37 - P.38 | NW-6 | 600+00.00 | 605+28.00 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | | 7392 |
| WALL 8 / BARRIER 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P.39 - P.40 | B-8 | 8000+00.00 | 8007+00.00 | RT | 187 | | 1 | | | 512 | 5 | 1 | 1 | 0.54 | 60 | | 2 | 78 | | 1117 | 700 | 120 | 61 | 68 | 30 | 30 | | 288 | 27 | 700 | |
| P.40 - P.43 | NW-8 | 800+00.00 | 818+08.00 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | 25312 |
| WALL 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P.44 - P.46 | NW-9 | 900+16.00 | 912+70.00 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | | 17556 |
| BARRIER 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P.47 - P.50 | B-10 | 1000+00.00 | 1012+70.07 | LT | | | | | 1 | 1312 | 11 | 3 | 1 | 0.54 | 104 | 45 | 3 | 141 | | 1962 | 1270 | 227 | 41 | 270 | 57 | 57 | | 610 | | 1270 | |
| | | 1012+70.07 | 1014+15.44 | LT | | | | | | | | | | | | | | 16 | | | 145 | 25 | 5 | 7 | 2 | 2 | 83 | | | 145 | |
| | | 1014+15.44 | 1016+49.64 | LT | | | | | | | | | | | | | | | | | | 140 | | | | | 48 | | | | |
| WALL 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P.51 - P.54 | NW-11 | 1100+00.00 | 1115+60.00 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | 21840 |
| WALL 12 / BARRIER 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P.55 - P.56 | B-12 | 1200+00.00 | 1202+97.05 | RT | 25 | 1 | 1 | | | 633 | 3 | | 1 | 0.27 | | 38 | 1 | 33 | | | 297 | 129 | 25 | 38 | 14 | 14 | | 441 | 27 | 297 | |
| | | 1202+97.05 | 1205+23.39 | RT | | | | | | | | | | | | | | 25 | | 417 | 226 | 53 | 32 | 21 | 12 | 12 | | 144 | | 226 | |
| | | 1205+23.39 | 1207+51.00 | RT | | | | | | | | | | | | | | 25 | | | 228 | 39 | 7 | 11 | 3 | 3 | | 101 | | 228 | |
| P.56 - P.57 | NW-12 | 120+00.00 | 124+97.00 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | 6958 |
| WALL 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 1500+00.00 | 1502+40.00 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | 3360 |
| P.58 - P.62 | NW-15 | 1504+27.00 | 1518+43.00 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | 19824 |
| | | 1518+90.00 | 1522+26.00 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | 4704 |
| TOTALS | | | | | 362 | 3 | 4 | 1 | 1 | 3,563 | 29 | 5 | 6 | 2.43 | 339 | 83 | 11 | 486 | 3 | 4,822 | 4,401 | 998 | 219 | 760 | 189 | 189 | 430 | 1,915 | 108 | 4,401 | 115,010 |

| SHEET NO. | REF. NO. | STATION FROM | STATION TO | SIDE | 630 GROUND MOUNTED SUPPORT, NO. 3 POST | 630 GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W8X18 | | 630 OVERHEAD SIGN SUPPORT, INSTALLATION ONLY, AS PER PLAN | 630 CONCRETE MEDIAN BARRIEER SIGN BRACKET | 630 SIGN BACKING ASSEMBLY | 630 GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION | 630 RIGID OVERHEAD SIGN SUPPORT FOUNDATION | 630 REMOVAL OF GROUND MOUNTED SIGN AND REERECTION | 630 REMOVAL OF GROUND MOUNTED MAJOR SIGN AND REERECTION | 630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL | 630 REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL | 807 WET REFLECTIVE SPRAY THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6" |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | FT | FT | | EACH | EACH | EACH | EACH | EACH | EACH | EACH | EACH | EACH | MILE |
| | LL-1 | 2126+70 | 2150+50 | LT | | | | | | | | | | | | | 0.45 |
| P.36 | S-1 | 2188+00 | | LT | 3.7 | | | | 1 | | | | 1 | | 1 | | |
| P.37 | S-2 | 6008+00 | | LT | | 20.0 | 19.9 | | | 1 | 2 | | 1 | 1 | | 2 | |
| P.47 | S-3 | 2232+50 | | LT | 3 | | | | 1 | | | | 1 | | 1 | | |
| P.56 | S-4 | 1207+00 | | RT | | | | 1 | | | | 1 | | | | | |
| TOTALS | | | | | 6.7 | 39.9 | | 1 | 2 | 1 | 2 | 1 | 3 | 1 | 2 | 2 | 0.45 |

| SHEET NO. | REF. NO. | STATION FROM | STATION TO | SIDE | 614 WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I | 614 WORK ZONE DOTTED LINE, CLASS I, 6" , 740.06, TYPE I | 614 WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL) | 614 BARRIER REFLECTOR, TYPE 1 (ONE-WAY) | 614 OBJECT MARKER (ONE-WAY) | 622 PORTABLE BARRIER, UNANCHORED |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | MILE | FT | EACH | EACH | EACH | FT |
| WALL 3 / BARRIER 3 | | | | | | | | | | |
| P.15 | PB-1 | 2135+33 | 2143+97 | LT | | | 1 | 18 | 18 | 870 |
| P.15 | WE-1 | 2126+70 | 2150+50 | LT | 0.45 | | | | | |
| P.15 | WD-1 | 2142+70 | 2150+50 | LT | | 780 | | | | |
| WALL 6 / BARRIER 6 | | | | | | | | | | |
| P.16 | PB-2 | 2187+50 | 2198+46 | LT | | | 1 | 22 | 22 | 3300 |
| WALL 8 / BARRIER 8 | | | | | | | | | | |
| P.16 | PB-3 | 2191+84 | 2200+50 | RT | | | 1 | 18 | 18 | 2610 |
| BARRIER 10 | | | | | | | | | | |
| P.17 | PB-4 | 2229+85 | 2247+50 | LT | | | 1 | 38 | 38 | 4670 |
| P.17 | WE-2 | 2236+68 | 2246+05 | LT | 0.18 | | | | | |
| WALL 12 / BARRIER 12 | | | | | | | | | | |
| P.17 | PB-5 | 2230+34 | 2241+78 | RT | | | 1 | 23 | 23 | 2250 |
| TOTALS | | | | | 0.63 | 780 | 5 | 119 | 119 | 13,700 |

SUBSUMMARY

FRA-161-15.80 NOISE ABATEMENT

MODEL: GS001 PAPERSIZE: 34x22 (in.) DATE: 9/20/2024 TIME: 10:26:45 AM USER: wallj4128
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\114372\0400_CAD\400-Engineering\Roadway\Sheets\117607_GS001.dgn

DESIGN AGENCY
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DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.26 TOTAL P.297

| SHEET NO. | REF. NO. | STATION FROM | STATION TO | SIDE | 601 TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT (SY) | 605 6" UNCLASSIFIED PIPE UNDERDRAINS (FT) | 611 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS (FT) | 611 PRECAST REINFORCED CONCRETE OUTLET (EACH) |
|---|---|---|---|---|---|---|---|---|
| **WALL 3 / BARRIER 3** | | | | | | | | |
| P.33 | UD-1 | 300+00.00 | 302+74.00 | LT | 2 | 279 | 12 | 1 |
| P.33 - P.34 | UD-2 | 302+78.00 | 305+76.00 | LT | 2 | 298 | 25 | 1 |
| P.34 | EC-1 | 2135+44.37 | 2135+50.00 | LT | 2 | | | |
| P.34 | EC-2 | 2136+45.04 | 2136+55.04 | LT | 12 | | | |
| | EC-3 | NOT USED | | | | | | |
| **WALL 6 / BARRIER 6** | | | | | | | | |
| P.36 | EC-4 | 2187+61.00 | 2187+61.00 | LT | 2 | | 8 | 2 |
| | EC-5 | NOT USED | | | | | | |
| | EC-18 | NOT USED | | | | | | |
| | EC-6 | NOT USED | | | | | | |
| P.37 | UD-3 | 600+00.00 | 602+02.00 | LT | 2 | 207 | 12 | 1 |
| P.37 - P.38 | UD-4 | 602+06.00 | 605+28.00 | LT | 2 | 322 | 16 | 1 |
| **WALL 8 / BARRIER 8** | | | | | | | | |
| P.39 | EC-7 | 2190+25.79 | 2190+31.29 | RT | 24 | | | |
| P.41 | EC-8 | 805+47.00 | 805+57.00 | LT | 25 | | | |
| | EC-19 | NOT USED | | | | | | |
| P.40 | EC-9 | 2196+45.02 | 2196+55.02 | RT | 21 | | | |
| P.40 - P.42 | UD-5 | 800+00.00 | 809+96.00 | RT | 2 | 1001 | 29 | 1 |
| P.42 | UD-6 | 810+00.00 | 812+40.00 | RT | 2 | 240 | 22 | 1 |
| P.42 - P.43 | UD-7 | 812+44.00 | 814+48.00 | RT | 2 | 204 | 41 | 1 |
| P.43 | UD-8 | 814+52.00 | 818+08.00 | RT | 2 | 356 | 41 | 1 |
| **WALL 9** | | | | | | | | |
| P.44 - P.45 | UD-9 | 900+11.00 | 904+34.00 | LT | 2 | 423 | 26 | 1 |
| P.45 | UD-10 | 904+38.00 | 908+42.00 | LT | 2 | 404 | 24 | 1 |
| P.45 - P.46 | UD-11 | 908+46.00 | 911+92.00 | LT | 2 | 346 | 22 | 1 |
| P.46 | UD-12 | 911+96.00 | 2231+10.24 | RT | 2 | 79 | 30 | 1 |
| **BARRIER 10** | | | | | | | | |
| P.47 | EC-10 | 2229+94.60 | 2230+00.00 | LT | 6 | | | |
| P.47 | EC-11 | 2230+93.49 | 2231+03.31 | LT | 8 | | | |
| P.47 | EC-12 | 2233+88.33 | 2233+98.11 | LT | 26 | | | |
| P.48 | EC-13 | 2236+82.81 | 2236+92.55 | LT | 29 | | | |
| P.49 - P.50 | UD-22 | 1012+25.00 | 1015+50.00 | LT | | 395 | 1 | |
| | EC-20 | NOT USED | | | | | | |
| | EC-15 | NOT USED | | | | | | |
| **WALL 11** | | | | | | | | |
| P.51 - P.54 | UD-22 | 1099+95.00 | 1115+60.00 | RT | 6 | 1565 | 77 | 3 |
| P.51 - P.54 | EC-14 | | 1107+90.00 | LT | 30 | | | |
| **WALL 12 / BARRIER 12** | | | | | | | | |
| P.55 | EC-16 | 2233+75.29 | 2233+80.90 | RT | 4 | | | |
| | EC-17 | NOT USED | | | | | | |
| P.56 | UD-13 | 120+00.00 | 121+96.00 | LT | 2 | 201 | 10 | 1 |
| P.56 - P.57 | UD-14 | 122+00.00 | 124+97.00 | LT | 2 | 297 | 17 | 1 |
| P.56 - P.57 | UD-23 | 1200+00.00 | 1207+51.00 | LT | 2 | 721 | 1 | 1 |
| **WALL 15** | | | | | | | | |
| P.58 | UD-15 | 1500+00.00 | 1502+40.00 | RT | 2 | 245 | 16 | 1 |
| P.59 | UD-16 | 1504+27.00 | 1507+03.00 | RT | 2 | 276 | 18 | 1 |
| P.59 - P.60 | UD-17 | 1507+07.00 | 1509+18.00 | RT | 2 | 211 | 24 | 1 |
| P.60 - P.61 | UD-18 | 1509+22.00 | 1514+20.00 | RT | 2 | 498 | 43 | 1 |
| P.61 | UD-19 | 1514+20.00 | 1517+33.00 | RT | | 313 | | |
| P.61 | UD-20 | 1517+37.00 | 1518+43.00 | RT | 2 | 111 | 6 | 1 |
| P.61 - P.62 | UD-21 | 1518+90.00 | 2308+61.91 | RT | 2 | 341 | 11 | 1 |
| TOTALS | | | | | 237 | 9,333 | 532 | 26 |

| SHEET NO. | REF. NO. | STATION FROM | STATION TO | SIDE | 202 GUARDRAIL REMOVED (FT) | 202 ANCHOR ASSEMBLY REMOVED, TYPE T (EACH) | 202 FENCE REMOVED (FT) | 203 EXCAVATION (CY) | 607 FENCE REMOVED AND REBUILT (FT) | 607 FENCE, MISC.: WHITE SPLIT RAIL FENCE (FT) | 659 TOPSOIL (CY) | 659 SEEDING AND MULCHING, CLASS 6 (SY) | 670 SLOPE EROSION PROTECTION (SY) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WALL 3 / BARRIER 3** | | | | | | | | | | | | | |
| P.29 | VF-1 | 299+99.94 | 305+75.94 | RT | | | | 175 | | | 175 | | 1572 |
| P.29 | SM-1 | 3002+79.85 | 3003+94.48 | CEN | | | | | | | | 86 | |
| **WALL 6 / BARRIER 6** | | | | | | | | | | | | | |
| P.37 - P.38 | R-1 | 2194+66.22 | 2200+13.85 | LT | | | 548 | | | | | | |
| P.36 | R-6 | 2187+65.24 | 2189+58.43 | LT | 195 | | | | | | | | |
| P.30 | VF-2 | 601+99.88 | 605+27.88 | RT | | | | 104 | | | 104 | | 935 |
| P.30 | SM-2 | 5999+74.18 | 6000+83.57 | CEN | | | | | | | | 141 | |
| P.37 | F-1 | 2194+66.22 | 2194+76.00 | LT | | | | | | 10 | | | |
| P.38 | F-2 | 2200+04.00 | 2200+13.85 | LT | | | | | | 10 | | | |
| **WALL 8 / BARRIER 8** | | | | | | | | | | | | | |
| P.40 - P.43 | R-2 | 2197+67.94 | 2215+93.03 | RT | | | 1828 | | | | | | |
| P.39 | R-7 | 7998+63.74 | 7999+76.24 | RT | 113 | 1 | | | | | | | |
| P.30 | VF-3 | 810+49.84 | 818+10.87 | LT | | | | 377 | | | 377 | | 3387 |
| P.40 | F-3 | 2197+67.94 | 2197+77.50 | RT | | | | | | 10 | | | |
| P.43 | F-4 | 2215+83.06 | 2215+93.03 | RT | | | | | | 10 | | | |
| **WALL 9** | | | | | | | | | | | | | |
| P.44 - P.46 | R-3 | 2218+67.02 | 2231+14.52 | LT | | | 1273 | | | | | | |
| P.30 - P.31 | VF-4 | 899+99.82 | 911+99.82 | RT | | | | 356 | | | 356 | | 3196 |
| P.44 | F-5 | 2218+67.02 | 2218+77.00 | LT | | | | | | 10 | | | |
| P.46 | F-6 | 2231+05.30 | 2231+14.52 | LT | | | | | | 10 | | | |
| **BARRIER 10** | | | | | | | | | | | | | |
| P.48 - P.49 | R-8 | 1008+56.41 | 1012+83.96 | LT | 428 | | | | | | | | |
| P.31 | SM-3 | 1010+49.68 | 1012+13.57 | CEN | | | | 217 | | | | 217 | |
| **WALL 11** | | | | | | | | | | | | | |
| P.51 | R-5 | 1099+94.42 | 1101+92.46 | RT | | | | | 201 | | | | |
| **WALL 12 / BARRIER 12** | | | | | | | | | | | | | |
| P.55 - P.56 | R-9 | 1202+02.04 | 1207+26.90 | RT | 526 | | | | | | | | |
| P.31 | SM-4 | 1204+13.85 | 1206+52.61 | CEN | | | | | | | | 511 | |
| **WALL 15** | | | | | | | | | | | | | |
| P.61 - P.62 | R-4 | 2305+00.84 | 2308+64.32 | RT | | | 352 | | | | | | |
| P.62 | F-7 | 2305+00.84 | 2305+09.61 | RT | | | | | | 10 | | | |
| P.62 | F-8 | 2308+56.65 | 2308+64.32 | RT | | | | | | 10 | | | |
| TOTALS | | | | | 1,262 | 1 | 4,001 | 1,229 | 201 | 80 | 1,012 | 955 | 9,090 |

SUBSUMMARY

FRA-161-15.80 NOISE ABATEMENT

MODEL: GS002 PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 2:41:19 PM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\14372\0400_CAD\400-Engineering\Roadway\Sheets\117607_GS002.dgn

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 825-4900
www.arcadis.com

DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.27 TOTAL P.297

| SHEET NO. | 203 EXCAVATION CY | 203 EMBANKMENT CY | 203 ROADWAY, MISC.: TEMPORARY OVER-STEEPENED FILL CY |
|---|---|---|---|
| **WALL 3 / 81" SSB 3** | | | |
| P.63 | | | |
| P.64 | | | |
| P.65 | | | |
| P.66 | | | |
| P.67 | | | |
| P.68 | | | |
| P.69 | | | |
| P.70 | 20 | 6 | |
| P.71 | 16 | 14 | |
| P.72 | 29 | 14 | |
| P.73 | 22 | 8 | |
| P.74 | 14 | 13 | |
| P.75 | 24 | 22 | |
| SUBTOTAL | 125 | 77 | 0 |

| SHEET NO. | 203 EXCAVATION CY | 203 EMBANKMENT CY | 203 ROADWAY, MISC.: TEMPORARY OVER-STEEPENED FILL CY |
|---|---|---|---|
| **WALL 6 / 81" SSB 6** | | | |
| P.76 | 2 | | |
| P.77 | 44 | 4 | |
| P.78 | 44 | 2 | |
| P.79 | 44 | 2 | |
| P.80 | 44 | 2 | |
| P.81 | 44 | 1 | |
| P.82 | 44 | 1 | |
| P.83 | 44 | | |
| P.84 | 44 | 1 | |
| P.85 | 11 | | |
| P.86 | | | |
| P.87 | | | |
| P.88 | | | |
| P.89 | | | |
| P.90 | | | |
| P.91 | | | |
| P.92 | | | |
| P.93 | | | |
| SUBTOTAL | 365 | 13 | 0 |

| SHEET NO. | 203 EXCAVATION CY | 203 EMBANKMENT CY | 203 ROADWAY, MISC.: TEMPORARY OVER-STEEPENED FILL CY |
|---|---|---|---|
| **81" SSB 8 / WALL 8** | | | |
| P.94 | | | |
| P.95 | | | |
| P.96 | | | |
| P.97 | | | |
| P.98 | | | |
| P.99 | | | |
| P.100 | | | |
| P.101 | | | |
| P.102 | | | |
| P.103 | | | |
| P.104 | | | |
| P.105 | | | |
| P.106 | | | |
| P.107 | | | |
| P.108 | | | |
| P.109 | | | |
| P.110 | | | |
| P.111 | | | |
| P.112 | | | |
| P.113 | | | |
| P.114 | | | |
| P.115 | | | |
| P.116 | | | |
| P.117 | | | |
| P.118 | | | |
| P.119 | | | |
| P.120 | | | |
| P.121 | | | |
| P.122 | | | |
| P.123 | | | |
| SUBTOTAL | 200 | 20 | 0 |

| SHEET NO. | 203 EXCAVATION CY | 203 EMBANKMENT CY | 203 ROADWAY, MISC.: TEMPORARY OVER-STEEPENED FILL CY |
|---|---|---|---|
| **WALL 9** | | | |
| P.124 | | | |
| P.125 | | | |
| P.126 | | | |
| P.127 | | | |
| P.128 | | | |
| P.129 | | | |
| P.130 | | | |
| P.131 | | | |
| P.132 | | | |
| P.133 | | | |
| P.134 | | | |
| P.135 | | | |
| P.136 | | | |
| P.137 | | | |
| P.138 | | | |
| P.139 | | | |
| SUBTOTAL | 0 | 0 | 0 |

| SHEET NO. | 203 EXCAVATION CY | 203 EMBANKMENT CY | 203 ROADWAY, MISC.: TEMPORARY OVER-STEEPENED FILL CY |
|---|---|---|---|
| **81" SSB 10** | | | |
| P.140 | | | |
| P.141 | 44 | 2 | |
| P.142 | 68 | 2 | |
| P.143 | 72 | | |
| P.144 | 72 | | |
| P.145 | 46 | | |
| P.146 | 45 | 1 | |
| P.147 | 42 | 2 | |
| P.148 | 41 | 2 | |
| P.149 | 40 | 2 | |
| P.150 | 20 | 1 | |
| P.151 | 39 | 4 | |
| P.152 | 39 | 3 | |
| P.153 | 48 | 2 | |
| P.154 | 58 | 3 | |
| P.155 | 71 | 4 | |
| P.156 | 33 | 1 | |
| SUBTOTAL | 778 | 29 | 0 |

| SHEET NO. | 203 EXCAVATION CY | 203 EMBANKMENT CY | 203 ROADWAY, MISC.: TEMPORARY OVER-STEEPENED FILL CY |
|---|---|---|---|
| **WALL 11** | | | |
| P.140 | | | |
| P.141 | | | |
| P.142 | | | |
| P.143 | | | |
| P.144 | | | |
| P.145 | | | |
| P.146 | | | |
| P.147 | | | |
| P.148 | | | |
| P.149 | | | |
| P.150 | | | |
| P.151 | | | |
| P.152 | | | |
| P.153 | | | |
| P.154 | | | |
| P.155 | | | |
| P.156 | | | |
| SUBTOTAL | 0 | 0 | 0 |

| SHEET NO. | 203 EXCAVATION CY | 203 EMBANKMENT CY | 203 ROADWAY, MISC.: TEMPORARY OVER-STEEPENED FILL CY |
|---|---|---|---|
| **81" SSB 12 / WALL 12** | | | |
| P.174 | 72 | 11 | |
| P.175 | 81 | 9 | |
| P.176 | 62 | 4 | |
| P.177 | 44 | 5 | |
| P.178 | 88 | 74 | 14 |
| P.179 | 180 | 200 | 27 |
| P.180 | 160 | 180 | 22 |
| P.181 | 74 | 62 | 4 |
| P.182 | | | |
| P.183 | | | |
| P.184 | | | |
| P.185 | | | |
| P.186 | | | |
| P.187 | | | |
| P.188 | | | |
| P.189 | | | |
| SUBTOTAL | 761 | 545 | 67 |

| SHEET NO. | 203 EXCAVATION CY | 203 EMBANKMENT CY | 203 ROADWAY, MISC.: TEMPORARY OVER-STEEPENED FILL CY |
|---|---|---|---|
| **WALL 15** | | | |
| P.190 | | | |
| P.191 | | | |
| P.192 | | | |
| P.193 | | | |
| P.194 | | | |
| P.195 | | | |
| P.196 | | | |
| P.197 | | | |
| P.198 | | | |
| P.199 | | | |
| P.200 | | | |
| P.201 | | | |
| P.202 | | | |
| P.203 | | | |
| P.204 | | | |
| P.205 | | | |
| P.206 | | | |
| P.207 | | | |
| P.208 | | | |
| P.209 | | | |
| P.210 | | | |
| P.211 | | | |
| P.212 | | | |
| P.213 | | | |
| SUBTOTAL | 0 | 0 | 0 |
| **TOTAL** (CADD GENERATED VALUES) | 2,229 | 684 | 67 |
| CADD VALUE REDUCTION PER THE VOLUME OF ITEM 202 - PAVEMENT REMOVED | 160 | 0 | 0 |
| TOTAL CARRIED TO GENERAL SUMMARY | 2,069 | 684 | 67 |

FRA-161-15.80 NOISE ABATEMENT

SUBSUMMARY

MODEL: GS002 PAPERSIZE: 34x22 (in.) DATE: 9/20/2024 TIME: 10:27:15 AM USER: watt4128
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GS003.dgn

DESIGN AGENCY
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8101 NORTH HIGH ST SUITE 100
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(614) 818-4900
www.arcadis.com

DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.28 TOTAL P.297

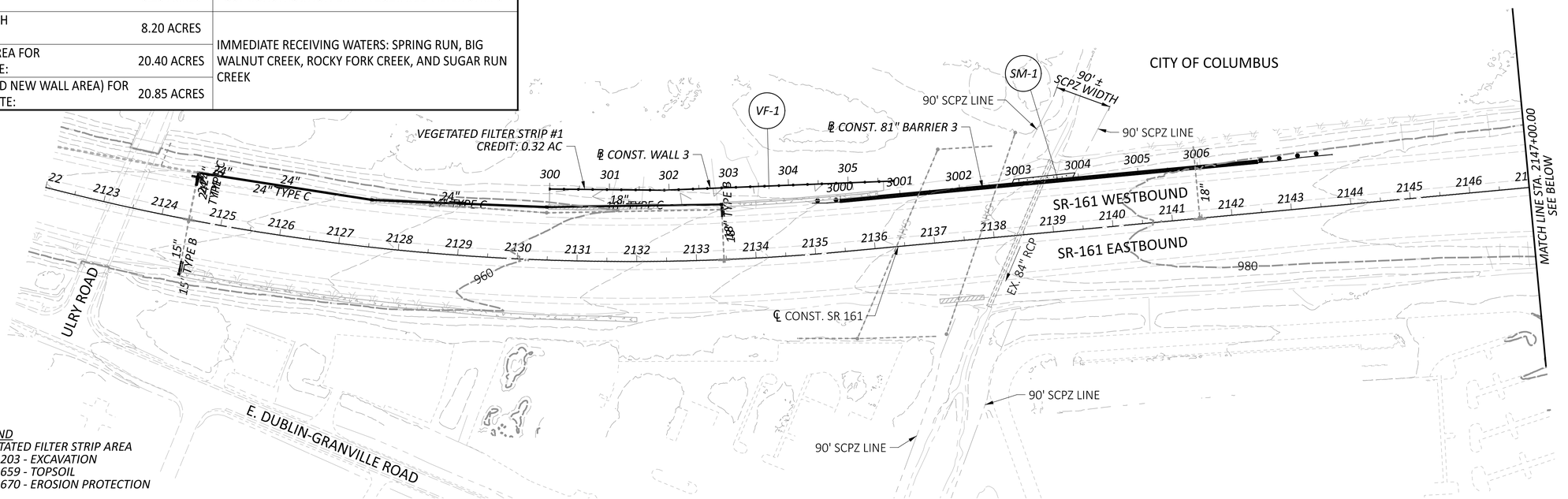
| PROJECT DATA | | | |
|---|---|---|---|
| TOTAL AREA (RIGHT-OF-WAY): | 42.77 ACRES | RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE: | 0.56 |
| PROJECT EARTH DISTURBED AREA: | 7.95 ACRES | RUNOFF COEFFICIENT FOR POST-CONSTRUCTION SITE: | 0.58 |
| ESTIMATED CONTRACTOR EARTH DISTURBED AREA: | 0.25 ACRES | POST CONSTRUCTION BMP: VEGETATED FILTER STRIPS | |
| NOTICE OF INTENT EARTH DISTURBED AREA: | 8.20 ACRES | IMMEDIATE RECEIVING WATERS: SPRING RUN, BIG WALNUT CREEK, ROCKY FORK CREEK, AND SUGAR RUN CREEK | |
| IMPERVIOUS (PAVED) AREA FOR PRE-CONSTRUCTION SITE: | 20.40 ACRES | | |
| IMPERVIOUS (PAVED AND NEW WALL AREA) FOR POST-CONSTRUCTION SITE: | 20.85 ACRES | | |

**USGS MAPS:**
NORTHEAST COLUMBUS, OH TNM GEOSPATIAL
NEW ALBANY, OH TNM GEOSPATIAL
LATITUDE: N 40°05'29"
LONGITUDE: W 82°49'56"
*LATITUDE AND LONGITUDE TO APPROX. CENTER OF PROJECT

## *PROJECT DESCRIPTION*

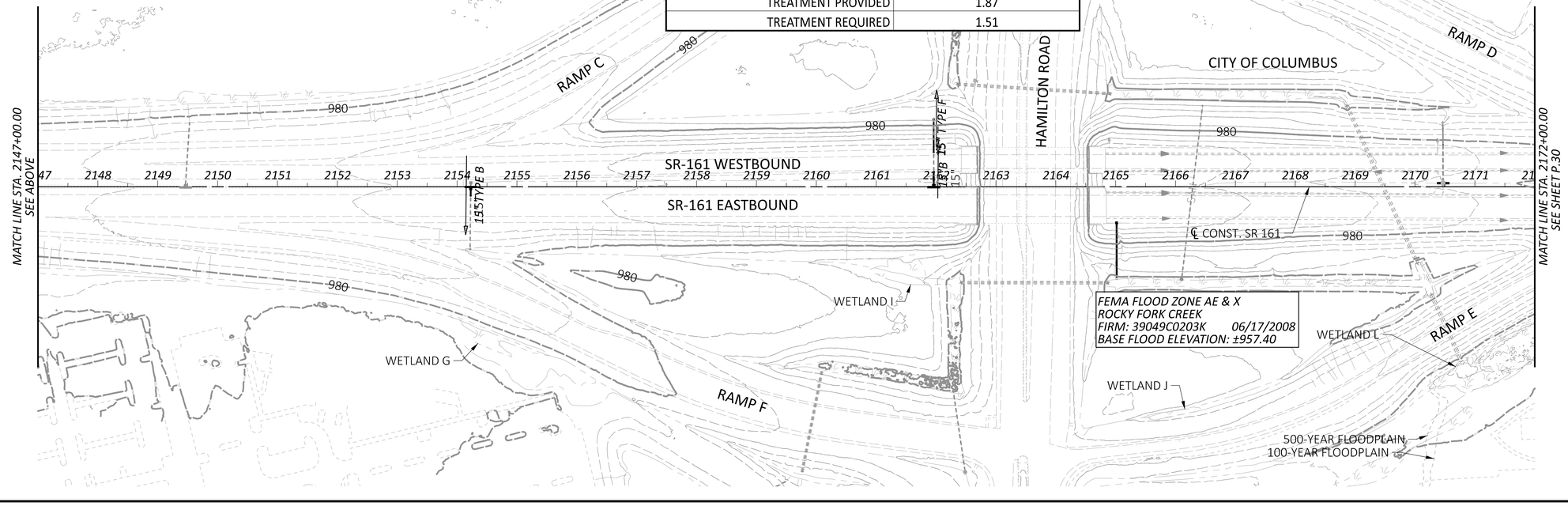
*INSTALLATION OF 8,406 FEET OF NOISE WALL AND 4,836 FEET OF 81" SINGLE SLOPE BARRIER AT VARIOUS LOCATIONS ALONG STATE ROUTE 161 BETWEEN ULRY ROAD AND US 62. THIS PROJECT SUPPLEMENTS THE FRA-161-15.80 WIDENING PROJECT.*

HORIZONTAL SCALE IN FEET
0 50 100 200




*LEGEND*
*VEGETATED FILTER STRIP AREA*
*ITEM 203 - EXCAVATION*
*ITEM 659 - TOPSOIL*
*ITEM 670 - EROSION PROTECTION*

| Maintenance Ownership | BMP TYPE | NORTHING | | EASTING | | BMP WIDTH | EDA TREATMENT CREDIT |
|---|---|---|---|---|---|---|---|
| | | BEGIN | END | BEGIN | END | | |
| CITY OF COLUMBUS | VEGETATED FILTER STRIP 1 | 612181.7892 | 612385.2908 | 229916.4923 | 230437.1461 | 15' MIN. | 0.32 |
| CITY OF COLUMBUS | VEGETATED FILTER STRIP 2 | 614971.5085 | 615112.1153 | 235908.4312 | 236204.7643 | 24' MIN. | 0.19 |
| CITY OF COLUMBUS | VEGETATED FILTER STRIP 3 | 615276.6007 | 615588.5647 | 237036.7344 | 237726.4929 | 23' MIN. | 0.70 |
| CITY OF COLUMBUS | VEGETATED FILTER STRIP 4 | 615909.0762 | 237882.0507 | 616316.8878 | 239006.7099 | 21' MIN. | 0.66 |
| | | | | | | TREATMENT PROVIDED | 1.87 |
| | | | | | | TREATMENT REQUIRED | 1.51 |




PROJECT SITE PLAN
STA. 2122+00.00 TO STA. 2172+00.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: CLP_SR161 - Plan 1 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-08-13 TIME: 3:42:13 PM USER: danny.tran
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Drainage\Sheets\117607_DE001.dgn



DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4500
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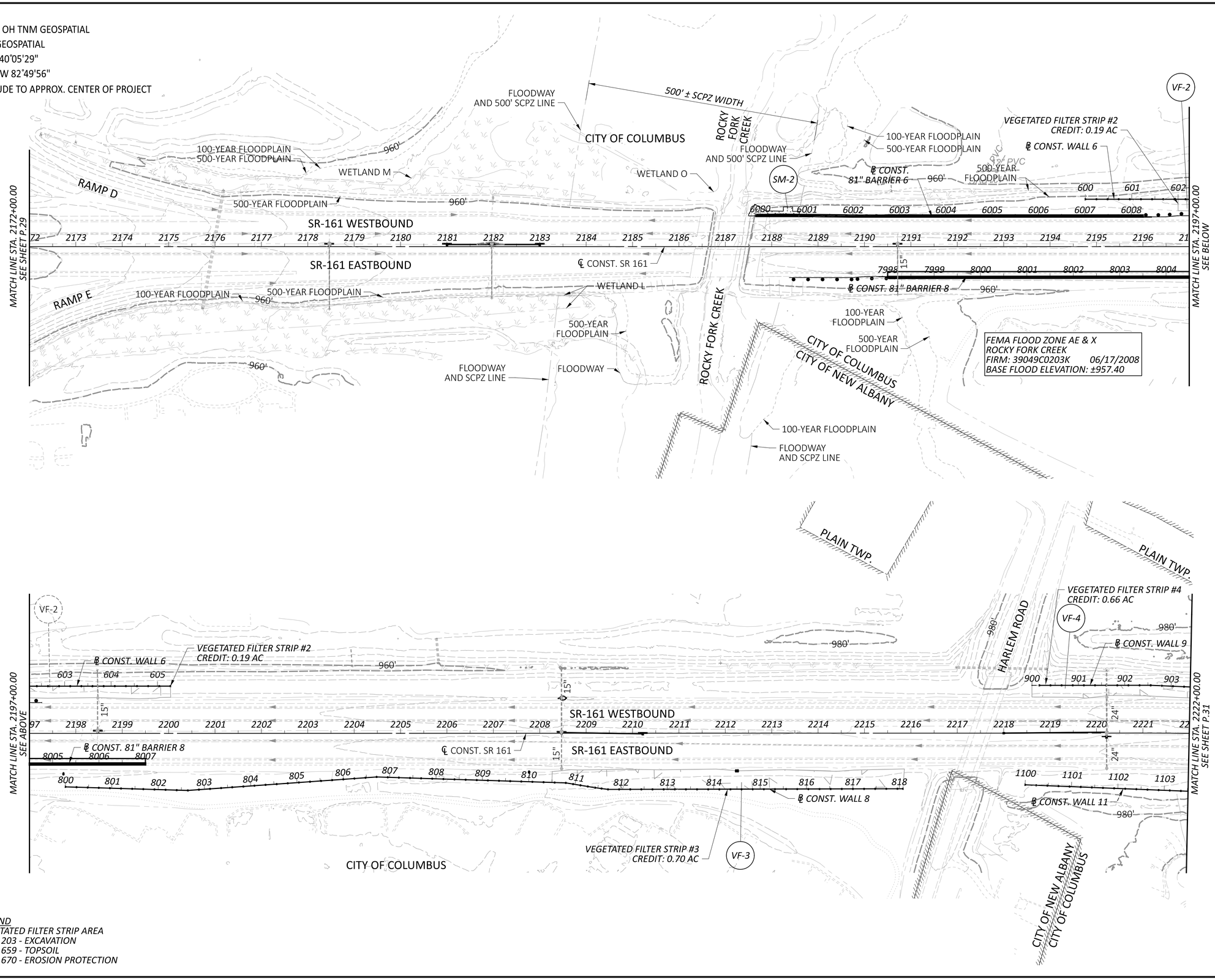
DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.29 TOTAL P.297

**USGS MAPS:**
NORTHEAST COLUMBUS, OH TNM GEOSPATIAL
NEW ALBANY, OH TNM GEOSPATIAL
LATITUDE: N 40°05'29"
LONGITUDE: W 82°49'56"
*LATITUDE AND LONGITUDE TO APPROX. CENTER OF PROJECT




*LEGEND*
*VEGETATED FILTER STRIP AREA*
*ITEM 203 - EXCAVATION*
*ITEM 659 - TOPSOIL*
*ITEM 670 - EROSION PROTECTION*

HORIZONTAL SCALE IN FEET
0 50 100 200

PROJECT SITE PLAN
STA. 2172+00.00 TO STA. 2222+00.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: CLP_SR161 - Plan 3 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-08-13 TIME: 3:45:06 PM USER: danny.tran
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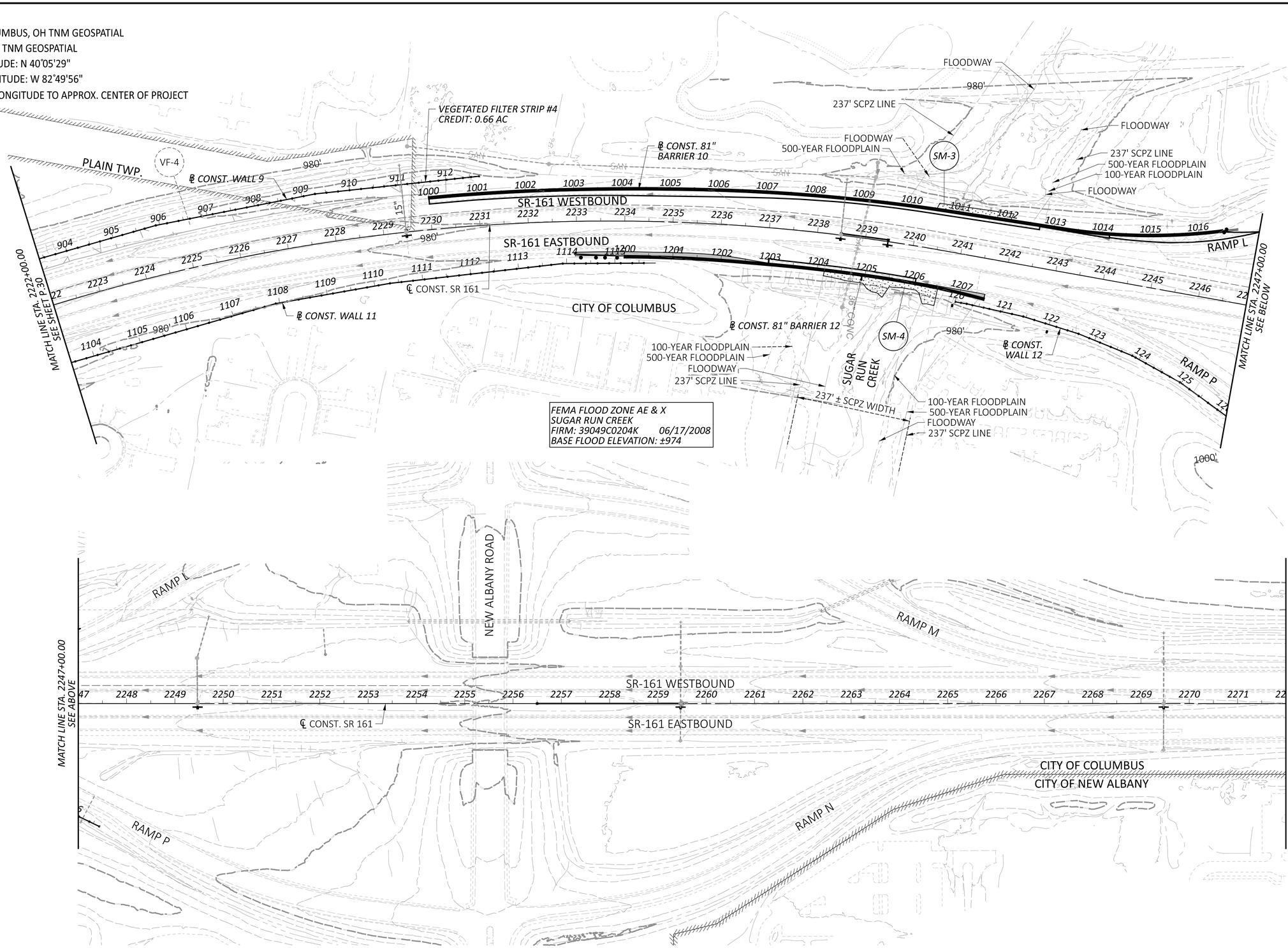
DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.30 TOTAL P.297

**USGS MAPS:**
NORTHEAST COLUMBUS, OH TNM GEOSPATIAL
NEW ALBANY, OH TNM GEOSPATIAL
LATITUDE: N 40°05'29"
LONGITUDE: W 82°49'56"
*LATITUDE AND LONGITUDE TO APPROX. CENTER OF PROJECT




HORIZONTAL SCALE IN FEET
0 50 100 200

# PROJECT SITE PLAN
## STA. 2222+00.00 TO STA. 2272+00.00

*LEGEND*
*VEGETATED FILTER STRIP AREA*
*ITEM 203 - EXCAVATION*
*ITEM 659 - TOPSOIL*
*ITEM 670 - EROSION PROTECTION*

FRA-161-15.80 NOISE ABATEMENT


MODEL: CLP_SR161 - Plan 5 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-08-13 TIME: 3:51:49 PM USER: danny.tran
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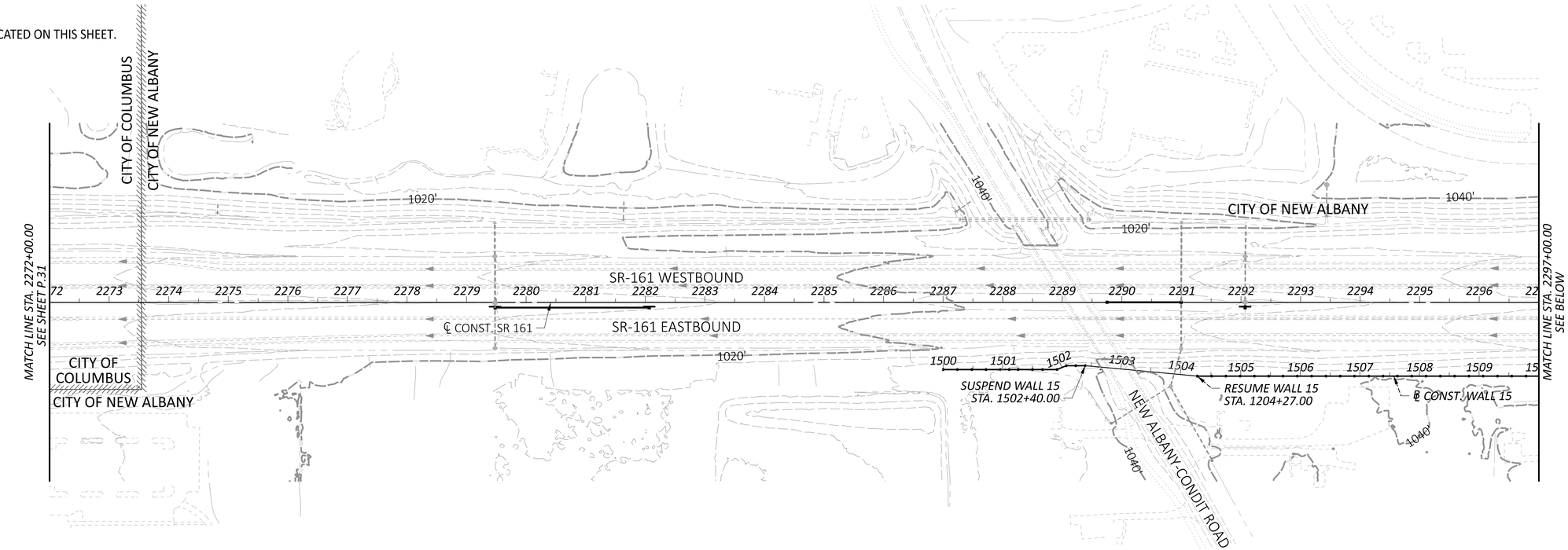
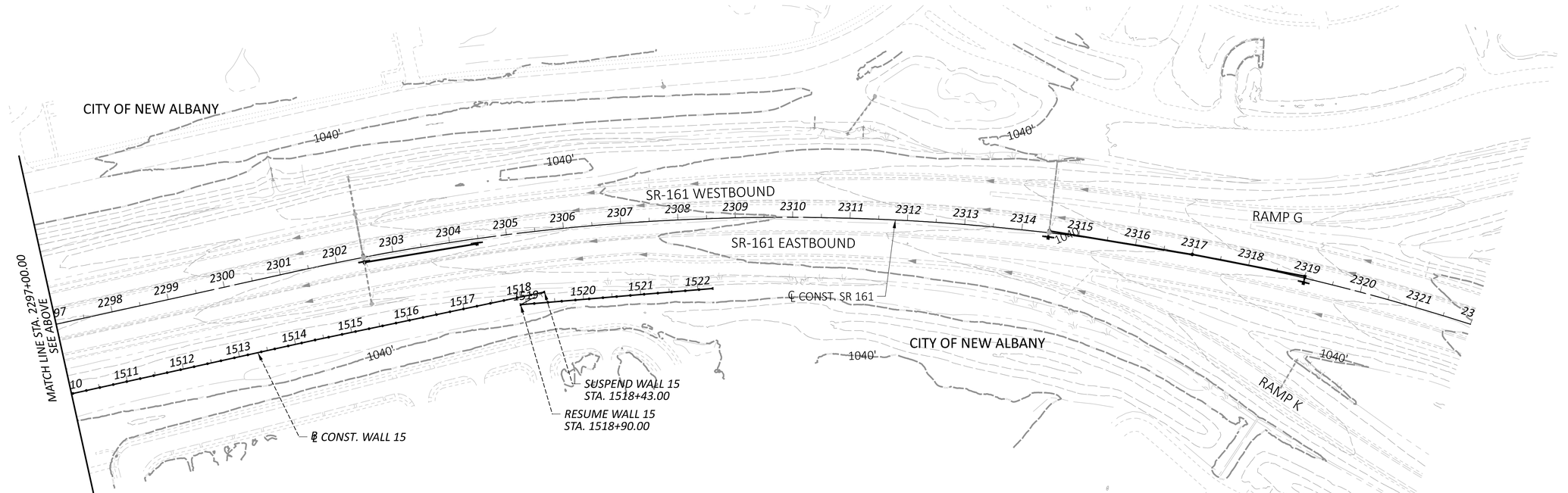
DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
TEL: 614.846.4500
www.arcadis.com


DESIGNER: JMK
REVIEWER: JDH 05-22-24
PROJECT ID: 117607
SHEET: P.31 TOTAL: P.297

**NOTE:**
NO BMPS ARE LOCATED ON THIS SHEET.




**USGS MAPS:**
NORTHEAST COLUMBUS, OH TNM GEOSPATIAL
NEW ALBANY, OH TNM GEOSPATIAL
LATITUDE: N 40°05'29"
LONGITUDE: W 82°49'56"
*LATITUDE AND LONGITUDE TO APPROX. CENTER OF PROJECT

HORIZONTAL SCALE IN FEET
0 50 100 200

# PROJECT SITE PLAN
## STA. 2272+00.00 TO STA. 2322+00.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: CLP_SR161 - Plan 7 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-08-13 TIME: 3:55:16 PM USER: danny.tran
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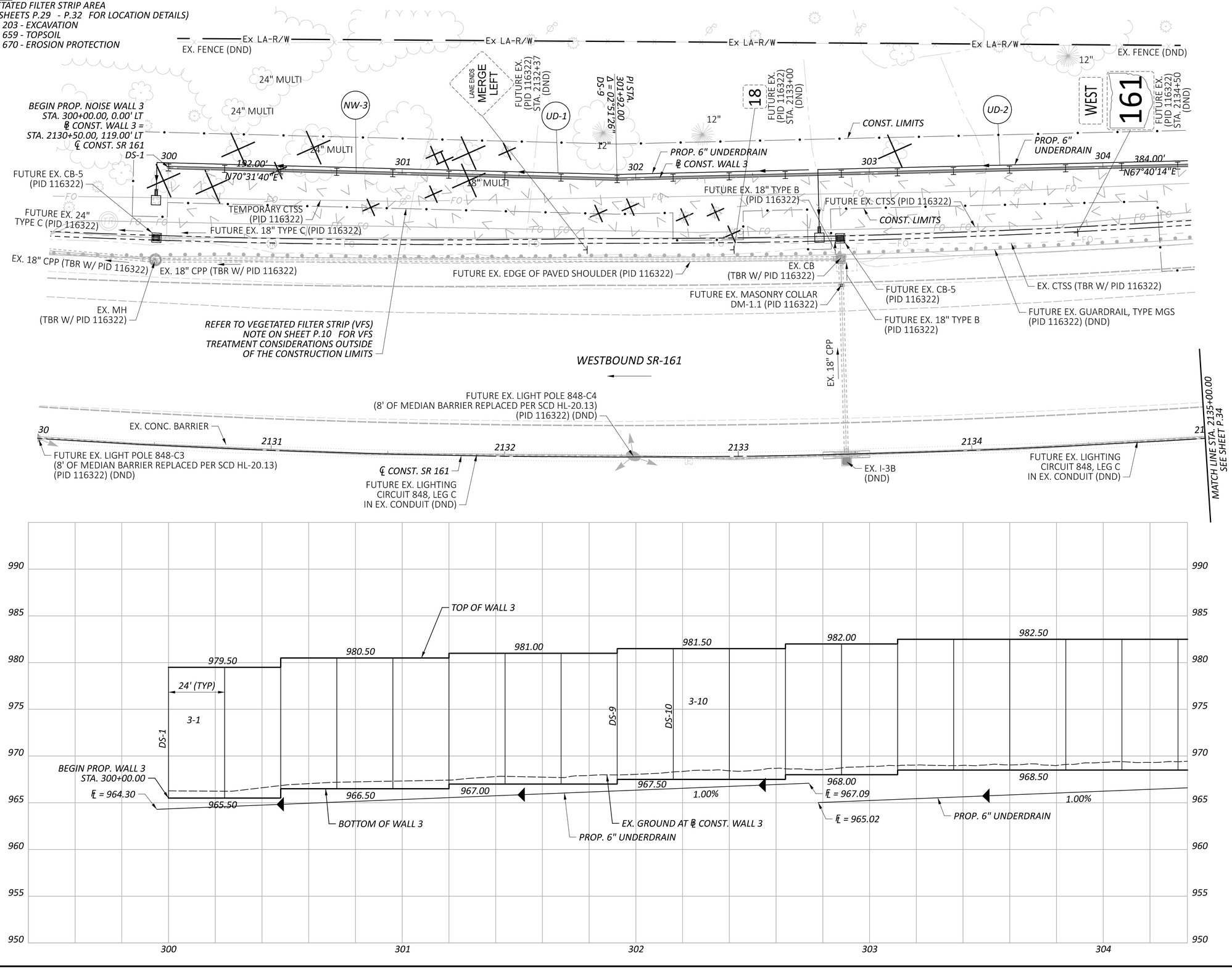
DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.32 TOTAL P.297

LEGEND
VEGETATED FILTER STRIP AREA
(SEE SHEETS P.29 - P.32 FOR LOCATION DETAILS)
ITEM 203 - EXCAVATION
ITEM 659 - TOPSOIL
ITEM 670 - EROSION PROTECTION







HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - WALL 3
## STA. 2130+00.00 TO STA. 2135+00.00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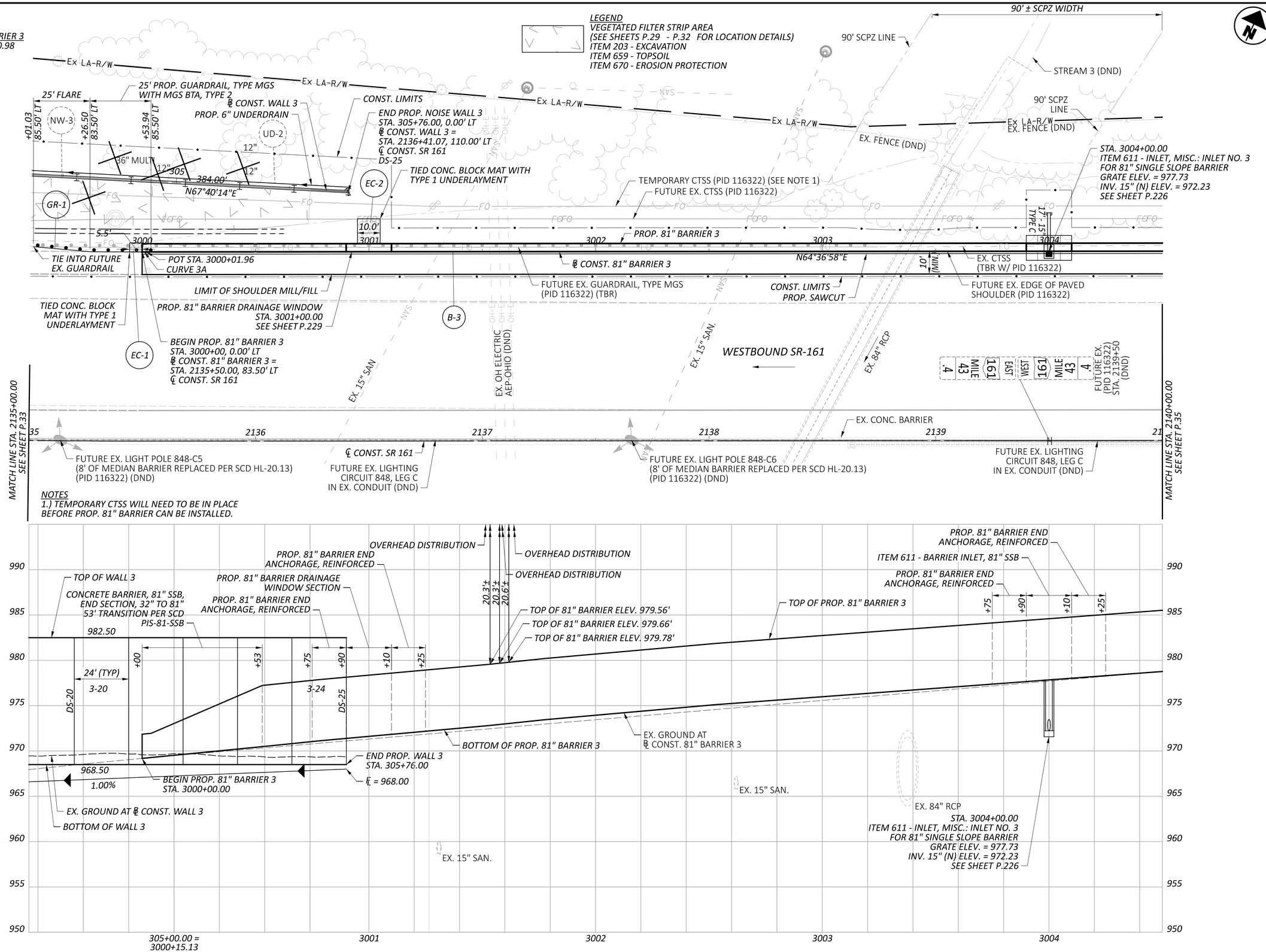
DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.33 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: Wall 3 - Plan 2 PAPERSIZE: 34x22 (in.) DATE: 2024-05-23 TIME: 2:10:47 PM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP301.dgn

3A *CURVE DATA*
*℄ CONST. 81" BARRIER 3*
*P.I. = STA. 3000+00.98*
*Δ = 00°01'46" LT*
*Dc = 01°29'57"*
*R = 3,822.15'*
*T = 0.98'*
*L = 1.96'*
*E = 0.00'*

*LEGEND*
*VEGETATED FILTER STRIP AREA*
*(SEE SHEETS P.29 - P.32 FOR LOCATION DETAILS)*
*ITEM 203 - EXCAVATION*
*ITEM 659 - TOPSOIL*
*ITEM 670 - EROSION PROTECTION*




*NOTES*
*1.) TEMPORARY CTSS WILL NEED TO BE IN PLACE BEFORE PROP. 81" BARRIER CAN BE INSTALLED.*




HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - WALL 3 / 81" BARRIER 3
# STA. 2135+00.00 TO STA. 2140+00.00


DESIGN AGENCY
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8101 NORTH HIGH ST SUITE 100
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DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.34 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: Wall 3 - Plan 3 PAPERSIZE: 34x22 (in.) DATE: 2024-05-23 TIME: 2:11:32 PM USER: jennifer.kelley
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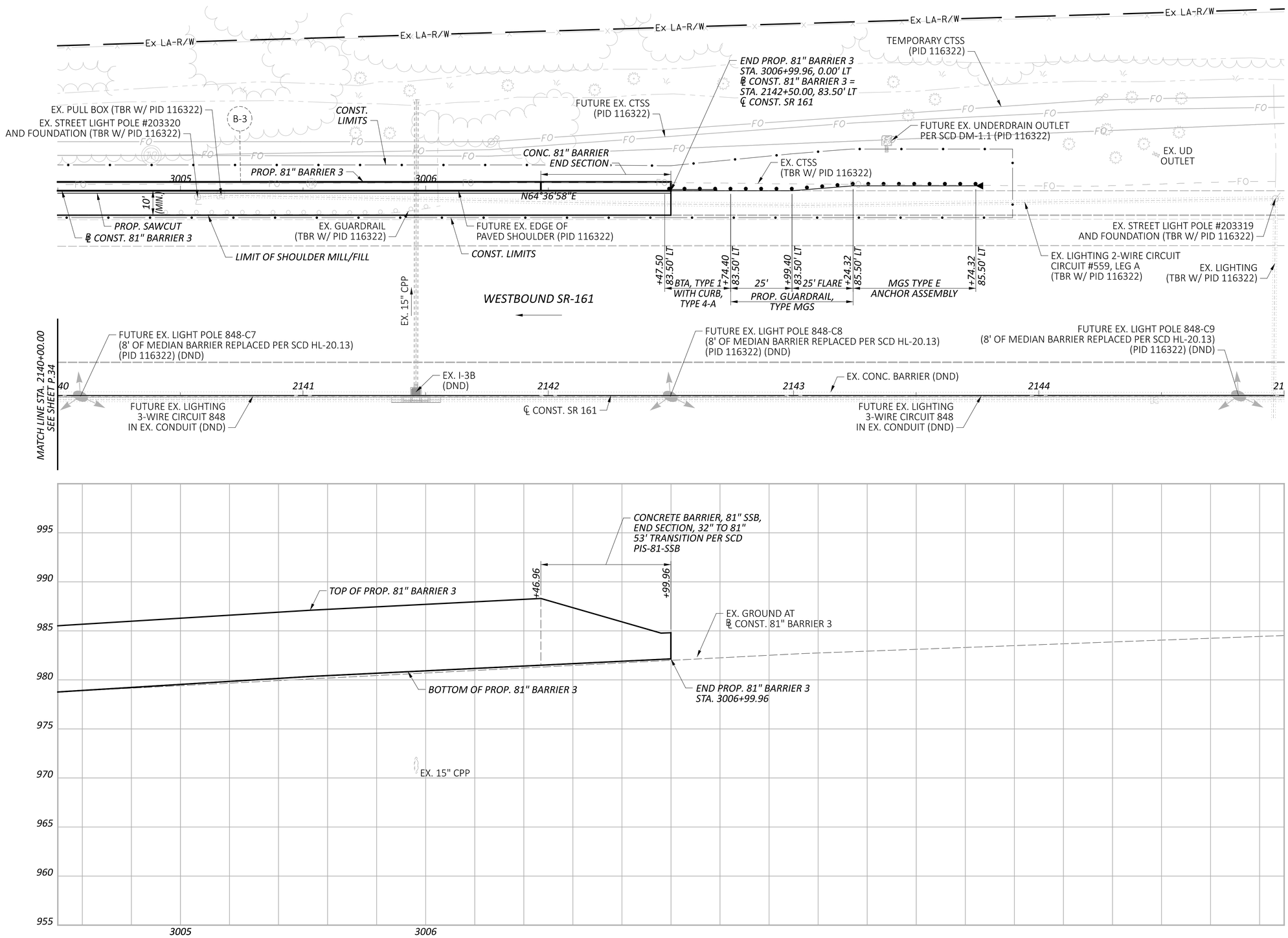


HORIZONTAL
SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - 81" BARRIER 3
# STA. 2140+00.00 TO STA. 2145+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: Wall 3 - Plan 4 PAPERSIZE: 34x22 (in.) DATE: 2024-05-23 TIME: 2:12:07 PM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP303.dgn

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DESIGNER
JMK

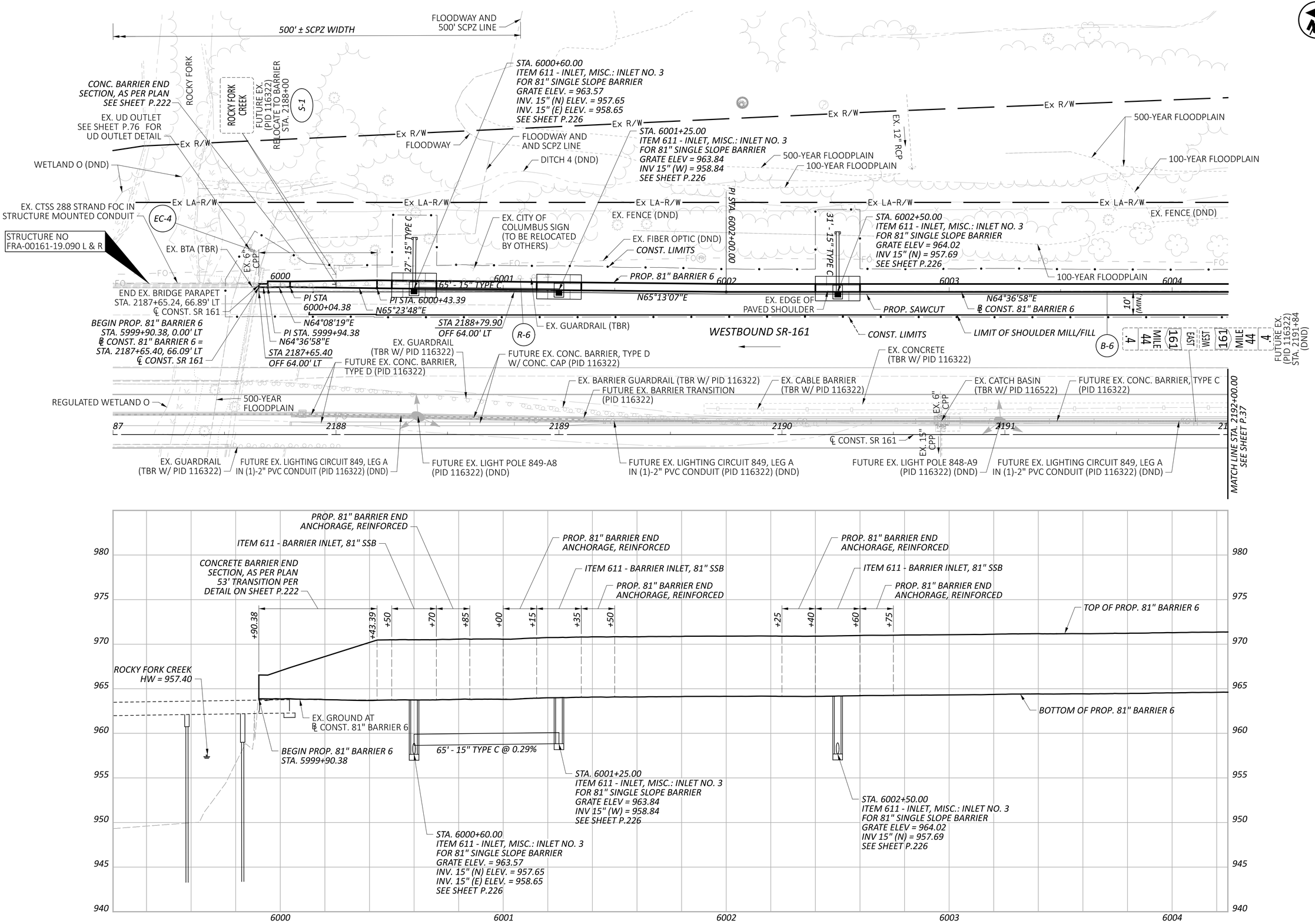
REVIEWER
JDH 05-22-24

PROJECT ID
117607

SHEET P.35 | TOTAL P.297

# PLAN & PROFILE - 81" BARRIER 6
# STA. 2187+00.00 TO STA. 2192+00.00

HORIZONTAL SCALE IN FEET
0 10 20 40





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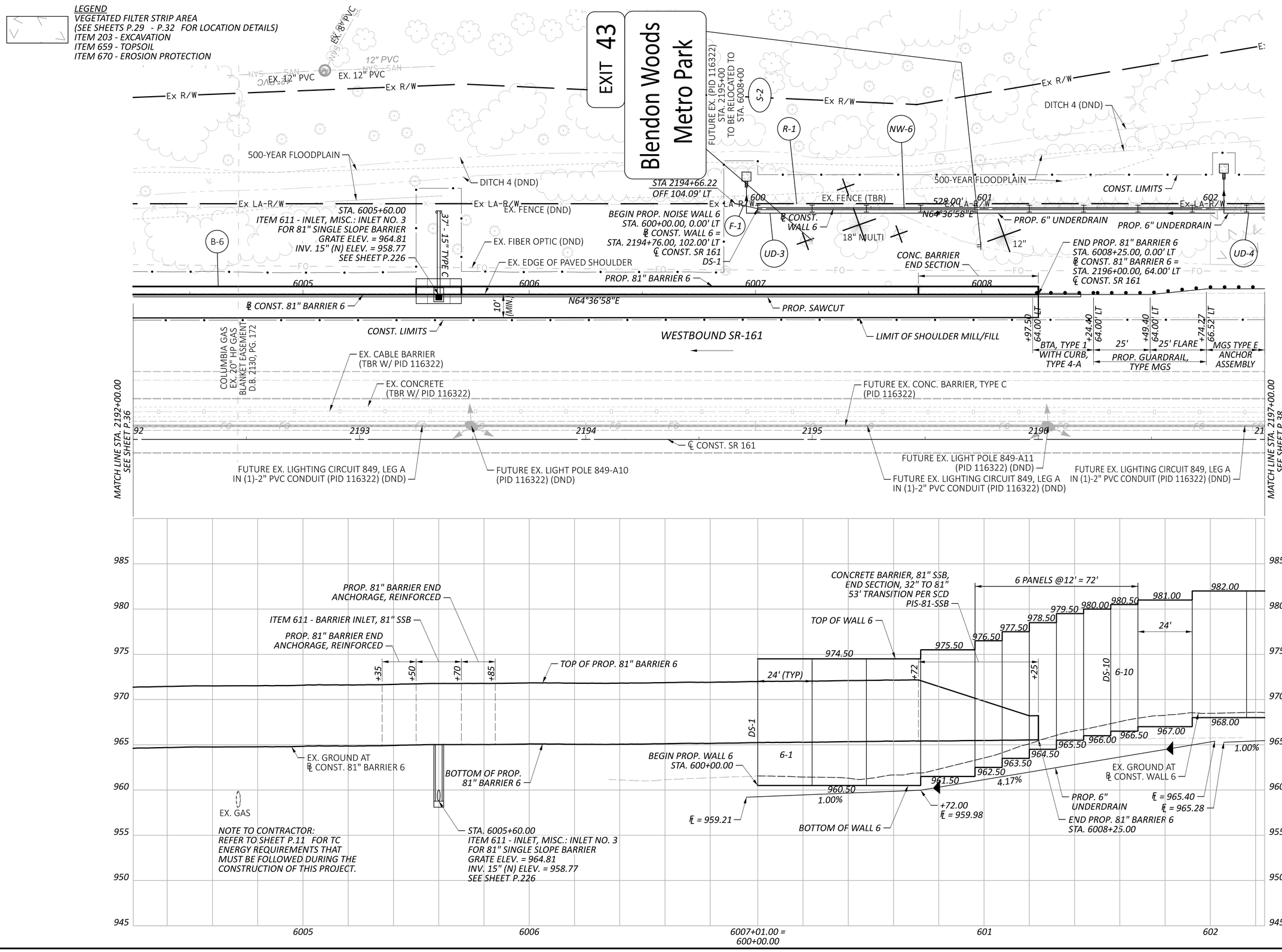
DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.36 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: Wall 6 - Plan 5 PAPERSIZE: 34x22 (in.) DATE: 2024-09-04 TIME: 1:39:32 PM USER: danny.tran
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP601.dgn




FRA-161-15.80 NOISE ABATEMENT

MODEL: Wall 6 - Plan 6 PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 10:19:09 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP602.dgn

HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - 81" BARRIER 6 / WALL 6
## STA. 2192+00.00 TO STA. 2197+00.00


DESIGN AGENCY
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(614) 846-4600
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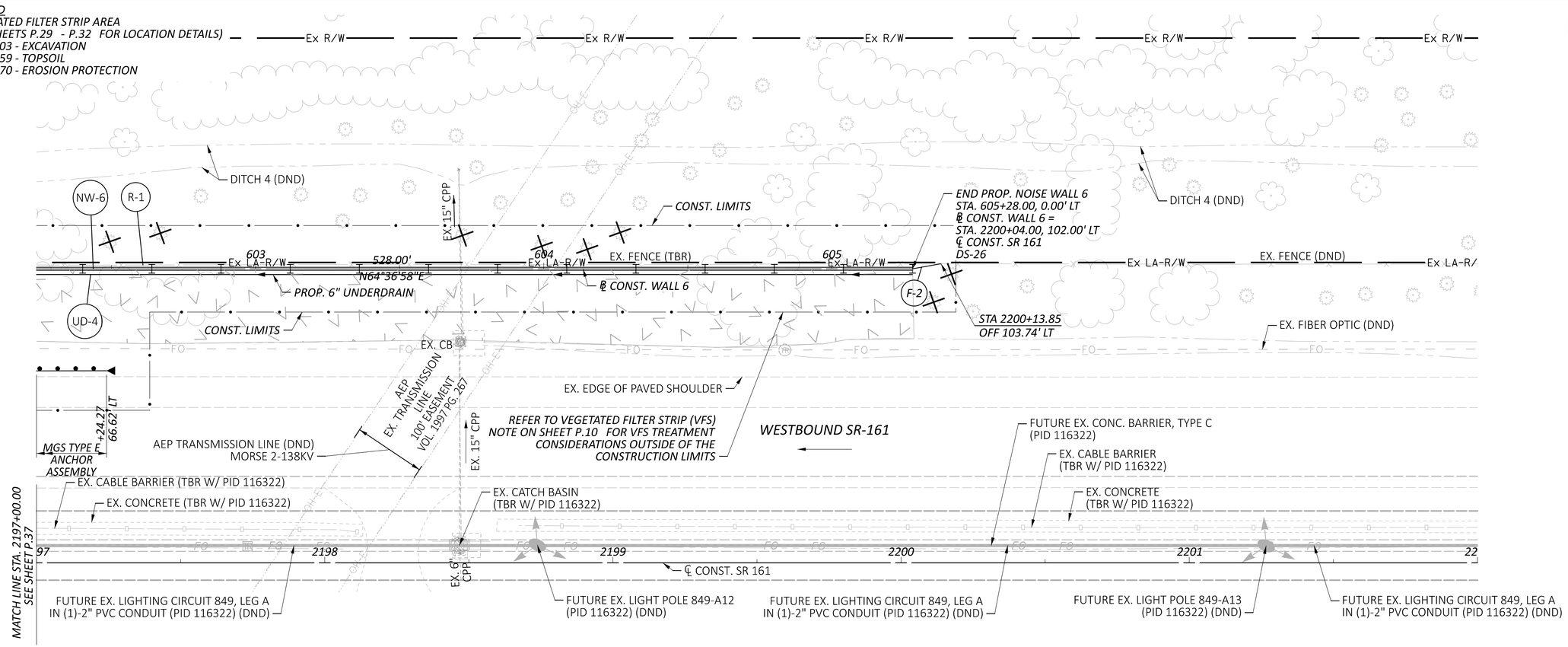
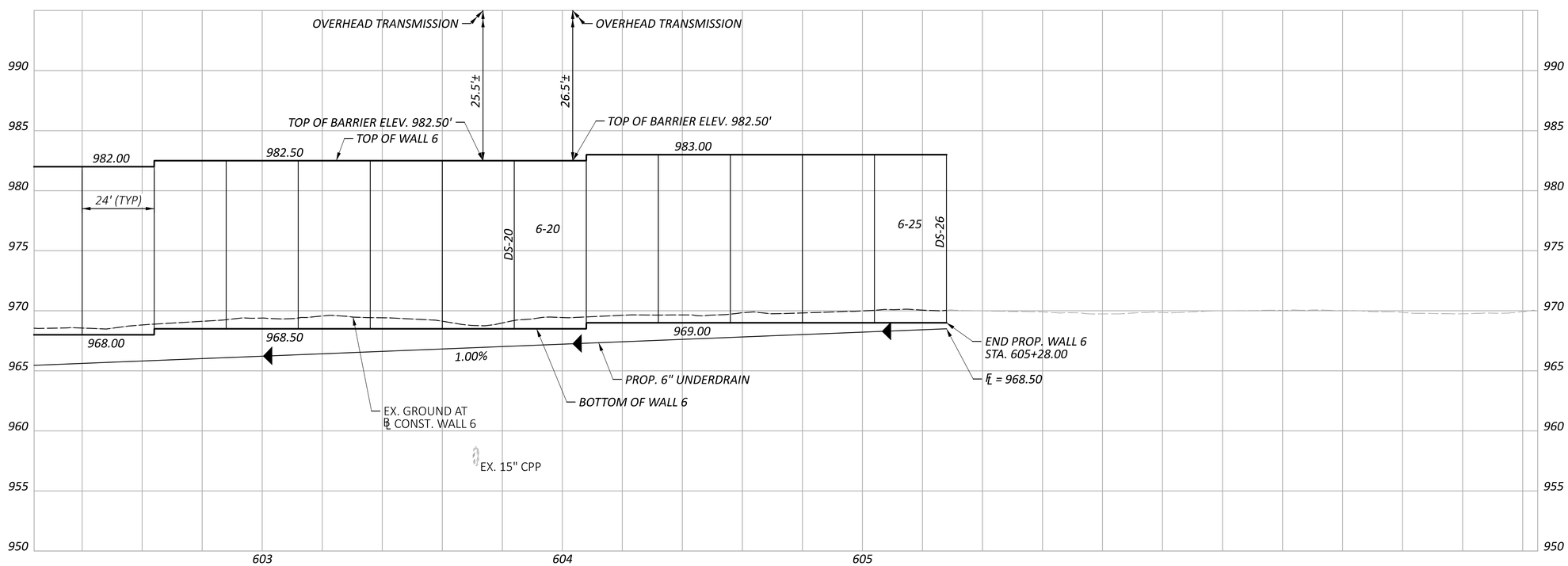
DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.37 TOTAL P.297

LEGEND
VEGETATED FILTER STRIP AREA
(SEE SHEETS P.29 - P.32 FOR LOCATION DETAILS)
ITEM 203 - EXCAVATION
ITEM 659 - TOPSOIL
ITEM 670 - EROSION PROTECTION




HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - WALL 6
## STA. 2197+00.00 TO STA. 2202+00.00

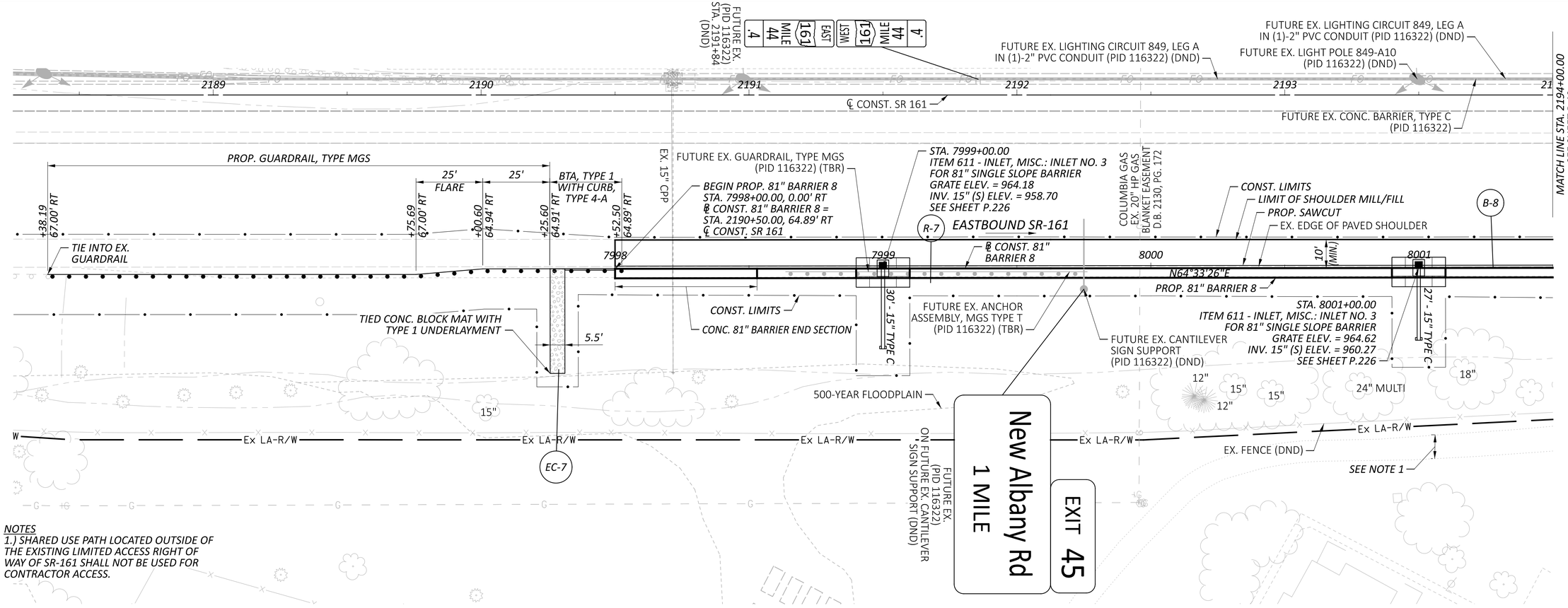
FRA-161-15.80 NOISE ABATEMENT


MODEL: Wall 6 - Plan 28 PAPERSIZE: 34x22 (in.) DATE: 2024-05-23 TIME: 2:13:58 PM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP603.dgn

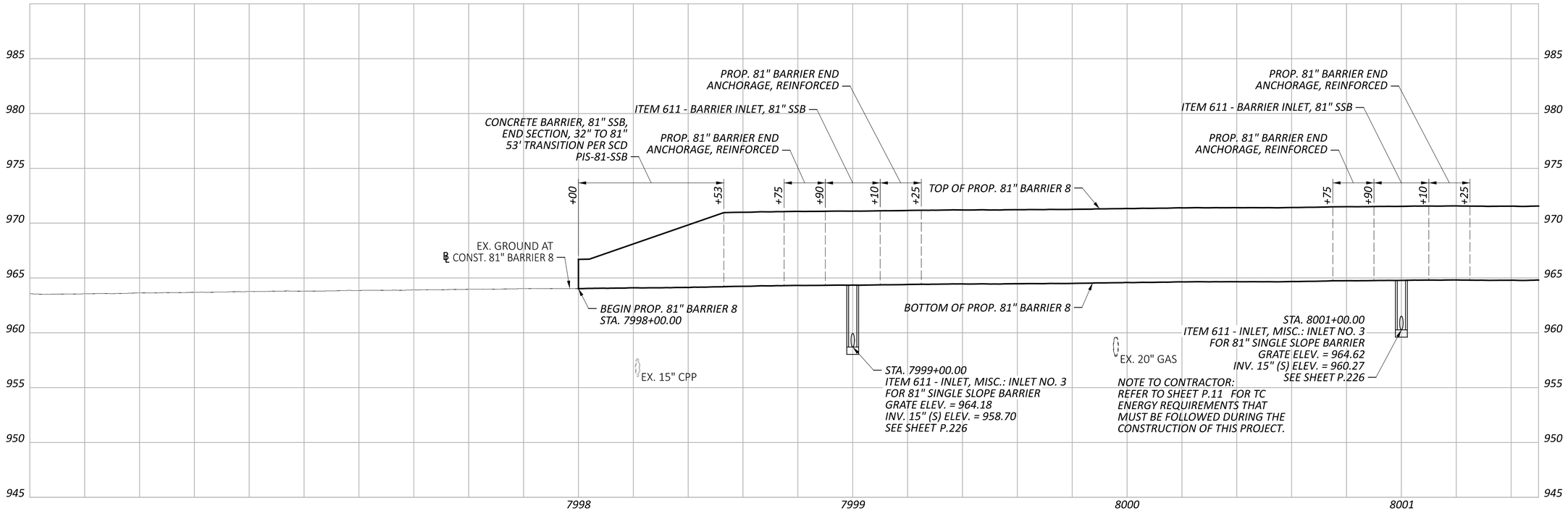


DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4600
www.arcadis.com


DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.38 TOTAL P.297




NOTES
1.) SHARED USE PATH LOCATED OUTSIDE OF THE EXISTING LIMITED ACCESS RIGHT OF WAY OF SR-161 SHALL NOT BE USED FOR CONTRACTOR ACCESS.




HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - 81" BARRIER 8
## STA. 2188+00.00 TO STA. 2194+00.00

DESIGN AGENCY
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8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
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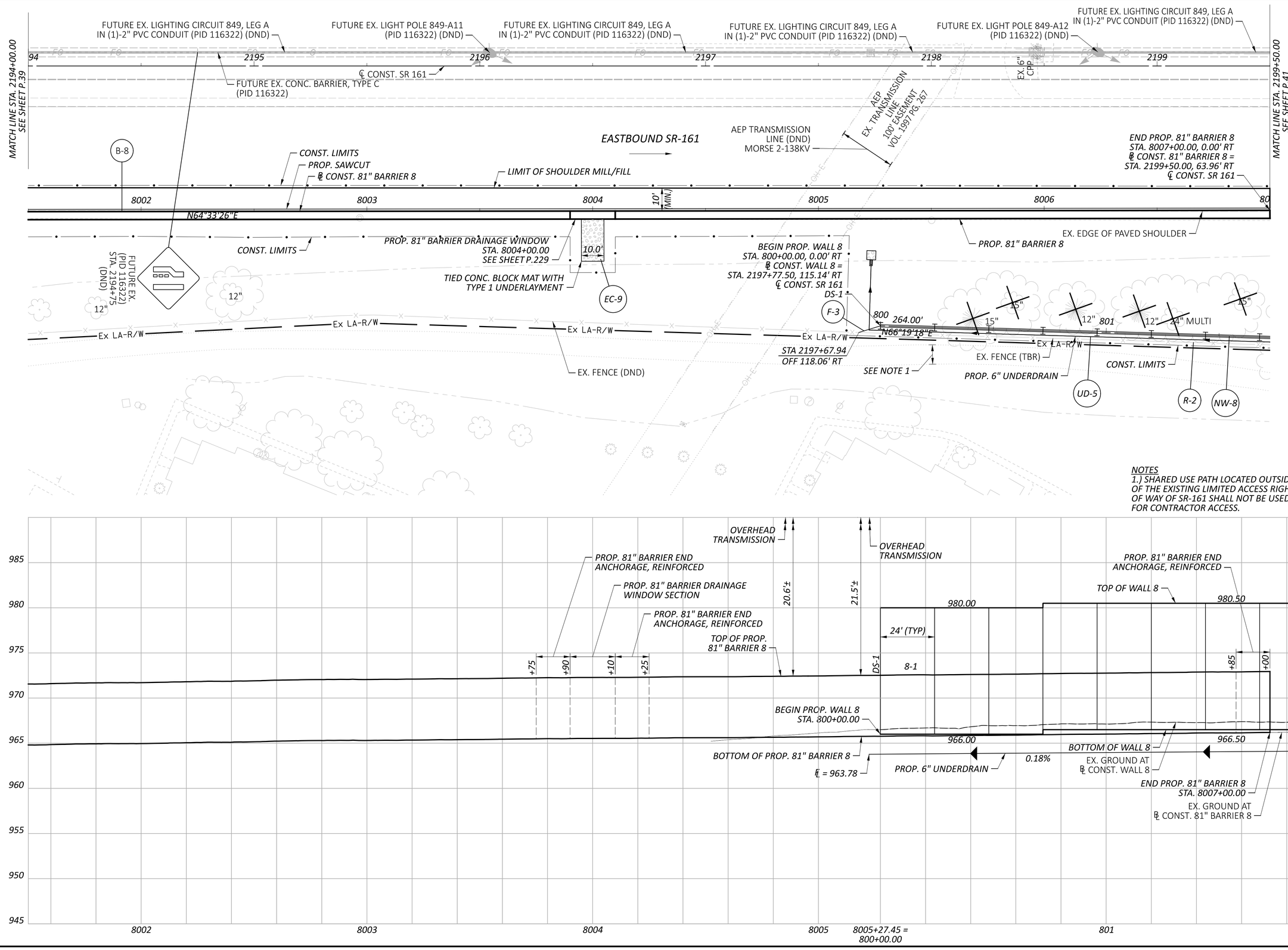
DESIGNER
JMK
REVIEWER
JDH 05-22-24
PROJECT ID
117607
SHEET P.39 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: CLP_SR161 - Plan 7 PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 10:03:36 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP801.dgn




HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - 81" BARRIER 8 / WALL 8
## STA. 2194+00.00 TO STA. 2199+50.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: CLP_SR161 - Plan 8 PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 2:16:28 PM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP802.dgn



DESIGN AGENCY
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8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 318-4000
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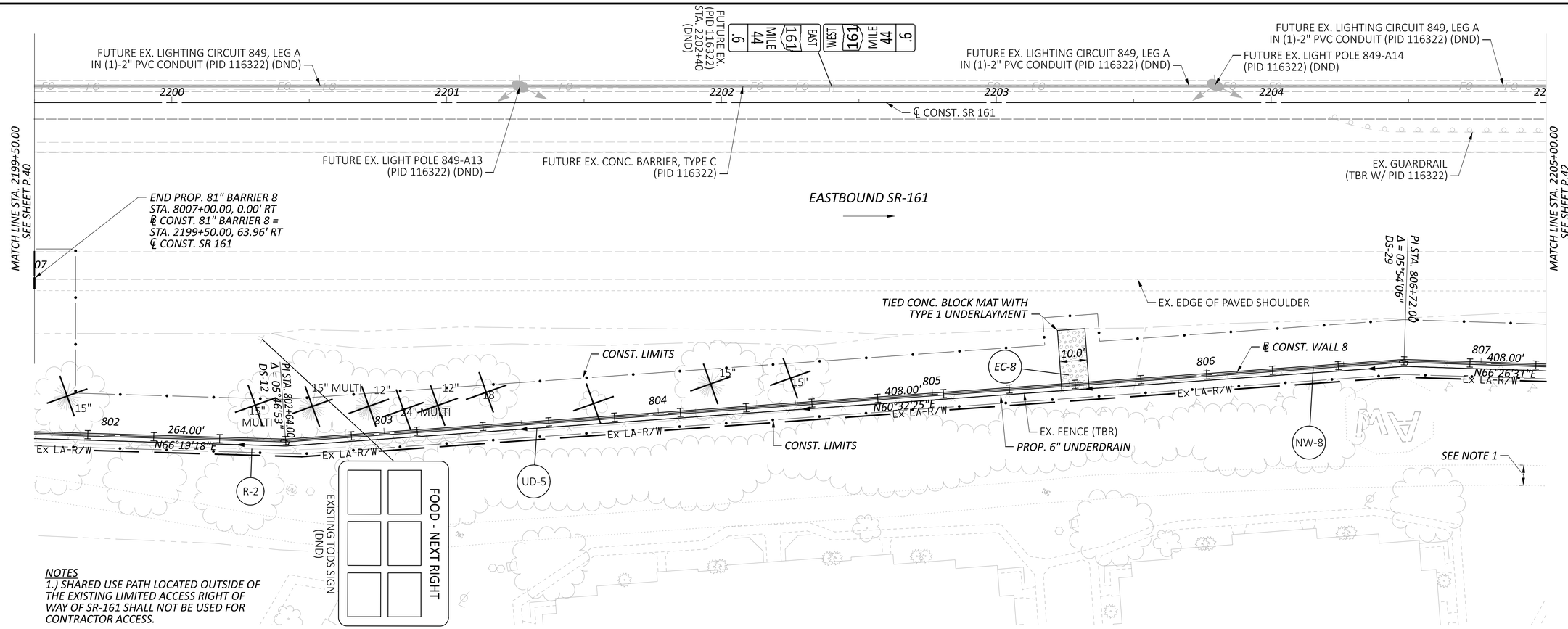
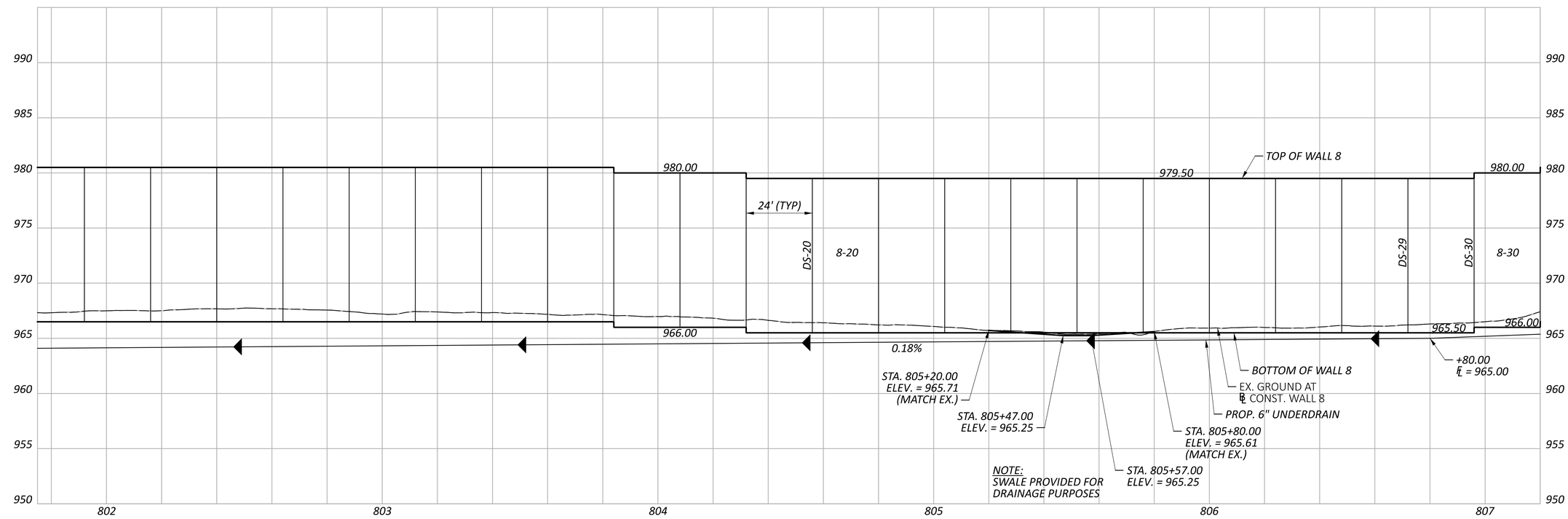
DESIGNER: JMK
REVIEWER: JDH 05-22-24
PROJECT ID: 117607
SHEET P.40 | TOTAL P.297




*NOTES*
*1.) SHARED USE PATH LOCATED OUTSIDE OF THE EXISTING LIMITED ACCESS RIGHT OF WAY OF SR-161 SHALL NOT BE USED FOR CONTRACTOR ACCESS.*




HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - WALL 8
## STA. 2199+50.00 TO STA. 2205+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: CLP_SR161 - Plan 9 PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 10:04:52 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP803.dgn

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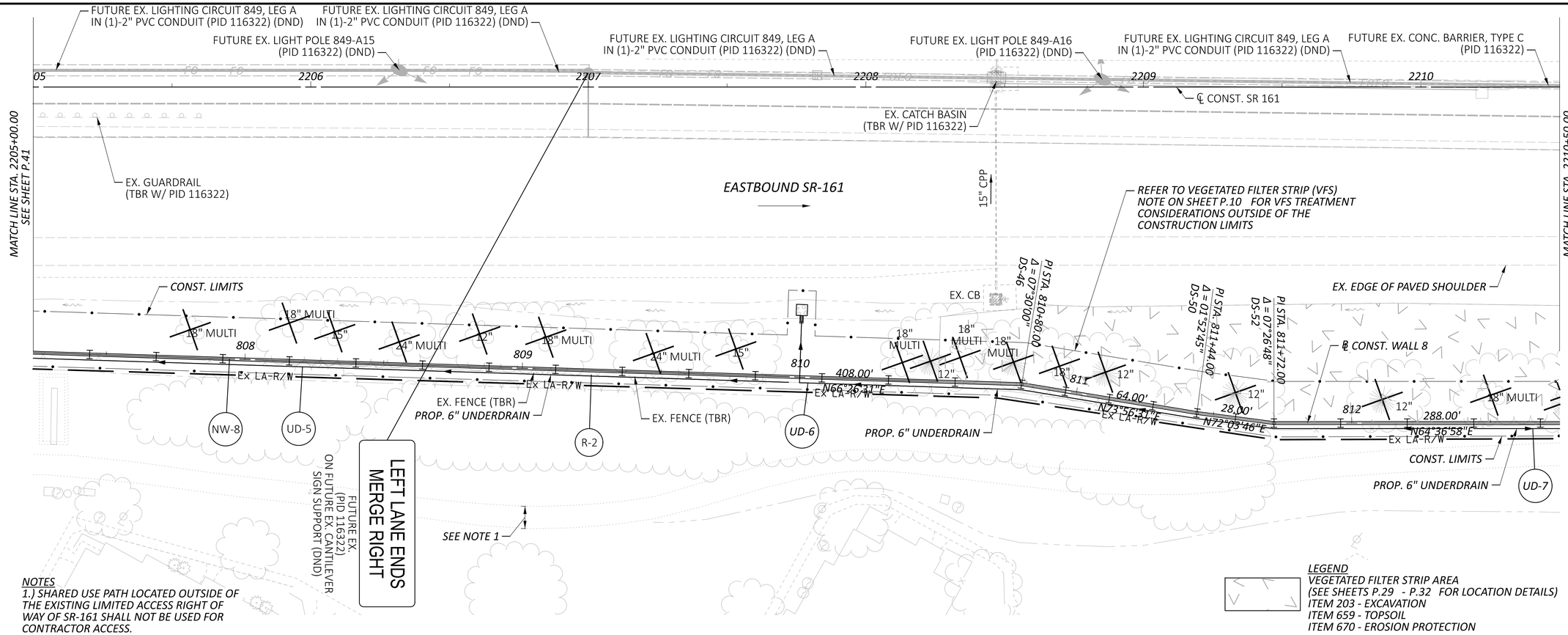
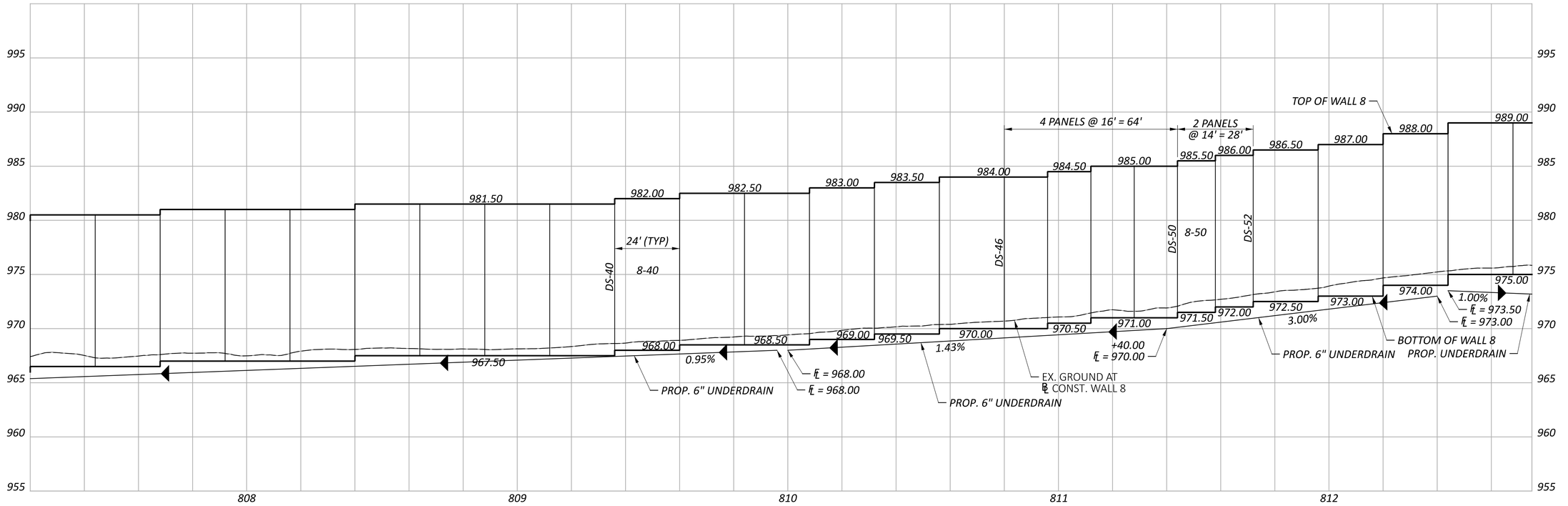
| | |
|---|---|
| DESIGNER | JMK |
| REVIEWER | JDH 05-22-24 |
| PROJECT ID | 117607 |
| SHEET | P.41 |
| TOTAL | P.297 |




*NOTES*
*1.) SHARED USE PATH LOCATED OUTSIDE OF THE EXISTING LIMITED ACCESS RIGHT OF WAY OF SR-161 SHALL NOT BE USED FOR CONTRACTOR ACCESS.*

*LEGEND*
*VEGETATED FILTER STRIP AREA*
*(SEE SHEETS P.29 - P.32 FOR LOCATION DETAILS)*
*ITEM 203 - EXCAVATION*
*ITEM 659 - TOPSOIL*
*ITEM 670 - EROSION PROTECTION*




HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - WALL 8
# STA. 2205+00.00 TO STA. 2210+50.00

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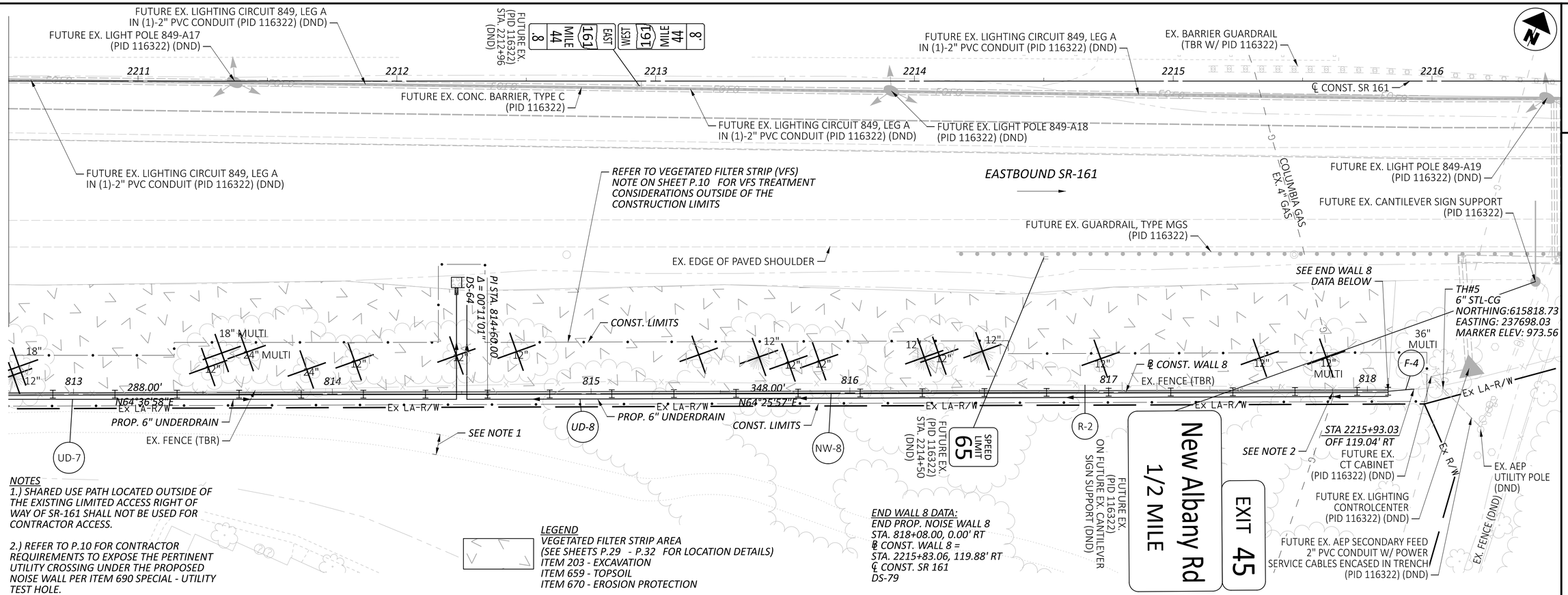
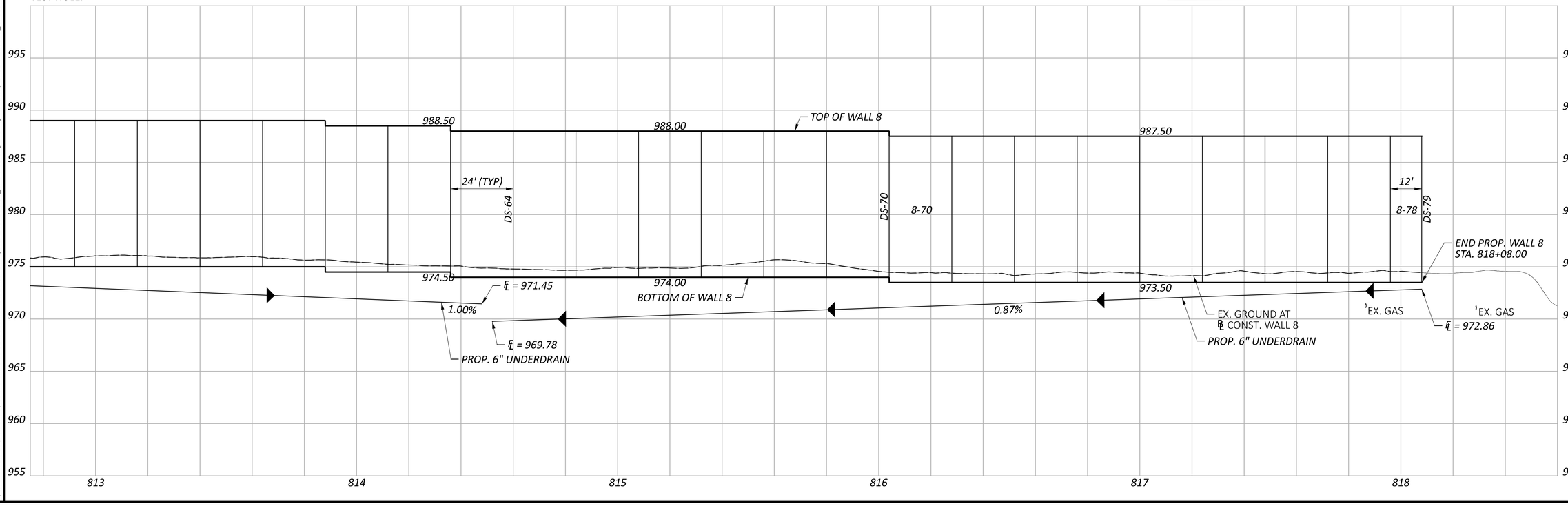
DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.42 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: CLP_SR161 - Plan 10 PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 10:28:11 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP804.dgn




HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - WALL 8
# STA. 2210+50.00 TO STA. 2216+50.00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DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.43 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: CLP_SR161 - Plan 11 PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 10:28:48 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP805.dgn

*NOTES*

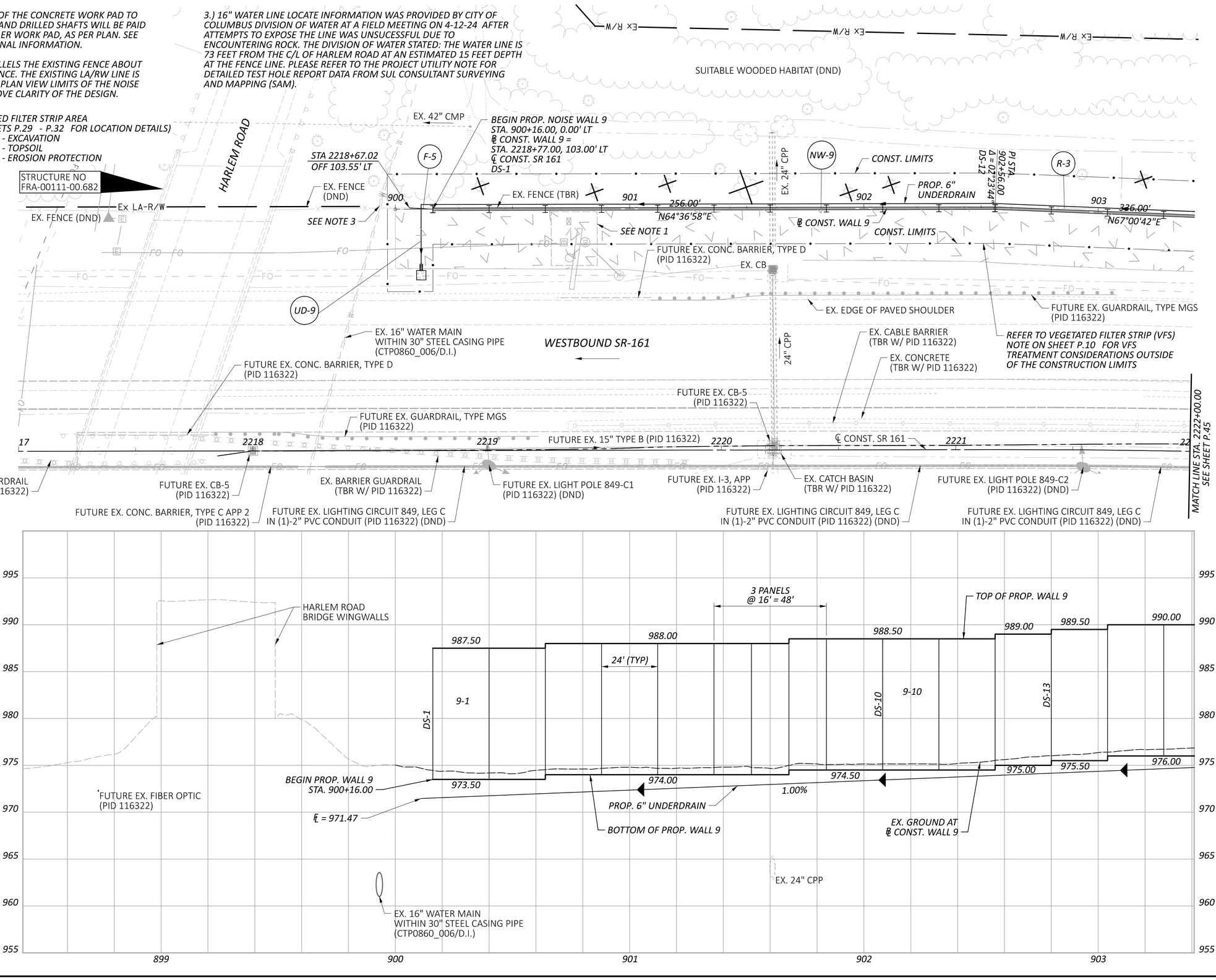
*1.) IF NECESSARY, REPAIR OF THE CONCRETE WORK PAD TO INSTALL THE NOISE WALL AND DRILLED SHAFTS WILL BE PAID PER ITEM 633 - CONTROLLER WORK PAD, AS PER PLAN. SEE SHEET P.10 FOR ADDITIONAL INFORMATION.*

*2.) EXISTING LA/RW PARALLELS THE EXISTING FENCE ABOUT 1 FOOT NORTH OF THE FENCE. THE EXISTING LA/RW LINE IS NOT SHOWN WITHIN THE PLAN VIEW LIMITS OF THE NOISE WALL IN ORDER TO IMPROVE CLARITY OF THE DESIGN.*

*3.) 16" WATER LINE LOCATE INFORMATION WAS PROVIDED BY CITY OF COLUMBUS DIVISION OF WATER AT A FIELD MEETING ON 4-12-24 AFTER ATTEMPTS TO EXPOSE THE LINE WAS UNSUCESSFUL DUE TO ENCOUNTERING ROCK. THE DIVISION OF WATER STATED: THE WATER LINE IS 73 FEET FROM THE C/L OF HARLEM ROAD AT AN ESTIMATED 15 FEET DEPTH AT THE FENCE LINE. PLEASE REFER TO THE PROJECT UTILITY NOTE FOR DETAILED TEST HOLE REPORT DATA FROM SUL CONSULTANT SURVEYING AND MAPPING (SAM).*

*LEGEND*

*VEGETATED FILTER STRIP AREA*
*(SEE SHEETS P.29 - P.32 FOR LOCATION DETAILS)*
*ITEM 203 - EXCAVATION*
*ITEM 659 - TOPSOIL*
*ITEM 670 - EROSION PROTECTION*




HORIZONTAL
SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - WALL 9
# STA. 2217+00.00 TO STA. 2222+00.00


DESIGN AGENCY
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8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
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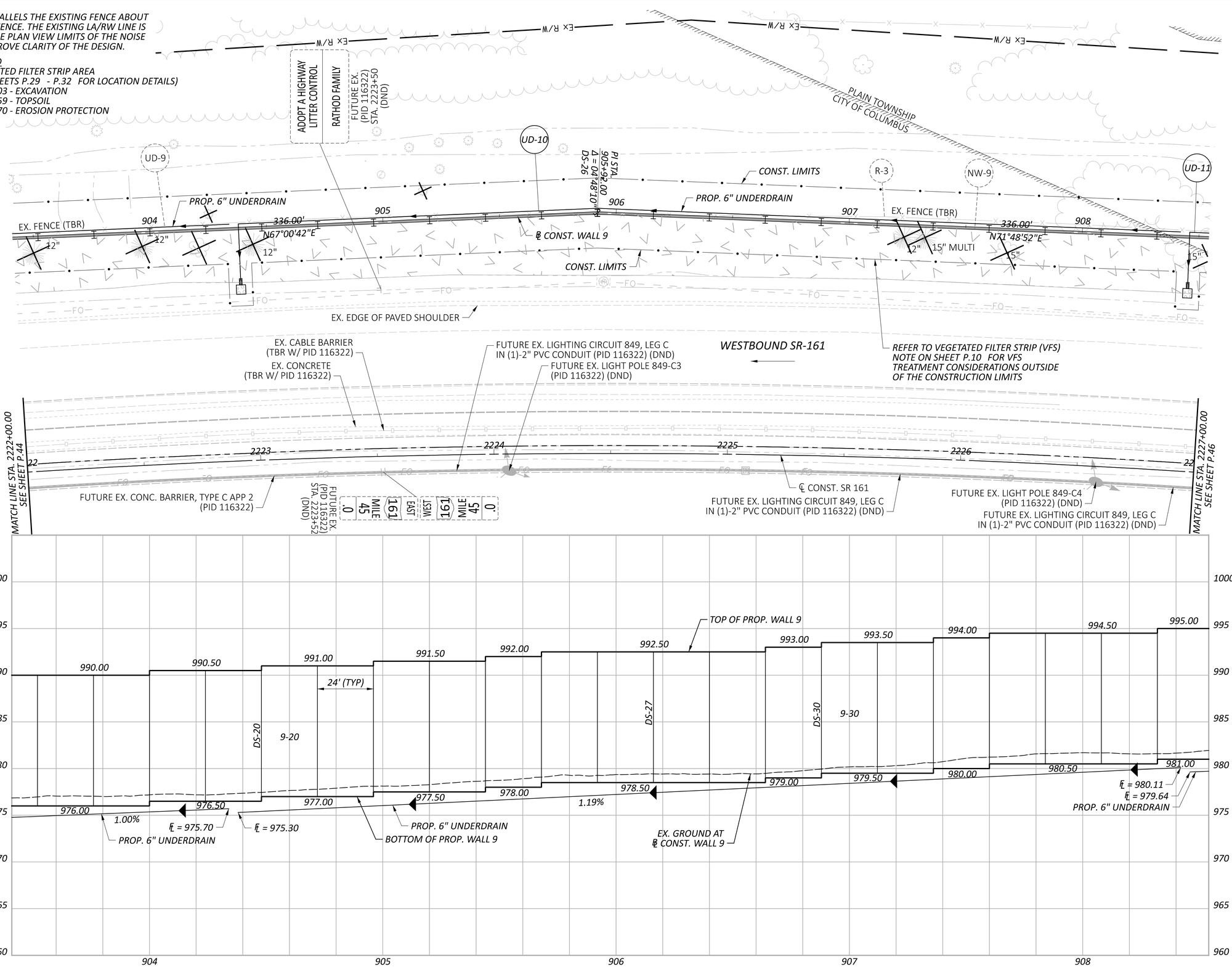
DESIGNER
JMK
REVIEWER
JDH 05-22-24
PROJECT ID
117607
SHEET P.44 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: Wall 9 - Plan 12 PAPERSIZE: 34x22 (in.) DATE: 2024-05-23 TIME: 2:17:26 PM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP901.dgn

NOTES:
1.) EXISTING LA/RW PARALLELS THE EXISTING FENCE ABOUT 1 FOOT NORTH OF THE FENCE. THE EXISTING LA/RW LINE IS NOT SHOWN WITHIN THE PLAN VIEW LIMITS OF THE NOISE WALL IN ORDER TO IMPROVE CLARITY OF the DESIGN.

LEGEND
VEGETATED FILTER STRIP AREA
(SEE SHEETS P.29 - P.32 FOR LOCATION DETAILS)
ITEM 203 - EXCAVATION
ITEM 659 - TOPSOIL
ITEM 670 - EROSION PROTECTION







HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - WALL 9
## STA. 2222+00.00 TO STA. 2227+00.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: Wall 9 - Plan 13 PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 10:38:59 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP902.dgn



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(614) 846-4500
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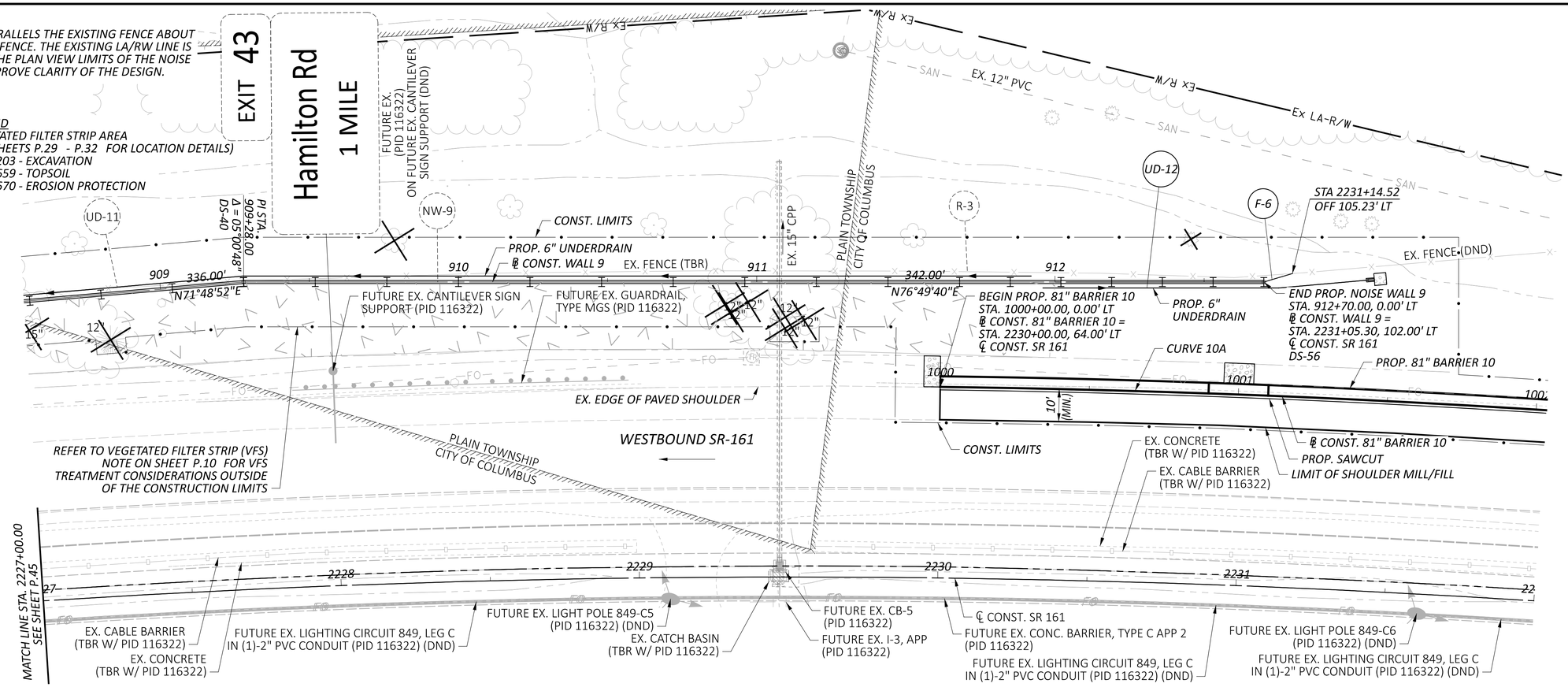
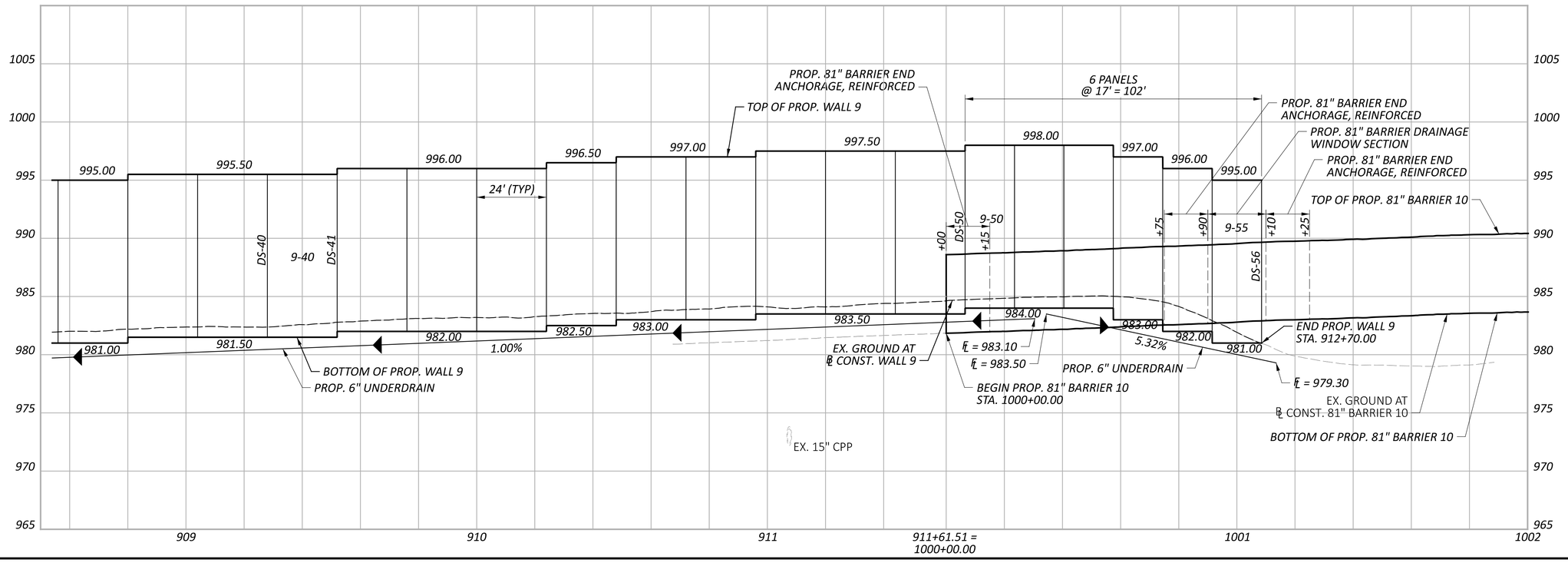
DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.45 TOTAL P.297

NOTES:
1.) EXISTING LA/RW PARALLELS THE EXISTING FENCE ABOUT 1 FOOT NORTH OF THE FENCE. THE EXISTING LA/RW LINE IS NOT SHOWN WITHIN THE PLAN VIEW LIMITS OF THE NOISE WALL IN ORDER TO IMPROVE CLARITY OF THE DESIGN.

LEGEND
VEGETATED FILTER STRIP AREA
(SEE SHEETS P.29 - P.32 FOR LOCATION DETAILS)
ITEM 203 - EXCAVATION
ITEM 659 - TOPSOIL
ITEM 670 - EROSION PROTECTION




HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - WALL 9
# STA. 2227+00.00 TO STA. 2232+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: Wall 9 - Plan 14 PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 10:39:38 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP903.dgn

DESIGN AGENCY
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8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 318-4600
www.arcadis.com

DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.46 TOTAL P.297

**10A** *CURVE DATA*
*℄ CONST. 81" BARRIER 10*
*P.I. = STA. 1001+17.86*
*Δ = 03°24'02" RT*
*Dc = 01°26'35"*
*R = 3,970.53'*
*T = 117.86'*
*L = 235.65'*
*E = 1.75'*

**10B** *CURVE DATA*
*℄ CONST. 81" BARRIER 10*
*P.I. = STA. 1004+09.87*
*Δ = 03°37'43" RT*
*Dc = 01°02'30"*
*R = 5,500.00'*
*T = 174.22'*
*L = 348.32'*
*E = 2.76'*

*NOTES*
*1.) CAUTION: EX. CTSS FIBER DEPTH BASED ON FIELD SURVEY SHOTS AT EX. PULL BOX LOCATIONS. THE CONTRACTOR SHALL USE EXTREME CAUTION WHILE WORKING NEAR THE CTSS FIBER TO NOT EXCAVATE BELOW THE 81" BARRIER FOUNDATION LIMITS SHOWN ON THE TYPICAL SECTIONS.*

HORIZONTAL SCALE IN FEET
0 10 20 40

EX. SAN MH
PLAIN TOWNSHIP
CITY OF COLUMBUS
EX. 12" PVC
Ex R/W
Ex LA-R/W
EX. 15" CPP
CONST. LIMITS
EX. FENCE (TBR)
EX. FENCE (DND)
911
912
END PROP. NOISE WALL 9
STA. 912+70.00, 0.00' LT
℄ CONST. WALL 9 =
STA. 2231+05.30, 102.00' LT
℄ CONST. SR 161
DS-57
20
FUTURE EX. (PID 116322) RELOCATE TO BARRIER STA. 2232+50
S-3
EX. SAN MH
EX. 12" PVC
TIED CONC. BLOCK MAT WITH TYPE 1 UNDERLAYMENT
EC-12
℄ CONST. WALL 9
TIED CONC. BLOCK MAT WITH TYPE 1 UNDERLAYMENT
PROP. 6" UNDERDRAIN
EC-11
B-10
CONST. LIMITS
EX. CTSS FIBER (SEE NOTE 1)
EX. LIGHTING 2-WIRE CIRCUIT CIRCUIT #560, LEG A (TBR W/ PID 116322)
PROP. 81" BARRIER DRAINAGE WINDOW STA. 1004+00.00 SEE SHEET P.229
PROP. 81" BARRIER 10
5.5'
10.0'
1000
1001
1002
1003
1004
EC-10
CURVE 10A
℄ CONST. 81" BARRIER 10
10' (MIN.)
PROP. SAWCUT
CURVE 10B
PROP. 81" BARRIER DRAINAGE WINDOW STA. 1001+00.00 SEE SHEET P.229
CONST. LIMITS
PCC STA. 1002+35.65
EX. STREET LIGHT POLE #202991 AND FOUNDATION (TBR W/ PID 116322)
LIMIT OF SHOULDER MILL/FILL
WESTBOUND SR-161
REFER TO VEGETATED FILTER STRIP (VFS) NOTE ON SHEET P.10 FOR VFS TREATMENT CONSIDERATIONS OUTSIDE OF THE CONSTRUCTION LIMITS
EX. EDGE OF PAVED SHOULDER
BEGIN PROP. 81" BARRIER 10
STA. 1000+00.00, 0.00' LT
℄ CONST. 81" BARRIER 10 =
STA. 2230+00.00, 64.00' LT
℄ CONST. SR 161
EX. CABLE BARRIER (TBR W/ PID 116322)
EX. CONCRETE (TBR W/ PID 116322)
MATCH LINE STA. 2234+00.00
SEE SHEET P.48
29
2230
2231
2232
2233
FUTURE EX. LIGHT POLE 849-C5 (PID 116322) (DND)
FUTURE EX. I-3, APP (PID 116322)
FUTURE EX. CB-5 (PID 116322)
FUTURE EX. LIGHTING CIRCUIT 849, LEG C IN (1)-2" PVC CONDUIT (PID 116322) (DND)
℄ CONST. SR 161
FUTURE EX. LIGHT POLE 849-C6 (PID 116322) (DND)
FUTURE EX. CONC. BARRIER, TYPE C APP 2 (PID 116322)
FUTURE EX. LIGHTING CIRCUIT 849, LEG C IN (1)-2" PVC CONDUIT (PID 116322) (DND)

1005
1000
995
990
985
980
975
970
965
911
911+61.51 = 1000+00.00
1001
1002
1003
1004
PROP. 81" BARRIER END ANCHORAGE, REINFORCED
TOP OF PROP. WALL 9
6 PANELS @ 17' = 102'
PROP. 81" BARRIER END ANCHORAGE, REINFORCED
PROP. 81" BARRIER DRAINAGE WINDOW SECTION
PROP. 81" BARRIER END ANCHORAGE, REINFORCED
PROP. 81" BARRIER DRAINAGE WINDOW SECTION
PROP. 81" BARRIER END ANCHORAGE, REINFORCED
997.00
997.50
998.00
997.00
996.00
995.00
983.00
983.50
984.00
983.00
982.00
981.00
1.00%
5.32%
DS-50
9-50
+00
+15
+75
+90
9-56
+10
+25
DS-57
+75
+90
TOP OF PROP. 81" BARRIER 10
BOTTOM OF PROP. 81" BARRIER 10
END PROP. WALL 9 STA. 912+70.00
EX. GROUND AT ℄ CONST. WALL 9
BEGIN PROP. 81" BARRIER 10 STA. 1000+00.00
EX. 15" CPP
PROP. 6" UNDERDRAIN
℄ = 983.10
℄ = 983.50
℄ = 979.30
EX. GROUND AT ℄ CONST. 81" BARRIER 10

# PLAN & PROFILE - 81" BARRIER 10 STA. 2229+00.00 TO STA. 2234+00.00


DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4800
www.arcadis.com

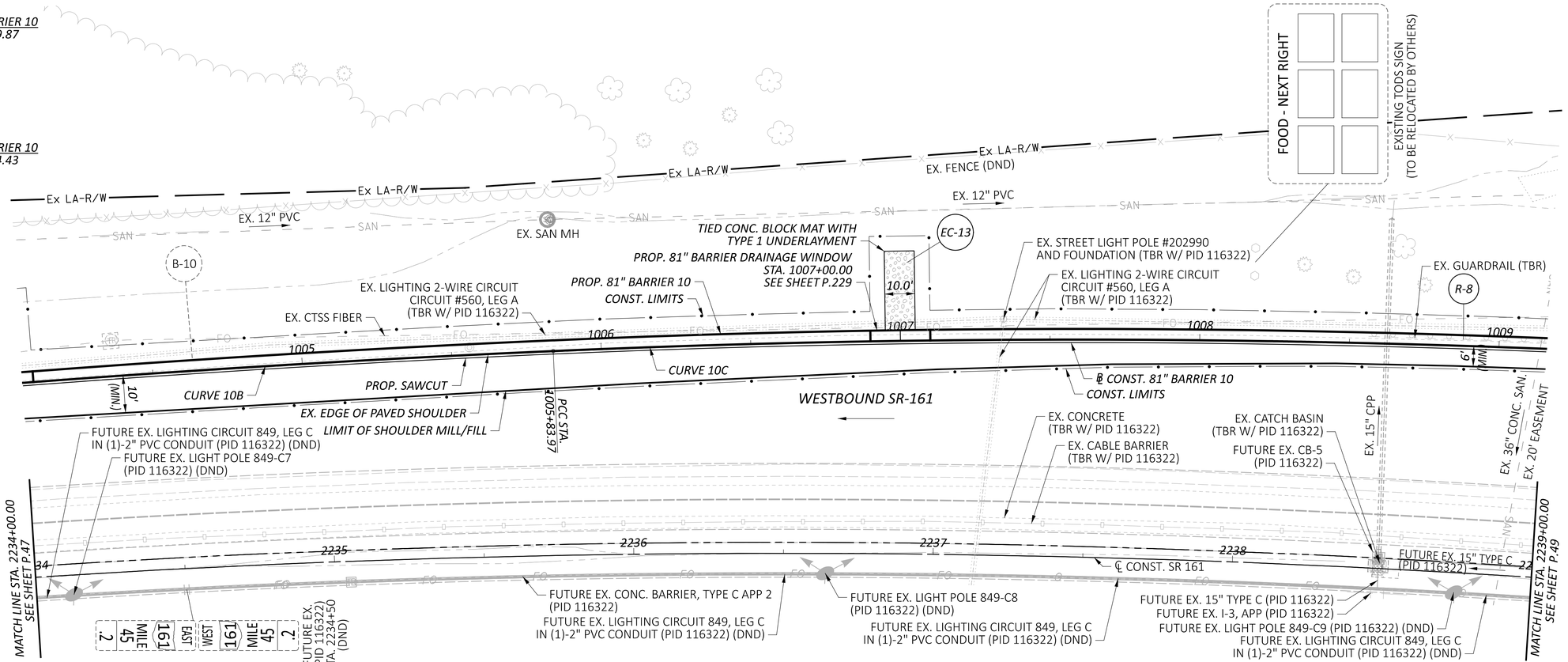

DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.47 TOTAL P.297

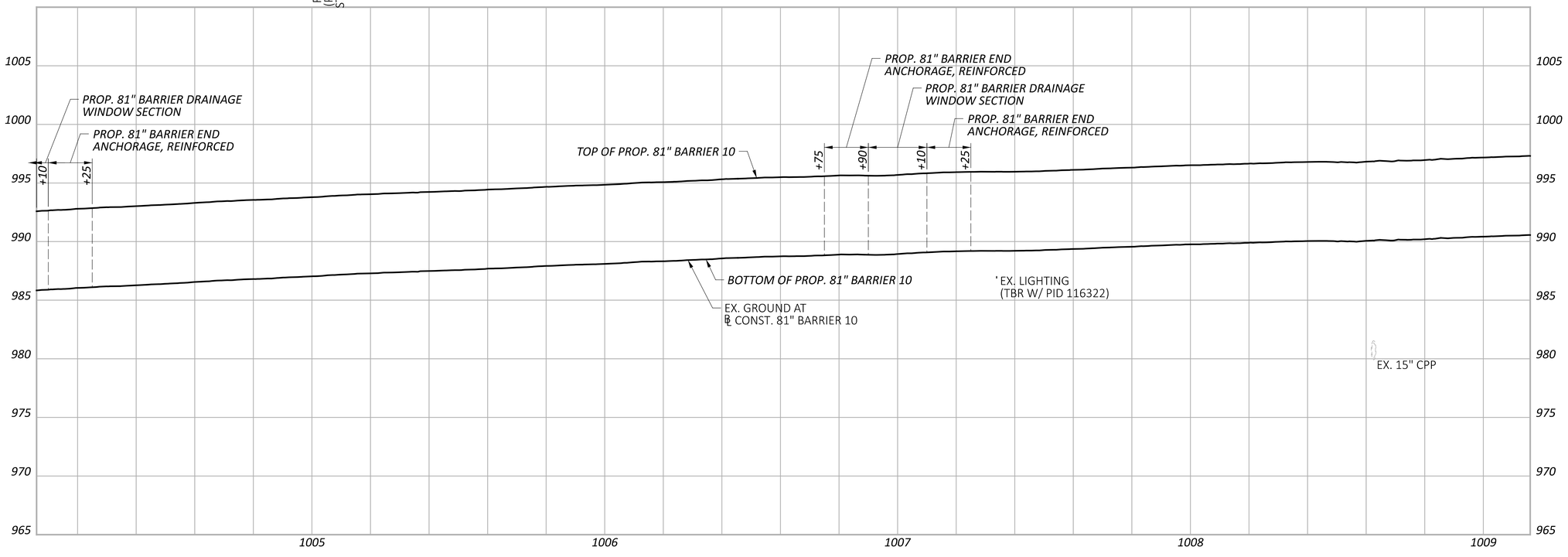
FRA-161-15.80 NOISE ABATEMENT


MODEL: Wall 10 - Plan 15 PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 10:46:00 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP1001.dgn

10B **CURVE DATA**
℄ CONST. 81" BARRIER 10
P.I. = STA. 1004+09.87
Δ = 03°37'43" RT
Dc = 01°02'30"
R = 5,500.00'
T = 174.22'
L = 348.32'
E = 2.76'

10C **CURVE DATA**
℄ CONST. 81" BARRIER 10
P.I. = STA. 1008+34.43
Δ = 07°09'57" RT
Dc = 01°25'57"
R = 4,000.00'
T = 250.46'
L = 500.27'
E = 7.83'




HORIZONTAL SCALE IN FEET
0 10 20 40

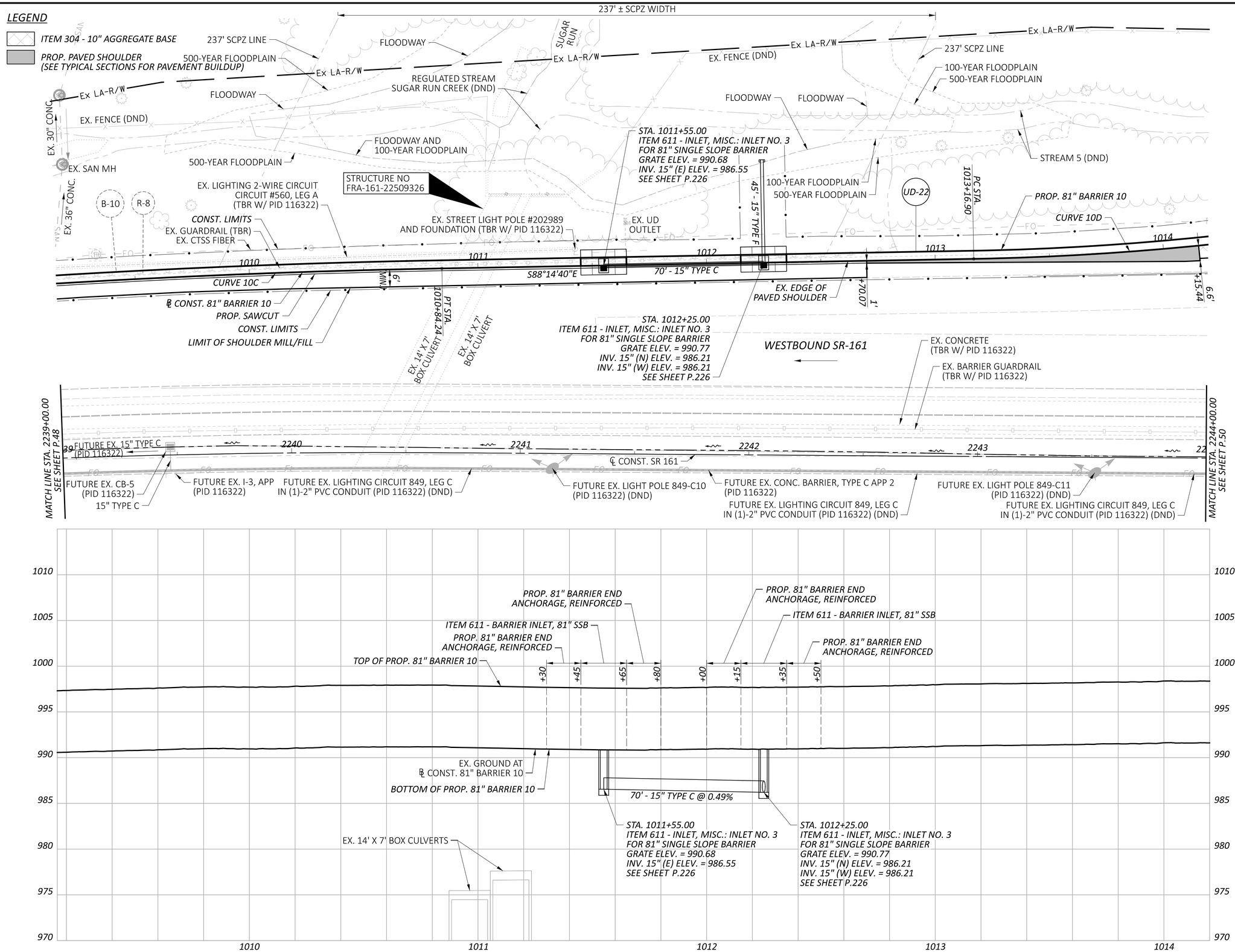
# PLAN & PROFILE - 81" BARRIER 10
# STA. 2234+00.00 TO STA. 2239+00.00

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4600
www.arcadis.com

DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.48 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: Wall 10 - Plan 16 PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 10:01:17 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP1002.dgn




HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - 81" BARRIER 10
## STA. 2239+00.00 TO STA. 2244+00.00

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 818-4900
www.arcadis.com

DESIGNER
JMK

REVIEWER
JDH 05-22-24

PROJECT ID
117607

SHEET P.49 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: Wall 10 - Plan 17 PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 2:43:52 PM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP1003.dgn

10D CURVE DATA
℄ CONST. 81" BARRIER 10
P.I. = STA. 1014+82.35
Δ = 15°41'58" LT
Dc = 04°46'29"
R = 1,200.00'
T = 165.44'
L = 328.81'
E = 11.35'

Ex LA-R/W
EX. FENCE (DND)

STA. 1015+50.00
ITEM 611 - INLET, MISC.: INLET NO. 3
FOR 81" SINGLE SLOPE BARRIER
GRATE ELEV. = 990.82
INV. 15" (N) ELEV. = 984.78
SEE SHEET P.226

EX. UD
(SEE NOTE 3)

STREAM 5

UD-22

34' - 15" TYPE C

EX. CTSS FIBER
(SEE NOTE 1)

B-10

PROP. IMPACT ATTENUATOR,
TYPE 2 (UNIDIRECTIONAL)
END PROP. 81" BARRIER 10
STA. 1016+49.64, 0.00' LT
℄ CONST. 81" BARRIER 10 =
STA. 2246+25.00, 140.43' LT
℄ CONST. SR 161

POT STA. 1016+49.64
PT STA. 1016+45.71

CONC. BARRIER
END SECTION

15.26'

1016

1015

CURVE 10D

EX. EDGE OF
PAVED SHOULDER

CONST.
LIMITS

PROP. 81" BARRIER 10

FUTURE EX. LIGHT POLE 560-A8
(PID 116322) (SEE NOTE 2) (DND)

℄ CONST. 81" BARRIER 10

CONST. LIMITS

N76°03'22"E

FUTURE EX. LIGHTING CIRCUIT 560, LEG A
MIS-403 (PID 116322) (DND)

FUTURE EX. LIGHT POLE 560-A9
(PID 116322) (SEE NOTE 2) (DND)

STA. 2247+03.73, 155.09' LT
℄ CONST. SR 161

RAMP L

61'

FUTURE EX. LIGHTING CIRCUIT 560, LEG A
MIS-403 (PID 116322) (DND)

FUTURE EX.
(PID 116322)
STA. 2202+40
(DND)

## LEGEND

ITEM 304 - 10" AGGREGATE BASE

PROP. PAVED SHOULDER
(SEE TYPICAL SECTIONS FOR PAVEMENT BUILDUP)

## NOTES

1.) CAUTION: EX. CTSS FIBER DEPTH BASED ON FIELD SURVEY SHOTS AT EX. PULL BOX LOCATIONS. THE CONTRACTOR SHALL USE EXTREME CAUTION WHILE WORKING NEAR THE CTSS FIBER TO NOT EXCAVATE BELOW THE 81" BARRIER FOUNDATION LIMITS SHOWN ON THE TYPICAL SECTIONS.

2.) ITEM 304 - 10" AGGREGATE BASE SHALL BE GRADED AROUND LIGHT POLE SO AS NOT TO BURY OR EXPOSE LIGHT POLE BASE.

3.) THE CONTRACTOR SHALL BE REQUIRED TO CONNECT THE EXISTING UNDERDRAIN OUTLET INTO THE PROPOSED BARRIER INLET AT STA. 1015+50.00. THE COST SHALL BE INCIDENTAL TO THE COST OF THE PLACEMENT OF THE BARRIER INLET AT STA. 1015+50.00.

HORIZONTAL
SCALE IN FEET
0 10 20 40

COLUMBIA GAS
EX. 20" HP GAS
BLANKET EASEMENT
VOL. 1495, PG. 566
VOL. 1495, PG. 568

COLUMBIA GAS
EX. 20" HP GAS
BLANKET EASEMENT
VOL. 1495, PG. 566
VOL. 1495, PG. 568

WESTBOUND SR-161

EX. CONCRETE
(TBR W/ PID 116322)

EX. CABLE BARRIER
(TBR W/ PID 116322)

MATCH LINE STA. 2244+00.00
SEE SHEET P.49

44 2245 2246 2247 2248 22

℄ CONST. SR 161

4.
45
MILE
161
EAST

WEST
161
MILE
45
.4

FUTURE EX.
(PID 116322)
STA. 2245+82
(DND)

FUTURE EX. LIGHT POLE 849-C12
(PID 116322) (DND)

FUTURE EX. LIGHTING CIRCUIT 849, LEG C
IN (1)-2" PVC CONDUIT (PID 116322) (DND)

FUTURE EX. CONC. BARRIER, TYPE C APP 2
(PID 116322)

FUTURE EX. LIGHTING CIRCUIT 849, LEG C
IN (1)-2" PVC CONDUIT (PID 116322) (DND)

1010 1005 1000 995 990 985 980 975 970

PROP. 81" BARRIER END
ANCHORAGE, REINFORCED

ITEM 611 - BARRIER INLET, 81" SSB

PROP. 81" BARRIER END
ANCHORAGE, REINFORCED

CONCRETE BARRIER, 81" SSB,
END SECTION, 32" TO 81"
53' TRANSITION PER SCD
PIS-81-SSB

TOP OF PROP. 81" BARRIER 10

+25 +40 +60 +75 +96.64 +49.64

BOTTOM OF
PROP. 81" BARRIER 10

EX. GROUND AT
℄ CONST. 81" BARRIER 10

EX. 20" GAS

EX. 20" GAS

NOTE TO CONTRACTOR:
REFER TO SHEET P.11 FOR TC
ENERGY REQUIREMENTS THAT
MUST BE FOLLOWED DURING THE
CONSTRUCTION OF THIS PROJECT.

NOTE TO CONTRACTOR:
REFER TO SHEET P.11 FOR TC
ENERGY REQUIREMENTS THAT
MUST BE FOLLOWED DURING THE
CONSTRUCTION OF THIS PROJECT.

EX. LIGHTING

EX. FIBER OPTIC

END PROP. 81" BARRIER 10
STA. 1016+49.64

STA. 1015+50.00
ITEM 611 - INLET, MISC.: INLET NO. 3
FOR 81" SINGLE SLOPE BARRIER
GRATE ELEV. = 990.82
INV. 15" (N) ELEV. = 981.40
SEE SHEET P.226

1015 1016

# PLAN & PROFILE - 81" BARRIER 10
# STA. 2244+00.00 TO STA. 2249+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: Wall 10 - Plan 18 PAPERSIZE: 34x22 (in.) DATE: 9/20/2024 TIME: 2:17:47 PM USER: watt4128
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP1004.dgn

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COLUMBUS, OHIO 43235
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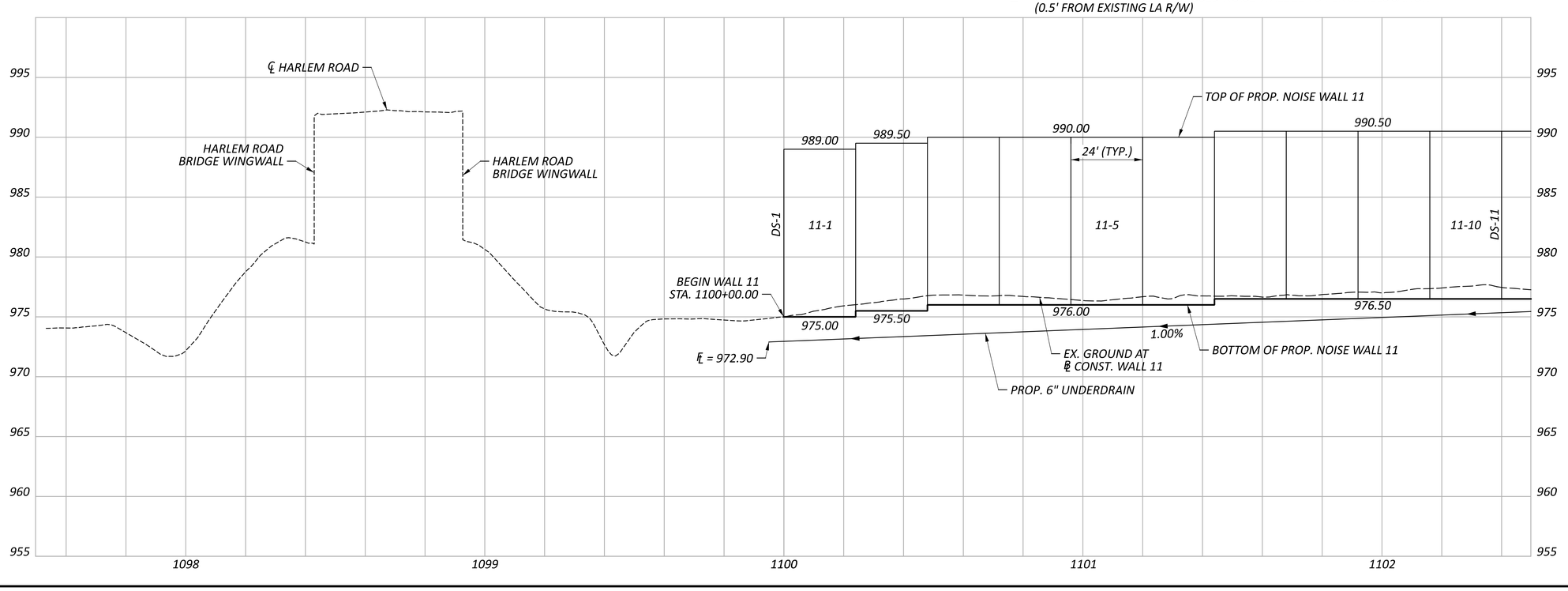
www.arcadis.com

DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.50 TOTAL P.297

FUTURE EX. LIGHTING CIRCUIT 849, LEG A IN (1)-2" PVC CONDUIT (PID 116322) (DND)
FUTURE EX. LIGHTING CIRCUIT 849, LEG C IN (1)-2" PVC CONDUIT (PID 116322) (DND)
FUTURE EX. CONC. BARRIER, TYPE D (PID 116322)
FUTURE EX. CB-5 (PID 116322)
FUTURE EX. GUARDRAIL, TYPE MGS (PID 116322)
FUTURE EX. LIGHT POLE 849-C1 (PID 116322) (DND)
EX. CABLE BARRIER (TBR W/ PID 116322)
FUTURE EX. LIGHTING CIRCUIT 849, LEG C IN (1)-2" PVC CONDUIT (PID 116322) (DND)
EX. CONCRETE (TBR W/ PID 116322)
FUTURE EX. CB-5 (PID 116322)
EX. CATCH BASIN (TBR W/ PID 116322)
EX. BARRIER GUARDRAIL (TBR W/ PID 116322)
FUTURE EX. LIGHT POLE 849-A19 (PID 116322) (DND)
16
2217
2218
2219
2220
22
℄ CONST. SR 161
FUTURE EX. 15" TYPE B (PID 116322)
FUTURE EX. 15" TYPE C (PID 116322)
FUTURE EX. LIGHTING CONDUIT (PID 116322)
EX. BARRIER GUARDRAIL (TBR W/ PID 116322)
PAVEMENT CORE 7
FUTURE EX. I-3, APP (PID 116322)
MATCH LINE STA. 2221+00.00 SEE SHEET P.52
EASTBOUND SR-161
FUTURE EX. CONC. BARRIER, TYPE C, APP 2 (PID 116322)
EX. 18" CPP (DND)
FUTURE EX. CANTILEVER SIGN SUPPORT (PID 116322)
EX. EDGE OF PAVED SHOULDER
FUTURE EX. GUARDRAIL, TYPE MGS (PID 116322)
POT STA. 1100+00.00
EX. 16" WATER MAIN (CTP08060_006/D.I.)
15" MULTI
BEGIN PROP. NOISE WALL 11 STA. 1100+00.00, 0.00' RT
℄ CONST. WALL 11 = STA. 2218+46.22, 111.43' RT
℄ CONST. SR 161
EX. CATCH BASIN (DND)
NW-11
CONST. LIMITS
36" MULTI
P.I. STA. 1102+40.00
Δ = 00°00'00" DS-11
XX"
CONST. LIMITS
1100
PROP. 6" UNDERDRAIN
1101
240.00'
N66°54'02"E
24" MULTI
1102
20.8Δ
22.2Δ
UD-22
12"
8.3Δ
15.5Δ
12"
15"
12"
18" MULTI
Ex LA-R/W
Ex R/W
CITY OF COLUMBUS
CITY OF NEW ALBANY
HARLEM ROAD
EX. FENCE (REMOVE AND REERECT 201')
℄ CONST. NOISE WALL 11
END FENCE REMOVED AND REBUILT STA. 1101+92.46, 16.0' RT
EX. FENCE (DND)
R-5
BEGIN FENCE REMOVED AND REBUILT STA. 1099+94.42, 21.3'RT
Δ = OFFSET FROM BACK OF PROPOSED NOISE WALL 11 TO FENCE RELOCATION (0.5' FROM EXISTING LA R/W)




HORIZONTAL SCALE IN FEET
0 10 20 40

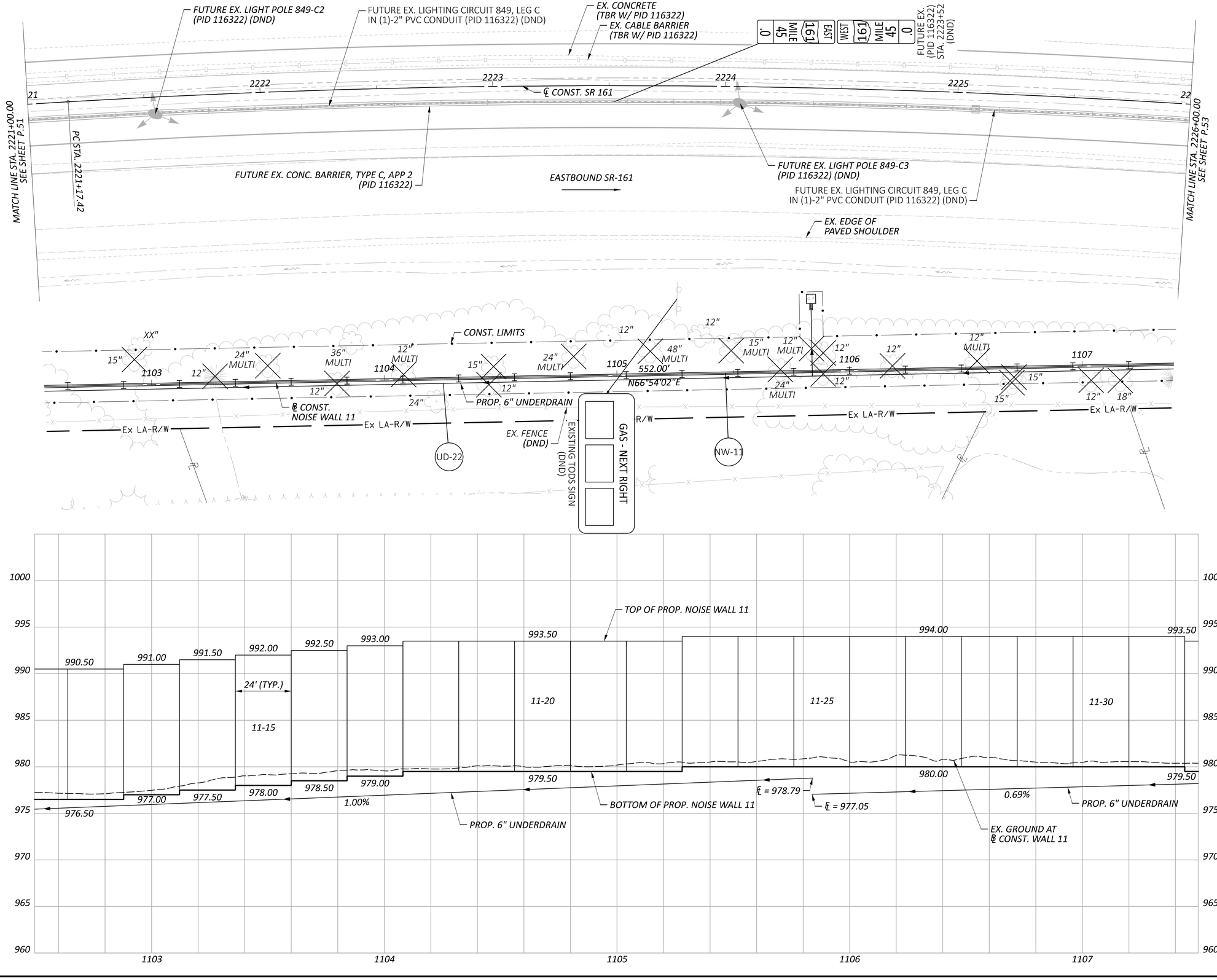
# PLAN & PROFILE - WALL 11
## STA. 2216+00.00 TO STA. 2221+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: Plan PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 9:57:28 AM USER: JPerchinske
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP1101.dgn

DESIGN AGENCY
BG
www.bgeng group.com
5960 WILCOX PLACE, SUITE C
DUBLIN, OHIO 43016

DESIGNER JEP
REVIEWER RG 05-22-24
PROJECT ID 117607
SHEET P.51 TOTAL P.297




HORIZONTAL SCALE IN FEET
0 10 20 40

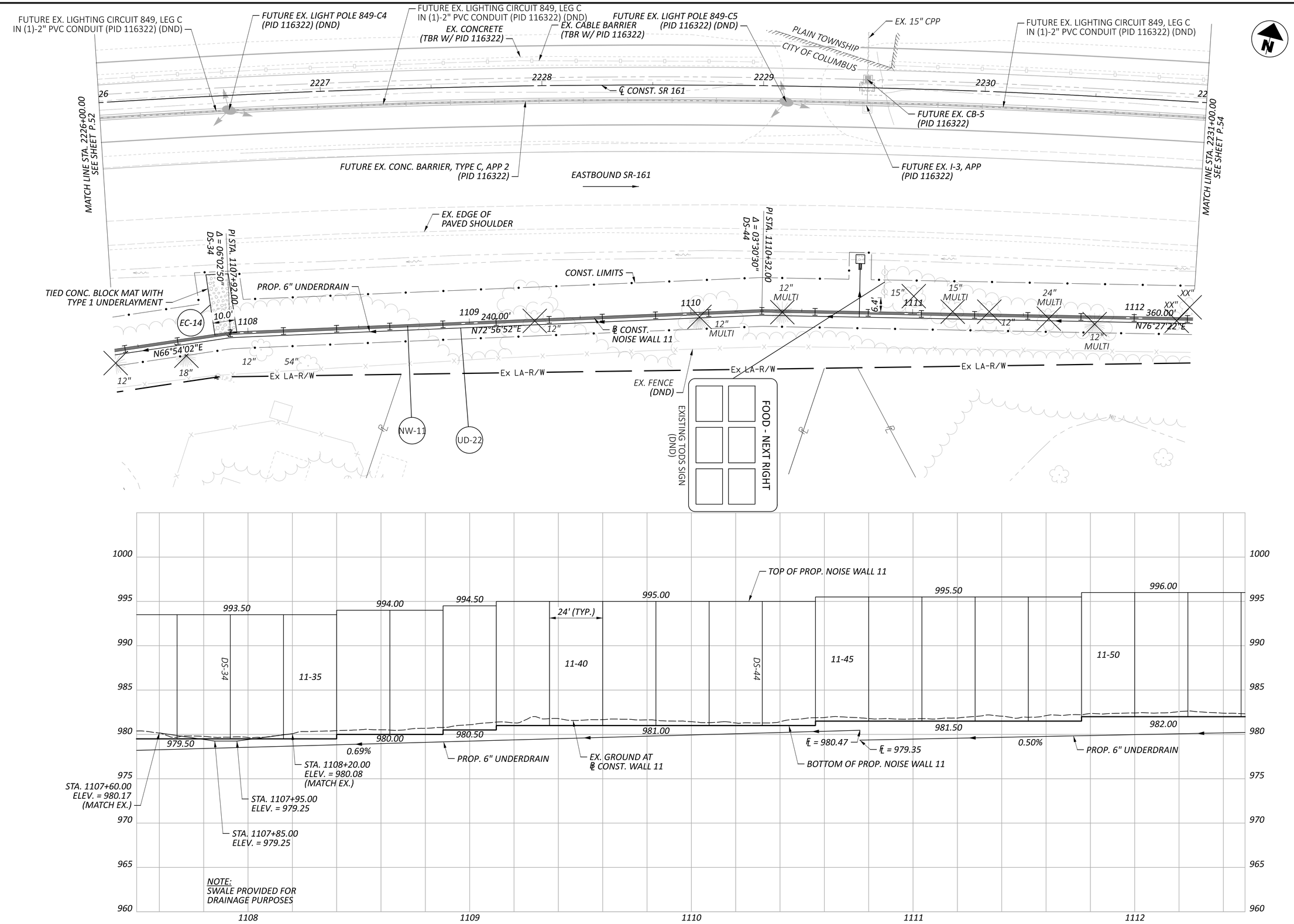
# PLAN & PROFILE - WALL 11
## STA. 2221+00.00 TO STA. 2226+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: Plan-1 PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 9:57:55 AM USER: JPerchinske
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP1102.dgn

DESIGN AGENCY
BG
www.bgeinggroup.com
5960 MILCOX PLACE, SUITE C
DUBLIN, OHIO 43016

DESIGNER JEP
REVIEWER RG 05-22-24
PROJECT ID 117607
SHEET P.52 TOTAL P.297




HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - WALL 11
## STA. 2226+00.00 TO STA. 2231+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: Plan-2 PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 9:58:14 AM USER: JPerchinske
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP1103.dgn

DESIGN AGENCY
BG
www.bgeng group.com
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DUBLIN, OHIO 43016

| | |
|---|---|
| DESIGNER | JEP |
| REVIEWER | RG 05-22-24 |
| PROJECT ID | 117607 |
| SHEET | P.53 |
| TOTAL | P.297 |

FUTURE EX. LIGHTING CIRCUIT 849, LEG C
IN (1)-2" PVC CONDUIT (PID 116322) (DND)

FUTURE EX. LIGHTING CIRCUIT 849, LEG C
IN (1)-2" PVC CONDUIT (PID 116322) (DND)

EX. CONCRETE
(TBR W/ PID 116322)

EX. CABLE BARRIER
(TBR W/ PID 116322)

.2 MILE 45 161 EAST

WEST 161 MILE 45 .2

FUTURE EX.
(PID 116322)
STA. 2234+50
(DND)

N

HORIZONTAL
SCALE IN FEET
0 10 20 40

MATCH LINE STA. 2231+00.00
SEE SHEET P.53

2232 2233 2234 2235

℄ CONST. SR 161

FUTURE EX. LIGHT POLE 849-C6
(PID 116322) (DND)

FUTURE EX. LIGHT POLE 849-C7
(PID 116322) (DND)

FUTURE EX. CONC. BARRIER, TYPE C, APP 2
(PID 116322)

EASTBOUND SR-161

BEGIN PROP. 81" BARRIER NW 12
STA. 1200+00.00, 0.00' RT
℄ CONST. BARRIER 12 =
STA. 2234+00.00, 72.00' RT
℄ CONST. SR 161

POT STA. 1115+84.00

FUTURE EX. LIGHTING CIRCUIT 849, LEG C
IN (1)-2" PVC CONDUIT (PID 116322) (DND)

EX. EDGE OF
PAVED SHOULDER

PI STA. 1113+92.00
Δ = 06°13'00"
DS-59

MGS TYPE E AA GR, TYPE MGS BTA, TYPE 1

CONST. LIMITS

℄ CONST. BARRIER 12

1200 1201

1114

PROP. 6" UNDERDRAIN

192.00' 1115
N82°40'22"E

1113

XX" 15"

N76°27'22"E

CONST. LIMITS

PC STA. 1200+06.51

PROP. 81" BARRIER NW 12

Ex LA-R/W

EX. FENCE
(DND)

℄ CONST.
NOISE WALL 11

UD-22

NW-11

END PROP. NOISE WALL 11
STA. 1115+60.00, 0.00' RT
℄ CONST. WALL 11 =
STA. 2234+41.07, 86.53' RT
℄ CONST. SR 161

1005
1000
995
990
985
980
975
970
965

TOP OF PROP. NOISE WALL 11

996.00 996.50

24' (TYP.) 24' (TYP.)

