

MODEL: Sheet PAPER SIZE: 11x17 (in.) DATE: 9/3/2021 TIME: 6:18:57 PM USER: SKRK
 p:\ohiodot-pw\benitey.com\ohiodot-pw-02\Documents\101Active Projects\Distric 10\Monroe\09278\402-Engineer\ing_HDR\Geotechnical\Sheets\09278_IC001.dgn

PROJECT DESCRIPTION

THE MOE-7-2.21 PROJECT CONSISTS OF A FULL DEPTH PAVEMENT REPLACEMENT ACROSS BOTH LANES OF STATE ROUTE 7 (SR 7) ALONG ITS EXISTING ALIGNMENT FROM MILE MARKER 2.21 TO MILE MARKER 8.65 IN MONROE COUNTY, OHIO.

HISTORIC RECORDS

A SEARCH OF THE AVAILABLE RECORDS ON ODOT'S TRANSPORTATION INFORMATION MAPPING SYSTEM (TIMS) REVEALS TWO PREVIOUS PROJECTS WITH SOILS INFORMATION PERFORMED WITHIN THE CURRENT PROJECT LIMITS. THE GEOTECHNICAL EXPLORATION PROGRAMS FOR THE MOE-7-(2.06)(2.21) AND MOE-7-2.06 PROJECT WERE PERFORMED BY ODOT IN 1938 AND 1956, RESPECTIVELY. BASED ON THE HISTORIC 1938 SOIL PROFILE SHEETS, THE SUBGRADE CONSISTS OF PREDOMINANTLY CLAY (A-7), SAND, SILT, AND CLAY (A-7), CLAY AND SILT (A-7), AND SILT AND CLAY (A-5) WITH SANDY SILT (A-2, A-4), SILT (A-4), AND GRAVELS (A-1, A-2) ENCOUNTERED TO A LESSER EXTENT. SHALE AND SANDSTONE BEDROCK WERE ALSO ENCOUNTERED WITHIN THE THEN PROPOSED ROADWAY A FEW HUNDRED FEET UP-STATION FROM NARROWS RUN ROAD, FROM APPROXIMATE STA. 387+00 TO STA. 391+00. THE HISTORIC 1956 SOIL PROFILE SHEETS INDICATED PREDOMINANTLY CLAY (A-7-6), SILTY CLAY (A-6B), AND SILT AND CLAY (A-6A) WITH SANDY SILT (A-4A), SILT (A-4B), GRAVEL WITH SAND AND SILT (A-2-4) AND GRAVEL WITH SAND, SILT, AND CLAY (A-2-6) ENCOUNTERED TO A LESSER EXTENT.

GEOLOGY

MONROE COUNTY LIES WITHIN THE UNGLACIATED ALLEGHENY (KANAWHA) PLATEAUS SECTION OF THE APPALACHIAN PLATEAUS PHYSIOGRAPHIC PROVINCE OF SOUTHEAST OHIO. THE PHYSIOGRAPHIC FEATURES WITHIN THIS REGION HAVE BEEN PREDOMINANTLY INFLUENCED BY PROCESSES OF EROSION AND UPLIFT. DRAINAGE-WAYS HAVE CUT STEEP, V-SHAPED VALLEYS AND NARROW RIDGETOPS THROUGHOUT MOST OF MONROE COUNTY, WITH THE CENTRAL AND SOUTHEASTERN PARTS OF THE COUNTY DRAINED BY THE OHIO RIVER AND ITS TRIBUTARIES. THE PROJECT SITE ITSELF IS EITHER DIRECTLY DRAINED BY THE OHIO RIVER RUNNING APPROXIMATELY PARALLEL TO SR 7, OR BY ONE OF THE MULTIPLE TRIBUTARIES PERPENDICULARLY TRAVERSING BENEATH SR 7 AND DRAINING TO THE NEARBY OHIO RIVER.

THE SURFICIAL MATERIALS WITHIN MONROE COUNTY PREDOMINANTLY CONSIST OF COLLUVIUM, RESIDUUM, AND WEATHERED MATERIAL DERIVED FROM THE UNDERLYING SEDIMENTARY BEDROCK. ALLUVIAL MATERIAL IS ALSO FOUND IN LOCALIZED AREAS AND NARROW BANDS ALONG STREAMS AND THE OHIO RIVER. THE BEDROCK BENEATH THE PROJECT SITE IS MAPPED AS THE PENNSYLVANIAN-AGE MONONGAHELA GROUP, WITH THE PENNSYLVANIAN-AGE DUNKARD GROUP LOCATED ALONG THE HILLS ABOVE THE ROADWAY TO THE NORTH AND WEST. THE MONONGAHELA GROUP CONSISTS OF SHALE, SILTSTONE, AND MUDSTONE, WITH MINOR AMOUNTS OF LIMESTONE AND COAL.

RECONNAISSANCE

A VISUAL RECONNAISSANCE OF THE PROJECT SITE AND SURROUNDING AREA WAS PERFORMED ON JANUARY 5, 2021, AS WELL AS DURING DRILLING ACTIVITIES. TO REVIEW THE CONDITION OF THE EXISTING ROADWAY AND NOTE ANY SIGNS OF PAVEMENT DISTRESS, SEEPAGE, ADJACENT OUTCROPS OR EVIDENCE OF PRIOR REPAIRS OR CONSTRUCTION. SR 7 IS SUPPORTED UPON CUT AND FILL WITHIN THE PROJECT AREA. THE TERRAIN SURROUNDING SR 7 CONSISTS OF A GENERALLY FLAT FLOODPLAIN TO THE SOUTH AND EAST, UNLESS DIRECTLY ADJACENT TO THE BANK OF THE OHIO RIVER. STEEP TO GENTLY STEEPENING SLOPES ARE LOCATED TO THE NORTH AND WEST ALONG THE TOE OF THE ADJACENT VALLEY WALL. ROCK OUTCROPS WERE NOTED ALONG CUT-SECTIONS ADJACENT TO SR 7, UP-STATION FROM ITS INTERSECTION WITH NARROWS RUN ROAD. SEVERAL DRAINAGE CULVERTS ARE LOCATED ALONG SR 7, TRAVERSING PERPENDICULAR TO AND BENEATH SR 7 TO ALLOW DRAINAGE OF HILLSIDE RUN-OFF DIRECTLY TO THE OHIO RIVER, OR ALONG ESTABLISHED DRAINAGE PATHS CONVEYING RUN-OFF EVENTUALLY TO THE OHIO RIVER. AREAS OF PAVEMENT DISTRESS, PATCHING, AND REPLACEMENT WERE NOTED IN AREAS ALONG THE ENTIRETY OF SR 7 WITHIN THE PROJECT AREA. ONE SEGMENT OF SR 7 WITH NOTED PAVEMENT PATCHING NEAR MILE MARKER 7.5 IS LOCATED IMMEDIATELY ADJACENT TO THE OHIO RIVER, WITH THE EMBANKMENT SLOPE BELOW THE ROADWAY SUPPORTED BY AN EXISTING SOLDIER PILE AND LAGGING WALL.

SUBSURFACE EXPLORATION

THE GEOTECHNICAL EXPLORATION PROGRAM CONSISTED OF A SERIES OF 84 TEST BORINGS DRILLED ALONG BOTH TRAVEL LANES OF SR 7 TO CHARACTERIZE THE SUBSURFACE PROFILE ALONG THE PROJECT ALIGNMENT. THE TEST BORINGS (DESIGNATED AS BORINGS B-001-0-20 THROUGH B-084-0-20) WERE SPACED APPROXIMATELY 400 FEET APART, ALTERNATING BETWEEN THE NORTHBOUND AND SOUTHBOUND TRAVEL LANES. THE BORINGS WERE DRILLED BY CENTRAL STAR DRILLING WITH A CME-55 TRUCK-MOUNTED DRILL RIG BEGINNING ON JANUARY 11, 2021 AND COMPLETED ON JANUARY 19, 2021. THIS RIG WAS CALIBRATED ON NOVEMBER 20, 2019 WITH A HAMMER ENERGY RATIO OF 84%. ALL BORINGS WERE DRILLED IN GENERAL ACCORDANCE WITH THE SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS (ODOT REVISED JULY 2020) UTILIZING 5.5-INCH FLIGHT AUGERS TO ADVANCE THE BORINGS TO THE EXPLORED DEPTHS, WITH THE EXCEPTION OF BORINGS B-004-0-20, B-008-0-20, B-018-0-20, AND B-081-0-20, WHICH WERE ADVANCED USING A 3-INCH SPLIT-SPOON SAMPLER TO EXCAVATE THE MATERIAL ALONG AN INTERVAL AFTER SAMPLING RATHER THAN AUGER DRILL AS A RESULT OF THE AUGERS GETTING CAUGHT ON REINFORCEMENT WITHIN THE EXISTING PAVEMENT. CONTINUOUS SAMPLING OF THE SOILS WAS ACCOMPLISHED IN ACCORDANCE WITH THE "STANDARD TEST METHOD FOR PENETRATION TEST AND SPLIT-BARREL SAMPLING OF SOILS", ASTM D 1586.

EXPLORATION FINDINGS

THE SOILS ENCOUNTERED ALONG SR 7 WITHIN THE PROJECT AREA GENERALLY CONSIST OF FILL, ALLUVIUM AND RESIDUUM. BEDROCK WAS NOT ENCOUNTERED AT ANY OF THE BORING LOCATIONS PRIOR TO TERMINATION.

THE EXISTING PAVEMENT FOR SR 7 WITHIN THE PROJECT LIMITS IS PREDOMINATELY A COMPOSITE PAVEMENT COMPRISED OF ASPHALT OVER REINFORCED CONCRETE. THE EXCEPTIONS WERE BORINGS B-052-0-20, B-059-0-20, B-062-0-20, B-063-0-20 AND B-066-0-20, WHERE THE UNDERLYING REINFORCED CONCRETE PAVEMENT WAS NOT ENCOUNTERED. ASPHALT PAVEMENT THICKNESSES RANGED FROM 7.5 INCHES TO 18 INCHES, WHERE ENCOUNTERED, REINFORCED CONCRETE THICKNESSES RANGED FROM 6 INCHES TO 12 INCHES. THE TOTAL PAVEMENT RANGED IN THICKNESS FROM 9.5 INCHES TO 26 INCHES, WITH TYPICAL THICKNESSES RANGING FROM 15 TO 21 INCHES.

THE EXISTING PAVEMENT SECTION IS UNDERLAIN PREDOMINATELY BY COHESIVE SOILS. THE ENCOUNTERED SOILS PRIMARILY CONSIST OF MEDIUM STIFF TO VERY STIFF SILT AND CLAY (A-6A), SILTY CLAY (A-6B), AND CLAY (A-7-6), WITH MEDIUM DENSE TO DENSE GRAVEL AND/OR STONE FRAGMENTS WITH SAND (A-1-B), GRAVEL AND/OR STONE FRAGMENTS WITH SAND AND SILT (A-2-4), GRAVEL AND/OR STONE FRAGMENTS WITH SAND, SILT AND CLAY (A-2-6), COURSE AND FINE SAND (A-3A), SANDY SILT (A-4A), AND SILT (A-4B) ENCOUNTERED TO A LESSER EXTENT. ELASTIC CLAY (A-7-5) WAS ALSO ENCOUNTERED, BUT ONLY AT BORING B-058-0-20 IN THE UPPER TWO SAMPLES COLLECTED.

LEGEND

DESCRIPTION	ODOT CLASS	CLASSIFIED MECH./VISUAL
GRAVEL/STONE FRAGMENTS W/SAND	A-1-b	6 10
GRAVEL/STONE FRAGMENTS W/SAND AND SILT	A-2-4	6 8
GRAVEL/STONE FRAGMENTS W/SAND, SILT AND CLAY	A-2-6	0 2
COURSE AND FINE SAND	A-3a	2 2
SANDY SILT	A-4a	12 10
SILT	A-4b	5 3
SILT AND CLAY	A-6a	35 37
SILTY CLAY	A-6b	35 40
ELASTIC CLAY	A-7-5	1 1
CLAY	A-7-6	64 61
	TOTAL	166 174
PAVEMENT OR BASE = X = APPROXIMATE THICKNESS	VISUAL	
SOD AND TOPSOIL = X = APPROXIMATE THICKNESS	VISUAL	
BORING LOCATION - PLAN VIEW.		
HISTORIC BORING LOCATION - PLAN VIEW.		
DRIVE SAMPLE AND/OR ROCK CORE BORING PLOTTED TO VERTICAL SCALE ONLY. HORIZONTAL BAR INDICATES A CHANGE IN STRATIGRAPHY.		
WC	INDICATES WATER CONTENT IN PERCENT.	
N ₆₀	INDICATES STANDARD PENETRATION RESISTANCE NORMALIZED TO 60% DRILL ROD ENERGY RATIO.	
X/Y/Z	NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT): X= NUMBER OF BLOWS FOR FIRST 6 INCHES. Y= NUMBER OF BLOWS FOR SECOND 6 INCHES. Z= NUMBER OF BLOWS FOR THIRD 6 INCHES.	
W	INDICATES FREE WATER ELEVATION.	
	INDICATES A PLASTIC MATERIAL WITH A MOISTURE CONTENT EQUAL TO OR GREATER THAN THE LIQUID LIMIT MINUS 3.	
*	INDICATES A HISTORIC SAMPLE TAKEN WITHIN 3 FT OF PROPOSED GRADE.	
SS	INDICATES A SPLIT SPOON SAMPLE.	
NP	INDICATES A NON-PLASTIC SAMPLE.	

EXPLORATION FINDINGS CONT.

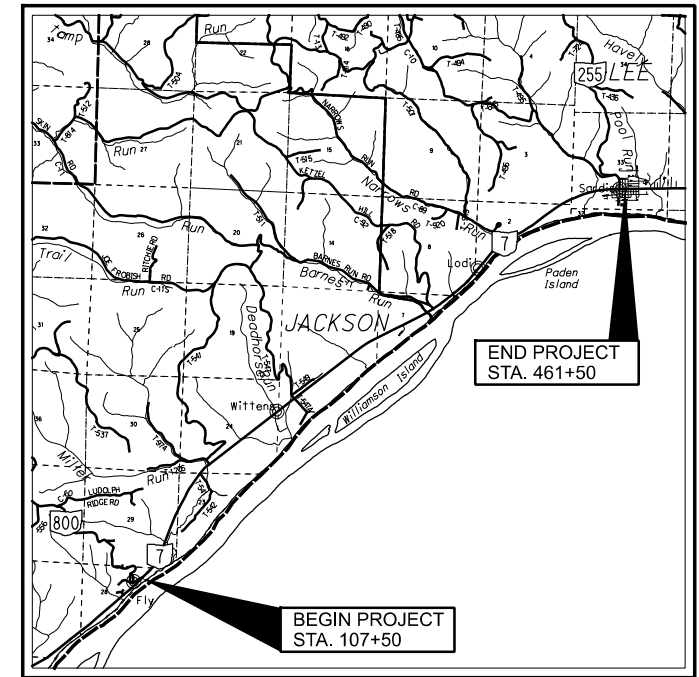
GROUNDWATER WAS NOT ENCOUNTERED IN ANY OF THE BORINGS AT THE TIME OF DRILLING. AS THE BORINGS WERE BACKFILLED UPON COMPLETION GIVEN THEIR LOCATIONS WITHIN THE ROADWAY, DELAYED WATER LEVEL READINGS WERE NOT OBTAINED. DUE TO THE LOW PERMEABILITY OF COHESIVE SOILS AND NEAR IMMEDIATE BACKFILL OF THE BORINGS UPON COMPLETION, THE LACK OF GROUNDWATER ENCOUNTERED IN THE REMAINING BORINGS MAY NOT BE REPRESENTATIVE OF LONG-TERM CONDITIONS. GIVEN THE PROXIMITY TO THE OHIO RIVER AND OTHER STREAMS AND TRIBUTARIES, GROUNDWATER MAY BE ASSUMED TO BE HEAVILY INFLUENCED BY THE RIVER LEVEL. GROUNDWATER LEVELS MAY ALSO VARY THROUGHOUT THE YEAR DEPENDING ON PRECIPITATION AND OTHER SEASONAL VARIATIONS.

SPECIFICATIONS

THE GEOTECHNICAL EXPLORATION WAS PERFORMED IN GENERAL ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING "SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS", DATED JULY 2020.

AVAILABLE INFORMATION

ALL AVAILABLE SOIL AND BEDROCK INFORMATION THAT CAN BE CONVENIENTLY SHOWN FROM THE GEOTECHNICAL EXPLORATION SHEETS HAS BEEN SO REPORTED. ADDITIONAL EXPLORATIONS MAY HAVE BEEN PERFORMED TO STUDY SPECIFIC ASPECTS OF THE PROJECT. COPIES OF THIS DATA, IF ANY, MAY BE INSPECTED AT THE ODOT DISTRICT 10 OFFICE LOCATED AT 338 MUSKINGUM DRIVE, MARIETTA, OHIO 45750.

