

**PROJECT DESCRIPTION**

IMPROVEMENT OF 1.10 MILES OF S.R. 315 BY SLOPE STABILIZATION AT TWO (2) LOCATIONS. WORK INCLUDES RETAINING WALLS, CULVERT REPLACEMENTS, RESURFACING, AND THE INSTALLATION OF ROADSIDE DITCHES ON THE WEST SIDE OF S.R. 315.

**HISTORIC RECORDS**

NO HISTORICAL GEOTECHNICAL RECORDS WERE FOUND WITHIN EACH SEGMENT OF THE PROJECT. HOWEVER, SEVERAL BORINGS HAVE BEEN COMPLETED WITHIN THE CORRIDOR INDICATING THE PRESENCE OF GENERALLY COHESIVE SOILS UNDERLAIN BY SHALLOW LIMESTONE BEDROCK.

**GEOLOGY**

THE PROJECT IS LOCATED WITHIN THE CENTRAL OHIO CLAYEY TILL PLAIN PHYSIOGRAPHIC REGION WHICH IS CHARACTERIZED BY MODERATE RELIEF WITH WELL-DEFINED MORAINES AND RELATIVELY FLAT GROUND MORAINES BETWEEN. THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR) INTERACTIVE GEOLOGIC MAP INDICATES THAT THE MAJORITY OF THE PROJECT AREA IS COMPRISED OF ALLUVIAL SOILS AT THE GROUND SURFACE ALONG THE BASE OF THE HILLSIDES WHICH ARE COMPRISED OF GLACIALLY DEPOSITED GROUND MORAINES. THE THIN OVERBURDEN SOILS ARE UNDERLAIN BY CARBONATE BEDROCK OF DEVONIAN AGE WITH THE COLUMBUS LIMESTONE PRESENT WITHIN THE OLENTANGY RIVER CHANNEL AND BANKS, AND DELAWARE LIMESTONE FOUND IN THE LOWER HILLSIDES.

**RECONNAISSANCE**

FIELD RECONNAISSANCE WAS COMPLETED BY PERSONNEL FROM THE OFFICE OF GEOTECHNICAL ENGINEERING (OGE) ON JULY 7, 2017. THE EXISTING ROADWAY WAS NOTED AS BEING PREDOMINATELY IN GOOD CONDITION. THE NORTHBOUND SHOULDER, RUNNING PARALLEL TO THE OLENTANGY RIVER, IS EXHIBITING MINOR DISTRESS DUE TO SLOPE INSTABILITY RESULTING FROM EROSION OF THE TOE OF THE SLOPE. ALONG THE SOUTHBOUND LANE A NARROW, FLAT, GRASS COVERED DITCH IS PRESENT ADJACENT TO EITHER WOODED HILLSIDE OR RURAL RESIDENTIAL LOTS. THE RIPARIAN CORRIDOR IS VEGETATED WITH GRASSES AND TREES, WITH AREA OF BARREN ERODED BANK PRESENT. IN ADDITION TO THE CURRENT PROJECT DEL-315-6.34 AND DEL-315-8.11 ALSO HAD RECONNAISSANCE COMPLETED. DEL-315-6.34 IS PRESENTED UNDER SEPARATE COVER AND DEL-315-8.11 WAS NON-PERFORMED WITH GEOTECHNICAL DATA PRESENTED WITHIN THE TRANSPORTATION INFORMATION MAPPING SYSTEM (TIMS).

**SUBSURFACE EXPLORATION**

FOUR (4) BORINGS, B-001-0-17 THROUGH B-004-0-17, WERE COMPLETED AS PART OF THE SUBSURFACE EXPLORATION BETWEEN JULY 11 AND 12, 2017. BORING B-001-0-17 WAS COMPLETED WITH A TRACK MOUNTED ACKER XLS ROTARY DRILL. BORINGS B-002-0-17 THROUGH B-004-0-17 WERE DRILLED WITH A TRUCK MOUNTED CME55 ROTARY DRILL RIG. ALL BORINGS WERE COMPLETED USING 3.25-INCH I.D. HOLLOW STEM AUGERS TO ADVANCE THROUGH THE OVERBURDEN SOILS. DISTURBED SAMPLES COLLECTED IN ACCORDANCE WITH THE STANDARD PENETRATION TEST (AASHTO T206) AT 2.5-FOOT INTERVALS. THE HAMMER SYSTEMS USED WERE CALIBRATED ON JUNE 1, 2017, WITH AN AVERAGE DRILL ROD ENERGY RATIO (ER) OF 89% FOR THE ACKER XLS AND 77% FOR THE CME55. ALL BORINGS WERE ADVANCED INTO BEDROCK AND SAMPLED (AASHTO T225) USING AN N SERIES WIRELINE CORE BARREL, WATER METHOD.