11-55 11-60 11-65

DS-59

TOP OF PROP. 81" BARRIER NW 12

982.00 982.50

0.50%

℄ = 981.77

END WALL 11
STA. 1115+60.00

BOTTOM OF PROP. 81" BARRIER NW 12

EX. GROUND AT
℄ CONST. WALL 11

PROP. 6" UNDERDRAIN

BOTTOM OF PROP. NOISE WALL 11

BEGIN PROP. 81" BARRIER NW 12
STA. 1200+00.00, 0.00' RT
℄ CONST. BARRIER 12 =
STA. 2234+00.00, 72.00' RT
℄ CONST. SR 161

EX. GROUND AT
℄ CONST. BARRIER 12

1113 1114 1115

# PLAN & PROFILE - WALL 11
## STA. 2231+00.00 TO STA. 2236+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: Plan-3 PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 9:58:35 AM USER: JPerchinske
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP1104.dgn

DESIGN AGENCY
BG
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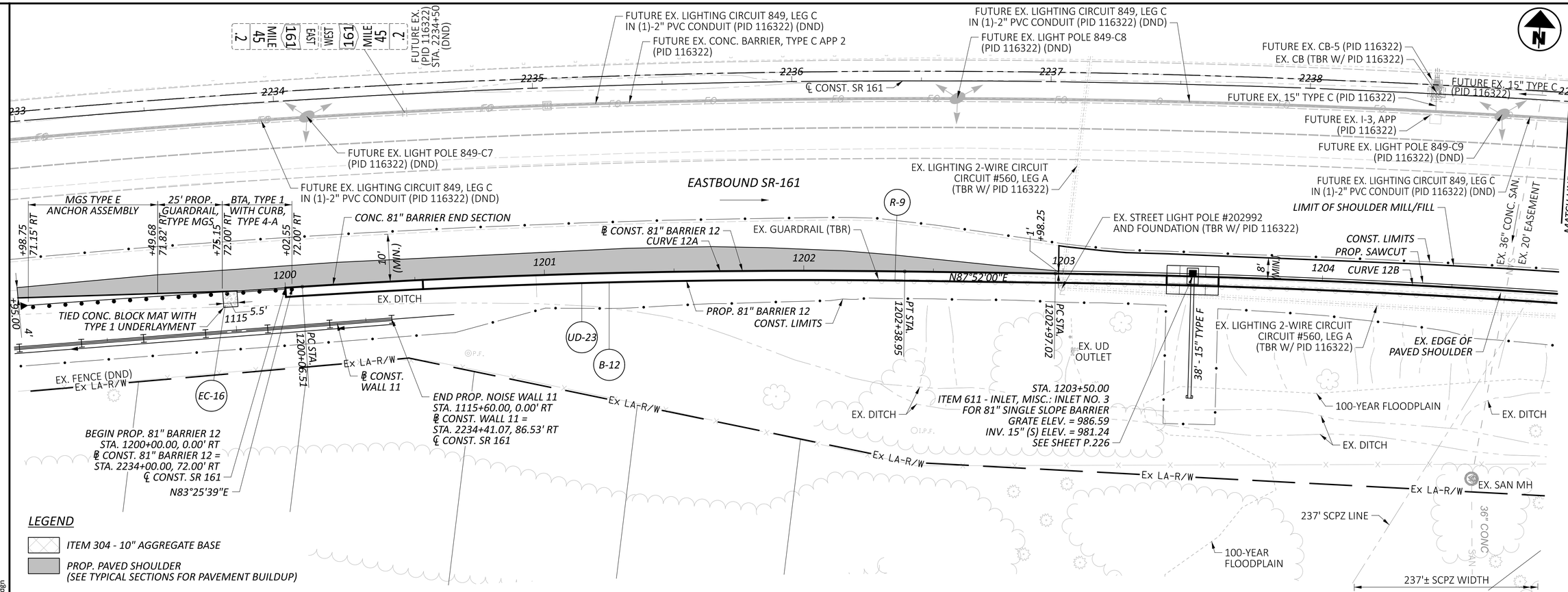
5960 WILCOX PLACE, SUITE C
DUBLIN, OHIO 43016

DESIGNER JEP

REVIEWER RG 05-22-24

PROJECT ID 117607

SHEET P.54 TOTAL P.297




12A CURVE DATA
℄ CONST. 81" BARRIER 12
P.I. = STA. 1201+22.78
Δ = 04°26'21" RT
Dc = 01°54'36"
R = 3,000.00'
T = 116.28'
L = 232.44'
E = 2.25'

12B CURVE DATA
℄ CONST. 81" BARRIER 12
P.I. = STA. 1204+26.22
Δ = 04°06'38" RT
Dc = 01°35'30"
R = 3,600.00'
T = 129.19'
L = 258.27'
E = 2.32'

FRA-161-15.80 NOISE ABATEMENT

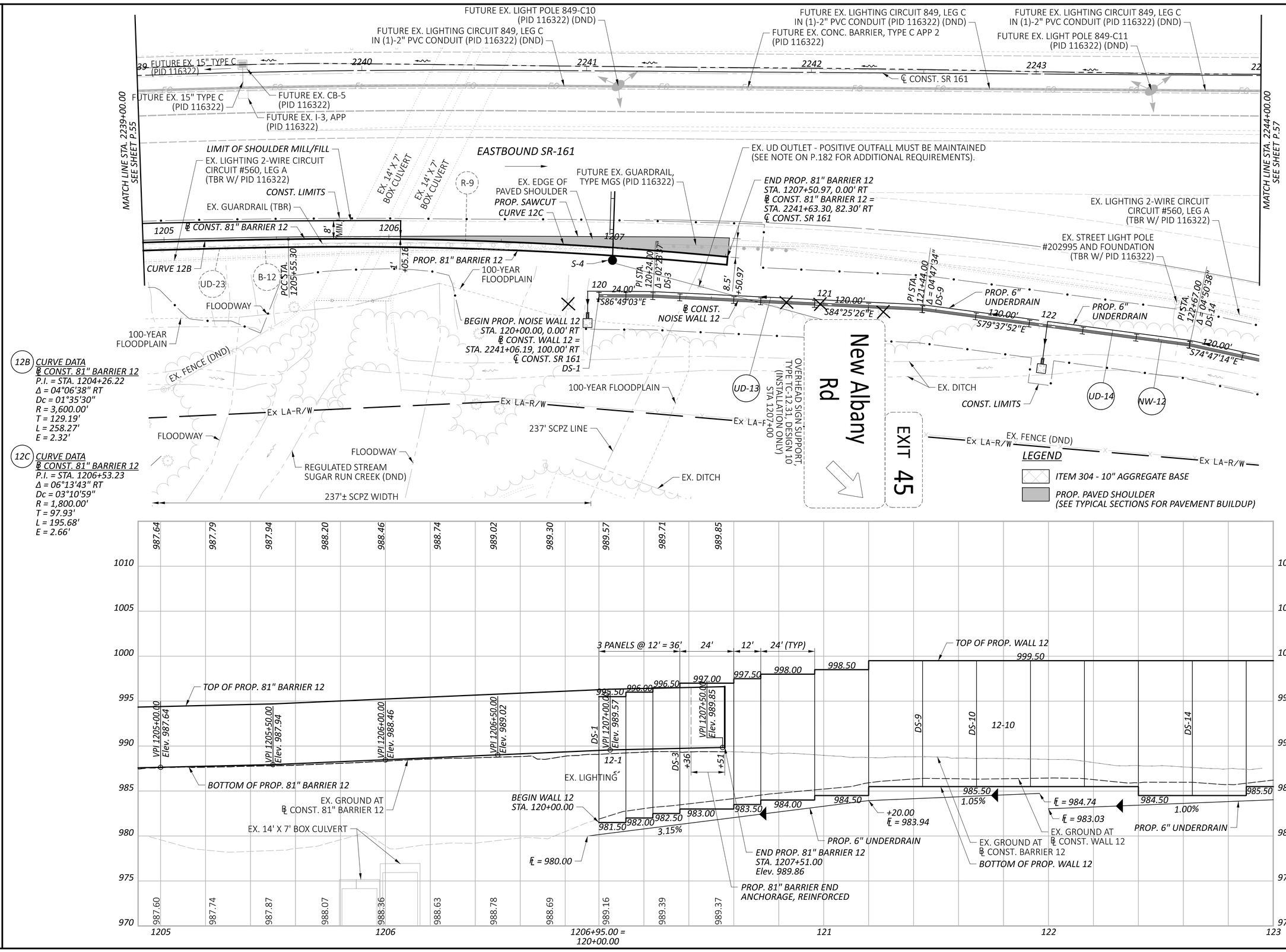
MODEL: Wall 12 - Plan 19 PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 10:51:25 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP1201.dgn

HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - 81" BARRIER 12
# STA. 2233+00.00 TO STA. 2239+00.00

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 818-4900
www.arcadis.com

DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.55 TOTAL P.297




**12B CURVE DATA**
℄ CONST. 81" BARRIER 12
P.I. = STA. 1204+26.22
Δ = 04°06'38" RT
Dc = 01°35'30"
R = 3,600.00'
T = 129.19'
L = 258.27'
E = 2.32'

**12C CURVE DATA**
℄ CONST. 81" BARRIER 12
P.I. = STA. 1206+53.23
Δ = 06°13'43" RT
Dc = 03°10'59"
R = 1,800.00'
T = 97.93'
L = 195.68'
E = 2.66'




HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - 81" BARRIER 12 / WALL 12
# STA. 2239+00.00 TO STA. 2244+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: Wall 12 - Plan 20 PAPERSIZE: 34x22 (in.) DATE: 2024-05-23 TIME: 1:56:56 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP1202.dgn

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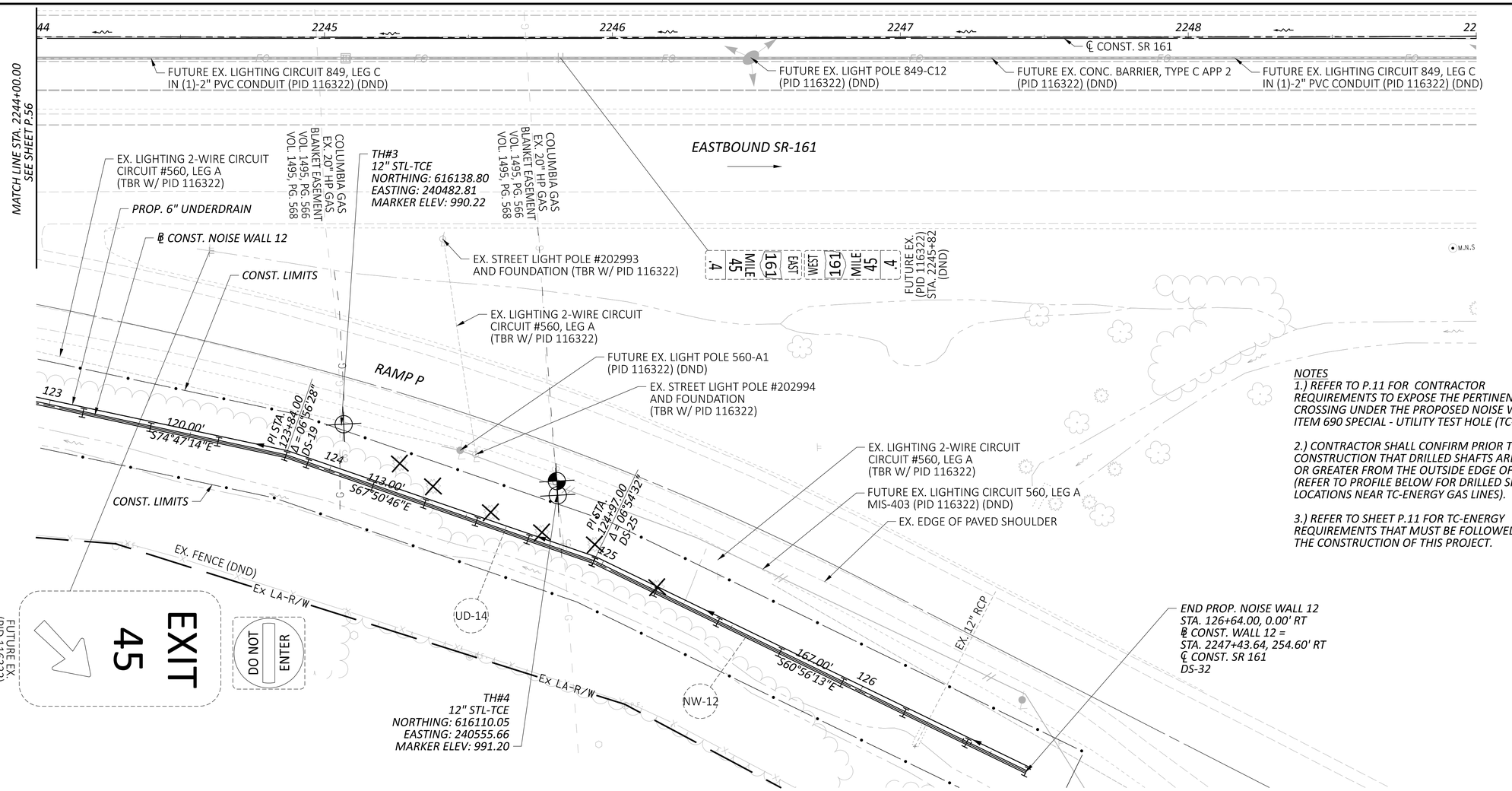
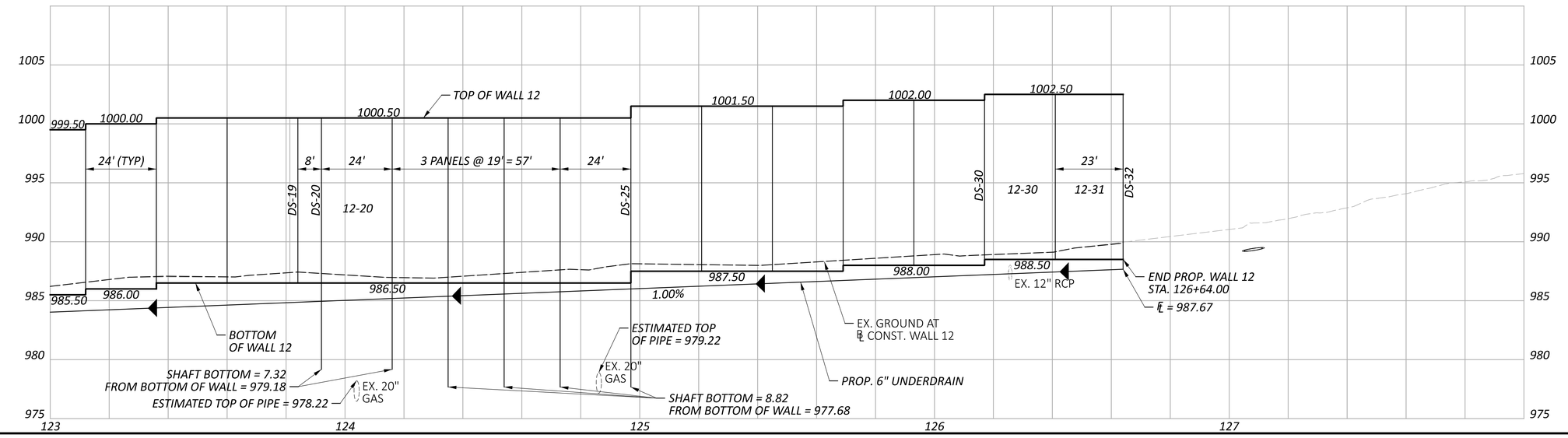
DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.56 TOTAL P.297




**NOTES**

*1.) REFER TO P.11 FOR CONTRACTOR REQUIREMENTS TO EXPOSE THE PERTINENT UTILITY CROSSING UNDER THE PROPOSED NOISE WALL PER ITEM 690 SPECIAL - UTILITY TEST HOLE (TC-ENERGY).*

*2.) CONTRACTOR SHALL CONFIRM PRIOR TO CONSTRUCTION THAT DRILLED SHAFTS ARE 10 FEET OR GREATER FROM THE OUTSIDE EDGE OF PIPELINES (REFER TO PROFILE BELOW FOR DRILLED SHAFT LOCATIONS NEAR TC-ENERGY GAS LINES).*

*3.) REFER TO SHEET P.11 FOR TC-ENERGY REQUIREMENTS THAT MUST BE FOLLOWED DURING THE CONSTRUCTION OF THIS PROJECT.*

HORIZONTAL
SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - WALL 12
## STA. 2244+00.00 TO STA. 2249+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: Wall 12 - Plan 21 PAPERSIZE: 34x22 (in.) DATE: 9/20/2024 TIME: 2:36:01 PM USER: watt|4128
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP1203.dgn

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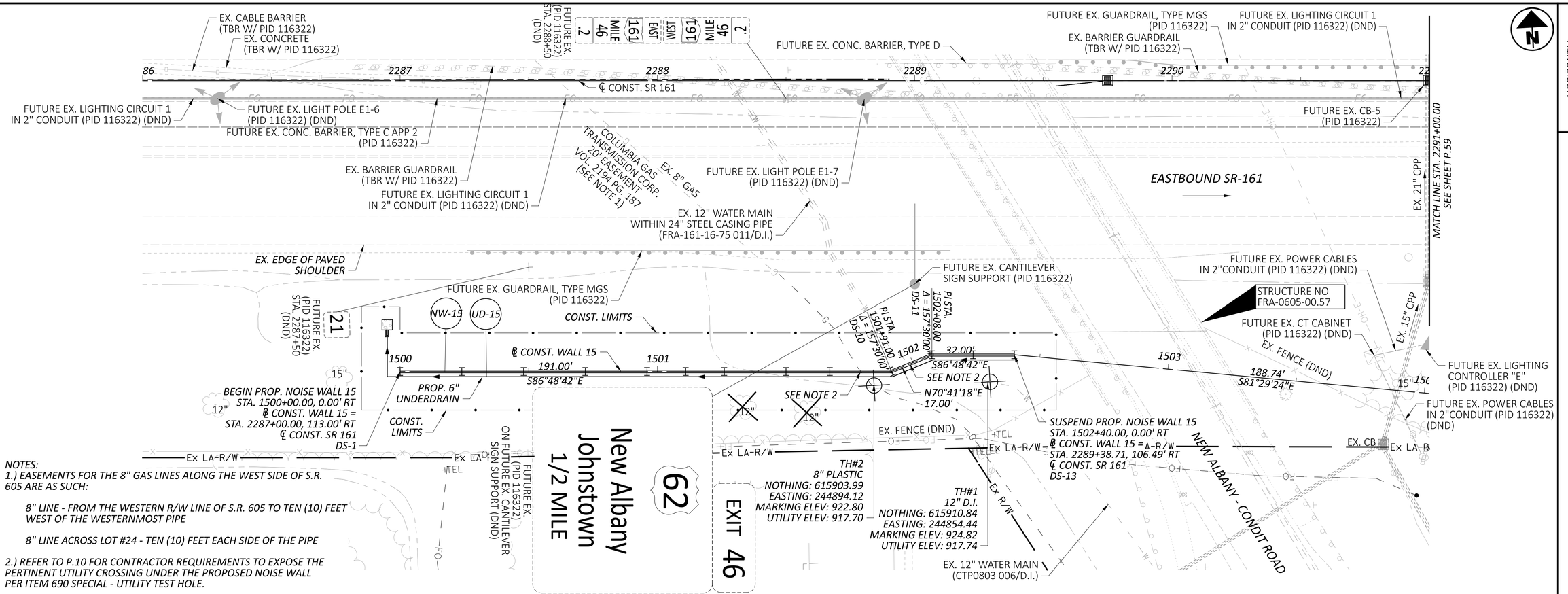
DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.57 TOTAL P.297




HORIZONTAL SCALE IN FEET
0 10 20 40

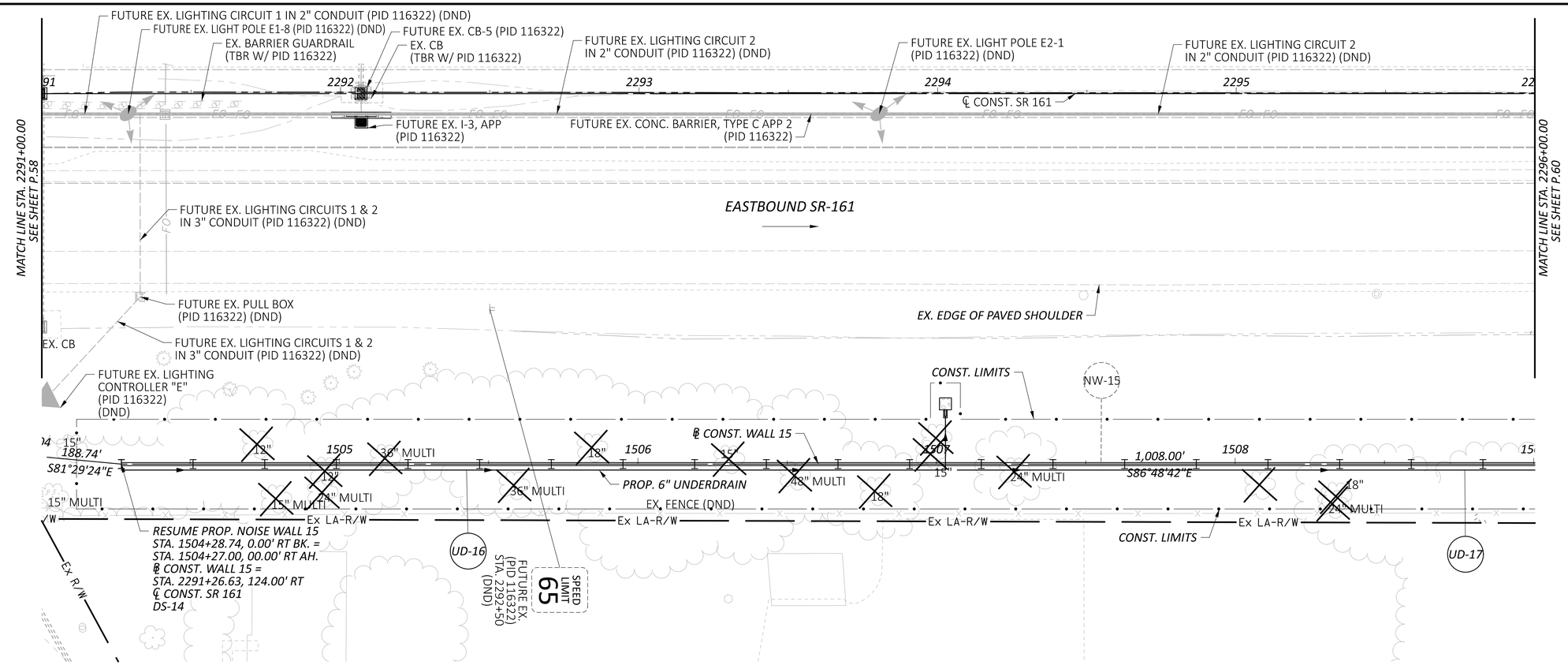
# PLAN & PROFILE - WALL 15
## STA. 2286+00.00 TO STA. 2291+00.00

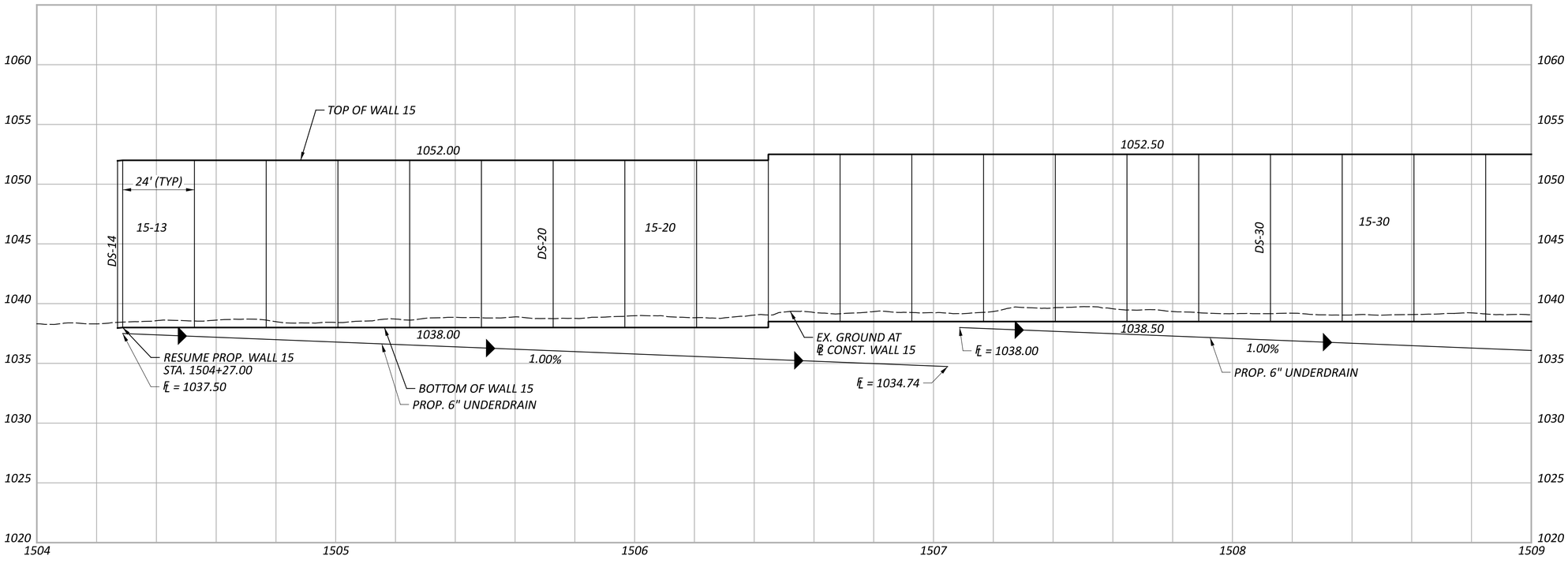
FRA-161-15.80 NOISE ABATEMENT

MODEL: Wall 15 - Plan 22 PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 2:28:04 PM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP1501.dgn

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4600
www.arcadis.com

| | |
|---|---|
| DESIGNER | JMK |
| REVIEWER | JDH 05-22-24 |
| PROJECT ID | 117607 |
| SHEET | P.58 |
| TOTAL | P.297 |




HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - WALL 15
## STA. 2291+00.00 TO STA. 2296+00.00


DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4500
www.arcadis.com


DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.59 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: Wall 15 - Plan 23 PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 2:28:48 PM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP1502.dgn

FUTURE EX. LIGHTING CIRCUIT 2
IN 2" CONDUIT (PID 116322) (DND)

FUTURE EX. LIGHTING CIRCUIT 2
IN 2" CONDUIT (PID 116322) (DND)

FUTURE EX. LIGHTING CIRCUIT 2
IN 2" CONDUIT (PID 116322) (DND)

EX. CONCRETE
(TBR W/ PID 116322)

EX. CABLE BARRIER
(TBR W/ 116322)

96 2297 2298 2299 2300 23

℄ CONST. SR 161

FUTURE EX. LIGHT POLE E2-2
(PID 116322) (DND)

FUTURE EX. LIGHT POLE E2-3
(PID 116322) (DND)

FUTURE EX. CONC. BARRIER, TYPE C APP 2
(PID 116322)

MATCH LINE STA. 2296+00.00
SEE SHEET P.59

MATCH LINE STA. 2301+00.00
SEE SHEET P.61

EASTBOUND SR-161

EX. EDGE OF PAVED SHOULDER

UD-17

NW-15

CONST. LIMITS

09 1510 ℄ CONST. WALL 15 1511 1512 1513 15

1,008.00'
S86°48'42"E

PROP. 6" UNDERDRAIN

15" MULTI

15"

PROP. 6" UNDERDRAIN

Ex LA-R/W

Ex LA-R/W

EXISTING TODS SIGN (DND)

LODGING - NEXT RIGHT

GAS - NEXT RIGHT

EX. FENCE (DND)

CONST. LIMITS

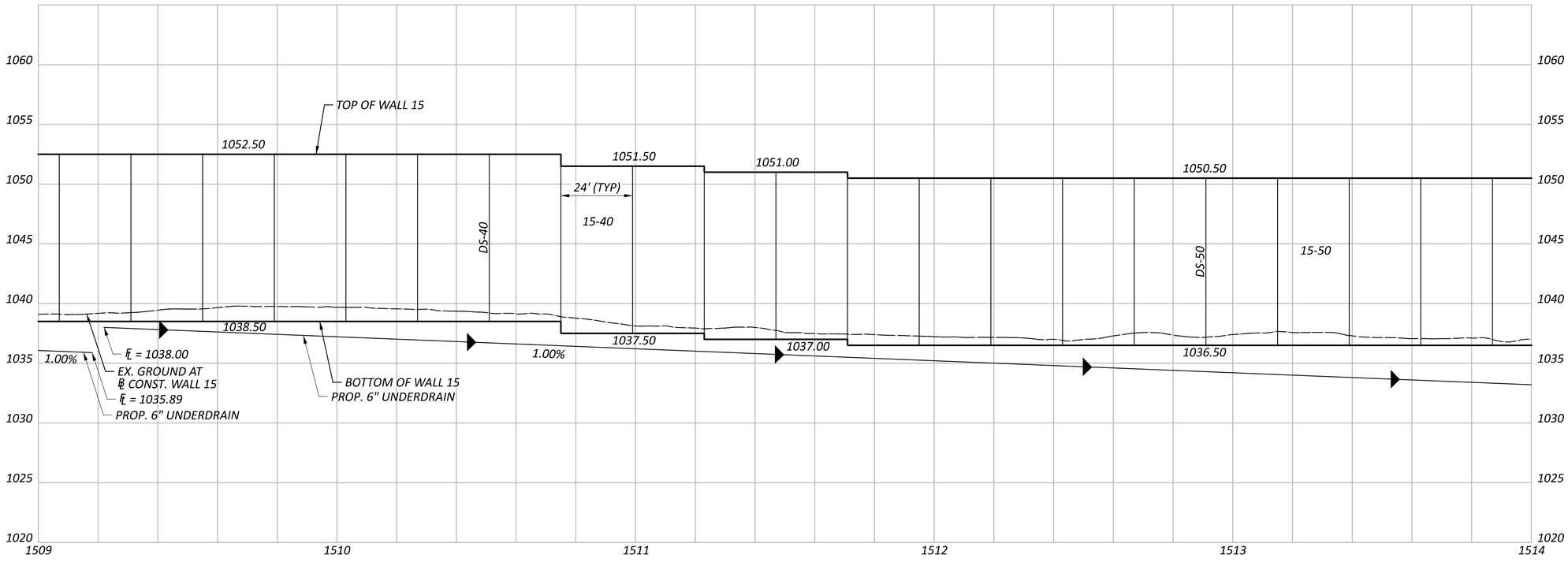
Ex LA-R/W

Ex LA-R/W

UD-18

HORIZONTAL
SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - WALL 15
## STA. 2296+00.00 TO STA. 2301+00.00

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DESIGNER
JMK

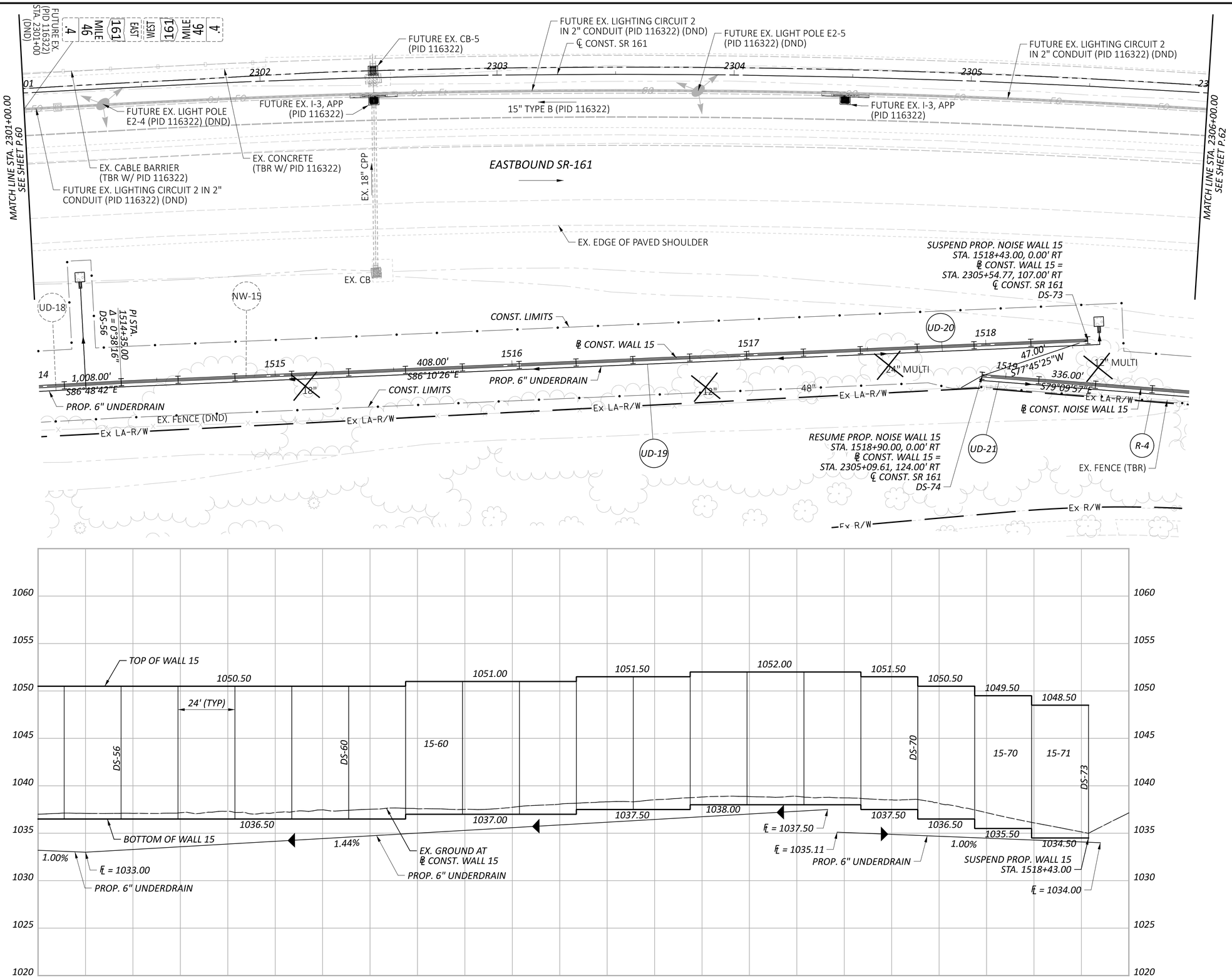
REVIEWER
JDH 05-22-24

PROJECT ID
117607

SHEET P.60 | TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: Wall 15 - Plan 24 PAPERSIZE: 34x22 (in.) DATE: 2024-05-23 TIME: 12:14:47 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP1503.dgn




FRA-161-15.80 NOISE ABATEMENT

MODEL: Wall 15 - Plan 25 PAPERSIZE: 34x22 (in.) DATE: 2024-05-23 TIME: 12:15:21 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP1504.dgn

HORIZONTAL SCALE IN FEET
0 10 20 40

# PLAN & PROFILE - WALL 15
# STA. 2301+00.00 TO STA. 2306+00.00


DESIGN AGENCY
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8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
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DESIGNER: JMK
REVIEWER: JDH 05-22-24
PROJECT ID: 117607
SHEET: P.61 TOTAL: P.297

FUTURE EX. LIGHTING CIRCUIT 2
IN 2" CONDUIT (PID 116322) (DND)
FUTURE EX. LIGHT POLE E2-6
(PID 116322) (DND)
FUTURE EX. LIGHTING CIRCUIT 2
IN 2" CONDUIT (PID 116322) (DND)
FUTURE EX. CONC. BARRIER, TYPE C APP 2
(PID 116322)
FUTURE EX. LIGHT POLE E2-7
(PID 116322) (DND)
FUTURE EX. LIGHTING CIRCUIT 2
IN 2" CONDUIT (PID 116322) (DND)

2306
2307
2308
2309
2310
℄ CONST. SR 161
FO
UD

MATCH LINE STA. 2306+00.00
SEE SHEET P.61

EASTBOUND SR-161

EX. EDGE OF PAVED SHOULDER

FUTURE EX. GUARDRAIL, TYPE MGS
(PID 116322)

EX. STREET LIGHT POLE AND FOUNDATION
(TBR W/ PID 116322)

EX. LIGHTING CIRCUIT
(TBR W/ PID 116322)

NW-15

CONST. LIMITS

END PROP. NOISE WALL 15
STA. 1522+26.00, 0.00' RT
℄ CONST. WALL 15 =
STA. 2308+56.65, 122.00' RT
℄ CONST. SR 161
DS-88

1518
47.00'
S77°45'25"W
1519
1520
℄ CONST. WALL 15
1521
336.00'
S79°09'57"E
1522
Ex LA-R/W
EX. FENCE (DND)
EX. FENCE (TBR)
CONST. LIMITS
PROP. 6" UNDERDRAIN
UD-21
F-8
R-4
F-7

RESUME PROP. NOISE WALL 15
STA. 1518+90.00, 0.00' RT
℄ CONST. WALL 15 =
STA. 2305+09.61, 124.00' RT
℄ CONST. SR 161
DS-74

Ex R/W
Ex R/W

TOP OF WALL 15
1051.50
1051.50
1051.00
1050.50
1050.00
24' (TYP)
15-72
15-80
15-85
DS-74
DS-80
DS-88
END PROP. WALL 15
STA. 1522+26.00
1037.50
1037.00
1036.50
1036.00
0.44%
℄ = 1037.00
PROP. 6" UNDERDRAIN
RESUME PROP. WALL 15
STA. 1518+90.00
BOTTOM OF WALL 15
PROP. 6" UNDERDRAIN
EX. GROUND AT
℄ CONST. WALL 15
℄ = 1035.50

1060
1055
1050
1045
1040
1035
1030
1025
1020
1519
1520
1521
1522

HORIZONTAL
SCALE IN FEET
0
10
20
40

# PLAN & PROFILE - WALL 15
## STA. 2306+00.00 TO STA. 2311+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: Wall 15 - Plan 26 PAPERSIZE: 34x22 (in.) DATE: 2024-05-23 TIME: 12:15:49 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GP1505.dgn

DESIGN AGENCY
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8101 NORTH HIGH ST SUITE 100
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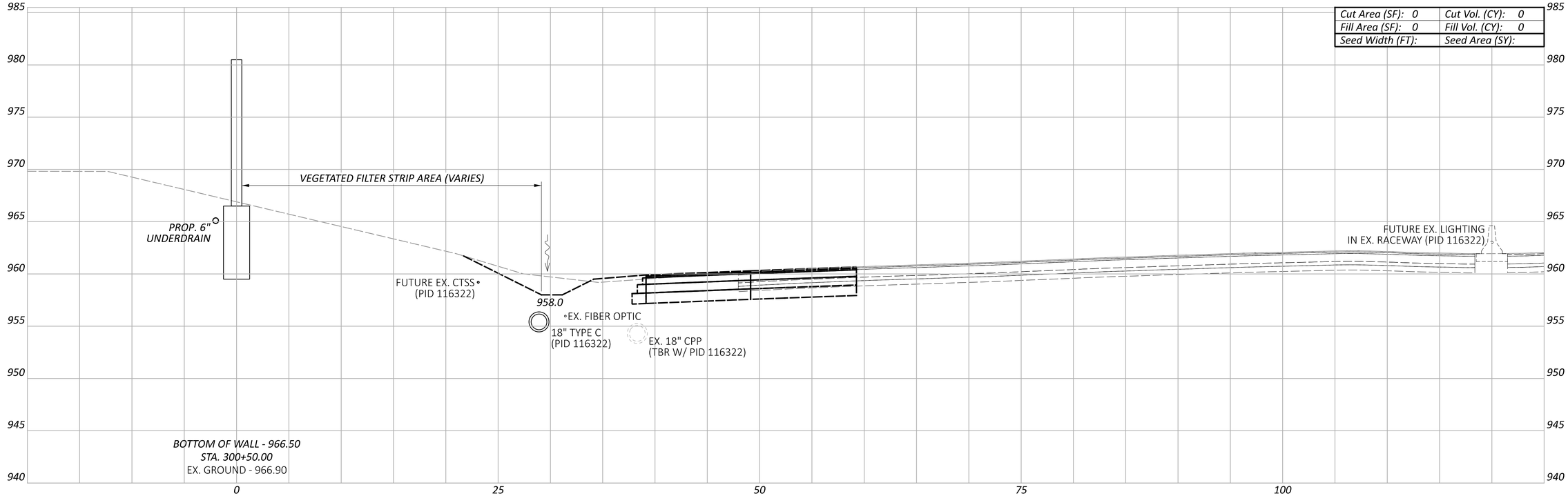
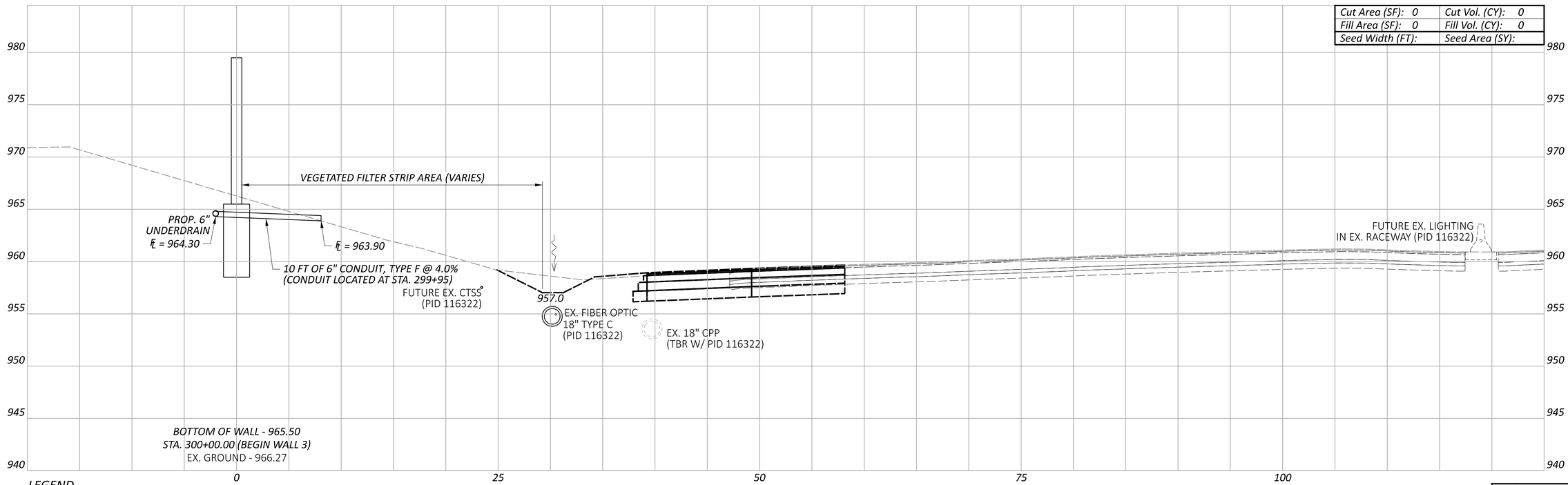
DESIGNER
JMK
REVIEWER
JDH 05-22-24
PROJECT ID
117607
SHEET P.62
TOTAL P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 3
## STA. 300+00.00 TO STA. 300+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |


DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
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DESIGNER JMK

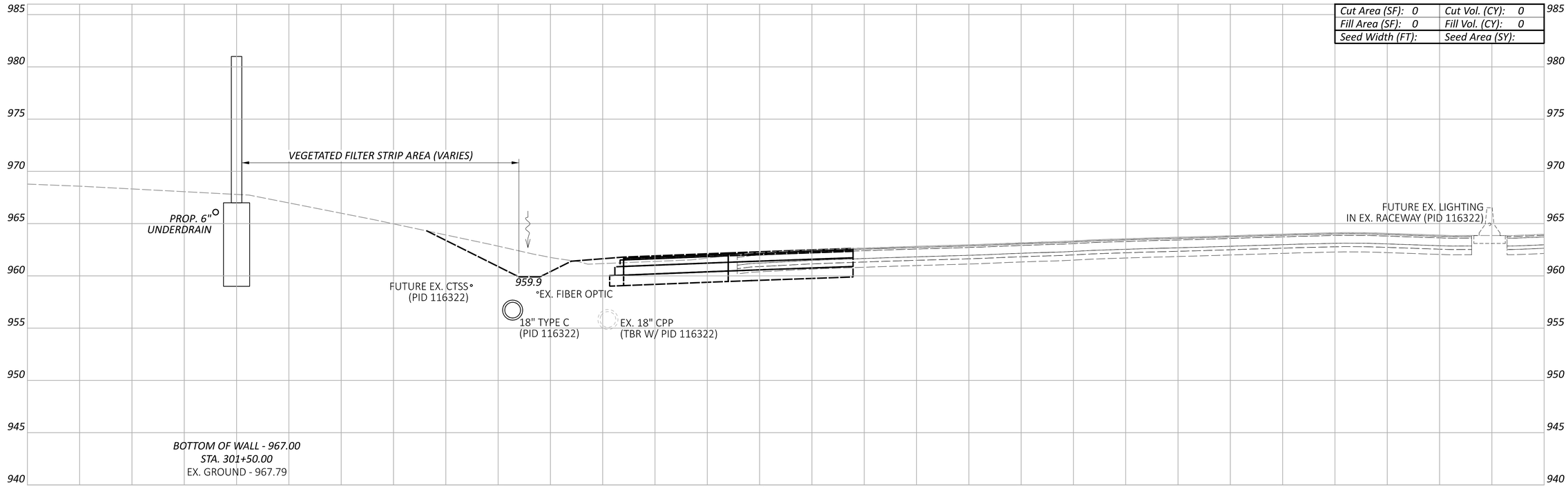
REVIEWER JDH 05-22-24

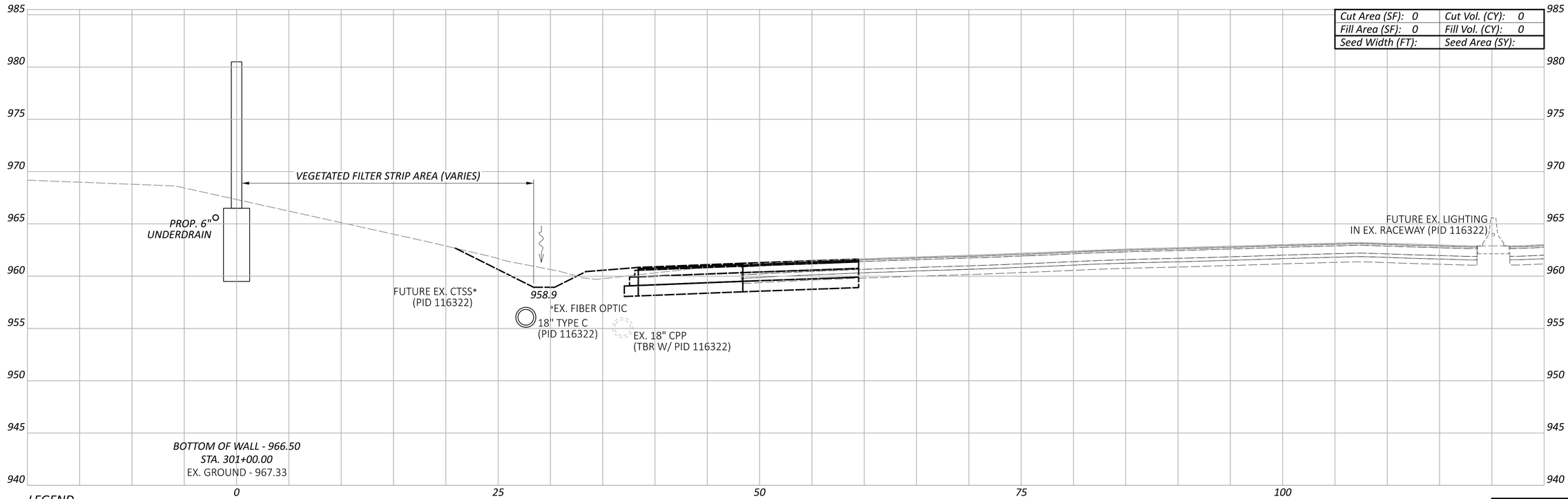
PROJECT ID 117607

SHEET P.63 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL3 - 300+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:50:40 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS003A.dgn




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 3
# STA. 301+00.00 TO STA. 301+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.64 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL3 - 301+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:51:14 PM USER: BEN.BROWN
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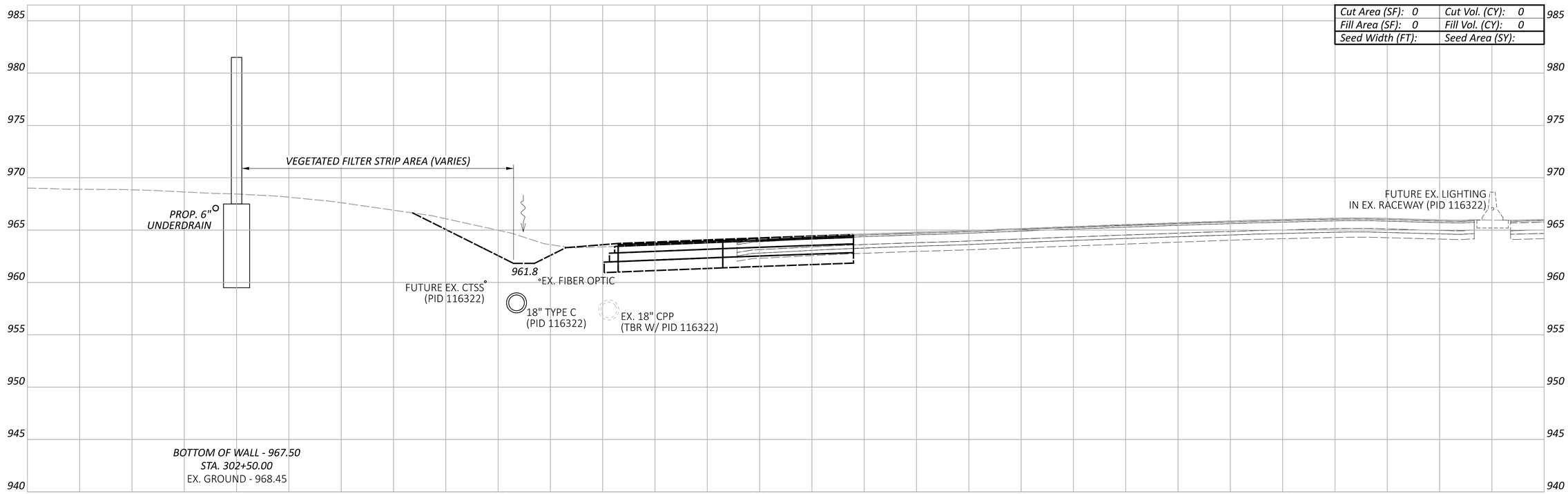


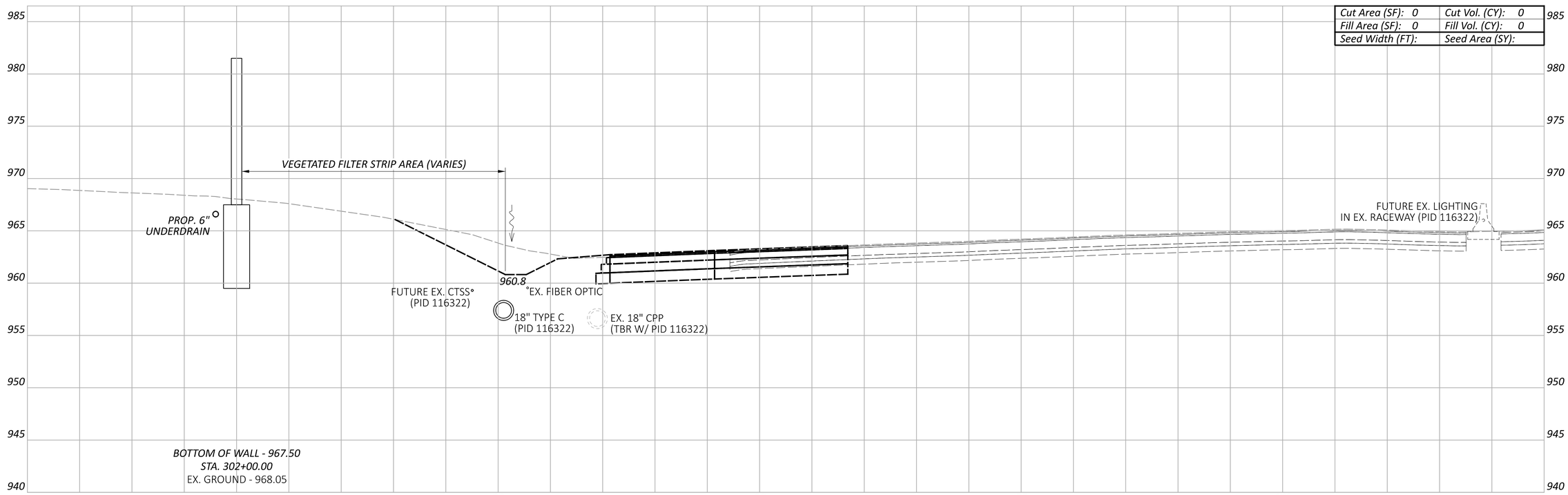


LEGEND

- - - EXISTING SR-161 PRIOR TO PID 116322

— — — FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 3
## STA. 302+00.00 TO STA. 302+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WAL3 - 302+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:51:33 PM USER: BEN.BROWN
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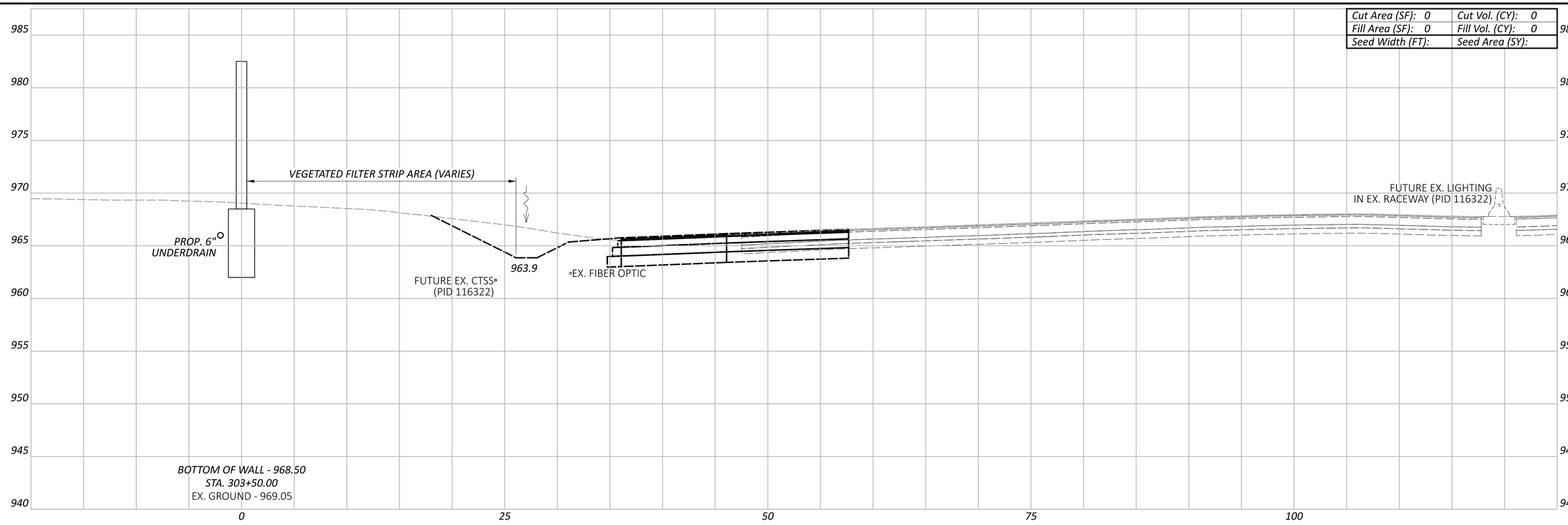
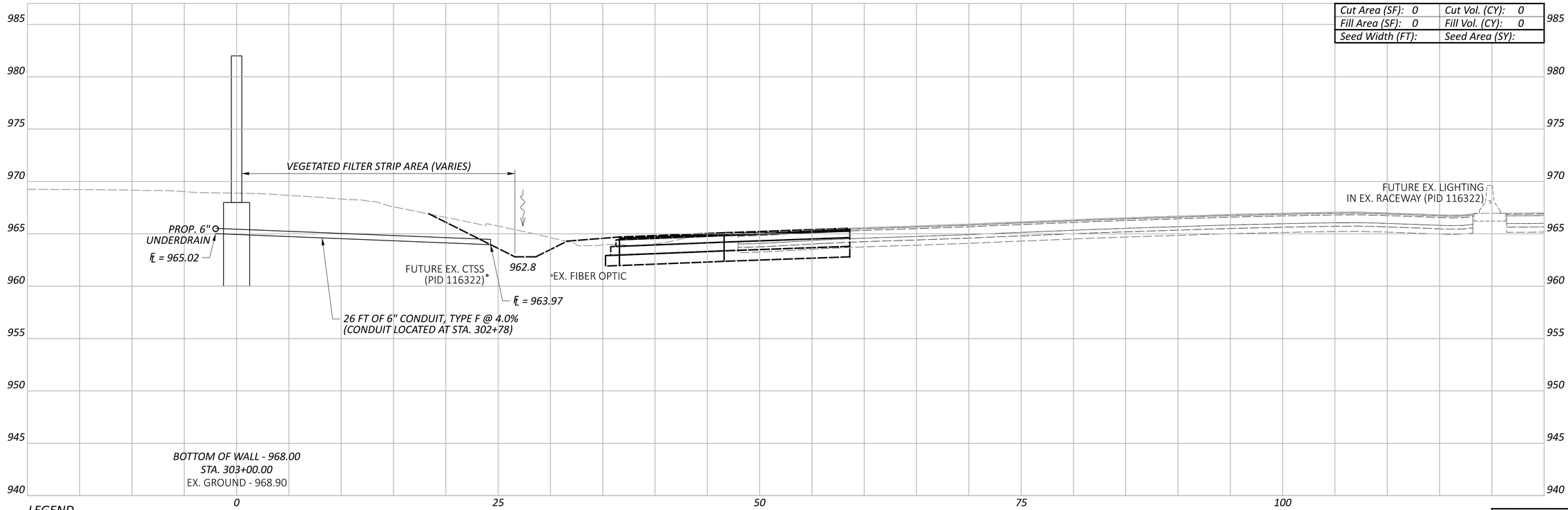
DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.65 TOTAL P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 3
## STA. 303+00.00 TO STA. 303+50.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL3 - 303+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:51:53 PM USER: BEN.BROWN
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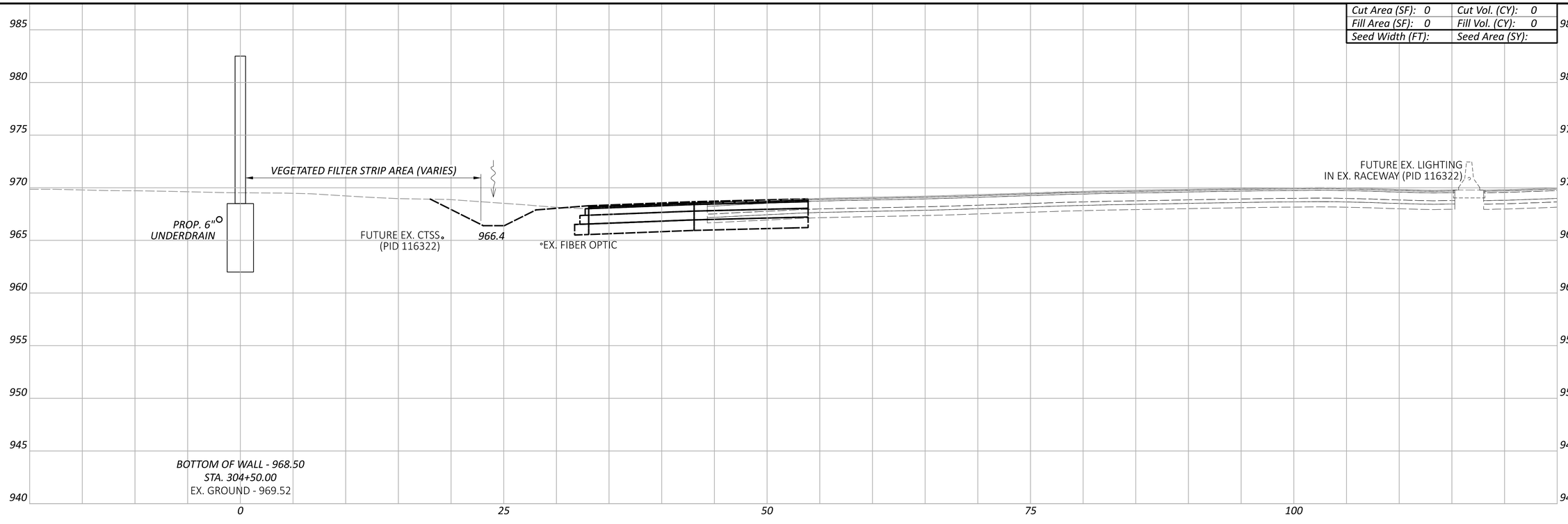
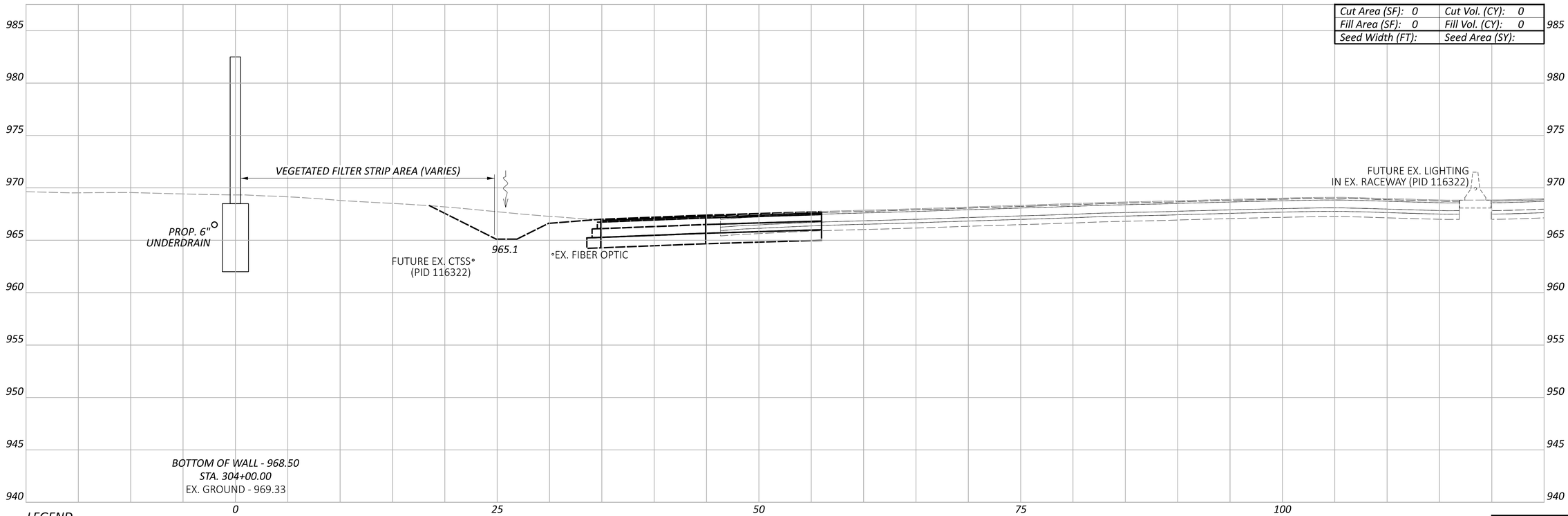
DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

| SHEET | TOTAL |
|---|---|
| P.66 | P.297 |




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 3
# STA. 304+00.00 TO STA. 304+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.67 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL3 - 304+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:52:12 PM USER: BEN.BROWN
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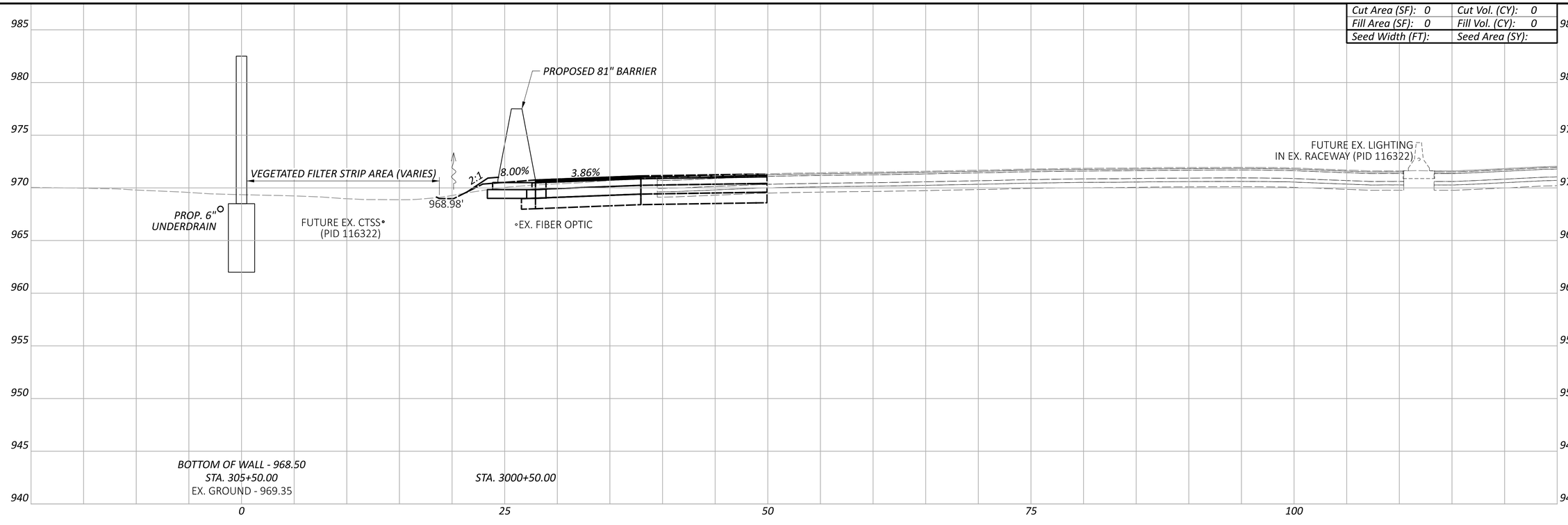


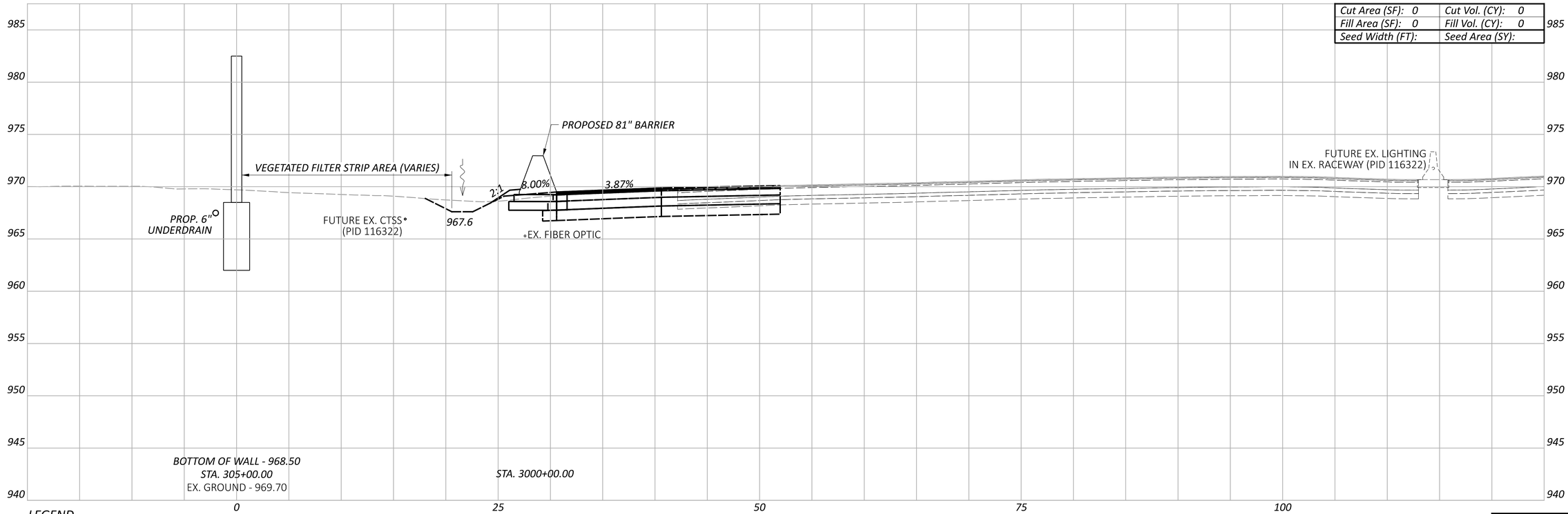


LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 3
## STA. 305+00.00 TO STA. 305+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL3 - 305+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:52:30 PM USER: BEN.BROWN
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8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4500
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DESIGNER: JMK

REVIEWER: JDH 05-22-24

PROJECT ID: 117607

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

SHEET: P.68 TOTAL: P.297

# FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WAL13 - 305+76.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:52:49 PM USER: BEN.BROWN
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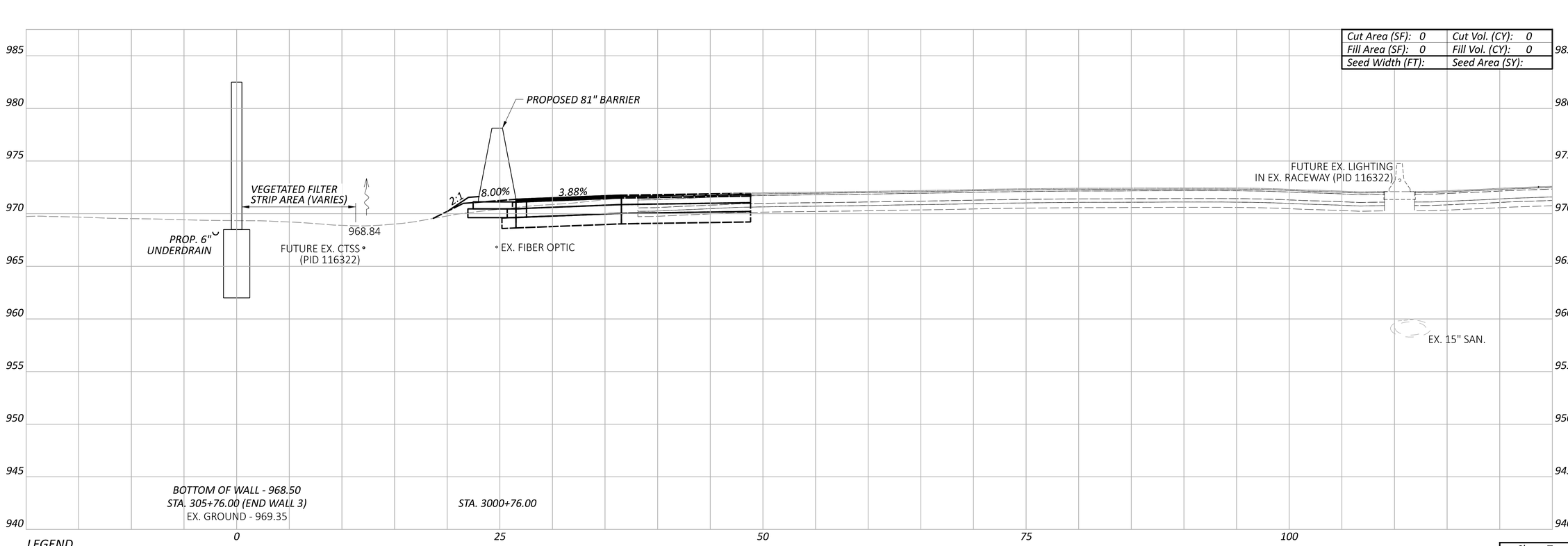
## CROSS SECTIONS - WALL 3
## STA. 305+76.00




| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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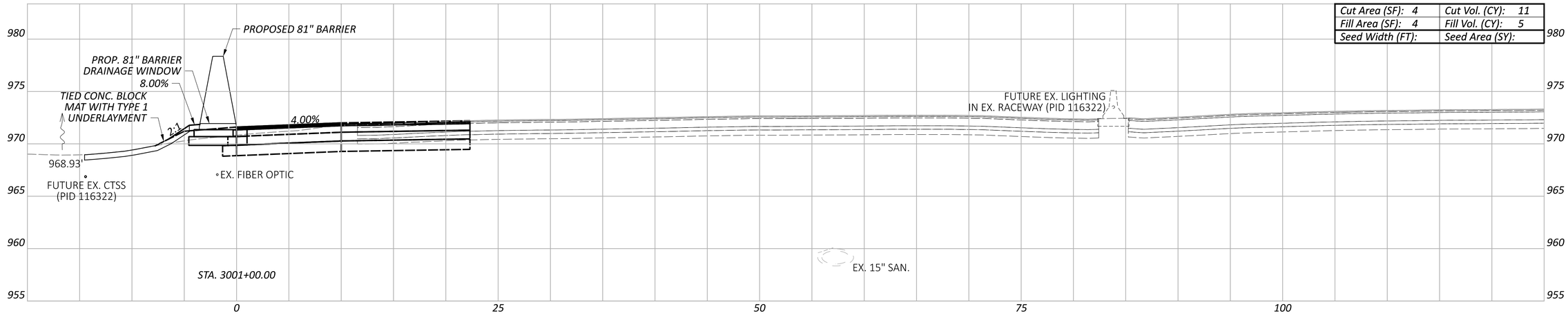
DESIGNER
JMK

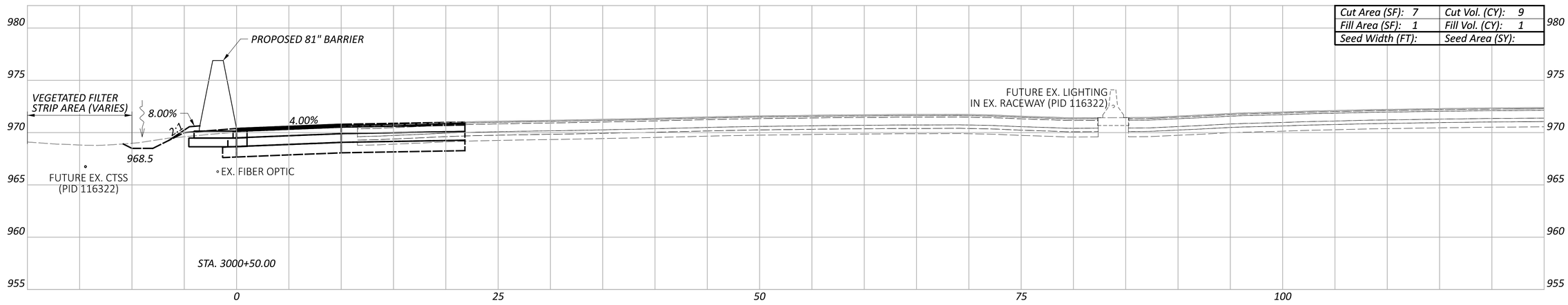
REVIEWER
JDH 05-22-24

PROJECT ID
117607

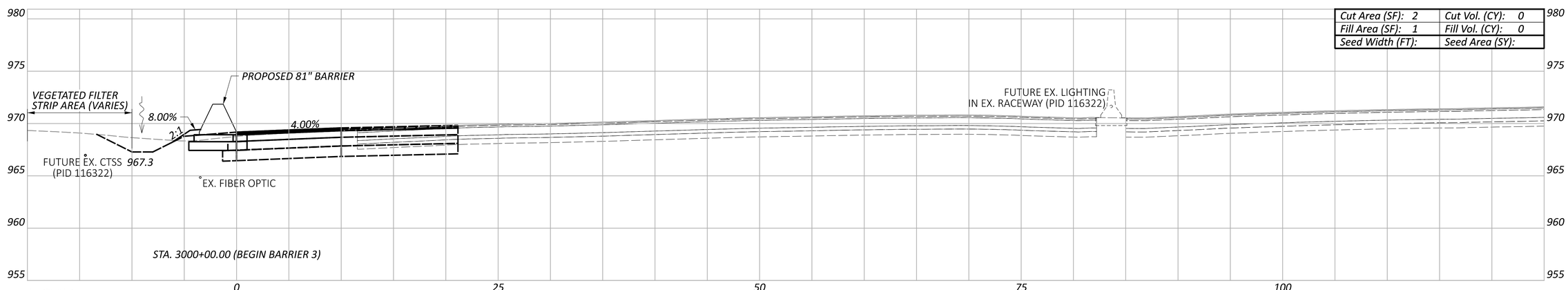
SHEET P.69 | TOTAL P.297




| | |
|---|---|
| Cut Area (SF): 4 | Cut Vol. (CY): 11 |
| Fill Area (SF): 4 | Fill Vol. (CY): 5 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 7 | Cut Vol. (CY): 9 |
| Fill Area (SF): 1 | Fill Vol. (CY): 1 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 2 | Cut Vol. (CY): 0 |
| Fill Area (SF): 1 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |

LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 20 | 6 |

# CROSS SECTIONS - 81" BARRIER 3
## STA. 3000+00.00 TO STA. 3001+00.00

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4500
www.arcadis.com

DESIGNER: JMK

REVIEWER: JDH 05-22-24

PROJECT ID: 117607

SHEET: P.70 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER3 - 3000+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:53:17 PM USER: BEN.BROWN
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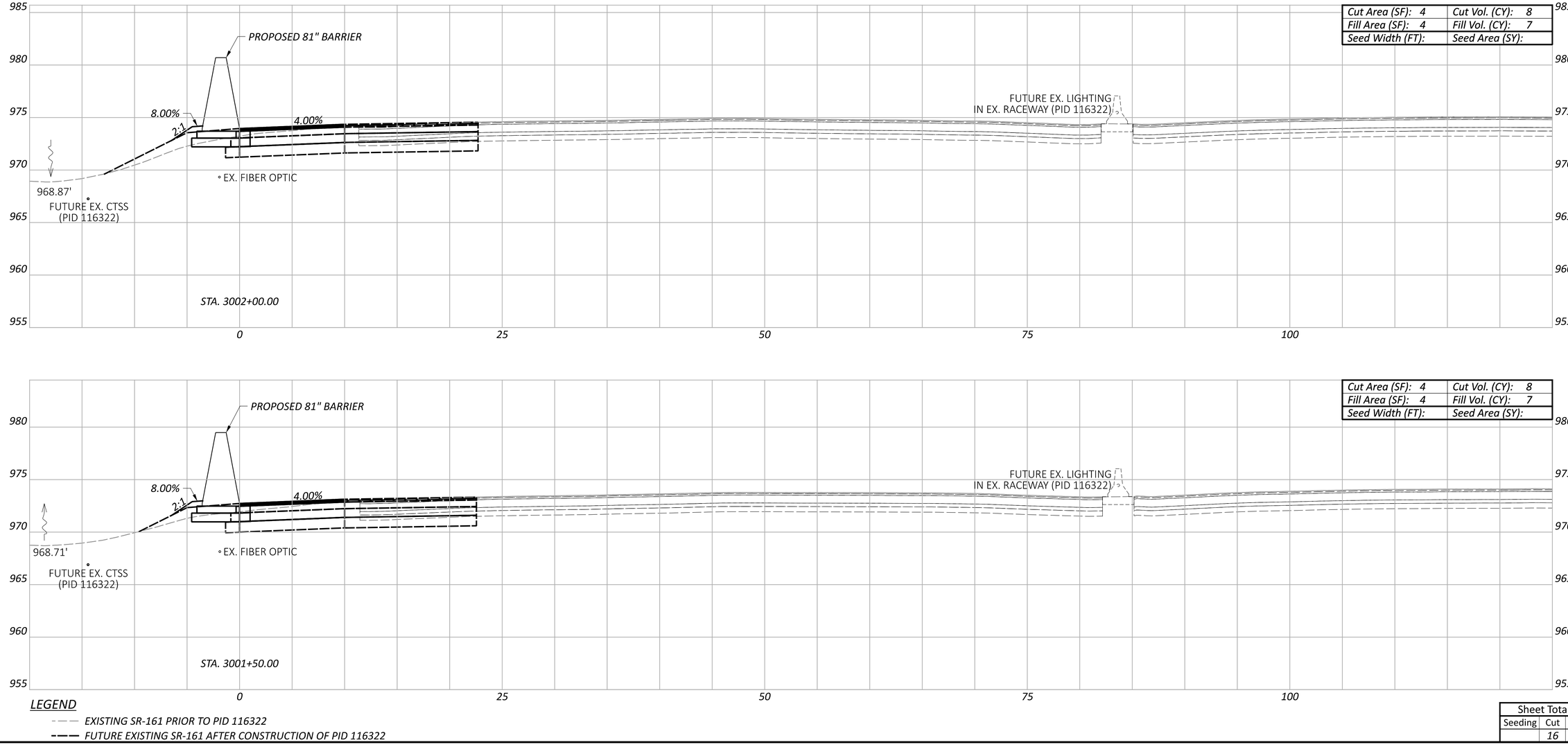



**LEGEND**

- - - EXISTING SR-161 PRIOR TO PID 116322

— — — FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 16 | 14 |

# CROSS SECTIONS - 81" BARRIER 3
# STA. 3001+50.00 TO STA. 3002+00.00


DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4500
www.arcadis.com


DESIGNER: JMK

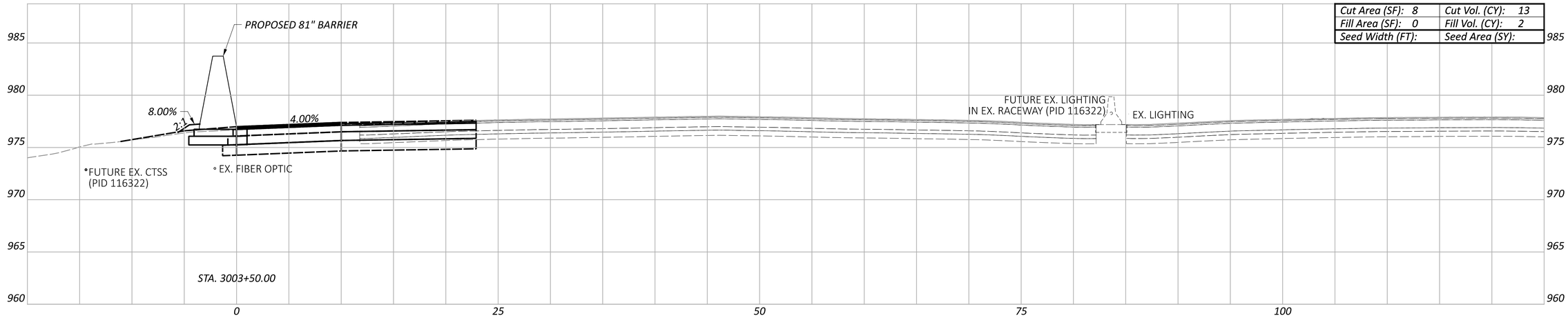
REVIEWER: JDH 05-22-24

PROJECT ID: 117607

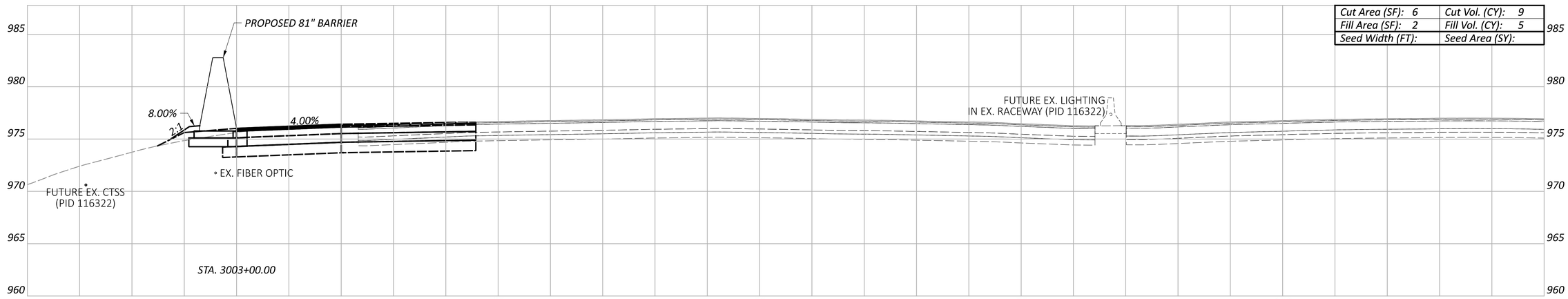
SHEET: P.71 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT

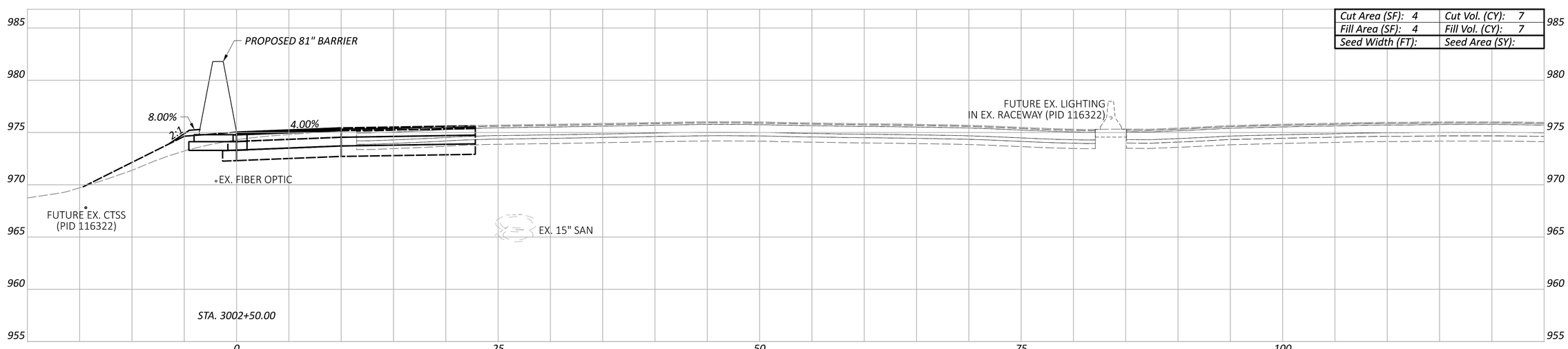

MODEL: BLP_BARRIER3 - 3001+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:53:42 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS003B.dgn




| | |
|---|---|
| Cut Area (SF): 8 | Cut Vol. (CY): 13 |
| Fill Area (SF): 0 | Fill Vol. (CY): 2 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 6 | Cut Vol. (CY): 9 |
| Fill Area (SF): 2 | Fill Vol. (CY): 5 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 4 | Cut Vol. (CY): 7 |
| Fill Area (SF): 4 | Fill Vol. (CY): 7 |
| Seed Width (FT): | Seed Area (SY): |

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 29 | 14 |

# CROSS SECTIONS - 81" BARRIER 3
# STA. 3002+50.00 TO STA. 3003+50.00

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4500
www.arcadis.com

DESIGNER: JMK

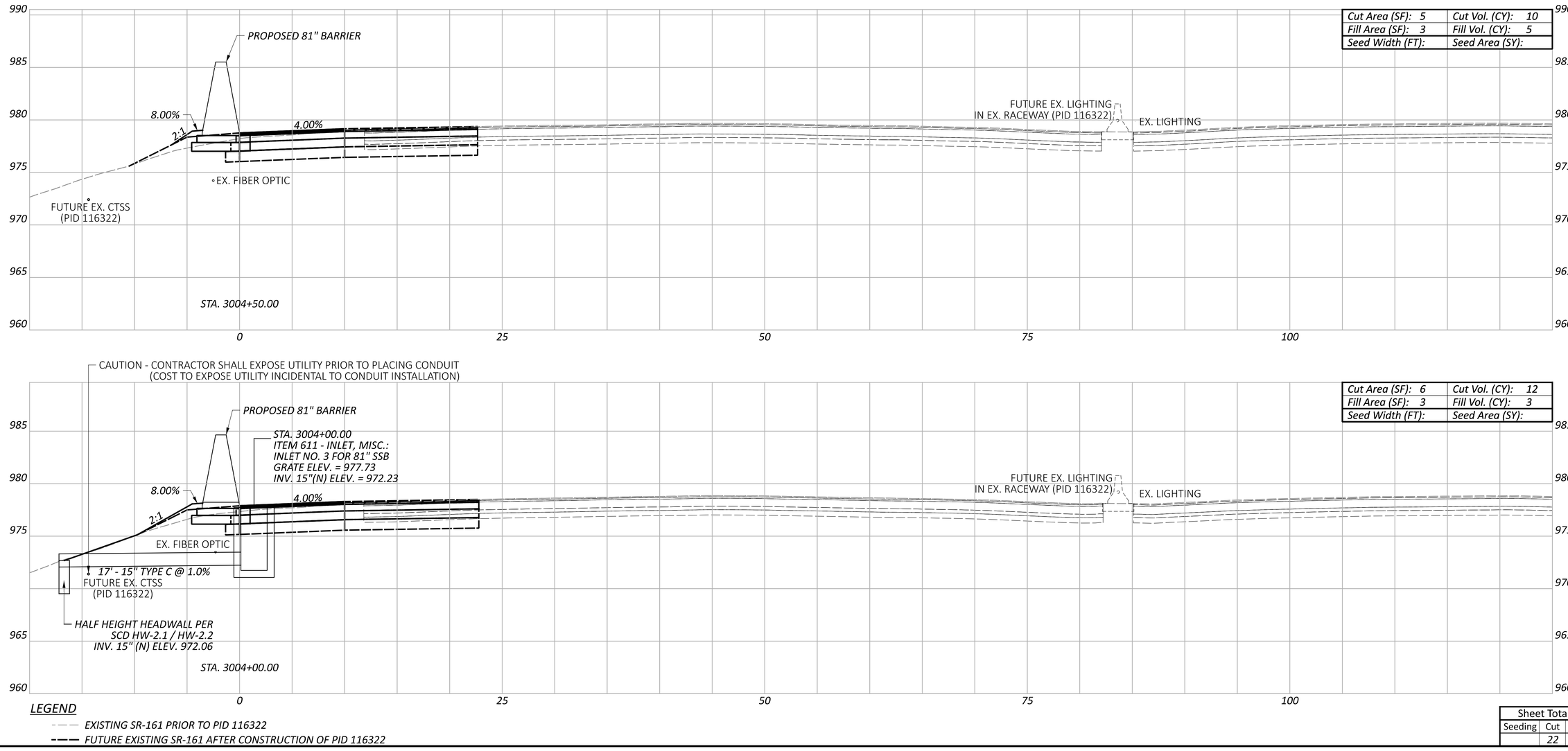
REVIEWER: JDH 05-22-24

PROJECT ID: 117607

SHEET: P.72 | TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER3 - 3002+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:53:59 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS003B.dgn




LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 22 | 8 |

# CROSS SECTIONS - 81" BARRIER 3
# STA. 3004+00.00 TO STA. 3004+50.00


DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4600
www.arcadis.com


DESIGNER: JMK

REVIEWER: JDH 05-22-24

PROJECT ID: 117607

SHEET: P.73 | TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_BARRIER3 - 3004+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:54:24 PM USER: BEN.BROWN
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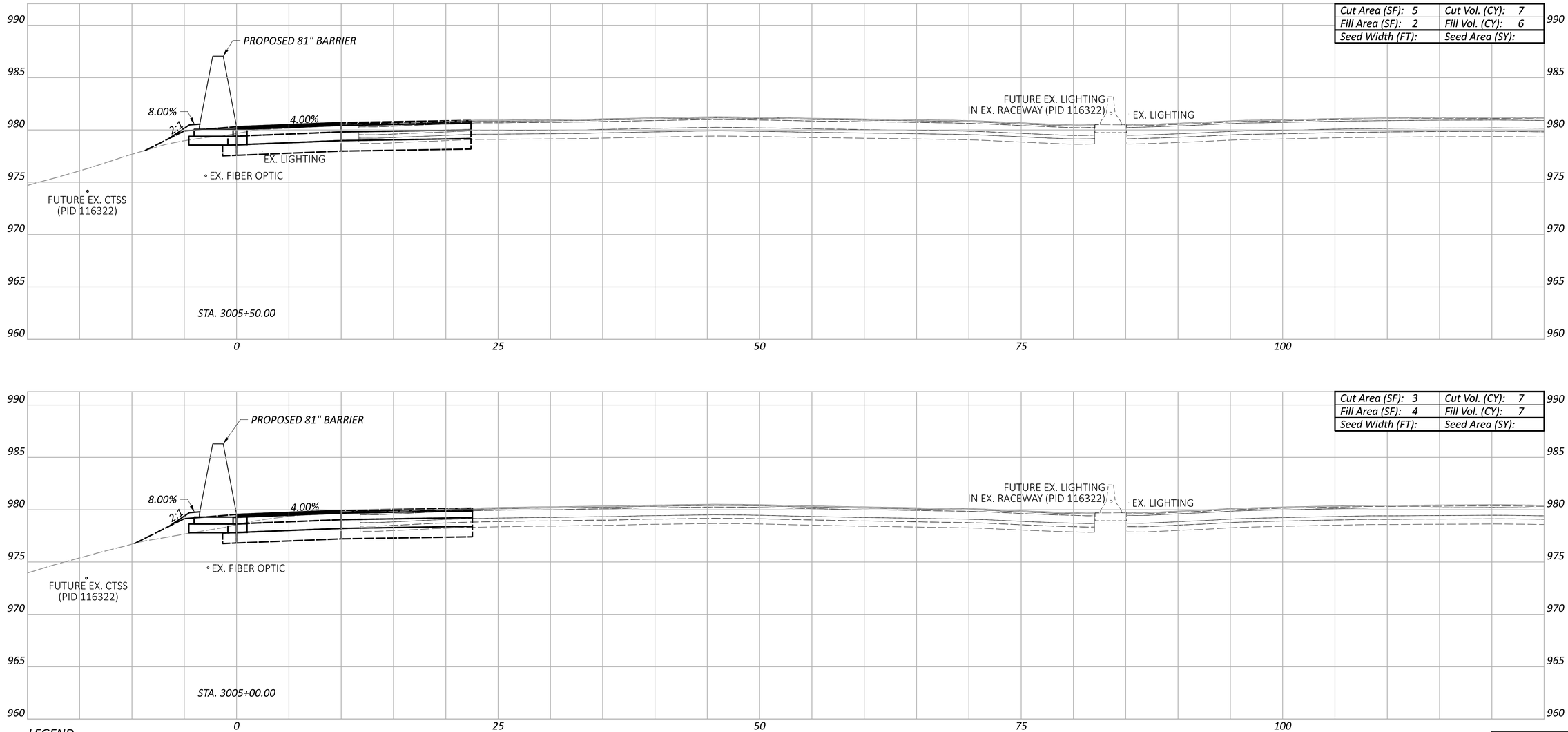



LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 14 | 13 |

# CROSS SECTIONS - 81" BARRIER 3
# STA. 3005+00.00 TO STA. 3005+50.00


DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 318-4000
www.arcadis.com


DESIGNER: JMK

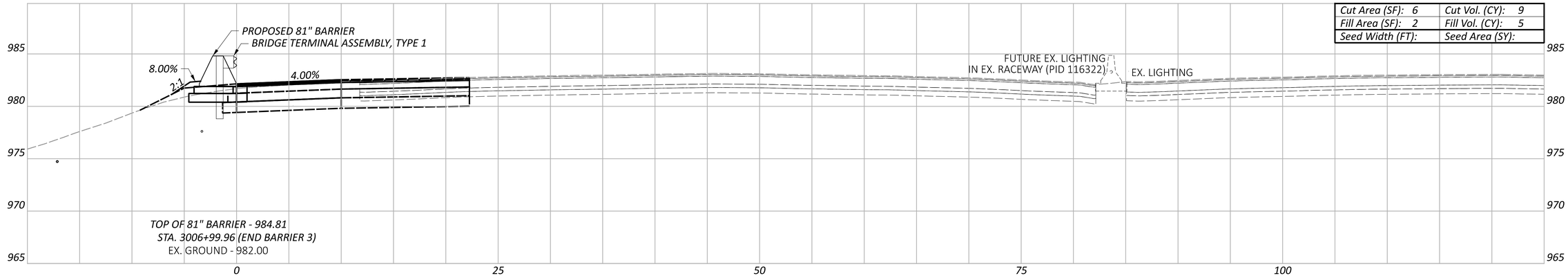
REVIEWER: JDH 05-22-24

PROJECT ID: 117607

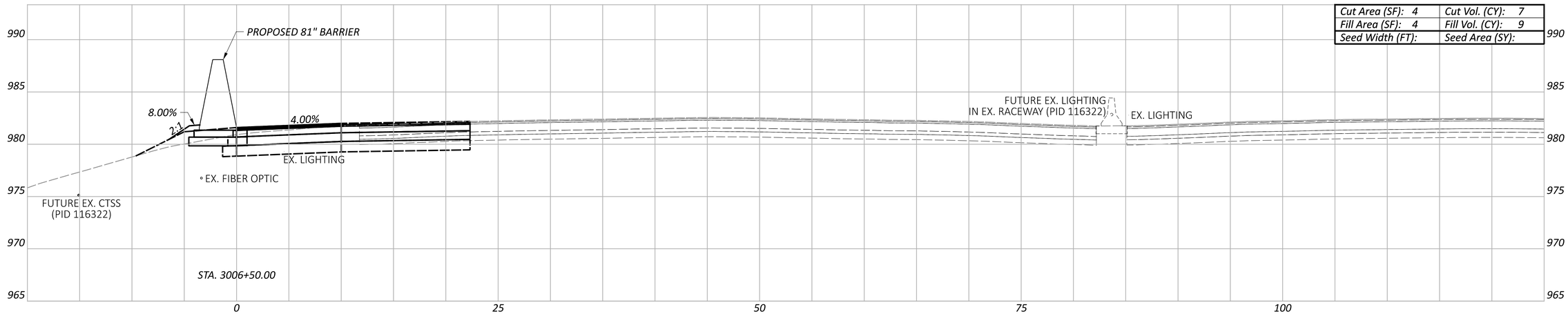
SHEET: P.74 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT

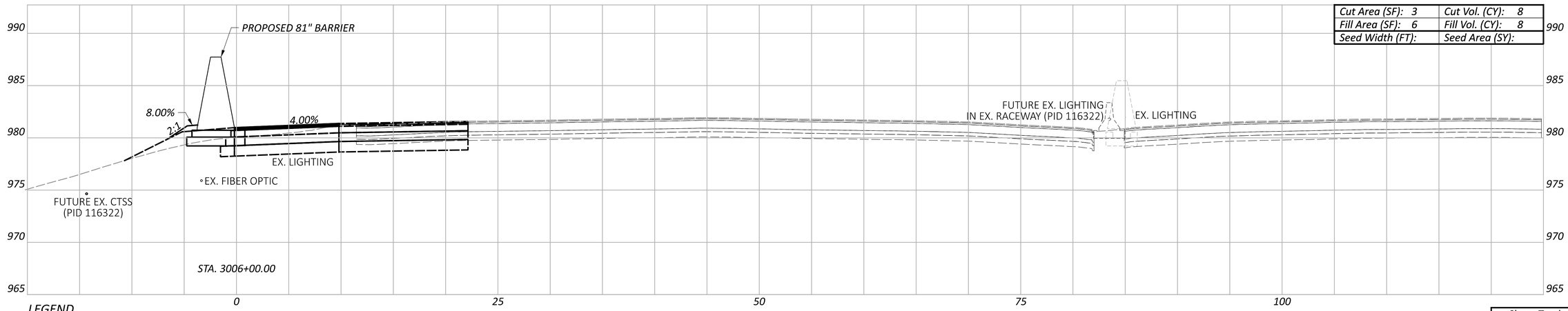

MODEL: BLP_BARRIER3 - 3005+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:54:40 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS003B.dgn




| | |
|---|---|
| Cut Area (SF): 6 | Cut Vol. (CY): 9 |
| Fill Area (SF): 2 | Fill Vol. (CY): 5 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 4 | Cut Vol. (CY): 7 |
| Fill Area (SF): 4 | Fill Vol. (CY): 9 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 3 | Cut Vol. (CY): 8 |
| Fill Area (SF): 6 | Fill Vol. (CY): 8 |
| Seed Width (FT): | Seed Area (SY): |

LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 24 | 22 |

# CROSS SECTIONS - 81" BARRIER 3
## STA. 3006+00.00 TO STA. 3006+99.96


DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 318-4000
www.arcadis.com


DESIGNER: JMK

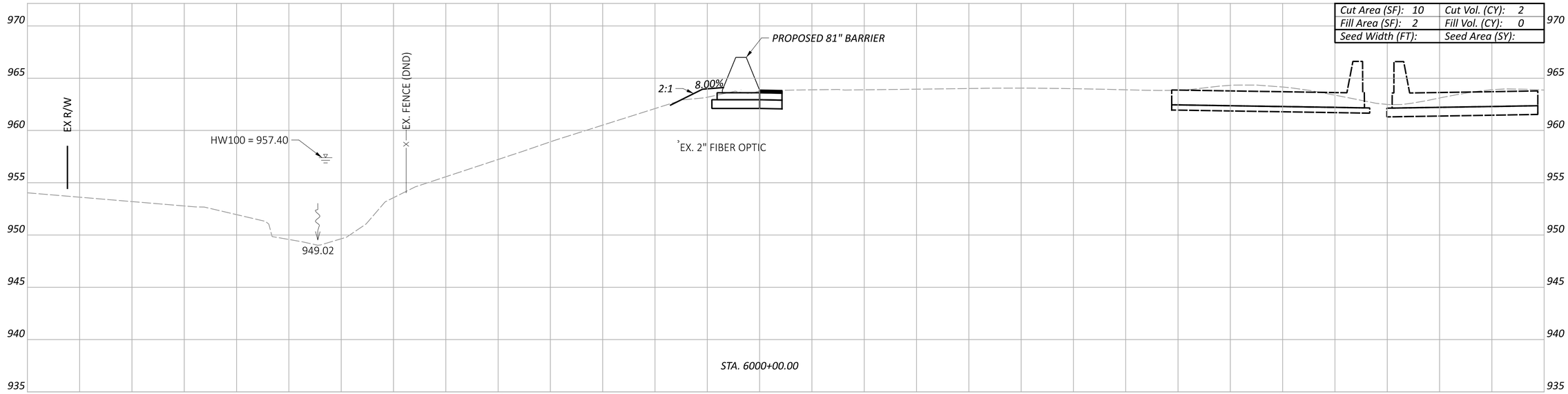
REVIEWER: JDH 05-22-24

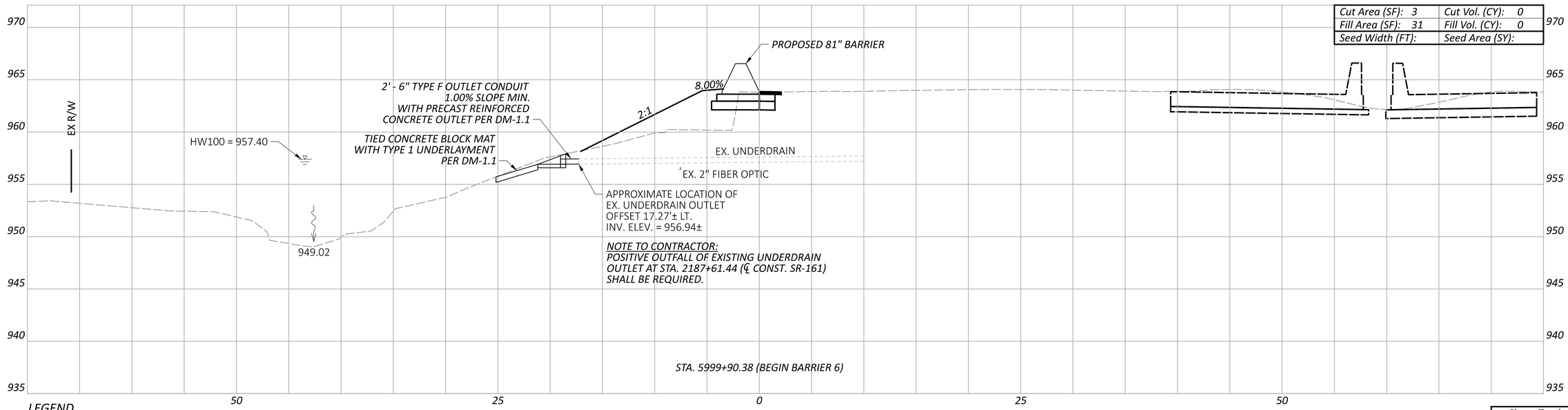
PROJECT ID: 117607

SHEET: P.75 | TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_BARRIER3 - 3006+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:54:57 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS003B.dgn




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# FRA-161-15.80 NOISE ABATEMENT

# CROSS SECTIONS - 81" BARRIER 6
# STA. 5999+90.38 TO STA. 6000+00.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 2 | 0 |


DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4500
www.arcadis.com


DESIGNER: JMK

REVIEWER: JDH 05-22-24

PROJECT ID: 117607

SHEET: P.76 TOTAL: P.297


MODEL: BLP_BARRIER6 - 5999+90.38 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:55:49 PM USER: BEN.BROWN
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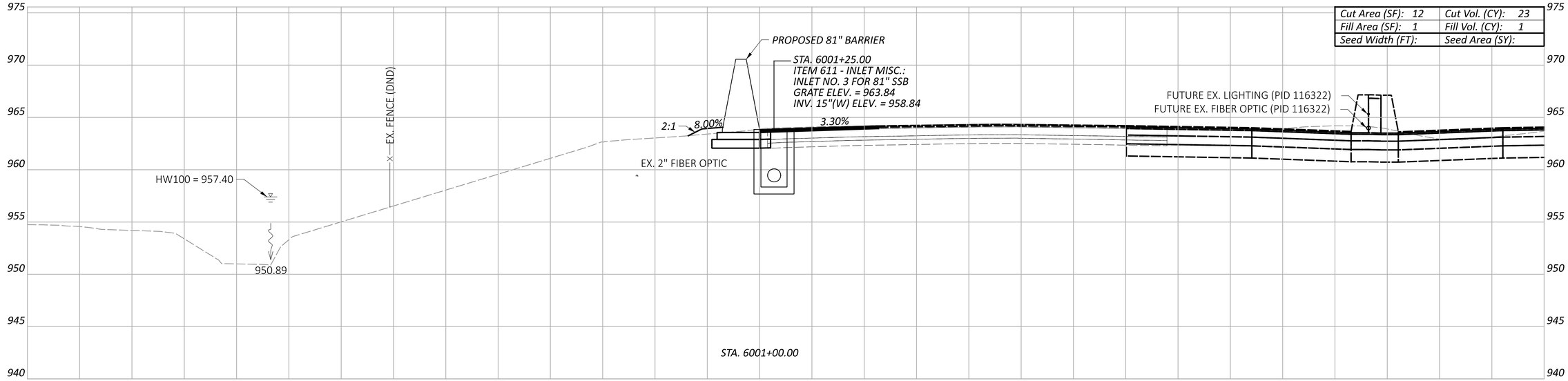


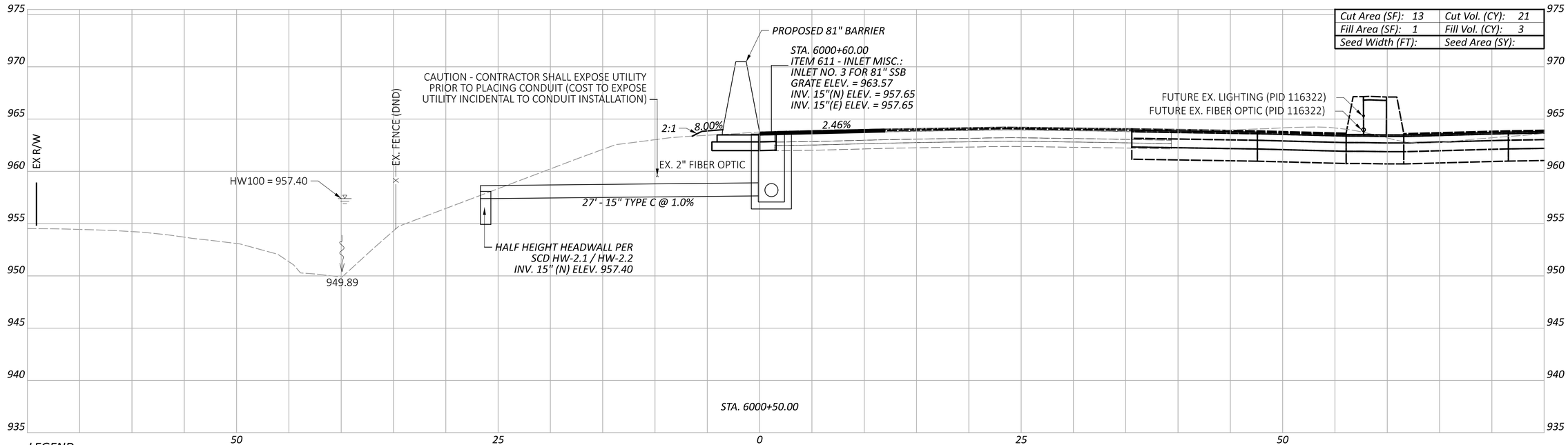


LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 44 | 4 |

# FRA-161-15.80 NOISE ABATEMENT

# CROSS SECTIONS - 81" BARRIER 6
# STA. 6000+50.00 TO STA. 6001+00.00


DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 825-4900
www.arcadis.com


DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.77 TOTAL P.297


MODEL: BLP_BARRIER6 - 6000+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:56:05 PM USER: BEN.BROWN
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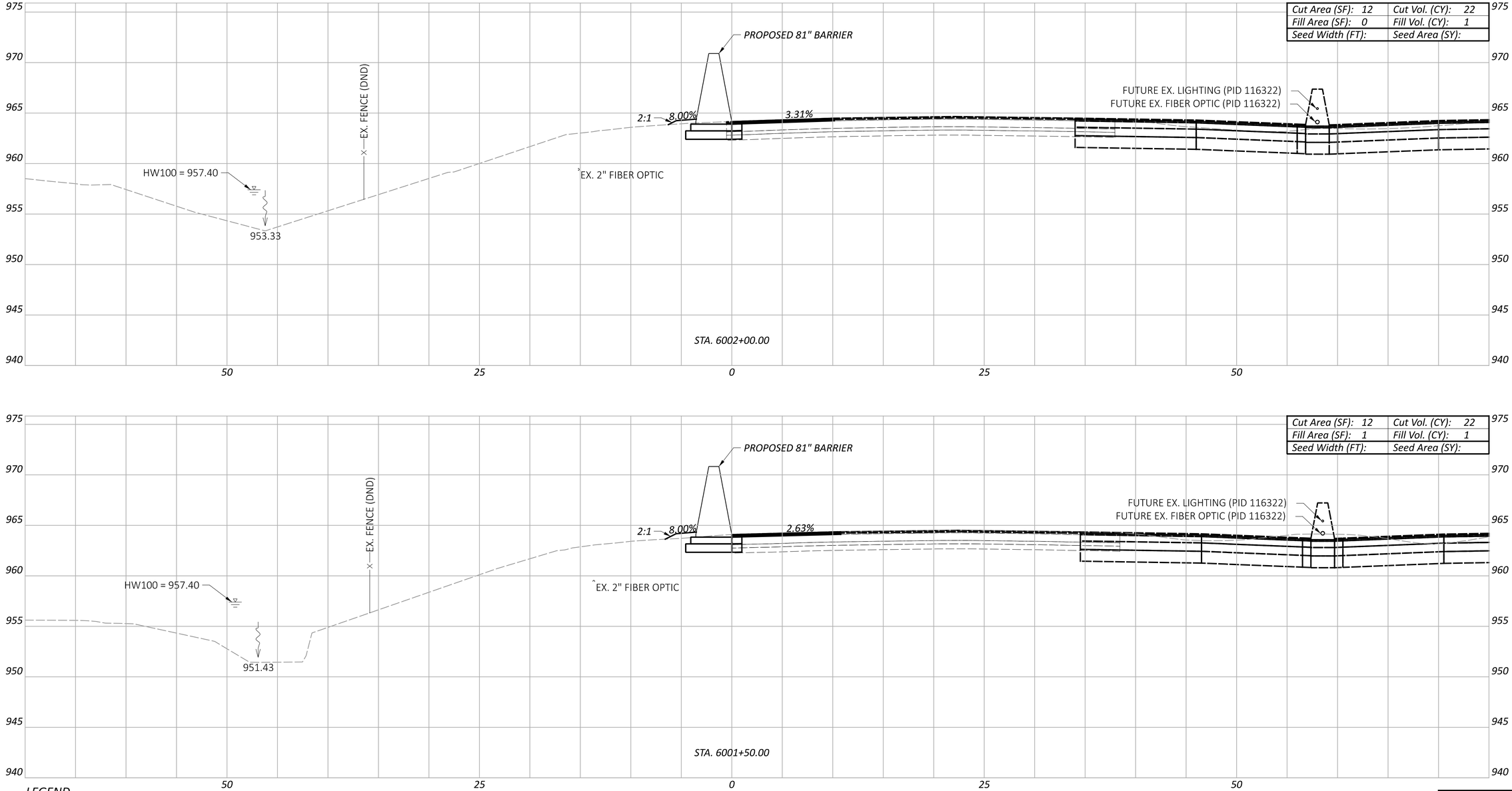



LEGEND

*EXISTING SR-161 PRIOR TO PID 116322*

*FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322*

# CROSS SECTIONS - 81" BARRIER 6
# STA. 6001+50.00 TO STA. 6002+00.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 44 | 2 |

DESIGN AGENCY

ARCADIS
8101 NORTHHIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 794-5800
www.arcadis.com

DESIGNER: JMK

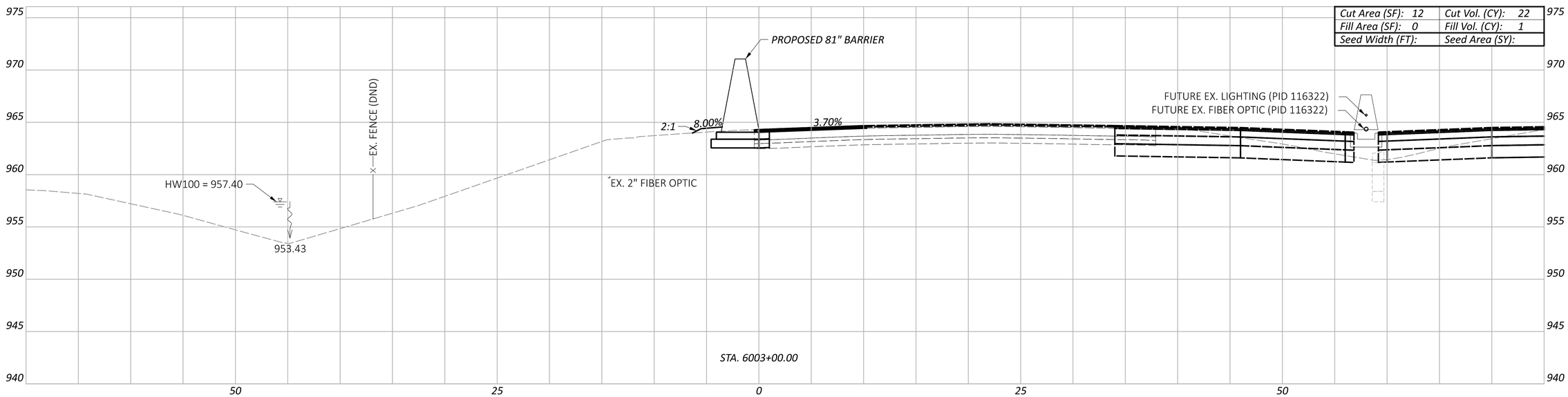
REVIEWER: JDH 05-22-24

PROJECT ID: 117607

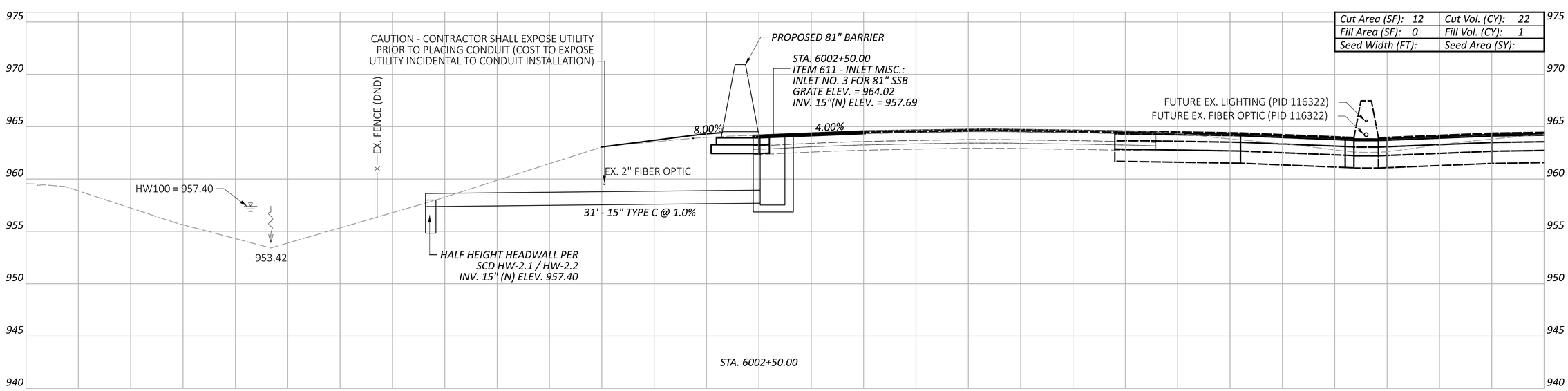
SHEET: P.78 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER6 - 6001+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:56:16 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS006A.dgn




| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 22 |
| Fill Area (SF): 0 | Fill Vol. (CY): 1 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 22 |
| Fill Area (SF): 0 | Fill Vol. (CY): 1 |
| Seed Width (FT): | Seed Area (SY): |

LEGEND

- - - EXISTING SR-161 PRIOR TO PID 116322

—— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 44 | 2 |

# CROSS SECTIONS - 81" BARRIER 6
## STA. 6002+50.00 TO STA. 6003+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER6 - 6002+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:56:26 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS006A.dgn

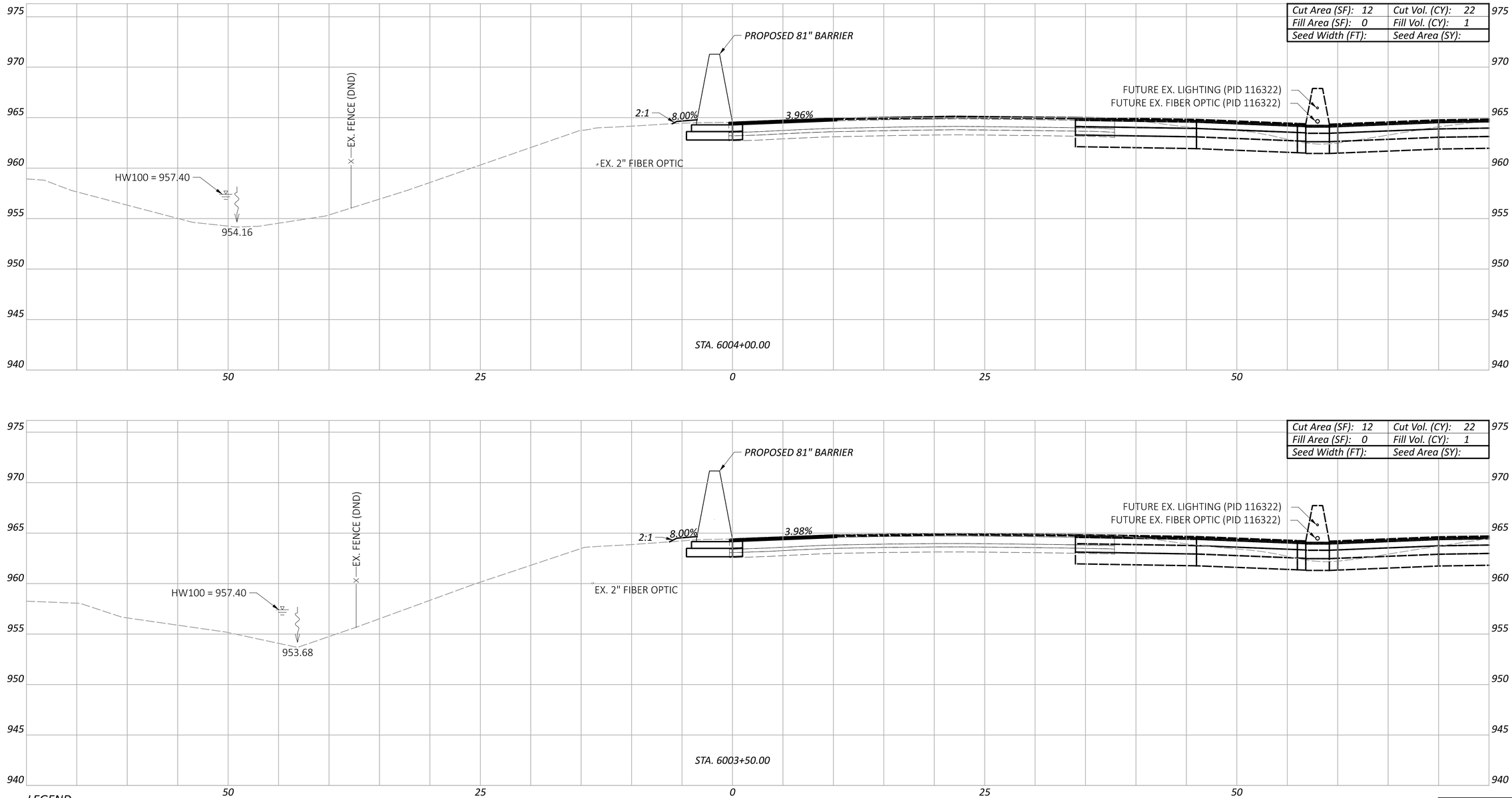
DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 818-4900
www.arcadis.com

DESIGNER
JMK

REVIEWER
JDH 05-22-24

PROJECT ID
117607

SHEET P.79 TOTAL P.297




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 44 | 2 |

# CROSS SECTIONS - 81" BARRIER 6
# STA. 6003+50.00 TO STA. 6004+00.00


DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 818-4900
www.arcadis.com


DESIGNER: JMK

REVIEWER: JDH 05-22-24

PROJECT ID: 117607

SHEET: P.80 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_BARRIER6 - 6003+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:56:38 PM USER: BEN.BROWN
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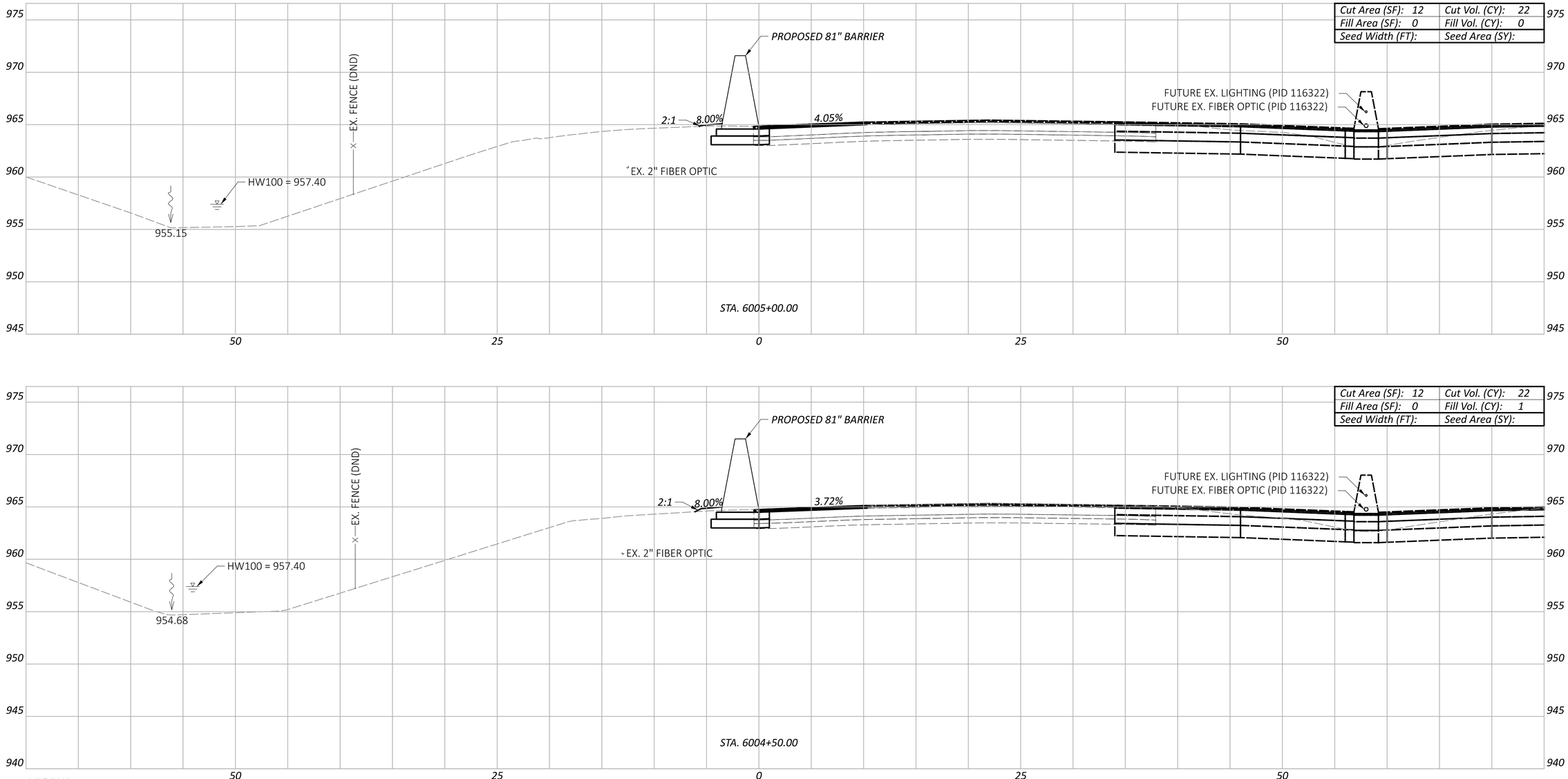


LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 44 | 1 |

# CROSS SECTIONS - 81" BARRIER 6
## STA. 6004+50.00 TO STA. 6005+00.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_BARRIER6 - 6004+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:56:49 PM USER: BEN.BROWN
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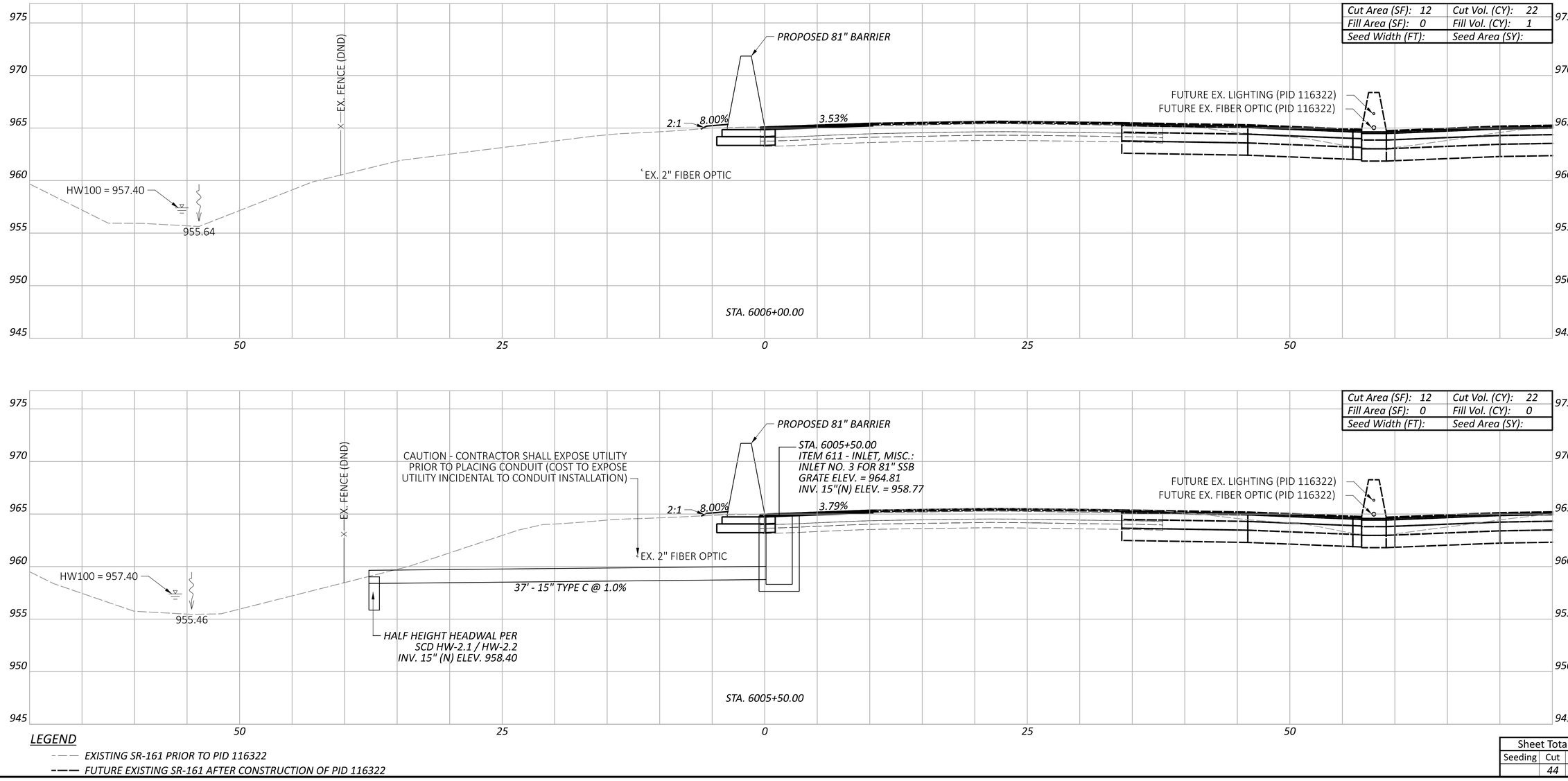
DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 818-4900
www.arcadis.com


DESIGNER: JMK

REVIEWER: JDH 05-22-24

PROJECT ID: 117607

| SHEET | TOTAL |
|---|---|
| P.81 | P.297 |




# CROSS SECTIONS - 81" BARRIER 6
# STA. 6005+50.00 TO STA. 6006+00.00

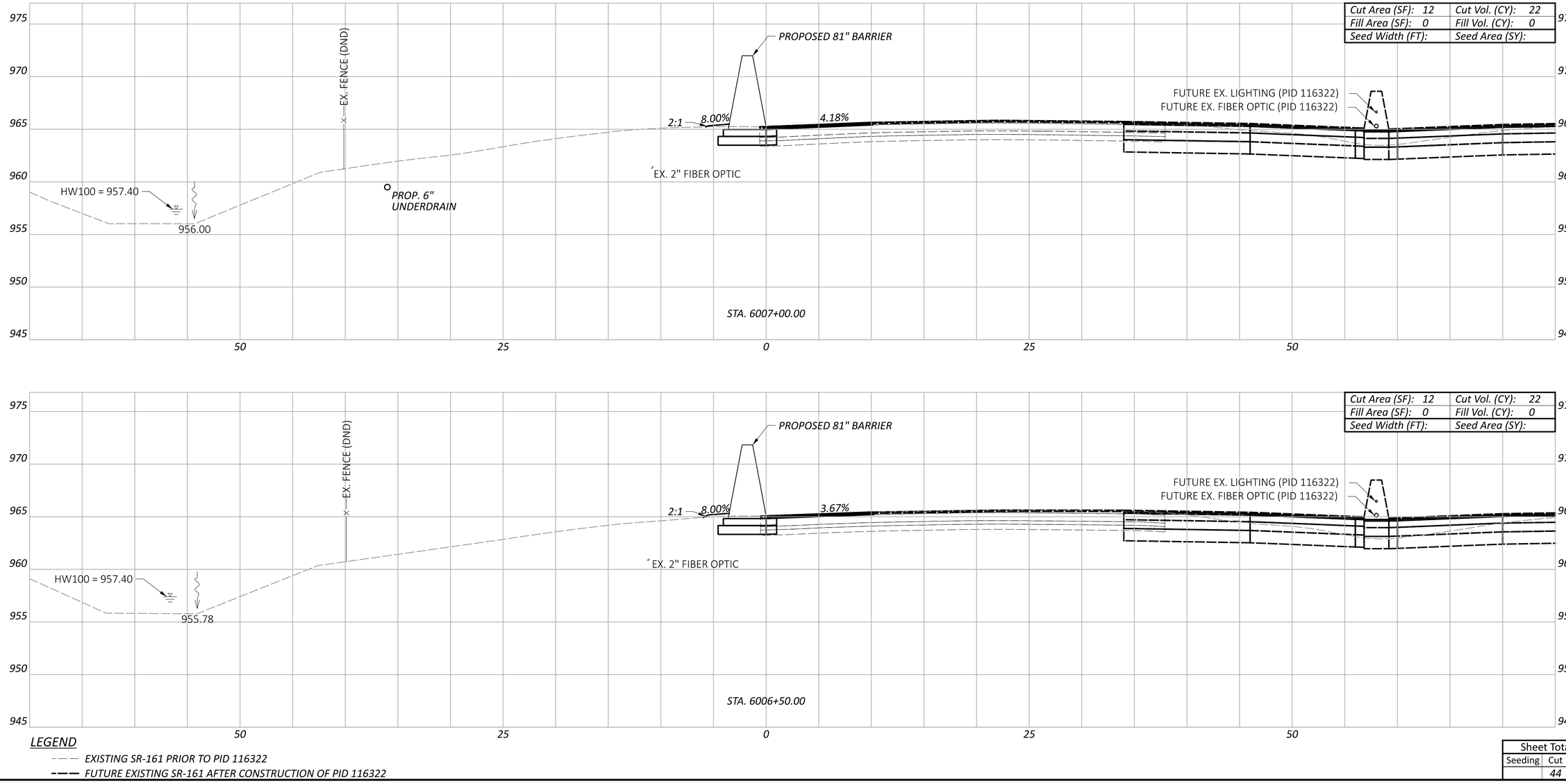
FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER6 - 6005+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:57:01 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS006A.dgn

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 44 | 1 |

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4800
www.arcadis.com

DESIGNER: JMK
REVIEWER: JDH 05-22-24
PROJECT ID: 117607
SHEET: P.82 TOTAL: P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 44 | 0 |

FRA-161-15.80 NOISE ABATEMENT

CROSS SECTIONS - 81" BARRIER 6
STA. 6006+50.00 TO STA. 6007+00.00


DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4500
www.arcadis.com

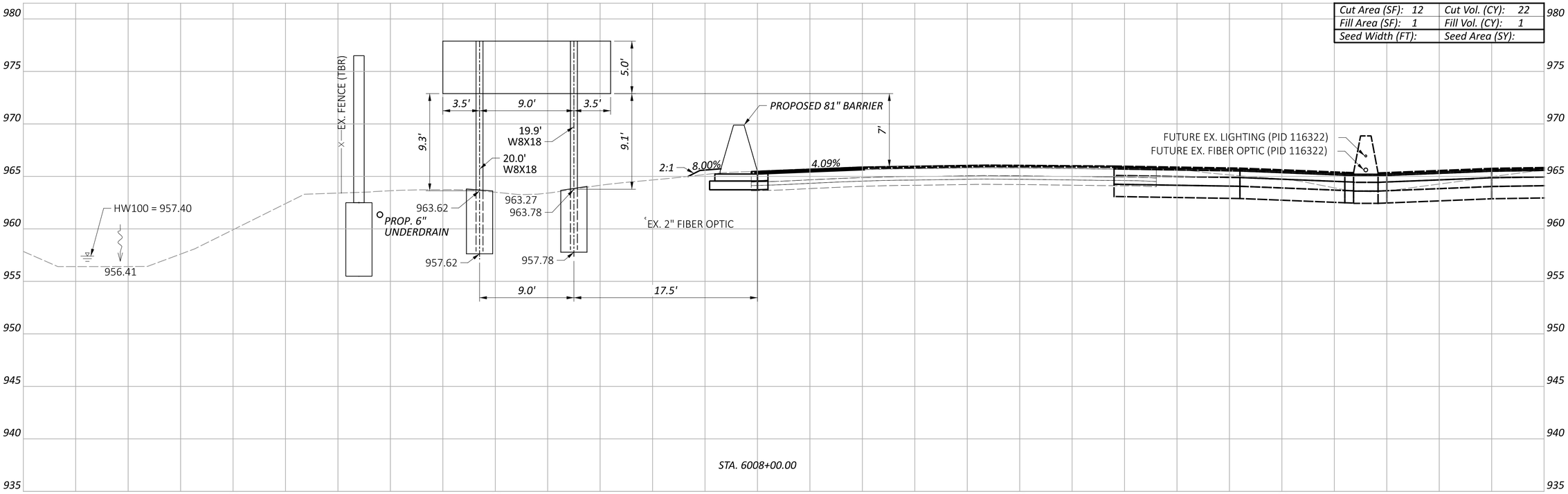

DESIGNER: JMK

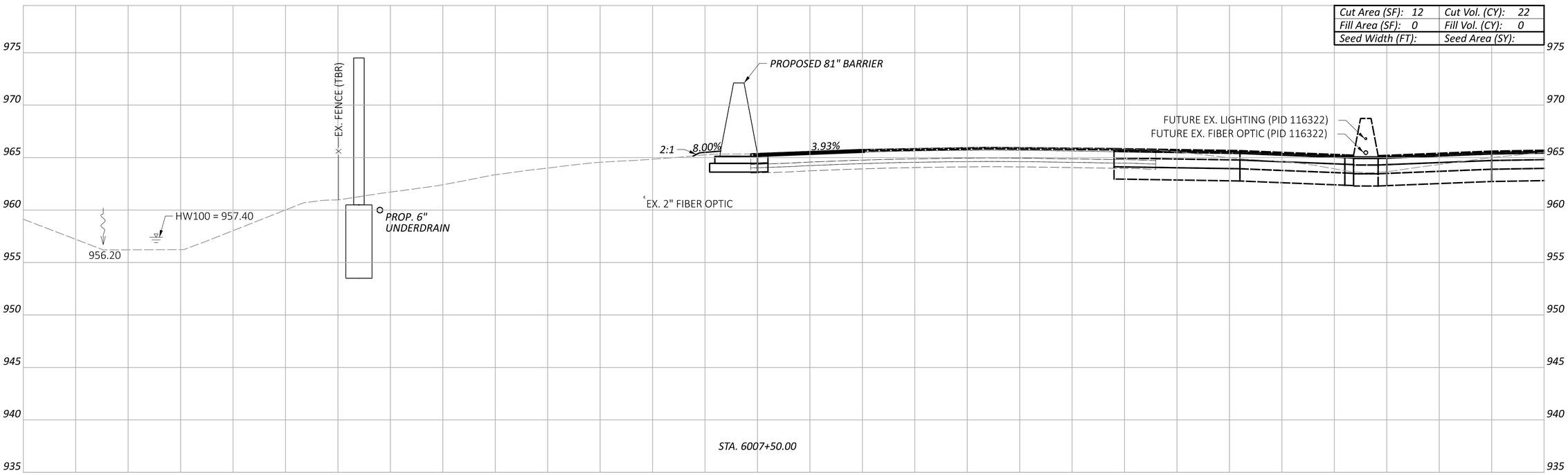
REVIEWER: JDH 05-22-24

PROJECT ID: 117607

SHEET: P.83 TOTAL: P.297


MODEL: BLP_BARRIER6 - 6006+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:57:13 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS006A.dgn




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 44 | 1 |

# CROSS SECTIONS - 81" BARRIER 6
# STA. 6007+50.00 TO STA. 6008+00.00

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4500
www.arcadis.com

DESIGNER: JMK

REVIEWER: JDH 05-22-24

PROJECT ID: 117607

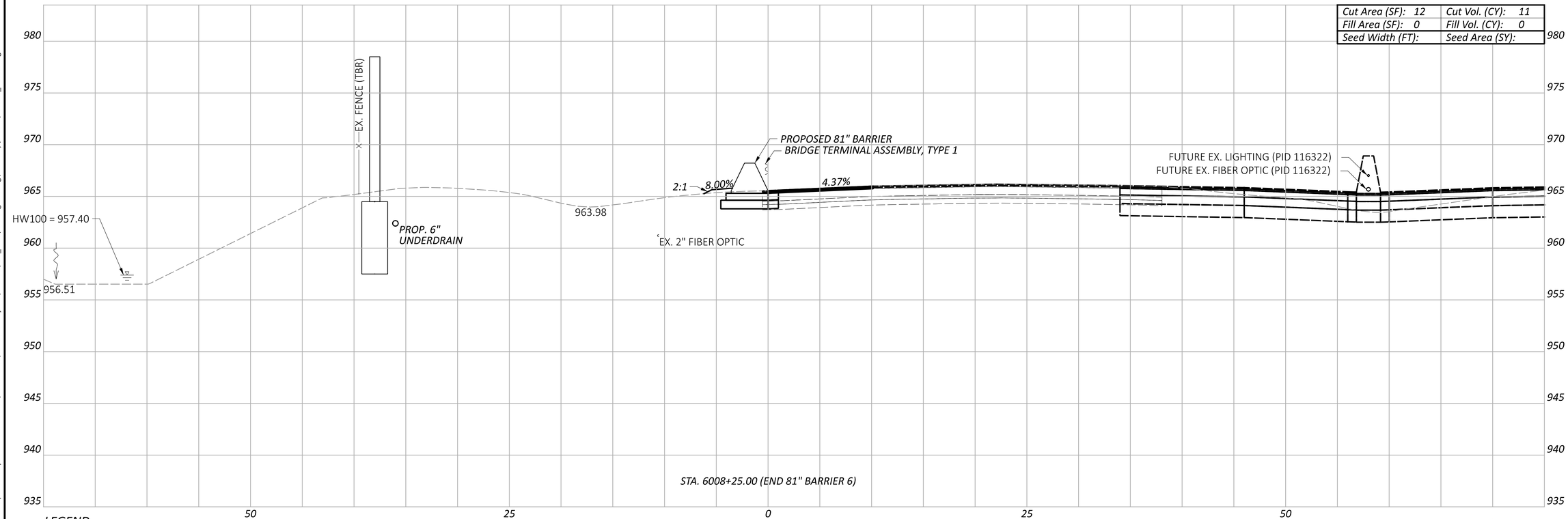
SHEET: P.84 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER6 - 6007+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:57:26 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS006A.dgn

# CROSS SECTIONS - 81" BARRIER 6
## STA. 6008+25.00

| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 11 |
| Fill Area (SF): 0 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

— — — FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 11 | 0 |

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER6 - 6008+25.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:57:40 PM USER: BEN.BROWN
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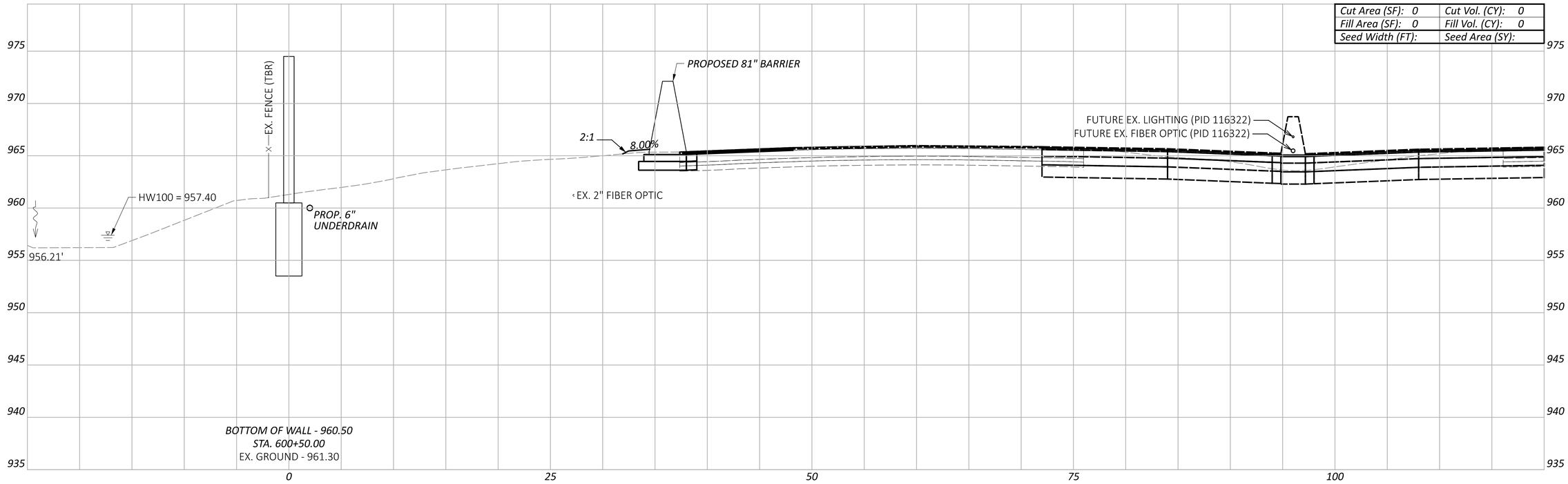
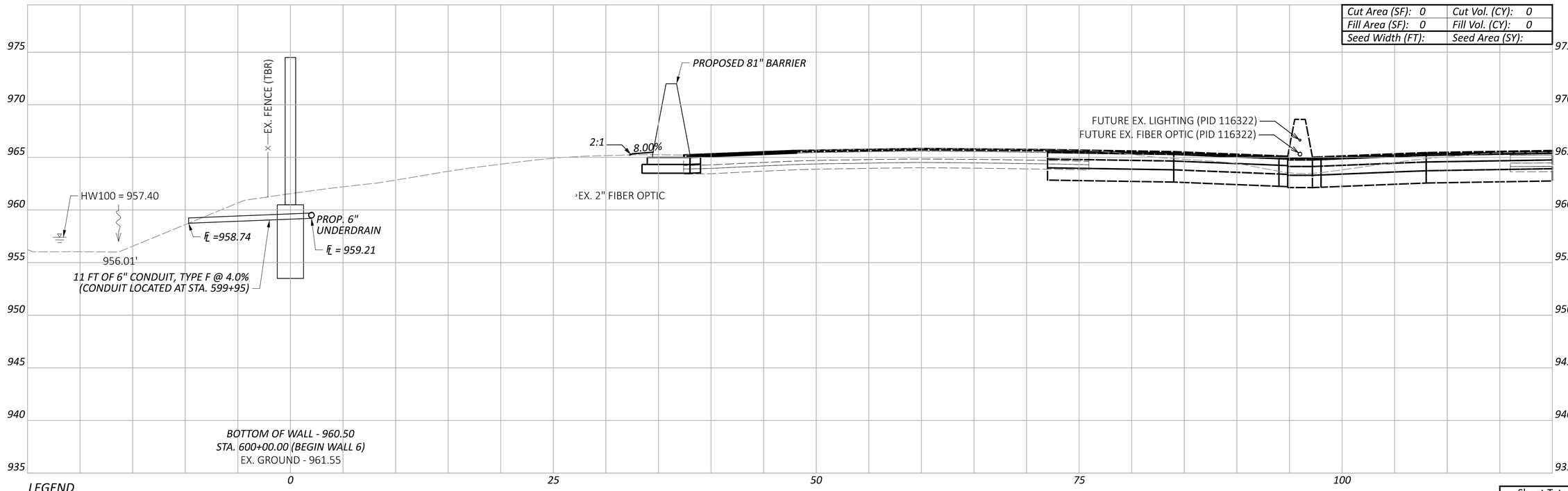
DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

| SHEET | TOTAL |
|---|---|
| P.85 | P.297 |




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 6
## STA. 600+00.00 TO STA. 600+50.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL6 - 600+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:58:17 PM USER: BEN.BROWN
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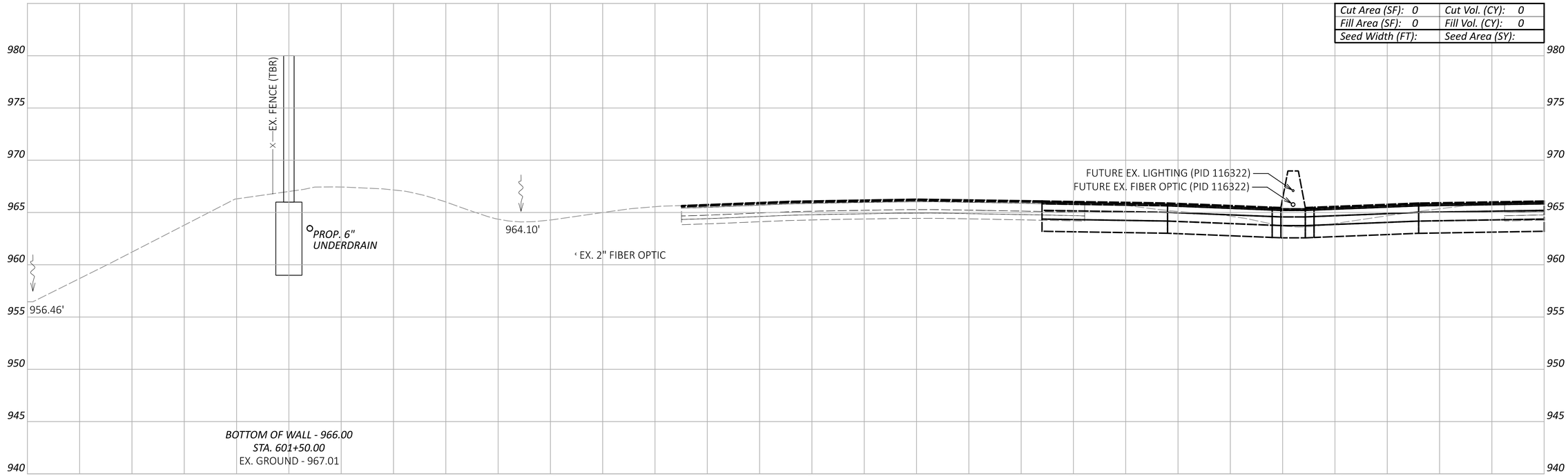
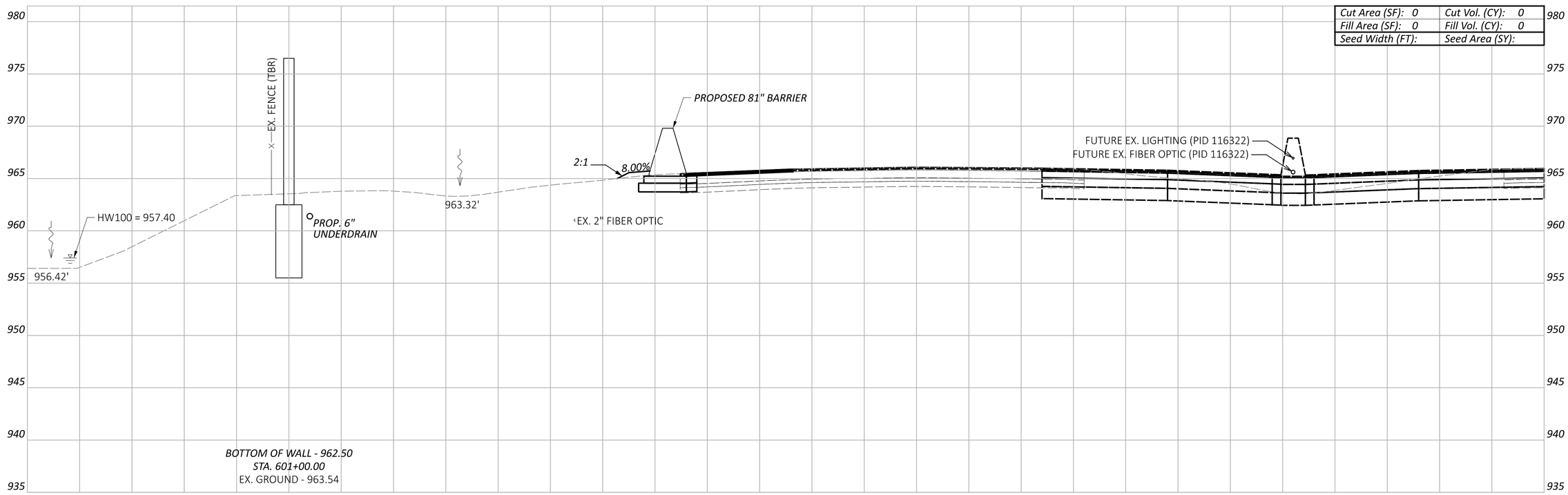
REVIEWER: JDH 05-22-24

PROJECT ID: 117607

SHEET: P.86 TOTAL: P.297




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 6
## STA. 601+00.00 TO STA. 601+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL6 - 601+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:58:30 PM USER: BEN.BROWN
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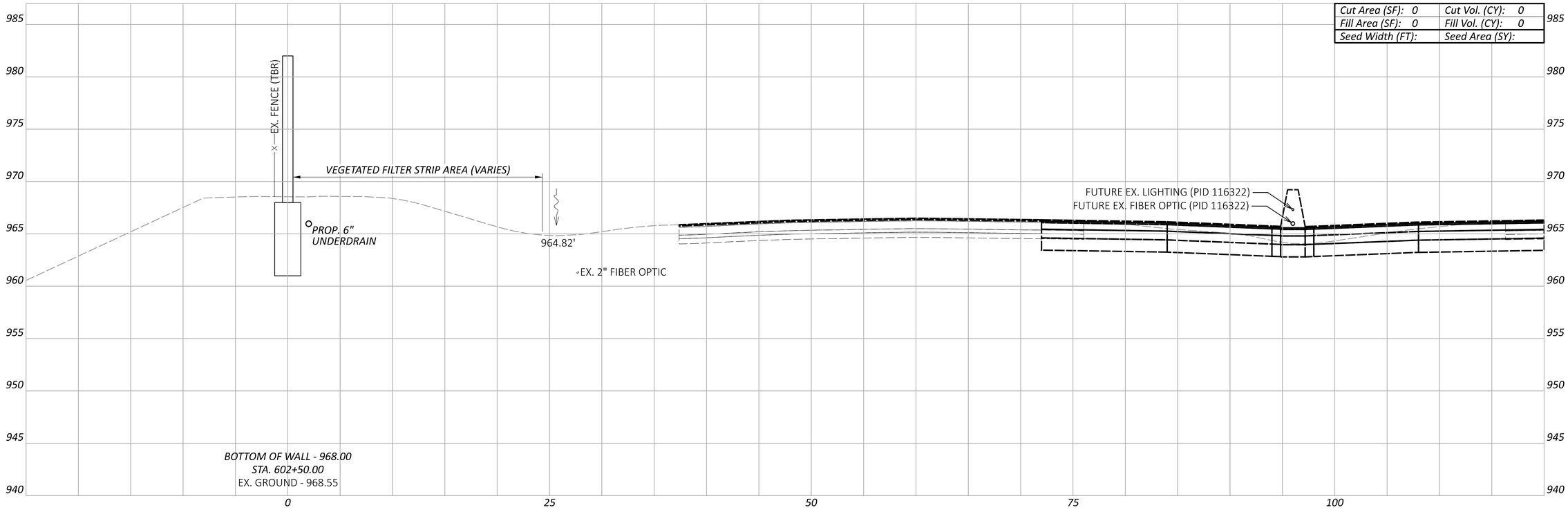
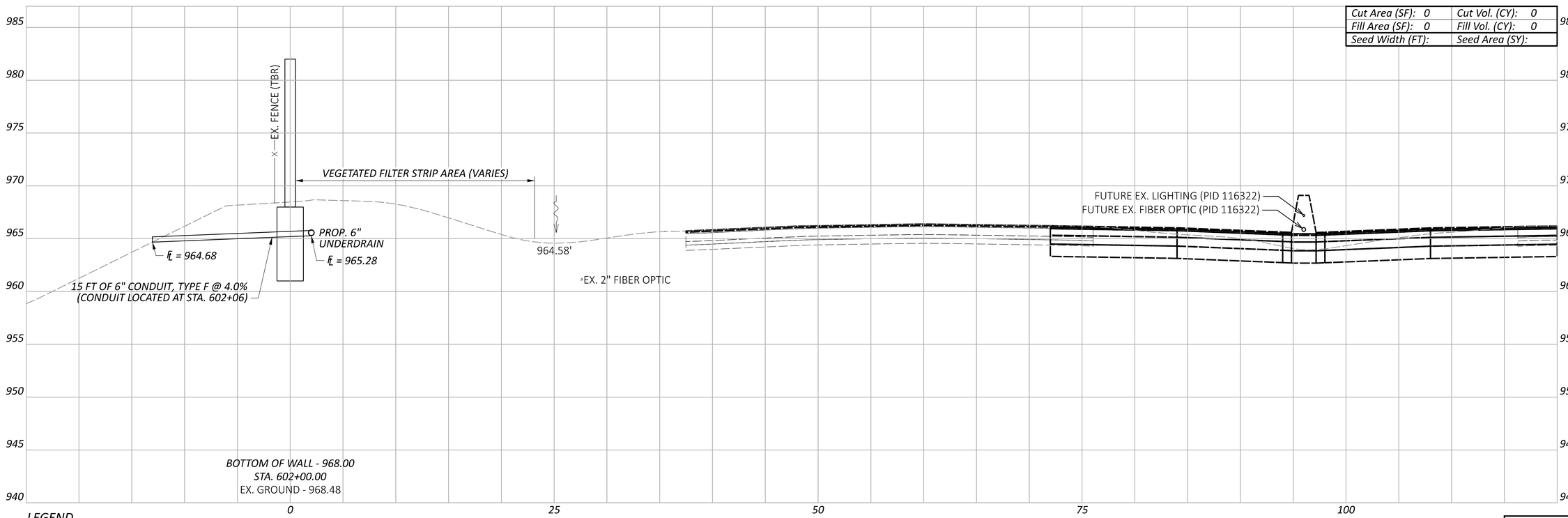
REVIEWER: JDH 05-22-24

PROJECT ID: 117607

SHEET: P.87 TOTAL: P.297




# CROSS SECTIONS - WALL 6
# STA. 602+00.00 TO STA. 602+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL6 - 602+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:58:45 PM USER: BEN.BROWN
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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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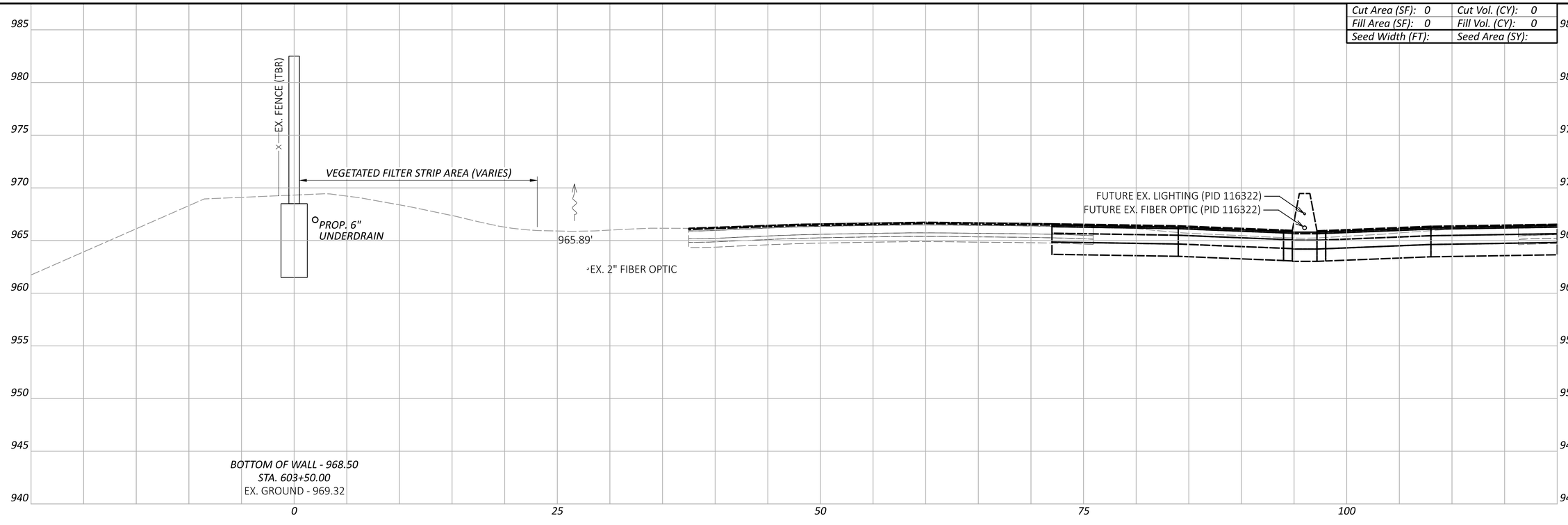
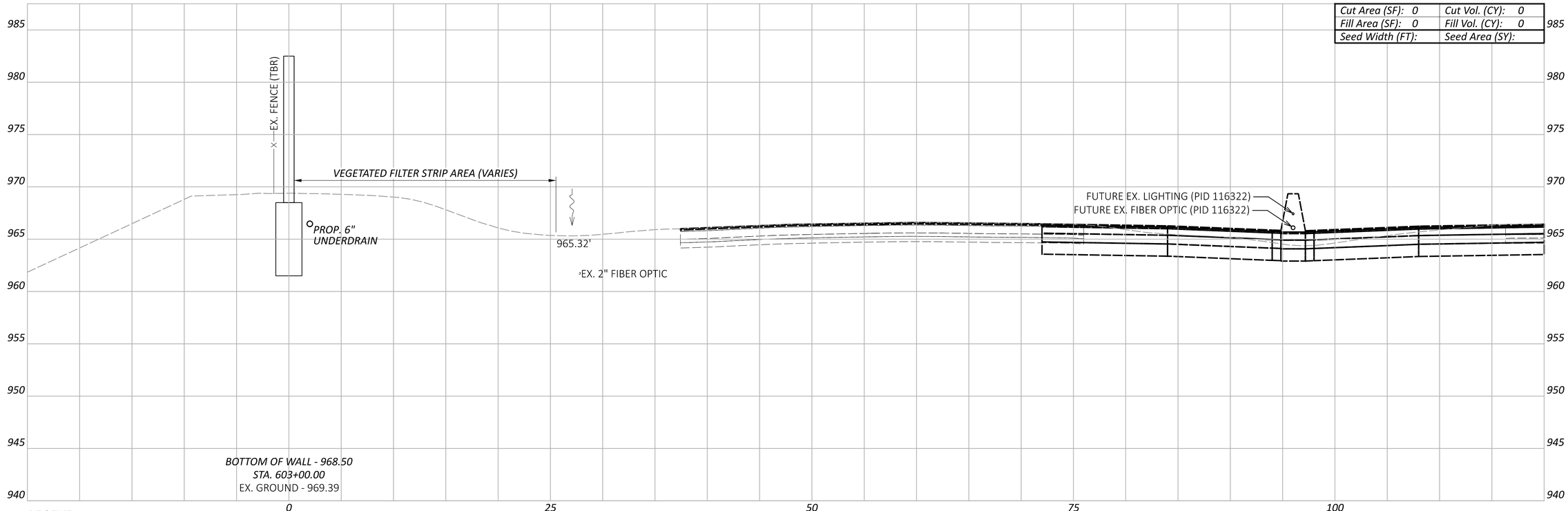
117607

| SHEET | TOTAL |
|---|---|
| P.88 | P.297 |




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

FRA-161-15.80 NOISE ABATEMENT

CROSS SECTIONS - WALL 6
STA. 603+00.00 TO STA. 603+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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PROJECT ID 117607

SHEET P.89 TOTAL P.297

MODEL: BLP_WALL6 - 603+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:59:00 PM USER: BEN.BROWN
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# FRA-161-15.80 NOISE ABATEMENT

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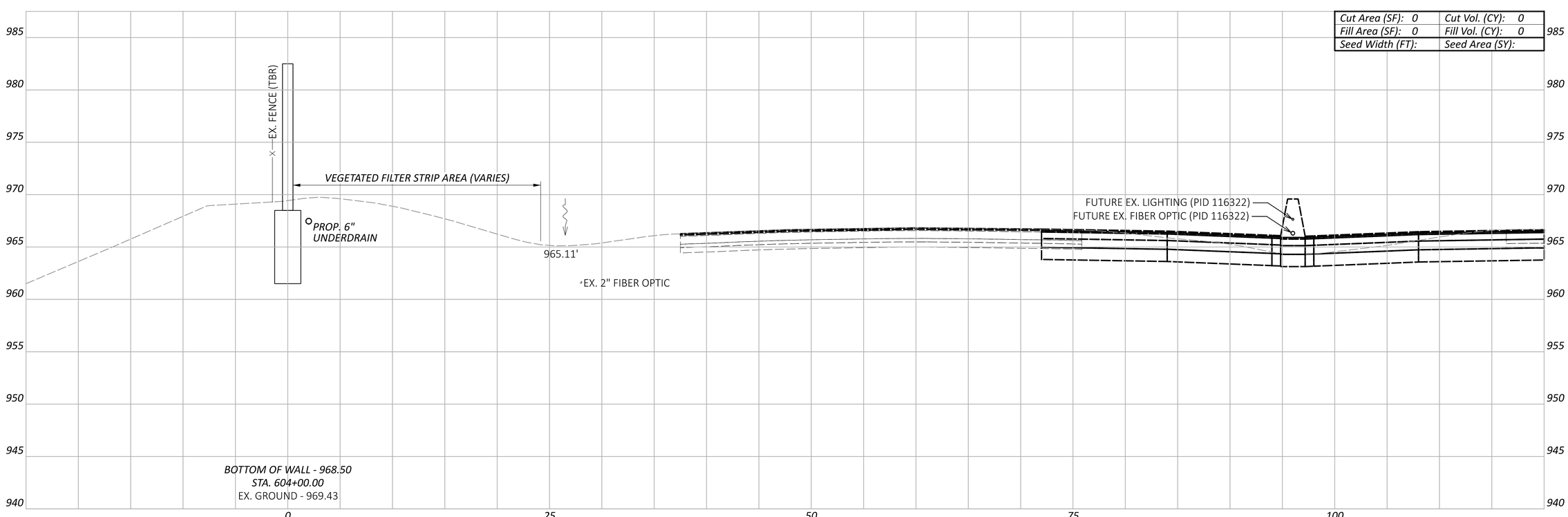
## CROSS SECTIONS - WALL 6
## STA. 604+00.00




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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| SHEET | TOTAL |
|---|---|
| P.90 | P.297 |

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WAL6 - 604+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:59:24 PM USER: BEN.BROWN
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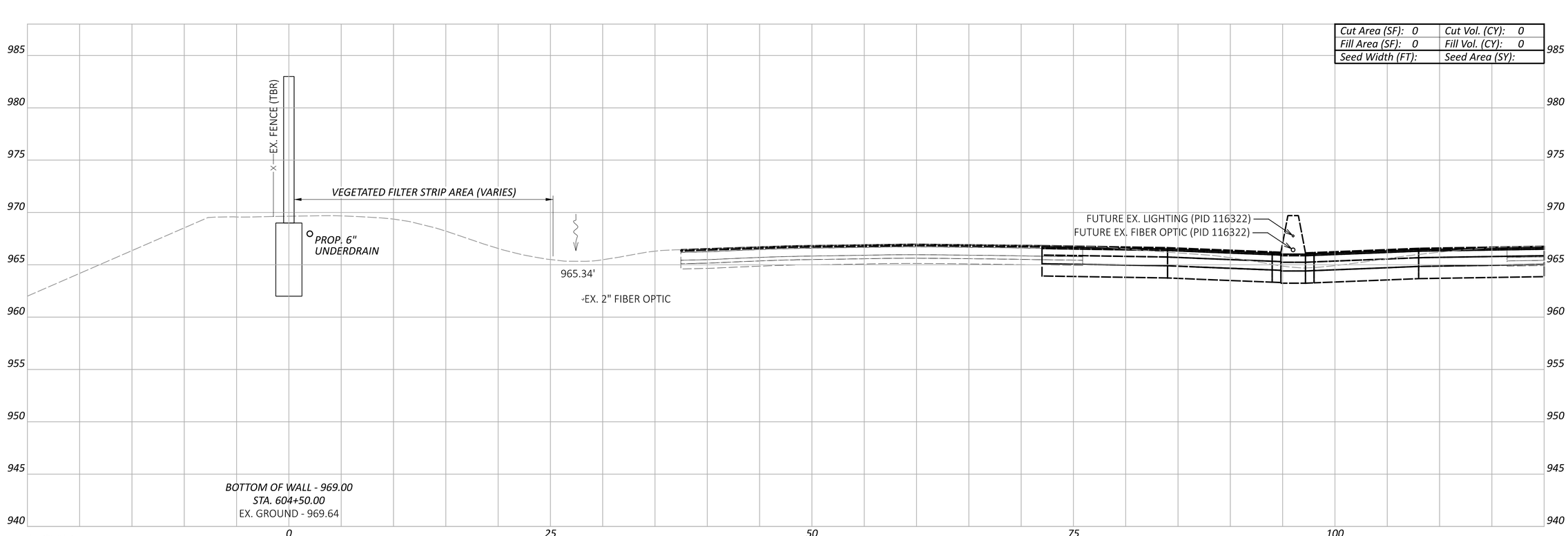
# CROSS SECTIONS - WALL 6
## STA. 604+50.00




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WAL6 - 605+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:59:33 PM USER: BEN.BROWN
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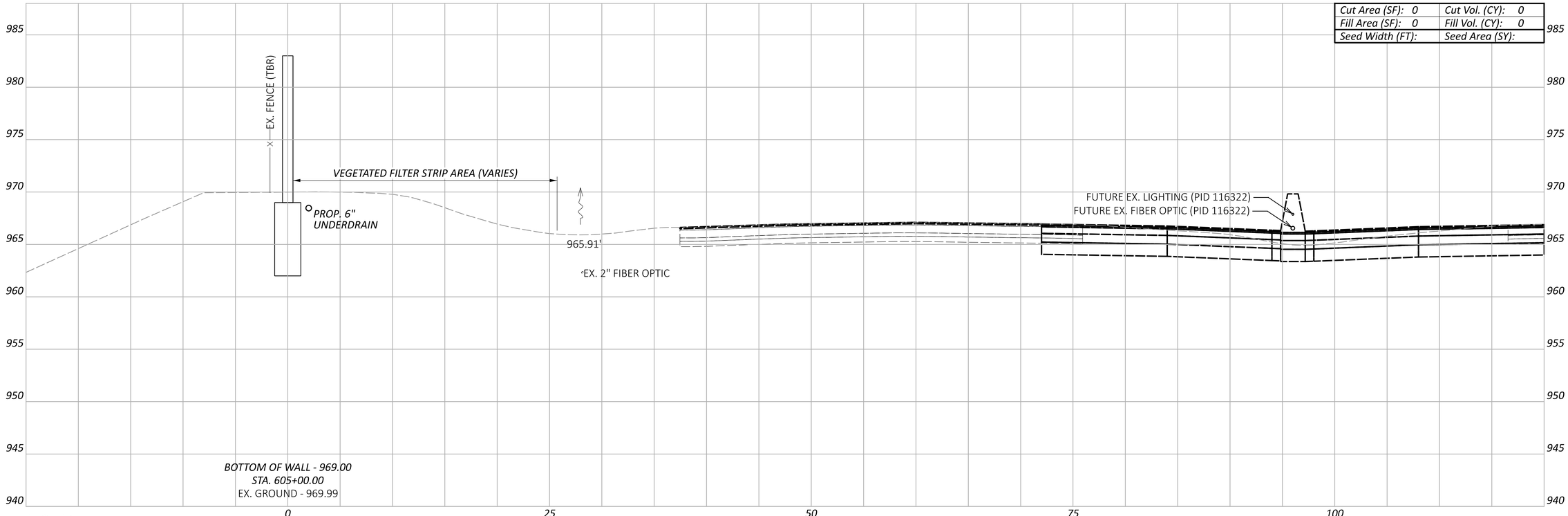
# CROSS SECTIONS - WALL 6
## STA. 605+00.00

| | |
|---|---|
| Cut Area (SF): 0 | Cut Vol. (CY): 0 |
| Fill Area (SF): 0 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |




**LEGEND**

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WAL6 - 605+28.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 1:59:40 PM USER: BEN.BROWN
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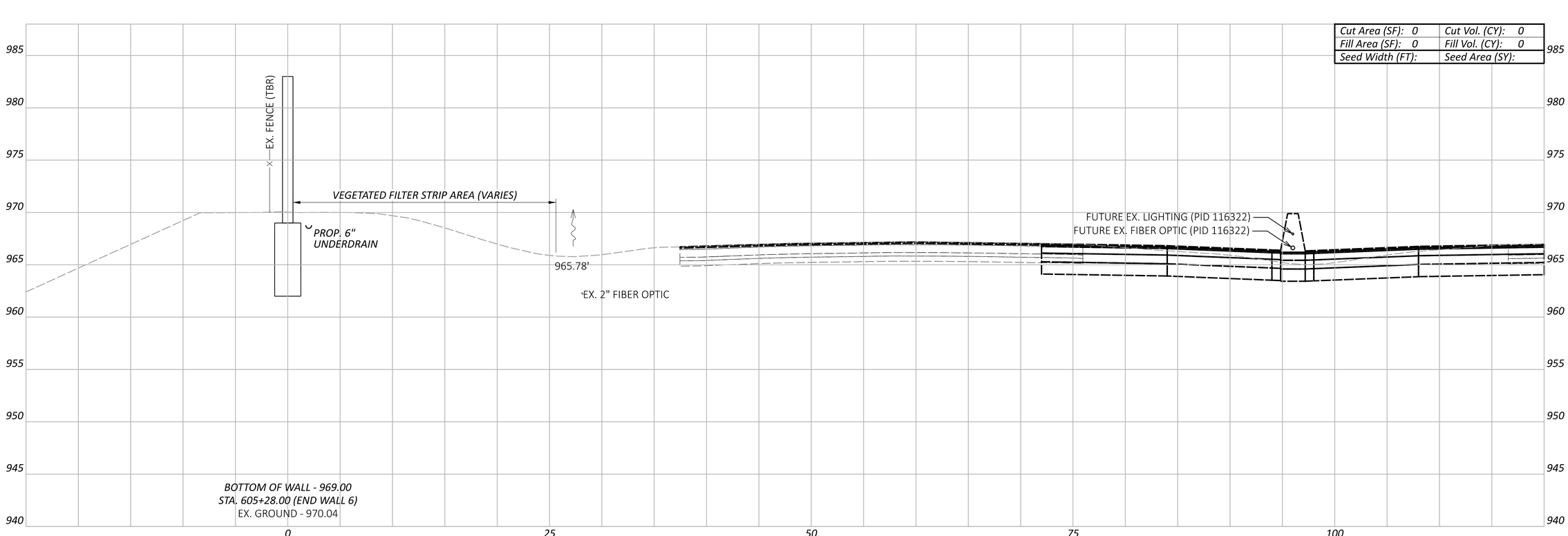
# CROSS SECTIONS - WALL 6
## STA. 605+28.00




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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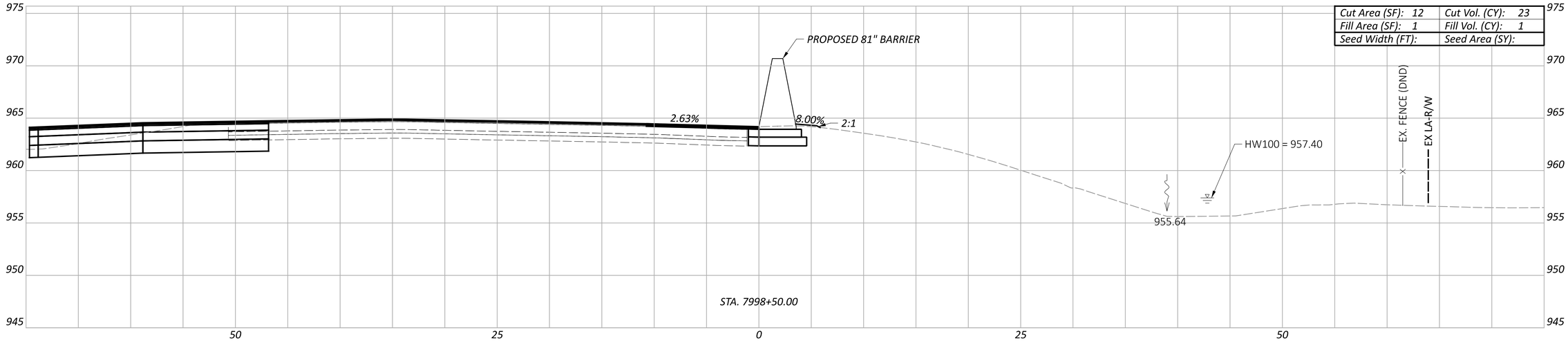
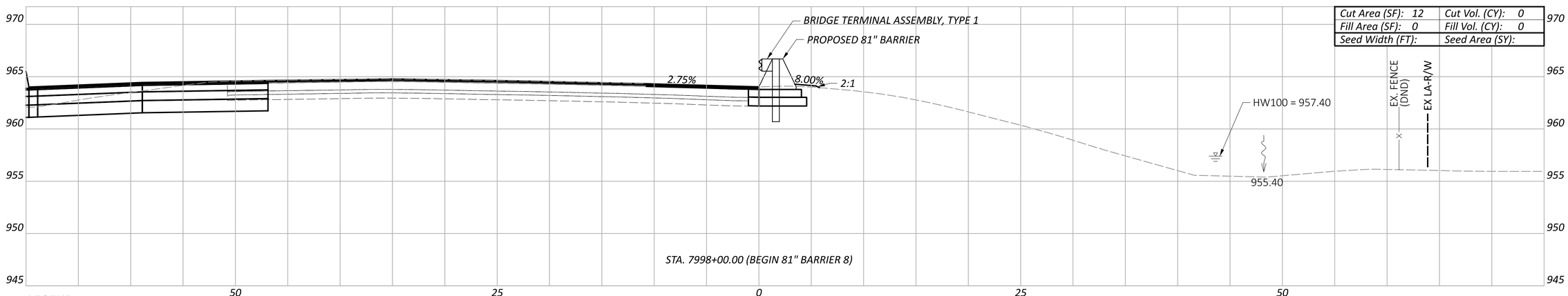
PROJECT ID
117607

SHEET P.93 | TOTAL P.297




| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 23 |
| Fill Area (SF): 1 | Fill Vol. (CY): 1 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 0 |
| Fill Area (SF): 0 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 23 | 1 |

# CROSS SECTIONS - 81" BARRIER 8
# STA. 7998+00.00 TO STA. 7998+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER8 - 7998+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 3:00:47 PM USER: jennifer.kelley
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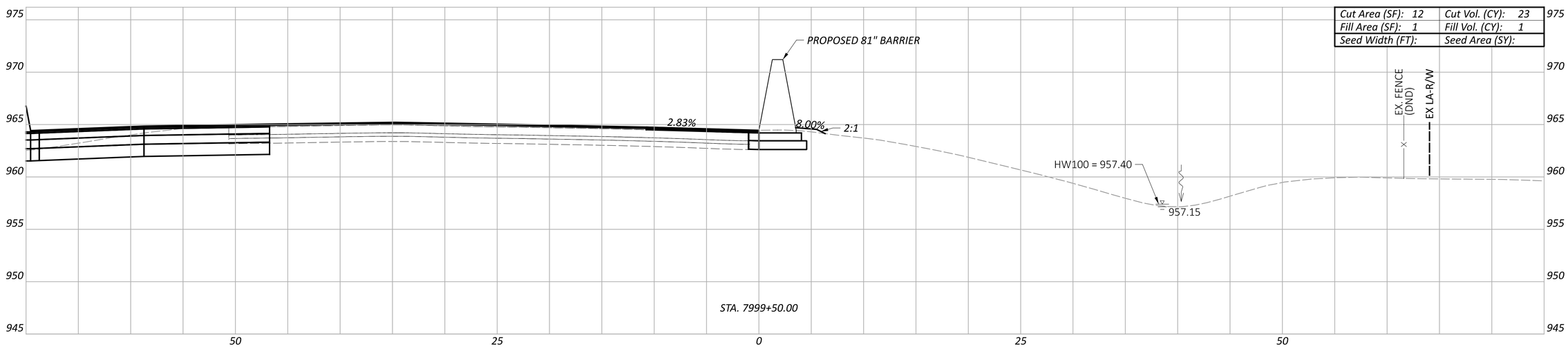
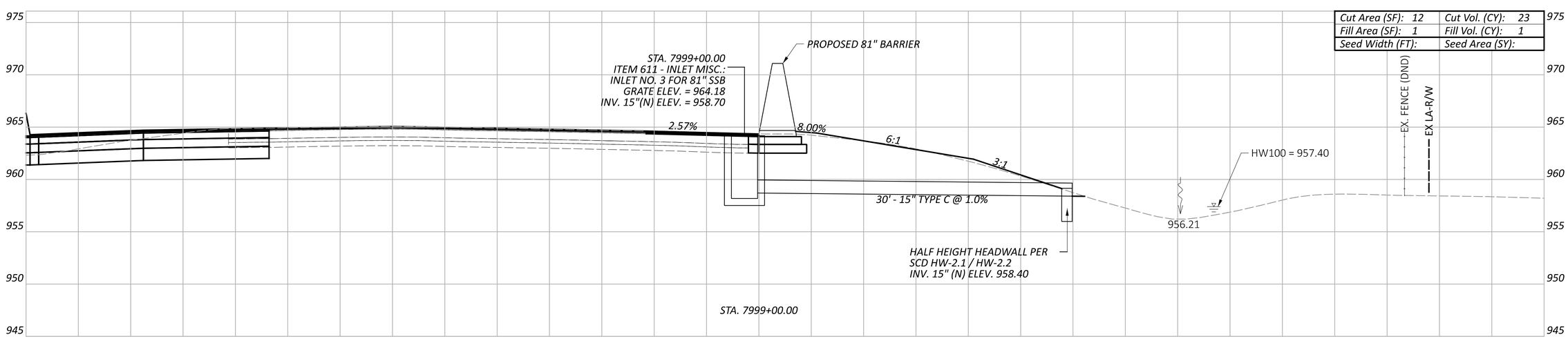
PROJECT ID 117607

SHEET P.94 TOTAL P.297




| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 23 |
| Fill Area (SF): 1 | Fill Vol. (CY): 1 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 23 |
| Fill Area (SF): 1 | Fill Vol. (CY): 1 |
| Seed Width (FT): | Seed Area (SY): |

