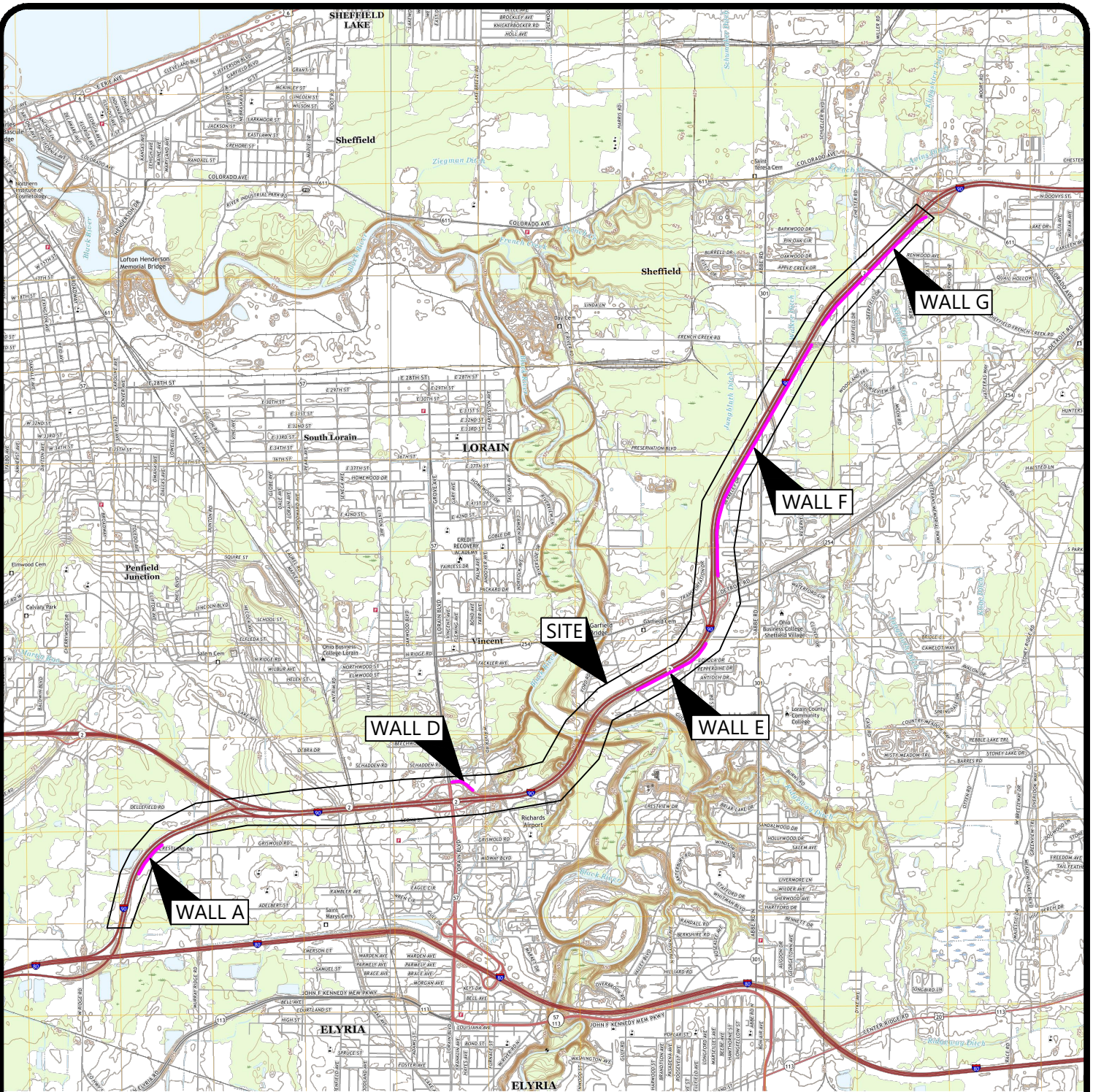
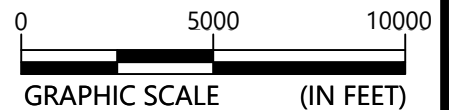




## Noise Wall Barrier Boring Data



USGS Mapping:  
Lorain and Avon USGS Quads



### Vicinity Map

Noise Barrier Wall Exploration  
LOR-90-10.76 Third Lane Widening  
Lorain County, Ohio

SCALE:	FIGURE NO.
GRAPHIC	<b>1</b>
DATE:	
PROJECT NUMBER	
217525A	

## EXPLANATION OF SYMBOLS AND TERMS USED ON BORING LOGS FOR SAMPLING AND DESCRIPTION OF SOIL

### SAMPLING DATA

- █ - Indicates sample was attempted within this depth interval.
- 2 - The number of blows required for each 6-inch increment of penetration of a "Standard" 2-inch O.D. split-barrel sampler, driven a distance of 18 inches by a 140-pound hammer freely falling 30 inches (SPT). The raw "blowcount" or "N" is equal to the sum of the second and third 6-inch increments of penetration.
- 3
- 5
- N<sub>60</sub> - Corrected Blowcount = [(Drill Rod Energy Ratio) / (0.60 Standard)] X N
- 90\* - Calibrated energy ratio exceeds 90% but is limited to 90% per ODOT SGE.
- SS - Split-barrel sampler, any size.
- ST - Shelby tube sampler, 3" O.D., hydraulically pushed.
- R - Refusal of sampler in very-hard or dense soil, or on a resistant surface.
- 50-4" - Number of blows (50) to drive a split-barrel sampler a certain distance (4 inches), other than the normal 6-inch increment.

### DEPTH DATA

- W - Depth of water or seepage encountered during drilling.
- ▽ - Depth to water in boring at the end of drilling (EOD).
- ▼ 5 days - Depth to water in monitoring well or piezometer in boring a certain number of days (5) after termination of drilling.
- TR - Depth to top of rock.

### SOIL DESCRIPTIONS

Soils have been classified in general accordance with Section 603 of the most recent ODOT SGE, and described in general accordance with Section 602, including the use of special adjectives to designate approximate percentages of minor components as follows:


<u>Adjective</u>	<u>Percent by Weight</u>
trace	1 to 10
little	10 to 20
some	20 to 35
"and"	35 to 50

The following terms are used to describe density and consistency of soils:

<u>Term (Granular Soils)</u>	<u>Blows per foot (N<sub>60</sub>)</u>
Very-loose	Less than 5
Loose	5 to 10
Medium-dense	11 to 30
Dense	31 to 50
Very-dense	Over 50
<u>Term (Cohesive Soils)</u>	<u>Qu (tsf)</u>
Very-soft	Less than 0.25
Soft	0.25 to 0.5
Medium-stiff	0.5 to 1.0
Stiff	1.0 to 2.0
Very-stiff	2.0 to 4.0
Hard	Over 4.0

## EXPLANATION OF SYMBOLS AND TERMS USED ON BORING LOGS FOR SAMPLING AND DESCRIPTION OF ROCK

### SAMPLING DATA

	<p><u>SPT/ RQD</u></p> <p>74%</p> <p>58%</p>	<p>When bedrock is encountered and rock core samples are attempted, the length of core recovered and lost during the core run is reported in the "REC" column. The type of rock core barrel utilized is recorded under the heading "Sampling Method" at the top of the boring log, and also in the "SAMPLE ID" column. Rock-core barrels can be of either single- or double-tube construction, and a special series of double-tube barrels, designated by the suffix M, may also be used to obtain maximum core recovery in very-soft or fractured rock. Four basic groups of barrels are used most often in subsurface investigations for engineering purposes, and these groups and the diameters of the cores obtained are as follows:</p> <table border="0" style="margin-left: 40px;"> <tr> <td>AX, AW, AXM, AWM</td> <td>-</td> <td>1-1/8 inches</td> </tr> <tr> <td>BX, BW, BXM, BWM</td> <td>-</td> <td>1-5/8 inches</td> </tr> <tr> <td>NX, NW, NXM, NWM</td> <td>-</td> <td>2-1/8 inches</td> </tr> <tr> <td>NQ, NQ2</td> <td>-</td> <td>1-7/8 inches</td> </tr> </table>	AX, AW, AXM, AWM	-	1-1/8 inches	BX, BW, BXM, BWM	-	1-5/8 inches	NX, NW, NXM, NWM	-	2-1/8 inches	NQ, NQ2	-	1-7/8 inches
AX, AW, AXM, AWM	-	1-1/8 inches												
BX, BW, BXM, BWM	-	1-5/8 inches												
NX, NW, NXM, NWM	-	2-1/8 inches												
NQ, NQ2	-	1-7/8 inches												

Rock Quality Designation (RQD) is expressed as a percentage and is obtained by summing the total length of all core pieces which are at least 4 inches long and then dividing this sum by, either, the total length of core run or the length of the core run in a particular bedrock stratum. The RQD value is reported as a percentage in the "SPT/RQD" column. It has been found that there is a reasonably good relationship between the RQD value and the general quality of rock for engineering purposes. This relationship is shown as follows:

<u>RQD - %</u>	<u>General Quality</u>
0 - 25	Very-poor
25 - 50	Poor
50 - 75	Fair
75 - 90	Good
90 - 100	Excellent

### ROCK HARDNESS

Recovered bedrock samples are described in general accordance with Section 605 of the 2007 ODOT SGE and subsequent revisions, where necessary. The following terms are used to describe rock hardness:

<u>Term</u>	<u>Meaning</u>
Very Weak	Rock can be excavated readily with the point of a pick and carved with a knife. Pieces 1 inch or greater in thickness can be broken by finger pressure. Can be scratched with a fingernail.
Weak	Rock can be grooved or gouged readily by a knife or pick, and can be excavated in small fragments with moderate blows from a pick point. Small, thin pieces may be broken with finger pressure.
Slightly Strong	Rock can be grooved or gouged 0.05 inches deep with firm pressure from a knife or pick point, and can be excavated in small chips to pieces of 1 inch maximum size using hard blows from the point of a geologist's pick.
Moderately Strong	Rock can be scratched with a knife or pick. Grooves or gouges to ¼ inch deep can be excavated by hard blows of a geologist's pick. Requires moderate hammer blows to detach a hand specimen.
Strong	Rock can be scratched with a knife or pick only with difficulty. Requires hard hammer blows to detach a hand specimen. Sharp and resistant edges are present on hand specimens.
Very Strong	Rock cannot be scratched by a knife or sharp pick. Breaking of hand specimens requires repeated hard blows of a geologist's hammer.
Extremely Strong	Rock cannot be scratched by a knife or sharp pick. Chipping of hand specimens requires repeated hard blows of a geologist's hammer.



# Important Information About Your Geotechnical Engineering Report

*Variations in subsurface conditions can be a principal cause of construction delays, cost overruns and claims. The following information is provided to assist you in understanding and managing the risk of these variations.*

## **Geotechnical Findings Are Professional Opinions**

Geotechnical engineers cannot specify material properties as other design engineers do. Geotechnical material properties have a far broader range on a given site than any manufactured construction material, and some geotechnical material properties may change over time because of exposure to air and water, or human activity.

Site exploration identifies subsurface conditions at the time of exploration and only at the points where subsurface tests are performed or samples obtained. Geotechnical engineers review field and laboratory data and then apply their judgment to render professional opinions about site subsurface conditions. Their recommendations rely upon these professional opinions. Variations in the vertical and lateral extent of subsurface materials may be encountered during construction that significantly impact construction schedules, methods and material volumes. While higher levels of subsurface exploration can mitigate the risk of encountering unanticipated subsurface conditions, no level of subsurface exploration can eliminate this risk.

## **Geotechnical Findings Are Professional Opinions**

Professional geotechnical engineering judgment is required to develop a geotechnical exploration scope to obtain information necessary to support design and construction. A number of unique project factors are considered in developing the scope of geotechnical services, such as the exploration objective; the location, type, size and weight of the proposed structure; proposed site grades and improvements; the construction schedule and sequence; and the site geology.

Geotechnical engineers apply their experience with construction methods, subsurface conditions and exploration methods to develop the exploration scope. The scope of each exploration is unique based on available project and site information. Incomplete project information or constraints on the scope of exploration increases the risk of variations in subsurface conditions not being identified and addressed in the geotechnical report.

## **Services Are Performed for Specific Projects**

Because the scope of each geotechnical exploration is unique, each geotechnical report is unique. Subsurface conditions are explored and recommendations are made for a specific project.

Subsurface information and recommendations may not be adequate for other uses. Changes in a proposed structure location, foundation loads, grades, schedule, etc. may require additional geotechnical exploration, analyses, and consultation. The geotechnical engineer should be consulted to determine if additional services are required in response to changes in proposed construction, location, loads, grades, schedule, etc.

## **Geo-Environmental Issues**

The equipment, techniques, and personnel used to perform a geo-environmental study differ significantly from those used for a geotechnical exploration. Indications of environmental contamination may be encountered incidental to performance of a geotechnical exploration but go unrecognized. Determination of the presence, type or extent of environmental contamination is beyond the scope of a geotechnical exploration.

## **Geotechnical Recommendations Are Not Final**

Recommendations are developed based on the geotechnical engineer's understanding of the proposed construction and professional opinion of site subsurface conditions. Observations and tests must be performed during construction to confirm subsurface conditions exposed by construction excavations are consistent with those assumed in development of recommendations. It is advisable to retain the geotechnical engineer that performed the exploration and developed the geotechnical recommendations to conduct tests and observations during construction. This may reduce the risk that variations in subsurface conditions will not be addressed as recommended in the geotechnical report.



## **Noise Barrier Wall A**

Drawing path: T:\Columbus-1170\Projects\2021\217525A\_ODOT\_DS\_LOR-90-1076 Noise Walls\_Sheffield OH\GEO\CAD\Construction\Plan of Borings.dwg



INFORMATION FOR SUBGRADE BORINGS IS INCLUDED IN S&ME'S SUBGRADE EXPLORATION REPORT DATED JUNE 28, 2023.



### PLAN OF BORINGS

LOR-90-1076 THIRD LANE WIDENING  
NOISE BARRIER WALL EXPLORATION - WALL A  
LORAIN COUNTY, OHIO

SCALE:
SEE GRAPHIC
DATE:
08-29-2023
PROJECT NUMBER
217525A
FIGURE NO.



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>580+64, 81' RT</u>	EXPLORATION ID: <b>B-002-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL A</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>747.8 (MSL)</u> EOB: <u>18.7 ft.</u>	
START: <u>5/15/23</u> END: <u>5/15/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.397532 N, 82.157971 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 4 INCHES	747.5	1																
FILL: Very-stiff gray and brown <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine gravel, damp.	747.8	1	4				2.0-3.0										<< >>	
	744.3	2	4	12	100	SS-1									13	A-6a (V)	<< >>	
	742.3	3															<< >>	
FILL: Medium-dense gray <b>GRAVEL WITH SAND AND SILT</b> , trace clay, many sandstone fragments, dry to damp.	742.3	4	4	20	100	SS-2									9	A-2-4 (V)	<< >>	
	741.8	5															<< >>	
FILL: Stiff to very-stiff gray mottled with brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	741.8	6	4				1.0-2.5										<< >>	
	739.3	7	4	12	67	SS-3		2	2	17	50	29	31	16	15	17	A-6a (10)	<< >>
	739.3	8																<< >>
Dense brown <b>SILT</b> , some fine sand, little clay, dry to damp.	736.8	9	8	48	100	SS-4		0	0	22	61	17	23	16	7	9	A-4b (8)	<< >>
	736.8	10	14															<< >>
	736.8	11	18															<< >>
<b>SHALE</b> , light-brown, severely to highly weathered, very weak.	734.8	11	50	-	100	SS-5		-	-	-	-	-	-	-	-	6	Rock (V)	<< >>
	734.8	12																<< >>
<b>SHALE</b> , gray, highly becoming moderately weathered, weak to slightly strong.	734.8	13																<< >>
	729.1	14	50-3"	-	33	SS-6		-	-	-	-	-	-	-	-	1	Rock (V)	<< >>
	729.1	15																<< >>
	729.1	16																<< >>
	729.1	17																<< >>
	729.1	18																<< >>
	729.1	18	50-2"	-	50	SS-7		-	-	-	-	-	-	-	-	4	Rock (V)	<< >>

NOTES:  
 - Seepage encountered at 6.0'.  
 - After removal of augers, boring caved at 14.8' and was dry.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 16:51 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



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S&ME JOB: 217525A



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>582+61, 78' RT</u>	EXPLORATION ID: <u>B-002-2-23</u>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <u>1 OF 1</u>
PID: <u>107714</u> BR ID: <u>WALL A</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>747.9 (MSL)</u> EOB: <u>21.3 ft.</u>	
START: <u>5/15/23</u> END: <u>5/15/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.398006 N, 82.157672 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
FILL: Loose brown and gray <b>GRAVEL WITH SAND</b> , trace to little silt, dry.	747.9	1	4				3.0-4.5	-	-	-	-	-	-	-	-	14	A-6b (V)	<< >>
FILL: Very-stiff to hard dark-brown becoming grayish-brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	744.9	2	4	12	100	SS-1A	3.0-4.5	-	-	-	-	-	-	-	-	13	A-6b (V)	<< >>
		3																<< >>
POSSIBLE FILL: Dense gray <b>SANDY SILT</b> , little fine to coarse gravel (shale fragments), trace clay, few cobbles, dry.	741.9	4	4	50	89	SS-2	-	-	-	-	-	-	-	-	-	7	A-4a (V)	<< >>
		5	14	19														<< >>
Stiff to very-stiff gray mottled with brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine to coarse gravel, few shale and sandstone fragments, becoming reddish-brown with depth, moist.	734.9	6	4	18	0	SS	-	-	-	-	-	-	-	-	-	-		<< >>
		7	5	7														<< >>
		8	5	-	100	SS-3	1.0-1.5	-	-	-	-	-	-	-	-	22	A-6b (V)	<< >>
		9	2	14	89	SS-4	2.5-4.0	-	-	-	-	-	-	-	-	24	A-6b (V)	<< >>
		10	4	5														<< >>
		11	2	15	100	SS-5	3.0-3.5	-	-	-	-	-	-	-	-	22	A-6b (V)	<< >>
		12	4	6														<< >>
Medium-dense brownish-gray <b>SANDY SILT</b> , little fine to coarse gravel, trace clay, damp.	732.4	13																<< >>
		14	6	27	100	SS-6	-	-	-	-	-	-	-	-	-	13	A-4a (V)	<< >>
		15	10	8														<< >>
<b>SHALE</b> , gray, severely to highly weathered, very weak to weak.	729.4	16	16	69	100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	<< >>
		17	31	15														<< >>
		18																<< >>
		19	50-3"	-	100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	<< >>
		20																<< >>
		21	50-4"	-	50	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	<< >>

**NOTES:**  
 - Encountered water at 18.5'.  
 - Water at 15.1' inside HSA at completion.

NOTES: SEE ABOVE.  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>584+69, 78' RT</u>	EXPLORATION ID: <b>B-003-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL A</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>747.4 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>5/15/23</u> END: <u>5/15/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.398485 N, 82.157302 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL		
								GR	CS	FS	SI	CL	LL	PL	PI					
FILL: Loose to medium-dense brown and gray <b>GRAVEL WITH SAND, SILT AND CLAY</b> , damp.	746.1	1	6	4	12	67	SS-1A	-	-	-	-	-	-	-	-	-	15	A-2-6 (V)		
POSSIBLE FILL: Medium-dense becoming dense grayish-brown and gray <b>SANDY SILT</b> , little to some fine to coarse gravel, trace to little clay, damp.	741.9	2	4	4			SS-1B	-	-	-	-	-	-	-	-	-	12	A-4a (V)		
		3																		
Stiff brown mottled with gray <b>SILTY CLAY</b> , little to some fine to coarse sand, trace fine gravel, damp to moist.	739.4	4	6	10	45	78	SS-2	-	28	7	25	28	12	NP	NP	NP	9	A-4a (1)		
		5		20																
Hard reddish-brown <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine to coarse gravel, damp.	736.9	6	2	2	6	56	SS-3	1.0-2.0	1	3	19	36	41	39	16	23	25	A-6b (13)		
		7		2																
Hard reddish-brown <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine to coarse gravel, damp.	734.4	8	4	4	14	89	SS-4	4.5+	-	-	-	-	-	-	-	-	15	A-6a (V)		
		9		5																
Hard reddish-brown <b>SILT AND CLAY</b> , little to some fine to coarse sand, partly similar to completely degraded shale, few iron oxide stains, damp.	734.4	10	6	16	62	100	SS-5	4.5+	-	-	-	-	-	-	-	-	10	A-6a (V)		
		11		25																
<b>SHALE</b> , brown, severely weathered, very weak, partly similar to hard soil.	722.4	12	8	16	56	100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)		
		13	TR																	
		14		8	16	56	100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		15		21																
		16		8	13	47	100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		17		18																
		18		8	13	38	100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		19		12																
EOB	722.4	20	10	20	60	100	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)		
		21		20																
		22	11	18	59	100	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)		
		23		21																
		24																		
		25																		

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

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S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 16:51 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINTWP\PROJECTS\217525A.GPJ

PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>586+73, 79' RT</u>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>
PID: <u>107714</u> BR ID: <u>WALL A</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>746.6 (MSL)</u> EOB: <u>25.0 ft.</u>
START: <u>5/15/23</u> END: <u>5/15/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.398934 N, 82.156890 W</u>

EXPLORATION ID  
**B-004-1-23**

PAGE  
1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
ROOTMAT mixed with SANDY SILT, slightly organic.	746.6																		
POSSIBLE FILL: Hard gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace to little fine to coarse gravel, damp.	744.9	1	2	4	12	100	SS-1A	-	-	-	-	-	-	-	-	-	13	Visual (V)	
		2	4	4			SS-1B	4.5+	-	-	-	-	-	-	-	-	-	12	A-6a (V)
Stiff gray mottled with brown <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp to moist.	741.1	3																	
		4	8	18	36	67	SS-2	4.5+	-	-	-	-	-	-	-	-	9	A-6a (V)	
Stiff to very-stiff brown becoming grayish-brown <b>SANDY SILT</b> , little fine to coarse gravel, little clay, damp.	738.6	5																	
		6	2	2	3	8	67	SS-3	1.0-2.0	3	3	11	40	43	44	19	25	23	A-7-6 (15)
	729.1	7																	
		8																	
SHALE, brown, severely weathered, very weak, partly similar to hard soil.	721.6	9	1	2	3	8	78	SS-4	-	-	-	-	-	-	-	-	-	18	A-4a (V)
		10																	
	721.6	11	4	10	13	35	100	SS-5	2.0-2.5	-	-	-	-	-	-	-	-	11	A-4a (V)
		12																	
	721.6	13																	
		14	8	3	3	9	56	SS-6	1.0-1.5	23	12	13	35	17	25	15	10	12	A-4a (3)
	721.6	15																	
		16	10	13	9	33	100	SS-7	-	-	-	-	-	-	-	-	-	14	A-4a (V)
	721.6	17																	
		18	4	8	11	29	100	SS-8	-	-	-	-	-	-	-	-	-	11	Rock (V)
	721.6	19																	
		20	9	11	14	38	100	SS-9	-	-	-	-	-	-	-	-	-	8	Rock (V)
	721.6	21																	
		22	10	18	23	62	100	SS-10	-	-	-	-	-	-	-	-	-	7	Rock (V)
	721.6	23																	
		24																	
	721.6	25																	
		25																	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>		DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>		DRILL RIG: <u>OTB MOBILE B-57</u>		STATION / OFFSET: <u>588+77, 79' RT</u>		EXPLORATION ID	
TYPE: <u>NOISE WALL</u>		SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>		HAMMER: <u>CME AUTOMATIC</u>		ALIGNMENT: <u>IR 90 CENTERLINE</u>		<b>B-004-2-23</b>	
PID: <u>107714</u> BR ID: <u>WALL A</u>		DRILLING METHOD: <u>3.25" HSA</u>		CALIBRATION DATE: <u>12/22/22</u>		ELEVATION: <u>746.2 (MSL)</u> EOB: <u>24.2 ft.</u>		PAGE	
START: <u>5/16/23</u> END: <u>5/16/23</u>		SAMPLING METHOD: <u>SPT</u>		ENERGY RATIO (%): <u>90*</u>		COORD: <u>41.399362 N, 82.156443 W</u>		1 OF 1	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
ROOTMAT mixed with SANDY SILT, slightly organic.	746.2																		
	744.8	1	2			SS-1A	-								17	Visual (V)	<<<<<		
FILL: Very-stiff gray and dark-gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, few roots, slightly organic, damp.	743.2	2	3	8	67	SS-1B	3.0-3.5								16	A-6b (V)	<<<<<		
		3	2														<<<<<		
POSSIBLE FILL: Stiff gray <b>SILTY CLAY</b> , little to some fine to coarse sand, trace fine gravel, slightly organic, moist.		4	2	6	67	SS-2	1.0-2.0	4	6	15	43	32	37	19	18	31	A-6b (11)	<<<<<	
	740.7	5	2														<<<<<		
Very-stiff gray mottled with dark-gray <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine to coarse gravel, damp to moist.		6	1														<<<<<		
	738.2	7	3	11	100	SS-3	2.0-3.5								23	A-7-6 (V)	<<<<<		
		8	4														<<<<<		
Hard brown <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine to coarse gravel, damp.		9	3	6	21	100	SS-4	4.5+							14	A-6a (V)	<<<<<		
	735.7	10	6	8													<<<<<		
Dense brown <b>SANDY SILT</b> , little fine to coarse gravel, trace to little clay, dry to damp.		11	5	14	42	100	SS-5	-							9	A-4a (V)	<<<<<		
		12	14	14													<<<<<		
		13															<<<<<		
		14	6	13	47	100	SS-6	-							9	A-4a (V)	<<<<<		
	730.7	15	18														<<<<<		
Hard reddish-brown <b>SILT AND CLAY</b> , little fine to coarse sand, little fine to coarse gravel (shale fragments), partly similar to very-weak shale, dry to damp.		16	12	16	51	100	SS-7	-	13	5	7	52	23	27	16	11	8	A-6a (8)	<<<<<
		17	18															<<<<<	
		18																<<<<<	
		19	6	12	45	100	SS-8	4.5+							9	A-6a (V)	<<<<<		
	725.7	20	18															<<<<<	
<b>SHALE</b> , reddish-brown, severely weathered, very weak.		TR																<<<<<	
		21	21												6	Rock (V)	<<<<<		
		22	50															<<<<<	
		23																<<<<<	
	722.0	EOB	22	50-3"											6	Rock (V)	<<<<<		

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 16:51 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>590+92, 78' RT</u>	EXPLORATION ID: <b>B-005-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL A</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>746.0 (MSL)</u> EOB: <u>19.0 ft.</u>	
START: <u>5/16/23</u> END: <u>5/16/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.399785 N, 82.155931 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 9 INCHES	746.0																	
FILL: Medium-dense brown <b>GRAVEL WITH SAND AND SILT</b> , trace clay, few asphalt fragments, damp.	745.3	1	3	10	30	67	SS-1	3.0-3.5	45	13	14	21	7	29	19	10	15	A-2-4 (0)
Very-stiff gray mottled with reddish-brown <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, few iron oxide stains, damp to moist.	743.0	2																
		3																
		4	2	2	8	78	SS-2	2.0-2.5	-	-	-	-	-	-	-	-	23	A-7-6 (V)
		5																
Very-stiff brown mottled with gray <b>SILTY CLAY</b> , trace fine to coarse sand, trace fine gravel, damp.	740.5	6	3	3	14	56	SS-3	2.0-4.0	2	1	6	57	34	34	17	17	15	A-6b (11)
		7																
		8																
Hard brown <b>SILT</b> , little to some clay, trace fine to coarse sand, trace fine gravel, partly similar to decomposed shale, dry.	738.0	9	19	24	-	100	SS-4	-	-	-	-	-	-	-	-	-	9	A-4b (V)
		10																
		11	19	50	-	100	SS-5	-	6	1	4	69	20	26	17	9	9	A-4b (8)
		12																
<b>SHALE</b> , brownish-gray, severely weathered, very-weak to weak.	734.0	12																
		13																
		14	50	-	100	100	SS-6	-	-	-	-	-	-	-	-	-	7	Rock (V)
		15																
		16	50	-	100	100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)
		17																
		18																
		19	50	-	100	100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)

**NOTES:**  
 - Encountered water at 16.0'.  
 - Water measured at 13.0' inside HSA at completion.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>592+98, 78' RT</u>	EXPLORATION ID: <b>B-005-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL A</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>745.2 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>5/16/23</u> END: <u>5/16/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.400161 N, 82.155397 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 9 INCHES	744.5																	
FILL: Stiff to very-stiff gray <b>SILTY CLAY</b> , little fine to coarse sand, trace to little fine to coarse gravel, few roots, slightly organic, few medium-stiff zones, damp to moist.																		
			3	9	39	SS-1	2.0-3.5	-	-	-	-	-	-	-	14	A-6b (V)		
			2	8	67	SS-2	0.5-1.5	-	-	-	-	-	-	-	22	A-6b (V)		
	739.7																	
Medium-dense brown <b>SILT</b> , little clay, trace fine to coarse sand, moist.																		
			2	12	89	SS-3	-	-	-	-	-	-	-	21	A-4b (V)			
			4	15	100	SS-4	-	0	0	5	81	14	NP	NP	NP	21	A-4b (8)	
	734.7																	
Hard brown becoming gray <b>SANDY SILT</b> , little to some clay, trace to little fine to coarse gravel, few cobbles, damp.																		
			4	38	100	SS-5	4.5+	-	-	-	-	-	-	14	A-4a (V)			
			9	42	89	SS-6	4.5+	-	-	-	-	-	-	11	A-4a (V)			
			14	57	100	SS-7	4.5+	6	9	14	49	22	21	14	7	10	A-4a (7)	
	725.7	TR																
<b>SHALE</b> , reddish-brown and gray, severely weathered, very weak, few zones similar to hard soil.																		
			16	-	100	SS-8	4.5+	-	-	-	-	-	-	8	A-4a (V)			
			8	39	67	SS-9	-	-	-	-	-	-	-	8	Rock (V)			
	720.2	EOB																
			7	48	100	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 16:51 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINTWP\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>595+00, 78' RT</u>	EXPLORATION ID
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	<b>B-006-1-23</b>
PID: <u>107714</u> BR ID: <u>WALL A</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>744.7 (MSL)</u> EOB: <u>10.5 ft.</u>	PAGE
START: <u>5/16/23</u> END: <u>5/16/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.400501 N, 82.154842 W</u>	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
ROOTMAT - 8 INCHES	744.7																		
FILL: Very-stiff gray and brown <b>SILTY CLAY</b> , some fine to coarse sand, trace fine gravel, damp.	741.7	1	3	11	67	SS-1	2.0-3.0	4	3	23	40	30	31	15	16	15	A-6b (9)		
<b>SANDSTONE</b> , reddish-brown and gray, severely weathered, very weak, few completely degraded zones similar to fine to coarse sand.	739.2	3	8	16	80	SS-2	-	-	-	-	-	-	-	-	-	-	14	Rock (V)	
		4	16	37															
		5	50-5"	-	40	SS-3	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		6																	
	736.2	7																	
	734.2	8	50	-	100	SS-4	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		9																	
		10																	
		EOB																	

**NOTES:**

- Encountered water at 8.5'.
- Encountered auger refusal at 10.5'.
- Water measured at 5.5' in HSA at completion.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>597+08, 78' RT</u>	EXPLORATION ID <b>B-006-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE 1 OF 1
PID: <u>107714</u> BR ID: <u>WALL A</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>744.0 (MSL)</u> EOB: <u>13.7 ft.</u>	
START: <u>5/16/23</u> END: <u>5/16/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.400821 N, 82.154238 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 9 INCHES	744.0																	
FILL: Stiff to very-stiff gray and brown <b>SILTY CLAY</b> , some fine to coarse sand, trace fine gravel, few medium-stiff zones, damp.	738.5	1	2	8	78	SS-1	2.0-3.0	-	-	-	-	-	-	-	-	-	14	A-6b (V)
		2	3															
		3																
		4	2	9	67	SS-2	0.5-3.0	2	1	27	42	28	34	16	18	18	A-6b (10)	
		5	4															
Dense to very-dense gray <b>SANDY SILT</b> , some fine to coarse gravel (sandstone fragments), trace clay, dry to damp.	735.5	6	9	54	67	SS-3	-	27	3	29	35	6	NP	NP	NP	8	A-4a (1)	
		7	17															
		8	19															
<b>SANDSTONE</b> , gray, severely weathered, very weak to weak.	735.5	TR																
		9	25	-	100	SS-4	-	-	-	-	-	-	-	-	-	-	17	Rock (V)
		10	50-4"															
		W 733.0																
		11	50-5"	-	100	SS-5	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		12																
		13																
	730.3	EOB	50-2"	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	-	Rock (V)

NOTES:  
- Encountered seepage at 11'.

