

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF THE CONSTRUCTION OF EIGHT (8) NEW NOISE WALLS ALONG SR 161 BETWEEN ULRU 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 OCTOBER 18 AND NOVEMBER 15, 2023. THE PROJECT SITE IS LOCATED ALONG SR 161 IN FRANKLIN COUNTY, OHIO. THE PROJECT SITE EXTENDS FROM ULRU 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 SPECIFICATIONS FOR GEOTECHNICAL ENGINEERING, 2022. 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_s). BASED ON THE SPT BLOW COUNTS OBTAINED, THE GRANULAR SOILS ENCOUNTERED RANGED FROM LOOSE (5 < N_s < 10 BLOWS PER FOOT [BPF]) TO VERY DENSE (N_s > 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 BROWN SANDSTONE, HIGHLY WEATHERED SILT, AND HIGHLY WEATHERED GRAY SILT.

is this supposed to be siltstone?

Rii Response: This has been updated.

CONSOLIDATE THIS TEXT (B-001-B-024 -ETC) TO SAVE TEXT SPACE)

LEGEND table with columns: DESCRIPTION, ODOT CLASS, CLASSIFIED MECH./VISUAL. Includes items like GRAVEL AND/OR STONE FRAGMENTS, SANDSTONE, SHALE, SILTSTONE, PAVEMENT OR BASE, SOD AND TOPSOIL, BORING LOCATION, DRIVE SAMPLE AND/OR ROCK CORE BORING, WC, N60, X/Y/Z, W, and NP.

Rii Response: This has been updated.

Rii Response: This has been updated.

Rii Response: This has been updated.

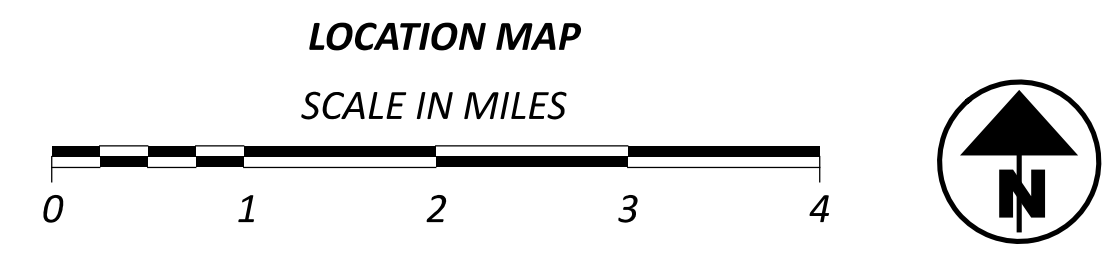
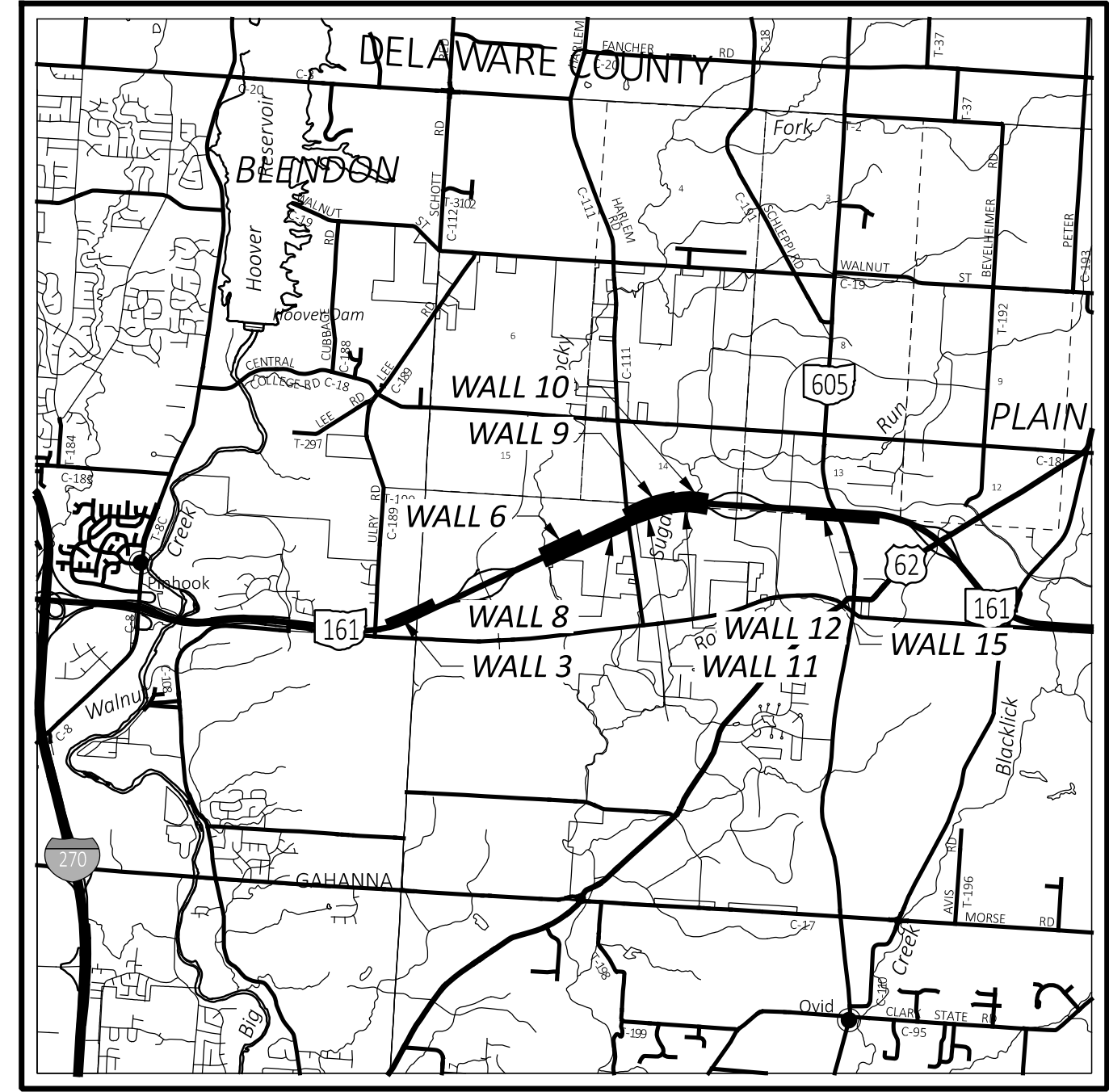
Rii Response: This has been updated.

Rii Response: This has been updated.

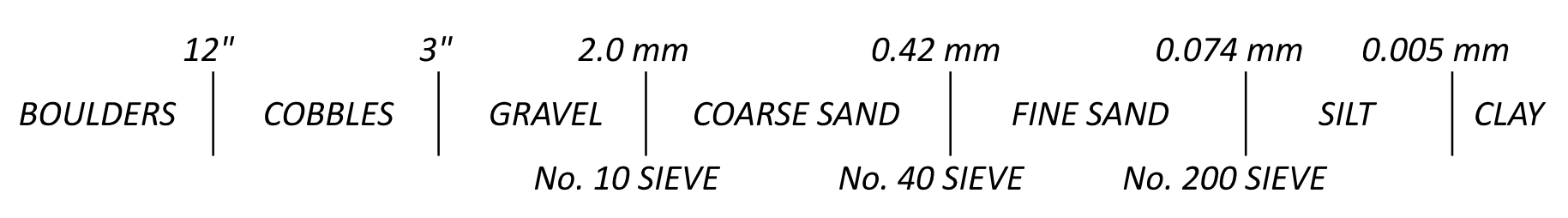
this first sentence appears to be incomplete. Are you referring that these were performed in accordance with the SGE?

NO NOTE INDICATING PRESENCE OF GROUNDWATER.

Please note presence of cobbles and boulders within the overburden soils. As these may pose difficult drilling conditions for the contractor to accurately bid



PARTICLE SIZE DEFINITIONS



INDEX OF SHEETS table with columns: LOCATION FROM STA. TO STA., PLAN, PROFILE. Lists sheets for Noise Walls 3, 6, 8, 9, 11, 12, and 15.

INDEX OF SHEETS (CON'T) table with columns: LOCATION FROM STA. TO STA., PLAN, PROFILE. Lists sheets for Noise Walls 11, 12, and 15.

Rii Response: This has been added.

DRILLING - TG 10/23 - 12/05/2023
DRAWN - JAS, KSJ 01/18/2023
REVIEWED - DEK 01/18/2023



RESOURCE INTERNATIONAL, INC.
Engineering Consultants

6350 Presidential Gateway, 9885 Rockside Road, 4480 Lake Forest Drive
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**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

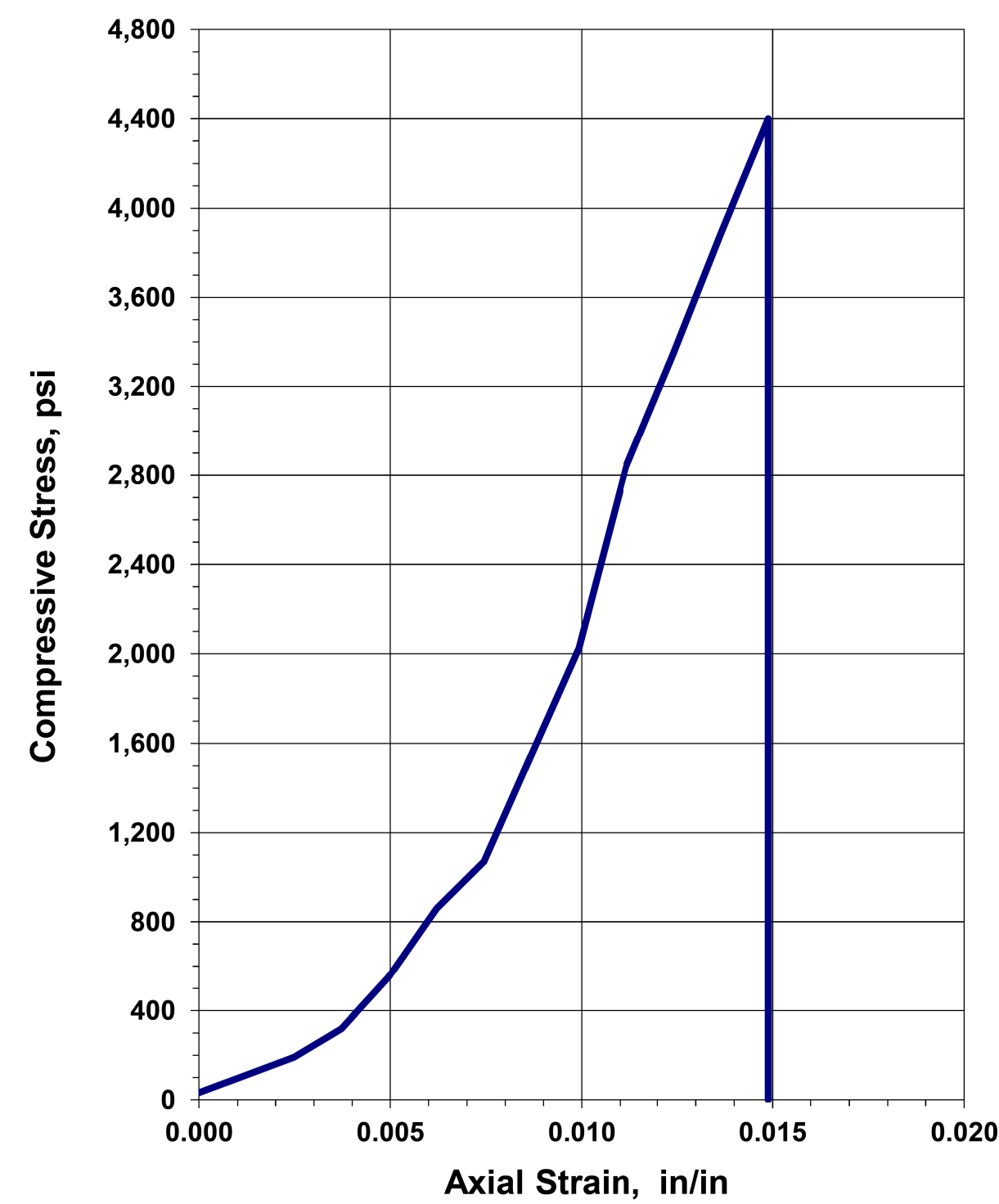
Rock Description: Gray Sandstone
Rock Formation: _____

Boring No.:	<u>B-001-0-23</u>	Average Length:	<u>4.030</u>	in
Sample No.:	<u>RC-2</u>	Average Diameter:	<u>1.993</u>	in
Depth (ft):	<u>14.0'</u>	Length to diameter ratio:	<u>2.022</u>	
Moisture condition:	<u>As received</u>	Cross Sectional Area:	<u>3.120</u>	in ²
Sample Mass:	<u>470.86</u>	Volume:	<u>0.0073</u>	ft ³
Testing Temperature:	<u>23</u>	Unit Weight (sample specimen)*:	<u>142.68</u>	lbs/ft ³
Rate of Loading:	<u>62.1</u>	Failure Load:	<u>13,727</u>	lbs
Testing Time:	<u>221</u>	Axial Strain at Failure:	<u>0.0149</u>	in/in
(Rate 2-15 min)		Compressive Strength:	<u>4,400</u>	psi

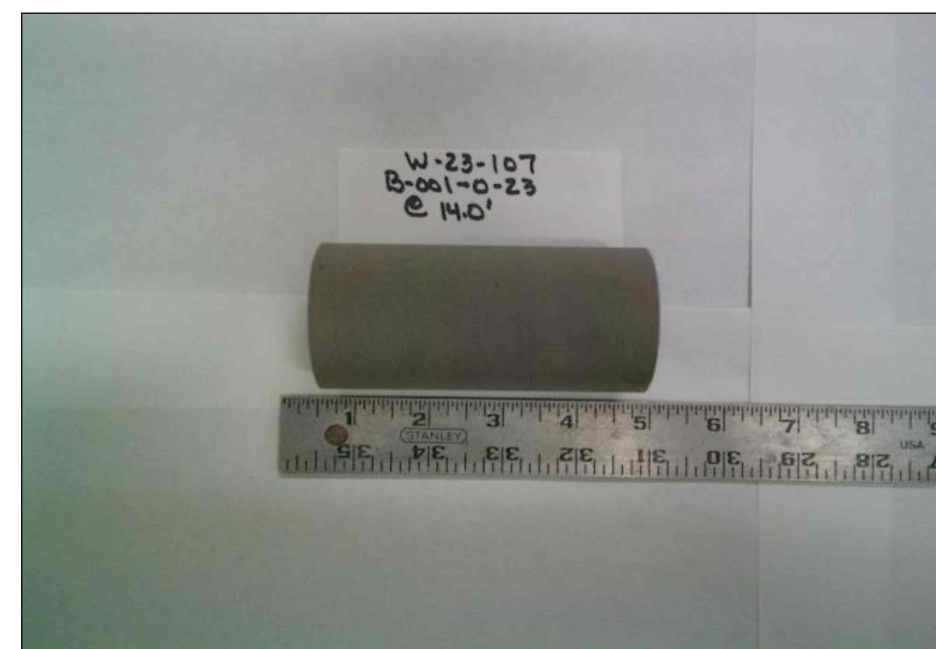
Sample Preparation: Per ASTM D4543

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

Unconfined Compression Test



Before Testing



After Failure



REMARKS: _____



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**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

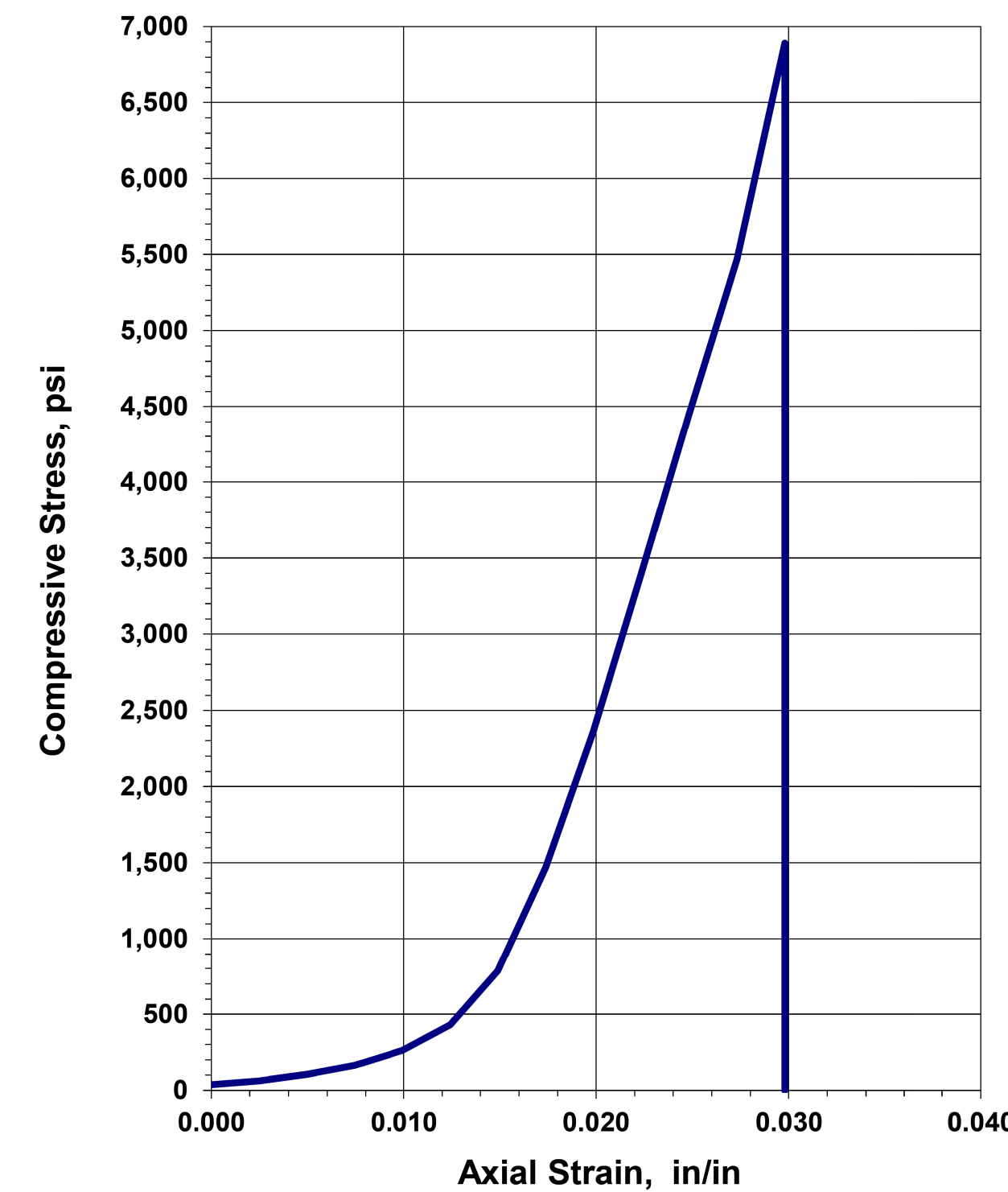
Rock Description: Gray Sandstone
Rock Formation: _____

Boring No.:	<u>B-003-0-23</u>	Average Length:	<u>4.028</u>	in
Sample No.:	<u>RC-2</u>	Average Diameter:	<u>1.995</u>	in
Depth (ft):	<u>13.8'</u>	Length to diameter ratio:	<u>2.019</u>	
Moisture condition:	<u>As received</u>	Cross Sectional Area:	<u>3.126</u>	in ²
Sample Mass:	<u>480.55</u>	Volume:	<u>0.0073</u>	ft ³
Testing Temperature:	<u>23</u>	Unit Weight (sample specimen)*:	<u>145.39</u>	lbs/ft ³
Rate of Loading:	<u>75.1</u>	Failure Load:	<u>21,542</u>	lbs
Testing Time:	<u>287</u>	Axial Strain at Failure:	<u>0.0298</u>	in/in
(Rate 2-15 min)		Compressive Strength:	<u>6,891</u>	psi

Sample Preparation: Per ASTM D4543

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

Unconfined Compression Test



Before Testing



After Failure



REMARKS: _____



DESIGN AGENCY	RESOURCE INTERNATIONAL
DESIGNER	JAS
REVIEWER	DEK
PROJECT ID	117607
SUBSET	TOTAL
2	66
SHEET	TOTAL
P.212	276



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**Unconfined Compressive Strength
of Intact Rock Core Specimens**
(ASTM D 7012-14)

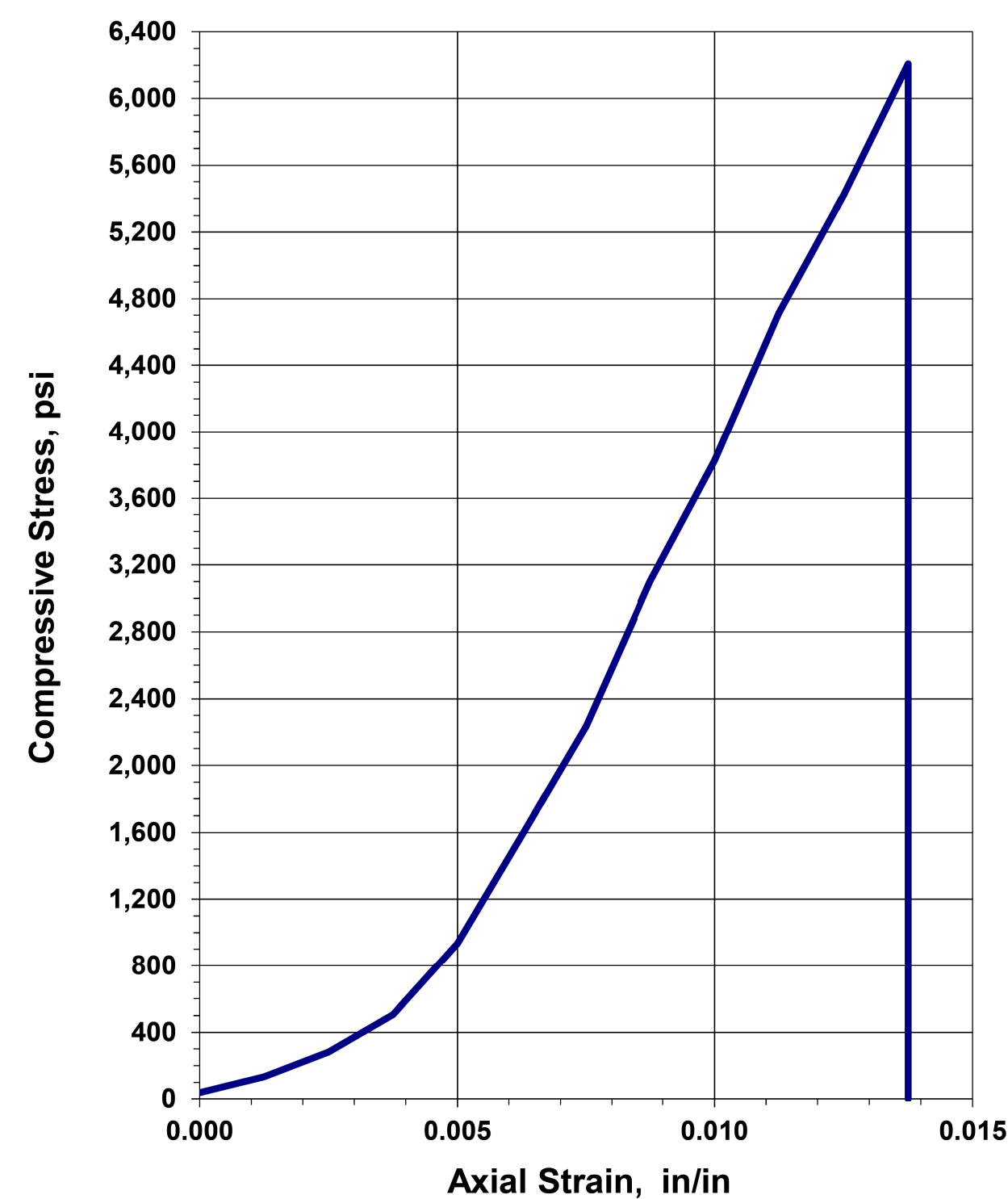
Project: FRA-161-15.80
Project No.: W-23-107
Date of Testing: 1/8/2024
Test Performed by: KL/EM

Rock Description: Gray Sandstone
Rock Formation: _____

Boring No.:	<u>B-043-0-23</u>	Average Length:	<u>4.000</u>	in
Sample No.:	<u>RC-2</u>	Average Diameter:	<u>1.988</u>	in
Depth (ft):	<u>21.00</u>	Length to diameter ratio:	<u>2.012</u>	
Moisture condition:	<u>As received</u>	Cross Sectional Area:	<u>3.104</u>	in ²
Sample Mass:	<u>460.53</u>	Volume:	<u>0.0072</u>	ft ³
Testing Temperature:	<u>23</u>	Unit Weight (sample specimen)*:	<u>141.30</u>	lbs/ft ³
Rate of Loading:	<u>87.2</u>	Failure Load:	<u>19,269</u>	lbs
Testing Time:	<u>221</u>	Axial Strain at Failure:	<u>0.0138</u>	in/in
(Rate 2-15 min)		Compressive Strength:	<u>6,208</u>	psi

Sample Preparation: Per ASTM D4543 *Actual test sample used for unit weight prior to testing.

Unconfined Compression Test



Before Testing



After Failure



REMARKS: _____



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**Unconfined Compressive Strength
of Intact Rock Core Specimens**
(ASTM D 7012-14)

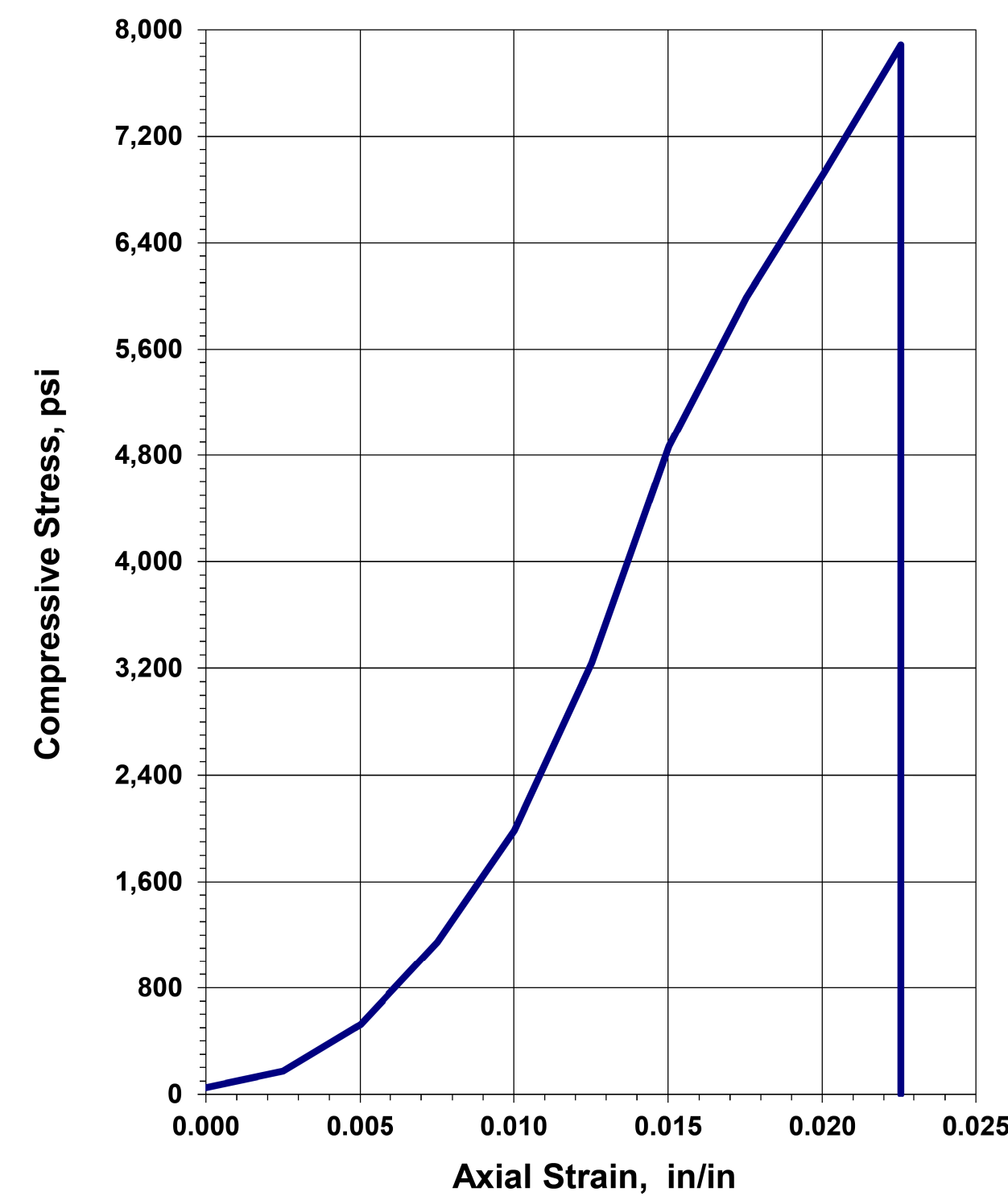
Project: FRA-161-15.80
Project No.: W-23-107
Date of Testing: 1/8/2024
Test Performed by: KL/EM

Rock Description: Gray Sandstone
Rock Formation: _____

Boring No.:	<u>B-046-0-23</u>	Average Length:	<u>3.992</u>	in
Sample No.:	<u>RC-2</u>	Average Diameter:	<u>1.995</u>	in
Depth (ft):	<u>22.0'</u>	Length to diameter ratio:	<u>2.001</u>	
Moisture condition:	<u>As received</u>	Cross Sectional Area:	<u>3.126</u>	in ²
Sample Mass:	<u>519.17</u>	Volume:	<u>0.0072</u>	ft ³
Testing Temperature:	<u>23</u>	Unit Weight (sample specimen)*:	<u>158.49</u>	lbs/ft ³
Rate of Loading:	<u>101.9</u>	Failure Load:	<u>24,655</u>	lbs
Testing Time:	<u>242</u>	Axial Strain at Failure:	<u>0.0225</u>	in/in
(Rate 2-15 min)		Compressive Strength:	<u>7,887</u>	psi

Sample Preparation: Per ASTM D4543 *Actual test sample used for unit weight prior to testing.

Unconfined Compression Test



Before Testing



After Failure



REMARKS: _____



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**Unconfined Compressive Strength
of Intact Rock Core Specimens**
(ASTM D 7012-14)

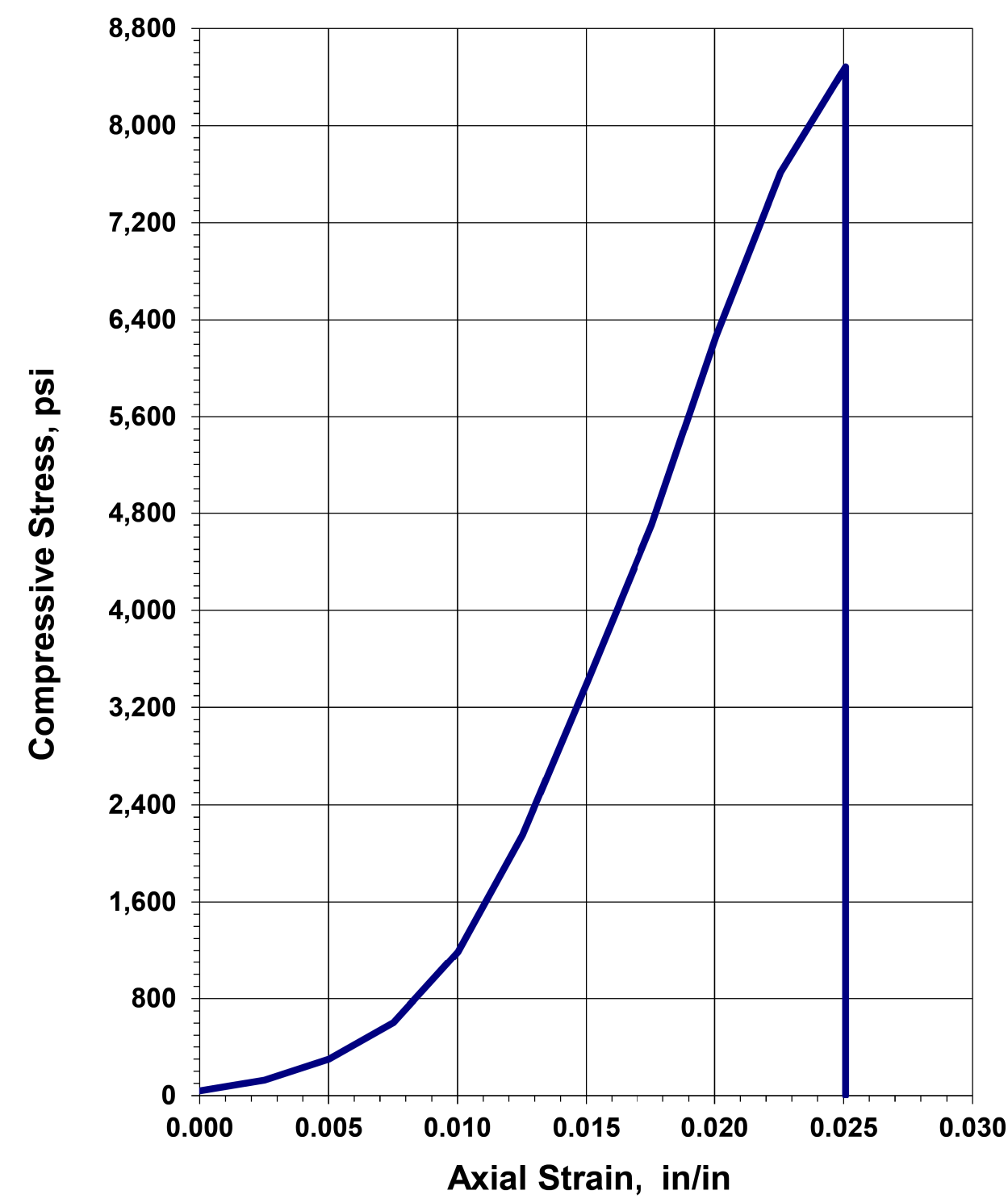
Project: FRA-161-15.80
Project No.: W-23-107
Date of Testing: 1/8/2024
Test Performed by: KL/EM

Rock Description: Gray Sandstone
Rock Formation: _____

Boring No.:	<u>B-050-0-23</u>	Average Length:	<u>3.988</u>	in	
Sample No.:	<u>RC-2</u>	Average Diameter:	<u>1.985</u>	in	
Depth (ft):	<u>21.0'</u> feet	Length to diameter ratio:	<u>2.009</u>		
Moisture condition:	<u>As received</u>	Cross Sectional Area:	<u>3.095</u>	in ²	
Sample Mass:	<u>455.36</u>	grams	Volume:	<u>0.0071</u>	ft ³
Testing Temperature:	<u>23</u>	°C	Unit Weight (sample specimen)*:	<u>140.56</u>	lbs/ft ³
Rate of Loading:	<u>108.5</u>	lbs/sec	Failure Load:	<u>26,255</u>	lbs
Testing Time:	<u>242</u>	sec	Axial Strain at Failure:	<u>0.0251</u>	in/in
(Rate 2-15 min)			Compressive Strength:	<u>8,484</u>	psi

Sample Preparation: Per ASTM D4543 *Actual test sample used for unit weight prior to testing.