IN SUPPLEMENT TO THE BORINGS, TWO (2) DYNAMIC CONE PENETRATION (DCP) SOUNDINGS, D-001-1-17 AND D-002-1-17, WERE COMPLETED WITHIN THE VICINITY OF THE PROPOSED CULVERT HEADWALL LOCATIONS. THE DCP SOUNDINGS WERE COMPLETED WITH A TRIGGS WILDCAT DCP UNIT UTILIZING A DISPOSABLE TIP.

ADDITIONALLY, THREE (3) ELECTRIC RESISTIVITY IMAGING (ERI) SURVEYS WERE COMPLETED IN VICINITY OF THE EXISTING GUARDRAIL LOCATED ALONG THE NORTHBOUND LANE. THE ERI DATA WAS COLLECTED WITH AN ADVANCED GEOSCIENCES INC. (AGI) SUPERSTING R8 CONTROL UNIT. FOR THE ERI SURVEY, FIFTY-SIX (56) ELECTRODES WERE SPACED APPROXIMATELY FIVE (5) FEET APART. THE SURVEY LINES STARTED NEAR B-001-1-17 AND EXTENDED JUST NORTH OF B-003-0-17. THE DATA WAS PROCESSED, AND SURFACE ELEVATION CORRECTED USING AGI'S EARTHIMAGER 2D SOFTWARE.

DURING JANUARY OF 2020 AN ADDITIONAL THREE (3) DCP SOUNDINGS, D-002-2-19 THROUGH D-002-4-19, WERE COMPLETED JUST OFF EDGE OF PAVEMENT ALONG THE SOUTHBOUND LANE TO EVALUATE IF SHALLOW BEDROCK WAS PRESENT WHICH MAY INTERFERE WITH PROPOSED STORMWATER BEST MANAGEMENT PRACTICES (BMP). THE DCP SOUNDINGS WERE COMPLETED WITH A TRIGGS WILDCAT DCP UNIT UTILIZING A DISPOSABLE TIP.

**EXPLORATION FINDINGS**

B-001-0-17 WAS COMPLETED ALONG THE EDGE OF THE STREAM BANK ENCOUNTERING 4-INCHES OF TOPSOIL UNDERLAIN BY DENSE TO VERY DENSE STONE FRAGMENTS WITH SAND AND SILT (A-2-4) CONTAINING COBBLES AND BOULDERS BELOW 5- FEET TO TOP OF BEDROCK.

B-002-0-17 THROUGH B-004-0-17 WERE COMPLETED WITHIN THE EXISTING ROADWAY ENCOUNTERING 12 TO 14-INCHES OF ASPHALT WITH B-003-0-17 ENCOUNTERING 2-INCHES OF AGGREGATE BASE BENEATH THE ASPHALT. UNDERLYING THE SURFACE MATERIALS B-002-0-17 AND B-003-0-17 ENCOUNTERED SILTY CLAY (A-6b) IN STIFF CONSISTENCY AND DAMP TO MOIST CONDITION AND B-004-0-17 ENCOUNTERED VERY STIFF SANDY SILT (A-4a) IN DAMP CONDITION TO TOP OF BEDROCK. BEDROCK WAS ENCOUNTERED IN B-001-0-17, B-002-0-17, B-003-0-17, AND B-004-0-17 AT ELEVATION 786.8, 792.5, 791.3, AND 790.4 FEET, RESPECTIVELY.