NOTES: SEE ABOVE.

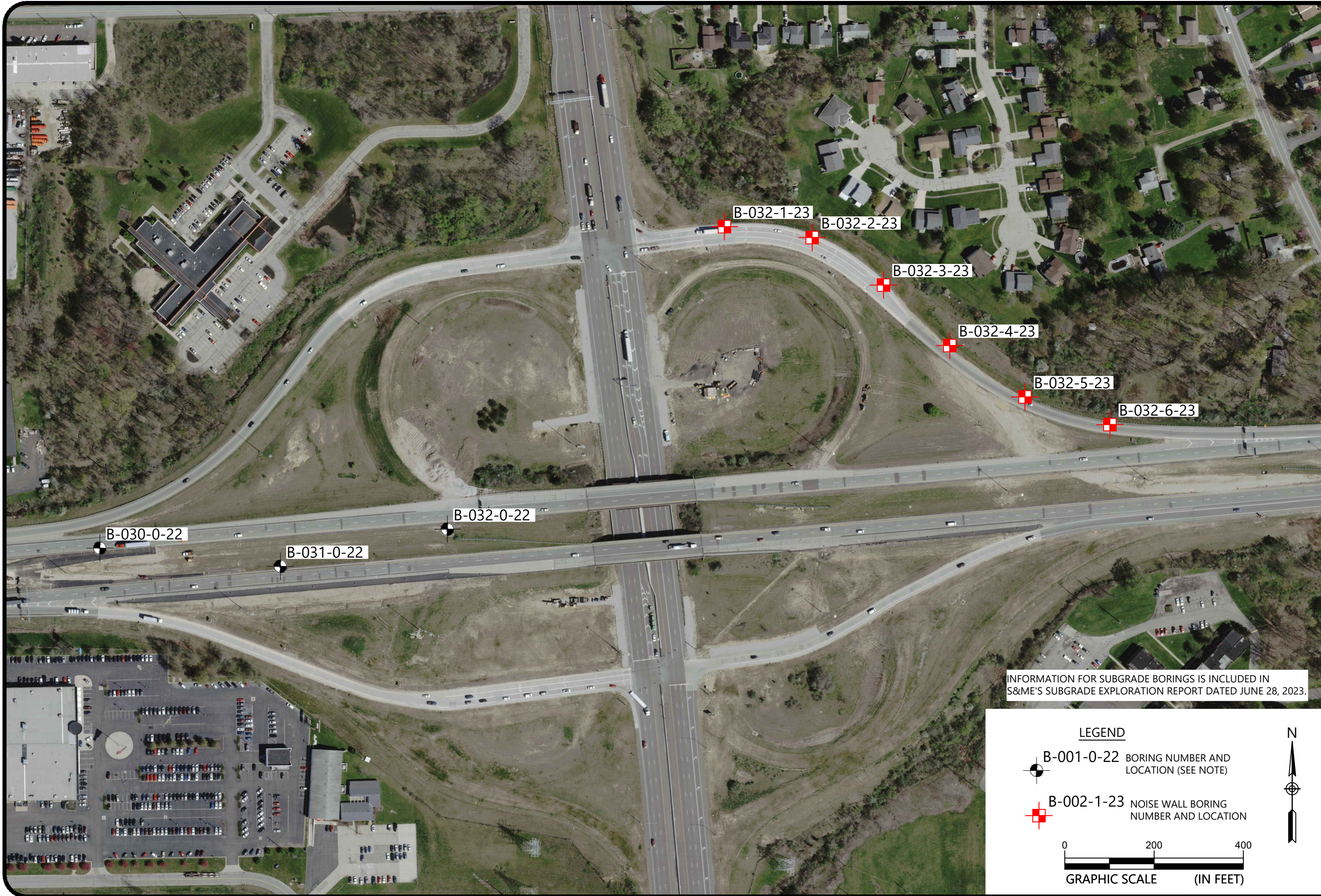
ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE






## Noise Barrier Wall D


Drawing path: T:\Columbus-1170\Projects\2021\217525A\_ODOT\_DS\_LOR-90-1076 Noise Walls\_Sheffield OH\GEO\CAD\Construction\Plan of Borings.dwg





INFORMATION FOR SUBGRADE BORINGS IS INCLUDED IN S&ME'S SUBGRADE EXPLORATION REPORT DATED JUNE 28, 2023.

**LEGEND**

 B-001-0-22 BORING NUMBER AND LOCATION (SEE NOTE)

 B-002-1-23 NOISE WALL BORING NUMBER AND LOCATION

 N


  
 GRAPHIC SCALE (IN FEET)



**PLAN OF BORINGS**

LOR-90-1076 THIRD LANE WIDENING  
NOISE BARRIER WALL EXPLORATION - WALL D  
LORAIN COUNTY, OHIO

SCALE:
SEE GRAPHIC
DATE:
08-29-2023
PROJECT NUMBER
217525A
FIGURE NO.



S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 16:54 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINTWP\PROJECTS\217525A.GPJ

PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>699+34, 645' LT</u>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>
PID: <u>107714</u> BR ID: <u>WALL D</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>692.8 (MSL)</u> EOB: <u>25.0 ft.</u>
START: <u>6/20/23</u> END: <u>6/20/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.406460 N, 82.116367 W</u>

EXPLORATION ID  
**B-032-1-23**

PAGE  
1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
CONCRETE - 10 INCHES	692.8																	
FILL: Loose gray <b>GRAVEL WITH SAND</b> , trace silt, trace clay, damp.	692.0	1																
	690.8	2	3	8	94	SS-1	-	-	-	-	-	-	-	8	A-1-b (V)			
FILL: Very-stiff to hard gray, brown and reddish-brown <b>SILTY CLAY</b> , little to some fine to coarse sand, trace to little fine gravel, slightly organic, damp.		3	3			SS-2	2.0-2.5	-	-	-	-	-	-	19	A-6b (V)			
		4	3	8	61	SS-2	3.5-4.5+	-	-	-	-	-	-	16	A-6b (V)			
	687.3	5																
POSSIBLE FILL: Very-stiff brown mottled with gray <b>CLAY</b> , "and" silt, trace fine to coarse sand, damp to moist.		6	2															
	684.8	7	3	12	78	SS-3	2.0-3.0	0	0	1	40	59	52	19	33	22	A-7-6 (18)	
Hard brown mottled with gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp to moist.		8																
		9	2	15	83	SS-4	4.5+	-	-	-	-	-	-	19	A-6b (V)			
		10	4	6														
		11	3	17	100	SS-5	4.5+	-	-	-	-	-	-	25	A-6b (V)			
	679.8	12	4	7														
Very-stiff to hard gray <b>SANDY SILT</b> , some to "and" clay, trace fine to coarse gravel, few seams of fine to coarse sand, becoming reddish-brown at 23.8 feet, damp.		13																
		14	3	15	100	SS-6	2.5-4.5+	-	-	-	-	-	-	17	A-4a (V)			
		15	5	5														
		16	3	18	100	SS-7	2.0-3.0	6	12	16	30	36	26	16	10	17	A-4a (6)	
		17	5	7														
		18																
		19	5	26	100	SS-8	4.5+	-	-	-	-	-	-	17	A-4a (V)			
		20	7	10														
	671.8	21	5	27	100	SS-9	4.5+	-	-	-	-	-	-	15	A-4a (V)			
		22	7	11														
		23																
		24	6	27	100	SS-10	4.5+	-	-	-	-	-	-	10	A-4a (V)			
	667.8	25	8	10														

NOTES:  
- Encountered seepage at 21.0'.

NOTES: SEE ABOVE.  
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 2



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>701+27, 605' LT</u>	EXPLORATION ID: <b>B-032-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL D</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>696.7 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>6/20/23</u> END: <u>6/20/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.406392 N, 82.115652 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
CONCRETE - 9 INCHES	696.7																	
GRANULAR BASE - 9 INCHES	695.2																	
FILL: Very-stiff to hard gray and dark gray <b>SILTY CLAY</b> , some fine to coarse sand, trace fine to coarse gravel, slight solvent odor, damp.		1																
		2	6	21	78	SS-1	4.5+	-	-	-	-	-	-	-	19	A-6b (V)		
		3	7															
		4	5	18	67	SS-2	2.0-3.0	8	8	16	27	41	37	17	20	21	A-6b (11)	
		5	6															
		6	3															
		7	4	15	89	SS-3	4.0-4.5+	-	-	-	-	-	-	-	19	A-6b (V)		
		8																
		9	1	14	100	SS-4	3.0-4.5+	-	-	-	-	-	-	-	18	A-6b (V)		
		10	5															
Stiff to very-stiff brown mottled with gray <b>CLAY</b> , "and" silt, trace fine to coarse sand, damp.		11	2	8	56	SS-5	1.5-2.0	0	1	2	42	55	41	28	13	26	A-7-6 (9)	
		12	2	3														
		13																
		14	2	15	94	SS-6	2.0-3.5	-	-	-	-	-	-	-	20	A-7-6 (V)		
Hard gray mottled with brown <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine to coarse gravel, few shale fragments, damp.		15	5															
		16	3	17	100	SS-7	4.5+	-	-	-	-	-	-	-	16	A-6a (V)		
		17	5	6														
		18																
		19	3	8	24	100	SS-8	4.5+	-	-	-	-	-	-	16	A-6a (V)		
		20	8	8														
		21																
		22	5	9	29	100	SS-9	4.5+	-	-	-	-	-	-	15	A-6a (V)		
		23	10															
		24	6	10	35	100	SS-10	4.5+	-	-	-	-	-	-	15	A-6a (V)		
	671.7	25	13															

NOTES  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 16:54 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>702+78.485' LT</u>	EXPLORATION ID: <b>B-032-3-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL D</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>697.3 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>6/20/23</u> END: <u>6/20/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.406098 N, 82.115071 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
CONCRETE - 9-1/4 INCHES	697.3																		
FILL: Very-dense gray <b>GRAVEL WITH SAND</b> , trace silt, trace clay, damp.	694.6	1	21	-	100	SS-1	-	-	-	-	-	-	-	-	-	18	A-1-b (V)		
FILL: Very-stiff gray, dark gray, reddish-brown and brown <b>SILTY CLAY</b> , some fine to coarse sand, trace to little fine to coarse gravel, few wood and brick fragments, slight asphalt odor in SS-3, damp.	691.3	2	50-2"																
		3																	
		4	2	4	14	61	SS-2	2.0-3.0	15	11	21	25	28	35	17	18	19	A-6b (7)	
		5																	
		6	5	7	18	38	72	SS-3	-	-	-	-	-	-	-	-	-	17	A-6b (V)
Very-stiff to hard gray mottled with brown <b>CLAY</b> , "and" silt, trace fine to coarse sand, trace fine gravel, damp to moist.	686.8	7																	
		8																	
		9	1	3	12	100	SS-4	2.0-4.0	-	-	-	-	-	-	-	-	-	14	A-6b (V)
		10																	
		11	2	2	9	78	SS-5	2.0-3.0	0	0	1	36	63	44	21	23	25	A-7-6 (14)	
Hard brown mottled with gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine to coarse gravel, few sandstone fragments, damp.	676.8	12	3	7	10	26	100	SS-6	4.5+	-	-	-	-	-	-	-	20	A-7-6 (V)	
		13																	
		14	3	5	18	83	SS-7	4.5+	-	-	-	-	-	-	-	-	25	A-7-6 (V)	
		15																	
		16	3	5	20	100	SS-8	4.5+	-	-	-	-	-	-	-	-	20	A-7-6 (V)	
Hard brown mottled with gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine to coarse gravel, few sandstone fragments, damp.	672.3	17																	
		18																	
		19	2	5	8	21	100	SS-9	4.5+	-	-	-	-	-	-	-	17	A-6b (V)	
		20																	
		21	4	6	8	27	100	SS-10	4.5+	-	-	-	-	-	-	17	A-6b (V)		
		22																	
		23																	
		24	3	7	11														
		25																	

**NOTE**  
 - Encountered seepage at 6.0'.  
 - Encountered water at 13.0'.  
 - After removing augers, borehole caved at 5.9' and was dry.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 16:54 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ

PLATE 4



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>704+14, 338' LT</u>	EXPLORATION ID
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	<b>B-032-4-23</b>
PID: <u>107714</u> BR ID: <u>WALL D</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>697.9 (MSL)</u> EOB: <u>25.0 ft.</u>	PAGE
START: <u>6/20/23</u> END: <u>6/20/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.405724 N, 82.114532 W</u>	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 2 INCHES	697.7	1	3															
FILL: Very-stiff brown and gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine to coarse gravel, few brick and wood fragments, damp.	694.9	2	8	23	100	SS-1	3.5-4.0	-	-	-	-	-	-	-	-	-	13	A-6a (V)
FILL: Dense to very-dense gray and dark gray <b>GRAVEL WITH SAND</b> (shale fragments), trace silt, trace clay, few cobbles (shale fragments), dry to damp.	690.4	3																
		4	13	31	100	SS-2	-	-	-	-	-	-	-	-	-	-	7	A-1-b (V)
		5	11															
		6	50-5"	-	100	SS-3	-	-	-	-	-	-	-	-	-	-	8	A-1-b (V)
PROBABLE FILL: Very-stiff gray and brown <b>SILT AND CLAY</b> , some fine to coarse sand, little to some fine to coarse gravel, damp.	687.4	7																
		8																
		9	4	23	100	SS-4	3.0-3.5	-	-	-	-	-	-	-	-	-	15	A-6a (V)
Very-stiff to hard brown mottled with gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	677.4	10																
		11	4	19	100	SS-5	2.5-3.0	1	2	9	33	55	38	19	19	23	A-6b (12)	
		12	5	8														
		13																
		14	4	28	100	SS-6	3.0-4.5	-	-	-	-	-	-	-	-	-	22	A-6b (V)
		15	8	12														
		16	5	34	89	SS-7	4.0-4.5	-	-	-	-	-	-	-	-	-	21	A-6b (V)
		17	11	13														
		18																
		19	5	30	100	SS-8	2.5-3.0	-	-	-	-	-	-	-	-	-	27	A-6b (V)
		20	8	13														
Very-stiff brown <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine to coarse gravel, few cobbles, damp.	672.9	21	4	23	100	SS-9	2.5-3.0	7	7	12	33	41	28	15	13	18	A-6a (9)	
		22	5	11														
		23																
		24	7	28	89	SS-10	2.0-2.5	-	-	-	-	-	-	-	-	-	15	A-6a (V)
		25	8	12														

EOB

NOTES

- Encountered water at 9.0'.
- Water measured at 9.0' inside HSA at completion.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 16:54 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>705+72.209' LT</u>	EXPLORATION ID: <b>B-032-5-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL D</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>699.4 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>6/20/23</u> END: <u>6/20/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.405406 N, 82.113921 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 2 INCHES	699.2																	
FILL: Hard brown and gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace to little fine to coarse gravel, few brick fragments, damp.	696.4	1	3	5	28	100	SS-1	4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)
FILL: Very-stiff (est.) gray <b>SILT AND CLAY</b> , some fine to coarse gravel (shale fragments), some fine to coarse sand, dry.	693.9	4	5	15	50	100	SS-2	-	35	15	8	30	12	27	16	11	7	A-6a (2)
FILL: Very-stiff gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine to coarse gravel, few shale fragments, damp.	691.4	7	3	3	23	89	SS-3	3.5-4.0	-	-	-	-	-	-	-	-	13	A-6a (V)
FILL: Very-stiff to hard (est.) gray <b>SILT AND CLAY</b> , some fine to coarse gravel, some fine to coarse sand, few cobbles and shale fragments, dry.	689.4	9	50-5'	-	100		SS-4	-	23	15	9	30	23	30	16	14	7	A-6a (5)
Very-stiff gray <b>SILTY CLAY</b> , little to some fine to coarse sand, trace fine gravel (shale fragments), damp.	683.9	11	3	3	11	100	SS-5	2.5-3.0	-	-	-	-	-	-	-	-	18	A-6b (V)
		12		5														
		14	4	6	21	100	SS-6	3.5-4.0	-	-	-	-	-	-	-	-	18	A-6b (V)
		15		9														
Stiff to very-stiff brown mottled with gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	676.4	16	3	5	16	100	SS-7	2.5-3.0	-	-	-	-	-	-	-	-	22	A-6b (V)
		17		6														
		19	3	3	13	100	SS-8	1.5-2.0	6	7	6	29	52	38	18	20	27	A-6b (12)
		20		6														
		21	3	5	17	100	SS-9	2.0-2.5	-	-	-	-	-	-	-	-	20	A-6b (V)
		22		7														
Stiff to very-stiff gray <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	674.4	23	3	5	30	100	SS-10	1.5-2.5	-	-	-	-	-	-	-	-	16	A-6a (V)
		24		16														
		25																

EOB

- NOTES**
- Encountered water at 10.0'.
  - Water measured at 10.0' inside HSA at completion.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 16:54 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ

PLATE 6



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>707+57, 132' LT</u>	EXPLORATION ID
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	<b>B-032-6-23</b>
PID: <u>107714</u> BR ID: <u>WALL D</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>700.2 (MSL)</u> EOB: <u>25.0 ft.</u>	PAGE
START: <u>6/20/23</u> END: <u>6/20/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.405234 N, 82.113229 W</u>	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT - 11 INCHES	700.2																		
GRANULAR BASE - 4 INCHES	699.3 698.9	1																	
FILL: Very-stiff to hard reddish-brown and gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine gravel, few brick and shale fragments, damp.	697.2	2	1	8	72	SS-1	3.0-4.5+	-	-	-	-	-	-	-	15	A-6a (V)			
		3	2	3															
		4	2	3	9	67	SS-2	-	-	-	-	-	-	-	7	A-2-6 (V)			
FILL: Loose to medium-dense brown and gray <b>GRAVEL WITH SAND, SILT AND CLAY</b> , many shale fragments, damp.	692.2	5	2	3															
		6	5	3	11	56	SS-3	-	-	-	-	-	-	10	A-2-6 (V)				
		7	3	4															
PROBABLE FILL: Stiff to very-stiff gray <b>SILTY CLAY</b> , little to some fine to coarse gravel, trace little fine to coarse sand, few shale fragments, damp.	687.2	8																	
		9	2	2	8	33	SS-4	1.5	26	4	4	31	35	33	17	16	11	A-6b (9)	
		10	1	3	5	12	72	SS-5	2.5-3.0	-	-	-	-	-	-	-	-	12	A-6b (V)
Stiff to very-stiff grayish-brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine to coarse gravel, damp.	682.2	11																	
		12	1	2	6	89	SS-6	1.0-2.0	9	6	10	30	45	32	16	16	16	A-6b (10)	
		13	1	2	5	11	100	SS-7	2.0-2.5	-	-	-	-	-	-	-	-	18	A-6b (V)
Hard brown mottled with gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine to coarse gravel, damp.	682.2	14																	
		15	2	3	14	100	SS-8	4.5+	-	-	-	-	-	-	-	-	17	A-6b (V)	
		16	4	6	8	21	100	SS-9	4.5+	-	-	-	-	-	-	-	-	15	A-6b (V)
	675.2	17	3	6	21	100	SS-10	4.5+	-	-	-	-	-	-	-	-	-	16	A-6b (V)
		18																	
		19	2	3	6	8	21	100	SS-10	4.5+	-	-	-	-	-	-	-	16	A-6b (V)
		20																	
		21																	
		22																	
		23																	
		24																	
		25																	

NOTES  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 16:54 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINTWP\PROJECTS\217525A.GPJ



**Structure (Noise Barrier Wall) Exploration Data Summary - Draft Report**

**LOR-90-10.76 PID 107714**

Lorain County, OH

S&ME Project No. 217525A



<b>1</b>	<b>Location / Orientation</b>	Pavement Core Recovered from Boring B-031-1-23	Photographer: NS	Date: 6/20/2023
	<b>Remarks</b>	10" Concrete		



<b>2</b>	<b>Location / Orientation</b>	Pavement Core Recovered from Boring B-031-2-23	Photographer: NS	Date: 6/20/2023
	<b>Remarks</b>	9" Concrete		



**Structure (Noise Barrier Wall) Exploration Data Summary - Draft Report**

**LOR-90-10.76 PID 107714**

Lorain County, OH

S&ME Project No. 217525A



<b>3</b>	<b>Location / Orientation</b>	Pavement Core Recovered from Boring B-031-3-23	Date: 6/20/2023  Photographer: NS
	<b>Remarks</b>	9-1/4" Concrete	



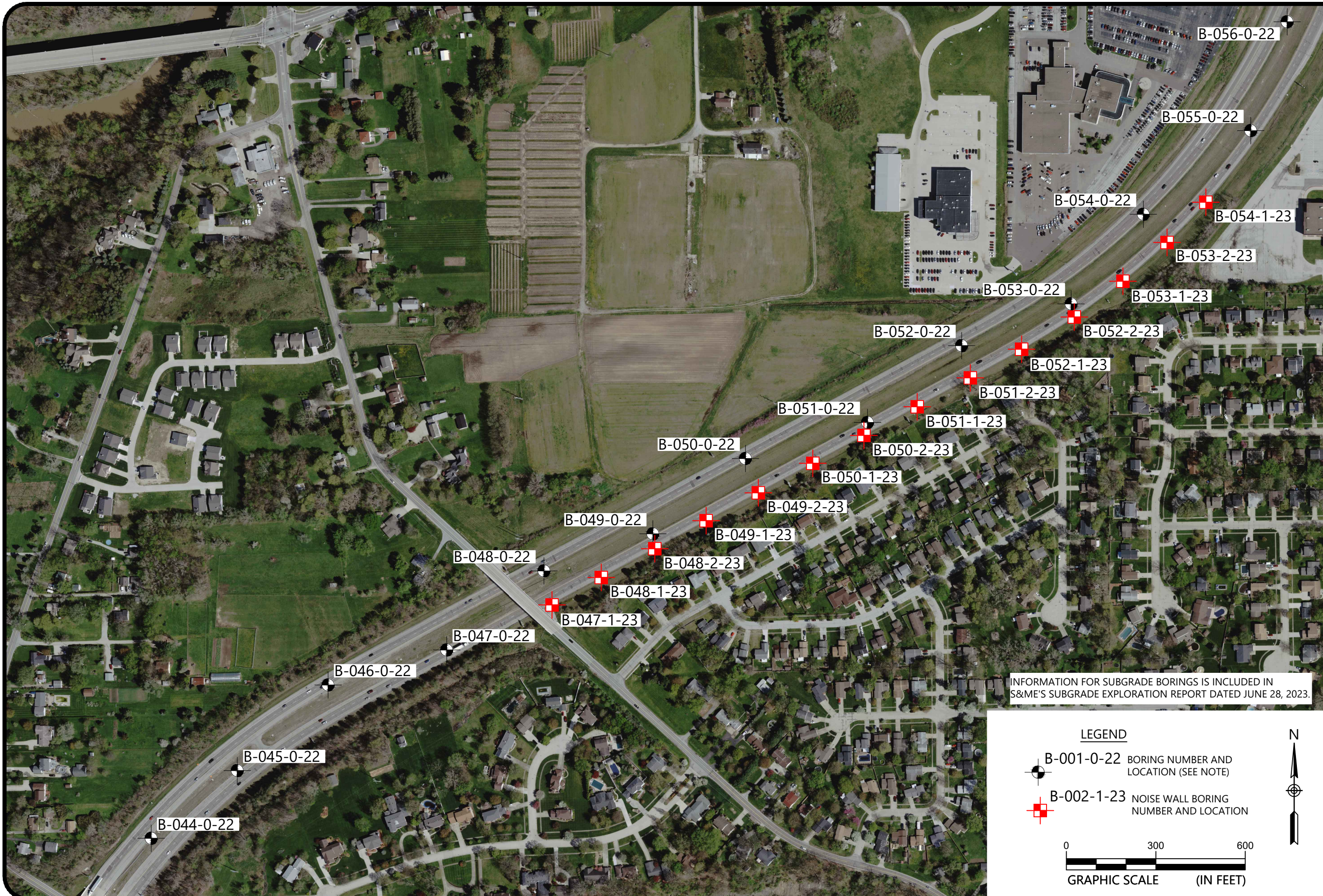
<b>4</b>	<b>Location / Orientation</b>	Pavement Core Recovered from Boring B-031-6-23	Date: 6/20/2023  Photographer: NS
	<b>Remarks</b>	11" Asphalt	







## **Noise Barrier Wall E**

Drawing path: T:\Columbus-1170\Projects\2021\217525A\_ODOT D3\_LOR-90-1076 Noise Walls\_Sheffield OH\GEO\CAD\Construction\Plan of Borings.dwg



INFORMATION FOR SUBGRADE BORINGS IS INCLUDED IN S&ME'S SUBGRADE EXPLORATION REPORT DATED JUNE 28, 2023.

**LEGEND**

-  B-001-0-22 BORING NUMBER AND LOCATION (SEE NOTE)
-  B-002-1-23 NOISE WALL BORING NUMBER AND LOCATION

**GRAPHIC SCALE (IN FEET)**

0 300 600



**PLAN OF BORINGS**

LOR-90-1076 THIRD LANE WIDENING  
NOISE BARRIER WALL EXPLORATION - WALLE  
LORAIN COUNTY, OHIO

SCALE:
SEE GRAPHIC
DATE:
08-29-2023
PROJECT NUMBER
217525A
FIGURE NO.