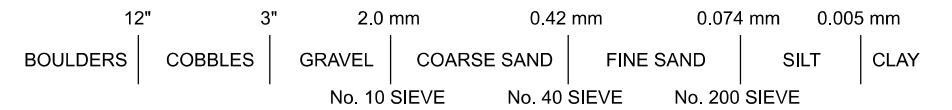


LOCATION MAP

SCALE IN MILES



PARTICLE SIZE DEFINITIONS



RECON. - DCM/AKB 1/5/2021

DRILLING - CENTRAL STAR 1/11/2021 – 1/19/2021

DRAWN - CLW 8/23/2021 – 9/3/2021

REVIEWED - DMV 9/3/2021

HISTORIC BORING LEGEND

1938 HISTORIC BORING DESCRIPTIONS	ODOT CLASS	CLASSIFIED MECH./VISUAL
GRAVEL, SAND AND SILT	A-1, A-2	2 0
GRAVEL AND SAND	A-2	2 1
SILT	A-4	1 2
SILT AND CLAY	A-5	2 1
SAND, SILT AND CLAY	A-7	9 3
CLAY AND SILT	A-7	5 3
CLAY	A-7	42 26
1956 HISTORIC BORING DESCRIPTIONS		
SILT AND CLAY	A-6a	10 1
SILTY CLAY	A-6b	20 2
CLAY	A-7-6	35 4
	TOTAL	128 43
BERM MATERIAL/FILL = X = APPROXIMATE THICKNESS	VISUAL	
TOPSOIL/SOD = APPROXIMATE THICKNESS	VISUAL	

DESIGN AGENCY



DESIGNER

DCM

REVIEWER

DMV 09/03/21

PROJECT ID

109278

SUBSET TOTAL

1 68

SHEET TOTAL

MOE-7-2.21

MODEL: Sheet PAPER:SIZE: 11x17 (in.) DATE: 9/3/2021 TIME: 6:19:23 PM USER: SKRRK
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**SUMMARY OF SOIL TEST DATA
STATE ROUTE 7**

EXPLOR. ID	FROM - TO	SAMPLE ID	N60	% REC	HP	tsf	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	WC	CLASS (G)	ODOT	ppm
B-018-0-20 STA. 188+39, 8' LT. LATITUDE : 39.583206 LONGITUDE : -80.991611	02.00 - 03.50 03.50 - 05.00 05.00 - 06.50 06.50 - 08.00	SS-1 SS-2 SS-3 SS-4	8 11 14 10	56 56 44 100	2 3.5 1.5	3	11	14	38	SAME AS SS-1 SAME AS SS-1	34	36	21	15	20 18 20 22	A-6a (9) A-6a (VISUAL) A-6a (VISUAL) A-6b (10)	<100 - - -	
B-019-0-20 STA. 192+42, 6' RT. LATITUDE : 39.583834 LONGITUDE : -80.990434	02.00 - 03.50 03.50 - 05.00 05.00 - 06.50 06.50 - 08.00	SS-1 SS-2 SS-3 SS-4	11 13 10 15	61 17 67 78	2.5 2 2 3	-	-	-	-	SAME AS SS-3 SAME AS SS-3	38	38	20	18	19 21 20	A-6b (VISUAL) A-6b (VISUAL) A-6b (11) A-6a (10)	- - - -	
B-020-0-20 STA. 196+58, 7' LT. LATITUDE : 39.584545 LONGITUDE : -80.989278	02.00 - 03.50 03.50 - 05.00 05.00 - 06.50 06.50 - 08.00	SS-1 SS-2 SS-3 SS-4	10 15 14 20	61 61 72 89	2.5 3 2.5 4	0	3	5	41	SAME AS SS-2 SAME AS SS-2 SAME AS SS-2 SAME AS SS-2	51	44	20	25	25 20 19 20	A-7-6 (13) A-6b (10) A-6b (VISUAL) A-6b (VISUAL)	- - - -	
B-021-0-20 STA. 200+38, 7' RT. LATITUDE : 39.585136 LONGITUDE : -80.988164	01.50 - 03.00 03.00 - 04.50 04.50 - 06.00 06.00 - 06.80 06.80 - 07.50	SS-1 SS-2 SS-3 SS-4A SS-4B	11 13 13 13 -	44 100 78 100 -	-	3	17	23	32	SAME AS SS-2 SAME AS SS-2 SAME AS SS-2 SAME AS SS-2	25	31	12	17	21 17 21 24	A-6a (VISUAL) A-6a (5) A-6a (VISUAL) A-6a (9)	- - - -	
B-022-0-20 STA. 204+69, 6' LT. LATITUDE : 39.585872 LONGITUDE : -80.986966	01.70 - 03.20 03.20 - 04.70 04.70 - 06.20 06.20 - 07.70	SS-1 SS-2 SS-3 SS-4	24 10 13 17	17 89 78 67	-	10	11	20	35	SAME AS SS-2 SAME AS SS-2 SAME AS SS-2	24	34	13	13	10 19 24 11	A-6a (VISUAL) A-6a (6) A-6a (VISUAL) A-2-4 (0)	- - - -	
B-023-0-20 STA. 208+59, 7' RT. LATITUDE : 39.586481 LONGITUDE : -80.985827	01.60 - 03.10 03.10 - 04.60 04.60 - 06.10 06.10 - 07.60	SS-1 SS-2 SS-3 SS-4	21 27 25 18	67 100 100 78	3.5 3.5 3 -	1	1	6	47	DARK REDDISH-BROWN AND BROWN CLAY, *AND* SILT, TRACE SAND TRACE GRAVEL, DAMP DARK BROWN, CLAY, LITTLE SAND, DAMP BROWN, SANDY SILT, DAMP	45	43	23	11	14 21 18 13	A-7-6 (VISUAL) A-7-6 (14) A-6a (8) A-4a (VISUAL)	- - - -	
B-024-0-20 STA. 212+72, 6' LT. LATITUDE : 39.587185 LONGITUDE : -80.984668	02.00 - 03.50 03.50 - 05.00 05.00 - 06.50 06.50 - 08.00	SS-1 SS-2 SS-3 SS-4	17 6 7 11	50 56 67 100	4.5 1 1.5 1	4	9	16	41	SAME AS SS-2 SAME AS SS-2 SAME AS SS-2 SAME AS SS-3	30	37	16	16	18 20 25 22	A-6b (VISUAL) A-6b (10) A-6b (10) A-6b (VISUAL)	- - - -	
B-025-0-20 STA. 216+78, 6' RT. LATITUDE : 39.587825 LONGITUDE : -80.983496	01.60 - 03.10 03.10 - 04.60 04.60 - 06.10 06.10 - 07.60	SS-1 SS-2 SS-3 SS-4	11 14 10 8	22 78 100 100	3 2 1.5 -	0	1	11	59	SAME AS SS-2 SAME AS SS-2 SAME AS SS-2	29	34	15	15	21 23 25 27	A-6a (VISUAL) A-6a (10) A-6a (VISUAL) A-4b (8) ●	- - - -	
B-026-0-20 STA. 221+55, 7' LT. LATITUDE : 39.588634 LONGITUDE : -80.982165	01.60 - 03.10 03.10 - 04.60 04.60 - 06.10 06.10 - 07.60	SS-1 SS-2 SS-3 SS-4	8 10 14 11	72 89 100 100	1 2.5 2 1	0	0	20	48	DARK BROWN, CLAY, LITTLE SAND, DAMP SAME AS SS-4	32	35	16	16	18 20 20 23	A-7-6 (VISUAL) A-6b (10) A-6a (VISUAL) A-6a (8)	- 120 - -	
B-027-0-20 STA. 225+56, 7' RT. LATITUDE : 39.589261 LONGITUDE : -80.980994	01.50 - 03.00 03.00 - 04.50 04.50 - 06.00 06.00 - 07.50	SS-1 SS-2 SS-3 SS-4	15 14 22 18	50 78 44 78	1.5 - - -	3	6	23	41	SAME AS SS-2 SAME AS SS-2 SAME AS SS-2 SAME AS SS-2	27	29	11	11	18 13 14 12	A-6a (7) A-2-4 (0) A-2-4 (VISUAL) A-2-4 (VISUAL)	- 100 - -	
B-028-0-20 STA. 229+54, 7' LT. LATITUDE : 39.589943 LONGITUDE : -80.979888	02.00 - 03.50 03.50 - 05.00 05.00 - 06.50 06.50 - 08.00	SS-1 SS-2 SS-3 SS-4	21 10 13 13	33 83 56 78	3 1 2 -	18	12	21	24	ORANGISH-BROWN, GRAVEL WITH SAND, SILT AND CLAY, DAMP TO MOIST SAME AS SS-3	25	29	11	11	12 21 16 16	A-6a (3) A-6b (8) A-2-6 (VISUAL) A-2-6 (VISUAL)	- - - -	
B-029-0-20 STA. 233+58, 7' RT. LATITUDE : 39.590573 LONGITUDE : -80.978711	01.50 - 03.00 03.00 - 04.50 04.50 - 06.00 06.00 - 07.50	SS-1 SS-2 SS-3 SS-4	11 17 17 14	17 83 100 100	- 2 1 1	2	9	31	32	SAME AS SS-2 SAME AS SS-3 SAME AS SS-3	26	35	15	15	14 20 25 26	A-6a (VISUAL) A-6a (7) A-4b (8) A-4b (VISUAL)	- 120 - -	
B-030-0-20 STA. 237+36, 6' LT. LATITUDE : 39.591221 LONGITUDE : -80.977659	01.60 - 03.10 03.10 - 04.60 04.60 - 06.10 06.10 - 07.60	SS-1 SS-2 SS-3 SS-4	11 20 15 14	78 44 83 56	2 3.5 3 3	2	3	11	44	SAME AS SS-1 SAME AS SS-1 SAME AS SS-3	40	33	14	14	18 15 23 -	A-6a (10) A-6a (VISUAL) A-7-6 (13) A-7-6 (VISUAL)	- - - -	
B-031-0-20 STA. 242+49, 7' RT. LATITUDE : 39.592034 LONGITUDE : -80.976172	01.60 - 03.10 03.10 - 04.60 04.60 - 06.10 06.10 - 07.60	SS-1 SS-2 SS-3 SS-4	18 17 17 15	44 72 50 100	- - - 2	25	16	22	21	SAME AS SS-2 SAME AS SS-4 SAME AS SS-4	16	30	11	11	13 13 14 17	A-6a (VISUAL) A-6a (1) A-4a (VISUAL) A-4a (2)	- 140 - -	
B-032-0-20 STA. 246+98, 7' LT. LATITUDE : 39.592798 LONGITUDE : -80.974923	01.70 - 03.20 03.20 - 04.70 04.70 - 06.20 06.20 - 07.70	SS-1 SS-2 SS-3 SS-4	14 7 14 17	83 67 89 100	2 1 1.5 3	8	10	18	37	SAME AS SS-1 SAME AS SS-4 SAME AS SS-4	27	30	11	11	17 19 18 30	A-6a (6) A-6a (VISUAL) A-6a (VISUAL) A-6a (10)	<100 - - -	
B-033-0-20 STA. 250+98, 6' RT. LATITUDE : 39.593425 LONGITUDE : -80.973757	01.50 - 03.00 03.00 - 04.50 04.50 - 06.00 06.00 - 07.50	SS-1 SS-2 SS-3 SS-4	21 15 17 14	61 78 56 89	- - 1.5 2.5	15	5	33	35	SAME AS SS-1 SAME AS SS-4 SAME AS SS-4	12	NP	NP	NP	16 19 28 24	A-4a (2) A-4a (VISUAL) A-7-6 (VISUAL) A-7-6 (13)	<100 - - -	
B-034-0-20 STA. 254+96, 7' LT. LATITUDE : 39.594106 LONGITUDE : -80.972651	01.60 - 03.10 03.10 - 04.60 04.60 - 06.10 06.10 - 07.60	SS-1 SS-2 SS-3 SS-4	11 14 22 20	56 56 100 61	2 2 3.5 2	2	7	9	38	SAME AS SS-2 SAME AS SS-4 SAME AS SS-4	44	43	21	22	19 19 20 16	A-7-6 (VISUAL) A-7-6 (13) A-6a (VISUAL) A-6a (8)	- - - -	

**SOIL PROFILE - ROADWAY
SUMMARY OF SOIL TEST DATA**

DESIGN AGENCY	DMV	
DESIGNER	DCM	
REVIEWER	DMV 09/03/21	
PROJECT ID	109278	
SUBSET TOTAL	3	68
SHEET TOTAL		

MOE-7-2.21

MODEL: Sheet PAPER SIZE: 11x17 (in.) DATE: 9/4/2021 TIME: 7:16:59 AM USER: SKIRK
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**HISTORIC SUMMARY OF SOIL TEST DATA
 STATE ROUTE 7**

EXPLOR. ID	FROM	TO	SAMPLE ID	N60	REC	HP	tsf	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)
B-012-2-56 STA. 165+00, 16' LT LATITUDE : 39.578544 LONGITUDE : -80.997183	00.00 - 00.30 00.30 - 08.00 08.00 - 20.00	- - -	- 57 -	- - -	- - -	- - -	- - -	4	4	6	33	53	42	25	17	22	A-7-6*
B-013-1-56 STA. 167+00, 16' LT LATITUDE : 39.579007 LONGITUDE : -80.9968	00.00 - 00.30 00.30 - 09.00 09.00 - 20.00	- - -	- 58 59	- - -	- - -	- - -	- - -	0	4	4	41	51	45	22	23	21	A-7-6*
B-013-2-56 STA. 169+00, 14' LT LATITUDE : 39.579464 LONGITUDE : -80.996403	00.00 - 00.30 00.30 - 02.00 02.00 - 09.00 09.00 - 15.00 15.00 - 20.00	- - - - -	- 60 - - 61	- - - - -	- - - - -	- - - - -	- - - - -	6	1	2	35	56	55	25	30	26	A-7-6*
B-013-3-56 STA. 171+00, 15' LT LATITUDE : 39.579918 LONGITUDE : -80.996004	00.00 - 00.30 00.30 - 03.00 03.00 - 08.00 08.00 - 15.00	- - - -	- 62 63 64	- - - -	- - - -	- - - -	- - - -	0	2	3	40	55	52	27	25	26	A-7-6*
B-014-1-56 STA. 173+00, 16' LT LATITUDE : 39.580368 LONGITUDE : -80.995596	00.00 - 00.30 00.30 - 02.50 02.50 - 20.00	- - -	- 65 66	- - -	- - -	- - -	- - -	3	3	4	20	70	53	27	26	27	A-7-6*
B-017-1-38 STA. 185+00, 15' LT LATITUDE : 39.582658 LONGITUDE : -80.992626	00.00 00.50 00.50 01.50 01.50 02.50 02.50 04.00	- - - -	- - - 41	- - - -	- - - -	- - - -	- - - -	-	-	14	30	24	37	21	16	20	A-7*
B-020-1-38 STA. 199+00, 14' LT LATITUDE : 39.584949 LONGITUDE : -80.988632	00.00 00.50 00.50 01.50 01.50 02.50 02.50 - 05.00	- - - -	- - 43 -	- - - -	- - - -	- - - -	- - - -	22	28	22	12	16	30	20	10	14	A-7 (VISUAL)*
B-023-1-38 STA. 211+00, 15' LT LATITUDE : 39.586915 LONGITUDE : -80.985219	00.00 00.50 00.50 01.00 01.00 01.50 01.50 04.00	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	16	11	16	40	18	28	17	11	19	A-7*
B-024-1-38 STA. 214+00, 15' LT LATITUDE : 39.58741 LONGITUDE : -80.984366	00.00 00.50 00.50 02.00 02.00 03.70 03.70 04.20	- - - -	- - 36 37 -	- - - -	- - - -	- - - -	- - - -	7	5	7	22	59	43	25	18	-	A-7*
B-025-1-38 STA. 220+00, 12' LT LATITUDE : 39.588386 LONGITUDE : -80.982651	00.00 00.50 00.50 02.00 02.00 05.80 05.80 06.20	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	0	1	15	45	39	43	20	23	27	A-7
B-026-1-38 STA. 222+00, 12' LT LATITUDE : 39.588713 LONGITUDE : -80.982082	00.00 00.33 00.33 01.00 01.00 01.80 01.80 04.50 04.50 05.50 05.50 07.00	- - - - - -	- - 98 - - -	- - - - - -	- - - - - -	- - - - - -	- - - - - -	2	10	5	47	36	44	20	24	25	A-7
B-026-2-38 STA. 225+00, 12' LT LATITUDE : 39.5892 LONGITUDE : -80.98123	00.00 00.33 00.33 00.67 00.67 01.00 01.00 03.50 03.50 04.80 04.80 05.50	- - - - - -	- - - - 32 33	- - - - - -	- - - - - -	- - - - - -	- - - - - -	1	1	11	73	14	29	20	10	23	A-4*
B-029-1-38 STA. 234+00, 12' LT LATITUDE : 39.590674 LONGITUDE : -80.97867	00.00 00.33 00.33 00.67 00.67 01.00 01.00 04.00	- - - -	- - - 31	- - - -	- - - -	- - - -	- - - -	48	16	12	15	10	29	19	10	17	A-1, A-2*
B-029-2-38 STA. 237+00, 12' LT LATITUDE : 39.591164 LONGITUDE : -80.977811	00.00 00.50 00.50 01.50 01.50 03.50 03.50 04.00	- - - -	- 28 29 30	- - - -	- - - -	- - - -	- - - -	13	4	10	48	25	35	23	13	22	A-7
B-032-1-38 STA. 247+00, 15' LT LATITUDE : 39.592813 LONGITUDE : -80.97497	00.00 01.50 01.50 04.00	- -	- 26	- -	- -	- -	- -	8	9	10	41	31	40	26	13	23	A-7*
B-032-2-38 STA. 249+00, 15' LT LATITUDE : 39.593143 LONGITUDE : -80.974397	00.00 - 00.50 00.50 - 01.50 01.50 - 04.00	- - -	- 55 56	- - -	- - -	- - -	- - -	0	3	12	47	38	45	28	18	28	A-5

SAME AS ABOVE WITH 40% GRAVEL AND SS

BERM MATERIAL

BERM MATERIAL

BERM MATERIAL

BERM MATERIAL

BERM MATERIAL

BERM MATERIAL

BERM MATERIAL

BERM MATERIAL

BERM MATERIAL

BERM MATERIAL


**SOIL PROFILE - ROADWAY
 SUMMARY OF SOIL TEST DATA**

DESIGN AGENCY	DMV
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET TOTAL	9 68
SHEET TOTAL	

