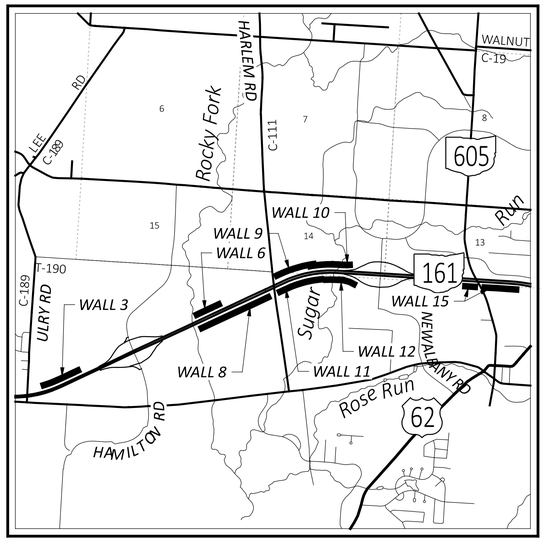
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

FRA-161-15.80
NOISE WALLS

CITY OF COLUMBUS AND NEW ALBANY
FRANKLIN COUNTY



LOCATION MAP

LATITUDE: 40 °07'08" LONGITUDE: 82 °52 '59"

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

INDEX OF SHEETS:

TITLE SHEET	P.1		
SCHEMATIC PLAN	P.2	-	P.5
TYPICAL SECTIONS	P.6	-	P.8
GENERAL NOTES	P.9	-	P.10
MAINTENANCE OF TRAFFIC	P.11		P.15
GENERAL SUMMARY	*		
SUBSUMMARIES	*		
PROJECT SITE PLAN	*		
PLAN AND PROFILE - WALL 3 / 81" BARRIER 3	P.16	-	P.18
PLAN AND PROFILE - WALL 6 / 81" BARRIER 6	P.19	-	P.21
PLAN AND PROFILE - WALL 8	P.22	-	P.26
PLAN AND PROFILE - WALL 9	P.27	-	P.29
PLAN AND PROFILE - 81" BARRIER 10	P.30	-	P.33
PLAN AND PROFILE - WALL 11	P.34	-	P.37
PLAN AND PROFILE - WALL 12 / 81" BARRIER 12	P.38	-	P.40
PLAN AND PROFILE - WALL 15	P.41	-	P.45
CROSS SECTIONS - WALL 3 / 81" BARRIER 3	P.46	-	P.58
CROSS SECTIONS - WALL 6 / 81" BARRIER 6	P.59	-	P.76
CROSS SECTIONS - WALL 8	P.77	-	P.104
CROSS SECTIONS - WALL 9	P.105	-	P.120
CROSS SECTIONS - 81" BARRIER 10	P.121	-	P.137
CROSS SECTIONS - WALL 11	P.138	-	P.154
CROSS SECTIONS - WALL 12 / 81" BARRIER 12	P.155	-	P.168
CROSS SECTIONS - WALL 15	P.169	-	P.192
NOISE WALL DETAILS	P.193	-	P.210
SOIL PROFILES	P.211	-	P.276

* TO BE INCLUDED WITH STAGE 3 SUBMITTAL

Division of Power — CITY OF COLUMBUS — DEPARTMENT OF PUBLIC UTILITIES
COMMENTS | COMMENTS (COMPLIANCE REVIEW ELIGIBLE) | NO COMMENTS
sawolfe
SUBMITTAL# 01/25/2024

FIRM PANELS: 39049C0203K
MAP EFFECTIVE DATE: JUNE 17, 2008
BFE: 957
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.

Need to address NPDES requirements, SWPPP, table of SCP's and their owner's

DOSD/Storm&Sanitary — CITY OF COLUMBUS — DEPARTMENT OF SANITARY AND STORM SEWERS
COMMENTS | COMMENTS (COMPLIANCE REVIEW ELIGIBLE) | NO COMMENTS
tlstewart
SUBMITTAL# Stage 2 02/23/2024

DOSD/SWPPP — CITY OF COLUMBUS — DEPARTMENT OF SANITARY AND STORM SEWERS
COMMENTS | COMMENTS (COMPLIANCE REVIEW ELIGIBLE) | NO COMMENTS
tlstewart
SUBMITTAL# Stage 2 02/23/2024

Will need a note/item for SS 832 if that is how SWPPP is handled

Division of Water — CITY OF COLUMBUS — DEPARTMENT OF PUBLIC UTILITIES
COMMENTS | COMMENTS (COMPLIANCE REVIEW ELIGIBLE) | NO COMMENTS
dahill
SUBMITTAL# Stg. 2 - Review 02/16/2024

FEDERAL PROJECT NUMBER

NON-FEDERAL

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

INSTALLATION OF 8,255 FEET OF NOISE WALL AND 4,636 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:	7.55 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	7.80 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.

Arcadis Response: Per ODOT, this project will follow ODOT's policy regarding NPDES which includes a project site plan and applicable SS832 pay items. Please refer to P. 24 (General Summary) and P.29-P.32 (project site plan) for details.

If further discussion is desired please advise and we will set up a call with ODOT D6 PM Katie Montoya and ODOT D6 Drainage Engineer Jon Adams. Response written by Jeff Hackenbracht (Arcadis) Cell # 614-563-9786.

District 06 Deputy Director

Jack Marchbanks, PhD
Director, Department of Transportation

NOTE:
FOR CITY OF COLUMBUS AND CITY OF NEW ALBANY SIGNATURES, SEE SEPARATE SIGNATURE PAGE

STAGE 2 SUBMITTAL 01/22/24

STANDARD CONSTRUCTION DRAWINGS					SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS

ENGINEER'S SEAL
STATE OF OHIO — E- — REGISTERED — PROFESSIONAL ENGINEER

Division of Power — CITY OF COLUMBUS — DEPARTMENT OF PUBLIC UTILITIES
COMMENTS | COMMENTS (COMPLIANCE REVIEW ELIGIBLE) | NO COMMENTS
klrhynehardt
SUBMITTAL# Stage 2 02/09/2024

3973-E
DOW#23-107

FRA-161-15.80 NOISE WALLS

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

DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.1 TOTAL P.276

FRA-161-15.80 NOISE WALLS

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STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

FRA-161-15.80 NOISE WALLS

CITY OF COLUMBUS AND NEW ALBANY

FRANKLIN COUNTY

SIGNATURES ON THIS PAGE SIGNIFY ONLY THE CONCURRENCE WITH THE GENERAL PURPOSES AND GENERAL LOCATION OF THE PROJECT. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE ENGINEER(S) PREPARING THE PLANS.

CITY OF COLUMBUS APPROVALS

DESIGN SECTION ENGINEER, DIVISION OF DESIGN AND CONSTRUCTION *DATE*

ADMINISTRATOR, DIVISION OF POWER *DATE*

ADMINISTRATOR, DIVISION OF SEWERAGE AND DRAINAGE *DATE*

ADMINISTRATOR, DIVISION OF WATER *DATE*

DIRECTOR DEPARTMENT OF PUBLIC UTILITIES *DATE*

FIRE PREVENTION BUREAU, DIVISION OF FIRE *DATE*

ENGINEERING SUPERVISOR, DEPARTMENT OF TECHNOLOGY *DATE*

DIRECTOR, DEPARTMENT OF RECREATION AND PARKS *DATE*

CITY ENGINEER/ADMINISTRATOR, DIVISION OF DESIGN AND CONSTRUCTION *DATE*

DIRECTOR, DEPARTMENT OF PUBLIC SERVICE *DATE*

CITY OF NEW ALBANY APPROVALS

PUBLIC SERVICE DIRECTOR *DATE*

SIGNATURE SHEET

3973-E
DOW#23-107

DESIGN AGENCY
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8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 810-4900
www.arcadis.com

DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET 1 TOTAL 1

FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 8.5x11 (in.) DATE: 2024-01-18 TIME: 6:35:18 PM USER: jennifer.kelley
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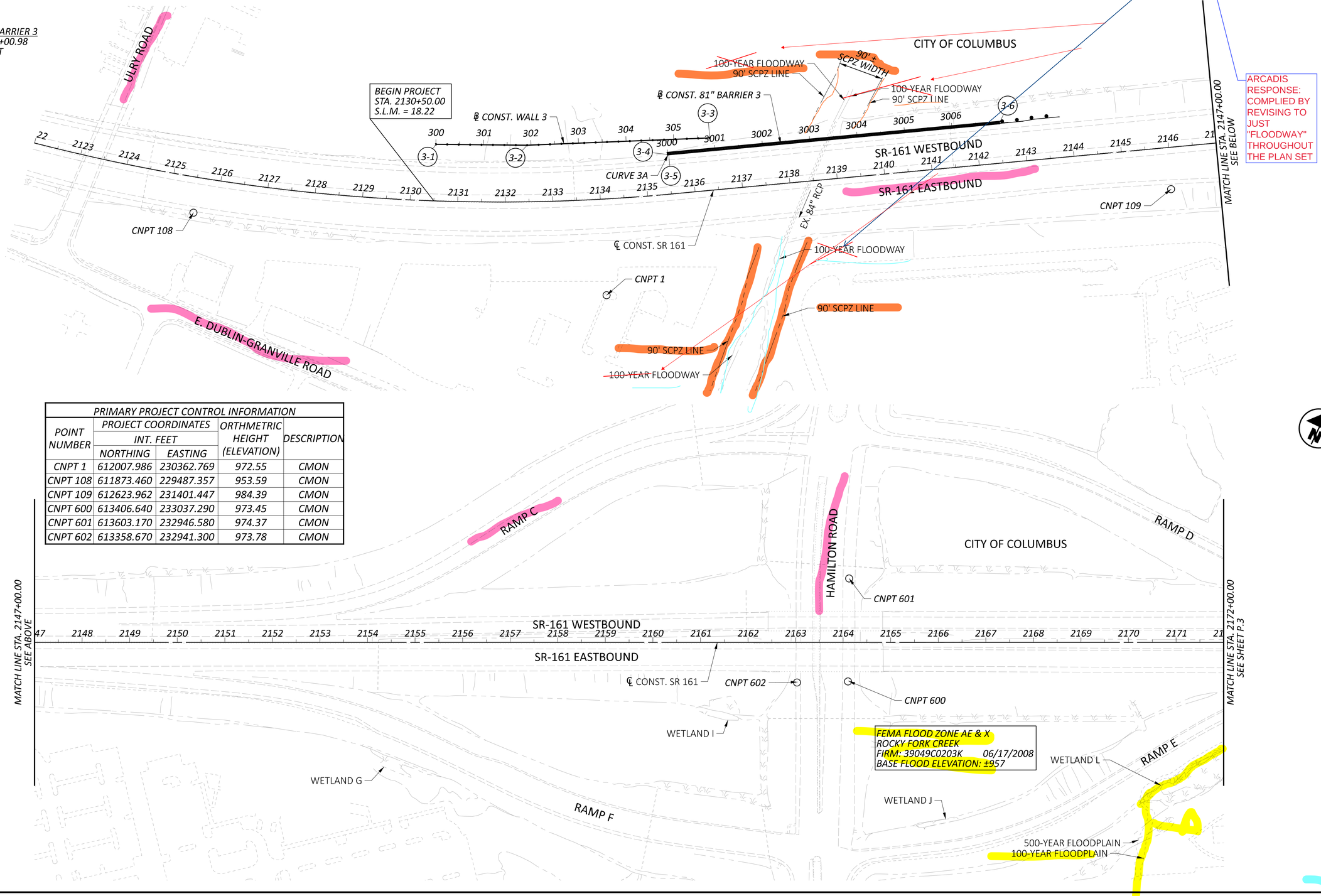
BASELINE GEOMETRY - NOISE WALL 3						
P.I. NUMBER	NOISE BARRIER STATION	SR-161 STATIONING		NORTHING	EASTING	BEARING
		STATION	OFFSET			
3-1	300+00.00	2130+50.00	119.00' LT	612183.0140	229916.9520	N 70°31'40" E
3-2	301+92.00	2132+48.06	119.00' LT	612247.0170	230097.9700	N 67°40'14" E
3-3	305+76.00	2136+41.07	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'



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 WALLS

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

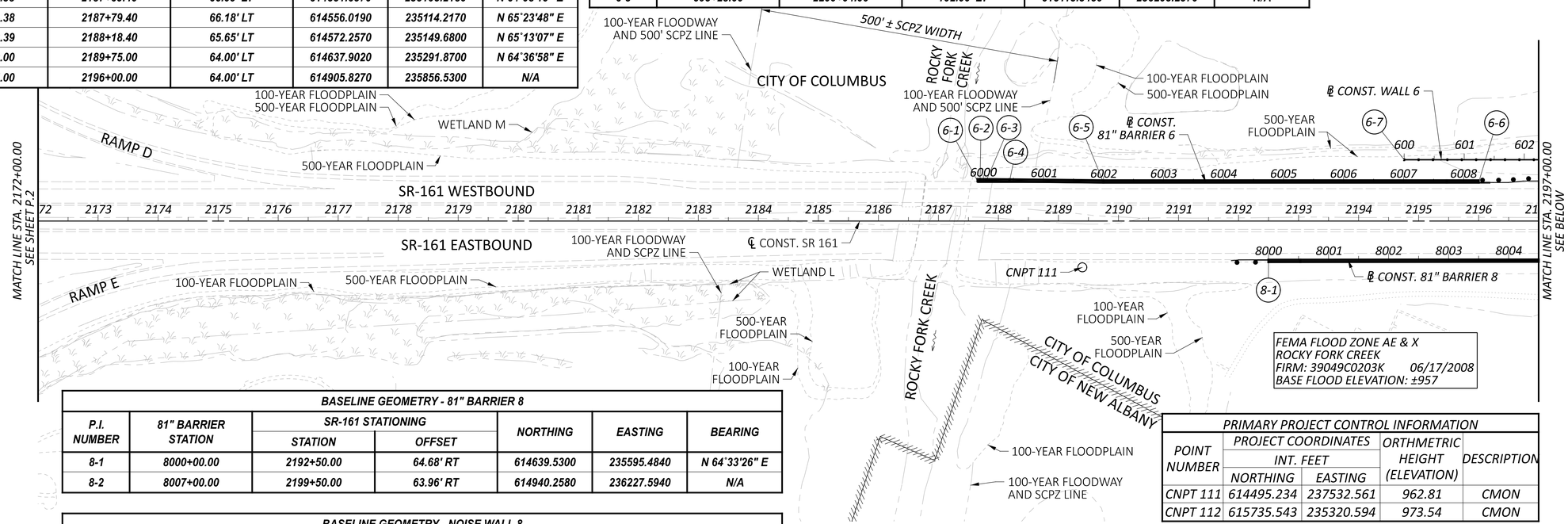
DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.2 TOTAL P.276

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

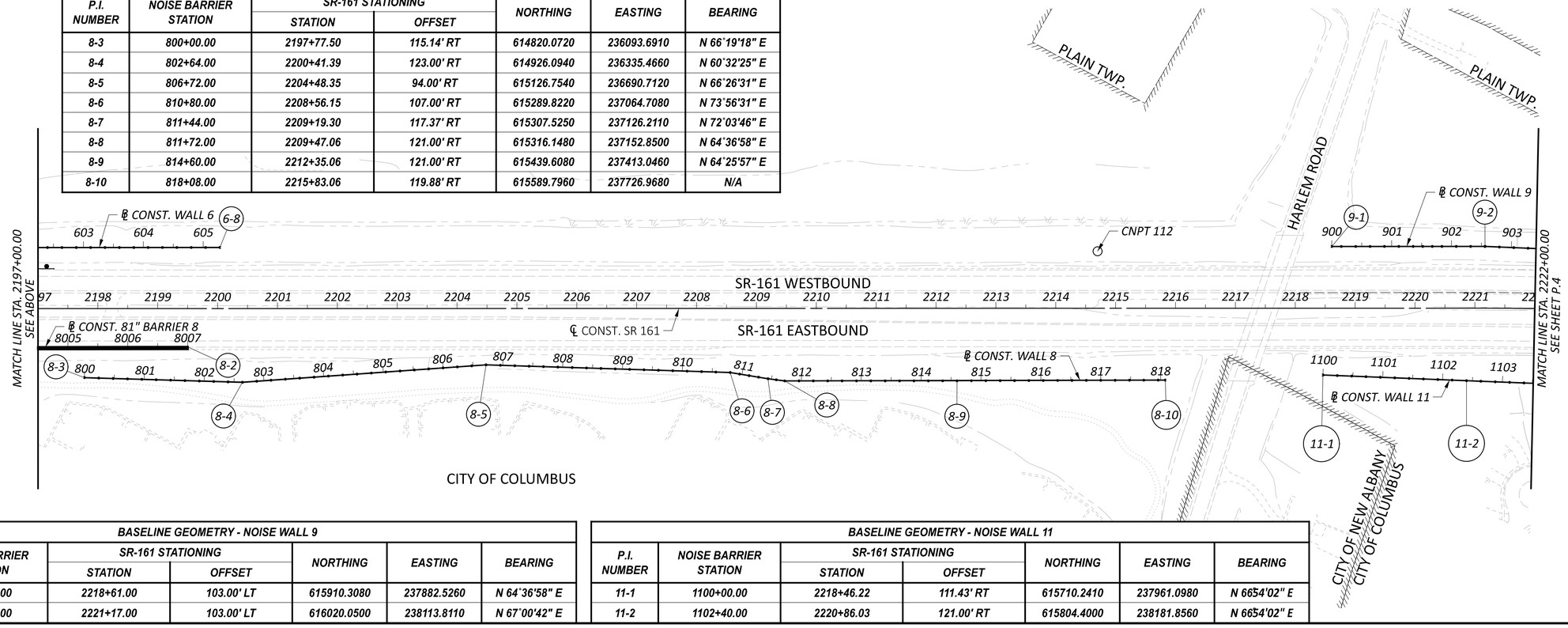
P.I. NUMBER	81" BARRIER STATION	SR-161 STATIONING		NORTHING	EASTING	BEARING
		STATION	OFFSET			
8-1	8000+00.00	2192+50.00	64.68' RT	614639.5300	235595.4840	N 64°33'26" E
8-2	8007+00.00	2199+50.00	63.96' RT	614940.2580	236227.5940	N/A

PRIMARY PROJECT CONTROL INFORMATION

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

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



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 WALLS

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

DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.3 TOTAL P.276

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

HORIZONTAL SCALE IN FEET
0 50 100 200

PLAIN TWP.
℄ CONST. WALL 9
CNPT 113
CURVE 10A
℄ CONST. 81" BARRIER 10
CURVE 10B
CURVE 10C
SR-161 WESTBOUND
SR-161 EASTBOUND
℄ CONST. SR 161
℄ CONST. WALL 11
CITY OF COLUMBUS
CURVE 12A
℄ CONST. 81" BARRIER 12
CURVE 12B
CURVE 12C
RAMP L
CURVE 10D
RAMP P
100-YEAR FLOODPLAIN
500-YEAR FLOODPLAIN
100-YEAR FLOODWAY
237' SCPZ LINE
237' ± SCPZ WIDTH
SUGAR RUN CREEK
℄ CONST. WALL 12
MATCH LINE STA. 2222+00.00 SEE SHEET P.3
MATCH LINE STA. 2247+00.00 SEE BELOW

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

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'

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

NEW ALBANY ROAD
RAMP L
RAMP M
RAMP N
RAMP P
CNPT 119
CNPT 114
SR-161 WESTBOUND
SR-161 EASTBOUND
℄ CONST. SR 161
CITY OF COLUMBUS
CITY OF NEW ALBANY
MATCH LINE STA. 2247+00.00 SEE ABOVE
MATCH LINE STA. 2272+00.00 SEE SHEET P.5

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+10.25
Δ = 03°23'01" RT
Dc = 01°29'42"
R = 3,832.53'
T = 113.20'
L = 226.33'
E = 1.67'

12C *CURVE DATA*
℄ CONST. 81" BARRIER 12
P.I. = STA. 1206+37.33
Δ = 06°57'20" RT
Dc = 03°03'21"
R = 1,875.00'
T = 113.95'
L = 227.62'
E = 3.46'

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+97.05	2237+02.68	74.00' RT	616227.6680	239690.3270	CURVE 12B
12-5	1205+23.39	2239+33.38	74.00' RT	616229.4120	239916.6190	CURVE 12C
12-6	1207+51.00	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	N/A

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

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

DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.4 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: CLP_SR161 - Plan 5 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:36:09 PM USER: jennifer.kelley
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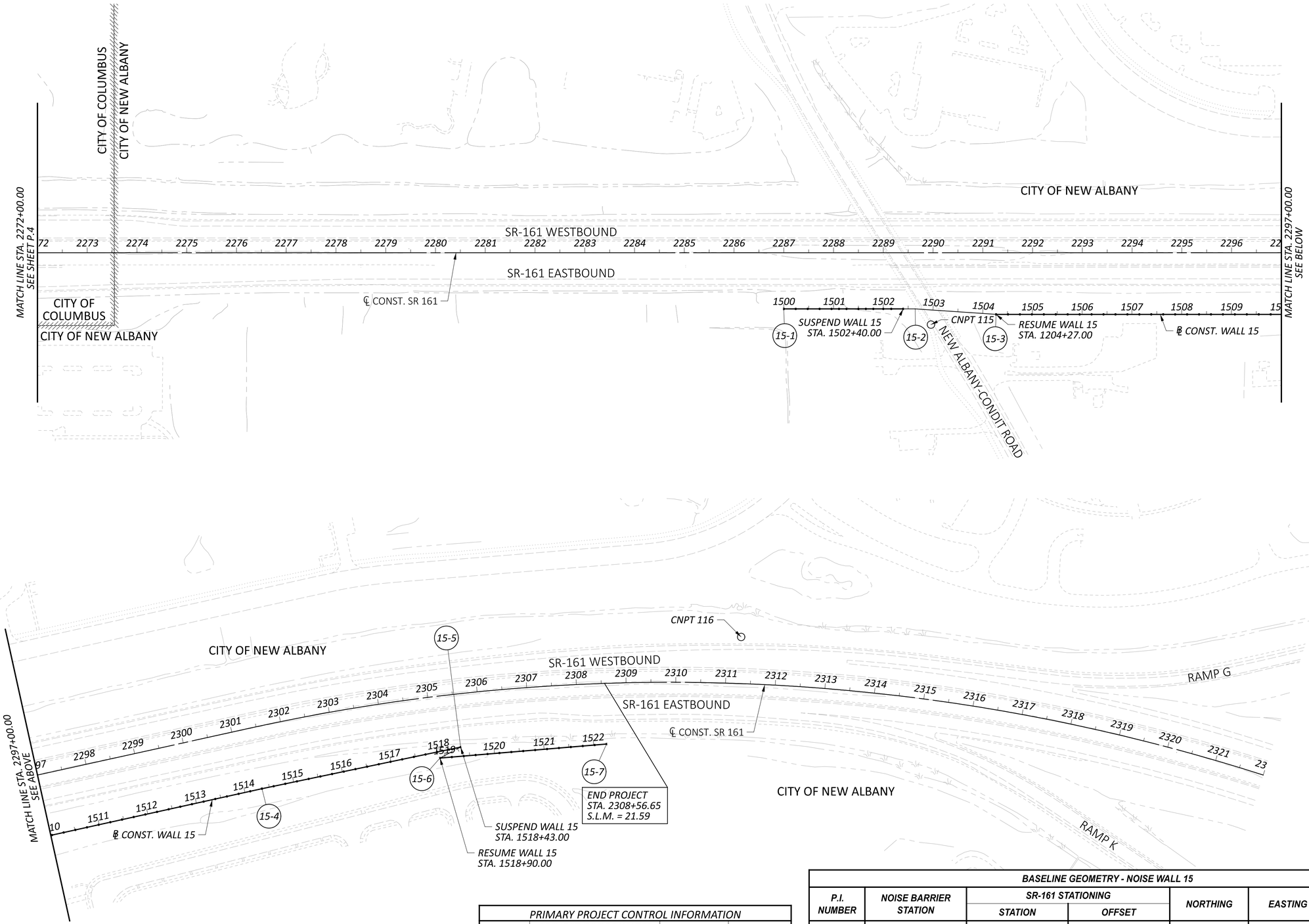

FRA-161-15.80 NOISE WALLS

MODEL: CLP_SR161 - Plan 7 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-19 TIME: 2:01:02 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

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

PRIMARY PROJECT CONTROL INFORMATION				
POINT NUMBER	PROJECT COORDINATES INT. FEET		ORTHMETRIC HEIGHT (ELEVATION)	DESCRIPTION
	NORTHING	EASTING		
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	1502+64.00	2289+64.00	113.00' RT	615913.0190	244934.8830	S 82°56'32" E
15-3	1504+27.00	2291+26.63	124.00' RT	615892.9920	245096.6480	S 86°48'42" E
15-4	1514+35.00	2301+34.63	124.00' RT	615836.9310	246103.0880	S 86°10'26" E
15-5	1518+43.00	2305+54.77	107.00' RT	615809.7050	246510.1780	S 77°45'25" W
15-6	1518+90.00	2305+09.61	124.00' RT	615799.7390	246464.2470	S 79°09'57" E
15-7	1522+26.00	2308+56.65	122.00' RT	615736.5810	246794.2580	N/A

DESIGN AGENCY
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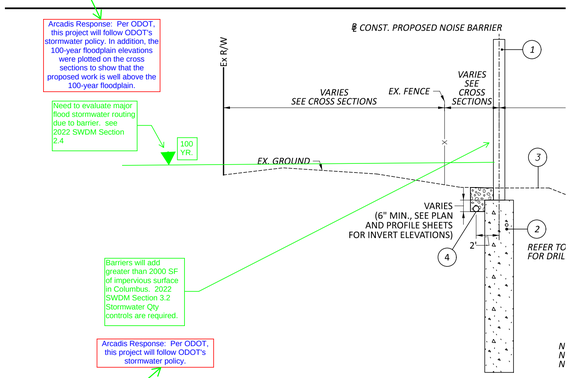
COLUMBUS, OHIO 43235
(614) 846-4500
www.arcadis.com

DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.5 TOTAL P.276

REPEAT STAGE 1 COMMENTS

STAGE 1 comment refers to barriers blocking 100 yr flows into the LA-ROW. Cannot flood adjacent property.



Arcadis Response: Per ODOT, this project will follow ODOT's stormwater policy. In addition, the 100-year floodplain elevations were plotted on the cross sections to show that the proposed work is well above the 100-year floodplain.

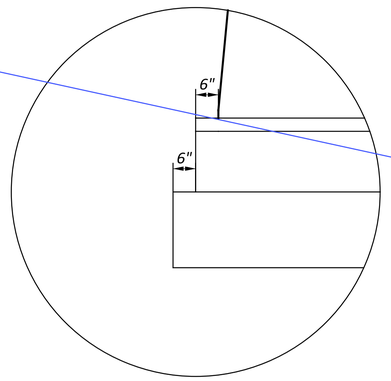
Need to evaluate major flood stormwater routing due to barrier, see 2022 SWDM Section 2.4

100 YR.

Barriers will add greater than 2000 SF of irrpervious surface in Columbus. 2022 SWDM Section 3.2 Stormwater Qty controls are required.

Arcadis Response: Per ODOT, this project will follow ODOT's stormwater policy.

This is in City of Columbus and therefore project must show good faith effort to comply with COC Stormwater Drainage Manual.



STEP DETAIL

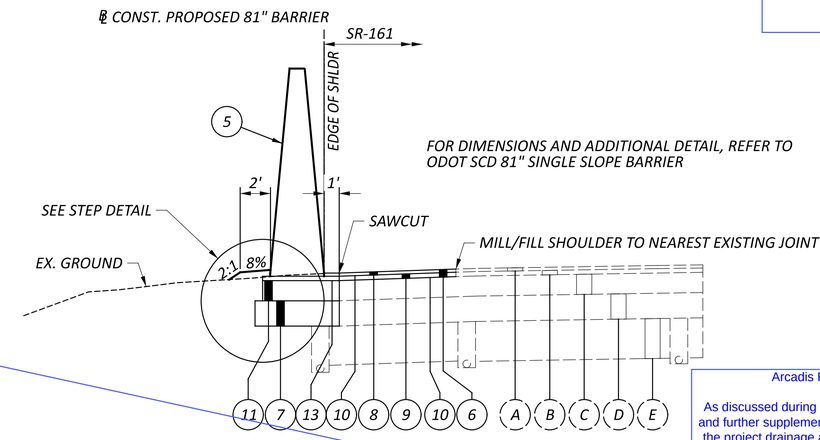
81" BARRIERS 8, 10, 12

NOISE BARRIER REFLECTIVE (LEFT SIDE)

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

Arcadis Response_3-27-2024: thank you for the clarification .
For this project, we are fortunate that only a couple of locations have the resemblance of concentrated flow. For these locations (Sta 805+52, EC-8) and (Sta1107 +90, EC-14) the panels are raised and a swale is provided to allow concentrated flow to enter the R/W ditch and not be blocked. Tied Concrete Block Mat is also provided to prevent erosion. For all other locations, the areas draining towards the wall are minimal and are drained by a 6" aggregate underdrain pipe as detailed in the typical sections shown on this sheet.

If further discussion is desired please advise and we will set up a call with ODOT D6 PM Katie Montoya and ODOT D6 Drainage Engineer Jon Adams. Response written by Jeff Hackenbracht (Arcadis) Cell # 614-563-9786.



FOR DIMENSIONS AND ADDITIONAL DETAIL, REFER TO ODOT SCD 81" SINGLE SLOPE BARRIER

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

81" BARRIER 3 - STA. 3000+00.00 TO STA. 3006+99.96
81" BARRIER 6 - STA. 5999+90.38 TO STA. 6008+25.00
81" BARRIER 10 - STA. 1000+00.00 TO STA. 1012+70.07

Arcadis Response_3-27-2024:

As discussed during a call with the COC on 2-14-2024, and further supplemented by Outfall Details showing that the project drainage areas outfall to waters of the state, ODOT believes it has provided a good faith effort to comply with the COC storm water policy with the BMP provisions provided within the Stage 3 plan set. Please refer to the Project Site Plan (P.29-P.32) for a table providing the type and location of the BMPs. BMP calculations are also provided for review.

f further discussion is desired please advise and we will set up a call with ODOT D6 PM Katie Montoya and ODOT D6 Drainage Engineer Jon Adams. Response written by Jeff Hackenbracht (Arcadis) Cell # 614-563-9786.

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 (446)
9. ITEM 442 - 1.5" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446)
10. ITEM 407 - NON-TRACKING TACK COAT (APPLIED AT A RATE 0.085 GAL PER SY)
11. ITEM 451 - 8" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P
12. ITEM 451 - 9" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P
13. ITEM 407 - TACK COAT (APPLIED AT A RATE 0.055 GAL PER SY)

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

NOTE: FOOTER FOR 81" BARRIER WILL BE POURED SEPARATE FROM 81" BARRIER. PROVIDE DOWELLS PER RM-4.3.

TYPICAL SECTIONS

FRA-161-15.80 NOISE WALLS

MODEL: GY001 PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:37:18 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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8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4800
www.arcadis.com

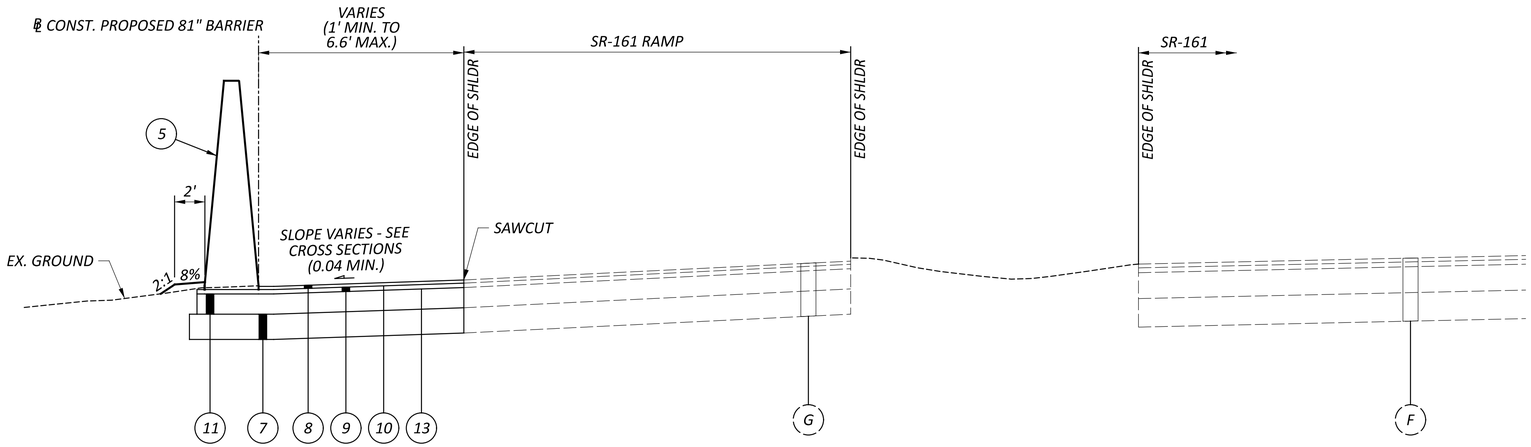
DESIGNER NRS

REVIEWER JDH 01-22-24

PROJECT ID 117607

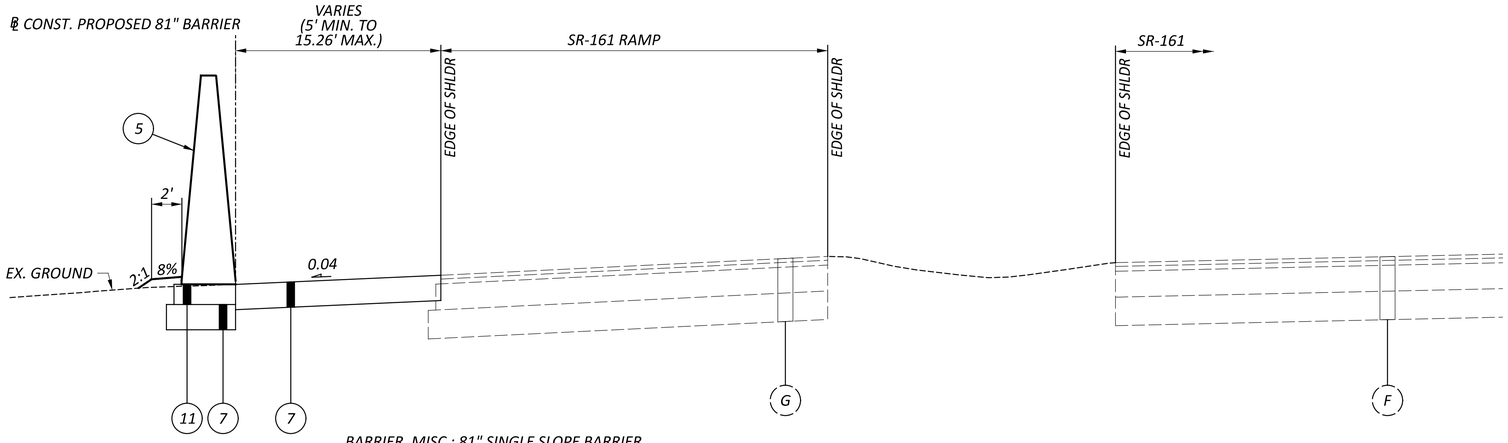
SHEET P.6 TOTAL P.276

FOR LEGEND AND STEP DETAIL, SEE SHEET P.6



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 WALLS

MODEL: GY002 PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:37:19 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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www.arcadis.com

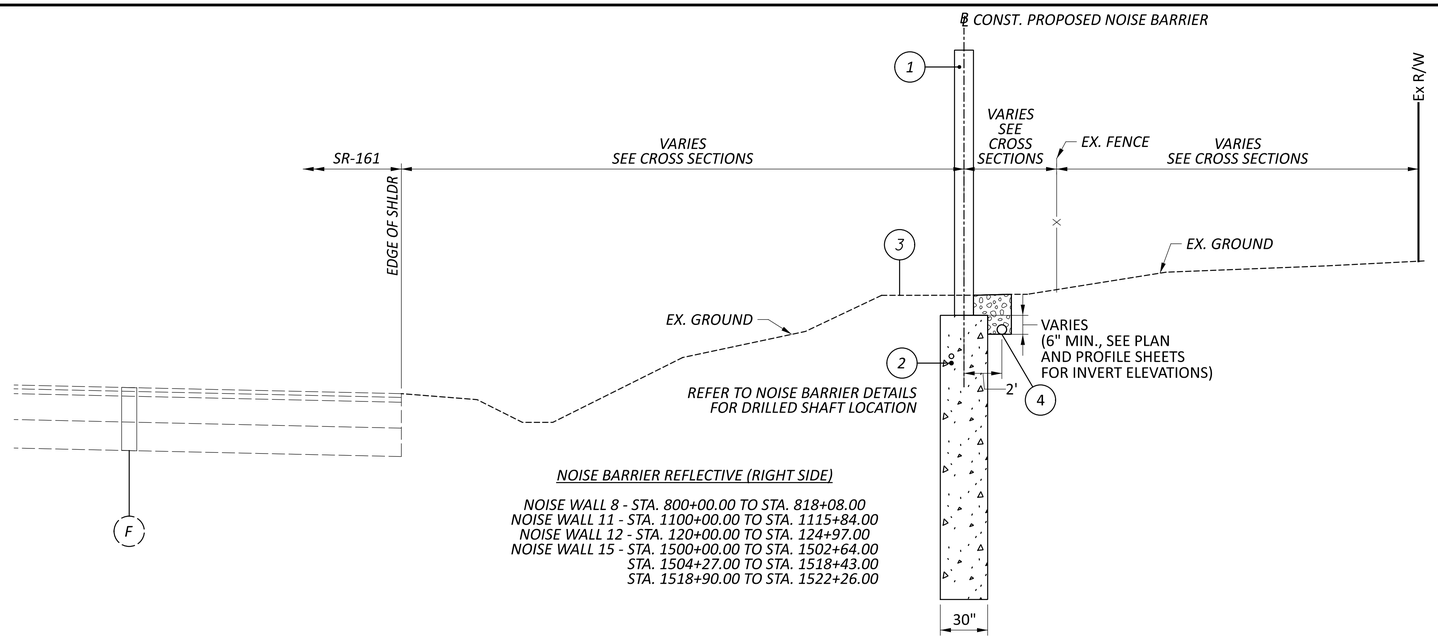
DESIGNER
NRS

REVIEWER
JDH 01-22-24

PROJECT ID
117607

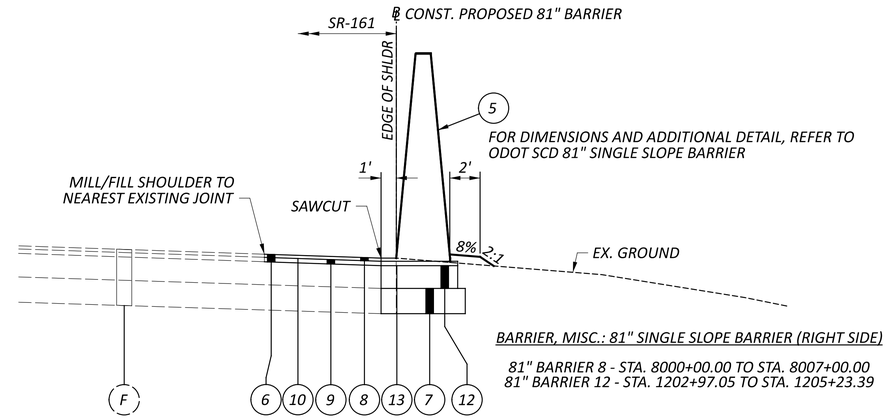
SHEET P.7 TOTAL P.276

FOR LEGEND AND STEP DETAIL, SEE SHEET P.6



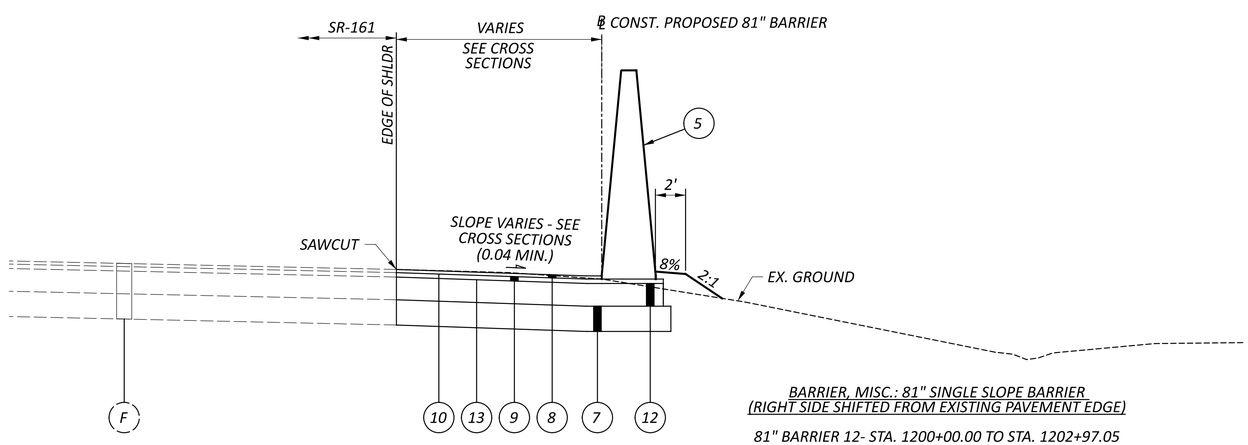
NOISE BARRIER REFLECTIVE (RIGHT SIDE)

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



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+97.05
STA. 1205+23.39 TO STA. 1207+51.00

TYPICAL SECTIONS

FRA-161-15.80 NOISE WALLS

MODEL: GY003 PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 1:14:15 PM USER: natalie.sakian
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720400_CAD\400-Engineering\Roadway\Sheets\117607_GY000.dgn

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
614.318.4000
www.arcadis.com

DESIGNER
NRS

REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET P.8 TOTAL P.276

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
OFFICE: 585-445-5813
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)
VZ.NET.COLUMBUS@VERIZON.COM
BRIAN.ANSEL@VERIZON.COM
TERRY.SHUMATE@VERIZONWIRELESS.COM
JOHN.CORNELL@VERIZONWIRELESS.COM
MICHAEL.HENNON@VERIZONWIRELESS.COM
MICHAEL.BONDY@VERIZONWIRELESS.COM
SVEN.CHRISTIANSON@VERIZONWIRELESS.COM

WATER
CITY OF COLUMBUS DIVISION OF WATER
910 DUBLIN RD.
COLUMBUS, OH 43215
PHONE: 614-645-7788

WATER (CONT.)
AQUA OHIO - WATER
5481 BUENOS AIRES BLVD.
WESTERVILLE, OH 43081
ATTN: JAKE LOGAN
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
PUBLICSERVICE@NEWALBANYOHIO.ORG

ELECTRIC
AMERICAN ELECTRIC POWER (DISTRIBUTION)
777 HOPEWELL DRIVE
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ATTN: PAUL PAXTON
PHONE: 740-348-5322
AEP SOLUTION CENTER: 800-277-2177
PTPAXTON@AEP.COM

AMERICAN ELECTRIC POWER (TRANSMISSION)
8600 SMITHS MILL ROAD
NEW ALBANY, OH 43054
ATTN: MICHAEL CARR
PHONE: 380-205-5072
TL_PUBLICPROJECTS@AEP.COM

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

OK

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

& Stormwater

AQUA OHIO - SEWER
5481 BUENOS AIRES BLVD.
WESTERVILLE, OH 43081
ATTN: JAKE LOGAN
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
PUBLICSERVICE@NEWALBANYOHIO.ORG

ITS/CTSS/TRAFFIC
ODOT CENTRAL OFFICE ITS
929 EASTWIND DRIVE
SUITE 201
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

CITY OF NEW ALBANY
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).

ARCADIS RESPONSE: COMPLIED

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 7:00 PM AND 7:00 AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

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.196 FOR COLOR, TEXTURE, AND LOCATION OF INSTALLATION.

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

SEEDING AND MULCHING IS REQUIRED. FOR AREAS ADJACENT TO A RESIDENTIAL PROPERTY, USE CMS 659 LAWN MIXTURE.

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 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.

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.

FOR THE 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 FROM DOP.

THESE ARE AVAILABLE ON THE INTERNET...PROVIDE ACTUAL ADDRESS

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.

https://www.columbus.gov/WorkArea/DownloadAsset.aspx?id=2147503200

The actual address to the new MIS-01 is shown...

ARCADIS RESPONSE: COMPLIED BY REVISING THE NOTE APPROPRIATELY

GENERAL NOTES

FRA-161-15.80 NOISE WALLS

MODEL: Sheet_SurvF1 PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:37:36 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_GN001.dgn

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JMK

REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET P.9 | TOTAL P.276

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 ____ SQ. YD.
ITEM 605, AGGREGATE DRAINS ____ FT.
ITEM 611, ____" CONDUIT, TYPE F ____ FT.
ITEM 611, PRECAST REINFORCED CONCRETE OUTLET ____ EACH
ITEM 605, ____" UNCLASSIFIED PIPE UNDERDRAINS ____ FT.

ITEM SPECIAL - AS-BUILT CONSTRUCTION RECORD DRAWINGS
PRIOR TO FINAL ACCEPTANCE OF THE WORK, THE CONTRACTOR SHALL FURNISH THE DEPARTMENT FORMAL AS-BUILT CONSTRUCTION RECORD-DRAWING PLANS. THE FORMAL AS-BUILT CONSTRUCTION RECORD-DRAWING SHALL INCLUDE ALL RED-LINED CHANGES. RED-LINE CHANGE SHALL BE DENOTED UTILIZING CLOUDING IN MICROSTATION (OR OTHER CAD SOFTWARE) OR CLOUDING IN PDF EDITING SOFTWARE. THE AS-BUILT CONSTRUCTION RECORD-DRAWING SHALL HAVE A SIGNED VERIFICATION ON THE TITLE SHEET FROM THE CONTRACTOR INDICATING THAT ALL RED-LINED AND FIELD CHANGES HAVE BEEN INCORPORATED INTO AS-BUILT CONSTRUCTION RECORD-DRAWINGS. THE CONTRACTOR'S VERIFICATION STATEMENT INDICATES ALL KNOWN FIELD MODIFICATIONS MADE HAVE BEEN INCLUDED IN THE FORMAL RECORD-DRAWING.

THE CONTRACTOR'S VERIFICATION STATEMENT SHALL BE SIGNED BY THE CONTRACTOR'S PROJECT MANAGER (OR ACCEPTABLE REPRESENTATIVE).

IN ADDITION TO THE INFORMATION SHOWN ON THE CONSTRUCTION PLANS, THE AS-BUILT CONSTRUCTION RECORD-DRAWINGS SHALL SHOW THE FOLLOWING:

1. ALL DEVIATIONS FROM THE ORIGINAL APPROVED CONSTRUCTION PLANS WHICH RESULT IN A CHANGE OF LOCATION, MATERIAL, TYPE OR SIZE OF WORK.
2. ANY UTILITIES, PIPES, WELLHEADS, ABANDONED PAVEMENTS, FOUNDATIONS OR OTHER MAJOR OBSTRUCTIONS DISCOVERED AND REMAINING IN PLACE WHICH ARE NOT SHOWN, OR DO NOT CONFORM TO LOCATIONS OR DEPTHS SHOWN IN THE PLANS. UNDERGROUND FEATURES SHALL BE SHOWN AND LABELED ON THE RECORD-DRAWING PLAN IN TERMS OF STATION, OFFSET AND ELEVATION.
3. THE FINAL OPTION AND SPECIFICATION NUMBER SELECTED FOR THOSE ITEMS WHICH ALLOW SEVERAL MATERIAL OPTIONS UNDER THE SPECIFICATION (E.G., CONDUIT).
4. CHANGES TO THE PAY ITEMS AND FINAL QUANTITIES AS PAID SHALL BE SHOWN ON THE GENERAL SUMMARY AND SUBSUMMARIES.
5. ADDITIONAL PLAN SHEETS MAY BE NEEDED IF NECESSARY TO SHOW WORK NOT INCLUDED IN THE CONSTRUCTION PLANS. IF ADDITIONAL PLAN SHEETS ARE NEEDED, THEY ARE REQUIRED TO BE PREPARED IN CONFORMANCE WITH THE LOCATION AND DESIGN MANUAL, VOLUME 3, SECTION 1200 - PLAN PREPARATION.

NOTATION SHALL ALSO BE MADE OF LOCATIONS AND THE EXTENT OF USE OF MATERIALS, OTHER THAN SOIL, FOR EMBANKMENT CONSTRUCTION (ROCK, BROKEN CONCRETE WITHOUT REINFORCING STEEL, ETC.).

THE PLAN INDEX SHALL SHOW THE PLAN SHEETS WHICH HAVE CHANGES APPEARING ON THEM. TWO COPIES OF THE AS-BUILT CONSTRUCTION RECORD-DRAWINGS SHALL BE DELIVERED TO THE PROJECT ENGINEER FOR APPROVAL UPON COMPLETION OF THE PHYSICAL WORK BUT PRIOR TO THE REQUEST FOR FINAL PAYMENT. AFTER THE DEPARTMENT HAS APPROVED THE AS-BUILT CONSTRUCTION RECORD-DRAWINGS, THE ASSOCIATED ELECTRONIC FILES SHALL BE DELIVERED TO THE DISTRICT CAPITAL PROGRAMS ADMINISTRATOR. ACCEPTANCE OF THESE PLANS AND DELIVERY OF THE ASSOCIATED ELECTRONIC FILES IS REQUIRED PRIOR TO THE WORK BEING ACCEPTED AND THE FINAL ESTIMATE APPROVED.

PAYMENT FOR ALL THE ABOVE SHALL BE LUMP SUM UPON PROPER EXECUTION OF ALL WORK OF THIS ITEM AS DETERMINED BY THE PROJECT ENGINEER.

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 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.

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.

Please add the following note:

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.

ARCADIS RESPONSE: COMPLIED

CONVENTIONAL SYMBOLS

County Line
Township Line
Section Line
Corporation Line or
Fence Line (Ex) (Pr)
Center Line
Right of Way (Ex) Ex R/W
Right of Way (Pr) R/W
Standard Highway Ease.(Ex) Ex SH
Standard Highway Ease.(Pr) SH
Temporary Right of Way TMP
Channel Ease. (Pr) CH
Utility Ease. (Ex) Ex U
Railroad or
Guardrail (Ex) (Pr)
Construction Limits
Edge of Pavement (Ex)
Edge of Pavement (Pr)

Edge of Shoulder (Ex)
Edge of Shoulder (Pr)
Ditch / Creek (Ex)
Ditch / Creek (Pr)
Tree Line (Ex)
Ownership Hook Symbol , Example
Property Line Symbol , Example
Break Line Symbol , Example
Tree (Pr) Tree (Ex) Shrub (Ex)
Tree (Remove) , Shrub (Remove)
Evergreen (Ex) , Stump
Evergreen (Remove) , Stump (Remove)
Wetland (Pr) , Grass (Pr) , Aerial Target
Post (Ex) , Mailbox (Ex) MB , Mailbox (Pr) MB
Light (Ex) , Telephone Marker (Ex) TEL
Fire Hydrant (Ex) , Water Meter (Ex)
Water Valve (Ex) , Utility Valve Unknown (Ex.)
Telephone Pole (Ex) , Power Pole (Ex)
Light Pole (Ex)

GENERAL NOTES

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DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.10 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-01-19 TIME: 3:21:15 PM USER: jennifer.kelley
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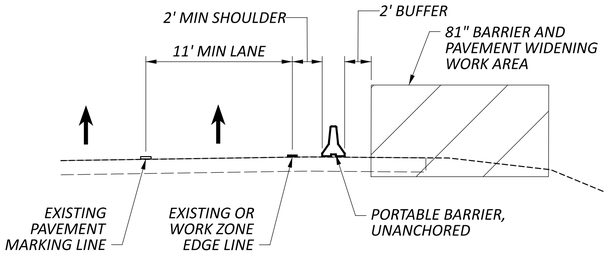
MAINTENANCE OF TRAFFIC SEQUENCE OF CONSTRUCTION

CONSTRUCT FOUNDATIONS, GRADING, PAVEMENT WIDENING, AND 81 INCH BARRIER 3 USING SHOULDER CLOSURES WITH PORTABLE BARRIER PER MT-95.45. RIGHT LANE WIDTH MAY BE REDUCED TO 11 FT MINIMUM.

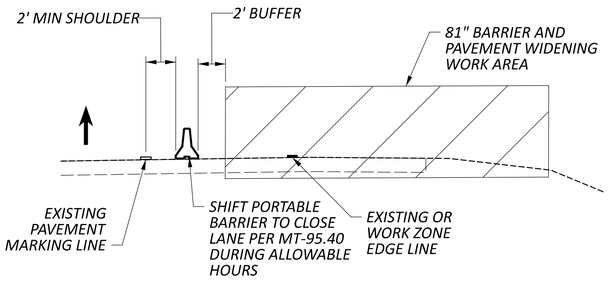
CONSTRUCT 81 INCH BARRIERS 6, 8, 10, AND 12 USING SINGLE LANE CLOSURES WITH PORTABLE BARRIER PER MT-95.40. LANE AND RAMP CLOSURES SHALL BE LIMITED TO HOURS LISTED IN THE LANE VALUE CONTRACT TABLE.

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

MAINTENANCE OF TRAFFIC TYPICAL SECTIONS



SHOULDER CLOSURE



LANE CLOSURE

LANE VALUE CONTRACT TABLE				
CRITICAL WORK	RESTRICTED TIME PERIOD		TIME UNIT	DISINCENTIVE PER TIME UNIT
	WEEKDAY	WEEKEND		
SR-161 LANE CLOSURE	6 AM - 9 AM 2 PM - 7 PM	6 AM MON - 7 PM FRI	EACH MINUTE	$XX
NEW ALBANY RD TO SR-161 WB RAMP CLOSURE	6 AM - 7 PM	6 AM MON - 7 PM FRI	EACH MINUTE	$XX

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)	LABOR DAY
TOTAL SOLAR ECLIPSE (4/8/24)	GENERAL/REGULAR ELECTION DAY (NOV)
MEMORIAL DAY	THANKSGIVING
FOURTH OF JULY (OBSERVED)	CHRISTMAS (OBSERVED)

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
MONDAY (TOTAL SOLAR ECLIPSE)	12:00 N FRIDAY THROUGH 6:00 AM WEDNESDAY
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).

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. 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.

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.

WORK ZONE MARKINGS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.

ITEM 614 -	WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE 1 (WHITE)	xx MILE
ITEM 614 -	WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE 1	XX FEET
ITEM 614 -	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 740.06, TYPE 1	XX FEET

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.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS (UNIDIRECTIONAL) __ EACH

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

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.

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

ITEM 614,	PORTABLE BARRIER, UNANCHORED	__ FT
ITEM 614,	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	__ EACH
ITEM 614,	OBJECT MARKER, ONE-WAY	__ EACH

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

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 ___ M. GAL.

MAINTENANCE OF TRAFFIC GENERAL NOTES

FRA-161-15.80 NOISE WALLS

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:38:00 PM USER: jennifer.kelley
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DESIGNER NRS/BSS

REVIEWER JDH 01-22-24

PROJECT ID 117607

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 _____ 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 _____ SIGN MONTH ASSUMING _____ PCMS SIGN(S) FOR _____ MONTH(S)

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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REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.12 TOTAL P.276

FRA-161-15.80 NOISE WALLS

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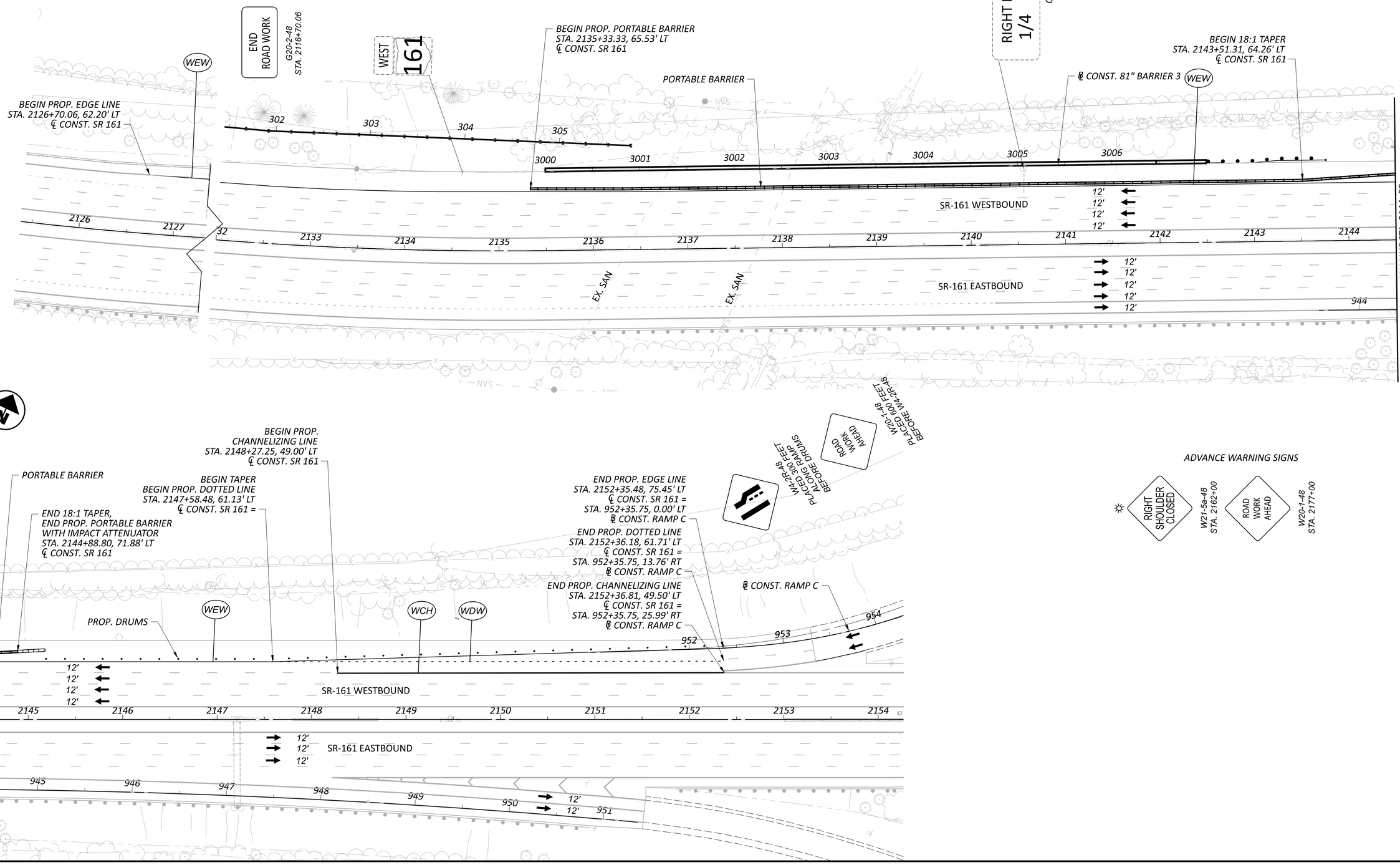
MAINTENANCE OF TRAFFIC LEGEND

- WEW — WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE 1 (WHITE)
- WDW — WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE 1
- WCH — WORK ZONE CHANNELIZING LINE, CLASS I, 12", 740.06, TYPE 1
- 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. PORTABLE BARRIER TO BE PLACED 2' OFFSET FROM THE EDGE OF PAVEMENT
4. PORTABLE BARRIER OFFSETS PROVIDED ON THE PLAN VIEW LAYOUTS ARE MEASURED TO THE CENTER OF PORTABLE BARRIER.

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100



MAINTENANCE OF TRAFFIC PLAN
81" BARRIER 3

FRA-161-15.80 NOISE WALLS

MODEL: CLP_SR162 - Barrier 3 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 10:30:30 AM USER: natalie.sakian
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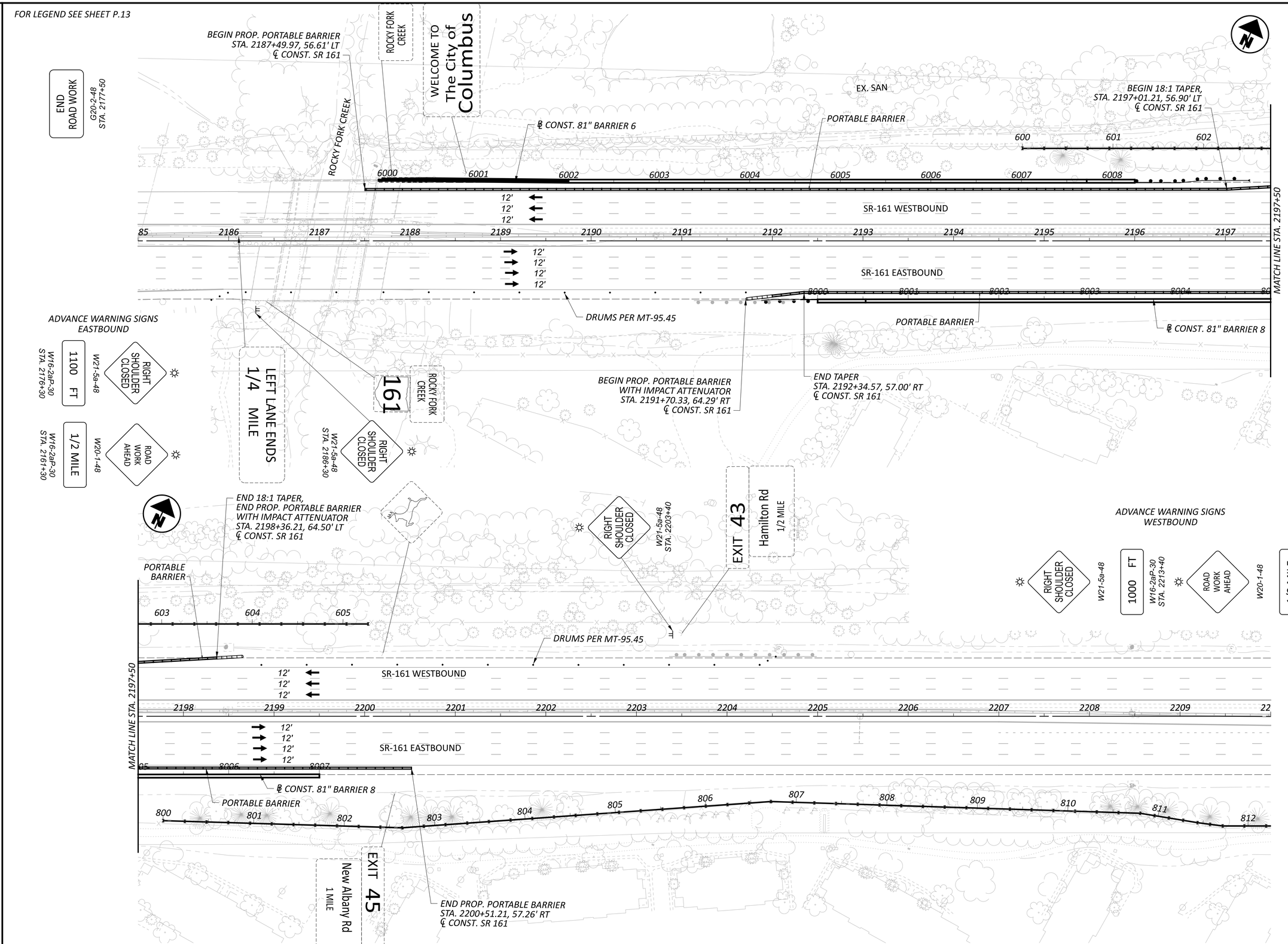
DESIGNER: NRS/BSS
REVIEWER: JDH 01-22-24
PROJECT ID: 117607
SHEET: P.13 TOTAL: P.276

FOR LEGEND SHEET P.13



HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC PLAN
81" BARRIERS 6 AND 8

DESIGN AGENCY	ARCADIS, 8101 NORTH HIGH ST SUITE 100, COLUMBUS, OHIO 43235, (614) 846-4500, www.arcadis.com
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REVIEWER	JDH 01-22-24
PROJECT ID	117607
SHEET	P.14
TOTAL	P.276

FRA-161-15.80 NOISE WALLS

MODEL: CLP_SR163 - Barrier 6-8 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-19 TIME: 4:07:45 PM USER: natalie.sakian
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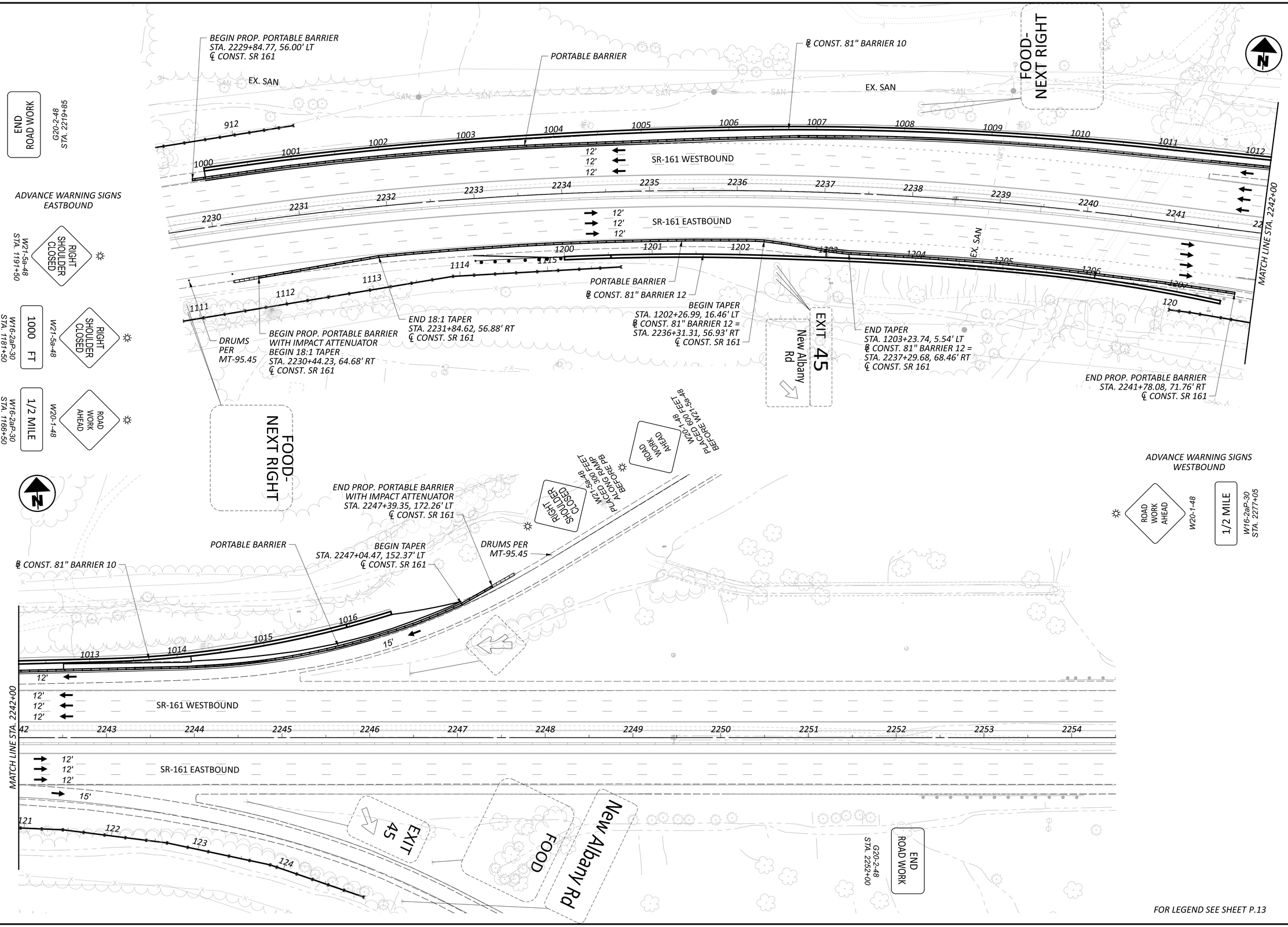
MAINTENANCE OF TRAFFIC PLAN
81" BARRIERS 10 AND 12

HORIZONTAL SCALE IN FEET
0 25 50 100



FOR LEGEND SEE SHEET P.13

FRA-161-15.80 NOISE WALLS

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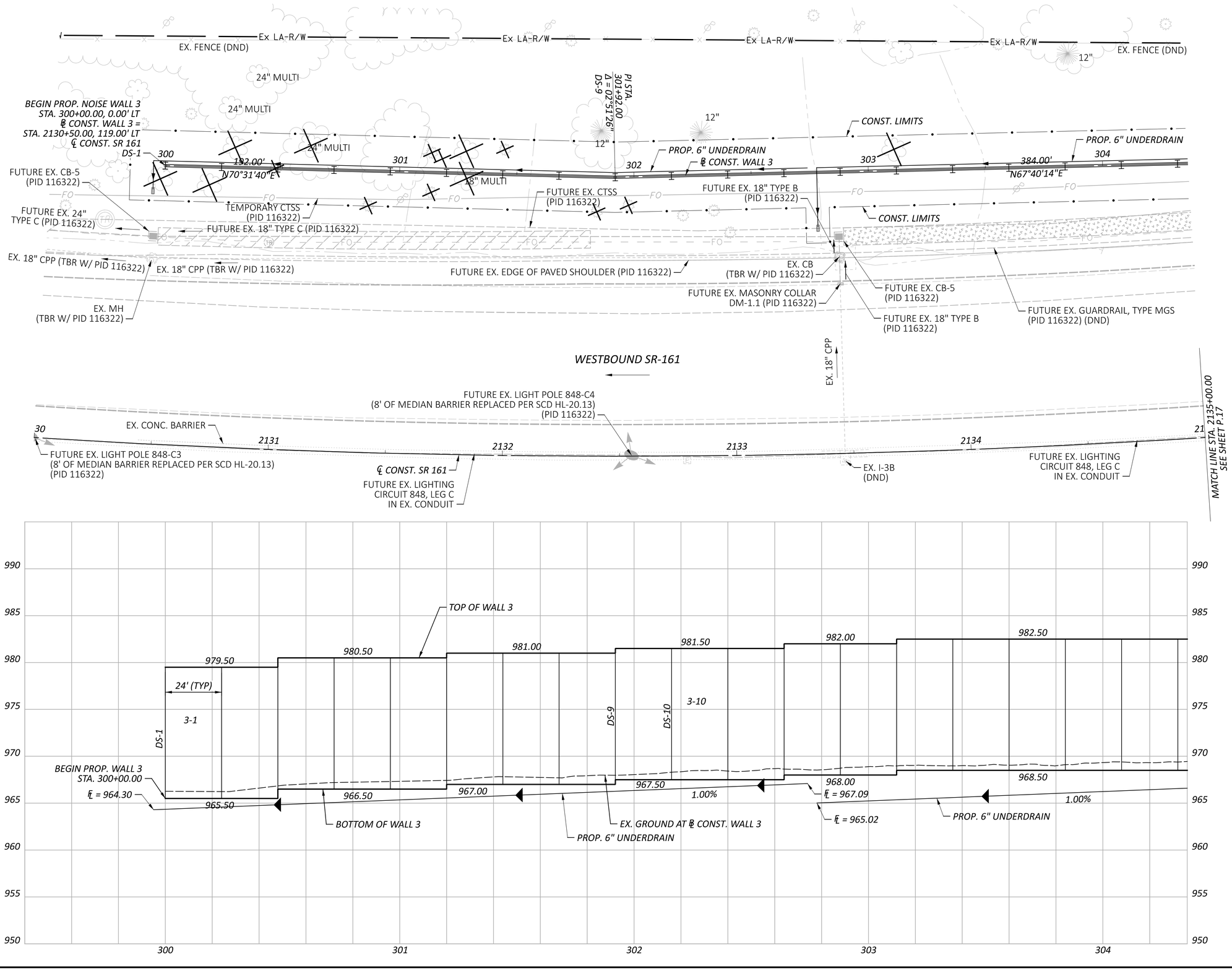
SHEET P.15 TOTAL P.276



HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN & PROFILE - 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: 2024-01-22 TIME: 9:15:03 AM USER: jennifer.kelley
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DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.16 TOTAL P.276

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'

HORIZONTAL SCALE IN FEET
0 10 20 40

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

Ex LA-R/W
CONST. LIMITS
℄ CONST. WALL 3
36" MULT
12"
305
384.00'
N67°40'14"E
PROP. 6" UNDERDRAIN
END PROP. NOISE WALL 3
STA. 305+76.00, 0.00' LT
℄ CONST. WALL 3 =
STA. 2136+41.07, 110.00' LT
℄ CONST. SR 161
DS-25
TIED CONC. BLOCK MAT WITH TYPE 1 UNDERLAYMENT
ARCADIS RESPONSE: COMPLIED AND SPECIFIED NATIVE VEGETATION WITHIN THE SCPZ LIMITS
Mitigate disturbance within SCPZ. 1:1 native vegetation within SCPZ
90' ± SCPZ WIDTH
90' SCPZ LINE
100-YEAR FLOODWAY
EX. FENCE (DND)
REGULATED STREAM 3
TIED CONC. BLOCK MAT WITH TYPE 1 UNDERLAYMENT
PROP. 81" BARRIER DRAINAGE WINDOW
STA. 3004+00.00
SEE SHEET P.209
TEMPORARY CTSS (PID 116322) (SEE NOTE 1)
FUTURE EX. CTSS (PID 116322)
PROP. 81" BARRIER 3
℄ CONST. 81" BARRIER 3
N64°36'58"E
CONST. LIMITS
PROP. SAWCUT
FUTURE EX. EDGE OF PAVED SHOULDER (PID 116322)
FUTURE EX. GUARDRAIL, TYPE MGS (PID 116322) (TBR)
LIMIT OF SHOULDER MILL/FILL
CURVE 3A
POT STA. 3000+01.96
5.5'
10.0'
3000
3001
3002
3003
3004
TIED CONC. BLOCK MAT WITH TYPE 1 UNDERLAYMENT
PROP. 81" BARRIER DRAINAGE WINDOW
STA. 3001+00.00
SEE SHEET P.209
BEGIN PROP. 81" BARRIER 3
STA. 3000+00, 0.00' LT
℄ CONST. 81" BARRIER 3 =
STA. 2135+50.00, 83.50' LT
℄ CONST. SR 161
EX. 15" SAN
ELECTRIC OH (DND)
ARCADIS RESPONSE: COMPLIED
EX. 15" SAN.
WESTBOUND SR-161
EX. 84" RCP
MATCH LINE STA. 2135+00.00 SEE SHEET P.16
MATCH LINE STA. 2140+00.00 SEE SHEET P.18
35
2136
2137
2138
2139
EX. CONC. BARRIER
21
FUTURE EX. LIGHT POLE 848-C5 (8' OF MEDIAN BARRIER REPLACED PER SCD HL-20.13) (PID 116322)
℄ CONST. SR 161
FUTURE EX. LIGHTING CIRCUIT 848, LEG C IN EX. CONDUIT
COMMENT FOR ENTIRE PLAN. ANY LIGHTING (BE IT FUTRE EXISTING OR WHATEVER) THAT IS NOT BEING DISTURBED SHOULD HAVE A "DND" CALLOUT FOR CLARIFICATION OF DISPOSTION. ALL LOCATIONS AND CALLOUTS
FUTURE EX. LIGHT POLE 848-C6 (8' OF MEDIAN BARRIER REPLACED PER SCD HL-20.13) (PID 116322)
FUTURE EX. LIGHTING CIRCUIT 848, LEG C IN EX. CONDUIT

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

990
985
980
975
970
965
960
955
950

OVERHEAD TRANSMISSION
PROP. 81" BARRIER END ANCHORAGE, REINFORCED
PROP. 81" BARRIER DRAINAGE WINDOW SECTION
PROP. 81" BARRIER END ANCHORAGE, REINFORCED
20.3'+
20.3'+
20.6'+
TOP OF 81" BARRIER ELEV. 979.56'
TOP OF 81" BARRIER ELEV. 979.66'
TOP OF 81" BARRIER ELEV. 979.78'
TOP OF PROP. 81" BARRIER 3
PROP. 81" BARRIER END ANCHORAGE, REINFORCED
PROP. 81" BARRIER DRAINAGE WINDOW SECTION
PROP. 81" BARRIER END ANCHORAGE, REINFORCED
+75
+90
+10
+25
TOP OF WALL 3
982.50
24' (TYP)
3-20
+00
+15
DS-20
3-24
DS-25
968.50
1.00%
BEGIN PROP. 81" BARRIER 3
STA. 3000+00.00
END PROP. WALL 3
STA. 305+76.00
℄ = 968.00
BOTTOM OF PROP. 81" BARRIER 3
EX. GROUND AT ℄ CONST. 81" BARRIER 3
EX. GROUND AT ℄ CONST. WALL 3
BOTTOM OF WALL 3
EX. 15" SAN.
EX. 15" SAN.
EX. 84" RCP
305+00.00 = 3000+15.13
3001
3002
3003
3004

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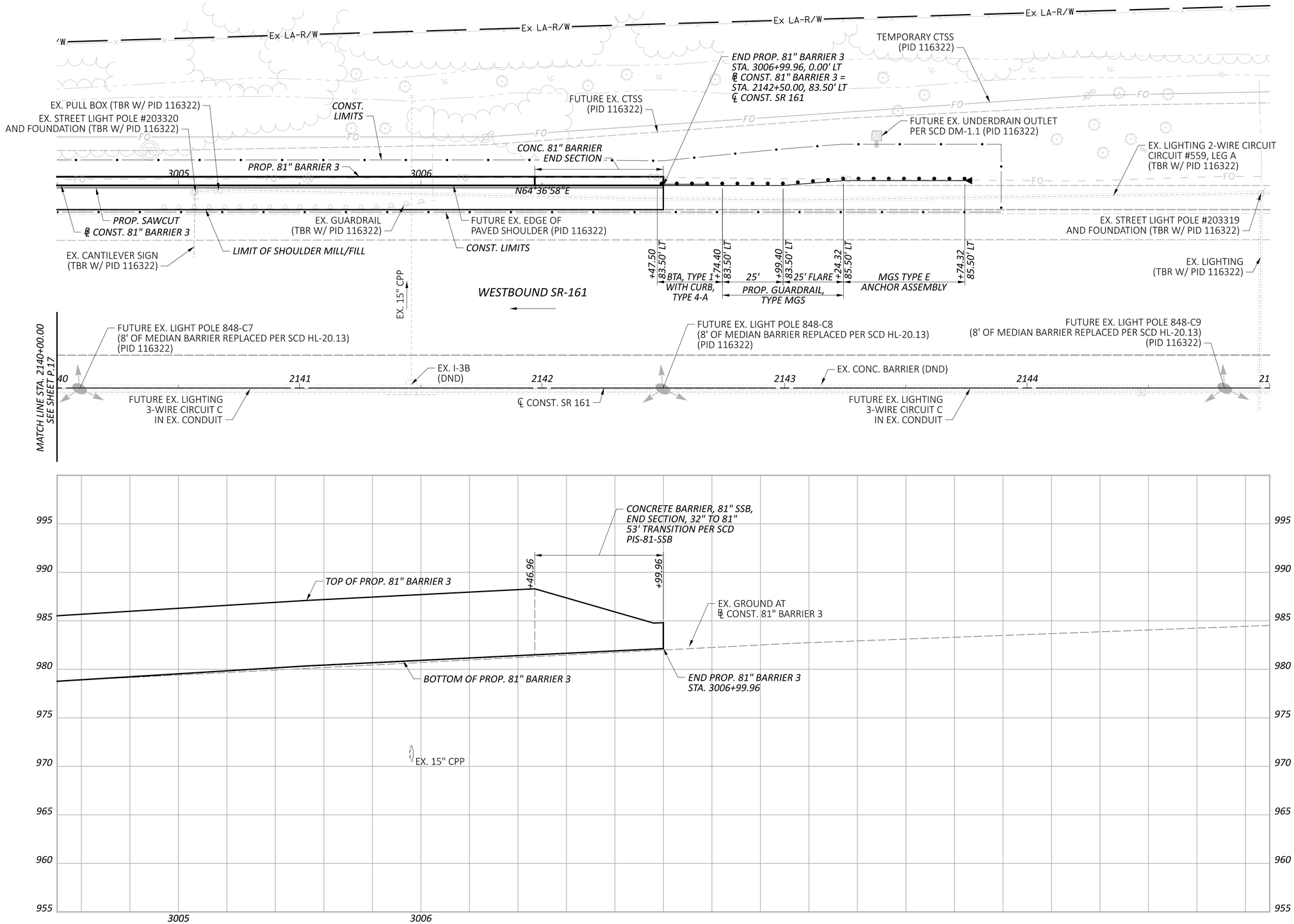
DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.17 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 3 - Plan 3 PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 9:15:44 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_GP302.dgn



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 WALLS

MODEL: Wall 3 - Plan 4 PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 9:15:59 AM USER: jennifer.kelley
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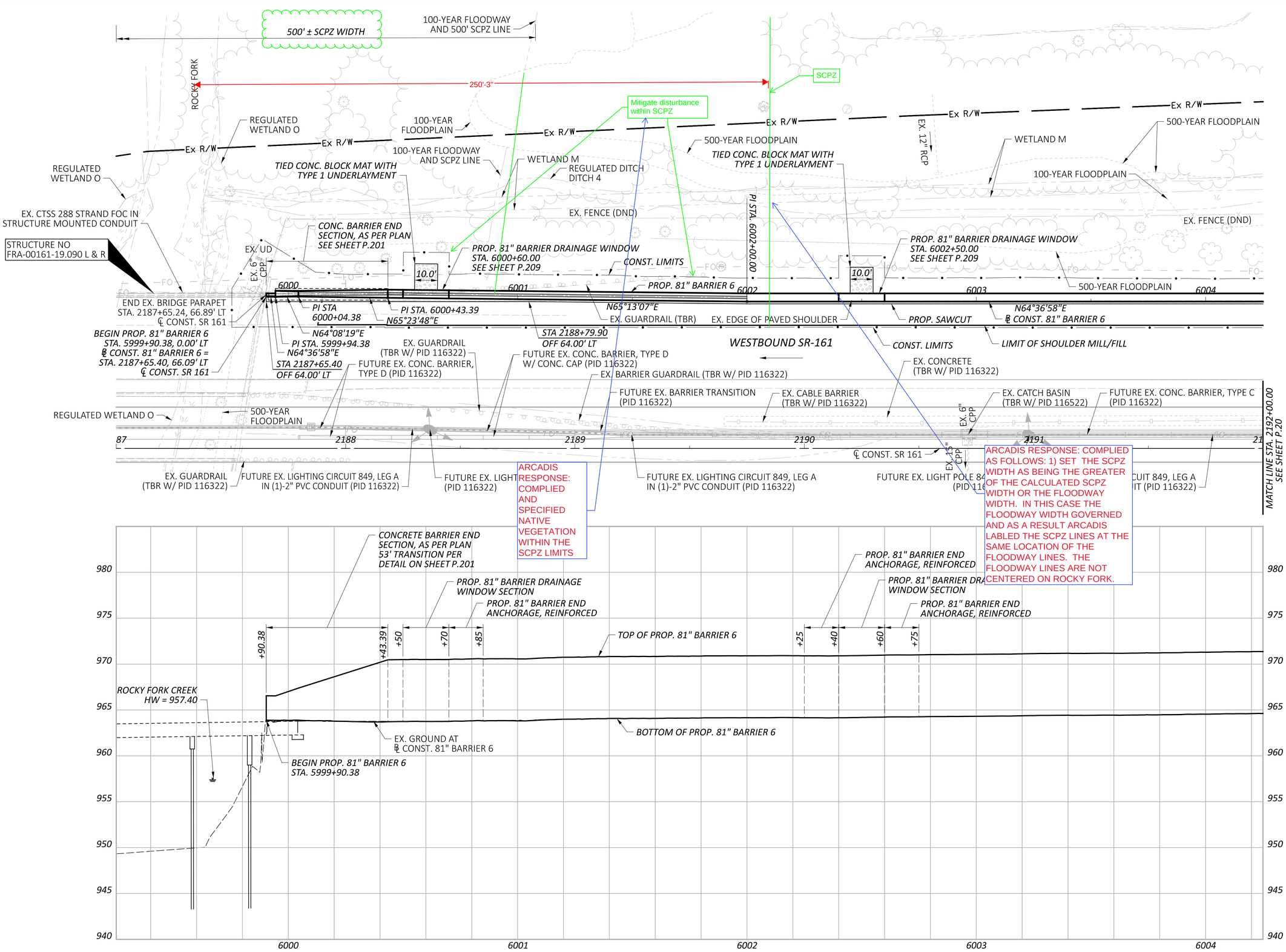
DESIGNER
JMK
REVIEWER
JDH 01-22-24
PROJECT ID
117607
SHEET P.18 TOTAL P.276



HORIZONTAL SCALE IN FEET
0 10 20 40

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

FRA-161-15.80 NOISE WALLS

MODEL: Wall 6 - Plan 5 PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 9:34:40 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_GP601.dgn

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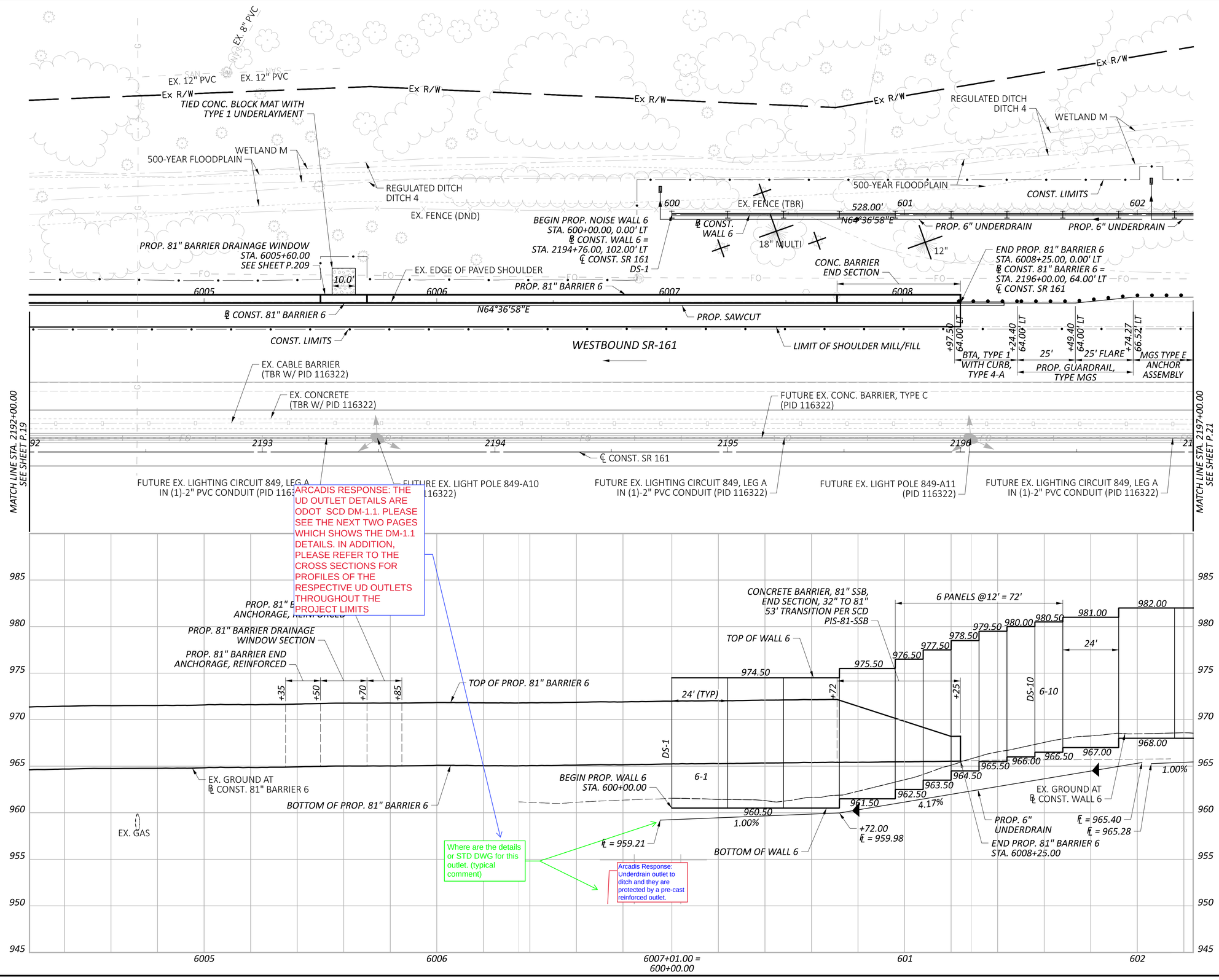
DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.19 TOTAL P.276



HORIZONTAL SCALE IN FEET
0 10 20 40

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

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DESIGNER
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REVIEWER
JDH 01-22-24

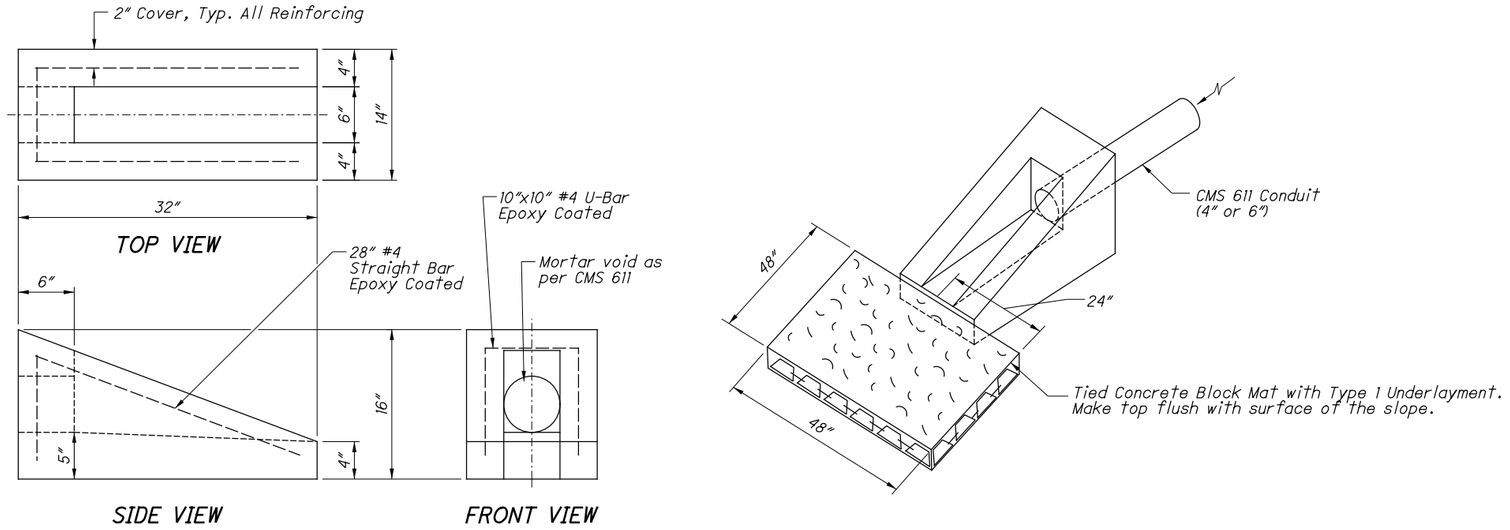
PROJECT ID
117607

SHEET P.20 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 6 - Plan 6 PAPERSIZE: 34x22 (in.) DATE: 2024-01-19 TIME: 3:49:14 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_GP602.dgn

CONSTRUCTION METHODS



PRECAST REINFORCED CONCRETE OUTLET

NOTES

EROSION CONTROL PAD: *Provide erosion control at the outlet of all farm drains except where they outlet into a drainage structure.*

PAYMENT: *Erosion control pads are included in the unit price bid for Item 611 - __ Inch Conduit, Type __ .*

PRECAST REINFORCED CONCRETE OUTLET: *Provide a concrete outlet that meets CMS 611 requirements.*

PAYMENT: *The precast reinforced concrete outlet are paid at the contract unit price bid for Item 611 - Precast Reinforced Concrete Outlet.*

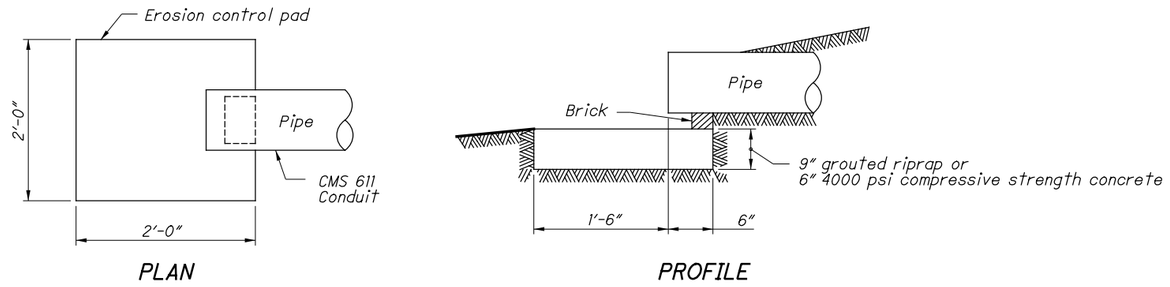
Tied Concrete Block Mat with Type 1 Underlayment is paid at the contract unit price bid for Item 601 - Tied Concrete Block Mat with Type 1 Underlayment.

SPRING DRAIN: *Aggregates, tarred paper, tarred burlap, or geotextile fabric backfill and necessary excavation for spring drains are included for payment in the unit price bid per Foot for Item 605 - Aggregate Drains for Springs.*

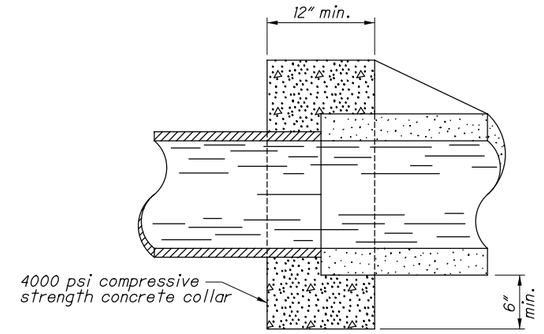
PAYMENT: *The pipe is included in the unit price bid per Foot for Item 605 - 6" Unclassified Pipe Underdrains for Springs.*

MASONRY COLLARS: *Provide a masonry collar where plans require that a pipe extension be joined to the end of an existing pipe with a butt joint. The cost is included in the unit price bid for the new conduit.*

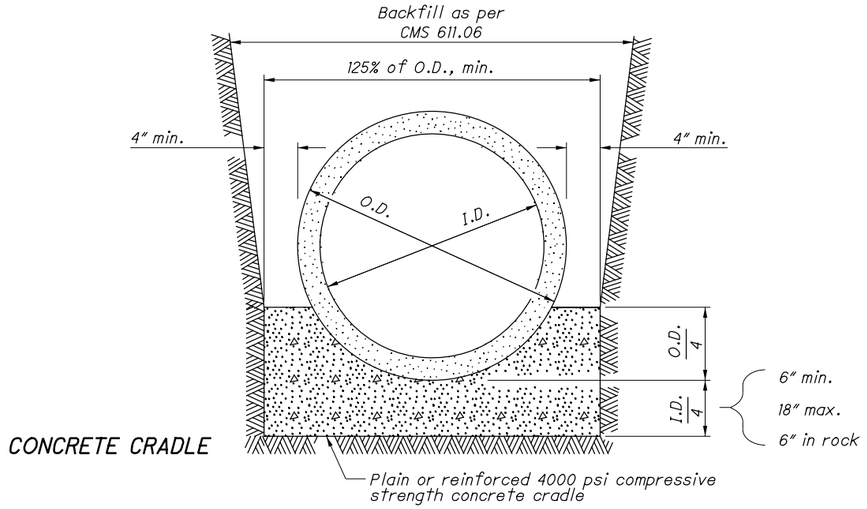
RIPRAP CUTOFF WALL: *The cost of the cutoff wall is included in the unit price bid for Item 601, Type D - Construct a 6" Reinforced Concrete Slab.*



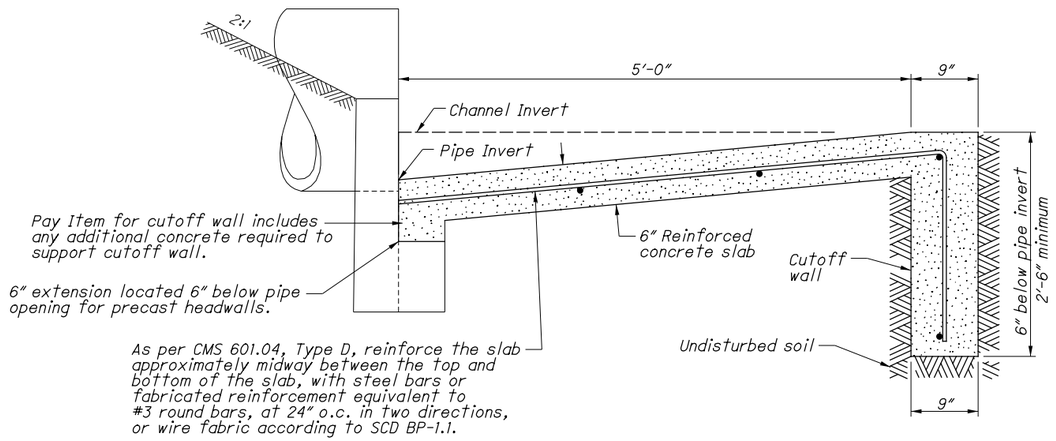
EROSION CONTROL PAD FOR OUTLET PIPE



MASONRY COLLAR



CONCRETE CRADLE



RIPRAP CUTOFF WALL

STATE OF OHIO DEPARTMENT OF TRANSPORTATION
STATE HYDRAULIC ENGINEER

REVISIONS
1-21-05
10-21-05
4-21-06
1-21-11
7-20-12
1-18-13
1-15-16
7-21-17
7-17-20

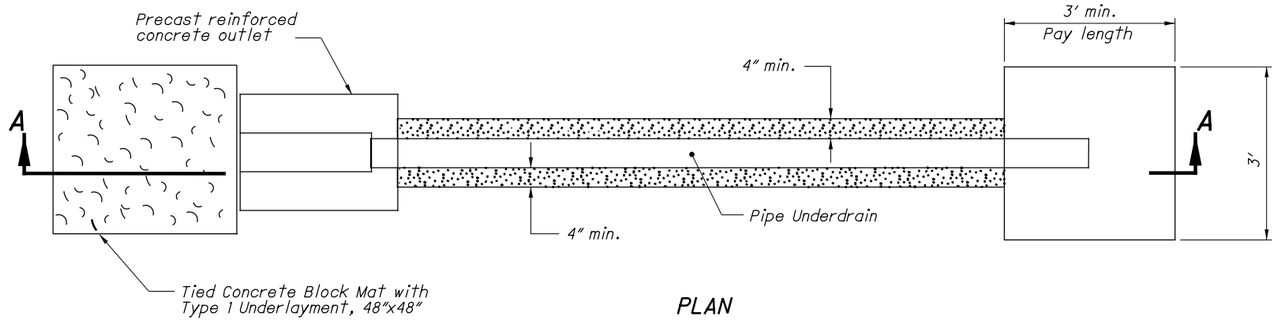
ROADWAY HYDRAULIC ENGINEER
Matt Cozzoli

OFFICE OF HYDRAULIC ENGINEERING

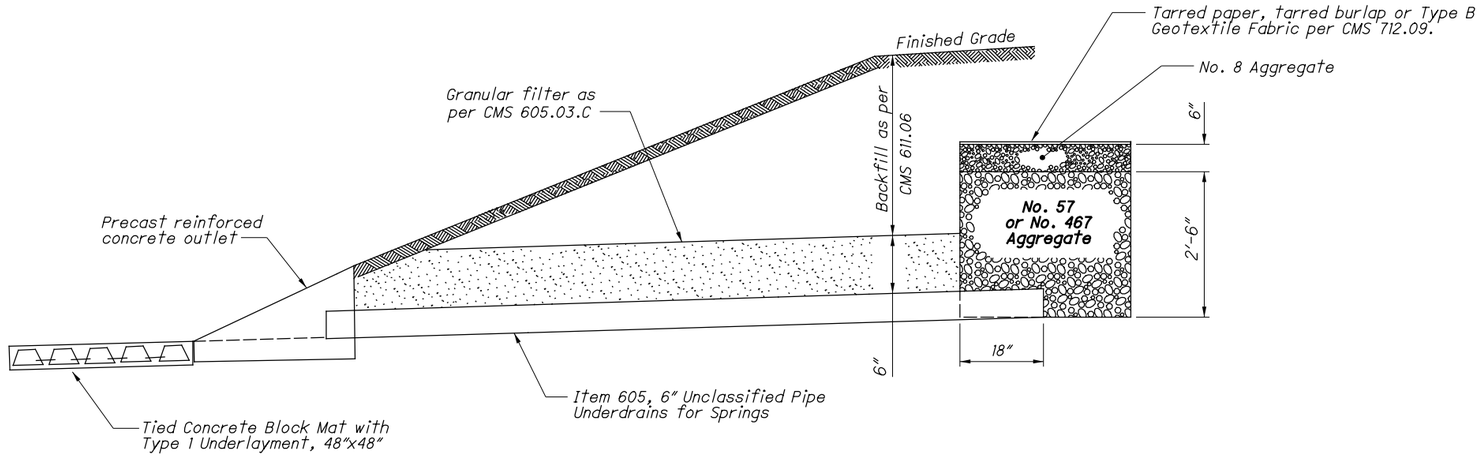
STANDARD HYDRAULIC CONSTRUCTION DRAWING
OUTLETS, DRAINS AND SEWERS

SCD NUMBER
DM-1.1

SPRING DRAIN DETAIL



PLAN



SECTION A-A

STATE OF OHIO DEPARTMENT OF TRANSPORTATION
STATE HYDRAULIC ENGINEER

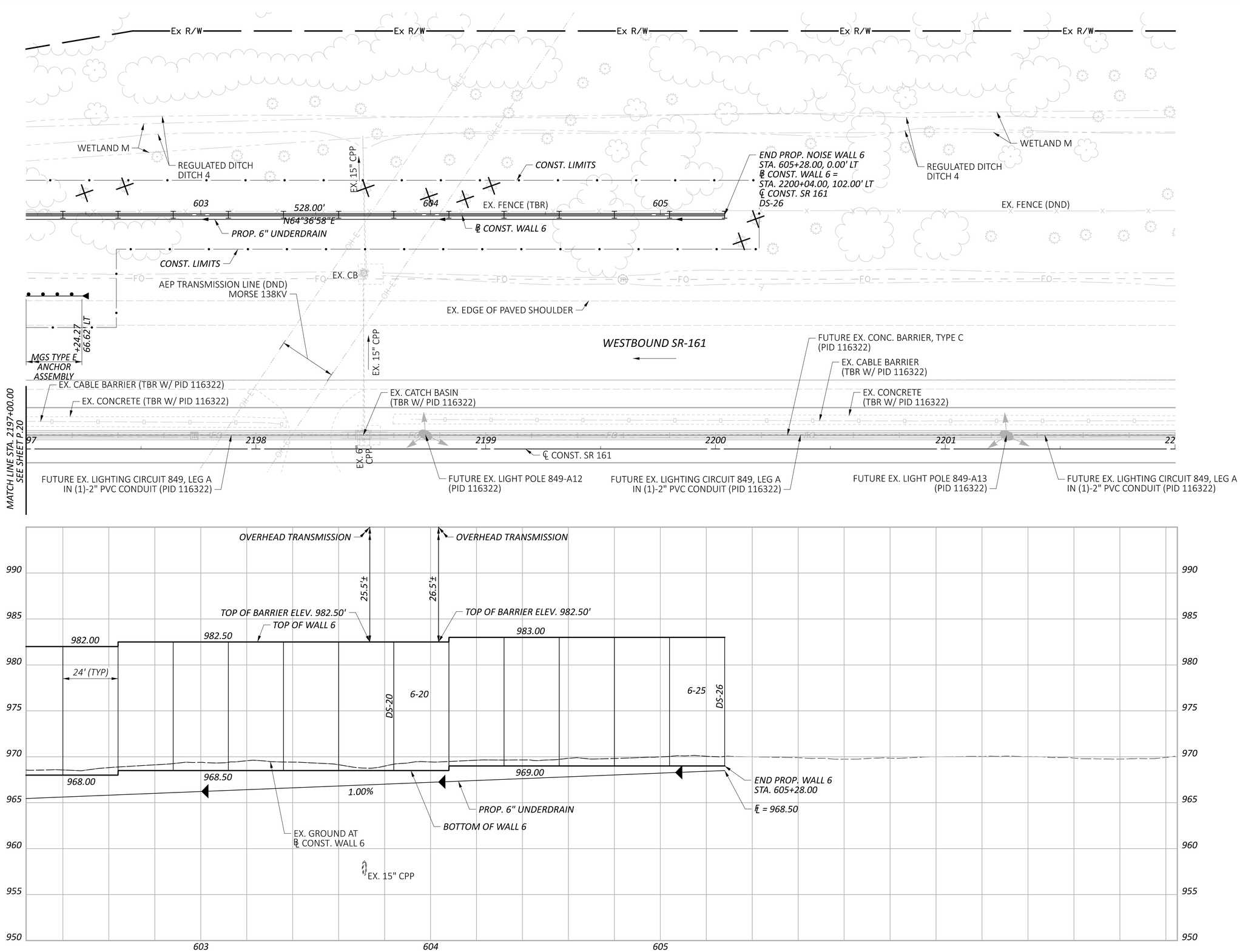
REVISIONS
1-21-05
10-21-05
4-21-06
1-21-11
7-20-12
1-18-13
1-15-16
7-21-17
7-17-20

ROADWAY HYDRAULIC ENGINEER
Matt Cozzoli

OFFICE OF HYDRAULIC ENGINEERING

STANDARD HYDRAULIC CONSTRUCTION DRAWING
OUTLETS, DRAINS AND SEWERS

SCD NUMBER
DM-1.1



HORIZONTAL SCALE IN FEET
0 10 20 40

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

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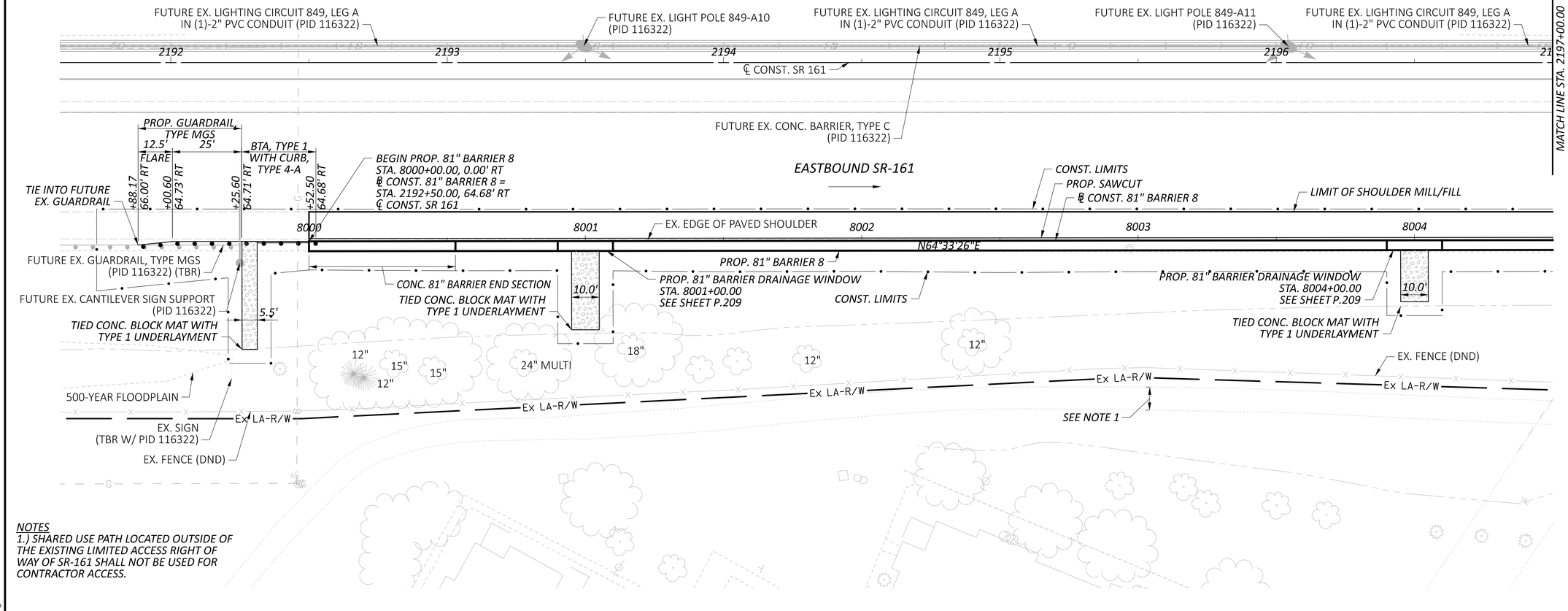
REVIEWER
JDH 01-22-24

PROJECT ID
117607

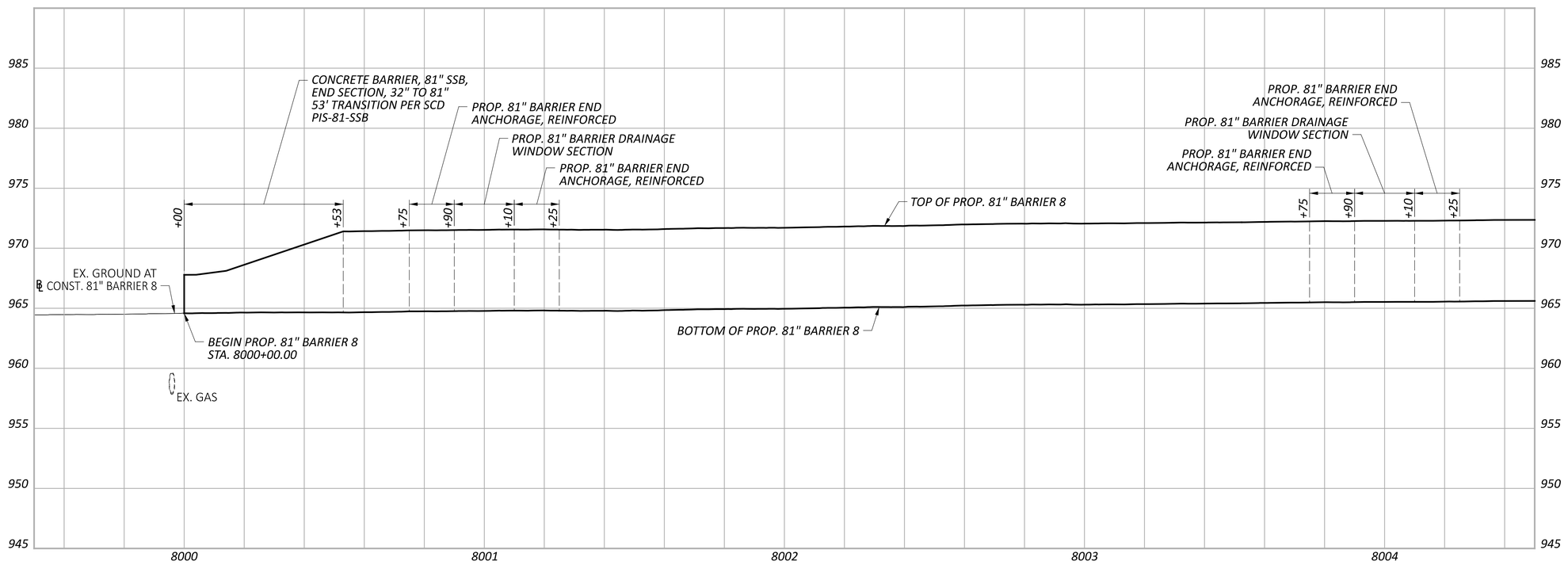
SHEET P.21 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 6 - Plan 28 PAPERSIZE: 34x22 (in.) DATE: 2024-01-19 TIME: 3:49:40 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



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. 2192+00.00 TO STA. 2197+00.00

FRA-161-15.80 NOISE WALLS

MODEL: CLP_SR161 - Plan 7 PAPERSIZE: 34x22 (in.) DATE: 2024-01-19 TIME: 3:50:43 PM USER: jennifer.kelley
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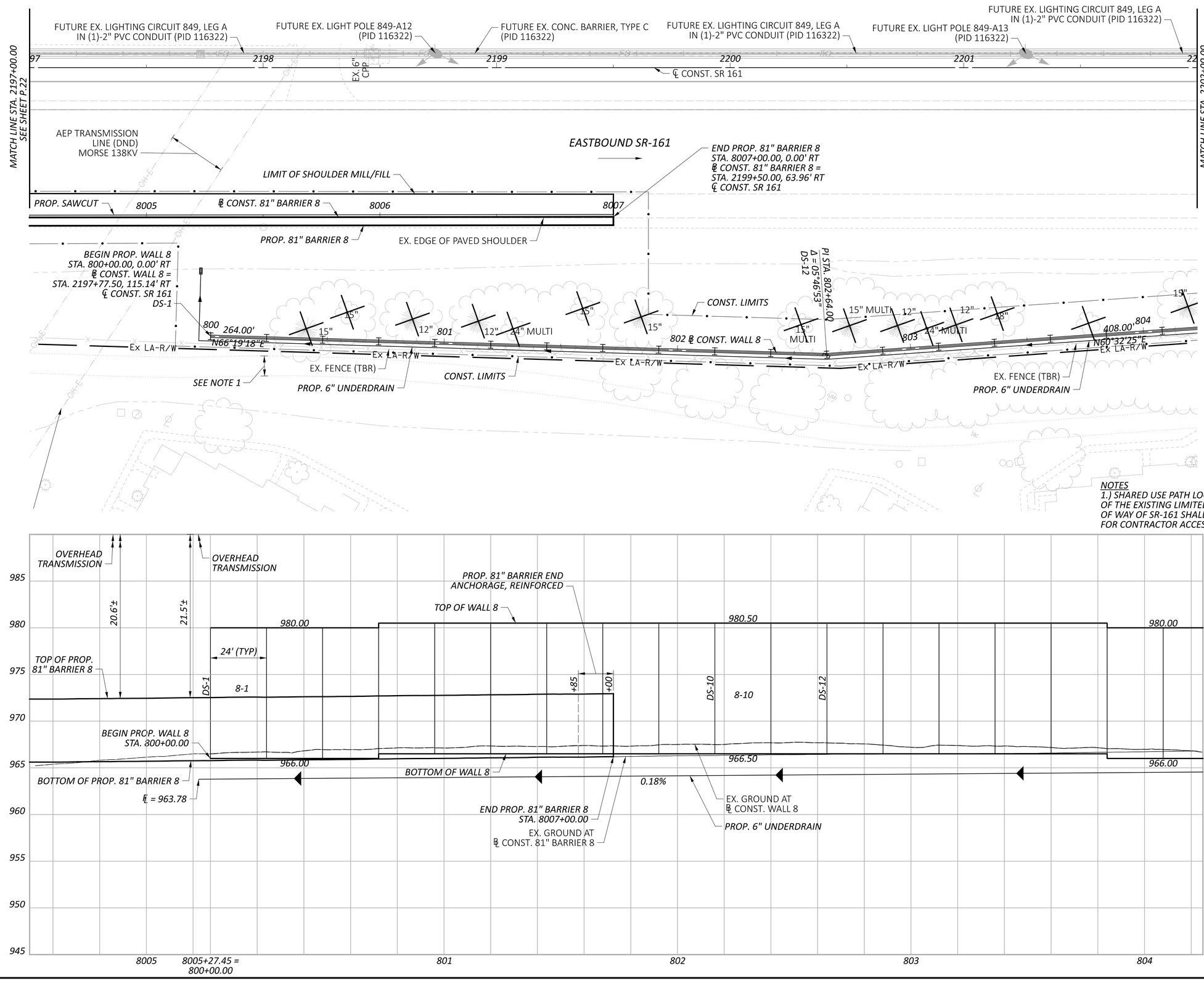
DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.22 TOTAL P.276



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 / WALL 8
STA. 2197+00.00 TO STA. 2202+00.00

FRA-161-15.80 NOISE WALLS

MODEL: CLP_SR161 - Plan 8 PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:43:16 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

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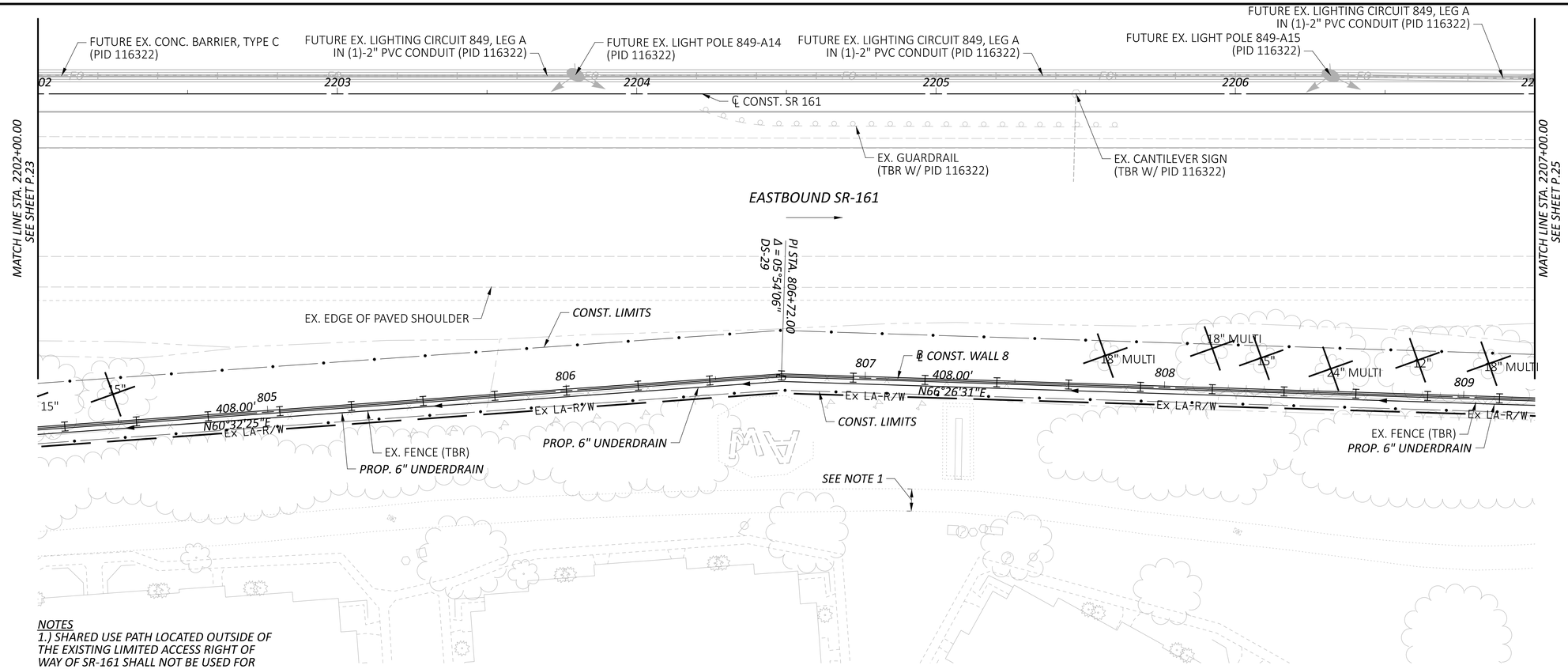
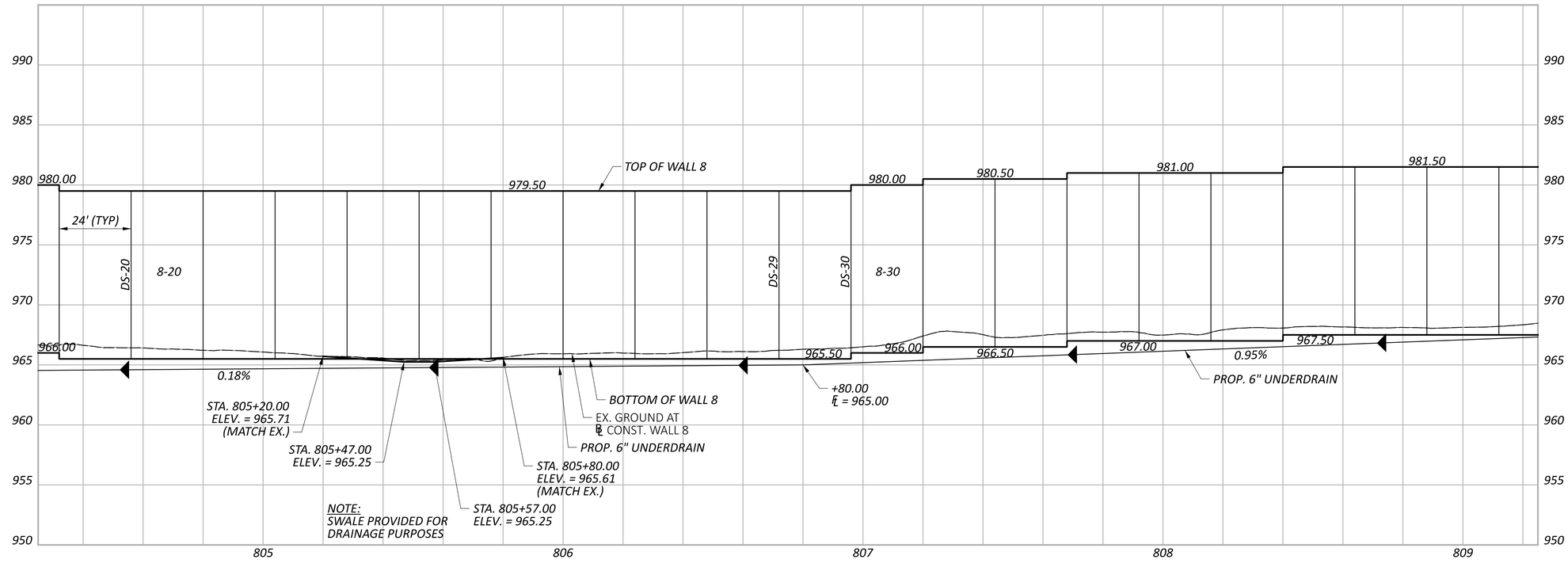
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.23 TOTAL P.276





HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN & PROFILE - WALL 8
STA. 2202+00.00 TO STA. 2207+00.00

FRA-161-15.80 NOISE WALLS

MODEL: CLP_SR161 - Plan 9 PAPERSIZE: 34x22 (in.) DATE: 2024-01-19 TIME: 11:48:14 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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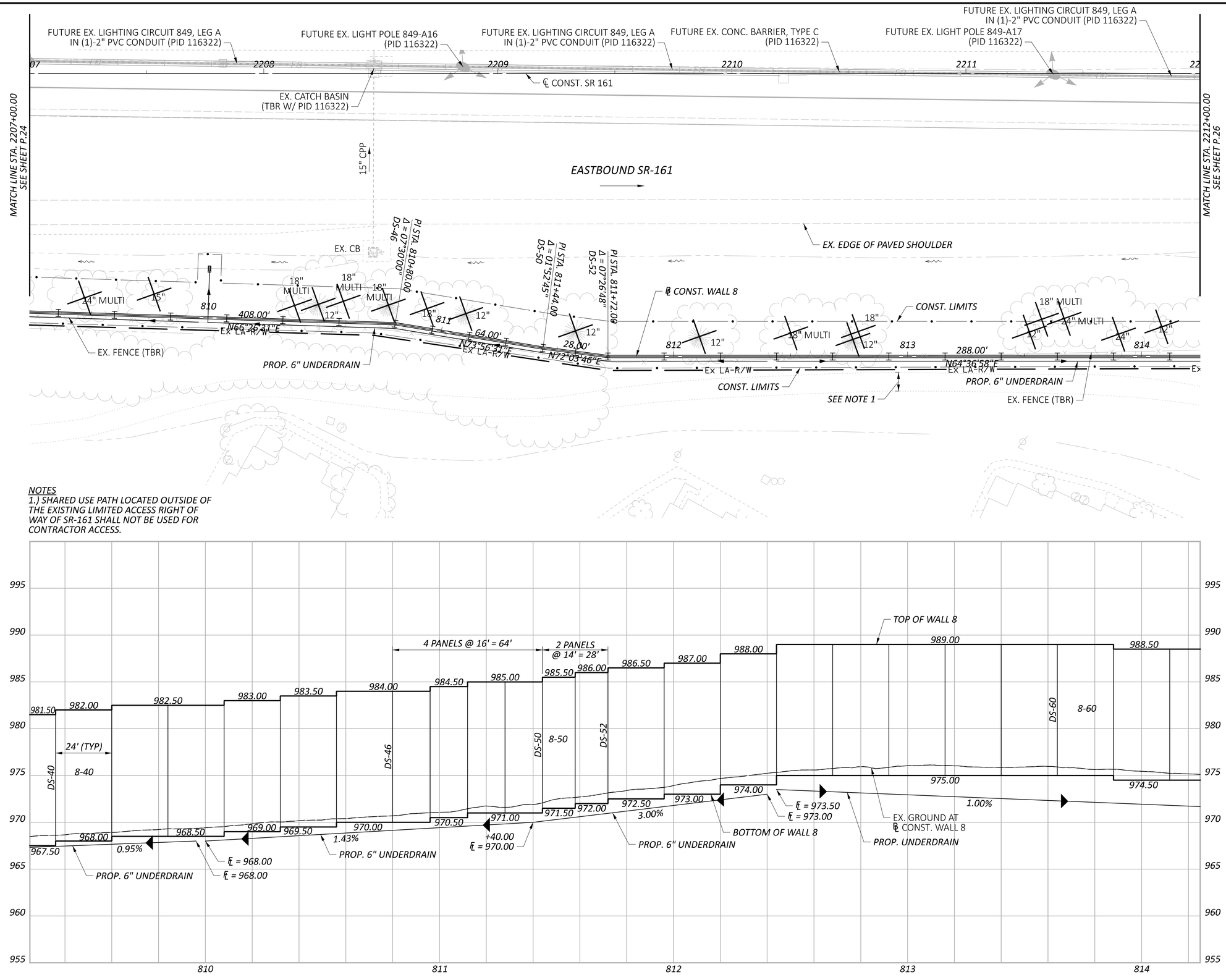
DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.24 TOTAL P.276



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.

FRA-161-15.80 NOISE WALLS

MODEL: CLP_SR161 - Plan 10 PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 9:49:54 AM USER: jennifer.kelley
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HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN & PROFILE - WALL 8
STA. 2207+00.00 TO STA. 2212+00.00

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DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.25 TOTAL P.276

FUTURE EX. LIGHTING CIRCUIT 849, LEG A IN (1)-2" PVC CONDUIT (PID 116322)
FUTURE EX. CONC. BARRIER, TYPE C (PID 116322)
FUTURE EX. LIGHT POLE 849-A18 (PID 116322)
FUTURE EX. LIGHTING CIRCUIT 849, LEG A IN (1)-2" PVC CONDUIT (PID 116322)
EX. BARRIER GUARDRAIL (TBR W/ PID 116322)
FUTURE EX. LIGHTING CIRCUIT 849, LEG C IN (1)-2" PVC CONDUIT (PID 116322)
FUTURE EX. LIGHT POLE 849-A19 (PID 116322)

12 2213 2214 2215 2216 22

℄ CONST. SR 161

MATCH LINE STA. 2212+00.00
SEE SHEET P.25

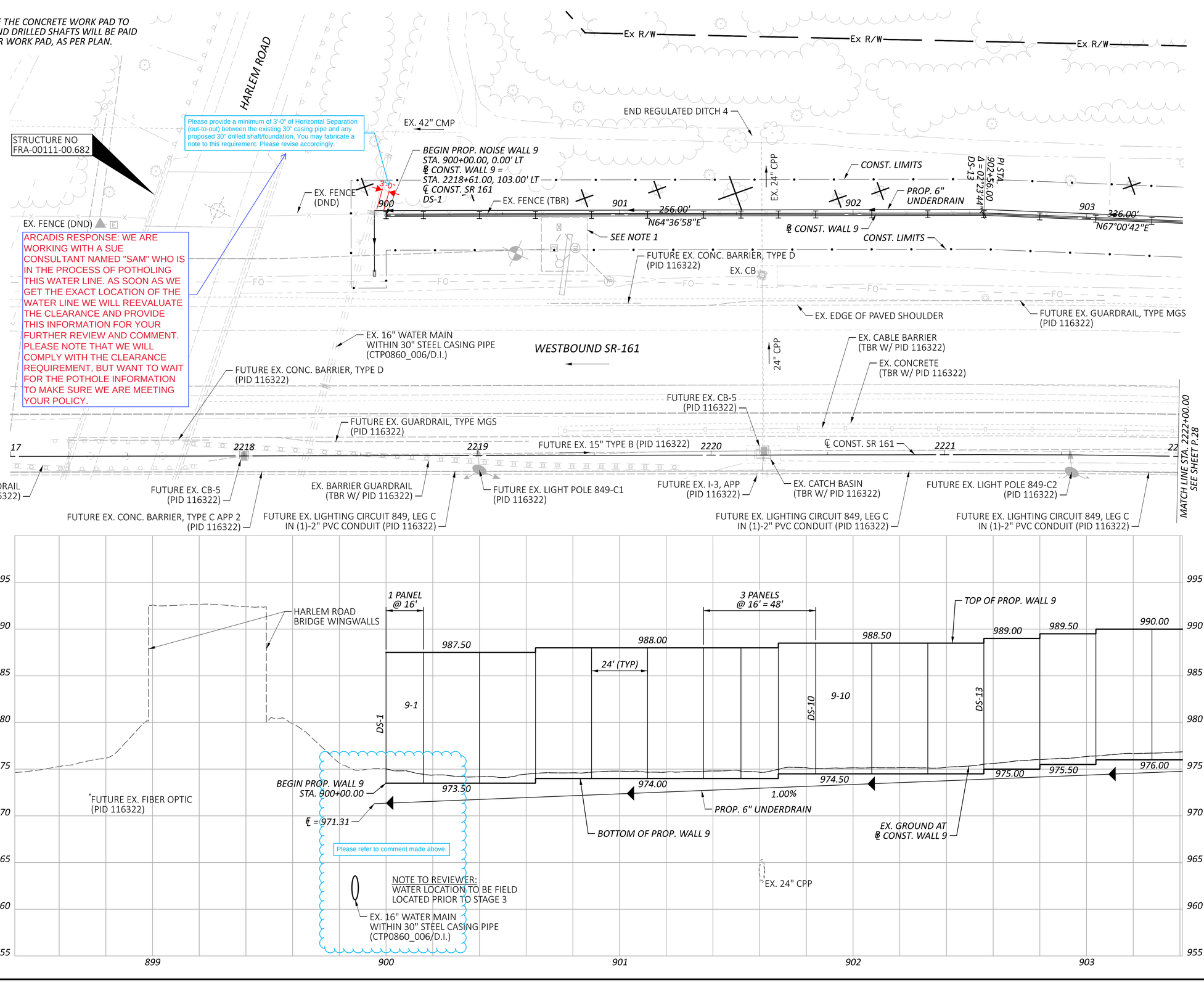
EASTBOUND SR-161

FUTURE EX. CANTILEVER SIGN SUPPORT (PID 116322)
FUTURE EX. GUARDRAIL, TYPE MGS (PID 116322)
EX. EDGE OF PAVED SHOULDER

PI STA. 814+60.00
Δ = 00°11'01"
DS-64

CONST. LIMITS
12" 12" 12"

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.



HORIZONTAL SCALE IN FEET
0 10 20 40

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

FRA-161-15.80 NOISE WALLS

MODEL: Wall 9 - Plan 12 PAPERSIZE: 34x22 (in.) DATE: 2024-01-19 TIME: 3:52:32 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

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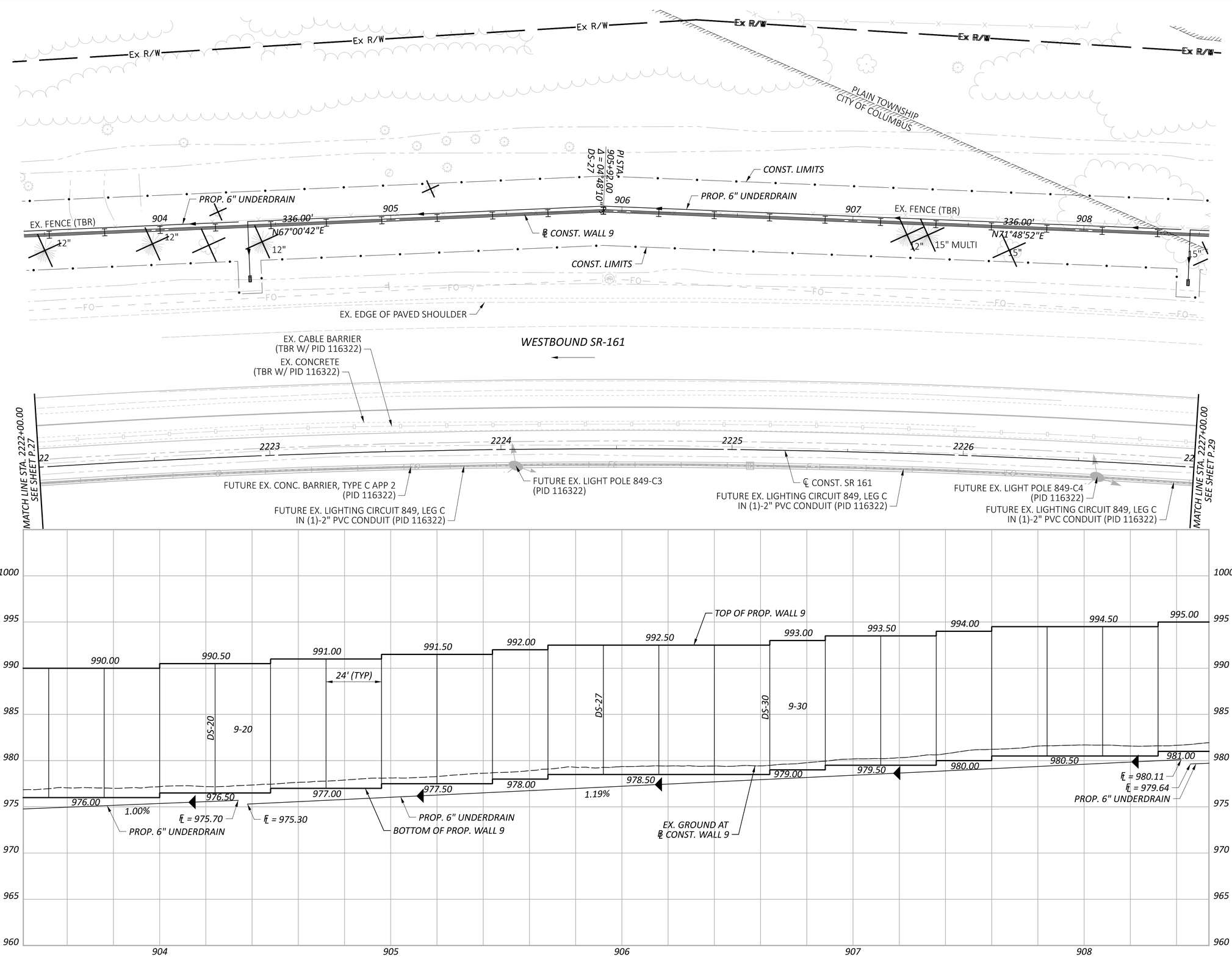
DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.27 TOTAL P.276



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 WALLS

MODEL: Wall 9 - Plan 13 PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:45:18 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_GP902.dgn

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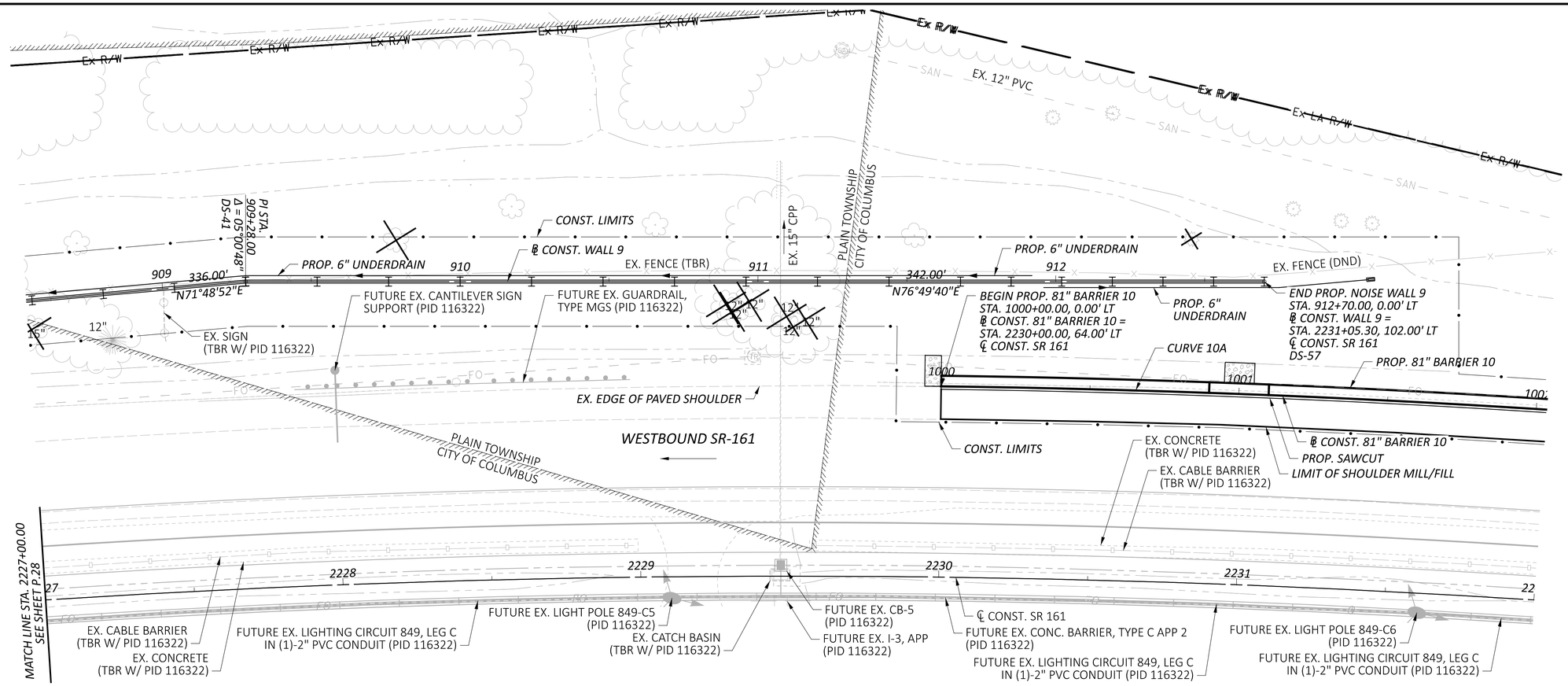
DESIGNER	
JMK	
REVIEWER	
JDH	01-22-24
PROJECT ID	
117607	
SHEET	TOTAL
P.28	P.276



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 WALLS

MODEL: Wall 9 - Plan 14 PAPERSIZE: 34x22 (in.) DATE: 2024-01-19 TIME: 3:51:39 PM USER: jennifer.kelley
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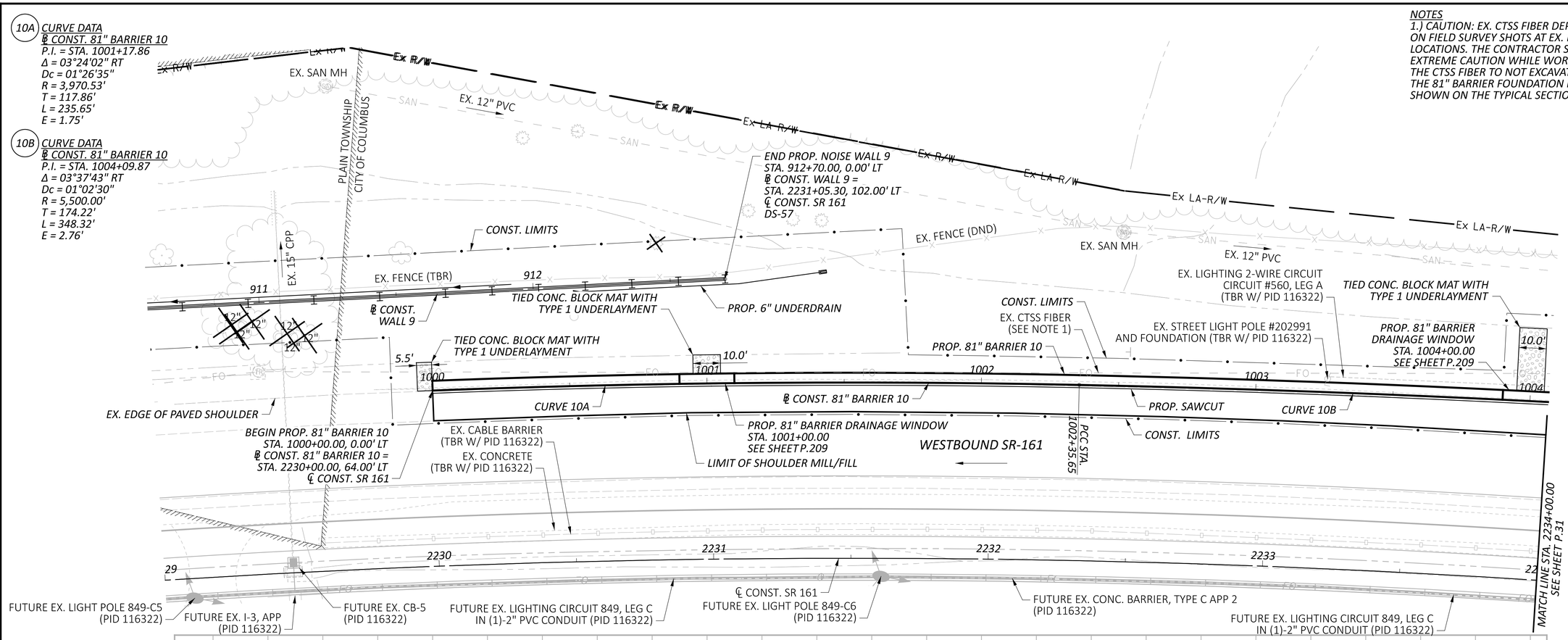
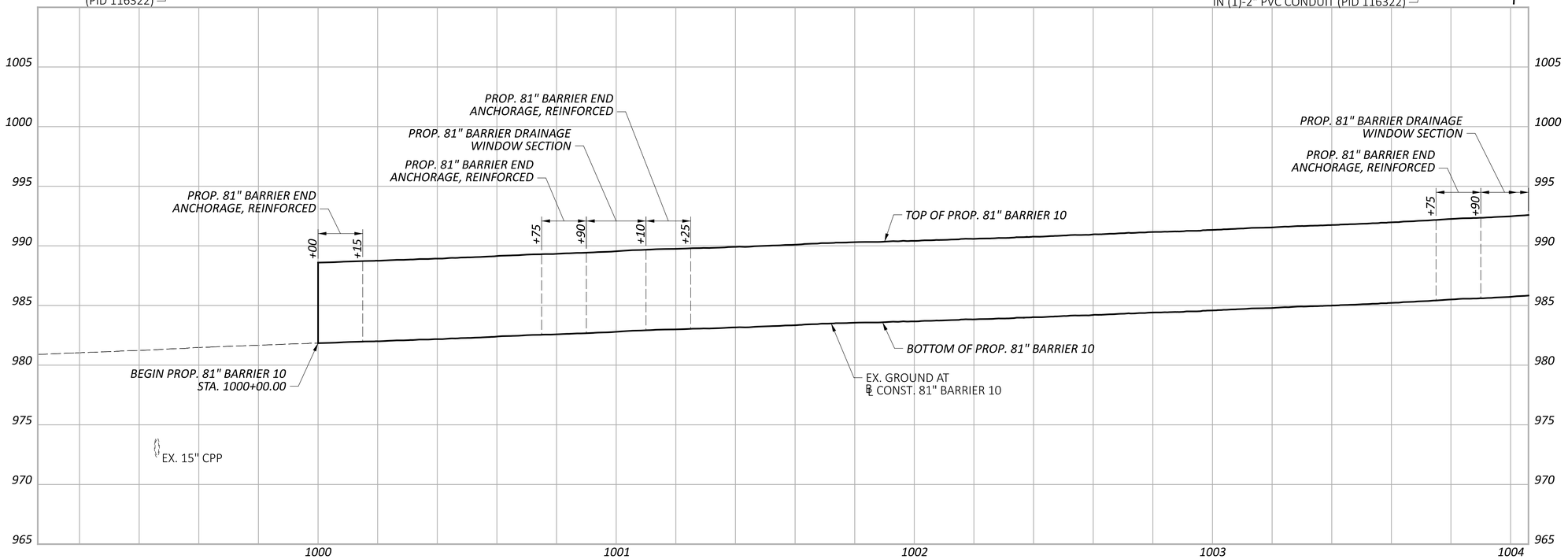
DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.29 TOTAL P.276

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

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

FRA-161-15.80 NOISE WALLS

MODEL: Wall 10 - Plan 15 PAPERSIZE: 34x22 (in.) DATE: 2024-01-19 TIME: 4:03:10 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_GP1001.dgn

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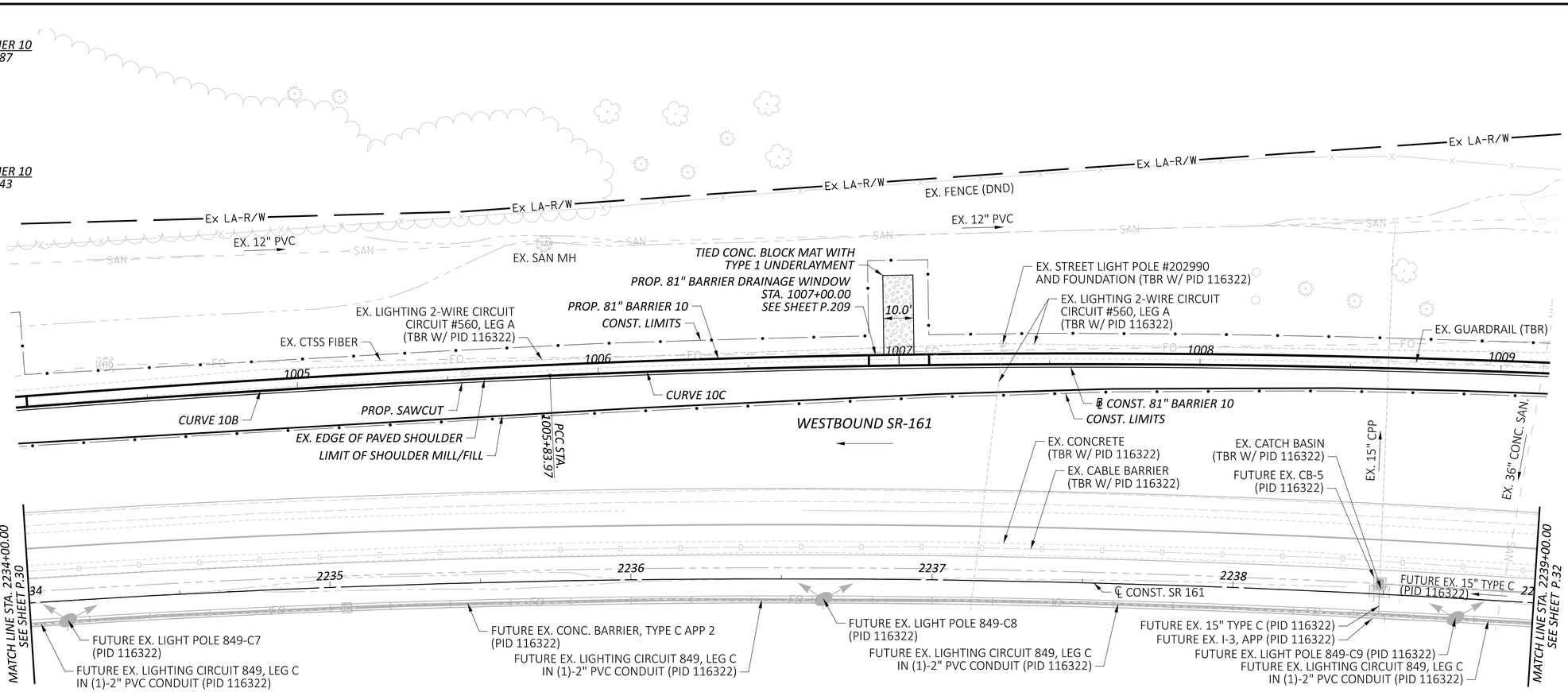
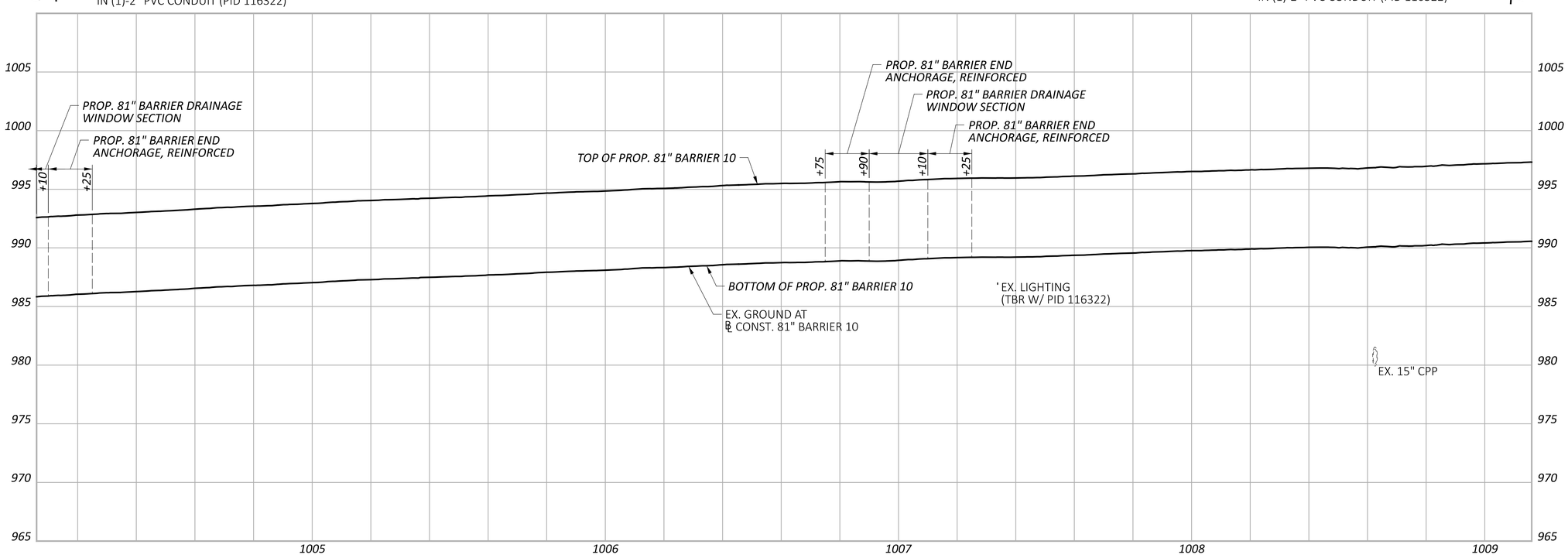
DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.30 TOTAL P.276

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 01-22-24
PROJECT ID 117607
SHEET P.31 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 10 - Plan 16 PAPERSIZE: 34x22 (in.) DATE: 2024-01-19 TIME: 4:03:37 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_GP1002.dgn

LEGEND

- ITEM 304 - 10" AGGREGATE BASE
- PROP. PAVED SHOULDER (SEE TYPICAL SECTIONS FOR PAVEMENT BUILDUP)

237' ± SCPZ WIDTH

100-YEAR FLOODWAY
237' SCPZ LINE
500-YEAR FLOODPLAIN
SUGAR RUN
~~100-YEAR FLOODWAY~~
EX. WETLAND
Ex LA-R/W
EX. FENCE (DND)
237' SCPZ LINE
REGULATED STREAM
SUGAR RUN CREEK
TIED CONC. BLOCK MAT WITH TYPE 1 UNDERLAYMENT
100-YEAR FLOODWAY AND SCPZ LINE
100-YEAR FLOODPLAIN
500-YEAR FLOODPLAIN
EX. 30" CONC.
SCPZ
237/2
EX. DITCH
This is disturbance within the SCPZ & most be mitigated.
EX. WETLAND
Stream Corridor Protection Zone
SCPZ is always the larger of the formulas provided.
EX. SAN MH
500-YEAR FLOODPLAIN
100-YEAR FLOODPLAIN
STRUCTURE NO FRA-161-22509326
EX. LIGHTING 2-WIRE CIRCUIT CIRCUIT #560, LEG A (TBR W/ PID 116322)
EX. 36" CONC.
CONST. LIMITS
EX. GUARDRAIL (TBR)
EX. CTSS FIBER
EX. STREET LIGHT POLE #202989 AND FOUNDATION (TBR W/ PID 116322)
10.0'
EX. EDGE OF PAVED SHOULDER
PROP. 81" BARRIER 10
EX. DITCH
PC STA. 1013+16.90
CURVE 10D
1010
1011
1012
1013
1014
S88°14'40"E
CURVE 10C
℄ CONST. 81" BARRIER 10
PROP. SAWCUT
CONST. LIMITS
LIMIT OF SHOULDER MILL/FILL
PT STA. 1010+84.24
PROP. 81" BARRIER DRAINAGE WINDOW STA. 1011+60.00
SEE SHEET P.209
+70.07
1'
6.6'
+15.44
EX. 14' X 7' BOX CULVERT
EX. 14' X 7' BOX CULVERT

WESTBOUND SR-161

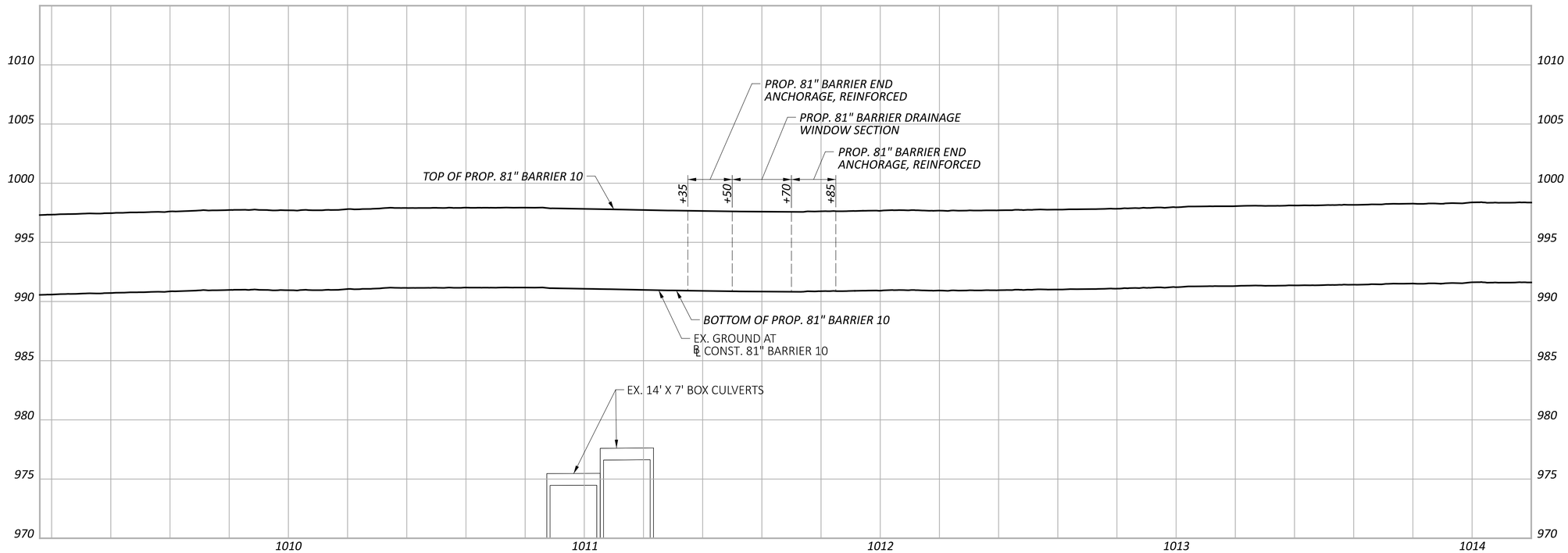
EX. CONCRETE (TBR W/ PID 116322)
EX. BARRIER GUARDRAIL (TBR W/ PID 116322)

ARCADIS RESPONSE: WE AGREE WITH THE COMMENT AND COMPLIED PER THE COMMENT.