S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:42 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY02 - GINTW\PROJECTS\217525A.GPJ

PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>780+36, 81' RT</u>	EXPLORATION ID <b>B-047-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE 1 OF 1
PID: <u>107714</u> BR ID: <u>WALL E</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>674.7 (MSL)</u> EOB: <u>23.8 ft.</u>	
START: <u>5/17/23</u> END: <u>5/17/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.415676 N, 82.092958 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
ROOTMAT MIXED WITH GRANULAR FILL - 16 INCHES	674.7																		
Very-stiff to hard brown mottled with gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace to little fine to coarse gravel, damp.	673.4	1																	
		2	3	4	14	67	SS-1	3.5-4.5	-	-	-	-	-	-	-	-	-	16	A-6a (V)
		3																	
		4	3	4	11	33	SS-2	4.5+	-	-	-	-	-	-	-	-	-	19	A-6a (V)
		5																	
		6	3	4	14	67	SS-3	3.0-4.5	10	8	13	27	42	28	15	13	16	A-6a (8)	
		7																	
		8																	
		9	3	6	17	67	SS-4	3.0-4.5	-	-	-	-	-	-	-	-	-	15	A-6a (V)
		10																	
Hard grayish-brown becoming gray <b>SANDY SILT</b> , some clay, trace fine to coarse gravel (shale fragments), damp.	664.2	11	4	7	24	100	SS-5	4.5+	-	-	-	-	-	-	-	-	15	A-4a (V)	
		12																	
		13																	
		14	5	12	46	89	SS-6	4.5+	9	9	13	38	31	25	15	10	14	A-4a (7)	
		15																	
		16																	
		17	13	18	57	100	SS-7	4.5+	-	-	-	-	-	-	-	-	10	A-4a (V)	
		18																	
<b>SHALE</b> , gray, severely weathered, very-weak to weak, partly similar to hard soil.	655.7	19	27	50-4"	-	100	SS-8	-	-	-	-	-	-	-	-	-	8	A-4a (V)	
		20																	
		21	38	50-3"	-	100	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		22																	
		23																	
	650.9	EOB	50-3"	-	100	SS-10	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	

**NOTES**  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>782+25, 78' RT</u>	EXPLORATION ID <b>B-048-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE 1 OF 1
PID: <u>107714</u> BR ID: <u>WALL E</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>676.0 (MSL)</u> EOB: <u>23.8 ft.</u>	
START: <u>5/17/23</u> END: <u>5/17/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.415927 N, 82.092355 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
GRANULAR SHOULDER FILL - 9 INCHES	675.2																		
Hard brown <b>SILTY CLAY</b> , trace fine to coarse sand, trace fine gravel, damp.	675.2	1	2																
		2	4	15	67	SS-1	4.5+	-	-	-	-	-	-	-	23	A-6b (V)			
		3																	
Very-stiff to hard gray mottled with brown <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine to coarse gravel, many shale fragments below 18 feet, damp.	669.6	4	3	17	72	SS-2	4.5+	0	0	1	35	64	40	18	22	21	A-6b (13)		
		5	5	7															
		6	3				SS-3A	-	-	-	-	-	-	-	-	16	A-6b (V)		
		7	5	6	15	72	SS-3B	2.0-2.5	-	-	-	-	-	-	-	-	-	A-6a (V)	
		8																	
		9	3	5	17	100	SS-4	2.0-2.5	6	8	12	32	42	29	15	14	16	A-6a (9)	
		10																	
		11	6	8	26	100	SS-5	4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)	
		12																	
		13	6	9	31	89	SS-6	4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)	
14																			
15																			
16	7	14	44	89	SS-7	4.5+	-	-	-	-	-	-	-	-	10	A-6a (V)			
17																			
18																			
19	28	50-3"	-	100	SS-8	4.5+	6	8	12	41	33	26	14	12	10	A-6a (9)			
20																			
21	654.5	TR	23		100	SS-9A	-	-	-	-	-	-	-	-	11	A-6a (V)			
SHALE, dark gray, severely to highly weathered, very-weak to weak.	654.5	22	50			SS-9B	-	-	-	-	-	-	-	-	-	-	Rock (V)		
		23																	
	652.2	EOB	50-3"	-	100	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)		

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:42 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY02 - GINTW\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>784+29, 78' RT</u>	EXPLORATION ID: <b>B-048-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL E</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>678.0 (MSL)</u> EOB: <u>24.3 ft.</u>	
START: <u>5/17/23</u> END: <u>5/17/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.416189 N, 82.091698 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 9 INCHES	677.2																	
Hard brown mottled with gray <b>SILTY CLAY</b> , trace to little fine to coarse sand, trace fine gravel, damp.	670.0	1	2															
		2	4	15	72	SS-1	4.0-4.5	-	-	-	-	-	-	-	20	A-6b (V)		
		3																
		4	4	19	100	SS-2	4.5+	-	-	-	-	-	-	-	23	A-6b (V)		
Stiff gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp to moist.	667.5	5																
		6	3															
		7	5	18	100	SS-3	4.5+	-	-	-	-	-	-	-	26	A-6b (V)		
		8																
Very-stiff to hard gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine to coarse gravel, few seams of fine to coarse sand, shale fragments below 21 feet, damp.	663.7	9	2	10	100	SS-4	1.5-2.0	-	-	-	-	-	-	-	27	A-6b (V)		
		10																
		11	3															
		12	5	17	67	SS-5	1.5-2.0	8	9	12	29	42	28	14	14	16	A-6a (9)	
		13																
		14	3	19	89	SS-6	3.0-3.5	-	-	-	-	-	-	-	-	15	A-6a (V)	
		15																
		16	11															
		17	12	40	100	SS-7	4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)	
		18	17															
Encountered split-spoon refusal on possible shale at 24.3'. No seepage noted.	663.7	19	17		100	SS-8	4.5+	-	-	-	-	-	-	-	8	A-6a (V)		
		20	25															
		21	14															
		22	25	73	100	SS-9	4.5+	9	7	8	37	39	27	14	13	10	A-6a (9)	
Encountered split-spoon refusal on possible shale at 24.3'. No seepage noted.	663.7	23																
		24	28		100	SS-10	4.5+	-	-	-	-	-	-	-	8	A-6a (V)		

NOTES:  
 - Encountered split-spoon refusal on possible shale at 24.3'.  
 - No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:42 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY02 - GINTW\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>786+25, 77' RT</u>	EXPLORATION ID: <b>B-049-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL E</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>679.9 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>5/17/23</u> END: <u>5/17/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.416445 N, 82.091070 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
GRANULAR SHOULDER FILL - 11 INCHES	679.9																		
Very-stiff to hard brown mottled with gray <b>SILTY CLAY</b> , trace fine to coarse sand, damp.	679.0	1	3	12	50	SS-1	4.5+	-	-	-	-	-	-	-	-	-	20	A-6b (V)	
		2	6																
		3																	
		4	3	5	15	78	SS-2	4.5+	0	0	1	42	57	37	19	18	22	A-6b (11)	
		5	6																
		6																	
		7	3	7	24	83	SS-3	4.5+	-	-	-	-	-	-	-	-	21	A-6b (V)	
		8	10																
		9	3	5	17	100	SS-4	2.5-4.5	-	-	-	-	-	-	-	-	21	A-6b (V)	
		10	7																
Very-stiff to hard gray mottled with brown <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine to coarse gravel, damp.	669.4	11	3	17	67	SS-5	2.0-3.5	-	-	-	-	-	-	-	-	-	16	A-6a (V)	
		12	5	7															
		13																	
		14	4	6	19	67	SS-6	3.0-3.5	7	7	10	35	41	29	15	14	14	A-6a (10)	
		15	8																
		16																	
		17	6	9	29	100	SS-7	4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)	
		18	12																
Hard gray <b>SANDY SILT</b> , some clay, trace to little fine to coarse gravel, dry to damp.	659.4	19	5	29	100	SS-8	4.5+	-	-	-	-	-	-	-	-	-	14	A-6a (V)	
		20	8	13															
		21																	
		22	8	13	42	100	SS-9	4.5+	-	-	-	-	-	-	-	-	7	A-4a (V)	
		23	17																
		24																	
	654.9	24	13	65	67	SS-10	4.5+	-	-	-	-	-	-	-	-	10	A-4a (V)		
		25	21	26															

EOB

NOTES  
- No seepage noted.

NOTES: SEE ABOVE.  
ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:42 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY02 - GINTW\PROJECTS\217525A.GPJ

PLATE 5





PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>788+24, 78' RT</u>	EXPLORATION ID: <b>B-049-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL E</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>681.7 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>5/17/23</u> END: <u>5/17/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.416700 N, 82.090430 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 11 INCHES	680.8	1	2															
Hard brown mottled with gray <b>SILTY CLAY</b> , trace to little fine to coarse sand, trace fine gravel, damp.	680.8	2	3	15	67	SS-1	4.5+	-	-	-	-	-	-	-	-	20	A-6b (V)	
		3	8															
		4	3	14	50	SS-2	4.5+	-	-	-	-	-	-	-	-	20	A-6b (V)	
Very-stiff to hard brown becoming grayish-brown <b>SANDY SILT</b> , some clay, trace fine gravel, damp.	673.7	5	4	6														
		6	3	6	19	78	SS-3	4.5+	-	-	-	-	-	-	-	20	A-6b (V)	
		7	6	8														
Very-stiff gray <b>SANDY SILT</b> , some clay, trace fine gravel, damp.	668.7	8	4	7	26	100	SS-4	4.5+	-	-	-	-	-	-	-	10	A-4a (V)	
		9	12															
		10	3	5	18	100	SS-5	2.5-3.5	4	8	18	45	25	21	13	8	11	A-4a (7)
Very-stiff gray <b>SANDY SILT</b> , some clay, trace fine gravel, damp.	666.7	11	2	3	11	67	SS-6	2.0-3.0	-	-	-	-	-	-	-	14	A-4a (V)	
		12	5															
Hard gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine to coarse gravel, damp.	666.2	13	4	6	22	67	SS-7	4.5+	-	-	-	-	-	-	-	13	A-6a (V)	
		14	10															
		15	5	8	25	83	SS-8	4.5+	-	-	-	-	-	-	-	14	A-6a (V)	
Very-dense gray and brown <b>GRAVEL WITH SAND AND SILT</b> , trace clay, damp.	661.2	16	13	32	92	100	SS-9	-	26	25	16	23	10	20	13	7	8	A-2-4 (0)
		17	34															
		18	16	25	76	89	SS-10	-	-	-	-	-	-	-	-	9	A-2-4 (V)	
	656.7	19	30															

EOB

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:42 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>790+31, 78' RT</u>	EXPLORATION ID: <b>B-050-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL E</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>683.6 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>5/18/23</u> END: <u>5/18/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.416968 N, 82.089763 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 13 INCHES	683.6																	
POSSIBLE FILL: Very-stiff to hard dark-gray and gray mottled with brown <b>CLAY</b> , some silt, trace fine to coarse sand, trace fine gravel, damp.	682.5	1	3															
		2	2	10	56	SS-1	3.0-3.5	-	-	-	-	-	-	-	22	A-7-6 (V)		
		3																
Hard gray mottled with brown <b>CLAY</b> , some silt, trace to little fine to coarse sand, trace fine gravel, damp.	678.1	4	3															
		5	5	15	50	SS-2	3.5-4.5	1	2	5	27	65	51	21	30	21	A-7-6 (18)	
		6																
Hard gray <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine to coarse gravel, damp.	673.1	7	3															
		8	7	25	67	SS-3	4.5+	-	-	-	-	-	-	-	22	A-7-6 (V)		
		9	7															
Hard gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	670.6	10	7	33	78	SS-4	4.5+	-	-	-	-	-	-	-	20	A-7-6 (V)		
		11	7															
		12	7	36	100	SS-5	4.5+	-	-	-	-	-	-	-	13	A-6a (V)		
Very-stiff to hard gray mottled with brown <b>SANDY SILT</b> , "and" clay, trace fine to coarse gravel, few shale fragments in SS-10.	668.1	13																
		14	4	22	100	SS-6	4.5+	-	-	-	-	-	-	-	18	A-6b (V)		
		15	7															
EOB	658.6	16	5	22	100	SS-7	2.5-3.5	6	7	11	33	43	29	20	9	15	A-4a (8)	
		17	7															
		18	5	22	33	SS-8	2.0-3.0	-	-	-	-	-	-	-	15	A-4a (V)		
		19	5															
		20	7															
		21	5	25	100	SS-9	4.5+	-	-	-	-	-	-	-	14	A-4a (V)		
		22	7															
		23	7															
		24	9	76	100	SS-10	4.5+	-	-	-	-	-	-	-	10	A-4a (V)		
25	26	29																

NOTES  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:42 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY02 - GINTW\PROJECTS\217525A.GPJ

PLATE 7



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>792+27, 77' RT</u>	EXPLORATION ID: <b>B-050-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL E</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>685.3 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>5/18/23</u> END: <u>5/18/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.417223 N, 82.089136 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 14 INCHES	685.3																	
FILL: Stiff to very-stiff dark-gray <b>CLAY</b> , some to "and" silt, some fine to coarse sand, trace fine gravel, damp.	684.1	1	3															
		2	3	11	67	SS-1	1.5-3.0	-	-	-	-	-	-	-	20	A-7-6 (V)		
Very-stiff brown mottled with gray <b>SILTY CLAY</b> , trace fine to coarse sand, trace fine gravel, damp to moist.	680.3	3																
		4	3	14	72	SS-2	1.5-2.5	1	7	18	33	41	41	20	21	23	A-7-6 (12)	
		5																
		6	2															
		7	5	15	67	SS-3	2.5-3.0	-	-	-	-	-	-	-	-	23	A-6b (V)	
		8																
		9	3	19	78	SS-4	3.5-4.5	-	-	-	-	-	-	-	-	23	A-6b (V)	
		10																
		11	4	21	100	SS-5	3.5-4.0	-	-	-	-	-	-	-	-	24	A-6b (V)	
		12																
Very-stiff gray mottled with brown <b>CLAY</b> , some to "and" silt, little fine to coarse sand, trace fine gravel, damp.	667.3	13																
		14	3	14	67	SS-6	2.5-3.0	-	-	-	-	-	-	-	21	A-6b (V)		
		15																
		16	3	17	67	SS-7	2.0-3.0	0	0	1	40	59	37	18	19	24	A-6b (12)	
		17																
		18																
		19	3	18	83	SS-8	2.5-3.5	-	-	-	-	-	-	-	-	14	A-7-6 (V)	
		20																
EOB	660.3	21	4	19	67	SS-9	2.5-3.5	6	7	11	36	40	42	18	24	16	A-7-6 (14)	
		22																
		23																
		24	5	29	83	SS-10	-	-	-	-	-	-	-	-	-	15	A-7-6 (V)	
25																		

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:42 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\217525A.GPJ



S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:42 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY02 - GINTW\PROJECTS\217525A.GPJ

PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>794+29, 78' RT</u>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>
PID: <u>107714</u> BR ID: <u>WALL E</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>686.7 (MSL)</u> EOB: <u>25.0 ft.</u>
START: <u>5/18/23</u> END: <u>5/18/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.417484 N, 82.088484 W</u>

EXPLORATION ID  
**B-051-1-23**

PAGE  
1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
GRANULAR SHOULDER FILL - 13 INCHES	686.7																		
FILL: Very-stiff dark-gray, brown and gray <b>CLAY</b> , some silt, little to some fine to coarse sand, trace fine gravel, damp to moist.	685.6	1	4	2	10	50	SS-1	2.0-3.0	-	-	-	-	-	-	-	-	-	21	A-7-6 (V)
		2	5																
Very-stiff to hard gray mottled with brown <b>CLAY</b> , some to "and" silt, little fine to coarse sand, trace fine gravel, damp.	681.2	4	2	2	10	67	SS-2	2.5-3.5	-	-	-	-	-	-	-	-	-	29	A-7-6 (V)
		5	5																
	676.2	6	2	4	12	67	SS-3	2.5-4.0	0	4	10	33	53	41	20	21	19	A-7-6 (13)	
		7	5																
Very-stiff to hard brown mottled with gray <b>SILTY CLAY</b> , trace to little fine to coarse sand, trace fine gravel, damp.	676.2	9	2	3	11	67	SS-4	4.0-4.5	-	-	-	-	-	-	-	-	-	23	A-7-6 (V)
		10	5																
	671.2	11	5	9	29	100	SS-5	4.5+	-	-	-	-	-	-	-	-	-	15	A-6b (V)
		12	12																
Stiff to very-stiff gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine to coarse gravel, few shale fragments below 20', becoming hard below 23', damp.	671.2	14	5	8	26	100	SS-6	3.0-3.5	-	-	-	-	-	-	-	-	-	16	A-6b (V)
		15	11																
	661.7	16	4	6	19	78	SS-7	1.5-2.0	-	-	-	-	-	-	-	-	-	15	A-6a (V)
		17	8																
	661.7	19	3	6	19	67	SS-8	2.5-3.0	-	-	-	-	-	-	-	-	-	16	A-6a (V)
		20	8																
	661.7	21	3	5	17	67	SS-9	1.0-1.5	5	8	12	33	42	28	16	12	17	A-6a (9)	
		22	7																
	661.7	24	5	6	21	100	SS-10	4.0-4.5	-	-	-	-	-	-	-	-	-	15	A-6a (V)
		25	9																

EOB

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 9



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>796+32, 77' RT</u>	EXPLORATION ID: <b>B-051-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL E</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>687.6 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>5/18/23</u> END: <u>5/18/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.417748 N, 82.087833 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 12 INCHES	686.6	1																
FILL: Loose gray and brown <b>SANDY SILT</b> , some clay, trace fine to coarse gravel, damp.	684.6	2	3	10	50	SS-1	3.5-4.5	-	-	-	-	-	-	-	15	A-4a (V)		
FILL: Hard gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	682.1	3																
		4	3	18	50	SS-2	4.5+	-	-	-	-	-	-	-	20	A-6b (V)		
		5	5	8														
PROBABLE FILL: Stiff to very-stiff gray mottled with brown <b>SILT AND CLAY</b> , little fine to coarse sand, slightly organic, damp. - Loss on Ignition (LOI) Test on SS-3 = 2.5%.	679.6	6	2	12	67	SS-3	1.5-2.5	0	5	12	36	47	28	17	11	12	A-6a (8)	
		7	3	6														
Hard gray mottled with brown <b>CLAY</b> , some to "and" silt, trace to little fine to coarse sand, trace fine gravel, damp.	677.1	8																
		9	3	15	67	SS-4	4.5+	-	-	-	-	-	-	-	25	A-7-6 (V)		
		10	4	7														
Very-stiff to hard gray mottled with brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, few silt seams, damp.	669.6	11	6	29	100	SS-5	4.5+	-	-	-	-	-	-	-	16	A-6b (V)		
		12	9	12														
		13																
		14	5	29	89	SS-6	4.5+	-	-	-	-	-	-	-	17	A-6b (V)		
		15	9	12														
		16																
		17	5	22	100	SS-7	3.0-3.5	-	-	-	-	-	-	-	15	A-6b (V)		
		18	8	8														
Very-stiff to hard gray <b>SANDY SILT</b> , some fine to coarse sand, trace fine to coarse gravel, few shale fragments below 23', damp.	662.6	19	3	15	100	SS-8	2.0-2.5	6	9	19	37	29	21	13	8	11	A-4a (6)	
		20	5	6														
		21																
		22	4	19	78	SS-9	3.5-4.5	-	-	-	-	-	-	-	14	A-4a (V)		
		23	6	8														
		24																
		25	5	26	67	SS-10	4.5+	-	-	-	-	-	-	-	14	A-4a (V)		
		EOB	9	10														

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:42 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY02 - GINTW\PROJECTS\217525A.GPJ

PLATE 10



PROJECT: LOR-90-10.76 NOISE WALLS	DRILLING FIRM / OPERATOR: OTB / C. SVITAK	DRILL RIG: OTB SIMCO 2800	STATION / OFFSET: 798+27, 76' RT	EXPLORATION ID
TYPE: NOISE WALL	SAMPLING FIRM / LOGGERS: S&ME / N. SOKOLOWSKI	HAMMER: CME AUTOMATIC	ALIGNMENT: IR 90 CENTERLINE	<b>B-052-1-23</b>
PID: 107714 BR ID: WALL E	DRILLING METHOD: 2.25" HSA	CALIBRATION DATE: 12/22/22	ELEVATION: 688.4 (MSL) EOB: 25.0 ft.	PAGE
START: 5/18/23 END: 5/18/23	SAMPLING METHOD: SPT	ENERGY RATIO (%): 83.2	COORD: 41.418009 N, 82.087204 W	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 12 INCHES	687.4																	
FILL: Medium-dense gray <b>SANDY SILT</b> , some clay, trace fine to coarse gravel, damp to moist. POSSIBLE FILL: Very-stiff gray mottled with brown <b>SILT AND CLAY</b> , "and" fine to coarse sand, trace fine to coarse gravel, few shale fragments, damp.	686.6	1	7	18	50	SS-1	-	-	-	-	-	-	-	-	16	A-4a (V)		
		2	9															
		3	4															
		4	2	11	67	SS-2	2.0-2.5	4	13	35	25	23	30	16	14	19	A-6a (4)	
		5	4															
		6	2															
		7	4	14	89	SS-3	3.0-3.5	-	-	-	-	-	-	-	14	A-6a (V)		
	680.4	8	2															
Very-stiff to hard brown <b>SILTY CLAY</b> , trace fine to coarse sand, trace fine gravel, damp to moist.		9	3	15	50	SS-4	4.5+	-	-	-	-	-	-	-	22	A-6b (V)		
		10	5															
		11	6															
		12	4	26	100	SS-5	4.5+	-	-	-	-	-	-	-	22	A-6b (V)		
		13	8															
		14	11															
		15	4	22	100	SS-6	4.5+	-	-	-	-	-	-	-	24	A-6b (V)		
		16	6															
		17	10															
		18	3	14	100	SS-7	2.0-2.5	0	0	1	38	61	37	20	17	26	A-6b (11)	
	670.4	19	5															
Stiff becoming very-stiff to hard gray mottled with brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp.		20	2	14	100	SS-8	1.0-1.5	-	-	-	-	-	-	-	13	A-6a (V)		
		21	4															
		22	6															
		23	2	14	67	SS-9	2.0-3.5	-	-	-	-	-	-	-	16	A-6a (V)		
		24	4															
	663.4	25	6	21	89	SS-10	4.0-4.5	-	-	-	-	-	-	-	15	A-6a (V)		

NOTES  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:42 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY02 - GINTWP\PROJECTS\217525A.GPJ



PROJECT: LOR-90-10.76 NOISE WALLS	DRILLING FIRM / OPERATOR: OTB / C. SVITAK	DRILL RIG: OTB SIMCO 2800	STATION / OFFSET: 800+28, 77' RT	EXPLORATION ID
TYPE: NOISE WALL	SAMPLING FIRM / LOGGERS: S&ME / N. SOKOLOWSKI	HAMMER: CME AUTOMATIC	ALIGNMENT: IR 90 CENTERLINE	<b>B-052-2-23</b>
PID: 107714 BR ID: WALL E	DRILLING METHOD: 2.25" HSA	CALIBRATION DATE: 12/22/22	ELEVATION: 687.8 (MSL) EOB: 25.0 ft.	PAGE
START: 5/22/23 END: 5/22/23	SAMPLING METHOD: SPT	ENERGY RATIO (%): 83.2	COORD: 41.418304 N, 82.086560 W	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
GRANULAR SHOULDER FILL - 12 INCHES	687.8																		
FILL: Very-stiff to hard dark-brown <b>SILT AND CLAY</b> , some fine to coarse sand, trace to little fine to coarse gravel, damp.	686.8	1	3	8	18	50	SS-1	4.5+	-	-	-	-	-	-	-	-	15	A-6a (V)	
		2	5																
		3																	
FILL: Medium-stiff dark-brown <b>SILT AND CLAY</b> , "and" fine sand, trace coarse sand, trace fine gravel, moist to wet.	682.3	4	2	6	18	67	SS-2	3.0-4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)	
		5	7																
		6	2	2	6	78	SS-3	0.5-0.75	3	6	36	30	25	28	16	12	26	A-6a (5)	
Stiff to very-stiff brown mottled with gray <b>SILTY CLAY</b> , trace fine to coarse sand, damp to moist.	679.8	7	2	2	6	78	SS-3	0.5-0.75	3	6	36	30	25	28	16	12	26	A-6a (5)	
		8																	
		9	2	2	8	67	SS-4	1.5-2.5	0	1	3	51	45	36	18	18	21	A-6b (11)	
		10	4																
		11	3	6	22	100	SS-5	2.0-4.0	-	-	-	-	-	-	-	-	-	25	A-6b (V)
		12	10																
		13																	
		14	4	5	17	100	SS-6	3.0-4.0	-	-	-	-	-	-	-	-	-	27	A-6b (V)
		15	7																
		16	3	4	12	100	SS-7	2.5-3.0	-	-	-	-	-	-	-	-	-	27	A-6b (V)
Stiff to very-stiff gray mottled with brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	667.3	17	4	5															
		18																	
		19	3	4	14	100	SS-8	1.5-2.0	0	1	2	29	68	38	19	19	22	A-6b (12)	
		20	6																
Stiff to very-stiff gray mottled with brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	662.8	21	3	5	15	100	SS-9	1.0-1.5	-	-	-	-	-	-	-	-	16	A-6a (V)	
		22	6																
		23																	
		24	4	7	22	89	SS-10	2.5-3.5	-	-	-	-	-	-	-	-	15	A-6a (V)	
		25	9																

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:42 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\217525A.GPJ



PROJECT: LOR-90-10.76 NOISE WALLS	DRILLING FIRM / OPERATOR: OTB / C. SVITAK	DRILL RIG: OTB SIMCO 2800	STATION / OFFSET: 802+23, 77' RT	EXPLORATION ID: B-053-1-23
TYPE: NOISE WALL	SAMPLING FIRM / LOGGERS: S&ME / N. SOKOLOWSKI	HAMMER: CME AUTOMATIC	ALIGNMENT: IR 90 CENTERLINE	PAGE: 1 OF 1
PID: 107714 BR ID: WALL E	DRILLING METHOD: 2.25" HSA	CALIBRATION DATE: 12/22/22	ELEVATION: 686.0 (MSL) EOB: 25.0 ft.	
START: 5/22/23 END: 5/22/23	SAMPLING METHOD: SPT	ENERGY RATIO (%): 83.2	COORD: 41.418631 N, 82.085968 W	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
GRANULAR SHOULDER FILL - 12 INCHES	686.0																		
FILL: Medium-dense gray, brown and dark-gray <b>GRAVEL WITH SAND AND SILT</b> , trace clay, damp.	684.2	1	9	17	50	SS-1	-	-	-	-	-	-	-	-	11	A-2-4 (V)	<<<<<<		
FILL: Hard dark-gray and dark-brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	680.5	2	4														>>>>>>		
		3															>>>>>>		
		4	3	17	67	SS-2	4.5+	-	-	-	-	-	-	-	17	A-6b (V)	>>>>>>		
		5	5	7													>>>>>>		
POSSIBLE FILL: Stiff gray and brown <b>CLAY</b> , some silt, trace fine to coarse sand, slightly organic, moist.	678.0	6	2	8	50	SS-3	1.0-2.0	0	1	9	31	59	46	19	27	26	A-7-6 (16)	>>>>>>	
		7	2	4														>>>>>>	
Very-stiff to hard brown mottled with gray <b>CLAY</b> , some silt, trace to little fine to coarse sand, trace fine gravel, damp.	673.0	8	2	6	19	78	SS-4	3.0-4.5+	-	-	-	-	-	-	-	20	A-7-6 (V)	>>>>>>	
		9	2	6	8													>>>>>>	
		10	2	6	8													>>>>>>	
		11	3	6	21	100	SS-5	3.5-4.5+	-	-	-	-	-	-	-	23	A-7-6 (V)	>>>>>>	
		12	3	6	9													>>>>>>	
Stiff to very-stiff gray mottled with brown <b>SILTY CLAY</b> , trace fine sand, moist.	670.5	13	3	4	14	100	SS-6	1.5-3.0	0	0	1	30	69	37	19	18	26	A-6b (11)	>>>>>>
		14	3	4	6														>>>>>>
Stiff to very-stiff gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine gravel, few hard zones, damp.	661.0	15	3	4	14	100	SS-7	1.5-3.5	-	-	-	-	-	-	-	15	A-6a (V)	>>>>>>	
		16	3	4	6														>>>>>>
		17	3	4	6														>>>>>>
		18	3	4	6														>>>>>>
		19	4	6	9	21	100	SS-8	2.0-3.5	-	-	-	-	-	-	16	A-6a (V)	>>>>>>	
		20	4	6	9														>>>>>>
		21	3	4	6	14	78	SS-9	1.5-3.0	-	-	-	-	-	-	15	A-6a (V)	>>>>>>	
		22	3	4	6														>>>>>>
		23	3	4	6														>>>>>>
		24	5	6	9	21	67	SS-10	2.0-4.5	-	-	-	-	-	-	14	A-6a (V)	>>>>>>	
		25	5	6	9														>>>>>>

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE





PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>804+15, 78' RT</u>	EXPLORATION ID: <b>B-053-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL E</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>683.8 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>5/22/23</u> END: <u>5/22/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.418986 N, 82.085421 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
FILL: Medium-dense gray and brown <b>GRAVEL WITH SAND AND SILT</b> , trace clay, moist.	683.8	1	10	8	17	67	SS-1	-	-	-	-	-	-	-	-	-	22	A-2-4 (V)	
FILL: Medium-dense brown <b>SANDY SILT</b> , little fine gravel, little clay, damp.	679.8	2	3	4	12	67	SS-2A	-	-	-	-	-	-	-	-	-	22	A-4a (V)	
Very-stiff to hard brown mottled with gray <b>SILTY CLAY</b> , trace fine to coarse sand, trace fine gravel, damp.	670.8	3	4	5	12	67	SS-2B	3.0-3.5	-	-	-	-	-	-	-	-	25	A-6b (V)	
		4	3	6	8	19	100	SS-3	4.5+	-	-	-	-	-	-	-	24	A-6b (V)	
Very-stiff to hard gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine gravel, damp.	658.8	5	3	6	8	19	83	SS-4	4.5+	-	-	-	-	-	-	-	21	A-6b (V)	
		6	5	7	7	19	100	SS-5	2.0-4.0	0	0	1	26	73	40	22	18	24	A-6b (11)
	658.8	7	3	5	6	15	83	SS-6	3.0-3.5	-	-	-	-	-	-	-	13	A-6a (V)	
		8	3	4	6	14	67	SS-7	3.0-4.5	-	-	-	-	-	-	-	15	A-6a (V)	
		9	4	5	8	18	100	SS-8	2.0-3.0	5	9	11	32	43	28	15	13	15	A-6a (9)
		10	4	5	8	18	100	SS-9	3.0-3.5	-	-	-	-	-	-	-	15	A-6a (V)	
		11	5	9	10	26	100	SS-10	4.5+	-	-	-	-	-	-	-	15	A-6a (V)	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:42 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY02 - GINTW\PROJECTS\217525A.GPJ

PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>805+97, 78' RT</u>	EXPLORATION ID <b>B-054-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE 1 OF 1
PID: <u>107714</u> BR ID: <u>WALL E</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>681.6 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>5/22/23</u> END: <u>5/22/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.419355 N, 82.084943 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL		
								GR	CS	FS	SI	CL	LL	PL	PI					
GRANULAR SHOULDER FILL - 12 INCHES	681.6																			
FILL: Very-stiff to hard gray and brown <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine gravel, damp.	678.6	1	3	7	17	100	SS-1	3.0-4.5+	-	-	-	-	-	-	-	-	-	15	A-6a (V)	
Very-stiff to hard brown mottled with gray <b>SILTY CLAY</b> , trace fine to coarse sand, trace fine gravel, damp.	671.1	3	3	4	12	67	SS-2	3.5-4.5+	-	-	-	-	-	-	-	-	-	23	A-6b (V)	
		4	3	4	5	19	100	SS-3	4.5+	-	-	-	-	-	-	-	-	24	A-6b (V)	
		5	3	5	9	21	83	SS-4	4.5+	-	-	-	-	-	-	-	-	21	A-6b (V)	
		6	3	5	9	11	100	SS-5	1.0-1.5	0	1	1	35	63	35	18	17	29	A-6b (11)	
		7	3	4	6	14	100	SS-6	3.0-3.5	-	-	-	-	-	-	-	-	-	15	A-6a (V)
Stiff gray <b>SILTY CLAY</b> , trace fine to coarse sand, moist.	668.6	11	2	3	5	11	100	SS-5	1.0-1.5	0	1	1	35	63	35	18	17	29	A-6b (11)	
		12	3	4	6	14	100	SS-6	3.0-3.5	-	-	-	-	-	-	-	-	-	15	A-6a (V)
Very-stiff to hard gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine gravel, becoming partly similar to severely weathered, very-weak shale at 23.5', damp.	656.6	13	3	4	6	14	100	SS-6	3.0-3.5	-	-	-	-	-	-	-	-	-	15	A-6a (V)
		14	3	4	6	14	100	SS-7	2.5-3.0	5	9	11	29	46	28	17	11	15	A-6a (8)	
		15	3	4	6	14	100	SS-7	2.5-3.0	5	9	11	29	46	28	17	11	15	A-6a (8)	
		16	3	4	6	14	100	SS-7	2.5-3.0	5	9	11	29	46	28	17	11	15	A-6a (8)	
		17	3	5	9	19	100	SS-8	3.5-4.5+	-	-	-	-	-	-	-	-	-	15	A-6a (V)
		18	3	5	9	19	100	SS-8	3.5-4.5+	-	-	-	-	-	-	-	-	-	15	A-6a (V)
		19	3	5	9	19	100	SS-8	3.5-4.5+	-	-	-	-	-	-	-	-	-	15	A-6a (V)
20	5	9	10	26	100	SS-9	4.5+	-	-	-	-	-	-	-	-	-	16	A-6a (V)		
21	5	9	10	26	100	SS-9	4.5+	-	-	-	-	-	-	-	-	-	16	A-6a (V)		
22	5	9	10	26	100	SS-9	4.5+	-	-	-	-	-	-	-	-	-	16	A-6a (V)		
23	5	9	10	26	100	SS-9	4.5+	-	-	-	-	-	-	-	-	-	16	A-6a (V)		
24	20	28	37	90	56	SS-10	4.5+	-	-	-	-	-	-	-	-	-	15	A-6a (V)		
25	20	28	37	90	56	SS-10	4.5+	-	-	-	-	-	-	-	-	-	15	A-6a (V)		

EOB

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



## **Noise Barrier Wall F**

Drawing path: T:\Columbus-1170\Projects\2021\217525A\_ODOT\_DS\_LOR-90-1076 Noise Walls\_Sheffield OH\GEO\CAD\Construction\Plan of Borings.dwg



INFORMATION FOR SUBGRADE BORINGS IS INCLUDED IN S&ME'S SUBGRADE EXPLORATION REPORT DATED JUNE 28, 2023.