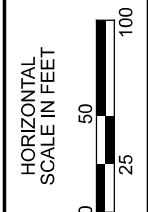
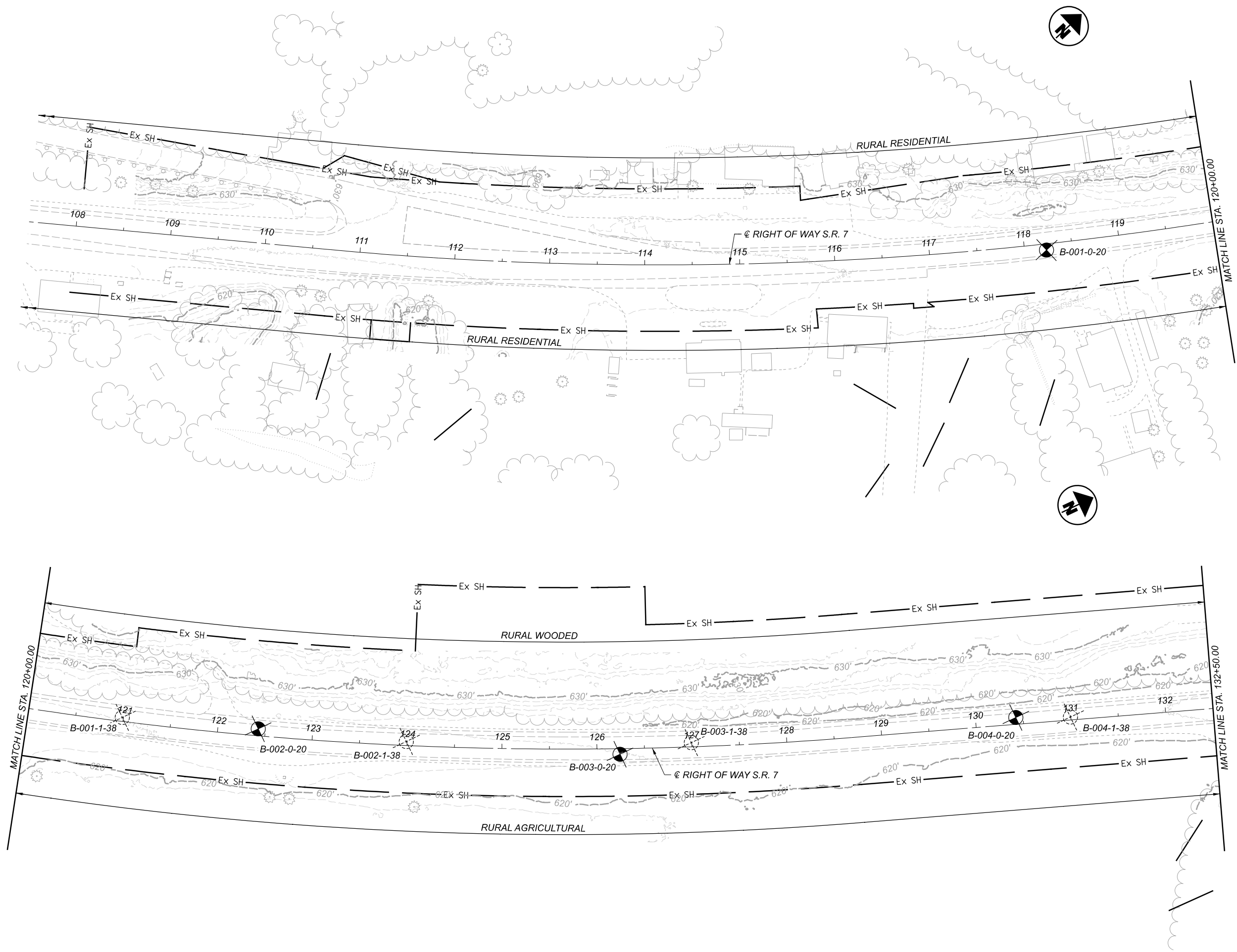


HISTORIC SUMMARY OF SOIL TEST DATA
 STATE ROUTE 7

EXPLOR. ID	FROM - TO	SAMPLE ID	N60	REC	%	HP	tsf	GR	%	CS	%	FS	%	SILT	%	CLAY	LL	PL	PI	%	WC	ODOT CLASS (GI)		
B-069-1-38	00.00 00.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
STA. 400+00, CL	01.00 01.50	103	-	-	-	-	-	12	16	3	33	37	56	23	33	37	56	23	33	26	26	A-7		
LATITUDE : 39.616719	01.50 04.00	-	-	-	-	-	-	SAME AS ABOVE														-	-	A-7 (VISUAL) *
LONGITUDE : -80.931036																								
B-073-1-38	00.00 00.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
STA. 414+00, CL	00.50 04.10	86	-	-	-	-	-	7	9	8	41	35	36	20	16	16	36	20	16	19	19	A-7 *		
LATITUDE : 39.618913																								
LONGITUDE : -80.926902																								
B-075-1-38	00.00 00.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
STA. 422+00, CL	00.50 04.00	54	-	-	-	-	-	5	12	7	38	39	47	22	25	25	47	22	25	24	24	A-7 *		
LATITUDE : 39.620164																								
LONGITUDE : -80.924539																								
B-083-1-38	00.00 01.50	47	-	-	-	-	-	51	24	4	15	6	38	27	11	11	38	27	11	21	21	A-2 *		
STA. 455+00, CL	01.50 04.00	-	-	-	-	-	-	GRAVEL AND SAND														-	-	A-2 (VISUAL)
LATITUDE : 39.622733																								
LONGITUDE : -80.913427																								

DESIGN AGENCY	
	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
11	68
SHEET	TOTAL

**SOIL PROFILE - ROADWAY
 SUMMARY OF SOIL TEST DATA**



SOIL PROFILE - ROADWAY
 STA. 107+50.00 TO STA. 132+50.00

DESIGN AGENCY



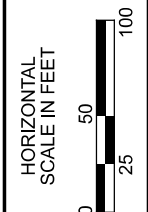
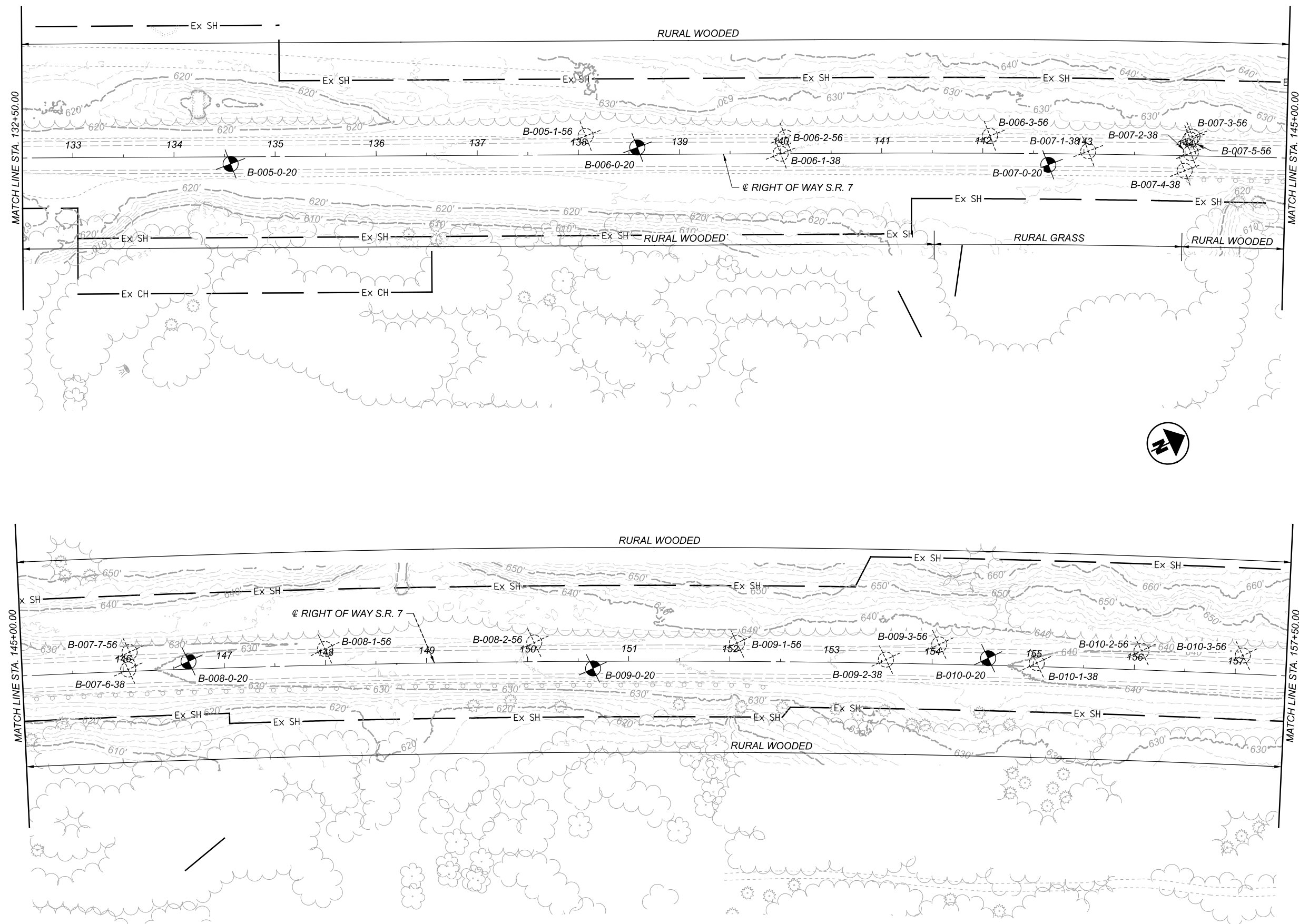
DESIGNER
 DCM

REVIEWER
 DMV 09/03/21

PROJECT ID
 109278

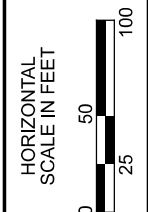
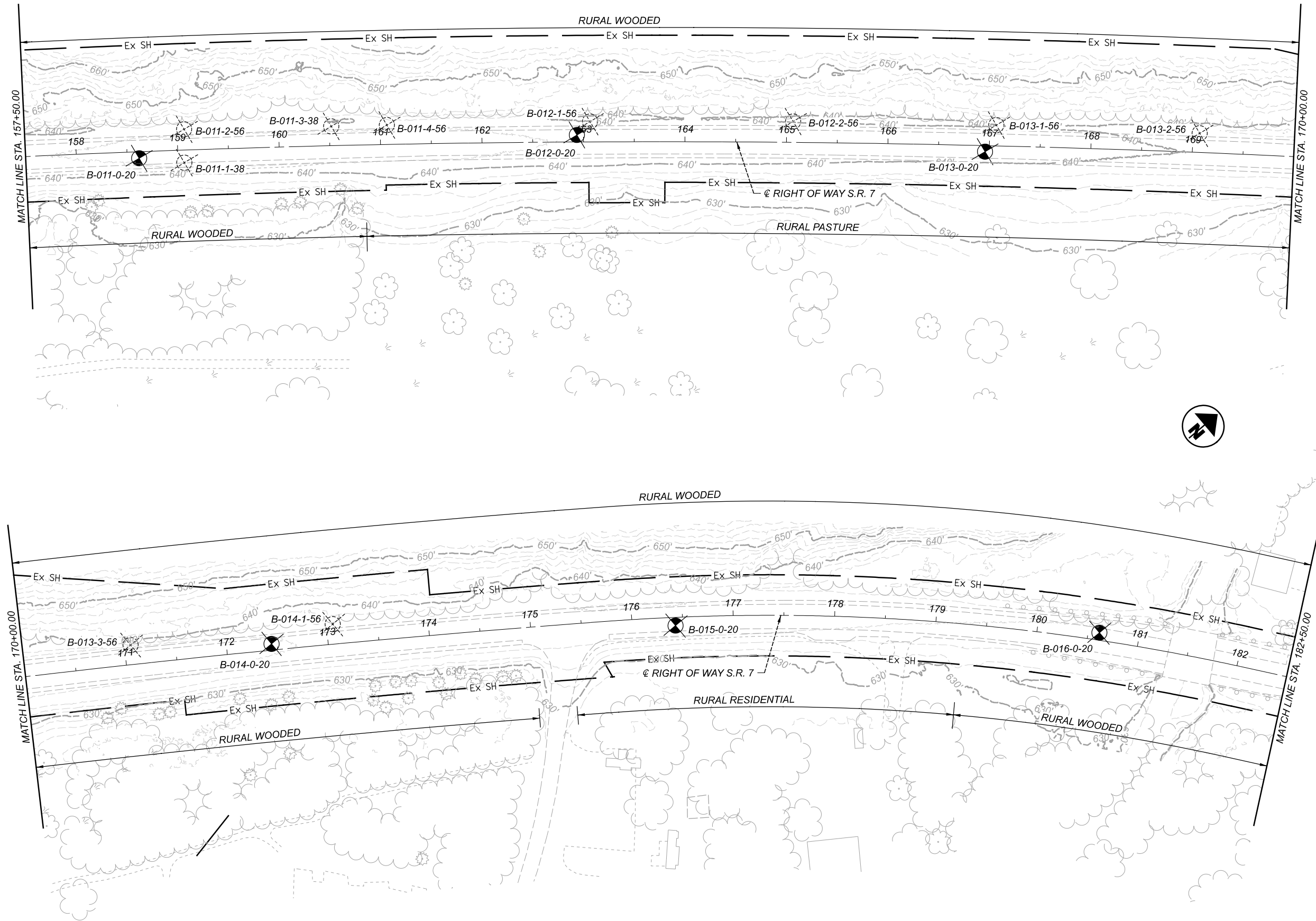
SUBSET	TOTAL
12	68

SHEET	TOTAL



SOIL PROFILE - ROADWAY
 STA. 132+50.00 TO STA. 157+50.00

DESIGN AGENCY	
HR	
DESIGNER	
DCM	
REVIEWER	
DMV 09/03/21	
PROJECT ID	
109278	
SUBSET	TOTAL
13	68
SHEET	TOTAL



SOIL PROFILE - ROADWAY
STA. 157+50.00 TO STA. 182+50.00

DESIGN AGENCY



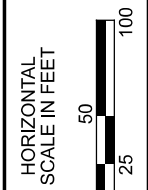
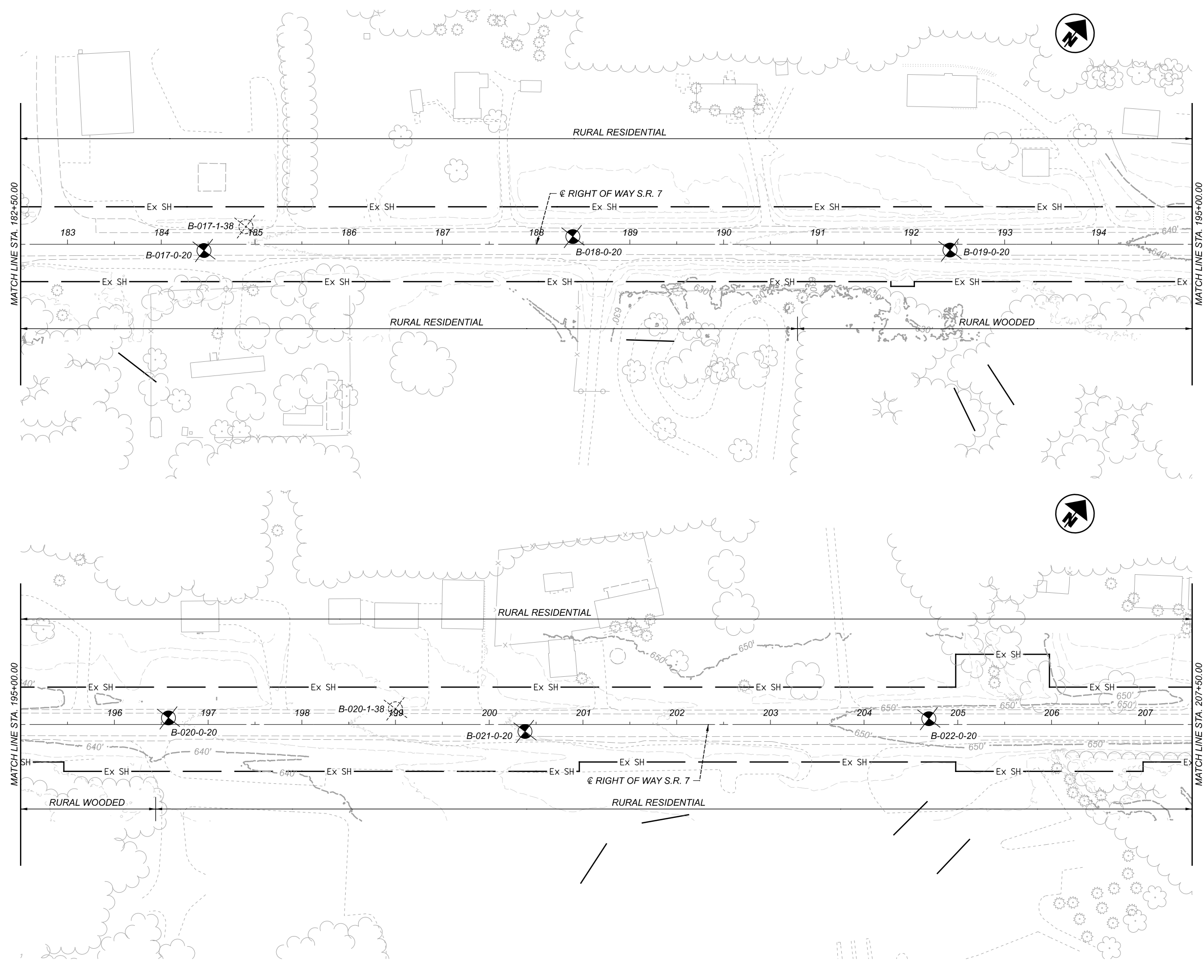
DESIGNER
DCM

REVIEWER
DMV 09/03/21

PROJECT ID
109278

SUBSET	TOTAL
14	68

SHEET	TOTAL



SOIL PROFILE - ROADWAY
 STA. 182+50.00 TO STA. 207+50.00

DESIGN AGENCY



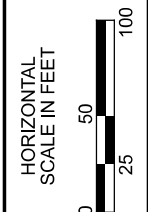
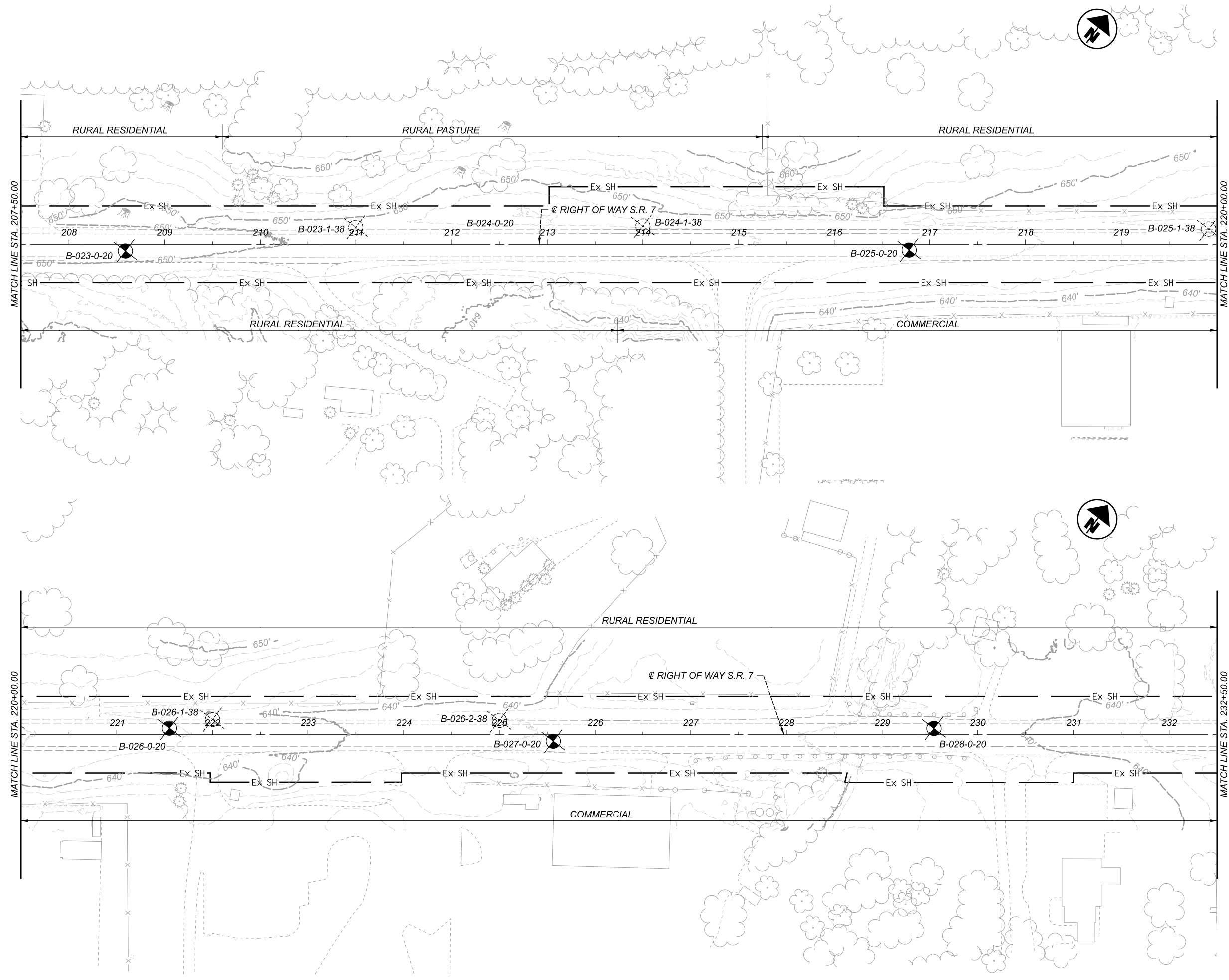
DESIGNER
 DCM