Unconfined Compression Test



Before Testing



After Failure



REMARKS: _____



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**Unconfined Compressive Strength
of Intact Rock Core Specimens**
(ASTM D 7012-14)

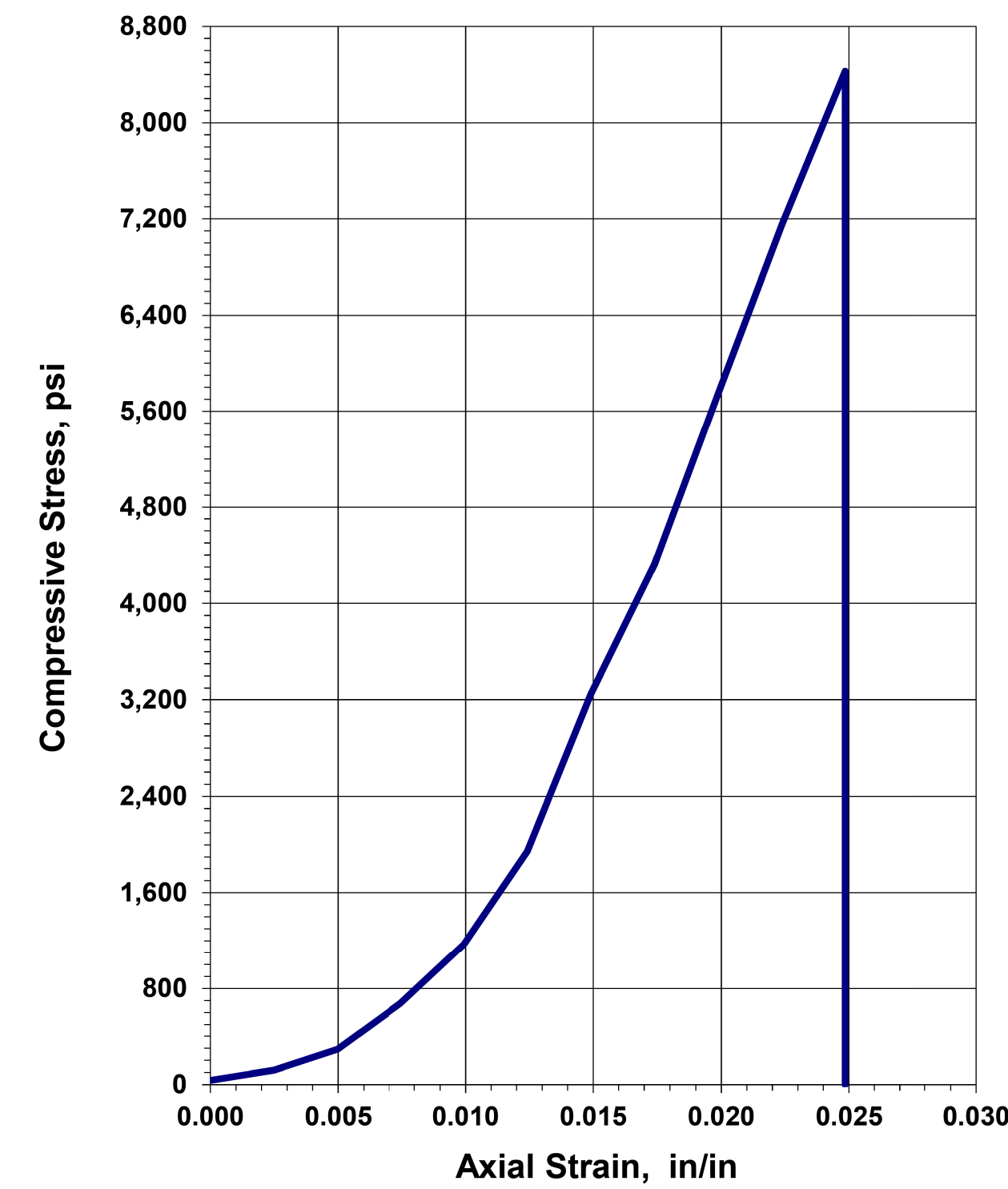
Project: FRA-161-15.80
Project No.: W-23-107
Date of Testing: 1/8/2024
Test Performed by: KL/EM

Rock Description: Gray Sandstone
Rock Formation: _____

Boring No.:	<u>B-052-0-23</u>	Average Length:	<u>4.024</u>	in	
Sample No.:	<u>RC-2</u>	Average Diameter:	<u>1.993</u>	in	
Depth (ft):	<u>21.20</u>	feet	Length to diameter ratio:	<u>2.019</u>	
Moisture condition:	<u>As received</u>	Cross Sectional Area:	<u>3.120</u>	in ²	
Sample Mass:	<u>505.98</u>	grams	Volume:	<u>0.0073</u>	ft ³
Testing Temperature:	<u>23</u>	°C	Unit Weight (sample specimen)*:	<u>153.55</u>	lbs/ft ³
Rate of Loading:	<u>112.4</u>	lbs/sec	Failure Load:	<u>26,295</u>	lbs
Testing Time:	<u>234</u>	sec	Axial Strain at Failure:	<u>0.0249</u>	in/in
(Rate 2-15 min)			Compressive Strength:	<u>8,429</u>	psi

Sample Preparation: Per ASTM D4543 *Actual test sample used for unit weight prior to testing.

Unconfined Compression Test



Before Testing



After Failure



REMARKS: _____



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**Point Load Strength Index
 of Rock Specimens**
 (ASTM D 5731-08)

Project: FRA-161-15.80
 Project No.: W-23-107
 Date of Testing: 1/8/2024
 Test Performed by: EMIKL

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 Uniaxial Compression, σ_c = K*Is

K = 12
 Mean σ_c = 5.90 MPa (0.856 psi)

*Per Section 206.1.3 of 2011 ODOT Rock Slope Design Guide

Remarks:

1



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**Point Load Strength Index
 of Rock Specimens**
 (ASTM D 5731-08)

Project: FRA-161-15.80
 Project No.: W-23-107
 Date of Testing: 1/8/2024
 Test Performed by: EMIKL

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 Uniaxial Compression, σ_c = K*Is

K = 12
 Mean σ_c = 0.39 MPa (0.057 psi)

*Per Section 206.1.3 of 2011 ODOT Rock Slope Design Guide

Remarks:

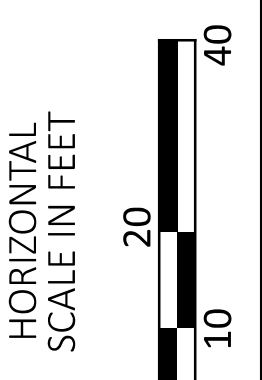
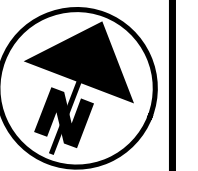
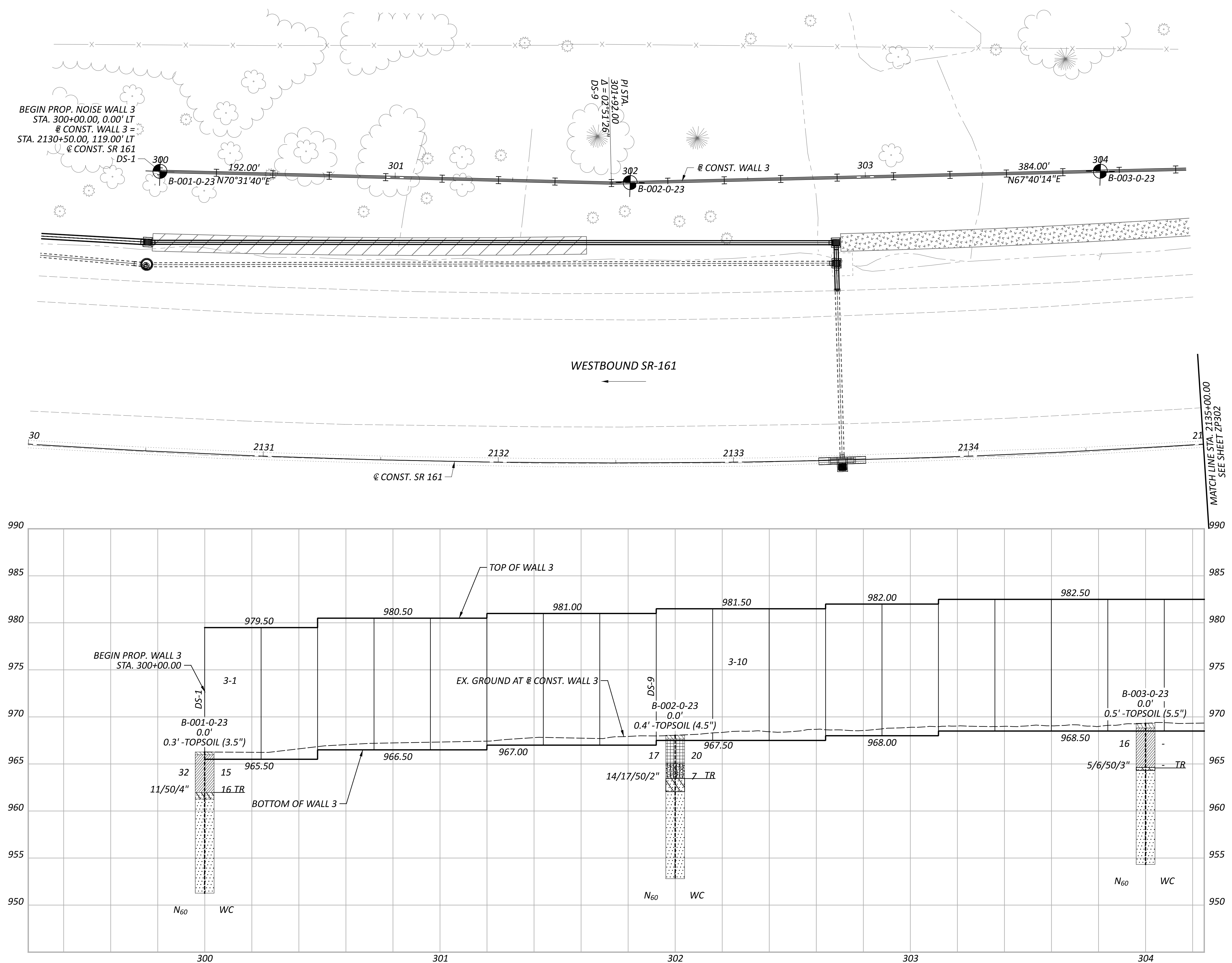


6350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949

DESIGN AGENCY	RESOURCE INTERNATIONAL
DESIGNER	JAS
REVIEWER	DEK
PROJECT ID	117607
SUBSET	5
TOTAL	66
SHEET	P.215
TOTAL	276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 3 - Plan 2 PAPER: 34x22 (in.) DATE: 1/19/2024 TIME: 10:06:46 AM USER: kevinj
 J:\GEO\GEOCH\Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP301.dgn



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

DESIGN AGENCY
RESOURCE INTERNATIONAL
 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949

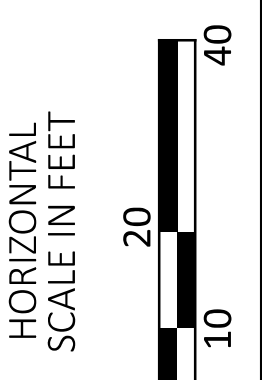
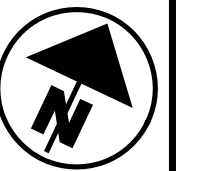
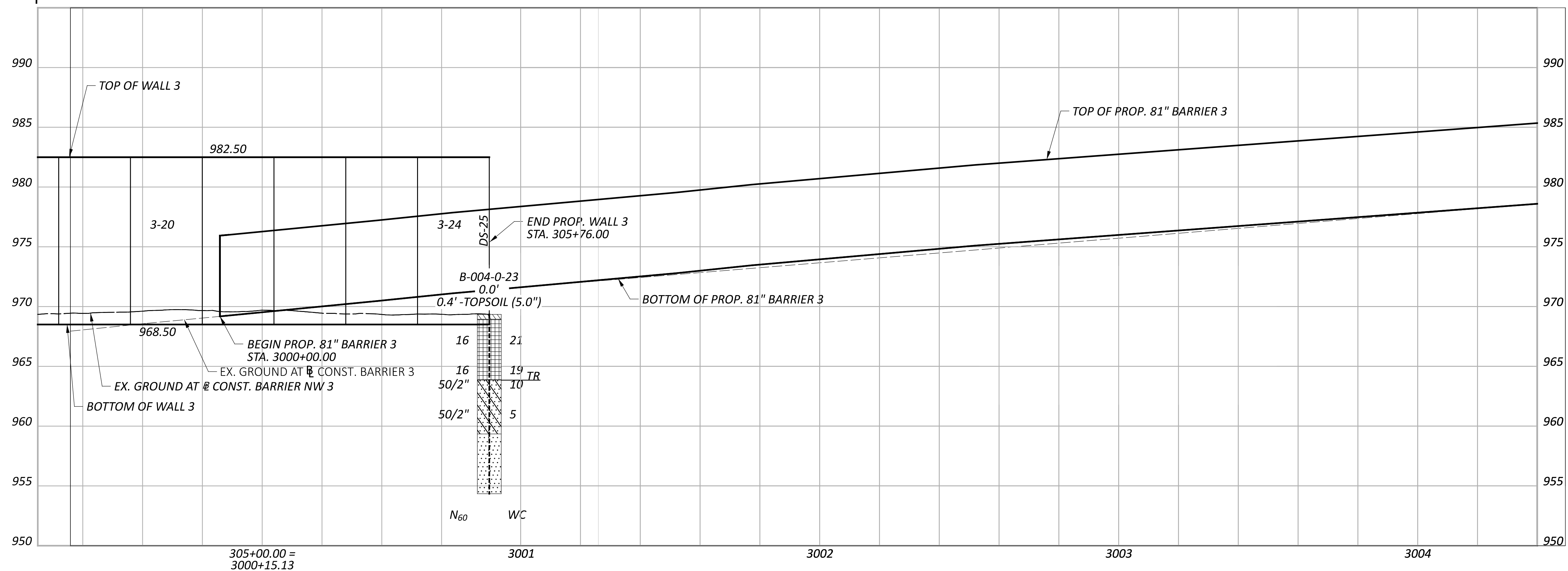
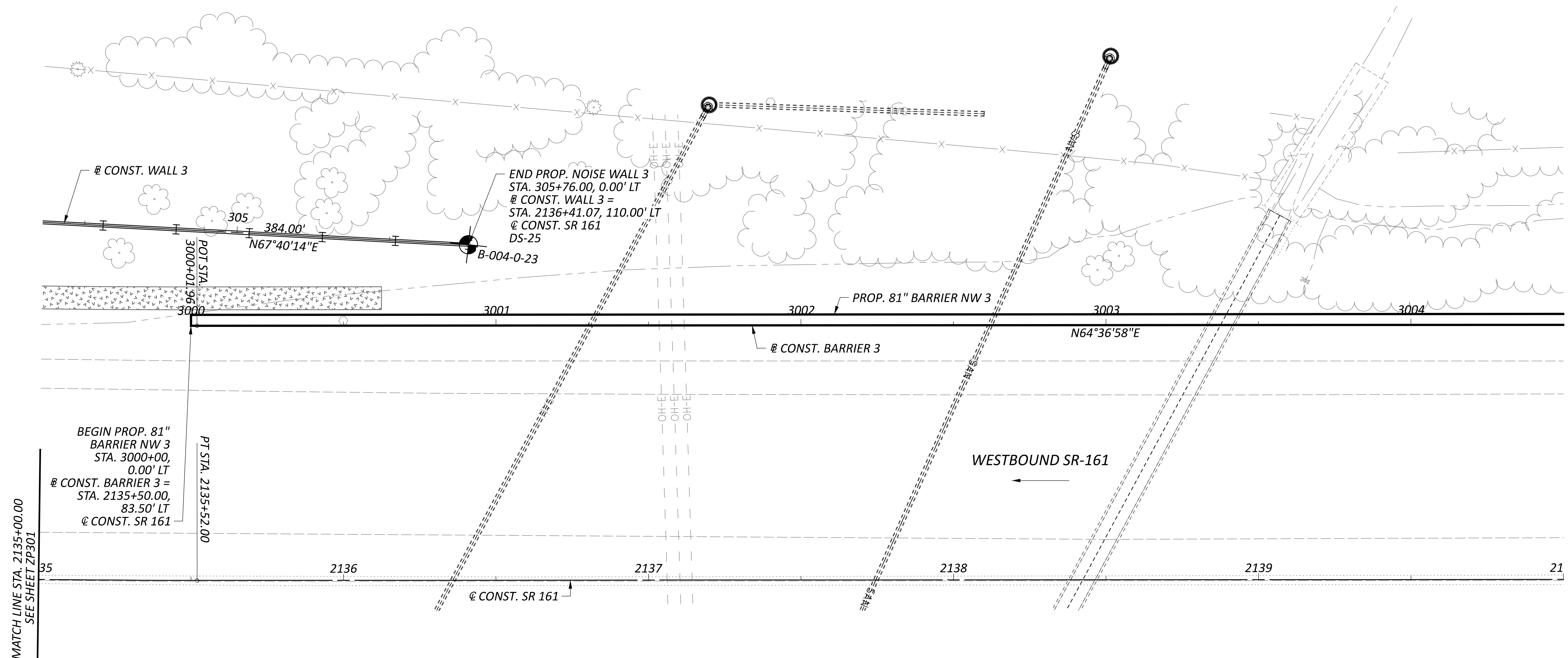
DESIGNER
KSJ

REVIEWER
DEK 1/19/24

PROJECT ID
117607

SUBSET	TOTAL
6	66

SHEET	TOTAL
P.216	276

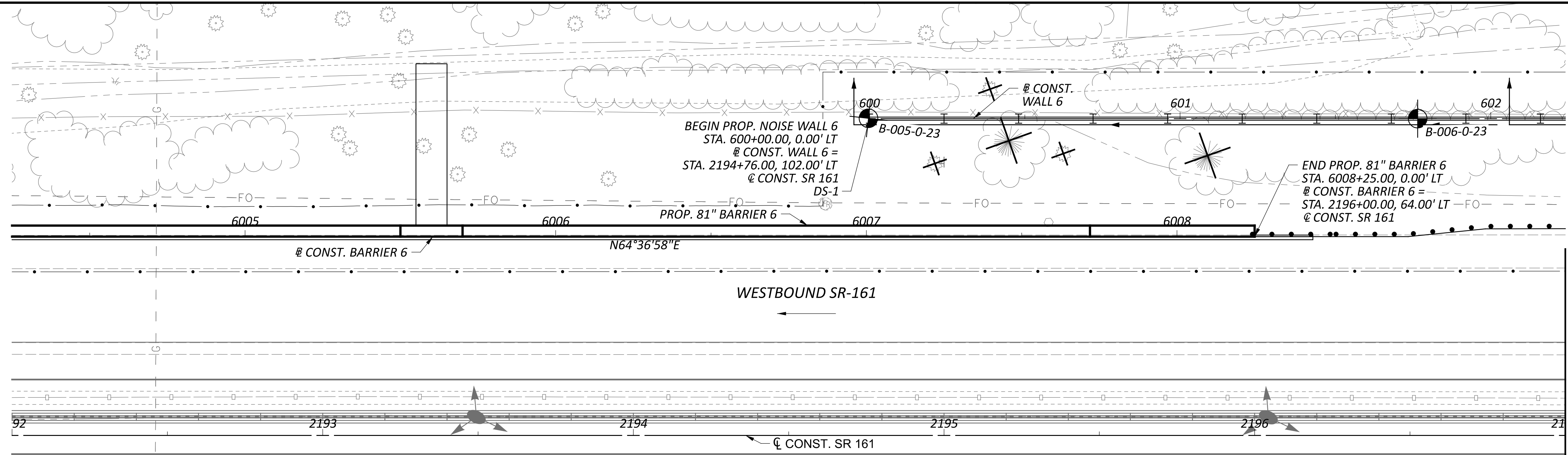


GEOTECHNICAL PROFILE - NOISE WALL 3
 STA. 2135+00.00 TO STA. 2140+00.00

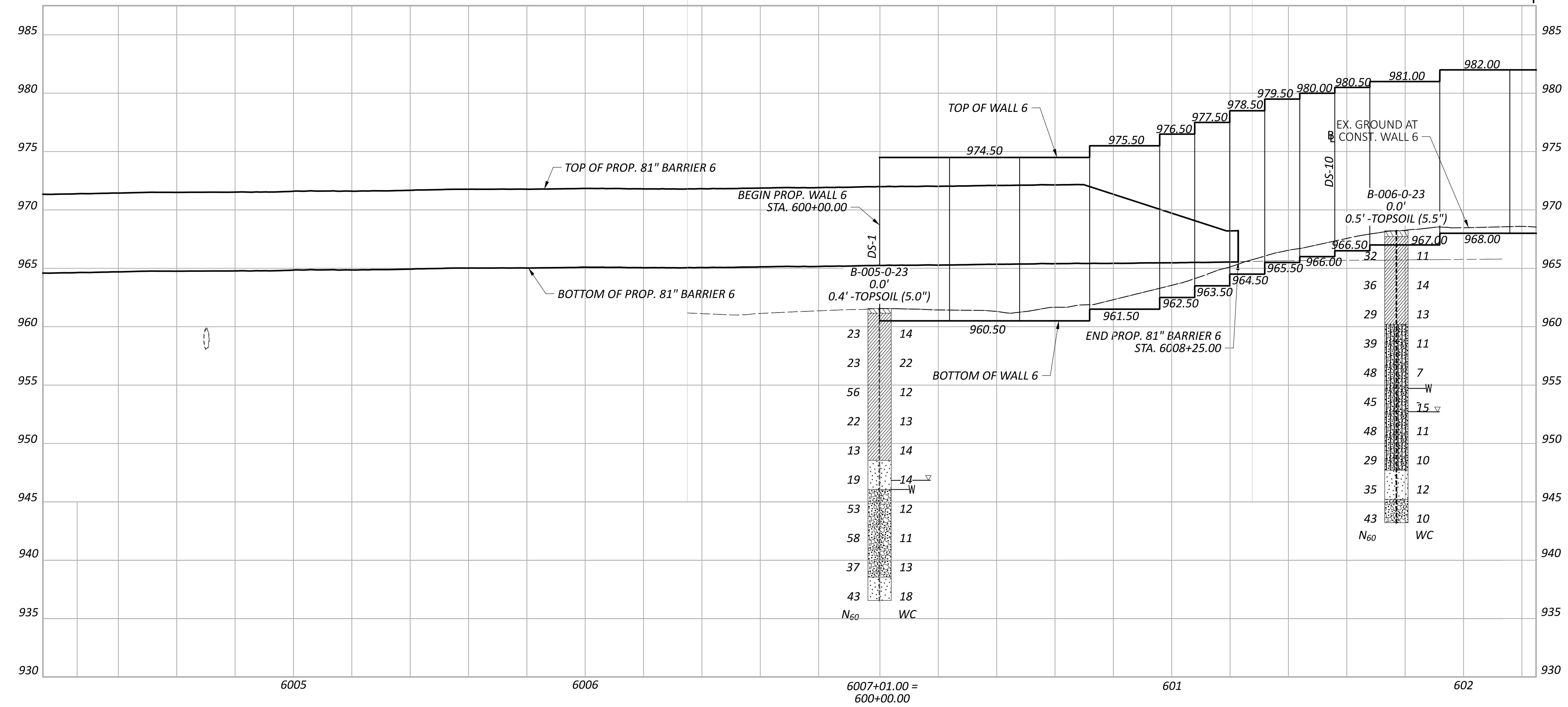
DESIGN AGENCY	
6350 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949	
DESIGNER	
KSJ	
REVIEWER	
DEK 1/19/24	
PROJECT ID	
117607	
SUBSET	TOTAL
7	66
SHEET	TOTAL
P.217	276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 6 - Plan 6 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:07:39 AM USER: kevinj
 J:\GEO TECH\Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP602.dgn



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



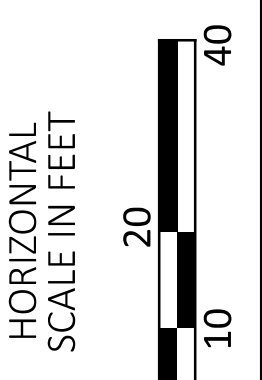
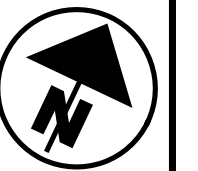
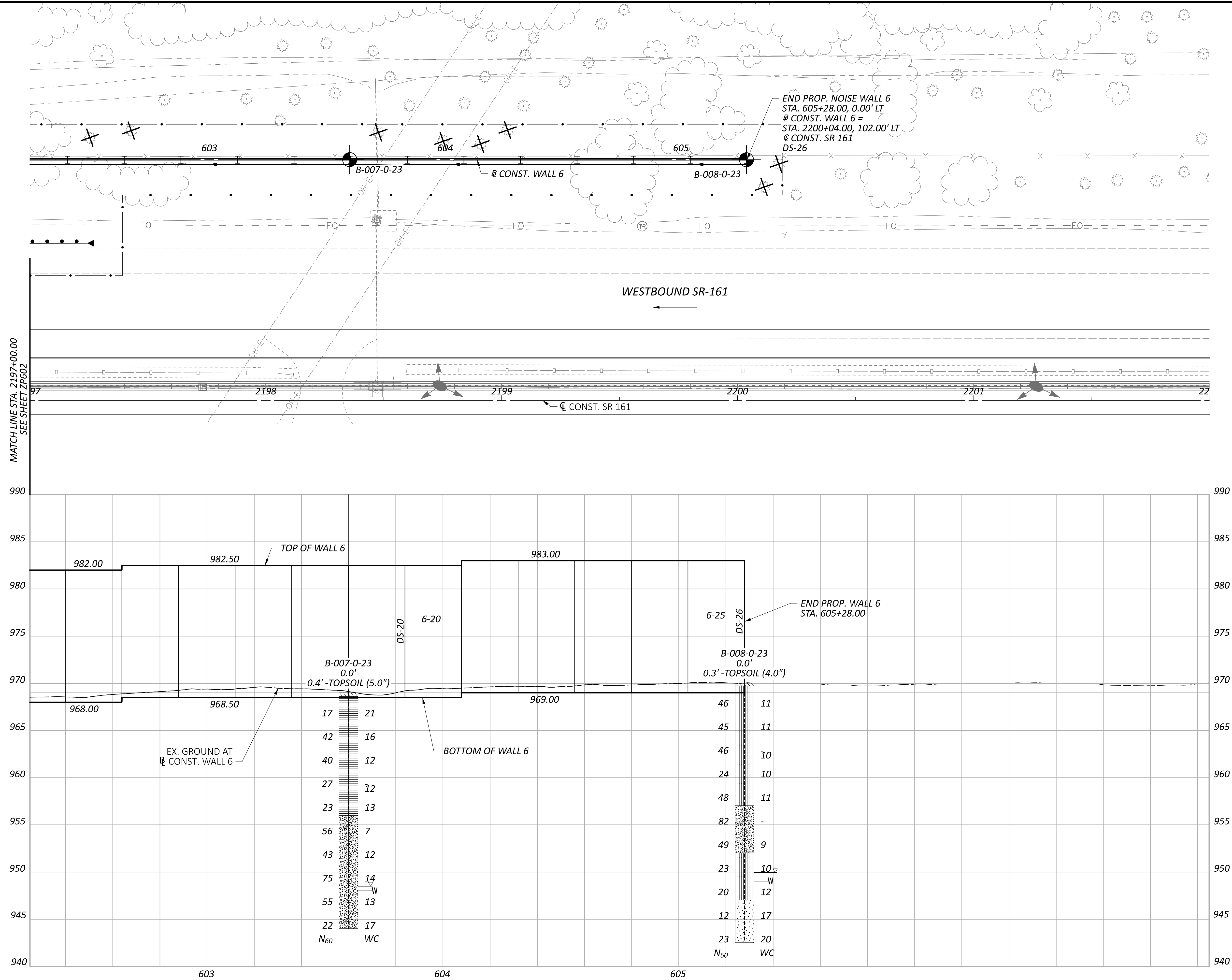
MATCH LINE STA. 2197+00.00
SEE SHEET ZP603

DESIGN AGENCY

 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
 DESIGNER
 KSJ
 REVIEWER
 DEK 1/19/24
 PROJECT ID
 117607
 SUBSET TOTAL
 8 66
 SHEET TOTAL
 P.218 276

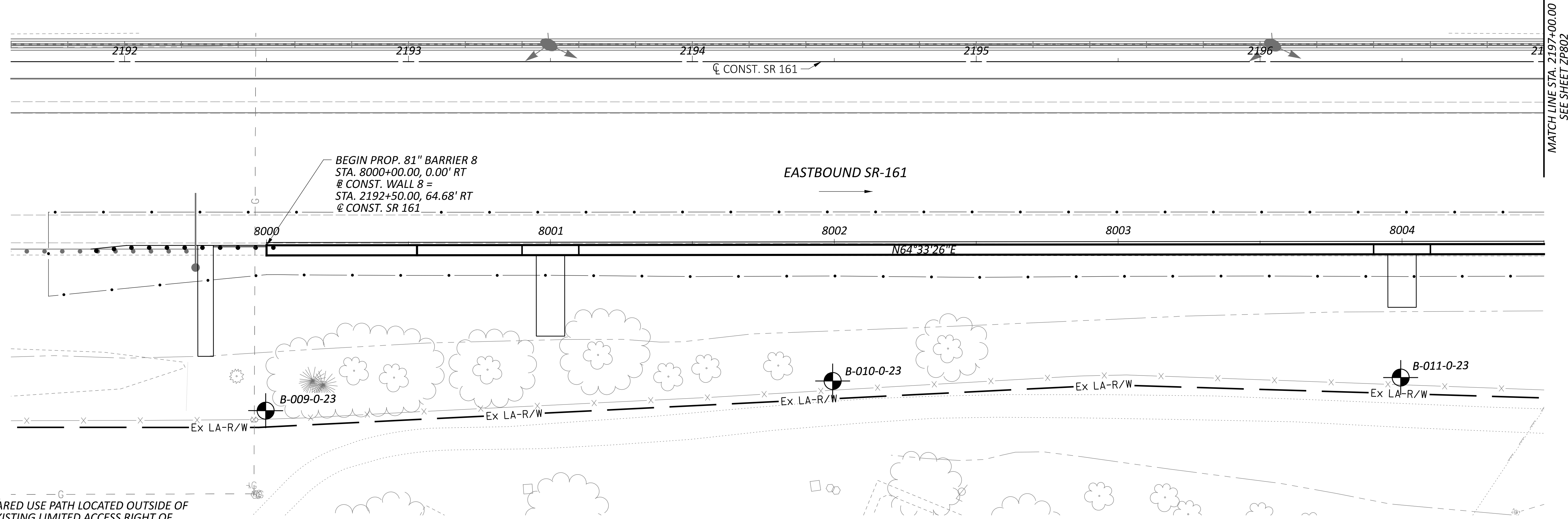
FRA-161-15.80 NOISE WALLS

MODEL: Wall 6 - Plan 28 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:07:52 AM USER: kevinj
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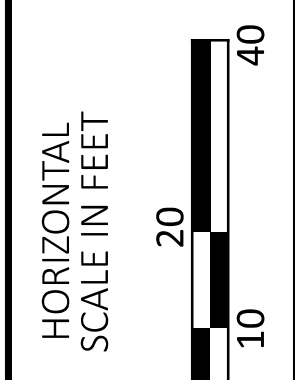
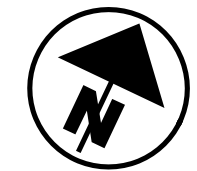
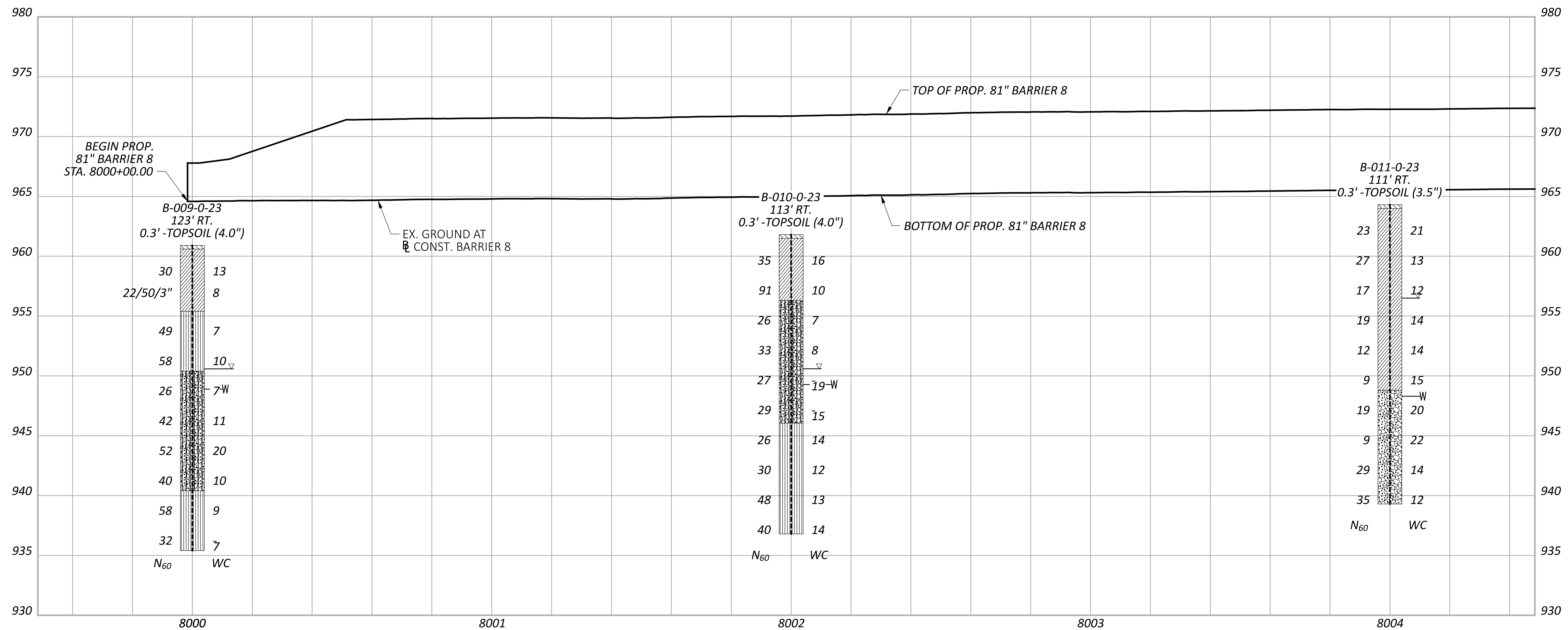


GEOTECHNICAL PROFILE - NOISE WALL 6
 STA. 2197+00.00 TO STA. 2202+00.00

DESIGN AGENCY	
 RESOURCE INTERNATIONAL 8350 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949	
DESIGNER	
KSJ	
REVIEWER	
DEK 1/19/24	
PROJECT ID	
117607	
SUBSET	TOTAL
9	66
SHEET	TOTAL
P.219	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.