**LEGEND**

DESCRIPTION	ODOT CLASS	CLASSIFIED MECH./VISUAL
STONE FRAGMENTS WITH SAND AND SILT	A-2-4	1 1
SANDY SILT	A-4a	3 2
SILTY CLAY	A-6b	3 3
	TOTAL	7 6
BOULDERY ZONE	VISUAL	
LIMESTONE	VISUAL	
PAVEMENT OR BASE = X = APPROXIMATE THICKNESS	VISUAL	
SOD AND TOPSOIL = X = APPROXIMATE THICKNESS	VISUAL	
BORING OR DCP LOCATION - PLAN VIEW.		
DRIVE SAMPLE AND ROCK CORE BORING PLOTTED TO VERTICAL SCALE ONLY. HORIZONTAL BAR INDICATES A CHANGE IN STRATIGRAPHY.		
WC	INDICATES WATER CONTENT IN PERCENT.	
N <sub>60</sub>	INDICATES STANDARD PENETRATION RESISTANCE NORMALIZED TO 60% DRILL ROD ENERGY RATIO.	
X/D"	NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT): X/D" = NUMBER OF BLOWS (UNCORRECTED) FOR D" OF PENETRATION AT REFUSAL.	
γ	INDICATES UNIT WEIGHT OF ROCK.	
HA	INDICATES A HAND AUGER SAMPLE.	
NP	INDICATES A NON-PLASTIC SAMPLE.	
NQ	"N" SERIES ROCK CORE BARREL OF "Q" WIRELINE BIT SIZE.	
Qu	INDICATES UNCONFINED COMPRESSION TEST, ASTM D7012.	
SS	INDICATES A SPLIT SPOON SAMPLE.	
TR	INDICATES TOP OF ROCK ELEVATION.	

**EXPLORATION FINDINGS, CONT.**

ALL BORINGS WERE EXTENDED INTO LIMESTONE WHICH RANGED FROM STRONG TO VERY STRONG AND WAS JOINTED WITH CORE RUN ROD VALUES RANGING FROM 49% TO 93% AND UNIT ROD VALUES RANGING FROM 0% TO 91%. ALL BORINGS WERE TERMINATED WITHIN BEDROCK. REPRESENTATIVE BEDROCK SAMPLES WERE TESTED FOR STRENGTH WITH UNCONFINED COMPRESSIVE TEST RESULTS RANGING FROM 6,365 TO 23,148 PSI. THESE RESULTS ARE PRESENTED IN TABULAR FORMAT, SEE BEDROCK TEST SUMMARY TABLE.

ALL BORINGS WERE REPORTED AS BEING DRY PRIOR TO CORING OPERATIONS.

DCP SOUNDINGS WERE COMPLETED ALONG THE BASE OF THE STREAM BANK TO DETERMINE OVERBURDEN THICKNESS IN THE VICINITY OF THE PROPOSED HEADWALLS. REFUSAL CONDITIONS WERE ENCOUNTERED IN BOTH SOUNDINGS AT RELATIVELY SHALLOW DEPTHS OF 2 AND 3- FEET WITHIN D-001-1-17 AND D-002-1-17, RESPECTIVELY.

BMP DCP SOUNDINGS ENCOUNTERED REFUSAL BETWEEN ELEVATION 792.9 AND 794.5 FEET.

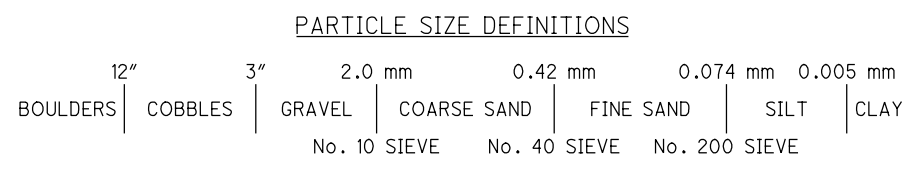
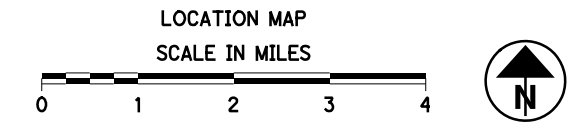
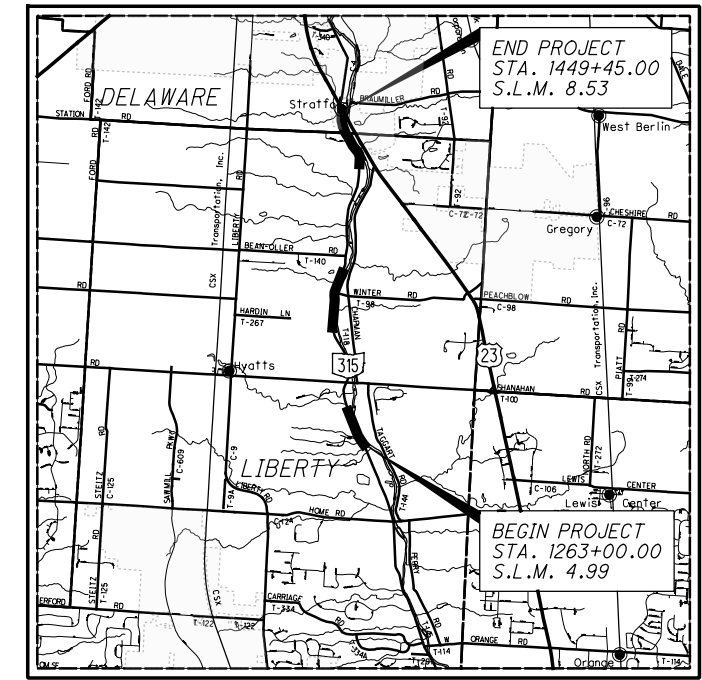
WATER WAS NOT NOTED IN ANY OF THE DCP SOUNDING LOCATIONS.