REVIEWER
 DMV 09/03/21

PROJECT ID
 109278

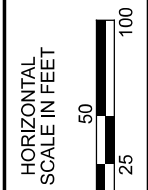
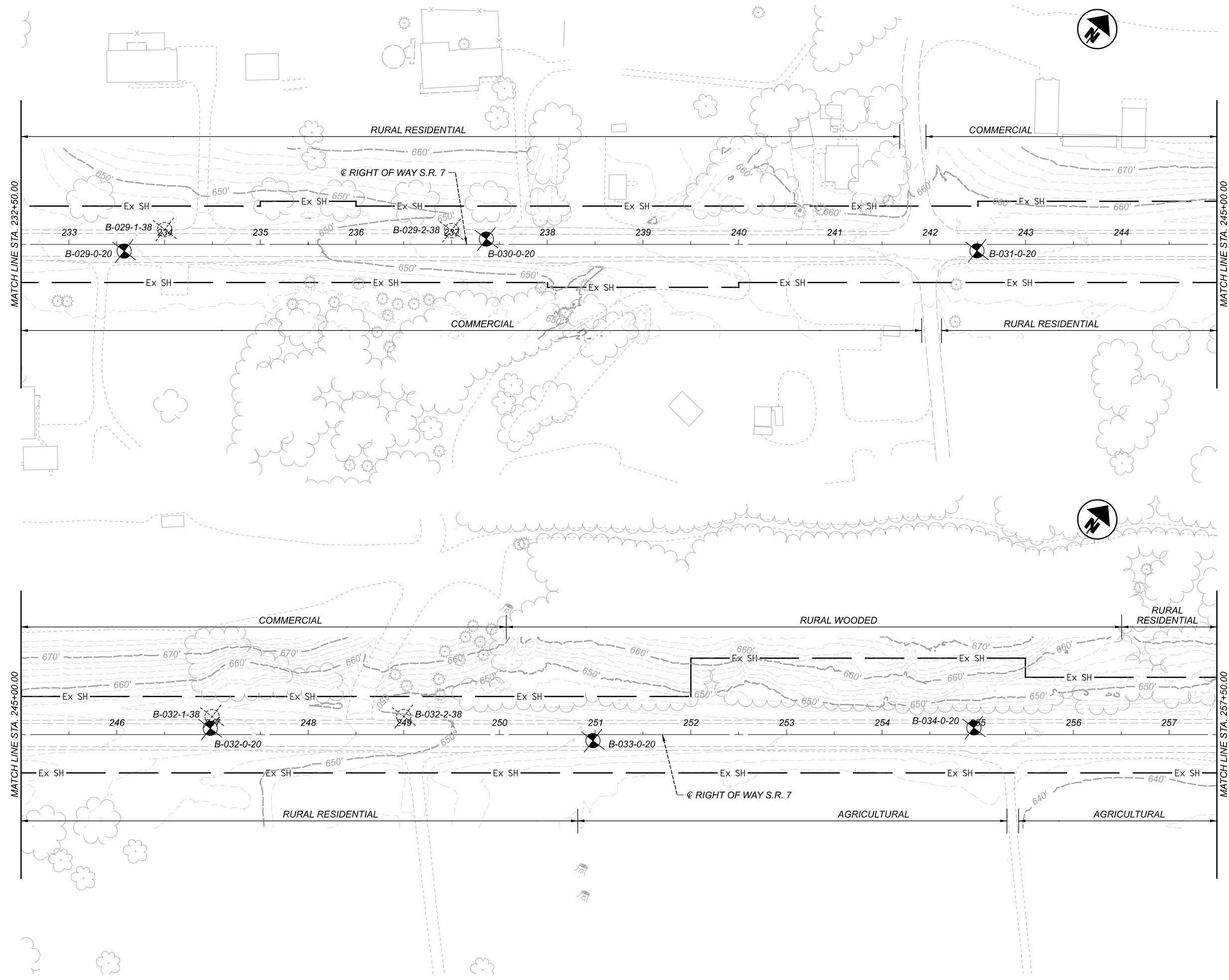
SUBSET	TOTAL
15	68

SHEET	TOTAL



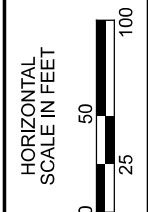
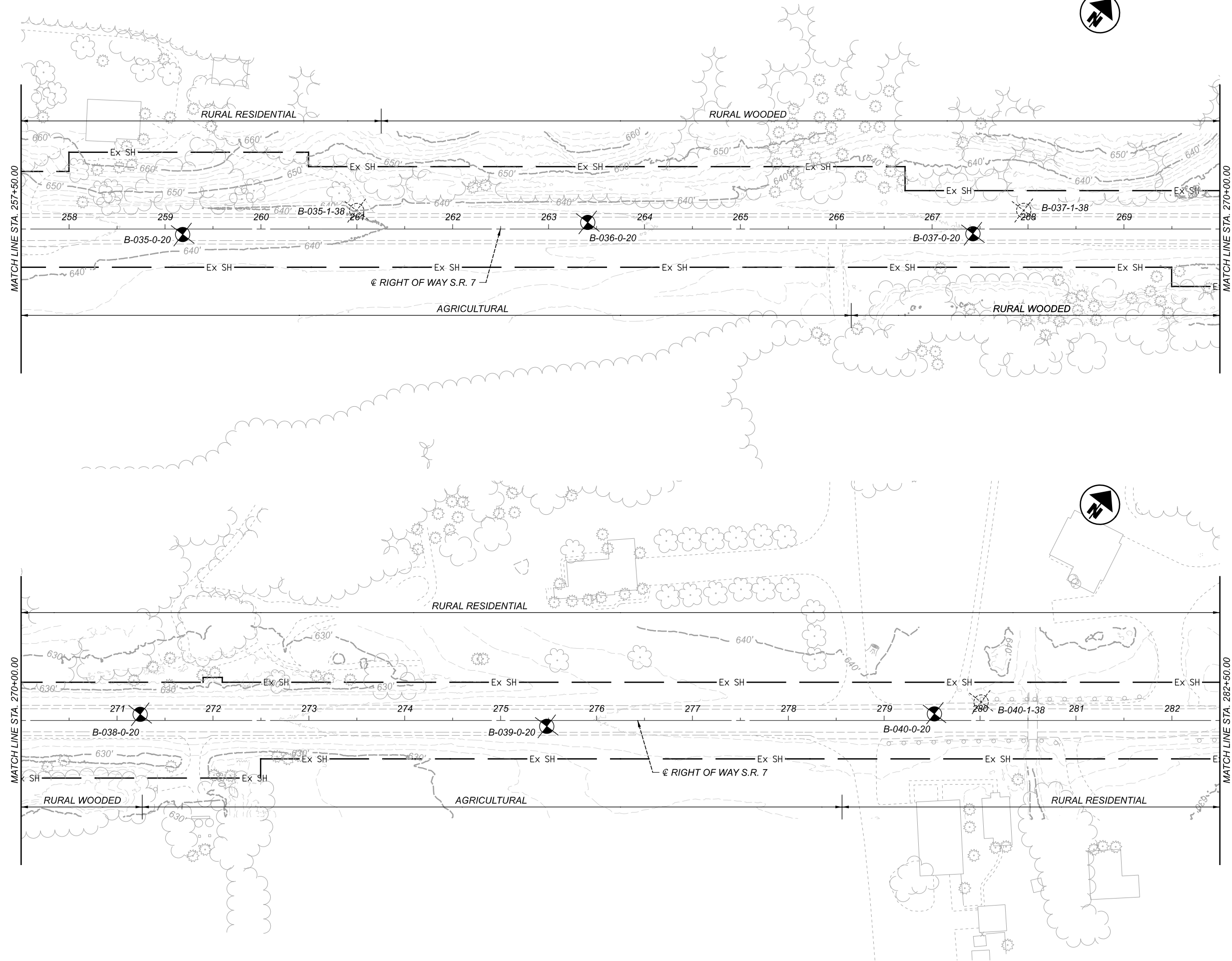
SOIL PROFILE - ROADWAY
 STA. 207+50.00 TO STA. 232+50.00

DESIGN AGENCY	
HR	
DESIGNER	
DCM	
REVIEWER	
DMV 09/03/21	
PROJECT ID	
109278	
SUBSET	TOTAL
16	68
SHEET	TOTAL



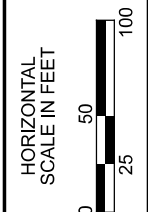
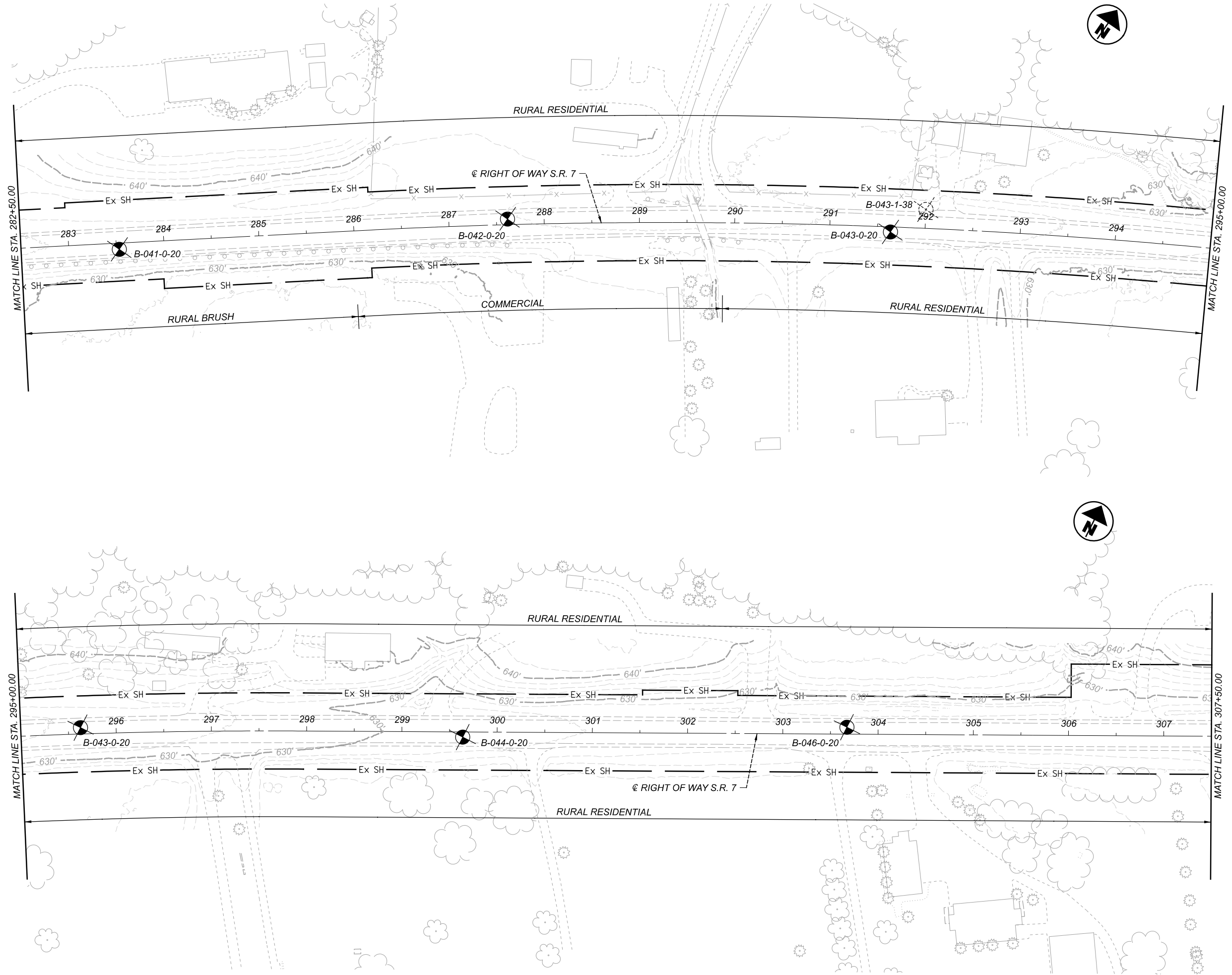
SOIL PROFILE - ROADWAY
 STA. 232+50.00 TO STA. 257+50.00

DESIGN AGENCY	
HR	
DESIGNER	
DCM	
REVIEWER	
DMV 09/03/21	
PROJECT ID	
109278	
SUBSET	TOTAL
17	68
SHEET	TOTAL



SOIL PROFILE - ROADWAY
 STA. 257+50.00 TO STA. 282+50.00

DESIGN AGENCY	
HR	
DESIGNER	
DCM	
REVIEWER	
DMV 09/03/21	
PROJECT ID	
109278	
SUBSET	TOTAL
18	68
SHEET	TOTAL



SOIL PROFILE - ROADWAY
 STA. 282+50.00 TO STA. 307+50.00

DESIGN AGENCY



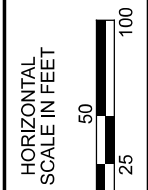
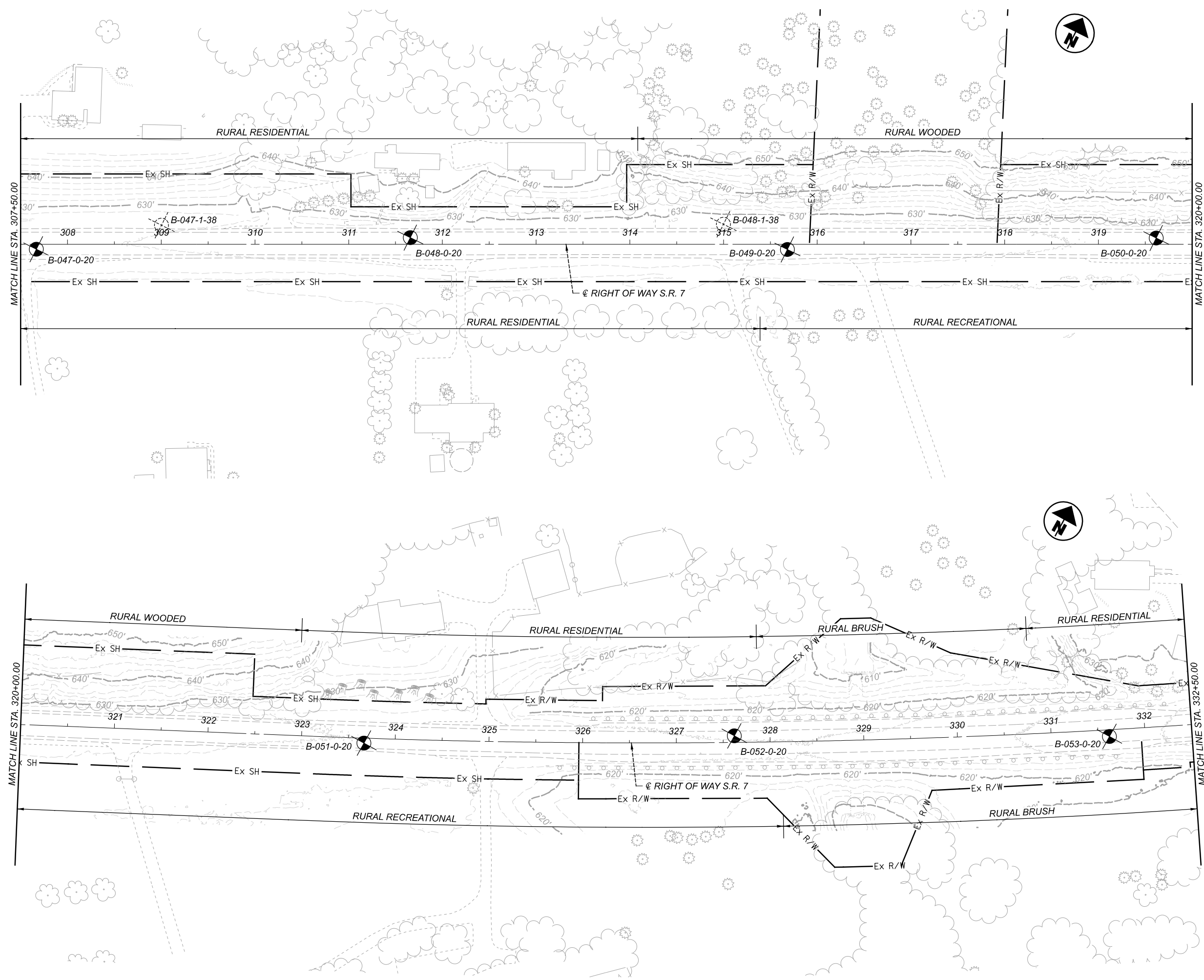
DESIGNER
 DCM