**LEGEND**

- B-001-0-22 BORING NUMBER AND LOCATION (SEE NOTE)
- B-002-1-23 NOISE WALL BORING NUMBER AND LOCATION

**GRAPHIC SCALE (IN FEET)**

0 300 600

**N**



**PLAN OF BORINGS**

LOR-90-1076 THIRD LANE WIDENING  
NOISE BARRIER WALL EXPLORATION - WALL F (1 OF 3)  
LORAIN COUNTY, OHIO

SCALE:
SEE GRAPHIC
DATE:
08-29-2023
PROJECT NUMBER
217525A
FIGURE NO.

**1A**

Drawing path: T:\Columbus-1170\Projects\2021\217525A\_ODOT DS\_LOR-90-1076 Noise Walls\_Sheffield OH\GEO\CAD\Construction\Plan of Borings.dwg



INFORMATION FOR SUBGRADE BORINGS IS INCLUDED IN S&M'S SUBGRADE EXPLORATION REPORT DATED JUNE 28, 2023.

**LEGEND**

- B-001-0-22 BORING NUMBER AND LOCATION (SEE NOTE)
- B-002-1-23 NOISE WALL BORING NUMBER AND LOCATION

0 300 600  
GRAPHIC SCALE (IN FEET)

N



**PLAN OF BORINGS**

LOR-90-1076 THIRD LANE WIDENING  
NOISE BARRIER WALL EXPLORATION - WALL F (2 OF 3)  
LORAIN COUNTY, OHIO

SCALE:
SEE GRAPHIC
DATE:
08-29-2023
PROJECT NUMBER
217525A
FIGURE NO.

**1B**

Drawing path: T:\Columbus-1170\Projects\2021\217525A\_ODOT DS\_LOR-90-1076 Noise Walls\_Sheffield OH\GEO\CAD\Construction\Plan of Borings.dwg



INFORMATION FOR SUBGRADE BORINGS IS INCLUDED IN S&ME'S SUBGRADE EXPLORATION REPORT DATED JUNE 28, 2023.

**LEGEND**

- B-001-0-22 BORING NUMBER AND LOCATION (SEE NOTE)
- B-002-1-23 NOISE WALL BORING NUMBER AND LOCATION

**GRAPHIC SCALE (IN FEET)**

0 300 600

**N**



**PLAN OF BORINGS**

LOR-90-1076 THIRD LANE WIDENING  
NOISE BARRIER WALL EXPLORATION - WALL F (3 OF 3)  
LORAIN COUNTY, OHIO

SCALE:	SEE GRAPHIC
DATE:	08-29-2023
PROJECT NUMBER	217525A
FIGURE NO.	<b>1C</b>



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>835+60, 107' RT</u>	EXPLORATION ID: <b>B-061-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA / NQ</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>649.9 (MSL)</u> EOB: <u>20.0 ft.</u>	
START: <u>6/19/23</u> END: <u>6/19/23</u>	SAMPLING METHOD: <u>SPT / NQ</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.427229 N, 82.082639 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 8 INCHES	649.9																	
POSSIBLE FILL: Very-stiff gray, dark-gray and brown <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine gravel, few shale fragments, damp.	649.2	1	2	4	14	11	SS-1	3.5	-	-	-	-	-	-	-	-	13	A-6a (V)
Very-stiff to hard gray mottled with brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	646.9	2	5															
		3																
		4	3	4	12	78	SS-2	2.0-4.5+	-	-	-	-	-	-	-	-	20	A-6b (V)
		5	4															
Dense to very-dense gray and dark-gray <b>SANDY SILT</b> , some fine to coarse gravel (highly weathered shale fragments), little clay, dry to damp.	644.4	6	8	15	51	78	SS-3	-	31	16	10	28	15	23	15	8	8	A-4a (2)
		7	15	19														
		8																
		9	5	9	42	100	SS-4A	-	-	-	-	-	-	-	-	-	8	A-4a (V)
		10	9	19			SS-4B	-	-	-	-	-	-	-	-	-	6	Rock (V)
<b>SHALE</b> , gray, severely weathered, very-weak, highly fractured.	640.3	11	15	50	-	100	SS-5	-	-	-	-	-	-	-	-	-	5	Rock (V)
		12																
		13																
<b>SHALE</b> , gray and dark-gray, highly weathered to moderately weathered, weak to slightly strong, laminated bedding, fissile, partly blocky structure.	636.9	14	22	50-1"	-	100	SS-6	-	-	-	-	-	-	-	-	-	5	Rock (V)
		15																
		16																
		17																
		18																
		19																
		20	33			100	NQ-7	-										CORE
- From 18.9' - 19.3': Unconfined Compressive Strength Test = 1,371 psi.	629.9	EOB																

NOTES:  
 - No seepage noted.  
 - Encountered auger refusal at 15.0'.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:11 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:11 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINTWP\PROJECTS\217525A.GPJ

PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>837+62, 103' RT</u>	EXPLORATION ID <b>B-062-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE 1 OF 1
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>650.5 (MSL)</u> EOB: <u>13.8 ft.</u>	
START: <u>6/19/23</u> END: <u>6/19/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.427784 N, 82.082659 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 9 INCHES	650.5																	
POSSIBLE FILL: Very-stiff gray and brown <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine to coarse gravel, damp.	649.8	1	2	14	89	SS-1	3.0-4.0	-	-	-	-	-	-	-	-	-	15	A-6a (V)
Very-stiff to hard brown mottled with gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, few iron oxide stains below 5 feet, partly similar to severely weathered shale below 5.5', damp.	647.5	2	5															
		3																
		4	2	9	78	SS-2	2.0-2.5	1	3	17	41	38	34	17	17	19	A-6b (11)	
		5	4															
	644.0	6	4			SS-3A	4.5+	-	-	-	-	-	-	-	-	-	15	A-6b (V)
<b>SHALE</b> , brownish-gray, severely to highly weathered, very-weak to weak.		7	12 20	48	100	SS-3B	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		8																
		9	20 50-4"	-	80	SS-4	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		10																
		11	30 50-2"	-	100	SS-5	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		12																
	636.7	13	50-3"	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	-	Rock (V)

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.  
ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE





PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>839+44, 100' RT</u>	EXPLORATION ID: <b>B-062-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>650.2 (MSL)</u> EOB: <u>16.2 ft.</u>	
START: <u>6/19/23</u> END: <u>6/19/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.428283 N, 82.082677 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 4 INCHES	649.9	1																
POSSIBLE FILL: Very-stiff to hard gray and brown <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace to little fine to coarse gravel, damp.	647.2	2	2	14	67	SS-1	2.5-4.5+	-	-	-	-	-	-	-	14	A-6a (V)	<< << <<	
Very-stiff to hard gray mottled with brown <b>SILTY CLAY</b> , some fine to coarse sand, trace fine gravel, damp.	644.7	3																
		4	2	11	72	SS-2	3.0-4.5+	1	3	23	35	38	35	18	26	A-6b (10)	<< << <<	
		5																
Medium-dense to dense gray and dark-gray <b>SANDY SILT</b> , little to some fine to coarse gravel (severely weathered shale fragments), trace to little clay, damp.	639.2	6	3	41	100	SS-3	-	-	-	-	-	-	-	-	13	A-4a (V)	<< << <<	
		7																
		8																
		9	6	29	100	SS-4	-	-	-	-	-	-	-	-	9	A-4a (V)	<< << <<	
		10																
<b>SHALE</b> , dark-gray and gray, severely to highly weathered, very-weak to weak.	634.0	11	15	-	67	SS-5	-	-	-	-	-	-	-	-	-	Rock (V)	<< << <<	
		12																
		13																
		14																
		15																
		16																
		EOB	50-2"	-	100	SS-7	-	-	-	-	-	-	-	-	-	Rock (V)	<< << <<	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.  
ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:11 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINTWPROJECTS\217525A.GPJ



PROJECT: LOR-90-10.76 NOISE WALLS	DRILLING FIRM / OPERATOR: S&ME / T. FROST	DRILL RIG: S&ME ATV D50 (R80)	STATION / OFFSET: 841+60, 105' RT	EXPLORATION ID
TYPE: NOISE WALL	SAMPLING FIRM / LOGGER: S&ME / T. FROST	HAMMER: CME AUTOMATIC	ALIGNMENT: IR 90 CENTERLINE	<b>B-063-1-23</b>
PID: 107714 BR ID: WALL F	DRILLING METHOD: 2.25" HSA	CALIBRATION DATE: 6/6/22	ELEVATION: 648.3 (MSL) EOB: 13.9 ft.	PAGE
START: 6/19/23 END: 6/19/23	SAMPLING METHOD: SPT	ENERGY RATIO (%): 85.4	COORD: 41.428875 N, 82.082664 W	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 5 INCHES	648.3																	
FILL: Hard brown and gray SILT AND CLAY, little to some fine to coarse sand, trace fine to coarse gravel, few plastic fragments, damp.	647.9	1	2														<< << <<	
	645.3	2	5	19	89	SS-1	4.5	-	-	-	-	-	-	-	15	A-6a (V)	<< << <<	
		3	8														<< << <<	
Stiff gray mottled with brown SILT AND CLAY, "and" fine to coarse sand, trace fine gravel, slightly organic, damp.	642.8	4	4	23	100	SS-2	1.5-2.0	2	8	30	24	36	31	16	15	19	A-6a (7)	<< << <<
		5	8														<< << <<	
Very-stiff gray and brown SANDY SILT, some clay, trace fine gravel, dry to damp.	640.3	6	3	11	100	SS-3	3.5-4.0	-	-	-	-	-	-	-	7	A-4a (V)	<< << <<	
		7	4														<< << <<	
SHALE, dark-gray to gray, highly weathered, very-weak to weak.	640.3	8															<< << <<	
		9	14														<< << <<	
		10	28		100	SS-4		-	-	-	-	-	-	-			<< << <<	
		11	50-4"														<< << <<	
		12	23														<< << <<	
		13	50-4"		100	SS-5		-	-	-	-	-	-	-			<< << <<	
	634.4	EOB	50-5"		100	SS-6		-	-	-	-	-	-	-			<< << <<	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.  
ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: LOR-90-10.76 NOISE WALLS TYPE: NOISE WALL PID: 107714 BR ID: WALL F START: 6/19/23 END: 6/19/23	DRILLING FIRM / OPERATOR: S&ME / T. FROST SAMPLING FIRM / LOGGER: S&ME / T. FROST DRILLING METHOD: 2.25" HSA SAMPLING METHOD: SPT	DRILL RIG: S&ME ATV D50 (R80) HAMMER: CME AUTOMATIC CALIBRATION DATE: 6/6/22 ENERGY RATIO (%): 85.4	STATION / OFFSET: 843+60, 97' RT ALIGNMENT: IR 90 CENTERLINE ELEVATION: 648.3 (MSL) EOB: 13.8 ft. COORD: 41.429425 N, 82.082697 W	EXPLORATION ID <b>B-063-2-23</b>	PAGE 1 OF 1
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MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 3 INCHES	648.3	1	3															
POSSIBLE FILL: Hard gray SILT AND CLAY, little to some fine to coarse sand, trace fine gravel, damp.	648.3	2	4	13	94	SS-1	4.5+	-	-	-	-	-	-	-	-	-	16	A-6a (V)
	642.8	3																
	642.8	4	7															
	642.8	5	8	23	100	SS-2	4.5	-	-	-	-	-	-	-	-	-	13	A-6a (V)
Very-stiff gray SILTY CLAY, trace to little fine to coarse sand, trace fine gravel, few roots, few shale fragments, damp to moist.	642.8	6																
	639.8	7	7															
	639.8	8	8	27	100	SS-3	2.5-3.5	-	-	-	-	-	-	-	-	-	26	A-6b (V)
	639.8	9																
SHALE, dark-gray becoming gray, severely to highly weathered, very-weak to weak.	639.8	10	11															
	639.8	11	22	64	100	SS-4	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
	639.8	12	23															
	634.5	13	50-5"	-	100	SS-5	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
	634.5	EOB	50-4"	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	-	Rock (V)

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>845+63, 96' RT</u>	EXPLORATION ID <b>B-064-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE 1 OF 1
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA / NQ</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>647.6 (MSL)</u> EOB: <u>15.0 ft.</u>	
START: <u>6/19/23</u> END: <u>6/19/23</u>	SAMPLING METHOD: <u>SPT / NQ</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.429980 N, 82.082710 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 4 INCHES	647.3	1																
FILL: Hard gray and brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine to coarse gravel, few straw and brick fragments, damp.	644.6	2	3	5	14	94	SS-1	4.5+	-	-	-	-	-	-	-	-	15	A-6a (V)
Hard gray and dark-gray <b>CLAY</b> , some to "and" silt, trace to little fine to coarse sand, trace fine gravel, damp.	642.1	3																
		4	4	7	21	100	SS-2	4.5	-	-	-	-	-	-	-	-	28	A-7-6 (V)
		5																
Very-stiff brown mottled with gray <b>SILTY CLAY</b> , trace to little fine to coarse sand, trace fine to coarse gravel, damp.	639.1	6	3	5	17	100	SS-3	3.0-4.0	-	-	-	-	-	-	-	-	23	A-6b (V)
		7																
		8																
<b>SHALE</b> , dark-gray and gray, highly becoming moderately to slightly weathered, very-weak becoming slightly to moderately strong, laminated bedding, fissile, fractured to highly fractured.	639.1	9	27			100	SS-4	-	-	-	-	-	-	-	-	-	-	Rock (V)
		10																
		11		0		100	NQ-5	-										CORE
		12																
		13		0		100	NQ-6	-										CORE
		14																
	632.6	15																

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>847+69, 89' RT</u>	EXPLORATION ID <b>B-064-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE 1 OF 1
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>647.0 (MSL)</u> EOB: <u>13.8 ft.</u>	
START: <u>6/19/23</u> END: <u>6/19/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.430542 N, 82.082740 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 4 INCHES	647.0	1	3															
POSSIBLE FILL: Hard brown and gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine to coarse gravel, damp.	644.0	2	4	16	100	SS-1	4.5	-	-	-	-	-	-	-	-	13	A-6a (V)	
		3																
Very-stiff brown mottled with gray <b>SILTY CLAY</b> , trace to little fine to coarse sand, trace fine gravel, damp.		4	4	20	100	SS-2	3.5-4.0	-	-	-	-	-	-	-	-	29	A-6b (V)	
		5																
		6	3															
		7	4	13	100	SS-3	4.0	-	-	-	-	-	-	-	-	23	A-6b (V)	
		8																
<b>SHALE</b> , dark-gray becoming gray, severely to highly weathered, very-weak to weak.	638.5	9	4		87	SS-4	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		10		27														
		11	11		100	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		12		50-3"														
		13																
	633.2	EOB		50-3"		SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>849+66, 83' RT</u>	EXPLORATION ID
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	<b>B-065-1-23</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>646.3 (MSL)</u> EOB: <u>13.8 ft.</u>	PAGE
START: <u>6/19/23</u> END: <u>6/19/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.431073 N, 82.082739 W</u>	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 3 INCHES	646.3	1																
POSSIBLE FILL: Hard brown and gray <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine to coarse gravel, few iron oxide stains, slightly organic, damp.	643.3	2	5	7	20	78	SS-1	4.5	-	-	-	-	-	-	-	-	12	A-6a (V)
Very-stiff dark-brown and dark-gray <b>CLAY</b> , some silt, trace fine to coarse sand, damp.	640.8	3																
Very-stiff to hard gray and dark-gray <b>SILTY CLAY</b> , trace to little fine to coarse sand, trace fine gravel, damp.	640.8	4	2	3	9	100	SS-2	2.5-3.0	0	1	4	33	62	59	29	30	33	A-7-6 (20)
	637.8	5																
	637.8	6	3	4	17	100	SS-3	3.5-4.5	-	-	-	-	-	-	-	-	23	A-6b (V)
	637.8	7																
	637.8	8																
<b>SHALE</b> , dark-gray becoming gray, severely to highly weathered, very-weak to weak, few iron oxide stains.	637.8	9	9	10	31	100	SS-4	-	-	-	-	-	-	-	-	-	-	Rock (V)
	637.8	10																
	637.8	11	50-5"			100	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)
	637.8	12																
	632.5	13	50-3"			100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>851+71, 84' RT</u>	EXPLORATION ID <b>B-065-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE 1 OF 1
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>645.5 (MSL)</u> EOB: <u>13.8 ft.</u>	
START: <u>6/19/23</u> END: <u>6/19/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.431620 N, 82.082675 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 5 INCHES	645.5																	
FILL: Hard gray and brown <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace to little fine to coarse gravel, damp.	642.5	1	3	5	16	100	SS-1	4.0-4.5	-	-	-	-	-	-	-	-	14	A-6a (V)
Hard brown mottled with gray and dark-gray <b>CLAY</b> , some to "and" silt, trace fine to coarse sand, damp.	640.0	2	2	3	13	100	SS-2	4.5+	-	-	-	-	-	-	-	-	22	A-7-6 (V)
Very-stiff to hard gray mottled with dark-gray <b>SILTY CLAY</b> , little fine to coarse sand, damp.	637.0	3	4	11	44	100	SS-3	3.5-4.5	0	5	9	63	23	38	22	16	17	A-6b (10)
<b>SHALE</b> , dark-gray, severely weathered, very-weak, partly similar to hard soil.	632.5	4	14	27	-	100	SS-4	-	-	-	-	-	-	-	-	-	-	Rock (V)
		5	14	18	25	61	100	SS-5	-	-	-	-	-	-	-	-	-	Rock (V)
<b>SHALE</b> , gray, highly weathered, weak.	631.7	6	14	50-4"	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>853+73, 78' RT</u>	EXPLORATION ID: <b>B-066-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>645.8 (MSL)</u> EOB: <u>16.3 ft.</u>	
START: <u>6/19/23</u> END: <u>6/19/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.432161 N, 82.082601 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 9 INCHES	645.8																	
POSSIBLE FILL: Hard gray and brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine to coarse gravel, few iron oxide stains, damp.	645.1	1	2	9	67	SS-1	4.5+	-	-	-	-	-	-	-	-	-	14	A-6a (V)
		2	4															
		3																
Very-stiff gray mottled with dark-gray <b>CLAY</b> , some to "and" silt, trace fine to coarse sand, damp.	641.6	4	4	12	83	SS-2A	4.5+	-	-	-	-	-	-	-	-	-	11	A-6a (V)
		5	4			SS-2B	2.5-4.0	-	-	-	-	-	-	-	-	-	26	A-7-6 (V)
Very-stiff to hard gray mottled with brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	640.3	6	2															
		7	3	11	72	SS-3	3.5-4.5+	1	3	8	37	51	39	19	20	20	A-6b (12)	
		8	4															
		9	3	12	100	SS-4	4.0-4.5+	-	-	-	-	-	-	-	-	-	16	A-6b (V)
		10	5															
<b>SHALE</b> , gray, severely to highly weathered, very-weak to weak, partly similar to hard soil.	634.8	11	5															
		12	15	50-5"	-	100	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)
		13																
		14	50-5"		100	SS-6	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		15																
	629.5	16	50-3"		100	SS-7	-	-	-	-	-	-	-	-	-	-	-	Rock (V)

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE





PROJECT: LOR-90-10.76 NOISE WALLS	DRILLING FIRM / OPERATOR: S&ME / T. FROST	DRILL RIG: S&ME ATV D50 (R80)	STATION / OFFSET: 855+82, 86' RT	EXPLORATION ID
TYPE: NOISE WALL	SAMPLING FIRM / LOGGER: S&ME / T. FROST	HAMMER: CME AUTOMATIC	ALIGNMENT: IR 90 CENTERLINE	<b>B-066-2-23</b>
PID: 107714 BR ID: WALL F	DRILLING METHOD: 3.25" HSA / NQ	CALIBRATION DATE: 6/6/22	ELEVATION: 644.5 (MSL) EOB: 17.0 ft.	PAGE
START: 6/20/23 END: 6/20/23	SAMPLING METHOD: SPT / NQ	ENERGY RATIO (%): 85.4	COORD: 41.432708 N, 82.082434 W	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 2 INCHES	644.3																	
POSSIBLE FILL: Hard brown and gray SILT AND CLAY, little fine to coarse sand, trace fine to coarse gravel, few iron oxide stains, damp.	641.5	1	3	5	20	89	SS-1	4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)
Very-stiff to hard gray mottled with dark-gray CLAY, some to "and" silt, trace fine to coarse sand, damp.		2																
		3																
		4	3	6	23	100	SS-2	3.5-4.5	0	1	6	40	53	49	21	28	22	A-7-6 (17)
		5																
		6	3	4	14	100	SS-3	4.0-4.5	-	-	-	-	-	-	-	-	24	A-7-6 (V)
		7																
	636.0	8																
SHALE, dark-gray, severely weathered, very-weak becoming weak, partly similar to hard soil.		9	8	8	28	100	SS-4	-	-	-	-	-	-	-	-	-	-	Rock (V)
		10																
	633.0	11	50-5"	-	100		SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)
SHALE, dark-gray and gray, highly to severely weathered, weak to slightly strong, laminated, slightly friable, fissile, laminated to blocky structure, fractured.		12																
		13																
		14																
		15	0			100	NQ-6	-										CORE
		16																
	627.5	17																

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>857+83, 86' RT</u>	EXPLORATION ID
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	<b>B-067-1-23</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>643.9 (MSL)</u> EOB: <u>13.9 ft.</u>	PAGE
START: <u>6/21/23</u> END: <u>6/21/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.433233 N, 82.082265 W</u>	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 3 INCHES	643.9																	
FILL: Very-stiff dark-gray <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	640.9	1	8	5	13	33	SS-1	2.5-3.0	-	-	-	-	-	-	-	-	16	A-6a (V)
Very-stiff brown mottled with gray <b>CLAY</b> , some to "and" silt, trace fine sand, damp to moist.	638.4	2	3	5	16	100	SS-2	2.5-2.7	0	0	1	33	66	60	24	36	27	A-7-6 (20)
Very-stiff gray mottled with reddish-brown <b>SILTY CLAY</b> , little fine to coarse sand, little fine to coarse gravel (shale fragments), partly similar to very-weak shale, damp.	635.9	3	3	8	33	100	SS-3	3.2-3.2	-	-	-	-	-	-	-	-	18	A-6b (V)
<b>SHALE</b> , dark-gray, severely to highly weathered, very-weak becoming weak.	630.0	4	20	50-3"	-	100	SS-4	-	-	-	-	-	-	-	-	-	-	Rock (V)
		5	50-5"	-	100	SS-5	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		6	50-5"	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	-	Rock (V)

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>859+83, 84' RT</u>	EXPLORATION ID: <b>B-067-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: 1 OF 1
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>643.9 (MSL)</u> EOB: <u>14.8 ft.</u>	
START: <u>6/21/23</u> END: <u>6/21/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.433748 N, 82.082067 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 3 INCHES	643.9																	
POSSIBLE FILL: Hard brown and dark-gray <b>SILT AND CLAY</b> , little fine to coarse sand, trace to little fine to coarse gravel, damp.	640.9	1	3	5	17	100	SS-1	4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)
Very-stiff brown mottled with gray and dark-gray <b>CLAY</b> , some to "and" silt, trace fine sand, damp to moist.	640.9	2	5	7														
		3																
	640.9	4	3	4	13	89	SS-2	3.0-3.2	-	-	-	-	-	-	-	-	29	A-7-6 (V)
		5	4	5														
	640.9	6	2	4	14	100	SS-3	2.7-3.0	0	0	0	29	71	55	25	30	25	A-7-6 (19)
		7	4	6														
<b>SHALE</b> , dark-gray, severely weathered to completely degraded, very-weak, partly similar to hard soil.	635.4	8																
		9	15	20	20	57	100	SS-4	-	-	-	-	-	-	-	-	-	Rock (V)
	635.4	10																
		11	5	14	20	48	100	SS-5	-	-	-	-	-	-	-	-	-	Rock (V)
	635.4	12																
		13																
	629.1	14	10	12	50-4"	-	100	SS-6	-	-	-	-	-	-	-	-	-	Rock (V)
		EOB																

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>861+90, 84' RT</u>	EXPLORATION ID <b>B-068-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE 1 OF 1
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>643.1 (MSL)</u> EOB: <u>14.3 ft.</u>	
START: <u>6/21/23</u> END: <u>6/21/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.434271 N, 82.081820 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 3 INCHES	643.1																	
POSSIBLE FILL: Hard grayish-brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace to little fine to coarse gravel, damp.	642.8	1	5	6	20	100	SS-1	4.0-4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)
Very-stiff brown mottled with gray and dark-gray <b>CLAY</b> , some to "and" silt, trace fine to coarse sand, damp to moist.	640.1	3																
		4	5	6	16	100	SS-2	2.5-2.7	-	-	-	-	-	-	-	-	23	A-7-6 (V)
Dense brown and dark-gray <b>GRAVEL WITH SAND AND SILT</b> , trace to little clay, many shale fragments, damp.	635.1	6																
		7	3	3	11	100	SS-3	2.5-2.8	0	0	1	27	72	65	27	38	28	A-7-6 (20)
Dense brown and dark-gray <b>GRAVEL WITH SAND AND SILT</b> , trace to little clay, many shale fragments, damp.	632.6	8																
		9	6	12	46	100	SS-4	-	-	-	-	-	-	-	-	-	15	A-2-4 (V)
<b>SHALE</b> , dark-gray, severely weathered, very-weak to weak.	628.8	10																
		11	30	50-5"	-	100	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)
		12																
		13																
		14	30	50-4"	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)
		EOB																

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>863+92, 79' RT</u>	EXPLORATION ID <b>B-068-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA / NQ</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>642.9 (MSL)</u> EOB: <u>20.0 ft.</u>	PAGE 1 OF 1
START: <u>6/21/23</u> END: <u>6/21/23</u>	SAMPLING METHOD: <u>SPT / NQ</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.434779 N, 82.081559 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 10 INCHES	642.9																	
FILL: Hard gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine to coarse gravel (shale fragments), slightly organic, damp.	642.1	1	2															
		2	3	11	78	SS-1	4.5+	-	-	-	-	-	-	-	-	12	A-6a (V)	
		3	4															
POSSIBLE FILL: Very-stiff dark-gray <b>CLAY</b> , some to "and" silt, trace fine to coarse sand, moderately organic, moist.	639.9	4	2															
		5	3	12	44	SS-2	2.5-3.5	-	-	-	-	-	-	-	-	35	A-7-6 (V)	
		6	4															
Very-stiff brown mottled with gray <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine to coarse gravel, few iron oxide stains, damp.	637.9	7	2															
		8	4	12	100	SS-3	2.5-3.5	-	-	-	-	-	-	-	-	19	A-6a (V)	
		9	2															
		10	3	15	100	SS-4	2.0-2.5	7	6	7	48	32	39	24	15	21	A-6a (10)	
		11	7															
Dense brownish-gray <b>GRAVEL WITH SAND AND SILT</b> , little clay, few shale fragments, dry to damp.	632.4	12	9															
		13	20															
<b>SHALE</b> , gray, severely becoming highly to moderately weathered, very-weak to weak, laminated, friable, fissile, fractured to highly fractured.	630.9	14	35	50-5"	-	88	SS-5	-	-	-	-	-	-	-	-	10	A-2-4 (V)	
		15	35	50-2"	-	100	SS-6	-	-	-	-	-	-	-	-	-	Rock (V)	
		16																
		17																
		18	7				NQ-7	-									CORE	
		19																
	622.9	20																

