



INNOVATIVE IDEAS  
EXCEPTIONAL DESIGN  
UNMATCHED CLIENT SERVICE

August 25, 2020

Peter Narsavage, P.E.  
E.L. Robinson Engineering (ELR)  
950 Goodale Boulevard, Suite 180  
Grandview Heights, OH 43212

**RE:** Subsurface Exploration Data Report  
SUM 76/77 Phase III

Dear Mr. Narsavage

DLZ American Drilling has completed the drilling and laboratory testing of soils from subsurface exploration of SUM 76/77. A plan of borings, boring summary sheet, pavement core photos, boring logs, grain size information, and GB-1 summary are attached. A copy of the gINT file is attached via email.

If you have any questions regarding the information provided, do not hesitate to contact us.

Sincerely,

Barry K. Wong, P.E.  
Vice President

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# ATTACHMENTS

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- I. Table of Borings
- II. Plan/Survey Data
- III. Pavement Core Photos
- IV. Boring Logs
- V. Grain Size Reports
- VI. Sulfate Report
- VII. GB-1 Subgrade Analysis Summary Table

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# TABLE OF BORINGS

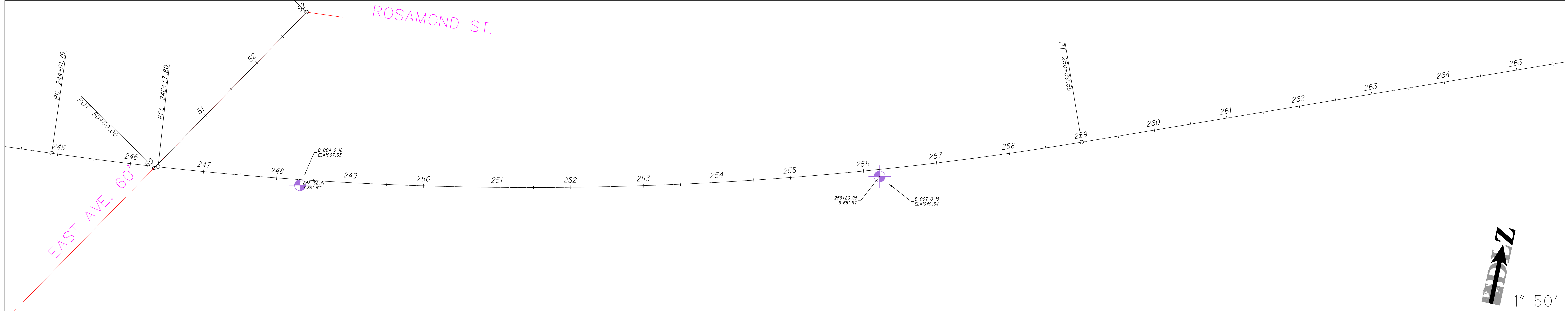
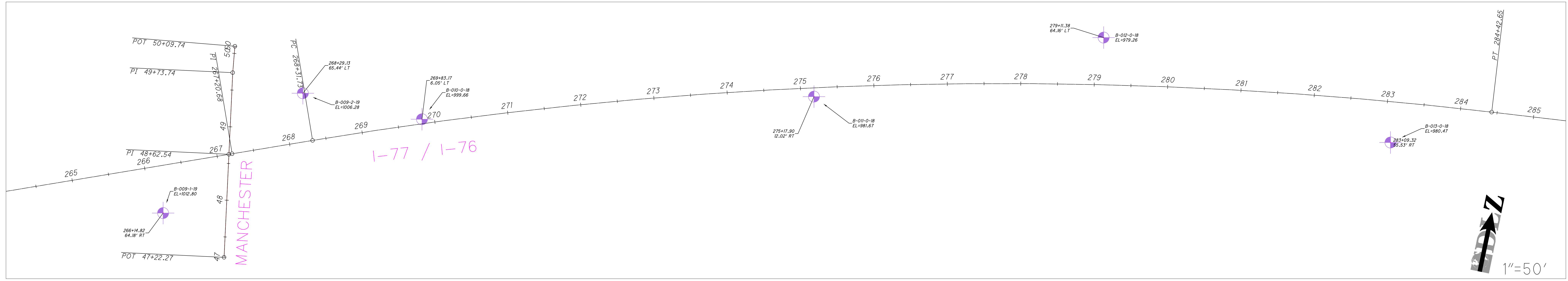
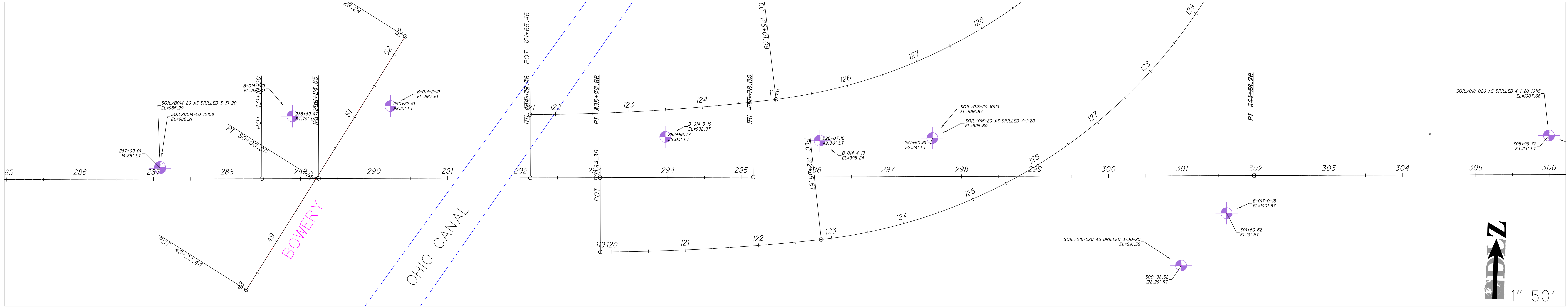
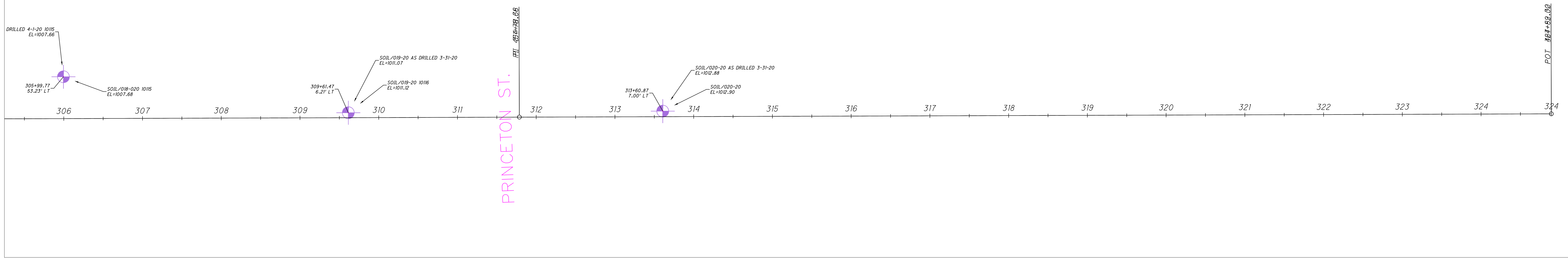
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Pavement Core #	Type	Road Name	Direction	Location	Estimated Depth (Feet)
P-002-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Outside Shoulder of S.R. 8	10
P-004-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Outside Lane of S.R. 8	10
P-005-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Inside Lane of S.R. 8	10
P-007-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Inside Shoulder of S.R. 8	10
P-010-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Outside Shoulder of S.R. 8	10
P-014-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Outside Lane of S.R. 8	10
P-015-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Inside Lane of S.R. 8	10
P-017-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Inside Shoulder of S.R. 8	10
P-019-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Outside Shoulder of S.R. 8	10
P-025-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Outside Shoulder of S.R. 8	10
P-027-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Outside Shoulder of S.R. 8	10
P-030-0-20	Pavement Core	S.R. 8 - Ramp	Northbound	Inside Shoulder of S.R. 8 Ramp	10
P-033-0-20	Pavement Core	S.R. 8 - Ramp	Northbound	Inside Lane of S.R. 8 Ramp	10
P-001-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Inside Shoulder of S.R. 8	10
P-003-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Outside Lane of S.R. 8	10
P-006-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Outside Shoulder of S.R. 8	10
P-008-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Inside Shoulder of S.R. 8	10
P-009-0-20	Pavement Core	S.R. 8 - Ramp	Southbound	Outside Shoulder of S.R. 8 Ramp	10
P-011-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Inside Lane of S.R. 8	10
P-012-0-20	Pavement Core	S.R. 8 - Ramp	Southbound	Outside Lane of S.R. 8 Ramp	10
P-013-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Gore Area of S.R. 8	10
P-016-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Outside Shoulder of S.R. 8	10
P-018-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Inside Shoulder of S.R. 8	10
P-020-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Outside Shoulder of S.R. 8	10
P-022-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Outside Lane of S.R. 8	10
P-024-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Outside Shoulder of S.R. 8	10
P-028-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Outside Shoulder of S.R. 8 Ramp	10
P-029-0-20	Pavement Core	S.R. 8 - Ramp	Southbound	Outside Lane of S.R. 8 Ramp	10
P-032-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Outside Shoulder of S.R. 8	10
Boring #	Boring Type	Road Name	Direction	Location	Estimated Depth (Feet)
E3-001-0-20	Retaining Wall	S.R. 8	Southbound	Existing Slope	50
E3-002-0-20	Retaining Wall	S.R. 8	Southbound	Existing Slope	50
E3-003-0-20	Retaining Wall	S.R. 8	Southbound	Existing Slope	50
E3-004-0-20	Retaining Wall	S.R. 8	Southbound	Existing Slope	50
E3-005-0-20	Retaining Wall	I.R. 77 - Ramp S8	Southbound	Existing Slope	50
E3-006-0-20	Retaining Wall	I.R. 77 - Ramp S8	Southbound	Existing Slope	50
E3-007-0-20	Retaining Wall	I.R. 77 - Ramp S8	Southbound	Existing Slope	50
E3-008-0-20	Retaining Wall	I.R. 77 - Ramp S8	Southbound	Existing Slope	50
B2-001-0-20	Cut Section	S.R. 8	Southbound	Existing Top of Slope	30

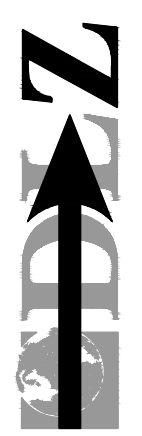
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# PLAN/SURVEY DATA

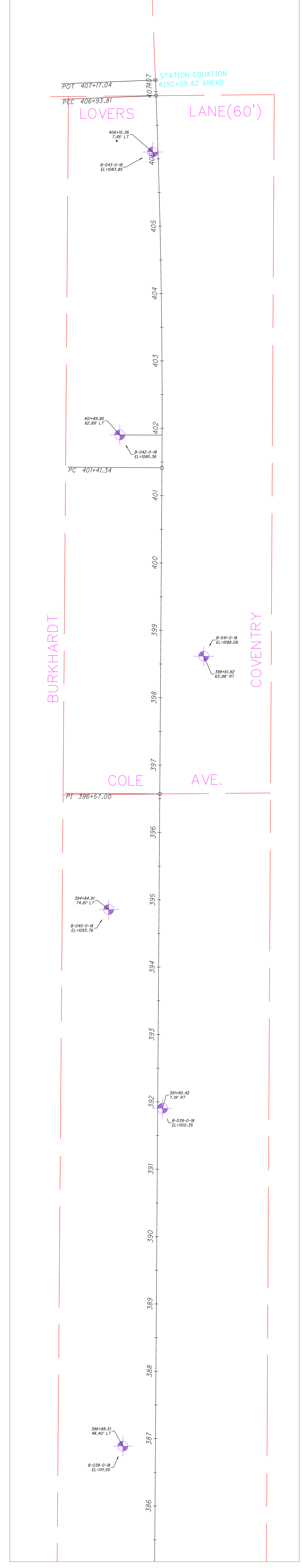
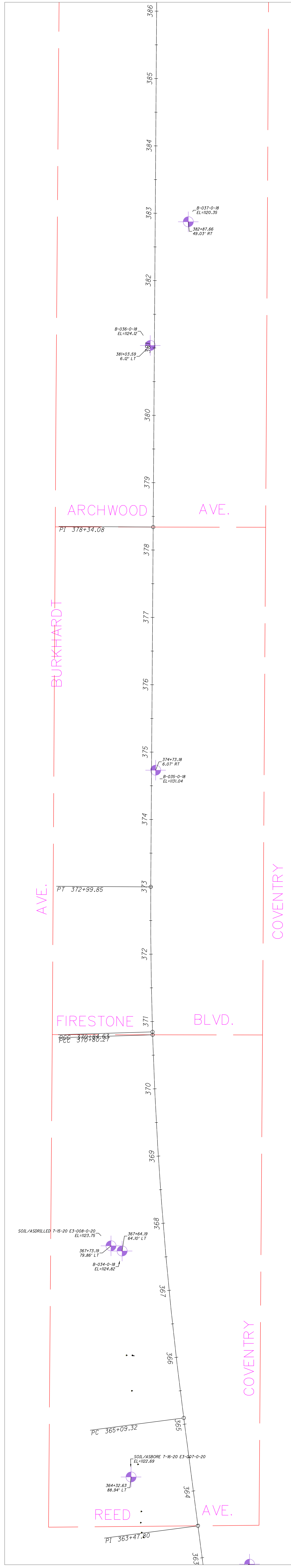
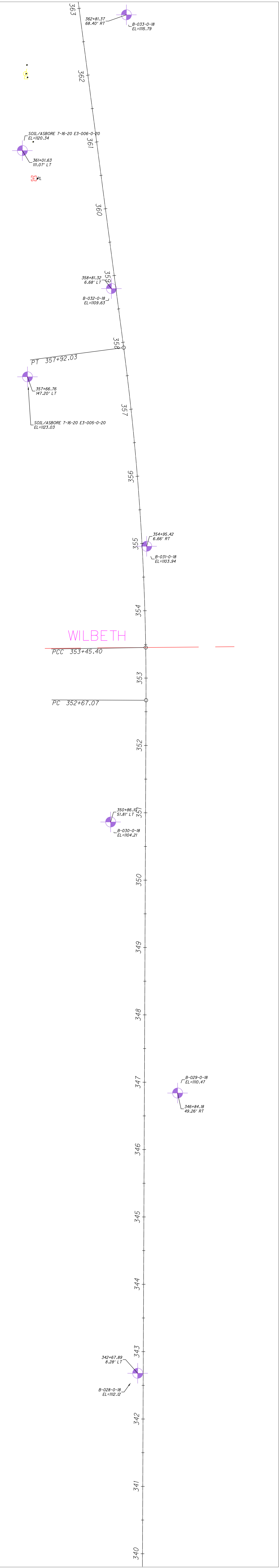
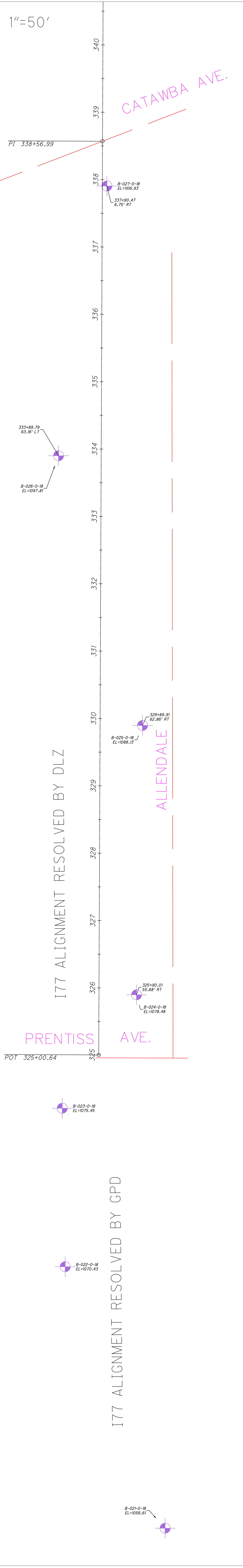
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1"=50'



STATION EQUATION  
4292+09.62 AHEAD

LOVERS LANE(60')

ARCHWOOD AVE.

BURKHARDT AVE.

FIRESTONE BLVD.

REED AVE.

COLE AVE.

I77 ALIGNMENT RESOLVED BY DLZ

I77 ALIGNMENT RESOLVED BY GPD

CATAWBA AVE.

ALLENDALE

PRENTISS AVE.

WILBETH

COVENTRY

BURKHARDT

COVENTRY





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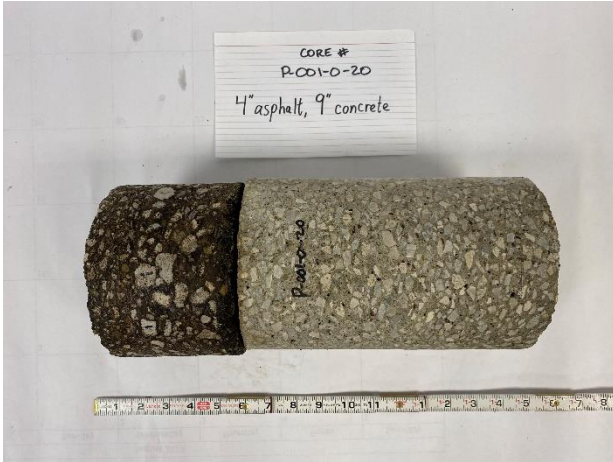
# PAVEMENT CORE PHOTOS

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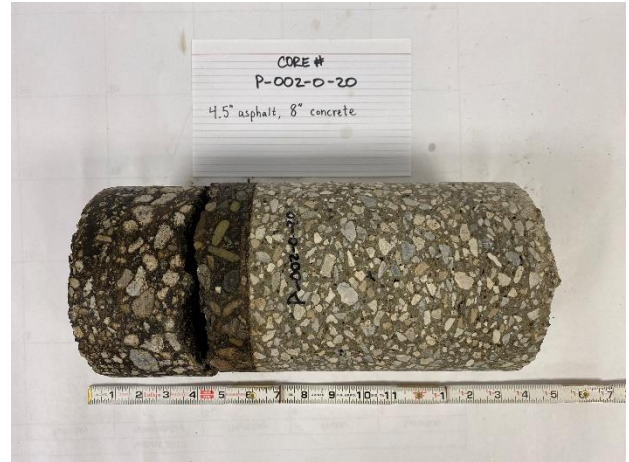
**Phase 3 Retaining Wall SR 8 Job # 1822-1016.00**

<b>Boring</b>	<b>Paving Thickness</b>	<b>Boring</b>	<b>Paving Thickness</b>
<b>P-001-0-20</b>	4" Asphalt / 9" Concrete	<b>P-018-0-20</b>	3" Asphalt / 4.5" Concrete
<b>P-002-0-20</b>	4.5" Asphalt / 8" Concrete	<b>P-019-0-20</b>	13.5" Asphalt
<b>P-003-0-20</b>	6.75" Asphalt / 8.5" Concrete	<b>P-020-0-20</b>	11.5" Asphalt
<b>P-004-0-20</b>	5.75" Asphalt / 8.5" Concrete	<b>P-022-0-20</b>	13.75" Asphalt
<b>P-005-0-20</b>	5" Asphalt / 9.25" Concrete	<b>P-024-0-20</b>	12" Asphalt
<b>P-006-0-20</b>	4.75" Asphalt / 9.25 Concrete	<b>P-025-0-20</b>	11.75" Asphalt
<b>P-007-0-20</b>	4" Asphalt / 10.75" Concrete	<b>P-027-0-20</b>	12.25" Asphalt
<b>P-008-0-20</b>	4" Asphalt	<b>P-028-0-20</b>	13.75" Asphalt
<b>P-009-0-20</b>	8.75" Asphalt	<b>P-029-0-20</b>	13" Asphalt
<b>P-010-0-20</b>	3.25" Asphalt / 9.5" Concrete	<b>P-030-0-20</b>	13.25" Asphalt
<b>P-011-0-20</b>	4" Asphalt	<b>P-032-0-20</b>	12.75" Asphalt
<b>P-012-0-20</b>	5.25" Asphalt / 8.5" Concrete	<b>P-033-0-20</b>	9" Concrete
<b>P-013-0-20</b>	2.25" Asphalt / 8.75" Concrete		
<b>P-014-0-20</b>	3.5" Asphalt / 8.5" Concrete		
<b>P-015-0-20</b>	3.75" Asphalt / 8.5" Concrete		
<b>P-016-0-20</b>	4" Asphalt / 9.5" Concrete		
<b>P-017-0-20</b>	4.75" Asphalt / 8.25" Concrete		

Phase 3 Retaining Wall SR 8 Job # 1822-1016.00



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-001-0-20  
Asphalt: 4"  
Concrete: 9"  
Date Cored: 06/24/2020  
Date Drilled: 06/24/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-002-0-20  
Asphalt: 4.5"  
Concrete: 8"  
Date Cored: 06/25/2020  
Date Drilled: 06/25/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-003-0-20  
Asphalt: 6.75"  
Concrete: 8.5"  
Date Cored: 06/24/2020  
Date Drilled: 06/25/2020

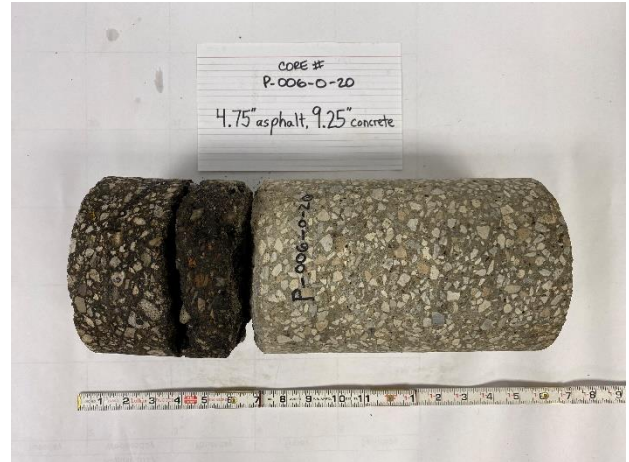


Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-004-0-20  
Asphalt: 5.75"  
Concrete: 8.5"  
Date Cored: 06/25/2020  
Date Drilled: 06/25/2020

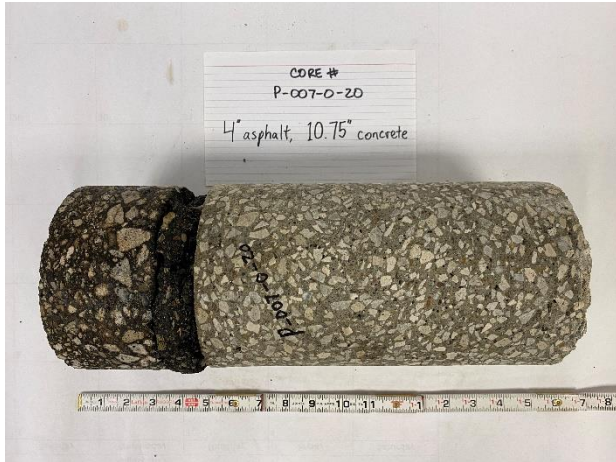
**Phase 3 Retaining Wall SR 8 Job # 1822-1016.00**



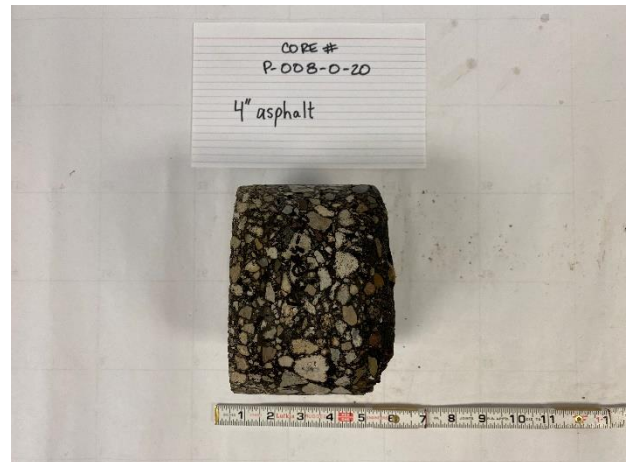
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Project Number: 1822-1016-00  
Boring: P-005-0-20  
Asphalt: 5"  
Concrete: 9.25"  
Date Cored: 06/26/2020  
Date Drilled: 06/26/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-006-0-20  
Asphalt: 4.75"  
Concrete: 9.25"  
Date Cored: 06/24/2020  
Date Drilled: 06/24/2020



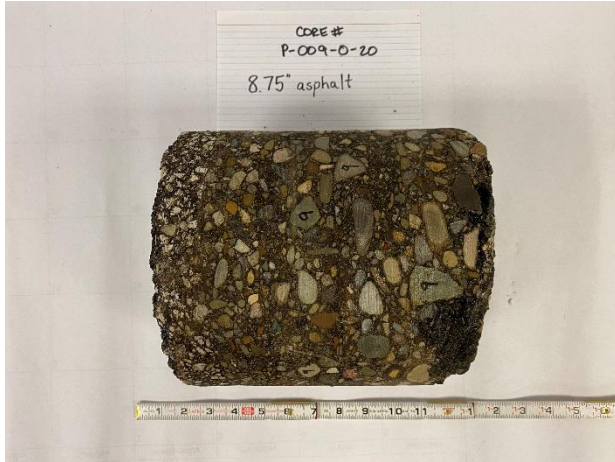
Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-007-0-20  
Asphalt: 4"  
Concrete: 10.75"  
Date Cored: 06/26/2020  
Date Drilled: 06/26/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-008-0-20  
Asphalt: 4"  
Concrete:  
Date Cored: 06/24/2020  
Date Drilled: 06/24/2020



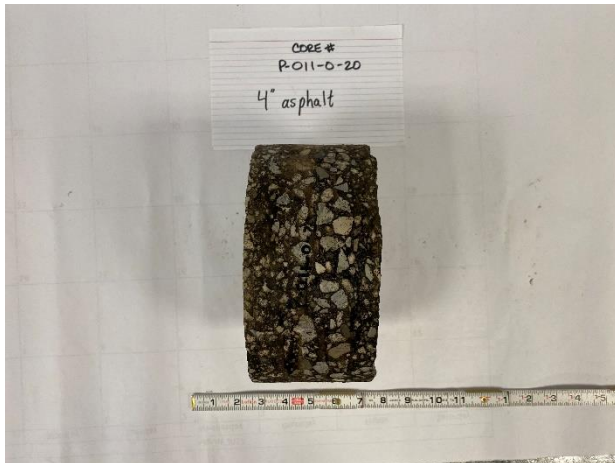
Phase 3 Retaining Wall SR 8 Job # 1822-1016.00