GEOTECHNICAL PROFILE - NOISE WALL 8
 STA. 2192+00.00 TO STA. 2197+00.00

DESIGN AGENCY
RESOURCE INTERNATIONAL
 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949

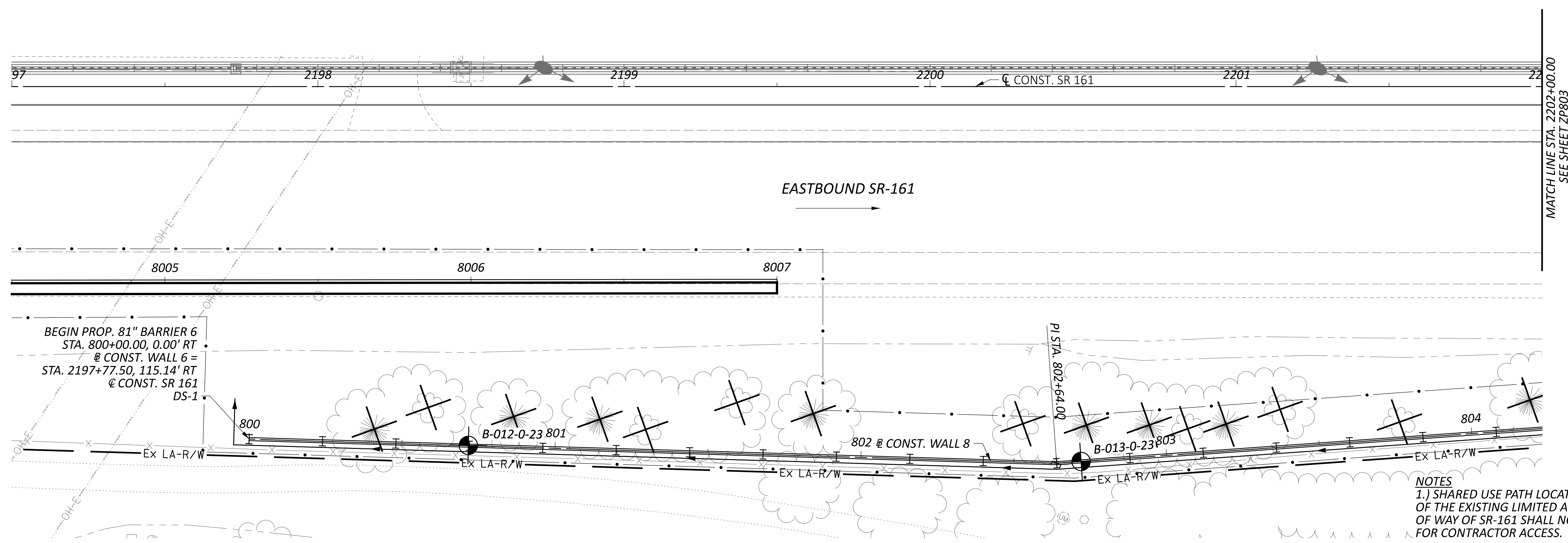
DESIGNER
 KSJ

REVIEWER
 DEK 1/19/24

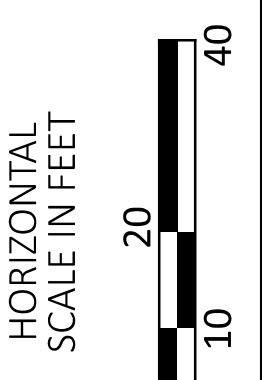
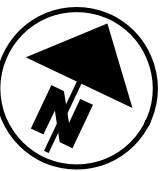
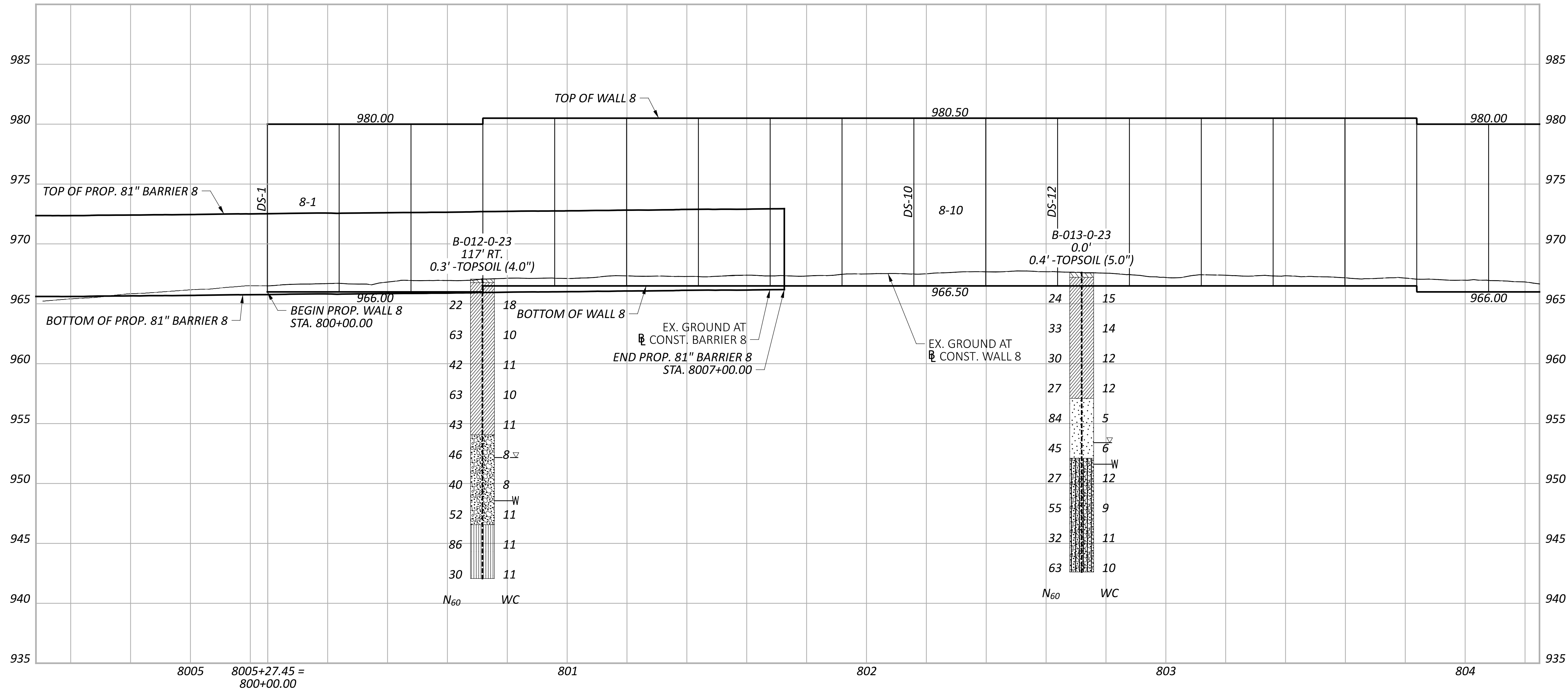
PROJECT ID
 117607

SUBSET	TOTAL
10	66

SHEET	TOTAL
P.220	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.



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

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

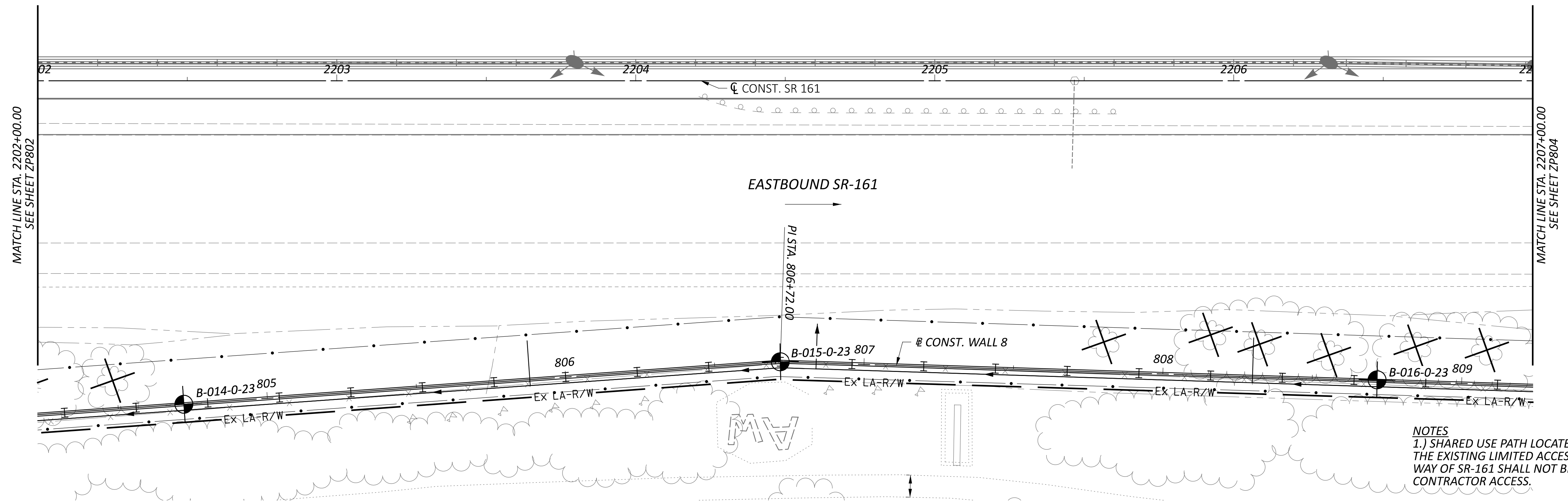
DESIGNER
KSJ

REVIEWER
DEK 1/19/24

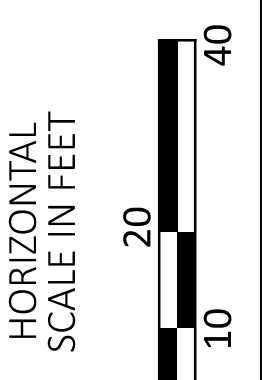
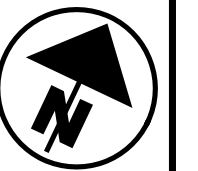
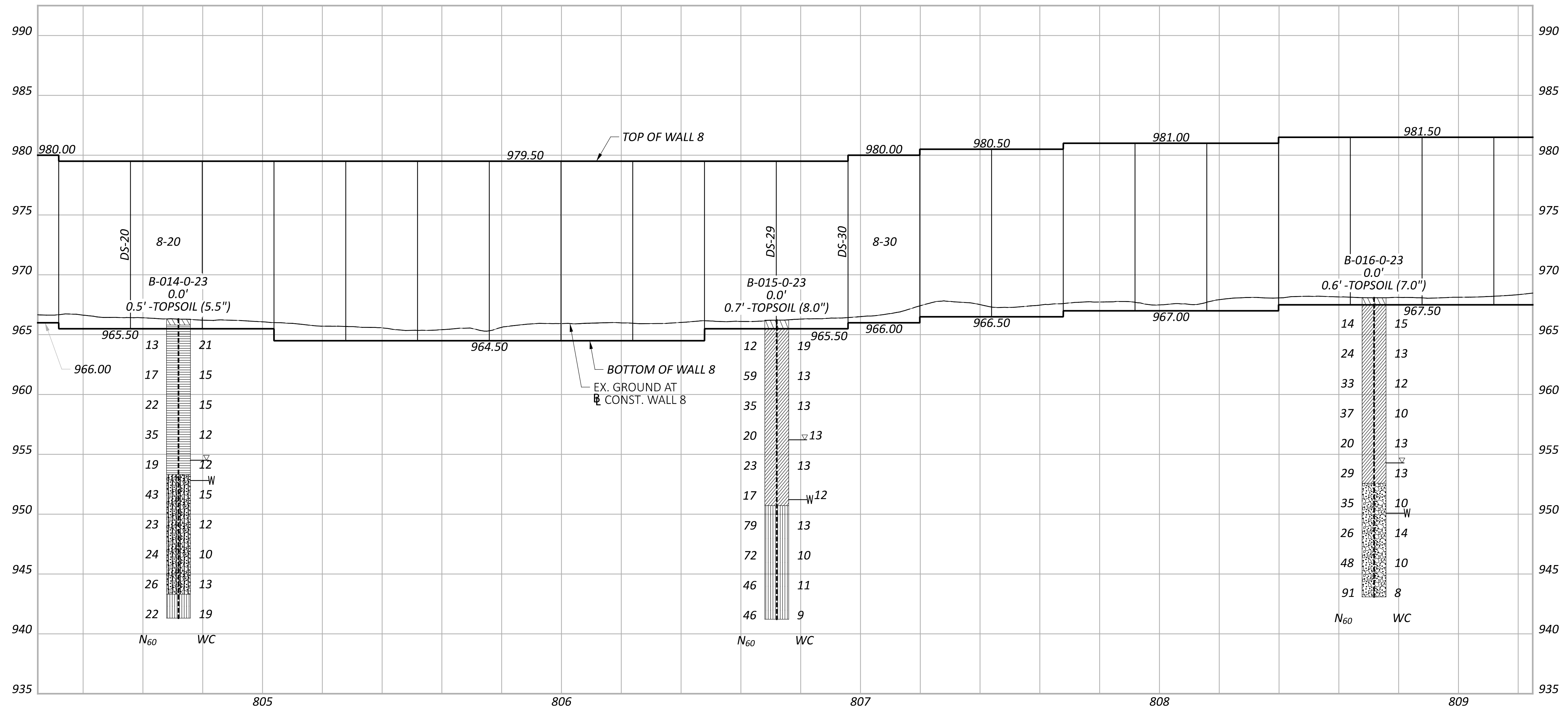
PROJECT ID
117607

SUBSET	TOTAL
11	66

SHEET	TOTAL
P.221	276

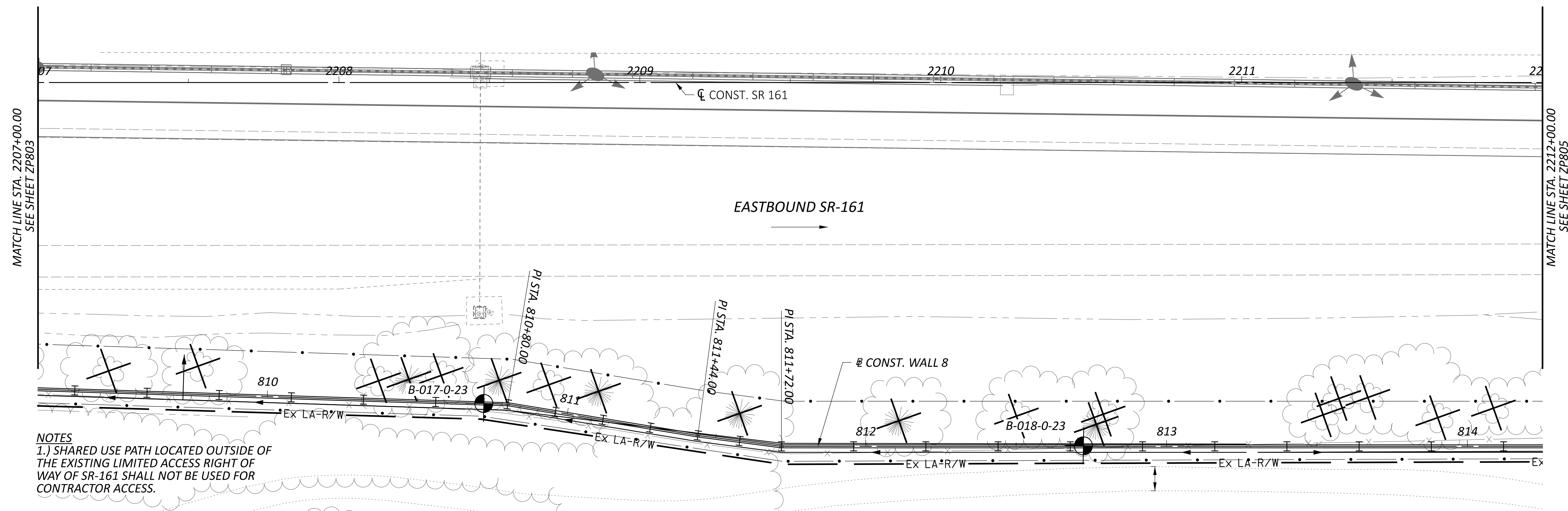


NOTES
 1.) SHARED USE PATH LOCATED OUTSIDE OF THE EXISTING LIMITED ACCESS RIGHT OF WAY OF SR-161 SHALL NOT BE USED FOR CONTRACTOR ACCESS.

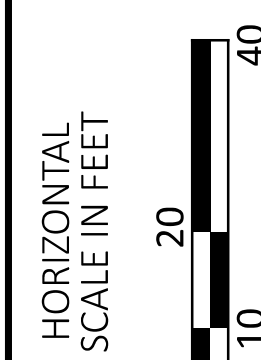
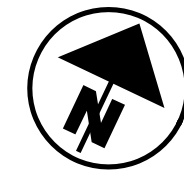
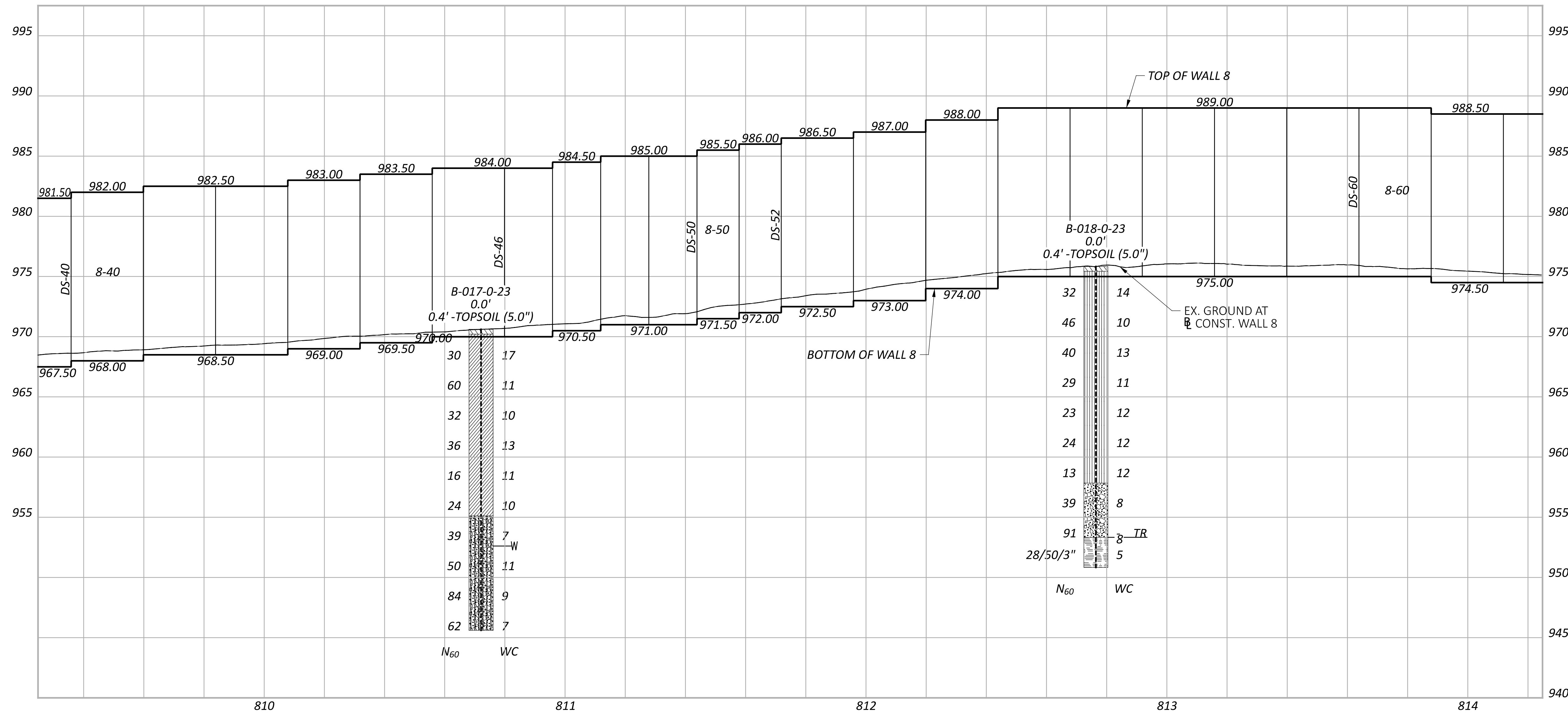


GEOTECHNICAL PROFILE - NOISE WALL 8
 STA. 2202+00.00 TO STA. 2207+00.00

DESIGN AGENCY	
 RESOURCE INTERNATIONAL 8350 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949	
DESIGNER	
KSJ	
REVIEWER	
DEK 1/19/24	
PROJECT ID	
117607	
SUBSET	TOTAL
12	66
SHEET	TOTAL
P.222	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.



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

DESIGN AGENCY



8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949

DESIGNER

KSJ

REVIEWER

DEK 1/19/24

PROJECT ID

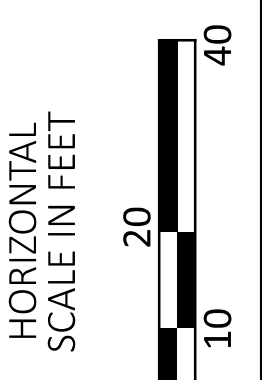
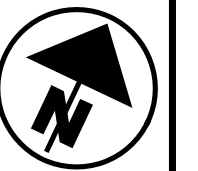
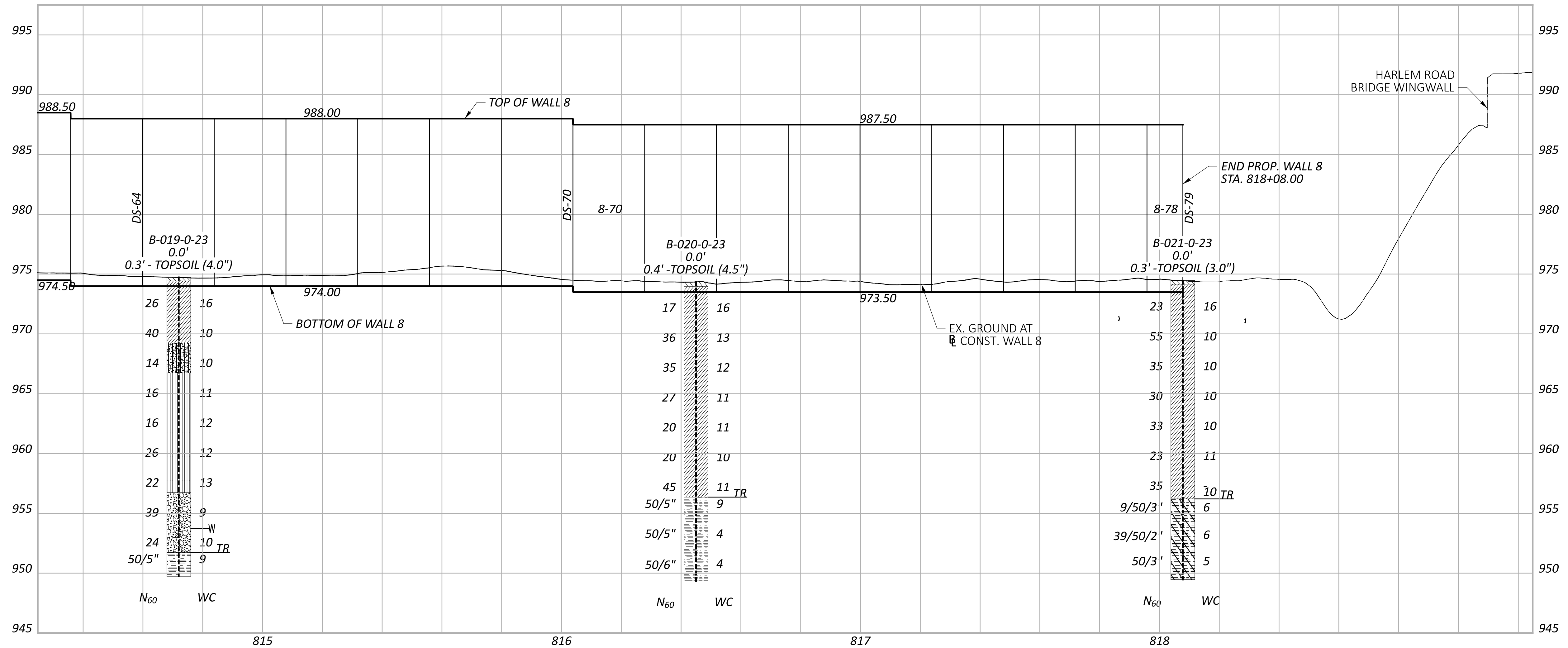
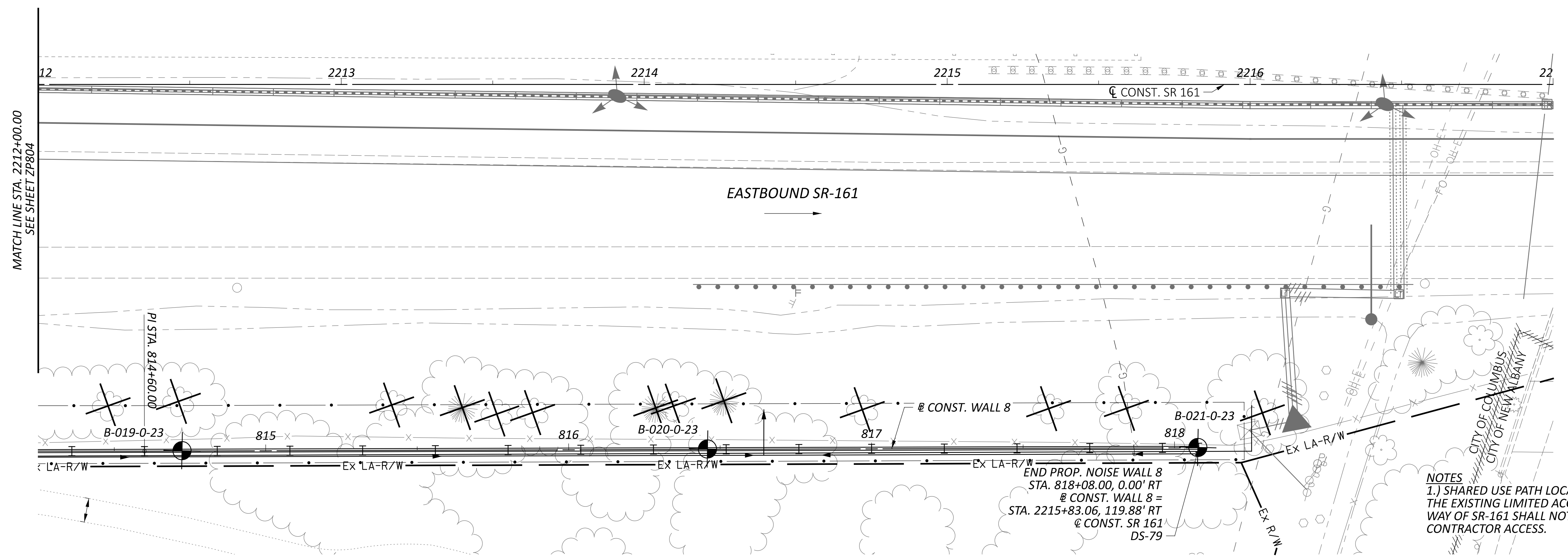
117607

SUBSET TOTAL

13 66

SHEET TOTAL

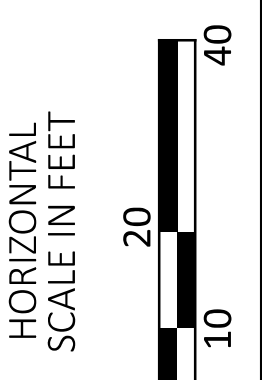
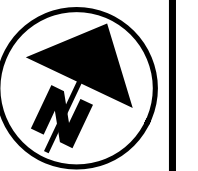
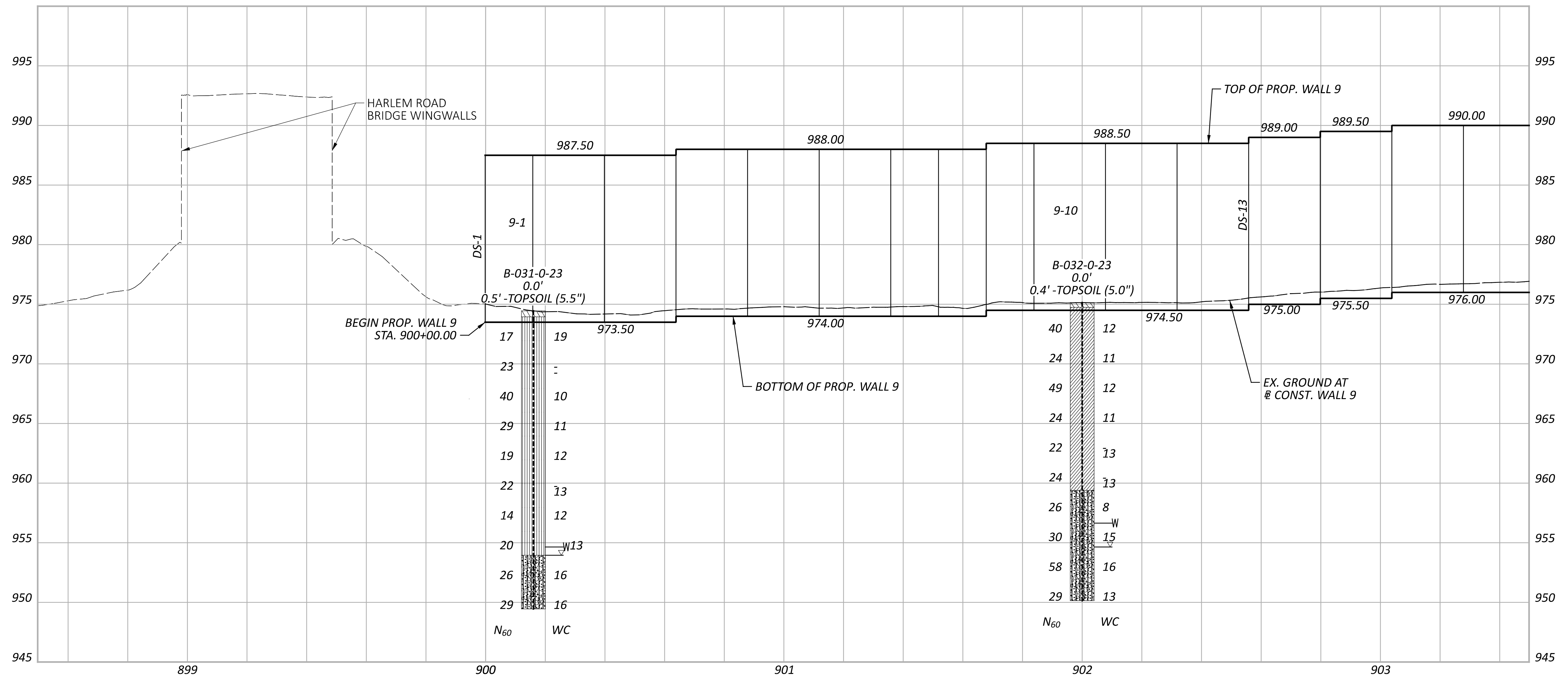
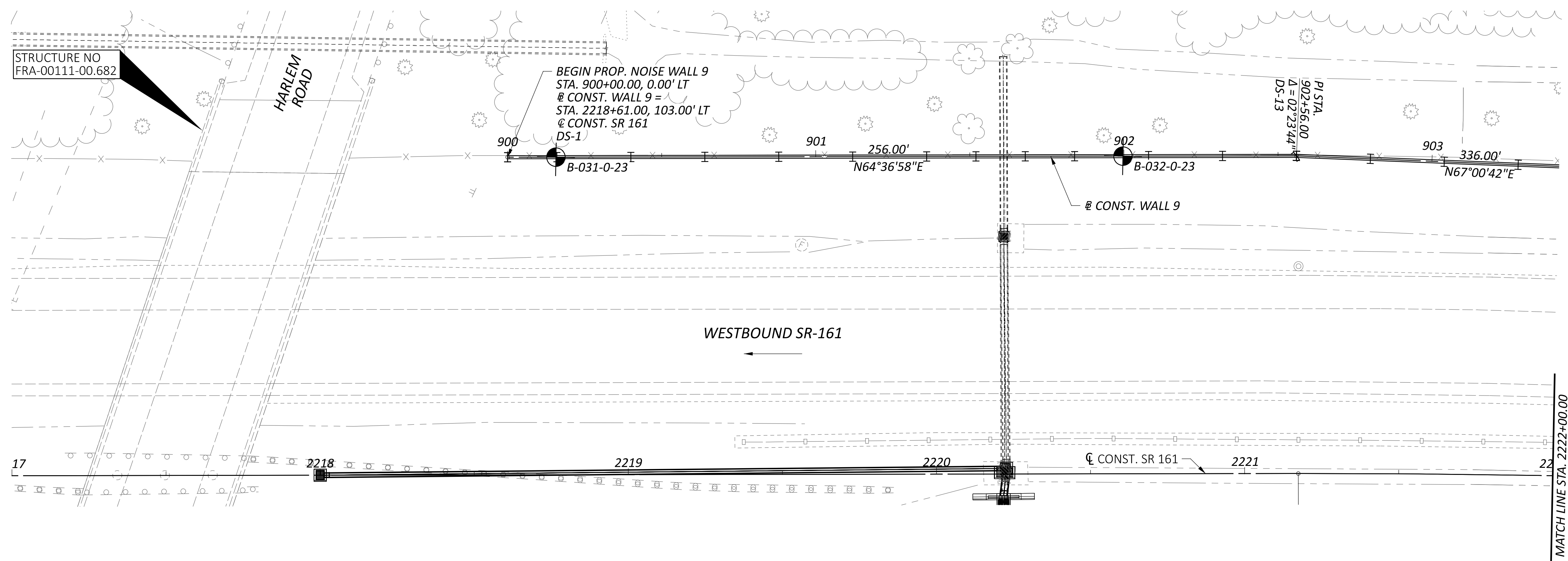
P.223 276



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

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.