**SPECIFICATIONS**

THIS GEOTECHNICAL EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING, SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED JULY 2017.

**AVAILABLE INFORMATION**

THE SOIL, BEDROCK, AND GROUNDWATER INFORMATION COLLECTED FOR THIS SUBSURFACE EXPLORATION THAT CAN BE CONVENIENTLY DISPLAYED ON THE GEOTECHNICAL PROFILE SHEETS HAS BEEN PRESENTED. THE RAW CPT DATA IS AVAILABLE FOR REVIEW ON THE OFFICE OF CONTRACT SALES WEBSITE.



BEDROCK TEST SUMMARY				
EXPLOR. ID	SAMPLE ELEVATION	SAMPLE DEPTH	Qu (PSI)	LITHOLOGY
B-001-0-17	786.0' - 785.7'	10.1' - 10.4'	11,424	LIMESTONE
	780.3' - 779.9'	15.8' - 16.2'	20,033	LIMESTONE
B-002-0-17	786.4' - 786.1'	11.7' - 12.0'	18,630	LIMESTONE
	783.4' - 783.0'	14.7' - 15.1'	23,148	LIMESTONE
B-003-0-17	789.8' - 789.5'	10.5' - 10.8'	12,062	LIMESTONE
	786.9' - 786.6'	13.4' - 13.7'	6,365	LIMESTONE
B-004-0-17	790.2' - 789.9'	10.5' - 10.8'	16,772	LIMESTONE
	784.4' - 784.1'	16.3' - 16.6'	19,032	LIMESTONE

RECON. -	PPP	07/07/17
DRILLING -	AMJ,KAM	07/11-12/17
DCP -	AMJ,PPP	07/10/17, 01/07/20
GEOPHYSICS -	AMJ,JMB	07/12/17, 08/11/17
DRAWN -	ARR	11/08/24
REVIEWED -	SAT	11/15/24

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DESIGN AGENCY  
OHIO DEPARTMENT OF TRANSPORTATION  
OFFICE OF GEOTECHNICAL ENGINEERING  
1980 W. BROAD ST. COLUMBUS, OH 43223