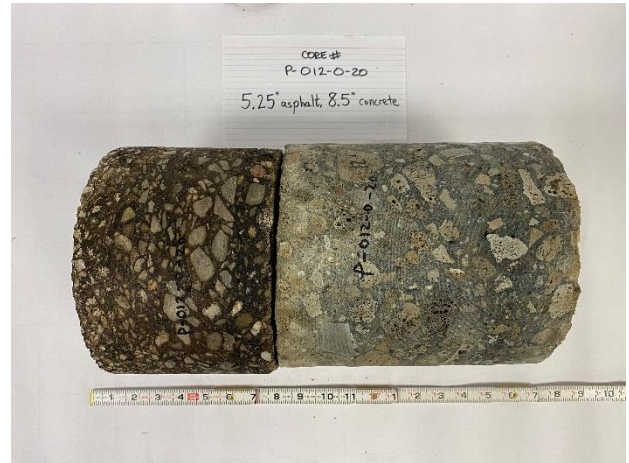
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Project Number: 1822-1016-00  
Boring: P-009-0-20  
Asphalt: 8.75"  
Concrete:  
Date Cored: 06/23/2020  
Date Drilled: 06/23/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-010-0-20  
Asphalt: 3.25"  
Concrete: 9.5"  
Date Cored: 06/25/2020  
Date Drilled: 06/25/2020



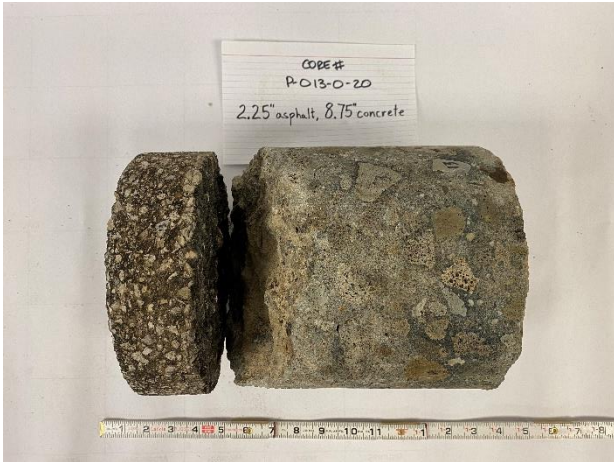
Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-011-0-20  
Asphalt: 4"  
Concrete:  
Date Cored: 06/24/2020  
Date Drilled: 06/24/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-012-0-20  
Asphalt: 5.25"  
Concrete: 8.5"  
Date Cored: 06/23/2020  
Date Drilled: 06/23/2020



**Phase 3 Retaining Wall SR 8 Job # 1822-1016.00**



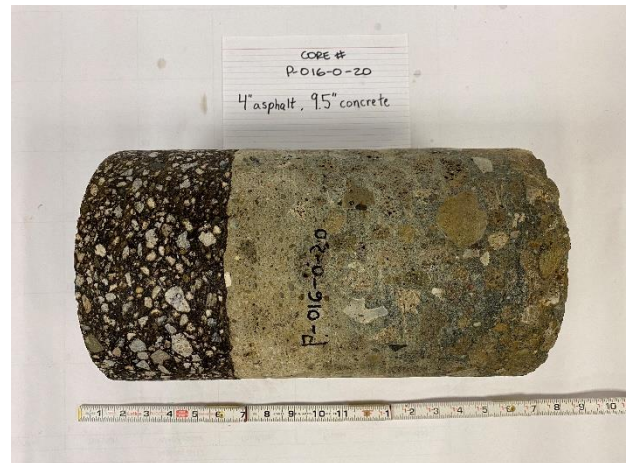
Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-013-0-20  
Asphalt: 2.25"  
Concrete: 8.75"  
Date Cored: 06/24/2020  
Date Drilled: 06/24/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-014-0-20  
Asphalt: 3.5"  
Concrete: 8.5"  
Date Cored: 06/25/2020  
Date Drilled: 06/25/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-015-0-20  
Asphalt: 3.75"  
Concrete: 8.5"  
Date Cored: 06/30/2020  
Date Drilled: 06/30/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-016-0-20  
Asphalt: 4"  
Concrete: 9.5"  
Date Cored: 06/23/2020  
Date Drilled: 06/23/2020

Phase 3 Retaining Wall SR 8 Job # 1822-1016.00



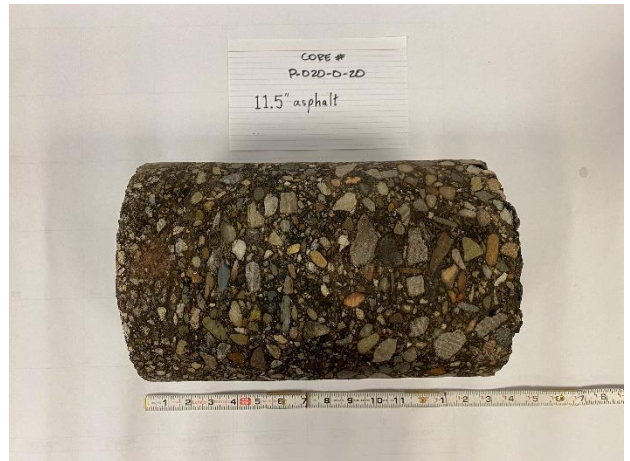
Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-017-0-20  
Asphalt: 4.75"  
Concrete: 8.25"  
Date Cored: 06/30/2020  
Date Drilled: 06/30/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-018-0-20  
Asphalt: 3"  
Concrete: 4.5"  
Date Cored: 06/24/2020  
Date Drilled: 06/24/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-019-0-20  
Asphalt: 13.5"  
Concrete:  
Date Cored: 06/25/2020  
Date Drilled: 06/25/2020



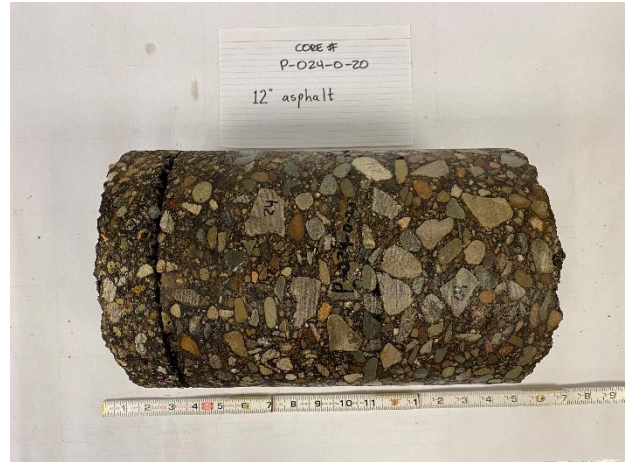
Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-020-0-20  
Asphalt: 11.5"  
Concrete:  
Date Cored: 06/23/2020  
Date Drilled: 06/23/2020



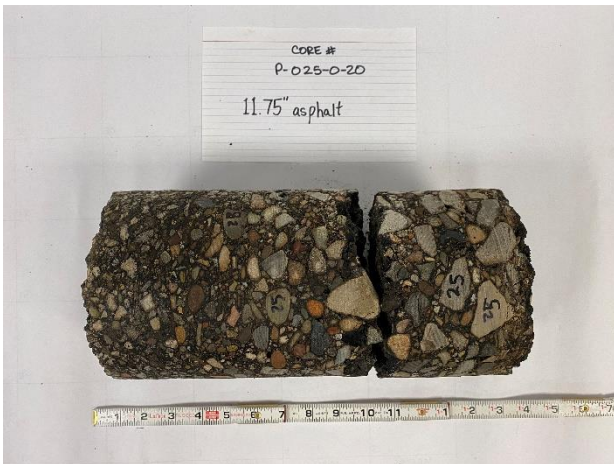
**Phase 3 Retaining Wall SR 8 Job # 1822-1016.00**



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-022-0-20  
Asphalt: 13.75"  
Concrete:  
Date Cored: 06/23/2020  
Date Drilled: 06/23/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-024-0-20  
Asphalt: 12"  
Concrete:  
Date Cored: 06/23/2020  
Date Drilled: 06/23/2020

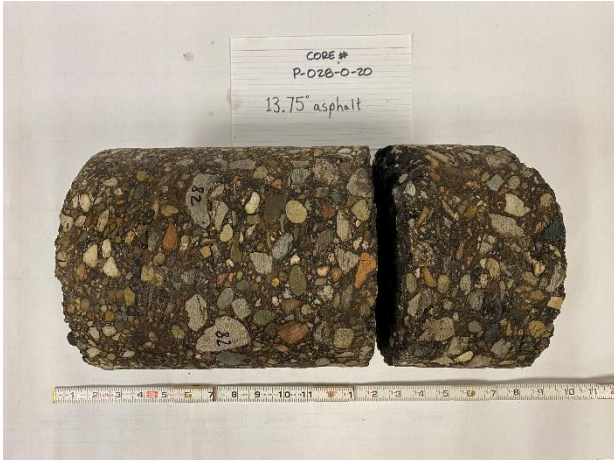


Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-025-0-20  
Asphalt: 11.75"  
Concrete:  
Date Cored: 06/25/2020  
Date Drilled: 06/25/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-027-0-20  
Asphalt: 12.25"  
Concrete:  
Date Cored: 06/30/2020  
Date Drilled: 07/01/2020

**Phase 3 Retaining Wall SR 8 Job # 1822-1016.00**



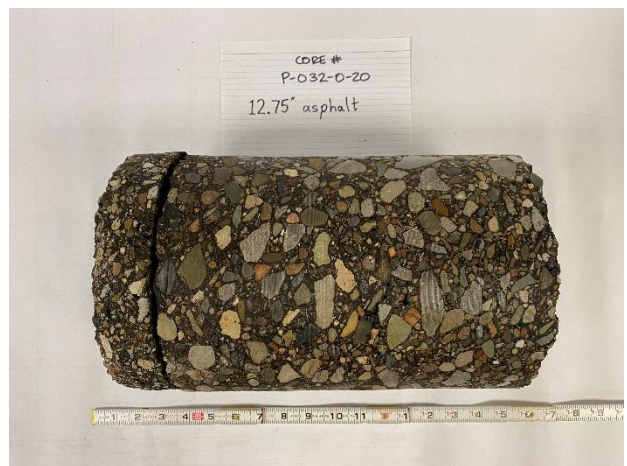
Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-028-0-20  
Asphalt: 13.75"  
Concrete:  
Date Cored: 06/22/2020  
Date Drilled: 06/23/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-029-0-20  
Asphalt: 13"  
Concrete:  
Date Cored: 06/22/2020  
Date Drilled: 06/22/2020

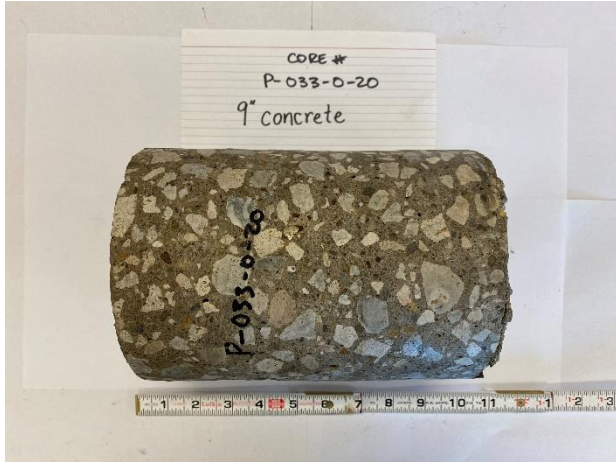


Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-030-0-20  
Asphalt: 13.25"  
Concrete:  
Date Cored: 07/01/2020  
Date Drilled: 07/01/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-032-0-20  
Asphalt: 12.75"  
Concrete:  
Date Cored: 06/22/2020  
Date Drilled: 06/22/2020

**Phase 3 Retaining Wall SR 8 Job # 1822-1016.00**



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8

Project Number: 1822-1016-00

Boring: P-033-0-20

Asphalt:

Concrete: 9"

Date Cored: 07/01/2020

Date Drilled: 07/01/2020



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# BORING LOGS

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STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:38 - X:\SHARED\DISCIPLINE\GEO\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / BEHR</u>	DRILL RIG: <u>'18 CME 55-TATV-265</u>	STATION / OFFSET: <u>333+51, 52' LT.</u>	EXPLORATION ID <u>B2-001-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / MORGAL</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 2
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>4/26/18</u>	ELEVATION: <u>1064.1 (MSL)</u> EOB: <u>40.0 ft.</u>	
START: <u>7/15/20</u> END: <u>7/15/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>511889.9690 N, 2242981.6090 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
<b>PAVEMENT AND BASE, 8" ASPHALT 4" GRANULAR BASE</b>	1064.1																		
STIFF, BROWN, <b>SANDY SILT</b> , LITTLE FINE SAND, TRACE GRAVEL, DAMP	1063.1	1	5																
		2	9	29	89	SS-1	-	8	8	23	37	24	25	17	8	11	A-4a (5)	<100	
	1060.6	3	10																
MEDIUM DENSE, LIGHT TAN BROWN, <b>FINE SAND</b> , SOME GRAVEL, LITTLE SILT, DAMP		4	2																
		5	8	32	78	SS-2	-	-	-	-	-	-	-	-	-	5	A-3 (V)	-	
		6	13																
		7	2																
	1055.6	8	4	9	33	SS-3	-	-	-	-	-	-	-	-	-	13	A-3 (V)	-	
MEDIUM STIFF, BROWN, <b>SANDY SILT</b> , LITTLE FINE SAND, TRACE GRAVEL, SAND LENSES, DAMP		9	3																
		10	4	14	83	SS-4	-	4	13	31	27	25	24	14	10	12	A-4a (3)	-	
		11	5																
		12	2																
	1050.6	13	3	15	72	SS-5	-	-	-	-	-	-	-	-	-	10	A-4a (V)	-	
MEDIUM STIFF, BROWN, <b>SANDY SILT</b> , LITTLE TO SOME FINE SAND, DAMP		14	4																
		15	6	20	56	SS-6	-	5	8	30	42	15	22	16	6	14	A-4a (4)	-	
		16	7																
STIFF, BROWN, <b>SILT AND CLAY</b> , TRACE SAND, TRACE GRAVEL, QUARTZITE FRAGMENTS, DAMP	1048.1	17	4	29	94	SS-7	-	6	3	12	51	28	30	18	12	18	A-6a (9)	-	
		18	10																
		19	9																
VERY STIFF, BROWN, <b>SILT AND CLAY</b> , LITTLE GRAVEL, TRACE SAND, DAMP	1045.6	20	3	12	83	SS-8	-	6	7	20	40	27	29	18	11	14	A-6a (7)	-	
		21	4																
		22	4	15	83	SS-9	-	-	-	-	-	-	-	-	-	17	A-6a (V)	-	
STIFF, BROWN, <b>SILT AND CLAY</b> , TRACE SAND, CONTAINS ROOT HAIRS, DAMP	1043.1	23	3																
		24	4																
		25	6	21	72	SS-10	-	-	-	-	-	-	-	-	-	11	A-6a (V)	-	
STIFF, GREENISH GREY, <b>SILT AND CLAY</b> , CONTAINS SHALE FRAGMENTS AND GRAVEL, DAMP	1040.6	26	7																
		27	7																
		28	3	12	72	SS-11	-	-	-	-	-	-	-	-	-	16	A-6a (V)	-	
		29	3	5															
	1035.6	30	50/4"	-	100	SS-12	-	-	-	-	-	-	-	-	-	10	UCF (V)	-	

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:38 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PID: 102329		SFN: _____		PROJECT: INTERSTATE 76/77		STATION / OFFSET: 333+51, 52' LT.		START: 7/15/20		END: 7/15/20		PG 2 OF 2		B2-001-0-20							
MATERIAL DESCRIPTION AND NOTES			ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
										GR	CS	FS	SI	CL	LL	PL	PI				
VERY DENSE, BLACK, <b>UNCONTROLLED FILL</b> , CONTAINS COAL, SLAG, BRICK, DARK GREY CLAY, DAMP (continued)			1034.1																		
			1033.1	31	3																
MEDIUM DENSE, BLACK, <b>COARSE AND FINE SAND</b> , LITTLE SILT, TRACE GRAVEL, DAMP TO MOIST			1031.0	32	4	4	12	83	SS-13	-	11	23	56	4	6	-	-	-	18	A-3a (V)	-
				33																	
			1025.6	34	3	4	12	61	SS-14	-	-	-	-	-	-	-	-	-	16	A-3a (V)	-
				35	4	4															
VERY DENSE, BLACK, <b>UNCONTROLLED FILL</b> , CONTAINS SLAG, DAMP			1024.1	36	2	3	12	56	SS-15	-	-	-	-	-	-	-	-	-	18	A-3a (V)	-
				37	5	5															
				38																	
				39	1	3	-	25	SS-16	-	-	-	-	-	-	-	-	18	UCF (V)	-	
				40	50/0																
				EOB																	

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; TREMIED BENTONITE GROUT



STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:38 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PID: 102329    SFN: \_\_\_\_\_    PROJECT: INTERSTATE 76/77    STATION / OFFSET: 4327+24, 129' LT.    START: 7/13/20    END: 7/13/20    PG 2 OF 2    E3-001-0-20

MATERIAL DESCRIPTION AND NOTES	ELEV. 1059.6	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED		
								GR	CS	FS	SI	CL	LL	PL	PI						
<b>SHALE</b> , GREY TO DARK GREY, DECOMPOSED TO HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG, FINE GRAINED, LAMINATED TO VERY THIN BEDDED. <i>(continued)</i>		31	50/5"	-	100	SS-13	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
		32																			
		33																			
		34		50/3"	-	100	SS-14	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		35																			
		36		50/5"	-	100	SS-15	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		37																			
		38																			
		39		50/2"	-	100	SS-16	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		40																			
	41		50/3"	-	100	SS-17	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
	42																				
	43																				
	44		50/2"	-	100	SS-18	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
	45																				
	46		50/3"	-	100	SS-19	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
	47																				
	48																				
	49		50/1"	-	100	SS-20	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
	1039.6	EOB																			

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT



STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:39 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / BEHR</u>	DRILL RIG: <u>'18 CME 55-TATV-265</u>	STATION / OFFSET: <u>4328+42, 112' LT.</u>	EXPLORATION ID <u>E3-002-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / MORGAL</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 2
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>4/26/18</u>	ELEVATION: <u>1091.7 (MSL)</u> EOB: <u>50.0 ft.</u>	
START: <u>7/13/20</u> END: <u>7/13/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>510818.3630 N, 2242925.2870 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (G)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
<b>UNCONTROLLED FILL</b> , 1" TO 3" TOPSOIL, SURFACE MATERIALS CONSISTED OF ORGANIC MATERIAL AND TRASH. SITE CLEARED BY TRACKHOE PRIOR TO RIG ARRIVAL.  VERY STIFF, LIGHT BROWN, <b>SILT AND CLAY</b> , TRACE SAND, CONTAINS ROOT HAIRS, DAMP	1091.7																		
	1090.7	1	6																
		2	10 15	38	94	SS-1	-	7	18	9	34	32	30	17	13	12	A-6a (7)	<100	
		3																	
		4	6																
<b>SANDSTONE</b> , LIGHT BROWN, HIGHLY WEATHERED, WEAK TO MODERATELY STRONG, FINE GRAINED, THIN BEDDED, FRIABLE.	1085.7	TR																	
		5	14 25	59	83	SS-2	-	12	7	17	33	31	29	17	12	11	A-6a (7)	-	
		6	6																
		7	11 16	41	67	SS-3	-	-	-	-	-	-	-	-	-	6	Rock (V)	-	
		8																	
		9	14 15	41	100	SS-4	-	71	4	19	-	6	-	-	-	6	Rock (V)	-	
		10																	
		11	5																
		12	5 3	12	61	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		13																	
		14	9 11 48	89	72	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
	<b>SHALE</b> , GREY, HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO THIN BEDDED.	1075.7																	
		16	14 50/5"	-	100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		17																	
		18																	
		19	35 50/3"	-	100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		20																	
		21	50/5"	-	100	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		22																	
		23																	
		24	50/5"	-	100	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		25																	
		26	50/4"	-	75	SS-11	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
	27																		
	28																		
	29	50/3"	-	100	SS-12	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:39 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76\_77\_EL ROBINSON (8-27-2020 -

PID: 102329    SFN: \_\_\_\_\_    PROJECT: INTERSTATE 76/77    STATION / OFFSET: 4328+42, 112' LT.    START: 7/13/20    END: 7/13/20    PG 2 OF 2    E3-002-0-20

MATERIAL DESCRIPTION AND NOTES	ELEV. 1061.7	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI					
SHALE, GREY, HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO THIN BEDDED. (continued)		31	50/2"	-	100	SS-13	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		32																		
		33																		
		34	50/3"	-	100	SS-14	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-
		35																		
		36	50/2"	-	100	SS-15	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-
		37																		
		38																		
		39	50/3"	-	100	SS-16	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-
		40																		
	41	50/3"	-	100	SS-17	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
	42																			
	43																			
	44	50/3"	-	33	SS-18	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
	45																			
	46	50/2"	-	50	SS-19	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
	47																			
	48																			
	49	50/4"	-	100	SS-20	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
	1041.7	EOB																		

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:40 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / BEHR</u>	DRILL RIG: <u>'18 CME 55-TATV-265</u>	STATION / OFFSET: <u>4329+57, 94' LT.</u>	EXPLORATION ID <u>E3-003-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / MORGAL</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 2
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>4/26/18</u>	ELEVATION: <u>1093.2 (MSL)</u> EOB: <u>50.0 ft.</u>	
START: <u>7/10/20</u> END: <u>7/10/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>510939.9690 N, 2242937.5330 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
<b>UNCONTROLLED FILL</b> , 1" TO 3" TOPSOIL, SURFACE MATERIALS CONSISTED OF ORGANIC MATERIAL AND TRASH. SITE CLEARED BY TRACKHOE PRIOR TO RIG ARRIVAL.  STIFF TO VERY STIFF, BROWN, <b>SANDY SILT</b> , TRACE SAND, CONTAINS ROOTHAIRS, DAMP	1093.2																		
	1092.2	1	6																
		2	12 17	44	89	SS-1	-	5	7	18	49	21	24	15	9	8	A-4a (7)	220	
		3																	
		4	4																
<b>SANDSTONE</b> , LIGHT BROWN, MODERATELY TO HIGHLY WEATHERED, WEAK TO MODERATELY STRONG, FINE TO MEDIUM GRAINED, VERY THIN TO THIN BEDDED, FRIABLE.	1087.2	5	5 16	32	83	SS-2	-	-	-	-	-	-	-	-	-	14	A-4a (V)	-	
		6	8																
		7	21 22	65	78	SS-3	-	54	4	26	-	16	-	-	-	6	Rock (V)	-	
		8																	
		9	30 35 26	92	94	SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	-	
		10																	
		11	50/5"	-	100	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		12																	
		13																	
		14	50/5"	-	60	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		15																	
	<b>SHALE</b> , GREY, MODERATELY TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO THIN BEDDED.	1077.2	16	17 20 24	66	78	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	-
		17																	
		18																	
		19	21 21 30	77	94	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		20																	
		21	50/5"	-	40	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		22																	
		23																	
		24	50/4"	-	100	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		25																	
		26	50/5"	-	60	SS-11	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		27																	
		28																	
		29	50/2"	-	100	SS-12	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:40 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PID: 102329    SFN: \_\_\_\_\_    PROJECT: INTERSTATE 76/77    STATION / OFFSET: 4329+57, 94' LT.    START: 7/10/20    END: 7/10/20    PG 2 OF 2    E3-003-0-20

MATERIAL DESCRIPTION AND NOTES	ELEV. 1063.2	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI					
SHALE, GREY, MODERATELY TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO THIN BEDDED. (continued)	1063.2	31	50/2"	-	100	SS-13	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
		32																		
		33																		
		34	50/2"	-	100	SS-14	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		35																		
		36	37	50/4"	-	80	SS-15	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		37																		
		38																		
		39	36	50/5"	-	100	SS-16	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		40																		
41	50/3"	-	67	SS-17	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-			
42																				
43																				
44	50/5"	-	80	SS-18	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-			
45																				
46	50/1"	-	100	SS-19	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-			
47																				
48																				
49	50/1"	-	100	SS-20	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-			
	1043.2	EOB																		

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT





STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:40 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PID: 102329		SFN: _____		PROJECT: INTERSTATE 76/77		STATION / OFFSET: 4330+72, 89' LT.		START: 7/9/20		END: 7/9/20		PG 2 OF 2		E3-004-0-20								
MATERIAL DESCRIPTION AND NOTES			ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED	
										GR	CS	FS	SI	CL	LL	PL	PI					
<b>SHALE</b> , GREYISH BROWN, DECOMPOSED TO HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG, FINE GRAINED, THIN BEDDED; RQD 0%, REC 39%. <i>(continued)</i>			1068.3	31																		
				32																		
				33																		
				34																		
				35																		
<b>SHALE</b> , GREY, MODERATELY TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED.			1062.3	36	50/5"	-	100	SS-15	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
				37																		
				38																		
				39	50/3"	-	100	SS-16	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-
				40																		
				41	50/3"	-	67	SS-17	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-
				42																		
				43																		
				44	50/3"	-	67	SS-18	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-
				45																		
	46	50/3"	-	67	SS-19	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-			
	47																					
	48																					
	49	50/2"	-	100	SS-20	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-			
	1048.3																					
				EOB	50																	

NOTES: NONE  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:41 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / BEHR</u>	DRILL RIG: <u>'18 CME 55-TATV-265</u>	STATION / OFFSET: <u>357+67, 147' LT.</u>	EXPLORATION ID <u>E3-005-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / MORGAL</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 2
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>4/26/18</u>	ELEVATION: <u>1123.0 (MSL)</u> EOB: <u>50.0 ft.</u>	
START: <u>7/15/20</u> END: <u>7/15/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>502235.3890 N, 2242798.3070 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
UNCONTROLLED FILL, 0" TO 2" TOPSOIL, SITE CLEARED WITH TRACKHOE BEFORE DRILL RIG ARRIVAL. VERY STIFF, DARK GREYISH BROWN, <b>SILTY CLAY</b> , DAMP	1123.0																		
	1122.0	1	5																
VERY STIFF, DARK GREY, <b>SILT AND CLAY</b> , DAMP	1119.5	2	9 18	41	78	SS-1	-	0	0	5	49	46	38	22	16	14	A-6b (10)	200	
	1117.0	3	8																
SHALE, GREY, HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED.	1117.0	4	13 18	47	94	SS-2	-	0	5	7	51	37	38	25	13	15	A-6a (9)	-	
		5	11																
TR	1117.0	6	38 50/5"	-	82	SS-3	-	-	-	-	-	-	-	-	-	6	Rock (V)	-	
		7	13 39 50/4"	-	81	SS-4	-	-	-	-	-	-	-	-	-	8	Rock (V)	-	
TR	1117.0	8	17 12 50/4"	-	88	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		9	50/4"	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
TR	1117.0	10	41 50/4"	-	70	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		11	50/5"	-	60	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
TR	1117.0	12	50/5"	-	40	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		13	50/4"	-	50	SS-10	-	-	-	-	-	-	-	-	8	Rock (V)	-		
TR	1117.0	14	50/3"	-	33	SS-11	-	-	-	-	-	-	-	-	9	Rock (V)	-		
		15	50/3"	-	33	SS-12	-	-	-	-	-	-	-	-	4	Rock (V)	-		

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:41 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76\_77 EL ROBINSON (8-27-2020 -