DESIGN AGENCY	
 RESOURCE INTERNATIONAL 8350 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949	
DESIGNER	
KSJ	
REVIEWER	
DEK 1/19/24	
PROJECT ID	
117607	
SUBSET	TOTAL
14	66
SHEET	TOTAL
P.224	276

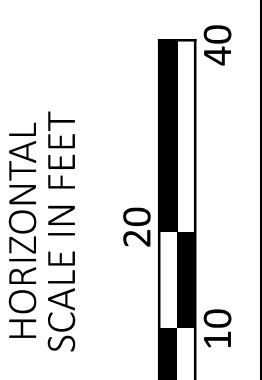
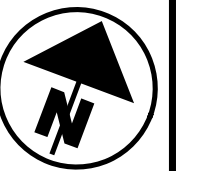
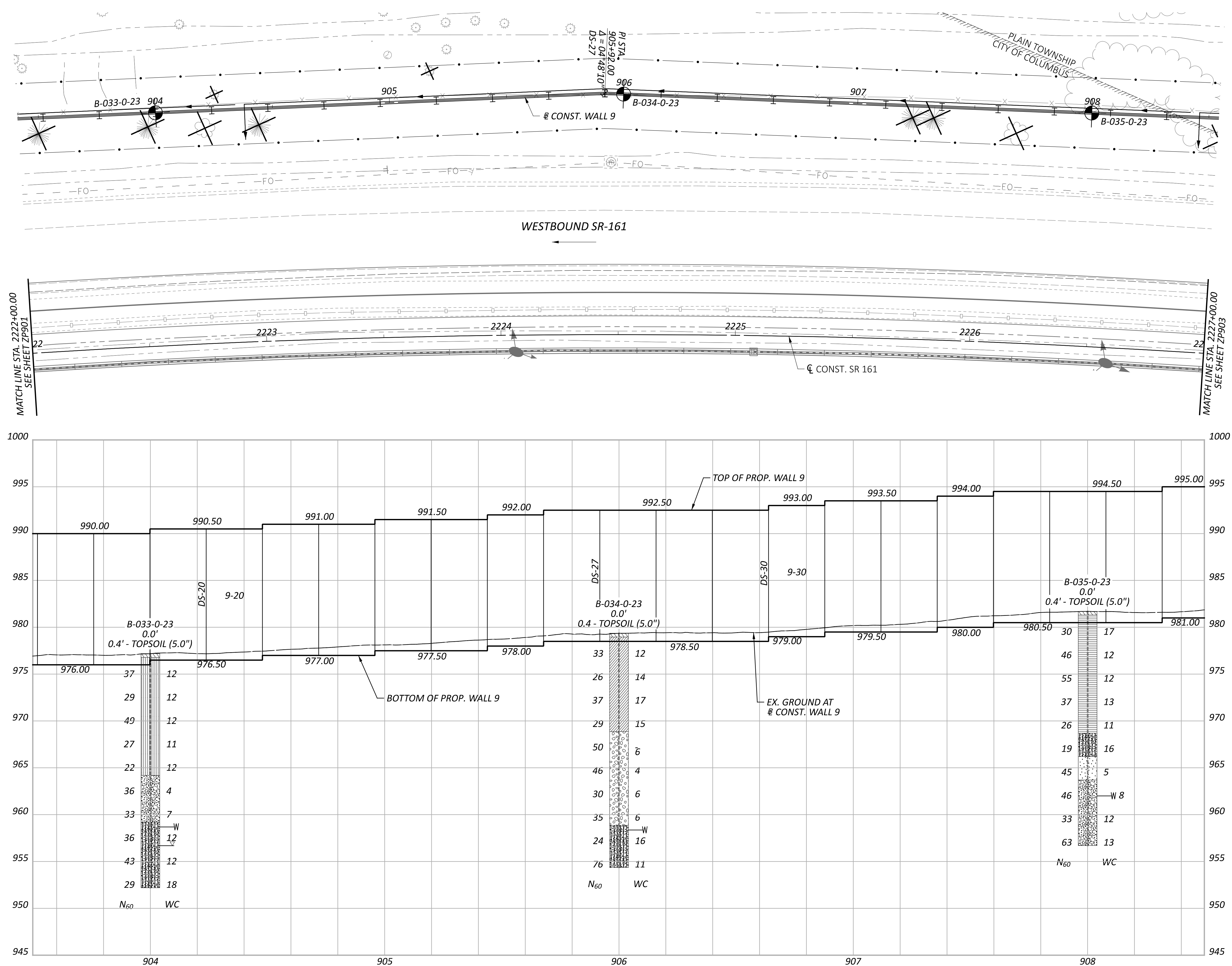


GEOTECHNICAL PROFILE - NOISE WALL 9
 STA. 2217+00.00 TO STA. 2222+00.00

DESIGN AGENCY	
8350 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949	
DESIGNER	
KSJ	
REVIEWER	
DEK 1/19/24	
PROJECT ID	
117607	
SUBSET	TOTAL
15	66
SHEET	TOTAL
P.225	276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 9 - Plan 13 PAPER SIZE: 34x42 (in.) DATE: 1/19/2024 TIME: 10:09:16 AM USER: kevinj
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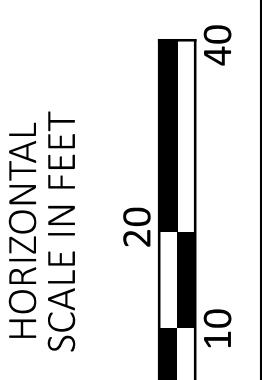
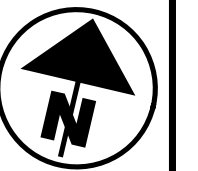
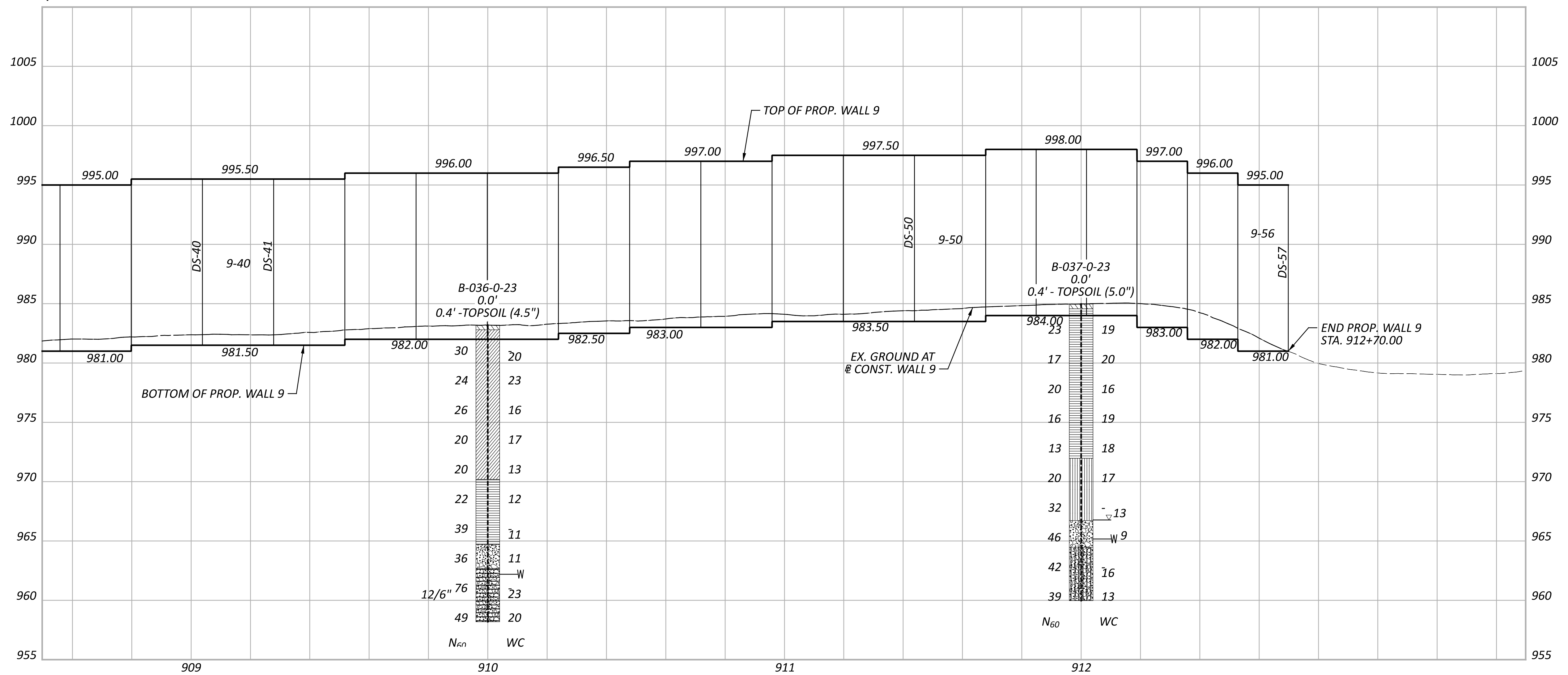
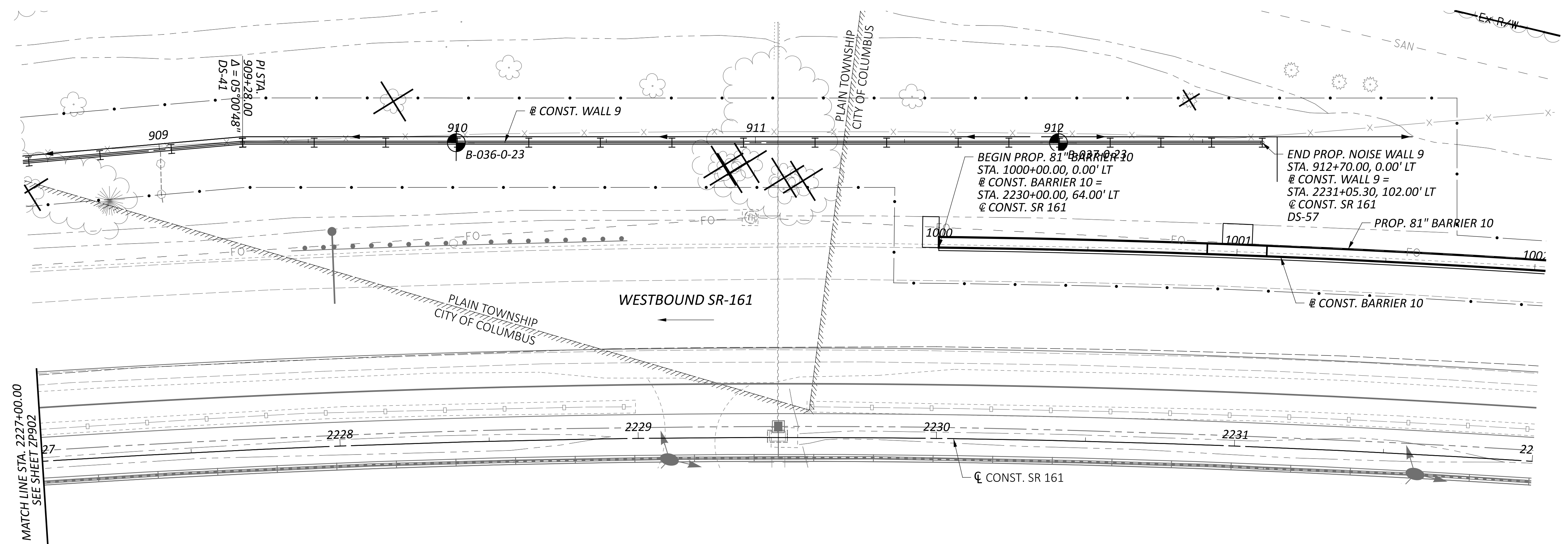


**GEOTECHNICAL PROFILE - NOISE WALL 9
 STA. 2222+00.00 TO STA. 2227+00.00**

DESIGN AGENCY	
6350 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949	
DESIGNER	
KSJ	
REVIEWER	
DEK 1/19/24	
PROJECT ID	
117607	
SUBSET	TOTAL
16	66
SHEET	TOTAL
P.226	276

FRA-161-15.80 NOISE WALLS

MODEL: Wall 9 - Plan 14 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:09:27 AM USER: kevinj
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**GEOTECHNICAL PROFILE - NOISE WALL 9
 STA. 2227+00.00 TO STA. 2232+00.00**

DESIGN AGENCY
RESOURCE INTERNATIONAL
 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949

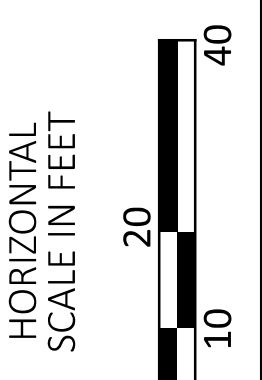
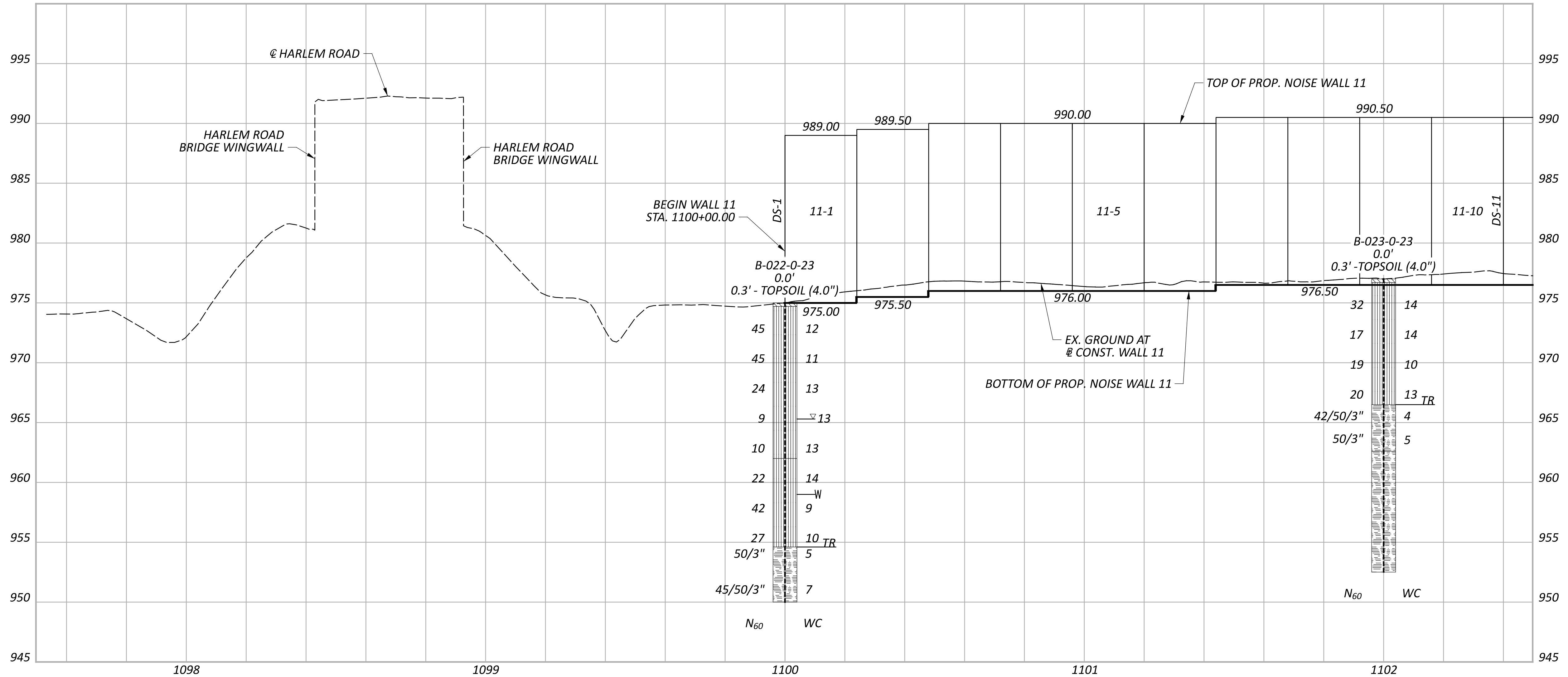
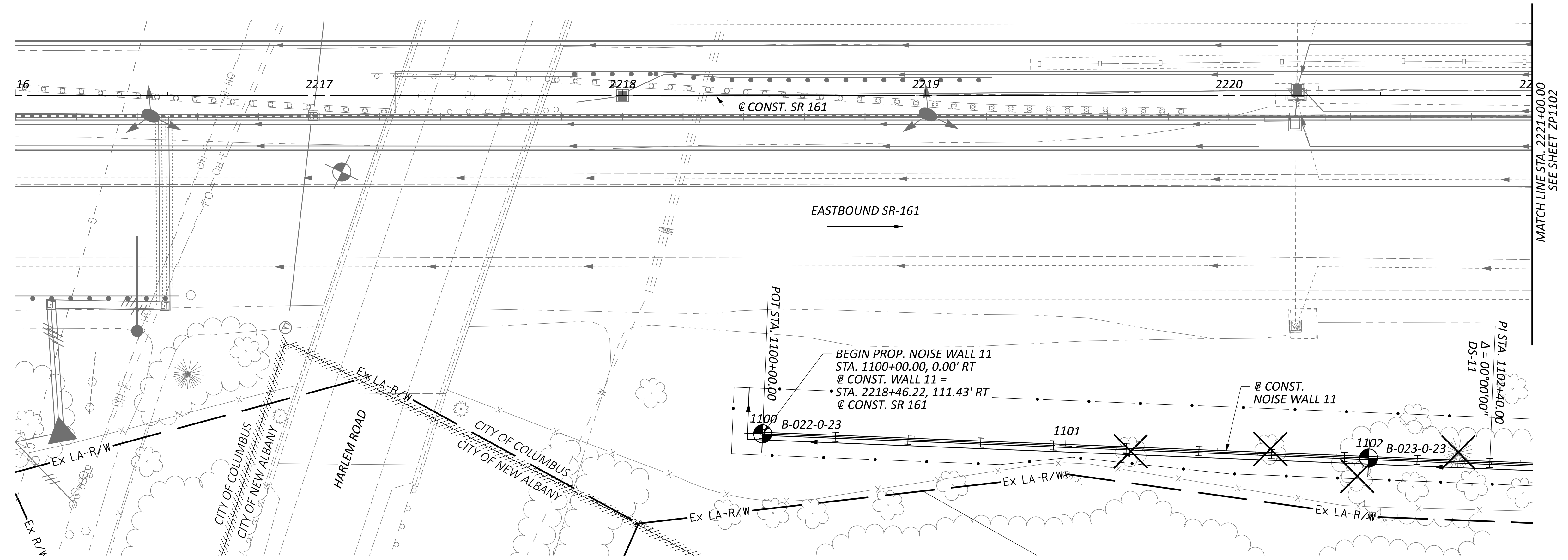
DESIGNER
KSJ

REVIEWER
DEK 1/19/24

PROJECT ID
117607

SUBSET	TOTAL
17	66

SHEET	TOTAL
P.227	276



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

DESIGN AGENCY
RESOURCE INTERNATIONAL
 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949

DESIGNER
KSJ

REVIEWER
DEK 1/19/24

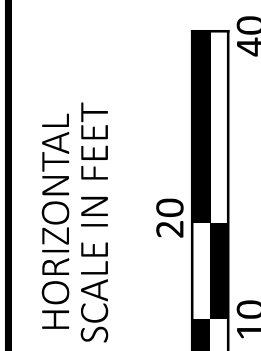
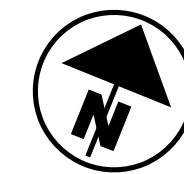
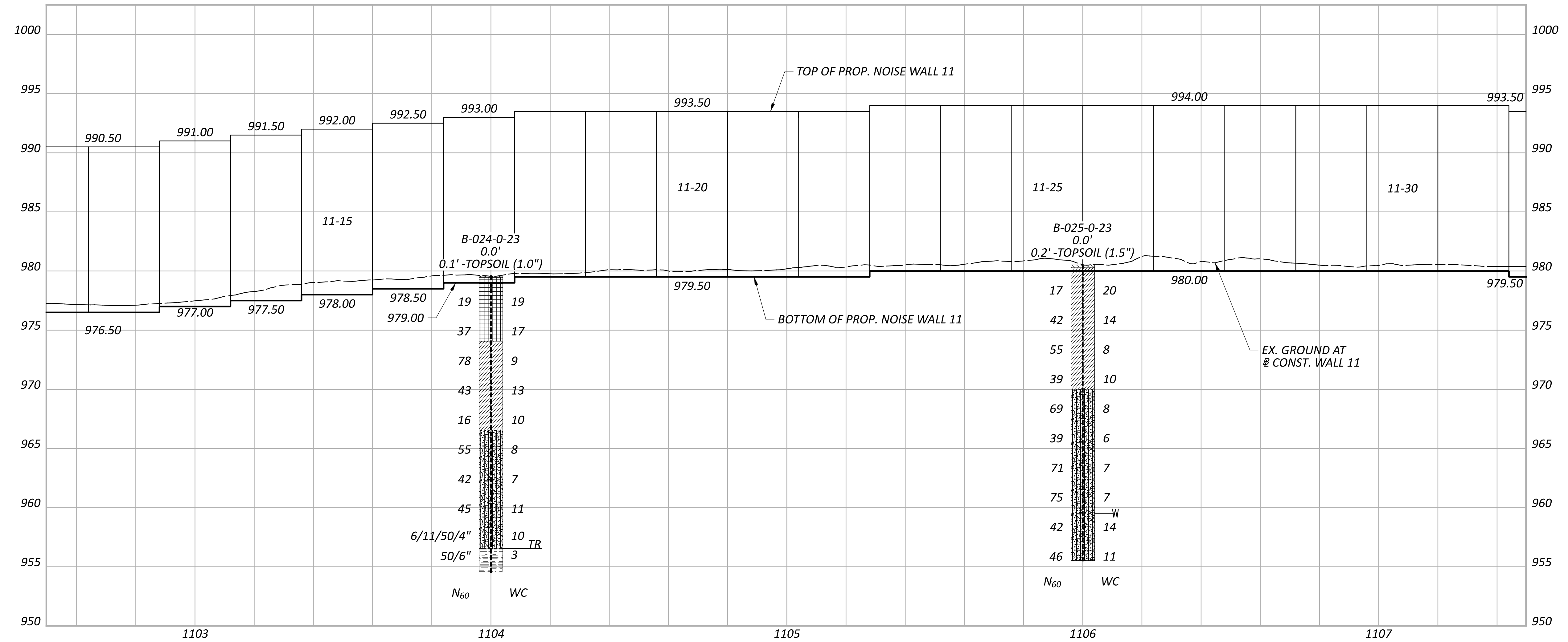
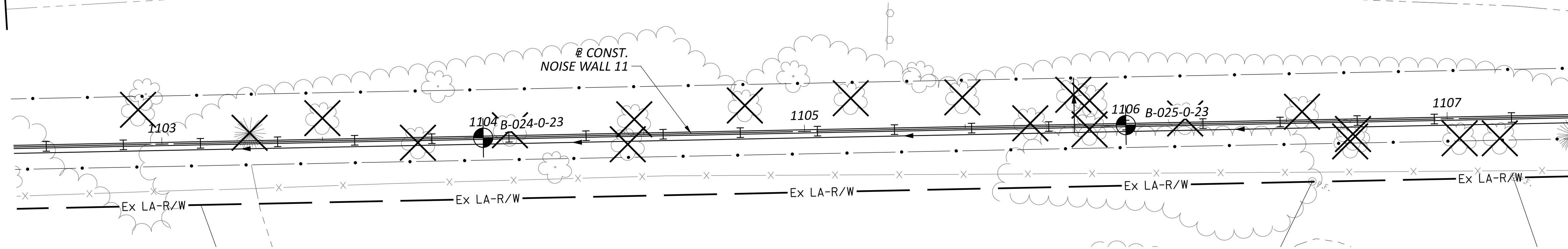
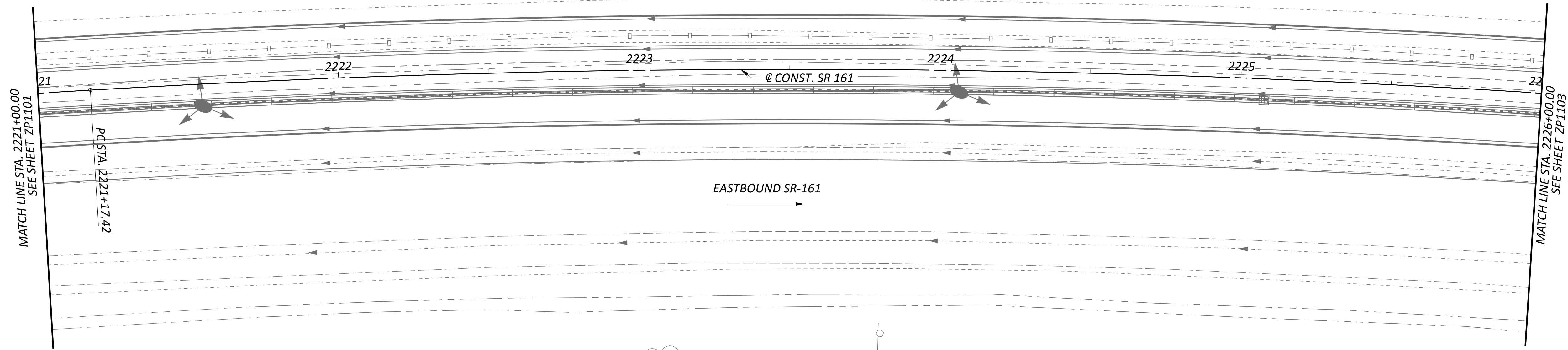
PROJECT ID
117607

SUBSET TOTAL
 18 66

SHEET TOTAL
 P.228 276

FRA-161-15.80 NOISE WALLS

MODEL: Plan-1 PAPER: 34x42 (in.) DATE: 1/19/2024 TIME: 10:09:58 AM USER: kevinj
 J:\GEO TECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1102.dgn



**GEOTECHNICAL PROFILE - NOISE WALL 11
 STA. 2221+00.00 TO STA. 2226+00.00**

DESIGN AGENCY



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

DESIGNER

KSJ

REVIEWER

DEK 1/19/24

PROJECT ID

117607

SUBSET TOTAL

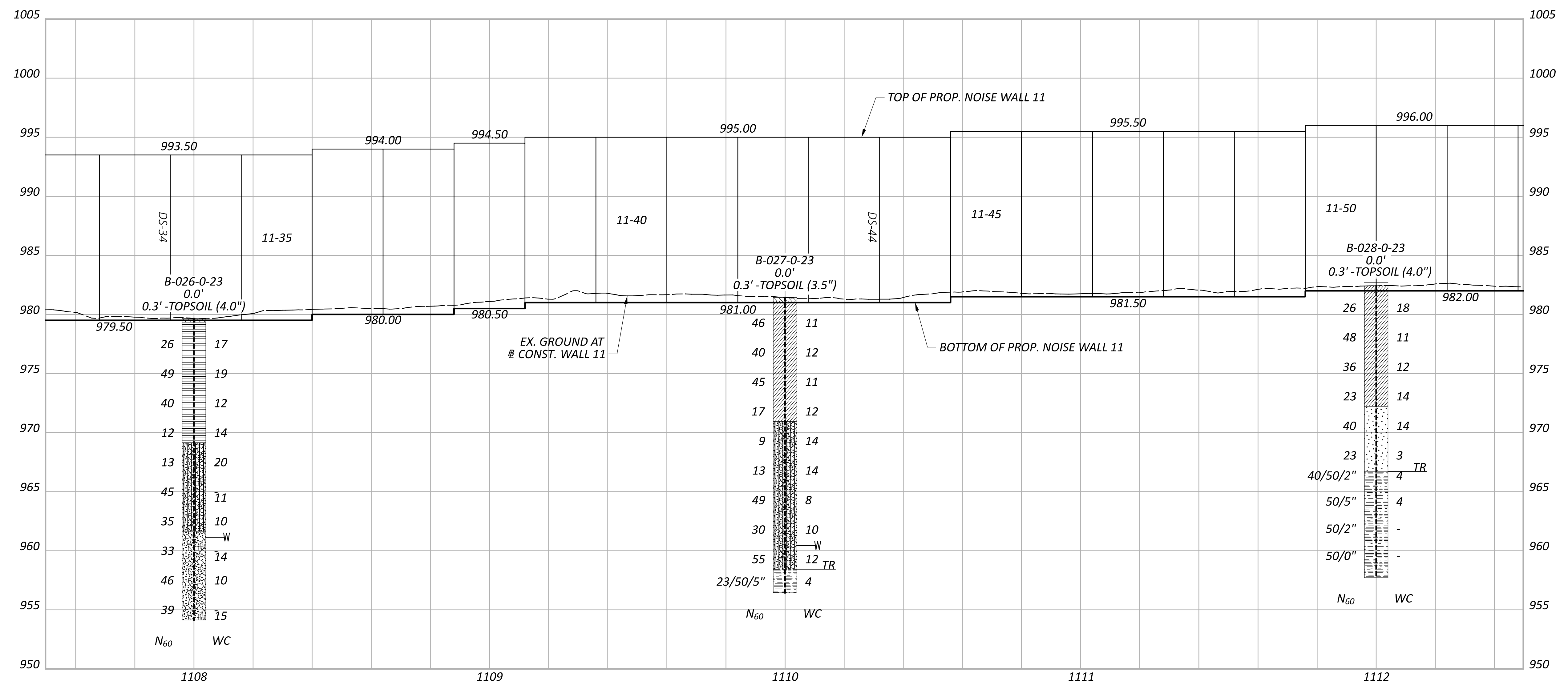
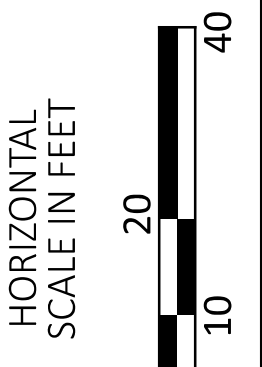
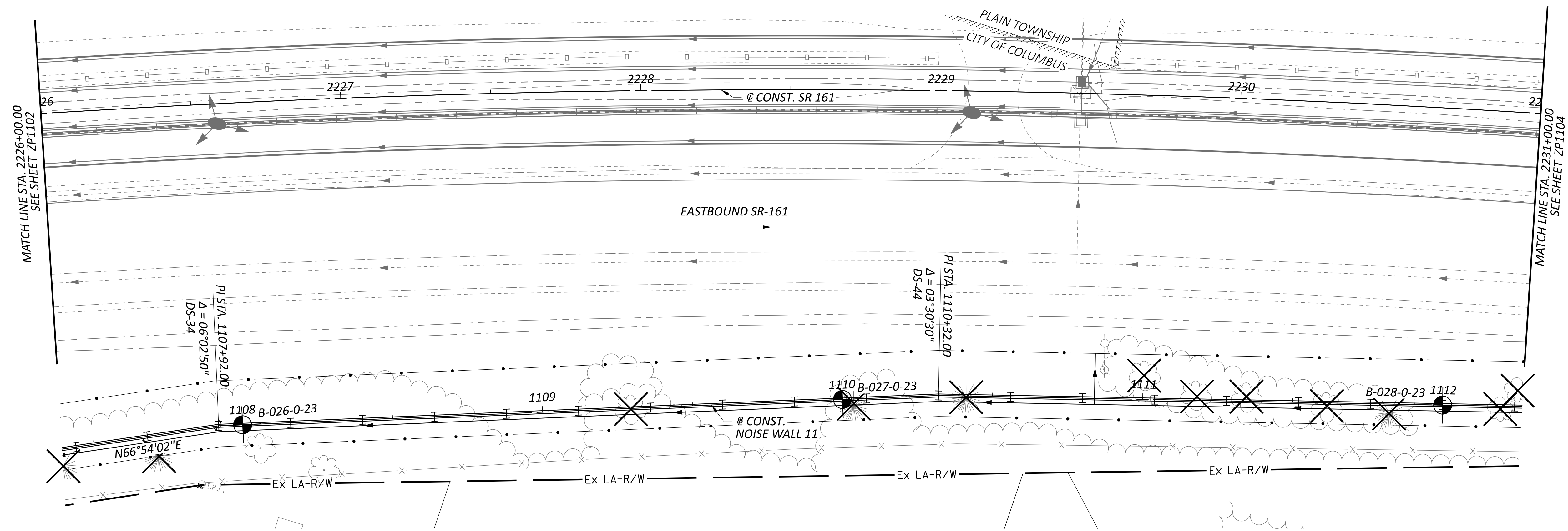
19 66

SHEET TOTAL

P.229 276

FRA-161-15.80 NOISE WALLS

MODEL: Plan-2 PAPER SIZE: 34x42 (in.) DATE: 1/19/2024 TIME: 10:10:10 AM USER: kevinj
 J:\GEO TECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607_400-Engineering\Sheets\117607_ZP1103.dgn



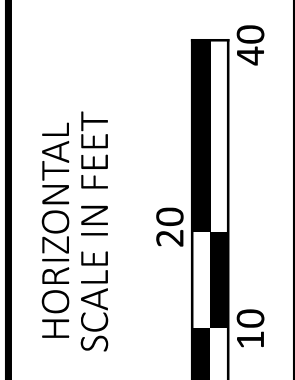
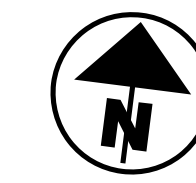
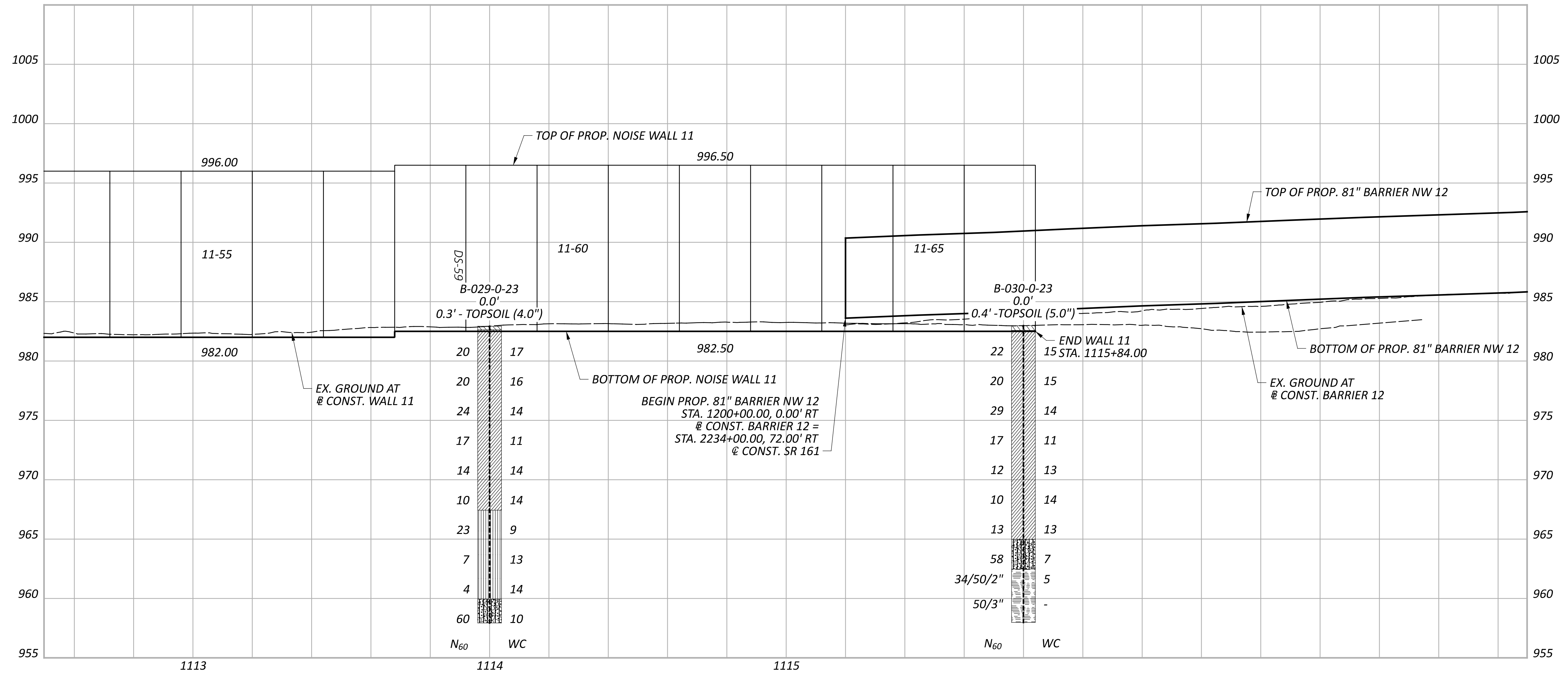
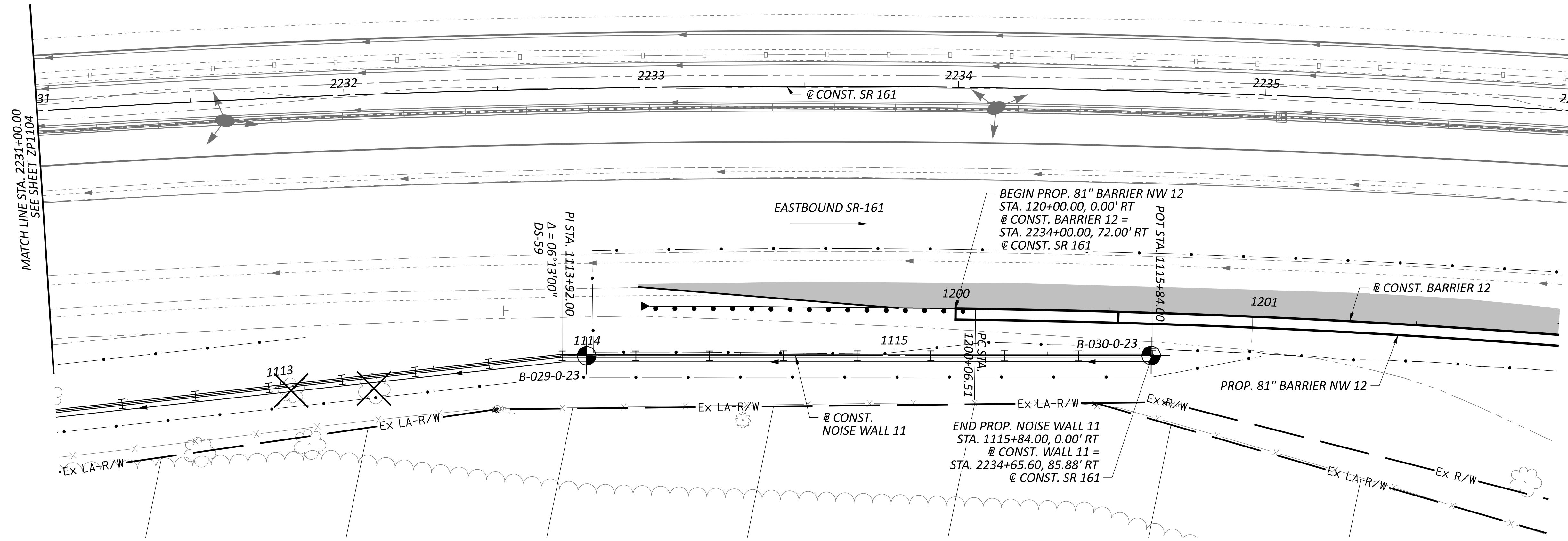
**GEOTECHNICAL PROFILE - NOISE WALL 11
 STA. 2226+00.00 TO STA. 2231+00.00**