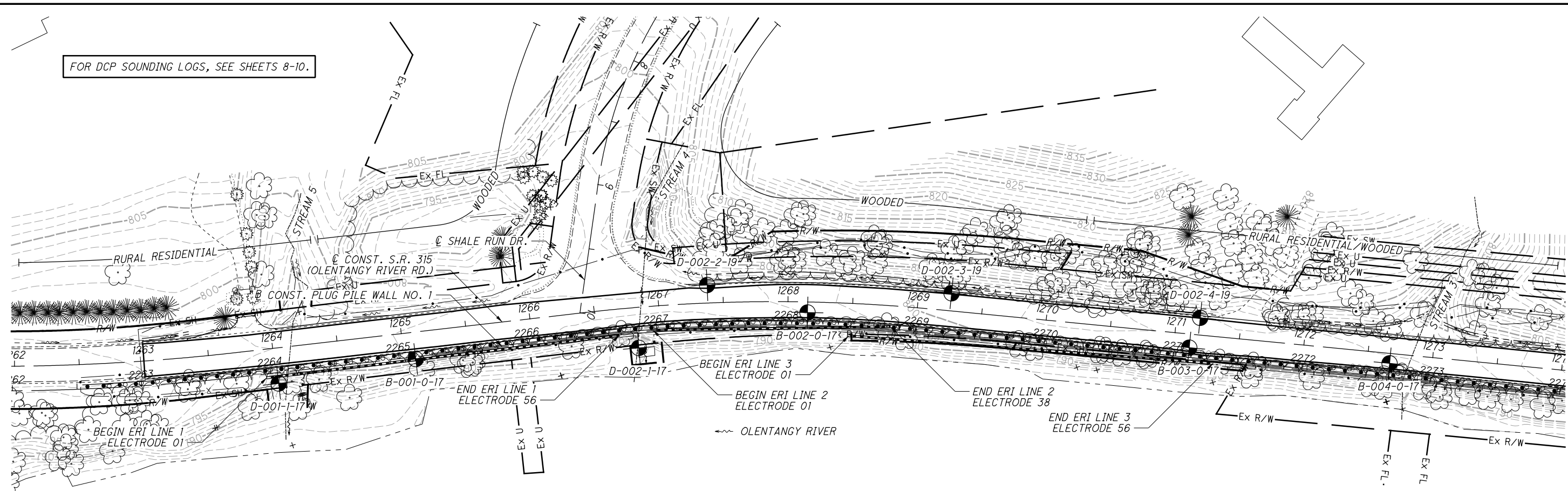
PID NO.  
**102124**

**GEOTECHNICAL PROFILE - LANDSLIDE**

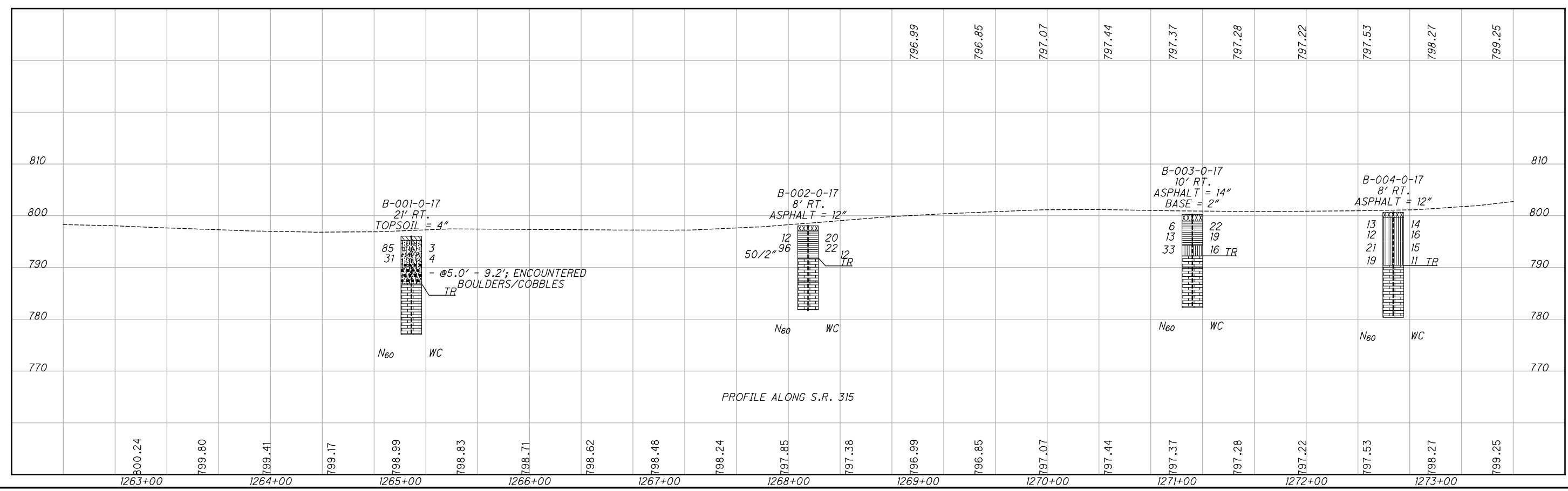
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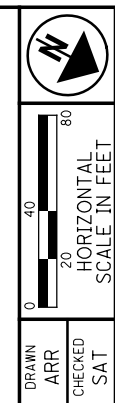
FOR DCP SOUNDING LOGS, SEE SHEETS 8-10.



**ELECTRICAL RESISTIVITY IMAGING (ERI) SURVEY LINE**  
 LINE 1 APPROX. STA. 1263+93, 22' RT. TO 1266+68, 20' RT. (ELECTRODES 01-56)  
 LINE 2 APPROX. STA. 1266+94, 19' RT. TO 1268+80, 16' RT. (ELECTRODES 01-38)  
 LINE 3 APPROX. STA. 1268+48, 25' RT. TO 1271+32, 21' RT. (ELECTRODES 01-56)

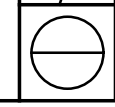


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**GEOTECHNICAL PROFILE - LANDSLIDE**  
**STA. 1262+00 TO STA. 1272+00 S.R. 315**