PID: 102329    SFN: \_\_\_\_\_    PROJECT: INTERSTATE 76/77    STATION / OFFSET: 357+67, 147' LT.    START: 7/15/20    END: 7/15/20    PG 2 OF 2    E3-005-0-20

MATERIAL DESCRIPTION AND NOTES	ELEV. 1093.0	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
SHALE, GREY, HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED. (continued)		31	50/2"	-	100	SS-13	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		32																	
		33																	
		34	50/5"	-	60	SS-14	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		35																	
		36	50/4"	-	75	SS-15	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		37																	
		38																	
		39	50/2"	-	50	SS-16	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		40																	
	41	50/2"	-	50	SS-17	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
	42																		
	43																		
	44	50/0"	-		SS-18	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
	45																		
	46	50/1"	-	100	SS-19	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
	47																		
	48																		
	49	50/1"	-	100	SS-20	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
	1073.0	EOB																	

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:41 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76\_77\_EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / BEHR</u>	DRILL RIG: <u>'18 CME 55-TATV-265</u>	STATION / OFFSET: <u>361+02, 111' LT.</u>	EXPLORATION ID <u>E3-006-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / MORGAL</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 2
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>4/26/18</u>	ELEVATION: <u>1120.3 (MSL)</u> EOB: <u>50.0 ft.</u>	
START: <u>7/16/20</u> END: <u>7/16/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>502570.2400 N, 2242794.9520 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
<b>SOD AND TOPSOIL</b> , 0" TO 2" TOPSOIL, SITE CLEARED WITH TRACKHOE BEFORE DRILL RIG ARRIVAL. VERY STIFF, DARK GREYISH BROWN, <b>SILTY CLAY</b> , DAMP	1120.3																		
	1119.3	1	10																
		2	11 16	41	72	SS-1	-	1	6	8	40	45	38	21	17	16	A-6b (11)	310	
		3																	
		4	13 14 17	47	94	SS-2	-	1	3	6	50	40	38	21	17	12	A-6b (11)	-	
<b>SHALE</b> , DARK GREY, DECOMPOSED WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED.	1114.3	TR																	
		6	13 16 16	48	78	SS-3	-	-	-	-	-	-	-	-	-	12	Rock (V)	-	
<b>SHALE</b> , GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK TO WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED.	1111.8																		
		8	50/5"	-	20	SS-4	-	-	-	-	-	-	-	-	-		Rock (V)	-	
		9																	
		11	4 22 50/4"	-	88	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		12																	
<b>SHALE</b> , GREY, DECOMPOSED TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED.	1106.8																		
		13																	
		14	39 50/3"	-	100	SS-6	-	-	-	-	-	-	-	-	-		Rock (V)	-	
		15																	
		16	29 50/5"	-	82	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		17																	
		18																	
		19	50/4"	-	100	SS-8	-	-	-	-	-	-	-	-	-	11	Rock (V)	-	
		20																	
		21	31 50/5"	-	91	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		22																	
		23	50/5"	-	80	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
	24																		
	25																		
	26	50/4"	-	50	SS-11	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
	27																		
	28																		
	29	50/5"	-	60	SS-12	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:41 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PID: 102329    SFN: \_\_\_\_\_    PROJECT: INTERSTATE 76/77    STATION / OFFSET: 361+02, 111' LT.    START: 7/16/20    END: 7/16/20    PG 2 OF 2    E3-006-0-20

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
SHALE, GREY, DECOMPOSED TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED. (continued)	1090.3	31	50/5"	-	100	SS-13	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-
		32																	
		33																	
		34		50/5"	-	80	SS-14	-	-	-	-	-	-	-	-	-	-	Rock (V)	-
		35																	
		36		50/3"	-	67	SS-15	-	-	-	-	-	-	-	-	-	-	Rock (V)	-
		37																	
		38																	
		39		50/5"	-	80	SS-16	-	-	-	-	-	-	-	-	-	-	Rock (V)	-
		40																	
	41		50/3"	-	100	SS-17	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
	42																		
	43																		
	44		50/2"	-	50	SS-18	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
	45																		
	46		50/3"	-	100	SS-19	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
	47																		
	48																		
	49		50/3"	-	100	SS-20	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
	1070.3	50																	

W 1072.7

EOB

NOTES: NONE  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:42 - X:ISHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00-176-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / BEHR</u>	DRILL RIG: <u>'18 CME 55-TATV-265</u>	STATION / OFFSET: <u>364+33, 89' LT.</u>	EXPLORATION ID <u>E3-007-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / MORGAL</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 2
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>4/26/18</u>	ELEVATION: <u>1122.7 (MSL)</u> EOB: <u>50.0 ft.</u>	
START: <u>7/16/20</u> END: <u>7/16/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>502906.2850 N, 2242768.0620 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED		
								GR	CS	FS	SI	CL	LL	PL	PI						
TOPSOIL, 0" TO 2" TOPSOIL, SITE CLEARED WITH TRACKHOE BEFORE DRILL RIG ARRIVAL. MEDIUM DENSE, BROWN, SANDY SILT, MOIST	1122.7	1	1																		
	1121.7	2	9	24	67	SS-1	-	11	4	44	12	29	23	16	7	20	A-4a (1)	260	< < < < > > > >		
VERY DENSE, BROWN AND GREY, SANDY SILT, CONTAINS SHALE FRAGMENTS, WET	1119.2	3																			
	1116.7	4	10 40 50/3"	-	100	SS-2	-	6	15	37	19	23	NP	NP	NP	41	A-4a (1)	-			
SHALE, GREY TO DARK GREY, MODERATELY TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED.	TR	5																			
		6	25 50/3"	-	78	SS-3	-	-	-	-	-	-	-	-	-	-	Rock (V)	-			
		7																			
		8																			
		9	25 48 50/0"	-	83	SS-4	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
		10																			
		11	20 25 47	108	78	SS-5	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
		12																			
		13																			
		14	30 36 49	128	72	SS-6	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
		15																			
		16	35 50/5"	-	100	SS-7	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
17																					
18																					
19	31 50/3"	-	67	SS-8	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-				
20																					
21	50/5"	-	80	SS-9	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-				
22																					
23																					
24	43 50/5"	-	45	SS-10	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-				
25																					
26	50/4"	-	75	SS-11	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-				
27																					
28																					
29	50/4"	-	100	SS-12	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-				

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:42 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PID: 102329    SFN: \_\_\_\_\_    PROJECT: INTERSTATE 76/77    STATION / OFFSET: 364+33, 89' LT.    START: 7/16/20    END: 7/16/20    PG 2 OF 2    E3-007-0-20

MATERIAL DESCRIPTION AND NOTES	ELEV. 1092.7	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI					
SHALE, GREY TO DARK GREY, MODERATELY TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED. (continued)		31	50/3"	-	67	SS-13	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		32																		
		33																		
		34	50/2"	-	100	SS-14	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		35																		
		36	50/2"	-	100	SS-15	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		37																		
		38																		
		39	50/3"	-	100	SS-16	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		40																		
	41	50/3"	-	100	SS-17	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
	42																			
	43																			
	44	50/2"	-	100	SS-18	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
	45																			
	46	50/5"	-	100	SS-19	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
	47																			
	48																			
	49	50/2"	-	100	SS-20	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
	1072.7	EOB																		

NOTES: NONE  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT



STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:43 - X:ISHARED\DISCIPLINE\GEO\GINT\_COLUMBUS\PROJECTS\1822-10\16-00\1-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / BEHR</u>	DRILL RIG: <u>'18 CME 55-TATV-265</u>	STATION / OFFSET: <u>367+73, 80' LT.</u>	EXPLORATION ID <u>E3-008-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / MORGAL</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 2
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>4/26/18</u>	ELEVATION: <u>1123.8 (MSL)</u> EOB: <u>50.0 ft.</u>	
START: <u>7/15/20</u> END: <u>7/15/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>503245.1290 N, 2242741.9430 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI					
<b>TOPSOIL, 4" TOPSOIL</b>	1123.8																			
<b>MEDIUM DENSE, DARK BROWNISH GREY, SANDY SILT, TRACE GRAVEL, CONTAINS SLAG, ROOT HAIRS, DAMP</b>	1122.8	1	6																	
		2	10 12	33	100	SS-1	-	18	10	20	33	19	27	17	10	13	A-4a (3)	660		
		3																		
		4	7																	
		5	9 10	29	100	SS-2	-	-	-	-	-	-	-	-	-	15	A-4a (V)	-		
		6	5																	
		7	6 5	17	100	SS-3	-	3	7	37	30	23	21	14	7	13	A-4a (4)	-		
<b>MEDIUM DENSE, GREENISH BROWN AND GREY, SILT AND CLAY, SOME GRAVEL, TRACE SAND, DAMP</b>	1115.3	8																		
		9	4																	
		10	5 7	18	100	SS-4	-	-	-	-	-	-	-	-	12	A-6a (V)	-			
<b>SHALE, GREY TO DARK GREY, DECOMPOSED TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED.</b>	1112.8	11	1																	
		12	38 44	123	100	SS-5	-	-	-	-	-	-	-	-	-	Rock (V)	-			
		13																		
		14	50/3"	-	67	SS-6	-	-	-	-	-	-	-	-	-	Rock (V)	-			
		15																		
		16	7																	
		17	11 13	36	50	SS-7	-	-	-	-	-	-	-	-	-	Rock (V)	-			
		18																		
		19	9																	
		20	12 12	36	72	SS-8	-	-	-	-	-	-	-	-	-	Rock (V)	-			
		21																		
		22	10 27 40	101	61	SS-9	-	-	-	-	-	-	-	-	-	Rock (V)	-			
		23																		
		24	15 38 50/4"	-	88	SS-10	-	-	-	-	-	-	-	-	-	Rock (V)	-			
		25																		
		26	16																	
		27	24 44	102	56	SS-11	-	-	-	-	-	-	-	-	-	Rock (V)	-			
		28																		
		29	50/2"	-	100	SS-12	-	-	-	-	-	-	-	-	-	Rock (V)	-			

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:43 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PID: 102329    SFN: \_\_\_\_\_    PROJECT: INTERSTATE 76/77    STATION / OFFSET: 367+73, 80' LT.    START: 7/15/20    END: 7/15/20    PG 2 OF 2    E3-008-0-20

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED			
								GR	CS	FS	SI	CL	LL	PL	PI							
SHALE, GREY TO DARK GREY, DECOMPOSED TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED. (continued)	1093.8	31	50/3"	-	100	SS-13	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-			
		32																				
		33																				
		34		50/1"	-	100	SS-14	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
		35																				
		36		50/2"	-	100	SS-15	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
		37																				
		38																				
		39		50/1"	-	100	SS-16	-	-	-	-	-	-	-	-	-	-	10	Rock (V)	-		
		40																				
		41		50/2"	-	100	SS-17	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	-		
		42																				
		SHALE, GREY, DECOMPOSED WEATHERED, VERY WEAK TO WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED, ARGILLACEOUS.	1075.3	43																		
44				50/3"	-	100	SS-18	-	-	-	-	-	-	-	-	-	-	Rock (V)	-			
45																						
46				50/4"	-	100	SS-19	-	-	-	-	-	-	-	-	-	-	Rock (V)	-			
47																						
48																						
49				50/3"	-	100	SS-20	-	-	-	-	-	-	-	-	-	15	Rock (V)	-			
50																						

NOTES: NONE  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:43 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00-176-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4314+13, 8' LT.</u>	EXPLORATION ID <u>P-001-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1065.0 (MSL)</u> EOB: <u>9.2 ft.</u>	
START: <u>6/24/20</u> END: <u>6/24/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>508995.6030 N, 2242835.2910 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
<b>PAVEMENT AND BASE, 4" ASPHALT, 9" CONCRETE</b>	1065.0																	
MEDIUM DENSE, BROWN, <b>COARSE AND FINE SAND</b> , TRACE GRAVEL, DAMP Note: sample taken from cuttings; spooned twice without any recovery.	1063.9	1	7														510	
		2	6 10	22	0	SS-1	-	8	25	37	15	15	16	17	NP	18	A-3a (0)	
	1061.5	3																
<b>CLAYSTONE</b> , GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.		4	19 50/4"	-	90	SS-2	-	0	20	9	46	25	29	46	NP	4	Rock (V)	
		5																
		6	38 50/4"	-	90	SS-3	-	-	-	-	-	-	-	-	-	4	Rock (V)	
		7																
		8																
	1055.8	9	42 50/2"	-	100	SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	
		EOB																

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:43 - X:ISHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00-176-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4310+80, 38' RT.</u>	EXPLORATION ID <u>P-002-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1062.6 (MSL)</u> EOB: <u>9.1 ft.</u>	
START: <u>6/24/20</u> END: <u>6/24/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>509058.8080 N, 2242886.4910 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
<b>PAVEMENT AND BASE, 4.5" ASPHALT, 8" CONCRETE</b>	1062.6																		
MEDIUM DENSE, BROWN, <b>COARSE AND FINE SAND</b> , TRACE GRAVEL, TRACE DARK BROWN AND GREY CLAY, MOIST TO WET	1061.6	1	9																
		2	10 13	32	72	SS-1	-	9	42	17	27	5	15	NP	NP	10	A-3a (0)	3600	
		3																	
<b>CLAYSTONE</b> , GREY, HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.	1058.6	TR	23 50/5"	-	91	SS-2	-	0	12	11	54	23	28	21	7	5	Rock (V)	-	
		4																	
		5																	
		6	36 50/2"	-	100	SS-3	-	-	-	-	-	-	-	-	-	5	Rock (V)	-	
		7																	
		8																	
	1053.5	EOB	42 50/1"	-	100	SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	-	

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:43 - X:ISHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4314+12, 32' LT.</u>	EXPLORATION ID <u>P-003-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1056.9 (MSL)</u> EOB: <u>9.1 ft.</u>	
START: <u>6/24/20</u> END: <u>6/24/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>509395.6030 N, 2242852.0760 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
<b>PAVEMENT AND BASE, 6.75" ASPHALT, 8.5" CONCRETE</b>	1056.9																		
<b>LOOSE, BROWN, GRAVEL AND/OR STONE FRAGMENTS WITH SAND, TRACE CLAY, MOIST TO WET</b>	1055.1	TR	7														1800		
<b>CLAYSTONE, GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.</b>			26 50	106	83	SS-1	-	19	56	13	2	10	NP	NP	NP	14	A-1-b (0)	-	
			31 50/1"		-	100	SS-2	-	0	36	16	28	20	28	19	9	4	Rock (V)	-
			50/5"		-	60	SS-3	-	-	-	-	-	-	-	-	-	4	Rock (V)	-
	1047.8	EOB	33 50/1"		-	100	SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	-

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:44 - X:\SHARED\DISCIPLINE\GEO\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4314+82, 29' RT.</u>	EXPLORATION ID <u>P-004-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1056.0 (MSL)</u> EOB: <u>8.9 ft.</u>	
START: <u>6/24/20</u> END: <u>6/24/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>509458.8080 N, 2242913.5160 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
<b>PAVEMENT AND BASE, 5.75" ASPHALT, 8.5" CONCRETE</b>	1056.0																		
DENSE, BROWN, <b>COARSE AND FINE SAND</b> , TRACE CLAY, DAMP	1054.7	TR	13 50	-	61	SS-1	-	10	41	21	26	2	18	NP	NP	11	A-3a (0)	1900	
<b>CLAYSTONE</b> , GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.	1054.3		48 50/1"	-	100	SS-2	-	0	36	15	33	16	26	19	7	4	Rock (V)	-	
			50/5"	-	100	SS-3	-	-	-	-	-	-	-	-	-	4	Rock (V)	-	
	1047.1	EOB	50/5"	-	60	SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	-	

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS



STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:44 - X:\SHARED\DISCIPLINE\GEO\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4318+15, 35' LT.</u>	EXPLORATION ID <u>P-006-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1054.8 (MSL)</u> EOB: <u>8.9 ft.</u>	
START: <u>6/24/20</u> END: <u>6/24/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>509795.6030 N, 2242882.4650 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
<b>PAVEMENT AND BASE, 4.75" ASPHALT, 9.25" CONCRETE</b>	1054.8																	
LOOSE, BROWN, <b>SANDY SILT</b> , TRACE CLAY AND GRAVEL, DAMP	1053.6	1	5															
<b>CLAYSTONE</b> , GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.	1053.0	2	5 37	59	83	SS-1	-	5	35	11	31	18	20	15	5	12	A-4a (3)	1000
		3																
		4	31 50/1"	-	100	SS-2	-	0	37	24	28	11	24	16	8	4	Rock (V)	-
		5																
		6	50/5"	-	100	SS-3	-	-	-	-	-	-	-	-	-	5	Rock (V)	-
		7																
	1045.9	8	50/5"	-	20	SS-4	-	-	-	-	-	-	-	-	-	5	Rock (V)	-
		EOB																

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS



STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:44 - X:\SHARED\DISCIPLINE\GEO\GINT.COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4321+13, 9' RT.</u>	EXPLORATION ID <u>P-007-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1058.0 (MSL)</u> EOB: <u>9.1 ft.</u>	
START: <u>6/25/20</u> END: <u>6/25/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>510089.5650 N, 2242956.9740 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
PAVEMENT AND BASE, 4" ASPHALT, 10.75" CONCRETE	1058.0																		
MEDIUM DENSE, BROWN, COARSE AND FINE SAND, TRACE CLAY, MOIST TO WET	1056.7	TR	4														180		
CLAYSTONE, DARK GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.	1056.4		8	28	78	SS-1	-	10	37	38	10	5	NP	NP	NP	18	A-3a (0)	-	
			13																
			50/2"	-	88	SS-2	-	0	17	11	49	23	28	21	7	6	Rock (V)	-	
			50/5"	-	80	SS-3	-	-	-	-	-	-	-	-	-	-	8	Rock (V)	-
	1048.9	EOB	48		57	SS-4	-	-	-	-	-	-	-	-	-	9	Rock (V)	-	
			50/1"																

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:45 - X:ISHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4322+19, 8' LT.</u>	EXPLORATION ID <u>P-008-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1059.8 (MSL)</u> EOB: <u>9.1 ft.</u>	
START: <u>6/23/20</u> END: <u>6/23/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>510195.6030 N, 2242955.5290 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
PAVEMENT AND BASE, 4" ASPHALT	1059.8																		
MEDIUM DENSE, BROWN, GRAVEL AND/OR STONE FRAGMENTS WITH SAND, TRACE CLAY, TIP OF SPOON CONTAINED BROWN A-7-6 W/ TRACE SAND, DAMP	1058.8	1	5																
	1057.5	2	7	21	44	SS-1A	-	13	50	23	12	2	NP	NP	NP	9	A-1-b (0)	170	
SOFT, BROWN, CLAY, TRACE SAND, DAMP	1056.3	3	9			SS-1B	4.00	8	34	23	23	12	-	-	-	13	A-7-6 (V)	5700	
CLAYSTONE, GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.		4	11																
		5	14	64	39	SS-2	-	8	34	23	23	12	28	25	3	6	Rock (V)	-	
		6	39																
		7	50/1"																
		8																	
	1050.7	9	47			SS-3	-	-	-	-	-	-	-	-	-	5	Rock (V)	-	
		EOB	50/1"			SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	-	

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:45 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00-176-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4322+06, 137' LT.</u>	EXPLORATION ID <u>P-009-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1075.0 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/23/20</u> END: <u>6/23/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>510195.6030 N, 2242824.0670 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				SO4 ppm	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI	WC			ODOT CLASS (GI)
PAVEMENT AND BASE, 8.75" ASPHALT, 3" GRAVEL BASE LOOSE, GREY, <b>GRANULAR BASE</b> Note: sample taken from cuttings; spooned twice with little recovery.	1075.0																		
	1074.0	1	6																
VERY STIFF, GREY, <b>SILTY CLAY</b> , TRACE SAND AND GRAVEL, DAMP	1071.5	2	4	10	6	SS-1	-	-	-	-	-	-	-	-	-	-	9	A-1-a (V)	150
	1069.0	3	2																
LOOSE, GREY AND BROWN, <b>COARSE AND FINE SAND</b> , SOME CLAY, TRACE GRAVEL, DAMP	1066.5	4	5	14	56	SS-2	2.25	4	24	30	30	12	37	20	17	19	A-6b (3)	-	
	1065.0	5	4	10	50	SS-3	-	0	13	63	19	5	22	NP	NP	11	A-3a (0)	-	
SOFT, GREY, <b>SILTY CLAY</b> , TRACE SAND AND GRAVEL, DAMP	1065.0	6	2																
	EOB	7	1	4	28	SS-4	-	-	-	-	-	-	-	-	-	9	A-6b (V)	-	
		8																	
		9																	
		10																	

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:45 - X:ISHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020)

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4325+18, 35' RT.</u>	EXPLORATION ID <u>P-010-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1066.1 (MSL)</u> EOB: <u>9.2 ft.</u>	
START: <u>6/24/20</u> END: <u>6/24/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>510489.5650 N, 2243027.2870 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				SO4 ppm	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI	WC			ODOT CLASS (GI)
PAVEMENT AND BASE, 3.25" ASPHALT, 9.5" CONCRETE	1066.1																		
LOOSE, BROWN, COARSE AND FINE SAND, TRACE CLAY AND GRAVEL, MOIST	1065.0	1	3															4000	
		2	4	13	56	SS-1	-	0	45	33	17	5	15	NP	NP	12	A-3a (0)	-	
	1062.6	3	5																
CLAYSTONE, GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.		4	19	-	91	SS-2	-	10	39	22	23	6	25	22	3	5	Rock (V)	-	
		5	50/5"																
		6	50/5"	-	100	SS-3	-	-	-	-	-	-	-	-	-	3	Rock (V)	-	
		7																	
		8																	
	1056.9	9	27	-	100	SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	-	
		EOB	50/2"																

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:46 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-10\16-00\1-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4326+28, 12' LT.</u>	EXPLORATION ID <u>P-011-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1068.8 (MSL)</u> EOB: <u>9.1 ft.</u>	
START: <u>6/23/20</u> END: <u>6/23/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>510595.6030 N, 2242987.9680 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				SO4 ppm	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI	WC			ODOT CLASS (GI)
<b>PAVEMENT AND BASE, 4" ASPHALT</b>	1068.8																		
<b>MEDIUM DENSE, GREY AND BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT, DAMP</b>	1067.7	1	5																
		2	6	20	44	SS-1	-	19	54	10	5	12	21	14	7	10	A-2-4 (0)	<100	
		3	8																
	1065.3	TR																	
<b>CLAYSTONE, GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.</b>		4	6		100	SS-2	-	4	22	32	34	8	20	NP	NP	6	Rock (V)	-	
		5																	
		6	23		100	SS-3	-	-	-	-	-	-	-	-	-	5	Rock (V)	-	
		7	50/1"																
		8																	
	1059.7	EOB	30		100	SS-4	-	-	-	-	-	-	-	-	-	6	Rock (V)	-	
		9	50/1"																

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:46 - X:ISHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4326+01, 91' LT.</u>	EXPLORATION ID <u>P-012-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1069.9 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/23/20</u> END: <u>6/23/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>510595.6030 N, 2242899.0430 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				SO4 ppm	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI	WC			ODOT CLASS (GI)
PAVEMENT AND BASE, 5.25" ASPHALT, 8.5" CONCRETE, 4" SUBBASE	1069.9	1																2900	X
VERY STIFF, BROWN AND GREY, <b>SANDY SILT</b> , TRACE SAND AND GRAVEL, DAMP	1068.4	2	3																^
		3	6	17	72	SS-1	3.50	4	15	13	39	29	24	15	9	16	A-4a (7)	-	^
		4	19																^
		5	24	50/5"		6	SS-2	-	14	17	32	26	11	17	NP	NP	9	A-4a (0)	-
MEDIUM DENSE, BROWN AND GREY, <b>COARSE AND FINE SAND</b> , LITTLE CLAY AND GRAVEL, DAMP	1063.9	6	10																^
	1061.4	7	13	39	50	SS-3	-	5	20	42	20	13	19	NP	NP	12	A-3a (0)	-	^
	1059.9	8	10																^
HARD, GREY, <b>CLAY</b> , TRACE SAND AND GRAVEL, DAMP looks similar to grey claystone from other borings, though blow counts are under 50.	1059.9	9	30	88	56	SS-4	-	-	-	-	-	-	-	-	-	6	A-7-6 (V)	-	^
		10	33																^
		EOB																	^

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:46 - X:ISHARED\DISCIPLINE\GEO\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4327+97, 48' LT.</u>	EXPLORATION ID <u>P-013-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1072.2 (MSL)</u> EOB: <u>8.9 ft.</u>	
START: <u>6/23/20</u> END: <u>6/23/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>510771.1720 N, 2242976.1200 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				SO4 ppm	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI	WC			ODOT CLASS (GI)
<b>PAVEMENT AND BASE</b> , 2.25" ASPHALT, 8.75" CONCRETE, 4" SUBBASE	1072.2																		
HARD, GREY, <b>SANDY SILT</b> , TRACE SAND AND GRAVEL, MOIST TO DAMP	1070.9	1	3																
		2	4	15	56	SS-1	4.00	0	19	30	40	11	24	16	8	14	A-4a (3)	2700	
		3																	
<b>CLAYSTONE</b> , GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.	1068.7	TR	31																
		4	50/1"	-	100	SS-2	-	0	32	23	35	10	28	17	11	6	Rock (V)	-	
		5																	
		6	50/5"	-	100	SS-3	-	-	-	-	-	-	-	-	-	6	Rock (V)	-	
		7																	
		8	50/5"	-	100	SS-4	-	-	-	-	-	-	-	-	-	7	Rock (V)	-	
	1063.3	EOB																	

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS



STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:46 - X:ISHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4329+22, 31' RT.</u>	EXPLORATION ID <u>P-014-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1075.0 (MSL)</u> EOB: <u>9.2 ft.</u>	
START: <u>6/24/20</u> END: <u>6/24/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>510889.5650 N, 2243060.7870 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
PAVEMENT AND BASE, 3.5" ASPHALT, 8.5" CONCRETE	1075.0																		X
DENSE, BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT, TRACE TO LITTLE CLAY, DAMP	1073.9	1	6																X
		2	7 29	50	78	SS-1	-	27	15	31	13	14	NP	NP	NP	12	A-2-4 (0)	-	X
	1071.5	3																	X
CLAYSTONE, GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.		4	7 50/5"		82	SS-2	-	1	17	28	41	13	28	22	6	7	Rock (V)	-	X
		5																	X
		6	50/5"		80	SS-3	-	-	-	-	-	-	-	-	-	5	Rock (V)	-	X
		7																	X
		8																	X
	1065.8	9	27 50/2"		100	SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	-	X
		EOB																	X