LEGEND

- - - EXISTING SR-161 PRIOR TO PID 116322

—— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 46 | 2 |

# CROSS SECTIONS - 81" BARRIER 8
## STA. 7999+00.00 TO STA. 7999+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER8 - 7999+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 3:01:27 PM USER: jennifer.kelley
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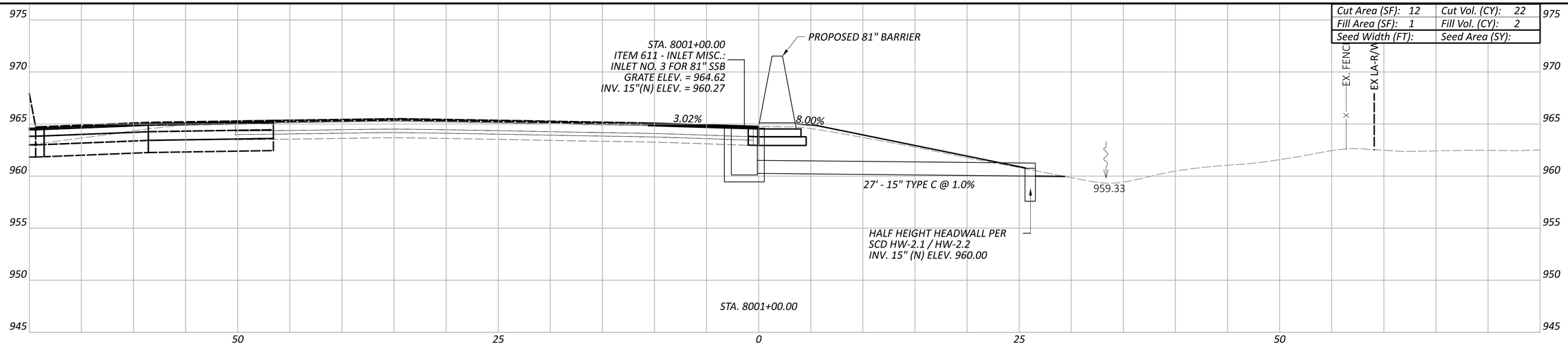
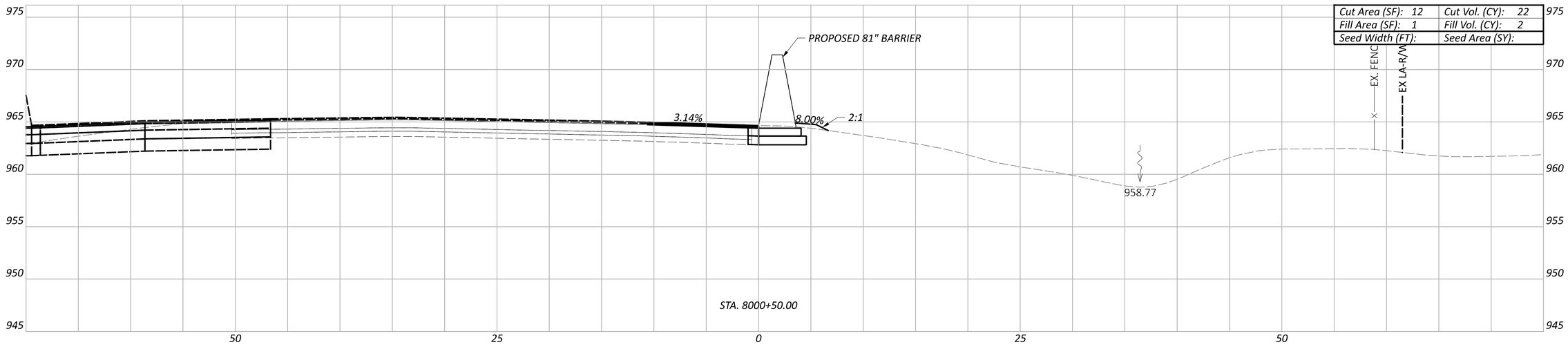
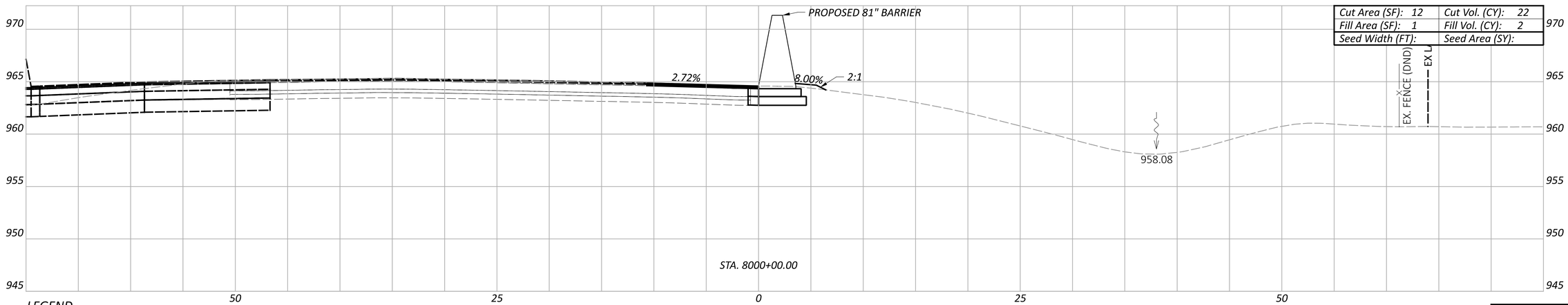
SHEET P.95 TOTAL P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - 81" BARRIER 8
# STA. 8000+00.00 TO STA. 8001+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER8 - 8000+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 3:01:40 PM USER: jennifer.kelley
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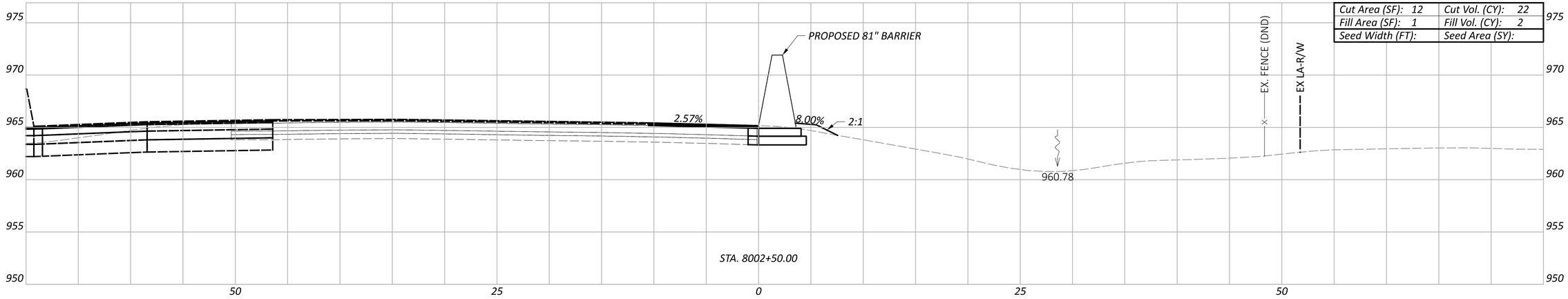
DESIGNER: JMK

REVIEWER: JDH 05-22-24

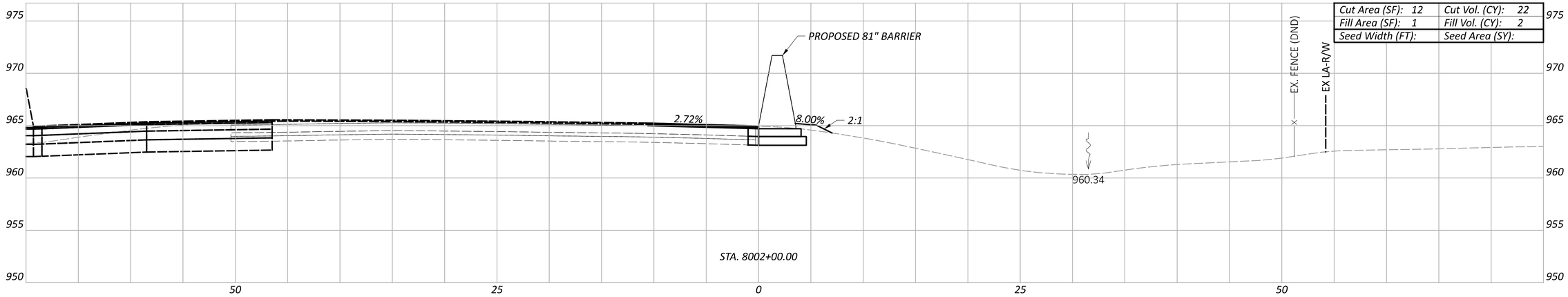
PROJECT ID: 117607

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 66 | 6 |

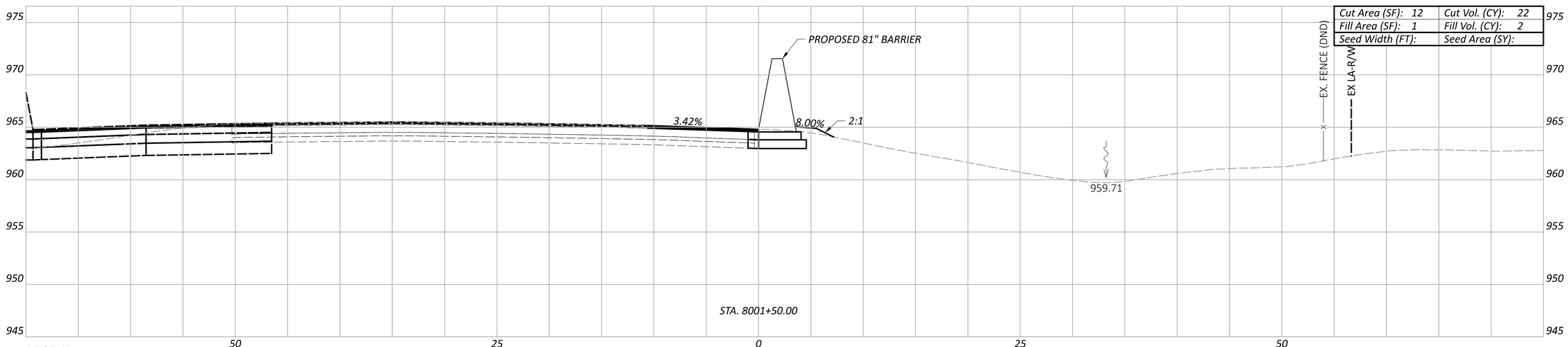
SHEET: P.96 TOTAL: P.297




| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 22 |
| Fill Area (SF): 1 | Fill Vol. (CY): 2 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 22 |
| Fill Area (SF): 1 | Fill Vol. (CY): 2 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 22 |
| Fill Area (SF): 1 | Fill Vol. (CY): 2 |
| Seed Width (FT): | Seed Area (SY): |

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 66 | 6 |

# CROSS SECTIONS - 81" BARRIER 8
# STA. 8001+50.00 TO STA. 8002+50.00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REVIEWER: JDH 05-22-24

PROJECT ID: 117607

SHEET: P.97 | TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_BARRIER8 - 8001+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 3:02:05 PM USER: jennifer.kelley
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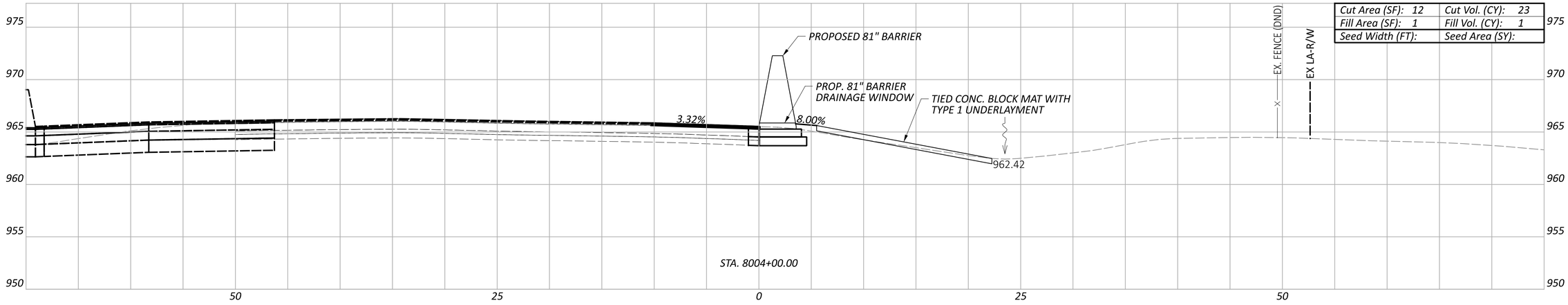
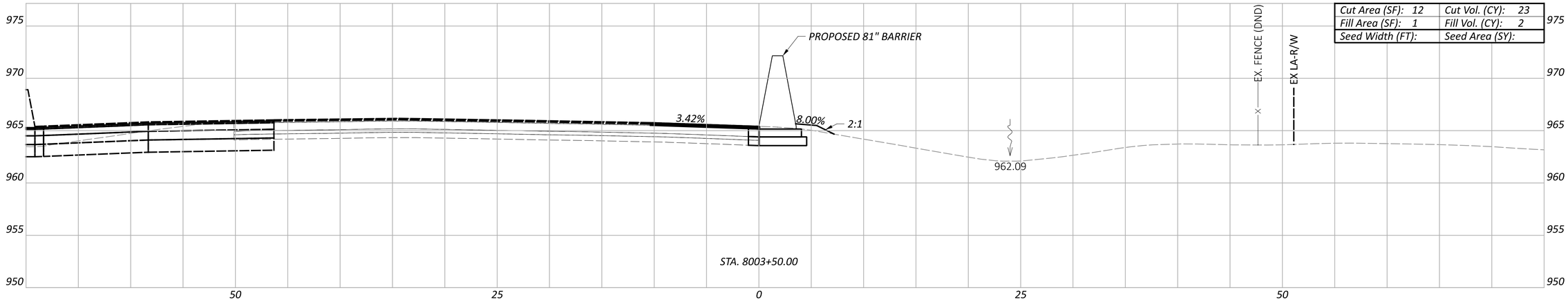
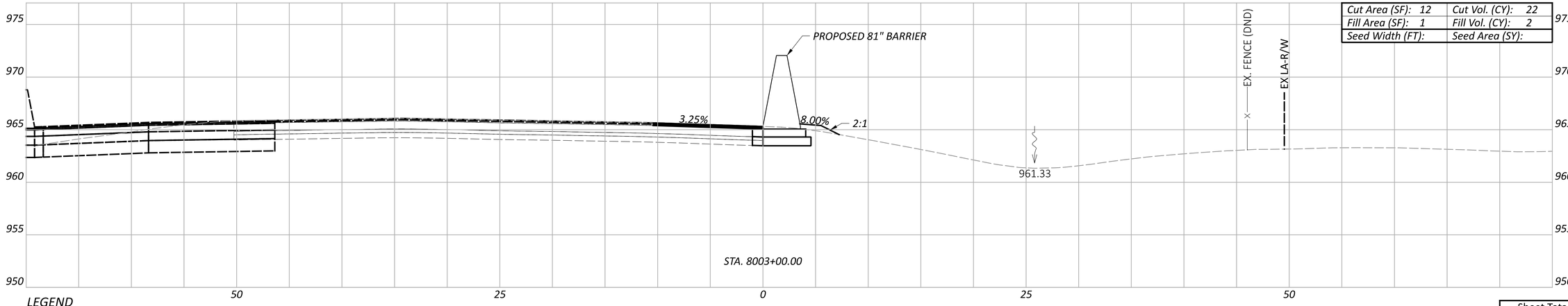



| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 23 |
| Fill Area (SF): 1 | Fill Vol. (CY): 1 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 23 |
| Fill Area (SF): 1 | Fill Vol. (CY): 2 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 22 |
| Fill Area (SF): 1 | Fill Vol. (CY): 2 |
| Seed Width (FT): | Seed Area (SY): |

LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 68 | 5 |

# CROSS SECTIONS - 81" BARRIER 8
# STA. 8003+00.00 TO STA. 8004+00.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_BARRIER8 - 8003+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 3:02:24 PM USER: jennifer.kelley
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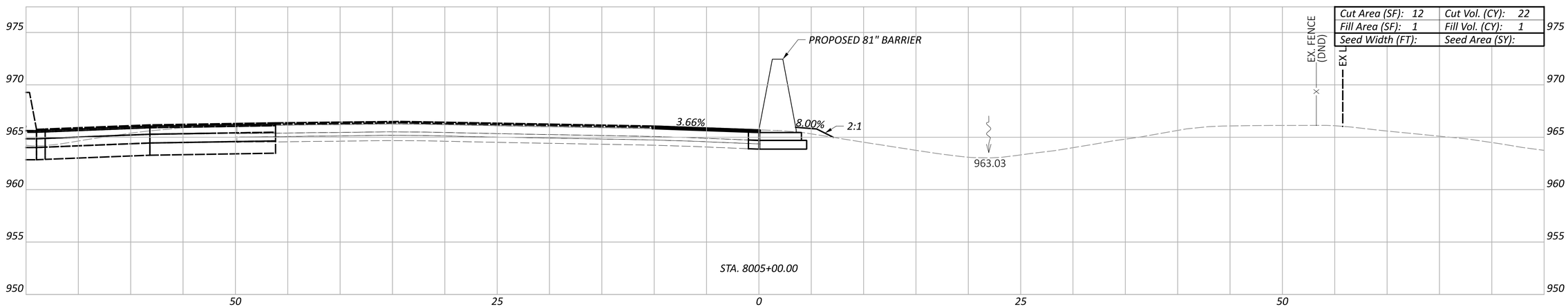
DESIGNER: JMK

REVIEWER: JDH 05-22-24

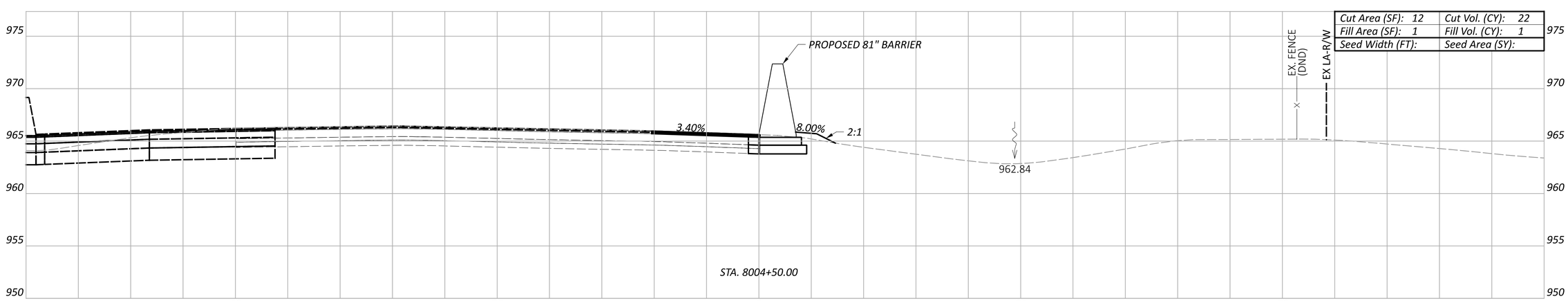
PROJECT ID: 117607

SHEET: P.98 TOTAL: P.297

# CROSS SECTIONS - 81" BARRIER 8
## STA. 8004+50.00 TO STA. 8005+00.00




| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 22 |
| Fill Area (SF): 1 | Fill Vol. (CY): 1 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 22 |
| Fill Area (SF): 1 | Fill Vol. (CY): 1 |
| Seed Width (FT): | Seed Area (SY): |

LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 44 | 2 |

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER8 - 8004+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 3:02:44 PM USER: jennifer.kelley
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PROJECT ID
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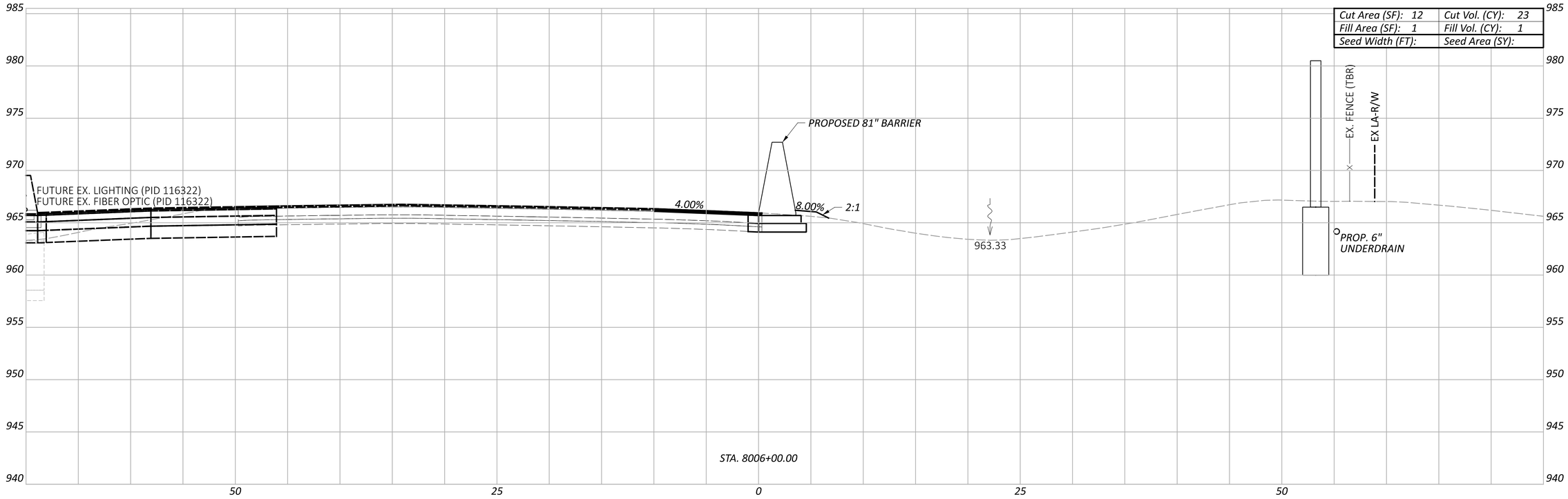
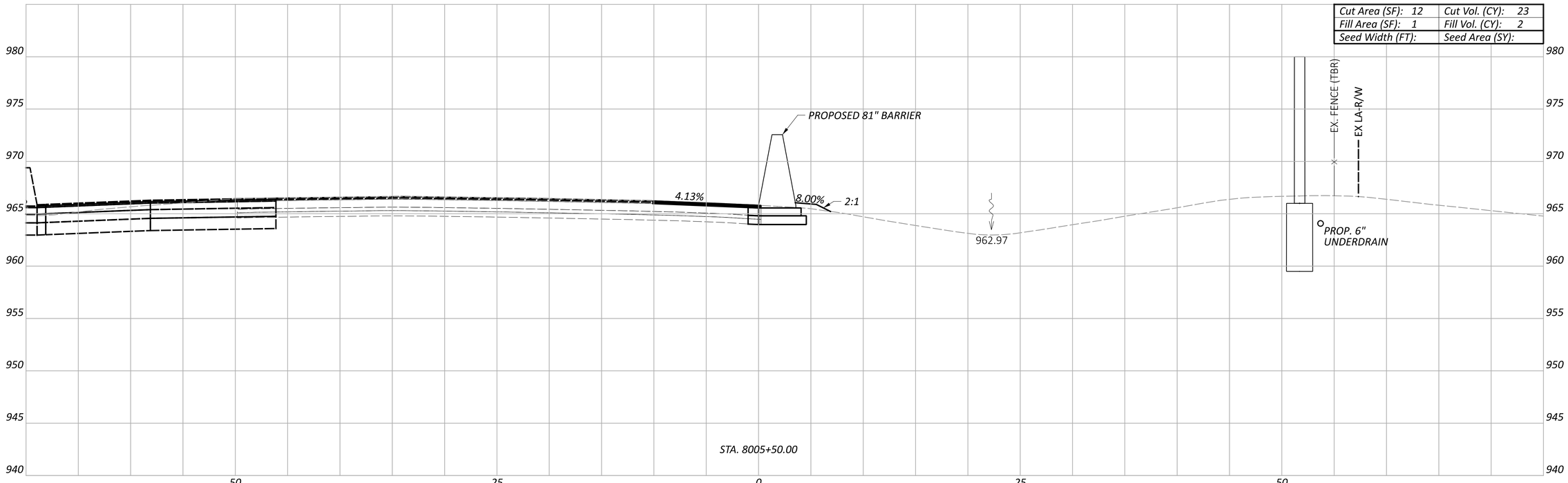
SHEET P.99 TOTAL P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - 81" BARRIER 8
# STA. 8005+50.00 TO STA. 8006+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER8 - 8005+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 3:02:58 PM USER: jennifer.kelley
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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 46 | 3 |

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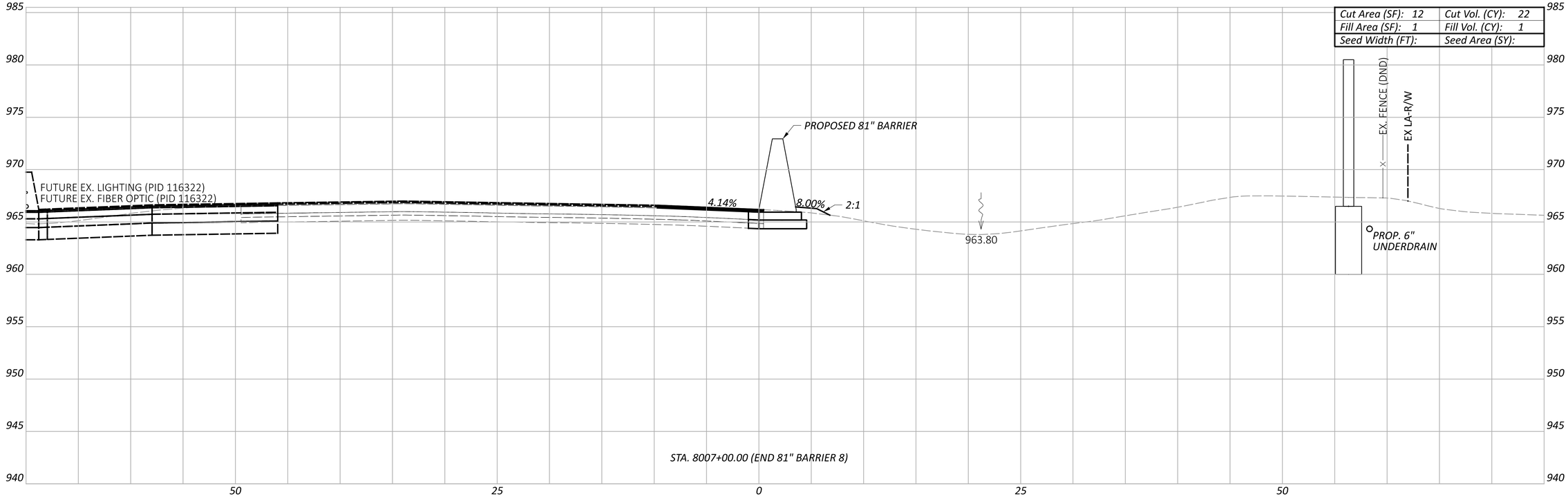
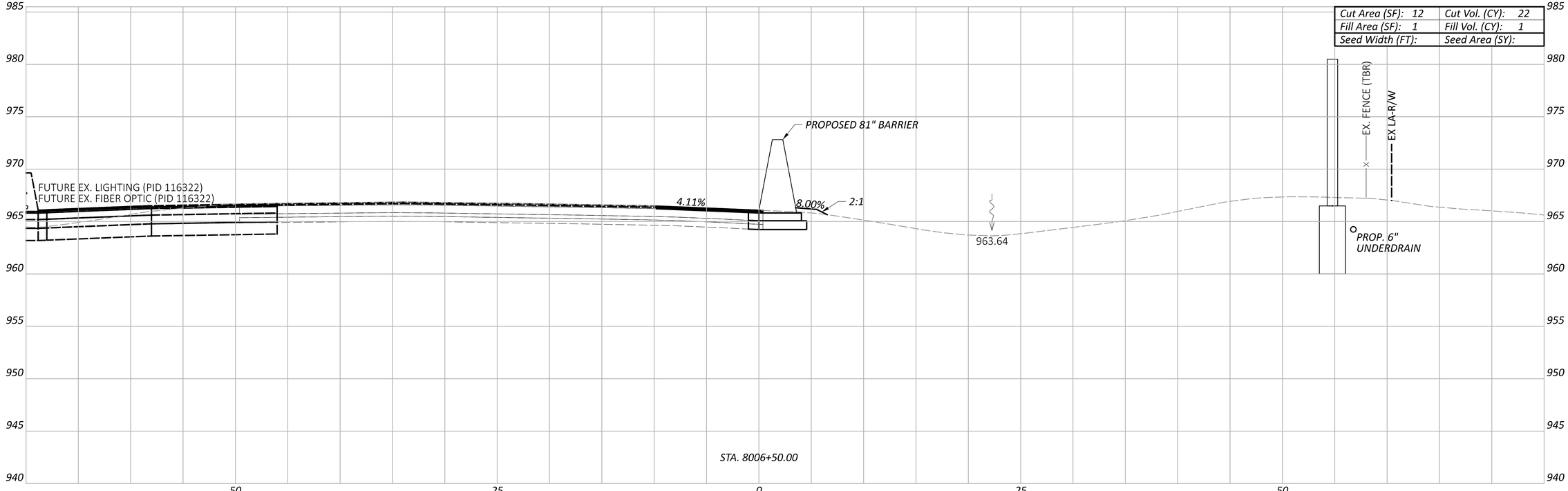
SHEET P.100 TOTAL P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - 81" BARRIER 8
# STA. 8006+50.00 TO STA. 8007+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER8 - 8006+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 3:03:13 PM USER: jennifer.kelley
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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 44 | 2 |

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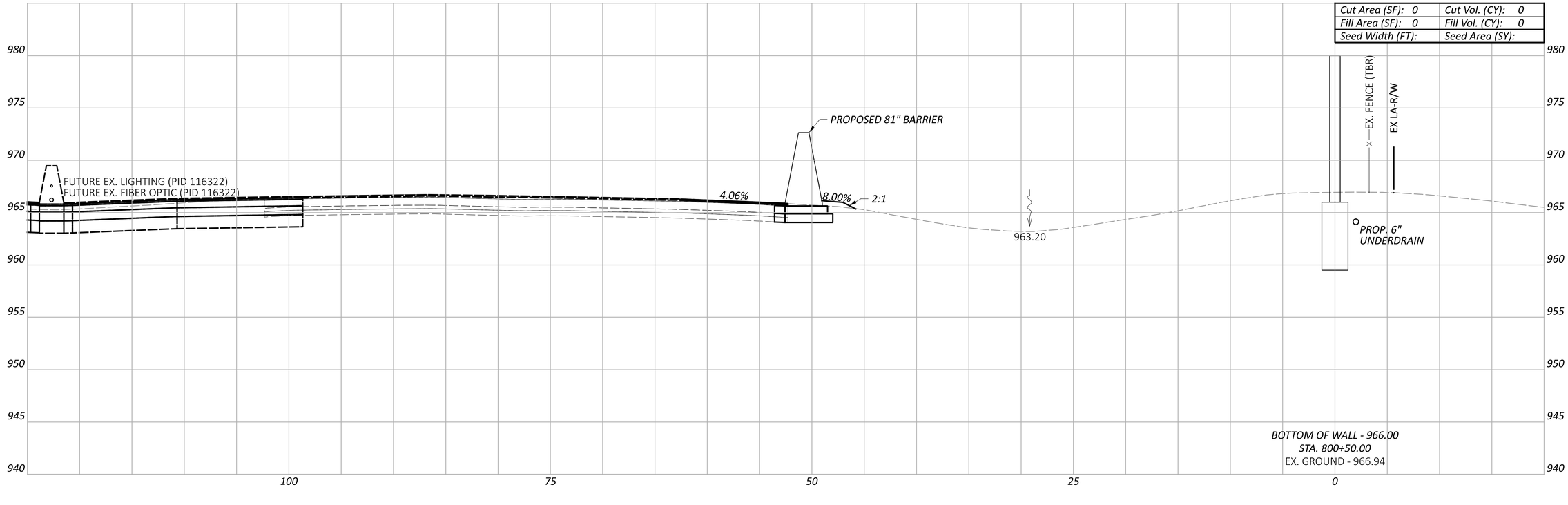
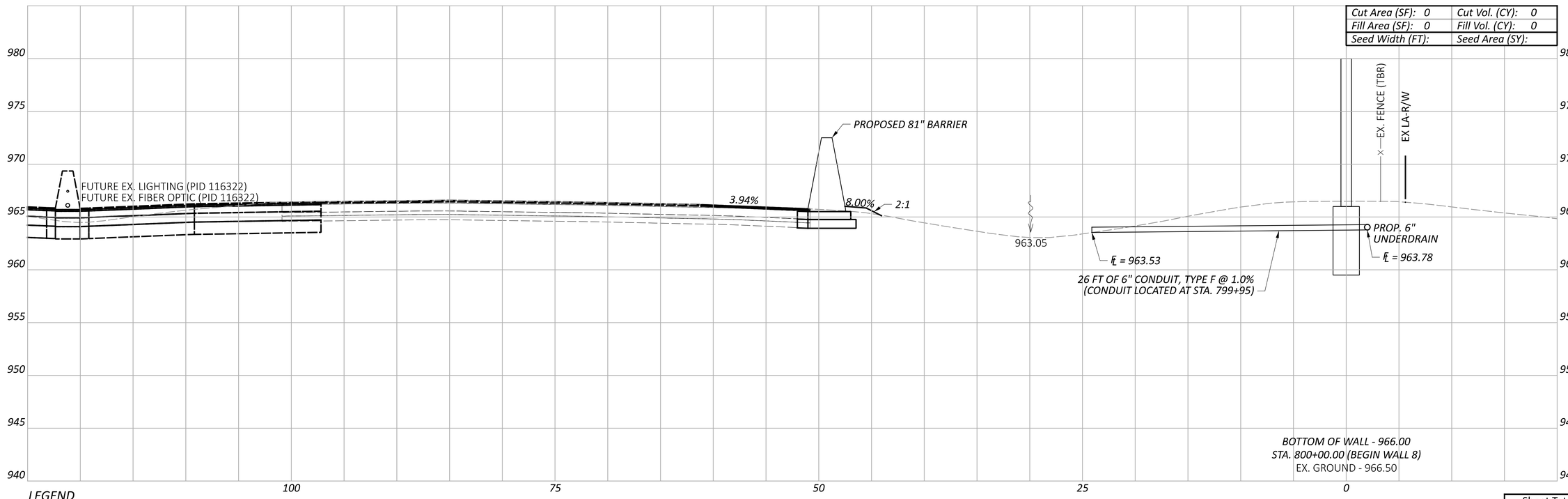
SHEET P.101 TOTAL P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 8
## STA. 800+00.00 TO STA. 800+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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SHEET P.102 | TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL9 - 800+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:02:48 PM USER: BEN.BROWN
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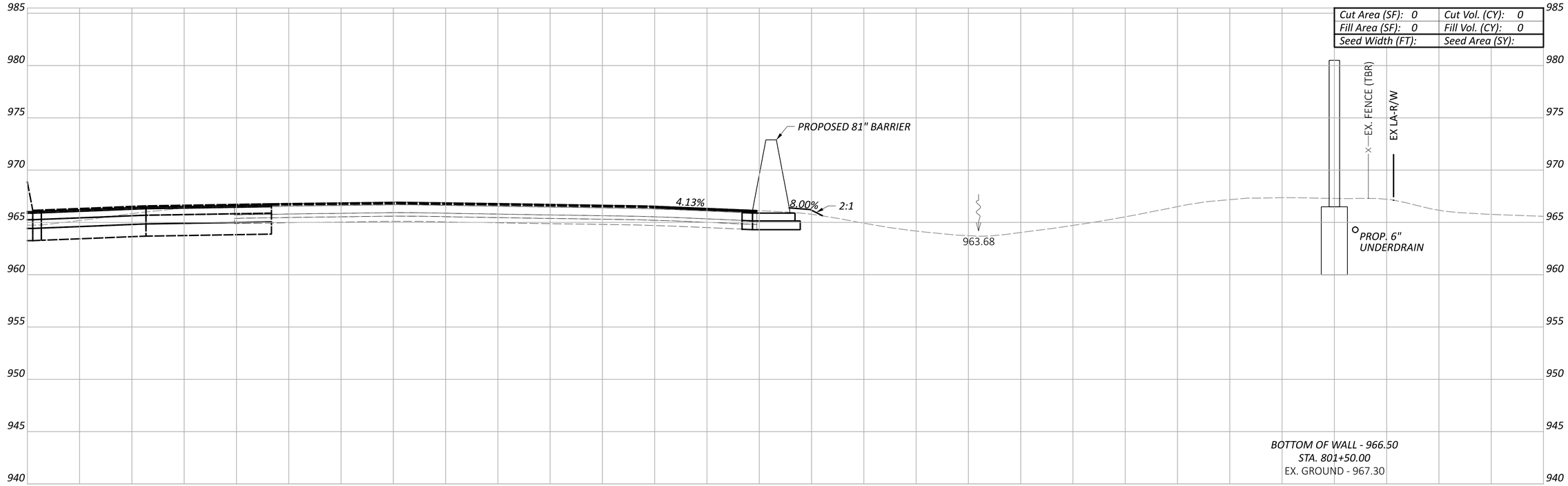


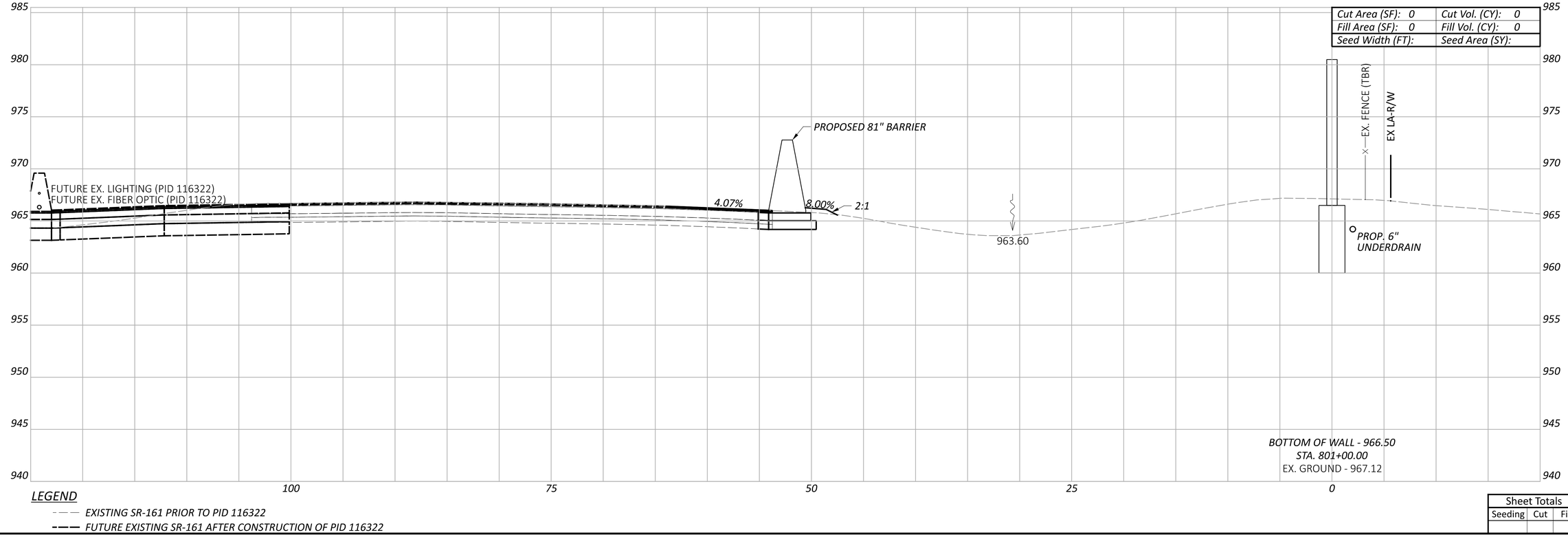


LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 8
## STA. 801+00.00 TO STA. 801+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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SHEET P.103 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL9 - 801+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:03:09 PM USER: BEN.BROWN
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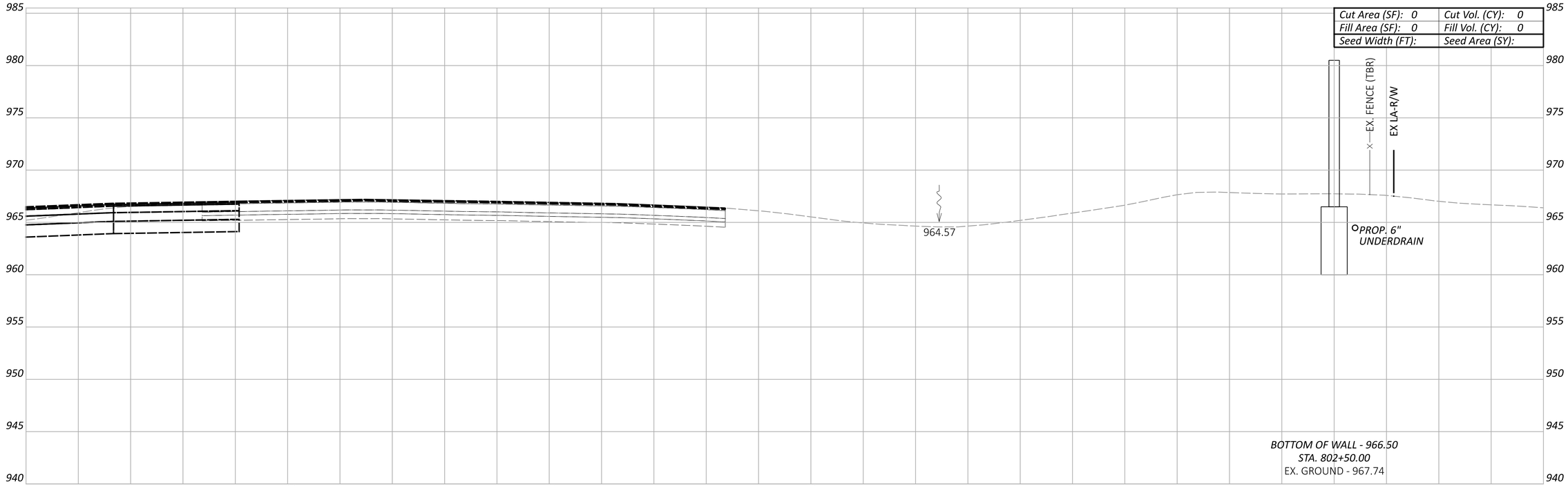


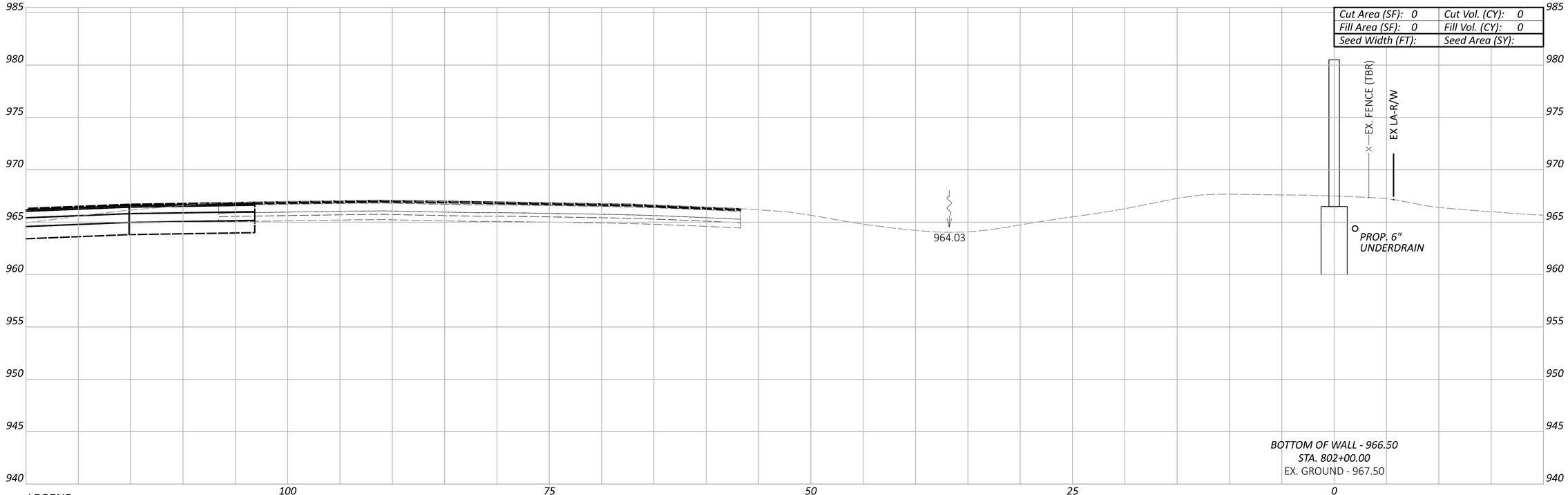


LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 8
## STA. 802+00.00 TO STA. 802+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL9 - 802+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:03:27 PM USER: BEN.BROWN
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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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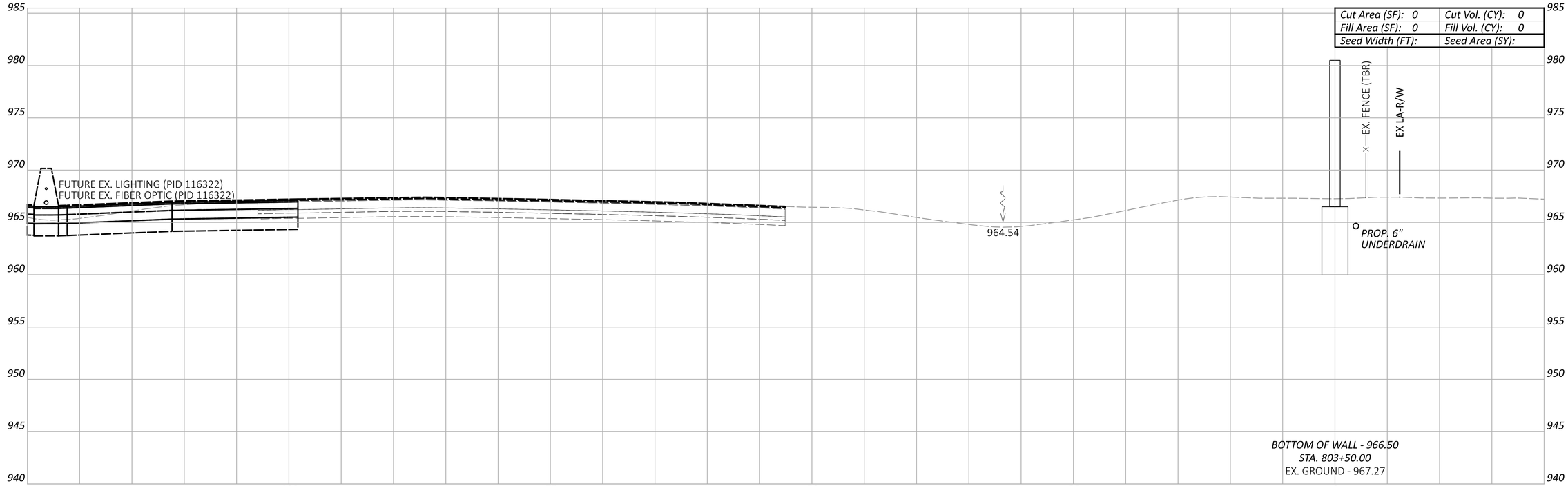
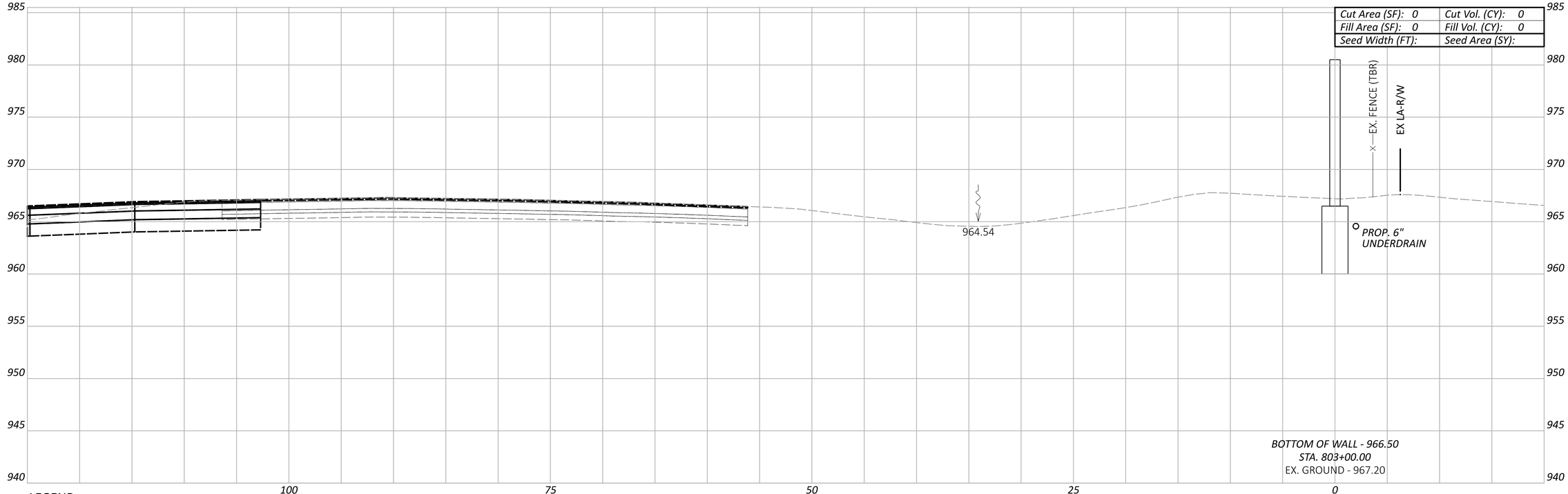
| SHEET | TOTAL |
|---|---|
| P.104 | P.297 |




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

# CROSS SECTIONS - WALL 8
## STA. 803+00.00 TO STA. 803+50.00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PROJECT ID: 117607

SHEET: P.105 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL9 - 803+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:03:47 PM USER: BEN.BROWN
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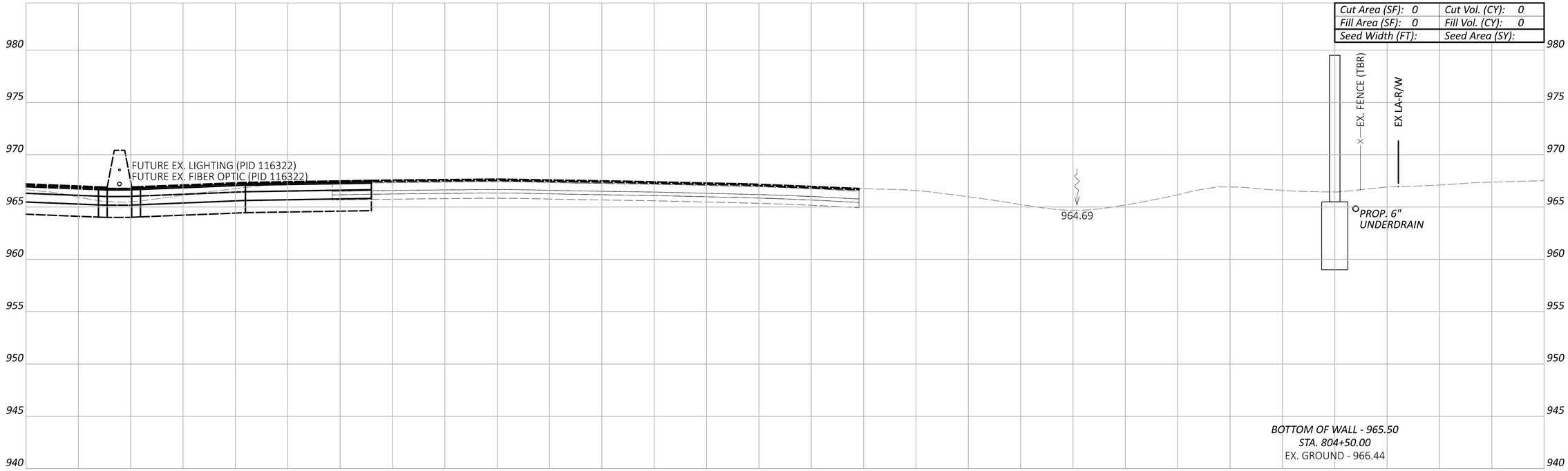


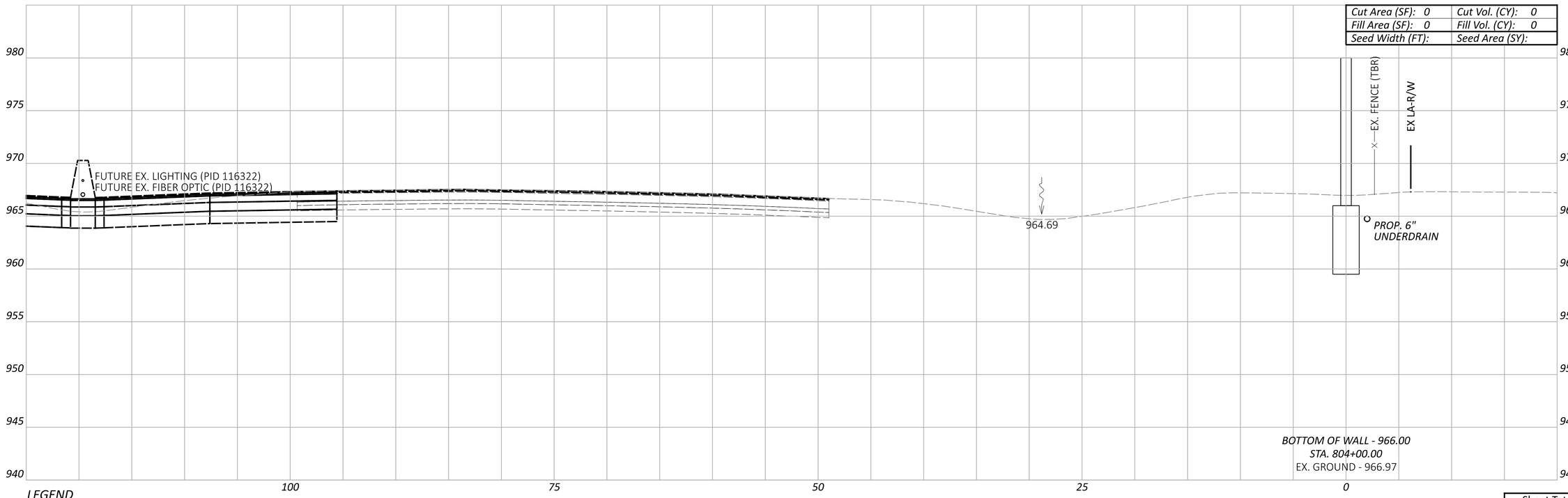


LEGEND

*EXISTING SR-161 PRIOR TO PID 116322*

*FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322*

# CROSS SECTIONS - WALL 8
## STA. 804+00.00 TO STA. 804+50.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL9 - 804+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:04:02 PM USER: BEN.BROWN
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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |


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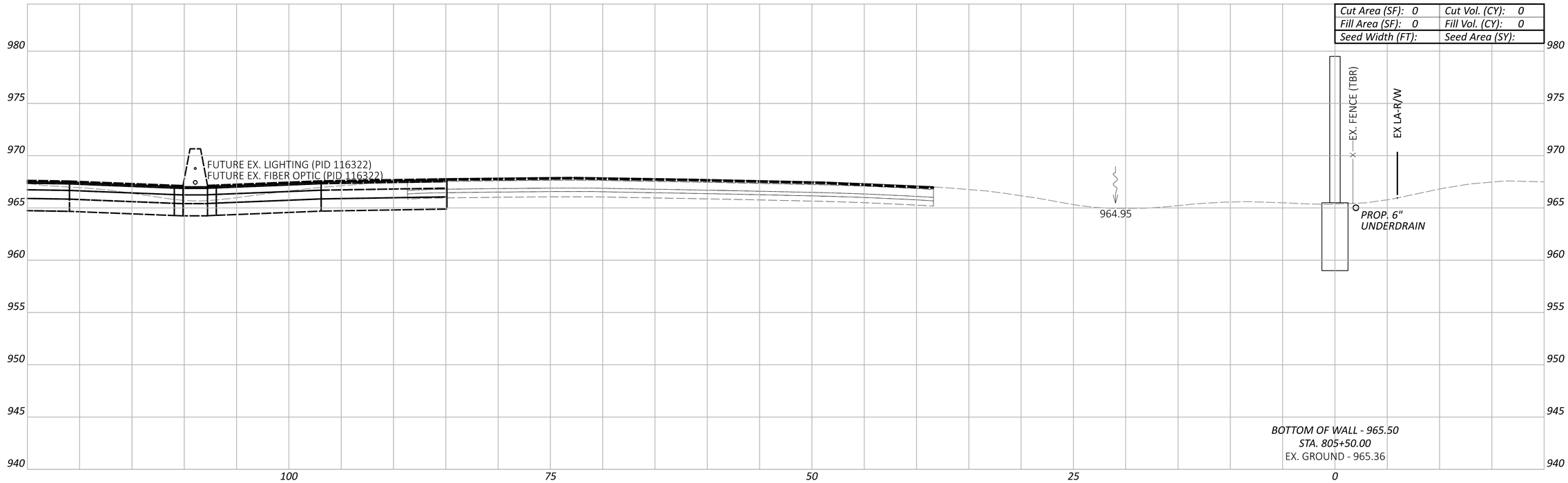
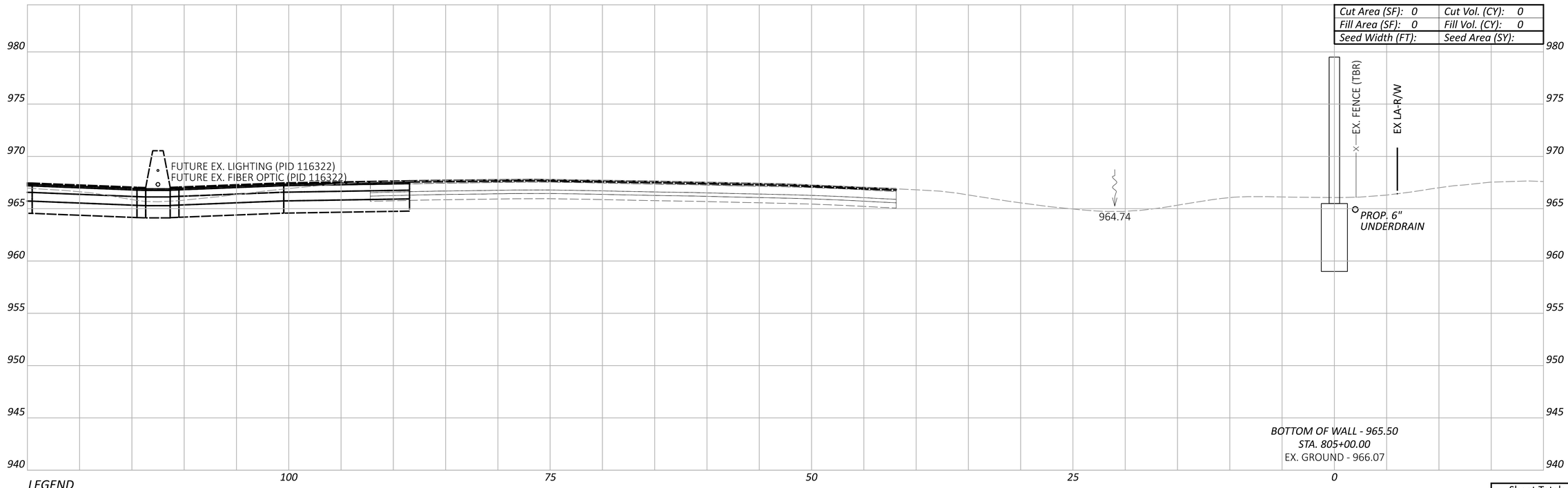
PROJECT ID 117607

SHEET P.106 | TOTAL P.297




LEGEND

*EXISTING SR-161 PRIOR TO PID 116322*

*FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322*

# CROSS SECTIONS - WALL 8
# STA. 805+00.00 TO STA. 805+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |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SHEET P.107 | TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL9 - 805+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:04:16 PM USER: BEN.BROWN
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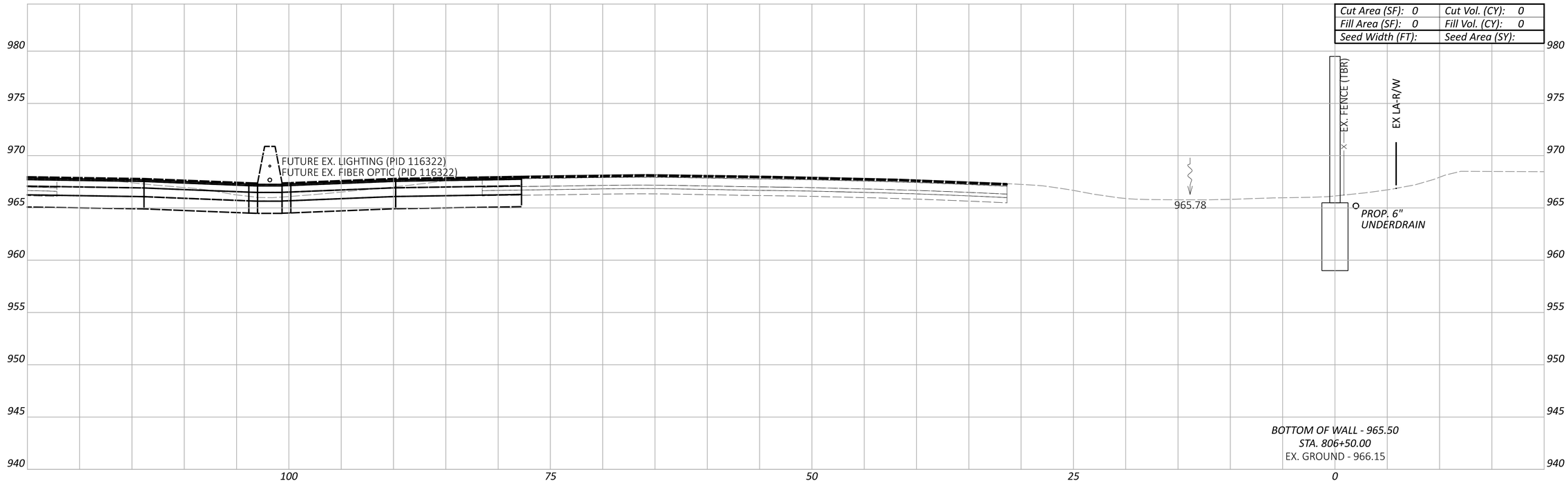


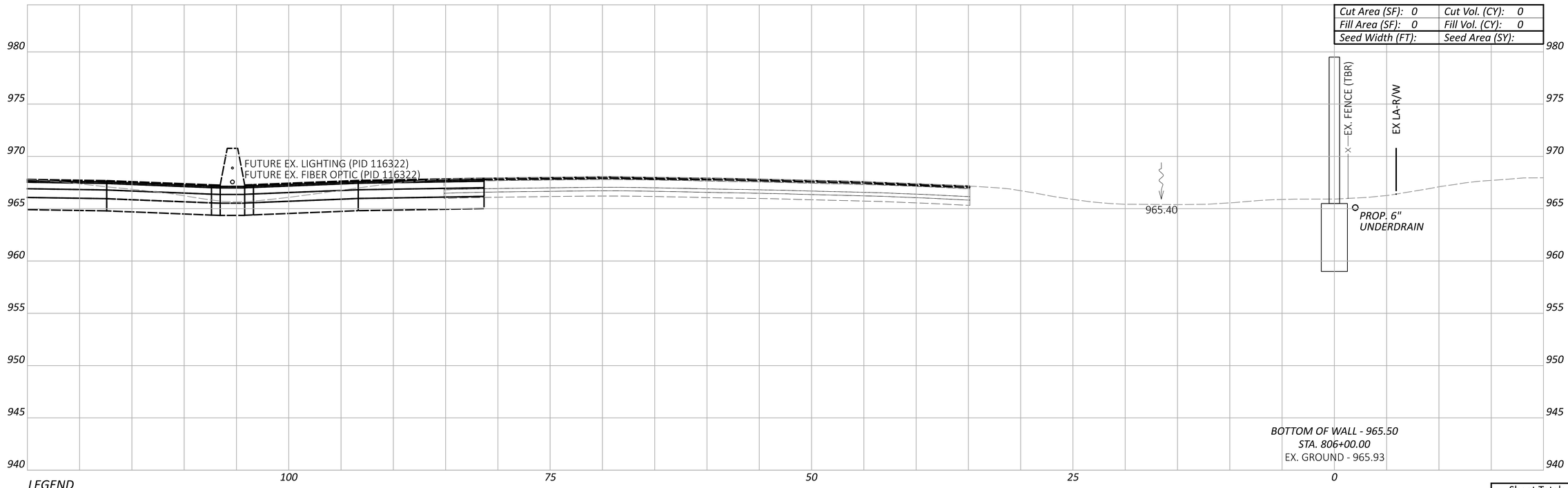


LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 8
# STA. 806+00.00 TO STA. 806+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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SHEET P.108 | TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL9 - 806+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:04:31 PM USER: BEN.BROWN
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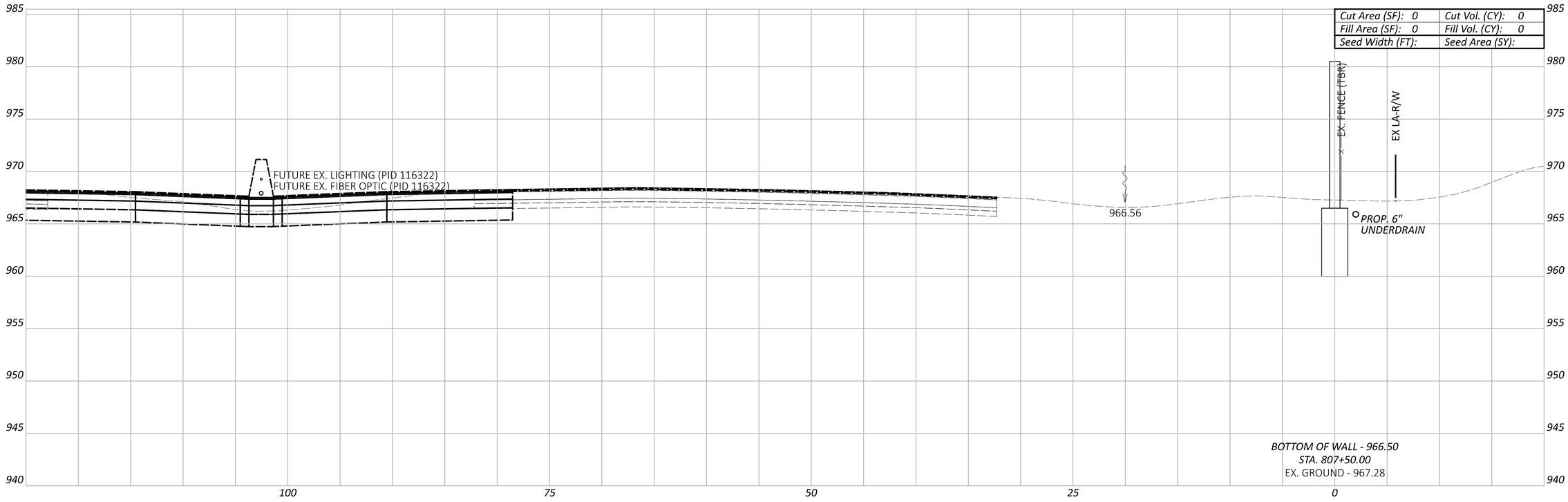


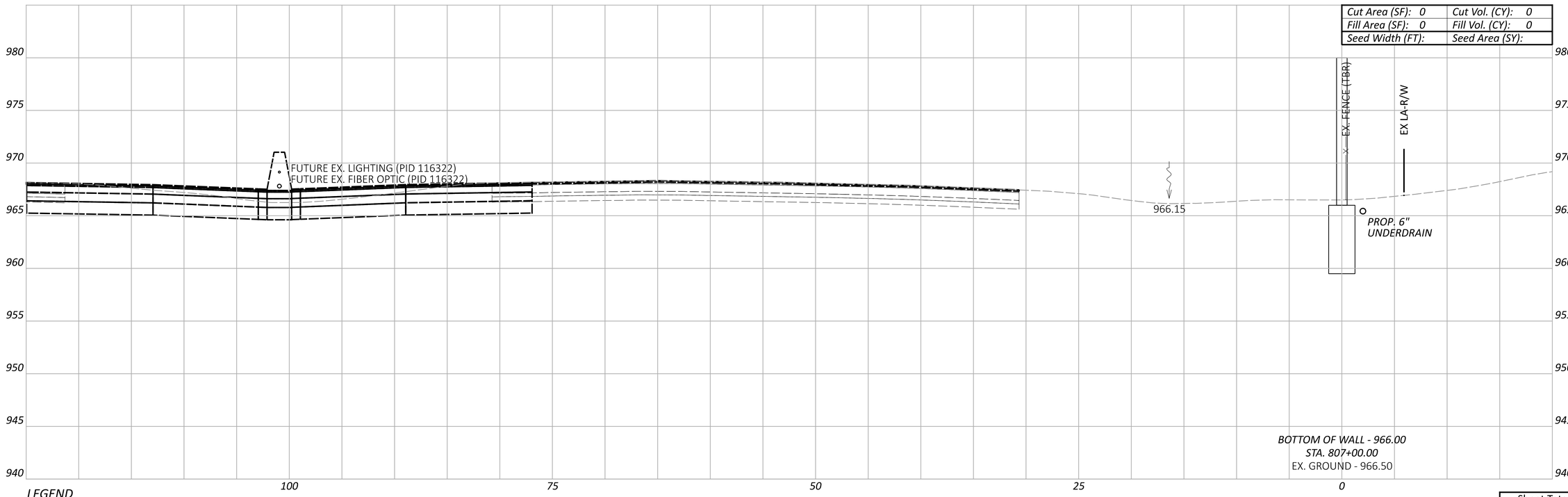


LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 8
# STA. 807+00.00 TO STA. 807+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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PROJECT ID 117607

SHEET P.109 | TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL9 - 807+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:04:44 PM USER: BEN.BROWN
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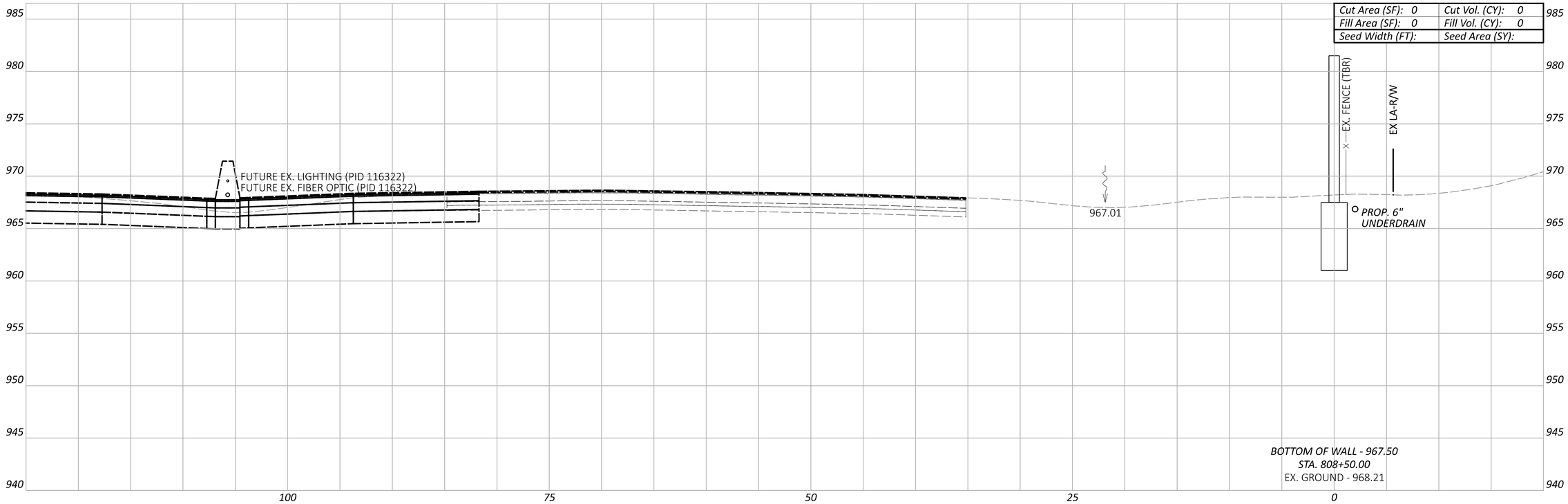


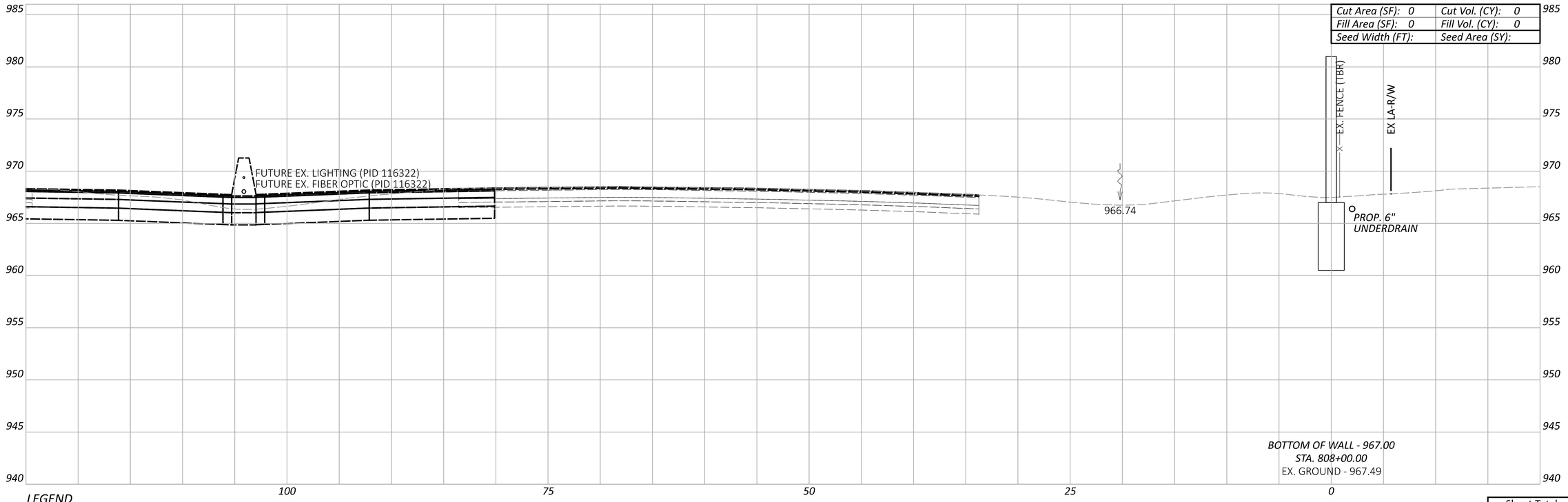


LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 8
# STA. 808+00.00 TO STA. 808+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

DESIGN AGENCY

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www.arcadis.com

DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.110 | TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL9 - 808+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:04:58 PM USER: BEN.BROWN
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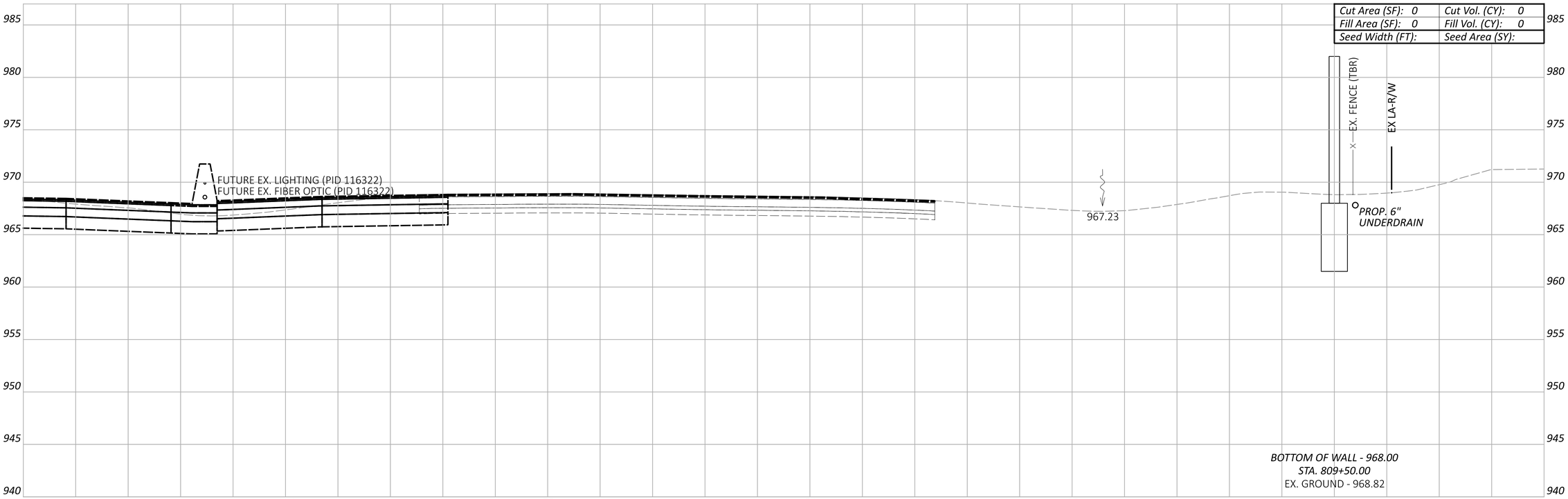


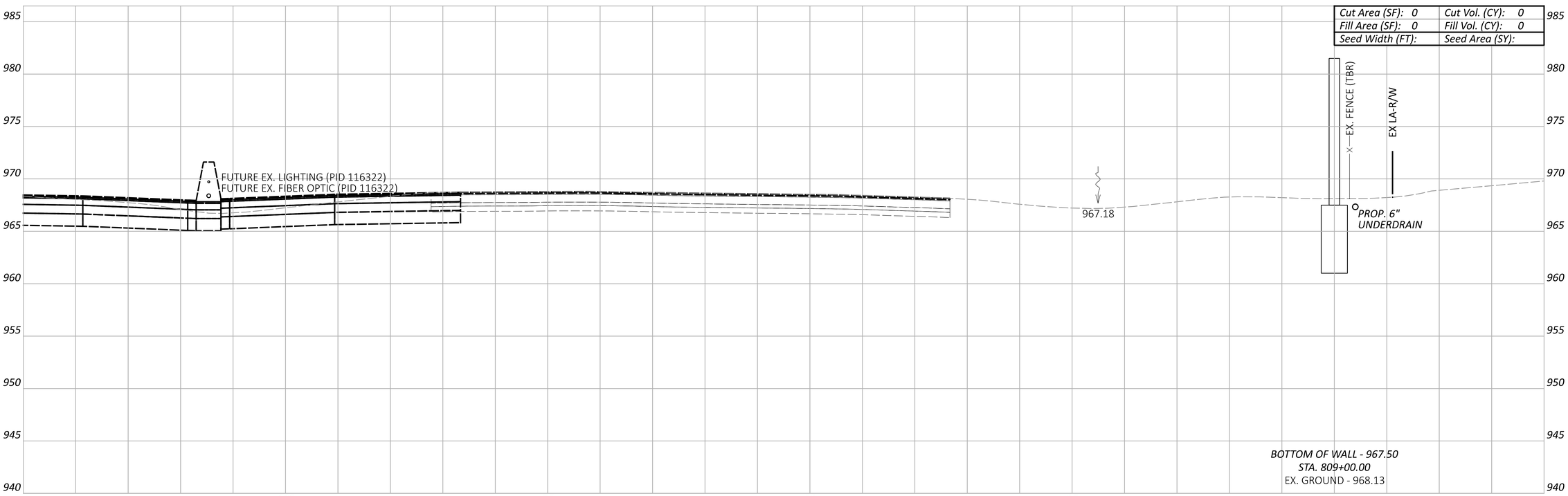


LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

# CROSS SECTIONS - WALL 8
## STA. 809+00.00 TO STA. 809+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WAL19 - 809+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:05:11 PM USER: BEN.BROWN
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DESIGNER: JMK

REVIEWER: JDH 05-22-24

PROJECT ID: 117607

SHEET: P.111 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WAL9 - 810+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:05:25 PM USER: BEN.BROWN
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# CROSS SECTIONS - WALL 8
## STA. 810+00.00

| | |
|---|---|
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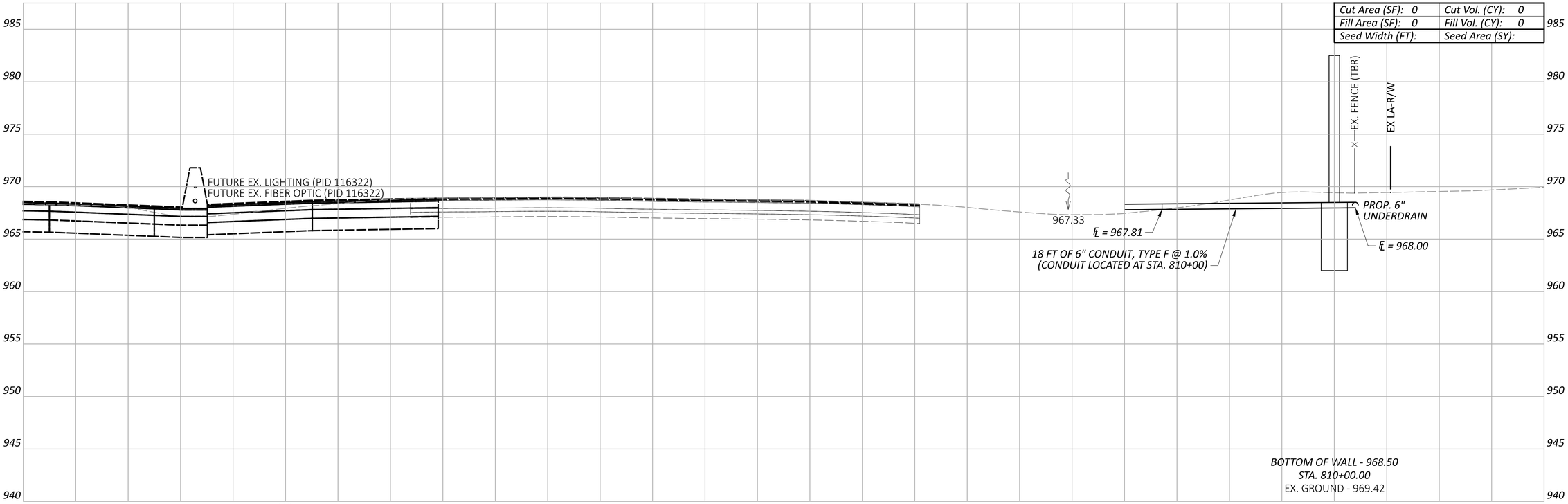
| Fill Area (SF): 0 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |




LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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JMK

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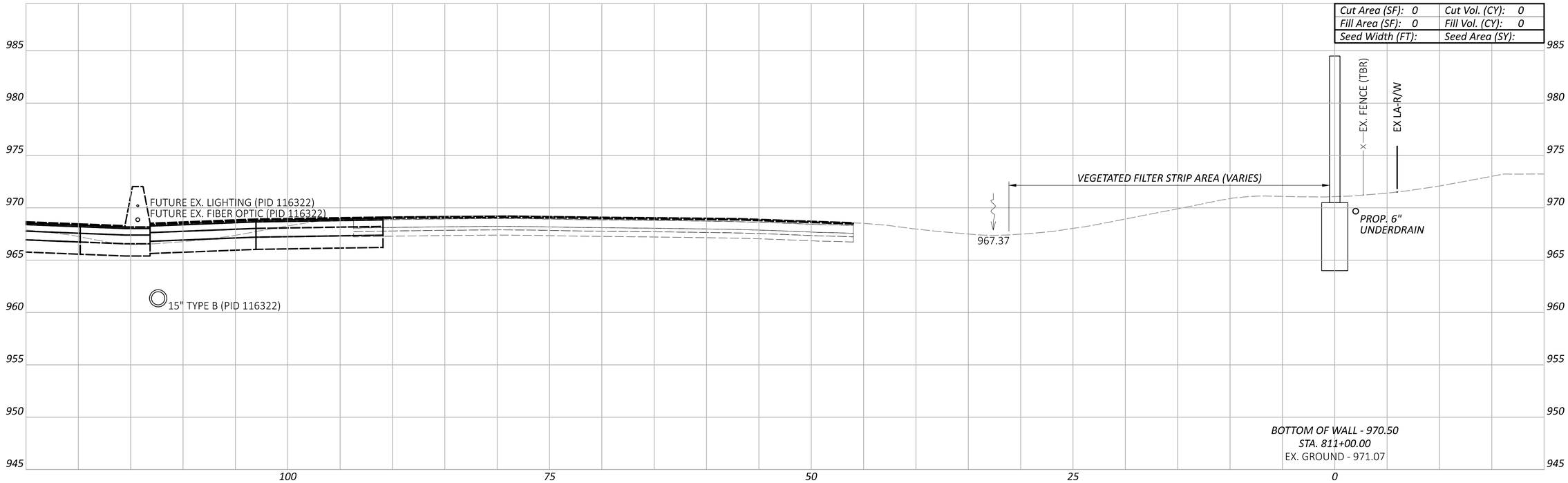
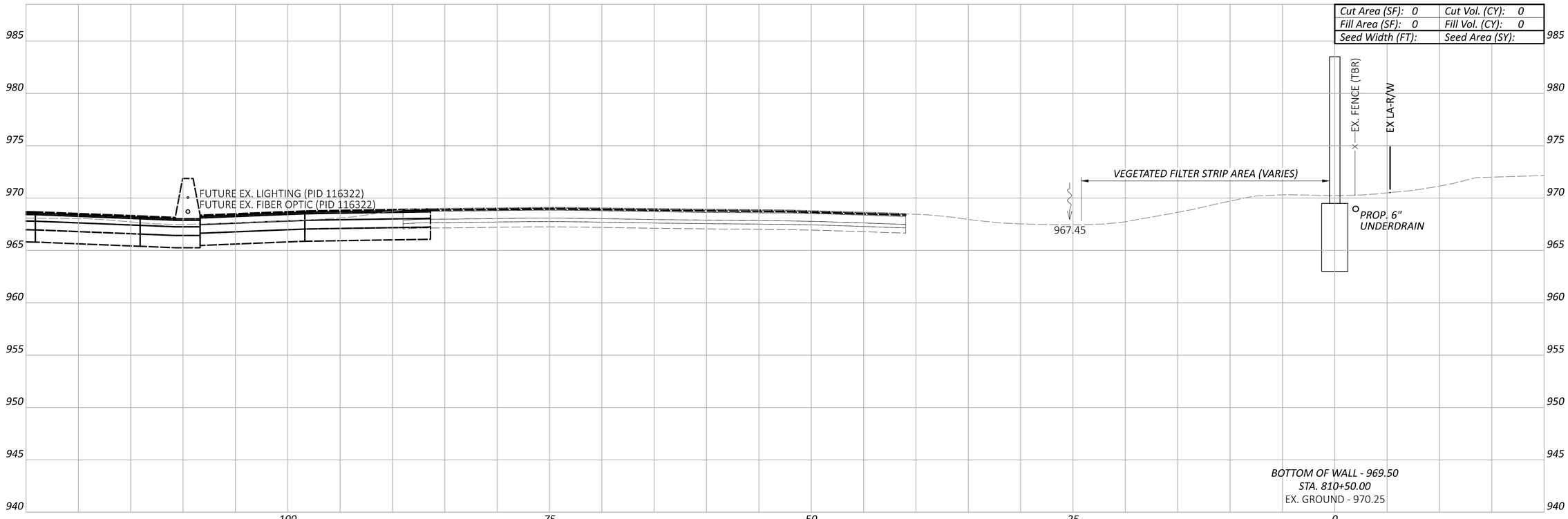
JDH 05-22-24

PROJECT ID
117607




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

— — — FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

FRA-161-15.80 NOISE ABATEMENT

CROSS SECTIONS - WALL 8
STA. 810+50.00 TO STA. 811+00.00

MODEL: BLP_WALL9 - 810+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:05:35 PM USER: BEN.BROWN
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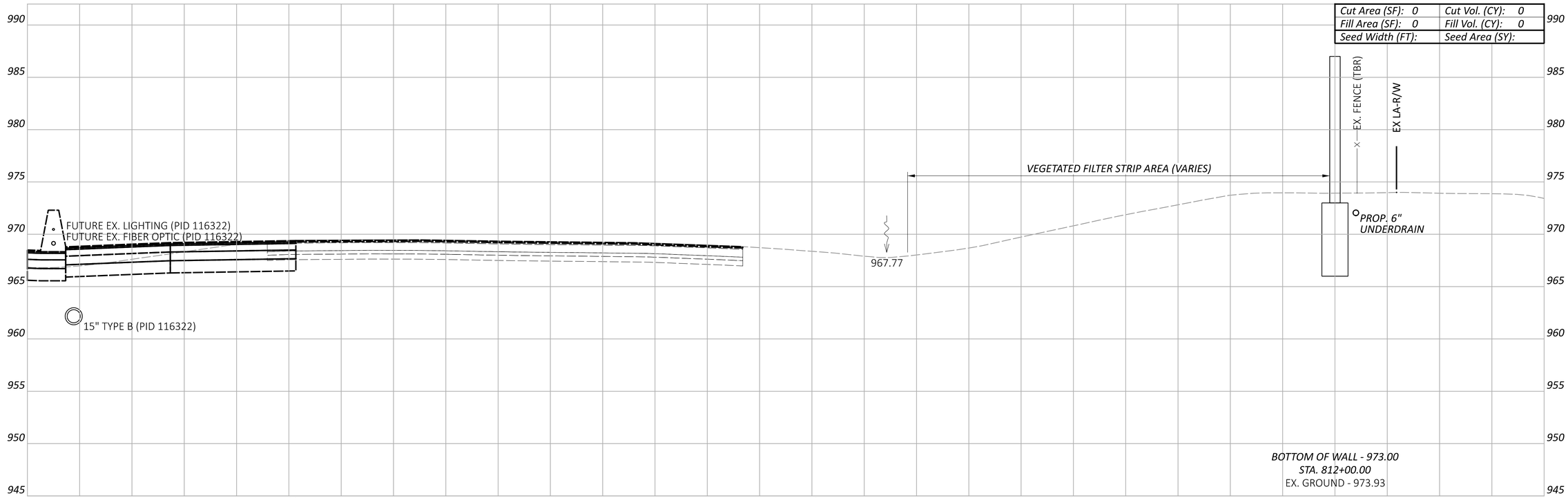
REVIEWER JDH 05-22-24

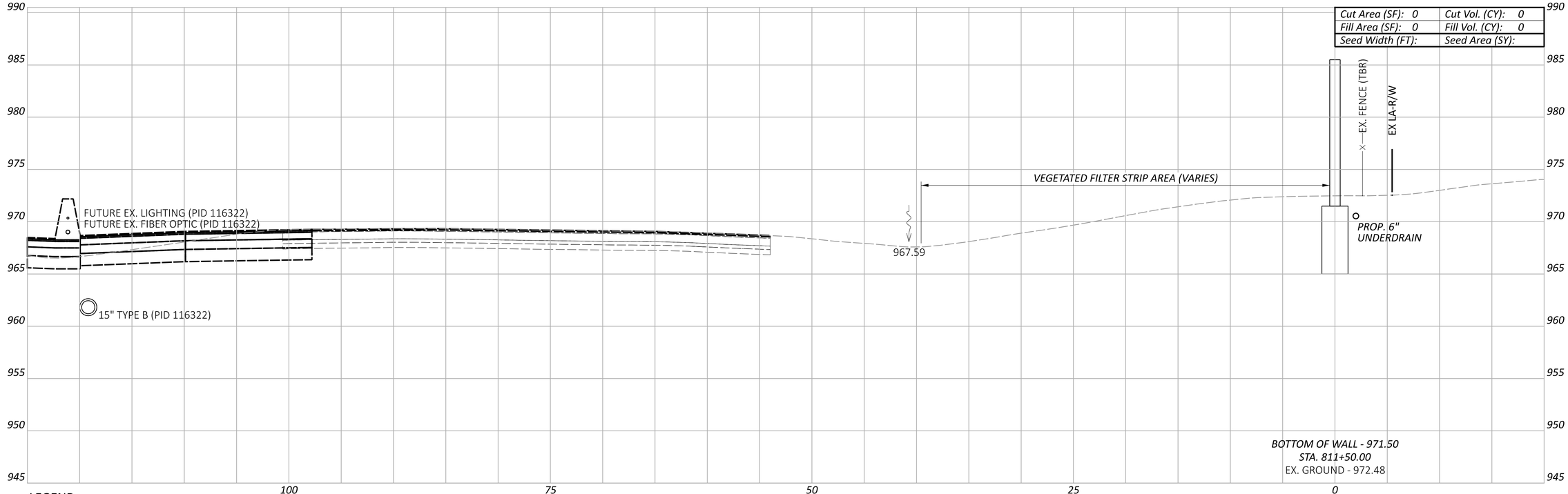
PROJECT ID 117607

SHEET P.113 TOTAL P.297

Sheet Totals

| Seeding | Cut | Fill |
|---|---|---|
| | | |




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 8
## STA. 811+50.00 TO STA. 812+00.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |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PROJECT ID 117607

SHEET P.114 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL9 - 811+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:05:52 PM USER: BEN.BROWN
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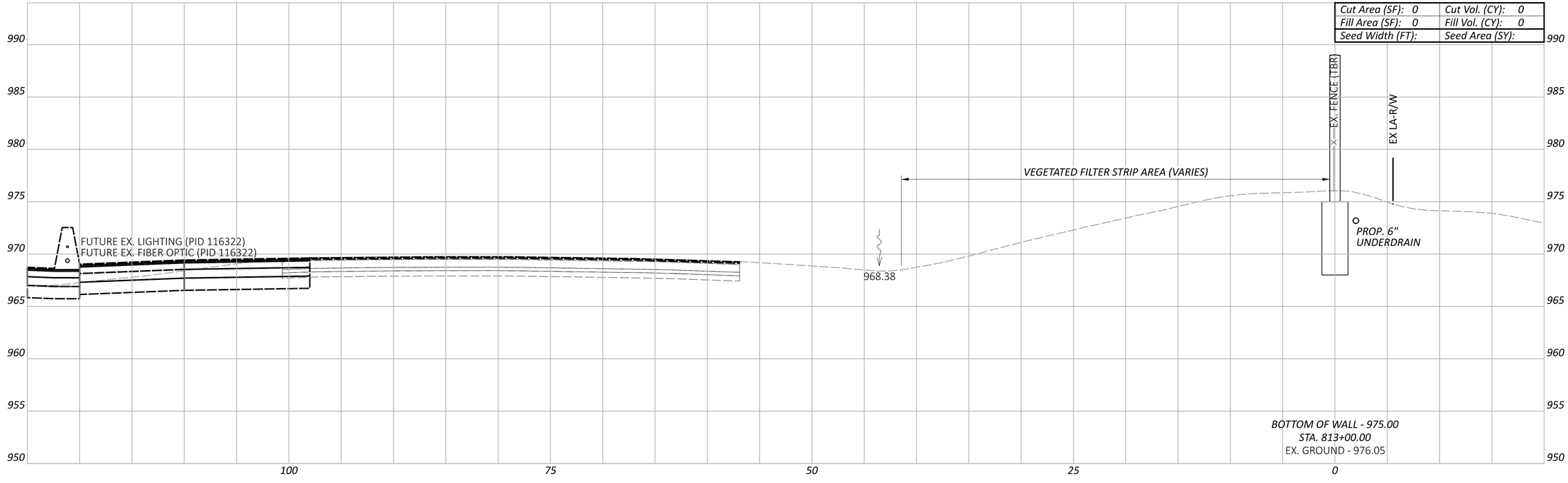


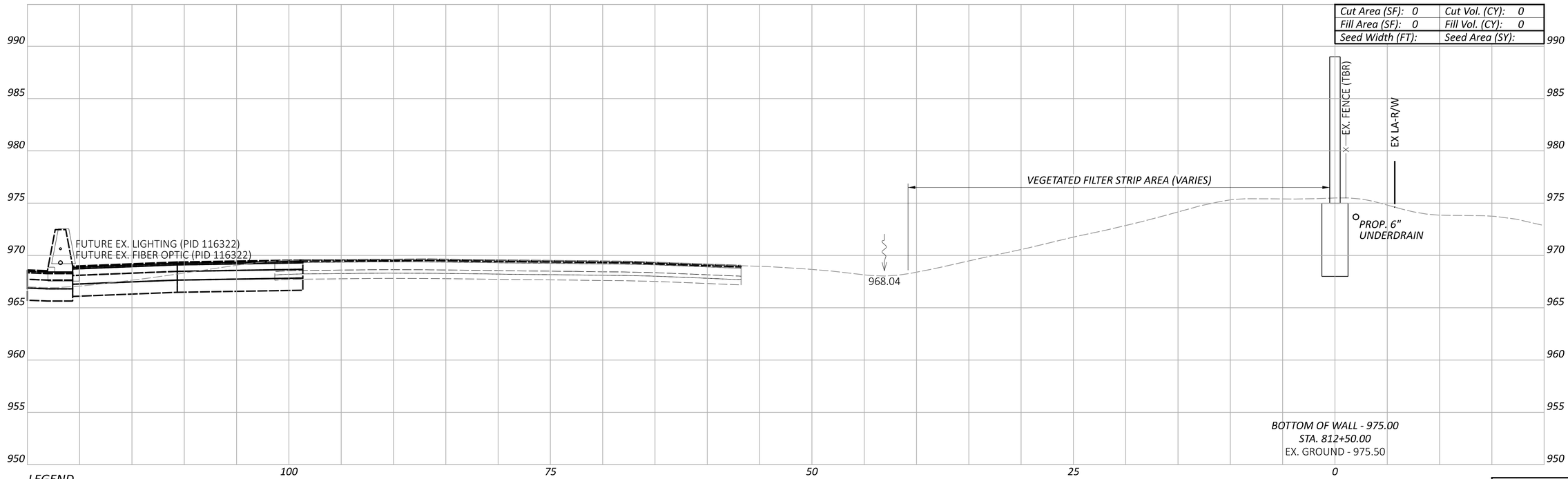


LEGEND

*EXISTING SR-161 PRIOR TO PID 116322*

*FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322*

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

# CROSS SECTIONS - WALL 8
## STA. 812+50.00 TO STA. 813+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL9 - 812+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:06:10 PM USER: BEN.BROWN
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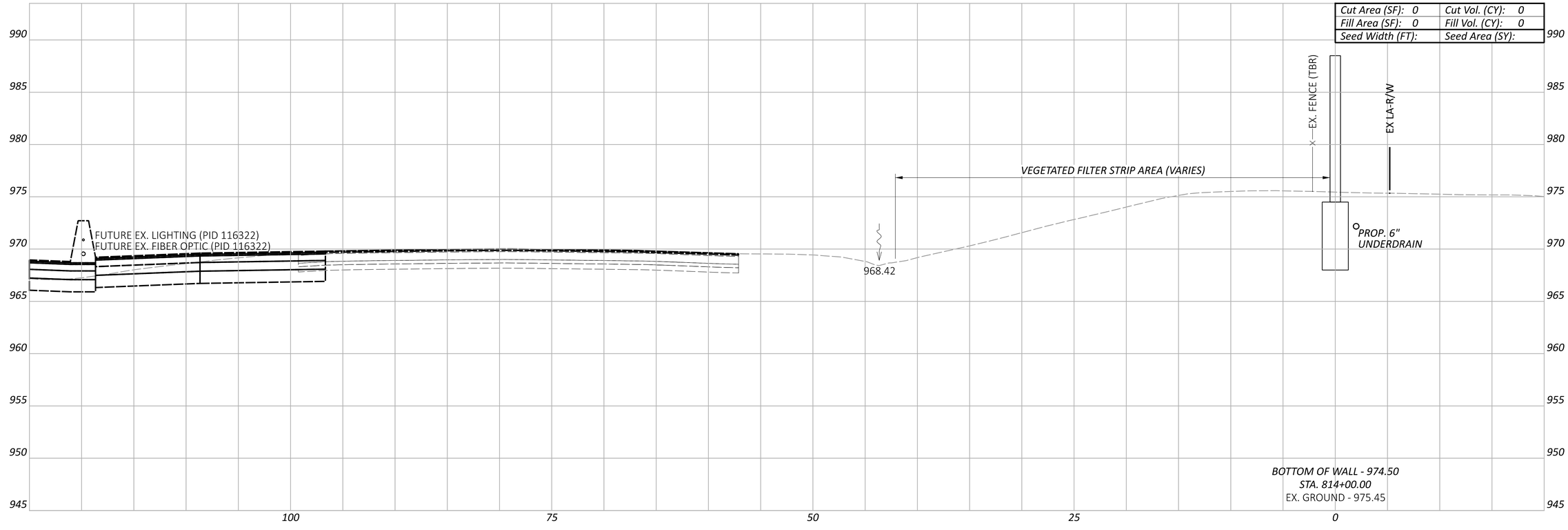
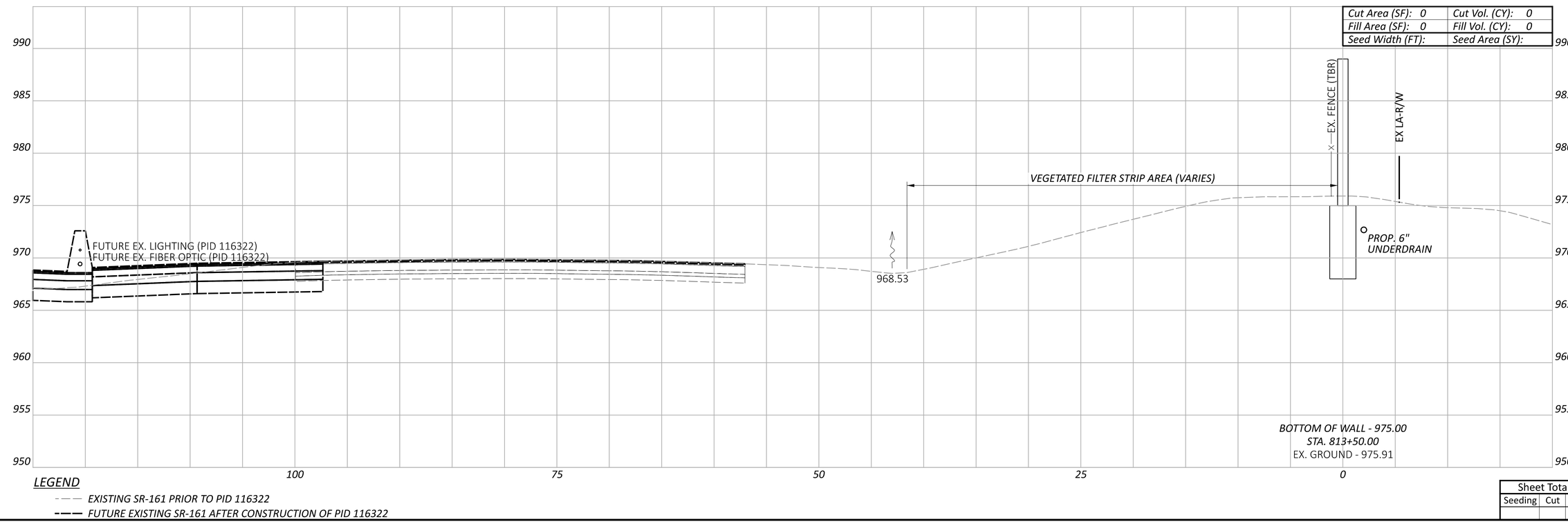
| SHEET | TOTAL |
|---|---|
| P.115 | P.297 |




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

# CROSS SECTIONS - WALL 8
## STA. 813+50.00 TO STA. 814+00.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL9 - 813+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:06:26 PM USER: BEN.BROWN
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REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.116 | TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WAL9 - 814+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:06:39 PM USER: BEN.BROWN
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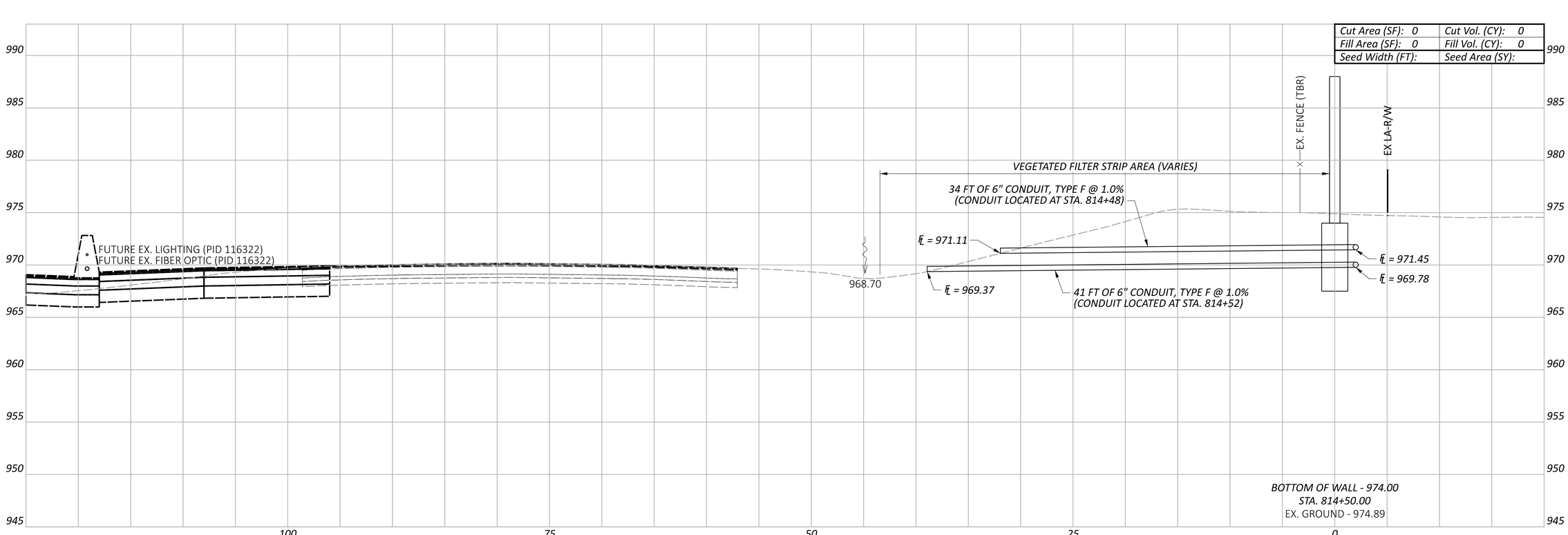
# CROSS SECTIONS - WALL 8
## STA. 814+50.00




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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DESIGNER
JMK

REVIEWER
JDH 05-22-24

PROJECT ID
117607

SHEET P.117 | TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WAL9 - 815+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:06:47 PM USER: BEN.BROWN
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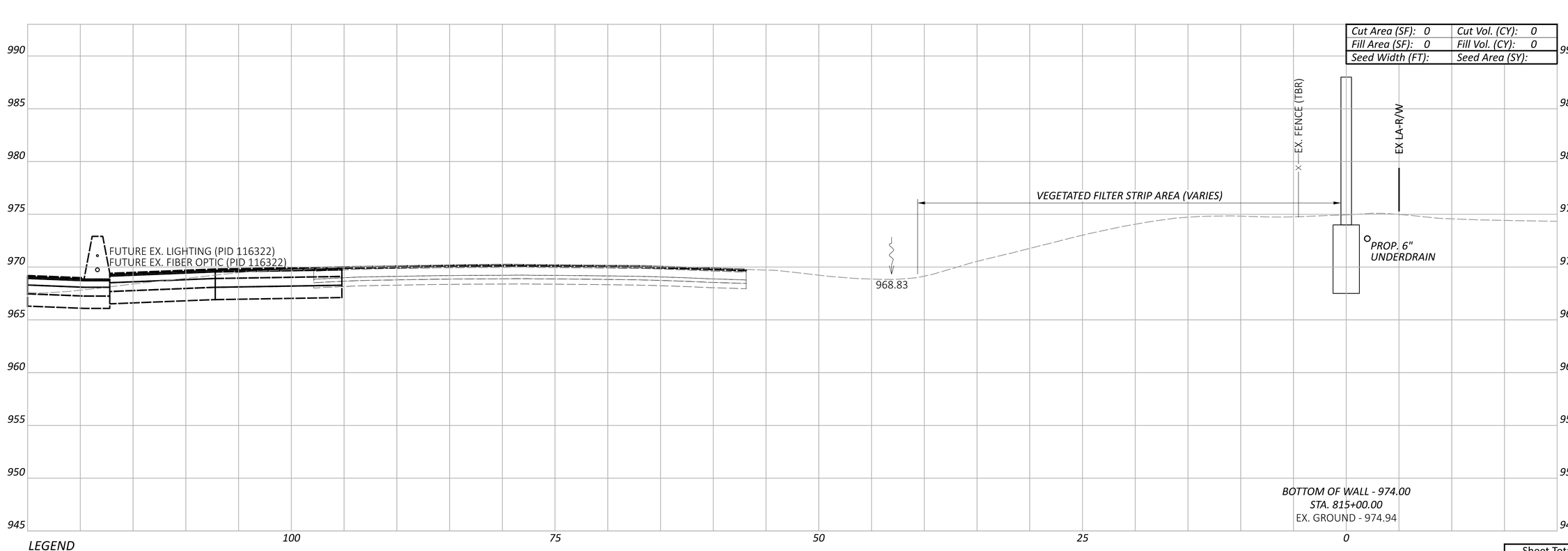
# CROSS SECTIONS - WALL 8
## STA. 815+00.00




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WAL9 - 815+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:06:54 PM USER: BEN.BROWN
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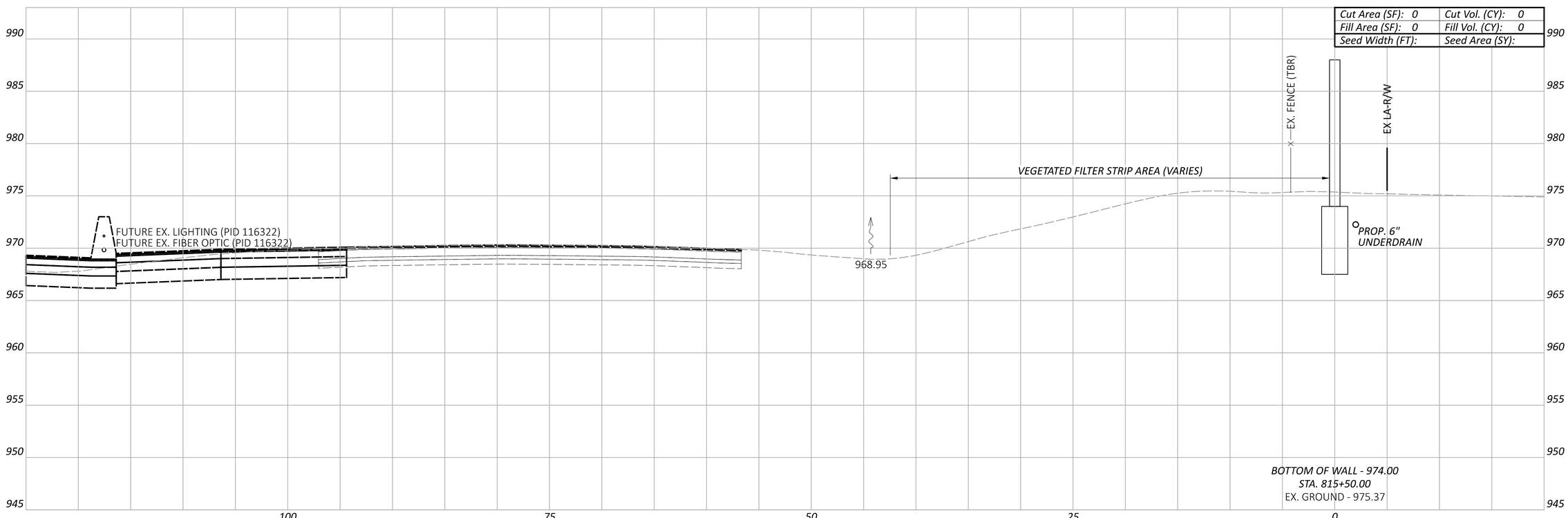
CROSS SECTIONS - WALL 8
STA. 815+50.00




LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WAL9 - 816+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:07:01 PM USER: BEN.BROWN
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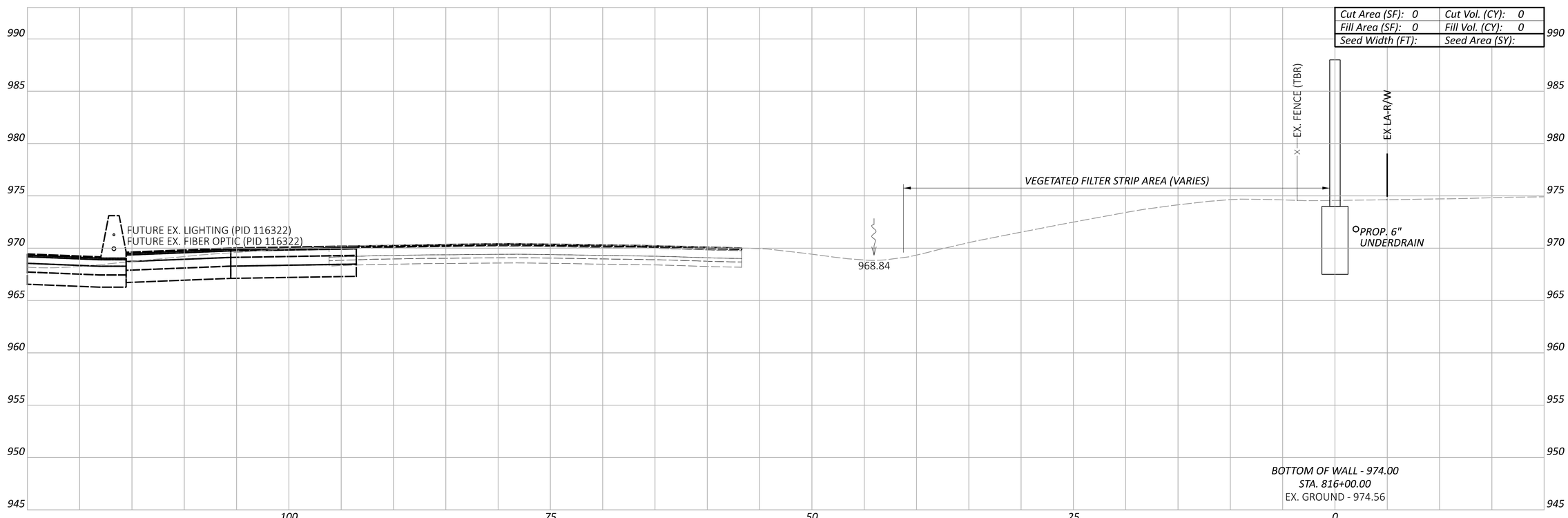
# CROSS SECTIONS - WALL 8
## STA. 816+00.00




LEGEND

*EXISTING SR-161 PRIOR TO PID 116322*

*FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322*

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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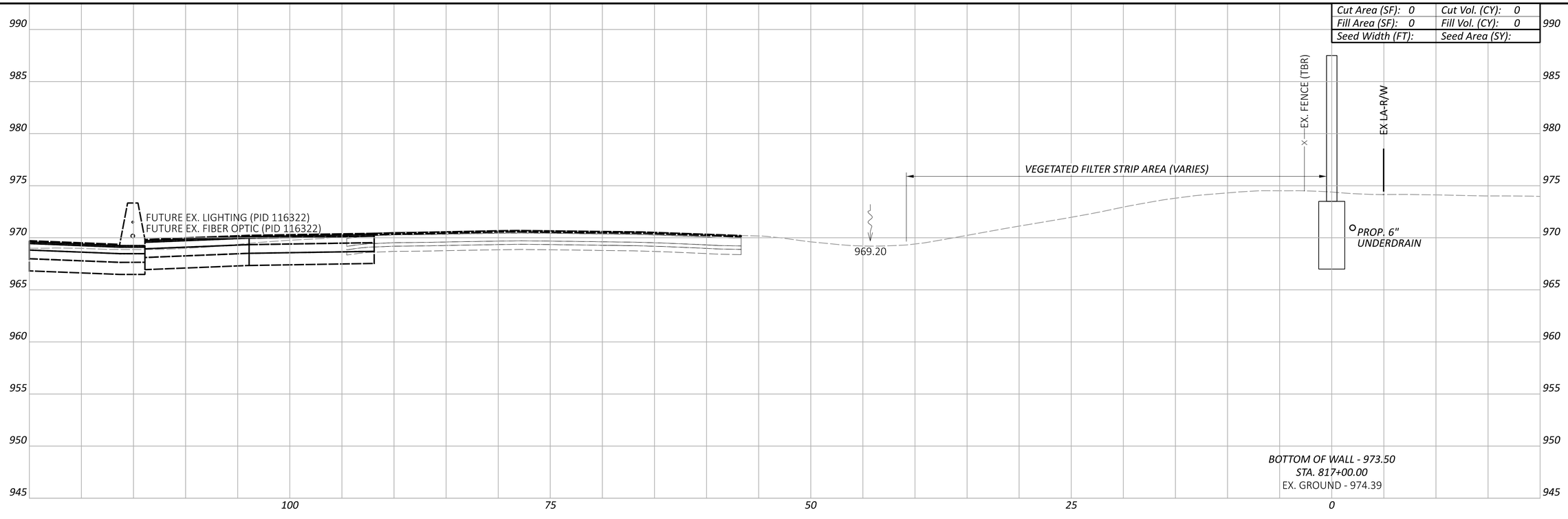


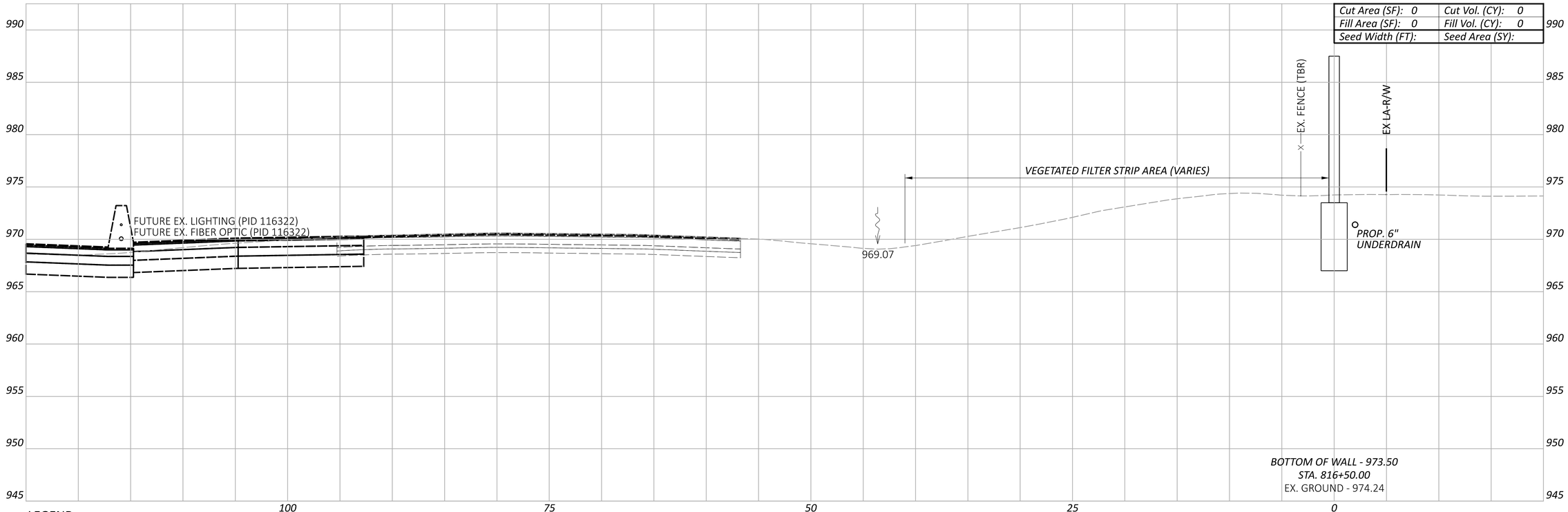


LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

— — — FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 8
## STA. 816+50.00 TO STA. 817+00.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.121 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL9 - 816+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:07:10 PM USER: BEN.BROWN
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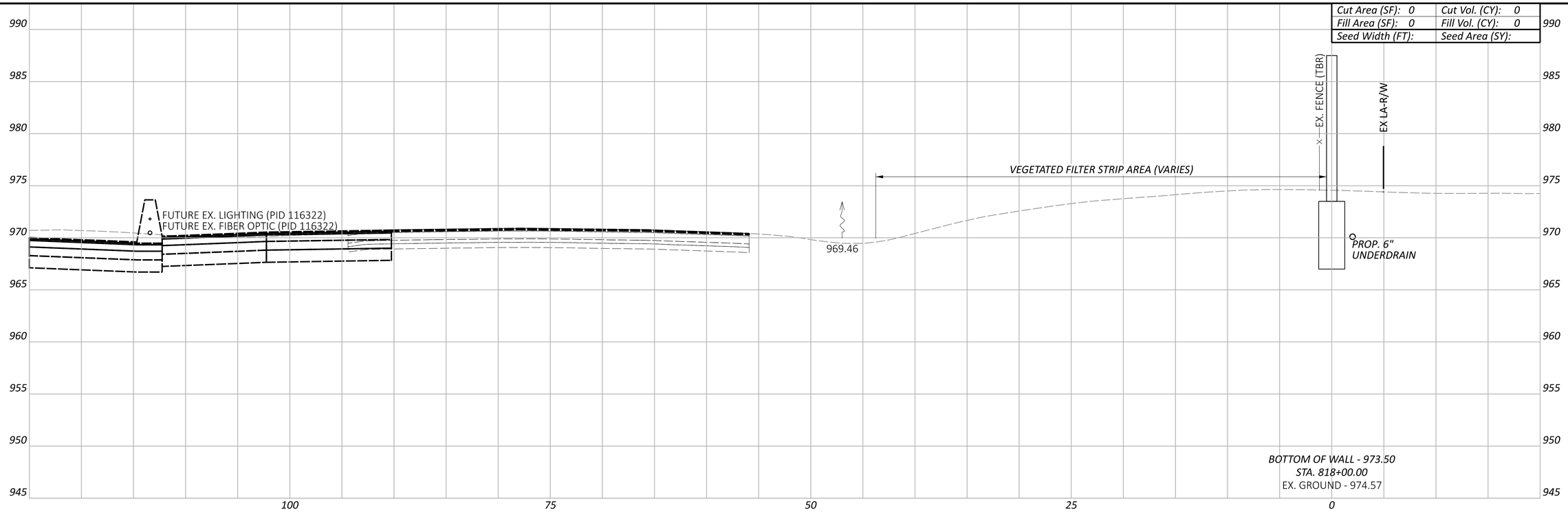


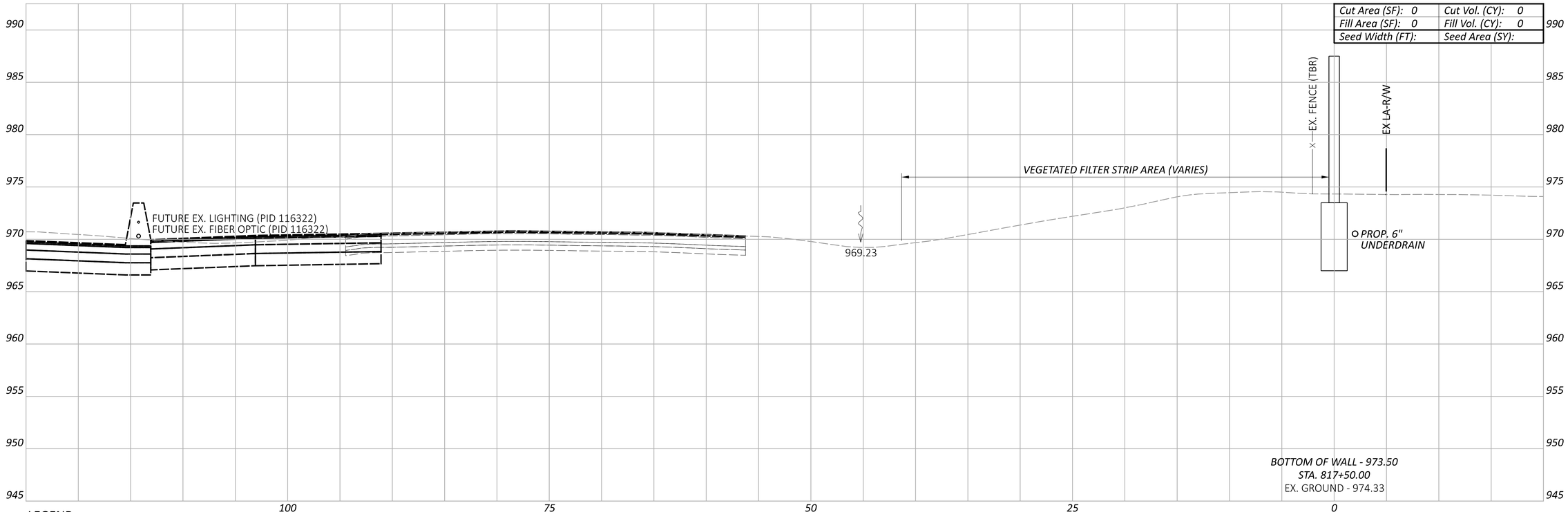


LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

— — — FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

FRA-161-15.80 NOISE ABATEMENT

CROSS SECTIONS - WALL 8
STA. 817+50.00 TO STA. 818+00.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.122 TOTAL P.297

MODEL: BLP_WALL9 - 817+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:07:24 PM USER: BEN.BROWN
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FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WAL9 - 818+08.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:07:35 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS008B.dgn

CROSS SECTIONS - WALL 8
STA. 818+08.00

| | |
|---|---|
| *Cut Area (SF): 0* | *Cut Vol. (CY): 0* |
| *Fill Area (SF): 0* | *Fill Vol. (CY): 0* |
| *Seed Width (FT):* | *Seed Area (SY):* |

990
985
980
975
970
965
960
955
950
945

100 75 50 25 0

FUTURE EX. LIGHTING (PID 116322)
FUTURE EX. FIBER OPTIC (PID 116322)

969.40

*VEGETATED FILTER STRIP AREA (VARIES)*

EX. FENCE (TBR)

EX LA-R/W

*PROP. 6" UNDERDRAIN*

*BOTTOM OF WALL - 973.50*
*STA. 818+08.00 (END WALL 8)*
EX. GROUND - 974.46

*LEGEND*

*EXISTING SR-161 PRIOR TO PID 116322*

*FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322*

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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PROJECT ID
117607

SHEET P.123 TOTAL P.297

# FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL9 - 900+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:08:17 PM USER: BEN.BROWN
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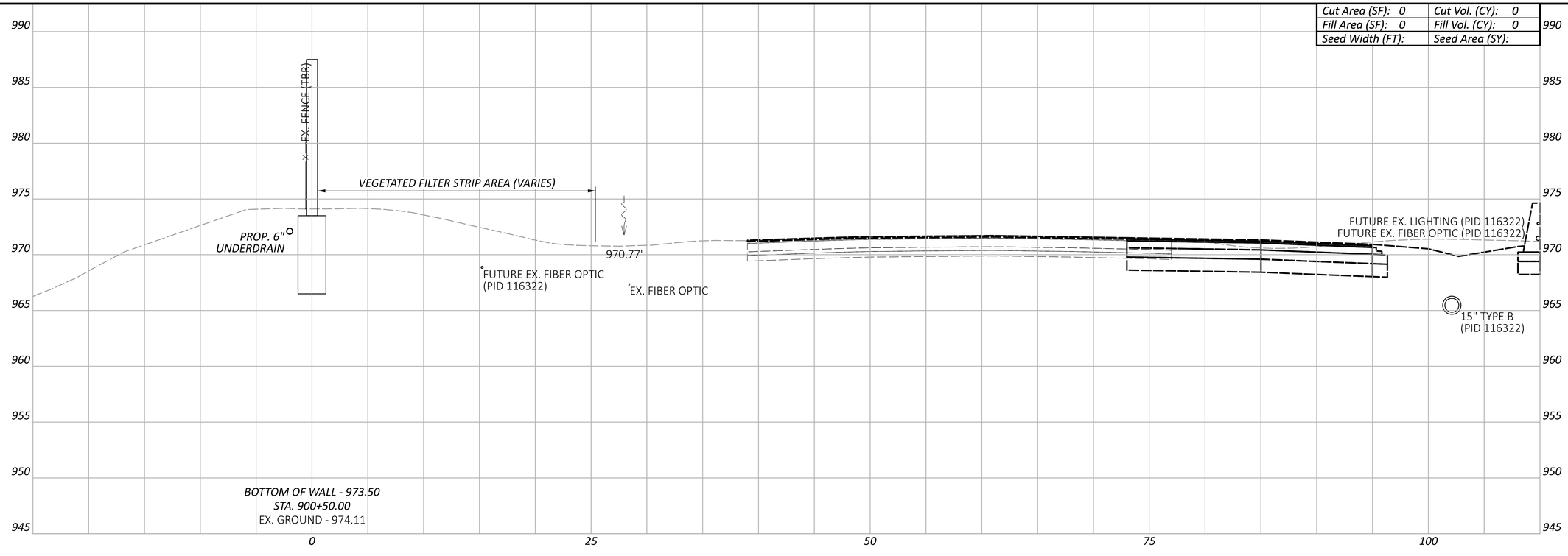
| Cut Area (SF): 0 | Cut Vol. (CY): 0 |
|---|---|
| Fill Area (SF): 0 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |

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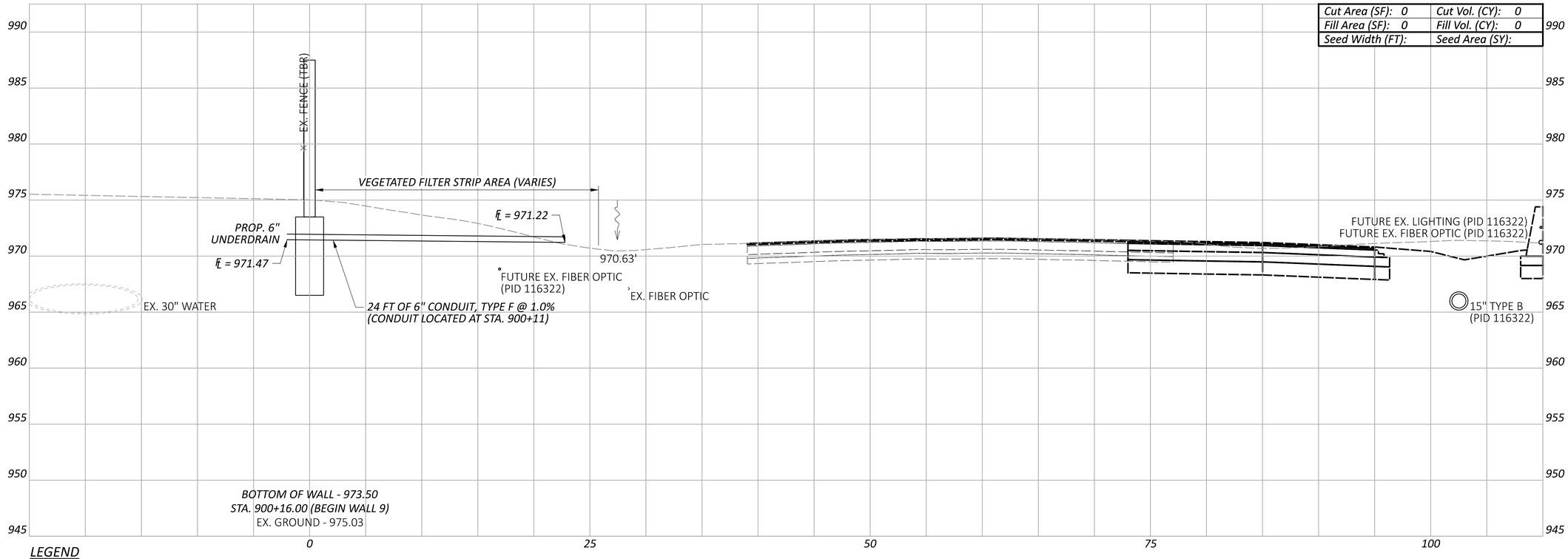


LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 9
# STA. 900+16.00 TO STA. 900+50.00

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DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

SHEET P.124 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WAL9 - 901+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:08:35 PM USER: BEN.BROWN
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# CROSS SECTIONS - WALL 9
## STA. 901+00.00

| | |
|---|---|
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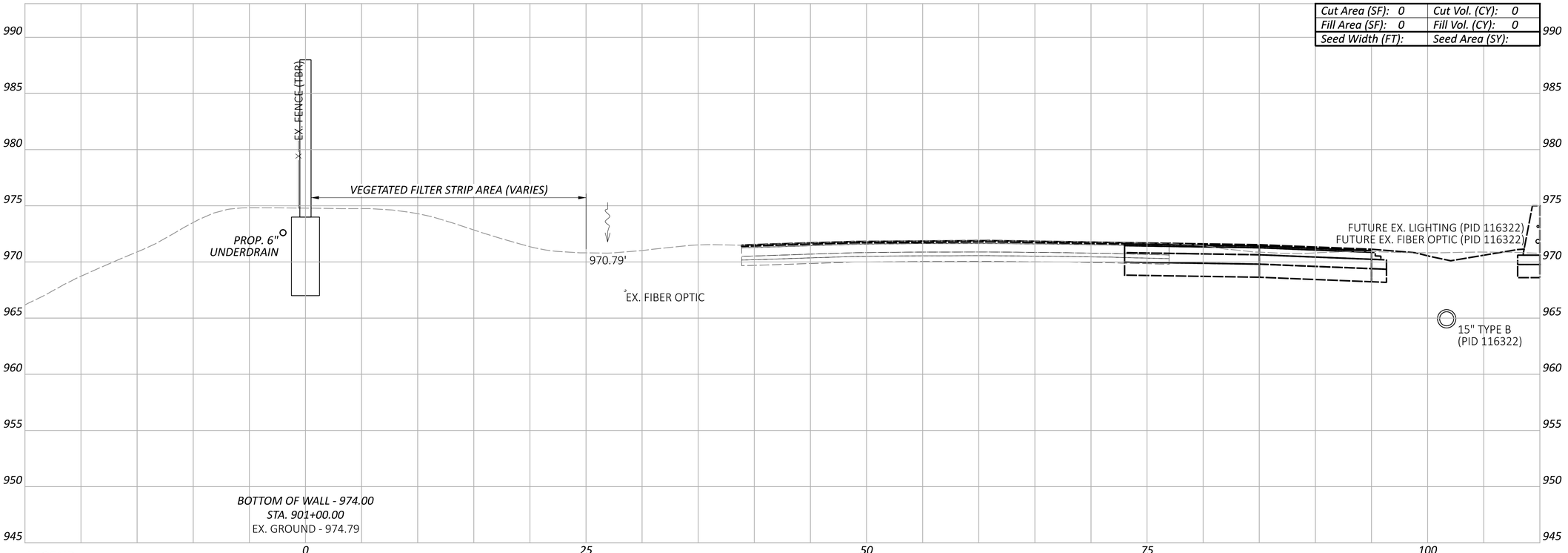
| Fill Area (SF): 0 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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REVIEWER
JDH 05-22-24

PROJECT ID
117607

| SHEET | TOTAL |
|---|---|
| P.125 | P.297 |

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WAL9 - 901+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:08:44 PM USER: BEN.BROWN
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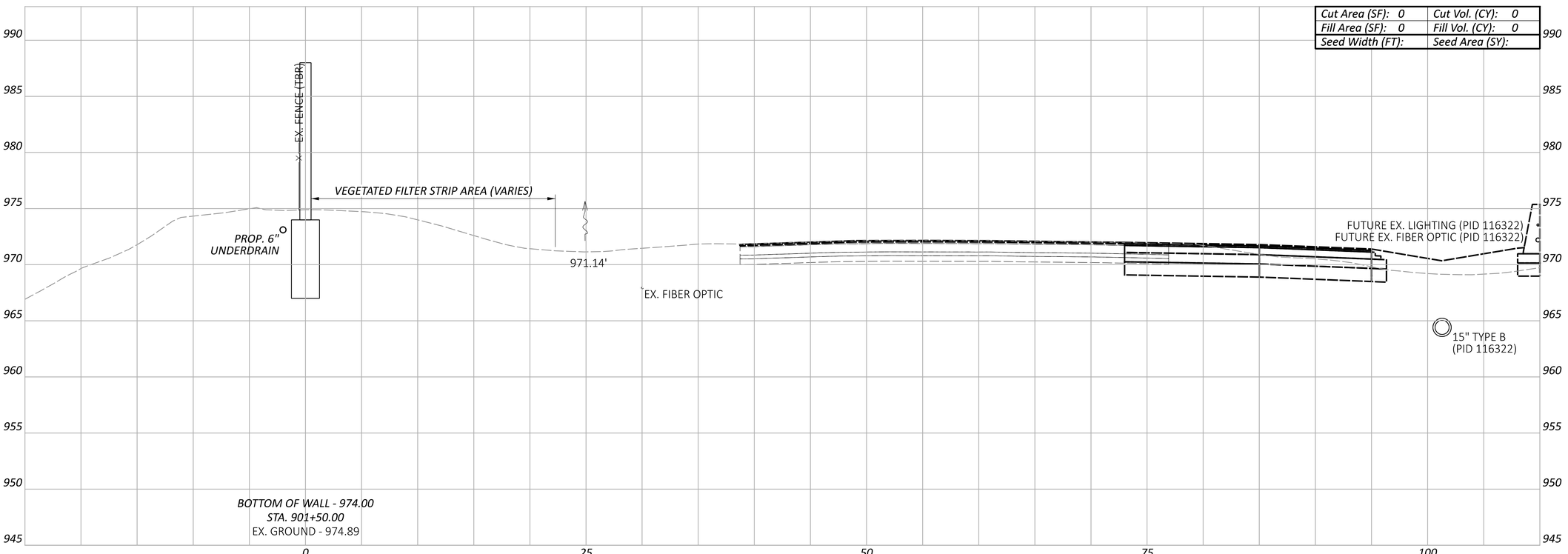


LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

CROSS SECTIONS - WALL 9
STA. 901+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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SHEET P.126 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL9 - 902+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:08:53 PM USER: BEN.BROWN
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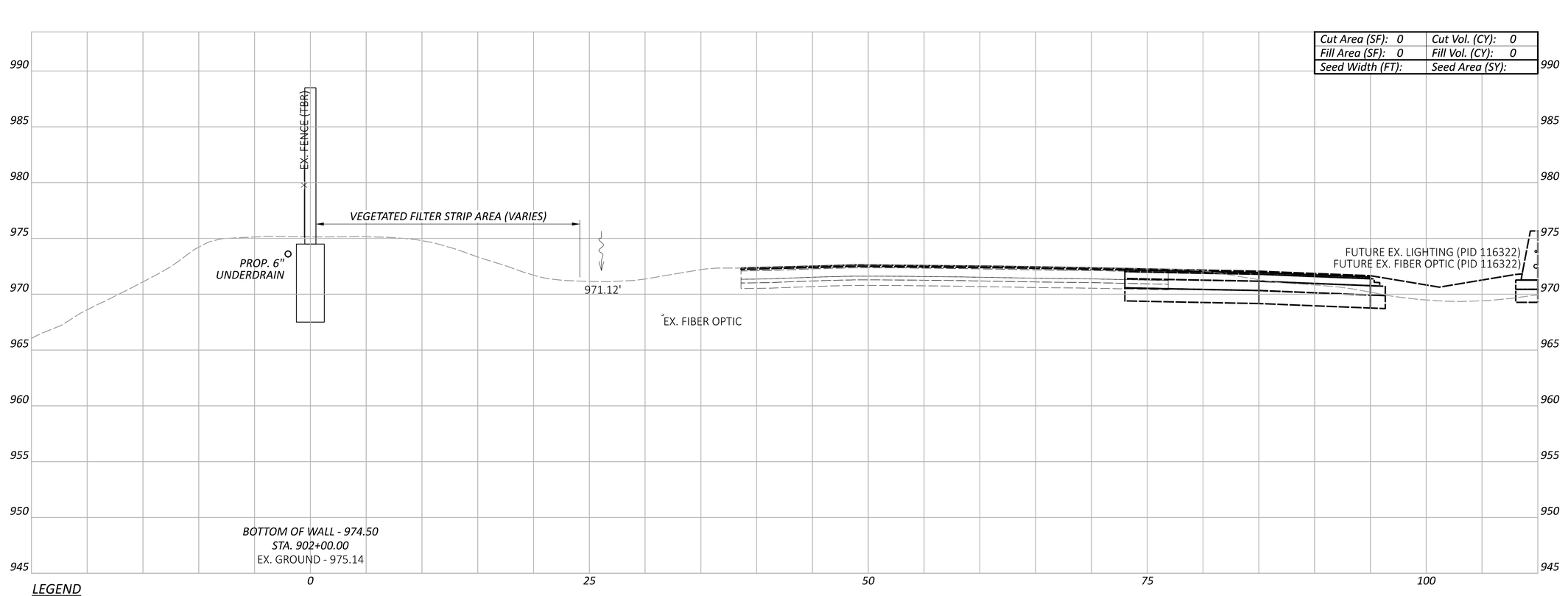
# CROSS SECTIONS - WALL 9
## STA. 902+00.00




LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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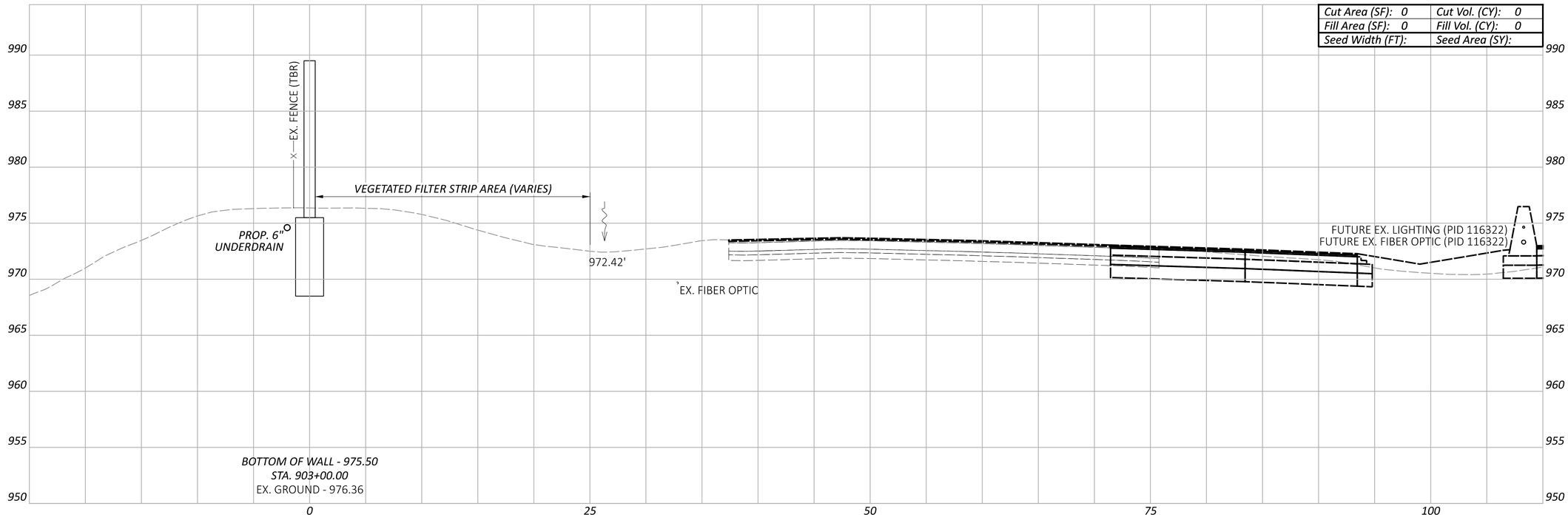
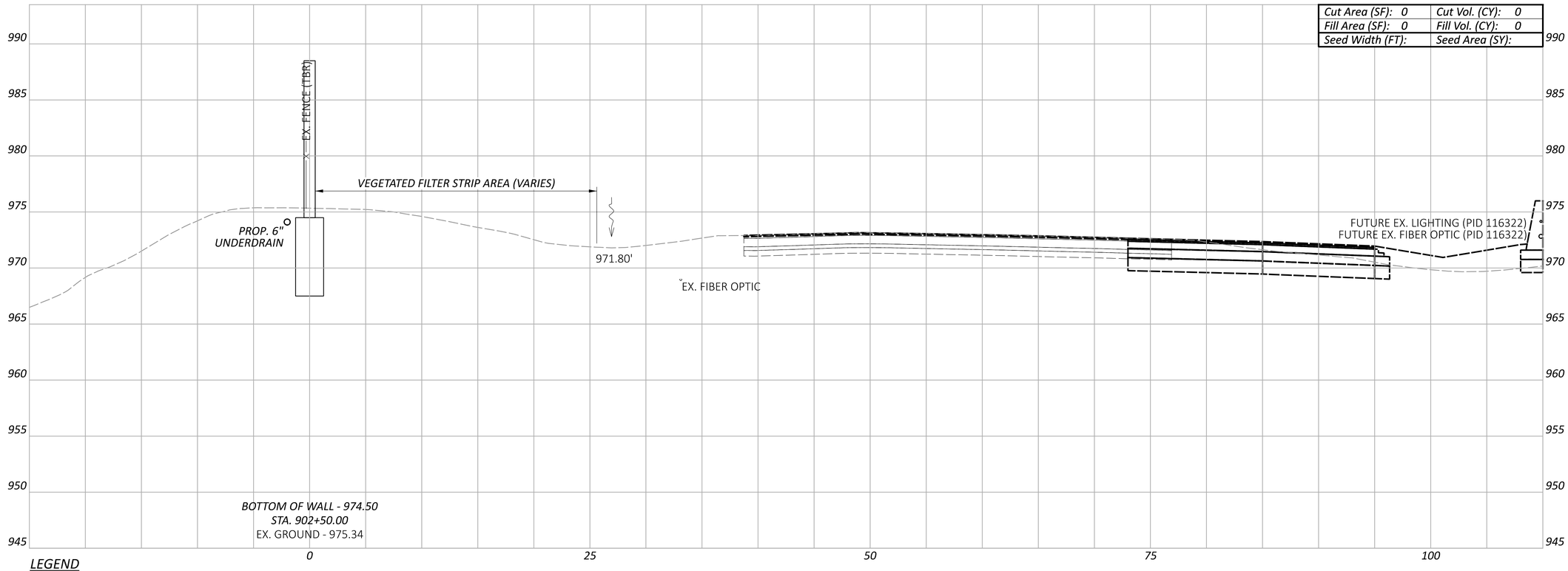
SHEET P.127 TOTAL P.297




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

FRA-161-15.80 NOISE ABATEMENT

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CROSS SECTIONS - WALL 9
STA. 902+50.00 TO STA. 903+00.00

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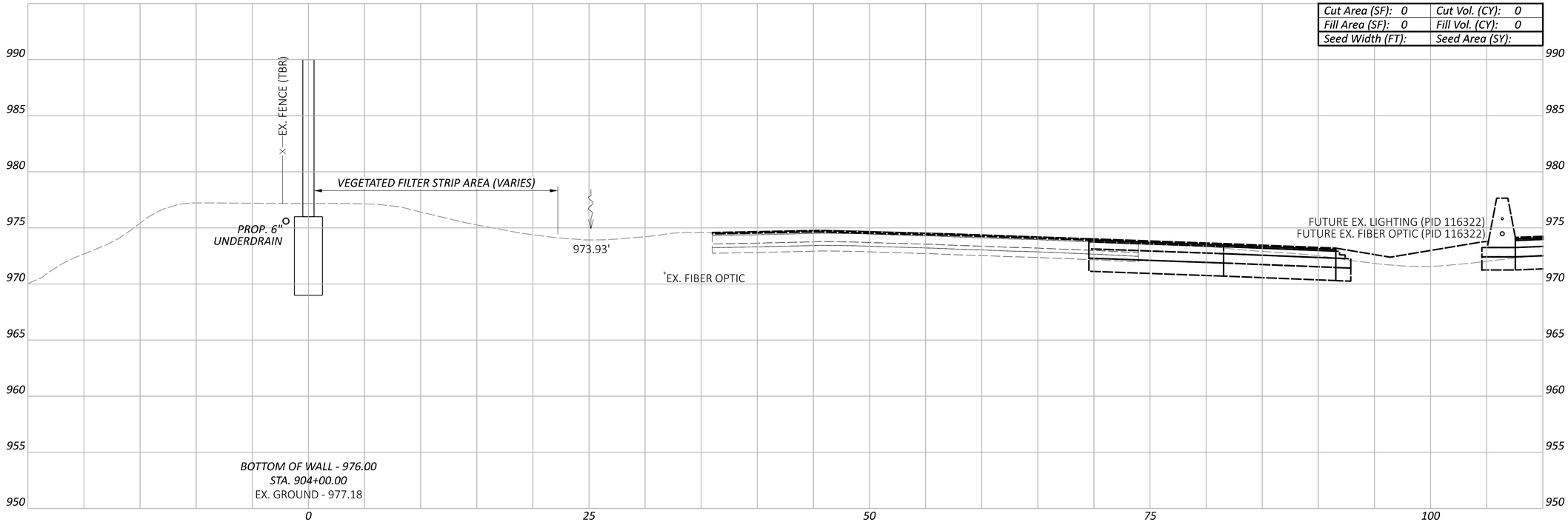
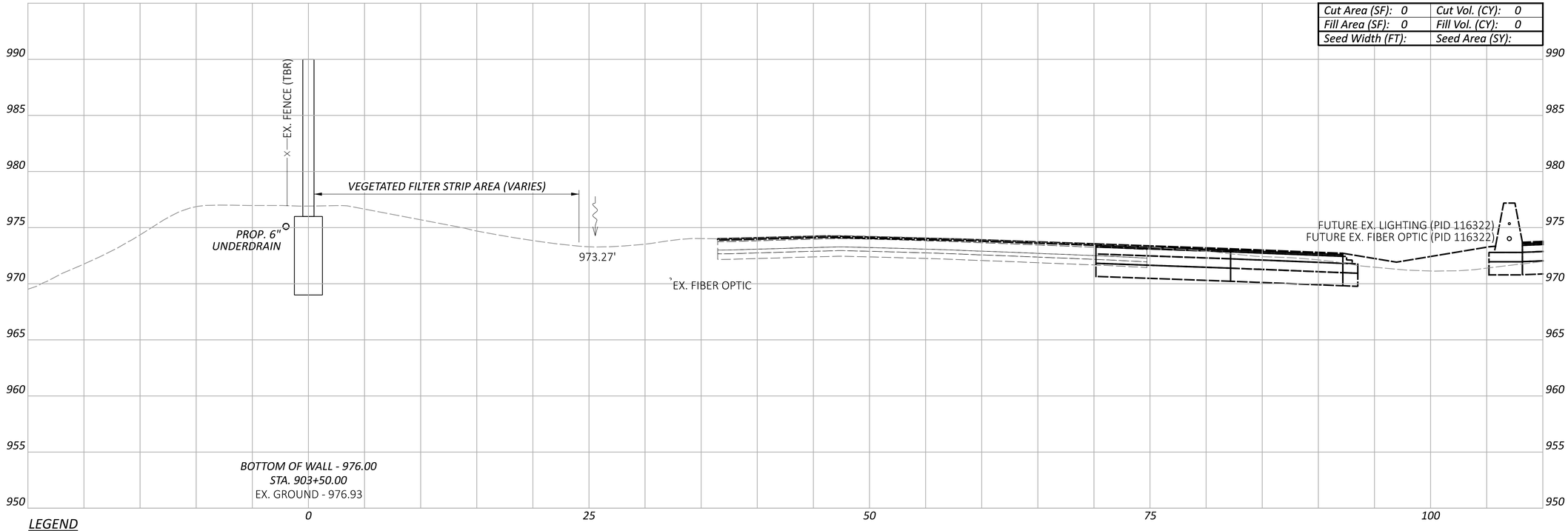
PROJECT ID 117607

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

SHEET P.128 TOTAL P.297




LEGEND

- - - EXISTING SR-161 PRIOR TO PID 116322

— — FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 9
## STA. 903+50.00 TO STA. 904+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL9 - 903+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:09:20 PM USER: BEN.BROWN
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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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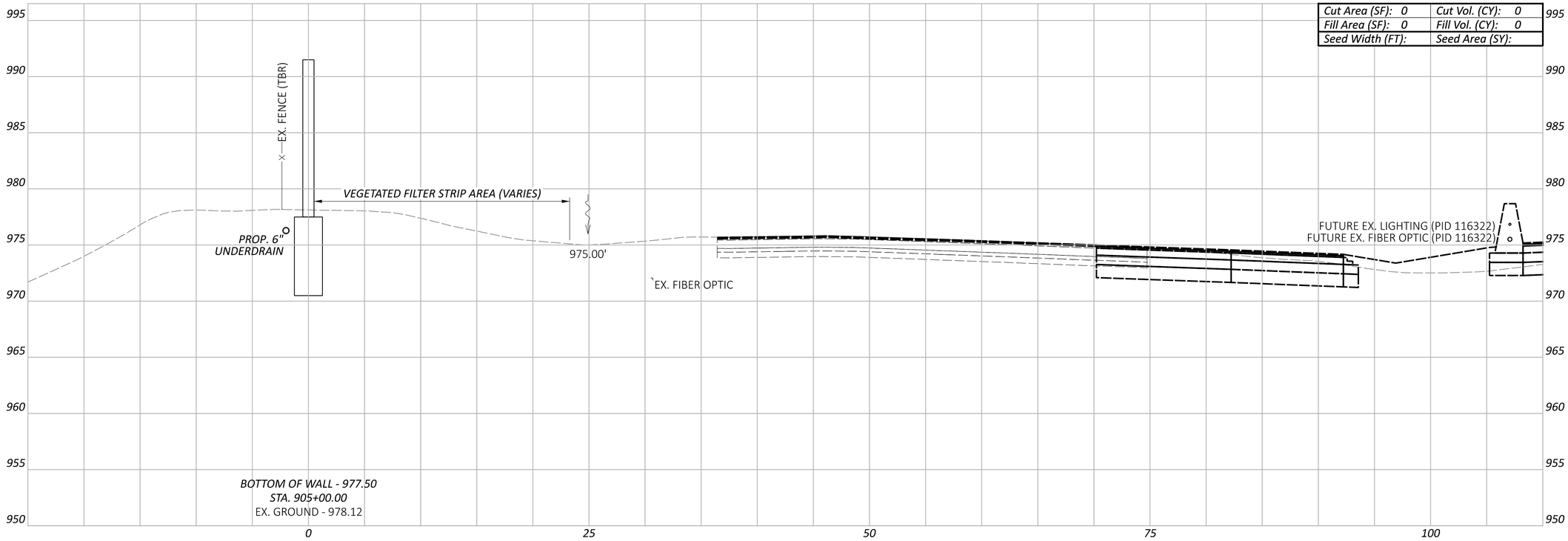
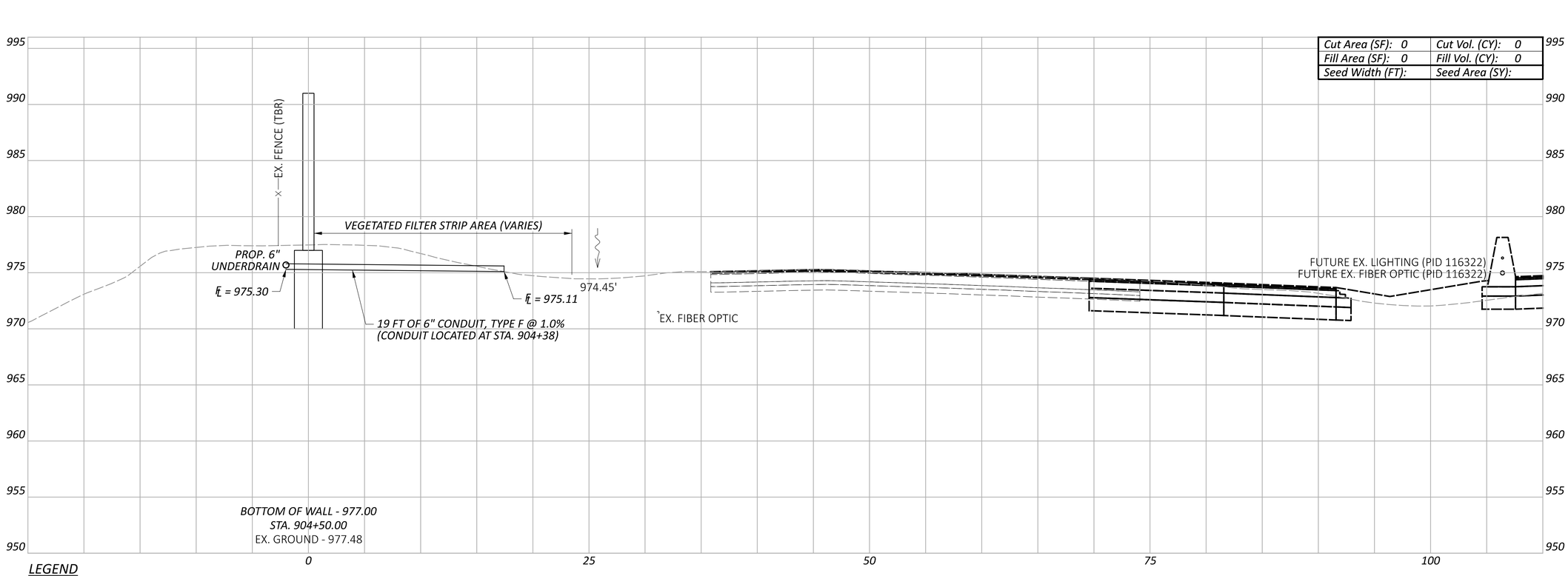
SHEET P.129 TOTAL P.297




LEGEND

*EXISTING SR-161 PRIOR TO PID 116322*

*FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322*

# CROSS SECTIONS - WALL 9
## STA. 904+50.00 TO STA. 905+00.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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SHEET P.130 | TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

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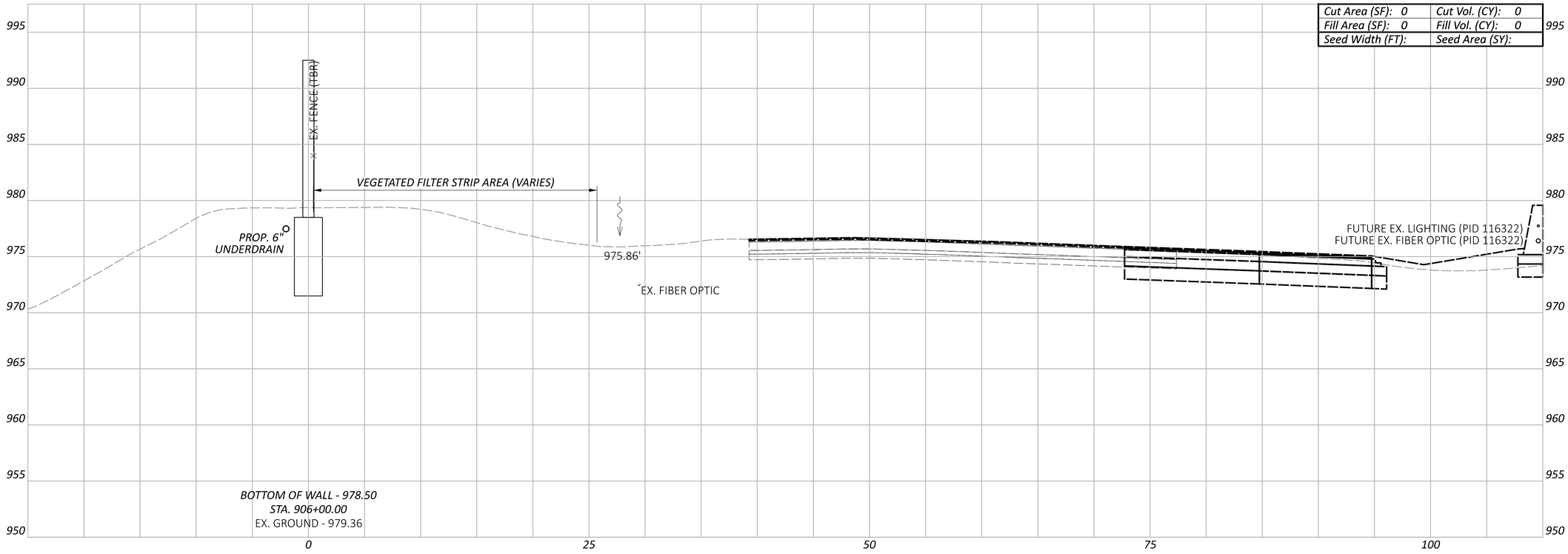


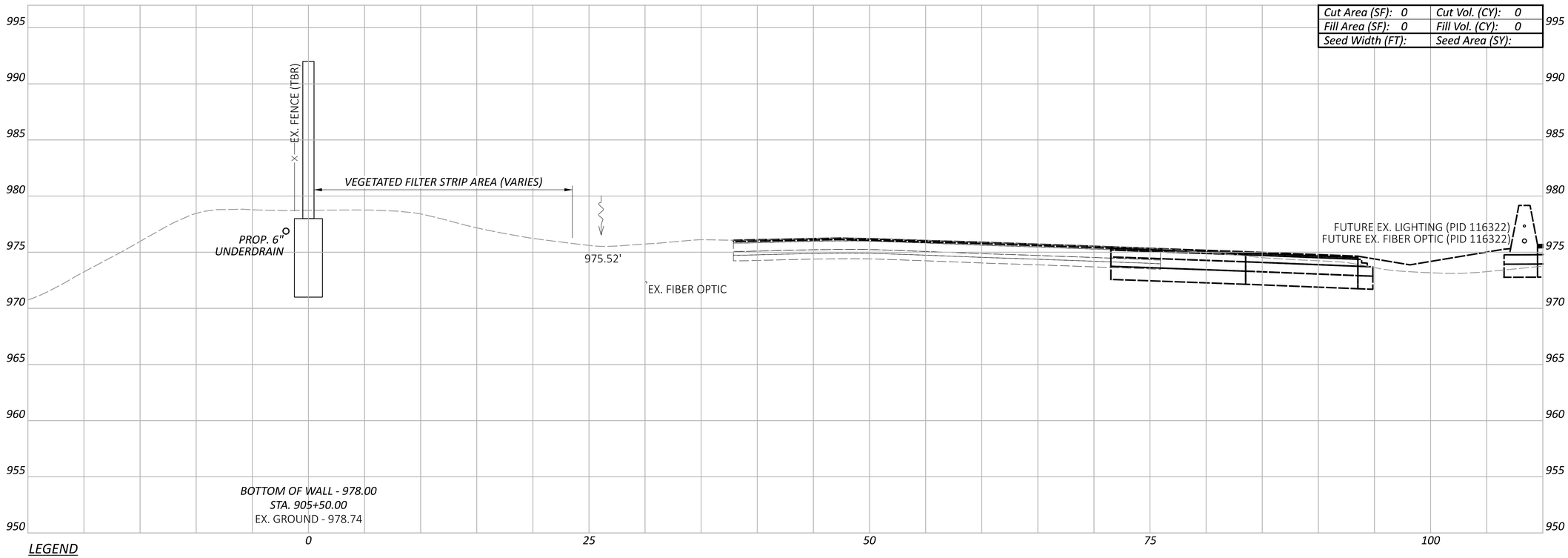


LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 9
# STA. 905+50.00 TO STA. 906+00.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |


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SHEET P.131 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL9 - 905+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:09:53 PM USER: BEN.BROWN
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FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WAL9 - 906+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:10:08 PM USER: BEN.BROWN
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# CROSS SECTIONS - WALL 9
## STA. 906+50.00




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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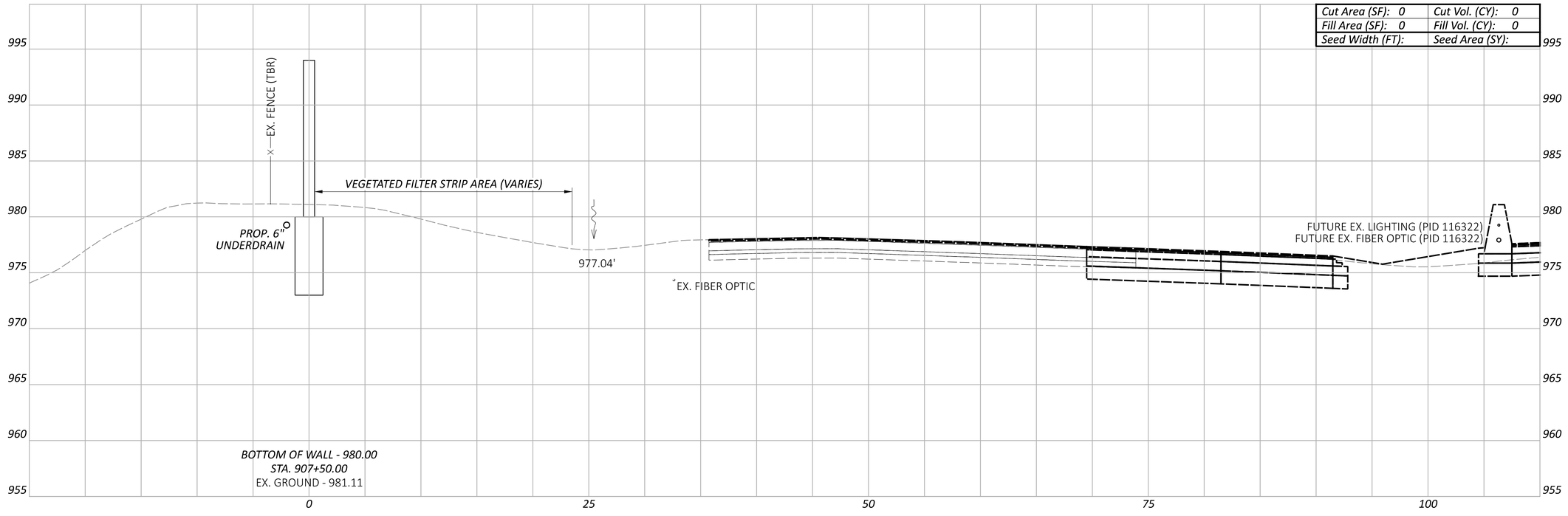
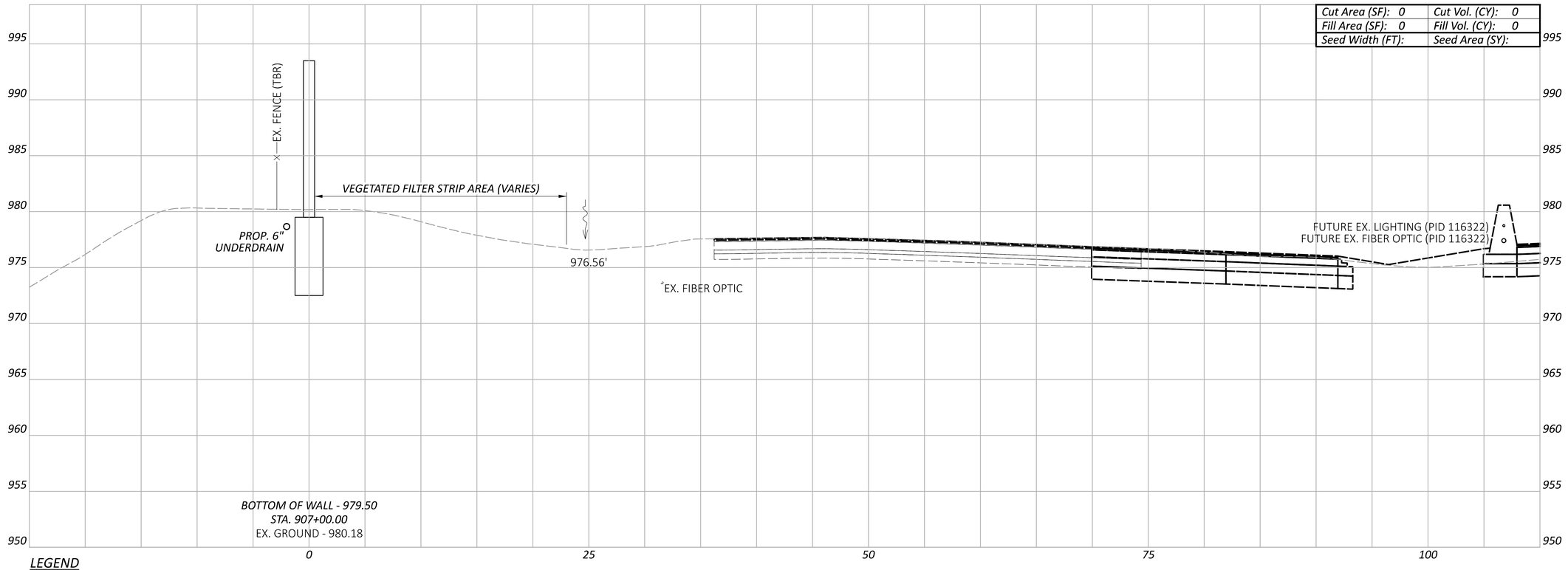
SHEET P.132 | TOTAL P.297




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

— — — FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 9
# STA. 907+00.00 TO STA. 907+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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SHEET P.133 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL9 - 907+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:10:20 PM USER: BEN.BROWN
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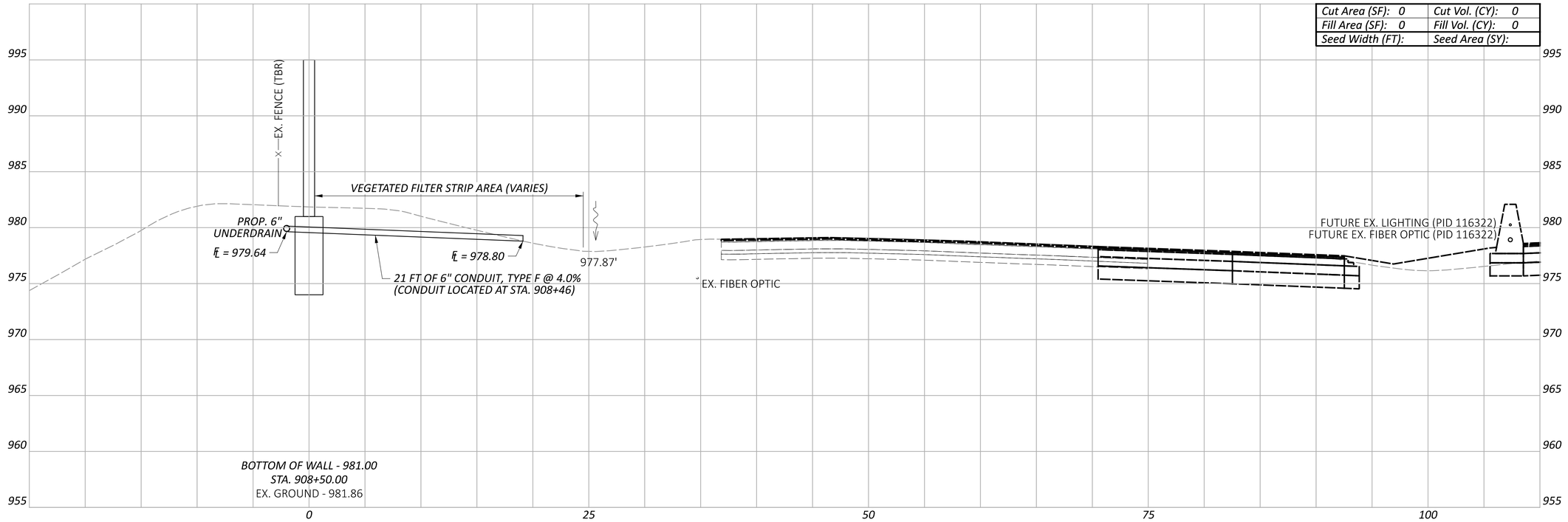


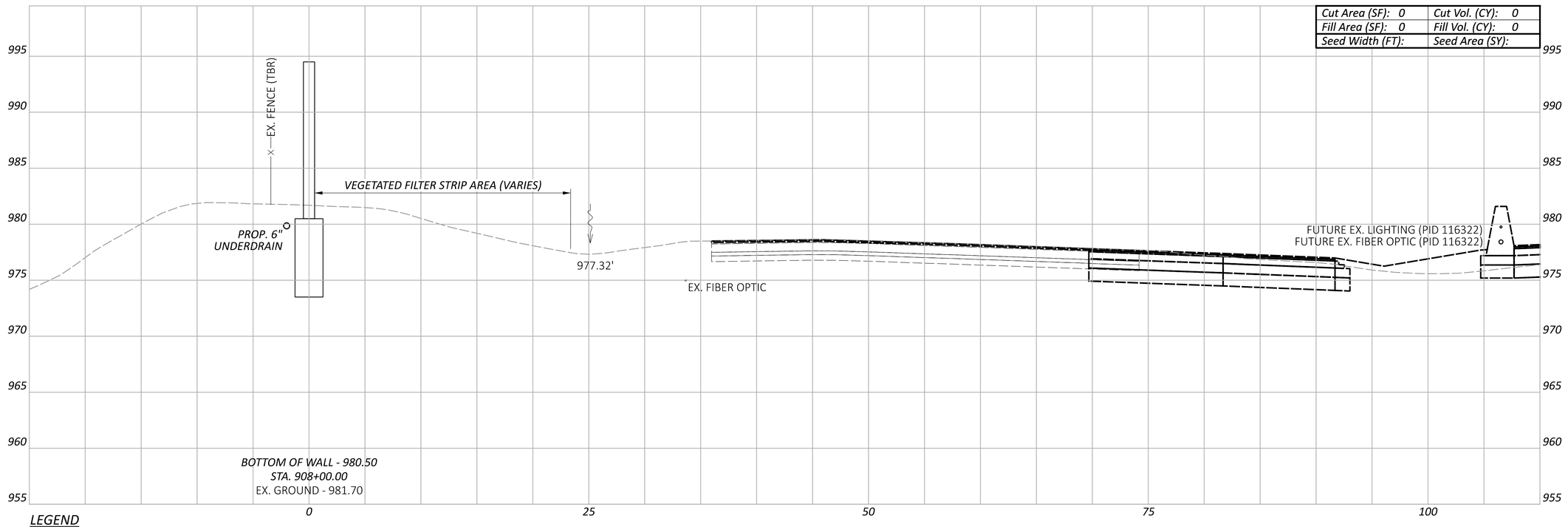


LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 9
## STA. 908+00.00 TO STA. 908+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |


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SHEET P.134 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL9 - 908+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:10:37 PM USER: BEN.BROWN
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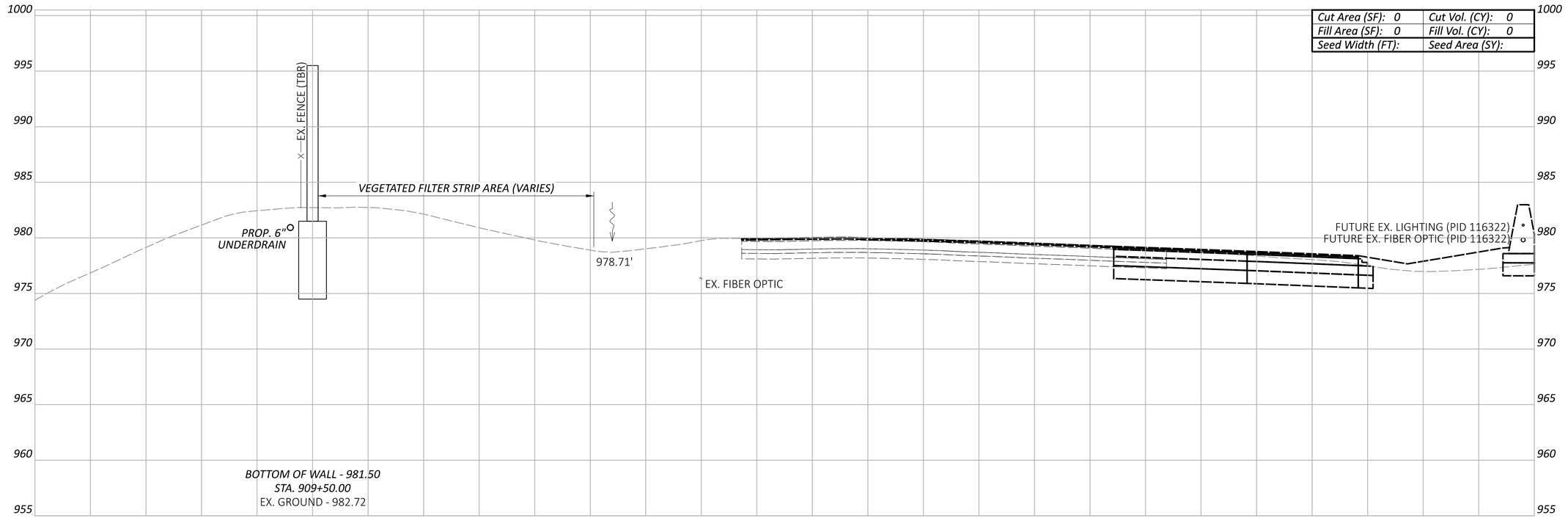


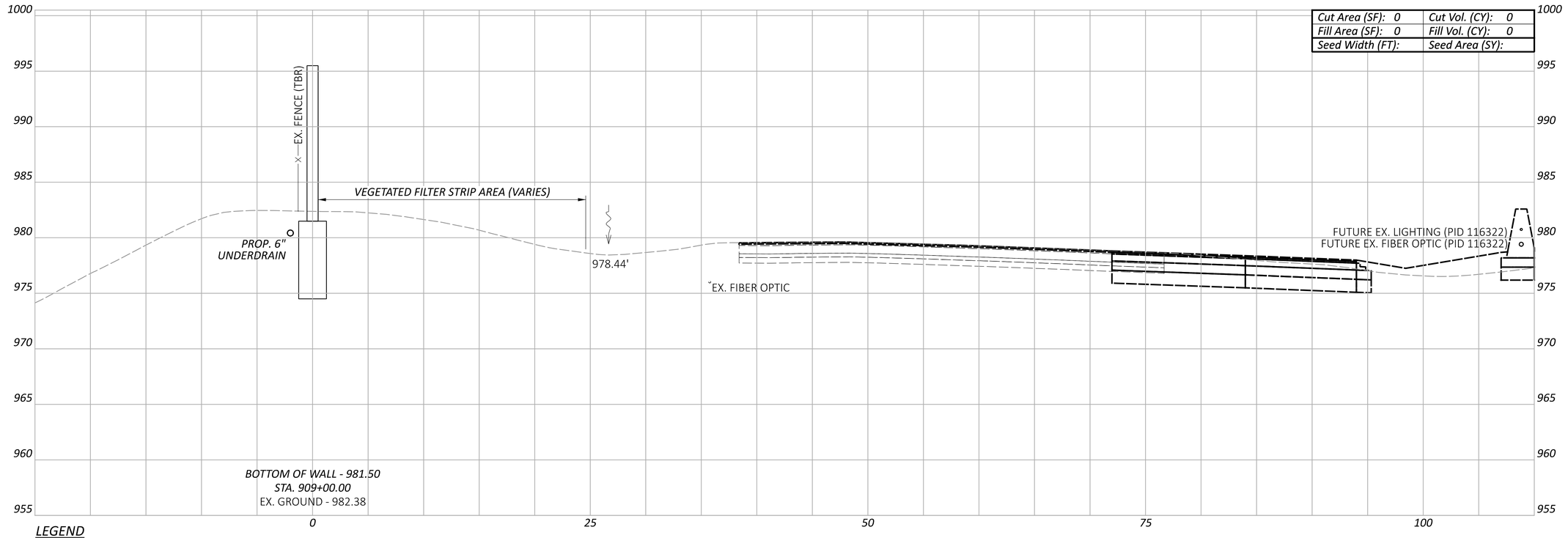


LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 9
# STA. 909+00.00 TO STA. 909+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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SHEET P.135 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL9 - 909+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:10:54 PM USER: BEN.BROWN
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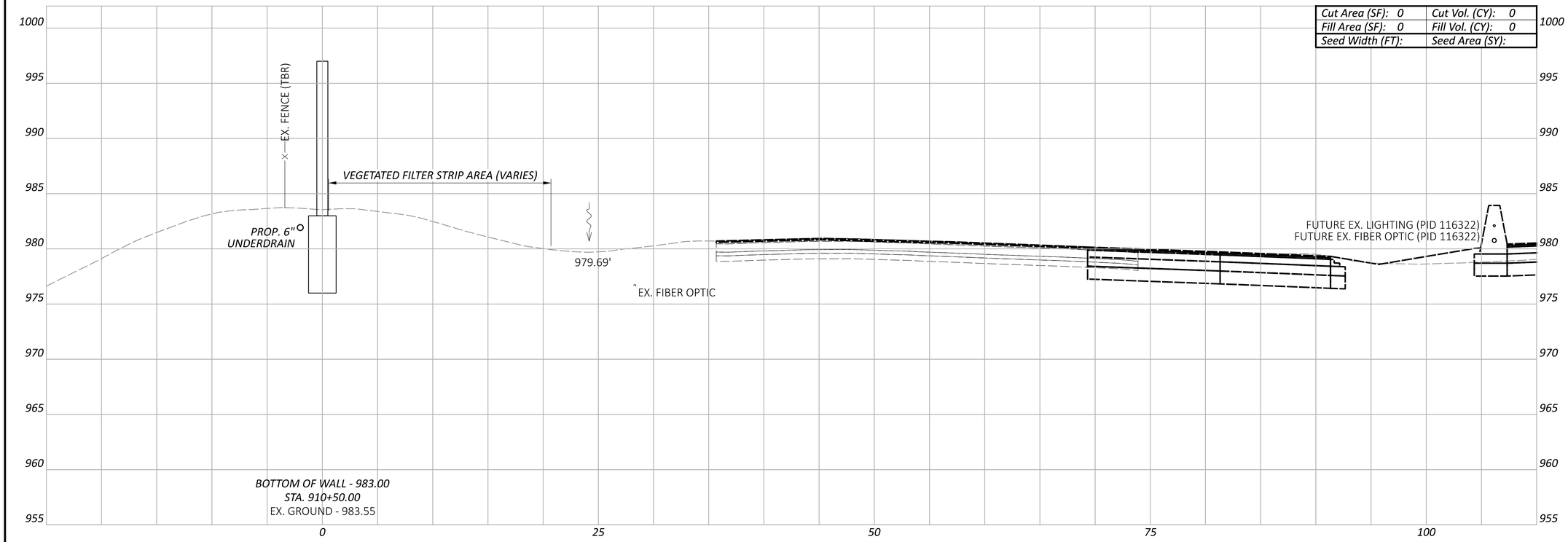


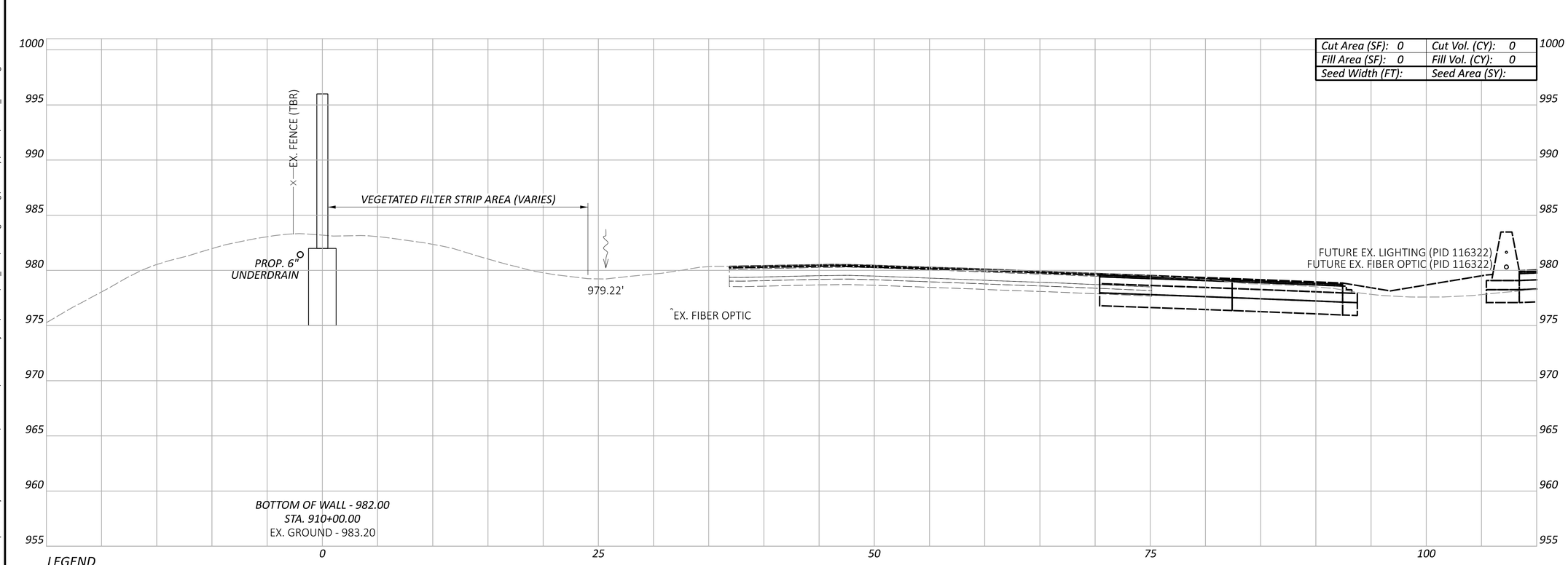


LEGEND

- - - EXISTING SR-161 PRIOR TO PID 116322

— — FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 9
## STA. 910+00.00 TO STA. 910+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL9 - 910+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:11:10 PM USER: BEN.BROWN
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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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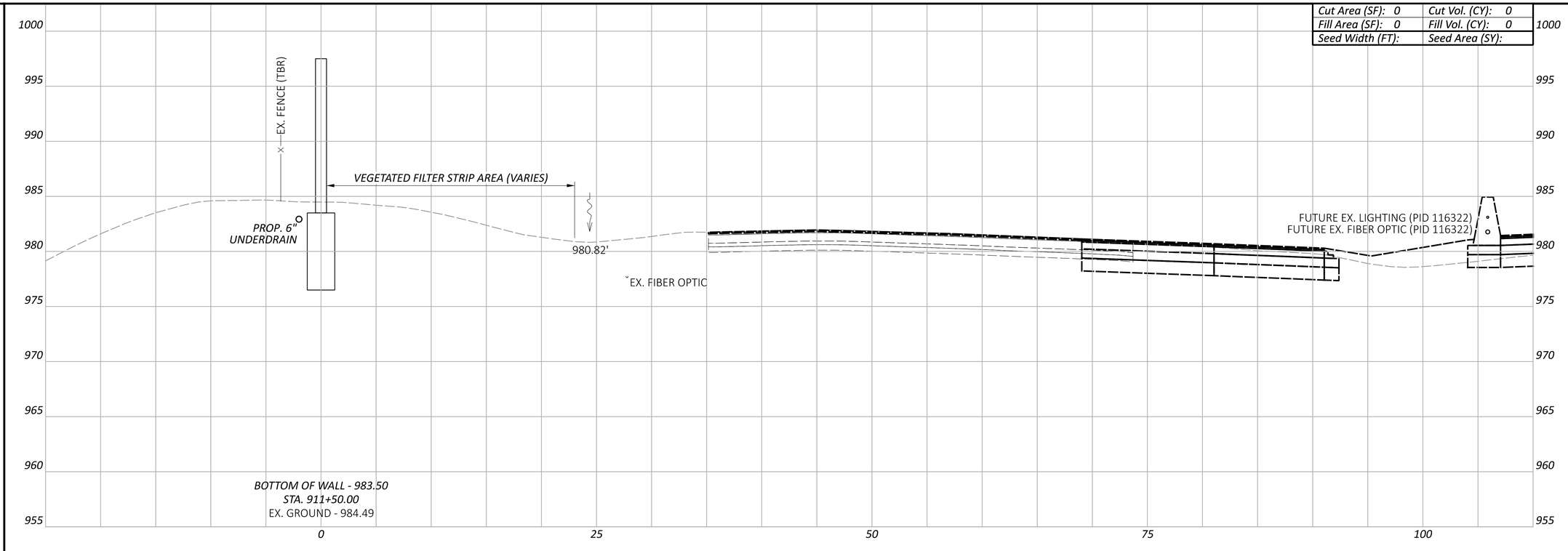
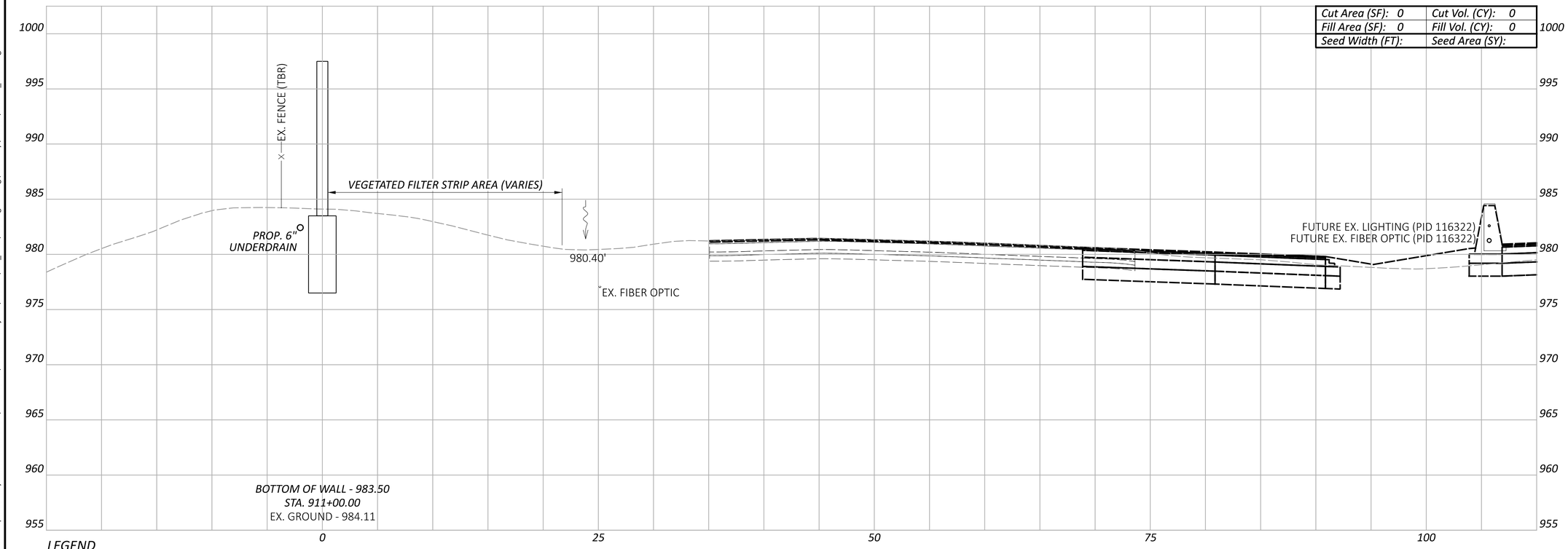
SHEET P.136 TOTAL P.297




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 9
## STA. 911+00.00 TO STA. 911+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL9 - 911+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:11:26 PM USER: BEN.BROWN
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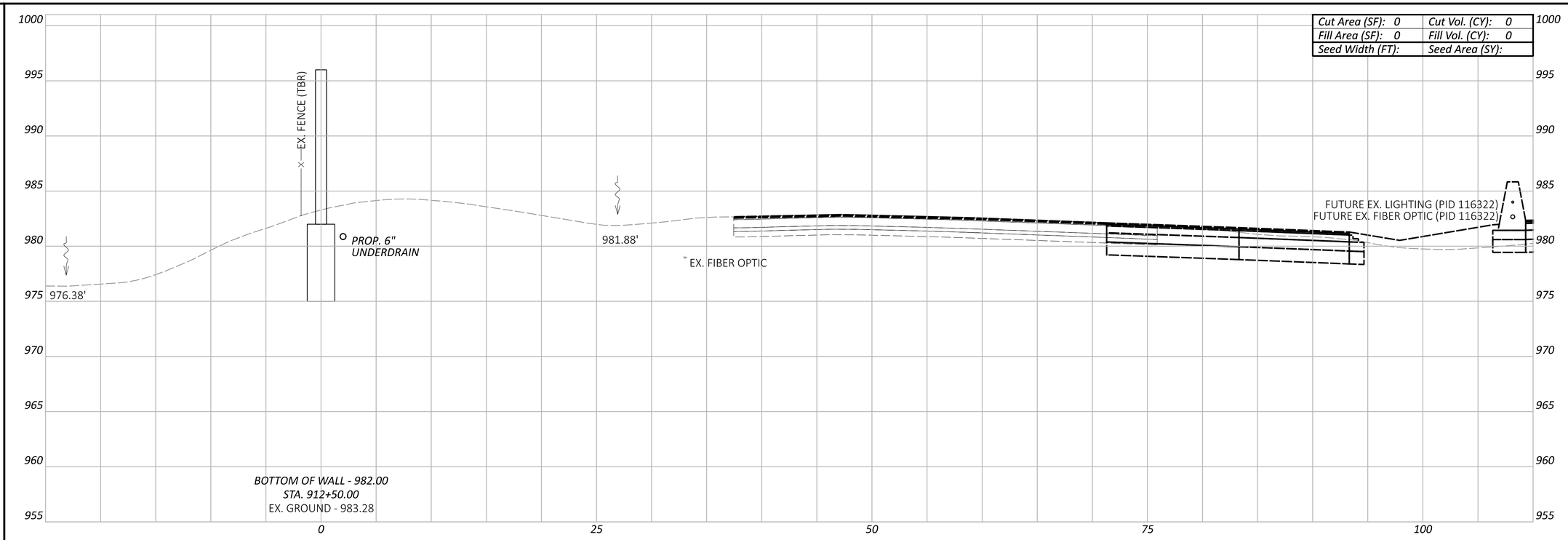
DESIGNER: JMK

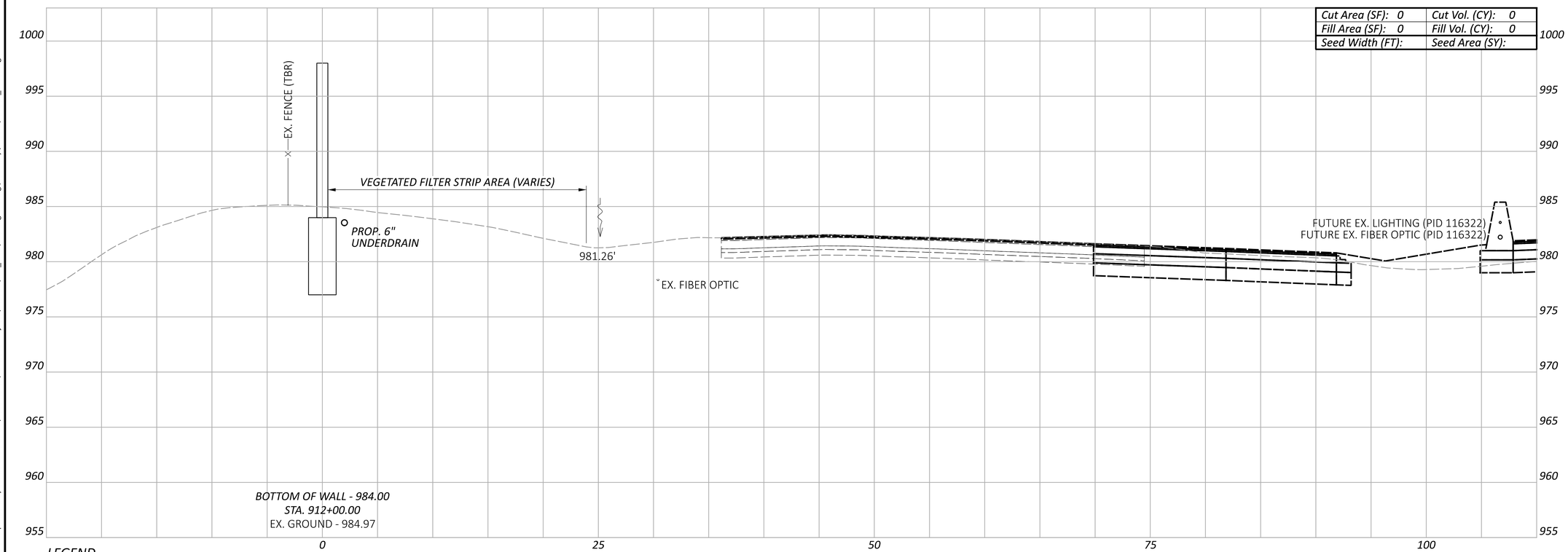
REVIEWER: JDH 05-22-24

PROJECT ID: 117607

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

SHEET: P.137 TOTAL: P.297




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# FRA-161-15.80 NOISE ABATEMENT

# CROSS SECTIONS - WALL 9
# STA. 912+00.00 TO STA. 912+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |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SHEET P.138 TOTAL P.297


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FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL9 - 912+70.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:11:46 PM USER: BEN.BROWN
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# CROSS SECTIONS - WALL 9
## STA. 912+70.00

| | |
|---|---|
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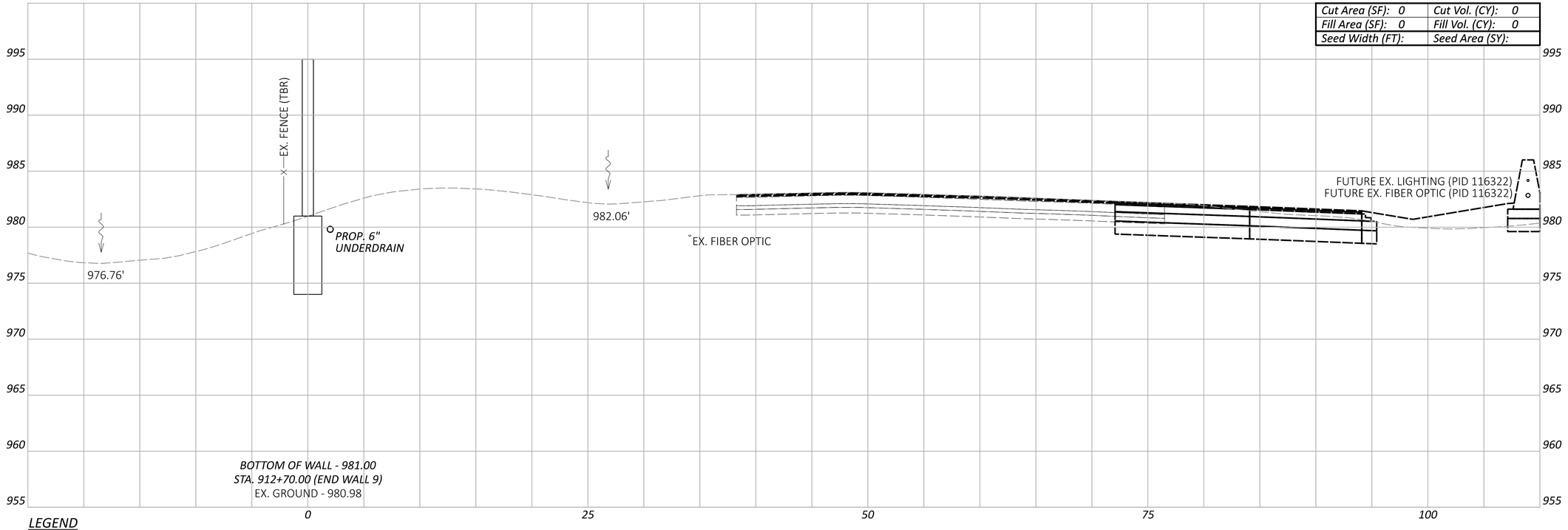
| Fill Area (SF): 0 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |




LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 847-4800
www.arcadis.com

DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

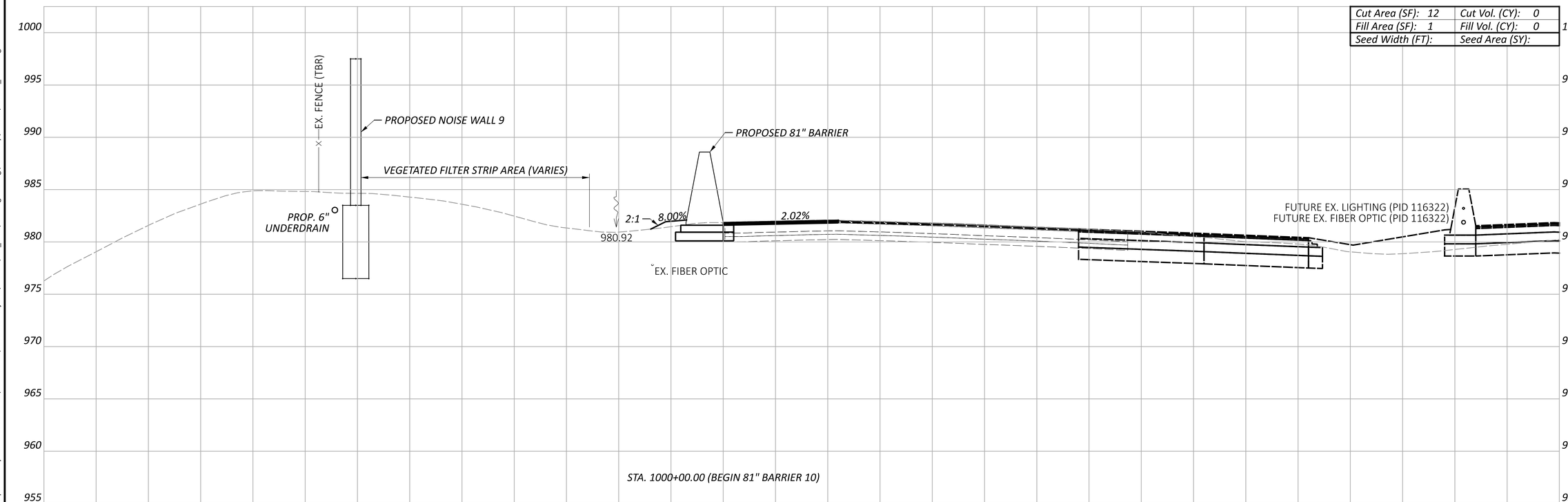
SHEET P.139 TOTAL P.297

# FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER11 - 1000+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:12:06 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS010.dgn

## CROSS SECTIONS - 81" BARRIER 10
## STA. 1000+00.00

| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 0 |
| Fill Area (SF): 1 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |




LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
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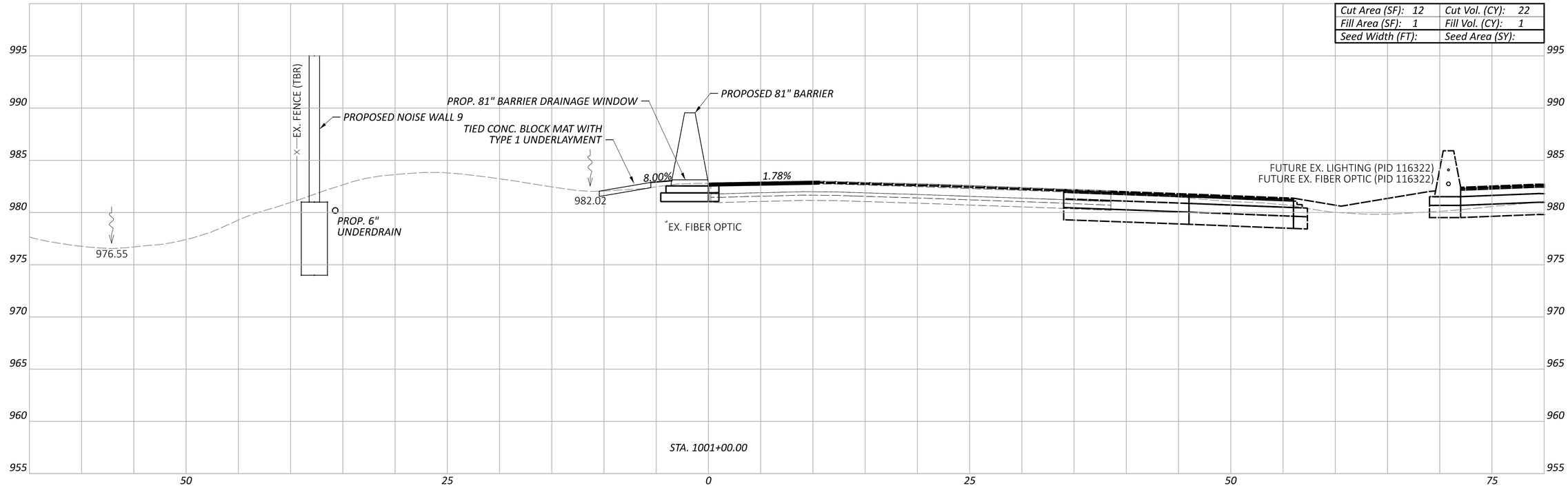
DESIGNER
JMK

REVIEWER
JDH 05-22-24

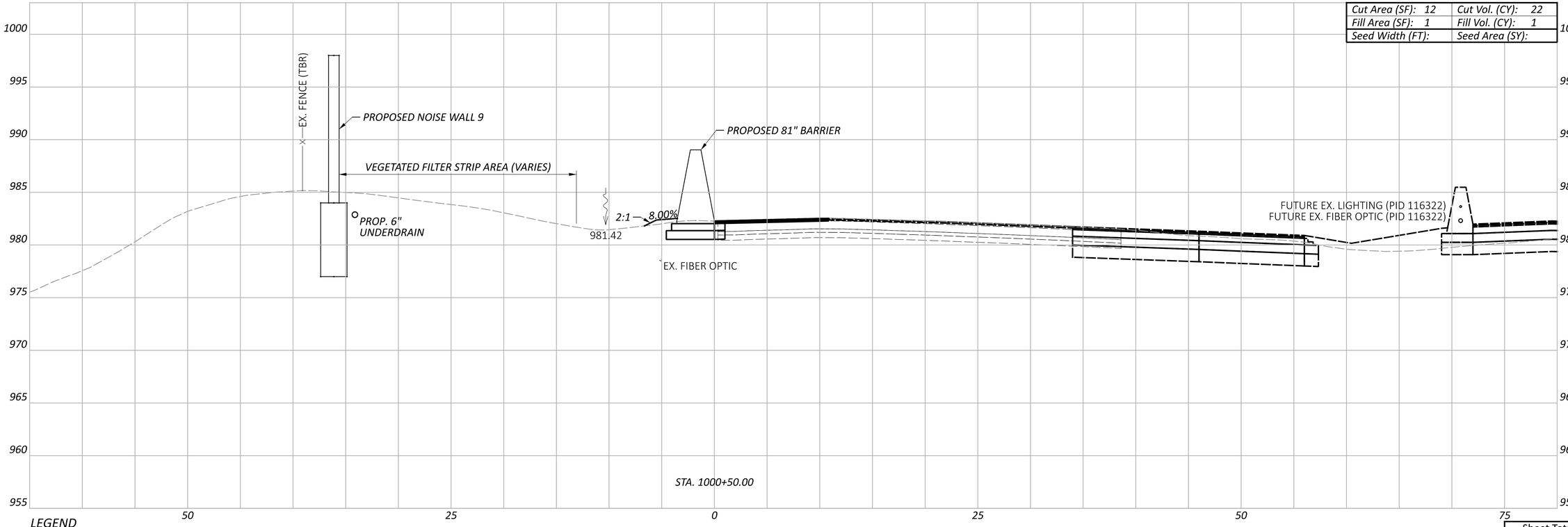
PROJECT ID
117607

| SHEET | TOTAL |
|---|---|
| P.140 | P.297 |

| Cut Area (SF): 12 | Cut Vol. (CY): 22 |
|---|---|
| Fill Area (SF): 1 | Fill Vol. (CY): 1 |
| Seed Width (FT): | Seed Area (SY): |




| Cut Area (SF): 12 | Cut Vol. (CY): 22 |
|---|---|
| Fill Area (SF): 1 | Fill Vol. (CY): 1 |
| Seed Width (FT): | Seed Area (SY): |




LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 44 | 2 |

# CROSS SECTIONS - 81" BARRIER 10
# STA. 1000+50.00 TO STA. 1001+00.00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COLUMBUS, OHIO 43235
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DESIGNER: JMK

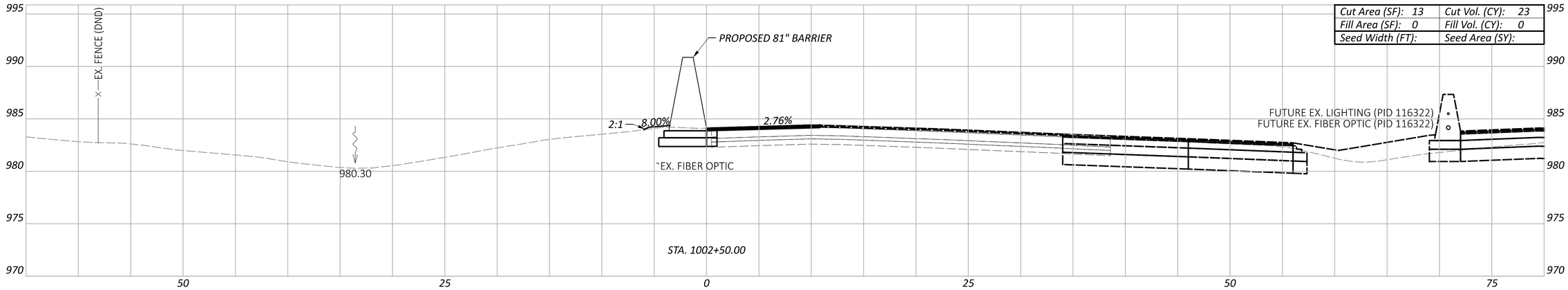
REVIEWER: JDH 05-22-24

PROJECT ID: 117607

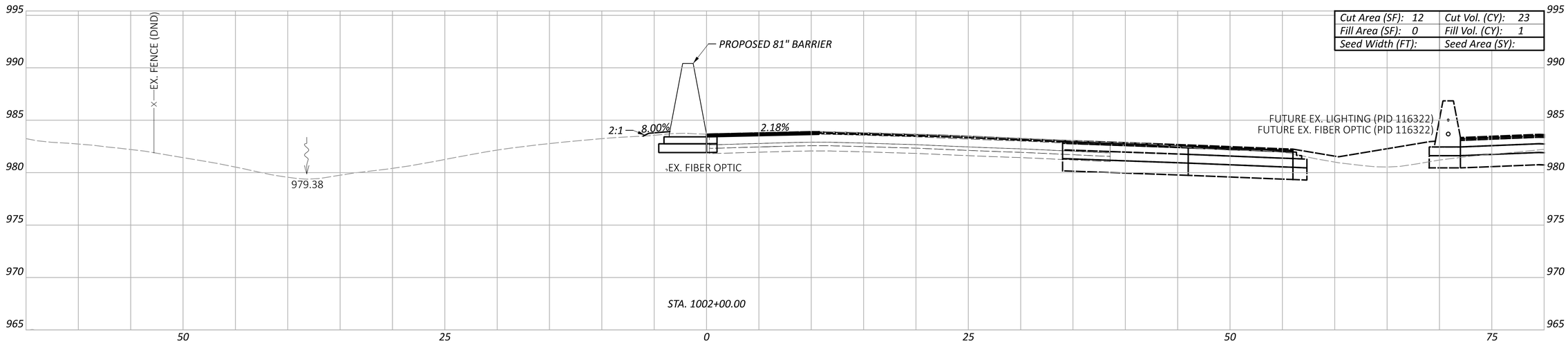
SHEET: P.141 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT

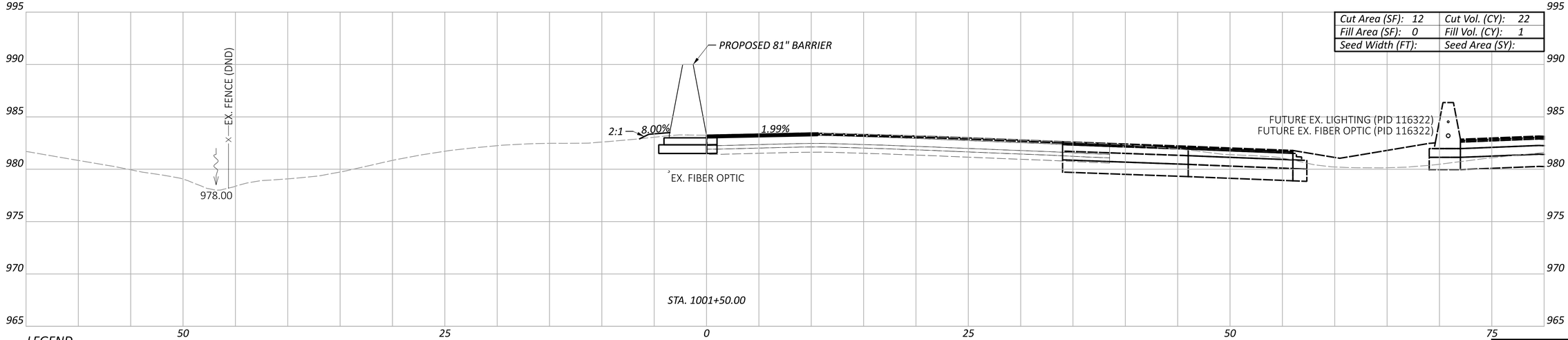

MODEL: BLP_BARRIER11 - 1000+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:12:22 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS010.dgn




| | |
|---|---|
| Cut Area (SF): 13 | Cut Vol. (CY): 23 |
| Fill Area (SF): 0 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 23 |
| Fill Area (SF): 0 | Fill Vol. (CY): 1 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 12 | Cut Vol. (CY): 22 |
| Fill Area (SF): 0 | Fill Vol. (CY): 1 |
| Seed Width (FT): | Seed Area (SY): |

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - 81" BARRIER 10
# STA. 1001+50.00 TO STA. 1002+50.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_BARRIER11 - 1001+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:12:33 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS010.dgn



DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4500
www.arcadis.com

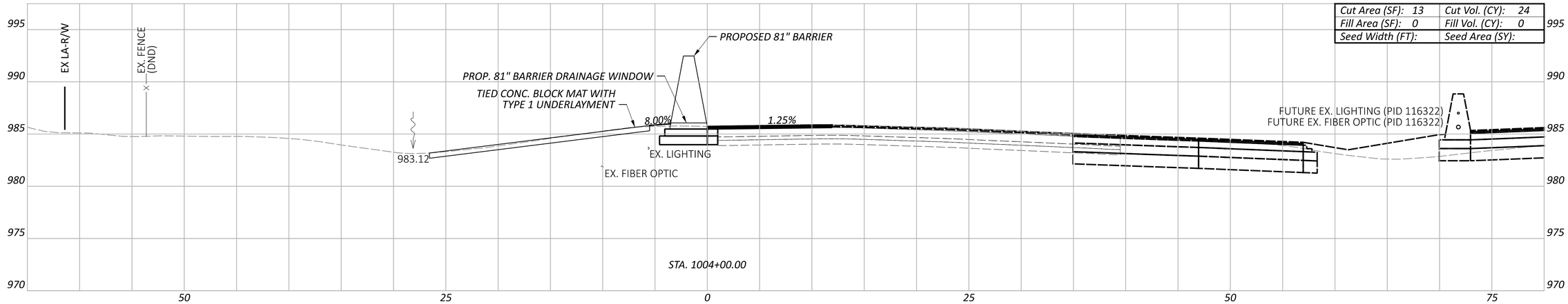

DESIGNER JMK

REVIEWER JDH 05-22-24

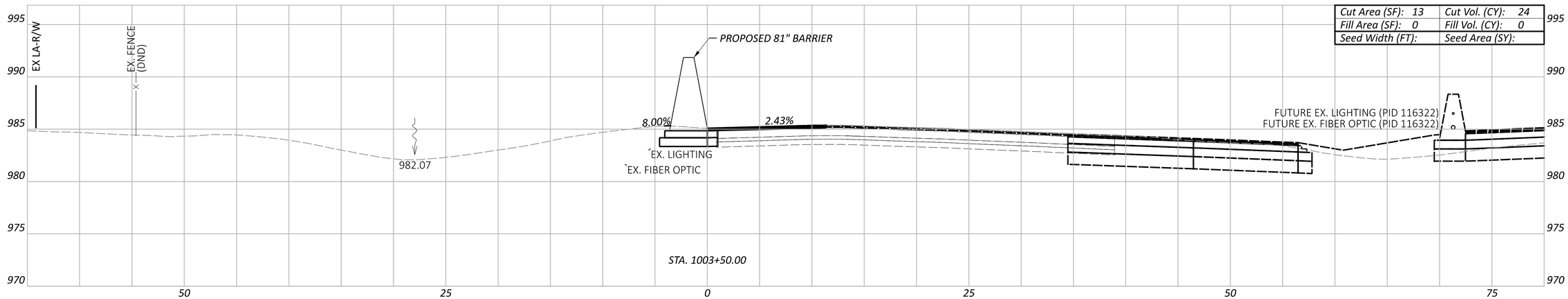
PROJECT ID 117607

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 68 | 2 |

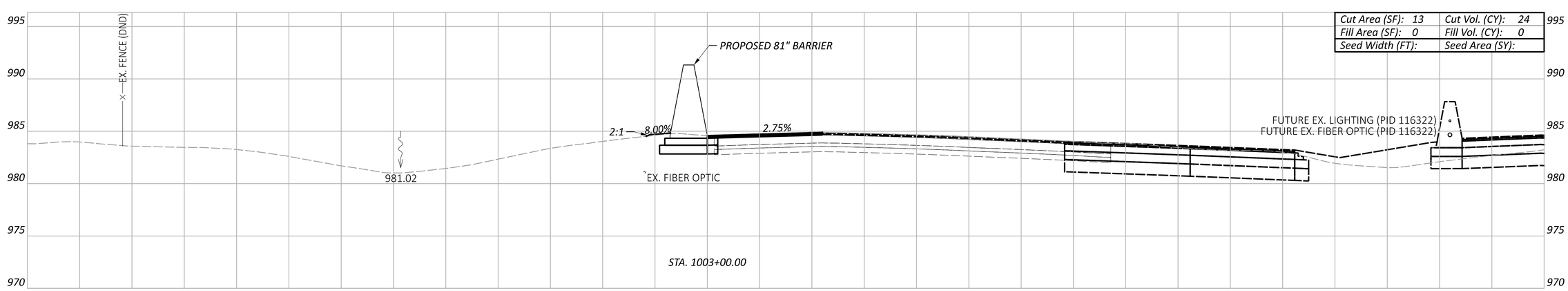
SHEET P.142 TOTAL P.297




| | |
|---|---|
| Cut Area (SF): 13 | Cut Vol. (CY): 24 |
| Fill Area (SF): 0 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 13 | Cut Vol. (CY): 24 |
| Fill Area (SF): 0 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 13 | Cut Vol. (CY): 24 |
| Fill Area (SF): 0 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |

LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 72 | 0 |

# FRA-161-15.80 NOISE ABATEMENT

# CROSS SECTIONS - 81" BARRIER 10
# STA. 1003+00.00 TO STA. 1004+00.00

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8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4500
www.arcadis.com

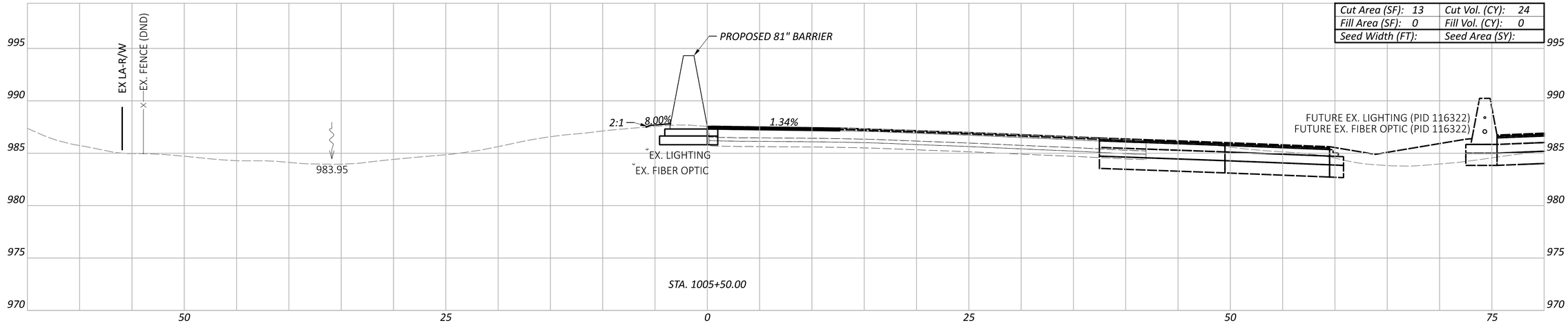
DESIGNER: JMK

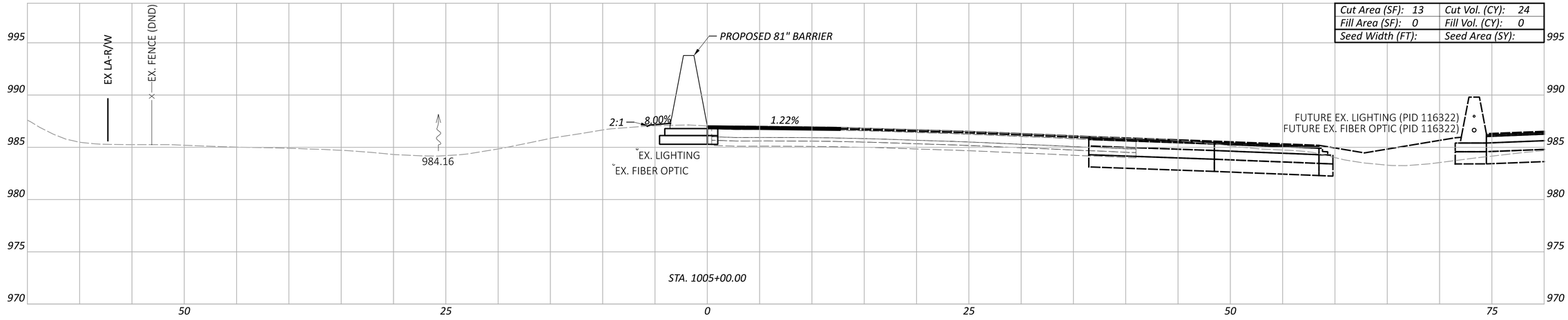
REVIEWER: JDH 05-22-24

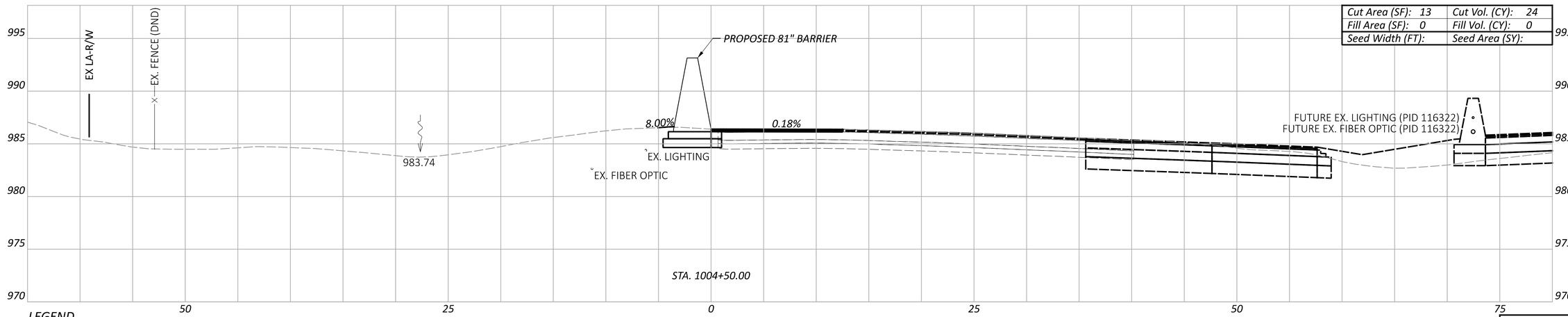
PROJECT ID: 117607

SHEET: P.143 TOTAL: P.297

MODEL: BLP_BARRIER11 - 1003+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:12:51 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS010.dgn




*LEGEND*

*EXISTING SR-161 PRIOR TO PID 116322*

*FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322*

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 72 | 0 |

# CROSS SECTIONS - 81" BARRIER 10
# STA. 1004+50.00 TO STA. 1005+50.00


DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 318-4600
www.arcadis.com


DESIGNER: JMK

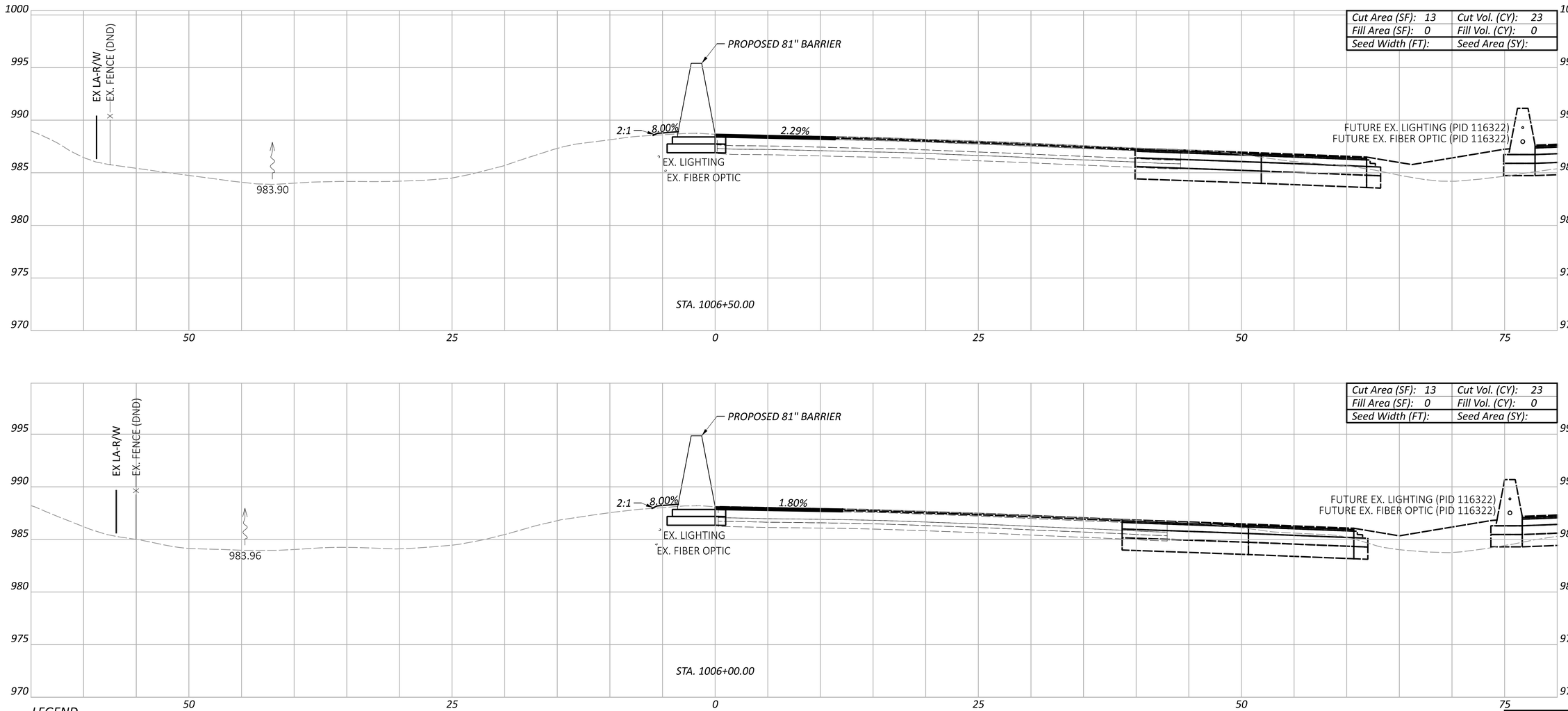
REVIEWER: JDH 05-22-24

PROJECT ID: 117607

| SHEET | TOTAL |
|---|---|
| P.144 | P.297 |

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_BARRIER11 - 1004+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:13:10 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS010.dgn




LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 46 | 0 |

# CROSS SECTIONS - 81" BARRIER 10
# STA. 1006+00.00 TO STA. 1006+50.00

FRA-161-15.80 NOISE ABATEMENT


DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 318-4000
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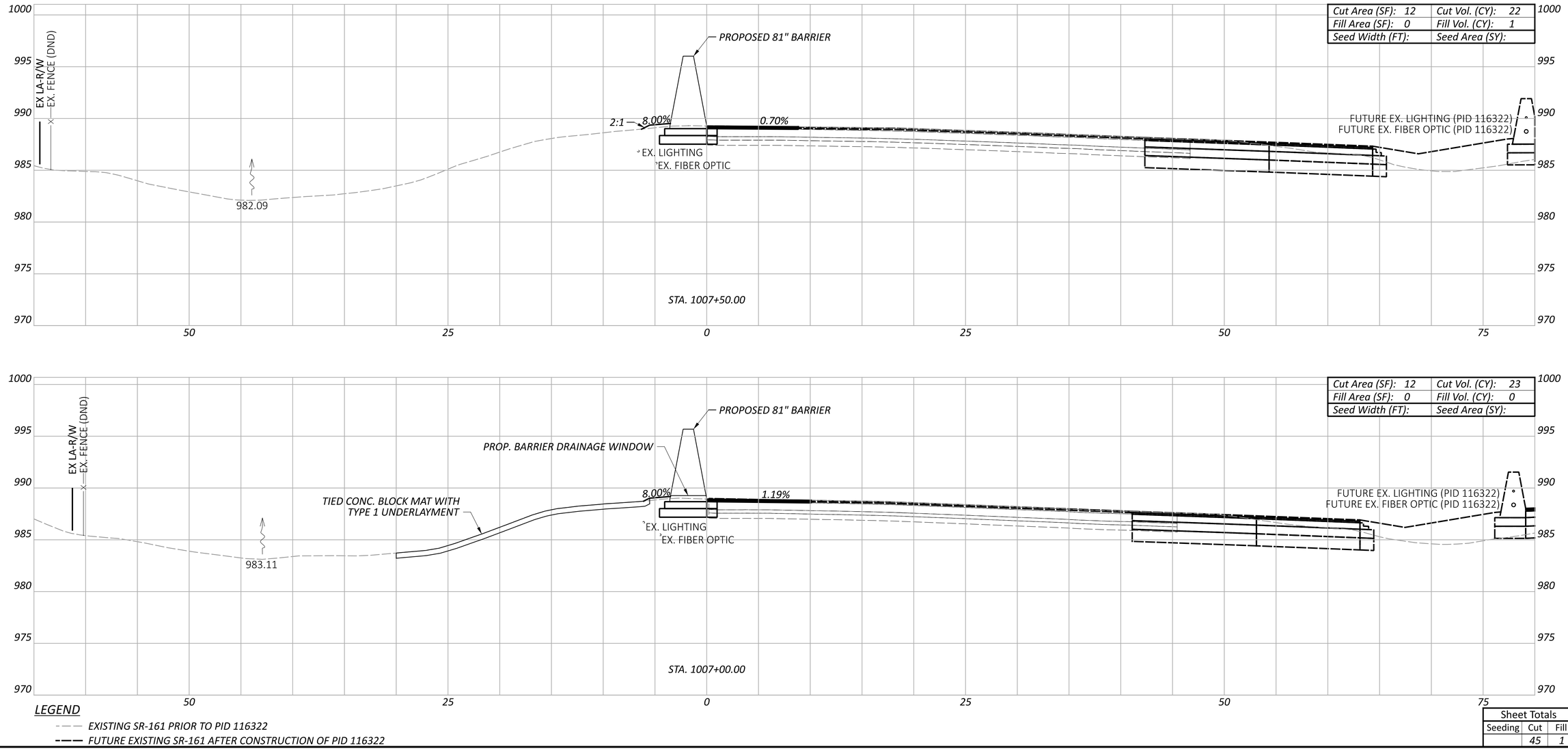
DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.145 TOTAL P.297

MODEL: BLP_BARRIER11 - 1006+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:13:28 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS010.dgn




FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER11 - 1007+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:13:41 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS010.dgn

CROSS SECTIONS - 81" BARRIER 10
STA. 1007+00.00 TO STA. 1007+50.00

Sheet Totals

| Seeding | Cut | Fill |
|---|---|---|
| | 45 | 1 |

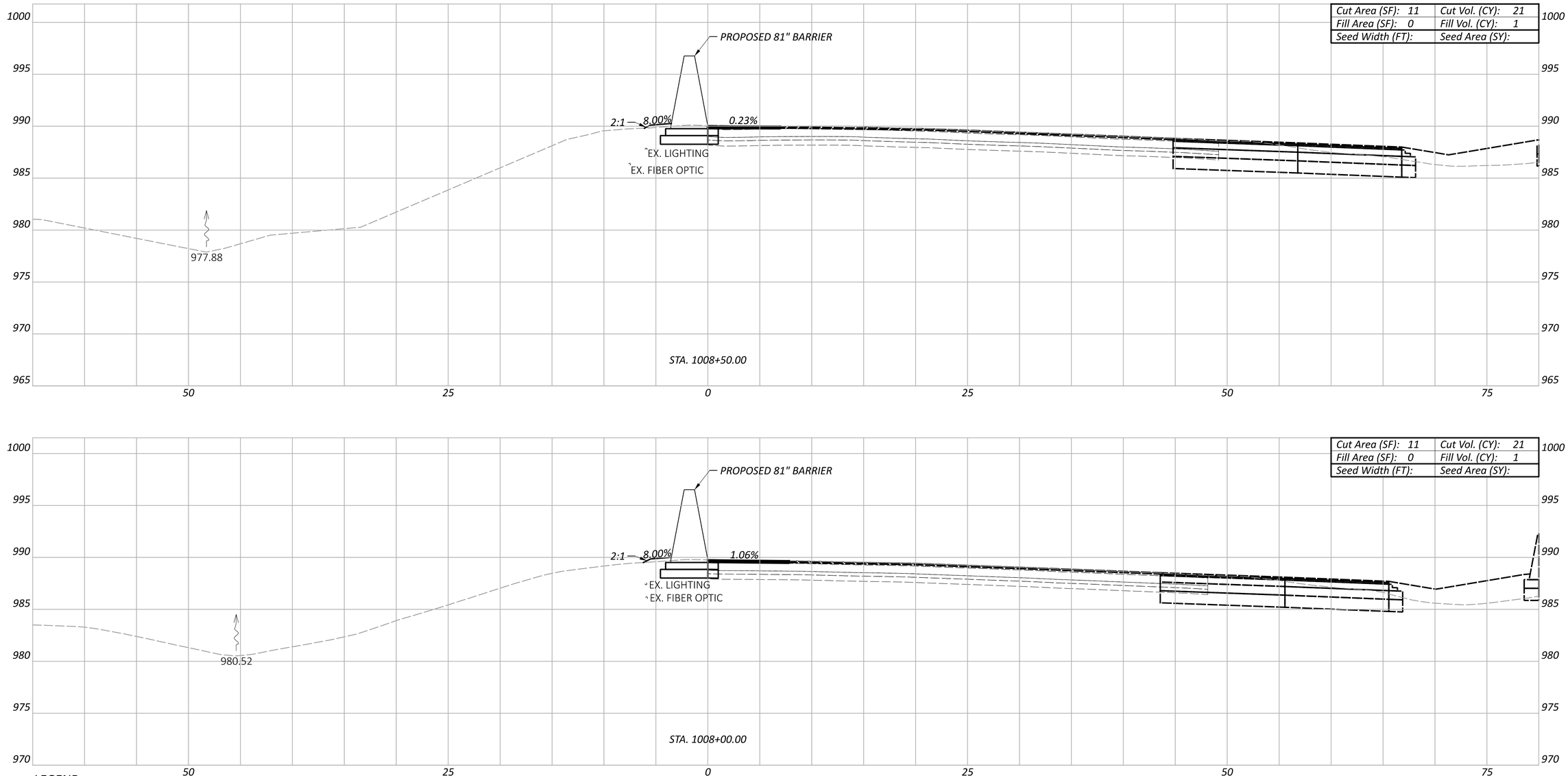
DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 318-4000
www.arcadis.com

DESIGNER
JMK

REVIEWER
JDH 05-22-24

PROJECT ID
117607

SHEET P.146 TOTAL P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 42 | 2 |

# CROSS SECTIONS - 81" BARRIER 10
# STA. 1008+00.00 TO STA. 1008+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER11 - 1008+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:13:53 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS010.dgn

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ARCADIS
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COLUMBUS, OHIO 43235
(614) 818-4900
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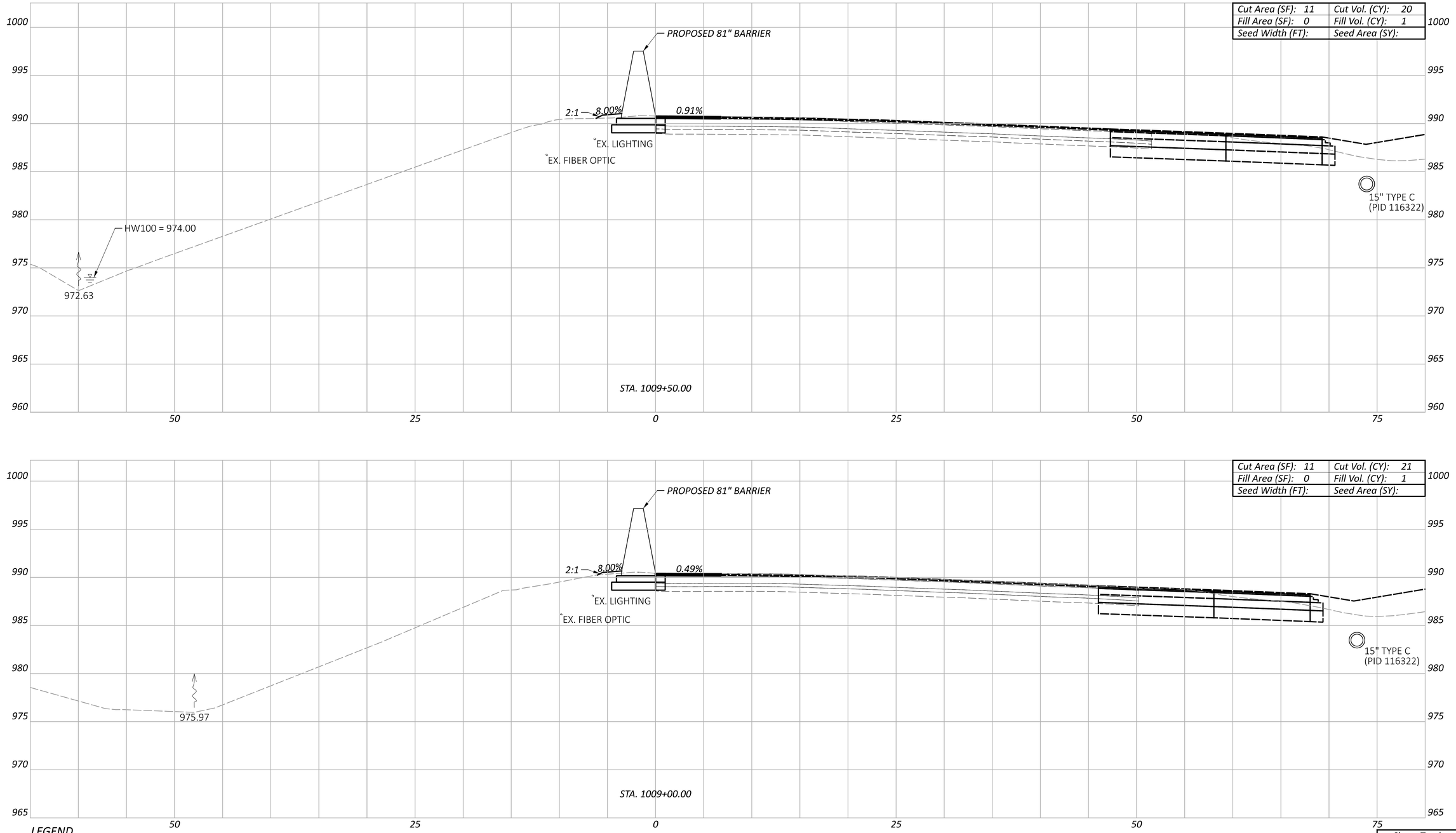
DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.147 TOTAL P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - 81" BARRIER 10
# STA. 1009+00.00 TO STA. 1009+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 41 | 2 |


DESIGN AGENCY
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8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
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DESIGNER: JMK

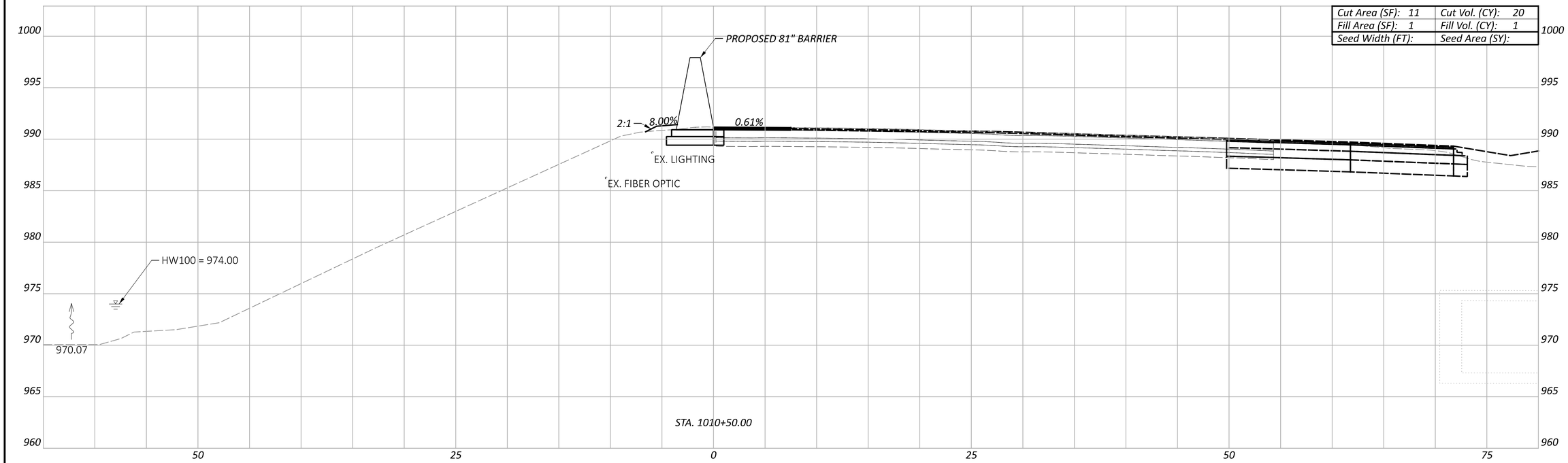
REVIEWER: JDH 05-22-24

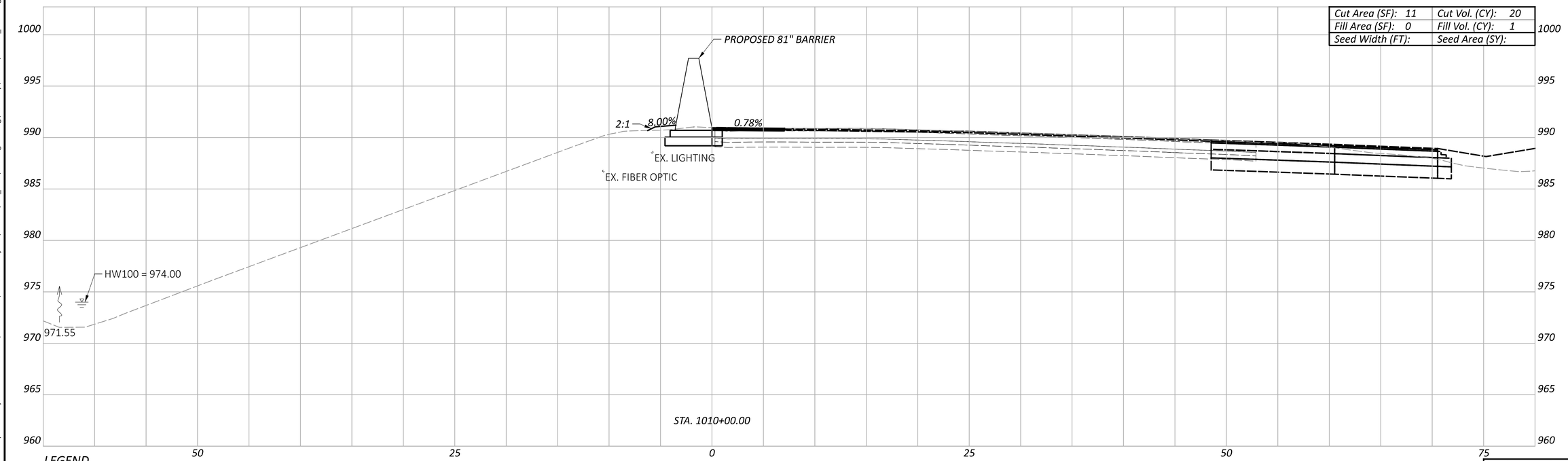
PROJECT ID: 117607

SHEET: P.148 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_BARRIER11 - 1009+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:14:04 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS010.dgn




LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 40 | 2 |

# CROSS SECTIONS - 81" BARRIER 10
## STA. 1010+00.00 TO STA. 1010+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER11 - 1010+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:14:13 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS010.dgn

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DESIGNER
JMK

REVIEWER
JDH 05-22-24

PROJECT ID
117607

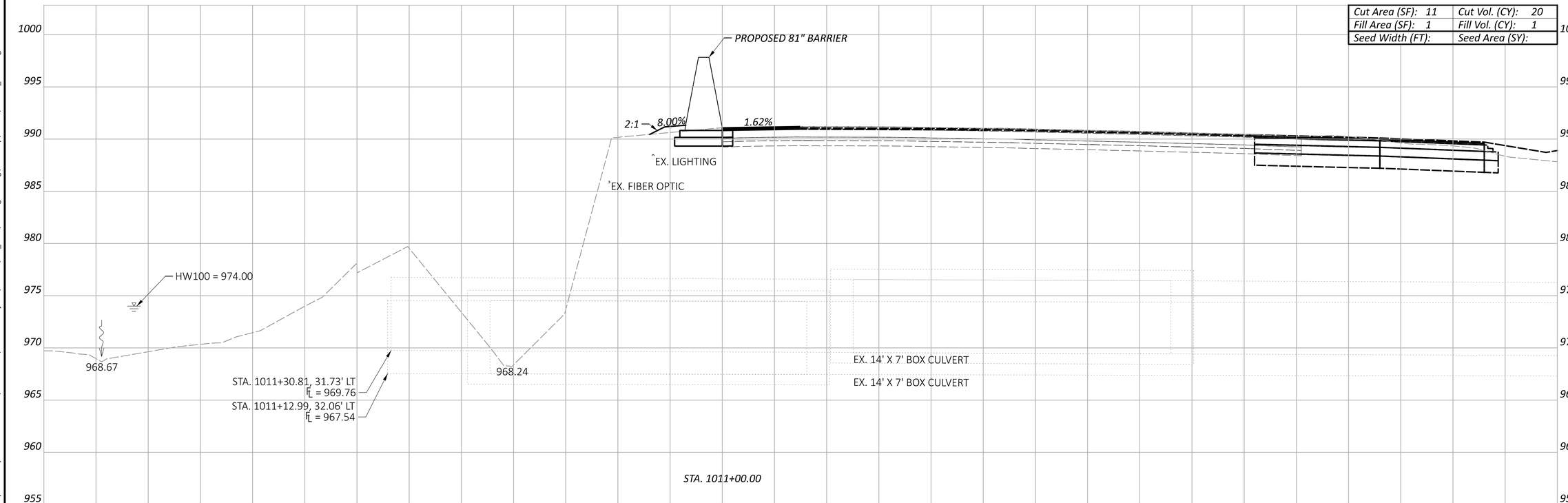
SHEET P.149 TOTAL P.297

# FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER11 - 1011+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:14:22 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS010.dgn

## CROSS SECTIONS - 81" BARRIER 10
## STA. 1011+00.00

| | |
|---|---|
| Cut Area (SF): 11 | Cut Vol. (CY): 20 |
| Fill Area (SF): 1 | Fill Vol. (CY): 1 |
| Seed Width (FT): | Seed Area (SY): |




LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 20 | 1 |

DESIGN AGENCY
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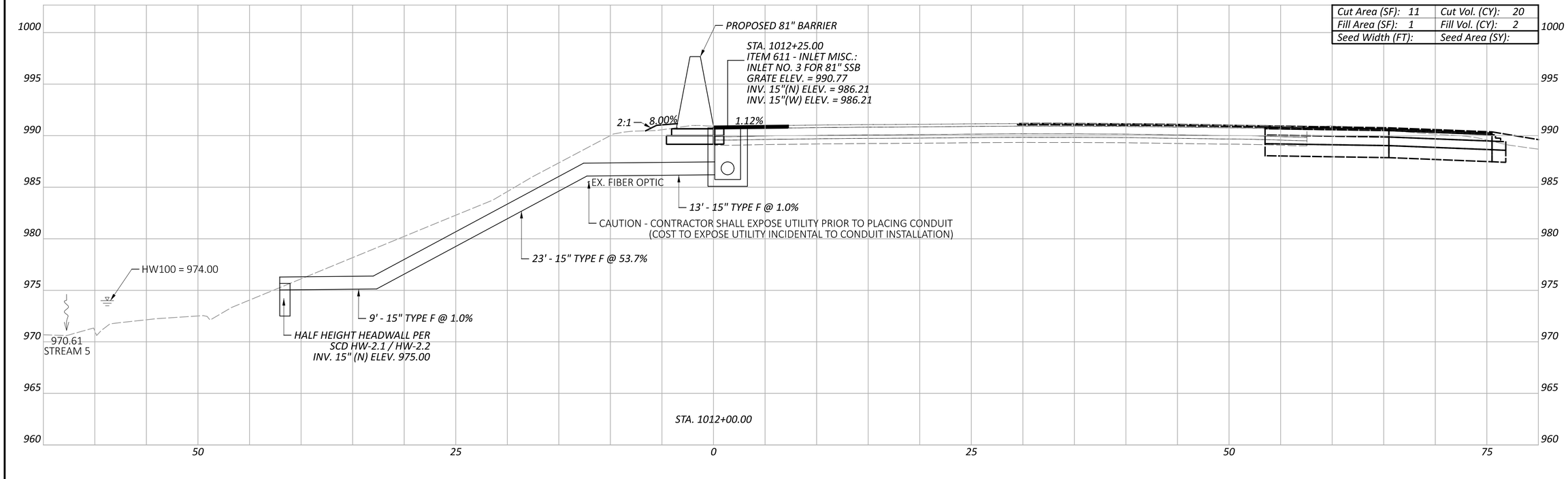
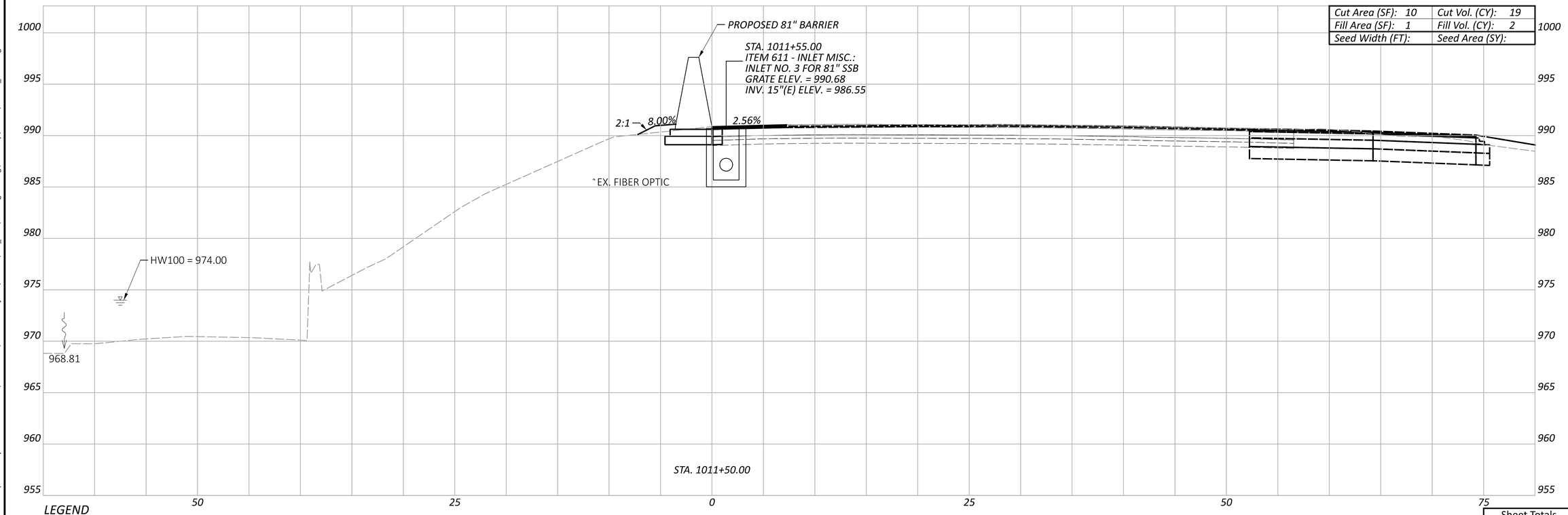
DESIGNER: JMK
REVIEWER: JDH 05-22-24
PROJECT ID: 117607
SHEET: P.150 TOTAL: P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 39 | 4 |

# CROSS SECTIONS - 81" BARRIER 10
# STA. 1011+50.00 TO STA. 1012+00.00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8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
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DESIGNER: JMK

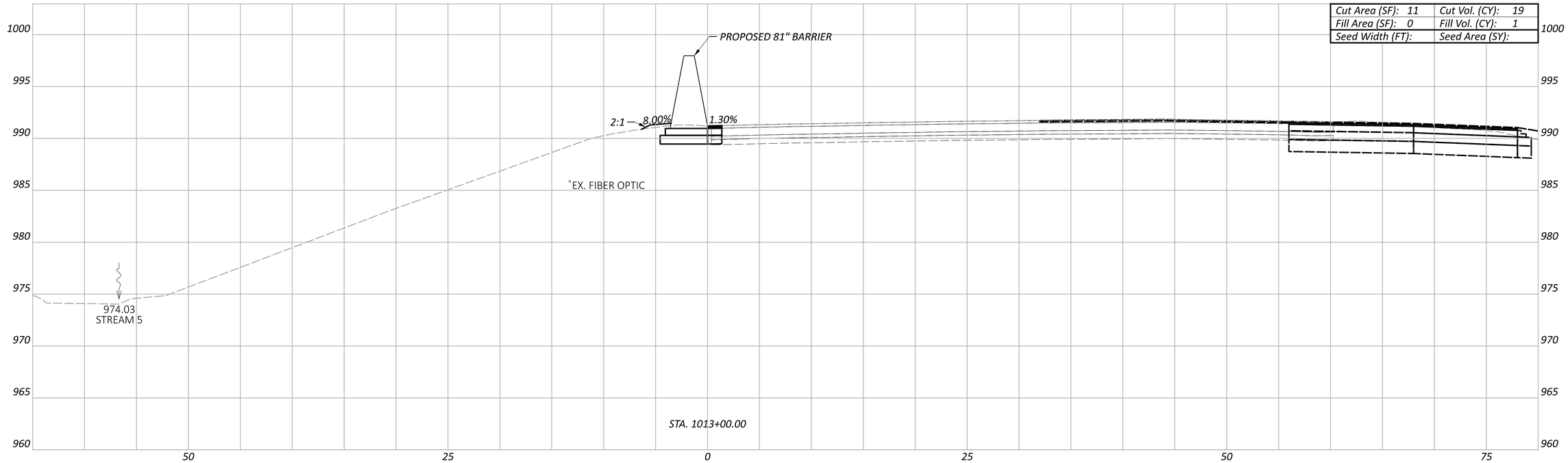
REVIEWER: JDH 05-22-24

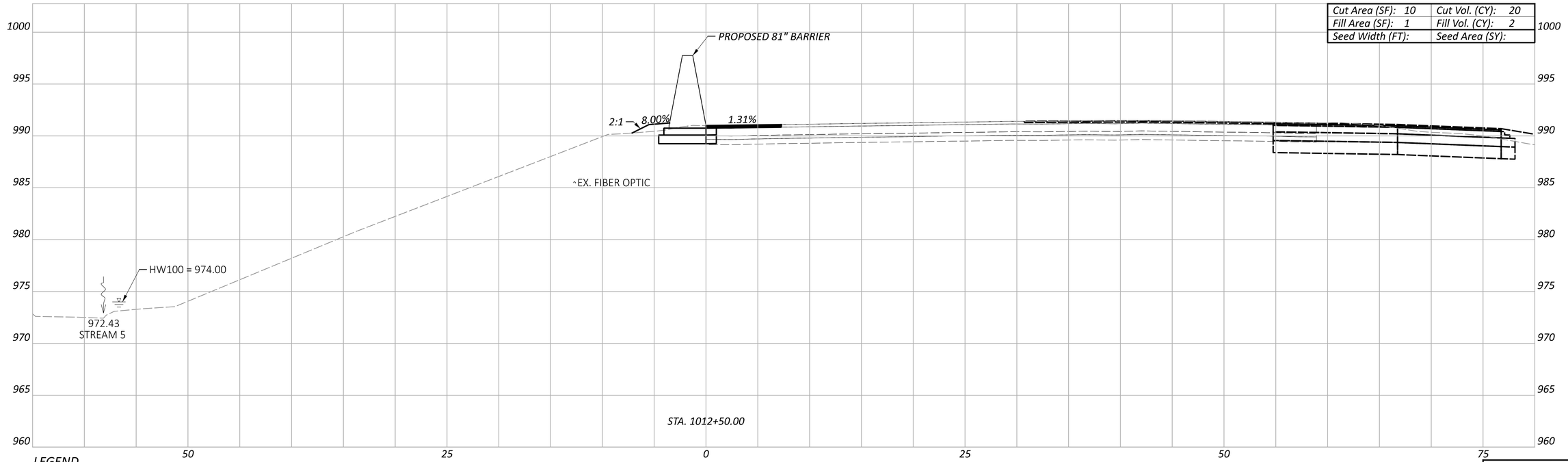
PROJECT ID: 117607

SHEET: P.151 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_BARRIER11 - 1011+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:14:29 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS010.dgn




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - 81" BARRIER 10
# STA. 1012+50.00 TO STA. 1013+00.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 39 | 3 |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DESIGNER: JMK

REVIEWER: JDH 05-22-24

PROJECT ID: 117607

SHEET: P.152 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_BARRIER11 - 1012+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:14:39 PM USER: BEN.BROWN
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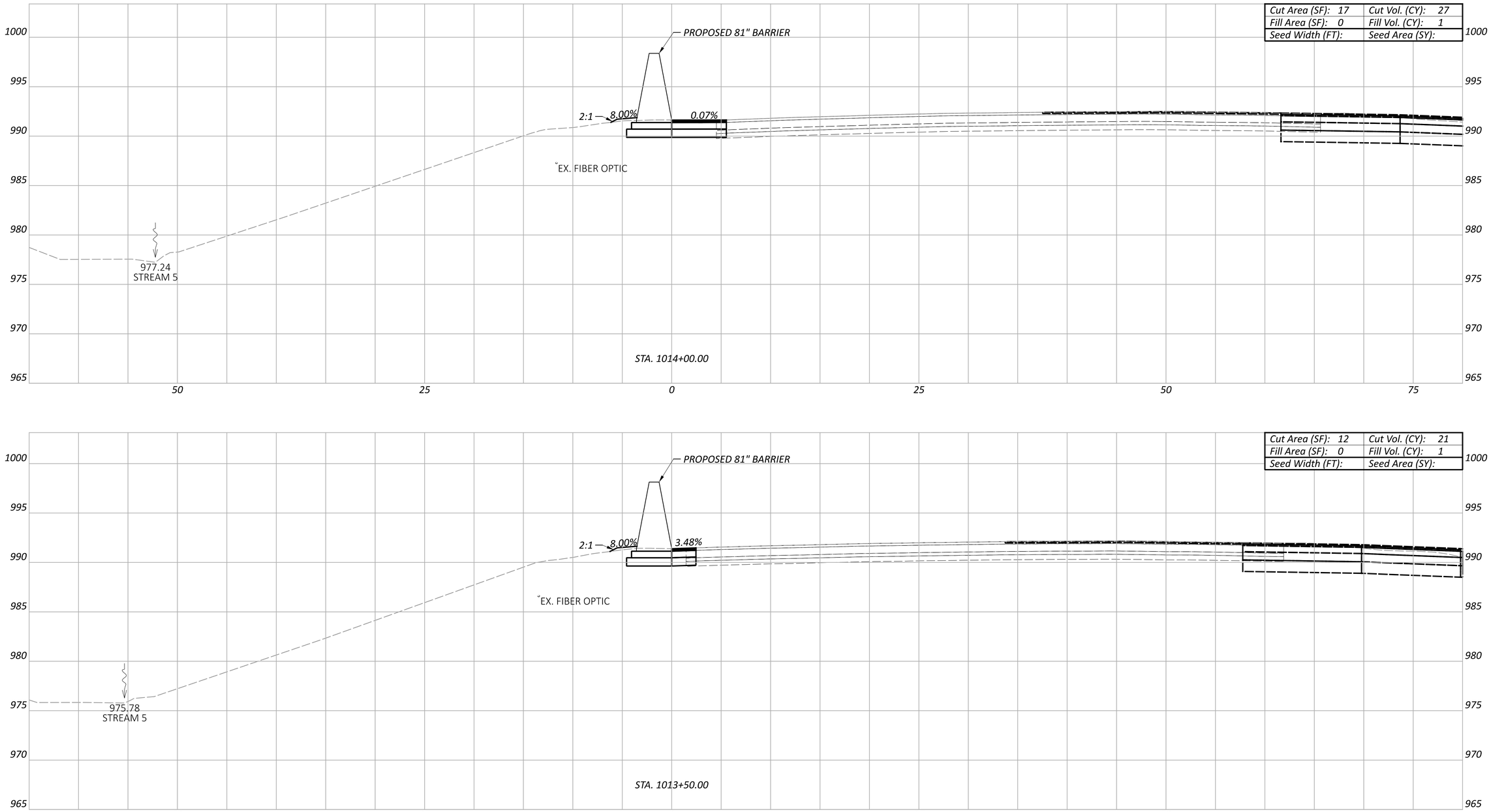


FRA-161-15.80 NOISE ABATEMENT

CROSS SECTIONS - 81" BARRIER 10
STA. 1013+50.00 TO STA. 1014+00.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 48 | 2 |

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SHEET P.153 | TOTAL P.297

MODEL: BLP_BARRIER11 - 1013+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:14:49 PM USER: BEN.BROWN
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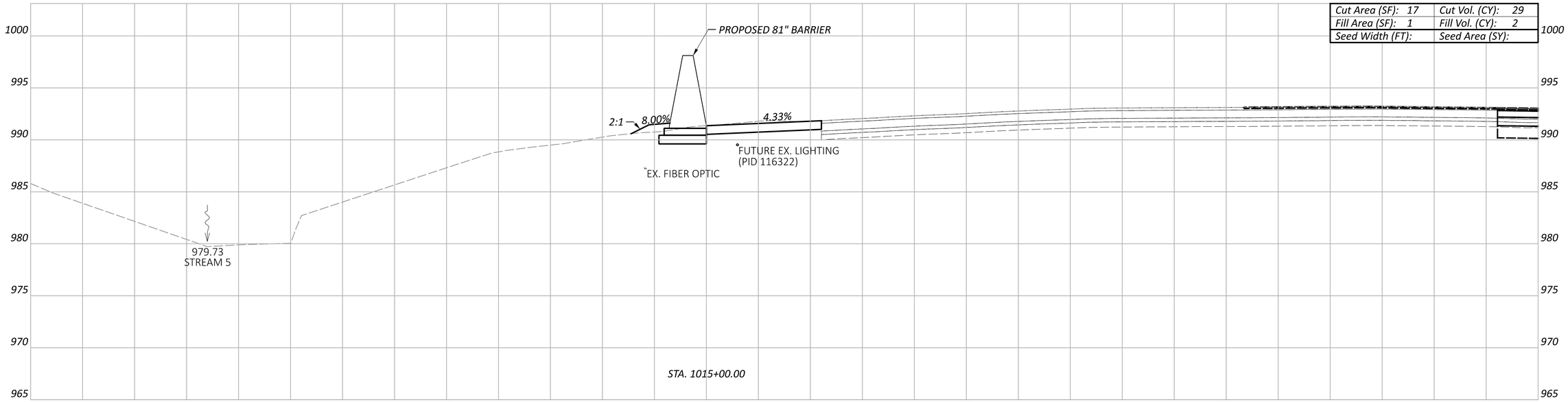


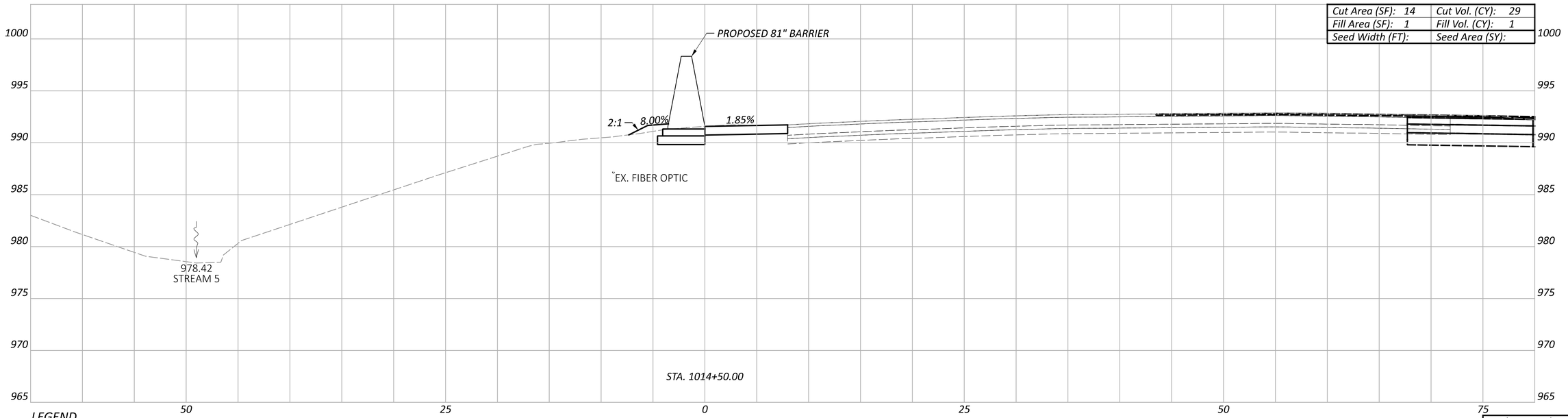


LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

— — — FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 58 | 3 |

# CROSS SECTIONS - 81" BARRIER 10
# STA. 1014+50.00 TO STA. 1015+00.00

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REVIEWER JDH 05-22-24

PROJECT ID 117607

| SHEET | TOTAL |
|---|---|
| P.154 | P.297 |

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER11 - 1014+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:14:58 PM USER: BEN.BROWN
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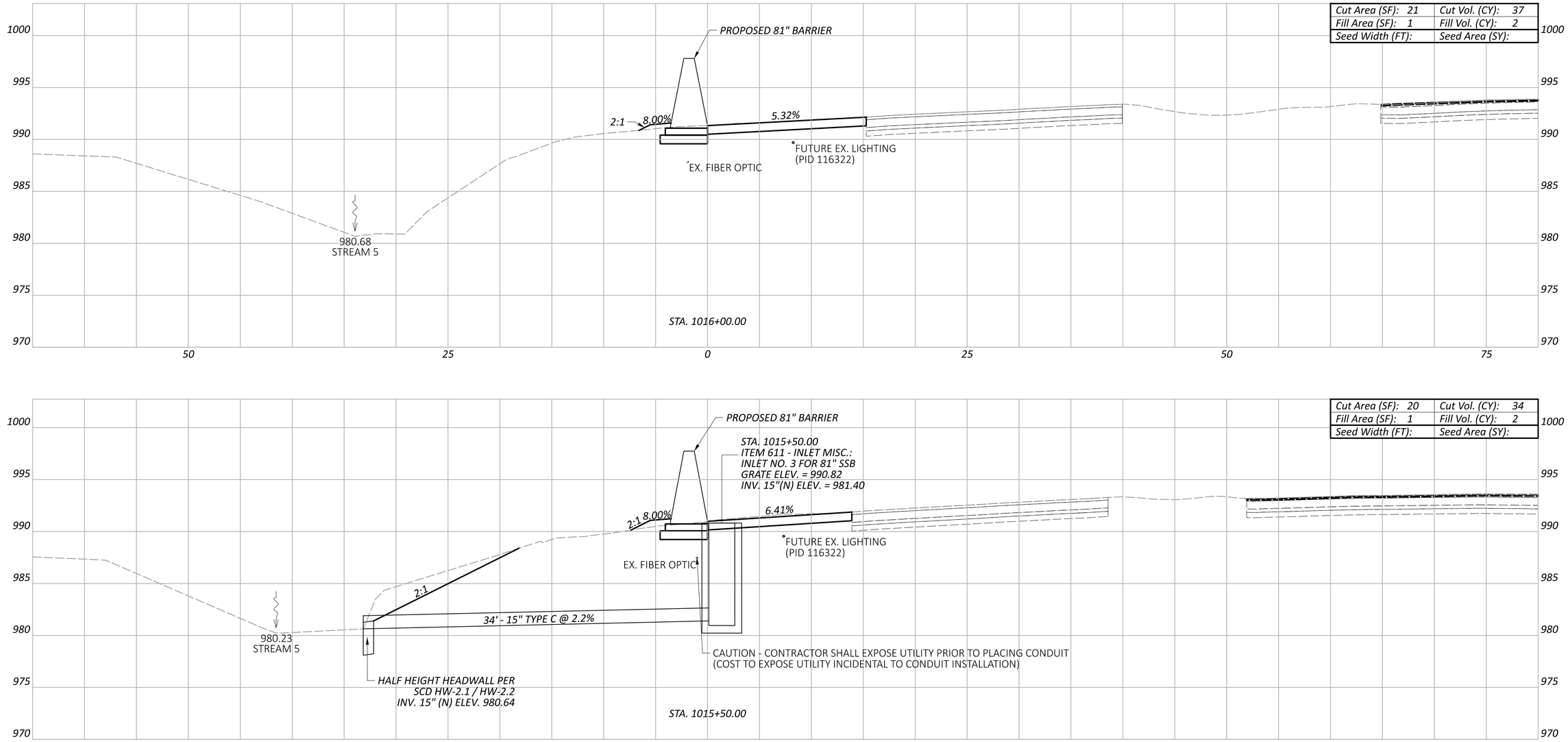


LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 71 | 4 |

# CROSS SECTIONS - 81" BARRIER 10
# STA. 1015+50.00 TO STA. 1016+00.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_BARRIER11 - 1015+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-07-08 TIME: 4:13:09 PM USER: danny.tran
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS010.dgn



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PROJECT ID: 117607

SHEET: P.155 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER11 - 1016+49.64 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:15:24 PM USER: BEN.BROWN
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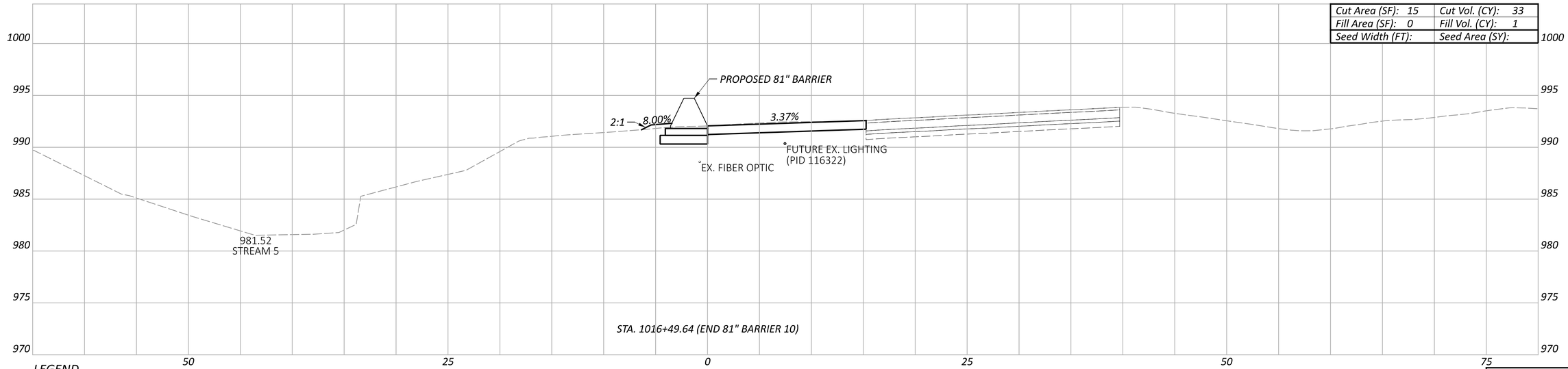
# CROSS SECTIONS - 81" BARRIER 10
STA. 1016+49.64




LEGEND

- - - EXISTING SR-161 PRIOR TO PID 116322

—— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 33 | 1 |

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PROJECT ID
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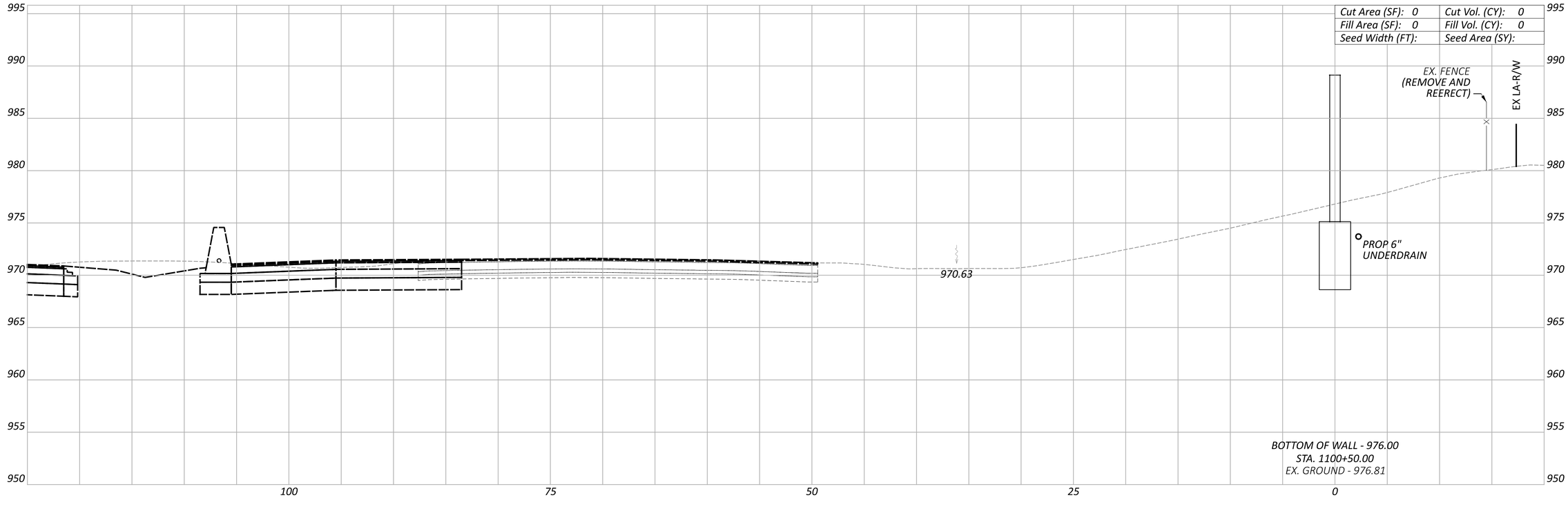
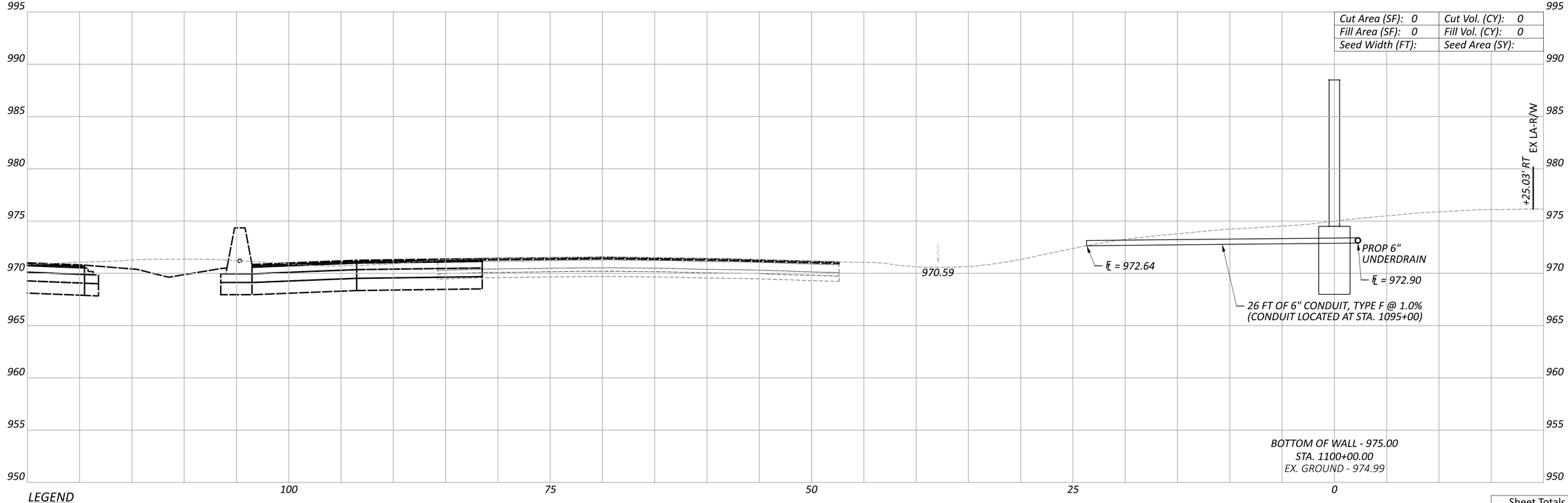
SHEET P.156 TOTAL P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

# CROSS SECTIONS - WALL 11
## STA. 1100+00.00 TO STA. 1100+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: 1100+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 10:07:54 AM USER: JPerchinske
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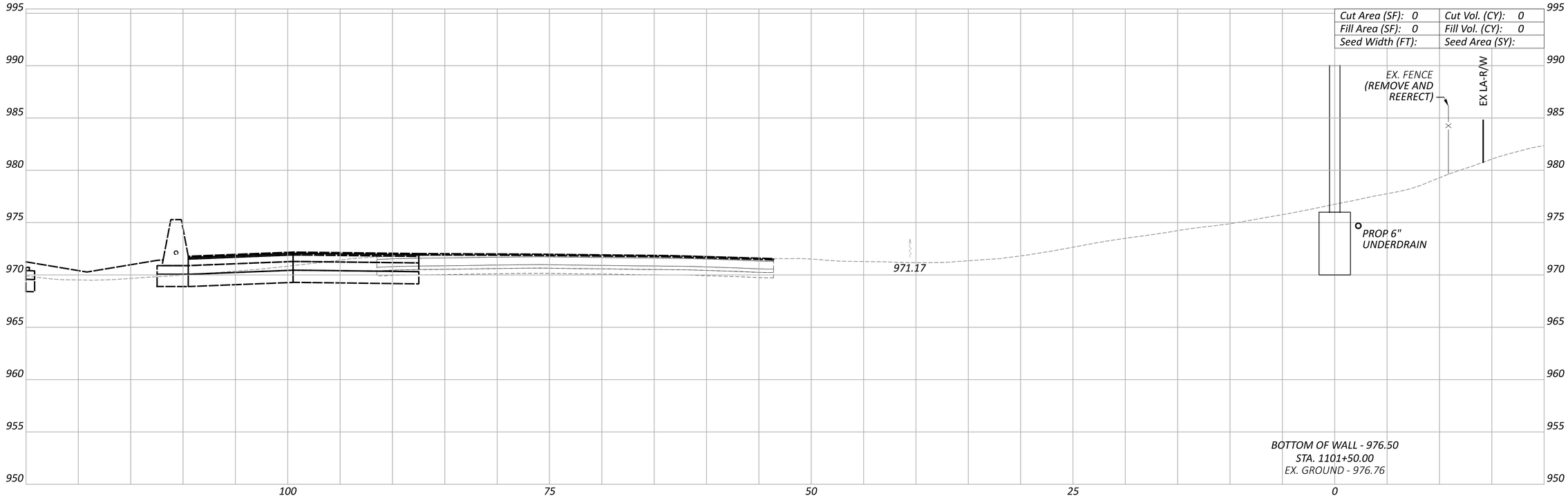
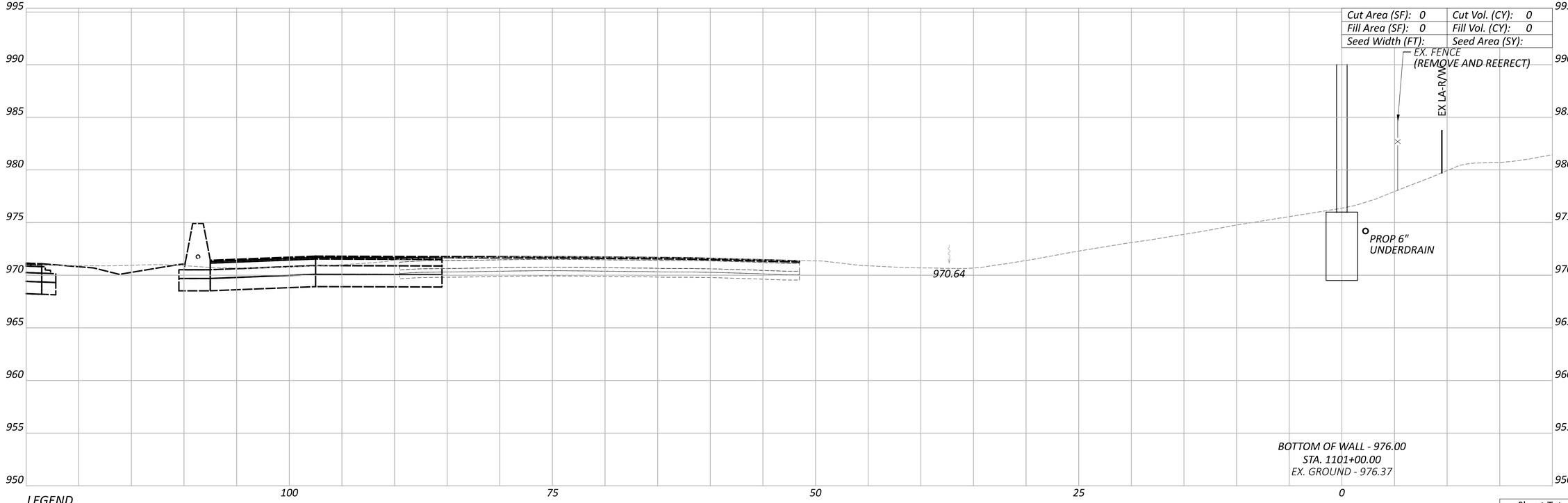
DESIGNER JEP

REVIEWER RG 05-22-24

PROJECT ID 117607

| SHEET | TOTAL |
|---|---|
| P.157 | P.297 |




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 11
## STA. 1101+00.00 TO STA. 1101+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: 1101+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 10:08:13 AM USER: JPerchinske
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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
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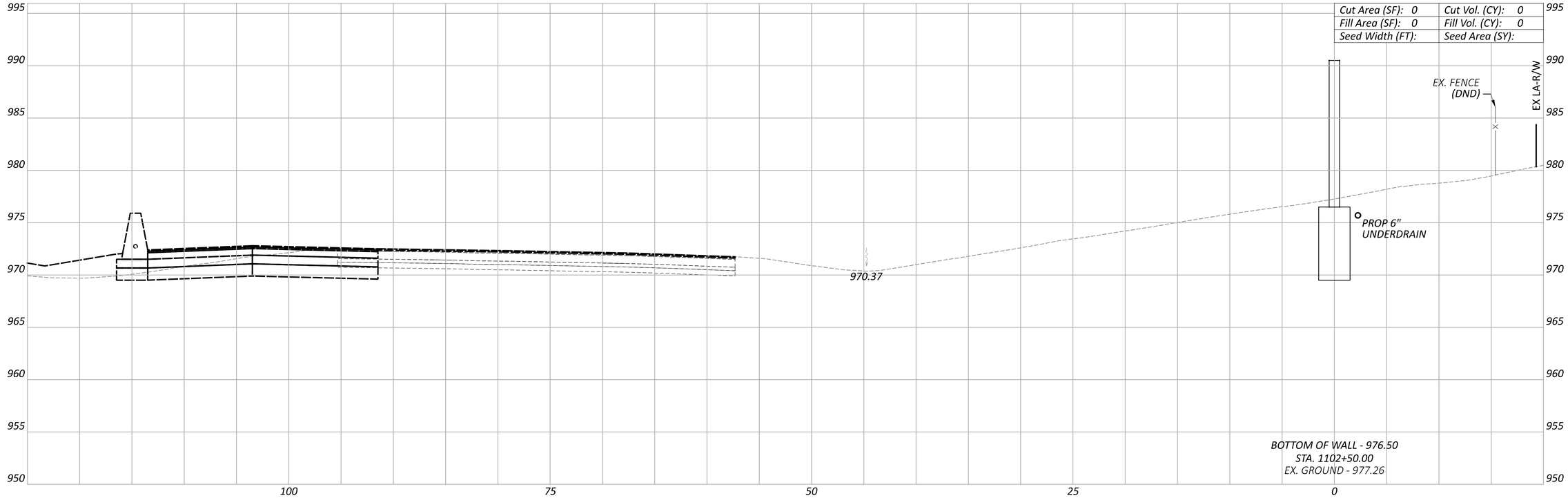
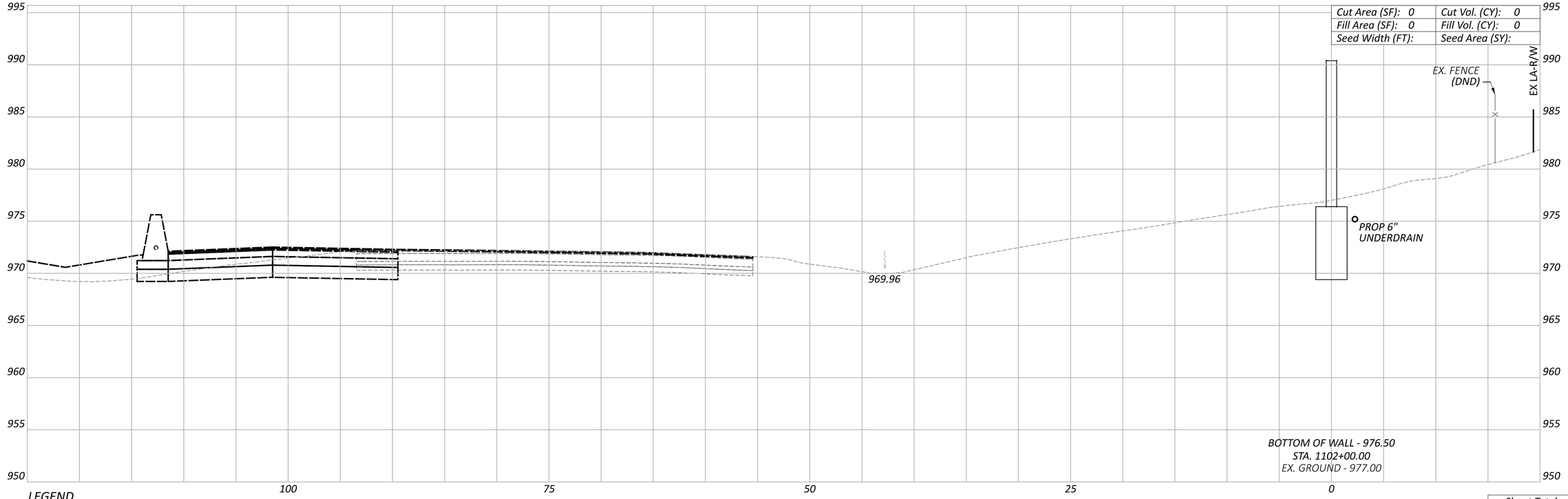
SHEET P.158 TOTAL P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

# CROSS SECTIONS - WALL 11
## STA. 1102+00.00 TO STA. 1102+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: 1102+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 10:08:22 AM USER: JPerchinske
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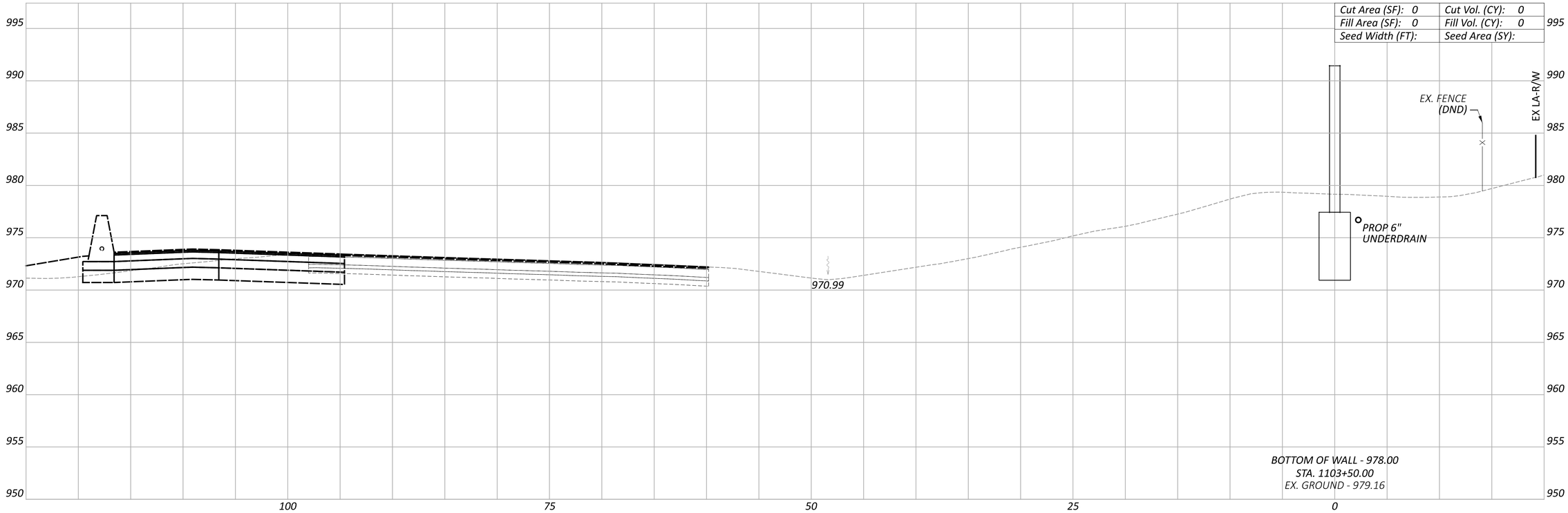
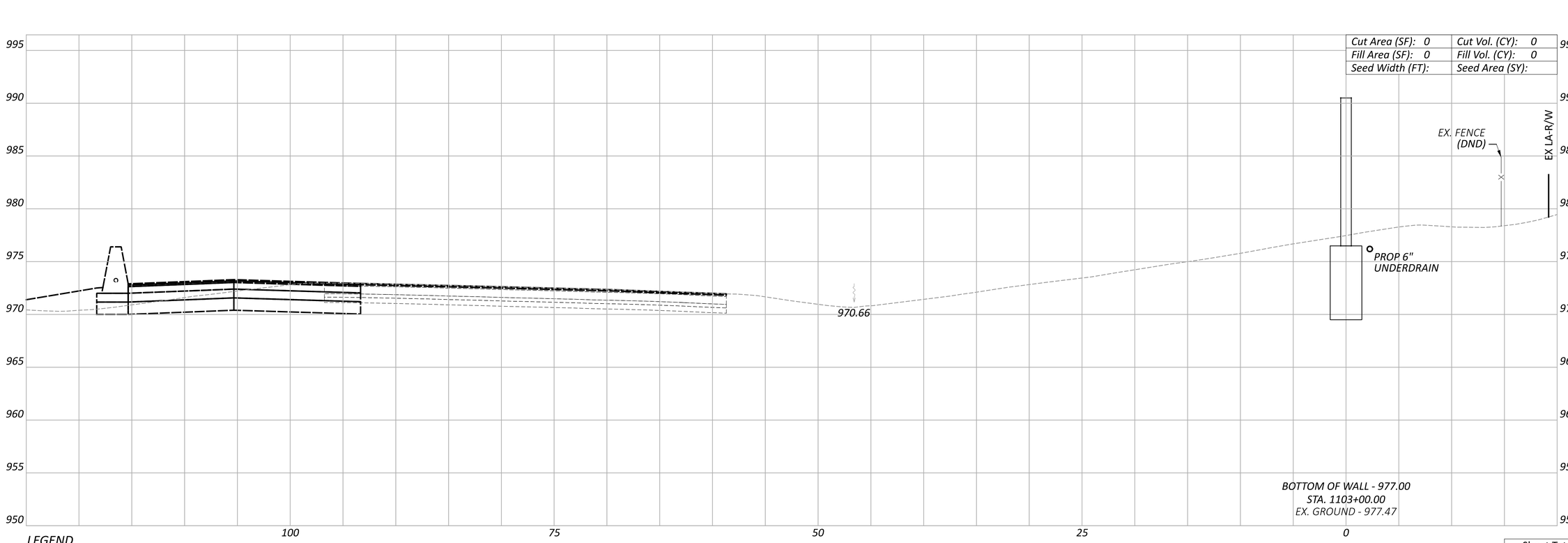
| SHEET | TOTAL |
|---|---|
| P.159 | P.297 |




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

# CROSS SECTIONS - WALL 11
## STA. 1103+00.00 TO STA. 1103+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: 1103+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 10:08:33 AM USER: JPerchinske
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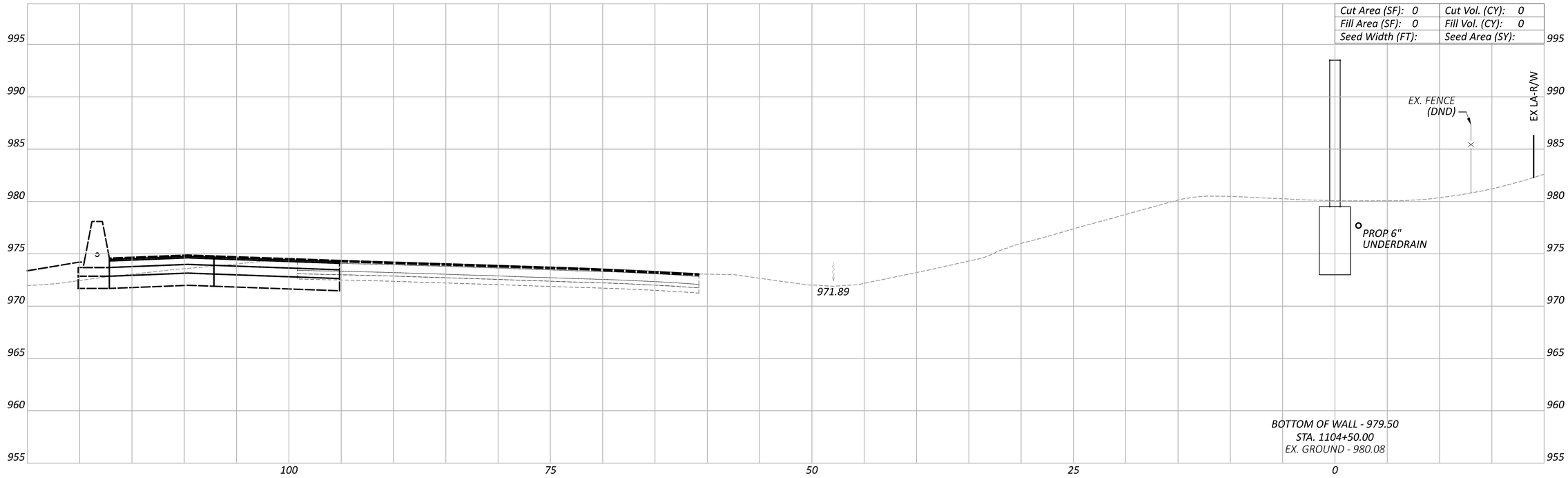
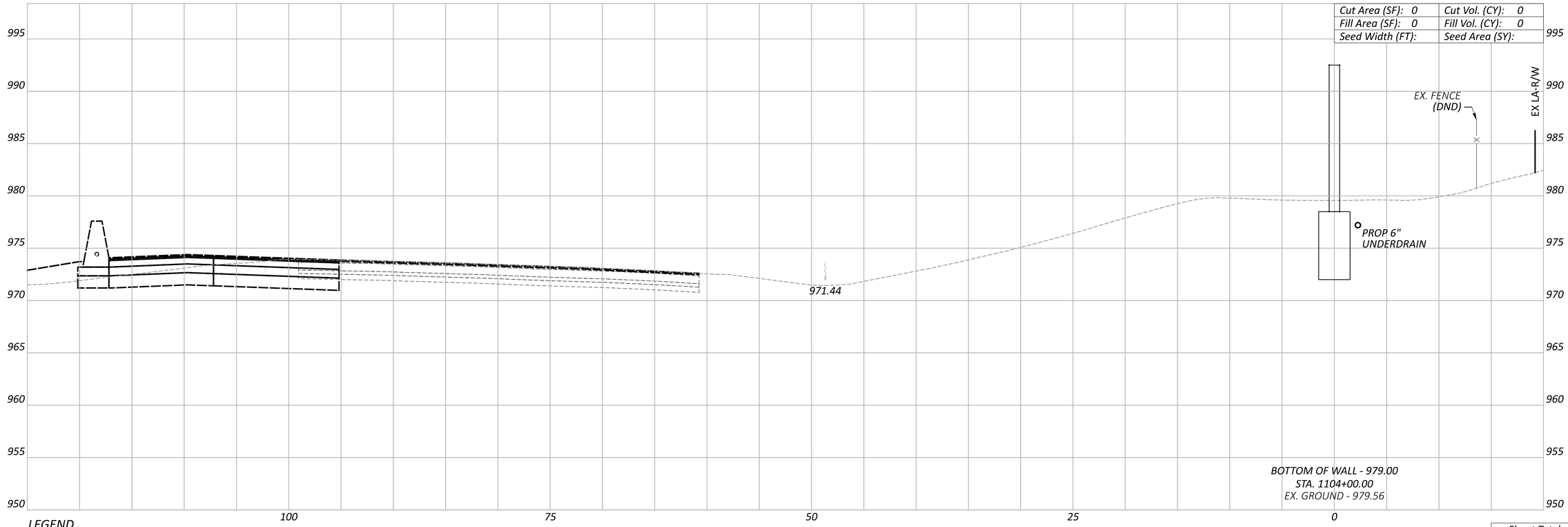
| SHEET | TOTAL |
|---|---|
| P.160 | P.297 |




LEGEND

——— EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

FRA-161-15.80 NOISE ABATEMENT

CROSS SECTIONS - WALL 11
STA. 1104+00.00 TO STA. 1104+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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|---|---|
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| REVIEWER | RG 05-22-24 |
| PROJECT ID | 117607 |
| SHEET | P.161 |
| TOTAL | P.297 |

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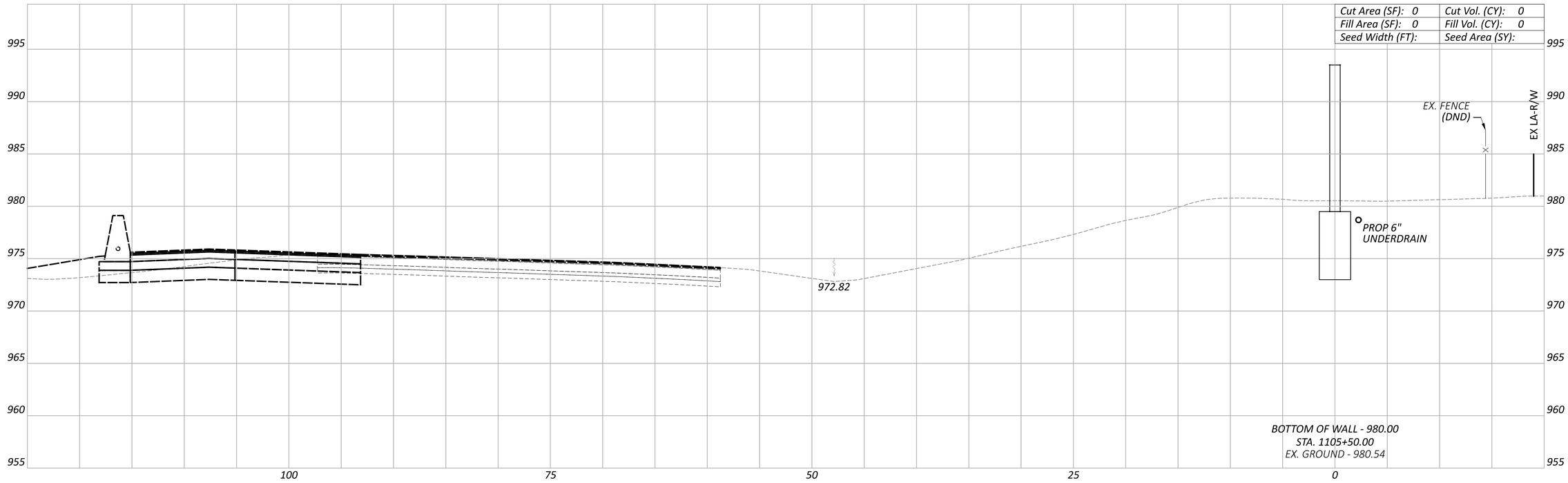


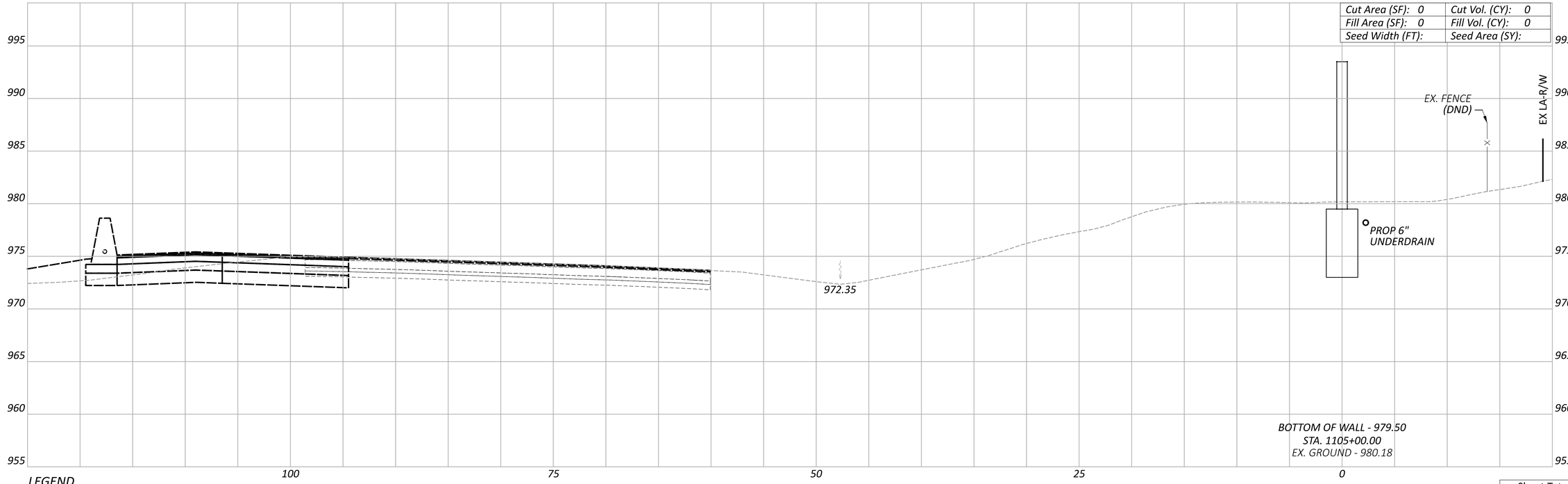


LEGEND

——— EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

FRA-161-15.80 NOISE ABATEMENT

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# CROSS SECTIONS - WALL 11
# STA. 1105+00.00 TO STA. 1105+50.00

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REVIEWER RG 05-22-24

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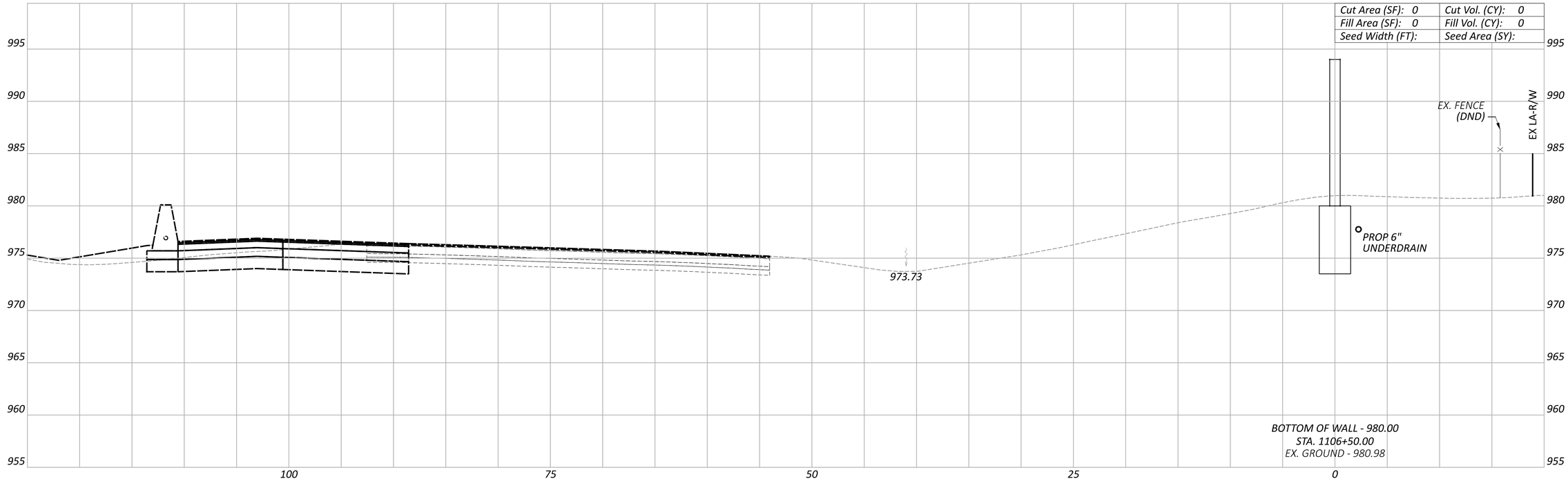
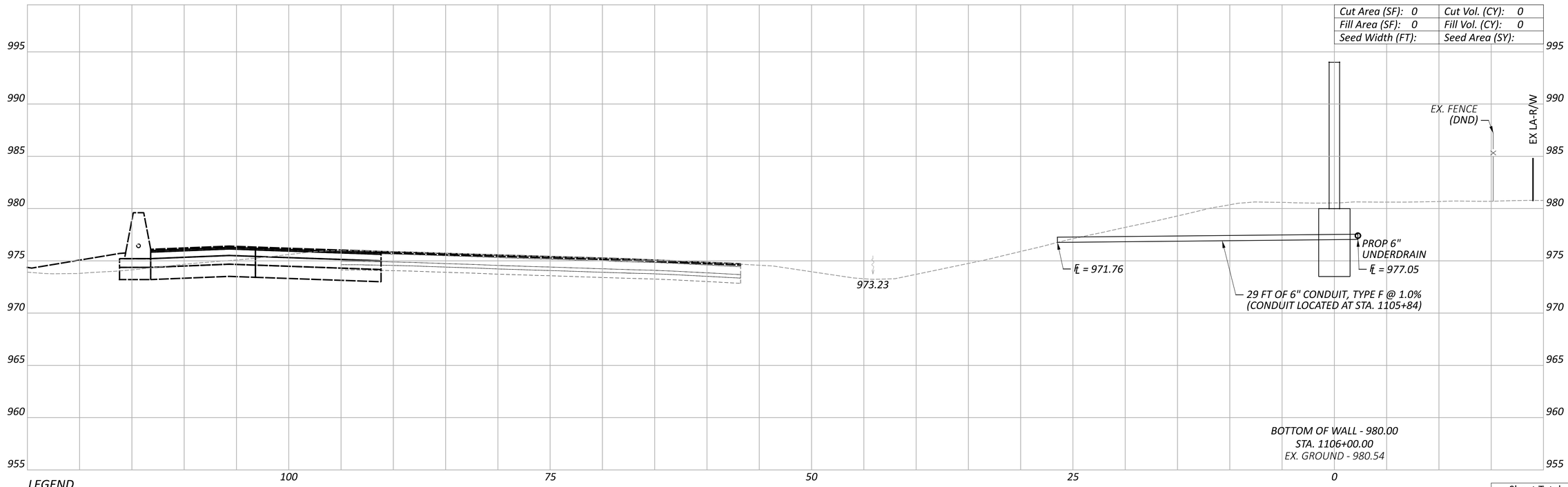
| SHEET | TOTAL |
|---|---|
| P.162 | P.297 |




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 11
## STA. 1106+00.00 TO STA. 1106+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: 1106+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 10:09:02 AM USER: JPerchinske
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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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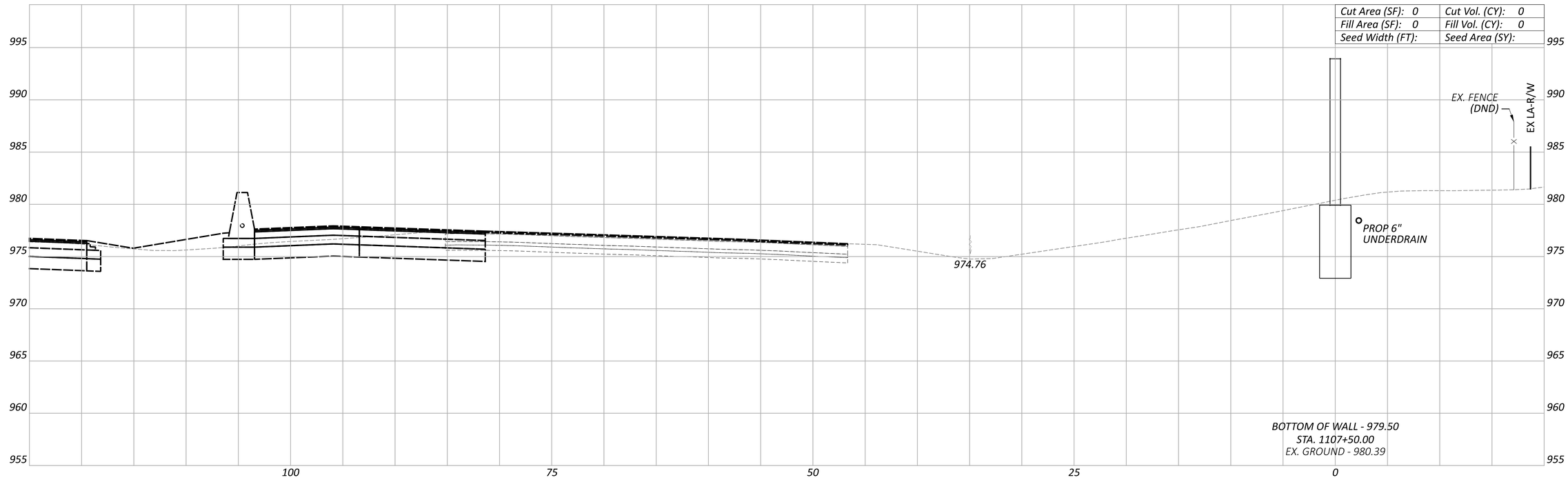
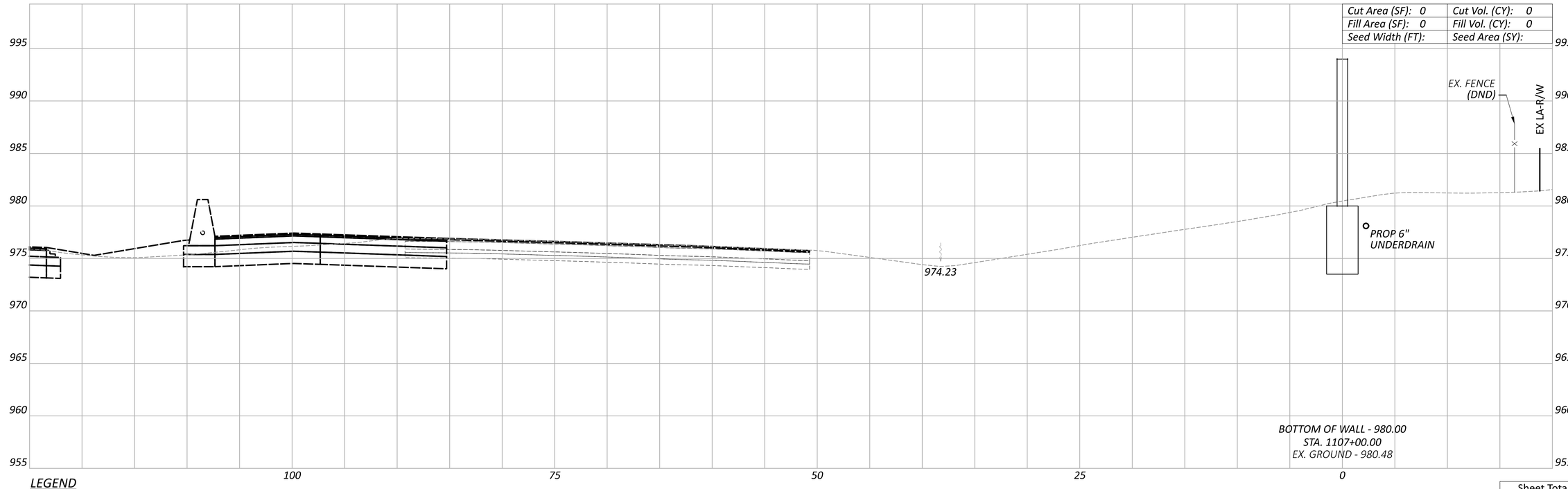
PROJECT ID 117607

SHEET P.163 TOTAL P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

FRA-161-15.80 NOISE ABATEMENT

MODEL: 1107+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 10:09:12 AM USER: JPerchinske
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# CROSS SECTIONS - WALL 11
# STA. 1107+00.00 TO STA. 1107+50.00

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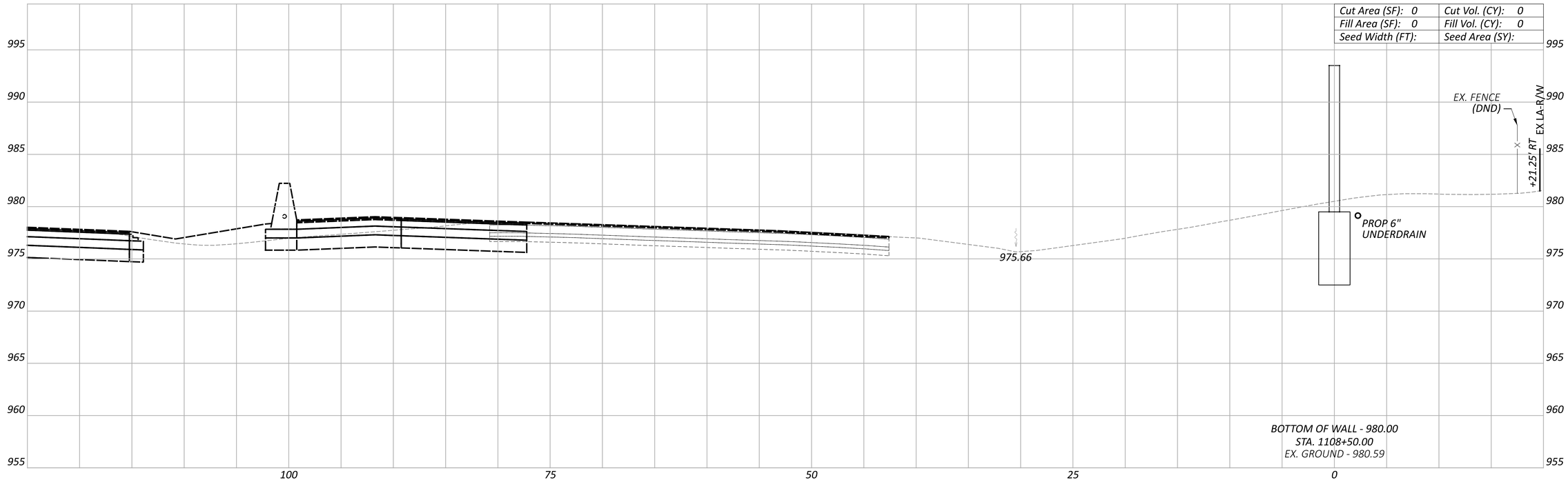
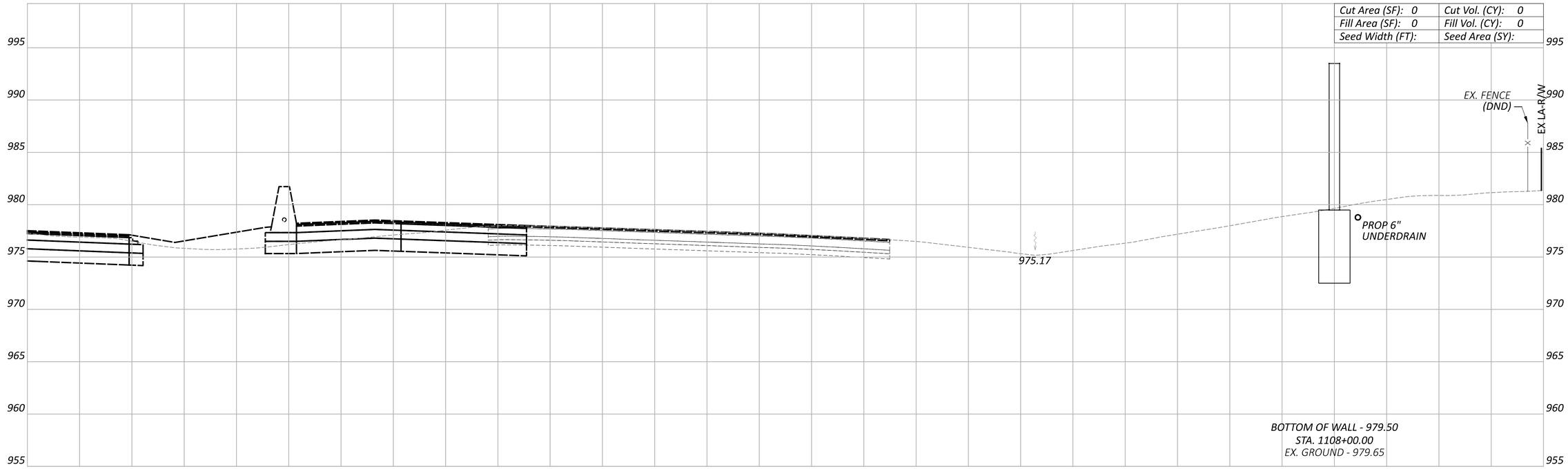
DESIGNER
JEP

REVIEWER
RG 05-22-24

PROJECT ID
117607

| SHEET | TOTAL |
|---|---|
| P.164 | P.297 |




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

# CROSS SECTIONS - WALL 11
STA. 1108+00.00 TO STA. 1108+50.00

FRA-161-15.80 NOISE ABATEMENT

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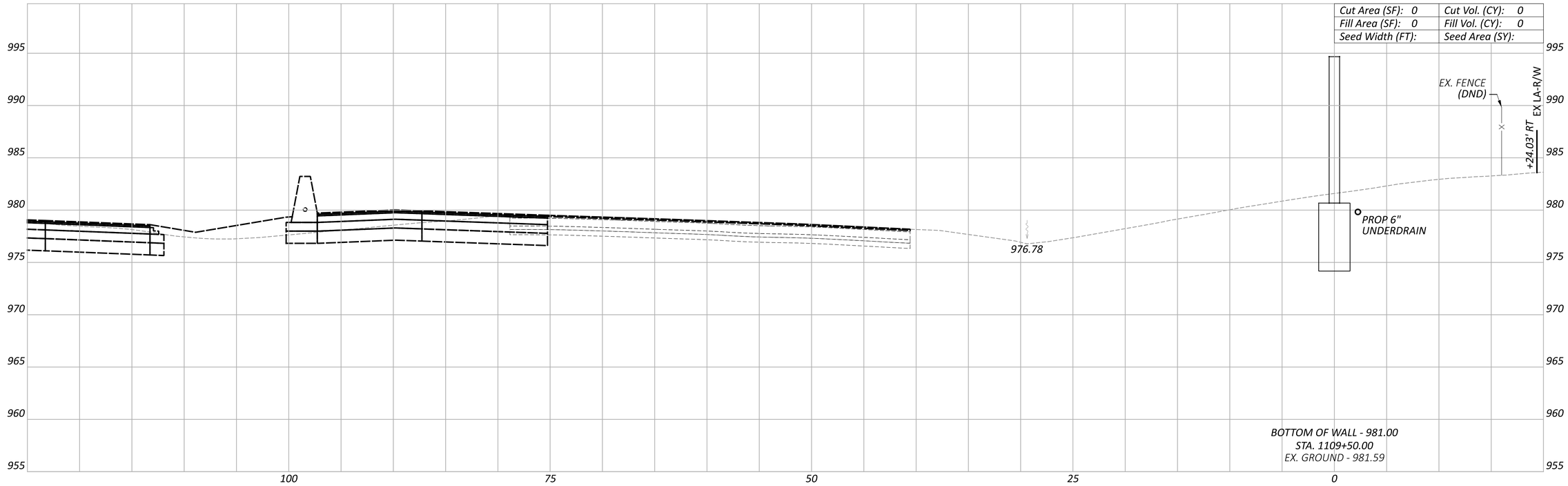
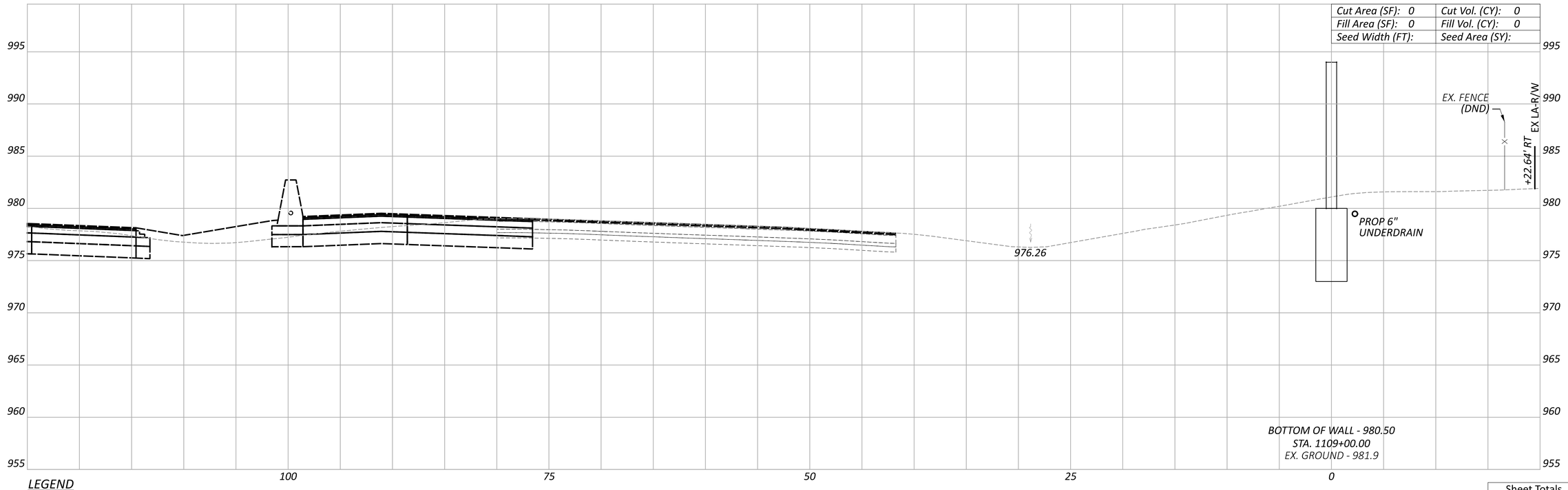
REVIEWER RG 05-22-24

PROJECT ID 117607

SHEET P.165 TOTAL P.297

MODEL: 1108+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 10:09:22 AM USER: JPerchinske
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS011.dgn




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

# CROSS SECTIONS - WALL 11
## STA. 1109+00.00 TO STA. 1109+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: 1109+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 10:09:32 AM USER: JPerchinske
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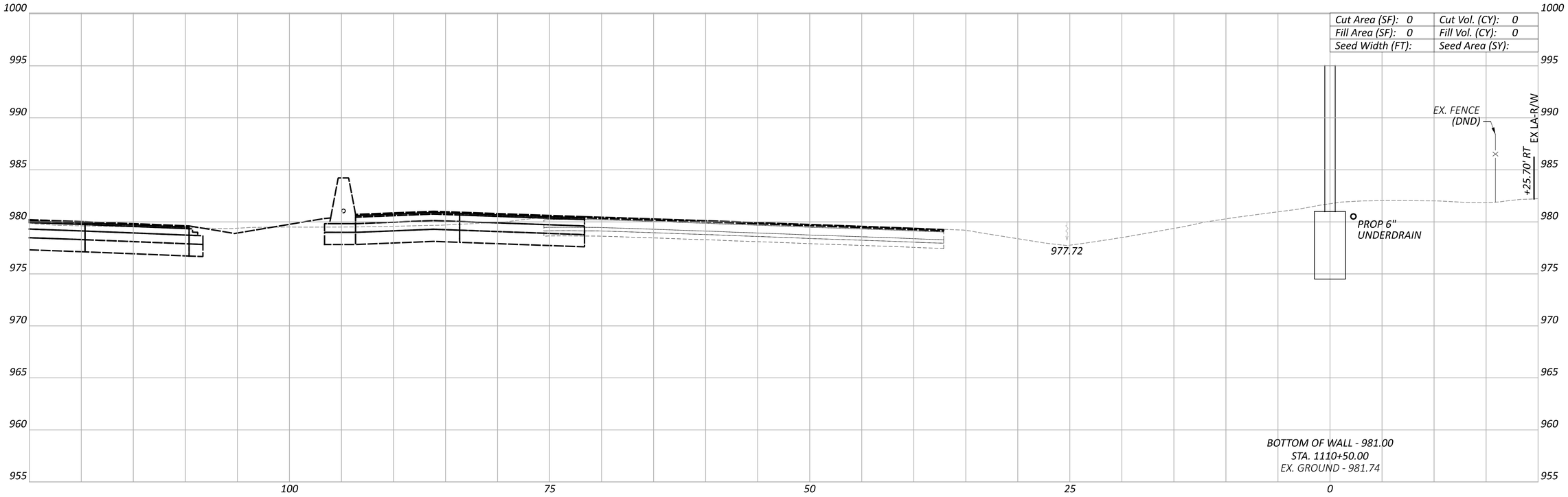
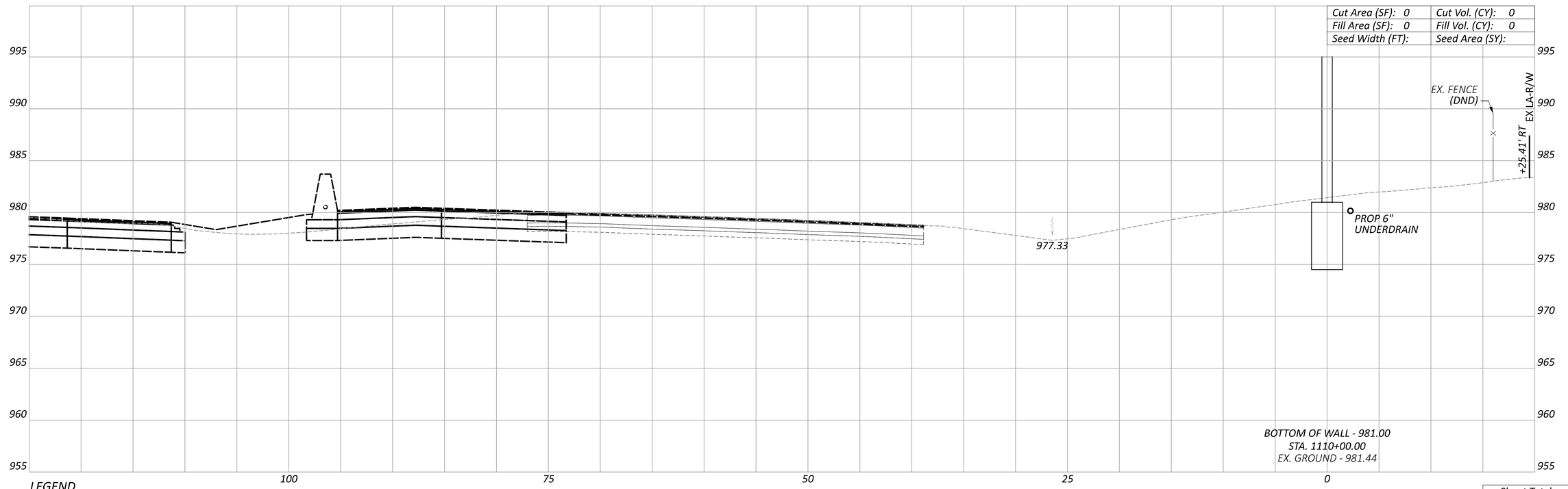
DESIGNER
JEP

REVIEWER
RG 05-22-24

PROJECT ID
117607

| SHEET | TOTAL |
|---|---|
| P.166 | P.297 |




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

# CROSS SECTIONS - WALL 11
## STA. 1110+00.00 TO STA. 1110+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: 1110+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 10:09:43 AM USER: JPerchinske
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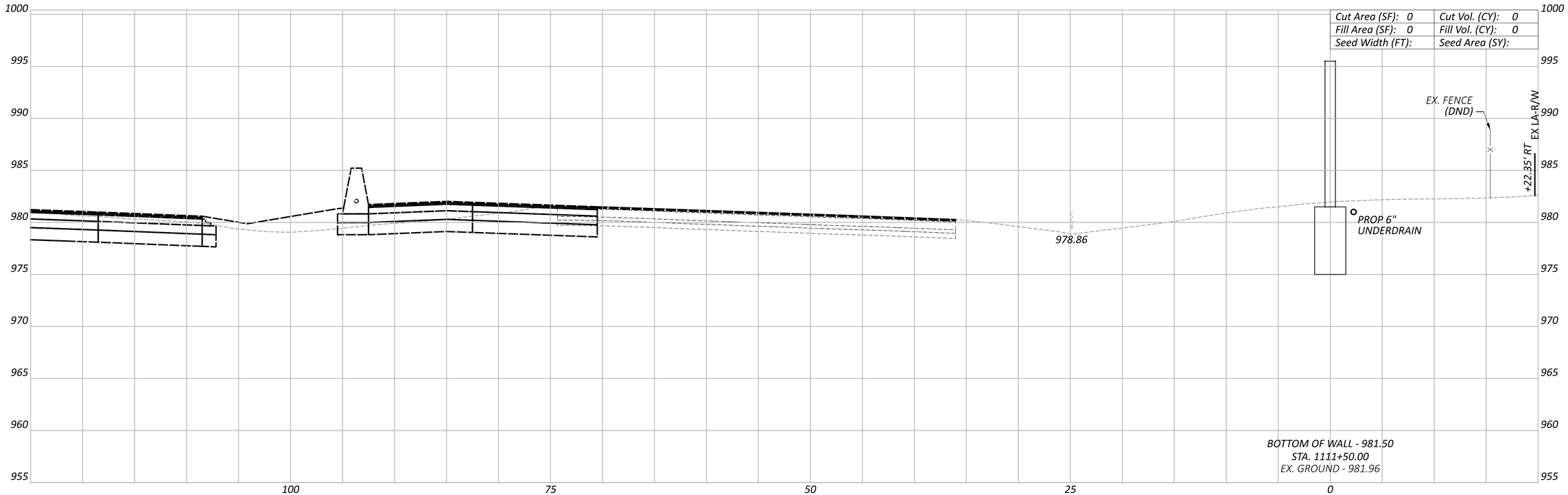
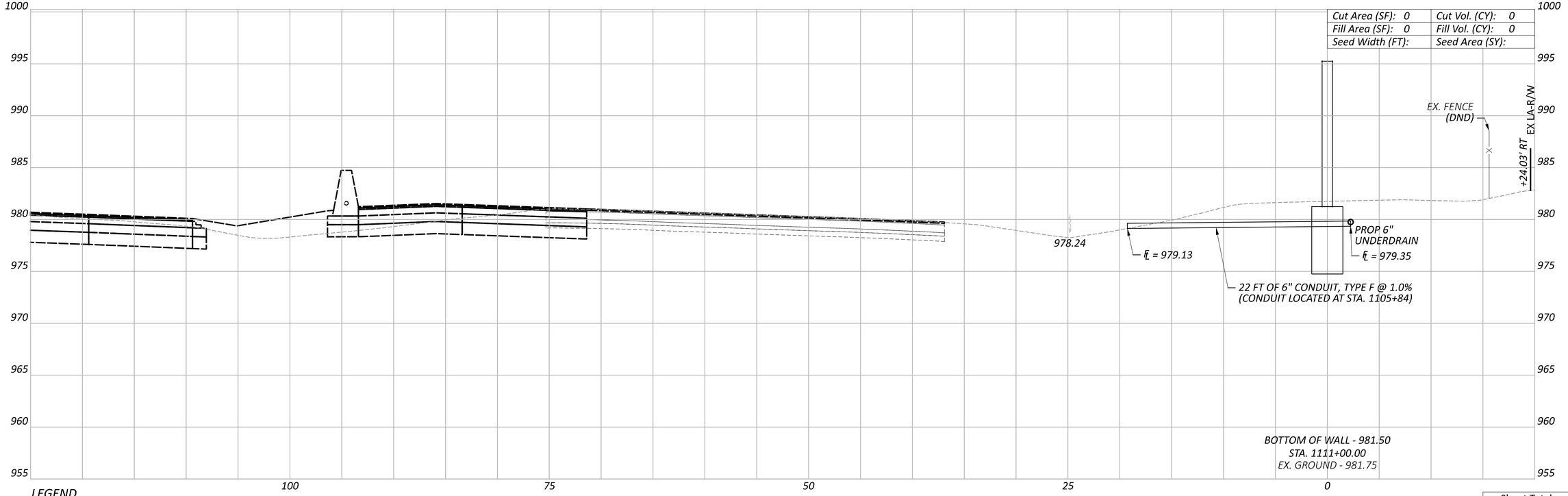
REVIEWER RG 05-22-24

PROJECT ID 117607

SHEET P.167 TOTAL P.297




*LEGEND*

——— *EXISTING SR-161 PRIOR TO PID 116322*

——— *FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322*

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

# CROSS SECTIONS - WALL 11
## STA. 1111+00.00 TO STA. 1111+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: 1111+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 10:09:53 AM USER: JPerchinske
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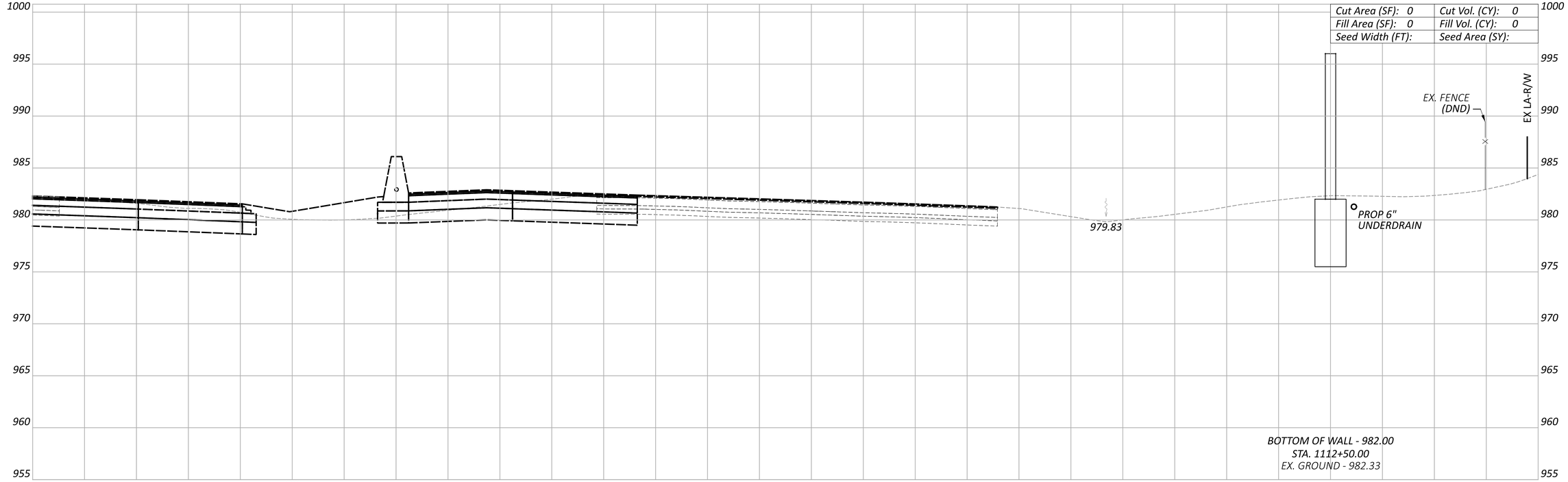
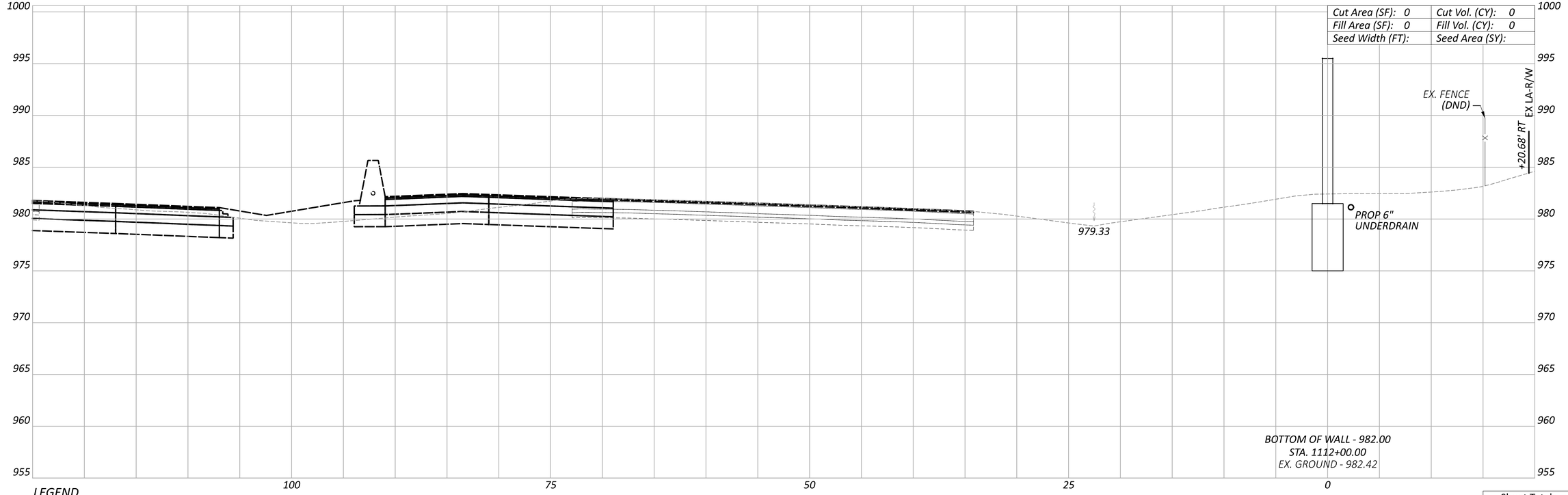
SHEET: P.168 TOTAL: P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 11
## STA. 1112+00.00 TO STA. 1112+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: 1112+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 10:10:04 AM USER: JPerchinske
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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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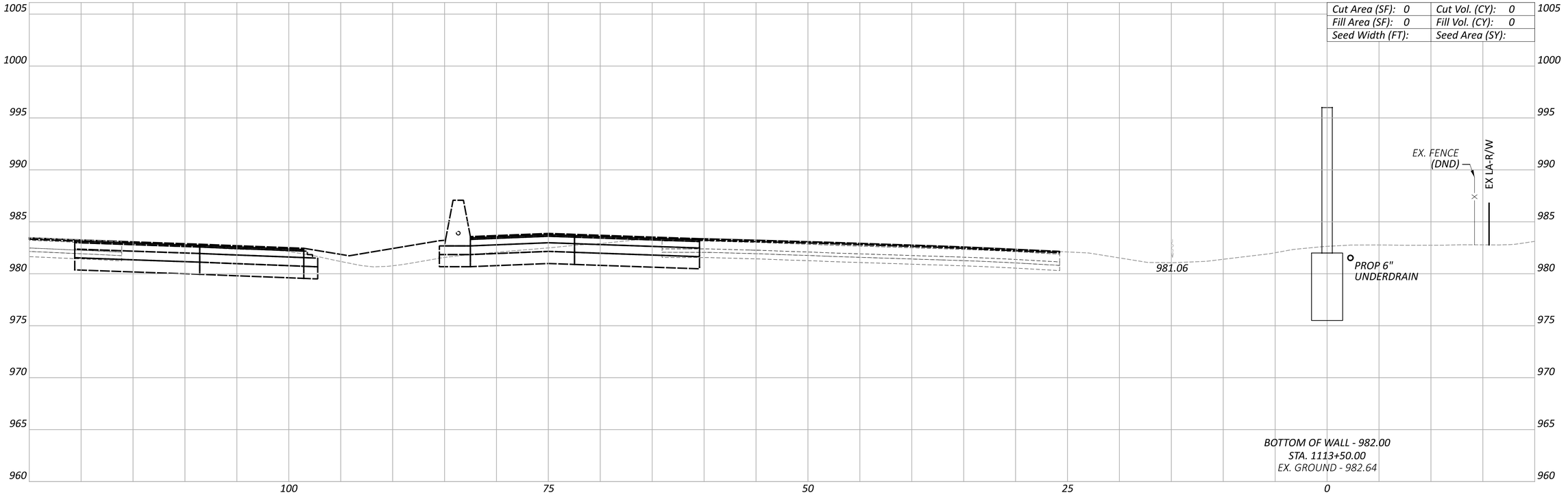
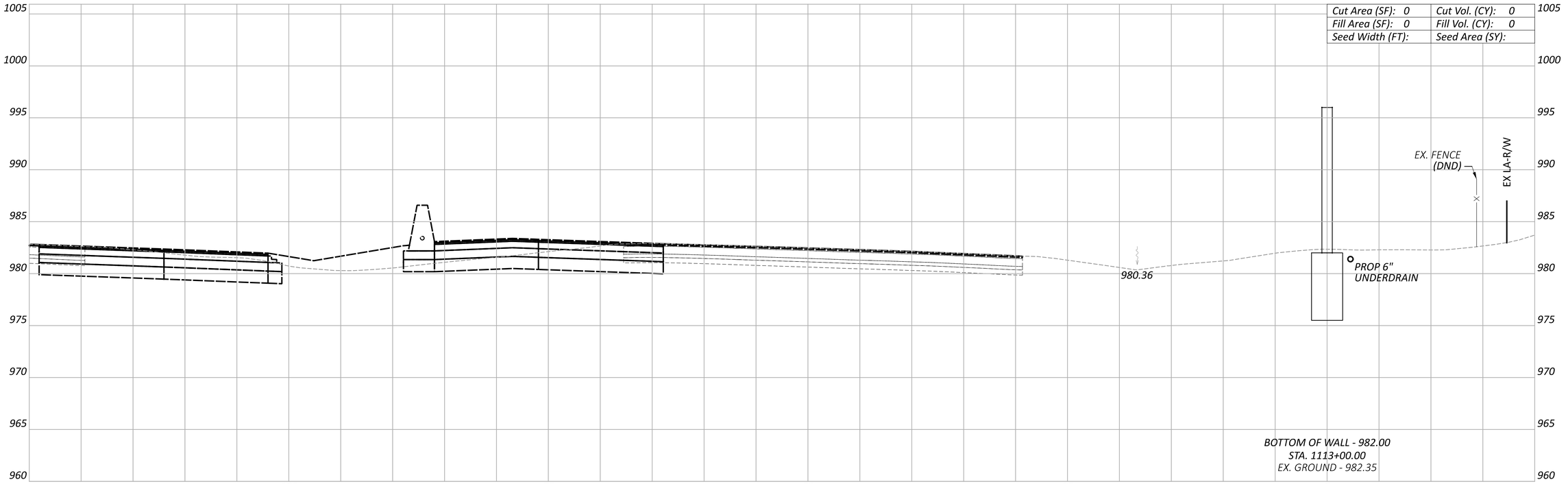
PROJECT ID 117607