DESIGN AGENCY

 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
 DESIGNER
 KSJ
 REVIEWER
 DEK 1/19/24
 PROJECT ID
 117607
 SUBSET TOTAL
 20 66
 SHEET TOTAL
 P.230 276

FRA-161-15.80 NOISE WALLS

MODEL: Plan-3 PAPER SIZE: 34x42 (in.) DATE: 1/19/2024 TIME: 10:10:22 AM USER: kevinj
 J:\GEO TECH\Geotech Connect Projects\2023\107-FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1104.dgn



**GEOTECHNICAL PROFILE - NOISE WALL 11
 STA. 2231+00.00 TO STA. 2236+00.00**

DESIGN AGENCY

 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949

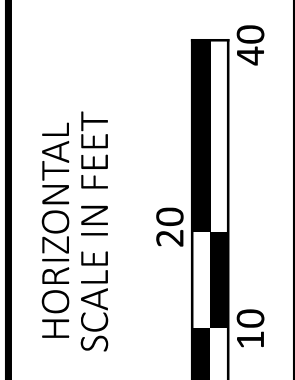
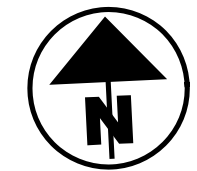
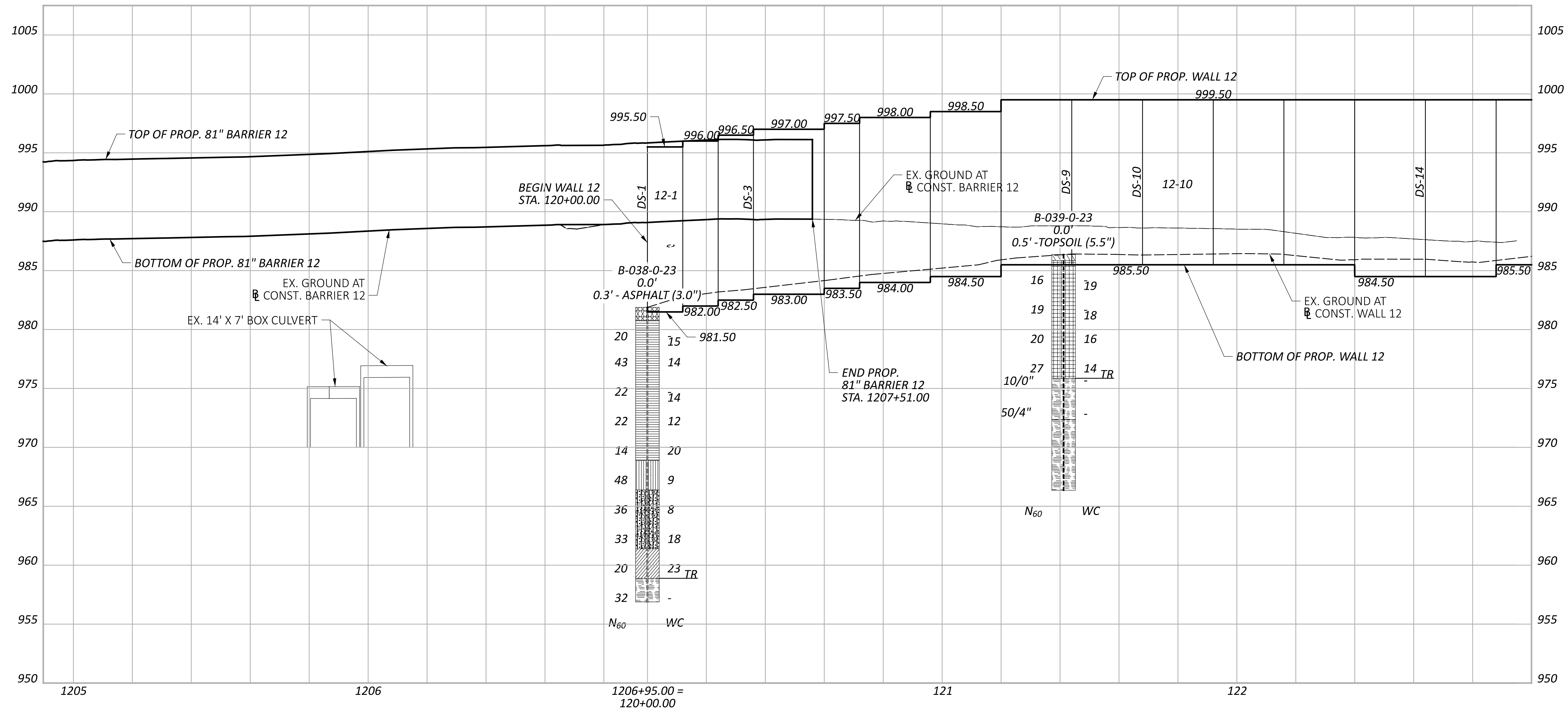
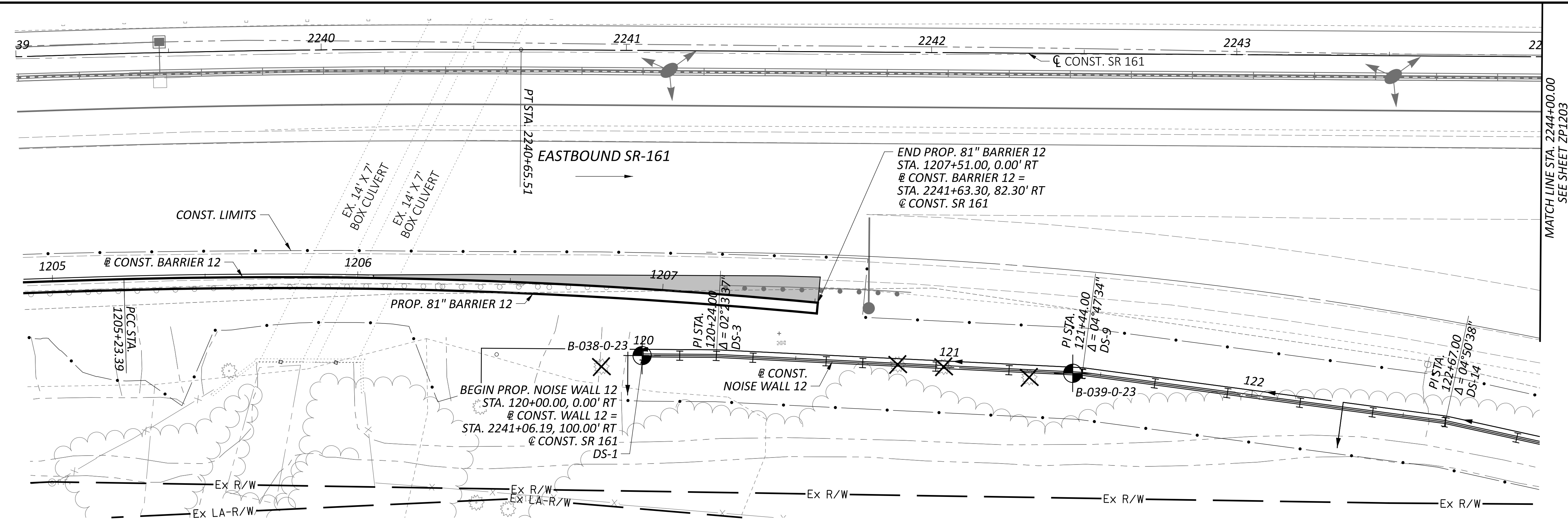
DESIGNER
 KSJ

REVIEWER
 DEK 1/19/24

PROJECT ID
 117607

SUBSET	TOTAL
21	66

SHEET	TOTAL
P.231	276

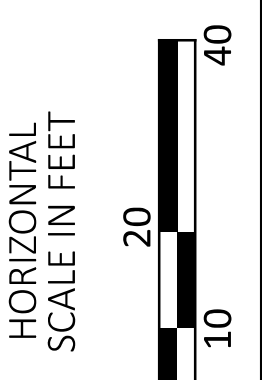
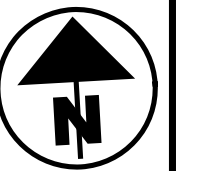
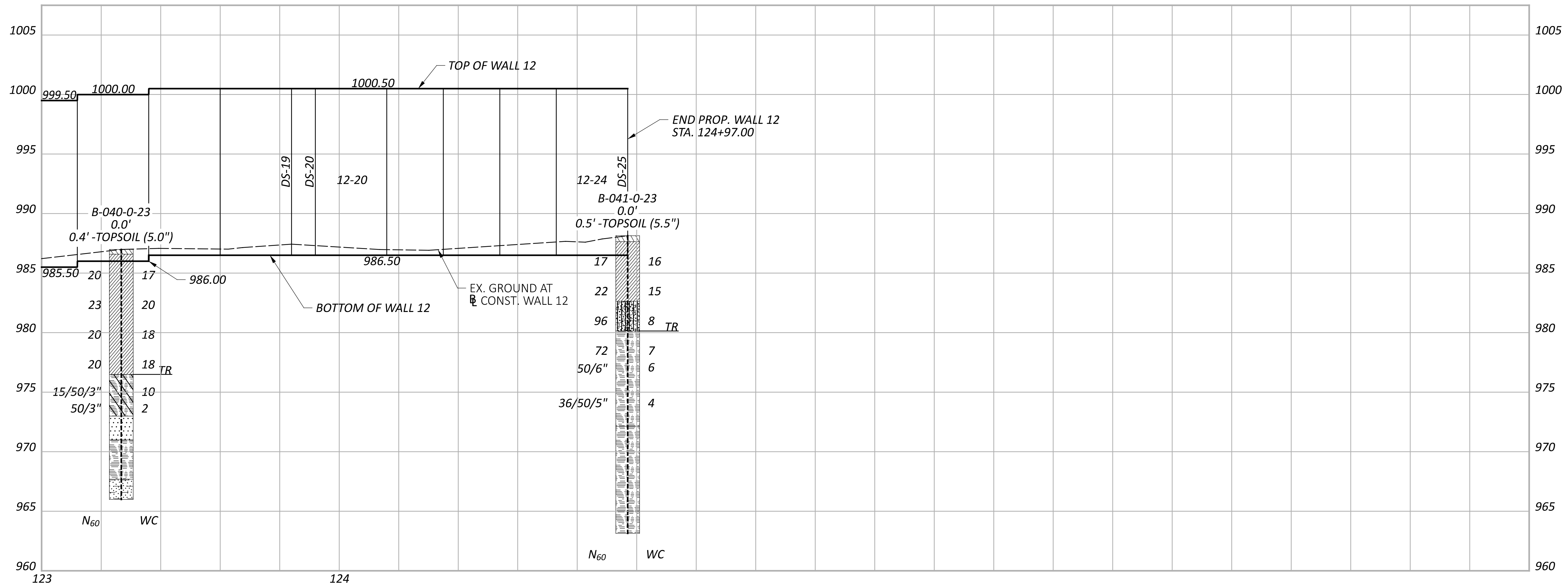
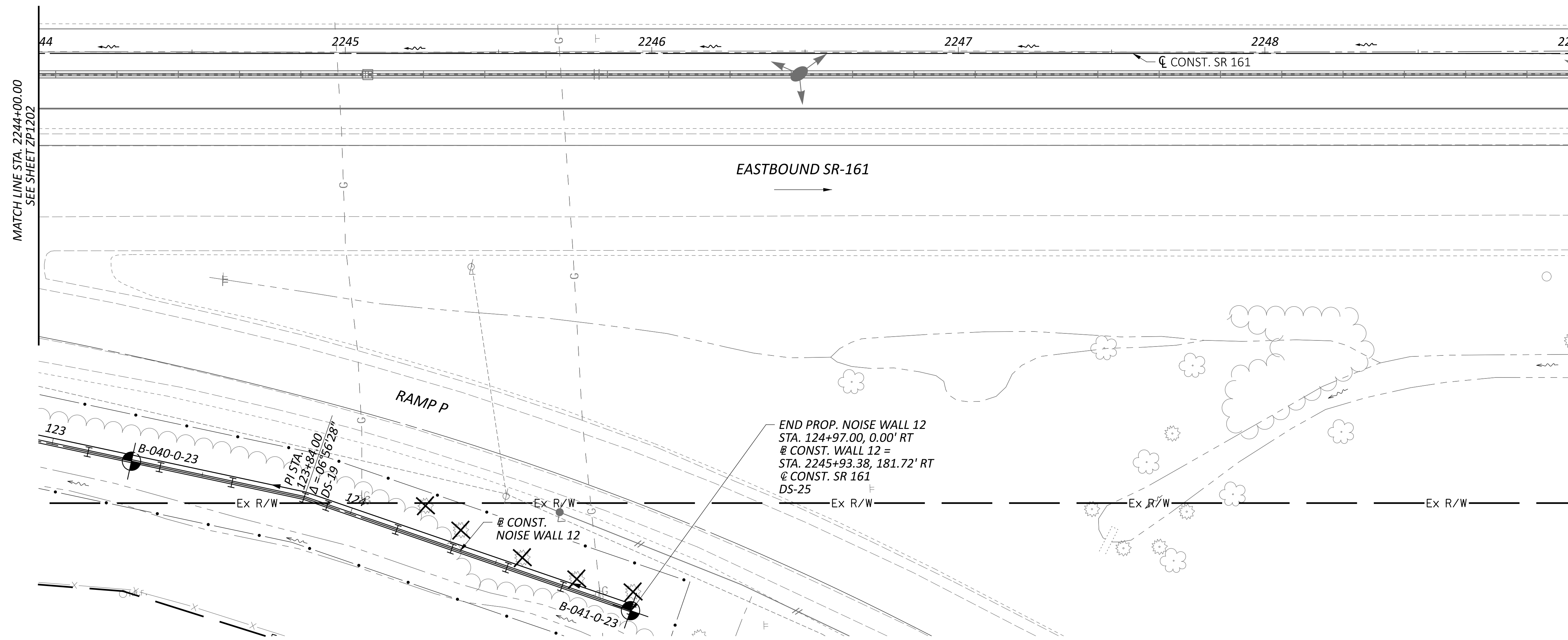


GEOTECHNICAL PROFILE - NOISE WALL 12
 STA. 2239+00.00 TO STA. 2244+00.00

DESIGN AGENCY	
6350 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949	
DESIGNER	
KSJ	
REVIEWER	
DEK 1/19/24	
PROJECT ID	
117607	
SUBSET	TOTAL
22	66
SHEET TOTAL	
P.232	276

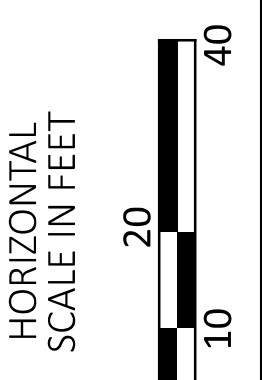
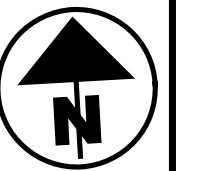
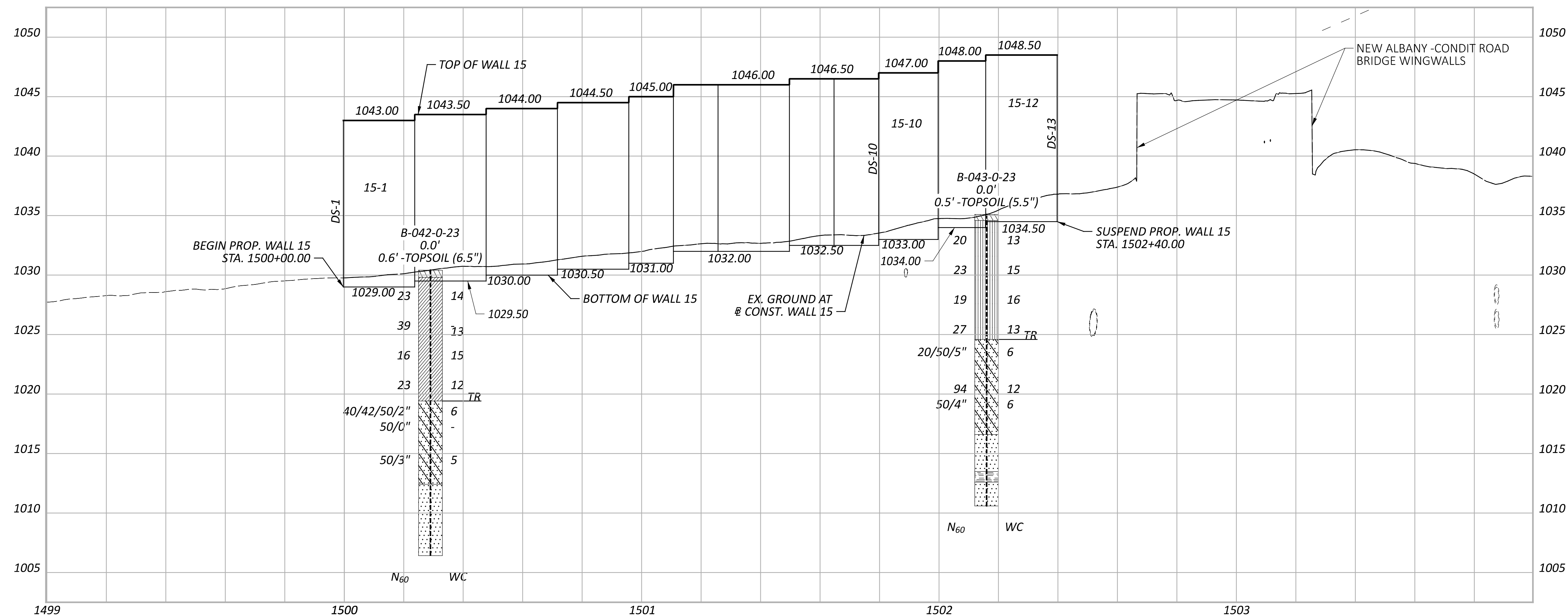
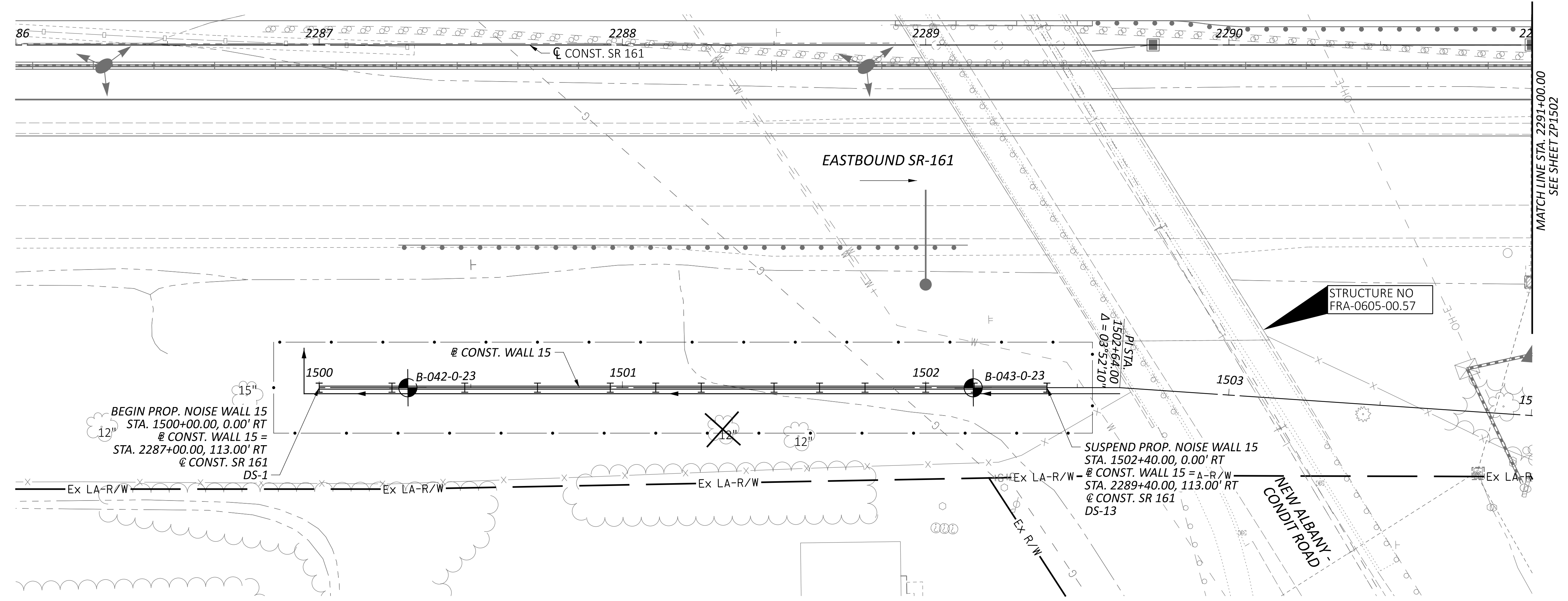
FRA-161-15.80 NOISE WALLS

MODEL: Wall 12 - Plan 21 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:10:40 AM USER: kevinj
 J:\GEO TECH\Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1203.dgn



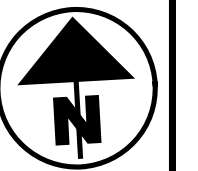
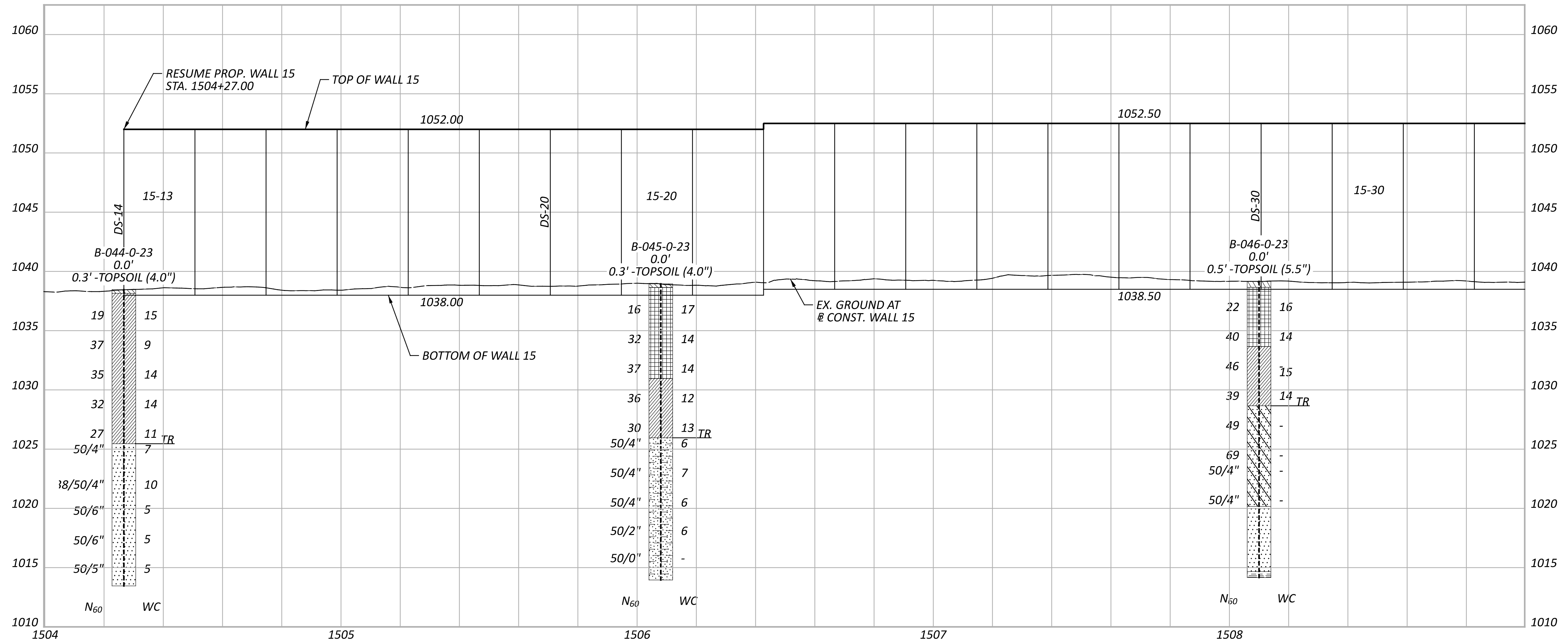
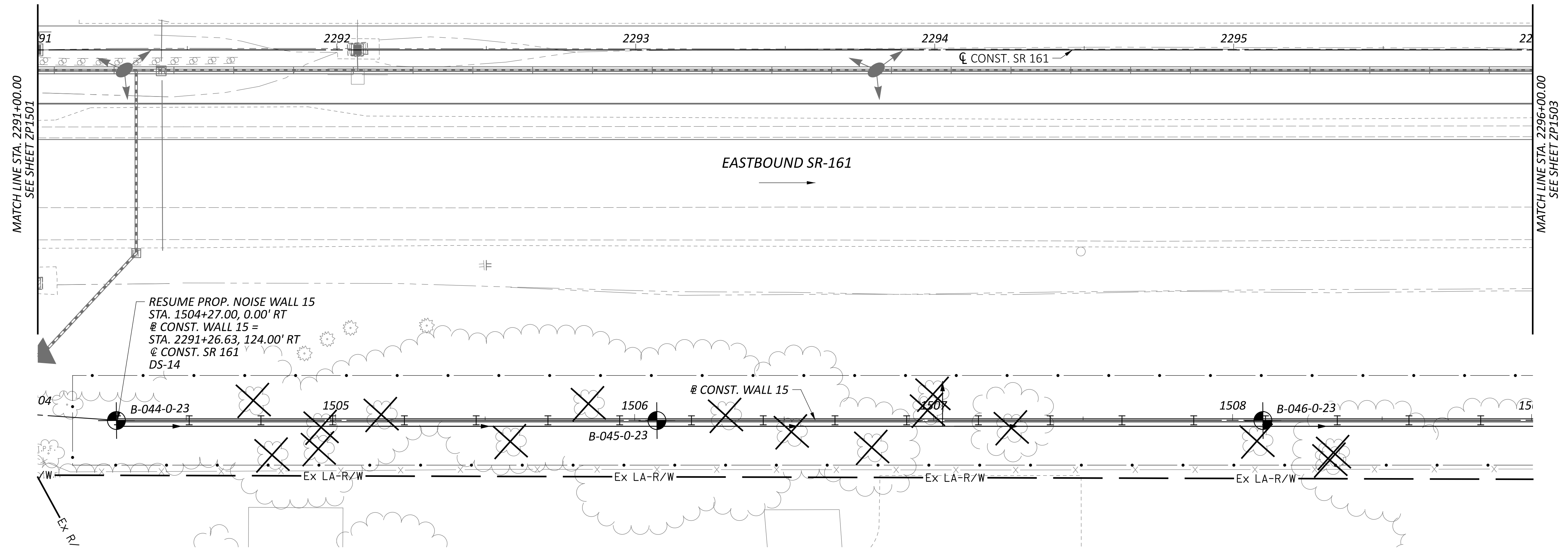
GEOTECHNICAL PROFILE - NOISE WALL 12
STA. 2244+00.00 TO STA. 2249+00.00

DESIGN AGENCY	
6350 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949	
DESIGNER	
KSJ	
REVIEWER	
DEK 1/19/24	
PROJECT ID	
117607	
SUBSET	TOTAL
23	66
SHEET	TOTAL
P.233	276



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

DESIGN AGENCY	
8350 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949	
DESIGNER	
KSJ	
REVIEWER	
DEK 1/19/24	
PROJECT ID	
117607	
SUBSET	TOTAL
24	66
SHEET	TOTAL
P.234	276



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

DESIGN AGENCY

 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949

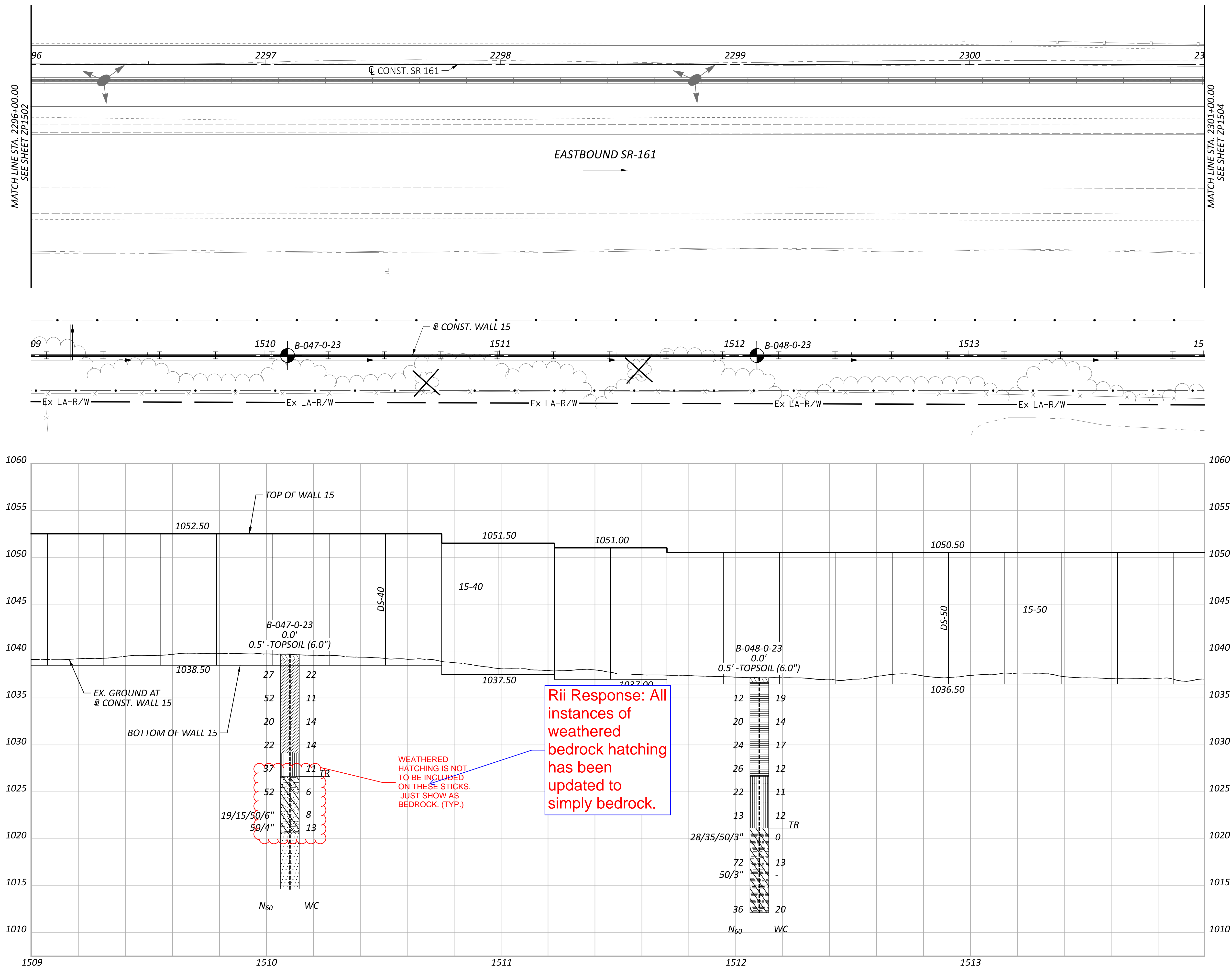
DESIGNER
 KSJ

REVIEWER
 DEK 1/19/24

PROJECT ID
 117607

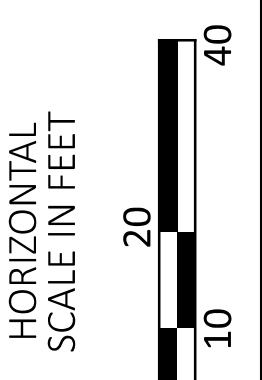
SUBSET TOTAL
 25 66

SHEET TOTAL
 P.235 276



Rii Response: All instances of weathered bedrock hatching has been updated to simply bedrock.

WEATHERED HATCHING IS NOT TO BE INCLUDED ON THESE STICKS. JUST SHOW AS BEDROCK. (TYP.)