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:47 - X:\SHARED\DISCIPLINE\GEO\GEO\GINT\_COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>327+44, 9' RT.</u>	EXPLORATION ID <u>P-015-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1077.7 (MSL)</u> EOB: <u>8.75 ft.</u>	
START: <u>6/30/20</u> END: <u>6/30/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>511289.5650 N, 2243082.1500 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
PAVEMENT AND BASE, 3.75" ASPHALT, 8.5" CONCRETE, 3" GRAVEL BASE	1077.7																		
	1076.4	TR	1	23	-	90	SS-1	-	0	12	48	29	11	24	19	5	4	Rock (V)	340
CLAYSTONE, GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.			2	50/4"															
			3																
			4	50/3"	-	100	SS-2	-	11	27	25	27	10	-	-	-	5	Rock (V)	-
			5																
			6	50/3"	-	33	SS-3	-	-	-	-	-	-	-	-	-	4	Rock (V)	-
			7																
	1068.9	EOB	8	50/3"	-	100	SS-4	-	-	-	-	-	-	-	-	4	Rock (V)	-	

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:47 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>328+48, 42' LT.</u>	EXPLORATION ID <u>P-016-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1076.9 (MSL)</u> EOB: <u>8.9 ft.</u>	
START: <u>6/22/20</u> END: <u>6/22/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>511395.6030 N, 2243026.1600 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
<b>PAVEMENT AND BASE, 4" ASPHALT, 9.5" CONCRETE, 5" SUBBASE</b>	1076.9																	
	1075.3	1	6														1800	
<b>HARD, GREY, SANDY SILT, TRACE SAND, DAMP</b>		2	10 12	31	56	SS-1	4.00	2	8	24	44	22	22	17	5	10	A-4a (6)	
	1073.4	3																
<b>CLAYSTONE, GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED TO VERY THIN BEDDED, ARENACEOUS.</b>		4	23 50/5"	-	82	SS-2	-	0	4	10	65	21	25	22	3	6	Rock (V)	
		5																
		6	16 50/5"	-	82	SS-3	-	-	-	-	-	-	-	-	-	6	Rock (V)	
		7																
	1068.0	8	50/5"	-	100	SS-4	-	-	-	-	-	-	-	-	-	5	Rock (V)	
		EOB																

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:47 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>331+43, 8' RT.</u>	EXPLORATION ID <u>P-017-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1070.3 (MSL)</u> EOB: <u>9.25 ft.</u>	
START: <u>6/30/20</u> END: <u>6/30/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>511689.5650 N, 2243082.5290 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
PAVEMENT AND BASE, 4.75" ASPHALT, 8.25" CONCRETE, 4" GRAVEL BASE	1070.3																	
HARD, BROWN, SILT, TRACE SAND AND GRAVEL, DAMP	1068.9	1	10															
		2	13 18	43	78	SS-1	4.00	0	7	7	52	34	25	18	7	13	A-4b (8)	1900
		3																
HARD, BROWN, SILT AND CLAY, TRACE SAND AND GRAVEL, DAMP	1066.8																	
		4	16															
		5	47 50/2"	-	71	SS-2	4.00	0	25	11	39	25	27	14	13	11	A-6a (7)	-
		6																
CLAYSTONE, GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.	1064.0	TR																
		7	17															
		8	50/5"	-	100	SS-3	-	-	-	-	-	-	-	-	-	8	Rock (V)	-
		9	29															
	1061.0	EOB	50/3"	-	100	SS-4	-	-	-	-	-	-	-	-	-	6	Rock (V)	-

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>332+50, 11' LT.</u>	EXPLORATION ID <u>P-018-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1067.0 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/23/20</u> END: <u>6/23/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>511795.6030 N, 2243067.1070 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
<b>PAVEMENT AND BASE, 3" ASPHALT, 4.5" CONCRETE, 4" GRAVEL BASE (NOTE: CONCRETE IS BROKEN).</b>	1067.0																		
<b>LOOSE, BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND, TRACE CLAY, DAMP</b>	1065.7	1	3																
		2	3	11	56	SS-1	3.25	23	54	10	4	9	NP	NP	NP	8	A-1-b (0)	710	
		3																	
<b>MEDIUM DENSE, BROWN, GRAVEL AND/OR STONE FRAGMENTS WITH SAND AND SILT, LITTLE CLAY, DAMP</b>	1063.5	4	3																
		5	5	15	72	SS-2	-	21	15	32	19	13	17	15	2	11	A-2-4 (0)	-	
		6																	
<b>VERY STIFF, BROWN, SANDY SILT, DAMP</b>	1061.0	7	3																
		8	13	42	67	SS-3	-	2	11	26	26	35	21	14	7	11	A-4a (5)	-	
		9	17																
<b>SHALE, BROWN, HIGHLY WEATHERED, VERY WEAK TO WEAK, VERY FINE GRAINED, VERY THIN BEDDED, ARENACEOUS.</b>	1058.5	TR																	
	1057.0	EOB	11	67	72	SS-4	-	-	-	-	-	-	-	-	-	9	Rock (V)	-	
		10	24																
			24																

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:48 - X:ISHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00-176-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>334+68, 61' RT.</u>	EXPLORATION ID <u>P-019-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1060.5 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/25/20</u> END: <u>6/25/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>512015.1450 N, 2243133.3590 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
PAVEMENT AND BASE, 13.5" ASPHALT, 5" GRAVEL BASE	1060.5	1																	
MEDIUM DENSE, BROWN, SANDY SILT, TRACE CLAY, DAMP	1059.0	2	10	27	50	SS-1	-	19	24	20	21	16	NP	NP	NP	8	A-4a (0)	500	
		3																	
		4	4	8	44	SS-2	1.25	0	25	29	30	16	21	16	5	12	A-4a (2)	-	
	1054.5	5	3																
LOOSE, BROWN, COARSE AND FINE SAND, TRACE GRAVEL, DAMP	1054.5	6	4																
		7	2	6	39	SS-3	-	5	24	36	23	12	20	NP	NP	11	A-3a (0)	-	
		8																	
LOOSE, BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT, LITTLE CLAY, DAMP	1052.0	9	3																
	1050.5	10	3	7	11	SS-4	-	-	-	-	-	-	-	-	-	13	A-2-4 (V)	-	
		EOB	2																

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS



STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:48 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00-176-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>336+52, 50' LT.</u>	EXPLORATION ID <u>P-020-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1056.0 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/22/20</u> END: <u>6/22/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>512195.6030 N, 2243013.5430 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
PAVEMENT AND BASE, 11.5" ASPHALT, 6" GRAVEL BASE	1056.0	1																X	
MEDIUM DENSE, BROWN, SANDY SILT, DAMP	1054.5	2	17	29	50	SS-1	-	43	8	19	18	12	-	-	-	11	A-4a (V)	470	^
LOOSE TO MEDIUM DENSE, ORANGISH BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT, TRACE CLAY, DAMP	1052.5	3																^	
STIFF, BROWN, SILT, DAMP	1050.0	4	7	14	11	SS-2	-	-	-	-	-	-	-	-	-	4	A-2-4 (V)	-	^
LOOSE, ORANGISH BROWN, SANDY SILT, TRACE CLAY, DAMP	1047.5	5	5															^	
STIFF, BROWN, SILT, DAMP	1046.0	6	6	14	56	SS-3	-	0	10	8	55	27	28	20	8	11	A-4b (8)	-	^
LOOSE, ORANGISH BROWN, SANDY SILT, TRACE CLAY, DAMP	1046.0	7	5															^	
LOOSE, ORANGISH BROWN, SANDY SILT, TRACE CLAY, DAMP	1046.0	8	4	13	67	SS-4	-	0	14	48	31	7	NP	NP	NP	15	A-4a (1)	-	^
		9	4															^	
		10	5															^	
		EOB																^	

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:48 - X:ISHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>340+04, 43' LT.</u>	EXPLORATION ID <u>P-022-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1048.3 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/22/20</u> END: <u>6/22/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>512547.3800 N, 2243020.5430 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				SO4 ppm	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI	WC			ODOT CLASS (GI)
PAVEMENT AND BASE, 13.75" ASPHALT, 5" GRAVEL BASE	1048.3																	1900	X
MEDIUM DENSE, BROWN, SILTY SAND, TRACE GRAVEL, @9.9' TIP OF SPOON CONTAINS BROWN CLAY, DAMP	1046.7	1	14				-	9	12	32	28	19	18	15	3	13	A-4a (2)	-	^
		2	12	36	56	SS-1	-												^
		3	14																^
		4	11				-	5	8	32	39	16	17	15	2	11	A-4a (4)	-	^
		5	12	35	72	SS-2	-												^
		6	13																^
		7	6				-	0	15	41	32	12	16	14	2	10	A-4a (2)	-	^
		8	15	45	78	SS-3	-												^
		9	17																^
		10	3				-	7	10	41	28	14	15	15	NP	11	A-4a (1)	-	^
	1038.3	EOB	6	15	72	SS-4	-												^

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:49 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>344+04, 55' LT.</u>	EXPLORATION ID <u>P-024-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1044.9 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/22/20</u> END: <u>6/22/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>512947.3800 N, 2242995.1570 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				SO4 ppm	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI	WC			ODOT CLASS (GI)
PAVEMENT AND BASE, 12" ASPHALT, 5" GRAVEL BASE	1044.9																		
MEDIUM DENSE, BROWN, SANDY SILT, CONTAINS ROCK FRAGMENTS, DAMP	1043.5	1	14		31	44	SS-1	-	0	17	45	28	10	18	17	1	9	A-4a (1)	770
MEDIUM DENSE, ORANGISH BROWN, SILT, DAMP	1041.4	2	10																
MEDIUM DENSE, BROWN, SANDY SILT, CONTAINS ROCK FRAGMENTS, DAMP	1038.9	3	9		39	72	SS-2	-	1	4	16	56	23	21	18	3	13	A-4b (8)	-
MEDIUM DENSE, LIGHT BROWN, COARSE AND FINE SAND, LITTLE GRAVEL, DAMP	1036.4	4	13																
	1034.9	5	6		38	72	SS-3	-	13	8	33	28	18	16	15	1	11	A-4a (2)	-
		6	4																
		7	6		31	72	SS-4	-	20	10	56	11	3	NP	NP	NP	5	A-3a (0)	-
		8	13																
		9	4																
		10	9																

EOB

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:49 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>347+84, 59' RT.</u>	EXPLORATION ID <u>P-025-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1042.7 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/25/20</u> END: <u>6/25/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>513322.2130 N, 2243106.1760 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO <sub>4</sub> ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
PAVEMENT AND BASE, 11.75" ASPHALT, 5" GRAVEL BASE	1042.7																		X
MEDIUM DENSE, BROWN, COARSE AND FINE SAND, TRACE TO LITTLE GRAVEL, @3.5-5.5': LOOSE TO MEDIUM DENSITY, TRACE CLAY AS WELL, DAMP	1041.3	1	24																V
		2	14	36	50	SS-1	-	17	30	32	15	6	NP	NP	NP	7	A-3a (0)	430	V
		3	12																V
		4	8																V
		5	5	14	44	SS-2	-	10	25	35	22	8	14	NP	NP	9	A-3a (0)	-	V
	1036.7	6	2																V
LOOSE, BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT, TRACE TO LITTLE CLAY, DAMP TO MOIST		7	3	7	17	SS-3	-	-	-	-	-	-	-	-	-	7	A-2-4 (V)	-	V
		8																	V
		9	2	6	17	SS-4	-	-	-	-	-	-	-	-	-	9	A-2-4 (V)	-	V
	1032.7	10	2	6	17	SS-4	-	-	-	-	-	-	-	-	-	9	A-2-4 (V)	-	V
		EOB																	V

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:49 - X:ISHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>351+75, 80' RT.</u>	EXPLORATION ID <u>P-027-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1039.1 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/30/20</u> END: <u>6/30/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>513722.2130 N, 2243120.1970 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
<b>PAVEMENT AND BASE, 12.25" ASPHALT, 3.75" GRAVEL BASE</b>	1039.1																		
MEDIUM DENSE, BROWN, <b>COARSE AND FINE SAND</b> , SOME CLAY, TRACE TO LITTLE GRAVEL, DAMP	1037.8	1	9																
		2	12	35	50	SS-1	-	33	20	17	15	15	-	-	-	11	A-3a (V)	770	
		3	13																
MEDIUM DENSE, GREY, <b>GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT</b> , DAMP	1035.6																		
STIFF, BROWN, <b>SILTY CLAY</b> , TRACE TO LITTLE SAND, TRACE TO LITTLE GRAVEL, DAMP	1034.8	4	11	20	44	SS-2A	-	52	17	19	9	3	-	-	-	5	A-2-4 (V)	-	
		5	7			SS-2B	1.75	-	-	-	-	-	-	-	-	12	A-6b (V)	-	
		6	5																
		7	5	15	44	SS-3	2.25	3	14	33	27	23	25	15	10	14	A-6b (V)	-	
		8	6																
		9	5																
	1029.1	10	4	10	56	SS-4	3.75	-	-	-	-	-	-	-	-	14	A-6b (V)	-	
		EOB																	

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:50 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76\_77\_EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>352+04, 72' LT.</u>	EXPLORATION ID <u>P-028-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1039.3 (MSL)</u> EOB: <u>8.7 ft.</u>	
START: <u>6/22/20</u> END: <u>6/22/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>513747.3800 N, 2242961.4840 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
PAVEMENT AND BASE, 13.75" ASPHALT, 4" GRAVEL BASE	1039.3	1																
DENSE, BROWN, COARSE AND FINE SAND, TRACE CLAY, TRACE GRAVEL, DAMP	1037.6	2	17	47	61	SS-1	-	27	16	28	17	12	NP	NP	NP	11	A-3a (V)	-
STIFF, BROWN, SANDY SILT, TRACE GRAVEL, DAMP	1035.8	3																
		4	2	10	56	SS-2	1.25	4	19	37	25	15	20	16	4	14	A-4a (1)	-
		5	3															
		6	4															
		7	6		76	SS-3	4.00	0	17	24	35	24	22	15	7	13	A-4a (5)	-
		8	4															
SANDSTONE, ORANGISH BROWN, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK TO WEAK, FINE GRAINED, VERY THIN BEDDED.	1030.8 1030.6	ETS	60/2"	-	100	SS-4	-	-	-	-	-	-	-	-	-	5	Rock (V)	-

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS



STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:50 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-10\16-00\1-76\_77\_EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>354+06, 85' LT.</u>	EXPLORATION ID <u>P-029-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1038.0 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/22/20</u> END: <u>6/22/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>513949.7200 N, 2242949.4840 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
PAVEMENT AND BASE, 13" ASPHALT, 5" GRAVEL BASE	1038.0	1																	
MEDIUM DENSE, BROWN, COARSE AND FINE SAND, DAMP	1036.5	2	15	33	56	SS-1	-	8	3	58	15	16	NP	NP	NP	10	A-3a (0)	550	
HARD, GREY, SANDY SILT, TRACE GRAVEL, DAMP	1034.5	3																	
MEDIUM DENSE, BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT, TRACE CLAY, DAMP	1032.0	4	7	33	39	SS-2	4.00	9	7	24	34	26	23	16	7	11	A-4a (5)	-	
DENSE TO VERY DENSE, BROWN AND GREY, COARSE AND FINE SAND, TRACE GRAVEL, SAMPLE IS MOTTLED, DAMP	1029.5	5	9	71	56	SS-4	-	2	2	61	18	17	17	16	1	9	A-3a (0)	-	
	1028.0	6	4																
		7	6	20	44	SS-3	-	32	7	28	17	16	19	16	3	11	A-2-4 (0)	-	
		8																	
		9	5																
		10	27																
		EOB	24																

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:50 - X:\SHARED\DISCIPLINE\GEO\GINT\_COLUMBUS\PROJECTS\1822-1016-001-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>355+21, 111' RT.</u>	EXPLORATION ID <u>P-030-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1033.1 (MSL)</u> EOB: <u>8.9 ft.</u>	
START: <u>6/30/20</u> END: <u>6/30/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>514066.9780 N, 2243137.8480 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
PAVEMENT AND BASE, 13.25" ASPHALT, 4" GRAVEL BASE	1033.1																		
MEDIUM DENSE, GREYISH BROWN, <b>COARSE AND FINE SAND</b> , LITTLE GRAVEL, TRACE CLAY, DAMP	1031.7	1	12																
		2	11	28	44	SS-1	-	48	42	3	5	2	-	-	-	8	A-3a (V)	<100	
	1029.6	3																	
MEDIUM DENSE, BROWN, <b>SANDY SILT</b> , TRACE CLAY, DAMP	1029.3	4	6			SS-2A	-	0	26	33	34	7	20	18	2	10	A-4a (1)	-	
VERY STIFF TO HARD, BROWN, <b>CLAY</b> , TRACE SAND AND GRAVEL, DAMP	1027.1	5	6	29	33	SS-2B	4.00	-	-	-	-	-	-	-	-	13	A-7-6 (V)	-	
<b>SANDSTONE</b> , BROWN, HIGHLY WEATHERED, WEAK TO MODERATELY STRONG, MEDIUM GRAINED, VERY THIN TO THIN BEDDED, @8.5-8.9': ALSO PORTIONS OF LIGHT GREY TO GREY SANDSTONE, FRIABLE, SAME CHARACTERISTICS OTHERWISE.	1027.1	6	50/5"	-	20	SS-3	-	-	-	-	-	-	-	-	-	6	Rock (V)	-	
	1024.2	7																	
		8	50/5"	-	20	SS-4	-	-	-	-	-	-	-	-	-	6	Rock (V)	-	
		EOB																	

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 11/25/20 10:50 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>360+05, 53' LT.</u>	EXPLORATION ID <u>P-032-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1034.6 (MSL)</u> EOB: <u>8.7 ft.</u>	
START: <u>6/22/20</u> END: <u>6/22/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>514547.3800 N, 2242971.2730 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI					
<b>PAVEMENT AND BASE, 12.75" ASPHALT, 4" GRAVEL BASE</b>	1034.6																			
VERY DENSE, BROWN, <b>COARSE AND FINE SAND</b> , CONTAINS ROCK FRAGMENTS, DAMP	1033.2	1	11																	
		2	42 29	99	61	SS-1	-	15	2	56	13	14	NP	NP	NP	9	A-3a (0)	400		
		3																		
		4	6 50/2"			SS-2	1.75	0	16	49	20	15	20	17	3	12	A-3a (0)	-		
VERY DENSE, BROWN, <b>GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT</b> , DAMP	1028.6	5																		
		6	50/5"		100	SS-3	-	-	-	-	-	-	-	-	-	9	A-2-4 (V)	-		
<b>SANDSTONE</b> , BROWN, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK TO WEAK, FINE GRAINED, VERY THIN BEDDED.	1026.1	7																		
	1025.9	8	60/2"		100	SS-4	-	-	-	-	-	-	-	-	-	8	Rock (V)	-		

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT. - 11/25/20 10:51 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-10\16-00\176-77 EL ROBINSON (8-27-2020 -

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>360+37, 139' RT.</u>	EXPLORATION ID <u>P-033-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1045.3 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/30/20</u> END: <u>6/30/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>514584.6860 N, 2243163.7210 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	SO4 ppm	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI				
PAVEMENT AND BASE, 9" CONCRETE , 7" GRAVEL BASE	1045.3																		
DENSE, GREY, SANDY SILT, DAMP	1044.0	1	18	63	39	SS-1	-	0	27	25	38	10	18	NP	NP	8	A-4a (3)	100	
		2	26																
		3	19																
VERY STIFF, BROWN AND GREY, SILT AND CLAY, TRACE SAND AND GRAVEL, @6-7.4': LITTLE SAND AND GRAVEL, DAMP	1041.8	4	6	15	44	SS-2	3.25	0	7	18	49	26	27	16	11	16	A-6a (8)	-	
		5	5																
		6	6																
MEDIUM DENSE, ORANGISH BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT, DAMP	1038.0	7	5	27	56	SS-3A	3.00	-	-	-	-	-	-	-	-	16	A-6a (V)	-	
	1036.8	8	9			SS-3B	-	-	-	-	-	-	-	-	-	10	A-2-4 (V)	-	
		9	10																
HARD, BROWN, SILT AND CLAY, TRACE SAND AND GRAVEL, DAMP	1035.3	9	9	22	44	SS-4	4.00	-	-	-	-	-	-	-	-	16	A-6a (V)	-	
		10	6																
		EOB	10																

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

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# GRAIN SIZE REPORTS

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OFFICE OF GEOTECHNICAL ENGINEERING

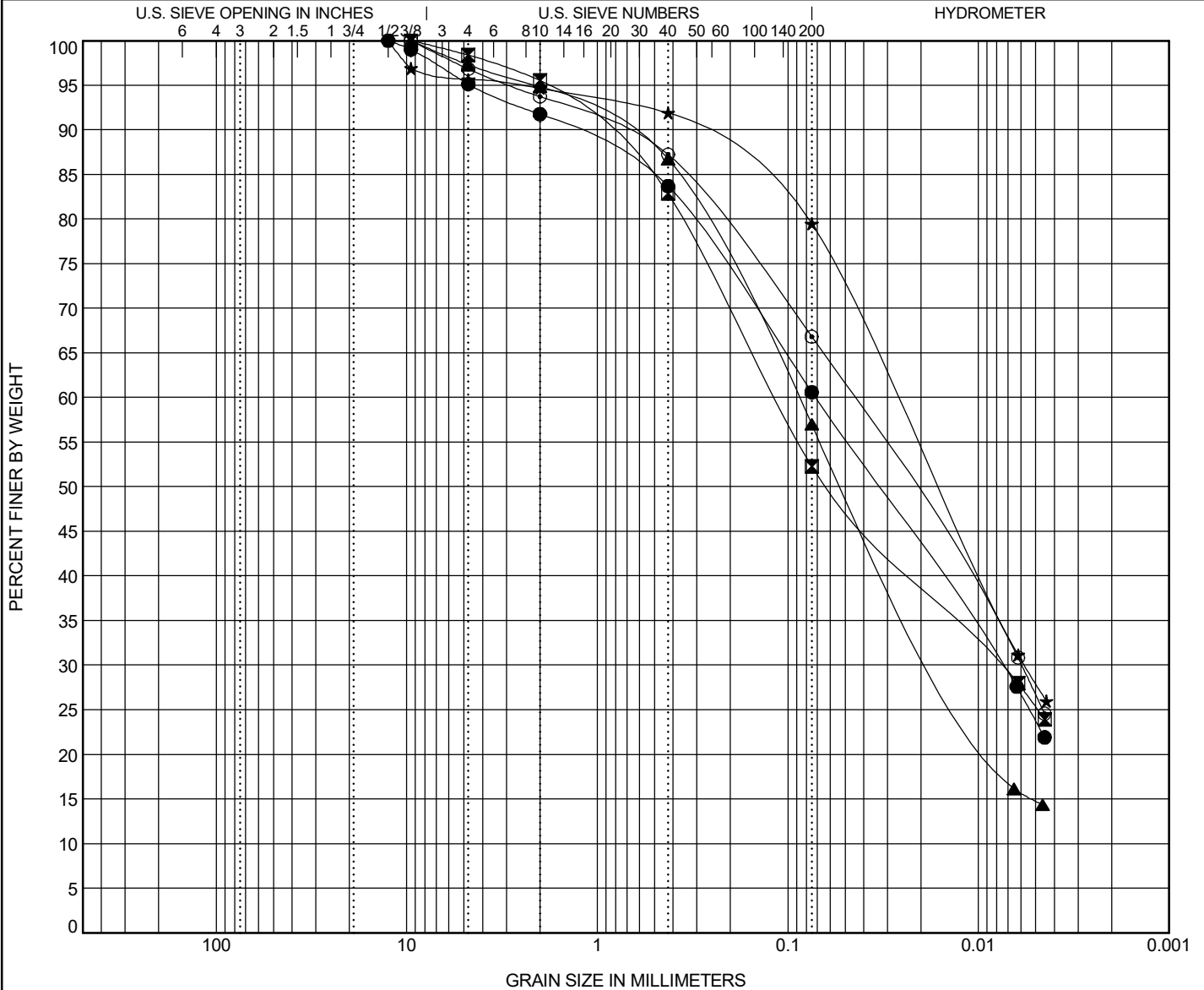
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● B2-001-0-20 1.0	A-4a ~ SANDY LEAN CLAY(CL)										25	17	8
■ B2-001-0-20 8.5	A-4a ~ SANDY LEAN CLAY(CL)										24	14	10
▲ B2-001-0-20 13.5	A-4a ~ SANDY SILTY CLAY(CL-ML)										22	16	6
★ B2-001-0-20 16.0	A-6a ~ LEAN CLAY with SAND(CL)										30	18	12
○ B2-001-0-20 18.5	A-6a ~ SANDY LEAN CLAY(CL)										29	18	11
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● B2-001-0-20 1.0	1.426	0.034	0.008		8	8	23	37	24				
■ B2-001-0-20 8.5	1.017	0.059	0.008		4	13	31	27	25				
▲ B2-001-0-20 13.5	0.794	0.049	0.015		5	8	30	42	15				
★ B2-001-0-20 16.0	0.326	0.016	0.006		6	3	12	51	28				
○ B2-001-0-20 18.5	0.821	0.023	0.006		6	7	20	40	27				

GRAIN SIZE - OH DOT.GDT - 8/25/20 12:16 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ



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OFFICE OF GEOTECHNICAL ENGINEERING