SHEET P.169 TOTAL P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

# CROSS SECTIONS - WALL 11
## STA. 1113+00.00 TO STA. 1113+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: 1113+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 10:10:14 AM USER: JPerchinske
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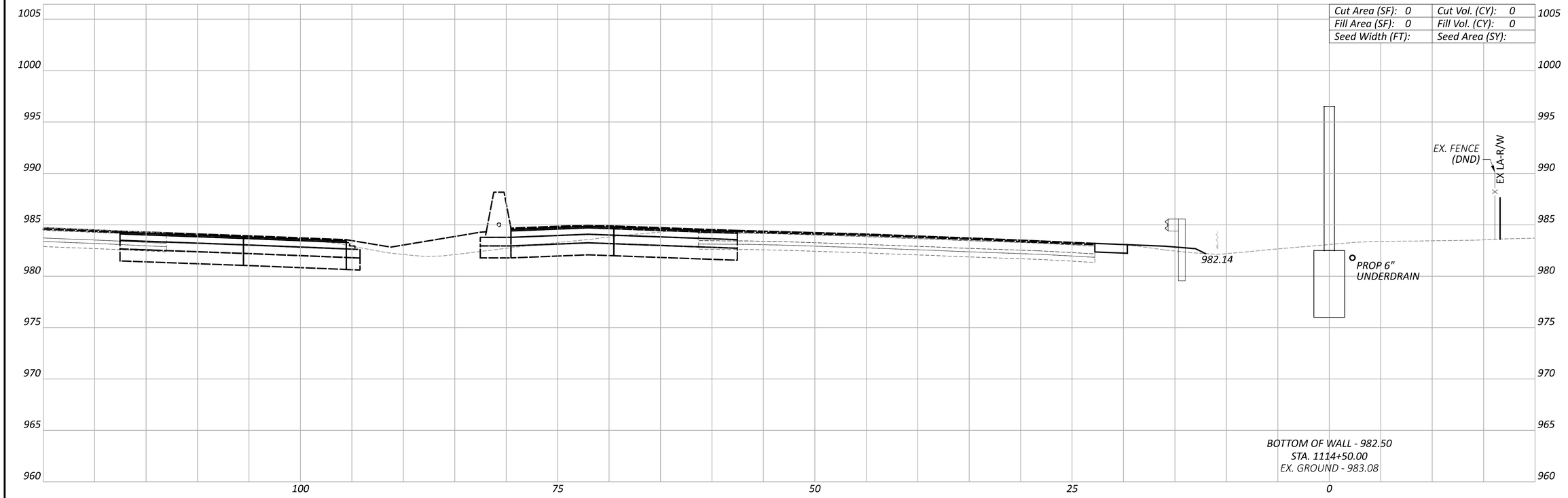
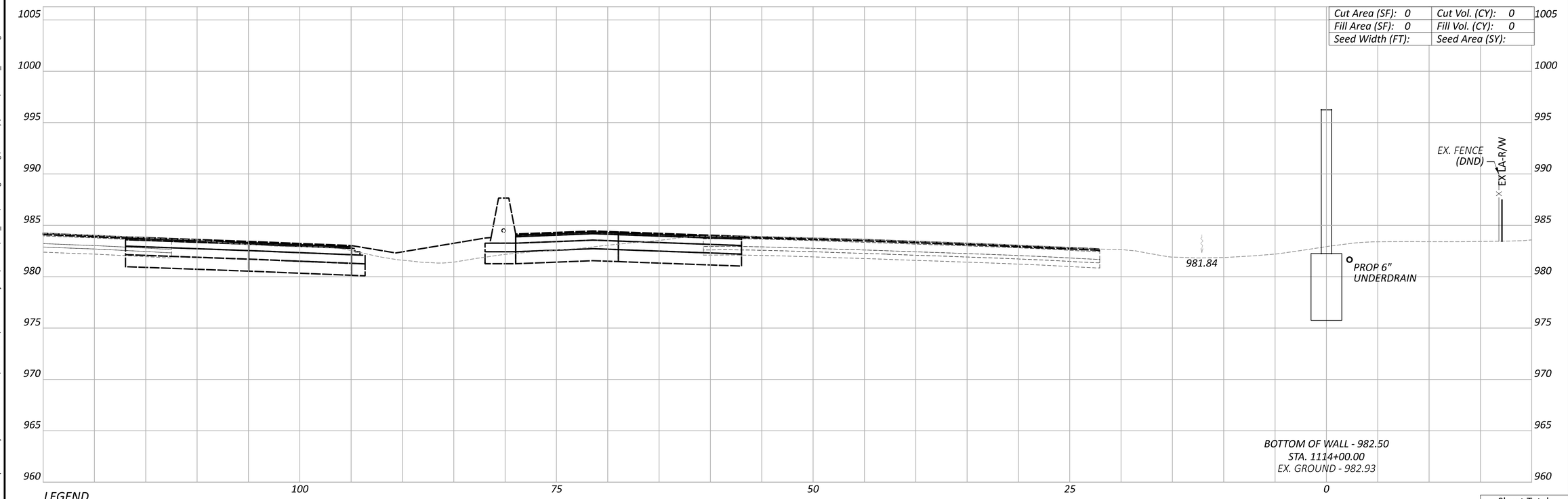
REVIEWER RG 05-22-24

PROJECT ID 117607

| SHEET | TOTAL |
|---|---|
| P.170 | P.297 |




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# FRA-161-15.80 NOISE ABATEMENT

# CROSS SECTIONS - WALL 11
# STA. 1114+00.00 TO STA. 1114+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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SHEET P.171 TOTAL P.297

MODEL: 1114+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 10:10:24 AM USER: JPerchinske
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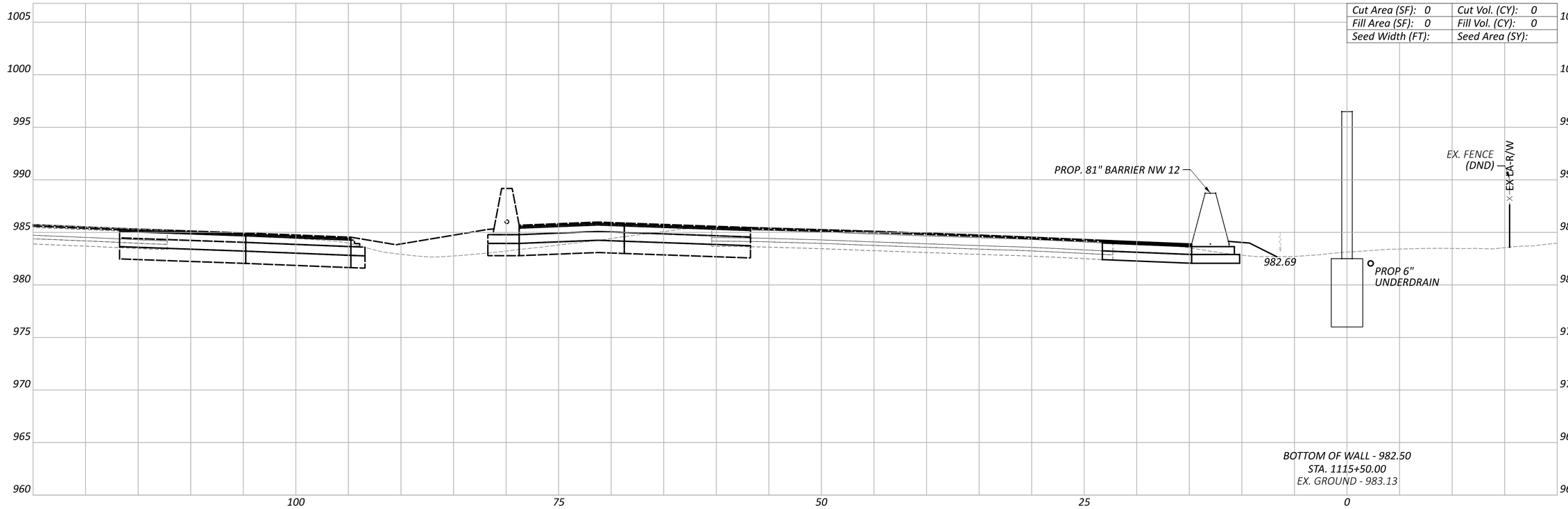


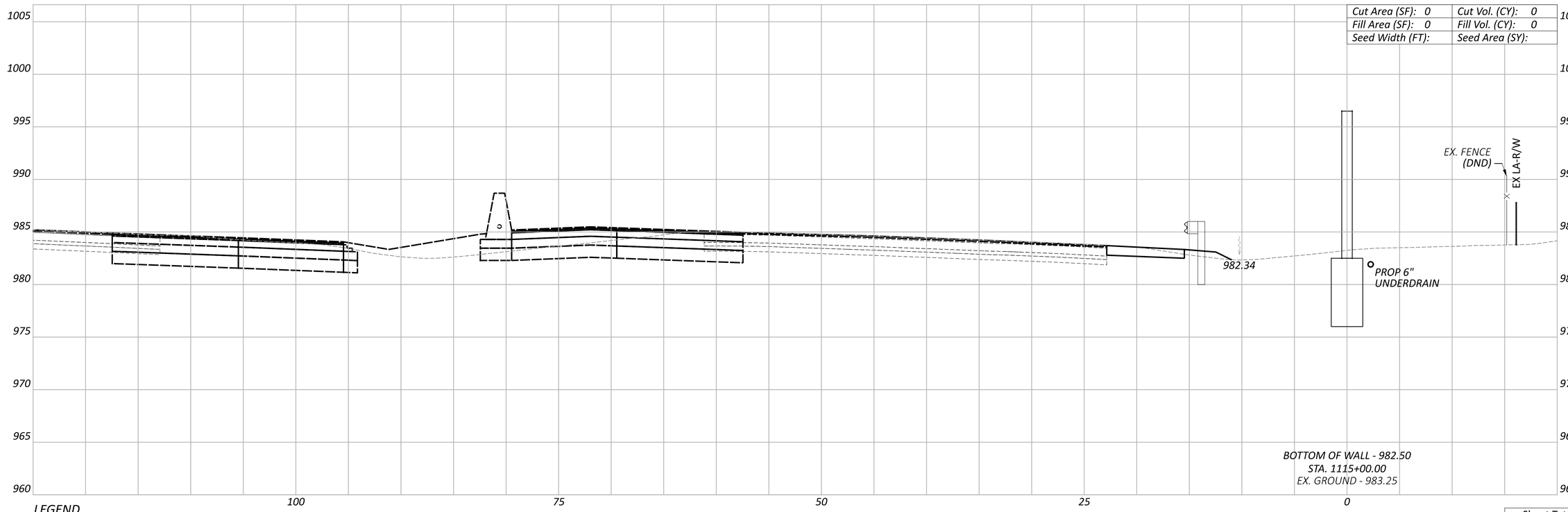


LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 11
## STA. 1115+00.00 TO STA. 1115+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: 1115+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 10:10:37 AM USER: JPerchinske
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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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SHEET P.172 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: 1115+84.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 5/21/2024 TIME: 10:10:49 AM USER: JPerchinske
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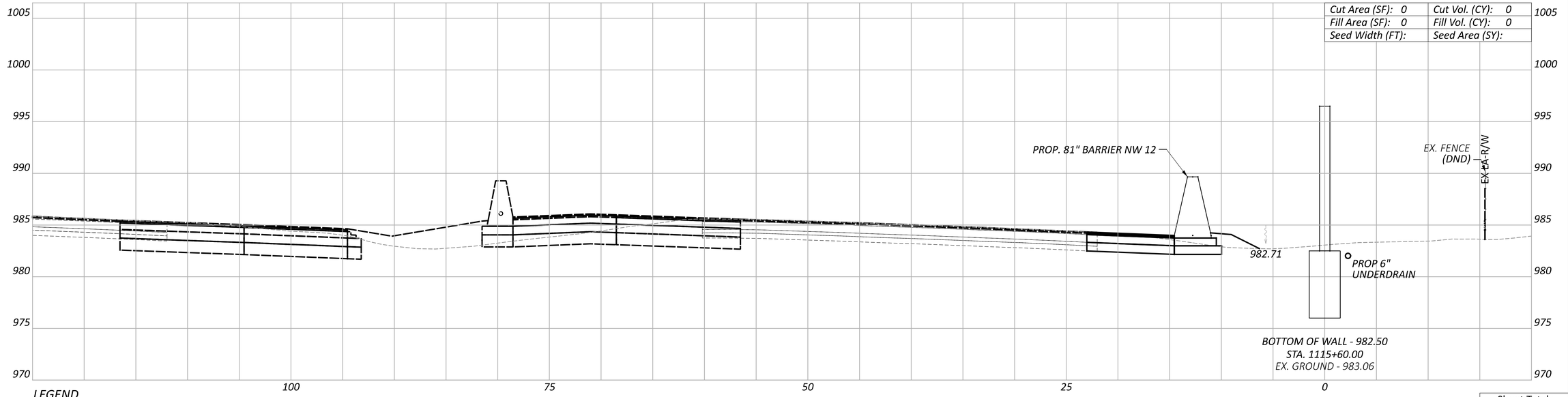
CROSS SECTIONS - WALL 11
STA. 1115+60.00




LEGEND

——— EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | | |

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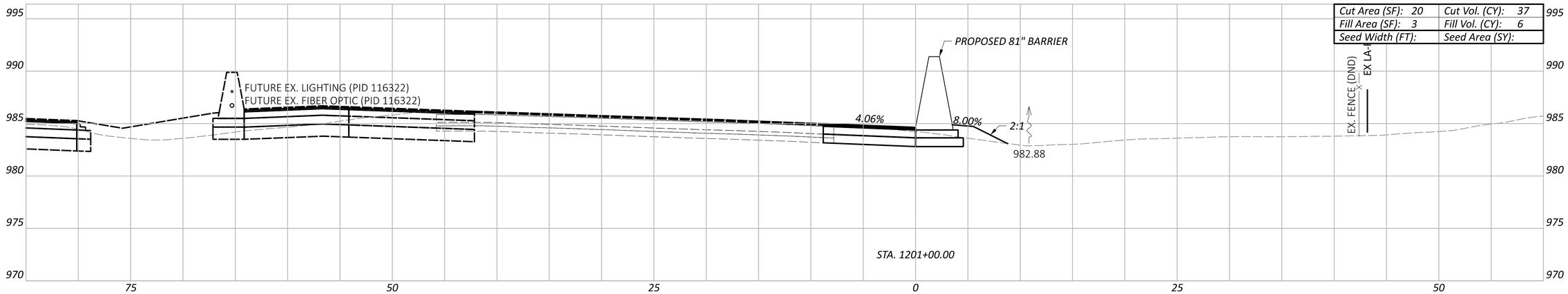
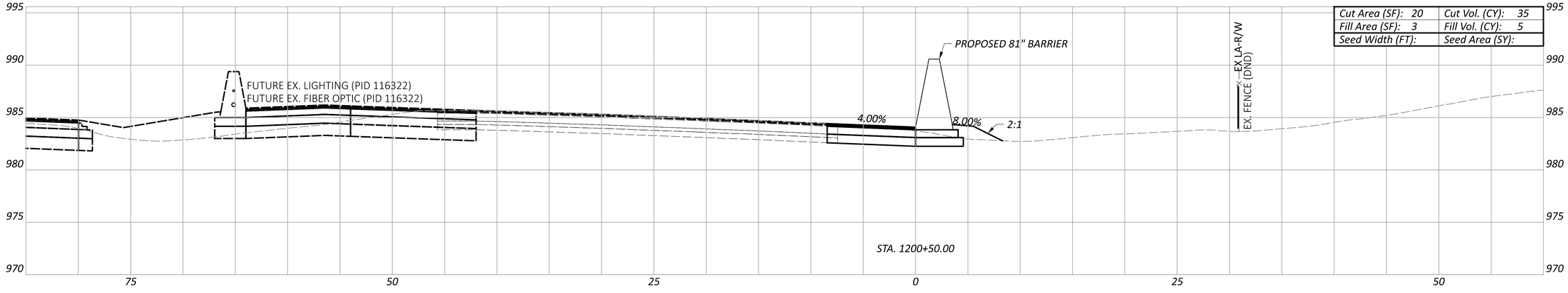
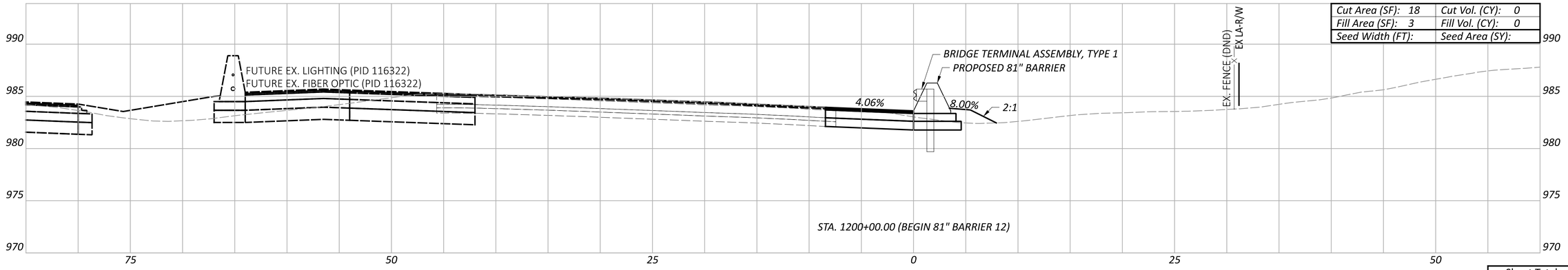
SHEET P.173 TOTAL P.297




| | |
|---|---|
| Cut Area (SF): 20 | Cut Vol. (CY): 37 |
| Fill Area (SF): 3 | Fill Vol. (CY): 6 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 20 | Cut Vol. (CY): 35 |
| Fill Area (SF): 3 | Fill Vol. (CY): 5 |
| Seed Width (FT): | Seed Area (SY): |




| | |
|---|---|
| Cut Area (SF): 18 | Cut Vol. (CY): 0 |
| Fill Area (SF): 3 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 72 | 11 |

# CROSS SECTIONS - 81" BARRIER 12
# STA. 1200+00.00 TO STA. 1201+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER12 - 1200+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:19:45 PM USER: BEN.BROWN
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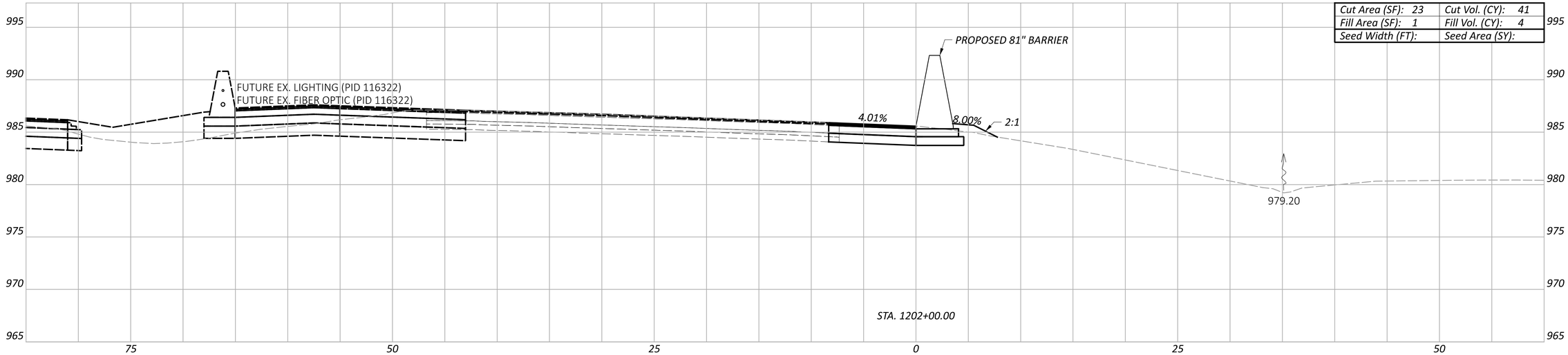
DESIGNER: JMK
REVIEWER: JDH 05-22-24
PROJECT ID: 117607

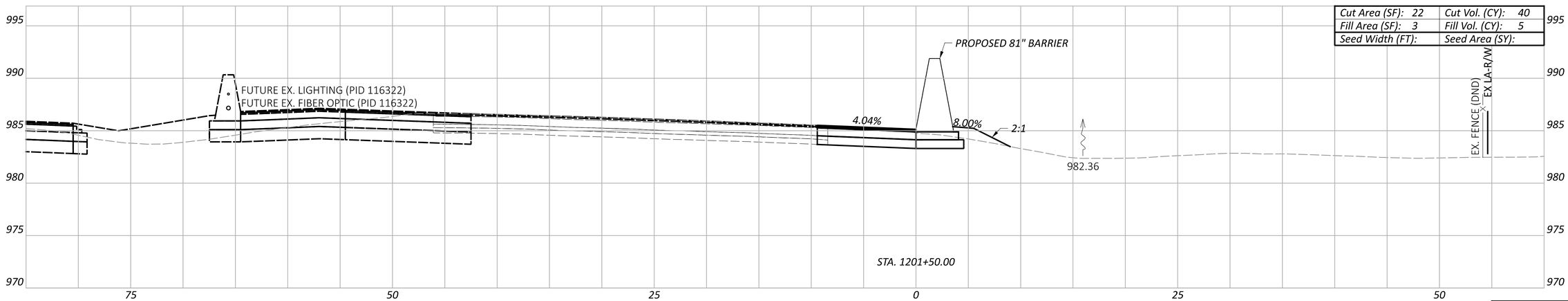
| SHEET | TOTAL |
|---|---|
| P.174 | P.297 |

# FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER12 - 1201+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:20:13 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS012A.dgn

## CROSS SECTIONS - 81" BARRIER 12
## STA. 1201+50.00 TO STA. 1202+00.00




| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 81 | 9 |

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JMK

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JDH 05-22-24

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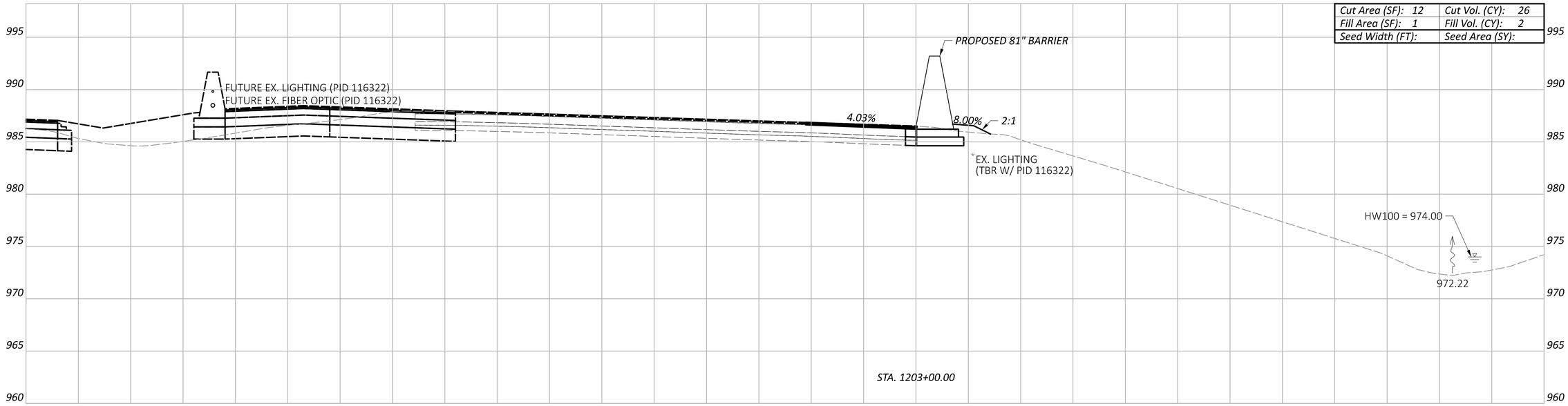
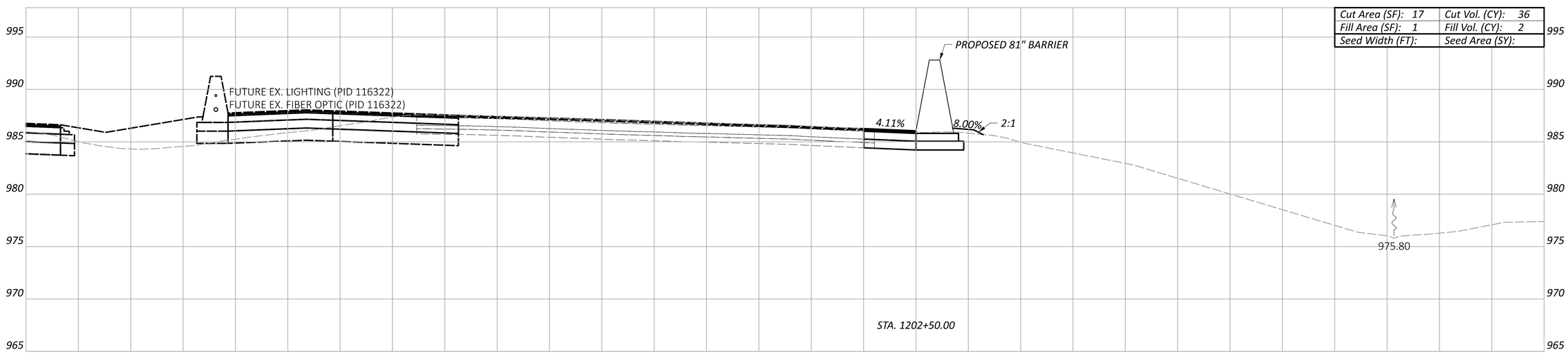
117607

| SHEET | TOTAL |
|---|---|
| P.175 | P.297 |




| Cut Area (SF): 12 | Cut Vol. (CY): 26 |
|---|---|
| Fill Area (SF): 1 | Fill Vol. (CY): 2 |
| Seed Width (FT): | Seed Area (SY): |




| Cut Area (SF): 17 | Cut Vol. (CY): 36 |
|---|---|
| Fill Area (SF): 1 | Fill Vol. (CY): 2 |
| Seed Width (FT): | Seed Area (SY): |

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 62 | 4 |

# FRA-161-15.80 NOISE ABATEMENT

# CROSS SECTIONS - 81" BARRIER 12
# STA. 1202+50.00 TO STA. 1203+00.00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PROJECT ID: 117607

SHEET: P.176 | TOTAL: P.297


MODEL: BLP_BARRIER12 - 1202+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:20:29 PM USER: BEN.BROWN
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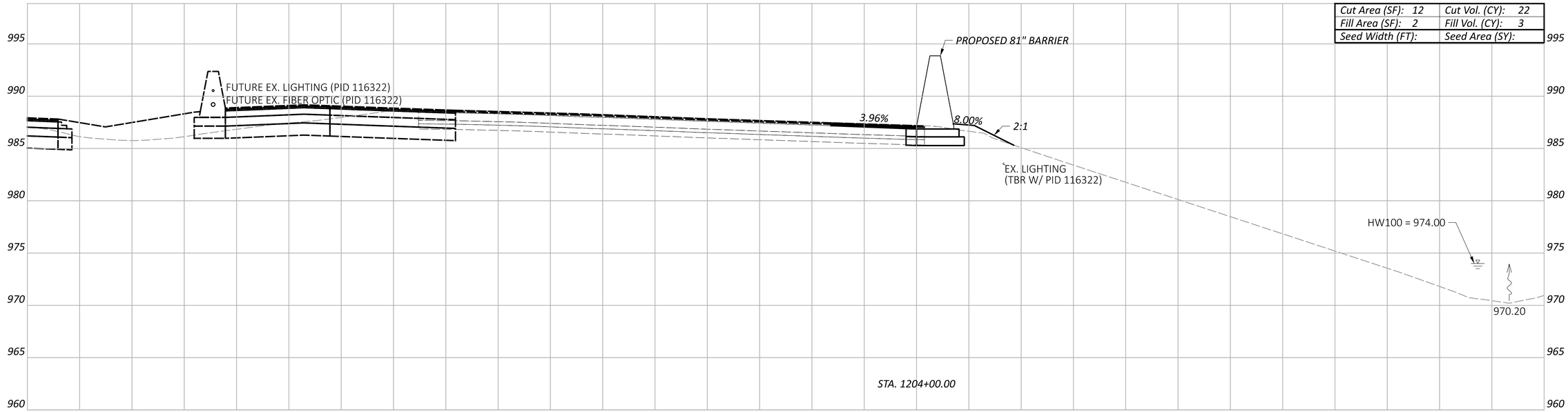


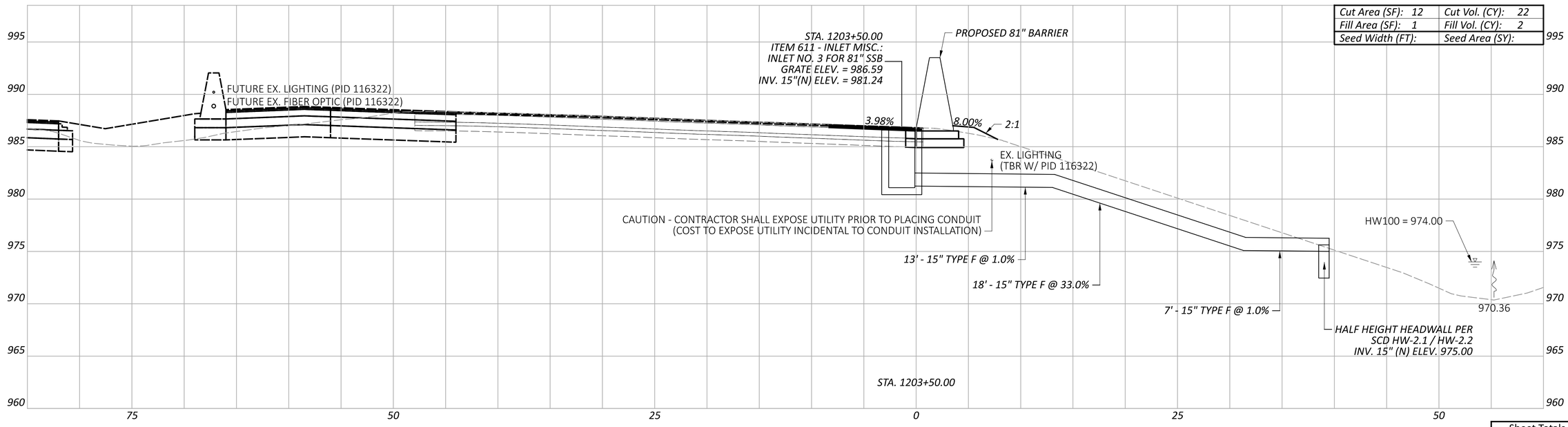


# CROSS SECTIONS - 81" BARRIER 12
# STA. 1203+50.00 TO STA. 1204+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER12 - 1203+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 3:31:47 PM USER: BEN.BROWN
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| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 44 | 5 |

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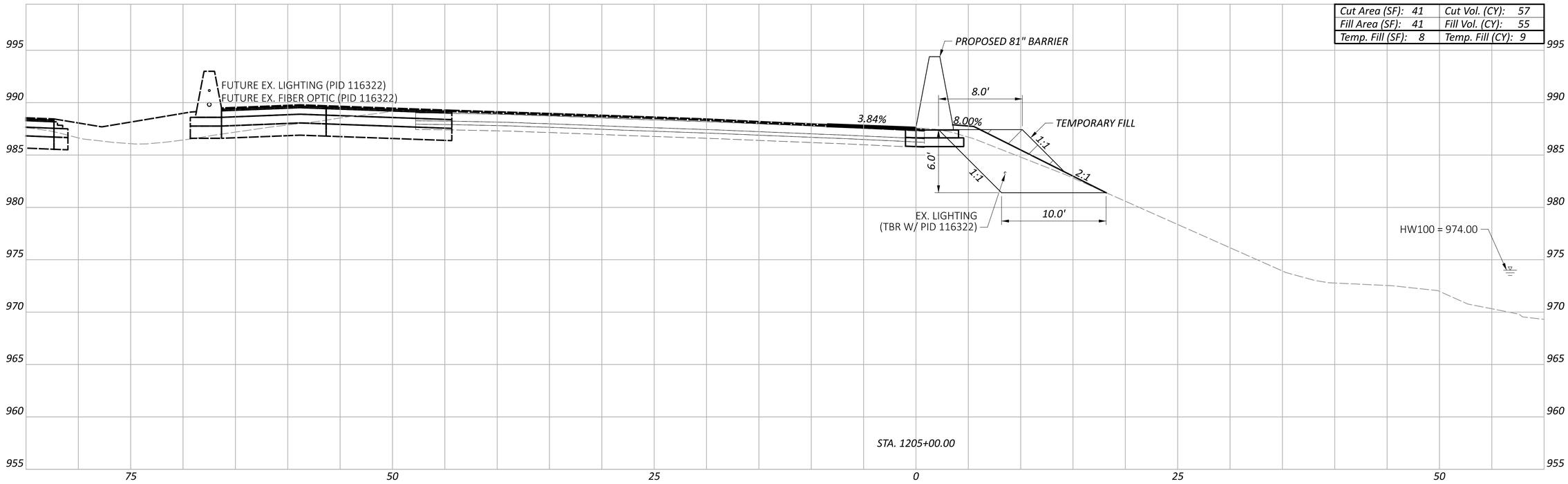
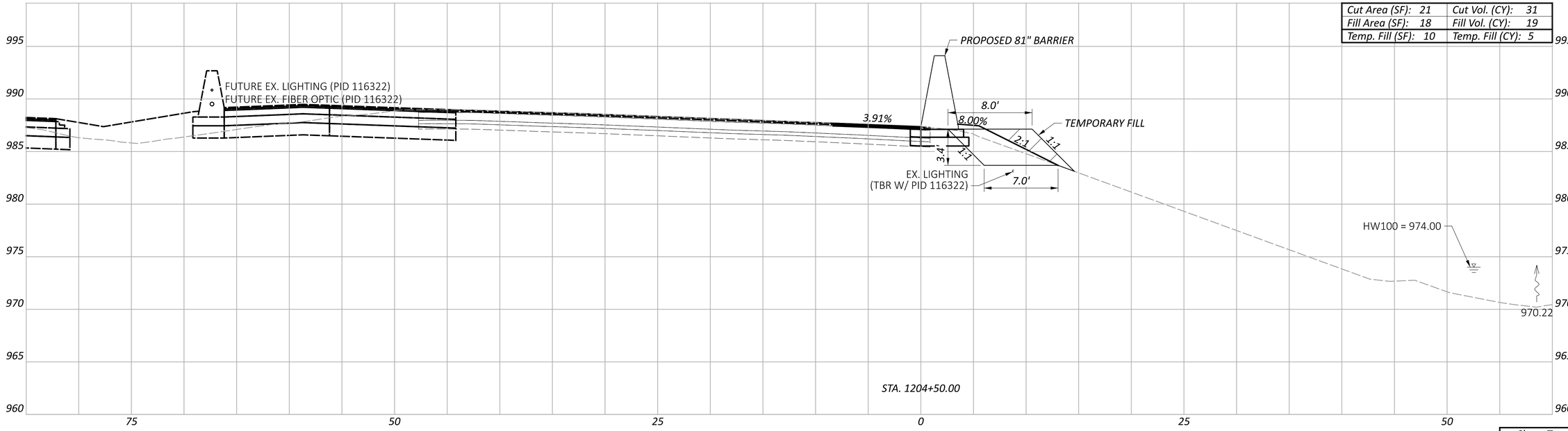
| SHEET | TOTAL |
|---|---|
| P.177 | P.297 |




| | | | |
|---|---|---|---|
| Cut Area (SF): | 41 | Cut Vol. (CY): | 57 |
| Fill Area (SF): | 41 | Fill Vol. (CY): | 55 |
| Temp. Fill (SF): | 8 | Temp. Fill (CY): | 9 |




| | | | |
|---|---|---|---|
| Cut Area (SF): | 21 | Cut Vol. (CY): | 31 |
| Fill Area (SF): | 18 | Fill Vol. (CY): | 19 |
| Temp. Fill (SF): | 10 | Temp. Fill (CY): | 5 |

| Sheet Totals | | |
|---|---|---|
| Temp. Fill | Cut | Fill |
| 14 | 88 | 74 |

# CROSS SECTIONS - 81" BARRIER 12
# STA. 1204+50.00 TO STA. 1205+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER12 - 1204+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:20:56 PM USER: BEN.BROWN
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JMK

REVIEWER
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PROJECT ID
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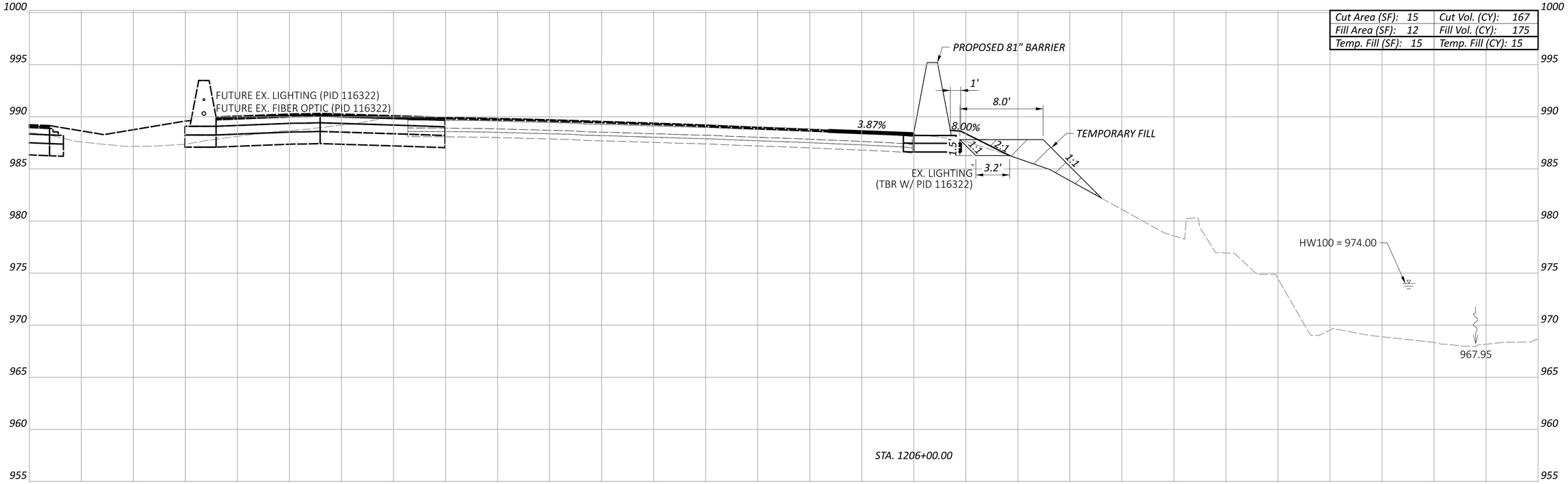
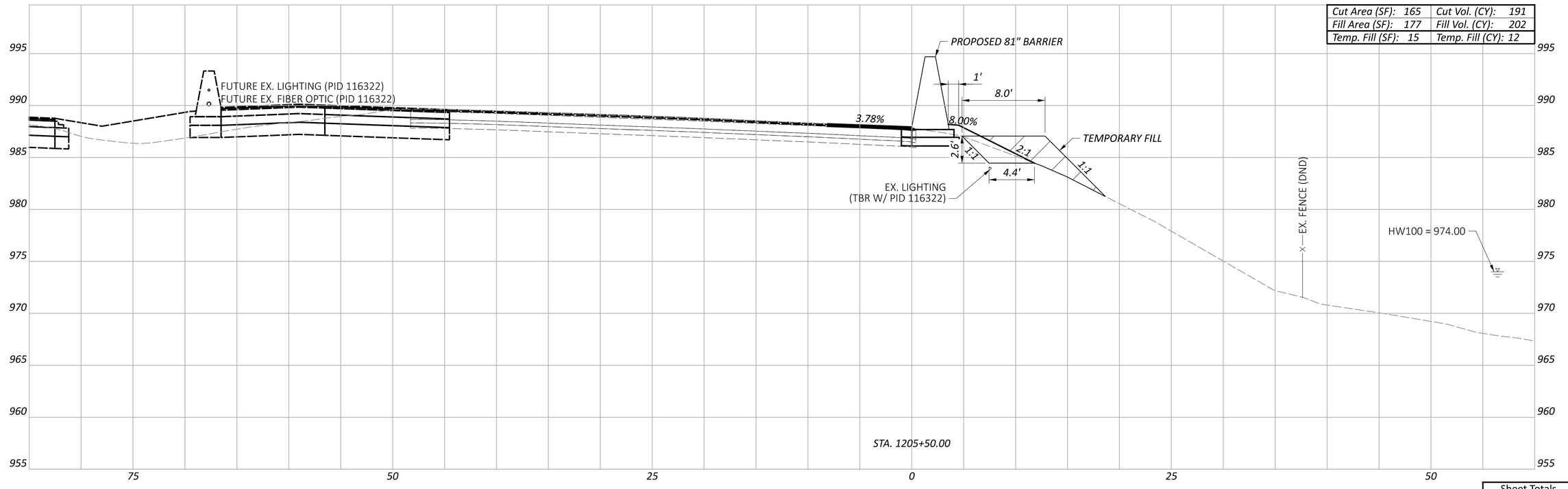
| SHEET | TOTAL |
|---|---|
| P.178 | P.297 |




# CROSS SECTIONS - 81" BARRIER 12
# STA. 1205+50.00 TO STA. 1206+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER12 - 1205+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:21:08 PM USER: BEN.BROWN
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| Sheet Totals | | |
|---|---|---|
| Temp. Fill | Cut | Fill |
| 27 | 358 | 377 |

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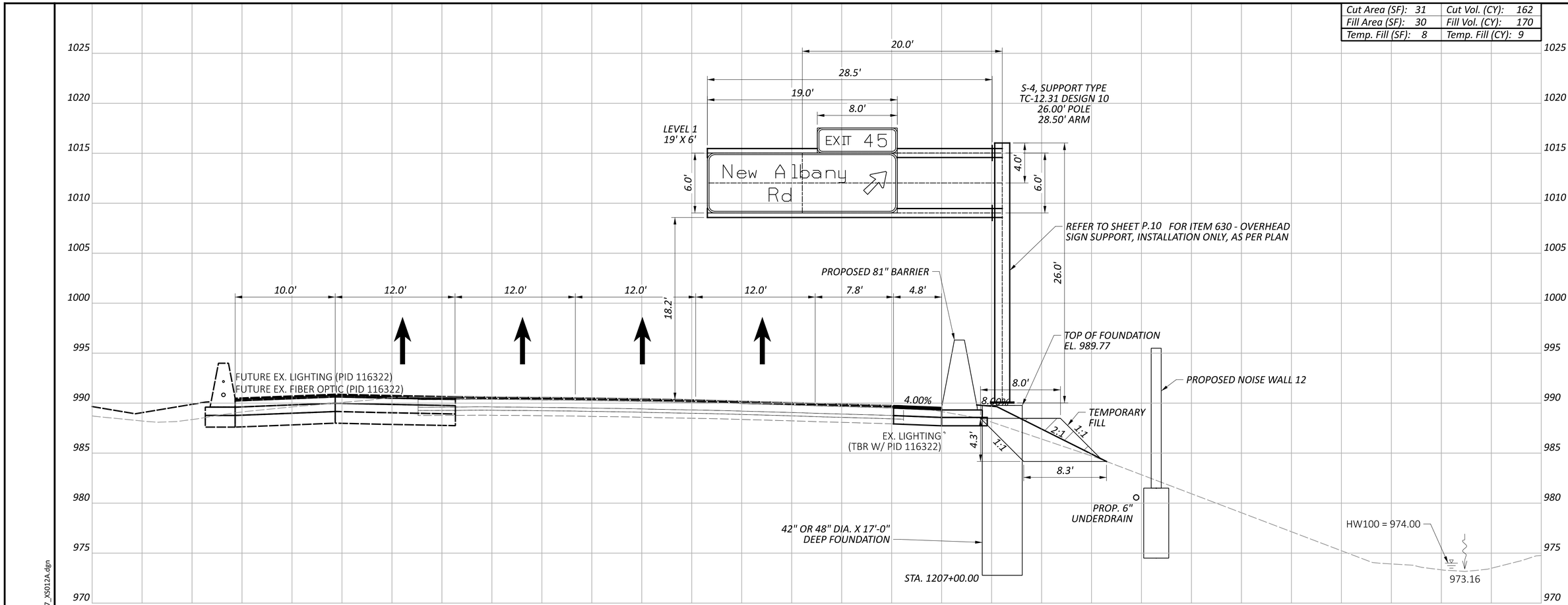
DESIGNER
JMK

REVIEWER
JDH 05-22-24

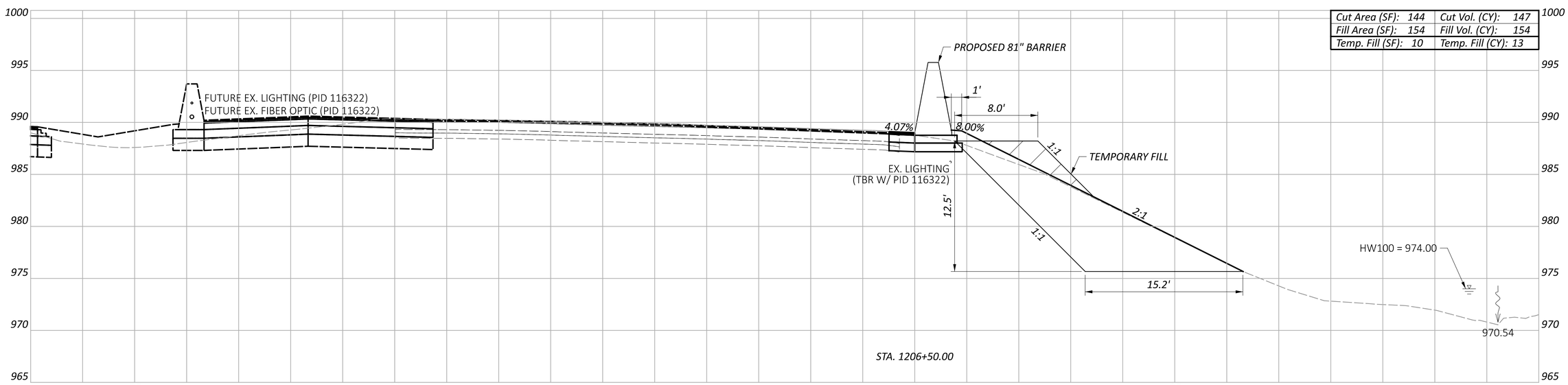
PROJECT ID
117607

SHEET P.179 TOTAL P.297

| Cut Area (SF): 31 | Cut Vol. (CY): 162 |
|---|---|
| Fill Area (SF): 30 | Fill Vol. (CY): 170 |
| Temp. Fill (SF): 8 | Temp. Fill (CY): 9 |




| Cut Area (SF): 144 | Cut Vol. (CY): 147 |
|---|---|
| Fill Area (SF): 154 | Fill Vol. (CY): 154 |
| Temp. Fill (SF): 10 | Temp. Fill (CY): 13 |




| Sheet Totals | | |
|---|---|---|
| Temp. Fill | Cut | Fill |
| 22 | 309 | 324 |

# CROSS SECTIONS - 81" BARRIER 12
# STA. 1206+50.00 TO STA. 1207+00.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_BARRIER12 - 1206+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-23 TIME: 8:51:30 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS012A.dgn



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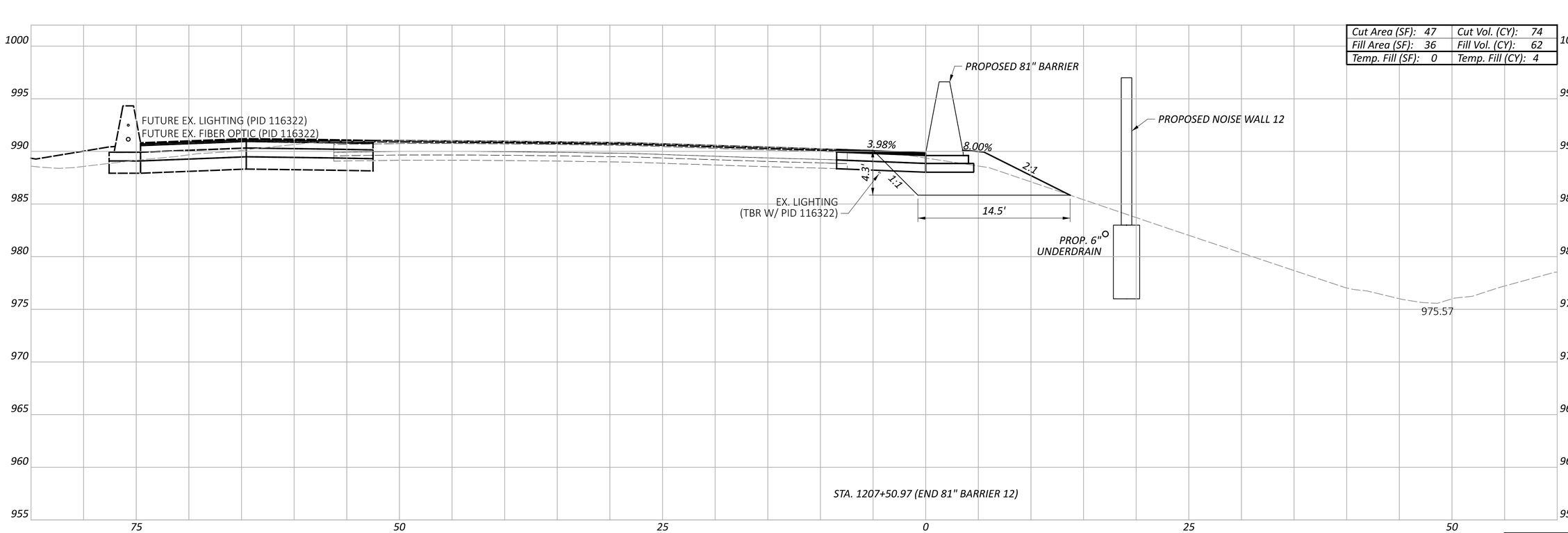
DESIGNER: JMK
REVIEWER: JDH 05-22-24
PROJECT ID: 117607
SHEET: P.180 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_BARRIER12 - 1207+50.97 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:21:33 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS012A.dgn

# CROSS SECTIONS - 81" BARRIER 12
## STA. 1207+50.97

| | |
|---|---|
| Cut Area (SF): 47 | Cut Vol. (CY): 74 |
| Fill Area (SF): 36 | Fill Vol. (CY): 62 |
| Temp. Fill (SF): 0 | Temp. Fill (CY): 4 |




| Sheet Totals | | |
|---|---|---|
| Temp. Fill | Cut | Fill |
| 4 | 74 | 62 |

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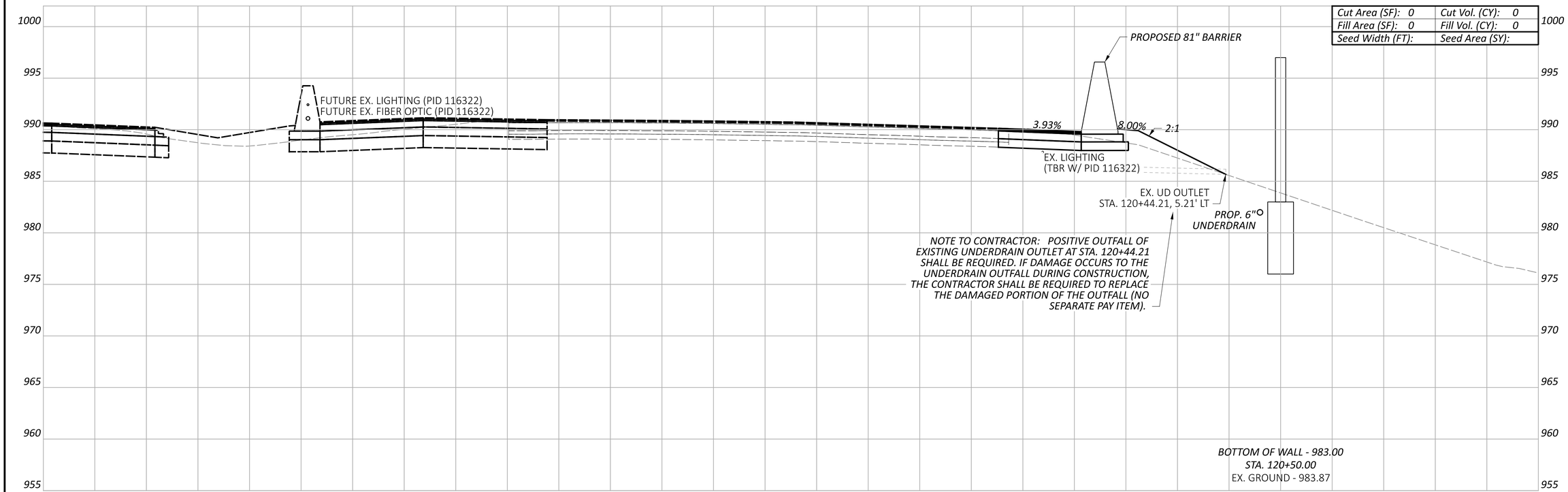
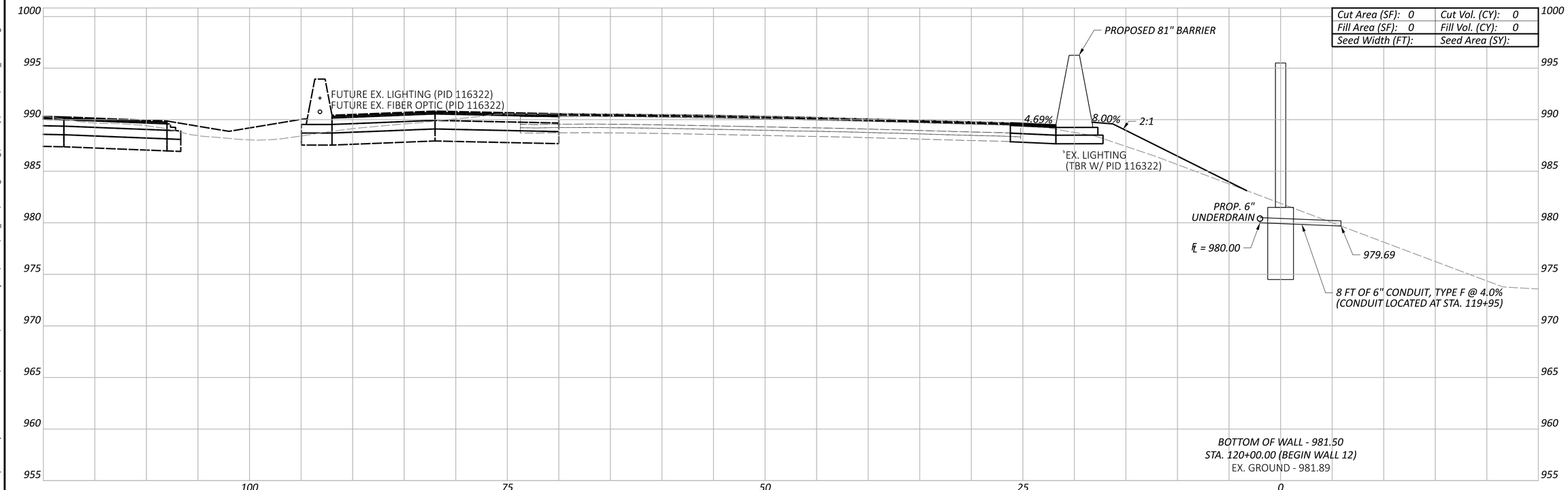
REVIEWER
JDH 05-22-24

PROJECT ID
117607

SHEET P.181 TOTAL P.297




LEGEND

*EXISTING SR-161 PRIOR TO PID 116322*

*FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322*

# CROSS SECTIONS - WALL 12
## STA. 120+00.00 TO STA. 120+50.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL13 - 120+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:21:58 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS012B.dgn


| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |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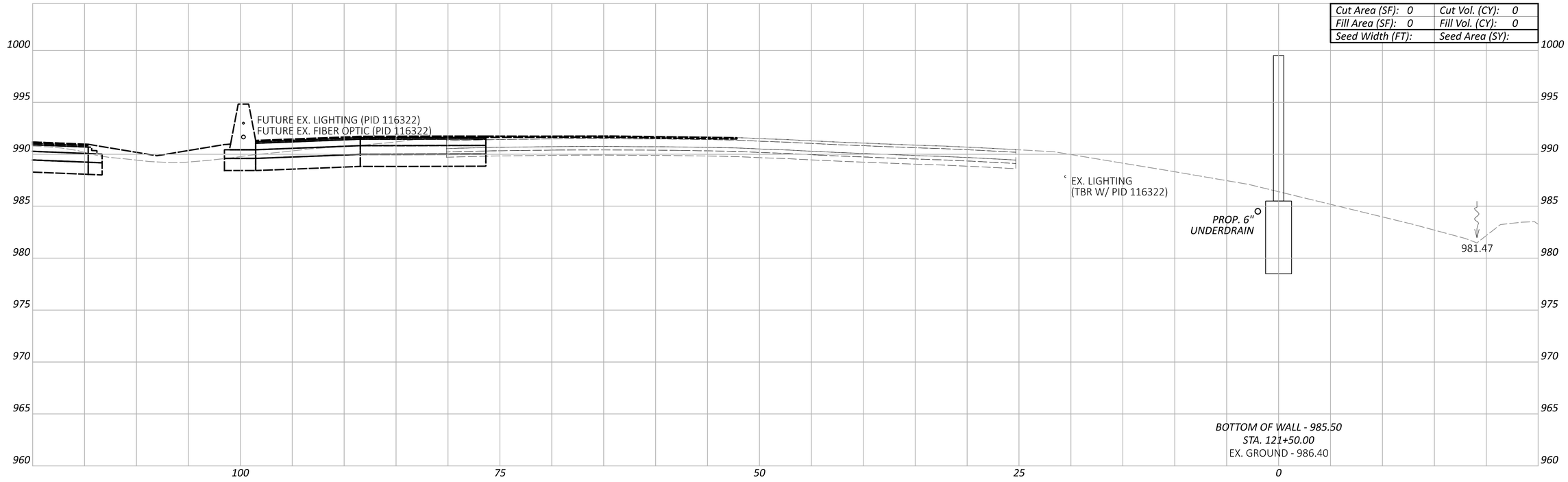
DESIGNER JMK

REVIEWER JDH 05-22-24

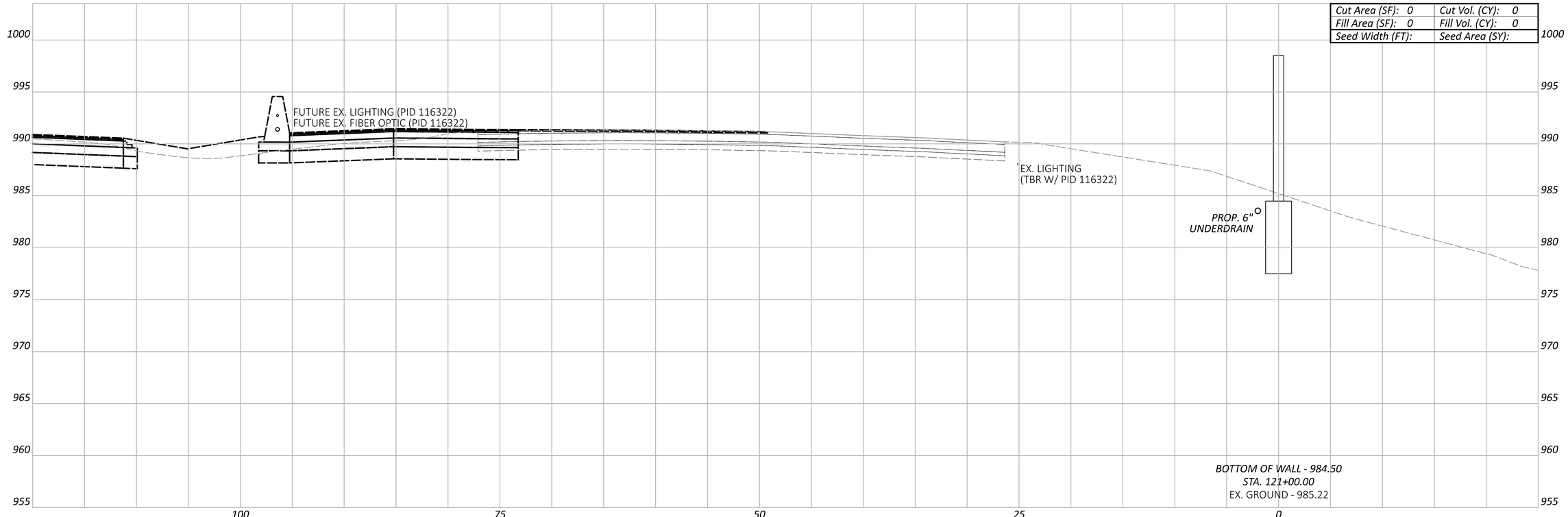
PROJECT ID 117607

SHEET P.182 TOTAL P.297

| Cut Area (SF): 0 | Cut Vol. (CY): 0 |
|---|---|
| Fill Area (SF): 0 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |




| Cut Area (SF): 0 | Cut Vol. (CY): 0 |
|---|---|
| Fill Area (SF): 0 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |




LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL13 - 121+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:22:15 PM USER: BEN.BROWN
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# CROSS SECTIONS - WALL 12
# STA. 121+00.00 TO STA. 121+50.00

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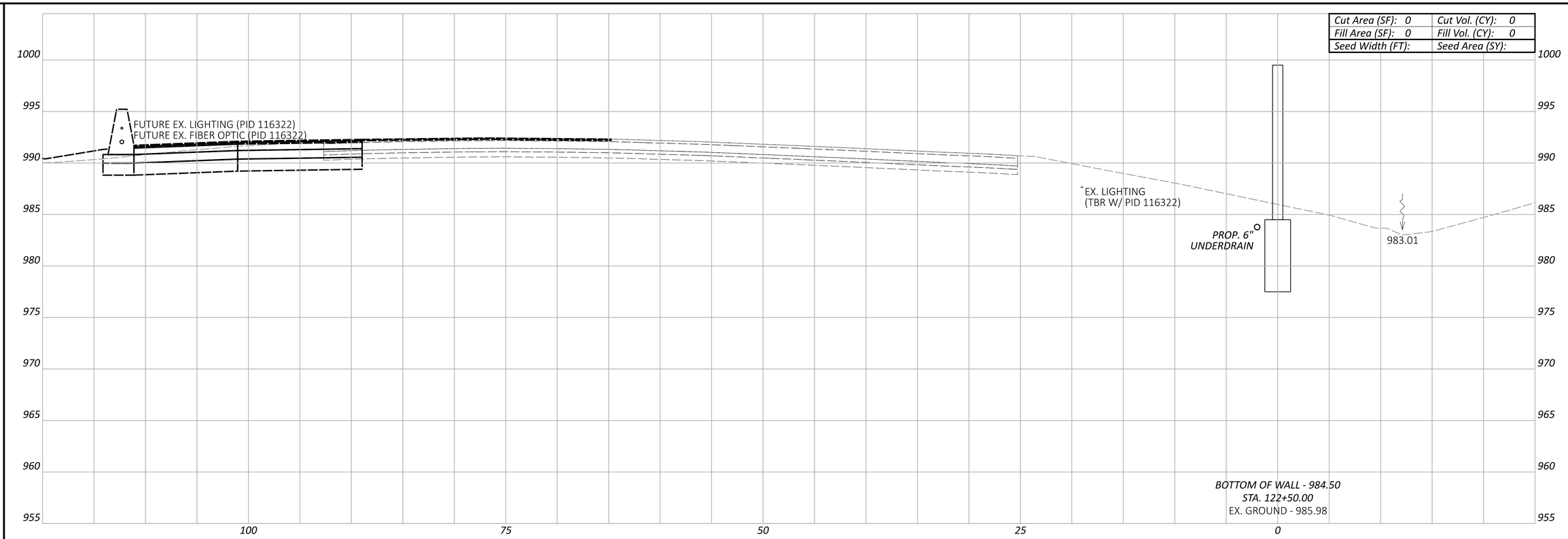
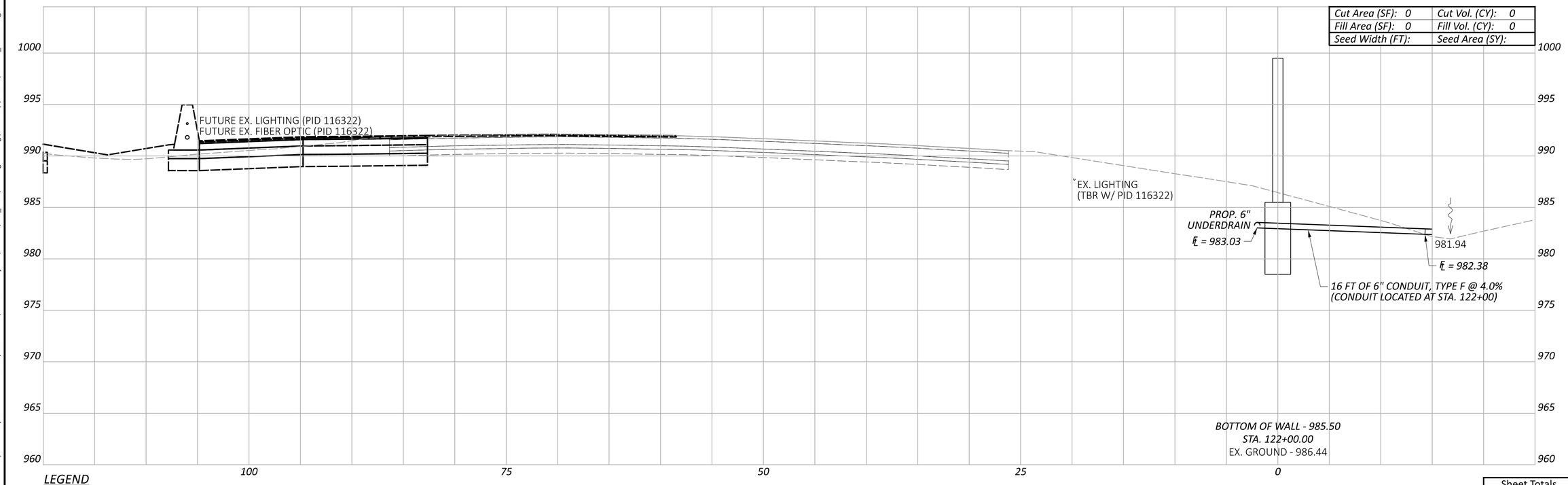
REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.183 TOTAL P.297




LEGEND

- - - EXISTING SR-161 PRIOR TO PID 116322

— — — FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 12
# STA. 122+00.00 TO STA. 122+50.00

FRA-161-15.80 NOISE ABATEMENT

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REVIEWER: JDH 05-22-24

PROJECT ID: 117607

SHEET: P.184 TOTAL: P.297

MODEL: BLP_WALL13 - 122+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:22:33 PM USER: BEN.BROWN
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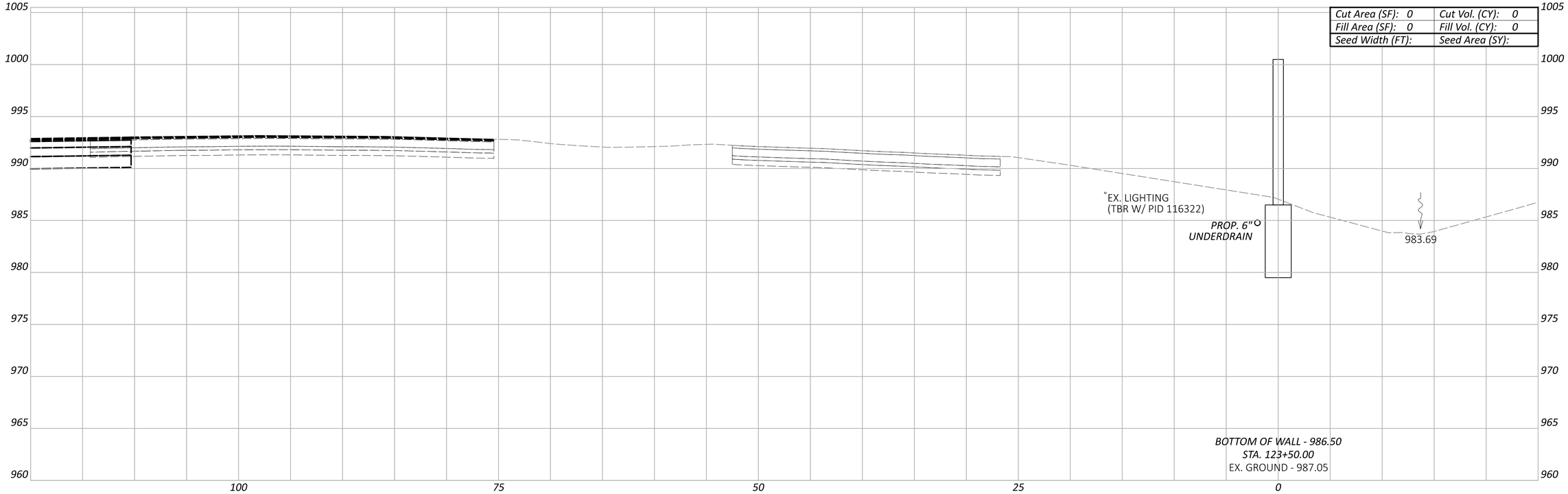


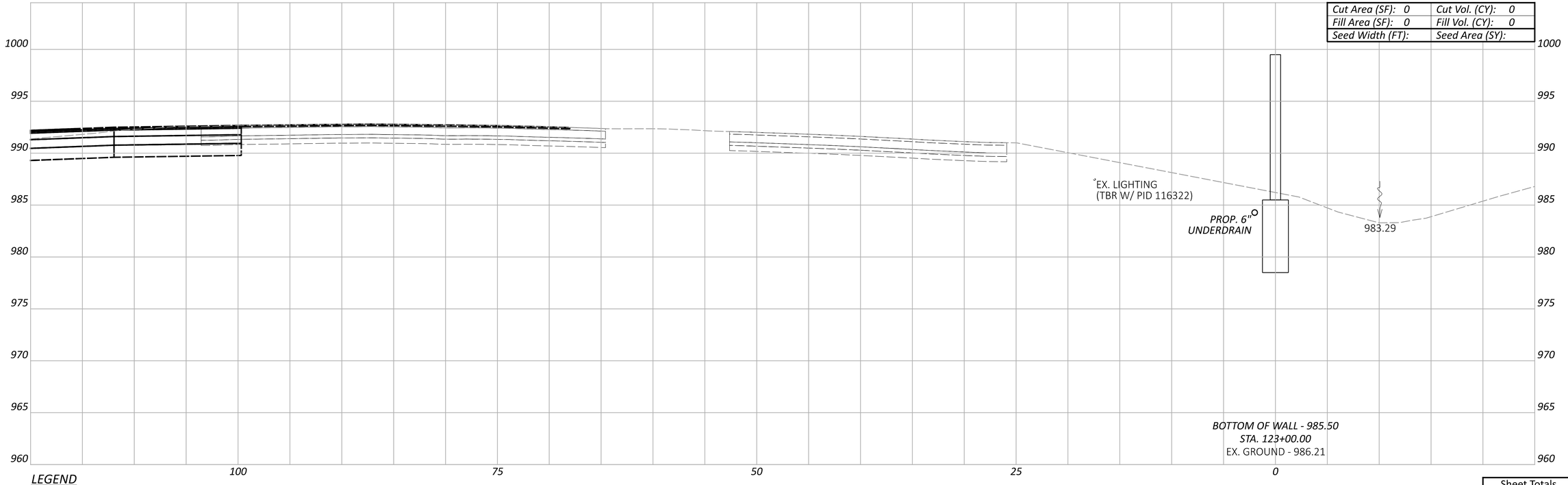


LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 12
# STA. 123+00.00 TO STA. 123+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL13 - 123+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:22:53 PM USER: BEN.BROWN
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PROJECT ID
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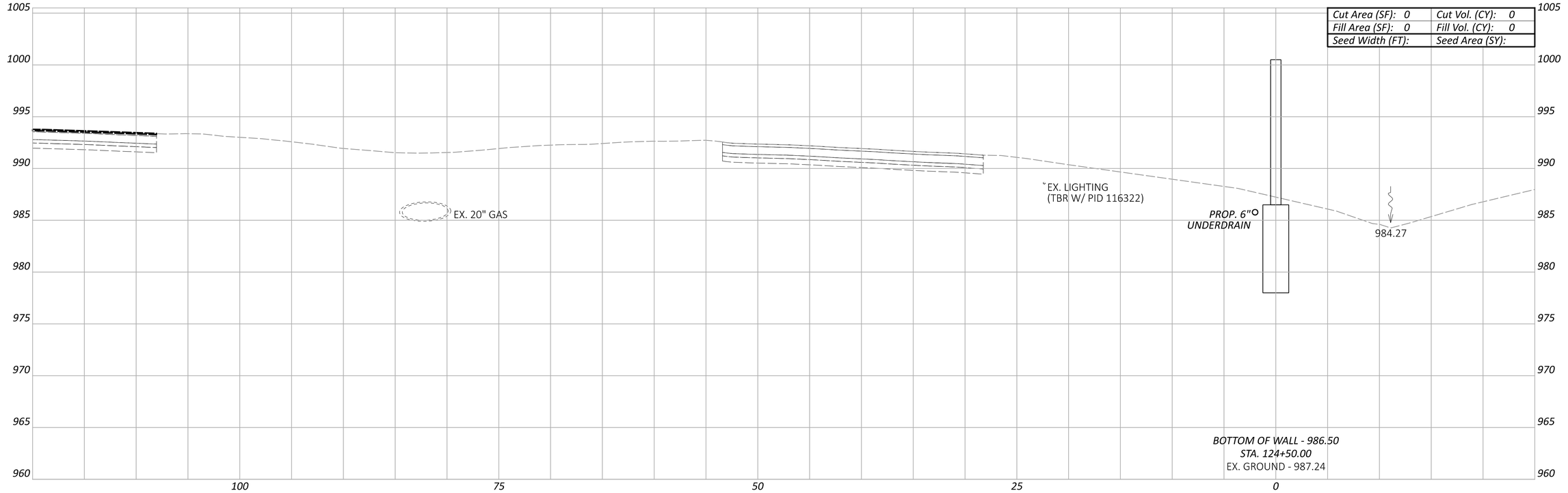
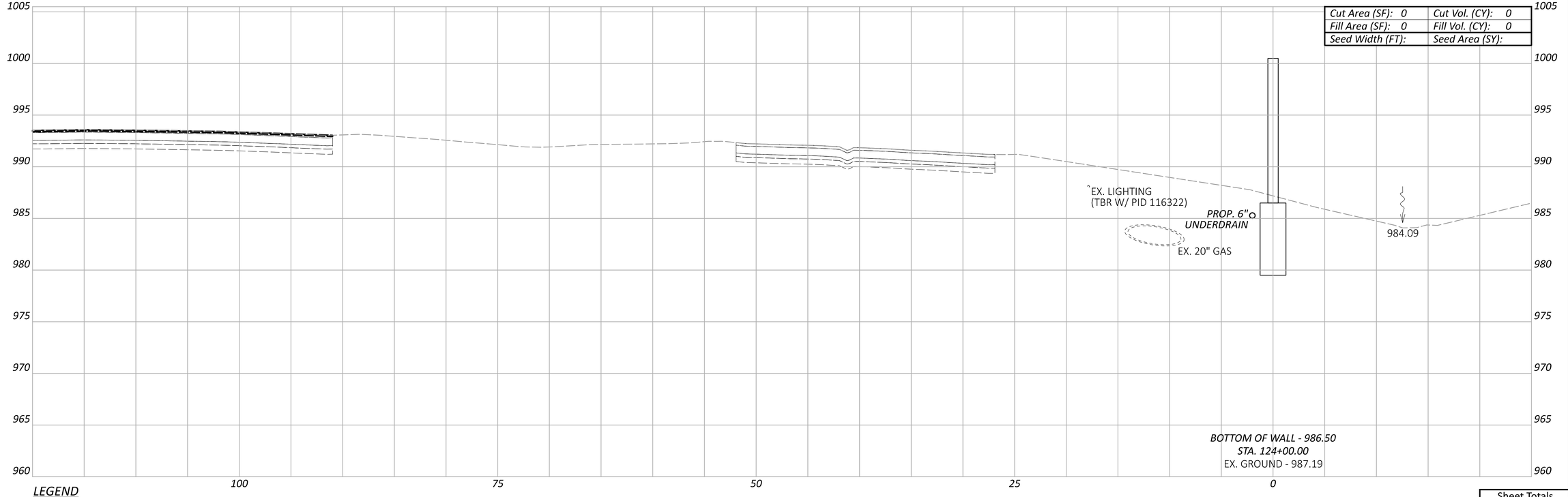
| SHEET | TOTAL |
|---|---|
| P.185 | P.297 |




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 12
# STA. 124+00.00 TO STA. 124+50.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL13 - 124+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:23:12 PM USER: BEN.BROWN
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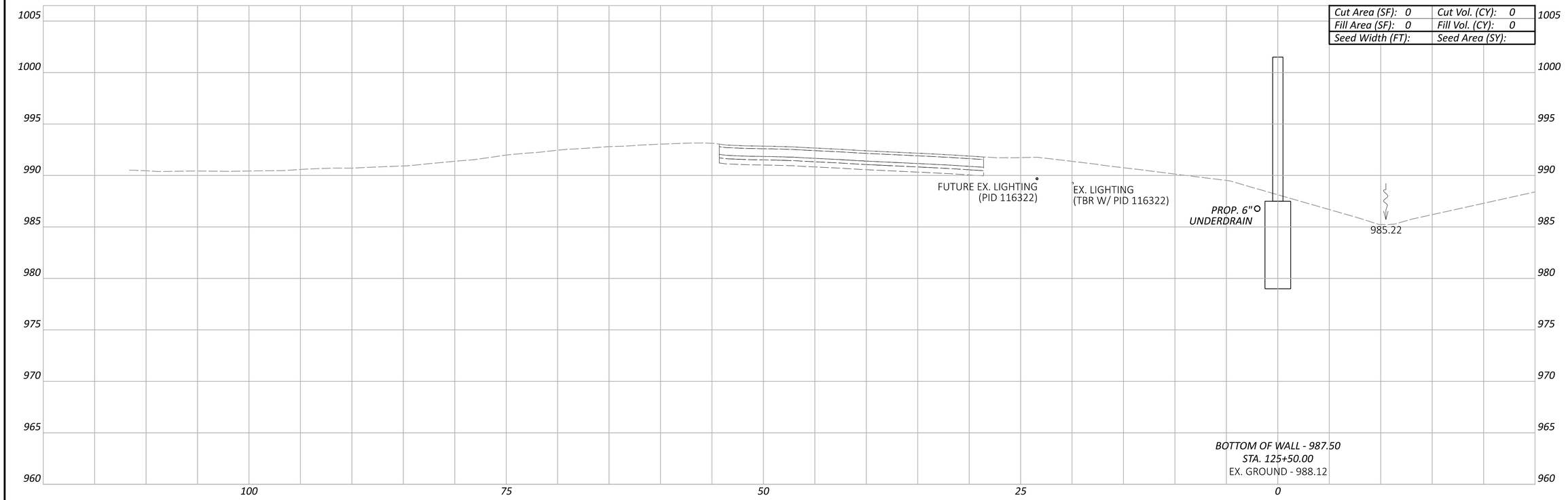
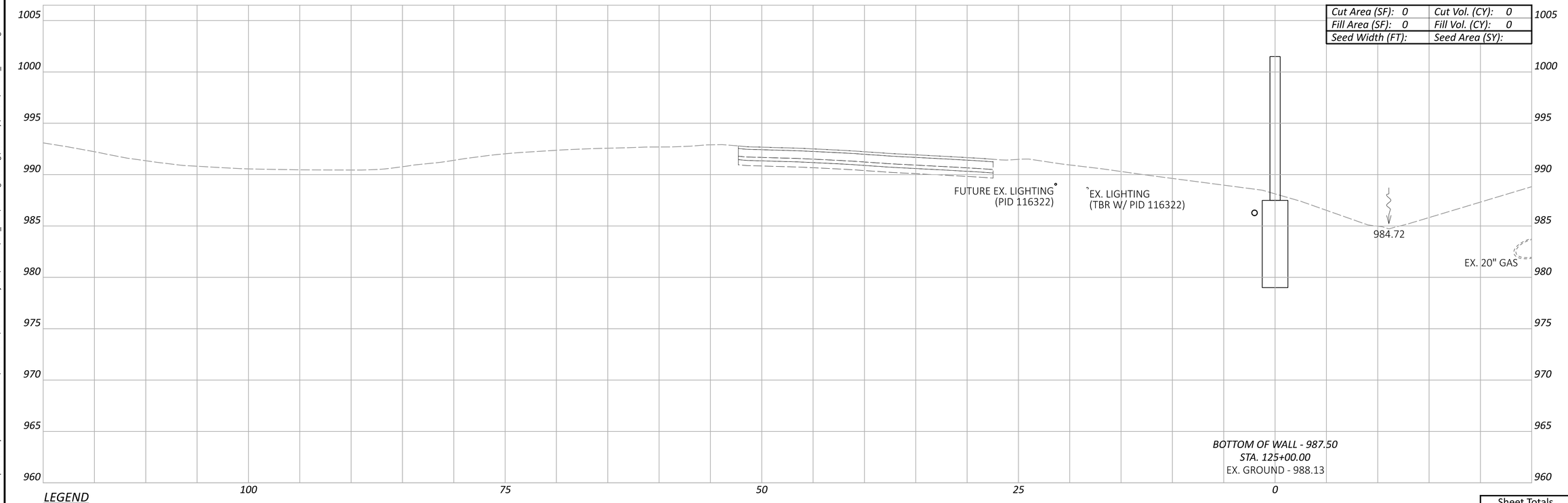
PROJECT ID 117607

SHEET P.186 TOTAL P.297




LEGEND

- - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 12
# STA. 125+00.00 TO STA. 125+50.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL13 - 125+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:23:43 PM USER: BEN.BROWN
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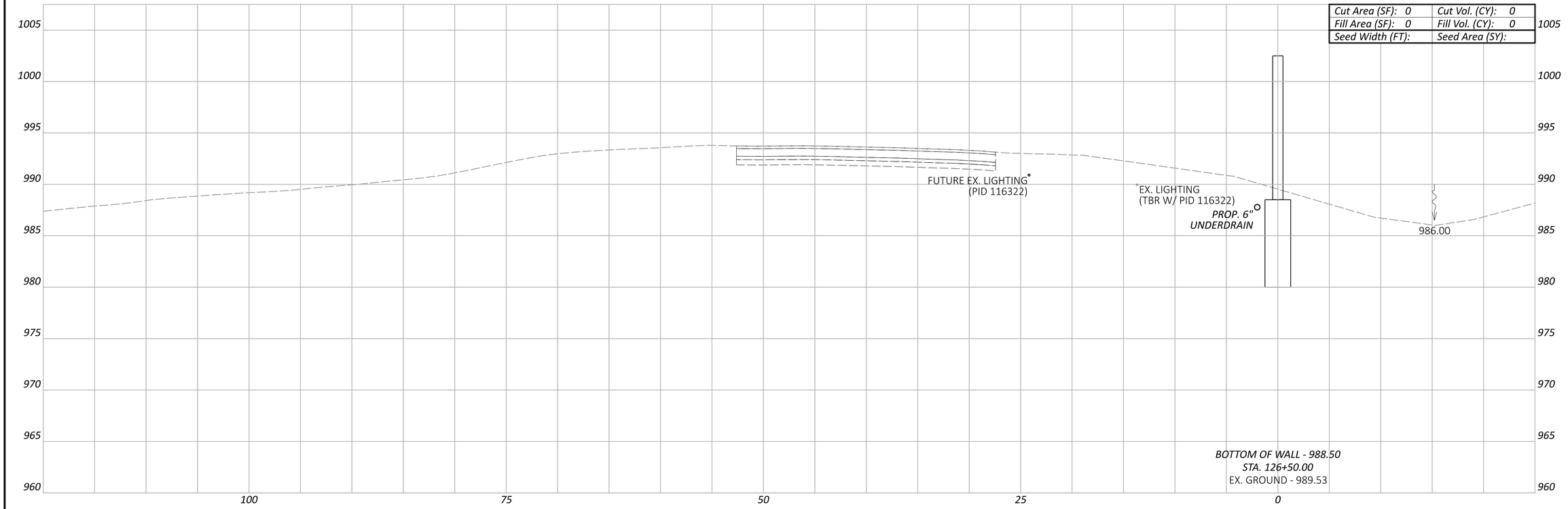
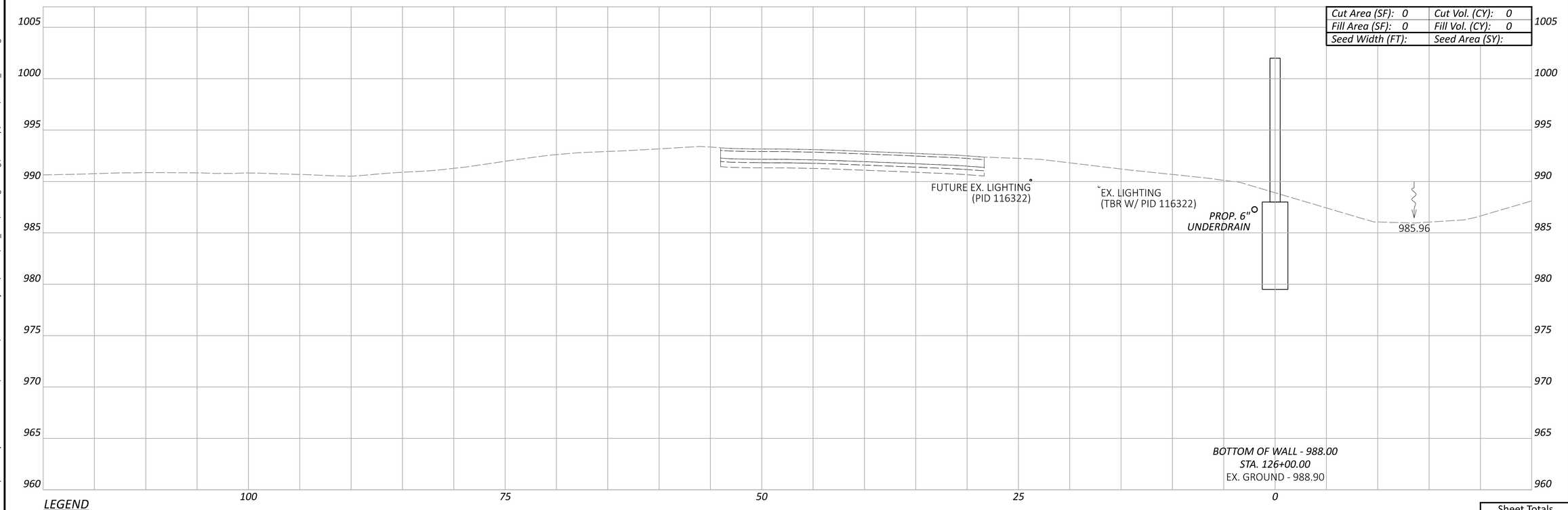
| SHEET | TOTAL |
|---|---|
| P.187 | P.297 |




LEGEND

- - - EXISTING SR-161 PRIOR TO PID 116322

— — — FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

FRA-161-15.80 NOISE ABATEMENT

CROSS SECTIONS - WALL 12
STA. 126+00.00 TO STA. 126+50.00

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| SHEET | TOTAL |
|---|---|
| P.188 | P.297 |

MODEL: BLP_WALL13 - 126+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:24:45 PM USER: BEN.BROWN
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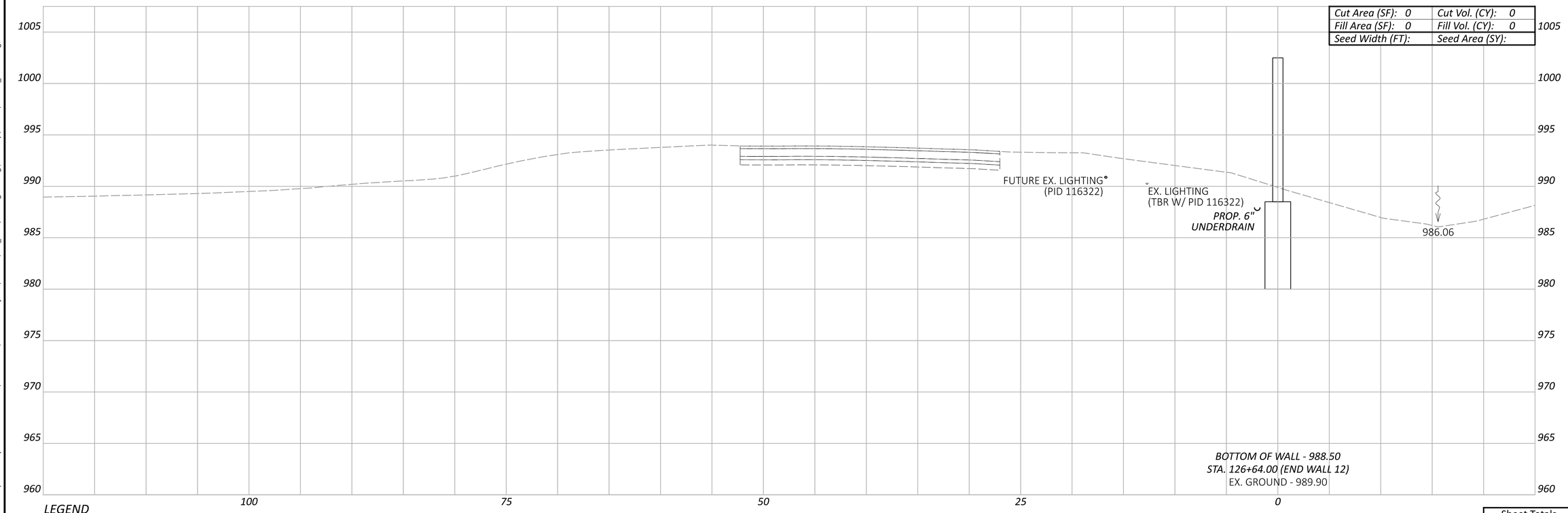
# FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL13 - 126+64.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:25:45 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS012B.dgn

| | |
|---|---|
| Cut Area (SF): 0 | Cut Vol. (CY): 0 |
| Fill Area (SF): 0 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

## CROSS SECTIONS - WALL 12
## STA. 126+64.00

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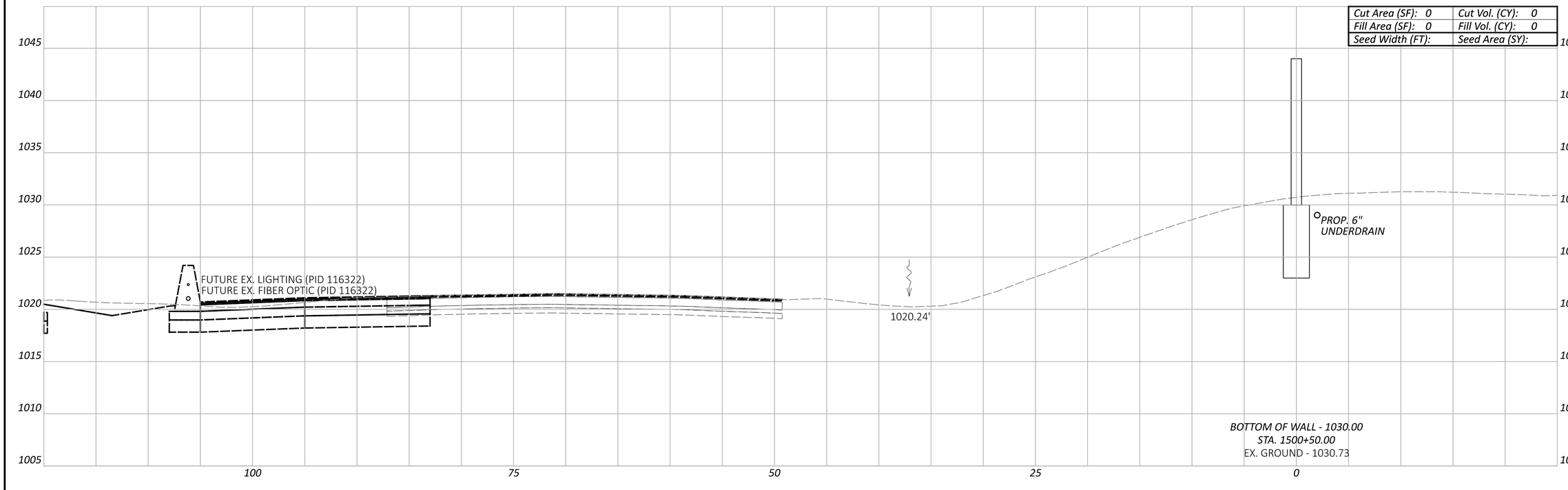
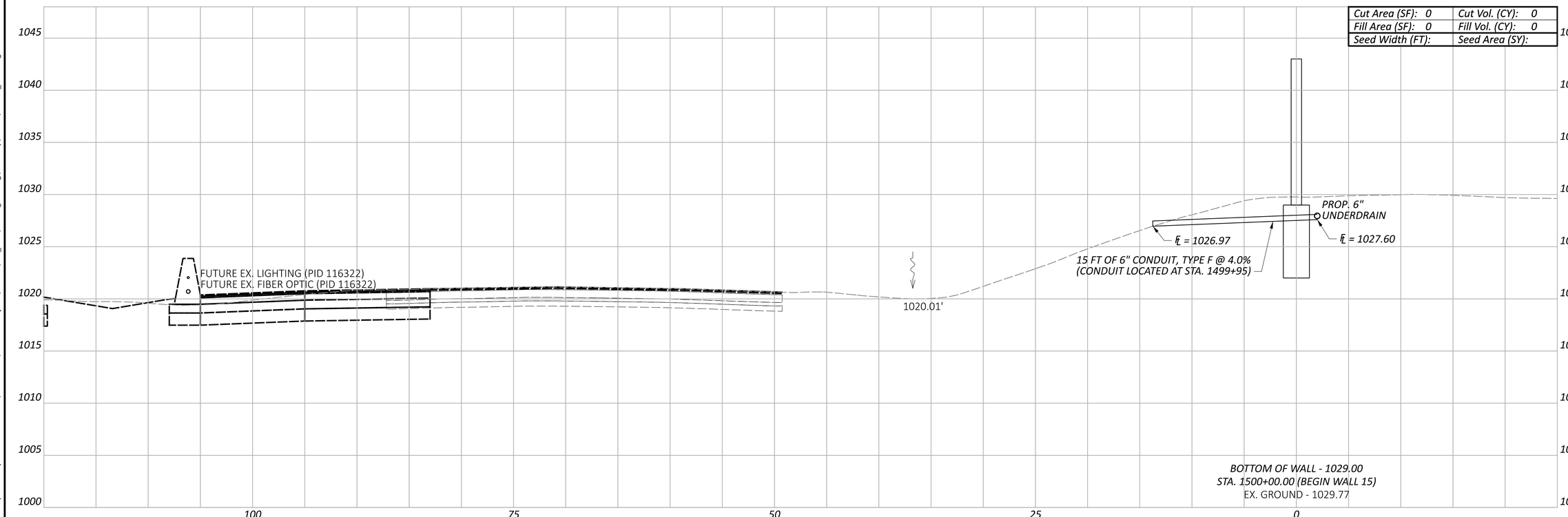
| SHEET | TOTAL |
|---|---|
| P.189 | P.297 |




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL15 - 1500+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 8:27:23 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS015.dgn

# CROSS SECTIONS - WALL 15
## STA. 1500+00.00 TO STA. 1500+50.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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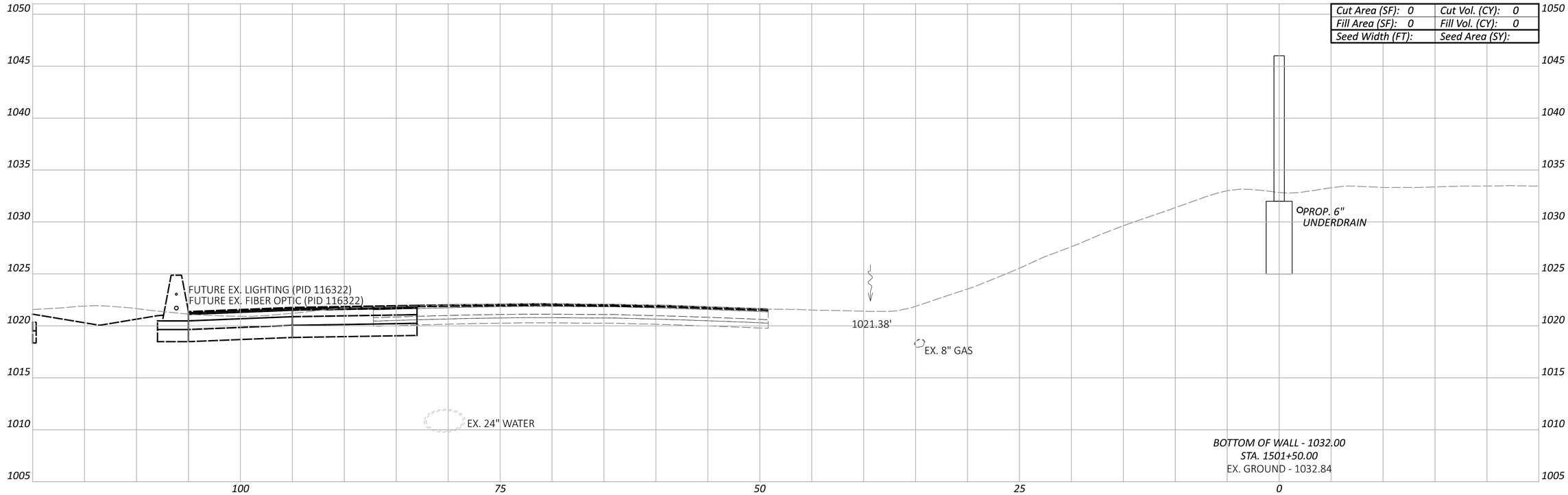
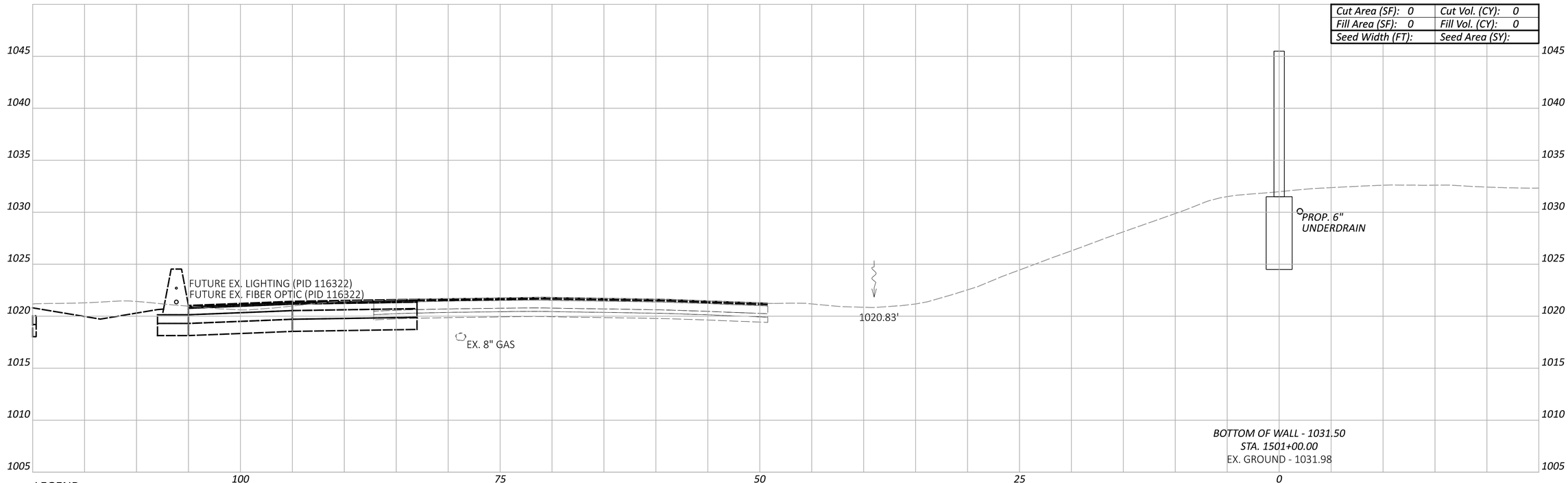
REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.190 TOTAL P.297




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

— — — FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 15
## STA. 1501+00.00 TO STA. 1501+50.00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DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.191 TOTAL P.297

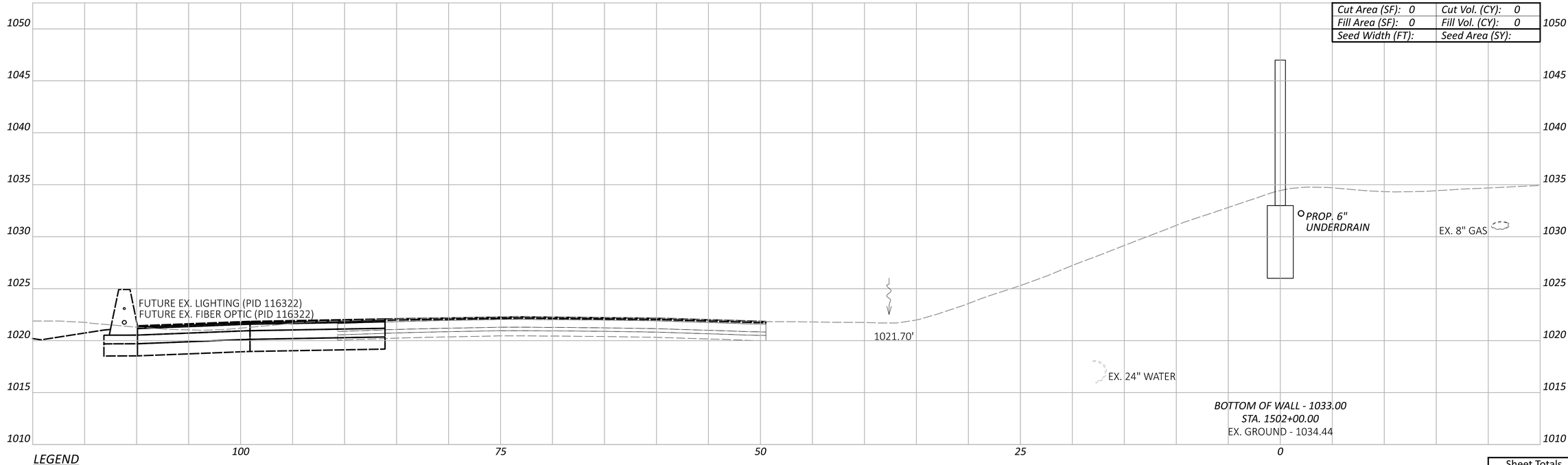
FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL15 - 1501+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 8:28:01 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS015.dgn

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL15 - 1502+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 8:28:19 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS015.dgn

CROSS SECTIONS - WALL 15
STA. 1502+00.00




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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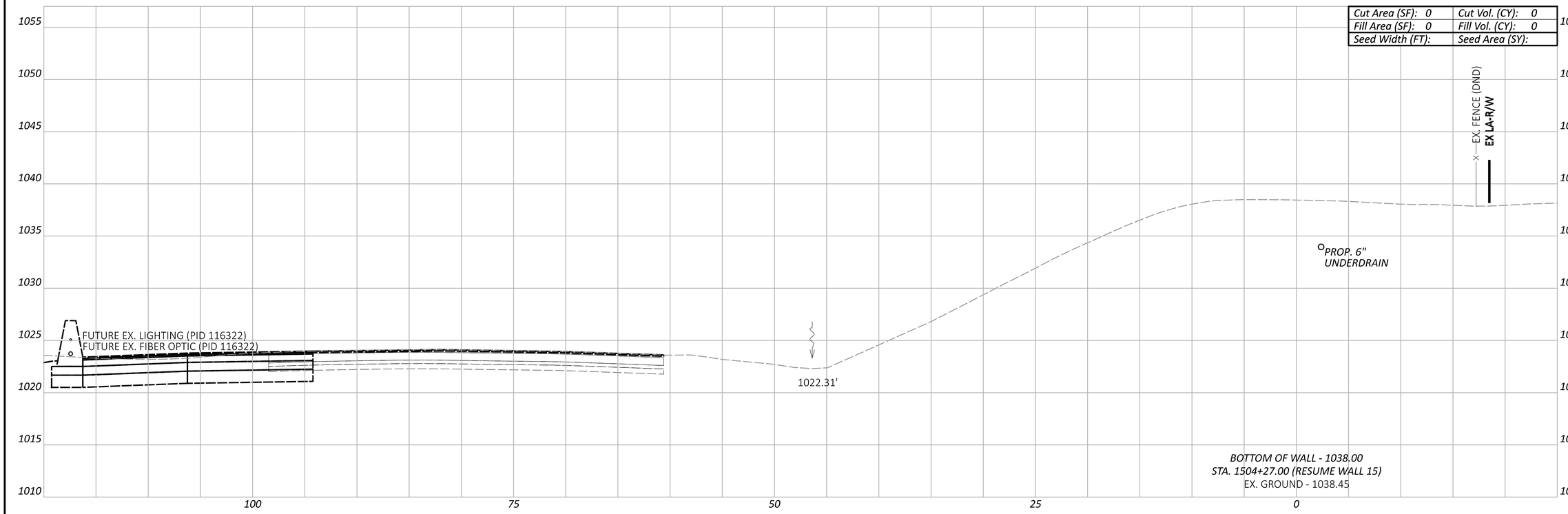
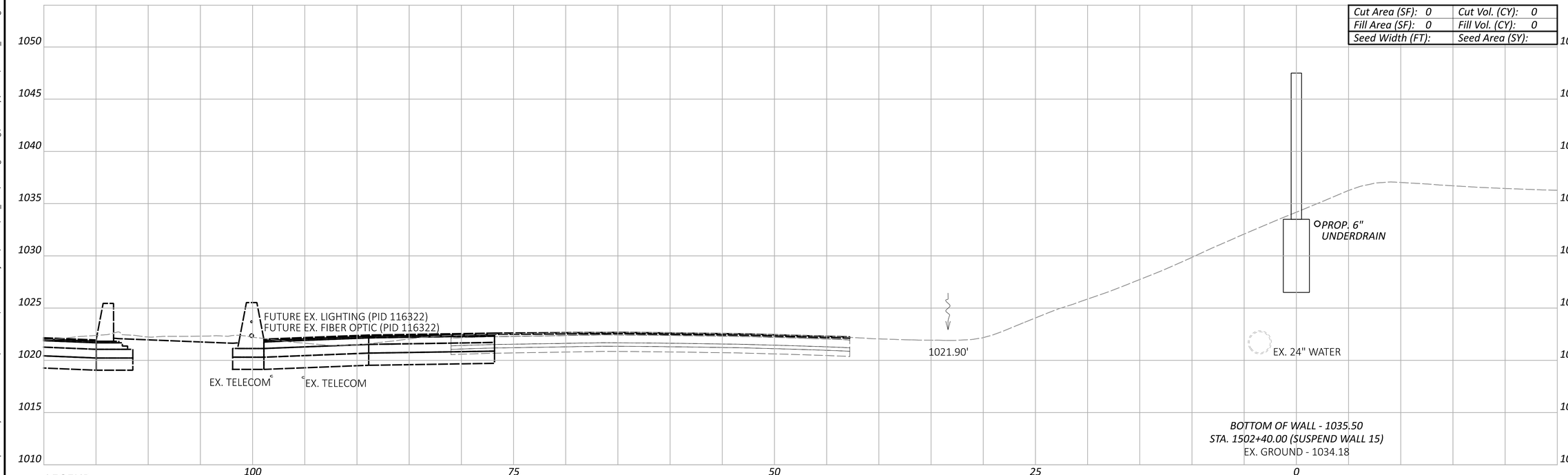
DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.192 TOTAL P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 15
# STA. 1502+40.00 TO STA. 1504+27.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL15 - 1502+64.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 8:28:28 AM USER: jennifer.kelley
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DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

| Sheet Totals | | |
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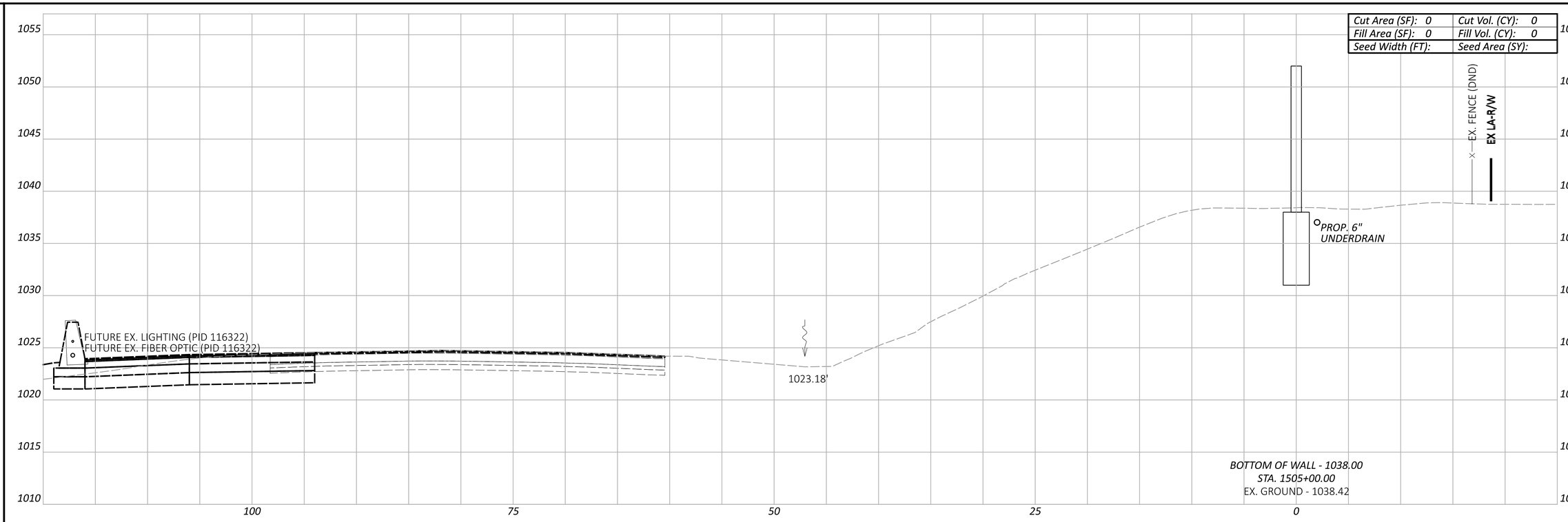
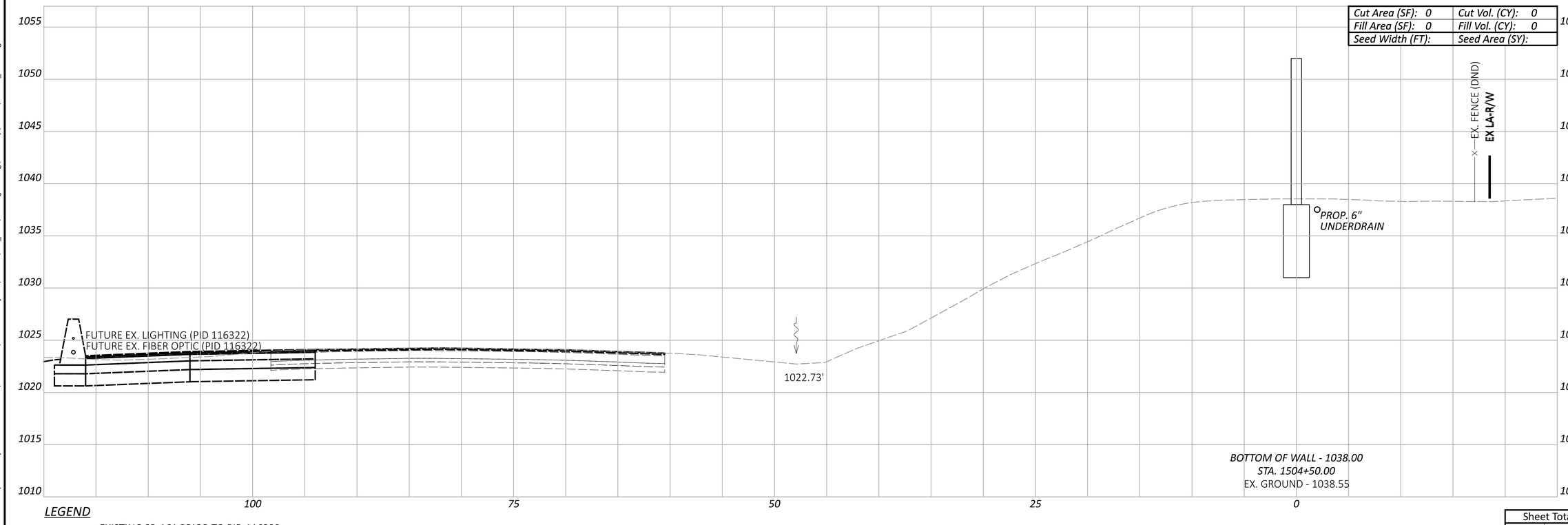
SHEET P.193 TOTAL P.297




LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 15
## STA. 1504+50.00 TO STA. 1505+00.00

FRA-161-15.80 NOISE ABATEMENT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SHEET P.194 TOTAL P.297


MODEL: BLP_WALL15 - 1504+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:27:49 PM USER: BEN.BROWN
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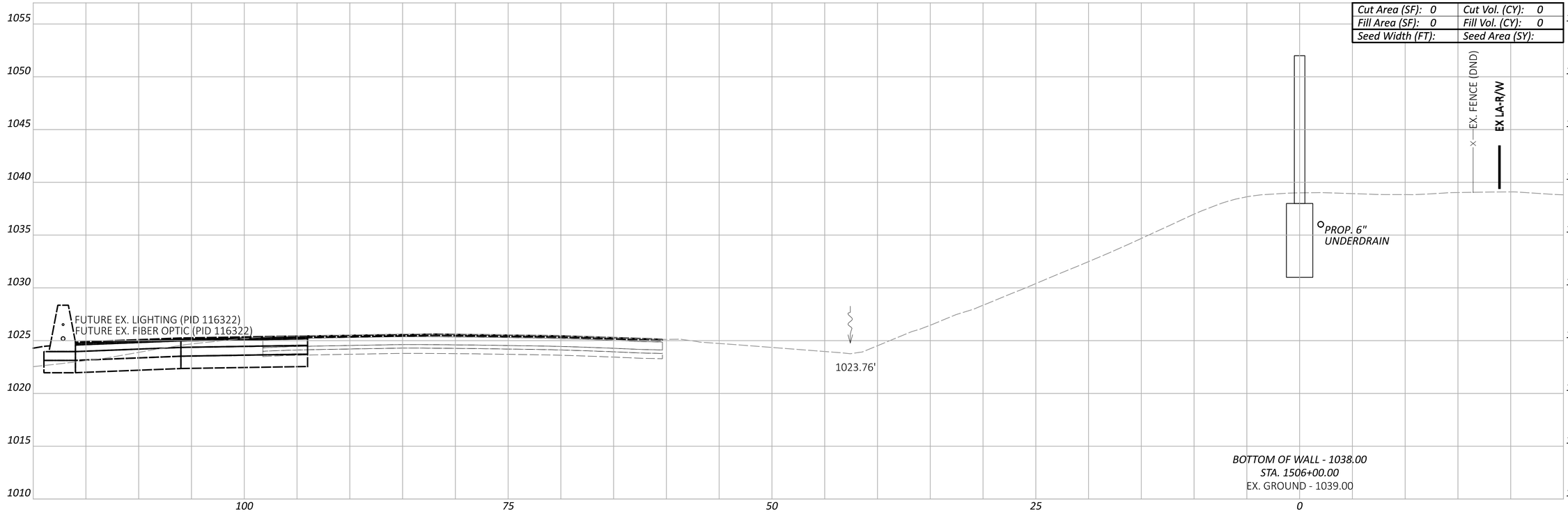


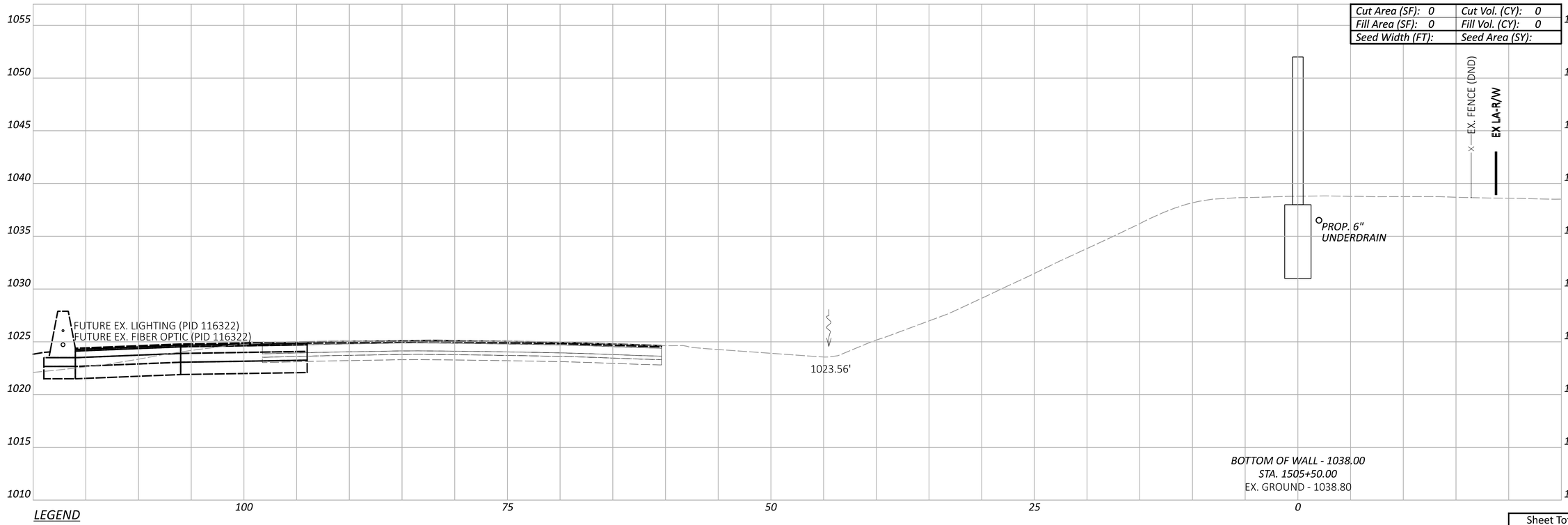


LEGEND

*EXISTING SR-161 PRIOR TO PID 116322*

*FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322*

# FRA-161-15.80 NOISE ABATEMENT

# CROSS SECTIONS - WALL 15
# STA. 1505+50.00 TO STA. 1506+00.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |


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SHEET: P.195 TOTAL: P.297


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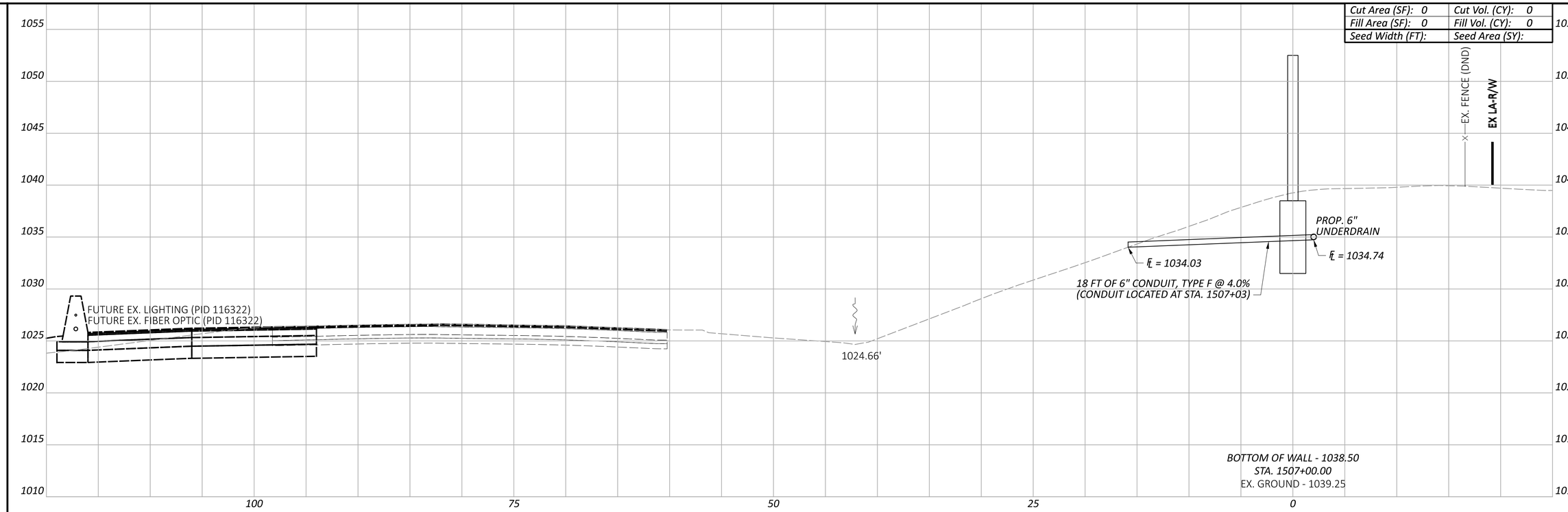


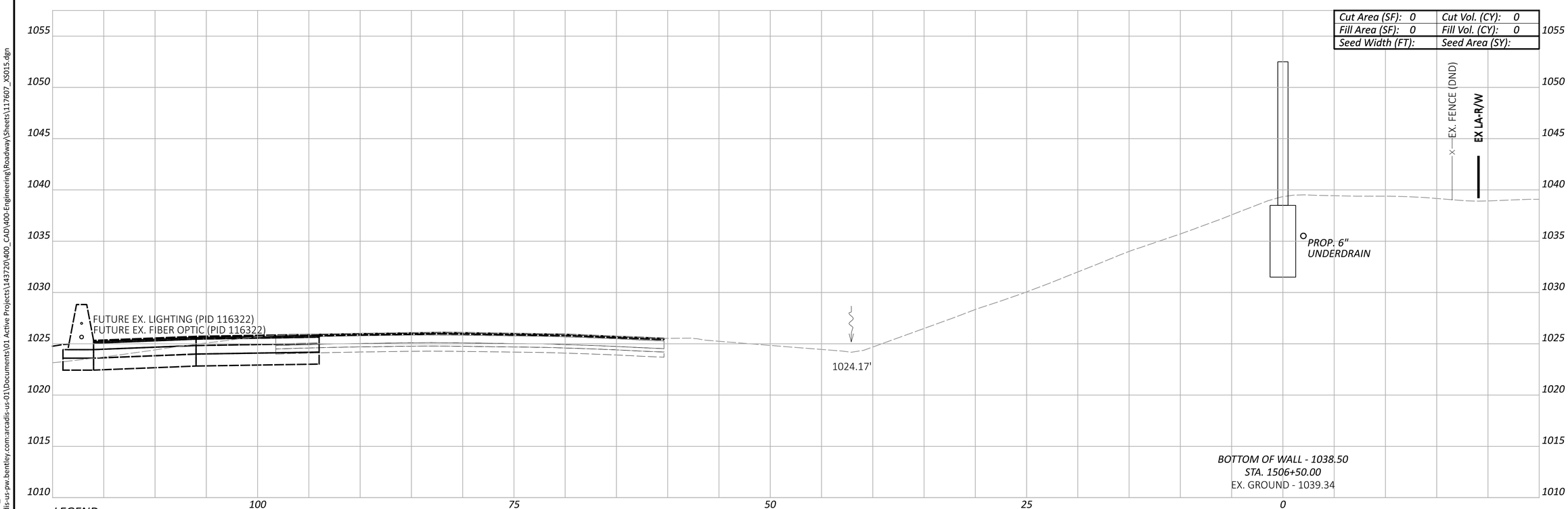


LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 15
## STA. 1506+50.00 TO STA. 1507+00.00

FRA-161-15.80 NOISE ABATEMENT

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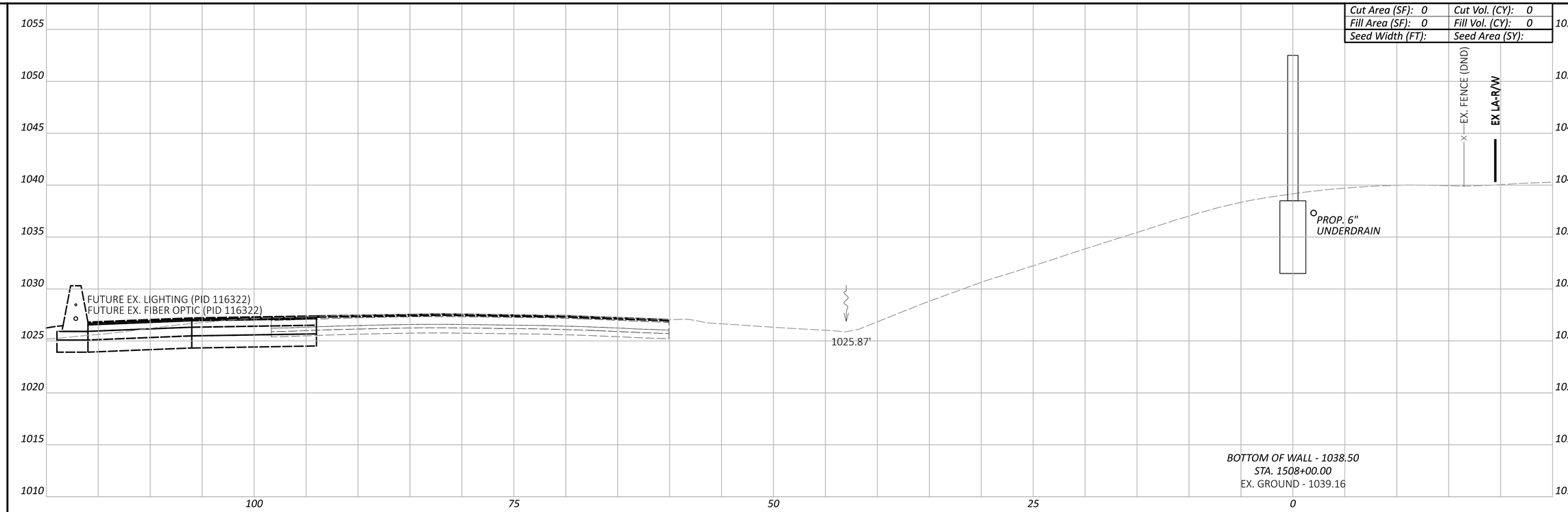
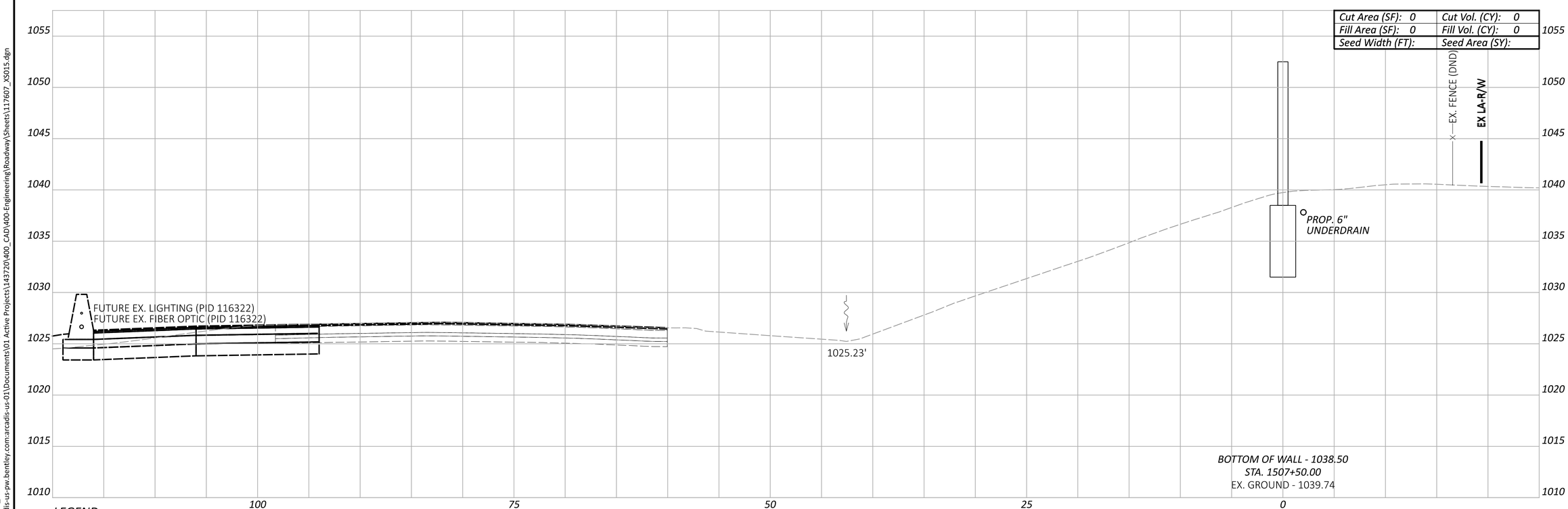
SHEET P.196 TOTAL P.297




LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 15
## STA. 1507+50.00 TO STA. 1508+00.00

FRA-161-15.80 NOISE ABATEMENT

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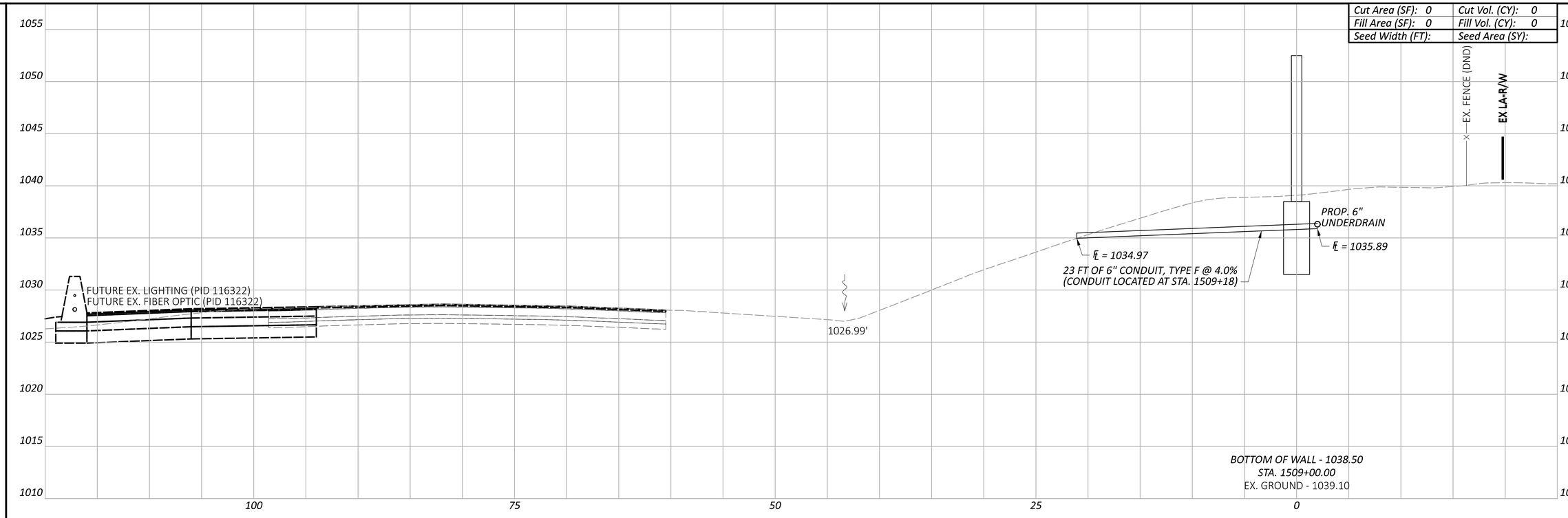
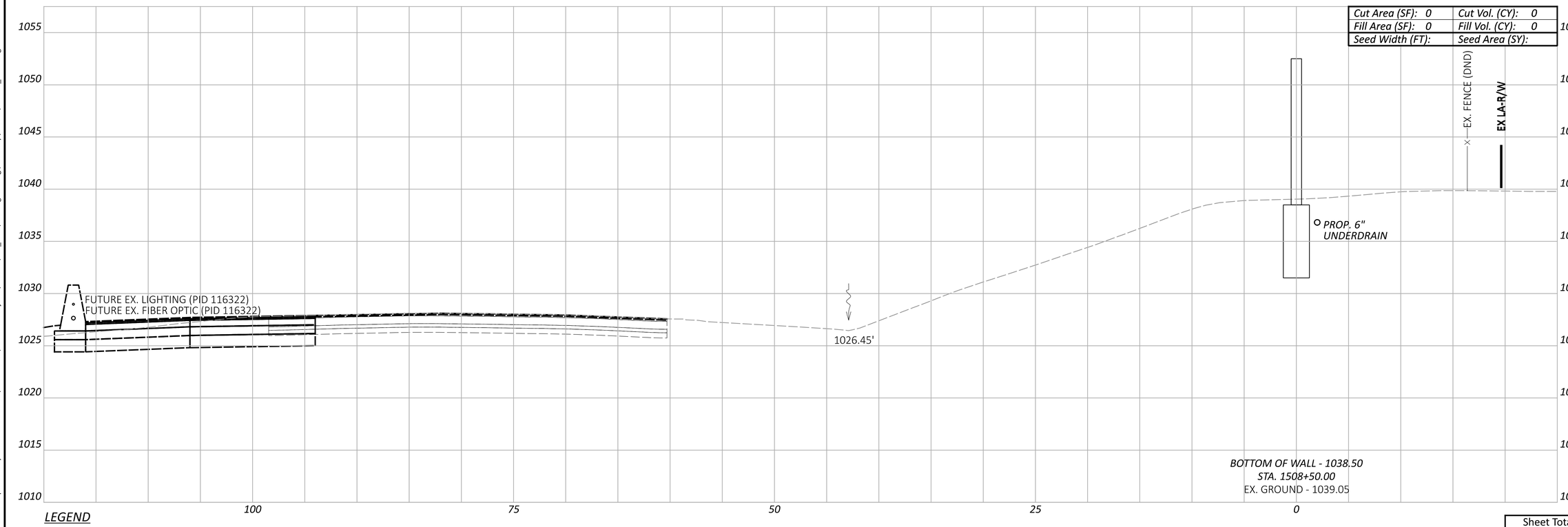
SHEET P.197 TOTAL P.297




LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
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# CROSS SECTIONS - WALL 15
## STA. 1508+50.00 TO STA. 1509+00.00

FRA-161-15.80 NOISE ABATEMENT

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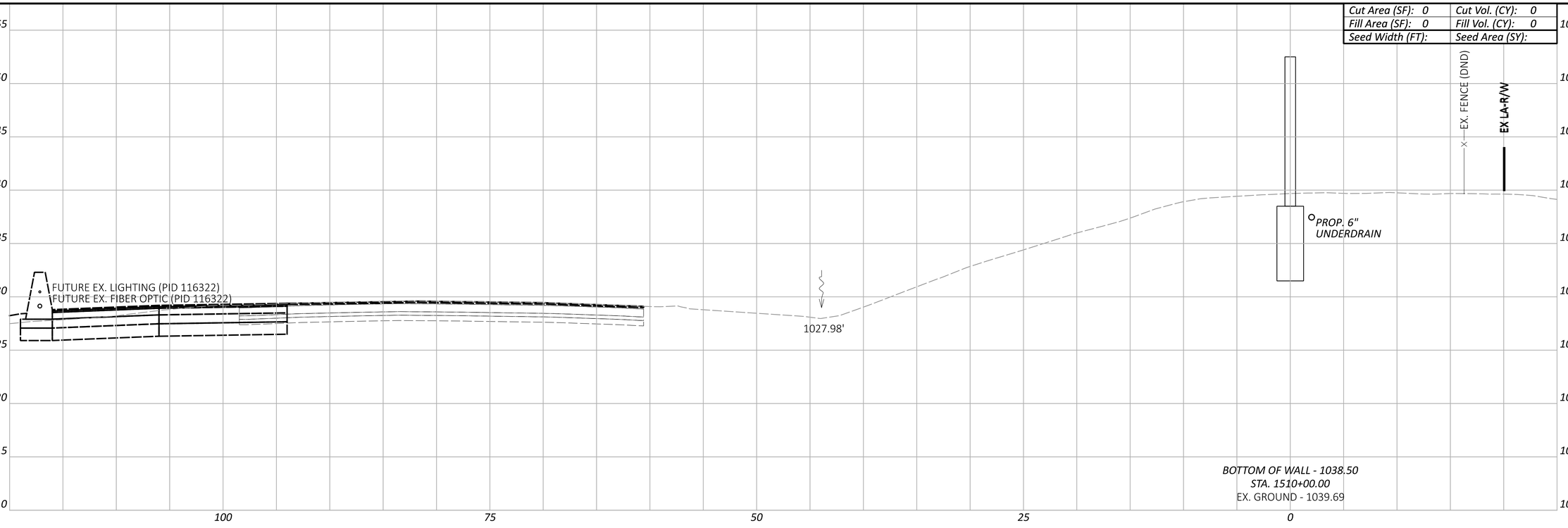
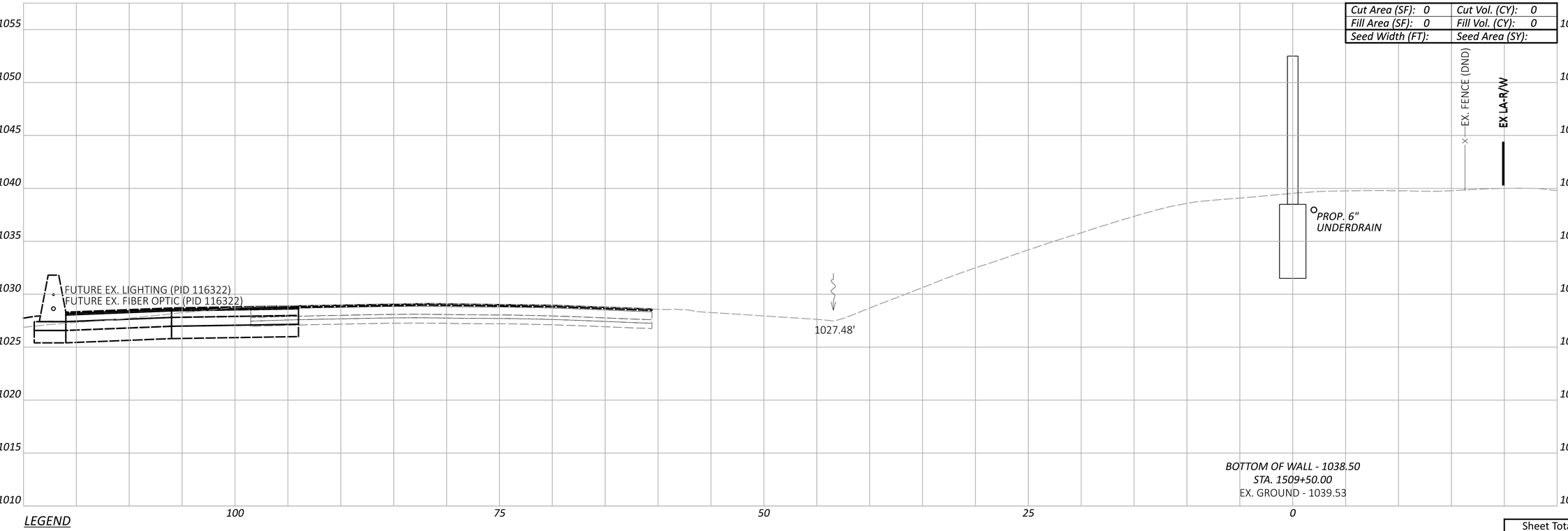
SHEET P.198 TOTAL P.297




LEGEND

*EXISTING SR-161 PRIOR TO PID 116322*

*FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322*

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
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# CROSS SECTIONS - WALL 15
## STA. 1509+50.00 TO STA. 1510+00.00

FRA-161-15.80 NOISE ABATEMENT


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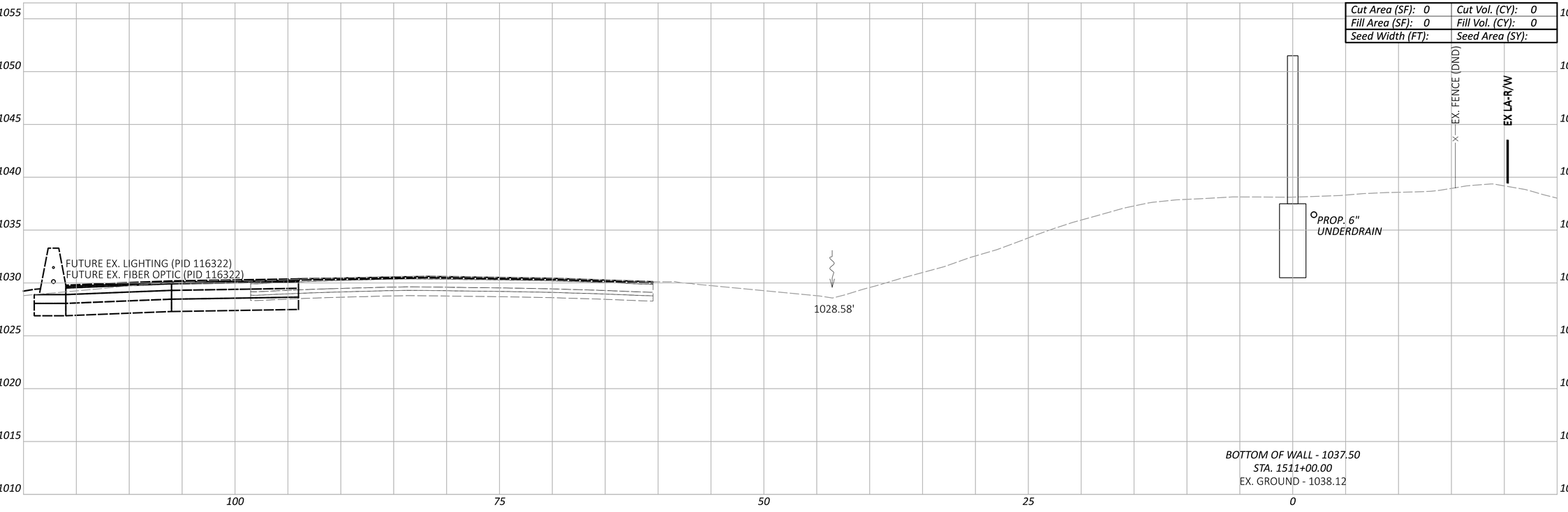
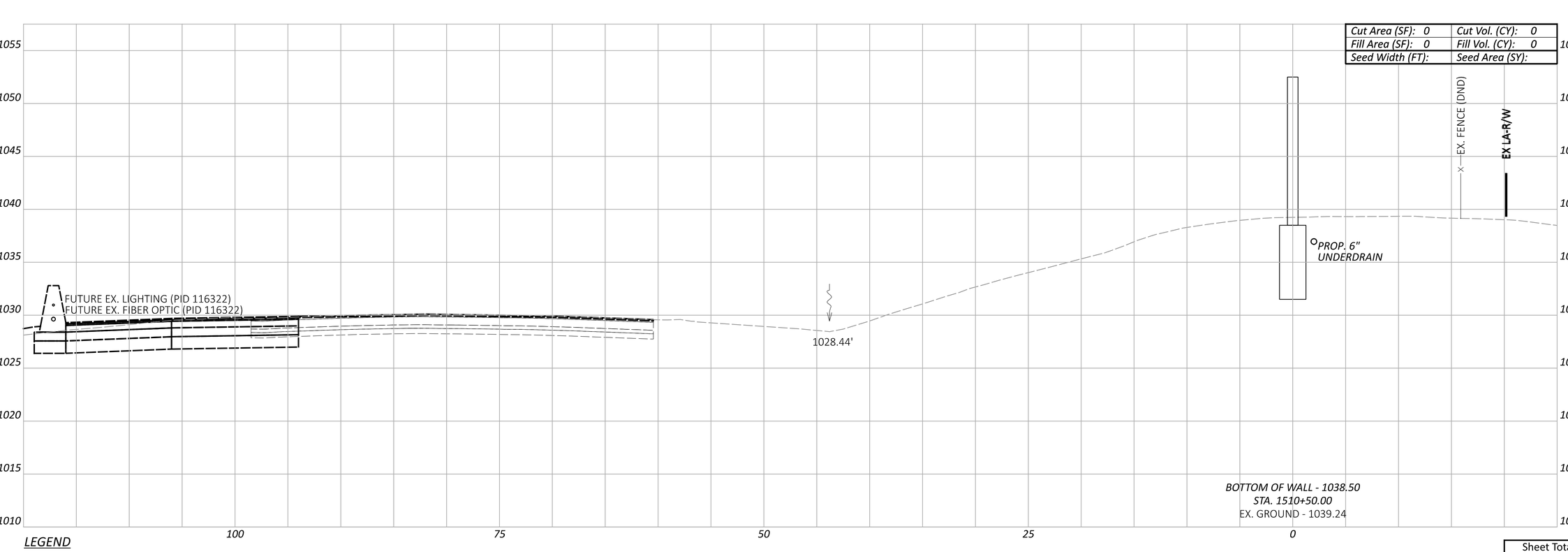
SHEET: P.199 | TOTAL: P.297




LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

——— FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
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# CROSS SECTIONS - WALL 15
## STA. 1510+50.00 TO STA. 1511+00.00

FRA-161-15.80 NOISE ABATEMENT

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| SHEET | TOTAL |
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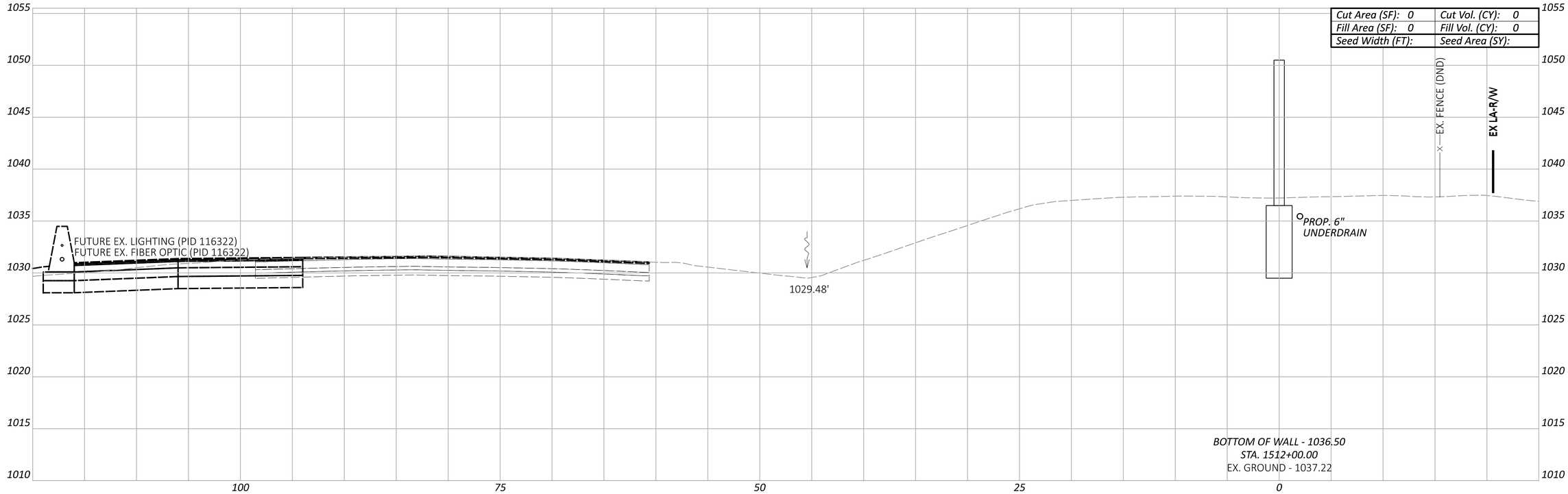
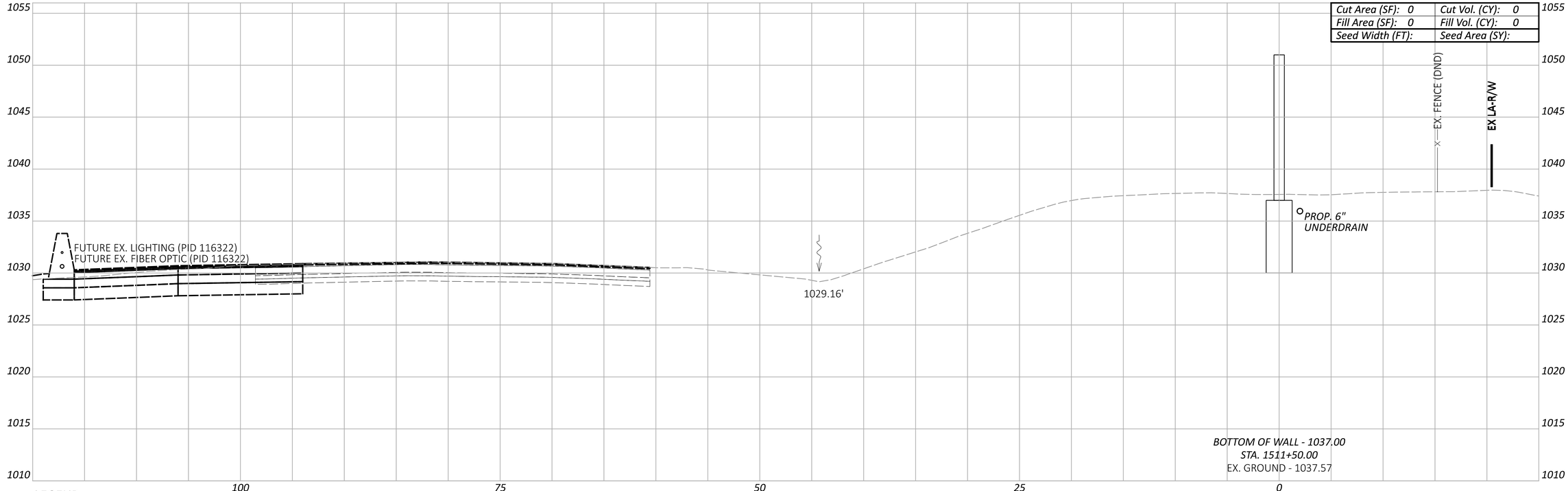
| P.200 | P.297 |




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
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# CROSS SECTIONS - WALL 15
## STA. 1511+50.00 TO STA. 1512+00.00

FRA-161-15.80 NOISE ABATEMENT


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SHEET P.201 TOTAL P.297

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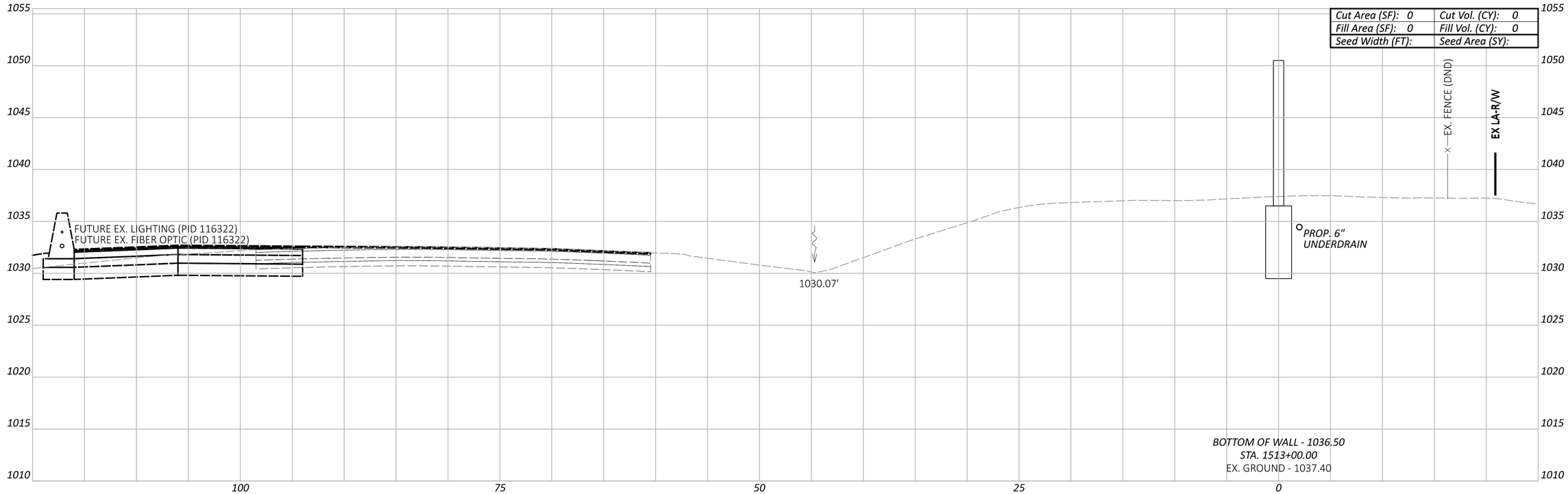


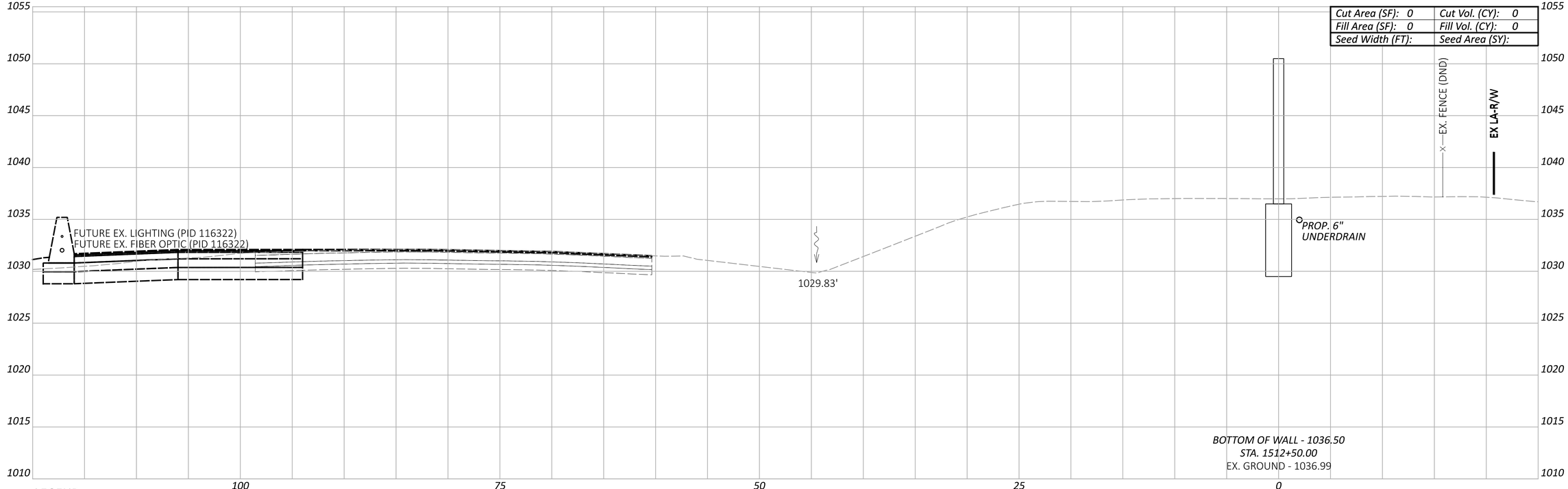


*LEGEND*

*EXISTING SR-161 PRIOR TO PID 116322*

*FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322*

# CROSS SECTIONS - WALL 15
# STA. 1512+50.00 TO STA. 1513+00.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
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SHEET P.202 | TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL15 - 1512+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:29:45 PM USER: BEN.BROWN
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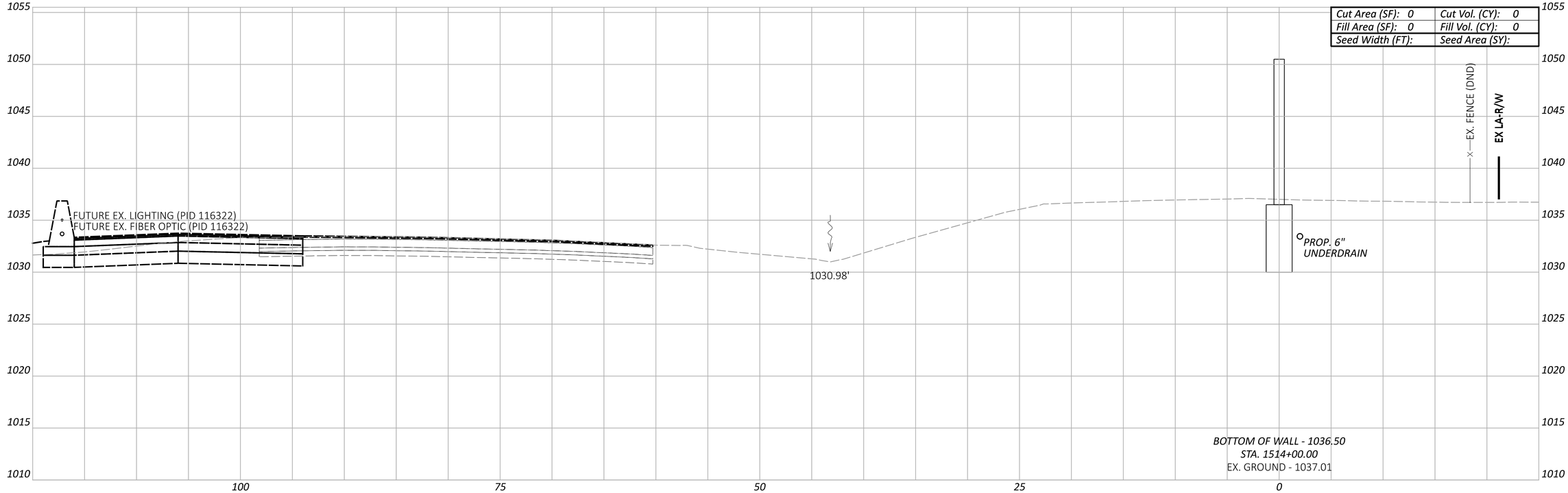


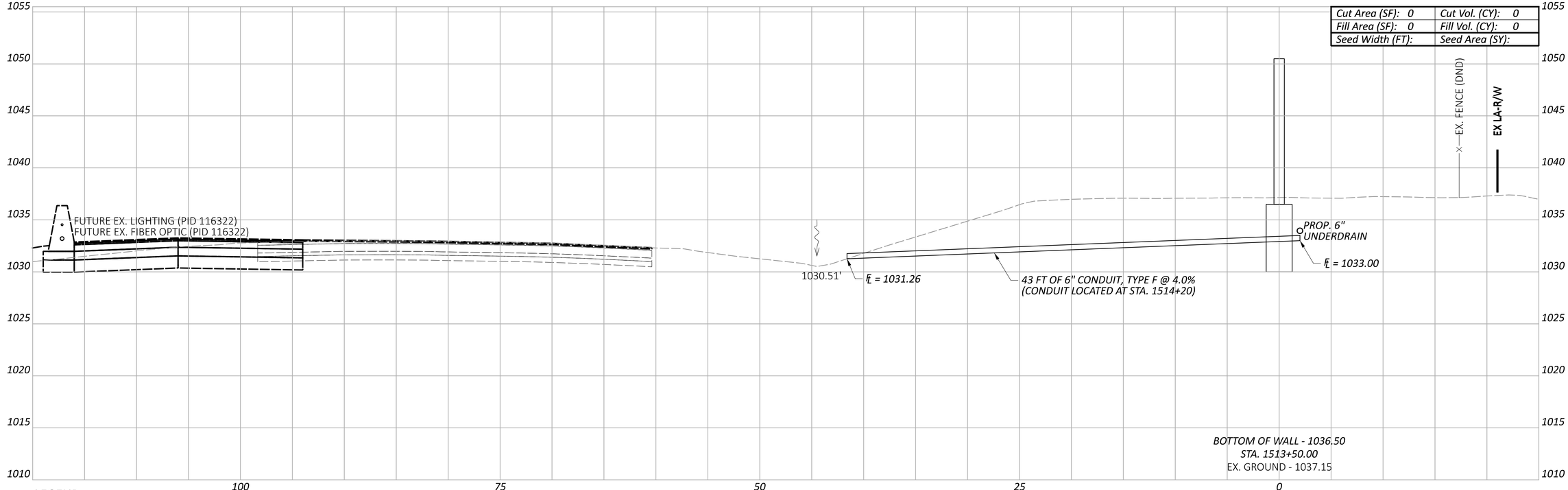


LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 15
## STA. 1513+50.00 TO STA. 1514+00.00

FRA-161-15.80 NOISE ABATEMENT


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| SHEET | TOTAL |
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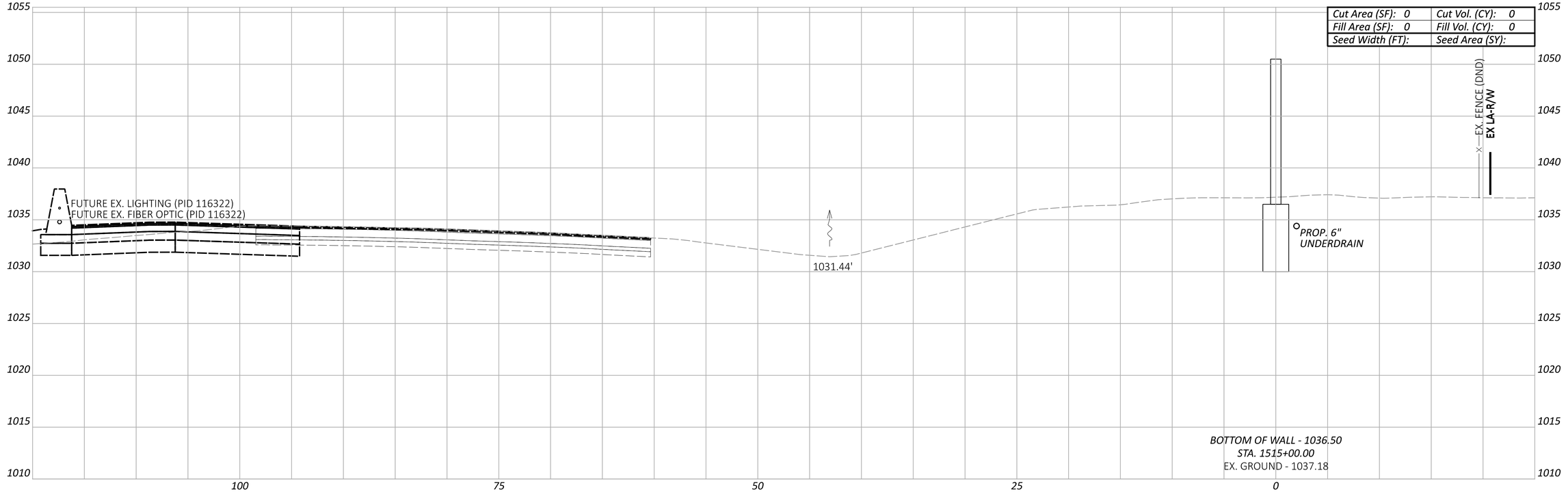
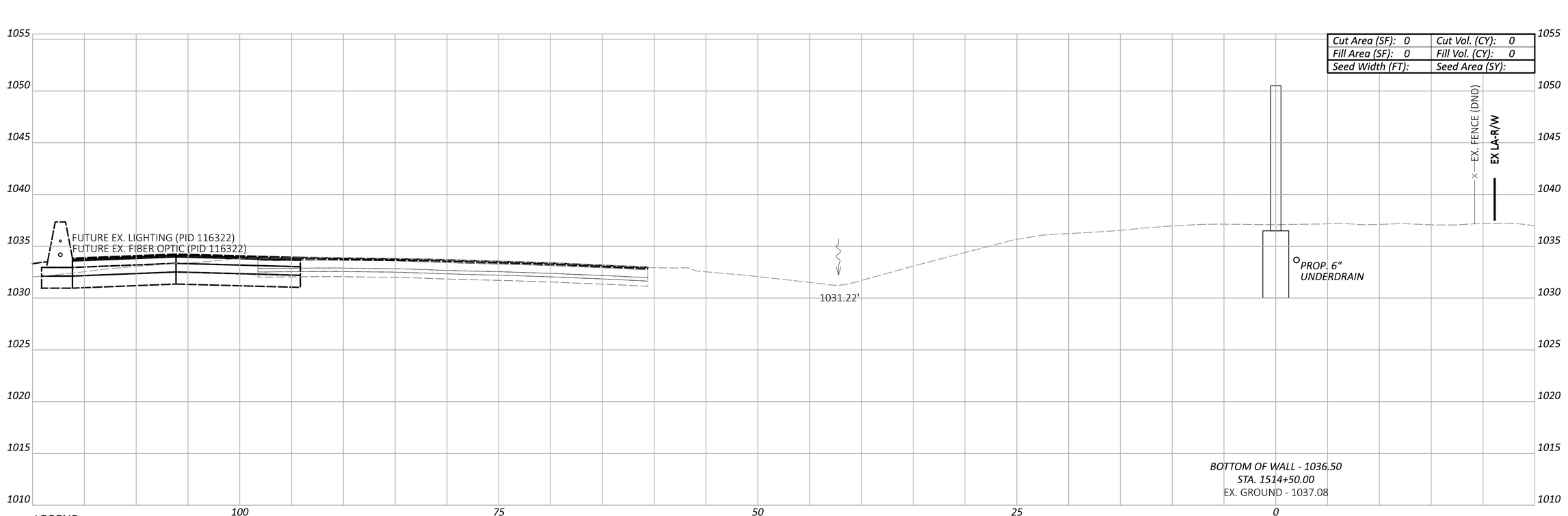
| P.203 | P.297 |




LEGEND

*EXISTING SR-161 PRIOR TO PID 116322*

*FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322*

# CROSS SECTIONS - WALL 15
# STA. 1514+50.00 TO STA. 1515+00.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
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SHEET P.204 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL15 - 1514+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:30:13 PM USER: BEN.BROWN
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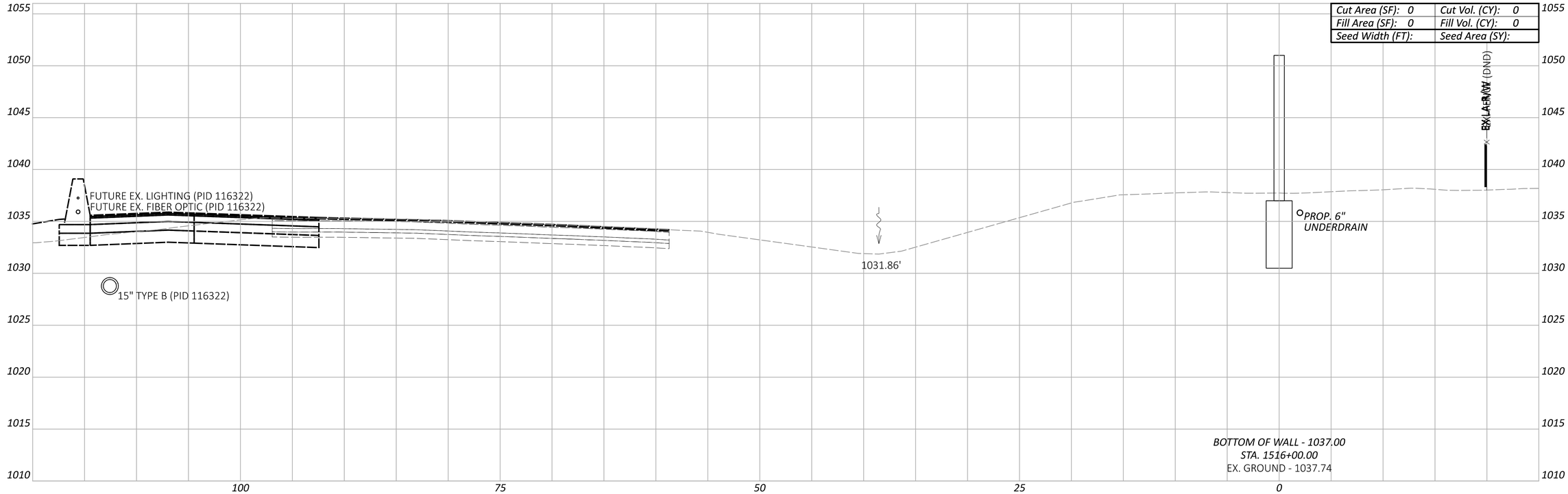


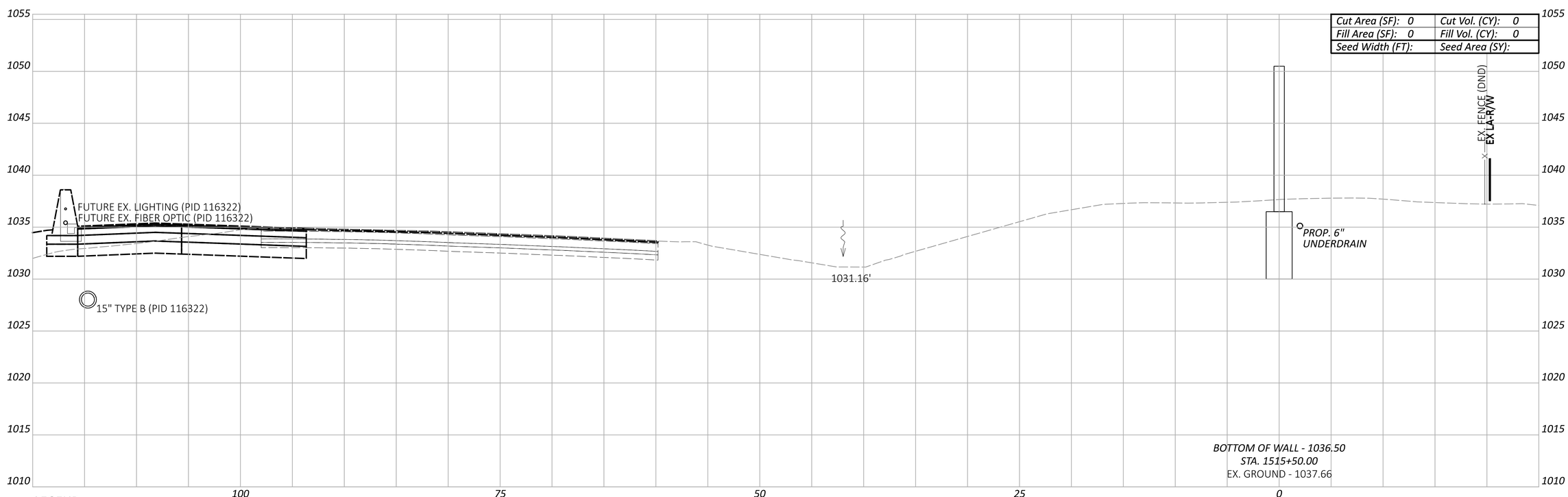


LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

— — — FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 15
## STA. 1515+50.00 TO STA. 1516+00.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
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SHEET P.205 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL15 - 1515+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:30:28 PM USER: BEN.BROWN
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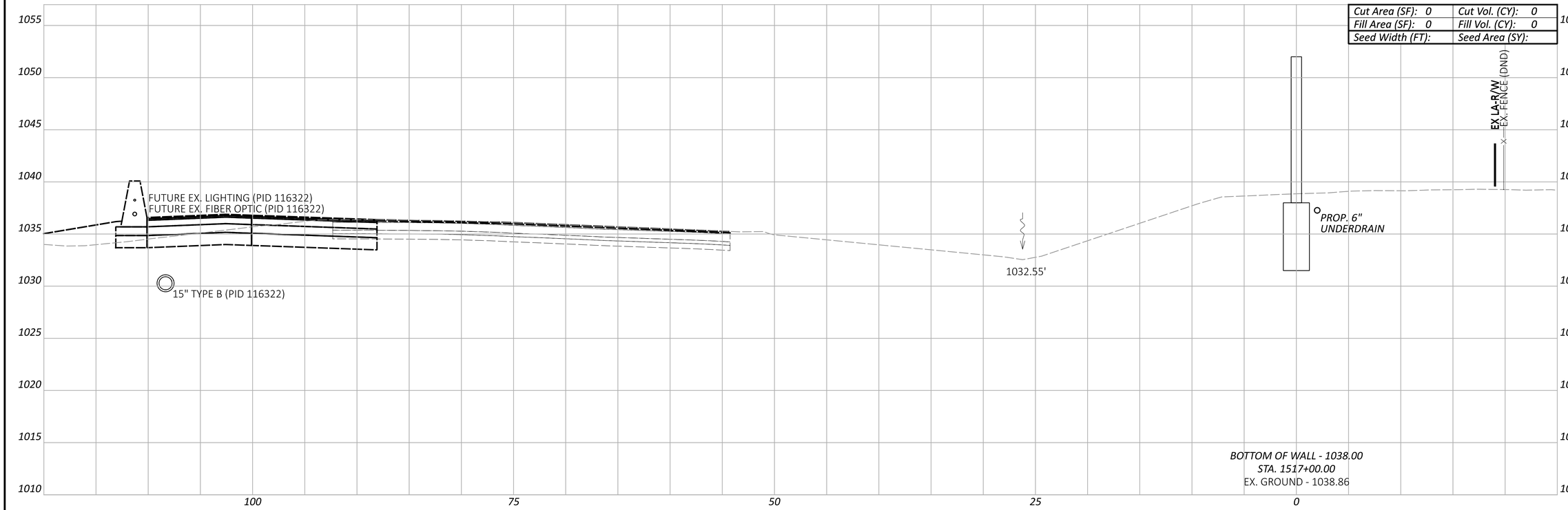


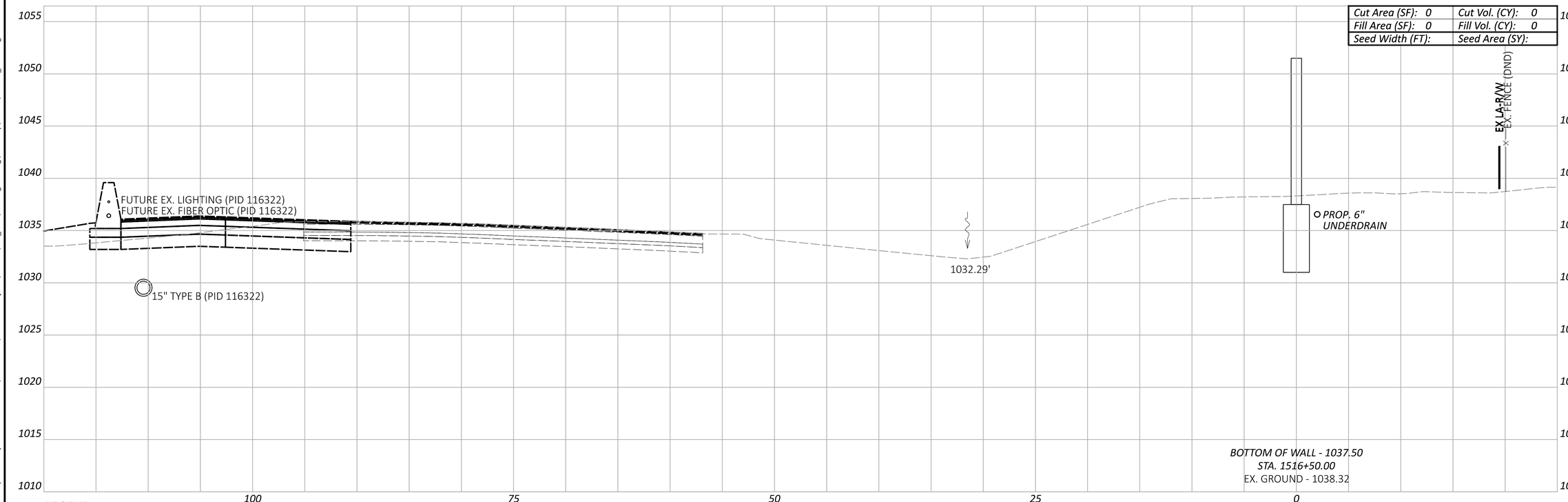


LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
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# CROSS SECTIONS - WALL 15
## STA. 1516+50.00 TO STA. 1517+00.00