MATCH LINE STA. 2239+00.00 SEE SHEET P.31

2239
FUTURE EX. 15" TYPE C (PID 116322)
2240
2241
2242
2243
℄ CONST. SR 161
FUTURE EX. CB-5 (PID 116322)
15" TYPE C
FUTURE EX. I-3, APP (PID 116322)
FUTURE EX. LIGHTING CIRCUIT 849, LEG C IN (1)-2" PVC CONDUIT (PID 116322)
FUTURE EX. LIGHT POLE 849-C10 (PID 116322)
FUTURE EX. CONC. BARRIER, TYPE C APP 2 (PID 116322)
FUTURE EX. LIGHTING CIRCUIT 849, LEG C IN (1)-2" PVC CONDUIT (PID 116322)
FUTURE EX. LIGHT POLE 849-C11 (PID 116322)
FUTURE EX. LIGHTING CIRCUIT 849, LEG C IN (1)-2" PVC CONDUIT (PID 116322)

MATCH LINE STA. 2244+00.00 SEE SHEET P.33



HORIZONTAL SCALE IN FEET
0 10 20 40

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

DESIGN AGENCY
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COLUMBUS, OHIO 43235
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www.arcadis.com

DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.32 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 10 - Plan 17 PAPERSIZE: 34x22 (in.) DATE: 2024-01-21 TIME: 11:00:36 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)
EX. WETLAND
TIED CONC. BLOCK MAT WITH TYPE 1 UNDERLAYMENT
EX. UD
EX. DITCH
EX. CTSS FIBER (SEE NOTE 1)
CONC. BARRIER END SECTION
POT STA. 1016+49.64
PT STA. 1016+45.71
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
FUTURE EX. LIGHTING CIRCUIT 560, LEG A
MIS-403 (PID 116322)
RAMP L
STA. 2247+03.73, 155.09' LT
℄ CONST. SR 161
FUTURE EX. LIGHT POLE 560-A9
(PID 116322)
EX. EDGE OF PAVED SHOULDER
CONST. LIMITS
CURVE 10D
10.0'
1016
15.26'
N76°03'22"E
PROP. 81" BARRIER 10
1015
FUTURE EX. LIGHTING CIRCUIT 560, LEG A
MIS-403 (PID 116322)
PROP. 81" BARRIER DRAINAGE WINDOW
STA. 1015+50.00
SEE SHEET P.209
FUTURE EX. LIGHT POLE 560-A8
(PID 116322)
℄ CONST. 81" BARRIER 10
CONST. LIMITS

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.

HORIZONTAL SCALE IN FEET
0 10 20 40

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.32
2244
2245
2246
2247
2248
2249
℄ CONST. SR 161
FUTURE EX. LIGHTING CIRCUIT 849, LEG C
IN (1)-2" PVC CONDUIT (PID 116322)
FUTURE EX. LIGHT POLE 849-C12
(PID 116322)
FUTURE EX. CONC. BARRIER, TYPE C APP 2
(PID 116322)
FUTURE EX. LIGHTING CIRCUIT 849, LEG C
IN (1)-2" PVC CONDUIT (PID 116322)

PROP. 81" BARRIER END ANCHORAGE, REINFORCED
PROP. 81" BARRIER DRAINAGE WINDOW SECTION
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. GAS
EX. GAS
EX. LIGHTING
EX. FIBER OPTIC
END PROP. 81" BARRIER 10
STA. 1016+49.64
1010
1005
1000
995
990
985
980
975
970
1015
1016

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

DESIGN AGENCY
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www.arcadis.com
DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.33 TOTAL P.276

FRA-161-15.80 NOISE WALLS
MODEL: Wall 10 - Plan 18 PAPERSIZE: 34x22 (in.) DATE: 2024-01-19 TIME: 4:04:16 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_GP1004.dgn

LEG CALLOUT INCORRECT. REF PID 116322 FOR CORRECT CALLOUTS

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

EX. BARRIER GUARDRAIL (TBR W/ PID 116322)

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

FUTURE EX. LIGHT POLE 849-A19 (PID 116322)

FUTURE EX. CONC. BARRIER, TYPE D (PID 116322)

FUTURE EX. CB-5 (PID 116322)

FUTURE EX. GUARDRAIL, TYPE MGS (PID 116322)

EX. CABLE BARRIER (TBR W/ PID 116322)

FUTURE EX. LIGHT POLE 849-C1 (PID 116322)

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

EX. CONCRETE (TBR W/ PID 116322)

FUTURE EX. CB-5 (PID 116322)

EX. CATCH BASIN (TBR W/ PID 116322)

16 2217 2218 2219 2220 22

℄ CONST. SR 161

FUTURE EX. LIGHTING CONDUIT (PID 116322)

FUTURE EX. CANTILEVER SIGN SUPPORT (PID 116322)

ARCADIS RESPONSE: COMPLIED

FUTURE EX. 15" TYPE B (PID 116322)

FUTURE EX. 15" TYPE C (PID 116322)

EX. BARRIER GUARDRAIL (TBR W/ PID 116322)

FUTURE EX. I-3, APP (PID 116322)

EASTBOUND SR-161

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

FUTURE EX. XX" TYPE B (PID 116322)

MATCH LINE STA. 2221+00.00 SEE SHEET P.35

FUTURE EX. GUARDRAIL, TYPE MGS (PID 116322)

EX. EGE OF PAVED SHOULDER

POT STA. 1100+00.00

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. 16" WATER MAIN (CTP08060_006/D.I.)

15" MULTI

CONST. LIMITS

1100

20.8Δ

22.2Δ

PROP. 6" UNDERDRAIN

1101

240.00'
N66°54'02"E

Ex LA-R/W

CITY OF COLUMBUS
CITY OF NEW ALBANY

HARLEM ROAD

EX. CATCH BASIN (DND)

CONST. LIMITS

24" MULTI

36" MULTI

1102

PI STA. 1102+40.00
Δ = 00°00'00"
DS-11

XX"

12"

15.5Δ

8.3Δ

EX. FENCE (REMOVE AND REERECT 201')

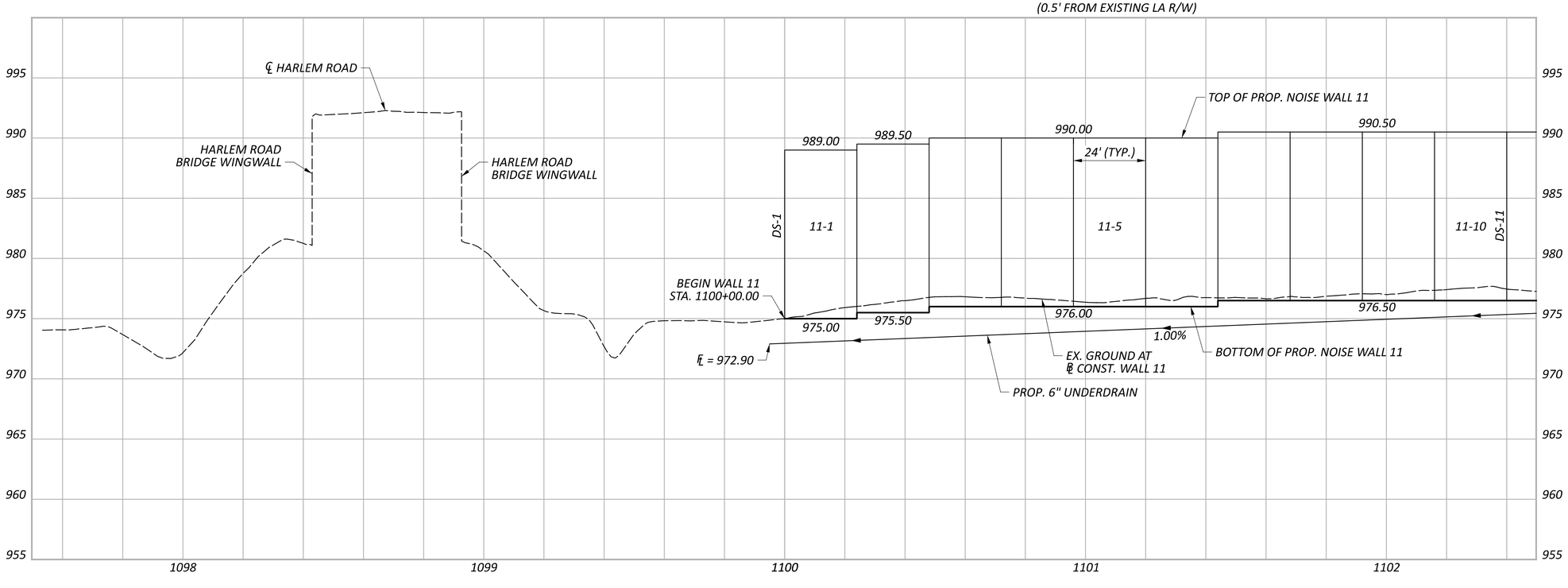
℄ CONST. NOISE WALL 11

END FENCE REMOVE AND REERECT

BEGIN FENCE REMOVE AND REERECT

EX. FENCE (DND)

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

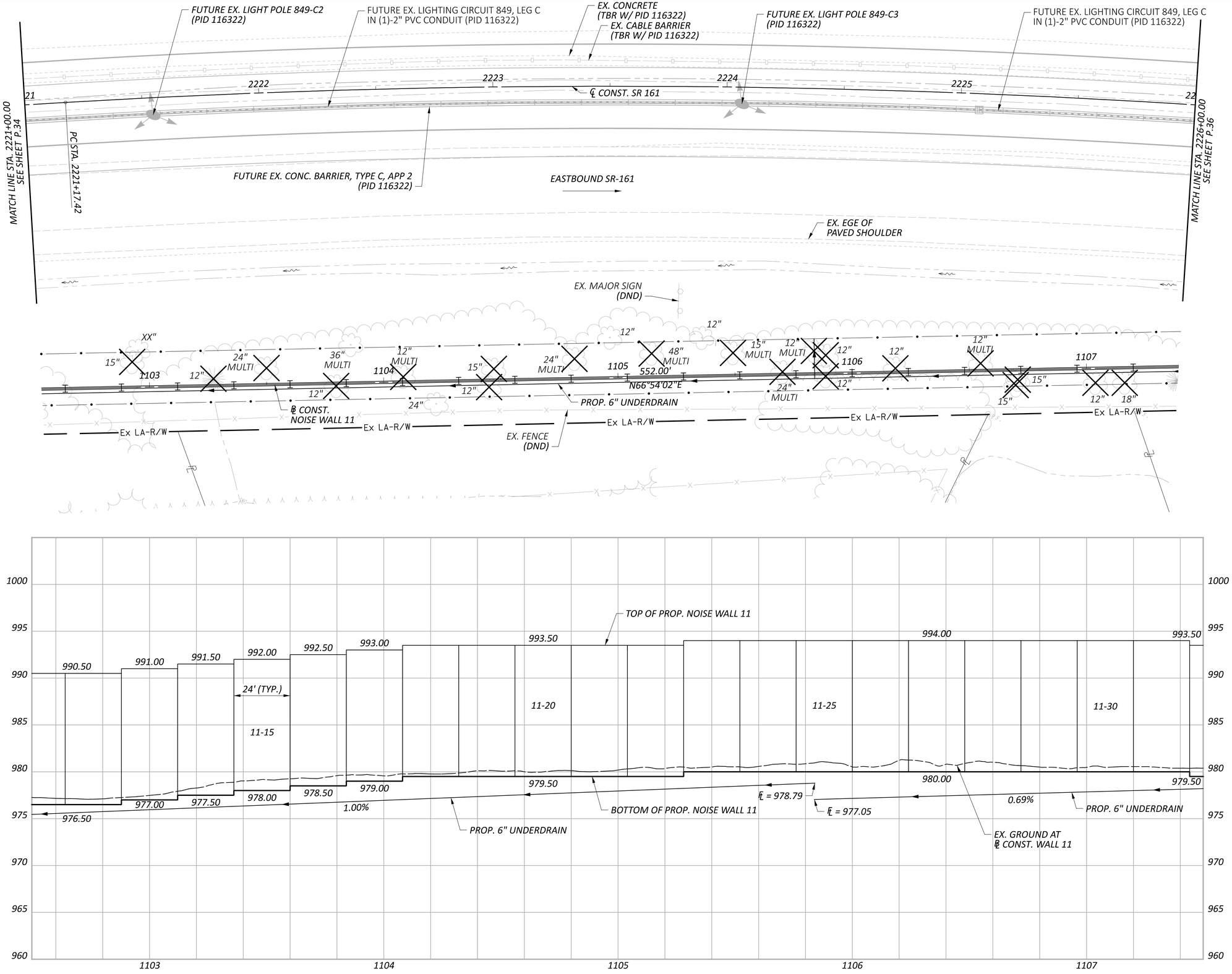
PLAN & PROFILE - WALL 11
STA. 2216+00.00 TO STA. 2221+00.00

FRA-161-15.80 NOISE WALLS

MODEL: Plan PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 11:53:19 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.bgenggroup.com
5960 WILCOX PLACE, SUITE C
DUBLIN, OHIO 43016

DESIGNER JEP
REVIEWER RG 01-22-24
PROJECT ID 117607
SHEET P.34 TOTAL P.276



HORIZONTAL SCALE IN FEET
0 10 20 40

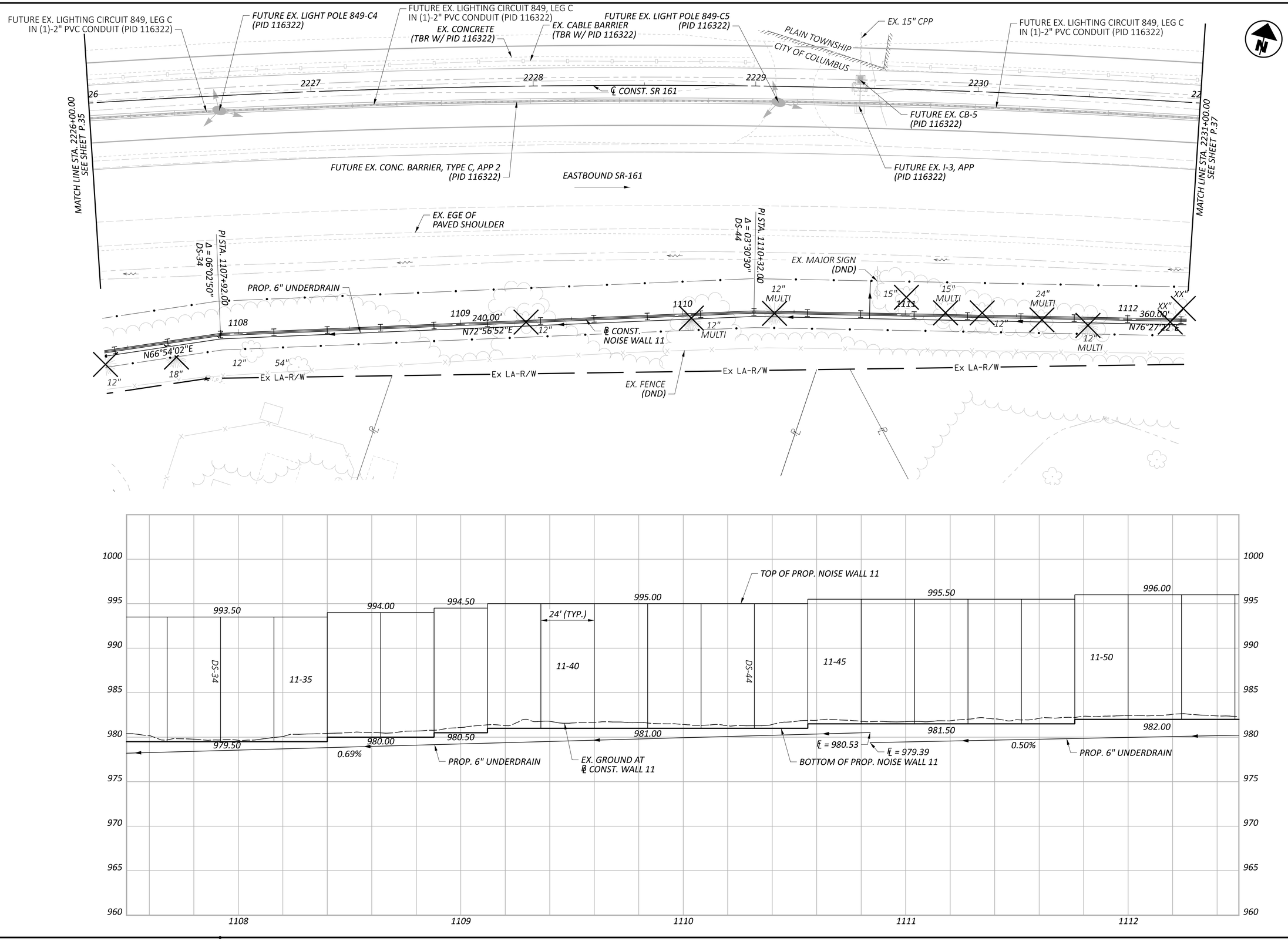
PLAN & PROFILE - WALL 11
STA. 2221+00.00 TO STA. 2226+00.00

FRA-161-15.80 NOISE WALLS

MODEL: Plan-1 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 11:53:40 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.bgenggroup.com
5960 WILCOX PLACE, SUITE C
DUBLIN, OHIO 43016

DESIGNER JEP
REVIEWER RG 01-22-24
PROJECT ID 117607
SHEET P.35 TOTAL P.276



HORIZONTAL SCALE IN FEET
0 10 20 40

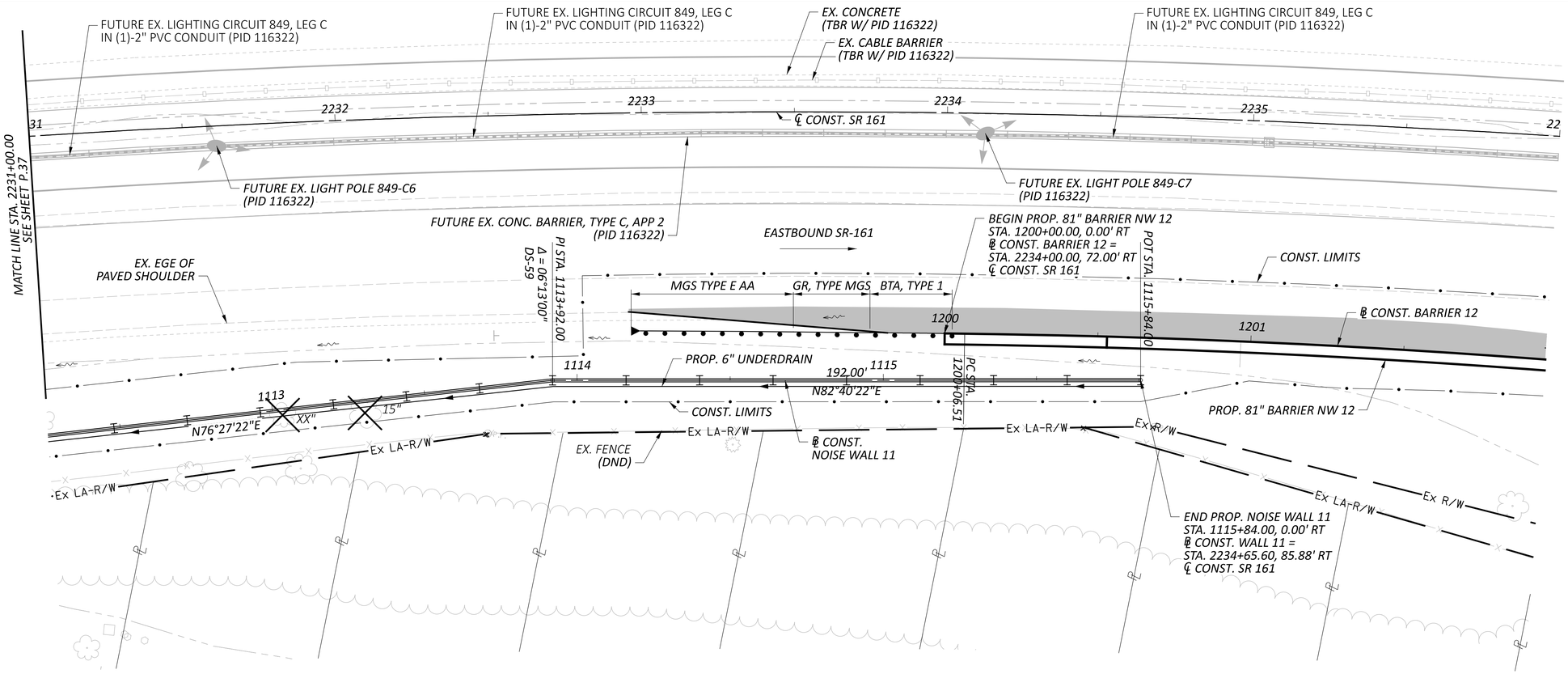
PLAN & PROFILE - WALL 11
STA. 2226+00.00 TO STA. 2231+00.00

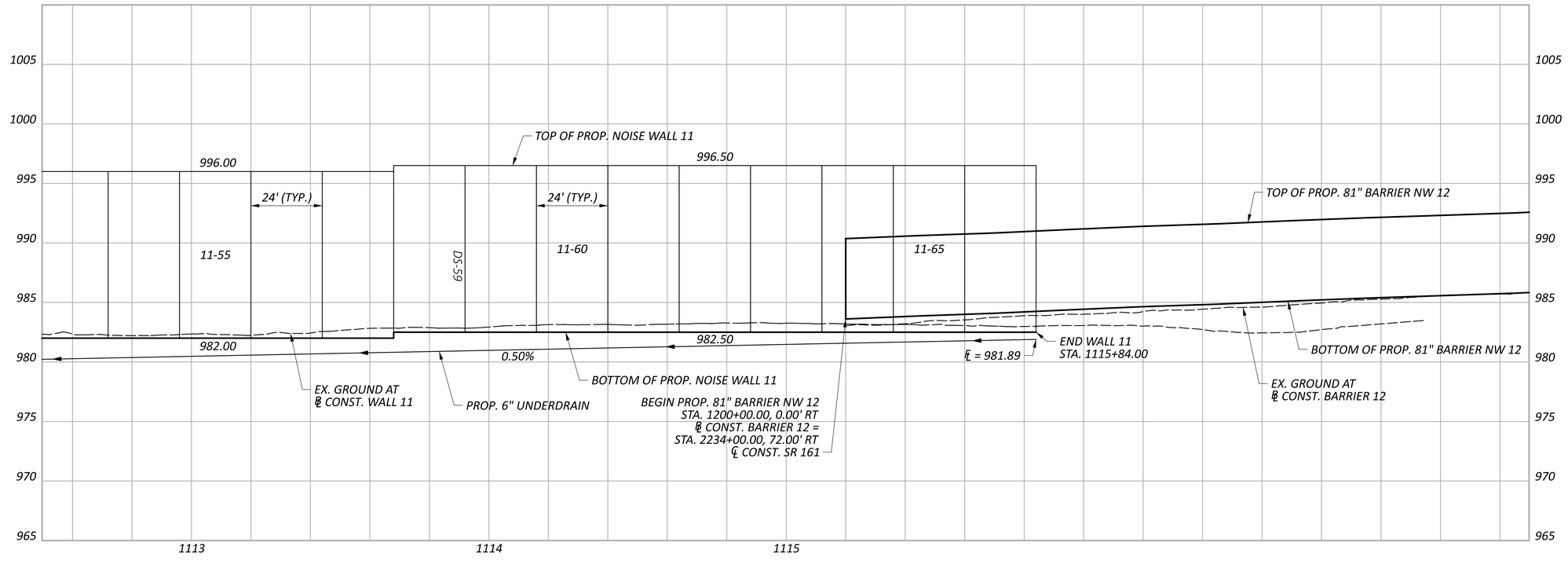
FRA-161-15.80 NOISE WALLS

MODEL: Plan-2 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 11:53:58 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.bgengrgroup.com
5960 MILCOX PLACE, SUITE C
DUBLIN, OHIO 43016

DESIGNER: JEP
REVIEWER: RG 01-22-24
PROJECT ID: 117607
SHEET: P.36 TOTAL: P.276





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

FRA-161-15.80 NOISE WALLS

MODEL: Plan-3 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 11:54:17 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 MILCOX PLACE, SUITE C
DUBLIN, OHIO 43016

DESIGNER	JEP
REVIEWER	RG 01-22-24
PROJECT ID	117607
SHEET	P.37
TOTAL	P.276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 12 - Plan 19 PAPERSIZE: 34x22 (in.) DATE: 2024-01-21 TIME: 9:38:51 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_GP1201.dgn

LEGEND

ITEM 304 - 10" AGGREGATE BASE

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

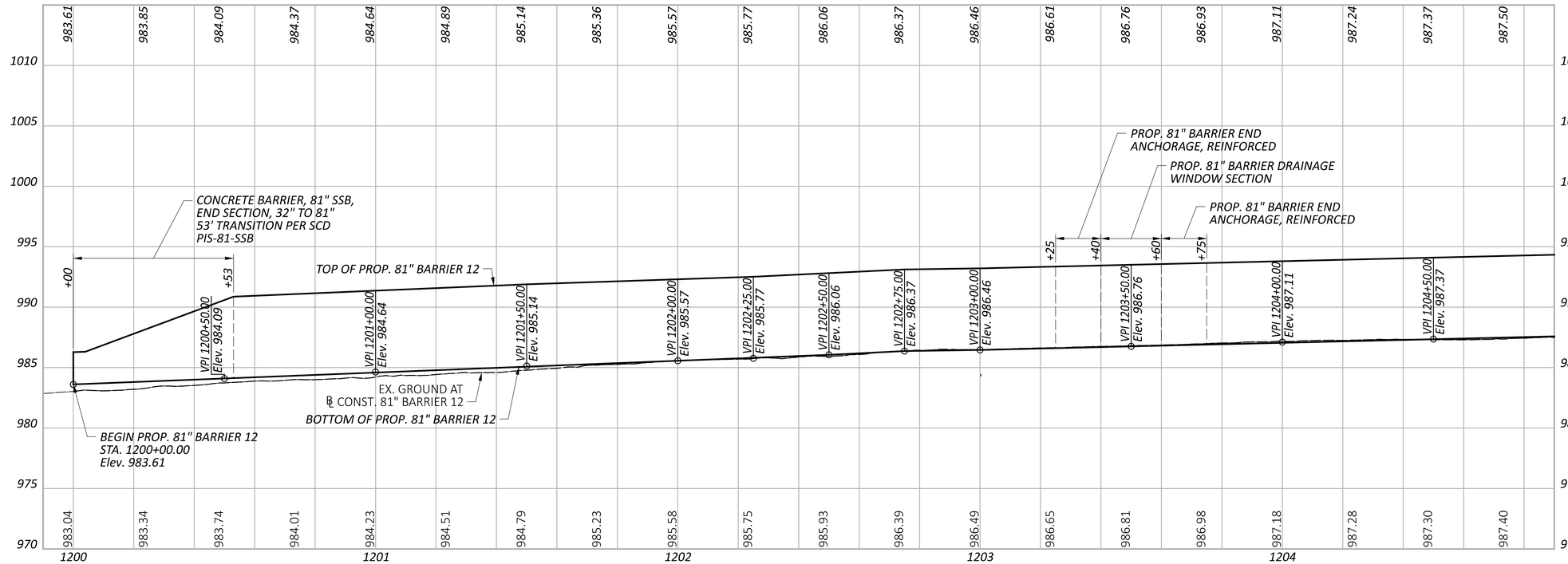
FUTURE EX. LIGHTING CIRCUIT 849, LEG C IN (1)-2" PVC CONDUIT (PID 116322)
FUTURE EX. LIGHT POLE 849-C7 (PID 116322)
FUTURE EX. CONC. BARRIER, TYPE C APP 2 (PID 116322)
FUTURE EX. LIGHTING CIRCUIT 849, LEG C IN (1)-2" PVC CONDUIT (PID 116322)
FUTURE EX. LIGHT POLE 849-C8 (PID 116322)
FUTURE EX. CB-5 (PID 116322)
EX. CB (TBR W/ PID 116322)
FUTURE EX. 15" TYPE C (PID 116322)
FUTURE EX. 15" TYPE C (PID 116322)
FUTURE EX. I-3, APP (PID 116322)
FUTURE EX. LIGHT POLE 849-C9 (PID 116322)
℄ CONST. SR 161
2233 2234 2235 2236 2237 2238
FUTURE EX. LIGHTING CIRCUIT 849, LEG C IN (1)-2" PVC CONDUIT (PID 116322)
EX. LIGHTING 2-WIRE CIRCUIT CIRCUIT #560, LEG A (TBR W/ PID 116322)
EX. STREET LIGHT POLE #202992 AND FOUNDATION (TBR W/ PID 116322)
FUTURE EX. LIGHTING CIRCUIT 849, LEG C IN (1)-2" PVC CONDUIT (PID 116322)
EX. 36" CONC. SAN.
MATCH LINE STA. 2239+00.00 - SEE SHEET P.39

EASTBOUND SR-161

MGS TYPE E ANCHOR ASSEMBLY | *25' PROP. GUARDRAIL, TYPE MGS* | *BTA, TYPE 1 WITH CURB, TYPE 4-A*

+98.75 71.15' RT | *+49.68 71.82' RT* | *+75.15 72.00' RT* | *+02.55 72.00' RT*

CONC. 81" BARRIER END SECTION
℄ CONST. 81" BARRIER 12 CURVE 12A
EX. GUARDRAIL (TBR)
1' +98.25
LIMIT OF SHOULDER MILL/FILL
PROP. 81" BARRIER DRAINAGE WINDOW STA. 1203+50.00 SEE SHEET P.209
CONST. LIMITS
PROP. SAWCUT
CURVE 12B
1200 1201 1202 1203 1204
N87°52'00"E
+00.56 1'
1115 5.5'
EX. DITCH
PC STA. 1200+06.51
PROP. 81" BARRIER 12 CONST. LIMITS
PT STA. 1202+38.95
PC STA. 1202+97.05
10.0'
EX. UD
EX. LIGHTING 2-WIRE CIRCUIT CIRCUIT #560, LEG A (TBR W/ PID 116322)
EX. EDGE OF PAVED SHOULDER
TIED CONC. BLOCK MAT WITH TYPE 1 UNDERLAYMENT
℄ CONST. WALL 11
Ex R/W
Ex LA-R/W
EX. FENCE (DND)
TIED CONC. BLOCK MAT WITH TYPE 1 UNDERLAYMENT
BEGIN PROP. 81" BARRIER 12 STA. 1200+00.00, 0.00' RT ℄ CONST. 81" BARRIER 12 = STA. 2234+00.00, 72.00' RT ℄ CONST. SR 161
N83°25'39"E
END PROP. NOISE WALL 11 STA. 1115+84.00, 0.00' RT ℄ CONST. WALL 11 = STA. 2234+65.60, 85.88' RT ℄ CONST. SR 161
500-YEAR FLOODPLAIN
EX. DITCH
EX. SAN MH



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+10.25
Δ = 03°23'01" RT
Dc = 01°29'42"
R = 3,832.53'
T = 113.20'
L = 226.33'
E = 1.67'

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
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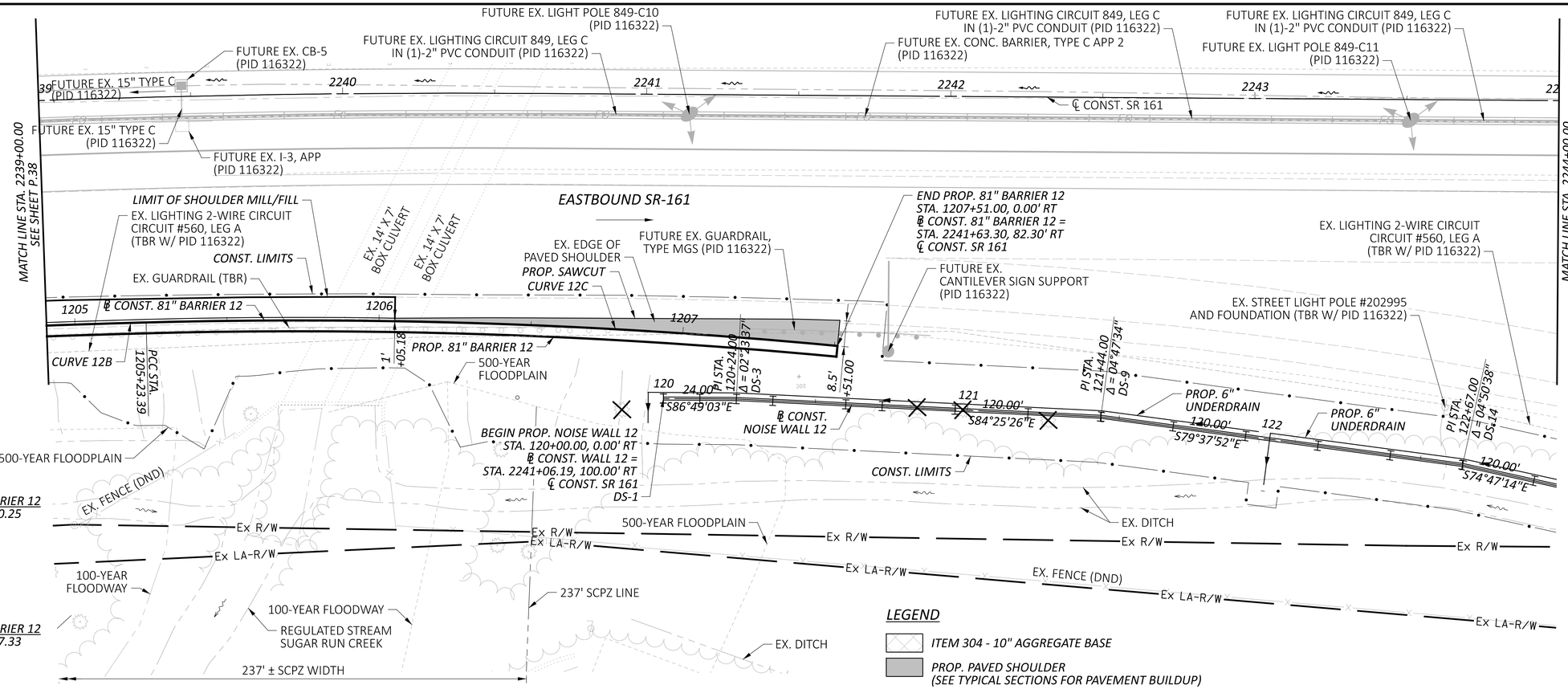
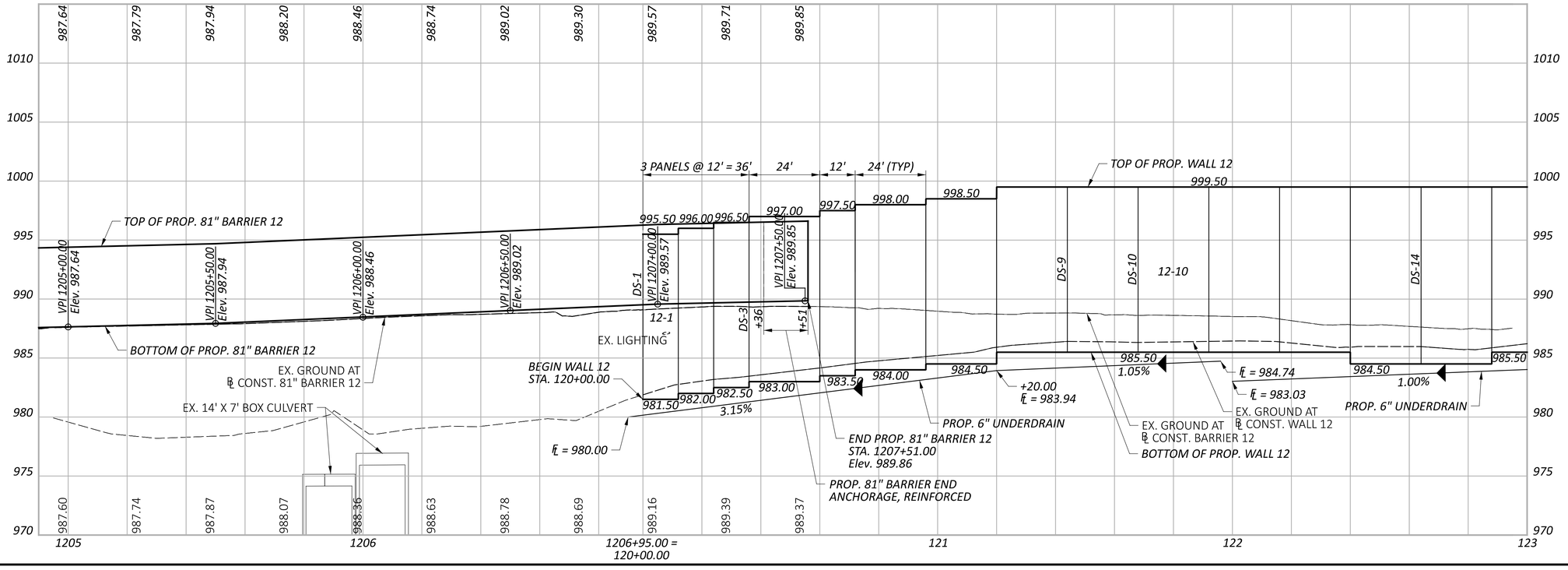
www.arcadis.com

DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.38 | TOTAL P.276





HORIZONTAL SCALE IN FEET
0 10 20 40

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

DESIGN AGENCY
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8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
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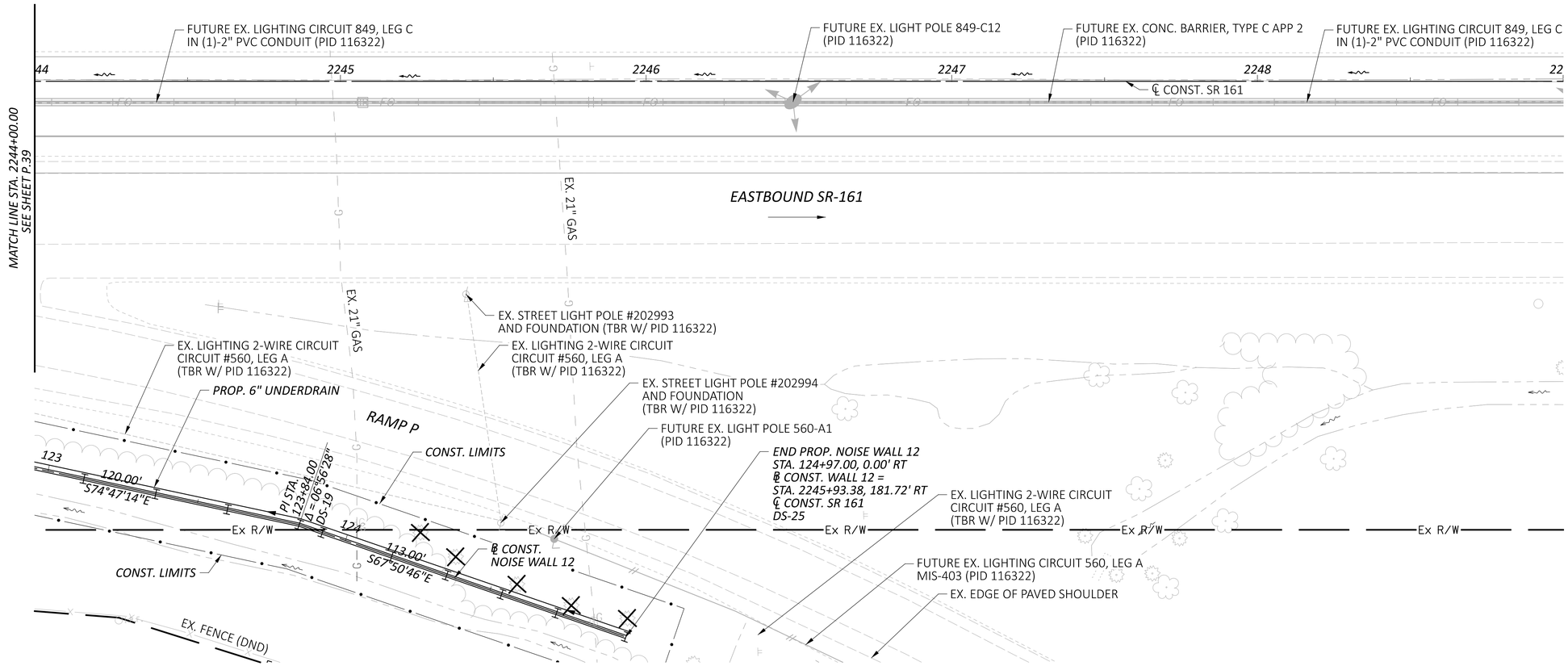
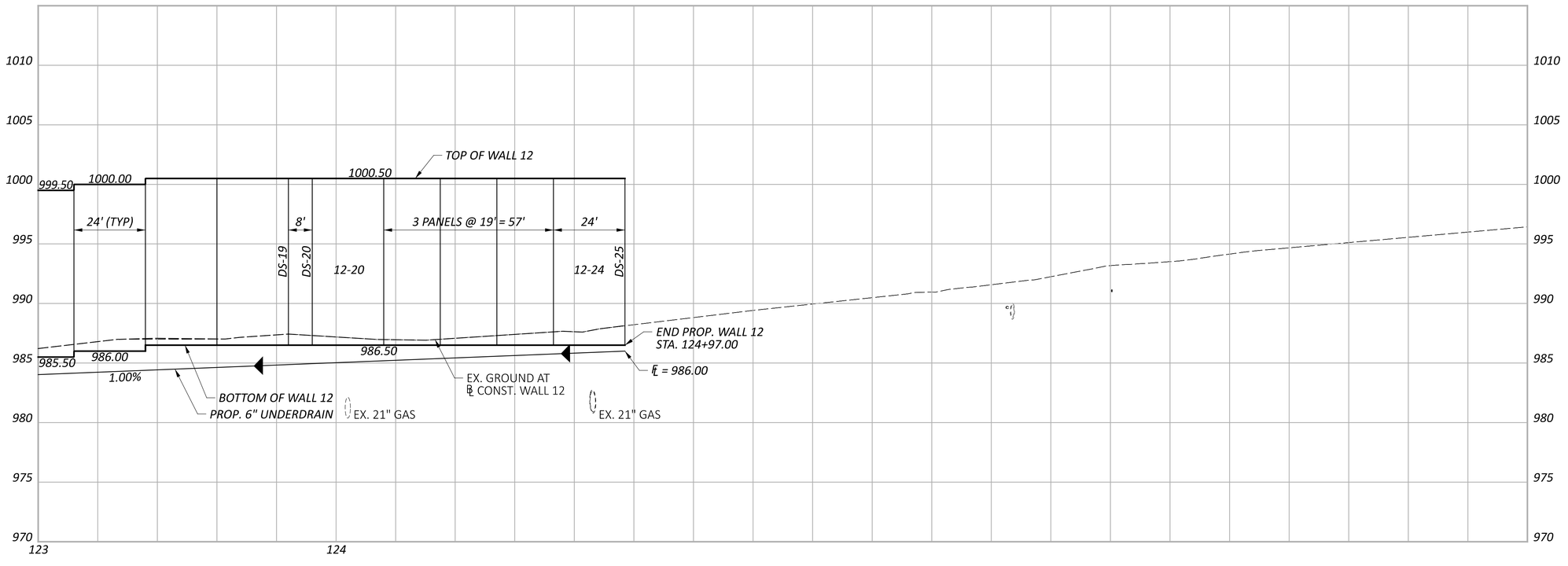
DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.39 | TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 12 - Plan 20 PAPERSIZE: 34x22 (in.) DATE: 2024-01-21 TIME: 9:39:25 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_GP1202.dgn





HORIZONTAL SCALE IN FEET
0 10 20 40

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

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DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.40 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 12 - Plan 21 PAPERSIZE: 34x22 (in.) DATE: 2024-01-21 TIME: 9:39:40 PM USER: jennifer.kelley
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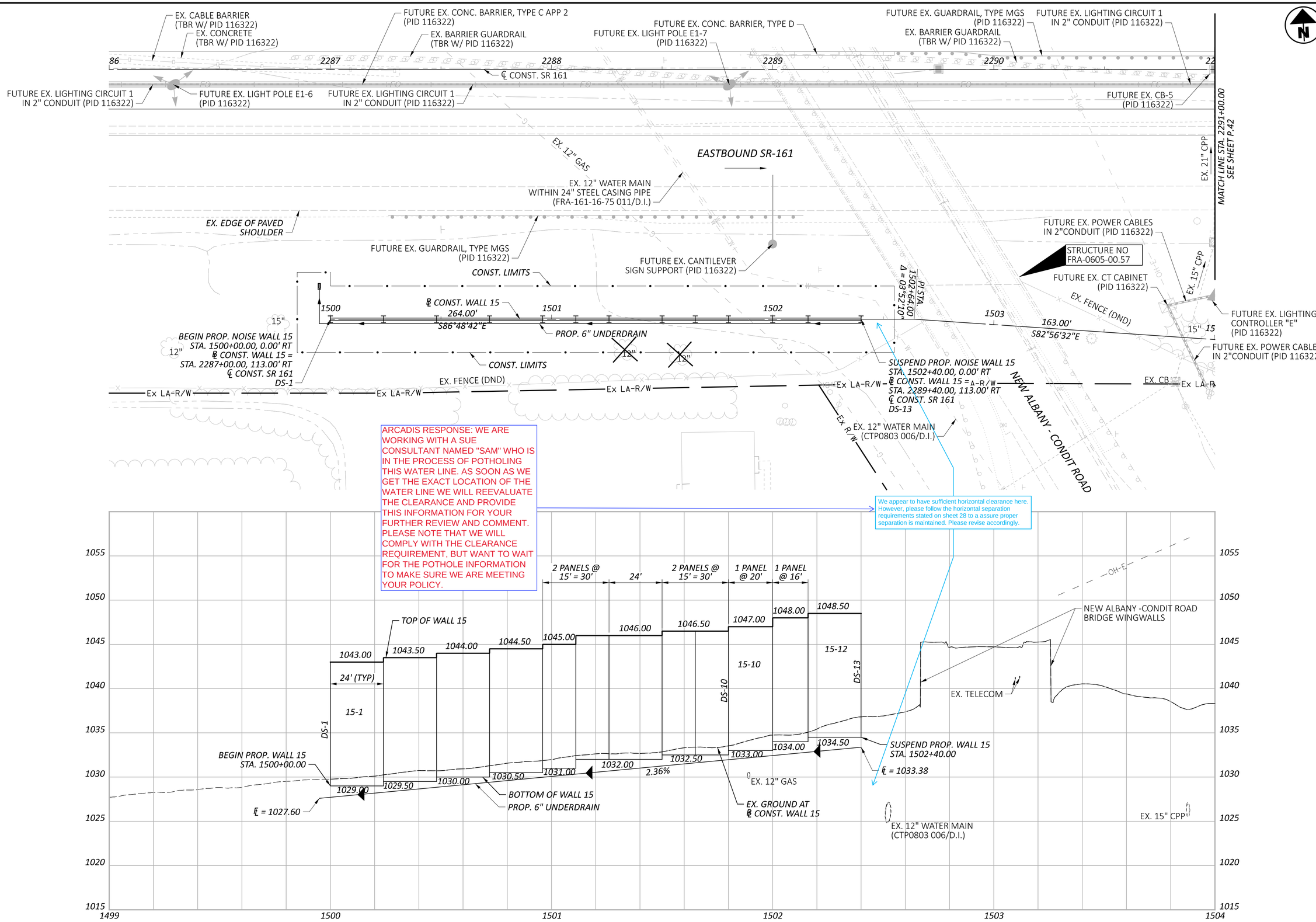

HORIZONTAL SCALE IN FEET
0 10 20 40

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

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JDH 01-22-24

PROJECT ID
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SHEET P.41 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 15 - Plan 22 PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:51:29 PM USER: jennifer.kelley
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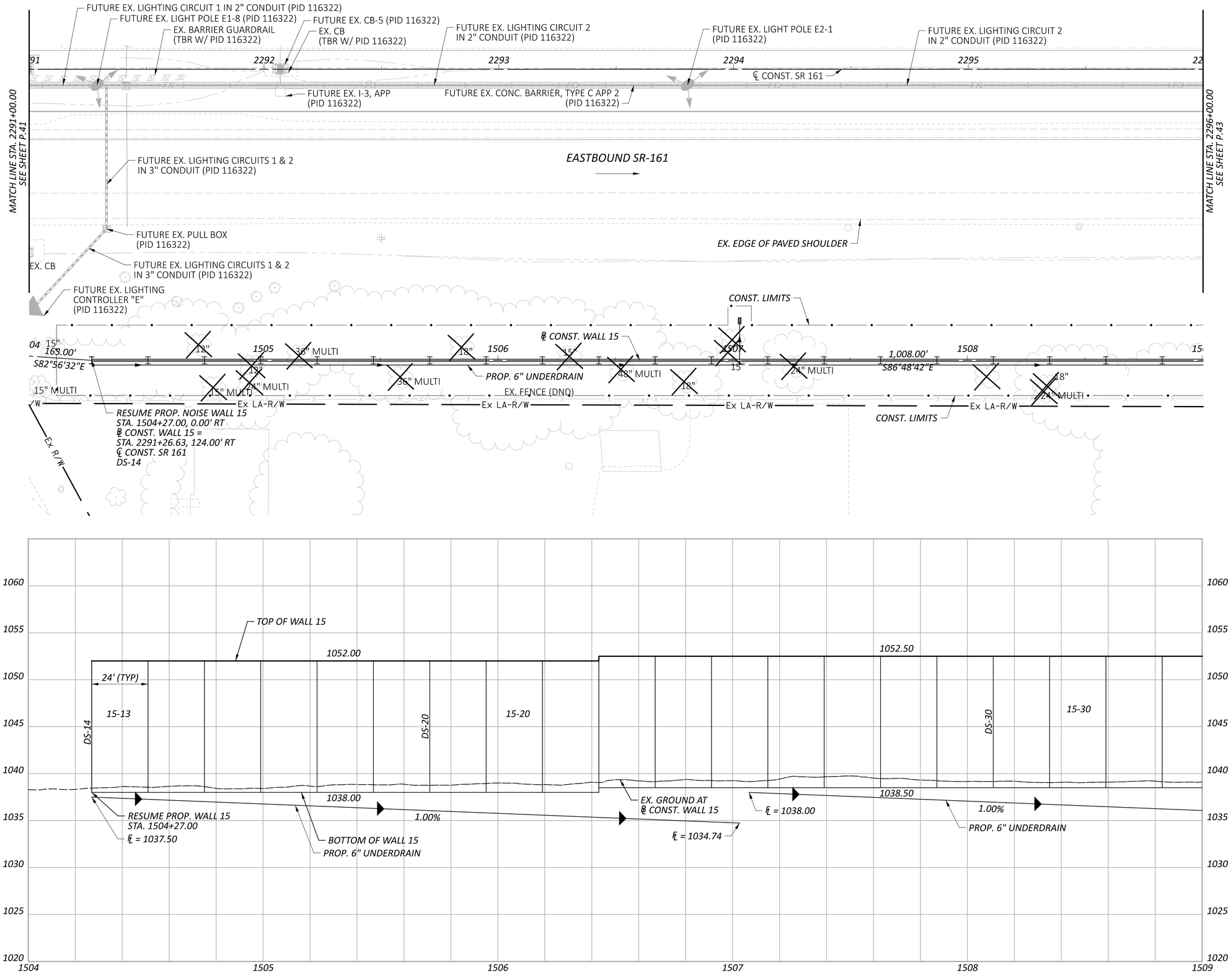

HORIZONTAL SCALE IN FEET
0 10 20 40

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

FRA-161-15.80 NOISE WALLS

MODEL: Wall 15 - Plan 23 PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:52:00 PM USER: jennifer.kelley
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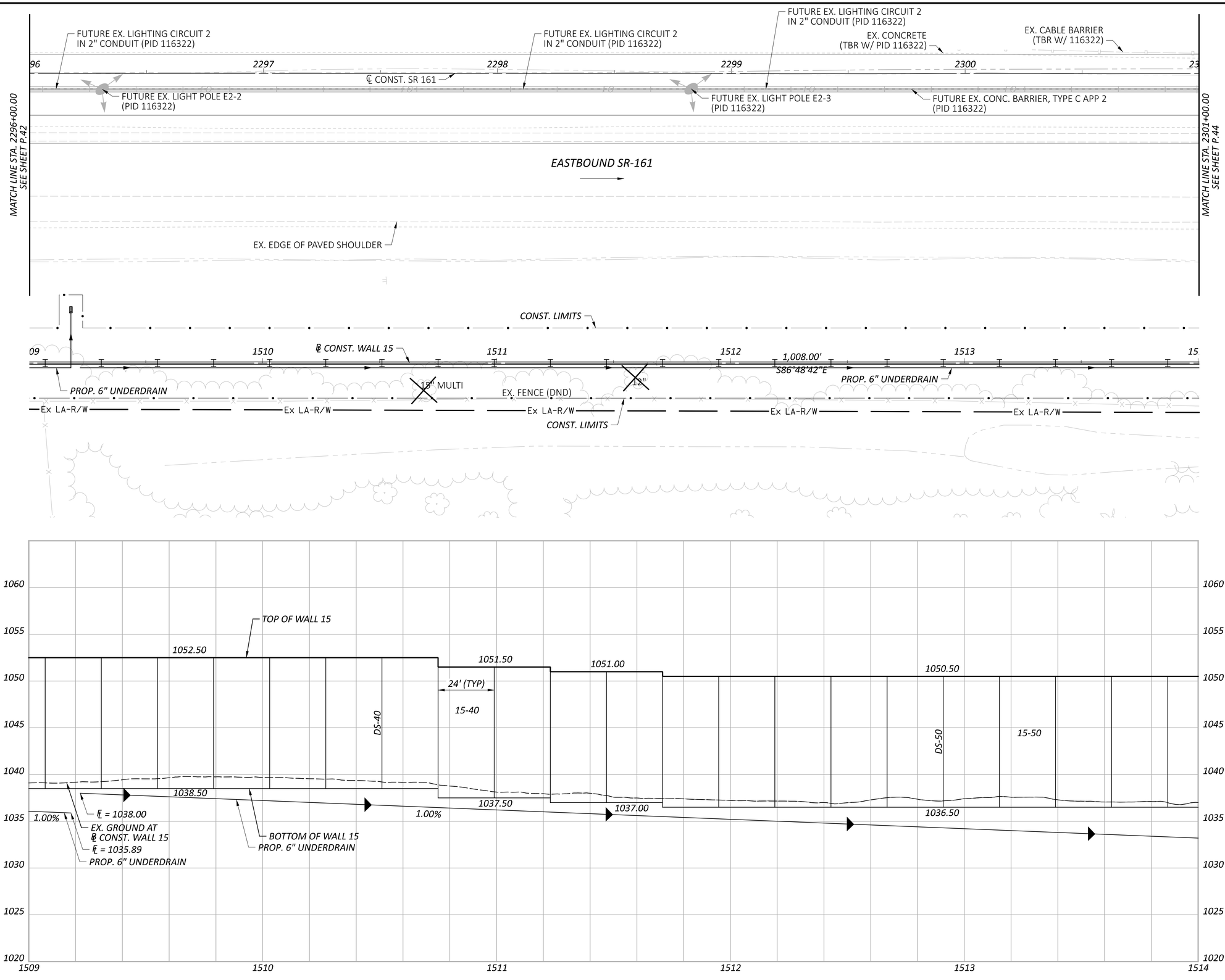
DESIGNER: JMK
REVIEWER: JDH 01-22-24
PROJECT ID: 117607
SHEET: P.42 TOTAL: P.276



HORIZONTAL
SCALE IN FEET
0 10 20 40

PLAN & PROFILE - 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: 2024-01-18 TIME: 6:52:25 PM USER: jennifer.kelley
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DESIGNER
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REVIEWER
JDH 01-22-24

PROJECT ID
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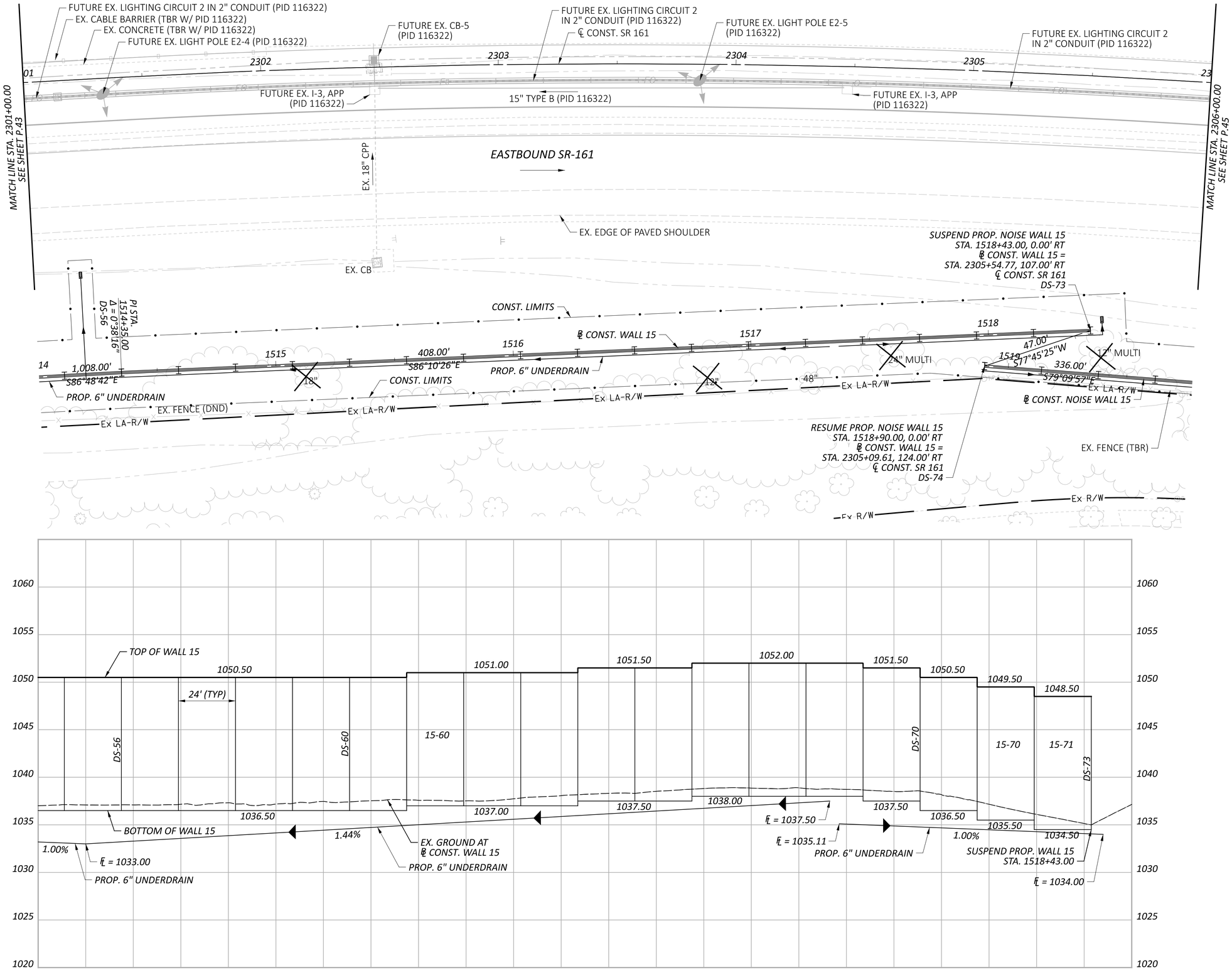
SHEET P.43 | TOTAL P.276



HORIZONTAL SCALE IN FEET
0 10 20 40

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

FRA-161-15.80 NOISE WALLS

MODEL: Wall 15 - Plan 25 PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:52:46 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_GP1504.dgn

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DESIGNER: JMK
REVIEWER: JDH 01-22-24
PROJECT ID: 117607
SHEET: P.44 TOTAL: P.276

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

2306 2307 2308 2309 2310

℄ CONST. SR 161

MATCH LINE STA. 2306+00.00
SEE SHEET P.44

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)

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 1519 1520 1521 1522

47.00'
S17°45'25"W

℄ CONST. WALL 15

336.00'
S79°09'57"E

Ex LA-R/W

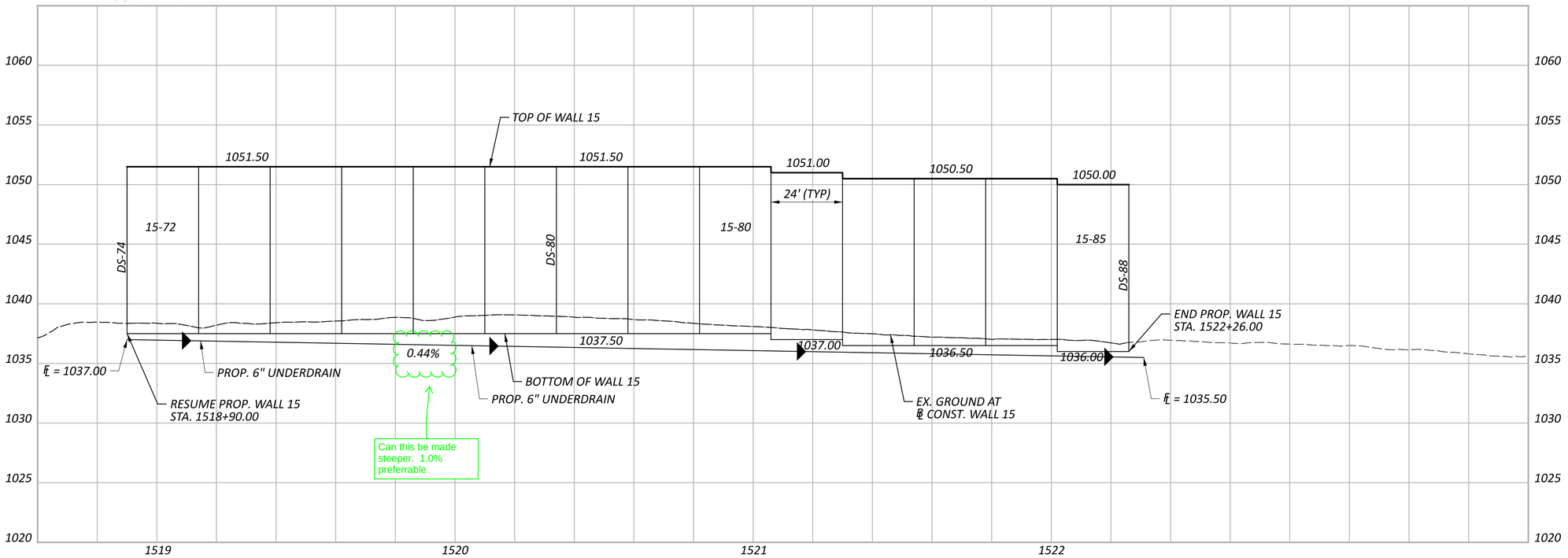
EX. FENCE (TBR)

CONST. LIMITS
PROP. 6" UNDERDRAIN

EX. FENCE (DND)

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



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 WALLS

MODEL: Wall 15 - Plan 26 PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:53:04 PM USER: jennifer.kelley
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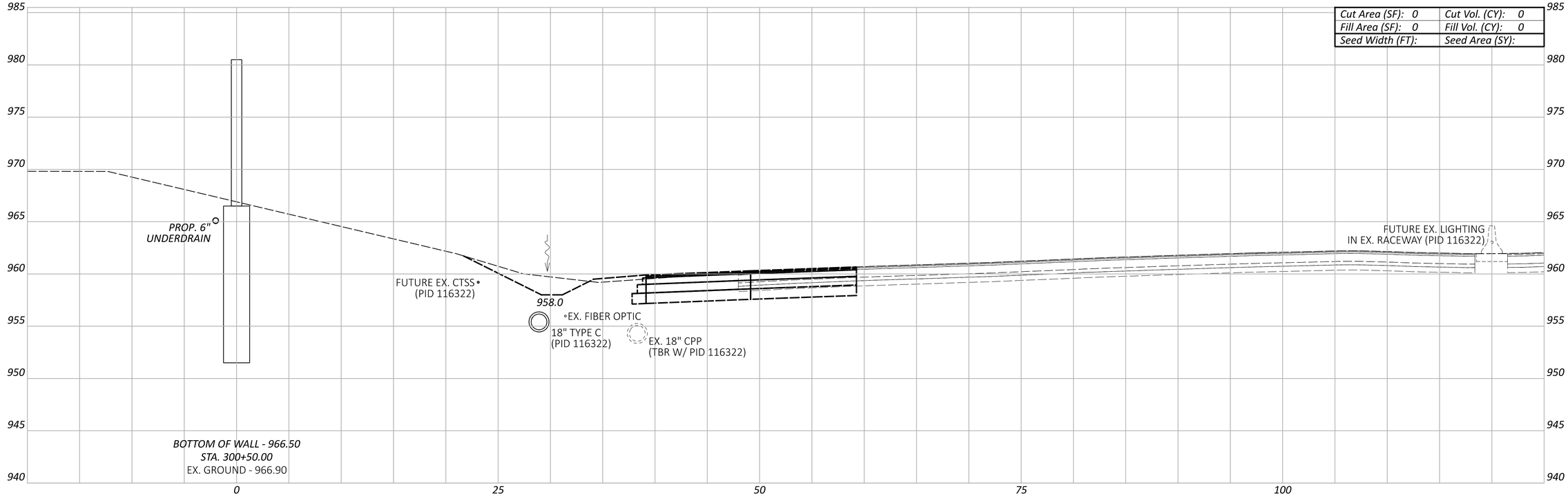
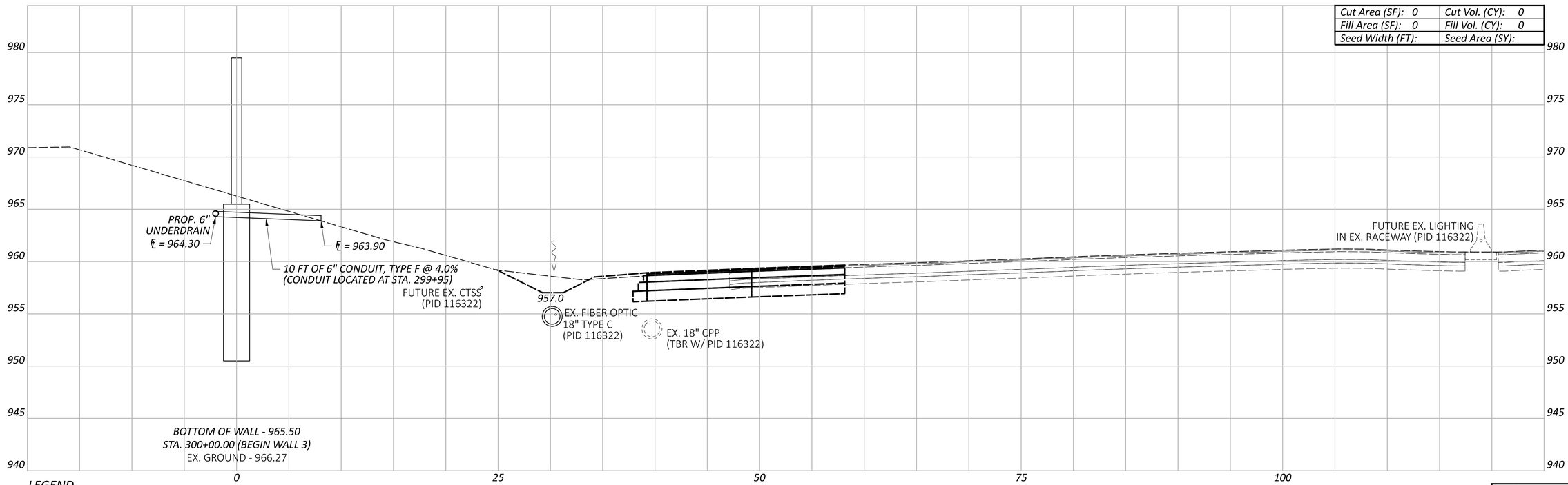
DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.45 TOTAL P.276





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

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL3 - 300+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 10:51:35 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_XS003A.dgn

Sheet Totals		
Seeding	Cut	Fill

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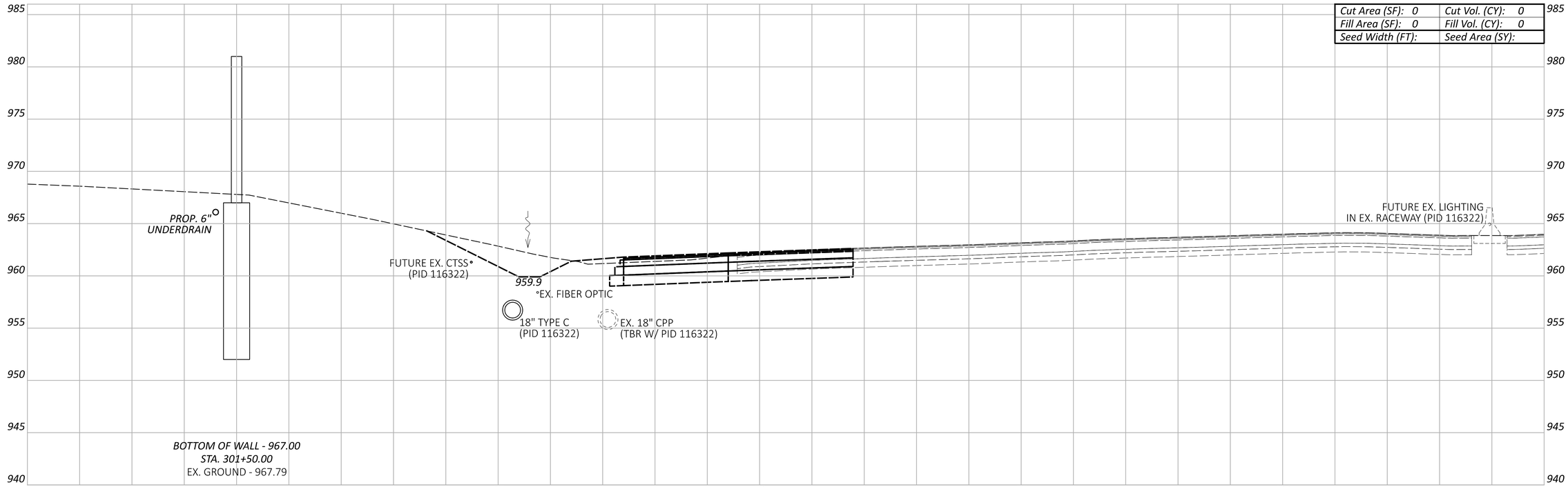
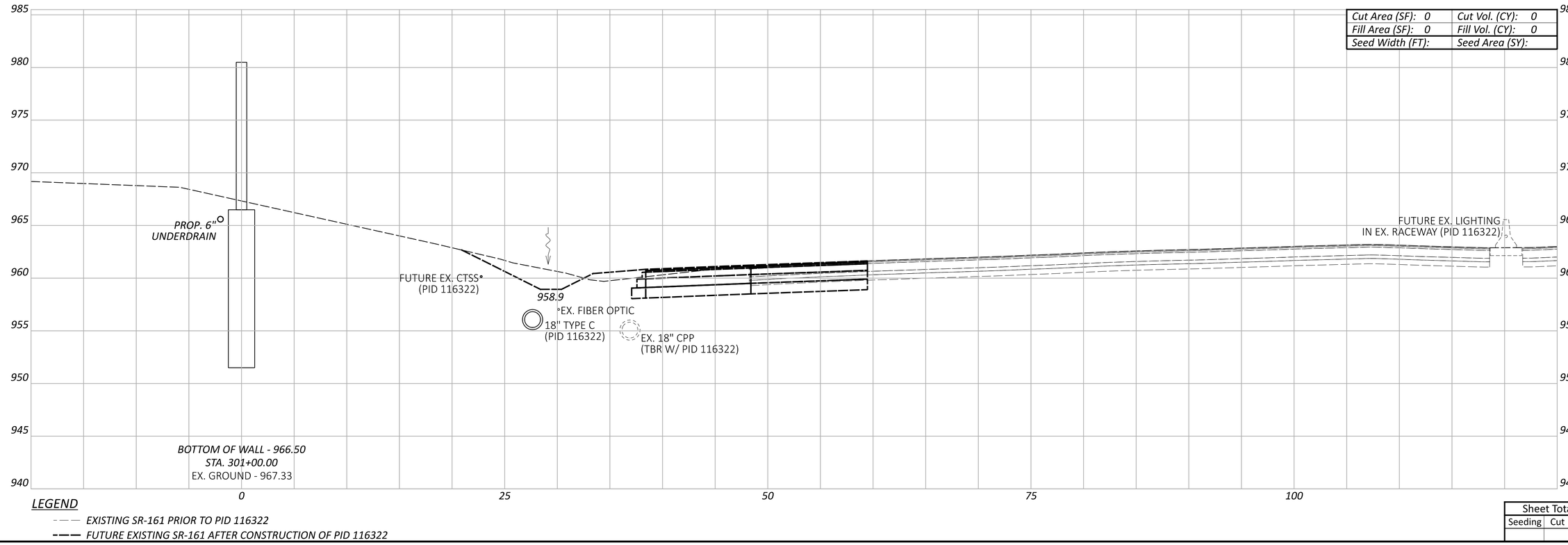
DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.46 TOTAL P.276





LEGEND

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

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

FRA-161-15.80 NOISE WALLS

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

MODEL: BLP_WALL3 - 301+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:54:35 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_X5003A.dgn

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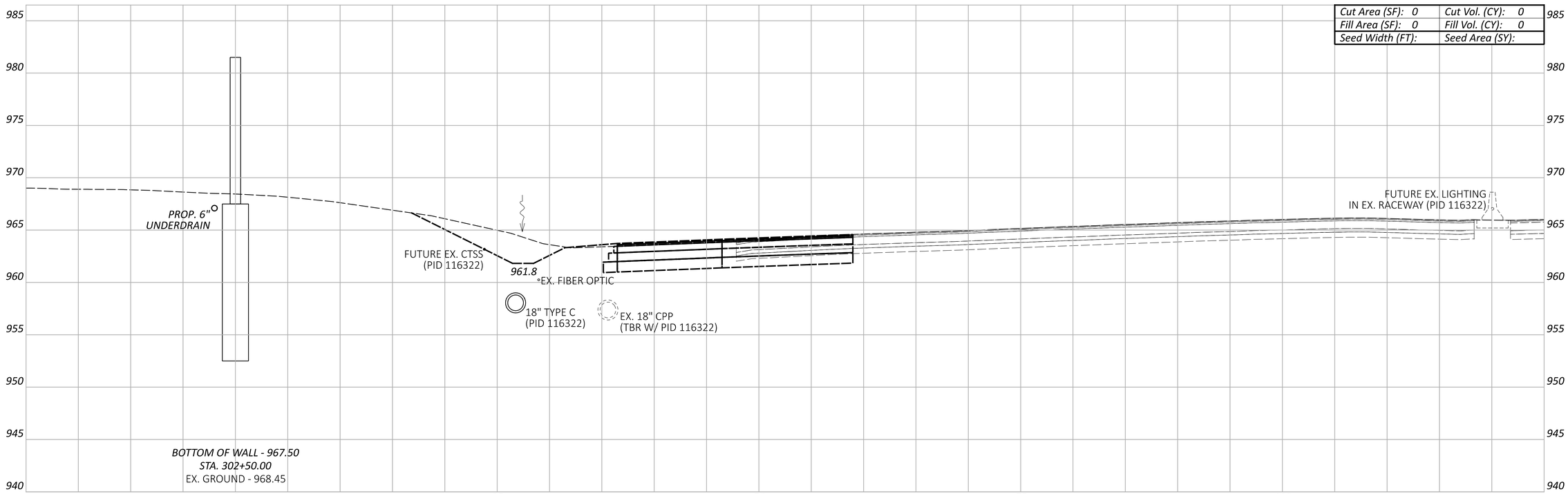
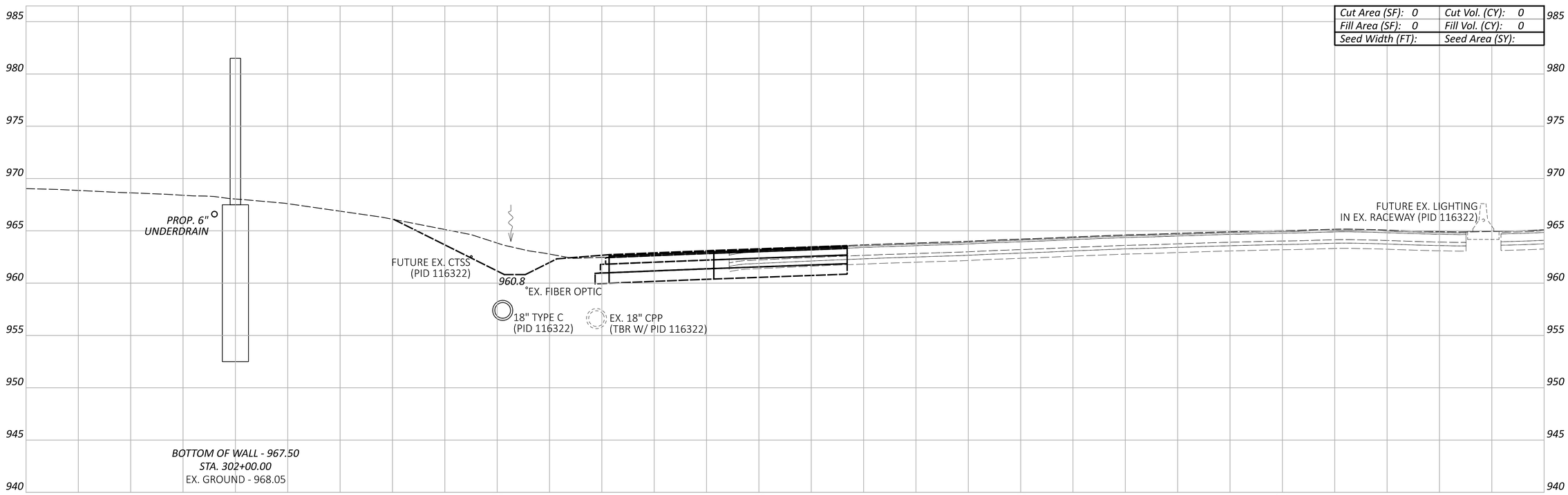
Sheet Totals		
Seeding	Cut	Fill

SHEET P.47 TOTAL P.276





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 3
STA. 302+00.00 TO STA. 302+50.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL3 - 302+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:55:17 PM USER: jennifer.kelley
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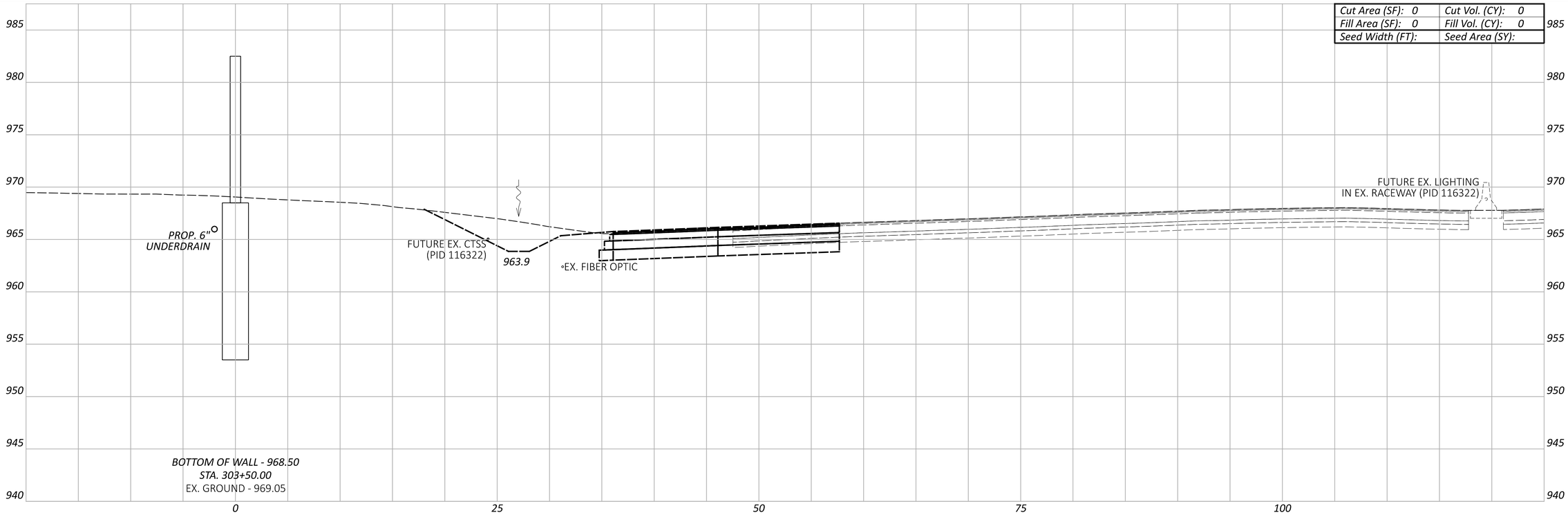
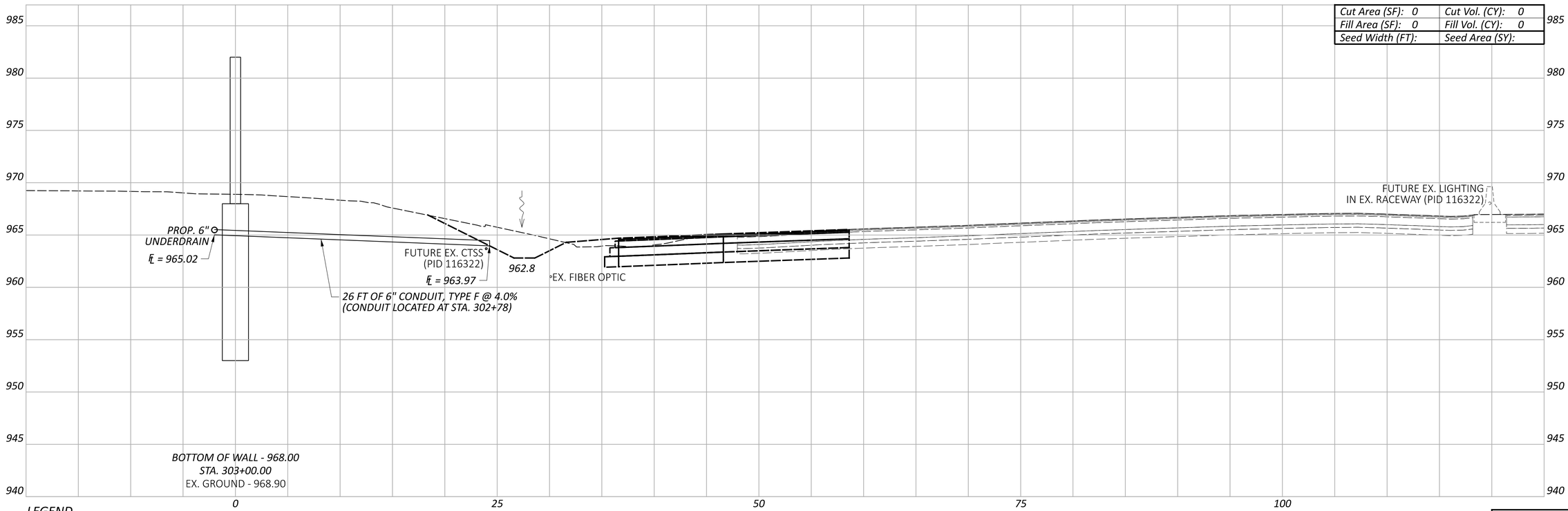
PROJECT ID: 117607

SHEET: P.48 TOTAL: P.276





LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

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

Sheet Totals		
Seeding	Cut	Fill

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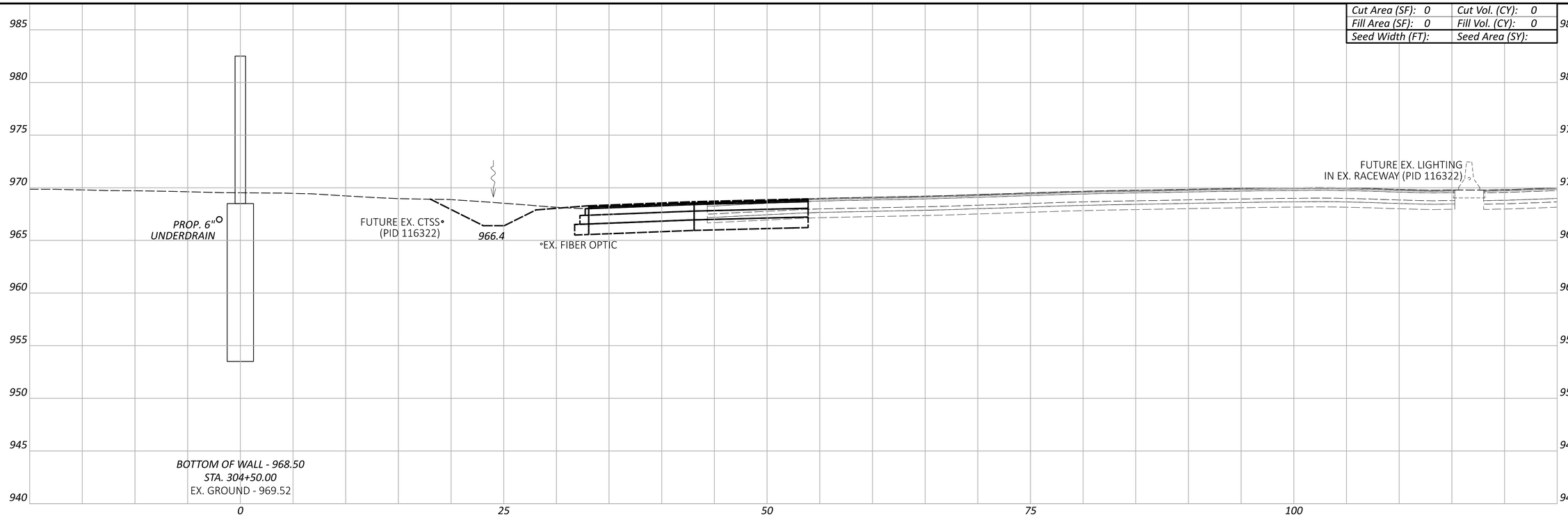
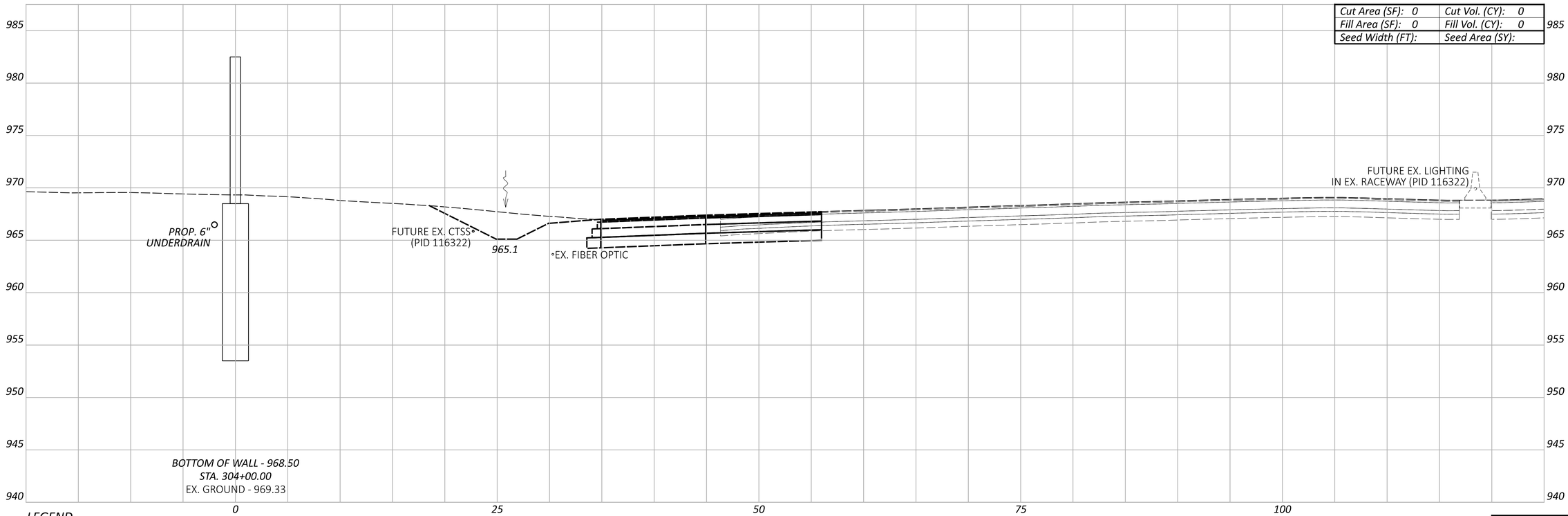
PROJECT ID: 117607

SHEET: P.49 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL3 - 303+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 10:52:22 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_XS003A.dgn





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

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL3 - 304+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:56:42 PM USER: jennifer.kelley
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DESIGNER: JMK

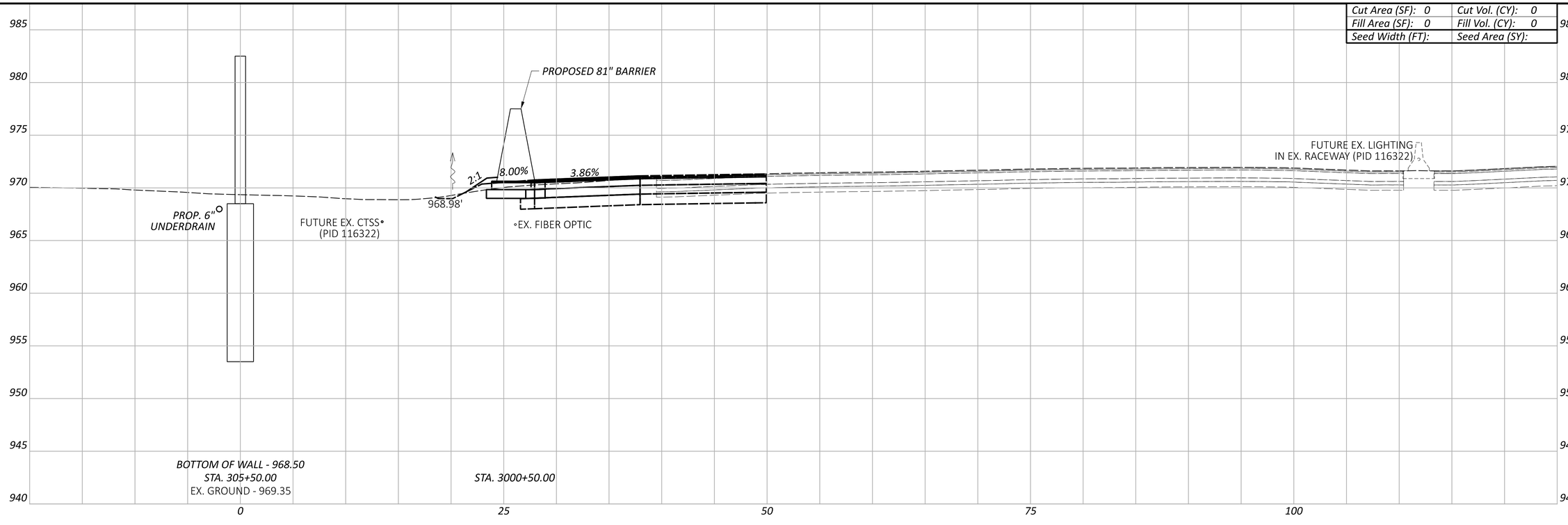
REVIEWER: JDH 01-22-24

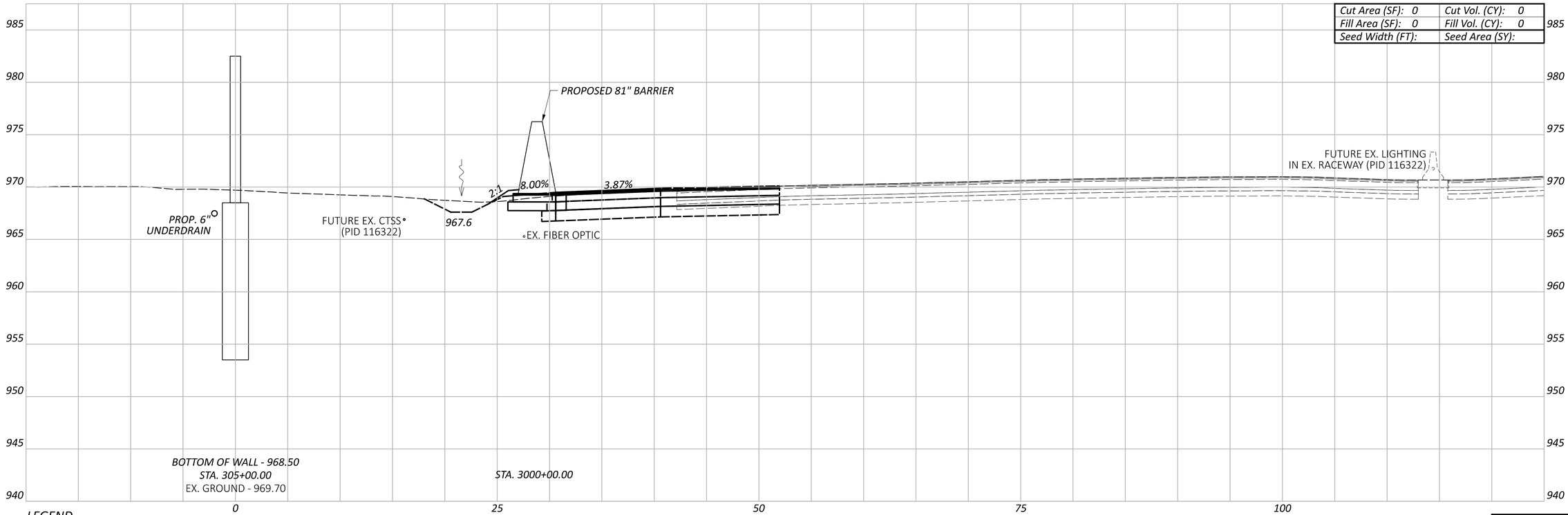
PROJECT ID: 117607

SHEET: P.50 TOTAL: P.276

Sheet Totals

Seeding	Cut	Fill





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 3
STA. 305+00.00 TO STA. 305+50.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL3 - 305+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:57:25 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_XS003A.dgn

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DESIGNER
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REVIEWER
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PROJECT ID
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SHEET P.51 TOTAL P.276

MODEL: BLP_WAL13 - 305+76.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:58:07 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_XS003A.dgn

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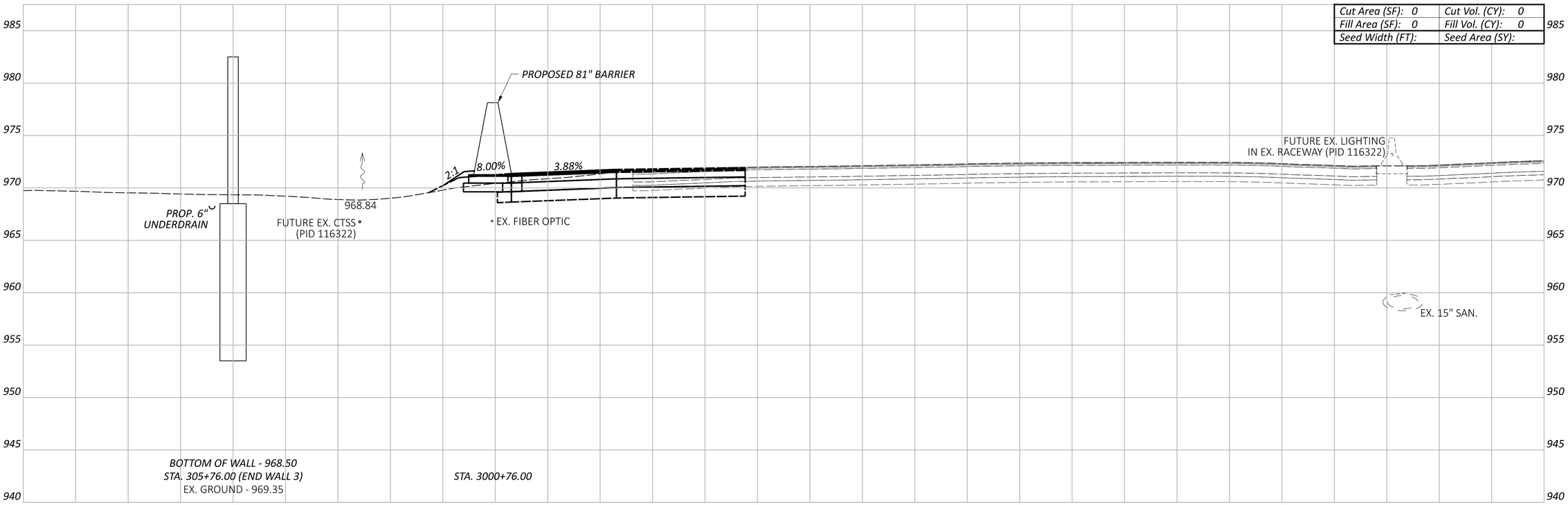
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT):	Seed Area (SY):



LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals		
Seeding	Cut	Fill

CROSS SECTIONS - WALL 3
STA. 305+76.00

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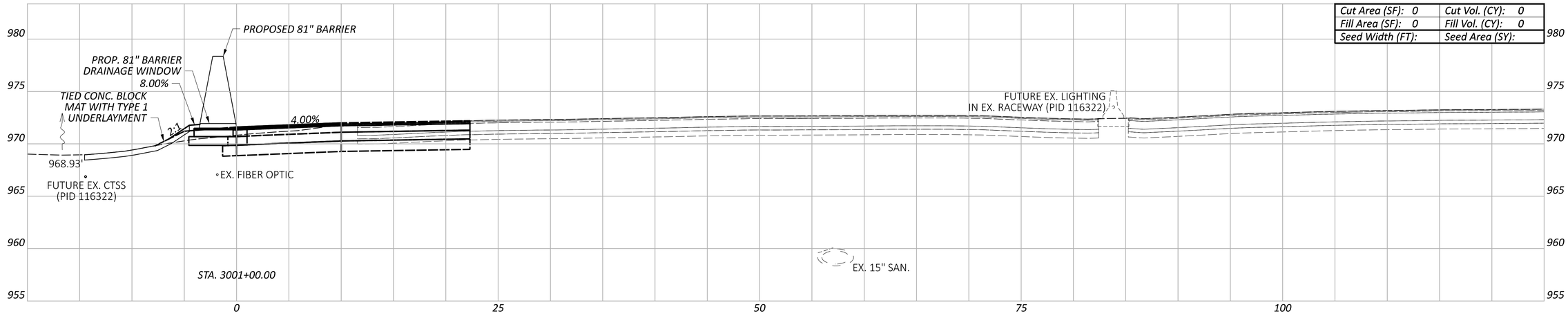
DESIGNER
JMK

REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET	TOTAL
P.52	P.276



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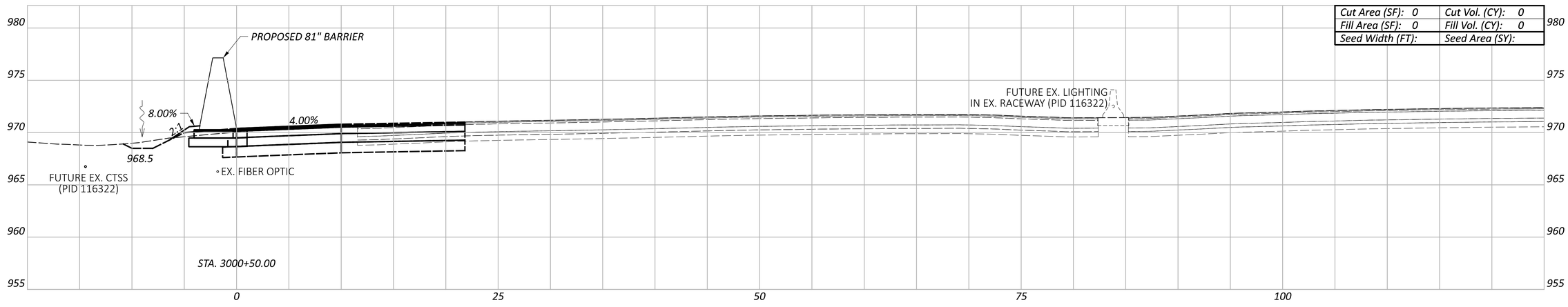

Cut Area (SF): 0	Cut Vol. (CY): 0
Fill Area (SF): 0	Fill Vol. (CY): 0
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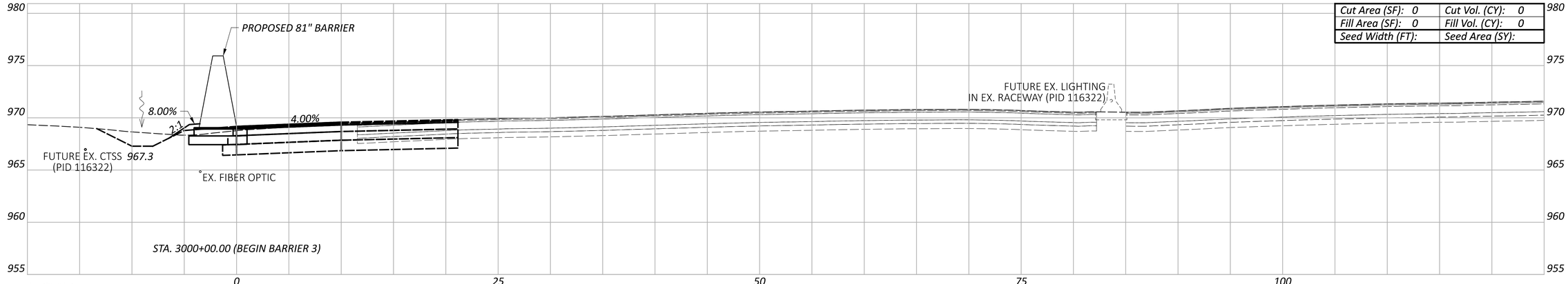

Cut Area (SF): 0	Cut Vol. (CY): 0
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT):	Seed Area (SY):

LEGEND

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

Sheet Totals		
Seeding	Cut	Fill

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

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DESIGNER: JMK

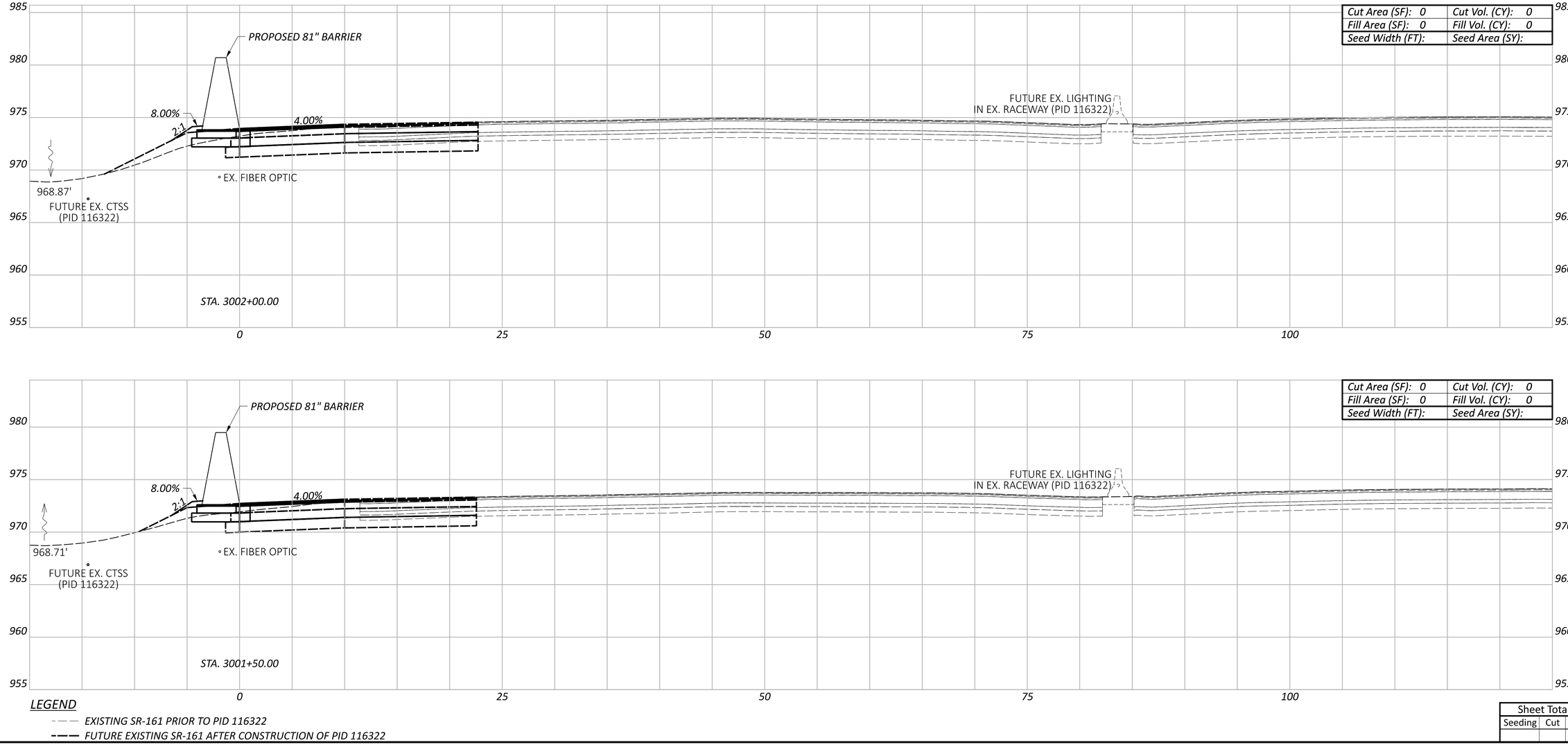
REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.53 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER3 - 3000+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 6:58:50 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_XS003B.dgn



LEGEND

- - - EXISTING SR-161 PRIOR TO PID 116322

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

FRA-161-15.80 NOISE WALLS

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

Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY
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PROJECT ID
117607

SHEET P.54 TOTAL P.276

MODEL: BLP_BARRIER3 - 3001+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:00:05 PM USER: jennifer.kelley
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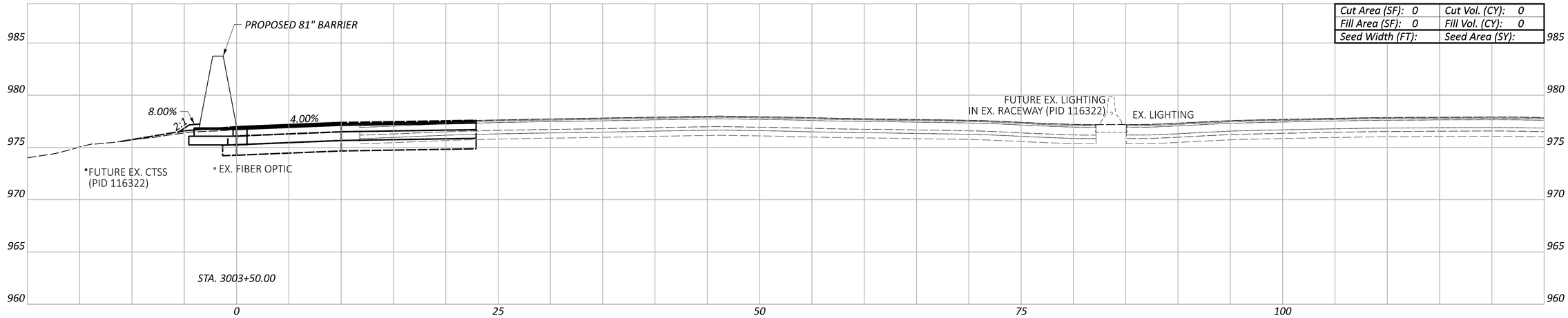

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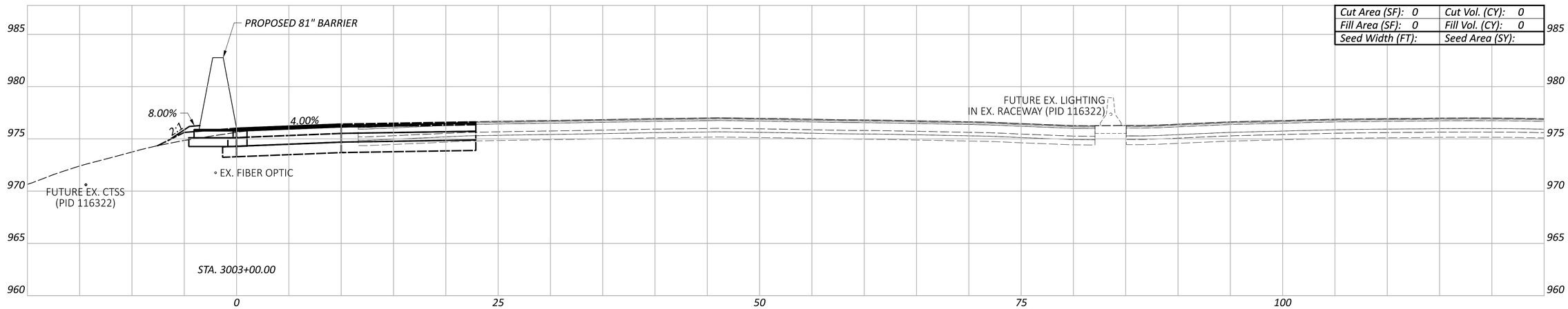

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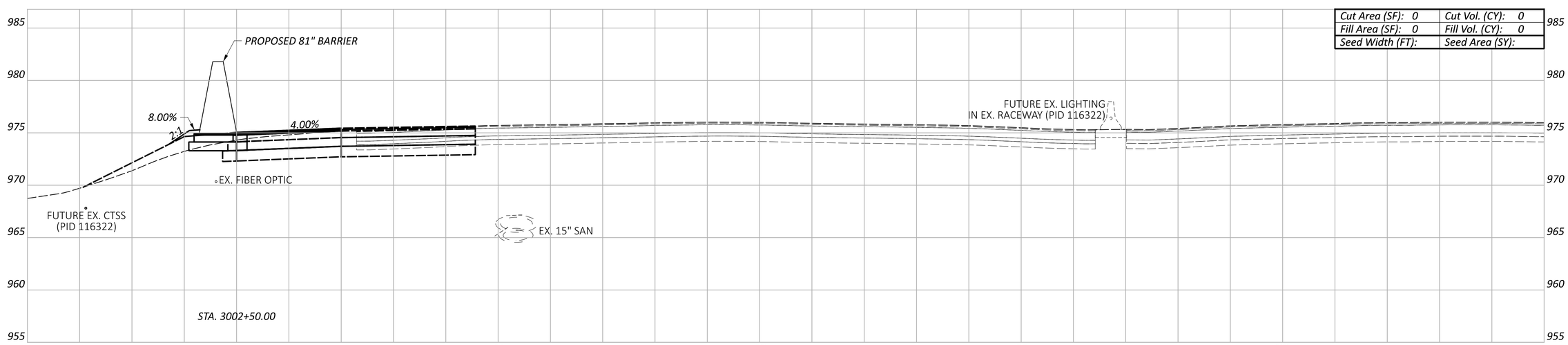

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LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals		
Seeding	Cut	Fill

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

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER3 - 3002+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:00:54 PM USER: jennifer.kelley
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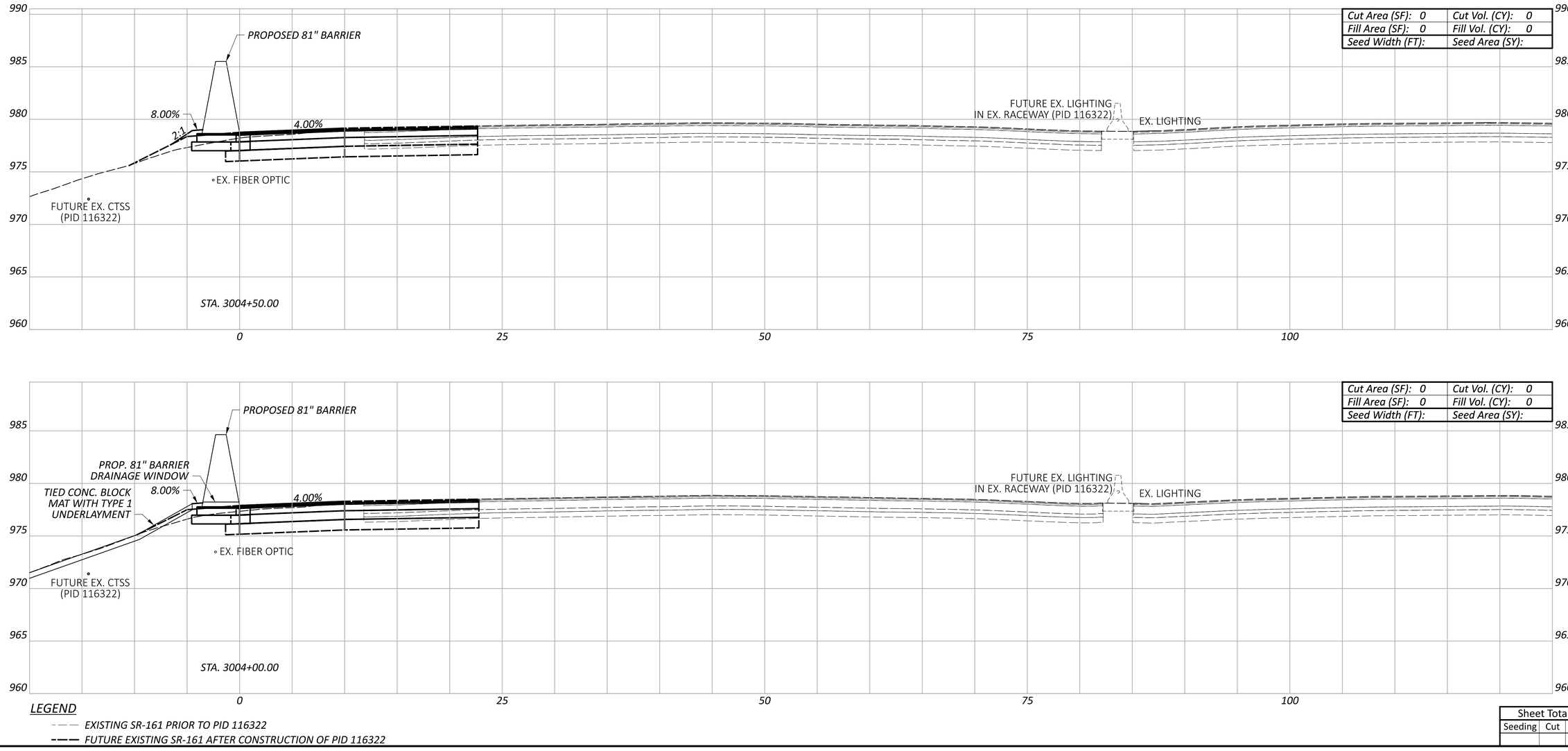
DESIGNER
JMK

REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET	TOTAL
P.55	P.276



FRA-161-15.80 NOISE WALLS

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

Sheet Totals		
Seeding	Cut	Fill

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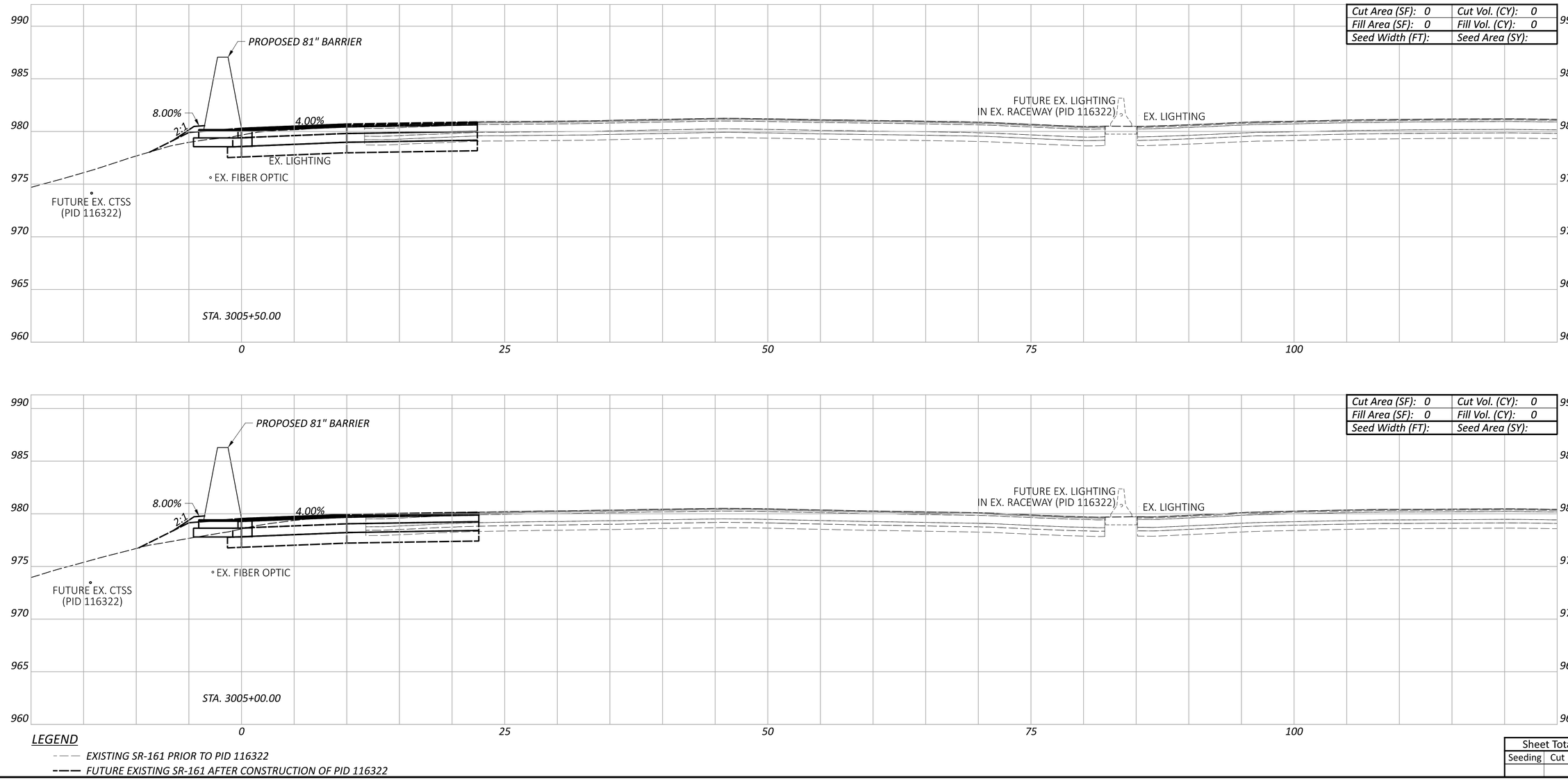
PROJECT ID
117607

SHEET P.56 TOTAL P.276



LEGEND

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

Sheet Totals		
Seeding	Cut	Fill

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

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DESIGNER: JMK

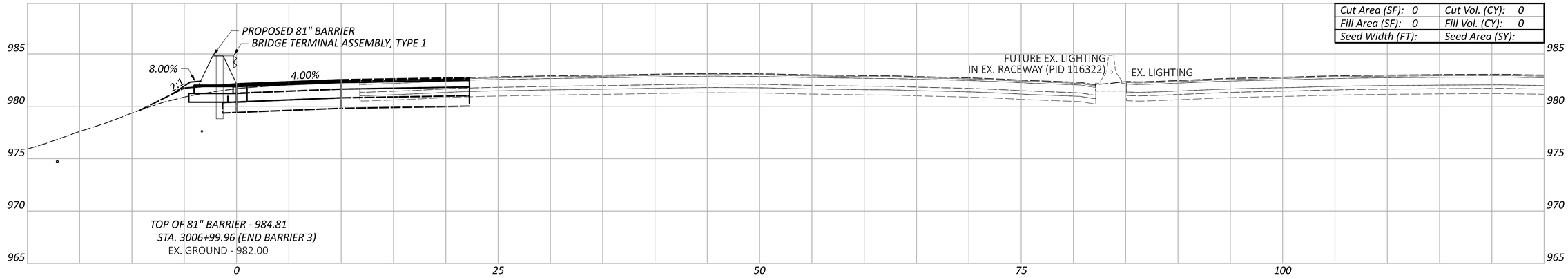
REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.57 | TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER3 - 3005+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:02:49 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_XS003B.dgn



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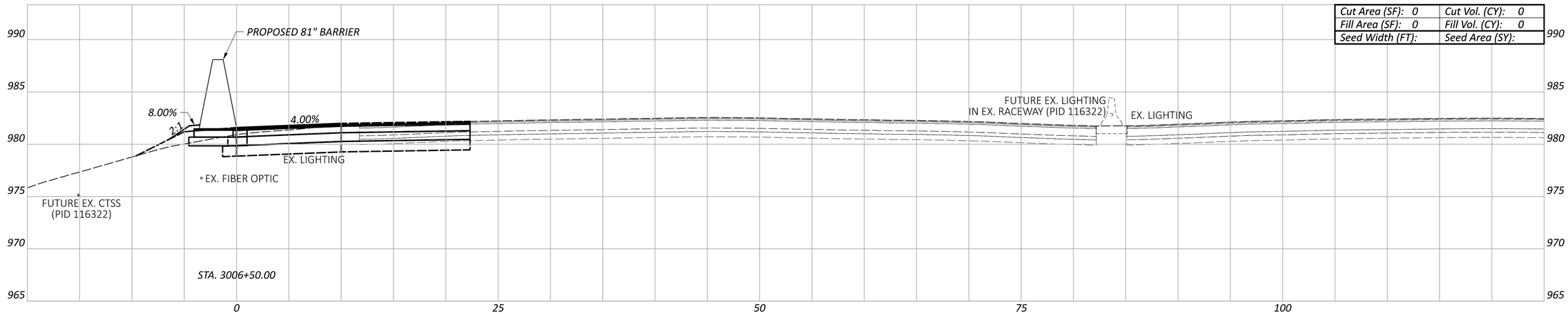

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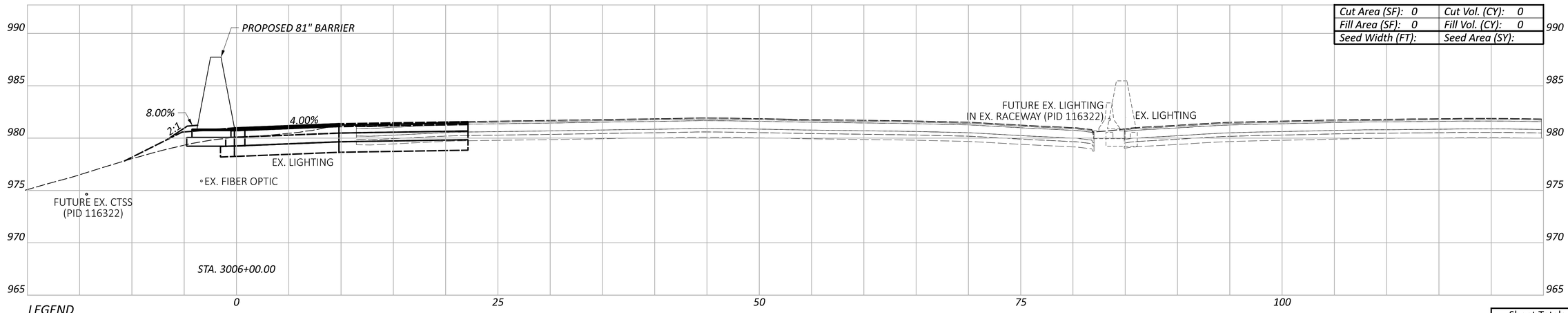

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Fill Area (SF): 0	Fill Vol. (CY): 0
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LEGEND

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

Sheet Totals		
Seeding	Cut	Fill

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

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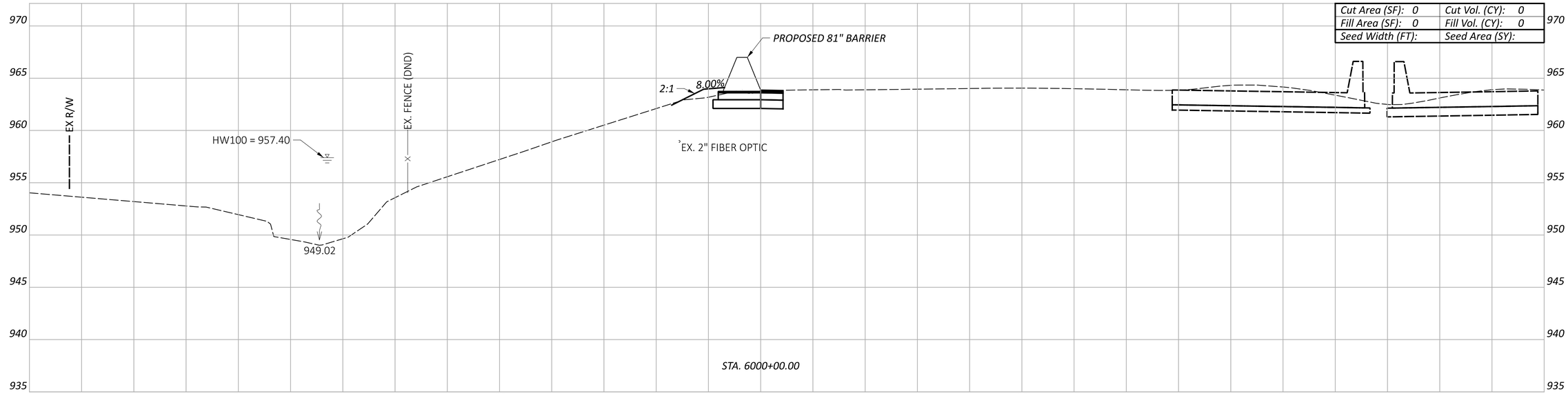
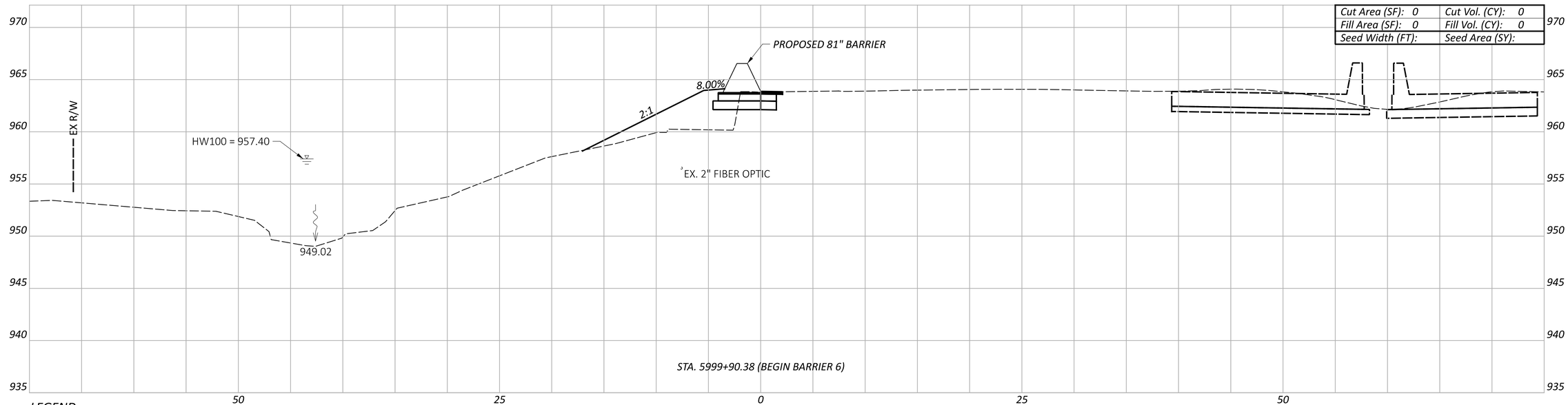
PROJECT ID: 117607

SHEET: P.58 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER3 - 3006+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:03:33 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_XS003B.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 - 81" BARRIER 6
STA. 5999+90.38 TO STA. 6000+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER6 - 5999+90.38 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:05:08 PM USER: jennifer.kelley
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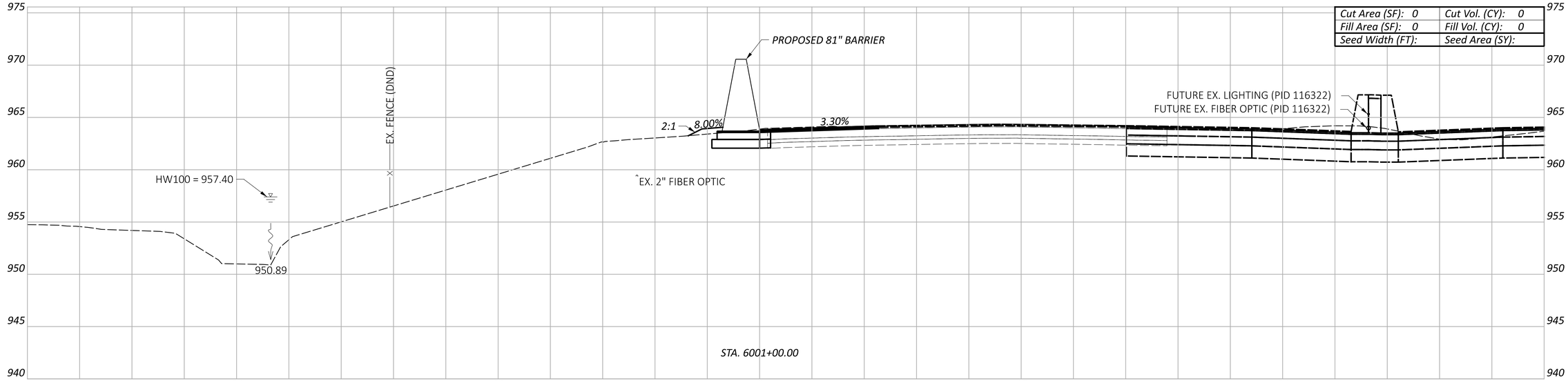
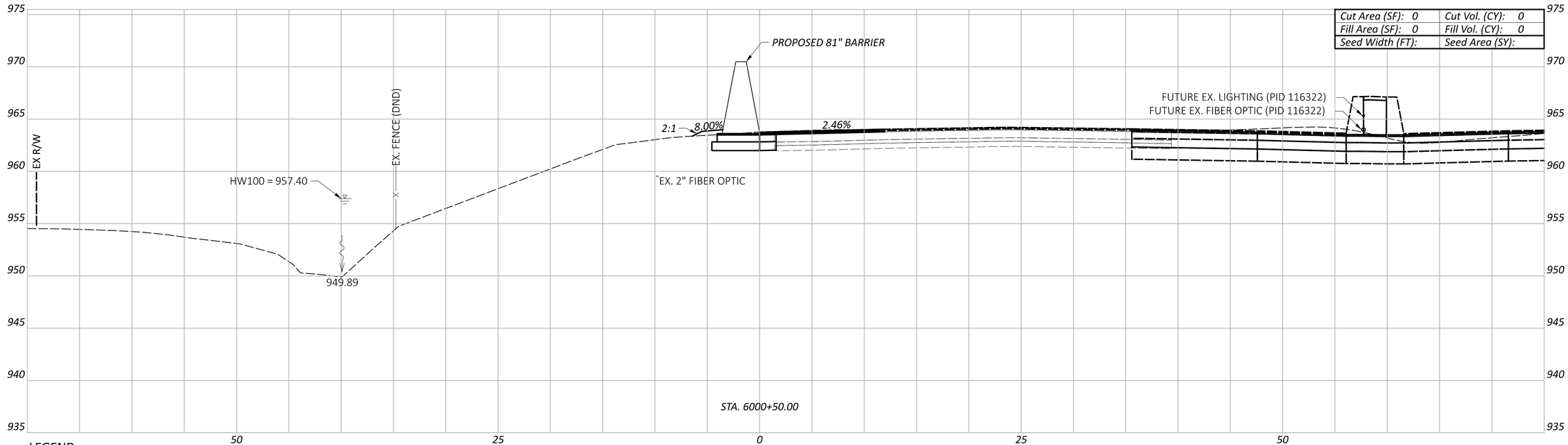
JDH 01-22-24

PROJECT ID
117607

SHEET P.59 TOTAL P.276





LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

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

Sheet Totals		
Seeding	Cut	Fill

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DESIGNER: JMK

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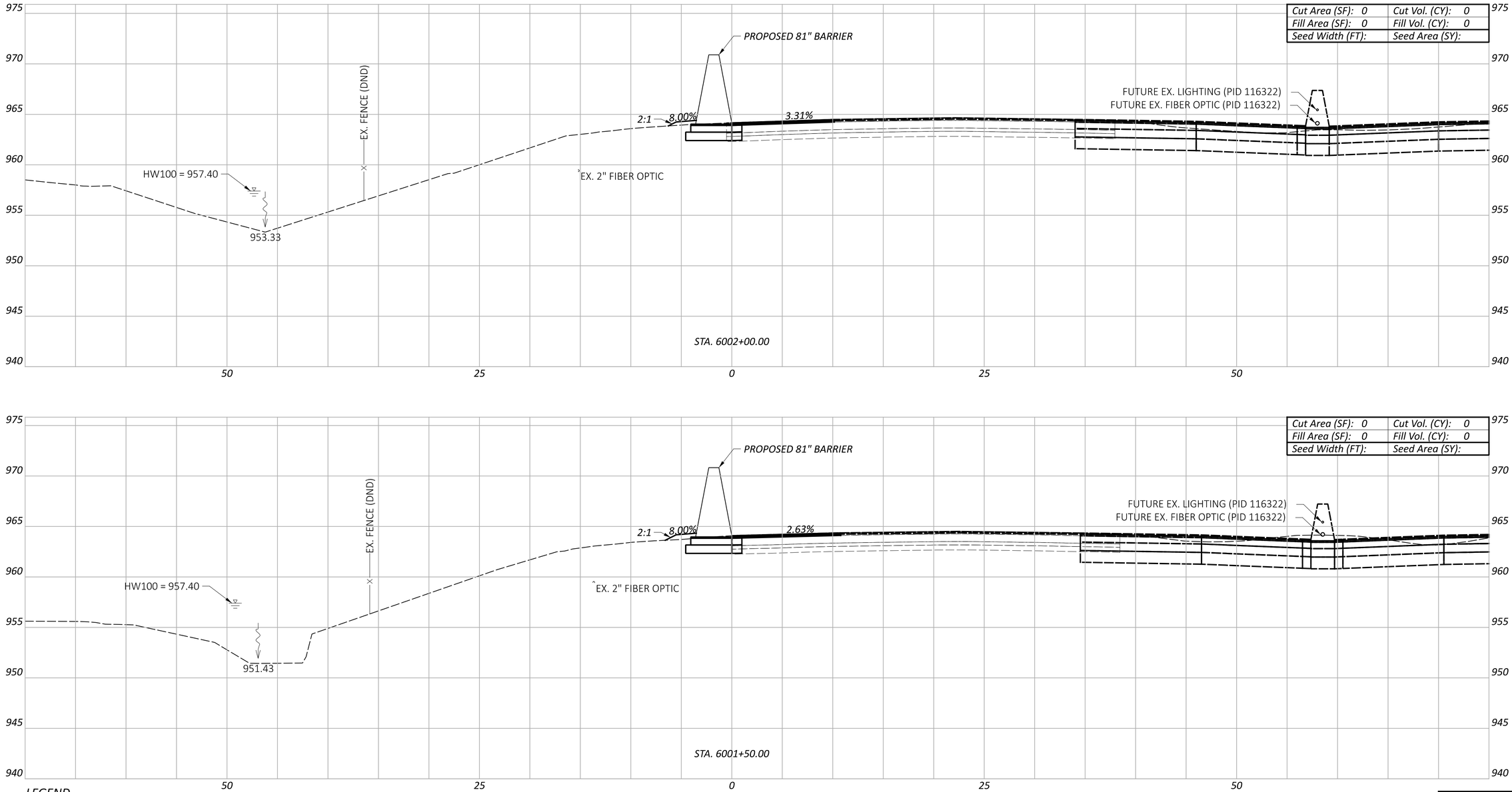
PROJECT ID: 117607

SHEET: P.60 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER6 - 6000+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:05:31 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_XS006A.dgn



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 WALLS

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

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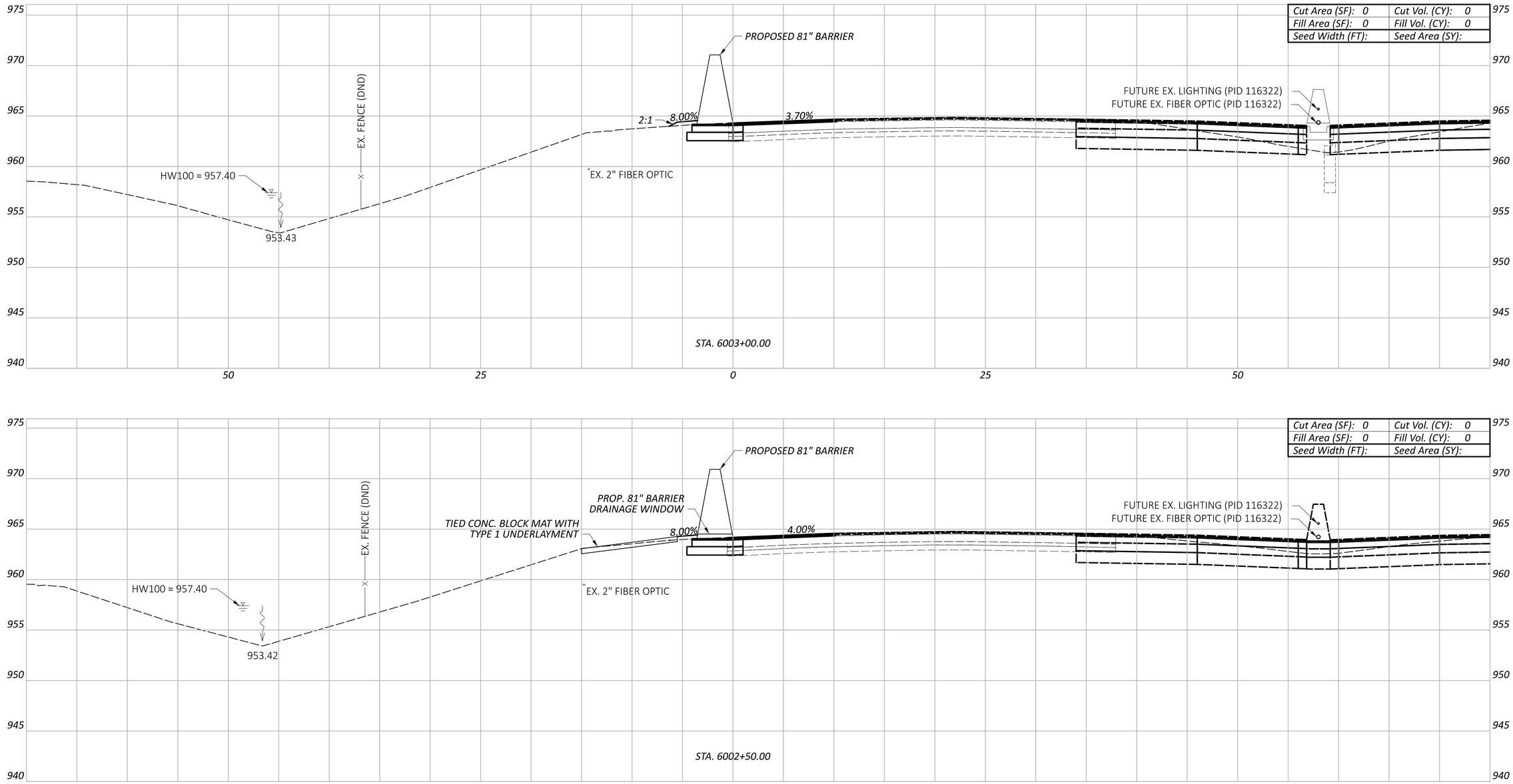
REVIEWER: JDH 01-22-24
PROJECT ID: 117607
SHEET: P.61
TOTAL: P.276