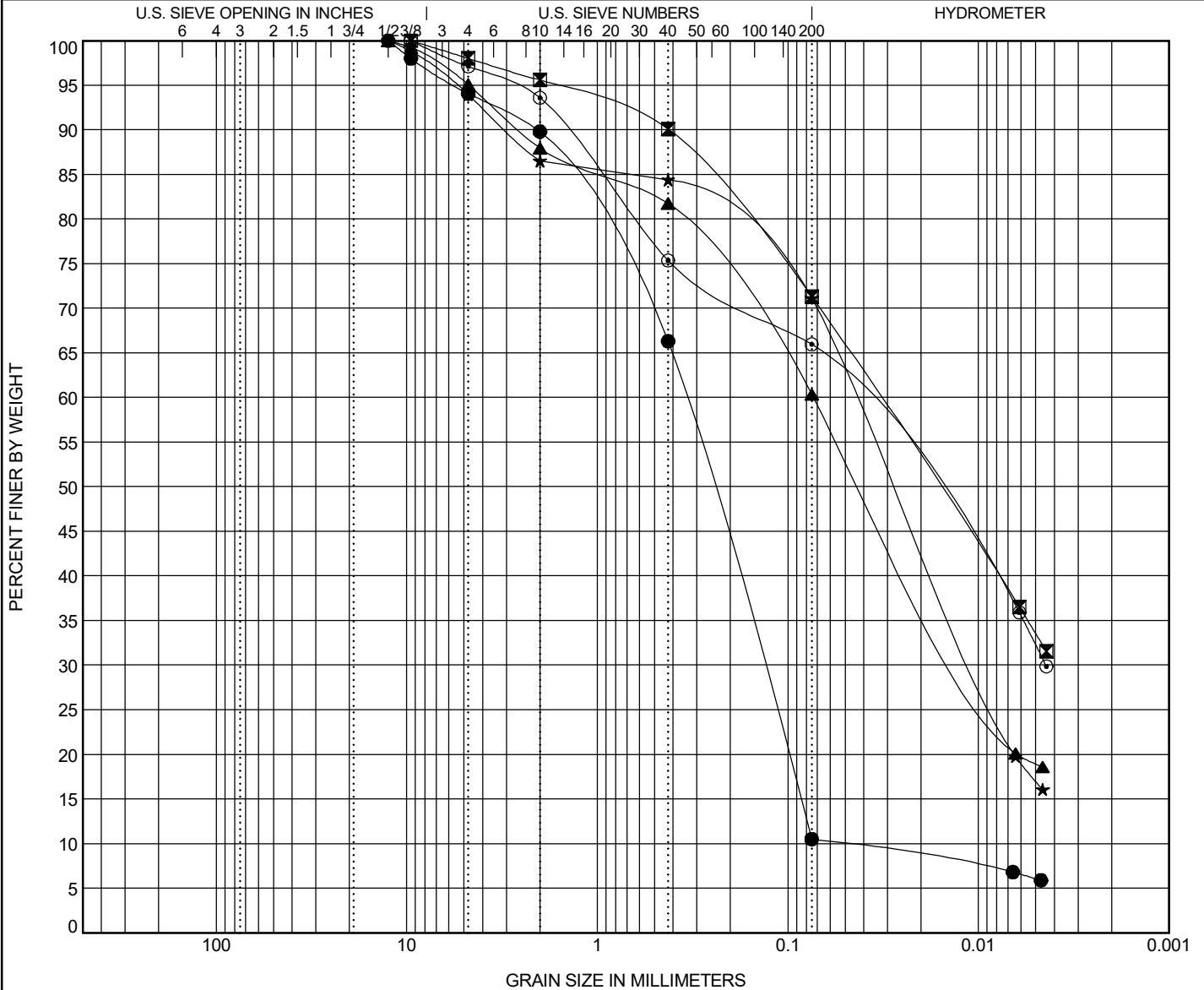
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● B2-001-0-20 31.0	~												
■ E3-001-0-20 1.0	A-6a ~ LEAN CLAY with SAND(CL)										27	16	11
▲ E3-001-0-20 3.5	A-4a ~ SANDY SILTY CLAY(CL-ML)										26	20	6
★ E3-001-0-20 6.0	A-4b ~ SILTY CLAY with SAND(CL-ML)										28	22	6
⊙ E3-002-0-20 1.0	A-6a ~ SANDY LEAN CLAY(CL)										30	17	13
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● B2-001-0-20 31.0	2.081	0.256	0.138	0.055	11	23	56	4	6	0.99	6.39		
■ E3-001-0-20 1.0	0.421	0.016			5	5	19	38	33				
▲ E3-001-0-20 3.5	2.566	0.04	0.012		13	6	21	41	19				
★ E3-001-0-20 6.0	2.996	0.027	0.01		14	2	13	54	17				
⊙ E3-002-0-20 1.0	1.474	0.02	0.004		7	18	9	34	32				

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:16 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

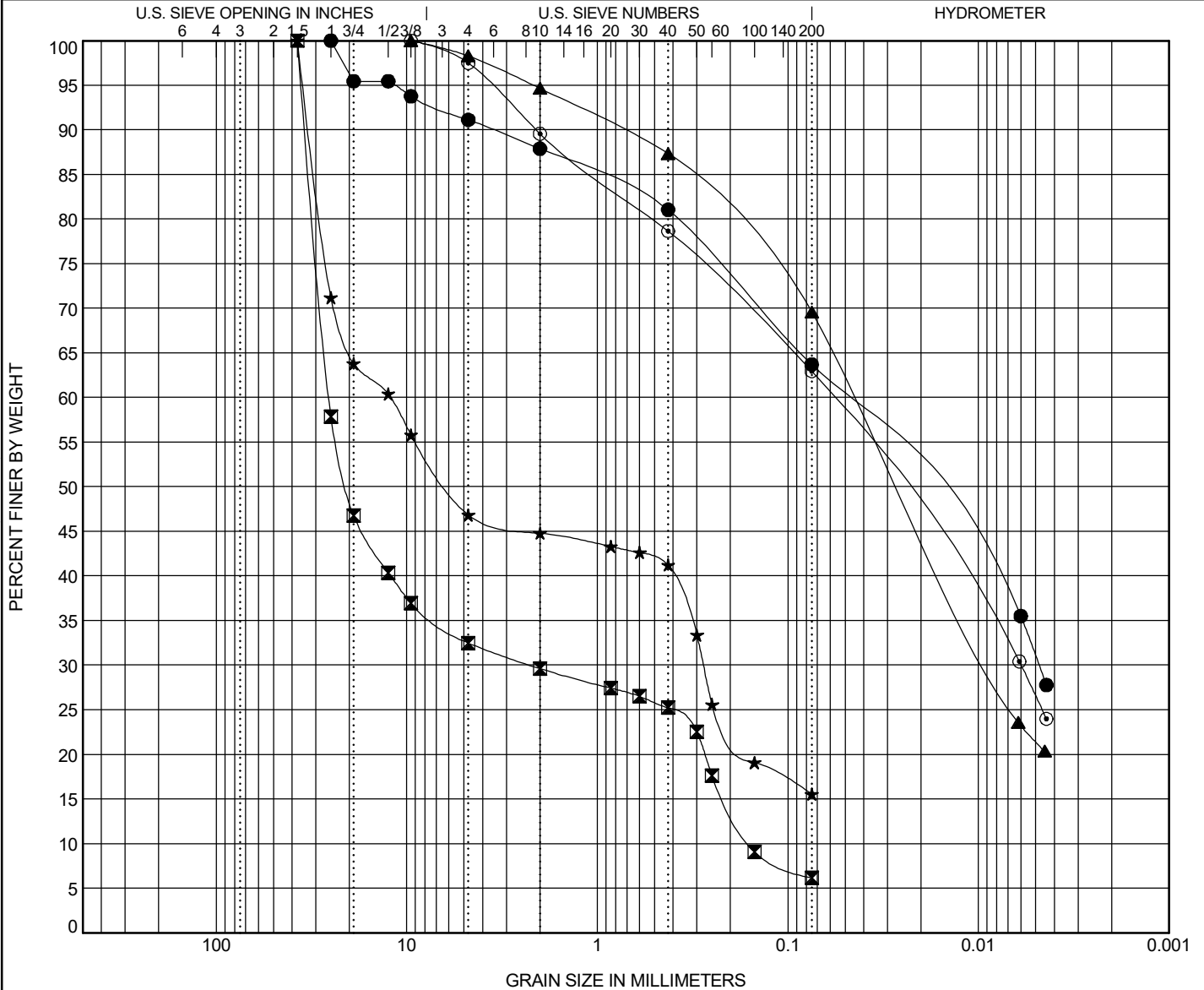


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● E3-002-0-20 3.5	A-6a ~ SANDY LEAN CLAY(CL)										29	17	12
■ E3-002-0-20 8.5	~												
▲ E3-003-0-20 1.0	A-4a ~ SANDY LEAN CLAY(CL)										24	15	9
★ E3-003-0-20 6.0	~												
⊙ E3-004-0-20 1.0	A-4a ~ SANDY LEAN CLAY(CL)										26	16	10
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● E3-002-0-20 3.5	3.514	0.022	0.005		12	7	17	33	31				
■ E3-002-0-20 8.5	34.061	20.583	2.258	0.159	71	4	19	6		1.26	160.73		
▲ E3-003-0-20 1.0	0.746	0.026	0.009		5	7	18	49	21				
★ E3-003-0-20 6.0	32.575	6.068	0.277		54	4	26	16					
⊙ E3-004-0-20 1.0	2.097	0.028	0.006		10	11	16	37	26				

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:16 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ





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OFFICE OF GEOTECHNICAL ENGINEERING**

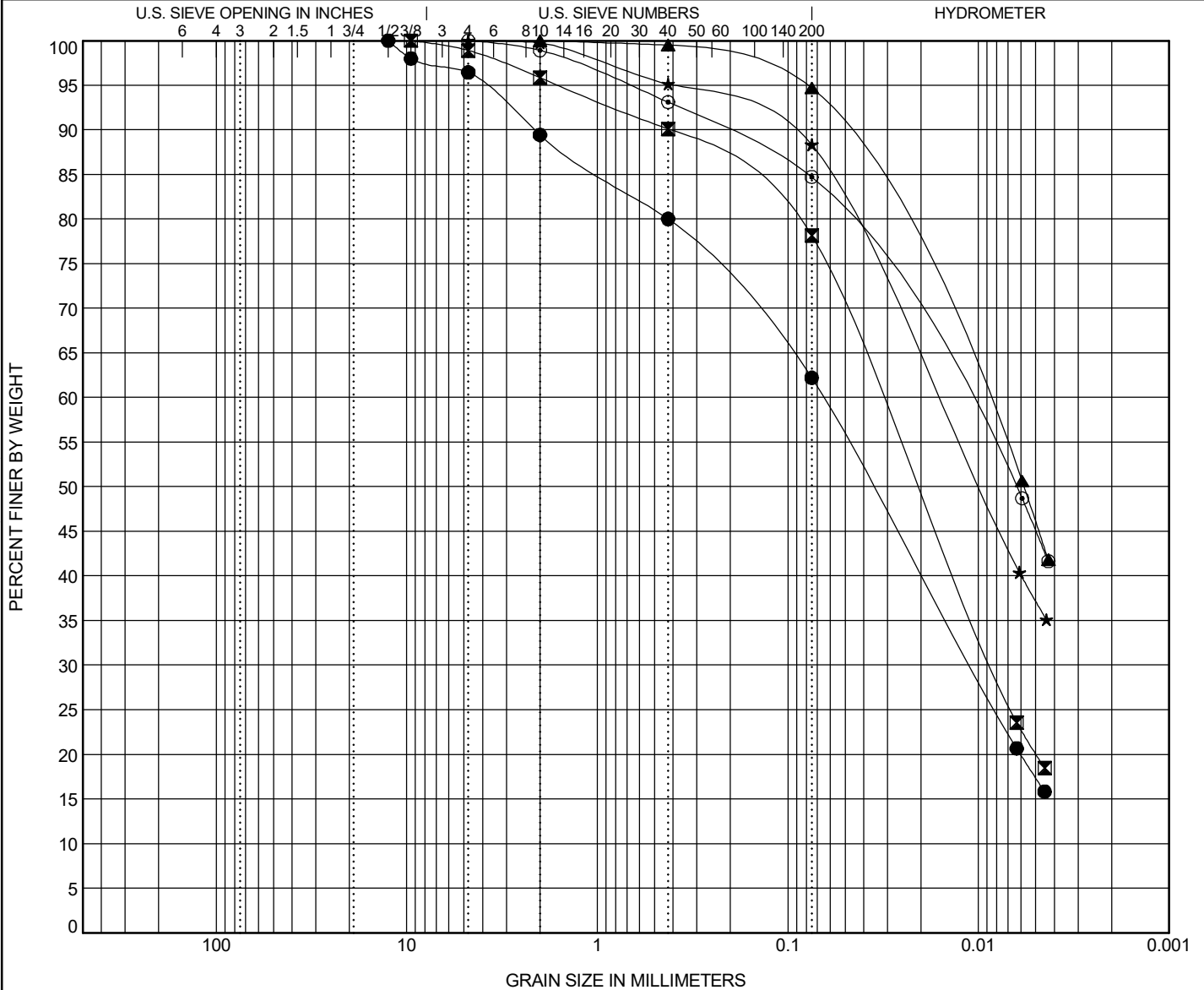
**GRAIN SIZE DISTRIBUTION**

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● E3-004-0-20 6.0	A-4a ~ SANDY LEAN CLAY(CL)										29	21	8
☒ E3-004-0-20 8.5	A-4b ~ LEAN CLAY with SAND(CL)										29	21	8
▲ E3-005-0-20 1.0	A-6b ~ LEAN CLAY(CL)										38	22	16
★ E3-005-0-20 3.5	A-6a ~ SILT(ML)										38	25	13
⊙ E3-006-0-20 1.0	A-6b ~ LEAN CLAY with SAND(CL)										38	21	17
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● E3-004-0-20 6.0	2.144	0.036	0.011		11	9	18	45	17				
☒ E3-004-0-20 8.5	0.418	0.021	0.008		4	6	12	58	20				
▲ E3-005-0-20 1.0	0.057	0.006			0	0	5	49	46				
★ E3-005-0-20 3.5	0.114	0.01			0	5	7	51	37				
⊙ E3-006-0-20 1.0	0.223	0.006			1	6	8	40	45				

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:16 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ



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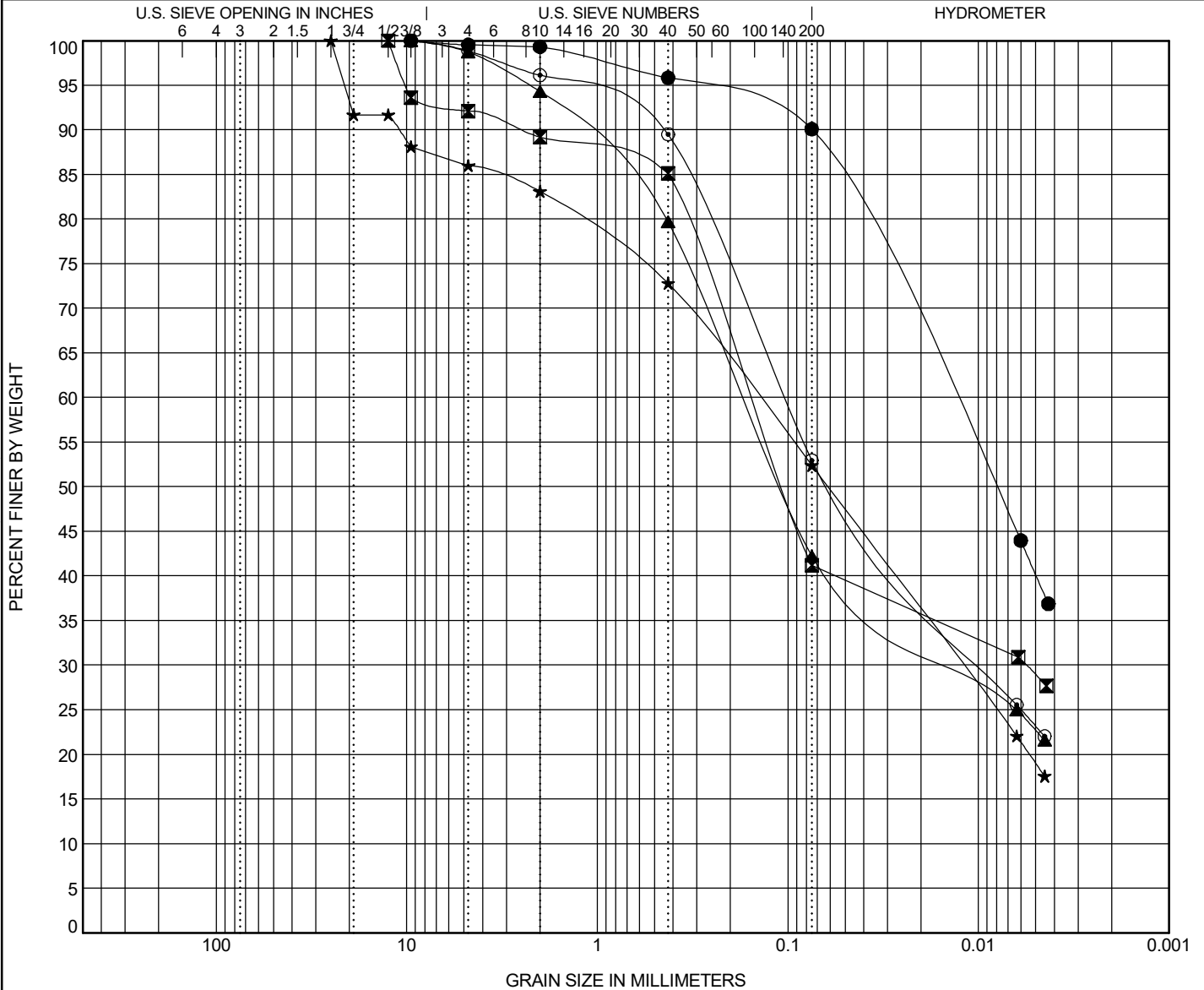
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● E3-006-0-20 3.5	A-6b ~ LEAN CLAY(CL)										38	21	17
▣ E3-007-0-20 1.0	A-4a ~ SILTY, CLAYEY SAND(SC-SM)										23	16	7
▲ E3-007-0-20 3.5	A-4a ~ SILTY SAND(SM)										NP	NP	NP
★ E3-008-0-20 1.0	A-4a ~ SANDY LEAN CLAY(CL)										27	17	10
◎ E3-008-0-20 6.0	A-4a ~ SANDY SILTY CLAY(CL-ML)										21	14	7
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● E3-006-0-20 3.5	0.075	0.008			1	3	6	50	40				
▣ E3-007-0-20 1.0	2.544	0.106	0.006		11	4	44	12	29				
▲ E3-007-0-20 3.5	1.266	0.108	0.013		6	15	37	19	23				
★ E3-008-0-20 1.0	10.978	0.062	0.012		18	10	20	33	19				
◎ E3-008-0-20 6.0	0.477	0.057	0.009		3	7	37	30	23				

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:16 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

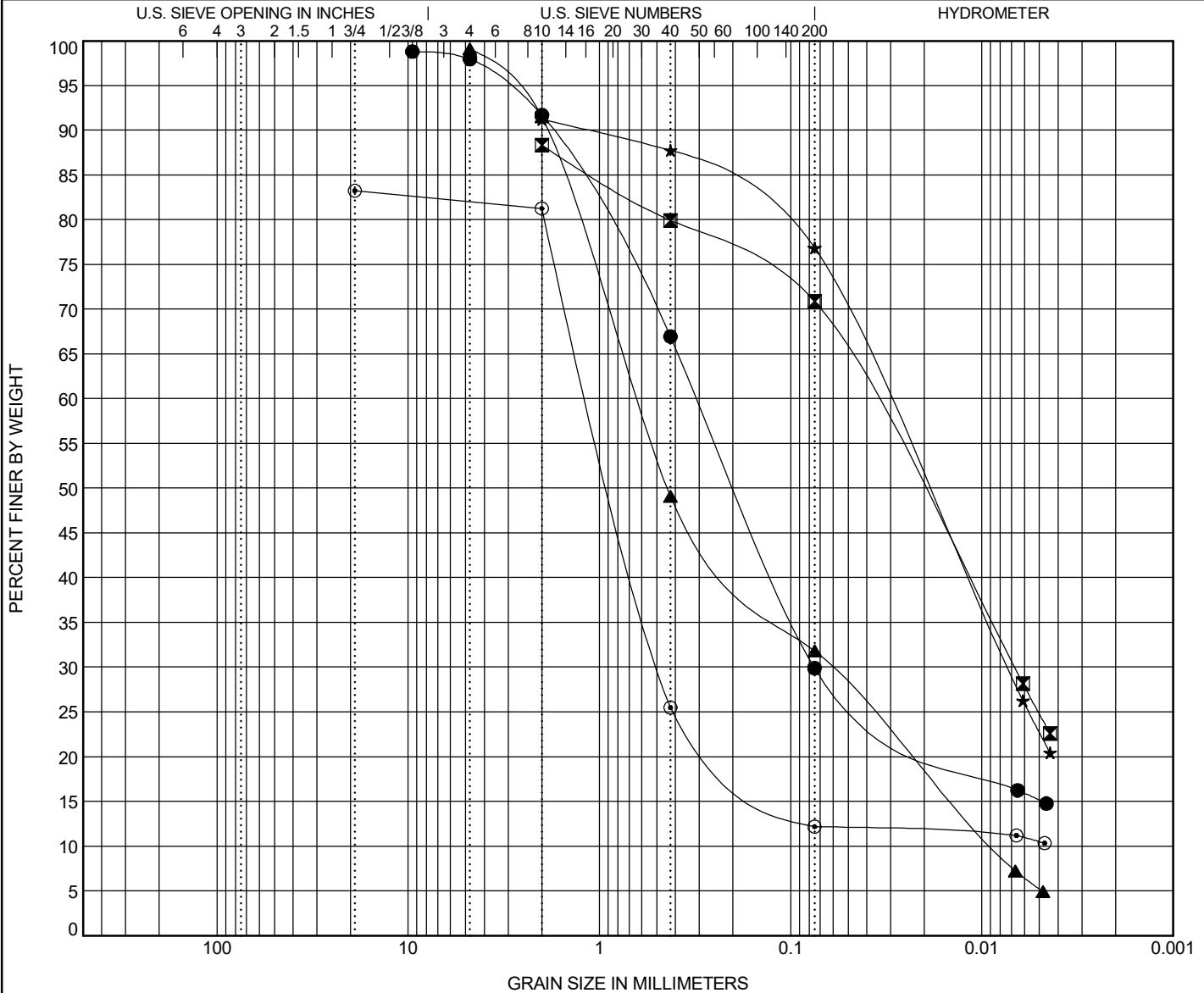


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-001-0-20 1.1	A-3a ~ SILTY SAND(SM)										16	17	NP
☒ P-001-0-20 3.5	A-4a ~ SILT with SAND(ML)										29	46	NP
▲ P-002-0-20 1.0	A-3a ~ SILTY SAND(SM)										15	NP	NP
★ P-002-0-20 3.5	A-4b ~ SILTY CLAY with SAND(CL-ML)										28	21	7
◎ P-003-0-20 1.3	A-1-b ~ SILTY SAND with GRAVEL(SM)										NP	NP	NP
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-001-0-20 1.1	1.798	0.192	0.075		8	25	37	15	15				
☒ P-001-0-20 3.5		0.022	0.007		0	20	9	46	25				
▲ P-002-0-20 1.0	1.894	0.439	0.063	0.009	9	42	17	27	5	0.71	71.88		
★ P-002-0-20 3.5	1.162	0.02	0.007		0	12	11	54	23				
◎ P-003-0-20 1.3		0.84	0.482		19	56	13	2	10				

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:16 - X:\SHARED\DISCIPLINE\GEOTECH\IGNT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

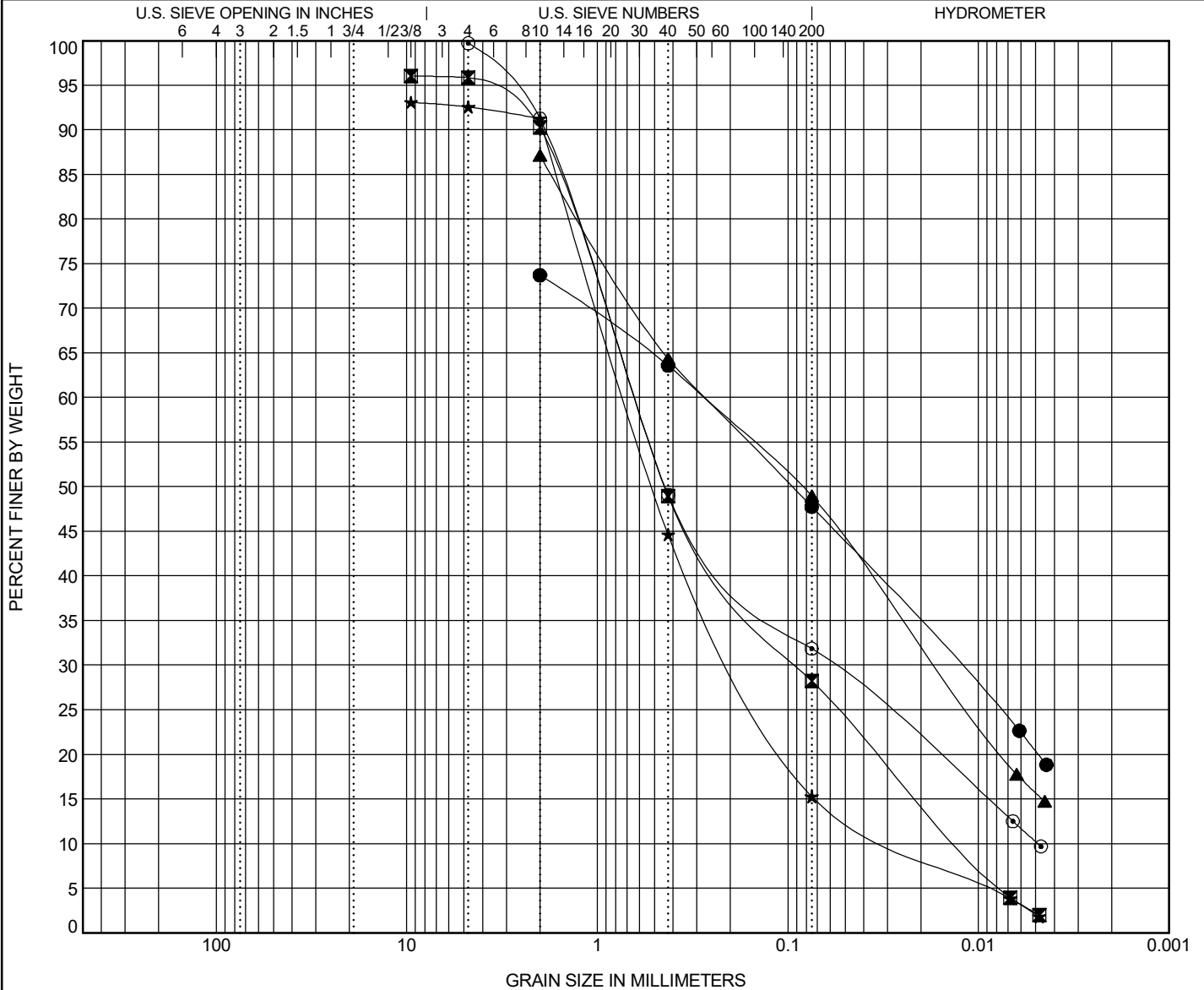


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-003-0-20 3.5	A-4a ~ CLAYEY SAND(SC)										28	19	9
■ P-004-0-20 1.3	A-3a ~ SILTY SAND(SM)										18	NP	NP
▲ P-004-0-20 3.5	A-4a ~ SILTY, CLAYEY SAND(SC-SM)										26	19	7
★ P-005-0-20 1.2	A-1-b ~ SILTY SAND(SM)										19	18	1
○ P-005-0-20 3.5	A-3a ~ SILTY, CLAYEY SAND(SC-SM)										24	20	4
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-003-0-20 3.5		0.096	0.013		0	36	16	28	20				
■ P-004-0-20 1.3	1.98	0.442	0.087	0.012	10	41	21	26	2	0.95	51.86		
▲ P-004-0-20 3.5		0.084	0.017		0	36	15	33	16				
★ P-005-0-20 1.2	1.918	0.508	0.179	0.025	9	47	29	13	2	1.82	28.50		
○ P-005-0-20 3.5	1.909	0.44	0.06	0.005	9	42	17	22	10	1.14	129.62		

GRAIN SIZE - OH DOT.GDT - 8/25/20 12:16 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ



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OFFICE OF GEOTECHNICAL ENGINEERING**