REVIEWER
 DMV 09/03/21

PROJECT ID
 109278

SUBSET	TOTAL
19	68

SHEET	TOTAL



SOIL PROFILE - ROADWAY
 STA. 307+50.00 TO STA. 332+50.00

DESIGN AGENCY



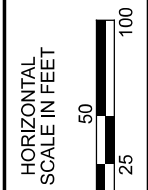
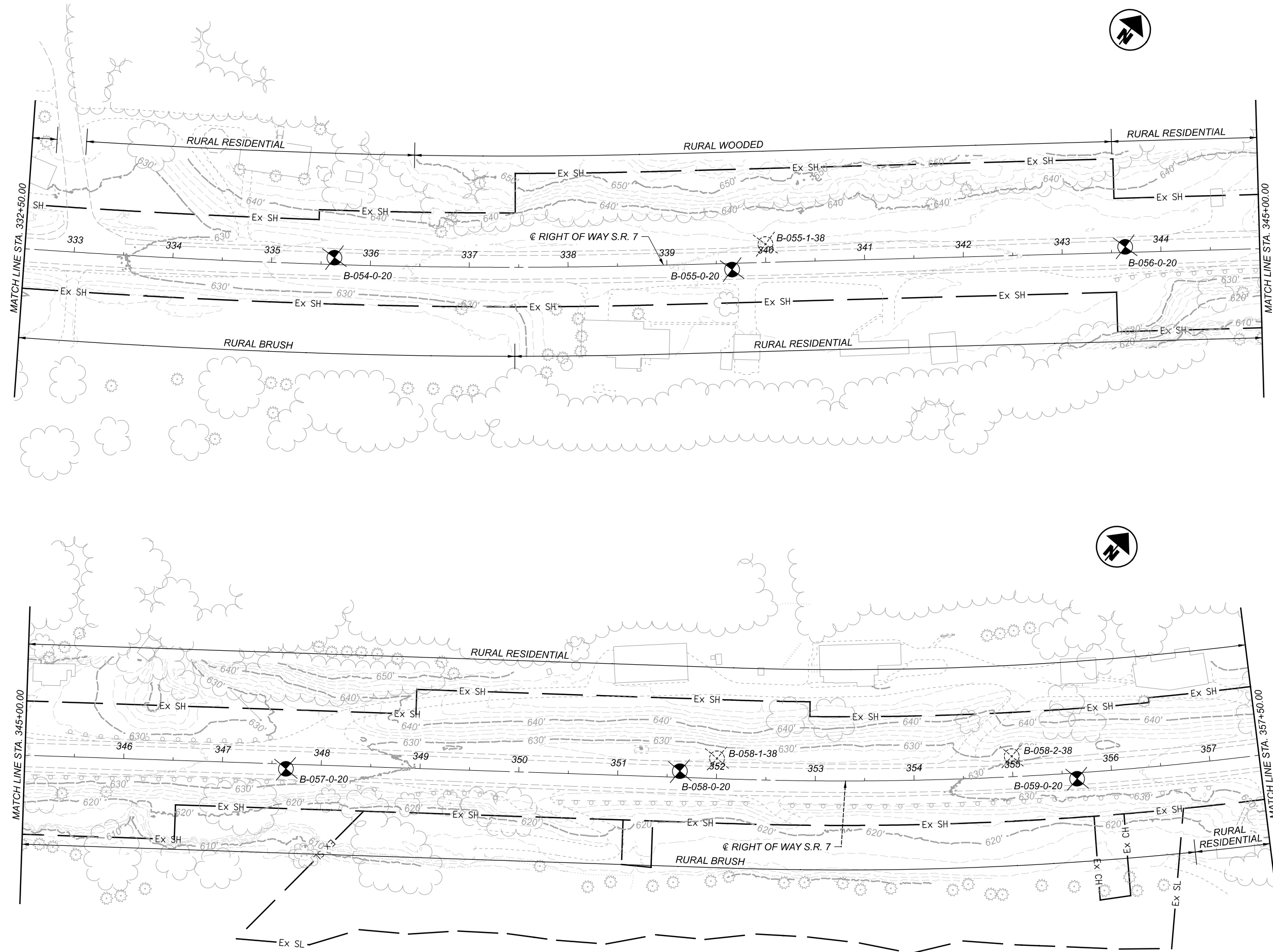
DESIGNER
 DCM

REVIEWER
 DMV 09/03/21

PROJECT ID
 109278

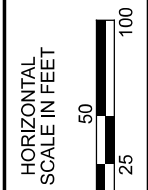
SUBSET	TOTAL
20	68

SHEET	TOTAL



SOIL PROFILE - ROADWAY
 STA. 332+50.00 TO STA. 357+50.00

DESIGN AGENCY	
HR	
DESIGNER	
DCM	
REVIEWER	
DMV 09/03/21	
PROJECT ID	
109278	
SUBSET	TOTAL
21	68
SHEET	TOTAL



SOIL PROFILE - ROADWAY
 STA. 357+50.00 TO STA. 382+50.00

DESIGN AGENCY



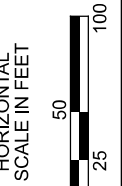
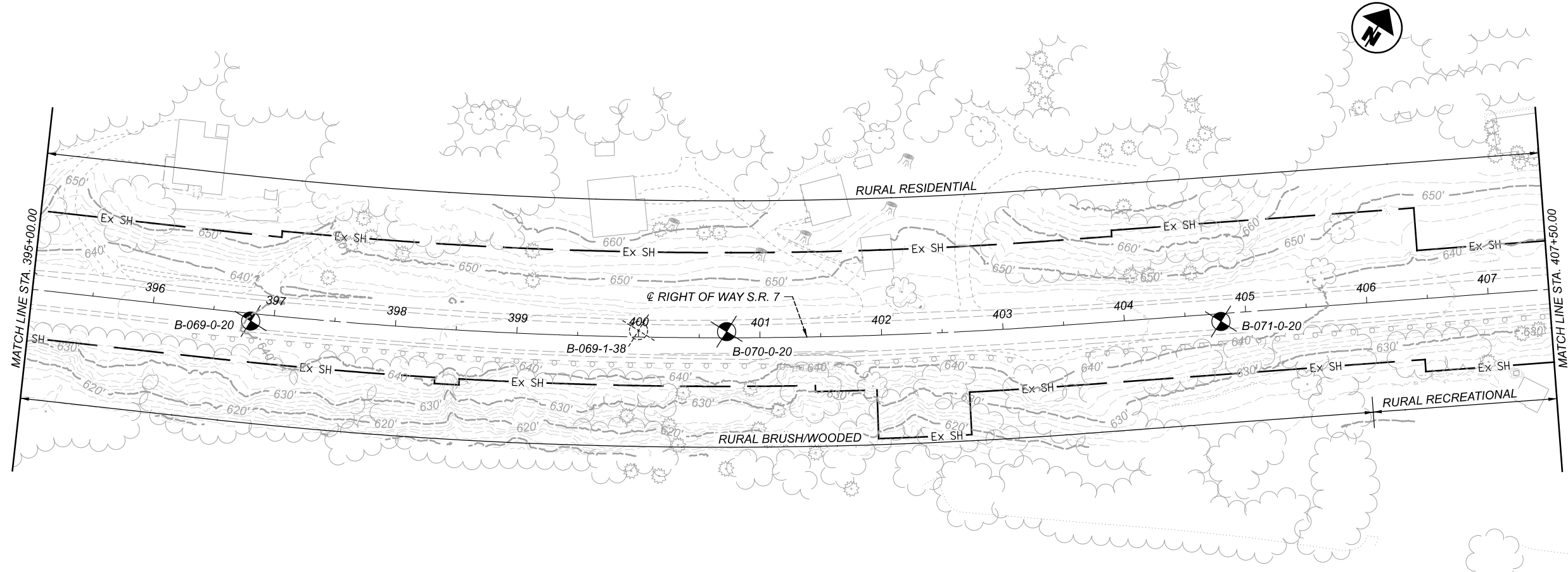
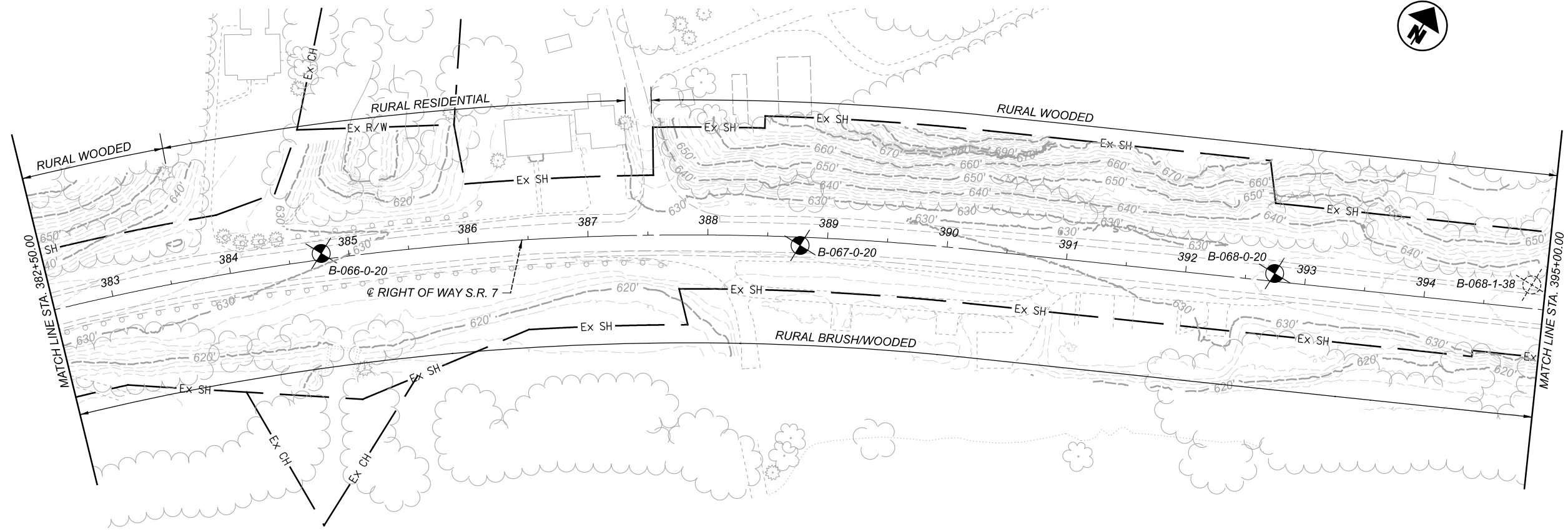
DESIGNER
 DCM

REVIEWER
 DMV 09/03/21

PROJECT ID
 109278

SUBSET	TOTAL
22	68

SHEET	TOTAL



SOIL PROFILE - ROADWAY
 STA. 382+50.00 TO STA. 407+50.00

DESIGN AGENCY



DESIGNER

DCM

REVIEWER

DMV 09/03/21

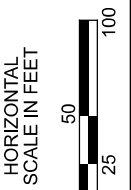
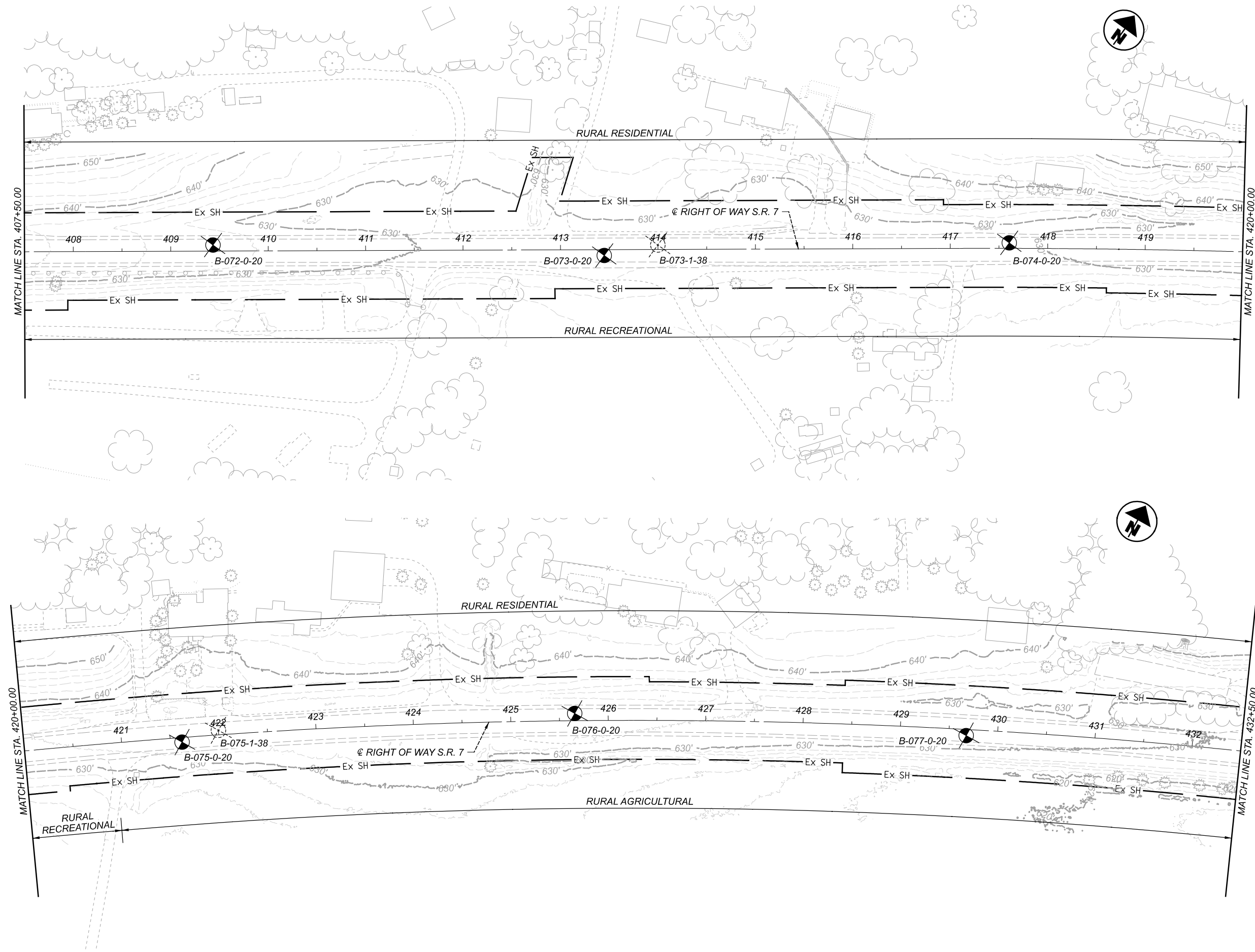
PROJECT ID

109278

SUBSET TOTAL

23 68

SHEET TOTAL



SOIL PROFILE - ROADWAY
 STA. 407+50.00 TO STA. 432+50.00

DESIGN AGENCY



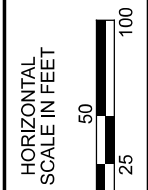
DESIGNER
 DCM

REVIEWER
 DMV 09/03/21

PROJECT ID
 109278

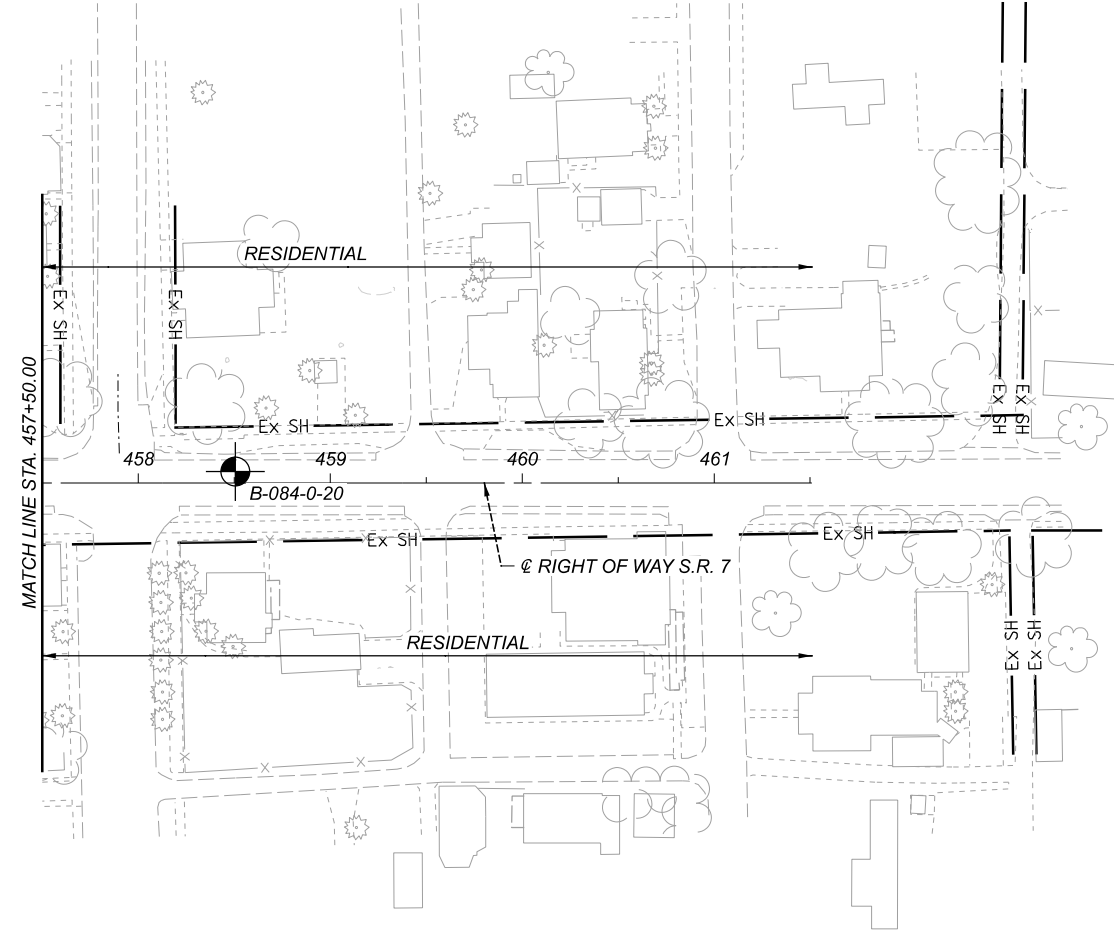
SUBSET	TOTAL
24	68

SHEET	TOTAL



SOIL PROFILE - ROADWAY
 STA. 432+50.00 TO STA. 457+50.00

DESIGN AGENCY	
HR	
DESIGNER	
DCM	
REVIEWER	
DMV 09/03/21	
PROJECT ID	
109278	
SUBSET	TOTAL
25	68
SHEET	TOTAL



DESIGN AGENCY



DESIGNER

DCM

REVIEWER

DMV 09/03/21

PROJECT ID

109278

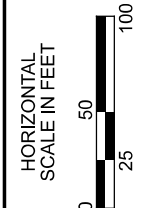
SUBSET TOTAL

26 68

SHEET TOTAL

1 68

SOIL PROFILE - ROADWAY
STA. 457+50.00 TO STA. 461+50.00



PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 118+23, 7' RT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-001-0-20
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 625.0 (MSL) EOB: 7.5 ft.	PAGE
START: 1/11/21 END: 1/11/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.566997, -81.004417	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS							SPT/ RQD	REC SAMPLE (%)	HP ID	GRADATION (%)	ATTERBERG							SO4 ppm	BACK FILL	
		1	2	3	4	5	6	7					GR	CS	FS	SI	CL	LL	PL			PI
10.5 inches Asphalt 6.5 inches Concrete	625.0																					
STIFF TO VERY STIFF, BROWN AND RED-BROWN, CLAY, TRACE GRAVEL, SOME SAND, SOME SILT, DAMP	623.6							1														
								2														
								3														
								4														
								5														
								6														
								7														
@ 5.0' - 5.5': Medium Sand Seam @ 5.5' - 6.0': Mottled Gray	617.5																				<100	