MODEL: BLP_BARRIER6 - 6001+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:05:50 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_XS006A.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 - 81" BARRIER 6
STA. 6002+50.00 TO STA. 6003+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER6 - 6002+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:06:07 PM USER: jennifer.kelley
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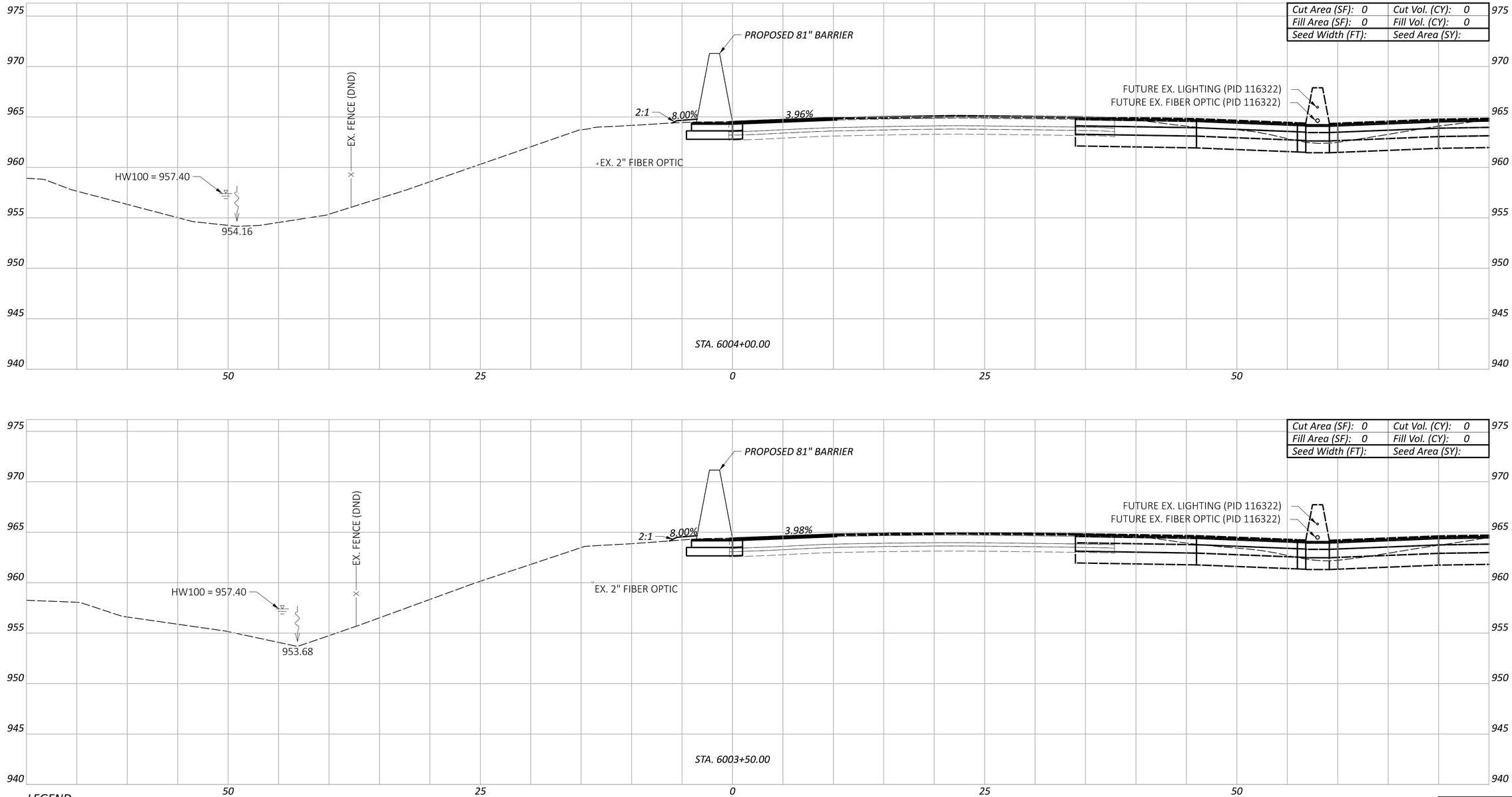
117607

SHEET	TOTAL
P.62	P.276



LEGEND

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

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

Sheet Totals		
Seeding	Cut	Fill

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

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER6 - 6003+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:06:27 PM USER: jennifer.kelley
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DESIGNER
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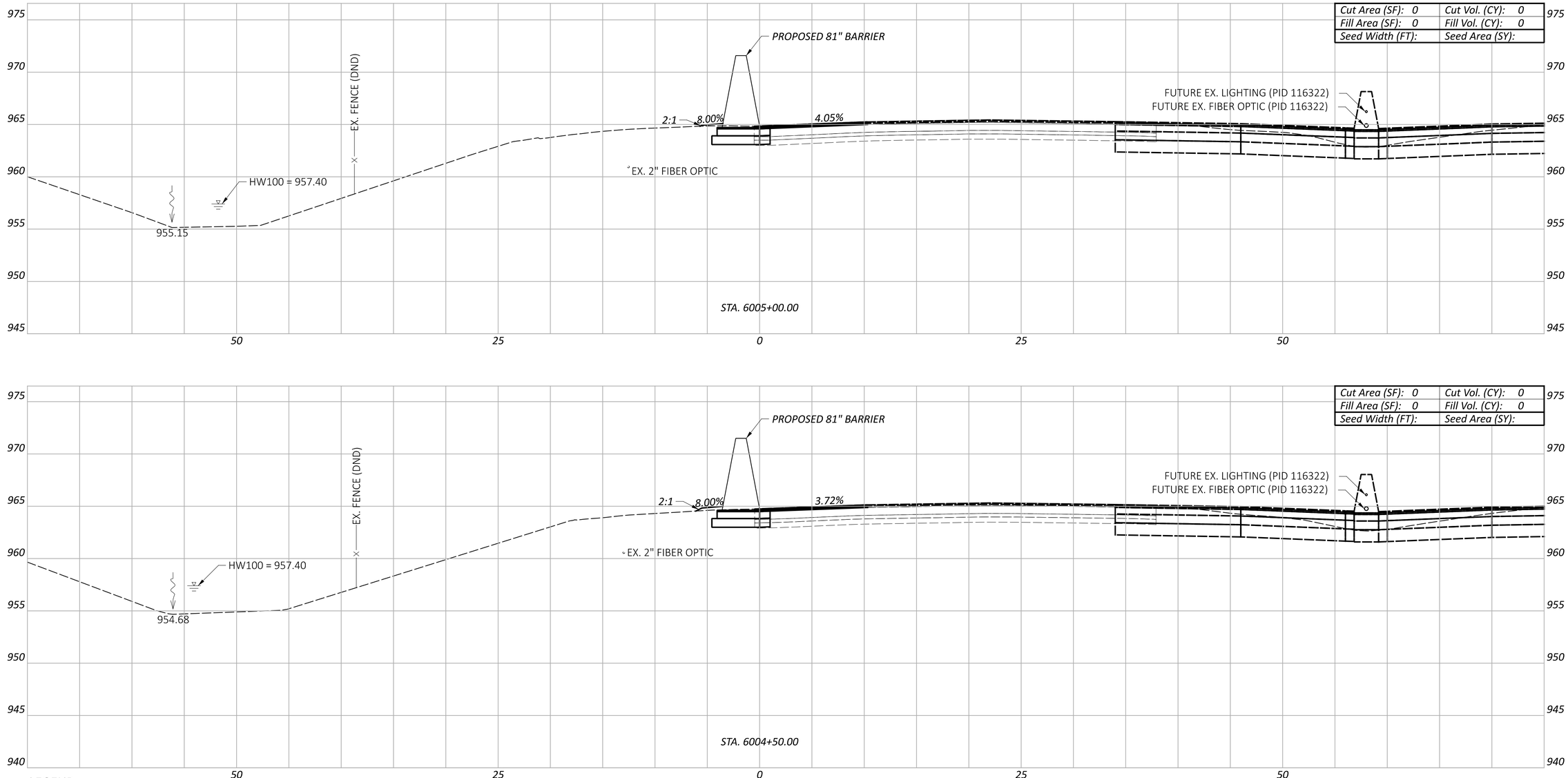
JDH 01-22-24

PROJECT ID
117607

SHEET	TOTAL
P.63	P.276



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 WALLS

MODEL: BLP_BARRIER6 - 6004+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:06:45 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_XS006A.dgn

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

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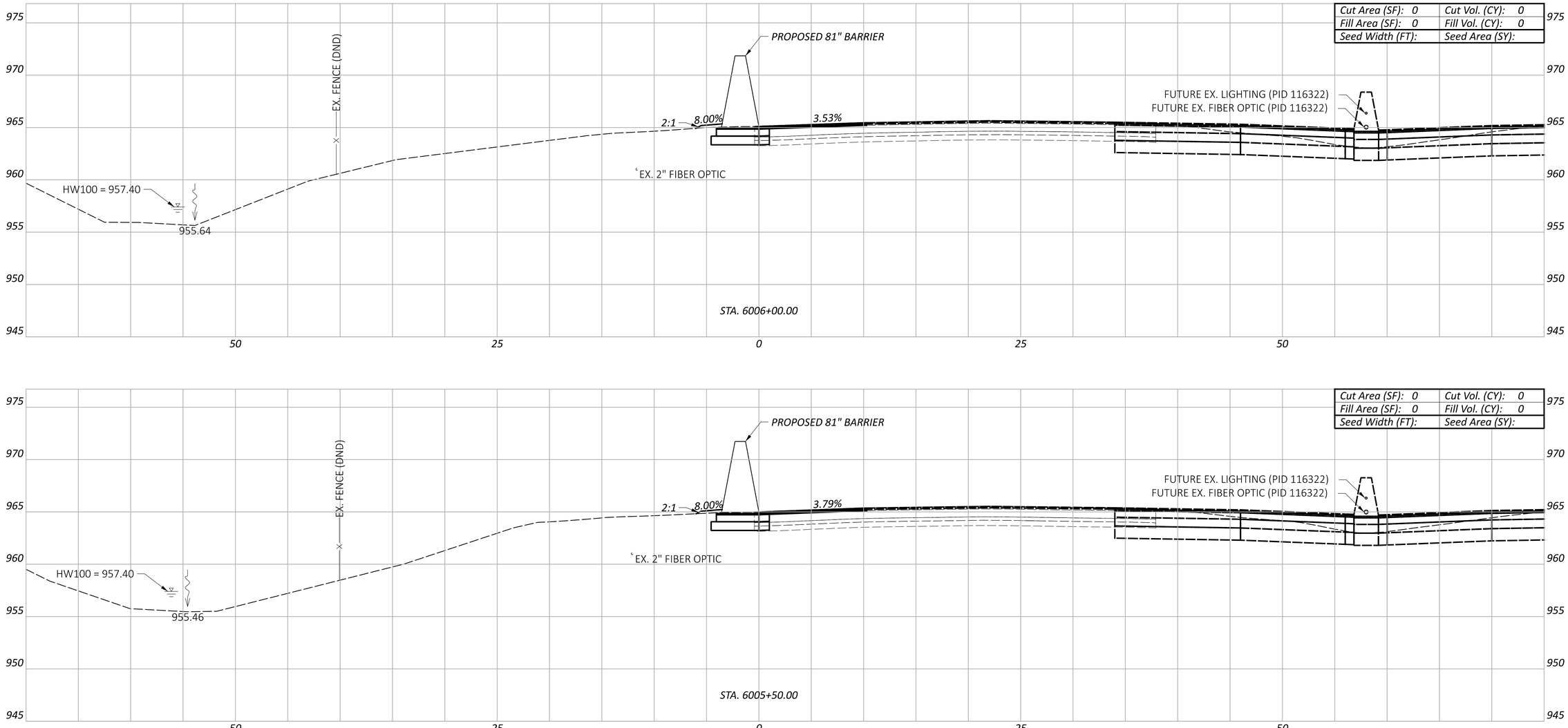
JDH 01-22-24

PROJECT ID
117607

SHEET	TOTAL
P.64	P.276



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 WALLS

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

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PROJECT ID: 117607

SHEET: P.65 | TOTAL: P.276

MODEL: BLP_BARRIER6 - 6005+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:07:03 PM USER: jennifer.kelley
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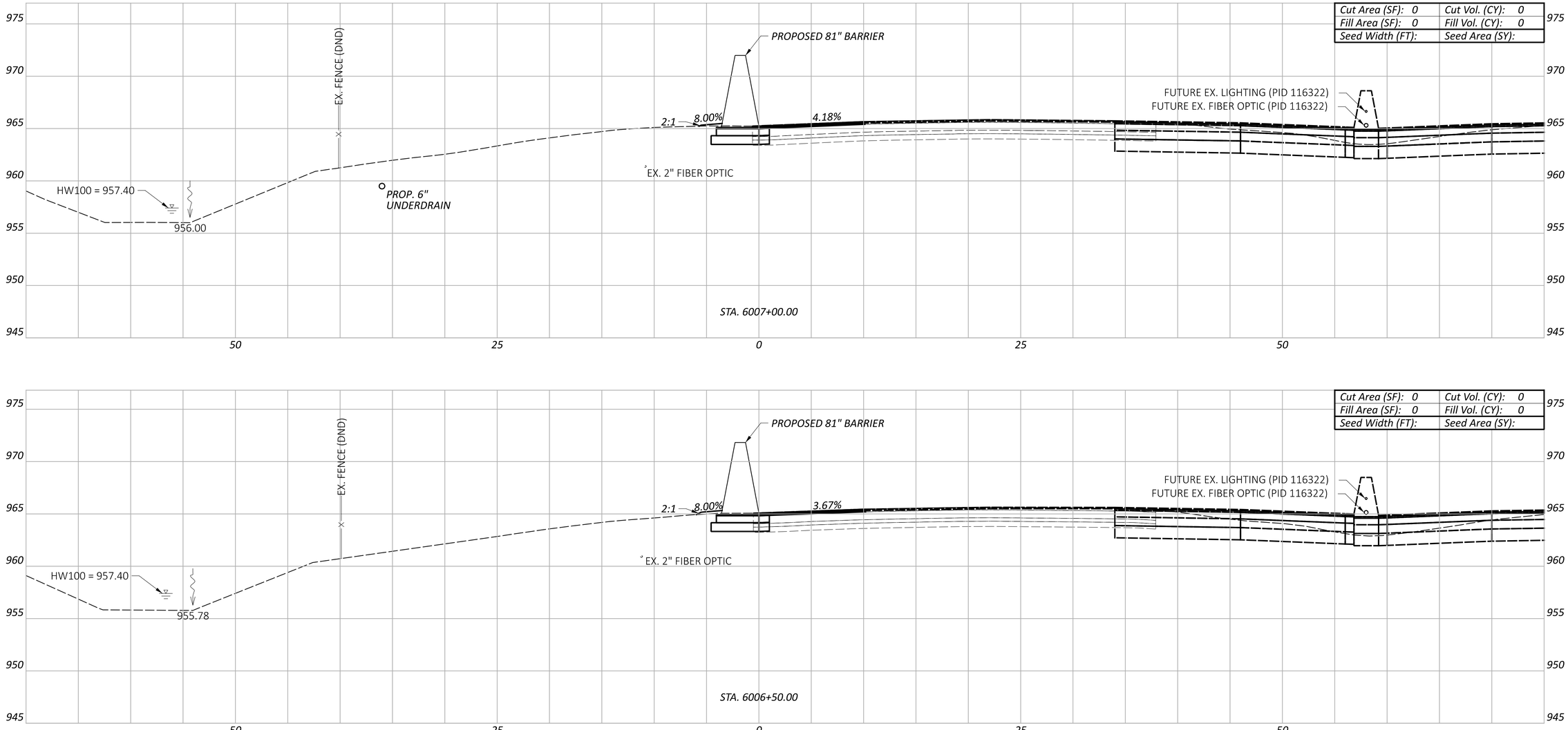

LEGEND

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 WALLS

MODEL: BLP_BARRIER6 - 6006+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:07:21 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_XS006A.dgn

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

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DESIGNER
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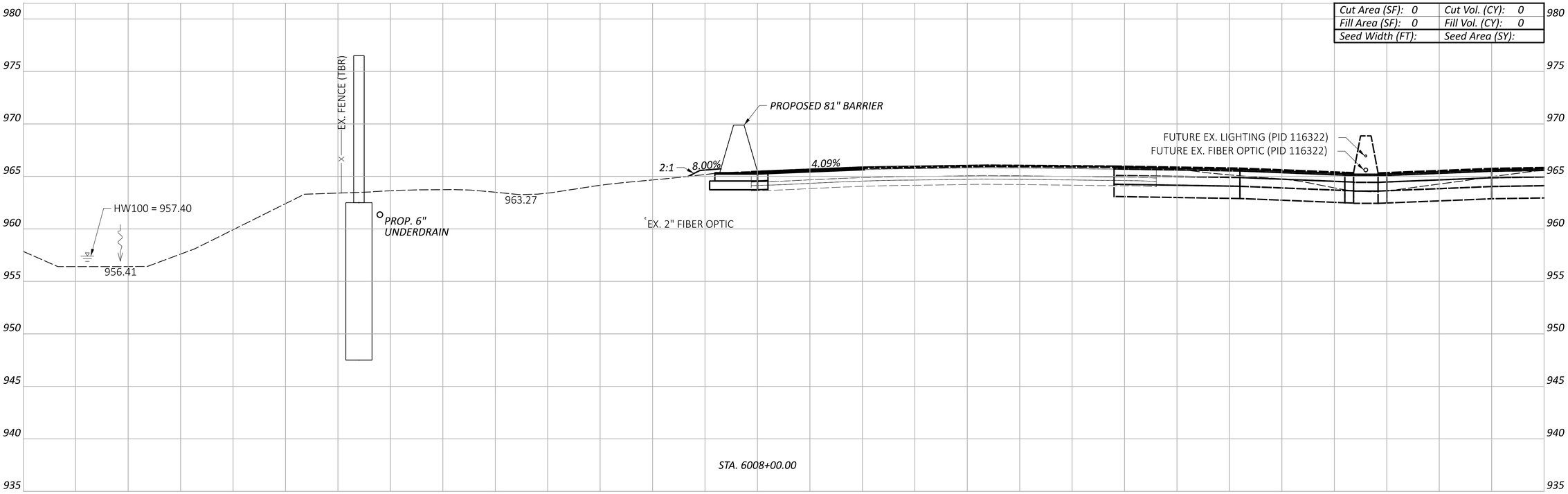
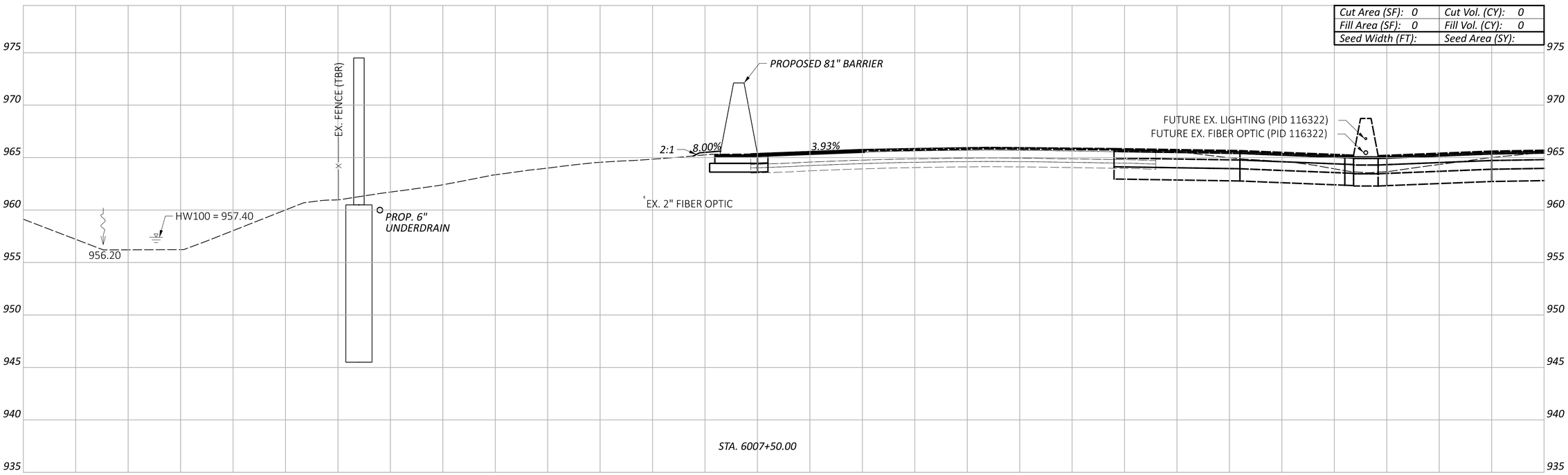
REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET P.66 | TOTAL P.276





LEGEND

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

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

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

Sheet Totals		
Seeding	Cut	Fill

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DESIGNER: JMK

REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.67 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER6 - 6007+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:07:39 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_XS006A.dgn

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER6 - 6008+25.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:07:57 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_XS006A.dgn

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

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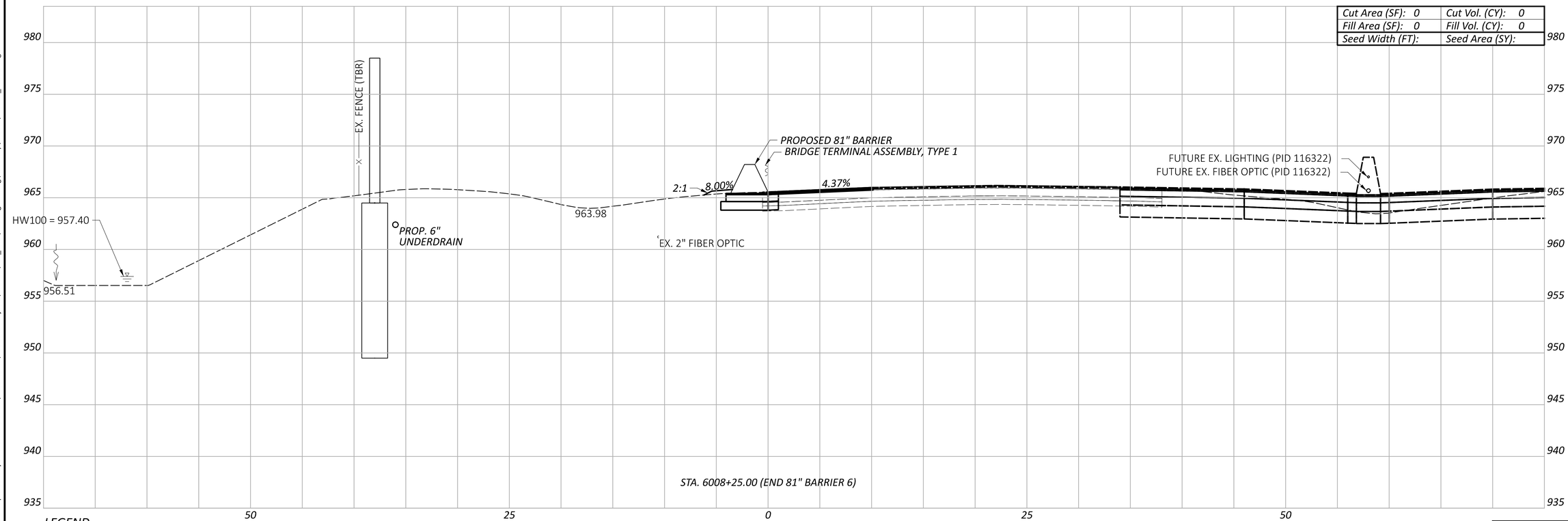
Seed Width (FT):	Seed Area (SY):



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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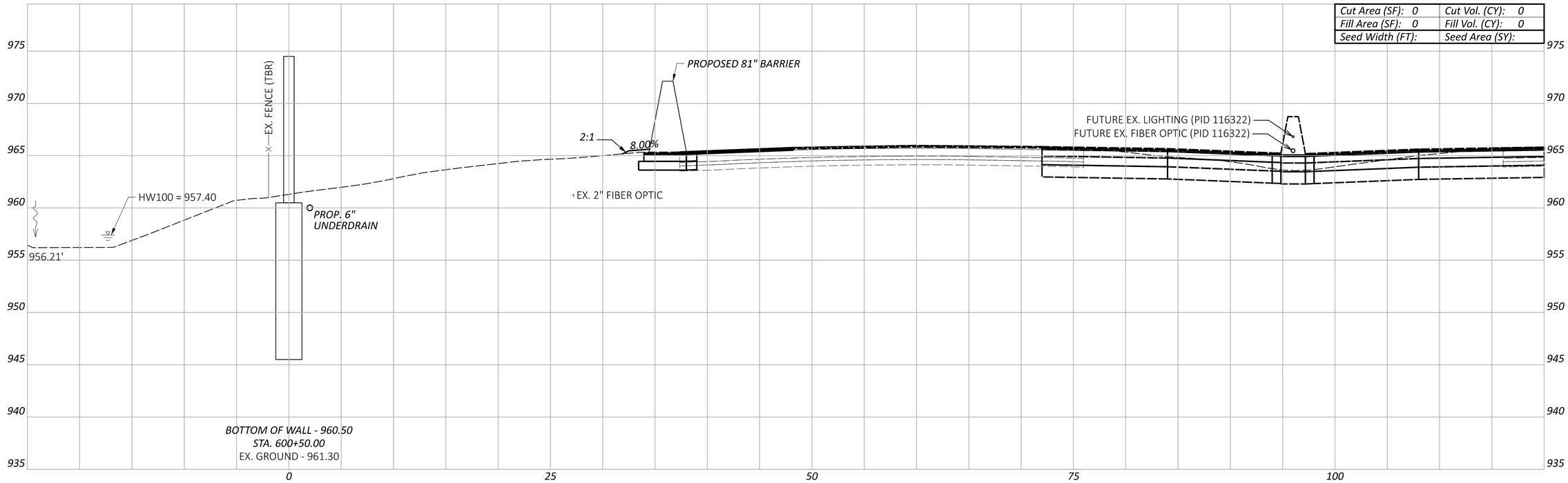
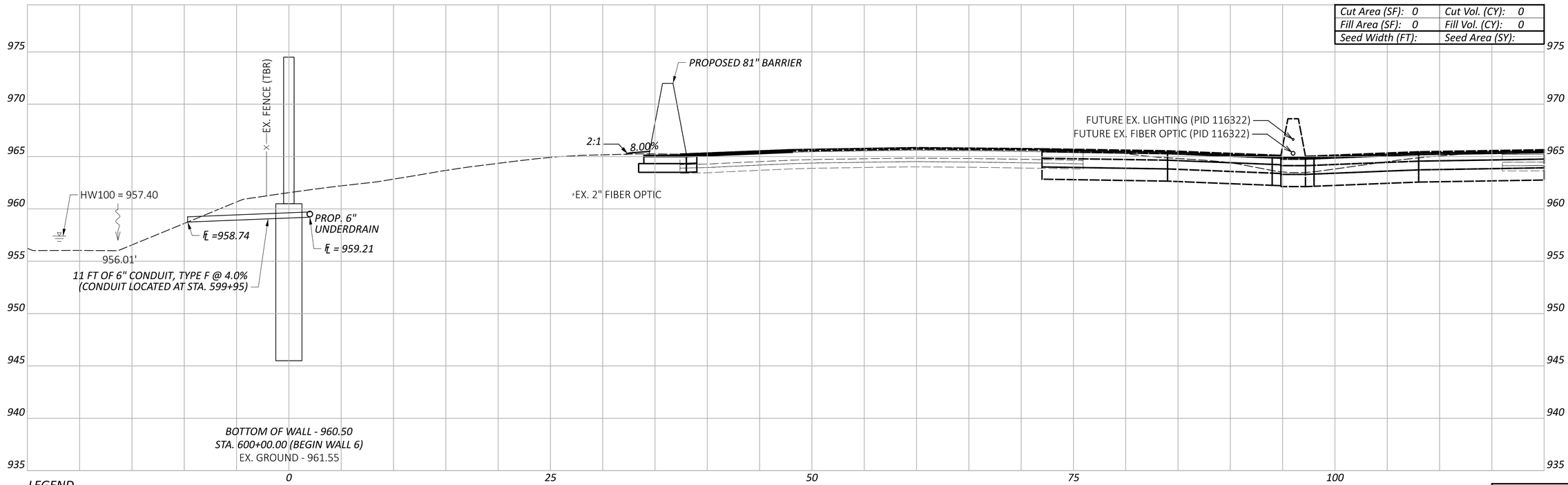
DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET	TOTAL
P.68	P.276





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 WALLS

MODEL: BLP_WALL6 - 600+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 11:12:37 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_XS006B.dgn

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

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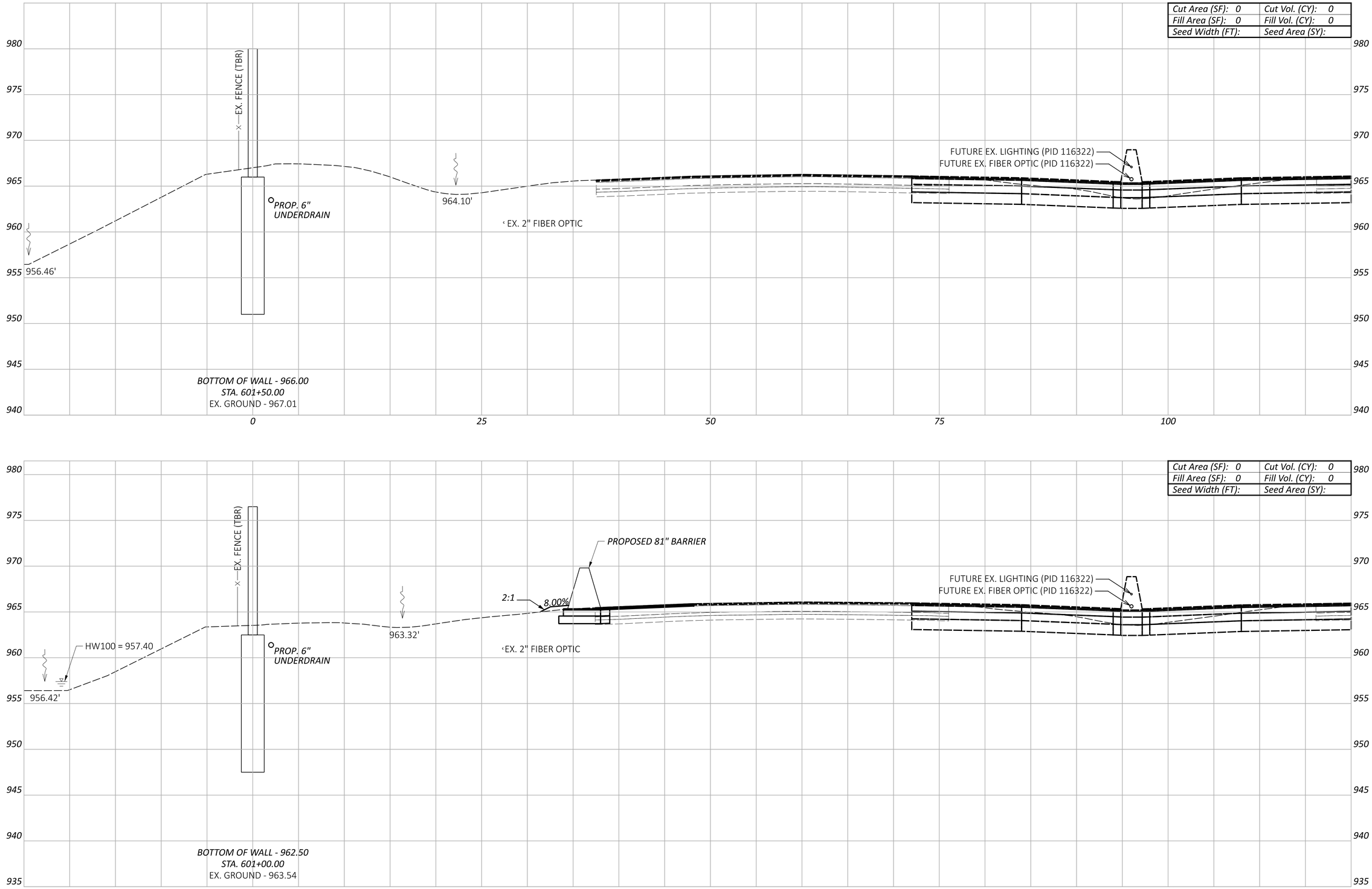
JMK

REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET P.69 | TOTAL P.276



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 WALLS

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

MODEL: BLP_WALL6 - 601+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:08:49 PM USER: jennifer.kelley
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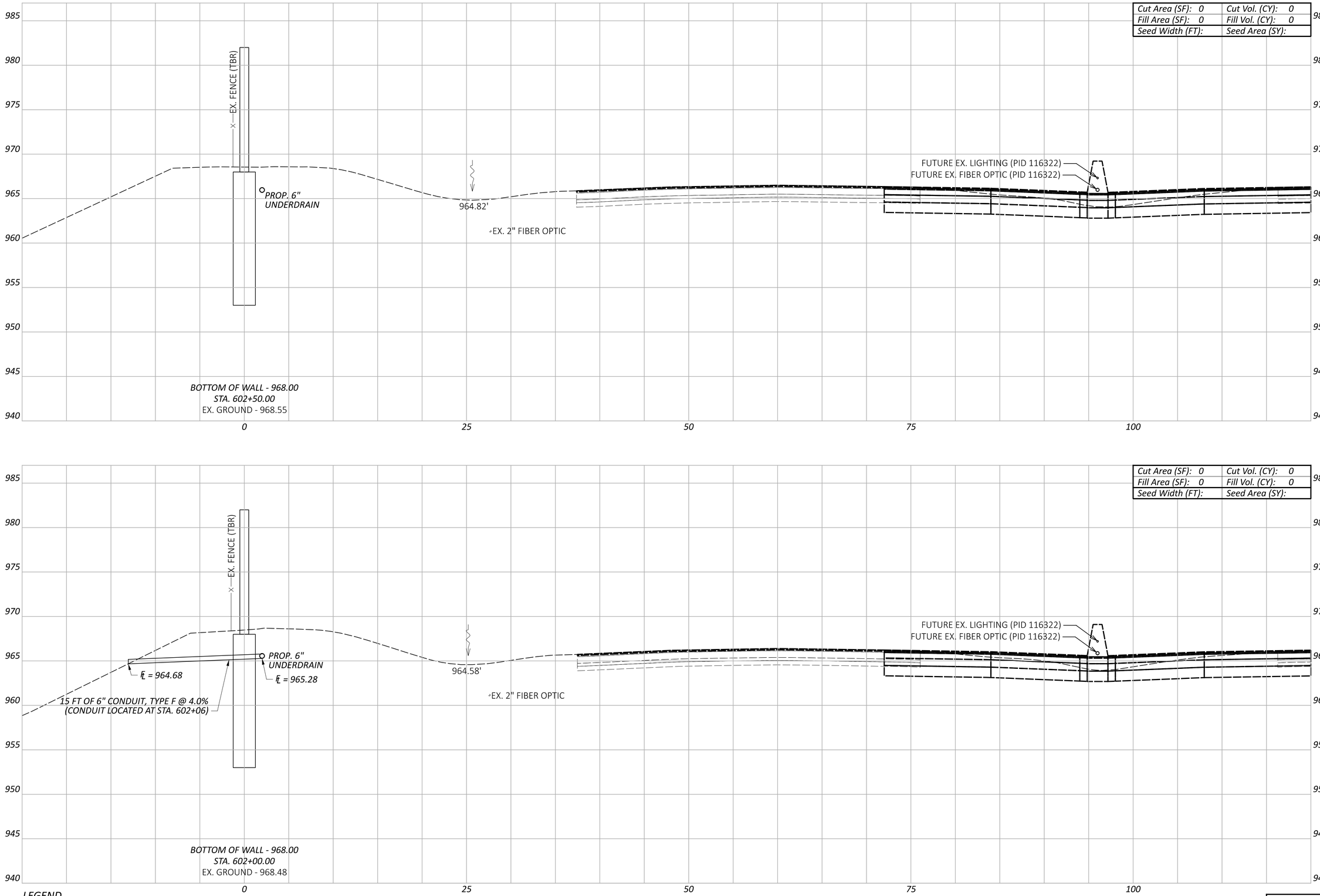
PROJECT ID 117607

SHEET P.70 TOTAL P.276



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

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL6 - 602+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 11:13:10 AM USER: jennifer.kelley
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Sheet Totals		
Seeding	Cut	Fill

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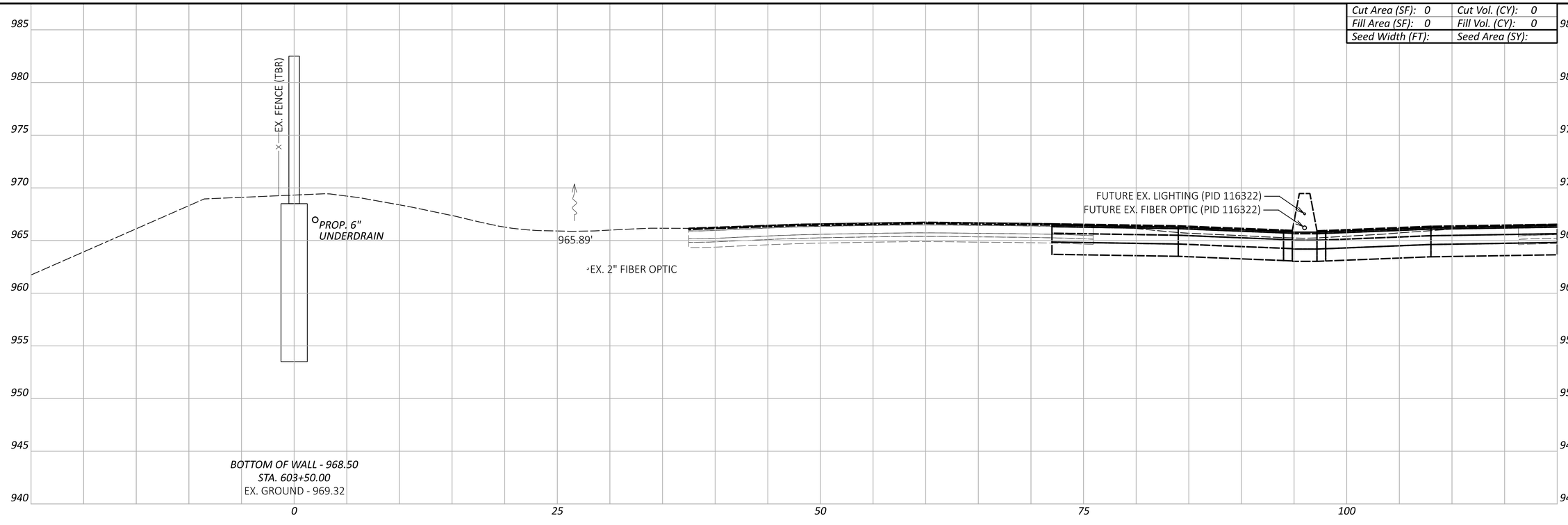
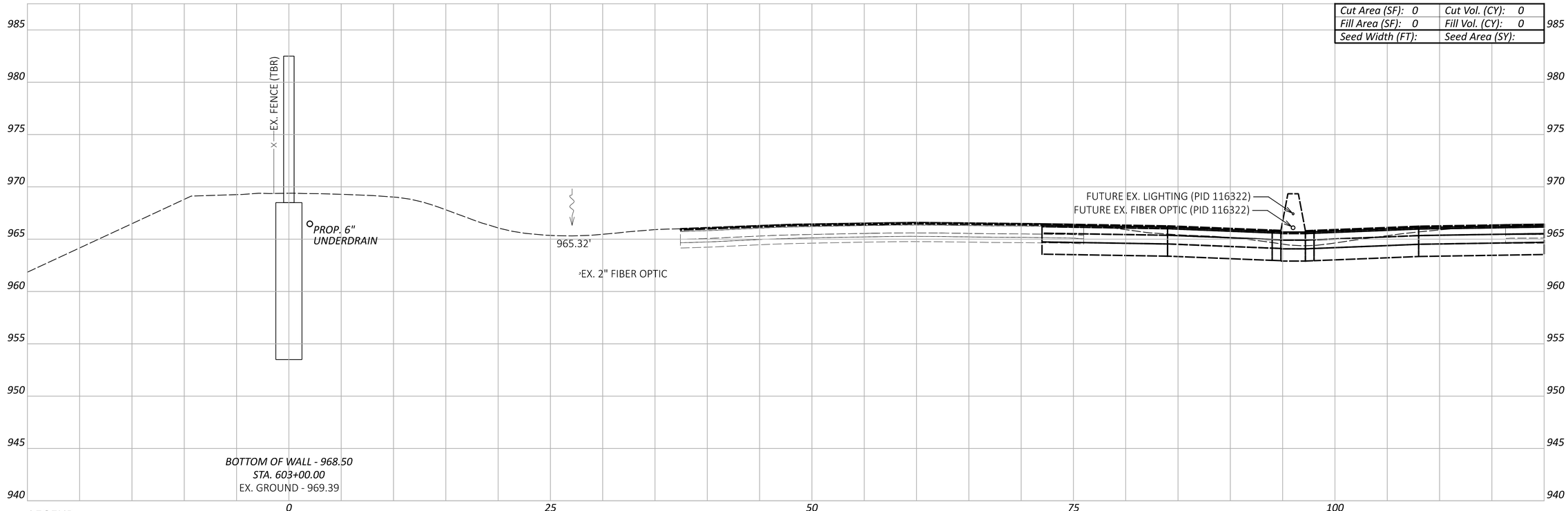
SHEET	TOTAL
P.71	P.276





LEGEND

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

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

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

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL6 - 603+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:09:33 PM USER: jennifer.kelley
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Sheet Totals		
Seeding	Cut	Fill

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PROJECT ID 117607

SHEET P.72 TOTAL P.276

CROSS SECTIONS - WALL 6
STA. 604+00.00

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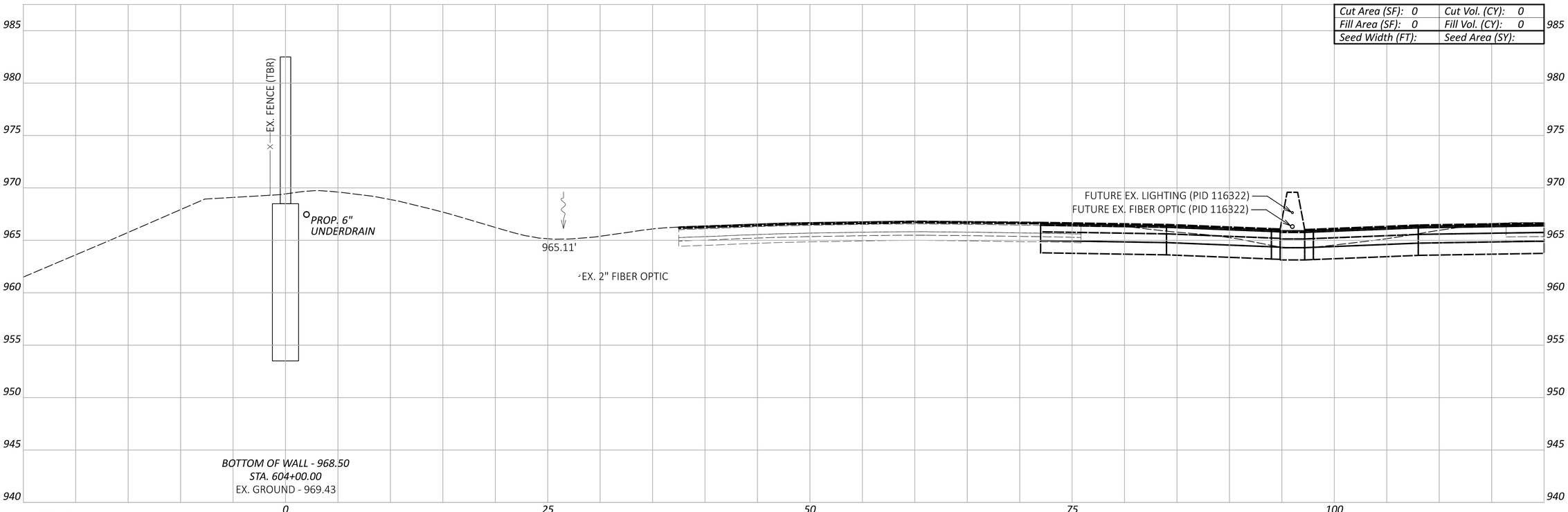

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals		
Seeding	Cut	Fill

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WAL6 - 604+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:09:55 PM USER: jennifer.kelley
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SHEET P.73 | TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WAL6 - 604+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:10:08 PM USER: jennifer.kelley
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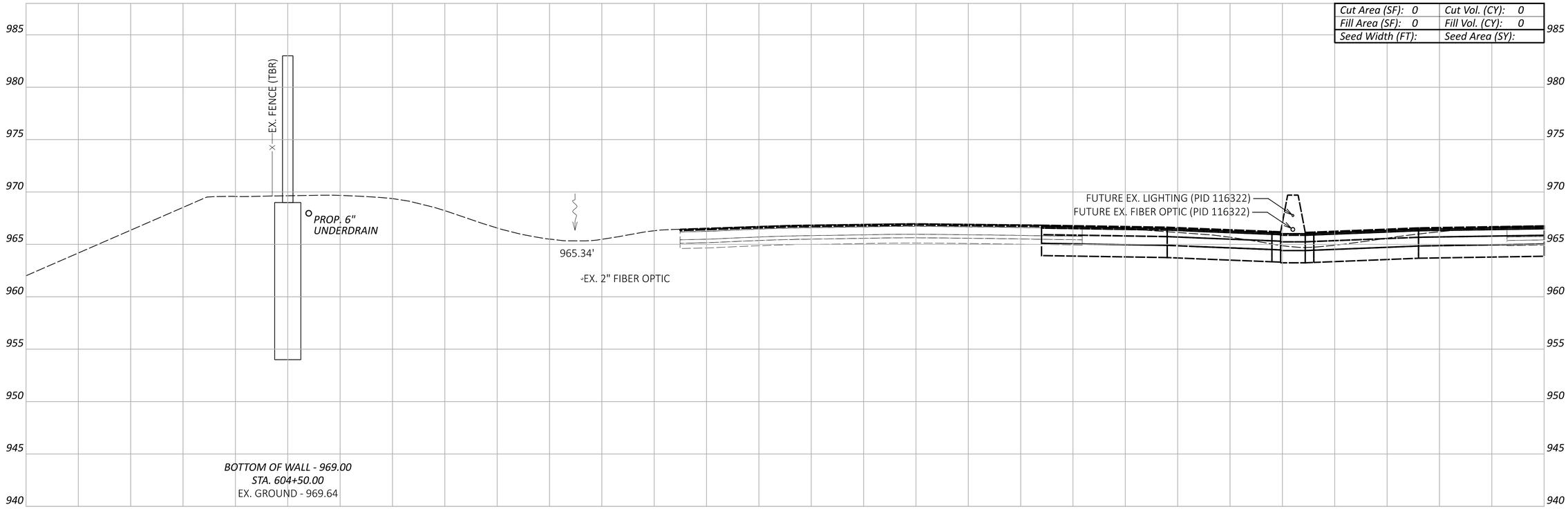

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals		
Seeding	Cut	Fill

CROSS SECTIONS - WALL 6
STA. 604+50.00

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SHEET P.74 | TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WAL6 - 605+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:10:22 PM USER: jennifer.kelley
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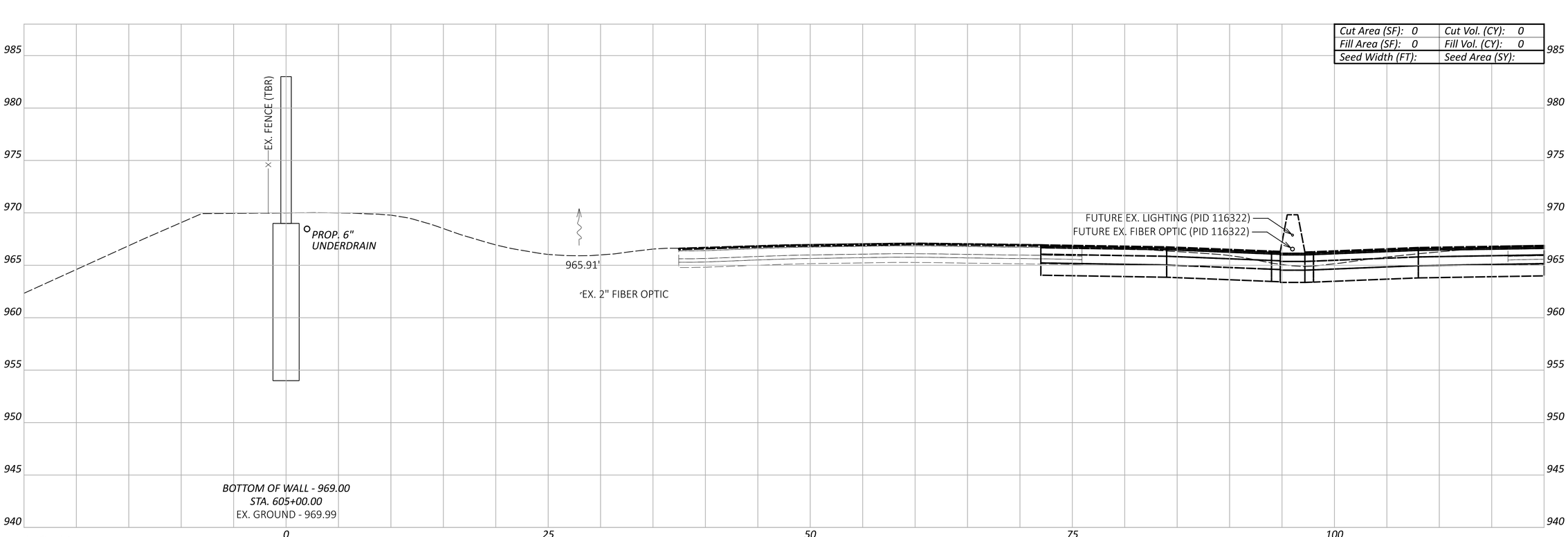
CROSS SECTIONS - WALL 6
STA. 605+00.00



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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SHEET	TOTAL
P.75	P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WAL6 - 605+28.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:10:35 PM USER: jennifer.kelley
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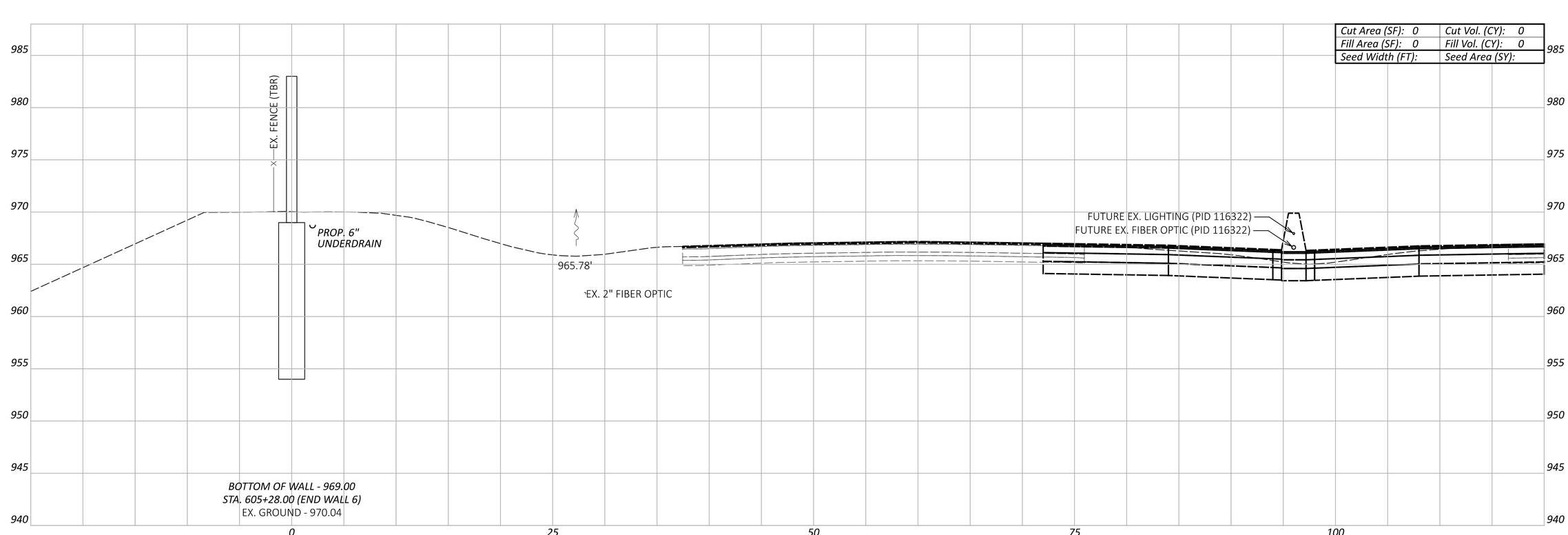
CROSS SECTIONS - WALL 6
STA. 605+28.00



LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals		
Seeding	Cut	Fill

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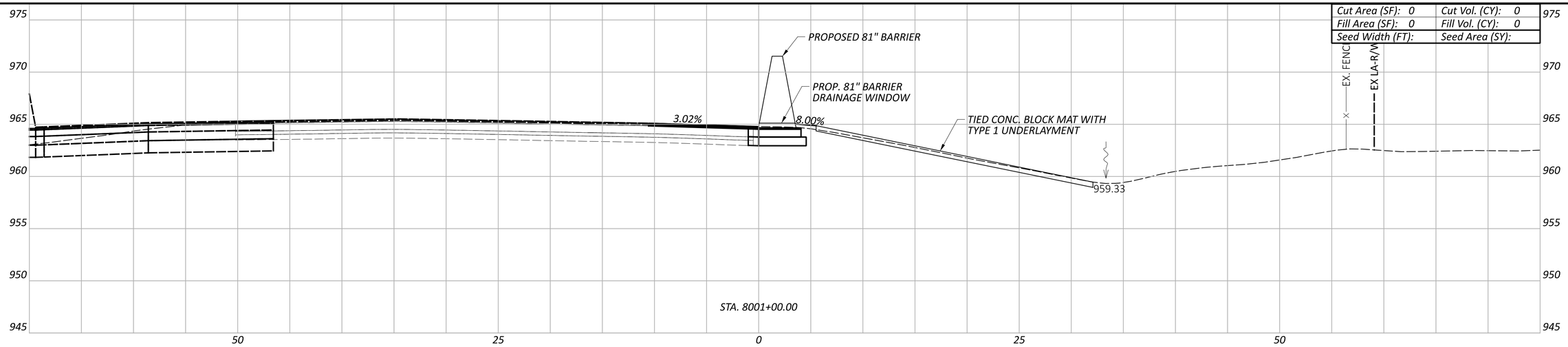
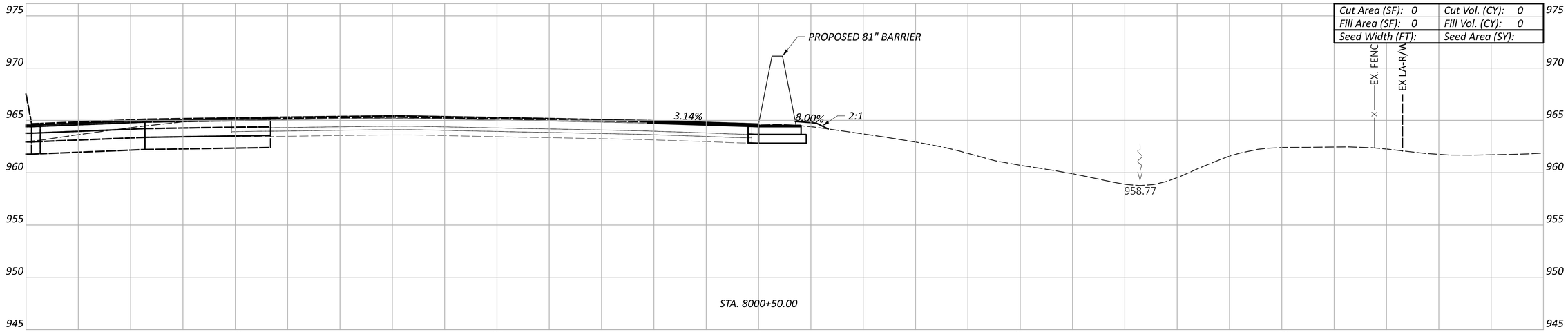
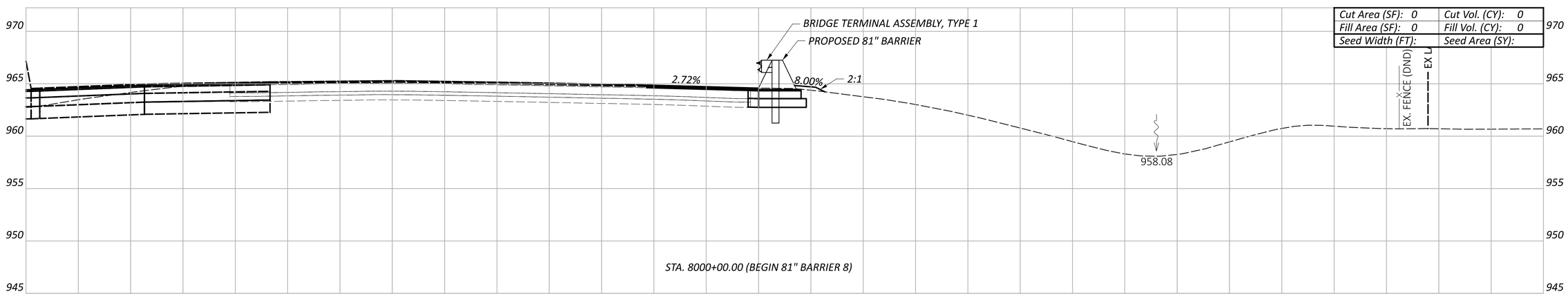
PROJECT ID
117607

SHEET	TOTAL
P.76	P.276







LEGEND

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

Sheet Totals		
Seeding	Cut	Fill

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

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER8 - 8000+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:11:18 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_XS008A.dgn

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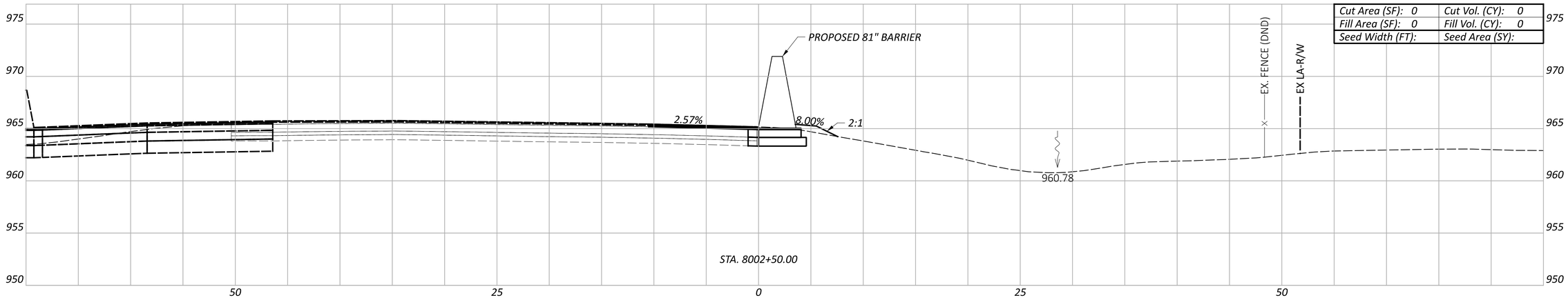
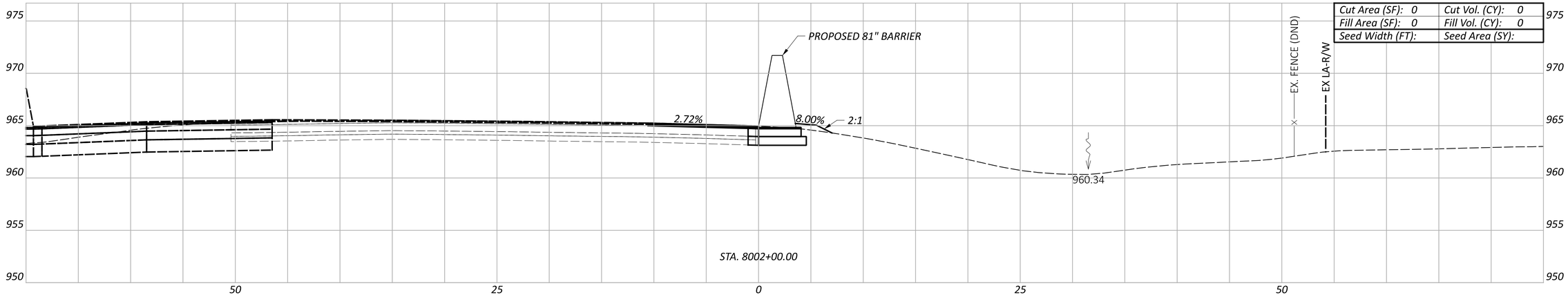
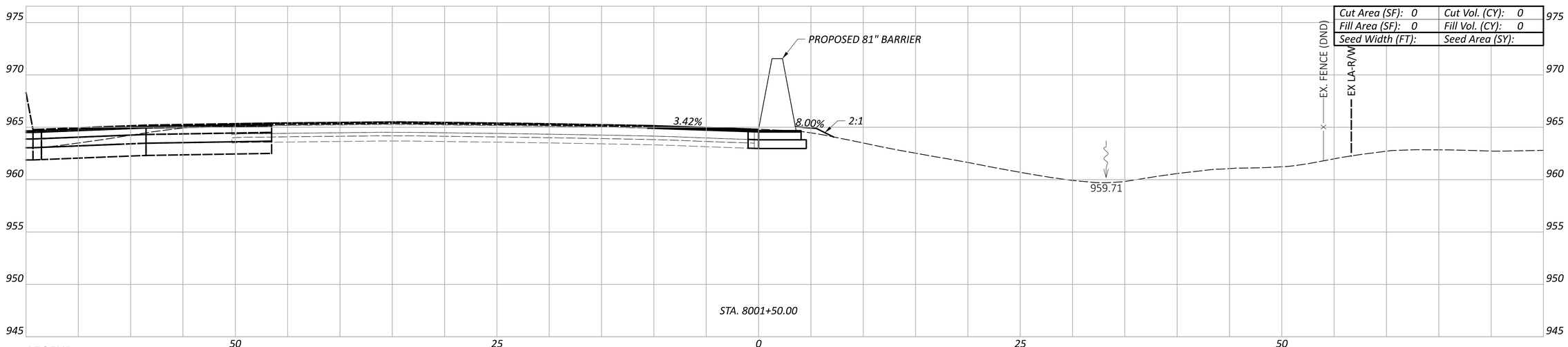
REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET P.77 TOTAL P.276







LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals		
Seeding	Cut	Fill

CROSS SECTIONS - 81" BARRIER 8
STA. 8001+50.00 TO STA. 8002+50.00

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PROJECT ID: 117607

SHEET: P.78 | TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER8 - 8001+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:11:51 PM USER: jennifer.kelley
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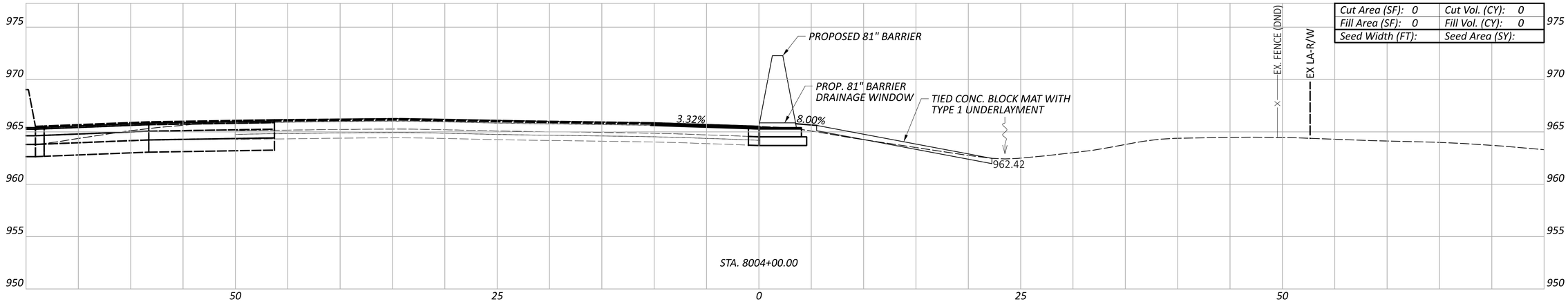

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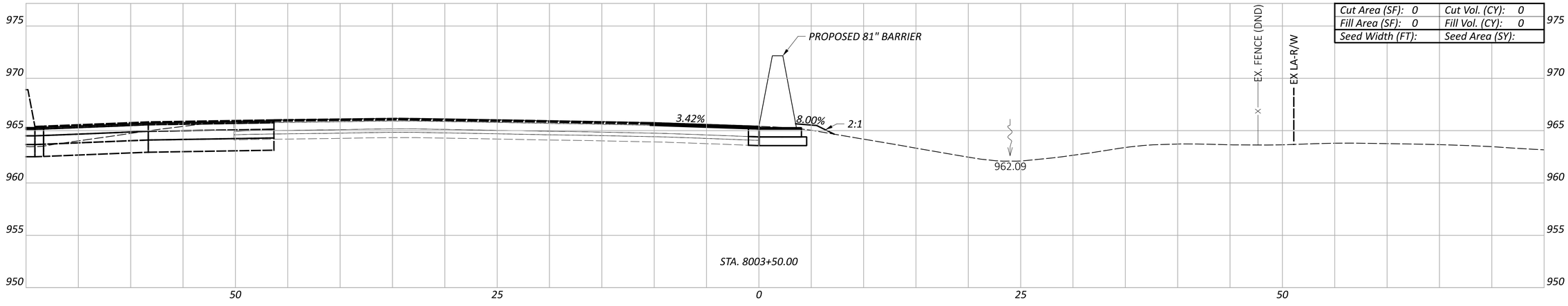

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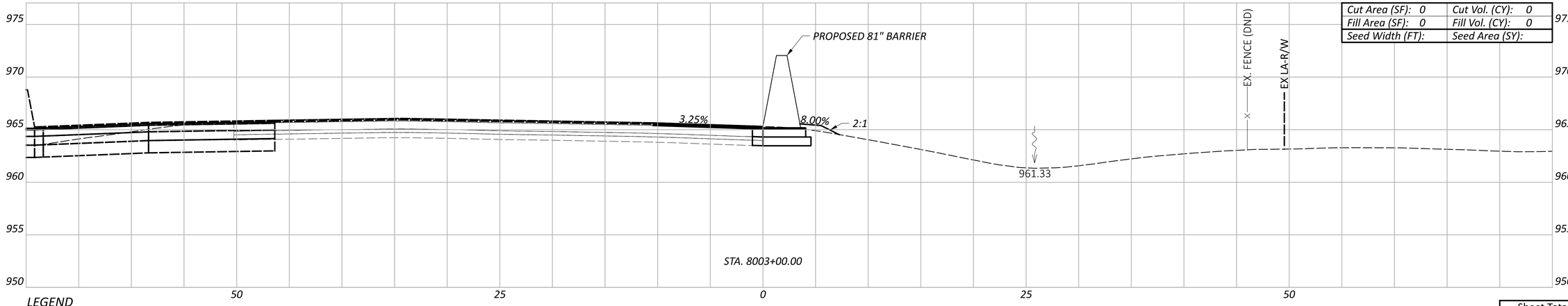

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Seed Width (FT):	Seed Area (SY):

LEGEND

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

Sheet Totals		
Seeding	Cut	Fill

FRA-161-15.80 NOISE WALLS

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

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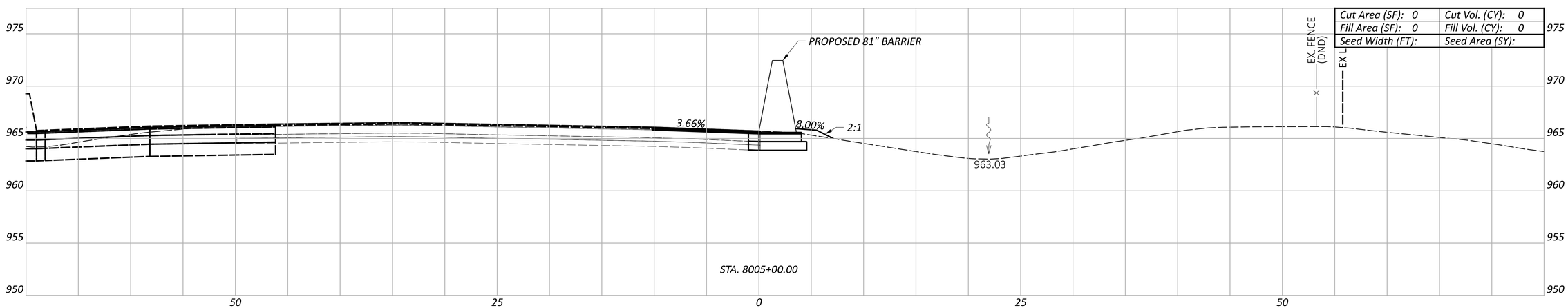
REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.79 TOTAL P.276

MODEL: BLP_BARRIER8 - 8003+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:12:16 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_XS008A.dgn



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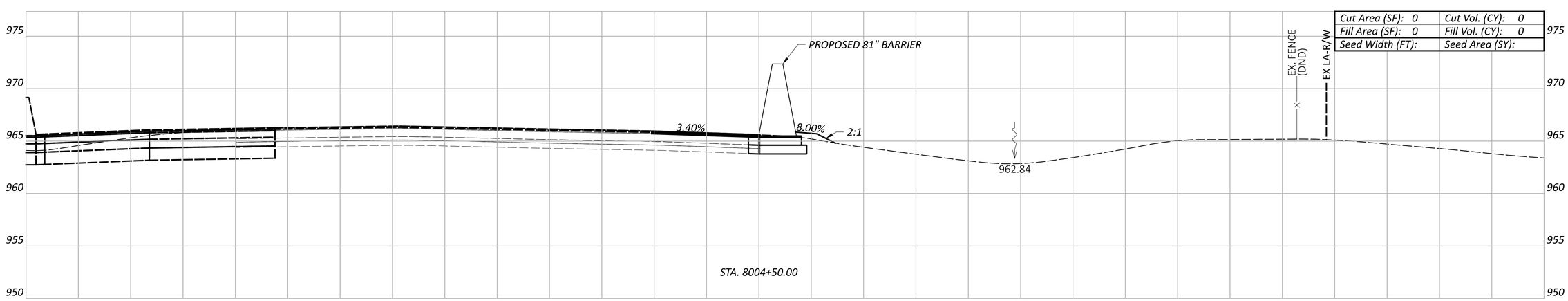

Cut Area (SF): 0	Cut Vol. (CY): 0
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT):	Seed Area (SY):

LEGEND

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

Sheet Totals		
Seeding	Cut	Fill

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

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER8 - 8004+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:12:41 PM USER: jennifer.kelley
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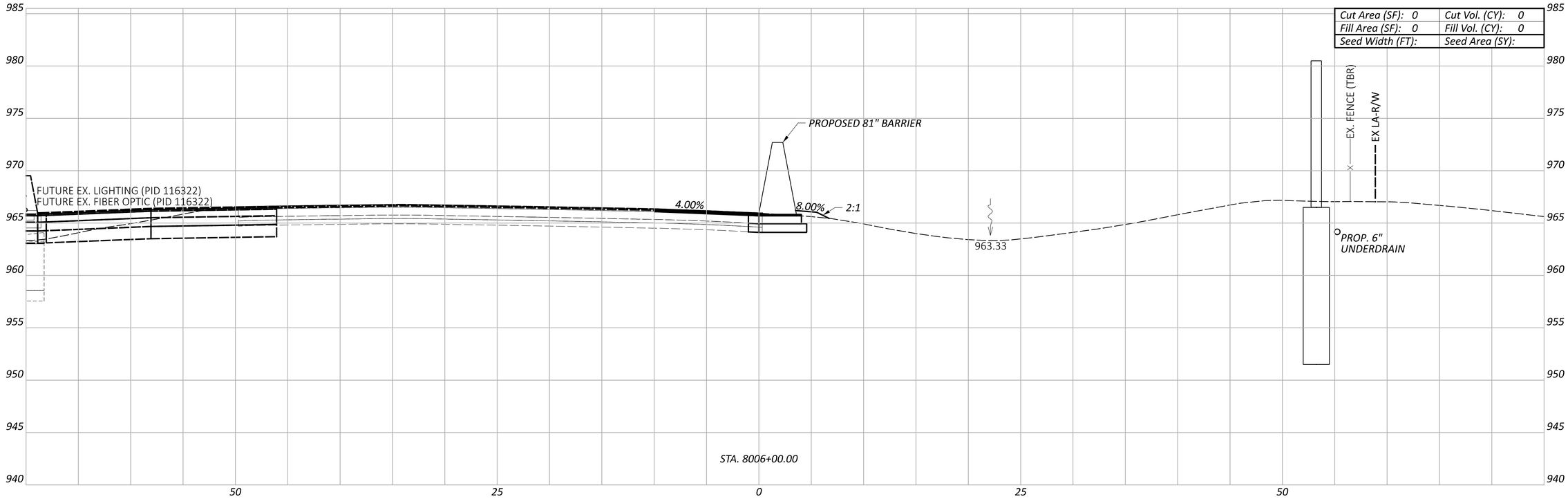
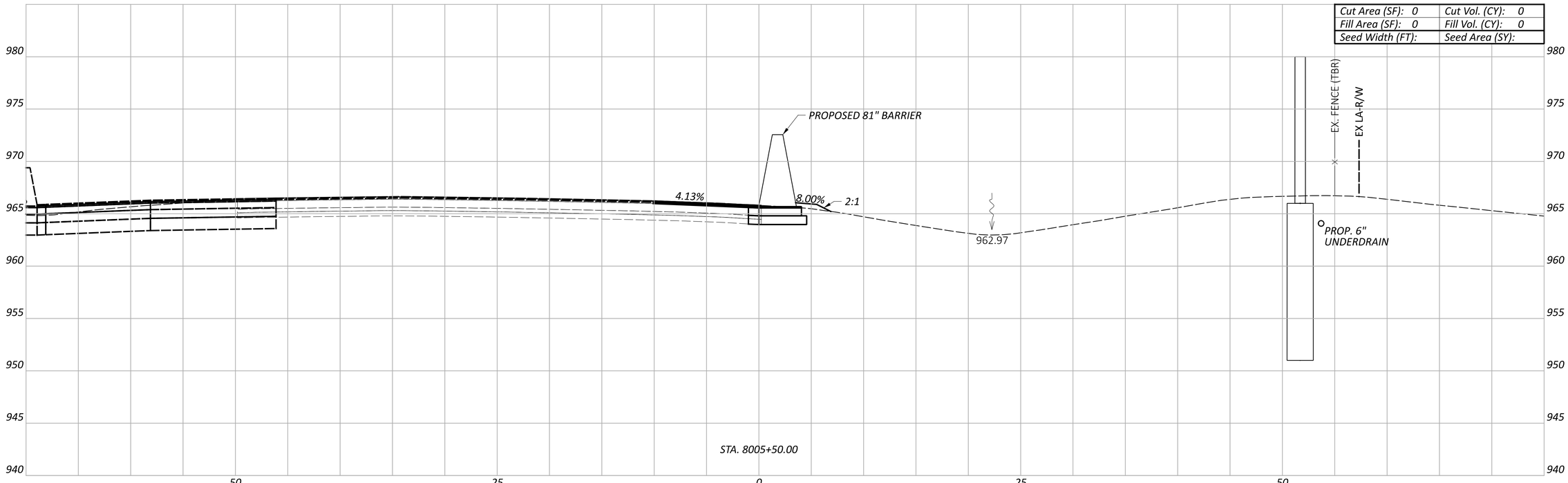
JDH 01-22-24

PROJECT ID
117607

SHEET P.80 TOTAL P.276





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 WALLS

MODEL: BLP_BARRIER8 - 8005+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:12:59 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_XS008A.dgn

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REVIEWER JDH 01-22-24

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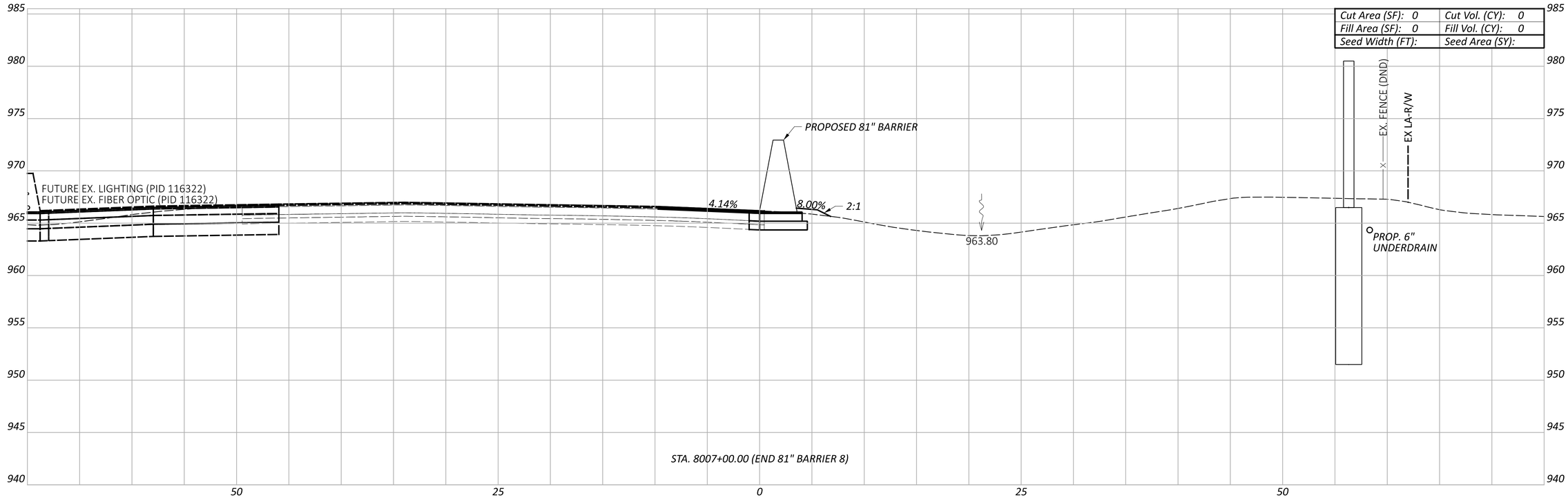
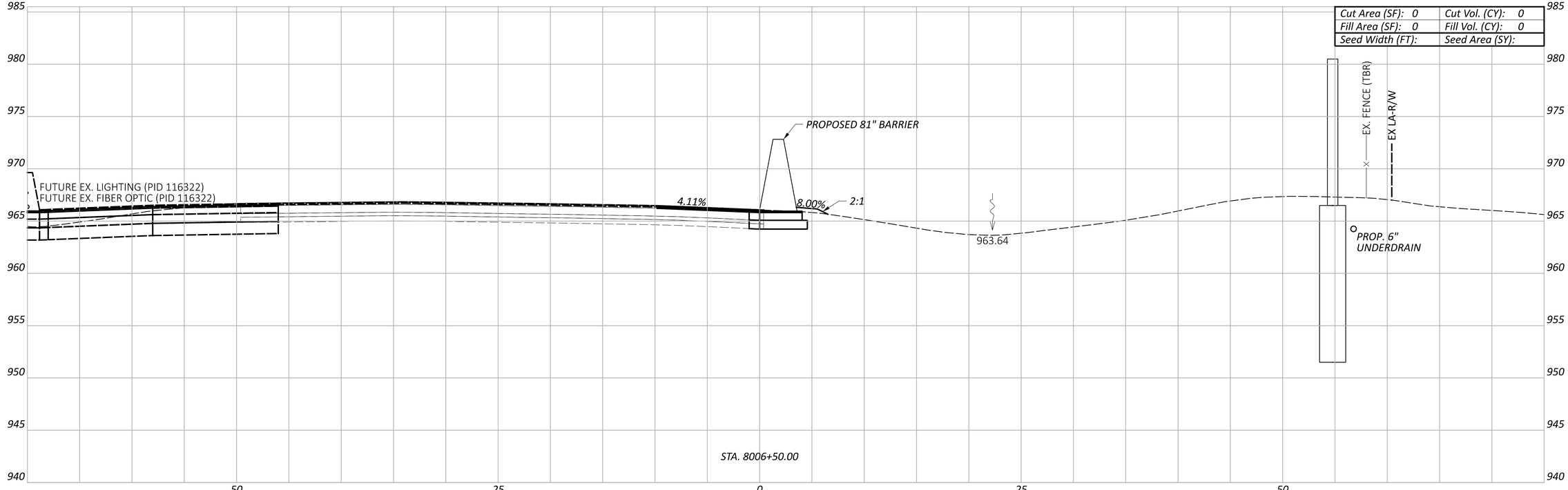
Sheet Totals		
Seeding	Cut	Fill

SHEET P.81 TOTAL P.276





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

Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 818-4900
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DESIGNER: JMK

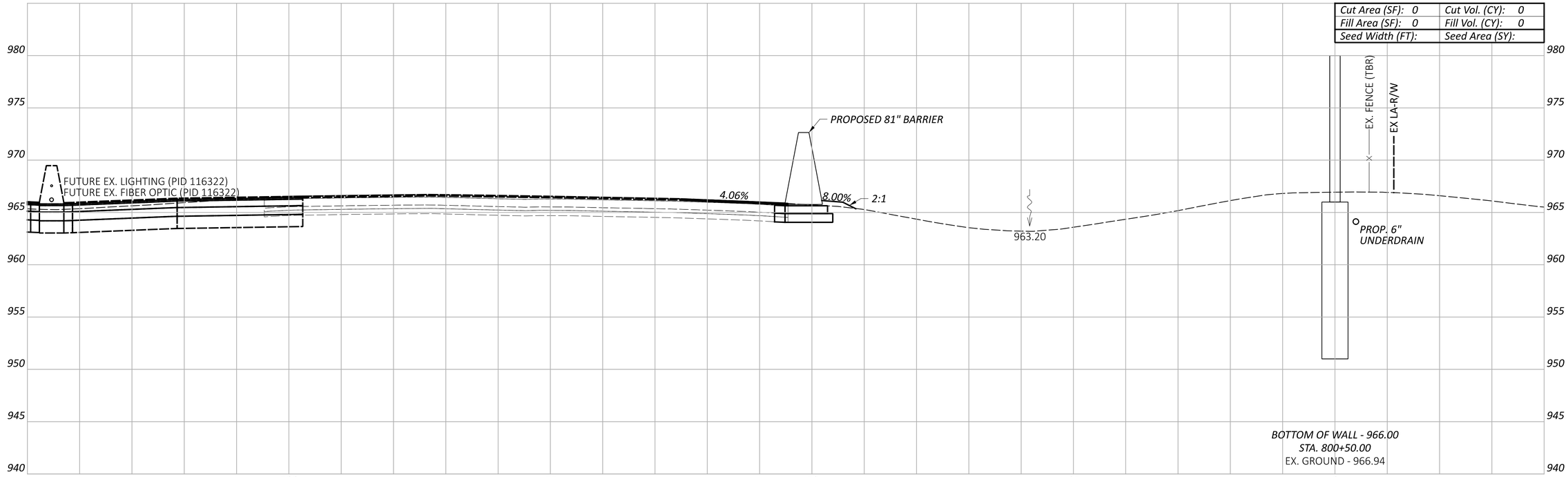
REVIEWER: JDH 01-22-24

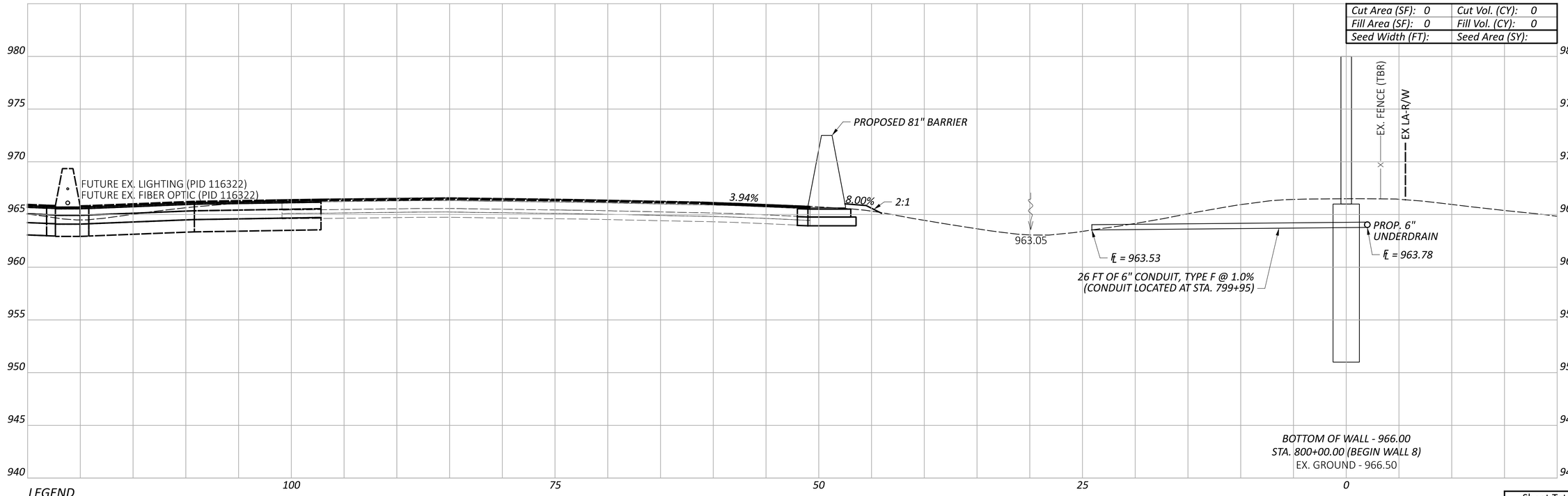
PROJECT ID: 117607

SHEET: P.82 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER8 - 8006+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:13:16 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_XS008A.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 8
STA. 800+00.00 TO STA. 800+50.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 800+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 1:36:08 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_XS008B.dgn

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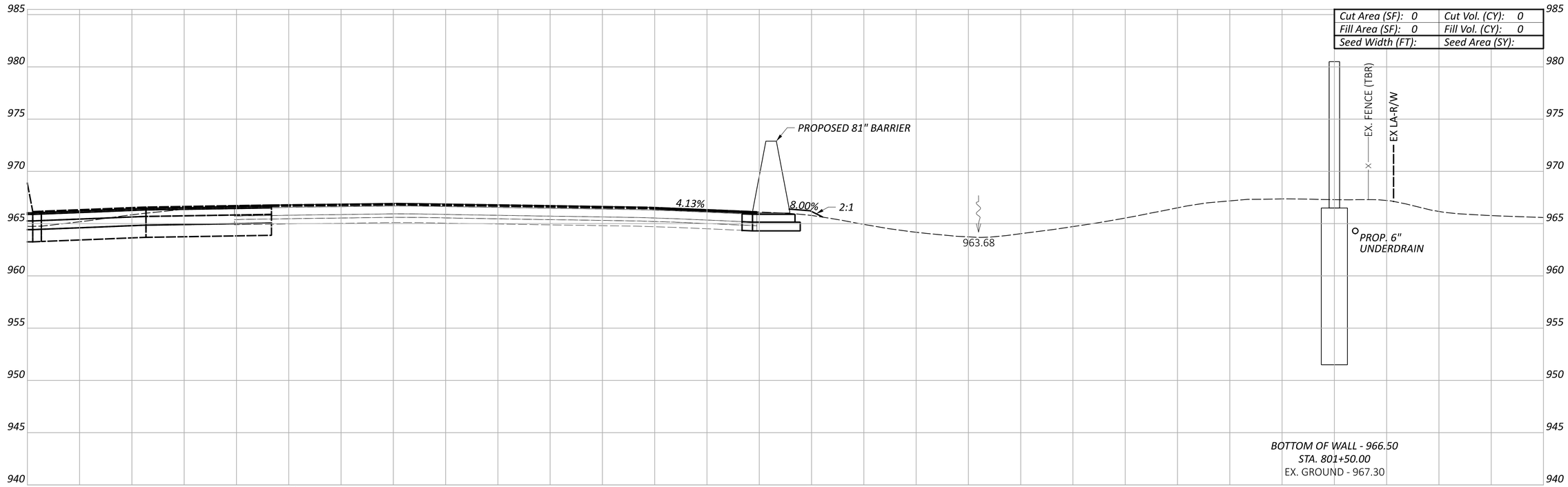
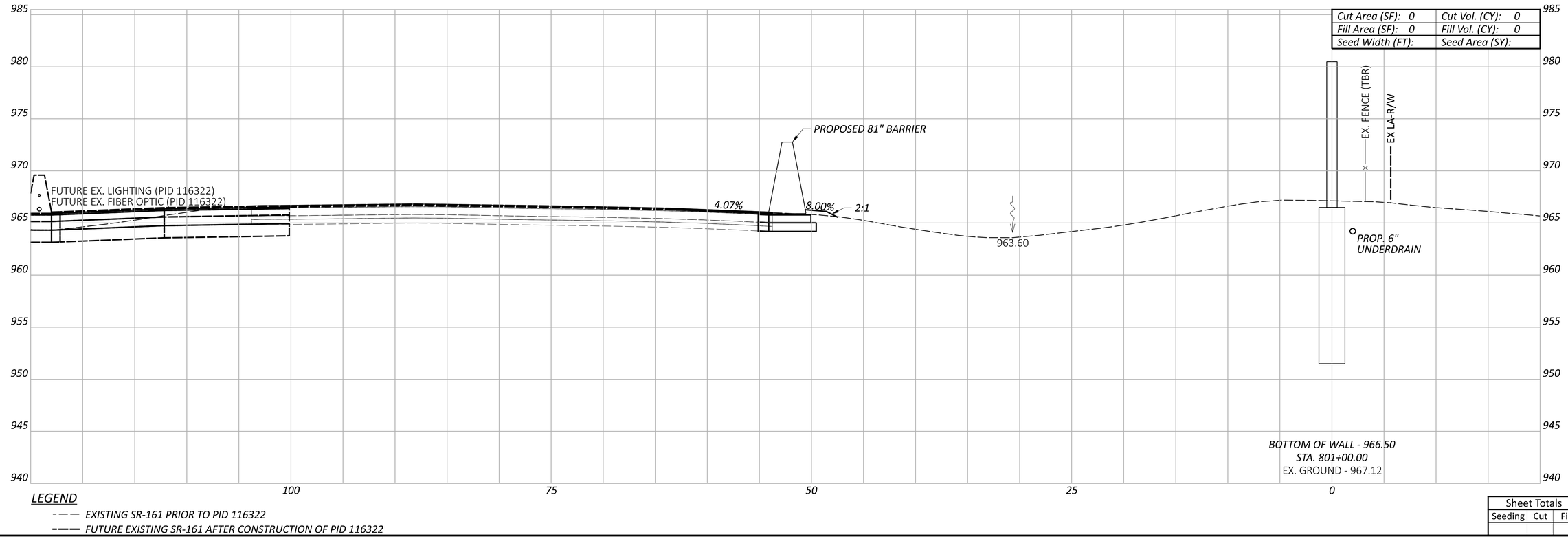
DESIGNER
JMK

REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET P.83 TOTAL P.276





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

DESIGN AGENCY
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DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.84 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 801+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:14:25 PM USER: jennifer.kelley
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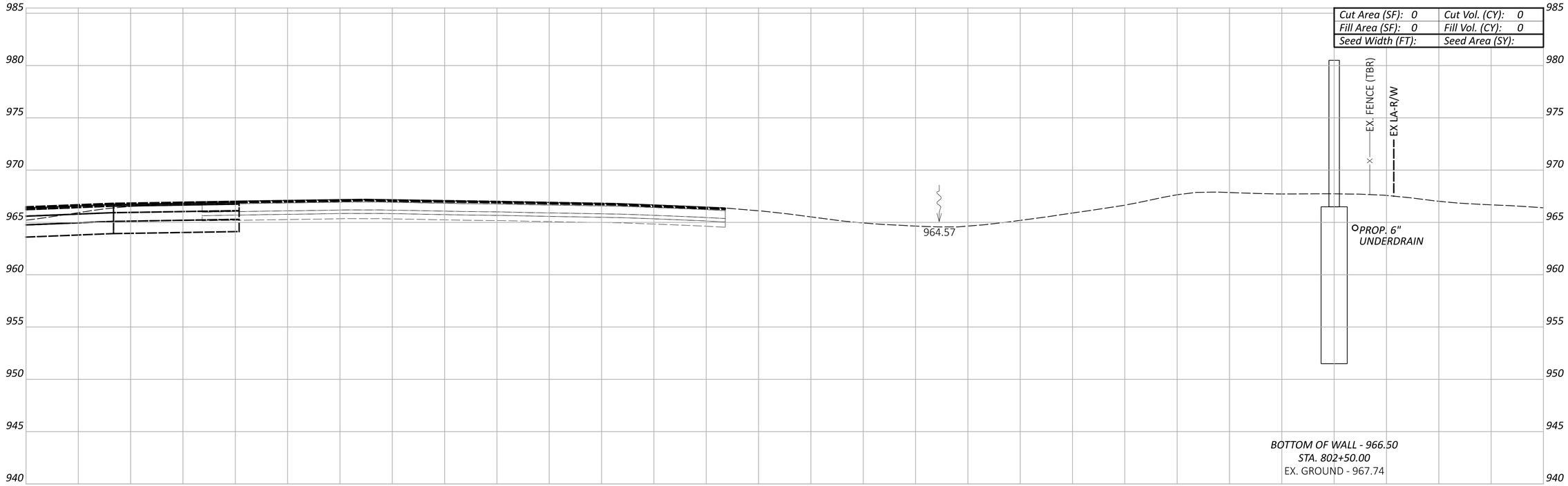

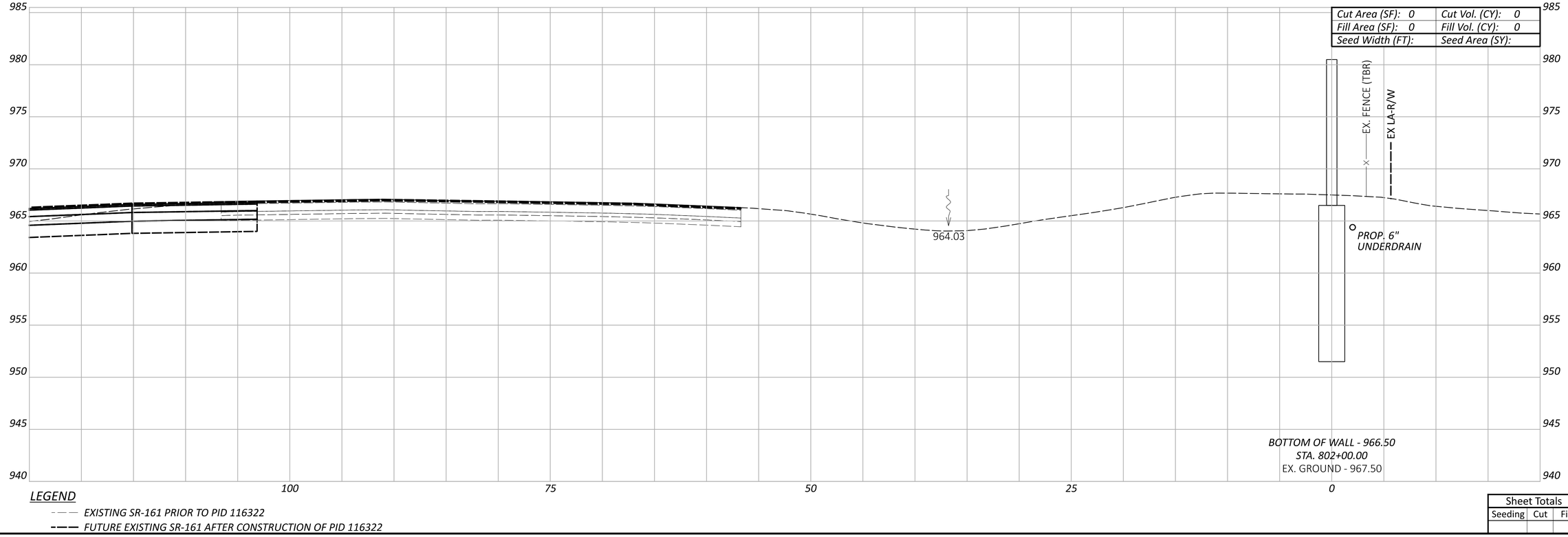

LEGEND

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

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

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 802+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:14:54 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_XS008B.dgn

CROSS SECTIONS - WALL 8
STA. 802+00.00 TO STA. 802+50.00

Sheet Totals		
Seeding	Cut	Fill

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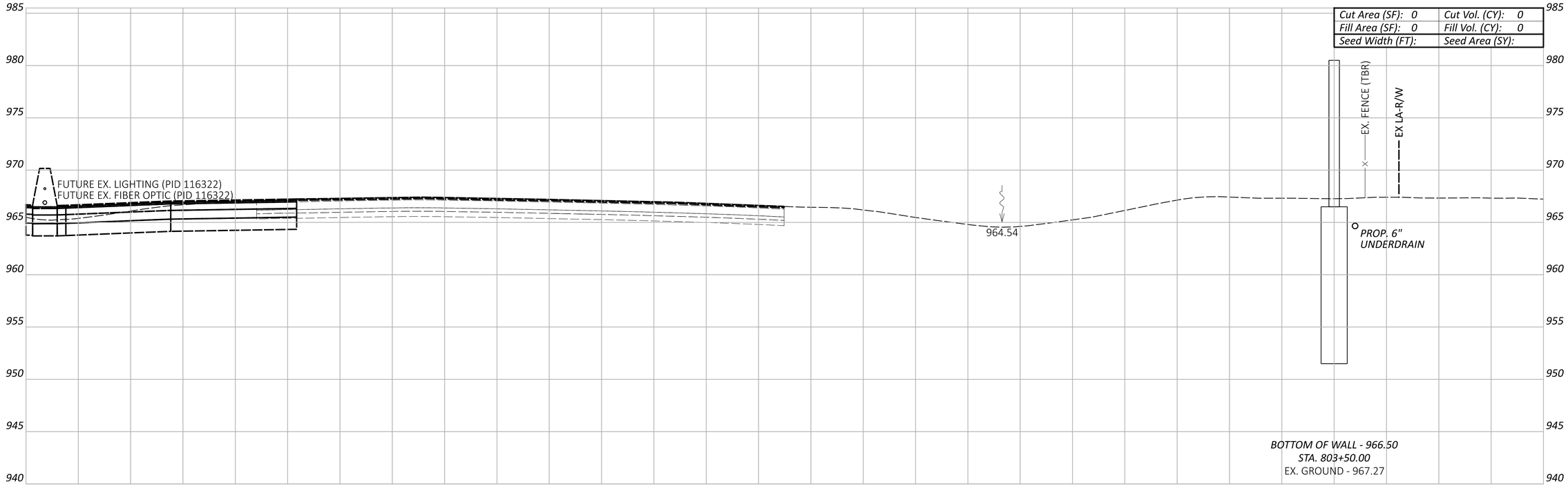
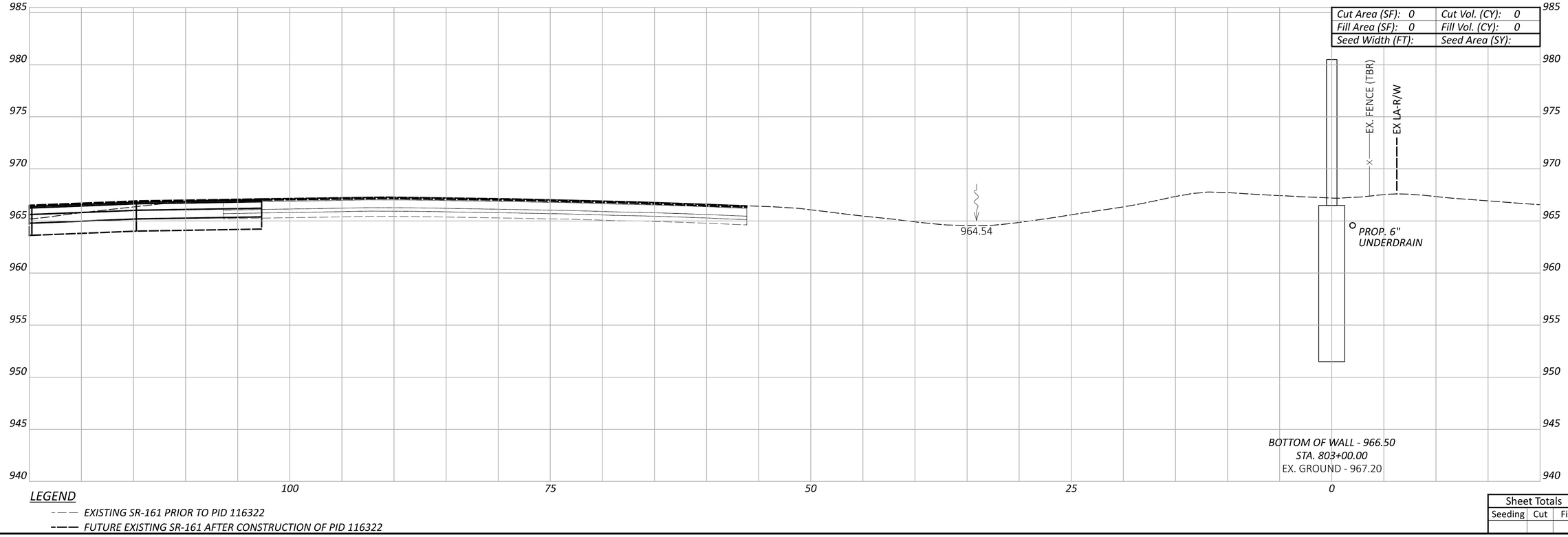
DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.85 TOTAL P.276





LEGEND

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

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

CROSS SECTIONS - WALL 8
STA. 803+00.00 TO STA. 803+50.00

Sheet Totals		
Seeding	Cut	Fill

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DESIGNER: JMK

REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.86 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 803+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:15:26 PM USER: jennifer.kelley
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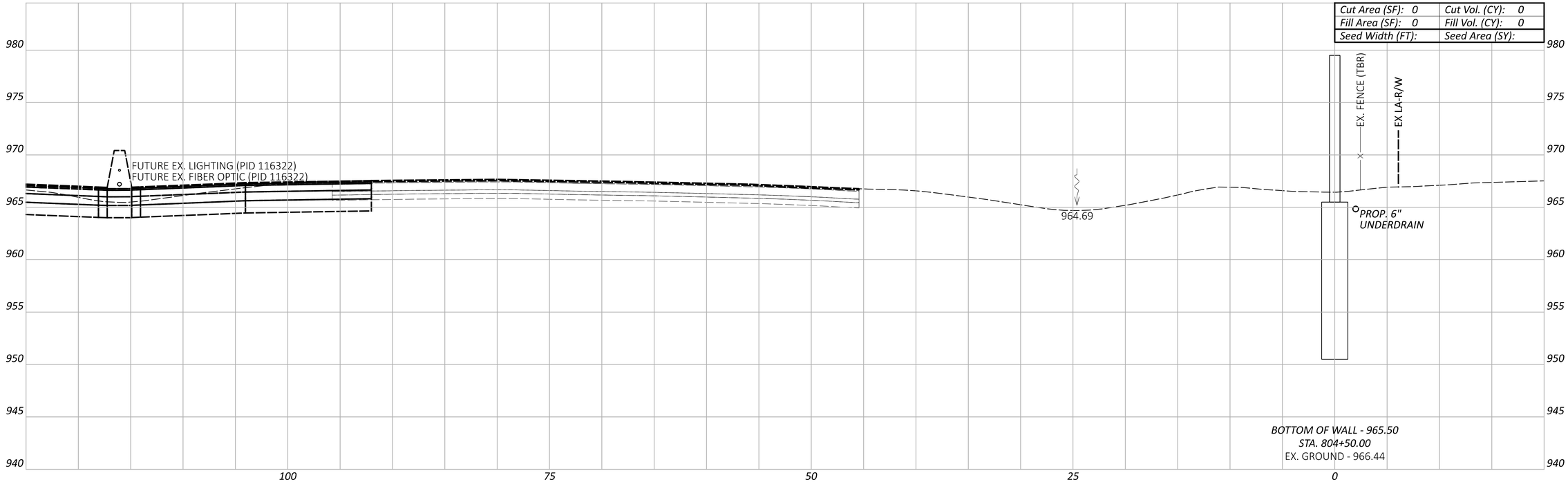

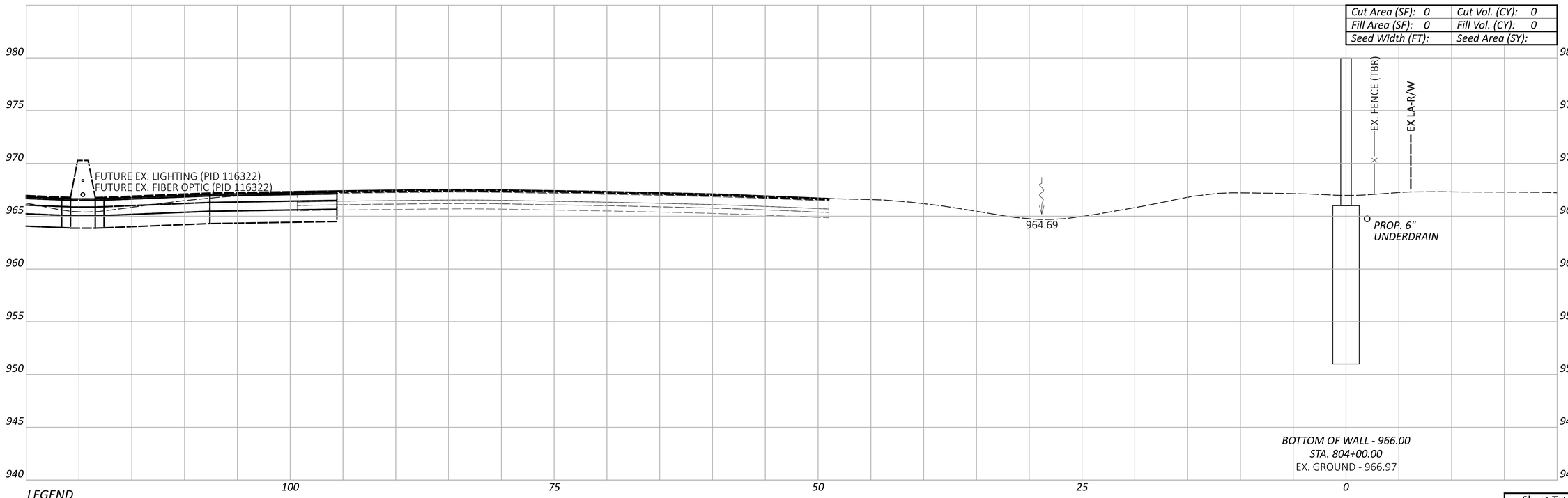

LEGEND

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 WALLS

MODEL: BLP_WALL9 - 804+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:15:50 PM USER: jennifer.kelley
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Sheet Totals		
Seeding	Cut	Fill

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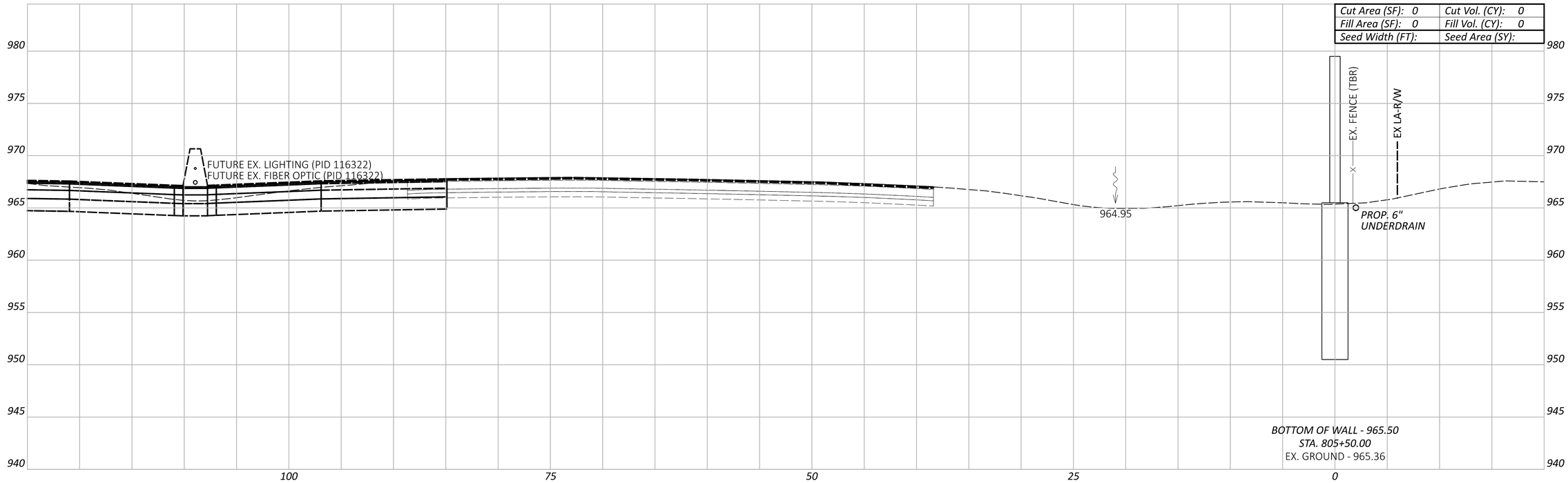
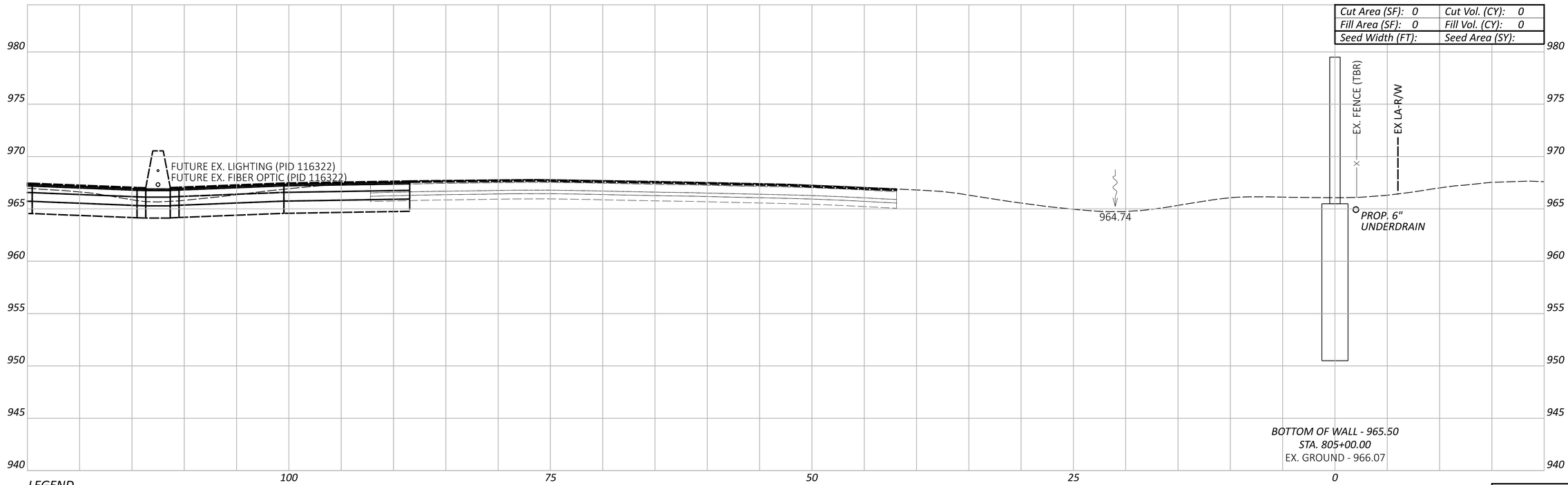
DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET	TOTAL
P.87	P.276





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

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 805+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-19 TIME: 12:03:01 PM USER: jennifer.kelley
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Sheet Totals		
Seeding	Cut	Fill

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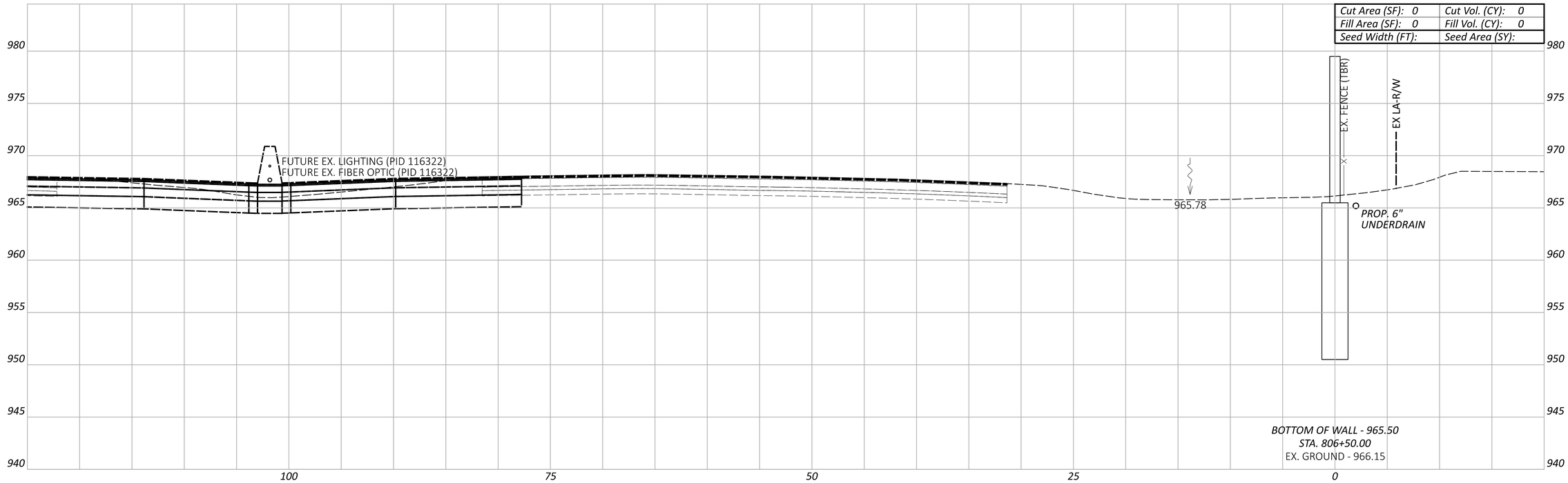
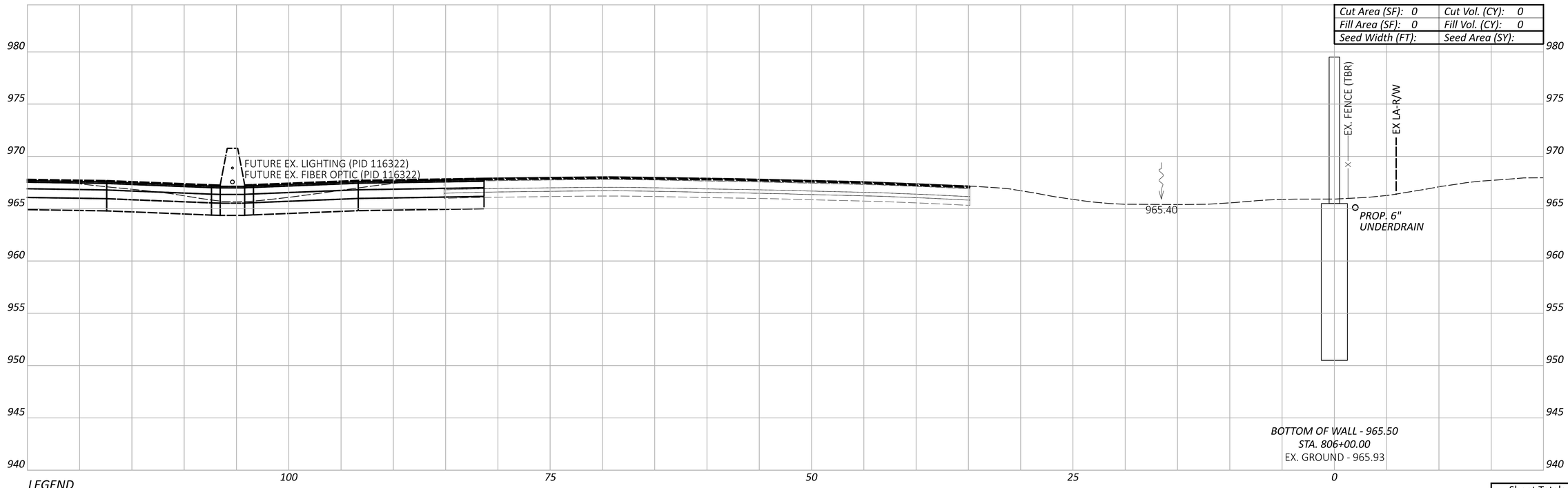
REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.88 TOTAL P.276





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

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WAL9 - 806+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-19 TIME: 12:03:39 PM USER: jennifer.kelley
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Sheet Totals		
Seeding	Cut	Fill

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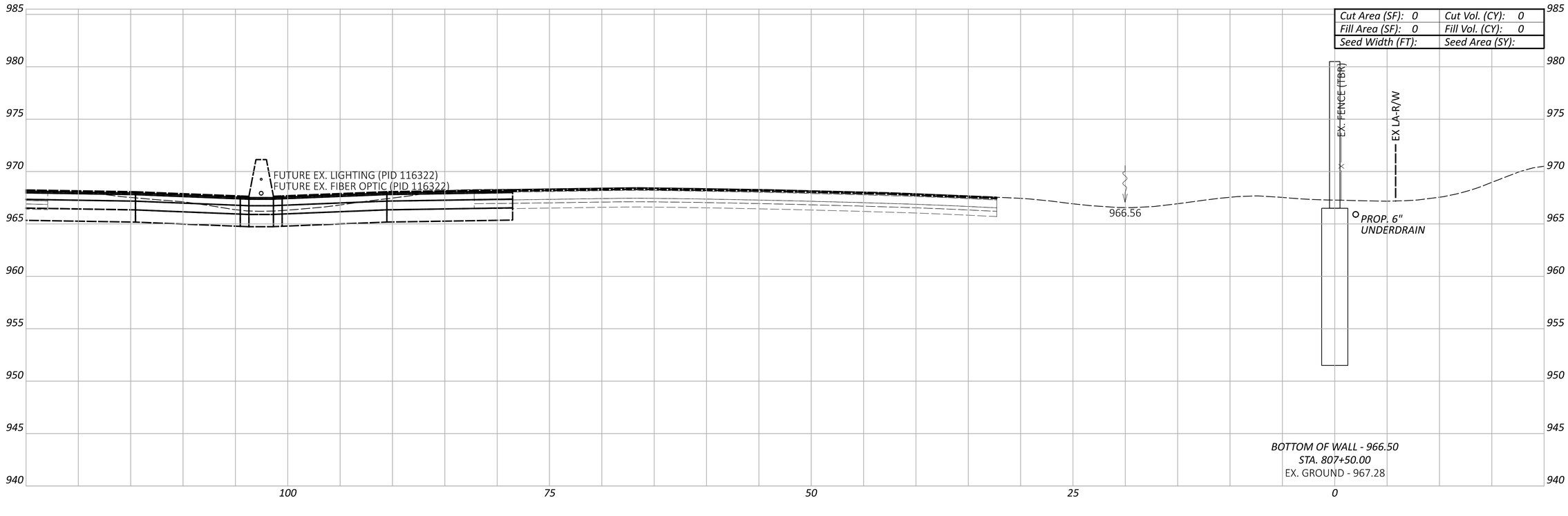
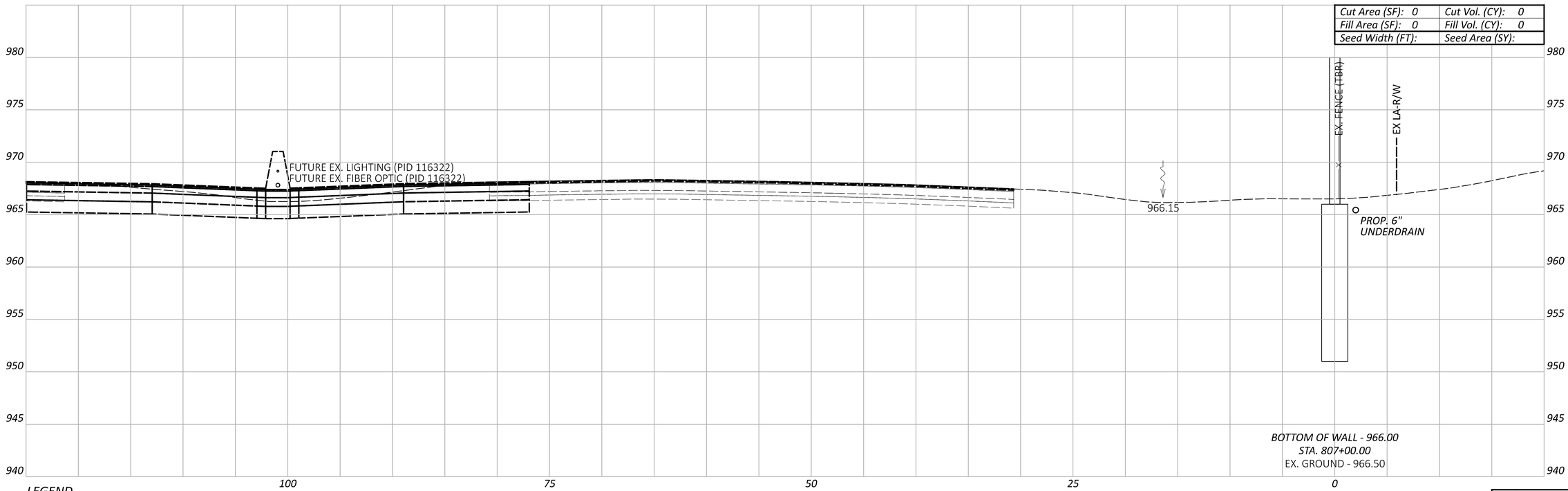
DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.89 TOTAL P.276





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. 807+00.00 TO STA. 807+50.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 807+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:17:01 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_XS008B.dgn

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ARCADIS
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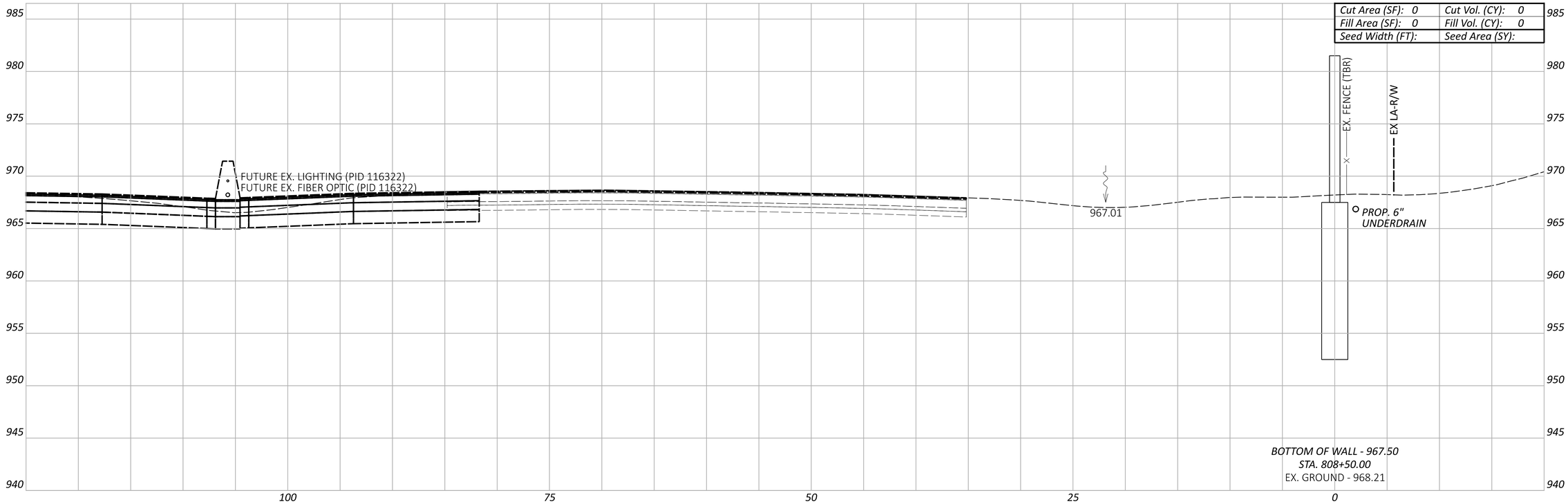
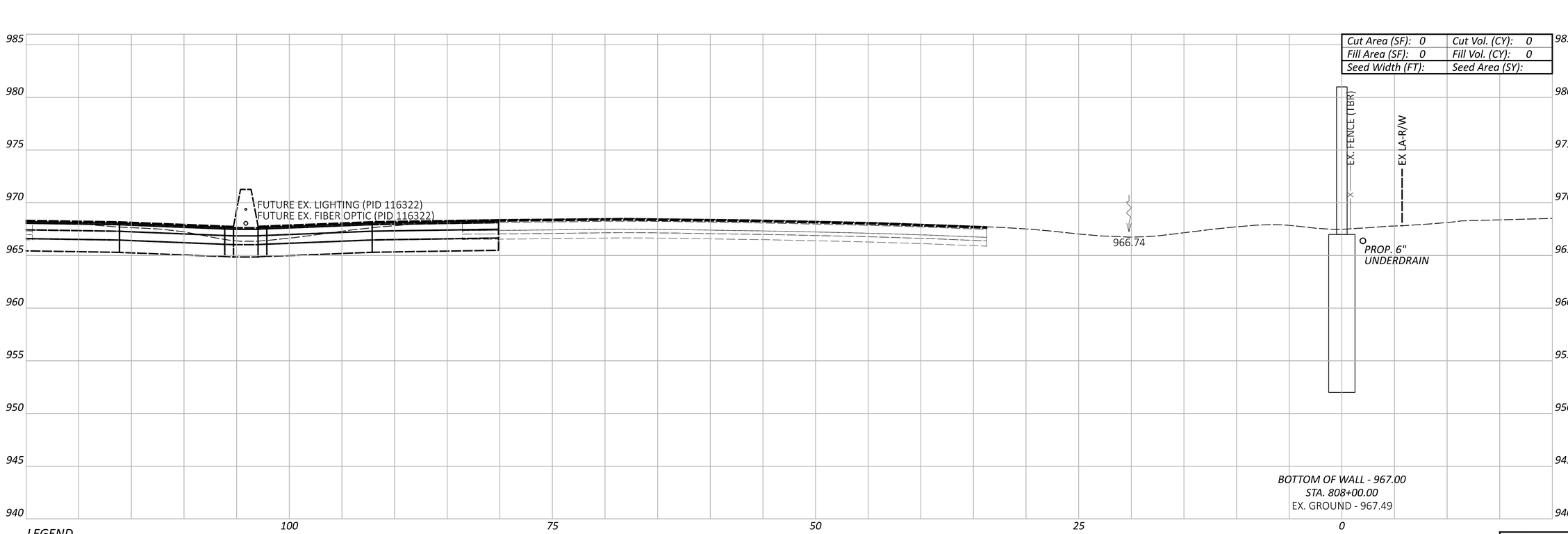
DESIGNER
JMK

REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET	TOTAL
P.90	P.276





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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DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.91 | TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 808+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:17:26 PM USER: jennifer.kelley
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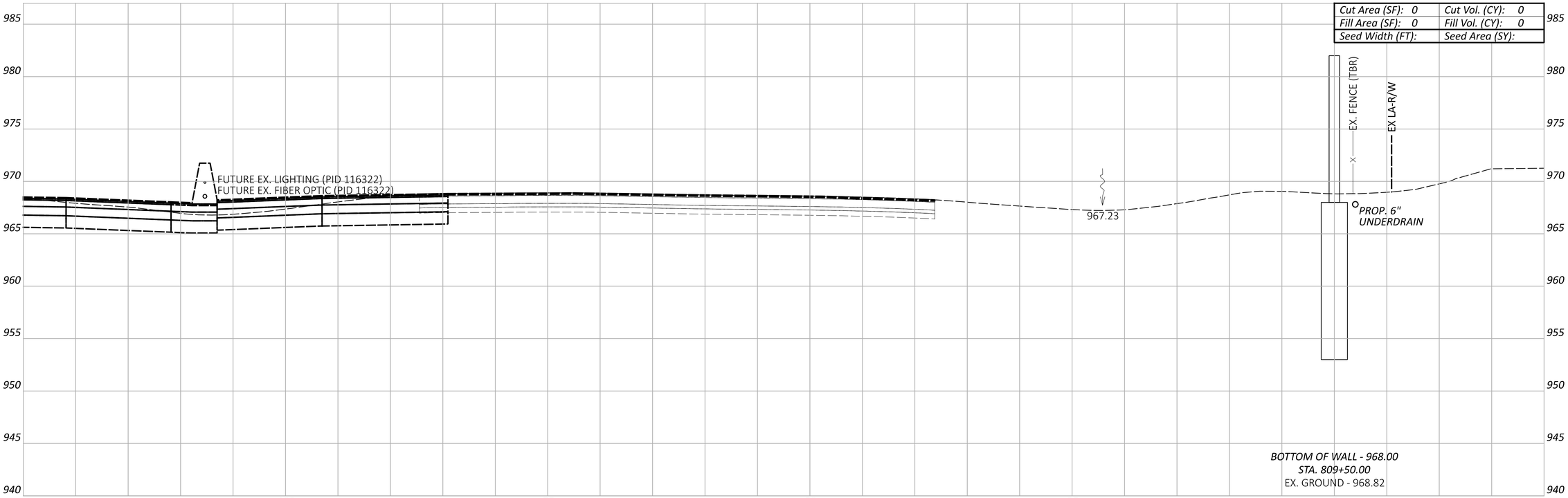

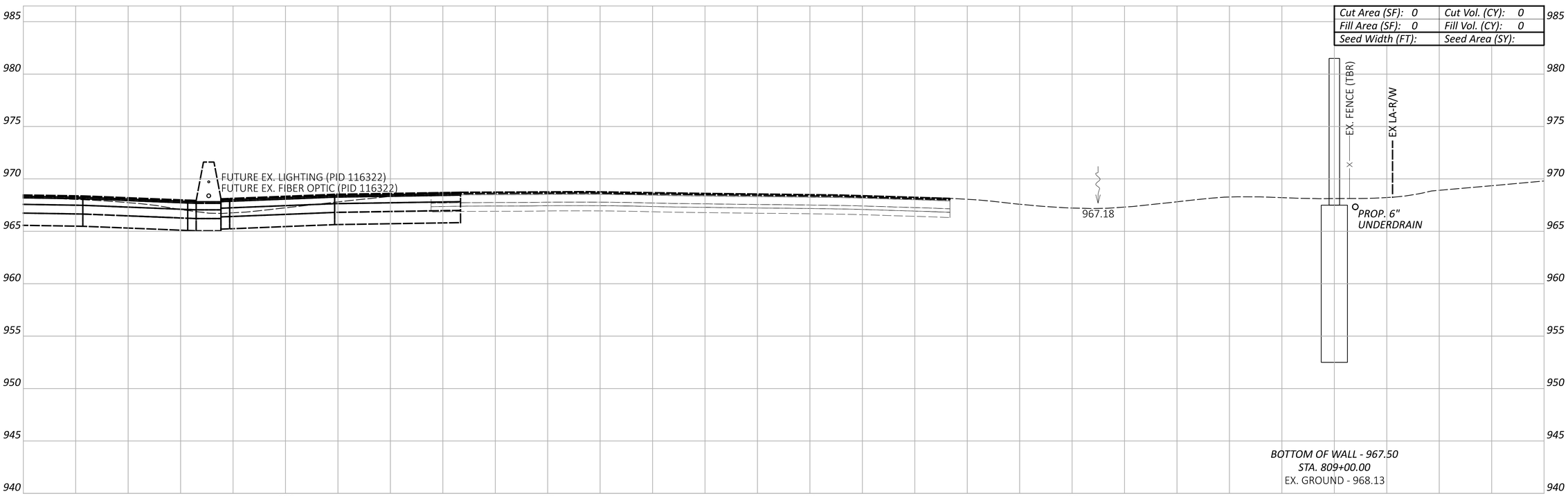

LEGEND

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 WALLS

MODEL: BLP_WAL19 - 809+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:17:51 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_XS008B.dgn

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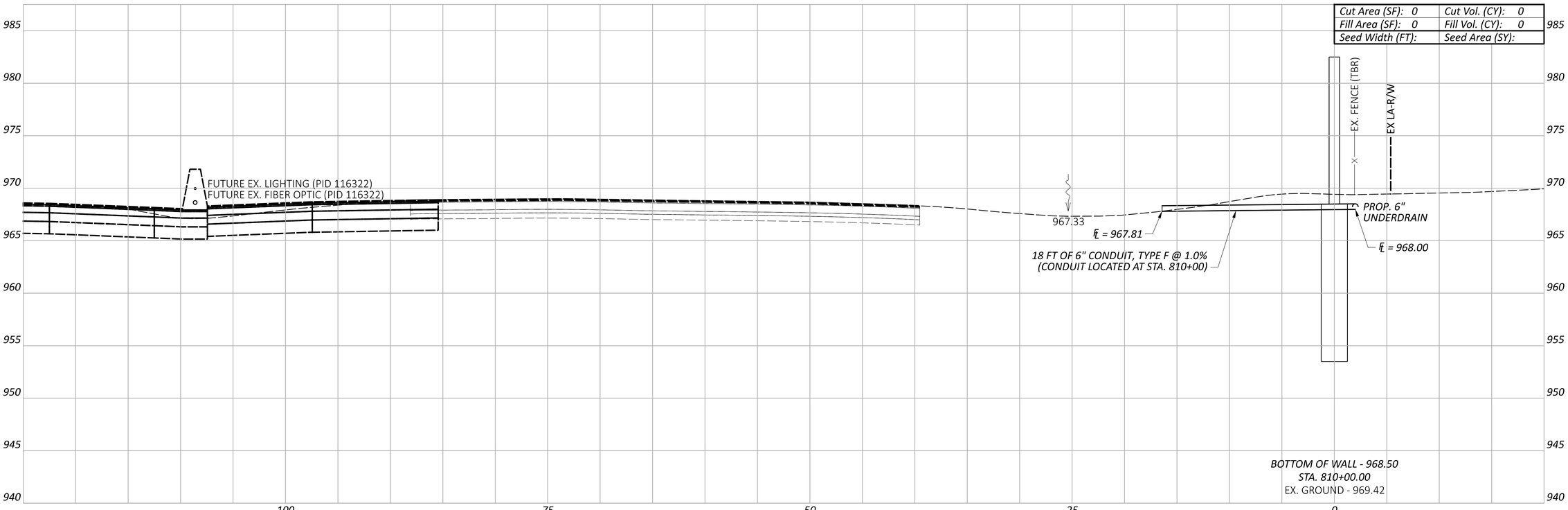
DESIGNER: JMK

REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.92 TOTAL: P.276

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

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 810+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 1:41:14 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_XS008B.dgn

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DESIGNER
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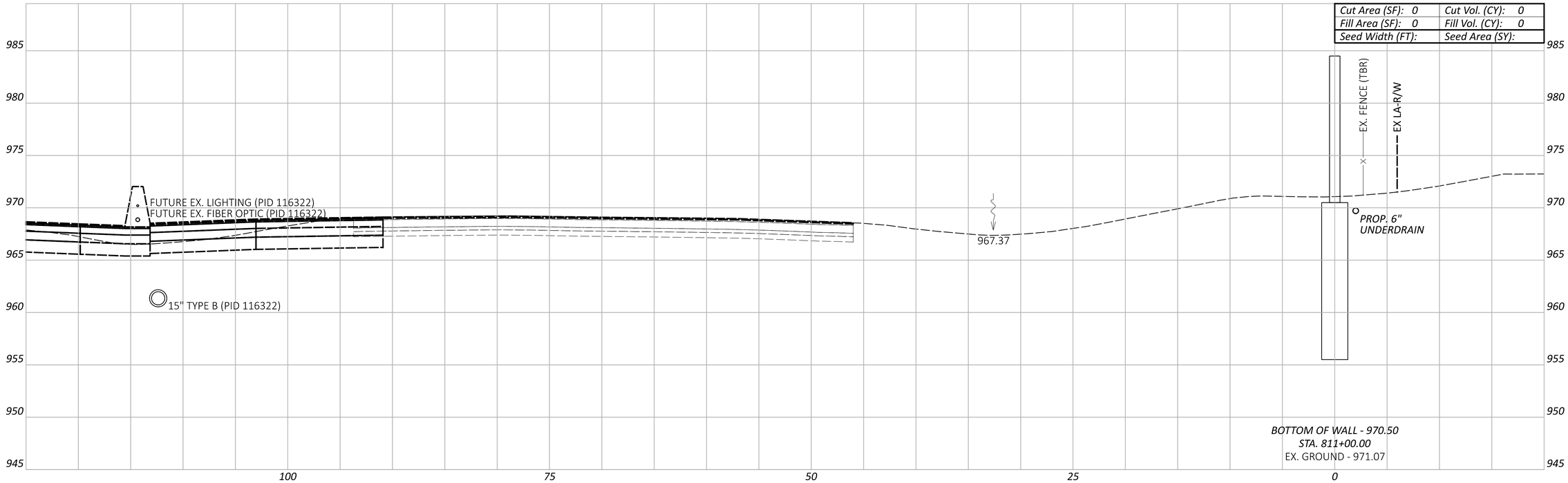
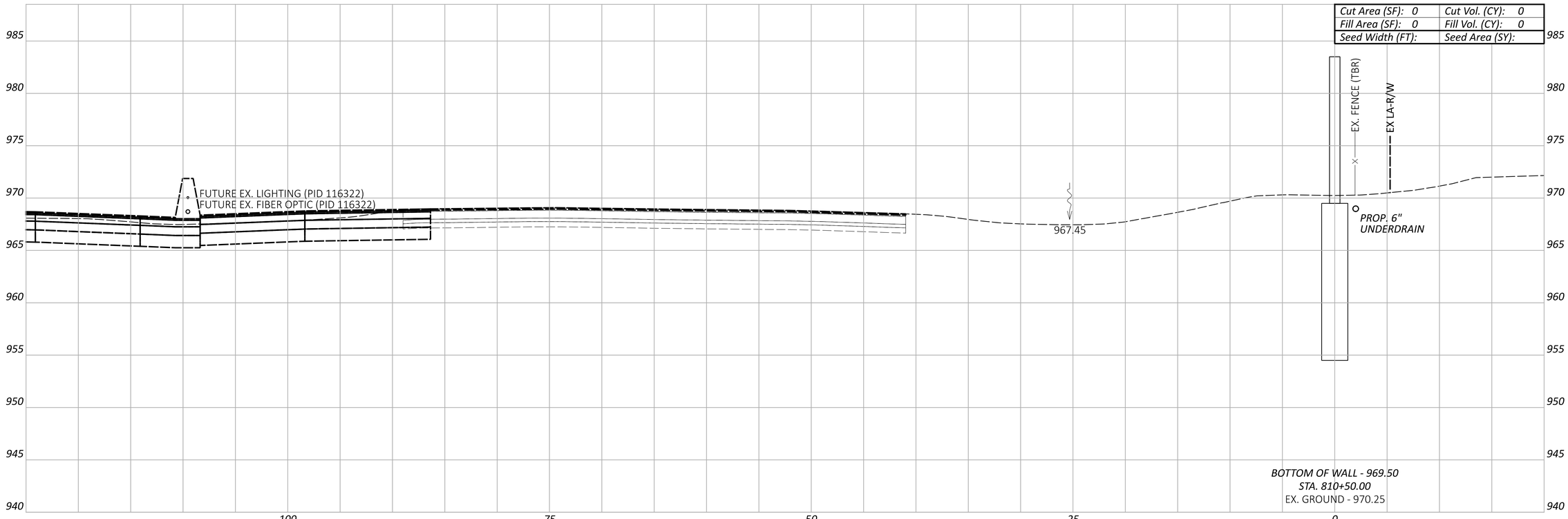
REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET P.93 TOTAL P.276





LEGEND

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

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

CROSS SECTIONS - WALL 8
STA. 810+50.00 TO STA. 811+00.00

Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY
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DESIGNER JMK

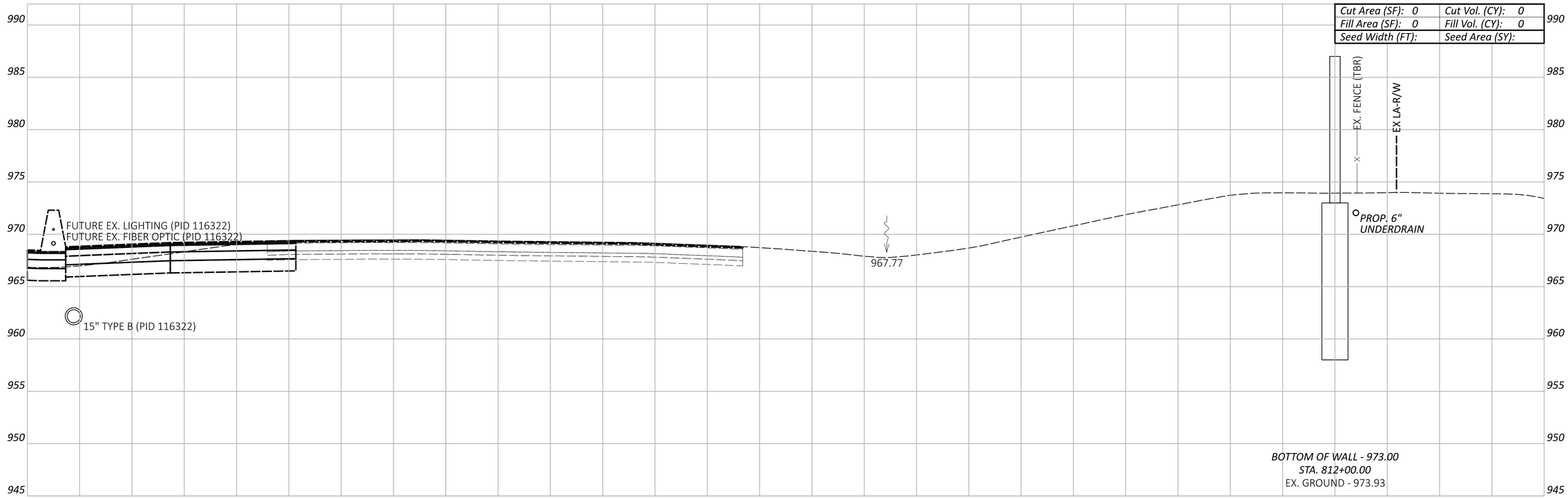
REVIEWER JDH 01-22-24

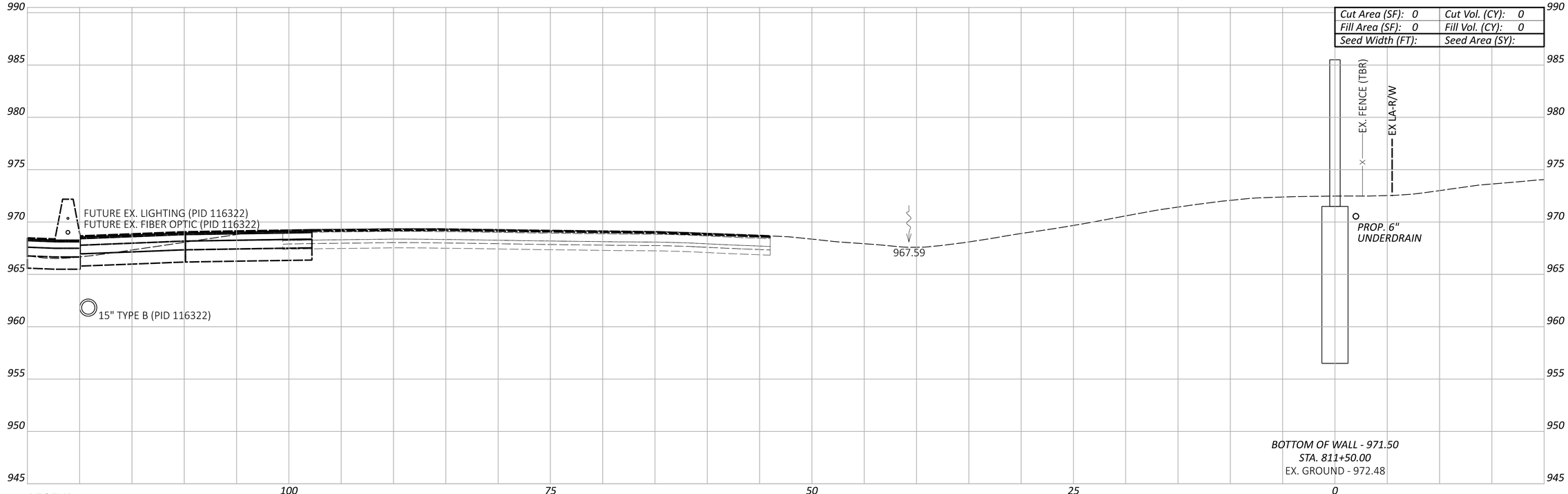
PROJECT ID 117607

SHEET P.94 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 810+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:18:31 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_XS008B.dgn