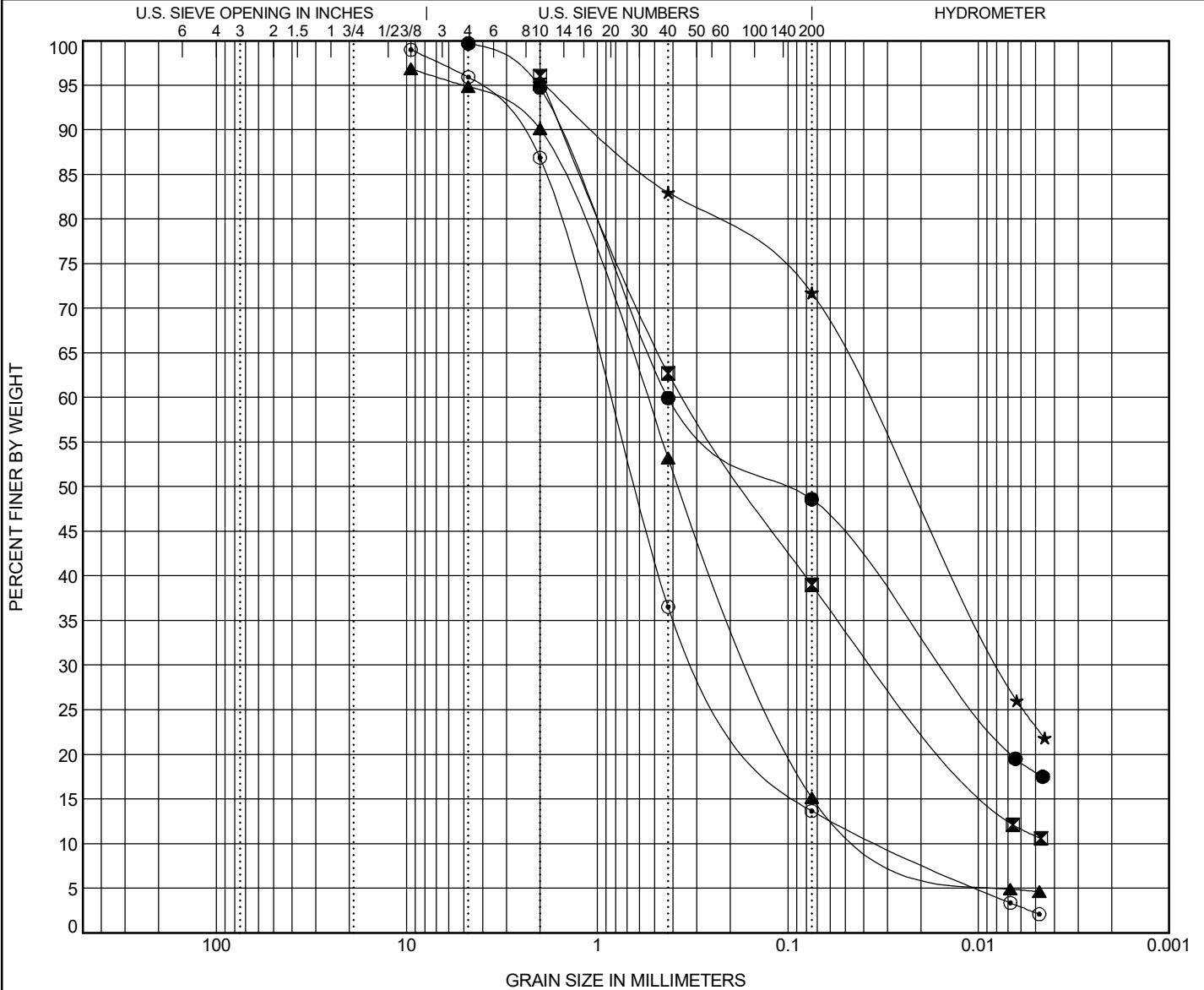
**GRAIN SIZE DISTRIBUTION**

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-006-0-20 1.2	<b>A-4a ~ SILTY, CLAYEY SAND(SC-SM)</b>										20	15	5
☒ P-006-0-20 3.5	<b>A-4a ~ CLAYEY SAND(SC)</b>										24	16	8
▲ P-007-0-20 1.3	<b>A-3a ~ SILTY SAND(SM)</b>										NP	NP	NP
★ P-007-0-20 3.5	<b>A-4a ~ SILTY CLAY with SAND(CL-ML)</b>										28	21	7
◎ P-008-0-20 1.0	<b>A-1-b ~ SILTY SAND(SM)</b>										NP	NP	NP
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-006-0-20 1.2	1.62	0.093	0.016		5	35	11	31	18				
☒ P-006-0-20 3.5	1.51	0.168	0.033		0	37	24	28	11				
▲ P-007-0-20 1.3	1.991	0.367	0.148	0.023	10	37	38	10	5	1.71	24.99		
★ P-007-0-20 3.5	1.005	0.023	0.008		0	17	11	49	23				
◎ P-008-0-20 1.0	2.696	0.643	0.259	0.032	13	50	23	12	2	2.39	27.22		

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:17 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

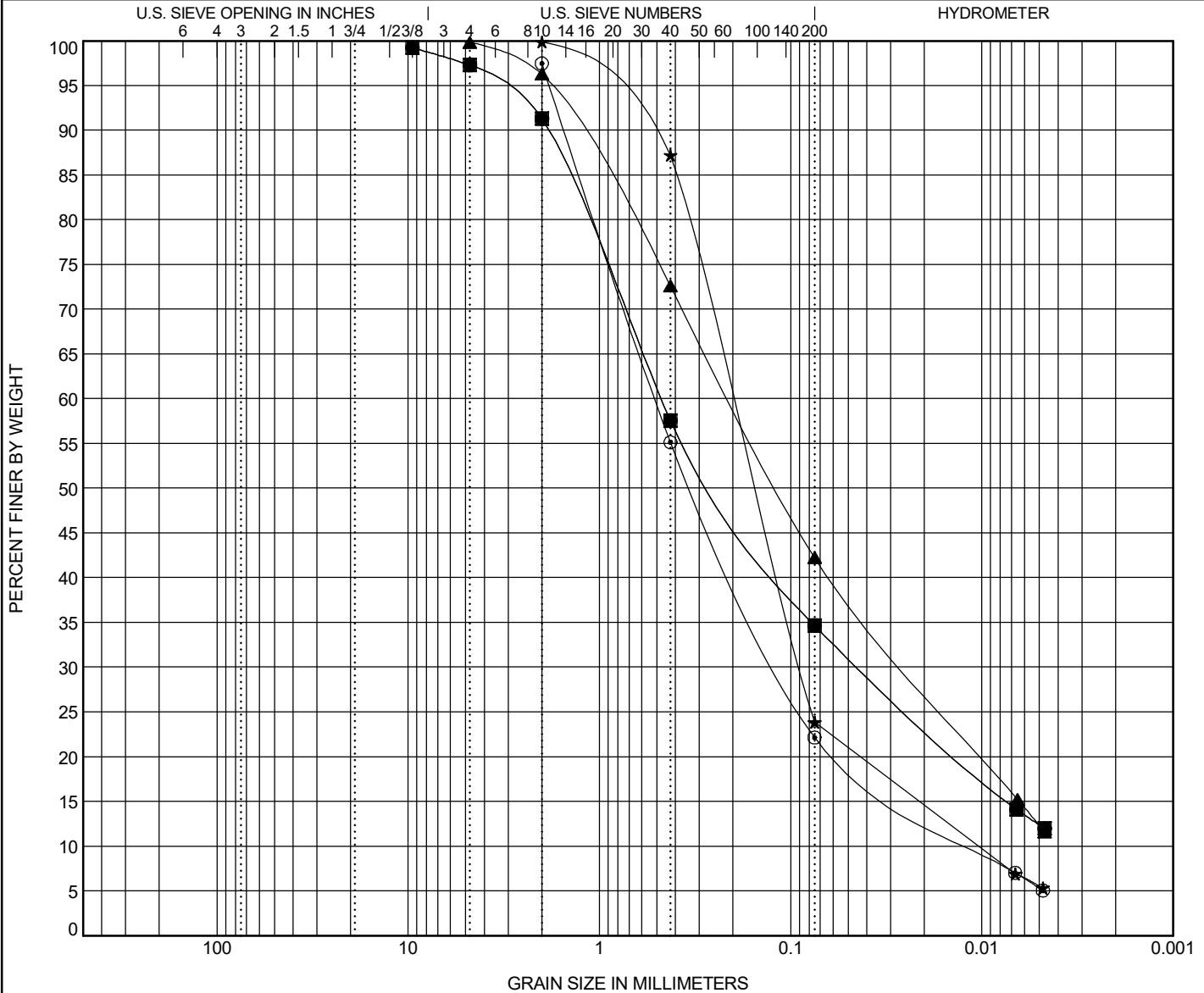


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-008-0-20 2.3	~												
☒ P-008-0-20 3.5	A-3a ~ SILTY SAND(SM)										28	25	3
▲ P-009-0-20 3.5	A-6b ~ CLAYEY SAND(SC)										37	20	17
★ P-009-0-20 6.0	A-3a ~ SILTY SAND(SM)										22	NP	NP
⊙ P-010-0-20 1.1	A-3a ~ SILTY SAND(SM)										15	NP	NP
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-008-0-20 2.3	1.884	0.24	0.043		8	34	23	23	12				
☒ P-008-0-20 3.5	1.884	0.24	0.043		8	34	23	23	12				
▲ P-009-0-20 3.5	1.326	0.117	0.025		4	24	30	30	12				
★ P-009-0-20 6.0	0.598	0.153	0.089	0.01	0	13	63	19	5	3.74	19.34		
⊙ P-010-0-20 1.1	1.522	0.325	0.113	0.011	0	45	33	17	5	2.34	47.01		

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:17 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

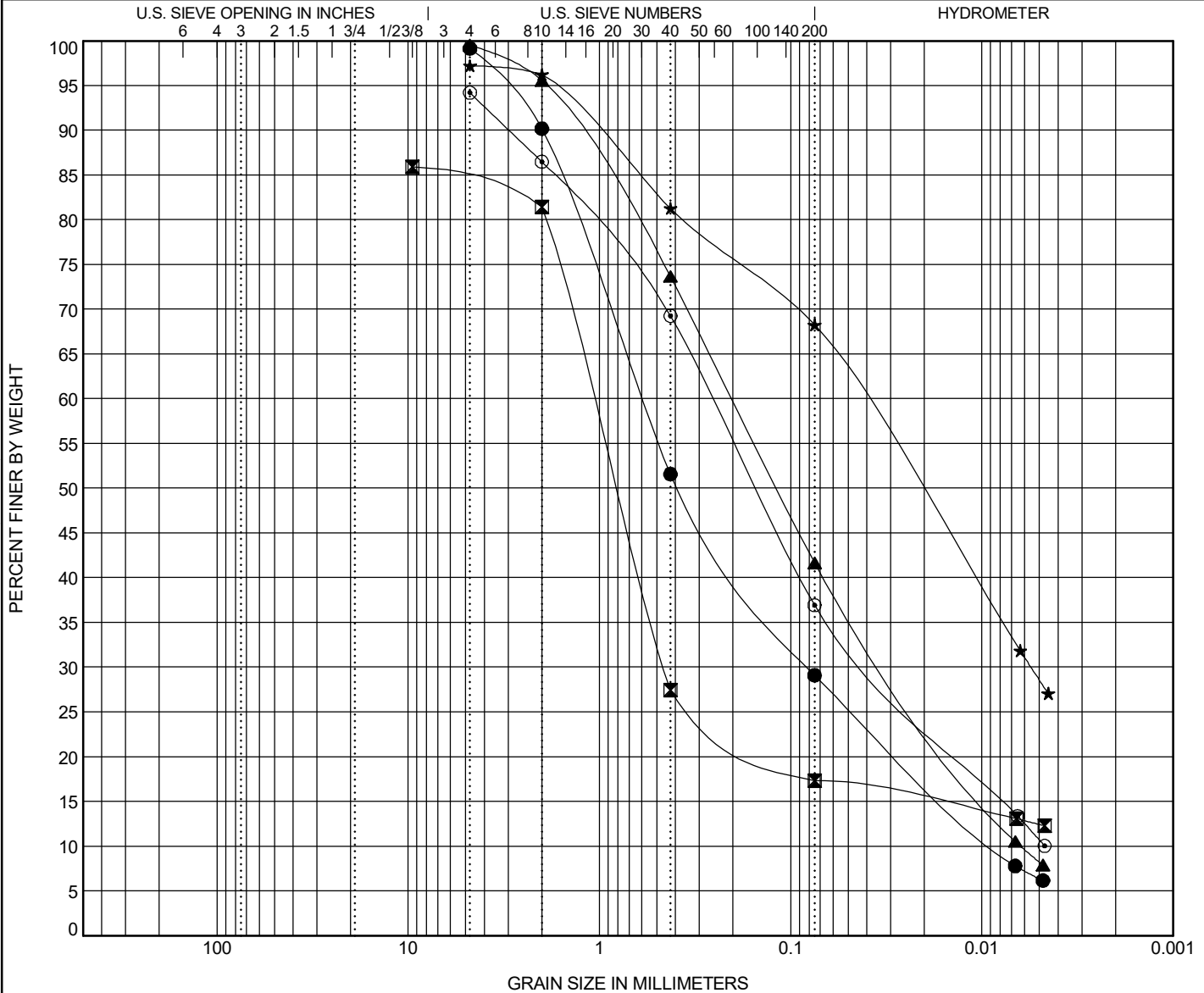


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-010-0-20 3.5	A-3a ~ SILTY SAND(SM)										25	22	3
☒ P-011-0-20 1.0	A-2-4 ~ SILTY, CLAYEY SAND with GRAVEL(SC-SM)										21	14	7
▲ P-011-0-20 3.5	A-4a ~ SILTY SAND(SM)										20	NP	NP
★ P-012-0-20 1.2	A-4a ~ SANDY LEAN CLAY(CL)										24	15	9
⊙ P-012-0-20 3.5	A-4a ~ SILTY SAND(SM)										17	NP	NP
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-010-0-20 3.5	1.986	0.377	0.081	0.009	10	39	22	23	6	1.26	69.10		
☒ P-011-0-20 1.0		0.812	0.458		19	54	10	5	12				
▲ P-011-0-20 3.5	1.347	0.118	0.03	0.006	4	22	32	34	8	0.72	32.25		
★ P-012-0-20 1.2	1.049	0.022	0.006		4	15	13	39	29				
⊙ P-012-0-20 3.5	2.969	0.151	0.037		14	17	32	26	11				

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:17 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

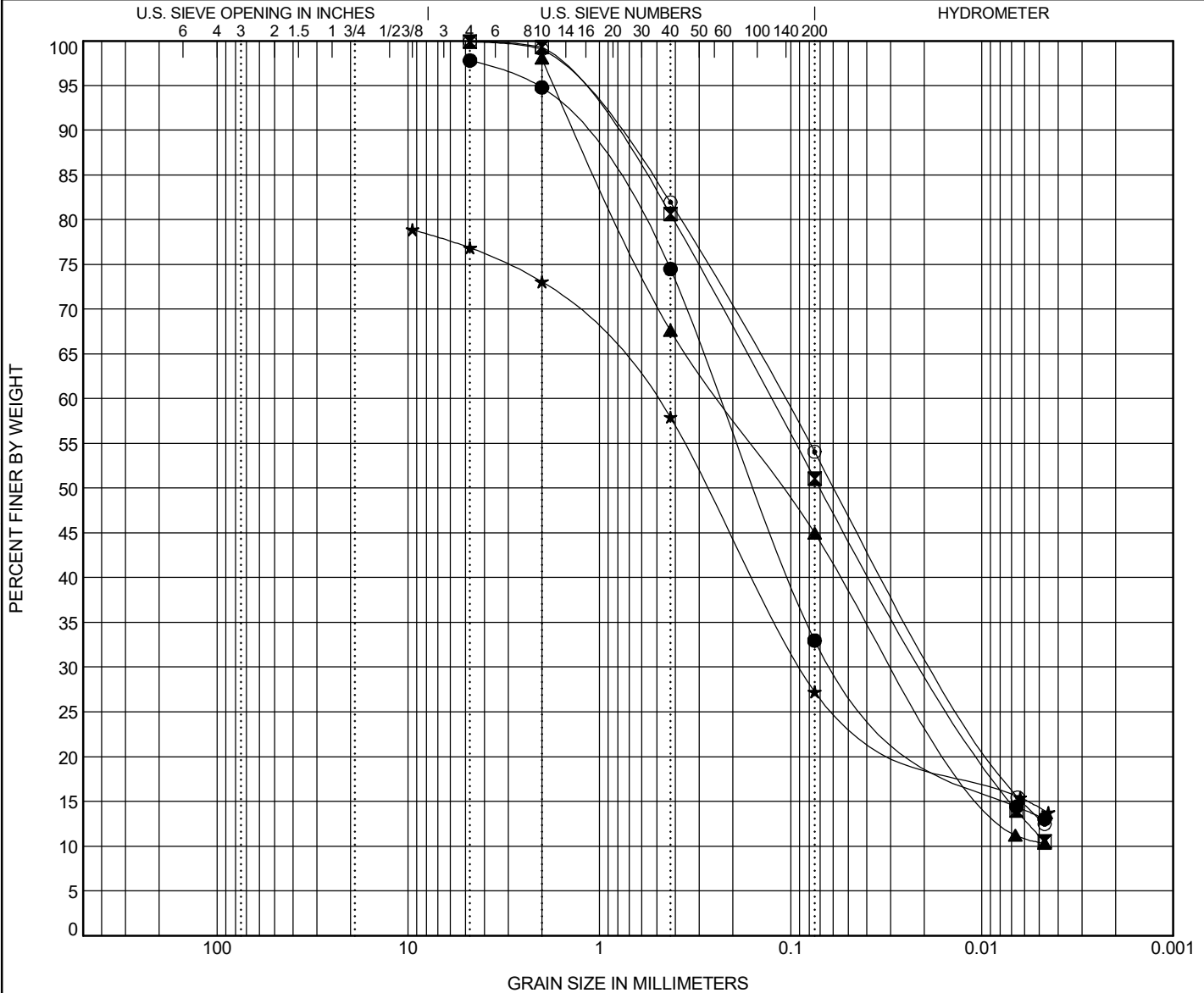


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-012-0-20 6.0	A-3a ~ SILTY SAND(SM)										19	NP	NP
☒ P-013-0-20 1.0	A-4a ~ SANDY LEAN CLAY(CL)										24	16	8
▲ P-013-0-20 3.5	A-6a ~ CLAYEY SAND(SC)										28	17	11
★ P-014-0-20 1.1	A-2-4 ~ SILTY SAND with GRAVEL(SM)										NP	NP	NP
◎ P-014-0-20 3.5	A-4a ~ SANDY SILTY CLAY(CL-ML)										28	22	6
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-012-0-20 6.0	1.389	0.153	0.051		5	20	42	20	13				
☒ P-013-0-20 1.0	0.924	0.07	0.019		0	19	30	40	11				
▲ P-013-0-20 3.5	1.328	0.11	0.026		0	32	23	35	10				
★ P-014-0-20 1.1		0.271	0.088		27	15	31	13	14				
◎ P-014-0-20 3.5	0.881	0.058	0.016		1	17	28	41	13				

GRAIN SIZE - OH DOT.GDT - 8/25/20 12:18 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ





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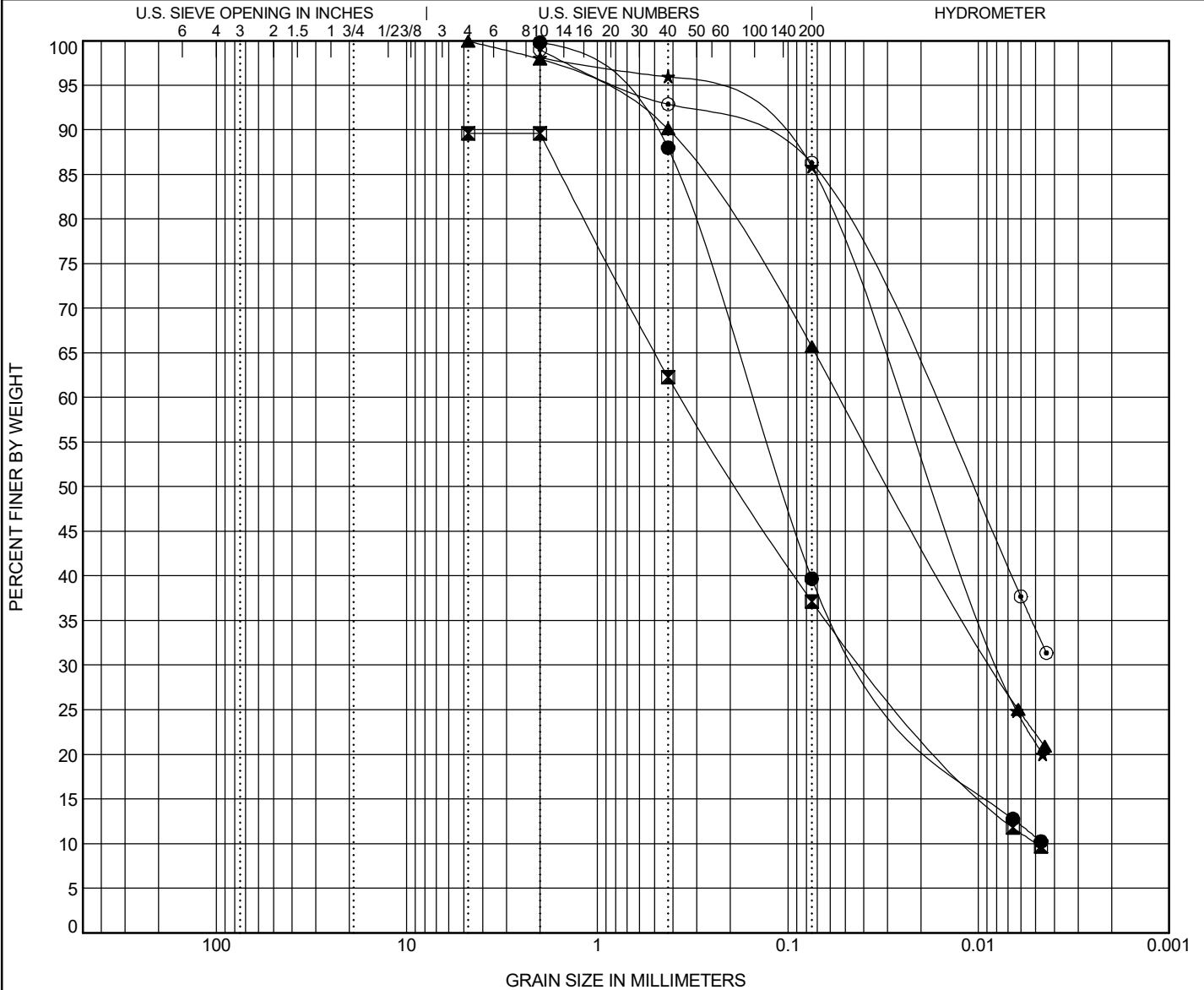
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-015-0-20 1.0	<b>A-4a ~ SILTY, CLAYEY SAND(SC-SM)</b>										24	19	5
■ P-015-0-20 3.5	~												
▲ P-016-0-20 1.2	<b>A-4a ~ SANDY SILTY CLAY(CL-ML)</b>										22	17	5
★ P-016-0-20 3.5	<b>A-4b ~ SILT(ML)</b>										25	22	3
⊙ P-017-0-20 1.1	<b>A-4b ~ SILTY CLAY(CL-ML)</b>										25	18	7
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-015-0-20 1.0	0.553	0.109	0.031		0	12	48	29	11				
■ P-015-0-20 3.5		0.182	0.038	0.005	11	27	25	27	10	0.80	73.13		
▲ P-016-0-20 1.2	0.422	0.029	0.008		2	8	24	44	22				
★ P-016-0-20 3.5	0.153	0.017	0.008		0	4	10	65	21				
⊙ P-017-0-20 1.1	0.199	0.011			0	7	7	52	34				

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:18 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

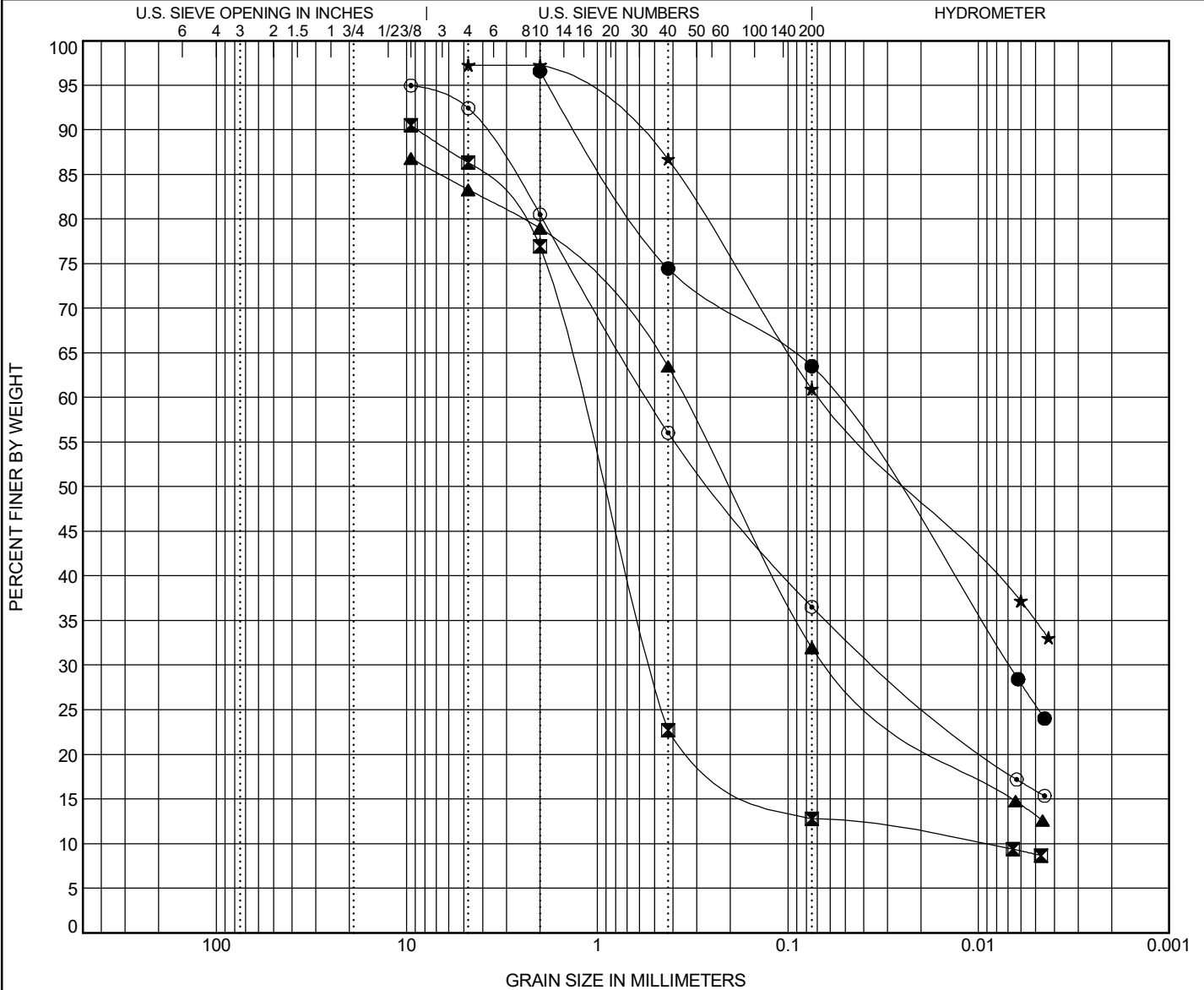


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-017-0-20 3.5	A-6a ~ SANDY LEAN CLAY(CL)										27	14	13
☒ P-018-0-20 1.0	A-1-b ~ SILTY SAND(SM)										NP	NP	NP
▲ P-018-0-20 3.5	A-2-4 ~ SILTY SAND with GRAVEL(SM)										17	15	2
★ P-018-0-20 6.0	A-4a ~ SANDY SILTY CLAY(CL-ML)										21	14	7
⊙ P-019-0-20 1.0	A-4a ~ SILTY SAND(SM)										NP	NP	NP
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-017-0-20 3.5	1.261	0.029	0.007		0	25	11	39	25				
☒ P-018-0-20 1.0	8.753	0.927	0.524	0.01	23	54	10	4	9	21.64	120.03		
▲ P-018-0-20 3.5		0.203	0.057		21	15	32	19	13				
★ P-018-0-20 6.0		0.688	0.023		2	11	26	26	35				
⊙ P-019-0-20 1.0	3.979	0.248	0.033		19	24	20	21	16				