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>865+96, 80' RT</u>	EXPLORATION ID: <b>B-069-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>642.7 (MSL)</u> EOB: <u>18.8 ft.</u>	
START: <u>6/21/23</u> END: <u>6/21/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.435271 N, 82.081243 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
FILL: Loose dark-gray <b>GRAVEL WITH SAND AND SILT</b> , little clay, few asphalt fragments, strong hydrocarbon odor, damp.	642.7																	
	641.4	1	7			SS-1A	-	-	-	-	-	-	-	-	-	9	A-2-4 (V)	
FILL: Very-stiff gray <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine to coarse gravel (shale fragments), damp.	639.7	2	2	3	8	61	SS-1B	2.5-3.5	-	-	-	-	-	-	-	14	A-6a (V)	
	639.7	3																
POSSIBLE FILL: Very-stiff to hard dark-gray <b>CLAY</b> , some to "and" silt, trace fine to coarse sand, moderately organic, damp to moist.	637.2	4	3	3	11	67	SS-2	3.0-4.5+	-	-	-	-	-	-	-	27	A-7-6 (V)	
	637.2	5	4															
Very-stiff to hard brown mottled with gray <b>CLAY</b> , "and" silt, trace fine to coarse sand, trace fine gravel, damp.	632.2	6	2	4	14	100	SS-3	3.0-4.5+	1	2	5	44	48	44	25	19	22	A-7-6 (12)
	632.2	7	5															
	632.2	8																
	632.2	9	2	3	11	72	SS-4	3.5-4.5+	-	-	-	-	-	-	-	21	A-7-6 (V)	
	632.2	10	4															
Very-dense dark-gray <b>GRAVEL WITH SAND AND SILT</b> , little clay, many shale fragments, dry.	630.7	11	11	27	-	100	SS-5	-	-	-	-	-	-	-	-	-	-	A-2-4 (V)
	630.7	12	27	50-3"														
<b>SHALE</b> , gray, severely to highly weathered, very-weak to weak.	623.9	13																
	623.9	14	19	50-5"	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)
	623.9	15																
	623.9	16	50-5"		-	100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)
	623.9	17																
	623.9	18	50-4"		-	100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: LOR-90-10.76 NOISE WALLS		DRILLING FIRM / OPERATOR: S&ME / T. FROST		DRILL RIG: S&ME ATV D50 (R80)		STATION / OFFSET: 868+07, 84' RT		EXPLORATION ID	
TYPE: NOISE WALL		SAMPLING FIRM / LOGGER: S&ME / T. FROST		HAMMER: CME AUTOMATIC		ALIGNMENT: IR 90 CENTERLINE		B-069-2-23	
PID: 107714 BR ID: WALL F		DRILLING METHOD: 2.25" HSA		CALIBRATION DATE: 6/6/22		ELEVATION: 642.4 (MSL) EOB: 16.8 ft.		PAGE	
START: 6/21/23 END: 6/21/23		SAMPLING METHOD: SPT		ENERGY RATIO (%): 85.4		COORD: 41.435767 N, 82.080866 W		1 OF 1	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 3 INCHES	642.4																	
POSSIBLE FILL: Very-stiff to hard brown mottled with gray and dark-gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace to little fine to coarse gravel, damp.	642.4	1	3														<< >>	
		2	5	14	100	SS-1	4.0-4.5+	-	-	-	-	-	-	-	15	A-6a (V)	<< >>	
		3																<< >>
Very-stiff brown mottled with gray <b>CLAY</b> , "and" silt, trace fine to coarse sand, trace fine sand, damp to moist.	636.9	4	3														<< >>	
		5	4	16	89	SS-2	3.0-3.3	-	-	-	-	-	-	-	15	A-6a (V)	<< >>	
		6																<< >>
SHALE, dark-gray, severely to highly weathered, very-weak to weak, partly similar to hard soil.	631.9	7	4														<< >>	
		8	5	14	100	SS-3	3.2-3.5	-	-	-	-	-	-	-	22	A-7-6 (V)	<< >>	
		9																<< >>
		10	4	5	17	100	SS-4	2.5	1	1	3	39	56	45	23	22	25	A-7-6 (14)
TR	631.9	11															<< >>	
		12	10	20	58	100	SS-5	-	-	-	-	-	-	-	-	-	Rock (V)	<< >>
		13																<< >>
EOB	625.6	14	33														<< >>	
		15	50-4"	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	<< >>
		16	15	50-3"	-	100	SS-7	-	-	-	-	-	-	-	-	-	Rock (V)	<< >>

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: LOR-90-10.76 NOISE WALLS	DRILLING FIRM / OPERATOR: S&ME / T. FROST	DRILL RIG: S&ME ATV D50 (R80)	STATION / OFFSET: 869+99, 80' RT	EXPLORATION ID
TYPE: NOISE WALL	SAMPLING FIRM / LOGGER: S&ME / T. FROST	HAMMER: CME AUTOMATIC	ALIGNMENT: IR 90 CENTERLINE	<b>B-070-1-23</b>
PID: 107714 BR ID: WALL F	DRILLING METHOD: 2.25" HSA	CALIBRATION DATE: 6/6/22	ELEVATION: 642.9 (MSL) EOB: 16.4 ft.	PAGE
START: 6/21/23 END: 6/21/23	SAMPLING METHOD: SPT	ENERGY RATIO (%): 85.4	COORD: 41.436228 N, 82.080531 W	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 4 INCHES	642.9																	
FILL: Hard brown and dark-brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine to coarse gravel, damp.	639.9	1	5	16	100	SS-1	4.0-4.5+	-	-	-	-	-	-	-	14	A-6a (V)	<< << <<	
POSSIBLE FILL: Very-stiff brown and gray <b>SANDY SILT</b> , trace fine gravel, few pockets of fine to coarse sand, damp.	637.4	3	3	28	100	SS-2	3.2-3.3	9	16	30	21	24	21	12	9	A-4a (2)	<< << <<	
Very-stiff brown mottled with gray and dark-gray <b>CLAY</b> , some to "and" silt, trace fine to coarse sand, trace fine gravel, damp.	631.9	6	4	21	94	SS-3	3.7-3.8	-	-	-	-	-	-	-	23	A-7-6 (V)	<< << <<	
		7	6	9													<< << <<	
		9	4	8	23	100	SS-4	3.5-3.8	-	-	-	-	-	-	21	A-7-6 (V)	<< << <<	
		10	8	8													<< << <<	
<b>SHALE</b> , gray, severely to highly weathered, very-weak to weak.	631.9	11	10	-	100	SS-5	-	-	-	-	-	-	-	-	-	Rock (V)	<< << <<	
		12	45	50-2"													<< << <<	
		13															<< << <<	
		14	50-5"	-	100	SS-6	-	-	-	-	-	-	-	-	-	Rock (V)	<< << <<	
		15															<< << <<	
	626.5	16	50-5"	-	100	SS-7	-	-	-	-	-	-	-	-	-	Rock (V)	<< << <<	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE





PROJECT: LOR-90-10.76 NOISE WALLS TYPE: NOISE WALL PID: 107714 BR ID: WALL F START: 6/21/23 END: 6/21/23	DRILLING FIRM / OPERATOR: S&ME / T. FROST SAMPLING FIRM / LOGGER: S&ME / T. FROST DRILLING METHOD: 3.25" HSA / NQ SAMPLING METHOD: SPT / NQ	DRILL RIG: S&ME ATV D50 (R80) HAMMER: CME AUTOMATIC CALIBRATION DATE: 6/6/22 ENERGY RATIO (%): 85.4	STATION / OFFSET: 872+03, 85' RT ALIGNMENT: IR 90 CENTERLINE ELEVATION: 642.1 (MSL) EOB: 17.0 ft. COORD: 41.436706 N, 82.080145 W	EXPLORATION ID <b>B-070-2-23</b> PAGE 1 OF 1
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MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 3 INCHES	642.1	1																
POSSIBLE FILL: Hard brown and dark-brown <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace to little fine to coarse gravel, damp.	639.1	2	3 4	11	100	SS-1	4.0- 4.5	-	-	-	-	-	-	-	14	A-6a (V)	<< << <<	
Very-stiff becoming hard brown mottled with gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, becoming similar to very-weak shale at 8.5', damp.	631.6	3																
		4	8 6	13	100	SS-2	2.2- 2.5	-	-	-	-	-	-	-	18	A-6b (V)	<< << <<	
		6																
		7	3 4	16	100	SS-3	4.0- 4.5	-	-	-	-	-	-	-	18	A-6b (V)	<< << <<	
SHALE, gray and dark-gray, highly weathered, weak to slightly strong, laminated bedding, slightly calcareous, fissile, fractured to highly fractured, few vertical fractures, slightly blocky structure.	625.1	9	6 10	40	100	SS-4	-	-	-	-	-	-	-	-	-	A-6b (V)	<< << <<	
		10																
		11	35 50-5"	-	100	SS-5	-	-	-	-	-	-	-	-	-	Rock (V)	<< << <<	
		12																
		13																
		14	0		100	NQ-6	-									CORE	<< << <<	
		15																
		16																
		17																

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.  
ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>874+11, 72' RT</u>	EXPLORATION ID
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	<b>B-071-1-23</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>642.5 (MSL)</u> EOB: <u>23.8 ft.</u>	PAGE
START: <u>6/21/23</u> END: <u>6/21/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.437221 N, 82.079811 W</u>	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT - 9-1/2 INCHES	641.7																	
GRANULAR BASE - 5-1/2 INCHES	641.2	1	5			SS-1A	-	-	-	-	-	-	-	-	9	A-1-b (V)		
FILL: Hard gray mottled with brown <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine gravel, damp.	639.5	2	2	8	56	SS-1B	4.0-4.5+	-	-	-	-	-	-	-	12	A-6a (V)		
FILL: Loose gray <b>COARSE AND FINE SAND</b> , little silt, trace clay, trace fine gravel, moist to wet.	637.0	3																
		4	1	9	39	SS-2	-	1	37	41	17	4	NP	NP	NP	15	A-3a (0)	
		5	2	4														
Stiff to very-stiff brown mottled with gray <b>CLAY</b> , "and" silt, little fine to coarse sand, damp.	632.0	6	2	12	78	SS-3	2.5-3.5	0	2	13	43	42	49	22	27	23	A-7-6 (17)	
		7	3	5														
		8																
		9	2	8	78	SS-4	1.5-3.0	-	-	-	-	-	-	-	-	21	A-7-6 (V)	
		10	2	3														
Hard brown and gray <b>SANDY SILT</b> , little clay, little fine gravel, few shale fragments, damp.	626.5	11	4	39	100	SS-5	4.5+	-	-	-	-	-	-	-	-	12	A-4a (V)	
		12	10	16														
		13																
		14	9	15	47	100	SS-6	4.5+	-	-	-	-	-	-	-	8	A-4a (V)	
		15	15	16														
<b>SHALE</b> , gray, highly weathered, weak.	618.7	16	10	-	70	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		17	50-4"															
		18																
		19	47	-	75	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		20	50-2"															
		21	50-3"	-	100	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		22																
		23	50-3"	-	100	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:11 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>876+01, 77' RT</u>	EXPLORATION ID: <b>B-071-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>641.6 (MSL)</u> EOB: <u>16.5 ft.</u>	
START: <u>6/21/23</u> END: <u>6/21/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.437666 N, 82.079449 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 7 INCHES FILL: Loose to medium-dense brown and gray <b>COARSE AND FINE SAND</b> , little fine gravel, little silt, trace clay, damp.	641.6	1	5	15	67	SS-1	-	-	-	-	-	-	-	-	-	-	10	A-3a (V)
		2	5															
		3																
		4	2	8	100	SS-2	-	17	23	38	16	6	NP	NP	NP	12	A-3a (0)	
		5	3	2														
Very-stiff to hard gray mottled with brown <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp.	636.1	6	2	12	61	SS-3	2.5-3.0	-	-	-	-	-	-	-	-	-	22	A-7-6 (V)
		7	3	5														
		8																
		9	2	15	39	SS-4	4.5+	-	-	-	-	-	-	-	-	-	19	A-7-6 (V)
		10	4	6														
<b>SHALE</b> , gray, highly to severely weathered, very-weak to weak.	631.1	11	9	102	100	SS-5	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		12	32	36														
		13																
		14	46	50-5"	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)
		15																
	625.1	16	50	-	100	SS-7	-	-	-	-	-	-	-	-	-	-	-	Rock (V)

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:11 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>878+04, 82' RT</u>	EXPLORATION ID: <b>B-072-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>640.3 (MSL)</u> EOB: <u>18.8 ft.</u>	
START: <u>6/22/23</u> END: <u>6/22/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.438143 N, 82.079066 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 3 INCHES	640.3																	
FILL: Loose to medium-dense brown <b>COARSE AND FINE SAND</b> , little silt, little clay, trace fine gravel, damp to moist.	640.0	1	3	17	100	SS-1	-	-	-	-	-	-	-	-	11	A-3a (V)	<< >>	
		2	5														<< >>	
		3	7														<< >>	
		4	3														<< >>	
		5	4	10	100	SS-2	-	9	23	39	17	12	NP	NP	NP	14	A-3a (0)	<< >>
	634.8	6	3														<< >>	
Very-stiff to hard brown mottled with gray <b>CLAY</b> , "and" silt, trace fine to coarse sand, trace fine gravel, damp.		7	4	11	100	SS-3	3.5	2	1	8	37	52	48	22	26	10	A-7-6 (16)	<< >>
		8	4														<< >>	
		9	6	19	100	SS-4	4.0-4.5	-	-	-	-	-	-	-	-	20	A-7-6 (V)	<< >>
	629.8	10	7														<< >>	
<b>SHALE</b> , dark-gray, severely weathered, very-weak, similar to hard soil.	629.8	11	21	-	100	SS-5	-	-	-	-	-	-	-	-	-	12	Rock (V)	<< >>
	627.8	12	50-4"														<< >>	
<b>SHALE</b> , gray, highly to severely weathered, weak.		13															<< >>	
		14	50-5"	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	<< >>
		15															<< >>	
		16	50-5"	-	100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	<< >>
		17															<< >>	
	621.5	18	50-4"	-	100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	<< >>

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:11 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



PROJECT: LOR-90-10.76 NOISE WALLS	DRILLING FIRM / OPERATOR: S&ME / T. FROST	DRILL RIG: S&ME ATV D50 (R80)	STATION / OFFSET: 879+93, 79' RT	EXPLORATION ID: B-072-2-23
TYPE: NOISE WALL	SAMPLING FIRM / LOGGER: S&ME / T. FROST	HAMMER: CME AUTOMATIC	ALIGNMENT: IR 90 CENTERLINE	PAGE: 1 OF 1
PID: 107714 BR ID: WALL F	DRILLING METHOD: 2.25" HSA	CALIBRATION DATE: 6/6/22	ELEVATION: 640.0 (MSL) EOB: 19.8 ft.	
START: 6/22/23 END: 6/22/23	SAMPLING METHOD: SPT	ENERGY RATIO (%): 85.4	COORD: 41.438598 N, 82.078732 W	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 3 INCHES	640.0																	
FILL: Medium-dense reddish-gray <b>COARSE AND FINE SAND</b> , little silt, little clay, trace to little fine gravel, damp.	639.7	1	3	5	17	100	SS-1	-	-	-	-	-	-	-	-	-	12	A-3a (V)
Hard gray <b>SILTY CLAY</b> , some fine to coarse sand, trace fine gravel, damp.	637.0	2																
		3																
		4	2	2	9	100	SS-2	4.0-4.5	5	8	15	28	44	33	17	16	15	A-6b (10)
		5																
Very-stiff brown mottled with gray <b>CLAY</b> , some silt, trace fine to coarse sand, damp.	634.5	6	3	5	14	89	SS-3	3.7-4.0	-	-	-	-	-	-	-	-	19	A-7-6 (V)
		7																
		8																
		9	2	5	17	100	SS-4	3.0-3.2	0	1	2	33	64	45	20	25	24	A-7-6 (15)
		10																
<b>SHALE</b> , gray, highly to severely weathered, very-weak to weak, partly similar to hard soil above 13'.	629.0	11	13	17	63	89	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)
		12																
		13																
		14	50-3"			100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)
		15																
		16	30	50-1"		100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)
		17																
		18																
		19	20	22		100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)
	620.2																	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>882+06, 78' RT</u>	EXPLORATION ID <b>B-073-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE 1 OF 1
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>640.0 (MSL)</u> EOB: <u>18.9 ft.</u>	
START: <u>6/22/23</u> END: <u>6/22/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.439105 N, 82.078351 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 4 INCHES	639.7																	
FILL: Medium-dense dark-brown <b>COARSE AND FINE SAND</b> , little fine to coarse gravel, trace silt, trace clay, damp.	637.0	1	13	21	100	SS-1	-	-	-	-	-	-	-	-	11	A-3a (V)	<< << <<	
POSSIBLE FILL: Hard gray <b>CLAY</b> , "and" silt, trace to little fine to coarse sand, trace fine gravel, damp.	634.5	2	3	10	100	SS-2	4.0-4.5+	-	-	-	-	-	-	-	19	A-7-6 (V)	<< << <<	
Very-stiff brown mottled with gray <b>SILTY CLAY</b> , trace fine to coarse sand, damp.	629.5	3	3	13	100	SS-3	3.5	-	-	-	-	-	-	-	19	A-6b (V)	<< << <<	
		4	4	10	100	SS-4	3.2-3.5	0	3	6	44	47	40	20	22	A-6b (12)	<< << <<	
Hard dark-gray <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine to coarse gravel, partly similar to very-weak shale, damp.	627.0	5	5	44	100	SS-5	4.5	-	-	-	-	-	-	-	11	A-6a (V)	<< << <<	
<b>SHALE</b> , dark-gray, severely to highly weathered, very-weak to weak.	621.1	6	35	-	100	SS-6	-	-	-	-	-	-	-	-	-	Rock (V)	<< << <<	
		7	50-5"	-	100	SS-7	-	-	-	-	-	-	-	-	-	Rock (V)	<< << <<	
		8	50-5"	-	100	SS-8	-	-	-	-	-	-	-	-	-	Rock (V)	<< << <<	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:11 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINTWP\PROJECTS\217525A.GPJ

PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>884+17, 78' RT</u>	EXPLORATION ID: <b>B-073-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA / NQ</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>639.7 (MSL)</u> EOB: <u>20.5 ft.</u>	PAGE: <b>1 OF 1</b>
START: <u>6/22/23</u> END: <u>6/22/23</u>	SAMPLING METHOD: <u>SPT / NQ</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.439609 N, 82.077970 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 14 INCHES	639.7																	
FILL: Medium-dense brown and gray <b>COARSE AND FINE SAND</b> , trace to little fine to coarse gravel, little silt, trace clay, few asphalt fragments, damp.	638.5	1	6	4	14	61	SS-1A	-	-	-	-	-	-	-	-	-	9	A-1-b (V)
	636.7	2		5			SS-1B	-	-	-	-	-	-	-	-	-	11	A-3a (V)
POSSIBLE FILL: Stiff gray <b>SANDY SILT</b> , little clay, little fine to coarse gravel, damp.		3																
	634.2	4	2	7	15	44	SS-2	1.5-2.0	11	19	28	27	15	23	16	7	14	A-4a (1)
Very-stiff to hard gray mottled with brown <b>SILTY CLAY</b> , trace to little fine to coarse sand, trace fine gravel, few iron oxide stains, damp.		5																
	629.2	6	2	2	8	83	SS-3	4.0-4.5+	-	-	-	-	-	-	-	-	17	A-6b (V)
		7		3														
		8																
		9	2	3	11	100	SS-4	2.5-3.0	-	-	-	-	-	-	-	-	17	A-6b (V)
		10		4														
Very-stiff to hard gray and grayish-brown <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine gravel, similar to very-weak shale, damp to dry.	625.7	11	4	7	26	72	SS-5	2.5-3.5	-	-	-	-	-	-	-	-	16	A-6a (V)
		12		10														
		13																
<b>SHALE</b> , dark-gray, highly to severely weathered, very-weak to slightly strong, laminated, friable, highly to moderately fractured.	619.2	14	11	50-5"	-	100	SS-6A	4.5+	-	-	-	-	-	-	-	-	11	A-6a (V)
		15					SS-6B	-	-	-	-	-	-	-	-	-	-	Rock (V)
		16																
		17																
		18		23		93	NQ-7	-										CORE
		19																
		20																

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>886+06, 79' RT</u>	EXPLORATION ID <b>B-074-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE 1 OF 1
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>639.2 (MSL)</u> EOB: <u>18.8 ft.</u>	
START: <u>6/22/23</u> END: <u>6/22/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.440059 N, 82.077625 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
FILL: Dense brown and gray <b>GRAVEL WITH SAND AND SILT</b> , trace clay, damp.	639.2	1	15															
	636.2	2	15	33	100	SS-1	-	-	-	-	-	-	-	-	10	A-2-4 (V)		
		3																
POSSIBLE FILL: Stiff brown and dark-gray <b>SANDY SILT</b> , little to some clay, little fine to coarse gravel, damp.		4	5	20	100	SS-2	1.5-2.0	11	17	36	16	20	22	14	8	12	A-4a (0)	
	633.7	5																
Very-stiff to hard brown mottled with gray <b>SILTY CLAY</b> , trace fine to coarse sand, trace fine gravel, damp.		6	3	11	100	SS-3	3.7-4.0	-	-	-	-	-	-	-	19	A-6b (V)		
		7	3	5														
		8																
		9	5	9	26	100	SS-4	4.0-4.5+	-	-	-	-	-	-	16	A-6b (V)		
	628.7	10																
Dense dark-gray <b>GRAVEL WITH SAND AND SILT</b> , trace to little clay, many shale fragments, damp.		11	7	43	89	SS-5	-	-	-	-	-	-	-	-	14	A-2-4 (V)		
	626.2	12	15	15														
<b>SHALE</b> , dark-gray, severely to highly weathered, very-weak becoming weak.		13																
		14	20	22	63	100	SS-6	-	-	-	-	-	-	-	-	-	Rock (V)	
		15	22	22														
		16	50-4"		100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		17																
	620.4	18	50-3"		100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE





PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>888+18, 78' RT</u>	EXPLORATION ID <b>B-074-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / P. LEITER</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE 1 OF 1
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>638.6 (MSL)</u> EOB: <u>19.3 ft.</u>	
START: <u>6/27/23</u> END: <u>6/27/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.440564 N, 82.077244 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 18 INCHES	638.6	1																
FILL: Medium-dense brown <b>COARSE AND FINE SAND</b> , little silt, trace clay, trace to little fine gravel, slight hydrocarbon odor, few asphalt fragments, damp.	637.1	2	2	5	18	67	SS-1	-	-	-	-	-	-	-	-	-	13	A-3a (V)
	634.4	3		7														
POSSIBLE FILL: Very-stiff dark-gray <b>CLAY</b> , "and" silt, trace to little fine to coarse sand, trace fine gravel, moderately organic, damp.	633.1	4	4	4	9	78	SS-2A	-	-	-	-	-	-	-	-	-	11	A-3a (V)
	633.1	5		2			SS-2B	3.0	-	-	-	-	-	-	-	-	18	A-7-6 (V)
Very-stiff to hard brown mottled with gray <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp.	628.1	6	2	3	11	94	SS-3	2.0-2.5	3	4	8	49	36	44	25	19	23	A-7-6 (12)
	628.1	7		4														
	628.1	8																
	628.1	9	1	3	14	100	SS-4	3.5-4.5	-	-	-	-	-	-	-	-	21	A-7-6 (V)
	628.1	10		6														
Hard gray <b>SILT AND CLAY</b> , "and" fine to coarse sand, some fine to coarse gravel, partly similar to very-weak shale, damp.	625.1	11	5	11	36	89	SS-5	4.5+	21	23	13	35	8	33	20	13	8	A-6a (2)
	625.1	12		13														
	625.1	13																
<b>SHALE</b> , gray and dark-gray, severely weathered, very-weak to weak.	619.3	14	6	14	72	94	SS-6	-	-	-	-	-	-	-	-	-	7	Rock (V)
	619.3	15		34														
	619.3	16	19	32	86	94	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)
	619.3	17		25														
	619.3	18																
	619.3	19	50-4"	-	50		SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)

NOTES:  
 - No seepage noted.  
 - Encountered auger refusal at 19.3'.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:11 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINTWP\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>890+16, 78' RT</u>	EXPLORATION ID: <b>B-075-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / P. LEITER</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>638.2 (MSL)</u> EOB: <u>23.7 ft.</u>	
START: <u>6/27/23</u> END: <u>6/27/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.441034 N, 82.076885 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 18 INCHES	638.2	1																
FILL: Medium-dense brown <b>COARSE AND FINE SAND</b> , little to some silt, trace to little clay, trace fine gravel, damp.	635.2	2	4	6	24	56	SS-1	-	-	-	-	-	-	-	-	-	9	A-3a (V)
POSSIBLE FILL: Very-stiff dark-gray and gray <b>CLAY</b> , "and" silt, trace fine to coarse sand, trace fine gravel, damp.	632.7	3																
		4	7	3	9	78	SS-2	2.0-4.0	-	-	-	-	-	-	-	-	27	A-7-6 (V)
Stiff to very-stiff brown mottled with gray <b>SILTY CLAY</b> , trace fine to coarse sand, trace fine gravel, damp to moist.	627.7	5																
		6	2	3	9	78	SS-3	2.0-4.0	-	-	-	-	-	-	-	-	24	A-6b (V)
		7																
		8																
		9	1	2	8	78	SS-4	1.0-2.6	1	2	7	55	35	40	19	21	25	A-6b (12)
		10																
Hard brown and dark-brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, similar to very-weak shale, damp.	625.2	11	6	10	39	100	SS-5	4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)
		12																
<b>SHALE</b> , gray and dark-gray, severely to highly weathered, very-weak, partly similar to hard soil.	620.2	13																
		14	16	50-5"	-	100	SS-6	-	-	-	-	-	-	-	-	-	5	Rock (V)
		15																
		16	30	50-5"	-	100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)
		17																
<b>SHALE</b> , brown and dark-brown, severely becoming highly weathered, very-weak to weak, partly similar to hard soil above 20'.	614.5	18																
		19	13	50-5"	-	100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)
		20																
		21	50-4"		-	100	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)
		22																
		23																
		EOB	50-2"		-	100	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:12 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINTWP\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>892+04, 77' RT</u>	EXPLORATION ID: <u>B-075-2-23</u>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <u>1 OF 1</u>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>637.8 (MSL)</u> EOB: <u>23.8 ft.</u>	
START: <u>6/22/23</u> END: <u>6/22/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.441486 N, 82.076546 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 16 INCHES	637.8																	
FILL: Very-stiff to hard brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine to coarse gravel, damp.	636.5	1	5															
	634.8	2	3	9	44	SS-1	3.5-4.5+	-	-	-	-	-	-	-	16	A-6a (V)		
FILL: Medium-dense gray <b>COARSE AND FINE SAND</b> , some fine to coarse gravel (asphalt fragments), trace clay, slight hydrocarbon odor, damp.	632.3	3	5	10	24	SS-2	-	-	-	-	-	-	-	-	9	A-3a (V)		
		4	10	6														
Very-stiff brown mottled with gray <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp.	632.3	5																
		6	2															
		7	4	14	72	SS-3	3.0-3.5	2	4	9	45	40	50	25	25	22	A-7-6 (16)	
		8																
		9	2															
	627.3	10	3	14	61	SS-4	2.0-3.0	-	-	-	-	-	-	-	16	A-7-6 (V)		
Hard gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine gravel, partly similar to very-weak shale, damp.	627.3	11	3															
		12	8	30	100	SS-5	4.5+	-	-	-	-	-	-	-	10	A-6a (V)		
		13																
		14	8	16	47	SS-6	4.5+	-	-	-	-	-	-	-	-	-	A-6a (V)	
	622.3	15	15															
<b>SHALE</b> , gray, severely becoming highly weathered, very-weak to weak.	622.3	16	11															
		17	20	78	100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		18																
		19	15															
		20	20	90	100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		21	40															
		22	50-2"		100	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		23																
	614.0	EOB	50-4"		100	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:12 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>894+13, 78' RT</u>	EXPLORATION ID: <b>B-076-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA / NQ</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>637.9 (MSL)</u> EOB: <u>23.5 ft.</u>	
START: <u>6/22/23</u> END: <u>6/22/23</u>	SAMPLING METHOD: <u>SPT / NQ</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.441982 N, 82.076166 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 16 INCHES	637.9																	
POSSIBLE FILL: Stiff to very-stiff brown <b>SILT AND CLAY</b> , some fine to coarse sand, trace to little fine to coarse gravel, damp.	634.9	1	2	5	15	61	SS-1	1.5-4.0	-	-	-	-	-	-	-	-	10	A-6a (V)
Very-stiff gray mottled with brown and dark-gray <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp.		2	5															
		3																
		4	1	2	9	56	SS-2	2.0-2.5	-	-	-	-	-	-	-	-	24	A-7-6 (V)
		5		4														
		6	1	2	9	67	SS-3	2.0-4.0	1	6	13	45	35	44	21	23	24	A-7-6 (14)
		7		4														
Very-stiff to hard brownish-gray <b>SANDY SILT</b> , some clay, trace to little fine to coarse gravel (shale fragments), damp.	629.9	8																
		9	4	4	12	100	SS-4	2.0-3.0	-	-	-	-	-	-	-	-	16	A-4a (V)
		10																
		11	6	11	33	44	SS-5	4.5+	-	-	-	-	-	-	-	-	11	A-4a (V)
		12		11														
Very-dense gray <b>GRAVEL WITH SAND AND SILT</b> (shale fragments), trace clay, dry to damp.	624.9	13																
		14	9	18	62	100	SS-6	-	-	-	-	-	-	-	-	-	-	A-2-4 (V)
		15		23														
<b>SHALE</b> , gray, severely becoming moderately weathered, weak becoming slightly to moderately strong, laminated, slightly calcareous, fissile, few very thin seams of limestone.	622.4	16																
		17																
		18																
		19																
		20																
		21																
- From 21.2' to 21.6': Unconfined Compressive Strength Test = 6,789 psi.		22		70		90	NQ-8	-										CORE
	614.4	23																
		TR																
		EOB																

NOTED:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:12 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>896+07, 74' RT</u>	EXPLORATION ID: <b>B-076-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>638.2 (MSL)</u> EOB: <u>18.9 ft.</u>	
START: <u>5/23/23</u> END: <u>5/23/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.442448 N, 82.075828 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT - 7 1/2 INCHES	638.2																	
FILL: Medium-dense dark-gray <b>GRAVEL WITH SAND AND SILT</b> , trace to little clay, damp.	637.6	1	8	12	67	SS-1A	-	-	-	-	-	-	-	-	10	A-2-4 (V)		
FILL: Stiff dark-gray <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine to coarse gravel, damp.	635.2	2	3			SS-1B	1.5-2.0	-	-	-	-	-	-	-	12	A-6a (V)		
POSSIBLE FILL: Medium-stiff to stiff gray and dark-gray <b>CLAY</b> , "and" silt, trace to little fine to coarse sand, damp.	632.7	3																
		4	5	11	56	SS-2	0.5-2.0	0	2	8	38	52	48	22	26	21	A-7-6 (16)	
Stiff to very-stiff gray mottled with brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp to moist.	627.7	5																
		6	3															
		7	4	15	100	SS-3	2.5-3.5	-	-	-	-	-	-	-	-	23	A-6b (V)	
		8																
		9	2															
		10	3	11	67	SS-4	1.5-3.0	4	6	11	39	40	39	19	20	23	A-6b (12)	
Hard gray <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, becoming similar to severely weathered shale, damp.	625.2	11	8															
		12	12	44	100	SS-5	4.5+	-	-	-	-	-	-	-	-	12	A-6a (V)	
<b>SHALE</b> , brownish-gray, severely to highly weathered, very-weak to weak.	619.3	13																
		14	40															
		15	38	101	100	SS-6	-	-	-	-	-	-	-	-	6	Rock (V)		
		16	35															
		17	50-3"		100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		18	50-5"		100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: LOR-90-10.76 NOISE WALLS TYPE: NOISE WALL PID: 107714 BR ID: WALL F START: 5/23/23 END: 5/23/23	DRILLING FIRM / OPERATOR: OTB / C. SVITAK SAMPLING FIRM / LOGGERS: S&ME / N. SOKOLOWSKI DRILLING METHOD: 2.25" HSA SAMPLING METHOD: SPT	DRILL RIG: OTB SIMCO 2800 HAMMER: CME AUTOMATIC CALIBRATION DATE: 12/22/22 ENERGY RATIO (%): 83.2	STATION / OFFSET: 898+00, 78' RT ALIGNMENT: IR 90 CENTERLINE ELEVATION: 638.0 (MSL) EOB: 18.8 ft. COORD: 41.442902 N, 82.075466 W	EXPLORATION ID <b>B-077-1-23</b> PAGE 1 OF 1
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MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 12 INCHES	638.0																	
FILL: Medium-dense brown <b>SANDY SILT</b> , little to some clay, trace fine gravel, damp.	637.0	1	4	5	17	83	SS-1	-	-	-	-	-	-	-	-	-	12	A-4a (V)
	635.0	2																
Hard becoming stiff gray <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine gravel, damp.		3	4	5	17	67	SS-2	4.5+	6	12	16	30	36	27	15	12	12	A-6a (7)
	631.5	4																
Hard gray <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp.	630.0	6	3	4	15	100	SS-3A	1.0-2.0/4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)
	630.0	7					SS-3B		-	-	-	-	-	-	-	-	22	A-7-6 (V)
Hard gray mottled with brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, few shale fragments, partly similar to severely weathered shale, damp.		8																
	624.5	9	10	9	25	17	SS-4	4.5+	-	-	-	-	-	-	-	-	11	A-6a (V)
		10																
		11	8	16	22	53	100	SS-5	4.5+	-	-	-	-	-	-	-	11	A-6a (V)
	624.5	12																
<b>SHALE</b> , gray, severely becoming highly weathered, very-weak to weak.		13																
		14	11	22	26	67	556	SS-6	-	-	-	-	-	-	-	-	8	Rock (V)
		15																
		16	20	50-3"	-	100		SS-7	-	-	-	-	-	-	-	-	-	Rock (V)
		17																
	619.2	18	50-4"	-	100			SS-8	-	-	-	-	-	-	-	-	-	Rock (V)