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PROJECT ID: 117607

SHEET: P.206 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL15 - 1516+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:30:43 PM USER: BEN.BROWN
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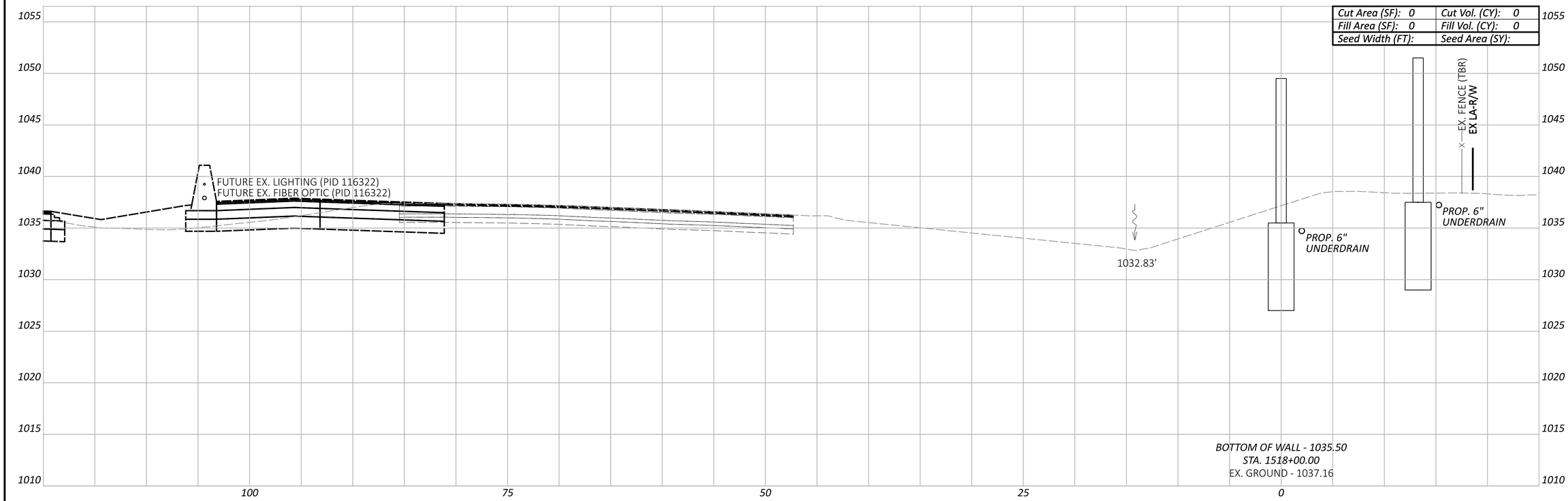


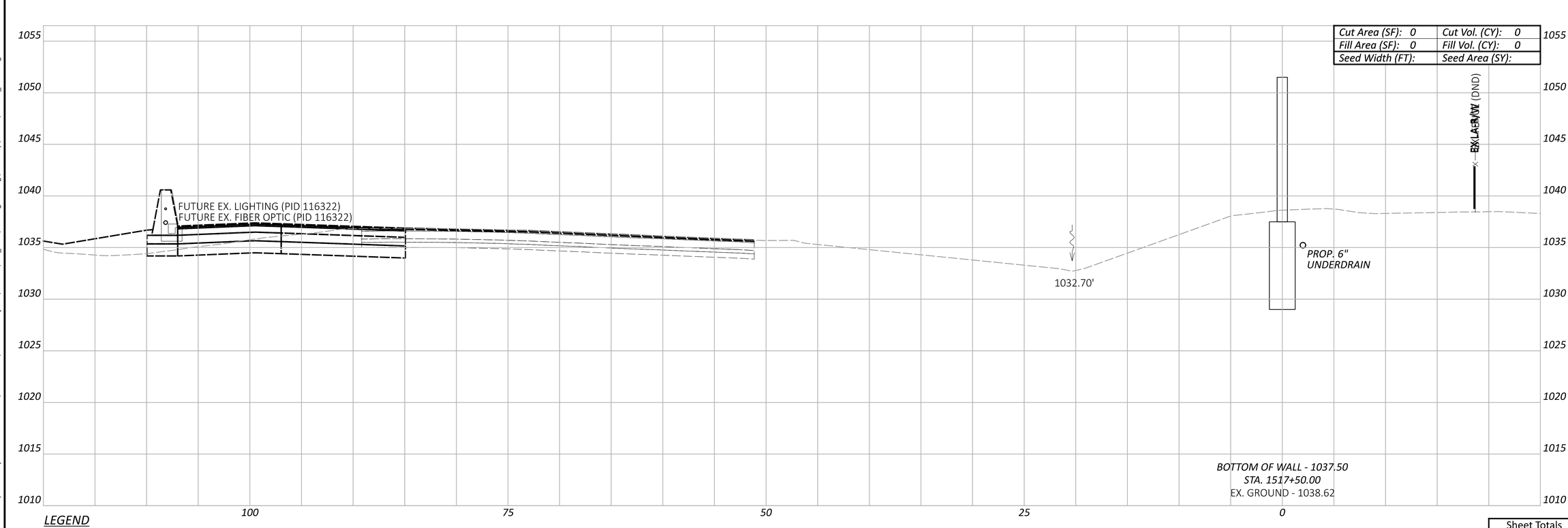


LEGEND

- - - - EXISTING SR-161 PRIOR TO PID 116322

— — — FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

# CROSS SECTIONS - WALL 15
## STA. 1517+50.00 TO STA. 1518+00.00

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 318-4000
www.arcadis.com

DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.207 | TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL15 - 1517+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:30:57 PM USER: BEN.BROWN
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# FRA-161-15.80 NOISE ABATEMENT

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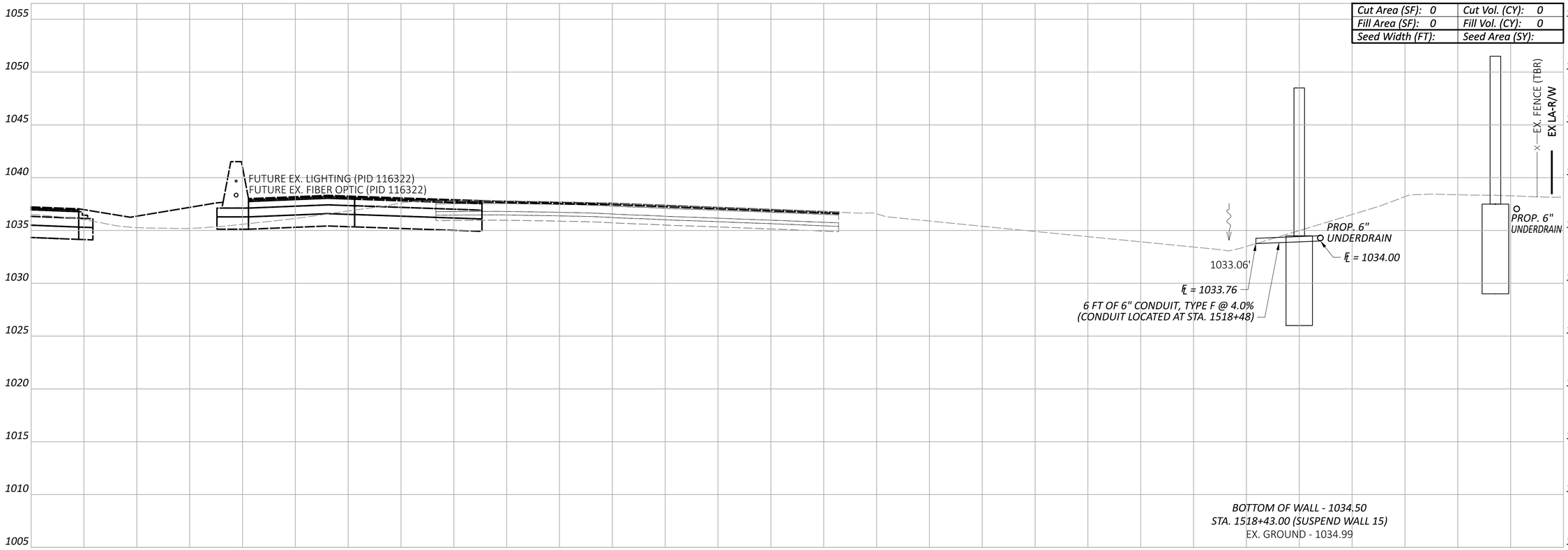
| Fill Area (SF): 0 | Fill Vol. (CY): 0 |
| Seed Width (FT): | Seed Area (SY): |




LEGEND

- - - EXISTING SR-161 PRIOR TO PID 116322

— — FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

## CROSS SECTIONS - WALL 15
## STA. 1518+43.00

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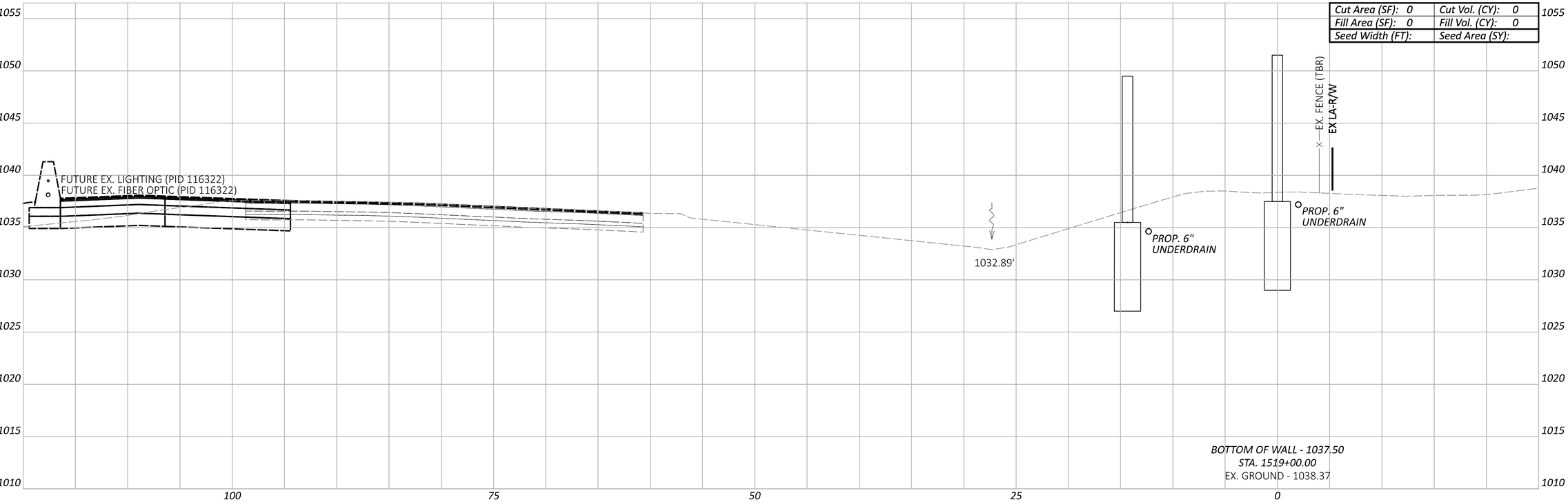
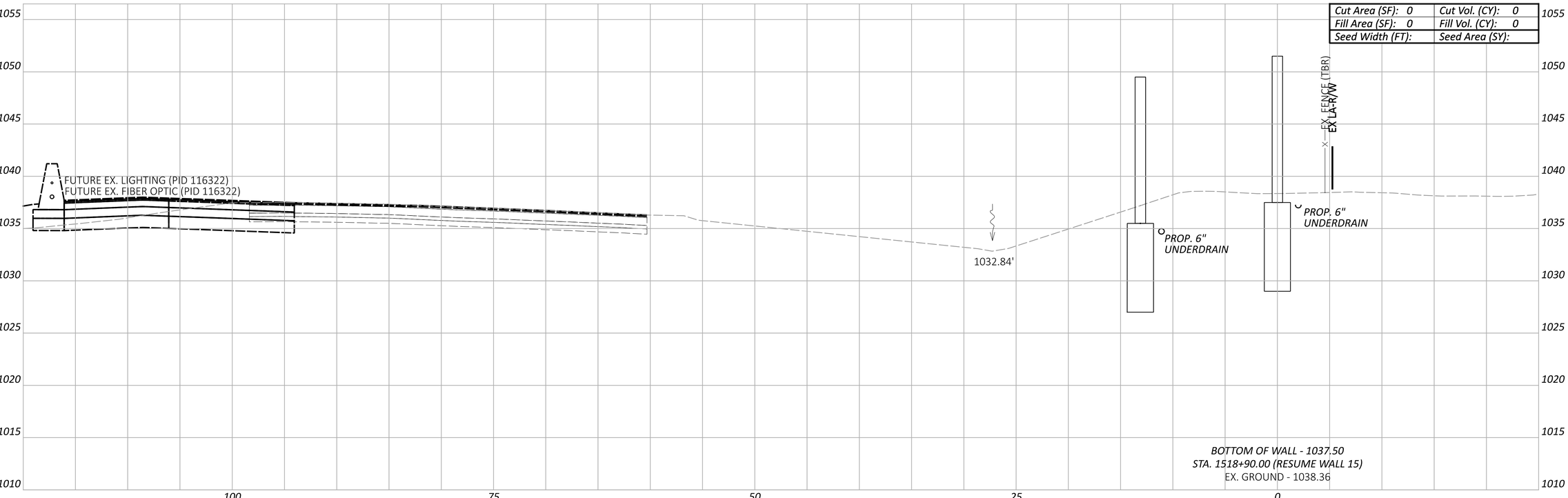
REVIEWER: JDH 05-22-24

PROJECT ID: 117607

SHEET: P.208 TOTAL: P.297




LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 15
## STA. 1518+90.00 TO STA. 1519+00.00

FRA-161-15.80 NOISE ABATEMENT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REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.209 TOTAL P.297

MODEL: BLP_WALL15 - 1518+90.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:31:18 PM USER: BEN.BROWN
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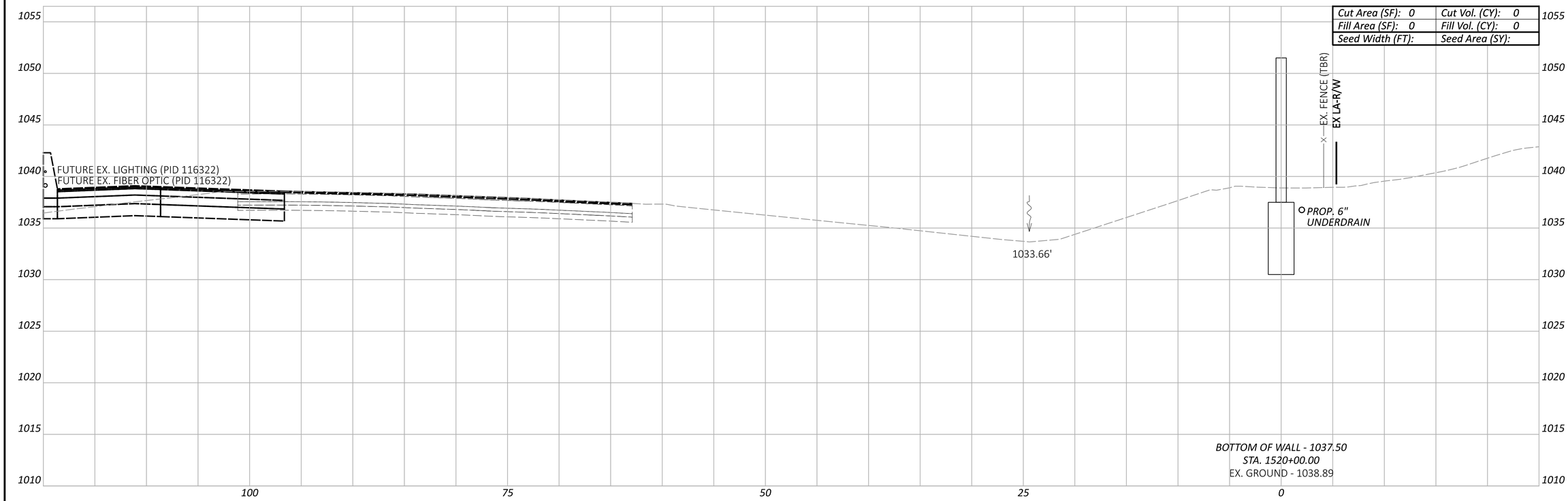


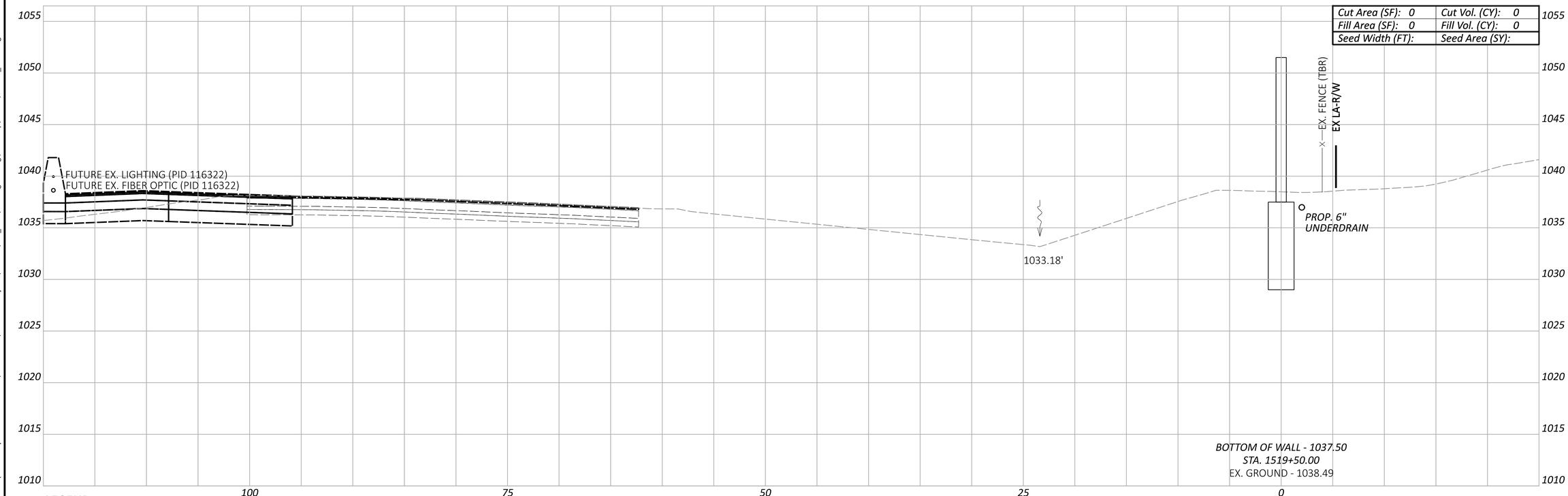


LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 15
## STA. 1519+50.00 TO STA. 1520+00.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL15 - 1519+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:31:51 PM USER: BEN.BROWN
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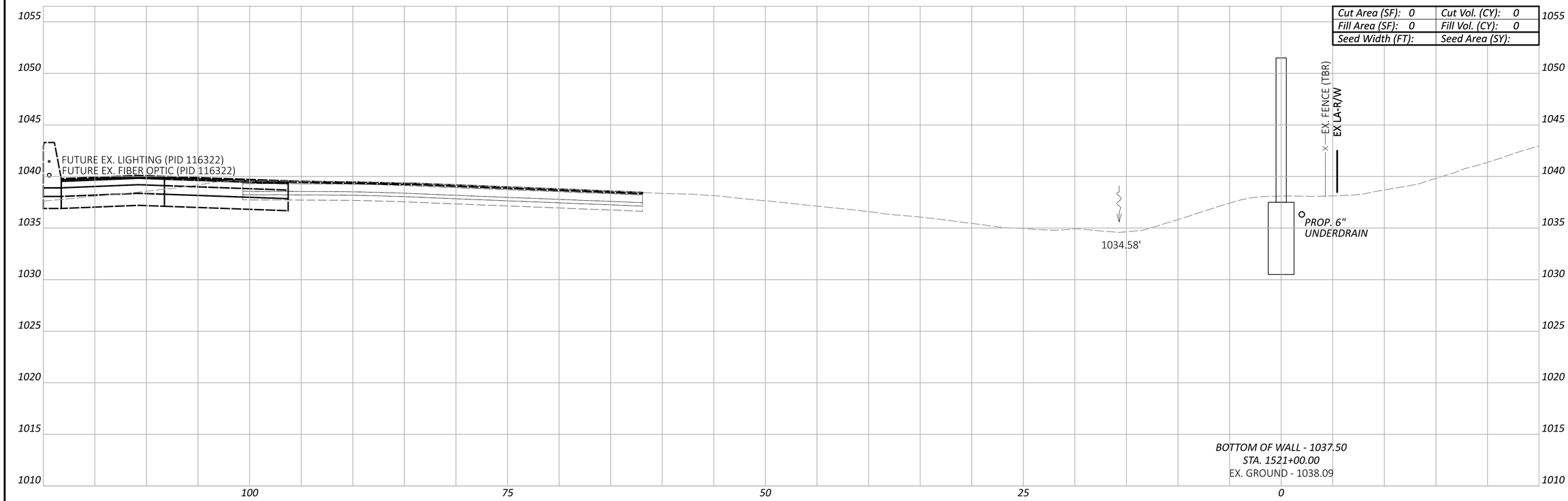
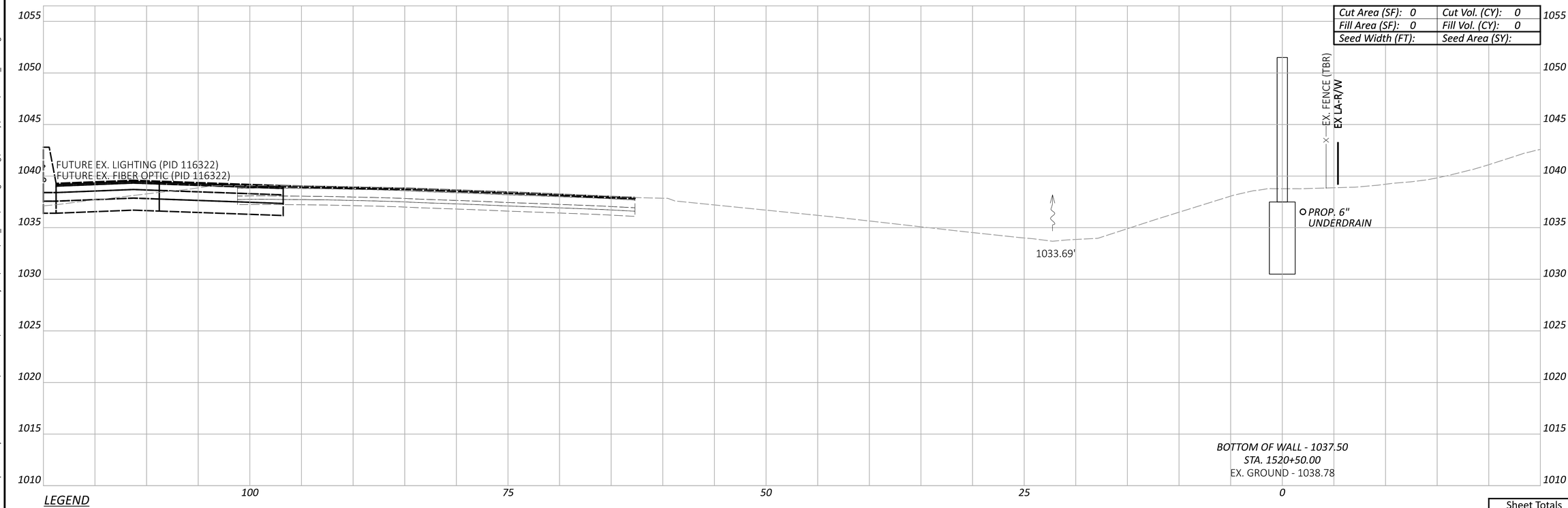
DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

| SHEET | TOTAL |
|---|---|
| P.210 | P.297 |




LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 15
## STA. 1520+50.00 TO STA. 1521+00.00

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL15 - 1520+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:32:25 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS015.dgn

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DESIGNER
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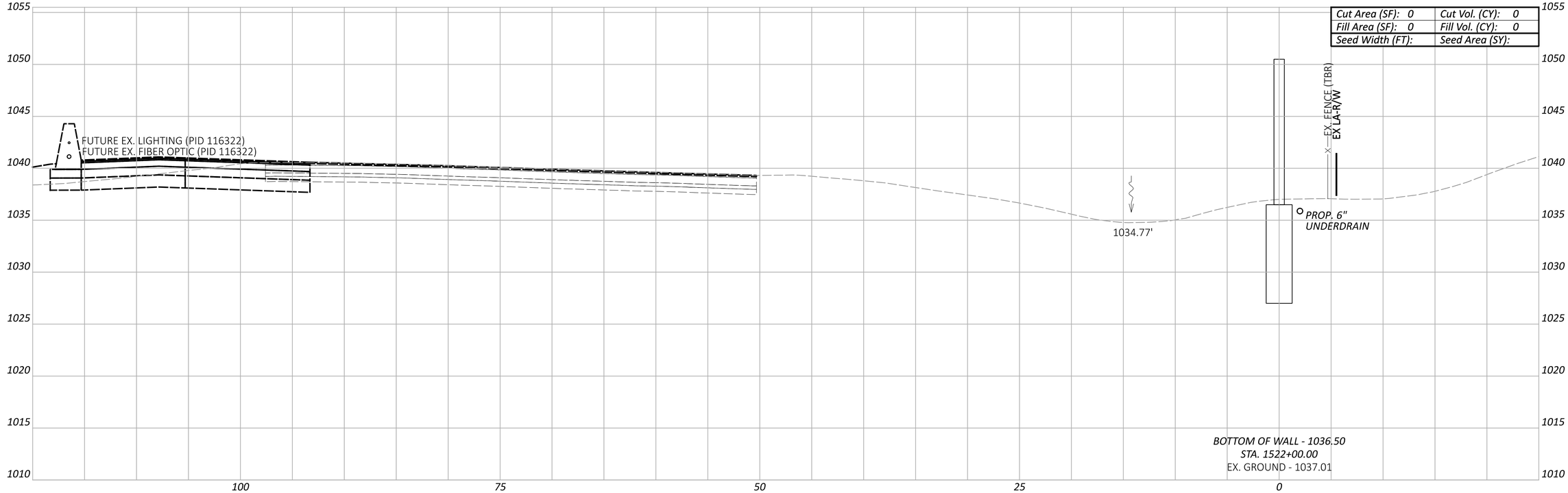
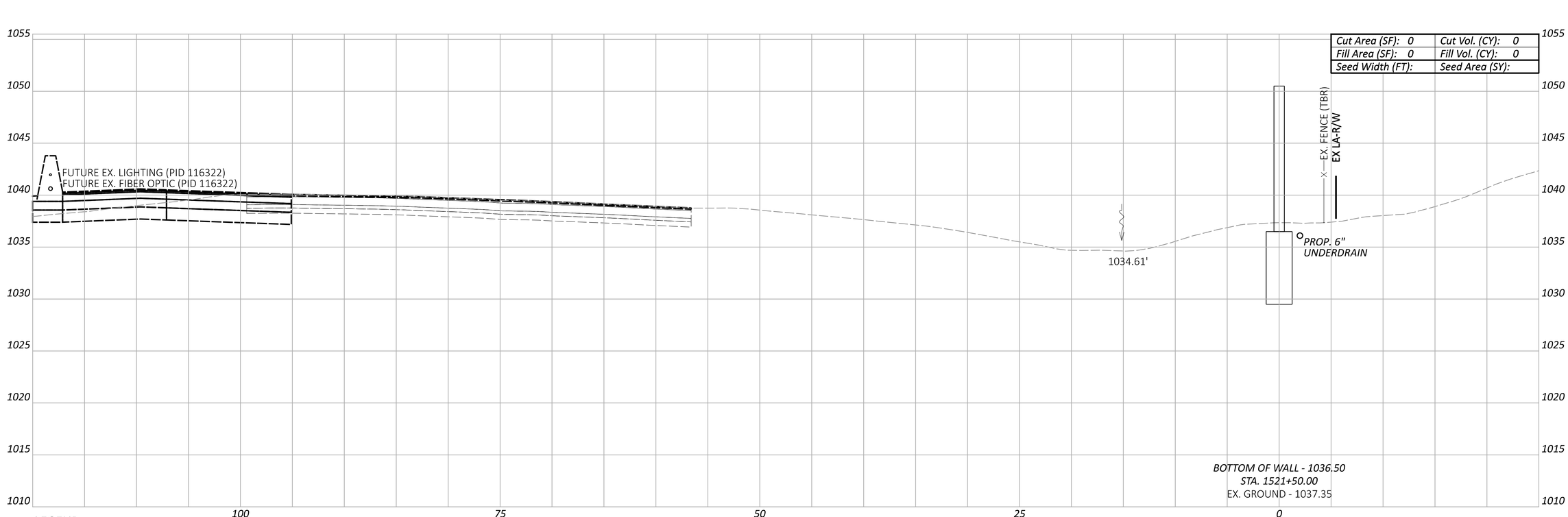
REVIEWER
JDH 05-22-24

PROJECT ID
117607

SHEET P.211 TOTAL P.297




LEGEND

- EXISTING SR-161 PRIOR TO PID 116322
- FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

# CROSS SECTIONS - WALL 15
## STA. 1521+50.00 TO STA. 1522+00.00

FRA-161-15.80 NOISE ABATEMENT


MODEL: BLP_WALL15 - 1521+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:32:57 PM USER: BEN.BROWN
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DESIGNER: JMK
REVIEWER: JDH 05-22-24
PROJECT ID: 117607
SHEET: P.212 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: BLP_WALL15 - 1522+26.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-05-22 TIME: 2:33:30 PM USER: BEN.BROWN
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS015.dgn

# CROSS SECTIONS - WALL 15
## STA. 1522+26.00

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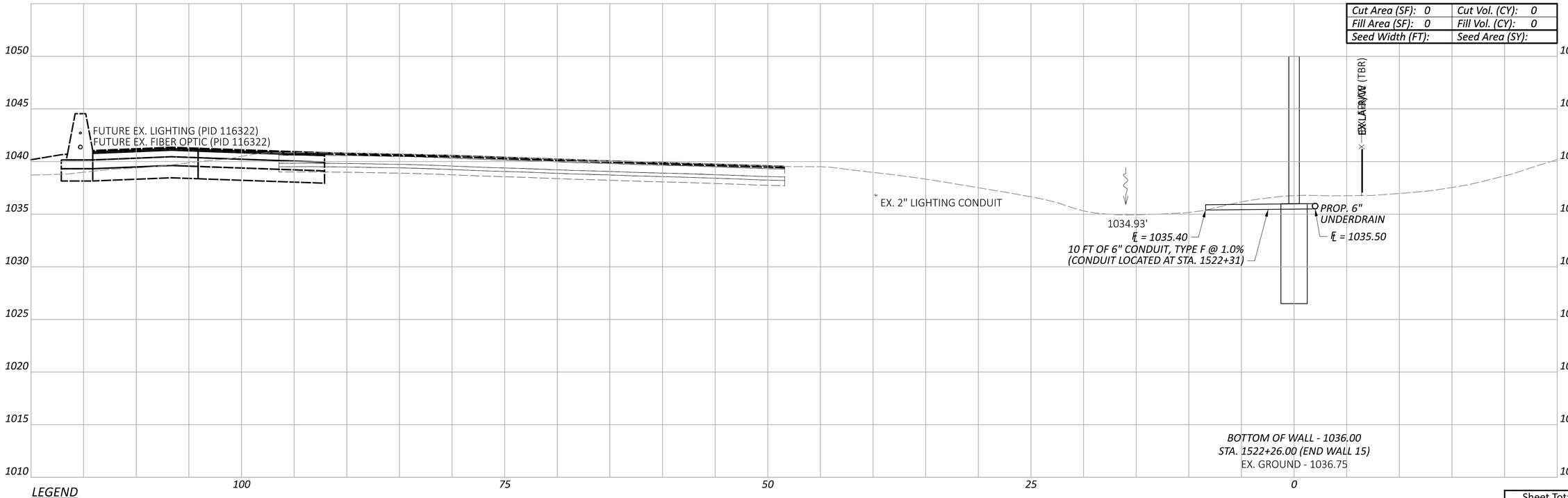


*LEGEND*

- - - - *EXISTING SR-161 PRIOR TO PID 116322*

— — — *FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322*

| Sheet Totals | | |
|---|---|---|
| Seeding | Cut | Fill |
| | 0 | 0 |

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8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 985-4600
www.arcadis.com

DESIGNER
JMK

REVIEWER
JDH 05-22-24

PROJECT ID
117607

| SHEET | TOTAL |
|---|---|
| P.213 | P.297 |

| NOISE WALL 3 | | | | | | |
|---|---|---|---|---|---|---|
| DRILLED SHAFT NO. | WORKPOINT STATION | DEFLECTION ANGLE | TOP OF DRILLED SHAFT ELEVATION | SHAFT LENGTH (FEET) | BOTTOM OF BARRIER ELEVATION | TOP OF BARRIER ELEVATION |
| 1 | 300+00.00 | 00D0'00" LT | 965.18 | 7.00 | 965.50 | 979.50 |
| 2 | 300+24.00 | 00D0'00" LT | 965.18 | 7.00 | 965.50 | 979.50 |
| 3 | 300+48.00 | 00D0'00" LT | 965.18 | 7.00 | 965.50 | 980.50 |
| 4 | 300+72.00 | 00D0'00" LT | 966.18 | 7.00 | 966.50 | 980.50 |
| 5 | 300+96.00 | 00D0'00" LT | 966.18 | 7.00 | 966.50 | 980.50 |
| 6 | 301+20.00 | 00D0'00" LT | 966.18 | 8.00 | 966.50 | 981.00 |
| 7 | 301+44.00 | 00D0'00" LT | 966.68 | 8.00 | 967.00 | 981.00 |
| 8 | 301+68.00 | 00D0'00" LT | 966.68 | 8.00 | 967.00 | 981.00 |
| 9 | 301+92.00 | 02°51'26" LT | 966.68 | 8.00 | 967.00 | 981.50 |
| 10 | 302+16.00 | 00D0'00" LT | 967.18 | 8.00 | 967.50 | 981.50 |
| 11 | 302+40.00 | 00D0'00" LT | 967.18 | 8.00 | 967.50 | 981.50 |
| 12 | 302+64.00 | 00D0'00" LT | 967.18 | 8.00 | 967.50 | 982.00 |
| 13 | 302+88.00 | 00D0'00" LT | 967.68 | 8.00 | 968.00 | 982.00 |
| 14 | 303+12.00 | 00D0'00" LT | 967.68 | 6.50 | 968.00 | 982.50 |
| 15 | 303+36.00 | 00D0'00" LT | 968.18 | 6.50 | 968.50 | 982.50 |
| 16 | 303+60.00 | 00D0'00" LT | 968.18 | 6.50 | 968.50 | 982.50 |
| 17 | 303+84.00 | 00D0'00" LT | 968.18 | 6.50 | 968.50 | 982.50 |
| 18 | 304+08.00 | 00D0'00" LT | 968.18 | 6.50 | 968.50 | 982.50 |
| 19 | 304+32.00 | 00D0'00" LT | 968.18 | 6.50 | 968.50 | 982.50 |
| 20 | 304+56.00 | 00D0'00" LT | 968.18 | 6.50 | 968.50 | 982.50 |
| 21 | 304+80.00 | 00D0'00" LT | 968.18 | 6.50 | 968.50 | 982.50 |
| 22 | 305+04.00 | 00D0'00" LT | 968.18 | 6.50 | 968.50 | 982.50 |
| 23 | 305+28.00 | 00D0'00" LT | 968.18 | 6.50 | 968.50 | 982.50 |
| 24 | 305+52.00 | 00D0'00" LT | 968.18 | 6.50 | 968.50 | 982.50 |
| 25 | 305+76.00 | 00D0'00" LT | 968.18 | 6.50 | 968.50 | 982.50 |

| NOISE WALL 6 | | | | | | |
|---|---|---|---|---|---|---|
| DRILLED SHAFT NO. | WORKPOINT STATION | DEFLECTION ANGLE | TOP OF DRILLED SHAFT ELEVATION | SHAFT LENGTH (FEET) | BOTTOM OF BARRIER ELEVATION | TOP OF BARRIER ELEVATION |
| 1 | 600+00.00 | 00D0'00" LT | 960.18 | 7.00 | 960.50 | 974.50 |
| 2 | 600+24.00 | 00D0'00" LT | 960.18 | 7.00 | 960.50 | 974.50 |
| 3 | 600+48.00 | 00D0'00" LT | 960.18 | 7.00 | 960.50 | 974.50 |
| 4 | 600+72.00 | 00D0'00" LT | 960.18 | 7.00 | 960.50 | 975.50 |
| 5 | 600+96.00 | 00D0'00" LT | 961.18 | 7.00 | 961.50 | 976.50 |
| 6 | 601+08.00 | 00D0'00" LT | 962.18 | 7.00 | 962.50 | 977.50 |
| 7 | 601+20.00 | 00D0'00" LT | 963.18 | 7.00 | 963.50 | 978.50 |
| 8 | 601+32.00 | 00D0'00" LT | 964.18 | 7.00 | 964.50 | 979.50 |
| 9 | 601+44.00 | 00D0'00" LT | 965.18 | 7.00 | 965.50 | 980.00 |
| 10 | 601+56.00 | 00D0'00" LT | 965.68 | 7.00 | 966.00 | 980.50 |
| 11 | 601+68.00 | 00D0'00" LT | 966.18 | 7.00 | 966.50 | 981.00 |
| 12 | 601+92.00 | 00D0'00" LT | 966.68 | 7.00 | 967.00 | 982.00 |
| 13 | 602+16.00 | 00D0'00" LT | 967.68 | 7.00 | 968.00 | 982.00 |
| 14 | 602+40.00 | 00D0'00" LT | 967.68 | 7.00 | 968.00 | 982.00 |
| 15 | 602+64.00 | 00D0'00" LT | 967.68 | 7.00 | 968.00 | 982.50 |
| 16 | 602+88.00 | 00D0'00" LT | 968.18 | 7.00 | 968.50 | 982.50 |
| 17 | 603+12.00 | 00D0'00" LT | 968.18 | 7.00 | 968.50 | 982.50 |
| 18 | 603+36.00 | 00D0'00" LT | 968.18 | 7.00 | 968.50 | 982.50 |
| 19 | 603+60.00 | 00D0'00" LT | 968.18 | 7.00 | 968.50 | 982.50 |
| 20 | 603+84.00 | 00D0'00" LT | 968.18 | 7.00 | 968.50 | 982.50 |
| 21 | 604+08.00 | 00D0'00" LT | 968.18 | 7.00 | 968.50 | 983.00 |
| 22 | 604+32.00 | 00D0'00" LT | 968.68 | 7.00 | 969.00 | 983.00 |
| 23 | 604+56.00 | 00D0'00" LT | 968.68 | 7.00 | 969.00 | 983.00 |
| 24 | 604+80.00 | 00D0'00" LT | 968.68 | 7.00 | 969.00 | 983.00 |
| 25 | 605+04.00 | 00D0'00" LT | 968.68 | 7.00 | 969.00 | 983.00 |
| 26 | 605+28.00 | 00D0'00" LT | 968.68 | 7.00 | 969.00 | 983.00 |

| NOISE WALL 8 | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DRILLED SHAFT NO. | WORKPOINT STATION | DEFLECTION ANGLE | TOP OF DRILLED SHAFT ELEVATION | SHAFT LENGTH (FEET) | BOTTOM OF BARRIER ELEVATION | TOP OF BARRIER ELEVATION | DRILLED SHAFT NO. | WORKPOINT STATION | DEFLECTION ANGLE | TOP OF DRILLED SHAFT ELEVATION | SHAFT LENGTH (FEET) | BOTTOM OF BARRIER ELEVATION | TOP OF BARRIER ELEVATION |
| 1 | 800+00.00 | 00°00'00" LT | 965.68 | 6.50 | 966.00 | 980.00 | 41 | 809+60.00 | 00°00'00" RT | 967.68 | 6.50 | 968.00 | 982.50 |
| 2 | 800+24.00 | 00°00'00" LT | 965.68 | 6.50 | 966.00 | 980.00 | 42 | 809+84.00 | 00°00'00" RT | 968.18 | 6.50 | 968.50 | 982.50 |
| 3 | 800+48.00 | 00°00'00" LT | 965.68 | 6.50 | 966.00 | 980.00 | 43 | 810+08.00 | 00°00'00" RT | 968.18 | 6.50 | 968.50 | 983.00 |
| 4 | 800+72.00 | 00°00'00" LT | 965.68 | 6.50 | 966.00 | 980.50 | 44 | 810+32.00 | 00°00'00" RT | 968.68 | 6.50 | 969.00 | 983.50 |
| 5 | 800+96.00 | 00°00'00" LT | 966.18 | 6.50 | 966.50 | 980.50 | 45 | 810+56.00 | 00°00'00" RT | 969.18 | 6.50 | 969.50 | 984.00 |
| 6 | 801+20.00 | 00°00'00" LT | 966.18 | 6.50 | 966.50 | 980.50 | 46 | 810+80.00 | 07°30'00" RT | 969.68 | 6.50 | 970.00 | 984.00 |
| 7 | 801+44.00 | 00°00'00" LT | 966.18 | 6.50 | 966.50 | 980.50 | 47 | 810+96.00 | 00°00'00" RT | 969.68 | 6.50 | 970.00 | 984.50 |
| 8 | 801+68.00 | 00°00'00" LT | 966.18 | 6.50 | 966.50 | 980.50 | 48 | 811+12.00 | 00°00'00" RT | 970.18 | 6.50 | 970.50 | 985.00 |
| 9 | 801+92.00 | 00°00'00" LT | 966.18 | 6.50 | 966.50 | 980.50 | 49 | 811+28.00 | 00°00'00" RT | 970.68 | 6.50 | 971.00 | 985.00 |
| 10 | 802+16.00 | 00°00'00" LT | 966.18 | 6.50 | 966.50 | 980.50 | 50 | 811+44.00 | 01°52'45" LT | 970.68 | 6.50 | 971.00 | 985.50 |
| 11 | 802+40.00 | 00°00'00" LT | 966.18 | 6.50 | 966.50 | 980.50 | 51 | 811+58.00 | 00°00'00" LT | 971.18 | 6.50 | 971.50 | 986.00 |
| 12 | 802+64.00 | 05°46'53" LT | 966.18 | 6.50 | 966.50 | 980.50 | 52 | 811+72.00 | 07°26'48" LT | 971.68 | 7.00 | 972.00 | 986.50 |
| 13 | 802+88.00 | 00°00'00" LT | 966.18 | 6.50 | 966.50 | 980.50 | 53 | 811+96.00 | 00°00'00" LT | 972.18 | 7.00 | 972.50 | 987.00 |
| 14 | 803+12.00 | 00°00'00" LT | 966.18 | 6.50 | 966.50 | 980.50 | 54 | 812+20.00 | 00°00'00" LT | 972.68 | 7.00 | 973.00 | 988.00 |
| 15 | 803+36.00 | 00°00'00" LT | 966.18 | 6.50 | 966.50 | 980.50 | 55 | 812+44.00 | 00°00'00" LT | 973.68 | 7.00 | 974.00 | 989.00 |
| 16 | 803+60.00 | 00°00'00" LT | 966.18 | 6.50 | 966.50 | 980.50 | 56 | 812+68.00 | 00°00'00" LT | 974.68 | 7.00 | 975.00 | 989.00 |
| 17 | 803+84.00 | 00°00'00" LT | 965.68 | 6.50 | 966.00 | 980.50 | 57 | 812+92.00 | 00°00'00" LT | 974.68 | 7.00 | 975.00 | 989.00 |
| 18 | 804+08.00 | 00°00'00" LT | 965.68 | 6.50 | 966.00 | 980.00 | 58 | 813+16.00 | 00°00'00" LT | 974.68 | 7.00 | 975.00 | 989.00 |
| 19 | 804+32.00 | 00°00'00" LT | 965.18 | 6.50 | 965.50 | 980.00 | 59 | 813+40.00 | 00°00'00" LT | 974.68 | 7.00 | 975.00 | 989.00 |
| 20 | 804+56.00 | 00°00'00" LT | 965.18 | 6.50 | 965.50 | 979.50 | 60 | 813+64.00 | 00°00'00" LT | 974.68 | 7.00 | 975.00 | 989.00 |
| 21 | 804+80.00 | 00°00'00" LT | 965.18 | 6.50 | 965.50 | 979.50 | 61 | 813+88.00 | 00°00'00" LT | 974.18 | 6.50 | 974.50 | 989.00 |
| 22 | 805+04.00 | 00°00'00" LT | 965.18 | 6.50 | 965.50 | 979.50 | 62 | 814+12.00 | 00°00'00" LT | 974.18 | 6.50 | 974.50 | 988.50 |
| 23 | 805+28.00 | 00°00'00" LT | 965.18 | 6.50 | 965.50 | 979.50 | 63 | 814+36.00 | 00°00'00" LT | 973.68 | 6.50 | 974.00 | 988.50 |
| 24 | 805+52.00 | 00°00'00" LT | 965.18 | 6.50 | 965.50 | 979.50 | 64 | 814+60.00 | 00°11'01" | 973.68 | 6.50 | 974.00 | 988.00 |
| 25 | 805+76.00 | 00°00'00" LT | 965.18 | 6.50 | 965.50 | 979.50 | 65 | 814+84.00 | 00°00'00" LT | 973.68 | 6.50 | 974.00 | 988.00 |
| 26 | 806+00.00 | 00°00'00" LT | 965.18 | 6.50 | 965.50 | 979.50 | 66 | 815+08.00 | 00°00'00" LT | 973.68 | 6.50 | 974.00 | 988.00 |
| 27 | 806+24.00 | 00°00'00" LT | 965.18 | 6.50 | 965.50 | 979.50 | 67 | 815+32.00 | 00°00'00" LT | 973.68 | 6.50 | 974.00 | 988.00 |
| 28 | 806+48.00 | 00°00'00" LT | 965.18 | 6.50 | 965.50 | 979.50 | 68 | 815+56.00 | 00°00'00" LT | 973.68 | 6.50 | 974.00 | 988.00 |
| 29 | 806+72.00 | 05°54'06" RT | 965.18 | 6.50 | 965.50 | 979.50 | 69 | 815+80.00 | 00°00'00" LT | 973.68 | 6.50 | 974.00 | 988.00 |
| 30 | 806+96.00 | 00°00'00" RT | 965.18 | 6.50 | 965.50 | 980.00 | 70 | 816+04.00 | 00°00'00" LT | 973.18 | 6.50 | 973.50 | 988.00 |
| 31 | 807+20.00 | 00°00'00" RT | 965.68 | 6.50 | 966.00 | 980.50 | 71 | 816+28.00 | 00°00'00" LT | 973.18 | 6.50 | 973.50 | 987.50 |
| 32 | 807+44.00 | 00°00'00" RT | 966.18 | 6.50 | 966.50 | 980.50 | 72 | 816+52.00 | 00°00'00" LT | 973.18 | 6.50 | 973.50 | 987.50 |
| 33 | 807+68.00 | 00°00'00" RT | 966.18 | 6.50 | 966.50 | 981.00 | 73 | 816+76.00 | 00°00'00" LT | 973.18 | 6.50 | 973.50 | 987.50 |
| 34 | 807+92.00 | 00°00'00" RT | 966.68 | 6.50 | 967.00 | 981.00 | 74 | 817+00.00 | 00°00'00" LT | 973.18 | 6.50 | 973.50 | 987.50 |
| 35 | 808+16.00 | 00°00'00" RT | 966.68 | 6.50 | 967.00 | 981.00 | 75 | 817+24.00 | 00°00'00" LT | 973.18 | 6.50 | 973.50 | 987.50 |
| 36 | 808+40.00 | 00°00'00" RT | 966.68 | 6.50 | 967.00 | 981.50 | 76 | 817+48.00 | 00°00'00" LT | 973.18 | 6.50 | 973.50 | 987.50 |
| 37 | 808+64.00 | 00°00'00" RT | 967.18 | 6.50 | 967.50 | 981.50 | 77 | 817+72.00 | 00°00'00" LT | 973.18 | 6.50 | 973.50 | 987.50 |
| 38 | 808+88.00 | 00°00'00" RT | 967.18 | 6.50 | 967.50 | 981.50 | 78 | 817+96.00 | 00°00'00" LT | 973.18 | 6.50 | 973.50 | 987.50 |
| 39 | 809+12.00 | 00°00'00" RT | 967.18 | 6.50 | 967.50 | 981.50 | 79 | 818+08.00 | 00°00'00" LT | 973.18 | 6.50 | 973.50 | 987.50 |
| 40 | 809+36.00 | 00°00'00" RT | 967.18 | 6.50 | 967.50 | 982.00 | | | | | | | |

*NOTES:*
*1.) FOR POST TYPE SPECIFICATIONS, SEE SHEETS P.218 - P.221*

*2.) VALUES LISTED FOR BOTTOM OF BARRIER ELEVATION AND TOP OF BARRIER ELEVATION CORRESPOND WITH THE BOTTOMMOST AND TOPMOST PANEL AT EACH DRILLED SHAFT LOCATION.*

FRA-161-15.80 NOISE ABATEMENT

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-05-21 TIME: 1:02:42 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\14372\0400_CAD\400-Engineering\Roadway\Sheets\117607_GM001.dgn

NOISE WALL DETAILS - WALLS 3, 6 & 8

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 818-4900
www.arcadis.com

DESIGNER
JMK

REVIEWER
JDH 05-22-24

PROJECT ID
117607

SHEET P.214 | TOTAL P.297

## NOISE WALL 9

| DRILLED SHAFT NO. | WORKPOINT STATION | DEFLECTION ANGLE | TOP OF DRILLED SHAFT ELEVATION | SHAFT LENGTH (FEET) | BOTTOM OF BARRIER ELEVATION | TOP OF BARRIER ELEVATION |
|---|---|---|---|---|---|---|
| 1 | 900+16.00 | 00D0'00" RT | 973.18 | 7.00 | 973.50 | 987.50 |
| 2 | 900+40.00 | 00D0'00" RT | 973.18 | 7.00 | 973.50 | 987.50 |
| 3 | 900+64.00 | 00D0'00" RT | 973.18 | 7.00 | 973.50 | 988.00 |
| 4 | 900+88.00 | 00D0'00" RT | 973.68 | 7.00 | 974.00 | 988.00 |
| 5 | 901+12.00 | 00D0'00" RT | 973.68 | 7.00 | 974.00 | 988.00 |
| 6 | 901+36.00 | 00D0'00" RT | 973.68 | 7.00 | 974.00 | 988.00 |
| 7 | 901+52.00 | 00D0'00" RT | 973.68 | 7.00 | 974.00 | 988.00 |
| 8 | 901+68.00 | 00D0'00" RT | 973.68 | 7.00 | 974.00 | 988.50 |
| 9 | 901+84.00 | 00D0'00" RT | 974.18 | 7.00 | 974.50 | 988.50 |
| 10 | 902+08.00 | 00D0'00" RT | 974.18 | 7.00 | 974.50 | 988.50 |
| 11 | 902+32.00 | 00D0'00" RT | 974.18 | 7.00 | 974.50 | 988.50 |
| 12 | 902+56.00 | 02°23'44" RT | 974.18 | 7.00 | 974.50 | 989.00 |
| 13 | 902+80.00 | 00D0'00" RT | 974.68 | 7.00 | 975.00 | 989.50 |
| 14 | 903+04.00 | 00D0'00" RT | 975.18 | 7.00 | 975.50 | 990.00 |
| 15 | 903+28.00 | 00D0'00" RT | 975.68 | 7.00 | 976.00 | 990.00 |
| 16 | 903+52.00 | 00D0'00" RT | 975.68 | 7.00 | 976.00 | 990.00 |
| 17 | 903+76.00 | 00D0'00" RT | 975.68 | 7.00 | 976.00 | 990.00 |
| 18 | 904+00.00 | 00D0'00" RT | 975.68 | 7.00 | 976.00 | 990.50 |
| 19 | 904+24.00 | 00D0'00" RT | 976.18 | 7.00 | 976.50 | 990.50 |
| 20 | 904+48.00 | 00D0'00" RT | 976.18 | 7.00 | 976.50 | 991.00 |
| 21 | 904+72.00 | 00D0'00" RT | 976.68 | 7.00 | 977.00 | 991.00 |
| 22 | 904+96.00 | 00D0'00" RT | 976.68 | 7.00 | 977.00 | 991.50 |
| 23 | 905+20.00 | 00D0'00" RT | 977.18 | 7.00 | 977.50 | 991.50 |
| 24 | 905+44.00 | 00D0'00" RT | 977.18 | 7.00 | 977.50 | 992.00 |
| 25 | 905+68.00 | 00D0'00" RT | 977.68 | 7.00 | 978.00 | 992.50 |
| 26 | 905+92.00 | 04°48'10" RT | 978.18 | 7.00 | 978.50 | 992.50 |
| 27 | 906+16.00 | 00D0'00" RT | 978.18 | 7.00 | 978.50 | 992.50 |
| 28 | 906+40.00 | 00D0'00" RT | 978.18 | 7.00 | 978.50 | 992.50 |
| 29 | 906+64.00 | 00D0'00" RT | 978.18 | 7.00 | 978.50 | 993.00 |
| 30 | 906+88.00 | 00D0'00" RT | 978.68 | 7.00 | 979.00 | 993.50 |
| 31 | 907+12.00 | 00D0'00" RT | 979.18 | 7.00 | 979.50 | 993.50 |
| 32 | 907+36.00 | 00D0'00" RT | 979.18 | 7.00 | 979.50 | 994.00 |
| 33 | 907+60.00 | 00D0'00" RT | 979.68 | 7.00 | 980.00 | 994.50 |
| 34 | 907+84.00 | 00D0'00" RT | 980.18 | 7.00 | 980.50 | 994.50 |
| 35 | 908+08.00 | 00D0'00" RT | 980.18 | 7.00 | 980.50 | 994.50 |
| 36 | 908+32.00 | 00D0'00" RT | 980.18 | 7.00 | 980.50 | 995.00 |
| 37 | 908+56.00 | 00D0'00" RT | 980.68 | 7.00 | 981.00 | 995.00 |
| 38 | 908+80.00 | 00D0'00" RT | 980.68 | 7.00 | 981.00 | 995.50 |
| 39 | 909+04.00 | 00D0'00" RT | 981.18 | 7.00 | 981.50 | 995.50 |
| 40 | 909+28.00 | 05°00'48" RT | 981.18 | 7.00 | 981.50 | 995.50 |
| 41 | 909+52.00 | 00D0'00" RT | 981.18 | 7.00 | 981.50 | 996.00 |
| 42 | 909+76.00 | 00D0'00" RT | 981.68 | 7.00 | 982.00 | 996.00 |
| 43 | 910+00.00 | 00D0'00" RT | 981.68 | 7.00 | 982.00 | 996.00 |
| 44 | 910+24.00 | 00D0'00" RT | 981.68 | 7.00 | 982.00 | 996.50 |
| 45 | 910+48.00 | 00D0'00" RT | 982.18 | 7.00 | 982.50 | 997.00 |
| 46 | 910+72.00 | 00D0'00" RT | 982.68 | 7.00 | 983.00 | 997.00 |
| 47 | 910+96.00 | 00D0'00" RT | 982.68 | 7.00 | 983.00 | 997.50 |
| 48 | 911+20.00 | 00D0'00" RT | 983.18 | 7.00 | 983.50 | 997.50 |
| 49 | 911+44.00 | 00D0'00" RT | 983.18 | 7.00 | 983.50 | 997.50 |
| 50 | 911+68.00 | 00D0'00" RT | 983.18 | 7.00 | 983.50 | 998.00 |
| 51 | 911+85.00 | 00D0'00" RT | 983.68 | 7.00 | 984.00 | 998.00 |
| 52 | 912+02.00 | 00D0'00" RT | 983.68 | 7.00 | 984.00 | 998.00 |
| 53 | 912+19.00 | 00D0'00" RT | 982.68 | 7.00 | 983.00 | 998.00 |
| 54 | 912+36.00 | 00D0'00" RT | 981.68 | 7.00 | 982.00 | 997.00 |
| 55 | 912+53.00 | 00D0'00" RT | 980.68 | 7.00 | 981.00 | 996.00 |
| 56 | 912+70.00 | 00D0'00" RT | 980.68 | 7.00 | 981.00 | 995.00 |

## NOISE WALL 11

| DRILLED SHAFT NO. | WORKPOINT STATION | DEFLECTION ANGLE | TOP OF DRILLED SHAFT ELEVATION | SHAFT LENGTH (FEET) | BOTTOM OF BARRIER ELEVATION | TOP OF BARRIER ELEVATION |
|---|---|---|---|---|---|---|
| 1 | 1100+00.00 | 00°00'00" RT | 974.68 | 6.50 | 975.00 | 989.00 |
| 2 | 1100+24.00 | 00°00'00" RT | 974.68 | 6.50 | 975.00 | 989.50 |
| 3 | 1100+48.00 | 00°00'00" RT | 975.18 | 6.50 | 975.50 | 990.00 |
| 4 | 1100+72.00 | 00°00'00" RT | 975.68 | 6.50 | 976.00 | 990.00 |
| 5 | 1100+96.00 | 00°00'00" RT | 975.68 | 6.50 | 976.00 | 990.00 |
| 6 | 1101+20.00 | 00°00'00" RT | 975.68 | 7.00 | 976.00 | 990.00 |
| 7 | 1101+44.00 | 00°00'00" RT | 975.68 | 7.00 | 976.00 | 990.50 |
| 8 | 1101+68.00 | 00°00'00" RT | 976.18 | 7.00 | 976.50 | 990.50 |
| 9 | 1101+92.00 | 00°00'00" RT | 976.18 | 7.00 | 976.50 | 990.50 |
| 10 | 1102+16.00 | 00°00'00" RT | 976.18 | 7.00 | 976.50 | 990.50 |
| 11 | 1102+40.00 | 00°00'00" RT | 976.18 | 7.00 | 976.50 | 990.50 |
| 12 | 1102+64.00 | 00°00'00" RT | 976.18 | 7.00 | 976.50 | 990.50 |
| 13 | 1102+88.00 | 00°00'00" RT | 976.18 | 7.00 | 976.50 | 991.00 |
| 14 | 1103+12.00 | 00°00'00" RT | 976.68 | 6.50 | 977.00 | 991.50 |
| 15 | 1103+36.00 | 00°00'00" RT | 977.18 | 6.50 | 977.50 | 992.00 |
| 16 | 1103+60.00 | 00°00'00" RT | 977.68 | 6.50 | 978.00 | 992.50 |
| 17 | 1103+84.00 | 00°00'00" RT | 978.18 | 6.50 | 978.50 | 993.00 |
| 18 | 1104+08.00 | 00°00'00" RT | 978.68 | 6.50 | 979.00 | 993.50 |
| 19 | 1104+32.00 | 00°00'00" RT | 979.18 | 6.50 | 979.50 | 993.50 |
| 20 | 1104+56.00 | 00°00'00" RT | 979.18 | 6.50 | 979.50 | 993.50 |
| 21 | 1104+80.00 | 00°00'00" RT | 979.18 | 6.50 | 979.50 | 993.50 |
| 22 | 1105+04.00 | 00°00'00" RT | 979.18 | 6.50 | 979.50 | 993.50 |
| 23 | 1105+28.00 | 00°00'00" RT | 979.18 | 6.50 | 979.50 | 994.00 |
| 24 | 1105+52.00 | 00°00'00" RT | 979.68 | 6.50 | 980.00 | 994.00 |
| 25 | 1105+76.00 | 00°00'00" RT | 979.68 | 6.50 | 980.00 | 994.00 |
| 26 | 1106+00.00 | 00°00'00" RT | 979.68 | 6.50 | 980.00 | 994.00 |
| 27 | 1106+24.00 | 00°00'00" RT | 979.68 | 6.50 | 980.00 | 994.00 |
| 28 | 1106+48.00 | 00°00'00" RT | 979.68 | 6.50 | 980.00 | 994.00 |
| 29 | 1106+72.00 | 00°00'00" RT | 979.68 | 6.50 | 980.00 | 994.00 |
| 30 | 1106+96.00 | 00°00'00" RT | 979.68 | 6.50 | 980.00 | 994.00 |
| 31 | 1107+20.00 | 00°00'00" RT | 979.68 | 7.00 | 980.00 | 994.00 |
| 32 | 1107+44.00 | 00°00'00" RT | 979.18 | 7.00 | 979.50 | 994.00 |
| 33 | 1107+68.00 | 00°00'00" RT | 979.18 | 7.00 | 979.50 | 993.50 |
| 34 | 1107+92.00 | 06°02'50" RT | 979.18 | 7.00 | 979.50 | 993.50 |

| DRILLED SHAFT NO. | WORKPOINT STATION | DEFLECTION ANGLE | TOP OF DRILLED SHAFT ELEVATION | SHAFT LENGTH (FEET) | BOTTOM OF BARRIER ELEVATION | TOP OF BARRIER ELEVATION |
|---|---|---|---|---|---|---|
| 35 | 1108+16.00 | 00°00'00" RT | 979.18 | 7.00 | 979.50 | 993.50 |
| 36 | 1108+40.00 | 00°00'00" RT | 979.18 | 7.00 | 979.50 | 994.00 |
| 37 | 1108+64.00 | 00°00'00" RT | 979.68 | 7.00 | 980.00 | 994.00 |
| 38 | 1108+88.00 | 00°00'00" RT | 979.68 | 7.00 | 980.00 | 994.50 |
| 39 | 1109+12.00 | 00°00'00" RT | 980.18 | 6.50 | 980.50 | 995.00 |
| 40 | 1109+36.00 | 00°00'00" RT | 980.68 | 6.50 | 981.00 | 995.00 |
| 41 | 1109+60.00 | 00°00'00" RT | 980.68 | 6.50 | 981.00 | 995.00 |
| 42 | 1109+84.00 | 00°00'00" RT | 980.68 | 6.50 | 981.00 | 995.00 |
| 43 | 1110+08.00 | 00°00'00" RT | 980.68 | 6.50 | 981.00 | 995.00 |
| 44 | 1110+32.00 | 03°30'30" RT | 980.68 | 6.50 | 981.00 | 995.00 |
| 45 | 1110+56.00 | 00°00'00" RT | 980.68 | 6.50 | 981.00 | 995.50 |
| 46 | 1110+80.00 | 00°00'00" RT | 981.18 | 6.50 | 981.50 | 995.50 |
| 47 | 1111+04.00 | 00°00'00" RT | 981.18 | 6.50 | 981.50 | 995.50 |
| 48 | 1111+28.00 | 00°00'00" RT | 981.18 | 6.50 | 981.50 | 995.50 |
| 49 | 1111+52.00 | 00°00'00" RT | 981.18 | 6.50 | 981.50 | 995.50 |
| 50 | 1111+76.00 | 00°00'00" RT | 981.18 | 6.50 | 981.50 | 996.00 |
| 51 | 1112+00.00 | 00°00'00" RT | 981.68 | 6.50 | 982.00 | 996.00 |
| 52 | 1112+24.00 | 00°00'00" RT | 981.68 | 6.50 | 982.00 | 996.00 |
| 53 | 1112+48.00 | 00°00'00" RT | 981.68 | 6.50 | 982.00 | 996.00 |
| 54 | 1112+72.00 | 00°00'00" RT | 981.68 | 6.50 | 982.00 | 996.00 |
| 55 | 1112+96.00 | 00°00'00" RT | 981.68 | 6.50 | 982.00 | 996.00 |
| 56 | 1113+20.00 | 00°00'00" RT | 981.68 | 6.50 | 982.00 | 996.00 |
| 57 | 1113+44.00 | 00°00'00" RT | 981.68 | 6.50 | 982.00 | 996.00 |
| 58 | 1113+68.00 | 00°00'00" RT | 981.68 | 6.50 | 982.00 | 996.50 |
| 59 | 1113+92.00 | 06°13'00" RT | 982.18 | 6.50 | 982.50 | 996.50 |
| 60 | 1114+16.00 | 00°00'00" RT | 982.18 | 6.50 | 982.50 | 996.50 |
| 61 | 1114+40.00 | 00°00'00" RT | 982.18 | 6.50 | 982.50 | 996.50 |
| 62 | 1114+64.00 | 00°00'00" RT | 982.18 | 6.50 | 982.50 | 996.50 |
| 63 | 1114+88.00 | 00°00'00" RT | 982.18 | 6.50 | 982.50 | 996.50 |
| 64 | 1115+12.00 | 00°00'00" RT | 982.18 | 6.50 | 982.50 | 996.50 |
| 65 | 1115+36.00 | 00°00'00" RT | 982.18 | 6.50 | 982.50 | 996.50 |
| 66 | 1115+60.00 | 00°00'00" RT | 982.18 | 6.50 | 982.50 | 996.50 |

## NOISE WALL 12

| DRILLED SHAFT NO. | WORKPOINT STATION | DEFLECTION ANGLE | TOP OF DRILLED SHAFT ELEVATION | SHAFT LENGTH (FEET) | BOTTOM OF BARRIER ELEVATION | TOP OF BARRIER ELEVATION |
|---|---|---|---|---|---|---|
| 1 | 120+00.00 | 00°00'00" RT | 981.18 | 7.00 | 981.50 | 995.50 |
| 2 | 120+12.00 | 00°00'00" RT | 981.18 | 7.00 | 981.50 | 996.00 |
| 3 | 120+24.00 | 02°23'37" RT | 981.68 | 7.00 | 982.00 | 996.50 |
| 4 | 120+36.00 | 00°00'00" RT | 982.18 | 7.00 | 982.50 | 997.00 |
| 5 | 120+60.00 | 00°00'00" RT | 982.68 | 7.00 | 983.00 | 997.50 |
| 6 | 120+72.00 | 00°00'00" RT | 983.18 | 7.00 | 983.50 | 998.00 |
| 7 | 120+96.00 | 00°00'00" RT | 983.68 | 7.00 | 984.00 | 998.50 |
| 8 | 121+20.00 | 00°00'00" RT | 984.18 | 7.00 | 984.50 | 999.50 |
| 9 | 121+44.00 | 04°47'34" RT | 985.18 | 7.00 | 985.50 | 999.50 |
| 10 | 121+68.00 | 00°00'00" RT | 985.18 | 7.00 | 985.50 | 999.50 |
| 11 | 121+92.00 | 00°00'00" RT | 985.18 | 7.00 | 985.50 | 999.50 |
| 12 | 122+16.00 | 00°00'00" RT | 985.18 | 7.00 | 985.50 | 999.50 |
| 13 | 122+40.00 | 00°00'00" RT | 984.18 | 7.00 | 984.50 | 999.50 |
| 14 | 122+64.00 | 04°50'38" RT | 984.18 | 7.00 | 984.50 | 999.50 |
| 15 | 122+88.00 | 00°00'00" RT | 984.18 | 7.00 | 984.50 | 999.50 |
| 16 | 123+12.00 | 00°00'00" RT | 985.18 | 7.00 | 985.50 | 1000.00 |

| DRILLED SHAFT NO. | WORKPOINT STATION | DEFLECTION ANGLE | TOP OF DRILLED SHAFT ELEVATION | SHAFT LENGTH (FEET) | BOTTOM OF BARRIER ELEVATION | TOP OF BARRIER ELEVATION |
|---|---|---|---|---|---|---|
| 17 | 123+36.00 | 00°00'00" RT | 985.68 | 7.00 | 986.00 | 1000.50 |
| 18 | 123+60.00 | 00°00'00" RT | 986.18 | 7.00 | 986.50 | 1000.50 |
| 19 | 123+84.00 | 06°56'28" RT | 986.18 | 7.00 | 986.50 | 1000.50 |
| 20 | 123+92.00 | 00°00'00" RT | 986.18 | 7.00 | 986.50 | 1000.50 |
| 21 | 124+16.00 | 00°00'00" RT | 986.18 | 7.00 | 986.50 | 1000.50 |
| 22 | 124+35.00 | 00°00'00" RT | 986.18 | 8.50 | 986.50 | 1000.50 |
| 23 | 124+54.00 | 00°00'00" RT | 986.18 | 8.50 | 986.50 | 1000.50 |
| 24 | 124+73.00 | 00°00'00" RT | 986.18 | 8.50 | 986.50 | 1000.50 |
| 25 | 124+97.00 | 06°54'32" RT | 986.18 | 8.50 | 986.50 | 1001.50 |
| 26 | 125+21.00 | 00°00'00" RT | 987.18 | 8.50 | 987.50 | 1001.50 |
| 27 | 125+45.00 | 00°00'00" RT | 987.18 | 8.50 | 987.50 | 1001.50 |
| 28 | 125+69.00 | 00°00'00" RT | 987.18 | 8.50 | 987.50 | 1002.00 |
| 29 | 125+93.00 | 00°00'00" RT | 987.68 | 8.50 | 988.00 | 1002.00 |
| 30 | 126+17.00 | 00°00'00" RT | 987.68 | 8.50 | 988.00 | 1002.50 |
| 31 | 126+41.00 | 00°00'00" RT | 988.18 | 8.50 | 988.50 | 1002.50 |
| 32 | 126+64.00 | 00°00'00" RT | 988.18 | 8.50 | 988.50 | 1002.50 |

*NOTES:*

*1.) FOR POST TYPE SPECIFICATIONS, SEE SHEETS P.218 - P.221*

*2.) VALUES LISTED FOR BOTTOM OF BARRIER ELEVATION AND TOP OF BARRIER ELEVATION CORRESPOND WITH THE BOTTOMMOST AND TOPMOST PANEL AT EACH DRILLED SHAFT LOCATION.*

NOISE WALL DETAILS - WALLS 9, 11 & 12

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 318-4000
www.arcadis.com

DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.215 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-08-13 TIME: 4:11:06 PM USER: danny.tran
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\1437220\400_CAD\400-Engineering\Roadway\Sheets\117607_GM002.dgn

| NOISE WALL 15 | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DRILLED SHAFT NO. | WORKPOINT STATION | DEFLECTION ANGLE | TOP OF DRILLED SHAFT ELEVATION | SHAFT LENGTH (FEET) | BOTTOM OF BARRIER ELEVATION | TOP OF BARRIER ELEVATION | DRILLED SHAFT NO. | WORKPOINT STATION | DEFLECTION ANGLE | TOP OF DRILLED SHAFT ELEVATION | SHAFT LENGTH (FEET) | BOTTOM OF BARRIER ELEVATION | TOP OF BARRIER ELEVATION |
| 1 | 1500+00.00 | 00°00'00" RT | 1028.68 | 7.00 | 1029.00 | 1043.00 | 45 | 1511+71.00 | 00°00'00" RT | 1036.18 | 7.00 | 1036.50 | 1051.00 |
| 2 | 1500+24.00 | 00°00'00" RT | 1028.68 | 7.00 | 1029.00 | 1043.50 | 46 | 1511+95.00 | 00°00'00" RT | 1036.18 | 7.00 | 1036.50 | 1050.50 |
| 3 | 1500+48.00 | 00°00'00" RT | 1029.18 | 7.00 | 1029.50 | 1044.00 | 47 | 1512+19.00 | 00°00'00" RT | 1036.18 | 7.00 | 1036.50 | 1050.50 |
| 4 | 1500+72.00 | 00°00'00" RT | 1029.68 | 7.00 | 1030.00 | 1044.50 | 48 | 1512+43.00 | 00°00'00" RT | 1036.18 | 7.00 | 1036.50 | 1050.50 |
| 5 | 1500+96.00 | 00°00'00" RT | 1030.18 | 7.00 | 1030.50 | 1045.50 | 49 | 1512+67.00 | 00°00'00" RT | 1036.18 | 7.00 | 1036.50 | 1050.50 |
| 6 | 1501+11.00 | 00°00'00" RT | 1031.18 | 7.00 | 1031.50 | 1046.00 | 50 | 1512+91.00 | 00°00'00" RT | 1036.18 | 7.00 | 1036.50 | 1050.50 |
| 7 | 1501+26.00 | 00°00'00" RT | 1031.68 | 7.00 | 1032.00 | 1046.00 | 51 | 1513+15.00 | 00°00'00" RT | 1036.18 | 6.50 | 1036.50 | 1050.50 |
| 8 | 1501+50.00 | 00°00'00" RT | 1031.68 | 7.00 | 1032.00 | 1046.50 | 52 | 1513+39.00 | 00°00'00" RT | 1036.18 | 6.50 | 1036.50 | 1050.50 |
| 9 | 1501+67.00 | 00°00'00" RT | 1032.18 | 7.00 | 1032.50 | 1047.00 | 53 | 1513+63.00 | 00°00'00" RT | 1036.18 | 6.50 | 1036.50 | 1050.50 |
| 10 | 1501+91.00 | 157°30'00" LT | 1032.68 | 7.00 | 1033.00 | 1047.00 | 54 | 1513+87.00 | 00°00'00" RT | 1036.18 | 6.50 | 1036.50 | 1050.50 |
| 11 | 1502+08.00 | 157°30'00" RT | 1032.68 | 7.00 | 1033.00 | 1047.00 | 55 | 1514+11.00 | 00°00'00" RT | 1036.18 | 6.50 | 1036.50 | 1050.50 |
| 12 | 1502+24.00 | 00°00'00" RT | 1032.68 | 7.00 | 1033.00 | 1047.50 | 56 | 1514+35.00 | 00°38'16" RT | 1036.18 | 6.50 | 1036.50 | 1050.50 |
| 13 | 1502+40.00 | 00°00'00" RT | 1033.18 | 7.00 | 1033.50 | 1047.50 | 57 | 1514+59.00 | 00°00'00" RT | 1036.18 | 6.50 | 1036.50 | 1050.50 |
| SUSPEND NOISE WALL 15 | | | | | | | 58 | 1514+83.00 | 00°00'00" RT | 1036.18 | 6.50 | 1036.50 | 1050.50 |
| 14 | 1504+27.00 | 00°00'00" RT | 1037.68 | 7.00 | 1038.00 | 1052.00 | 59 | 1515+07.00 | 00°00'00" RT | 1036.18 | 6.50 | 1036.50 | 1050.50 |
| 15 | 1504+51.00 | 00°00'00" RT | 1037.68 | 7.00 | 1038.00 | 1052.00 | 60 | 1515+31.00 | 00°00'00" RT | 1036.18 | 6.50 | 1036.50 | 1050.50 |
| 16 | 1504+75.00 | 00°00'00" RT | 1037.68 | 7.00 | 1038.00 | 1052.00 | 61 | 1515+55.00 | 00°00'00" RT | 1036.18 | 6.50 | 1036.50 | 1051.00 |
| 17 | 1504+99.00 | 00°00'00" RT | 1037.68 | 7.00 | 1038.00 | 1052.00 | 62 | 1515+79.00 | 00°00'00" RT | 1036.68 | 6.50 | 1037.00 | 1051.00 |
| 18 | 1505+23.00 | 00°00'00" RT | 1037.68 | 7.00 | 1038.00 | 1052.00 | 63 | 1516+03.00 | 00°00'00" RT | 1036.68 | 6.50 | 1037.00 | 1051.00 |
| 19 | 1505+47.00 | 00°00'00" RT | 1037.68 | 7.00 | 1038.00 | 1052.00 | 64 | 1516+27.00 | 00°00'00" RT | 1036.68 | 6.50 | 1037.00 | 1051.50 |
| 20 | 1505+71.00 | 00°00'00" RT | 1037.68 | 7.00 | 1038.00 | 1052.00 | 65 | 1516+51.00 | 00°00'00" RT | 1037.18 | 6.50 | 1037.50 | 1051.50 |
| 21 | 1505+95.00 | 00°00'00" RT | 1037.68 | 7.00 | 1038.00 | 1052.00 | 66 | 1516+75.00 | 00°00'00" RT | 1037.18 | 6.50 | 1037.50 | 1052.00 |
| 22 | 1506+19.00 | 00°00'00" RT | 1037.68 | 7.00 | 1038.00 | 1052.00 | 67 | 1516+99.00 | 00°00'00" RT | 1037.68 | 6.50 | 1038.00 | 1052.00 |
| 23 | 1506+43.00 | 00°00'00" RT | 1037.68 | 7.00 | 1038.00 | 1052.50 | 68 | 1517+23.00 | 00°00'00" RT | 1037.68 | 8.50 | 1038.00 | 1052.00 |
| 24 | 1506+67.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | 69 | 1517+47.00 | 00°00'00" RT | 1037.18 | 8.50 | 1037.50 | 1052.00 |
| 25 | 1506+91.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | 70 | 1517+71.00 | 00°00'00" RT | 1036.18 | 8.50 | 1036.50 | 1051.50 |
| 26 | 1507+15.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | 71 | 1517+95.00 | 00°00'00" RT | 1035.18 | 8.50 | 1035.50 | 1050.50 |
| 27 | 1507+39.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | 72 | 1518+19.00 | 00°00'00" RT | 1034.18 | 8.50 | 1034.50 | 1049.50 |
| 28 | 1507+63.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | 73 | 1518+43.00 | 00°00'00" RT | 1034.18 | 8.50 | 1034.50 | 1048.50 |
| 29 | 1507+87.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | SUSPEND NOISE WALL 15 | | | | | | |
| 30 | 1508+11.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | 74 | 1518+90.00 | 00°00'00" RT | 1037.18 | 8.50 | 1037.50 | 1051.50 |
| 31 | 1508+35.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | 75 | 1519+14.00 | 00°00'00" RT | 1037.18 | 8.50 | 1037.50 | 1051.50 |
| 32 | 1508+59.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | 76 | 1519+38.00 | 00°00'00" RT | 1037.18 | 8.50 | 1037.50 | 1051.50 |
| 33 | 1508+83.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | 77 | 1519+62.00 | 00°00'00" RT | 1037.18 | 8.50 | 1037.50 | 1051.50 |
| 34 | 1509+07.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | 78 | 1519+86.00 | 00°00'00" RT | 1037.18 | 7.00 | 1037.50 | 1051.50 |
| 35 | 1509+31.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | 79 | 1520+10.00 | 00°00'00" RT | 1037.18 | 7.00 | 1037.50 | 1051.50 |
| 36 | 1509+55.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | 80 | 1520+34.00 | 00°00'00" RT | 1037.18 | 7.00 | 1037.50 | 1051.50 |
| 37 | 1509+79.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | 81 | 1520+58.00 | 00°00'00" RT | 1037.18 | 7.00 | 1037.50 | 1051.50 |
| 38 | 1510+03.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | 82 | 1520+82.00 | 00°00'00" RT | 1037.18 | 7.00 | 1037.50 | 1051.50 |
| 39 | 1510+27.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | 83 | 1521+06.00 | 00°00'00" RT | 1036.68 | 7.00 | 1037.00 | 1051.50 |
| 40 | 1510+51.00 | 00°00'00" RT | 1038.18 | 7.00 | 1038.50 | 1052.50 | 84 | 1521+30.00 | 00°00'00" RT | 1036.18 | 7.00 | 1036.50 | 1051.00 |
| 41 | 1510+75.00 | 00°00'00" RT | 1037.18 | 7.00 | 1037.50 | 1052.50 | 85 | 1521+54.00 | 00°00'00" RT | 1036.18 | 9.50 | 1036.50 | 1050.50 |
| 42 | 1510+99.00 | 00°00'00" RT | 1037.18 | 7.00 | 1037.50 | 1051.50 | 86 | 1521+78.00 | 00°00'00" RT | 1036.18 | 9.50 | 1036.50 | 1050.50 |
| 43 | 1511+23.00 | 00°00'00" RT | 1036.68 | 7.00 | 1037.00 | 1051.50 | 87 | 1522+02.00 | 00°00'00" RT | 1035.68 | 9.50 | 1036.00 | 1050.50 |
| 44 | 1511+47.00 | 00°00'00" RT | 1036.68 | 7.00 | 1037.00 | 1051.00 | 88 | 1522+26.00 | 00°00'00" RT | 1035.68 | 9.50 | 1036.00 | 1050.00 |

*NOTES:*

*1.) FOR POST TYPE SPECIFICATIONS, SEE SHEETS P.218 - P.221*

*2.) VALUES LISTED FOR BOTTOM OF BARRIER ELEVATION AND TOP OF BARRIER ELEVATION CORRESPOND WITH THE BOTTOMMOST AND TOPMOST PANEL AT EACH DRILLED SHAFT LOCATION.*

FRA-161-15.80 NOISE ABATEMENT

MODEL: Sheet_SurvFI PAPERSIZE: 34x22 (in.) DATE: 2024-06-06 TIME: 11:05:06 AM USER: jennifer.kelley
pw:\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\14372\0400_CAD\400-Engineering\Roadway\Sheets\117607_GM003.dgn

NOISE WALL DETAILS - WALL 15

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 818-4900
www.arcadis.com

DESIGNER JMK

REVIEWER JDH 05-22-24

PROJECT ID 117607

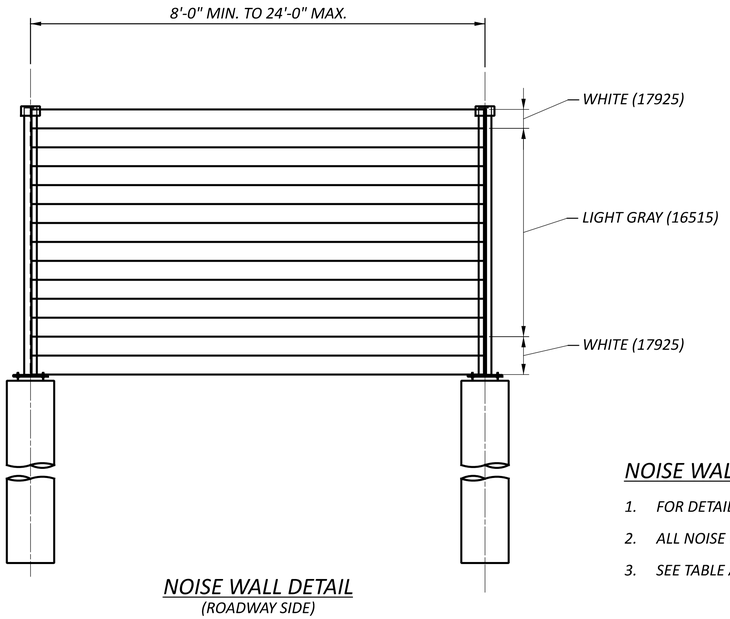
SHEET P.216 | TOTAL P.297

## PANEL MATERIAL AND ARCHITECTURAL SURFACE TREATMENT

| NOISE BARRIER | PANEL MATERIAL | RESIDENTIAL SIDE TREATMENT | | ROADWAY SIDE TREATMENT | |
|---|---|---|---|---|---|
| | | COLOR | TEXTURE | COLOR | TEXTURE |
| | | FEDERAL COLOR NUMBER | FORMLINER ID | FEDERAL COLOR NUMBER | FORMLINER ID |
| WALL 3 | FIBERGLASS | POST COVERS: LIGHT GRAY (16515)<br>PANELS: LIGHT GRAY (16515) | N/A | POST COVERS: WHITE (17925)<br>TOP PANEL OF EACH BAY: WHITE (17925)<br>BOTTOM TWO PANELS OF EACH BAY: WHITE (17925)<br>ALL OTHER PANELS*: LIGHT GRAY (16515) | N/A |
| WALL 6 | FIBERGLASS | POST COVERS: LIGHT GRAY (16515)<br>PANELS: LIGHT GRAY (16515) | N/A | POST COVERS: WHITE (17925)<br>TOP PANEL OF EACH BAY: WHITE (17925)<br>BOTTOM TWO PANELS OF EACH BAY: WHITE (17925)<br>ALL OTHER PANELS*: LIGHT GRAY (16515) | N/A |
| WALL 8 | FIBERGLASS | POST COVERS: LIGHT GRAY (16515)<br>PANELS: LIGHT GRAY (16515) | N/A | POST COVERS: WHITE (17925)<br>TOP PANEL OF EACH BAY: WHITE (17925)<br>BOTTOM TWO PANELS OF EACH BAY: WHITE (17925)<br>ALL OTHER PANELS*: LIGHT GRAY (16515) | N/A |
| WALL 9 | FIBERGLASS | POST COVERS: LIGHT GRAY (16515)<br>PANELS: LIGHT GRAY (16515) | N/A | POST COVERS: WHITE (17925)<br>TOP PANEL OF EACH BAY: WHITE (17925)<br>BOTTOM TWO PANELS OF EACH BAY: WHITE (17925)<br>ALL OTHER PANELS*: LIGHT GRAY (16515) | N/A |
| WALL 11 | FIBERGLASS | POST COVERS: LIGHT GRAY (16515)<br>PANELS: LIGHT GRAY (16515) | N/A | POST COVERS: WHITE (17925)<br>TOP PANEL OF EACH BAY: WHITE (17925)<br>BOTTOM TWO PANELS OF EACH BAY: WHITE (17925)<br>ALL OTHER PANELS*: LIGHT GRAY (16515) | N/A |
| WALL 15 | FIBERGLASS | POST COVERS: LIGHT GRAY (16515)<br>PANELS: LIGHT GRAY (16515) | N/A | POST COVERS: WHITE (17925)<br>TOP PANEL OF EACH BAY: WHITE (17925)<br>BOTTOM TWO PANELS OF EACH BAY: WHITE (17925)<br>ALL OTHER PANELS*: LIGHT GRAY (16515) | N/A |

** INCLUDES ALL PANELS BETWEEN THE TOP PANEL AND THE BOTTOM TWO PANELS*

***AESTHETIC SURFACE TREATMENT:***
*THE SURFACE OF ALL NOISE PANELS SHALL HAVE A PATTERN SPECIFIED BY THE CHART ABOVE. PATTERN RELIEF SHALL BE A MINIMUM OF 1". THE COLOR SHALL BE AS SPECIFIED BY THE CHART ABOVE, UNLESS SPECIFIED OTHERWISE BY THE PLAN DETAILS.*




*NOISE WALL DETAIL*
*(ROADWAY SIDE)*

## *NOISE WALL PANEL NOTES:*

1. *FOR DETAILS NOT SHOWN SEE STD. DWG. NBS-1-09*
2. *ALL NOISE WALL PANELS SHALL BE REFLECTIVE.*
3. *SEE TABLE ABOVE FOR ARCHITECTURAL SURFACE TREATMENTS.*

NOISE WALL DETAILS

FRA-161-15.80 NOISE ABATEMENT

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-05-21 TIME: 1:03:22 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GM004.dgn

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 818-4900
www.arcadis.com

DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.217 TOTAL P.297

## ITEM SPECIAL - NOISE BARRIERS

## GENERAL NOTES:

*DESCRIPTION:*

*THIS WORK CONSISTS OF PREPARING ANY NECESSARY SHOP DRAWINGS, AND MANUFACTURING, TESTING, TRANSPORTING, STORING, AND INSTALLING NOISE BARRIERS; FURNISHING AND INSTALLING DRILLED SHAFTS; EXCAVATING AND BACKFILLING; AND RESTORING THE WORK AREA IN ACCORDANCE WITH THESE PROVISIONS AND IN CONFORMITY WITH THE DIMENSIONS, LINES AND GRADES SHOWN ON THE PROJECT PLANS. ALL APPLICABLE REQUIREMENTS OF THE STANDARD BRIDGE DRAWING NBS-1-09 SHALL BE MET UNLESS DIRECTED OTHERWISE BY THIS PLAN SET.*

*STANDARD DRAWINGS:*

*REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:*
*NBS-1-09 REVISED 01-15-21*

*DESIGN SPECIFICATIONS:*

*THIS STRUCTURE CONFORMS TO THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020, AND THE ODOT BRIDGE DESIGN MANUAL, 2020*

*DESIGN LOADING:*

*WIND LOAD: APPLIED WIND LOAD ON POSTS AND PANELS IS 35 PSF.*
*ICE LOAD: APPLIED ICE LOAD IS 3 INCHES AT 57.3 PCF = 14.32 PSF*

*MATERIAL SPECIFICATIONS:*

*REINFORCING STEEL:*
*REINFORCING STEEL SHALL BE EPOXY-COATED AS PER CMS 709.00 OR GALVANIZED AS PER CMS 709.16.*
*THE REQUIREMENTS OF 509.09 SHALL APPLY TO BOTH EPOXY-COATED AND GALVANIZED REINFORCING STEEL.*
*REINFORCING STEEL SHALL CONFORM TO CMS 709.01, GRADE 60.*

*CONCRETE:*
*CONCRETE CLASS QC5 = 4,000 PSI (DRILLED SHAFTS)*
*CONCRETE FOR DRILLED SHAFTS SHALL CONFORM TO CMS 524.*

*STRUCTURAL STEEL:*
*ASTM A709, GRADE 50 AS PER CMS 711.01.*

*PANELS AND POST COVERS:*
*NOISE BARRIER PANELS, RETAINER PANELS, AND POST COVER MATERIALS SHALL BE GLASS FIBER REINFORCED PULTRUSION BY CARSONITE COMPOSITES OR AN APPROVED EQUAL. REFER TO SHEET P.221 FOR EXAMPLE SCHEMATIC PANEL AND POST COVER.*

*FASTENERS:*

*BASE PLATE TO DRILLED SHAFT CONNECTIONS:*
*ANCHOR BOLTS SHALL BE ASTM F1554, GRADE 105*
*NUTS SHALL BE ASTM A563, GRADE DH*
*WASHERS SHALL BE ASTM F436*

*BACKUP BRACKET AND PANEL TO POST CONNECTIONS:*
*BOLTS, NUTS AND WASHERS SHALL BE ASTM A325*

*GALVANIZING:*

*GALVANIZE ALL STRUCTURAL STEEL, STEEL POSTS, ANGLES, BENT PLATES, BASE PLATES AS PER CMS 711.02. GALVANIZE AFTER CUTTING, BENDING, AND WELDING AS SHOWN ON THE PLANS.*

*GALVANIZE ALL ANCHOR BOLTS, BOLTS, NUTS, AND WASHERS AS PER CMS 711.02. ENSURE THAT THE ENTIRE LENGTH OF ANCHOR BOLTS ARE GALVANIZED.*

*BEARING PADS:*

*ALL BOTTOM NOISE BARRIER PANELS REQUIRE A NEOPRENE PREFORMED BEARING PAD BETWEEN THE BOTTOM OF THE NOISE PANEL AND THE BEARING SURFACE AT THE BASE PLATE AND SUPPORT ANGLES. THE BEARING PADS SHALL BE 1/8" THICK AND 4 INCHES BY 5 INCHES FOR NOISE BARRIER PANELS AND 5 INCHES BY 5 INCHES FOR RETAINER PANELS. THE BEARING PADS SHALL CONFORM TO ODOT CMS SECTION 711.21, PREFORMED BEARING PADS.*

*DRILLED SHAFTS:*

*THE NOISE BARRIER POSTS SHALL BE SUPPORTED BY 30" DIAMETER DRILLED SHAFT FOUNDATION. CONSTRUCT DRILLED SHAFTS ACCORDING TO C&MS 524.*

*AVOIDANCE OF UNEXPECTED OBSTRUCTIONS:*

*IF THE AVOIDANCE OF UNEXPECTED UTILITIES OR OTHER OBSTRUCTIONS REQUIRES THE USE OF CLOSER POST SPACINGS THAN WHAT WAS SHOWN ON THE PROJECT PLANS FURNISH AND INSTALL ADDITIONAL FOUNDATIONS, POSTS, AND PANELS AS DIRECTED BY THE ENGINEER. THE ADDITIONAL FOUNDATIONS, POSTS, AND PANELS SHALL CONFORM TO THESE STANDARD DRAWINGS AND PROVISIONS. THE TOP AND BOTTOM ELEVATIONS OF THE ADDITIONAL POSTS AND PANELS, AND PANEL JOINT LOCATION.*

*SHOP DRAWINGS:*

*PROVIDE SHOP DRAWINGS FOR ALL NOISE WALL COMPONENTS THAT REQUIRE SHOP FABRICATION. INCLUDE THE FABRICATION SCHEDULE FOR ALL NOISE BARRIER WALL COMPONENTS IN THE PROJECT PROGRESS SCHEDULE AS REQUIRED BY C&MS 108.02.*

*NOISE BARRIER AND RETAINER PANELS, AND POST COVERS:*

*THE NOISE BARRIER AND RETAINER PANELS, AND POST COVERS SHALL BE GLASS FIBER REINFORCED, AND FABRICATED AND INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS. THE SURFACE TEXTURE AND FINISH COLOR SHALL BE AS SHOWN IN THE PLANS.*

*PANELS BELOW GRADE:*

*PANELS INSTALLED BELOW GRADES WITHIN SIDE SLOPES SHALL BE RETAINER PANELS AND BE DESIGNED TO RETAIN BACK SLOPES. SUBMIT DESIGN CALCULATIONS SEALED AND SIGNED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER.*

*DIMENSION ADJUSTMENTS:*

*PANEL DIMENSIONS SHOWN ON THE PLANS WERE OBTAINED FROM THE GLASS FIBER NOISE WALL MANUFACTURER AT THE TIME THE PLANS WERE PREPARED. IF THE CONTRACTOR'S SELECTED MANUFACTURER HAS A DESIGN WITH PANEL DIMENSIONS THAT DO NOT CONFORM TO THE DIMENSIONS SHOWN ON THE PLANS, A MARKED COPY OF THE PROJECT PLANS, INCLUDING ALL PLAN NOTES AND DETAILS SHOWING ALL ITEMS AFFECTED BY THE DIFFERENT PANEL DIMENSIONS, SHALL BE SUBMITTED FOR APPROVAL WITH THE SHOP DRAWINGS. ALL WORK REQUIRED TO ACCOMMODATE ANY REVISED DIMENSIONS SHALL BE AT NO EXTRA COST TO THE PROJECT.*

*HIGH DENSITY POLYURETHANE:*

*FILL GAP BETWEEN THE BASE PLATE AND THE DRILLED SHAFT WITH HIGH DENSITY POLYURETHANE PER SS 842.*

*NEOPRENE FOAM RUBBER:*

*THE NEOPRENE FOAM RUBBER SHALL BE MEDIUM DENSITY FOAM RUBBER WITH UV, WATER AND WEATHERING RESISTANCE AND WIDE OPERATING TEMPERATURE RANGE. THE COLOR SHALL BE LIGHT GREY. FURNISH AND INSTALL NEOPRENE FOAM RUBBER STRIPS PER THE MANUFACTURER'S RECOMMENDED SPECIFICATIONS.*

*CONSTRUCTION METHODS:*

*CONSTRUCTION METHODS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD BRIDGE DRAWING NBS-1-09.*

*METHOD OF MEASUREMENT:*

*THE DEPARTMENT WILL MEASURE THE NOISE BARRIER BY THE NUMBER OF SQUARE FEET.*

*THE DEPARTMENT WILL DETERMINE THE AREA OF INDIVIDUAL NOISE BARRIER SEGMENTS FROM PROJECT PLAN DIMENSIONS USING A HEIGHT FROM THE BOTTOM OF THE BOTTOM PANEL TO THE TOP OF THE CAP ON THE TOP PANEL, AND SPAN LENGTHS MEASURED FROM CENTER TO CENTER POSTS.*

*BASIS OF PAYMENT:*

*PAYMENT FOR NOISE BARRIERS IS FULL COMPENSATION FOR FURNISHING AND INSTALLING FOUNDATIONS, POSTS INCLUDING APPARATUS SUCH AS BACKUP BRACKETS AND BENT PLATES, PANELS, POST COVERS, STEEL BASE PLATES AND CONNECTIONS, ARCHITECTURAL SURFACE TREATMENTS, SAMPLE POST(S) AND PANEL(S), BEARING PADS, EXCAVATION, DRAINAGE AND BACKFILL, AND OTHER ITEMS THAT DO NOT HAVE SEPARATE PAY ITEMS BUT ARE NECESSARY TO COMPLETE THE NOISE BARRIER.*

*THE DEPARTMENT WILL PAY FOR THE ADDITIONAL LENGTH OF DRILLED SHAFTS CONSTRUCTED AT THE DIRECTION OF THE ENGINEER IN UNEXPECTED AREAS OF POOR SOIL AS EXTRA WORK IN ACCORDANCE WITH C&MS 109.05.*

*THE DEPARTMENT WILL PAY FOR THE ADDITIONAL FOUNDATIONS, POSTS, AND PANELS FURNISHED AND INSTALLED AT THE DIRECTION OF THE ENGINEER TO AVOID UNEXPECTED UTILITIES OR OTHER OBSTRUCTIONS AS EXTRA WORK IN ACCORDANCE WITH C&MS 109.05.*

*WHERE THE DRILLED SHAFT LENGTH WAS DECREASED FROM THE PROJECT PLAN DIMENSION DUE TO INTERFERENCE WITH UNEXPECTED BEDROCK, THE DEPARTMENT WILL NON-PERFORM THE SHAFT LENGTH BELOW THE BEDROCK ELEVATION AND PAY FOR THE ROCK SOCKET AND INCIDENTALS AS EXTRA WORK ACCORDING TO C&MS 109.05.*

*THE DEPARTMENT WILL NOT PAY FOR REPAIRED OR REPLACED COMPONENTS DAMAGED BY IMPROPER HANDLING, TRANSPORTING, STORING, OR ERECTING.*

*THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICES AS FOLLOWS:*

*ITEM 606 - SPECIAL - NOISE BARRIER (REFLECTIVE)*



DESIGN AGENCY
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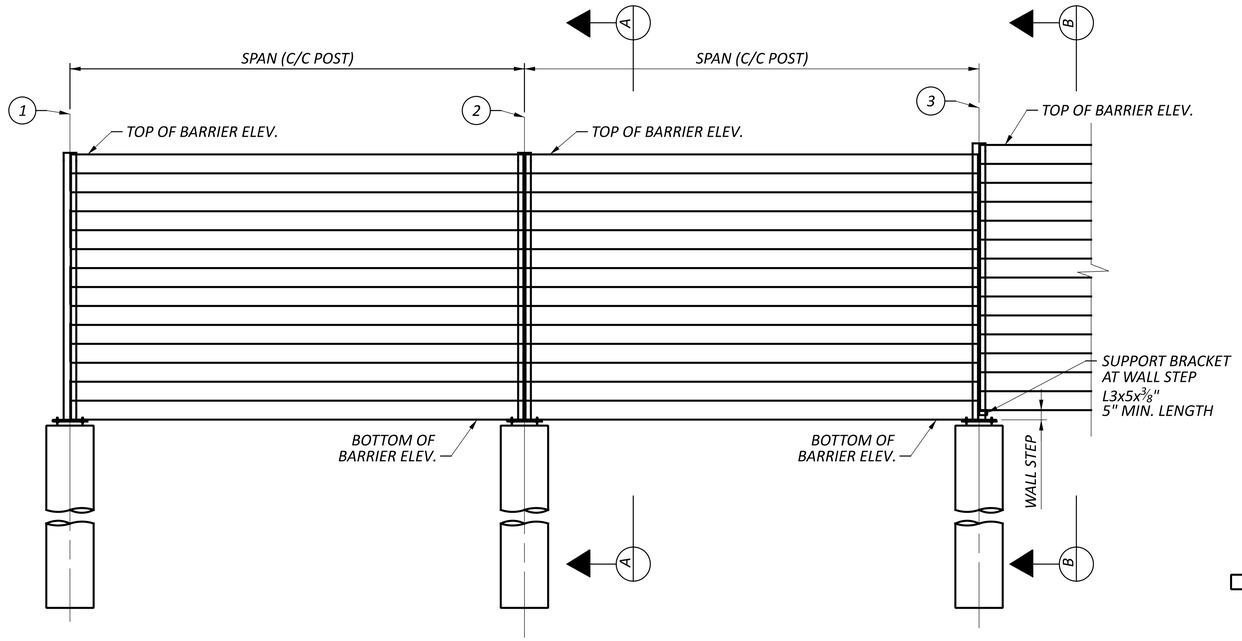
DESIGNER AIS
REVIEWER SS 05-22-24
PROJECT ID 117607
SHEET P.218 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 2024-05-21 TIME: 1:03:33 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_WN001.dgn




PARTIAL ELEVATION

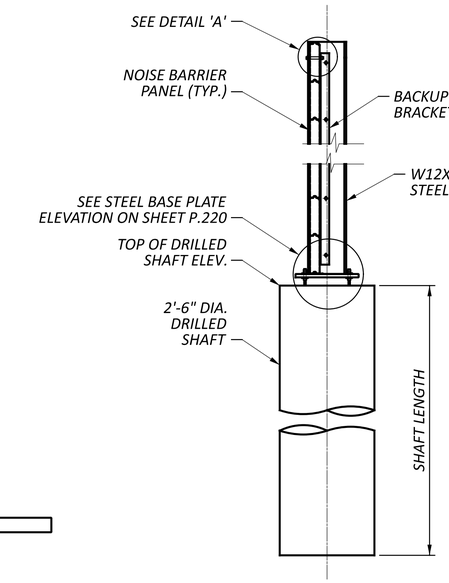
(POST COVERS NOT SHOWN)

NOTES:

1. FOR NOISE WALL PLANS AND PROFILE, SEE SHEETS P.33 - P.62 .
2. FOR NOISE WALL ELEVATION TABLES, SEE SHEETS P.214 - P.216.
3. FOR NOISE WALL STEPS HEIGHT AND LOCATION, SEE NOISE WALL PLANS AND PROFILE SHEETS.
4. SHOP DRILL HOLES IN THE STRUCTURAL STEEL BEFORE GALVANIZING AND FIELD DRILL HOLES IN THE PANELS AS SHOWN.

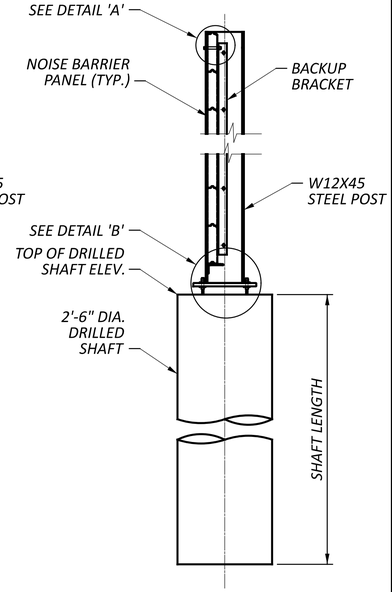
LEGEND:

(X) - DRILLED SHAFT NUMBER



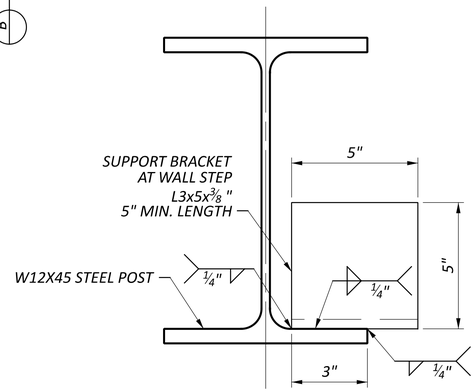

SECTION A-A

(POST COVERS NOT SHOWN)

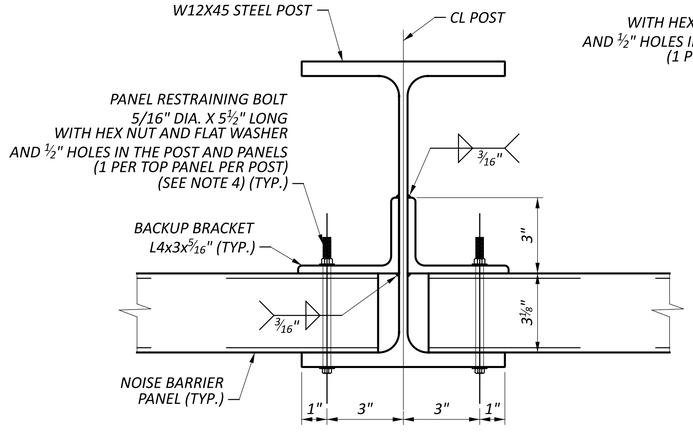



SECTION B-B

(POST COVERS NOT SHOWN)

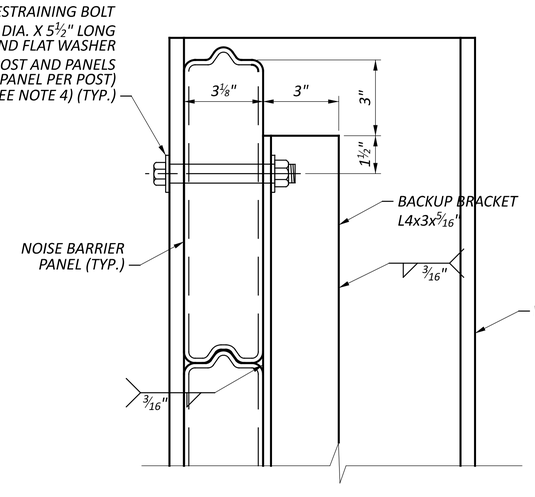



SECTION C-C



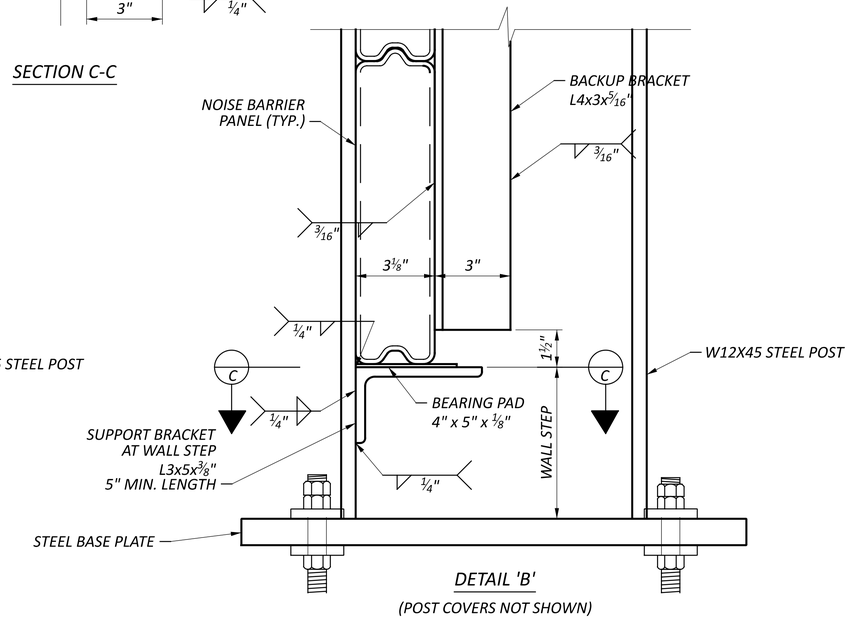

PARTIAL PLAN

(POST COVERS NOT SHOWN)




DETAIL 'A'

(POST COVERS NOT SHOWN)




DETAIL 'B'

(POST COVERS NOT SHOWN)

NOISE WALL DETAILS – 1 OF 3
WALLS 3, 6, 8, 9, 11, 12, & 15

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DESIGNER
AIS

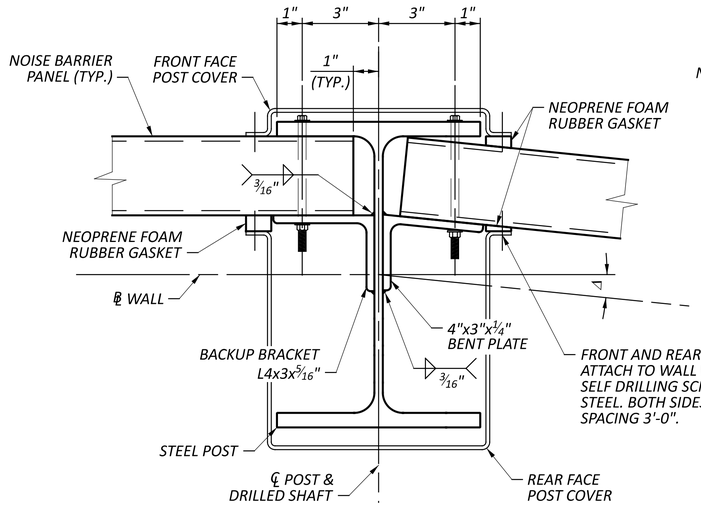
REVIEWER
SS 05-22-24

PROJECT ID
117607

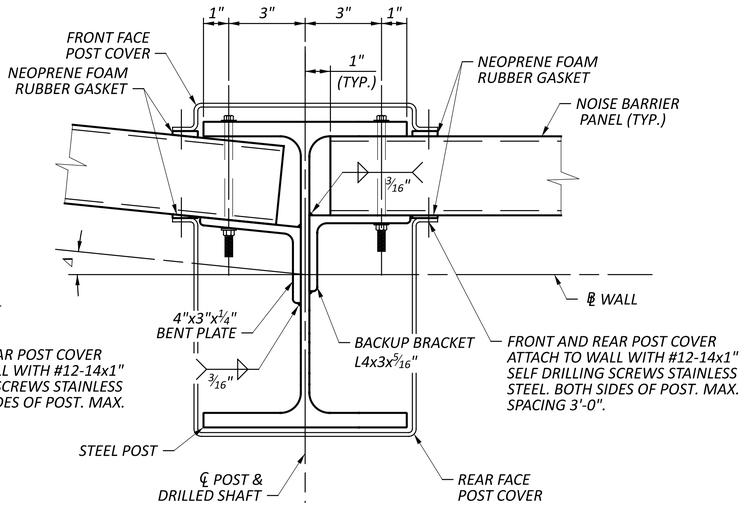
SHEET P.219 | TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 2024-05-21 TIME: 1:03:46 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_WD002.dgn




SKEWED POST DETAILS - 1



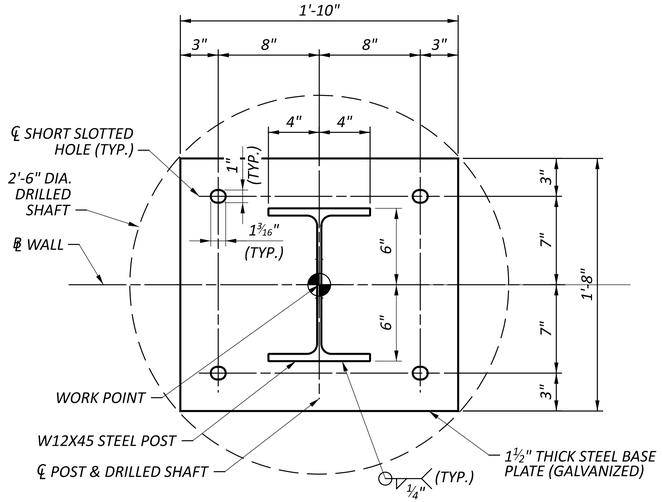

SKEWED POST DETAILS - 2

*NOTES:*

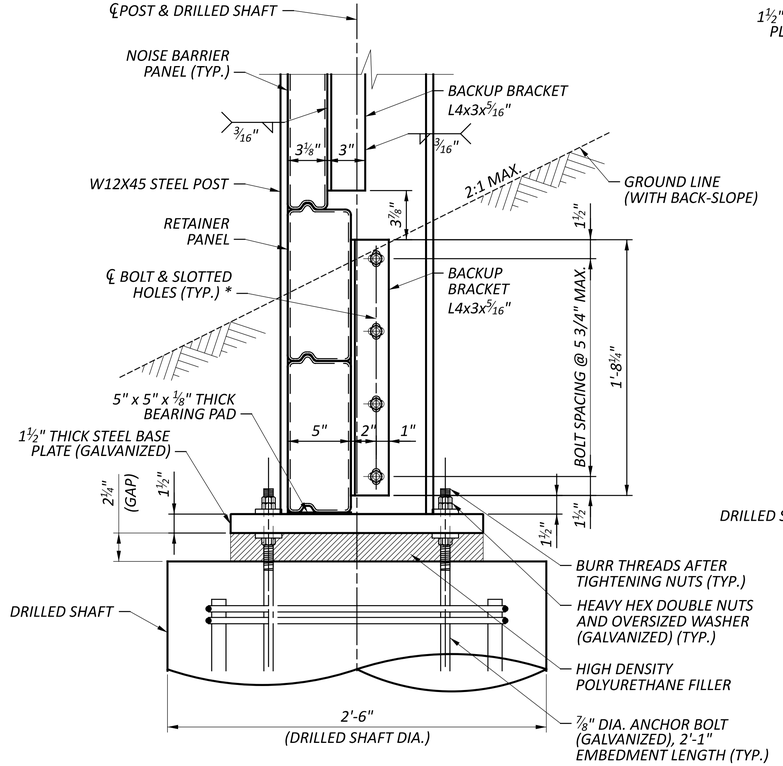
1. *FOR WALL DEFLECTION ANGLES, SEE TABLES ON SHEETS P.214 - P.216.*
2. *FOR GROUND LINE BACK-SLOPES, SEE CROSS SECTIONS ON SHEETS P.63 - P.213.*
3. *FOR ADDITIONAL BASE PLATE AND DRILLED SHAFT NOTES AND DETAILS, REFER TO STD. DWG. NBS-1-09.*
4. *BACKUP BRACKET BOLTS SHALL BE F3125, GRADE A325, TYPE 1, WITH HEX NUTS AND WASHERS. GALVANIZE BOLTS, NUTS AND WASHERS IN ACCORDANCE TO CMS 711.02.*
5. *INSTALL 1" WIDE x 1/4" MINIMUM TO 1" MAXIMUM THICK NEOPRENE FOAM RUBBER STRIPS WITH ADHESIVE BACKING AT SKEWED POSTS AND AS NEEDED TO INSTALL POST COVERS PARALLEL TO THE FLANGE. THE COLOR SHALL BE LIGHT GREY. FURNISH AND INSTALL THE NEOPRENE FOAM RUBBER STRIPS ACCORDING TO THE MANUFACTURER'S RECOMMENDED SPECIFICATIONS.*

Δ - *WALL DEFLECTION ANGLE*

* - *1/2" x 1 3/4" A325 BOLT WITH HEX NUT AND WASHERS*
*THE SIZE OF SLOTTED HOLE SHALL BE 5/8 x 1 1/4". THE SLOT SHALL BE HORIZONTAL IN THE STEEL POST AND VERTICAL IN THE ANGLE AND BENT PLATE.*

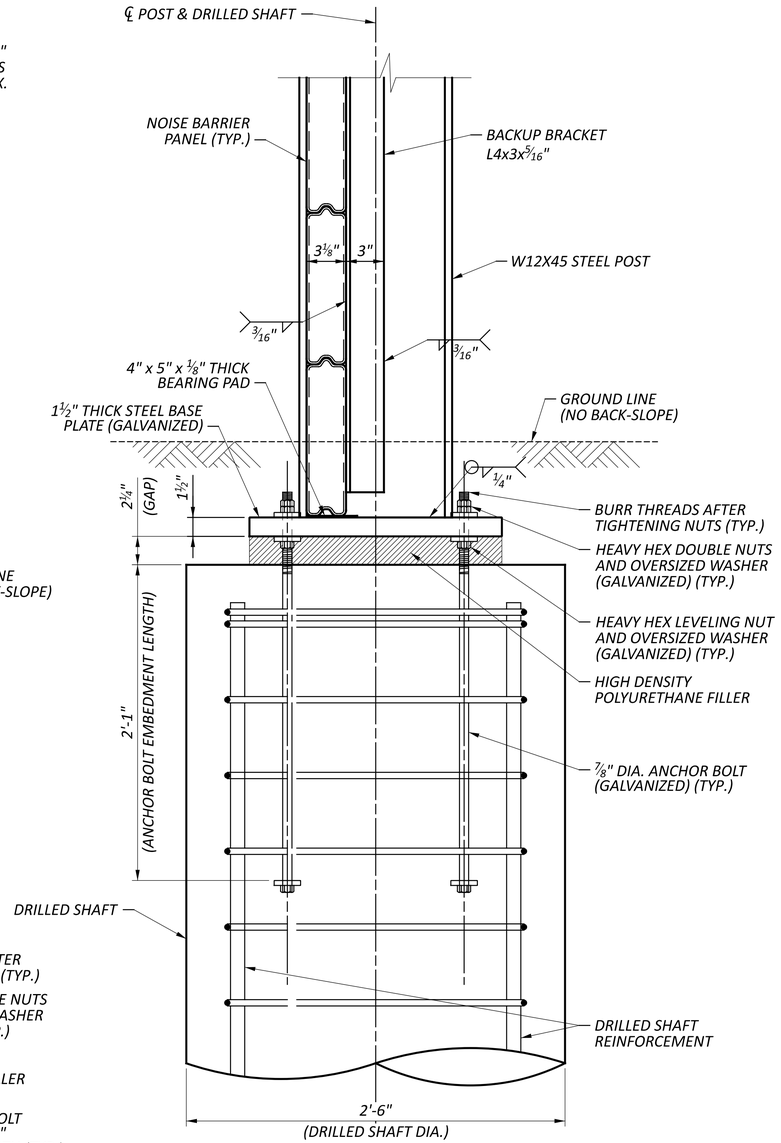



STEEL BASE PLATE PLANS




STEEL POST AND BASE PLATE ELEVATION

*(WITH BACK-SLOPE)*
*(POST COVERS NOT SHOWN)*




STEEL POST AND BASE PLATE ELEVATION

*(NO BACK-SLOPE)*
*(POST COVERS NOT SHOWN)*

FRA-161-15.80 NOISE ABATEMENT

NOISE WALL DETAILS – 2 OF 3
WALLS 3, 6, 8, 9, 11, 12, & 15

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DESIGNER
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REVIEWER
SS 05-22-24

PROJECT ID
117607

SHEET P.220 | TOTAL P.297

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 2024-05-21 TIME: 1:03:58 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_WD003.dgn

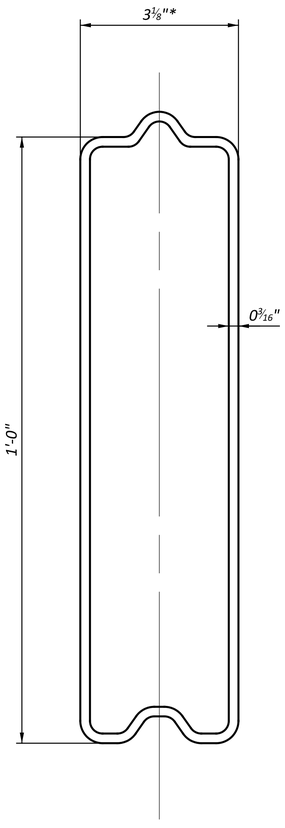
*NOTES:*

1. *INSTALL PANELS AND POST COVER PER MANUFACTURER'S WRITTEN RECOMMENDATIONS.*
2. *PANELS AND POST COVER SHALL BE GLASS FIBER REINFORCED FROM CARSONITE COMPOSITES OR AN APPROVED EQUAL.*
3. *TRIM REAR FACE POST COVER AT RETAINER PANELS AS SHOWN ON THE PLANS. ATTACH REAR POST COVER TO RETAINER PANELS WITH THE USE OF L 1 x 2" BRACKET AND SELF DRILLING SCREWS. THE L 1" x 2" BRACKET MATERIAL TYPE AND COLOR SHALL BE THE SAME AS THE POST COVER.*
4. *INSTALL SIDE COVER FROM TOP OF WALL TO TOP OF POST AT THE LOW SIDE OF WALL STEPS AS SHOWN. ATTACH FRONT AND REAR POST COVERS TO THE SIDE COVER WITH A MINIMUM OF TWO SELF DRILLING SCREWS EACH SIDE. THE SIDE COVER MATERIAL TYPE AND COLOR SHALL BE THE SAME AS THE POST COVER.*

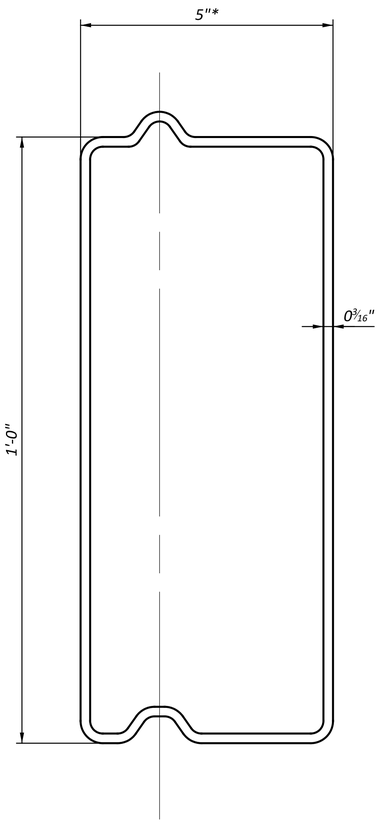
* - *½" x 1¾" A325 BOLT WITH HEX NUT AND WASHERS THE SIZE OF SLOTTED HOLE SHALL BE ⅝ x 1¼". THE SLOT SHALL BE HORIZONTAL IN THE STEEL POST AND VERTICAL IN THE ANGLE AND BENT PLATE.*

** - *FRONT AND REAR POST COVER ATTACH TO WALL WITH #12-14x1" SELF DRILLING SCREWS STAINLESS STEEL. MAX. SPACING 3'-0".*

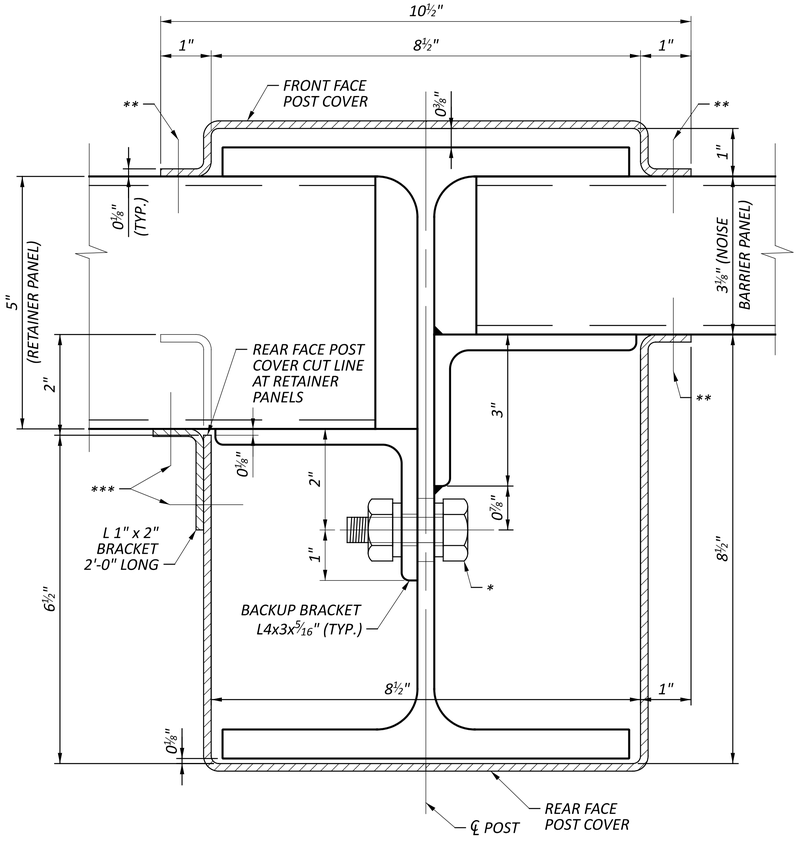
*** - *REAR POST COVER ATTACH TO WALL WITH #12-14x1" SELF DRILLING SCREWS STAINLESS STEEL. MAX. SPACING 1'-0".*



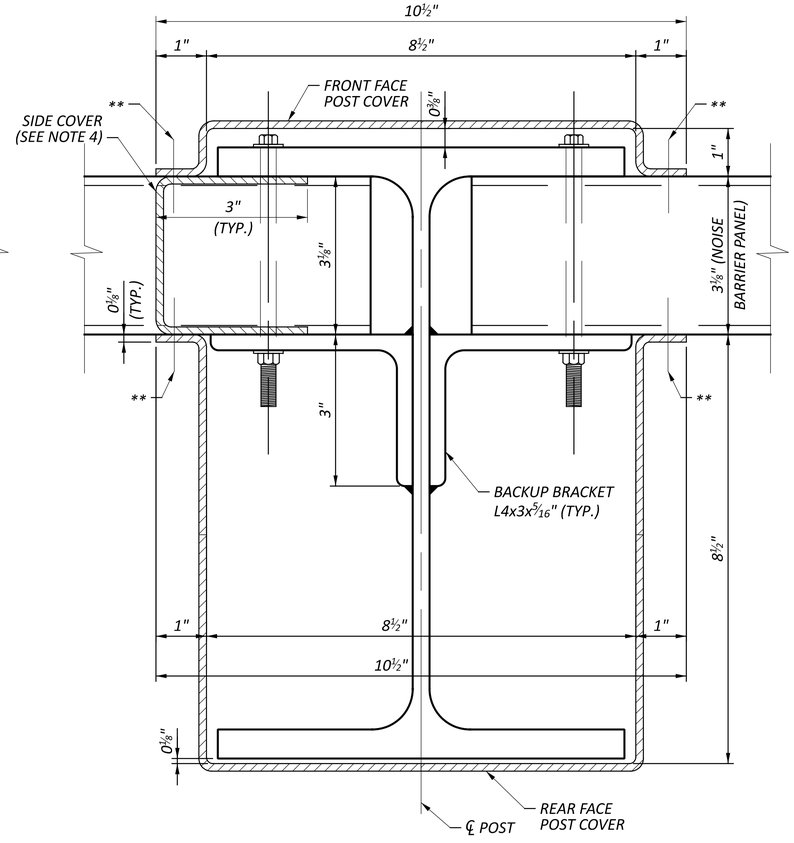

*NOISE BARRIER PANEL DETAIL*




*RETAINER PANEL DETAIL*




*(AT RETAINER PANELS)*




*(AT NOISE BARRIER PANELS)*

*POST COVER DETAIL*

NOISE WALL DETAILS – 3 OF 3
WALLS 3, 6, 8, 9, 11, 12, & 15

FRA-161-15.80 NOISE ABATEMENT


MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 2024-05-21 TIME: 1:04:10 AM USER: jennifer.kelley
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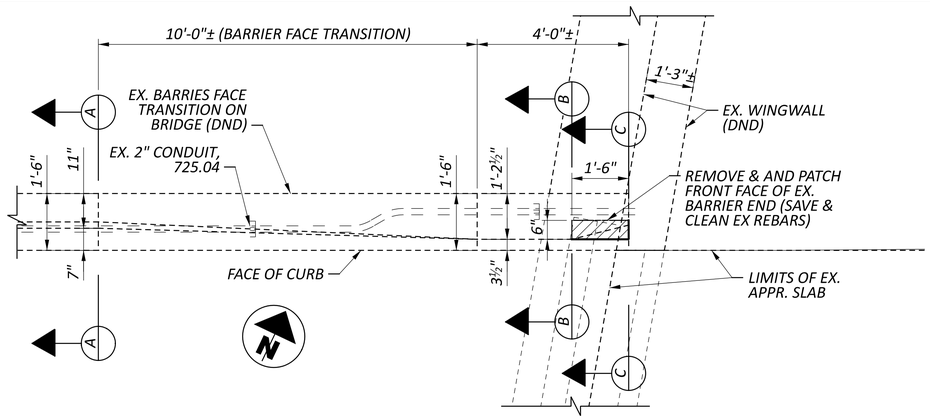
DESIGNER AIS

REVIEWER SS 05-22-24

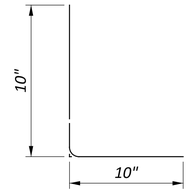
PROJECT ID 117607

SHEET P.221 TOTAL P.297




PLAN

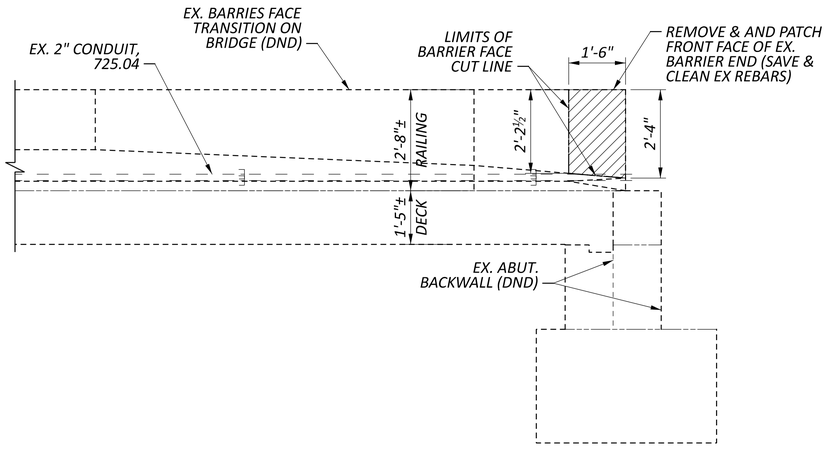
| STEEL LIST (For Estimating Purposes Only) | | | | | |
|---|---|---|---|---|---|
| Mark | Bar | Shape | No. | Length | Weight (lb) |
| X510 | #5 | Straight | 4 | 1'-2" | 5 |
| Y510 | #5 | Straight | 2 | 2'-8" | 6 |
| Y511 | #5 | Bent | 2 | 1'-7" | 3 |
| | | | | Total = | 14 |



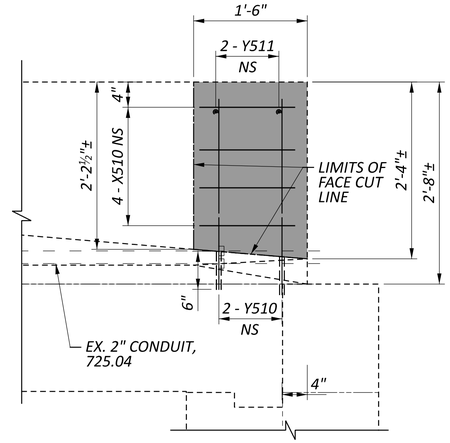

BENDING DIAGRAM

## NOTES:

1. REMOVE EX. CONCRETE BARRIER FRONT FACE ON ABUTMENT WINGWALL AS SHOWN. THE COST SHALL BE INCLUDED WITH THE UNIT PRICE FOR ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN FOR PAYMENT.
2. ALL EX. DIMENSIONS ARE ±.
3. INSTALL DOWEL BARS IN ACCORDANCE WITH CMS 510 USING NON-SHRINK NONMETALLIC GROUT.
4. FOR ADDITIONAL CONCRETE RAILING NOTES AND DETAILS, SEE STD. DWG. BR-1 REV. 04-03-90.
5. PAYMENT FOR PATCHING CONCRETE BARRIER END SECTION SHALL BE MADE AT THE UNIT PRICE FOR ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN AND SHALL INCLUDE ALL MATERIALS, LABOR, DOWEL HOLES AND REINFORCING STEEL REQUIRED TO PATCH THE BARRIER END SECTION AS SHOWN.




ELEVATION



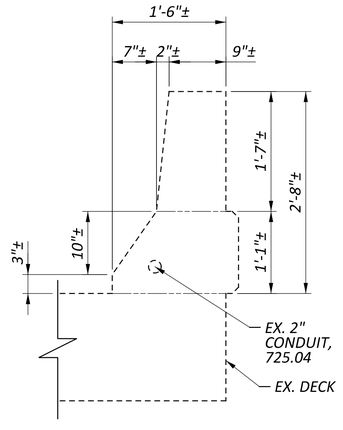

ELEVATION
(PATCHING BARRIER END SECTION)

LEGEND:

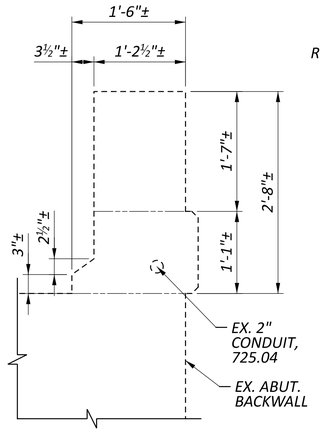
- EX. CONCRETE BARRIER REMOVAL
- PATCHING OF CONCRETE

ABBREVIATIONS:

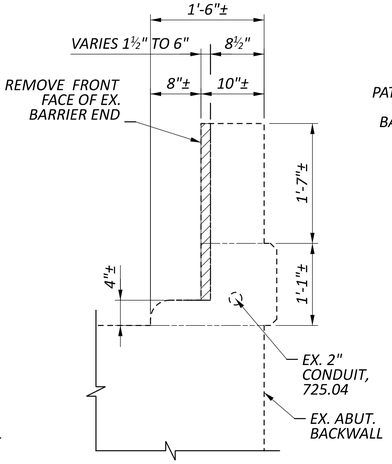
CONST. = CONSTRUCTION
DND = DO NOT DISTURB
ES = EACH SIDE
EX. = EXISTING
FS = FAR SIDE
NS = NEAR SIDE
PEJF = PREFORMED EXPANSION JOINT FILLER
PROP. = PROPOSED
TYP. = TYPICAL



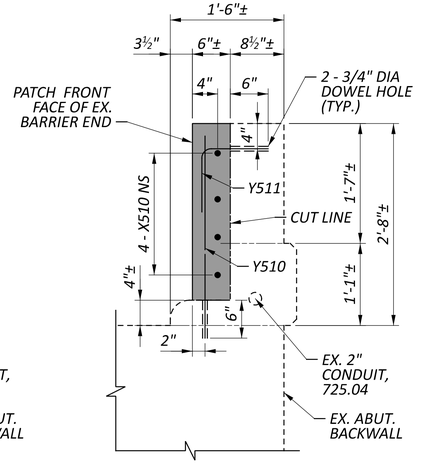

SECTION A-A
(EX. BARRIER)




SECTION B-B
(EX. BARRIER END SECTION)




SECTION C-C
(EX. BARRIER END SECTION REMOVAL)




SECTION C-C
(PATCHING BARRIER END SECTION)

CONCRETE 81" BARRIER 6 END SECTION, AS PER PLAN

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DESIGNER: SS
REVIEWER: JDH 05-22-24
PROJECT ID: 117607
SHEET: P.222 TOTAL: P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: SHEET - 1 PAPERSIZE: 34x22 (in.) DATE: 2024-05-21 TIME: 1:04:25 AM USER: jennifer.kelley
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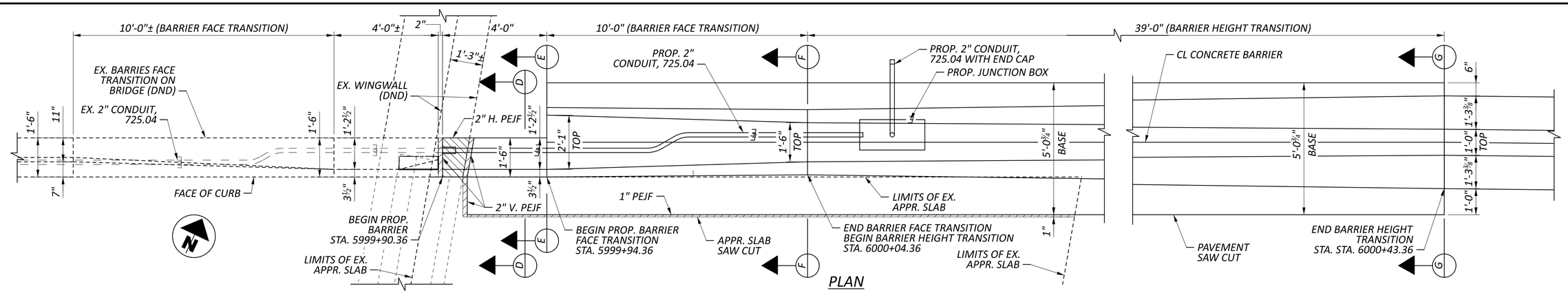
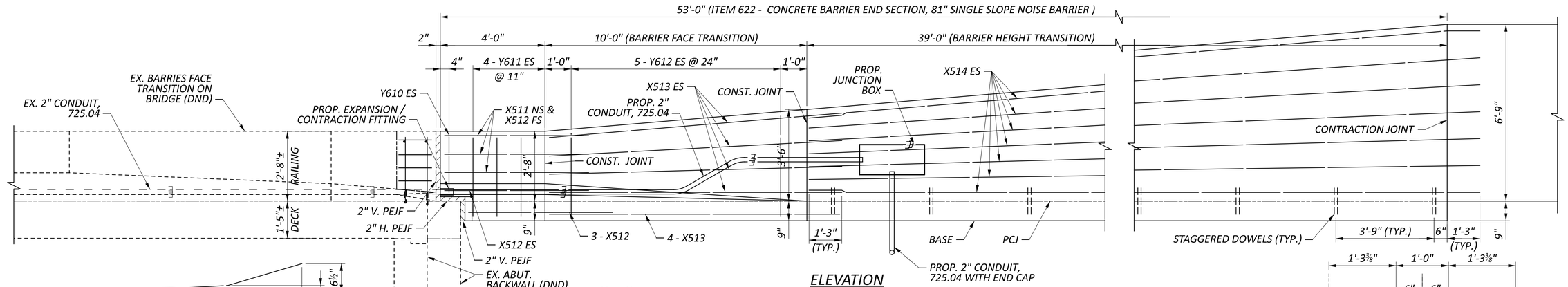


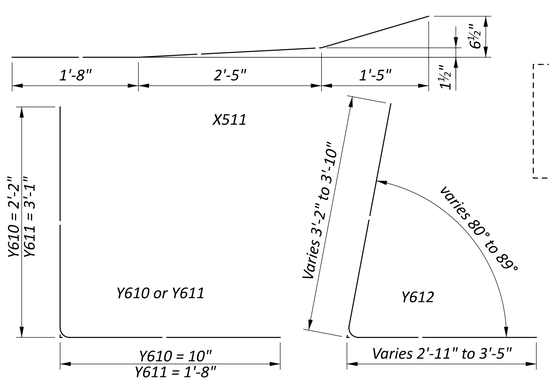

PLAN




ELEVATION

## NOTES:

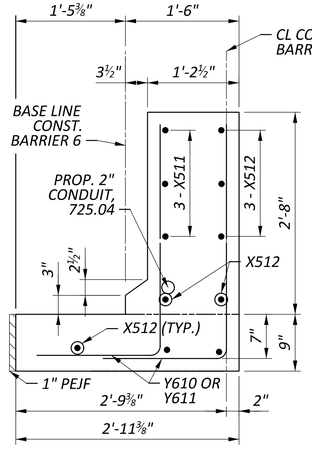
1. FOR ADDITIONAL NOTES AND DETAILS, SEE ST DWG RM-4.3.
2. FOR ADDITIONAL JUNCTION BOX AND CONDUIT NOTES AND DETAILS, SEE ST DWG HL-30.31.
3. ALL EX. DIMENSIONS ARE ±.
4. 2. PAYMENT FOR THE CONCRETE BARRIER END SECTION SHALL BE MADE AT THE UNIT PRICE FOR ITEM 622 - CONCRETE BARRIER, 81" SSB, END SECTION, 32" TO 81" AND SHALL INCLUDE ALL MATERIALS, LABOR, AND REINFORCING STEEL REQUIRED TO CONSTRUCT THE BARRIER END SECTION AS SHOWN.



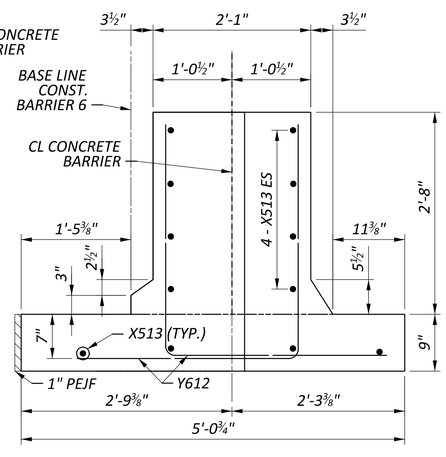

## BENDING DIAGRAMS

STEEL LIST
(For Estimating Purposes Only)

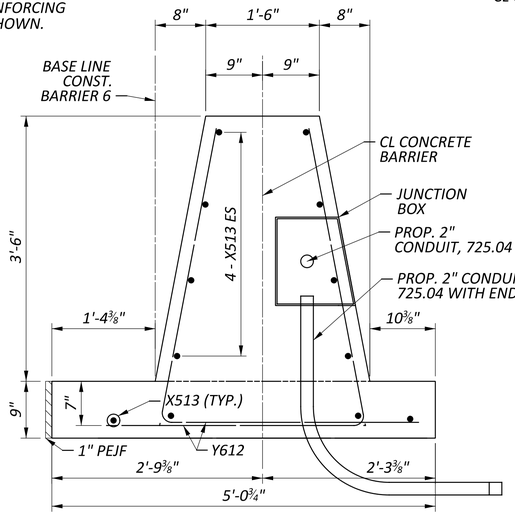
| Mark | Bar | Shape | No. | Length | Weight (lb) |
|---|---|---|---|---|---|
| X511 | #5 | Bent | 3 | 5'-6" | 17 |
| X512 | #5 | Straight | 8 | 5'-6" | 46 |
| X513 | #5 | Straight | 12 | 11'-1" | 139 |
| X514 | #5 | Straight | 14 | 40'-3" | 588 |
| Y610 | #6 | Bent | 2 | 2'-10" | 9 |
| Y611 | #6 | Bent | 8 | 4'-7" | 55 |
| Y612 | #6 | Bent | 2 SERIES OF 5 | Varies 5'-11" to 7'-1" | 98 |
| | | | | Total = | 955 |



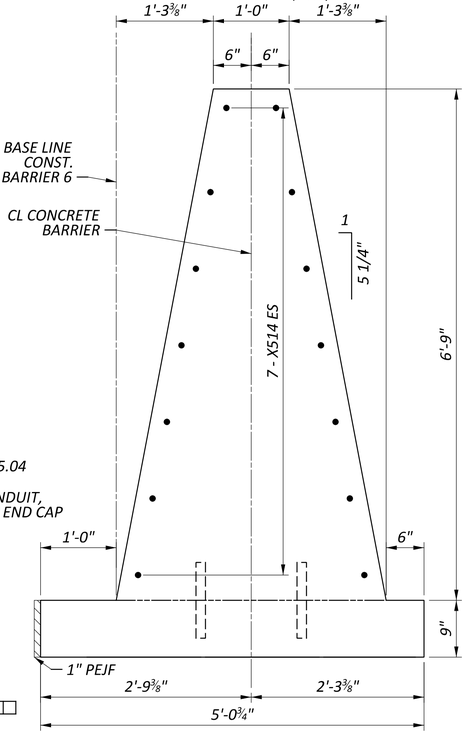

SECTION D-D




SECTION E-E




SECTION F-F




SECTION G-G

CONCRETE 81" BARRIER 6 END SECTION, AS PER PLAN

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DESIGNER SS
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.223 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT

MODEL: SHEET - 2 PAPERSIZE: 34x22 (in.) DATE: 2024-05-21 TIME: 1:04:26 AM USER: jennifer.kelley
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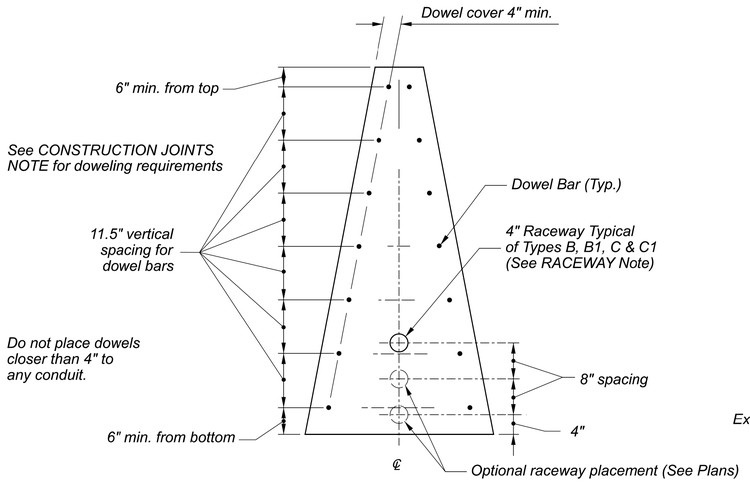
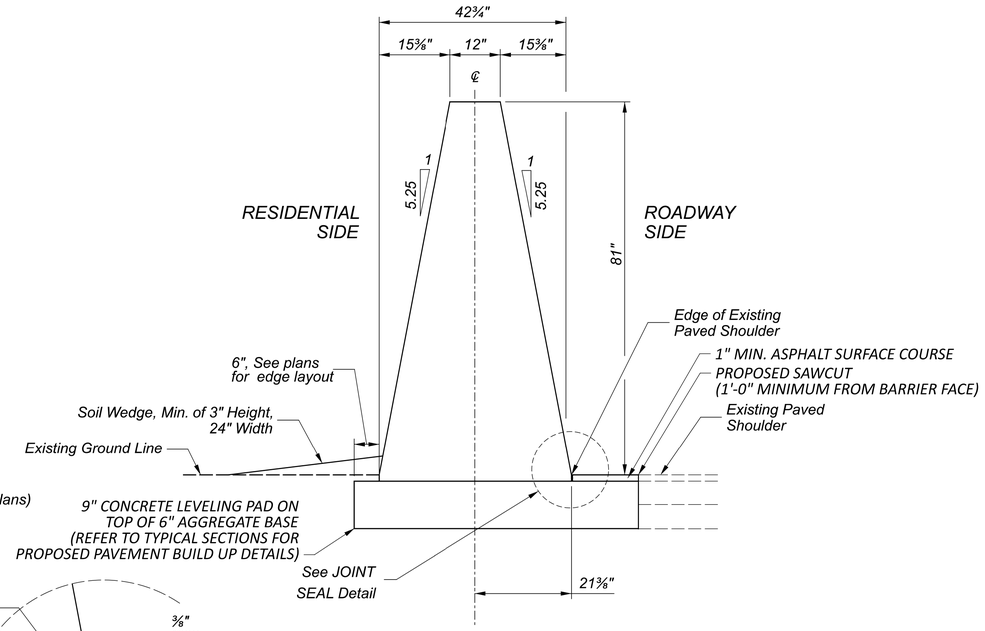
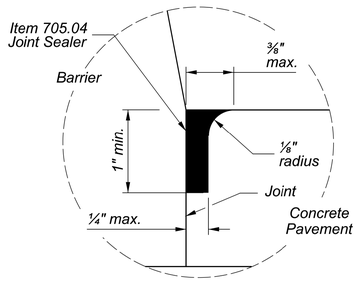


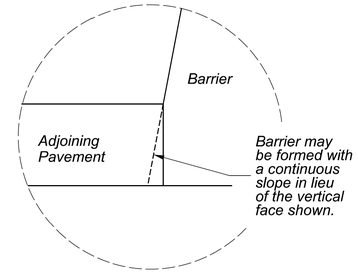

## RACEWAY AND DOWEL BAR PLACEMENT



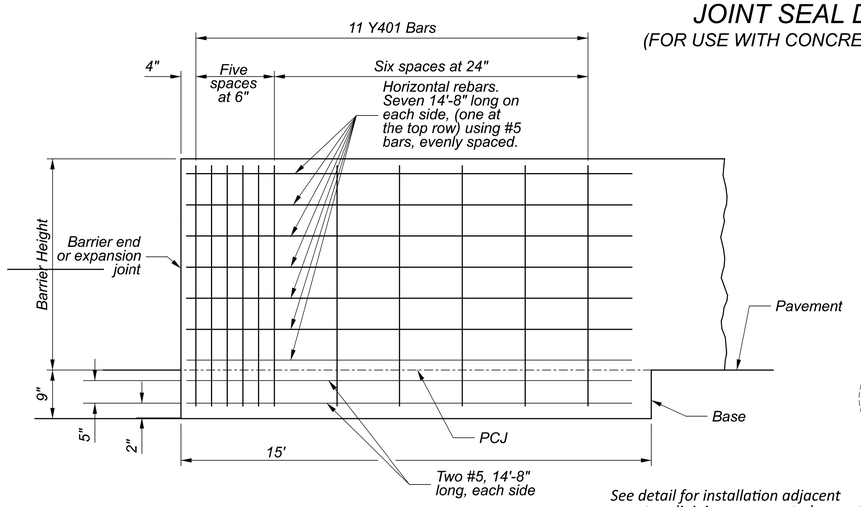

## DETAIL FOR INSTALLATION ADJACENT TO ADJOINING PAVEMENT



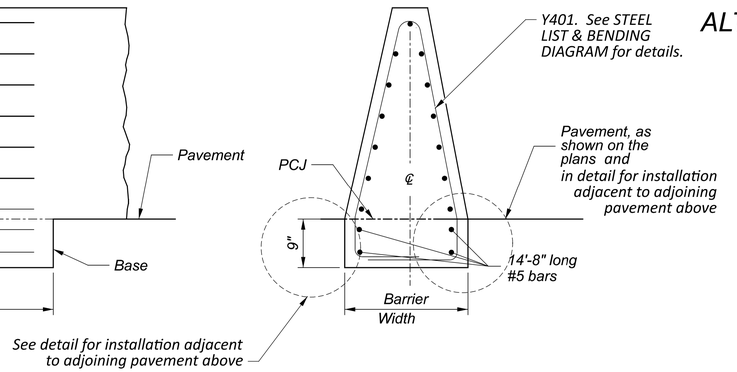

## JOINT SEAL DETAIL
(FOR USE WITH CONCRETE PAVEMENT)




## ALTERNATE TOE DETAIL




## ELEVATION

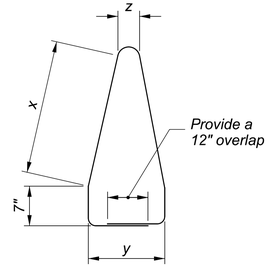



## SECTION

## END ANCHORAGE

| Dimensions for Y401 (English) | | | |
|---|---|---|---|
| x | y | z | Length |
| 74" | 37" | 9" | 18'-8" |

## Y401 STEEL LIST & BENDING DIAGRAM




Y401 #4

*REINFORCED END ANCHORAGES are required at the ends of concrete barrier runs and at interruptions in barrier caused by expansion joints. When barrier does not abut another barrier run, construct the last 15' using the END ANCHORAGE Detail as shown here.*

*At expansion joints, construct an End Anchorage on both sides of joint, with a maximum gap of 2" for the open joint. The maximum expansion joint spacing shall be 800'. This anchorage is not needed at construction joints, provide dowel bar connections instead. See CONSTRUCTION JOINT NOTE for doweling details.*

## NOTES

*SINGLE SLOPE CONCRETE BARRIER may be cast-in-place or slip formed.*
*See SCD RM-4.3 for Type B, B1, C, and C1 barrier.*
*See SCD RM-4.5 for Type D barrier.*
*See SCD RM-4.6 for End Sections.*

*MATERIALS: Construct using concrete with a minimum design strength of 4000 psi conforming to the requirements of CMS 499. Construct top and end edges with either a 1" radius or ¾" chamfer, except at light pole foundations.*

*CONTRACTION JOINTS: Maximum allowable spacing of unsealed joints is 20' throughout the run of the barrier. Construct joints by using metal inserts inside the forms, preformed full width joint filler, a grooving tool, or by sawing. Inserts, tooled, or sawed joints will have a 3" depth. Construct all joints for the full height of the barrier. Saw as soon as curing will allow to prevent spalling. When used in conjunction with concrete pavement, match joints to those in the concrete pavement but not exceeding the maximum allowable spacing.*

*ADJOINING PAVEMENT: When the barrier is constructed in conjunction with new pavement (asphalt or concrete), the concrete leveling pad shall match the thickness of the proposed asphalt or concrete pavement. The leveling pad shall be placed on 6" of aggregate base. The barrier shall then be doweled in to the concrete leveling pad. Barrier constructed next to existing pavement shall have a 9" thick concrete leveling pad placed on 6" of aggregate base. The barrier shall then be doweled in to the concrete levelir pad. Compacted soil on the back side must be placed against the barrier at a minimum height of 3" and extend for a minimum of 2' prior to the breakpoint of the slope.*

*SEALING JOINTS: Use a butt longitudinal joint between the barrier and adjoining concrete pavement sealed with CMS 705.04 joint sealer. See detail on RM-4.3*

*TRANSITIONS: Make linear transitions between different types of barrier within a 20' length.*

*CONSTRUCTION JOINTS: Barrier runs with abutting vertical surfaces at either required or permissible construction joints are to be doweled to each other by use of 3/4" dia. by 18" long epoxy coated deformed dowel bars as per CMS 622.02. Bars are to be placed as shown on the RACEWAY and DOWEL BAR PLACEMENT detail on this sheet. Provide a 4" clearance to barrier surfaces and to any raceways.*

*STATION MARKINGS: Impress markings in the "green" concrete on both sides at the top of the barrier. The cost is incidental to the unit cost bid for this barrier.*

*RACEWAY: Raceway not to be included on this project.*

*PAYMENT: will be made at the unit price bid per Foot for ITEM 622 - BARRIER, MISC.: 81" SSB. Include all reinforcement, materials, labor, raceways, dowel holes, markings and other incidentals necessary to construct the barrier.*

*Payment for any reinforced end anchors, as shown on the END ANCHORAGE details will be made at the unit price bid per Each for ITEM 622 - BARRIER, MISC.: 81" SSB, END ANCHORAGE, REINFORCED. This includes all materials, labor, and other incidentals necessary to construct this anchor.*

# 81" SINGLE SLOPE BARRIER DETAIL (PIS-81-SSB)

FRA-161-15.80 NOISE ABATEMENT

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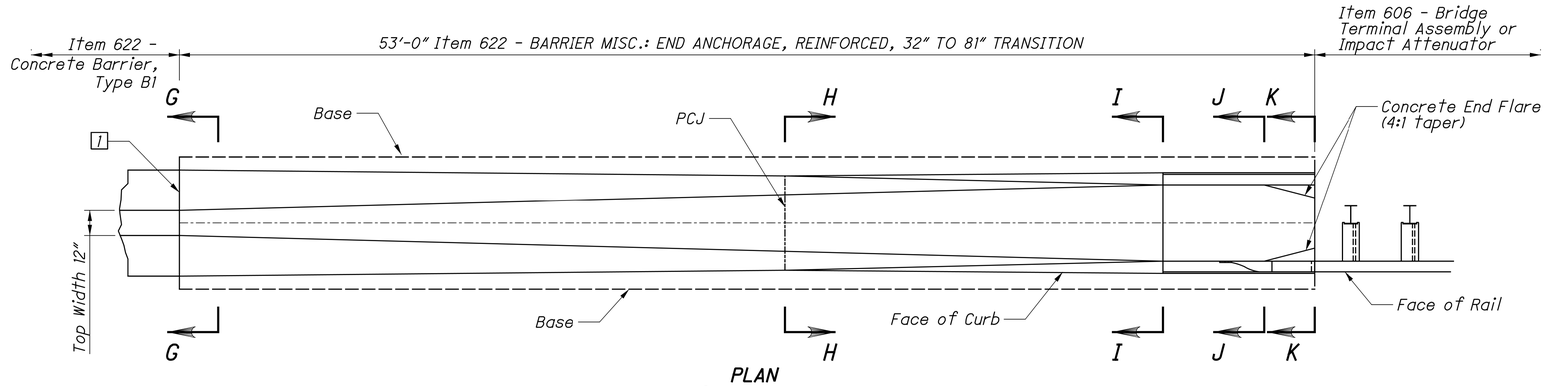
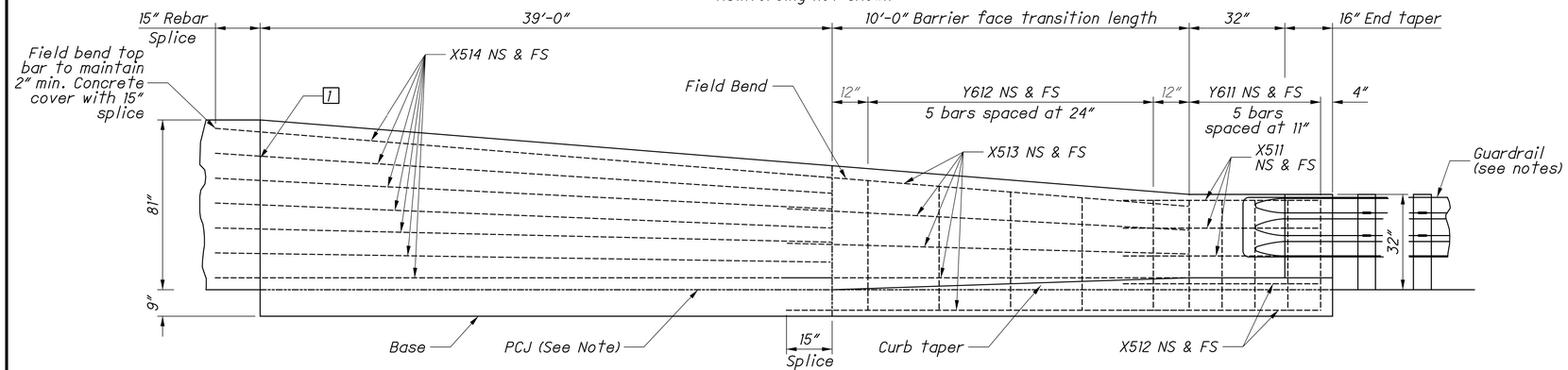
DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.224 TOTAL P.297



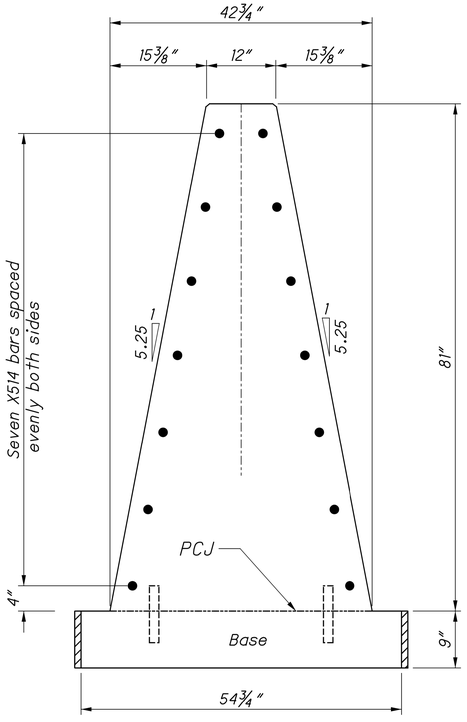

**PLAN**
*Reinforcing not shown*



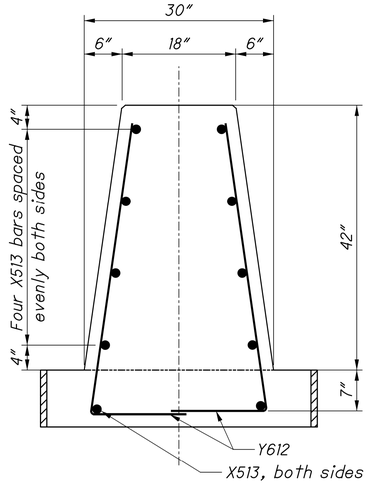

**ELEVATION**

NS = Near Side
FS = Far Side

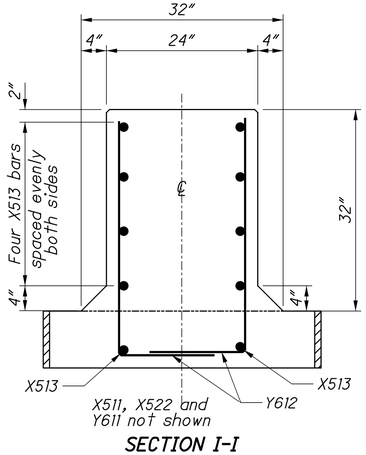
1 Contraction Joint. See NOTES on 1/8. Provide rebar cover of 3½".