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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8101 NORTH HIGH ST SUITE 100
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(614) 846-4500
www.arcadis.com

DESIGNER JMK

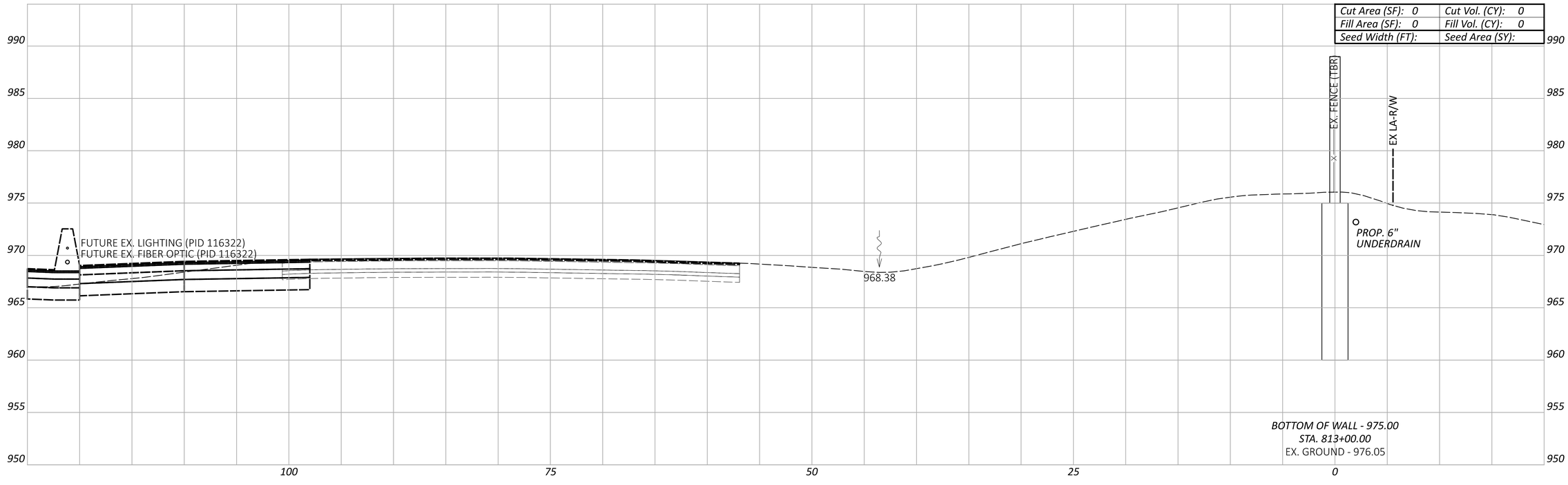
REVIEWER JDH 01-22-24

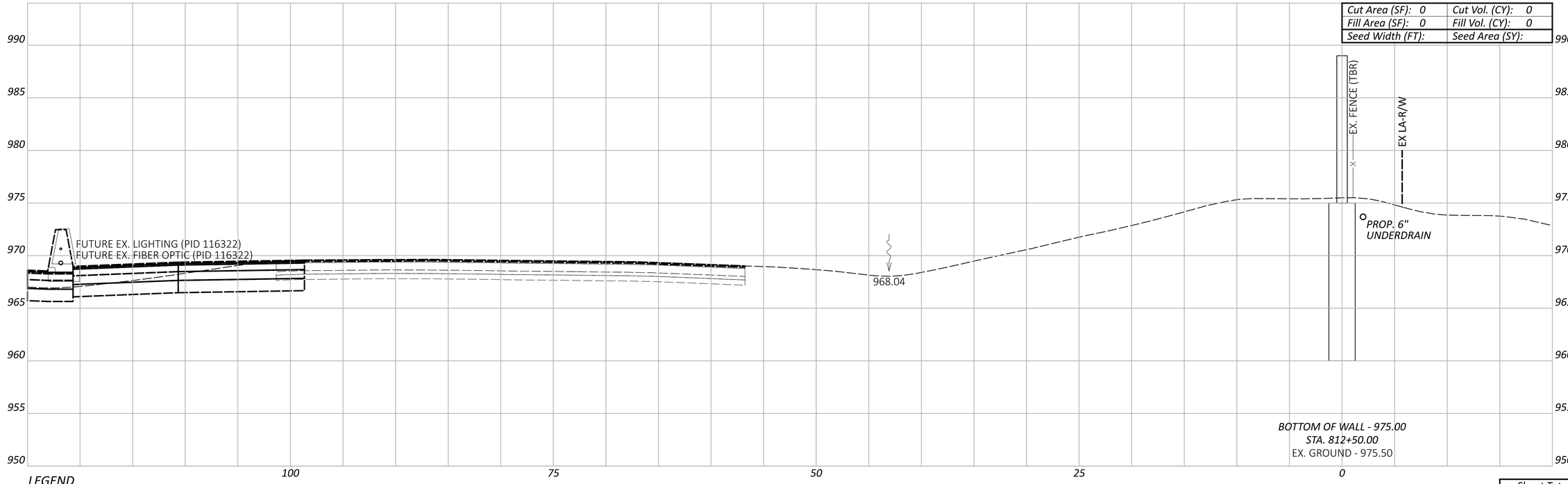
PROJECT ID 117607

SHEET P.95 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 811+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:18:56 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_XS008B.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 8
STA. 812+50.00 TO STA. 813+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 812+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:19:17 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_XS008B.dgn

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
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(614) 818-4900
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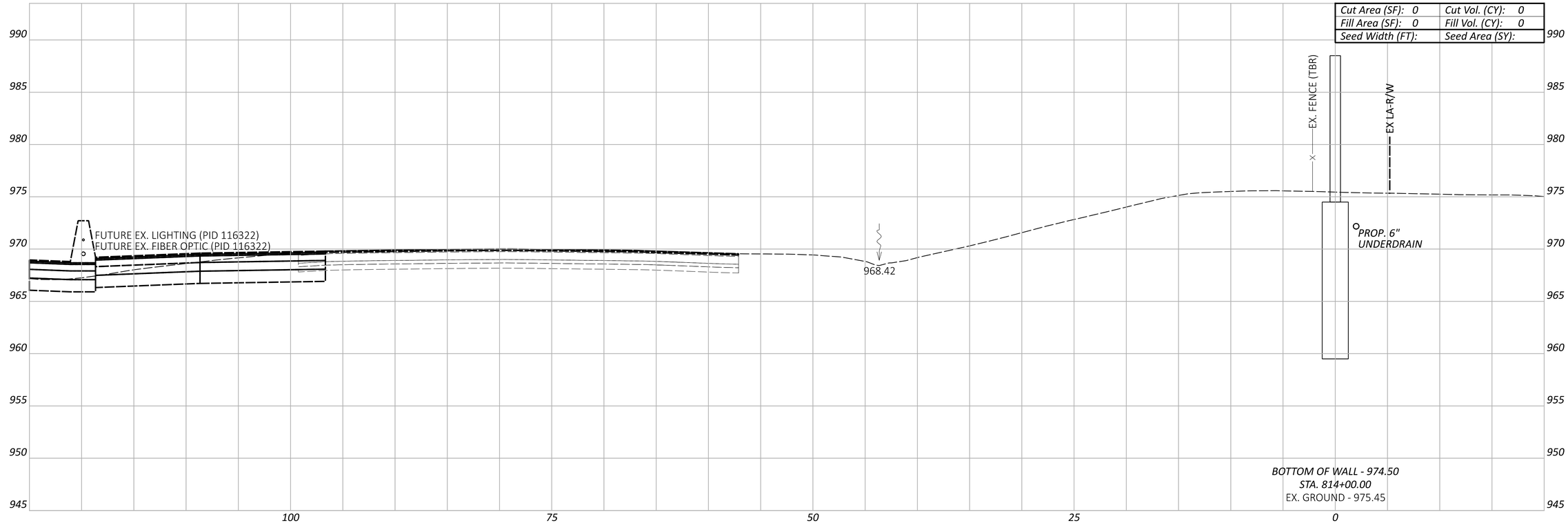
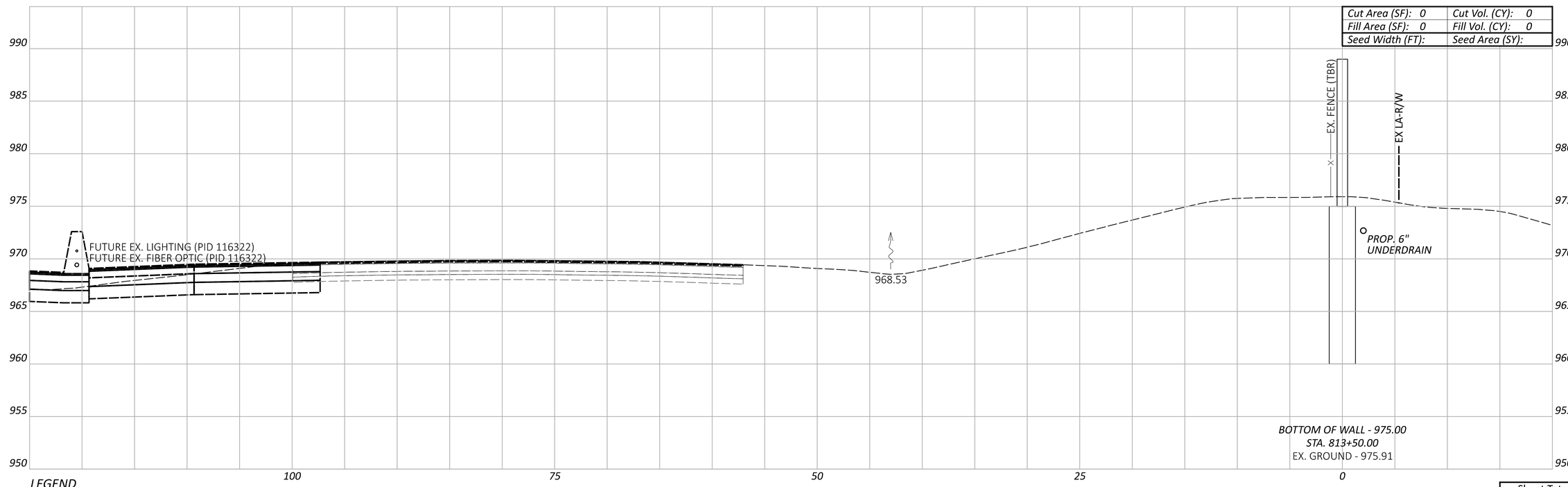
DESIGNER
JMK

REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET P.96 TOTAL P.276





LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

CROSS SECTIONS - WALL 8
STA. 813+50.00 TO STA. 814+00.00

Sheet Totals		
Seeding	Cut	Fill

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DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.97 | TOTAL P.276

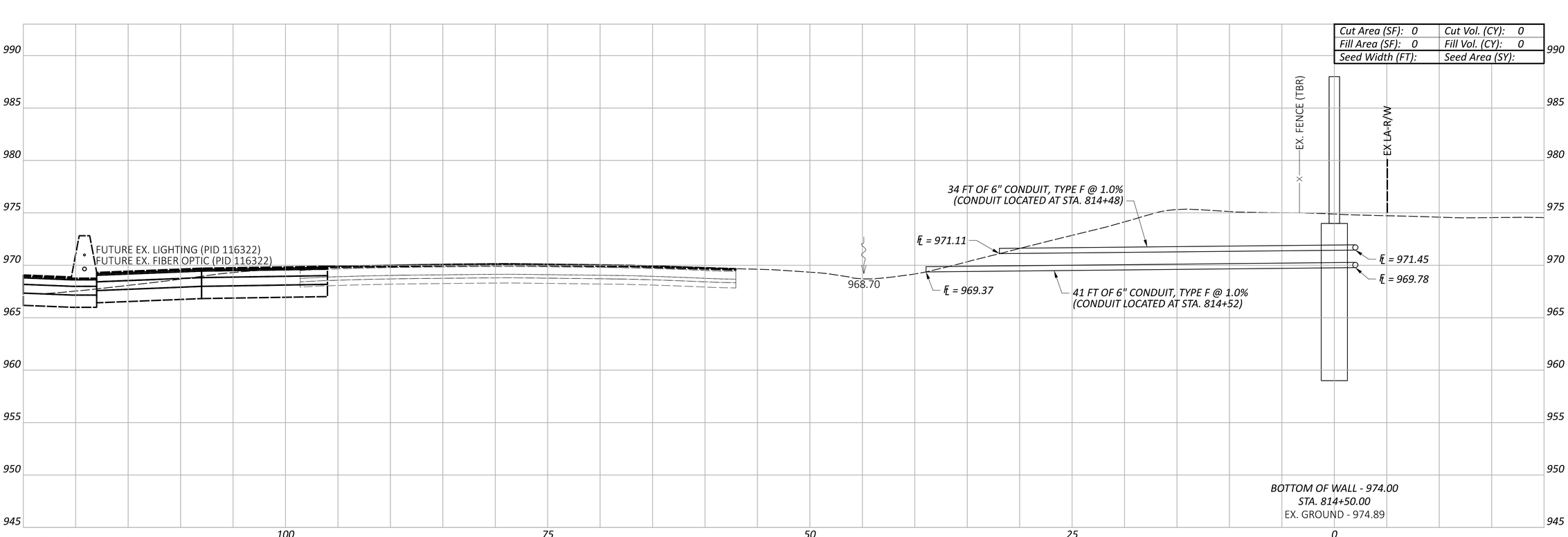
FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 813+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:19:38 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_XS008B.dgn

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WAL9 - 814+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 1:37:04 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_XS008B.dgn

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

DESIGN AGENCY
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DESIGNER
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REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET P.98 | TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WAL9 - 815+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:20:14 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_XS008B.dgn

CROSS SECTIONS - WALL 8
STA. 815+00.00

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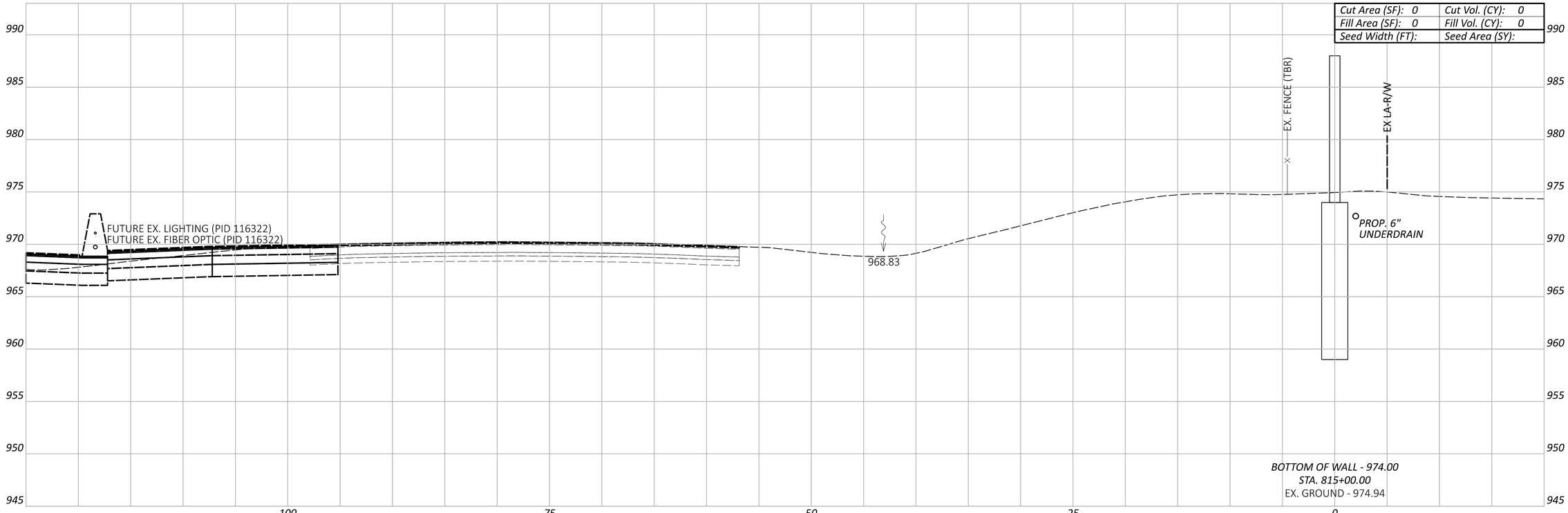
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT):	Seed Area (SY):



LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY
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DESIGNER: JMK

REVIEWER: JDH 01-22-24

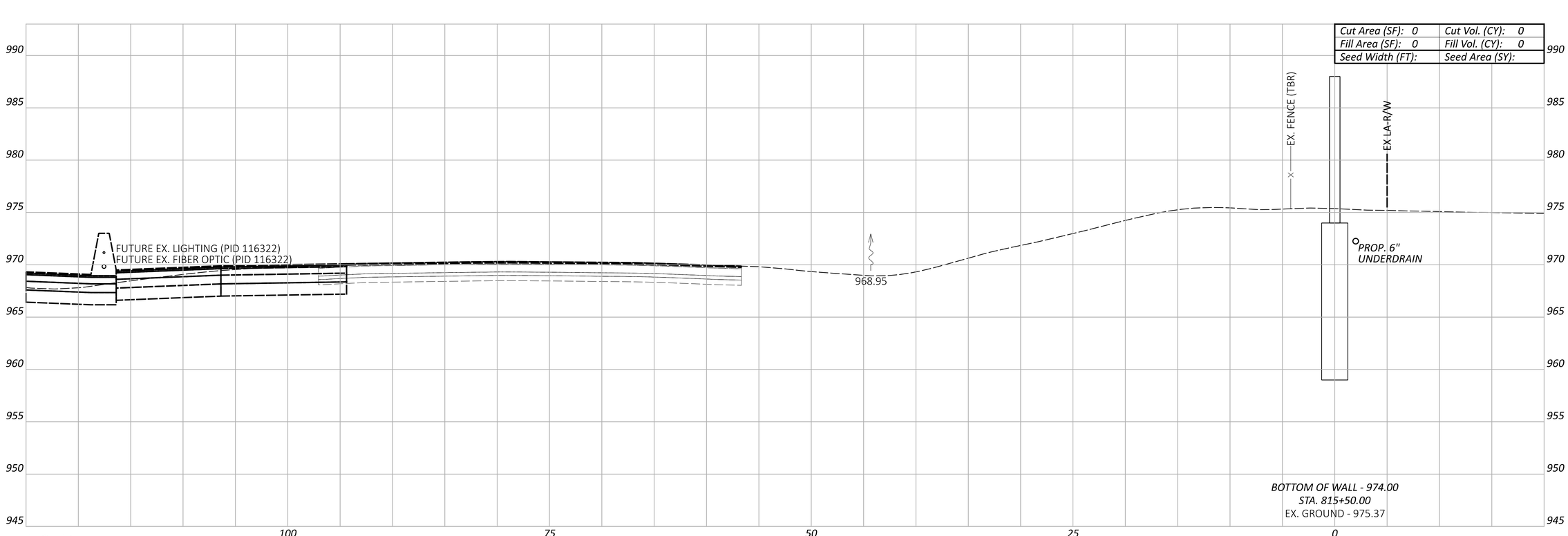
PROJECT ID: 117607

SHEET: P.99 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WAL9 - 815+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:20:27 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_XS008B.dgn

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

DESIGN AGENCY
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DESIGNER: JMK

REVIEWER: JDH 01-22-24

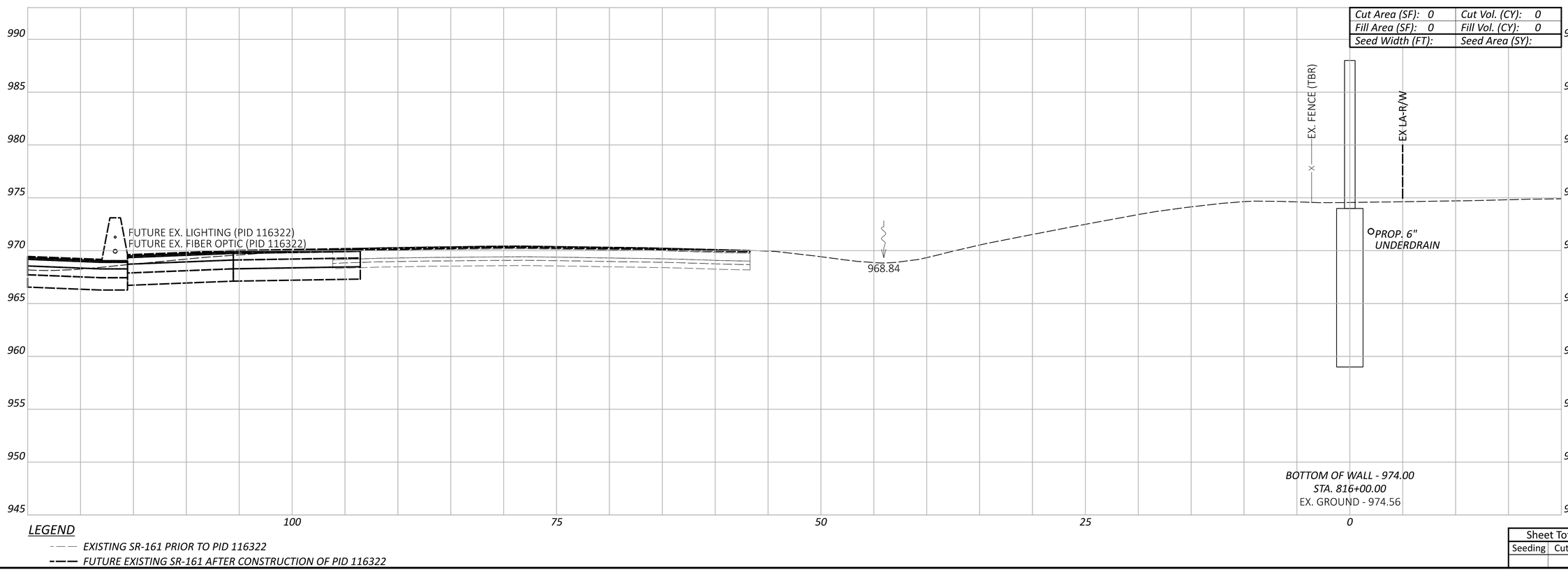
PROJECT ID: 117607

SHEET: P.100 | TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WAL9 - 816+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:20:41 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_XS008B.dgn

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

DESIGN AGENCY
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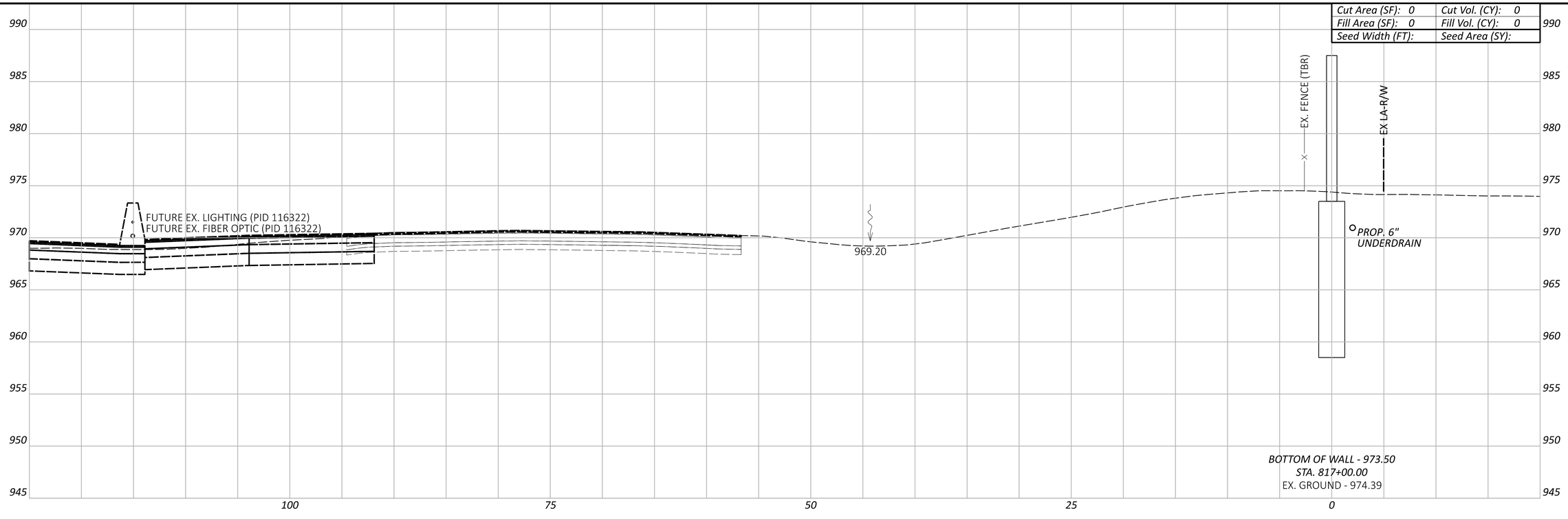
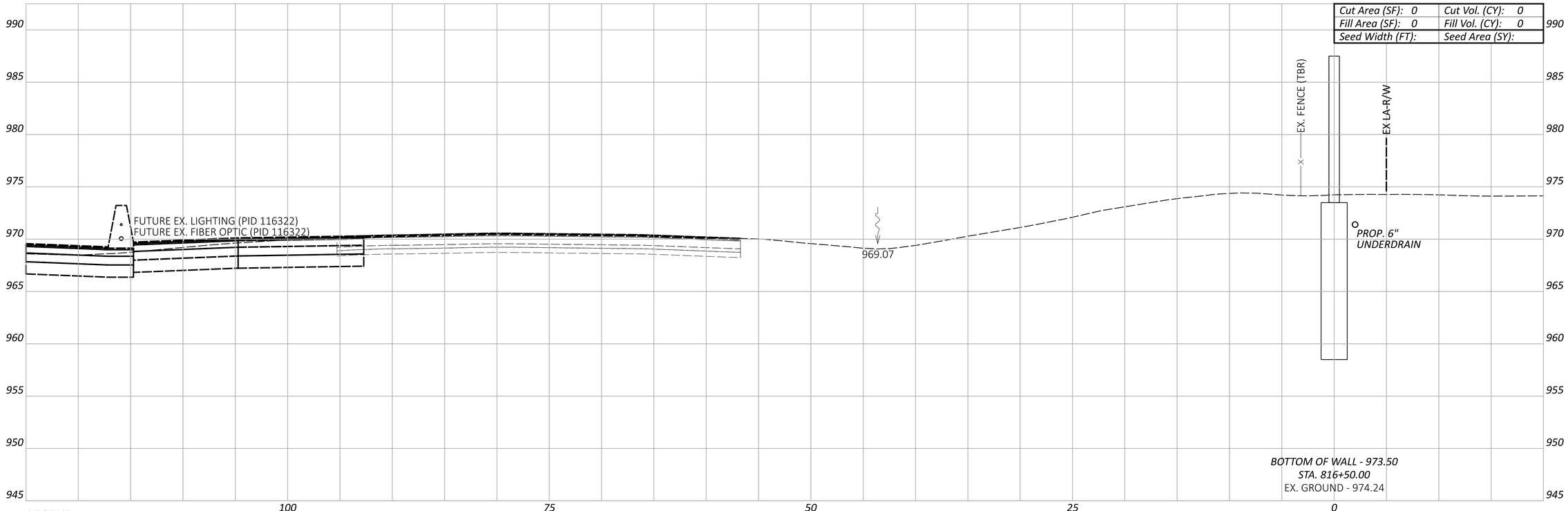
DESIGNER: JMK

REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.101 TOTAL: P.276





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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DESIGNER JMK

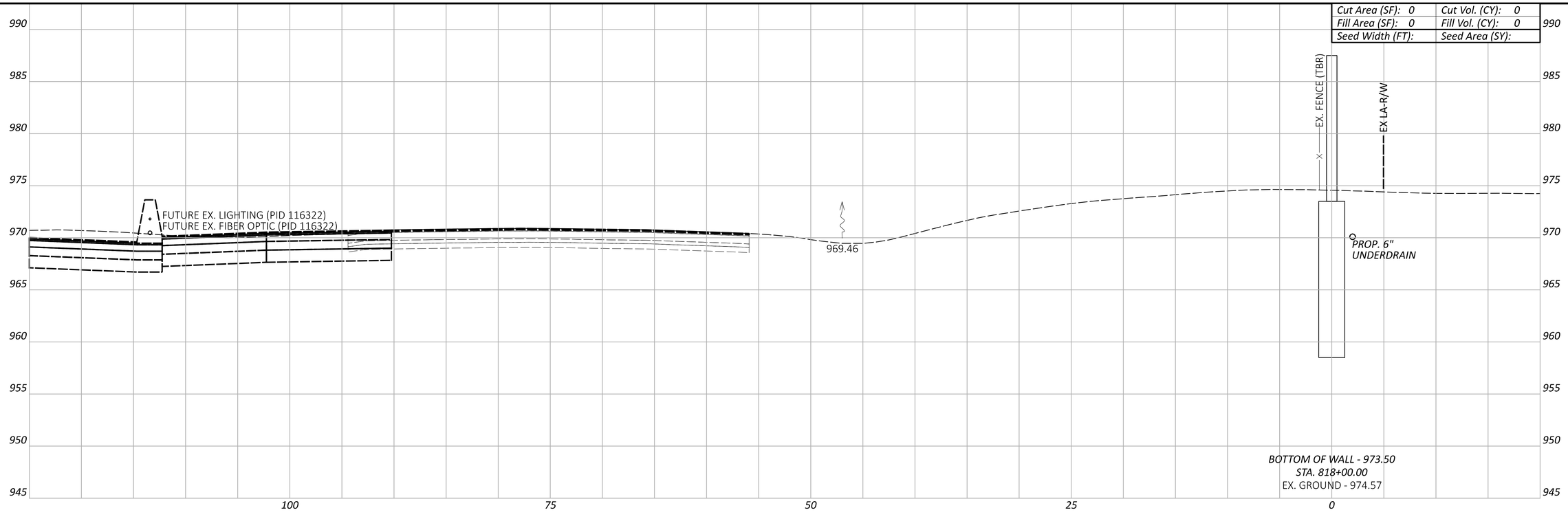
REVIEWER JDH 01-22-24

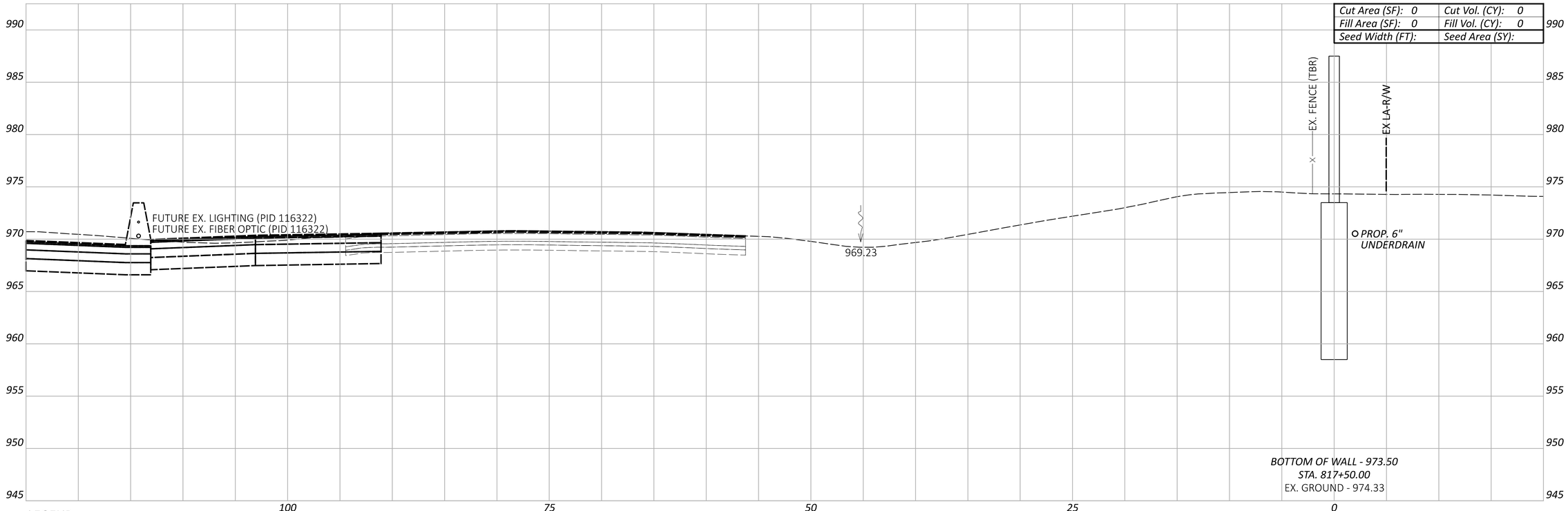
PROJECT ID 117607

SHEET P.102 | TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 816+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:20:54 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_XS008B.dgn





LEGEND

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

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

FRA-161-15.80 NOISE WALLS

CROSS SECTIONS - WALL 8
STA. 817+50.00 TO STA. 818+00.00

Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY
ARCADIS
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DESIGNER: JMK
REVIEWER: JDH 01-22-24
PROJECT ID: 117607
SHEET: P.103 TOTAL: P.276

MODEL: BLP_WALL9 - 817+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:21:18 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_XS008B.dgn

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WAL9 - 818+08.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:21:39 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_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
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

DESIGN AGENCY
ARCADIS
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DESIGNER
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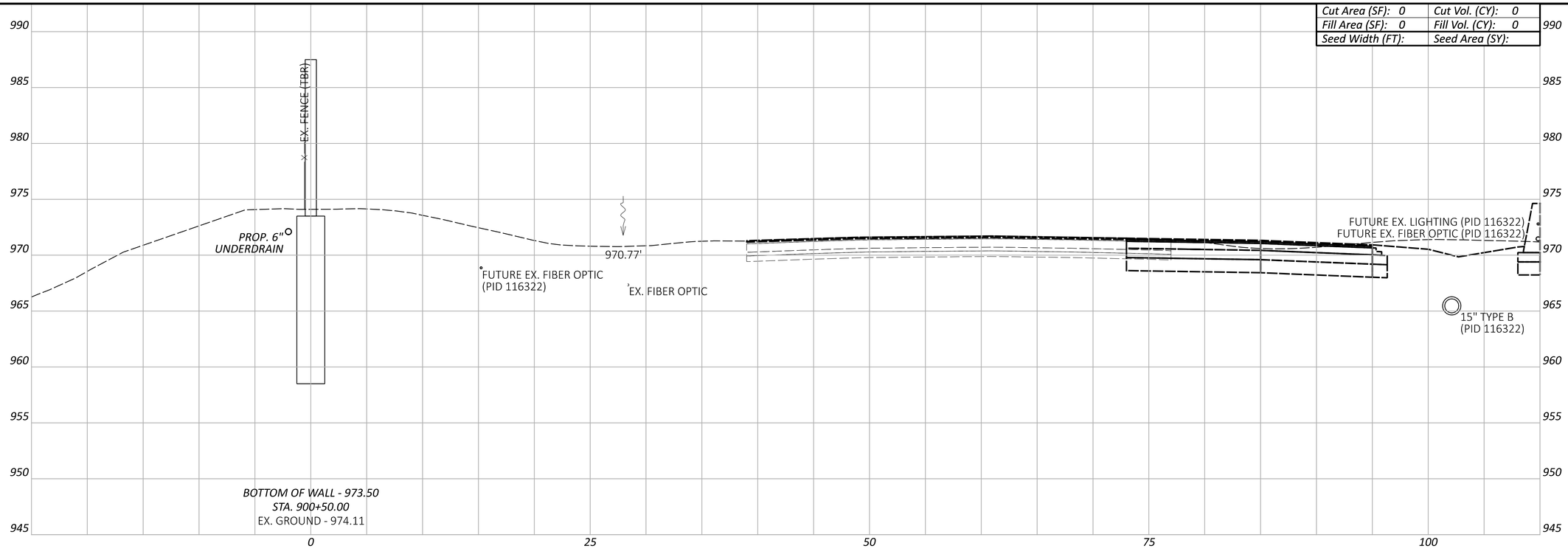
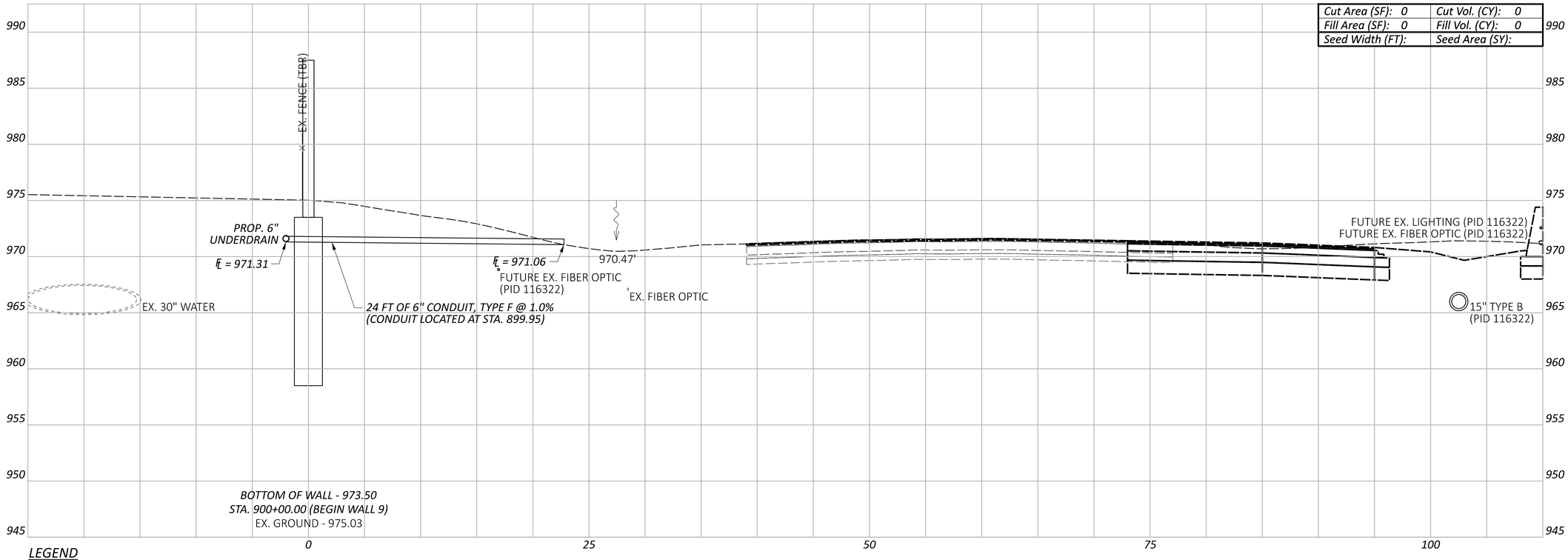
REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET P.104 TOTAL P.276





LEGEND

- - - EXISTING SR-161 PRIOR TO PID 116322

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

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 900+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 2:16:52 PM USER: jennifer.kelley
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CROSS SECTIONS - WALL 9
STA. 900+00.00 TO STA. 900+50.00

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REVIEWER JDH 01-22-24

PROJECT ID 117607

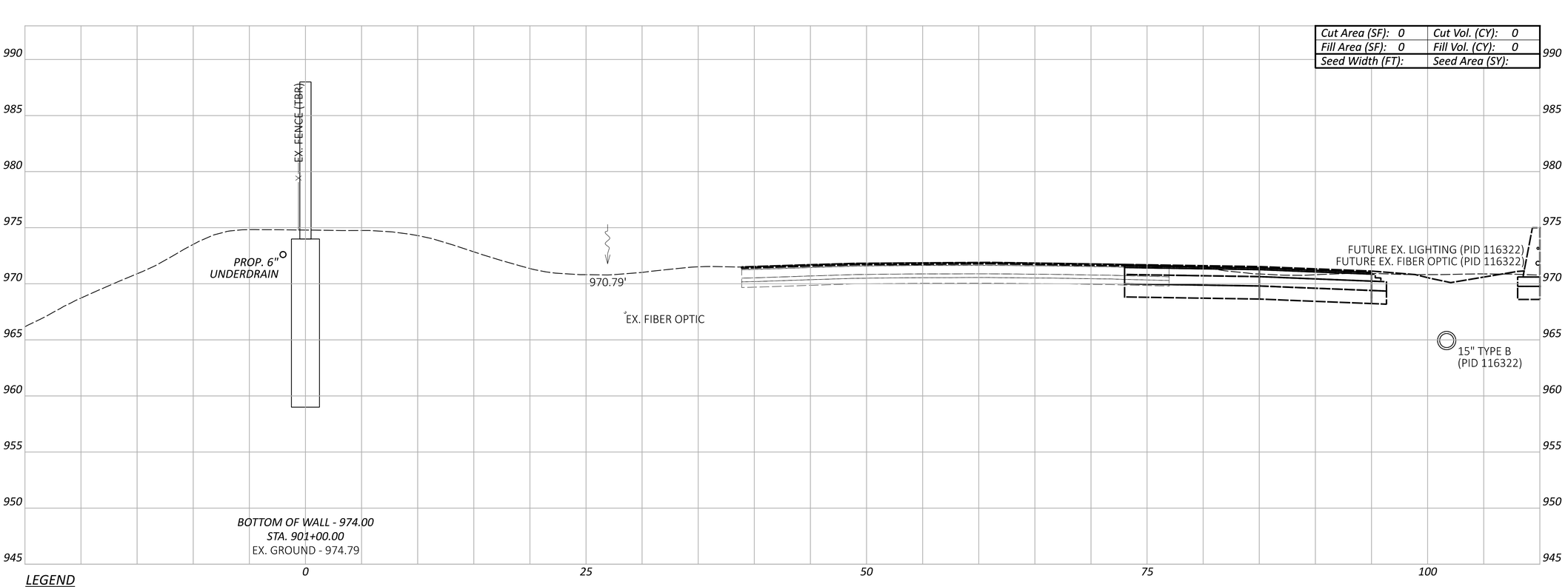
Sheet Totals		
Seeding	Cut	Fill

SHEET P.105 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WAL9 - 901+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:23:09 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_XS009.dgn

CROSS SECTIONS - WALL 9
STA. 901+00.00



LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY
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DESIGNER
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REVIEWER
JDH 01-22-24

PROJECT ID
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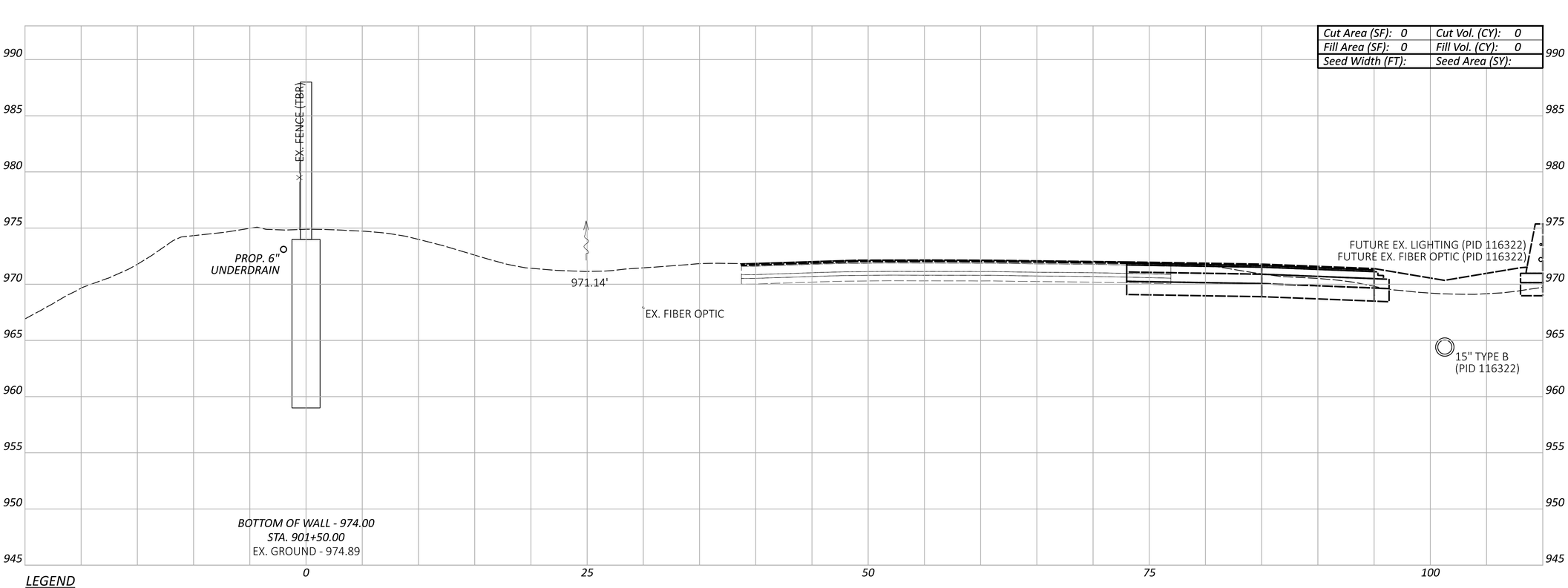
SHEET P.106 | TOTAL P.276

MODEL: BLP_WAL9 - 901+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:23:31 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_XS009.dgn

CROSS SECTIONS - WALL 9
STA. 901+50.00



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DESIGNER
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REVIEWER
JDH 01-22-24

PROJECT ID
117607

Sheet Totals		
Seeding	Cut	Fill

SHEET P.107 TOTAL P.276

CROSS SECTIONS - WALL 9
STA. 902+00.00

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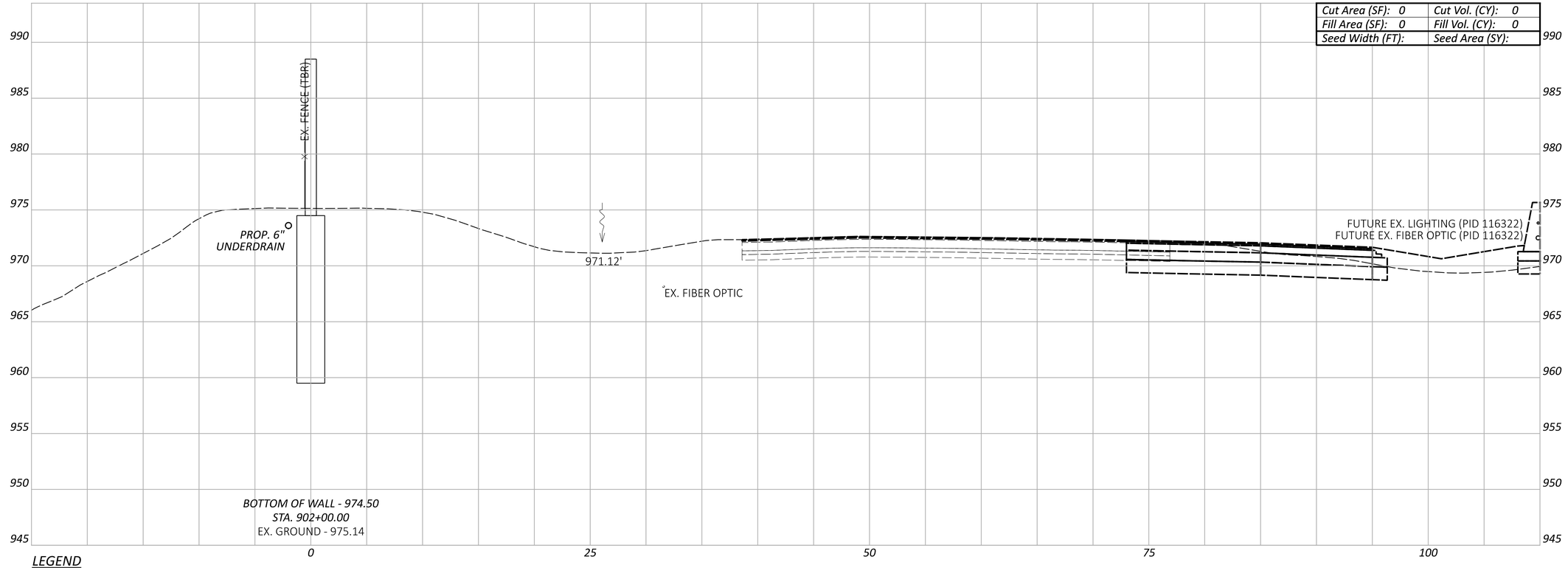
Seed Width (FT):	Seed Area (SY):



LEGEND

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

Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY
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DESIGNER JMK

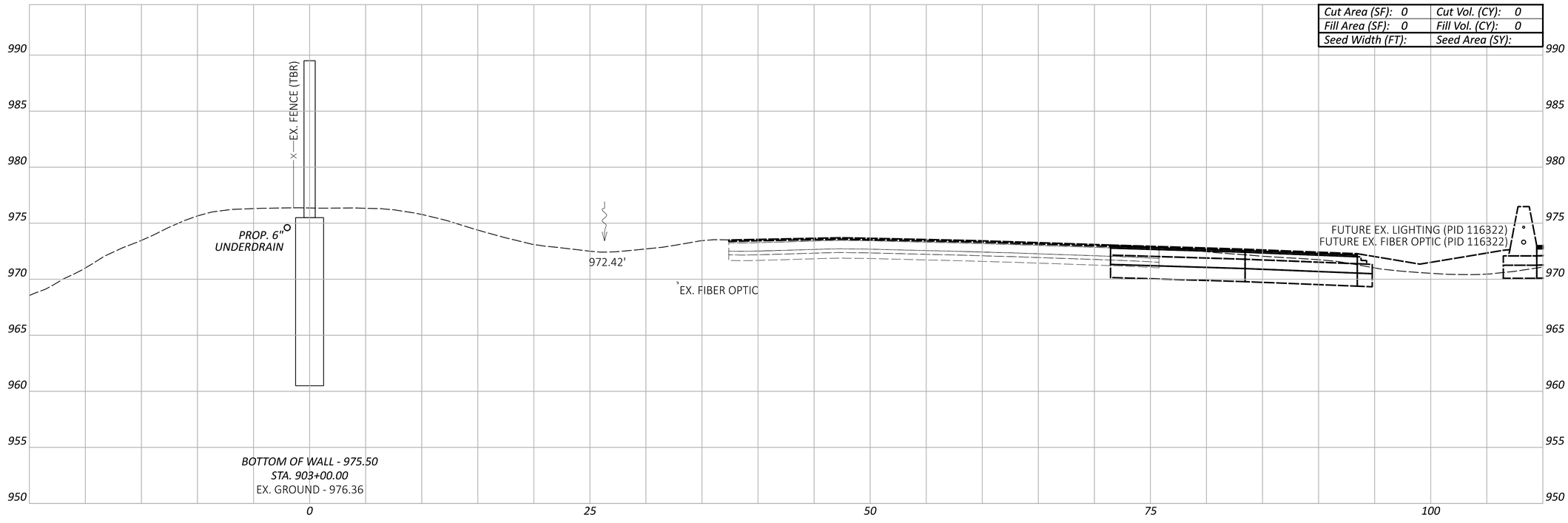
REVIEWER JDH 01-22-24

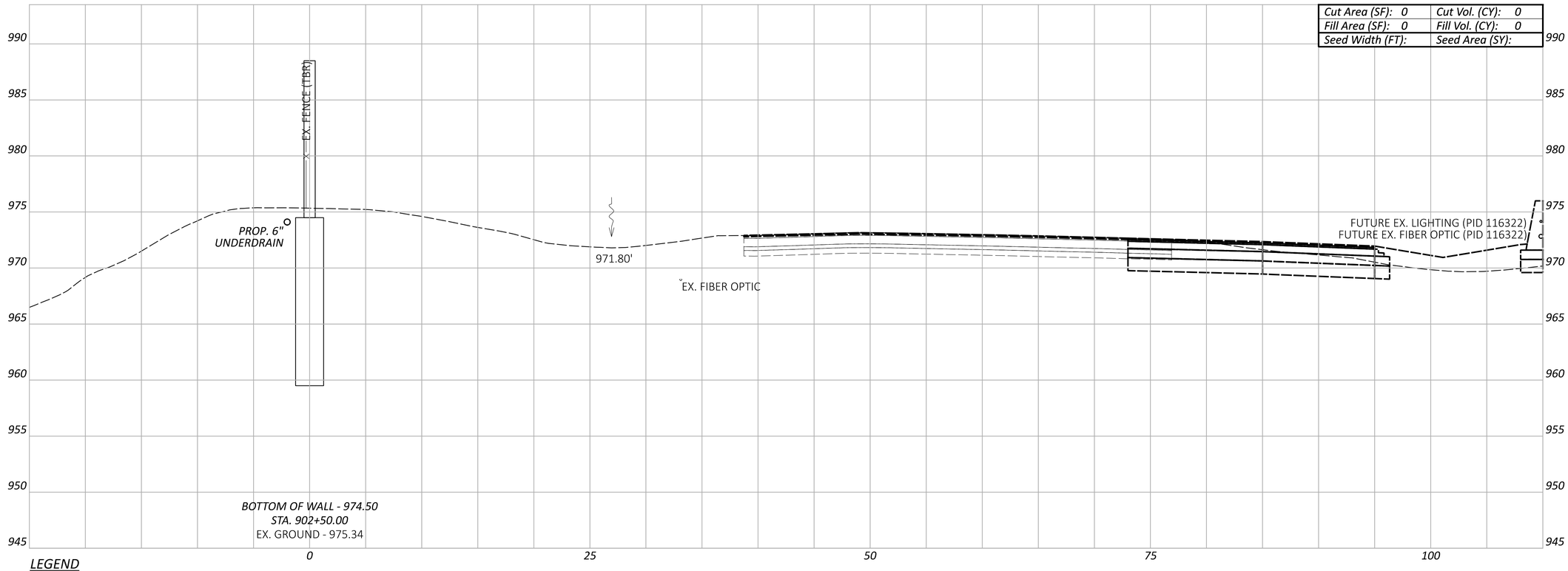
PROJECT ID 117607

SHEET P.108 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 902+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:23:50 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_XS009.dgn





LEGEND

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

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

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 902+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:24:09 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_XS009.dgn

CROSS SECTIONS - WALL 9
STA. 902+50.00 TO STA. 903+00.00

Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY
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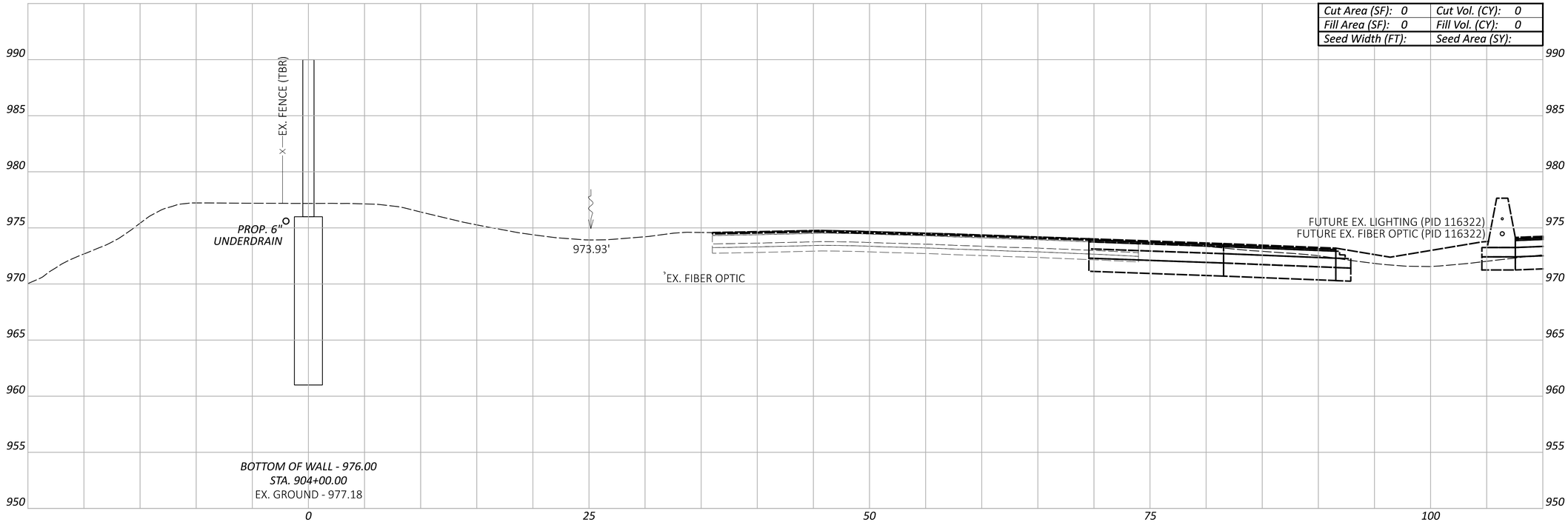
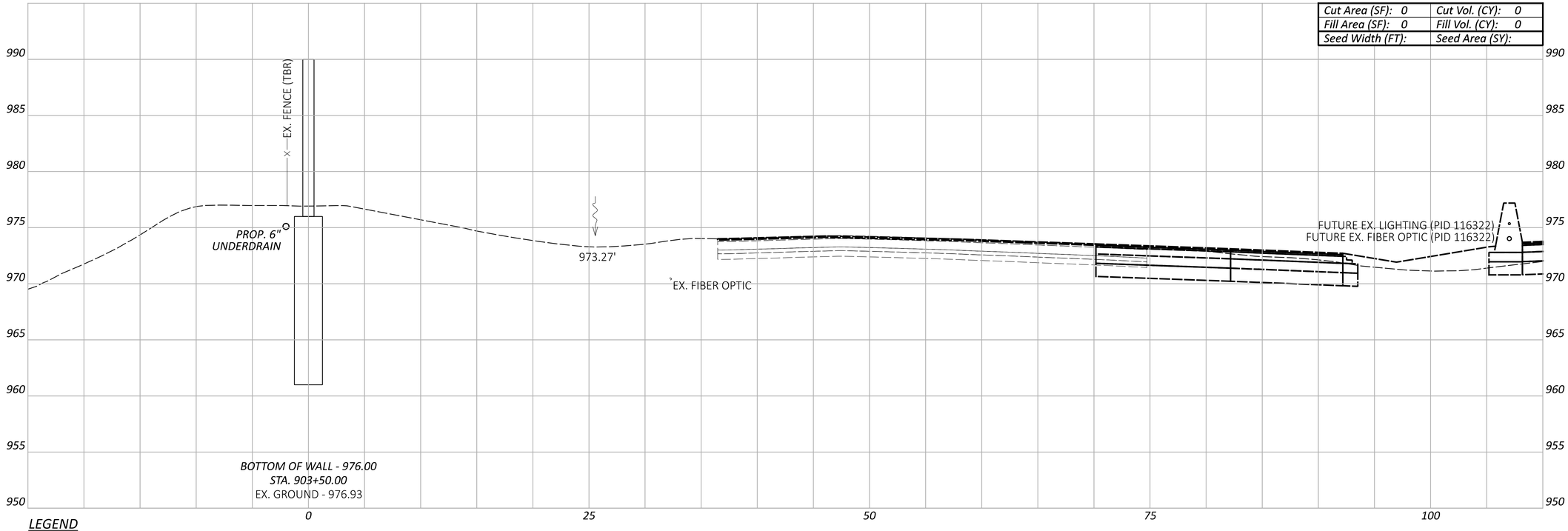
DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.109 TOTAL P.276





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 WALLS

MODEL: BLP_WALL9 - 903+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:24:41 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_XS009.dgn

Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY
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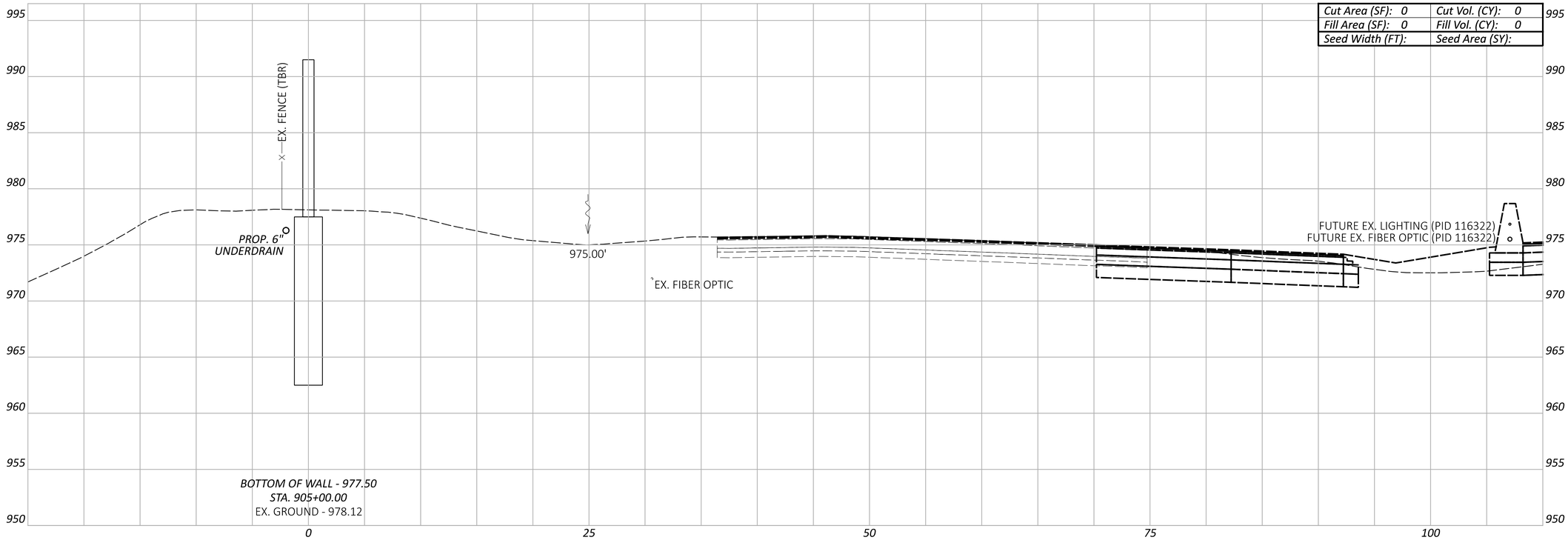
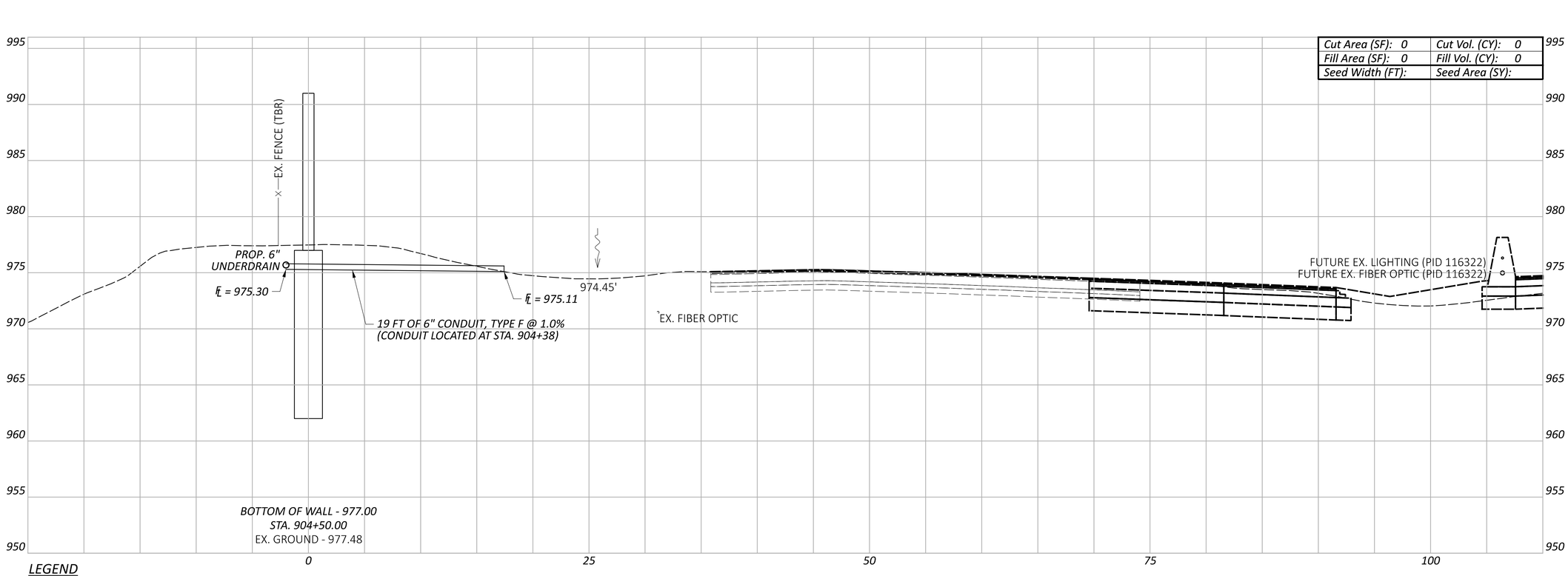
DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.110 | TOTAL P.276





CROSS SECTIONS - WALL 9
STA. 904+50.00 TO STA. 905+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 904+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 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_XS009.dgn

Sheet Totals		
Seeding	Cut	Fill

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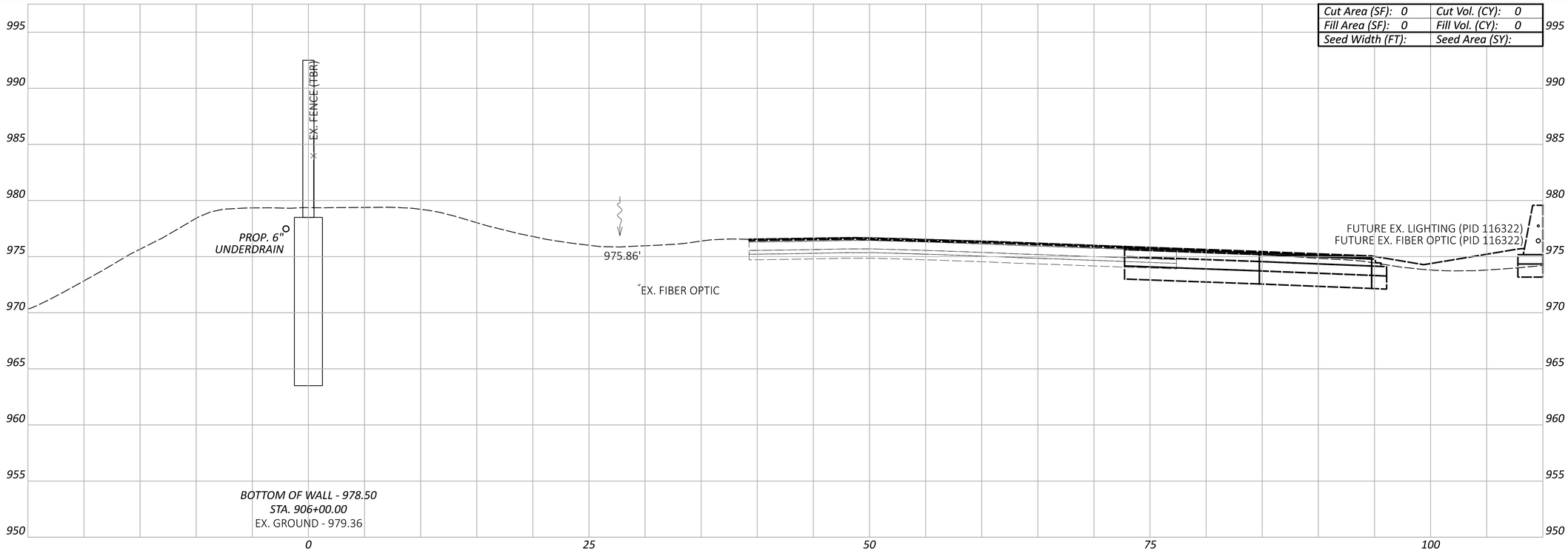
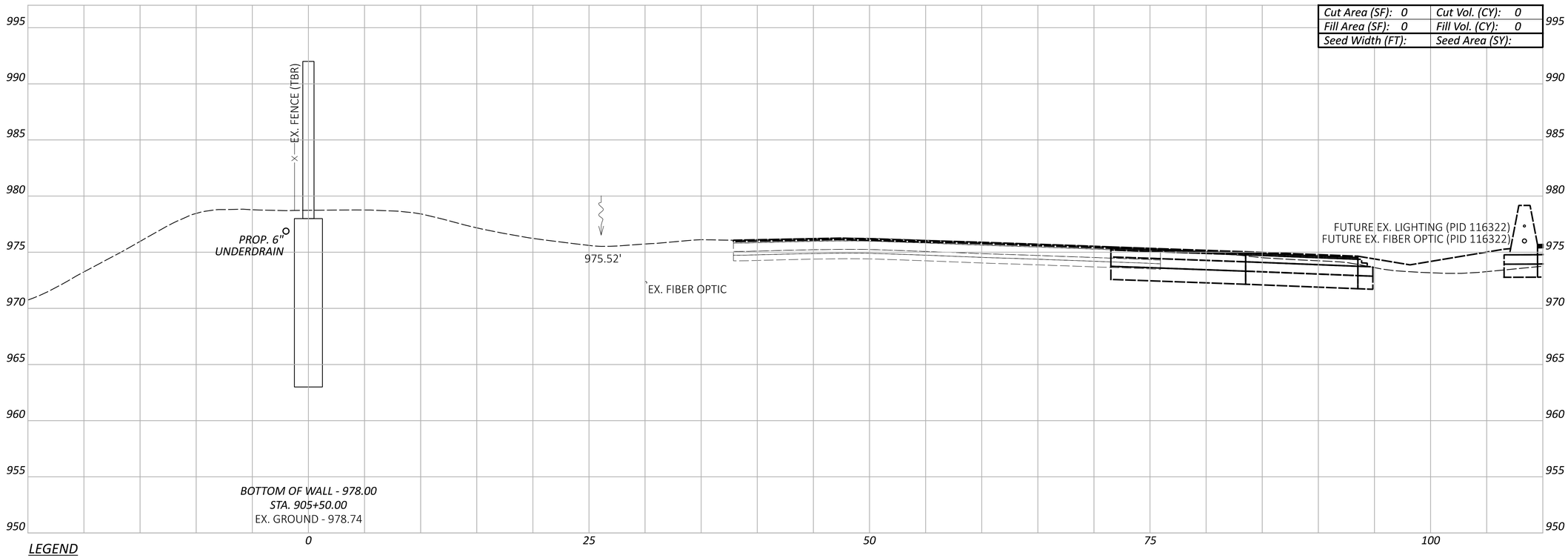
DESIGNER: JMK
REVIEWER: JDH 01-22-24
PROJECT ID: 117607
SHEET: P.111 TOTAL: P.276





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

FRA-161-15.80 NOISE WALLS

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PROJECT ID
117607

Sheet Totals		
Seeding	Cut	Fill

SHEET P.112 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WAL9 - 906+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:26:04 PM USER: jennifer.kelley
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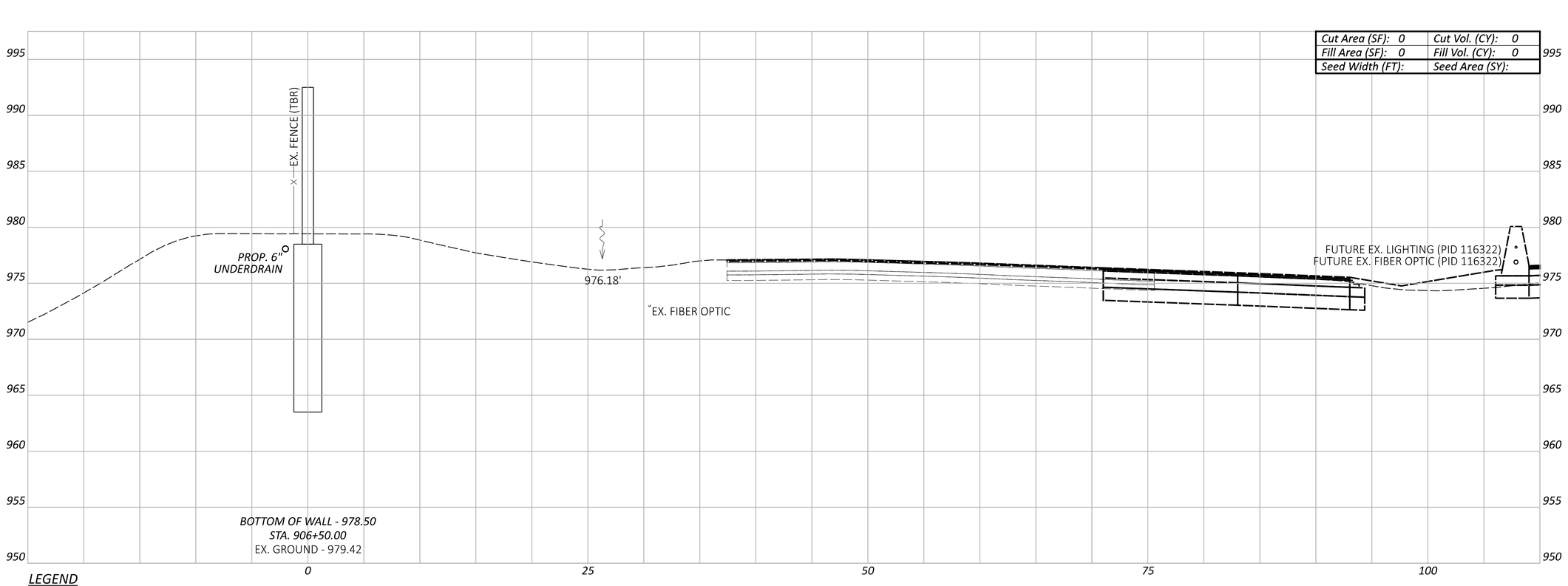
CROSS SECTIONS - WALL 9
STA. 906+50.00



LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals		
Seeding	Cut	Fill

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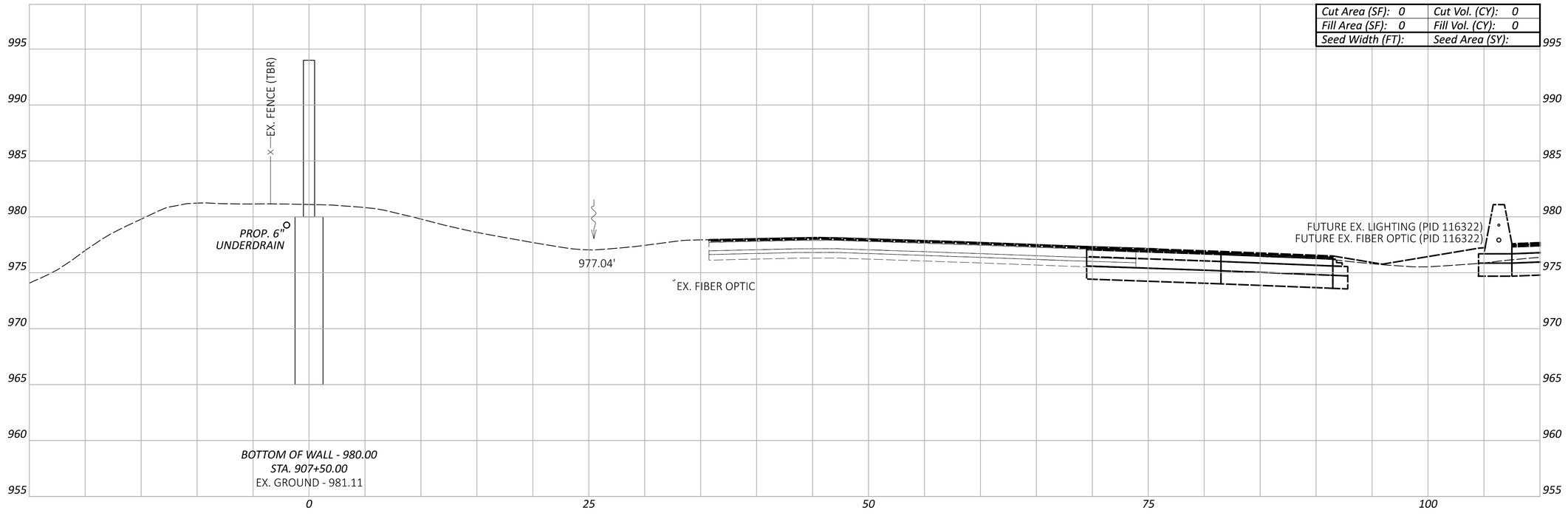
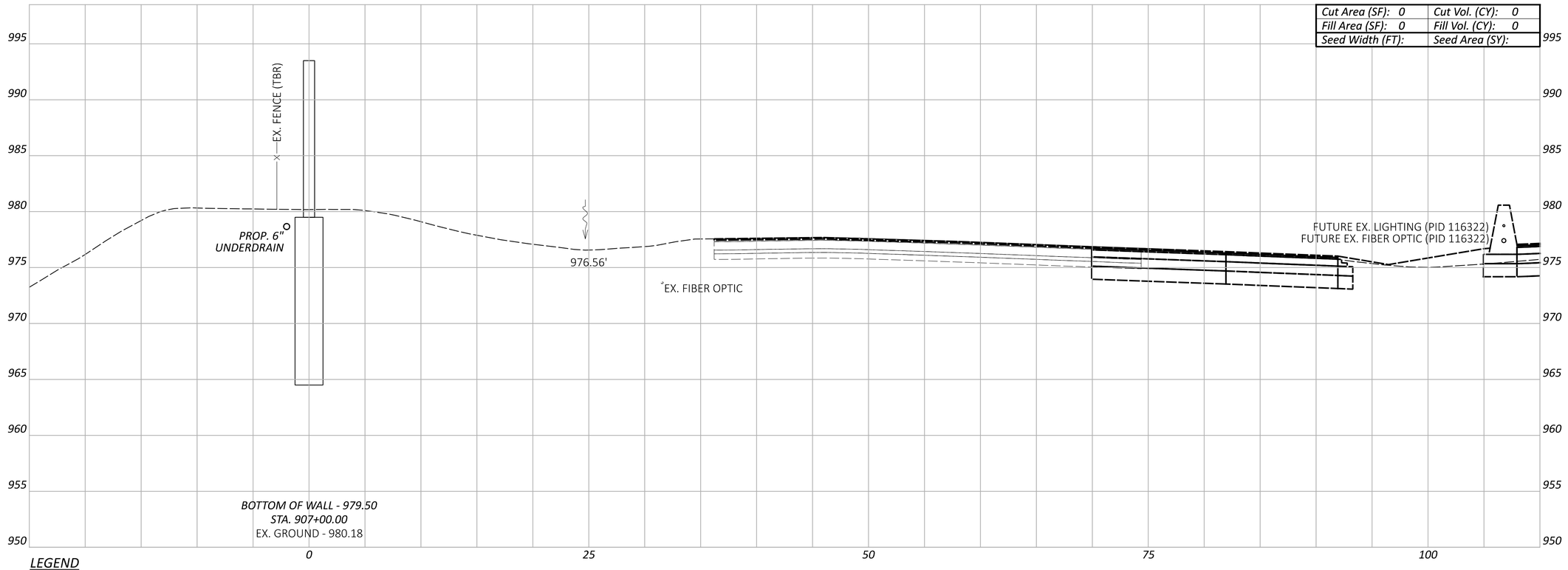
SHEET P.113 | TOTAL P.276





LEGEND

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

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

FRA-161-15.80 NOISE WALLS

CROSS SECTIONS - WALL 9
STA. 907+00.00 TO STA. 907+50.00

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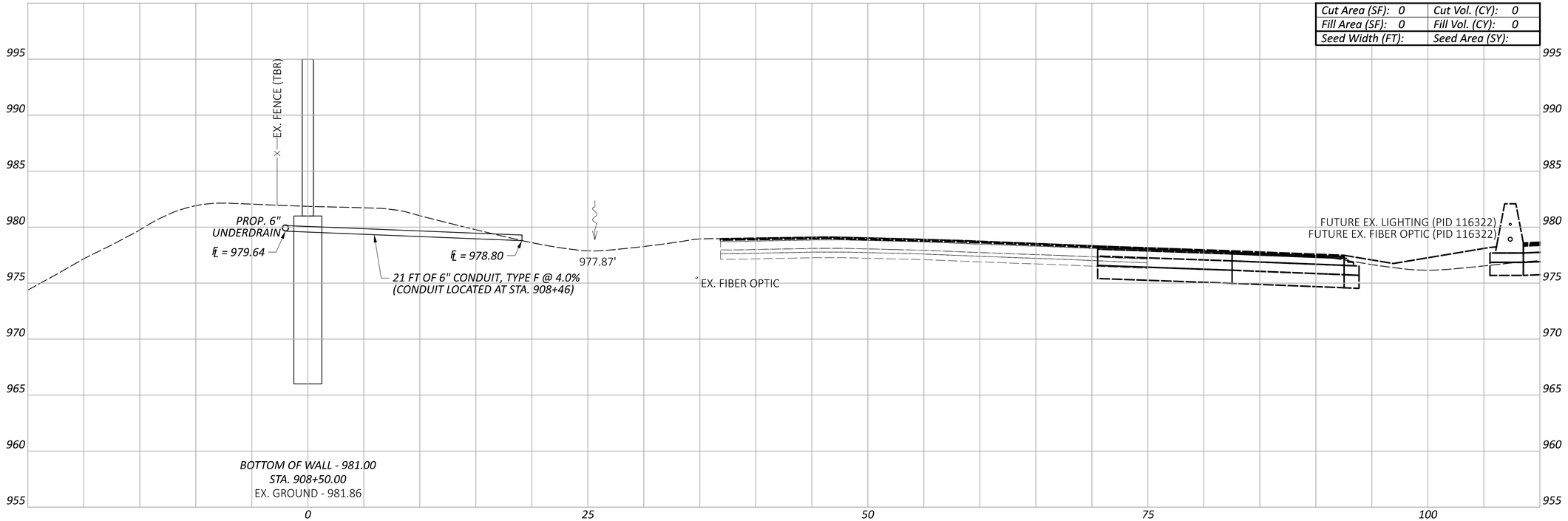
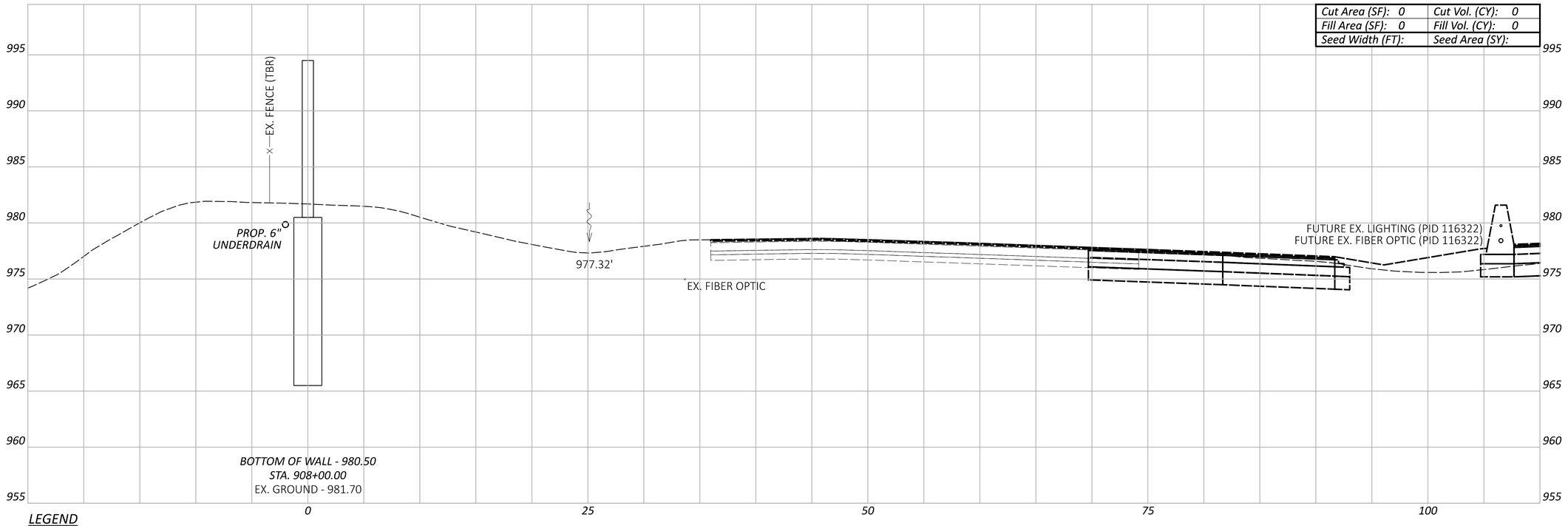
PROJECT ID 117607

Sheet Totals		
Seeding	Cut	Fill

SHEET	TOTAL
P.114	P.276





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

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WAL9 - 908+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 2:20:28 PM USER: jennifer.kelley
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Sheet Totals		
Seeding	Cut	Fill

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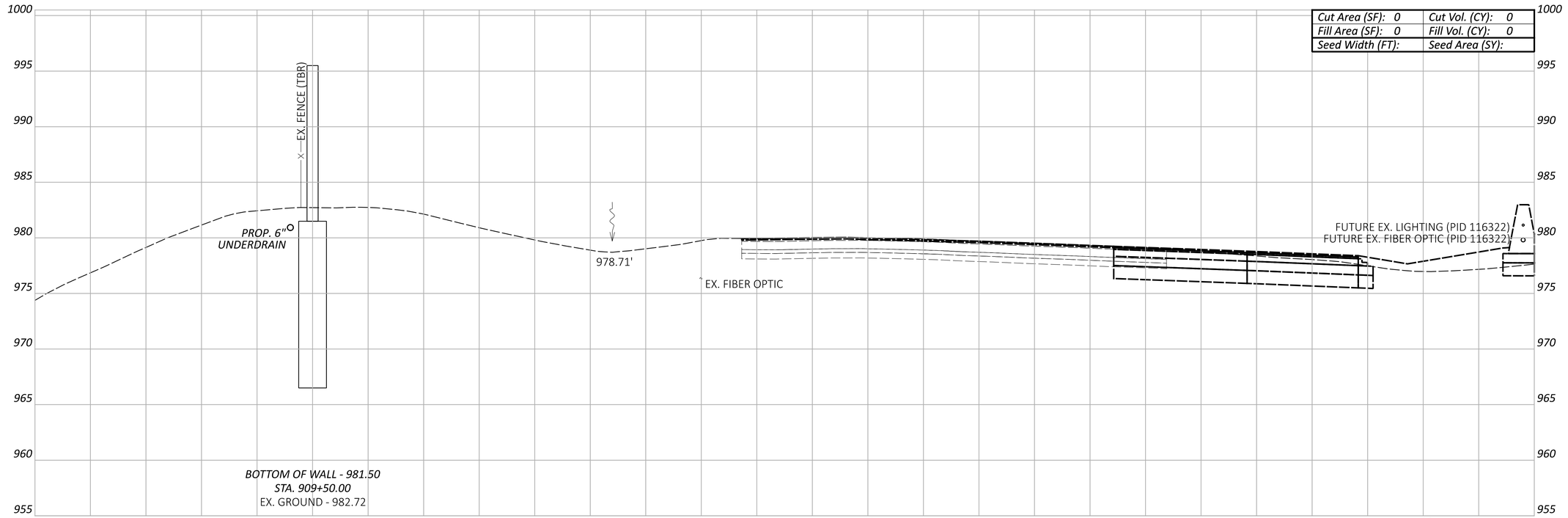
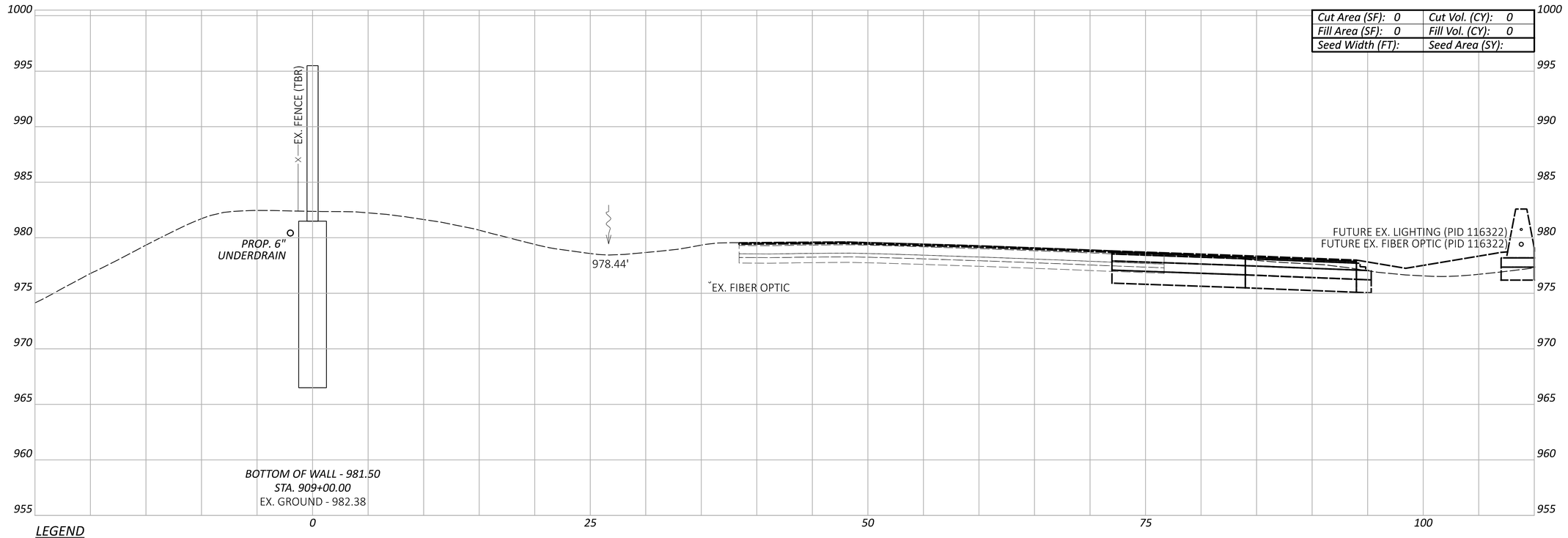
PROJECT ID 117607

SHEET P.115 | TOTAL P.276





LEGEND

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

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

FRA-161-15.80 NOISE WALLS

CROSS SECTIONS - WALL 9
STA. 909+00.00 TO STA. 909+50.00

MODEL: BLP_WALL9 - 909+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:26:59 PM USER: jennifer.kelley
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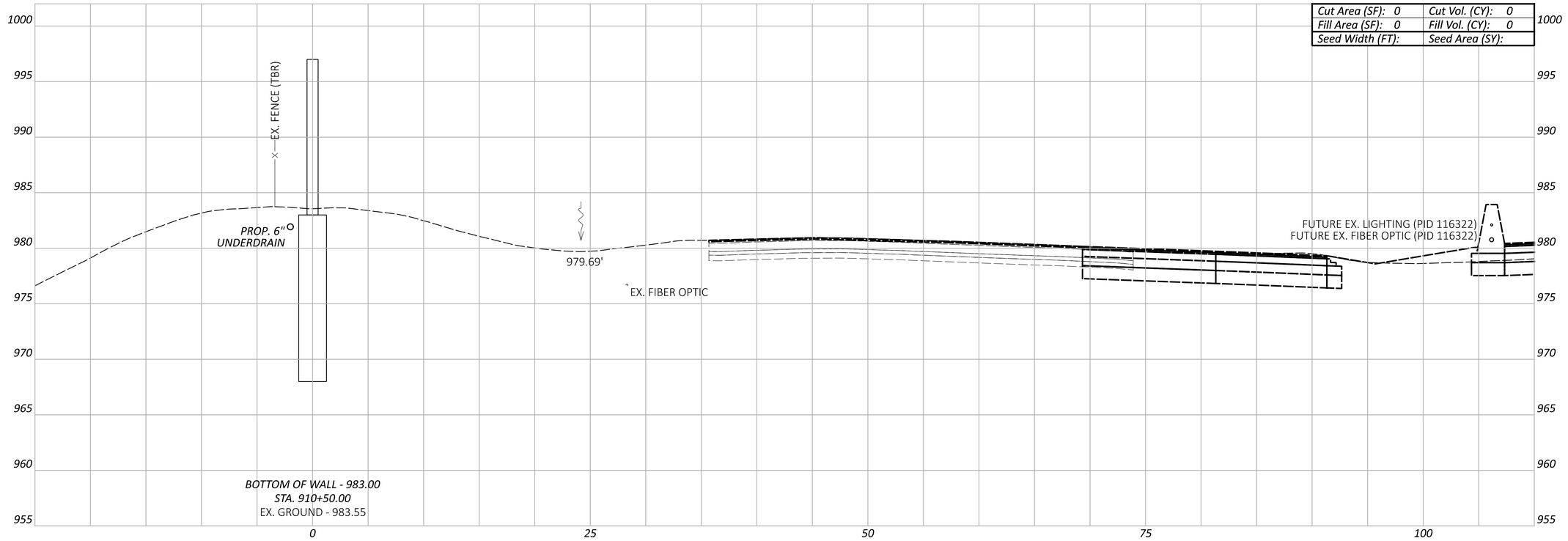
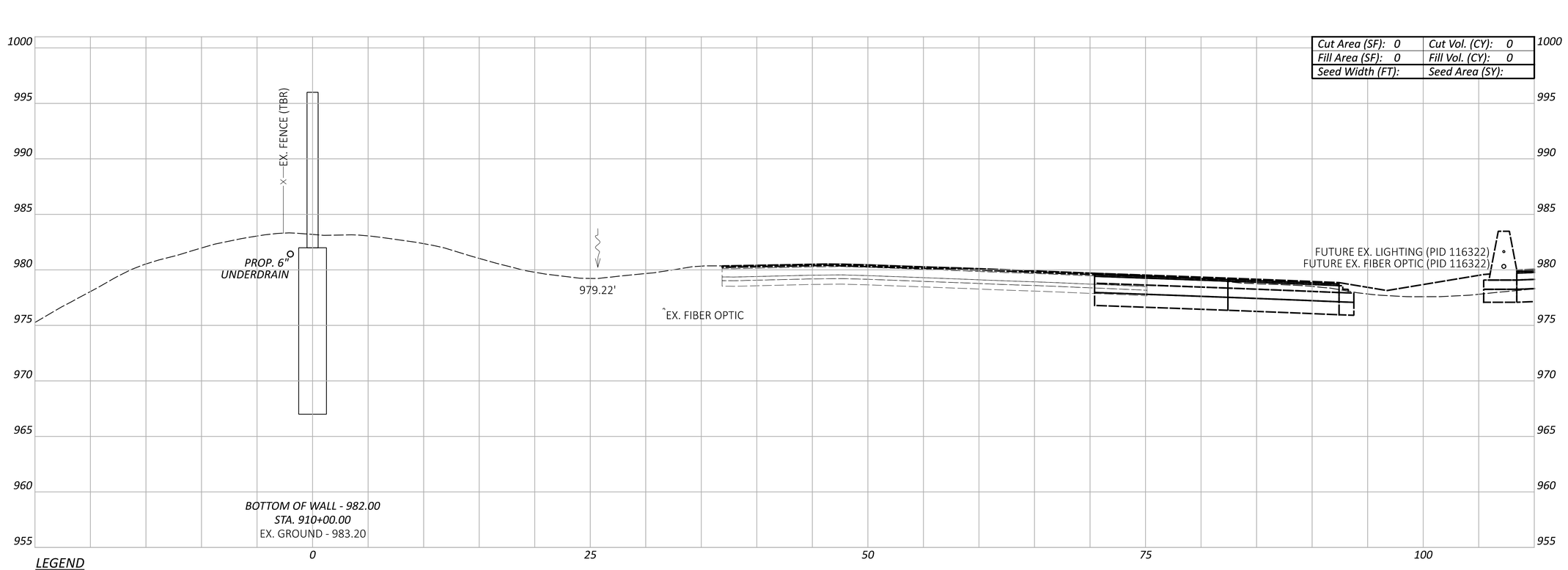
PROJECT ID 117607

Sheet Totals		
Seeding	Cut	Fill

SHEET P.116 TOTAL P.276





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 WALLS

MODEL: BLP_WAL9 - 910+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:27:17 PM USER: jennifer.kelley
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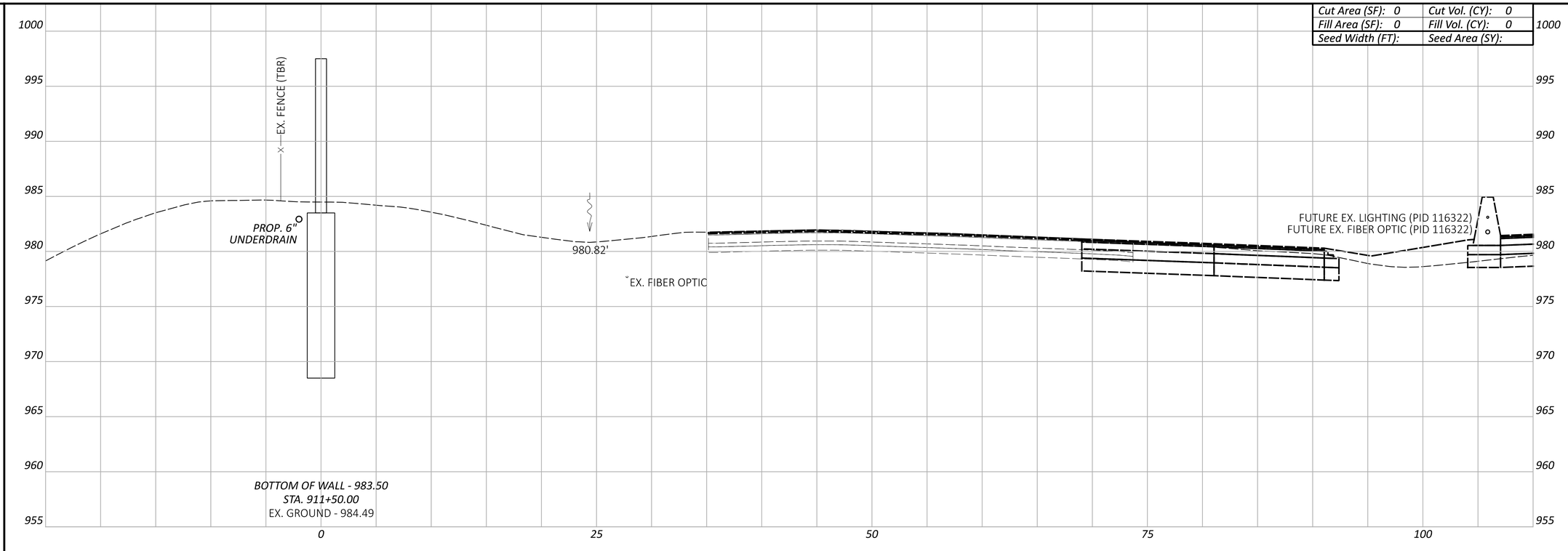
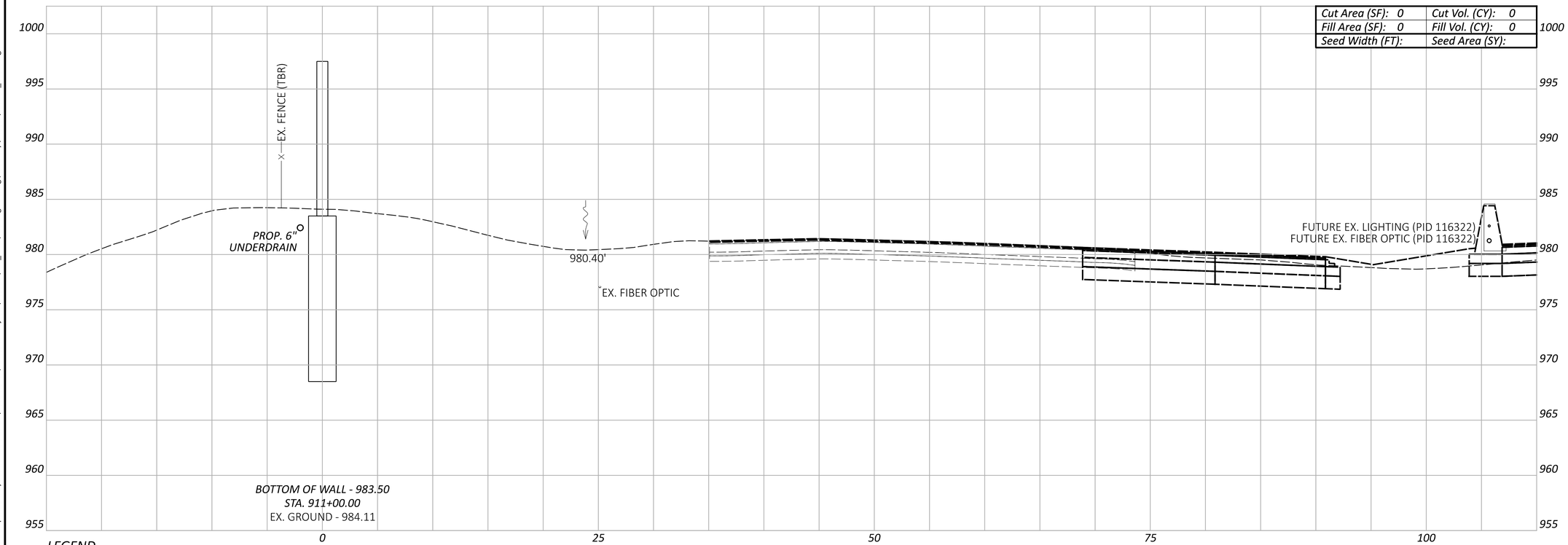
Sheet Totals		
Seeding	Cut	Fill

SHEET P.117 TOTAL P.276





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 WALLS

MODEL: BLP_WALL9 - 911+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:27:33 PM USER: jennifer.kelley
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Sheet Totals		
Seeding	Cut	Fill

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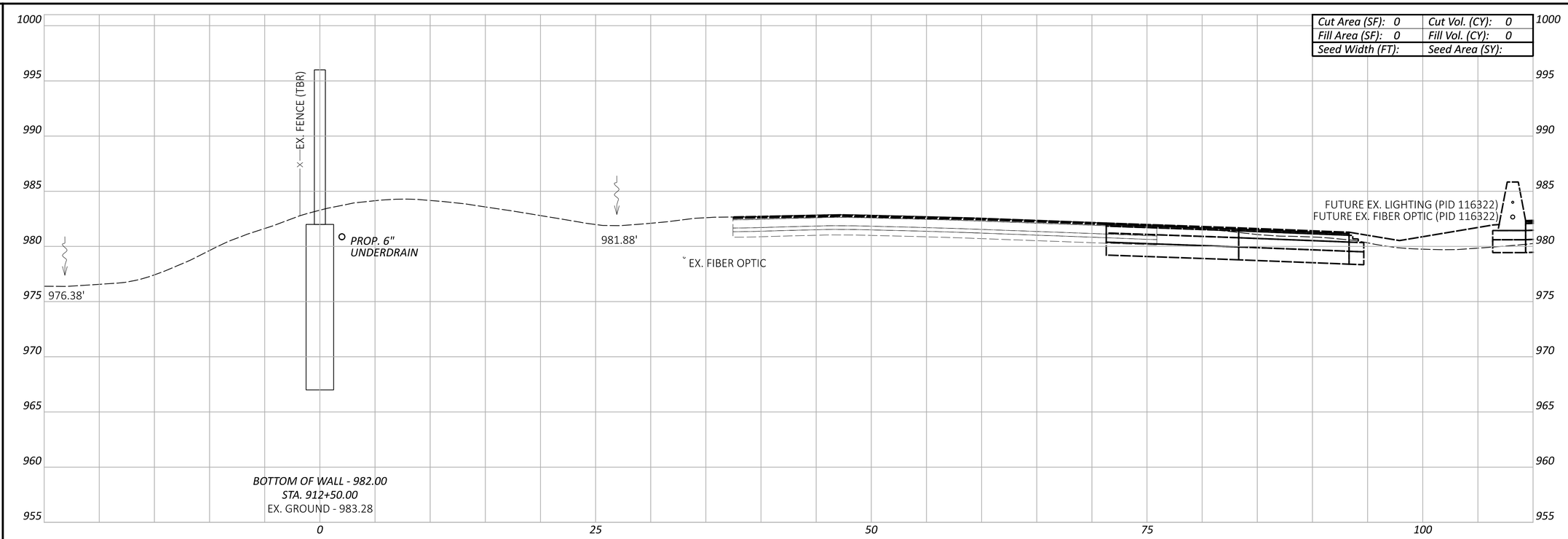
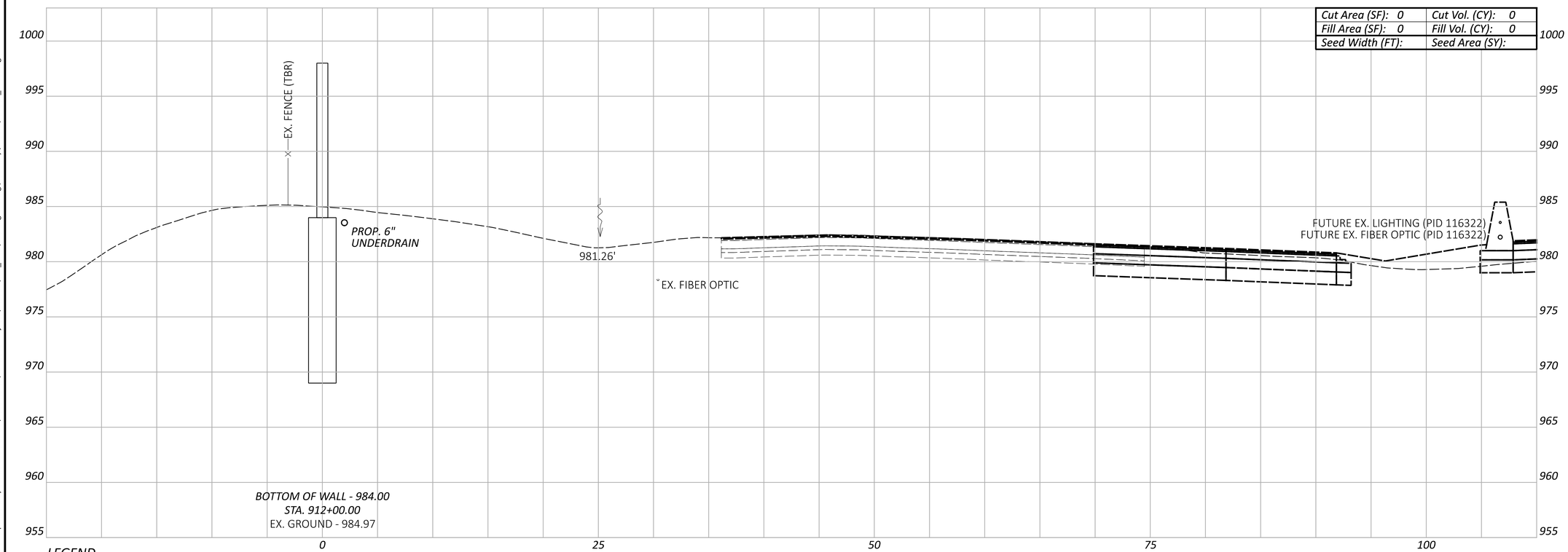
REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET	TOTAL
P.118	P.276





LEGEND

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

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

FRA-161-15.80 NOISE WALLS

CROSS SECTIONS - WALL 9
STA. 912+00.00 TO STA. 912+50.00

MODEL: BLP_WALL9 - 912+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:27:48 PM USER: jennifer.kelley
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PROJECT ID 117607

Sheet Totals		
Seeding	Cut	Fill

SHEET P.119 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL9 - 912+70.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:28:04 PM USER: jennifer.kelley
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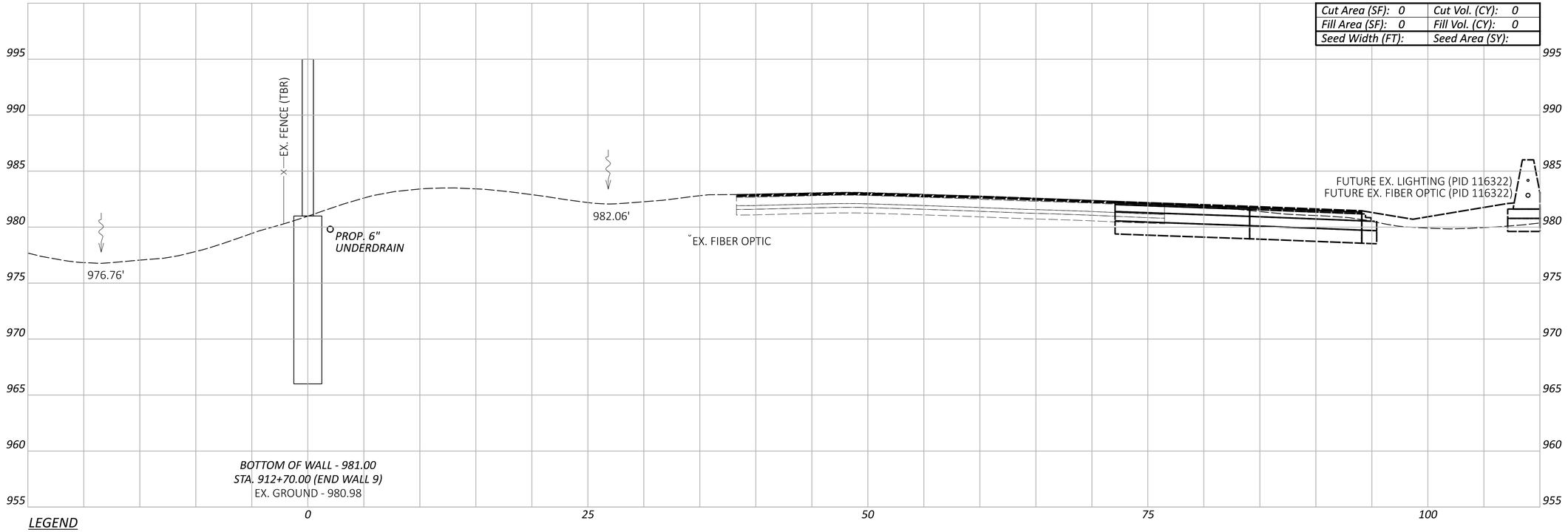
CROSS SECTIONS - WALL 9
STA. 912+70.00



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 01-22-24

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117607

SHEET	TOTAL
P.120	P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER11 - 1000+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:28:34 PM USER: jennifer.kelley
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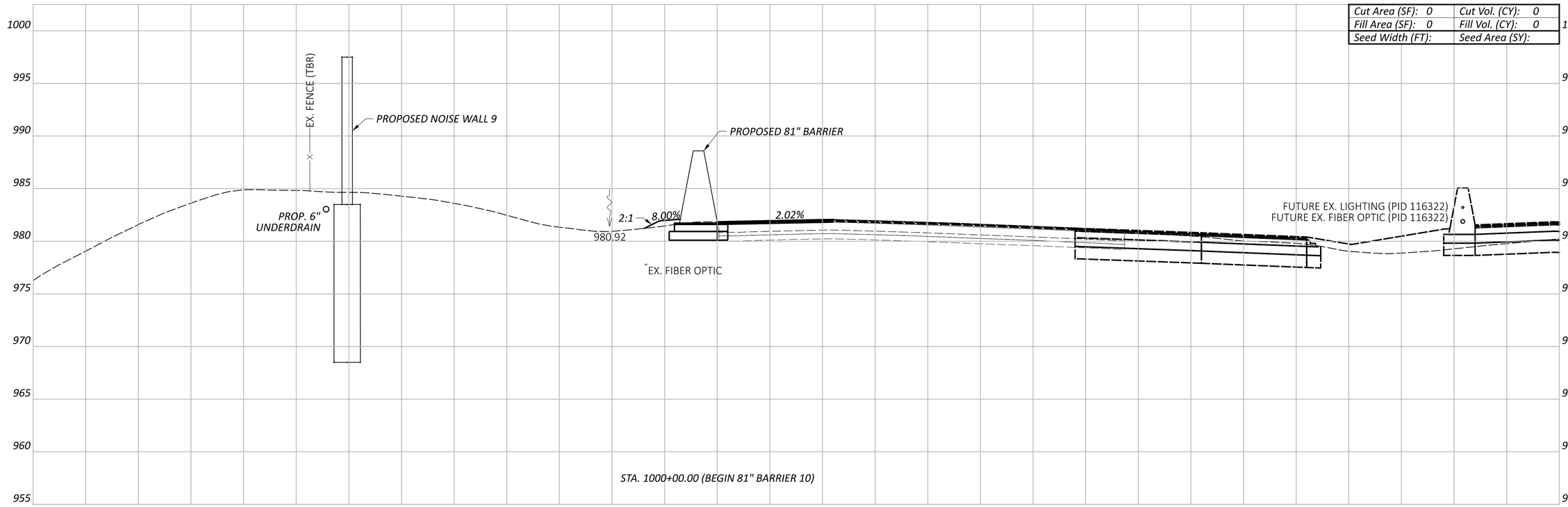

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals		
Seeding	Cut	Fill

CROSS SECTIONS - 81" BARRIER 10
STA. 1000+00.00

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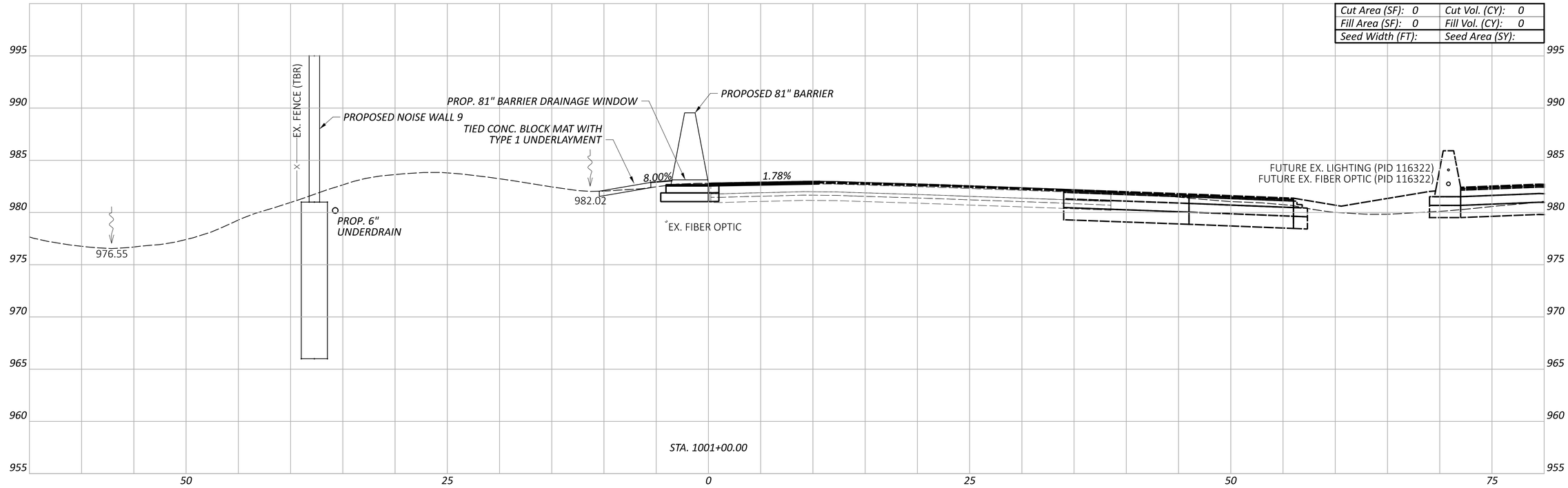
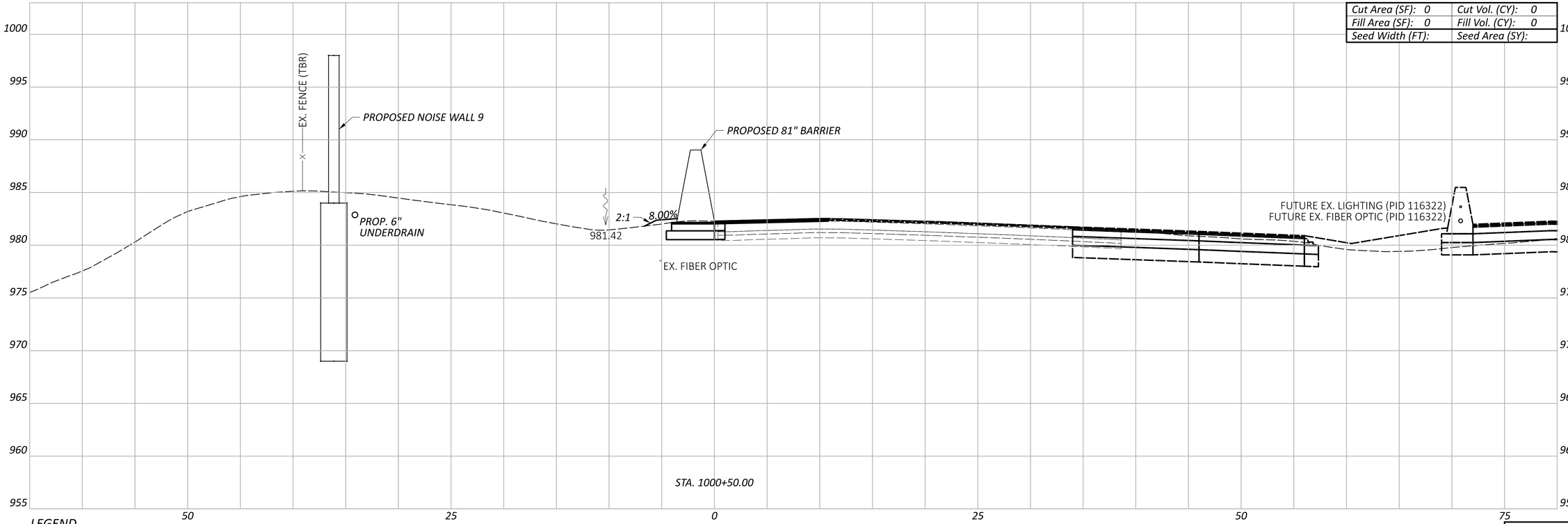
SHEET P.121 | TOTAL P.276





LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

CROSS SECTIONS - 81" BARRIER 10
STA. 1000+50.00 TO STA. 1001+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER11 - 1000+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:28:51 PM USER: jennifer.kelley
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Sheet Totals		
Seeding	Cut	Fill

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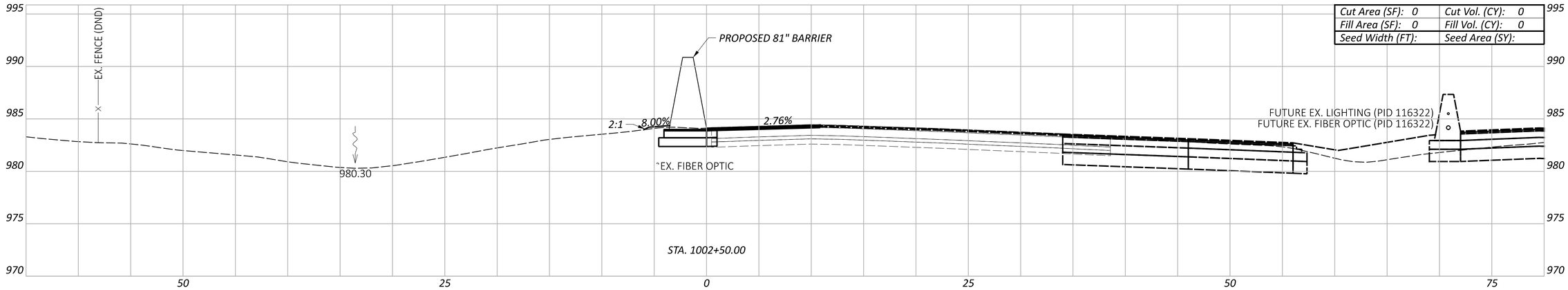
DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.122 TOTAL P.276



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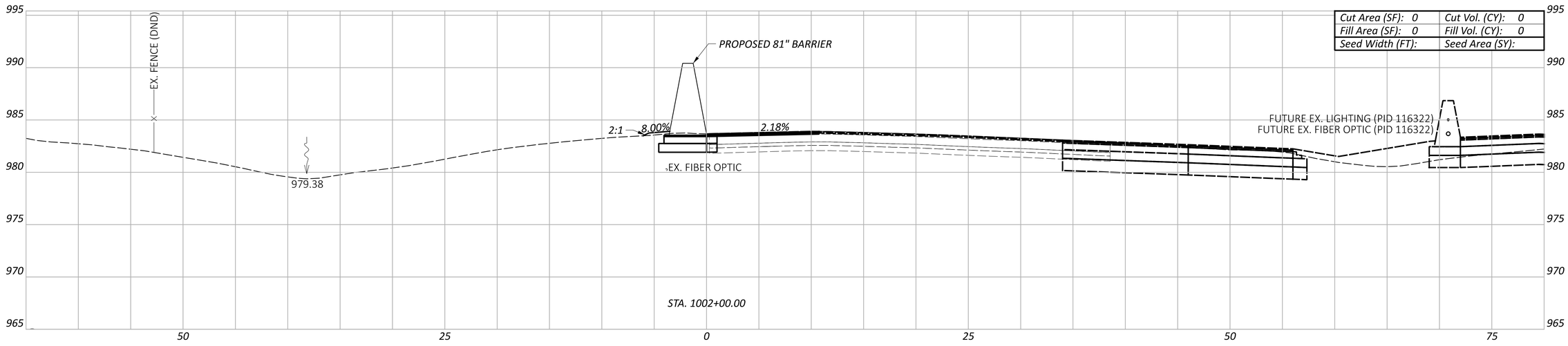

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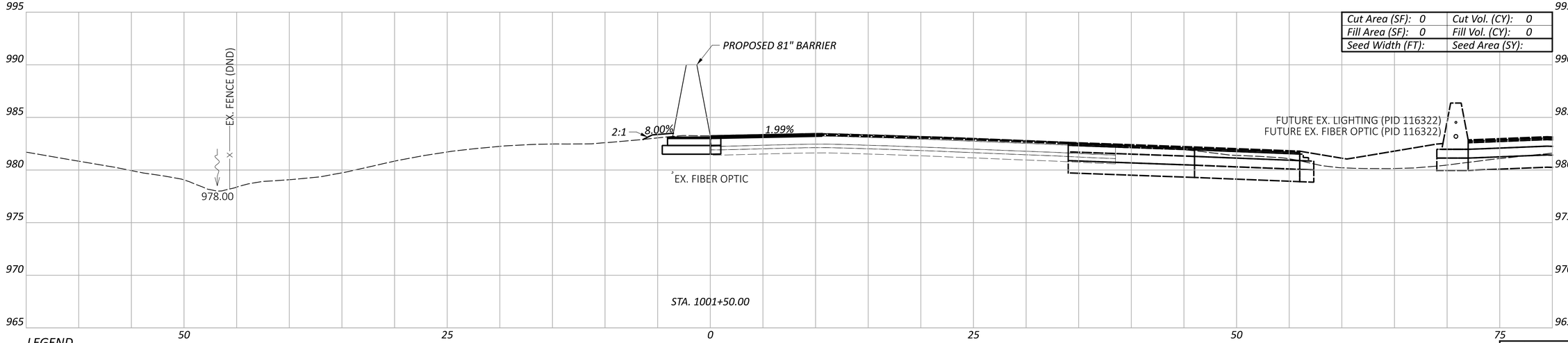

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LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

CROSS SECTIONS - 81" BARRIER 10
STA. 1001+50.00 TO STA. 1002+50.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER11 - 1001+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:29:14 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_XS010.dgn

Sheet Totals		
Seeding	Cut	Fill

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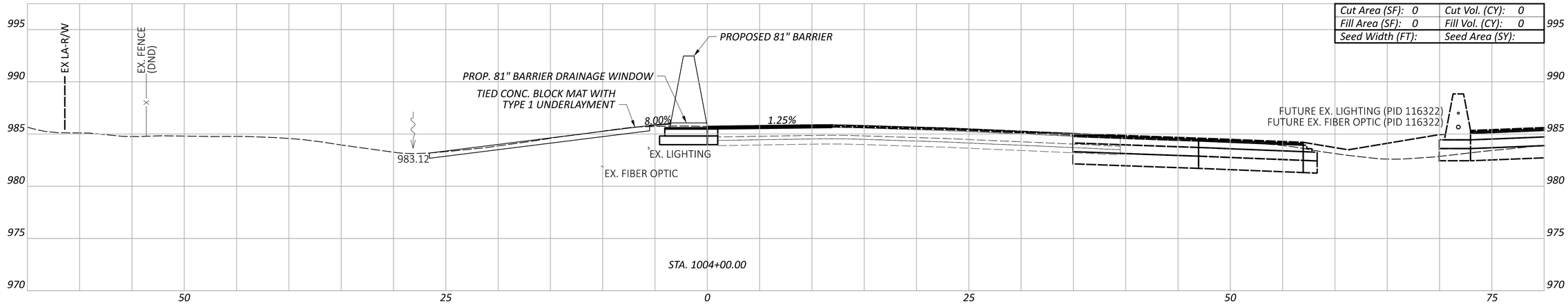
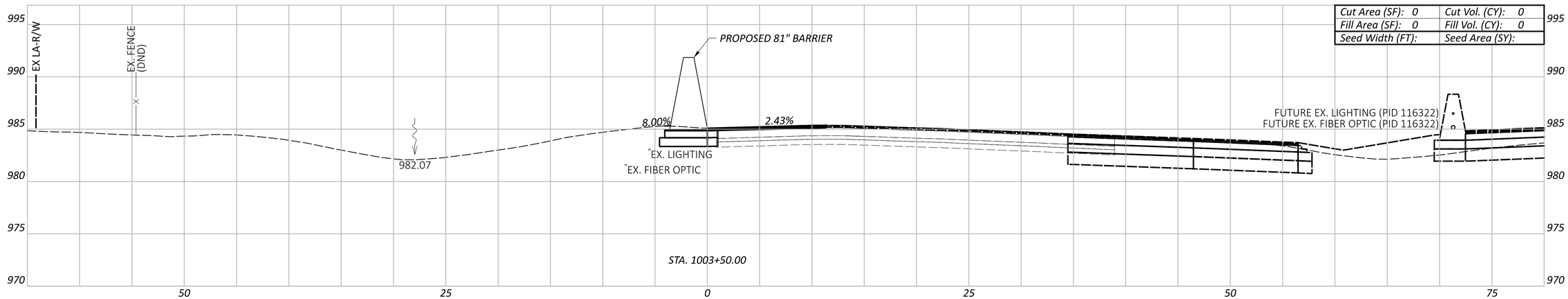
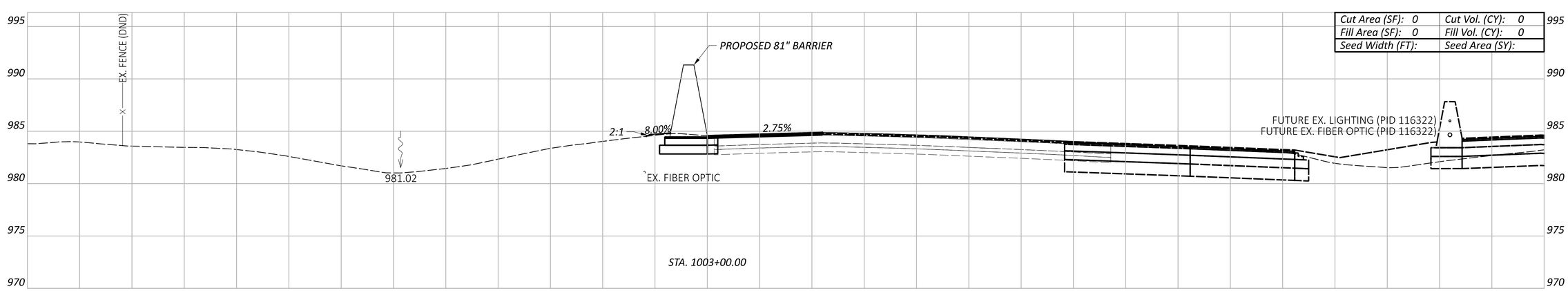
REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.123 TOTAL P.276







LEGEND

- - - EXISTING SR-161 PRIOR TO PID 116322

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

Sheet Totals		
Seeding	Cut	Fill

CROSS SECTIONS - 81" BARRIER 10
STA. 1003+00.00 TO STA. 1004+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER11 - 1003+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:29:49 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_XS010.dgn

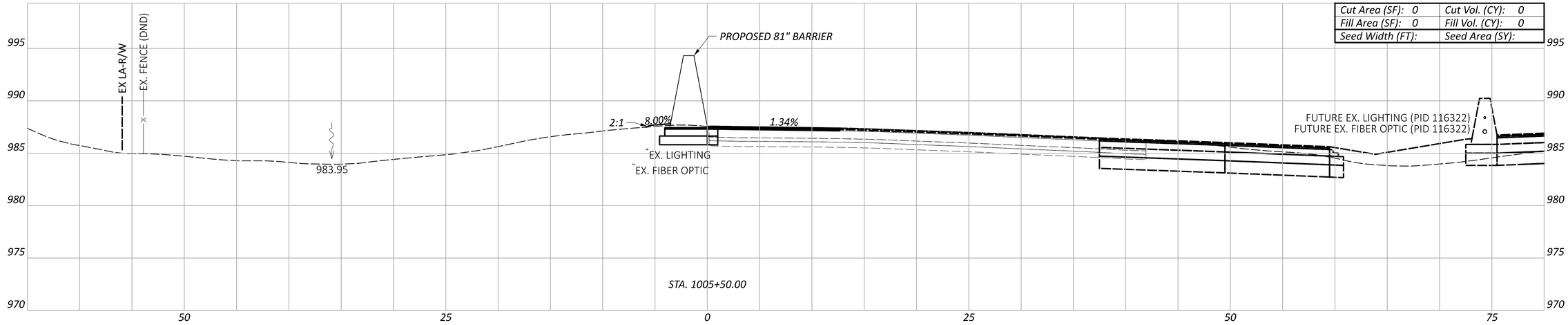
DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4500
www.arcadis.com

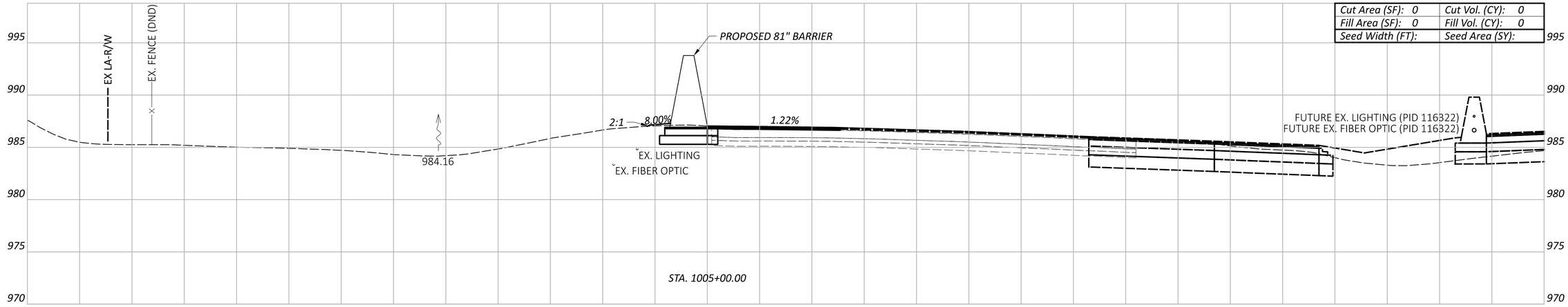
DESIGNER: JMK

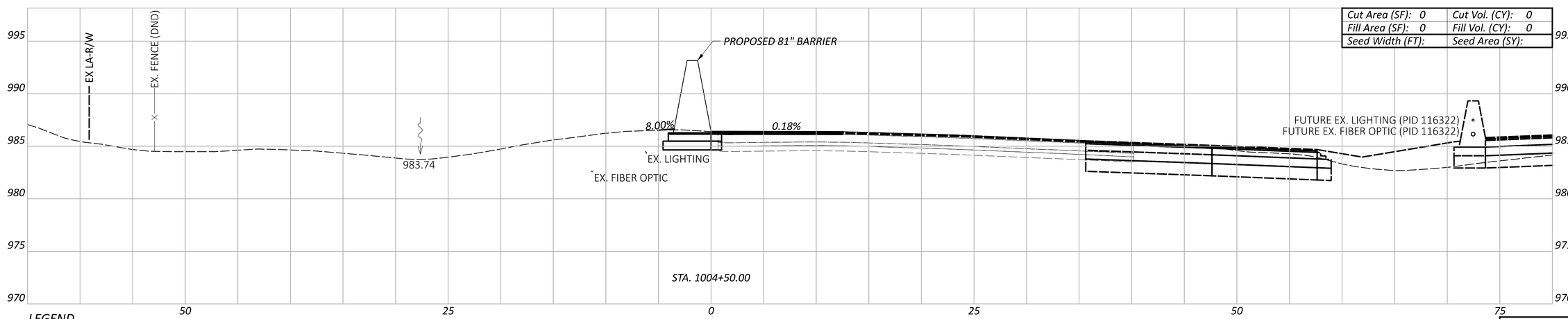
REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.124 TOTAL: P.276







LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals		
Seeding	Cut	Fill

CROSS SECTIONS - 81" BARRIER 10
STA. 1004+50.00 TO STA. 1005+50.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER11 - 1004+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:30:21 PM USER: jennifer.kelley
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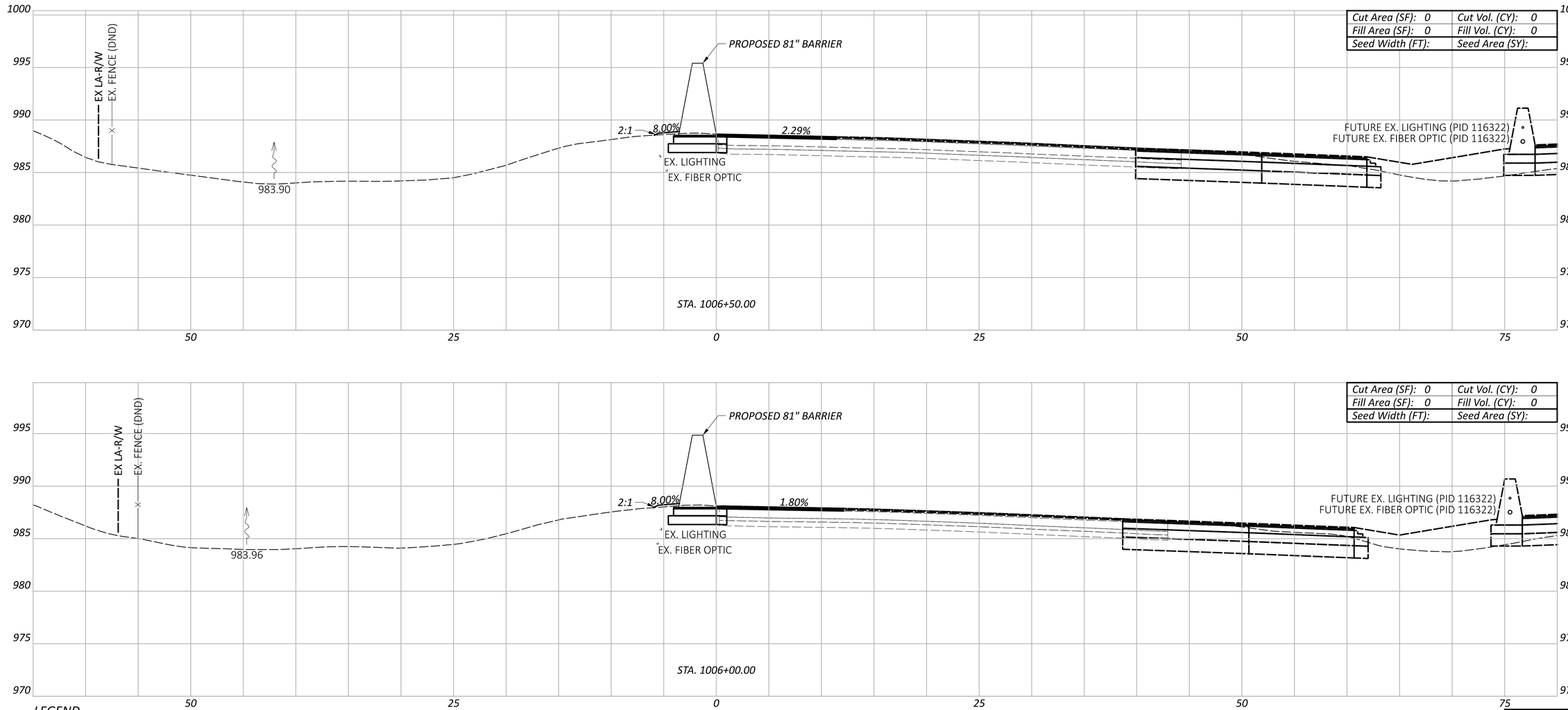
DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 318-4600
www.arcadis.com

DESIGNER
JMK

REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET	TOTAL
P.125	P.276



LEGEND

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

FRA-161-15.80 NOISE WALLS

CROSS SECTIONS - 81" BARRIER 10
STA. 1006+00.00 TO STA. 1006+50.00

Sheet Totals		
Seeding	Cut	Fill

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

DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.126 TOTAL P.276

MODEL: BLP_BARRIER11 - 1006+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:30:51 PM USER: jennifer.kelley
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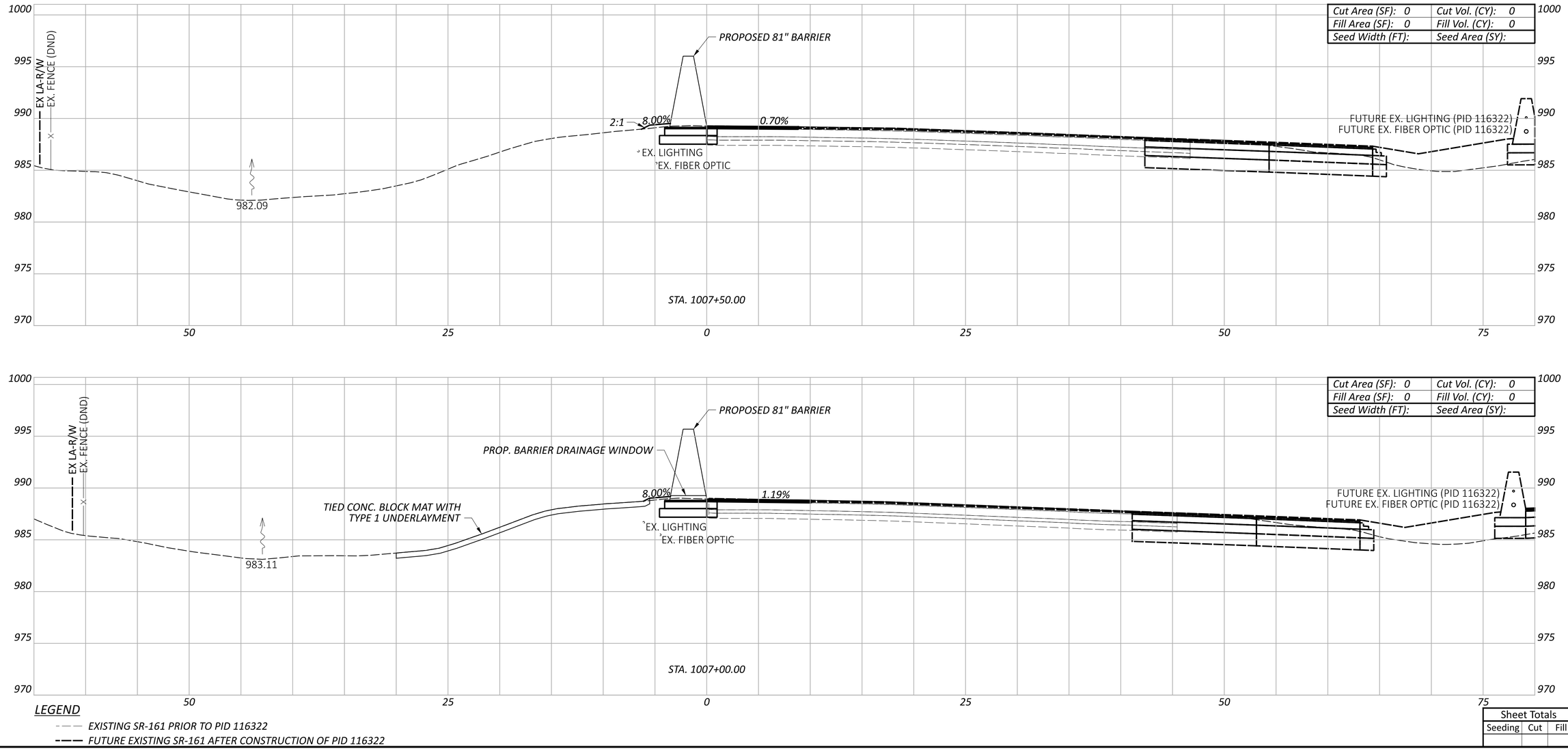

CROSS SECTIONS - 81" BARRIER 10
STA. 1007+00.00 TO STA. 1007+50.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER11 - 1007+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:31:10 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_XS010.dgn

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DESIGNER
JMK

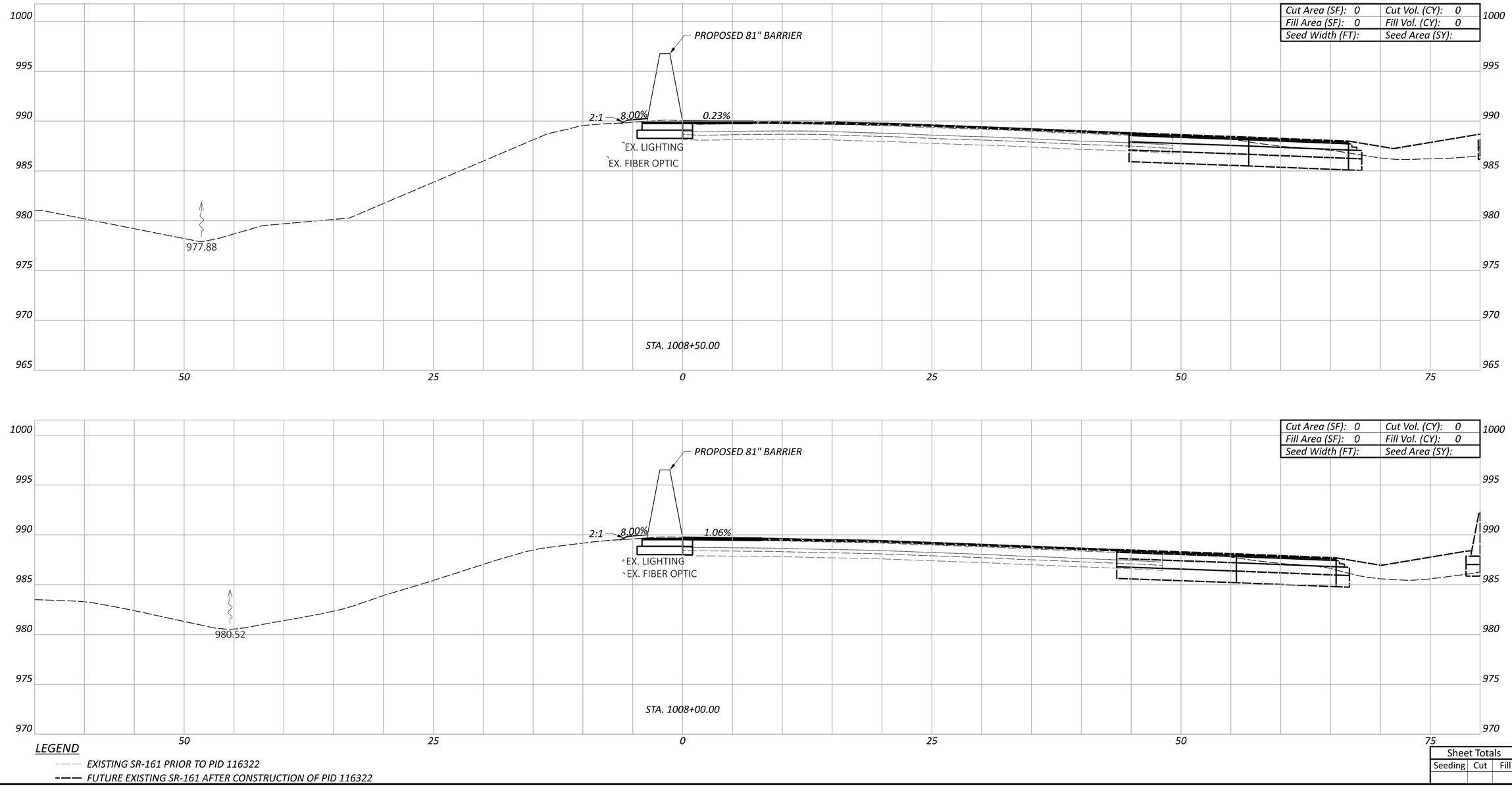
REVIEWER
JDH 01-22-24

PROJECT ID
117607

Sheet Totals

Seeding	Cut	Fill

SHEET P.127 TOTAL P.276



LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER11 - 1008+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:31:29 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_XS010.dgn

CROSS SECTIONS - 81" BARRIER 10
STA. 1008+00.00 TO STA. 1008+50.00

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

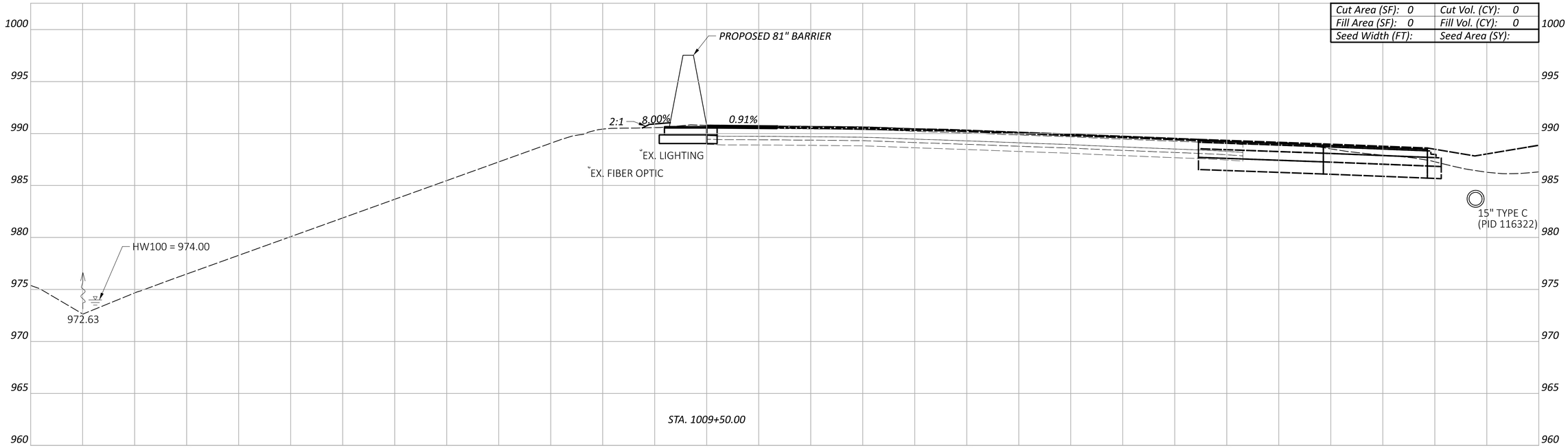
REVIEWER
JDH 01-22-24

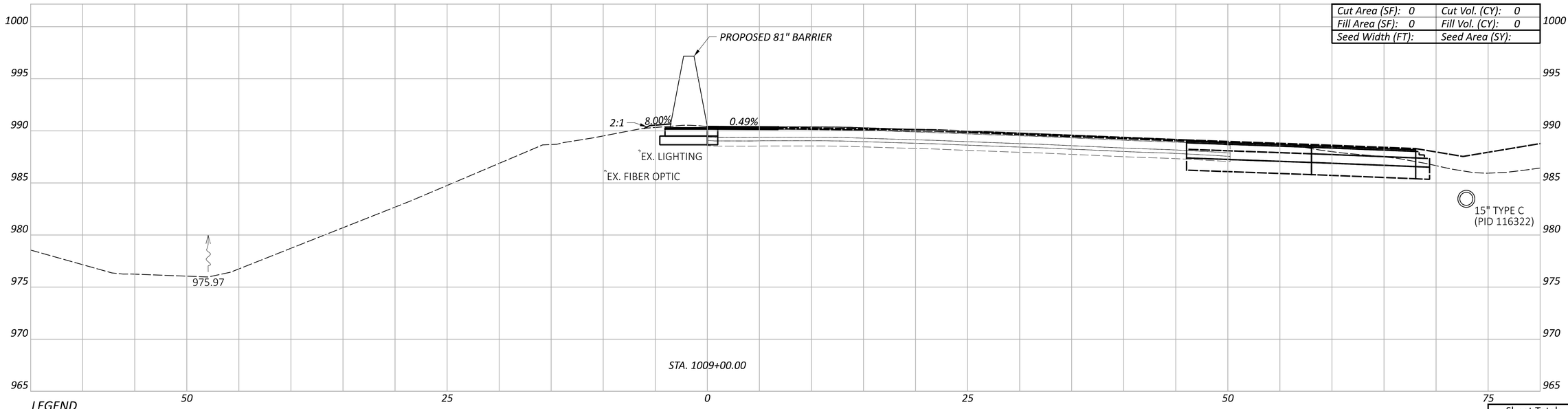
PROJECT ID
117607

Sheet Totals

Seeding	Cut	Fill

SHEET P.128 TOTAL P.276





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 WALLS

CROSS SECTIONS - 81" BARRIER 10
STA. 1009+00.00 TO STA. 1009+50.00

DESIGN AGENCY
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DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.129 TOTAL P.276