**NOTES:**  
 - Seepage observed at 16.0'.  
 - Water measured at 13.3' inside HSA before removing augers.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:12 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>900+11, 78' RT</u>	EXPLORATION ID: <b>B-077-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>638.8 (MSL)</u> EOB: <u>18.8 ft.</u>	
START: <u>5/23/23</u> END: <u>5/23/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.443407 N, 82.075082 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
FILL: Medium-dense brown <b>GRAVEL WITH SAND</b> , little silt, trace clay, moist.	638.8	1	12															
	636.8	2	12	21	100	SS-1A	-	-	-	-	-	-	-	-	22	A-1-b (V)		
FILL: Medium-stiff brown <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine gravel, damp to moist.	635.3	3	3			SS-1B	0.5-1.0	-	-	-	-	-	-	-	15	A-6a (V)		
Stiff to very-stiff gray <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp to moist.		4	3	11	67	SS-2	1.5-2.5	1	3	13	39	44	45	23	22	A-7-6 (14)		
		5	4															
		6	3															
		7	5	15	67	SS-3	2.5-4.0	-	-	-	-	-	-	-	21	A-7-6 (V)		
	630.8	8	6															
Very-stiff gray <b>SILT AND CLAY</b> , "and" fine to coarse sand, little fine gravel, few shale fragments, moist.		9	2	11	67	SS-4	2.0-3.0	-	-	-	-	-	-	-	27	A-6a (V)		
		10	3															
		11	2															
		12	4	19	100	SS-5	2.0-3.0	15	13	36	15	21	31	19	12	26	A-6a (1)	
		13	10															
<b>SHALE</b> , gray, severely becoming highly weathered, very-weak to weak.	625.3	14	8	79	100	SS-6	-	-	-	-	-	-	-	-	9	Rock (V)		
		15	19	38														
		16	22															
		17	38		100	SS-7	-	-	-	-	-	-	-	-	-	Rock (V)		
		18	50-4"															
	620.0	EOB	50-4"		100	SS-8	-	-	-	-	-	-	-	-	-	Rock (V)		

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>902+05, 78' RT</u>	EXPLORATION ID: <b>B-078-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>638.5 (MSL)</u> EOB: <u>19.0 ft.</u>	
START: <u>5/23/23</u> END: <u>5/23/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.443869 N, 82.074731 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
FILL: Medium-dense brown <b>GRAVEL WITH SAND</b> , little silt, trace clay, damp.	638.5	1	8															
Hard gray <b>SILT</b> , some fine to coarse sand, little clay, trace fine gravel, damp.	636.5	2	17	28	67	SS-1	-	-	-	-	-	-	-	-	10	A-1-b (V)		
		3																
	630.5	4	4	8	22	67	SS-2	4.5+	-	-	-	-	-	-	-	12	A-4b (V)	
		5	8															
Very-stiff to hard gray mottled with brown <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp to moist.	628.0	6	6	9	31	100	SS-3	4.5+	4	12	11	57	16	23	15	8	12	A-4b (8)
		7	13															
Very-stiff gray <b>SANDY SILT</b> , some fine gravel, little clay, few shale fragments, damp.	625.5	8	3	4	14	67	SS-4	3.5-4.5	-	-	-	-	-	-	-	21	A-7-6 (V)	
		9	6															
SHALE, gray, highly to severely weathered, very-weak to weak.	619.5	10	4	5	19	100	SS-5	2.0-2.5	21	20	19	29	11	22	17	5	11	A-4a (1)
		11	9															
TR	619.5	12	4	5	19	100	SS-5	2.0-2.5	21	20	19	29	11	22	17	5	11	A-4a (1)
		13																
EOB	619.5	14	8	17	50-5'	-	82	SS-6	-	-	-	-	-	-	-	7	Rock (V)	
		15																
	619.5	16	50-4"			100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)
		17																
	619.5	18																
		19	50	-	100	SS-8	-	-	-	-	-	-	-	-	-	-	-	Rock (V)

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE





PROJECT: LOR-90-10.76 NOISE WALLS TYPE: NOISE WALL PID: 107714 BR ID: WALL F START: 5/23/23 END: 5/23/23	DRILLING FIRM / OPERATOR: OTB / C. SVITAK SAMPLING FIRM / LOGGERS: S&ME / N. SOKOLOWSKI DRILLING METHOD: 2.25" HSA SAMPLING METHOD: SPT	DRILL RIG: OTB SIMCO 2800 HAMMER: CME AUTOMATIC CALIBRATION DATE: 12/22/22 ENERGY RATIO (%): 83.2	STATION / OFFSET: 904+13, 78' RT ALIGNMENT: IR 90 CENTERLINE ELEVATION: 638.1 (MSL) EOB: 18.7 ft. COORD: 41.444364 N, 82.074355 W	EXPLORATION ID <b>B-078-2-23</b> PAGE 1 OF 1
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MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
FILL: Medium-dense brown <b>GRAVEL WITH SAND</b> , little silt, trace clay, damp.	638.1	1																
FILL: Very-stiff to hard gray <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	636.4	2	22	14	83	SS-1A	-	-	-	-	-	-	-	-	9	A-1-b (V)		
			6	4		SS-1B	2.5-3.5	-	-	-	-	-	-	-	15	A-6a (V)		
PROBABLE FILL: Medium-dense gray <b>GRAVEL WITH SAND AND SILT</b> , little clay, damp.	632.6	4	4															
		5	5	17	67	SS-2	4.5+	-	-	-	-	-	-	-	11	A-6a (V)		
Hard gray mottled with brown <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp.	630.1	6	7															
		7	11	25	100	SS-3	-	6	20	41	18	15	20	13	7	9	A-2-4 (0)	
Hard gray mottled with brown <b>SANDY SILT</b> , little to some clay, trace to little fine gravel, few shale fragments, damp.	627.6	9	3	6	19	67	SS-4	4.0-4.5	-	-	-	-	-	-	20	A-7-6 (V)		
		10	6	10	35	100	SS-5	4.5	-	-	-	-	-	-	11	A-4a (V)		
<b>SHALE</b> , gray, highly to severely weathered, very-weak to weak.	625.1	13																
		14	23		100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	619.4	15																
		16	50		100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		18	50-2"		100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>906+11, 77' RT</u>	EXPLORATION ID: <b>B-079-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>637.4 (MSL)</u> EOB: <u>23.6 ft.</u>	
START: <u>5/24/23</u> END: <u>5/24/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.444835 N, 82.074000 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 14 INCHES	637.4																	
FILL: Medium-stiff gray <b>SANDY SILT</b> , some fine gravel, little clay, few shale fragments, damp to moist.	636.2	1	4															
	634.4	2	3	9	67	SS-1	0.5	-	-	-	-	-	-	-	-	12	A-4a (V)	
Stiff to hard gray mottled with brown <b>SILTY CLAY</b> , little fine to coarse sand, damp to moist.		3																
		4	2	17	67	SS-2	4.5+	-	-	-	-	-	-	-	-	14	A-6b (V)	
		5	6	5														
		6	4															
		7	3	12	50	SS-3	2.0-4.0	-	-	-	-	-	-	-	-	23	A-6b (V)	
		8																
		9	2	9	100	SS-4	1.5-3.0	23	3	10	32	32	35	18	17	21	A-6b (9)	
	626.9	10	3															
Very-stiff to hard gray <b>SANDY SILT</b> , little clay, trace fine gravel, partly similar to very-weak and severely weathered shale (SS-5B), dry to damp.		11	3	41	100	SS-5A	3.0-4.5+	-	-	-	-	-	-	-	-	13	A-4a (V)	
		12	7	20		SS-5B	-	-	-	-	-	-	-	-	-	3	A-4a (V)	
		13																
		14	5	44	100	SS-6	4.0	2	23	15	49	11	24	17	7	8	A-4a (5)	
		15	7	22														
		16	13															
		17	21	107	100	SS-7	3.0-4.5	-	-	-	-	-	-	-	-	12	A-4a (V)	
	619.4	18																
<b>SHALE</b> , gray, highly to severely weathered, very-weak to weak.		19	50	-	100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		20																
		21	50-2"	-	100	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		22																
	613.8	23																
		EOB	50-1"	-	100	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:12 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>908+08, 78' RT</u>	EXPLORATION ID: <b>B-079-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>636.6 (MSL)</u> EOB: <u>23.8 ft.</u>	
START: <u>5/24/23</u> END: <u>6/27/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.445304 N, 82.073639 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 12 INCHES	636.6																	
POSSIBLE FILL: Hard brown and gray <b>SANDY SILT</b> , little to some clay, trace fine gravel, damp.	635.6	1	3	17	78	SS-1	4.5+	-	-	-	-	-	-	-	-	9	A-4a (V)	
		2	5															
		3	6															
Stiff to very-stiff gray and dark-gray <b>CLAY</b> , "and" silt, little fine to coarse sand, damp to moist.	631.1	4	2	12	78	SS-2	4.5+	-	-	-	-	-	-	-	-	10	A-4a (V)	
		5	4															
		6	4															
Hard gray <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine gravel, dry to damp.	626.1	7	2	12	100	SS-3	3.0-3.5	-	-	-	-	-	-	-	-	24	A-7-6 (V)	
		8	3															
		9	3	12	100	SS-4	1.5-2.5	0	3	10	43	44	52	26	26	20	A-7-6 (17)	
		10	5															
Hard gray <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine gravel, dry to damp.	621.1	11	7	53	83	SS-5	4.5+	8	6	16	41	29	26	14	12	12	A-6a (8)	
		12	15															
		13	20															
		14	17	56	100	SS-6	4.5+	-	-	-	-	-	-	-	-	7	A-6a (V)	
<b>SHALE</b> , gray, severely becoming highly weathered, very-weak to weak.	621.1	15	20															
		16	TR															
		17	15	83	100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		18	25															
		19	30															
		20	50-3"	-	100	SS-8	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		21	50-1"	-	100	SS-9	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
612.8	22																	
	23	EOB	50-3"	-	100	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	

**NOTES:**

- No seepage noted.
- Encountered auger refusal at 20' in the original boring on 5/24/23 drilled using the OTB Mobile B-57 rig. Using the S&ME D50 rig, the borehole was extended to obtain SS-9 and SS-10 on 6/27/23.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:12 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>910+13, 81' RT</u>	EXPLORATION ID: <b>B-080-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>635.4 (MSL)</u> EOB: <u>23.8 ft.</u>	
START: <u>5/24/23</u> END: <u>7/13/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.445788 N, 82.073258 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 12 INCHES	634.4																	
FILL: Hard brown and gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace to little fine gravel, damp.	634.4	1	3	14	67	SS-1	4.5+	-	-	-	-	-	-	-	-	-	12	A-6a (V)
		2	4	5														
		3																
		4	2	5	12	100	SS-2	4.5+	-	-	-	-	-	-	-	-	15	A-6a (V)
		5		3														
Very-stiff gray mottled with brown <b>CLAY</b> , "and" silt, trace fine to coarse sand, damp to moist.	629.9	6	1	2	11	100	SS-3	2.5-3.5	0	1	7	39	53	56	26	30	30	A-7-6 (19)
		7		5														
		8																
		9	2	3	9	100	SS-4	2.5-3.5	-	-	-	-	-	-	-	-	22	A-7-6 (V)
		10		3														
Dense to very-dense gray <b>SANDY SILT</b> , "and" fine to coarse gravel, trace clay, many shale fragments, damp.	624.9	11	11	15	53	100	SS-5	-	-	-	-	-	-	-	-	-	11	A-4a (V)
		12		20														
		13																
		14	11	14	50	100	SS-6	-	36	16	12	28	8	18	15	3	11	A-4a (0)
		15		19														
		16																
		17	11	13	42	100	SS-7	-	-	-	-	-	-	-	-	-	11	A-4a (V)
		18		15														
<b>SHALE</b> , gray, highly to severely weathered, weak.	617.4	18																
		19	50-3"		-	100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)
		20																
		21																
		22	15	50-1"		29	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)
		23																
	611.6	23	50-3"		-	67	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)

**NOTES:**

- No seepage noted.
- Encountered auger refusal at 20' in the original boring on 5/24/23 drilled using the OTB Mobile B-57 rig. Using the S&ME D50 rig, the borehole was extended to obtain SS-9 and SS-10 on 7/13/23.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:12 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>912+14, 77' RT</u>	EXPLORATION ID: <b>B-080-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>635.5 (MSL)</u> EOB: <u>23.9 ft.</u>	
START: <u>5/24/23</u> END: <u>7/13/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.446272 N, 82.072906 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 12 INCHES	635.5																	
FILL: Hard brown <b>SANDY SILT</b> , little to some clay, trace fine gravel, damp.	634.5	1	2															
		2	3	11	67	SS-1	4.5+	-	-	-	-	-	-	-	11	A-4a (V)		
	632.5	3	4															
Hard gray and brown <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine gravel, moist.		4	2															
		5	3	9	67	SS-2	4.5+	4	9	13	42	32	28	16	12	20	A-6a (9)	
		6	2															
		7	5	15	100	SS-3	4.5+	-	-	-	-	-	-	-	19	A-6a (V)		
	627.5	8	5															
Very-stiff to hard brown <b>SANDY SILT</b> , some fine to coarse gravel, trace clay, damp.		9	8															
		10	5	15	22	SS-4	2.5-4.5+	22	19	9	40	10	24	17	7	15	A-4a (3)	
	625.0	11	8															
Hard brown and gray <b>SANDY SILT</b> , some fine to coarse gravel, trace clay, partly similar to severely weathered shale, dry.		12	13	45	100	SS-5	4.5+	-	-	-	-	-	-	-	5	A-4a (V)		
		13	17															
		14	9															
		15	19	66	100	SS-6	4.5+	-	-	-	-	-	-	-	8	A-4a (V)		
		16	25															
		17	14															
		18	22	84	100	SS-7	4.5+	-	-	-	-	-	-	-	8	A-4a (V)		
	617.5	19	34															
<b>SHALE</b> , gray, highly to severely weathered, weak.		18	TR															
		19	50-3"	-	100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		20																
		21	35															
		22	50-1"	-	14	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		23																
	611.6	23	50-5"	-	80	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:

- No seepage noted.
- Groundwater measured at 14.1' inside HSA before removing augers in original boring on 5/24/23.
- Encountered auger refusal at 20' in the original boring on 5/24/23 drilled using the OTB Mobile B-57 rig. Using the S&ME D50 rig, the borehole was extended to obtain SS-9 and SS-10 on 7/13/23.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:12 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>914+13, 78' RT</u>	EXPLORATION ID: <b>B-081-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>635.2 (MSL)</u> EOB: <u>23.6 ft.</u>	
START: <u>5/25/23</u> END: <u>5/25/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.446744 N, 82.072543 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 12 INCHES	635.2																	
POSSIBLE FILL: Very-stiff to hard brown and gray <b>SILT AND CLAY</b> , "and" fine to coarse sand, trace fine gravel, damp.	634.2	1	2															
		2	4	11	67	SS-1	2.0-4.5	5	8	28	25	34	29	18	11	11	A-6a (5)	
		3																
		4	3	10	67	SS-2	4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)	
Very-stiff to hard gray mottled with brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace to little fine to coarse gravel, damp to moist.	629.7	5	4															
		6	3	21	67	SS-3	3.0-4.5+	-	-	-	-	-	-	-	21	A-6a (V)		
		7	6	9														
		8																
Hard gray <b>SANDY SILT</b> , little clay, little fine gravel, many shale fragments, partly similar to severely weathered shale, dry to damp.	624.7	9	2	14	50	SS-4	2.0-2.5	13	5	9	50	23	30	19	11	21	A-6a (8)	
		10	4	6														
		11	11	26	78	100	SS-5	4.5+	-	-	-	-	-	-	-	9	A-4a (V)	
		12	26	30														
SHALE, gray, severely weathered, very-weak, few zones of silty clay.	617.2	13																
		14	17	50-5"	-	82	SS-6	4.5+	-	-	-	-	-	-	-	7	A-4a (V)	
		15																
		16	28	38	122	100	SS-7	4.5+	-	-	-	-	-	-	-	8	A-4a (V)	
SHALE, gray, highly weathered, weak.	612.7	17	38	50														
		18	TR															
		19	25	50-4"	-	100	SS-8	-	-	-	-	-	-	-	-	-	Rock (V)	
SHALE, gray, highly weathered, weak.	611.6	20																
		21	28	50-5"	-	100	SS-9	-	-	-	-	-	-	-	-	-	Rock (V)	
		22																
		23																
		EOB	50-1"	-	100	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:12 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINTWP\PROJECTS\217525A.GPJ



PROJECT: LOR-90-10.76 NOISE WALLS	DRILLING FIRM / OPERATOR: OTB / C. SVITAK	DRILL RIG: OTB SIMCO 2800	STATION / OFFSET: 916+14, 73' RT
TYPE: NOISE WALL	SAMPLING FIRM / LOGGERS: S&ME / N. SOKOLOWSKI	HAMMER: CME AUTOMATIC	ALIGNMENT: IR 90 CENTERLINE
PID: 107714 BR ID: WALL F	DRILLING METHOD: 2.25" HSA	CALIBRATION DATE: 12/22/22	ELEVATION: 635.1 (MSL) EOB: 23.7 ft.
START: 5/25/23 END: 7/13/23	SAMPLING METHOD: SPT	ENERGY RATIO (%): 83.2	COORD: 41.447231 N, 82.072197 W

EXPLORATION ID <b>B-081-2-23</b>
PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT - 8 INCHES	634.4																	
GRANULAR BASE - 9 INCHES	633.7																	
POSSIBLE FILL: Very-stiff to hard brown and gray <b>SANDY SILT</b> , some clay, trace fine gravel, damp.	629.6	1	7	8	78	SS-1A	-	-	-	-	-	-	-	-	6	A-1-b (V)		
		2	2	4		SS-1B	2.0-4.5+	-	-	-	-	-	-	-	13	A-4a (V)		
		3																
Medium-dense gray and brown <b>SANDY SILT</b> , little clay, little fine gravel, damp to moist.	624.6	4	3	10	50	SS-2	2.0-3.0	9	7	12	40	32	29	19	10	14	A-4a (7)	
		5	3	4														
		6	3	5	15	83	SS-3	-	-	-	-	-	-	-	-	18	A-4a (V)	
		7	5	6														
Hard gray <b>SANDY SILT</b> , little to some clay, little fine gravel, many shale fragments, partly similar to severely weathered shale, damp.	617.1	8																
		9	2	4	17	67	SS-4	-	12	12	16	44	16	24	22	2	17	A-4a (5)
		10		8														
		11	13	26	78	100	SS-5	4.5+	-	-	-	-	-	-	-	-	10	A-4a (V)
		12	26	30														
SHALE, gray, highly weathered, weak.	611.4	13																
		14	21	28	82	100	SS-6	4.5+	-	-	-	-	-	-	-	10	A-4a (V)	
		15		31														
		16	27															
		17	34	50-3"	-	100	SS-7	4.5+	-	-	-	-	-	-	-	8	A-4a (V)	
		18																
		TR																
			50-3"	-	100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	
			50-2"	-	50	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	
			50-2"	-	50	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		EOB																

**NOTES:**

- No seepage noted.
- Encountered auger refusal at 19.8' in the original boring on 5/25/23 drilled using the OTB SIMCO 2800 rig. Using the S&ME D50 rig, the borehole was extended to obtain SS-9 and SS-10 on 7/13/23.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE



S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:12 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINTWP\PROJECTS\217525A.GPJ

PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>918+18, 78' RT</u>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>634.5 (MSL)</u> EOB: <u>16.3 ft.</u>
START: <u>5/25/23</u> END: <u>5/25/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.447709 N, 82.071810 W</u>

EXPLORATION ID  
**B-082-1-23**

PAGE  
1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 9 INCHES	633.7																	
FILL: Very-stiff brown <b>SILTY CLAY</b> , some fine to coarse sand, trace fine gravel, slightly organic, moist.	633.0	1	2	3	8	67	SS-1A	3.0-4.0	-	-	-	-	-	-	-	-	22	A-6b (V)
Very-stiff gray mottled with brown <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine gravel, damp.	631.5	2	3				SS-1B	3.0-3.5	-	-	-	-	-	-	-	-	14	A-6a (V)
Very-stiff to hard dark gray and gray mottled with brown <b>CLAY</b> , "and" silt, trace fine to coarse sand, damp to moist.		3																
		4	2	2	10	100	SS-2	3.5-4.5	0	2	8	45	45	54	29	25	25	A-7-6 (17)
		5		5														
		6		3														
		7		5	15	78	SS-3	4.5+	-	-	-	-	-	-	-	-	26	A-7-6 (V)
	626.5	8		6														
Hard gray <b>SILT AND CLAY</b> , trace fine to coarse sand, trace fine gravel, damp to moist.		9	2	4	17	83	SS-4	4.5+	6	5	5	51	33	31	20	11	20	A-6a (8)
		10		8														
<b>SHALE</b> , gray, severely becoming highly weathered, very-weak to weak.	623.5	11		21	-	100	SS-5	-	-	-	-	-	-	-	-	-	7	Rock (V)
		12		50														
		13																
		14		29	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)
		15		50-4"														
	618.2	16		50-4"	-	100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)

**NOTES:**  
 - Water noted at 16.0' during drilling.  
 - Water measured at 13.1' inside HSA at completion.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE





PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>920+06, 80' RT</u>	EXPLORATION ID
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	<b>B-082-2-23</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>633.6 (MSL)</u> EOB: <u>18.0 ft.</u>	PAGE
START: <u>5/25/23</u> END: <u>5/25/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.448155 N, 82.071464 W</u>	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 14 INCHES	633.6																	
FILL: Very-stiff brown <b>SILTY CLAY</b> , little to some fine to coarse sand, trace fine gravel, damp to moist.	632.4	1	4	7	50	SS-1	2.0-4.0	-	-	-	-	-	-	-	-	19	A-6b (V)	
		2	3															
		3	2															
Stiff to hard gray and dark-gray <b>CLAY</b> , "and" silt, trace fine to coarse sand, damp to moist.	629.6	4	2	8	67	SS-2A	3.0-4.0	-	-	-	-	-	-	-	-	18	A-6b (V)	
		5	2	4			SS-2B	1.5-2.5	-	-	-	-	-	-	-	32	A-7-6 (V)	
		6	2															
		7	4	5	12	67	SS-3	2.5-3.5	0	2	6	39	53	48	20	28	23	A-7-6 (17)
Hard gray <b>SANDY SILT</b> , little clay, little fine gravel, many shale fragments, partly similar to severely weathered shale, dry.	623.1	8																
		9	2															
		10	4	7	15	83	SS-4	1.5-4.5+	0	0	1	43	56	46	20	26	23	A-7-6 (16)
SHALE, gray, highly weathered, weak.	620.6	11	12	20	67	100	SS-5	4.5+	-	-	-	-	-	-	-	-	A-4a (V)	
		12	20	28														
SHALE, gray, highly weathered, weak.	615.6	13	50	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		14																
		16	50-3"	-	100	SS-7	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		18																

NOTES:  
 - No seepage noted.  
 - Encountered auger refusal at 18.0'.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>922+25, 78' RT</u>	EXPLORATION ID: <b>B-083-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>633.4 (MSL)</u> EOB: <u>19.2 ft.</u>	
START: <u>6/12/23</u> END: <u>6/12/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.448679 N, 82.071075 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 12 INCHES	633.4																	
FILL: Very-stiff grayish-brown <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine gravel, damp.	632.4	1	5	3	7	61	SS-1	2.0-2.5	-	-	-	-	-	-	-	-	12	A-6a (V)
	630.4	2																
		3																
Medium-stiff to very-stiff dark-brown and gray <b>CLAY</b> , "and" silt, trace fine to coarse sand, trace fine gravel, slightly organic, damp to moist.		4	4	4	12	61	SS-2	1.0-3.0	-	-	-	-	-	-	-	-	31	A-7-6 (V)
		5																
		6	4	5	14	28	SS-3	0.5-1.5	2	3	6	40	49	46	21	25	27	A-7-6 (15)
	625.4	7																
Hard brown and gray <b>SANDY SILT</b> , little to some clay, trace to little fine to coarse gravel, many shale fragments, becoming partly similar to very-weak shale below 13', damp.		8																
		9	11	16	57	67	SS-4	4.5+	-	-	-	-	-	-	-	-	7	A-4a (V)
		10																
		11	17	11	44	100	SS-5	4.5+	-	-	-	-	-	-	-	-	12	A-4a (V)
		12																
	619.0	13	16	50-5"	-	91	SS-6	4.5+	-	-	-	-	-	-	-	-	9	A-4a (V)
<b>SHALE</b> , brown, highly to severely weathered, very-weak to weak.		14																
		15																
		16	44	50	-	75	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)
		17																
	614.2	18																
		19	25	50-2"	-	100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)

NOTES:

- Seepage noted at 3.5'.
- Groundwater observed at 6.0' during drilling.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/24/23 17:12 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>923+97, 78' RT</u>	EXPLORATION ID: <b>B-083-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	
PID: <u>107714</u> BR ID: <u>WALL F</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>634.0 (MSL)</u> EOB: <u>16.3 ft.</u>	PAGE: <b>1 OF 1</b>
START: <u>6/12/23</u> END: <u>6/12/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.449088 N, 82.070761 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 12 INCHES	634.0																	
FILL: Very-stiff brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine to coarse gravel, damp.	633.0	1	3	7	33	SS-1	2.0-3.0	-	-	-	-	-	-	-	-	14	A-6a (V)	
Very-stiff to hard brownish-gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.  - From 6.0' to 7.5', stiff and moist.	631.0	3	3															
		4	4	12	78	SS-2	2.5-4.5+	2	7	10	41	40	40	20	20	17	A-6b (12)	
		7	4	12	67	SS-3	1.0-2.0	-	-	-	-	-	-	-	-	22	A-6b (V)	
		9	4	18	100	SS-4	2.0-3.0	-	-	-	-	-	-	-	-	18	A-6b (V)	
<b>SHALE</b> , brown and gray, highly to severely weathered, very-weak to weak.	624.0	10																
		11	22		100	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		12																
		14	17		100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	617.7	16	50-4"		100	SS-7	-	-	-	-	-	-	-	-	-	Rock (V)		

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



**Boring B-061-1-23**



- From 18.9' – 19.3': Unconfined Compressive Strength Test = 1,371 psi.
- Unconfined Compressive Strength Test attempted from 18.4' – 18.8', but sample delaminated during test preparation.

\* Width of core box = 2ft.

Core Run #:	Depth	Recovery		RQD	
NQ-7	15.0' - 20.0'	60/60	100%	20/60	33%
<b>LOR-90-10.75 Widening and Noise Walls, Lorain Co., Ohio</b>				<b>PID 107714</b>	



**Boring B-064-1-23**



\* Width of core box = 2ft.

Core Run #:	Depth	Recovery		RQD	
NQ-5	10.0' - 12.0'	24/24	100%	0/24	0%
NQ-6	12.0' - 15.0'	36/36	100%	0/36	0%

**LOR-90-10.75 Widening and Noise Walls, Lorain Co., Ohio**

**PID 107714**



**Boring B-066-2-23**



\* Width of core box = 2ft.

Core Run #:	Depth	Recovery		RQD	
NQ-6	12.0' - 17.0'	60/60	100%	0/60	0%
<b>LOR-90-10.75 Widening and Noise Walls, Lorain Co., Ohio</b>				<b>PID 107714</b>	



**Boring B-068-2-23**



- Section of core from 19.66' - 20.0' preserved for Unconfined Compressive Strength Test; however, sample delaminated during test

\* Width of core box = 2ft.

Core Run #:	Depth	Recovery		RQD	
NQ-7	15.0' - 20.0'	60/60	100%	4/60	7%
<b>LOR-90-10.75 Widening and Noise Walls, Lorain Co., Ohio</b>				<b>PID 107714</b>	



**Boring B-070-2-23**



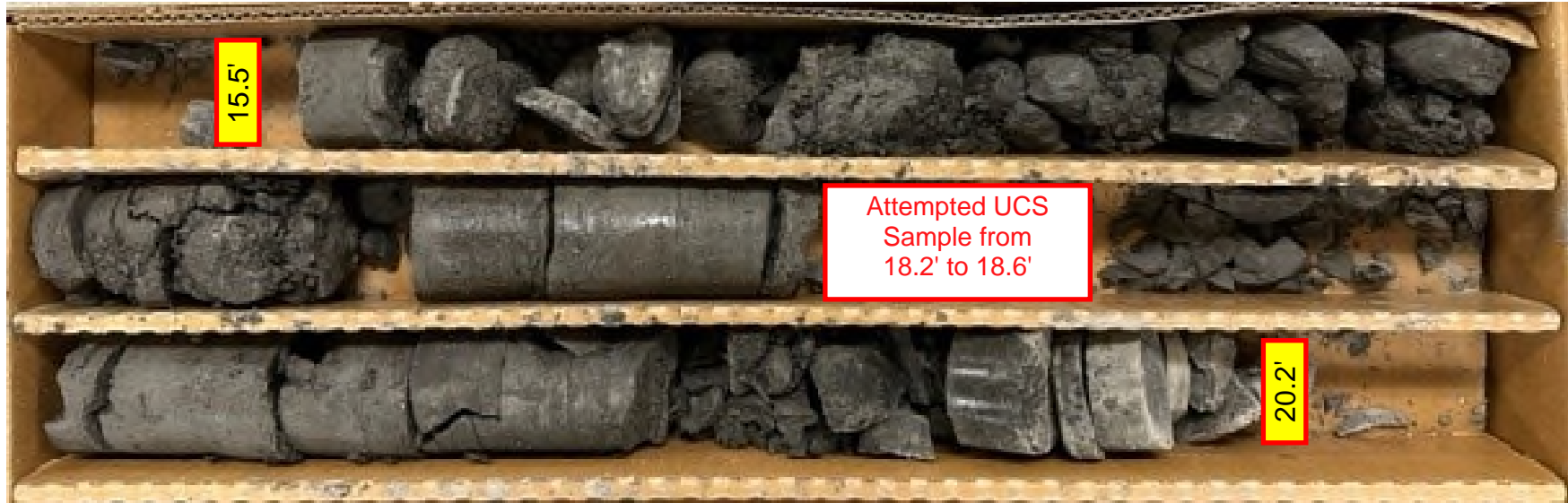
\* Width of core box = 2ft.