**DEL -315 -4.99**



PROJECT: DEL-315-4.99 LANDSLIDE EXPLORATION ID B-001-0-17  
 TYPE: LANDSLIDE  
 PID: 102124 SFN: N/A  
 START: 7/11/17 END: 7/11/17  
 DRILLING FIRM / OPERATOR: ODOT / BINKLEY  
 SAMPLING FIRM / LOGGER: ODOT / AJ  
 DRILLING METHOD: 3.25" HSA / NQ2  
 SAMPLING METHOD: SPT  
 DRILL RIG: ACKER XLS TRACK  
 HAMMER: AUTO  
 STATION / OFFSET: 1265+09.21' RT.  
 ALIGNMENT: CL SR 315  
 ELEVATION: 796.1 (ft) EOB: 19.0 ft.  
 LAT / LONG: 40.206485, -83.059277  
 CALIBRATION DATE: 6/11/17  
 ENERGY RATIO (%): 89

TOPSOIL (4")	MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)								WC	ODOT CLASS (GI)	BACK FILL
									GR	CS	FS	SI	CL	LL	PL	PI			
		796.1	1																
		795.3	2	10	85	78	SS-1A	-										A-2.4 (0)	
			3	25															
			4	28	31	72	SS-2A	-										A-2.4 (V)	
			5	10															
			6																
			7	0		33	NQ2-1											CORE	
			8																
			9																
		786.9	TR																
			10																
			11																
			12	80		98	NQ2-2											CORE	
			13																
			14																
			15																
			16																
			17																
			18	70		97	NQ2-3											CORE	
			19																
		777.1	EOB																

NOTES: LAT/LONG FROM OGE HANDHELD GPS UNIT. ELEV FROM CONSULTANT SURVEY TIN. HOLE DRY BEFORE CORING.  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 50 LB. BENTONITE CHIPS

3 / 11	DEL - 315 - 4.99	GEOTECHNICAL PROFILE - LANDSLIDE	
		BORING LOG FOR B-001-0-17	
		DRAWN	ARR
		CHECKED	SAT



Office of Geotechnical Engineering

B-001-0-17



Run #:	Depth		Recovery		RQD	
NQ2-1	5.5'	9.0'	14/42	33%	0/42	0%
NQ2-2	9.0'	14.0'	59/60	98%	48/60	80%
DEL-315-4.99 PID 102124						



Office of Geotechnical Engineering

B-001-0-17



Run #:	Depth		Recovery		RQD	
NQ2-3	14.0'	19.0'	58/60	97%	42/60	70%
DEL-315-4.99 PID 102124						



DEL -315 -4.99

GEOTECHNICAL PROFILE - LANDSLIDE  
ROCK CORE PHOTOS FOR B-001-0-17

DRAWN	ARR	CHECKED	SAT
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PROJECT: DEL-315-4.99 LANDSLIDE	DRILLING FIRM / OPERATOR: ODOT / CAREY	DRILL RIG: CME 55 TRUCK	STATION / OFFSET: 1272+67.8' RT.	EXPLORATION ID: B-004-0-17
PID: 102124 SFN: N/A	SAMPLING FIRM / LOGGER: ODOT / MCLEISH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 315	
START: 7/12/17 END: 7/12/17	DRILLING METHOD: 3.25" HSA / NQ2	CALIBRATION DATE: 6/1/17	ELEVATION: 800.7 (ft) EOB: 20.3 ft.	PAGE: 1 OF 1
	SAMPLING METHOD: SPT	ENERGY RATIO (%): 77	LAT / LONG: 40.208312, -83.060530	
MATERIAL DESCRIPTION AND NOTES				
ASPHALT (12")	ELEV. 800.7	DEPTH	GRADATION (%)	BACK FILL
VERY STIFF, BROWN, SANDY SILT, SOME CLAY, SOME STONE FRAGMENTS, DAMP	799.7	1		
		2		
		3		
@3.5'; REDDISH BROWN		4		
		5		
		6		
@8.5'; HARD, REDDISH BROWN AND BROWN	790.4	7		
		8		
LIMESTONE, LIGHT GRAY, MODERATELY WEATHERED, VERY STRONG, THIN BEDDED, CRYSTALLINE, FOSSILIFEROUS, BEDDING, MODERATELY FRACTURED, OPEN, VERY ROUGH, BLOCKY, GOOD; RQD 79%, REC 100%.		9		
@10.5' - 10.8'; $\gamma = 168$ pcf; $Q_u = 16,772$ psi		10		
@13.9'; VERY THIN CLAY SEAM		11		
@16.0'; 1.0" CLAY SEAM		12		
@16.3' - 16.6'; $\gamma = 170$ pcf; $Q_u = 19,032$ psi		13		
@17.0'; 45° FRACTURE		14		
@17.2'; 45° FRACTURE		15		
		16		
@19.5' - 19.9'; HIGH ANGLE HEALED FRACTURE		17		
		18		
		19		
		20		
		TR		
		EOB		