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:19 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ





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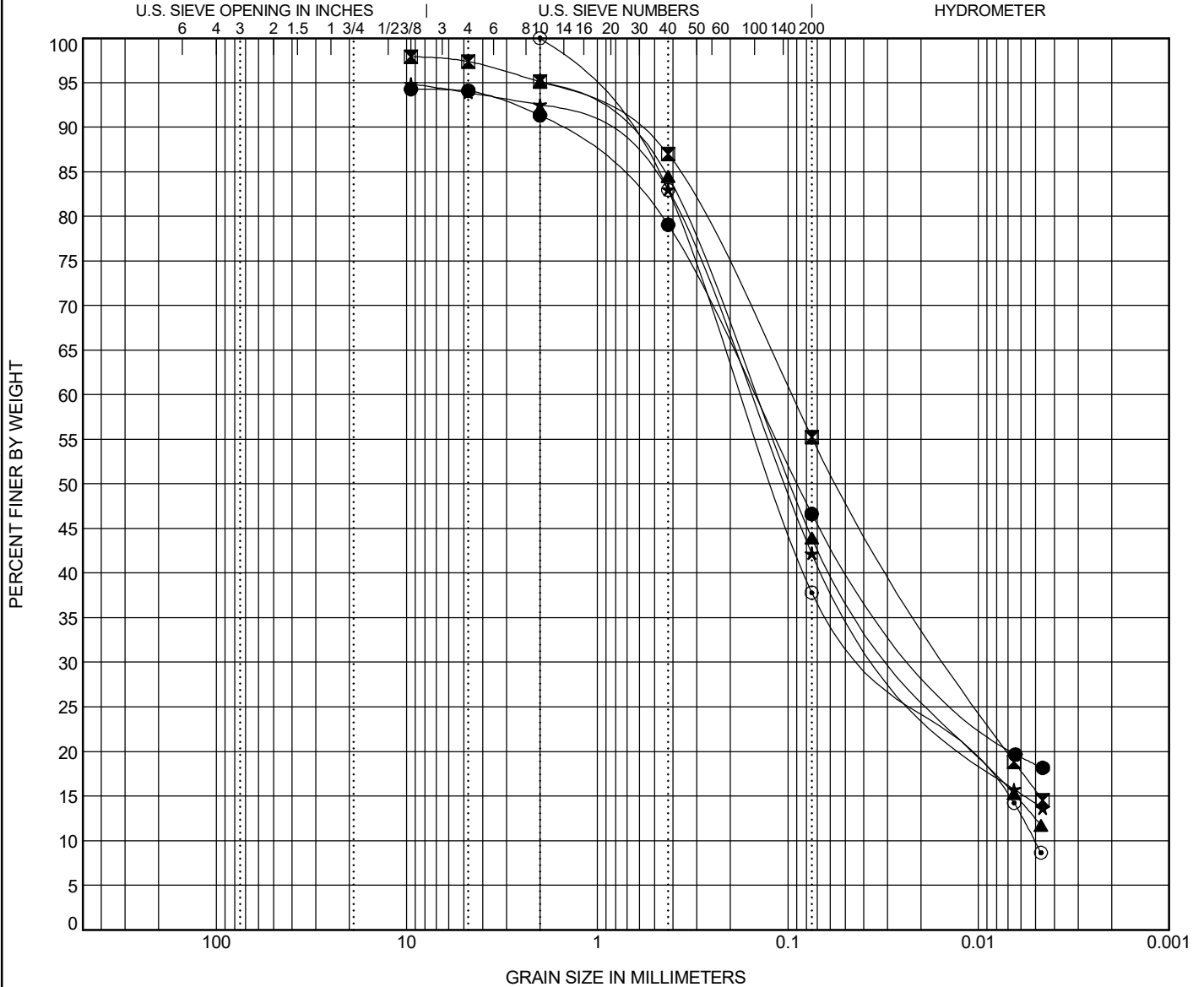
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PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-022-0-20 1.2	A-4a ~ SILTY SAND(SM)										18	15	3
■ P-022-0-20 3.5	A-4a ~ SANDY SILT(ML)										17	15	2
▲ P-022-0-20 6.0	A-4a ~ SILTY SAND(SM)										16	14	2
★ P-022-0-20 8.5	A-4a ~ SILTY SAND(SM)										15	15	NP
○ P-024-0-20 1.0	A-4a ~ SILTY SAND(SM)										18	17	1
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-022-0-20 1.2	1.687	0.09	0.016		9	12	32	28	19				
■ P-022-0-20 3.5	0.752	0.053	0.014		5	8	32	39	16				
▲ P-022-0-20 6.0	0.949	0.097	0.023		0	15	41	32	12				
★ P-022-0-20 8.5	1.323	0.105	0.024		7	10	41	28	14				
○ P-024-0-20 1.0	0.805	0.12	0.033	0.005	0	17	45	28	10	1.25	34.58		

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:20 - X:\SHARED\DISCIPLINE\GEOTECH\IGNT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ



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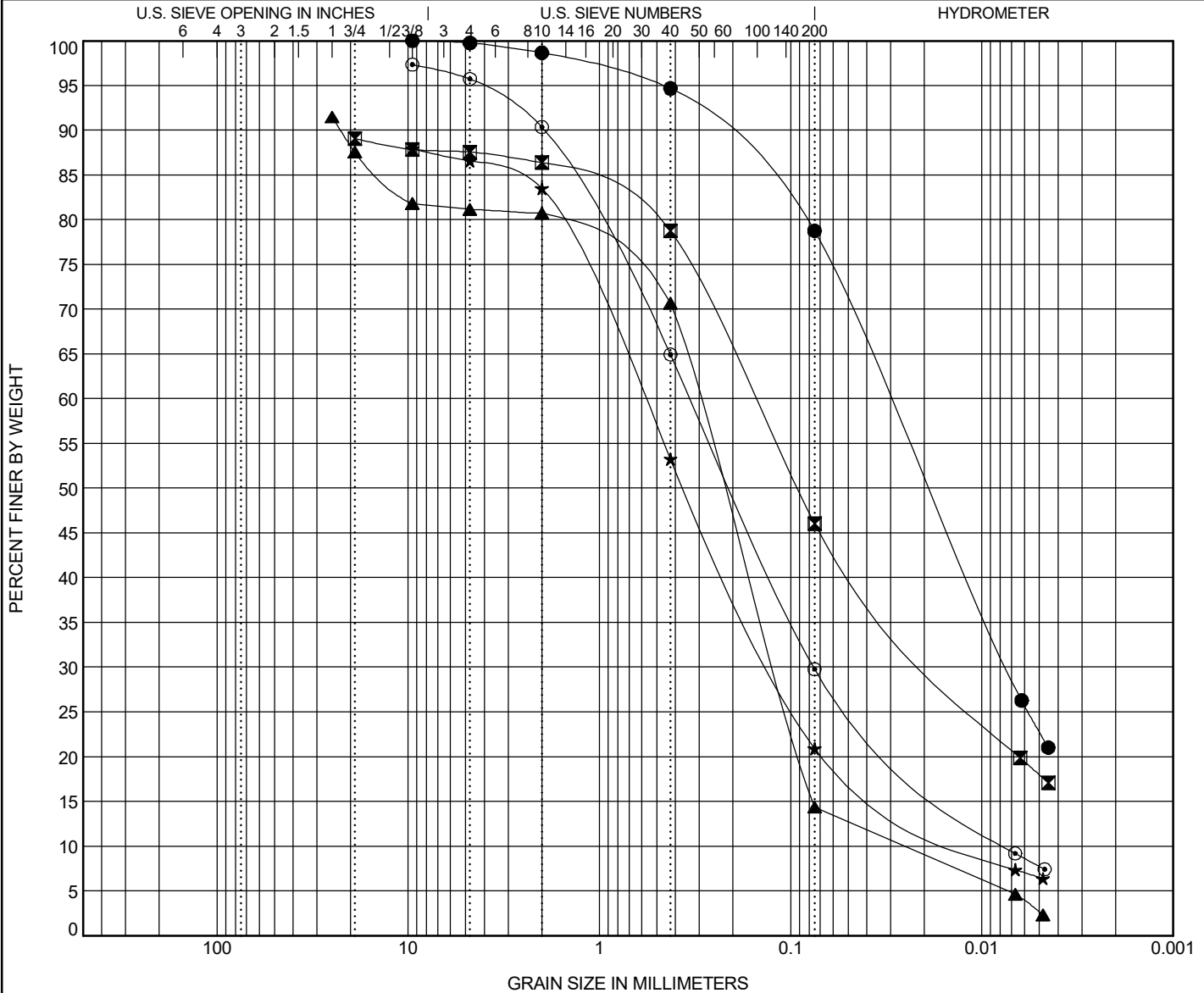
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-024-0-20 3.5	A-4b ~ SILT with SAND(ML)										21	18	3
☒ P-024-0-20 6.0	A-4a ~ SILTY SAND(SM)										16	15	1
▲ P-024-0-20 8.5	A-3a ~ SILTY SAND with GRAVEL(SM)										NP	NP	NP
★ P-025-0-20 1.0	A-3a ~ SILTY SAND(SM)										NP	NP	NP
◎ P-025-0-20 3.5	A-3a ~ SILTY SAND(SM)										14	NP	NP
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-024-0-20 3.5	0.255	0.019	0.007		1	4	16	56	23				
☒ P-024-0-20 6.0		0.093	0.016		13	8	33	28	18				
▲ P-024-0-20 8.5	22.54	0.225	0.121	0.026	20	10	56	11	3	1.89	11.99		
★ P-025-0-20 1.0		0.357	0.122	0.011	17	30	32	15	6	2.31	55.82		
◎ P-025-0-20 3.5	1.957	0.203	0.076	0.007	10	25	35	22	8	2.34	45.11		

GRAIN SIZE - OH DOT.GDT - 8/25/20 12:21 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ



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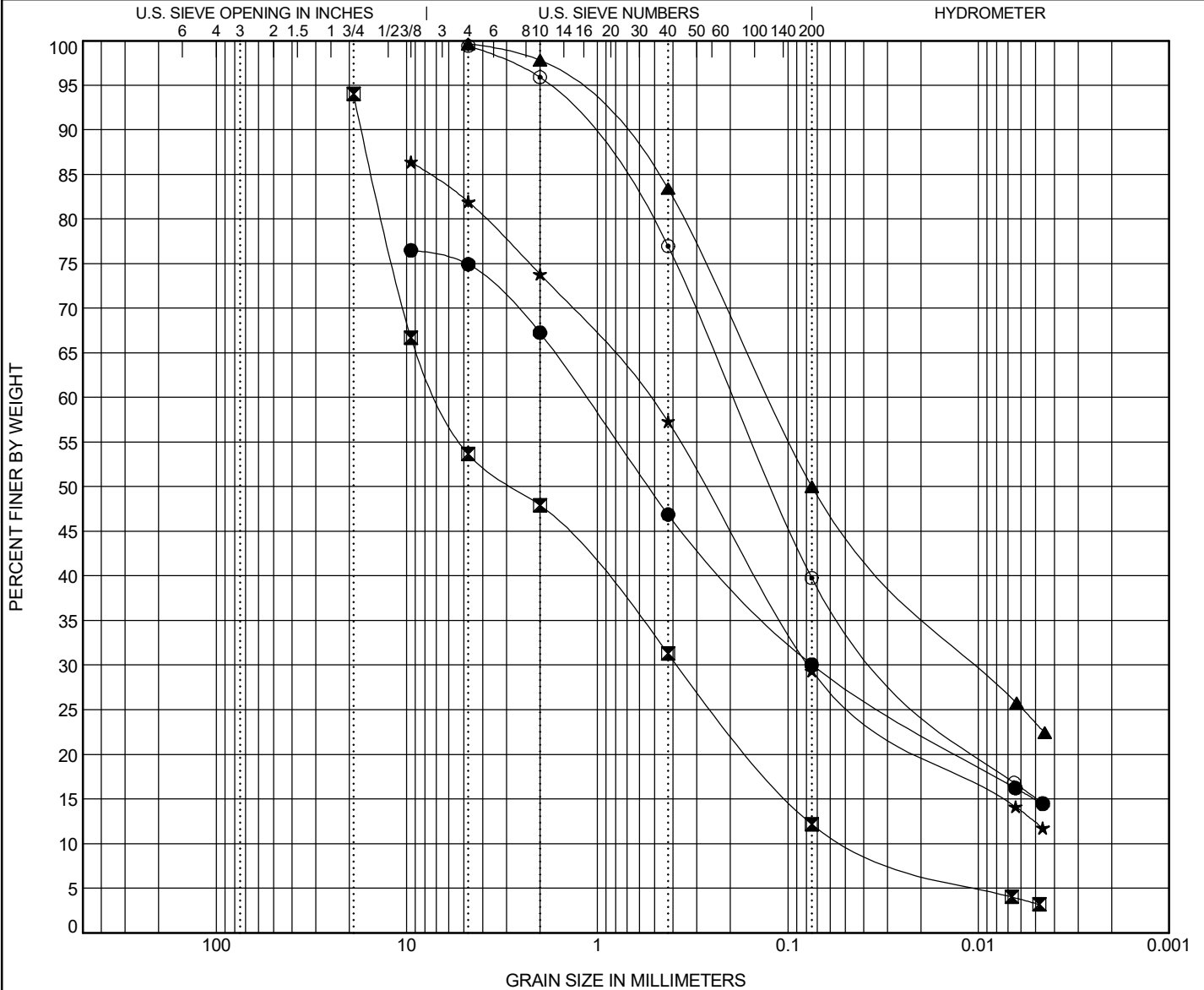
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification									LL	PL	PI
● P-027-0-20 1.0	~											
☒ P-027-0-20 3.5	~											
▲ P-027-0-20 6.0	<b>A-4a ~ CLAYEY SAND(SC)</b>									25	15	10
★ P-028-0-20 1.2	<b>A-2-4 ~ SILTY SAND with GRAVEL(SM)</b>									NP	NP	NP
◎ P-028-0-20 3.5	<b>A-4a ~ SILTY, CLAYEY SAND(SC-SM)</b>									20	16	4
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu	
● P-027-0-20 1.0		0.539	0.074		33	20	17	15	15			
☒ P-027-0-20 3.5	17.159	2.738	0.378	0.04	52	17	19	9	3	0.54	167.62	
▲ P-027-0-20 6.0	0.862	0.075	0.01		3	14	33	27	23			
★ P-028-0-20 1.2		0.27	0.078		27	16	28	17	12			
◎ P-028-0-20 3.5	1.234	0.121	0.027		4	19	37	25	15			

GRAIN SIZE - OH DOT.GDT - 8/25/20 12:22 - X:\SHARED\DISCIPLINE\GEOTECH\IGNT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

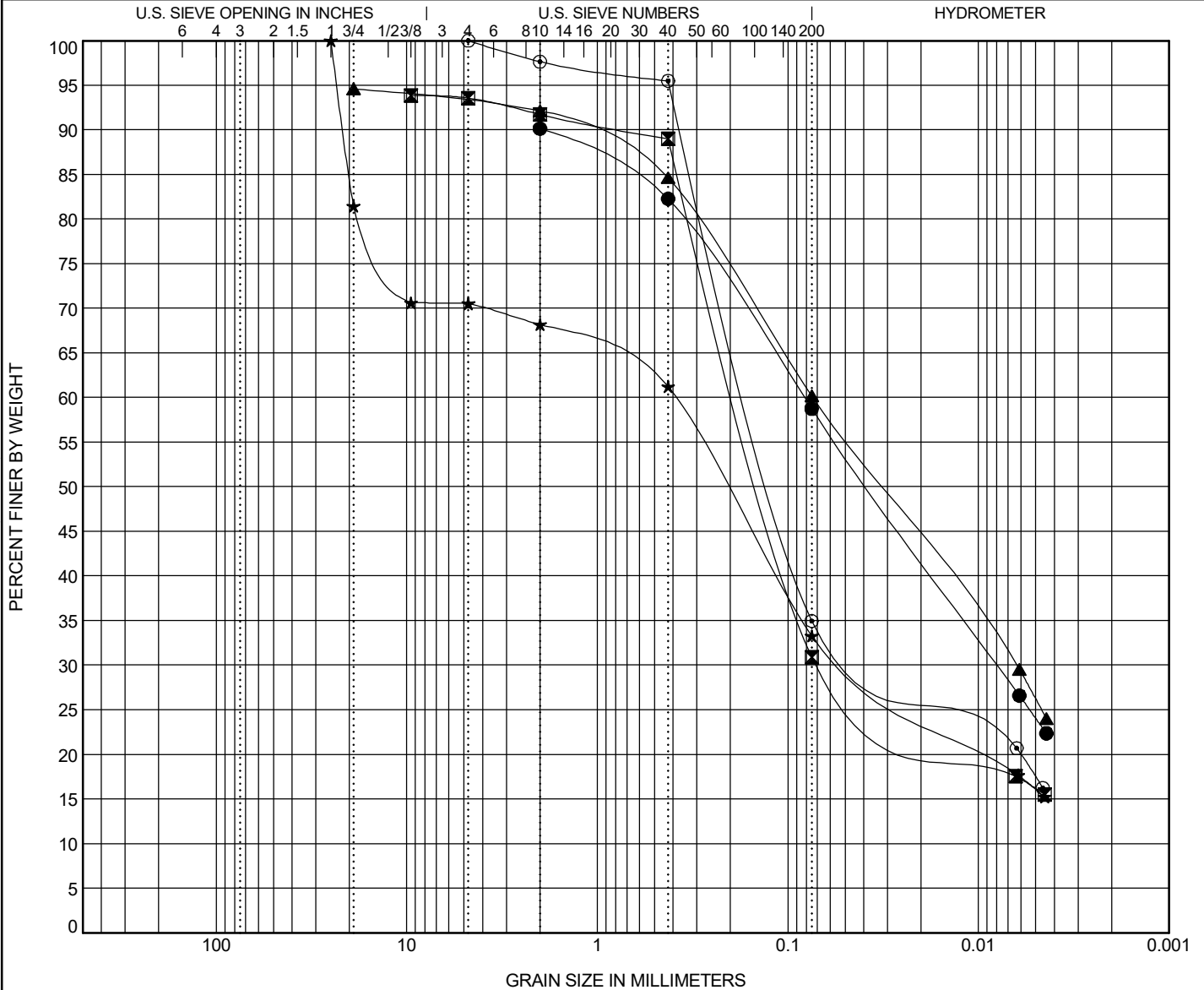


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification									LL	PL	PI
● P-028-0-20 6.0	A-4a ~ SANDY SILTY CLAY(CL-ML)									22	15	7
■ P-029-0-20 1.1	A-3a ~ SILTY SAND(SM)									NP	NP	NP
▲ P-029-0-20 3.5	A-4a ~ SANDY SILTY CLAY(CL-ML)									23	16	7
★ P-029-0-20 6.0	A-2-4 ~ SILTY SAND with GRAVEL(SM)									19	16	3
○ P-029-0-20 8.5	A-3a ~ SILTY SAND(SM)									17	16	1
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu	
● P-028-0-20 6.0	1.944	0.038	0.008		0	17	24	35	24			
■ P-029-0-20 1.1	0.746	0.133	0.064		8	3	58	15	16			
▲ P-029-0-20 3.5	1.287	0.033	0.006		9	7	24	34	26			
★ P-029-0-20 6.0	21.56	0.212	0.044		32	7	28	17	16			
○ P-029-0-20 8.5	0.363	0.115	0.032		2	2	61	18	17			

GRAIN SIZE - OH DOT.GDT - 8/25/20 12:23 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ



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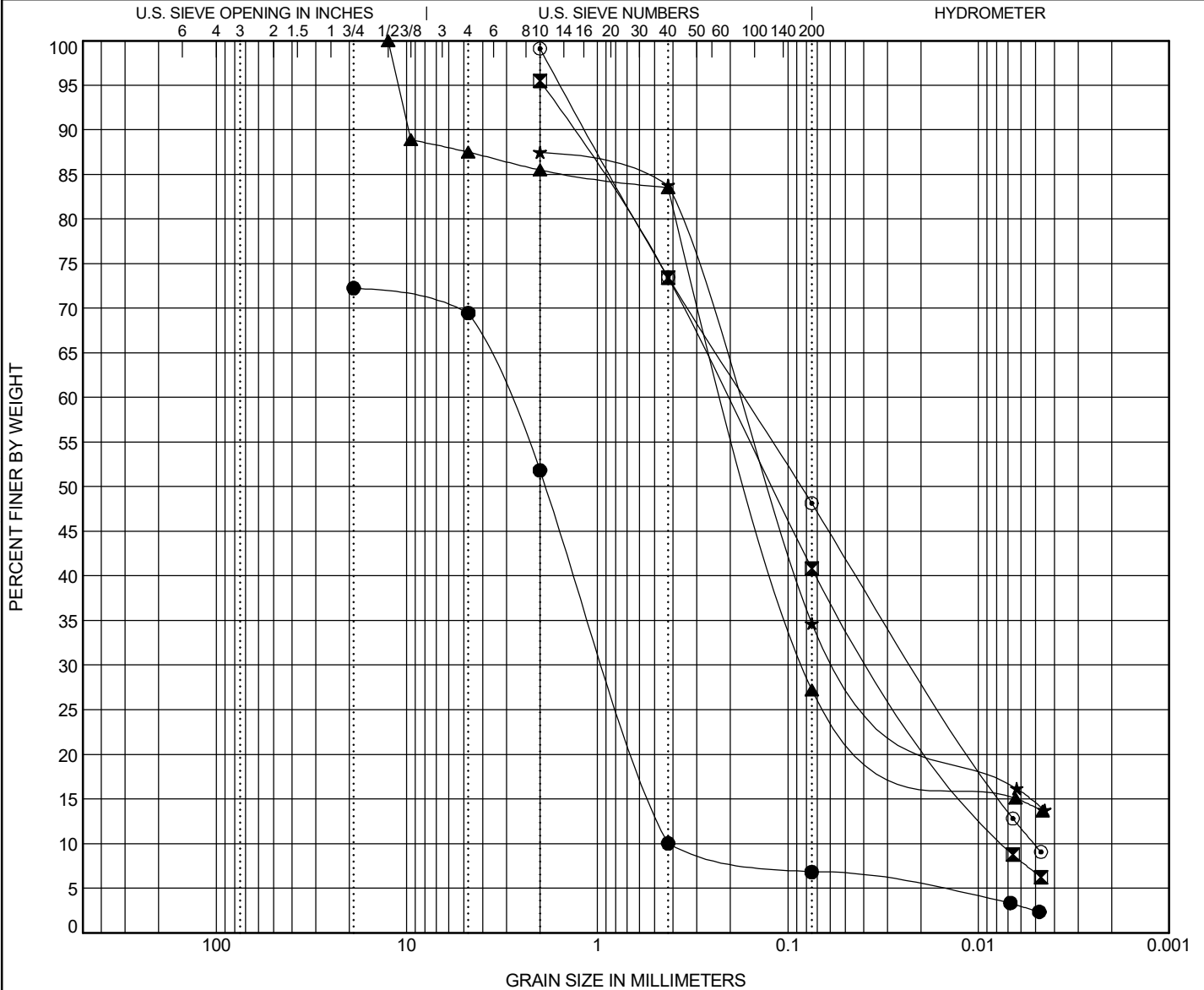
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-030-0-20 1.0	~												
■ P-030-0-20 3.5	A-4a ~ SILTY SAND(SM)										20	18	2
▲ P-032-0-20 1.0	A-3a ~ SILTY SAND(SM)										NP	NP	NP
★ P-032-0-20 3.5	A-3a ~ SILTY SAND(SM)										20	17	3
○ P-033-0-20 1.0	A-4a ~ SILTY SAND(SM)										18	NP	NP
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-030-0-20 1.0	1.0	1.869	0.891	0.422	48	42	3	5	2	0.63	7.08		
■ P-030-0-20 3.5	3.5	1.358	0.122	0.033	0	26	33	34	7	0.72	28.65		
▲ P-032-0-20 1.0	1.0	9.764	0.151	0.082	15	2	56	13	14				
★ P-032-0-20 3.5	3.5		0.129	0.04	0	16	49	20	15				
○ P-033-0-20 1.0	1.0	1.153	0.085	0.022	0	27	25	38	10	0.54	32.97		

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:24 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ





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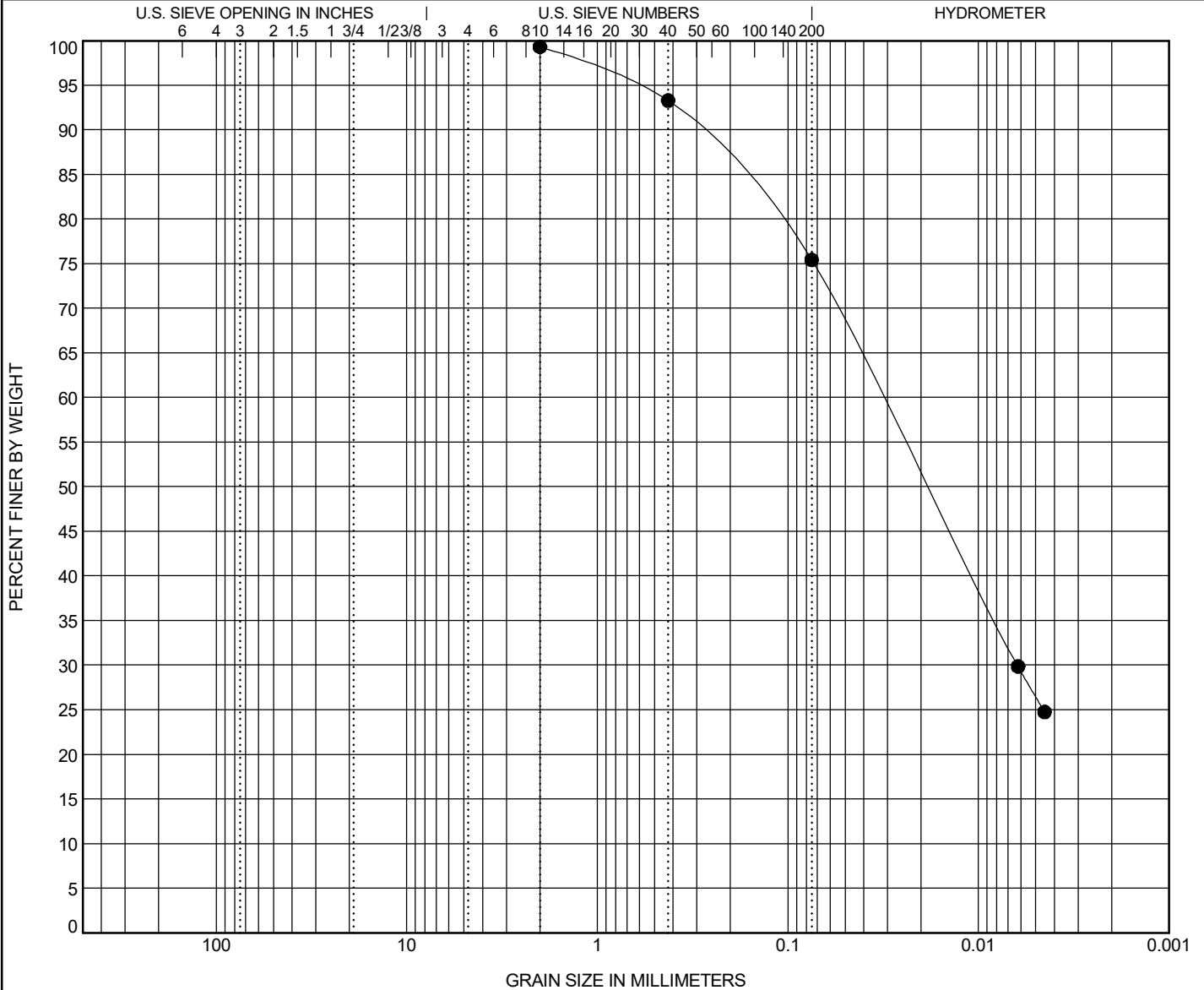
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification							LL	PL	PI
● P-033-0-20 3.5	<b>A-6a ~ LEAN CLAY with SAND(CL)</b>							<b>27</b>	<b>16</b>	<b>11</b>

Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu
● P-033-0-20 3.5	<b>0.309</b>	<b>0.019</b>	<b>0.006</b>		<b>0</b>	<b>7</b>	<b>18</b>	<b>49</b>	<b>26</b>		

GRAIN SIZE - OH DOT.GDT - 8/25/20 12:24 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

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# SULFATE REPORT

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**Sulfate Content Report**

PROJECT NAME SUM 76-77 Phase 3 SR 8

PROJECT NO. 1822-1016.00 SHEET 1 OF 5

CLIENT EL Robinson

PROCEDURE Supplement 1122

COMP. BY RB

DATE 7/8/2020

Boring No.	Sample No.	Depth	Initial Can No.	Can No.	Can No.	Bottle No.	Beaker No.	Readings w/Dilution of 1/20			Average (ppm)	Actual (ppm) (Avg x 20)
				Weight	Weight			1	2	3		
P-019-0-20	S-1	1.0'-2.5'		6	6	1	51	21	27	27	25	500
				20g	20g							
P-014-0-20	S-1	1.0'-2.5'		7	7	2	48	97	98	98	98	2000
				20g	20g							
P-016-0-20	S-1	1.0'-2.5'		9	9	3	44	89	90	90	90	1800
				20g	20g							
P-032-0-20	S-1	1.0'-2.5'		55	55	4	49	20	20	20	20	400
				20g	20g							
P-029-0-20	S-1	1.0'-2.5'		5	5	5	45	26	28	28	27	550
				20g	20g							
P-028-0-20	S-1	1.0'-2.5'		1	1	6	50	5	6	5	5	110
				20g	20g							

Remarks 1st round of testing



**Sulfate Content Report**

PROJECT NAME SUM 76-77 Phase 3 SR 8 PROJECT NO. 1822-1016.00 SHEET 2 OF 5  
 CLIENT EL Robinson PROCEDURE Supplement 1122 COMP. BY RB DATE 7/10/2020

Boring No.	Sample No.	Depth	Initial Can No.	Can No.	Can No.	Bottle No.	Beaker No.	Readings w/Dilution of 1/20			Average (ppm)	Actual (ppm) (Avg x 20)
				Weight	Weight			1	2	3		
P-001-0-20	S-1	1.0'-2.5'		18	18	1	43	24	25	28	26	510
				20g	20g							
P-006-0-20	S-1	1.0'-2.5'		19	19	2	45	48	47	60	52	1000
				20g	20g							
P-008-0-20	S-1A	1.0'-2.5'		14	14	3	47	9	10	7	9	170
				20g	20g							
P-020-0-20	S-1	1.0'-2.5'		23	23	4	49	21	23	26	23	470
				20g	20g							
P-022-0-20	S-1	1.0'-2.5'		25	25	5	51	96	99	97	97	1900
				20g	20g							
P-009-0-20	S-1	1.0'-2.5'		15	15	6	53	7	8	8	8	150
				20g	20g							

Remarks 2nd round of testing



**Sulfate Content Report**

PROJECT NAME SUM 76-77 Phase 3 SR 8 PROJECT NO. 1822-1016.00 SHEET 3 OF 5  
 CLIENT EL Robinson PROCEDURE Supplement 1122 COMP. BY DPH DATE 7/13/2020

Boring No.	Sample No.	Depth	Initial Can No.	Can No.	Can No.	Bottle No.	Beaker No.	Readings w/Dilution of 1/20			Average (ppm)	Actual (ppm) (Avg x 20)
				Weight	Weight			1	2	3		
P-007-0-20	S-1	1.0'-2.5'		10	10	1	43	9	9	9	9	180
				20g	20g							
P-008-0-20	S-1B	1.0'-2.5'		21	21	2	44	286	288	288	287	5700
				20g	20g							
P-025-0-20	S-1	1.0'-2.5'		8	8	3	45	22	21	22	22	430
				20g	20g							
P-010-0-20	S-1	1.0'-2.5'		3	3	4	47	199	198	199	199	4000
				20g	20g							
P-017-0-20	S-1	1.0'-2.5'		60	60	5	49	96	99	97	97	1900
				20g	20g							
P-033-0-20	S-1	1.0'-2.5'		62	62	6	51	5	5	5	5	100
				20g	20g							
P-024-0-20	S-1	1.0'-2.5'		4	4	7	53	39	38	39	39	770
				20g	20g							

Remarks 3rd round of testing



**Sulfate Content Report**

PROJECT NAME SUM 76-77 Phase 3 SR 8 PROJECT NO. 1822-1016.00 SHEET 4 OF 5  
 CLIENT EL Robinson PROCEDURE Supplement 1122 COMP. BY DPH DATE 7/15/2020

Boring No.	Sample No.	Depth	Initial Can No.	Can No.	Can No.	Bottle No.	Beaker No.	Readings w/Dilution of 1/20			Average (ppm)	Actual (ppm) (Avg x 20)
				Weight	Weight			1	2	3		
P-011-0-20	S-1	1.0'-2.5'		13	13	1	43	3	3	3	3	<100
				20g	20g							
P-005-0-20	S-1	1.0'-2.5'		2	2	2	45	2	3	3	3	<100
				20g	20g							
P-004-0-20	S-1	1.0'-2.5'		11	11	3	47	91	99	92	94	1900
				20g	20g							
P-002-0-20	S-1	1.0'-2.5'		12	12	4	49	179	178	178	178	3600
				20g	20g							
P-013-0-20	S-1	1.0'-2.5'		22	22	5	51	136	132	134	134	2700
				20g	20g							
P-015-0-20	S-1	1.0'-2.5'		59	59	6	53	17	17	17	17	340
				20g	20g							

Remarks 4nd round of testing



**Sulfate Content Report**

PROJECT NAME SUM 76-77 Phase 3 SR 8

PROJECT NO. 1822-1016.00

SHEET 5 OF 5

CLIENT EL Robinson

PROCEDURE Supplement 1122

COMP. BY RB

DATE 7/17/2020

Boring No.	Sample No.	Depth	Initial Can No.	Can No.	Can No.	Bottle No.	Beaker No.	Readings w/Dilution of 1/20			Average (ppm)	Actual (ppm) (Avg x 20)
				Weight	Weight			1	2	3		
P-003-0-20	S-1	1.0'-2.5'		100 20g	100 20g	1	43	91	91	91	91	1800
P-018-0-20	S-1	1.0'-2.5'		120 20g	120 20g	2	45	35	35	36	35	710
P-030-0-20	S-1	1.0'-2.5'		115 20g	115 20g	3	47	4	5	4	4	<100
P-012-0-20	S-1	1.0'-2.5'		112 20g	112 20g	4	49	146	148	147	147	2900
P-027-0-20	S-1	1.0'-2.5'		124 20g	124 20g	5	51	37	38	40	38	770

Remarks 5nd round of testing



**Sulfate Content Report**

PROJECT NAME SUM 76-77 PROJECT NO. 1822-1016.00 SHEET 1 OF 1  
 CLIENT EL ROBINSON PROCEDURE ODOT Supplement 1122 COMP. BY PB DATE 11/20/2020

Boring No.	Sample No.	Depth	Initial Can No.	Can No.	Can No.	Bottle No.	Beaker No.	Readings w/Dilution of 1/20			Average (ppm)	Actual (ppm) (Avg x 20)
				Weight	Weight			1	2	3		
B2-01-0-20	1	1'-2.5'	JAR	36 20g	23 20g	1	1001	3	3	3	3	<100
E3-01-0-20	1 & 2	1'-5'	JAR		58 20g	2	1002	3	4	3	3	<100
E3-02-0-20	1 & 2	1'-5'	JAR		60 20g	4	1004	3	3	3	3	<100
E3-03-0-20	1 & 2	1'-5'	JAR	75 20g	71 20g	5	1005	11	11	11	11	220
E3-04-0-20	1 & 2	1'-5'	JAR	65 20g	57 20g	6	1006	8	8	8	8	160
E3-05-0-20	1 & 2	1'-5'	JAR		100 20g	7	1007	10	10	10	10	200
E3-06-0-20	1 & 2	1'-5'	JAR		112 20g	8	1008	15	16	16	16	310
E3-07-0-20	1 & 2	1'-5'	JAR		118 20g	9	1009	13	13	13	13	260
E3-08-0-20	1	1'-2.5'	JAR	144 20g	143 20g	10	1010	33	33	33	33	660

Remarks \_\_\_\_\_



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# GB-1 SUBGRADE ANALYSIS TAB

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EXPLOR. ID	STATION	OFFSET	DIR	SAMPLE ID	SAMPLE FROM	TO	SUBGRADE FROM	TO	N60	N60L	tsf HP	LL	PL	PI	% SILT	% CLAY	P 200	% WC	MOPT	ODOT CLASS	GI	ppm SO4
B2-001-0-20	333+51	52	Lt	SS-1	01.00	02.50			29			25	17		37	24		11		A-4a		<100
B2-001-0-20	333+51	52	Lt	SS-2	03.50	05.00			29									5		A-3		-
B2-001-0-20	333+51	52	Lt	SS-3	06.00	07.50			3									13		A-3		-
B2-001-0-20	333+51	52	Lt	SS-4	08.50	10.00			14			24	14		27	25		12		A-4a		-
B2-001-0-20	333+51	52	Lt	SS-5	11.00	12.50			15									10		A-4a		-
B2-001-0-20	333+51	52	Lt	SS-6	13.50	15.00			20			22	16		42	15		14		A-4a		-
B2-001-0-20	333+51	52	Lt	SS-7	16.00	17.50			29			30	18		51	28		18		A-6a		-
B2-001-0-20	333+51	52	Lt	SS-8	18.50	20.00			12			29	18		40	27		14		A-6a		-
B2-001-0-20	333+51	52	Lt	SS-9	21.00	22.50			15									17		A-6a		-
B2-001-0-20	333+51	52	Lt	SS-10	23.50	25.00			21									11		A-6a		-
B2-001-0-20	333+51	52	Lt	SS-11	26.00	27.50			12									10		A-6a		-
B2-001-0-20	333+51	52	Lt	SS-12	28.50	29.33			30/50/4"									16		UCF		-
B2-001-0-20	333+51	52	Lt	SS-13	31.00	32.50			12						4	6		18		A-3a		-
B2-001-0-20	333+51	52	Lt	SS-14	33.50	35.00			12									16		A-3a		-
B2-001-0-20	333+51	52	Lt	SS-15	36.00	37.50			12									18		A-3a		-
B2-001-0-20	333+51	52	Lt	SS-16	38.50	39.50			1/3/50/0"									18		UCF		-
E3-001-0-20	4327+24	129	Lt	SS-1	01.00	02.50			27									13		A-6a		<100
E3-001-0-20	4327+24	129	Lt	SS-2	03.50	05.00			29			26	20		41	19		12		A-4a		-
E3-001-0-20	4327+24	129	Lt	SS-3	06.00	07.50			42			28	22		54	17		8		A-4b		-
E3-001-0-20	4327+24	129	Lt	SS-4	08.50	09.42			20/50/5"									8		A-4b		-
E3-001-0-20	4327+24	129	Lt	SS-5	11.00	12.50			72											Rock		-
E3-001-0-20	4327+24	129	Lt	SS-6	13.50	14.42			25/50/5"											Rock		-
E3-001-0-20	4327+24	129	Lt	SS-7	16.00	16.42			50/5"											Rock		-
E3-001-0-20	4327+24	129	Lt	SS-8	18.50	18.92			50/5"											Rock		-
E3-001-0-20	4327+24	129	Lt	SS-9	21.00	21.42			50/5"											Rock		-
E3-001-0-20	4327+24	129	Lt	SS-10	23.50	23.83			50/4"											Rock		-
E3-001-0-20	4327+24	129	Lt	SS-11	26.00	26.92			35/50/5"											Rock		-
E3-001-0-20	4327+24	129	Lt	SS-12	28.50	29.42			32/50/5"											Rock		-
E3-001-0-20	4327+24	129	Lt	SS-13	31.00	31.42			50/5"											Rock		-
E3-001-0-20	4327+24	129	Lt	SS-14	33.50	33.75			50/3"											Rock		-
E3-001-0-20	4327+24	129	Lt	SS-15	36.00	36.42			50/5"											Rock		-
E3-001-0-20	4327+24	129	Lt	SS-16	38.50	38.67			50/2"											Rock		-
E3-001-0-20	4327+24	129	Lt	SS-17	41.00	41.25			50/3"											Rock		-
E3-001-0-20	4327+24	129	Lt	SS-18	43.50	43.67			50/2"											Rock		-
E3-001-0-20	4327+24	129	Lt	SS-19	46.00	46.25			50/3"											Rock		-
E3-001-0-20	4327+24	129	Lt	SS-20	48.50	48.58			50/1"											Rock		-
E3-002-0-20	4328+42	112	Lt	SS-1	01.00	02.50			38									12		A-6a		<100
E3-002-0-20	4328+42	112	Lt	SS-2	03.50	05.00			59			30	17		34	32		11		A-6a		-
E3-002-0-20	4328+42	112	Lt	SS-3	06.00	07.50			41			29	17		33	31		6		Rock		-
E3-002-0-20	4328+42	112	Lt	SS-4	08.50	10.00			41									6		Rock		-
E3-002-0-20	4328+42	112	Lt	SS-5	11.00	12.50			12											Rock		-
E3-002-0-20	4328+42	112	Lt	SS-6	13.50	15.00			89											Rock		-
E3-002-0-20	4328+42	112	Lt	SS-7	16.00	16.92			14/50/5"											Rock		-
E3-002-0-20	4328+42	112	Lt	SS-8	18.50	19.25			35/50/3"											Rock		-
E3-002-0-20	4328+42	112	Lt	SS-9	21.00	21.42			50/5"											Rock		-
E3-002-0-20	4328+42	112	Lt	SS-10	23.50	23.92			50/5"											Rock		-
E3-002-0-20	4328+42	112	Lt	SS-11	26.00	26.33			50/4"											Rock		-
E3-002-0-20	4328+42	112	Lt	SS-12	28.50	28.75			50/3"											Rock		-
E3-002-0-20	4328+42	112	Lt	SS-13	31.00	31.17			50/2"											Rock		-
E3-002-0-20	4328+42	112	Lt	SS-14	33.50	33.75			50/3"											Rock		-
E3-002-0-20	4328+42	112	Lt	SS-15	36.00	36.17			50/2"											Rock		-
E3-002-0-20	4328+42	112	Lt	SS-16	38.50	38.75			50/3"											Rock		-
E3-002-0-20	4328+42	112	Lt	SS-17	41.00	41.25			50/3"											Rock		-
E3-002-0-20	4328+42	112	Lt	SS-18	43.50	43.75			50/3"											Rock		-
E3-002-0-20	4328+42	112	Lt	SS-19	46.00	46.17			50/2"											Rock		-
E3-002-0-20	4328+42	112	Lt	SS-20	48.50	48.83			50/4"											Rock		-
E3-003-0-20	4329+57	94	Lt	SS-1	01.00	02.50			44			24	15		49	21		8		A-4a		220
E3-003-0-20	4329+57	94	Lt	SS-2	03.50	05.00			32									14		A-4a		-
E3-003-0-20	4329+57	94	Lt	SS-3	06.00	07.50			65									6		Rock		-
E3-003-0-20	4329+57	94	Lt	SS-4	08.50	10.00			92									4		Rock		-
E3-003-0-20	4329+57	94	Lt	SS-5	11.00	11.42			50/5"											Rock		-
E3-003-0-20	4329+57	94	Lt	SS-6	13.50	13.92			50/5"											Rock		-
E3-003-0-20	4329+57	94	Lt	SS-7	16.00	17.50			66											Rock		-
E3-003-0-20	4329+57	94	Lt	SS-8	18.50	20.00			77											Rock		-
E3-003-0-20	4329+57	94	Lt	SS-9	21.00	21.42			50/5"											Rock		-
E3-003-0-20	4329+57	94	Lt	SS-10	23.50	23.83			50/4"											Rock		-
E3-003-0-20	4329+57	94	Lt	SS-11	26.00	26.42			50/5"											Rock		-
E3-003-0-20	4329+57	94	Lt	SS-12	28.50	28.67			50/2"											Rock		-
E3-003-0-20	4329+57	94	Lt	SS-13	31.00	31.17			50/2"											Rock		-
E3-003-0-20	4329+57	94	Lt	SS-14	33.50	33.67			50/2"											Rock		-
E3-003-0-20	4329+57	94	Lt	SS-15	36.00	36.83			37/50/4"											Rock		-
E3-003-0-20	4329+57	94	Lt	SS-16	38.50	39.42			36/50/5"											Rock		-
E3-003-0-20	4329+57	94	Lt	SS-17	41.00	41.25			50/3"											Rock		-
E3-003-0-20	4329+57	94	Lt	SS-18	43.50	43.92			50/5"											Rock		-
E3-003-0-20	4329+57	94	Lt	SS-19	46.00	46.08			50/1"											Rock		-
E3-003-0-20	4329+57	94	Lt	SS-20	48.50	48.58			50/1"											Rock		-
E3-004-0-20	4330+72	89	Lt	SS-1	01.00	02.50			50			26	16		37	26		10		A-4a		160
E3-004-0-20	4330+72	89	Lt	SS-2	03.50	05.00			50									9		A-4a		-
E3-004-0-20	4330+72	89	Lt	SS-3	06.00	07.50			35			29	21		45	17		14		A-4a		-
E3-004-0-20	4330+72	89	Lt	SS-4	08.50	09.83			7/39/50/4"			29	21		58	20		10		A-4b		-
E3-004-0-20	4330+72	89	Lt	SS-5	11.00	11.92			17/50/5"					</								





EXPLOR. ID	STATION	OFFSET	DIR	SAMPLE ID	SAMPLE FROM	TO	SUBGRADE FROM	TO	N60	N60L	tsf HP	LL	PL	PI	% SILT	% CLAY	P 200	% WC	MOPT	ODOT CLASS	GI	ppm SO4
P-016-0-20	328+48	42	Lt	SS-3	06.00	06.90			16/50/5"									6		Rock		-
P-016-0-20	328+48	42	Lt	SS-4	08.50	08.90			50/5"									5		Rock		-
P-017-0-20	331+43	8	Rt		01.00	01.00																1900
P-017-0-20	331+43	8	Rt	SS-1	01.10	02.60			43		4.00	25	18		52	34		13		A-4b		-
P-017-0-20	331+43	8	Rt	SS-2	03.50	04.90			16/47/50/2"		4.00	27	14		39	25		11		A-6a		-
P-017-0-20	331+43	8	Rt	SS-3	06.00	06.90			17/50/5"									8		Rock		-
P-017-0-20	331+43	8	Rt	SS-4	08.50	09.25			29/50/3"									8		Rock		-
P-018-0-20	332+50	11	Lt	SS-1	01.00	02.50			11		3.25	NP	NP		4	9		8		A-1-b		710
P-018-0-20	332+50	11	Lt	SS-2	03.50	05.00			15			17	15		19	13		11		A-2-4		-
P-018-0-20	332+50	11	Lt	SS-3	06.00	07.50			42			21	14		26	35		11		A-4a		-
P-018-0-20	332+50	11	Lt	SS-4	08.50	10.00			67									9		Rock		-
P-019-0-20	334+68	61	Rt	SS-1	01.00	02.50			27		1.25	NP	NP		21	16		12		A-4a		500
P-019-0-20	334+68	61	Rt	SS-2	03.50	05.00			8			21	16		30	16		11		A-4a		-
P-019-0-20	334+68	61	Rt	SS-3	06.00	07.50			7			20	NP		23	12		11		A-3a		-
P-019-0-20	334+68	61	Rt	SS-4	08.50	10.00			29									13		A-2-4		-
P-020-0-20	336+52	50	Lt	SS-1	01.00	02.50			14						18	12		11		A-4a		470
P-020-0-20	336+52	50	Lt	SS-2	03.50	05.00			14									4		A-2-4		-
P-020-0-20	336+52	50	Lt	SS-3	06.00	07.50			14			28	20		55	27		11		A-4b		-
P-020-0-20	336+52	50	Lt	SS-4	08.50	10.00			13			NP	NP		31	7		15		A-4a		-
P-022-0-20	340+04	43	Lt	SS-1	01.20	02.70			36			18	15		28	19		13		A-4a		-
P-022-0-20	340+04	43	Lt	SS-2	03.50	05.00			35			17	15		39	16		11		A-4a		-
P-022-0-20	340+04	43	Lt	SS-3	06.00	07.50			45			16	14		32	12		10		A-4a		-
P-022-0-20	340+04	43	Lt	SS-4	08.50	10.00			15			15	15		28	14		11		A-4a		-
P-024-0-20	344+04	55	Lt	SS-1	01.00	02.50			31			18	17		28	10		11		A-4a		770
P-024-0-20	344+04	55	Lt	SS-2	03.50	05.00			39			21	18		56	23		13		A-4b		-
P-024-0-20	344+04	55	Lt	SS-3	06.00	07.50			38			16	15		28	18		11		A-4a		-
P-024-0-20	344+04	55	Lt	SS-4	08.50	10.00			31			NP	NP		11	3		5		A-3a		-
P-025-0-20	347+84	59	Rt	SS-1	01.00	02.50			36			NP	NP		15	6		7		A-3a		430
P-025-0-20	347+84	59	Rt	SS-2	03.50	05.00			14			14	NP		22	8		9		A-3a		-
P-025-0-20	347+84	59	Rt	SS-3	06.00	07.50			7									7		A-2-4		-
P-025-0-20	347+84	59	Rt	SS-4	08.50	10.00			6									9		A-2-4		-
P-027-0-20	351+75	80	Rt	SS-1	01.00	02.50			35						15	15		11		A-3a		770
P-027-0-20	351+75	80	Rt	SS-2A	03.50	04.25			20		1.75				9	3		5		A-2-4		-
P-027-0-20	351+75	80	Rt	SS-2B	04.25	05.00					2.25							12		A-6b		-
P-027-0-20	351+75	80	Rt	SS-3	06.00	07.50			15		3.75	25	15		27	23		14		A-6b		-
P-027-0-20	351+75	80	Rt	SS-4	08.50	10.00			10									14		A-6b		-
P-028-0-20	352+04	72	Lt		01.00	01.00																110
P-028-0-20	352+04	72	Lt	SS-1	01.20	02.70			47			NP	NP		17	12		11		A-3a		-
P-028-0-20	352+04	72	Lt	SS-2	03.50	05.00			10		1.25	20	16		25	15		14		A-4a		-
P-028-0-20	352+04	72	Lt	SS-3	06.00	07.40			4/6/50/5"		4.00	22	15		35	24		13		A-4a		-
P-028-0-20	352+04	72	Lt	SS-4	08.50	08.70			50/2"									5		Rock		-
P-029-0-20	354+06	85	Lt		01.00	01.00																550
P-029-0-20	354+06	85	Lt	SS-1	01.10	02.60			33		4.00	NP	NP		15	16		10		A-3a		-
P-029-0-20	354+06	85	Lt	SS-2	03.50	05.00			30			23	16		34	26		11		A-4a		-
P-029-0-20	354+06	85	Lt	SS-3	06.00	07.50			20			19	16		17	16		11		A-2-4		-
P-029-0-20	354+06	85	Lt	SS-4	08.50	10.00			71			17	16		18	17		9		A-3a		-
P-030-0-20	355+21	111	Rt	SS-1	01.00	02.50			28						5	2		8		A-3a		<100
P-030-0-20	355+21	111	Rt	SS-2A	03.50	03.75			29		4.00	20	18		34	7		10		A-4a		-
P-030-0-20	355+21	111	Rt	SS-2B	03.75	05.00												13		A-7-6		-
P-030-0-20	355+21	111	Rt	SS-3	06.00	06.40			50/5"									6		Rock		-
P-030-0-20	355+21	111	Rt	SS-4	08.50	08.90			50/5"									6		Rock		-
P-032-0-20	360+05	53	Lt	SS-1	01.00	02.50			99			NP	NP		13	14		9		A-3a		400
P-032-0-20	360+05	53	Lt	SS-2	03.50	03.70			6/50/2"		1.75	20	17		20	15		12		A-3a		-
P-032-0-20	360+05	53	Lt	SS-3	06.00	06.40			50/5"									9		A-2-4		-
P-032-0-20	360+05	53	Lt	SS-4	08.50	08.70			50/2"									8		Rock		-
P-033-0-20	360+37	139	Rt	SS-1	01.00	02.50			63			18	NP		38	10		8		A-4a		100
P-033-0-20	360+37	139	Rt	SS-2	03.50	05.00			15		3.25	27	16		49	26		16		A-6a		-
P-033-0-20	360+37	139	Rt	SS-3A	06.00	07.25			27		3.00							16		A-6a		-
P-033-0-20	360+37	139	Rt	SS-3B	07.25	07.50												10		A-2-4		-
P-033-0-20	360+37	139	Rt	SS-4	08.50	10.00			22		4.00							16		A-6a		-