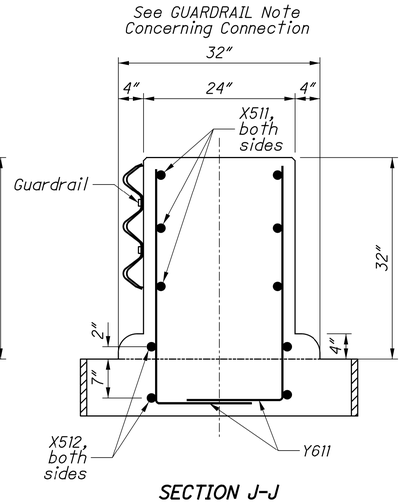

**SECTION G-G**



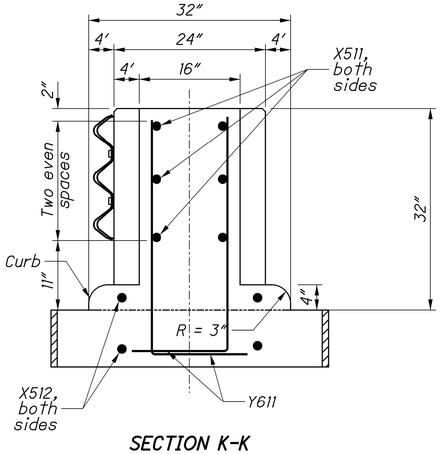

**SECTION H-H**




**SECTION I-I**




**SECTION J-J**




**SECTION K-K**

## NOTES

***GENERAL:*** *See 1/8 for 81" Single Slope Barrier details and materials. Provide 2" concrete cover over rebars, except as noted.*

***GUARDRAIL:*** *For Bridge Terminal Assembly and attachment details see SCD MGS-1.1 (SCD GR-3.5 if connecting to Type 5 Guardrail). Information on Impact Attenuators is found in the Location and Design Manual, Volume 1, Section 603.*

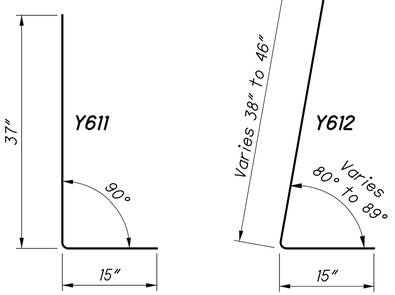
***BARRIER FACE TRANSITIONS:*** *To prevent vehicle snagging, smooth transitions from vertical faces to the single slope faces are made over a 10' distance.*

***PCJ:*** *Permissible Construction Joint. In the unreinforced base section, barrier may be placed on top of concrete base if doweled as shown on SCD RM-4.3.*

***PAYMENT:*** *Payment for the Concrete End Section shall be made at the unit price for Item 622 - BARRIER, MISC.: 81" SSB, END SECTION, 32" TO 81" and shall include all materials, labor, and reinforcing steel required to construct the barrier end section as shown.*

| TYPE B1 STEEL LIST | | | | |
|---|---|---|---|---|
| **Mark** | **Bar** | **Shape** | **No.** | **Length** |
| X511 | #5 | Bent | 6 | 5'-6" |
| X512 | #5 | Straight | 4 | 5'-6" |
| X513 | #5 | Straight | 10 | 11'-1" |
| X514 | #5 | Straight | 10 | 40'-3" |
| Y611 | #6 | Bent | 10 | 4'-2" |
| Y612 | #6 | Bent | 2 series of 5 | Varies 4'-3" to 5'-3" |




**BENDING DIAGRAMS**

# 81" SINGLE SLOPE BARRIER DETAIL (PIS-81-SSB)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DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.225 TOTAL P.297

FRA-161-15.80 NOISE ABATEMENT


MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-05-21 TIME: 1:06:39 AM USER: jennifer.kelley
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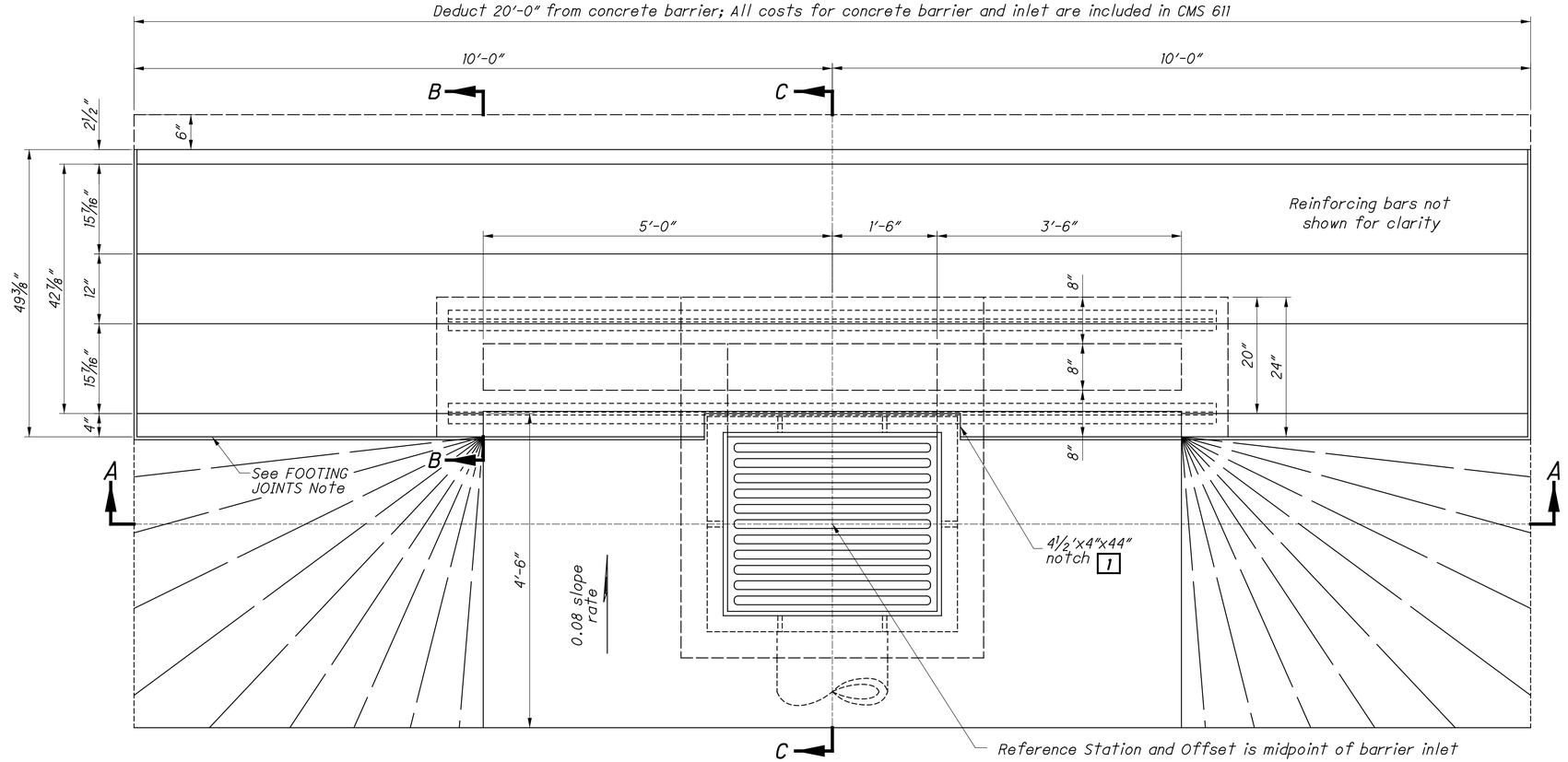


PLAN VIEW

## NOTES

***GENERAL:*** *For details of 81" Single Slope Barriers, see SCD RM-4.8.*

***WALLS:*** *The walls between the bottom slab and the upper permissible construction joint may be built of brick, concrete, concrete block, or cast-in-place concrete, 8" nominal thickness for depths of 12' or less. Precast walls have a minimum thickness of 6" and are reinforced sufficiently to permit shipping and handling without damage. The unit above the permissible construction joint may be precast or cast-in-place.*

***CONCRETE:*** *Provide 4000 psi compressive strength concrete for cast-in -place structures. All precast concrete must meet the requirements of CMS 706.13. Mark the inlet number on the structure. Seal the exposed concrete surfaces of the barrier per Item 512 when specified in the plans.*

***REINFORCING STEEL:*** *Provide epoxy coated reinforcing steel in accordance with CMS 509.09.*

***FOOTING JOINTS:*** *Provide a sealed joint with the vertical walls between the barrier footing and a concrete pavement or concrete base as detailed on SCD RM-4.3.*

***CASTINGS:*** *The minimum weight of frame and cover is 540 lbs. See Sheet 2 for casting details.*

*Lighter weight frames and grates that meet the requirements of CMS 711.14 may also be provided. Grate openings and dimensions may not differ from those shown unless otherwise shown in the plans.*

***STEPS:*** *Provide steps according to SCD MH-1.*

***INLETS OVER 12 FEET IN DEPTH:*** *Provide precast or cast-in-place concrete for inlets over 12 feet in depth. Reinforce with #4 bars on 12" centers both vertically and horizontally with 2" clearance from the inside wall face.*

***OPENINGS:*** *Ensure pipe openings are the outside diameter of the pipe being supplied plus 2" when fabricated orfield cut. Fill any voids per C&MS 611.*

***PCJ:*** *Permissible construction joint*

***PAYMENT:*** *Payment will be made at the unit price bid per Each for Item 611 - Inlet No. 3 for 81" Single Slope Barrier and includes all materials, reinforcing steel, castings, labor and incidentals required to construct the inlet as shown. Sealing of exposed concrete and sealing of the barrier will be paid for under Item 512 when specified in the plans.*

## LEGEND

1. *After casting is placed, fill notch with 4000 psi compressive strength concrete.*
2. *Provide a 1½" minimum exp. joint in concrete pavement or concrete shoulders.*

*See Sheet 2 for Section A-A.*
*See Sheet 3 for Sections B-B, C-C and steel information.*

FRA-161-15.80 NOISE ABATEMENT

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INLET, MISC.: INLET NO. 3 FOR 81" SINGLE SLOPE BARRIER

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PROJECT ID
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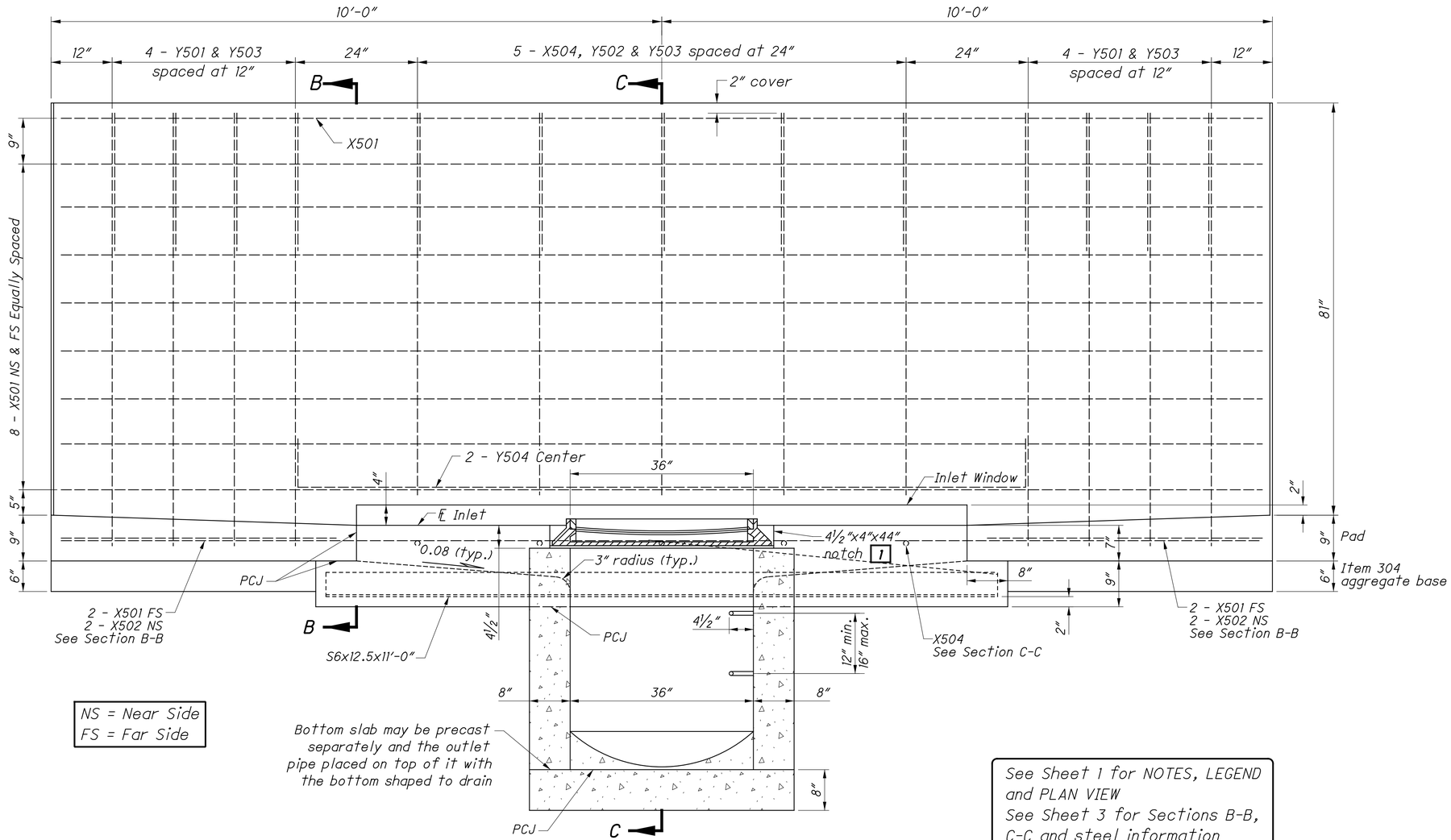


SECTION A-A

See Sheet 1 for NOTES, LEGEND and PLAN VIEW
See Sheet 3 for Sections B-B, C-C and steel information

INLET, MISC.: INLET NO. 3 FOR 81" SINGLE SLOPE BARRIER

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| | |
|---|---|
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| REVIEWER | JDH 05-22-24 |
| PROJECT ID | 117607 |
| SHEET | P.227 |
| TOTAL | P.297 |

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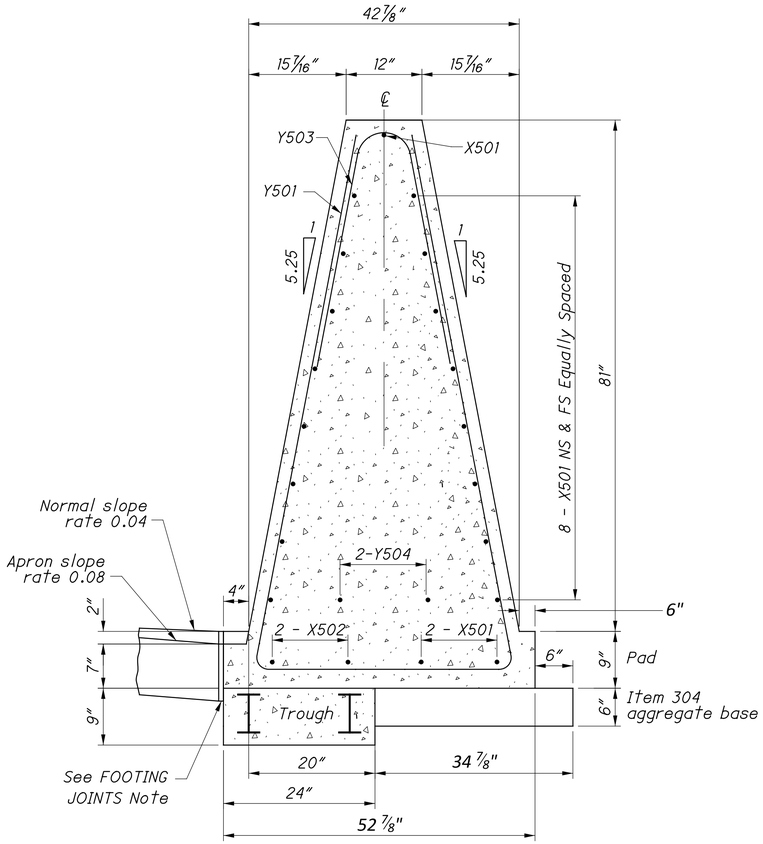
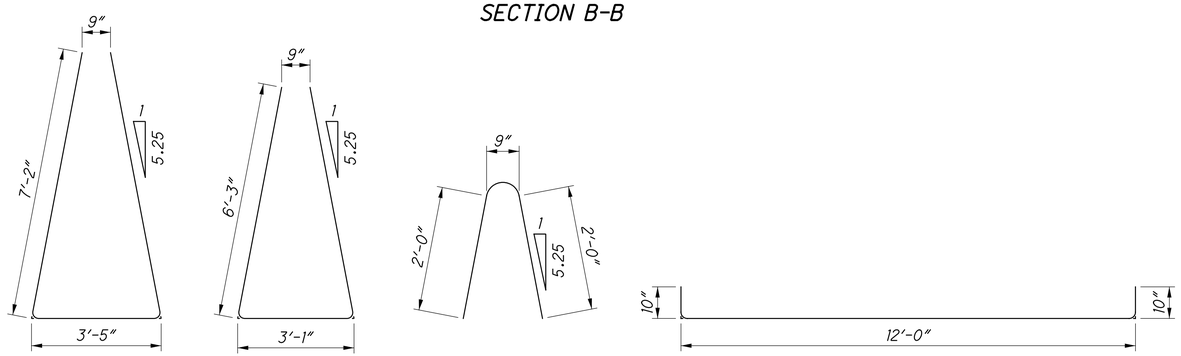
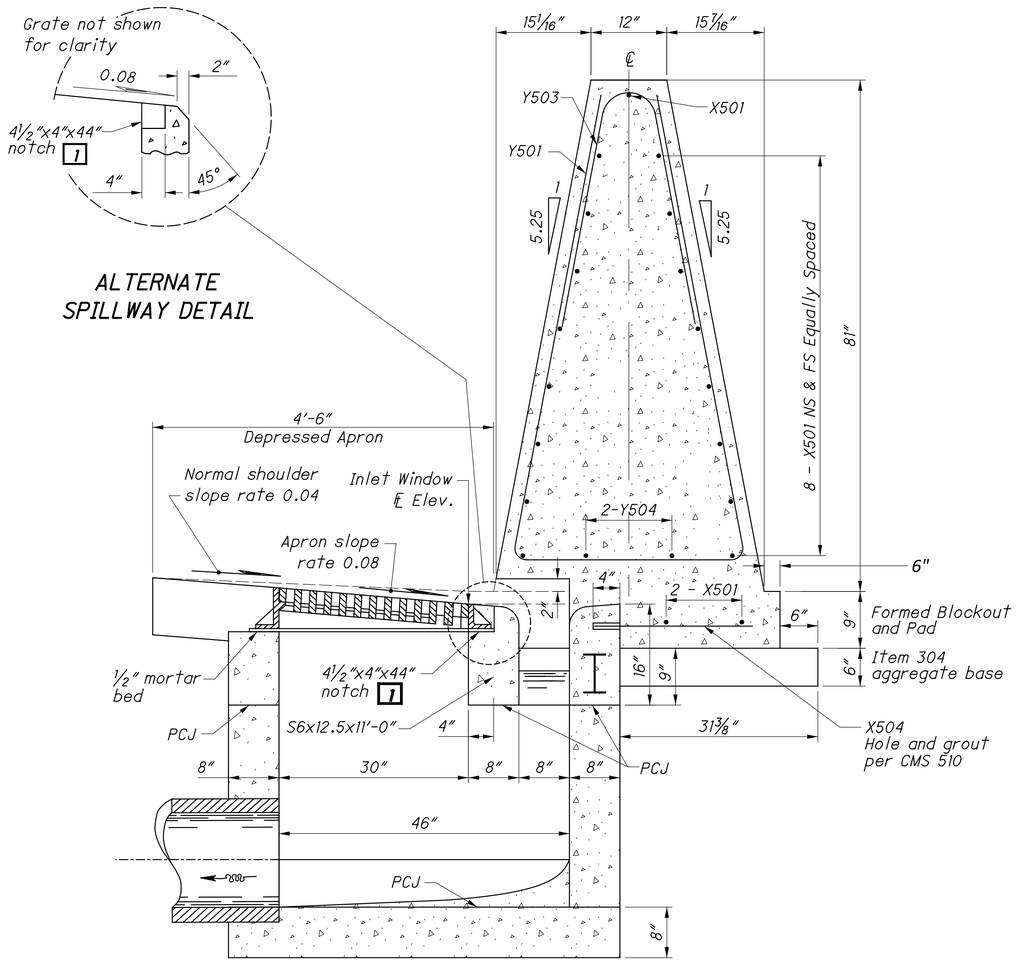



SECTION B-B

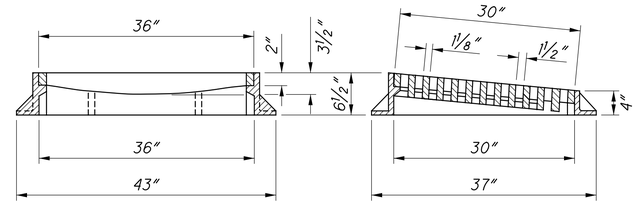



BENDING DIAGRAMS

| STEEL LIST (For Estimating Purposes Only) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| X501 #5 Bar | | X502 #5 Bar | | X503 #5 Bar | | X504 #5 Bar | | Y501 #5 Bar | | Y502 #5 Bar | | Y503 #5 Bar | | Y504 #5 Bar | |
| Straight | | Straight | | Straight | | Straight | | Bent | | Bent | | Bent | | Bent | |
| No. | Length | No. | Length | No. | Length | No. | Length | No. | Length | No. | Length | No. | Length | No. | Length |
| 19 | 19'-8" | 4 | 4'-8" | 8 | 3'-5" | 5 | 2'-2" | 8 | 17'-6" | 5 | 19'-8" | 13 | 8'-11" | 2 | 13'-5" |




SECTION C-C




CASTING DETAILS

See Sheet 1 For NOTES, LEGEND and PLAN VIEW

INLET, MISC.: INLET NO. 3 FOR 81" SINGLE SLOPE BARRIER

FRA-161-15.80 NOISE ABATEMENT

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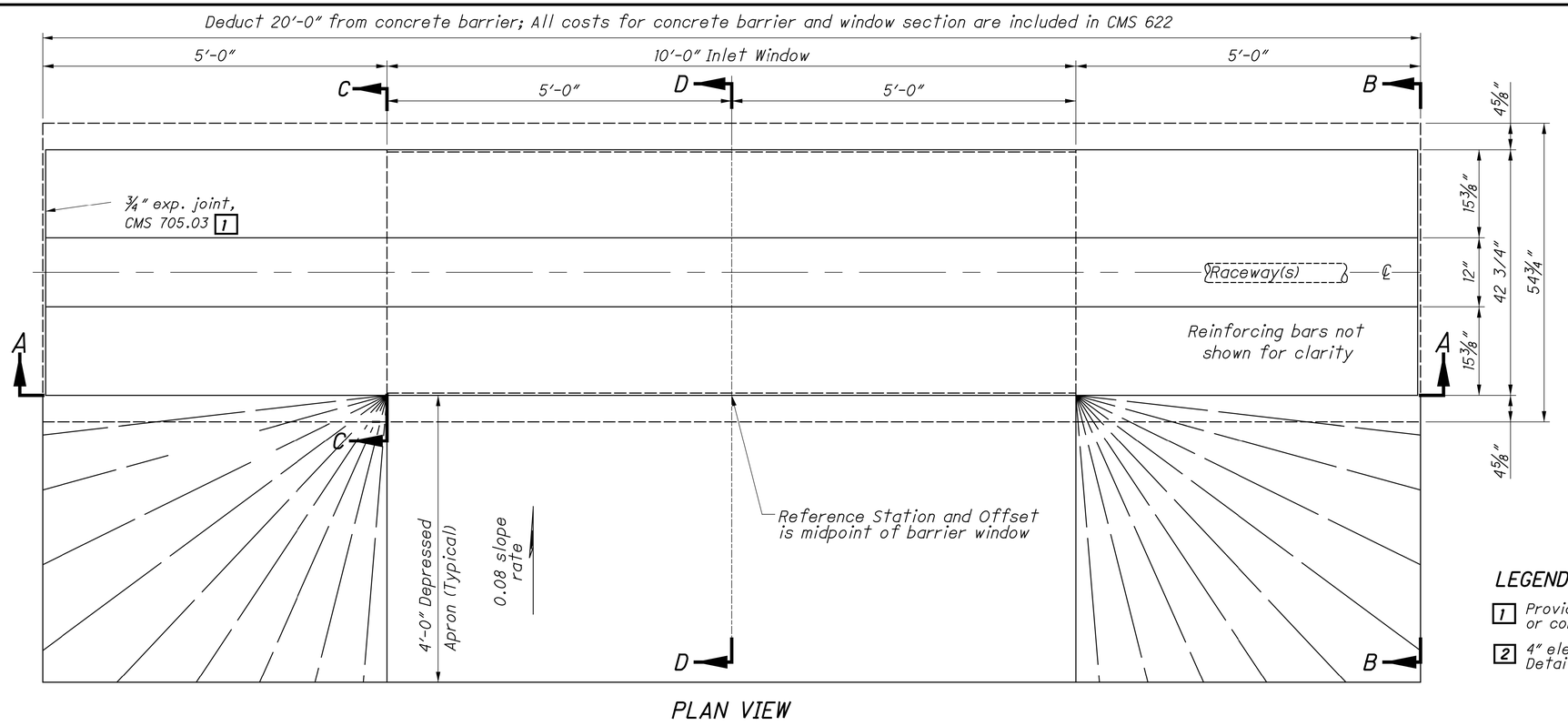
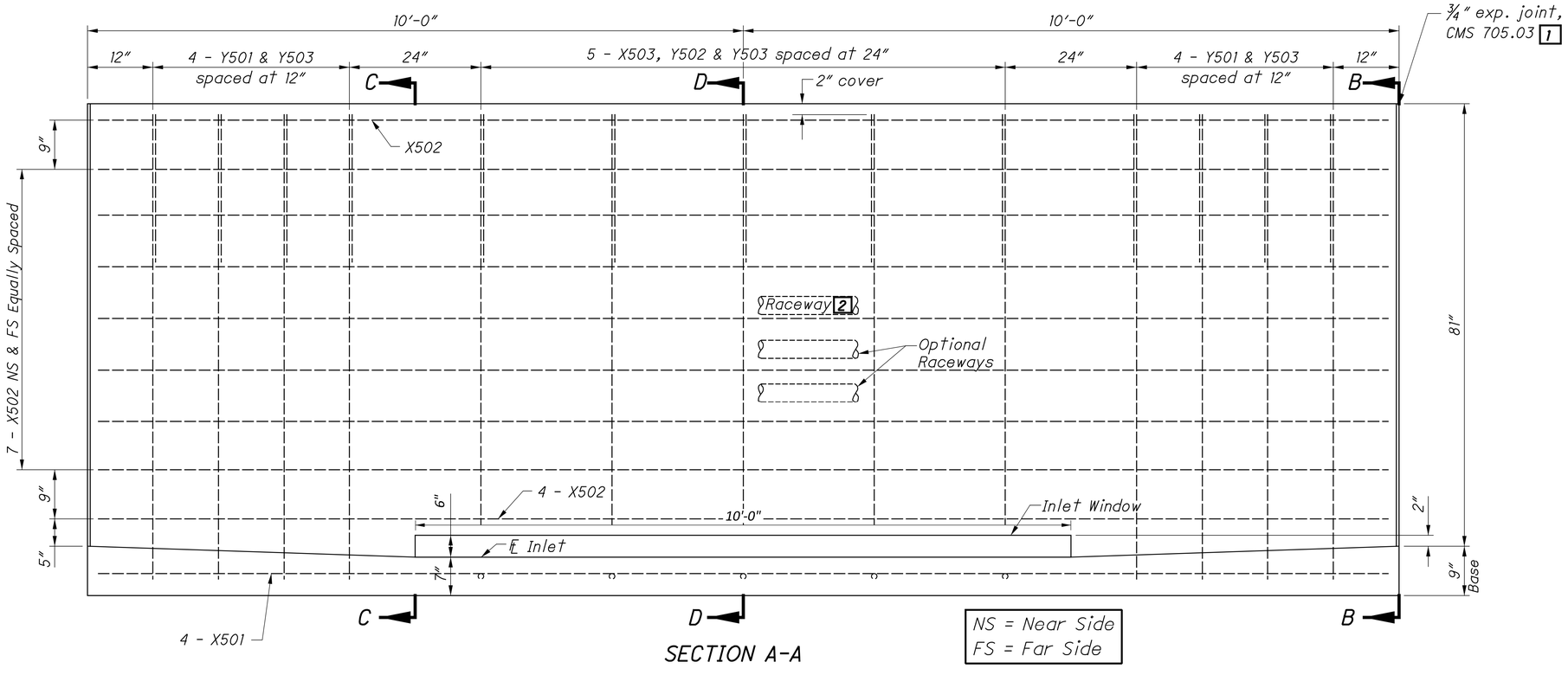
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.228 TOTAL P.297




PLAN VIEW




SECTION A-A

## NOTES

1. For additional notes and details, see SCD I-3B.

2. For sections B-B, C-C, & D-D, see sheet P.230

**PAYMENT:** Payment for the Concrete Barrier Window Section shall be made at the unit price bid for ITEM 622 - BARRIER, MISC.: 81" SSB, WINDOW SECTION, Each and shall includes all materials, reinforcing steel, castings, labor and incidentals required to construct the Concrete Barrier Window Section as shown.

Tied Concrete Block Mat with Type 1 Underlayment is paid at the contract unit price bid for Item 601 - Tied Concrete Block Mat with Type 2 Underlayment

## LEGEND

1 Provide a 1½" minimum exp. joint in concrete pavement or concrete shoulders.

2 4" electrical raceway. See Sheet 6/8 for RACEWAY PLACEMENT Details.

# 81" SINGLE SLOPE BARRIER DETAIL (PIS-81-SSB)

FRA-161-15.80 NOISE ABATEMENT

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-05-21 TIME: 1:08:02 AM USER: jennifer.kelley
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DESIGNER JMK

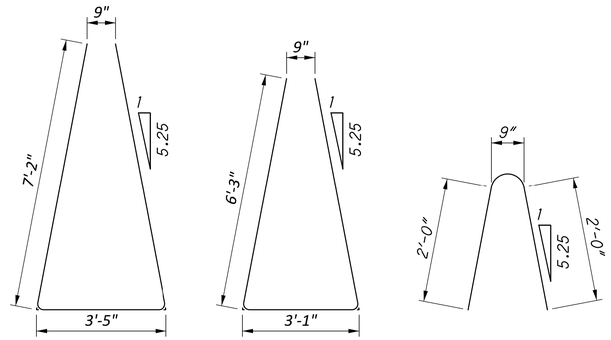
REVIEWER JDH 05-22-24

PROJECT ID 117607

SHEET P.229 TOTAL P.297

## STEEL LIST (For Estimating Purposes Only)

| X501 #5 Bar Straight | | X502 #5 Bar Straight | | X503 #5 Bar Straight | | Y501 #5 Bar Bent | | Y502 #5 Bar Bent | | Y503 #5 Bar Bent | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Length | No. | Length | No. | Length | No. | Length | No. | Length | No. | Length |
| 4 | 19'-8" | 19 | 19'-6" | 5 | 4'-0" | 8 | 17'-6" | 5 | 15'-4" | 13 | 5'-2" |




Y501 Y502 Y503

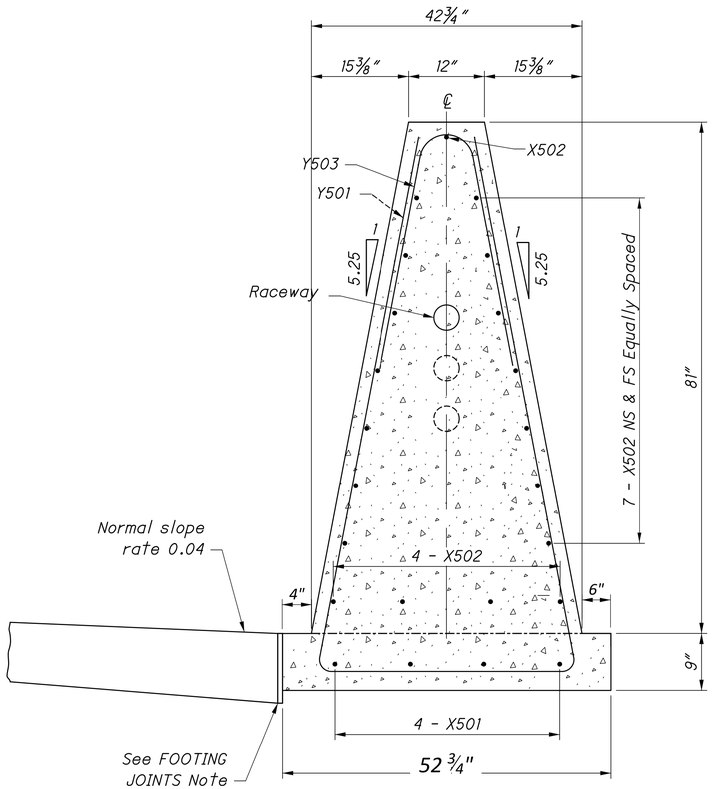
BENDING DIAGRAMS

### NOTES

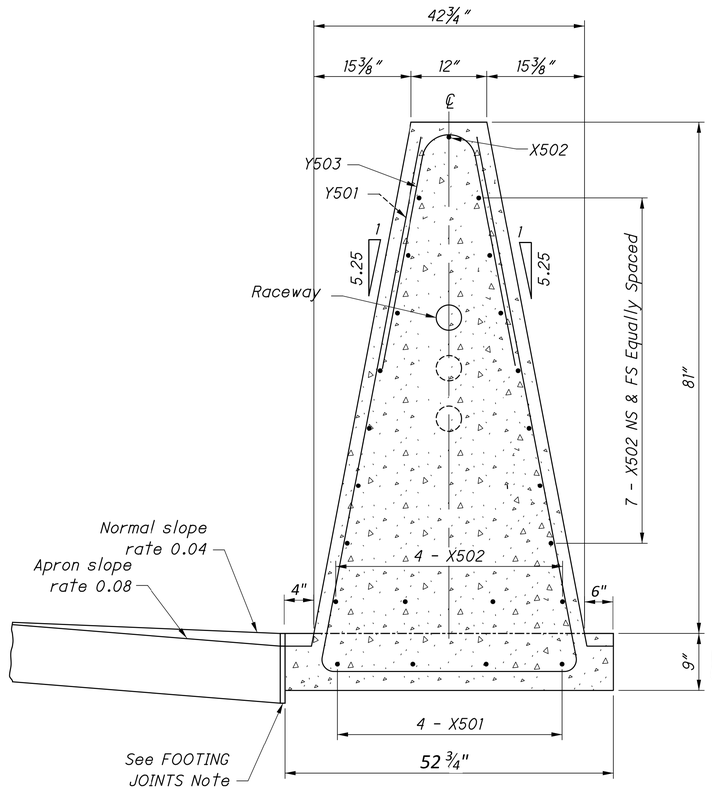
1. For additional notes and details, see SCD I-3B.
2. For location of sections A-A, B-B & C-C, see sheet P.229
3. Reinforcing Steel: Provide epoxy coated reinforcing steel in accordance with CMS 509.09.

**FOOTING JOINTS:** Provide a sealed joint with the vertical walls between the barrier footing and a concrete pavement or concrete base as detailed on SCD RM-4.3.

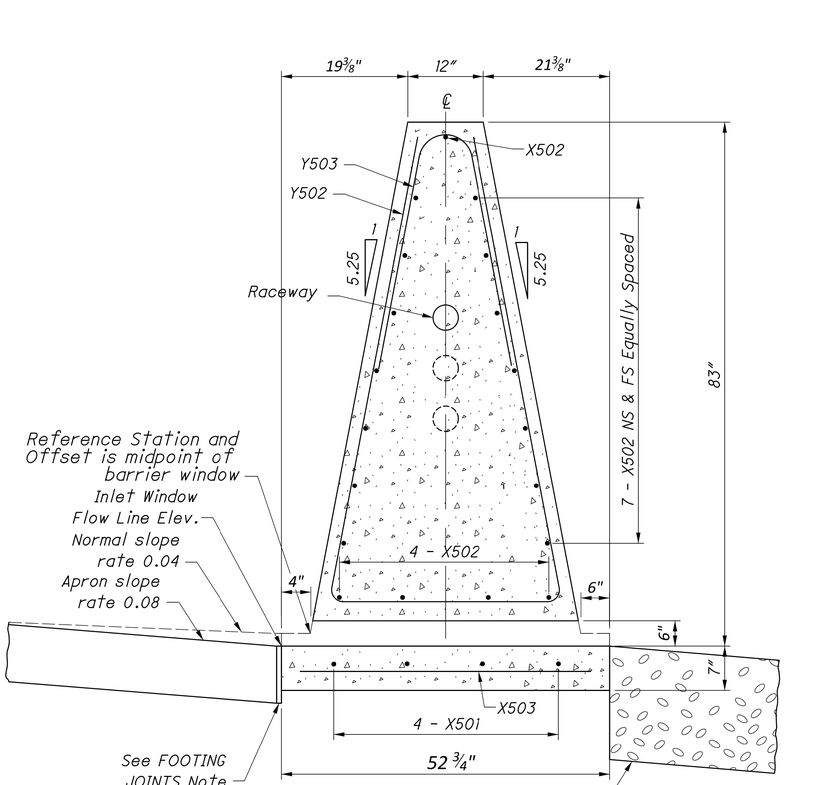
4. Raceway not to be included on this project.




SECTION B-B




SECTION C-C




SECTION D-D

81" SINGLE SLOPE BARRIER DETAIL (PIS-81-SSB)

FRA-161-15.80 NOISE ABATEMENT

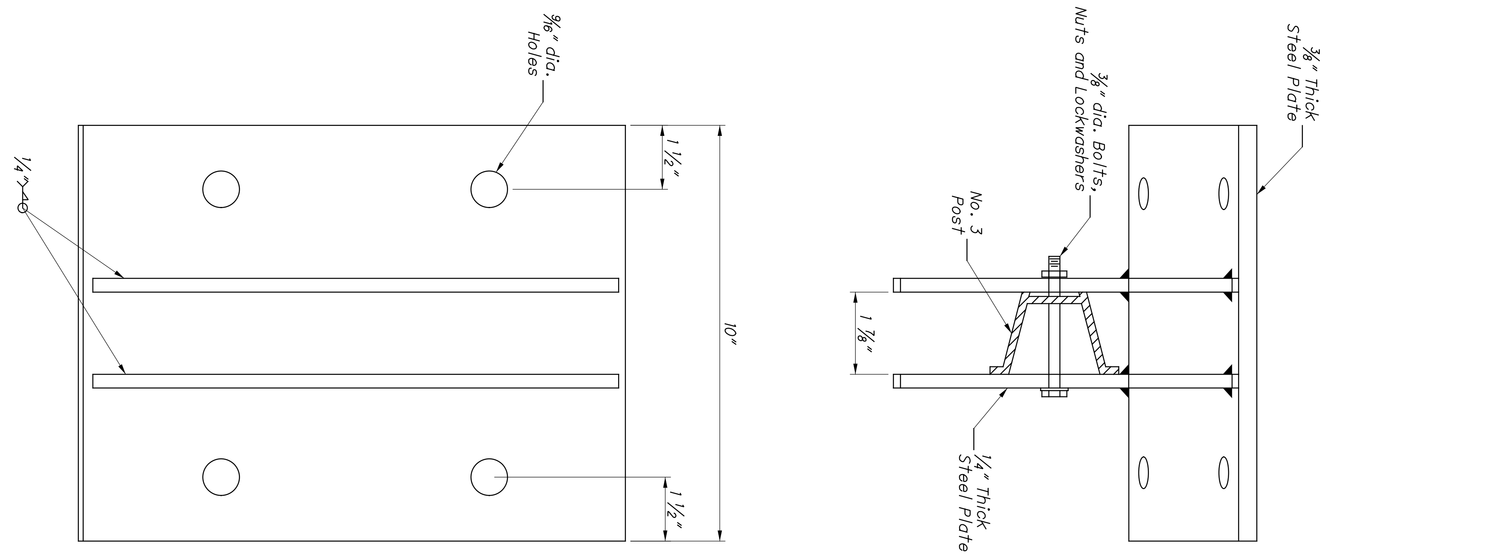

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/18/2024 TIME: 2:28:28 PM USER: watlj4128
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\40D-Engineering\Roadway\Sheets\117607_GR008.dgn

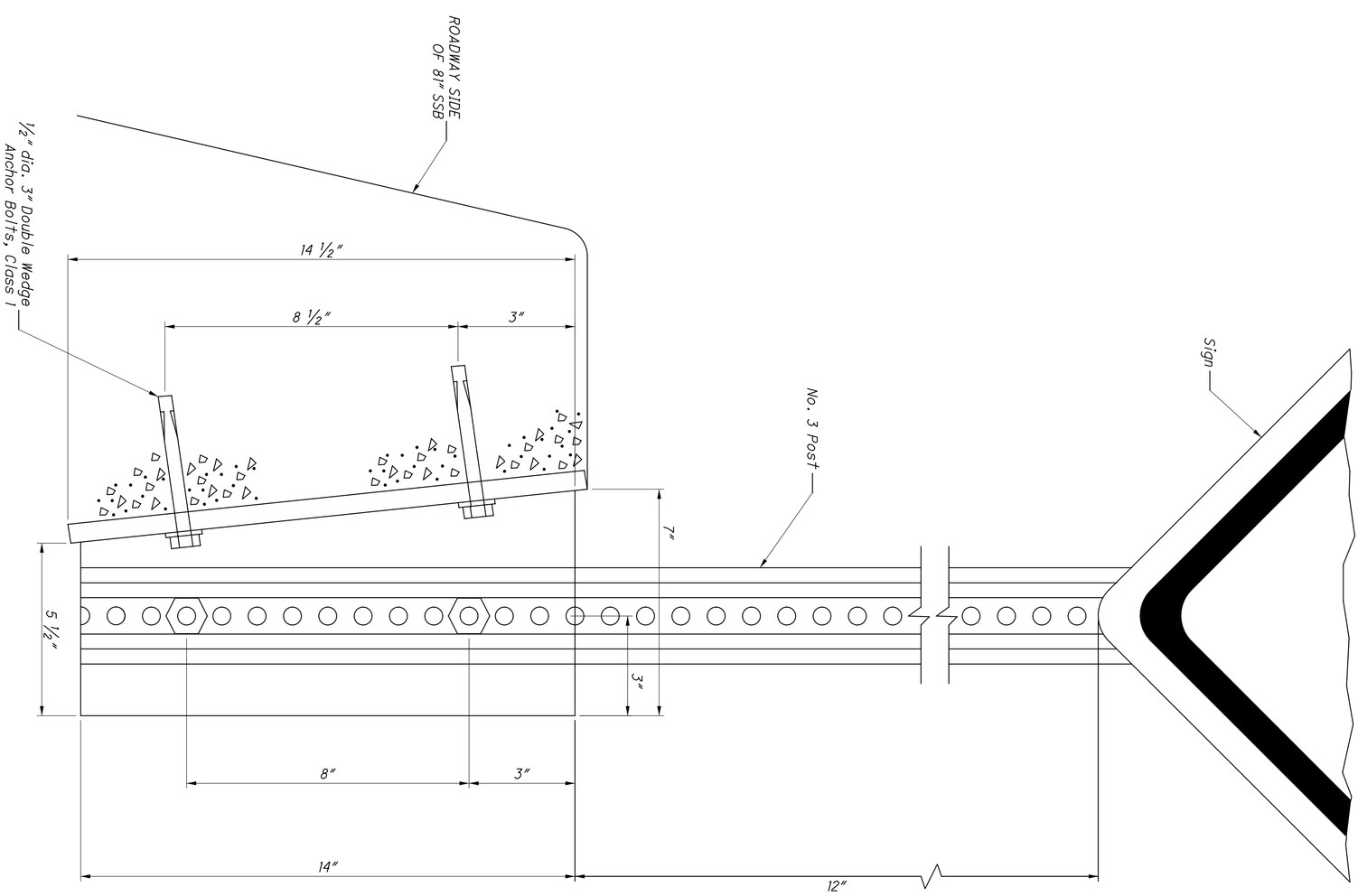


DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 318-4600
www.arcadis.com


DESIGNER JMK
REVIEWER JDH 05-22-24
PROJECT ID 117607
SHEET P.230 TOTAL P.297

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-05-21 TIME: 1:10:15 AM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_GR009.dgn




NOTES:

1. Unit shall be galvanized after fabrication.

THIS DRAWING REPLACES PIS 202022 DATED 11-27-2006.

| SHEET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|
| P.231 TOTAL P.297 | 117607 | JDH 05-22-24 | JNK | ARCADIS 8101 NORTH HIGH ST SUITE 100 COLUMBUS, OHIO 43235 (614) 818-4900 www.arcadis.com |

CONCRETE MEDIAN BARRIER SIGN BRACKET, AS PER PLAN (PIS-202022)

## PROJECT DESCRIPTION

THE PROJECT CONSISTS OF THE CONSTRUCTION OF EIGHT (8) NEW NOISE WALLS ALONG SR 161 BETWEEN ULRY ROAD NAD US 62 IN FRANKLIN COUNTY, OHIO. BASED ON THE AVAILABLE PROJECT INFORMATION, IT IS UNDERSTOOD THAT THE WALLS WILL RANGE FROM 497 TO 2,226 FEET IN LENGTH AND WILL BE 14 FEET HIGH. NOISE WALLS 3, 6, 8, 9, 11, 12 AND 15, AS DESIGNATED AND SHOWN ON THE PROJECT DOCUMENTS, ARE INCLUDED AS PART OF THIS INVESTIGATION.

## HISTORIC RECORDS

HISTORIC GEOTECHNICAL RECORDS WERE OBTAINED FROM ODOT'S TRANSPORTATION INFORMATION MAPPING SYTEM (TIMS). RESULTS OF THESE EXPLORATIONS INDICATED THAT PREDOMINANTLY EXISTING COHESIVE AND GRANULAR SOILS ARE PRESENT BELOW THE EXISTING GROUND SURFACE, AND ARE UNDERLAIN BY AND SHALE BEDROCK. THESE RESULTS WERE NOT UTILIZED DURING THE CURRENT DESIGN

## GEOLOGY

PHYSIOGRAPHICALLY, THE PROJECT SITE FALLS WITHIN GALION GLACIATED LOW PLATEAU. THIS REGION IS CHARACTERIZED BY ROLLING UPLANDS WHICH ARE TRANSITIONAL BETWEEN THE GENTLY ROLLING TILL PLAINS AND HILL GLACIATED ALLEGHENY PLATEAU. THE SOILS CONSIST OF THIN TO THICK DRIFT WITH MODERATE RELIEF.

BASED ON BEDROCK GEOLOGY AND TOPOGRAPHY MAPS OF THE AREA FROM THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR), THE UNDERLYING BEDROCK BENEATH THE SITE IS MISSISSIPPIAN-AGE SHALES AND SANDSTONES THE BEDROCK SURFACE IN THE VICINITY OF THE SITE RANGES BETWEEN APPROXIMATELY 5 TO 25 FEET BELOW THE EXISTING SURFACE GRADE.

## RECONNAISSANCE

FIELD RECONNAISSANCE WAS COMPLETED BY PERSONNELL FROM RESOURCE INTERNATIONAL, INC (RII) BETWEEN OCTBER 18 AND NOVEMBER 15,2023. THE PROJECT SITE IS LOCATED ALONG SR 161 IN FRANKLIN COUNTY, OHIO. THE PROJECT SITE EXTENDS FROM URLY ROAD TO APPROXIMATELY 0.3 MILES WEST OF US 62. SR 161 WITHIN THE PROJECT LIMITS IS A BIDIRECTIONAL, DIVIDED, ASPHALT PAVED ROADWAY WITH TWO LANES IN EACH DIRECTION. ALONG THE PROJECT ALIGNMENT, THE LAND USE SURROUNDING SR 161 IS PRIMARILY RESIDENTIAL WITH SOME COMMERCIAL AND/OR INDUSTRIAL PURPOSE. SURFACE DRAINAGE APPEARS TO BE COLLECTED IN THE DRAINAGE DITCHES ALONG THE MAJORITY OF THE ROADWAY ALIGNMENT.

## SUBSURFACE EXPLORATION

BETWEEN OCTOBER 23 AND DECEMBER 5, 2023, A TOTAL OF FIFTY-THREE (53) BORINGS, DESIGNATED AS B-001-0-23 THROUGH B-053-0-23, WERE PERFORMED AS PART OF THE SUBSURFACE EXPLORATION. THE BORINGS WERE DRILLED AND SAMPLED WITH DIEDRICH D50 TRACK MOUNTED DRILL RIG UTILIZING 3.25-INCH HOLLOW STEM AUGERS TO ADVANCE THE HOLES. STANDARD PENETRATION TESTING (SPT) AND SPLIT SPOON SAMPLING WERE PERFORMED AT 2.5-FOOT INTERVALS IN ALL BORINGS EITHER TO THE BORING TERMINATION DEPTHS OR TO AUGER REFUSAL ON BEDROCK. THE HAMMER UTILIZED IN DIEDRICH D50 TRACK RIG WAS CALIBRATED ON MARCH 21, 2022 AND HAD AN ENERGY RATIO OF 86.4 PERCENT.

THE DEPTH TO BEDROCK WAS DETERMINED BY SPLIT SPOON SAMPLER REFUSAL AND/OR AUGER REFUSAL ON BEDROCK. WHERE THE BORINGS WERE EXTENDED INTO THE BEDROCK, AN NQ2 SIZED, DOUBLE TUBE, DIAMOND BIT CORE BARREL (UTILIZING WIRE LINE EQUIPMENT) WAS USED TO CORE THE BEDROCK. THE ROCK CORES OBTAINED FROM THE BORINGS WERE LOGGED IN THE FIELD AND VISUALLY CLASSIFIED IN THE LABORATORY. THE RETRIEVED CORES WERE ANALYZED TO IDENTIFY THE TYPE OF ROCK, COLOR, MINERAL CONTENT, BEDDING PLANES AND OTHER GEOLOGICAL AND MECHANICAL FEATURES OF INTEREST IN THIS PROJECT.

## EXPLORATION FINDINGS

THE BORINGS WERE GENERALLY PERFORMED IN THE VICINITY OF THE PROPOSED NOISE WALL ALIGNMENTS. ALL BORINGS, EXCEPT B-038-0-23, ENCOUNTERED TOPSOIL THICKNESSES BETWEEN 1 INCH AND 10 INCHES. BORING B-038-0-23 ENCOUNTERED 3.0 INCHES OF ASPHALT OVERLYING 6.5 INCHES OF CONCRETE OVERLYING 3.5 INCHES OF AGGREGATE BASE.

UNDERLYING THE SURFICIAL SOILS, THE NATURAL SOILS WERE ENCOUNTERED, CONSISTING OF BOTH COHESIVE AND GRANULAR DEPOSITS. THE NATURAL COHESIVE SOILS WERE DESCRIBED AS SANDY SILT, SILT AND CLAY, SILTY CLAY, AND CLAY (ODOT A-4A, A-6A, A-6B, A-7-6). THE SHEAR STRENGTH AND CONSISTENCY OF THE COHESIVE SOILS ARE PRIMARILY DERIVED FROM THE HAND PENETROMETER VALUES (HP). THE COHESIVE SOILS ENCOUNTERED RANGED FROM MEDIUM STIFF (0.5 < HP 1.0 TSF) TO HARD (HP 4.0 TSF). THE UNCONFINED COMPRESSIVE STRENGTH OF THE COHESIVE SOIL SAMPLES TESTED, OBTAINED FROM THE HAND PENETROMETER, RANGED FROM 0.75 TO OVER 4.5 TSF (LIMIT OF THE INSTRUMENT).

THE GRANULAR SOILS WERE DESCRIBED AS GRAVEL, GRAVEL WITH SAND, GRAVEL WITH SAND AND SILT, GRAVEL WITH SAND AND SILT AND CLAY, AND COARSE AND FINE SAND (ODOT A-1-A, A1B, A-2-4, A-2-6, A-3A). THE RELATIVE DENSITY OF GRANULAR SOILS IS PRIMARILY DERIVED FROM SPT BLOW COUNTS ($N_{60}$). BASED ON THE SPT BLOW COUNTS OBTAINED, THE GRANULAR SOILS ENCOUNTERED RANGED FROM LOOSE (5 < $N_{60}$ <10 BLOWS PER FOOT [BPF]) TO VERY DENSE ($N_{60}$ > 50 BPF). BLOW COUNTS RECORDED FROM THE SPT SAMPLING WITHIN THE GRANULAR SOIL DEPOSITS RANGED FROM 9 TO 96 BPF.

COBBLES WERE ENCOUNTERED WITHIN THE OVERBURDEN SOILS AT VARIOUS BORING LOCATIONS AT VARYING DEPTHS.

GROUNDWATER SEEPAGE WAS ENCOUNTERED IN THREE (3) OF THE BORINGS AT DEPTHS RANGING FROM 14.0 TO 22.4 FEET BELOW THE GROUND SURFACE. SIGNIFICANT GROUND WATER FLOW WAS ENCOUNTERED DURING DRILLING IN TWENTY-SIX (26) OF THE BORINGS AT DEPTHS RANGING FROM 12.0 TO 21.0 FEET BELOW THE EXISTING GROUND SURFACE. MEASURABLE GROUNDWATER WAS OBSERVED AT THE COMPLETION OF DRILLING IN SEVENTEEN (17) OF THE BORINGS AT DEPTHS RANGING FROM 7.8 TO 20.5 FEET BELOW EXISTING GRADE "."

## LEGEND

| DESCRIPTION | ODOT CLASS | CLASSIFIED MECH./VISUAL | |
|---|---|---|---|
| GRAVEL AND/OR STONE FRAGMENTS | A-1-a | 2 | 4 |
| GRAVEL AND/OR STONE FRAGMENTS WITH SAND | A-1-b | 11 | 23 |
| GRAVEL AND/OR STONE FRAGS. WITH SAND & SILT | A-2-4 | 12 | 57 |
| GR. AND/OR ST. FRAGS. WITH SAND, SILT & CLAY | A-2-6 | - | 2 |
| COARSE AND FINE SAND | A-3a | 1 | 9 |
| SANDY SILT | A-4a | 18 | 58 |
| SILT AND CLAY | A-6a | 26 | 102 |
| SILTY CLAY | A-6b | 12 | 38 |
| CLAY | A-7-6 | 7 | 9 |
| | TOTAL | 89 | 302 |
| SANDSTONE | VISUAL | | |
| SHALE | VISUAL | | |
| SILTSTONE | VISUAL | | |
| PAVEMENT OR BASE = X = APPROXIMATE THICKNESS | VISUAL | | |
| SOD AND TOPSOIL = X = APPROXIMATE THICKNESS | VISUAL | | |

BORING LOCATION - PLAN VIEW.

DRIVE SAMPLE AND/OR ROCK CORE BORING PLOTTED TO VERTICAL SCALE ONLY. HORIZONTAL BAR INDICATES A CHANGE IN STRATIGRAPHY.

WC — INDICATES WATER CONTENT IN PERCENT.

$N_{60}$ — INDICATES STANDARD PENETRATION RESISTANCE NORMALIZED TO 60% DRILL ROD ENERGY RATIO.

X/Y/Z — NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT):
X= NUMBER OF BLOWS FOR FIRST 6 INCHES.
Y= NUMBER OF BLOWS FOR SECOND 6 INCHES.
Z= NUMBER OF BLOWS FOR THIRD 6 INCHES.

INDICATES FREE WATER ELEVATION.

INDICATES A PLASTIC MATERIAL WITH A MOISTURE CONTENT EQUAL TO OR GREATER THAN THE LIQUID LIMIT MINUS 3.

INDICATES A NON-PLASTIC MATERIAL WITH A MOISTURE CONTENT GREATER THAN 25 % OR GREATER THAN 19 % WITH A WET APPEARANCE.

SS — INDICATES A SPLIT SPOON SAMPLE.

NP — INDICATES A NON-PLASTIC SAMPLE.

## EXPLORATION FINDINGS (CON'T)

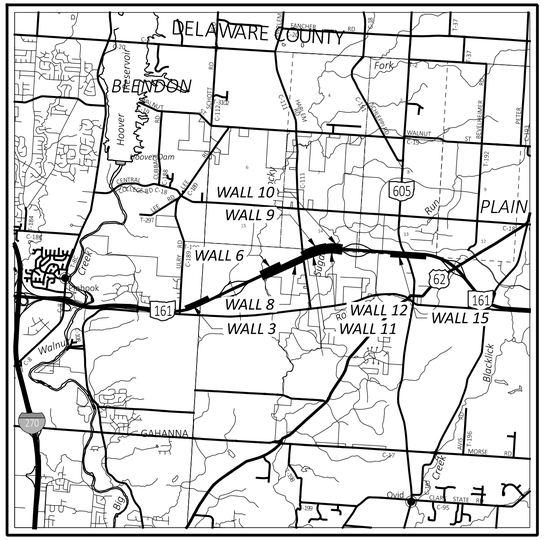
BEDROCK WAS ENCOUNTERED IN BORINGS B-001-0-23 TO B-004-0-23, B-018-0-23, B-024-0-23 B-027-0-23, B-028-0-23, B-038-0-23 TO B-053-0-23 AT DEPTHS RANGING FROM 4.3 TO 23.0 FEET BENEATH THE EXISTING GROUND SURFACE. THE BEDROCK WAS DESCRIBED AS HIGHLY WEATHERED GRAY AND BROWN SANDSTONE, HIGHLY WEATHERED TO SEVERELY WEATHERED GRAY AND BLACK SILTSTONE, AND HIGHLY WEATHERED GRAY SHALESTONE.

## SPECIFICATIONS

THIS GEOTECHNICAL EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING, SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED JULY 2022.

## AVAILABLE INFORMATION

THE SOIL, BEDROCK, AND GROUNDWATER INFORMATION COLLECTED FOR THIS SUBSURFACE EXPLORATION THAT CAN BE CONVENIENTLY DISPLAYED ON THE GEOTECHNICAL PROFILE SHEETS HAS BEEN PRESENTED. GEOTECHNICAL REPORTS, IF PREPARED, ARE AVAILABLE FOR REVIEW ON THE OFFICE OF CONTRACT SALES WEBSITE.




LOCATION MAP

SCALE IN MILES

0 1 2 3 4

N

## PARTICLE SIZE DEFINITIONS

| 12" | 3" | 2.0 mm | 0.42 mm | 0.074 mm | 0.005 mm |
|---|---|---|---|---|---|
| BOULDERS | COBBLES | GRAVEL | COARSE SAND | FINE SAND | SILT | CLAY |
| | | No. 10 SIEVE | No. 40 SIEVE | No. 200 SIEVE | | |

### INDEX OF SHEETS

SUMMARY OF SOIL TEST DATA, SHEETS 2 - 5.

| LOCATION FROM STA. | TO STA. | PLAN | PROFILE |
|---|---|---|---|
| ℄ CONST. SR 161 NOISE WALL 3 | | | |
| 2130+00 | 2135+00 | 6 | 6 |
| 2135+00 | 2140+00 | 7 | 7 |
| NOISE WALL 6 | | | |
| 2192+00 | 2197+00 | 8 | 8 |
| 2197+00 | 2202+00 | 9 | 9 |
| NOISE WALL 8 | | | |
| 2192+00 | 2197+00 | 10 | 10 |
| 2197+00 | 2202+00 | 11 | 11 |
| 2202+00 | 2207+00 | 12 | 12 |
| 2207+00 | 2212+00 | 13 | 13 |
| 2212+00 | 2217+00 | 14 | 14 |
| NOISE WALL 9 | | | |
| 2217+00 | 2222+00 | 15 | 15 |
| 2222+00 | 2227+00 | 16 | 16 |
| 2227+00 | 2232+00 | 17 | 17 |

### INDEX OF SHEETS (CON'T)

| LOCATION FROM STA. | TO STA. | PLAN | PROFILE |
|---|---|---|---|
| ℄ CONST. SR 161 NOISE WALL 11 | | | |
| 2216+00 | 2221+00 | 18 | 18 |
| 2221+00 | 2226+00 | 19 | 19 |
| 2226+00 | 2231+00 | 20 | 20 |
| 2231+00 | 2236+00 | 21 | 21 |
| NOISE WALL 12 | | | |
| 2239+00 | 2244+00 | 22 | 22 |
| 2244+00 | 2249+00 | 23 | 23 |
| NOISE WALL 15 | | | |
| 2286+00 | 2291+00 | 24 | 24 |
| 2291+00 | 2296+00 | 25 | 25 |
| 2296+00 | 2301+00 | 26 | 26 |
| 2301+00 | 2306+00 | 27 | 27 |
| 2306+00 | 2311+00 | 28 | 28 |

BORING LOGS, SHEETS 29 - 66.

BEDROCK TEST SUMMARY

| BORING ID | SAMPLE ELEVATION | SAMPLE DEPTH | UCS Qu (PSI) | POINT LOAD Qu (PSI) | LITHOLOGY |
|---|---|---|---|---|---|
| B-001-0-23 | 952.3' | 14.0' | 4400 | - | SANDSTONE |
| B-003-0-23 | 955.3' | 13.8' | 6891 | - | SANDSTONE |
| B-023-0-23 | 955.3' - 953.5' | 21.5' - 23.5' | - | 856 | SHALE |
| B-039-0-23 | 971.4' - 966.4' | 15.0' - 20.0' | - | 57 | SHALE |
| B-043-0-23 | 1014.0' | 21.0' | 6208 | - | SANDSTONE |
| B-046-0-23 | 1017.1' | 22.0' | 7887 | - | SANDSTONE |
| B-050-0-23 | 1017.0' | 21.0' | 8484 | - | SANDSTONE |
| B-051-0-23 | 1016.9' | 21.2' | 8429 | - | SANDSTONE |

**DRILLING -** TG 10/23 - 12/05/2023
**DRAWN -** JAS, KSJ 01/18/2023
**REVIEWED -** DEK 01/18/2023

GEOTECHNICAL PROFILE - NOISE ABATEMENT

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

DESIGNER JAS
REVIEWER DEK 1/19/24
PROJECT ID 117607
SUBSET 1 TOTAL 66
SHEET P.232 TOTAL 297

FRA-161-15.80 NOISE WALLS

MODEL: COVER SHEET PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:08:56 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZC001.dgn

**RESOURCE INTERNATIONAL, INC.**
*Engineering Consultants*


6350 Presidential Gatew. | 9885 Rockside Road | 4480 Lake Forest Drive
Columbus, OH 43231 | Cleveland, OH 44125 | Cincinnati, Ohio 45242
Phone (614) 823-4949 | Phone (216) 573-0955 | Phone (513) 769-6998


## Unconfined Compressive Strength of Intact Rock Core Specimens

(ASTM D 7012-14)

Project: FRA-161-15.80
Project No.: W-23-107
Date of Testing: 1/8/2024
Test Performed by: KL/EM

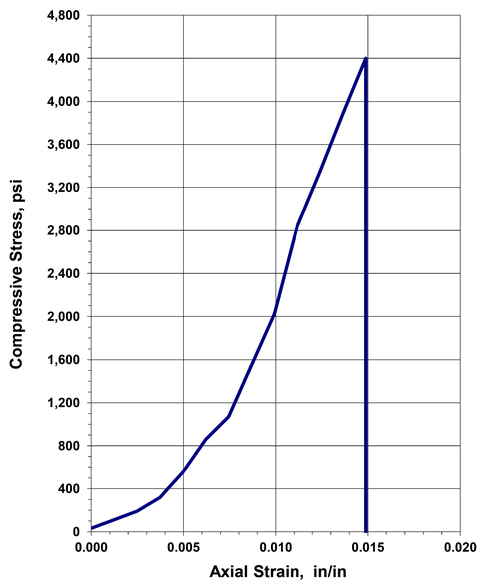
Rock Description: Gray Sandstone
Rock Formation:

| | | | | | |
|---|---|---|---|---|---|
| Boring No.: | B-001-0-23 | | Average Length: | 4.030 | in |
| Sample No: | RC-2 | | Average Diameter: | 1.993 | in |
| Depth (ft): | 14.0' | feet | Length to diameter ratio: | 2.022 | |
| Moisture condition: | As received | | Cross Sectional Area: | 3.120 | $in^2$ |
| Sample Mass: | 470.86 | grams | Volume: | 0.0073 | $ft^3$ |
| Testing Temperature: | 23 | °C | Unit Weight (sample specimen)*: | 142.68 | lbs/ft3 |
| Rate of Loading: | 62.1 | lbs/sec | Failure Load: | 13,727 | lbs |
| Testing Time: | 221 | sec | Axial Strain at Failure: | 0.0149 | in/in |
| *(Rate 2-15 min* | | | Compressive Strength: | 4,400 | psi |

Sample Preparation: Per ASTM D4543

**Actual test sample used for unit weight prior to testing.*

**Unconfined Compression Test**




**Before Testing**




**After Failure**




REMARKS:



**RESOURCE INTERNATIONAL, INC.**
*Engineering Consultants*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Columbus, OH 43231 | Cleveland, OH 44125 | Cincinnati, Ohio 45242
Phone (614) 823-4949 | Phone (216) 573-0955 | Phone (513) 769-6998


## Unconfined Compressive Strength of Intact Rock Core Specimens

(ASTM D 7012-14)

Project: FRA-161-15.80
Project No.: W-23-107
Date of Testing: 1/8/2024
Test Performed by: KL/EM

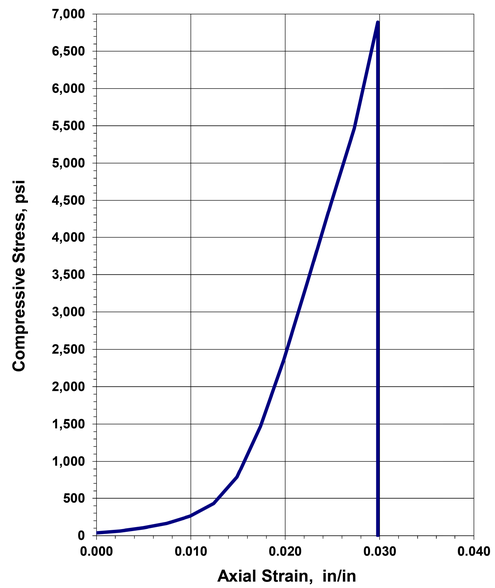
Rock Description: Gray Sandstone
Rock Formation:

| | | | | | |
|---|---|---|---|---|---|
| Boring No.: | B-003-0-23 | | Average Length: | 4.028 | in |
| Sample No: | RC-2 | | Average Diameter: | 1.995 | in |
| Depth (ft): | 13.8' | feet | Length to diameter ratio: | 2.019 | |
| Moisture condition: | As received | | Cross Sectional Area: | 3.126 | $in^2$ |
| Sample Mass: | 480.55 | grams | Volume: | 0.0073 | $ft^3$ |
| Testing Temperature: | 23 | °C | Unit Weight (sample specimen)*: | 145.39 | lbs/ft3 |
| Rate of Loading: | 75.1 | lbs/sec | Failure Load: | 21,542 | lbs |
| Testing Time: | 287 | sec | Axial Strain at Failure: | 0.0298 | in/in |
| *(Rate 2-15 min* | | | Compressive Strength: | 6,891 | psi |

Sample Preparation: Per ASTM D4543

**Actual test sample used for unit weight prior to testing.*

**Unconfined Compression Test**




**Before Testing**




**After Failure**




REMARKS:



GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 3
LABORATORY TEST DATA - UNCONFINED COMPRESSIVE STRENGTH OF INTACT ROCK

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

DESIGNER: JAS
REVIEWER: DEK 1/19/24
PROJECT ID: 117607
SUBSET: 2 | TOTAL: 66
SHEET: P.233 | TOTAL: 297

FRA-161-15.80 NOISE WALLS


MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:11:51 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL0001.dgn

**RESOURCE INTERNATIONAL, INC.**
*Engineering Consultants*


6350 Presidential Gatew. | 9885 Rockside Road | 4480 Lake Forest Drive
Columbus, OH 43231 | Cleveland, OH 44125 | Cincinnati, Ohio 45242
Phone (614) 823-4949 | Phone (216) 573-0955 | Phone (513) 769-6998


## Unconfined Compressive Strength of Intact Rock Core Specimens

(ASTM D 7012-14)

Project: FRA-161-15.80
Project No.: W-23-107
Date of Testing: 1/8/2024
Test Performed by: KL/EM

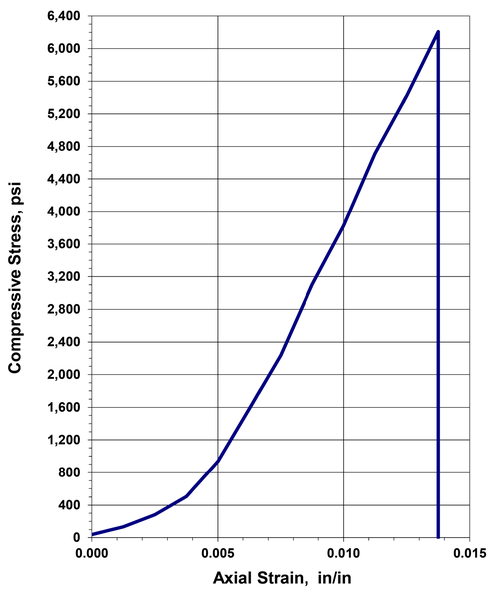
Rock Description: Gray Sandstone
Rock Formation:

| | | | | | |
|---|---|---|---|---|---|
| Boring No.: | B-043-0-23 | | Average Length: | 4.000 | in |
| Sample No: | RC-2 | | Average Diameter: | 1.988 | in |
| Depth (ft): | 21.00 | feet | Length to diameter ratio: | 2.012 | |
| Moisture condition: | As received | | Cross Sectional Area: | 3.104 | $in^2$ |
| Sample Mass: | 460.53 | grams | Volume: | 0.0072 | $ft^3$ |
| Testing Temperature: | 23 | °C | Unit Weight (sample specimen)*: | 141.30 | lbs/ft3 |
| Rate of Loading: | 87.2 | lbs/sec | Failure Load: | 19,269 | lbs |
| Testing Time: | 221 | sec | Axial Strain at Failure: | 0.0138 | in/in |
| *(Rate 2-15 min* | | | Compressive Strength: | 6,208 | psi |

Sample Preparation: Per ASTM D4543

**Actual test sample used for unit weight prior to testing.*

**Unconfined Compression Test**




**Before Testing**




**After Failure**




REMARKS:



**RESOURCE INTERNATIONAL, INC.**
*Engineering Consultants*


6350 Presidential Gatew. | 9885 Rockside Road | 4480 Lake Forest Drive
Columbus, OH 43231 | Cleveland, OH 44125 | Cincinnati, Ohio 45242
Phone (614) 823-4949 | Phone (216) 573-0955 | Phone (513) 769-6998


## Unconfined Compressive Strength of Intact Rock Core Specimens

(ASTM D 7012-14)

Project: FRA-161-15.80
Project No.: W-23-107
Date of Testing: 1/8/2024
Test Performed by: KL/EM

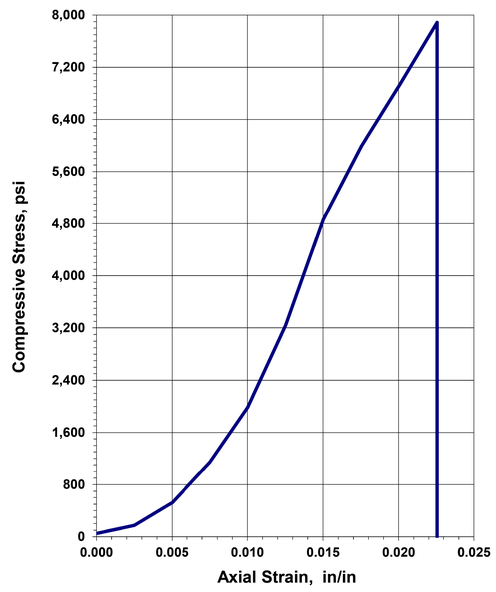
Rock Description: Gray Sandstone
Rock Formation:

| | | | | | |
|---|---|---|---|---|---|
| Boring No.: | B-046-0-23 | | Average Length: | 3.992 | in |
| Sample No: | RC-2 | | Average Diameter: | 1.995 | in |
| Depth (ft): | 22.0' | feet | Length to diameter ratio: | 2.001 | |
| Moisture condition: | As received | | Cross Sectional Area: | 3.126 | $in^2$ |
| Sample Mass: | 519.17 | grams | Volume: | 0.0072 | $ft^3$ |
| Testing Temperature: | 23 | °C | Unit Weight (sample specimen)*: | 158.49 | lbs/ft3 |
| Rate of Loading: | 101.9 | lbs/sec | Failure Load: | 24,655 | lbs |
| Testing Time: | 242 | sec | Axial Strain at Failure: | 0.0225 | in/in |
| *(Rate 2-15 min* | | | Compressive Strength: | 7,887 | psi |

Sample Preparation: Per ASTM D4543

**Actual test sample used for unit weight prior to testing.*

**Unconfined Compression Test**




**Before Testing**




**After Failure**




REMARKS:



GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 15
LABORATORY TEST DATA - UNCONFINED COMPRESSIVE STRENGTH OF INTACT ROCK

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

DESIGNER: JAS
REVIEWER: DEK 1/19/24
PROJECT ID: 117607
SUBSET: 3 | TOTAL: 66
SHEET: P.234 | TOTAL: 297

FRA-161-15.80 NOISE WALLS


MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:12:10 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL0002.dgn

**RESOURCE INTERNATIONAL, INC.**
*Engineering Consultants*

6350 Presidential Gatew. | 9885 Rockside Road | 4480 Lake Forest Drive
Columbus, OH 43231 | Cleveland, OH 44125 | Cincinnati, Ohio 45242
Phone (614) 823-4949 | Phone (216) 573-0955 | Phone (513) 769-6998

## Unconfined Compressive Strength of Intact Rock Core Specimens

(ASTM D 7012-14)

Project: FRA-161-15.80
Project No.: W-23-107
Date of Testing: 1/8/2024
Test Performed by: KL/EM

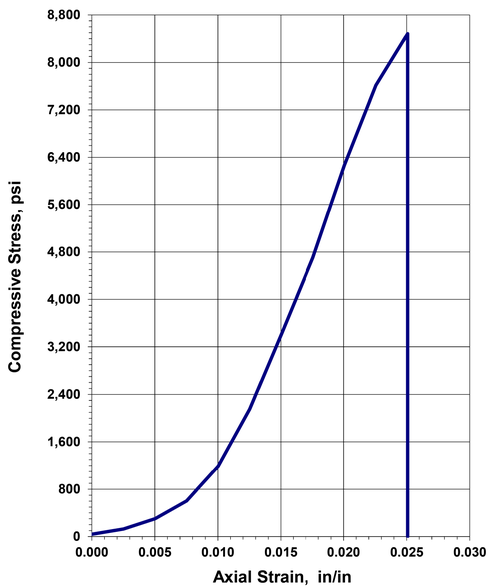
Rock Description: Gray Sandstone
Rock Formation:

| | | | | | |
|---|---|---|---|---|---|
| Boring No.: | B-050-0-23 | | Average Length: | 3.988 | in |
| Sample No: | RC-2 | | Average Diameter: | 1.985 | in |
| Depth (ft): | 21.0' | feet | Length to diameter ratio: | 2.009 | |
| Moisture condition: | As received | | Cross Sectional Area: | 3.095 | $in^2$ |
| Sample Mass: | 455.36 | grams | Volume: | 0.0071 | $ft^3$ |
| Testing Temperature: | 23 | °C | Unit Weight (sample specimen)*: | 140.56 | lbs/ft3 |
| Rate of Loading: | 108.5 | lbs/sec | Failure Load: | 26,255 | lbs |
| Testing Time: *(Rate 2-15 min* | 242 | sec | Axial Strain at Failure: | 0.0251 | in/in |
| | | | Compressive Strength: | 8,484 | psi |

Sample Preparation: Per ASTM D4543

**Actual test sample used for unit weight prior to testing.*

**Unconfined Compression Test**




**Before Testing**




**After Failure**




REMARKS:



**RESOURCE INTERNATIONAL, INC.**
*Engineering Consultants*

6350 Presidential Gatew. | 9885 Rockside Road | 4480 Lake Forest Drive
Columbus, OH 43231 | Cleveland, OH 44125 | Cincinnati, Ohio 45242
Phone (614) 823-4949 | Phone (216) 573-0955 | Phone (513) 769-6998

## Unconfined Compressive Strength of Intact Rock Core Specimens

(ASTM D 7012-14)

Project: FRA-161-15.80
Project No.: W-23-107
Date of Testing: 1/8/2024
Test Performed by: KL/EM

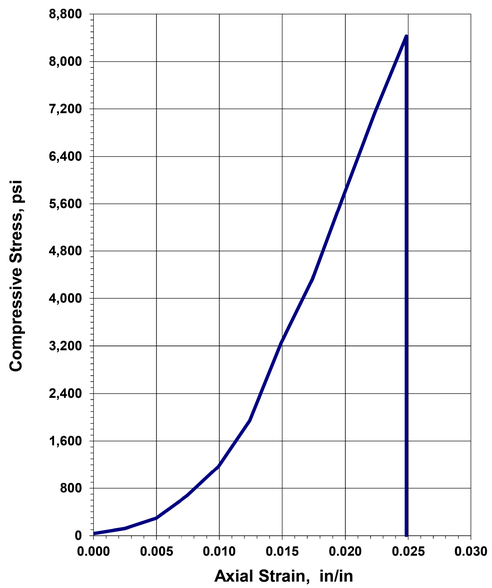
Rock Description: Gray Sandstone
Rock Formation:

| | | | | | |
|---|---|---|---|---|---|
| Boring No.: | B-052-0-23 | | Average Length: | 4.024 | in |
| Sample No: | RC-2 | | Average Diameter: | 1.993 | in |
| Depth (ft): | 21.20 | feet | Length to diameter ratio: | 2.019 | |
| Moisture condition: | As received | | Cross Sectional Area: | 3.120 | $in^2$ |
| Sample Mass: | 505.98 | grams | Volume: | 0.0073 | $ft^3$ |
| Testing Temperature: | 23 | °C | Unit Weight (sample specimen)*: | 153.55 | lbs/ft3 |
| Rate of Loading: | 112.4 | lbs/sec | Failure Load: | 26,295 | lbs |
| Testing Time: *(Rate 2-15 min* | 234 | sec | Axial Strain at Failure: | 0.0249 | in/in |
| | | | Compressive Strength: | 8,429 | psi |

Sample Preparation: Per ASTM D4543

**Actual test sample used for unit weight prior to testing.*

**Unconfined Compression Test**




**Before Testing**




**After Failure**




REMARKS:



GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 15
LABORATORY TEST DATA - UNCONFINED COMPRESSIVE STRENGTH OF INTACT ROCK

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

DESIGNER: JAS
REVIEWER: DEK 1/19/24
PROJECT ID: 117607
SUBSET: 4 | TOTAL: 66
SHEET: P.235 | TOTAL: 297

FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:12:28 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL0003.dgn

**RESOURCE INTERNATIONAL, INC.**
*Engineering Consultants*

6350 Presidential Gatew. | 9885 Rockside Road | 4480 Lake Forest Drive
Columbus, OH 43231 | Cleveland, OH 44125 | Cincinnati, Ohio 45242
Phone (614) 823-4949 | Phone (216) 573-0955 | Phone (513) 769-6998

**Point Load Strength Index of Rock Specimens**
**(ASTM D 5731-08)**

Project: FRA-161-15.80
Project No.: W-23-107
Date of Testing: 1/8/2024
Test Performed by: EM/KL

Rock Description: Gray Shale

Boring No.: B-23-0-23
Station / Offset: RC-3
Sample No. / Depth: 21.5'-23.5'

Test Apparatus: Forney-LA 0080
Serial Number: A125/AZ/0014
Date of Calibration: 4/25/2023

| Sample No. | Test Type | Depth (ft) | Width (mm) | Diameter (mm) | Load (N) | $D_e^2$ ($mm^2$) | $D_e$ (mm) | F | Is (MPa) | $Is_{(50)}$ (MPa) | $\sigma_c$ (MPa) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | a ⊥ | 21.5-23.5 | 49.7 | 21.1 | 503 | 1,336 | 36.5 | 0.87 | 0.38 | 0.33 | 4.52 |
| 2 | a ⊥ | 21.5-23.5 | 49.6 | 25.8 | 783 | 1,631 | 40.4 | 0.91 | 0.48 | 0.44 | 5.76 |
| 3 | a ⊥ | 21.5-23.5 | 49.7 | 23.1 | 525 | 1,463 | 38.3 | 0.89 | 0.36 | 0.32 | 4.31 |
| 4 | a ⊥ | 21.5-23.5 | 49.7 | 28.5 | 814 | 1,802 | 42.5 | 0.93 | 0.45 | 0.42 | 5.42 |
| 5 | a ⊥ | 21.5-23.5 | 49.7 | 30.0 | 854 | 1,895 | 43.5 | 0.94 | 0.45 | 0.42 | 5.41 |
| 6 | a ⊥ | 21.5-23.5 | 49.7 | 25.1 | 916 | 1,589 | 39.9 | 0.90 | 0.58 | 0.52 | 6.92 |
| 7 | a ⊥ | 21.5-23.5 | 49.7 | 24.6 | 816 | 1,555 | 39.4 | 0.90 | 0.52 | 0.47 | 6.30 |
| 8 | a ⊥ | 21.5-23.5 | 49.7 | 22.6 | 798 | 1,429 | 37.8 | 0.88 | 0.56 | 0.49 | 6.70 |
| 9 | a ⊥ | 21.5-23.5 | 49.7 | 21.5 | 789 | 1,361 | 36.9 | 0.87 | 0.58 | 0.51 | 6.96 |
| 10 | a ⊥ | 21.5-23.5 | 49.7 | 22.5 | 801 | 1,427 | 37.8 | 0.88 | 0.56 | 0.49 | 6.73 |

| STATISTICS | |
|---|---|
| Mean $Is_{(50)}$ ⊥ | 0.44 MPa (64 psi) |
| Mean $Is_{(50)}$ ‖ | |
| $Ia_{(50)}$ | |

**Specific Specimen Shape:**
d = diametrical
a = axial
b = block
i = irregular lump
⊥ = perpendicular to bedding plane
‖ = parallel to bedding plane

**Estimated Unaxial Compression, $\sigma_c$ = K*Is**
K = 12
*Per Section 206.1.3 of 2011 ODOT Rock Slope Design Guide

Mean $\sigma_c$ = 5.90 MPa (0,856 psi)

Remarks: 1

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**Point Load Strength Index of Rock Specimens**
**(ASTM D 5731-08)**

Project: FRA-161-15.80
Project No.: W-23-107
Date of Testing: 1/8/2024
Test Performed by: EM/KL

Rock Description: Gray Shale

Boring No.: B-39-0-23
Station / Offset: RC-2
Sample No. / Depth: 15.0-20.0

Test Apparatus: Forney-LA 0080
Serial Number: A125/AZ/0014
Date of Calibration: 4/25/2023

| Sample No. | Test Type | Depth (ft) | Width (mm) | Diameter (mm) | Load (N) | $D_e^2$ ($mm^2$) | $D_e$ (mm) | F | Is (MPa) | $Is_{(50)}$ (MPa) | $\sigma_c$ (MPa) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | a ⊥ | 17.5-18.5 | 49.9 | 21.7 | 50 | 1,381 | 37.2 | 0.88 | 0.04 | 0.03 | 0.43 |
| 2 | a ⊥ | 17.5-18.5 | 49.5 | 24.4 | 45 | 1,539 | 39.2 | 0.90 | 0.03 | 0.03 | 0.35 |
| 3 | a ⊥ | 17.5-18.5 | 50.5 | 20.4 | 40 | 1,309 | 36.2 | 0.86 | 0.03 | 0.03 | 0.37 |
| 4 | a ⊥ | 17.5-18.5 | 50.6 | 23.9 | 48 | 1,538 | 39.2 | 0.90 | 0.03 | 0.03 | 0.37 |
| 5 | a ⊥ | 17.5-18.5 | 50.6 | 22.3 | 49 | 1,440 | 38.0 | 0.88 | 0.03 | 0.03 | 0.41 |
| 6 | a ⊥ | 17.5-18.5 | 50.6 | 21.1 | 49 | 1,362 | 36.9 | 0.87 | 0.04 | 0.03 | 0.43 |
| 7 | a ⊥ | 17.5-18.5 | 50.6 | 22.6 | 53 | 1,455 | 38.1 | 0.89 | 0.04 | 0.03 | 0.44 |
| 8 | a ⊥ | 17.5-18.5 | 50.6 | 22.6 | 48 | 1,456 | 38.2 | 0.89 | 0.03 | 0.03 | 0.40 |
| 9 | a ⊥ | 17.5-18.5 | 50.6 | 35.0 | 51 | 2,255 | 47.5 | 0.98 | 0.02 | 0.02 | 0.27 |
| 10 | a ⊥ | 17.5-18.5 | 50.6 | 22.2 | 52 | 1,429 | 37.8 | 0.88 | 0.04 | 0.03 | 0.44 |

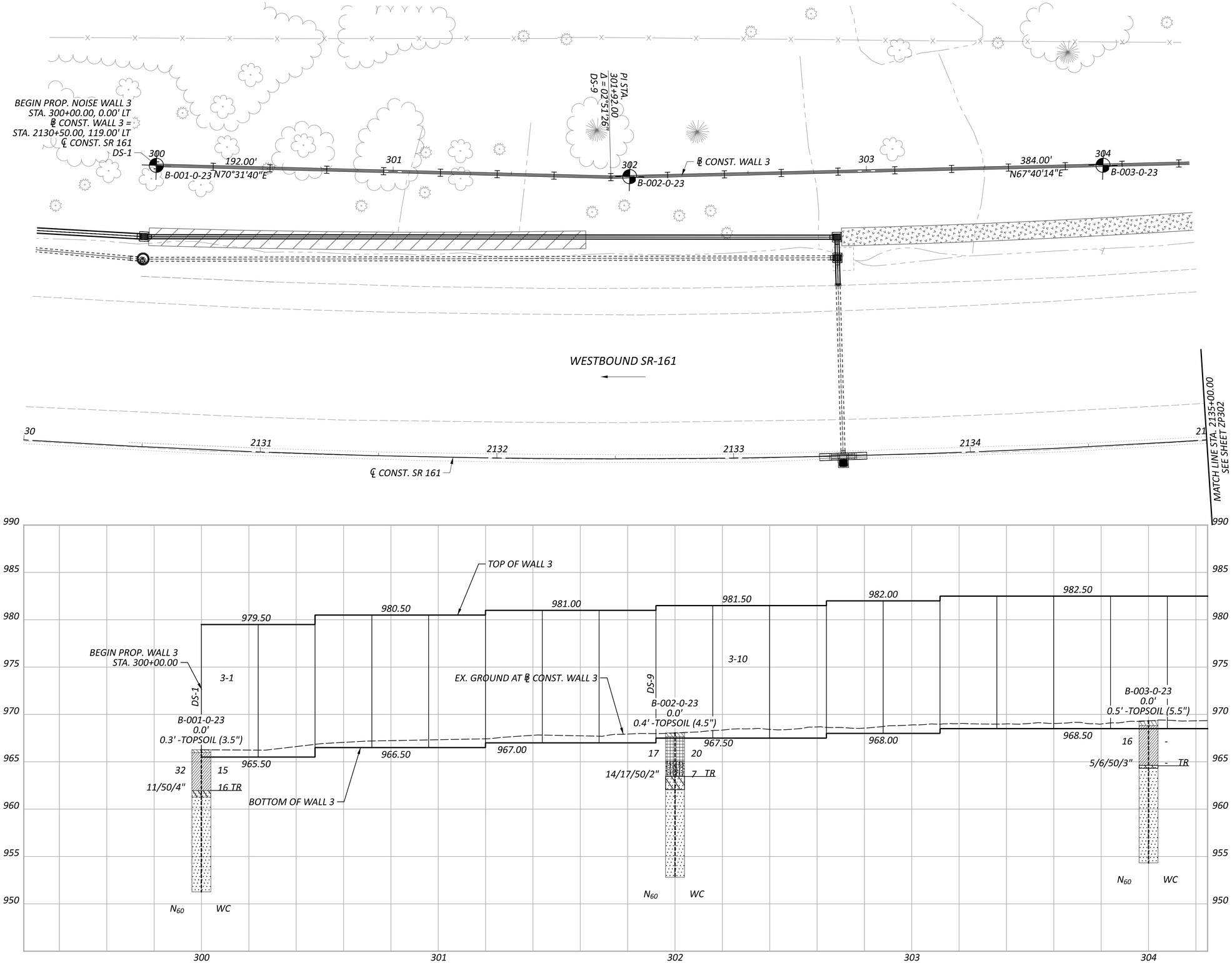
| STATISTICS | |
|---|---|
| Mean $Is_{(50)}$ ⊥ | 0.03 MPa (4 psi) |
| Mean $Is_{(50)}$ ‖ | |
| $Ia_{(50)}$ | |

**Specific Specimen Shape:**
d = diametrical
a = axial
b = block
i = irregular lump
⊥ = perpendicular to bedding plane
‖ = parallel to bedding plane

**Estimated Unaxial Compression, $\sigma_c$ = K*Is**
K = 12
*Per Section 206.1.3 of 2011 ODOT Rock Slope Design Guide

Mean $\sigma_c$ = 0.39 MPa (0,057 psi)

Remarks:




HORIZONTAL SCALE IN FEET
0 10 20 40

# GEOTECHNICAL PROFILE - NOISE WALL 3
# STA. 2130+00.00 TO STA. 2135+00.00

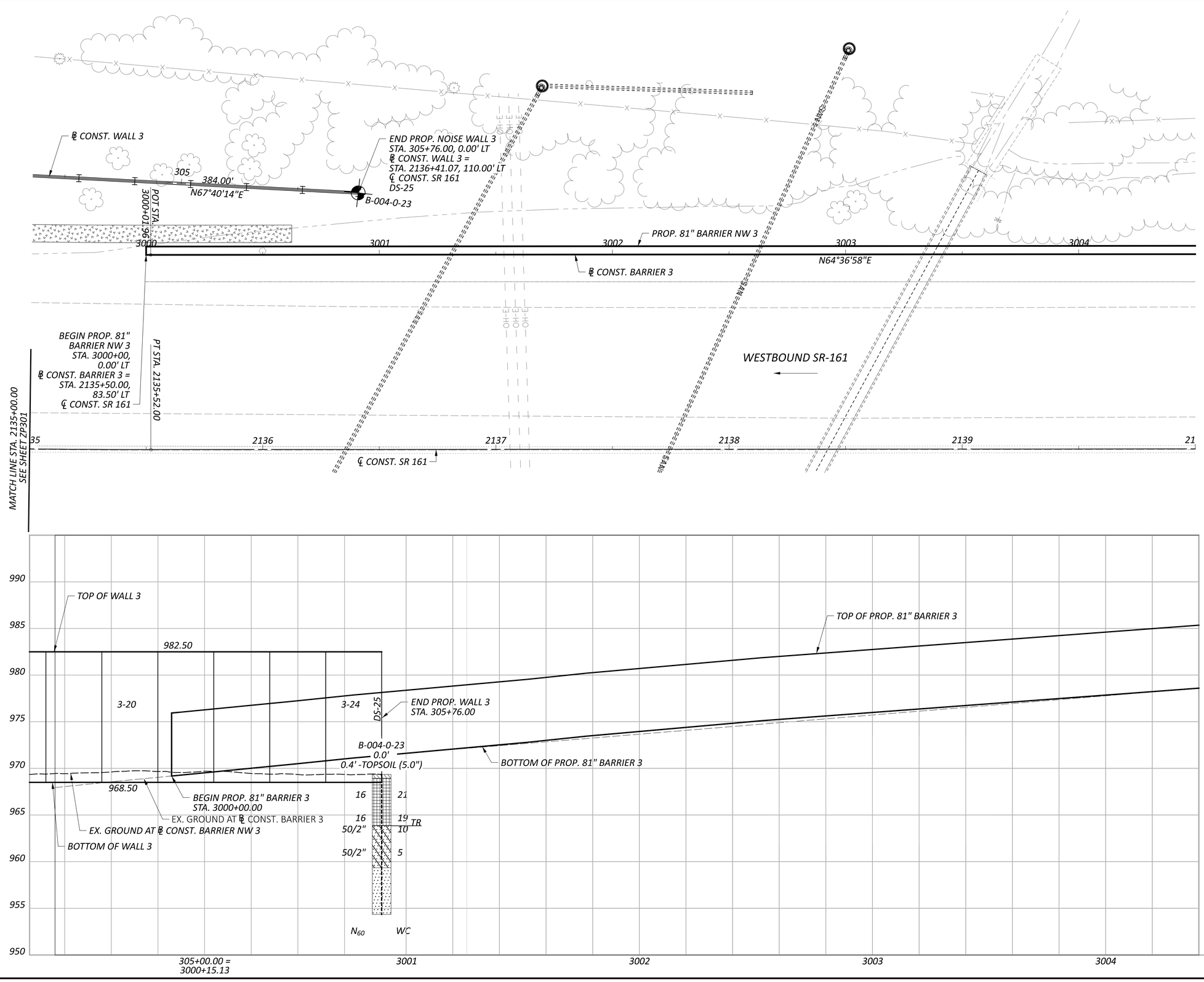
FRA-161-15.80 NOISE WALLS

MODEL: Wall 3 - Plan 2 PAPERSIZE: 34x22 (in.) DATE: 5/15/2024 TIME: 8:53:37 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP301.dgn

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 6 |
| TOTAL | 66 |
| SHEET | P.237 |
| TOTAL | 297 |

MODEL: Wall 3 - Plan 3 PAPERSIZE: 34x22 (in.) DATE: 5/15/2024 TIME: 9:29:15 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP302.dgn

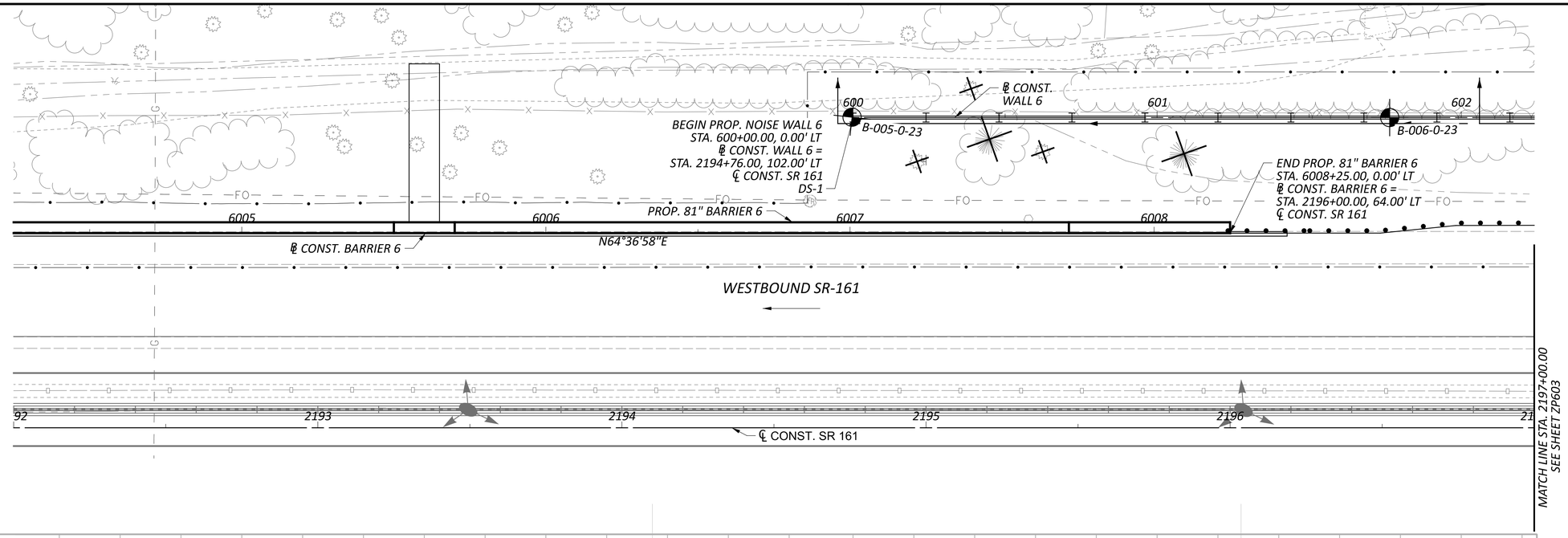


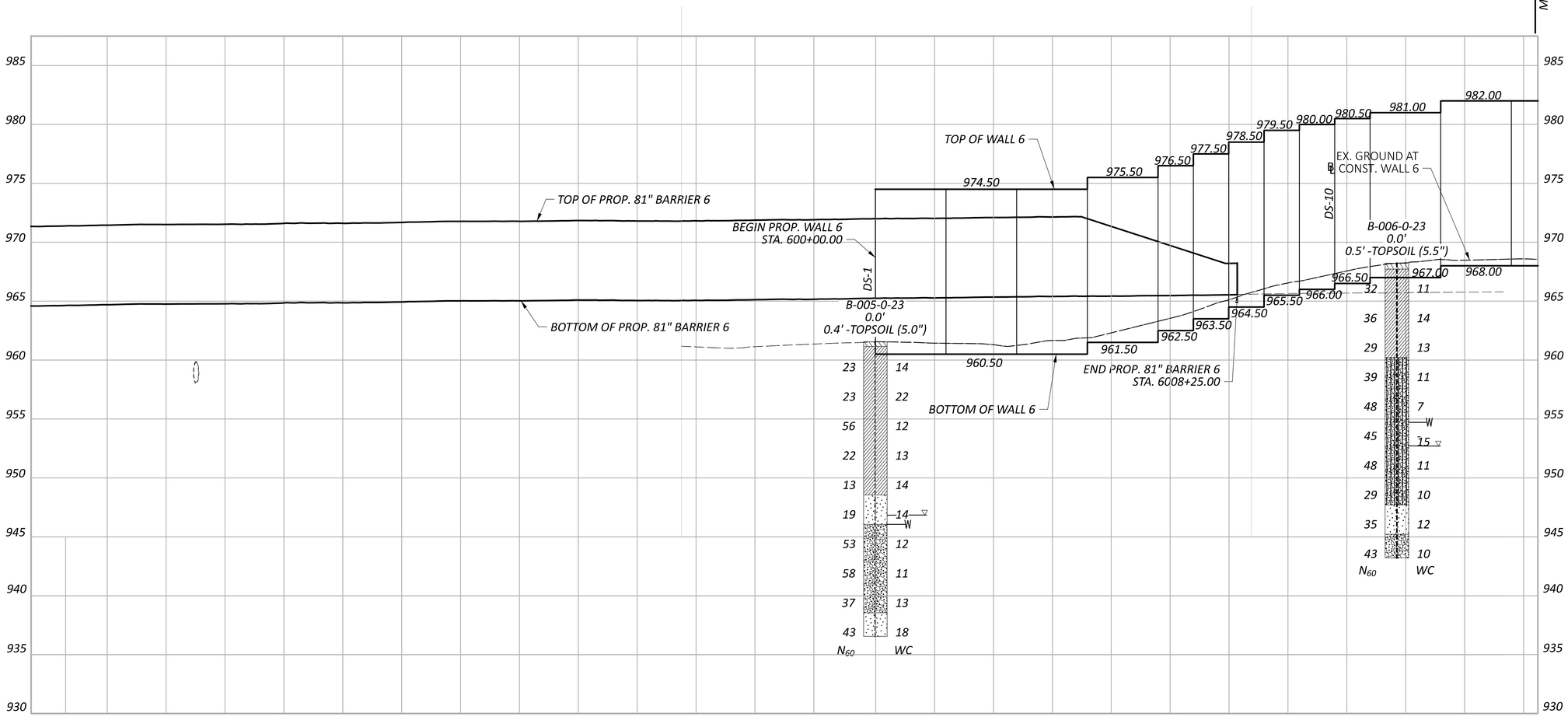

HORIZONTAL SCALE IN FEET
0 10 20 40

# GEOTECHNICAL PROFILE - NOISE WALL 3
# STA. 2135+00.00 TO STA. 2140+00.00

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

DESIGNER KSJ
REVIEWER DEK 1/19/24
PROJECT ID 117607
SUBSET 7 TOTAL 66
SHEET P.238 TOTAL 297




# GEOTECHNICAL PROFILE - NOISE WALL 6
# STA. 2192+00.00 TO STA. 2197+00.00

HORIZONTAL SCALE IN FEET
0 10 20 40

FRA-161-15.80 NOISE WALLS

MODEL: Wall 6 - Plan 6 PAPERSIZE: 34x22 (in.) DATE: 5/15/2024 TIME: 9:36:27 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP602.dgn

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 8 |
| TOTAL | 66 |
| SHEET | P.239 |
| TOTAL | 297 |

# FRA-161-15.80 NOISE WALLS

MODEL: Wall 6 - Plan 28 PAPERSIZE: 34x22 (in.) DATE: 5/15/2024 TIME: 9:40:27 PM USER: juans
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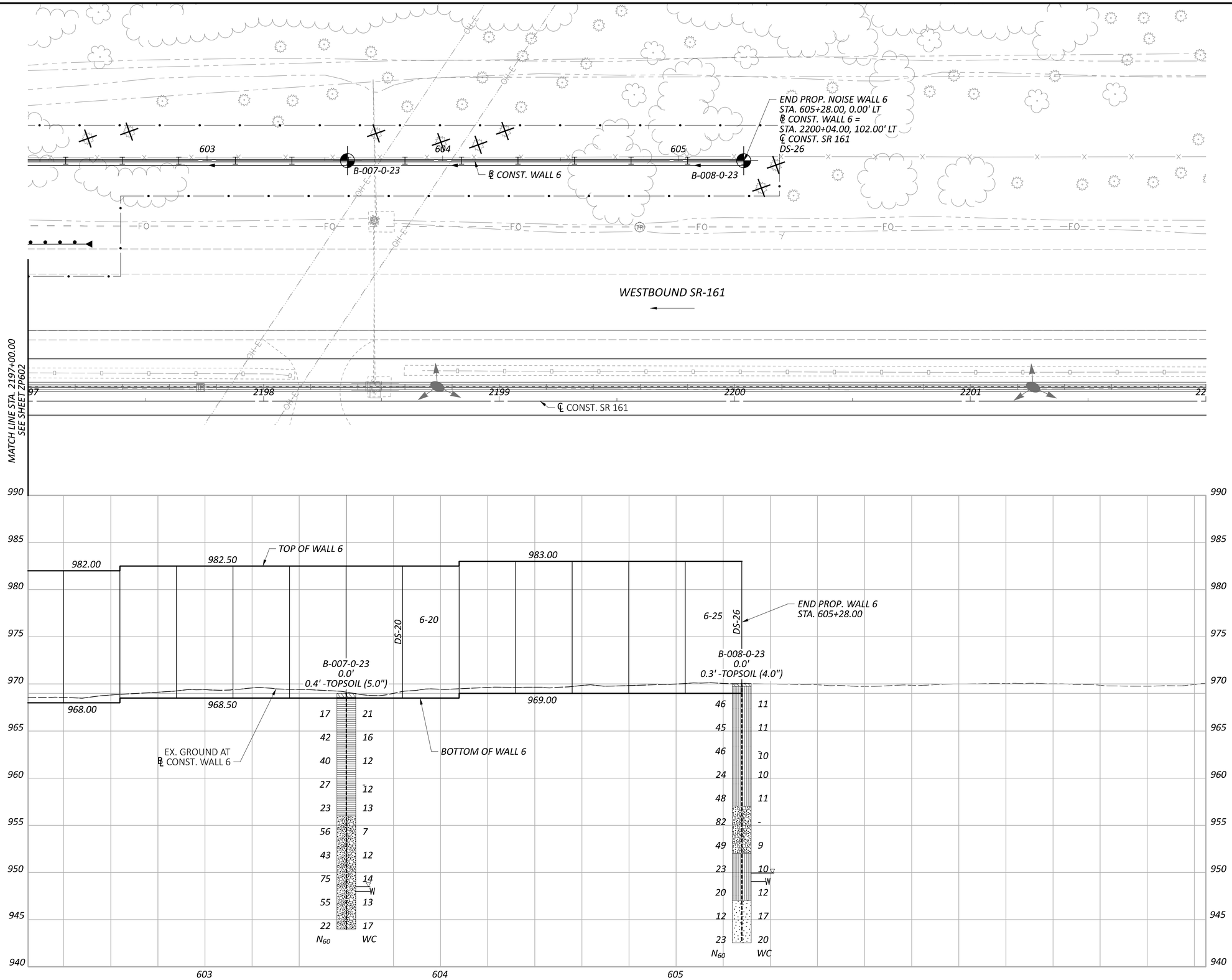
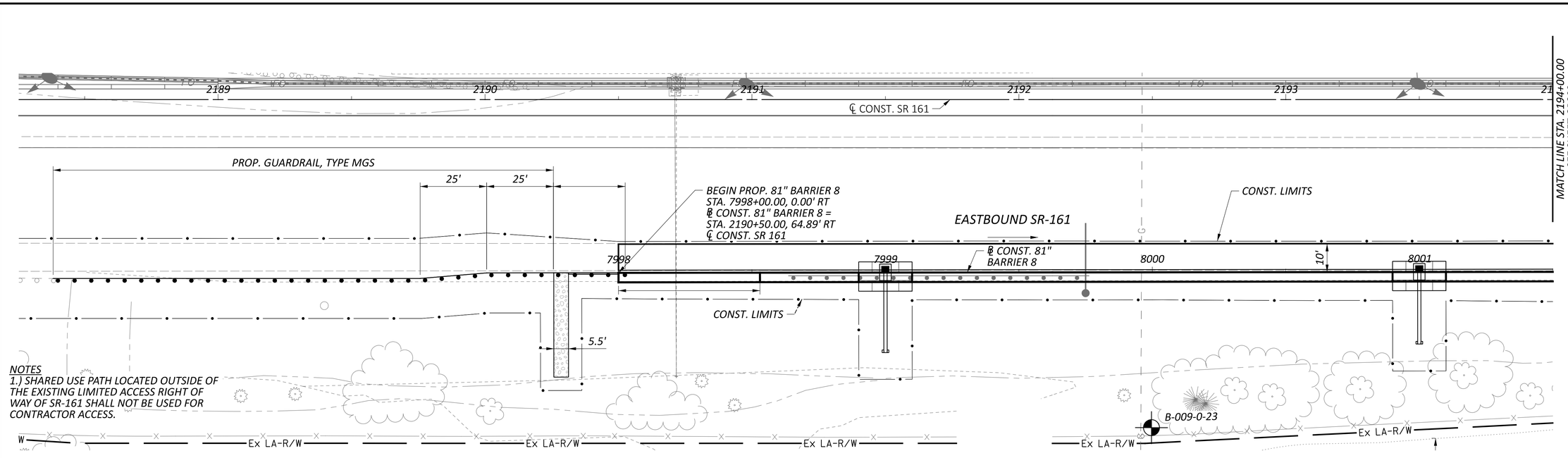
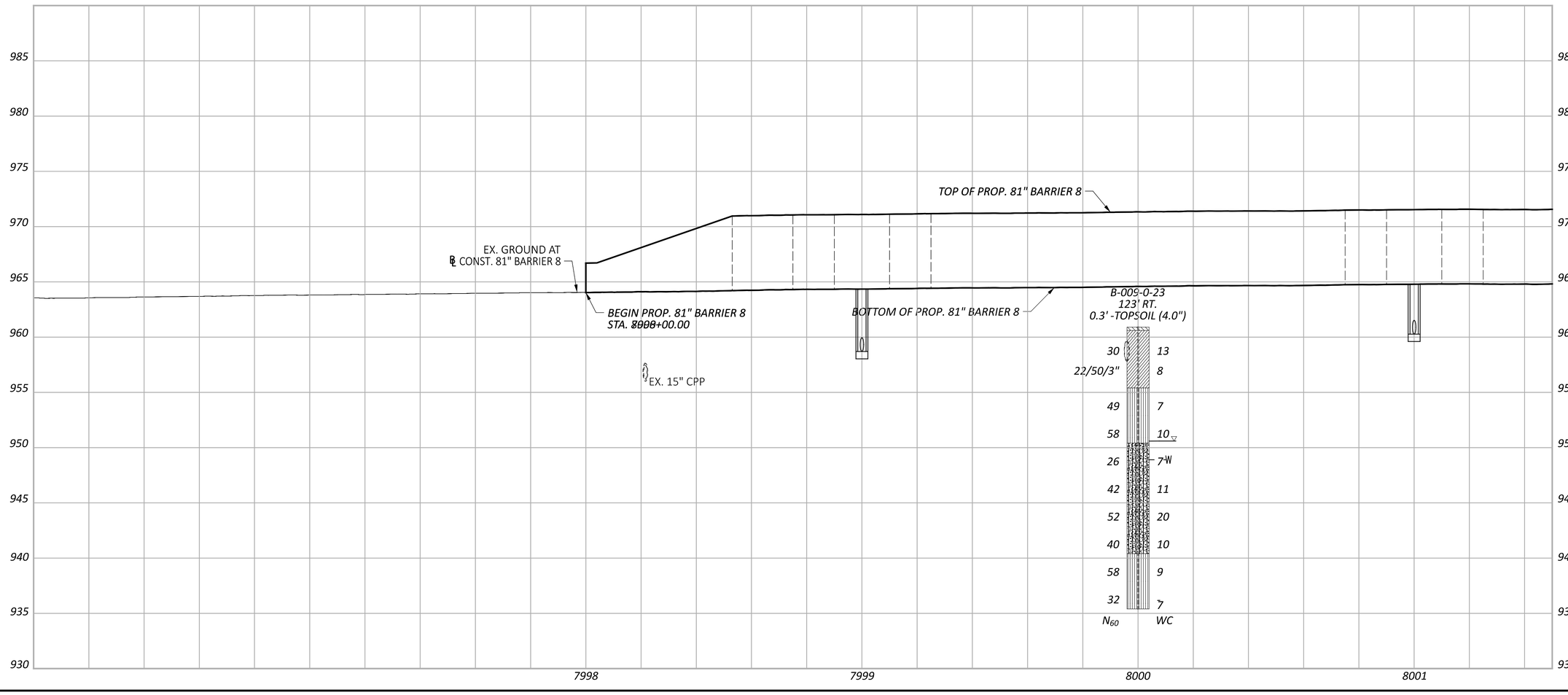



# GEOTECHNICAL PROFILE - NOISE WALL 6
# STA. 2197+00.00 TO STA. 2202+00.00

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 9 |
| TOTAL | 66 |
| SHEET | P.240 |
| TOTAL | 297 |




HORIZONTAL SCALE IN FEET
0 10 20 40

# GEOTECHNICAL PROFILE - NOISE WALL 8
# STA. 2188+00.00 TO STA. 2194+00.00

FRA-161-15.80 NOISE WALLS

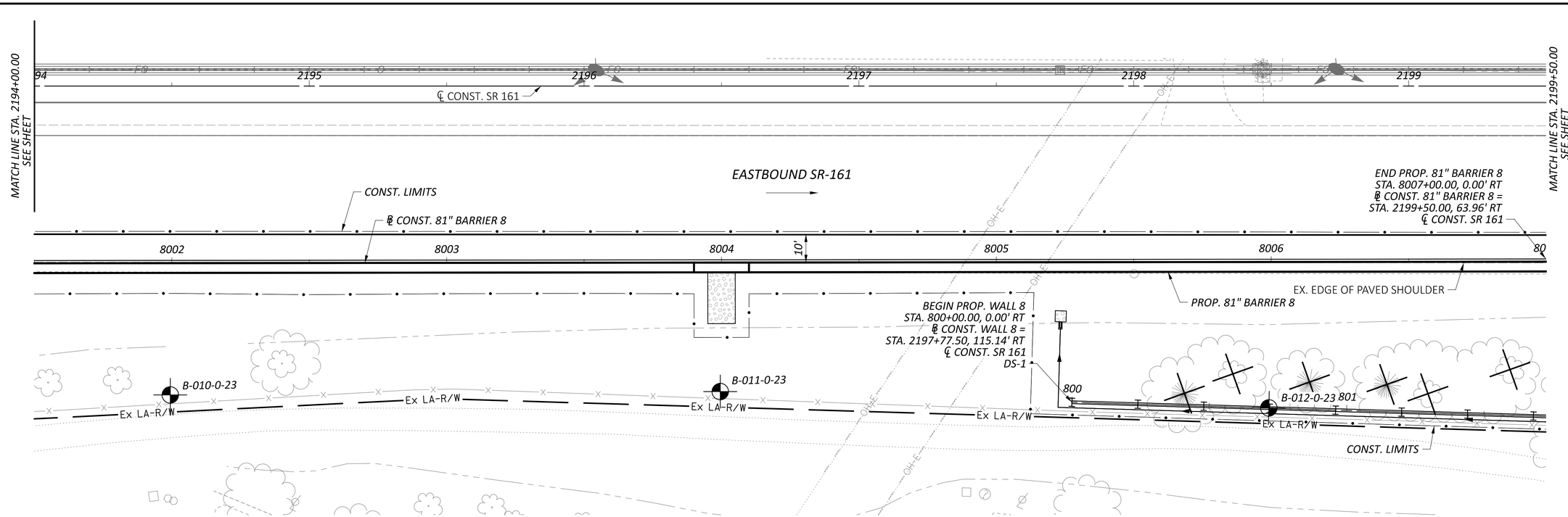
MODEL: CLP_SR161 - Plan 7 PAPERSIZE: 34x22 (in.) DATE: 5/15/2024 TIME: 10:23:55 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP801.dgn

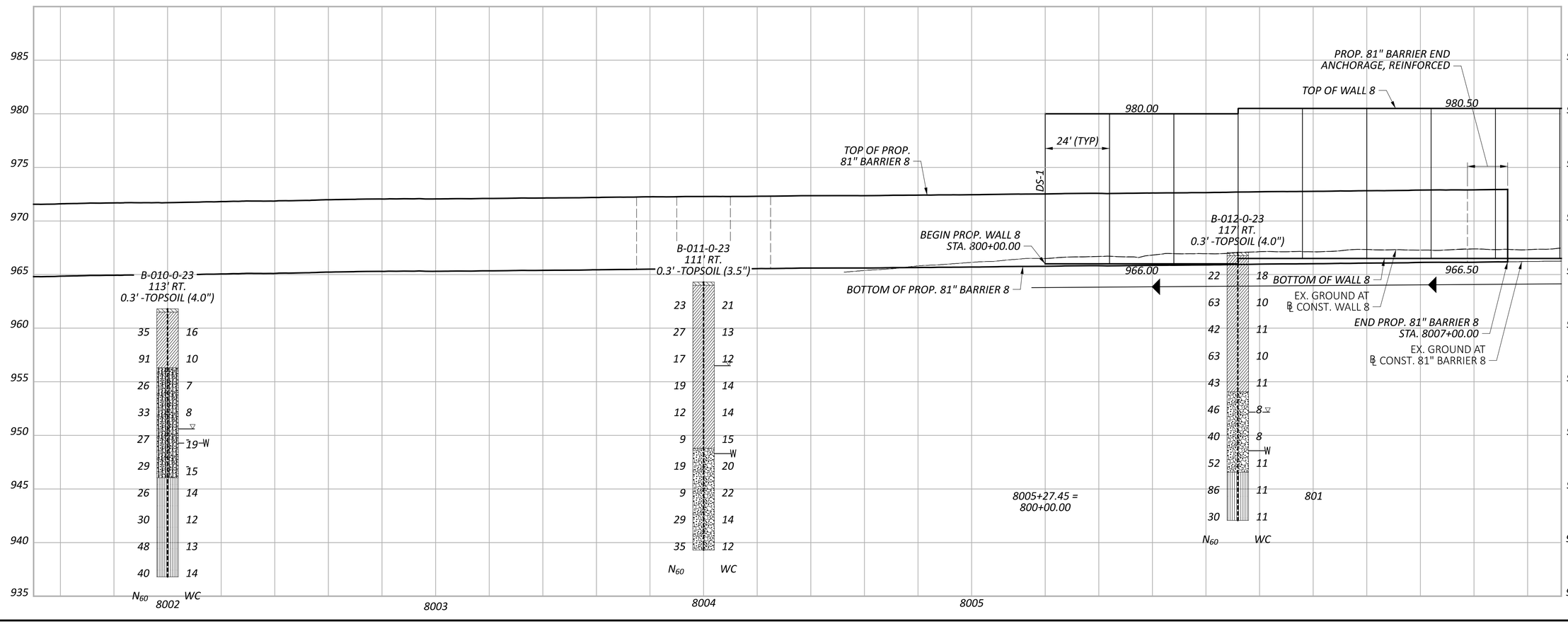

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949


| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 10 |
| TOTAL | 66 |
| SHEET | P.241 |
| TOTAL | 297 |

# GEOTECHNICAL PROFILE - NOISE WALL 8
## STA. 2194+00.00 TO STA. 2199+50.00

HORIZONTAL SCALE IN FEET
0 10 20 40



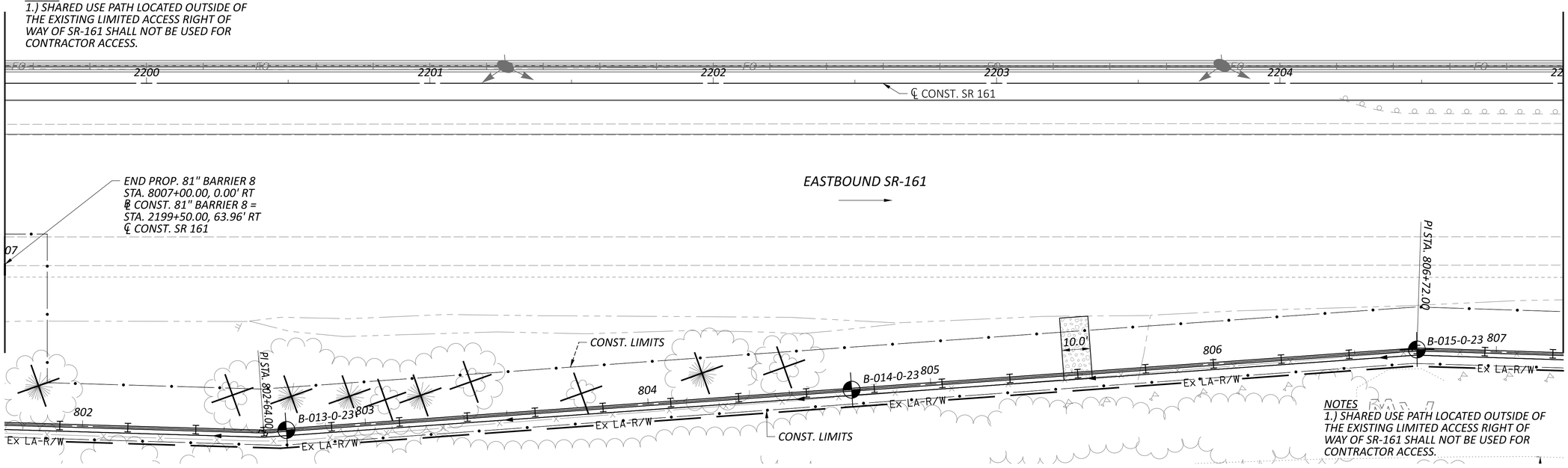

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

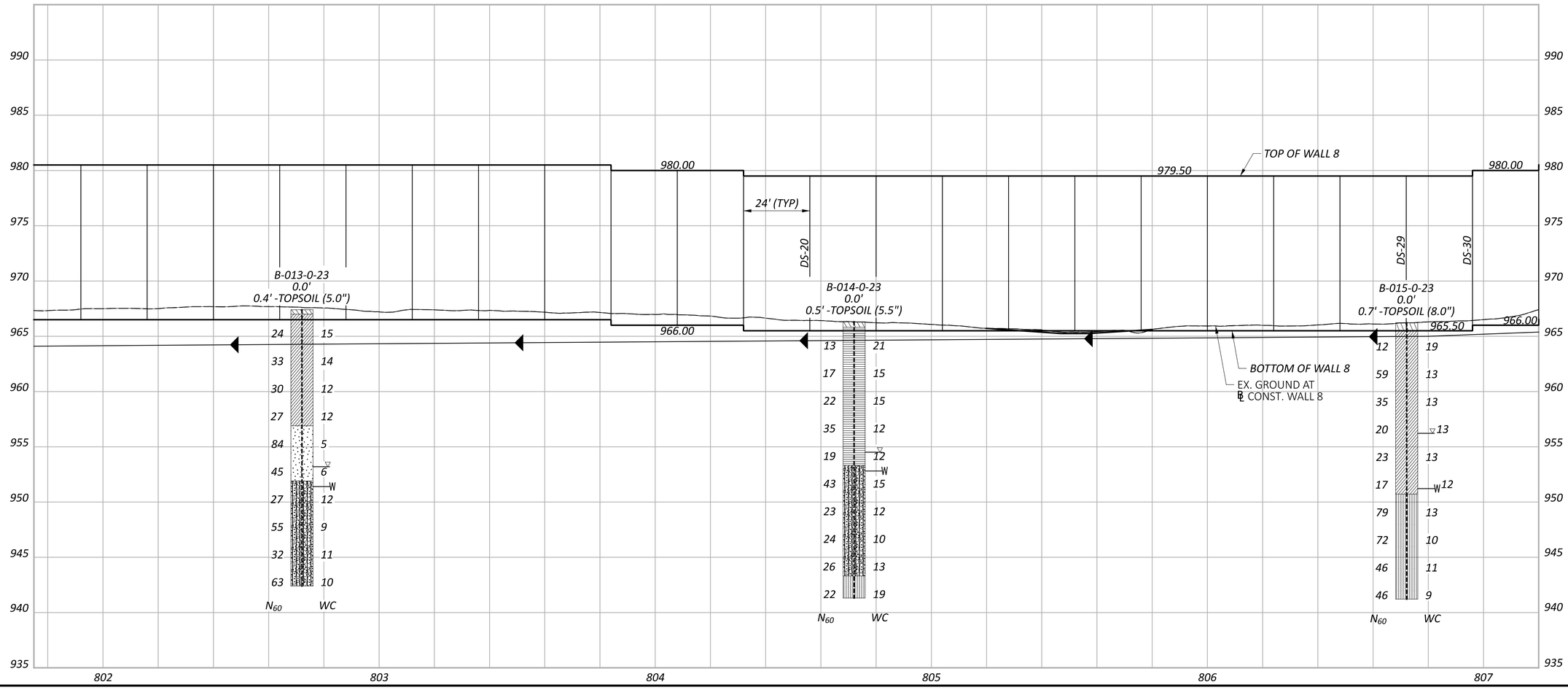
DESIGNER: KSJ
REVIEWER: DEK 1/19/24
PROJECT ID: 117607
SUBSET: 11 TOTAL: 66
SHEET: P.242 TOTAL: 297

FRA-161-15.80 NOISE WALLS

MODEL: CLP_SR161 - Plan B PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 9:03:16 AM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP802.dgn

NOTES
1.) SHARED USE PATH LOCATED OUTSIDE OF THE EXISTING LIMITED ACCESS RIGHT OF WAY OF SR-161 SHALL NOT BE USED FOR CONTRACTOR ACCESS.




HORIZONTAL SCALE IN FEET
0 10 20 40

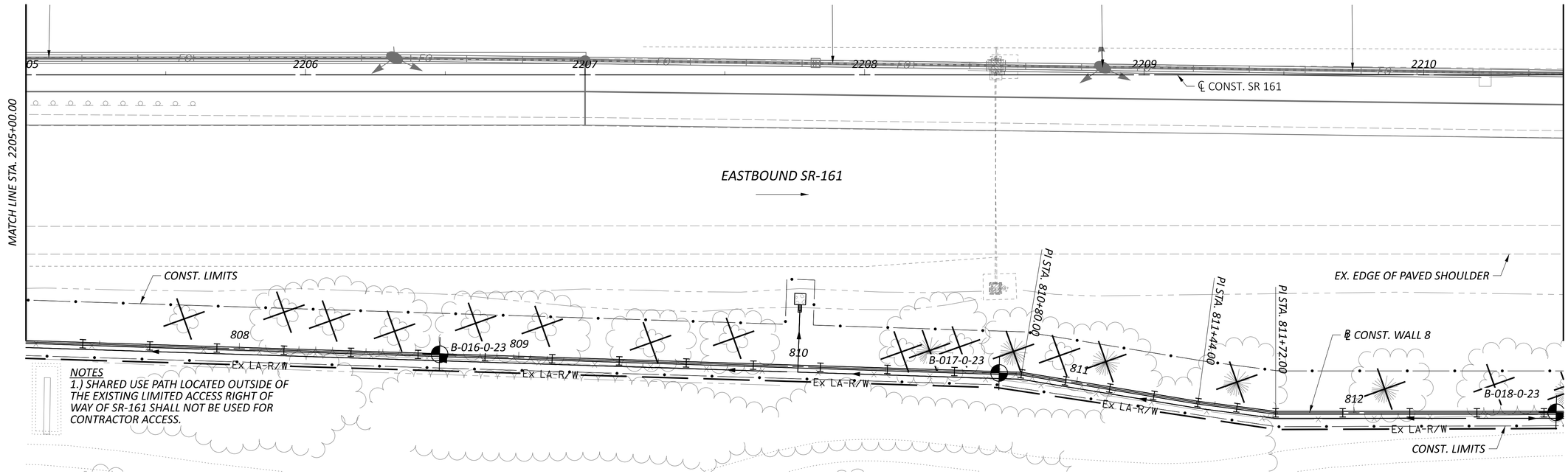
# GEOTECHNICAL PROFILE - NOISE WALL 8
# STA. 2199+00.00 TO STA. 2203+00.00

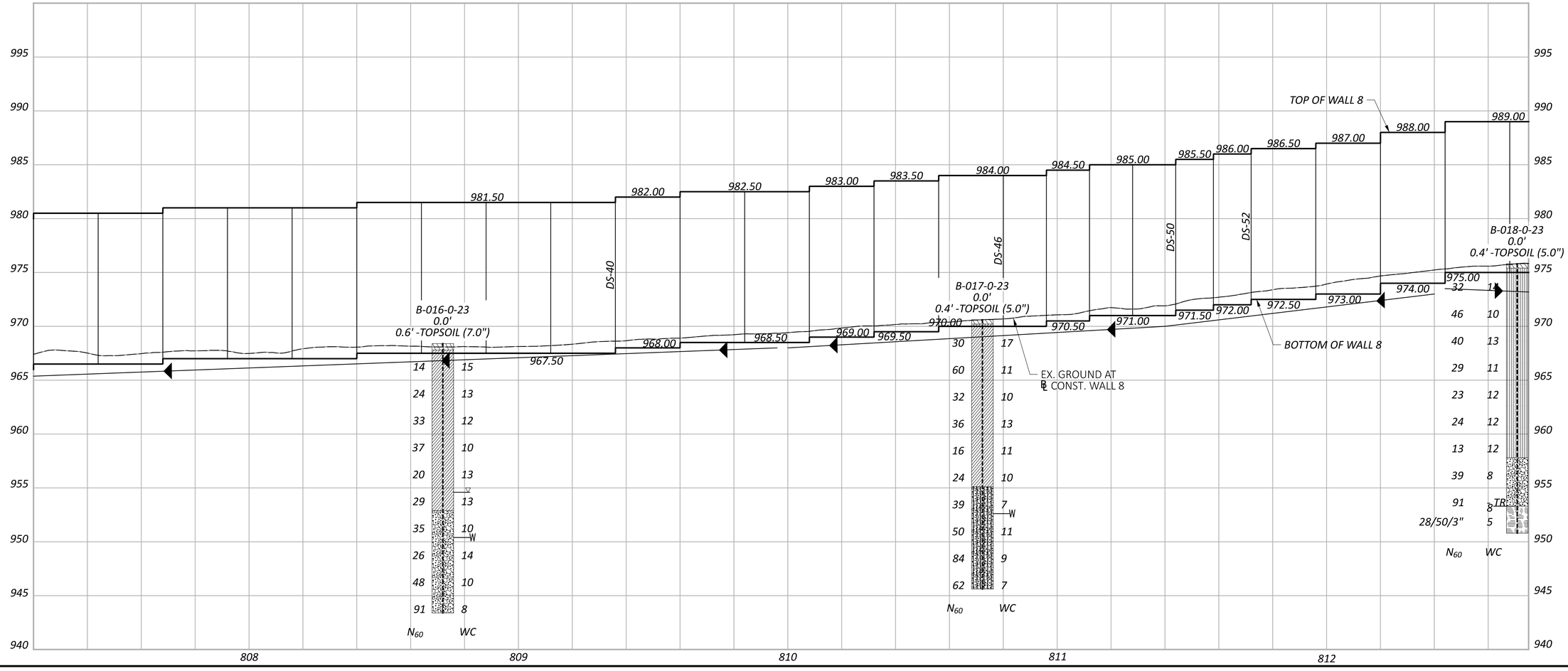
FRA-161-15.80 NOISE WALLS

MODEL: CLP_SR161 - Plan 9 PAPERSIZE: 34x22 (in.) DATE: 5/15/2024 TIME: 10:50:50 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP803.dgn

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 12 |
| TOTAL | 66 |
| SHEET | P.243 |
| TOTAL | 297 |




HORIZONTAL SCALE IN FEET
0 10 20 40

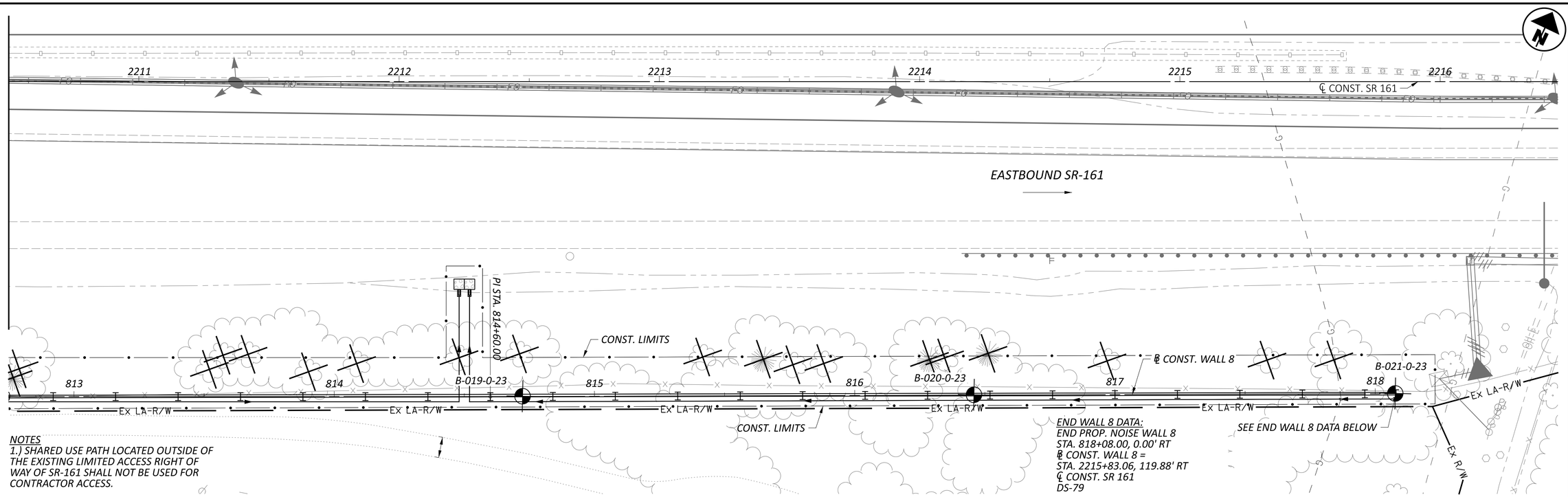
# GEOTECHNICAL PROFILE - NOISE WALL 8
# STA. 2205+00.00 TO STA. 2210+50.00

FRA-161-15.80 NOISE WALLS

MODEL: CLP_SR161 - Plan 10 PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 10:11:09 AM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP804.dgn

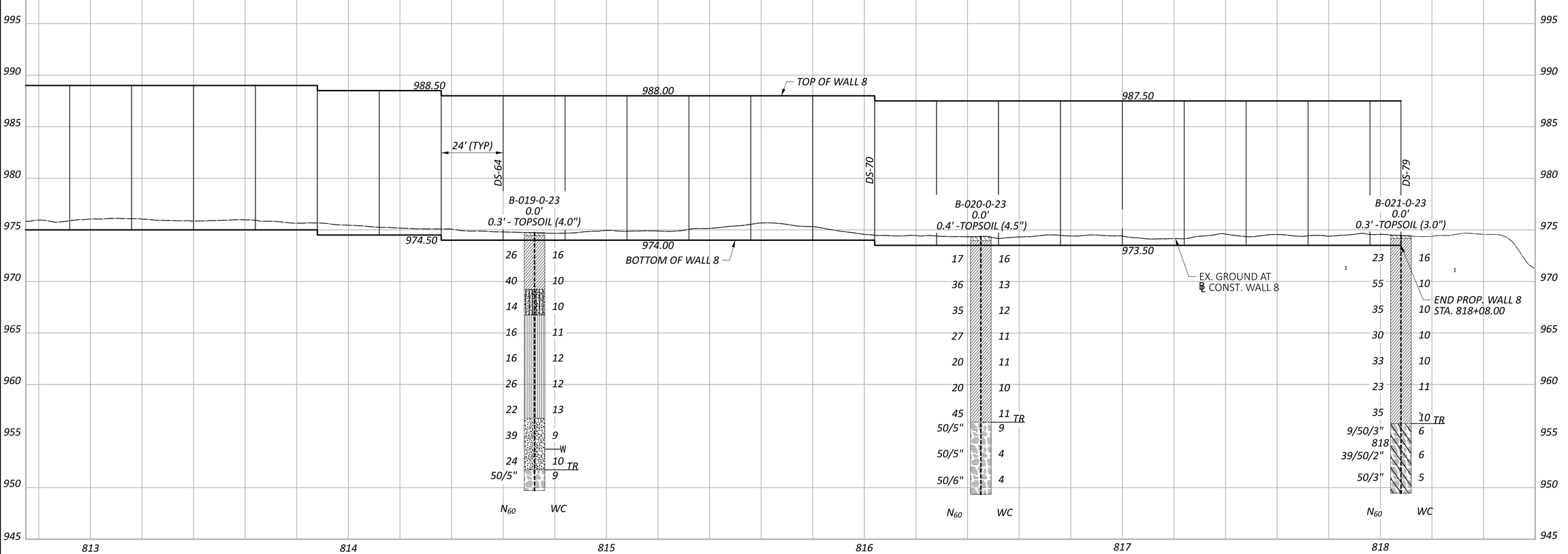
DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 13 |
| TOTAL | 66 |
| SHEET | P.244 |
| TOTAL | 297 |




NOTES
1.) SHARED USE PATH LOCATED OUTSIDE OF THE EXISTING LIMITED ACCESS RIGHT OF WAY OF SR-161 SHALL NOT BE USED FOR CONTRACTOR ACCESS.

END WALL 8 DATA:
END PROP. NOISE WALL 8
STA. 818+08.00, 0.00' RT
℄ CONST. WALL 8 =
STA. 2215+83.06, 119.88' RT
℄ CONST. SR 161
DS-79




FRA-161-15.80 NOISE WALLS

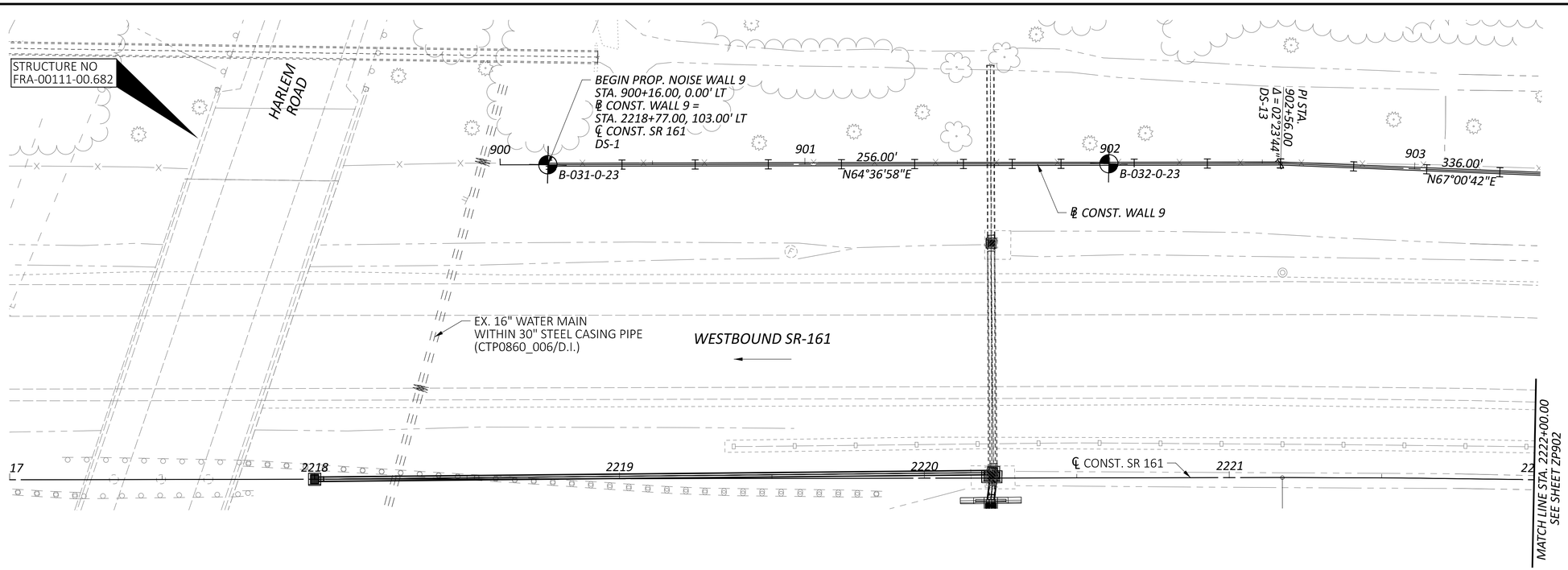
MODEL: CLP_SR161 - Plan 11 PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 11:49:39 AM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP805.dgn

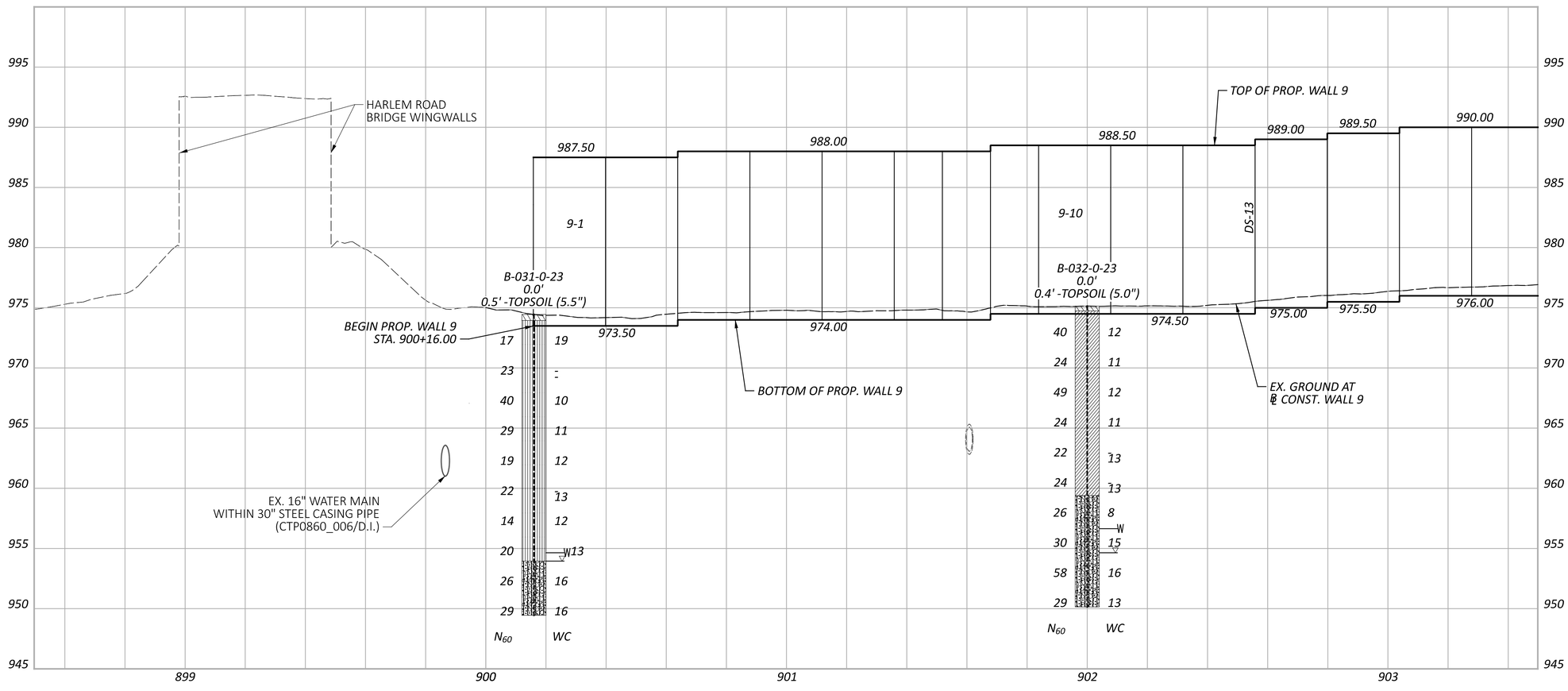
HORIZONTAL SCALE IN FEET
0 10 20 40

# GEOTECHNICAL PROFILE - NOISE WALL 8
# STA. 2210+50.00 TO STA. 2216+50.00

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 14 |
| TOTAL | 66 |
| SHEET | P.245 |
| TOTAL | 297 |




HORIZONTAL SCALE IN FEET
0 10 20 40

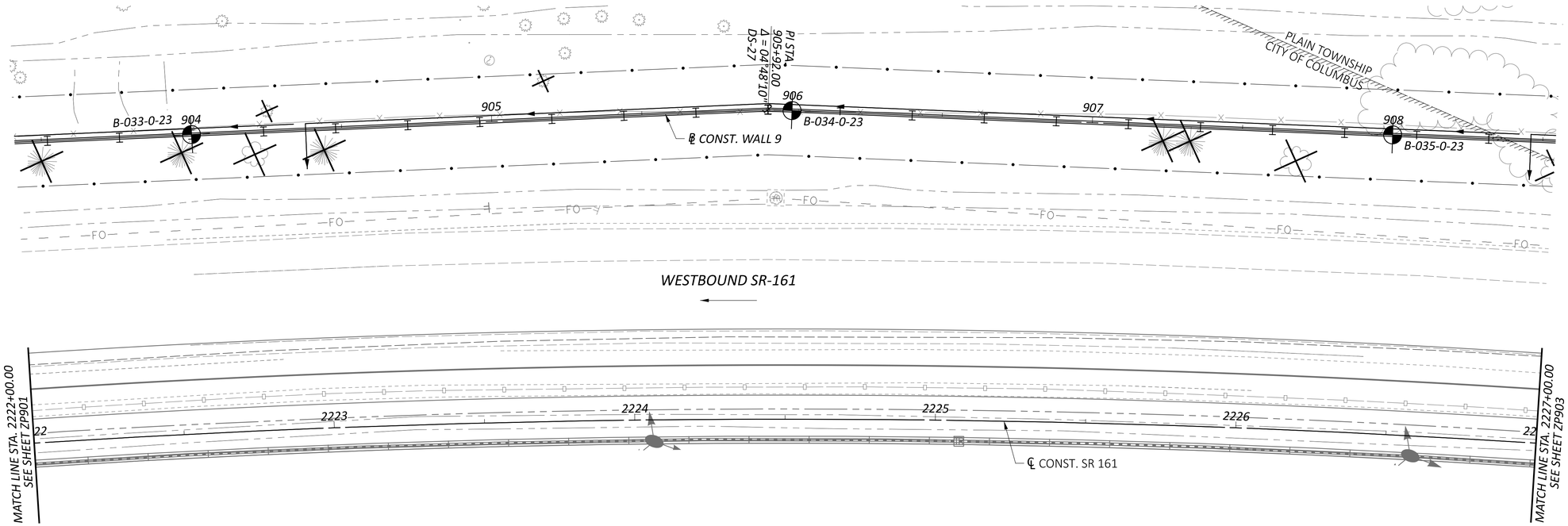
# GEOTECHNICAL PROFILE - NOISE WALL 9
## STA. 2217+16.00 TO STA. 2222+00.00

FRA-161-15.80 NOISE WALLS

MODEL: Wall 9 - Plan 12 PAPERSIZE: 34x22 (in.) DATE: 5/17/2024 TIME: 1:17:12 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP901.dgn

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 15 |
| TOTAL | 66 |
| SHEET | P.246 |
| TOTAL | 297 |




# GEOTECHNICAL PROFILE - NOISE WALL 9
# STA. 2222+00.00 TO STA. 2227+00.00

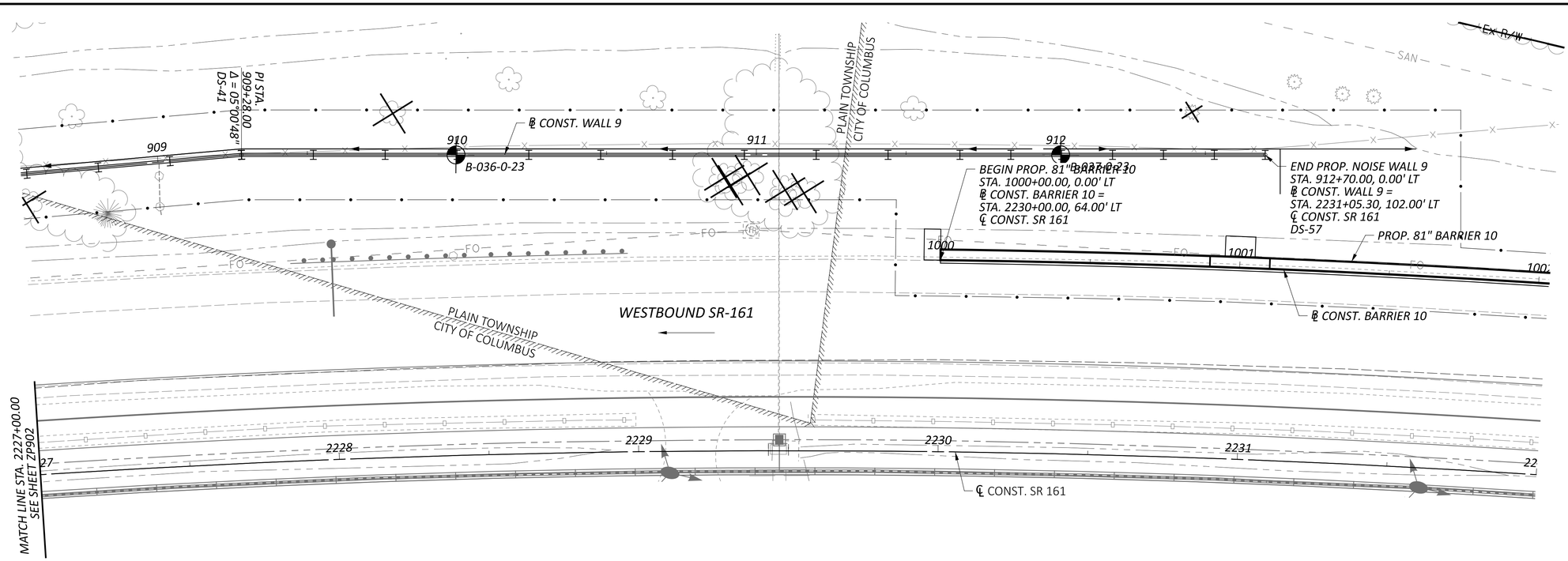
HORIZONTAL SCALE IN FEET
0 10 20 40

FRA-161-15.80 NOISE WALLS

MODEL: Wall 9 - Plan 13 PAPERSIZE: 34x22 (in.) DATE: 5/17/2024 TIME: 11:18:06 AM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP902.dgn

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 16 |
| TOTAL | 66 |
| SHEET | P.247 |
| TOTAL | 297 |




HORIZONTAL SCALE IN FEET
0 10 20 40

# GEOTECHNICAL PROFILE - NOISE WALL 9
## STA. 2227+00.00 TO STA. 2232+00.00

FRA-161-15.80 NOISE WALLS

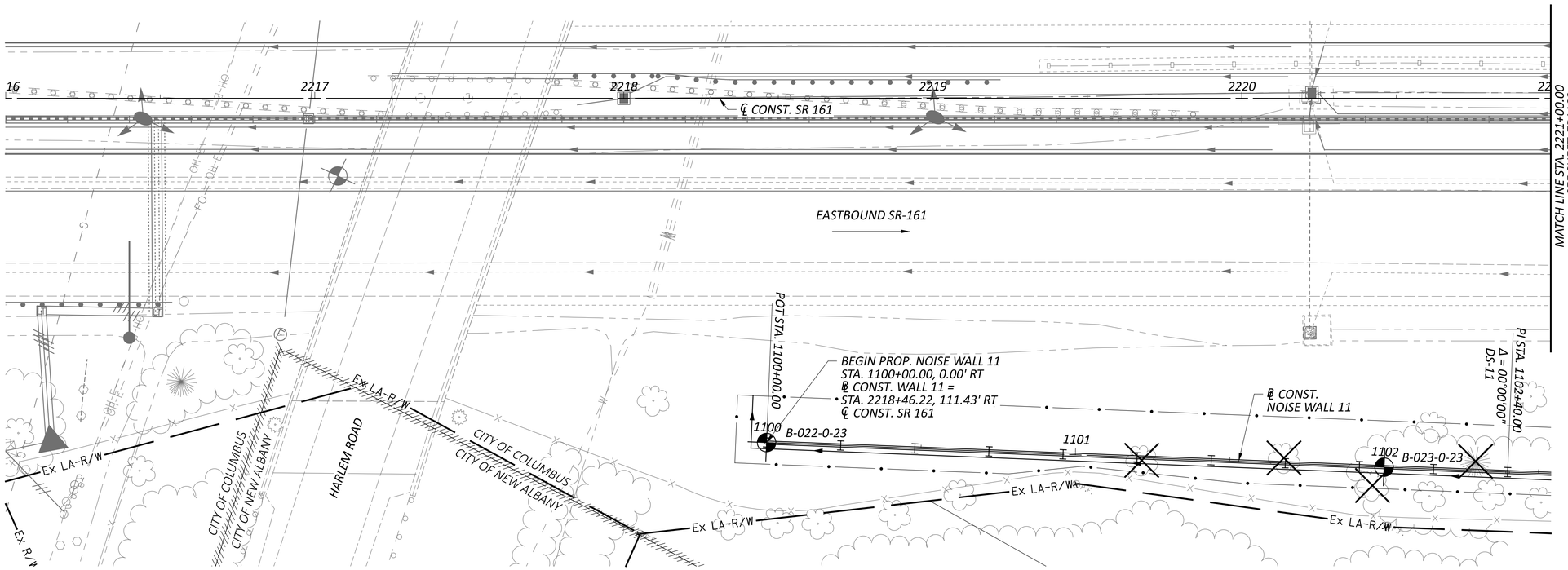
MODEL: Wall 9 - Plan 14 PAPERSIZE: 34x22 (in.) DATE: 5/17/2024 TIME: 11:47:44 AM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_2P903.dgn

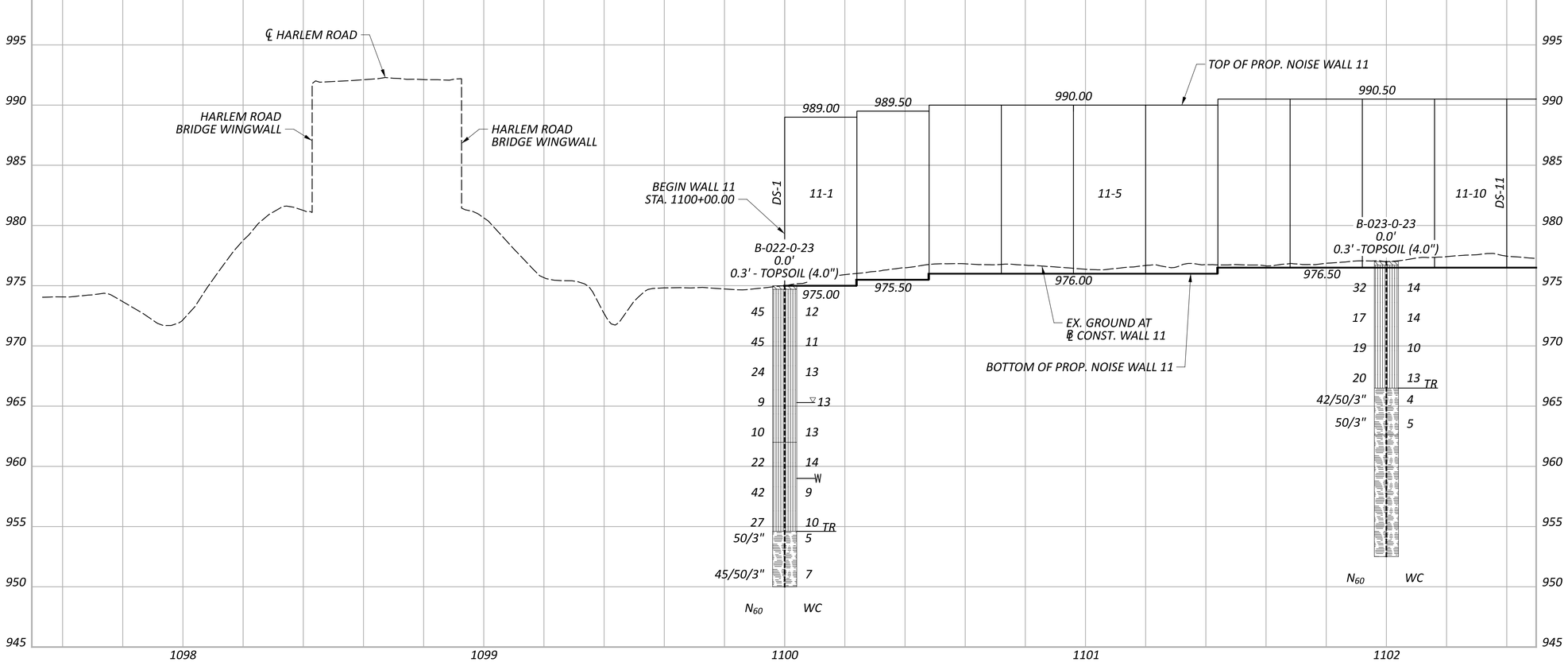
DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 17 |
| TOTAL | 66 |
| SHEET | P.248 |
| TOTAL | 297 |

# GEOTECHNICAL PROFILE - NOISE WALL 11
# STA. 2216+00.00 TO STA. 2221+00.00

HORIZONTAL SCALE IN FEET
0 10 20 40



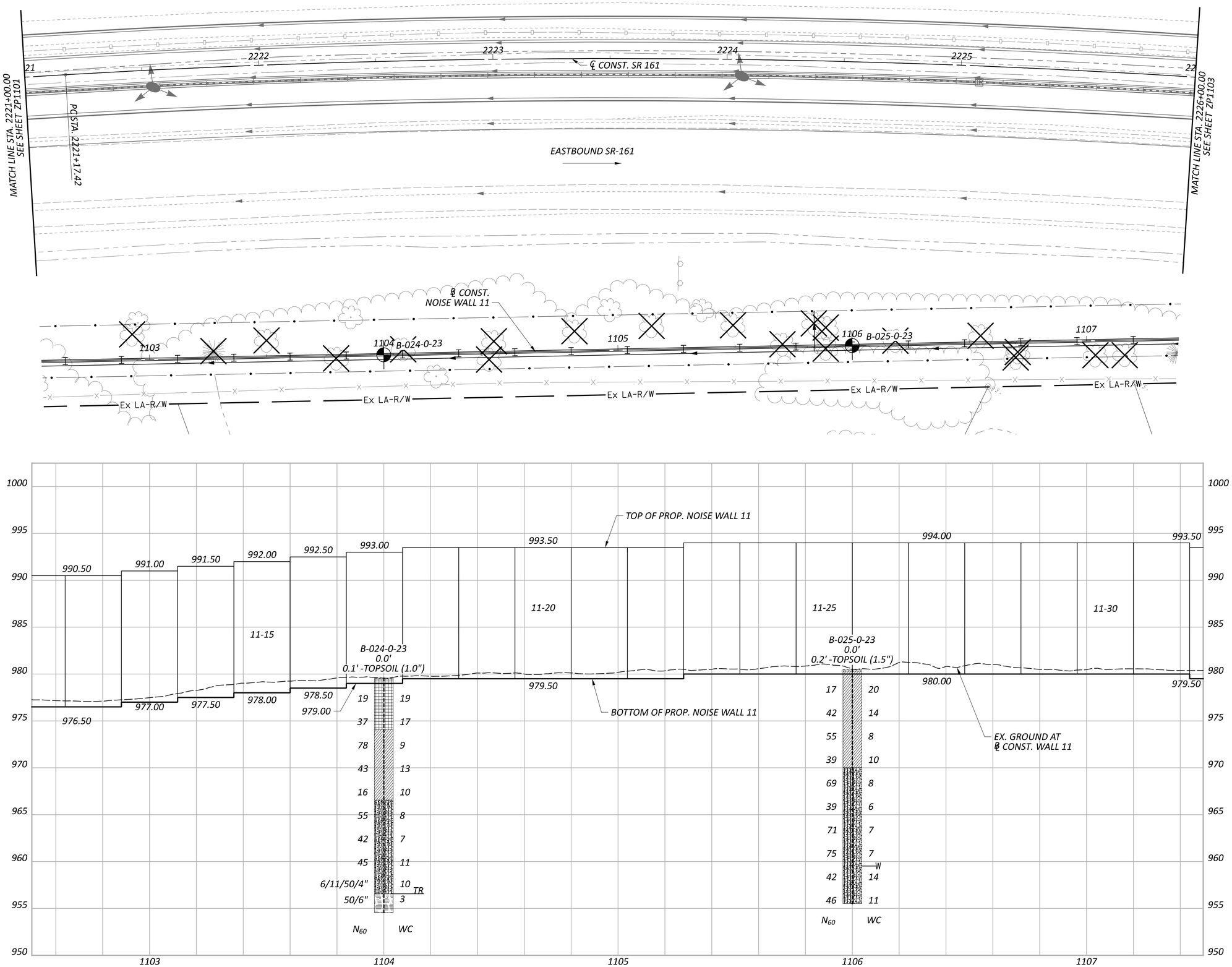




FRA-161-15.80 NOISE WALLS

MODEL: Plan PAPERSIZE: 34x22 (in.) DATE: 5/15/2024 TIME: 11:55:45 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1101.dgn

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 18 |
| TOTAL | 66 |
| SHEET | P.249 |
| TOTAL | 297 |




HORIZONTAL
SCALE IN FEET
0 10 20 40

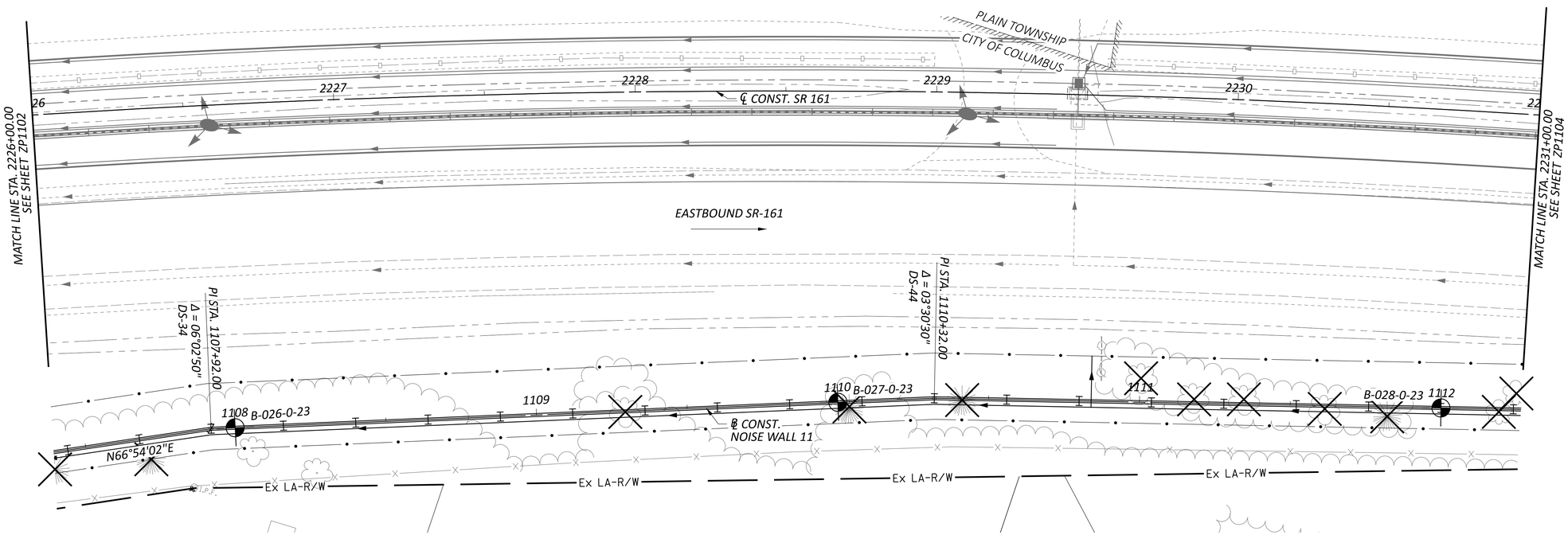
# GEOTECHNICAL PROFILE - NOISE WALL 11
# STA. 2221+00.00 TO STA. 2226+00.00

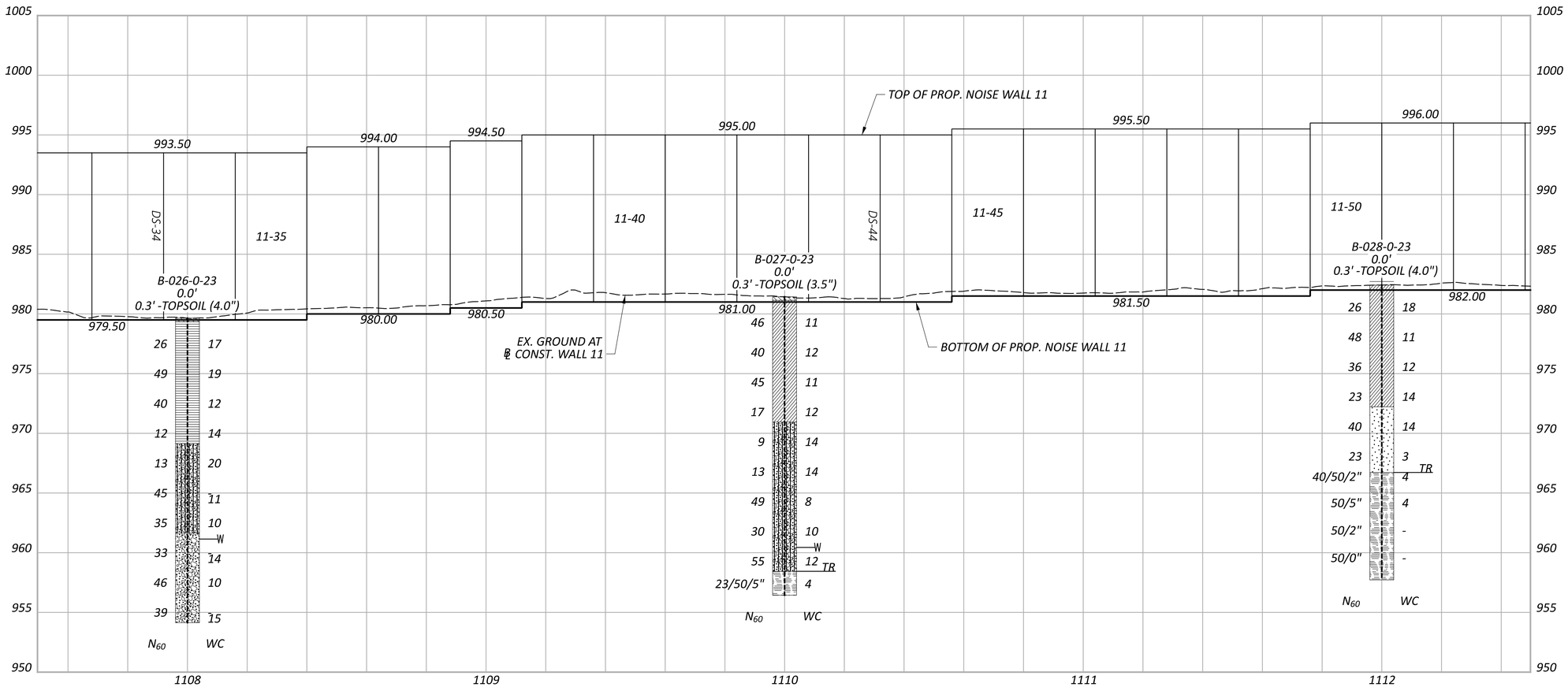
FRA-161-15.80 NOISE WALLS

MODEL: Plan-1 PAPERSIZE: 34x22 (in.) DATE: 5/15/2024 TIME: 11:58:13 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1102.dgn

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 19 |
| TOTAL | 66 |
| SHEET | P.250 |
| TOTAL | 297 |




HORIZONTAL SCALE IN FEET
0 10 20 40

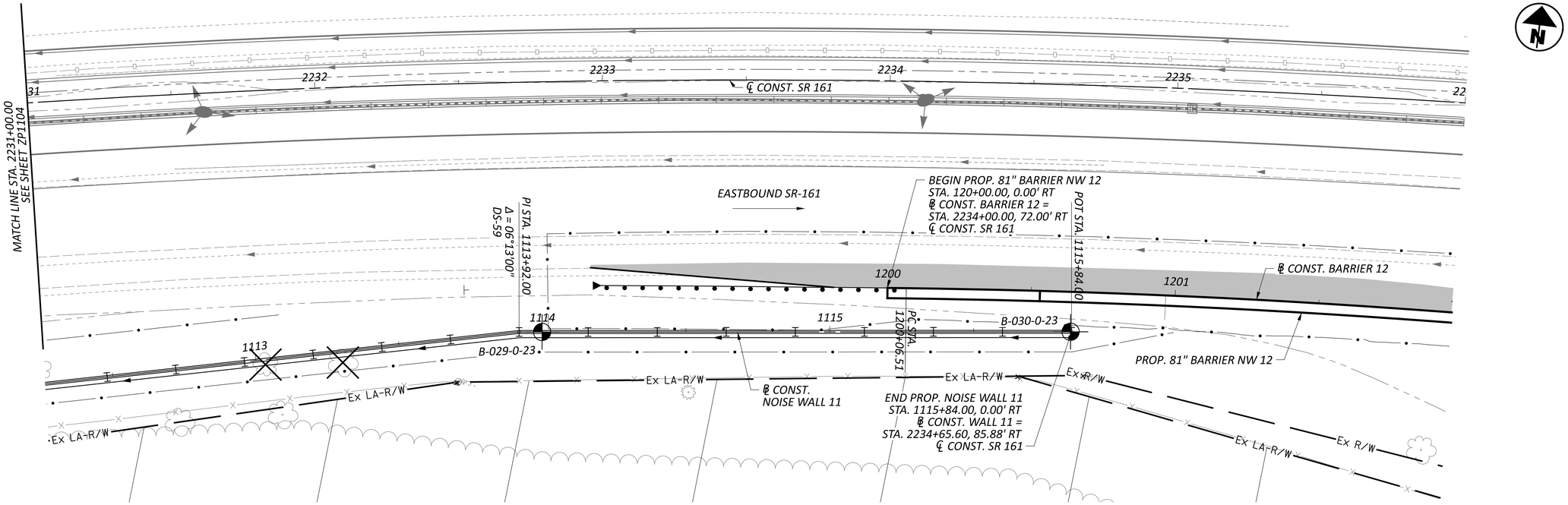
# GEOTECHNICAL PROFILE - NOISE WALL 11
# STA. 2226+00.00 TO STA. 2231+00.00

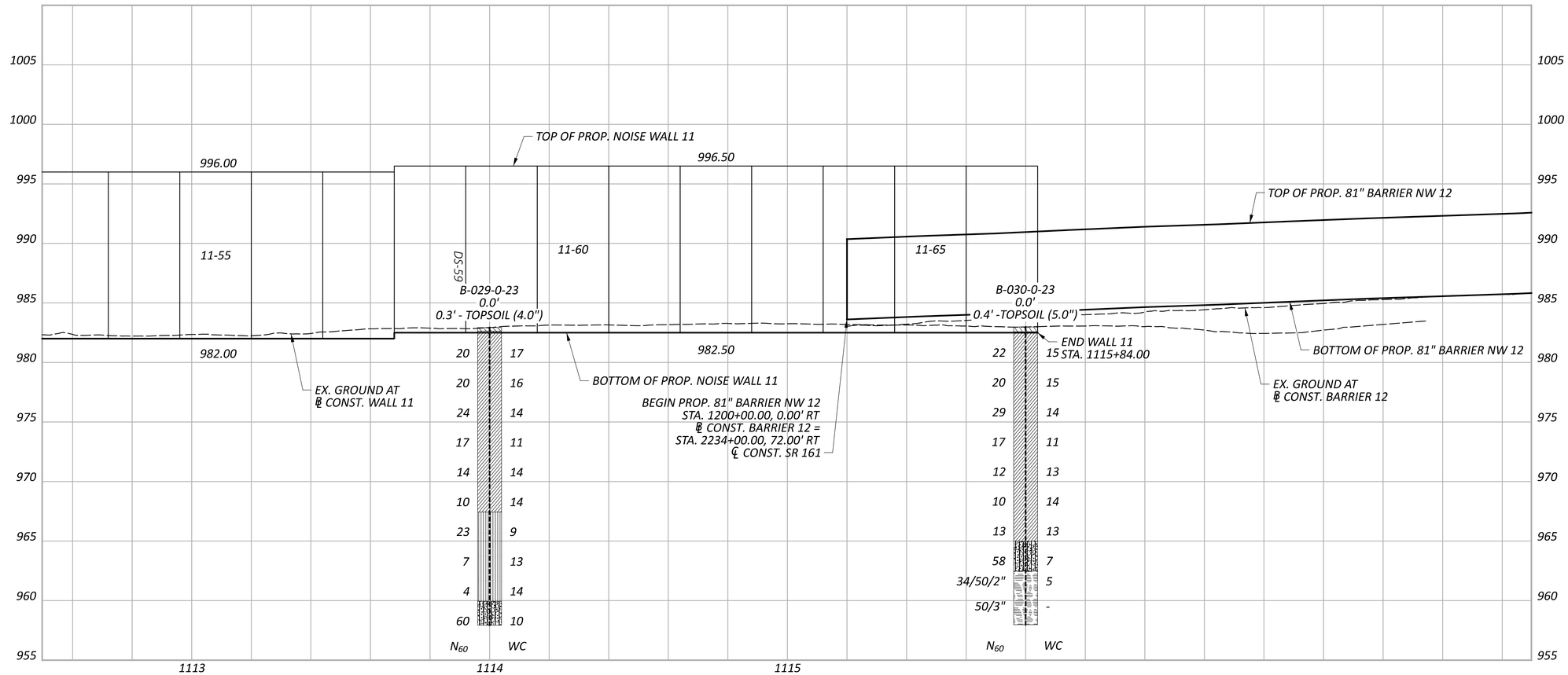
DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

DESIGNER KSJ
REVIEWER DEK 1/19/24
PROJECT ID 117607
SUBSET 20 TOTAL 66
SHEET P.251 TOTAL 297

FRA-161-15.80 NOISE WALLS

MODEL: Plan-2 PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 12:00:42 AM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1103.dgn




HORIZONTAL SCALE IN FEET
0 10 20 40

# GEOTECHNICAL PROFILE - NOISE WALL 11
# STA. 2231+00.00 TO STA. 2236+00.00

FRA-161-15.80 NOISE WALLS

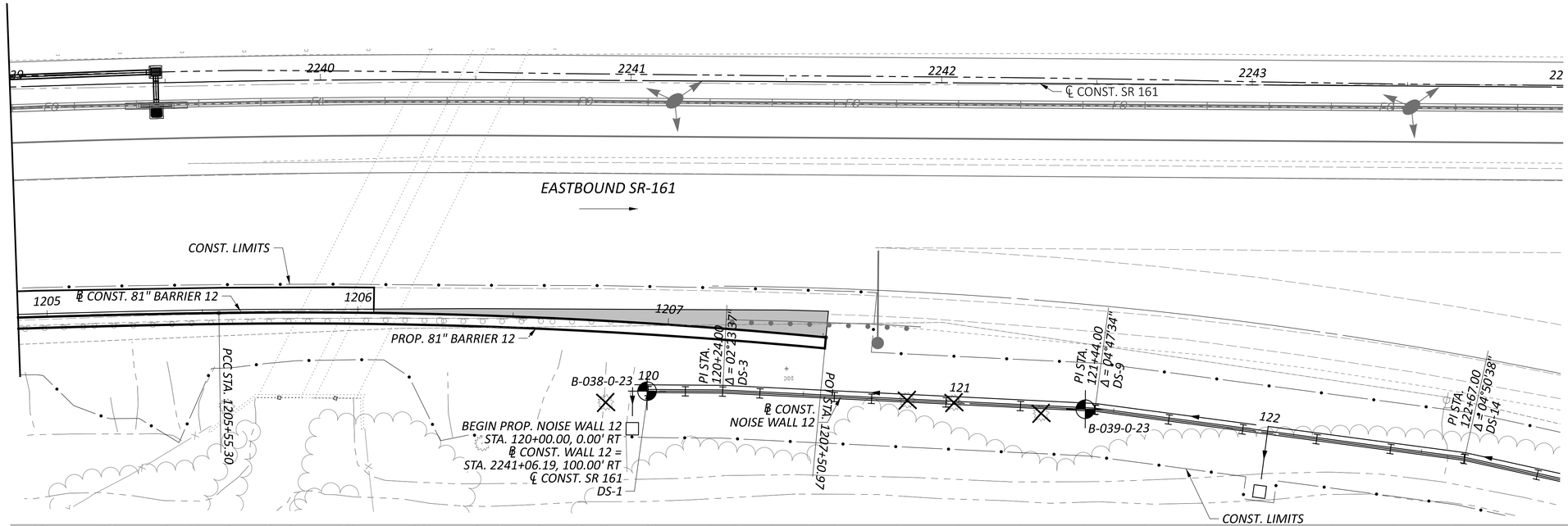
MODEL: Plan-3 PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 12:03:10 AM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1104.dgn

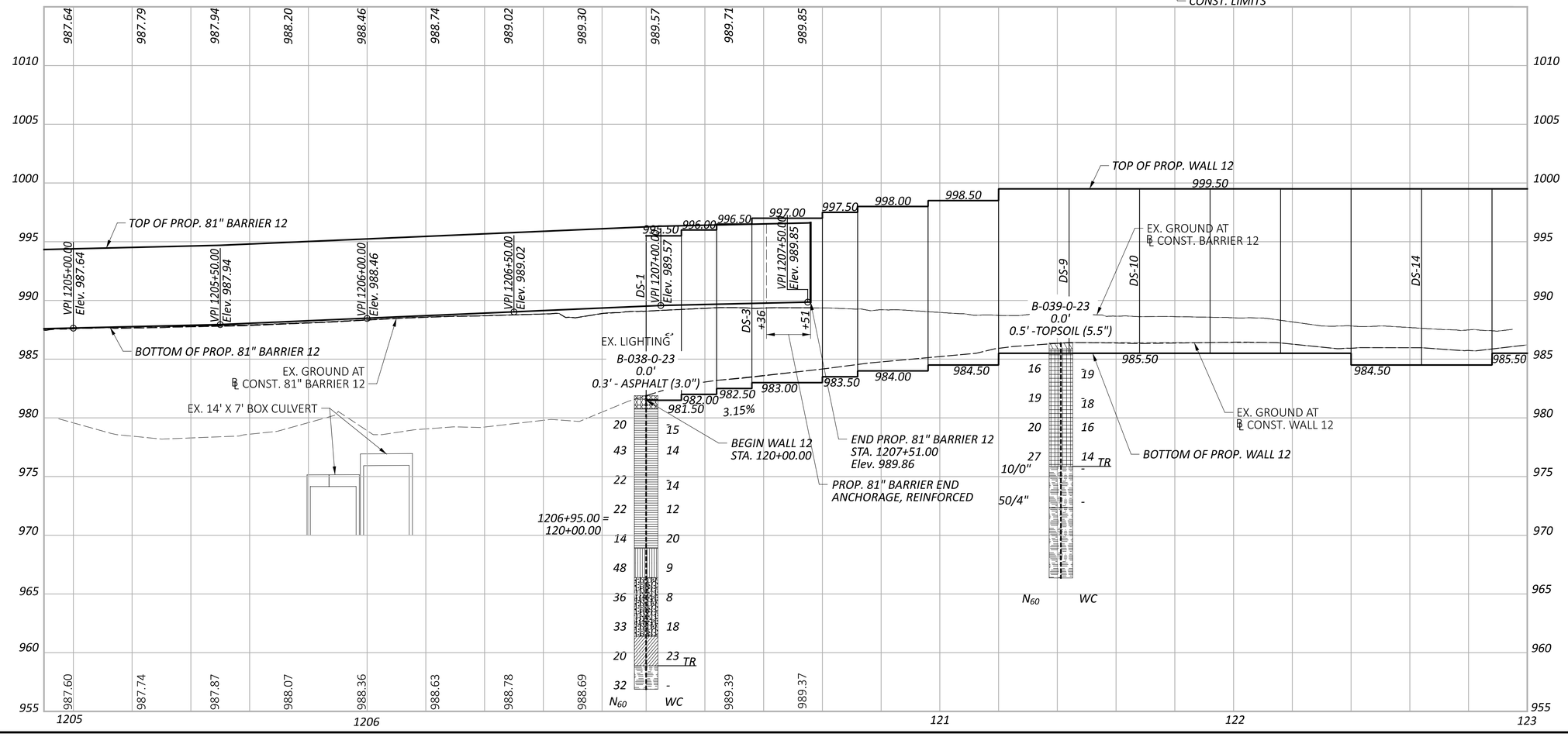
DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 21 |
| TOTAL | 66 |
| SHEET | P.252 |
| TOTAL | 297 |

# FRA-161-15.80 NOISE WALLS

MODEL: Wall 12 - Plan 20 PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 12:30:46 AM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1202.dgn



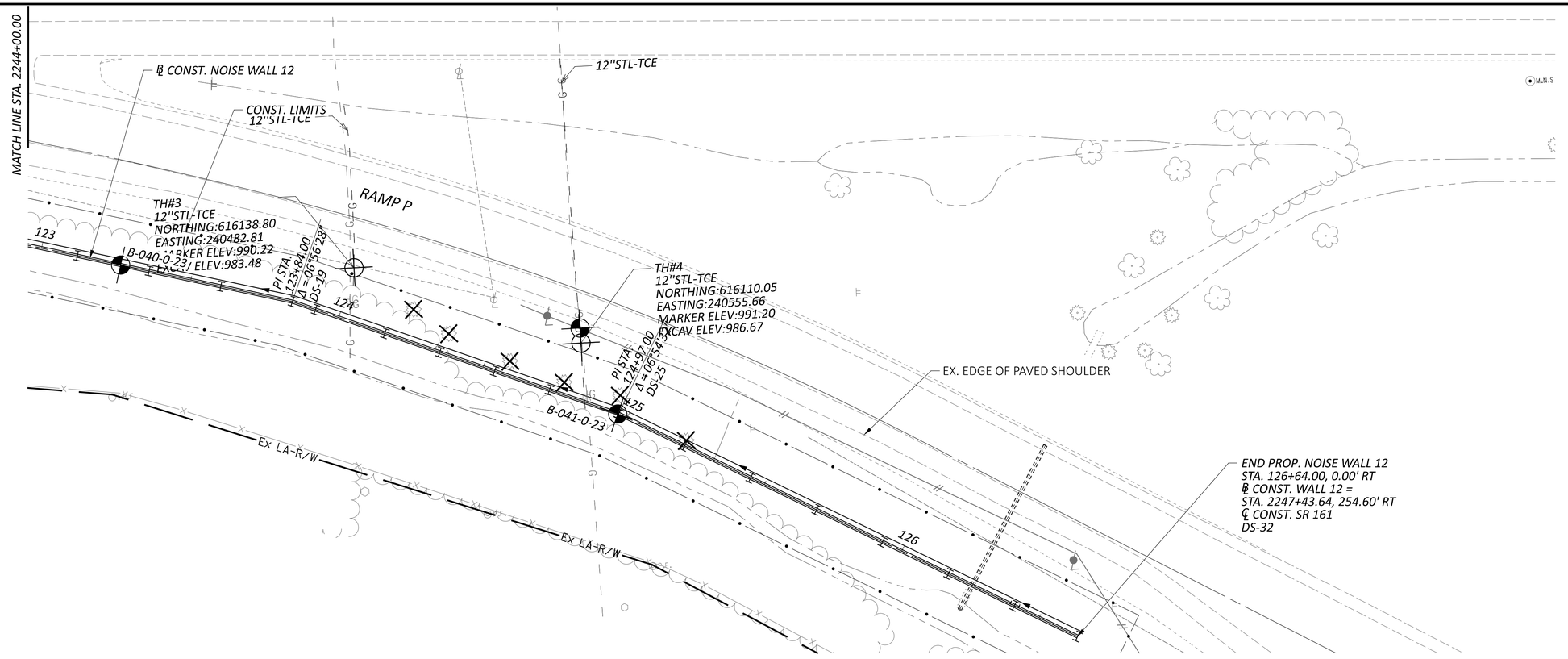



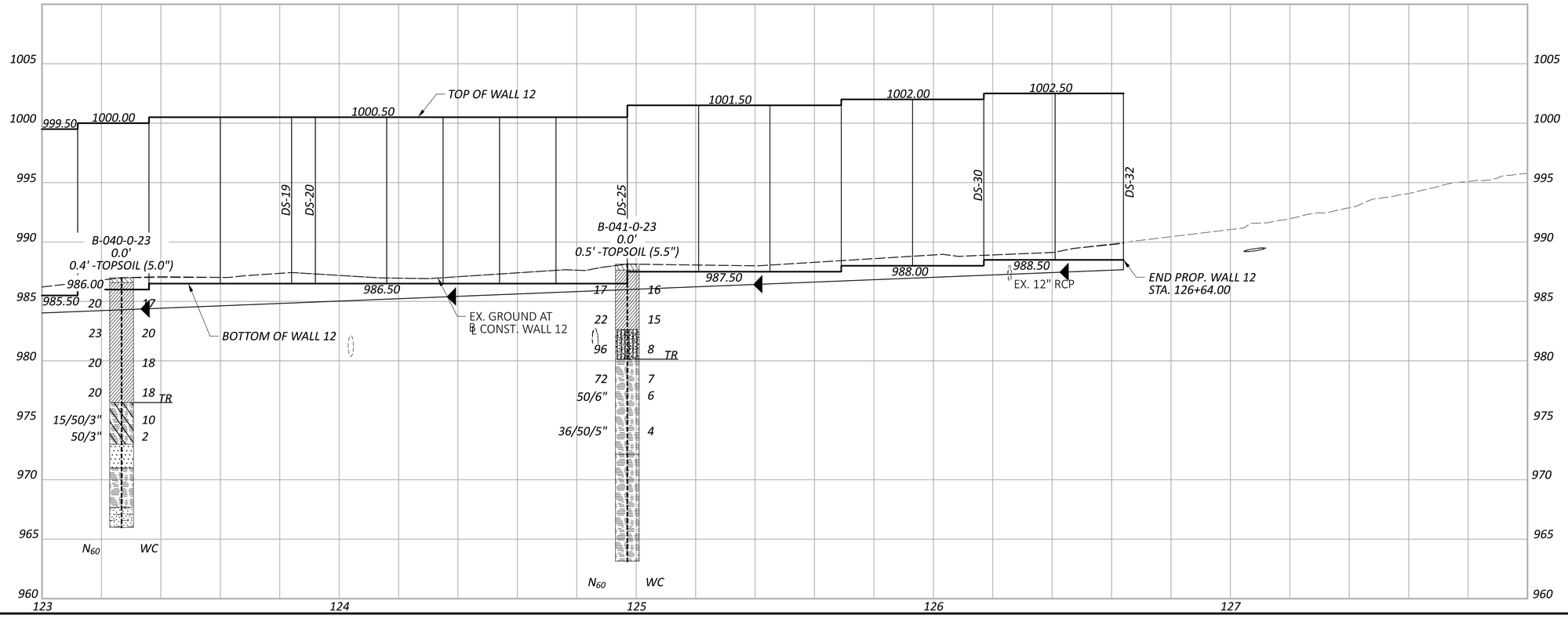

HORIZONTAL SCALE IN FEET
0 10 20 40

# GEOTECHNICAL PROFILE - NOISE WALL 12
# STA. 2239+00.00 TO STA. 2244+00.00


DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949


| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 22 |
| TOTAL | 66 |
| SHEET | P.253 |
| TOTAL | 297 |