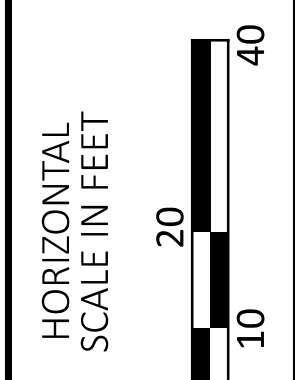
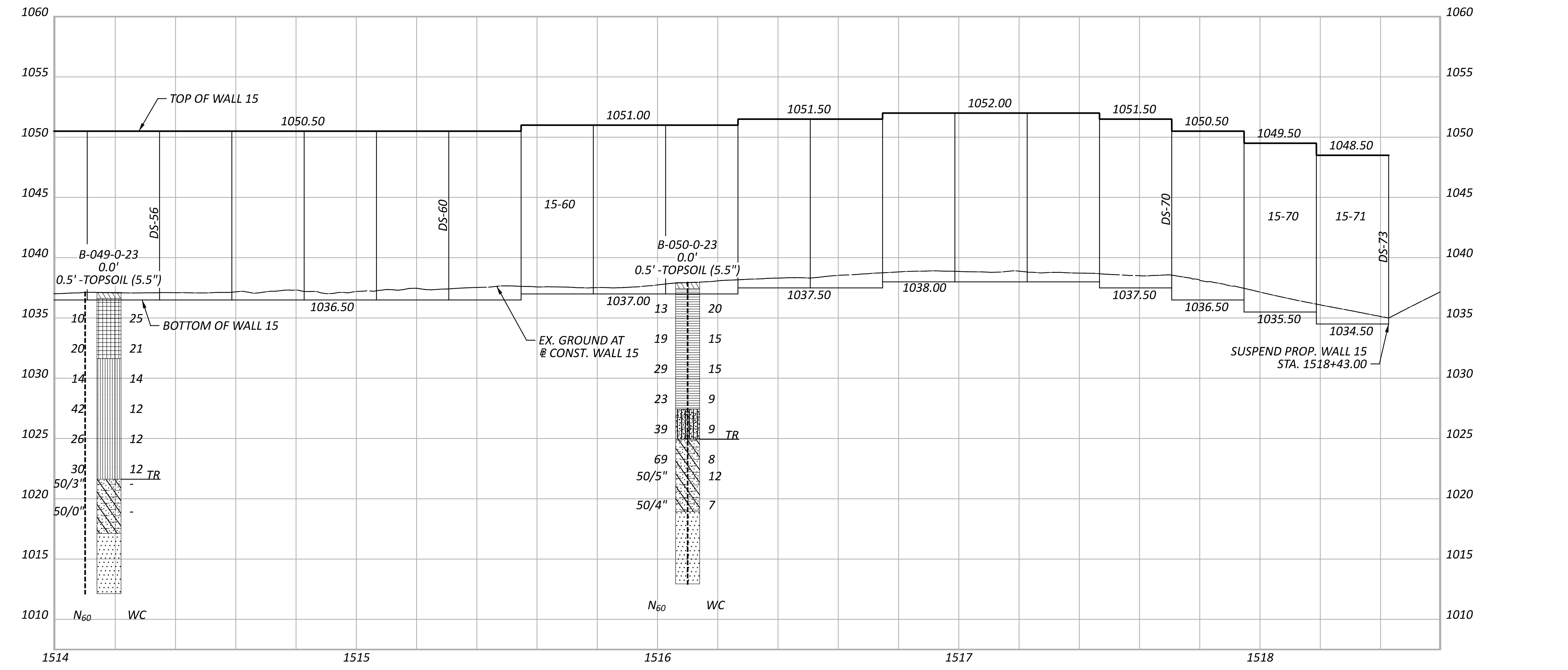
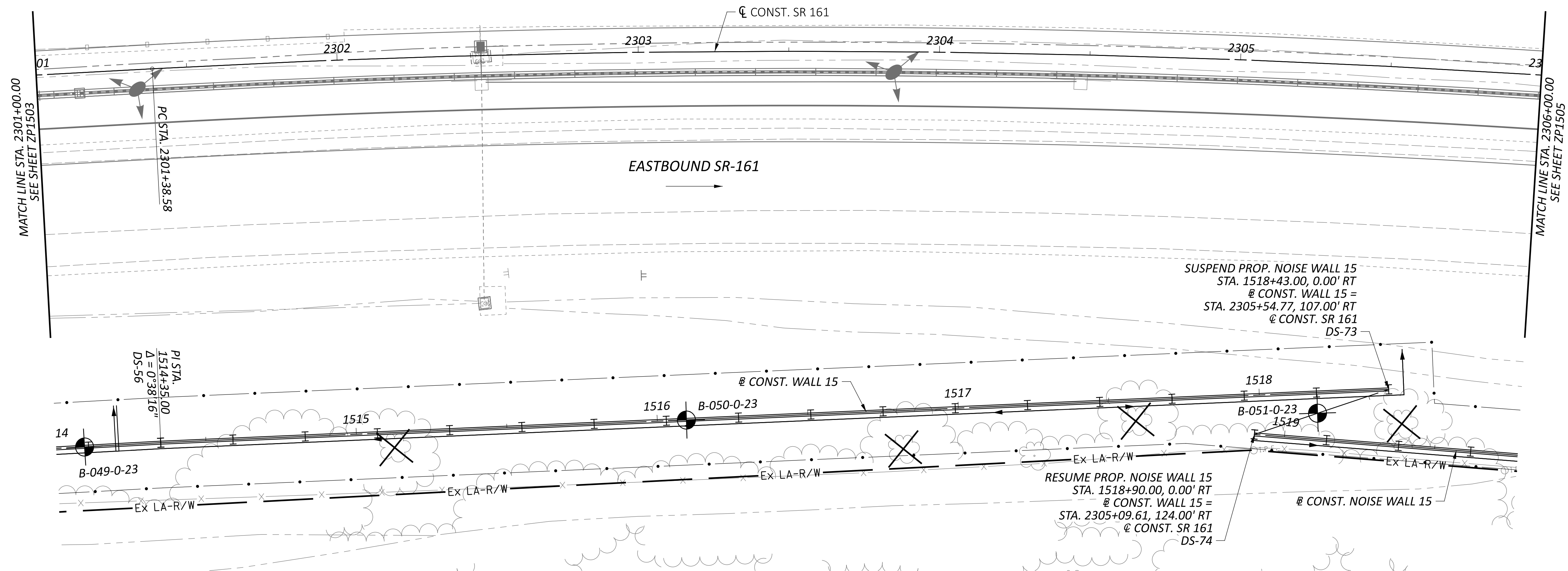


GEOTECHNICAL PROFILE - NOISE WALL 15
 STA. 2296+00.00 TO STA. 2301+00.00


DESIGN AGENCY	
8350 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949	
DESIGNER	
KSJ	
REVIEWER	
DEK 1/19/24	
PROJECT ID	
117607	
SUBSET	TOTAL
26	66
SHEET	TOTAL
P.236	276

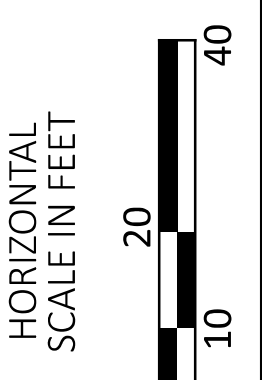
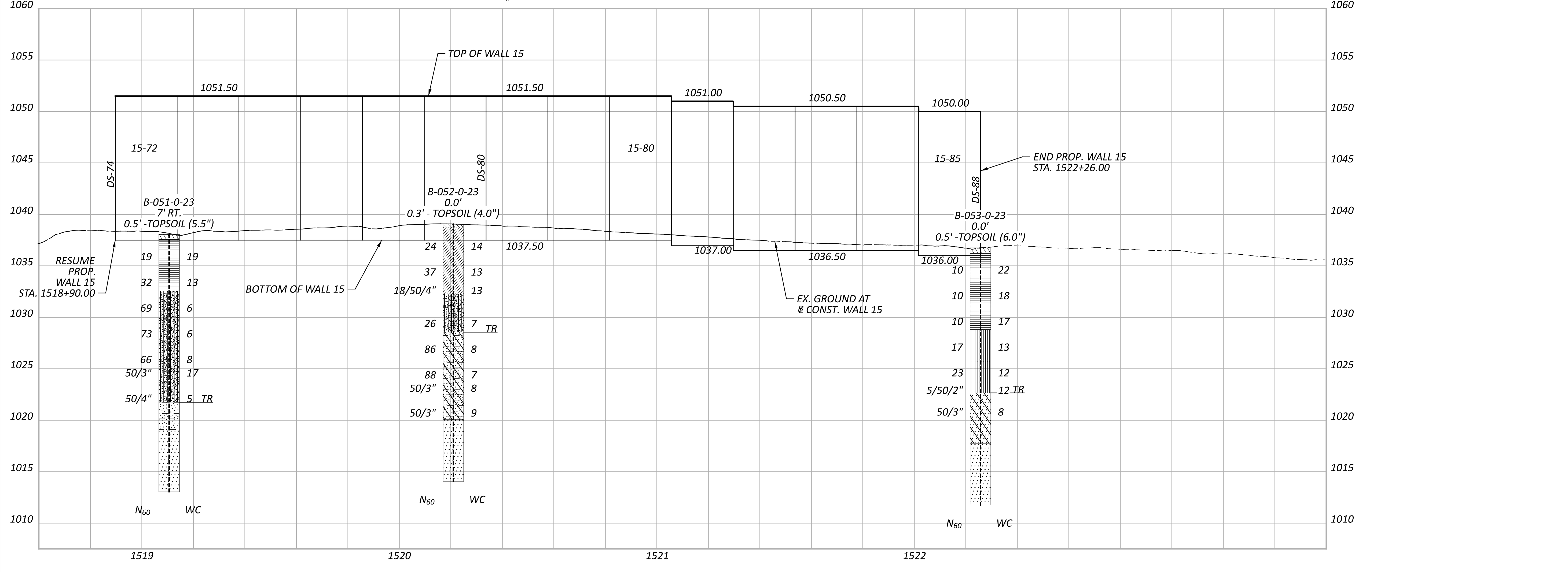
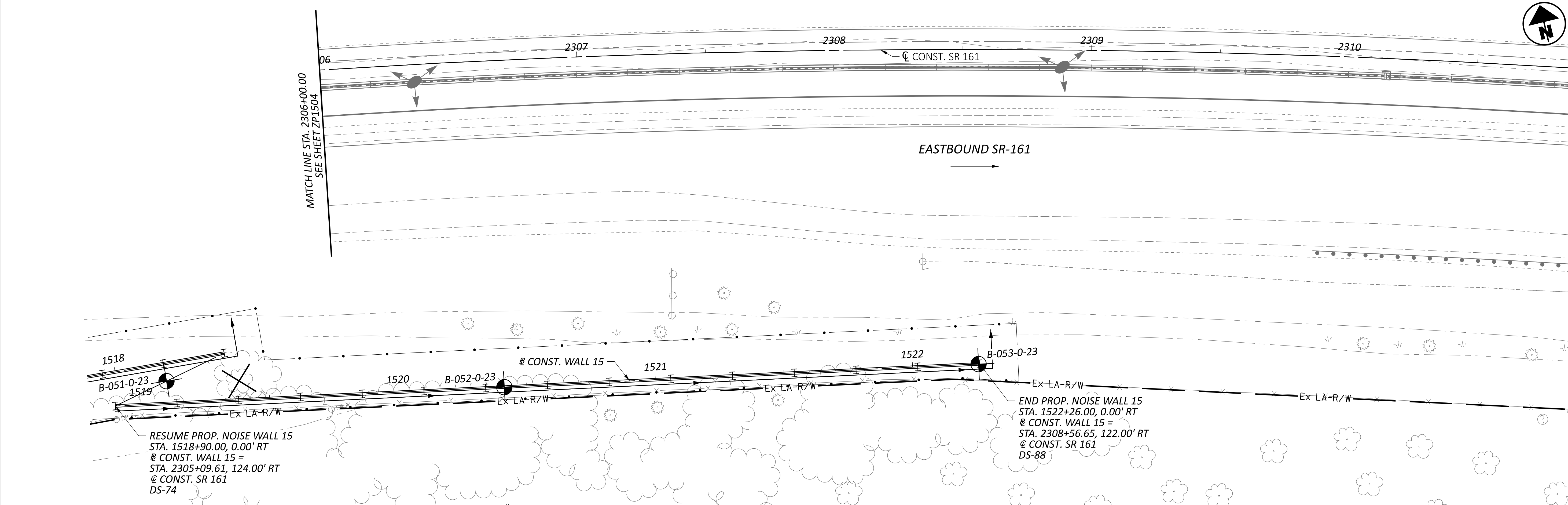
FRA-161-15.80 NOISE WALLS

MODEL: Wall 15 - Plan 25 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:11:22 AM USER: kevinj
 J:\GEO TECH\Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZP1504.dgn



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

DESIGN AGENCY	
	
6350 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949	
DESIGNER	
KSJ	
REVIEWER	
DEK 1/19/24	
PROJECT ID	
117607	
SUBSET	TOTAL
27	66
SHEET	TOTAL
P.237	276



GEOTECHNICAL PROFILE - NOISE WALL 15
 STA. 2306+00.00 TO STA. 2311+00.00

DESIGN AGENCY	
8350 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949	
DESIGNER	
KSJ	
REVIEWER	
DEK 1/19/24	
PROJECT ID	
117607	
SUBSET	TOTAL
28	66
SHEET	TOTAL
P.238	276

FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:48:40 AM USER: kevinj
 J:\GEO TECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL001.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/22/23 END: 11/22/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 300+00 / 0'
 ALIGNMENT: CL WALL 3
 ELEVATION: 966.3 (MSL) EOB: 15.0 ft.
 LAT / LONG: 40.080429, -82.864610

EXPLORATION ID
B-001-0-23
 PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

0.3' - TOPSOIL (3.5")
 HARD, BROWN SILT AND CLAY, LITTLE GRAVEL,
 TRACE SAND, DAMP.

SANDSTONE : GRAY, HIGHLY WEATHERED.

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

-@ 10.3' - 10.8' 45 DEGREE FRACTURE AND HEAVILY IRON STAINED

-@ 10.8' - 13.6' SPECKLES OF PYRITE THROUGHOUT

DEPTH (ft)	SPT / RQD	REC SAMPLE ID	HP (tsf)	GRADATION (%)							WC	HOLE SEALED
				GR	FS	SI	CL	LL	PL	PI		
1	6											
2	10	32	4.5+								15	A-6a (V)
3	12											
4	11										16	A-6a (V)
5	50/4"		4.5+									
6												
7												
8	0											CORE
9												
10												
11												
12												
13	45										100	NQ2-2
14												
15												

EOB

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT GDT - 1/11/24 07:55 - U:\G\8\PROJECTS\2023\W-23-107.GPJ

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

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 (%):10

RC-2: 10.0'-15.0'
 REC (%):100
 RQD (%):45



FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:48:58 AM USER: kevinj
 J:\GEO TECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL002.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/22/23 END: 11/22/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 302+00 / 0'
 ALIGNMENT: CL WALL 3
 ELEVATION: 968.1 (MSL) EOB: 15.3 ft.
 LAT / LONG: 40.080609, -82.863925

EXPLORATION ID
B-002-0-23
 PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

0.4' TOPSOIL (4.5")
 HARD, BROWN-GRAY CLAY, SOME SILT, LITTLE COARSE TO FINE SAND, TRACE SAND AND GRAVEL, MOIST.
 -@2.8' - 3.4' COBBLES
 VERY DENSE, GRAY GRAVEL WITH SAND AND SILT, DAMP.
SANDSTONE : GRAY, HIGHLY WEATHERED.
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
 -@10.25' - 12.0' MANY PYRITE FLECKS THROUGHOUT
 -@11.0' - 15.75' FEW PYRITE FLECKS

DEPTH (ft)	SPT / RQD	REC SAMPLE ID	REC (%)	HP (tsf)	GR	GRADATION (%)							WC	HOLE SEALED
						FS	SI	CL	LL	PL	PI			
1	3													
2	5													
3	7													
4	14													
5	17													
6	50/2"													
7														
8	0													
9														
10														
11														
12														
13														
14														
15														

EOB

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT GDT - 1/11/24 07:55 - U:\G18\PROJECTS\2023\W-23-107.GPJ

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

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 (%): 10	
RC-2: 10.25-15.25' REC (%): 96 RQD (%): 53	

FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:49:17 AM USER: kevinj
 J:\GEO TECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL003.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/20/23 END: 11/22/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 304+00 / 0'
 ALIGNMENT: CL WALL 3
 ELEVATION: 969.1 (MSL) EOB: 15.0 ft.
 LAT / LONG: 40.080806, -82.863307

EXPLORATION ID
B-003-0-23
 PAGE
 1 OF 1

**MATERIAL DESCRIPTION
 AND NOTES**

0.5' - TOPSOIL (5.5')
 HARD, BROWN SILT AND CLAY, TRACE GRAVEL

SANDSTONE : BROWN, HIGHLY WEATHERED.
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

-@10.0' - 11.0' 4MM PYRITE NODULES THROUGHOUT
 -@11.0' - 11.2' CLAY SEAM
 -@11.2' - 13.5' MANY TINY PYRTIE SPECKS THROUGHOUT

-@13.5' - 15.0' LITTLE PYRITE

DEPTHS	SPT/ RQD	N ₆₀	REC SAMPLE ID	HP (tsf)	GRADATION (%)							WC	HOLE SEALED	
					GR	CS	FS	SI	CL	LL	PL			PI
1	3													
2	5	16	SS-1	4.5+										A-6a (V)
3	6													
4	5													
5	6		SS-2	4.5+										A-6a (V)
6	50/3"													
7	0													CORE
8			NQ2-1											
9														
10														
11														
12														
13	55		NQ2-2											CORE
14														
15														

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT GDT - 1/11/24 07:55 - U:\G18\PROJECTS\2023\W-23-107.GPJ

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

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



FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:49:35 AM USER: kevinj
 J:\GEO TECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_Z1004.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



DESIGNER		JAS
REVIEWER		DEK
DATE		1/19/24
PROJECT ID		117607
SUBSET	TOTAL	
32	66	
SHEET	TOTAL	
P.242	276	

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

FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:49:42 AM USER: kevinj
 J:\GEO\GEO\GEOtech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL005.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/20/23 END: 11/20/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 305+76 / 0'
 ALIGNMENT: CL WALL 3
 ELEVATION: 969.2 (MSL) EOB: 15.0 ft.
 LAT / LONG: 40.081003, -82.862692

EXPLORATION ID
B-004-0-23

PAGE
 1 OF 1

**MATERIAL DESCRIPTION
 AND NOTES**

0.4' TOPSOIL (5.0')

HARD, MOTTLED BROWN CLAY, SOME SILT, TRACE COARSE TO FINE SAND, MOIST.

SANDSTONE : GRAY, HIGHLY WEATHERED.

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

DEPTH	ELEV.	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)								WC	ODOT CLASS (GI)	HOLE SEALED
							GR	CS	FS	SI	CL	LL	PL	PI			
1	969.2	3															
2	968.8	4	16	36	SS-1	4.5+	0	1	6	35	58	52	20	32	21	A-7-6 (18)	
3		7															
4		4	16	50	SS-2	4.5+	-	-	-	-	-	-	-	-	19	A-7-6 (V)	
5	963.7	7															
6		50/2"		100	SS-3	-	-	-	-	-	-	-	-	-	10	Rock (V)	
7																	
8		50/2"		100	SS-4	-	-	-	-	-	-	-	-	-	5	Rock (V)	
9																	
10	959.2																
11																	
12		0		75	NQ2-1											CORE	
13																	
14	954.2																
15																	

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT GDT - 1/11/24 07:55 - U:\G18\PROJECTS\2023\W-23-107.GPJ

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

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



FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:50:01 AM USER: kevinj
 J:\GEO\GEOCH\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
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/20/23 END: 11/20/23



DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 600+00 / 0'
 ALIGNMENT: CL WALL 6
 ELEVATION: 961.5 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.087831, -82.843714

EXPLORATION ID
 B-005-0-23

PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES		ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC SAMPLE (%)	HP (tsf)	GR	GRADATION (%)			ATTERBERG			W.C.	ODOT CLASS (GI)	BACK FILL
									FS	SI	CL	LL	PL	PI			
0.4' - TOPSOIL (5.0')		961.1		6	8	72	4.5+										
VERY STIFF TO HARD, DARK BROWN TO BROWNISH GRAY SILT AND CLAY, LITTLE COARSE TO FINE SAND, TRACE GRAVEL, DAMP TO MOIST.			1	8													14 A-6a (V)
			2														
			3														
			4	5	23	56	4.5+										22 A-6a (V)
			5	10													
			6														
			7	16	56	100	4.5+										12 A-6a (V)
			8	23													
			9														
			10	7	22	56	4.5+	9	11	16	31	33	28	16	12	13	A-6a (7)
			11	8													
			12														
			13	4	4	33	2.50										14 A-6a (V)
		948.5	14	5	19	47											
MEDIUM DENSE, DARK GRAY COARSE AND FINE SAND, LITTLE SILT, TRACE GRAVEL, WET.		946.0	15	8													14 A-3a (V)
			16	21	53	50											
			17	16													12 A-1-b (V)
			18														
			19	31	58	53											11 A-1-b (V)
			20	25													
			21														
			22	9	10	37	53	51	17	10	13	9	NP	NP	NP	13	A-1-b (0)
		938.5	23	16													
			24	8	12	43	64										
DENSE, DARK GRAY COARSE AND FINE SAND, TRACE FINE GRAVEL, TRACE SILT, WET.		936.5	25	18													18 A-3a (V)

NOTES: GROUNDWATER INITIALLY 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.

RESOURCE INTERNATIONAL, INC.

PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/20/23 END: 11/20/23



DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 601+77 / 0'
 ALIGNMENT: CL WALL 6
 ELEVATION: 968.1 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.088035, -82.843136

EXPLORATION ID
 B-006-0-23

PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES		ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC SAMPLE (%)	HP (tsf)	GR	GRADATION (%)			ATTERBERG			W.C.	ODOT CLASS (GI)	BACK FILL
									FS	SI	CL	LL	PL	PI			
0.5' - TOPSOIL (5.5')		967.6		6	10	32	4.5+										
HARD, BROWN SILT AND CLAY, SOME CLAY, TRACE FINE GRAVEL, DAMP.			1	12													11 A-6a (V)
			2														
			3														
			4	7	36	75	4.5+	7	11	16	32	34	29	17	12	14	A-6a (7)
			5	13													
			6														
			7	9	29	100	4.5+										13 A-6a (V)
			8	11													
			9	6	11	39	72										11 A-2-4 (V)
		960.1	10	16													
			11	7	17	48	33										7 A-2-4 (V)
			12	16													
			13														
			14	9	15	45	0										
			15	13			67	2S-6A									15 A-2-4 (V)
			16														
			17	21	18	48	44	36	19	14	19	12	24	17	7	11	A-2-4 (0)
			18	15													
			19	16	29	64	SS-8										10 A-2-4 (V)
		947.6	20	8													
			21	10	35	83	SS-9										12 A-3a (V)
DENSE, GRAY COARSE AND FINE SAND, LITTLE FINE GRAVEL, LITTLE SILT, WET.		945.1	22	12													
			23														
			24	16	15	43	97										10 A-1-b (V)

NOTES: GROUNDWATER INITIALLY 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.

DESIGN AGENCY

 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
 DESIGNER
 JAS
 REVIEWER
 DEK 1/19/24
 PROJECT ID
 117607
 SUBSET TOTAL
 34 66
 SHEET TOTAL
 P.244 276

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 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:50:32 AM USER: kevinj J:\GEO TECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_Z1007.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80 NOISE WALLS
TYPE: NOISE WALLS
PID: 117607 SFN: NA
START: 11/17/23 END: 11/17/23

DRILLING FIRM / OPERATOR: RII / TG
SAMPLING FIRM / LOGGER: RII / MJ
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
HAMMER: AUTOMATIC
CALIBRATION DATE: 3/21/22
ENERGY RATIO (%): 86.4

STATION / OFFSET: 603+60 / 0'
ALIGNMENT: CL WALL 6
ELEVATION: 969.0 (MSL) EOB: 25.0 ft.
LAT / LONG: 40.088248, -82.842572

EXPLORATION ID
B-007-0-23
PAGE
1 OF 1

MATERIAL DESCRIPTION AND NOTES

0.4' TOPSOIL (5.0")
HARD, BROWN TO BROWNISH GRAY SILTY CLAY, LITTLE COARSE TO FINE SAND, TRACE GRAVEL, DAMP TO MOIST.

Table with columns: ELEV., DEPTHS, SPT/RQD, N60, REC SAMPLE ID, HP (tsf), GR, FS, CS, SI, CL, LL, PL, PI, WC, ODOT CLASS (GI), BACK FILL. Includes soil logs and data for depths 1-25.

MEDIUM DENSE TO VERY DENSE, GRAY GRAVEL WITH SAND, LITTLE SILT, TRACE CLAY, MOIST TO WET.

Table with columns: ELEV., DEPTHS, SPT/RQD, N60, REC SAMPLE ID, HP (tsf), GR, FS, CS, SI, CL, LL, PL, PI, WC, ODOT CLASS (GI), BACK FILL. Includes soil logs and data for depths 1-25.

NOTES: GROUNDWATER INITIALLY 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.

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80 NOISE WALLS
TYPE: NOISE WALLS
PID: 117607 SFN: NA
START: 11/17/23 END: 11/17/23

DRILLING FIRM / OPERATOR: RII / TG
SAMPLING FIRM / LOGGER: RII / MJ
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
HAMMER: AUTOMATIC
CALIBRATION DATE: 3/21/22
ENERGY RATIO (%): 86.4

STATION / OFFSET: 605+28 / 0'
ALIGNMENT: CL WALL 6
ELEVATION: 970.0 (MSL) EOB: 27.5 ft.
LAT / LONG: 40.088448, -82.842015

EXPLORATION ID
B-008-0-23
PAGE
1 OF 1

MATERIAL DESCRIPTION AND NOTES

0.3' TOPSOIL (4.0")
HARD BROWN TO BROWN/GRAY SANDY SILT, SOME CLAY, LITTLE FINE GRAVEL, DAMP.

Table with columns: ELEV., DEPTHS, SPT/RQD, N60, REC SAMPLE ID, HP (tsf), GR, FS, CS, SI, CL, LL, PL, PI, WC, ODOT CLASS (GI), BACK FILL. Includes soil logs and data for depths 1-27.

VERY DENSE TO DENSE, GRAY GRAVEL WITH SAND, LITTLE SILT, MOIST.

VERY STIFF TO HARD, GRAY SANDY SILT, SOME CLAY, SOME FINE GRAVEL, DAMP.
-COBBLES FROM 18.0' - 18.5'

MEDIUM DENSE, BROWN TO BROWNISH GRAY COARSE AND FINE SAND, TRACE FINE GRAVEL, TRACE SILT, WET.

NOTES: GROUNDWATER INITIALLY 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.

Design Agency: Resource International, Inc. Designer: JAS. Reviewer: DEK 1/19/24. Project ID: 117607. Subsets: 35/66. Sheet: P.245/276.

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 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:51:02 AM USER: kevinj
 J:\GEO\GEOCH\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: DIETRICH D-50 (# 313)		STATION / OFFSET: 2192+50 / 123' RT		EXPLORATION ID	
TYPE: NOISE WALLS		SAMPLING FIRM / LOGGER: RII / MJ		HAMMER: AUTOMATIC		ALIGNMENT: CL SR 161		B-009-0-23	
PID: 117607 SFN: NA		DRILLING METHOD: 3.25" HSA		CALIBRATION DATE: 3/21/22		ELEVATION: 960.9 (MSL) EOB: 25.5 ft.		PAGE	
START: 11/2/23 END: 11/2/23		SAMPLING METHOD: SPT		ENERGY RATIO (%): 86.4		LAT / LONG: 40.086999, -82.844104		1 OF 1	

SPT / ROD	N ₆₀	REC SAMPLE ID	HP (tsf)	GRADATION (%)				ATTERBERG	ODOT CLASS (GI)	BACK FILL
				GR	CS	FS	SI			
1	5									
2	8	30	4.5+							13 A-6a (V)
3	13									
4	22	50	4.5+							8 A-6a (V)
5	30									
6	9	15								7 A-4a (V)
7	15	49								
8	24	26								
9	26	58								10 A-4a (V)
10	14									
11	9	10								7 A-2-4 (V)
12	10	8								
13	11	42								11 A-2-4 (V)
14	13	33								
15	15	52								20 A-2-4 (V)
16	18	18								
17	15	40								10 A-2-4 (V)
18	14									
19	10	40								
20	14									
21	12	58								9 A-4a (V)
22	20	20								
23	20									
24	5	9								
25	13	32								
	21	100								7 A-4a (V)

NOTES: GROUNDWATER INITIALLY 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.


RESOURCE INTERNATIONAL, INC.

PROJECT: FRA-161-15.80		DRILLING FIRM / OPERATOR: RII / TG		DRILL RIG: DIETRICH D-50 (# 313)		STATION / OFFSET: 2194+49 / 112' RT		EXPLORATION ID	
TYPE: NOISE WALLS		SAMPLING FIRM / LOGGER: RII / MJ		HAMMER: AUTOMATIC		ALIGNMENT: CL SR 161		B-010-0-23	
PID: 117607 SFN: NA		DRILLING METHOD: 3.25" HSA		CALIBRATION DATE: 3/21/22		ELEVATION: 961.8 (MSL) EOB: 25.0 ft.		PAGE	
START: 11/3/23 END: 11/3/23		SAMPLING METHOD: SPT		ENERGY RATIO (%): 86.4		LAT / LONG: 40.087252, -82.843476		1 OF 1	

SPT / ROD	N ₆₀	REC SAMPLE ID	HP (tsf)	GRADATION (%)				ATTERBERG	ODOT CLASS (GI)	BACK FILL
				GR	CS	FS	SI			
1	8									
2	12	35	4.5+							16 A-6a (V)
3	12									
4	15	91	4.5+							10 A-6a (V)
5	45	42								
6	11	26								7 A-2-4 (0)
7	9	9								
8	11	33								8 A-2-4 (V)
9	11	67								
10	12									
11	6	27								
12	8	11								
13	7	100								19 A-2-4 (V)
14	10	29								
15	10	0								
16	5	100								15 A-2-4 (V)
17	7	26								14 A-4a (V)
18	8	10								
19	5	30								12 A-4a (6)
20	8	13								
21	9	16								13 A-4a (V)
22	17	48								
23	10	40								14 A-4a (V)
24	15	67								
25	13	100								

NOTES: GROUNDWATER INITIALLY 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.

DESIGN AGENCY

 6350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
 DESIGNER
 JAS
 REVIEWER
 DEK 1/19/24
 PROJECT ID
 117607
 SUBSET TOTAL
 36 66
 SHEET TOTAL
 P.246 276

GEOTECHNICAL PROFILE - NOISE WALLS

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

FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:51:33 AM USER: kevinj
 J:\GEO TECH\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
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/3/23 END: 11/3/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (#313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 2196+50 / 111' RT
 ALIGNMENT: CL SR 161
 ELEVATION: 964.3 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.087493, -82.842814

EXPLORATION ID
B-011-0-23

PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

0.3' TOPSOIL (3.5")
 STIFF TO HARD, BROWN TO GRAY SILT AND CLAY, "AND" COARSE TO FINE SAND, LITTLE FINE GRAVEL, DAMP TO MOIST.

ELEVATED HYDROSTATIC PRESSURES NEED TO BE INCLUDED IN THE NOTES TO MAKE THE CONTRACTOR AWARE OF ADVERSE WATER CONDITIONS PRIOR TO BIDDING.

LOOSE TO DENSE, BROWN GRAVEL WITH SAND, TRACE SILT, TRACE CLAY, WET.

Rii Response: This has been included on the cover sheet.

-HEAVE @ 21.0' AND 23.0'

SPT / RQD	N ₆₀	REC SAMPLE ID	HP (tsf)	GRADATION (%)				ATTERBERG				WC	ODOT CLASS (GI)	BACK FILL	
				GR	FS	SI	CL	LL	PL	PI					
5	7	23	53	-	-	-	-	-	-	-	-	-	-	-	-
7	9		4.5+	-	-	-	-	-	-	-	-	-	-	-	-
9	10		4.5+	-	-	-	-	-	-	-	-	-	-	-	-
17	6	81	4.5+	17	15	30	27	16	11	12	12	A-6a (5)			
19	5	89	3.75	-	-	-	-	-	-	-	-	-	-	-	-
23	5	12	2.50	-	-	-	-	-	-	-	-	-	-	-	-
29	11	53	1.25	-	-	-	-	-	-	-	-	-	-	-	-
39	7	19	-	-	-	-	-	-	-	-	-	-	-	-	-
67	2	9	-	9	68	17	1	5	NP	NP	NP	22	A-1-b (0)		
100	5	29	-	-	-	-	-	-	-	-	-	-	-	-	-
100	14	35	-	-	-	-	-	-	-	-	-	-	-	-	-

NOTES: GROUNDWATER INITIALLY 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.

RESOURCE INTERNATIONAL, INC.

PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/3/23 END: 11/3/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (#313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 800+72 / 117' RT
 ALIGNMENT: CL SR 161
 ELEVATION: 967.1 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.087734, -82.842176

EXPLORATION ID
B-012-0-23

PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

0.3' TOPSOIL (4.0")
 HARD, LIGHT BROWN SILT AND CLAY, SOME COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP TO MOIST.

-COBBLES FROM 4.8' - 5.2'
 -AUGER REFUSAL @ 5.2'. OFFSET 7.0' SW, CONTINUED SAMPLING AT 6.0'


DENSE TO VERY DENSE, DARK GRAY GRAVEL WITH SAND, LITTLE SILT, TRACE CLAY, MOIST.

HARD, BROWN SANDY SILT, LITTLE CLAY, TRACE FINE GRAVEL, MOIST.

SPT / RQD	N ₆₀	REC SAMPLE ID	HP (tsf)	GRADATION (%)				ATTERBERG				WC	ODOT CLASS (GI)	BACK FILL	
				GR	FS	SI	CL	LL	PL	PI					
5	6	22	53	-	-	-	-	-	-	-	-	-	-	-	-
6	9		4.5+	-	-	-	-	-	-	-	-	-	-	-	-
14	28	63	72	-	-	-	-	-	-	-	-	-	-	-	-
16	28		4.5+	-	-	-	-	-	-	-	-	-	-	-	-
42	16	78	4.5+	8	10	15	33	34	17	13	11	A-6a (8)			
63	20	47	-	-	-	-	-	-	-	-	-	-	-	-	-
63	16		4.5+	-	-	-	-	-	-	-	-	-	-	-	-
43	5	33	4.5+	-	-	-	-	-	-	-	-	-	-	-	-
46	12		-	-	-	-	-	-	-	-	-	-	-	-	-
53	7	46	-	46	21	8	18	7	NP	NP	NP	8	A-1-b (0)		
72	14	40	-	-	-	-	-	-	-	-	-	-	-	-	-
72	18		-	-	-	-	-	-	-	-	-	-	-	-	-
52	17	61	-	-	-	-	-	-	-	-	-	-	-	-	-
61	18		-	-	-	-	-	-	-	-	-	-	-	-	-
50	18		4.5+	-	-	-	-	-	-	-	-	-	-	-	-
86	26	50	-	-	-	-	-	-	-	-	-	-	-	-	-
30	6	47	4.5+	-	-	-	-	-	-	-	-	-	-	-	-

NOTES: GROUNDWATER INITIALLY 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.

DESIGN AGENCY

 6350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
 DESIGNER
 JAS
 REVIEWER
 DEK 1/19/24
 PROJECT ID
 117607
 SUBSET TOTAL
 37 66
 SHEET TOTAL
 P.247 276

**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 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:52:03 AM USER: kevinj
 J:\GEO\GEO\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
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/3/23 END: 11/3/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 802+72 / 0'
 ALIGNMENT: CL WALL 8
 ELEVATION: 967.4 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.087953, -82.841539

EXPLORATION ID
B-013-0-23

PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

0.4' TOPSOIL (5.0")
 HARD, LIGHT BROWN TO BROWN SILT AND CLAY, SOME COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP TO MOIST.

DENSE TO VERY DENSE, GRAY COARSE AND FINE SAND, TRACE FINE GRAVEL, TRACE SILT, DAMP.

MEDIUM DENSE TO VERY DENSE, GRAY GRAVEL WITH SAND AND SILT, MOIST.

-AUGER LOST IN BORING @ 18.5' - 23.5'

SPT / RQD	N ₆₀	REC SAMPLE (%)	HP ID	GRADATION (%)				ATTERBERG				ODOT CLASS (GI)	BACK FILL	
				GR	CS	FS	SI	CL	LL	PL	PI			
5	7	24	SS-1	4.5+	-	-	-	-	-	-	-	-	15	A-6a (V)
10	10	33	SS-2	4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)
13	11	30	SS-3	4.5+	-	-	-	-	-	-	-	-	12	A-6a (V)
11	8	27	SS-4	4.5+	8	16	35	32	28	15	13	12	12	A-6a (8)
17	84	64	SS-5	-	-	-	-	-	-	-	-	-	5	A-3a (V)
41	45	33	SS-6	-	-	-	-	-	-	-	-	-	6	A-3a (V)
18	27	61	SS-7	-	-	-	-	-	-	-	-	-	12	A-2-4 (V)
16	55	47	SS-8	-	-	-	-	-	-	-	-	-	9	A-2-4 (V)
14	32	44	SS-9	-	65	10	6	12	7	23	16	7	11	A-2-4 (0)
15	63	47	SS-10	-	-	-	-	-	-	-	-	-	10	A-2-4 (V)
942.4	EOB													

NOTES: GROUNDWATER INITIALLY ENCOUNTERED @ 16.0' AND UPON COMPLETION @ 14.2'
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS.

RESOURCE INTERNATIONAL, INC.

PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/6/23 END: 11/2/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 804+72 / 0'
 ALIGNMENT: CL WALL 8
 ELEVATION: 966.4 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.088209, -82.840922

EXPLORATION ID
B-014-0-23

PAGE
 1 OF 1


MATERIAL DESCRIPTION AND NOTES

0.5' TOPSOIL (5.5")
 HARD, LIGHT BROWN TO GRAY SILTY CLAY, LITTLE COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP TO MOIST.

MEDIUM DENSE TO DENSE, GRAY GRAVEL WITH SAND AND SILT, WET.