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/22/16 24-C:\P\WORKING\ENG\EA\T01D\1910318182020011 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 122+43, 7' LT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-002-0-20
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 623.4 (MSL) EOB: 8.1 ft.	PAGE
START: 1/19/21 END: 1/19/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.567968, -81.003617	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS								SPT/ RQD	REC SAMPLE (%)	HP ID	GRADATION (%)	ATTERBERG							SO4 ppm	BACK FILL
		1	2	3	4	5	6	7	8					GR	CS	FS	SI	CL	LL	PL		
12.5 inches Asphalt 12 inches Concrete	623.4																					
SOFT TO MEDIUM STIFF, BROWN TO REDDISH-BROWN, CLAY, SOME SAND, LITTLE GRAVEL, SOME SILT, DAMP	621.6							1														
								2														
								3														
								4														
								5														
								6														
								7														
STIFF, REDDISH-BROWN, SILTY CLAY, LITTLE SAND, TRACE GRAVEL, DAMP	616.8																				<100	
	615.3																					

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/22/16 24-C:\P\WORKING\ENG\EA\T01D\1910318182020011 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY



DESIGNER
DCM

REVIEWER
DMV 09/03/21

PROJECT ID
109278

SUBSET TOTAL
27 68

SHEET TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-001-0-20 & B-002-0-20

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 10:02:00 DATE: 9/3/2021 TIME: 6:26:14 PM USER: SKIRK
 pw:\ohiodot-pw\bentley.com\ohiodot-pw-02\Documents\01 Active Projects\District 10\Monroe\09278\402-Engineering\HDR\Geotechnical\Sheets\09278_IL.002.dgn

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 126+24, 6' RT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-003-0-20
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 622.0 (MSL) EOB: 7.3 ft.	PAGE
START: 1/11/21 END: 1/11/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.568872, -81.002934	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT / RQD	REC SAMPLE ID (%)	HP (tsf)	GRADATION (%)						WC	SO4 ppm			
						GR	CS	FS	SI	CL	LL			PL	PI	
10 inches Asphalt	622.0	1														
6 inches Concrete	620.7	2	5	22	56	SS-1	-	-	-	-	-	-	16	A-6a (V)		
VERY STIFF, BROWN AND RED-BROWN, SILT AND CLAY, LITTLE GRAVEL AND STONE FRAGMENTS, SOME SAND, DAMP		3	4	21	83	SS-2	2.50	10	18	20	28	24	34	22	14	A-6a (4)
	617.7	4	6	21	83	SS-2	2.50	10	18	20	28	24	34	22	14	A-6a (4)
		5	20	42	22	SS-3	-	-	-	-	-	-	-	-	15	A-6b (V)
VERY STIFF TO HARD, BROWN AND RED-BROWN, SILTY CLAY "AND" SAND, TRACE GRAVEL, DAMP		6	4	22	94	SS-4	1.50	2	10	30	23	35	33	16	20	A-6b (7)
SS-3 : Gravel Stuck in Shoe		7	8	22	94	SS-4	1.50	2	10	30	23	35	33	16	20	A-6b (7)
@ 6.8' - 7.3' : Sand and Gravel Seam	614.7	7	8	22	94	SS-4	1.50	2	10	30	23	35	33	16	20	A-6b (7)

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\MWORKING\EA\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ


NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 130+42, 7' LT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-004-0-20
PID: 109278_SFN:	DRILLING METHOD: 3" SAMPLER	CALIBRATION DATE: 11/20/19	ELEVATION: 621.2 (MSL) EOB: 7.8 ft.	PAGE
START: 1/19/21 END: 1/19/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.569945, -81.002403	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT / RQD	REC SAMPLE ID (%)	HP (tsf)	GRADATION (%)						WC	SO4 ppm				
						GR	CS	FS	SI	CL	LL			PL	PI		
13.5 inches Asphalt	621.2	1															
8 inches Concrete	619.4	2	9	15	33	SS-1	3.00	-	-	-	-	-	-	-	18	A-7-6 (V)	
STIFF, DARK BROWN TRACE GRAY, CLAY, "AND" SILT, TRACE SAND, TRACE GRAVEL, DAMP		3	6	14	56	SS-2	3.00	1	0	3	48	48	55	29	26	A-7-6 (17)	
	616.4	4	4	14	56	SS-2	3.00	1	0	3	48	48	55	29	26	A-7-6 (17)	
		5	4	17	44	SS-3	2.50	-	-	-	-	-	-	-	23	A-6a (V)	
STIFF TO VERY STIFF, BROWN MOTTLED GRAY, SILT AND CLAY LITTLE SAND, DAMP		6	6	14	100	SS-4	2.00	0	1	17	50	32	37	22	15	23	A-6a (10)
	613.4	7	4	14	100	SS-4	2.00	0	1	17	50	32	37	22	15	23	A-6a (10)

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\MWORKING\EA\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY

 DESIGNER: DCM
 REVIEWER: DMV 09/03/21
 PROJECT ID: 109278
 SUBSET: 28 TOTAL: 68
 SHEET: TOTAL

**SOIL PROFILE - ROADWAY
 BORING LOGS B-003-0-20 & B-004-0-20**

MOE-7-2.21

MODEL: Sheet PAPER SIZE: 11x17 (in.) DATE: 9/3/2021 TIME: 6:26:40 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 134+56, 7' RT.	EXPLORATION ID						
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-005-0-20						
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 623.0 (MSL) EOB: 8.0 ft.	PAGE						
START: 1/11/21 END: 1/11/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.570986, -81.001814	1 OF 1						
MATERIAL DESCRIPTION AND NOTES										
13 inches Asphalt	ELEV: 623.0	REC SAMPLE ID	GRADATION (%)	ATTERBERG						
8 inches Concrete	621.2	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)						
STIFF TO VERY STIFF, DARK BROWN, SILTY CLAY, TRACE GRAVEL, LITTLE SAND, DAMP	1									
	2	18	4	13	49	32	17	22	A-6b (11)	
	3	10								
	4	22								
STIFF, BROWN AND RED-BROWN TRACE GRAY CLAY, SOME SILT, LITTLE GRAVEL, LITTLE SAND, DAMP	5	14	12	10	29	39	44	21	23	A-7-6 (12)
	6	3								
	7	14	1.50							A-7-6 (V)
	8	39								
EOB										


STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\MWORKING\EA\ST01\D\1910318120200111 MOE-7-2.21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 138+58, 7' LT.	EXPLORATION ID							
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-006-0-20							
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 625.1 (MSL) EOB: 8.0 ft.	PAGE							
START: 1/19/21 END: 1/19/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.572027, -81.001333	1 OF 1							
MATERIAL DESCRIPTION AND NOTES											
14 inches Asphalt	ELEV: 625.1	REC SAMPLE ID	GRADATION (%)	ATTERBERG							
7 inches Concrete	623.3	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)							
STIFF, BROWN TO REDDISH-BROWN, CLAY, LITTLE GRAVEL, SOME SAND, SOME SILT, DAMP	1										
	2	10	4	11	28	32	43	21	22	A-7-6 (V)	
	3	17									
	4	67	2.50	18	11	28	32	43	21	22	A-7-6 (10)
STIFF, BROWN TO REDDISH-BROWN, SILTY CLAY, SOME GRAVEL, SOME SAND, DAMP	5	11	3.00								
	6	4									
	7	44	1.50	23	10	26	39	19	20	17	A-6b (V)
	8	11									
EOB											

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\MWORKING\EA\ST01\D\1910318120200111 MOE-7-2.21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY		
DESIGNER	DCM	
REVIEWER	DMV 09/03/21	
PROJECT ID	109278	
SUBSET	29	TOTAL 68
SHEET	TOTAL	

**SOIL PROFILE - ROADWAY
 BORING LOGS B-005-0-20 & B-006-0-20**

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 10:07:07 AM DATE: 9/3/2021 TIME: 6:27:07 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 142+65, 7' RT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-007-0-20
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 627.0 (MSL) EOB: 7.0 ft.	PAGE
START: 1/11/21 END: 1/11/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.573049, -81.000751	1 OF 1
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG
13 inches Asphalt	627.0	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
7 inches Concrete	625.3			
VERY STIFF, DARK RED-BROWN TO RED-BROWN AND BROWN, CLAY, TRACE STONE FRAGMENTS, SOME SAND, DAMP		6 11		17 A-7-6 (V)
		59	11 10 33 39 45 23 22	20 A-7-6 (13)
VERY DENSE, BROWN AND LIGHT BROWN, STONE FRAGMENTS WITH SAND/DAMP	622.0	100		7 A-1-B (V)
	620.0	100		6 A-1-B (V)


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\WORKING\ENGINEAS\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 146+65, 8' LT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-008-0-20
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 630.2 (MSL) EOB: 8.0 ft.	PAGE
START: 1/19/21 END: 1/19/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.574071, -81.000233	1 OF 1
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG
13 inches Asphalt	630.2	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
8 inches Concrete	628.4			
STIFF TO VERY STIFF, BROWN, SILTY CLAY TRACE GRAVEL, SOME SAND, DAMP		20 67	12 14 28 37 40 20 20	18 A-6b (10)
		15 33		23 A-6b (V)
STIFF TO VERY STIFF, BROWN, CLAY, LITTLE GRAVEL, SOME SAND, SOME SILT, DAMP 5.0' - 6.5'; Trace Light Brown, Little Stone Fragments	625.2	83	12 28 37 41 22 19	18 A-7-6 (10)
	622.2	56		19 A-7-6 (V)

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\WORKING\ENGINEAS\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: SS-1 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY		
DESIGNER		
DCM	REVIEWER	
DMV 09/03/21	PROJECT ID	109278
SUBSET	TOTAL	
30	68	
SHEET	TOTAL	

**SOIL PROFILE - ROADWAY
 BORING LOGS B-007-0-20 & B-008-0-20**

MOE-7-2.21

MODEL: Sheet PAPER: 9/3/2021 10:00:00 AM DATE: 9/3/2021 TIME: 6:27:32 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55-TRUCK	STATION / OFFSET: 150+65, 7' RT.	EXPLORATION ID									
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-009-0-20									
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 634.7 (MSL) EOB: 8.0 ft.	PAGE									
START: 1/11/21 END: 1/11/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.575048, -80.999583	1 OF 1									
MATERIAL DESCRIPTION AND NOTES													
12 inches Asphalt	ELEV: 634.7	REC SAMPLE ID	GRADATION (%)	ATTERBERG									
8 inches Concrete	633.0	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)									
STIFF TO VERY STIFF, DARK BROWN AND RED-BROWN, TRACE GRAY, CLAY, LITTLE TO TRACE GRAVEL, SOME TO LITTLE SAND, SOME SILT, DAMP	DEPTHS				SO4 ppm								
	1												
	2	3	17	11	29	31	41	22	19	A-7-6 (9)	<100		
	3	5											
	4	7	10	11	-	-	-	-	-	16	A-7-6 (V)	-	
	5	3											
	6	4											
	7	5	11	72	-	-	-	-	-	18	A-7-6 (V)	-	
8	3	11	33	3.00	9	8	31	43	44	23	21	A-7-6 (13)	-
EOB													

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\WORKING\ENGINEAS\T01D\1910318120200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55-TRUCK	STATION / OFFSET: 154+55, 7' LT.	EXPLORATION ID												
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-010-0-20												
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 639.7 (MSL) EOB: 7.7 ft.	PAGE												
START: 1/19/21 END: 1/19/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.576022, -80.999003	1 OF 1												
MATERIAL DESCRIPTION AND NOTES																
12 inches Asphalt	ELEV: 639.7	REC SAMPLE ID	GRADATION (%)	ATTERBERG												
8 inches Concrete	638.0	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)												
LOOSE, BROWN, GRAVEL WITH SAND AND SILT DAMP STIFF TO VERY STIFF, BROWN TRACE LIGHT BROWN, CLAY, LITTLE TO TRACE GRAVEL, SOME TO LITTLE SAND, SOME SILT, DAMP Below 6.2': Reddish- to Orangish- Brown	DEPTHS				SO4 ppm											
	1															
	2	2	7	-	-	-	-	-	-	13	A-2-4 (V)	-				
	3	3														
	4	4	11	83	1.50	13	14	11	28	34	43	22	21	19	A-7-6 (10)	140
	5	4	18	67	3.50	8	10	8	33	41	45	24	21	20	A-7-6 (13)	-
	6	5														
	7	4	14	44	3.50	-	-	-	-	-	-	-	-	16	A-7-6 (V)	-
EOB																

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\WORKING\ENGINEAS\T01D\1910318120200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY		
DESIGNER		
DCM	REVIEWER	
DMV 09/03/21	PROJECT ID	109278
SUBSET	TOTAL	
31	68	
SHEET	TOTAL	

**SOIL PROFILE - ROADWAY
 BORING LOGS B-009-0-20 & B-010-0-20**

MOE-7-2.21

MODEL: Sheet PAPER: 9/3/2021 10:55:55 AM DATE: 9/3/2021 TIME: 6:27:55 PM USER: SKIRK
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PROJECT: MOE-7-02.21 DRILLING FIRM / OPERATOR: CENTRAL STAR / TS STATION / OFFSET: 158+62, 6' RT. EXPLORATION ID B-011-0-20
 TYPE: SUBGRADE SAMPLING FIRM / LOGGER: HDR / DM HDR / DM HAMMER: CME 55- TRUCK ALIGNMENT: SR 7
 PID: 109278 SFN: 1/11/21 DRILLING METHOD: 5.5" FLIGHT AUGER CALIBRATION DATE: 11/20/19 ELEVATION: 642.0 (MSL) EOB: 8.5 ft. PAGE 1 OF 1
 START: 1/11/21 END: 1/11/21 SAMPLING METHOD: SPT ENERGY RATIO (%): 84 LAT / LONG: 39.576985, -80.998272

MATERIAL DESCRIPTION AND NOTES	ELEV.	SPT / RQD	DEPTHS	REC SAMPLE ID (%)	HP (tsf)	GRADATION (%)			ATTERBERG			SO4 ppm					
						GR	CS	FS	CL	LL	PL		WC	PI	PI		
13 inches Asphalt 8 inches Concrete	642.0	1	1														
VERY STIFF, DARK RED-BROWN, BROWN, AND GRAY, CLAY, LITTLE GRAVEL, SOME SAND, SOME SILT, DAMP	640.2	5	2	89	3.00	17	12	9	32	30	41	22	19	17	A-7-6 (9)	<100	
		7	3														
		11	4														
			4														
STIFF TO VERY STIFF, RED-BROWN, TRACE GRAY AND BROWN, CLAY, TRACE GRAVEL, LITTLE SAND, SOME SILT, DAMP	638.0	4	5	56	2.00	-	-	-	-	-	-	-	-	21	A-7-6 (V)	-	
		6	6	78	3.50	3	8	7	33	49	48	24	24	21	A-7-6 (15)	-	
		7	7														
		8	8	56	4.00	-	-	-	-	-	-	-	-	-	19	A-7-6 (V)	-
	633.5		8														

EOB

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/22/16 24-C:\P\WORKING\ENGINEAS\T01D19103181820200111 MOE-7-2.21 BORING LOGS.GPJ


PROJECT: MOE-7-02.21 DRILLING FIRM / OPERATOR: CENTRAL STAR / TS STATION / OFFSET: 162+94, 7' LT. EXPLORATION ID B-012-0-20
 TYPE: SUBGRADE SAMPLING FIRM / LOGGER: HDR / DM HDR / DM HAMMER: CME 55- TRUCK ALIGNMENT: SR 7
 PID: 109278 SFN: 1/19/21 DRILLING METHOD: 5.5" FLIGHT AUGER CALIBRATION DATE: 11/20/19 ELEVATION: 641.6 (MSL) EOB: 7.8 ft. PAGE 1 OF 1
 START: 1/19/21 END: 1/19/21 SAMPLING METHOD: SPT ENERGY RATIO (%): 84 LAT / LONG: 39.578027, -80.997539

MATERIAL DESCRIPTION AND NOTES	ELEV.	SPT / RQD	DEPTHS	REC SAMPLE ID (%)	HP (tsf)	GRADATION (%)			ATTERBERG			SO4 ppm				
						GR	CS	FS	CL	LL	PL		WC	PI	PI	
13 inches Asphalt 7 inches Concrete	641.6	1	1													
STIFF TO VERY STIFF, DARK BROWN TRACE GRAY, CLAY, TRACE GRAVEL, LITTLE TO SOME SAND, SOME SILT, DAMP	639.8	6	2	39	-	-	-	-	-	-	-	-	-	13	A-7-6 (V)	-
		8	3													
		6	4	67	2.00	2	8	11	37	42	45	23	22	24	A-7-6 (14)	<100
		5	5													
Below 4.8' : Trace Light Brown, Trace Stone Fragments	633.8	3	6	89	2.50	-	-	-	-	-	-	-	-	26	A-7-6 (V)	-
		4	3													
		5	4	44	-	5	14	10	32	39	46	23	23	21	A-7-6 (13)	-
	633.8		6													

EOB

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/22/16 24-C:\P\WORKING\ENGINEAS\T01D19103181820200111 MOE-7-2.21 BORING LOGS.GPJ