MODEL: BLP_BARRIER11 - 1009+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:31:47 PM USER: jennifer.kelley
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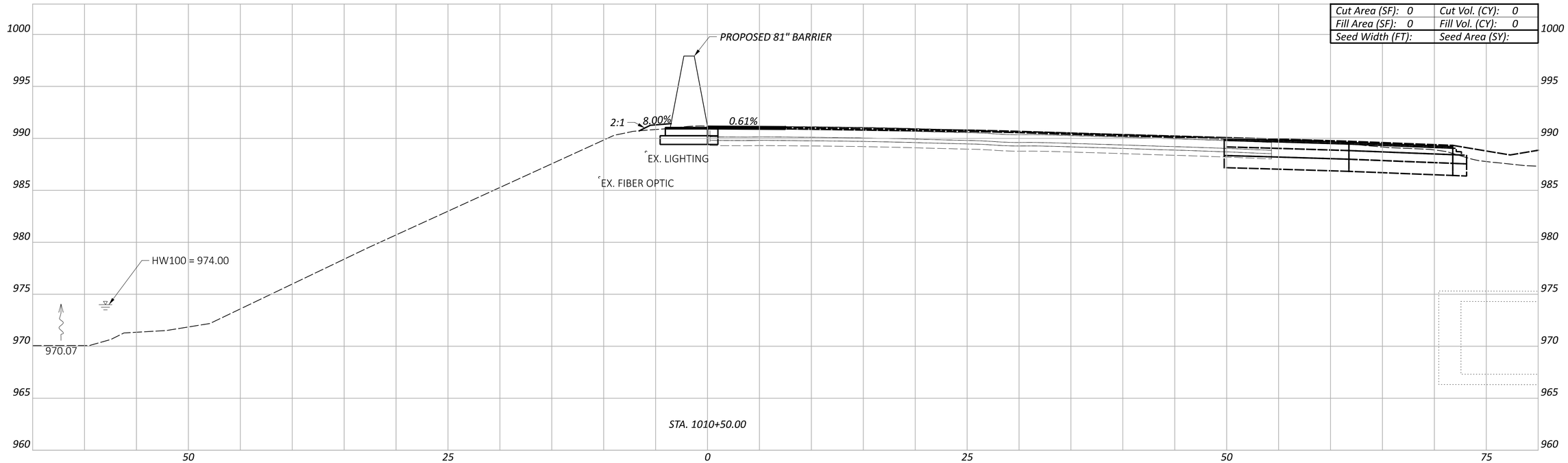

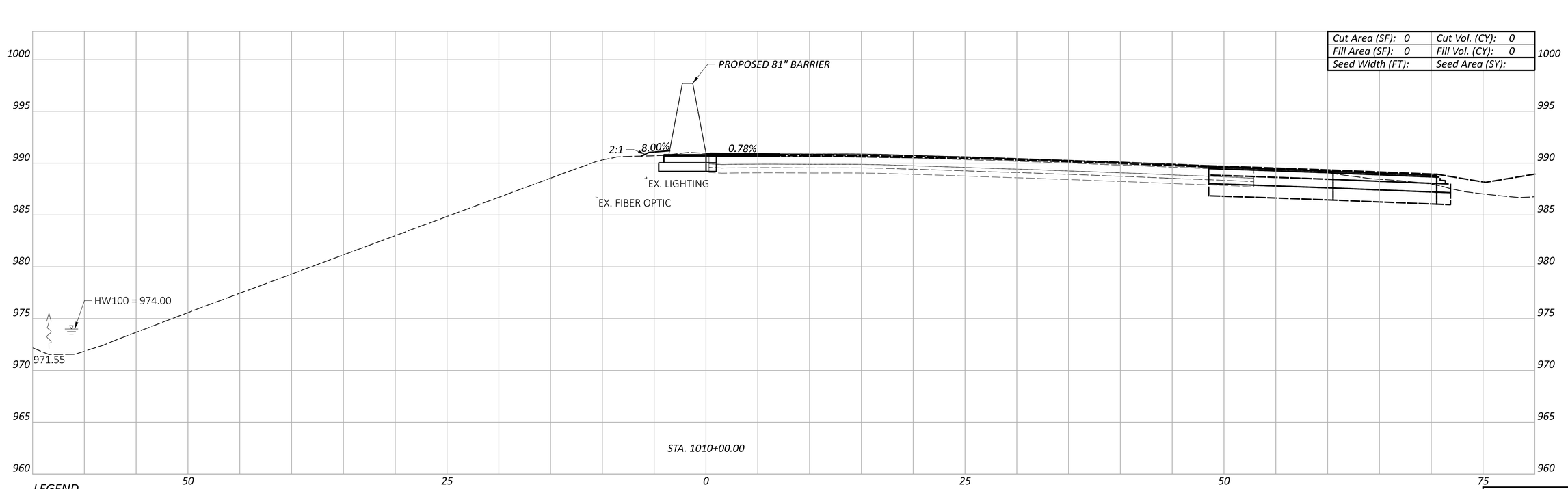

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

CROSS SECTIONS - 81" BARRIER 10
STA. 1010+00.00 TO STA. 1010+50.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER11 - 1010+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:32:00 PM USER: jennifer.kelley
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Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
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DESIGNER: JMK

REVIEWER: JDH 01-22-24

PROJECT ID: 117607

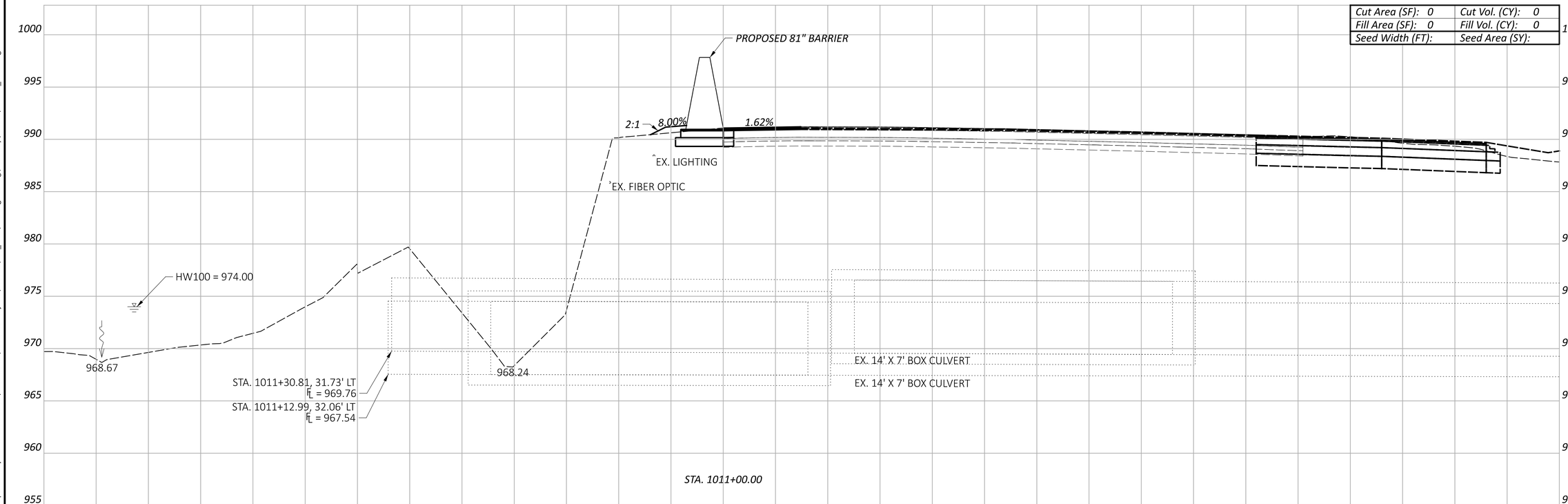
SHEET: P.130 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER11 - 1011+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:32:13 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_XS010.dgn

CROSS SECTIONS - 81" BARRIER 10
STA. 1011+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

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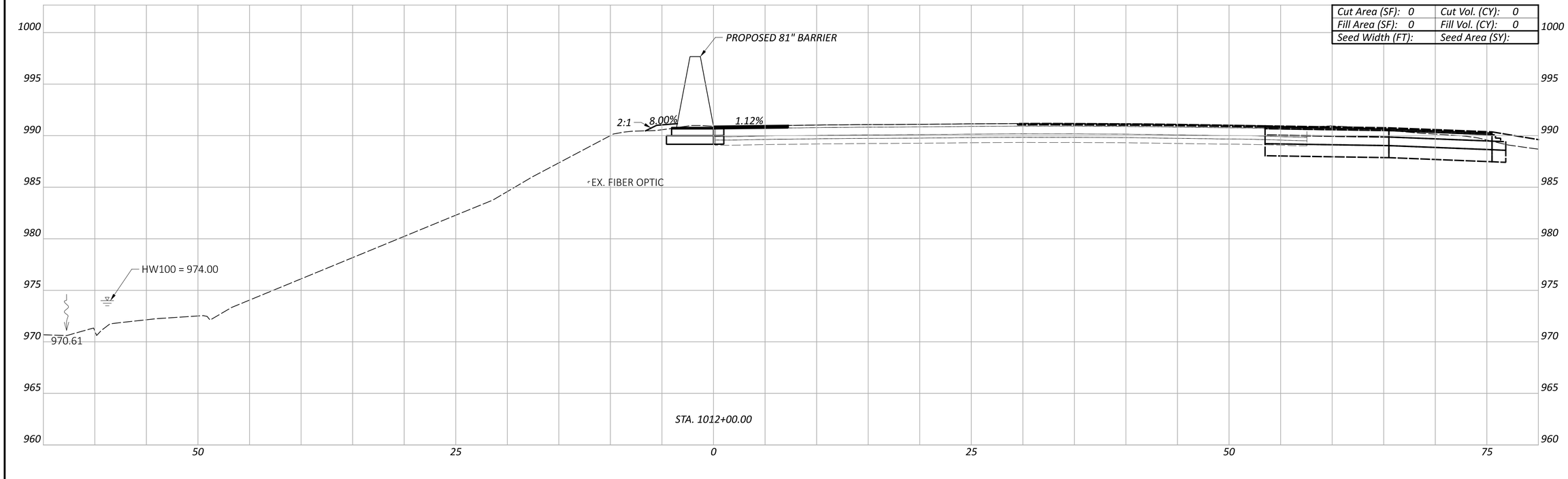
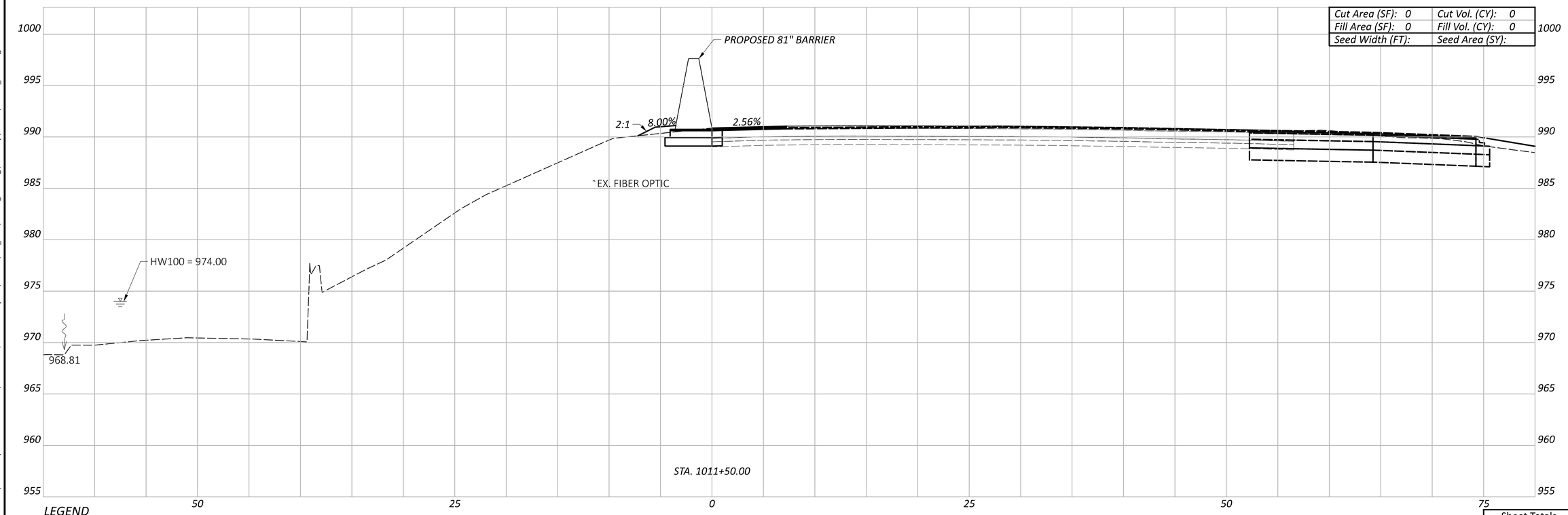
DESIGNER: JMK

REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.131 TOTAL: P.276





LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

CROSS SECTIONS - 81" BARRIER 10
STA. 1011+50.00 TO STA. 1012+00.00

Sheet Totals		
Seeding	Cut	Fill

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

REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.132 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER11 - 1011+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:32:22 PM USER: jennifer.kelley
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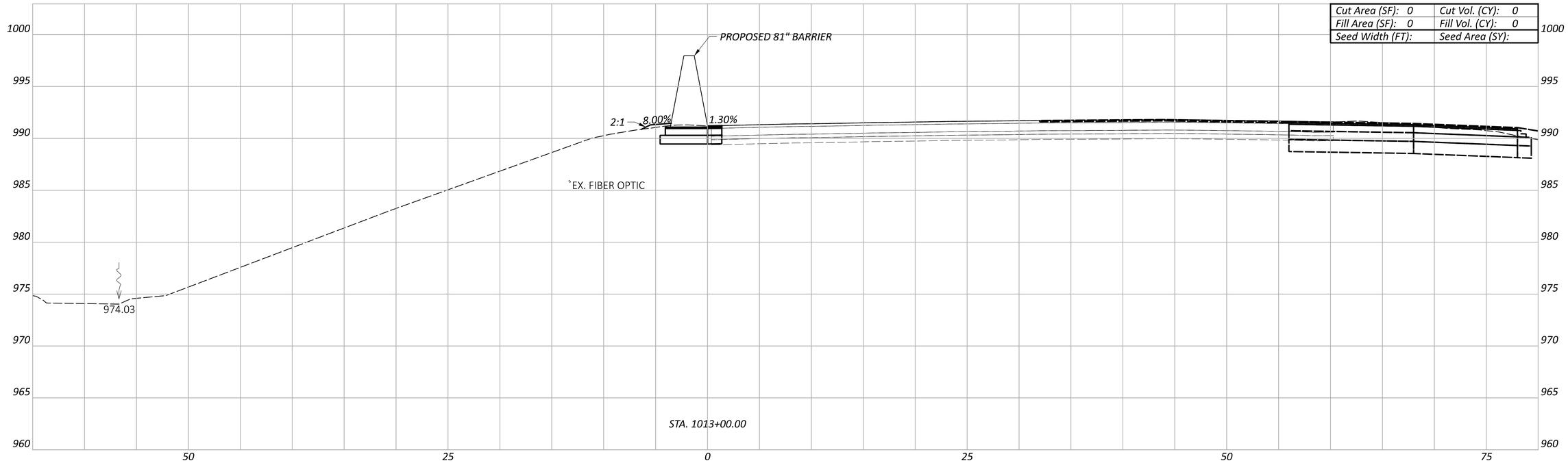

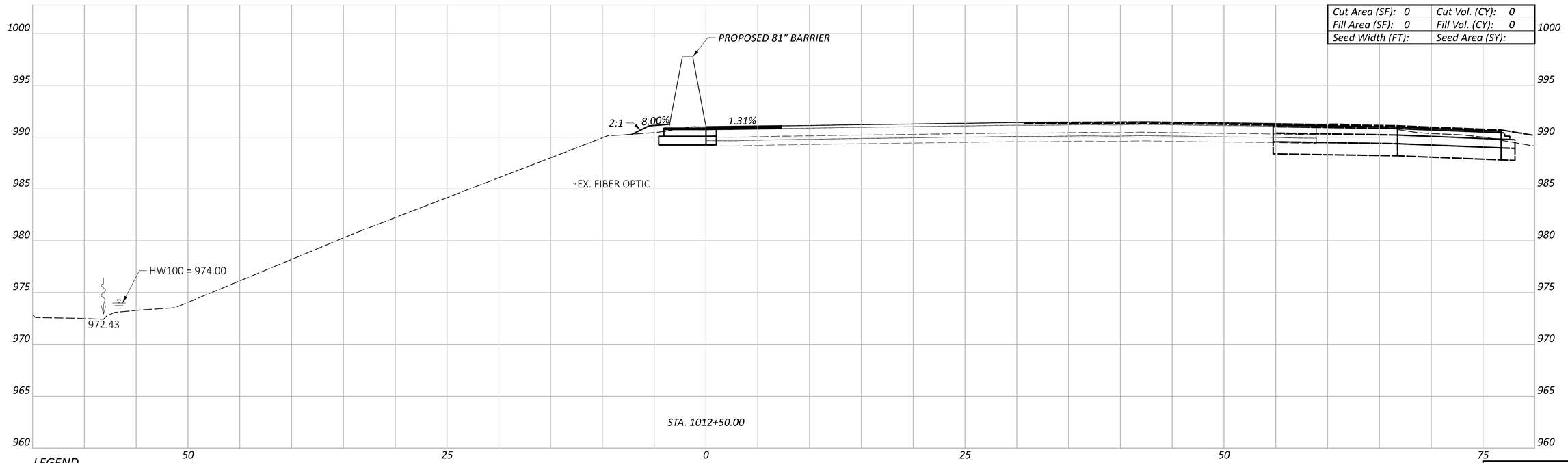

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

CROSS SECTIONS - 81" BARRIER 10
STA. 1012+50.00 TO STA. 1013+00.00

Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4500
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DESIGNER: JMK

REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.133 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER11 - 1012+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:32:36 PM USER: jennifer.kelley
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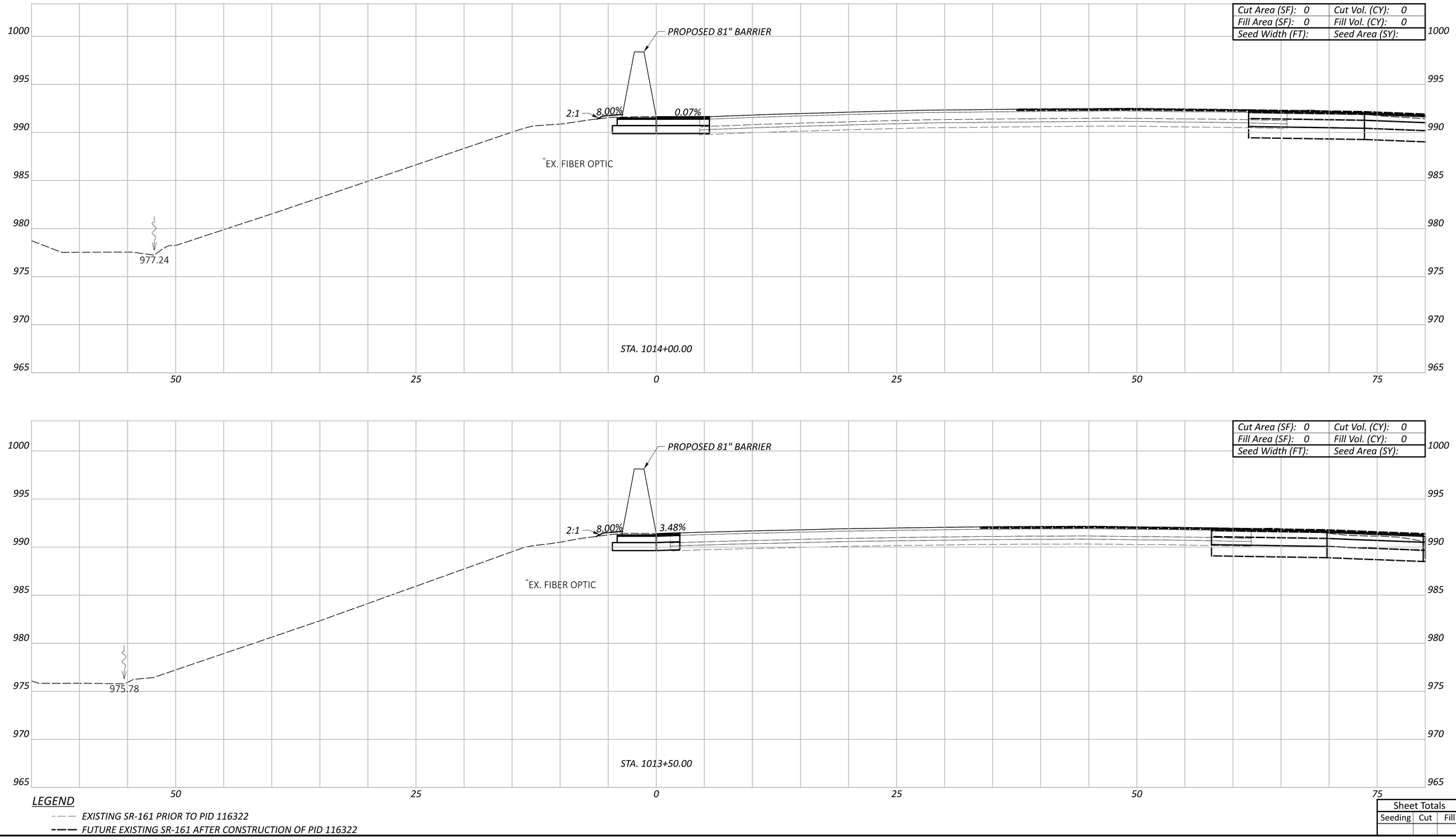

CROSS SECTIONS - 81" BARRIER 10
STA. 1013+50.00 TO STA. 1014+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER11 - 1013+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:32:51 PM USER: jennifer.kelley
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Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY
ARCADIS
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COLUMBUS, OHIO 43235
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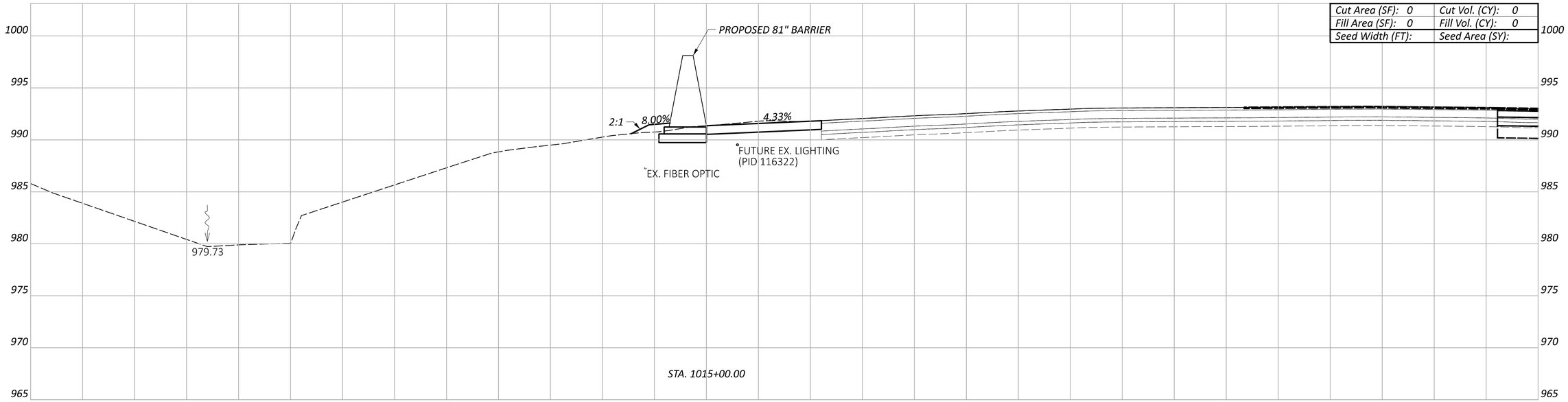
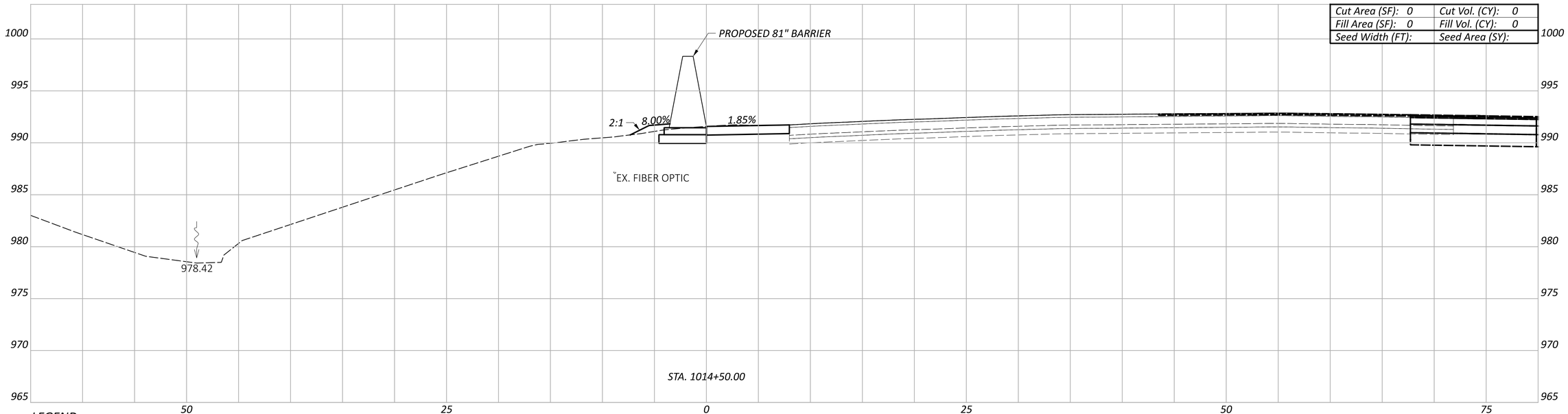
DESIGNER
JMK

REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET P.134 | TOTAL P.276





LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

CROSS SECTIONS - 81" BARRIER 10
STA. 1014+50.00 TO STA. 1015+00.00

Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4500
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DESIGNER: JMK

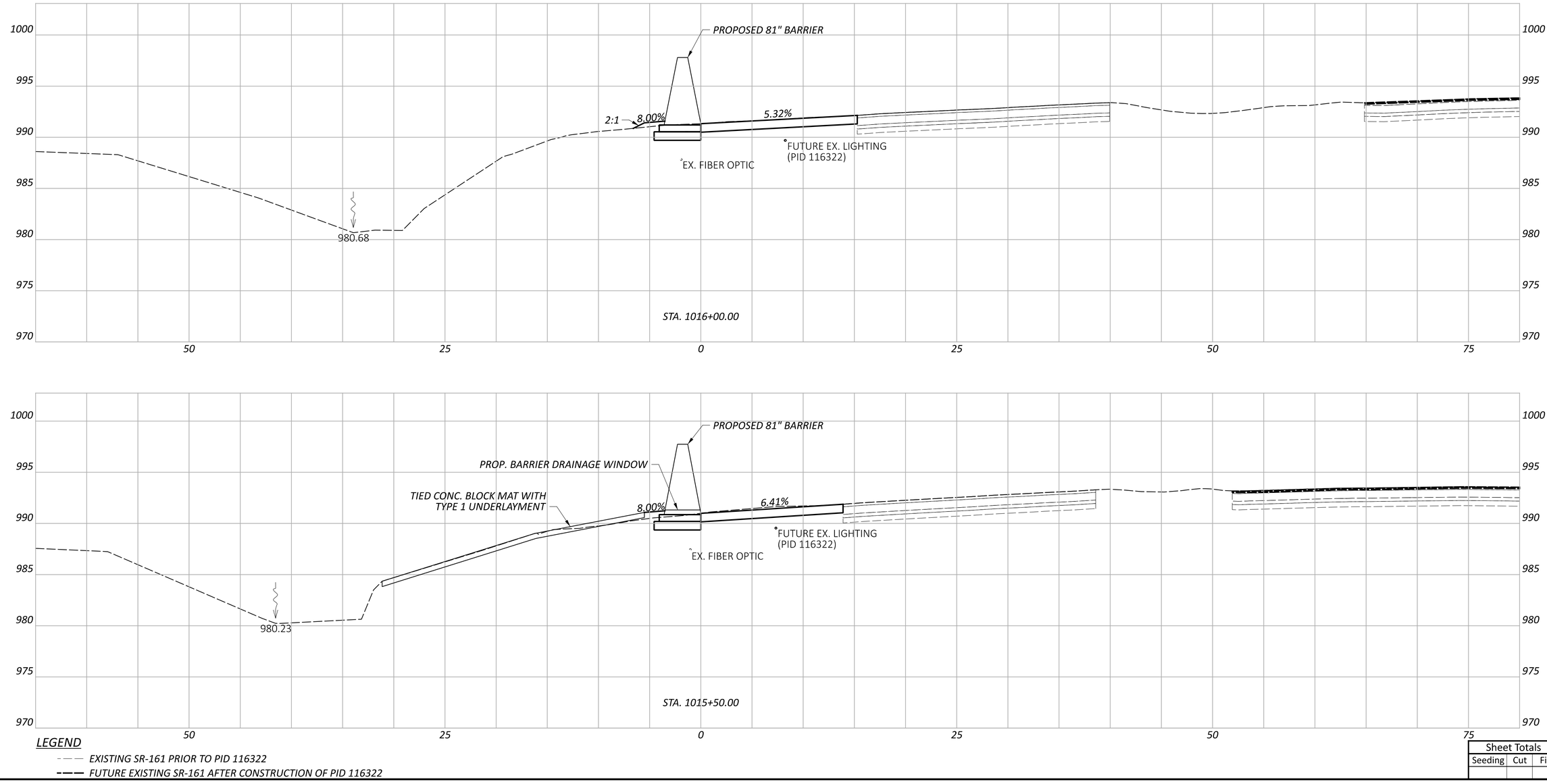
REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.135 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER11 - 1014+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:33:05 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_XS010.dgn



LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER11 - 1015+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:33:24 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_XS010.dgn

CROSS SECTIONS - 81" BARRIER 10
STA. 1015+50.00 TO STA. 1016+00.00

Sheet Totals		
Seeding	Cut	Fill

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

REVIEWER: JDH 01-22-24

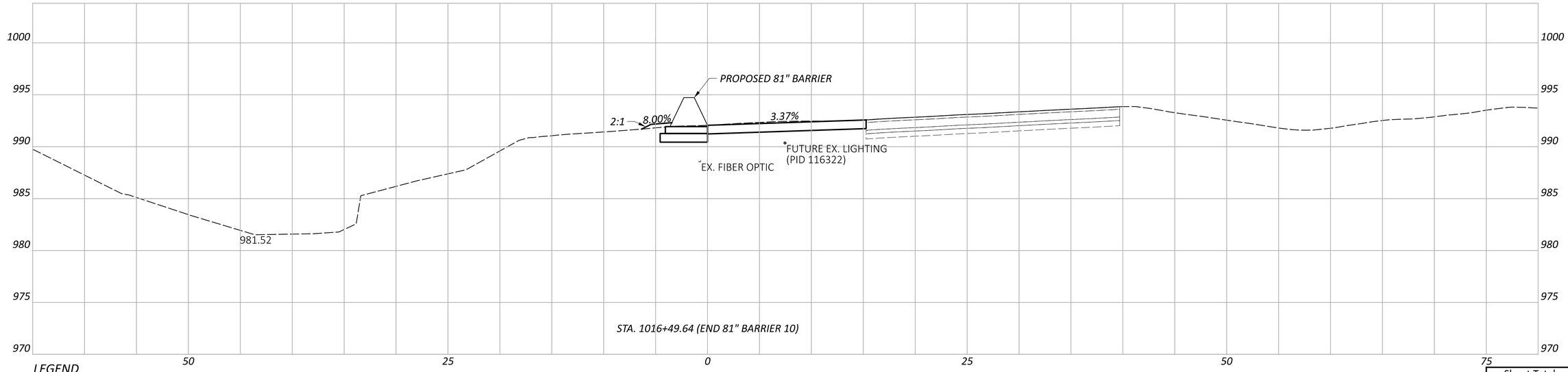
PROJECT ID: 117607

SHEET: P.136 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER11 - 1016+49.64 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:33:44 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_XS010.dgn

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

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 847-4800
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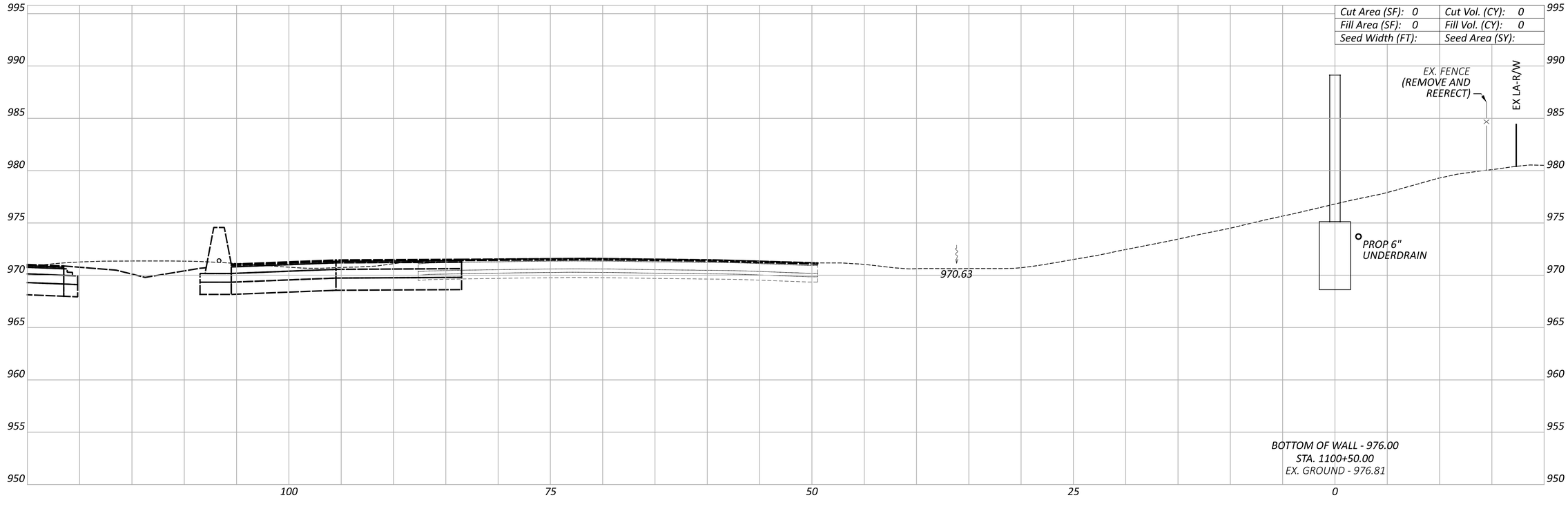
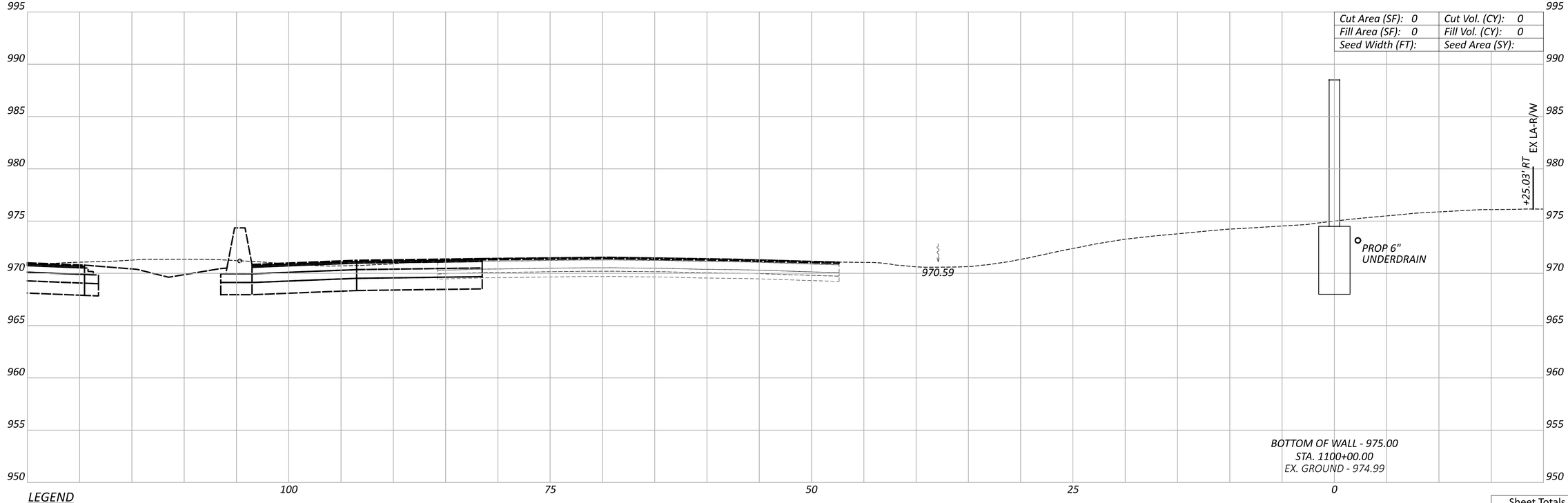
DESIGNER
JMK

REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET	TOTAL
P.137	P.276





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 WALLS

MODEL: 1100+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 11:57:29 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

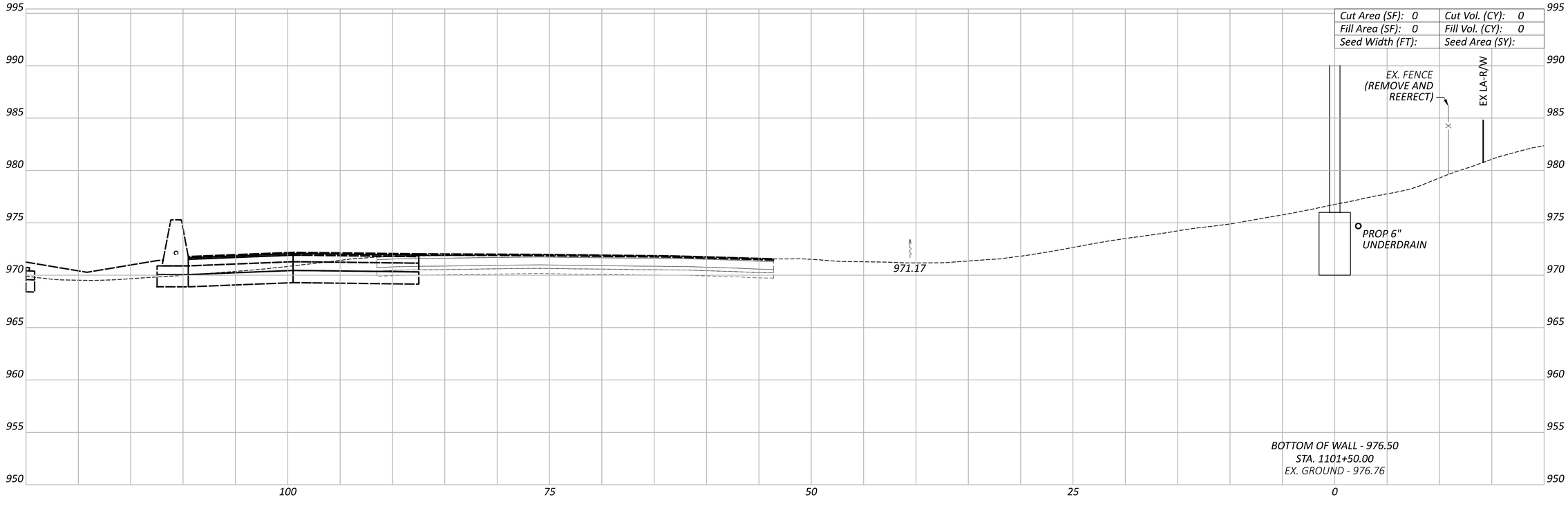
DESIGN AGENCY
BG
www.bgeng group.com
5960 WILCOX PLACE, SUITE C
DUBLIN, OHIO 43016

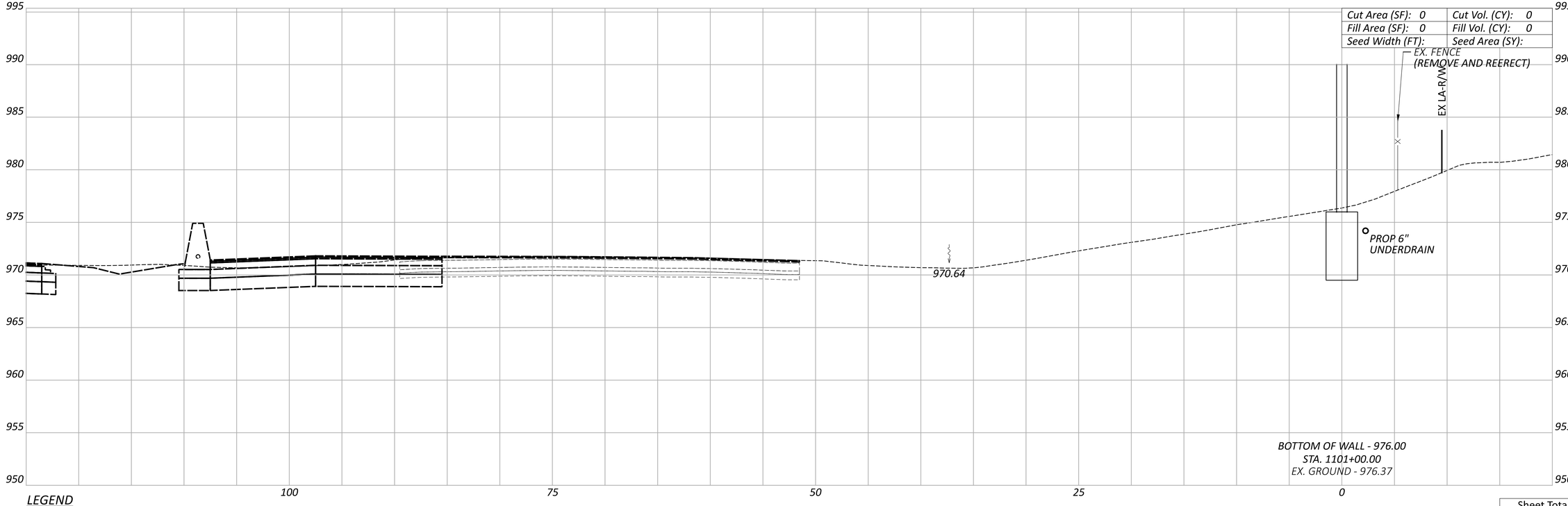
DESIGNER
JEP

REVIEWER
RG 01-22-24

PROJECT ID
117607

SHEET	TOTAL
P.138	P.276





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

Sheet Totals		
Seeding	Cut	Fill

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REVIEWER RG 01-22-24

PROJECT ID 117607

SHEET P.139 TOTAL P.276

FRA-161-15.80 NOISE WALLS

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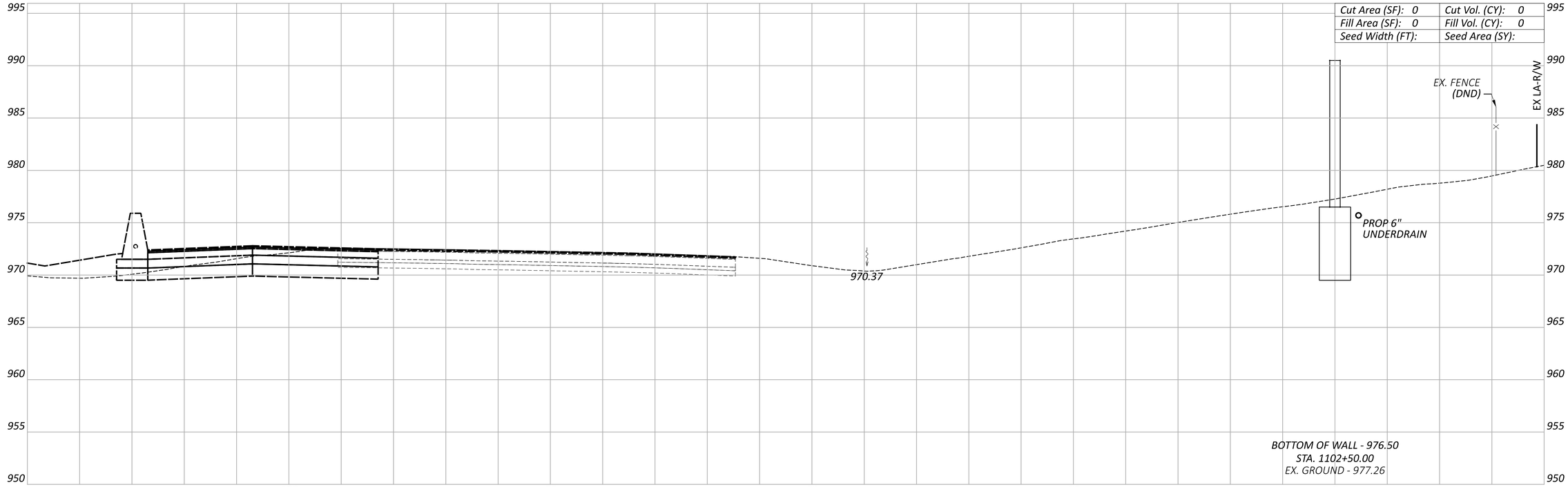

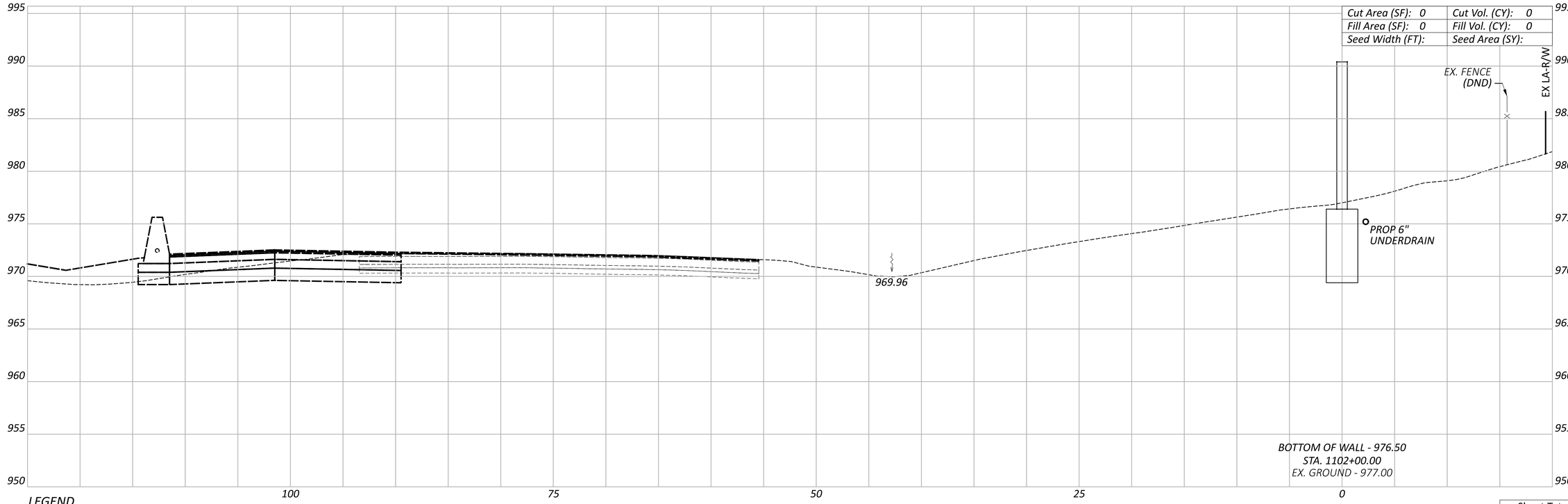

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

CROSS SECTIONS - WALL 11
STA. 1102+00.00 TO STA. 1102+50.00

FRA-161-15.80 NOISE WALLS

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Sheet Totals		
Seeding	Cut	Fill

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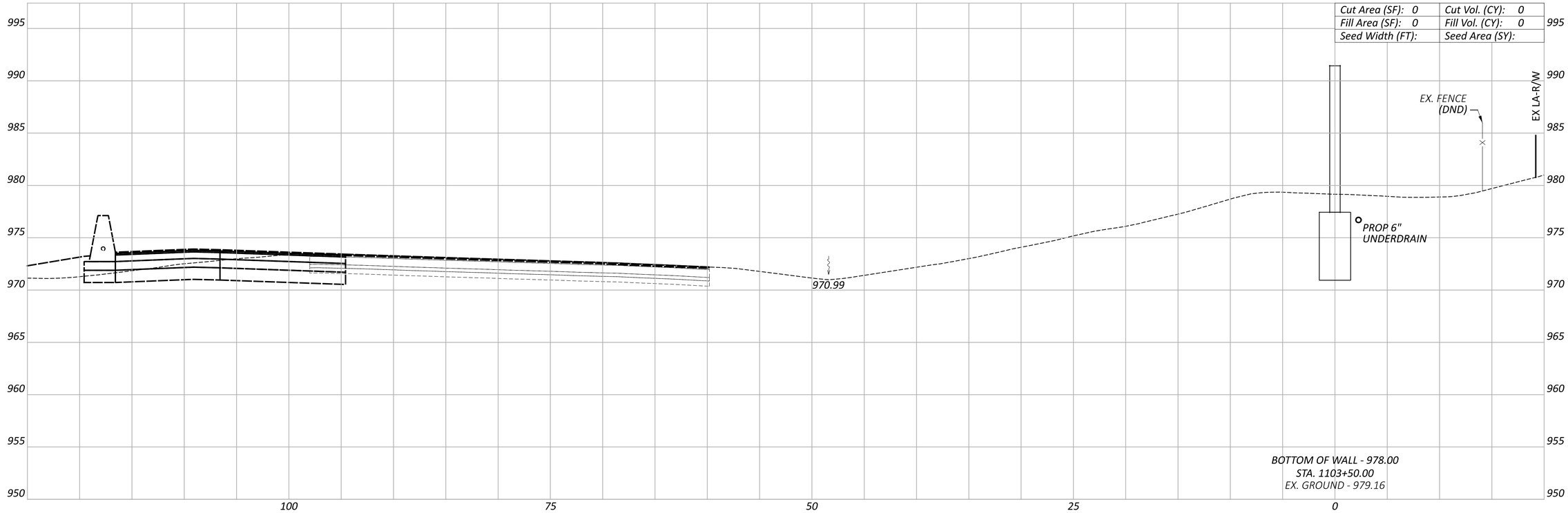
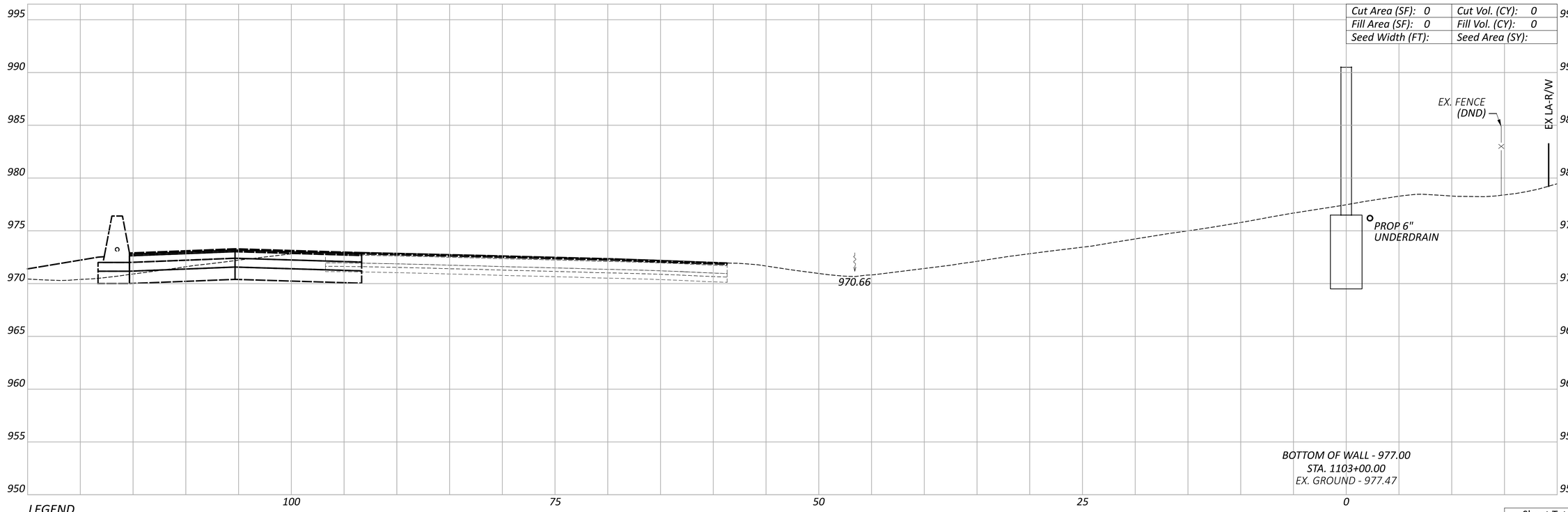
SHEET	TOTAL
P.140	P.276





LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

CROSS SECTIONS - WALL 11
STA. 1103+00.00 TO STA. 1103+50.00

FRA-161-15.80 NOISE WALLS

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Sheet Totals		
Seeding	Cut	Fill

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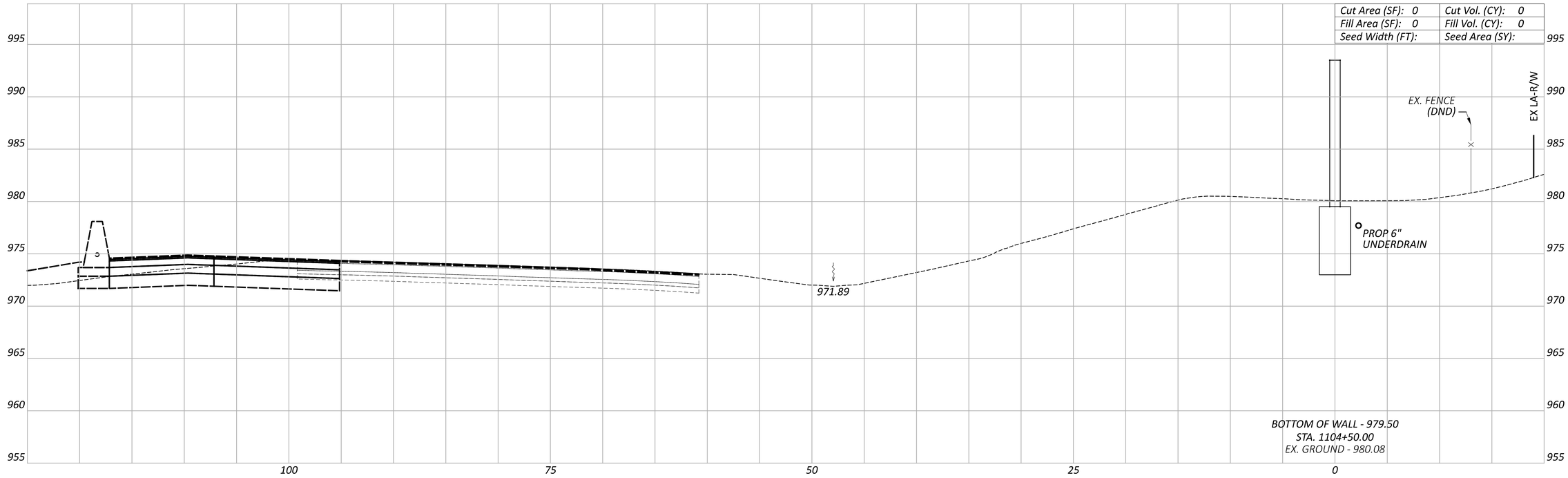
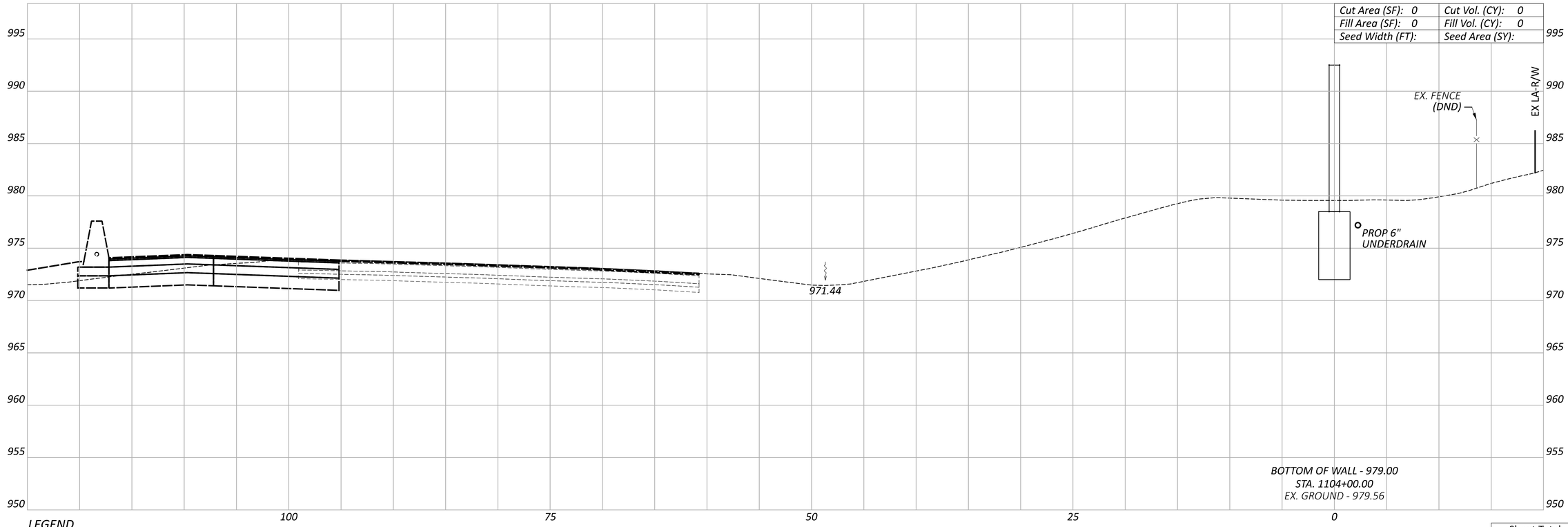
PROJECT ID 117607

SHEET P.141 TOTAL P.276





LEGEND

——— EXISTING SR-161 PRIOR TO PID 116322

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

FRA-161-15.80 NOISE WALLS

CROSS SECTIONS - WALL 11
STA. 1104+00.00 TO STA. 1104+50.00

Sheet Totals		
Seeding	Cut	Fill

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PROJECT ID 117607

SHEET P.142 TOTAL P.276

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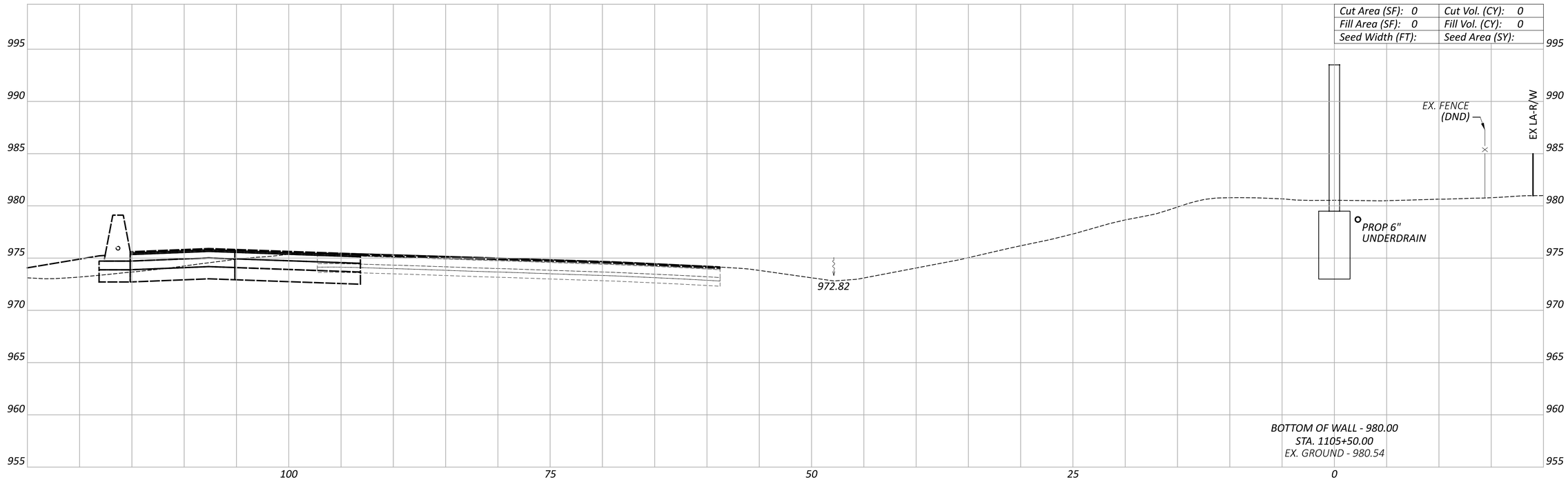

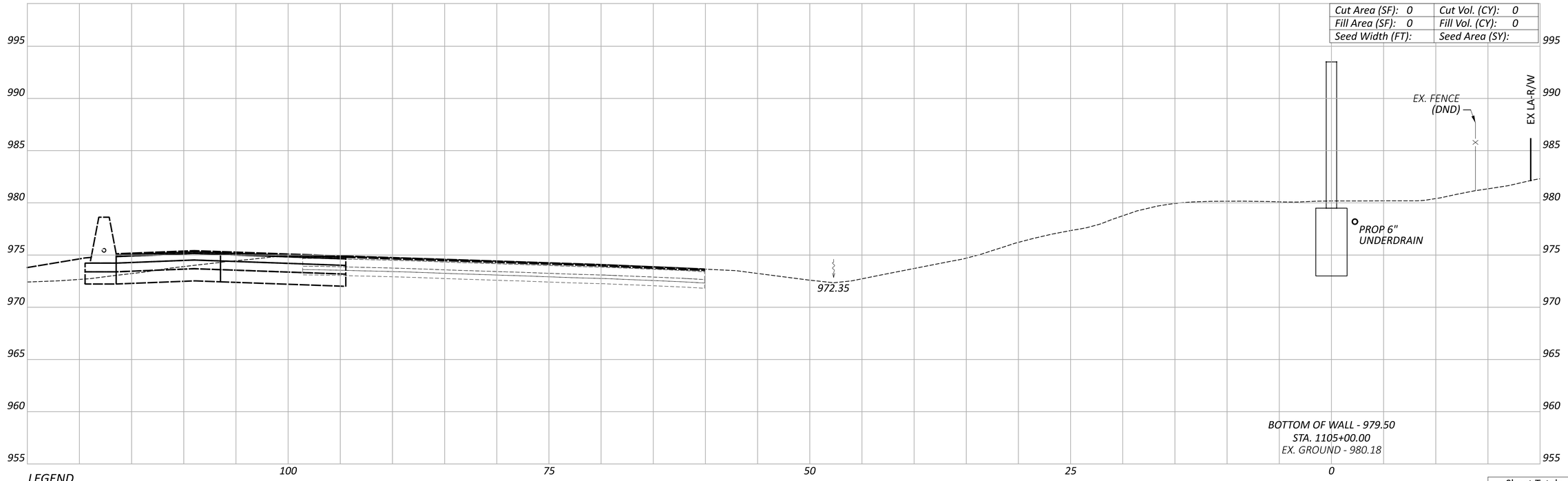

CROSS SECTIONS - WALL 11
STA. 1105+00.00 TO STA. 1105+50.00

FRA-161-15.80 NOISE WALLS

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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

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PROJECT ID
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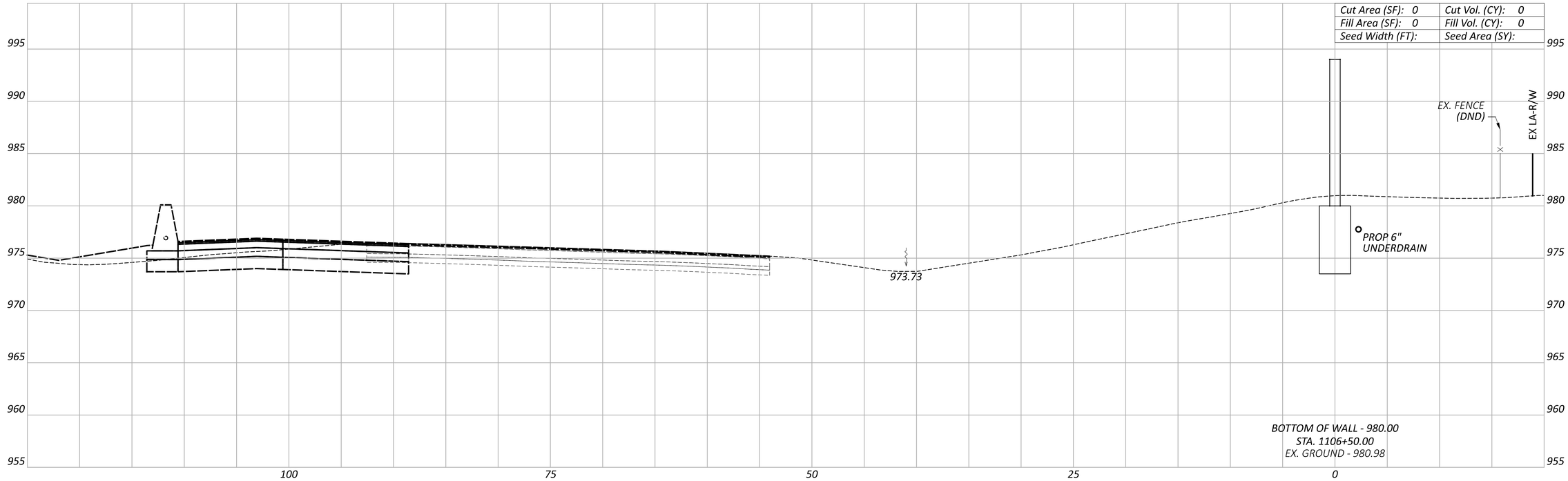
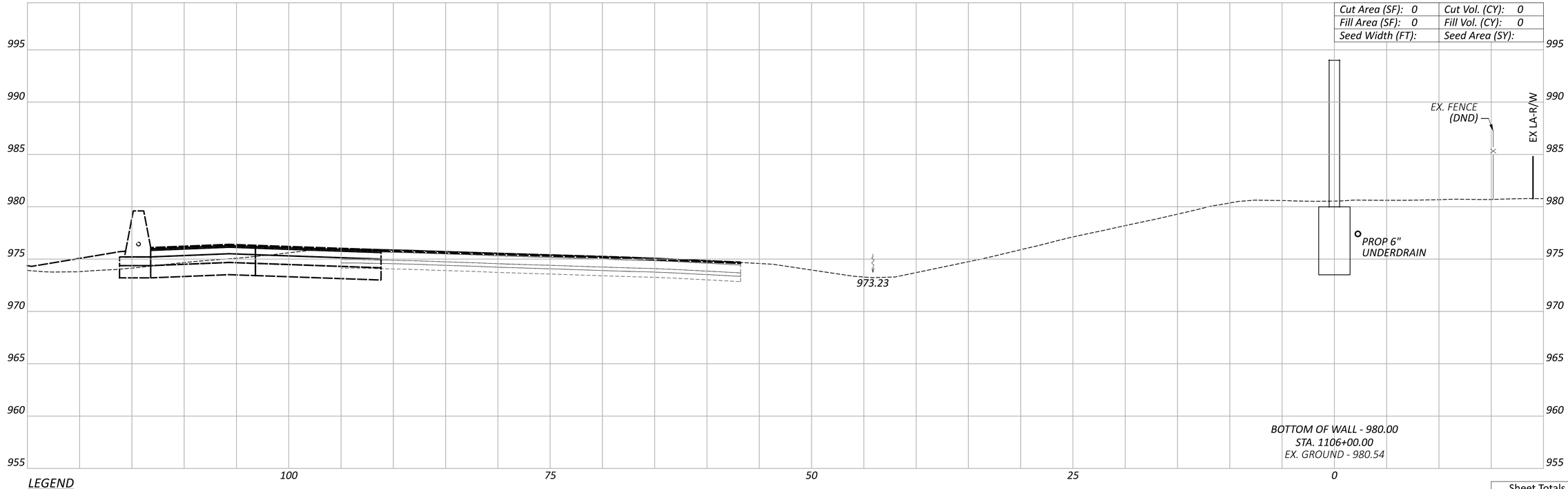
SHEET	TOTAL
P.143	P.276





LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

FRA-161-15.80 NOISE WALLS

CROSS SECTIONS - WALL 11
STA. 1106+00.00 TO STA. 1106+50.00

Sheet Totals		
Seeding	Cut	Fill

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SHEET P.144 TOTAL P.276

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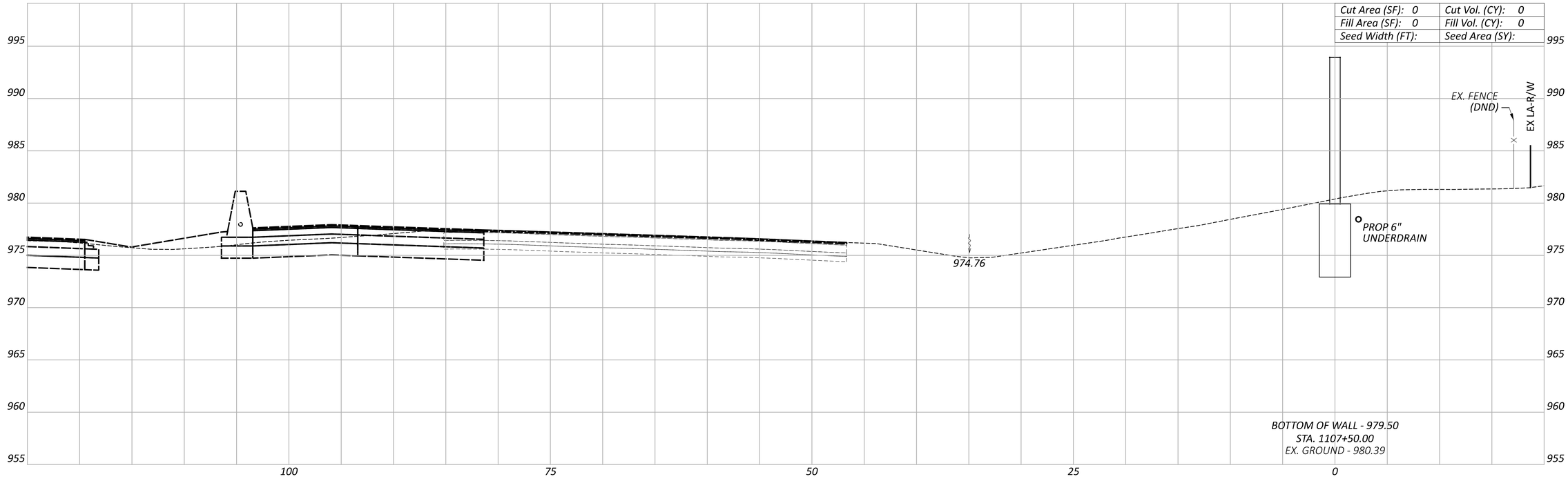

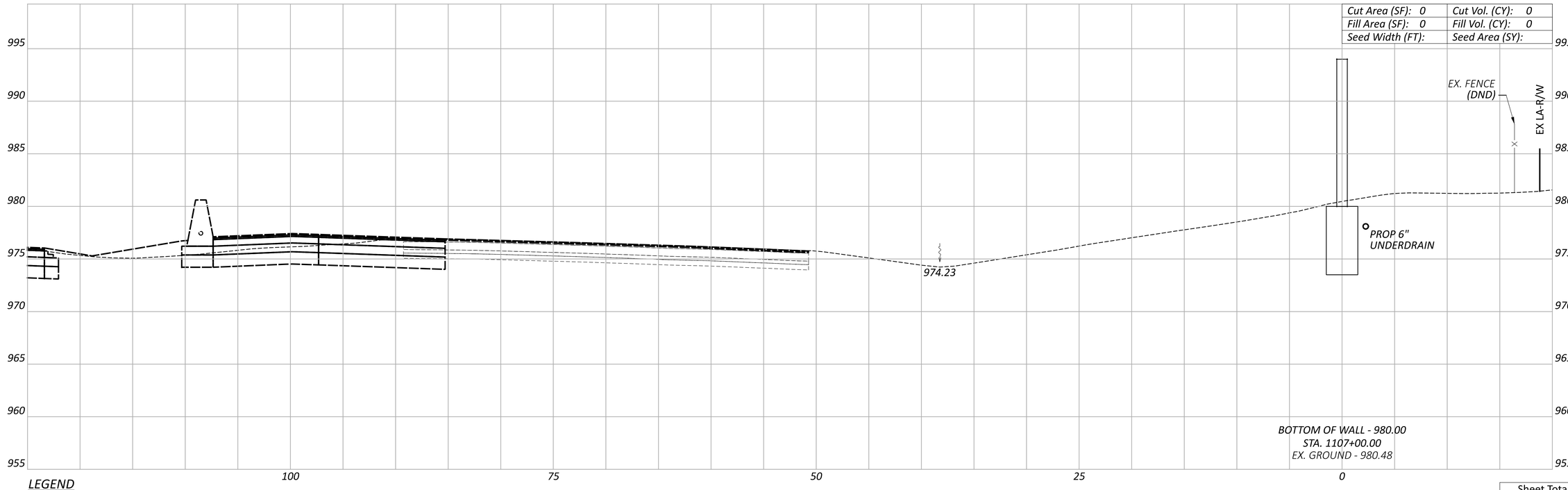

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals		
Seeding	Cut	Fill

CROSS SECTIONS - WALL 11
STA. 1107+00.00 TO STA. 1107+50.00

FRA-161-15.80 NOISE WALLS

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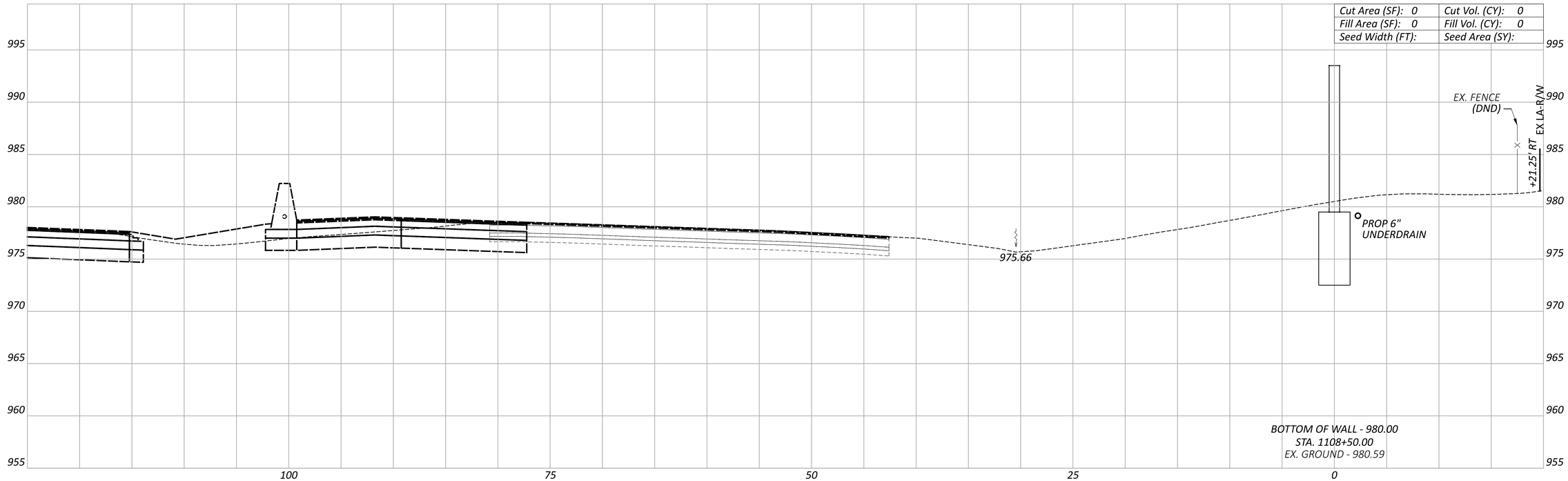
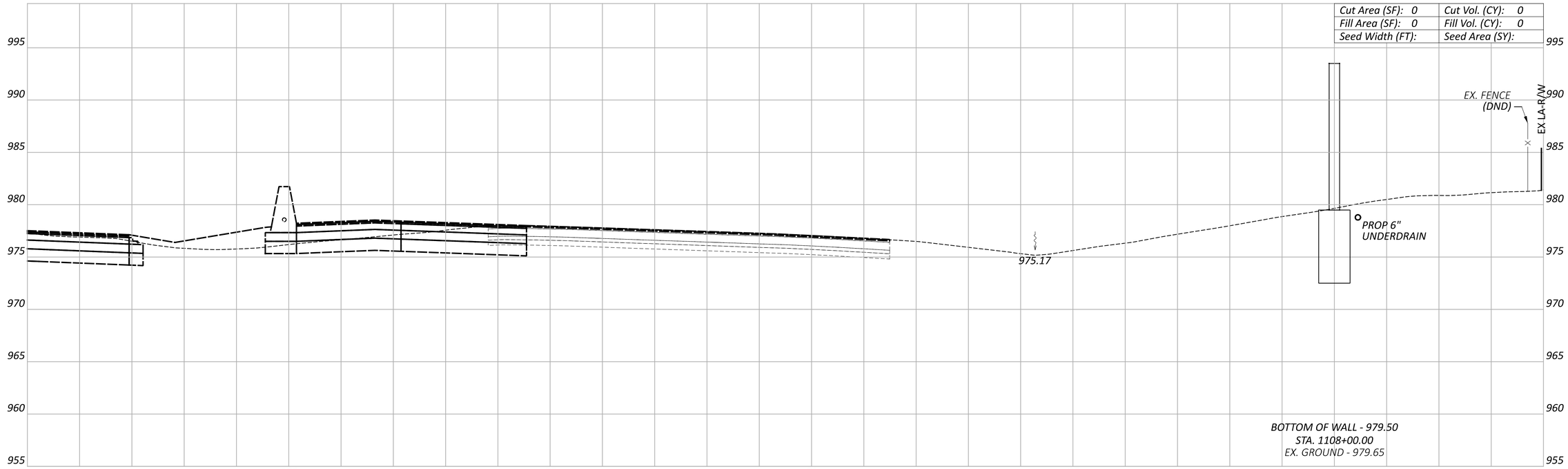
SHEET	TOTAL
P.145	P.276





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 WALLS

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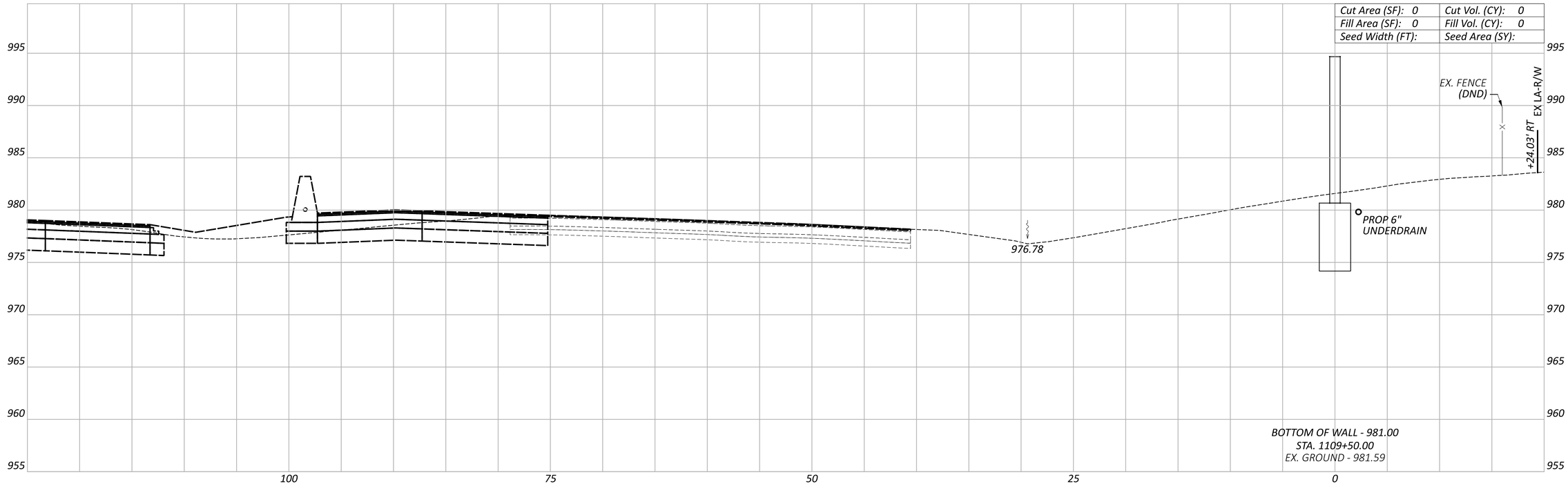
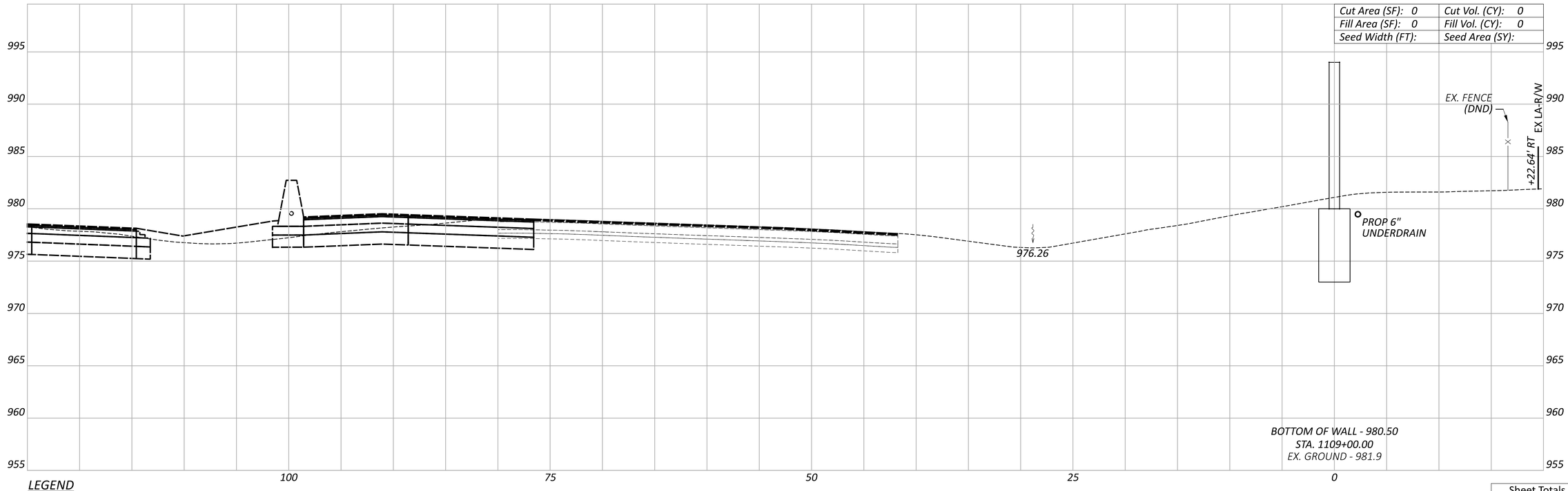
SHEET	TOTAL
P.146	P.276





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 WALLS

CROSS SECTIONS - WALL 11
STA. 1109+00.00 TO STA. 1109+50.00

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PROJECT ID 117607

SHEET P.147 TOTAL P.276

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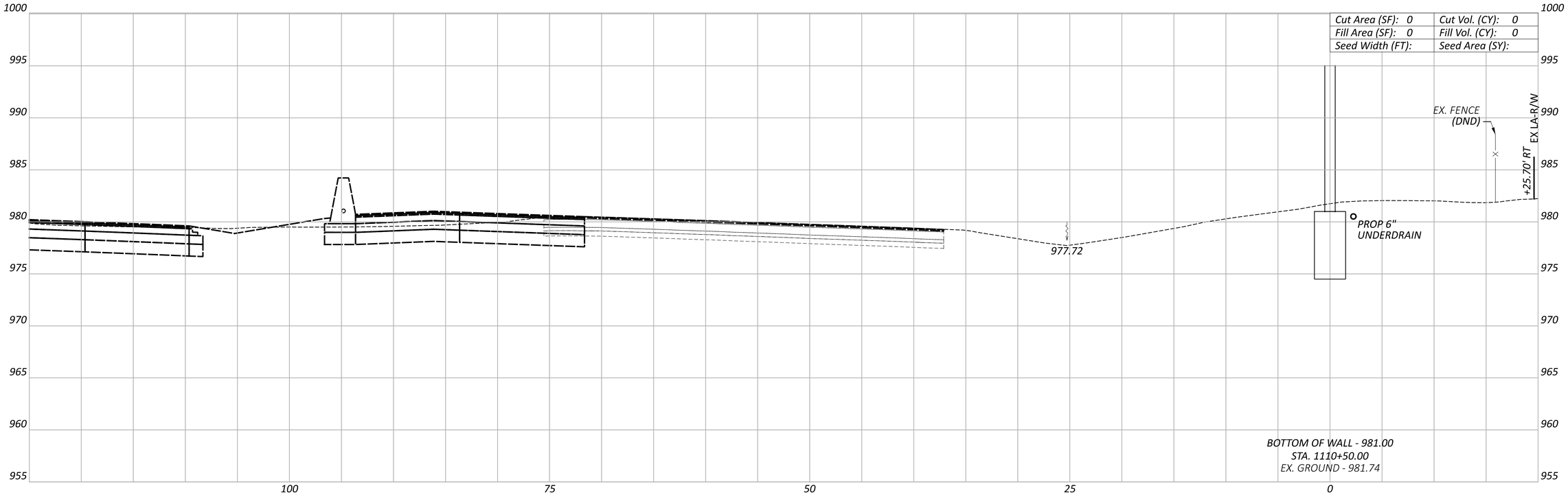

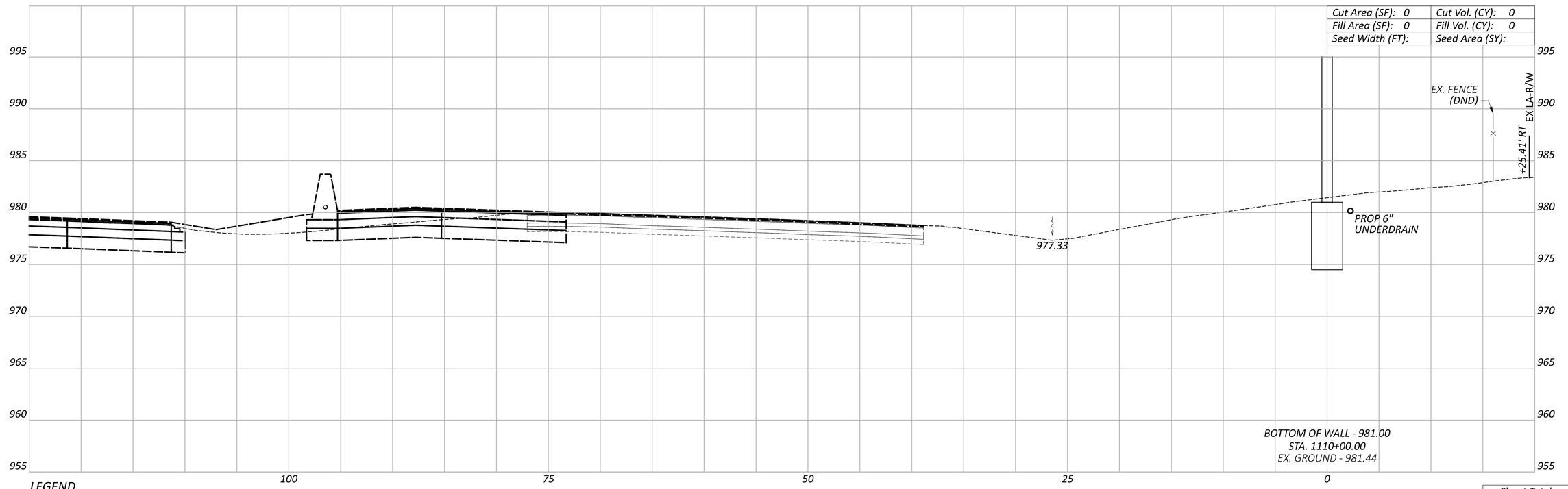

LEGEND

——— 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 WALLS

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CROSS SECTIONS - WALL 11
STA. 1110+00.00 TO STA. 1110+50.00

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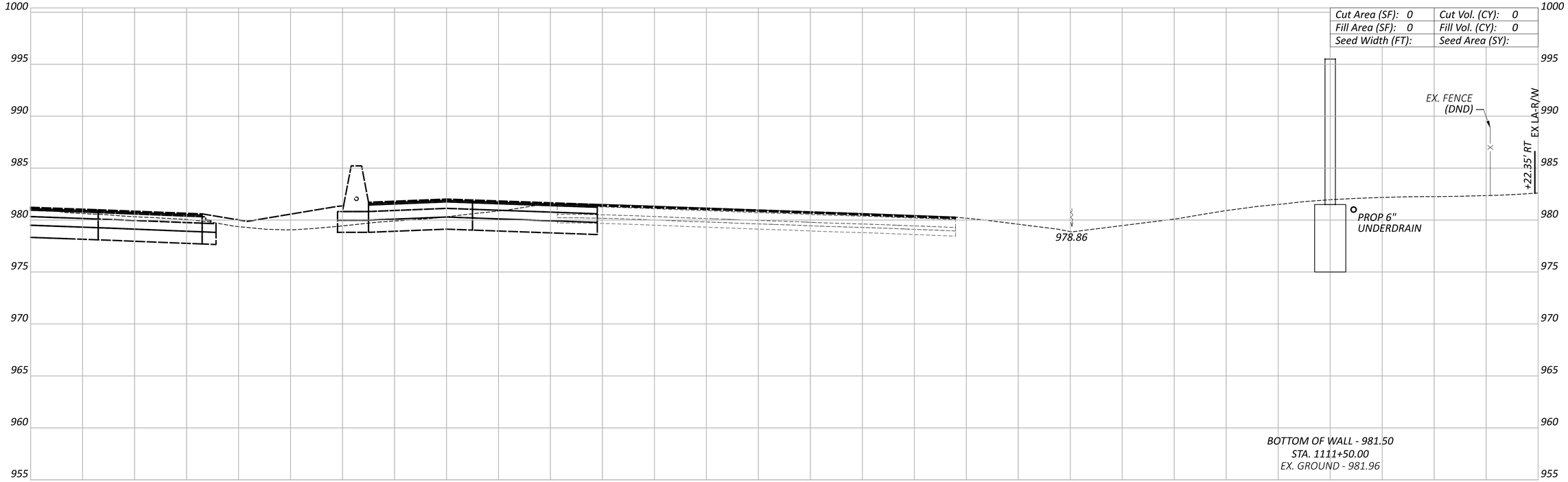
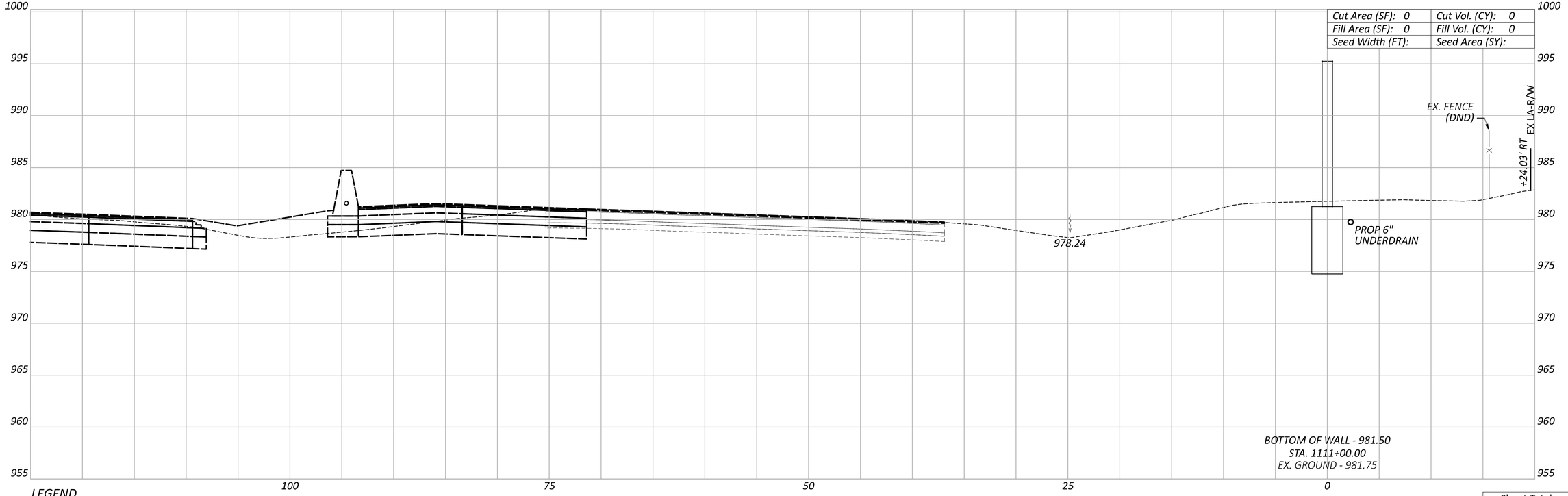
PROJECT ID 117607

SHEET	TOTAL
P.148	P.276





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 WALLS

MODEL: 1111+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 11:59:05 AM USER: JPerchinske
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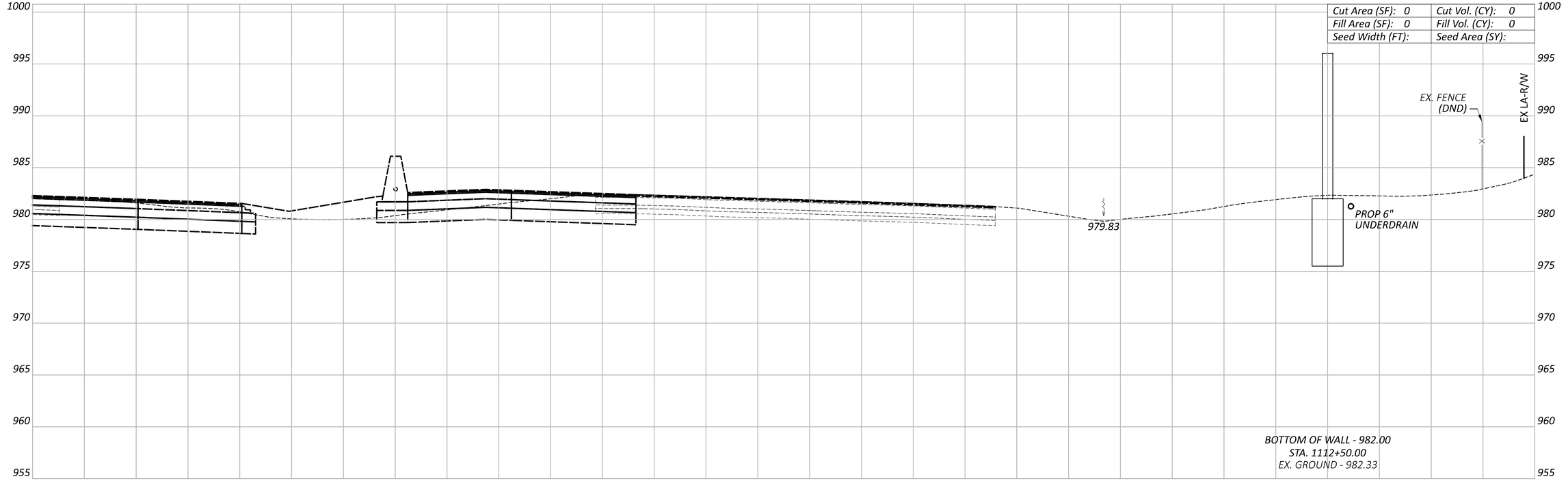
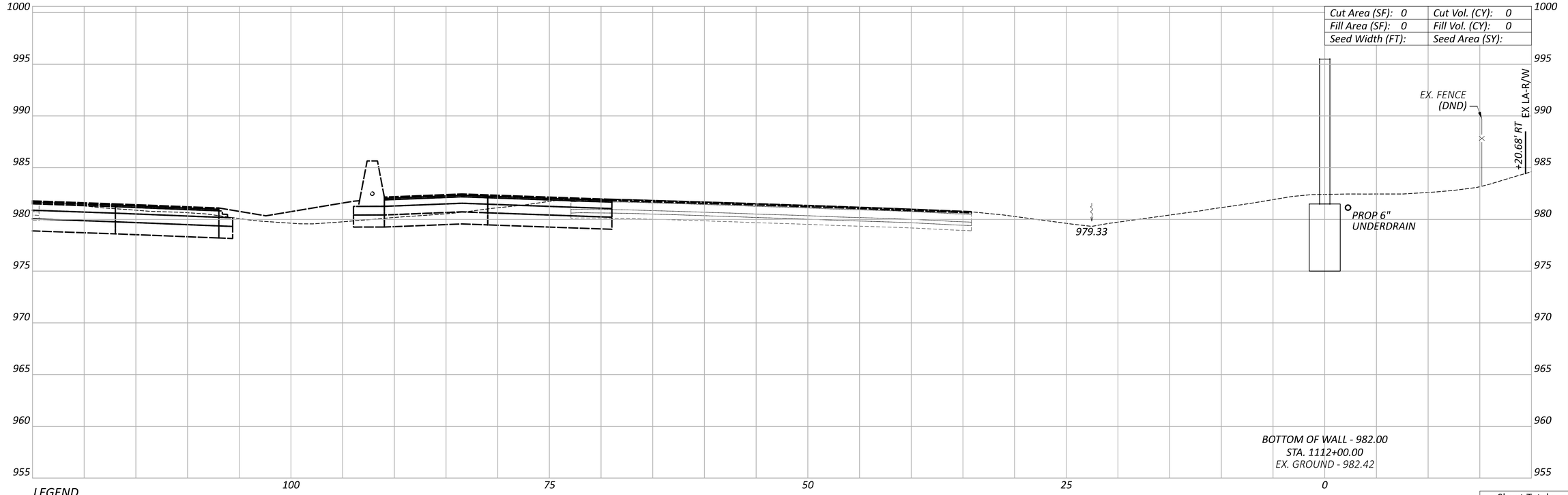
PROJECT ID 117607

SHEET	TOTAL
P.149	P.276





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. 1112+00.00 TO STA. 1112+50.00

FRA-161-15.80 NOISE WALLS

MODEL: 1112+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 11:59:14 AM USER: JPerchinske
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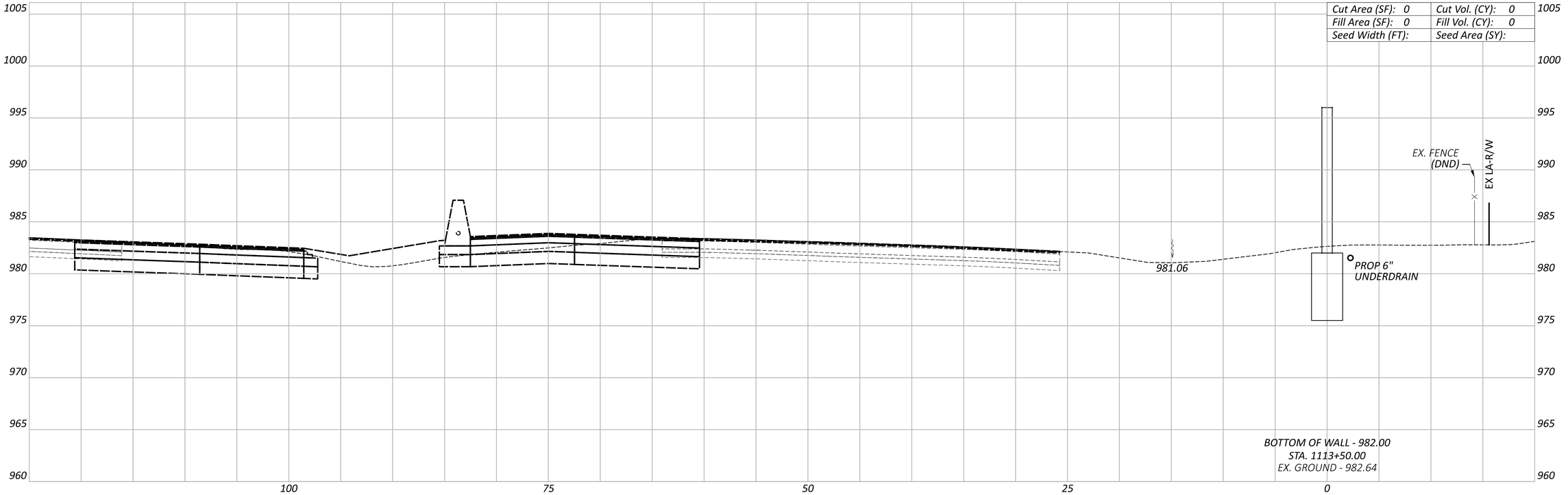
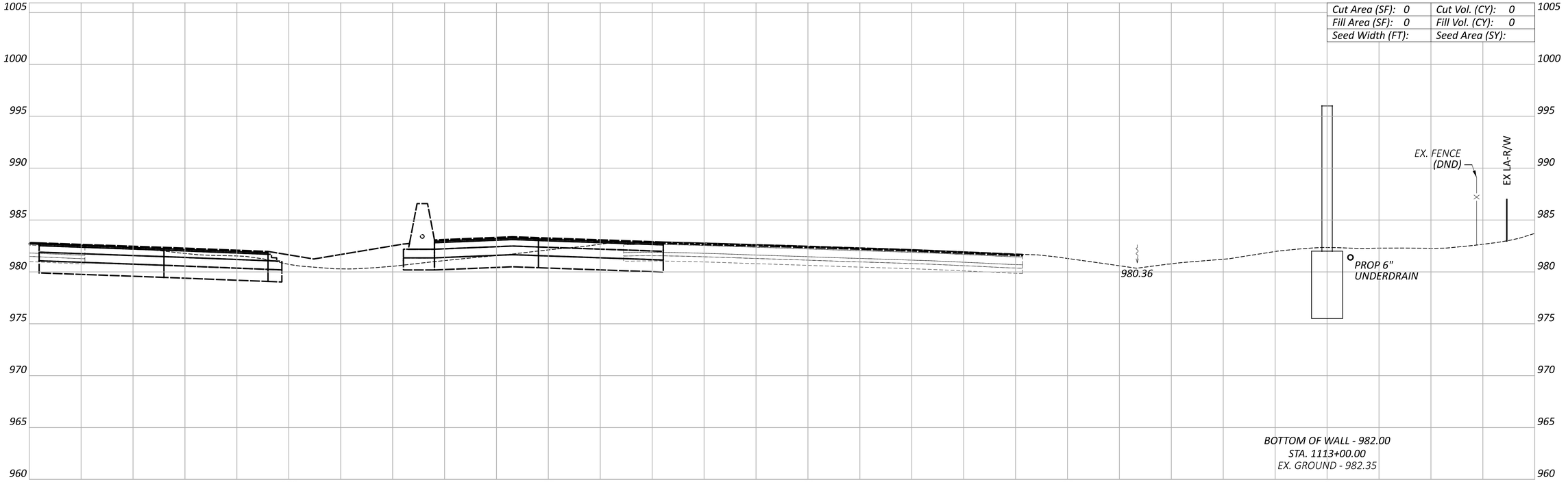
PROJECT ID 117607

SHEET	TOTAL
P.150	P.276





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 WALLS

CROSS SECTIONS - WALL 11
STA. 1113+00.00 TO STA. 1113+50.00

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SHEET	TOTAL
P.151	P.276

MODEL: 1113+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 11:59:23 AM USER: JPerchinske
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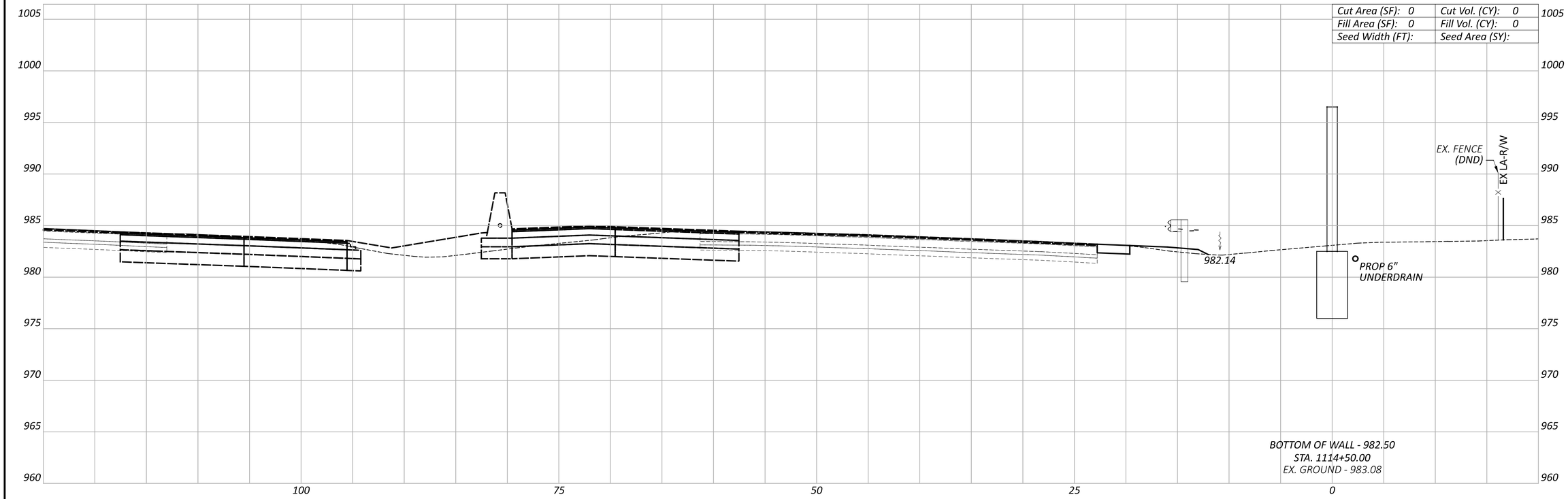

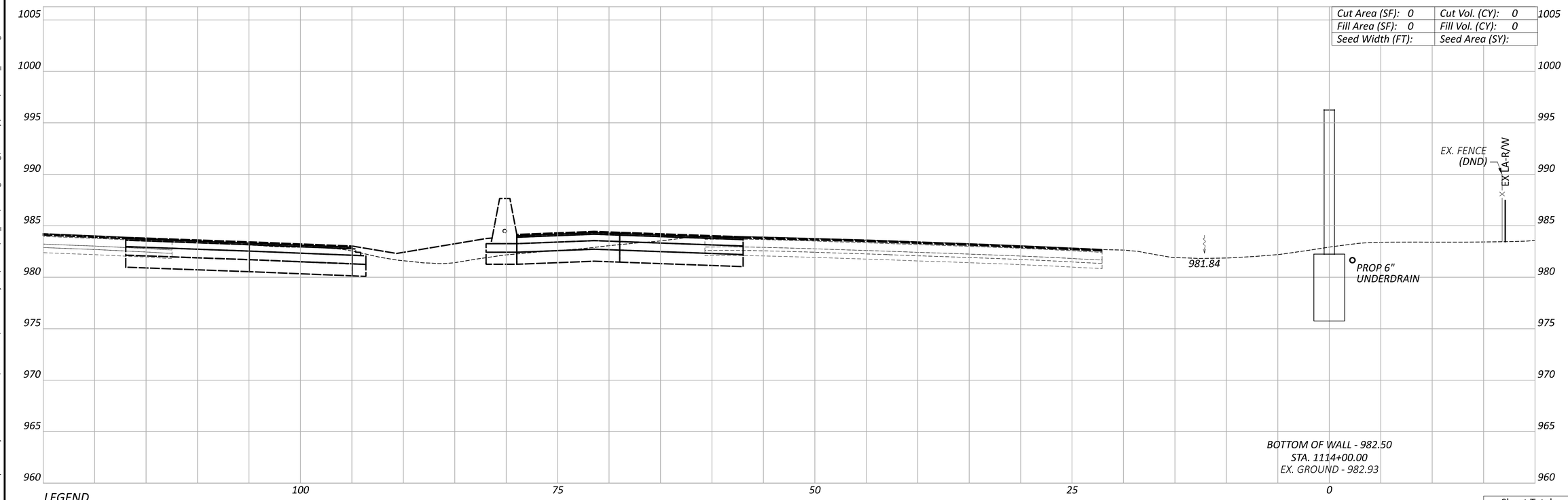

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

FRA-161-15.80 NOISE WALLS

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CROSS SECTIONS - WALL 11
STA. 1114+00.00 TO STA. 1114+50.00

Sheet Totals		
Seeding	Cut	Fill

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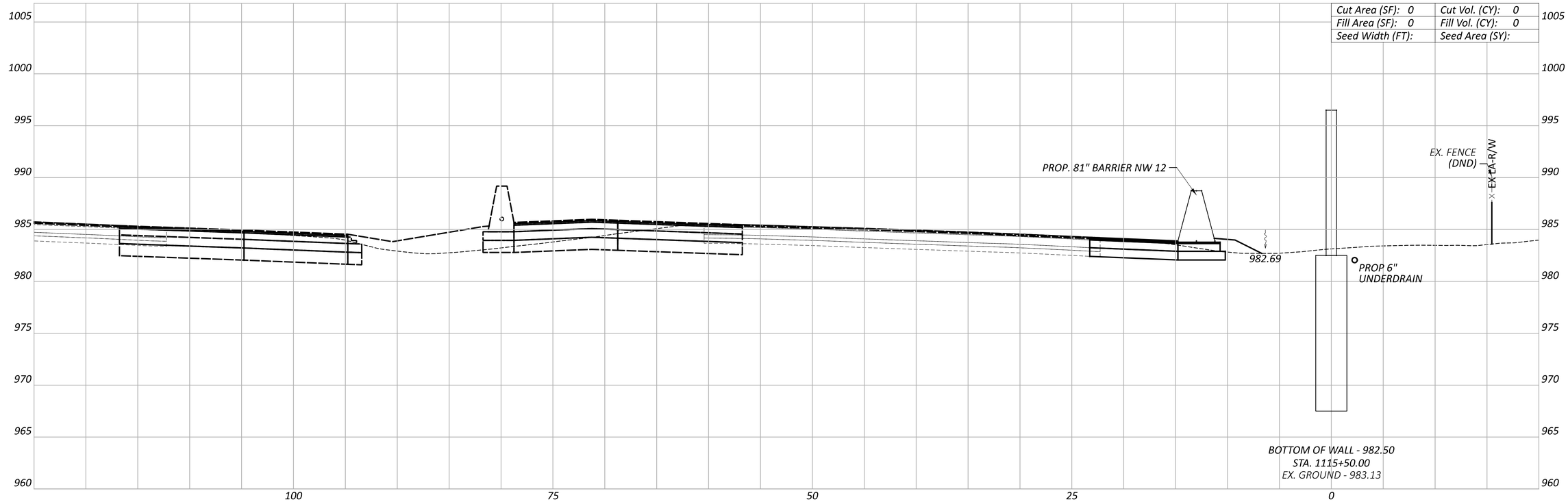
PROJECT ID 117607

SHEET P.152 TOTAL P.276



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 WALLS

CROSS SECTIONS - WALL 11
STA. 1115+00.00 TO STA. 1115+50.00

MODEL: 1115+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 11:59:42 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

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

DESIGNER
JEP

REVIEWER
RG 01-22-24

PROJECT ID
117607

SHEET	TOTAL
P.153	P.276

CROSS SECTIONS - WALL 11
STA. 1115+84.00

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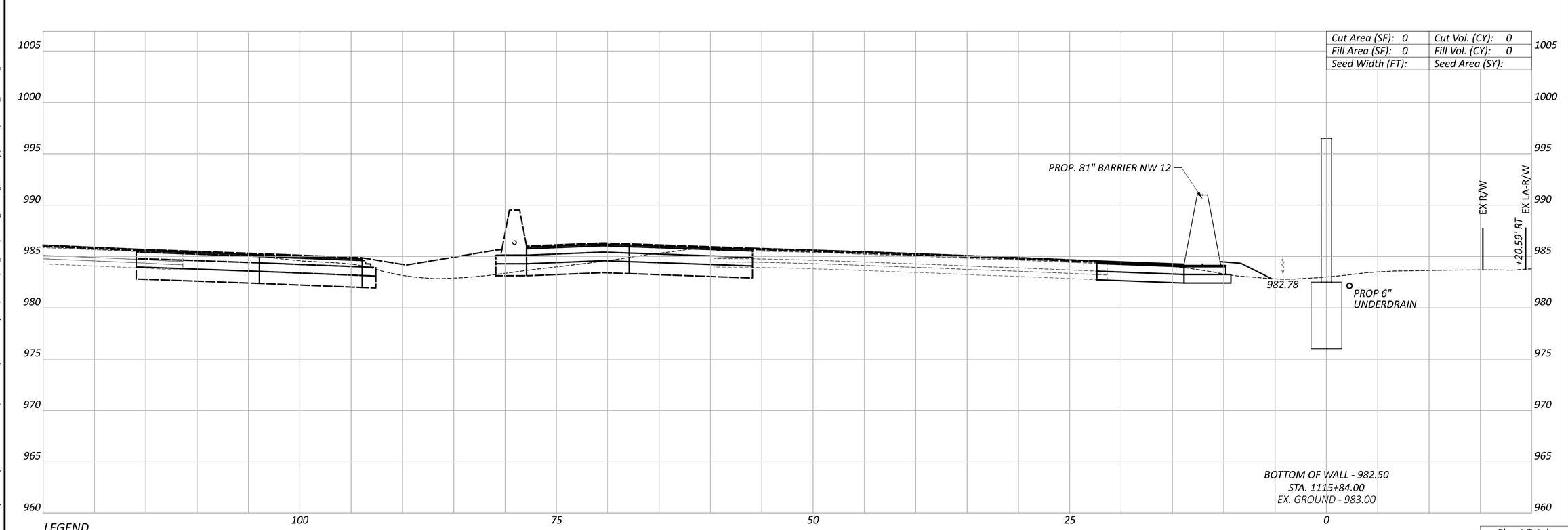


LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals		
Seeding	Cut	Fill

FRA-161-15.80 NOISE WALLS

MODEL: 1115+84.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 11:59:51 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

DESIGN AGENCY

BG

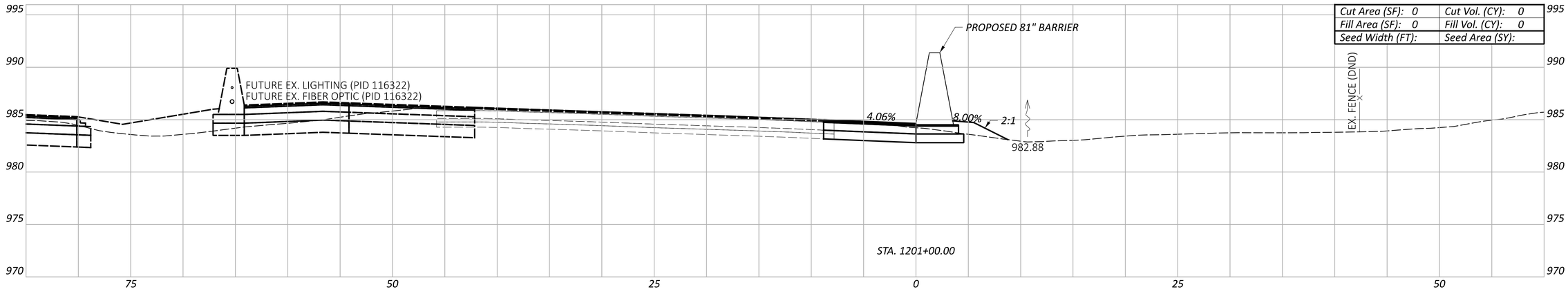
www.bgenggroup.com
5960 WILCOX PLACE, SUITE C
DUBLIN, OHIO 43016

DESIGNER: JEP

REVIEWER: RG 01-22-24

PROJECT ID: 117607

SHEET: P.154 TOTAL: P.276



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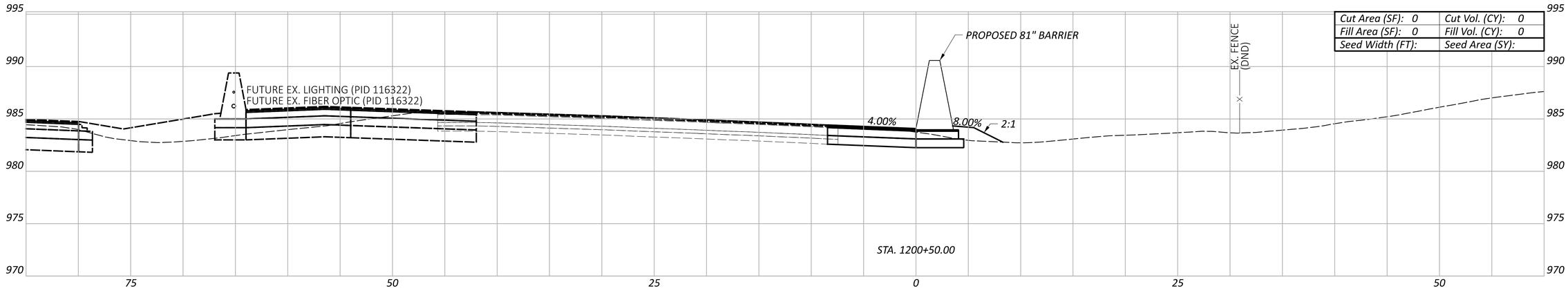

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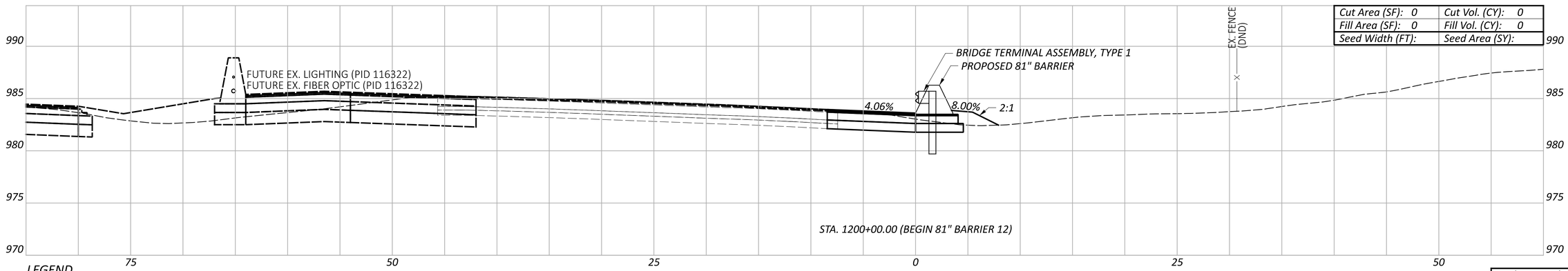

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Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT):	Seed Area (SY):

LEGEND

- - - EXISTING SR-161 PRIOR TO PID 116322

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

Sheet Totals		
Seeding	Cut	Fill

CROSS SECTIONS - 81" BARRIER 12
STA. 1200+00.00 TO STA. 1201+00.00

FRA-161-15.80 NOISE WALLS

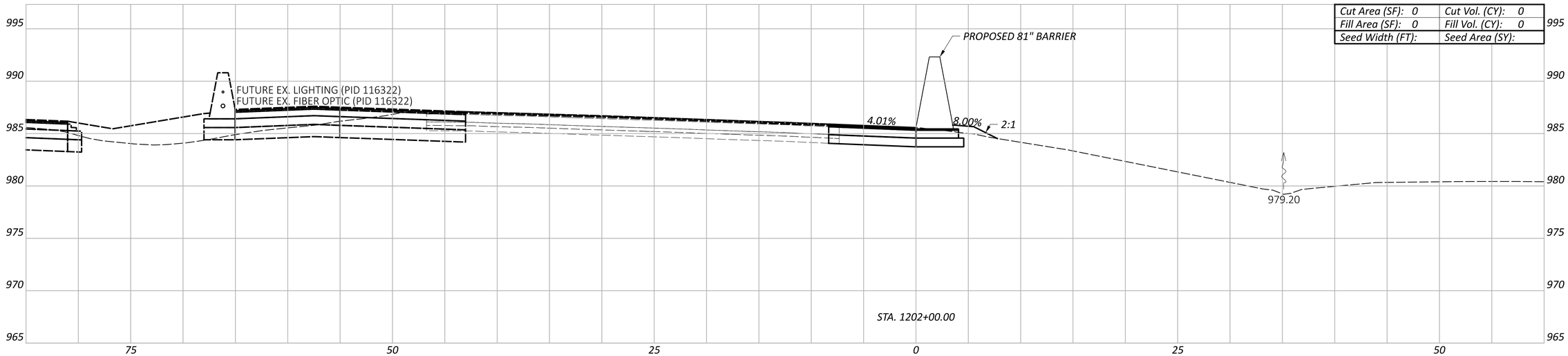
MODEL: BLP_BARRIER12 - 1200+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:40:55 PM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_XS012A.dgn

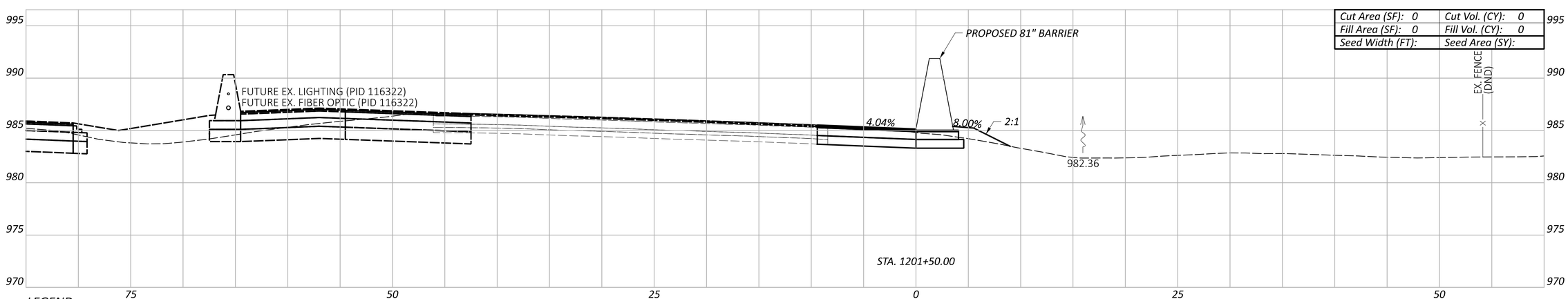
DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 818-4900
www.arcadis.com

DESIGNER
JMK

REVIEWER
JDH 01-22-24

PROJECT ID
117607





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 WALLS

CROSS SECTIONS - 81" BARRIER 12
STA. 1201+50.00 TO STA. 1202+00.00

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COLUMBUS, OHIO 43235
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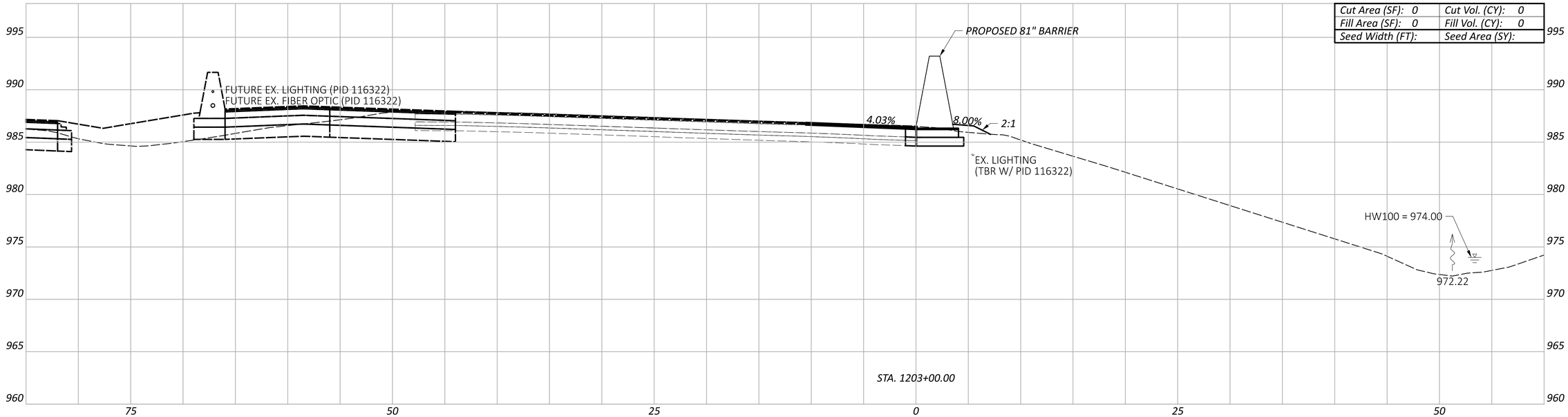
DESIGNER JMK

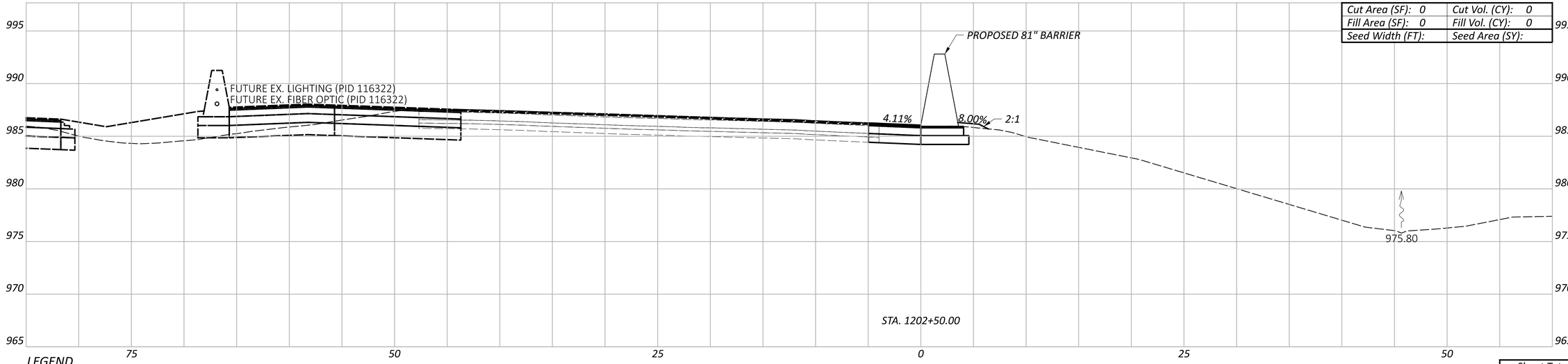
REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.156 TOTAL P.276

MODEL: BLP_BARRIER12 - 1201+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:41:44 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_XS012A.dgn





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 WALLS

CROSS SECTIONS - 81" BARRIER 12
STA. 1202+50.00 TO STA. 1203+00.00

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COLUMBUS, OHIO 43235
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DESIGNER: JMK

REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.157 TOTAL: P.276

MODEL: BLP_BARRIER12 - 1202+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:42:09 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_XS012A.dgn

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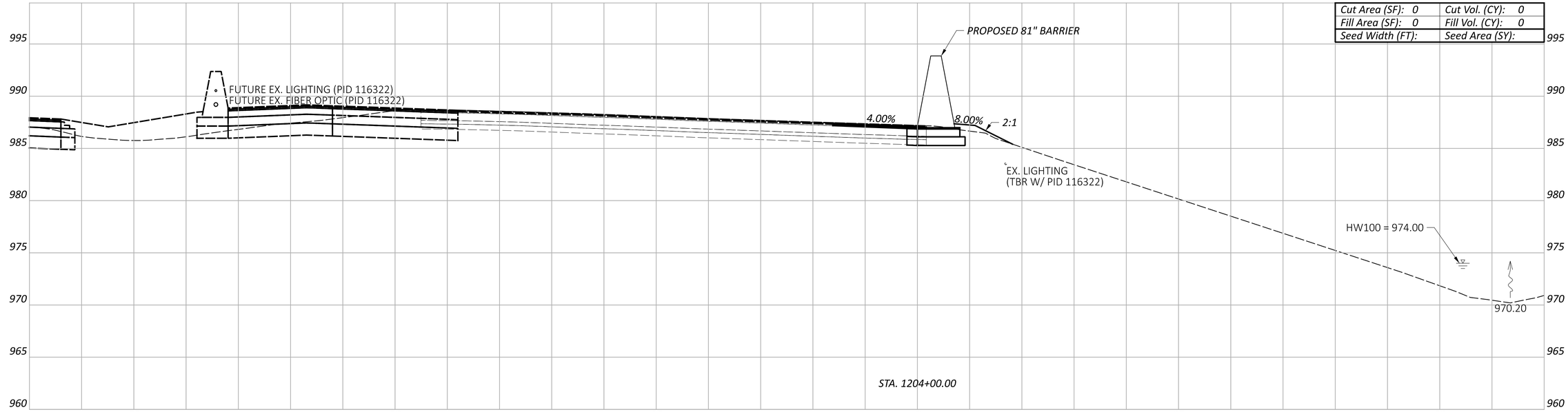

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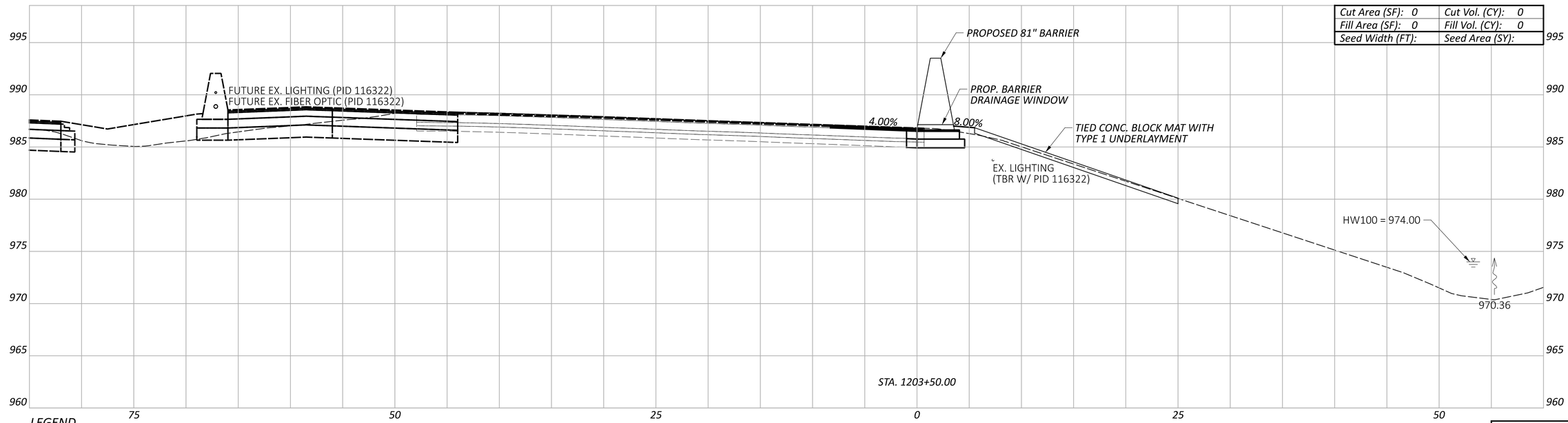

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals		
Seeding	Cut	Fill

CROSS SECTIONS - 81" BARRIER 12
STA. 1203+50.00 TO STA. 1204+00.00

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COLUMBUS, OHIO 43235
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DESIGNER: JMK

REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.158 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER12 - 1203+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:42:34 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_XS012A.dgn

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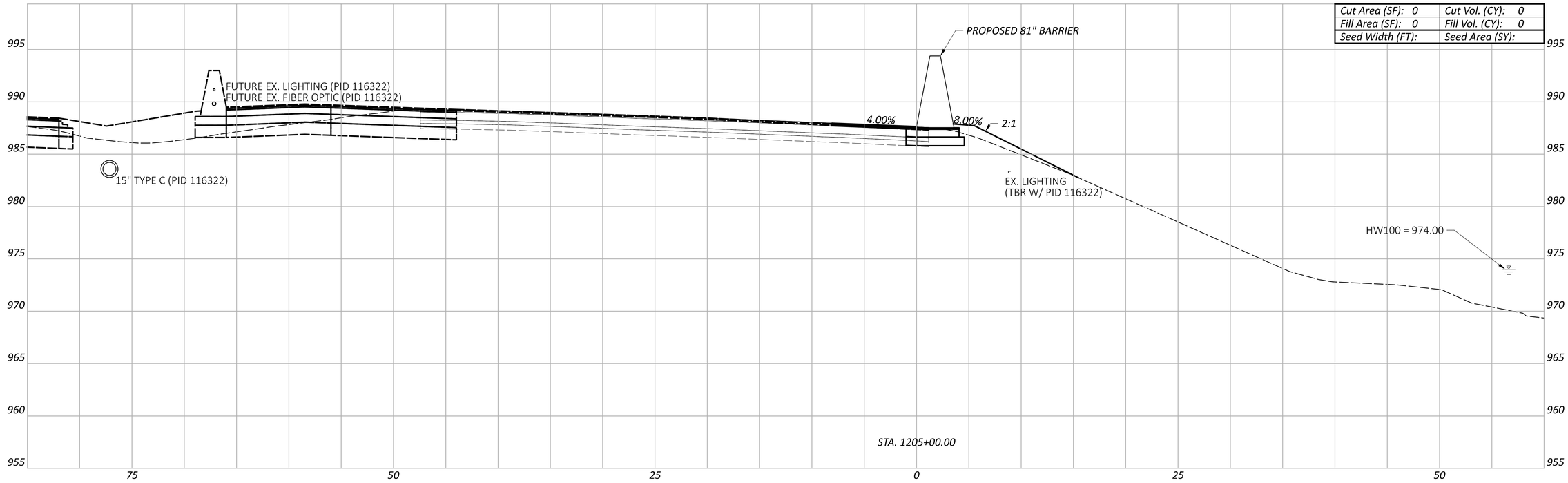

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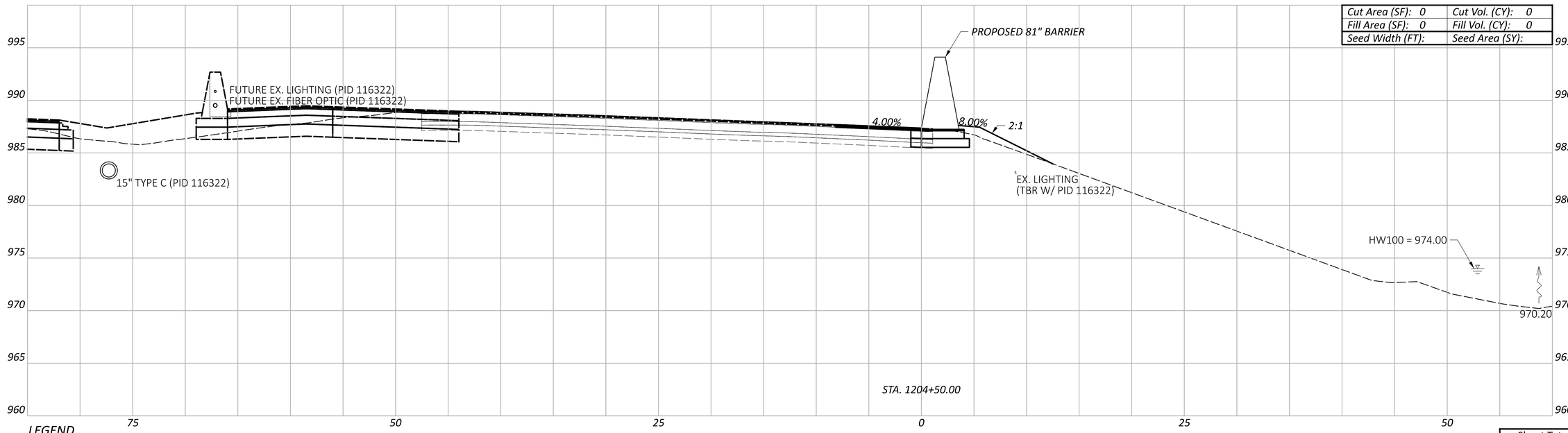

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals		
Seeding	Cut	Fill

CROSS SECTIONS - 81" BARRIER 12
STA. 1204+50.00 TO STA. 1205+00.00

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COLUMBUS, OHIO 43235
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DESIGNER: JMK

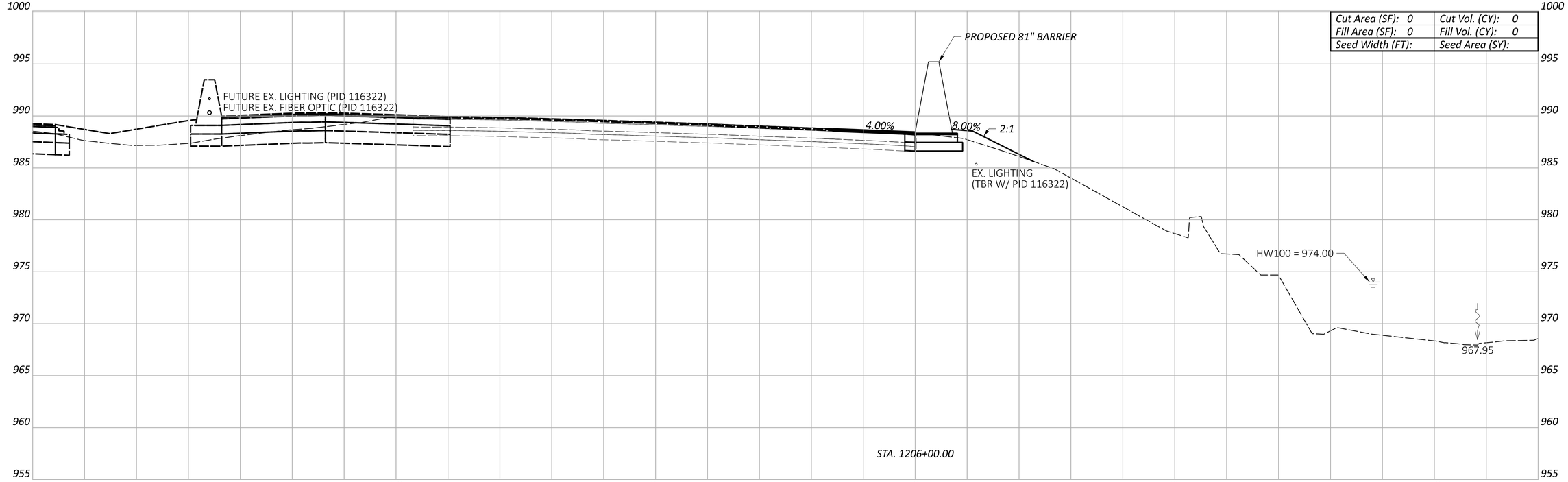
REVIEWER: JDH 01-22-24

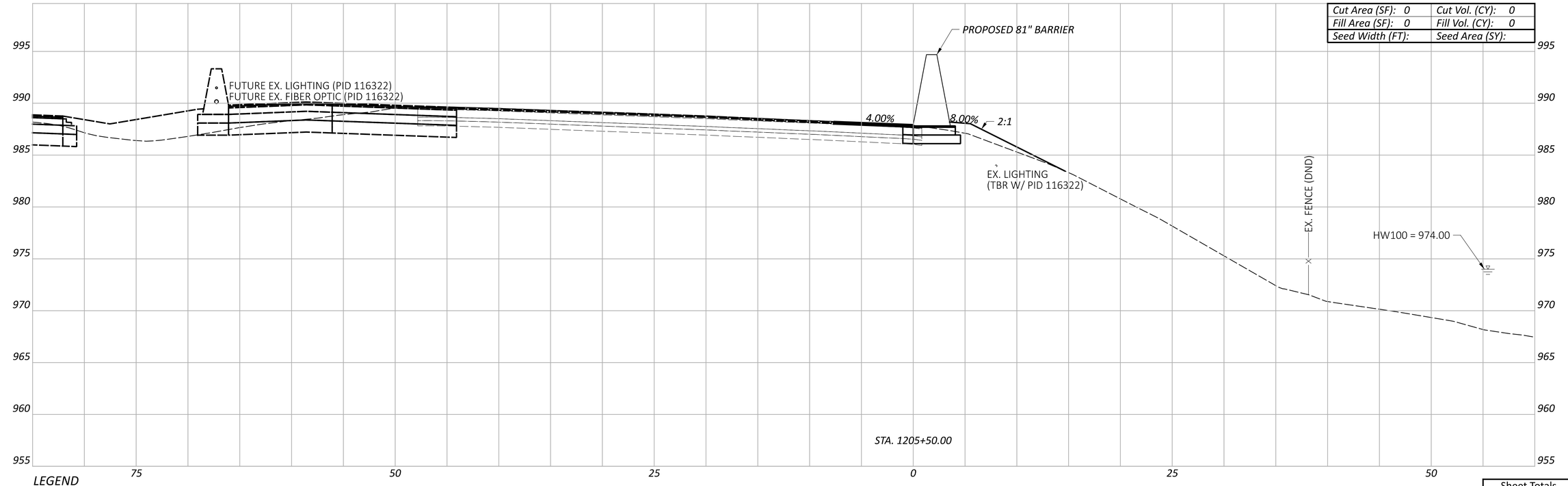
PROJECT ID: 117607

SHEET: P.159 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER12 - 1204+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:42:53 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_XS012A.dgn





LEGEND

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

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

CROSS SECTIONS - 81" BARRIER 12
STA. 1205+50.00 TO STA. 1206+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER12 - 1205+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:43:12 PM USER: jennifer.kelley
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Sheet Totals		
Seeding	Cut	Fill

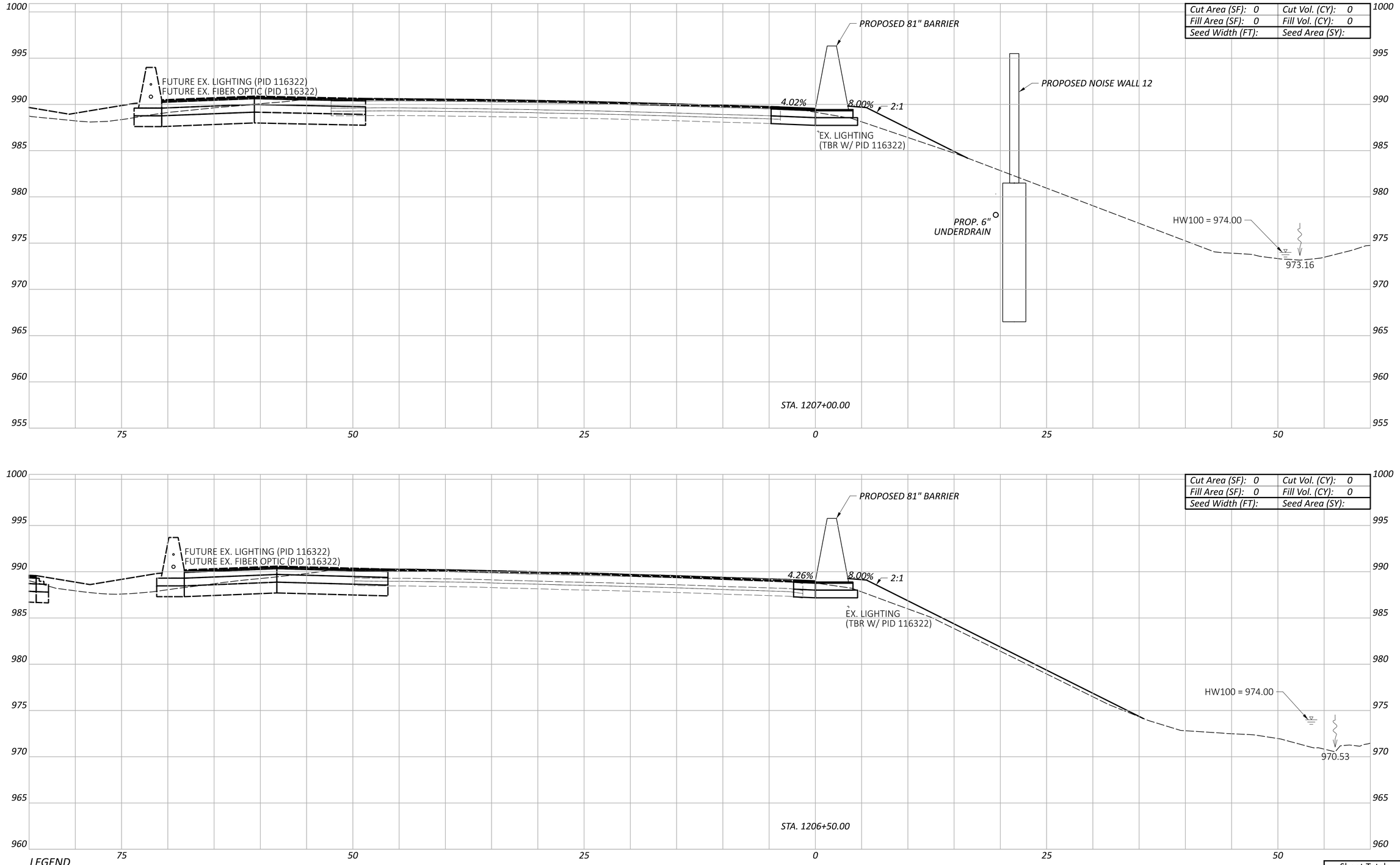
DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 895-4500
www.arcadis.com

DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.160 TOTAL P.276



LEGEND

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

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

CROSS SECTIONS - 81" BARRIER 12
STA. 1206+50.00 TO STA. 1207+00.00

Sheet Totals		
Seeding	Cut	Fill

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ARCADIS
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COLUMBUS, OHIO 43235
(614) 846-4500
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DESIGNER: JMK

REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.161 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER12 - 1206+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:43:30 PM USER: jennifer.kelley
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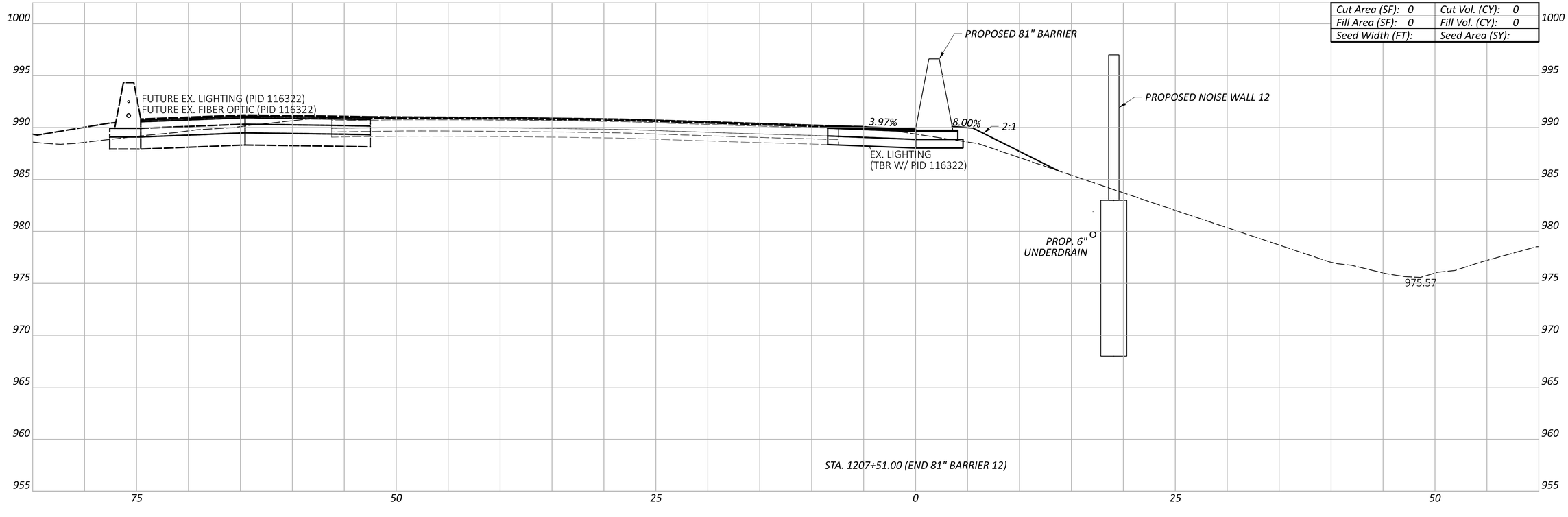

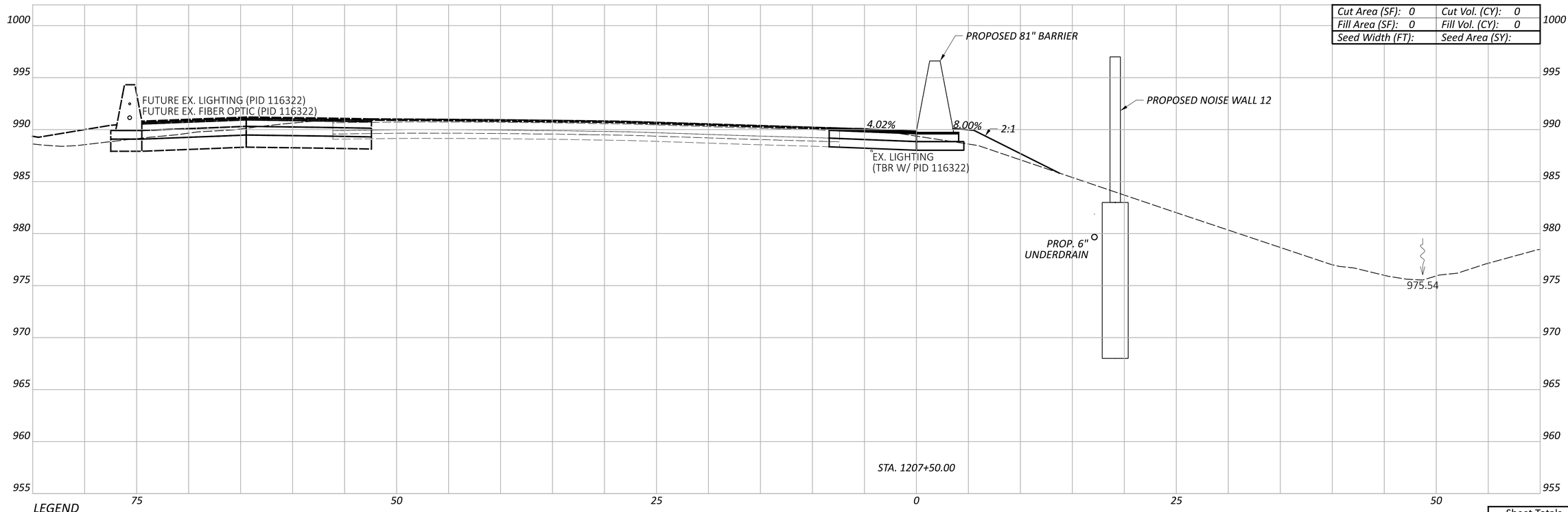

LEGEND

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

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

CROSS SECTIONS - 81" BARRIER 12
STA. 1207+50.00 TO STA. 1207+51.00

Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY

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8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 985-4500
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DESIGNER: JMK

REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.162 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_BARRIER12 - 1207+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:43:50 PM USER: jennifer.kelley
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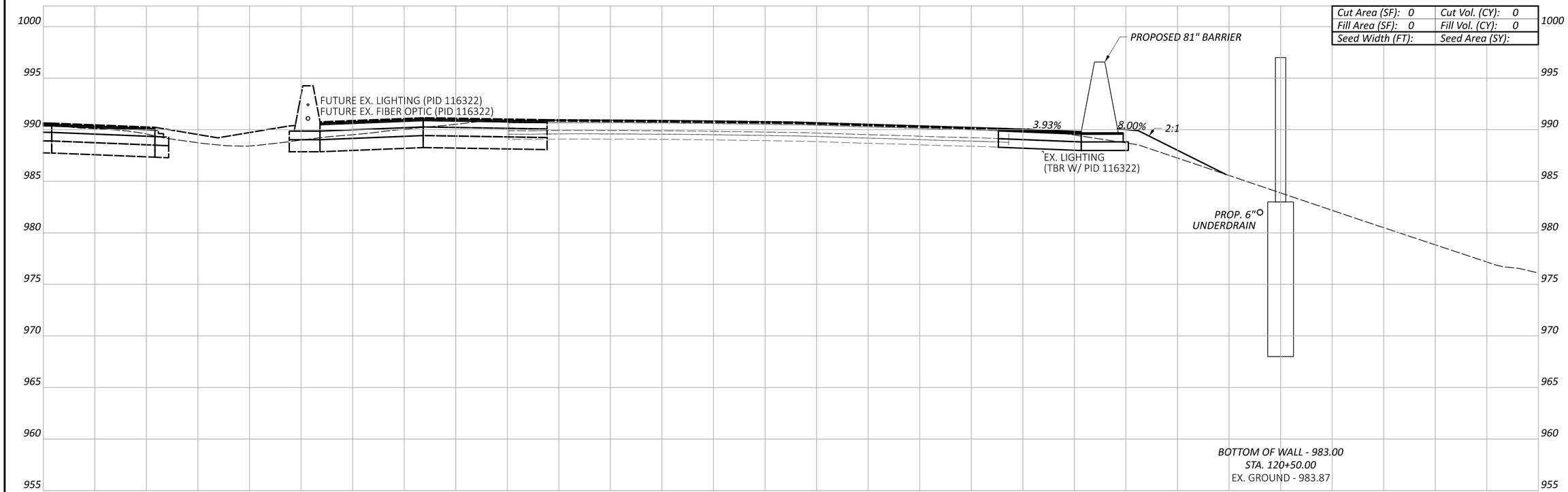

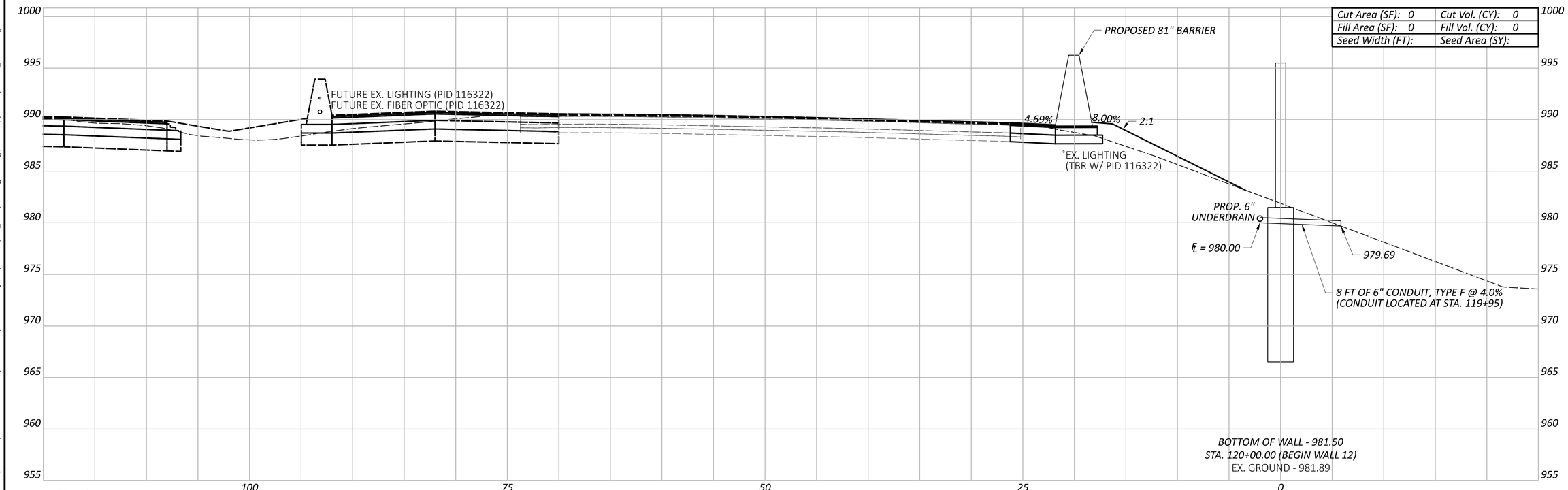

LEGEND

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 WALLS

MODEL: BLP_WALL13 - 120+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 3:26:13 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_XS012B.dgn

Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 846-4500
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DESIGNER
JMK

REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET P.163 | TOTAL P.276

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Fill Area (SF): 0	Fill Vol. (CY): 0
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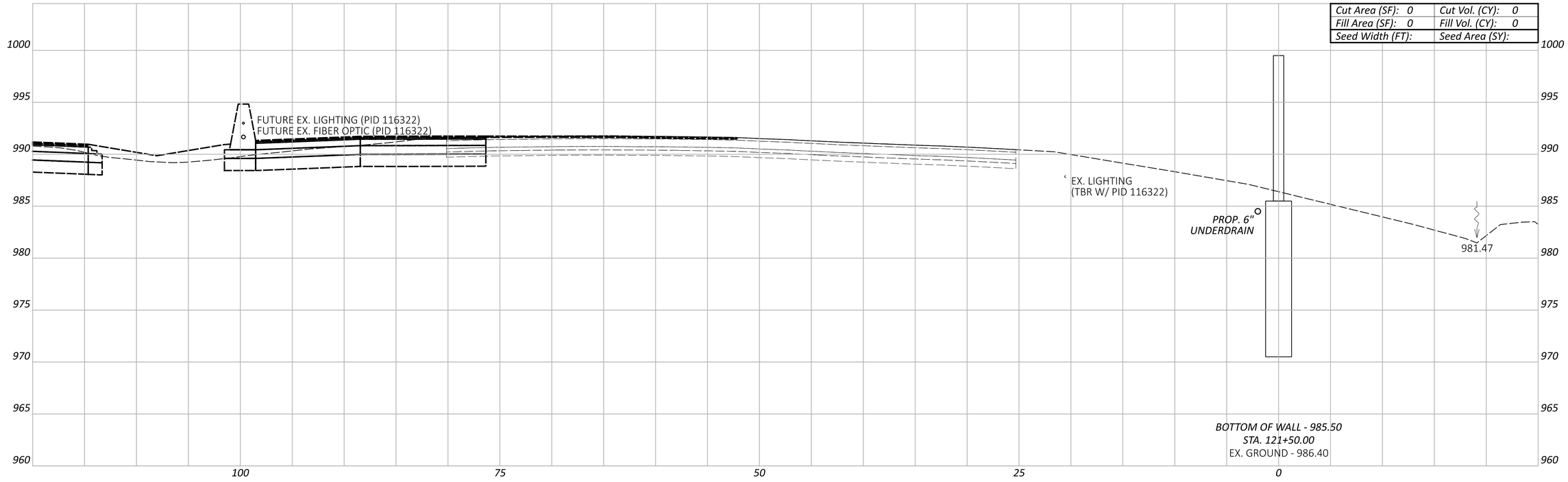

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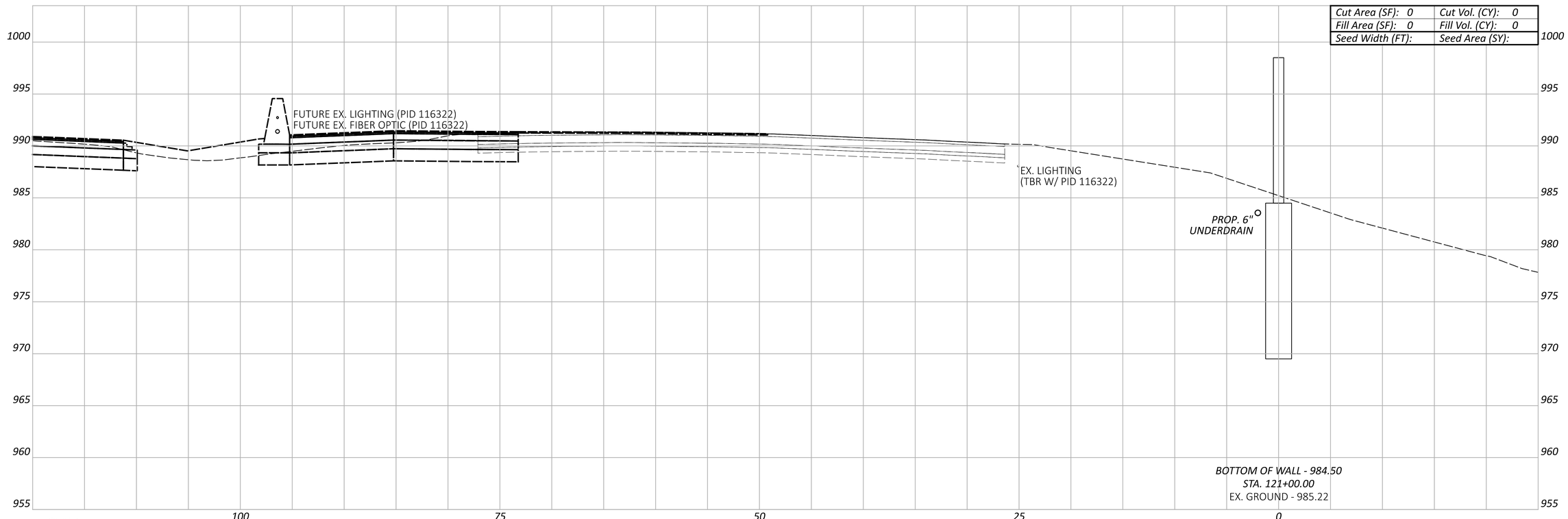

LEGEND

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 WALLS

MODEL: BLP_WALL13 - 121+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 3:26:41 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_XS012B.dgn

CROSS SECTIONS - WALL 12
STA. 121+00.00 TO STA. 121+50.00

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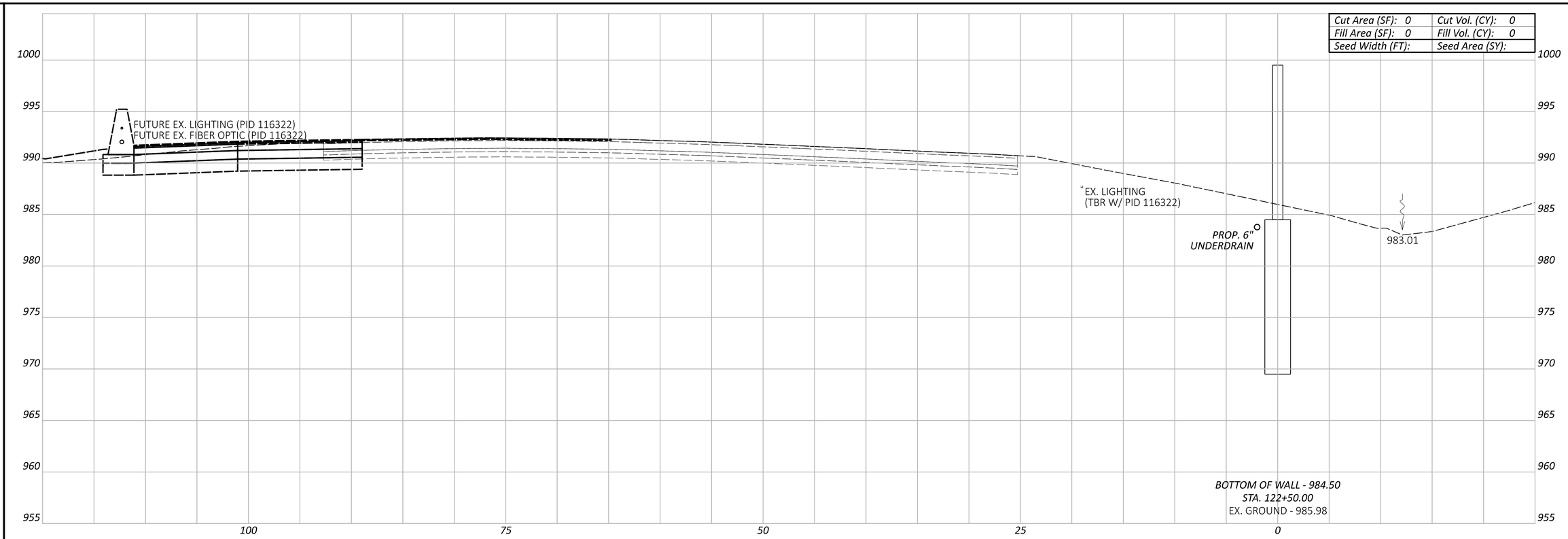
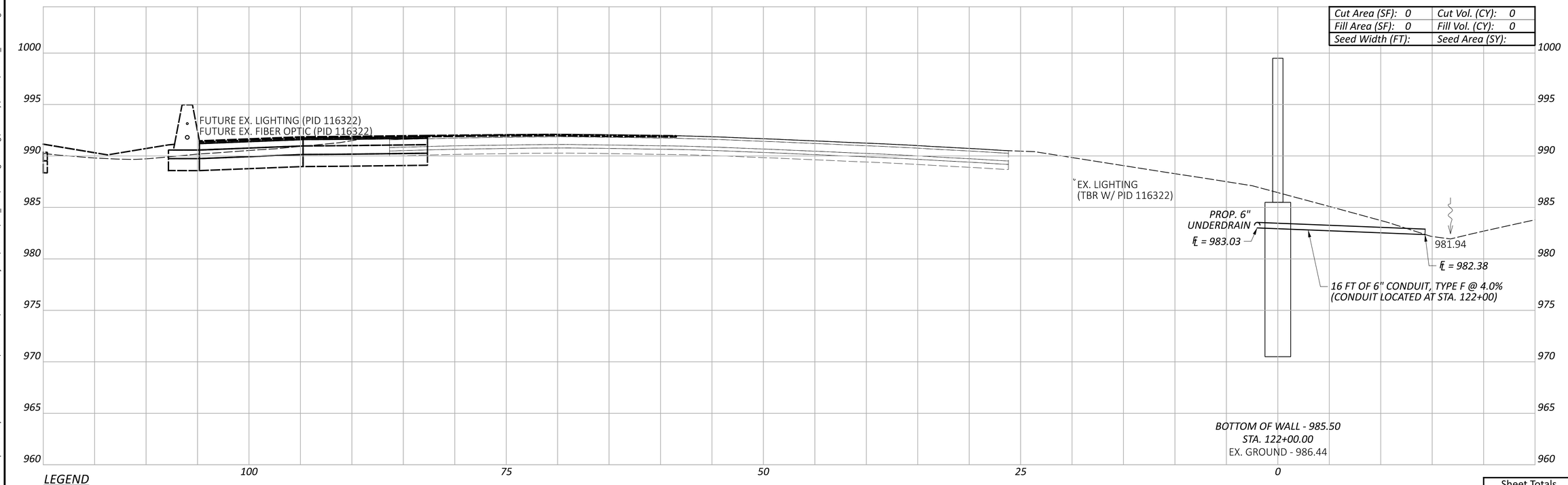
DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.164 | TOTAL P.276





LEGEND

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

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

CROSS SECTIONS - WALL 12
STA. 122+00.00 TO STA. 122+50.00

Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 985-4600
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DESIGNER
JMK

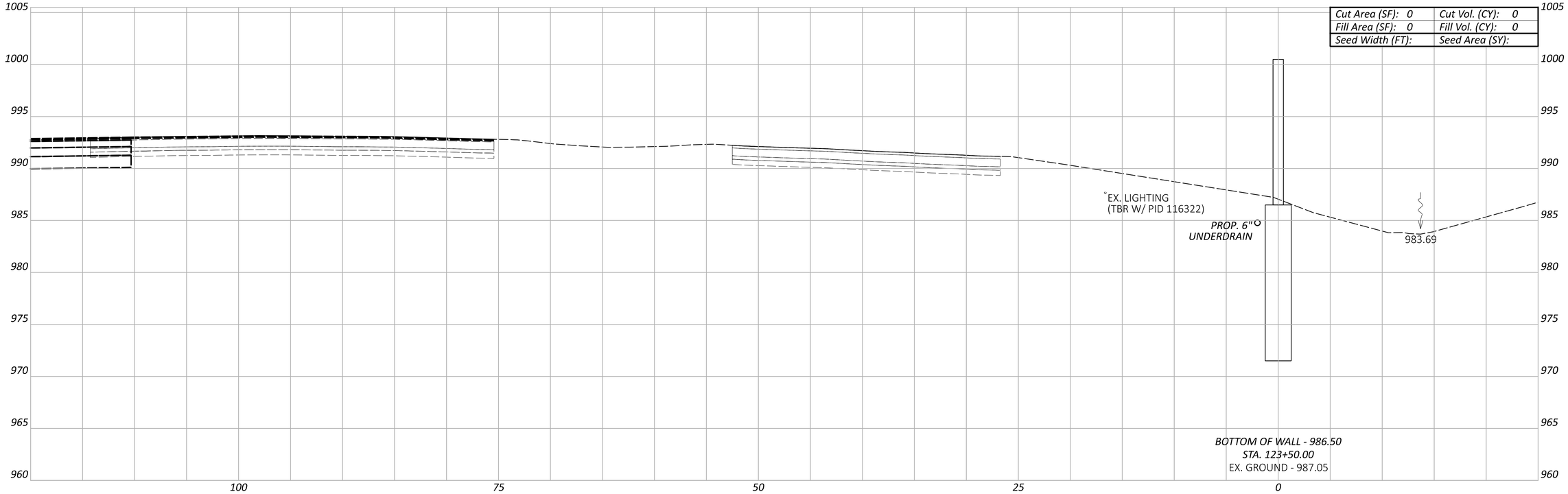
REVIEWER
JDH 01-22-24

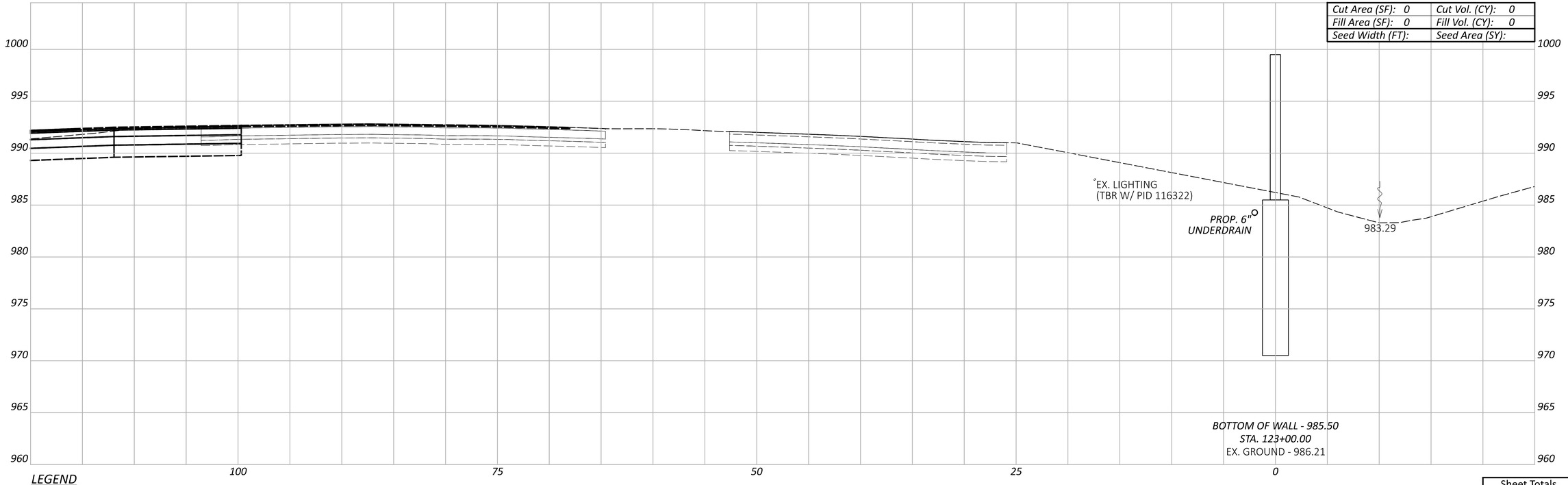
PROJECT ID
117607

SHEET P.165 | TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL13 - 122+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 3:26:55 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_XS012B.dgn





LEGEND

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

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

CROSS SECTIONS - WALL 12
STA. 123+00.00 TO STA. 123+50.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL13 - 123+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 3:27:11 PM USER: jennifer.kelley
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Sheet Totals		
Seeding	Cut	Fill

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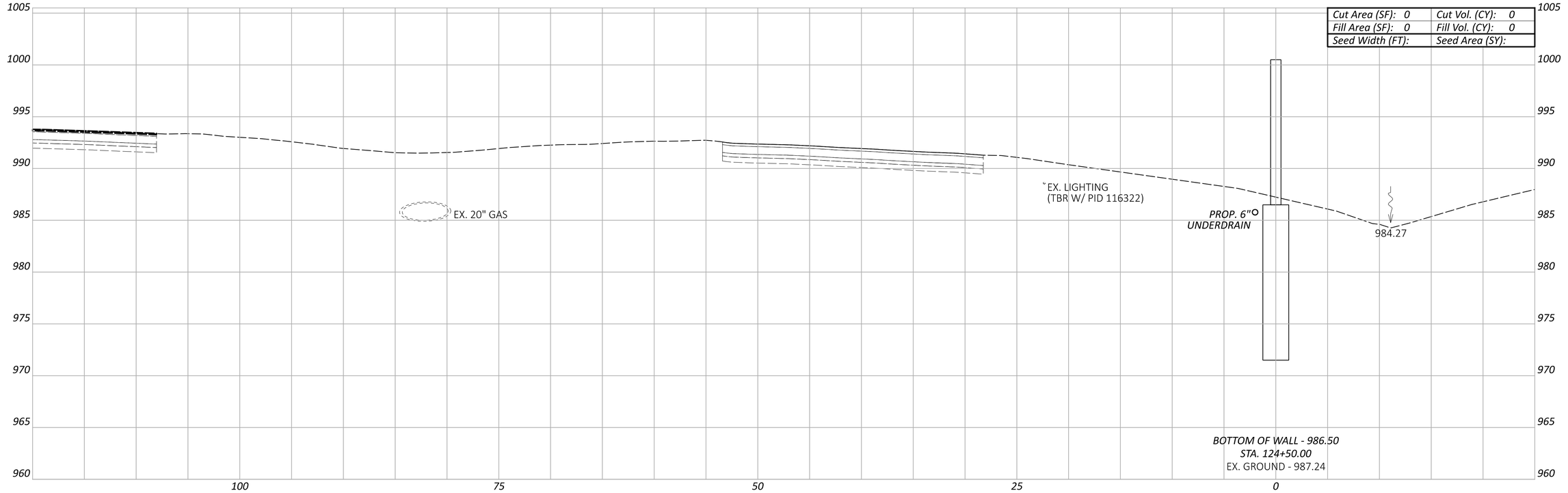
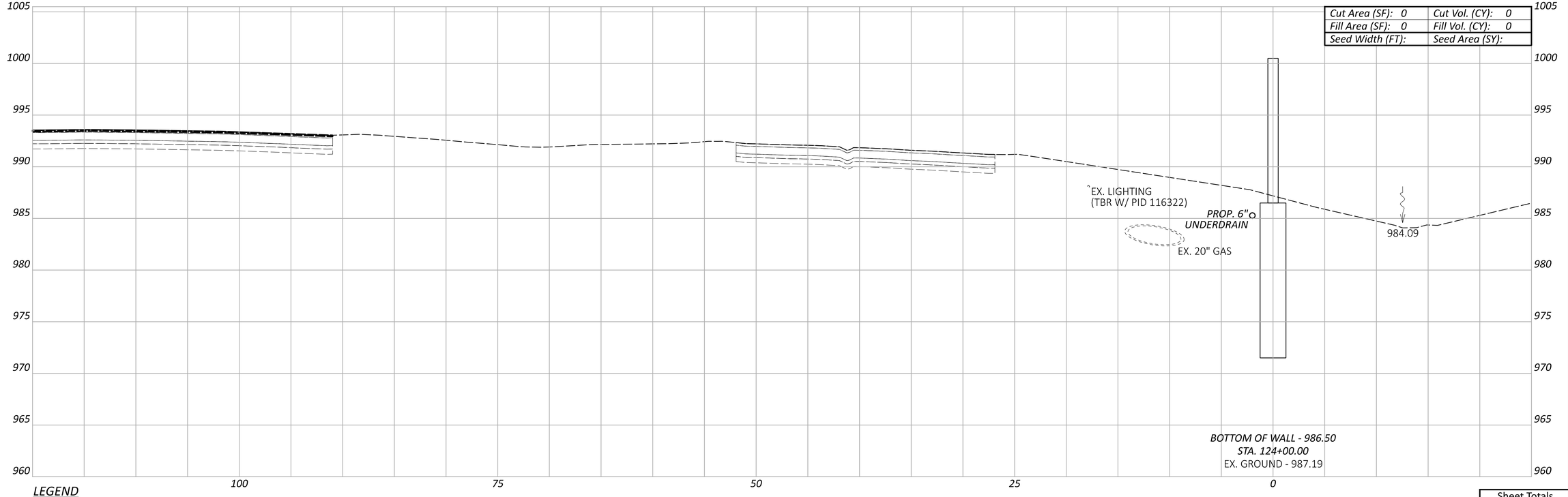
DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.166 TOTAL P.276





LEGEND

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

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

CROSS SECTIONS - WALL 12
STA. 124+00.00 TO STA. 124+50.00

Sheet Totals		
Seeding	Cut	Fill

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PROJECT ID
117607

SHEET P.167 | TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL13 - 124+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 3:27:27 PM USER: jennifer.kelley
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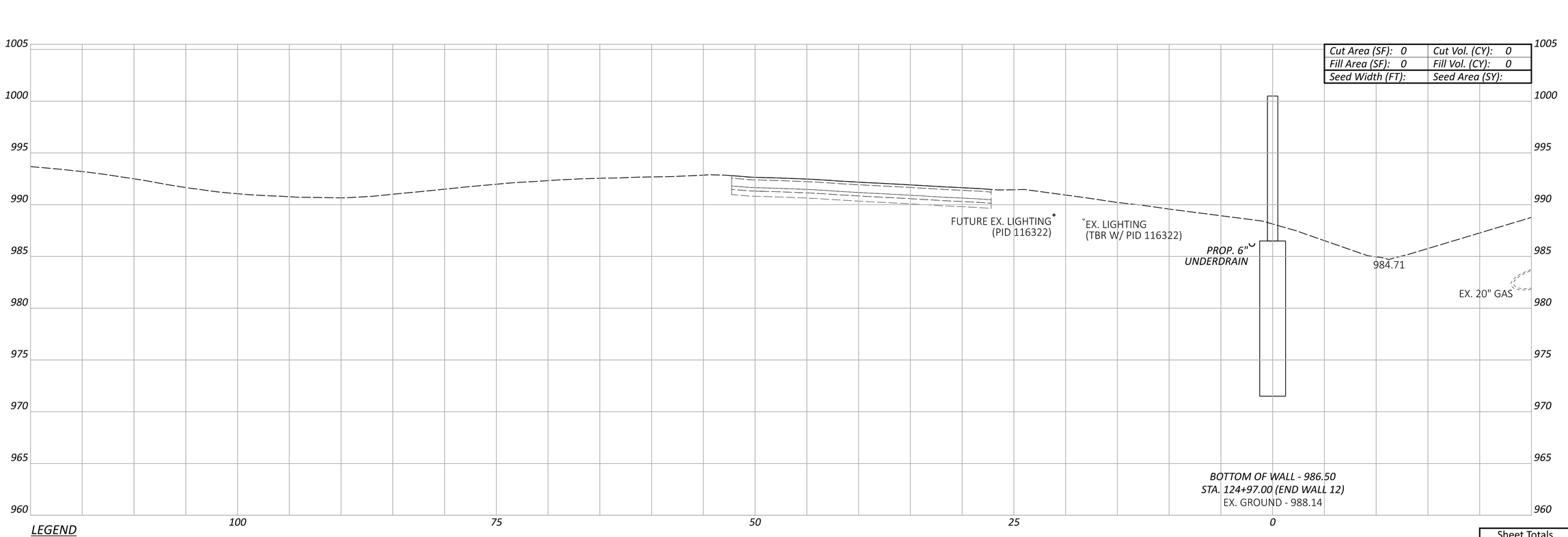
FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL13 - 124+97.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 3:28:03 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_XS012B.dgn

CROSS SECTIONS - WALL 12
STA. 124+97.00



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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PROJECT ID
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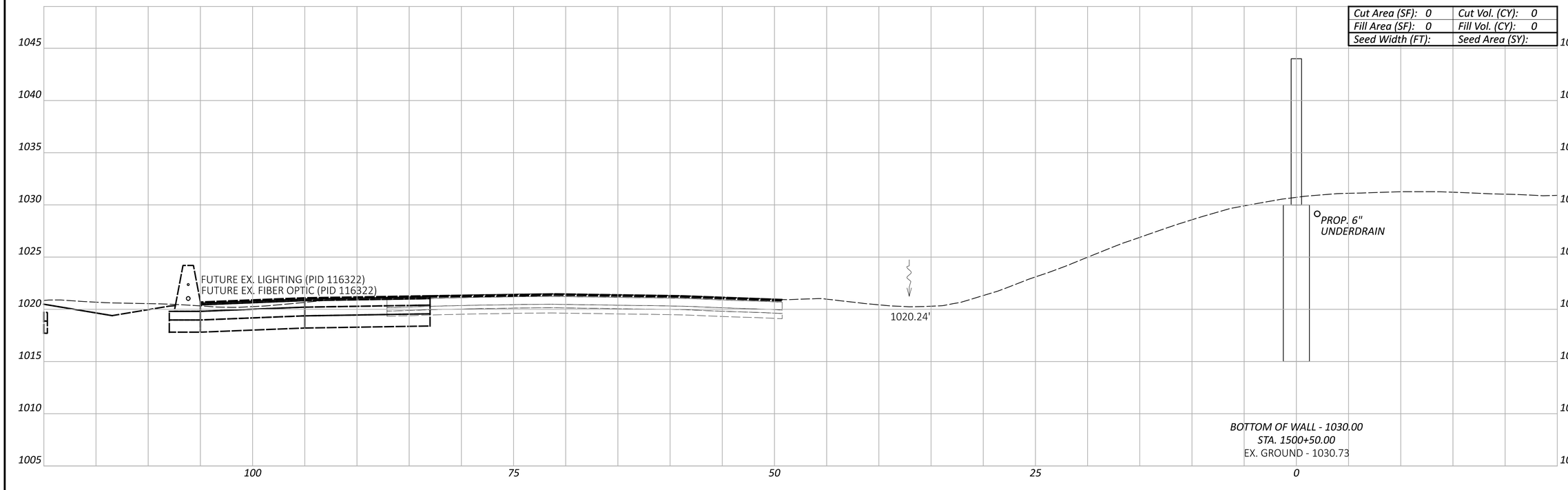
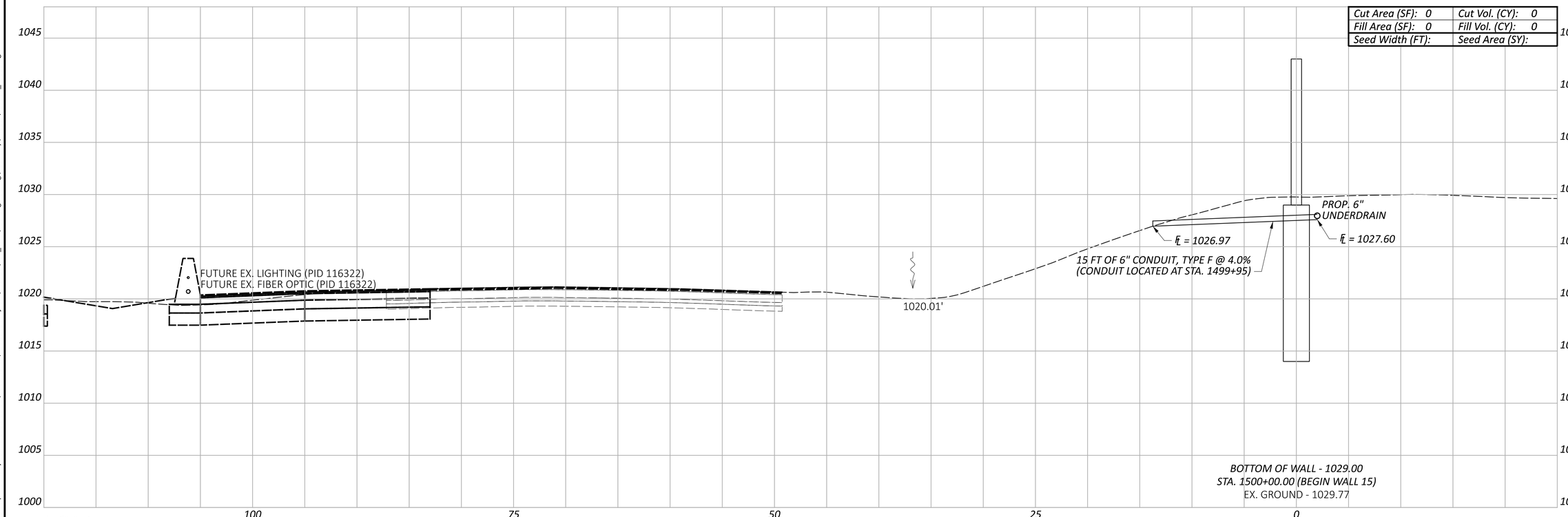
SHEET	TOTAL
P.168	P.276





LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

CROSS SECTIONS - WALL 15
STA. 1500+00.00 TO STA. 1500+50.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1500+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 4:16:42 PM USER: jennifer.kelley
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Sheet Totals		
Seeding	Cut	Fill

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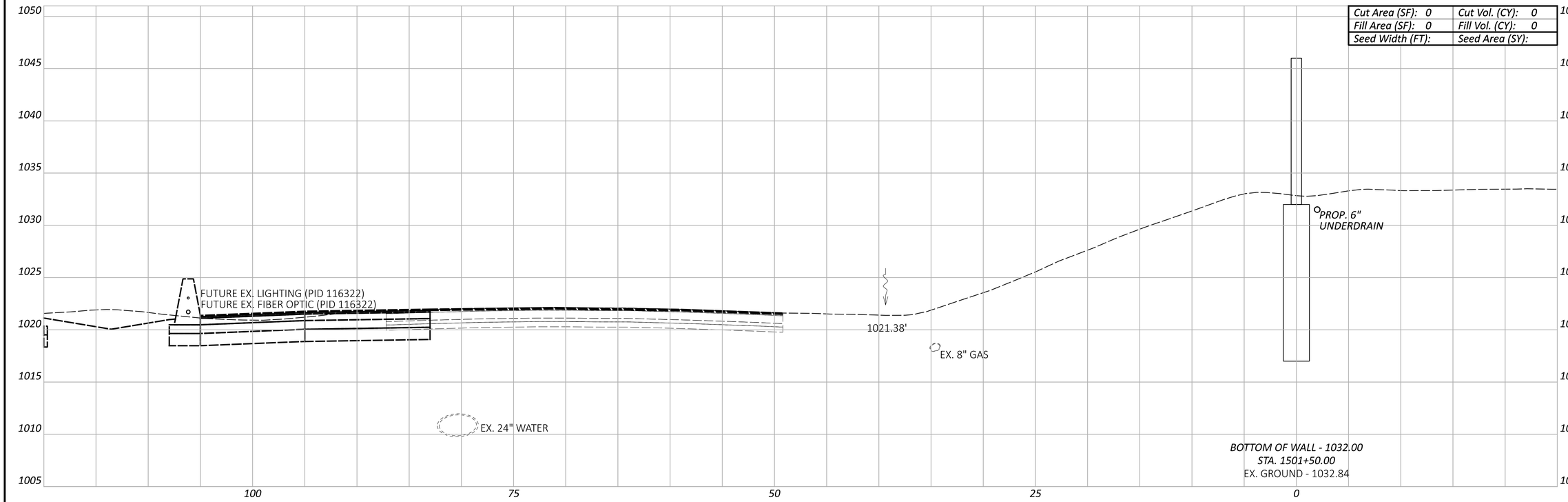
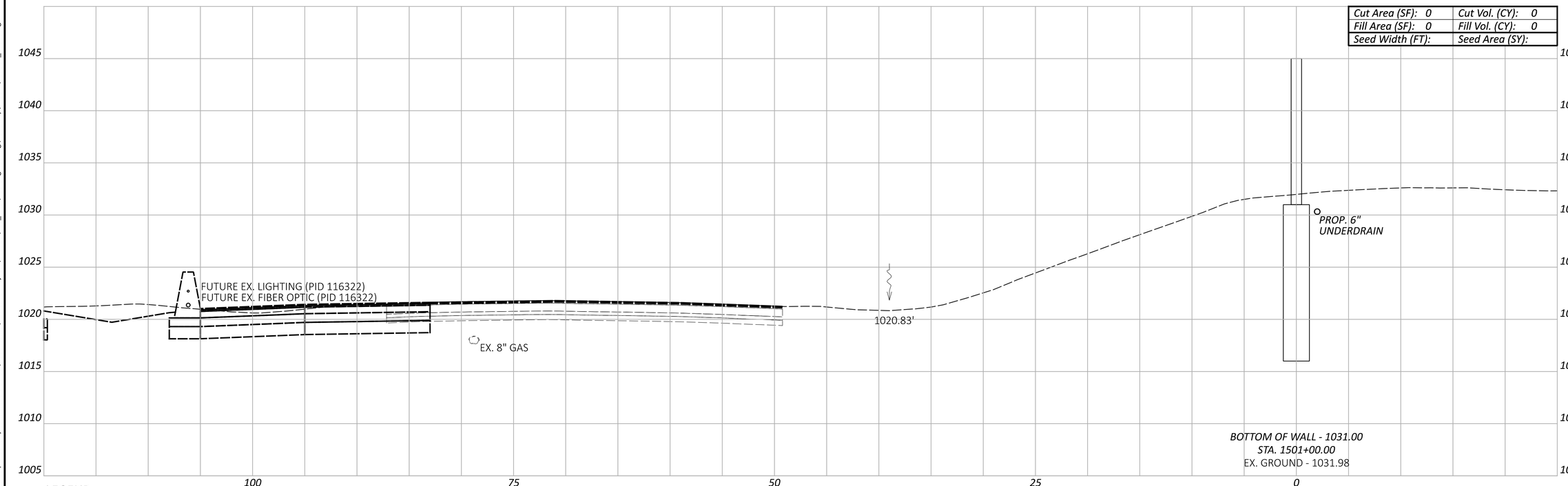
REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.169 TOTAL P.276





LEGEND

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

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

CROSS SECTIONS - WALL 15
STA. 1501+00.00 TO STA. 1501+50.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1501+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:48:41 PM USER: jennifer.kelley
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Sheet Totals		
Seeding	Cut	Fill

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PROJECT ID 117607

SHEET P.170 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1502+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:49:08 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_XS015.dgn

CROSS SECTIONS - WALL 15
STA. 1502+00.00

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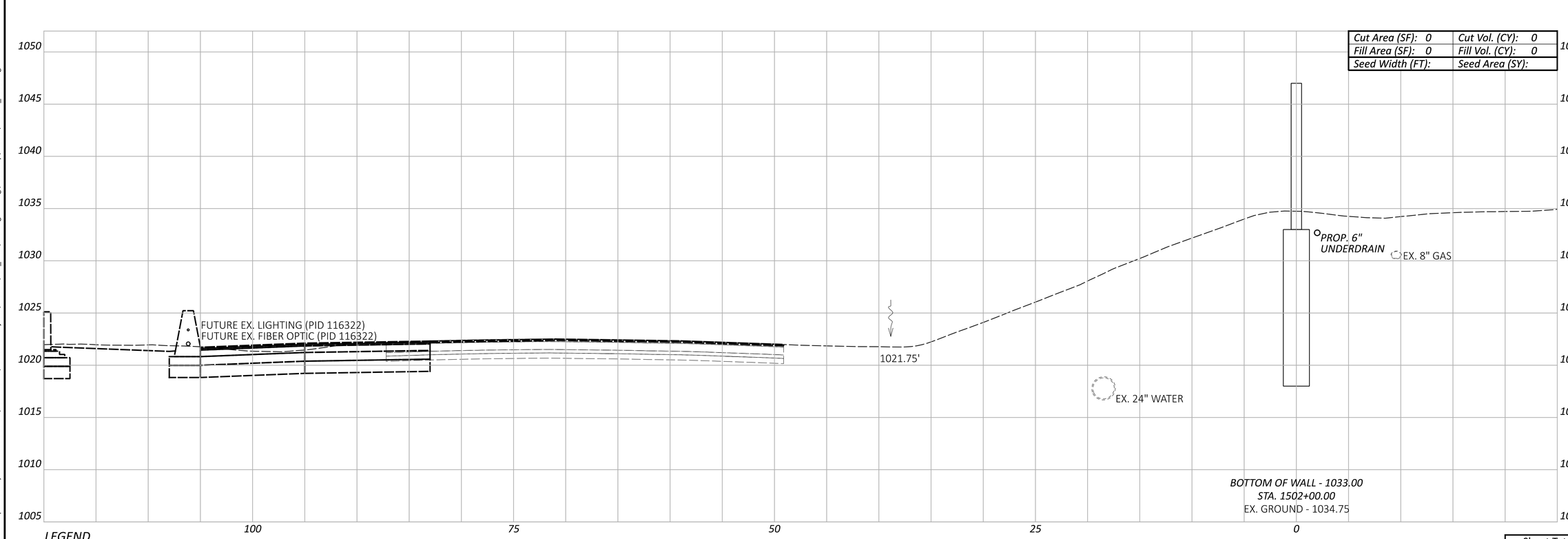

LEGEND

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

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

Sheet Totals		
Seeding	Cut	Fill

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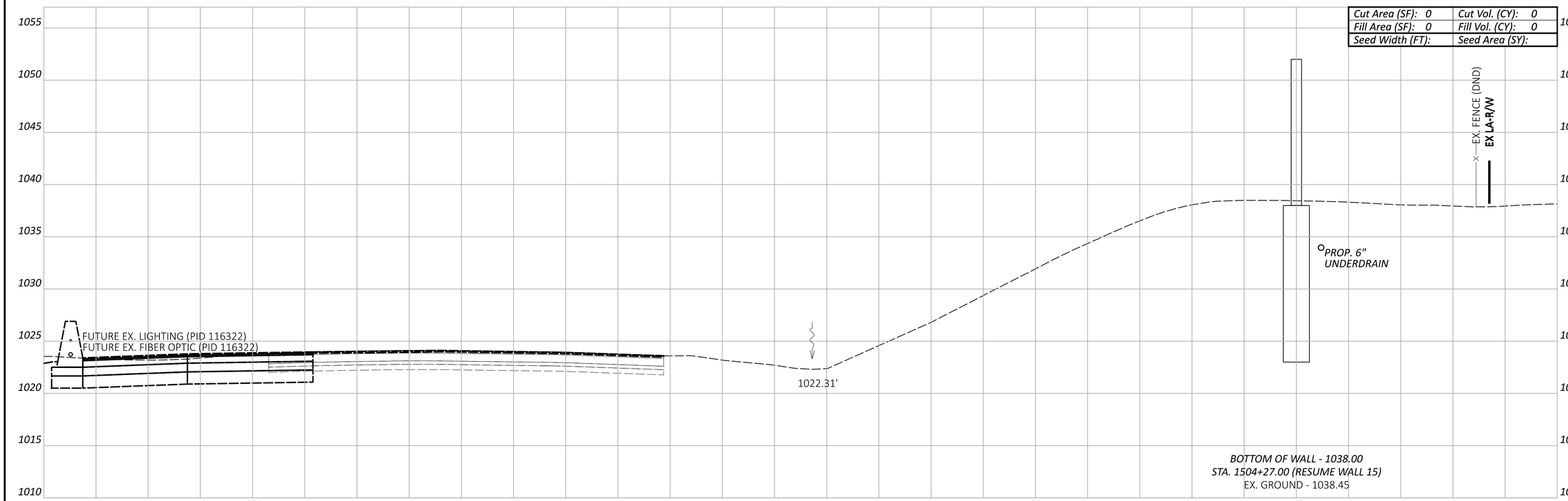
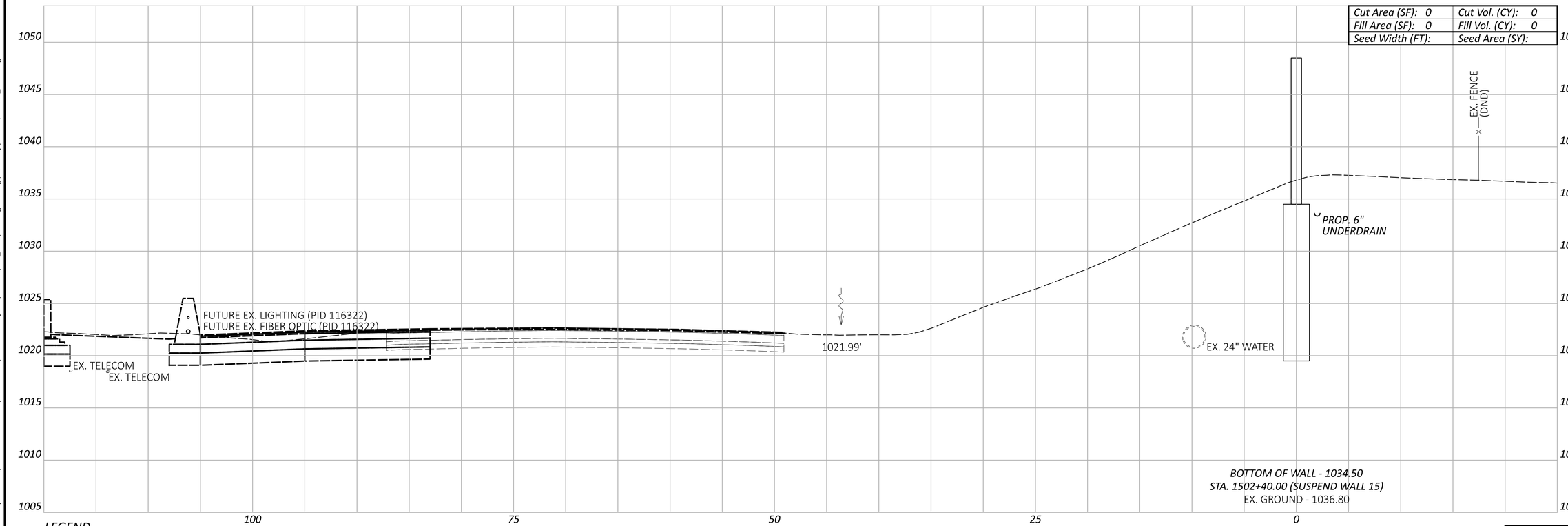
PROJECT ID 117607

SHEET P.171 TOTAL P.276





LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1502+64.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-21 TIME: 11:11:22 PM USER: jennifer.kelley
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CROSS SECTIONS - WALL 15
STA. 1502+40.00 TO STA. 1504+27.00

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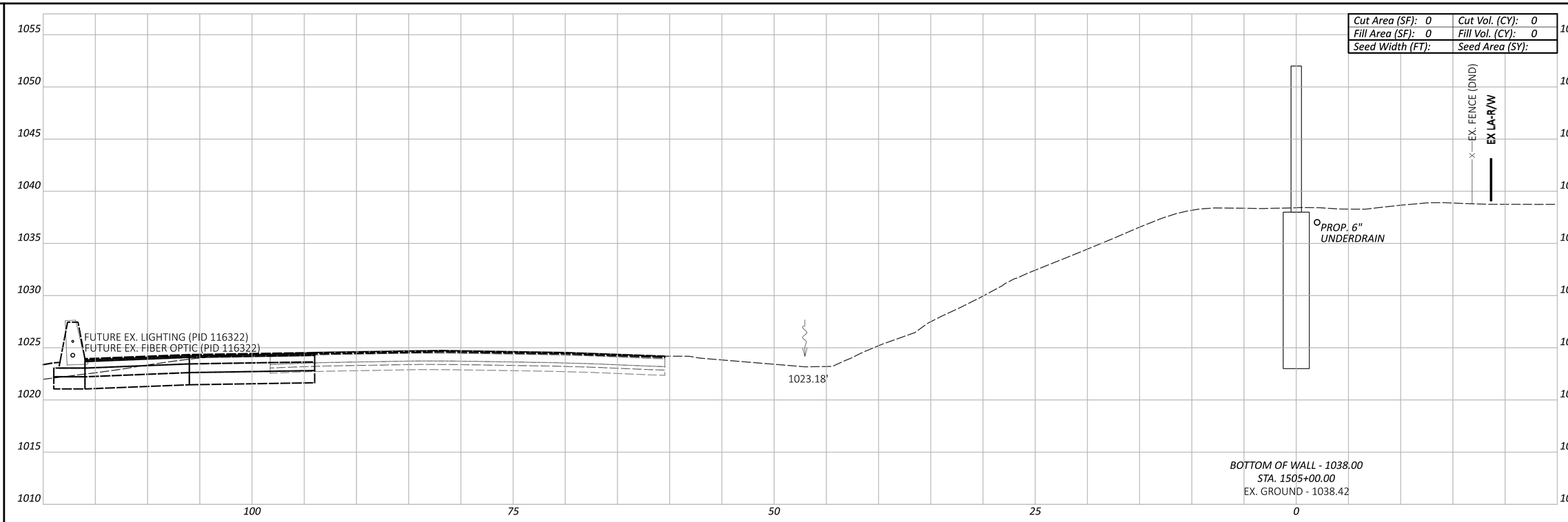
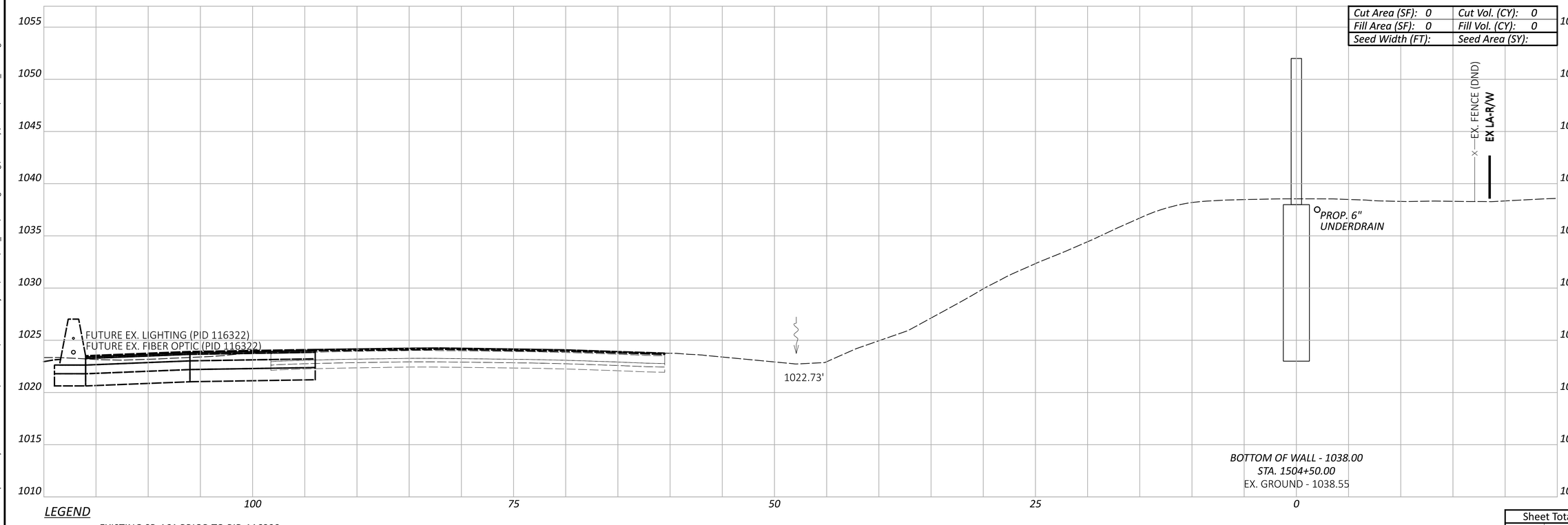
Sheet Totals		
Seeding	Cut	Fill

SHEET	TOTAL
P.172	P.276





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 15
STA. 1504+50.00 TO STA. 1505+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1504+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:49:48 PM USER: jennifer.kelley
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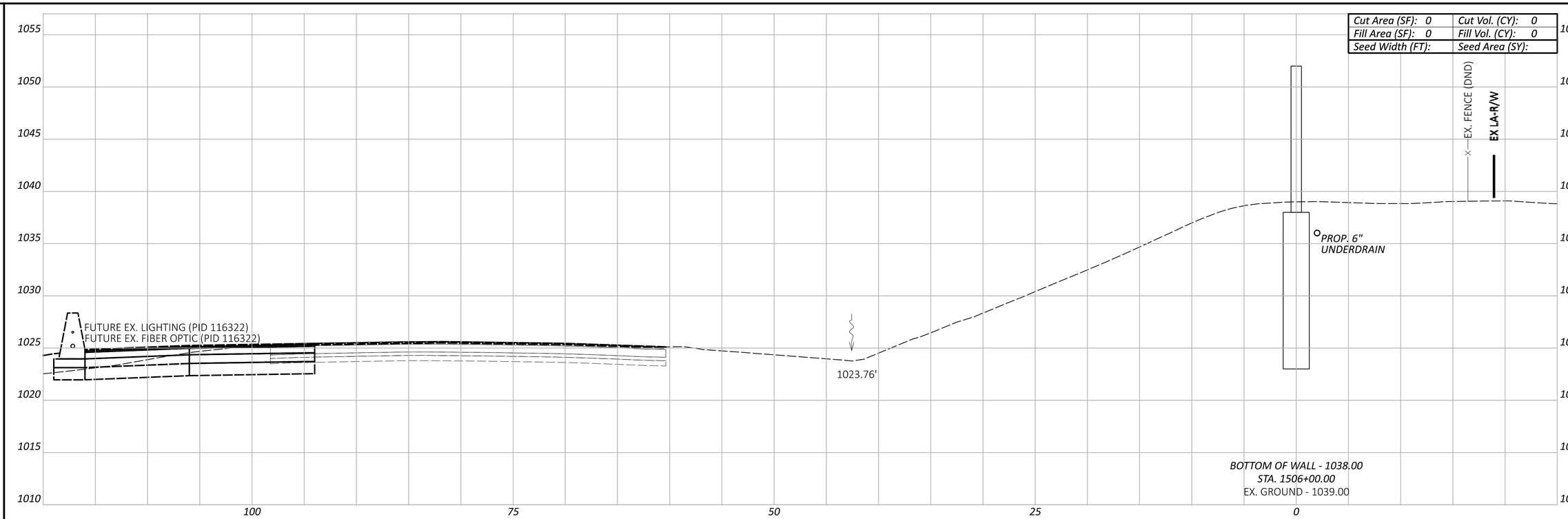
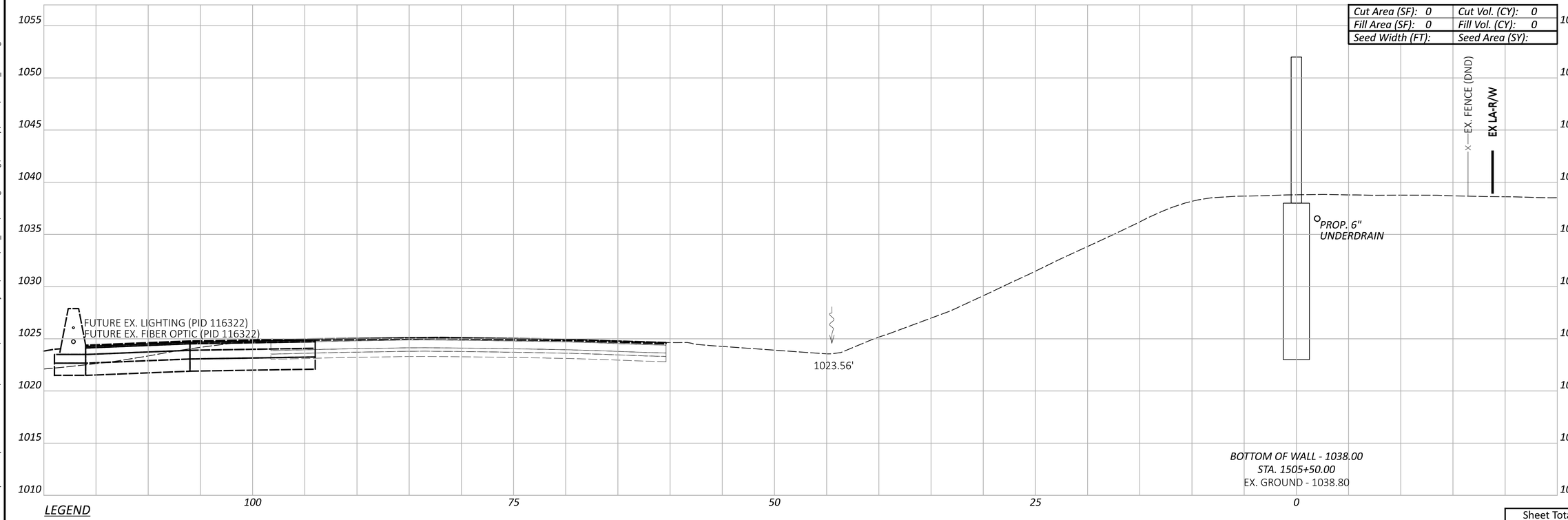
SHEET	TOTAL
P.173	P.276





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 15
STA. 1505+50.00 TO STA. 1506+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1505+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:50:10 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_XS015.dgn

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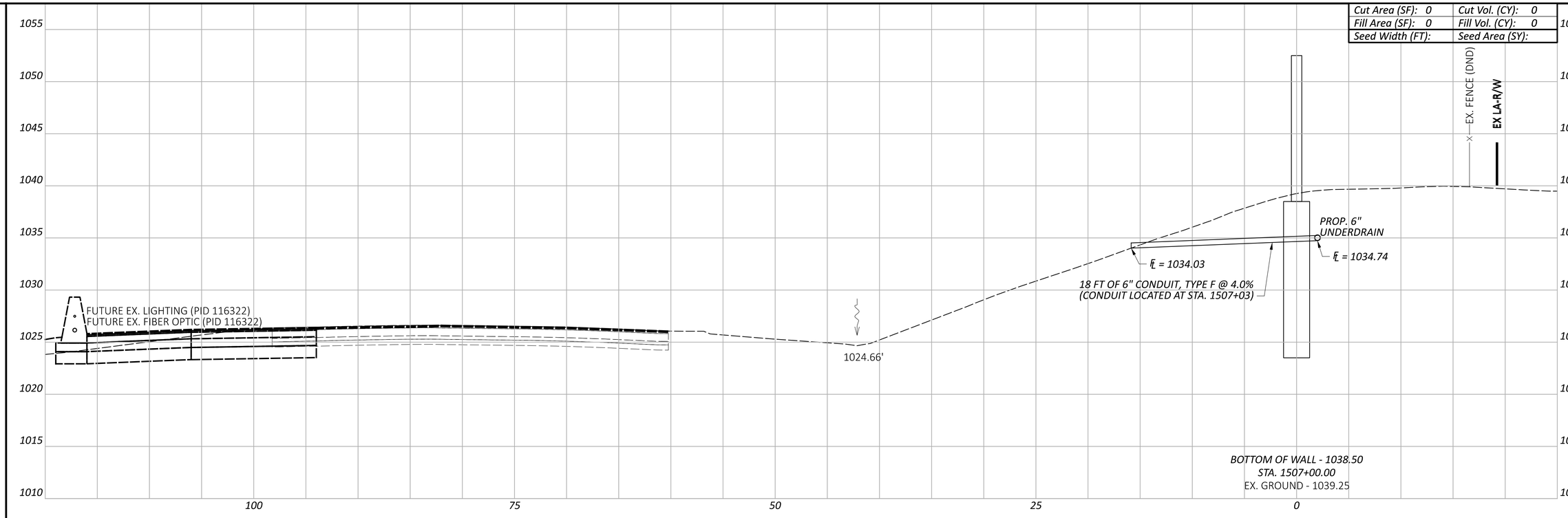
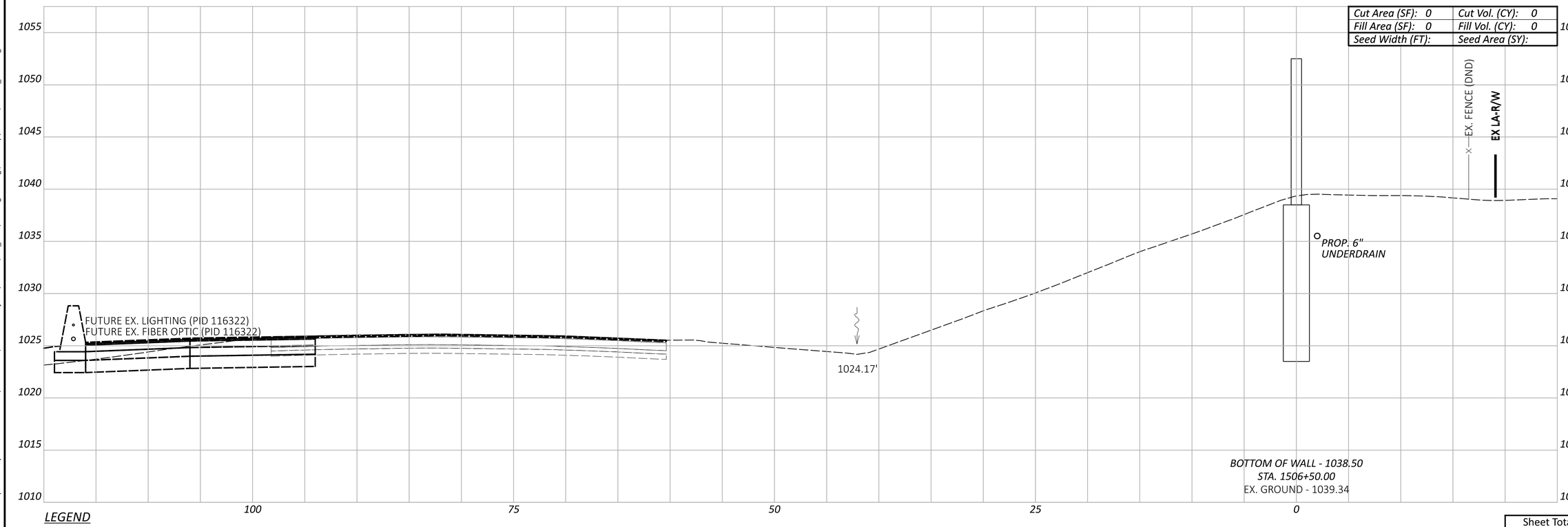
SHEET P.174 | TOTAL P.276





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 15
STA. 1506+50.00 TO STA. 1507+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1506+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 4:17:22 PM USER: jennifer.kelley
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JDH 01-22-24

PROJECT ID
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SHEET P.175 TOTAL P.276

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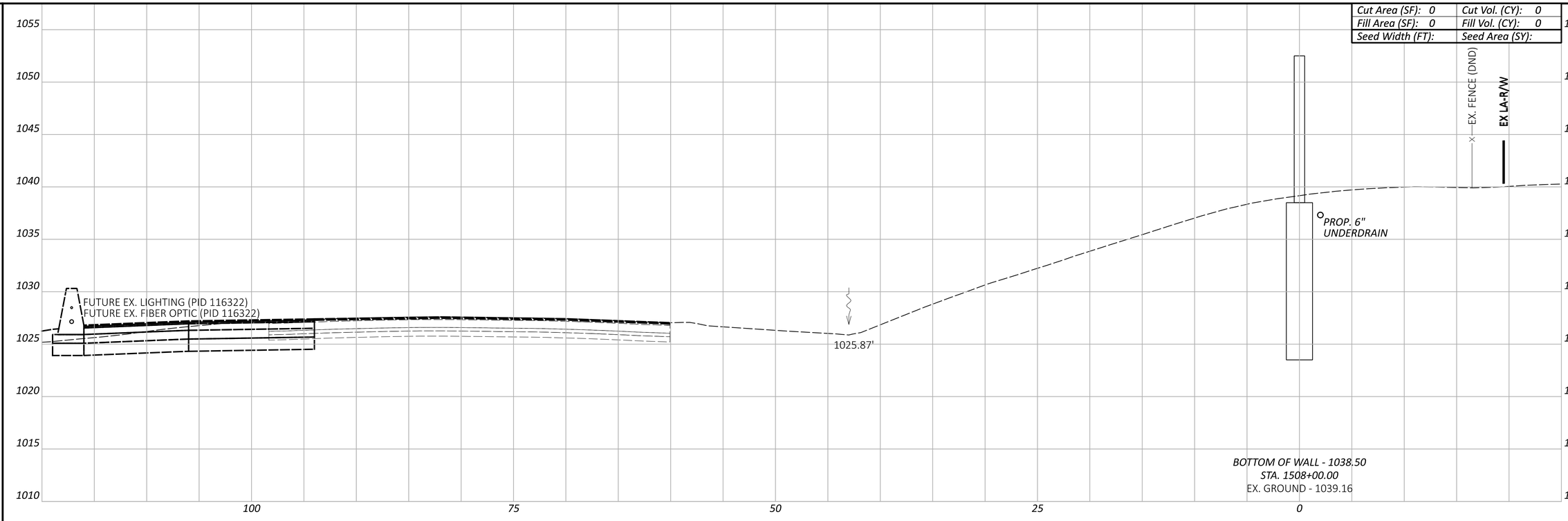

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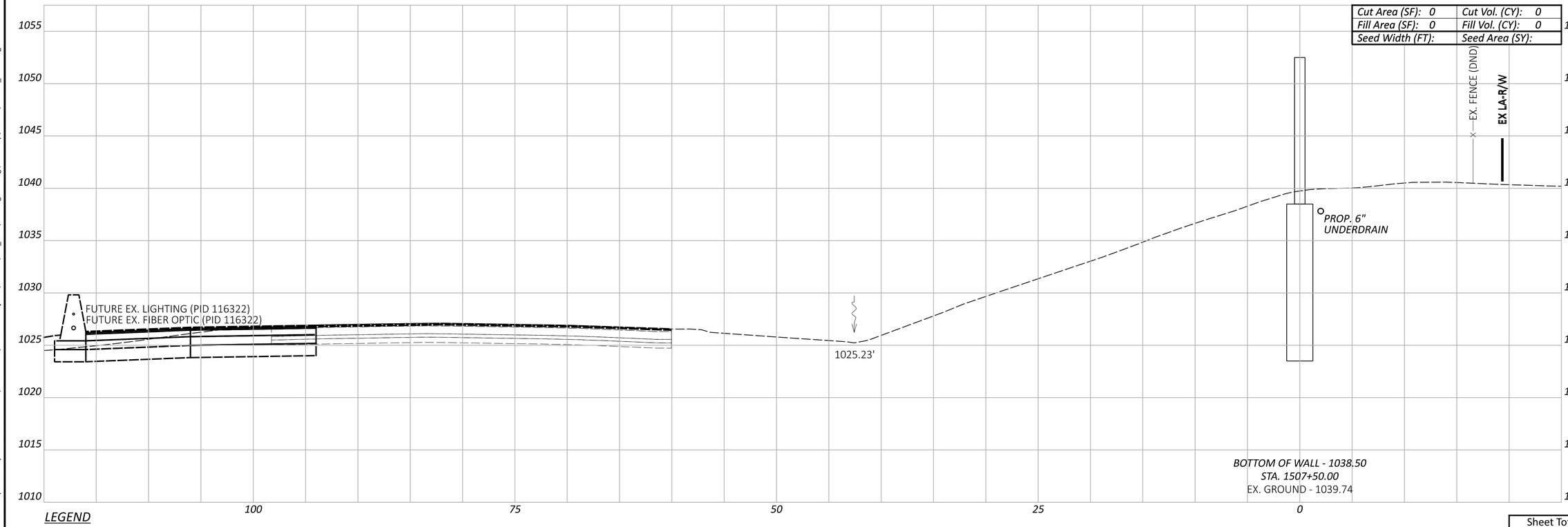

LEGEND

- - - - 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 WALLS

CROSS SECTIONS - WALL 15
STA. 1507+50.00 TO STA. 1508+00.00

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SHEET P.176 | TOTAL P.276

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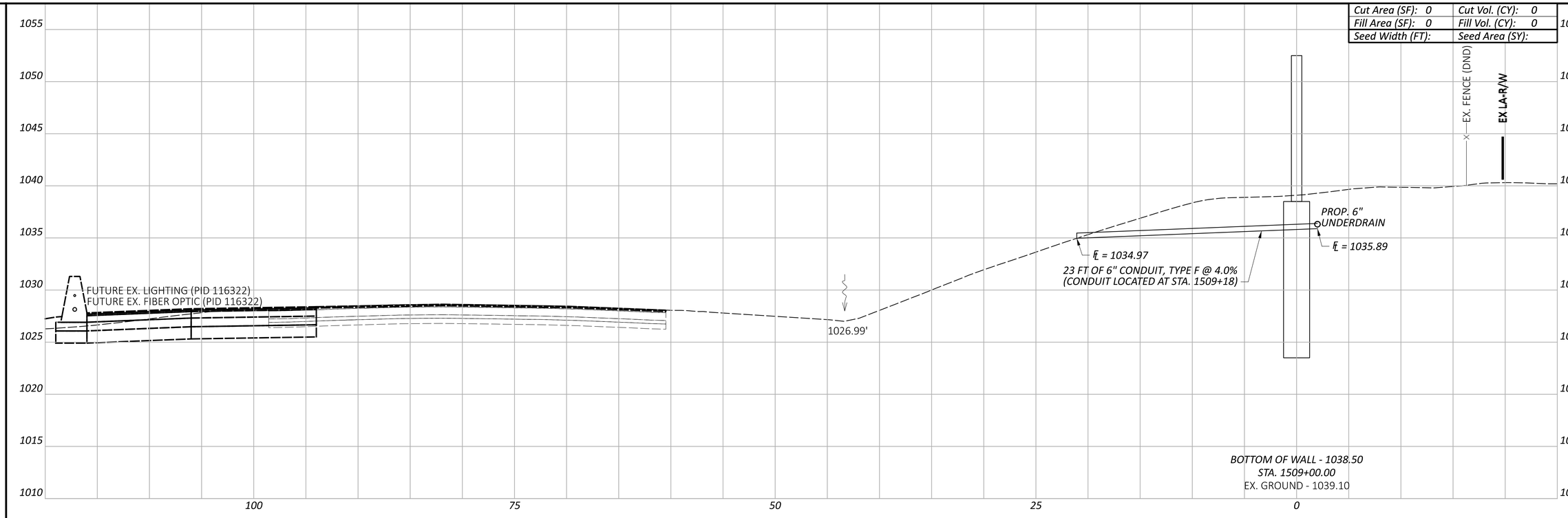

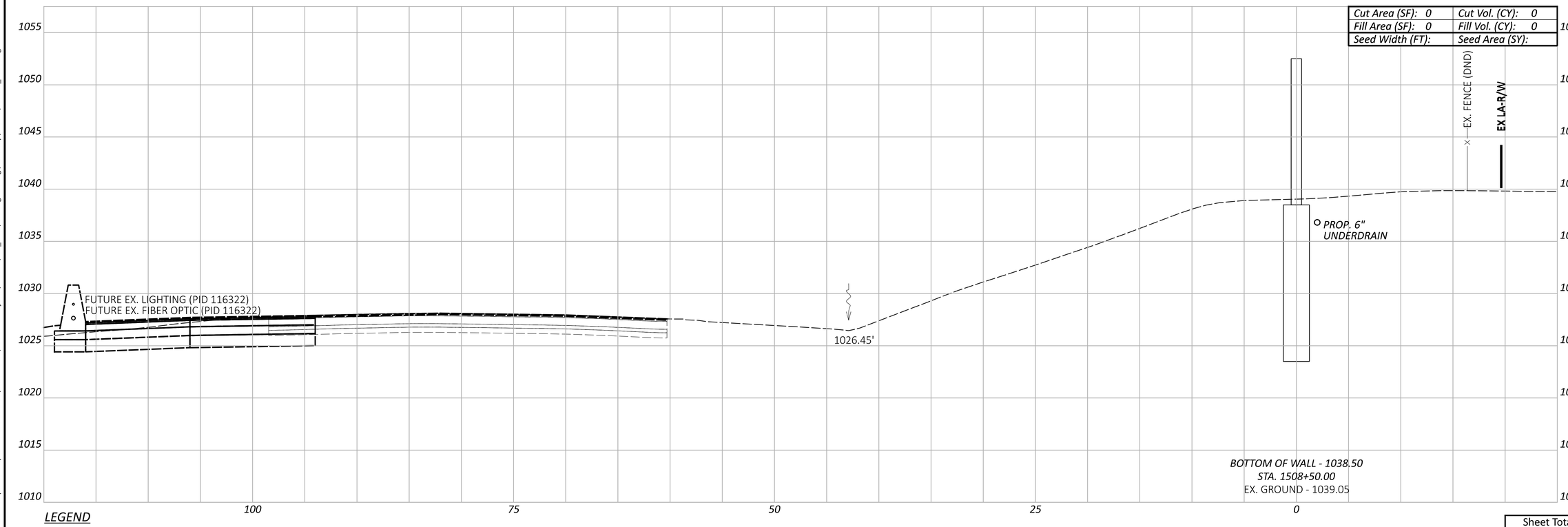

LEGEND

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

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

CROSS SECTIONS - WALL 15
STA. 1508+50.00 TO STA. 1509+00.00

18 FT C
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Sheet Totals		
Seeding	Cut	Fill

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SHEET	TOTAL
P.177	P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1508+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 4:17:42 PM USER: jennifer.kelley
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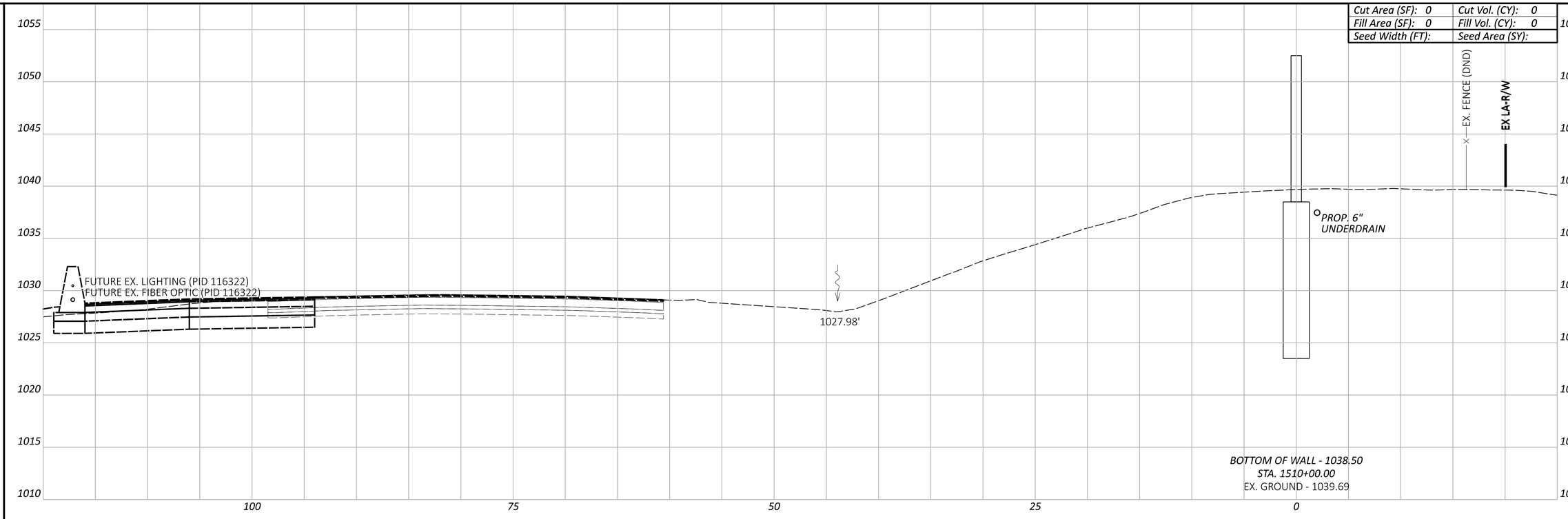

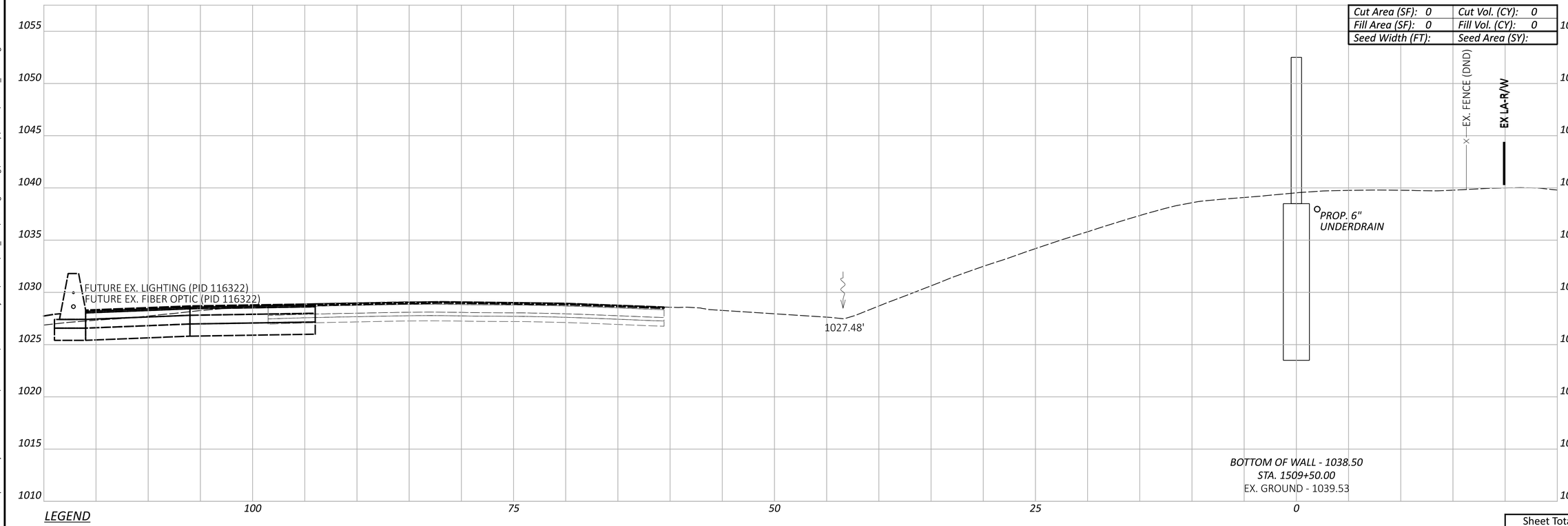

LEGEND

- - - EXISTING SR-161 PRIOR TO PID 116322

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

Sheet Totals		
Seeding	Cut	Fill

CROSS SECTIONS - WALL 15
STA. 1509+50.00 TO STA. 1510+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1509+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:51:34 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_XS015.dgn

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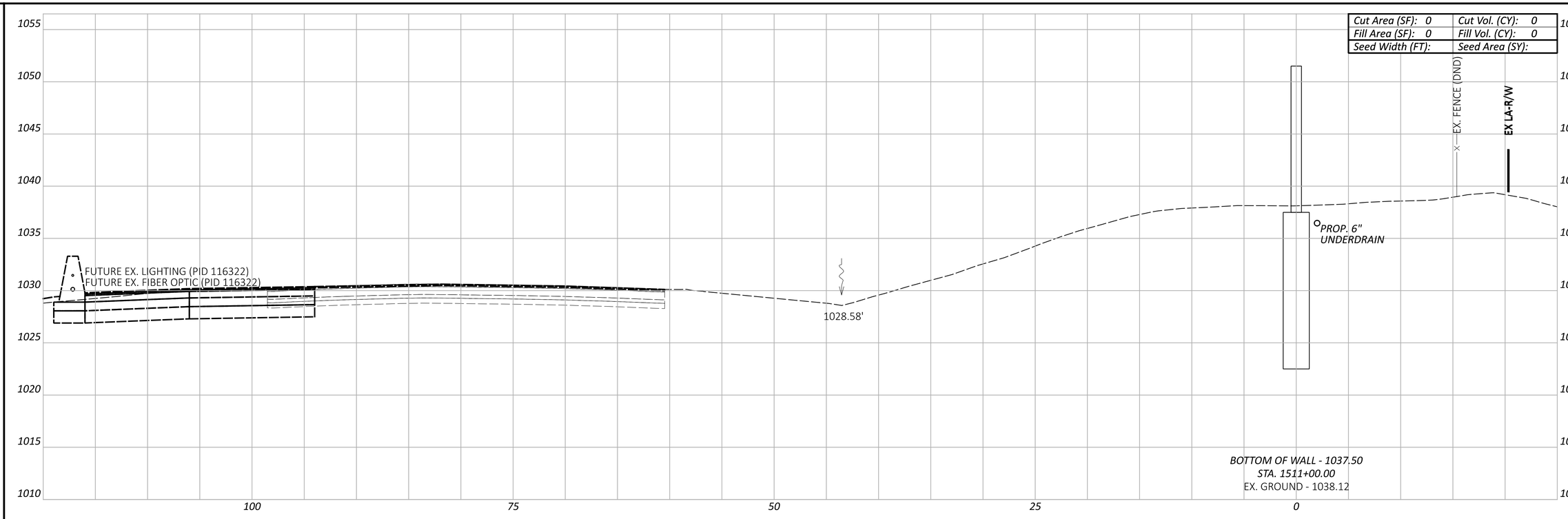
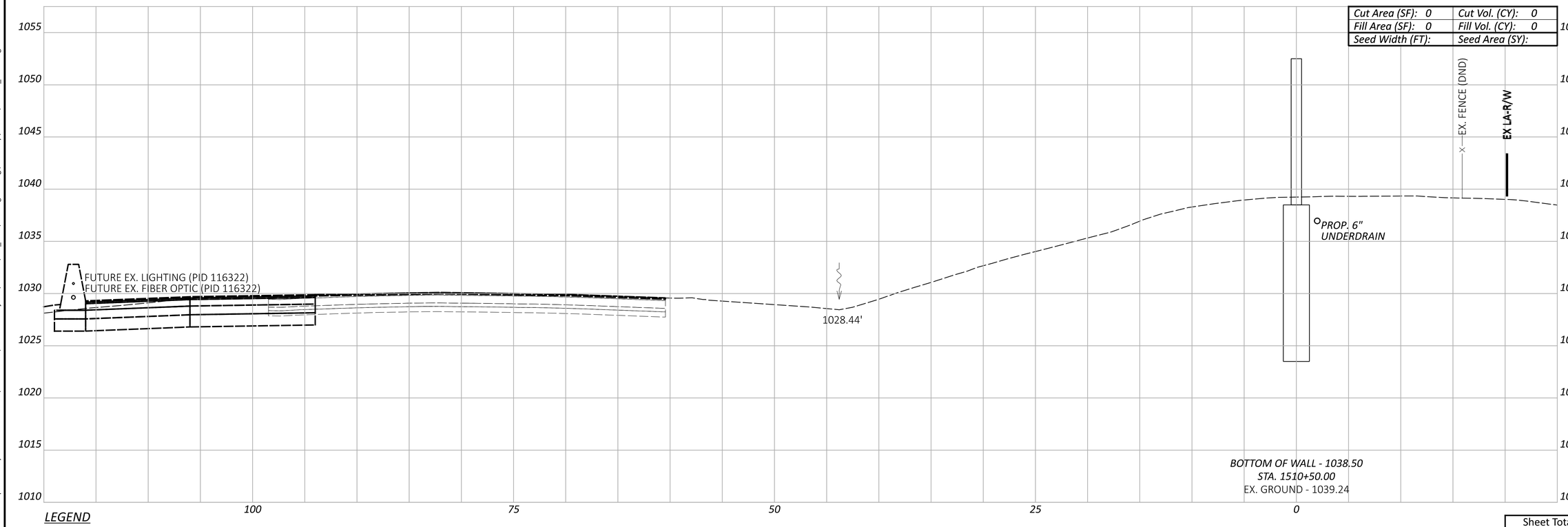
PROJECT ID 117607

SHEET P.178 TOTAL P.276





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 15
STA. 1510+50.00 TO STA. 1511+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1510+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:51:55 PM USER: jennifer.kelley
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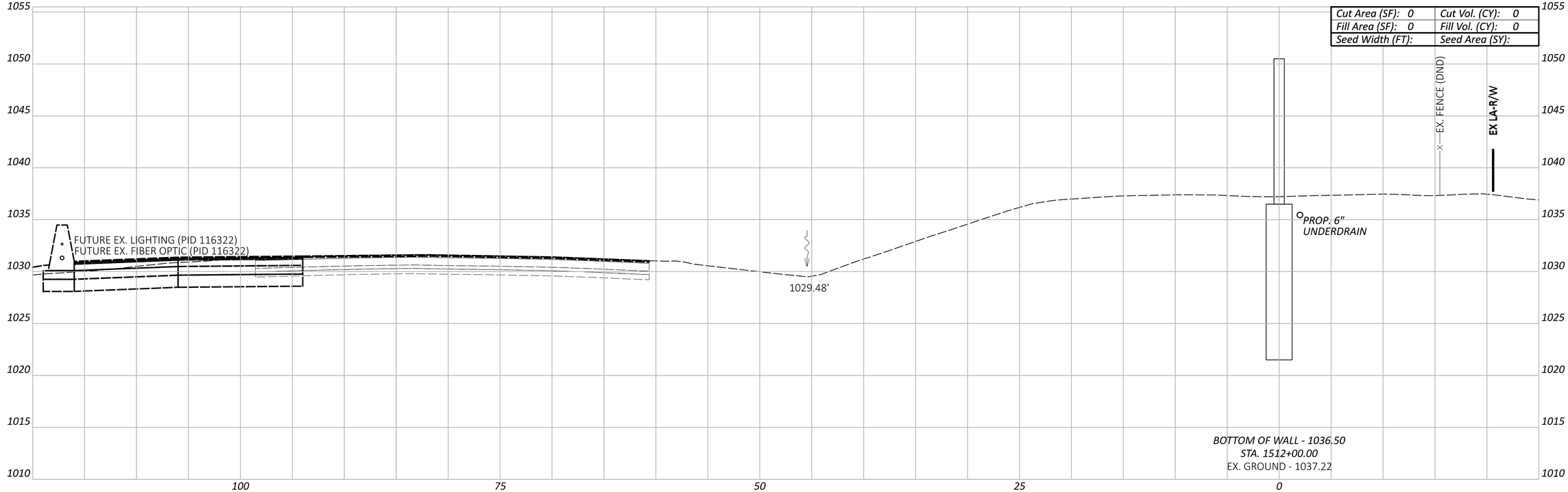
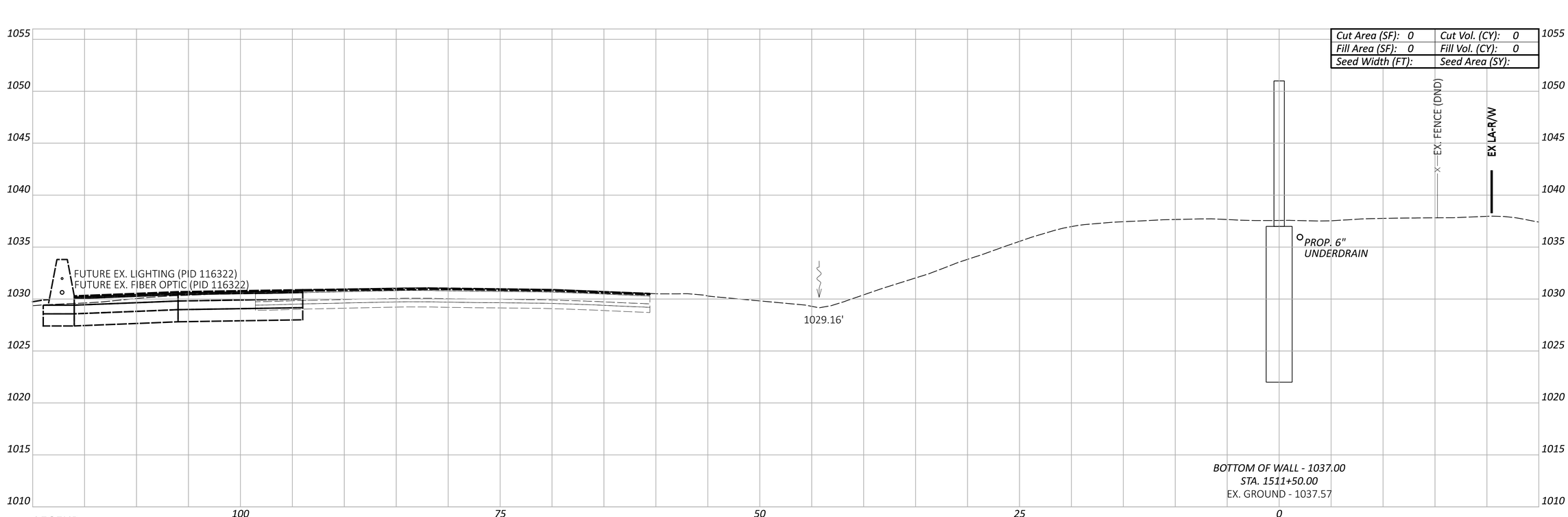
SHEET	TOTAL
P.179	P.276





LEGEND

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

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

CROSS SECTIONS - WALL 15
STA. 1511+50.00 TO STA. 1512+00.00

Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY
ARCADIS
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DESIGNER JMK

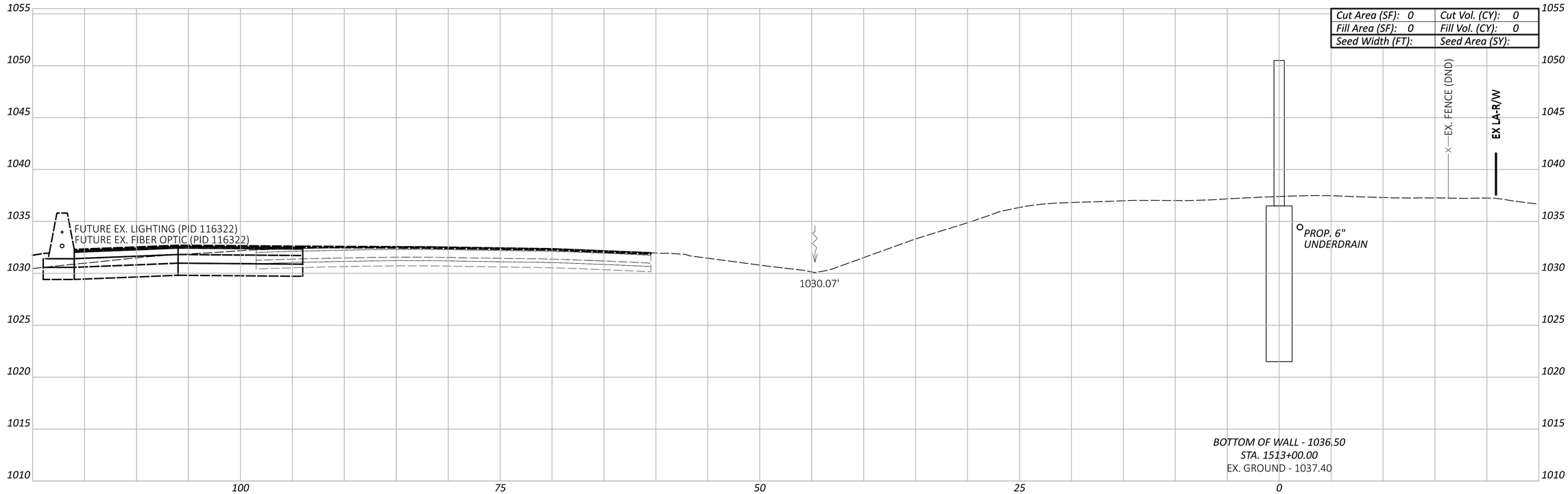
REVIEWER JDH 01-22-24

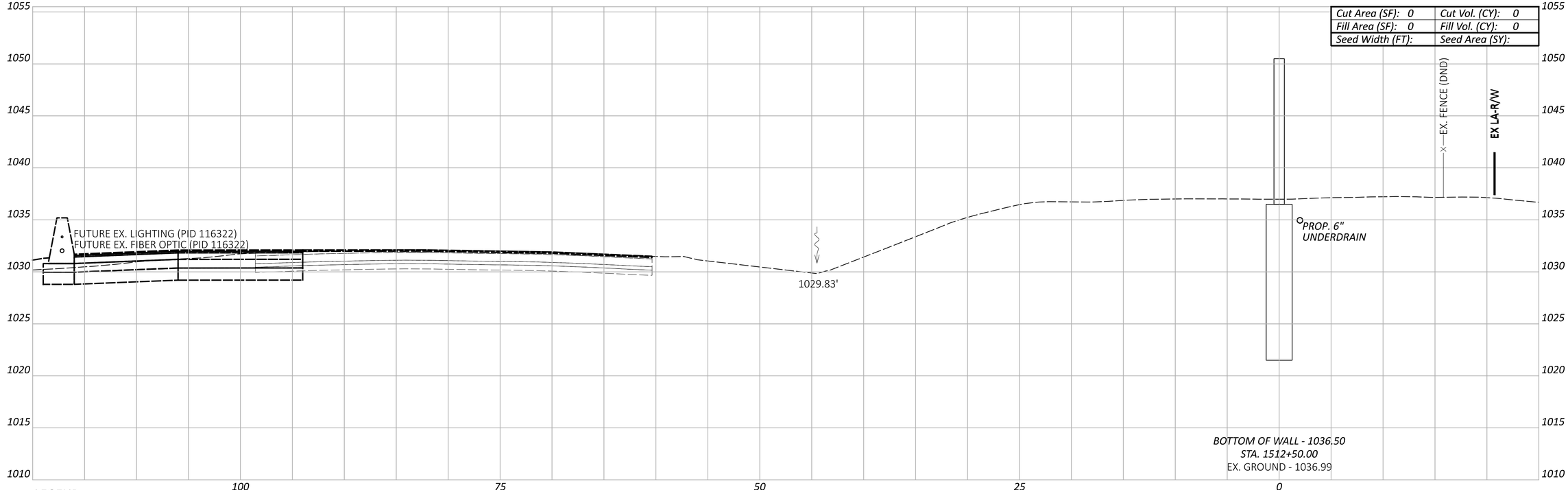
PROJECT ID 117607

SHEET P.180 | TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1511+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:52:15 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_XS015.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 15
STA. 1512+50.00 TO STA. 1513+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1512+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:52:36 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_XS015.dgn

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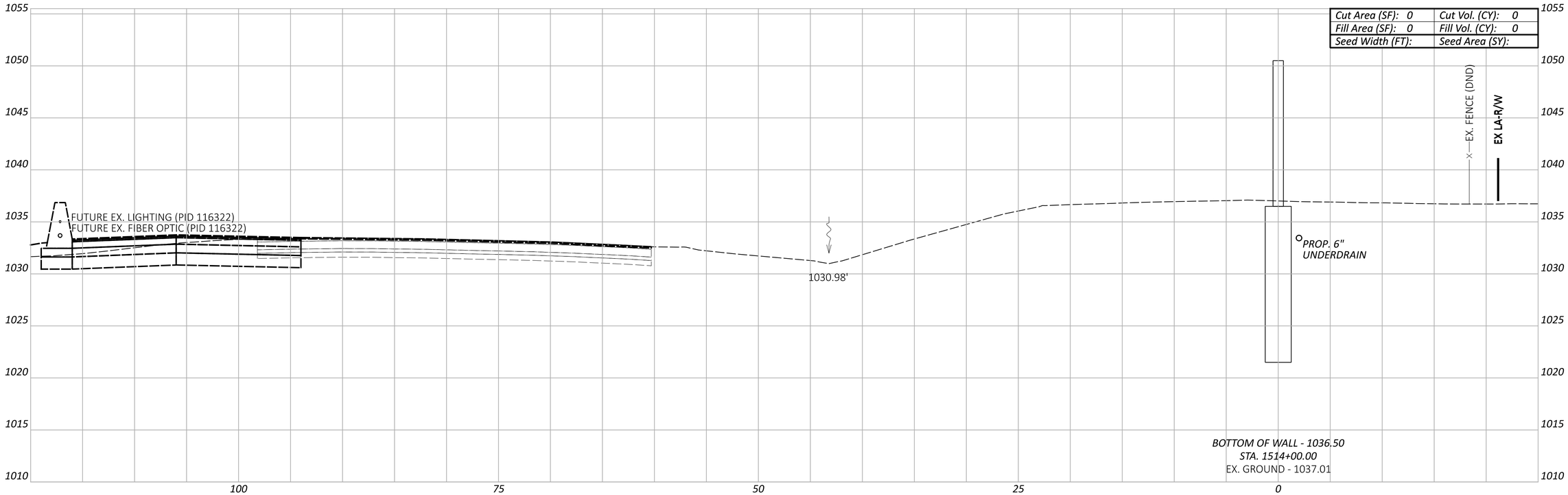
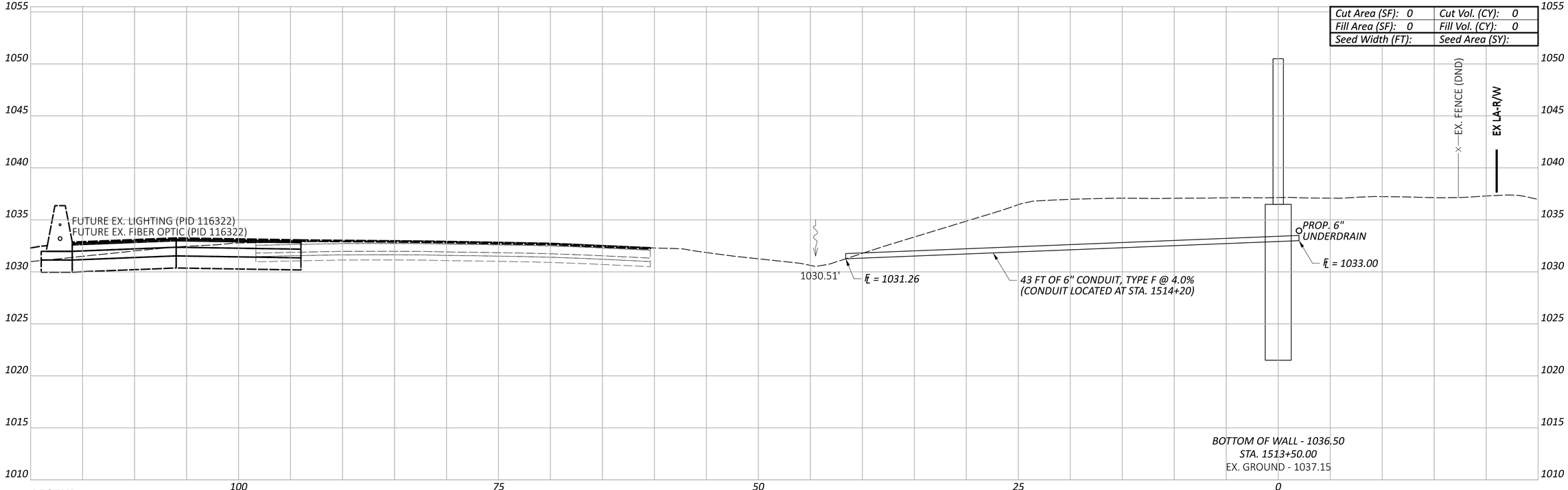
REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET	TOTAL
P.181	P.276

CROSS SECTIONS - WALL 15
STA. 1513+50.00 TO STA. 1514+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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PROJECT ID 117607

SHEET	TOTAL
P.182	P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1513+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 4:18:02 PM USER: jennifer.kelley
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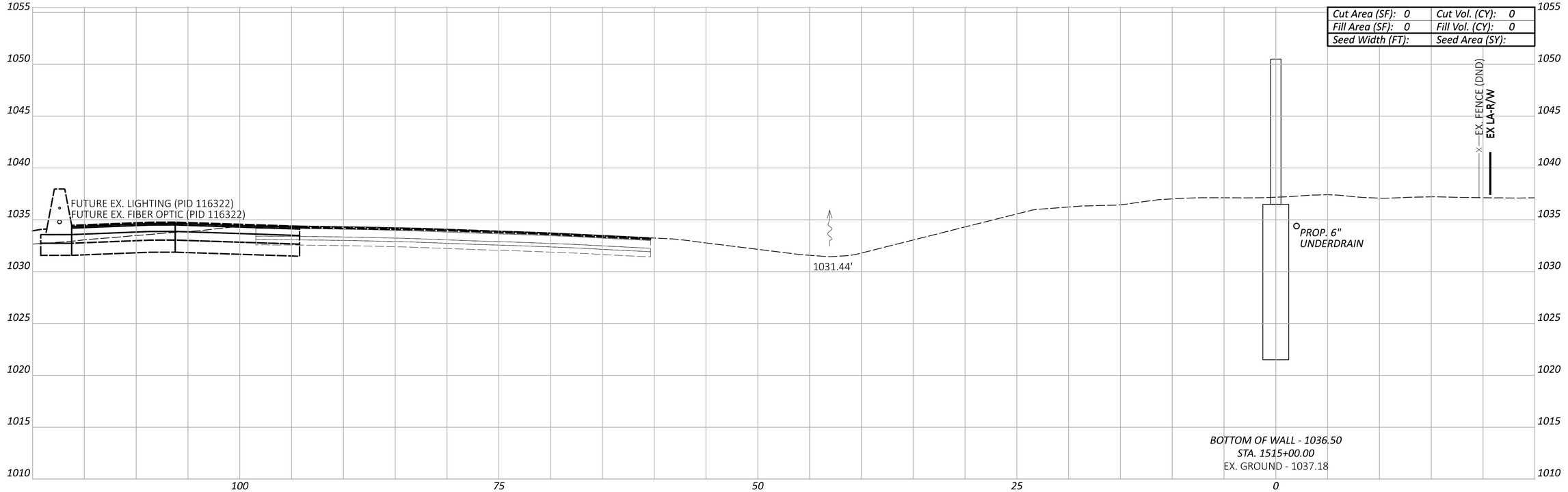

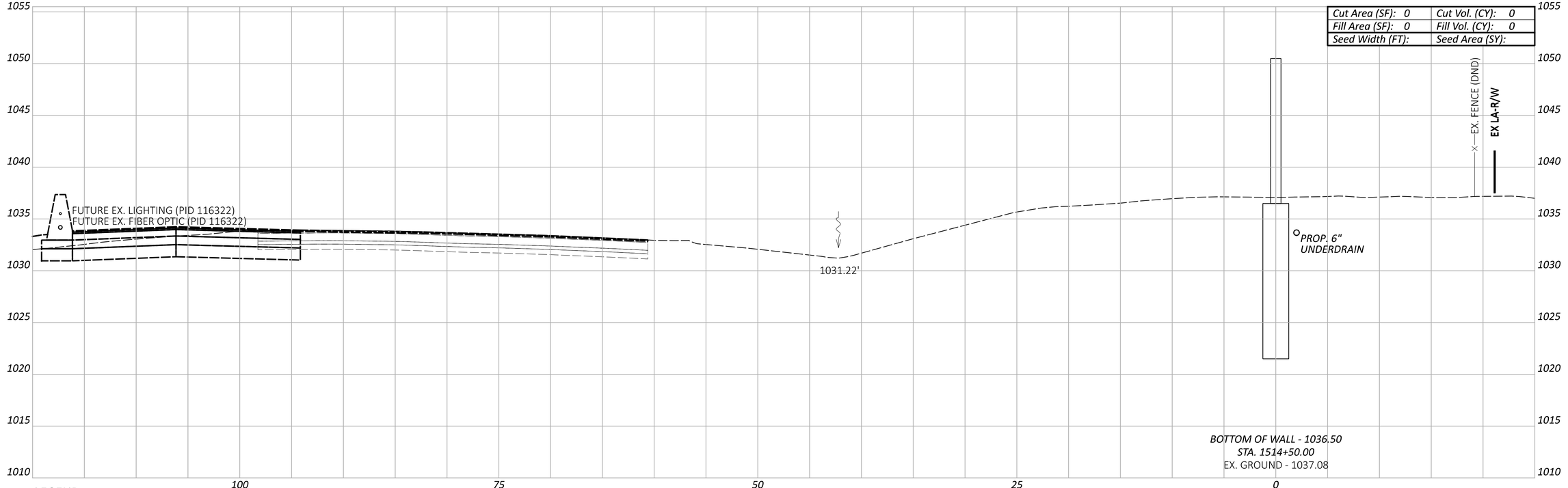

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals

Seeding	Cut	Fill

CROSS SECTIONS - WALL 15
STA. 1514+50.00 TO STA. 1515+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1514+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:53:15 PM USER: jennifer.kelley
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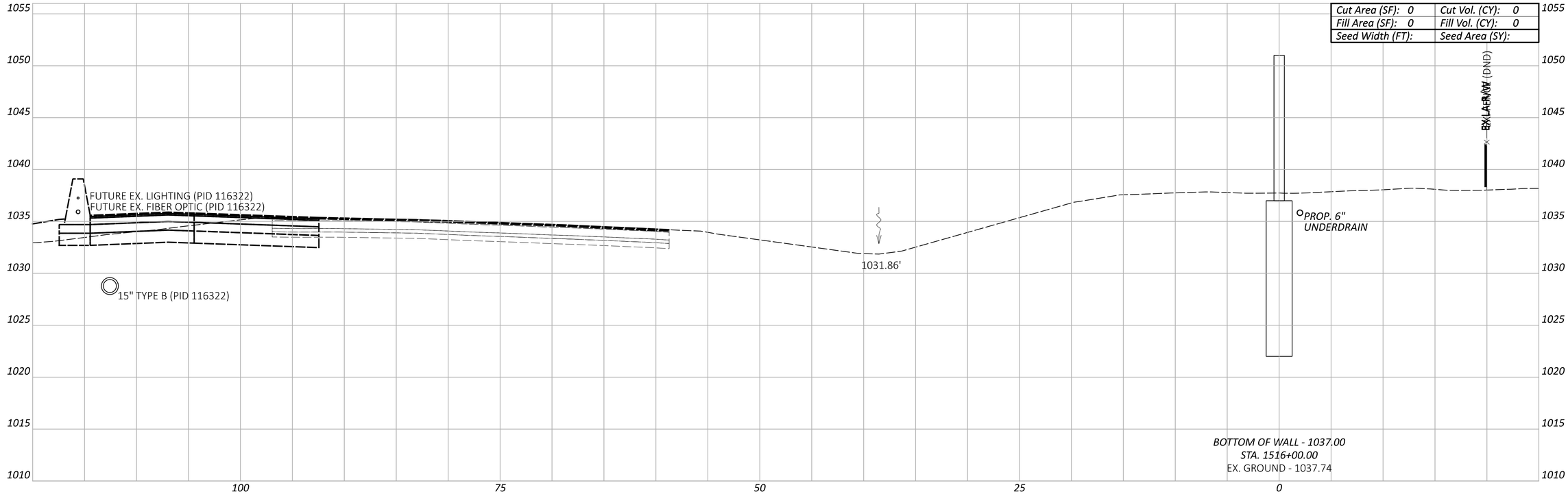
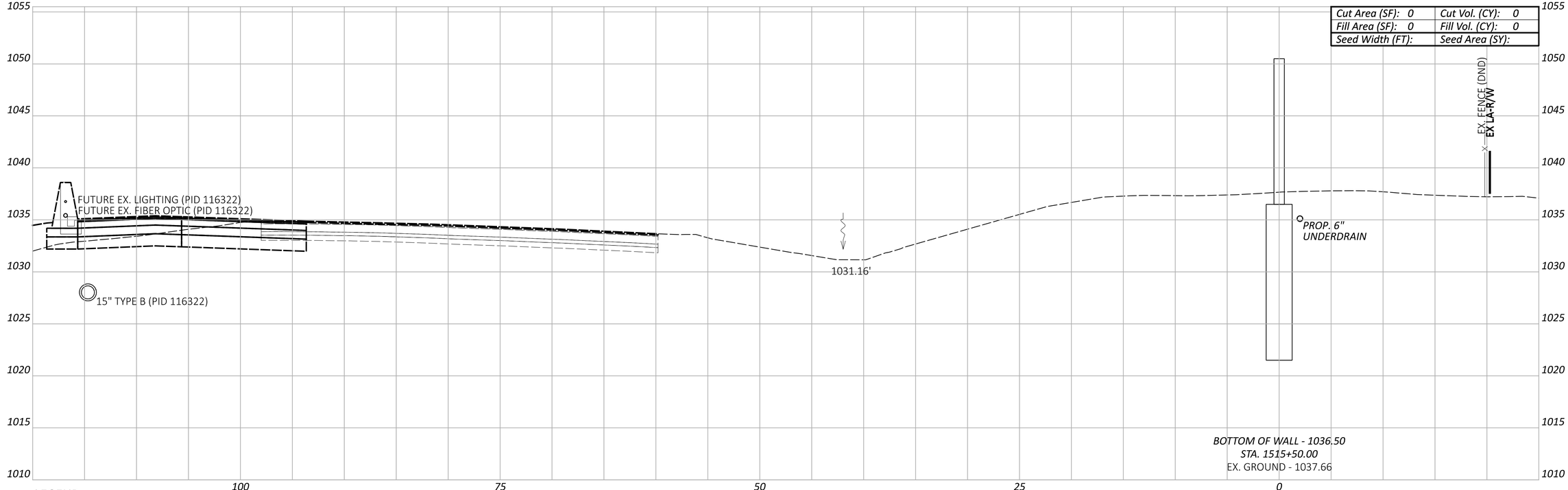
PROJECT ID 117607

SHEET P.183 TOTAL P.276





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 15
STA. 1515+50.00 TO STA. 1516+00.00

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PROJECT ID 117607

SHEET P.184 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1515+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:53:36 PM USER: jennifer.kelley
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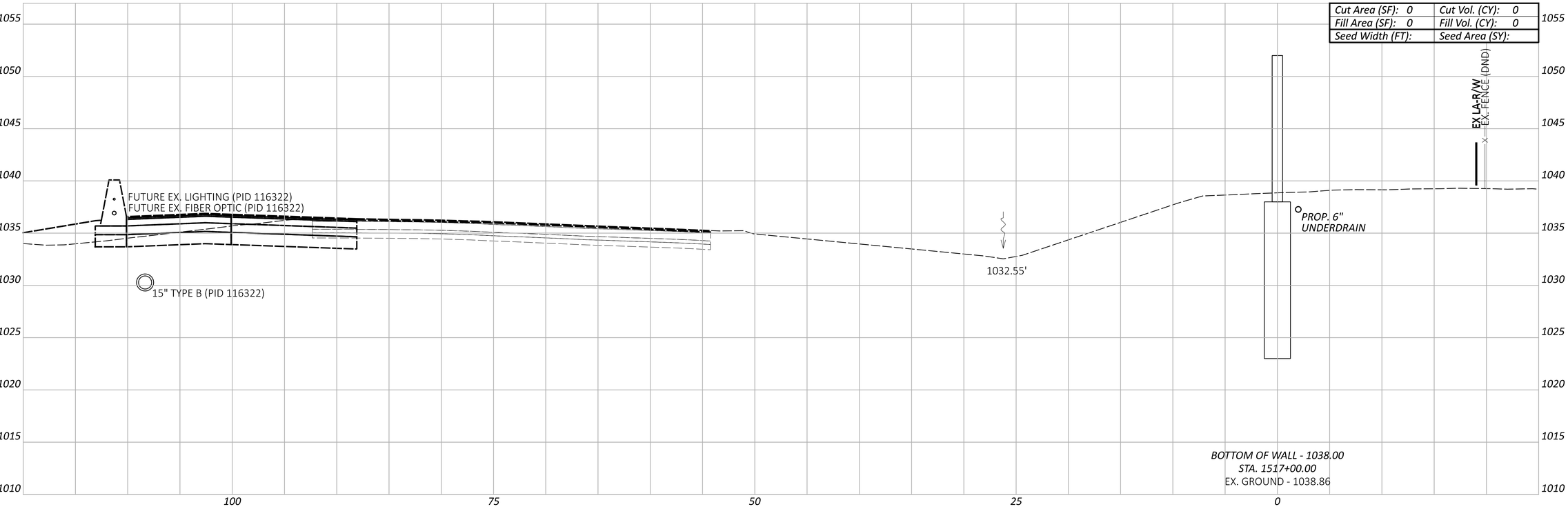

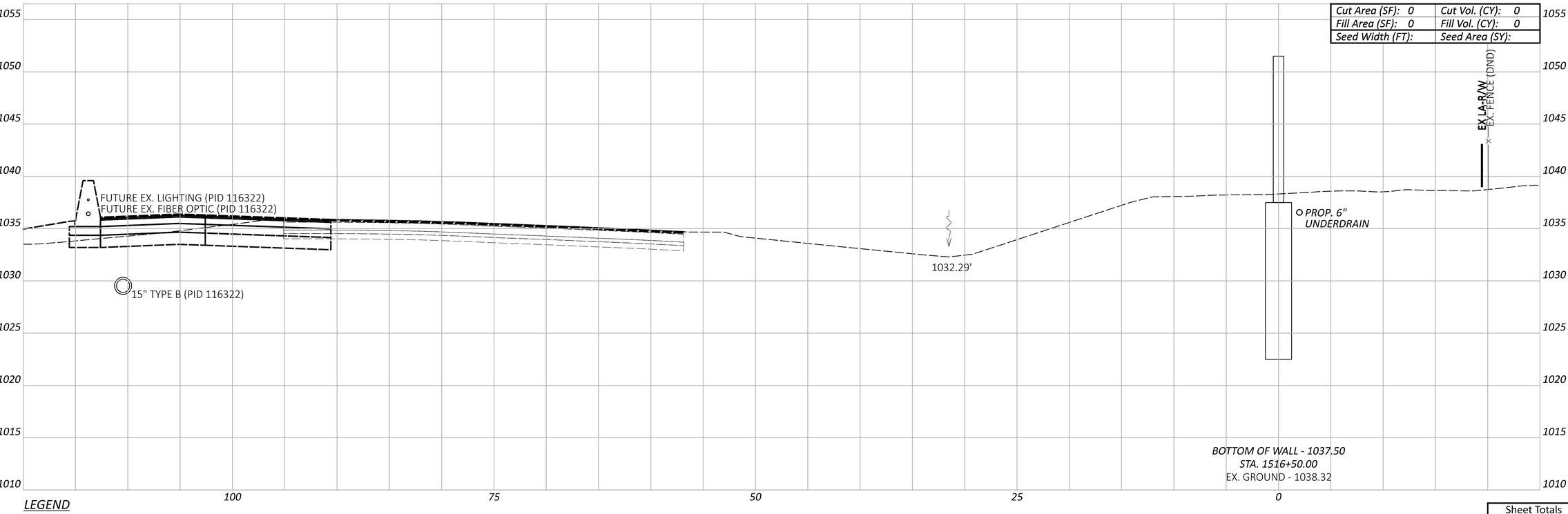

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals

Seeding	Cut	Fill

CROSS SECTIONS - WALL 15
STA. 1516+50.00 TO STA. 1517+00.00

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DESIGNER: JMK

REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.185 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1516+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:53:57 PM USER: jennifer.kelley
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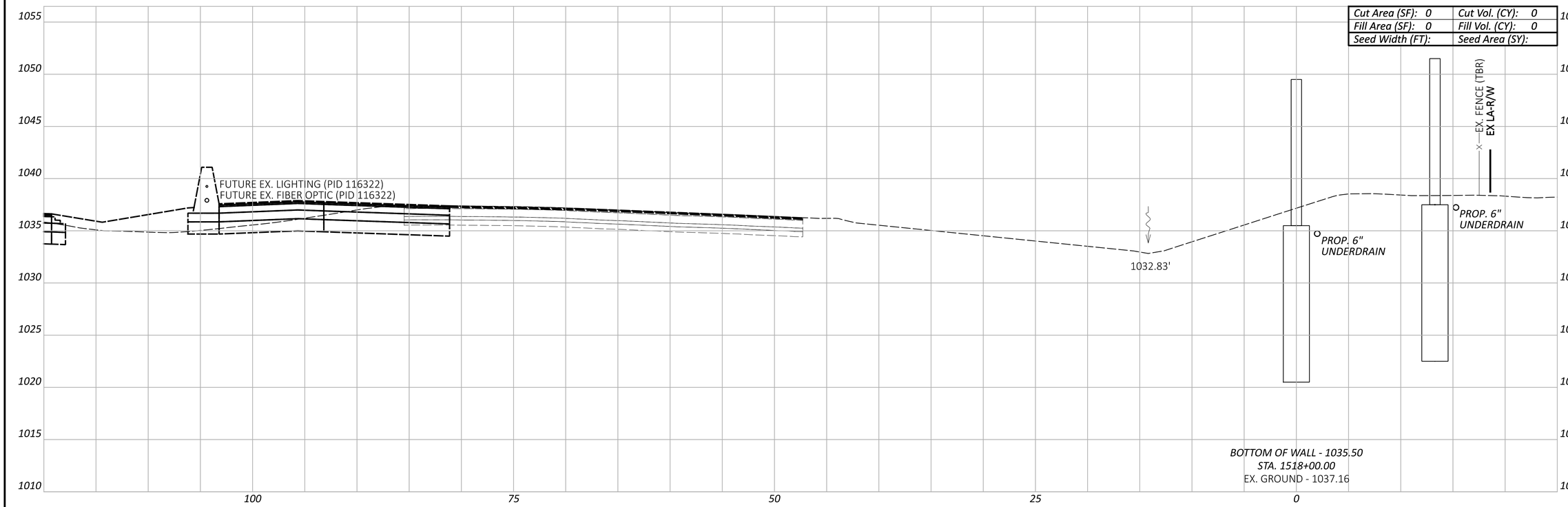

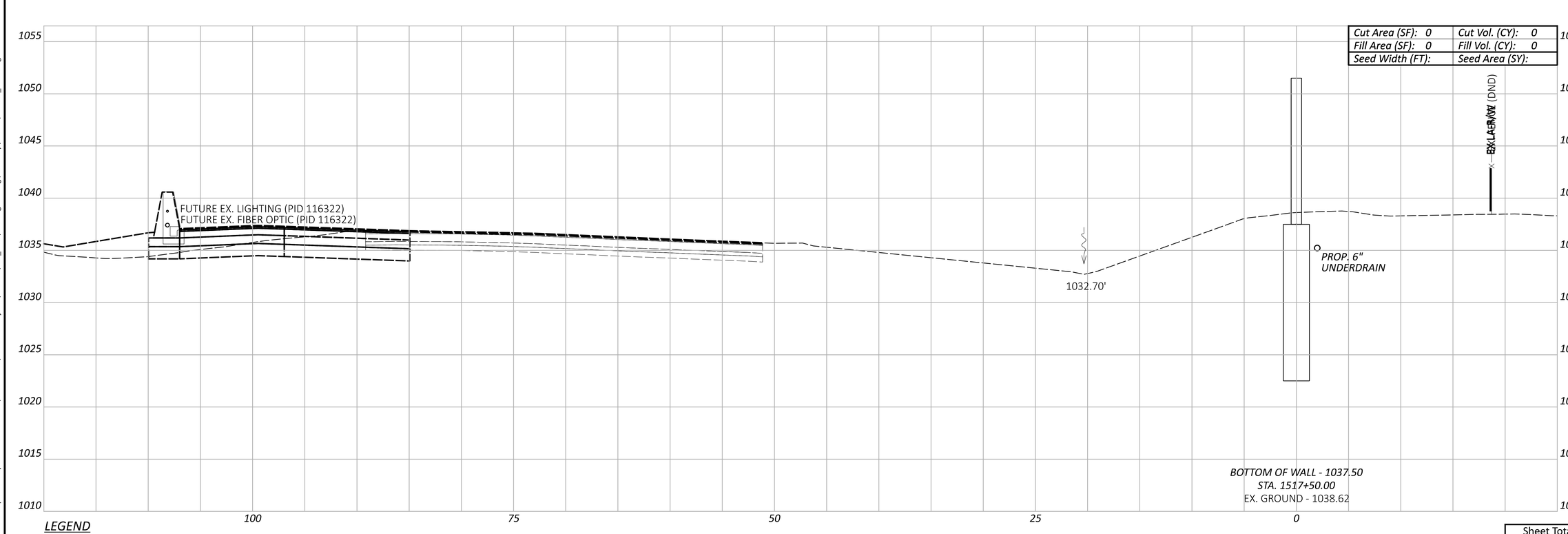

LEGEND

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

Sheet Totals		
Seeding	Cut	Fill

CROSS SECTIONS - WALL 15
STA. 1517+50.00 TO STA. 1518+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1517+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:54:16 PM USER: jennifer.kelley
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DESIGNER: JMK
REVIEWER: JDH 01-22-24
PROJECT ID: 117607
SHEET: P.186 TOTAL: P.276

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1518+43.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 4:18:20 PM USER: jennifer.kelley
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Fill Area (SF): 0	Fill Vol. (CY): 0
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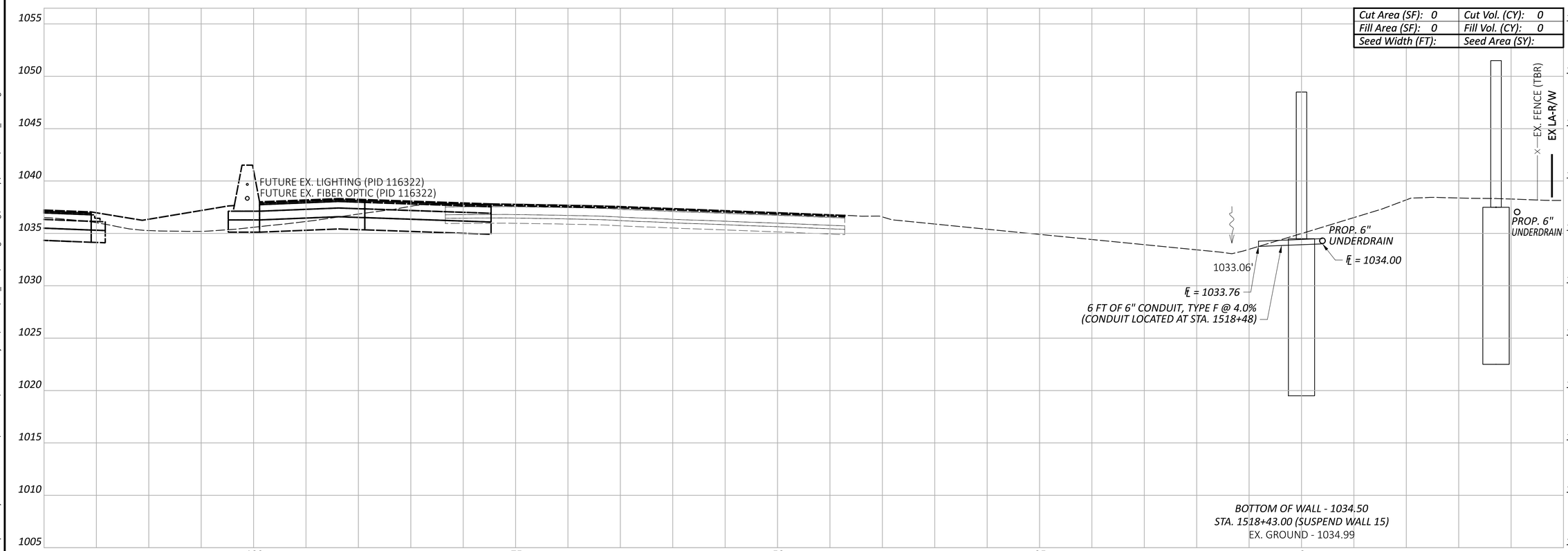

LEGEND

EXISTING SR-161 PRIOR TO PID 116322

FUTURE EXISTING SR-161 AFTER CONSTRUCTION OF PID 116322

Sheet Totals		
Seeding	Cut	Fill

CROSS SECTIONS - WALL 15
STA. 1518+43.00

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
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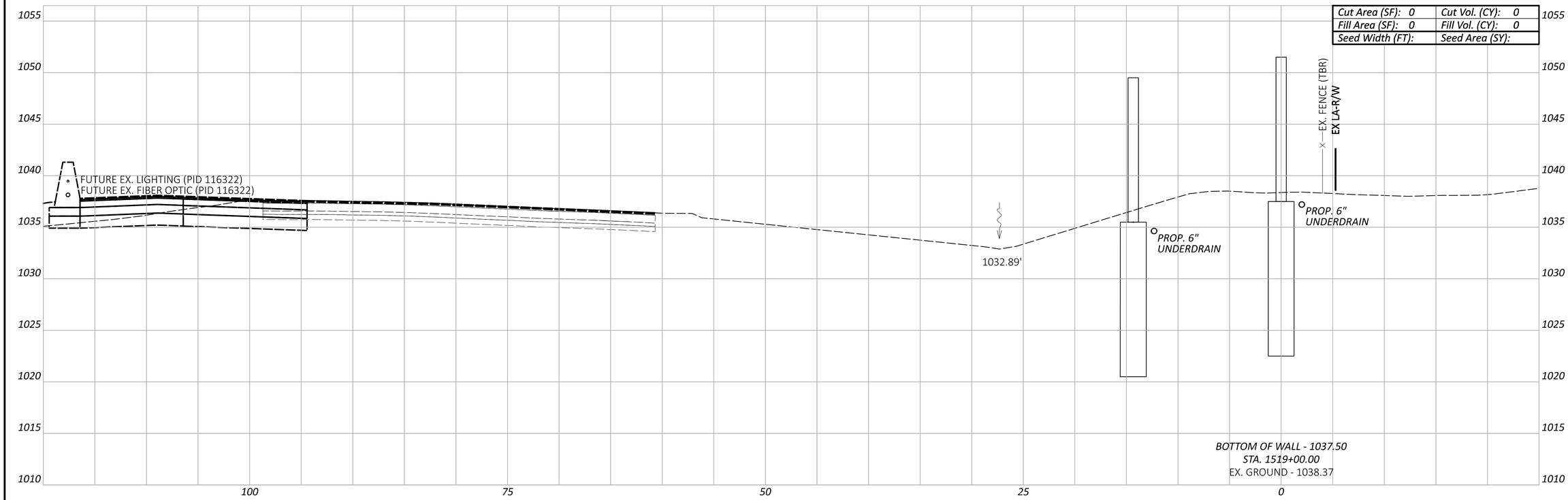
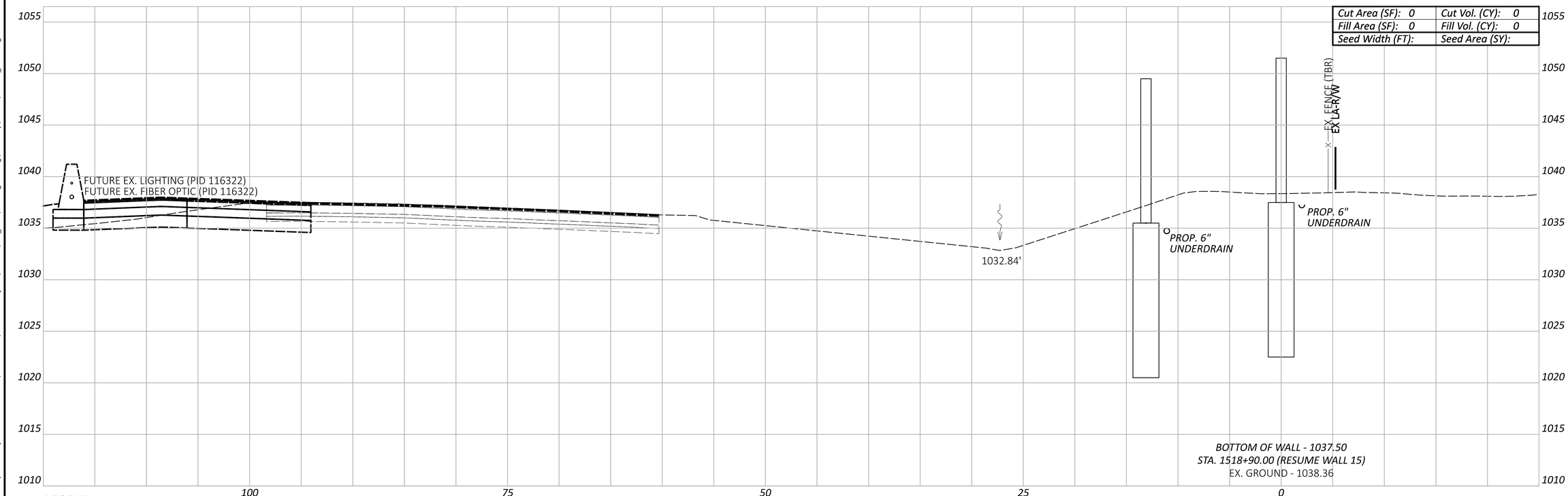
DESIGNER: JMK

REVIEWER: JDH 01-22-24

PROJECT ID: 117607

SHEET: P.187 TOTAL: P.276





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 WALLS

CROSS SECTIONS - WALL 15
STA. 1518+90.00 TO STA. 1519+00.00

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REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.188 TOTAL P.276

MODEL: BLP_WALL15 - 1518+90.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:54:46 PM USER: jennifer.kelley
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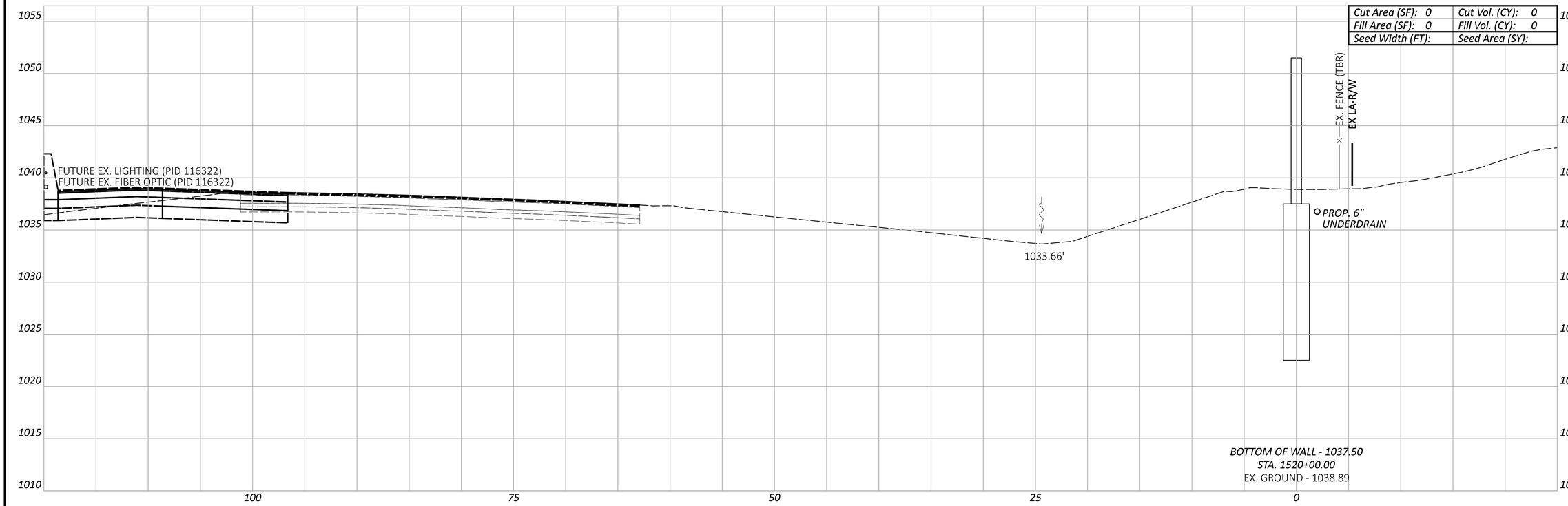

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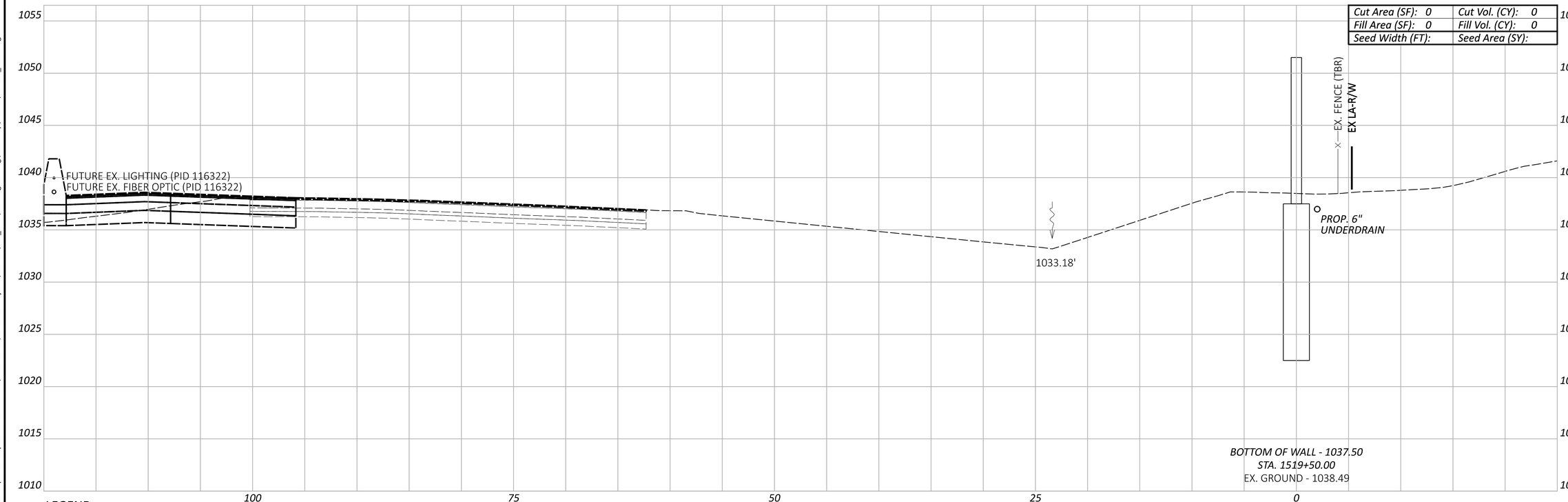

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LEGEND

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

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

Sheet Totals		
Seeding	Cut	Fill

CROSS SECTIONS - WALL 15
STA. 1519+50.00 TO STA. 1520+00.00

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1519+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:55:30 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_XS015.dgn

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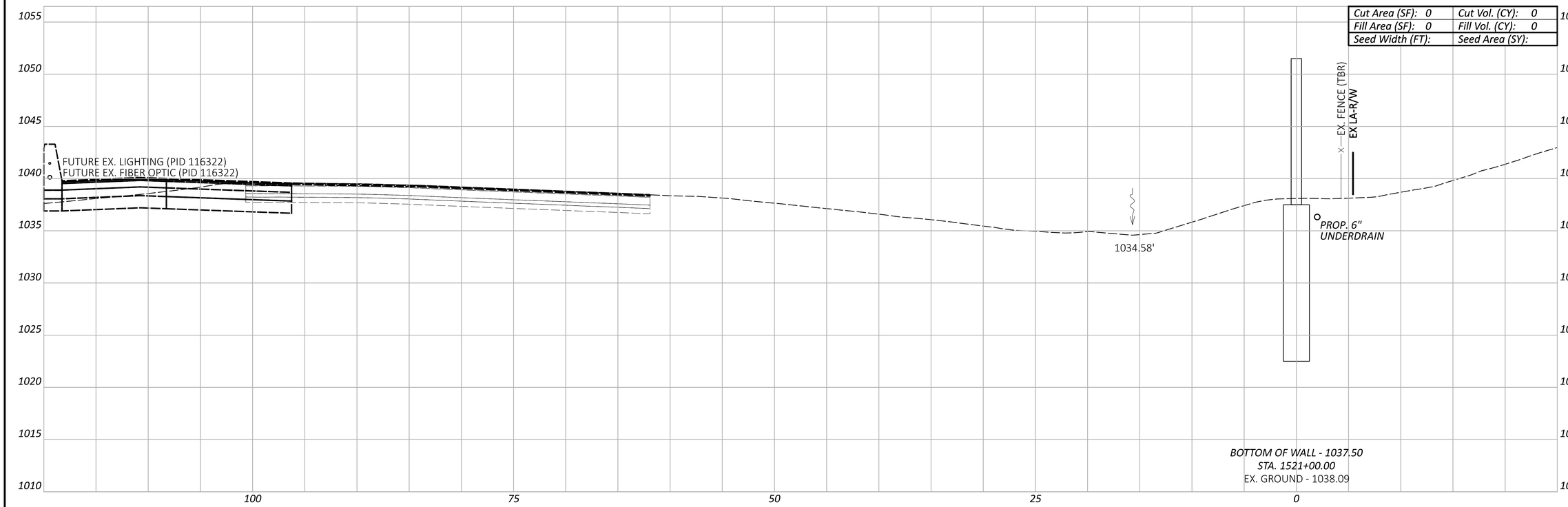
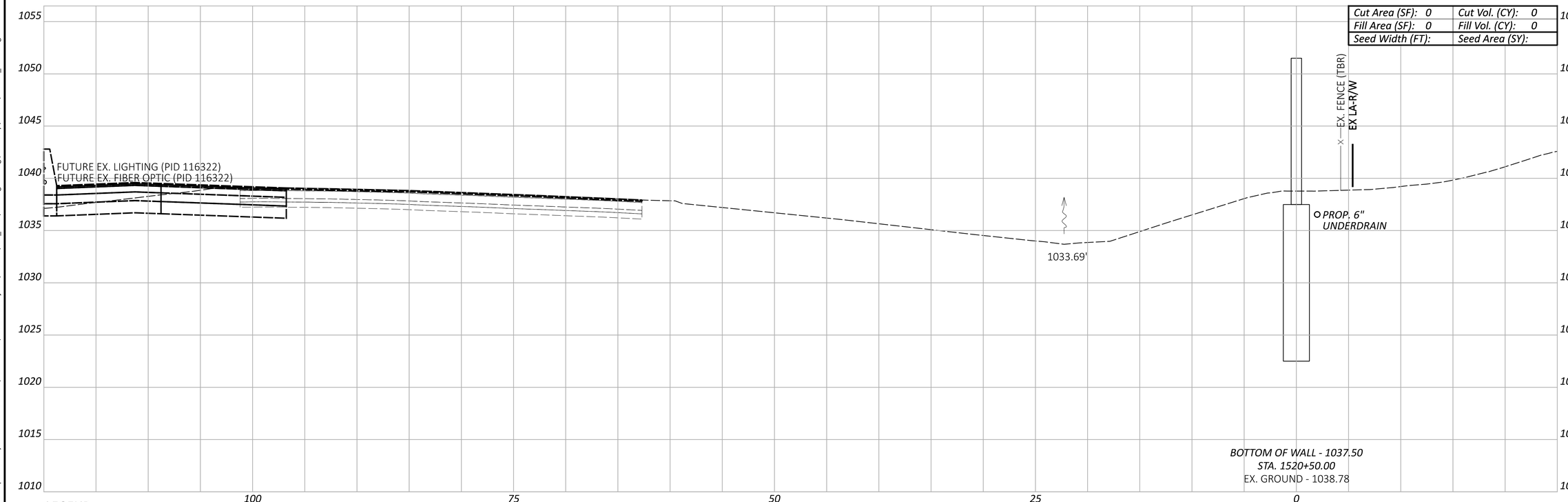
PROJECT ID 117607

SHEET P.189 | TOTAL P.276





LEGEND

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

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

FRA-161-15.80 NOISE WALLS

CROSS SECTIONS - WALL 15
STA. 1520+50.00 TO STA. 1521+00.00

Sheet Totals		
Seeding	Cut	Fill

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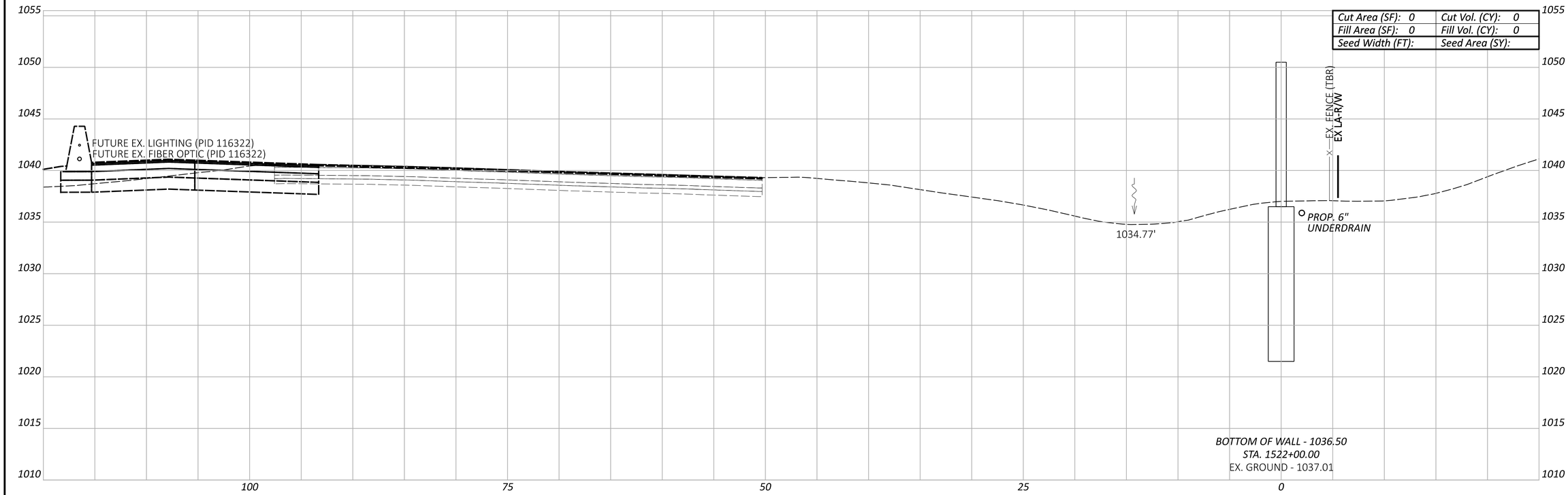
PROJECT ID 117607

SHEET P.190 TOTAL P.276

MODEL: BLP_WALL15 - 1520+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:56:14 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_XS015.dgn



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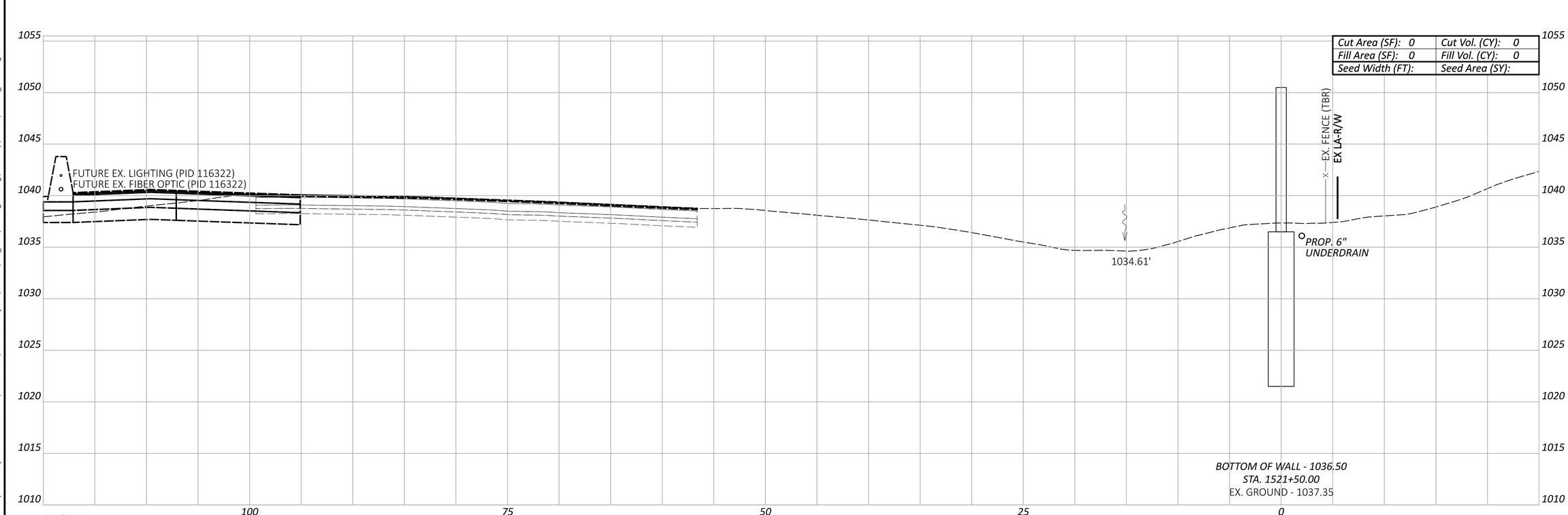

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LEGEND

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

Sheet Totals		
Seeding	Cut	Fill

CROSS SECTIONS - WALL 15
STA. 1521+50.00 TO STA. 1522+00.00

FRA-161-15.80 NOISE WALLS

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DESIGNER JMK

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PROJECT ID 117607

SHEET P.191 | TOTAL P.276

MODEL: BLP_WALL15 - 1521+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:57:00 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_XS015.dgn

FRA-161-15.80 NOISE WALLS

MODEL: BLP_WALL15 - 1522+26.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 4:32:15 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_XS015.dgn

CROSS SECTIONS - WALL 15
STA. 1522+26.00

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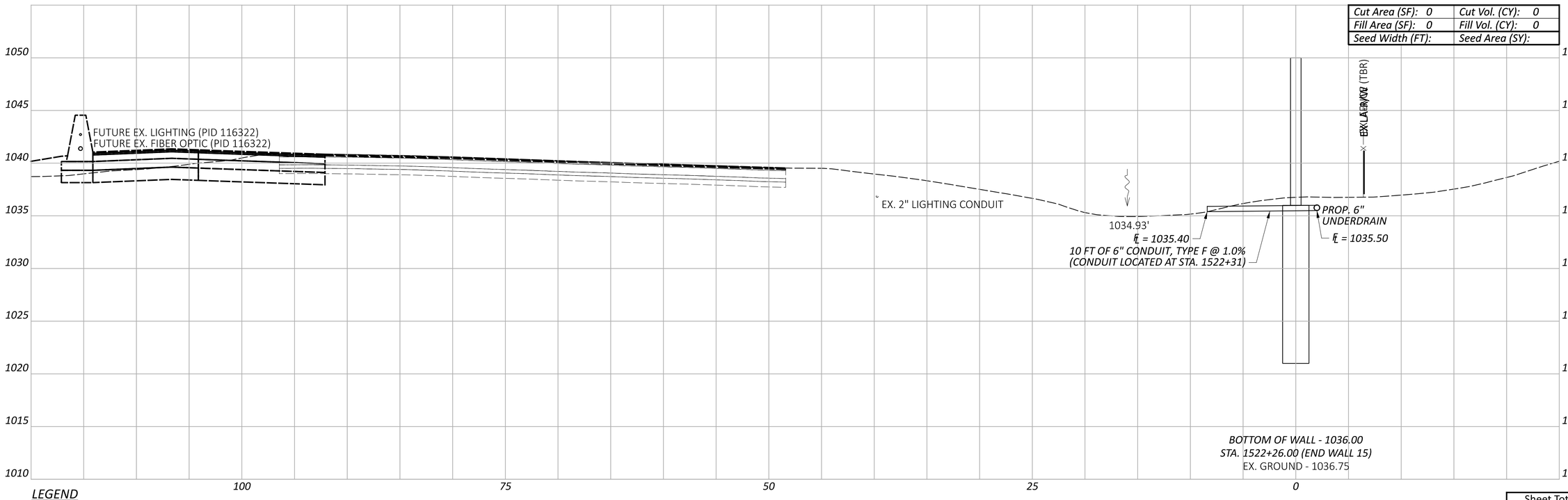

LEGEND

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

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

Sheet Totals		
Seeding	Cut	Fill

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DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.192 TOTAL P.276

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	965.19	7.00	965.50	979.50
2	300+24.00	00D0'00" LT	965.19	7.00	965.50	979.50
3	300+48.00	00D0'00" LT	965.19	7.00	965.50	980.50
4	300+72.00	00D0'00" LT	966.19	7.00	966.50	980.50
5	300+96.00	00D0'00" LT	966.19	7.00	966.50	980.50
6	301+20.00	00D0'00" LT	966.19	8.00	966.50	981.00
7	301+44.00	00D0'00" LT	966.69	8.00	967.00	981.00
8	301+68.00	00D0'00" LT	966.69	8.00	967.00	981.00
9	301+92.00	02°51'26" LT	966.69	8.00	967.00	981.50
10	302+16.00	00D0'00" LT	967.19	8.00	967.50	981.50
11	302+40.00	00D0'00" LT	967.19	8.00	967.50	981.50
12	302+64.00	00D0'00" LT	967.19	8.00	967.50	982.00
13	302+88.00	00D0'00" LT	967.69	8.00	968.00	982.00
14	303+12.00	00D0'00" LT	967.69	6.50	968.00	982.50
15	303+36.00	00D0'00" LT	968.19	6.50	968.50	982.50
16	303+60.00	00D0'00" LT	968.19	6.50	968.50	982.50
17	303+84.00	00D0'00" LT	968.19	6.50	968.50	982.50
18	304+08.00	00D0'00" LT	968.19	6.50	968.50	982.50
19	304+32.00	00D0'00" LT	968.19	6.50	968.50	982.50
20	304+56.00	00D0'00" LT	968.19	6.50	968.50	982.50
21	304+80.00	00D0'00" LT	968.19	6.50	968.50	982.50
22	305+04.00	00D0'00" LT	968.19	6.50	968.50	982.50
23	305+28.00	00D0'00" LT	968.19	6.50	968.50	982.50
24	305+52.00	00D0'00" LT	968.19	6.50	968.50	982.50
25	305+76.00	00D0'00" LT	968.19	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	960.19	7.00	960.50	974.50
2	600+24.00	00D0'00" LT	960.19	7.00	960.50	974.50
3	600+48.00	00D0'00" LT	960.19	7.00	960.50	974.50
4	600+72.00	00D0'00" LT	960.19	7.00	960.50	975.50
5	600+96.00	00D0'00" LT	961.19	7.00	961.50	976.50
6	601+08.00	00D0'00" LT	962.19	7.00	962.50	977.50
7	601+20.00	00D0'00" LT	963.19	7.00	963.50	978.50
8	601+32.00	00D0'00" LT	964.19	7.00	964.50	979.50
9	601+44.00	00D0'00" LT	965.19	7.00	965.50	980.00
10	601+56.00	00D0'00" LT	965.69	7.00	966.00	980.50
11	601+68.00	00D0'00" LT	966.19	7.00	966.50	981.00
12	601+92.00	00D0'00" LT	966.69	7.00	967.00	982.00
13	602+16.00	00D0'00" LT	967.69	7.00	968.00	982.00
14	602+40.00	00D0'00" LT	967.69	7.00	968.00	982.00
15	602+64.00	00D0'00" LT	967.69	7.00	968.00	982.50
16	602+88.00	00D0'00" LT	968.19	7.00	968.50	982.50
17	603+12.00	00D0'00" LT	968.19	7.00	968.50	982.50
18	603+36.00	00D0'00" LT	968.19	7.00	968.50	982.50
19	603+60.00	00D0'00" LT	968.19	7.00	968.50	982.50
20	603+84.00	00D0'00" LT	968.19	7.00	968.50	982.50
21	604+08.00	00D0'00" LT	968.19	7.00	968.50	983.00
22	604+32.00	00D0'00" LT	968.69	7.00	969.00	983.00
23	604+56.00	00D0'00" LT	968.69	7.00	969.00	983.00
24	604+80.00	00D0'00" LT	968.69	7.00	969.00	983.00
25	605+04.00	00D0'00" LT	968.69	7.00	969.00	983.00
26	605+28.00	00D0'00" LT	968.69	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	965.69	6.50	966.00	980.00	41	809+60.00	00°00'00" RT	967.69	6.50	968.00	982.50
2	800+24.00	00°00'00" LT	965.69	6.50	966.00	980.00	42	809+84.00	00°00'00" RT	968.19	6.50	968.50	982.50
3	800+48.00	00°00'00" LT	965.69	6.50	966.00	980.00	43	810+08.00	00°00'00" RT	968.19	6.50	968.50	983.00
4	800+72.00	00°00'00" LT	965.69	6.50	966.00	980.50	44	810+32.00	00°00'00" RT	968.69	6.50	969.00	983.50
5	800+96.00	00°00'00" LT	966.19	6.50	966.50	980.50	45	810+56.00	00°00'00" RT	969.19	6.50	969.50	984.00
6	801+20.00	00°00'00" LT	966.19	6.50	966.50	980.50	46	810+80.00	07°30'00" RT	969.69	6.50	970.00	984.00
7	801+44.00	00°00'00" LT	966.19	6.50	966.50	980.50	47	810+96.00	00°00'00" RT	969.69	6.50	970.00	984.50
8	801+68.00	00°00'00" LT	966.19	6.50	966.50	980.50	48	811+12.00	00°00'00" RT	970.19	6.50	970.50	985.00
9	801+92.00	00°00'00" LT	966.19	6.50	966.50	980.50	49	811+28.00	00°00'00" RT	970.69	6.50	971.00	985.00
10	802+16.00	00°00'00" LT	966.19	6.50	966.50	980.50	50	811+44.00	01°52'45" LT	970.69	6.50	971.00	985.50
11	802+40.00	00°00'00" LT	966.19	6.50	966.50	980.50	51	811+58.00	00°00'00" LT	971.19	6.50	971.50	986.00
12	802+64.00	05°46'53" LT	966.19	6.50	966.50	980.50	52	811+72.00	07°26'48" LT	971.69	7.00	972.00	986.50
13	802+88.00	00°00'00" LT	966.19	6.50	966.50	980.50	53	811+96.00	00°00'00" LT	972.19	7.00	972.50	987.00
14	803+12.00	00°00'00" LT	966.19	6.50	966.50	980.50	54	812+20.00	00°00'00" LT	972.69	7.00	973.00	988.00
15	803+36.00	00°00'00" LT	966.19	6.50	966.50	980.50	55	812+44.00	00°00'00" LT	973.69	7.00	974.00	989.00
16	803+60.00	00°00'00" LT	966.19	6.50	966.50	980.50	56	812+68.00	00°00'00" LT	974.69	7.00	975.00	989.00
17	803+84.00	00°00'00" LT	965.69	6.50	966.00	980.50	57	812+92.00	00°00'00" LT	974.69	7.00	975.00	989.00
18	804+08.00	00°00'00" LT	965.69	6.50	966.00	980.00	58	813+16.00	00°00'00" LT	974.69	7.00	975.00	989.00
19	804+32.00	00°00'00" LT	965.19	6.50	965.50	980.00	59	813+40.00	00°00'00" LT	974.69	7.00	975.00	989.00
20	804+56.00	00°00'00" LT	965.19	6.50	965.50	979.50	60	813+64.00	00°00'00" LT	974.69	7.00	975.00	989.00
21	804+80.00	00°00'00" LT	965.19	6.50	965.50	979.50	61	813+88.00	00°00'00" LT	974.19	6.50	974.50	989.00
22	805+04.00	00°00'00" LT	965.19	6.50	965.50	979.50	62	814+12.00	00°00'00" LT	974.19	6.50	974.50	988.50
23	805+28.00	00°00'00" LT	965.19	6.50	965.50	979.50	63	814+36.00	00°00'00" LT	973.69	6.50	974.00	988.50
24	805+52.00	00°00'00" LT	965.19	6.50	965.50	979.50	64	814+60.00	00°11'01" LT	973.69	6.50	974.00	988.00
25	805+76.00	00°00'00" LT	965.19	6.50	965.50	979.50	65	814+84.00	00°00'00" LT	973.69	6.50	974.00	988.00
26	806+00.00	00°00'00" LT	965.19	6.50	965.50	979.50	66	815+08.00	00°00'00" LT	973.69	6.50	974.00	988.00
27	806+24.00	00°00'00" LT	965.19	6.50	965.50	979.50	67	815+32.00	00°00'00" LT	973.69	6.50	974.00	988.00
28	806+48.00	00°00'00" LT	965.19	6.50	965.50	979.50	68	815+56.00	00°00'00" LT	973.69	6.50	974.00	988.00
29	806+72.00	05°54'06" RT	965.19	6.50	965.50	979.50	69	815+80.00	00°00'00" LT	973.69	6.50	974.00	988.00
30	806+96.00	00°00'00" RT	965.19	6.50	965.50	980.00	70	816+04.00	00°00'00" LT	973.19	6.50	973.50	988.00
31	807+20.00	00°00'00" RT	965.69	6.50	966.00	980.50	71	816+28.00	00°00'00" LT	973.19	6.50	973.50	987.50
32	807+44.00	00°00'00" RT	966.19	6.50	966.50	980.50	72	816+52.00	00°00'00" LT	973.19	6.50	973.50	987.50
33	807+68.00	00°00'00" RT	966.19	6.50	966.50	981.00	73	816+76.00	00°00'00" LT	973.19	6.50	973.50	987.50
34	807+92.00	00°00'00" RT	966.69	6.50	967.00	981.00	74	817+00.00	00°00'00" LT	973.19	6.50	973.50	987.50
35	808+16.00	00°00'00" RT	966.69	6.50	967.00	981.00	75	817+24.00	00°00'00" LT	973.19	6.50	973.50	987.50
36	808+40.00	00°00'00" RT	966.69	6.50	967.00	981.50	76	817+48.00	00°00'00" LT	973.19	6.50	973.50	987.50
37	808+64.00	00°00'00" RT	967.19	6.50	967.50	981.50	77	817+72.00	00°00'00" LT	973.19	6.50	973.50	987.50
38	808+88.00	00°00'00" RT	967.19	6.50	967.50	981.50	78	817+96.00	00°00'00" LT	973.19	6.50	973.50	987.50
39	809+12.00	00°00'00" RT	967.19	6.50	967.50	981.50	79	818+08.00	00°00'00" LT	973.19	6.50	973.50	987.50
40	809+36.00	00°00'00" RT	967.19	6.50	967.50	982.00							

NOTE:
FOR POST TYPE SPECIFICATIONS, SEE SHEETS P.197 - P.200

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 01-22-24

PROJECT ID
117607

SHEET P.193 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-01-21 TIME: 9:09:33 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_GM001.dgn

ARCADIS RESPONSE: WE ARE WORKING WITH A SUE CONSULTANT NAMED "SAM" WHO IS IN THE PROCESS OF POTHOLING THIS WATER LINE. AS SOON AS WE GET THE EXACT LOCATION OF THE WATER LINE WE WILL REEVALUATE THE CLEARANCE AND PROVIDE THIS INFORMATION FOR YOUR FURTHER REVIEW AND COMMENT. PLEASE NOTE THAT WE WILL COMPLY WITH THE CLEARANCE REQUIREMENT, BUT WANT TO WAIT FOR THE POTHOLE INFORMATION TO MAKE SURE WE ARE MEETING YOUR POLICY.