SPT / RQD	N ₆₀	REC SAMPLE (%)	HP ID	GRADATION (%)				ATTERBERG				ODOT CLASS (GI)	BACK FILL	
				GR	CS	FS	SI	CL	LL	PL	PI			
3	3	13	SS-1	4.5+	-	-	-	-	-	-	-	-	21	A-6b (V)
6	5	17	SS-2	4.5+	8	6	12	34	40	19	21	15	15	A-6b (12)
7	22	53	SS-3	4.5+	-	-	-	-	-	-	-	-	15	A-6b (V)
9	35	64	SS-4	4.5+	-	-	-	-	-	-	-	-	12	A-6b (V)
10	19	72	SS-5	4.25	-	-	-	-	-	-	-	-	12	A-6b (V)
5	43	33	SS-6	-	-	-	-	-	-	-	-	-	15	A-2-4 (V)
14	23	61	SS-7	-	43	25	11	13	8	28	20	8	12	A-2-4 (0)
8	24	78	SS-8	-	-	-	-	-	-	-	-	-	10	A-2-4 (V)
9	26	36	SS-9	-	-	-	-	-	-	-	-	-	13	A-2-4 (V)
10	22	39	SS-10	-	-	-	-	-	-	-	-	-	19	A-4a (V)
941.4	EOB													

NOTES: GROUNDWATER INITIALLY 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.

DESIGN AGENCY

 6350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
 DESIGNER
JAS
 REVIEWER
 DEK 1/19/24
 PROJECT ID
 117607
 SUBSET TOTAL
 38 66
 SHEET TOTAL
 P.248 276

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 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:52:33 AM USER: kevinj
 J:\GEO TECH\Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL01.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 10/23/23 END: 10/23/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 806+72 / 0'
 ALIGNMENT: CL WALL 8
 ELEVATION: 966.5 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.088482, -82.840308

EXPLORATION ID
B-015-0-23

PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES		ELEV.	DEPTH	SPT / ROD	N ₆₀	REC SAMPLE (%)	HP ID	GR	GRADATION (%)			ATTERBERG			W.C.	ODOT CLASS (GI)	BACK FILL		
									FS	SI	CL	LL	PL	PI					
0.7' -TOPSOIL (8.0") VERY STIFF, BROWNISH GRAY TO GRAY SILTY CLAY, SOME COARSE TO FINE SAND, TRACE GRAVEL AND SAND, DAMP TO MOIST.		966.5	1	3	4	61	SS-1	-	-	-	-	-	-	-	-	19	A-6b (V)		
		965.8	2	4	4														
			3																
			4	10	30	59	100	SS-2	4.00	-	-	-	-	-	-	-	13	A-6b (V)	
			5	11															
			6	8	11	35	47	SS-3	3.50	16	8	13	33	30	34	18	16	13	A-6b (8)
			7	13															
			8																
			9	9	6	20	50	SS-4	3.50	-	-	-	-	-	-	-	13	A-6b (V)	
			10	10															
			11																
			12	6	6	23	39	SS-5	3.50	-	-	-	-	-	-	-	13	A-6b (V)	
			13	10															
			14	6	7	17	47	SS-6	3.50	-	-	-	-	-	-	-	12	A-6b (V)	
			15	951.0	15	7	5												
	16																		
	17		17	30	79	44	SS-7	-	-	-	-	-	-	-	13	A-4a (V)			
	18																		
	19		19	24	72	56	SS-8	-	42	13	8	24	13	26	17	9	10	A-4a (0)	
	20		20																
	21																		
	22		22	18	46	53	SS-9	-	-	-	-	-	-	-	-	11	A-4a (V)		
	23																		
	24	941.5	24	9	15	46	SS-10	-	-	-	-	-	-	-	9	A-4a (V)			
	25		25	17															

NOTES: SEE PAGE @ 14.0'. GROUNDWATER INITIALLY 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.

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 10/23/23 END: 10/23/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 808+72 / 0'
 ALIGNMENT: CL WALL 8
 ELEVATION: 968.4 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.088693, -82.839666

EXPLORATION ID
B-016-0-23

PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES		ELEV.	DEPTH	SPT / ROD	N ₆₀	REC SAMPLE (%)	HP ID	GR	GRADATION (%)			ATTERBERG			W.C.	ODOT CLASS (GI)	BACK FILL		
									FS	SI	CL	LL	PL	PI					
0.6' -TOPSOIL (7.0") VERY STIFF TO HARD, LIGHT BROWN TO BROWN SILT AND CLAY, SOME COARSE TO FINE GRAVEL, LITTLE FINE GRAVEL, DAMP TO MOIST.		968.4	1	5	14	50	SS-1	4.5+	-	-	-	-	-	-	-	15	A-6a (V)		
		967.8	2	5	5														
			3																
			4	8	8	24	100	SS-2	4.5+	-	-	-	-	-	-	-	13	A-6a (V)	
			5	9															
			6		11	33	58	SS-3	4.5+	-	-	-	-	-	-	-	12	A-6a (V)	
			7	12															
			8																
			9	8	13	37	56	SS-4	4.5+	14	11	15	33	27	28	16	12	10	A-6a (6)
			10																
			11		7	7	20	78	SS-5	3.00	-	-	-	-	-	-	13	A-6a (V)	
			12																
			13																
			14	954.6	14	5	11	29	SS-6	3.00	-	-	-	-	-	-	13	A-6a (V)	
			15																
	16	952.9	16	12	35	61	SS-7	-	50	23	9	12	6	23	17	6	10	A-1-b (0)	
	17																		
	18		18	11	26	56	SS-8	-	-	-	-	-	-	-	-	14	A-1-b (V)		
	19																		
	20																		
	21		21	16	48	83	SS-9	-	-	-	-	-	-	-	10	A-1-b (V)			
	22																		
	23																		
	24	943.4	24	13	31	91	SS-10	-	-	-	-	-	-	-	8	A-1-b (V)			
	25		25	32															

NOTES: SEE PAGE @ 17.5'. GROUNDWATER INITIALLY 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.

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

DESIGNER
 JAS

REVIEWER
 DEK 1/19/24

PROJECT ID
 117607

SUBSET TOTAL
 39 66

SHEET TOTAL
 P.249 276

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 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:53:02 AM USER: kevinj
J:\GEO TECH\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
TYPE: NOISE WALLS
PID: 117607 SFN: NA
START: 10/23/23 END: 10/23/23

DRILLING FIRM / OPERATOR: RII / TG
SAMPLING FIRM / LOGGER: RII / MJ
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
HAMMER: AUTOMATIC
CALIBRATION DATE: 3/21/22
ENERGY RATIO (%): 86.4

STATION / OFFSET: 810+72 / 0'
ALIGNMENT: CL WALL 8
ELEVATION: 970.7 (MSL) EOB: 25.0 ft.
LAT / LONG: 40.088908, -82.839020

EXPLORATION ID
B-017-0-23

PAGE
1 OF 1

MATERIAL DESCRIPTION
AND NOTES

0.4' TOPSOIL (5.0')

HARD TO VERY STIFF, BROWN TO GRAY SILT AND CLAY, SOME COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP TO MOIST.

DENSE TO VERY DENSE, GRAY GRAVEL WITH SAND AND SILT, TRACE CLAY, DAMP TO MOIST.

Table with columns: ELEV., DEPTHS, SPT/ROD, N60, REC SAMPLE ID, HP (tsf), GRADATION (%), ATTERBERG, ODOT CLASS (GI), BACK FILL. Includes soil profile data for depths 1-25 and ODOT classes A-6a(V), A-2-4(V), A-6a(V), A-2-4(V).

NOTES: GROUNDWATER INITIALLY ENCOUNTERED @ 18.0'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS.

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
TYPE: NOISE WALLS
PID: 117607 SFN: NA
START: 10/23/23 END: 10/23/23

DRILLING FIRM / OPERATOR: RII / TG
SAMPLING FIRM / LOGGER: RII / MJ
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
HAMMER: AUTOMATIC
CALIBRATION DATE: 3/21/22
ENERGY RATIO (%): 86.4

STATION / OFFSET: 812+76 / 0'
ALIGNMENT: CL WALL 8
ELEVATION: 975.5 (MSL) EOB: 25.0 ft.
LAT / LONG: 40.089106, -82.838365

EXPLORATION ID
B-018-0-23

PAGE
1 OF 1

MATERIAL DESCRIPTION
AND NOTES

0.4' TOPSOIL (5.0')

VERY STIFF TO HARD, BROWN TO GRAY SANDY SILT, SOME CLAY, LITTLE FINE GRAVEL, DAMP TO MOIST.

DENSE TO VERY DENSE, BROWN-GRAY TO GRAY GRAVEL WITH SAND, LITTLE SILT, TRACE CLAY, MOIST.

SHALE : GRAY, HIGHLY WEATHERED.

Table with columns: ELEV., DEPTHS, SPT/ROD, N60, REC SAMPLE ID, HP (tsf), GRADATION (%), ATTERBERG, ODOT CLASS (GI), BACK FILL. Includes soil profile data for depths 1-25 and ODOT classes A-4a(V), A-1-b(0), Rock(V).

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. CAVE-IN DEPTH @ 16.4'
ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS.

Design Agency: RESOURCE INTERNATIONAL, INC. (Logo)
Designer: JAS
Reviewer: 1/19/24
Project ID: 117607
Subset: 40 of 66
Sheet: P.250 of 276

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 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:54:01 AM USER: kevinj
 J:\GEO TECH\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
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 10/27/23 END: 10/27/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 818+03 / 0'
 ALIGNMENT: CL WALL 8
 ELEVATION: 974.1 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.089729, -82.836617

EXPLORATION ID
B-021-0-23

PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

0.3' TOPSOIL (3.0")

HARD, BROWN TO GRAY SILT AND CLAY, SOME COARSE TO FINE SAND, TRACE TO LITTLE FINE GRAVEL, DAMP TO MOIST.

DEPTHS

SPT / RQD

REC SAMPLE ID

GRADATION (%)

ATTERBERG

WC

BACK FILL

DEPTH	SPT / RQD	REC SAMPLE ID	GRADATION (%)	ATTERBERG	WC	BACK FILL
1	6					
2	8	SS-1	4.5+		16	A-6a (V)
3	8					
4	17	SS-2	4.5+	31	14	A-6a (8)
5	19					
6	10	SS-3	4.5+		10	A-6a (V)
7	12					
8	12					
9	9	SS-4	4.5+		10	A-6a (V)
10	12					
11	8	SS-5	4.5+		10	A-6a (V)
12	10					
13	13					
14	6	SS-6	4.5+	26	15	A-6a (5)
15	7					
16	12					
17	12	SS-7				
18	12	SS-7A	4.5+		10	A-6a (V)
19	9	SS-8			6	Rock (V)
20	50/3"					
21	39	SS-9			6	Rock (V)
22	50/2"					
23						
24	50/3"	SS-10			5	Rock (V)
25						

ELIMINATE WEATHERED HATCHING (TYPICAL)

SHALE : GRAY, HIGHLY WEATHERED.

Rii Response: All instances of weathered bedrock hatching has been updated to simply bedrock.

NOTES: GROUNDWATER NO ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACK-FILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS.

ING: CAVE-IN DEPTH @ 19.7'

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 10/30/23 END: 10/30/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1100+00 / 0'
 ALIGNMENT: CL WALL 11
 ELEVATION: 975.0 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.090031, -82.835639

EXPLORATION ID
B-022-0-23

PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

0.3' TOPSOIL (4.0")

VERY STIFF TO HARD, BROWN SANDY SILT, SOME CLAY, LITTLE FINE GRAVEL, DAMP TO MOIST.

DEPTHS

SPT / RQD

REC SAMPLE ID

GRADATION (%)

ATTERBERG

WC

BACK FILL

DEPTH	SPT / RQD	REC SAMPLE ID	GRADATION (%)	ATTERBERG	WC	BACK FILL
1	9					
2	14	SS-1	4.5+		12	A-4a (V)
3	17					
4	11	SS-2	4.5+		11	A-4a (V)
5	14					
6	8	SS-3	4.5+		13	A-4a (V)
7	8					
8	9					
9	3	SS-4	3.00	25	15	A-4a (6)
10	3					
11	3	SS-5	2.50		13	A-4a (V)
12	4					
13						
14	5	SS-6			14	A-4a (V)
15	7					
16	8					
17	14	SS-7		24	7	A-4a (1)
18	15					
19	5	SS-8			10	A-4a (V)
20	9					
21	10					
22	50/3"	SS-9			5	Rock (V)
23						
24	45	SS-10			7	Rock (V)
25	50/3"					

SHALE : GRAY, HIGHLY WEATHERED.

NOTES: GROUNDWATER INITIALLY ENCOUNTERED @ 16.0' AND UPON COMPLETION @ 9.7'; CAVE-IN DEPTH @ 17.6'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACK-FILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS.

DESIGN AGENCY

 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
 DESIGNER
JAS
 REVIEWER
DEK 1/19/24
 PROJECT ID
117607
 SUBSET TOTAL
42 66
 SHEET TOTAL
P.252 276

GEOTECHNICAL PROFILE - NOISE WALLS
NOISE WALLS 8 AND 11
BORING LOGS B-021-0-23 AND B-022-0-23

FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:54:29 AM USER: kevinj
 J:\GEO TECH\Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL015.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 10/30/23 END: 10/30/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1102+00 / 0'
 ALIGNMENT: CL WALL 11
 ELEVATION: 977.0 (MSL) EOB: 24.5 ft.
 LAT / LONG: 40.090244, -82.835195

EXPLORATION ID
B-023-0-23
 PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

DEPTH (ft)	SPT / RQD	N ₆₀	REC SAMPLE ID	HP (tsf)	GRADATION (%)						WC	HOLE SEALED
					GR	FS	SI	CL	LL	PL		
1	7											
2	10	32	SS-1	4.5+	-	-	-	-	-	-	14	A-4a (V)
3	12											
4	6	17	SS-2	4.5+	8	11	16	39	26	16	9	A-4a (6)
5	6											
6	4	5	SS-3	4.00	-	-	-	-	-	-	10	A-4a (V)
7	8	19										
8												
9	4	5	SS-4	3.50	-	-	-	-	-	-	13	A-4a (V)
10	9	20										
11	42		SS-5	-	-	-	-	-	-	-	4	Rock (V)
12	50/3"											
13												
14	50/3"		SS-6	-	-	-	-	-	-	-	5	Rock (V)
15	0		NQ2-1									CORE
16												
17	0		NQ2-2									CORE
18												
19												
20												
21												
22	0		NQ2-3									CORE
23												
24												

0.3' - TOPSOIL (4.0')
 VERY STIFF TO HARD, BROWN TO GRAY SANDY SILT, SOME CLAY, TRACE FINE GRAVEL, DAMP TO MOIST.

SHALE : GRAY, HIGHLY WEATHERED.

SHALE : BLACK, HIGHLY WEATHERED, WEAK, VERY FINE GRAINED, LAMINATED, HIGHLY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, DISTURBED, SEAMY, VERY POOR SURFACE.

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

Project Name: FRA-161-15.80

Location:
 Franklin County, Ohio

<p>Photo No. 6</p>			
<p>Boring: B-023-0-23</p>			
<p>RC-1: 14.4-15.0' REC (%):0 RQD (%):0</p>			
<p>RC-2: 15.0-19.5' REC (%):35 RQD (%):0</p>			

FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:54:49 AM USER: kevinj
 J:\GEO TECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_Z1016.dgn

Project Name: FRA-161-15.80

Location:
Franklin County, Ohio

<p>Photo No. 7</p>	<p>Boring: B-023-0-23</p>	<p>RC-3: 19.5-24.5' REC (%):100 RQD (%):0</p>
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FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:54:55 AM USER: kevinj
 J:\GEO\GEO\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
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 10/31/23 END: 10/31/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1104+00 / 0'
 ALIGNMENT: CL WALL 11
 ELEVATION: 979.6 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.090471, -82.834551

EXPLORATION ID
B-024-0-23
 PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

DEPTH (ft)	SPT / RQD	REC SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL		
				GR	CS	FS	SI	CL	LL	PL	PI					
1	5															
2	5	19	47	4.5+	-	-	-	-	-	-	-	-	-	19	A-7-6 (V)	
3	8															
4	10	37	78	4.5+	4	10	35	48	42	20	22	17		A-7-6 (13)		
5	16															
6	17	28	78	4.5+	-	-	-	-	-	-	-	-	-	9	A-6a (V)	
7	26															
8																
9	28	18	43	33	4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)	
10	12															
11	5	6	16	36	2.50	-	-	-	-	-	-	-	-	10	A-6a (V)	
12																
13																
14	10	17	55	67	SS-6	-	-	-	-	-	-	-	-	8	A-2-4 (V)	
15	21															
16	10	14	42	92	SS-7	-	-	-	-	-	-	-	-	7	A-2-4 (V)	
17	15															
18																
19	6	14	45	75	SS-8	-	40	14	12	21	13	25	18	7	A-2-4 (0)	
20	17															
21	6	11	-	75	SS-9	-	-	-	-	-	-	-	-	10	A-2-4 (V)	
22	50/4"															
23	TR															
24	50/6"				36	SS-10	-	-	-	-	-	-	-	3	Rock (V)	
25	EOB															

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING; CAVE-IN DEPTH @ 18.5'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS.

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT GDT - 1/11/24 07:56 - U:\G18\PROJECTS\2023\W-23-107.GPJ

RESOURCE INTERNATIONAL, INC.

PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 10/31/23 END: 10/31/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1106+00 / 0'
 ALIGNMENT: CL WALL 11
 ELEVATION: 980.2 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.090688, -82.833893

EXPLORATION ID
B-025-0-23
 PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

DEPTH (ft)	SPT / RQD	REC SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL		
				GR	CS	FS	SI	CL	LL	PL	PI					
1	4															
2	5	17	50	4.5+	-	-	-	-	-	-	-	-	-	20	A-6a (V)	
3	7															
4	8	12	42	61	4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)	
5	17															
6	12	17	55	61	SS-3	4.5+	10	16	34	30	27	16	11	8	A-6a (6)	
7	21															
8																
9	10	13	39	64	SS-4	4.5+	-	-	-	-	-	-	-	10	A-6a (V)	
10	14															
11																
12	18	21	69	83	SS-5	-	-	-	-	-	-	-	-	8	A-2-4 (V)	
13	27															
14	9	12	39	78	SS-6	-	38	23	12	17	10	27	20	7	A-2-4 (0)	
15	15															
16	14	21	71	64	SS-7	-	-	-	-	-	-	-	-	7	A-2-4 (V)	
17	28															
18																
19	12	22	75	39	SS-8	-	-	-	-	-	-	-	-	7	A-2-4 (V)	
20	30															
21	12	16	42	61	SS-9	-	-	-	-	-	-	-	-	14	A-2-4 (V)	
22	13															
23																
24	8	15	46	61	SS-10	-	-	-	-	-	-	-	-	11	A-2-4 (V)	
25	EOB															

-SHALE FRAGMENTS PRESENT THROUGHOUT

NOTES: GROUNDWATER INITIALLY 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:\G18\PROJECTS\2023\W-23-107.GPJ

DESIGN AGENCY
RESOURCE INTERNATIONAL
 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
 DESIGNER
JAS
 REVIEWER
DEK 1/19/24
 PROJECT ID
117607
 SUBSET TOTAL
 45 66
 SHEET TOTAL
 P.255 276

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 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:55:24 AM USER: kevinj
 J:\GEO TECH\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
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 10/31/23 END: 10/31/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1108+00 / 0'
 ALIGNMENT: CL WALL 11
 ELEVATION: 979.8 (MSL) EOB: 25.5 ft.
 LAT / LONG: 40.090906, -82.833225

EXPLORATION ID
B-026-0-23

PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

0.3' TOPSOIL (4.0")
 VERY STIFF TO HARD, LIGHT BROWN SILTY CLAY,
 "AND" FINE TO COARSE SAND, LITTLE FINE GRAVEL,
 DAMP TO MOIST.

MEDIUM DENSE TO DENSE, BROWN TO DARK GRAY
 GRAVEL WITH SAND AND SILT, TRACE CLAY, MOIST.

DENSE, GRAY TO BLACK GRAVEL WITH SAND, LITTLE
 SILT, TRACE CLAY, MOIST.

-SHALE FRAGMENTS PRESENT THROUGHOUT

DEPTHS	SPT/ RQD	N ₆₀	REC SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			ODOT CLASS (GI)	BACK FILL
					GR	CS	FS	SI	CL	LL	PL	PI		
1	4													
2	5	26	SS-1	4.5+									17	A-6b (V)
3	13													
4	18	49	SS-2	4.5+									19	A-6b (V)
5	16													
6	9	13	SS-3	4.5+									12	A-6b (V)
7	15													
8														
9	4	4	SS-4	4.00	19	24	12	23	22	36	19	17	14	A-6b (4)
10	4													
11	3	4	SS-5	-									20	A-2-4 (V)
12	4	13	SS-5	-										
13	5													
14	14	45	SS-6	-										
15	16													
16	7	-	2S-6A	-									11	A-2-4 (V)
17	14	35	SS-7	-									10	A-2-4 (V)
18	14													
19	9	33	SS-8	-										
20	14													
21	12	46	SS-9	-	50	20	11	11	8	24	18	6	10	A-1-b (0)
22	17													
23														
24	11	39	SS-10	-										
25	8	-	2S-10A	-									15	A-1-b (V)
EOB														

NOTES: GROUNDWATER INITIALLY 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.

RESOURCE INTERNATIONAL, INC.

PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/1/23 END: 11/1/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1110+00 / 0'
 ALIGNMENT: CL WALL 11
 ELEVATION: 981.5 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.091062, -82.832539

EXPLORATION ID
B-027-0-23

PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

0.3' TOPSOIL (3.5")
 HARD, LIGHT BROWN SILT AND CLAY, LITTLE COARSE
 TO FINE SAND, TRACE GRAVEL, DAMP.


LOOSE TO VERY DENSE, GRAY GRAVEL WITH SAND
 AND SILT, TRACE TO LITTLE CLAY, DAMP.

SHALE : GRAY, HIGHLY WEATHERED.

DEPTHS	SPT/ RQD	N ₆₀	REC SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			ODOT CLASS (GI)	BACK FILL
					GR	CS	FS	SI	CL	LL	PL	PI		
1	7													
2	13	46	SS-1	4.5+									11	A-6a (V)
3	19													
4	11	40	SS-2	4.5+									12	A-6a (V)
5	15													
6	13	45	SS-3	4.5+									11	A-6a (V)
7	16													
8	15													
9	8	17	SS-4	4.5+									12	A-6a (V)
10	5	7												
11	3	9	SS-5	-									14	A-2-4 (V)
12	3													
13														
14	4	13	SS-6	-	35	20	14	19	12	29	19	10	14	A-2-4 (0)
15	4													
16	7	49	SS-7	-									8	A-2-4 (V)
17	16													
18	18													
19	6	30	SS-8	-	54	20	8	13	5	28	18	10	10	A-2-4 (0)
20	12													
21	12	55	SS-9	-									12	A-2-4 (V)
22	14	24												
23														
24	23	50/5'	SS-10	-	27								4	Rock (V)
EOB														

NOTES: GROUNDWATER INITIALLY 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.

DESIGN AGENCY

 6350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
 DESIGNER
JAS
 REVIEWER
DEK 1/19/24
 PROJECT ID
117607
 SUBSET TOTAL
46 66
 SHEET TOTAL
P.256 276

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 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:56:21 AM USER: kevinj
J:\GEO\GEOCH\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
TYPE: NOISE WALLS
PID: 117607 SFN: NA
START: 11/1/23 END: 11/1/23

DRILLING FIRM / OPERATOR: RII / TG
SAMPLING FIRM / LOGGER: RII / MJ
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
HAMMER: AUTOMATIC
CALIBRATION DATE: 3/21/22
ENERGY RATIO (%): 86.4

STATION / OFFSET: 1115+84 / 0'
ALIGNMENT: CL WALL 11
ELEVATION: 983.0 (MSL) EOB: 25.0 ft.
LAT / LONG: 40.091378, -82.830480

EXPLORATION ID
B-030-0-23
PAGE
1 OF 1

DEPTH (ft)	SPT / RQD	REC SAMPLE ID (%)	HP (tsf)	GRADATION (%)				ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
				GR	FS	SI	CL	LL	PL	PI			
1	3												
2	6	78	4.5+									15 A-6a (V)	
3	9												
4	20	100	4.5+	11	15	35	30	17	13			15 A-6a (7)	
5	8												
6	29	94	4.5+									14 A-6a (V)	
7	12												
8	4												
9	17	86	4.5+									11 A-6a (V)	
10	7												
11	2												
12	3	39	3.25									13 A-6a (V)	
13	5												
14	10	50	2.00	11	14	32	23	27	15	12		14 A-6a (5)	
15	2												
16	4	61	3.00									13 A-6a (V)	
17	5												
18	8	58	86									7 A-2-4 (V)	
19	20												
20	20												
21	34	50	SS-9									5 Rock (V)	
22	50/2'												
23	50/3'	0	SS-10									Rock (V)	
24	50/3'												
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:\G18\PROJECTS\2023\W-23-107.GPJ

RESOURCE INTERNATIONAL, INC.

PROJECT: FRA-161-15.80
TYPE: NOISE WALLS
PID: 117607 SFN: NA
START: 11/16/23 END: 11/16/23

DRILLING FIRM / OPERATOR: RII / TG
SAMPLING FIRM / LOGGER: RII / MJ
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
HAMMER: AUTOMATIC
CALIBRATION DATE: 3/21/22
ENERGY RATIO (%): 86.4

STATION / OFFSET: 900+16 / 0'
ALIGNMENT: CL WALL 9
ELEVATION: 974.5 (MSL) EOB: 25.0 ft.
LAT / LONG: 40.090580, -82.836109

EXPLORATION ID
B-031-0-23
PAGE
1 OF 1

DEPTH (ft)	SPT / RQD	REC SAMPLE ID (%)	HP (tsf)	GRADATION (%)				ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
				GR	FS	SI	CL	LL	PL	PI			
1	4												
2	5	78	4.5+									19 A-4a (V)	
3	7												
4	23	0	SS-2										
5	7												
6	9												
7	16	40	83	4.5+								10 A-4a (V)	
8	12												
9	13	29	78	4.5+								11 A-4a (V)	
10	10												
11	6	19	83	4.5+	11	10	36	27	15	10		12 A-4a (6)	
12	7												
13													
14	7	22	0	SS-6									
15	12												
16	4	14	75	4.5+								13 A-4a (V)	
17	5												
18													
19	4	20	83	4.5+								13 A-4a (V)	
20	10												
21	8	26	78	SS-9	39	35	11	9	6	NP	NP	16 A-1-b (0)	
22	10												
23													
24	8	29	92	SS-10								16 A-1-b (V)	
25	12												

0.5' TOPSOIL (5.0')
HARD BROWN TO GRAY SANDY SILT, SOME CLAY,
LITTLE FINE GRAVEL, DAMP TO MOIST.

-COBBLES @ 6.0'-6.5'

MEDIUM DENSE, DARK GRAY GRAVEL WITH SAND,
TRACE SILT, TRACE CLAY, MOIST.
-SHALE FRAGMENTS PRESENT THROUGHOUT

-1.5' OF HEAVING SANDS @23.5'

NOTES: GROUNDWATER INITIALLY 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:\G18\PROJECTS\2023\W-23-107.GPJ



DESIGNER: JAS
REVIEWER: DEK 1/19/24
PROJECT ID: 117607
SUBSET TOTAL: 48 / 66
SHEET TOTAL: P.258 / 276

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 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:56:46 AM USER: kevinj
J:\GEO TECH\Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_Z1021.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
TYPE: NOISE WALLS
PID: 117607 SFN: NA
START: 11/16/23 END: 11/16/23

DRILLING FIRM / OPERATOR: RII / TG
SAMPLING FIRM / LOGGER: RII / MJ
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
HAMMER: AUTOMATIC
CALIBRATION DATE: 3/21/22
ENERGY RATIO (%): 86.4

STATION / OFFSET: 902+00 / 0'
ALIGNMENT: CL WALL 9
ELEVATION: 975.2 (MSL) EOB: 25.0 ft.
LAT / LONG: 40.090809, -82.835481

EXPLORATION ID
B-032-0-23

PAGE
1 OF 1

MATERIAL DESCRIPTION
AND NOTES

0.4' TOPSOIL (5.0')

HARD, BROWN SILT AND CLAY, SOME COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP.

ELEV. 975.2

974.8

959.5

950.2

MEDIUM DENSE TO DENSE, GRAY GRAVEL WITH SAND AND SILT, LITTLE CLAY, MOIST.

DEPTH	ELEV.	SPT / RQD	N ₆₀	REC SAMPLE (%)	HP ID	GR	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
1		9													
2		14	40	86	SS-1	4.5+	-	-	-	-	-	-	12	A-6a (V)	
3		14													
4		8	24	61	SS-2	4.5+	9	10	19	34	28	11	11	A-6a (6)	
5		9													
6		7	20	49	SS-3	4.5+	-	-	-	-	-	-	12	A-6a (V)	
7		14													
8															
9		5	8	24	75	SS-4	4.5+	-	-	-	-	-	11	A-6a (V)	
10		9													
11		5	7	22	0	SS-5	-	-	-	-	-	-	-		
12		12													
13		12	-	67	2S-5A	4.5+	-	-	-	-	-	-	13	A-6a (V)	
14		6	8	24	0	SS-6	-	-	-	-	-	-	-		
15		12													
16		4	9	26	53	SS-7	41	14	12	21	12	24	16	8	A-2-4 (0)
17		9													
18		18													
19		8	10	30	50	SS-8	-	-	-	-	-	-	15	A-2-4 (V)	
20		11													
21		15													
22		22	58	64	SS-9	-	-	-	-	-	-	-	16	A-2-4 (V)	
23		18													
24		5	8	29	67	SS-10	-	-	-	-	-	-	13	A-2-4 (V)	
25		12													

NOTES: GROUNDWATER INITIALLY 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.

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
TYPE: NOISE WALLS
PID: 117607 SFN: NA
START: 11/16/23 END: 11/16/23

DRILLING FIRM / OPERATOR: RII / TG
SAMPLING FIRM / LOGGER: RII / MJ
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
HAMMER: AUTOMATIC
CALIBRATION DATE: 3/21/22
ENERGY RATIO (%): 86.4

STATION / OFFSET: 904+00 / 0'
ALIGNMENT: CL WALL 9
ELEVATION: 977.2 (MSL) EOB: 25.0 ft.
LAT / LONG: 40.091043, -82.834836

EXPLORATION ID
B-033-0-23

PAGE
1 OF 1

MATERIAL DESCRIPTION
AND NOTES

0.4' TOPSOIL (5.0')

HARD, BROWN TO GRAY SANDY SILT, SOME CLAY, LITTLE FINE GRAVEL, DAMP.

ELEV. 977.2

976.8

964.2

DENSE, GRAY TO BLACK GRAVEL, SOME FINE TO COARSE SAND, LITTLE SILT, MOIST.
-LIMESTONE FRAGMENTS IN SS-6

DEPTH	ELEV.	SPT / RQD	N ₆₀	REC SAMPLE (%)	HP ID	GR	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
1		7													
2		12	37	67	SS-1	4.5+	-	-	-	-	-	-	12	A-4a (V)	
3		14													
4		10	29	81	SS-2	4.5+	-	-	-	-	-	-	12	A-4a (V)	
5		10													
6		8	20	49	47	SS-3	4.5+	-	-	-	-	-	12	A-4a (V)	
7		14													
8															
9		6	9	27	83	SS-4	4.5+	12	9	16	39	24	15	10	A-4a (6)
10		10													
11		6	7	22	78	SS-5	4.5+	-	-	-	-	-	12	A-4a (V)	
12		8													
13															
14		7	13	36	56	SS-6	-	-	-	-	-	-	4	A-1-a (V)	
15		12													
16		8	12	33	72	SS-7	-	59	21	9	-	11	NP	NP	A-1-a (0)
17		11													
18		18													
19		9	13	36	64	SS-8	-	-	-	-	-	-	12	A-2-4 (V)	
20		12													
21		17	15	43	44	SS-9	-	-	-	-	-	-	12	A-2-4 (V)	
22		15													
23		12													
24		12	10	29	59	SS-10	-	-	-	-	-	-	18	A-2-4 (V)	
25		10													

NOTES: GROUNDWATER INITIALLY 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.

DESIGN AGENCY

 6350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
 DESIGNER
 JAS
 REVIEWER
 DEK 1/19/24
 PROJECT ID
 117607
 SUBSET TOTAL
 49 66
 SHEET TOTAL
 P.259 276

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 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:57:14 AM USER: kevinj
 J:\GEO TECH\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 NOISE WALLS
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/16/23 END: 11/15/23

DRILLING FIRM / OPERATOR: RII/TG
 SAMPLING FIRM / LOGGER: RII/MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 908+00 / 0'
 ALIGNMENT: CL WALL 9
 ELEVATION: 979.3 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.091273, -82.834170

EXPLORATION ID
B-034-0-23

PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

DEPTH	ELEV.	SPT / RQD	REC SAMPLE ID	HP (tsf)	GR	GRADATION (%)						WC	ODOT CLASS (GI)	BACK FILL	
						FS	SI	CL	LL	PL	PI				
1	979.3	6													
2	978.9	10	33	4.5+	-	-	-	-	-	-	-	-	-	12	A-6a (V)
3		13													
4		7	26	75	11	10	15	38	26	30	18	12	14	14	A-6a (7)
5		10													
6		12	37	89	-	-	-	-	-	-	-	-	-	17	A-6a (V)
7		14													
8															
9	968.8	9	29	36	-	-	-	-	-	-	-	-	-	15	A-6a (V)
10		10													
11		7	50	0	-	-	-	-	-	-	-	-	-	-	
12		15	20		-	-	-	-	-	-	-	-	-	-	
13		18		100	-	-	-	-	-	-	-	-	-	6	A-1-a (V)
14		20	46	69	-	74	10	6	-	10	-	NP	NP	4	A-1-a (0)
15		18													
16		10	30	72	-	-	-	-	-	-	-	-	-	6	A-1-a (V)
17		11													
18		12	35	39	-	-	-	-	-	-	-	-	-	6	A-1-a (V)
19		14													
20	958.8	10													
21		6													
22		7	24	75	-	-	-	-	-	-	-	-	-	16	A-2-4 (V)
23		10													
24	954.3	8	76	69	-	-	-	-	-	-	-	-	-	11	A-2-4 (V)
25		11	42												

NOTES: GROUNDWATER INITIALLY 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 GP1

RESOURCE INTERNATIONAL, INC.