Core Run #:	Depth	Recovery		RQD	
NQ-6	12.0' - 17.0'	60/60	100%	0/60	0%
<b>LOR-90-10.75 Widening and Noise Walls, Lorain Co., Ohio</b>				<b>PID 107714</b>	





**Boring B-073-2-23**



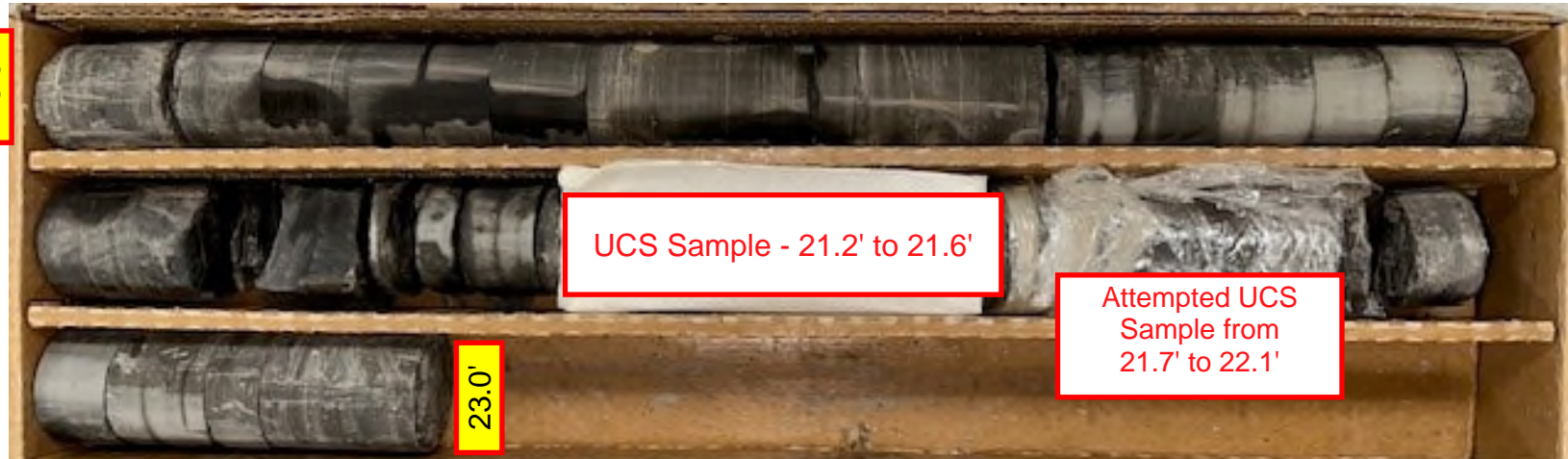
- Unconfined Compressive Strength Test attempted from 18.2' – 18.6', but sample delaminated during test preparation.

\* Width of core box = 2ft.

Core Run #:	Depth	Recovery		RQD	
NQ-7	15.5 - 20.5'	56/60	93%	14/60	24%
<b>LOR-90-10.75 Widening and Noise Walls, Lorain Co., Ohio</b>				<b>PID 107714</b>	



**Boring B-076-1-23**



- From 21.2' – 21.6': Unconfined Compressive Strength Test = 6,789 psi.
- Unconfined Compressive Strength Test attempted from 21.7' – 22.1', but sample delaminated during test preparation.

\* Width of core box = 2ft.

Core Run #:	Depth	Recovery		RQD	
NQ-8	18.5' - 23.5'	54/60"	90%	42/60	70%
<b>LOR-90-10.75 Widening and Noise Walls, Lorain Co., Ohio</b>				<b>PID 107714</b>	

# UNIAXIAL COMPRESSIVE STRENGTH OF ROCK



ASTM D 7012 Method C

Quality Assurance

S&ME, Inc. - Columbus: 6190 Enterprise Court, Dublin, Ohio 43016

Project No.:	217525A	Report Date:	07/24/23
Project Name:	LOR-90-10.76 Noise Wall	Test Date(s):	07/18/23
Client Name:	ODOT DISTRICT 3		
Client Address:	906 Clark Avenue, Ashland, OH 44805		
Boring ID:	B-061-1-23, NQ-7	Depth/Elev., ft:	18.9-19.3
Sample Description:	SHALE, gray		

Angle of load relative to lithology: Approximately perpendicular to bedding plane

### Test Results

<b>Moisture Content</b>	<b>3.5 %</b>	<b>Dry Unit Weight</b>	<b>147.9 pcf</b>
	<b>Compressive Strength</b>	<b>1,371 psi</b>	



Before Test



After Test

Strain rate: 0.03 in/min.

**Notes / Deviations / References:** Specimen end preparation was not done in accordance with ASTM D4543.

Specimen was capped using sulfur in accordance with ASTM C617, based on previous similar samples.

Test results for specimens not meeting this requirement may differ from test results obtained from specimens meeting this requirement.

Paula J. Manning  
Technical Responsibility

Paula J. Manning  
Signature

Laboratory Manager  
Position

7/24/2023  
Date

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# UNIAXIAL COMPRESSIVE STRENGTH OF ROCK



ASTM D 7012 Method C

Quality Assurance

S&ME, Inc. - Columbus: 6190 Enterprise Court, Dublin, Ohio 43016

Project No.:	217525A	Report Date:	07/24/23
Project Name:	LOR-90-10.76 Noise Wall	Test Date(s):	07/18/23
Client Name:	ODOT DISTRICT 3		
Client Address:	906 Clark Avenue, Ashland, OH 44805		
Boring ID:	B-076-1-23, NQ-8	Depth/Elev., ft:	21.2-21.6
Sample Description:	SHALE, gray		

Angle of load relative to lithology: Approximately perpendicular to bedding plane

### Test Results

Moisture Content	2.4 %	Dry Unit Weight	144.4 pcf
Compressive Strength	6,789 psi		



Before Test



After Test

Strain rate: 0.03 in/min.

Notes / Deviations / References: Specimen end preparation was not done in accordance with ASTM D4543.

Specimen was capped using sulfur in accordance with ASTM C617, based on previous similar samples.

Test results for specimens not meeting this requirement may differ from test results obtained from specimens meeting this requirement.

Paula J. Manning  
Technical Responsibility

*Paula J. Manning*  
Signature

Laboratory Manager  
Position

7/24/2023  
Date

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## Noise Barrier Wall G

Drawing path: T:\Columbus-1170\Projects\2021\217525A\_ODOT\_DS\_LOR-90-10.76 Noise Walls\_Sheffield OH\GEO\CAD\Construction\Plan of Borings.dwg



INFORMATION FOR SUBGRADE BORINGS IS INCLUDED IN S&ME'S SUBGRADE EXPLORATION REPORT DATED JUNE 28, 2023.

**LEGEND**

- B-001-0-22 BORING NUMBER AND LOCATION (SEE NOTE)
- B-002-1-23 NOISE WALL BORING NUMBER AND LOCATION

0 300 600  
GRAPHIC SCALE (IN FEET)

N



**PLAN OF BORINGS**

LOR-90-10.76 THIRD LANE WIDENING  
NOISE BARRIER WALL EXPLORATION - WALL G (1 OF 2)  
LORAIN COUNTY, OHIO

SCALE:
SEE GRAPHIC
DATE:
08-29-2023
PROJECT NUMBER
217525A
FIGURE NO.



**1A**

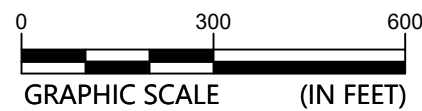
Drawing path: T:\Columbus-1170\Projects\2021\217525A\_ODOT DS\_LOR-90-1076 Noise Walls\_Sheffield OH\GEO\CAD\Construction\Plan of Borings.dwg



INFORMATION FOR SUBGRADE BORINGS IS INCLUDED IN S&ME'S SUBGRADE EXPLORATION REPORT DATED JUNE 28, 2023.

**LEGEND**

-  B-001-0-22 BORING NUMBER AND LOCATION (SEE NOTE)
-  B-002-1-23 NOISE WALL BORING NUMBER AND LOCATION



**PLAN OF BORINGS**

LOR-90-1076 THIRD LANE WIDENING  
NOISE BARRIER WALL EXPLORATION - WALL G (2 OF 2)  
LORAIN COUNTY, OHIO

SCALE:
SEE GRAPHIC
DATE:
08-29-2023
PROJECT NUMBER
217525A
FIGURE NO.

**1B**



S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY02 - GINTW\PROJECTS\217525A.GPJ

PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>934+45, 73' RT</u>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>651.5 (MSL)</u> EOB: <u>25.0 ft.</u>
START: <u>6/12/23</u> END: <u>6/12/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.451576 N, 82.068867 W</u>

EXPLORATION ID  
**B-086-1-23**

PAGE  
1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT - 10 INCHES	650.7																	
GRANULAR BASE - 9 INCHES	649.9	1																
FILL: Medium-dense brown <b>SANDY SILT</b> , little clay, trace fine gravel, dry.	648.5	2	4	12	67	SS-1	-	-	-	-	-	-	-	-	2	A-4a (V)		
FILL: Very-stiff to hard gray and brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, moist.		3	5															
		4	3	10	67	SS-2	2.0-4.0	7	6	10	34	43	37	17	20	A-6b (12)		
		5	4															
		6	2	3	8	44	SS-3	2.0-2.5	-	-	-	-	-	-	-	14	A-6b (V)	
		7	3	3														
		8																
		9	3	3	14	56	SS-4	3.0-3.5	-	-	-	-	-	-	-	22	A-6b (V)	
		10	7															
		11	4	7	19	67	SS-5	4.5+	-	-	-	-	-	-	-	17	A-6b (V)	
		12	7															
	13	3	4	14	50	SS-6	2.0-3.5	-	-	-	-	-	-	-	21	A-6b (V)		
	14	6																
FILL: Very-stiff gray and brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	636.0	15																
	633.5	16	3	5	15	67	SS-7	3.0-4.0	5	6	11	39	39	30	16	14	A-6a (10)	
		17	6															
FILL: Very-stiff gray and brown <b>SILTY CLAY</b> , little fine to coarse sand, little fine gravel, damp to moist.		18																
		19	4	6	18	67	SS-8	2.0-3.5	-	-	-	-	-	-	22	A-6b (V)		
		20	7															
		21																
		22	3	5	18	100	SS-9	2.0-3.5	-	-	-	-	-	-	23	A-6b (V)		
		23	8															
		24	6	8	25	78	SS-10	2.0-2.5	13	7	13	32	35	38	19	19	A-6b (10)	
	626.5	24	10															

EOB

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 2





PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>936+44, 72' RT</u>	EXPLORATION ID <b>B-087-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE 1 OF 1
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>654.9 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>6/12/23</u> END: <u>6/12/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.452028 N, 82.068475 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL			
								GR	CS	FS	SI	CL	LL	PL	PI						
ASPHALT - 11 INCHES	654.9																				
GRANULAR BASE - 8 INCHES	653.3																				
FILL: Hard gray <b>SANDY SILT</b> , little fine gravel, little clay, damp.	651.9	1	4	7	19	67	SS-1	4.5+	-	-	-	-	-	-	-	-	12	A-4a (V)			
FILL: Very-stiff gray and brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp to moist.  - @ 13.5', few stiff zones	639.4	2	3	5	11	56	SS-2	2.5-3.5	-	-	-	-	-	-	-	-	-	18	A-6b (V)		
		3	2	3	5	11	56	SS-3	2.0-3.0	3	5	10	37	45	38	18	20	18	A-6b (12)		
		4	2	4	4	11	67	SS-4	2.0-4.0	-	-	-	-	-	-	-	-	-	16	A-6b (V)	
		5	3	3	5	11	56	SS-5	3.0-3.5	-	-	-	-	-	-	-	-	-	21	A-6b (V)	
		6	2	4	7	15	78	SS-6	1.0-3.0	-	-	-	-	-	-	-	-	-	-	18	A-6b (V)
		7	3	4	7	15	67	SS-7	2.0-4.0	1	3	10	31	55	46	20	26	23	A-7-6 (16)		
		8	5	9	8	24	56	SS-8	4.0-4.5+	-	-	-	-	-	-	-	-	-	20	A-7-6 (V)	
		9	3	7	11	25	100	SS-9	4.5+	-	-	-	-	-	-	-	-	-	20	A-7-6 (V)	
		10	3	5	8	18	67	SS-10	3.0-3.8	-	-	-	-	-	-	-	-	-	21	A-7-6 (V)	
			629.9	25																	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\217525A.GPJ

PLATE 3



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>938+03, 73' RT</u>	EXPLORATION ID: <b>B-087-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>656.8 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>6/12/23</u> END: <u>6/12/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.452380 N, 82.068143 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT - 13 INCHES	656.8																		
GRANULAR BASE - 8-1/2 INCHES	655.7	1																	
	655.0	2	3	7	22	100	SS-1A	-	-	-	-	-	-	-	-	-	A-1-b (V)		
FILL: Hard gray <b>SANDY SILT</b> , some fine gravel, little clay, few shale fragments, damp.		3	7	9			SS-1B	4.5+	-	-	-	-	-	-	-	-	A-4a (V)		
		4	6	4	10	56	SS-2	4.5+	24	15	17	29	15	19	16	3	10	A-4a (2)	
		5		3															
FILL: Very-stiff to hard gray and gray mottled with brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, few shale fragments, damp to moist.	651.3	6	2	2	10	61	SS-3	2.0-4.5+	-	-	-	-	-	-	-	-	21	A-6b (V)	
		7		5															
		8																	
		9	2	4	4	11	67	SS-4	3.0-3.5	-	-	-	-	-	-	-	-	18	A-6b (V)
		10																	
FILL: Hard gray <b>SANDY SILT</b> , little fine gravel, little clay, few brick fragments, damp.	643.8	11	3	4	14	44	SS-5	2.0-2.5	-	-	-	-	-	-	-	-	-	17	A-6b (V)
		12		6															
FILL: Hard gray <b>SANDY SILT</b> , little fine gravel, little clay, few brick fragments, damp.	641.3	13	5	6	17	61	SS-6	4.5+	-	-	-	-	-	-	-	-	-	8	A-4a (V)
		14		6															
FILL: Hard gray and black <b>CLAY</b> , some to "and" silt, little fine to coarse sand, trace fine gravel, slightly organic, moist.	638.8	15	5	5	17	100	SS-7	4.5+	-	-	-	-	-	-	-	-	-	37	A-7-6 (V)
		16		7															
FILL: Very-stiff to hard gray <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine gravel, few brick fragments, damp.	633.8	17	4	3	10	78	SS-8	4.5+	7	10	12	43	28	26	15	11	12	A-6a (8)	
		18		4															
		19	3	4	7	15	44	SS-9	3.0-3.5	-	-	-	-	-	-	-	-	14	A-6a (V)
FILL: Hard gray <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp.	631.8	20	3	7	21	78	SS-10	4.5+	-	-	-	-	-	-	-	-	-	20	A-7-6 (V)
		21		8															

EOB

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\217525A.GPJ

PLATE 4



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>940+55, 72' RT</u>	EXPLORATION ID: <b>B-088-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>658.9 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>6/13/23</u> END: <u>6/13/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.452925 N, 82.067596 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT - 13 INCHES	658.9																		
GRANULAR BASE - 6 INCHES	657.8 657.3	1																	
FILL: Dense brown and gray <b>SANDY SILT</b> , little fine gravel, trace to little clay, few shale fragments, damp.	655.4	2	4	13	35	50	SS-1	-	-	-	-	-	-	-	-	8	A-4a (V)		
FILL: Very-stiff to hard grayish-brown <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine gravel, few shale fragments, damp.		3																	
		4	4	7	33	44	SS-2	2.5-4.5+	-	-	-	-	-	-	-	11	A-6a (V)		
		5																	
		6	4	5	14	22	SS-3	3.5	-	-	-	-	-	-	-	12	A-6a (V)		
		7																	
		8																	
		9	3	5	14	72	SS-4	1.5-3.5	6	9	12	38	35	32	17	15	16	A-6a (10)	
		10																	
		11	3	5	14	67	SS-5	3.5-4.5+	-	-	-	-	-	-	-	-	-	14	A-6a (V)
		12																	
		13	3	5	17	67	SS-6	4.5+	-	-	-	-	-	-	-	-	-	13	A-6a (V)
		14																	
FILL: Very-stiff to hard gray mottled with brown <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp to moist.	643.4	15																	
		16	3	3	14	83	SS-7	2.5-4.5+	-	-	-	-	-	-	-	-	-	24	A-7-6 (V)
		17																	
		18																	
		19	3	6	17	67	SS-8	3.0-4.0	-	-	-	-	-	-	-	-	-	20	A-7-6 (V)
		20																	
FILL: Very-stiff to hard gray <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine gravel, damp.	638.4	21																	
		22	5	5	18	100	SS-9	2.0-4.5+	8	10	12	43	27	27	15	12	10	A-6a (8)	
		23																	
		24	6	11	26	100	SS-10	2.0-4.0	-	-	-	-	-	-	-	-	-	15	A-6a (V)
		25																	

EOB

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\217525A.GPJ

PLATE 5



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>943+68, 72' RT</u>	EXPLORATION ID: <b>B-088-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>659.5 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>6/13/23</u> END: <u>6/13/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.453575 N, 82.066871 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT - 12 INCHES	659.5																	
GRANULAR BASE - 6 INCHES	658.5 658.0	1																
FILL: Hard gray <b>SANDY SILT</b> , little clay, little fine gravel, damp.	656.5	2	6	12	36	100	SS-1	4.5+	-	-	-	-	-	-	-	-	9	A-4a (V)
FILL: Stiff gray <b>SANDY SILT</b> , little clay, little fine gravel, damp.	654.0	3	5	4	10	67	SS-2	1.5-2.0	12	14	20	36	18	19	13	6	12	A-4a (4)
FILL: Very-stiff gray mottled with brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp to moist.	649.0	4	2	3	10	67	SS-3	2.0-3.0	-	-	-	-	-	-	-	-	17	A-6b (V)
		5	2	3	4													
		6	2	3	4	10	67	SS-3	2.0-3.0	-	-	-	-	-	-	-	17	A-6b (V)
		7	2	3	4													
		8	2	3	4	14	61	SS-4	2.0-3.5	-	-	-	-	-	-	-	22	A-6b (V)
		9	2	3	4													
		10	2	3	4	14	61	SS-4	2.0-3.5	-	-	-	-	-	-	-	22	A-6b (V)
FILL: Hard gray <b>SANDY SILT</b> , some fine gravel, little clay, many shale fragments, damp.	641.5	11	3	4	14	67	SS-5	4.5+	33	15	9	25	18	24	18	6	9	A-4a (2)
		12	3	4	6													
		13	3	4	6	14	33	SS-6	-	-	-	-	-	-	-	-	9	A-4a (V)
		14	3	4	6													
		15	3	4	6	14	33	SS-6	-	-	-	-	-	-	-	-	9	A-4a (V)
		16	3	4	6													
		17	3	4	6	14	67	SS-7	4.5+	-	-	-	-	-	-	-	9	A-4a (V)
		18	3	4	6													
FILL: Stiff to very-stiff gray mottled with brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	636.5	19	4	4	11	78	SS-8	2.0-3.0	-	-	-	-	-	-	-	-	13	A-6b (V)
		20	4	4														
		21	4	4														
		22	5	5	7	17	100	SS-9	1.5-2.5	-	-	-	-	-	-	-	18	A-6b (V)
		23	5	5	7													
FILL: Hard gray <b>SILTY CLAY</b> , "and" fine to coarse gravel (shale fragments), little fine to coarse sand, damp.	634.5	24	18	7	22	67	SS-10	4.5+	-	-	-	-	-	-	-	-	-	A-6b (V)
		25	18	7	9													

EOB

NOTED  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\217525A.GPJ

PLATE 6



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>945+54, 72' RT</u>	EXPLORATION ID <b>B-089-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE 1 OF 1
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>659.2 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>6/14/23</u> END: <u>6/14/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.453946 N, 82.066419 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT - 12 INCHES	659.2																		
GRANULAR BASE - 7 INCHES	658.2 657.6	1																	
FILL: Very-stiff to hard gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace to little fine gravel, few shale fragments, damp.	651.2	2	4	9	28	61	SS-1	4.5+	-	-	-	-	-	-	-	-	11	A-6a (V)	
		3		11															
		4	4	5	21	67	SS-2	3.5-4.5+	-	-	-	-	-	-	-	-	-	12	A-6a (V)
		5		10															
FILL: Very-stiff becoming hard brown mottled with gray <b>CLAY</b> , some silt, little fine to coarse sand, trace fine gravel, damp to moist.	646.2	6	2	3	10	17	SS-3	-	-	-	-	-	-	-	-	-	-	13	A-6a (V)
		7		4															
		8																	
		9	2	5	15	72	SS-4	2.0-3.0	4	3	8	28	57	45	18	27	22	A-7-6 (16)	
FILL: Hard gray <b>SANDY SILT</b> , some fine to coarse gravel, some clay, many shale fragments, damp.	638.7	10																	
		11	7	25	50	100	SS-5	4.5+	-	-	-	-	-	-	-	-	15	A-7-6 (V)	
		12		11															
		13																	
FILL: Very-stiff to hard brown mottled with gray <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	634.2	14	8	10	25	17	SS-6	4.5+	-	-	-	-	-	-	-	-	5	A-4a (V)	
		15		8															
		16	6	9	25	100	SS-7	4.5+	-	-	-	-	-	-	-	-	8	A-4a (V)	
		17		9															
FILL: Very-stiff to hard brown mottled with gray <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	634.2	18																	
		19	5	4	14	100	SS-8	4.5+	29	11	10	29	21	23	15	8	11	A-4a (3)	
		20		6															
		21	5	6	15	100	SS-9	3.5-4.5+	-	-	-	-	-	-	-	-	-	13	A-6a (V)
		22		5															
		23																	
		24	3	7	21	78	SS-10	3.5-4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)	
		25		8															

EOB

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\217525A.GPJ

PLATE 7



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>947+58, 71' RT</u>	EXPLORATION ID: <b>B-089-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>658.2 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>6/14/23</u> END: <u>6/14/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.454346 N, 82.065906 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT - 12 INCHES	658.2																	
GRANULAR BASE - 7 INCHES	657.2 656.6	1																
FILL: Hard gray <b>SANDY SILT</b> , little fine gravel, little clay, few shale fragments, damp.		2	5 11	26	100	SS-1	4.5+	-	-	-	-	-	-	-	9	A-4a (V)		
		3																
		4	7 11	29	100	SS-2	4.5+	-	-	-	-	-	-	-	9	A-4a (V)		
		5																
FILL: Stiff to hard gray <b>CLAY</b> , some to "and" silt, little fine to coarse sand, trace fine gravel, few shale fragments, damp.	652.7	6	2	7	67	SS-3	1.0-1.5	2	3	10	31	54	44	19	25	24	A-7-6 (15)	
		7																
		8																
		9	2	6	18	72	SS-4	2.0-3.0	-	-	-	-	-	-	21	A-7-6 (V)		
		10																
		11	3	6	21	100	SS-5	4.0-4.5+	-	-	-	-	-	-	18	A-7-6 (V)		
		12																
FILL: Hard gray mottled with brown <b>SANDY SILT</b> , some clay, little fine gravel, few shale fragments, damp.	645.2	13	3	5	17	100	SS-6	4.5+	-	-	-	-	-	-	10	A-4a (V)		
		14																
		15																
		16	22	13	35	100	SS-7	4.5+	19	12	11	35	23	24	15	9	A-4a (5)	
		17																
		18																
		19	4	5	12	100	SS-8	4.5+	-	-	-	-	-	-	13	A-4a (V)		
		20																
		21	5	8	25	67	SS-9	4.5+	-	-	-	-	-	-	11	A-4a (V)		
		22																
FILL: Hard brown mottled with gray <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp to moist.	635.2	23																
		24	4	6	17	100	SS-10	4.0-4.5+	-	-	-	-	-	-	14	A-6a (V)		
	633.2	25																

EOB

NOTES  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINT\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>949+57, 70' RT</u>	EXPLORATION ID <b>B-090-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE 1 OF 1
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>655.9 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>6/14/23</u> END: <u>6/14/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.454738 N, 82.065400 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT - 12 INCHES	655.9																	
GRANULAR BASE - 7 INCHES	654.9 654.3	1																
FILL: Very-stiff gray <b>SANDY SILT</b> , little fine gravel, little clay, many shale fragments, damp.		2	8 5 6	15	67	SS-1	2.5-3.5	-	-	-	-	-	-	-	10	A-4a (V)		
		3																
		4	3 7 5	17	100	SS-2	3.0-4.0	-	-	-	-	-	-	-	12	A-4a (V)		
	650.4	5																
FILL: Hard brown mottled with gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.		6	3 5 6	15	72	SS-3	4.5+	-	-	-	-	-	-	-	17	A-6b (V)		
		7																
		8																
		9	2 4 7	15	67	SS-4	4.5+	-	-	-	-	-	-	-	22	A-6b (V)		
	645.4	10																
FILL: Very-stiff to hard gray and grayish-brown <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace to little fine gravel, few shale fragments, damp to moist.		11	6 9 9	25	67	SS-5	4.5+	14	10	8	27	41	32	18	14	13	A-6a (8)	
		12																
		13																
		14	6 11 13	33	100	SS-6	4.5+	-	-	-	-	-	-	-	9	A-6a (V)		
		15																
		16	6 7 7	19	100	SS-7	3.0-4.5+	-	-	-	-	-	-	-	12	A-6a (V)		
		17																
		18																
		19	9 11 7	25	78	SS-8	4.5+	-	-	-	-	-	-	-	14	A-6a (V)		
		20																
		21	4 6 8	19	72	SS-9	4.5+	-	-	-	-	-	-	-	17	A-6a (V)		
		22																
		23																
		24	3 6 9	21	72	SS-10	2.5-3.0	9	9	12	32	38	32	18	14	14	A-6a (9)	
	630.9	25																

NOTES  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>951+57, 70' RT</u>	EXPLORATION ID: <b>B-090-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>652.7 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>6/14/23</u> END: <u>6/14/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.455128 N, 82.064887 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT - 13 INCHES	652.7																	
GRANULAR BASE - 7 INCHES	651.6 651.0	1																
FILL: Hard gray <b>SANDY SILT</b> , some clay, trace fine to coarse gravel, few shale fragments, damp.		2	8 9	22	78	SS-1A SS-1B	- 4.5+	-	-	-	-	-	-	-	-	-	A-1-b (V) A-4a (V)	
		3																
		4	3 6	12	56	SS-2	4.0- 4.5+	9	10	13	35	33	25	16	9	12	A-4a (7)	
	647.2	5																
FILL: Very-stiff gray mottled with brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.		6	4															
		7	6	8	19	72	SS-3	3.0- 4.0	-	-	-	-	-	-	-	17	A-6b (V)	
	644.7	8																
FILL: Hard brown mottled with gray <b>SANDY SILT</b> , some clay, little fine to coarse gravel, few shale and brick fragments, damp.		9	4															
		10	5	6	15	67	SS-4	4.5+	-	-	-	-	-	-	-	12	A-4a (V)	
		11																
		12	6	13	26	83	SS-5	4.5+	-	-	-	-	-	-	-	11	A-4a (V)	
		13																
		14	6	9	24	100	SS-6	4.5+	11	11	15	37	26	22	15	7	10	A-4a (6)
	637.2	15																
FILL: Hard grayish-brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.		16	3															
		17	6	9	21	100	SS-7	4.5+	-	-	-	-	-	-	-	16	A-6b (V)	
		18																
		19	4	5	17	67	SS-8	4.5+	-	-	-	-	-	-	-	17	A-6b (V)	
		20																
		21	4	9	32	100	SS-9	4.5+	-	-	-	-	-	-	-	17	A-6b (V)	
	629.7	22		14														
Very-stiff gray <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, moist.		23																
		24	3	4	17	100	SS-10	3.5	-	-	-	-	-	-	-	26	A-7-6 (V)	
	627.7	25		8														

EOB

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\217525A.GPJ

PLATE 10





S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\217525A.GPJ

PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB SIMCO 2800</u>	STATION / OFFSET: <u>953+58, 70' RT</u>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGERS: <u>S&amp;ME / N. SOKOLOWSKI</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>648.7 (MSL)</u> EOB: <u>25.0 ft.</u>
START: <u>6/14/23</u> END: <u>6/14/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.2</u>	COORD: <u>41.455523 N, 82.064375 W</u>

EXPLORATION ID  
**B-091-1-23**

PAGE  
1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
ASPHALT - 13 INCHES	648.7																		
GRANULAR BASE - 7 INCHES	647.6	1																	
FILL: Hard grayish-brown <b>SANDY SILT</b> , some clay, trace to little fine to coarse gravel, few shale fragments, damp.	647.0	2	5	7	22	67	SS-1A	-	-	-	-	-	-	-	-	-	A-1-b (V)		
		3	7	9			SS-1B	4.5+	-	-	-	-	-	-	-	-	14	A-4a (V)	
		4	5	7	22	100	SS-2	4.5+	-	-	-	-	-	-	-	-	12	A-4a (V)	
		5																	
		6	4	5	7	17	100	SS-3	4.5+	-	-	-	-	-	-	-	11	A-4a (V)	
		7																	
		8																	
		9	6	10	11	29	100	SS-4	4.5+	-	-	-	-	-	-	-	-	11	A-4a (V)
		10																	
		638.2	11	4	6	7	18	78	SS-5	3.0-3.5	6	8	12	36	38	28	15	13	15
FILL: Very-stiff grayish-brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp.		12																	
	633.2	13																	
		14	3	4	7	15	72	SS-6	3.0-4.0	-	-	-	-	-	-	-	-	17	A-6a (V)
		15																	
FILL: Stiff to very-stiff gray mottled with brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp to moist.		16	5	4	8	17	83	SS-7	3.0-3.5	-	-	-	-	-	-	-	-	20	A-6b (V)
		17																	
		18																	
		19	2	5	7	17	67	SS-8	1.5-3.0	3	6	11	34	46	37	17	20	20	A-6b (12)
	628.2	20																	
Very-stiff to hard gray mottled with brown <b>CLAY</b> , some to "and" silt, little fine to coarse sand, trace fine gravel, damp.		21	5	7	11	25	67	SS-9	4.0-4.5+	-	-	-	-	-	-	-	-	24	A-7-6 (V)
		22																	
		23																	
		24	6	6	9	21	67	SS-10	3.0-3.5	-	-	-	-	-	-	-	-	22	A-7-6 (V)
	623.7	25																	

EOB

NOTES  
- No seepage noted.