Please refer to comments made on Sheet 28 & 226 & revise if required.

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+00.00	00D0'00" RT	973.19	7.00	973.50	987.50
2	900+16.00	00D0'00" RT	973.19	7.00	973.50	987.50
3	900+40.00	00D0'00" RT	973.19	7.00	973.50	987.50
4	900+64.00	00D0'00" RT	973.19	7.00	973.50	988.00
5	900+88.00	00D0'00" RT	973.69	7.00	974.00	988.00
6	901+12.00	00D0'00" RT	973.69	7.00	974.00	988.00
7	901+36.00	00D0'00" RT	973.69	7.00	974.00	988.00
8	901+52.00	00D0'00" RT	973.69	7.00	974.00	988.00
9	901+68.00	00D0'00" RT	973.69	7.00	974.00	988.50
10	901+84.00	00D0'00" RT	974.19	7.00	974.50	988.50
11	902+08.00	00D0'00" RT	974.19	7.00	974.50	988.50
12	902+32.00	00D0'00" RT	974.19	7.00	974.50	988.50
13	902+56.00	02°23'44" RT	974.19	7.00	974.50	989.00
14	902+80.00	00D0'00" RT	974.69	7.00	975.00	989.50
15	903+04.00	00D0'00" RT	975.19	7.00	975.50	990.00
16	903+28.00	00D0'00" RT	975.69	7.00	976.00	990.00
17	903+52.00	00D0'00" RT	975.69	7.00	976.00	990.00
18	903+76.00	00D0'00" RT	975.69	7.00	976.00	990.00
19	904+00.00	00D0'00" RT	975.69	7.00	976.00	990.50
20	904+24.00	00D0'00" RT	976.19	7.00	976.50	990.50
21	904+48.00	00D0'00" RT	976.19	7.00	976.50	991.00
22	904+72.00	00D0'00" RT	976.69	7.00	977.00	991.00
23	904+96.00	00D0'00" RT	976.69	7.00	977.00	991.50
24	905+20.00	00D0'00" RT	977.19	7.00	977.50	991.50
25	905+44.00	00D0'00" RT	977.19	7.00	977.50	992.00
26	905+68.00	00D0'00" RT	977.69	7.00	978.00	992.50
27	905+92.00	04°48'10" RT	978.19	7.00	978.50	992.50
28	906+16.00	00D0'00" RT	978.19	7.00	978.50	992.50
29	906+40.00	00D0'00" RT	978.19	7.00	978.50	992.50
30	906+64.00	00D0'00" RT	978.19	7.00	978.50	993.00
31	906+88.00	00D0'00" RT	978.69	7.00	979.00	993.50
32	907+12.00	00D0'00" RT	979.19	7.00	979.50	993.50
33	907+36.00	00D0'00" RT	979.19	7.00	979.50	994.00
34	907+60.00	00D0'00" RT	979.69	7.00	980.00	994.50
35	907+84.00	00D0'00" RT	980.19	7.00	980.50	994.50
36	908+08.00	00D0'00" RT	980.19	7.00	980.50	994.50
37	908+32.00	00D0'00" RT	980.19	7.00	980.50	995.00
38	908+56.00	00D0'00" RT	980.69	7.00	981.00	995.00
39	908+80.00	00D0'00" RT	980.69	7.00	981.00	995.50
40	909+04.00	00D0'00" RT	981.19	7.00	981.50	995.50
41	909+28.00	05°00'48" RT	981.19	7.00	981.50	995.50
42	909+52.00	00D0'00" RT	981.19	7.00	981.50	996.00
43	909+76.00	00D0'00" RT	981.69	7.00	982.00	996.00
44	910+00.00	00D0'00" RT	981.69	7.00	982.00	996.00
45	910+24.00	00D0'00" RT	981.69	7.00	982.00	996.50
46	910+48.00	00D0'00" RT	982.19	7.00	982.50	997.00
47	910+72.00	00D0'00" RT	982.69	7.00	983.00	997.00
48	910+96.00	00D0'00" RT	982.69	7.00	983.00	997.50
49	911+20.00	00D0'00" RT	983.19	7.00	983.50	997.50
50	911+44.00	00D0'00" RT	983.19	7.00	983.50	997.50
51	911+68.00	00D0'00" RT	983.19	7.00	983.50	998.00
52	911+85.00	00D0'00" RT	983.69	7.00	984.00	998.00
53	912+02.00	00D0'00" RT	983.69	7.00	984.00	998.00
54	912+19.00	00D0'00" RT	982.69	7.00	983.00	998.00
55	912+36.00	00D0'00" RT	981.69	7.00	982.00	997.00
56	912+53.00	00D0'00" RT	980.69	7.00	981.00	996.00
57	912+70.00	00D0'00" RT	980.69	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	974.69	6.50	975.00	989.00
2	1100+24.00	00°00'00" RT	974.69	6.50	975.00	989.50
3	1100+48.00	00°00'00" RT	975.19	6.50	975.50	990.00
4	1100+72.00	00°00'00" RT	975.69	6.50	976.00	990.00
5	1100+96.00	00°00'00" RT	975.69	6.50	976.00	990.00
6	1101+20.00	00°00'00" RT	975.69	7.00	976.00	990.00
7	1101+44.00	00°00'00" RT	975.69	7.00	976.00	990.50
8	1101+68.00	00°00'00" RT	976.19	7.00	976.50	990.50
9	1101+92.00	00°00'00" RT	976.19	7.00	976.50	990.50
10	1102+16.00	00°00'00" RT	976.19	7.00	976.50	990.50
11	1102+40.00	00°00'00" RT	976.19	7.00	976.50	990.50
12	1102+64.00	00°00'00" RT	976.19	7.00	976.50	990.50
13	1102+88.00	00°00'00" RT	976.19	7.00	976.50	991.00
14	1103+12.00	00°00'00" RT	976.69	6.50	977.00	991.50
15	1103+36.00	00°00'00" RT	977.19	6.50	977.50	992.00
16	1103+60.00	00°00'00" RT	977.69	6.50	978.00	992.50
17	1103+84.00	00°00'00" RT	978.19	6.50	978.50	993.00
18	1104+08.00	00°00'00" RT	978.69	6.50	979.00	993.50
19	1104+32.00	00°00'00" RT	979.19	6.50	979.50	993.50
20	1104+56.00	00°00'00" RT	979.19	6.50	979.50	993.50
21	1104+80.00	00°00'00" RT	979.19	6.50	979.50	993.50
22	1105+04.00	00°00'00" RT	979.19	6.50	979.50	993.50
23	1105+28.00	00°00'00" RT	979.19	6.50	979.50	994.00
24	1105+52.00	00°00'00" RT	979.69	6.50	980.00	994.00
25	1105+76.00	00°00'00" RT	979.69	6.50	980.00	994.00
26	1106+00.00	00°00'00" RT	979.69	6.50	980.00	994.00
27	1106+24.00	00°00'00" RT	979.69	6.50	980.00	994.00
28	1106+48.00	00°00'00" RT	979.69	6.50	980.00	994.00
29	1106+72.00	00°00'00" RT	979.69	6.50	980.00	994.00
30	1106+96.00	00°00'00" RT	979.69	6.50	980.00	994.00
31	1107+20.00	00°00'00" RT	979.69	7.00	980.00	994.00
32	1107+44.00	00°00'00" RT	979.19	7.00	979.50	994.00
33	1107+68.00	00°00'00" RT	979.19	7.00	979.50	993.50
34	1107+92.00	06°02'50" RT	979.19	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	979.19	7.00	979.50	993.50
36	1108+40.00	00°00'00" RT	979.19	7.00	979.50	994.00
37	1108+64.00	00°00'00" RT	979.69	7.00	980.00	994.00
38	1108+88.00	00°00'00" RT	979.69	7.00	980.00	994.50
39	1109+12.00	00°00'00" RT	980.19	6.50	980.50	995.00
40	1109+36.00	00°00'00" RT	980.69	6.50	981.00	995.00
41	1109+60.00	00°00'00" RT	980.69	6.50	981.00	995.00
42	1109+84.00	00°00'00" RT	980.69	6.50	981.00	995.00
43	1110+08.00	00°00'00" RT	980.69	6.50	981.00	995.00
44	1110+32.00	03°30'30" RT	980.69	6.50	981.00	995.00
45	1110+56.00	00°00'00" RT	980.69	6.50	981.00	995.50
46	1110+80.00	00°00'00" RT	981.19	6.50	981.50	995.50
47	1111+04.00	00°00'00" RT	981.19	6.50	981.50	995.50
48	1111+28.00	00°00'00" RT	981.19	6.50	981.50	995.50
49	1111+52.00	00°00'00" RT	981.19	6.50	981.50	995.50
50	1111+76.00	00°00'00" RT	981.19	6.50	981.50	996.00
51	1112+00.00	00°00'00" RT	981.69	6.50	982.00	996.00
52	1112+24.00	00°00'00" RT	981.69	6.50	982.00	996.00
53	1112+48.00	00°00'00" RT	981.69	6.50	982.00	996.00
54	1112+72.00	00°00'00" RT	981.69	6.50	982.00	996.00
55	1112+96.00	00°00'00" RT	981.69	6.50	982.00	996.00
56	1113+20.00	00°00'00" RT	981.69	6.50	982.00	996.00
57	1113+44.00	00°00'00" RT	981.69	6.50	982.00	996.00
58	1113+68.00	00°00'00" RT	981.69	6.50	982.00	996.50
59	1113+92.00	06°13'00" RT	982.19	6.50	982.50	996.50
60	1114+16.00	00°00'00" RT	982.19	6.50	982.50	996.50
61	1114+40.00	00°00'00" RT	982.19	6.50	982.50	996.50
62	1114+64.00	00°00'00" RT	982.19	6.50	982.50	996.50
63	1114+88.00	00°00'00" RT	982.19	6.50	982.50	996.50
64	1115+12.00	00°00'00" RT	982.19	6.50	982.50	996.50
65	1115+36.00	00°00'00" RT	982.19	6.50	982.50	996.50
66	1115+60.00	00°00'00" RT	982.19	6.50	982.50	996.50
67	1115+84.00	00°00'00" RT	982.19	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	981.19	7.00	981.50	995.50
2	120+12.00	00°00'00" RT	981.19	7.00	981.50	996.00
3	120+24.00	02°23'37" RT	981.69	7.00	982.00	996.50
4	120+36.00	00°00'00" RT	982.19	7.00	982.50	997.00
5	120+60.00	00°00'00" RT	982.69	7.00	983.00	997.50
6	120+72.00	00°00'00" RT	983.19	7.00	983.50	998.00
7	120+96.00	00°00'00" RT	983.69	7.00	984.00	998.50
8	121+20.00	00°00'00" RT	984.19	7.00	984.50	999.50
9	121+44.00	04°47'34" RT	985.19	7.00	985.50	999.50
10	121+68.00	00°00'00" RT	985.19	7.00	985.50	999.50
11	121+92.00	00°00'00" RT	985.19	7.00	985.50	999.50
12	122+16.00	00°00'00" RT	985.19	7.00	985.50	999.50
13	122+40.00	00°00'00" RT	984.19	7.00	984.50	999.50

DRILLED SHAFT NO.	WORKPOINT STATION	DEFLECTION ANGLE	TOP OF DRILLED SHAFT ELEVATION	SHAFT LENGTH (FEET)	BOTTOM OF BARRIER ELEVATION	TOP OF BARRIER ELEVATION
14	122+64.00	04°50'38" RT	984.19	7.00	984.50	999.50
15	122+88.00	00°00'00" RT	984.19	7.00	984.50	999.50
16	123+12.00	00°00'00" RT	985.19	7.00	985.50	1000.00
17	123+36.00	00°00'00" RT	985.69	7.00	986.00	1000.50
18	123+60.00	00°00'00" RT	986.19	7.00	986.50	1000.50
19	123+84.00	06°56'28" RT	986.19	7.00	986.50	1000.50
20	123+92.00	00°00'00" RT	986.19	7.00	986.50	1000.50
21	124+16.00	00°00'00" RT	986.19	7.00	986.50	1000.50
22	124+35.00	00°00'00" RT	986.19	8.50	986.50	1000.50
23	124+54.00	00°00'00" RT	986.19	8.50	986.50	1000.50
24	124+73.00	00°00'00" RT	986.19	8.50	986.50	1000.50
25	124+97.00	00°00'00" RT	986.19	8.50	986.50	1000.50

NOTE:
FOR POST TYPE SPECIFICATIONS, SEE SHEETS P.197 - P.200

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 01-22-24
PROJECT ID 117607
SHEET P.194 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:58:34 PM USER: jennifer.kelley
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	1028.69	7.00	1029.00	1043.00	45	1511+71.00	00°00'00" RT	1036.19	7.00	1036.50	1051.00
2	1500+24.00	00°00'00" RT	1028.69	7.00	1029.00	1043.50	46	1511+95.00	00°00'00" RT	1036.19	7.00	1036.50	1050.50
3	1500+48.00	00°00'00" RT	1029.19	7.00	1029.50	1044.00	47	1512+19.00	00°00'00" RT	1036.19	7.00	1036.50	1050.50
4	1500+72.00	00°00'00" RT	1029.69	7.00	1030.00	1044.50	48	1512+43.00	00°00'00" RT	1036.19	7.00	1036.50	1050.50
5	1500+96.00	00°00'00" RT	1030.19	7.00	1030.50	1045.00	49	1512+67.00	00°00'00" RT	1036.19	7.00	1036.50	1050.50
6	1501+11.00	00°00'00" RT	1030.69	7.00	1031.00	1046.00	50	1512+91.00	00°00'00" RT	1036.19	7.00	1036.50	1050.50
7	1501+26.00	00°00'00" RT	1031.69	7.00	1032.00	1046.00	51	1513+15.00	00°00'00" RT	1036.19	6.50	1036.50	1050.50
8	1501+50.00	00°00'00" RT	1031.69	7.00	1032.00	1046.50	52	1513+39.00	00°00'00" RT	1036.19	6.50	1036.50	1050.50
9	1501+65.00	00°00'00" RT	1032.19	7.00	1032.50	1046.50	53	1513+63.00	00°00'00" RT	1036.19	6.50	1036.50	1050.50
10	1501+80.00	00°00'00" RT	1032.19	7.00	1032.50	1047.00	54	1513+87.00	00°00'00" RT	1036.19	6.50	1036.50	1050.50
11	1502+00.00	00°00'00" RT	1032.69	7.00	1033.00	1048.00	55	1514+11.00	00°00'00" RT	1036.19	6.50	1036.50	1050.50
12	1502+16.00	00°00'00" RT	1033.69	7.00	1034.00	1048.50	56	1514+35.00	00°38'16" RT	1036.19	6.50	1036.50	1050.50
13	1502+40.00	00°00'00" RT	1034.19	7.00	1034.50	1048.50	57	1514+59.00	00°00'00" RT	1036.19	6.50	1036.50	1050.50
SUSPEND NOISE WALL 15							58	1514+83.00	00°00'00" RT	1036.19	6.50	1036.50	1050.50
14	1504+27.00	00°00'00" RT	1037.69	7.00	1038.00	1052.00	59	1515+07.00	00°00'00" RT	1036.19	6.50	1036.50	1050.50
15	1504+51.00	00°00'00" RT	1037.69	7.00	1038.00	1052.00	60	1515+31.00	00°00'00" RT	1036.19	6.50	1036.50	1050.50
16	1504+75.00	00°00'00" RT	1037.69	7.00	1038.00	1052.00	61	1515+55.00	00°00'00" RT	1036.19	6.50	1036.50	1051.00
17	1504+99.00	00°00'00" RT	1037.69	7.00	1038.00	1052.00	62	1515+79.00	00°00'00" RT	1036.69	6.50	1037.00	1051.00
18	1505+23.00	00°00'00" RT	1037.69	7.00	1038.00	1052.00	63	1516+03.00	00°00'00" RT	1036.69	6.50	1037.00	1051.00
19	1505+47.00	00°00'00" RT	1037.69	7.00	1038.00	1052.00	64	1516+27.00	00°00'00" RT	1036.69	6.50	1037.00	1051.50
20	1505+71.00	00°00'00" RT	1037.69	7.00	1038.00	1052.00	65	1516+51.00	00°00'00" RT	1037.19	6.50	1037.50	1051.50
21	1505+95.00	00°00'00" RT	1037.69	7.00	1038.00	1052.00	66	1516+75.00	00°00'00" RT	1037.19	6.50	1037.50	1052.00
22	1506+19.00	00°00'00" RT	1037.69	7.00	1038.00	1052.00	67	1516+99.00	00°00'00" RT	1037.69	6.50	1038.00	1052.00
23	1506+43.00	00°00'00" RT	1037.69	7.00	1038.00	1052.50	68	1517+23.00	00°00'00" RT	1037.69	8.50	1038.00	1052.00
24	1506+67.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	69	1517+47.00	00°00'00" RT	1037.19	8.50	1037.50	1052.00
25	1506+91.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	70	1517+71.00	00°00'00" RT	1036.19	8.50	1036.50	1051.50
26	1507+15.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	71	1517+95.00	00°00'00" RT	1035.19	8.50	1035.50	1050.50
27	1507+39.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	72	1518+19.00	00°00'00" RT	1034.19	8.50	1034.50	1049.50
28	1507+63.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	73	1518+43.00	00°00'00" RT	1034.19	8.50	1034.50	1048.50
29	1507+87.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	SUSPEND NOISE WALL 15						
30	1508+11.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	74	1518+90.00	00°00'00" RT	1037.19	8.50	1037.50	1051.50
31	1508+35.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	75	1519+14.00	00°00'00" RT	1037.19	8.50	1037.50	1051.50
32	1508+59.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	76	1519+38.00	00°00'00" RT	1037.19	8.50	1037.50	1051.50
33	1508+83.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	77	1519+62.00	00°00'00" RT	1037.19	8.50	1037.50	1051.50
34	1509+07.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	78	1519+86.00	00°00'00" RT	1037.19	7.00	1037.50	1051.50
35	1509+31.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	79	1520+10.00	00°00'00" RT	1037.19	7.00	1037.50	1051.50
36	1509+55.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	80	1520+34.00	00°00'00" RT	1037.19	7.00	1037.50	1051.50
37	1509+79.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	81	1520+58.00	00°00'00" RT	1037.19	7.00	1037.50	1051.50
38	1510+03.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	82	1520+82.00	00°00'00" RT	1037.19	7.00	1037.50	1051.50
39	1510+27.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	83	1521+06.00	00°00'00" RT	1036.69	7.00	1037.00	1051.50
40	1510+51.00	00°00'00" RT	1038.19	7.00	1038.50	1052.50	84	1521+30.00	00°00'00" RT	1036.19	7.00	1036.50	1051.00
41	1510+75.00	00°00'00" RT	1037.19	7.00	1037.50	1052.50	85	1521+54.00	00°00'00" RT	1036.19	9.50	1036.50	1050.50
42	1510+99.00	00°00'00" RT	1037.19	7.00	1037.50	1051.50	86	1521+78.00	00°00'00" RT	1036.19	9.50	1036.50	1050.50
43	1511+23.00	00°00'00" RT	1036.69	7.00	1037.00	1051.50	87	1522+02.00	00°00'00" RT	1035.69	9.50	1036.00	1050.50
44	1511+47.00	00°00'00" RT	1036.69	7.00	1037.00	1051.00	88	1522+26.00	00°00'00" RT	1035.69	9.50	1036.00	1050.00

NOTE:
FOR POST TYPE SPECIFICATIONS, SEE SHEETS P.197 - P.200

NOISE WALL DETAILS - WALL 15

DESIGN AGENCY
ARCADIS
8101 NORTH HIGH ST SUITE 100
COLUMBUS, OHIO 43235
(614) 985-4600
www.arcadis.com

DESIGNER JMK

REVIEWER JDH 01-22-24

PROJECT ID 117607

SHEET P.195 TOTAL P.276

FRA-161-15.80 NOISE WALLS

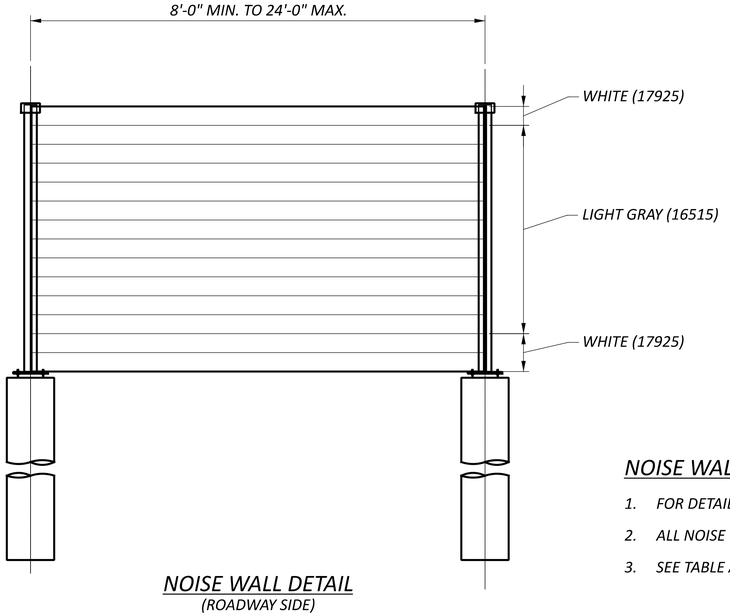
MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-01-21 TIME: 9:09:46 PM USER: jennifer.kelley
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\1437220\400_CAD\400-Engineering\Roadway\Sheets\117607_GM003.dgn

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) PANELS: LIGHT GRAY (16515)	N/A	POST COVERS: WHITE (17925) TOP PANEL OF EACH BAY: WHITE (17925) BOTTOM TWO PANELS OF EACH BAY: WHITE (17925) ALL OTHER PANELS*: LIGHT GRAY (16515)	N/A
WALL 6	FIBERGLASS	POST COVERS: LIGHT GRAY (16515) PANELS: LIGHT GRAY (16515)	N/A	POST COVERS: WHITE (17925) TOP PANEL OF EACH BAY: WHITE (17925) BOTTOM TWO PANELS OF EACH BAY: WHITE (17925) ALL OTHER PANELS*: LIGHT GRAY (16515)	N/A
WALL 8	FIBERGLASS	POST COVERS: LIGHT GRAY (16515) PANELS: LIGHT GRAY (16515)	N/A	POST COVERS: WHITE (17925) TOP PANEL OF EACH BAY: WHITE (17925) BOTTOM TWO PANELS OF EACH BAY: WHITE (17925) ALL OTHER PANELS*: LIGHT GRAY (16515)	N/A
WALL 9	FIBERGLASS	POST COVERS: LIGHT GRAY (16515) PANELS: LIGHT GRAY (16515)	N/A	POST COVERS: WHITE (17925) TOP PANEL OF EACH BAY: WHITE (17925) BOTTOM TWO PANELS OF EACH BAY: WHITE (17925) ALL OTHER PANELS*: LIGHT GRAY (16515)	N/A
WALL 11	FIBERGLASS	POST COVERS: LIGHT GRAY (16515) PANELS: LIGHT GRAY (16515)	N/A	POST COVERS: WHITE (17925) TOP PANEL OF EACH BAY: WHITE (17925) BOTTOM TWO PANELS OF EACH BAY: WHITE (17925) ALL OTHER PANELS*: LIGHT GRAY (16515)	N/A
WALL 15	FIBERGLASS	POST COVERS: LIGHT GRAY (16515) PANELS: LIGHT GRAY (16515)	N/A	POST COVERS: WHITE (17925) TOP PANEL OF EACH BAY: WHITE (17925) BOTTOM TWO PANELS OF EACH BAY: WHITE (17925) 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

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

DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.196 TOTAL P.276

FRA-161-15.80 NOISE WALLS

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 7:58:56 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_GM004.dgn

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, POST COVERS AND CAPS:
NOISE BARRIER PANEL, POST COVER AND CAP MATERIALS SHALL BE GLASS FIBER REINFORCED PULTRUSION BY CARSONITE COMPOSITES OR AN APPROVED EQUAL. REFER TO SHEET P.200 FOR EXAMPLE SCHEMATIC PANEL, POST COVER AND CAP DETAILS.

FASTENERS:
ANCHOR BOLTS SHALL BE ASTM F1554, GRADE 105
THREADED RODS SHALL BE DEFORMED, ONE-END THREADED, ASTM A615, GRADE 60
NUTS SHALL BE ASTM A563, GRADE DH
WASHERS SHALL BE ASTM F436

GALVANIZING:

GALVANIZE ALL STEEL POSTS, STRUCTURAL STEEL, BASE PLATES, ANCHOR BOLTS, THREADED RODS, NUTS, AND WASHERS AS PER CMS 711.02. ENSURE THAT THE ENTIRE LENGTH OF ANCHOR BOLTS AND THREADED RODS 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. THE BEARING PADS SHALL BE A MINIMUM 1/8" THICK AND COVER A MINIMUM OF 25 SQUARE INCHES. 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.

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 PANELS AND POSTS:

THE NOISE BARRIER PANELS, POST COVER AND CAPS 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. THE MANUFACTURER SHALL DESIGN AND PROVIDE SUPPLEMENTARY REINFORCEMENT FOR THE BOTTOM PANELS INSTALLED BELOW FINISHED GRADE SEALED AND SIGNED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER.

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, SUPPORT BRACKETS AND BENT PLATES, PANELS, POST COVERTS AND CAPS, 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)

NOISE WALL GENERAL NOTES
WALLS 3, 6, 8, 9, 11, 12, & 15

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

REVIEWER
SS 01-12-24

PROJECT ID
117607

SHEET P.197 TOTAL P.276

FRA-15.80 NOISE WALLS
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 2024-01-19 TIME: 3:22:58 PM USER: jennifer.kelley
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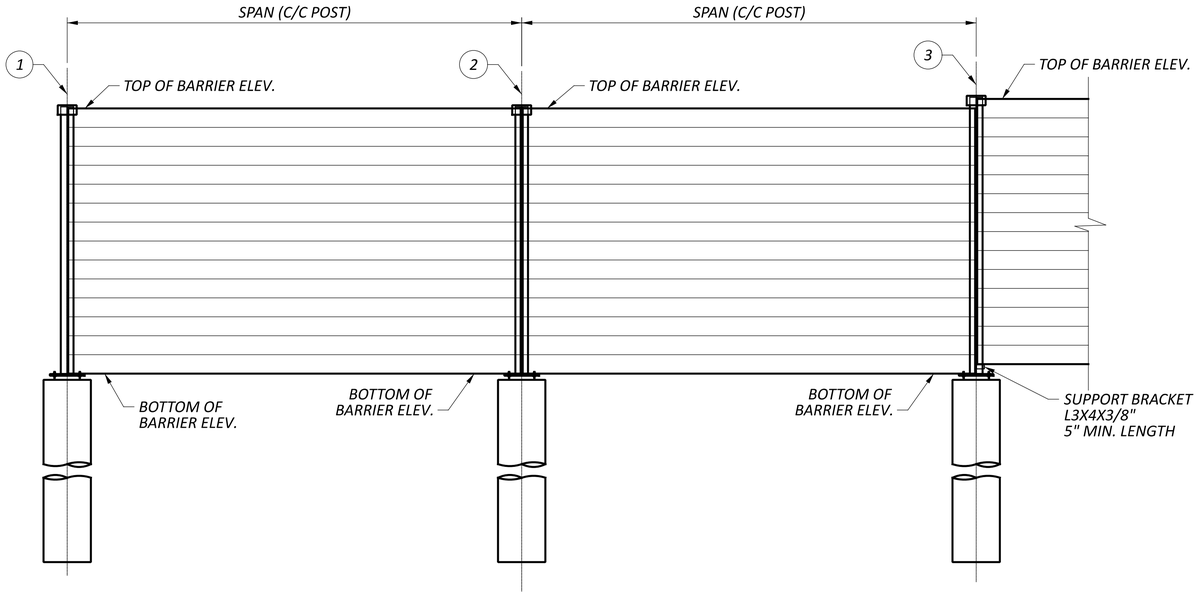


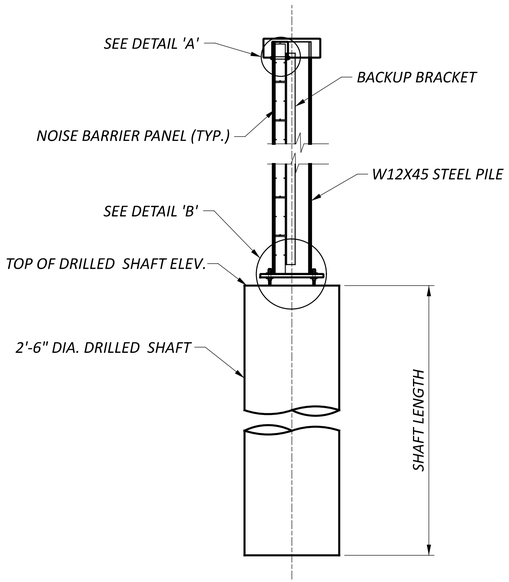
LEGEND:

(X) - DRILLED SHAFT NUMBER

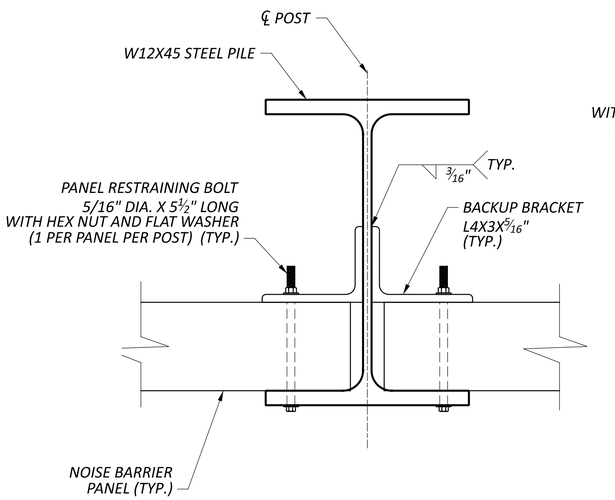
NOTES:

1. FOR NOISE WALL PLANS AND PROFILE, SEE SHEETS P.16 TO P.45 .
2. FOR NOISE WALL ELEVATION TABLES, SEE SHEETS P.193 TO P.195.

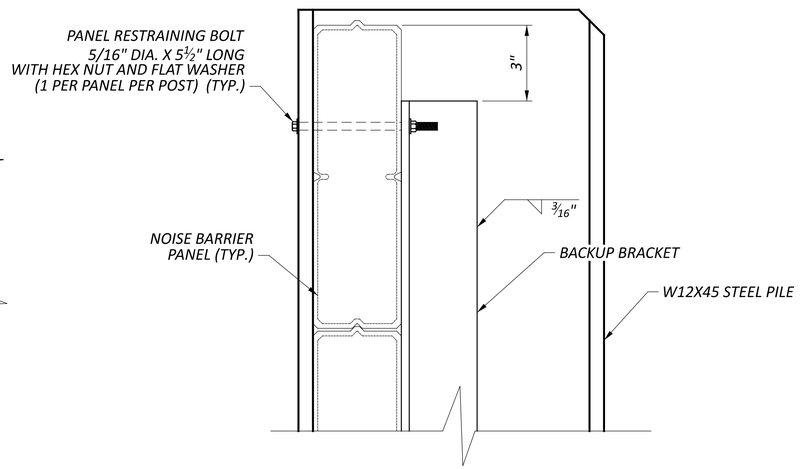
PARTIAL ELEVATION



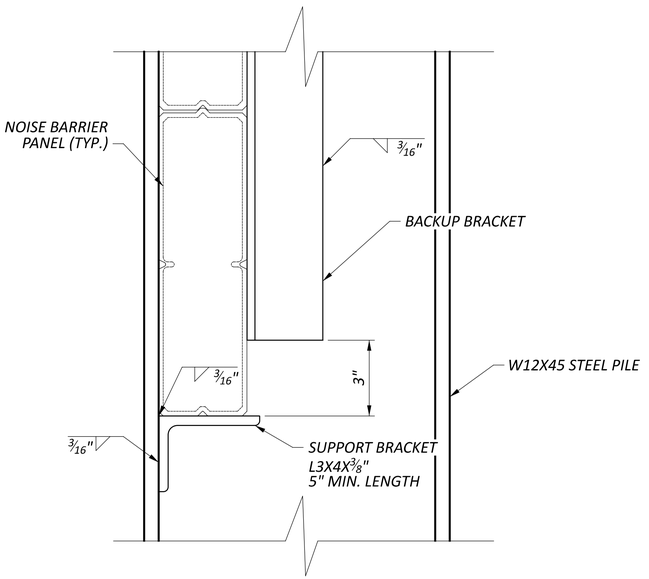
TYPICAL SECTION



PARTIAL PLAN



DETAIL 'A'



DETAIL 'B'

NOISE WALL DETAILS – 1 OF 3
WALLS 3, 6, 8, 9, 11, 12, & 15

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DESIGNER	AIS
REVIEWER	SS 01-12-24
PROJECT ID	117607
SHEET	P.198
TOTAL	P.276

FRA-15.80 NOISE WALLS

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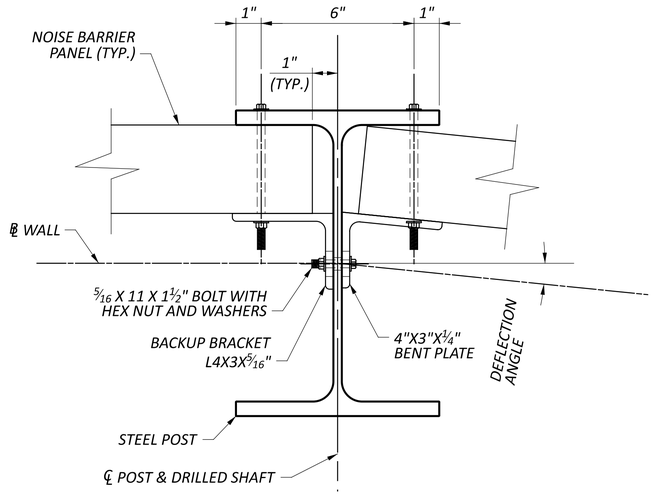
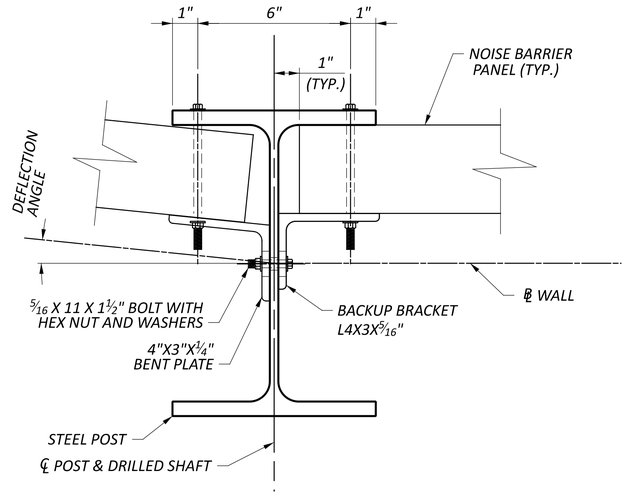
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\143720\400_CAD\400-Engineering\Roadway\Sheets\117607_WD002.dgn

NOTES:

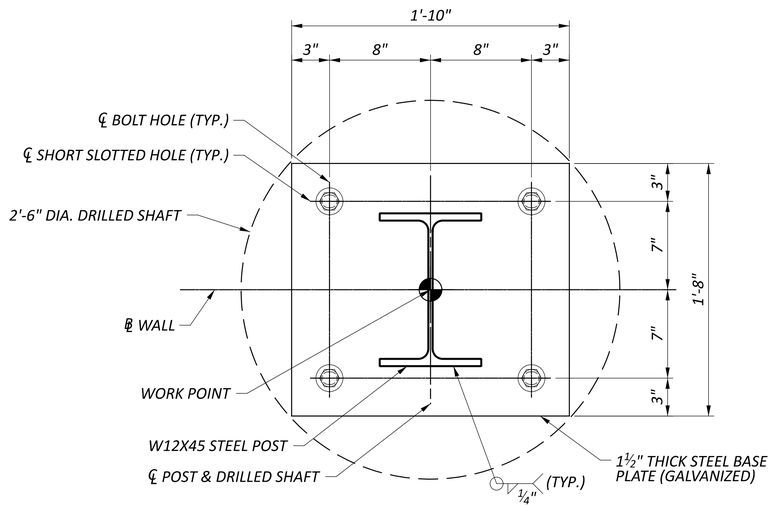
1. FOR WALL DEFLECTION ANGLES, SEE TABLES ON SHEETS P.193 TO P.195.
2. FOR ADDITIONAL BASE PLATE AND DRILLED SHAFT NOTES AND DETAILS, REFER TO STD. DWG. NBS-1-09.



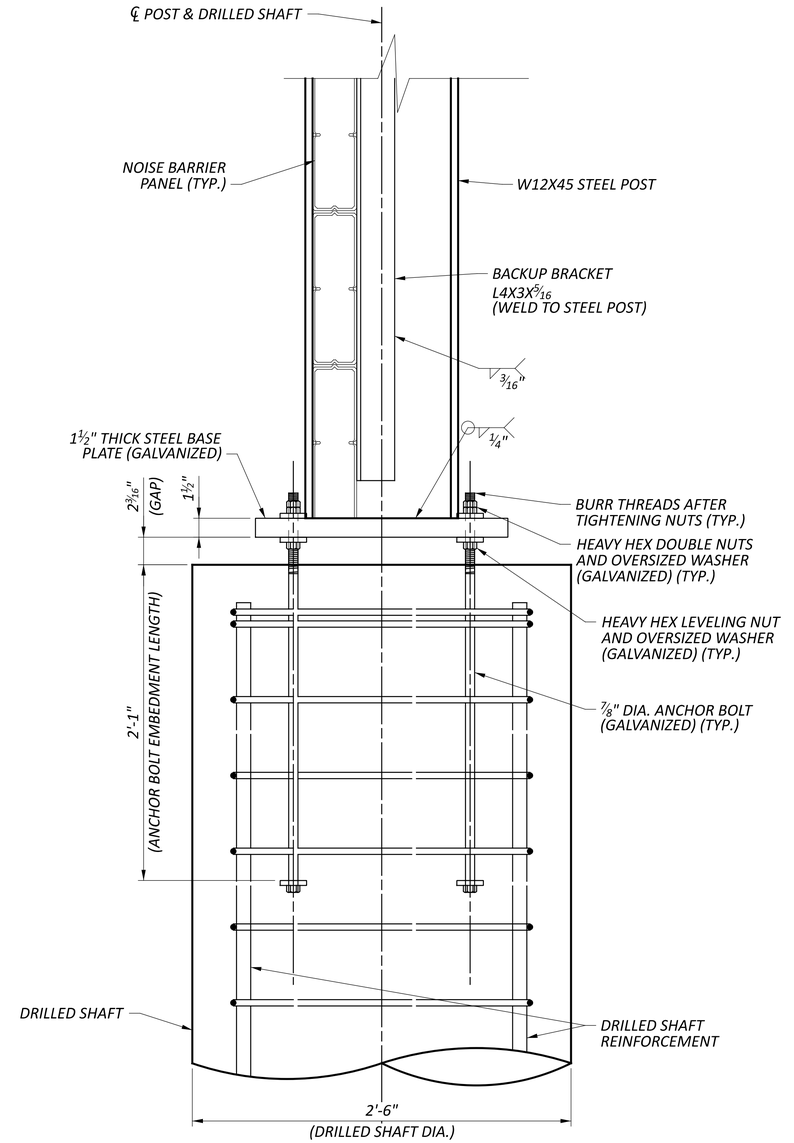
SKEWED POST DETAILS - 1



SKEWED POST DETAILS - 2



STEEL BASE PLATE PLANS



STEEL BASE PLATE ELEVATION

NOISE WALL DETAILS – 2 OF 3
WALLS 3, 6, 8, 9, 11, 12, & 15

FRA-15.80 NOISE WALLS

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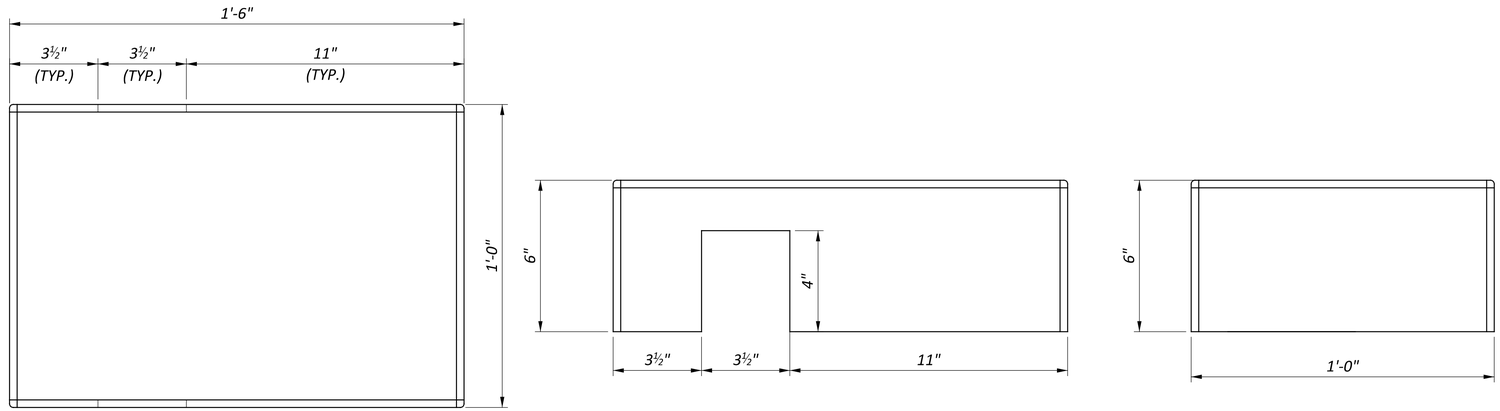
COLUMBUS, OHIO 43235
(614) 818-4900
www.arcadis.com

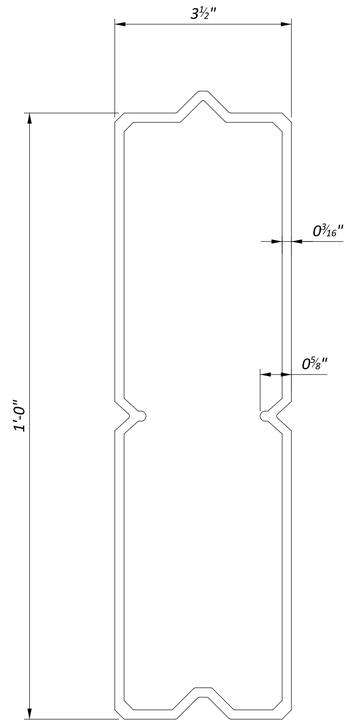
DESIGNER: AIS
REVIEWER: SS 01-12-24
PROJECT ID: 117607
SHEET: P.199 TOTAL: P.276



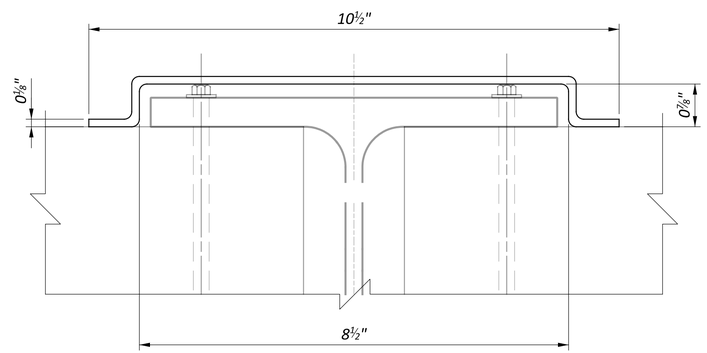
POST CAP DETAIL

NOTES:

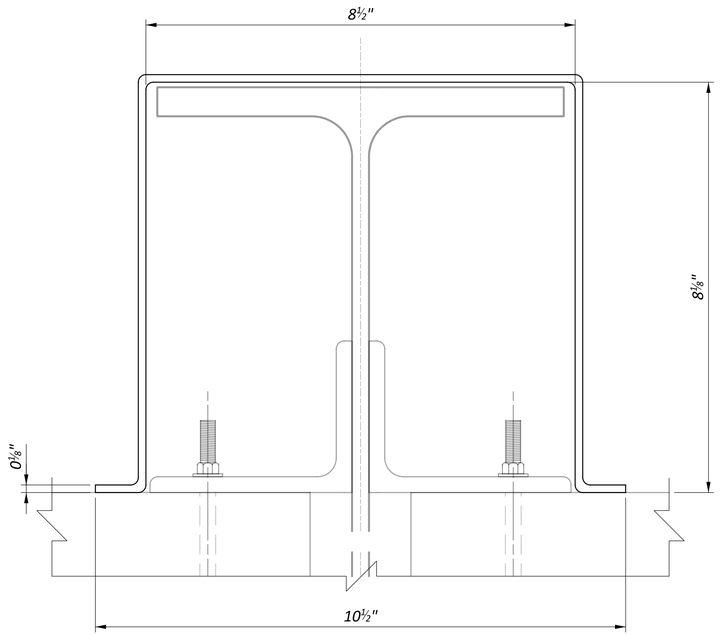
1. INSTALL POST COVER AND CAPS PER MANUFACTURER'S RECOMMENDATIONS.
2. PANELS, POST COVER AND CAPS SHALL BE GLASS FIBER REINFORCED FROM CARSONITE COMPOSITES AS SHOWN OR AN APPROVED EQUAL.



PANEL DETAIL



FRONT FACE POST COVER DETAIL



REAR FACE POST COVER DETAIL

FRA-15.80 NOISE WALLS

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NOISE WALL DETAILS – 3 OF 3
WALLS 3, 6, 8, 9, 11, 12, & 15

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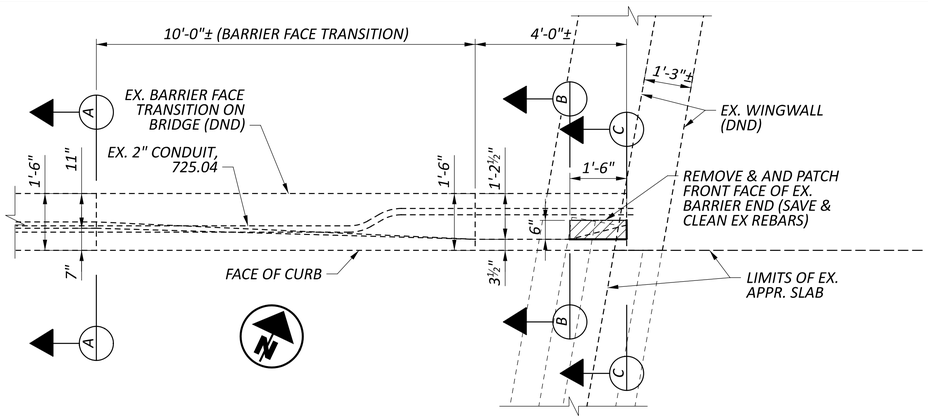
REVIEWER
SS 01-12-24

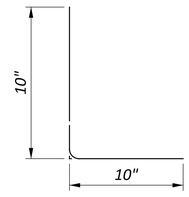
PROJECT ID
117607

SHEET P.200 TOTAL P.276



PLAN

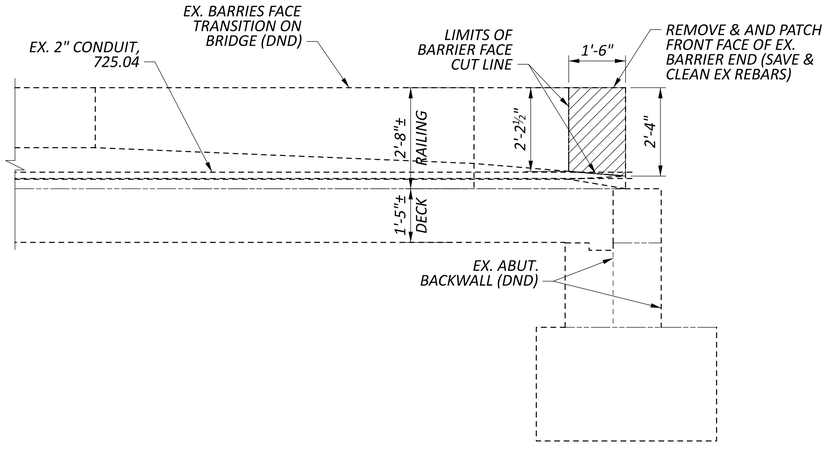
STEEL LIST (For Estimating Purposes Only)					
Mark	Bar	Shape	No.	Length	Weight (lb)
X510	#5	Straight	4	1'-10"	8
Y510	#5	Straight	2	2'-8"	6
Y511	#5	Bent	2	1'-7"	3
				Total =	17



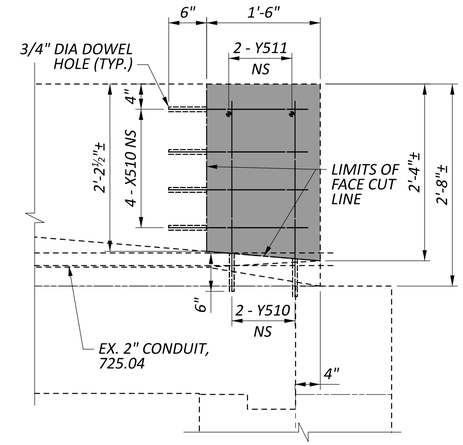
BENDING DIAGRAM

NOTES:

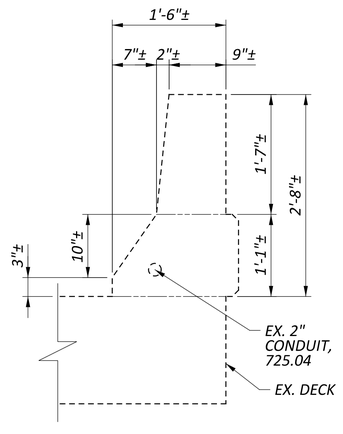
1. REMOVE EX. CONCRETE BARRIER FRONT FACE ON ABUTMENT WINGWALL AS SHOWN. THE COST SHALL BE INCLUDED WITH THE UNIT PRICE FOR ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN FOR PAYMENT.
2. ALL EX. DIMENSIONS ARE ±.
3. INSTALL DOWEL BARS IN ACCORDANCE WITH CMS 510 USING NON-SHRINK NONMETALLIC GROUT.
4. FOR ADDITIONAL CONCRETE RAILING NOTES AND DETAILS, SEE STD. DWG. BR-1-13.
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.



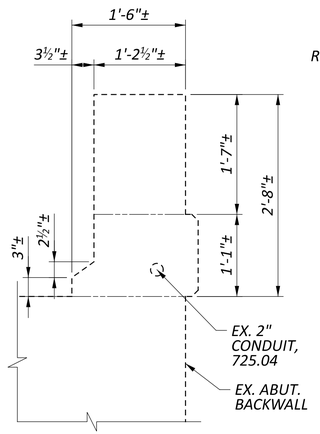
ELEVATION



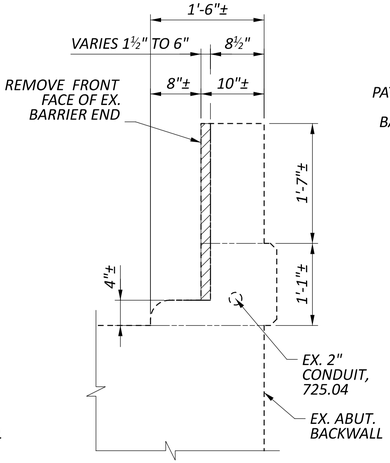
ELEVATION
(PATCHING BARRIER END SECTION)



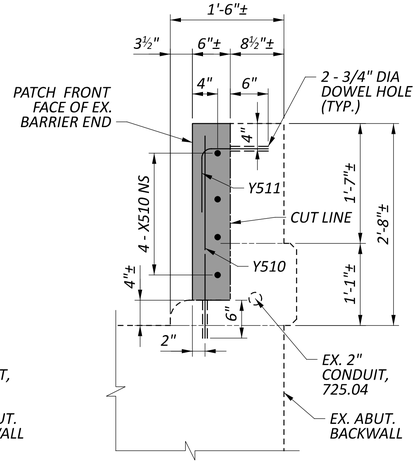
SECTION A-A
(EX. BARRIER)



SECTION B-B
(EX. BARRIER END SECTION)



SECTION C-C
(EX. BARRIER END SECTION REMOVAL)



SECTION C-C
(PATCHING BARRIER END SECTION)

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

FRA-161-15.80 NOISE WALLS

MODEL: SHEET - 1 PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 3:40:38 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_WD001.dgn

CONCRETE 81" BARRIER 6 END SECTION, AS PER PLAN

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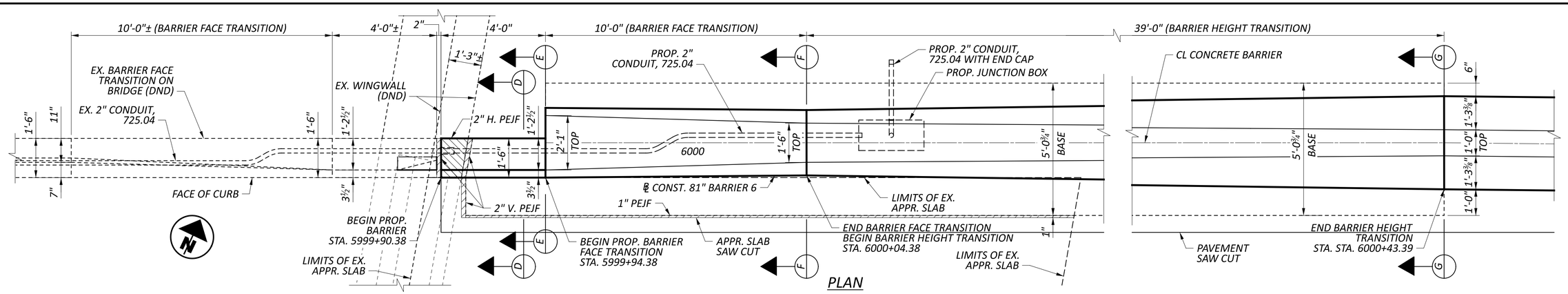
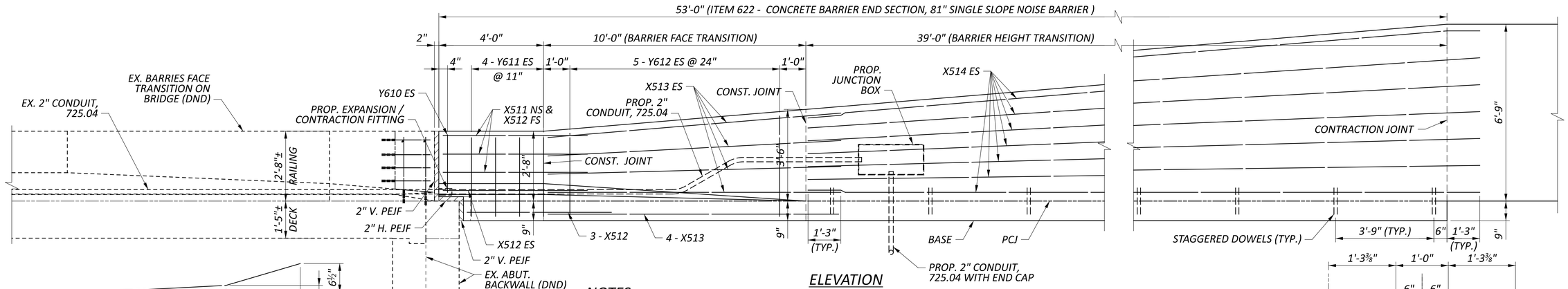
REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET P.201 TOTAL P.276



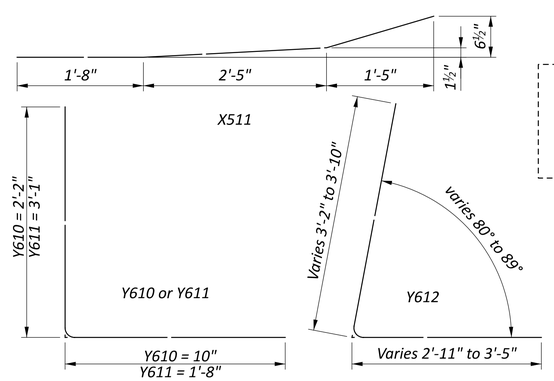
PLAN



ELEVATION

NOTES:

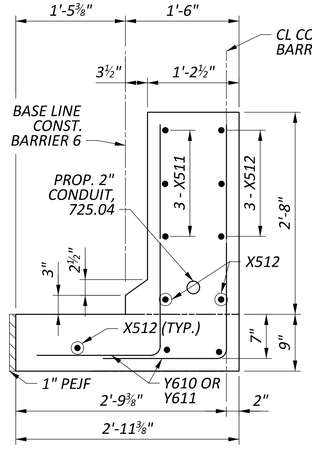
1. FOR ADDITIONAL NOTES AND DETAILS, SEE STD. DWG. RM-4.3.
2. FOR ADDITIONAL JUNCTION BOX AND CONDUIT NOTES AND DETAILS, SEE STD. DWG. HL-30.31.
3. ALL EX. DIMENSIONS ARE ±.
4. PAYMENT FOR THE CONCRETE BARRIER END SECTION SHALL BE MADE AT THE UNIT PRICE FOR ITEM 622 - CONCRETE BARRIER, 81" SSB, END SECTION, 32" TO 81" AND SHALL INCLUDE ALL MATERIALS, LABOR, CONDUIT, JUNCTION BOX, AND REINFORCING STEEL REQUIRED TO CONSTRUCT THE BARRIER END SECTION AS SHOWN.



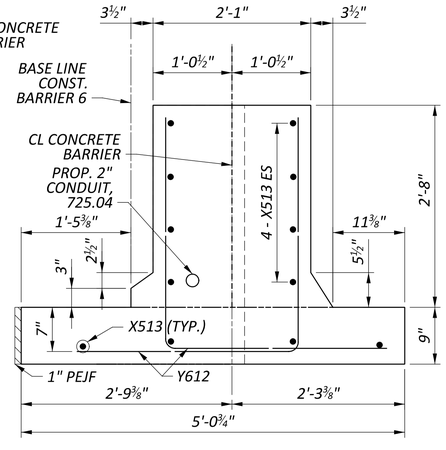
BENDING DIAGRAMS

STEEL LIST
(For Estimating Purposes Only)

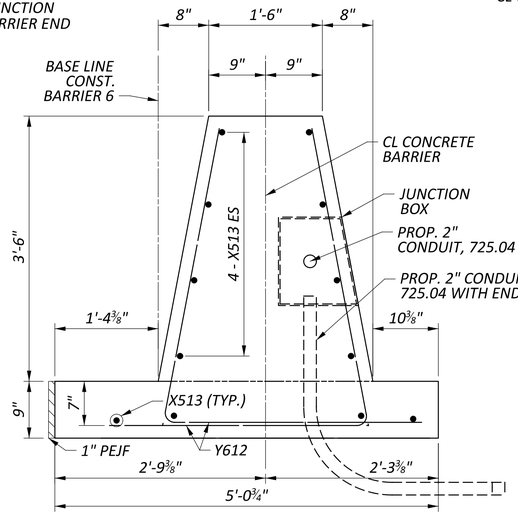
Mark	Bar	Shape	No.	Length	Weight (lb)
X511	#5	Bent	3	5'-6"	17
X512	#5	Straight	8	5'-6"	46
X513	#5	Straight	12	11'-1"	139
X514	#5	Straight	14	40'-3"	588
Y610	#6	Bent	2	2'-10"	9
Y611	#6	Bent	8	4'-7"	55
Y612	#6	Bent	2 SERIES OF 5	Varies 5'-11" to 7'-1"	98
				Total =	955



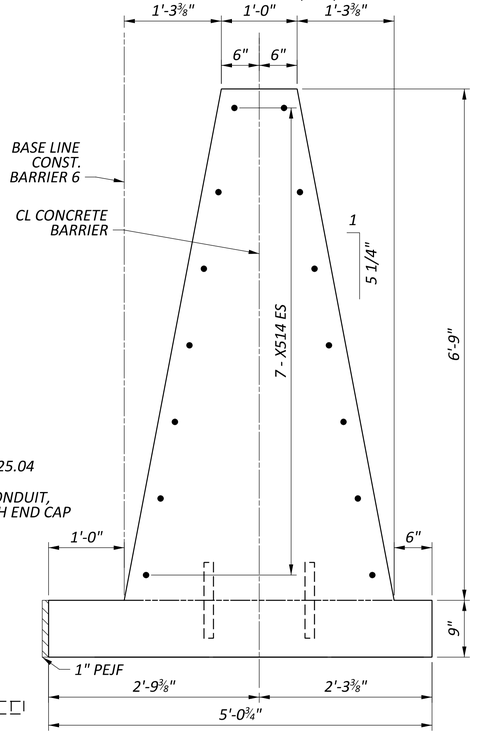
SECTION D-D



SECTION E-E



SECTION F-F



SECTION G-G

CONCRETE 81" BARRIER 6 END SECTION, AS PER PLAN

FRA-161-15.80 NOISE WALLS

MODEL: SHEET - 2 PAPERSIZE: 34x22 (in.) DATE: 2024-01-22 TIME: 3:40:39 PM USER: jennifer.kelley
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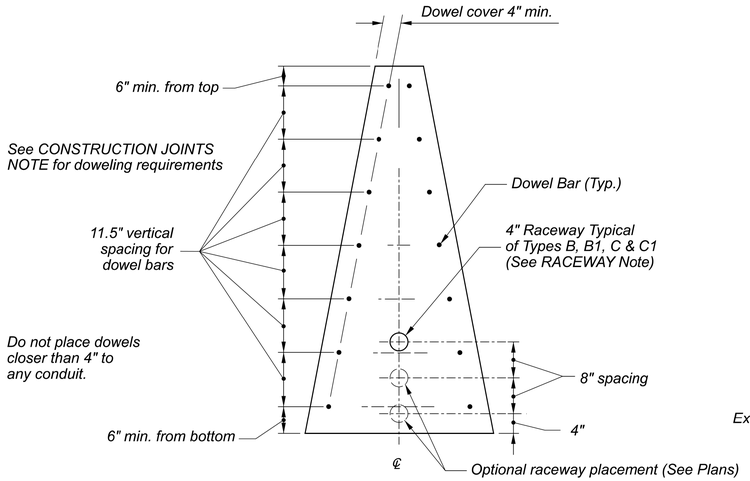
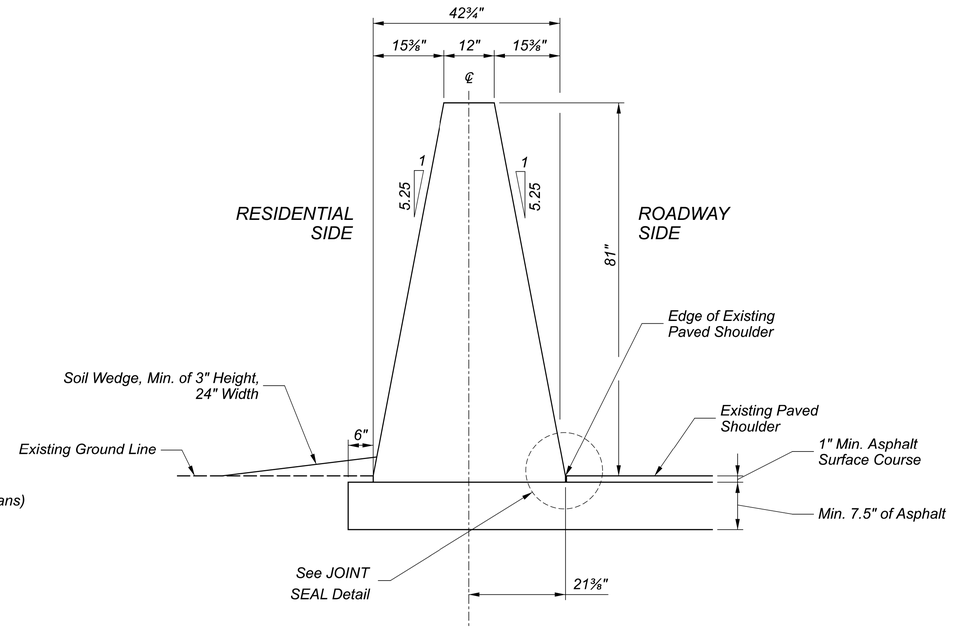
REVIEWER AMP 01-22-24

PROJECT ID 117607

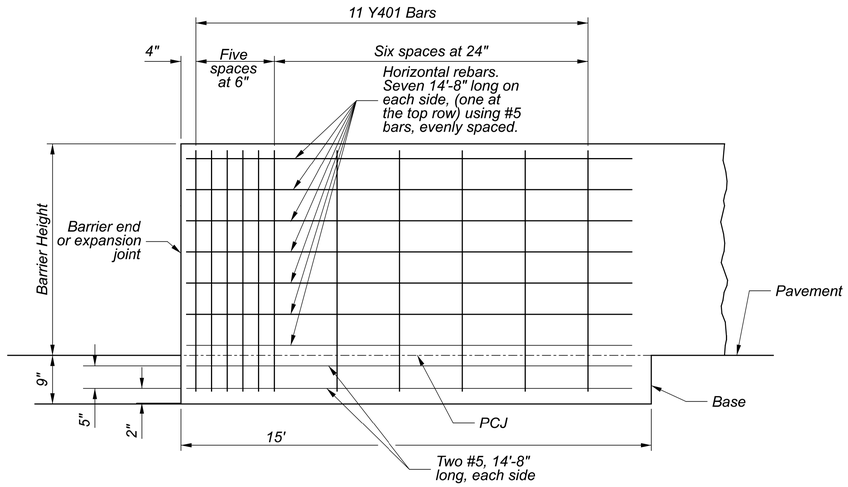
SHEET P.202 | TOTAL P.276



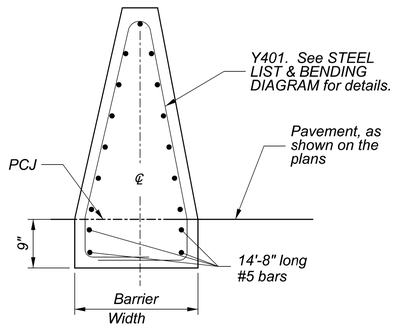
RACEWAY AND DOWEL BAR PLACEMENT



DETAIL FOR ASPHALT PAVEMENT

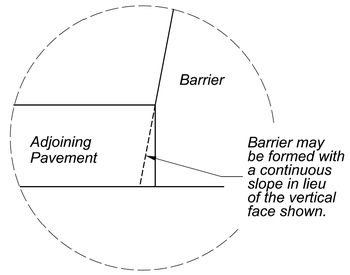


ELEVATION



SECTION

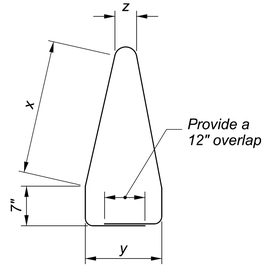
END ANCHORAGE



ALTERNATE TOE DETAIL

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

81" SINGLE SLOPE BARRIER may be cast-in-place or slip formed.

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: Place barrier directly on the intermediate or bituminous aggregate base. Construct the surface course directly against the barrier.

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: Locate as shown on in RACEWAY PLACEMENT Detail, unless otherwise directed by the Engineer. Ensure that the electrical raceway is clear of obstructions.

Cost of the 4" polyvinyl chloride raceway is included where shown on the plans. The cost for additional raceways and No. 10 AWG copperclad or aluminum-clad wire is also included where shown on the plans for future installation of circuits.

PAYMENT: will be made at the unit price bid per Foot for ITEM 622 - Concrete Barrier, 81" SSB. Include all 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 - Concrete Barrier, 81" SSB, End Anchorage, Reinforced. This includes all materials, labor, and other incidentals necessary to construct this anchor.

81" SINGLE SLOPE BARRIER NOISE WALL DETAIL (PIS-81-SSB)

FRA-161-15.80 NOISE WALLS

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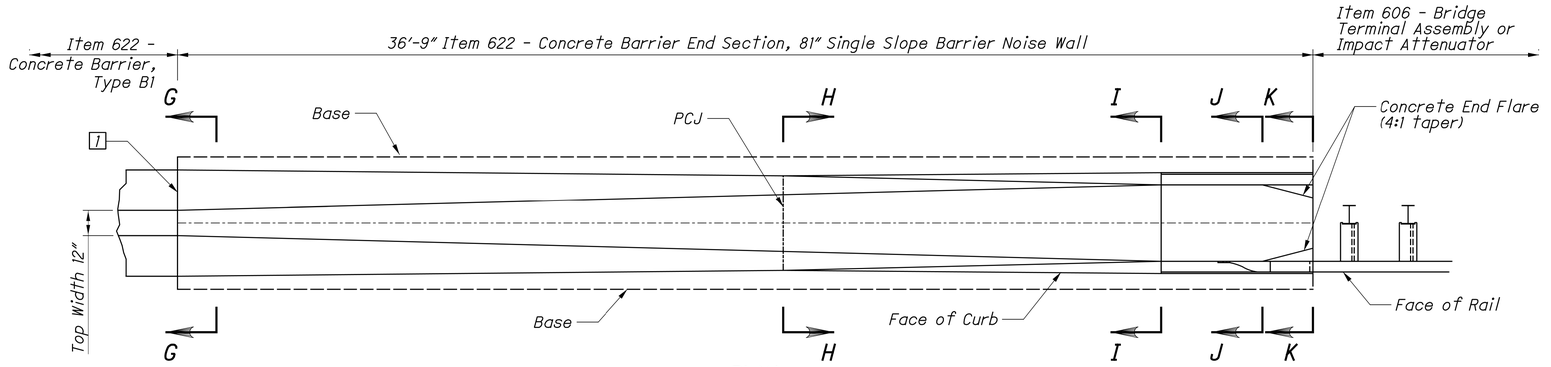
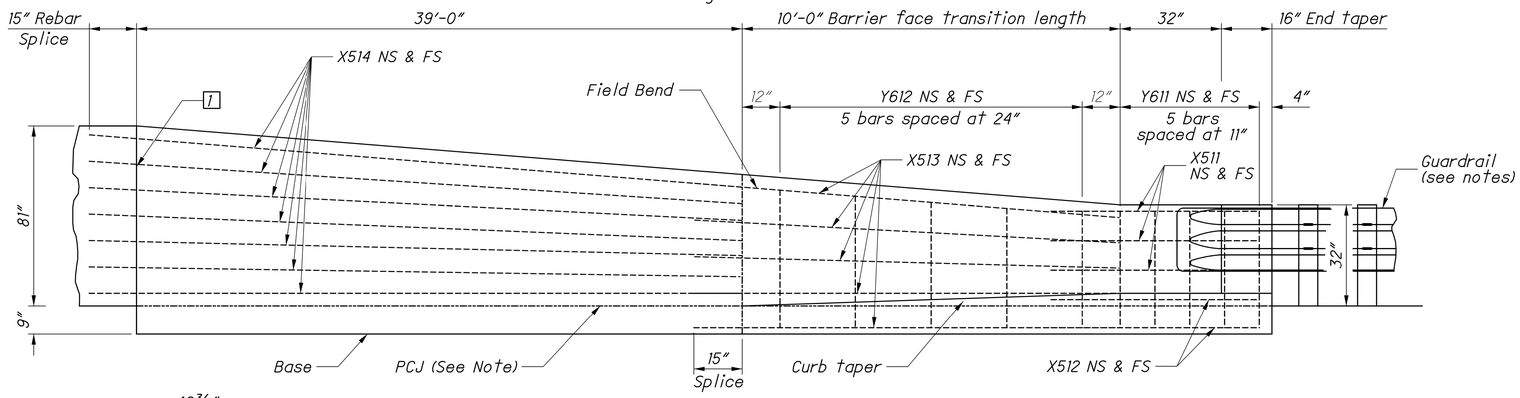
REVIEWER JDH 01-22-24

PROJECT ID 117607

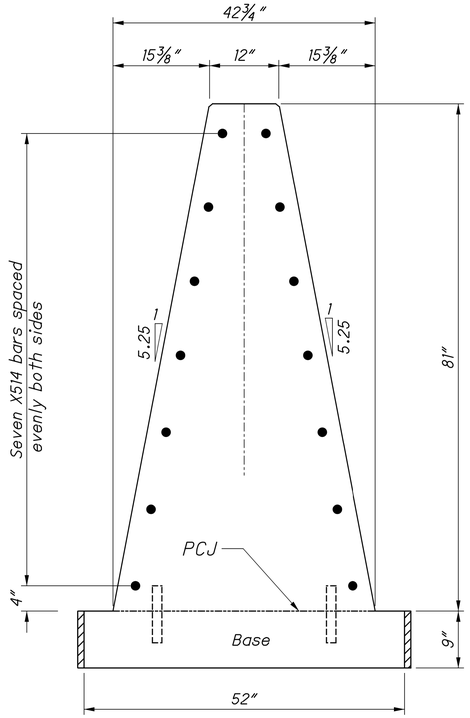
SHEET P.203 | TOTAL P.276



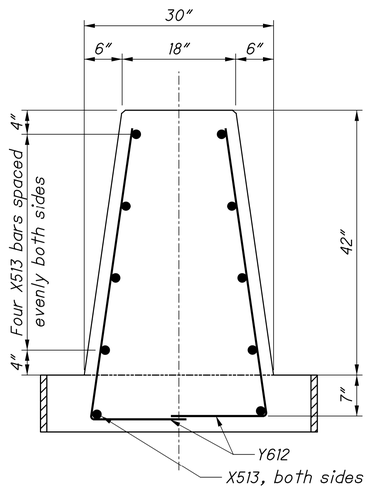
PLAN
Reinforcing not shown



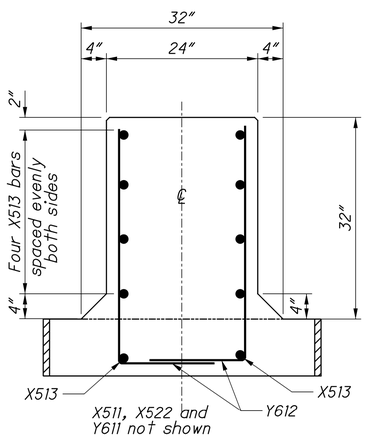
ELEVATION



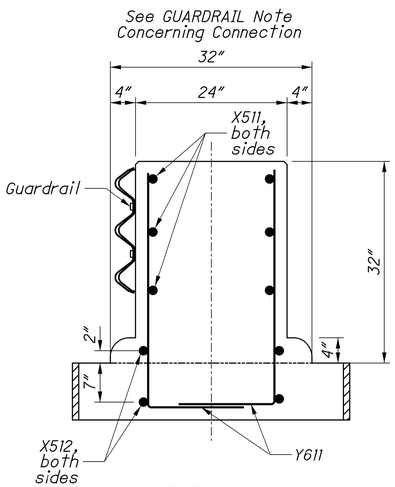
SECTION G-G



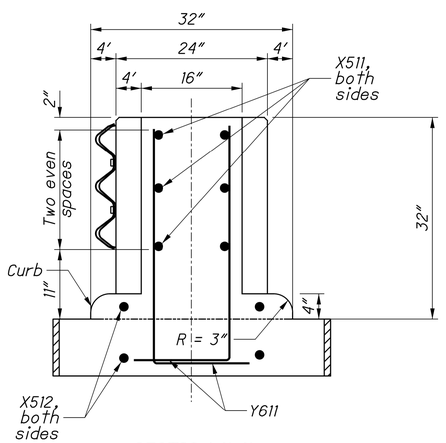
SECTION H-H



SECTION I-I



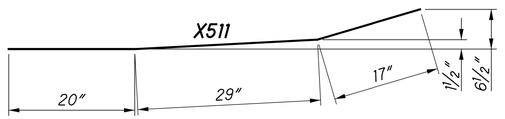
SECTION J-J



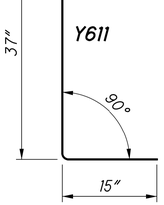
SECTION K-K

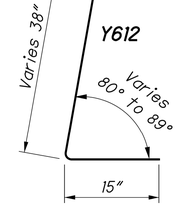
NS = Near Side
FS = Far Side

1 Contraction Joint. See NOTES on 1/8. Provide rebar cover of 3½".



BENDING DIAGRAMS





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 - 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.

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"

81" SINGLE SLOPE BARRIER NOISE WALL DETAIL (PIS-81-SSB)

FRA-161-15.80 NOISE WALLS

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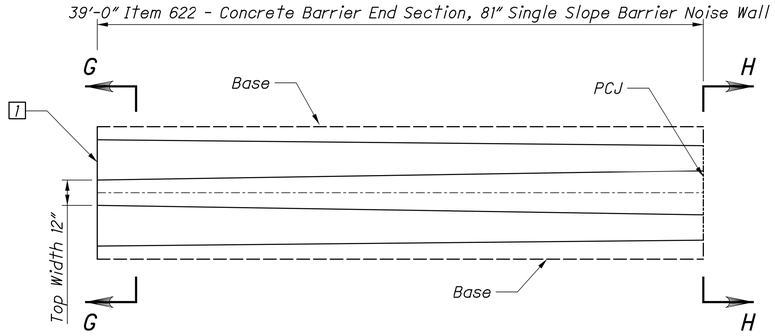
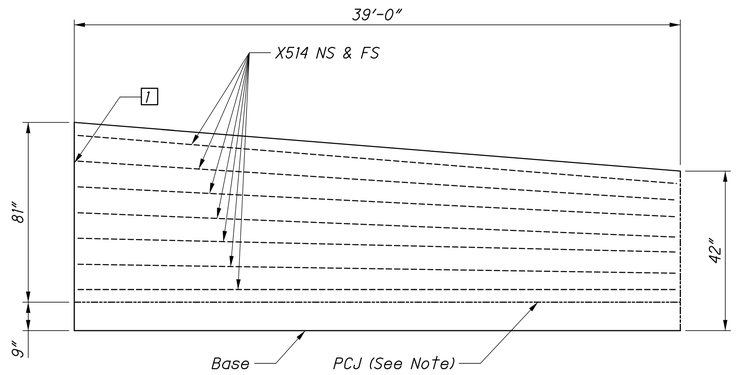
DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.204 TOTAL P.276



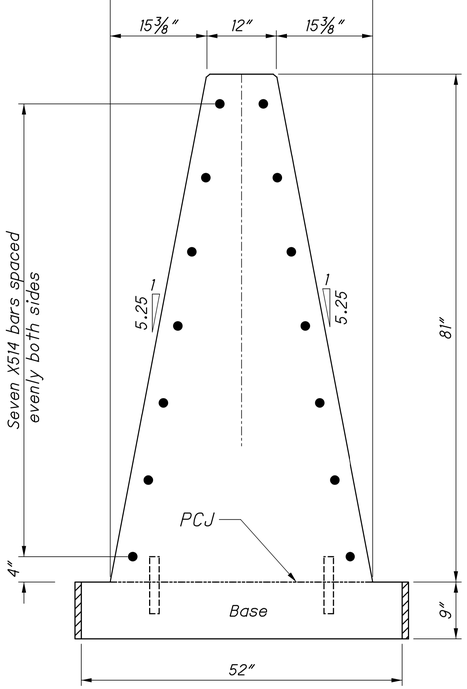
PLAN
Reinforcing not shown



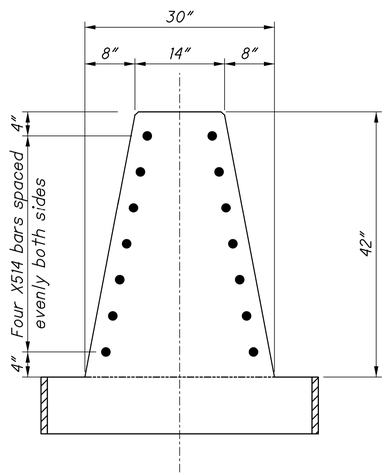
ELEVATION

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

NOTES

GENERAL: See 1/8 for 81" Single Slope Barrier details and materials. Provide 2" concrete cover over rebars, except as noted.

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 - Concrete Barrier, 81" SSB, End Section, 42" 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
X514	#5	Straight	10	38'-5"

81" SINGLE SLOPE BARRIER NOISE WALL DETAIL (PIS-81-SSB)

FRA-161-15.80 NOISE WALLS

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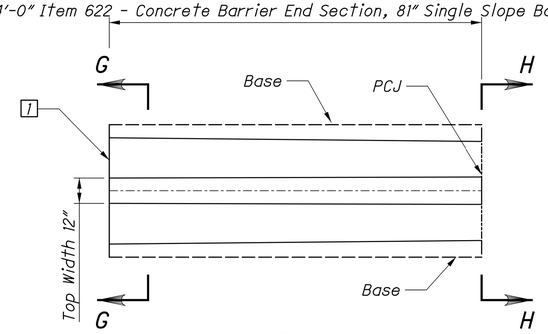
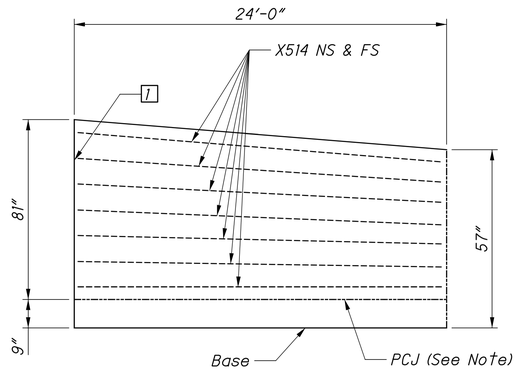
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.205 TOTAL P.276

24'-0" Item 622 - Concrete Barrier End Section, 81" Single Slope Barrier Noise Wall



PLAN
Reinforcing not shown



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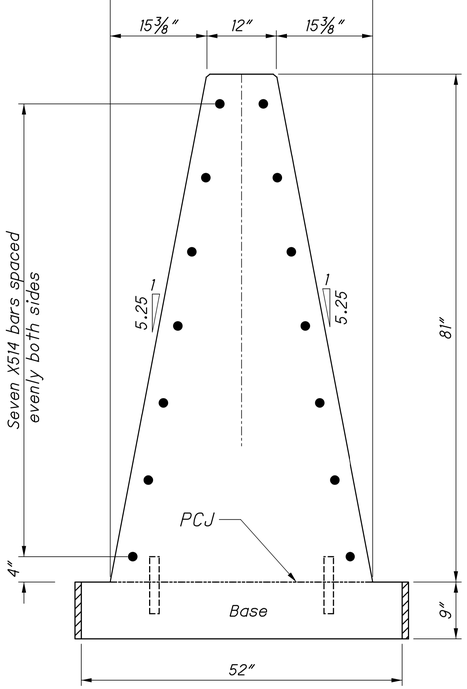
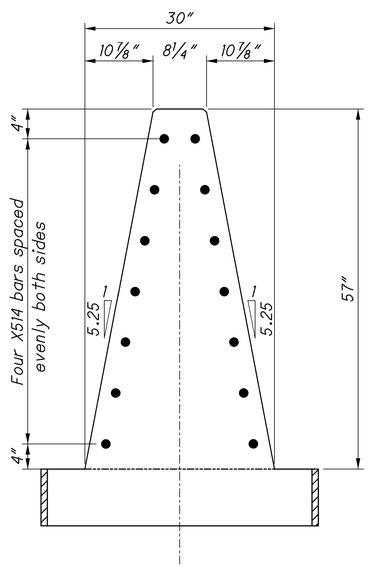


SECTION G-G



SECTION H-H

NS = Near Side
FS = Far Side

1 Contraction Joint. See NOTES on 1/8. Provide rebar cover of 3½".

NOTES

GENERAL: See 1/8 for 81" Single Slope Barrier details and materials. Provide 2" concrete cover over rebars, except as noted.

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 - Concrete Barrier, 81" SSB, End Section, 57" 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**
X514	#5	Straight	10	23'-5"

FRA-161-15.80 NOISE WALLS

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 8:02:41 PM USER: jennifer.kelley
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81" SINGLE SLOPE BARRIER NOISE WALL DETAIL (PIS-81-SSB)

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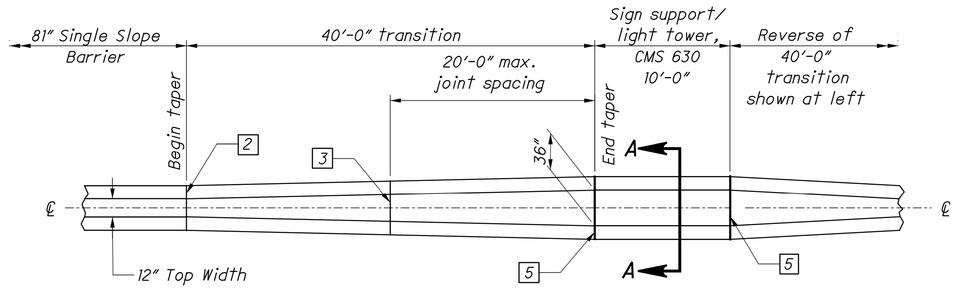
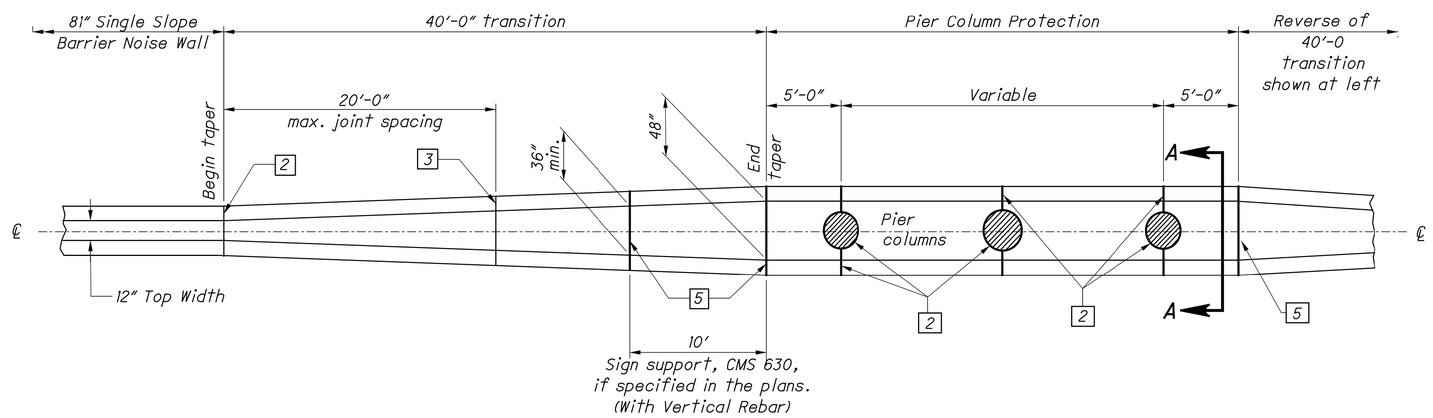
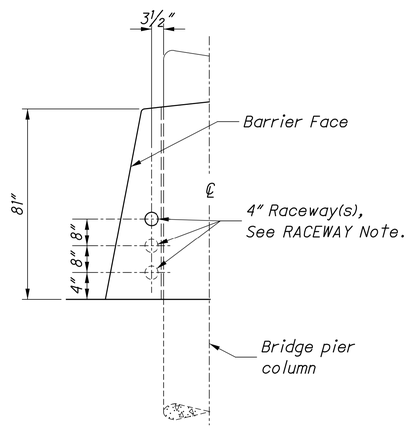
PROJECT ID 117607
SHEET P.206 TOTAL P.276



PLAN VIEW - SIGN SUPPORT TRANSITION / LIGHT TOWER HIGHWAY LIGHTING HL-20.24

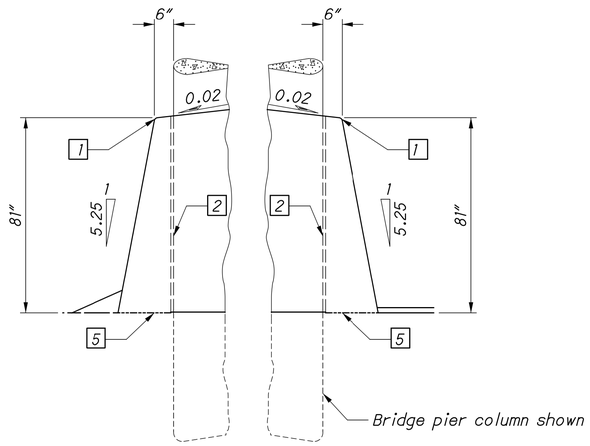


PLAN VIEW - BRIDGE PIER TRANSITION (With Sign Support)



Rebar Not Shown

RACEWAY PLACEMENT



SECTION A-A

NOTES

STANDARD BARRIERS: Construct 81" Single Slope Barrier as shown on 1/8 For barrier information not shown on this drawing, see CMS 622.

CONCRETE: Use 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. The area between barrier faces shall be completely filled with concrete.

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.

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 1/4.

EXPANSION JOINTS: Construct ¾" joint with CMS 705.03 filler at indicated positions.

Reinforced end anchorage sections, as shown on 1/4 are required only at the expansion joint between the normal barrier section and the start of the transition, not at expansion joints within the limits of the pier column protection.

RACEWAY: Locate as shown on in RACEWAY PLACEMENT Detail, unless otherwise directed by the Engineer. Keep raceway clear of obstructions. Gradually adjust the raceway height to match placement in abutting barrier.

Cost of the 4" polyvinyl chloride raceway is included where shown on the plans. The cost for additional raceways and No. 10 AWG copper-clad or aluminum-clad wire is also included where shown on the plans for future installation of circuits.

PAYMENT will be made at the unit price bid per Foot for ITEM 622 - Concrete Barrier, 81" SSB, and include all materials, labor, raceways and other incidentals necessary to construct the barrier transition.

Payment for the reinforced end anchors, will be made at the unit price bid per Each for ITEM 622 - Concrete Barrier, 81" SSB, End Anchorage, Reinforced. This includes all materials, labor, and other incidentals necessary to construct this anchor.

LEGEND

1. 1" radius or ¾" chamfer.
2. Expansion joint, ¾" min. Preformed Filler, CMS 705.03 (See NOTES).
3. Contraction joint (see NOTES).
4. See **1/8** for adjoining pavement details.
5. PCJ: Permissible construction joint.

81" SINGLE SLOPE BARRIER NOISE WALL DETAIL (PIS-81-SSB)

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PROJECT ID 117607
SHEET P.207 TOTAL P.276

FRA-161-15.80 NOISE WALLS

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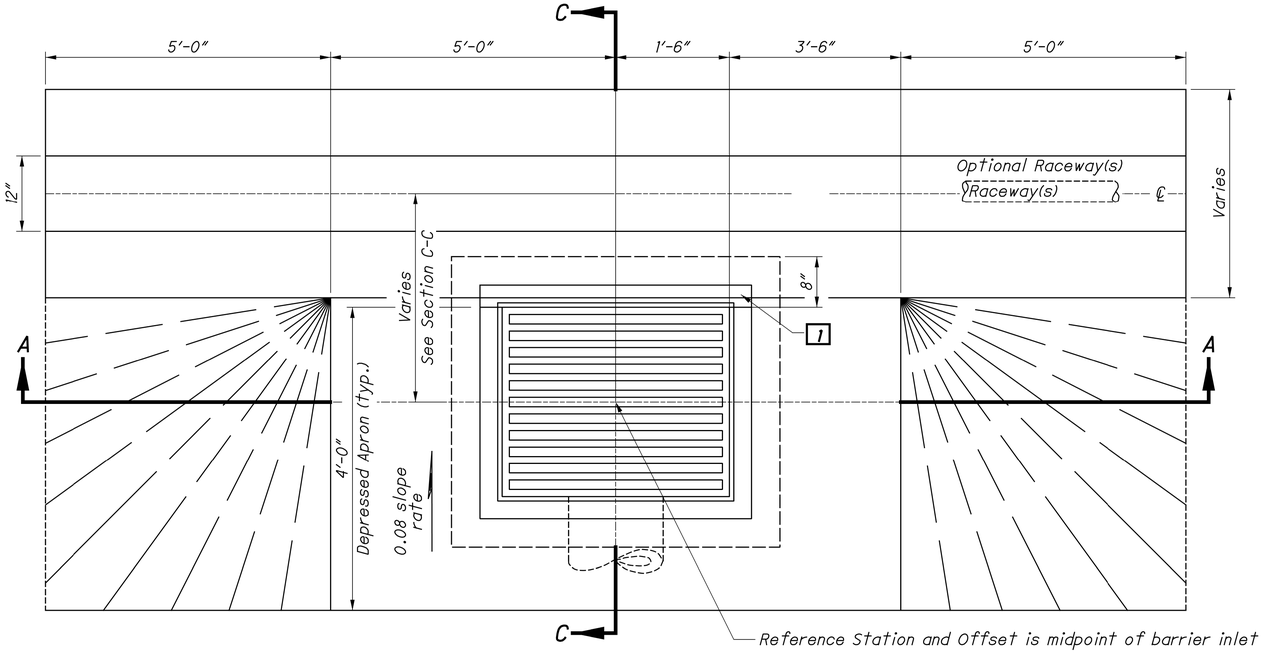
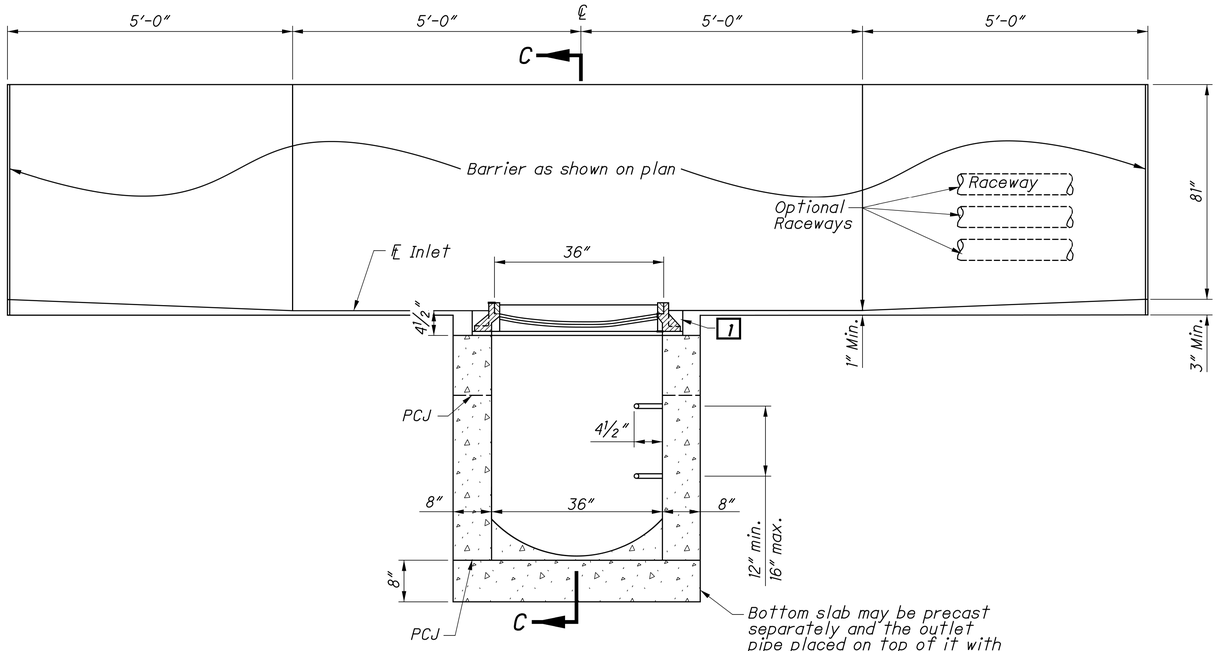
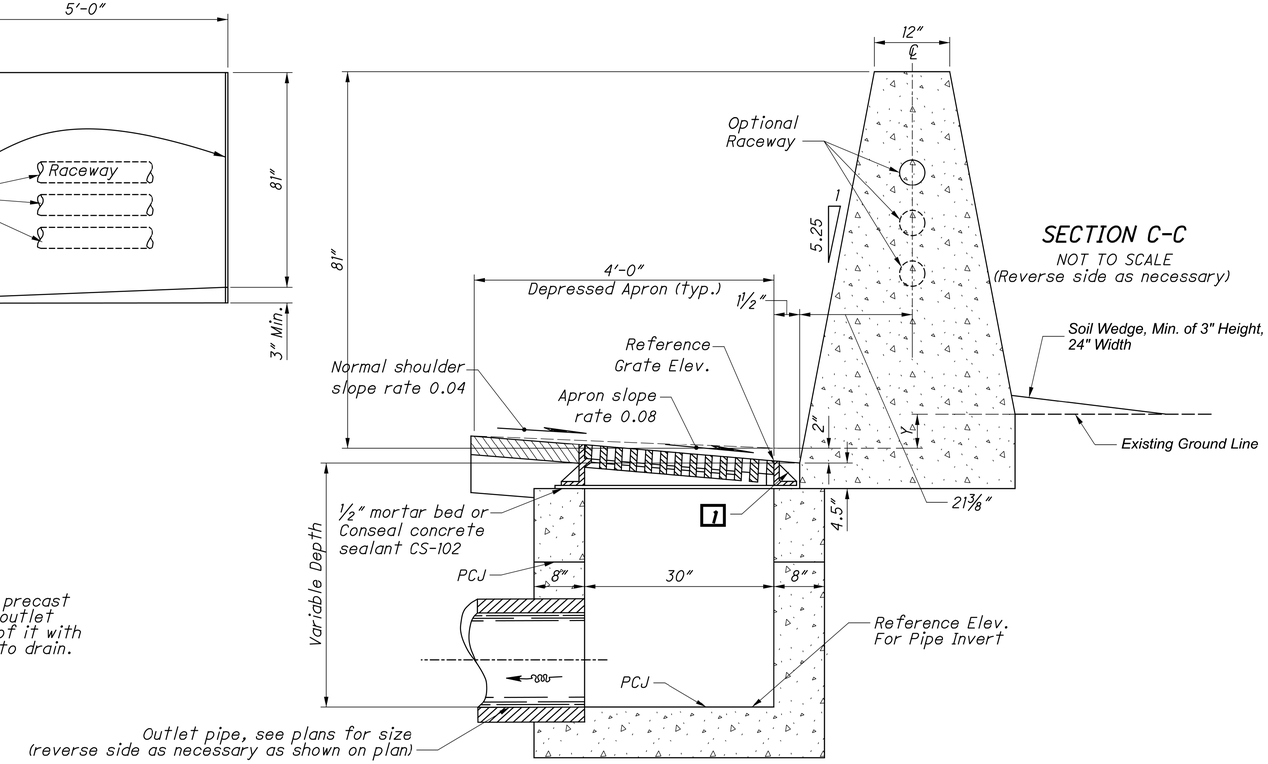


PLAN VIEW
NOT TO SCALE



SECTION A-A
NOT TO SCALE



SECTION C-C
NOT TO SCALE
(Reverse side as necessary)

LEGEND

1 After casting is placed, fill void with 4000 psi compressive strength concrete.

NOTES

GENERAL: For details of 81" Single Slope Barrier, see Sheet 1/8.

WALLS: The walls between the bottom slab and the upper permissible construction joint may be built of brick, 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 upper permissible construction joint may be precast or cast-in-place.

CONCRETE: Provide 4000 psi compressive strength concrete for cast-in-place structures. When precast, provide concrete that meets the requirements of CMS 706.13. Mark the inlet number on the structure. Seal the exposed concrete surfaces of the barrier per CMS Item 512 when specified in the plans.

REINFORCING STEEL: Provide epoxy coated reinforcing steel in accordance with CMS 509.09.

CASTINGS: Provide casting according to SCD I-3B.

INLETS OVER 12 FEET IN DEPTH: Provide precast or cast-in-place concrete for inlets over 12 feet in depth. Reinforce with #5 bars on 12" centers both vertically and horizontally with 2" clearance from the inside wall face.

OPENINGS: Pipe openings are the outside diameter of the pipe being supplied plus 2" when fabricated or field cut. Fill any voids per CMS 611.

PCJ: Permissible construction joint.

STEPS: Provide steps according to SCD MH-1.

PAYMENTS: Payment will be made at the unit price bid per Each for Item 611 - Barrier Inlet, 81" SSB and includes all materials, reinforcing steel, castings, raceways, wiring and labor 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.

81" SINGLE SLOPE BARRIER NOISE WALL DETAIL (PIS-81-SSB)

FRA-161-15.80 NOISE WALLS

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 8:04:51 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_GR006.dgn

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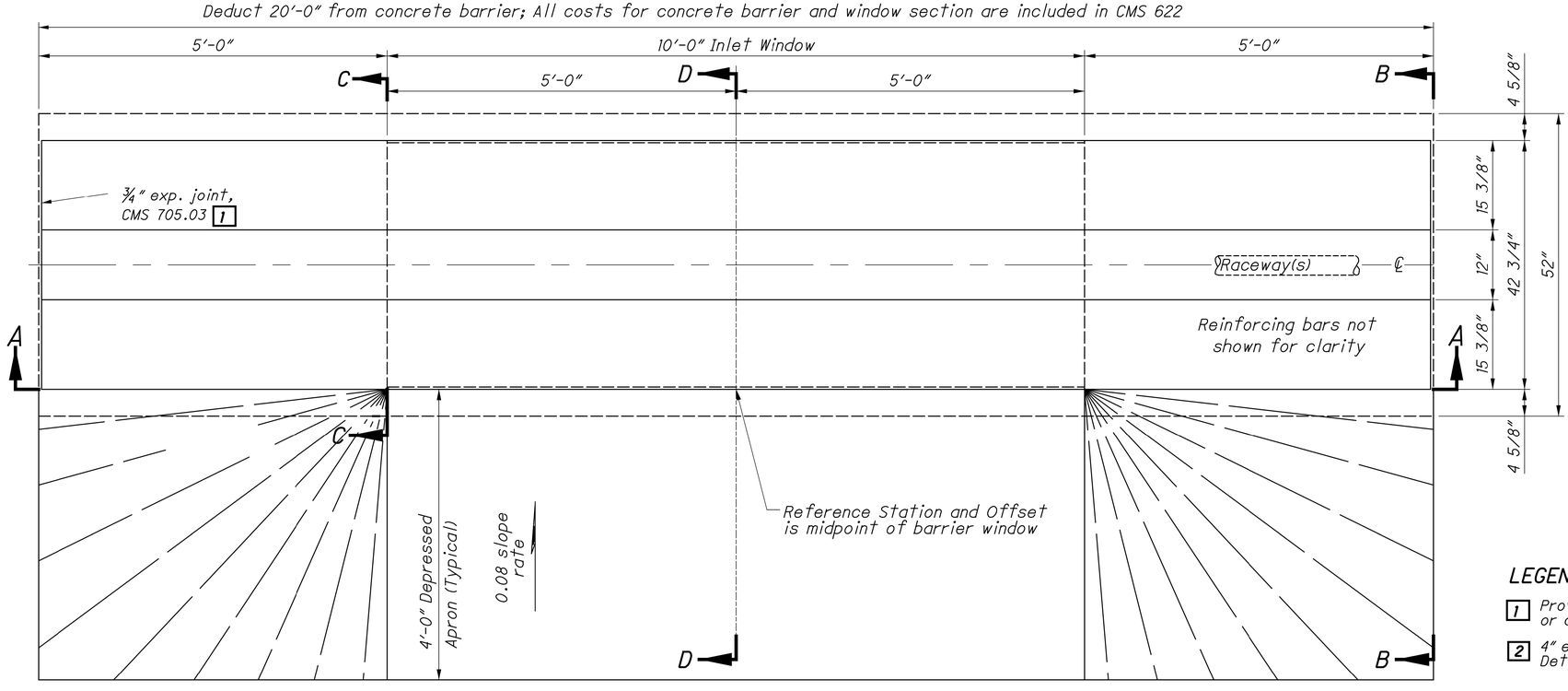
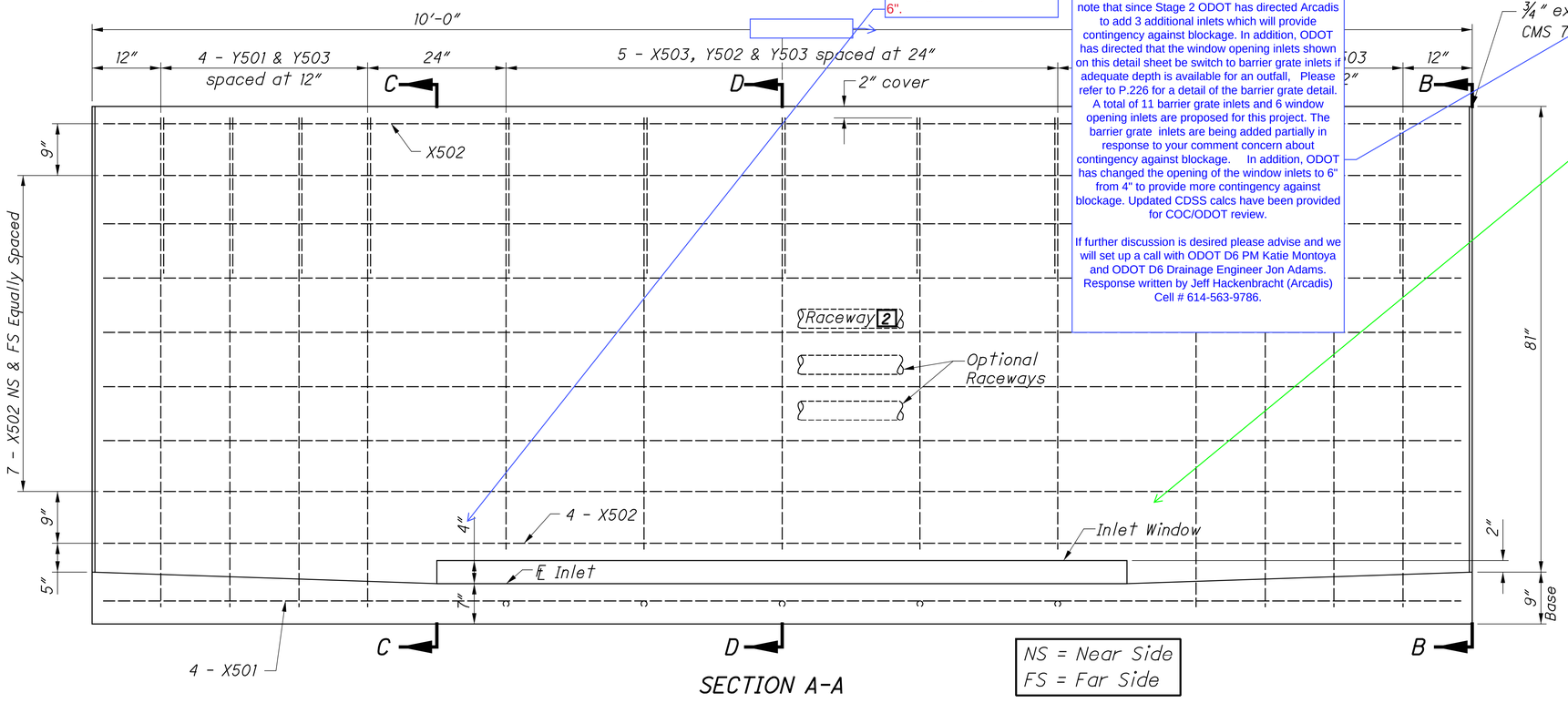
(614) 818-4900
www.arcadis.com

DESIGNER	JMK
REVIEWER	JDH 01-22-24
PROJECT ID	117607
SHEET	P.208
TOTAL	P.276

Deduct 20'-0" from concrete barrier; All costs for concrete barrier and window section are included in CMS 622



PLAN VIEW



SECTION A-A

NS = Near Side
FS = Far Side

NOTES

1. For additional notes and details, see SCD I-3B.

2. For sections B-B, C-C, & D-D, see sheet 8/8 .

PAYMENT: Payment for the Concrete Barrier Window Section shall be made at the unit price bid for Item 622 - Concrete Barrier, 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 1 Underlayment

LEGEND

1 Provide a 1½" minimum exp. joint in concrete pavement or concrete shoulders.

2 4" electrical raceway. See Sheet DD002for RACEWAY PLACEMENT Details.

Arcadis Response_3-27-24 revising opening from 4" to 6".

Arcadis Response_3-27-2024: Per ODOT, this project will follow ODOT's stormwater policy. Please note that since Stage 2 ODOT has directed Arcadis to add 3 additional inlets which will provide contingency against blockage. In addition, ODOT has directed that the window opening inlets shown on this detail sheet be switch to barrier grate inlets if adequate depth is available for an outfall, Please refer to P.226 for a detail of the barrier grate detail. A total of 11 barrier grate inlets and 6 window opening inlets are proposed for this project. The barrier grate inlets are being added partially in response to your comment concern about contingency against blockage. In addition, ODOT has changed the opening of the window inlets to 6" from 4" to provide more contingency against blockage. Updated CDSS calcs have been provided for COC/ODOT review.

If further discussion is desired please advise and we will set up a call with ODOT D6 PM Katie Montoya and ODOT D6 Drainage Engineer Jon Adams. Response written by Jeff Hackenbracht (Arcadis) Cell # 614-563-9786.

REPEAT STAGE 1 COMMENTS

There should be a maintenance plan or contingency within the design.

Arcadis Response: ODOT D6 was not familiar with maintenance of these types of inlets, but they are checking with their maintenance group. Please note that during our field walk in June/2023 the City of Columbus representative requested this style of inlets.

Who maintains these Inlets? How does ODOT maintain these ?

Spread calculations should consider partial and/or complete blockage of some windows.

Arcadis Response: Per ODOT, this project will follow ODOT's stormwater policy. ODOT's direction is to run standard spread calcs per CDSS using a barrier inlet, plus maintain a minimum of 0.3% longitudinal grade where installed. CDSS calcs have been provided for COC/ODOT review.

81" SINGLE SLOPE BARRIER NOISE WALL DETAIL (PIS-81-SSB)

FRA-161-15.80 NOISE WALLS

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 8:06:10 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_GR007.dgn

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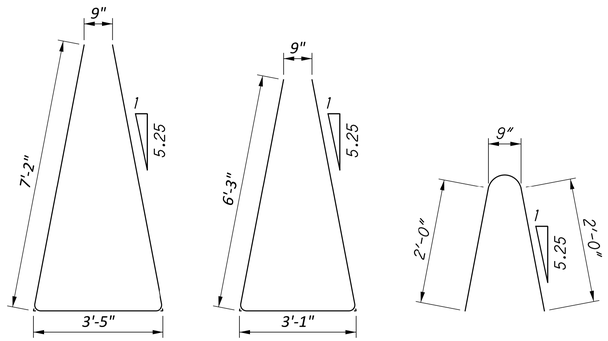
DESIGNER JMK
REVIEWER JDH 01-22-24
PROJECT ID 117607
SHEET P.209 TOTAL P.276

STEEL LIST (For Estimating Purposes Only)											
X501 #5 Bar		X502 #5 Bar		X503 #5 Bar		Y501 #5 Bar		Y502 #5 Bar		Y503 #5 Bar	
Straight		Straight		Straight		Bent		Bent		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"



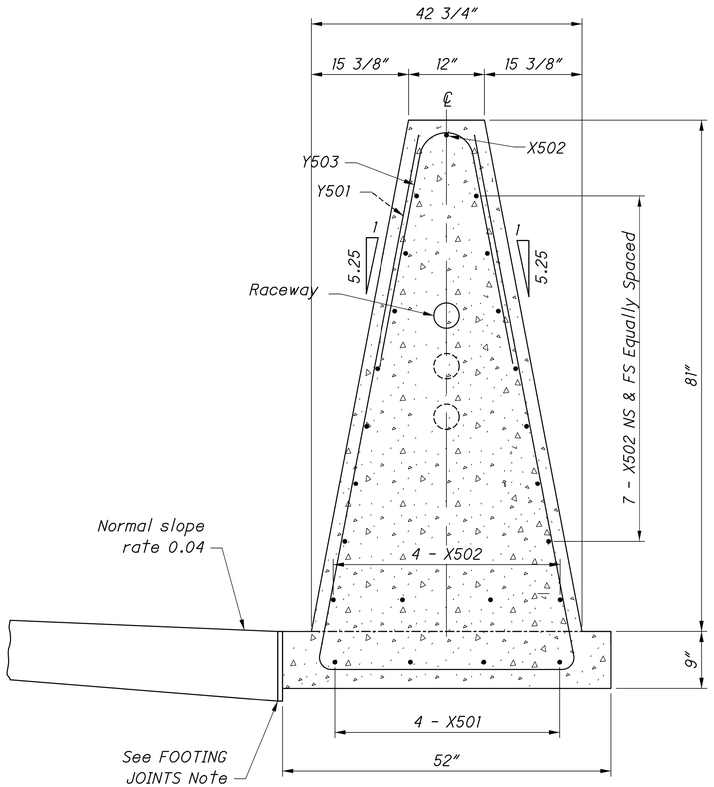
Y501 Y502 Y503

BENDING DIAGRAMS

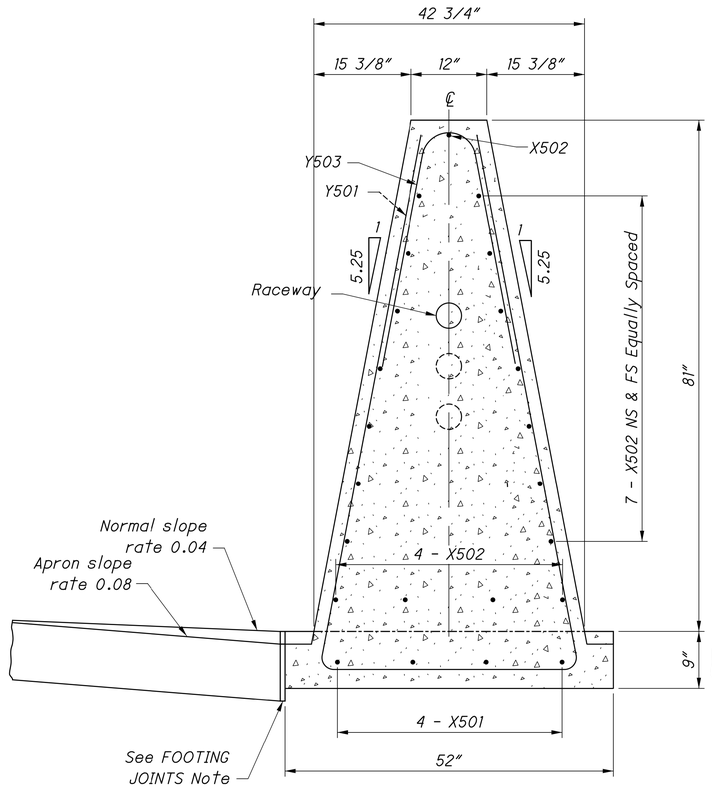
NOTES

1. For additional notes and details, see SCD I-3B.
2. For location of sections A-A, B-B & C-C, see sheet 7/8.
3. Reinforcing Steel: Provide epoxy coated reinforcing steel in accordance with CMS 509.09.

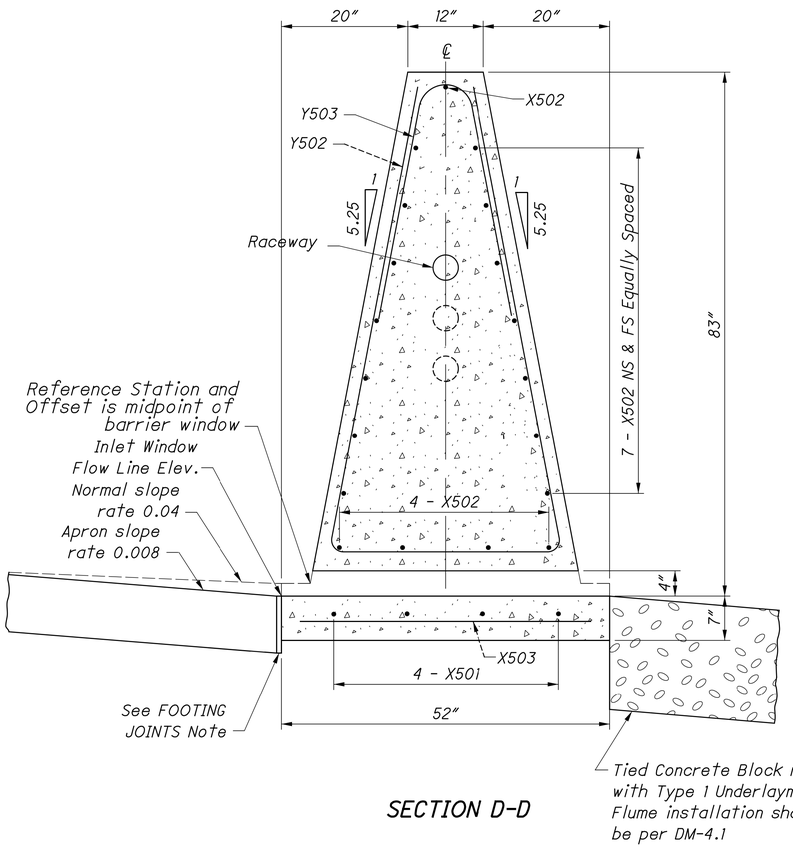
FOOTING JOINTS: Provide a sealed joint with the vertical walls between the barrier footing and a concrete pavement or concrete base as detailed on SCD RM-4.3.



SECTION B-B



SECTION C-C



SECTION D-D

81" SINGLE SLOPE BARRIER NOISE WALL DETAIL (PIS-81-SSB)

FRA-161-15.80 NOISE WALLS

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 2024-01-18 TIME: 8:07:11 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_GR008.dgn

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DESIGNER
JMK

REVIEWER
JDH 01-22-24

PROJECT ID
117607

SHEET P.210 TOTAL P.276

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

THIS GEOTECHNICAL EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE 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.

BEDROCK WAS ENCOUNTERED IN BORINGS B-001-0-23, B-002-0-23, B-003-0-23, B-004-0-23, B-018-0-23, B-019-0-23, B-020-0-23, B-021-0-23, B-022-0-23, B-023-0-23, B-024-0-23, B-027-0-23, B-028-0-23, B-038-0-23, B-039-0-23, B-040-0-23, B-041-0-23, B-042-0-23, B-043-0-23, B-044-0-23, B-045-0-23, B-046-0-23, B-047-0-23, B-048-0-23, B-049-0-23, B-050-0-23, B-051-0-23, B-052-0-23, AND 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 SILT, AND HIGHLY WEATHERED GRAY SHALESTONE.

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.

W — 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.

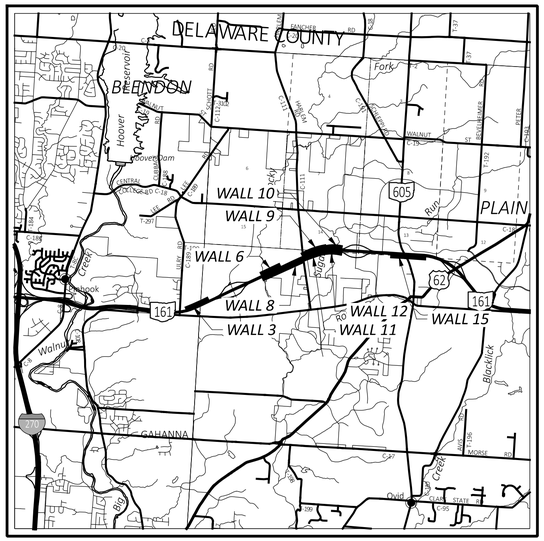
NP — INDICATES A NON-PLASTIC SAMPLE.

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.