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 10/9/24 13:43 - X:\GINT\PROJECTS\2017\COMPLETE\600385.GPJ

NOTES: LAT/LONG FROM OGE HANDHELD GPS UNIT. ELEV FROM CONSULTANT SURVEY TIN. HOLE DRY BEFORE CORING. ABANDONMENT METHODS. MATERIALS. QUANTITIES: AUGER CUTTINGS MIXED WITH 75 LB. BENTONITE CHIPS



Office of Geotechnical Engineering

B-004-0-17



Run #:	Depth	Recovery	RQD
NQ2-1	10.3'	60/60	39/60
NQ2-2	15.3'	60/60	56/60
	20.3'	100%	65%
		100%	93%

DEL-315-4.99 PID 102124



DEL - 315 - 4.99

GEOTECHNICAL PROFILE - LANDSLIDE  
BORING LOG AND ROCK CORE PHOTO FOR B-004-0-17

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CHECKED SAT





# WILDCAT DYNAMIC CONE LOG

The Ohio Department of Transportation  
Office of Geotechnical Engineering  
1600 West Broad Street, Columbus, Ohio 43223

PROJECT NUMBER: 102124  
DATE STARTED: 01-07-2020  
DATE COMPLETED: 01-07-2020

HOLE #: D-002-2-19  
CREW: Jalbrzikowski, Hesler, Bloor & Painter  
PROJECT: DEL-315-4.99  
LAT/LONG: 40.206955, -83.059849  
LOCATION: DEL-315-4.99 BMP location Southbound

SURFACE ELEVATION: 797.2  
WATER ON COMPLETION: None observed.  
HAMMER WEIGHT: 35 lbs.  
CONE AREA: 10 sq. cm

# WILDCAT DYNAMIC CONE LOG

The Ohio Department of Transportation  
Office of Geotechnical Engineering  
1600 West Broad Street, Columbus, Ohio 43223

PROJECT NUMBER: 102124  
DATE STARTED: 01-07-2020  
DATE COMPLETED: 01-07-2020

HOLE #: D-002-3-19  
CREW: Jalbrzikowski, Hesler, Bloor & Painter  
PROJECT: DEL-315-4.99  
LAT/LONG: 40.207421, -83.060146  
LOCATION: DEL-315-4.99 BMP location Southbound

SURFACE ELEVATION: 800.2  
WATER ON COMPLETION: None observed.  
HAMMER WEIGHT: 35 lbs.  
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm <sup>2</sup>	GRAPH OF CONE RESISTANCE	N'	TESTED CONSISTENCY	
					NON-COHESIVE	COHESIVE
	1	4.4	•	1	VERY LOOSE	VERY SOFT
	5	22.2	•••••	6	LOOSE	MEDIUM STIFF
1 ft	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
	14	62.2	••••••••••••••••••••	17	MEDIUM DENSE	VERY STIFF
	8	35.5	••••••••••	10	LOOSE	STIFF
2 ft	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
	3	13.3	•••	3	VERY LOOSE	SOFT
	25	111.0	••••••••••••••••••••	25+	DENSE	HARD
3 ft	Refusal at 82cm (25 blows/2cm) ~EL. 792.9 ft.					
1 m						
4 ft						
5 ft						
6 ft						
2 m						
7 ft						
8 ft						
9 ft						
3 m						
10 ft						
11 ft						
12 ft						
4 m						
13 ft						