NOTES: SEE ABOVE.  
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 11



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>955+60, 71' RT</u>	EXPLORATION ID: <b>B-091-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / P. LEITER</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>644.7 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>6/27/23</u> END: <u>6/27/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.455918 N, 82.063857 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT - 15 INCHES	644.7																	
GRANULAR BASE - 8 INCHES	643.4	1																
FILL: Hard dark-gray mottled with brown <b>SANDY SILT</b> , some clay, trace to little fine gravel, few shale fragments, damp.	642.8	2	4															
		3	4	15	67	SS-1	4.5								13	A-4a (V)		
		4	2	3	8	SS-2	4.0-4.5								15	A-4a (V)		
	639.2	5																
FILL: Very-stiff brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.		6	3															
		7	5	17	89	SS-3	3.5-4.0								20	A-6b (V)		
	636.7	8																
FILL: Very-stiff to hard gray mottled with brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp.		9	2															
		10	2	6	78	SS-4	2.0-2.5	7	8	12	45	28	32	19	13	16	A-6a (9)	
		11																
		12	2	4	15	100	SS-5	3.5-4.5										
	631.7	13																
Stiff to very-stiff gray mottled with brown <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, few hard zones, damp.		14	2															
		15	2	4	9	67	SS-6	2.0-3.5										
		16																
		17	3	4	14	100	SS-7	1.5-3.5	1	3	9	38	49	46	20	26	22	
	624.2	18																
Very-stiff to hard brown and dark brown <b>SANDY SILT</b> , little clay, trace fine gravel, damp.		19	2	4	14	83	SS-8	3.5-4.5										
		20																
		21	3	4	17	100	SS-9	2.5-4.5	6	13	14	47	20	30	20	10	17	
	621.7	22																
Very-stiff to hard brown <b>SANDY SILT</b> , little clay, little fine gravel, few shale fragments, partly similar to severely weathered, very-weak shale, damp.		23																
		24	8	12	36	94	SS-10	3.5-4.5										
	619.7	25																

EOB

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\217525A.GPJ

PLATE 12





S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\217525A.GPJ

PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>959+64, 79' RT</u>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / P. LEITER</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>636.4 (MSL)</u> EOB: <u>25.0 ft.</u>
START: <u>6/27/23</u> END: <u>6/27/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.456693 N, 82.062804 W</u>
			EXPLORATION ID <b>B-092-2-23</b>
			PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 18 INCHES	636.4																	
FILL: Very-stiff to hard dark-brown and gray <b>SANDY SILT</b> , some clay, little fine gravel, damp.	634.9	1																
		2	4	11	83	SS-1	3.5-4.5	-	-	-	-	-	-	-	13	A-4a (V)		
		3	3															
		4	2	11	100	SS-2	2.0-4.5	-	-	-	-	-	-	-	11	A-4a (V)		
Stiff to hard brown and gray <b>CLAY</b> , "and" silt, little fine to coarse sand, slightly organic, damp to moist.	630.9	5																
		6	2															
		7	2	8	67	SS-3	4.0-4.5	-	-	-	-	-	-	-	19	A-7-6 (V)		
		8																
		9	1	8	67	SS-4	1.0-3.5	0	2	10	36	52	56	23	33	32	A-7-6 (19)	
		10	2															
Hard gray and brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	623.4	11	2	8	72	SS-5	2.0-2.5	-	-	-	-	-	-	-	26	A-7-6 (V)		
		12	3															
		13																
Hard gray and brown <b>SANDY SILT</b> , some fine to coarse gravel, little clay, few shale fragments, partly similar to severely weathered, very-weak shale, damp.	620.9	14	2	14	94	SS-6	4.5	-	-	-	-	-	-	-	18	A-6b (V)		
		15	4	5														
Hard gray and brown <b>SANDY SILT</b> , some fine to coarse gravel, little clay, few shale fragments, partly similar to severely weathered, very-weak shale, damp.	616.4	16	7															
		17	18	80	100	SS-7	4.5	-	-	-	-	-	-	-	12	A-4a (V)		
		18																
		19	11	54	100	SS-8	4.0-4.5	25	25	14	22	14	28	19	9	9	A-4a (0)	
<b>SHALE</b> , gray, severely to highly weathered, very-weak to weak.	611.4	20																
		21	50-5"	-	100	SS-9	-	-	-	-	-	-	-	-	-	Rock (V)		
		22																
		23																
		24	25	116	100	SS-10	-	-	-	-	-	-	-	-	Rock (V)			
		25	44	33														

NOTES:  
- Seeped noted at 15.5'.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE





PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>963+58, 78' RT</u>	EXPLORATION ID: <b>B-093-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / P. LEITER</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>631.6 (MSL)</u> EOB: <u>20.7 ft.</u>	
START: <u>6/28/23</u> END: <u>6/28/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.457467 N, 82.061799 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 18 INCHES	631.6	1																
FILL: Very-stiff to hard dark-brown and gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine sand, damp.	630.1	2	3	8	78	SS-1	2.5-4.5	-	-	-	-	-	-	-	22	A-6b (V)		
		3	3	2														
		4	3	8	67	SS-2	2.5-4.5	-	-	-	-	-	-	-	21	A-6b (V)		
Very-stiff to hard brown and gray <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, few stiff zones, damp.	626.1	5																
		6	2															
		7	2	4	9	67	SS-3	1.0-3.0	2	3	9	37	49	53	22	31	24	A-7-6 (19)
		8																
		9	2	4	12	67	SS-4	3.0-4.0	-	-	-	-	-	-	-	22	A-7-6 (V)	
Hard gray <b>SANDY SILT</b> , little clay, little fine gravel, damp.	618.6	11	3	5	20	89	SS-5	4.5	-	-	-	-	-	-	24	A-7-6 (V)		
		12	5	8														
		13	4	6	21	94	SS-6	4.5	13	11	22	38	16	20	11	9	9	A-4a (4)
<b>SHALE</b> , dark-gray, highly to severely weathered, very-weak to weak.	616.1	14	6	8														
		15	9	10	36	100	SS-7	-	-	-	-	-	-	-	7	Rock (V)		
		16	9	14														
		17	60-3"	-	67		SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)
	610.9	19																
		20																

**NOTES:**

- Seepage noted at 15.5'.
- Encountered auger refusal at 20.7'.
- After HSA removed, borehole caved at 12.1' and water was measured at 7.4'.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY02 - GINTW\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>965+56, 79' RT</u>	EXPLORATION ID: <b>B-094-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / P. LEITER</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>631.2 (MSL)</u> EOB: <u>21.1 ft.</u>	
START: <u>6/28/23</u> END: <u>6/28/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.457854 N, 82.061291 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 18 INCHES	631.2																	
PROBABLE FILL: Hard dark-gray <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	629.7	1	5															
	627.7	2	5	11	89	SS-1	4.5	-	-	-	-	-	-	-	7	A-6a (V)		
		3	2															
Very-stiff to hard brown and gray <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp.		4	2	9	72	SS-2	2.5-4.5	-	-	-	-	-	-	-	20	A-7-6 (V)		
		5	3	3														
		6	2															
	623.2	7	3	9	89	SS-3	2.0-3.0	2	5	11	37	45	43	22	21	23	A-7-6 (13)	
		8																
Stiff brown and gray <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine gravel, damp to moist.		9	2	5	72	SS-4	1.0-1.5	3	6	15	49	27	30	17	13	21	A-6a (9)	
	620.7	10	1															
Very-stiff to hard gray and dark-gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, few shale fragments, dry to damp.		11	4	27	89	SS-5	3.5-4.0	-	-	-	-	-	-	-	19	A-6b (V)		
		12	6	12														
		13																
		14	8	60	94	SS-6	2.5-4.5	-	-	-	-	-	-	-	9	A-6b (V)		
	615.7	15	16	24														
<b>SHALE</b> , dark gray, highly to severely weathered, weak.		16	19	-	100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		17	50-3"															
	613.2	18																
		19	50-5"		100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		20																
	610.1	21	50-1"		100	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:  
- Seepage noted at 18.0'.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>967+51, 78' RT</u>	EXPLORATION ID: <b>B-094-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / P. LEITER</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>631.3 (MSL)</u> EOB: <u>23.9 ft.</u>	
START: <u>6/28/23</u> END: <u>6/28/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.458237 N, 82.060795 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 18 INCHES	631.3	1																
FILL: Stiff to very-stiff brownish-gray <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	629.8	2	2	9	72	SS-1	1.5-4.0	-	-	-	-	-	-	-	14	A-6a (V)		
		3	3															
		4	2	8	78	SS-2	2.0-3.5	8	7	10	42	33	35	20	15	20	A-6a (10)	
Stiff to very-stiff brown and gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp to moist.	625.8	5																
		6	2															
		7	3	11	78	SS-3	2.5-4.0	-	-	-	-	-	-	-	26	A-6b (V)		
		8	4															
Hard brown and gray <b>SILT AND CLAY</b> , little to some fine to coarse sand, trace fine gravel, damp.	620.8	9	1	14	89	SS-4	1.5-3.0	-	-	-	-	-	-	-	21	A-6b (V)		
		10	3	6														
		11	7	13	45	100	SS-5	4.5	-	-	-	-	-	-	12	A-6a (V)		
Stiff to very-stiff brownish-gray <b>SILT</b> , some fine to coarse sand, little clay, trace fine gravel, damp.	618.3	12	13	17														
		13																
		14	9	25	77	100	SS-6	2.0-2.5	-	-	-	-	-	-	8	A-4b (V)		
		15	26															
SHALE, dark-gray, highly to severely weathered, very-weak to weak, partly similar to hard soil above 23'.	613.3	16	9	48	100	SS-7	1.5-2.0	3	6	17	60	14	20	13	7	13	A-4b (8)	
		17	14	18														
		18	TR															
SHALE, dark-gray, highly to severely weathered, very-weak to weak, partly similar to hard soil above 23'.	607.4	19	24	32	108	100	SS-8	-	-	-	-	-	-	-	-	-	Rock (V)	
		20	40															
		21	16	20	74	100	SS-9	-	-	-	-	-	-	-	-	-	Rock (V)	
		22	29															
		23	50-5"	-	100	SS-10	-	-	-	-	-	-	-	-	-	Rock (V)		

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\217525A.GPJ





S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY02 - GINTW\PROJECTS\217525A.GPJ

PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>OTB / C. SVITAK</u>	DRILL RIG: <u>OTB MOBILE B-57</u>	STATION / OFFSET: <u>969+67, 79' RT</u>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / P. LEITER</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>12/22/22</u>	ELEVATION: <u>631.6 (MSL)</u> EOB: <u>21.3 ft.</u>
START: <u>6/28/23</u> END: <u>6/28/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>41.458657 N, 82.060242 W</u>

EXPLORATION ID  
**B-095-1-23**

PAGE  
1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
								GR	CS	FS	SI	CL	LL	PL	PI				
GRANULAR SHOULDER FILL - 18 INCHES	631.6	1																	
FILL: Stiff to very-stiff brown and gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	630.1	2	2	8	78	SS-1	2.0-4.0	-	-	-	-	-	-	-	17	A-6b (V)			
		3	3	2															
		4	1	3	8	89	SS-2	1.0-4.0	-	-	-	-	-	-	-	15	A-6b (V)		
Very-stiff to hard gray and brown <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp.	626.1	5																	
		6	2	3	11	61	SS-3	2.5-3.0	1	3	8	38	50	52	22	30	22	A-7-6 (18)	
		7	3	4															
Hard gray and brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	621.1	8																	
		9	2	4	15	100	SS-4	4.0-4.5	-	-	-	-	-	-	-	14	A-7-6 (V)		
		10		6															
SHALE, dark-gray, highly to severely weathered, very-weak to weak.	616.1	11	6	13	50	89	SS-5	4.5+	-	-	-	-	-	-	-	12	A-6a (V)		
		12		20															
		13	7	11	32	100	SS-6	4.0-4.5+	-	-	-	-	-	-	-	10	A-6a (V)		
SHALE, dark-gray, highly to severely weathered, very-weak to weak.	610.3	14		10															
		15																	
		16	25	23	74	100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	
SHALE, dark-gray, highly to severely weathered, very-weak to weak.	610.3	17		26															
		18																	
		19	13	26	98	100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	610.3	20		39															
	610.3	21	50-4"		75		SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.  
ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>971+59, 79' RT</u>	EXPLORATION ID: <b>B-095-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>632.1 (MSL)</u> EOB: <u>24.2 ft.</u>	
START: <u>7/11/23</u> END: <u>7/11/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.459035 N, 82.059752 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
GRANULAR SHOULDER FILL - 6 INCHES FILL: Very-stiff dark gray <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, few wood fragments, iron oxide staining, damp.	631.6	1	4															
		2	3	10	100	SS-1	2.5-3.0	-	-	-	-	-	-	-	17	A-6b (V)		
		3																
		4	3	10	100	SS-2	3.0-3.5	-	-	-	-	-	-	-	15	A-6b (V)		
Very-stiff gray and brown <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp.	626.6	5	3	10	100													
		6	3	17	44	SS-3	2.0-2.5	5	5	9	36	45	44	22	22	19	A-7-6 (14)	
		7	5	7														
		8																
Hard dark gray <b>SANDY SILT</b> , little clay, trace to little fine gravel, damp.	621.6	9	3	16	100	SS-4	3.0-3.5	-	-	-	-	-	-	-	18	A-7-6 (V)		
		10	4	7														
		11	9	18	57	100	SS-5	4.5	-	-	-	-	-	-	12	A-4a (V)		
		12	18	22														
Dense to very-dense dark-gray <b>SILT</b> , little clay, trace fine to coarse sand, trace fine to coarse gravel, few shale fragments, damp.	614.1	13	18	120	100	SS-6	4.5	-	-	-	-	-	-	-	11	A-4a (V)		
		14	40	44														
		15	17	23	65	100	SS-7	4.5	-	-	-	-	-	-	10	A-4a (V)		
		16	23	23														
SHALE, dark-gray, highly to severely weathered, weak.	610.1	17	8	46	100	SS-8	-	5	3	5	67	20	23	17	6	16	A-4b (8)	
		18	12	20														
		19	10	18	97	100	SS-9	-	-	-	-	-	-	-	4	A-4b (V)		
	607.9	20	49	50-2"	-	100	SS-10	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY02 - GINTW\PROJECTS\217525A.GPJ





PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>975+61, 79' RT</u>	EXPLORATION ID: <b>B-096-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>633.2 (MSL)</u> EOB: <u>23.6 ft.</u>	
START: <u>7/5/23</u> END: <u>7/5/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.459822 N, 82.058725 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ROOTMAT - 2 INCHES	633.2																	
FILL: Stiff to very-stiff gray and brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, slightly organic, few brick fragments, damp.	627.7	1	4	14	100	SS-1	1.5	-	-	-	-	-	-	-	-	-	13	A-6a (V)
		2	5															
		3																
		4	3	9	100	SS-2	3.0-3.5	-	-	-	-	-	-	-	-	-	13	A-6a (V)
		5	3															
Very-stiff brown and gray <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp.	622.7	6	3	20	100	SS-3	3.0-4.0	6	5	9	38	42	43	22	21	17	A-7-6 (13)	
		7	5	9														
		8																
		9	5	24	89	SS-4	3.5-4.0	-	-	-	-	-	-	-	-	-	16	A-7-6 (V)
		10	7	10														
		11																
Hard gray and dark-gray <b>SANDY SILT</b> , little to some clay, trace fine gravel, few shale fragments, becoming partly similar to severely weathered, very-weak shale, dry to damp.	612.7	12	2	37	89	SS-5	4.5+	-	-	-	-	-	-	-	-	-	12	A-4a (V)
		13																
		14	18	50-4"	-	100	SS-6	4.5+	8	14	14	45	19	28	18	10	10	A-4a (6)
		15																
		16	18	73	100	SS-7	4.5+	-	-	-	-	-	-	-	-	-	9	A-4a (V)
		17	21	30														
		18																
		19	17	90	89	SS-8	4.5+	-	-	-	-	-	-	-	-	-	8	A-4a (V)
		20	23	40														
<b>SHALE</b> , dark-gray, highly to severely weathered, very-weak to weak.	609.6	21	25	-	100	SS-9	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		22	33	50-4"														
		23																
		EOB	50-1"	-	100	SS-10	-	-	-	-	-	-	-	-	-	-	-	Rock (V)

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE



PROJECT: LOR-90-10.76 NOISE WALLS	DRILLING FIRM / OPERATOR: S&ME / T. FROST	DRILL RIG: S&ME ATV D50 (R80)	STATION / OFFSET: 977+62, 80' RT	EXPLORATION ID: B-097-1-23
TYPE: NOISE WALL	SAMPLING FIRM / LOGGER: S&ME / T. FROST	HAMMER: CME AUTOMATIC	ALIGNMENT: IR 90 CENTERLINE	PAGE: 1 OF 1
PID: 107714 BR ID: WALL G	DRILLING METHOD: 2.25" HSA	CALIBRATION DATE: 6/6/22	ELEVATION: 634.0 (MSL) EOB: 24.4 ft.	
START: 7/6/23 END: 7/6/23	SAMPLING METHOD: SPT	ENERGY RATIO (%): 85.4	COORD: 41.460216 N, 82.058209 W	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT - 4 INCHES	634.0																	
GRANULAR BASE - 6 INCHES	633.7																	
FILL: Medium-dense dark gray <b>COARSE AND FINE SAND</b> , little fine gravel, trace to little clay, few brick fragments, slight hydrocarbon odor, damp.	633.2	1	18															
		2	8	16	89	SS-1	-	-	-	-	-	-	-	-	8	A-3a (V)		
	631.0	3																
FILL: Very-stiff dark-gray and brown <b>SILT AND CLAY</b> , some fine to coarse sand, little fine gravel, few shale fragments, damp.		4	4															
		5	3	9	89	SS-2	3.0-4.0	17	16	17	34	16	26	13	13	A-6a (4)		
	628.5	6																
Very-stiff gray <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, moist.		7	3															
		8																
	626.0	9	3	10	100	SS-3	2.5-3.5	-	-	-	-	-	-	-	26	A-7-6 (V)		
		10																
Very-stiff to hard gray and brown <b>SILT AND CLAY</b> , some fine to coarse sand, trace fine to coarse gravel, damp.		11	4															
		12	6	19	100	SS-4	3.0-4.0	-	-	-	-	-	-	-	15	A-6a (V)		
		13																
		14	5															
		15	9	31	100	SS-5	3.5-4.5	8	8	15	38	31	35	20	15	A-6a (9)		
		16																
		17	11															
		18	13	54	100	SS-6	4.0-4.5	-	-	-	-	-	-	-	12	A-6a (V)		
		19																
		20	11															
		21	13	41	89	SS-7	4.5	-	-	-	-	-	-	-	15	A-6a (V)		
		22																
	616.0	23	11															
<b>SHALE</b> , dark-gray, highly to severely weathered, very-weak to weak, similar to hard soil above 20'.		24	16	46	89	SS-8	-	-	-	-	-	-	-	-	-	Rock (V)		
		25																
		26	50-4"		100	SS-9	-	-	-	-	-	-	-	-	-	Rock (V)		
		27																
		28																
		29																
	609.6	30	40															
		31	50-5"		100	SS-10	-	-	-	-	-	-	-	-	-	Rock (V)		

EOB

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\217525A.GPJ

PLATE 23



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>979+65, 85' RT</u>	EXPLORATION ID: <b>B-097-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>634.2 (MSL)</u> EOB: <u>25.0 ft.</u>	
START: <u>7/6/23</u> END: <u>7/6/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.460603 N, 82.057677 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT - 4 INCHES	633.9																	
GRANULAR BASE - 6 INCHES	633.4																	
FILL: Very-stiff dark-gray and brown <b>SILTY CLAY</b> , little fine to coarse sand, trace to little fine gravel, few asphalt fragments, damp.		1	18	7	20	89	SS-1	2.5	-	-	-	-	-	-	-	-	11	A-6b (V)
		2	7	7														
		3																
		4	5	6	17	100	SS-2	3.5-4.0	-	-	-	-	-	-	-	-	15	A-6b (V)
		5	6	6														
	628.7	6																
FILL: Very-stiff dark-gray and brown <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, few wood fragments, damp.		7	2	3	10	100	SS-3	2.5-3.3	1	2	9	44	44	44	22	22	27	A-7-6 (14)
		8																
	626.2	9	4	7	21	100	SS-4	3.5-4.5+	-	-	-	-	-	-	-	-	10	A-6a (V)
Very-stiff to hard brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp.		10																
		11	6	10	36	100	SS-5	4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)
		12	15															
		13																
		14	10	18	54	100	SS-6	4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)
		15	20															
	618.7	16	39	50-5"	-	100	SS-7	-	8	17	15	49	11	20	17	3	9	A-4a (5)
Very-dense dark-gray <b>SANDY SILT</b> , little clay, trace fine gravel, few shale fragments, partly similar to severely weathered, very-weak shale, dry to damp.		17																
		18																
		19	33	50-5"	-	100	SS-8	-	-	-	-	-	-	-	-	-	8	A-4a (V)
		20																
		21	26	36	110	89	SS-9	-	-	-	-	-	-	-	-	-	9	A-4a (V)
		22	41															
	611.2	23																
Hard dark-gray <b>CLAY</b> , some silt, trace fine sand, damp.		24	21	24	78	100	SS-10	4.5	0	0	1	29	70	45	22	23	21	A-7-6 (14)
		25	31															
	609.2																	

EOB

NOTES:  
- No seepage noted.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY02 - GINTW\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>981+10, 86' RT</u>	EXPLORATION ID: <b>B-098-1-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>634.3 (MSL)</u> EOB: <u>23.6 ft.</u>	
START: <u>7/6/23</u> END: <u>7/6/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.460885 N, 82.057306 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT - 4 INCHES	634.0																	
GRANULAR BASE - 4 INCHES	633.6																	
FILL: Medium-dense dark-gray <b>GRAVEL WITH SAND AND SILT</b> , little clay, few brick fragments, damp.	631.3	W 631.3	8	20	89	SS-1	-	-	-	-	-	-	-	-	9	A-2-4 (V)		
Very-stiff dark-gray and brown <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine sand, damp.	623.8		3	10	100	SS-2	2.5-3.5								23	A-7-6 (V)		
			4															
Hard brown mottled with gray <b>SANDY SILT</b> , some clay, trace fine gravel, damp.	618.8		2	7	100	SS-3	2.25	3	3	9	45	40	43	25	18	26	A-7-6 (12)	
			3															
Very-dense gray <b>SANDY SILT</b> , some fine to coarse gravel, trace clay, few shale fragments, partly similar to severely weathered, very-weak shale, dry to damp.	614.3	TR	3	19	100	SS-4	3.0-3.5								21	A-7-6 (V)		
			5															
<b>SHALE</b> , dark-gray, highly weathered, weak.	610.7	EOB	5	31	100	SS-5	4.5+								13	A-4a (V)		
			7															
			14	51	100	SS-6	4.5+	5	9	13	48	25	27	19	8	11	A-4a (8)	
			18															
			25	-	100	SS-7	-	24	15	14	37	10	21	15	6	8	A-4a (2)	
			50-3"															
			32	-	100	SS-8	-	-	-	-	-	-	-	-	8	A-4a (V)		
			50-4"															
			50-4"	-	100	SS-9	-	-	-	-	-	-	-	-	4	Rock (V)		
			50-1"															

NOTES:  
- Seepage noted at 3.0'.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY02 - GINTW\PROJECTS\217525A.GPJ



PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>983+13, 94' RT</u>	EXPLORATION ID: <b>B-098-2-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>634.8 (MSL)</u> EOB: <u>24.4 ft.</u>	
START: <u>7/6/23</u> END: <u>7/6/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.461267 N, 82.056767 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT - 4 INCHES	634.5																	
GRANULAR BASE - 4 INCHES	634.1																	
FILL: Very-dense dark-gray and black <b>GRAVEL WITH SAND AND SILT</b> , trace to little clay, slight hydrocarbon odor, damp.	631.8	W 632.8	18 25 25	71	100	SS-1	-	-	-	-	-	-	-	-	6	A-2-4 (V)		
FILL: Dense dark-gray <b>COARSE AND FINE SAND</b> , little silt, trace clay, trace fine gravel, moist.	629.3		18 26 4	43	100	SS-2	-	-	-	-	-	-	-	-	12	A-3a (V)		
Very-stiff grayish-brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp to moist.	626.8		3 4 4	11	100	SS-3	2.0-3.0	-	-	-	-	-	-	-	15	A-6a (V)		
Very-stiff grayish-brown <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp to moist.	621.8		3 4 5	13	100	SS-4	3.0-3.5	1	2	11	46	40	47	26	21	29	A-7-6 (14)	
	621.8		3 6 7	19	100	SS-5	3.0	-	-	-	-	-	-	-	29	A-7-6 (V)		
Very-stiff grayish-brown <b>SILT AND CLAY</b> , little fine to coarse sand, trace fine gravel, damp to moist.	616.8		7 9 10	27	89	SS-6	3.5-4.0	-	-	-	-	-	-	-	15	A-6a (V)		
	616.8		32 50-5"	-	100	SS-7	2.0-2.5	-	-	-	-	-	-	-	12	A-6a (V)		
Hard dark-gray <b>SILTY CLAY</b> , trace fine to coarse sand, trace fine gravel, damp to moist.	610.4	EOB	11 13 15	40	89	SS-8	4.0-4.5+	2	4	4	36	54	38	15	23	17	A-6b (13)	
	610.4		16 21 32	75	89	SS-9	4.0-4.5	-	-	-	-	-	-	-	21	A-6b (V)		
	610.4		32 50-5"	-	100	SS-10	4.0-4.5	-	-	-	-	-	-	-	16	A-6b (V)		

NOTES:  
- Seepage noted at 2.0'.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 11/17/23 12:44 - R:\SERVICE LINES\CS-2557\LEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\217525A.GPJ





PROJECT: <u>LOR-90-10.76 NOISE WALLS</u>	DRILLING FIRM / OPERATOR: <u>S&amp;ME / T. FROST</u>	DRILL RIG: <u>S&amp;ME ATV D50 (R80)</u>	STATION / OFFSET: <u>985+14, 115' RT</u>	EXPLORATION ID: <b>B-098-3-23</b>
TYPE: <u>NOISE WALL</u>	SAMPLING FIRM / LOGGER: <u>S&amp;ME / T. FROST</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: <u>IR 90 CENTERLINE</u>	PAGE: <b>1 OF 1</b>
PID: <u>107714</u> BR ID: <u>WALL G</u>	DRILLING METHOD: <u>2.25" HSA</u>	CALIBRATION DATE: <u>6/6/22</u>	ELEVATION: <u>634.9 (MSL)</u> EOB: <u>23.5 ft.</u>	
START: <u>7/11/23</u> END: <u>7/11/23</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>85.4</u>	COORD: <u>41.461621 N, 82.056196 W</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT - 4 INCHES	634.6																	
GRANULAR BASE - 4 INCHES	634.2																	
FILL: Medium-dense dark-gray <b>GRAVEL WITH SAND AND SILT</b> , little clay, few asphalt fragments, damp.	631.9	1	7	19	100	SS-1	-	-	-	-	-	-	-	-	10	A-2-4 (V)		
Very-stiff dark-brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	629.4	2	9	14	89	SS-2	2.5-3.5	-	-	-	-	-	-	-	15	A-6b (V)		
		3	4	6														
Very-stiff grayish-brown <b>CLAY</b> , "and" silt, little fine to coarse sand, trace fine gravel, damp to moist.	624.4	4	3	19	89	SS-3	2.0-3.5	-	-	-	-	-	-	-	28	A-7-6 (V)		
		5	4	9														
		6	2	4	19	89	SS-4	2.0-3.0	4	5	10	45	36	45	26	19	25	A-7-6 (13)
		7	4	6														
Very-stiff grayish-brown <b>SILTY CLAY</b> , little fine to coarse sand, trace fine gravel, damp.	619.4	8	4	14	89	SS-4	2.0-3.0	4	5	10	45	36	45	26	19	25	A-7-6 (13)	
		9	4	6														
		10	4	6														
Hard gray mottled with dark-gray <b>SANDY SILT</b> , some clay, little fine gravel, few shale fragments, partly similar to severely weathered, very-weak shale, damp.	611.4	11	3	26	100	SS-5	3.5	-	-	-	-	-	-	-	18	A-6b (V)		
		12	7	11														
		13	5	12	43	100	SS-6	3.0-3.5	-	-	-	-	-	-	-	15	A-6b (V)	
		14	5	18														
Hard gray mottled with dark-gray <b>SANDY SILT</b> , some clay, little fine gravel, few shale fragments, partly similar to severely weathered, very-weak shale, damp.	611.4	15	33	-	100	SS-7	4.5+	-	-	-	-	-	-	-	17	A-4a (V)		
		16	33	50-4"														
		17	23	33	-	100	SS-8	4.5+	-	-	-	-	-	-	-	12	A-4a (V)	
Hard gray mottled with dark-gray <b>SANDY SILT</b> , some clay, little fine gravel, few shale fragments, partly similar to severely weathered, very-weak shale, damp.	611.4	18	23	36	-	100	SS-9	4.5+	13	11	11	39	26	25	16	9	15	A-4a (6)
		19	23	50-5"														
		20	23	36	-	100	SS-9	4.5+	13	11	11	39	26	25	16	9	15	A-4a (6)
		21	23	36	-	100	SS-9	4.5+	13	11	11	39	26	25	16	9	15	A-4a (6)
		22	23	36	-	100	SS-9	4.5+	13	11	11	39	26	25	16	9	15	A-4a (6)
		23	23	36	-	100	SS-9	4.5+	13	11	11	39	26	25	16	9	15	A-4a (6)

EOB 50-0" / - / 0

NOTES:  
- Groundwater noted at 4.0'.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