DRILLING - TG 10/23 - 12/05/2023

DRAWN - JAS, KSJ 01/18/2023

REVIEWED - DEK 01/18/2023

GEOTECHNICAL PROFILE - NOISE WALLS

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43221
(614) 823-4949

DESIGNER JAS

REVIEWER DEK 1/19/24

PROJECT ID 117607

SUBSET 1 | TOTAL 66

SHEET P.211 | TOTAL 276

FRA-161-15.80 NOISE WALLS

MODEL: COVER SHEET PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:05:13 AM USER: kevinj
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

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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

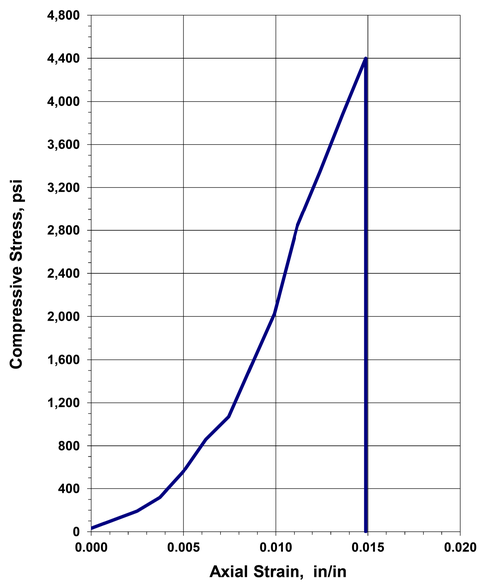
Rock Description: Gray Sandstone
Rock Formation:

Boring No.:	B-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

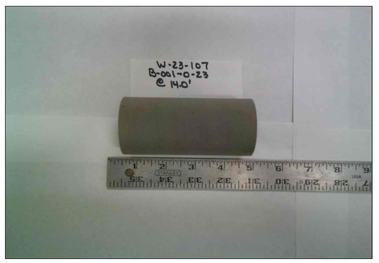
Sample Preparation: Per ASTM D4543

**Actual test sample used for unit weight prior to testing.*

Unconfined Compression Test



Before Testing



After Failure

REMARKS:

1

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

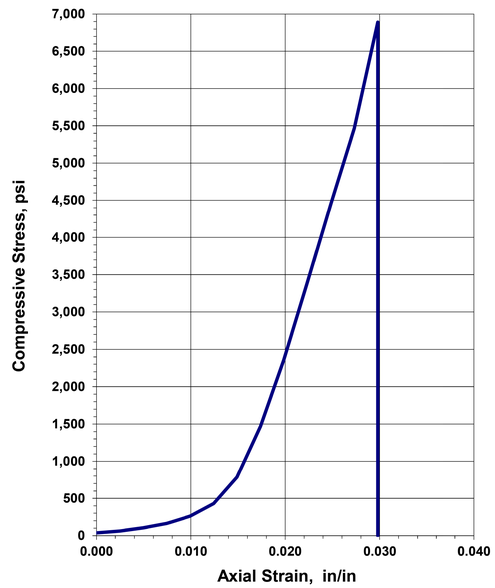
Rock Description: Gray Sandstone
Rock Formation:

Boring No.:	B-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:

1

FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:47:21 AM USER: kevinj
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL0001.dgn

GEOTECHNICAL PROFILE - NOISE WALLS
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.212
TOTAL	276

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

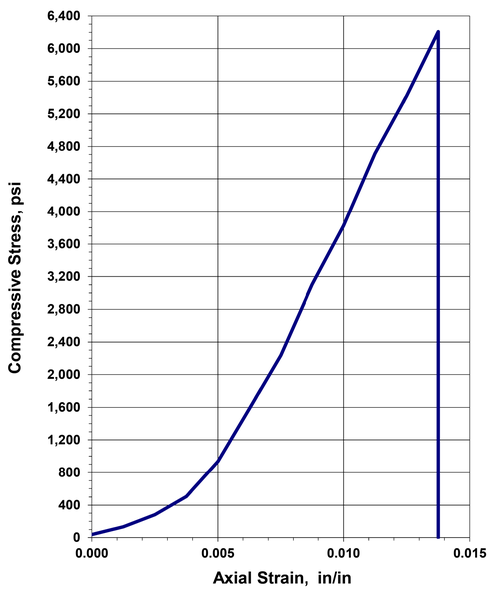
Rock Description: Gray Sandstone
Rock Formation:

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

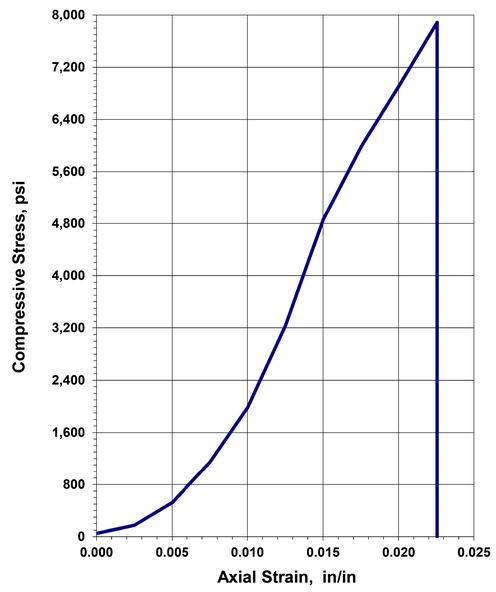
Rock Description: Gray Sandstone
Rock Formation:

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 WALLS
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.213 | TOTAL: 276

FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:47:43 AM USER: kevinj
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

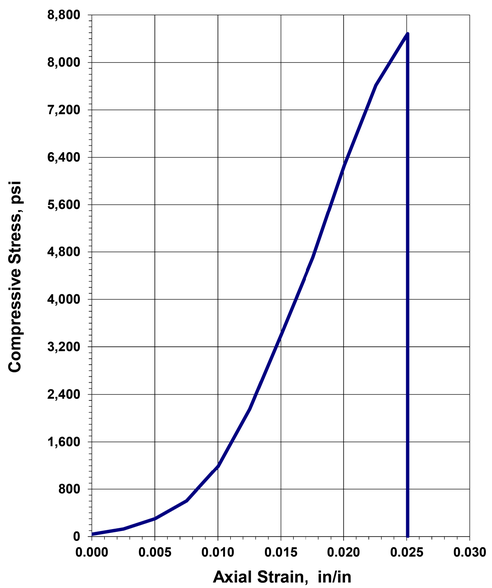
Rock Description: Gray Sandstone
Rock Formation:

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

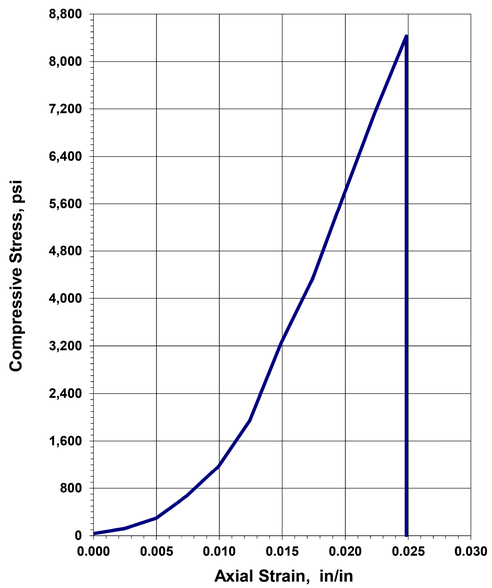
Rock Description: Gray Sandstone
Rock Formation:

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 WALLS
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.214
TOTAL	276

FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:48:01 AM USER: kevin]
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)	σ_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 σ_c = 5.90 MPa (0,856 psi)

Remarks: 1

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-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)	σ_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

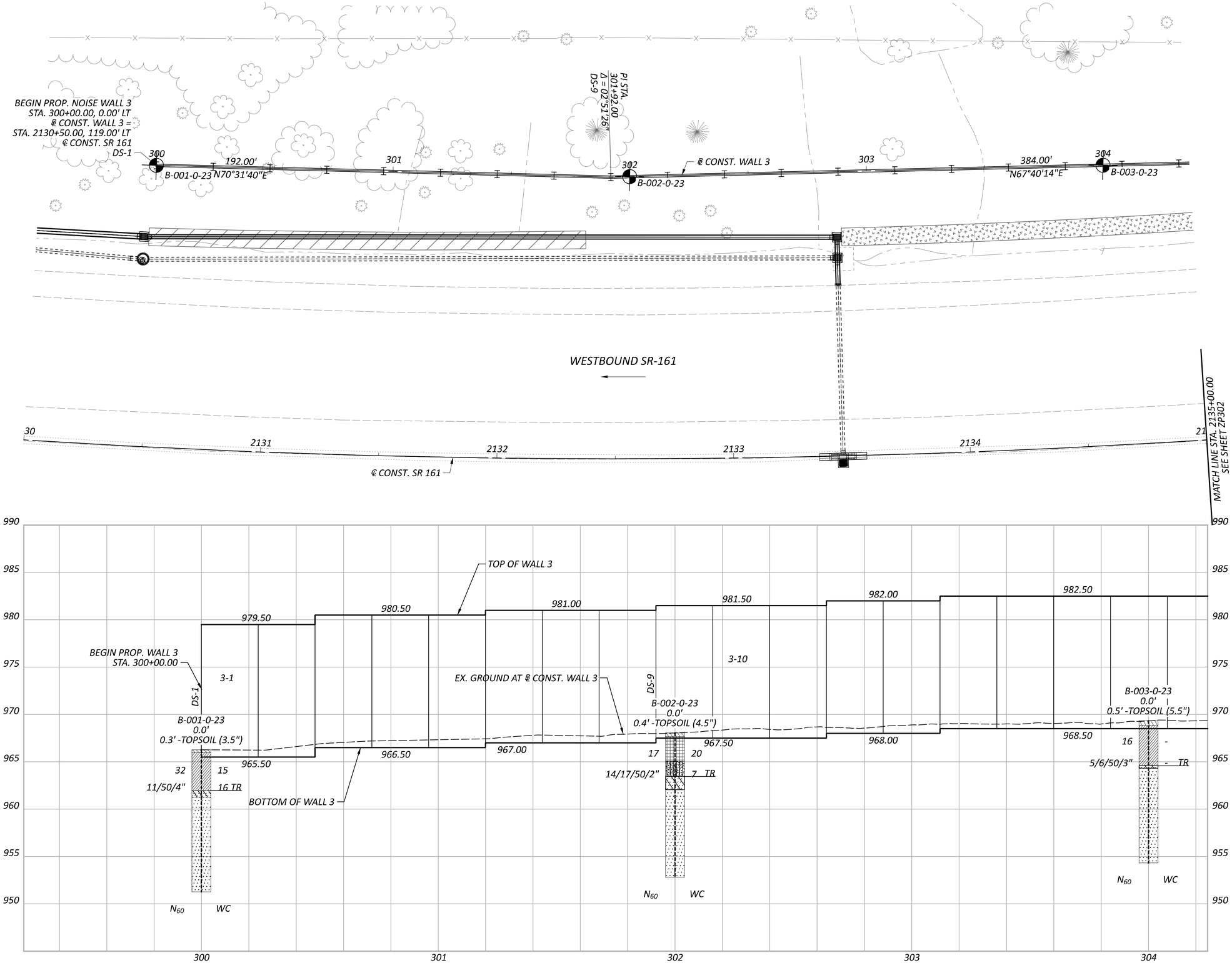
STATISTICS	
Mean $Is_{(50)}$ ⊥	0.03 MPa (4 psi)
Mean $Is_{(50)}$ ‖	
$Ia_{(50)}$	

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 σ_c = 0.39 MPa (0,057 psi)

Remarks:



HORIZONTAL SCALE IN FEET
0 10 20 40

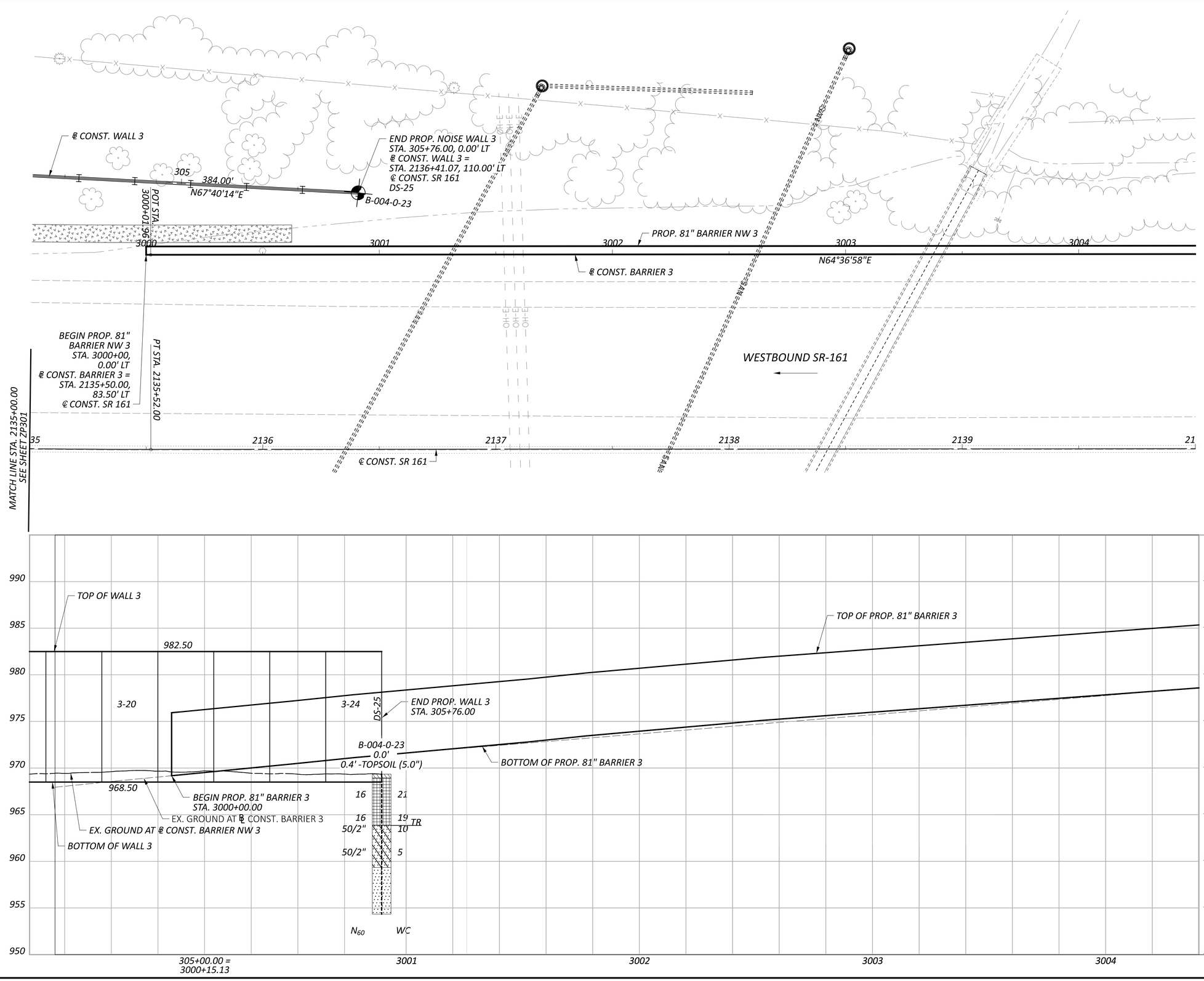
GEOTECHNICAL PROFILE - NOISE WALL 3
STA. 2130+00.00 TO STA. 2135+00.00

FRA-161-15.80 NOISE WALLS

MODEL: Wall 3 - Plan 2 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:06:46 AM USER: kevinj
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.216
TOTAL	276



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.217
TOTAL	276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 3 - Plan 3 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:07:28 AM USER: kevinj
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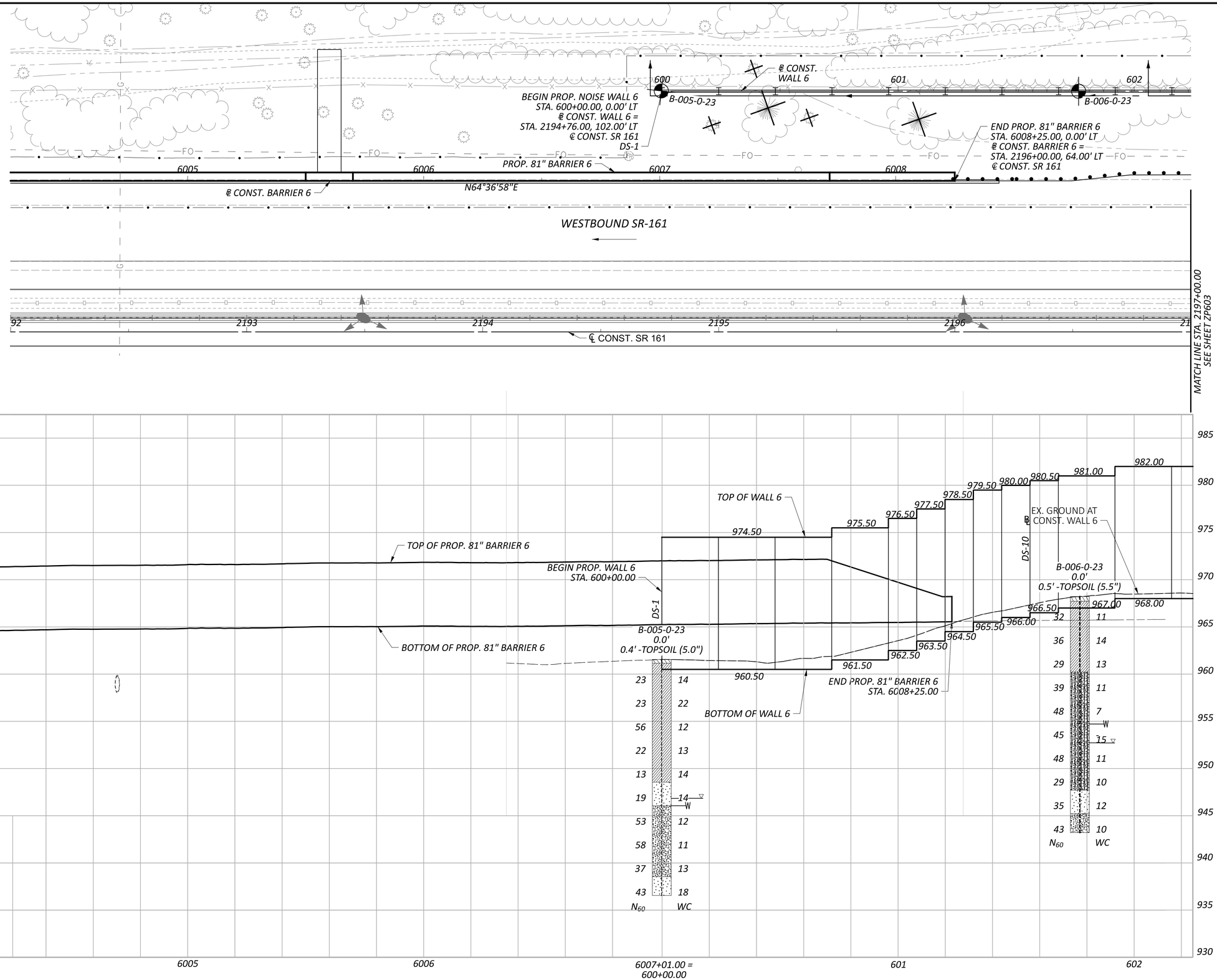

GEOTECHNICAL PROFILE - NOISE WALL 6
STA. 2192+00.00 TO STA. 2197+00.00

HORIZONTAL SCALE IN FEET
0 10 20 40

FRA-161-15.80 NOISE WALLS

MODEL: Wall 6 - Plan 6 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:07:39 AM USER: kevinj
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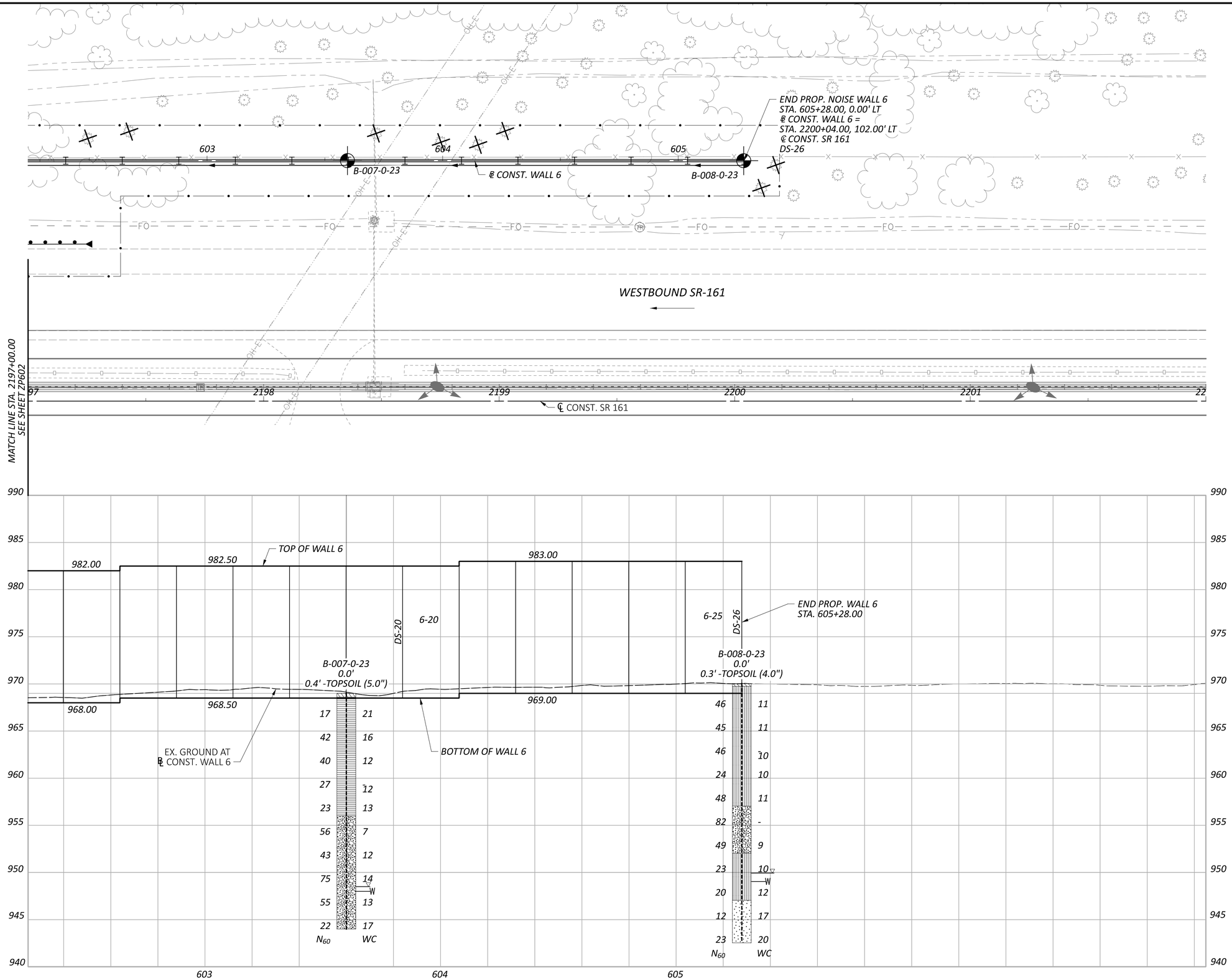
DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

DESIGNER	KSJ
REVIEWER	DEK 1/19/24
PROJECT ID	117607
SUBSET	8
TOTAL	66
SHEET	P.218
TOTAL	276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 6 - Plan 28 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:07:52 AM USER: kevinj
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP603.dgn

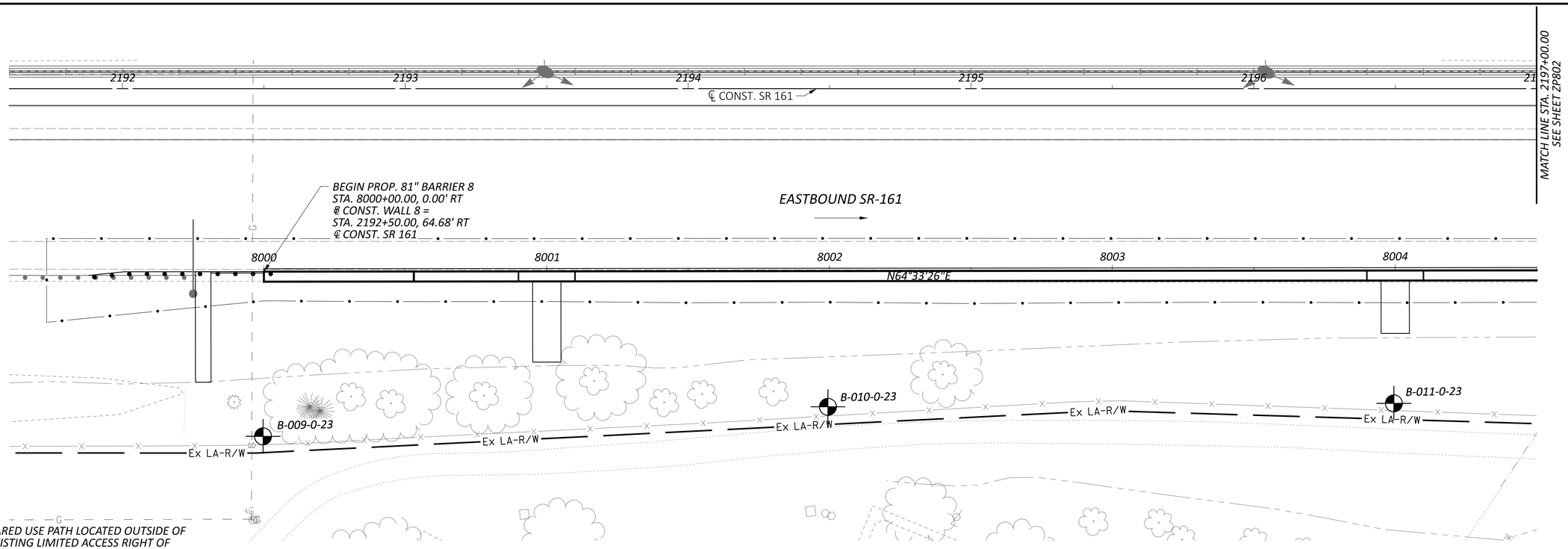


HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - NOISE WALL 6
STA. 2197+00.00 TO STA. 2202+00.00

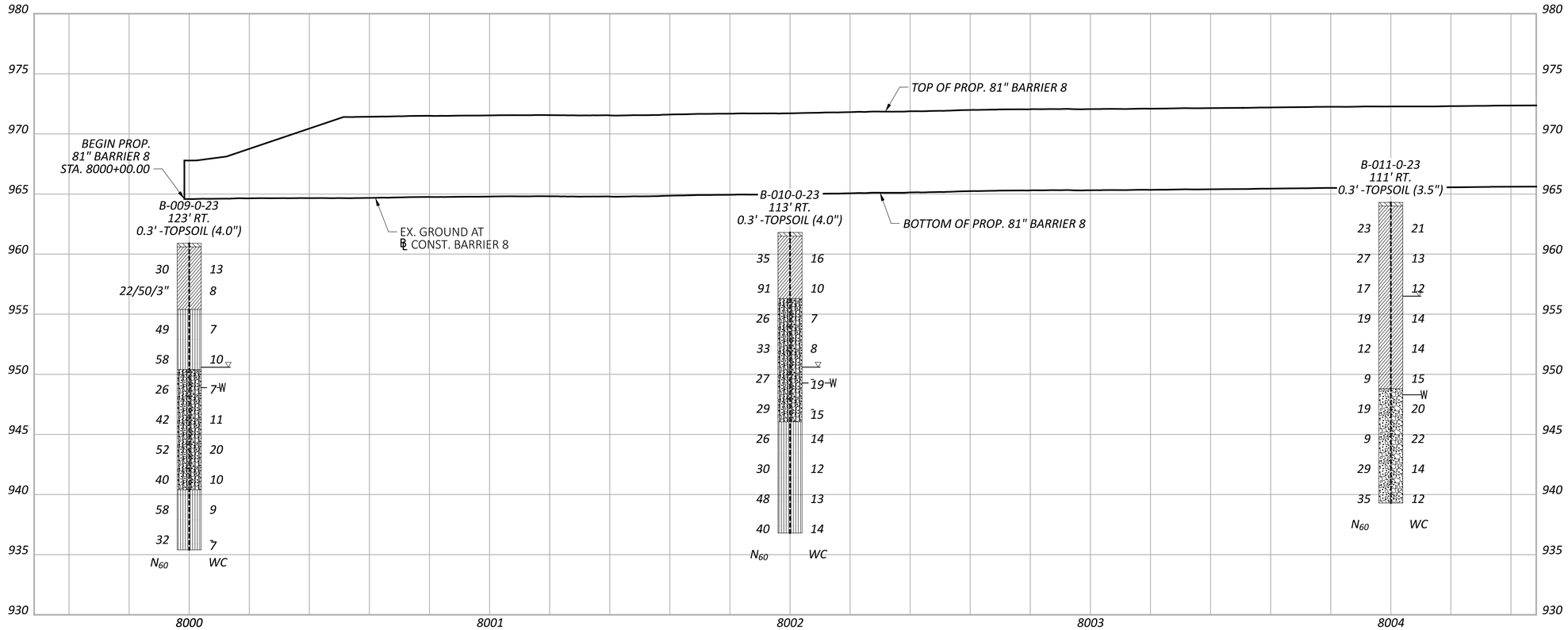
DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

DESIGNER	KSJ
REVIEWER	DEK 1/19/24
PROJECT ID	117607
SUBSET	9
TOTAL	66
SHEET	P.219
TOTAL	276



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.



FRA-161-15.80 NOISE WALLS

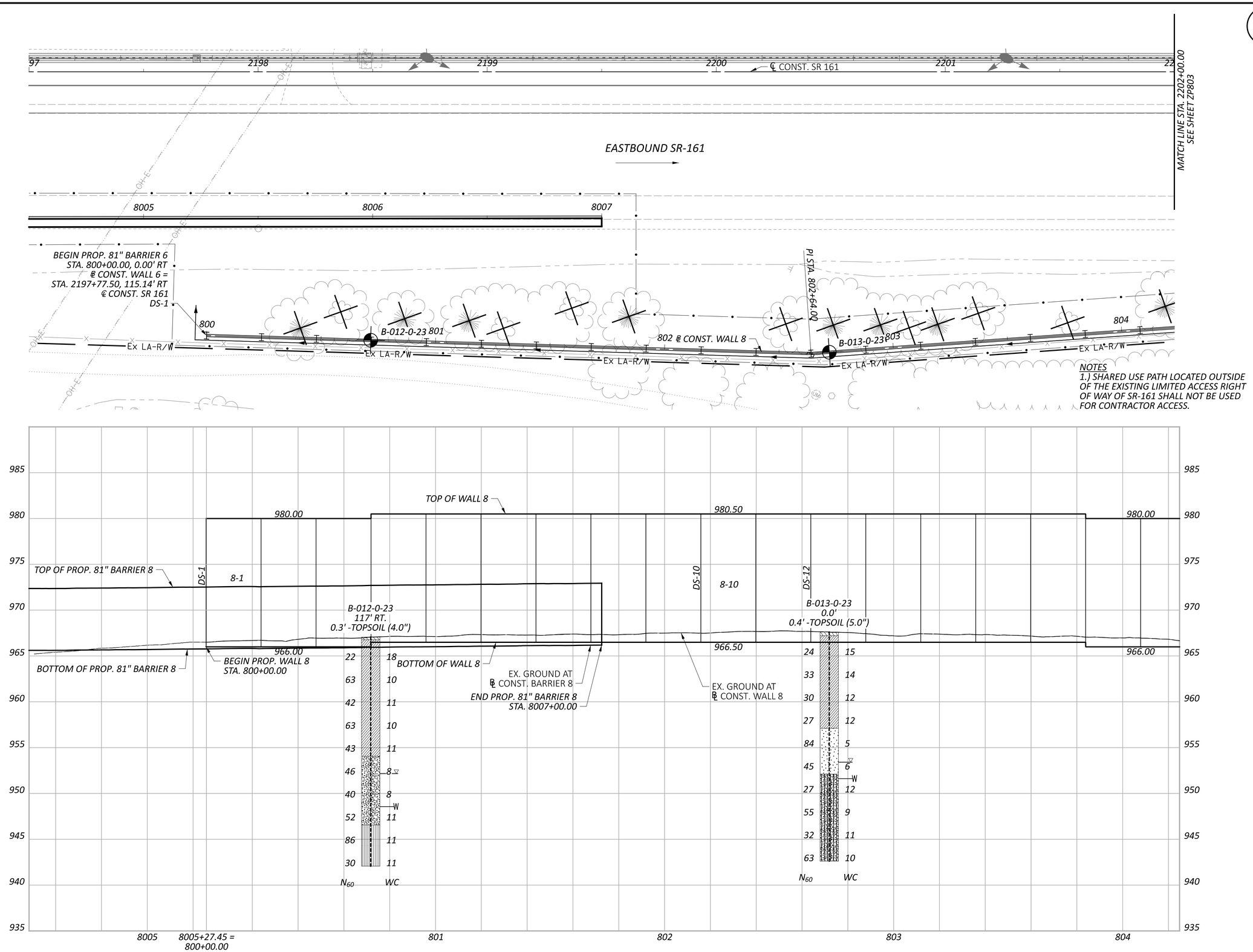
MODEL: CLP_SR161 - Plan 7 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:08:01 AM USER: kevinj
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP801.dgn

HORIZONTAL
SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - NOISE WALL 8
STA. 2192+00.00 TO STA. 2197+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 10 TOTAL 66
SHEET P.220 TOTAL 276



HORIZONTAL
SCALE IN FEET
0 10 20 40

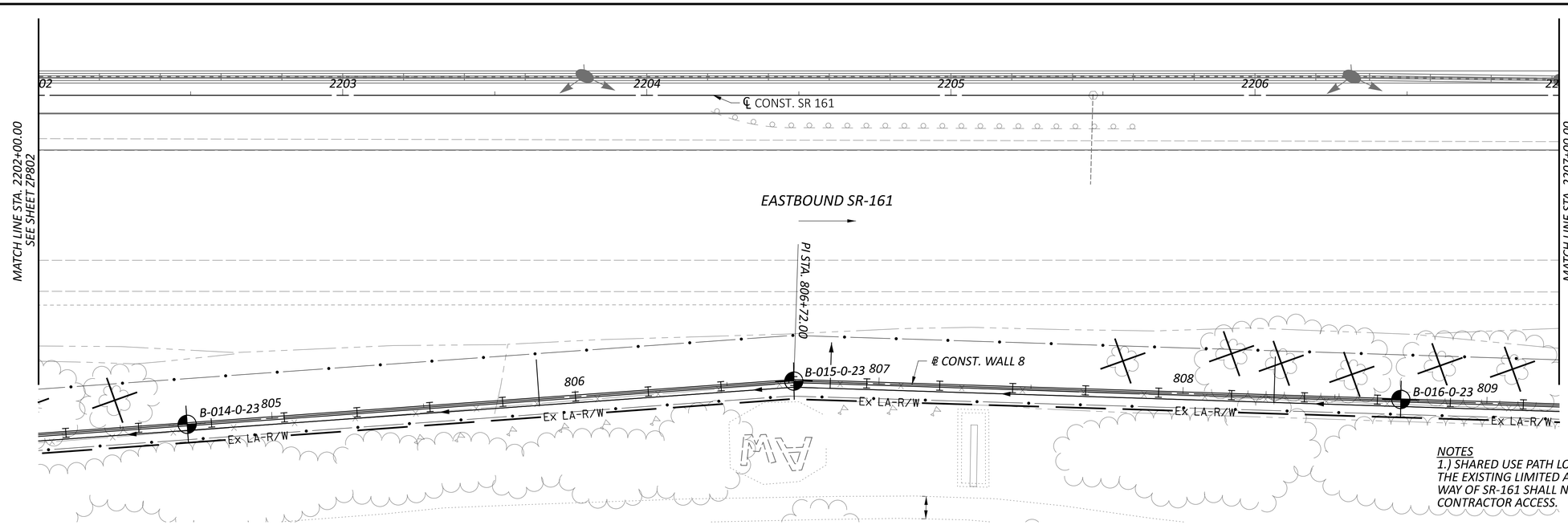
GEOTECHNICAL PROFILE - NOISE WALL 8
STA. 2197+00.00 TO STA. 2202+00.00

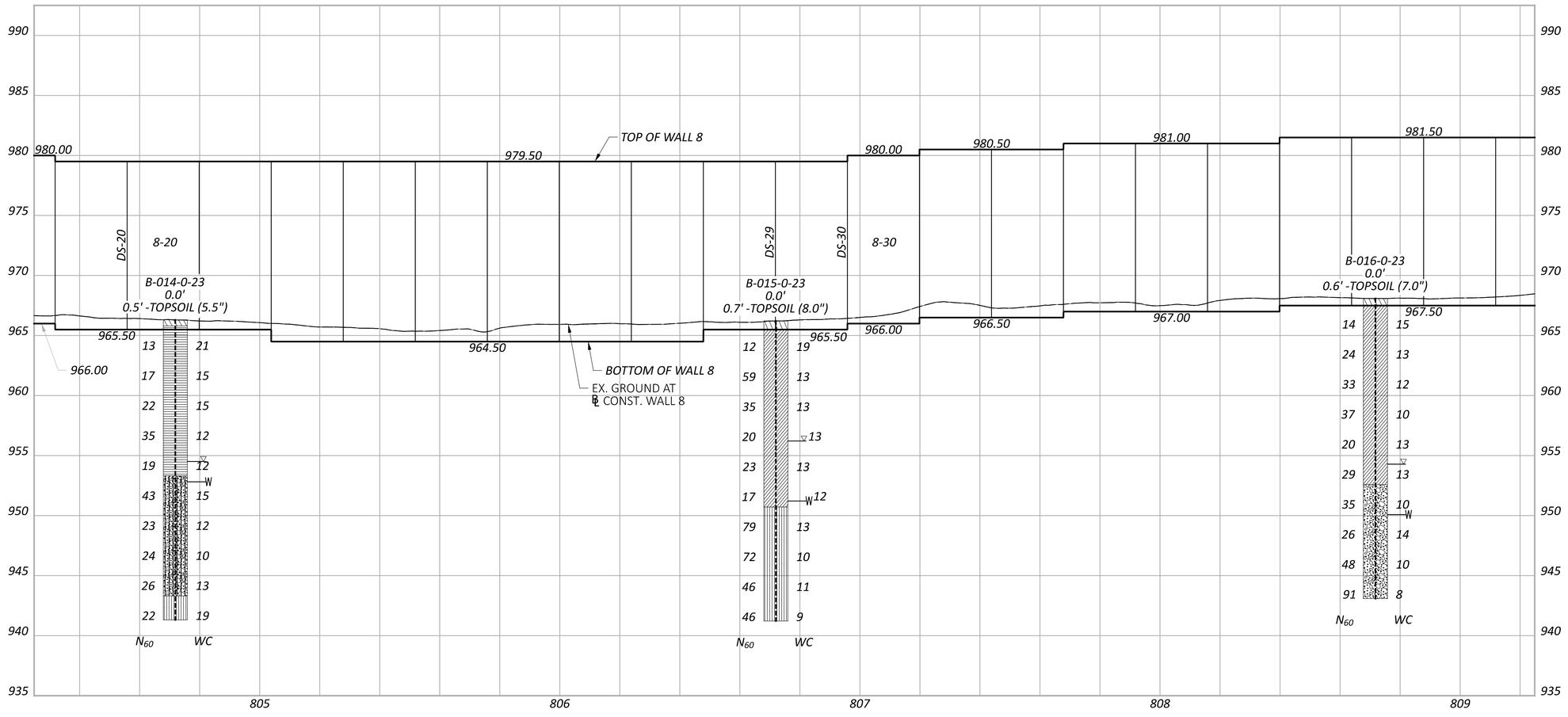
FRA-161-15.80 NOISE WALLS

MODEL: CLP_SR161 - Plan 8 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:08:10 AM USER: kevinj
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP802.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	11
TOTAL	66
SHEET	P.221
TOTAL	276





HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - NOISE WALL 8
STA. 2202+00.00 TO STA. 2207+00.00

FRA-161-15.80 NOISE WALLS

MODEL: CLP_SR161 - Plan 9 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:08:23 AM USER: kevinj
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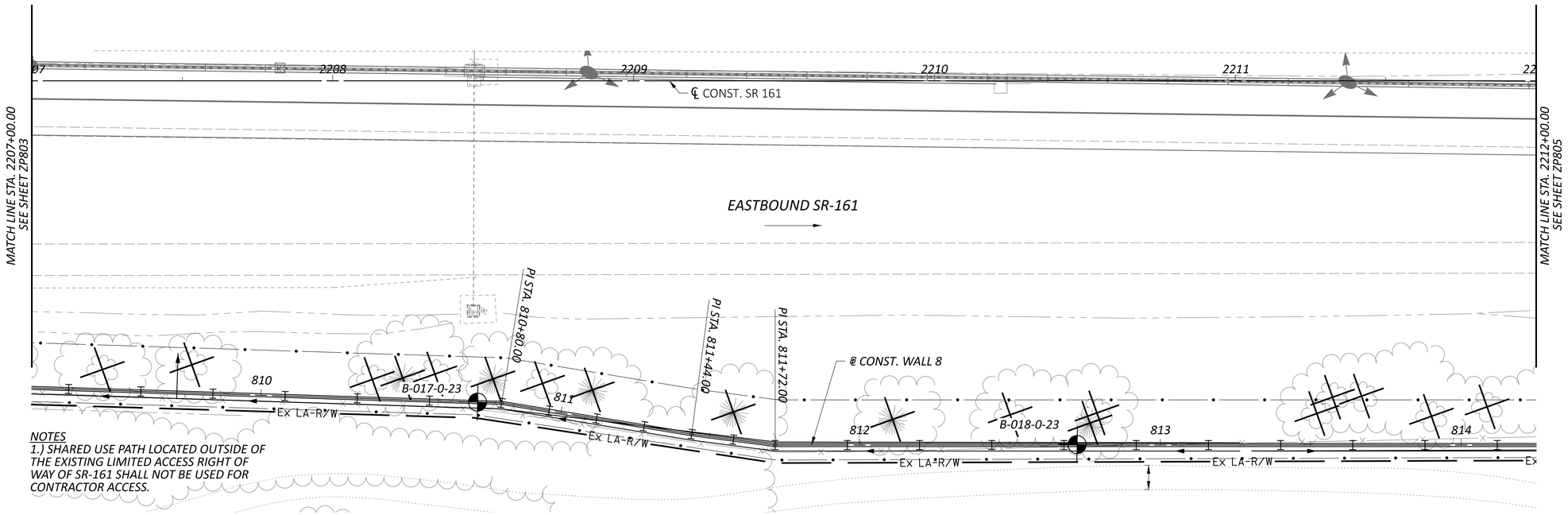
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

DESIGNER KSJ
REVIEWER DEK 1/19/24
PROJECT ID 117607
SUBSET 12 TOTAL 66
SHEET P.222 TOTAL 276



HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - NOISE WALL 8
STA. 2207+00.00 TO STA. 2212+00.00

FRA-161-15.80 NOISE WALLS

MODEL: CLP_SR161 - Plan 10 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:08:34 AM USER: kevinj
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP804.dgn

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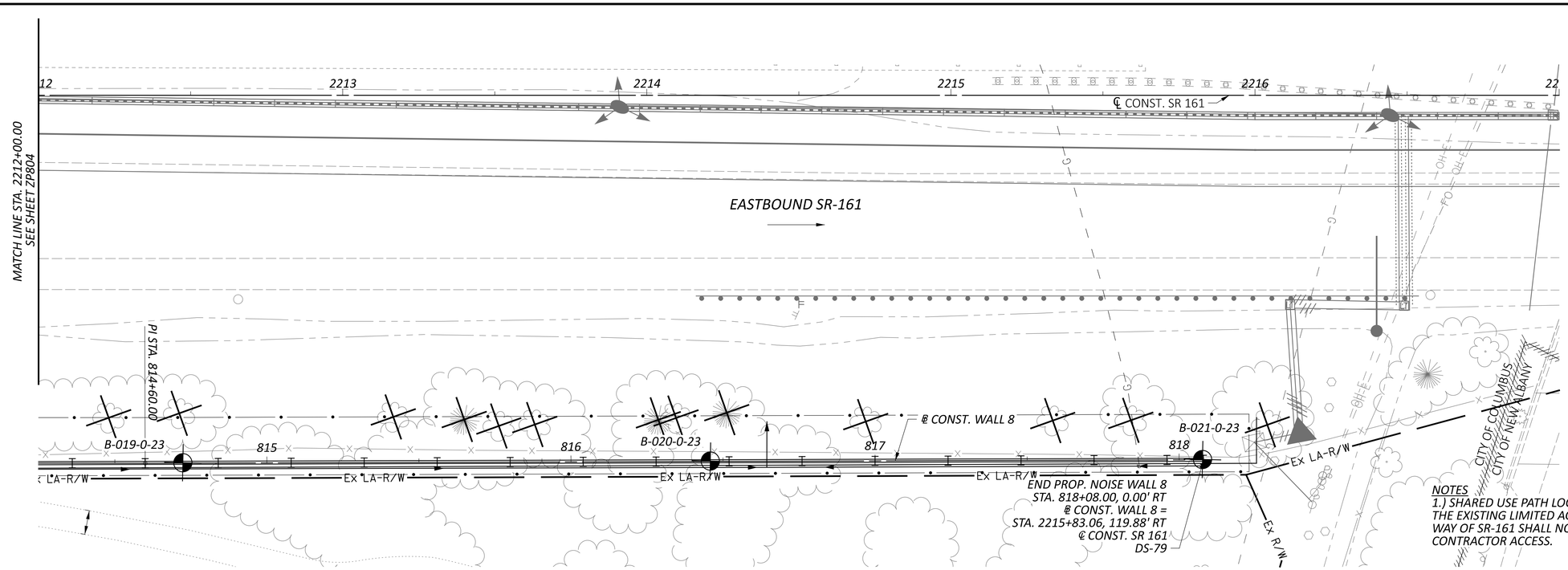
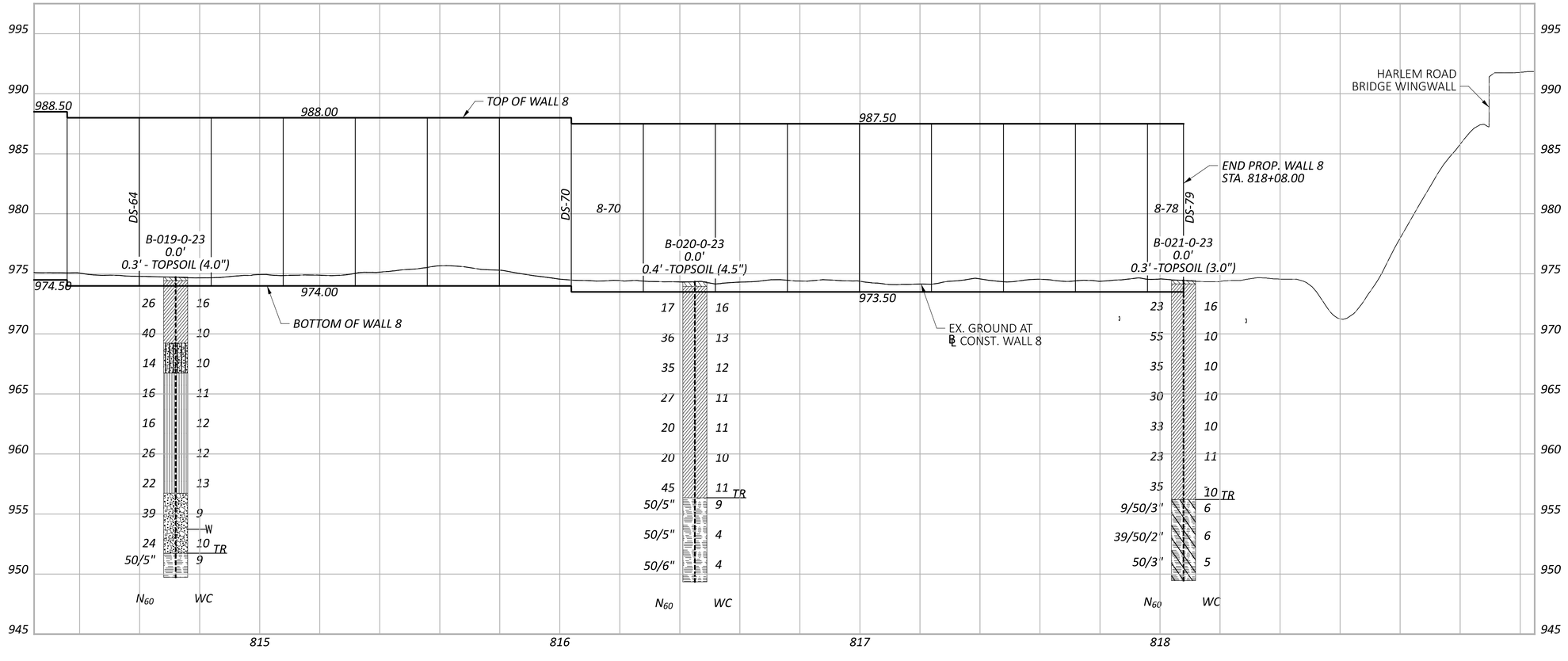
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

DESIGNER KSJ
REVIEWER DEK 1/19/24
PROJECT ID 117607
SUBSET 13 TOTAL 66
SHEET P.223 TOTAL 276





GEOTECHNICAL PROFILE - NOISE WALL 8
STA. 2212+00.00 TO STA. 2217+00.00

HORIZONTAL SCALE IN FEET
0 10 20 40

FRA-161-15.80 NOISE WALLS

MODEL: CLP_SR161 - Plan 11 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:08:46 AM USER: kevinj
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP805.dgn

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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.224
TOTAL	276

STRUCTURE NO
FRA-00111-00.682

HARLEM ROAD

BEGIN PROP. NOISE WALL 9
STA. 900+00.00, 0.00' LT
℄ CONST. WALL 9 =
STA. 2218+61.00, 103.00' LT
℄ CONST. SR 161
DS-1

900 B-031-0-23 901 256.00' N64°36'58"E 902 B-032-0-23 903 336.00' N67°00'42"E

PI STA. 902+56.00
Δ = 02°23'44"
DS-13

℄ CONST. WALL 9

Please show the Existing 16" Water Main & 30" Casing Pipe per the available Plan of Record. Also, please refer to the comments made on Sheet #28 and revise accordingly.

WESTBOUND SR-161

17 2218 2219 2220 ℄ CONST. SR 161 2221 22

MATCH LINE STA. 2222+00.00
SEE SHEET ZP902

HARLEM ROAD
BRIDGE WINGWALLS

BEGIN PROP. WALL 9
STA. 900+00.00

DS-1 9-1 B-031-0-23 0.0' 0.5' -TOPSOIL (5.5")

987.50	973.50	
17	19	
23	-	
40	10	
29	11	
19	12	
22	13	
14	12	
20	W13	
26	16	
29	16	
N_{60}	WC	

988.00 974.00 BOTTOM OF PROP. WALL 9

DS-13 9-10 B-032-0-23 0.0' 0.4' -TOPSOIL (5.0")

988.50	974.50	
40	12	
24	11	
49	12	
24	11	
22	13	
24	13	
26	8	
30	W15	
58	16	
29	13	
N_{60}	WC	

TOP OF PROP. WALL 9

989.00	975.00
989.50	975.50
990.00	976.00

EX. GROUND AT
℄ CONST. WALL 9

995 990 985 980 975 970 965 960 955 950 945

899 900 901 902 903

HORIZONTAL SCALE IN FEET
0 10 20 40

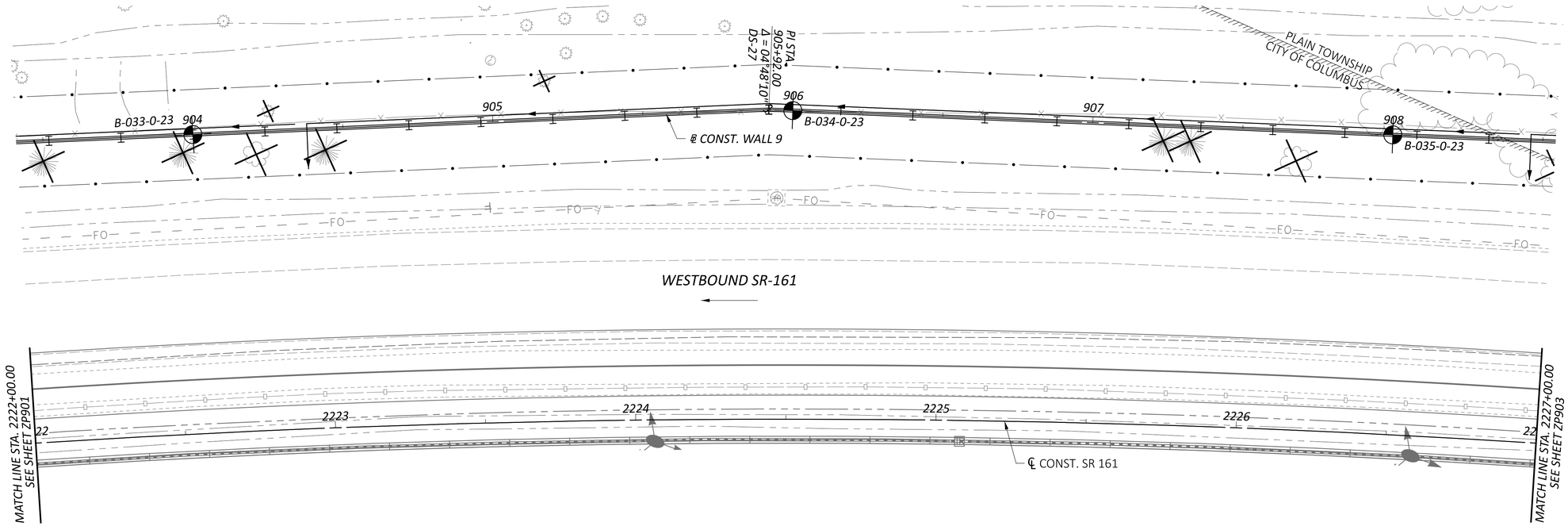
GEOTECHNICAL PROFILE - NOISE WALL 9
STA. 2217+00.00 TO STA. 2222+00.00

FRA-161-15.80 NOISE WALLS

MODEL: Wall 9 - Plan 12 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:09:08 AM USER: kevinj
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.225 TOTAL 276



HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - NOISE WALL 9
STA. 2222+00.00 TO STA. 2227+00.00

FRA-161-15.80 NOISE WALLS

MODEL: Wall 9 - Plan 13 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:09:16 AM USER: kevinj
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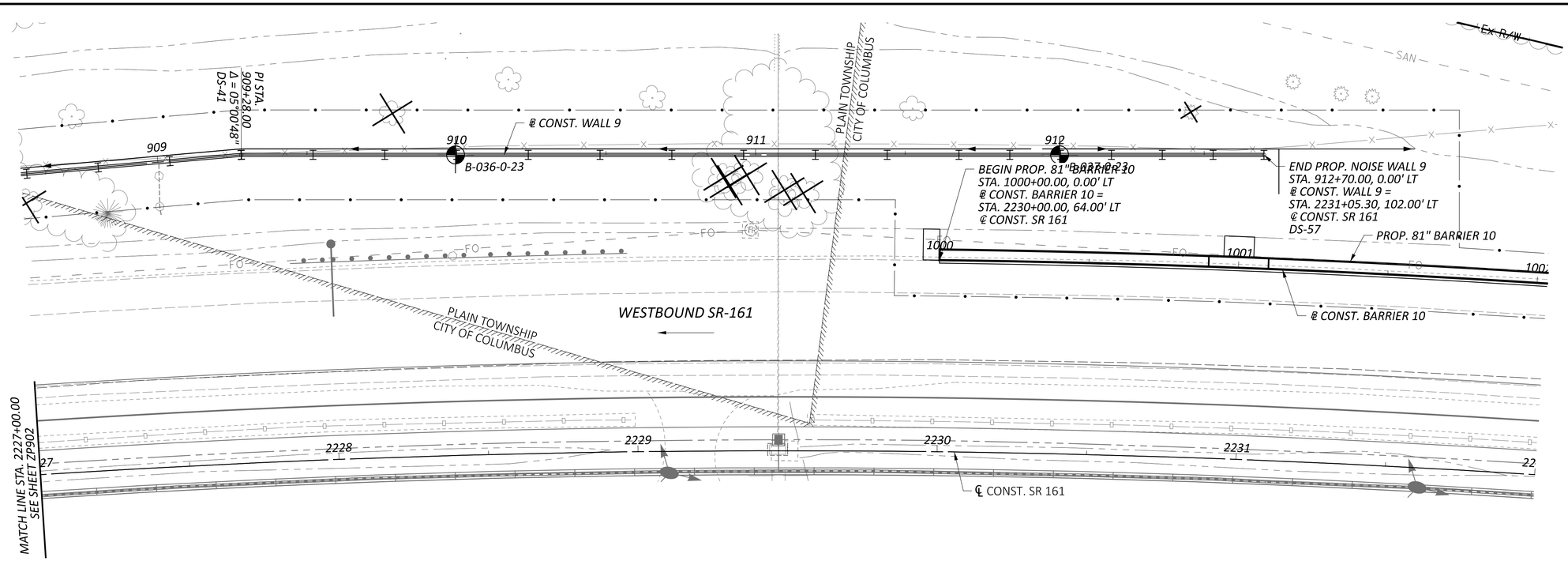
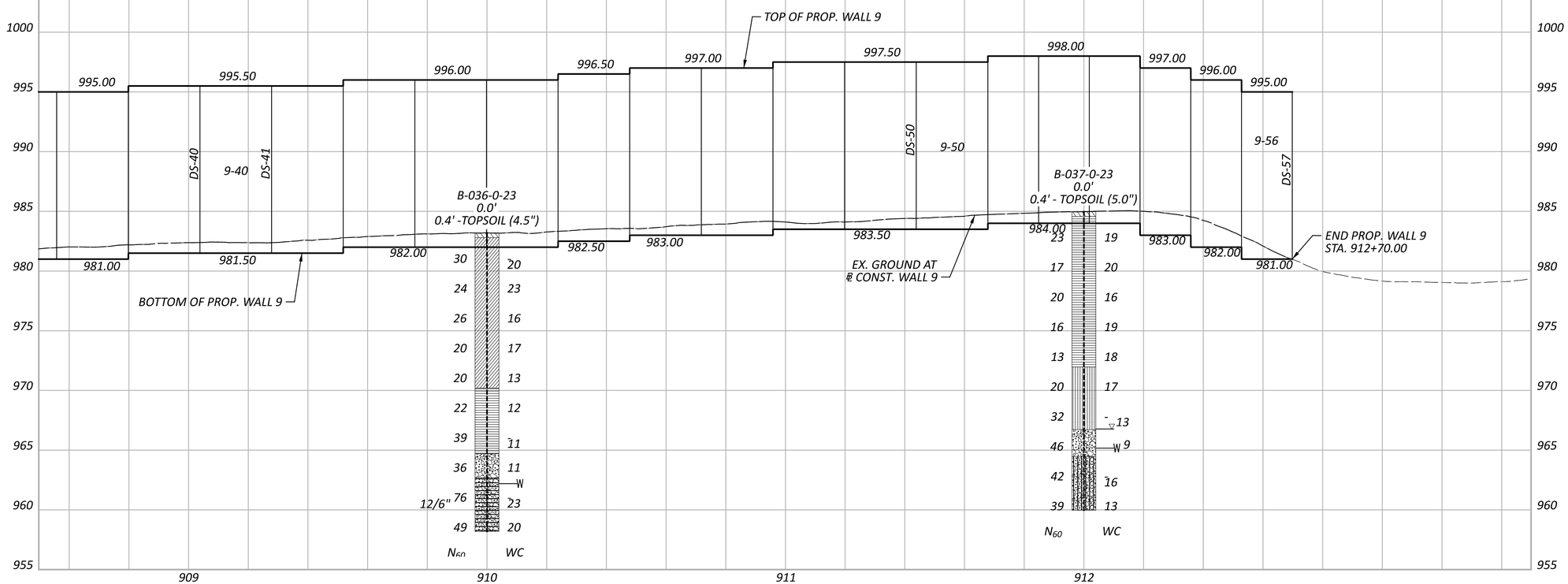
DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

DESIGNER	KSJ
REVIEWER	DEK 1/19/24
PROJECT ID	117607
SUBSET	16
TOTAL	66
SHEET	P.226
TOTAL	276





FRA-161-15.80 NOISE WALLS

MODEL: Wall 9 - Plan 14 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:09:27 AM USER: kevinj
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HORIZONTAL
SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - NOISE WALL 9
STA. 2227+00.00 TO STA. 2232+00.00

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

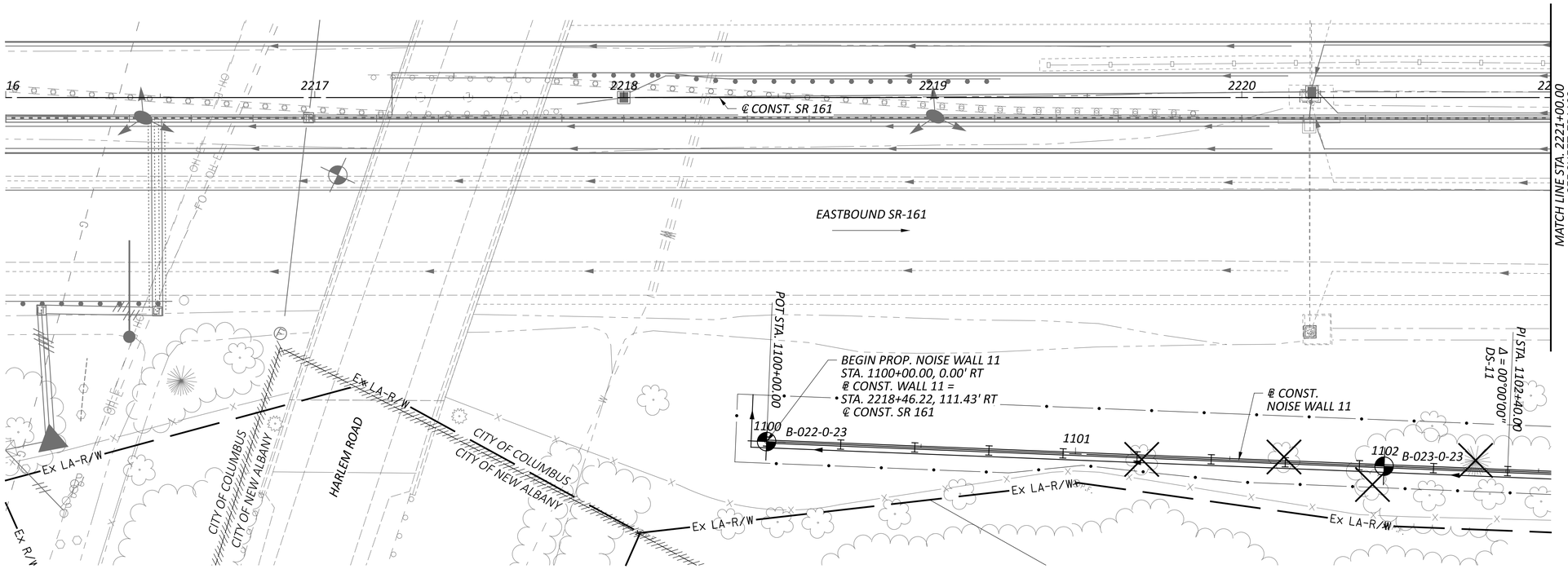
DESIGNER
KSJ

REVIEWER
DEK 1/19/24

PROJECT ID
117607

SUBSET 17 | TOTAL 66

SHEET P.227 | TOTAL 276



HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - NOISE WALL 11
STA. 2216+00.00 TO STA. 2221+00.00

FRA-161-15.80 NOISE WALLS

MODEL: Plan PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:09:46 AM USER: kevinj
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
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6350 PRESIDENTIAL GATEWAY
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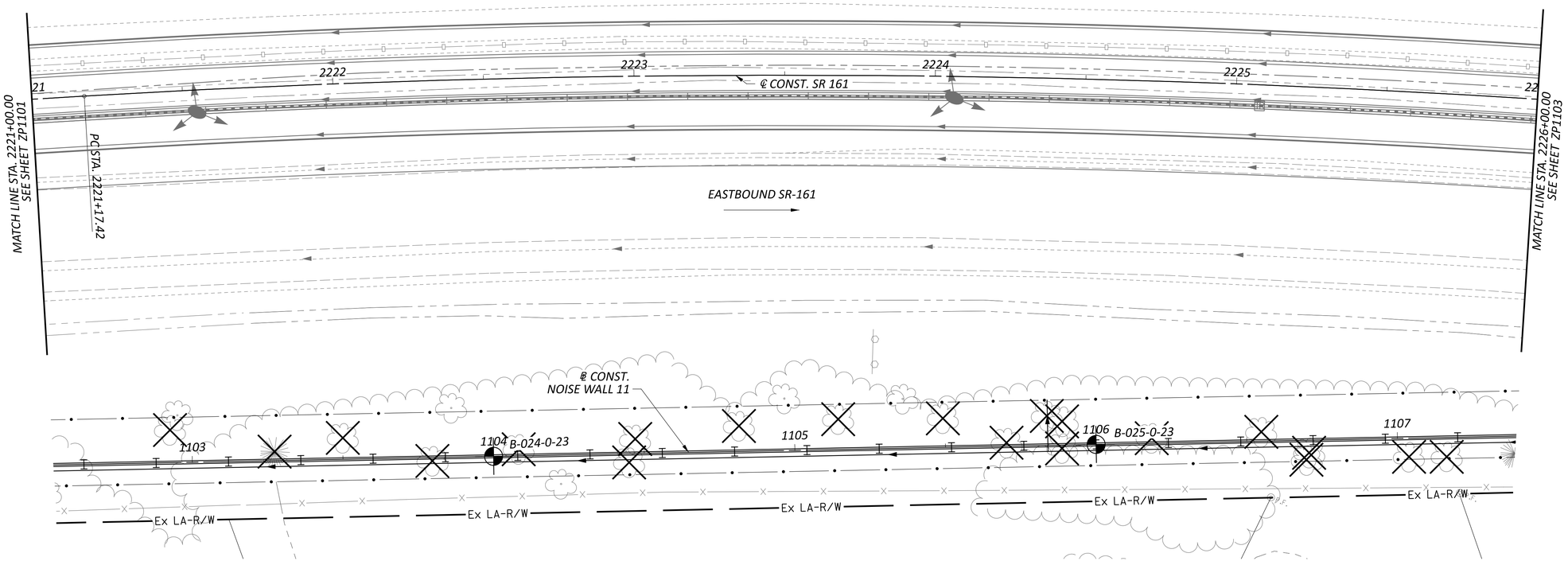
(614) 823-4949

DESIGNER KSJ
REVIEWER DEK 1/19/24
PROJECT ID 117607
SUBSET 18 TOTAL 66
SHEET P.228 TOTAL 276



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: 1/19/2024 TIME: 10:09:58 AM USER: kevinj
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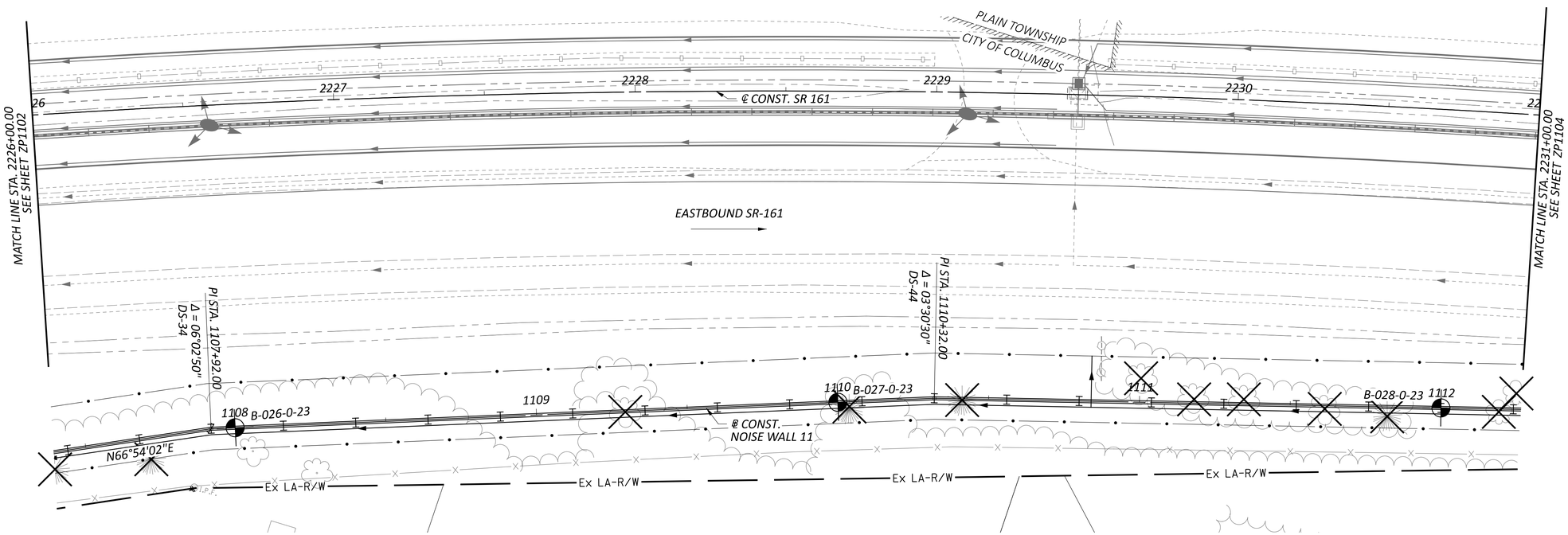
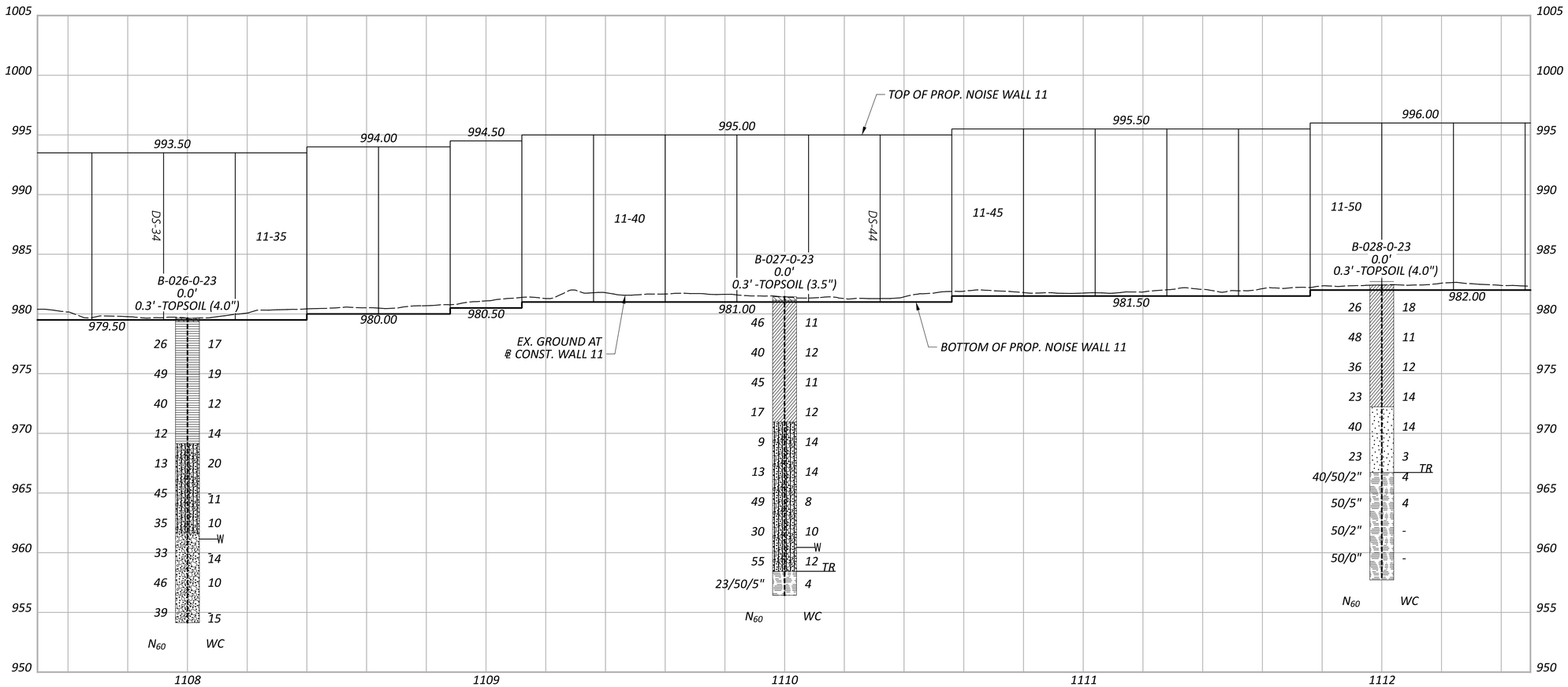
DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

DESIGNER	KSJ
REVIEWER	DEK 1/19/24
PROJECT ID	117607
SUBSET	19
TOTAL	66
SHEET	P.229
TOTAL	276





HORIZONTAL SCALE IN FEET
0 10 20 40

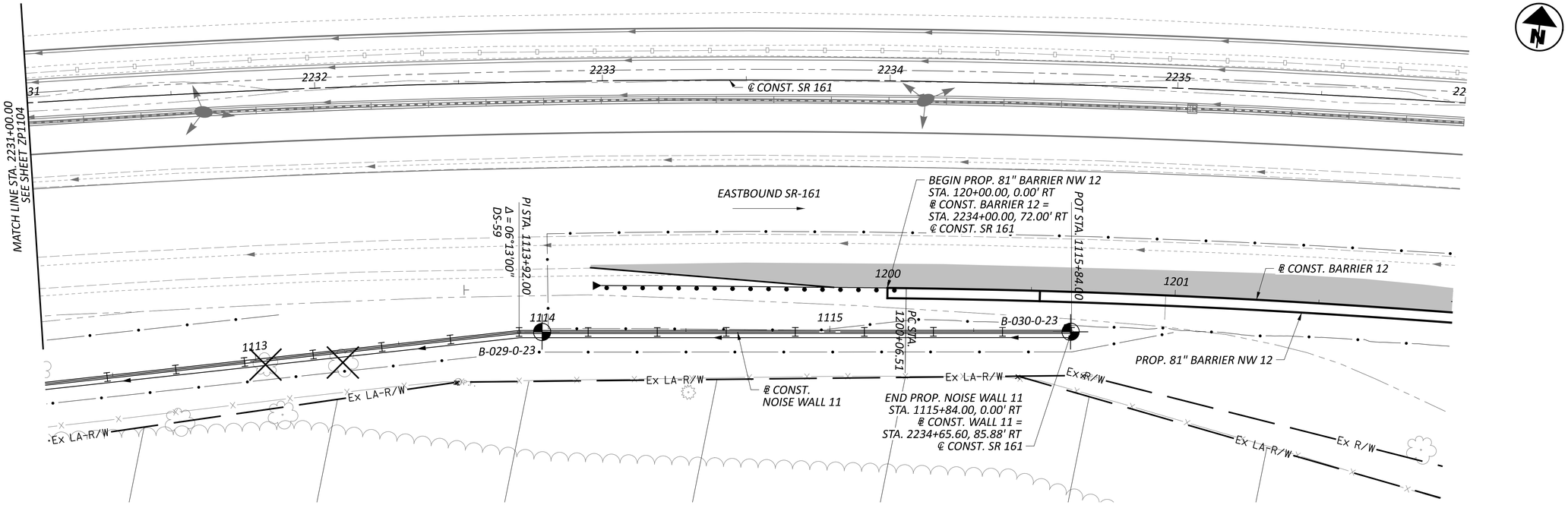
GEOTECHNICAL PROFILE - NOISE WALL 11
STA. 2226+00.00 TO STA. 2231+00.00

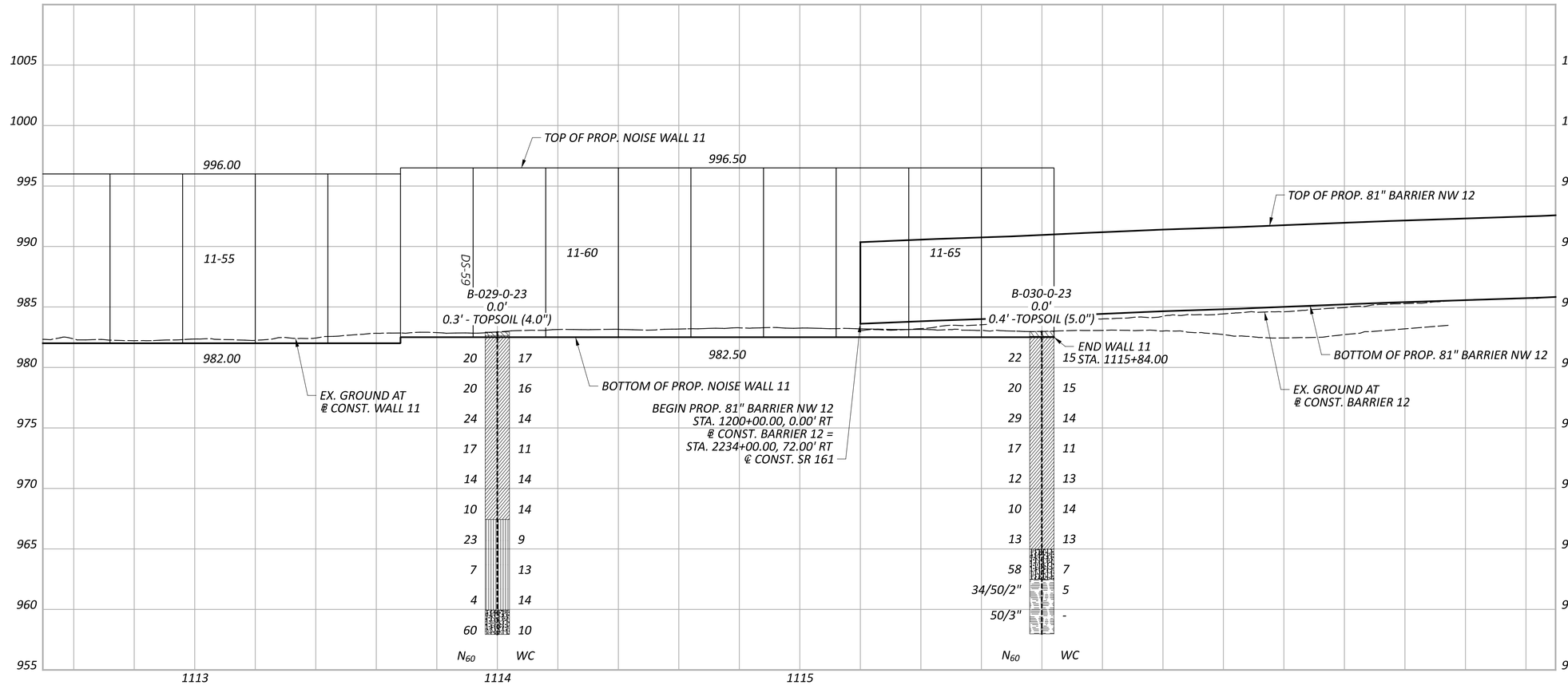
FRA-161-15.80 NOISE WALLS

MODEL: Plan-2 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:10:10 AM USER: kevinj
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1103.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 20 TOTAL 66
SHEET P.230 TOTAL 276





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: 1/19/2024 TIME: 10:10:22 AM USER: kevinj
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DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
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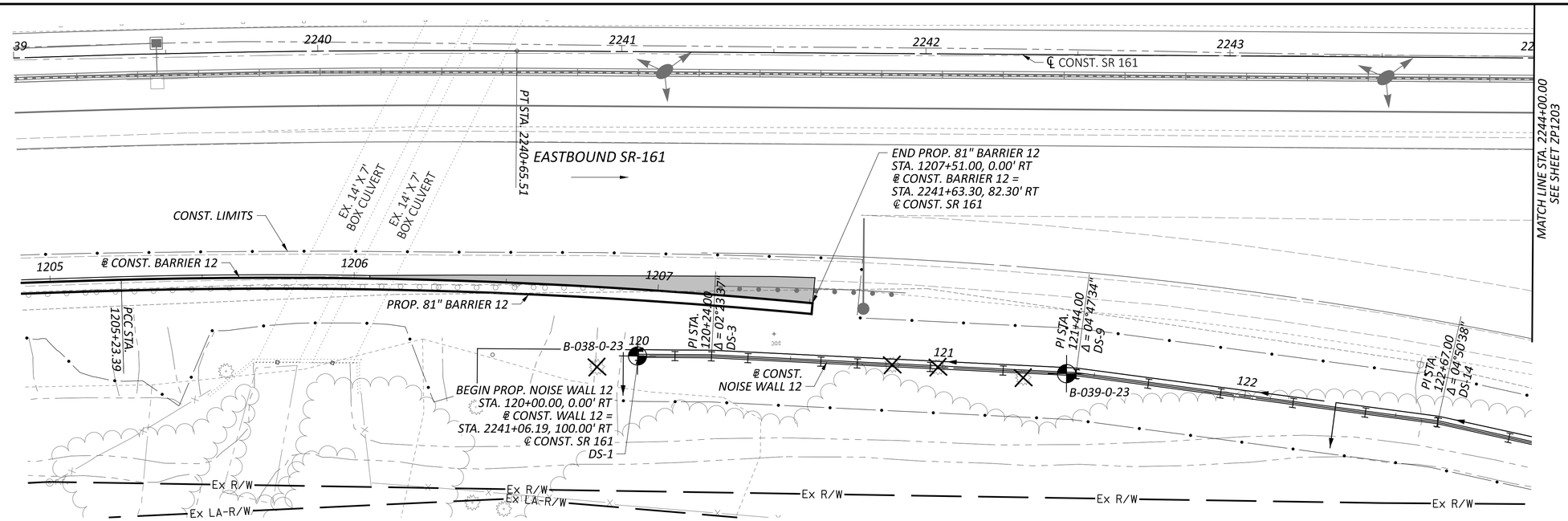
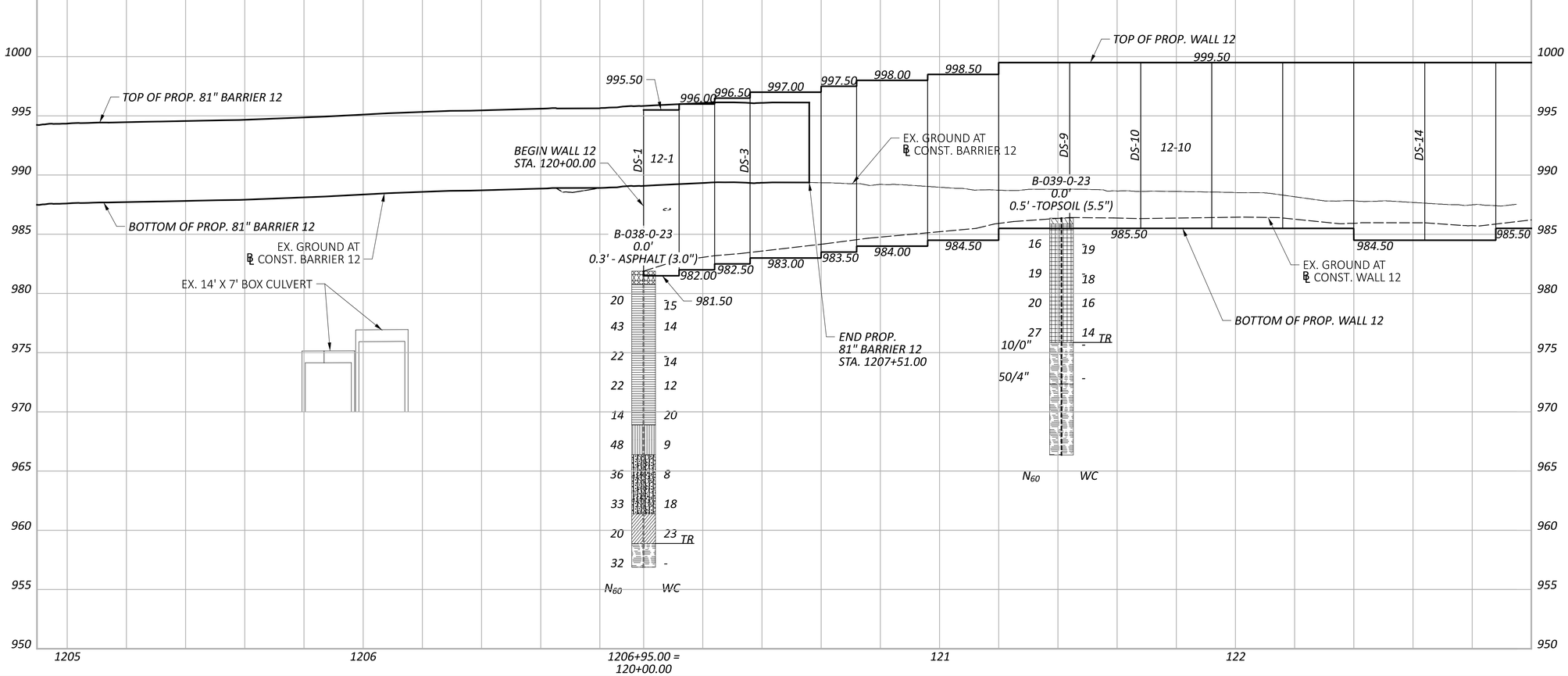
(614) 823-4949

DESIGNER	KSJ
REVIEWER	DEK 1/19/24
PROJECT ID	117607
SUBSET	21
TOTAL	66
SHEET	P.231
TOTAL	276





FRA-161-15.80 NOISE WALLS

MODEL: Wall 12 - Plan 20 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:10:30 AM USER: kevinj
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HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - NOISE WALL 12
STA. 2239+00.00 TO STA. 2244+00.00

DESIGN AGENCY
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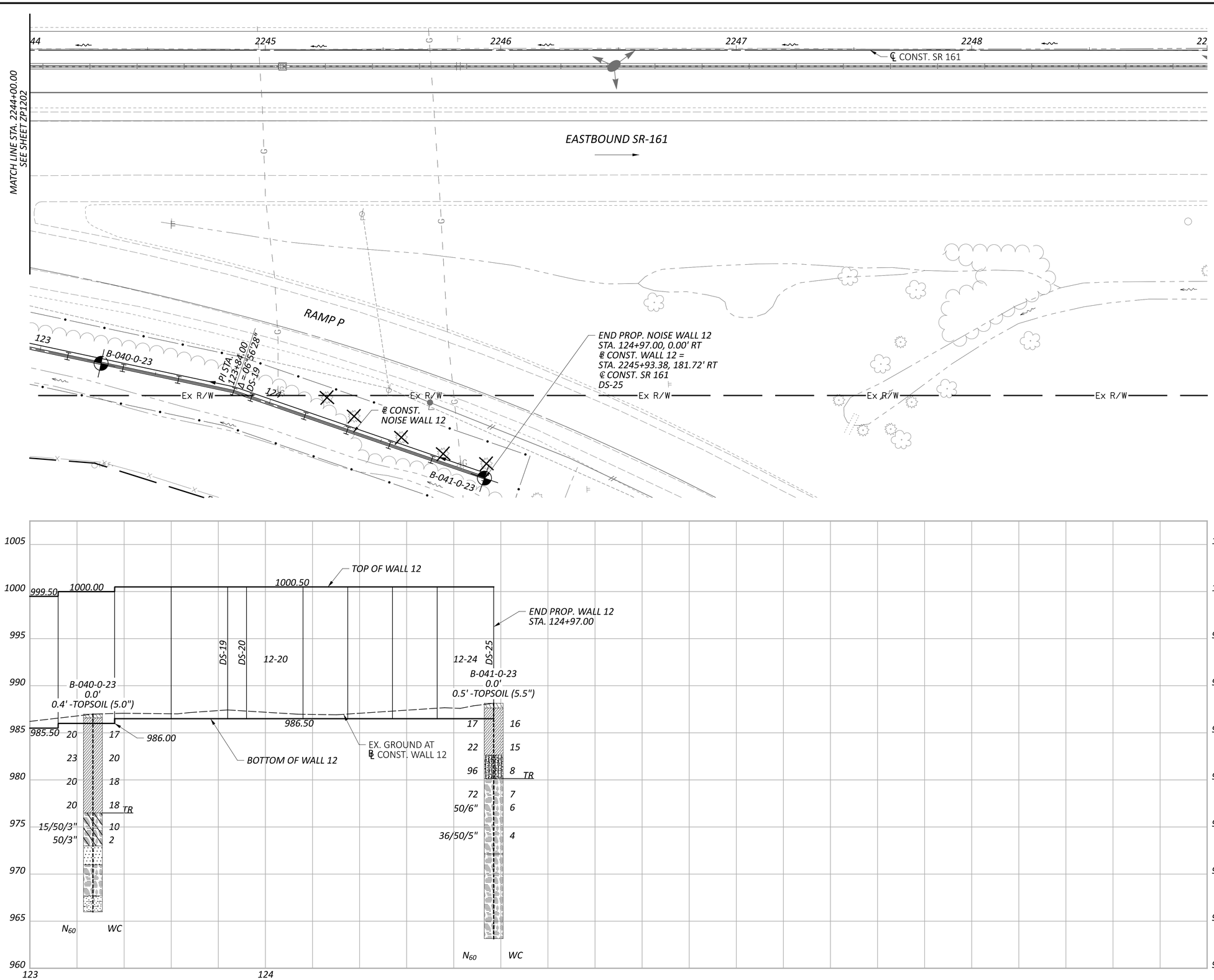
(614) 823-4949

DESIGNER	KSJ
REVIEWER	DEK 1/19/24
PROJECT ID	117607
SUBSET	22
TOTAL	66
SHEET	P.232
TOTAL	276



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: 1/19/2024 TIME: 10:10:40 AM USER: kevinj
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
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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.233 TOTAL: 276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 15 - Plan 22 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:10:48 AM USER: kevinj
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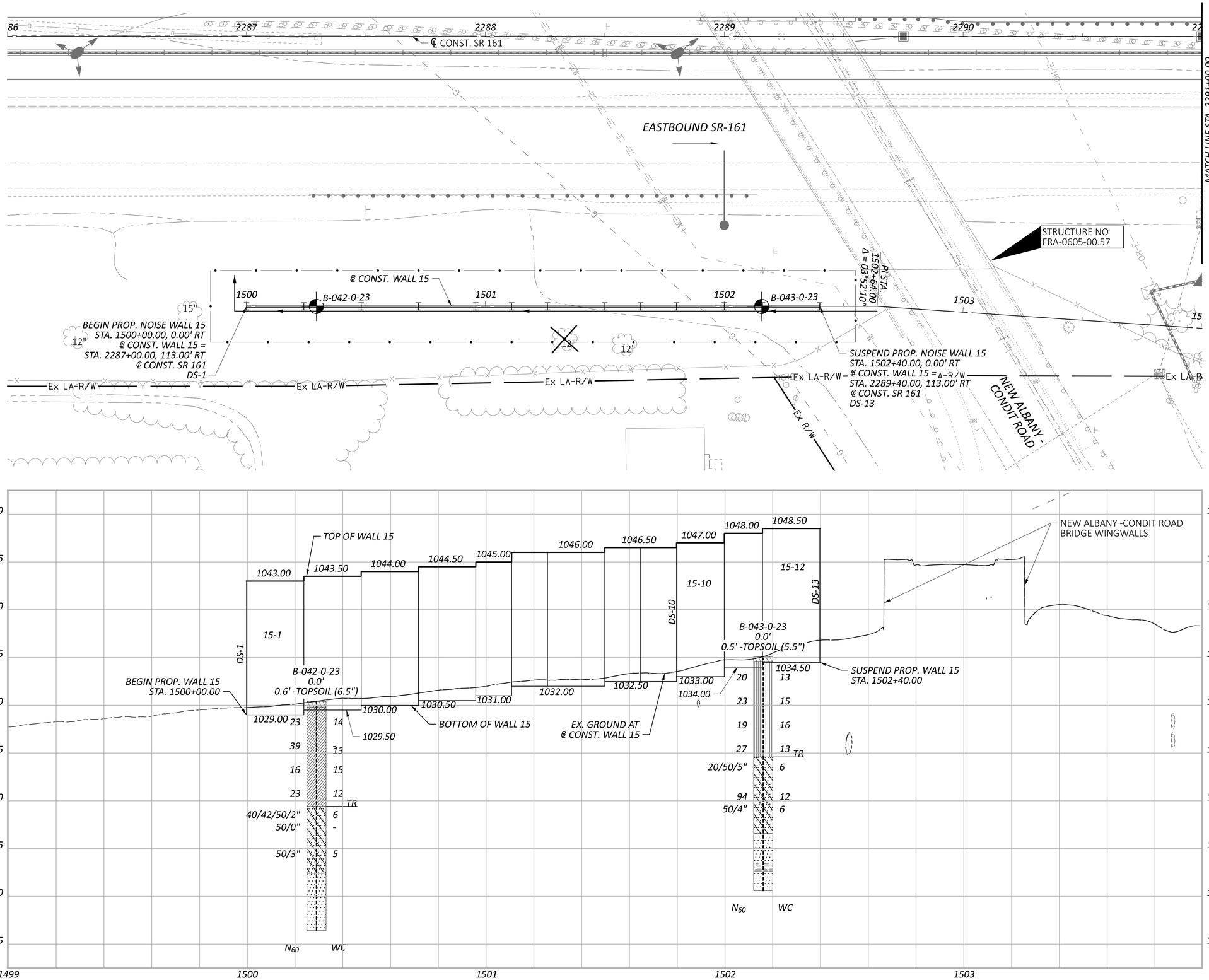


HORIZONTAL SCALE IN FEET
0 10 20 40

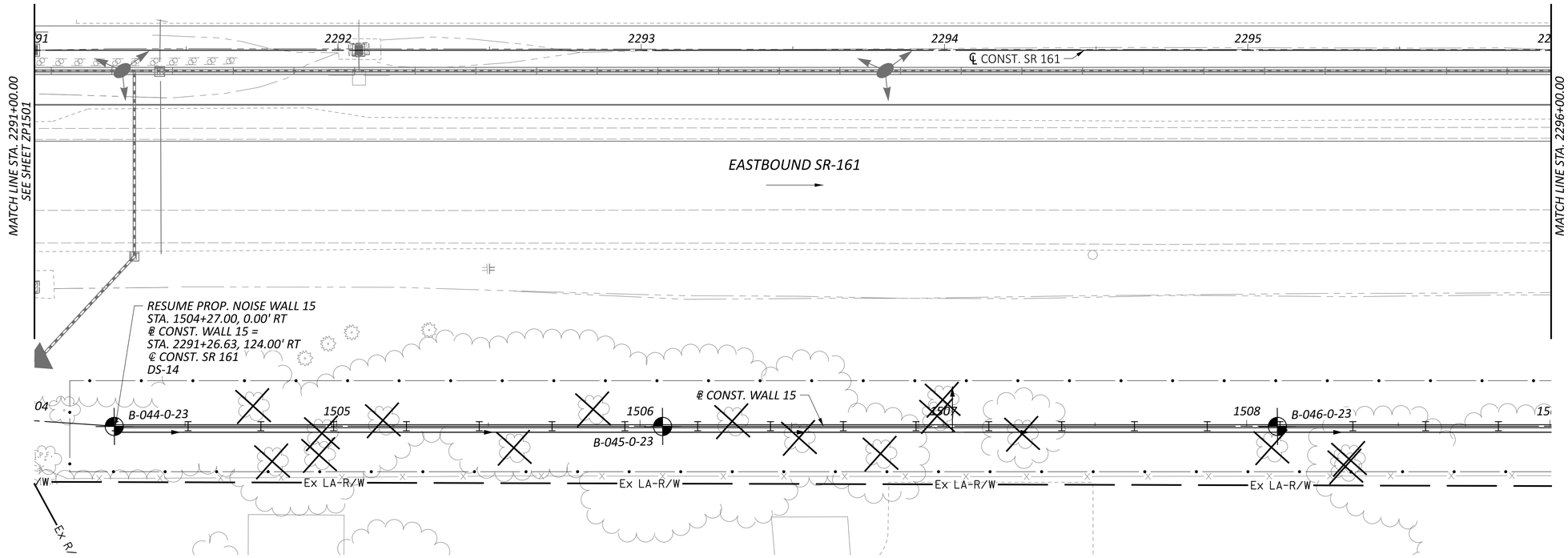
GEOTECHNICAL PROFILE - NOISE WALL 15
STA. 2286+00.00 TO STA. 2291+00.00

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.234
TOTAL	276

GEOTECHNICAL PROFILE - NOISE WALL 15
STA. 2291+00.00 TO STA. 2296+00.00

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	25
TOTAL	66
SHEET	P.235
TOTAL	276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 15 - Plan 23 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:11:00 AM USER: kevinj
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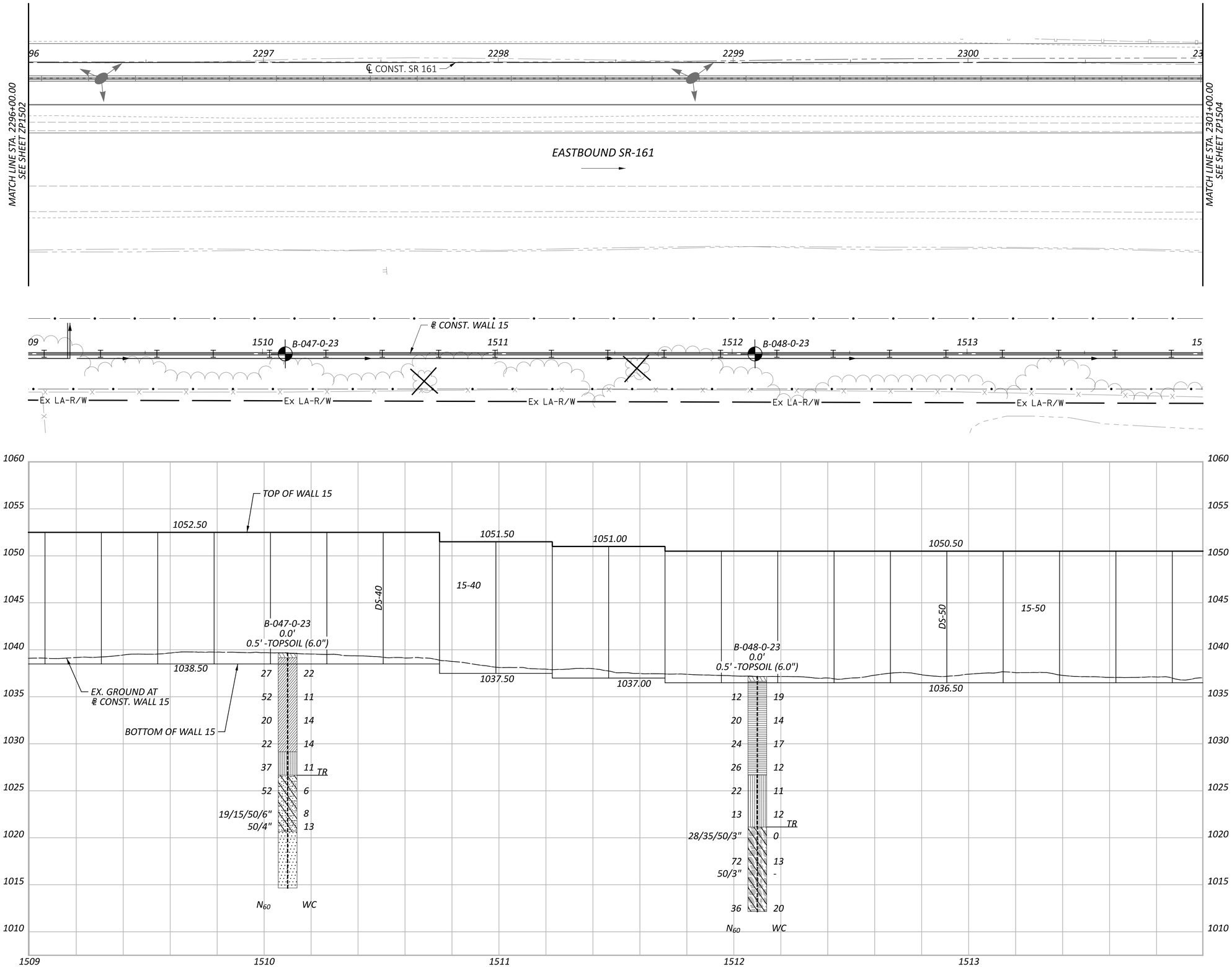


HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - NOISE WALL 15
STA. 2296+00.00 TO STA. 2301+00.00

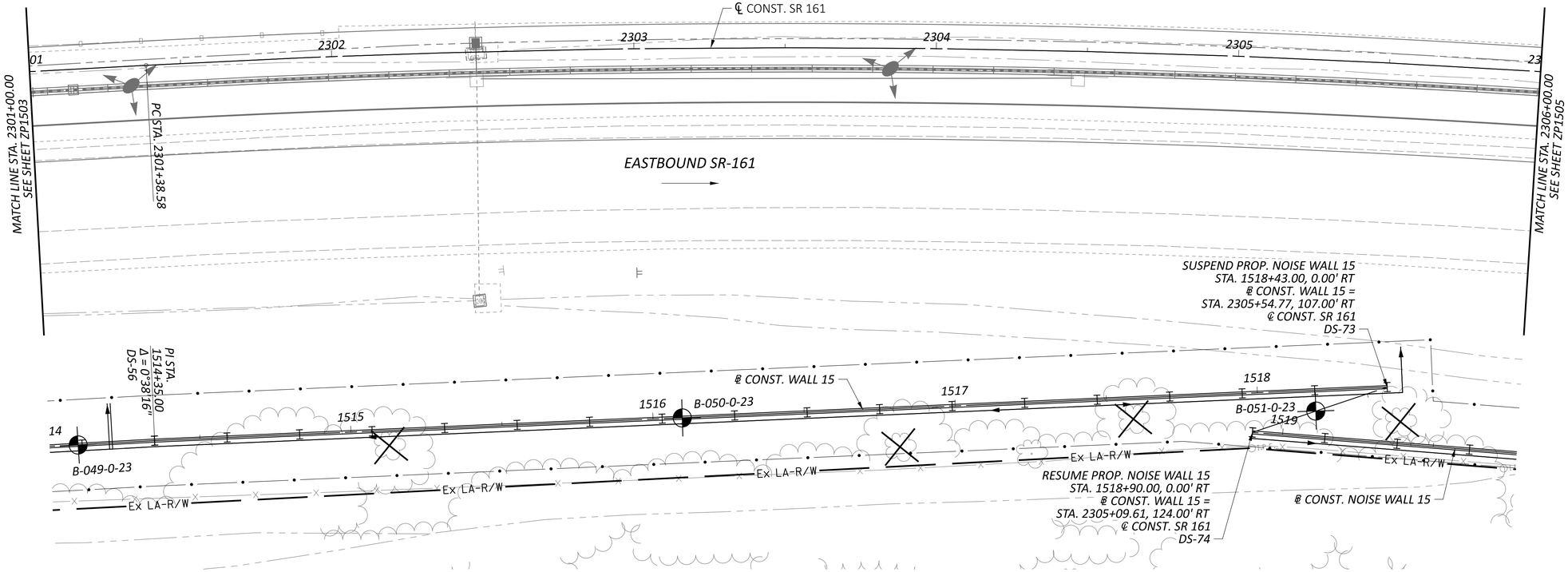
FRA-161-15.80 NOISE WALLS

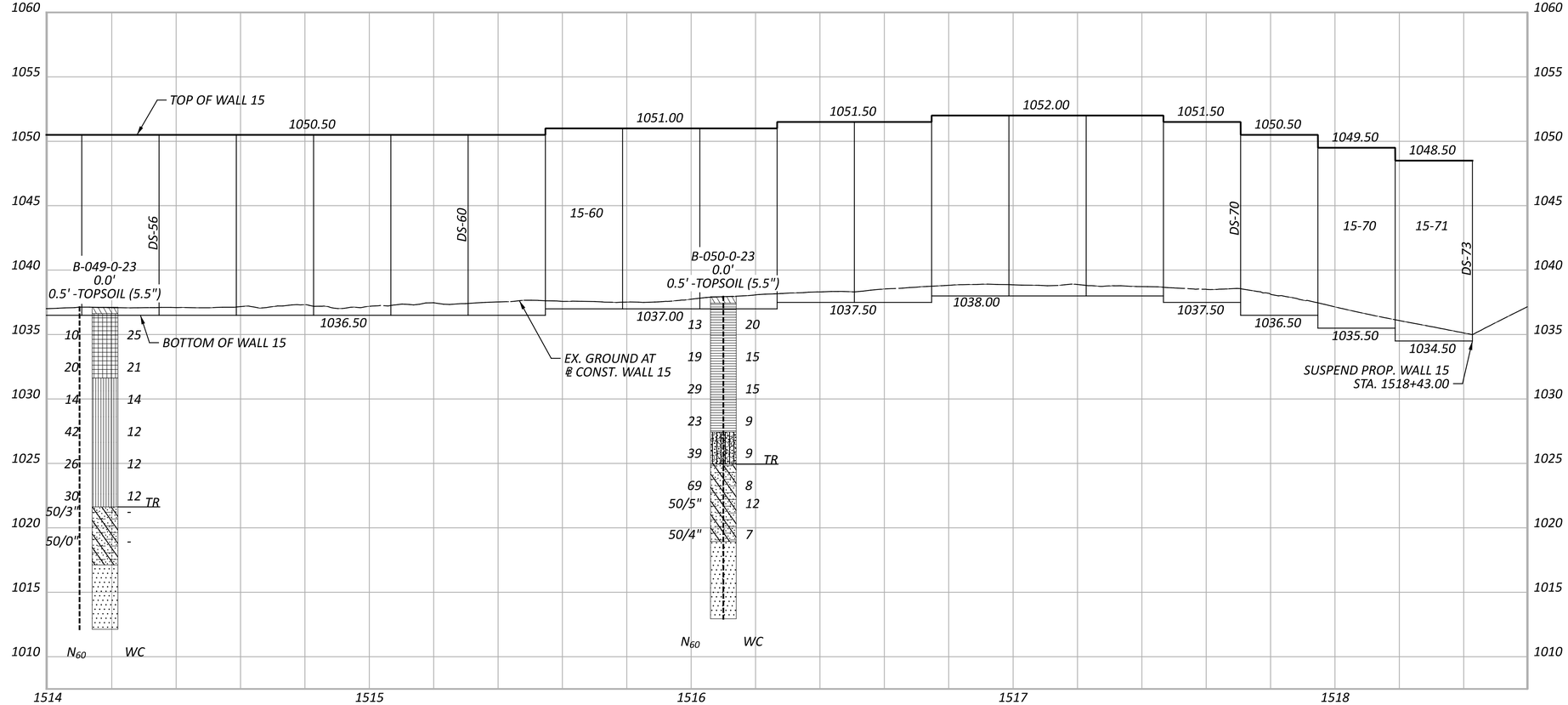
MODEL: Wall 15 - Plan 24 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:11:12 AM USER: kevinj
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1503.dgn

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.236 TOTAL 276

GEOTECHNICAL PROFILE - NOISE WALL 15
STA. 2301+00.00 TO STA. 2306+00.00





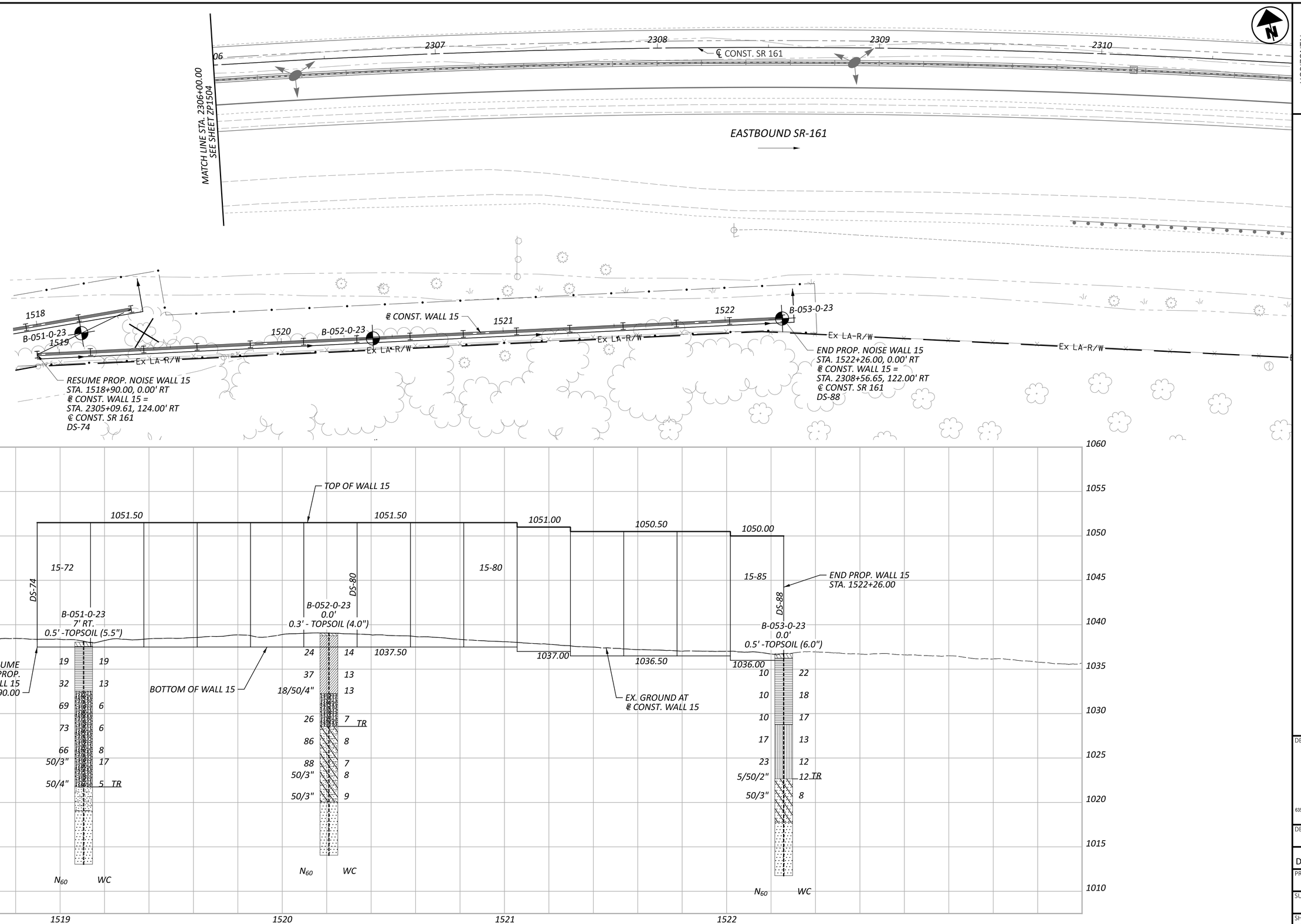
HORIZONTAL SCALE IN FEET
0 10 20 40

FRA-161-15.80 NOISE WALLS

MODEL: Wall 15 - Plan 25 PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:11:22 AM USER: kevinj
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.237 | TOTAL 276



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: 1/19/2024 TIME: 10:11:31 AM USER: kevinj
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.238
TOTAL	276

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	4	11 50/4"	-	100	SS-2	4.5+	-	-	-	-	-	-	-	-	16	A-6a (V)	
SANDSTONE : GRAY, HIGHLY WEATHERED.	961.3	TR																
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		5																
		6																
		7																
		8	0		80	NQ2-1											CORE	
		9																
		10																
-@ 10.3' - 10.8' 45 DEGREE FRACTURE AND HEAVILY IRON STAINED -@10.8' - 13.6' SPECKLES OF PYRITE THROUGHOUT		11																
		12																
		13	45		100	NQ2-2											CORE	
		14																
	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 WALLS
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		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		14 17 50/2"	-	100	SS-2	4.5+	-	-	-	-	-	-	-	-	7	A-2-4 (V)	
SANDSTONE : GRAY, HIGHLY WEATHERED.	962.1	TR																
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			0		68	NQ2-1											CORE	
-@10.25' - 12.0' MANY PYRITE FLECKS THROUGHOUT -@11.0' - 15.75' FEW PYRITE FLECKS	952.9	EOB	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

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.240 TOTAL 276	30 TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC. 6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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 WALLS
NOISE WALL 3
BORING LOG & ROCK CORE PHOTO FOR B-003-0-23

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:49:35 AM USER: kevinj
J:\GEOTECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL004.dgn

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 WALLS
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															
		2	4 7	16	36	SS-1	4.5+	0	1	6	35	58	52	20	32	21	A-7-6 (18)	
		3																
		4	4															
		5	4 7	16	50	SS-2	4.5+	-	-	-	-	-	-	-	-	19	A-7-6 (V)	
	963.7	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																	
SANDSTONE : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, PYRITIC, FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, GOOD SURFACE. -@11.8' - 12.4' FRACTURE -@13.3' - 15.0' MANY TINY PYRITE NODULES THROUGHOUT		10																
		11																
		12																
		13	0		75	NQ2-1											CORE	
		14																
	954.2	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:\GI8\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 WALLS
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: 1/19/2024 TIME: 9:50:01 AM USER: kevinj
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.			6 8 8	23	72	SS-1	4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)	
			5 6 10	23	56	SS-2	4.5+	-	-	-	-	-	-	-	-	22	A-6a (V)	
			8 16 23	56	100	SS-3	4.5+	-	-	-	-	-	-	-	-	12	A-6a (V)	
			7 7 8	22	56	SS-4	4.5+	9	11	16	31	33	28	16	12	13	A-6a (7)	
			4 4 5	13	33	SS-5	2.50	-	-	-	-	-	-	-	-	14	A-6a (V)	
	948.5																	
MEDIUM DENSE, DARK GRAY **COARSE AND FINE SAND**, LITTLE SILT, TRACE GRAVEL, WET.		▽ 946.8	5 5 8	19	47	SS-6	-	-	-	-	-	-	-	-	-	14	A-3a (V)	
	946.0	W 946.0																
DENSE TO VERY DENSE, DARK GRAY **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, WET.			21 21 16	53	50	SS-7	-	-	-	-	-	-	-	-	-	12	A-1-b (V)	
			31 15 25	58	53	SS-8	-	-	-	-	-	-	-	-	-	11	A-1-b (V)	
			9 10 16	37	53	SS-9	-	51	17	10	13	9	NP	NP	NP	13	A-1-b (0)	
	938.5																	
DENSE, DARK GRAY **COARSE AND FINE SAND**, TRACE FINE GRAVEL, TRACE SILT, WET.			8 12 18	43	64	SS-10	-	-	-	-	-	-	-	-	-	18	A-3a (V)	
	936.5	EOB																

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.			6 10 12	32	78	SS-1	4.5+	-	-	-	-	-	-	-	-	11	A-6a (V)	
			7 12 13	36	75	SS-2	4.5+	7	11	16	32	34	29	17	12	14	A-6a (7)	
			7 9 11	29	100	SS-3	4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)	
	960.1																	
DENSE TO MEDIUM DENSE, BROWN GRAY **GRAVEL WITH SAND, SILT, AND CLAY**, MOIST.			6 11 16	39	72	SS-4	-	-	-	-	-	-	-	-	-	11	A-2-4 (V)	
			7 17 16	48	33	SS-5	-	-	-	-	-	-	-	-	-	7	A-2-4 (V)	
		W 954.6																
			9 15 16	45	0	SS-6	-	-	-	-	-	-	-	-	-	-		
		▽ 952.6	13	-	67	2S-6A	-	-	-	-	-	-	-	-	-	15	A-2-4 (V)	
			21 18 15	48	44	SS-7	-	36	19	14	19	12	24	17	7	11	A-2-4 (0)	
			16 12 8	29	64	SS-8	-	-	-	-	-	-	-	-	-	10	A-2-4 (V)	
	947.6																	
DENSE, GRAY **COARSE AND FINE SAND**, LITTLE FINE GRAVEL, LITTLE SILT, WET.			10 12 12	35	83	SS-9	-	-	-	-	-	-	-	-	-	12	A-3a (V)	
	945.1																	
DENSE, GRAY **GRAVEL WITH SAND**, TRACE SILT, WET.			16 15 15	43	97	SS-10	-	-	-	-	-	-	-	-	-	10	A-1-b (V)	
	943.1	EOB																

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.244 / TOTAL 276	34 / TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC. 8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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: 1/19/2024 TIME: 9:50:32 AM USER: kevinj
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.			5 5 7	17	83	SS-1	4.5+	4	10	13	31	42	34	18	16	21	A-6b (10)	
			12 14 15	42	36	SS-2	4.5+	-	-	-	-	-	-	-	-	16	A-6b (V)	
			8 12 16	40	100	SS-3	4.5+	-	-	-	-	-	-	-	-	12	A-6b (V)	
			9 9 10	27	0	SS-4	-	-	-	-	-	-	-	-	-	-		
			22	-	100	2S-4A	4.5+	-	-	-	-	-	-	-	-	12	A-6b (V)	
			8 8 8	23	78	SS-5	4.5+	-	-	-	-	-	-	-	-	13	A-6b (V)	
	956.0																	
MEDIUM DENSE TO VERY DENSE, GRAY **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, MOIST TO WET.			12 19 20	56	83	SS-6	-	-	-	-	-	-	-	-	-	7	A-1-b (V)	
			13 13 17	43	83	SS-7	-	24	39	15	12	10	NP	NP	NP	12	A-1-b (0)	
			15 16 36	75	100	SS-8	-	-	-	-	-	-	-	-	-	14	A-1-b (V)	
		▽ 948.5																
		W 948.0																
			16 20 18	55	42	SS-9	-	-	-	-	-	-	-	-	-	13	A-1-b (V)	
			5 7 8	22	44	SS-10	-	-	-	-	-	-	-	-	-	17	A-1-b (V)	
	944.0	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.			10 14 18	46	75	SS-1	4.5+	-	-	-	-	-	-	-	-	11	A-4a (V)	
			10 10 21	45	61	SS-2	4.5+	-	-	-	-	-	-	-	-	11	A-4a (V)	
			13 16 16	46	0	SS-3	-	-	-	-	-	-	-	-	-	-		
			28	-	67	2S-3A	4.5+	-	-	-	-	-	-	-	-	10	A-4a (V)	
			5 7 10	24	69	SS-4	4.5+	13	11	16	30	30	16	14	2	10	A-4a (5)	
			5 9 24	48	78	SS-5	4.5+	-	-	-	-	-	-	-	-	11	A-4a (V)	
	957.0																	
VERY DENSE TO DENSE, GRAY **GRAVEL WITH SAND**, LITTLE SILT, MOIST.			29 29 28	82	0	SS-6	-	-	-	-	-	-	-	-	-	-		
			10 17 17	49	44	SS-7	-	-	-	-	-	-	-	-	-	9	A-1-b (V)	
	952.0																	
VERY STIFF TO HARD, GRAY **SANDY SILT**, SOME CLAY, SOME FINE GRAVEL, DAMP. -COBBLES FROM 18.0' - 18.5'			6 8 8	23	36	SS-8	4.5+	27	10	13	27	23	24	14	10	10	A-4a (3)	
		▽ 949.9																
		W 949.0																
			10 7 7	20	44	SS-9	3.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
	947.0																	
MEDIUM DENSE, BROWN TO BROWNISH GRAY **COARSE AND FINE SAND**, TRACE FINE GRAVEL, TRACE SILT, WET.			3 4 4	12	69	SS-10	-	-	-	-	-	-	-	-	-	17	A-3a (V)	
			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.245 / TOTAL 276	35 / TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC. 8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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: 1/19/2024 TIME: 9:51:02 AM USER: kevinj
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)	GR	CS	FS	SI	CL	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.		1	5 8 13	30	50	SS-1	4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)	
-COBBLES @ 4.0'		2																
		3																
		4	22 50/3"	-	50	SS-2	4.5+	-	-	-	-	-	-	-	-	8	A-6a (V)	
	955.4	5																
DENSE TO VERY DENSE, LIGHT BROWN **SANDY SILT**, LITTLE CLAY, TRACE GRAVEL, DAMP.		6																
		7	9 15 19	49	69	SS-3	-	-	-	-	-	-	-	-	-	7	A-4a (V)	
		8																
		9	24 26 14	58	36	SS-4	-	-	-	-	-	-	-	-	-	10	A-4a (V)	
	950.4	10	▽ 950.6															
MEDIUM DENSE TO VERY DENSE, DARK GRAY TO GRAY **GRAVEL WITH SAND AND SILT**, MOIST.		11	W 948.9															
		12	9 10 8	26	64	SS-5	-	-	-	-	-	-	-	-	-	7	A-2-4 (V)	
		13																
		14	11 13 16	42	33	SS-6	-	-	-	-	-	-	-	-	-	11	A-2-4 (V)	
		15																
		16	15 18 18	52	33	SS-7	-	-	-	-	-	-	-	-	-	20	A-2-4 (V)	
		17																
		18																
		19	10 14 14	40	47	SS-8	-	-	-	-	-	-	-	-	-	10	A-2-4 (V)	
	940.4	20																
DENSE TO VERY DENSE, GRAY **SILTY SAND**, TRACE CLAY, TRACE FINE GRAVEL, MOIST.		21																
		22	12 20 20	58	56	SS-9	-	-	-	-	-	-	-	-	-	9	A-4a (V)	
		23																
		24	5 9 13	32	0	SS-10	-	-	-	-	-	-	-	-	-	-		
	935.4	25	21	-	100	2S-10A	-	-	-	-	-	-	-	-	-	7	A-4a (V)	
		EOB																

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)	GR	CS	FS	SI	CL	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.		1																
		2	8 12 12	35	33	SS-1	4.5+	-	-	-	-	-	-	-	-	16	A-6a (V)	
		3																
-COBBLES FROM 3.8' - 4.5'		4	15 45 18	91	42	SS-2	4.5+	-	-	-	-	-	-	-	-	10	A-6a (V)	
	956.3	5																
MEDIUM DENSE TO DENSE, BROWN **GRAVEL WITH SAND AND SILT**, WET.		6																
		7	11 9 9	26	56	SS-3	-	44	16	14	16	10	27	19	8	7	A-2-4 (0)	
		8																
		9	9 11 12	33	67	SS-4	-	-	-	-	-	-	-	-	-	8	A-2-4 (V)	
		10																
		11	▽ 950.6															
		12	W 949.3 6 8 11	27	0	SS-5	-	-	-	-	-	-	-	-	-	-		
		13	7	-	100	2S-5A	-	-	-	-	-	-	-	-	-	19	A-2-4 (V)	
		14	10 10 10	29	0	SS-6	-	-	-	-	-	-	-	-	-	-		
	946.1	15	5	-	100	2S-6A	-	-	-	-	-	-	-	-	-	15	A-2-4 (V)	
HARD, BROWN **SANDY SILT**, LITTLE CLAY, TRACE FINE GRAVEL, DAMP.		16																
		17	7 8 10	26	47	SS-7	4.5+	-	-	-	-	-	-	-	-	14	A-4a (V)	
		18																
		19	5 8 13	30	75	SS-8	4.5+	12	11	14	39	24	26	17	9	12	A-4a (6)	
		20																
		21																
		22	9 16 17	48	78	SS-8	4.5+	-	-	-	-	-	-	-	-	13	A-4a (V)	
		23																
	936.8	24	10 15 13	40	67	SS-10	4.5+	-	-	-	-	-	-	-	-	14	A-4a (V)	
		EOB																

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	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.246 TOTAL 276	36 TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC.

8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949

GEOTECHNICAL PROFILE - NOISE WALLS

BORING LOGS B-009-0-23 AND B-010-0-23

FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:51:33 AM USER: kevinj
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.
START: 11/3/23 END: 11/3/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.087493, -82.842814
PAGE 1 OF 1

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	5 9 11	29	100	SS-9	-	-	-	-	-	-	-	-	-	14	A-1-b (V)	
		22																
		23																
	939.3	24	7 10 14	35	100	SS-10	-	-	-	-	-	-	-	-	-	12	A-1-b (V)	
	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.
START: 11/3/23 END: 11/3/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.087734, -82.842176
PAGE 1 OF 1

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																
	942.1	24	6 9 12	30	47	SS-10	4.5+	-	-	-	-	-	-	-	-	11	A-4a (V)	
	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	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.247 TOTAL 276	37 TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC. 8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43240 (614) 825-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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: 1/19/2024 TIME: 9:52:03 AM USER: kevinj
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. | PAGE 1 OF 1
START: 11/3/23 END: 11/3/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.087953, -82.841539

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	W 951.4																
MEDIUM DENSE TO VERY DENSE, GRAY **GRAVEL WITH SAND AND SILT**, MOIST.			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. | PAGE 1 OF 1
START: 11/6/23 END: 11/2/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.088209, -82.840922

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	W 952.9																
MEDIUM DENSE TO DENSE, GRAY **GRAVEL WITH SAND AND SILT**, WET.			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.248 TOTAL 276	38 TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC.

6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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: 1/19/2024 TIME: 9:52:33 AM USER: kevinj
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.			12 12 12	35	61	SS-7	-	50	23	9	12	6	23	17	6	10	A-1-b (0)	
		W 950.4	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	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.249 TOTAL 276	39 TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC. 6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 825-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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: 1/19/2024 TIME: 9:53:02 AM USER: kevinj
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.250 TOTAL 276	40 TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC. 6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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: 1/19/2024 TIME: 9:53:32 AM USER: kevinj
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
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 974.9 (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: 40.089329, -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
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 974.3 (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: 40.089531, -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																
		2	5 5 7	17	44	SS-1	4.5+	-	-	-	-	-	-	-	-	16	A-6a (V)	
		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	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.251 / TOTAL 276	41 / TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC.

6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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: 1/19/2024 TIME: 9:54:01 AM USER: kevinj
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																
	W 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.252 TOTAL 276	42 TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC. 6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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. 977.0	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
0.3' -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 WALLS
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' REC (%):100 RQD (%):0	

RESOURCE INTERNATIONAL, INC.
8500 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 822-4949

GEOTECHNICAL PROFILE - NOISE WALLS
NOISE WALL 11
BORING ROCK CORE PHOTO FOR B-023-0-23

FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:54:55 AM USER: kevinj
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	5 6 5	16	36	SS-5	2.50	-	-	-	-	-	-	-	-	10	A-6a (V)	
	966.6	12																
DENSE TO VERY DENSE, GRAY TO BLACK **GRAVEL WITH SAND AND SILT**, LITTLE CLAY, MOIST.		13																
		14	10 17 21	55	67	SS-6	-	-	-	-	-	-	-	-	-	8	A-2-4 (V)	
		15																
		16	10 14 15	42	92	SS-7	-	-	-	-	-	-	-	-	-	7	A-2-4 (V)	
		17																
		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																
SHALE : GRAY, HIGHLY WEATHERED.		TR																
		24	50/6"	-	36	SS-10	-	-	-	-	-	-	-	-	-	3	Rock (V)	
	954.6	EOB 25																

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	EOB 25																

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.255 TOTAL 276	45 TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC. 6500 PRESIDENTIAL GATEWAY COLUMBUS, OH 43231 (614) 882-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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: 1/19/2024 TIME: 9:55:24 AM USER: kevinj
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.
START: 10/31/23 END: 10/31/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.090906, -82.833225
PAGE 1 OF 1

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.		1	4 5 13	26	67	SS-1	4.5+	-	-	-	-	-	-	-	-	17	A-6b (V)	
		2																
		3																
		4	18 18 16	49	39	SS-2	4.5+	-	-	-	-	-	-	-	-	19	A-6b (V)	
		5																
		6																
		7	9 13 15	40	89	SS-3	4.5+	-	-	-	-	-	-	-	-	12	A-6b (V)	
		8																
		9	4 4 4	12	50	SS-4	4.00	19	24	12	23	22	36	19	17	14	A-6b (4)	
		10																
MEDIUM DENSE TO DENSE, BROWN TO DARK GRAY **GRAVEL WITH SAND AND SILT**, TRACE CLAY, MOIST.	969.3	11	3 4 5	13	56	SS-5	-	-	-	-	-	-	-	-	-	20	A-2-4 (V)	
		12																
		13																
		14	14 15 16	45	0	SS-6	-	-	-	-	-	-	-	-	-	-		
		15	7	-	100	2S-6A	-	-	-	-	-	-	-	-	-	11	A-2-4 (V)	
		16																
		17	14 14 10	35	72	SS-7	-	-	-	-	-	-	-	-	-	10	A-2-4 (V)	
	961.8	18																
DENSE, GRAY TO BLACK **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, MOIST.	W 961.3	19	9 9 14	33	0	SS-8	-	-	-	-	-	-	-	-	-	-		
-SHALE FRAGMENTS PRESENT THROUGHOUT		20	14	-	100	2S-8A	-	-	-	-	-	-	-	-	-	14	A-1-b (V)	
		21																
		22	12 15 17	46	75	SS-9	-	50	20	11	11	8	24	18	6	10	A-1-b (0)	
		23																
		24	11 14 13	39	0	SS-10	-	-	-	-	-	-	-	-	-	-		
	954.3	25	8	-	100	2S-10A	-	-	-	-	-	-	-	-	-	15	A-1-b (V)	
		EOB																

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.
START: 11/1/23 END: 11/1/23 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 86.4 | LAT / LONG: 40.091062, -82.832539
PAGE 1 OF 1

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.		1	7 13 19	46	61	SS-1	4.5+	-	-	-	-	-	-	-	-	11	A-6a (V)	
		2																
		3																
		4	11 13 15	40	67	SS-2	4.5+	-	-	-	-	-	-	-	-	12	A-6a (V)	
		5																
		6																
		7	13 16 15	45	64	SS-3	4.5+	-	-	-	-	-	-	-	-	11	A-6a (V)	
		8																
		9	8 5 7	17	61	SS-4	4.5+	-	-	-	-	-	-	-	-	12	A-6a (V)	
	971.0	10																
LOOSE TO VERY DENSE, GRAY **GRAVEL WITH SAND AND SILT**, TRACE TO LITTLE CLAY, DAMP.		11	3 3 3	9	67	SS-5	-	-	-	-	-	-	-	-	-	14	A-2-4 (V)	
		12																
		13																
		14	4 4 5	13	58	SS-6	-	35	20	14	19	12	29	19	10	14	A-2-4 (0)	
		15																
		16																
		17	7 16 18	49	67	SS-7	-	-	-	-	-	-	-	-	-	8	A-2-4 (V)	
		18																
		19	6 9 12	30	67	SS-8	-	54	20	8	13	5	28	18	10	10	A-2-4 (0)	
		20																
	W 960.5	21																
		22	12 14 24	55	78	SS-9	-	-	-	-	-	-	-	-	-	12	A-2-4 (V)	
	958.5	TR																
SHALE : GRAY, HIGHLY WEATHERED.		23																
		24	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.256 TOTAL 276	46 TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC. 8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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: 1/19/2024 TIME: 9:55:54 AM USER: kevinj
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 | PAGE 1 OF 1
PID: 117607 SFN: NA | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 3/21/22 | ELEVATION: 982.2 (MSL) EOB: 25.0 ft.
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:\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: 1114+00 / 0' | **EXPLORATION ID B-029-0-23**
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: 40.091321, -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	2 3 4	10	42	SS-6	2.00	-	-	-	-	-	-	-	-	14	A-6a (V)	
	967.5	15																
MEDIUM STIFF TO VERY STIFF, BLACK TO GRAY **SANDY SILT**, SOME CLAY, LITTLE FINE GRAVEL, DAMP TO MOIST.		16																
		17	4 7 9	23	56	SS-7	3.00	-	-	-	-	-	-	-	-	9	A-4a (V)	
		18																
		19	2 2 3	7	56	SS-8	2.25	12	15	16	34	23	25	15	10	13	A-4a (4)	
		20																
		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. -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:\GI8\PROJECTS\2023\W-23-107.GPJ

SHEET	SUBSET	PROJECT ID	DESIGNER	DESIGN AGENCY
P.257 / TOTAL 276	47 / TOTAL 66	117607 REVIEWER DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC. 6500 PRESIDENTIAL GATEWAY COLUMBUS, OH 43231 (614) 882-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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: 1/19/2024 TIME: 9:56:21 AM USER: kevinj
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	4 8 12	29	94	SS-3	4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)	
		7																
		8																
		9	4 5 7	17	86	SS-4	4.5+	-	-	-	-	-	-	-	-	11	A-6a (V)	
		10																
		11	2 3 5	12	39	SS-5	3.25	-	-	-	-	-	-	-	-	13	A-6a (V)	
		12																
		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	6 6 7	19	83	SS-5	4.5+	11	10	16	36	27	25	15	10	12	A-4a (6)	
		12																
		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																
		19	3 4 10	20	83	SS-8	4.5+	-	-	-	-	-	-	-	-	13	A-4a (V)	
	W 954.7	20																
	954.0 ▽ 954.0																	
MEDIUM DENSE, DARK GRAY **GRAVEL WITH SAND**, TRACE SILT, TRACE CLAY, MOIST.		21	4 8 10	26	78	SS-9	-	39	35	11	9	6	NP	NP	NP	16	A-1-b (0)	
-SHALE FRAGMENTS PRESENT THROUGHOUT		22																
		23																
-1.5' OF HEAVING SANDS @23.5'		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.258 / TOTAL 276	48 / TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC. 8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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: 1/19/2024 TIME: 9:56:46 AM USER: kevinj
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)	
		15																
		16																
	959.2	17	8 12 11	33	72	SS-7	-	59	21	9	-	11 -	NP	NP	NP	7	A-1-a (0)	
MEDIUM DENSE TO DENSE, DARK GRAY **GRAVEL WITH SAND AND SILT**, TRACE CLAY, MOIST. -SHALE FRAGMENTS PRESENT THROUGHOUT		18																
W 958.7		19	9 13 12	36	64	SS-8	-	-	-	-	-	-	-	-	-	12	A-2-4 (V)	
▽ 956.7		20																
		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.259 / TOTAL 276	49 / TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC.

8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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: 1/19/2024 TIME: 9:57:14 AM USER: kevinj
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																
		12	7 15 20	50	0	SS-5	-	-	-	-	-	-	-	-	-	-		
		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	25 EOB																

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.		19	10 14 18	46	69	SS-8	-	57	17	9	15	2	NP	NP	NP	8	A-1-b (0)	
	W 961.7	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	25 EOB																

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	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.260 TOTAL 276	50 TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC. 6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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: 1/19/2024 TIME: 9:57:41 AM USER: kevinj
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	9 9 9	26	83	SS-3	4.5+	-	-	-	-	-	-	-	-	16	A-6a (V)	
		6																
		7	6 7 7	20	100	SS-4	4.5+	-	-	-	-	-	-	-	-	17	A-6a (V)	
		8																
		9	6 7 7	20	36	SS-5	4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)	
	970.2	10																
SOFT, DARK BROWN **SILTY CLAY**, SOME FINE TO COARSE SAND, SOME FINE GRAVEL, DAMP.		11	5 7 8	22	39	SS-6	-	33	15	13	29	10	38	21	17	12	A-6b (2)	
		12																
		13	10 10 17	39	0	SS-7	-	-	-	-	-	-	-	-	-	-		
		14	20	-	67	2S-7A	-	-	-	-	-	-	-	-	-	11	A-6b (V)	
	964.7	15																
DENSE, DARK GRAY **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, MOIST.		16	11 13 12	36	69	SS-8	-	31	31	16	20	2	23	17	6	11	A-1-b (0)	
	962.7	17																
DENSE TO VERY DENSE, GRAY **GRAVEL WITH SAND, SILT, AND CLAY**, WET.		18	W 962.2															
		19	10 18 35	76	0	SS-9	-	-	-	-	-	-	-	-	-	-		
		20	12	-	100	2S-9A	-	-	-	-	-	-	-	-	-	23	A-2-6 (V)	
		21																
		22	10 17 17	49	33	SS-10	-	-	-	-	-	-	-	-	-	20	A-2-6 (V)	
	958.2	23	EOB															
		24																
		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. .

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	4 5 9	20	72	SS-3	4.5+	9	8	13	40	30	37	18	19	16	A-6b (11)	
		6																
		7	5 6 5	16	94	SS-4	4.5+	-	-	-	-	-	-	-	-	19	A-6b (V)	
		8																
		9	4 4 5	13	61	SS-5	3.50	-	-	-	-	-	-	-	-	18	A-6b (V)	
	971.9	10																
MEDIUM DENSE TO DENSE, BROWN **SANDY SILT**, SOME CLAY AND GRAVEL, MOIST TO DAMP.		11	4 7 7	20	53	SS-6	-	-	-	-	-	-	-	-	-	17	A-4a (V)	
		12																
		13	3 9 13	32	0	SS-7	-	-	-	-	-	-	-	-	-	-		
	966.7	14	16 ▽ 966.7	-	75	SS-7A	-	28	16	12	33	11	28	19	9	13	A-4a (2)	
DENSE, GRAY **GRAVEL WITH SAND**, TRACE SILT, MOIST.		15	W 965.1															
		16	13 16 16	46	100	SS-8	-	-	-	-	-	-	-	-	-	9	A-1-b (V)	
	964.4	17																
DENSE, DARK GRAY **GRAVEL WITH SAND AND SILT**, TRACE CLAY, MOIST.		18																
		19	9 14 15	42	0	SS-9	-	-	-	-	-	-	-	-	-	-		
		20	14	-	100	SS-9A	-	-	-	-	-	-	-	-	-	16	A-2-4 (V)	
		21																
		22	12 12 15	39	61	SS-10	-	-	-	-	-	-	-	-	-	13	A-2-4 (V)	
	959.9	23	EOB															
		24																
		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.261	276	51	66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC. 8500 FREEDOM CROSSING BLVD. GAHANNA, OHIO 43230 (614) 882-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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: 1/19/2024 TIME: 9:58:10 AM USER: kevinj
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.			6 7 7	20	0	SS-1	-	-	-	-	-	-	-	-	-	-		
			9	-	67	2S-1A	4.5+	-	-	-	-	-	-	-	-	15	A-6b (V)	
			7 10 20	43	50	SS-2	4.5+	-	-	-	-	-	-	-	-	14	A-6b (V)	
			6 6 9	22	0	SS-3	-	-	-	-	-	-	-	-	-	-		
			14	-	100	2S-3A	4.5+	17	9	10	32	32	39	18	21	14	A-6b (10)	
			5 6 9	22	33	SS-4	4.5+	-	-	-	-	-	-	-	-	12	A-6b (V)	
	966.3		4 5 5	14	81	SS-5	4.00	-	-	-	-	-	-	-	-	20	A-6b (V)	
LOOSE TO MEDIUM DENSE, BROWN **SANDY SILT**, SOME FINE GRAVEL, LITTLE CLAY, MOIST.	963.8		7 13 20	48	50	SS-6	-	-	-	-	-	-	-	-	-	9	A-4a (V)	
LOOSE TO MEDIUM DENSE, GRAY **GRAVEL WITH SAND AND SILT**, TRACE CLAY, MOIST.	958.8		14 15 10	36	39	SS-7	4.5+	50	13	7	22	8	26	21	5	8	A-2-4 (0)	
			9 18 5	33	81	SS-8	-	-	-	-	-	-	-	-	-	18	A-2-4 (V)	
VERY STIFF, BROWN **SILT AND CLAY**, LITTLE COARSE TO FINE SAND, TRACE FINE GRAVEL, MOIST.	956.3		5 6 8	20	56	SS-9	-	-	-	-	-	-	-	-	-	23	A-2-4 (V)	
SHALE : BLACK, HIGHLY WEATHERED.	954.3	TR EOB	14 11 11	32	72	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	

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	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.262 / TOTAL 276	52 / TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL 6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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	11	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.		12	0		0	NQ2-1											CORE	
		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 WALLS
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") HARD, BROWN TO GRAY **SILT AND CLAY**, LITTLE TO TRACE SAND AND GRAVEL, DAMP TO MOIST.	986.6		3 6 8	20	72	SS-1	4.5+	-	-	-	-	-	-	-	-	17	A-6a (V)	
			6 7 9	23	69	SS-2	4.5+	-	-	-	-	-	-	-	-	20	A-6a (V)	
			4 6 8	20	81	SS-3	4.5+	7	9	15	37	32	33	18	15	18	A-6a (9)	
			4 6 8	20	47	SS-4	4.5+	-	-	-	-	-	-	-	-	18	A-6a (V)	
SHALE : GRAY, HIGHLY WEATHERED.	976.5	TR	8 15 50/3"	-	87	SS-5	-	-	-	-	-	-	-	-	-	10	Rock (V)	
	973.0		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. -@14.3' IRON STAINING IN FRACTURE -@15.0' - 15.2' ZONE OF FRACTURES -@15.7' CLAY SEAM	971.0		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		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	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

GEOTECHNICAL PROFILE - NOISE WALLS
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.			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.			13 32 35	96	69	SS-3	-	-	-	-	-	-	-	-	-	8	A-2-4 (V)	
	980.2	TR																
SHALE : GRAY, HIGHLY WEATHERED.			10 21 29	72	89	SS-4	-	-	-	-	-	-	-	-	-	7	Rock (V)	
			50/6"	-	100	SS-5	-	-	-	-	-	-	-	-	-	6	Rock (V)	
			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. -0.3' CLAYSTONE SEAM @ 16.0' -@17.4' CLAY SEAM -@18.0' CLAY SEAM -SILTSTONE SEAM @ 21.4'-23.0'			20		68	NQ2-1											CORE	
			40		100	NQ2-2											CORE	
	963.2	EOB																

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 WALLS
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.			3 8 8	23	44	SS-1	4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)	
			14 14 13	39	0	SS-2	-	-	-	-	-	-	-	-	-	-		
			17	-	100	2S-2A	4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)	
			4 5 6	16	58	SS-3	4.5+	9	11	16	37	27	27	16	11	15	A-6a (6)	
			4 8 8	23	58	SS-4	4.5+	-	-	-	-	-	-	-	-	12	A-6a (V)	
	1019.3																	
SANDSTONE : GRAY, HIGHLY WEATHERED.		TR	40 42 50/2"	-	100	SS-5	-	-	-	-	-	-	-	-	-	6	Rock (V)	
			50/0"	-		SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	
			50/3"	-	67	SS-7	-	-	-	-	-	-	-	-	-	5	Rock (V)	
	1012.3																	
SANDSTONE : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATLY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACES, BLOCKY, GOOD SURFACE.			58		75	NQ2-1											CORE	
			68		92	NQ2-2											CORE	
	1006.3	EOB																

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER; CAVE-IN DEPTH @ 16.9'

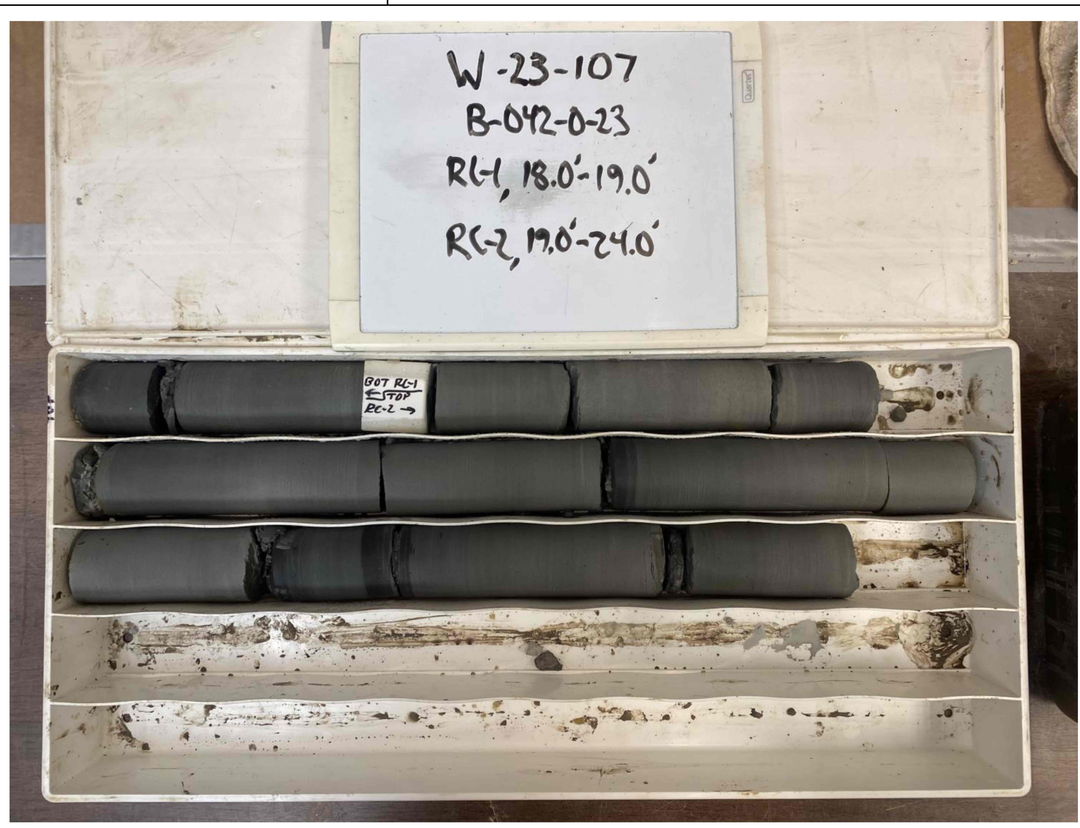
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 47 LBS CEMENT, 25 LBS BENTONITE POWDER AND 40 GAL WATER .

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

GEOTECHNICAL PROFILE - NOISE WALLS
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

GEOTECHNICAL PROFILE - NOISE WALLS
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: 1/19/2024 TIME: 10:00:05 AM USER: kevinj
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.		1	4 7 6	19	67	SS-1	4.5+	-	-	-	-	-	-	-	-	15	A-6a (V)	
		2																
		3																
		4	12 13 13	37	33	SS-2	-	-	-	-	-	-	-	-	-	9	A-6a (V)	
		5																
		6																
		7	10 12 12	35	100	SS-3	4.5+	15	10	14	39	22	30	17	13	14	A-6a (6)	
		8																
		9	8 9 13	32	67	SS-4	4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)	
		10																
		11																
		12	6 10 9	27	72	SS-5	4.5+	-	-	-	-	-	-	-	-	11	A-6a (V)	
	1025.3	TR 13																
SANDSTONE : GRAY, HIGHLY WEATHERED.		14	50/4"	-	63	SS-6	-	-	-	-	-	-	-	-	-	7	Rock (V)	
		15																
		16																
		17	38 50/4"	-	84	SS-7	-	-	-	-	-	-	-	-	-	10	Rock (V)	
		18																
		19	50/6"	-	100	SS-8	-	-	-	-	-	-	-	-	-	5	Rock (V)	
		20																
		21	50/6"	-	100	SS-9	-	-	-	-	-	-	-	-	-	5	Rock (V)	
		22																
		23																
		24	50/5"	-	100	SS-10	-	-	-	-	-	-	-	-	-	5	Rock (V)	
	1013.3	EOB 25																

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.		1	5 5 6	16	56	SS-1	4.5+	0	3	8	51	38	48	20	28	17	A-7-6 (17)	
		2																
		3																
		4	9 10 12	32	50	SS-2	4.5+	-	-	-	-	-	-	-	-	14	A-7-6 (V)	
		5																
		6																
		7	10 13 13	37	100	SS-3	4.5+	-	-	-	-	-	-	-	-	14	A-7-6 (V)	
	1030.9	8																
HARD, BROWN **SILT AND CLAY**, SOME COARSE TO FINE SAND, LITTLE FINE GRAVEL, MOIST.		9	8 12 13	36	83	SS-4	-	11	13	16	7	53	28	17	11	12	A-6a (5)	
		10																
		11																
		12	4 6 15	30	78	SS-5	-	-	-	-	-	-	-	-	-	13	A-6a (V)	
	1025.9	TR 13																
SILTSTONE : GRAY TO DARK GRAY, HIGHLY WEATHERED.		14	50/4"	-	75	SS-6	-	-	-	-	-	-	-	-	-	6	Rock (V)	
		15																
		16	50/4"	-	88	SS-7	-	-	-	-	-	-	-	-	-	7	Rock (V)	
		17																
		18																
		19	50/4"	-	86	SS-8	-	-	-	-	-	-	-	-	-	6	Rock (V)	
		20																
		21	50/2"	-	75	SS-9	-	-	-	-	-	-	-	-	-	6	Rock (V)	
		22																
		23																
		24	50/0"	-		SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	1013.9	EOB 25																

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.268 / TOTAL 276	58 / TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC. 8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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**	
TYPE: NOISE WALLS	SAMPLING FIRM / LOGGER: RII / MJ	HAMMER: AUTOMATIC	ALIGNMENT: CL WALL 15	**B-046-0-23**	
PID: 117607 SFN: NA	DRILLING METHOD: 3.25" HSA / NQ2	CALIBRATION DATE: 3/21/22	ELEVATION: 1039.1 (MSL) EOB: 25.0 ft.	PAGE	
START: 11/10/23 END: 11/10/23	SAMPLING METHOD: SPT / NQ2	ENERGY RATIO (%): 86.4	LAT / LONG: 40.090415, -82.808921	1 OF 1	

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	
	1014.6		37		93	NQ2-2											CORE	
-@ 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 WALLS
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 -@ 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'

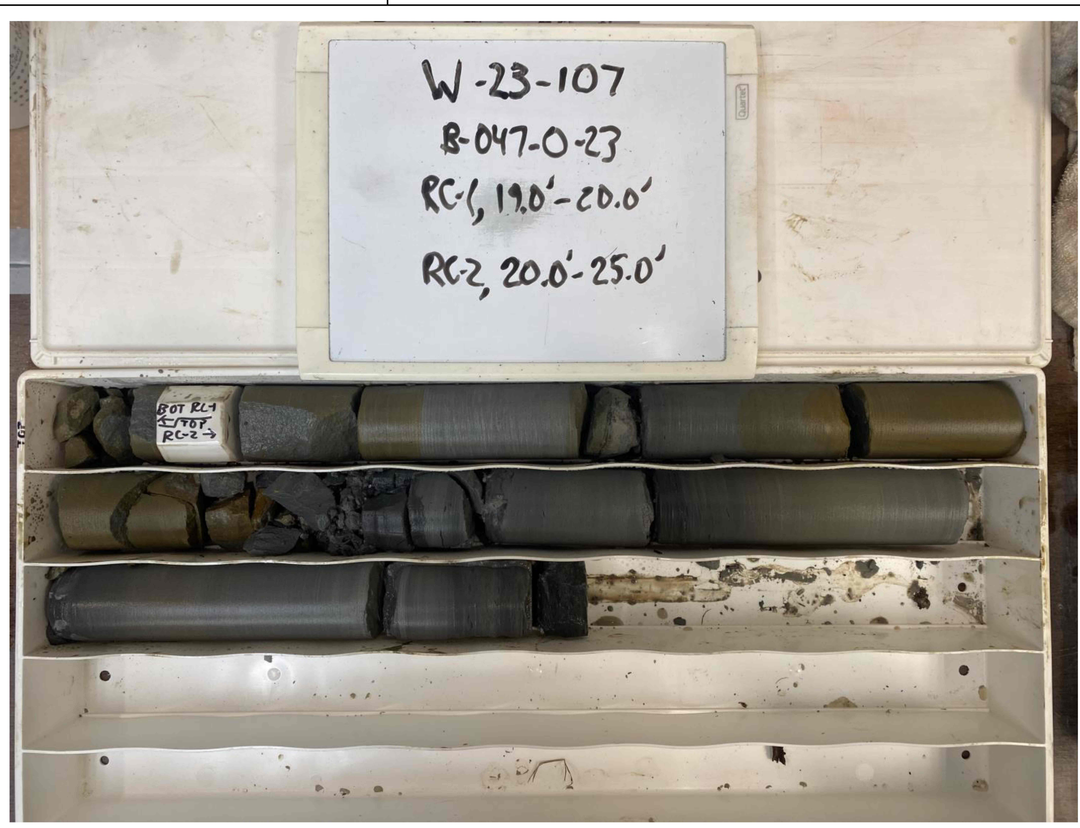
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 47 LBS CEMENT, 25 LBS BENTONITE POWDER AND 40 GAL WATER .

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

GEOTECHNICAL PROFILE - NOISE WALLS
NOISE WALL 15
BORING LOG & ROCK CORE PHOTO FOR B-047-0-23

FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:01:16 AM USER: kevinj
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 EOB 25	11 10 15	36	50	SS-10	-	-	-	-	-	-	-	-	-	20	Rock (V)	

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 P.271	SUBSET 61	PROJECT ID 117607	REVIEWER DEK 1/19/24	DESIGNER JAS	8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949	DESIGN AGENCY RESOURCE INTERNATIONAL, INC.
TOTAL 276	TOTAL 66					

GEOTECHNICAL PROFILE - NOISE WALLS
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 3 4	10	53	SS-1	2.25	28	2	5	27	38	53	20	33	25	A-7-6 (16)	
	1033.4		5 6 8	20	100	SS-2	4.00	-	-	-	-	-	-	-	-	21	A-7-6 (V)	
HARD, GRAY **SANDY SILT**, TRACE GRAVEL, MOIST TO DAMP.			3 4 6	14	44	SS-3	4.00	-	-	-	-	-	-	-	-	14	A-4a (V)	
			8 13 16	42	89	SS-4	4.5+	-	-	-	-	-	-	-	-	12	A-4a (V)	
			4 8 10	26	83	SS-5	4.5+	8	14	16	34	28	26	16	10	12	A-4a (5)	
			5 7 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 WALLS
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

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.273 TOTAL 276	63 TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC. 8500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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 WALLS
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:\GIS\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.275 TOTAL 276	65 TOTAL 66	117607	DEK 1/19/24	JAS	RESOURCE INTERNATIONAL, INC. 6500 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 882-4949

GEOTECHNICAL PROFILE - NOISE WALLS
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**	
TYPE: NOISE WALLS	SAMPLING FIRM / LOGGER: RII / MJ	HAMMER: AUTOMATIC	ALIGNMENT: CL WALL 15	**B-053-0-23**	
PID: 117607 SFN: NA	DRILLING METHOD: 3.25" HSA / NQ2	CALIBRATION DATE: 3/21/22	ELEVATION: 1036.5 (MSL) EOB: 25.0 ft.		PAGE
START: 11/14/23 END: 11/14/23	SAMPLING METHOD: SPT / NQ2	ENERGY RATIO (%): 86.4	LAT / LONG: 40.090039, -82.804245		1 OF 1

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'

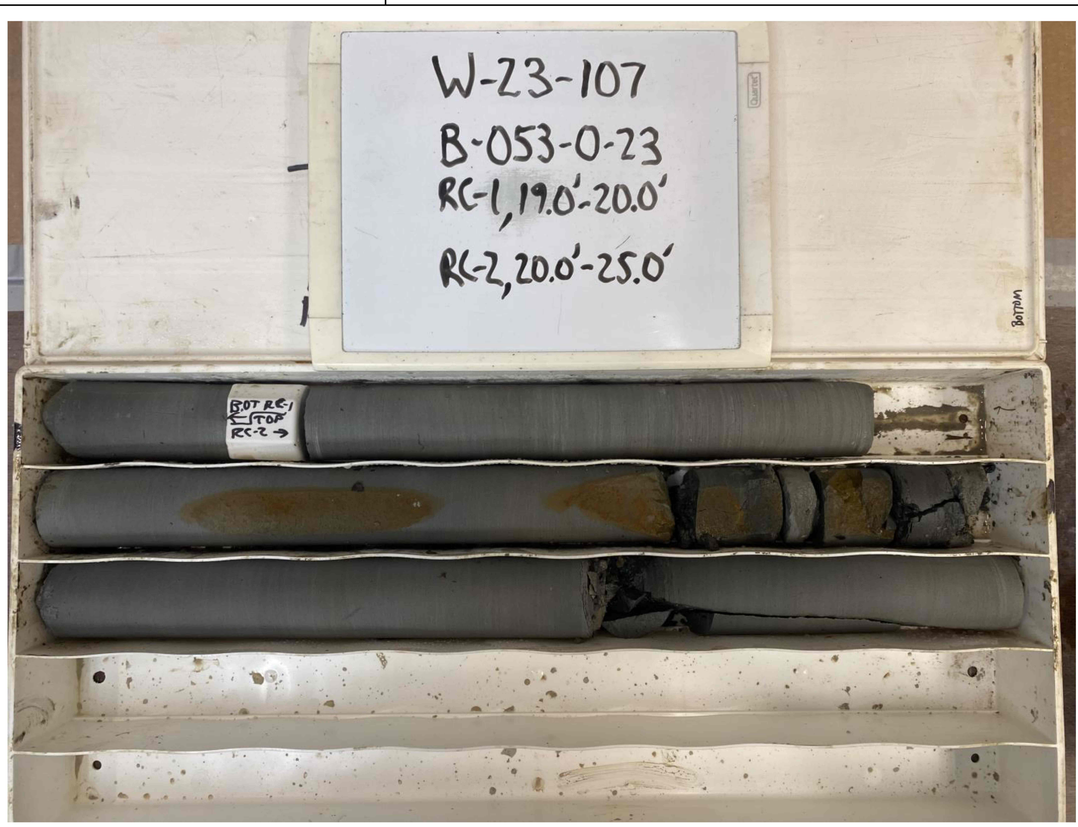
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 47 LBS CEMENT, 25 LBS BENTONITE POWDER AND 40 GAL WATER .

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 WALLS
NOISE WALL 15
BORING LOG & ROCK CORE PHOTO FOR B-053-0-23