DESIGN AGENCY

 DESIGNER: DCM
 REVIEWER: DMV 09/03/21
 PROJECT ID: 109278
 SUBSET TOTAL: 32 68
 SHEET TOTAL: 1 68

**SOIL PROFILE - ROADWAY
 BORING LOGS B-011-0-20 & B-012-0-20**

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55-TRUCK	STATION / OFFSET: 166+96, 6' RT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-013-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 640.5 (MSL) EOB: 8.0 ft.	PAGE	
START: 1/11/21 END: 1/11/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.578943, -80.996742	1 OF 1	
MATERIAL DESCRIPTION AND NOTES					
11 inches Asphalt 8 inches Concrete	ELEV: 640.5	REC SAMPLE ID	GRADATION (%)	ATTERBERG	
STIFF TO VERY STIFF, DARK RED-BROWN TO RED-BROWN, TRACE BROWN AND GRAY, CLAY, TRACE GRAVEL, SOME TO LITTLE SAND, SOME SILT, DAMP	DEPTHS	N ₆₀	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)	
	1				
	2	22	13	9 33 37 46 23 23	23 A-7-6 (13)
	3	15	-	- - - - -	22 A-7-6 (V)
	4	17	8	6 33 51 47 23 24	19 A-7-6 (15)
	5	13	-	- - - - -	15 A-7-6 (V)
	6				
	7				
8					
SO4 ppm	SO4 ppm				

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\WORKING\EA\ST01\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55-TRUCK	STATION / OFFSET: 172+44, 6' LT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-014-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 638.1 (MSL) EOB: 7.7 ft.	PAGE	
START: 1/19/21 END: 1/19/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.580208, -80.995684	1 OF 1	
MATERIAL DESCRIPTION AND NOTES					
13 inches Asphalt 7 inches Concrete	ELEV: 638.1	REC SAMPLE ID	GRADATION (%)	ATTERBERG	
VERY STIFF, DARK BROWN, SILTY CLAY, SOME GRAVEL, SOME SAND, SOME SILT, DAMP	DEPTHS	N ₆₀	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)	
	1				
	2	25	11	16 28 23 37 20 17	15 A-6b (V)
	3	78	-	- - - - -	15 A-6b (6)
	4	14	5	14 13 36 32 50 29 21	28 A-7-6 (13)
	5	72	-	- - - - -	25 A-7-6 (V)
	6				
	7				
SO4 ppm	SO4 ppm				

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\WORKING\EA\ST01\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 10:02:49 PM DATE: 9/3/2021 TIME: 6:28:49 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 176+43, 8' RT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-015-0-20
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 636.6 (MSL) EOB: 8.0 ft.	PAGE
START: 1/11/21 END: 1/11/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.581066, -80.994806	1 OF 1
MATERIAL DESCRIPTION AND NOTES				
18 inches Asphalt 6 inches Concrete	ELEV. 636.6	REC SAMPLE ID	GRADATION (%)	ATTERBERG
		N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
STIFF, DARK REDDISH-BROWN TRACE GRAY, CLAY TRACE GRAVEL, LITTLE SAND, SOME SILT, DAMP	ELEV. 634.6	72	7 8 9 28 48 51 25 26	A-7-6 (17)
		15	- - - - -	A-7-6 (V)
STIFF TO VERY STIFF, DARK REDDISH-BROWN TRACE GRAY, SILTY CLAY, TRACE GRAVEL, SOME SAND, DAMP	ELEV. 631.6	67	5 10 14 36 35 37 20 17	A-6b (10)
		21	- - - - -	A-6b (V)
	ELEV. 628.6	67	- - - - -	-


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\WORKING\ENGINEAS\T01D\1910318120200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 180+61, 7' LT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-016-0-20
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 635.6 (MSL) EOB: 8.2 ft.	PAGE
START: 1/19/21 END: 1/19/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.581919, -80.993816	1 OF 1
MATERIAL DESCRIPTION AND NOTES				
18 inches Asphalt 8 inches Concrete	ELEV. 635.6	REC SAMPLE ID	GRADATION (%)	ATTERBERG
		N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
MEDIUM DENSE TO DENSE, BROWN, GRAVEL WITH SAND AND SILT TRACE CLAY, DAMP	ELEV. 633.4	33	- - - - -	A-2-4 (V)
		100	30 19 25 18 8 NP NP NP	A-2-4 (0)
		78	38 15 21 16 10 NP NP	A-2-4 (0)
	ELEV. 627.4	33	- - - - -	A-2-4 (V)

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\WORKING\ENGINEAS\T01D\1910318120200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY	
	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
34	68
SHEET	TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-015-0-20 & B-016-0-20

MOE-7-2.21

MODEL: Sheet PAPERSIZE: Txiil (in.) DATE: 9/3/2021 TIME: 6:29:45 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 184+46, 7' RT.	EXPLORATION ID															
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-017-0-20															
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 635.5 (MSL)	EOB: 8.0 ft.															
START: 1/11/21 END: 1/11/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.582529, -80.992700	PAGE 1 OF 1															
MATERIAL DESCRIPTION AND NOTES																			
12 inches Asphalt	ELEV. 635.5	REC SAMPLE ID	GRADATION (%)	ATTERBERG															
7 inches Concrete	633.9	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)															
MEDIUM STIFF TO STIFF, DARK REDDISH-BROWN, SILT AND CLAY LITTLE SAND, DAMP	1																		
	2	13	89	SS-1	2.00	0	1	11	49	39	38	23	15	22	A-6a (10)	<100			
	3																		
	4	8	50	SS-2	1.50	-	-	-	-	-	-	-	-	-	20	A-6a (V)	-		
	5																		
	6	8	100	SS-3	0.50	0	2	14	51	33	36	21	15	22	A-6a (10)	-			
	7	11	78	SS-4	2.00	-	-	-	-	-	-	-	-	-	21	A-6a (V)	-		
	8																		
EOB																			


STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\MWORKING\ENGINEAS\T01D\1910318\20200111 MOE-7-2.21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 188+39, 8' LT.	EXPLORATION ID															
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-018-0-20															
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 637.1 (MSL)	EOB: 8.0 ft.															
START: 1/19/21 END: 1/19/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.583206, -80.991611	PAGE 1 OF 1															
MATERIAL DESCRIPTION AND NOTES																			
14 inches Asphalt	ELEV. 637.1	REC SAMPLE ID	GRADATION (%)	ATTERBERG															
7 inches Concrete	635.3	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)															
MEDIUM STIFF TO STIFF, ORANGISH-BROWN, SILT AND CLAY TRACE GRAVEL, SOME SAND, DAMP	1																		
	2	8	56	SS-1	2.00	3	11	14	38	34	36	21	15	20	A-6a (9)	<100			
	3																		
	4	11	56	SS-2	3.50	-	-	-	-	-	-	-	-	-	18	A-6a (V)	-		
	5																		
	6	14	44	SS-3	1.50	-	-	-	-	-	-	-	-	-	20	A-6a (V)	-		
	7	10	100	SS-4	1.50	0	1	19	47	33	35	19	16	22	A-6b (10)	-			
	8																		
EOB																			

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\MWORKING\ENGINEAS\T01D\1910318\20200111 MOE-7-2.21 BORING LOGS.GPJ

NOTES: SS-1 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY

 DESIGNER DCM
 REVIEWER DMV 09/03/21
 PROJECT ID 109278
 SUBSET TOTAL 35 68
 SHEET TOTAL

**SOIL PROFILE - ROADWAY
 BORING LOGS B-017-0-20 & B-018-0-20**

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 10:00:00 AM DATE: 9/3/2021 TIME: 6:29:39 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55-TRUCK	STATION / OFFSET: 192+42, 6' RT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-019-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 638.7 (MSL) EOB: 8.0 ft.	PAGE	
START: 1/11/21 END: 1/11/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.583834, -80.990434	1 OF 1	
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm
12 inches Asphalt	638.7	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	LL PL PI WC	
6 inches Concrete	637.2				
STIFF, REDDISH-BROWN TRACE BROWN, SILTY CLAY, TRACE GRAVEL, LITTLE SAND, DAMP		11 61	- - - - -	- - - - -	-
		13 17	- - - - -	- - - - -	-
		10 67	8 10 39 38 20 18 21	19 A-6b (V)	-
		15 78	6 10 39 38 23 15 20	18 A-6b (V)	-
STIFF, DARK REDDISH-BROWN, TRACE GRAY AND BROWN, SILT AND CLAY TRACE GRAVEL, LITTLE SAND, DAMP	631.7				<100
	630.7				-


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\WORKING\EA\ST01\1910318182020011 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55-TRUCK	STATION / OFFSET: 196+58, 7' LT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-020-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 641.6 (MSL) EOB: 8.0 ft.	PAGE	
START: 1/18/21 END: 1/18/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.584545, -80.989278	1 OF 1	
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm
13 inches Asphalt	641.6	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	LL PL PI WC	
8 inches Concrete	639.8				
STIFF, BROWN, CLAY, "AND" SILT, TRACE SAND, DAMP	638.1	10 61	0 3 5 41 51 44 24 20 25	A-7-6 (13)	-
STIFF TO VERY STIFF, ORANGISH-BROWN, SILTY CLAY, TRACE GRAVEL, SOME SAND, DAMP		15 61	8 13 34 41 37 21 16 20	A-6b (10)	<100
		14 72	- - - - -	- - - - -	-
		20 89	- - - - -	- - - - -	-

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\WORKING\EA\ST01\1910318182020011 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY

 DESIGNER: DCM
 REVIEWER: DMV 09/03/21
 PROJECT ID: 109278
 SUBSET: 36 TOTAL: 68
 SHEET: TOTAL

**SOIL PROFILE - ROADWAY
 BORING LOGS B-019-0-20 & B-020-0-20**

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 10:07:00 AM DATE: 9/3/2021 TIME: 6:30:07 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 200+38, 7' RT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-021-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 645.8 (MSL) EOB: 7.5 ft.	PAGE	
START: 1/12/21 END: 1/12/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.585136, -80.988164	1 OF 1	
MATERIAL DESCRIPTION AND NOTES					
12 inches Asphalt	ELEV: 645.8	SPT/ RQD	GRADATION (%)	ATTERBERG	
6 inches Concrete	644.3	DEPTHS	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)	
STIFF, BROWN AND REDDISH-BROWN, SILT AND CLAY, "AND" SAND, TRACE GRAVEL, DAMP		1			
		2			
		3			
		4			
		5			
		6			
		7			
STIFF, BROWN MOTTLED GRAY, SILT AND CLAY TRACE GRAVEL, SOME SAND, DAMP	639.0	3			
	638.3	4			
		5			
		6			
		7			
		EOB			

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\WORKING\ENGINEAS\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 204+69, 6' LT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-022-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 650.6 (MSL) EOB: 7.7 ft.	PAGE	
START: 1/18/21 END: 1/18/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.585872, -80.988966	1 OF 1	
MATERIAL DESCRIPTION AND NOTES					
12 inches Asphalt	ELEV: 650.6	SPT/ RQD	GRADATION (%)	ATTERBERG	
8 inches Concrete	648.9	DEPTHS	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)	
STIFF TO VERY STIFF, DARK BROWN TRACE GRAY, SILT AND CLAY TRACE GRAVEL, SOME SAND, DAMP		1			
		2			
		3			
		4			
		5			
		6			
		7			
MEDIUM DENSE, BROWN AND LIGHT BROWN, GRAVEL WITH SAND AND SILT, TRACE CLAY, DAMP	644.4	5			
	642.9	6			
		7			
		EOB			

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\WORKING\ENGINEAS\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY	
	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
37	68
SHEET	TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-021-0-20 & B-022-0-20

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 10:00:31 AM DATE: 9/3/2021 TIME: 6:30:31 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 208+59, 7' RT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-023-0-20	
PID: 109278_SF1	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 650.4 (MSL) EOB: 7.6 ft.	PAGE	
START: 1/12/21 END: 1/12/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.586481, -80.985827	1 OF 1	
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm
12 inches Asphalt	650.4	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	LL PL PI WC	ppm
7 inches Concrete	648.8	21	- - - - - - - - - -	- - - - - - - - - -	
VERY STIFF, DARK REDDISH-BROWN AND BROWN, CLAY, "AND" SILT, TRACE SAND, TRACE GRAVEL, DAMP	646.8	67	- - - - - - - - - -	- - - - - - - - - -	
VERY STIFF, BROWN MOTTLED GRAY, CLAY, "AND" SILT, TRACE SAND, TRACE GRAVEL, DAMP	645.4	100	6 47 45 43 20 23 21	14	A-7-6 (V)
VERY STIFF, BROWN MOTTLED GRAY, SILT AND CLAY, TRACE GRAVEL, LITTLE SAND, DAMP	643.8	100	11 62 26 29 18 11	21	A-7-6 (14)
MEDIUM DENSE, BROWN, SANDY SILT DAMP	642.8	78	- - - - - - - - - -	- - - - - - - - - -	
@ 7.1' - 7.6': Gray		18	- - - - - - - - - -	- - - - - - - - - -	
		6	- - - - - - - - - -	- - - - - - - - - -	


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\MWORKING\EA\T01D19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 212+72, 6' LT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-024-0-20	
PID: 109278_SF1	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 648.8 (MSL) EOB: 8.0 ft.	PAGE	
START: 1/18/21 END: 1/18/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.587185, -80.984680	1 OF 1	
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm
13 inches Asphalt	648.8	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	LL PL PI WC	ppm
8 inches Concrete	647.0	17	- - - - - - - - - -	- - - - - - - - - -	
MEDIUM STIFF TO STIFF, DARK BROWN TO GRAYISH-BROWN, SILTY CLAY, TRACE GRAVEL, SOME SAND, DAMP		50	- - - - - - - - - -	- - - - - - - - - -	
		6	9 16 41 30 37 21 16	18	A-6b (V)
		2	2 2 2 2 2 2 2	20	A-6b (10)
		7	3 2 3 3 3 3 3	25	A-6b (10)
		11	- - - - - - - - - -	- - - - - - - - - -	
		5	- - - - - - - - - -	- - - - - - - - - -	
		8	- - - - - - - - - -	- - - - - - - - - -	

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\MWORKING\EA\T01D19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: SS-2 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY		
DESIGNER		
REVIEWER	DCM	
PROJECT ID	DMV	09/03/21
SUBSET	109278	
SHEET	38	TOTAL 68
	TOTAL	

SOIL PROFILE - ROADWAY
BORING LOGS B-023-0-20 & B-024-0-20

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 11:03:55 AM DATE: 9/3/2021 TIME: 6:30:55 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 216+78, 6' RT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-025-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 646.8 (MSL) EOB: 7.6 ft.	PAGE	
START: 1/12/21 END: 1/12/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.587825, -80.983496	1 OF 1	
MATERIAL DESCRIPTION AND NOTES					
12 inches Asphalt	ELEV: 646.8	REC SAMPLE ID	GRADATION (%)	ATTERBERG	
7 inches Concrete	645.2	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)	
STIFF, GRAYISH-BROWN TO BROWN MOTTLED GRAY, SILT AND CLAY LITTLE SAND, DAMP	1				
	2	11	- - - -	- - - -	21 A-6a (V)
	3	14	78	11 59 29 34 19 15	23 A-6a (10)
	4	10	100	- - - -	25 A-6a (V)
	5	8	100	19 63 18 24 20	4 A-4b (8)
	6				
	7				
MEDIUM STIFF, BROWN, SILT, LITTLE SAND, LITTLE CLAY, MOIST TO WET	640.7				
	639.2				

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\WORKING\ENGINEAS\T01D19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 221+55, 7' LT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-026-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 641.8 (MSL) EOB: 7.6 ft.	PAGE	
START: 1/18/21 END: 1/18/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.588634, -80.982165	1 OF 1	
MATERIAL DESCRIPTION AND NOTES					
11 inches Asphalt	ELEV: 641.8	REC SAMPLE ID	GRADATION (%)	ATTERBERG	
8 inches Concrete	640.2	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)	
MEDIUM STIFF, DARK BROWN, CLAY, LITTLE SAND, DAMP	1				
	2	8	72	- - - -	18 A-7-6 (V)
	3	10	89	20 48 32 35 19 16	20 A-6b (10)
	4	14	100	- - - -	20 A-6a (V)
	5	11	100	30 41 28 30 18 12	23 A-6a (8)
	6				
	7				
STIFF, BROWN MOTTLED GRAY AND ORANGE, SILTY CLAY, LITTLE SAND, DAMP	638.2				
STIFF, ORANGISH-BROWN, SILT AND CLAY SOME SAND, DAMP	637.2				
	634.2				

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\WORKING\ENGINEAS\T01D19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 11:11:11 DATE: 9/3/2021 TIME: 6:34:22 PM USER: SKIRK
 pw:\ohlodot-pw-bentley.com\ohlodot-pw-02\Documents\01Active Projects\Distric ID\Monroe\09278\402-Engineering\HDR\Geotechnical\Sheets\09278_IL04.dgn

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 225+56, 7' RT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-027-0-20
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 637.6 (MSL)	EOB: 7.5 ft.
START: 1/18/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.589261, -80.980994	PAGE 1 OF 1
MATERIAL DESCRIPTION AND NOTES				
9 inches Asphalt	ELEV. 637.6	SPT/ RQD	GRADATION (%)	ATTERBERG
6 inches Concrete	636.3	DEPTHS	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
STIFF, BROWN TO ORANGISH-BROWN, SILT AND CLAY, SOME SAND, DAMP	634.6	1	3 6 23 41 27 29 18 11	18 A-6a (7)
MEDIUM DENSE, BROWN, GRAVEL WITH SAND AND SILT, LITTLE CLAY, DAMP		2 3 5 6	3 6 23 41 27 29 18 11	13 A-2-4 (0)
		3 7 5 5	3 6 23 41 27 29 18 11	14 A-2-4 (V)
		4 5 5	3 6 23 41 27 29 18 11	12 A-2-4 (V)
		5 7 9	3 6 23 41 27 29 18 11	
		6 7 6 7	3 6 23 41 27 29 18 11	
	630.1	7	3 6 23 41 27 29 18 11	
		EOB		


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\MWORKING\ENG\EA\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 229+54, 7' LT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-028-0-20
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 638.8 (MSL)	EOB: 8.0 ft.
START: 1/18/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.589943, -80.979888	PAGE 1 OF 1
MATERIAL DESCRIPTION AND NOTES				
14 inches Asphalt	ELEV. 638.8	SPT/ RQD	GRADATION (%)	ATTERBERG
8 inches Concrete	636.8	DEPTHS	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
STIFF, DARK BROWN, SILT AND CLAY LITTLE GRAVEL, SOME SAND, DAMP	635.3	1	3 6 23 41 27 29 18 11	12 A-6a (3)
STIFF BROWN, SILTY CLAY LITTLE GRAVEL, SOME SAND, DAMP TO MOIST	633.3	2 8 8 7	3 6 23 41 27 29 18 11	21 A-6b (8)
MEDIUM DENSE, ORANGISH-BROWN, GRAVEL WITH SAND, SILT, AND CLAY DAMP TO MOIST		3 3 4	3 6 23 41 27 29 18 11	16 A-2-6 (V)
		4 5 4	3 6 23 41 27 29 18 11	16 A-2-6 (V)
		5 4 5	3 6 23 41 27 29 18 11	
	630.8	6 7 8	3 6 23 41 27 29 18 11	
		EOB		