HORIZONTAL SCALE IN FEET
0 10 20 40

# GEOTECHNICAL PROFILE - NOISE WALL 12
# STA. 2244+00.00 TO STA. 2249+00.00

FRA-161-15.80 NOISE WALLS

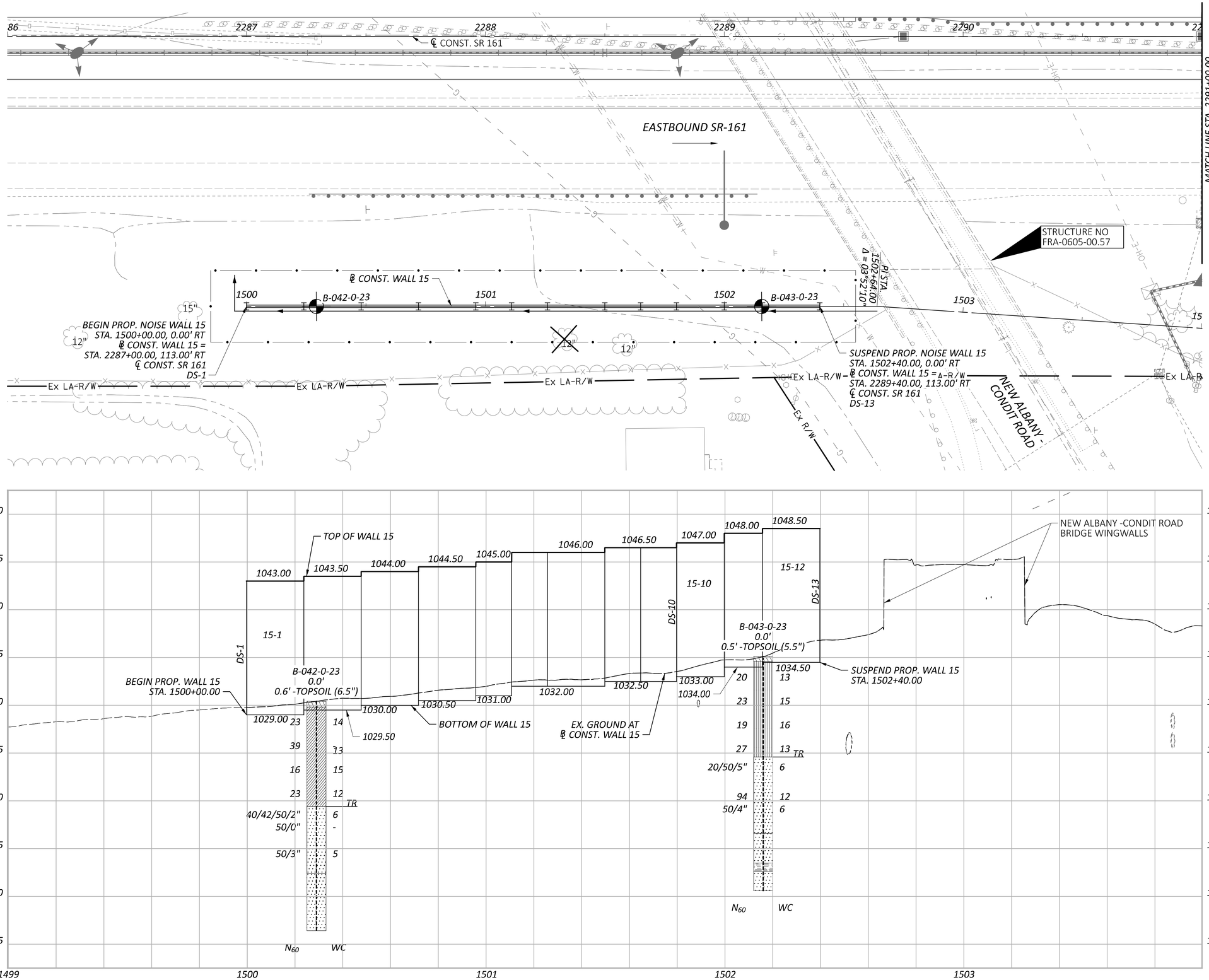
MODEL: Wall 12 - Plan 21 PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 12:55:01 AM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1203.dgn

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 23 |
| TOTAL | 66 |
| SHEET | P.254 |
| TOTAL | 297 |

# FRA-161-15.80 NOISE WALLS

MODEL: Wall 15 - Plan 22 PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 1:01:17 AM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1501.dgn



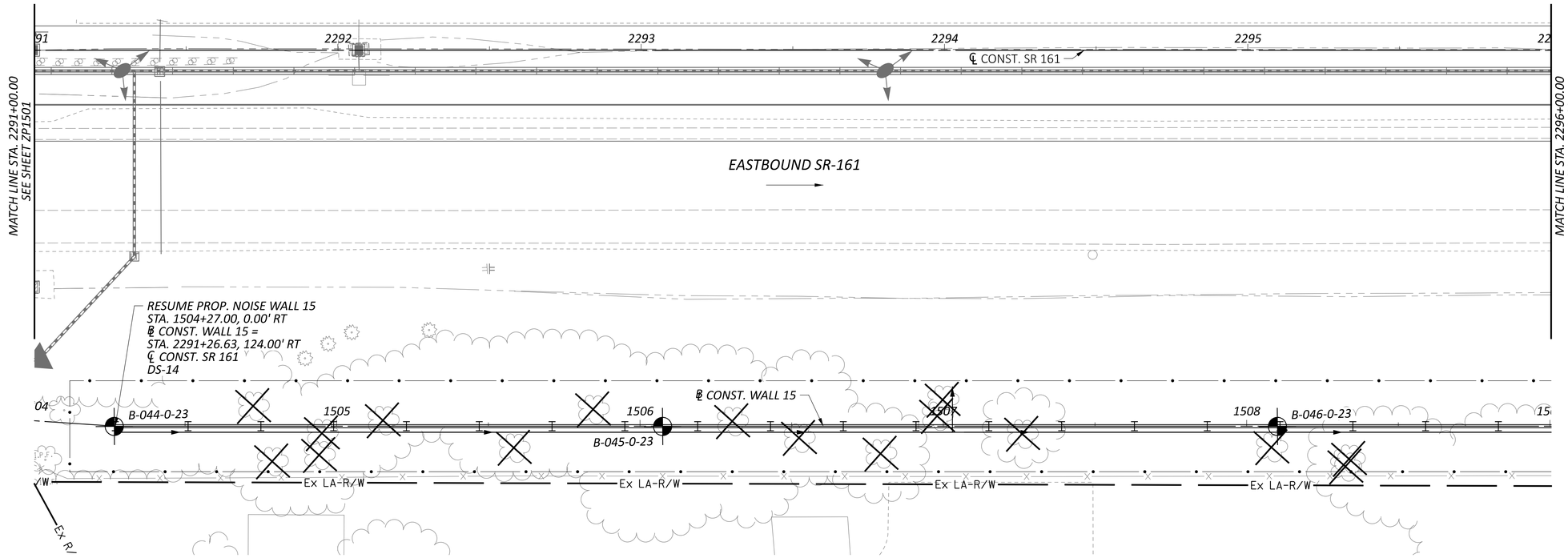

HORIZONTAL SCALE IN FEET
0 10 20 40

# GEOTECHNICAL PROFILE - NOISE WALL 15
# STA. 2286+00.00 TO STA. 2291+00.00

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 24 |
| TOTAL | 66 |
| SHEET | P.255 |
| TOTAL | 297 |

# GEOTECHNICAL PROFILE - NOISE WALL 15
# STA. 2291+00.00 TO STA. 2296+00.00



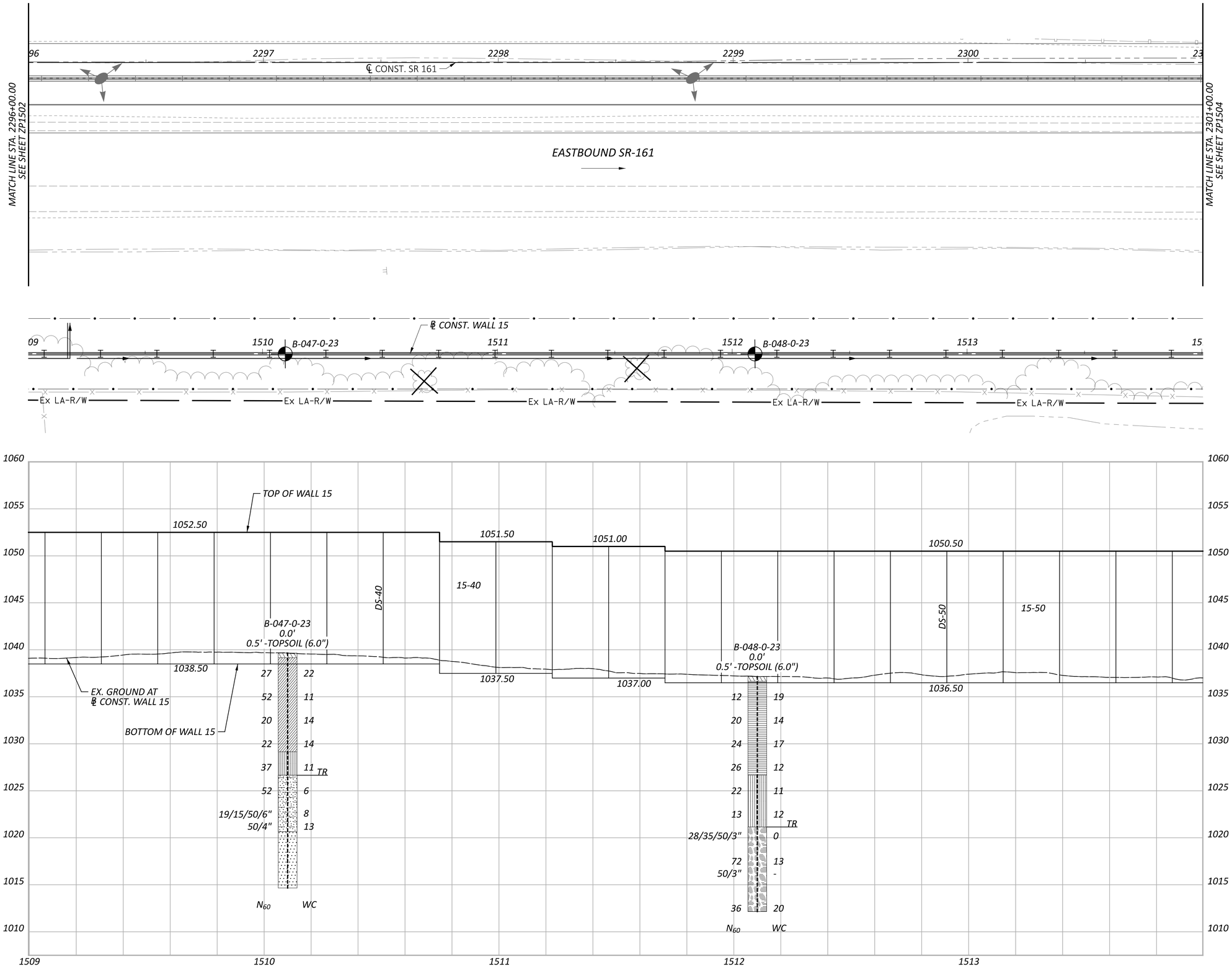

HORIZONTAL SCALE IN FEET
0 10 20 40

FRA-161-15.80 NOISE WALLS

MODEL: Wall 15 - Plan 23 PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 1:05:19 AM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1502.dgn

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 25 |
| TOTAL | 66 |
| SHEET | P.256 |
| TOTAL | 297 |




HORIZONTAL SCALE IN FEET
0 10 20 40

# GEOTECHNICAL PROFILE - NOISE WALL 15
# STA. 2296+00.00 TO STA. 2301+00.00

FRA-161-15.80 NOISE WALLS

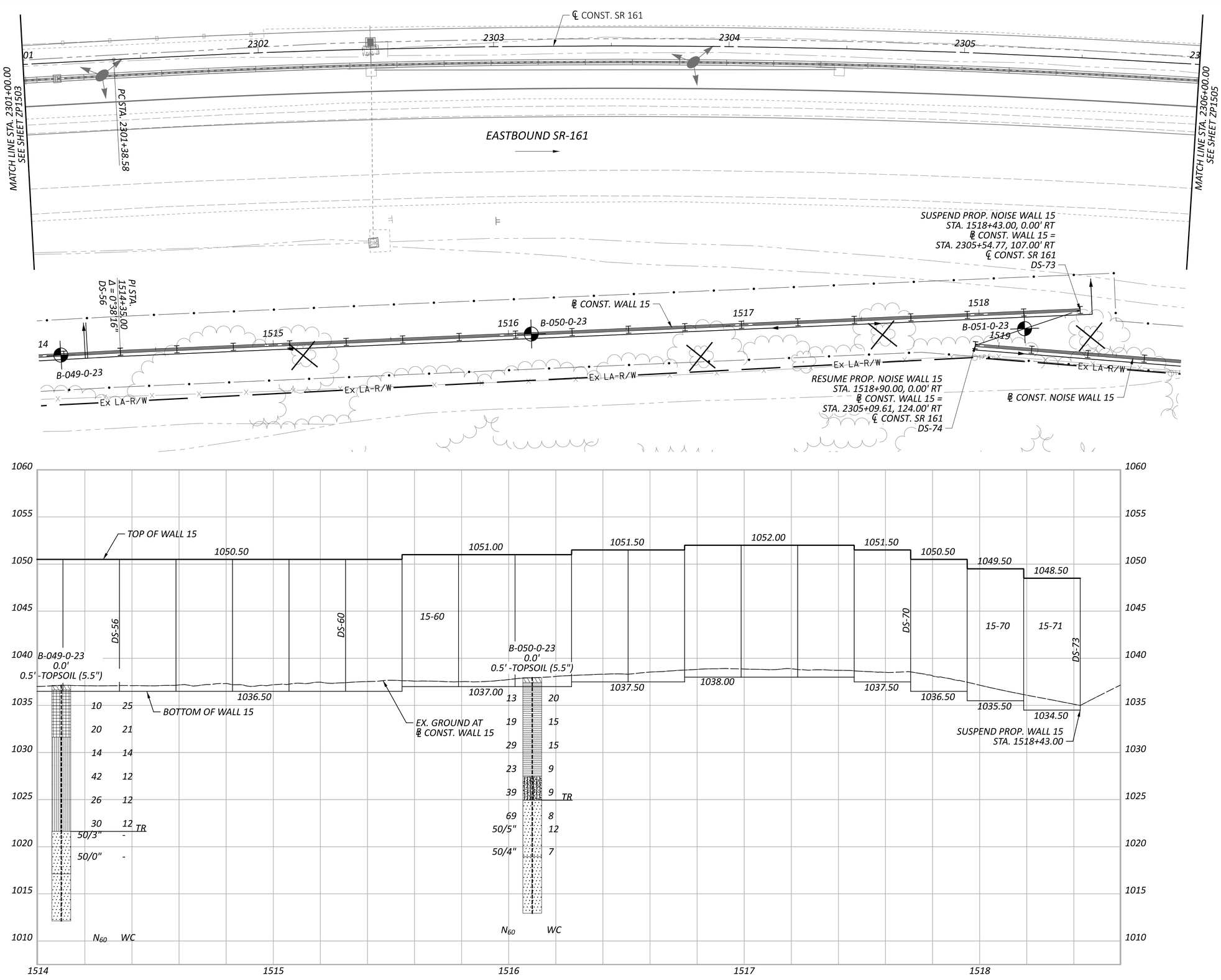
MODEL: Wall 15 - Plan 24 PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 1:07:20 AM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1503.dgn


DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949


DESIGNER KSJ
REVIEWER DEK 1/19/24
PROJECT ID 117607
SUBSET 26 TOTAL 66
SHEET P.257 TOTAL 297

# FRA-161-15.80 NOISE WALLS

# GEOTECHNICAL PROFILE - NOISE WALL 15
# STA. 2301+00.00 TO STA. 2306+00.00

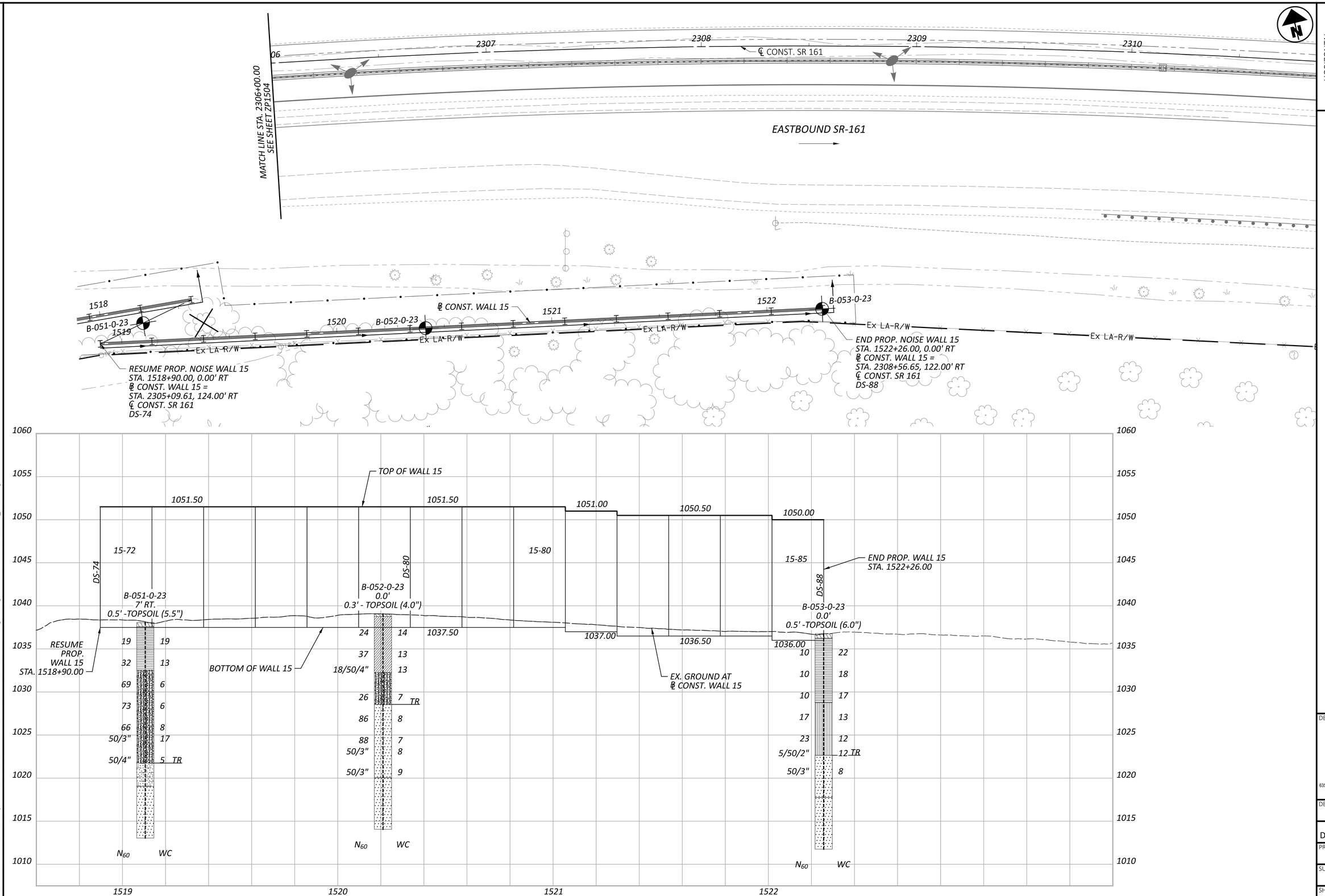



HORIZONTAL SCALE IN FEET
0 10 20 40

MODEL: Wall 15 - Plan 25 PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 1:10:55 AM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1504.dgn

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 27 |
| TOTAL | 66 |
| SHEET | P.258 |
| TOTAL | 297 |




HORIZONTAL SCALE IN FEET
0 10 20 40

# GEOTECHNICAL PROFILE - NOISE WALL 15
# STA. 2306+00.00 TO STA. 2311+00.00

FRA-161-15.80 NOISE WALLS

MODEL: Wall 15 - Plan 26 PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 1:14:28 AM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1505.dgn

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

| | |
|---|---|
| DESIGNER | KSJ |
| REVIEWER | DEK 1/19/24 |
| PROJECT ID | 117607 |
| SUBSET | 28 |
| TOTAL | 66 |
| SHEET | P.259 |
| TOTAL | 297 |

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 300+00 / 0' | EXPLORATION ID B-001-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 3 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 966.3 (MSL) EOB: 15.0 ft. | PAGE 1 OF 1 |
| START: 11/22/23 END: 11/22/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.080429, -82.864610 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 966.3 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' -TOPSOIL (3.5") | 966.0 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SILT AND CLAY**, LITTLE GRAVEL, TRACE SAND, DAMP. | | 1 | 6 | | | | | | | | | | | | | | | |
| | | 2 | 10 12 | 32 | 56 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 15 | A-6a (V) | |
| | | 3 | | | | | | | | | | | | | | | | |
| | 962.0 | TR 4 | 11 50/4" | - | 100 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 16 | A-6a (V) | |
| **SANDSTONE** : GRAY, HIGHLY WEATHERED. | 961.3 | 5 | | | | | | | | | | | | | | | | |
| **SANDSTONE** : BROWN AND GRAY, MODERATELY TO SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, IRON STAINED, PYRITIC, FRACTURED, NARROW APERTURE, SLIGHTLY ROUGH SURFACES, BLOCKY, GOOD SURFACE CONDITION. -HIGHLY FRACTURED AND HEAVILY IRON STAINED FROM 5.0' - 7.0' -@ 6.6' - 7.0' 60 DEGREE FRACTURE | | 6 7 8 9 10 | 0 | | 80 | NQ2-1 | | | | | | | | | | | CORE | |
| -@ 10.3' - 10.8' 45 DEGREE FRACTURE AND HEAVILY IRON STAINED -@10.8' - 13.6' SPECKLES OF PYRITE THROUGHOUT | | 11 12 13 14 | 45 | | 100 | NQ2-2 | | | | | | | | | | | CORE | |
| | 951.3 | EOB 15 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 23.5 LBS CEMENT / 12 LBS BENTONITE POWDER / 20 GAL WATER .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:55 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**Project Name:** FRA-161-15.80

**Location:**
Franklin County, Ohio

**Photo No.**
**1**




**Boring:**
B-001-0-23

RC-1: 5.0-10.0'
REC (%):80
RQD (%):0

RC-2: 10.0-15.0'
REC (%):100
RQD (%):45



GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 3
BORING LOG & ROCK CORE PHOTO FOR B-001-0-23

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 302+00 / 0' | EXPLORATION ID B-002-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 3 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 968.1 (MSL) EOB: 15.3 ft. | PAGE 1 OF 1 |
| START: 11/22/23 END: 11/22/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.080609, -82.863925 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 968.1 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.4' -TOPSOIL (4.5") | 967.7 | | | | | | | | | | | | | | | | | |
| HARD, BROWN-GRAY **CLAY**, SOME SILT, LITTLE COARSE TO FINE SAND, TRACE SAND AND GRAVEL, MOIST. -@2.8' - 3.4' COBBLES | 965.1 | 1 2 3 | 3 5 7 | 17 | 56 | SS-1 | 4.5+ | 3 | 5 | 8 | 34 | 50 | 55 | 21 | 34 | 20 | A-7-6 (19) | |
| VERY DENSE, GRAY **GRAVEL WITH SAND AND SILT**, DAMP. | 963.5 | 4 | 14 17 50/2" | - | 100 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 7 | A-2-4 (V) | |
| **SANDSTONE** : GRAY, HIGHLY WEATHERED. | 962.1 | TR 5 | | | | | | | | | | | | | | | | |
| **SANDSTONE** : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, PYRITIC, FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACES, BLOCKY, GOOD SURFACE. -@6.0' - 9.7' APPROXIMATELY 4MM PYRITE NODULES THROUGHOUT -@9.7' CLAY SEAM | | 6 7 8 9 10 | 0 | | 68 | NQ2-1 | | | | | | | | | | | CORE | |
| -@10.25' - 12.0' MANY PYRITE FLECKS THROUGHOUT -@11.0' - 15.75' FEW PYRITE FLECKS | 952.9 | 11 12 13 14 EOB 15 | 53 | | 96 | NQ2-2 | | | | | | | | | | | CORE | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER

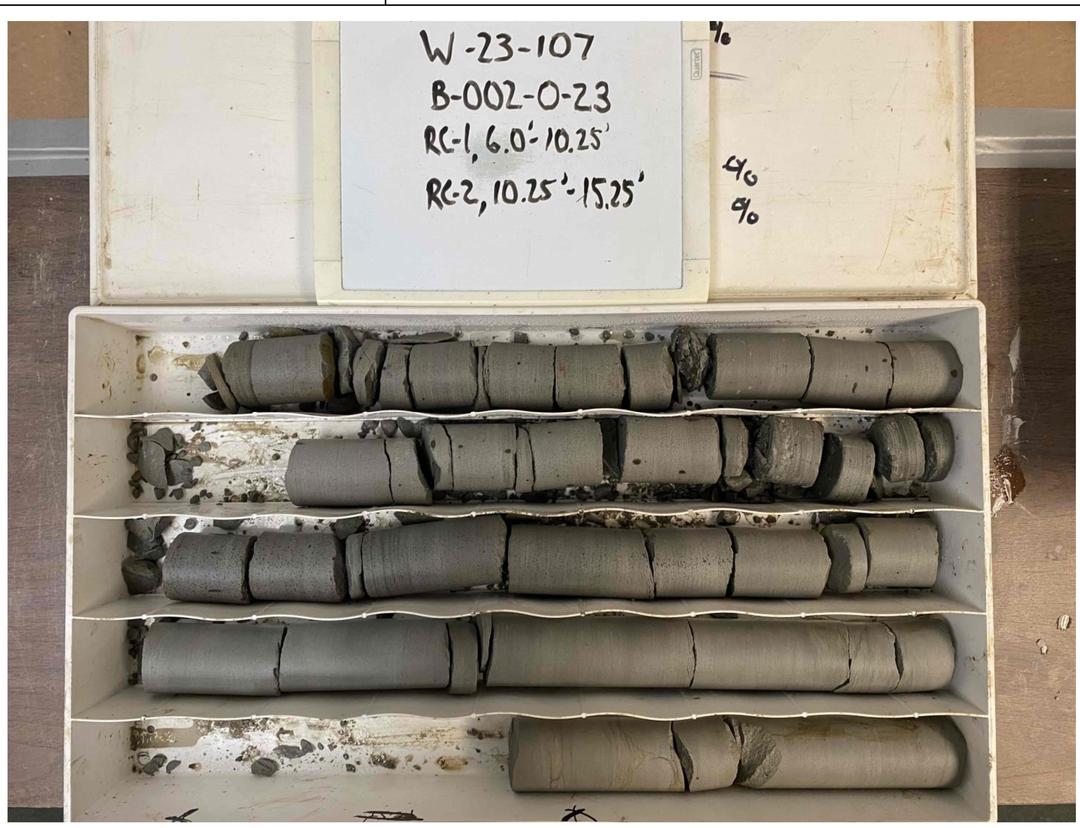
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 23.5 LBS CEMENT / 12 LBS BENTONITE POWDER / 20 GAL WATER .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:55 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**Project Name:** FRA-161-15.80

**Location:**
Franklin County, Ohio

**Photo No.**
**2**




**Boring:**
B-002-0-23

RC-1: 6.0-10.25'
REC (%):68
RQD (%):0

RC-2: 10.25-15.25'
REC (%):96
RQD (%):53



GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 3
BORING LOG & ROCK CORE PHOTO FOR B-002-0-23

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 304+00 / 0' | EXPLORATION ID B-003-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 3 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 969.1 (MSL) EOB: 15.0 ft. | PAGE 1 OF 1 |
| START: 11/20/23 END: 11/22/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.080806, -82.863307 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 969.1 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.5' -TOPSOIL (5.5") | 968.6 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SILT AND CLAY**, TRACE GRAVEL | | 1 | 3 | | | | | | | | | | | | | | | |
| | | 2 | 5 6 | 16 | 47 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | - | A-6a (V) | |
| | | 3 | | | | | | | | | | | | | | | | |
| | 964.4 | 4 | 5 6 50/3" | - | 60 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | - | A-6a (V) | |
| **SANDSTONE** : BROWN, HIGHLY WEATHERED. | 964.1 | TR 5 | | | | | | | | | | | | | | | | |
| **SANDSTONE** : BROWN TO GRAY, MODERATELY TO SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, PYRITIC, FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, GOOD SURFACE. -@7.0' - 9.0' HIGHLY FRACTURED, RED IRON OXIDE STAINING IN FRACTURES | | 6 7 8 9 10 | 0 | | 80 | NQ2-1 | | | | | | | | | | | CORE | |
| -@10.0' - 11.0' 4MM PYRITE NODULES THROUGHOUT -@11.0' - 11.2' CLAY SEAM -@11.2' - 13.5' MANY TINY PYRTIE SPECKS THROUGHOUT | | 11 12 13 | 55 | | 100 | NQ2-2 | | | | | | | | | | | CORE | |
| -@13.5' - 15.0' LITTLE PYRITE | 954.1 | EOB 15 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 23.5 LBS CEMENT / 12 LBS BENTONITE POWDER / 20 GAL WATER .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:55 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**Project Name:** FRA-161-15.80

**Location:**
Franklin County, Ohio

**Photo No.**
**3**




**Boring:**
B-003-0-23

RC-1: 5.0-10.0'
REC (%):80
RQD (%):0



GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 3
BORING LOG & ROCK CORE PHOTO FOR B-003-0-23

| **Project Name:** FRA-161-15.80 | **Location:** Franklin County, Ohio |
|---|---|
| **Photo No.** **4** |  |
| **Boring:** B-003-0-23 | |
| RC-2: 10.0-15.0' REC (%):100 RQD (%):55 | |





GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 3
BORING LOG & ROCK CORE PHOTO FOR B-003-0-23

**RESOURCE INTERNATIONAL, INC.**

| | | | | |
|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 305+76 / 0' | EXPLORATION ID B-004-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 3 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 969.2 (MSL) EOB: 15.0 ft. | PAGE 1 OF 1 |
| START: 11/20/23 END: 11/20/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.081003, -82.862692 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 969.2 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.4' -TOPSOIL (5.0") | 968.8 | | | | | | | | | | | | | | | | | |
| HARD, MOTTLED BROWN **CLAY**, SOME SILT, TRACE COARSE TO FINE SAND, MOIST. | | 1 | 3 4 7 | 16 | 36 | SS-1 | 4.5+ | 0 | 1 | 6 | 35 | 58 | 52 | 20 | 32 | 21 | A-7-6 (18) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 4 4 7 | 16 | 50 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 19 | A-7-6 (V) | |
| | 963.7 | 5 TR | | | | | | | | | | | | | | | | |
| **SANDSTONE** : GRAY, HIGHLY WEATHERED. | | 6 | 50/2" | - | 100 | SS-3 | - | - | - | - | - | - | - | - | - | 10 | Rock (V) | |
| | | 7 | | | | | | | | | | | | | | | | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 50/2" | - | 100 | SS-4 | - | - | - | - | - | - | - | - | - | 5 | Rock (V) | |
| | 959.2 | 10 | | | | | | | | | | | | | | | | |
| **SANDSTONE** : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, PYRITIC, FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, GOOD SURFACE.<br>-@11.8' - 12.4' FRACTURE<br>-@13.3' - 15.0' MANY TINY PYRITE NODULES THROUGHOUT | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | | | | | | | | | | | | | | | | |
| | | 13 | 0 | | 75 | NQ2-1 | | | | | | | | | | | CORE | |
| | | 14 | | | | | | | | | | | | | | | | |
| | 954.2 | 15 EOB | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 23.5 LBS CEMENT / 12 LBS BENTONITE POWDER / 20 GAL WATER .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:55 - U:\GI\PROJECTS\2023\W-23-107.GPJ

**Project Name:** FRA-161-15.80

**Location:**
Franklin County, Ohio

**Photo No.**
**5**




**Boring:**
B-004-0-23

RC-1: 10.0-15.0'
REC (%):75
RQD (%):0



GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 3
BORING LOG & ROCK CORE PHOTO FOR B-004-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:14:32 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL006.dgn

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 600+00 / 0' | **EXPLORATION ID B-005-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 6 | PAGE 1 OF 1
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 961.5 (MSL) EOB: 25.0 ft.
START: 11/20/23 END: 11/20/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.087831, -82.843714

| MATERIAL DESCRIPTION AND NOTES | ELEV. 961.5 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.4' -TOPSOIL (5.0") | 961.1 | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, DARK BROWN TO BROWNISH GRAY **SILT AND CLAY**, LITTLE COARSE TO FINE SAND, TRACE GRAVEL, DAMP TO MOIST. | | 1 | 6 8 8 | 23 | 72 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 5 6 10 | 23 | 56 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 22 | A-6a (V) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 8 16 23 | 56 | 100 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-6a (V) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 7 7 8 | 22 | 56 | SS-4 | 4.5+ | 9 | 11 | 16 | 31 | 33 | 28 | 16 | 12 | 13 | A-6a (7) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 4 4 5 | 13 | 33 | SS-5 | 2.50 | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| | 948.5 | 13 | | | | | | | | | | | | | | | | |
| MEDIUM DENSE, DARK GRAY **COARSE AND FINE SAND**, LITTLE SILT, TRACE GRAVEL, WET. | | 14 | 5 5 8 | 19 | 47 | SS-6 | - | - | - | - | - | - | - | - | - | 14 | A-3a (V) | |
| | 946.0 | ▽ 946.8 | | | | | | | | | | | | | | | | |
| DENSE TO VERY DENSE, DARK GRAY **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, WET. | | W 946.0 | | | | | | | | | | | | | | | | |
| | | 15 | | | | | | | | | | | | | | | | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 21 21 16 | 53 | 50 | SS-7 | - | - | - | - | - | - | - | - | - | 12 | A-1-b (V) | |
| | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | 31 15 25 | 58 | 53 | SS-8 | - | - | - | - | - | - | - | - | - | 11 | A-1-b (V) | |
| | | 20 | | | | | | | | | | | | | | | | |
| | | 21 | | | | | | | | | | | | | | | | |
| | | 22 | 9 10 16 | 37 | 53 | SS-9 | - | 51 | 17 | 10 | 13 | 9 | NP | NP | NP | 13 | A-1-b (0) | |
| | 938.5 | 23 | | | | | | | | | | | | | | | | |
| DENSE, DARK GRAY **COARSE AND FINE SAND**, TRACE FINE GRAVEL, TRACE SILT, WET. | | 24 | 8 12 18 | 43 | 64 | SS-10 | - | - | - | - | - | - | - | - | - | 18 | A-3a (V) | |
| | 936.5 | EOB 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 15.5' AND UPON COMPLETION @ 14.7'; CAVE-IN DEPTH @ 11.8'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:55 - U:\GIB\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 601+77 / 0' | **EXPLORATION ID B-006-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 6 | PAGE 1 OF 1
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 968.1 (MSL) EOB: 25.0 ft.
START: 11/20/23 END: 11/20/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.088035, -82.843136

| MATERIAL DESCRIPTION AND NOTES | ELEV. 968.1 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.5' -TOPSOIL (5.5") | 967.6 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SILT AND CLAY**, SOME CLAY, TRACE FINE GRAVEL, DAMP. | | 1 | 6 10 12 | 32 | 78 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-6a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 7 12 13 | 36 | 75 | SS-2 | 4.5+ | 7 | 11 | 16 | 32 | 34 | 29 | 17 | 12 | 14 | A-6a (7) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 7 9 11 | 29 | 100 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| | 960.1 | 8 | | | | | | | | | | | | | | | | |
| DENSE TO MEDIUM DENSE, BROWN GRAY **GRAVEL WITH SAND, SILT, AND CLAY**, MOIST. | | 9 | 6 11 16 | 39 | 72 | SS-4 | - | - | - | - | - | - | - | - | - | 11 | A-2-4 (V) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | 7 17 16 | 48 | 33 | SS-5 | - | - | - | - | - | - | - | - | - | 7 | A-2-4 (V) | |
| | | 12 | | | | | | | | | | | | | | | | |
| | | 13 | W 954.6 | | | | | | | | | | | | | | | |
| | | 14 | 9 15 16 | 45 | 0 | SS-6 | - | - | - | - | - | - | - | - | - | - | | |
| | | 15 | ▽ 952.6 13 | - | 67 | 2S-6A | - | - | - | - | - | - | - | - | - | 15 | A-2-4 (V) | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 21 18 15 | 48 | 44 | SS-7 | - | 36 | 19 | 14 | 19 | 12 | 24 | 17 | 7 | 11 | A-2-4 (0) | |
| | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | 16 12 8 | 29 | 64 | SS-8 | - | - | - | - | - | - | - | - | - | 10 | A-2-4 (V) | |
| | 947.6 | 20 | | | | | | | | | | | | | | | | |
| DENSE, GRAY **COARSE AND FINE SAND**, LITTLE FINE GRAVEL, LITTLE SILT, WET. | | 21 | 10 12 12 | 35 | 83 | SS-9 | - | - | - | - | - | - | - | - | - | 12 | A-3a (V) | |
| | 945.1 | 22 | | | | | | | | | | | | | | | | |
| DENSE, GRAY **GRAVEL WITH SAND**, TRACE SILT, WET. | | 23 | | | | | | | | | | | | | | | | |
| | | 24 | 16 15 15 | 43 | 97 | SS-10 | - | - | - | - | - | - | - | - | - | 10 | A-1-b (V) | |
| | 943.1 | EOB 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 13.5' AND UPON COMPLETION @ 15.5'; CAVE-IN DEPTH @ 12.2'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:55 - U:\GIB\PROJECTS\2023\W-23-107.GPJ

| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| P.265 / TOTAL 297 | 34 / TOTAL 66 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. 8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949 |

# GEOTECHNICAL PROFILE - NOISE ABATEMENT
## NOISE WALL 6
## BORING LOGS B-005-0-23 AND B-006-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:14:56 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL007.dgn

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 603+60 / 0' | **EXPLORATION ID B-007-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 6
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 969.0 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 11/17/23 END: 11/17/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.088448, -82.842572

| MATERIAL DESCRIPTION AND NOTES | ELEV. 969.0 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.4' -TOPSOIL (5.0") | 968.6 | | | | | | | | | | | | | | | | | |
| HARD, BROWN TO BROWNISH GRAY **SILTY CLAY**, LITTLE COARSE TO FINE SAND, TRACE GRAVEL, DAMP TO MOIST. | | 1 | 5 5 7 | 17 | 83 | SS-1 | 4.5+ | 4 | 10 | 13 | 31 | 42 | 34 | 18 | 16 | 21 | A-6b (10) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 12 14 15 | 42 | 36 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 16 | A-6b (V) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 8 12 16 | 40 | 100 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-6b (V) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 9 9 10 | 27 | 0 | SS-4 | - | - | - | - | - | - | - | - | - | - | | |
| | | 10 | 22 | - | 100 | 2S-4A | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-6b (V) | |
| | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 8 8 8 | 23 | 78 | SS-5 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-6b (V) | |
| | 956.0 | 13 | | | | | | | | | | | | | | | | |
| MEDIUM DENSE TO VERY DENSE, GRAY **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, MOIST TO WET. | | 14 | 12 19 20 | 56 | 83 | SS-6 | - | - | - | - | - | - | - | - | - | 7 | A-1-b (V) | |
| | | 15 | | | | | | | | | | | | | | | | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 13 13 17 | 43 | 83 | SS-7 | - | 24 | 39 | 15 | 12 | 10 | NP | NP | NP | 12 | A-1-b (0) | |
| | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | 15 16 36 | 75 | 100 | SS-8 | - | - | - | - | - | - | - | - | - | 14 | A-1-b (V) | |
| | | 20 | ▽ 948.5 | | | | | | | | | | | | | | | |
| | | | W 948.0 | | | | | | | | | | | | | | | |
| | | 21 | | | | | | | | | | | | | | | | |
| | | 22 | 16 20 18 | 55 | 42 | SS-9 | - | - | - | - | - | - | - | - | - | 13 | A-1-b (V) | |
| | | 23 | | | | | | | | | | | | | | | | |
| | | 24 | 5 7 8 | 22 | 44 | SS-10 | - | - | - | - | - | - | - | - | - | 17 | A-1-b (V) | |
| | 944.0 | 25 | EOB | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 21.0' AND UPON COMPLETION @ 20.5'; CAVE-IN DEPTH @ 13.1'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:55 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 605+28 / 0' | **EXPLORATION ID B-008-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 6
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 970.0 (MSL) EOB: 27.5 ft. | PAGE 1 OF 1
START: 11/17/23 END: 11/17/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.088448, -82.842015

| MATERIAL DESCRIPTION AND NOTES | ELEV. 970.0 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' -TOPSOIL (4.0") | 969.7 | | | | | | | | | | | | | | | | | |
| HARD, BROWN TO BROWN/GRAY **SANDY SILT**, SOME CLAY, LITTLE FINE GRAVEL, DAMP. | | 1 | 10 14 18 | 46 | 75 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-4a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 10 10 21 | 45 | 61 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-4a (V) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 13 16 16 | 46 | 0 | SS-3 | - | - | - | - | - | - | - | - | - | - | | |
| | | 8 | 28 | - | 67 | 2S-3A | 4.5+ | - | - | - | - | - | - | - | - | 10 | A-4a (V) | |
| | | 9 | 5 7 10 | 24 | 69 | SS-4 | 4.5+ | 13 | 11 | 16 | 30 | 30 | 16 | 14 | 2 | 10 | A-4a (5) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 5 9 24 | 48 | 78 | SS-5 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-4a (V) | |
| | 957.0 | 13 | | | | | | | | | | | | | | | | |
| VERY DENSE TO DENSE, GRAY **GRAVEL WITH SAND**, LITTLE SILT, MOIST. | | 14 | 29 29 28 | 82 | 0 | SS-6 | - | - | - | - | - | - | - | - | - | - | | |
| | | 15 | | | | | | | | | | | | | | | | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 10 17 17 | 49 | 44 | SS-7 | - | - | - | - | - | - | - | - | - | 9 | A-1-b (V) | |
| | 952.0 | 18 | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, GRAY **SANDY SILT**, SOME CLAY, SOME FINE GRAVEL, DAMP. -COBBLES FROM 18.0' - 18.5' | | 19 | 6 8 8 | 23 | 36 | SS-8 | 4.5+ | 27 | 10 | 13 | 27 | 23 | 24 | 14 | 10 | 10 | A-4a (3) | |
| | | 20 | ▽ 949.9 | | | | | | | | | | | | | | | |
| | | | W 949.0 | | | | | | | | | | | | | | | |
| | | 21 | | | | | | | | | | | | | | | | |
| | | 22 | 10 7 7 | 20 | 44 | SS-9 | 3.50 | - | - | - | - | - | - | - | - | 12 | A-4a (V) | |
| | 947.0 | 23 | | | | | | | | | | | | | | | | |
| MEDIUM DENSE, BROWN TO BROWNISH GRAY **COARSE AND FINE SAND**, TRACE FINE GRAVEL, TRACE SILT, WET. | | 24 | 3 4 4 | 12 | 69 | SS-10 | - | - | - | - | - | - | - | - | - | 17 | A-3a (V) | |
| | | 25 | | | | | | | | | | | | | | | | |
| | | 26 | | | | | | | | | | | | | | | | |
| | | 27 | 3 6 10 | 23 | 100 | SS-11 | - | - | - | - | - | - | - | - | - | 20 | A-3a (V) | |
| | 942.5 | | EOB | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 21.0' AND UPON COMPLETION @ 20.1'; CAVE-IN DEPTH @ 13.1'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:55 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| P.266 | 35 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. 8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43240 (614) 825-4949 |
| TOTAL 297 | TOTAL 66 | | | | |

# GEOTECHNICAL PROFILE - NOISE ABATEMENT
## NOISE WALL 6
## BORING LOGS B-007-0-23 AND B-008-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:15:19 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL008.dgn

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 2192+50 / 123' RT | **EXPLORATION ID B-009-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL SR 161
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 960.9 (MSL) EOB: 25.5 ft.
START: 11/2/23 END: 11/2/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.086999, -82.844104 | PAGE 1 OF 1

| MATERIAL DESCRIPTION AND NOTES | ELEV. 960.9 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' -TOPSOIL (4.0") | 960.6 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SILT AND CLAY**, LITTLE COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP. | | | 5 8 13 | 30 | 50 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| -COBBLES @ 4.0' | | | 22 50/3" | - | 50 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 8 | A-6a (V) | |
| | 955.4 | | | | | | | | | | | | | | | | | |
| DENSE TO VERY DENSE, LIGHT BROWN **SANDY SILT**, LITTLE CLAY, TRACE GRAVEL, DAMP. | | | 9 15 19 | 49 | 69 | SS-3 | - | - | - | - | - | - | - | - | - | 7 | A-4a (V) | |
| | | | 24 26 14 | 58 | 36 | SS-4 | - | - | - | - | - | - | - | - | - | 10 | A-4a (V) | |
| | 950.4 | ▽ 950.6 | | | | | | | | | | | | | | | | |
| MEDIUM DENSE TO VERY DENSE, DARK GRAY TO GRAY **GRAVEL WITH SAND AND SILT**, MOIST. | | W 948.9 | 9 10 8 | 26 | 64 | SS-5 | - | - | - | - | - | - | - | - | - | 7 | A-2-4 (V) | |
| | | | 11 13 16 | 42 | 33 | SS-6 | - | - | - | - | - | - | - | - | - | 11 | A-2-4 (V) | |
| | | | 15 18 18 | 52 | 33 | SS-7 | - | - | - | - | - | - | - | - | - | 20 | A-2-4 (V) | |
| | | | 10 14 14 | 40 | 47 | SS-8 | - | - | - | - | - | - | - | - | - | 10 | A-2-4 (V) | |
| | 940.4 | | | | | | | | | | | | | | | | | |
| DENSE TO VERY DENSE, GRAY **SILTY SAND**, TRACE CLAY, TRACE FINE GRAVEL, MOIST. | | | 12 20 20 | 58 | 56 | SS-9 | - | - | - | - | - | - | - | - | - | 9 | A-4a (V) | |
| | | | 5 9 13 | 32 | 0 | SS-10 | - | - | - | - | - | - | - | - | - | - | | |
| | 935.4 | EOB | 21 | - | 100 | 2S-10A | - | - | - | - | - | - | - | - | - | 7 | A-4a (V) | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 12.0' AND UPON COMPLETION @ 10.3'; CAVE-IN DEPTH @ 19.1'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:55 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 2194+49 / 112' RT | **EXPLORATION ID B-010-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL SR 161
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 961.8 (MSL) EOB: 25.0 ft.
START: 11/3/23 END: 11/3/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.087252, -82.843476 | PAGE 1 OF 1

| MATERIAL DESCRIPTION AND NOTES | ELEV. 961.8 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' -TOPSOIL (4.0") | 961.5 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SILT AND CLAY**, LITTLE COARSE TO FINE SAND, TRACE GRAVEL, DAMP TO MOIST. | | | 8 12 12 | 35 | 33 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 16 | A-6a (V) | |
| -COBBLES FROM 3.8' - 4.5' | | | 15 45 18 | 91 | 42 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 10 | A-6a (V) | |
| | 956.3 | | | | | | | | | | | | | | | | | |
| MEDIUM DENSE TO DENSE, BROWN **GRAVEL WITH SAND AND SILT**, WET. | | | 11 9 9 | 26 | 56 | SS-3 | - | 44 | 16 | 14 | 16 | 10 | 27 | 19 | 8 | 7 | A-2-4 (0) | |
| | | | 9 11 12 | 33 | 67 | SS-4 | - | - | - | - | - | - | - | - | - | 8 | A-2-4 (V) | |
| | | ▽ 950.6 | | | | | | | | | | | | | | | | |
| | | W 949.3 | 6 8 11 | 27 | 0 | SS-5 | - | - | - | - | - | - | - | - | - | - | | |
| | | | 7 | - | 100 | 2S-5A | - | - | - | - | - | - | - | - | - | 19 | A-2-4 (V) | |
| | | | 10 10 10 | 29 | 0 | SS-6 | - | - | - | - | - | - | - | - | - | - | | |
| | 946.1 | | 5 | - | 100 | 2S-6A | - | - | - | - | - | - | - | - | - | 15 | A-2-4 (V) | |
| HARD, BROWN **SANDY SILT**, LITTLE CLAY, TRACE FINE GRAVEL, DAMP. | | | 7 8 10 | 26 | 47 | SS-7 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-4a (V) | |
| | | | 5 8 13 | 30 | 75 | SS-8 | 4.5+ | 12 | 11 | 14 | 39 | 24 | 26 | 17 | 9 | 12 | A-4a (6) | |
| | | | 9 16 17 | 48 | 78 | SS-8 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-4a (V) | |
| | 936.8 | EOB | 10 15 13 | 40 | 67 | SS-10 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-4a (V) | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 12.5' AND UPON COMPLETION @ 11.2'; CAVE-IN DEPTH @ 13.1'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:55 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

| SHEET | TOTAL | SUBSET | TOTAL | PROJECT ID | RELEVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|---|---|
| P.267 | 297 | 36 | 66 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. |

6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949

## GEOTECHNICAL PROFILE - NOISE ABATEMENT

## BORING LOGS B-009-0-23 AND B-010-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:15:43 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL009.dgn

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 2196+50 / 111' RT | **EXPLORATION ID B-011-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL SR 161
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 964.3 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 11/3/23 END: 11/3/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.087493, -82.842814

| MATERIAL DESCRIPTION AND NOTES | ELEV. 964.3 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' -TOPSOIL (3.5") | 964.0 | | | | | | | | | | | | | | | | | |
| STIFF TO HARD, BROWN TO GRAY **SILT AND CLAY**, "AND" COARSE TO FINE SAND, LITTLE FINE GRAVEL, DAMP TO MOIST. | | 1 | 5 7 9 | 23 | 53 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 21 | A-6a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 7 9 10 | 27 | 61 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 4 6 6 | 17 | 81 | SS-3 | 4.5+ | 17 | 11 | 15 | 30 | 27 | 27 | 16 | 11 | 12 | A-6a (5) | |
| | 956.5 ▽ | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 5 5 8 | 19 | 89 | SS-4 | 3.75 | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 2 3 5 | 12 | 56 | SS-5 | 2.50 | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | 1 2 4 | 9 | 53 | SS-6 | 1.25 | - | - | - | - | - | - | - | - | 15 | A-6a (V) | |
| | 948.8 | 15 | | | | | | | | | | | | | | | | |
| LOOSE TO DENSE, BROWN **GRAVEL WITH SAND**, TRACE SILT, TRACE CLAY, WET. | W 948.3 | 16 | 3 6 7 | 19 | 39 | SS-7 | - | - | - | - | - | - | - | - | - | 20 | A-1-b (V) | |
| | | 17 | | | | | | | | | | | | | | | | |
| | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | 2 2 4 | 9 | 67 | SS-8 | - | 9 | 68 | 17 | 1 | 5 | NP | NP | NP | 22 | A-1-b (0) | |
| -HEAVE @ 21.0' AND 23.0' | | 20 | | | | | | | | | | | | | | | | |
| | | 21 | | | | | | | | | | | | | | | | |
| | | 22 | 5 9 11 | 29 | 100 | SS-9 | - | - | - | - | - | - | - | - | - | 14 | A-1-b (V) | |
| | | 23 | | | | | | | | | | | | | | | | |
| | | 24 | 7 10 14 | 35 | 100 | SS-10 | - | - | - | - | - | - | - | - | - | 12 | A-1-b (V) | |
| | 939.3 | EOB 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 16.0' AND UPON COMPLETION @ 7.8'; CAVE-IN DEPTH @ 13.9'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 800+72 / 117' RT | **EXPLORATION ID B-012-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL SR 161
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 967.1 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 11/3/23 END: 11/3/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.087734, -82.842176

| MATERIAL DESCRIPTION AND NOTES | ELEV. 967.1 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' -TOPSOIL (4.0") | 966.8 | | | | | | | | | | | | | | | | | |
| HARD, LIGHT BROWN **SILT AND CLAY**, SOME COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP TO MOIST. | | 1 | 5 6 9 | 22 | 53 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 18 | A-6a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 14 16 28 | 63 | 72 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 10 | A-6a (V) | |
| -COBBLES FROM 4.8' - 5.2' | | 5 | | | | | | | | | | | | | | | | |
| -AUGER REFUSAL @ 5.2'. OFFSET 7.0' SW, CONTINUED SAMPLING AT 6.0' | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 11 13 16 | 42 | 78 | SS-3 | 4.5+ | 8 | 10 | 15 | 33 | 34 | 30 | 17 | 13 | 11 | A-6a (8) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 20 28 16 | 63 | 47 | SS-4 | - | - | - | - | - | - | - | - | - | 10 | A-6a (V) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 5 18 12 | 43 | 33 | SS-5 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-6a (V) | |
| | 954.1 | 13 | | | | | | | | | | | | | | | | |
| DENSE TO VERY DENSE, DARK GRAY **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, MOIST. | | 14 | 7 14 18 | 46 | 53 | SS-6 | - | 46 | 21 | 8 | 18 | 7 | NP | NP | NP | 8 | A-1-b (0) | |
| | 952.2 ▽ | 15 | | | | | | | | | | | | | | | | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 15 18 10 | 40 | 72 | SS-7 | - | - | - | - | - | - | - | - | - | 8 | A-1-b (V) | |
| | W 948.6 | 18 | | | | | | | | | | | | | | | | |
| | | 19 | 17 18 18 | 52 | 61 | SS-8 | - | - | - | - | - | - | - | - | - | 11 | A-1-b (V) | |
| | 946.6 | 20 | | | | | | | | | | | | | | | | |
| HARD, BROWN **SANDY SILT**, LITTLE CLAY, TRACE FINE GRAVEL, MOIST. | | 21 | | | | | | | | | | | | | | | | |
| | | 22 | 18 34 26 | 86 | 50 | SS-9 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-4a (V) | |
| | | 23 | | | | | | | | | | | | | | | | |
| | | 24 | 6 9 12 | 30 | 47 | SS-10 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-4a (V) | |
| | 942.1 | EOB 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 18.5' AND UPON COMPLETION @ 14.9'; CAVE-IN DEPTH @ 18.5'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

| SHEET | TOTAL | SUBSET | TOTAL | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|---|---|
| P.268 | 297 | 37 | 66 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. |

8500 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 825-4949

GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 8
BORING LOGS B-011-0-23 AND B-012-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:16:06 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL010.dgn

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 802+72 / 0' | **EXPLORATION ID B-013-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 8
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 967.4 (MSL) EOB: 25.0 ft.
START: 11/3/23 END: 11/3/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.087953, -82.841539
PAGE 1 OF 1

| MATERIAL DESCRIPTION AND NOTES | ELEV. 967.4 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.4' -TOPSOIL (5.0") | 967.0 | | | | | | | | | | | | | | | | | |
| HARD, LIGHT BROWN TO BROWN **SILT AND CLAY**, SOME COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP TO MOIST. | | | 5 7 10 | 24 | 61 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 15 | A-6a (V) | |
| | | | 9 10 13 | 33 | 58 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| | | | 11 10 11 | 30 | 100 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-6a (V) | |
| | | | 7 8 11 | 27 | 61 | SS-4 | 4.5+ | 9 | 8 | 16 | 35 | 32 | 28 | 15 | 13 | 12 | A-6a (8) | |
| | 956.9 | | | | | | | | | | | | | | | | | |
| DENSE TO VERY DENSE, GRAY **COARSE AND FINE SAND**, TRACE FINE GRAVEL, TRACE SILT, DAMP. | | | 10 17 41 | 84 | 64 | SS-5 | - | - | - | - | - | - | - | - | - | 5 | A-3a (V) | |
| | | ▽ 953.2 | 18 15 16 | 45 | 33 | SS-6 | - | - | - | - | - | - | - | - | - | 6 | A-3a (V) | |
| | 951.9 | | | | | | | | | | | | | | | | | |
| MEDIUM DENSE TO VERY DENSE, GRAY **GRAVEL WITH SAND AND SILT**, MOIST. | | W 951.4 | 5 8 11 | 27 | 61 | SS-7 | - | - | - | - | - | - | - | - | - | 12 | A-2-4 (V) | |
| | | | 14 24 14 | 55 | 47 | SS-8 | - | - | - | - | - | - | - | - | - | 9 | A-2-4 (V) | |
| -AUGER LOST IN BORING @ 18.5' - 23.5' | | | 9 12 10 | 32 | 44 | SS-9 | - | 65 | 10 | 6 | 12 | 7 | 23 | 16 | 7 | 11 | A-2-4 (0) | |
| | 942.4 | EOB | 23 23 21 | 63 | 47 | SS-10 | - | - | - | - | - | - | - | - | - | 10 | A-2-4 (V) | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 16.0' AND UPON COMPLETION @ 14.2'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 804+72 / 0' | **EXPLORATION ID B-014-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 8
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 966.4 (MSL) EOB: 25.0 ft.
START: 11/6/23 END: 11/2/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.088209, -82.840922
PAGE 1 OF 1

| MATERIAL DESCRIPTION AND NOTES | ELEV. 966.4 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.5' -TOPSOIL (5.5") | 965.9 | | | | | | | | | | | | | | | | | |
| HARD, LIGHT BROWN TO GRAY **SILTY CLAY**, LITTLE COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP TO MOIST. | | | 3 3 6 | 13 | 72 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 21 | A-6b (V) | |
| | | | 5 5 7 | 17 | 47 | SS-2 | 4.5+ | 8 | 6 | 12 | 34 | 40 | 40 | 19 | 21 | 15 | A-6b (12) | |
| | | | 4 6 9 | 22 | 53 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 15 | A-6b (V) | |
| | | | 16 14 10 | 35 | 64 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-6b (V) | |
| | | ▽ 954.6 | 5 5 8 | 19 | 72 | SS-5 | 4.25 | - | - | - | - | - | - | - | - | 12 | A-6b (V) | |
| | 953.4 | | | | | | | | | | | | | | | | | |
| MEDIUM DENSE TO DENSE, GRAY **GRAVEL WITH SAND AND SILT**, WET. | | W 952.9 | 8 14 16 | 43 | 33 | SS-6 | - | - | - | - | - | - | - | - | - | 15 | A-2-4 (V) | |
| | | | 5 8 8 | 23 | 61 | SS-7 | - | 43 | 25 | 11 | 13 | 8 | 28 | 20 | 8 | 12 | A-2-4 (0) | |
| | | | 6 8 9 | 24 | 78 | SS-8 | - | - | - | - | - | - | - | - | - | 10 | A-2-4 (V) | |
| | | | 9 8 10 | 26 | 36 | SS-9 | - | - | - | - | - | - | - | - | - | 13 | A-2-4 (V) | |
| | 943.4 | | | | | | | | | | | | | | | | | |
| MEDIUM DENSE, GRAY **SANDY SILT**, TRACE CLAY, TRACE FINE GRAVEL, MOIST. | | | 5 7 8 | 22 | 39 | SS-10 | - | - | - | - | - | - | - | - | - | 19 | A-4a (V) | |
| | 941.4 | EOB | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 13.5' AND UPON COMPLETION @ 11.8'; CAVE-IN DEPTH @ 12.3'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| P.269 | 38 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. |
| TOTAL 297 | TOTAL 66 | | | | 8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949 |

# GEOTECHNICAL PROFILE - NOISE ABATEMENT
## NOISE WALL 8
## BORING LOGS B-013-0-23 AND B-014-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:16:30 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL011.dgn

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 806+72 / 0' | **EXPLORATION ID B-015-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 8
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 966.5 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 10/23/23 END: 10/23/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.088482, -82.840308

| MATERIAL DESCRIPTION AND NOTES | ELEV. | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.7' -TOPSOIL (8.0") | 965.8 | | | | | | | | | | | | | | | | | |
| VERY STIFF, BROWNISH GRAY TO GRAY **SILTY CLAY**, SOME COARSE TO FINE SAND, TRACE GRAVEL AND SAND, DAMP TO MOIST. | | | 3 4 4 | 12 | 61 | SS-1 | 3.50 | - | - | - | - | - | - | - | - | 19 | A-6b (V) | |
| | | | 10 30 11 | 59 | 100 | SS-2 | 4.00 | - | - | - | - | - | - | - | - | 13 | A-6b (V) | |
| | | | 8 11 13 | 35 | 47 | SS-3 | 3.50 | 16 | 8 | 13 | 33 | 30 | 34 | 18 | 16 | 13 | A-6b (8) | |
| | | ▽ 956.5 | 9 6 8 | 20 | 50 | SS-4 | 3.50 | - | - | - | - | - | - | - | - | 13 | A-6b (V) | |
| | | | 6 6 10 | 23 | 39 | SS-5 | 3.50 | - | - | - | - | - | - | - | - | 13 | A-6b (V) | |
| | 951.0 | W 951.5 | 6 7 5 | 17 | 47 | SS-6 | 3.50 | - | - | - | - | - | - | - | - | 12 | A-6b (V) | |
| HARD, BROWN **SANDY SILT**, "AND" FINE GRAVEL, LITTLE CLAY, DAMP. | | | 17 30 25 | 79 | 44 | SS-7 | - | - | - | - | - | - | - | - | - | 13 | A-4a (V) | |
| | | | 19 24 26 | 72 | 56 | SS-8 | - | 42 | 13 | 8 | 24 | 13 | 26 | 17 | 9 | 10 | A-4a (0) | |
| | | | 10 18 14 | 46 | 53 | SS-9 | - | - | - | - | - | - | - | - | - | 11 | A-4a (V) | |
| | 941.5 | EOB | 9 15 17 | 46 | 69 | SS-10 | - | - | - | - | - | - | - | - | - | 9 | A-4a (V) | |

NOTES: SEEPAGE @ 14.0'; GROUNDWATER INTIALLY ENCOUNTERED @ 15.0' AND UPON COMPLETION @ 10.0'; CAVE-IN DEPTH @ 14.1'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 808+72 / 0' | **EXPLORATION ID B-016-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 8
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 968.4 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 10/23/23 END: 10/23/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.088693, -82.839666

| MATERIAL DESCRIPTION AND NOTES | ELEV. | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.6' -TOPSOIL (7.0") | 967.8 | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, LIGHT BROWN TO BROWN **SILT AND CLAY**, SOME COARSE TO FINE GRAVEL, LITTLE FINE GRAVEL, DAMP TO MOIST. | | | 5 5 5 | 14 | 50 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 15 | A-6a (V) | |
| | | | 8 8 9 | 24 | 100 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| | | | 11 11 12 | 33 | 58 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-6a (V) | |
| | | | 8 13 13 | 37 | 56 | SS-4 | 4.5+ | 14 | 11 | 15 | 33 | 27 | 28 | 16 | 12 | 10 | A-6a (6) | |
| | | | 7 7 7 | 20 | 78 | SS-5 | 3.00 | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| | | ▽ 954.6 | 5 11 9 | 29 | 44 | SS-6 | 3.00 | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| | 952.9 | | | | | | | | | | | | | | | | | |
| MEDIUM DENSE TO VERY DENSE, GRAY **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, MOIST. | | W 950.4 | 12 12 12 | 35 | 61 | SS-7 | - | 50 | 23 | 9 | 12 | 6 | 23 | 17 | 6 | 10 | A-1-b (0) | |
| | | | 11 9 9 | 26 | 56 | SS-8 | - | - | - | - | - | - | - | - | - | 14 | A-1-b (V) | |
| | | | 16 16 17 | 48 | 83 | SS-9 | - | - | - | - | - | - | - | - | - | 10 | A-1-b (V) | |
| | 943.4 | EOB | 13 31 32 | 91 | 89 | SS-10 | - | - | - | - | - | - | - | - | - | 8 | A-1-b (V) | |

NOTES: SEEPAGE @ 17.5'; GROUNDWATER INTIALLY ENCOUNTERED @ 18.0' AND UPON COMPLETION @ 13.8'; CAVE-IN DEPTH @ 21.0'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

| SHEET | TOTAL | SUBSET | TOTAL | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|---|---|
| P.270 | 297 | 35 | 66 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. |

8500 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 825-4949

GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 8
BORING LOGS B-015-0-23 AND B-016-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:16:54 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL012.dgn

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 810+72 / 0' | **EXPLORATION ID B-017-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 8
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 970.7 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 10/23/23 END: 10/23/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.088908, -82.839020

| MATERIAL DESCRIPTION AND NOTES | ELEV. 970.7 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.4' -TOPSOIL (5.0") | 970.3 | | | | | | | | | | | | | | | | | |
| HARD TO VERY STIFF, BROWN TO GRAY **SILT AND CLAY**, SOME COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP TO MOIST. | | 1 | 6 9 12 | 30 | 81 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 17 | A-6a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 20 22 20 | 60 | 36 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-6a (V) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 12 11 11 | 32 | 89 | SS-3 | 4.5+ | 9 | 10 | 16 | 37 | 28 | 28 | 17 | 11 | 10 | A-6a (6) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 7 10 15 | 36 | 86 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 5 5 6 | 16 | 33 | SS-5 | 4.00 | - | - | - | - | - | - | - | - | 11 | A-6a (V) | |
| | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | 5 5 12 | 24 | 44 | SS-6 | 3.50 | - | - | - | - | - | - | - | - | 10 | A-6a (V) | |
| | 955.2 | 15 | | | | | | | | | | | | | | | | |
| DENSE TO VERY DENSE, GRAY **GRAVEL WITH SAND AND SILT**, TRACE CLAY, DAMP TO MOIST. | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 10 12 15 | 39 | 53 | SS-7 | - | - | - | - | - | - | - | - | - | 7 | A-2-4 (V) | |
| W 952.7 | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | 10 15 20 | 50 | 78 | SS-8 | - | 45 | 15 | 12 | 22 | 6 | NP | NP | NP | 11 | A-2-4 (0) | |
| | | 20 | | | | | | | | | | | | | | | | |
| | | 21 | | | | | | | | | | | | | | | | |
| | | 22 | 15 30 28 | 84 | 100 | SS-9 | - | - | - | - | - | - | - | - | - | 9 | A-2-4 (V) | |
| | | 23 | | | | | | | | | | | | | | | | |
| | | 24 | 13 17 26 | 62 | 69 | SS-10 | - | - | - | - | - | - | - | - | - | 7 | A-2-4 (V) | |
| | 945.7 | EOB 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 18.0'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 812+76 / 0' | **EXPLORATION ID B-018-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 8
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 975.5 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 10/23/23 END: 10/23/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.089106, -82.838365

| MATERIAL DESCRIPTION AND NOTES | ELEV. 975.5 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.4' -TOPSOIL (5.0") | 975.1 | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, BROWN TO GRAY **SANDY SILT**, SOME CLAY, LITTLE FINE GRAVEL, DAMP TO MOIST. | | 1 | 6 10 12 | 32 | 58 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-4a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 12 13 19 | 46 | 92 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 10 | A-4a (V) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 17 13 15 | 40 | 92 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-4a (V) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 8 9 11 | 29 | 94 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-4a (V) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 7 8 8 | 23 | 72 | SS-5 | 3.25 | 13 | 11 | 15 | 35 | 26 | 24 | 15 | 9 | 12 | A-4a (5) | |
| | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | 6 8 9 | 24 | 89 | SS-6 | 3.25 | - | - | - | - | - | - | - | - | 12 | A-4a (V) | |
| | | 15 | | | | | | | | | | | | | | | | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 3 4 5 | 13 | 81 | SS-7 | 2.50 | - | - | - | - | - | - | - | - | 12 | A-4a (V) | |
| | 957.5 | 18 | | | | | | | | | | | | | | | | |
| DENSE TO VERY DENSE, BROWN-GRAY TO GRAY **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, MOIST. | | 19 | 8 13 14 | 39 | 58 | SS-8 | - | 61 | 15 | 8 | 11 | 5 | 26 | 20 | 6 | 8 | A-1-b (0) | |
| | | 20 | | | | | | | | | | | | | | | | |
| | | 21 | | | | | | | | | | | | | | | | |
| | | 22 | 11 29 34 | 91 | 0 | SS-9 | - | - | - | - | - | - | - | - | - | - | | |
| | 953.0 | TR | | | | | | | | | | | | | | | | |
| **SHALE** : GRAY, HIGHLY WEATHERED. | | 23 | 38 | - | 100 | 2S-9A | - | - | - | - | - | - | - | - | - | 8 | Rock (V) | |
| | | 24 | 28 50/3" | - | 89 | SS-10 | - | - | - | - | - | - | - | - | - | 5 | Rock (V) | |
| | 950.5 | EOB 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING; CAVE-IN DEPTH @ 16.4'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| P.271 | 40 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. 8500 FREEPORT PARKWAY COLUMBUS, OHIO 43240 (614) 825-4949 |
| TOTAL 297 | TOTAL 66 | | | | |

# GEOTECHNICAL PROFILE - NOISE ABATEMENT
# NOISE WALL 8
# BORING LOGS B-017-0-23 AND B-018-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:17:18 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL013.dgn

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 814+72 / 0' | EXPLORATION ID: B-019-0-23
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 8 | PAGE: 1 OF 1
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 974.9 (MSL) EOB: 25.0 ft.
START: 10/23/23 END: 10/23/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.089329, -82.837734

| MATERIAL DESCRIPTION AND NOTES | ELEV. 974.9 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' - TOPSOIL (4.0") | 974.6 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SILT AND CLAY**, LITTLE COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP TO MOIST. | | 1 | 7 9 9 | 26 | 83 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 16 | A-6a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 8 12 16 | 40 | 94 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 10 | A-6a (V) | |
| | 969.4 | 5 | | | | | | | | | | | | | | | | |
| MEDIUM DENSE, BROWN **GRAVEL WITH SAND AND SILT**, MOIST. | | 6 | 4 7 3 | 14 | 61 | SS-3 | - | - | - | - | - | - | - | - | - | 10 | A-2-4 (V) | |
| | 966.9 | 7 | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, GRAY **SANDY SILT**, SOME CLAY, LITTLE FINE GRAVEL, DAMP TO MOIST. | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 3 5 6 | 16 | 100 | SS-4 | 4.25 | 12 | 11 | 17 | 35 | 25 | 24 | 14 | 10 | 11 | A-4a (5) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | 4 5 6 | 16 | 56 | SS-5 | 2.50 | - | - | - | - | - | - | - | - | 12 | A-4a (V) | |
| | | 12 | | | | | | | | | | | | | | | | |
| | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | 6 8 10 | 26 | 44 | SS-6 | 2.50 | - | - | - | - | - | - | - | - | 12 | A-4a (V) | |
| | | 15 | | | | | | | | | | | | | | | | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 5 6 9 | 22 | 89 | SS-7 | 3.50 | - | - | - | - | - | - | - | - | 13 | A-4a (V) | |
| | 956.9 | 18 | | | | | | | | | | | | | | | | |
| MEDIUM DENSE TO DENSE, GRAY **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, MOIST. | | 19 | 10 12 15 | 39 | 47 | SS-8 | - | 53 | 18 | 10 | 13 | 6 | 24 | 18 | 6 | 9 | A-1-b (0) | |
| | | 20 | | | | | | | | | | | | | | | | |
| W 953.9 | | 21 | 8 9 8 | 24 | 56 | SS-9 | - | - | - | - | - | - | - | - | - | 10 | A-1-b (V) | |
| | 951.9 | 22 | | | | | | | | | | | | | | | | |
| **SHALE** : GRAY, HIGHLY WEATHERED. | | TR 23 | | | | | | | | | | | | | | | | |
| | | 24 | 50/5" | - | 100 | SS-10 | - | - | - | - | - | - | - | - | - | 9 | Rock (V) | |
| | 949.9 | EOB 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 21.0' AND DRY UPON COMPLETION; CAVE-IN DEPTH @ 17.1'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 816+46 / 0' | EXPLORATION ID: B-020-0-23
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 8 | PAGE: 1 OF 1
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 974.3 (MSL) EOB: 25.0 ft.
START: 10/27/23 END: 10/27/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.089531, -82.837178

| MATERIAL DESCRIPTION AND NOTES | ELEV. 974.3 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.4' -TOPSOIL (4.5") | 973.9 | | | | | | | | | | | | | | | | | |
| HARD, BROWN TO GRAY **SILT AND CLAY**, SOME COARSE TO FINE SAND, TRACE TO LITTLE FINE GRAVEL, DAMP TO MOIST. | | 1 | 5 5 7 | 17 | 44 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 16 | A-6a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 6 10 15 | 36 | 11 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 10 10 14 | 35 | 58 | SS-3 | 4.5+ | 8 | 10 | 15 | 34 | 33 | 29 | 17 | 12 | 12 | A-6a (7) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 9 9 10 | 27 | 58 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-6a (V) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 4 6 8 | 20 | 58 | SS-5 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-6a (V) | |
| | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | 4 6 8 | 20 | 56 | SS-6 | 4.5+ | 11 | 11 | 15 | 34 | 29 | 26 | 15 | 11 | 10 | A-6a (6) | |
| | | 15 | | | | | | | | | | | | | | | | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 4 16 15 | 45 | 56 | SS-7 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-6a (V) | |
| | 956.3 | 18 | | | | | | | | | | | | | | | | |
| **SHALE** : GRAY, HIGHLY WEATHERED. | | TR 19 | 50/5" | - | 67 | SS-8 | - | - | - | - | - | - | - | - | - | 9 | Rock (V) | |
| | | 20 | | | | | | | | | | | | | | | | |
| | | 21 | 50/5" | - | 56 | SS-9 | - | - | - | - | - | - | - | - | - | 4 | Rock (V) | |
| | | 22 | | | | | | | | | | | | | | | | |
| | | 23 | | | | | | | | | | | | | | | | |
| | | 24 | 50/6" | - | 73 | SS-10 | - | - | - | - | - | - | - | - | - | 4 | Rock (V) | |
| | 949.3 | EOB 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING; CAVE-IN DEPTH @ 17.2'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

| SHEET | TOTAL |
|---|---|
| P.272 | 297 |

| SUBSET | TOTAL |
|---|---|
| 41 | 66 |

PROJECT ID: 117607
REVIEWER: DEK 1/19/24
DESIGNER: JAS
DESIGN AGENCY: RESOURCE INTERNATIONAL
6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949

# GEOTECHNICAL PROFILE - NOISE ABATEMENT
## NOISE WALL 8
## BORING LOGS B-019-0-23 AND B-020-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:17:42 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL014.dgn

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 818+03 / 0' | **EXPLORATION ID B-021-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 8
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 974.1 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 10/27/23 END: 10/27/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.089729, -82.836617

| MATERIAL DESCRIPTION AND NOTES | ELEV. 974.1 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' -TOPSOIL (3.0") | 973.8 | | | | | | | | | | | | | | | | | |
| HARD, BROWN TO GRAY **SILT AND CLAY**, SOME COARSE TO FINE SAND, TRACE TO LITTLE FINE GRAVEL, DAMP TO MOIST. | | 1 | 6 8 8 | 23 | 44 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 16 | A-6a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | 17 19 19 | 55 | 64 | SS-2 | 4.5+ | 9 | 10 | 15 | 33 | 33 | 31 | 17 | 14 | 10 | A-6a (8) | |
| | | 4 | | | | | | | | | | | | | | | | |
| | | 5 | 10 12 12 | 35 | 64 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 10 | A-6a (V) | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 9 9 12 | 30 | 72 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 10 | A-6a (V) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 8 10 13 | 33 | 64 | SS-5 | 4.5+ | - | - | - | - | - | - | - | - | 10 | A-6a (V) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | 6 7 9 | 23 | 72 | SS-6 | 4.5+ | 19 | 11 | 14 | 32 | 24 | 26 | 15 | 11 | 11 | A-6a (5) | |
| | | 12 | | | | | | | | | | | | | | | | |
| | | 13 | 12 12 12 | 35 | 0 | SS-7 | - | - | - | - | - | - | - | - | - | - | | |
| | 955.9 | 14 | 12 | - | 58 | 2S-7A | 4.5+ | - | - | - | - | - | - | - | - | 10 | A-6a (V) | |
| **SHALE** : GRAY, HIGHLY WEATHERED. | | TR | | | | | | | | | | | | | | | | |
| | | 15 | 9 50/3" | - | 100 | SS-8 | - | - | - | - | - | - | - | - | - | 6 | Rock (V) | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 39 50/2" | - | 100 | SS-9 | - | - | - | - | - | - | - | - | - | 6 | Rock (V) | |
| | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | 50/3" | - | 100 | SS-10 | - | - | - | - | - | - | - | - | - | 5 | Rock (V) | |
| | 949.1 | EOB | | | | | | | | | | | | | | | | |
| | | 20 | | | | | | | | | | | | | | | | |
| | | 21 | | | | | | | | | | | | | | | | |
| | | 22 | | | | | | | | | | | | | | | | |
| | | 23 | | | | | | | | | | | | | | | | |
| | | 24 | | | | | | | | | | | | | | | | |
| | | 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING; CAVE-IN DEPTH @ 19.7'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 09:47 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1100+00 / 0' | **EXPLORATION ID B-022-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 11
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 975.0 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 10/30/23 END: 10/30/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090031, -82.835839

| MATERIAL DESCRIPTION AND NOTES | ELEV. 975.0 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' - TOPSOIL (4.0") | 974.7 | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, BROWN **SANDY SILT**, SOME CLAY, LITTLE FINE GRAVEL, DAMP TO MOIST. | | 1 | 9 14 17 | 45 | 67 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-4a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | 11 14 17 | 45 | 44 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-4a (V) | |
| | | 4 | | | | | | | | | | | | | | | | |
| | | 5 | 8 8 9 | 24 | 39 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-4a (V) | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 3 3 3 | 9 | 56 | SS-4 | 3.00 | 12 | 10 | 15 | 36 | 27 | 25 | 15 | 10 | 13 | A-4a (6) | |
| | ▽ 965.3 | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 3 3 4 | 10 | 39 | SS-5 | 2.50 | - | - | - | - | - | - | - | - | 13 | A-4a (V) | |
| | 962.0 | 10 | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, GRAY **SANDY SILT**, SOME FINE GRAVEL, TRACE CLAY, DAMP. | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 5 7 8 | 22 | 78 | SS-6 | - | - | - | - | - | - | - | - | - | 14 | A-4a (V) | |
| | | 13 | | | | | | | | | | | | | | | | |
| | ▼ 959.0 | 14 | | | | | | | | | | | | | | | | |
| | | 15 | 7 14 15 | 42 | 50 | SS-7 | - | 26 | 21 | 15 | 28 | 10 | 24 | 17 | 7 | 9 | A-4a (1) | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 5 9 10 | 27 | 72 | SS-8 | - | - | - | - | - | - | - | - | - | 10 | A-4a (V) | |
| | 954.6 | 18 | | | | | | | | | | | | | | | | |
| **SHALE** : GRAY, HIGHLY WEATHERED. | | TR | | | | | | | | | | | | | | | | |
| | | 19 | 50/3" | - | 33 | SS-9 | - | - | - | - | - | - | - | - | - | 5 | Rock (V) | |
| | | 20 | | | | | | | | | | | | | | | | |
| | | 21 | | | | | | | | | | | | | | | | |
| | | 22 | | | | | | | | | | | | | | | | |
| | | 23 | | | | | | | | | | | | | | | | |
| | | 24 | 45 50/3" | - | 83 | SS-10 | - | - | - | - | - | - | - | - | - | 7 | Rock (V) | |
| | 950.0 | EOB | | | | | | | | | | | | | | | | |
| | | 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 16.0' AND UPON COMPLETION @ 9.7'; CAVE-IN DEPTH @ 17.6'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| P.273 | 42 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. |
| TOTAL 297 | TOTAL 66 | | | | 6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949 |

# GEOTECHNICAL PROFILE - NOISE ABATEMENT
## NOISE WALLS 8 AND 11
## BORING LOGS B-021-0-23 AND B-022-0-23

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1102+00 / 0' | EXPLORATION ID B-023-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 11 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 977.0 (MSL) EOB: 24.5 ft. | PAGE 1 OF 1 |
| START: 10/30/23 END: 10/30/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090244, -82.835195 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' -TOPSOIL (4.0") | 976.7 | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, BROWN TO GRAY **SANDY SILT**, SOME CLAY, TRACE FINE GRAVEL, DAMP TO MOIST. | | 1 | 7 10 12 | 32 | 67 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-4a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 6 6 6 | 17 | 75 | SS-2 | 4.5+ | 8 | 11 | 16 | 39 | 26 | 25 | 16 | 9 | 14 | A-4a (6) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 4 5 8 | 19 | 50 | SS-3 | 4.00 | - | - | - | - | - | - | - | - | 10 | A-4a (V) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 4 5 9 | 20 | 61 | SS-4 | 3.50 | - | - | - | - | - | - | - | - | 13 | A-4a (V) | |
| | 966.5 | 10 | | | | | | | | | | | | | | | | |
| **SHALE** : GRAY, HIGHLY WEATHERED. | | TR 11 | 42 50/3" | - | 100 | SS-5 | - | - | - | - | - | - | - | - | - | 4 | Rock (V) | |
| | | 12 | | | | | | | | | | | | | | | | |
| | | 13 | | | | | | | | | | | | | | | | |
| | 962.6 | 14 | 50/3" | - | 100 | SS-6 | - | - | - | - | - | - | - | - | - | 5 | Rock (V) | |
| **SHALE** : BLACK, HIGHLY WEATHERED, WEAK, VERY FINE GRAINED, LAMINATED, HIGHLY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, DISTURBED, SEAMY, VERY POOR SURFACE. | | 15 | 0 | | 0 | NQ2-1 | | | | | | | | | | | | CORE | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 0 | | 35 | NQ2-2 | | | | | | | | | | | | CORE |
| | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | | | | | | | | | | | | | | | | |
| | | 20 | | | | | | | | | | | | | | | | |
| | | 21 | | | | | | | | | | | | | | | | |
| | | 22 | 0 | | 100 | NQ2-3 | | | | | | | | | | | | CORE |
| | 952.5 | 23 | | | | | | | | | | | | | | | | |
| | | EOB 24 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER; CAVE-IN DEPTH @ 16.1'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 47 LBS CEMENT, 25 LBS BENTONITE POWDER AND 40 GAL WATER .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**Project Name:** FRA-161-15.80

**Location:**
Franklin County, Ohio

**Photo No.**
**6**




**Boring:**
B-023-0-23

RC-1: 14.4-15.0'
REC (%):0
RQD (%):0

RC-2: 15.0-19.5'
REC (%):35
RQD (%):0



GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 11
BORING LOGS & ROCK CORE PHOTO FOR B-023-0-23

| **Project Name:** FRA-161-15.80 | **Location:** Franklin County, Ohio |
|---|---|
| **Photo No.** 7 |  |
| **Boring:** B-023-0-23 | |
| RC-3: 19.5-24.5'<br>REC (%):100<br>RQD (%):0 | |





RESOURCE INTERNATIONAL, INC.
8500 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 822-4949

GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 11
BORING ROCK CORE PHOTO FOR B-023-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:18:38 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL017.dgn

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1104+00 / 0' | EXPLORATION ID B-024-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 11 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 979.6 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1 |
| START: 10/31/23 END: 10/31/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090471, -82.834551 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 979.6 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.1' -TOPSOIL (1.0") | 979.5 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **CLAY**, SOME SILT, LITTLE COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP TO MOIST. | | 1 | 5 5 8 | 19 | 47 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 19 | A-7-6 (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 8 10 16 | 37 | 78 | SS-2 | 4.5+ | 3 | 4 | 10 | 35 | 48 | 42 | 20 | 22 | 17 | A-7-6 (13) | |
| | 974.1 | 5 | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, BROWN **SILT AND CLAY**, LITTLE COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP. | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 17 28 26 | 78 | 78 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 9 | A-6a (V) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 28 18 12 | 43 | 33 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 5 6 5 | 16 | 36 | SS-5 | 2.50 | - | - | - | - | - | - | - | - | 10 | A-6a (V) | |
| | 966.6 | 13 | | | | | | | | | | | | | | | | |
| DENSE TO VERY DENSE, GRAY TO BLACK **GRAVEL WITH SAND AND SILT**, LITTLE CLAY, MOIST. | | 14 | 10 17 21 | 55 | 67 | SS-6 | - | - | - | - | - | - | - | - | - | 8 | A-2-4 (V) | |
| | | 15 | | | | | | | | | | | | | | | | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 10 14 15 | 42 | 92 | SS-7 | - | - | - | - | - | - | - | - | - | 7 | A-2-4 (V) | |
| | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | 6 14 17 | 45 | 75 | SS-8 | - | 40 | 14 | 12 | 21 | 13 | 25 | 18 | 7 | 11 | A-2-4 (0) | |
| | | 20 | | | | | | | | | | | | | | | | |
| | | 21 | | | | | | | | | | | | | | | | |
| | | 22 | 6 11 50/4" | - | 75 | SS-9 | - | - | - | - | - | - | - | - | - | 10 | A-2-4 (V) | |
| | 956.6 | 23 | TR | | | | | | | | | | | | | | | |
| **SHALE** : GRAY, HIGHLY WEATHERED. | | 24 | 50/6" | - | 36 | SS-10 | - | - | - | - | - | - | - | - | - | 3 | Rock (V) | |
| | 954.6 | 25 | EOB | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING; CAVE-IN DEPTH @ 18.5'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1106+00 / 0' | EXPLORATION ID B-025-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 11 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 980.2 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1 |
| START: 10/31/23 END: 10/31/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090688, -82.833893 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 980.2 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.2' -TOPSOIL (1.5") | 980.0 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SILT AND CLAY**, LITTLE GRAVEL AND SAND, DAMP. | | 1 | | | | | | | | | | | | | | | | |
| | | 2 | 4 5 7 | 17 | 50 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 20 | A-6a (V) | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 8 12 17 | 42 | 61 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 12 17 21 | 55 | 61 | SS-3 | 4.5+ | 10 | 10 | 16 | 34 | 30 | 27 | 16 | 11 | 8 | A-6a (6) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 10 13 14 | 39 | 64 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 10 | A-6a (V) | |
| | 969.7 | 10 | | | | | | | | | | | | | | | | |
| DENSE TO VERY DENSE, BROWN **GRAVEL WITH SAND AND SILT**, TRACE CLAY, DAMP TO MOIST. | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 18 21 27 | 69 | 83 | SS-5 | - | - | - | - | - | - | - | - | - | 8 | A-2-4 (V) | |
| | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | 9 12 15 | 39 | 78 | SS-6 | - | 38 | 23 | 12 | 17 | 10 | 27 | 20 | 7 | 6 | A-2-4 (0) | |
| | | 15 | | | | | | | | | | | | | | | | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 14 21 28 | 71 | 64 | SS-7 | - | - | - | - | - | - | - | - | - | 7 | A-2-4 (V) | |
| | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | 12 22 30 | 75 | 39 | SS-8 | - | - | - | - | - | - | - | - | - | 7 | A-2-4 (V) | |
| -SHALE FRAGMENTS PRESENT THROUGHOUT | | 20 | | | | | | | | | | | | | | | | |
| | W 959.2 | 21 | | | | | | | | | | | | | | | | |
| | | 22 | 12 16 13 | 42 | 61 | SS-9 | - | - | - | - | - | - | - | - | - | 14 | A-2-4 (V) | |
| | | 23 | | | | | | | | | | | | | | | | |
| | | 24 | 8 15 17 | 46 | 61 | SS-10 | - | - | - | - | - | - | - | - | - | 11 | A-2-4 (V) | |
| | 955.2 | 25 | EOB | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 21.0' AND DRY UPON COMPLETION; CAVE-IN DEPTH @ 15.3'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| P.276 TOTAL 297 | 45 TOTAL 66 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. 6500 PRESIDENTIAL GATEWAY COLUMBUS, OH 43231 (614) 882-4949 |

# GEOTECHNICAL PROFILE - NOISE ABATEMENT
# NOISE WALL 11
# BORING LOGS B-024-0-23 AND B-025-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:19:02 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL018.dgn

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1108+00 / 0' | **EXPLORATION ID B-026-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 11
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 979.8 (MSL) EOB: 25.5 ft. | PAGE 1 OF 1
START: 10/31/23 END: 10/31/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090906, -82.833225

| MATERIAL DESCRIPTION AND NOTES | ELEV. 979.8 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' -TOPSOIL (4.0") | 979.5 | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, LIGHT BROWN **SILTY CLAY**, "AND" FINE TO COARSE SAND, LITTLE FINE GRAVEL, DAMP TO MOIST. | | | 4 5 13 | 26 | 67 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 17 | A-6b (V) | |
| | | | 18 18 16 | 49 | 39 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 19 | A-6b (V) | |
| | | | 9 13 15 | 40 | 89 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-6b (V) | |
| | | | 4 4 4 | 12 | 50 | SS-4 | 4.00 | 19 | 24 | 12 | 23 | 22 | 36 | 19 | 17 | 14 | A-6b (4) | |
| | 969.3 | | | | | | | | | | | | | | | | | |
| MEDIUM DENSE TO DENSE, BROWN TO DARK GRAY **GRAVEL WITH SAND AND SILT**, TRACE CLAY, MOIST. | | | 3 4 5 | 13 | 56 | SS-5 | - | - | - | - | - | - | - | - | - | 20 | A-2-4 (V) | |
| | | | 14 15 16 | 45 | 0 | SS-6 | - | - | - | - | - | - | - | - | - | - | | |
| | | | 7 | - | 100 | 2S-6A | - | - | - | - | - | - | - | - | - | 11 | A-2-4 (V) | |
| | | | 14 14 10 | 35 | 72 | SS-7 | - | - | - | - | - | - | - | - | - | 10 | A-2-4 (V) | |
| | 961.8 | | | | | | | | | | | | | | | | | |
| DENSE, GRAY TO BLACK **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, MOIST. | | W 961.3 | 9 9 14 | 33 | 0 | SS-8 | - | - | - | - | - | - | - | - | - | - | | |
| -SHALE FRAGMENTS PRESENT THROUGHOUT | | | 14 | - | 100 | 2S-8A | - | - | - | - | - | - | - | - | - | 14 | A-1-b (V) | |
| | | | 12 15 17 | 46 | 75 | SS-9 | - | 50 | 20 | 11 | 11 | 8 | 24 | 18 | 6 | 10 | A-1-b (0) | |
| | | | 11 14 13 | 39 | 0 | SS-10 | - | - | - | - | - | - | - | - | - | - | | |
| | 954.3 | EOB | 8 | - | 100 | 2S-10A | - | - | - | - | - | - | - | - | - | 15 | A-1-b (V) | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 18.5' AND DRY UPON COMPLETION; CAVE-IN DEPTH @ 13.5'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1110+00 / 0' | **EXPLORATION ID B-027-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 11
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 981.5 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 11/1/23 END: 11/1/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.091062, -82.832539

| MATERIAL DESCRIPTION AND NOTES | ELEV. 981.5 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' -TOPSOIL (3.5") | 981.2 | | | | | | | | | | | | | | | | | |
| HARD, LIGHT BROWN **SILT AND CLAY**, LITTLE COARSE TO FINE SAND, TRACE GRAVEL, DAMP. | | | 7 13 19 | 46 | 61 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-6a (V) | |
| | | | 11 13 15 | 40 | 67 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-6a (V) | |
| | | | 13 16 15 | 45 | 64 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-6a (V) | |
| | | | 8 5 7 | 17 | 61 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-6a (V) | |
| | 971.0 | | | | | | | | | | | | | | | | | |
| LOOSE TO VERY DENSE, GRAY **GRAVEL WITH SAND AND SILT**, TRACE TO LITTLE CLAY, DAMP. | | | 3 3 3 | 9 | 67 | SS-5 | - | - | - | - | - | - | - | - | - | 14 | A-2-4 (V) | |
| | | | 4 4 5 | 13 | 58 | SS-6 | - | 35 | 20 | 14 | 19 | 12 | 29 | 19 | 10 | 14 | A-2-4 (0) | |
| | | | 7 16 18 | 49 | 67 | SS-7 | - | - | - | - | - | - | - | - | - | 8 | A-2-4 (V) | |
| | | | 6 9 12 | 30 | 67 | SS-8 | - | 54 | 20 | 8 | 13 | 5 | 28 | 18 | 10 | 10 | A-2-4 (0) | |
| | | W 960.5 | | | | | | | | | | | | | | | | |
| | | | 12 14 24 | 55 | 78 | SS-9 | - | - | - | - | - | - | - | - | - | 12 | A-2-4 (V) | |
| | 958.5 | TR | | | | | | | | | | | | | | | | |
| **SHALE** : GRAY, HIGHLY WEATHERED. | | | 23 50/5" | - | 27 | SS-10 | - | - | - | - | - | - | - | - | - | 4 | Rock (V) | |
| | 956.5 | EOB | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 21.0' AND DRY UPON COMPLETION; CAVE-IN DEPTH @ 16.1'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| P.277 | 46 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. |
| TOTAL 297 | TOTAL 66 | | | | 8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 825-4949 |

GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 11
BORING LOGS B-026-0-23 AND B-027-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:19:25 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL019.dgn

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1112+00 / 0' | **EXPLORATION ID B-028-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 11
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 982.2 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 11/1/23 END: 11/1/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.091197, -82.831841

| MATERIAL DESCRIPTION AND NOTES | ELEV. 982.2 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' - TOPSOIL (4.0") | 981.9 | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, BROWNISH GRAY TO GRAY **SILT AND CLAY**, SOME COARSE TO FINE SAND, LITTLE FINE GRAVEL, DAMP TO MOIST. | | 1 | 6 8 10 | 26 | 64 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 18 | A-6a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 11 15 18 | 48 | 83 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-6a (V) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 10 11 14 | 36 | 72 | SS-3 | 4.5+ | 17 | 10 | 13 | 31 | 29 | 31 | 17 | 14 | 12 | A-6a (7) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 4 6 10 | 23 | 58 | SS-4 | 3.00 | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| | 971.7 | 10 | | | | | | | | | | | | | | | | |
| MEDIUM DENSE TO DENSE, GRAY TO BROWN **COARSE AND FINE SAND**, SOME SILT, TRACE CLAY, TRACE FINE GRAVEL, DAMP TO MOIST. | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 23 13 15 | 40 | 64 | SS-5 | - | - | - | - | - | - | - | - | - | 14 | A-3a (V) | |
| | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | 5 8 8 | 23 | 100 | SS-6 | - | 1 | 32 | 38 | 22 | 7 | NP | NP | NP | 3 | A-3a (0) | |
| | 966.2 | 15 | | | | | | | | | | | | | | | | |
| **SHALE** : GRAY, HIGHLY WEATHERED. | | 16 TR | 40 50/2" | - | 63 | SS-7 | - | - | - | - | - | - | - | - | - | 4 | Rock (V) | |
| | | 17 | | | | | | | | | | | | | | | | |
| | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | 50/5" | - | 33 | SS-8 | - | - | - | - | - | - | - | - | - | 4 | Rock (V) | |
| | | 20 | | | | | | | | | | | | | | | | |
| | | 21 | 50/2" | - | 0 | SS-9 | - | - | - | - | - | - | - | - | - | - | | |
| | | 22 | | | | | | | | | | | | | | | | |
| | | 23 | | | | | | | | | | | | | | | | |
| | | 24 | 50/0" | - | | SS-10 | - | - | - | - | - | - | - | - | - | - | | |
| | 957.2 | 25 EOB | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING; CAVE-IN DEPTH @ 15.2'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GI\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1114+00 / 0' | **EXPLORATION ID B-029-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 11
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 983.0 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 11/1/23 END: 11/1/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.091321, -82.831138

| MATERIAL DESCRIPTION AND NOTES | ELEV. 983.0 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' - TOPSOIL (4.0") | 982.7 | | | | | | | | | | | | | | | | | |
| HARD TO VERY STIFF, BROWN TO GRAY **SILT AND CLAY**, SOME COARSE TO FINE SAND, LITTLE FINE GRAVEL, DAMP TO MOIST. | | 1 | 3 5 9 | 20 | 53 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 17 | A-6a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 4 6 8 | 20 | 81 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 16 | A-6a (V) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 4 7 10 | 24 | 89 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 4 5 7 | 17 | 61 | SS-4 | 4.5+ | 19 | 11 | 14 | 34 | 22 | 26 | 15 | 11 | 11 | A-6a (5) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 3 3 7 | 14 | 81 | SS-5 | 2.50 | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | | | | | | | | | | | | | | | | |
| | | 15 | 2 3 4 | 10 | 42 | SS-6 | 2.00 | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| | 967.5 | 16 | | | | | | | | | | | | | | | | |
| MEDIUM STIFF TO VERY STIFF, BLACK TO GRAY **SANDY SILT**, SOME CLAY, LITTLE FINE GRAVEL, DAMP TO MOIST. | | 17 | 4 7 9 | 23 | 56 | SS-7 | 3.00 | - | - | - | - | - | - | - | - | 9 | A-4a (V) | |
| | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | | | | | | | | | | | | | | | | |
| | | 20 | 2 2 3 | 7 | 56 | SS-8 | 2.25 | 12 | 15 | 16 | 34 | 23 | 25 | 15 | 10 | 13 | A-4a (4) | |
| | | 21 | | | | | | | | | | | | | | | | |
| | | 22 | 1 1 2 | 4 | 33 | SS-9 | 0.75 | - | - | - | - | - | - | - | - | 14 | A-4a (V) | |
| | 960.0 | 23 | | | | | | | | | | | | | | | | |
| VERY DENSE, DARK GRAY **GRAVEL WITH SAND AND SILT**, TRACE CLAY, MOIST.<br>-SHALE FRAGMENTS IN SS-10 | 958.0 | 24 | 8 19 23 | 60 | 83 | SS-10 | - | - | - | - | - | - | - | - | - | 10 | A-2-4 (V) | |
| | | 25 EOB | | | | | | | | | | | | | | | | |

NOTES: SEEPAGE @ 22.4' - 25.0' AND DRY UPON COMPLETION; CAVE-IN DEPTH @ 13.0'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GI\PROJECTS\2023\W-23-107.GPJ

| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| P.278 | 47 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. |
| TOTAL 297 | TOTAL 66 | | | | 8500 PRESIDENTIAL GATEWAY COLUMBUS, OH 43231 (614) 823-4949 |

# GEOTECHNICAL PROFILE - NOISE ABATEMENT
## NOISE WALL 11
## BORING LOGS B-028-0-23 AND B-029-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:19:47 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL020.dgn

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1115+84 / 0' | **EXPLORATION ID B-030-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 11 | PAGE 1 OF 1
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 983.0 (MSL) EOB: 25.0 ft.
START: 11/1/23 END: 11/1/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.091378, -82.830480

| MATERIAL DESCRIPTION AND NOTES | ELEV. 983.0 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.4' -TOPSOIL (5.0") | 982.6 | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, BROWN TO DARK BROWN TO GRAY **SILT AND CLAY**, SOME COARSE TO FINE SAND, TRACE TO LITTLE FINE GRAVEL, DAMP TO MOIST. | | 1 | 3 6 9 | 22 | 78 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 15 | A-6a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 5 6 8 | 20 | 100 | SS-2 | 4.5+ | 9 | 11 | 15 | 35 | 30 | 30 | 17 | 13 | 15 | A-6a (7) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 4 8 12 | 29 | 94 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 4 5 7 | 17 | 86 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-6a (V) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 2 3 5 | 12 | 39 | SS-5 | 3.25 | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | 2 2 5 | 10 | 50 | SS-6 | 2.00 | 20 | 11 | 14 | 32 | 23 | 27 | 15 | 12 | 14 | A-6a (5) | |
| | | 15 | | | | | | | | | | | | | | | | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 2 4 5 | 13 | 61 | SS-7 | 3.00 | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| | 965.0 | 18 | | | | | | | | | | | | | | | | |
| VERY DENSE, DARK GRAY **GRAVEL WITH SAND AND SILT**, TRACE CLAY, MOIST. | | 19 | 8 20 20 | 58 | 86 | SS-8 | - | - | - | - | - | - | - | - | - | 7 | A-2-4 (V) | |
| | 962.5 | 20 | | | | | | | | | | | | | | | | |
| **SHALE** : GRAY, HIGHLY WEATHERED. | | 21 | 34 50/2" | - | 50 | SS-9 | - | - | - | - | - | - | - | - | - | 5 | Rock (V) | |
| | | 22 | | | | | | | | | | | | | | | | |
| | | 23 | | | | | | | | | | | | | | | | |
| | | 24 | 50/3" | - | 0 | SS-10 | - | - | - | - | - | - | - | - | - | - | Rock (V) | |
| | 958.0 | EOB 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING; CAVE-IN DEPTH @ 22.3'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 900+16 / 0' | **EXPLORATION ID B-031-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 9 | PAGE 1 OF 1
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 974.5 (MSL) EOB: 25.0 ft.
START: 11/16/23 END: 11/16/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090580, -82.836109

| MATERIAL DESCRIPTION AND NOTES | ELEV. 974.5 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.5' -TOPSOIL (5.5") | 974.0 | | | | | | | | | | | | | | | | | |
| HARD, BROWN TO GRAY **SANDY SILT**, SOME CLAY, LITTLE FINE GRAVEL, DAMP TO MOIST. | | 1 | 4 5 7 | 17 | 78 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 19 | A-4a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 18 9 7 | 23 | 0 | SS-2 | - | - | - | - | - | - | - | - | - | - | | |
| | | 5 | 9 | - | 0 | 2S-2A | - | - | - | - | - | - | - | - | - | - | | |
| -COBBLES @ 6.0'-6.5' | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 30 16 12 | 40 | 83 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 10 | A-4a (V) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 13 10 10 | 29 | 78 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-4a (V) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 6 6 7 | 19 | 83 | SS-5 | 4.5+ | 11 | 10 | 16 | 36 | 27 | 25 | 15 | 10 | 12 | A-4a (6) | |
| | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | 6 7 8 | 22 | 0 | SS-6 | - | - | - | - | - | - | - | - | - | - | | |
| | | 15 | 12 | - | 100 | 2S-6A | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-4a (V) | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 4 5 5 | 14 | 75 | SS-7 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-4a (V) | |
| | | 18 | | | | | | | | | | | | | | | | |
| | W 954.7 | 19 | | | | | | | | | | | | | | | | |
| | 954.0 ▽ 954.0 | 20 | 3 4 10 | 20 | 83 | SS-8 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-4a (V) | |
| MEDIUM DENSE, DARK GRAY **GRAVEL WITH SAND**, TRACE SILT, TRACE CLAY, MOIST. | | 21 | | | | | | | | | | | | | | | | |
| -SHALE FRAGMENTS PRESENT THROUGHOUT | | 22 | 4 8 10 | 26 | 78 | SS-9 | - | 39 | 35 | 11 | 9 | 6 | NP | NP | NP | 16 | A-1-b (0) | |
| -1.5' OF HEAVING SANDS @23.5' | | 23 | | | | | | | | | | | | | | | | |
| | | 24 | 8 8 12 | 29 | 92 | SS-10 | - | - | - | - | - | - | - | - | - | 16 | A-1-b (V) | |
| | 949.5 | EOB 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 19.8' AND UPON COMPLETION @ 20.5'; CAVE-IN DEPTH @ 13.8'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| P.279 | 48 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. |
| TOTAL 297 | TOTAL 66 | | | | 8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949 |

# GEOTECHNICAL PROFILE - NOISE ABATEMENT
## NOISE WALLS 11 AND 9
## BORING LOGS B-030-0-23 AND B-031-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:20:08 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL021.dgn

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 902+00 / 0' | **EXPLORATION ID B-032-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 9
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 975.2 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 11/16/23 END: 11/16/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090809, -82.835481

| MATERIAL DESCRIPTION AND NOTES | ELEV. 975.2 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.4' -TOPSOIL (5.0") | 974.8 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SILT AND CLAY**, SOME COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP. | | 1 | 9 14 14 | 40 | 86 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-6a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 8 8 9 | 24 | 61 | SS-2 | 4.5+ | 9 | 10 | 19 | 34 | 28 | 27 | 16 | 11 | 11 | A-6a (6) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | 7 20 14 | 49 | 56 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-6a (V) | |
| | | 7 | | | | | | | | | | | | | | | | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 5 8 9 | 24 | 75 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-6a (V) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | 5 7 8 | 22 | 0 | SS-5 | - | - | - | - | - | - | - | - | - | - | | |
| | | 12 | 12 | - | 67 | 2S-5A | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | 6 8 9 | 24 | 0 | SS-6 | - | - | - | - | - | - | - | - | - | - | | |
| | 959.5 | 15 | 12 | - | 33 | 2S-6A | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| MEDIUM DENSE TO DENSE, GRAY **GRAVEL WITH SAND AND SILT**, LITTLE CLAY, MOIST. | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 4 9 9 | 26 | 53 | SS-7 | - | 41 | 14 | 12 | 21 | 12 | 24 | 16 | 8 | 8 | A-2-4 (0) | |
| W 956.7 | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | 8 10 11 | 30 | 50 | SS-8 | - | - | - | - | - | - | - | - | - | 15 | A-2-4 (V) | |
| ▽ 954.7 | | 20 | | | | | | | | | | | | | | | | |
| | | 21 | 15 22 18 | 58 | 64 | SS-9 | - | - | - | - | - | - | - | - | - | 16 | A-2-4 (V) | |
| | | 22 | | | | | | | | | | | | | | | | |
| | | 23 | | | | | | | | | | | | | | | | |
| | 950.2 | 24 | 5 8 12 | 29 | 67 | SS-10 | - | - | - | - | - | - | - | - | - | 13 | A-2-4 (V) | |
| | EOB | 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 18.5' AND UPON COMPLETION @ 20.5'; CAVE-IN DEPTH @ 15.1'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 904+00 / 0' | **EXPLORATION ID B-033-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 9
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 977.2 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 11/16/23 END: 11/16/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.091043, -82.834836

| MATERIAL DESCRIPTION AND NOTES | ELEV. 977.2 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.4' - TOPSOIL (5.0") | 976.8 | | | | | | | | | | | | | | | | | |
| HARD, BROWN TO GRAY **SANDY SILT**, SOME CLAY, LITTLE FINE GRAVEL, DAMP. | | 1 | 7 12 14 | 37 | 67 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-4a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 10 10 10 | 29 | 81 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-4a (V) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 8 20 14 | 49 | 47 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-4a (V) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 6 9 10 | 27 | 83 | SS-4 | 4.5+ | 12 | 9 | 16 | 39 | 24 | 25 | 15 | 10 | 11 | A-4a (6) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | 6 7 8 | 22 | 78 | SS-5 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-4a (V) | |
| | 964.2 | 12 | | | | | | | | | | | | | | | | |
| DENSE, GRAY TO BLACK **GRAVEL**, SOME FINE TO COARSE SAND, LITTLE SILT, MOIST. -LIMESTONE FRAGMENTS IN SS-6 | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | 7 13 12 | 36 | 56 | SS-6 | - | - | - | - | - | - | - | - | - | 4 | A-1-a (V) | |
| | 959.2 | 15 | | | | | | | | | | | | | | | | |
| MEDIUM DENSE TO DENSE, DARK GRAY **GRAVEL WITH SAND AND SILT**, TRACE CLAY, MOIST. | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 8 12 11 | 33 | 72 | SS-7 | - | 59 | 21 | 9 | - | 11 - | NP | NP | NP | 7 | A-1-a (0) | |
| W 958.7 | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | 9 13 12 | 36 | 64 | SS-8 | - | - | - | - | - | - | - | - | - | 12 | A-2-4 (V) | |
| -SHALE FRAGMENTS PRESENT THROUGHOUT | | 20 | | | | | | | | | | | | | | | | |
| ▽ 956.7 | | 21 | | | | | | | | | | | | | | | | |
| | | 22 | 17 15 15 | 43 | 44 | SS-9 | - | - | - | - | - | - | - | - | - | 12 | A-2-4 (V) | |
| | | 23 | | | | | | | | | | | | | | | | |
| | 952.2 | 24 | 12 10 10 | 29 | 59 | SS-10 | - | - | - | - | - | - | - | - | - | 18 | A-2-4 (V) | |
| | EOB | 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 18.5' AND UPON COMPLETION @ 20.5'; CAVE-IN DEPTH @ 14.5'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| P.280 TOTAL 297 | 49 TOTAL 66 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. 8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43240 (614) 825-4949 |

# GEOTECHNICAL PROFILE - NOISE ABATEMENT
# NOISE WALL 9
# BORING LOGS B-032-0-23 AND B-033-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:20:31 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL022.dgn

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 906+00 / 0' | **EXPLORATION ID B-034-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 9
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 979.3 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 11/16/23 END: 11/16/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.091273, -82.834170

| MATERIAL DESCRIPTION AND NOTES | ELEV. 979.3 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.4 - TOPSOIL (5.0") | 978.9 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SILT AND CLAY**, LITTLE GRAVEL AND SAND, DAMP. | | 1 | 6 10 13 | 33 | 92 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-6a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 7 8 10 | 26 | 75 | SS-2 | 4.5+ | 11 | 10 | 15 | 38 | 26 | 30 | 18 | 12 | 14 | A-6a (7) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | 10 12 14 | 37 | 89 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 17 | A-6a (V) | |
| | | 7 | | | | | | | | | | | | | | | | |
| | | 8 | | | | | | | | | | | | | | | | |
| -ROOT FIBERS IN SS-4 | | 9 | 9 10 10 | 29 | 36 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 15 | A-6a (V) | |
| | 968.8 | 10 | | | | | | | | | | | | | | | | |
| DENSE TO VERY DENSE, GRAY **GRAVEL**, LITTLE COARSE TO FINE SAND, TRACE SILT, DAMP. | | 11 | 7 15 20 | 50 | 0 | SS-5 | - | - | - | - | - | - | - | - | - | - | | |
| | | 12 | | | | | | | | | | | | | | | | |
| | | 13 | 18 | - | 100 | 2S-5A | - | - | - | - | - | - | - | - | - | 6 | A-1-a (V) | |
| | | 14 | 20 14 18 | 46 | 69 | SS-6 | - | 74 | 10 | 6 | - 10 - | | NP | NP | NP | 4 | A-1-a (0) | |
| | | 15 | | | | | | | | | | | | | | | | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 10 10 11 | 30 | 72 | SS-7 | - | - | - | - | - | - | - | - | - | 6 | A-1-a (V) | |
| | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | 12 14 10 | 35 | 39 | SS-8 | - | - | - | - | - | - | - | - | - | 6 | A-1-a (V) | |
| | 958.8 | 20 | | | | | | | | | | | | | | | | |
| MEDIUM DENSE TO VERY DENSE, BLACK **GRAVEL WITH SAND AND SILT**, MOIST. | | W 958.3 | | | | | | | | | | | | | | | | |
| | | 21 | | | | | | | | | | | | | | | | |
| -SHALE FRAGMENTS PRESENT THROUGHOUT | | 22 | 6 7 10 | 24 | 75 | SS-9 | - | - | - | - | - | - | - | - | - | 16 | A-2-4 (V) | |
| | | 23 | | | | | | | | | | | | | | | | |
| | | 24 | 8 11 42 | 76 | 69 | SS-10 | - | - | - | - | - | - | - | - | - | 11 | A-2-4 (V) | |
| | 954.3 | EOB 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 21.0' AND DRY UPON COMPLETION; CAVE-IN DEPTH @ 14.0'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 908+00 / 0' | **EXPLORATION ID B-035-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 9
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 981.4 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 11/15/23 END: 11/15/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.091443, -82.833496

| MATERIAL DESCRIPTION AND NOTES | ELEV. 981.4 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.4' - TOPSOIL (5.0") | 981.0 | | | | | | | | | | | | | | | | | |
| HARD, BROWN TO GRAY **SILTY CLAY**, SOME COARSE TO FINE SAND, LITTLE FINE GRAVEL, DAMP. | | 1 | 7 9 12 | 30 | 36 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 17 | A-6b (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 10 15 17 | 46 | 83 | SS-2 | 4.5+ | 13 | 8 | 13 | 38 | 28 | 34 | 18 | 16 | 12 | A-6b (9) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 13 18 20 | 55 | 39 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-6b (V) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 6 12 14 | 37 | 89 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-6b (V) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | | | | | | | | | | | | | | | | |
| -CHERT FRAGMENTS IN SS-5 | | 12 | 8 9 9 | 26 | 47 | SS-5 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-6b (V) | |
| | 968.4 | 13 | | | | | | | | | | | | | | | | |
| MEDIUM DENSE, BROWN TO BLACK **GRAVEL WITH SAND AND SILT**, TRACE CLAY, DAMP. | | 14 | 6 7 6 | 19 | 83 | SS-6 | - | - | - | - | - | - | - | - | - | 16 | A-2-4 (V) | |
| -SHALE FRAGMENTS IN SS-6 | 965.9 | 15 | | | | | | | | | | | | | | | | |
| DENSE, GRAY **COARSE AND FINE SAND**, LITTLE GRAVEL, TRACE SILT, DAMP. | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 7 13 18 | 45 | 42 | SS-7 | - | - | - | - | - | - | - | - | - | 5 | A-3a (V) | |
| | 963.4 | 18 | | | | | | | | | | | | | | | | |
| DENSE TO VERY DENSE, DARK GRAY **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, MOIST. | | W 961.7 | | | | | | | | | | | | | | | | |
| | | 19 | 10 14 18 | 46 | 69 | SS-8 | - | 57 | 17 | 9 | 15 | 2 | NP | NP | NP | 8 | A-1-b (0) | |
| | | 20 | | | | | | | | | | | | | | | | |
| | | 21 | | | | | | | | | | | | | | | | |
| | | 22 | 5 11 12 | 33 | 64 | SS-9 | - | - | - | - | - | - | - | - | - | 12 | A-1-b (V) | |
| | | 23 | | | | | | | | | | | | | | | | |
| | | 24 | 18 24 20 | 63 | 50 | SS-10 | - | - | - | - | - | - | - | - | - | 13 | A-1-b (V) | |
| | 956.4 | EOB 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 19.7' AND DRY UPON COMPLETION; CAVE-IN DEPTH @ 14.3'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:56 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

| SHEET | TOTAL | SUBSET | TOTAL | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|---|---|
| P.281 | 297 | 50 | 66 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. 6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949 |

# GEOTECHNICAL PROFILE - NOISE ABATEMENT
# NOISE WALL 9
# BORING LOGS B-034-0-23 AND B-035-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:20:53 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL023.dgn

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 910+00 / 0' | **EXPLORATION ID B-036-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 9
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 983.2 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 11/15/23 END: 11/15/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.091597, -82.832807

| MATERIAL DESCRIPTION AND NOTES | ELEV. 983.2 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.4' -TOPSOIL (4.5") | 982.8 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SILT AND CLAY**, LITTLE COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP TO MOIST. | | 1 | 9 10 11 | 30 | 0 | SS-1 | - | - | - | - | - | - | - | - | - | - | | |
| | | 2 | 12 | - | 100 | 2S-1A | 4.5+ | - | - | - | - | - | - | - | - | 20 | A-6a (V) | |
| | | 3 | 6 6 11 | 24 | 72 | SS-2 | 4.25 | - | - | - | - | - | - | - | - | 23 | A-6a (V) | |
| | | 4 | | | | | | | | | | | | | | | | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | 9 9 9 | 26 | 83 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 16 | A-6a (V) | |
| | | 7 | | | | | | | | | | | | | | | | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 6 7 7 | 20 | 100 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 17 | A-6a (V) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | 6 7 7 | 20 | 36 | SS-5 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| | 970.2 | 12 | | | | | | | | | | | | | | | | |
| SOFT, DARK BROWN **SILTY CLAY**, SOME FINE TO COARSE SAND, SOME FINE GRAVEL, DAMP. | | 13 | 5 7 8 | 22 | 39 | SS-6 | - | 33 | 15 | 13 | 29 | 10 | 38 | 21 | 17 | 12 | A-6b (2) | |
| | | 14 | | | | | | | | | | | | | | | | |
| | | 15 | | | | | | | | | | | | | | | | |
| | | 16 | 10 10 17 | 39 | 0 | SS-7 | - | - | - | - | - | - | - | - | - | - | | |
| | | 17 | 20 | - | 67 | 2S-7A | - | - | - | - | - | - | - | - | - | 11 | A-6b (V) | |
| | 964.7 | 18 | | | | | | | | | | | | | | | | |
| DENSE, DARK GRAY **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, MOIST. | | 19 | 11 13 12 | 36 | 69 | SS-8 | - | 31 | 31 | 16 | 20 | 2 | 23 | 17 | 6 | 11 | A-1-b (0) | |
| | 962.7 | 20 | | | | | | | | | | | | | | | | |
| DENSE TO VERY DENSE, GRAY **GRAVEL WITH SAND, SILT, AND CLAY**, WET. | | W 962.2 21 | 10 18 35 | 76 | 0 | SS-9 | - | - | - | - | - | - | - | - | - | - | | |
| | | 22 | 12 | - | 100 | 2S-9A | - | - | - | - | - | - | - | - | - | 23 | A-2-6 (V) | |
| | | 23 | | | | | | | | | | | | | | | | |
| | | 24 | 10 17 17 | 49 | 33 | SS-10 | - | - | - | - | - | - | - | - | - | 20 | A-2-6 (V) | |
| | 958.2 | EOB 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 21.0' AND DRY UPON COMPLETION; CAVE-IN DEPTH @ 14.3'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 912+00 / 0' | **EXPLORATION ID B-037-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 9
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 984.9 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 11/15/23 END: 11/15/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.091724, -82.832101

| MATERIAL DESCRIPTION AND NOTES | ELEV. 984.9 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.4' - TOPSOIL (5.0") | 984.5 | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, LIGHT BROWN **SILTY CLAY**, SOME COARSE TO FINE SAND, TRACE FINE GRAVEL, MOIST. | | 1 | 5 7 9 | 23 | 50 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 19 | A-6b (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | 4 5 7 | 17 | 100 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 20 | A-6b (V) | |
| | | 4 | | | | | | | | | | | | | | | | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | 4 5 9 | 20 | 72 | SS-3 | 4.5+ | 9 | 8 | 13 | 40 | 30 | 37 | 18 | 19 | 16 | A-6b (11) | |
| | | 7 | | | | | | | | | | | | | | | | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 5 6 5 | 16 | 94 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 19 | A-6b (V) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | | 11 | 4 4 5 | 13 | 61 | SS-5 | 3.50 | - | - | - | - | - | - | - | - | 18 | A-6b (V) | |
| | 971.9 | 12 | | | | | | | | | | | | | | | | |
| MEDIUM DENSE TO DENSE, BROWN **SANDY SILT**, SOME CLAY AND GRAVEL, MOIST TO DAMP. | | 13 | 4 7 7 | 20 | 53 | SS-6 | - | - | - | - | - | - | - | - | - | 17 | A-4a (V) | |
| | | 14 | | | | | | | | | | | | | | | | |
| | | 15 | | | | | | | | | | | | | | | | |
| | | 16 | 3 9 13 | 32 | 0 | SS-7 | - | - | - | - | - | - | - | - | - | - | | |
| | 966.7 | 17 | 16 | - | 75 | SS-7A | - | 28 | 16 | 12 | 33 | 11 | 28 | 19 | 9 | 13 | A-4a (2) | |
| DENSE, GRAY **GRAVEL WITH SAND**, TRACE SILT, MOIST. | | ▽ 966.7 18 | | | | | | | | | | | | | | | | |
| | | W 965.1 19 | 13 16 16 | 46 | 100 | SS-8 | - | - | - | - | - | - | - | - | - | 9 | A-1-b (V) | |
| | 964.4 | 20 | | | | | | | | | | | | | | | | |
| DENSE, DARK GRAY **GRAVEL WITH SAND AND SILT**, TRACE CLAY, MOIST. | | 21 | 9 14 15 | 42 | 0 | SS-9 | - | - | - | - | - | - | - | - | - | - | | |
| | | 22 | 14 | - | 100 | SS-9A | - | - | - | - | - | - | - | - | - | 16 | A-2-4 (V) | |
| | | 23 | | | | | | | | | | | | | | | | |
| | | 24 | 12 12 15 | 39 | 61 | SS-10 | - | - | - | - | - | - | - | - | - | 13 | A-2-4 (V) | |
| | 959.9 | EOB 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER INTIALLY ENCOUNTERED @ 19.8' AND UPON COMPLETION @ 18.2'; CAVE-IN DEPTH @ 19.0'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

| SHEET | TOTAL | SUBSET | TOTAL | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|---|---|
| P.282 | 297 | 51 | 66 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. 8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949 |

# GEOTECHNICAL PROFILE - NOISE ABATEMENT
## NOISE WALL 9
## BORING LOGS B-036-0-23 AND B-037-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:21:15 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL024.dgn

**RESOURCE INTERNATIONAL, INC.**

| | | | | |
|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 120+00 / 0' | EXPLORATION ID B-038-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 12 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 979.3 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1 |
| START: 12/5/23 END: 12/5/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.091445, -82.828386 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 979.3 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' - ASPHALT (3.0") | 979.0 | | | | | | | | | | | | | | | | | |
| 0.5' - CONCRETE (6.5") | 978.5 | | | | | | | | | | | | | | | | | |
| 0.3' - AGGREGATE BASE (3.5") | 978.2 | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, BROWN TO GRAY **SILTY CLAY**, LITTLE COARSE TO FINE SAND, TRACE FINE GRAVEL, MOIST. | | 1 | 6 7 7 | 20 | 0 | SS-1 | - | - | - | - | - | - | - | - | - | - | | |
| | | 2 | 9 | - | 67 | 2S-1A | 4.5+ | - | - | - | - | - | - | - | - | 15 | A-6b (V) | |
| | | 3 | 7 10 20 | 43 | 50 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-6b (V) | |
| | | 4 | | | | | | | | | | | | | | | | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | 6 6 9 | 22 | 0 | SS-3 | - | - | - | - | - | - | - | - | - | - | | |
| | | 7 | 14 | - | 100 | 2S-3A | 4.5+ | 17 | 9 | 10 | 32 | 32 | 39 | 18 | 21 | 14 | A-6b (10) | |
| | | 8 | 5 6 9 | 22 | 33 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-6b (V) | |
| | 966.3 | 9 | | | | | | | | | | | | | | | | |
| LOOSE TO MEDIUM DENSE, BROWN **SANDY SILT**, SOME FINE GRAVEL, LITTLE CLAY, MOIST. | | 10 | 4 5 5 | 14 | 81 | SS-5 | 4.00 | - | - | - | - | - | - | - | - | 20 | A-6b (V) | |
| | 963.8 | 11 | | | | | | | | | | | | | | | | |
| LOOSE TO MEDIUM DENSE, GRAY **GRAVEL WITH SAND AND SILT**, TRACE CLAY, MOIST. | | 12 | 7 13 20 | 48 | 50 | SS-6 | - | - | - | - | - | - | - | - | - | 9 | A-4a (V) | |
| | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | | | | | | | | | | | | | | | | |
| | | 15 | 14 15 10 | 36 | 39 | SS-7 | 4.5+ | 50 | 13 | 7 | 22 | 8 | 26 | 21 | 5 | 8 | A-2-4 (0) | |
| | 958.8 | 16 | | | | | | | | | | | | | | | | |
| VERY STIFF, BROWN **SILT AND CLAY**, LITTLE COARSE TO FINE SAND, TRACE FINE GRAVEL, MOIST. | | 17 | 9 18 5 | 33 | 81 | SS-8 | - | - | - | - | - | - | - | - | - | 18 | A-2-4 (V) | |
| | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | | | | | | | | | | | | | | | | |
| | | 20 | 5 6 8 | 20 | 56 | SS-9 | - | - | - | - | - | - | - | - | - | 23 | A-2-4 (V) | |
| | 956.3 | 21 | | | | | | | | | | | | | | | | |
| **SHALE** : BLACK, HIGHLY WEATHERED. | | 22 | TR | | | | | | | | | | | | | | | |
| | 954.3 | 23 | | | | | | | | | | | | | | | | |
| | | 24 | 14 11 11 | 32 | 72 | SS-10 | - | - | - | - | - | - | - | - | - | - | Rock (V) | |
| | | 25 | EOB | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING; CAVE-IN DEPTH @ 14.3'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. PAVEMENT PATCHED WITH COLD PATCH ASPHALT. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

| | | | | | | |
|---|---|---|---|---|---|---|
| SHEET P. 283 | SUBSET 52 | PROJECT ID 117607 | REVIEWER DEK 1/19/24 | DESIGNER JAS | 8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949 | DESIGN AGENCY RESOURCE INTERNATIONAL, INC. |
| TOTAL 297 | TOTAL 66 | | | | | |

GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 12
BORING LOGS B-038-0-23

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 121+41.21 / 0' | EXPLORATION ID B-039-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 12 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 986.4 (MSL) EOB: 20.0 ft. | PAGE 1 OF 1 |
| START: 12/4/23 END: 12/4/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.091317, -82.827731 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 986.4 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.5' -TOPSOIL (5.5") | 985.9 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **CLAY**, LITTLE COARSE TO FINE SAND, TRACE FINE GRAVEL, MOIST. | | 1 | 7 5 6 | 16 | 0 | SS-1 | - | - | - | - | - | - | - | - | - | - | | |
| | | 2 | 9 | - | 100 | 2S-1A | 4.5+ | - | - | - | - | - | - | - | - | 19 | A-7-6 (V) | |
| | | 3 | 4 6 7 | 19 | 0 | SS-2 | - | - | - | - | - | - | - | - | - | - | | |
| | | 4 | 10 | - | 50 | 2S-2A | 4.5+ | - | - | - | - | - | - | - | - | 18 | A-7-6 (V) | |
| | | 5 | 8 8 6 | 20 | 81 | SS-3 | 4.5+ | 28 | 9 | 7 | 25 | 31 | 50 | 20 | 30 | 16 | A-7-6 (13) | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | | | | | | | | | | | | | | | | |
| | | 8 | 9 9 10 | 27 | 75 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-7-6 (V) | |
| | 975.9 | 9 | | | | | | | | | | | | | | | | |
| **SHALE** : GRAY, HIGHLY WEATHERED. | | TR 10 | 10/0" | - | | SS-5 | - | - | - | - | - | - | - | - | - | - | Rock (V) | |
| | 972.4 | | 50/4" | - | 0 | SS-6 | - | - | - | - | - | - | - | - | - | - | Rock (V) | |
| **SHALE** : GRAY, MODERATELY WEATHERED, WEAK, VERY FINE GRAINED, LAMINATED, FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, DISTURBED, SEAMY, POOR SURFACE. | | 11 | 0 | | 0 | NQ2-1 | | | | | | | | | | | CORE | |
| | | 12 | | | | | | | | | | | | | | | | |
| | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | | | | | | | | | | | | | | | | |
| | | 15 | | | | | | | | | | | | | | | | |
| | | 16 | | | | | | | | | | | | | | | | |
| | | 17 | 43 | | 100 | NQ2-2 | | | | | | | | | | | CORE | |
| | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | | | | | | | | | | | | | | | | |
| | 966.4 | EOB 20 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER; CAVE-IN DEPTH @ 11.2'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 47 LBS CEMENT, 25 LBS BENTONITE POWDER AND 40 GAL WATER .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

**Project Name:** FRA-161-15.80

**Location:**
Franklin County, Ohio

**Photo No.**
**8**




**Boring:**
B-039-0-23

RC-1: 14.0-15.0'
REC (%):0
RQD (%):0

RC-2: 15.0-20.0'
REC (%):100
RQD (%):43



GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 12
BORING LOG & ROCK CORE PHOTO FOR B-039-0-23

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 123+26.79 / 0' | EXPLORATION ID B-040-0-23 | |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 12 | | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 987.0 (MSL) EOB: 21.0 ft. | PAGE 1 OF 1 | |
| START: 12/4/23 END: 12/4/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.091207, -82.827079 | | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 987.0 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.4' -TOPSOIL (5.0") | 986.6 | | | | | | | | | | | | | | | | | |
| HARD, BROWN TO GRAY **SILT AND CLAY**, LITTLE TO TRACE SAND AND GRAVEL, DAMP TO MOIST. | | 1 | 3 6 8 | 20 | 72 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 17 | A-6a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | 6 7 9 | 23 | 69 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 20 | A-6a (V) | |
| | | 4 | | | | | | | | | | | | | | | | |
| | | 5 | 4 6 8 | 20 | 81 | SS-3 | 4.5+ | 7 | 9 | 15 | 37 | 32 | 33 | 18 | 15 | 18 | A-6a (9) | |
| | | 6 | | | | | | | | | | | | | | | | |
| | | 7 | 4 6 8 | 20 | 47 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 18 | A-6a (V) | |
| | | 8 | | | | | | | | | | | | | | | | |
| | 976.5 | TR | | | | | | | | | | | | | | | | |
| **SHALE** : GRAY, HIGHLY WEATHERED. | | 9 | 8 15 50/3" | - | 87 | SS-5 | - | - | - | - | - | - | - | - | - | 10 | Rock (V) | |
| | 973.0 | 10 | 50/3" | - | 60 | SS-6 | - | - | - | - | - | - | - | - | - | 2 | Rock (V) | |
| **SANDSTONE** : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATELY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, GOOD SURFACE.<br>-@14.3' IRON STAINING IN FRACTURE<br>-@15.0' - 15.2' ZONE OF FRACTURES<br>-@15.7' CLAY SEAM | 971.0 | 11 | 0 | | 37 | NQ2-1 | | | | | | | | | | | CORE | |
| **SHALE** : GRAY, MODERATELY WEATHERED, WEAK, FINE GRAINED, LAMINATED, FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, DISTURBED, SEAMY, POOR SURFACE. | 967.7 | 12 | 0 | | 100 | NQ2-2 | | | | | | | | | | | CORE | |
| **SILTSTONE** : GRAY, SLIGHTLY WEATHERED, MODERATELY STRONG, VERY FINE GRAINED, VERY THIN, HIGHLY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, DISTURBED, SEAMY, FAIR SURFACE. | 966.0 | 13 EOB | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 94 LBS CEMENT / 25 LBS BENTONITE POWDER / 40 GAL WATER. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**Project Name:** FRA-161-15.80

**Location:**
Franklin County, Ohio

**Photo No.**
**9**




**Boring:**
B-040-0-23

RC-1: 14.0-16.0'
REC (%):37
RQD (%):0

RC-2: 16.0-21.0'
REC (%):100
RQD (%):0

| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| P. 285 TOTAL 297 | 54 TOTAL 66 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. 6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949 |

GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 12
BORING LOG & ROCK CORE PHOTO FOR B-040-0-23

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 124+97.00 / 0' | EXPLORATION ID B-041-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 12 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 988.2 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1 |
| START: 12/4/23 END: 12/4/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.091033, -82.826474 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 988.2 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.5' -TOPSOIL (5.5") | 987.7 | | | | | | | | | | | | | | | | | |
| VERY STIFF, BROWN **SILTY CLAY**, SOME TO LITTLE SAND, LITTLE GRAVEL, MOIST. | | 1–5 | 4 5 7 | 17 | 64 | SS-1 | 3.50 | - | - | - | - | - | - | - | - | 16 | A-6a (V) | |
| | | | 5 5 10 | 22 | 67 | SS-2 | 3.00 | 6 | 12 | 19 | 34 | 29 | 30 | 17 | 13 | 15 | A-6a (7) | |
| | 982.7 | | | | | | | | | | | | | | | | | |
| VERY DENSE, GRAY **GRAVEL WITH SAND AND SILT**, TRACE CLAY, MOIST. | | 6–7 | 13 32 35 | 96 | 69 | SS-3 | - | - | - | - | - | - | - | - | - | 8 | A-2-4 (V) | |
| | 980.2 | TR 8 | | | | | | | | | | | | | | | | |
| **SHALE** : GRAY, HIGHLY WEATHERED. | | 9–10 | 10 21 29 | 72 | 89 | SS-4 | - | - | - | - | - | - | - | - | - | 7 | Rock (V) | |
| | | 11 | 50/6" | - | 100 | SS-5 | - | - | - | - | - | - | - | - | - | 6 | Rock (V) | |
| | | 14 | 36 50/5" | - | 100 | SS-6 | - | - | - | - | - | - | - | - | - | 4 | Rock (V) | |
| | 972.2 | | | | | | | | | | | | | | | | | |
| **SHALE** : GRAY, MODERATELY TO SLIGHTLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO THIN BEDDED, FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACES, BLOCKY, DISTURBED, SEAMY, POOR TO GOOD SURFACE.<br>-0.3' CLAYSTONE SEAM @ 16.0'<br>-@17.4' CLAY SEAM<br>-@18.0' CLAY SEAM<br><br>-SILTSTONE SEAM @ 21.4'-23.0' | | 16–18 | 20 | | 68 | NQ2-1 | | | | | | | | | | | CORE | |
| | | 20–23 | 40 | | 100 | NQ2-2 | | | | | | | | | | | CORE | |
| | 963.2 | EOB 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER; CAVE-IN DEPTH @ 12.1'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 94 LBS CEMENT / 25 LBS BENTONITE POWDER / 40 GAL WATER. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**Project Name:** FRA-161-15.80

**Location:**
Franklin County, Ohio

**Photo No.**
**10**




**Boring:**
B-041-0-23

RC-1: 16.0-20.0'
REC (%):68
RQD (%):20

RC-2: 20.0-25.0'
REC (%):100
RQD (%):40



GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 12
BORING LOG & ROCK CORE PHOTO FOR B-041-0-23

**RESOURCE INTERNATIONAL, INC.**

| | | | | |
|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1500+29 / 0' | EXPLORATION ID B-042-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 15 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 1030.3 (MSL) EOB: 24.0 ft. | PAGE 1 OF 1 |
| START: 11/9/23 END: 11/9/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090577, -82.811738 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 1030.3 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.6' -TOPSOIL (6.5") | 1029.7 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SILT AND CLAY**, SOME COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP TO MOIST. | | 1 | 3 8 8 | 23 | 44 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 14 14 13 | 39 | 0 | SS-2 | - | - | - | - | - | - | - | - | - | - | | |
| | | 5 | 17 | - | 100 | 2S-2A | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| | | 6 | 4 5 6 | 16 | 58 | SS-3 | 4.5+ | 9 | 11 | 16 | 37 | 27 | 27 | 16 | 11 | 15 | A-6a (6) | |
| | | 7 | | | | | | | | | | | | | | | | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 4 8 8 | 23 | 58 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-6a (V) | |
| | | 10 | | | | | | | | | | | | | | | | |
| | 1019.3 | TR 11 | | | | | | | | | | | | | | | | |
| **SANDSTONE** : GRAY, HIGHLY WEATHERED. | | 12 | 40 42 50/2" | - | 100 | SS-5 | - | - | - | - | - | - | - | - | - | 6 | Rock (V) | |
| | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | 50/0" | - | | SS-6 | - | - | - | - | - | - | - | - | - | - | Rock (V) | |
| | | 15 | | | | | | | | | | | | | | | | |
| | | 16 | 50/3" | - | 67 | SS-7 | - | - | - | - | - | - | - | - | - | 5 | Rock (V) | |
| | 1012.3 | 17 | | | | | | | | | | | | | | | | |
| **SANDSTONE** : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATLY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACES, BLOCKY, GOOD SURFACE. | | 18 | 58 | | 75 | NQ2-1 | | | | | | | | | | | CORE | |
| | | 19 | | | | | | | | | | | | | | | | |
| | | 20 | | | | | | | | | | | | | | | | |
| | | 21 | | | | | | | | | | | | | | | | |
| | | 22 | 68 | | 92 | NQ2-2 | | | | | | | | | | | CORE | |
| | | 23 | | | | | | | | | | | | | | | | |
| | 1006.3 | EOB 24 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER; CAVE-IN DEPTH @ 16.9'

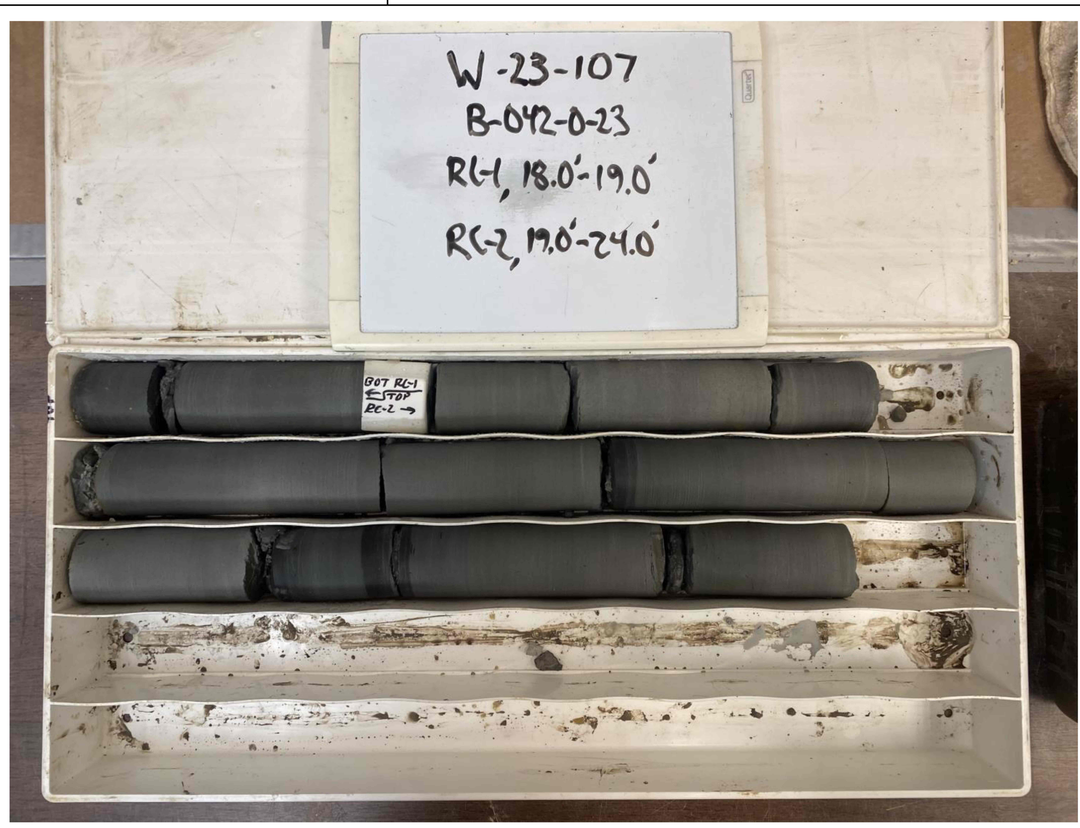
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 47 LBS CEMENT, 25 LBS BENTONITE POWDER AND 40 GAL WATER .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**Project Name:** FRA-161-15.80

**Location:**
Franklin County, Ohio

**Photo No.**
**11**




**Boring:**
B-042-0-23

RC-1: 18.0-19.0'
REC (%):75
RQD (%):58

RC-2: 19.0-24.0'
REC (%):92
RQD (%):68

| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| P. 287 TOTAL 297 | 56 TOTAL 66 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. 6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949 |

# GEOTECHNICAL PROFILE - NOISE ABATEMENT
# NOISE WALL 15
# BORING LOG & ROCK CORE PHOTO FOR B-042-0-23

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1502+16 / 0' | EXPLORATION ID B-043-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 15 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 1035.0 (MSL) EOB: 24.5 ft. | PAGE 1 OF 1 |
| START: 11/9/23 END: 11/9/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090545, -82.811039 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 1035.0 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.5' -TOPSOIL (5.5") | 1034.5 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SANDY SILT**, SOME COARSE TO FINE SAND, LITTLE FINE GRAVEL, MOIST TO DAMP. | | | 3 5 9 | 20 | 72 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-4a (V) | |
| | | | 7 8 8 | 23 | 72 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 15 | A-4a (V) | |
| | | | 3 5 8 | 19 | 100 | SS-3 | 4.5+ | 14 | 11 | 14 | 34 | 27 | 27 | 17 | 10 | 16 | A-4a (5) | |
| | | | 4 5 14 | 27 | 61 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-4a (V) | |
| | 1024.5 | TR | | | | | | | | | | | | | | | | |
| **SANDSTONE** : GRAY, HIGHLY WEATHERED. | | | 20 50/5" | - | 55 | SS-5 | - | - | - | - | - | - | - | - | - | 6 | Rock (V) | |
| | | | 20 30 35 | 94 | 67 | SS-6 | - | - | - | - | - | - | - | - | - | 12 | Rock (V) | |
| | | | 50/4" | - | 38 | SS-7 | - | - | - | - | - | - | - | - | - | 6 | Rock (V) | |
| | 1016.5 | | | | | | | | | | | | | | | | | |
| **SANDSTONE** : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATELY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, GOOD SURFACE. | | | 0 | | 75 | NQ2-1 | | | | | | | | | | | CORE | |
| | 1013.4 | | | | | | | | | | | | | | | | | |
| **SHALE** : GRAY, MODERATELY WEATHERED, WEAK, FINE GRAINED, LAMINATED, FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, DISTURBED, SEAMY, POOR SURFACE. | 1012.5 | | 33 | | 68 | NQ2-2 | | | | | | | | | | | CORE | |
| **SANDSTONE** : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATELY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, GOOD SURFACE. | 1010.5 | EOB | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER; CAVE-IN DEPTH @ 15.2'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 47 LBS CEMENT, 25 LBS BENTONITE POWDER AND 40 GAL WATER .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**Project Name:** FRA-161-15.80

**Location:**
Franklin County, Ohio

**Photo No.**
**12**




**Boring:**
B-043-0-23

RC-1: 18.5-19.5'
REC (%):75
RQD (%):0

RC-2: 19.5-24.5'
REC (%):68
RQD (%):33

| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| P. 288 TOTAL 297 | 57 TOTAL 66 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. 6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949 |

GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 15
BORING LOG & ROCK CORE PHOTO FOR B-043-0-23

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:23:08 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL030.dgn

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1504+27 / 0' | **EXPLORATION ID B-044-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 15
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 1038.3 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 11/14/23 END: 11/14/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090479, -82.810313

| MATERIAL DESCRIPTION AND NOTES | ELEV. 1038.3 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' -TOPSOIL (4.0") | 1038.0 | | | | | | | | | | | | | | | | | |
| HARD, LIGHT BROWN **SILT AND CLAY**, SOME COARSE TO FINE SAND, LITTLE FINE GRAVEL, DAMP TO MOIST. | | | 4 7 6 | 19 | 67 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 15 | A-6a (V) | |
| | | | 12 13 13 | 37 | 33 | SS-2 | - | - | - | - | - | - | - | - | - | 9 | A-6a (V) | |
| | | | 10 12 12 | 35 | 100 | SS-3 | 4.5+ | 15 | 10 | 14 | 39 | 22 | 30 | 17 | 13 | 14 | A-6a (6) | |
| | | | 8 9 13 | 32 | 67 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| | | | 6 10 9 | 27 | 72 | SS-5 | 4.5+ | - | - | - | - | - | - | - | - | 11 | A-6a (V) | |
| | 1025.3 | TR | | | | | | | | | | | | | | | | |
| **SANDSTONE** : GRAY, HIGHLY WEATHERED. | | | 50/4" | - | 63 | SS-6 | - | - | - | - | - | - | - | - | - | 7 | Rock (V) | |
| | | | 38 50/4" | - | 84 | SS-7 | - | - | - | - | - | - | - | - | - | 10 | Rock (V) | |
| | | | 50/6" | - | 100 | SS-8 | - | - | - | - | - | - | - | - | - | 5 | Rock (V) | |
| | | | 50/6" | - | 100 | SS-9 | - | - | - | - | - | - | - | - | - | 5 | Rock (V) | |
| | | | 50/5" | - | 100 | SS-10 | - | - | - | - | - | - | - | - | - | 5 | Rock (V) | |
| | 1013.3 | EOB | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING; CAVE-IN DEPTH @ 12.8'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

**RESOURCE INTERNATIONAL, INC.**

PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1506+08 / 0' | **EXPLORATION ID B-045-0-23**
TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 15
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 1038.9 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 11/14/23 END: 11/14/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090452, -82.809651

| MATERIAL DESCRIPTION AND NOTES | ELEV. 1038.9 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' -TOPSOIL (4.0") | 1038.6 | | | | | | | | | | | | | | | | | |
| HARD, LIGHT BROWN TO BROWN **CLAY**, "AND" SILT, TRACE COARSE TO FINE SAND, DAMP. | | | 5 5 6 | 16 | 56 | SS-1 | 4.5+ | 0 | 3 | 8 | 51 | 38 | 48 | 20 | 28 | 17 | A-7-6 (17) | |
| | | | 9 10 12 | 32 | 50 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-7-6 (V) | |
| | | | 10 13 13 | 37 | 100 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-7-6 (V) | |
| | 1030.9 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SILT AND CLAY**, SOME COARSE TO FINE SAND, LITTLE FINE GRAVEL, MOIST. | | | 8 12 13 | 36 | 83 | SS-4 | - | 11 | 13 | 16 | 7 | 53 | 28 | 17 | 11 | 12 | A-6a (5) | |
| | | | 4 6 15 | 30 | 78 | SS-5 | - | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| | 1025.9 | TR | | | | | | | | | | | | | | | | |
| **SILTSTONE** : GRAY TO DARK GRAY, HIGHLY WEATHERED. | | | 50/4" | - | 75 | SS-6 | - | - | - | - | - | - | - | - | - | 6 | Rock (V) | |
| | | | 50/4" | - | 88 | SS-7 | - | - | - | - | - | - | - | - | - | 7 | Rock (V) | |
| | | | 50/4" | - | 86 | SS-8 | - | - | - | - | - | - | - | - | - | 6 | Rock (V) | |
| | | | 50/2" | - | 75 | SS-9 | - | - | - | - | - | - | - | - | - | 6 | Rock (V) | |
| | | | 50/0" | - | | SS-10 | - | - | - | - | - | - | - | - | - | - | Rock (V) | |
| | 1013.9 | EOB | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER; CAVE-IN DEPTH @ 13.9'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| P. 289 TOTAL 297 | 58 TOTAL 66 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. 8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949 |

# GEOTECHNICAL PROFILE - NOISE ABATEMENT
# NOISE WALL 15
# BORING LOGS B-044-0-23 AND B-045-0-23

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1508+10 / 0' | EXPLORATION ID B-046-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 15 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 1039.1 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1 |
| START: 11/10/23 END: 11/10/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090415, -82.808921 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 1039.1 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.5' -TOPSOIL (5.5") | 1038.6 | | | | | | | | | | | | | | | | | |
| HARD, BROWNISH GRAY **CLAY**, "AND" SILT, LITTLE FINE GRAVEL, LITTLE COARSE TO FINE SAND, DAMP. | | | 5 7 8 | 22 | 44 | SS-1 | 4.5+ | 20 | 3 | 9 | 31 | 37 | 42 | 20 | 22 | 16 | A-7-6 (12) | |
| | 1033.6 | | 12 14 14 | 40 | 50 | SS-2 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-7-6 (V) | |
| HARD, BROWNISH GRAY **SILT AND CLAY**, SOME COARSE TO FINE SAND, SOME FINE GRAVEL, MOIST. | | | 15 16 16 | 46 | 0 | SS-3 | - | - | - | - | - | - | - | - | - | - | | |
| | | | 10 | - | 42 | 2S-3A | 4.5+ | 21 | 10 | 14 | 31 | 24 | 27 | 16 | 11 | 15 | A-6a (4) | |
| | 1028.6 | | 8 12 15 | 39 | 64 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| **SANDSTONE** : GRAY, HIGHLY WEATHERED. | | TR | 11 18 16 | 49 | 42 | SS-5 | - | - | - | - | - | - | - | - | - | - | Rock (V) | |
| | | | 6 16 32 | 69 | 61 | SS-6 | - | - | - | - | - | - | - | - | - | - | Rock (V) | |
| | | | 50/4" | - | 100 | SS-7 | - | - | - | - | - | - | - | - | - | - | Rock (V) | |
| | 1020.1 | | 50/4" | - | 50 | SS-8 | - | - | - | - | - | - | - | - | - | - | Rock (V) | |
| **SANDSTONE** : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATELY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACES, BLOCKY, GOOD SURFACE. -@21.3' - 21.5' SHALE -@22.5' CLAY SEAM | | | 0 | | 33 | NQ2-1 | | | | | | | | | | | CORE | |
| | | | 37 | | 93 | NQ2-2 | | | | | | | | | | | CORE | |
| | 1014.6 | | | | | | | | | | | | | | | | | |
| -@ 24.5'-25.0' SHALE | | EOB | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER; CAVE-IN DEPTH @ 15.2'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 47 LBS CEMENT, 25 LBS BENTONITE POWDER AND 40 GAL WATER .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**Project Name:** FRA-161-15.80

**Location:**
Franklin County, Ohio

**Photo No.**
**13**




**Boring:**
B-046-0-23

RC-1: 19.0-20.0'
REC (%):33
RQD (%):0

RC-2: 20.0-25.0'
REC (%):93
RQD (%):37



GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 15
BORING LOG & ROCK CORE PHOTO FOR B-046-0-23

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1510+10 / 0' | EXPLORATION ID B-047-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 15 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 1039.2 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1 |
| START: 11/10/23 END: 11/10/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090391, -82.808171 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 1039.2 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.5' -TOPSOIL (6.0") | 1038.7 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SILT AND CLAY**, SOME COARSE TO FINE SAND, LITTLE FINE GRAVEL, DAMP. | | | 4 8 11 | 27 | 44 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 22 | A-6a (V) | |
| | | | 11 17 19 | 52 | 81 | SS-2 | 4.5+ | 11 | 9 | 13 | 36 | 31 | 31 | 17 | 14 | 11 | A-6a (8) | |
| | | | 5 6 8 | 20 | 75 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| | | | 5 7 8 | 22 | 58 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| | 1028.7 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SANDY SILT**, LITTLE CLAY, SOME FINE GRAVEL, DAMP. | | | 12 14 12 | 37 | 61 | SS-5 | 4.5+ | 23 | 14 | 13 | 32 | 18 | 26 | 17 | 9 | 11 | A-4a (3) | |
| | 1026.2 | TR | | | | | | | | | | | | | | | | |
| **SILTSTONE** : GRAY, HIGHLY WEATHERED. | | | 15 20 16 | 52 | 36 | SS-6 | - | - | - | - | - | - | - | - | - | 6 | Rock (V) | |
| | | | 19 15 50/6" | - | 54 | SS-7 | - | - | - | - | - | - | - | - | - | 8 | Rock (V) | |
| | 1020.2 | | 50/4" | - | 100 | SS-8 | - | - | - | - | - | - | - | - | - | 13 | Rock (V) | |
| **SANDSTONE** : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACES, BLOCKY, GOOD SURFACE. | | | 0 | | 42 | NQ2-1 | | | | | | | | | | | CORE | |
| -@22.4' CLAY SEAM<br>-@ 19.0' - 25.0' RED IRON STAINING THROUGHOUT | | | 55 | | 92 | NQ2-2 | | | | | | | | | | | CORE | |
| | 1014.2 | EOB | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER; CAVE-IN DEPTH @ 14.9'

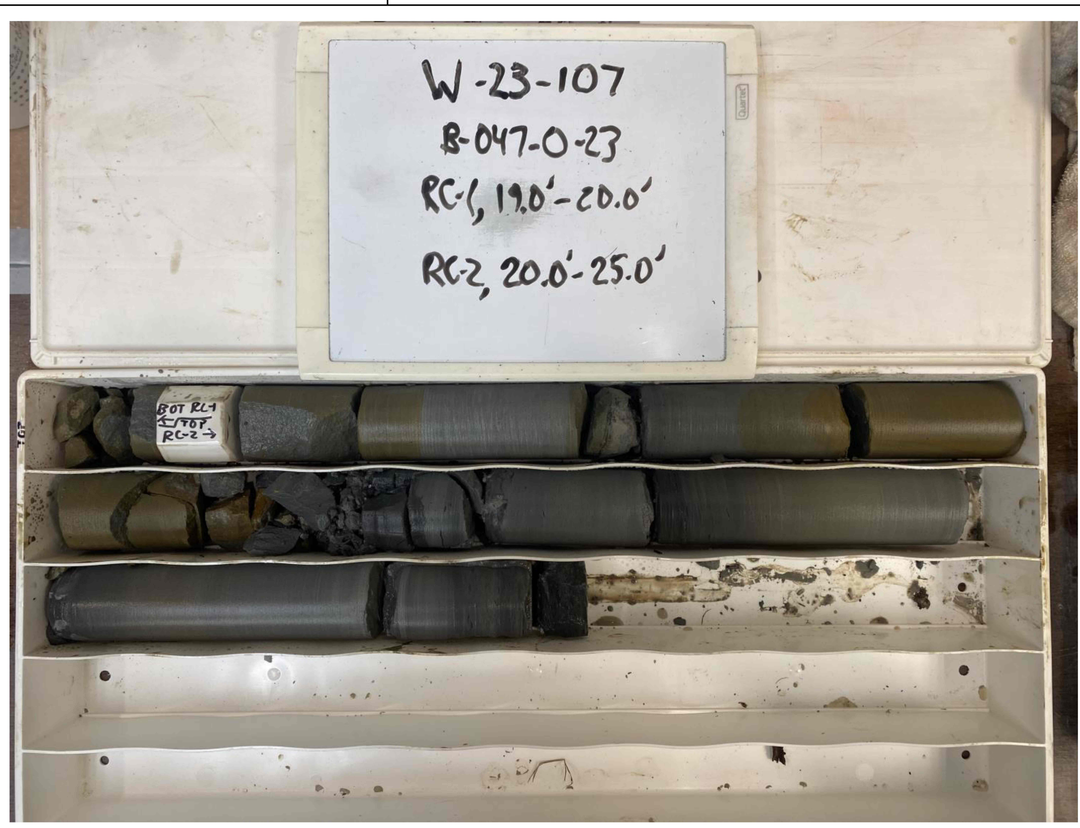
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 47 LBS CEMENT, 25 LBS BENTONITE POWDER AND 40 GAL WATER .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**Project Name:** FRA-161-15.80

**Location:**
Franklin County, Ohio

**Photo No.**
**14**




**Boring:**
B-047-0-23

RC-1: 19.0-20.0'
REC (%):42
RQD (%):0

RC-2: 20.0-25.0'
REC (%):92
RQD (%):55

# FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 5/16/2024 TIME: 7:24:10 PM USER: juans
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL033.dgn

**RESOURCE INTERNATIONAL, INC.**

| | | | | |
|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1512+10 / 0' | EXPLORATION ID B-048-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 15 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 1037.4 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1 |
| START: 11/10/23 END: 11/10/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090360, -82.807478 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 1037.4 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | BACK FILL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.5' -TOPSOIL (6.0") | 1036.9 | | | | | | | | | | | | | | | | | |
| HARD, BROWN TO GRAY **SILTY CLAY**, SOME COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP TO MOIST. | | 1 | 3 3 5 | 12 | 39 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 19 | A-6b (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 6 7 7 | 20 | 100 | SS-2 | 4.5+ | 10 | 5 | 19 | 32 | 34 | 36 | 17 | 19 | 14 | A-6b (10) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | | 6 | 6 6 11 | 24 | 33 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 17 | A-6b (V) | |
| | | 7 | | | | | | | | | | | | | | | | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 6 8 10 | 26 | 69 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-6b (V) | |
| | 1026.9 | 10 | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, GRAY **SANDY SILT**, SOME CLAY, LITTLE FINE GRAVEL, DAMP. | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 5 6 9 | 22 | 83 | SS-5 | 4.5+ | 18 | 11 | 14 | 33 | 24 | 26 | 16 | 10 | 11 | A-4a (4) | |
| | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | 3 4 5 | 13 | 64 | SS-6 | 3.00 | - | - | - | - | - | - | - | - | 12 | A-4a (V) | |
| | 1021.4 | 15 | | | | | | | | | | | | | | | | |
| **SHALE** : BROWN, SEVERELY WEATHERED. | | TR 16 | 28 35 50/3" | - | 40 | SS-7 | - | - | - | - | - | - | - | - | - | 0 | Rock (V) | |
| | | 17 | | | | | | | | | | | | | | | | |
| | | 18 | | | | | | | | | | | | | | | | |
| | | 19 | 15 24 26 | 72 | 83 | SS-8 | - | - | - | - | - | - | - | - | - | 13 | Rock (V) | |
| | | 20 | | | | | | | | | | | | | | | | |
| | | 21 | 50/3" | - | 0 | SS-9 | - | - | - | - | - | - | - | - | - | - | Rock (V) | |
| | | 22 | | | | | | | | | | | | | | | | |
| | | 23 | | | | | | | | | | | | | | | | |
| | 1012.4 | 24 | 11 10 15 | 36 | 50 | SS-10 | - | - | - | - | - | - | - | - | - | 20 | Rock (V) | |
| | | EOB 25 | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING; CAVE-IN DEPTH @ 16.1'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS. .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| P.292 / TOTAL 297 | 61 / TOTAL 66 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. 6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949 |

# GEOTECHNICAL PROFILE - NOISE ABATEMENT
## NOISE WALL 15
## BORING LOG B-048-0-23

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1514+10 / 0' | EXPLORATION ID B-049-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 15 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 1038.9 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1 |
| START: 11/10/23 END: 11/10/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090327, -82.806756 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 1038.9 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.5' -TOPSOIL (5.5") | 1038.4 | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, BROWN **CLAY**, SOME SILT, SOME FINE GRAVEL, TRACE COARSE TO FINE SAND, MOIST TO DAMP. | | | 1<br>3<br>4 | 10 | 53 | SS-1 | 2.25 | 28 | 2 | 5 | 27 | 38 | 53 | 20 | 33 | 25 | A-7-6 (16) | |
| | 1033.4 | | 5<br>6<br>8 | 20 | 100 | SS-2 | 4.00 | - | - | - | - | - | - | - | - | 21 | A-7-6 (V) | |
| HARD, GRAY **SANDY SILT**, TRACE GRAVEL, MOIST TO DAMP. | | | 3<br>4<br>6 | 14 | 44 | SS-3 | 4.00 | - | - | - | - | - | - | - | - | 14 | A-4a (V) | |
| | | | 8<br>13<br>16 | 42 | 89 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-4a (V) | |
| | | | 4<br>8<br>10 | 26 | 83 | SS-5 | 4.5+ | 8 | 14 | 16 | 34 | 28 | 26 | 16 | 10 | 12 | A-4a (5) | |
| | | | 5<br>7<br>14 | 30 | 100 | SS-6 | 4.5+ | - | - | - | - | - | - | - | - | 12 | A-4a (V) | |
| | 1023.4 | TR | | | | | | | | | | | | | | | | |
| **SILTSTONE** : GRAY, HIGHLY WEATHERED. | | | 50/3" | - | - | SS-7 | - | - | - | - | - | - | - | - | - | - | Rock (V) | |
| | | | 50/0" | - | - | SS-8 | - | - | - | - | - | - | - | - | - | - | Rock (V) | |
| | 1018.9 | | 0 | | 0 | NQ2-1 | | | | | | | | | | | CORE | |
| **SANDSTONE** : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATELY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACES, BLOCKY, GOOD SURFACE. | | | 28 | | 42 | NQ2-2 | | | | | | | | | | | CORE | |
| | 1013.9 | EOB | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER; CAVE-IN DEPTH @ 17.1'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 47 LBS CEMENT, 25 LBS BENTONITE POWDER AND 40 GAL WATER .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**Project Name:** FRA-161-15.80

**Location:**
Franklin County, Ohio

**Photo No.**
**15**




**Boring:**
B-049-0-23

RC-1: 19.0-20.0'
REC (%):0
RQD (%):0

RC-2: 20.0-25.0'
REC (%):42
RQD (%):28



GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 15
BORING LOG & ROCK CORE PHOTO FOR B-049-0-23

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1516+10 / 0' | EXPLORATION ID B-050-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 15 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 1038.0 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1 |
| START: 11/13/23 END: 11/13/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090286, -82.806054 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 1038.0 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.5' -TOPSOIL (5.5") | 1037.5 | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, BROWN TO GRAY **SILTY CLAY**, SOME COARSE TO FINE SAND, LITTLE FINE GRAVEL, DAMP TO MOIST. | | | 2 4 5 | 13 | 56 | SS-1 | 4.00 | - | - | - | - | - | - | - | - | 20 | A-6b (V) | |
| | | | 5 7 6 | 19 | 72 | SS-2 | 3.25 | 13 | 8 | 13 | 39 | 27 | 37 | 19 | 18 | 15 | A-6b (9) | |
| | | | 8 10 10 | 29 | 64 | SS-3 | 4.00 | - | - | - | - | - | - | - | - | 15 | A-6b (V) | |
| | | | 4 5 11 | 23 | 36 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 9 | A-6b (V) | |
| DENSE, BROWN **GRAVEL WITH SAND AND SILT**, TRACE CLAY, DAMP. | 1027.5 | | 18 15 12 | 39 | 64 | SS-5 | - | - | - | - | - | - | - | - | - | 9 | A-2-4 (V) | |
| **SILTSTONE** : GRAY, HIGHLY WEATHERED. | 1025.0 | TR | 6 16 32 | 69 | 39 | SS-6 | - | - | - | - | - | - | - | - | - | 8 | Rock (V) | |
| | | | 50/5" | - | 40 | SS-7 | - | - | - | - | - | - | - | - | - | 12 | Rock (V) | |
| | 1019.0 | | 50/4" | - | 75 | SS-8 | - | - | - | - | - | - | - | - | - | 7 | Rock (V) | |
| **SANDSTONE** : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATELY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACES, BLOCKY, GOOD SURFACE. -@21.0' RED STAINING | | | 0 | | 25 | NQ2-1 | | | | | | | | | | | CORE | |
| | | | 82 | | 100 | NQ2-2 | | | | | | | | | | | CORE | |
| | 1013.0 | EOB | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER; CAVE-IN DEPTH @ 13.0'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 47 LBS CEMENT, 25 LBS BENTONITE POWDER AND 40 GAL WATER .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

**Project Name:** FRA-161-15.80

**Location:**
Franklin County, Ohio

**Photo No.**
**16**




**Boring:**
B-050-0-23

RC-1: 19.0-20.0'
REC (%):0
RQD (%):25

RC-2: 20.0-25.0'
REC (%):100
RQD (%):82



GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 15
BORING LOG & ROCK CORE PHOTO FOR B-050-0-23

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1519+10.6 / 8.77' LT | EXPLORATION ID B-051-0-23 | |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 15 | | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 1038.1 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1 | |
| START: 11/13/23 END: 11/13/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090226, -82.805330 | | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 1038.1 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.5' -TOPSOIL (5.5") | 1037.6 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SILTY CLAY**, LITTLE GRAVEL AND SAND, DAMP. | | | 3 6 7 | 19 | 39 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 19 | A-6b (V) | |
| | | | 10 10 12 | 32 | 83 | SS-2 | 4.5+ | 7 | 6 | 12 | 43 | 32 | 40 | 19 | 21 | 13 | A-6b (12) | |
| | 1032.6 | | | | | | | | | | | | | | | | | |
| VERY DENSE, BROWN TO GRAY **GRAVEL WITH SAND AND SILT**, DAMP. | | | 36 26 22 | 69 | 61 | SS-3 | - | - | - | - | - | - | - | - | - | 6 | A-2-4 (V) | |
| -@ 6.0' - 8.0' COBBLES | | | 17 19 32 | 73 | 72 | SS-4 | - | - | - | - | - | - | - | - | - | 6 | A-2-4 (V) | |
| | | | 14 17 29 | 66 | 44 | SS-5 | - | - | - | - | - | - | - | - | - | 8 | A-2-4 (V) | |
| | | | 50/3" | - | 50 | SS-6 | - | - | - | - | - | - | - | - | - | 17 | Rock (V) | |
| | 1021.8 | TR | 50/4" | - | 88 | SS-7 | - | - | - | - | - | - | - | - | - | 5 | A-2-4 (V) | |
| **SILTSTONE** : GRAY, HIGHLY WEATHERED. | 1019.1 | | | | | | | | | | | | | | | | | |
| **SANDSTONE** : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATELY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, GOOD SURFACE. | | | 50 | | 75 | NQ2-1 | | | | | | | | | | | CORE | |
| -VERTICAL FRACTURE @ 20.3', 20.9', 23.2' AND 24.7' | | | 50 | | 97 | NQ2-2 | | | | | | | | | | | CORE | |
| | 1013.1 | EOB | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER; CAVE-IN DEPTH @ 14.8'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 94 LBS CEMENT / 25 LBS BENTONITE POWDER / 40 GAL WATER .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**Project Name:** FRA-161-15.80

**Location:**
Franklin County, Ohio

**Photo No.**
**17**




**Boring:**
B-051-0-23

RC-1: 19.0-20.0'
REC (%):75
RQD (%):50

RC-2: 20.0-25.0'
REC (%):97
RQD (%):50



GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 15
BORING LOG & ROCK CORE PHOTO FOR B-051-0-23

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1520+41 / 0' | EXPLORATION ID B-052-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 15 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 1038.6 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1 |
| START: 11/13/23 END: 11/13/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090130, -82.804859 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 1038.6 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3' - TOPSOIL (4.0") | 1038.3 | | | | | | | | | | | | | | | | | |
| HARD, BROWN **SILT AND CLAY**, LITTLE GRAVEL AND SAND, DAMP. | | 1 | 6 7 10 | 24 | 78 | SS-1 | 4.5+ | - | - | - | - | - | - | - | - | 14 | A-6a (V) | |
| | | 2 | | | | | | | | | | | | | | | | |
| | | 3 | | | | | | | | | | | | | | | | |
| | | 4 | 12 13 13 | 37 | 69 | SS-2 | 4.5+ | 7 | 8 | 13 | 43 | 29 | 33 | 18 | 15 | 13 | A-6a (9) | |
| | | 5 | | | | | | | | | | | | | | | | |
| | 1031.8 | 6 | 18 50/4" | - | 90 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-6a (V) | |
| MEDIUM DENSE, BROWN **GRAVEL WITH SAND AND SILT**, DAMP. -COBBLES @ 6.5'-8.0' | | 7 | | | | | | | | | | | | | | | | |
| | | 8 | | | | | | | | | | | | | | | | |
| | | 9 | 12 10 8 | 26 | 53 | SS-4 | - | 44 | 16 | 11 | 21 | 8 | 27 | 17 | 10 | 7 | A-2-4 (0) | |
| | 1028.1 | 10 | TR | | | | | | | | | | | | | | | |
| **SILTSTONE** : GRAY, HIGHLY WEATHERED. | | 11 | | | | | | | | | | | | | | | | |
| | | 12 | 10 25 35 | 86 | 56 | SS-5 | - | - | - | - | - | - | - | - | - | 8 | Rock (V) | |
| | | 13 | | | | | | | | | | | | | | | | |
| | | 14 | 28 19 42 | 88 | 61 | SS-6 | - | - | - | - | - | - | - | - | - | 7 | Rock (V) | |
| | | 15 | | | | | | | | | | | | | | | | |
| | | 16 | 50/3" | - | 100 | SS-7 | - | - | - | - | - | - | - | - | - | 8 | Rock (V) | |
| | | 17 | | | | | | | | | | | | | | | | |
| | | 18 | | | | | | | | | | | | | | | | |
| | 1019.6 | 19 | 50/3" | - | 0 | SS-8 | - | - | - | - | - | - | - | - | - | 9 | Rock (V) | |
| **SANDSTONE** : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATELY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, GOOD SURFACE. | | 20 | 92 | | 92 | NQ2-1 | | | | | | | | | | | | CORE | |
| | | 21 | | | | | | | | | | | | | | | | |
| | | 22 | | | | | | | | | | | | | | | | |
| -SHALE SEAMS @ 22.6', 23.0, 24.2' | | 23 | 77 | | 93 | NQ2-2 | | | | | | | | | | | | CORE |
| | | 24 | | | | | | | | | | | | | | | | |
| | 1013.6 | 25 | EOB | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER; CAVE-IN DEPTH @ 13.8'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 47 LBS CEMENT, 25 LBS BENTONITE POWDER AND 40 GAL WATER .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GI8\PROJECTS\2023\W-23-107.GPJ

| | |
|---|---|
| **Project Name:** FRA-161-15.80 | **Location:** Franklin County, Ohio |
| **Photo No.** **18** |  |
| **Boring:** B-052-0-23 | |
| RC-1: 19.0-20.0' REC (%):92 RQD (%):92 | |
| RC-2: 20.0-25.0' REC (%):93 RQD (%):77 | |



| SHEET | SUBSET | PROJECT ID | REVIEWER | DESIGNER | DESIGN AGENCY |
|---|---|---|---|---|---|
| P.296 TOTAL 297 | 65 TOTAL 66 | 117607 | DEK 1/19/24 | JAS | RESOURCE INTERNATIONAL, INC. 6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949 |

GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 15
BORING LOG & ROCK CORE PHOTO FOR B-052-0-23

**RESOURCE INTERNATIONAL, INC.**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FRA-161-15.80 | DRILLING FIRM / OPERATOR: RII / TG | DRILL RIG: DIEDRICH D-50 (# 313) | STATION / OFFSET: 1522+26 / 0' | EXPLORATION ID B-053-0-23 |
| TYPE: NOISE WALLS | SAMPLING FIRM / LOGGER: RII / MJ | HAMMER: AUTOMATIC | ALIGNMENT: CL WALL 15 | |
| PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA / NQ2 | CALIBRATION DATE: 3/21/22 | ELEVATION: 1036.5 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1 |
| START: 11/14/23 END: 11/14/23 | SAMPLING METHOD: SPT / NQ2 | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090039, -82.804245 | |

| MATERIAL DESCRIPTION AND NOTES | ELEV. 1036.5 | DEPTHS | SPT/ RQD | $N_{60}$ | REC (%) | SAMPLE ID | HP (tsf) | GRADATION (%) GR | CS | FS | SI | CL | ATTERBERG LL | PL | PI | WC | ODOT CLASS (GI) | HOLE SEALED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.5' -TOPSOIL (6.0") | 1036.0 | | | | | | | | | | | | | | | | | |
| VERY STIFF TO HARD, BROWN TO GRAY **SILTY CLAY**, SOME TO TRACE SAND, TRACE GRAVEL, MOIST. | | | 1 2 5 | 10 | 47 | SS-1 | 4.00 | - | - | - | - | - | - | - | - | 22 | A-6b (V) | |
| | | | 3 3 4 | 10 | 100 | SS-2 | 4.25 | 4 | 8 | 13 | 33 | 42 | 35 | 19 | 16 | 18 | A-6b (10) | |
| | | | 2 3 4 | 10 | 83 | SS-3 | 4.5+ | - | - | - | - | - | - | - | - | 17 | A-6b (V) | |
| | 1028.5 | | | | | | | | | | | | | | | | | |
| HARD, BROWN TO BROWN GRAY **SANDY SILT**, TRACE GRAVEL, DAMP TO MOIST. | | | 3 5 7 | 17 | 78 | SS-4 | 4.5+ | - | - | - | - | - | - | - | - | 13 | A-4a (V) | |
| | | | 5 7 9 | 23 | 94 | SS-5 | 4.5+ | 13 | 13 | 14 | 29 | 31 | 25 | 15 | 10 | 12 | A-4a (5) | |
| | 1022.4 | TR | 5 50/2" | - | 63 | SS-6 | - | - | - | - | - | - | - | - | - | 12 | Rock (V) | |
| **SANDSTONE** : GRAY, HIGHLY WEATHERED. | | | 50/3" | - | 100 | SS-7 | - | - | - | - | - | - | - | - | - | 8 | Rock (V) | |
| | 1017.5 | | | | | | | | | | | | | | | | | |
| **SANDSTONE** : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATELY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, GOOD SURFACE. -@22.2' FRACTURE -@22.8' SHALE SEAM | | | 50 | | 50 | NQ2-1 | | | | | | | | | | | CORE | |
| -@24.0 CLAY SEAM | | | 68 | | 100 | NQ2-2 | | | | | | | | | | | CORE | |
| | 1011.5 | EOB | | | | | | | | | | | | | | | | |

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER; CAVE-IN DEPTH @ 15.8'

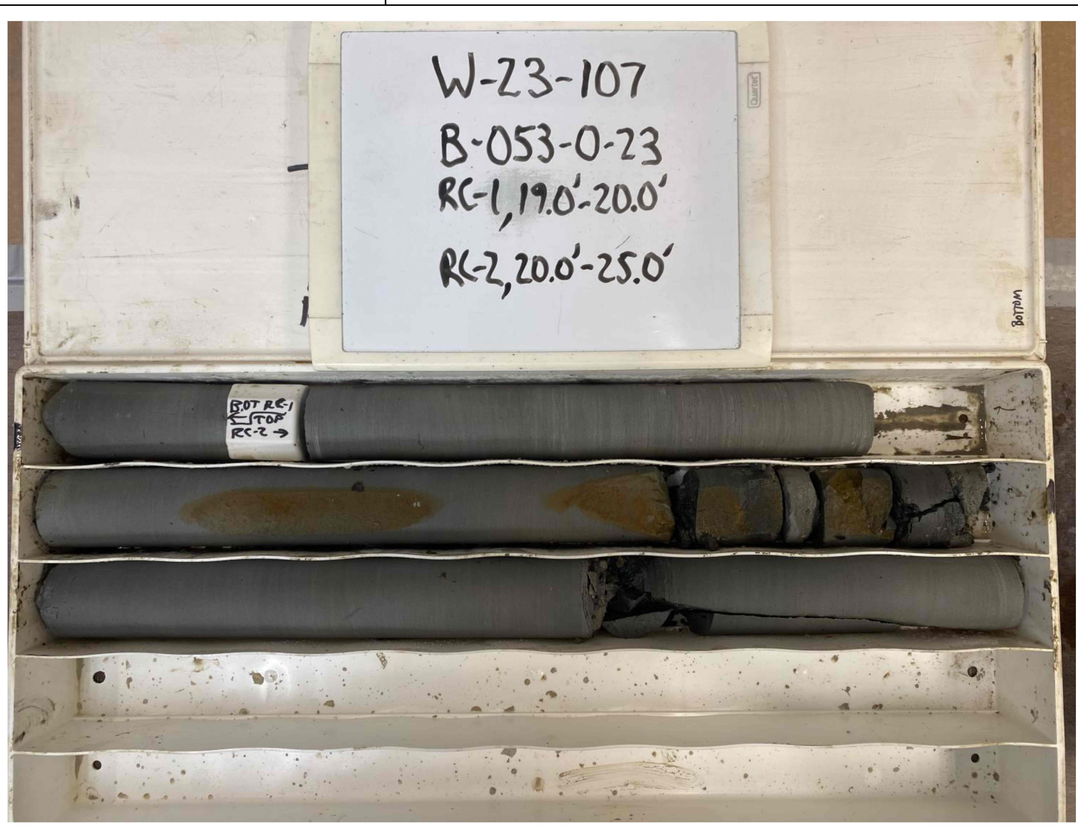
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 47 LBS CEMENT, 25 LBS BENTONITE POWDER AND 40 GAL WATER .

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT.GDT - 1/11/24 07:57 - U:\GIS\PROJECTS\2023\W-23-107.GPJ

**Project Name:** FRA-161-15.80

**Location:**
Franklin County, Ohio

**Photo No.**
**19**




**Boring:**
B-053-0-23

RC-1: 19.0-20.0'
REC (%):50
RQD (%):50

RC-2: 20.0-25.0'
REC (%):100
RQD (%):68



GEOTECHNICAL PROFILE - NOISE ABATEMENT
NOISE WALL 15
BORING LOG & ROCK CORE PHOTO FOR B-053-0-23