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm <sup>2</sup>	GRAPH OF CONE RESISTANCE	N'	TESTED CONSISTENCY	
					NON-COHESIVE	COHESIVE
	1	4.4	•	1	VERY LOOSE	VERY SOFT
	2	8.9	••	2	VERY LOOSE	SOFT
1 ft	5	22.2	•••••	6	LOOSE	MEDIUM STIFF
	5	22.2	•••••	6	LOOSE	MEDIUM STIFF
	5	22.2	•••••	6	LOOSE	MEDIUM STIFF
2 ft	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
	5	22.2	•••••	6	LOOSE	MEDIUM STIFF
3 ft	5	22.2	•••••	6	LOOSE	MEDIUM STIFF
1 m	5	22.2	•••••	6	LOOSE	MEDIUM STIFF
	4	15.4	••••	4	VERY LOOSE	SOFT
4 ft	6	23.2	•••••	6	LOOSE	MEDIUM STIFF
	22	84.9	••••••••••••••••••••	24	MEDIUM DENSE	VERY STIFF
	15	57.9	••••••••••••••••	16	MEDIUM DENSE	VERY STIFF
5 ft	12	46.3	••••••••••••••••	13	MEDIUM DENSE	STIFF
	9	34.7	••••••••••••••••	9	LOOSE	STIFF
	12	46.3	••••••••••~•••••	13	MEDIUM DENSE	STIFF
6 ft	9	34.7	••••••••••	9	LOOSE	STIFF
	25	96.5	••••••~•••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
2 m	Refusal at 195cm (25 blows/5cm) ~EL. 793.3 ft.					
7 ft						
8 ft						
9 ft						
3 m						
10 ft						
11 ft	Hand Auger Sample Collected: 0.0' - 0.6': Topsoil 0.6' - 1.6': Brown SILTY CLAY, some sand, trace little gravel and stone fragment, moist. 0.6'-1.0': G%: 14 CS%: 12 FS%: 15 ML%: 28 CL%: 31 LL: 40 PL: 23 PI: 17 M%: 23 1.3'-1.6': G%: 6 CS%: 7 FS%: 15 ML%: 34 CL%: 38 LL: 38 PL: 22 PI: 16 M%: 27 1.3' 1.6': Brown and orangish brown 6.4': Refusal					
12 ft						
4 m						
13 ft						

Latitude & Longitude from OGE handheld GPS unit. Elevation from Consultant Survey terrain file.

Latitude & Longitude from OGE handheld GPS unit. Elevation from Consultant Survey terrain file.

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DRAWN ARR CHECKED SAT  
GEO TECHNICAL PROFILE - LANDSLIDE  
DCP SOUNDING LOGS FOR D-002-2-19 & D-002-3-19  
DEL-315-4.99  
9/11

# WILDCAT DYNAMIC CONE LOG

The Ohio Department of Transportation  
Office of Geotechnical Engineering  
1600 West Broad Street, Columbus, Ohio 43223

PROJECT NUMBER: 102124  
DATE STARTED: 01-07-2020  
DATE COMPLETED: 01-07-2020

HOLE #: D-002-4-19  
CREW: Jalbrzikowski, Hesler, Bloor & Painter  
PROJECT: DEL-315-4.99  
LAT/LONG: 40.207911, -83.060409  
LOCATION: DEL-315-4.99 BMP location Southbound

SURFACE ELEVATION: 800.9  
WATER ON COMPLETION: None observed.  
HAMMER WEIGHT: 35 lbs.  
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm <sup>2</sup>	GRAPH OF CONE RESISTANCE 0    50    100    150	N'	TESTED CONSISTENCY	
					NON-COHESIVE	COHESIVE
	1	4.4	•	1	VERY LOOSE	VERY SOFT
	1	4.4	•	1	VERY LOOSE	VERY SOFT
1 ft	3	13.3	•••	3	VERY LOOSE	SOFT
	3	13.3	•••	3	VERY LOOSE	SOFT
	2	8.9	••	2	VERY LOOSE	SOFT
2 ft	5	22.2	•••••	6	LOOSE	MEDIUM STIFF
	6	26.6	•••••	7	LOOSE	MEDIUM STIFF
	6	26.6	•••••	7	LOOSE	MEDIUM STIFF
3 ft	3	13.3	•••	3	VERY LOOSE	SOFT
1 m	4	17.8	••••	5	LOOSE	MEDIUM STIFF
	20	77.2	••••••••••••••••••••	22	MEDIUM DENSE	VERY STIFF
4 ft	13	50.2	••••••••••	14	MEDIUM DENSE	STIFF
	27	104.2	••••••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
	17	65.6	••••••••••	18	MEDIUM DENSE	VERY STIFF
5 ft	25	96.5	••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
6 ft	Difficult driving on an apparent root. Location offset 5 ft. from original drive location which encountered large rocks and roots.					
2 m						
	7 ft					
	8 ft					
	9 ft					
3 m	10 ft					
	11 ft					
	12 ft					
4 m	13 ft					

**GEOTECHNICAL PROFILE - LANDSLIDE  
DCP SOUNDING LOG FOR D-002-4-19**

**DEL - 315 - 4.99**

Latitude & Longitude from OGE handheld GPS unit. Elevation from Consultant Survey terrain file.

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