PROJECT: FRA-161-15.80 NOISE WALLS
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/15/23 END: 11/15/23

DRILLING FIRM / OPERATOR: RII/TG
 SAMPLING FIRM / LOGGER: RII/MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

EXPLORATION ID
B-035-0-23

PAGE
 1 OF 1


MATERIAL DESCRIPTION AND NOTES

DEPTH	ELEV.	SPT / RQD	REC SAMPLE ID	HP (tsf)	GR	GRADATION (%)						WC	ODOT CLASS (GI)	BACK FILL	
						FS	SI	CL	LL	PL	PI				
1	981.0	7													
2	981.0	9	30	36	-	-	-	-	-	-	-	-	-	17	A-6b (V)
3		12													
4		10	46	83	-	13	8	13	38	28	34	18	16	12	A-6b (9)
5		17													
6		13	55	39	-	-	-	-	-	-	-	-	-	12	A-6b (V)
7		18													
8		20													
9	968.4	6	37	89	-	-	-	-	-	-	-	-	-	13	A-6b (V)
10		14													
11		8	26	47	-	-	-	-	-	-	-	-	-	11	A-6b (V)
12		9													
13															
14	968.4	6	19	83	-	-	-	-	-	-	-	-	-	16	A-2-4 (V)
15		7													
16	965.9	7	45	42	-	-	-	-	-	-	-	-	-	5	A-3a (V)
17		13													
18	963.4	10	46	69	-	57	17	9	15	2	NP	NP	NP	8	A-1-b (0)
19		14													
20		18													
21		5	11	33	64	-	-	-	-	-	-	-	-	12	A-1-b (V)
22		12													
23		18													
24	956.4	18	63	50	-	-	-	-	-	-	-	-	-	13	A-1-b (V)
25		20													

NOTES: GROUNDWATER INITIALLY 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 GP1

DESIGN AGENCY	
 6350 PRESIDENTIAL GATEWAY COLUMBUS, OHIO 43231 (614) 823-4949	
DESIGNER	
JAS	
REVIEWER	
DEK 1/19/24	
PROJECT ID	117607
SUBSET TOTAL	50 66
SHEET TOTAL	P.260 276

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 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:57:41 AM USER: kevinj
 J:\GEO TECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_Z1023.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/15/23 END: 11/15/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 910+00 / 0'
 ALIGNMENT: CL WALL 9
 ELEVATION: 983.2 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.091597, -82.832807

EXPLORATION ID
B-036-0-23
 PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

DEPTH (ft)	SPT / RQD	REC SAMPLE ID	HP (tsf)	GR	GRADATION (%)							WC	ODOT CLASS (GI)	BACK FILL	
					FS	CS	SI	CL	LL	PL	PI				
0.4' - TOPSOIL (4.5')															
1	9														
2	10	30	0	SS-1	-	-	-	-	-	-	-	-	-	-	
3	12	-	100	2S-1A	4.5+	-	-	-	-	-	-	-	-	20	A-6a (V)
4	6	24	72	SS-2	4.25	-	-	-	-	-	-	-	-	23	A-6a (V)
5	11														
6	9	26	83	SS-3	4.5+	-	-	-	-	-	-	-	-	16	A-6a (V)
7	9														
8															
9	6	20	100	SS-4	4.5+	-	-	-	-	-	-	-	-	17	A-6a (V)
10	7														
11	6	7	36	SS-5	4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)
12	7														
13															
14	5	22	39	SS-6	-	33	15	13	29	10	38	21	17	12	A-6b (2)
15															
16	10	39	0	SS-7	-	-	-	-	-	-	-	-	-	-	
17	10														
18	20	-	67	2S-7A	-	-	-	-	-	-	-	-	-	11	A-6b (V)
19	11	36	69	SS-8	-	31	31	16	20	2	23	17	6	11	A-1-b (0)
20	12														
21	10														
22	18	76	0	SS-9	-	-	-	-	-	-	-	-	-	-	
23	12	-	100	2S-9A	-	-	-	-	-	-	-	-	-	23	A-2-6 (V)
24	10	49	33	SS-10	-	-	-	-	-	-	-	-	-	20	A-2-6 (V)
25	17														

NOTES: GROUNDWATER INITIALLY 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
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/15/23 END: 11/15/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 912+00 / 0'
 ALIGNMENT: CL WALL 9
 ELEVATION: 984.9 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.091724, -82.832101

EXPLORATION ID
B-037-0-23
 PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

DEPTH (ft)	SPT / RQD	REC SAMPLE ID	HP (tsf)	GR	GRADATION (%)							WC	ODOT CLASS (GI)	BACK FILL	
					FS	CS	SI	CL	LL	PL	PI				
0.4' - TOPSOIL (5.0')															
1	5														
2	7	23	50	SS-1	4.5+	-	-	-	-	-	-	-	-	19	A-6b (V)
3															
4	4	17	100	SS-2	4.5+	-	-	-	-	-	-	-	-	20	A-6b (V)
5	7														
6	4	20	72	SS-3	4.5+	-	8	13	40	30	37	18	19	16	A-6b (11)
7	5														
8															
9	6	16	94	SS-4	4.5+	-	-	-	-	-	-	-	-	19	A-6b (V)
10	5														
11	4	13	61	SS-5	3.50	-	-	-	-	-	-	-	-	18	A-6b (V)
12	4														
13															
14	4	20	53	SS-6	-	-	-	-	-	-	-	-	-	17	A-4a (V)
15	7														
16	3	32	0	SS-7	-	-	-	-	-	-	-	-	-	-	
17	9														
18	16	-	75	SS-7A	-	28	16	12	33	11	28	19	9	13	A-4a (2)
19	13	46	100	SS-8	-	-	-	-	-	-	-	-	-	9	A-1-b (V)
20	16														
21															
22	9	42	0	SS-9	-	-	-	-	-	-	-	-	-	-	
23	14	-	100	SS-9A	-	-	-	-	-	-	-	-	-	16	A-2-4 (V)
24	12	39	61	SS-10	-	-	-	-	-	-	-	-	-	13	A-2-4 (V)
25	15														

NOTES: GROUNDWATER INITIALLY 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.

DESIGN AGENCY

 6350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
 DESIGNER
 JAS
 REVIEWER
 DEK 1/19/24
 PROJECT ID
 117607
 SUBSET TOTAL
 51 66
 SHEET TOTAL
 P.261 276

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 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:58:10 AM USER: kevinj
 J:\GEO\GEO\GEOtech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_Z1024.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 12/5/23 END: 12/5/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 120+00 / 0'
 ALIGNMENT: CL WALL 12
 ELEVATION: 979.3 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.091445, -82.828386

EXPLORATION ID
B-038-0-23

PAGE
 1 OF 1

**MATERIAL DESCRIPTION
 AND NOTES**

DEPTH (ft)	SPT / RQD	REC SAMPLE ID	HP (tsf)	GRADATION (%)				ATTERBERG			ODOT CLASS (GI)	BACK FILL			
				GR	CS	FS	SI	CL	LL	PL			PI	WC	
1	6														
2	7	20	0												
3	9		67	2S-1A	4.5+										
4	10	43	50	SS-2	4.5+							15 A-6b (V)			
5	20											14 A-6b (V)			
6	6	22	0	SS-3											
7	9		100	2S-3A	4.5+	17	9	10	32	32	39	18	21	14 A-6b (10)	
8	14														
9	5	6	22	33	SS-4	4.5+								12 A-6b (V)	
10	9														
11	4	5	14	81	SS-5	4.00								20 A-6b (V)	
12	5														
13	7	13	48	50	SS-6									9 A-4a (V)	
14	20														
15	7														
16	14	15	36	39	SS-7	4.5+	50	13	7	22	8	26	21	5	8 A-2-4 (0)
17	10														
18	9	18	33	81	SS-8										18 A-2-4 (V)
19	5														
20	6	8	20	56	SS-9										23 A-2-4 (V)
21	5														
22	6														
23	14	11	32	72	SS-10										Rock (V)
24	11														
25	11														

ELEV. 979.3
 978.5
 978.2
 966.3
 963.8
 958.8
 956.3
 954.3

LOOSE TO MEDIUM DENSE, BROWN SANDY SILT,
 SOME FINE GRAVEL, LITTLE CLAY, MOIST.

LOOSE TO MEDIUM DENSE, GRAY GRAVEL WITH SAND
 AND SILT, TRACE CLAY, MOIST.

VERY STIFF, BROWN SILT AND CLAY, LITTLE COARSE
 TO FINE SAND, TRACE FINE GRAVEL, MOIST.

SHALE : BLACK, HIGHLY WEATHERED.

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.

DESIGN AGENCY

 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
 DESIGNER
JAS
 REVIEWER
DEK 1/19/24
 PROJECT ID
117607
 SUBSET TOTAL
 52 | 66
 SHEET TOTAL
 P.262 | 276

**GEOTECHNICAL PROFILE - NOISE WALLS
 NOISE WALL 12
 BORING LOGS B-038-0-23**

FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:58:25 AM USER: kevinj
 J:\GEO\GEO\GEOtech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_Z1025.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 12/4/23 END: 12/4/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 121+41.21 / 0'
 ALIGNMENT: CL WALL 12
 ELEVATION: 986.4 (MSL) EOB: 20.0 ft.
 LAT / LONG: 40.091317, -82.827731

EXPLORATION ID
B-039-0-23
 PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

0.5' TOPSOIL (5.5')
 HARD, BROWN CLAY, LITTLE COARSE TO FINE SAND,
 TRACE FINE GRAVEL, MOIST.

SHALE : GRAY, HIGHLY WEATHERED.

SHALE : GRAY, MODERATELY WEATHERED, WEAK,
 VERY FINE GRAINED, LAMINATED, FRACTURED,
 NARROW APERTURES, SLIGHTLY ROUGH SURFACE,
 BLOCKY, DISTURBED, SEAMY, POOR SURFACE.

DEPTH (ft)	SPT / RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)						WC	HOLE SEALED		
						GR	FS	SI	CL	LL	PL			PI	
1	7														
2	5	16	0	SS-1	-	-	-	-	-	-	-	-			
3	9		100	2S-1A	4.5+	-	-	-	-	-	-	19	A-7.6 (V)		
4	4														
5	6	19	0	SS-2	-	-	-	-	-	-	-	-			
6	10		50	2S-2A	4.5+	-	-	-	-	-	-	18	A-7.6 (V)		
7	8	20	81	SS-3	4.5+	28	9	7	25	31	50	20	30	16	A-7.6 (13)
8															
9	9	27	75	SS-4	4.5+	-	-	-	-	-	-	-	-	14	A-7.6 (V)
10	10														
11	10/0"														Rock (V)
12															
13															
14	50/4"		0	SS-6	-	-	-	-	-	-	-	-	-		Rock (V)
15	0		0	NQ2-1											CORE
16															
17	43		100	NQ2-2											CORE
18															
19															
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

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



FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:58:44 AM USER: kevinj
 J:\GEO TECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_Z1026.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 12/4/23 END: 12/4/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 123+26.79 / 0'
 ALIGNMENT: CL WALL 12
 ELEVATION: 987.0 (MSL) EOB: 21.0 ft.
 LAT / LONG: 40.091207, -82.827079

EXPLORATION ID
B-040-0-23

PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

DEPTH	ELEV.	SPT / RQD	REC SAMPLE ID	HP (tsf)	GR	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	HOLE SEALED
1	986.6	3												
2		6	SS-1	4.5+								17	A-6a (V)	
3		8												
4		7	SS-2	4.5+								20	A-6a (V)	
5		9												
6		6	SS-3	4.5+	7	9	15	37	32	18	15	18	A-6a (9)	
7		8												
8		4	SS-4	4.5+								18	A-6a (V)	
9	976.5	6												
10		8												
11		8												
12		15	SS-5	-								10	Rock (V)	
13		50/3"												
14	973.0	60/3"	SS-6	-								2	Rock (V)	
15		0	NQ2-1	37									CORE	
16	971.0													
17														
18		0	NQ2-2	100									CORE	
19	967.7													
20														
21	966.0													

0.4' TOPSOIL (5.0')
 HARD, BROWN TO GRAY SILT AND CLAY, LITTLE TO TRACE SAND AND GRAVEL, DAMP TO MOIST.

SHALE : GRAY, HIGHLY WEATHERED.

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

SHALE : GRAY, MODERATELY WEATHERED, WEAK, FINE GRAINED, LAMINATED, FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, DISTURBED, SEAMY, POOR SURFACE.

SILTSTONE : GRAY, SLIGHTLY WEATHERED, MODERATELY STRONG, VERY FINE GRAINED, VERY THIN, HIGHLY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, DISTURBED, SEAMY, FAIR SURFACE.

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.

Project Name: FRA-161-15.80

Location:
 Franklin County, Ohio

<p>Photo No. 9</p>			
<p>Boring: B-040-0-23</p>			
<p>RC-1: 14.0-16.0' REC (%):37 RQD (%):0</p>			
<p>RC-2: 16.0-21.0' REC (%):100 RQD (%):0</p>			

FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:59:04 AM USER: kevinj
 J:\GEO\GEO\GEOtech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_Z1027.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 12/4/23 END: 12/4/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 124+97.00 / 0'
 ALIGNMENT: CL WALL 12
 ELEVATION: 988.2 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.091033, -82.826474

EXPLORATION ID
B-041-0-23

PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

DEPTHS	ELEV.	SPT / RQD	N ₆₀	REC SAMPLE ID	HP (tsf)	GRADATION (%)						WC	HOLE SEALED		
						GR	FS	SI	CL	LL	PL			PI	
1	988.2	4													
2	987.7	5	17	SS-1	3.50	-	-	-	-	-	-	16	A-6a (V)		
3		7													
4		5	22	SS-2	3.00	6	12	19	34	29	30	17	13	15	A-6a (7)
5	982.7	10													
6		13													
7		32	96	SS-3	-	-	-	-	-	-	-	-	8	A-2-4 (V)	
8	980.2	35													
9		10	72	SS-4	-	-	-	-	-	-	-	-	7	Rock (V)	
10		21	29												
11		50/6"		SS-5	-	-	-	-	-	-	-	-	6	Rock (V)	
12															
13		36	50/5"	SS-6	-	-	-	-	-	-	-	-	4	Rock (V)	
14															
15															
16	972.2														
17															
18		20		NQ2-1	68										CORE
19															
20															
21															
22		40		NQ2-2	100										CORE
23															
24															
25	963.2														

000-23 RII STA ODOT BORING LOG (8.5X11) - OH DOT GDT - 1/11/24 07:57 - U:\G18\PROJECTS\2023\W-23-107.GPJ

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.

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

DESIGN AGENCY

 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949

DESIGNER
JAS

REVIEWER
DEK 1/19/24

PROJECT ID
117607

SUBSET TOTAL
 55 | 66

SHEET TOTAL
 P.265 | 276

GEOTECHNICAL PROFILE - NOISE WALLS
NOISE WALL 12
BORING LOG & ROCK CORE PHOTO FOR B-041-0-23

FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:59:24 AM USER: kevinj
 J:\GEO\GEO\Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_Z1028.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/9/23 END: 11/9/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1500+29 / 0'
 ALIGNMENT: CL WALL 15
 ELEVATION: 1030.3 (MSL) EOB: 24.0 ft.
 LAT / LONG: 40.090577, -82.811738

EXPLORATION ID
B-042-0-23
 PAGE
 1 OF 1

DEPTH (ft)	SPT / RQD	REC SAMPLE ID	HP (tsf)	GRADATION (%)							WC	ODOT CLASS (GI)	HOLE SEALED
				GR	FS	SI	CL	LL	PL	PI			
1	3												
2	8	23	4.5+										
3	8												
4	14	39											
5	13												
6	4	16	4.5+										
7	5	6											
8	4	23	4.5+										
9	8												
10	8												
11	40												
12	42												
13	50/2'												
14	50/0"												
15													
16	50/3"												
17													
18	58												
19													
20													
21													
22	68												
23													
24													

0.6' TOPSOIL (6.5")
 HARD, BROWN SILT AND CLAY, SOME COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP TO MOIST.

SANDSTONE : GRAY, HIGHLY WEATHERED.

SANDSTONE : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATLY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACES, BLOCKY, GOOD SURFACE.

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

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	

DESIGN AGENCY

 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
 DESIGNER
 JAS
 REVIEWER
 DEK 1/19/24
 PROJECT ID
 117607
 SUBSET TOTAL
 56 66
 SHEET TOTAL
 P.266 276

GEOTECHNICAL PROFILE - NOISE WALLS
NOISE WALL 15
BORING LOG & ROCK CORE PHOTO FOR B-042-0-23

FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 9:59:45 AM USER: kevinj
 J:\GEO\GEO\GEOtech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_Z1029.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/9/23 END: 11/9/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1502+16 / 0'
 ALIGNMENT: CL WALL 15
 ELEVATION: 1035.0 (MSL) EOB: 24.5 ft.
 LAT / LONG: 40.090645, -82.811039

EXPLORATION ID
B-043-0-23
 PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

DEPTHS	ELEV.	SPT / RQD	REC SAMPLE ID	HP (tsf)	GR	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	HOLE SEALED
1	1034.5	3												
2		5												
3		9												
4		8	SS-1	4.5+								13	A-4a (V)	
5		8												
6		3												
7		5												
8		8												
9		4												
10	1024.5	5												
11		20												
12		50/5"										6	Rock (V)	
13														
14		20												
15		30												
16		35												
17		50/4"										6	Rock (V)	
18														
19	1016.5	0												
20			NQ2-1											CORE
21														
22	1013.4	33												
23	1012.5													
24	1010.5		NQ2-2											CORE

0.5' TOPSOIL (5.5')
 HARD, BROWN SANDY SILT, SOME COARSE TO FINE SAND, LITTLE FINE GRAVEL, MOIST TO DAMP.

SANDSTONE : GRAY, HIGHLY WEATHERED.

SANDSTONE : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATELY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, GOOD SURFACE.

SHALE : GRAY, MODERATELY WEATHERED, WEAK, FINE GRAINED, LAMINATED, FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, DISTURBED, SEAMY, POOR SURFACE.

SANDSTONE : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATELY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, GOOD SURFACE.

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

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 (%):10	
RC-2: 19.5-24.5' REC (%):68 RQD (%):33	

DESIGN AGENCY

 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
 DESIGNER
 JAS
 REVIEWER
 DEK 1/19/24
 PROJECT ID
 117607
 SUBSET TOTAL
 57 66
 SHEET TOTAL
 P.267 276

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 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:00:05 AM USER: kevinj
 J:\GEO TECH\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
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/14/23 END: 11/14/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1504+27.0'
 ALIGNMENT: CL WALL 15
 ELEVATION: 1038.3 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.090479, -82.810313

EXPLORATION ID
B-044-0-23

**MATERIAL DESCRIPTION
 AND NOTES**

0.3' TOPSOIL (4.0")
 HARD, LIGHT BROWN SILT AND CLAY, SOME COARSE TO FINE SAND, LITTLE FINE GRAVEL, DAMP TO MOIST.

SANDSTONE : GRAY, HIGHLY WEATHERED.

DEPTH (ft)	SPT / RQD	N ₆₀	REC SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
					GR	CS	FS	SI	CL	LL	PL	PI			
1	4														
2	7	19	SS-1	4.5+	-	-	-	-	-	-	-	-	15	A-6a (V)	
3															
4	12	37	SS-2	-	-	-	-	-	-	-	-	-	9	A-6a (V)	
5	13														
6	10	35	SS-3	4.5+	15	10	14	39	22	30	17	13	14	A-6a (6)	
7	12														
8	8	32	SS-4	4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)	
9	13														
10															
11	6	27	SS-5	4.5+	-	-	-	-	-	-	-	-	11	A-6a (V)	
12	10	9													
13	TR														
14	50/4"		SS-6	-	-	-	-	-	-	-	-	-	7	Rock (V)	
15															
16	38		SS-7	-	-	-	-	-	-	-	-	-	10	Rock (V)	
17	50/4"														
18															
19	50/6"		SS-8	-	-	-	-	-	-	-	-	-	5	Rock (V)	
20															
21	50/6"		SS-9	-	-	-	-	-	-	-	-	-	5	Rock (V)	
22															
23	50/5"		SS-10	-	-	-	-	-	-	-	-	-	5	Rock (V)	
24															
25	EOB														

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING; CAVE-IN DEPTH @ 12.8'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS.

RESOURCE INTERNATIONAL, INC.

PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/14/23 END: 11/14/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1506+08.70'
 ALIGNMENT: CL WALL 15
 ELEVATION: 1038.9 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.090452, -82.809651

EXPLORATION ID
B-045-0-23

**MATERIAL DESCRIPTION
 AND NOTES**

0.3' TOPSOIL (4.0")
 HARD, LIGHT BROWN TO BROWN CLAY, "AND" SILT, TRACE COARSE TO FINE SAND, DAMP.


HARD, BROWN SILT AND CLAY, SOME COARSE TO FINE SAND, LITTLE FINE GRAVEL, MOIST.

SILTSTONE : GRAY TO DARK GRAY, HIGHLY WEATHERED.

DEPTH (ft)	SPT / RQD	N ₆₀	REC SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
					GR	CS	FS	SI	CL	LL	PL	PI			
1	5														
2	5	16	SS-1	4.5+	0	3	8	51	38	48	20	28	17	A-7-6 (17)	
3															
4	9	32	SS-2	4.5+	-	-	-	-	-	-	-	-	14	A-7-6 (V)	
5	10														
6	10	37	SS-3	4.5+	-	-	-	-	-	-	-	-	14	A-7-6 (V)	
7	13														
8	8	36	SS-4	-	11	13	16	7	53	28	17	11	12	A-6a (5)	
9	12														
10	4	30	SS-5	-	-	-	-	-	-	-	-	-	13	A-6a (V)	
11	6														
12	15														
13	TR														
14	50/4"		SS-6	-	-	-	-	-	-	-	-	-	6	Rock (V)	
15															
16	50/4"		SS-7	-	-	-	-	-	-	-	-	-	7	Rock (V)	
17															
18	50/4"		SS-8	-	-	-	-	-	-	-	-	-	6	Rock (V)	
19															
20															
21	50/2"		SS-9	-	-	-	-	-	-	-	-	-	6	Rock (V)	
22															
23															
24	50/0"		SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	
25	EOB														

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER; CAVE-IN DEPTH @ 13.9'

ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS.

DESIGN AGENCY

 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
 DESIGNER
JAS
 REVIEWER
DEK 1/19/24
 PROJECT ID
117607
 SUBSET TOTAL
58 66
 SHEET TOTAL
P.268 276

**GEOTECHNICAL PROFILE - NOISE WALLS
 NOISE WALL 15
 BORING LOGS B-044-0-23 AND B-045-0-23**

FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPER: 34x22 (in.) DATE: 1/19/2024 TIME: 10:00:35 AM USER: kevinj
 J:\GEO TECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL031.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/10/23 END: 11/10/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1508+10 / 0'
 ALIGNMENT: CL WALL 15
 ELEVATION: 1039.1 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.090415, -82.808921

EXPLORATION ID
B-046-0-23
 PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

DEPTH (ft)	SPT / RQD	REC SAMPLE ID	HP (tsf)	GRADATION (%)							WC	HOLE SEALED
				GR	CS	FS	SI	CL	LL	PL		
1	5											
2	7											
3	8											
4	12											
5	14											
6	15											
7	16											
8	10											
9	8											
10	12											
11	15											
12	11											
13	18											
14	16											
15	32											
16	50/4"											
17												
18	50/4"											
19	0											
20												
21												
22	37											
23												
24												
25												

0.5' - TOPSOIL (5.5')
 HARD, BROWNISH GRAY CLAY, "AND" SILT, LITTLE FINE GRAVEL, LITTLE COARSE TO FINE SAND, DAMP.

HARD, BROWNISH GRAY SILT AND CLAY, SOME COARSE TO FINE SAND, SOME FINE GRAVEL, MOIST.

SANDSTONE : GRAY, HIGHLY WEATHERED.

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
 -@24.5'-25.0' SHALE

NOTES: GROUNDWATER NOT MEASURED UPON COMPLETION DUE TO INFLUENCE OF CORE WATER. CAVE-IN DEPTH @ 19.2'
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 47 LBS CEMENT, 25 LBS BENTONITE POWDER AND 40 GAL WATER

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 (%):10

RC-2: 20.0-25.0'
 REC (%):93
 RQD (%):37

FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:00:56 AM USER: kevinj
 J:\GEO\GEO\Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL032.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/10/23 END: 11/10/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1510+10 / 0'
 ALIGNMENT: CL WALL 15
 ELEVATION: 1039.2 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.090391, -82.808171

EXPLORATION ID
B-047-0-23
 PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

DEPTH (ft)	SPT / RQD	REC SAMPLE ID	HP (tsf)	GRADATION (%)							WC	HOLE CLASS (GI)	HOLE SEALED
				GR	FS	SI	CL	LL	PL	PI			
1	4												
2	8	27	4.5+									22	A-6a (V)
3	11												
4	17	52	4.5+	11	13	36	31	31	17	14		11	A-6a (8)
5	19												
6	5	6	20	75								14	A-6a (V)
7	8												
8													
9	5	7	22	58								14	A-6a (V)
10	8												
11													
12	12	37	61	SS-5	14	13	32	18	26	17	9	11	A-4a (3)
13	14												
14	15	20	52	SS-6								6	Rock (V)
15	16												
16	19	15	54	SS-7								8	Rock (V)
17	50/6"												
18	50/4"											13	Rock (V)
19	0												CORE
20													
21													
22													
23	55												
24													
25													

0.5' TOPSOIL (6.0")
 HARD, BROWN SILT AND CLAY, SOME COARSE TO FINE SAND, LITTLE FINE GRAVEL, DAMP.

HARD, BROWN SANDY SILT, LITTLE CLAY, SOME FINE GRAVEL, DAMP.

SILTSTONE : GRAY, HIGHLY WEATHERED.

SANDSTONE : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACES, BLOCKY, GOOD SURFACE.

-@22.4' CLAY SEAM
 -@ 19.0' - 25.0' RED IRON STAINING THROUGHOUT

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

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 (%):10

RC-2: 20.0-25.0'
 REC (%):92
 RQD (%):55



DESIGN AGENCY
 RESOURCE INTERNATIONAL
 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949

DESIGNER	JAS
REVIEWER	DEK
REVIEW DATE	1/19/24
PROJECT ID	117607
SUBSET TOTAL	60 / 66
SHEET TOTAL	P.270 / 276

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 PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:01:16 AM USER: kevinj
 J:\GEO\GEO\GEOtech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_Z1033.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/10/23 END: 11/10/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA
 SAMPLING METHOD: SPT

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1512+10 / 0'
 ALIGNMENT: CL WALL 15
 ELEVATION: 1037.4 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.090360, -82.807478

EXPLORATION ID
B-048-0-23
 PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

ELEV.	DEPTHS	SPT / RQD	REC SAMPLE ID	HP (tsf)	GR	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
1037.4	1	3												
1036.9	2	3	SS-1	4.5+	-	-	-	-	-	-	-	19	A-6b (V)	
	3	5												
	4	6												
	5	7	SS-2	4.5+	10	5	19	32	34	17	19	14	A-6b (10)	
	6	7												
	7	6	SS-3	4.5+	-	-	-	-	-	-	-	17	A-6b (V)	
	8	11												
	9	6	SS-4	4.5+	-	-	-	-	-	-	-	12	A-6b (V)	
	10	10												
1026.9	11	5	SS-5	4.5+	18	11	14	33	24	26	10	11	A-4a (4)	
	12	6												
	13	9												
	14	3	SS-6	3.00	-	-	-	-	-	-	-	12	A-4a (V)	
	15	4												
	16	5												
	17	28	SS-7	-	-	-	-	-	-	-	-	0	Rock (V)	
	18	35												
	19	50/3"												
	20	15	SS-8	-	-	-	-	-	-	-	-	13	Rock (V)	
	21	24												
	22	26												
	23	60/3"	SS-9	-	-	-	-	-	-	-	-	-	Rock (V)	
	24	11												
	25	10	SS-10	-	-	-	-	-	-	-	-	20	Rock (V)	
1012.4	EOB	15												

0.5' - TOPSOIL (6.0')

HARD, BROWN TO GRAY SILTY CLAY, SOME COARSE TO FINE SAND, TRACE FINE GRAVEL, DAMP TO MOIST.

VERY STIFF TO HARD, GRAY SANDY SILT, SOME CLAY, LITTLE FINE GRAVEL, DAMP.

SHALE : BROWN, SEVERELY WEATHERED.

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING; CAVE-IN DEPTH @ 16.1'
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: BACKFILLED WITH 50 LBS. BENTONITE CHIPS AND SOIL CUTTINGS.

DESIGN AGENCY

 8350 PRESIDENTIAL GATEWAY
 COLUMBUS, OHIO 43231
 (614) 823-4949
 DESIGNER
JAS
 REVIEWER
DEK 1/19/24
 PROJECT ID
117607
 SUBSET TOTAL
61 66
 SHEET TOTAL
P.271 276

GEOTECHNICAL PROFILE - NOISE WALLS
NOISE WALL 15
BORING LOG B-048-0-23

FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPER: 34x22 (in.) DATE: 1/19/2024 TIME: 10:01:31 AM USER: kevinj
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RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/10/23 END: 11/10/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1514+10 / 0'
 ALIGNMENT: CL WALL 15
 ELEVATION: 1038.9 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.090327, -82.806756

EXPLORATION ID
B-049-0-23
 PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

0.5' TOPSOIL (5.5')
 VERY STIFF TO HARD, BROWN CLAY, SOME SILT,
 SOME FINE GRAVEL, TRACE COARSE TO FINE SAND,
 MOIST TO DAMP.

HARD, GRAY SANDY SILT, TRACE GRAVEL, MOIST TO
 DAMP.

SILTSTONE : GRAY, HIGHLY WEATHERED.

SANDSTONE : GRAY, SLIGHTLY WEATHERED,
 STRONG, FINE GRAINED, THIN BEDDED, MODERATELY
 FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH
 SURFACES, BLOCKY, GOOD SURFACE.

DEPTH (ft)	SPT / RQD	REC SAMPLE ID	HP (tsf)	GRADATION (%)							WC	ODOT CLASS (GI)	HOLE SEALED
				GR	FS	SI	CL	LL	PL	PI			
1	1												
2	3												
3	4												
4	6												
5	8												
6	3												
7	4												
8	8												
9	13												
10	16												
11	4												
12	8												
13	10												
14	5												
15	7												
16	50/3"												
17													
18	50/0"												
19	0												
20													
21													
22													
23	28												
24													
25													

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

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



FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:01:51 AM USER: kevinj
 J:\GEO TECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL035.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/13/23 END: 11/13/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1516+10 / 0'
 ALIGNMENT: CL WALL 15
 ELEVATION: 1038.0 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.090286, -82.806054

EXPLORATION ID
B-050-0-23
 PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

0.5' TOPSOIL (5.5')
 VERY STIFF TO HARD, BROWN TO GRAY SILTY CLAY, SOME COARSE TO FINE SAND, LITTLE FINE GRAVEL, DAMP TO MOIST.

DENSE, BROWN GRAVEL WITH SAND AND SILT, TRACE CLAY, DAMP.

SILTSTONE : GRAY, HIGHLY WEATHERED.

SANDSTONE : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATELY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACES, BLOCKY, GOOD SURFACE.
 -@21.0' RED STAINING

DEPTH (ft)	SPT / RQD	N ₆₀	REC SAMPLE ID	HP (tsf)	GRADATION (%)					WC	ODOT CLASS (GI)	HOLE SEALED
					GR	CS	FS	SI	CL			
1	2											
2	4	13	SS-1	4.00	-	-	-	-	-	20	A-6b (V)	
3	5											
4	7	19	SS-2	3.25	13	8	13	39	27	15	A-6b (9)	
5	6											
6	8	29	SS-3	4.00	-	-	-	-	-	15	A-6b (V)	
7	10											
8	10											
9	4	23	SS-4	4.5+	-	-	-	-	-	9	A-6b (V)	
10	11											
11	18	39	SS-5	-	-	-	-	-	-	9	A-2.4 (V)	
12	15											
13	12											
14	6	69	SS-6	-	-	-	-	-	-	8	Rock (V)	
15	16	32										
16	50/5"	-	SS-7	-	-	-	-	-	-	12	Rock (V)	
17												
18	50/4"	-	SS-8	-	-	-	-	-	-	7	Rock (V)	
19	0	25	NQ2-1								CORE	
20												
21												
22	82		NQ2-2	100							CORE	
23												
24												
25												

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

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



FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:02:12 AM USER: kevinj
 J:\GEO TECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL036.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/13/23 END: 11/13/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1519+10.6 / 8.77' LT
 ALIGNMENT: CL WALL 15
 ELEVATION: 1038.1 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.090226, -82.806530

EXPLORATION ID
B-051-0-23
 PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

0.5' - TOPSOIL (5.5")
 HARD, BROWN SILTY CLAY, LITTLE GRAVEL AND SAND, DAMP.

VERY DENSE, BROWN TO GRAY GRAVEL WITH SAND AND SILT, DAMP.

-@ 6.0' - 8.0' COBBLES

SILTSTONE : GRAY, HIGHLY WEATHERED.

SANDSTONE : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATELY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, GOOD SURFACE.

-VERTICAL FRACTURE @ 20.3', 20.9', 23.2' AND 24.7'

DEPTH (ft)	SPT / RQD	REC SAMPLE ID	REC (%)	HP (tsf)	GRADATION (%)							WC	HOLE SEALED
					GR	FS	SI	CL	LL	PL	PI		
1	3												
2	6												
3	7												
4	10												
5	12												
6	36												
7	26												
8	22												
9	17												
10	19												
11	32												
12	17												
13	29												
14	14												
15	50/3"												
16	50/4"												
17													
18													
19	50												
20													
21													
22	50												
23													
24													
25													

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

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



FRA-161-15.80 NOISE WALLS

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 1/19/2024 TIME: 10:02:34 AM USER: kevinj
 J:\GEO TECH\Geotech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL037.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/13/23 END: 11/13/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1520+41 / 0'
 ALIGNMENT: CL WALL 15
 ELEVATION: 1038.6 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.090130, -82.804859

EXPLORATION ID
B-052-0-23
 PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES

0.3' - TOPSOIL (4.0')
 HARD, BROWN SILT AND CLAY, LITTLE GRAVEL AND SAND, DAMP.

MEDIUM DENSE, BROWN GRAVEL WITH SAND AND SILT, DAMP.
 -COBBLES @ 6.5'-8.0'

SILTSTONE : GRAY, HIGHLY WEATHERED.

SANDSTONE : GRAY, SLIGHTLY WEATHERED, STRONG, FINE GRAINED, THIN BEDDED, MODERATELY FRACTURED, NARROW APERTURES, SLIGHTLY ROUGH SURFACE, BLOCKY, GOOD SURFACE.

-SHALE SEAMS @ 22.6', 23.0, 24.2'

DEPTH (ft)	SPT / RQD	REC SAMPLE ID	HP (tsf)	GRADATION (%)				ATTERBERG				ODOT CLASS (GI)	HOLE SEALED
				GR	CS	FS	SI	CL	LL	PL	PI		
1	6												
2	7												
3	10		4.5+										
4	12												
5	13												
6	18												
7	50/4"		4.5+										
8													
9	12												
10	10												
11	8												
12	25												
13	35												
14	28												
15	19												
16	42												
17	50/3"												
18	92												
19	92												
20	92												
21													
22													
23													
24													
25													

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

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



FRA-161-15.80 NOISE WALLS

MODEL: Sheet PAPER: 34x22 (in.) DATE: 1/19/2024 TIME: 10:02:55 AM USER: kevinj
 J:\GEO\GEO\GEOtech Connect Projects\2023\W-23-107 FRA-161-15.80 NOISE WALLS\117607\400-Engineering\Geotechnical\Sheets\117607_ZL038.dgn

RESOURCE INTERNATIONAL, INC.



PROJECT: FRA-161-15.80
 TYPE: NOISE WALLS
 PID: 117607 SFN: NA
 START: 11/14/23 END: 11/14/23

DRILLING FIRM / OPERATOR: RII / TG
 SAMPLING FIRM / LOGGER: RII / MJ
 DRILLING METHOD: 3.25" HSA / NQ2
 SAMPLING METHOD: SPT / NQ2

DRILL RIG: DIETRICH D-50 (# 313)
 HAMMER: AUTOMATIC
 CALIBRATION DATE: 3/21/22
 ENERGY RATIO (%): 86.4

STATION / OFFSET: 1522+26 / 0'
 ALIGNMENT: CL WALL 15
 ELEVATION: 1036.5 (MSL) EOB: 25.0 ft.
 LAT / LONG: 40.090039, -82.804245

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DEPTH (ft)	SPT / RQD	REC SAMPLE ID	HP (tsf)	GRADATION (%)								WC	HOLE SEALED	
				GR	FS	SI	CL	LL	PL	PI	ODOT CLASS (GI)			
1	1													
2	2													
3	3													
4	4													
5	5													
6	6													
7	7													
8	8													
9	9													
10	10													
11	11													
12	12													
13	13													
14	14													
15	15													
16	16													
17	17													
18	18													
19	19													
20	20													
21	21													
22	22													
23	23													
24	24													
25	25													

0.5' TOPSOIL (6.0")
 VERY STIFF TO HARD, BROWN TO GRAY SILTY CLAY,
 SOME TO TRACE SAND, TRACE GRAVEL, MOIST.

HARD, BROWN TO BROWN GRAY SANDY SILT, TRACE
 GRAVEL, DAMP TO MOIST.

SANDSTONE : GRAY, HIGHLY WEATHERED.

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
 -@24.0 CLAY SEAM

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

Project Name: FRA-161-15.80

Location:
 Franklin County, Ohio

Photo No.
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Boring:
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RC-1: 19.0-20.0'
REC (%):50
RQD (%):50

RC-2: 20.0-25.0'
REC (%):100
RQD (%):68