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:24 - C:\P\MWORKING\ENG\EA\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
40	68
SHEET	TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-027-0-20 & B-028-0-20

MOE-7-2.21

MODEL: Sheet PAPER: 9/3/2021 10:02:11 DATE: 9/3/2021 TIME: 6:31:48 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 233+58, 7' RT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-029-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 645.5 (MSL) EOB: 7.5 ft.	PAGE	
START: 1/12/21 END: 1/12/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.590573, -80.978711	1 OF 1	
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm
11 inches Asphalt	645.5	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)	BACK FILL
6 inches Concrete	644.1				
STIFF TO VERY STIFF, BROWN TO ORANGISH-BROWN, SILT AND CLAY "AND" SAND, TRACE GRAVEL, DAMP		11 17	- - - - -	- - - - -	-
		17 83	31 32 26 35 20 15 20	14	A-6a (V)
STIFF TO VERY STIFF, ORANGISH-BROWN AND BROWN, SILT, TRACE SAND, LITTLE CLAY, DAMP	641.0	17 100	6 77 17 31 22 9	25	A-4b (B)
		14 100	- - - - -	-	A-4b (V)
	638.0				


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\T01D\19103181820200111 MOE-7-2.21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 237+36, 6' LT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-030-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 653.4 (MSL) EOB: 7.6 ft.	PAGE	
START: 1/18/21 END: 1/18/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.591221, -80.977659	1 OF 1	
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm
11 inches Asphalt	653.4	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)	BACK FILL
8 inches Concrete	651.8				
STIFF TO VERY STIFF, DARK BROWN AND GRAY, SILT AND CLAY TRACE GRAVEL, LITTLE SAND, DAMP		11 78	3 11 44 40 33 19 14 18	14	A-6a (10)
		20 44	- - - - -	-	A-6a (V)
STIFF TO VERY STIFF, DARK BROWN, CLAY, "AND" SILT, TRACE GRAVEL, LITTLE SAND, DAMP	648.8	15 83	3 12 42 41 43 22 21	23	A-7-6 (13)
		14 56	- - - - -	-	A-7-6 (V)
	645.8				

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\T01D\19103181820200111 MOE-7-2.21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY

 DESIGNER: DCM
 REVIEWER: DMV 09/03/21
 PROJECT ID: 109278
 SUBSET: 41 TOTAL: 68
 SHEET: TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-029-0-20 & B-030-0-20

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 242+49, 7' RT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-031-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 658.0 (MSL) EOB: 7.6 ft.	PAGE	
START: 1/12/21 END: 1/12/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.592034, -80.976172	1 OF 1	
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm
12 inches Asphalt	658.0	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)	BACK FILL
7 inches Concrete	656.4				
VERY STIFF, BROWN, REDDISH-BROWN, ORANGISH-BROWN, SILT AND CLAY "AND" SAND, SOME GRAVEL, DAMP		18	- - - - -	- - - - -	-
		17	22 21 16 30 19 11 13	A-6a (1)	140
STIFF TO VERY STIFF, REDDISH-BROWN AND BROWN, SANDY SILT TRACE GRAVEL, SOME CLAY, DAMP	653.4	50	- - - - -	- - - - -	-
		15	28 24 22 25 29 19 10 17	A-4a (2)	-
	650.4	100	1	28 24 22 25 29 19 10 17	-

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\T01D19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 246+98, 7' LT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-032-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 654.6 (MSL) EOB: 7.7 ft.	PAGE	
START: 1/18/21 END: 1/18/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.592798, -80.974923	1 OF 1	
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm
12 inches Asphalt	654.6	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)	BACK FILL
8 inches Concrete	652.9				
MEDIUM STIFF TO STIFF, DARK BROWN AND REDDISH-BROWN, TRACE GRAY, SILT AND CLAY TRACE GRAVEL, SOME SAND, DAMP		14	10 18 37 27 30 19 11 17	A-6a (6)	<100
		7	- - - - -	- - - - -	-
STIFF TO VERY STIFF, ORANGISH-BROWN, SILT AND CLAY, TRACE GRAVEL, LITTLE SAND, DAMP	649.9	89	- - - - -	- - - - -	-
		17	14 6 35 44 34 20 14 30	A-6a (10)	-
Below 6.5' : Trace Light Brown, Trace Stone Fragments	646.9	100	1	14 6 35 44 34 20 14 30	-

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\T01D19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

MOE-7-2.21

MODEL: Sheet PAPER: 1/18/21 DATE: 9/3/2021 TIME: 6:32:40 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	STATION / OFFSET: 250+98, 6' RT.	EXPLORATION ID: B-033-0-20																																																																																																																																																																																																
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	DRILL RIG: CME 55- TRUCK																																																																																																																																																																																																	
PID: 109278_SF: 1/12/21	DRILLING METHOD: 5.5" FLIGHT AUGER	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7																																																																																																																																																																																																
START: 1/12/21 END: 1/12/21	SAMPLING METHOD: SPT	CALIBRATION DATE: 11/20/19	ELEVATION: 647.5 (MSL) EOB: 7.5 ft.																																																																																																																																																																																																
		ENERGY RATIO (%): 84	LAT / LONG: 39.593425, -80.973757																																																																																																																																																																																																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">MATERIAL DESCRIPTION AND NOTES</th> <th rowspan="2">ELEV.</th> <th colspan="2">SPT / RQD</th> <th colspan="4">GRADATION (%)</th> <th colspan="4">ATTERBERG</th> <th rowspan="2">SO4 ppm</th> <th rowspan="2">BACK FILL</th> </tr> <tr> <th>N₆₀</th> <th>RQD (%)</th> <th>GR</th> <th>CS</th> <th>FS</th> <th>SI</th> <th>CL</th> <th>LL</th> <th>PL</th> <th>PI</th> <th>WC</th> <th>ODOT CLASS (GI)</th> </tr> </thead> <tbody> <tr> <td>12 inches Asphalt 6 inches Concrete</td> <td>647.5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="4">MEDIUM DENSE, DARK BROWN, SANDY SILT, LITTLE GRAVEL, LITTLE CLAY, DAMP</td> <td rowspan="4">646.0</td> <td>8</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>2</td> <td>15</td> <td>5</td> <td>33</td> <td>35</td> <td>12</td> <td>NP</td> <td>NP</td> <td>16</td> <td>A-4a (2)</td> <td><100</td> </tr> <tr> <td>5</td> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="4">STIFF TO VERY STIFF, DARK BROWN MOTTLED GRAY, CLAY, "AND" SILT, TRACE GRAVEL, TRACE SAND, DAMP</td> <td rowspan="4">643.5</td> <td>5</td> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>6</td> <td>17</td> <td>56</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>640.0</td> <td>4</td> <td>5</td> <td>14</td> <td>89</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>5</td> <td>5</td> <td>1</td> <td>9</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				MATERIAL DESCRIPTION AND NOTES	ELEV.	SPT / RQD		GRADATION (%)				ATTERBERG				SO4 ppm	BACK FILL	N ₆₀	RQD (%)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	12 inches Asphalt 6 inches Concrete	647.5															MEDIUM DENSE, DARK BROWN, SANDY SILT, LITTLE GRAVEL, LITTLE CLAY, DAMP	646.0	8	1													5	2	15	5	33	35	12	NP	NP	16	A-4a (2)	<100	5	3														6	4														STIFF TO VERY STIFF, DARK BROWN MOTTLED GRAY, CLAY, "AND" SILT, TRACE GRAVEL, TRACE SAND, DAMP	643.5	5	5													6	6	17	56											6	4														5	5															640.0	4	5	14	89													5	5	1	9										
MATERIAL DESCRIPTION AND NOTES	ELEV.	SPT / RQD				GRADATION (%)				ATTERBERG				SO4 ppm	BACK FILL																																																																																																																																																																																				
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STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/22/16 25- C:\P\MWORKING\EA\1019103181820200111 MOE-7-2.21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	STATION / OFFSET: 254+96, 7' LT.	EXPLORATION ID: B-034-0-20																																																																																																																																																																																							
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	DRILL RIG: CME 55- TRUCK																																																																																																																																																																																								
PID: 109278_SF: 1/18/21	DRILLING METHOD: 5.5" FLIGHT AUGER	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7																																																																																																																																																																																							
START: 1/18/21 END: 1/18/21	SAMPLING METHOD: SPT	CALIBRATION DATE: 11/20/19	ELEVATION: 644.4 (MSL) EOB: 7.6 ft.																																																																																																																																																																																							
		ENERGY RATIO (%): 84	LAT / LONG: 39.594106, -80.972651																																																																																																																																																																																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">MATERIAL DESCRIPTION AND NOTES</th> <th rowspan="2">ELEV.</th> <th colspan="2">SPT / RQD</th> <th colspan="4">GRADATION (%)</th> <th colspan="4">ATTERBERG</th> <th rowspan="2">SO4 ppm</th> <th rowspan="2">BACK FILL</th> </tr> <tr> <th>N₆₀</th> <th>RQD (%)</th> <th>GR</th> <th>CS</th> <th>FS</th> <th>SI</th> <th>CL</th> <th>LL</th> <th>PL</th> <th>PI</th> <th>WC</th> <th>ODOT CLASS (GI)</th> </tr> </thead> <tbody> <tr> <td>11 inches Asphalt 9 inches Concrete</td> <td>644.4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="4">STIFF, ORANGISH-BROWN AND LIGHT BROWN, CLAY "AND" SILT, TRACE GRAVEL, LITTLE SAND, DAMP</td> <td rowspan="4">642.8</td> <td>3</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>2</td> <td>11</td> <td>56</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="4">VERY STIFF, ORANGISH-BROWN AND LIGHT BROWN, SILT AND CLAY TRACE GRAVEL, SOME SAND, DAMP</td> <td rowspan="4">639.8</td> <td>5</td> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>6</td> <td>22</td> <td>100</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>7</td> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>636.8</td> <td>6</td> <td>7</td> <td>20</td> <td>61</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>7</td> <td>7</td> <td>2</td> <td>15</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				MATERIAL DESCRIPTION AND NOTES	ELEV.	SPT / RQD		GRADATION (%)				ATTERBERG				SO4 ppm	BACK FILL	N ₆₀	RQD (%)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	11 inches Asphalt 9 inches Concrete	644.4														STIFF, ORANGISH-BROWN AND LIGHT BROWN, CLAY "AND" SILT, TRACE GRAVEL, LITTLE SAND, DAMP	642.8	3	1												4	2	11	56										5	3													5	4													VERY STIFF, ORANGISH-BROWN AND LIGHT BROWN, SILT AND CLAY TRACE GRAVEL, SOME SAND, DAMP	639.8	5	5												6	6	22	100										6	7													7	7														636.8	6	7	20	61												7	7	2	15									
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STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/22/16 25- C:\P\MWORKING\EA\1019103181820200111 MOE-7-2.21 BORING LOGS.GPJ

NOTES: SS-2 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

**SOIL PROFILE - ROADWAY
 BORING LOGS B-033-0-20 & B-034-0-20**

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 10:07:00 AM DATE: 9/3/2021 TIME: 6:33:07 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 259+18, 6' RT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-035-0-20	
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 641.2 (MSL) EOB: 7.6 ft.	PAGE	
START: 1/12/21 END: 1/12/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.594770, -80.971420	1 OF 1	
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm
11 inches Asphalt	641.2	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	LL PL PI WC	ppm
8 inches Concrete	639.6				
STIFF, DARK BROWN TRACE GRAY, CLAY, LITTLE GRAVEL, LITTLE SAND, SOME SILT, DAMP		11 83	14 32 35 43 22 21	20	A-7-6 (11)
		13 11	- - - - -	18	A-7-6 (V)
@ 5.5' - 5.6': Noted Organics		11 78	- - - - -	27	A-7-6 (V)
Below 6.6': Dark Brown Mottled Gray and Brown	633.6	13 61	6 34 59 46 23 23	27	A-7-6 (14)
	EOB				

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\T01D\1910318120200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE


ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 263+41, 7' LT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-036-0-20	
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 638.2 (MSL) EOB: 7.5 ft.	PAGE	
START: 1/18/21 END: 1/18/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.595489, -80.970244	1 OF 1	
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm
10 inches Asphalt	638.2	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	LL PL PI WC	ppm
8 inches Concrete	636.7				
STIFF TO VERY STIFF, REDDISH-BROWN AND LIGHT BROWN, CLAY, "AND" SILT, TRACE GRAVEL, LITTLE SAND, DAMP		8 44	- - - - -	19	A-7-6 (V)
		17 83	10 41 43 43 22 21	21	A-7-6 (13)
VERY STIFF, REDDISH-BROWN AND LIGHT BROWN, SILT AND CLAY TRACE GRAVEL, SOME SAND, DAMP	633.7	17 44	- - - - -	18	A-6a (V)
		18 78	15 31 39 34 20 14	16	A-6a (9)
	630.7				
	EOB				

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\T01D\1910318120200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY	
	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
44	68
SHEET	TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-035-0-20 & B-036-0-20

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 10:00:00 AM DATE: 9/3/2021 TIME: 6:33:34 PM USER: SKIRK
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PROJECT: MOE-7-02.21
 TYPE: SUBGRADE
 PID: 109278 SFN:
 START: 1/18/21 END: 1/18/21

DRILLING FIRM / OPERATOR: CENTRAL STAR / TS
 SAMPLING FIRM / LOGGER: HDR / DM
 DRILLING METHOD: 5.5" FLIGHT AUGER
 SAMPLING METHOD: SPT

DRILL RIG: CME 55- TRUCK
 HAMMER: CME AUTOMATIC
 CALIBRATION DATE: 11/20/19
 ENERGY RATIO (%): 84

STATION / OFFSET: 267+43.5 RT.
 ALIGNMENT: SR 7
 ELEVATION: 635.6 (MSL) EOB: 7.5 ft.
 LAT / LONG: 39.596121, -80.969075

EXPLORATION ID
 B-037-0-20

PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	SPT/ RQD	DEPTHS	REC SAMPLE ID	REC N ₆₀ (%)	GRADATION (%)			ATTERBERG			ODOT CLASS (GI)	SO4 ppm			
						GR	CS	FS	SI	CL	LL			PL	PI	WC
10 inches Asphalt	635.6		1													
8 inches Concrete	634.1		2													
MEDIUM STIFF TO STIFF, DARK BROWN, SILT, SOME SAND, LITTLE CLAY, DAMP		6	3	SS-1	24											
		3	4													
		4	5													
	631.1	1	5	SS-2	13	0	29	53	18	26	20	6	22	A-4b (7)	<100	
		1	6													
		2	7	SS-3	4									14	A-4a (V)	-
		1	8													
		1	9	SS-4	6	100	41	38	20	23	17	6	25	A-4a (5)	-	
	628.1	3	7													

SOFT TO MEDIUM STIFF, DARK BROWN, SANDY
 SILT, LITTLE CLAY, DAMP
 @ 4.5' - 6.0' : Wet
 Below 6.0' : Orangish-Brown

EOB

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\PWORKING\ENGINEAS\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21
 TYPE: SUBGRADE
 PID: 109278 SFN:
 START: 1/18/21 END: 1/18/21

DRILLING FIRM / OPERATOR: CENTRAL STAR / TS
 SAMPLING FIRM / LOGGER: HDR / DM
 DRILLING METHOD: 5.5" FLIGHT AUGER
 SAMPLING METHOD: SPT

DRILL RIG: CME 55- TRUCK
 HAMMER: CME AUTOMATIC
 CALIBRATION DATE: 11/20/19
 ENERGY RATIO (%): 84

STATION / OFFSET: 271+24.6 LT.
 ALIGNMENT: SR 7
 ELEVATION: 635.3 (MSL) EOB: 7.5 ft.
 LAT / LONG: 39.596771, -80.968012

EXPLORATION ID
 B-038-0-20

PAGE
 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	SPT/ RQD	DEPTHS	REC SAMPLE ID	REC N ₆₀ (%)	GRADATION (%)			ATTERBERG			ODOT CLASS (GI)	SO4 ppm			
						GR	CS	FS	SI	CL	LL			PL	PI	WC
10 inches Asphalt	635.3		1													
8 inches Concrete	633.8		2													
STIFF, BROWN TO REDDISH-BROWN, SILT AND CLAY, SOME GRAVEL, SOME SAND, DAMP		5	3	SS-1	13											
		4	4													
		3	5													
		4	6	SS-2	11	61	16	28	24	34	20	14	16	A-6a (5)	<100	
		4	7													
	629.3	4	8	SS-3	15	50								16	A-6a (V)	-
		6	9													
		7	10	SS-4	17	56	2	45	39	13	NP	NP	15	A-4a (3)	-	
	627.8	6	11													

MEDIUM DENSE, BROWN, SANDY SILT, TRACE
 GRAVEL, LITTLE CLAY, DAMP

EOB

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\PWORKING\ENGINEAS\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: SS-2 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY



DESIGNER

DCM

REVIEWER

DMV 09/03/21

PROJECT ID

109278

SUBSET TOTAL

45 68

SHEET TOTAL

45 68

SOIL PROFILE - ROADWAY
BORING LOGS B-037-0-20 & B-038-0-20

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 DATE: 9/3/2021 TIME: 6:34:05 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	STATION / OFFSET: 275+48, 6' RT.	EXPLORATION ID																																																																																																																																														
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	ALIGNMENT: SR 7	B-039-0-20																																																																																																																																														
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	ELEVATION: 637.4 (MSL)	7.5 ft.																																																																																																																																														
START: 1/12/21	SAMPLING METHOD: SPT	LAT / LONG: 39.597438, -80.966778	PAGE 1 OF 1																																																																																																																																														
<table border="1"> <thead> <tr> <th rowspan="3">MATERIAL DESCRIPTION AND NOTES</th> <th rowspan="3">ELEV.</th> <th rowspan="3">SPT / RQD</th> <th rowspan="3">DEPTHS</th> <th rowspan="3">REC SAMPLE ID</th> <th rowspan="3">REC N₆₀ (%)</th> <th colspan="3">GRADATION (%)</th> <th colspan="3">ATTERBERG</th> <th rowspan="3">SO₄ ppm</th> </tr> <tr> <th>GR</th> <th>CS</th> <th>FS</th> <th>SI</th> <th>CL</th> <th>LL</th> <th>PL</th> <th>WC</th> </tr> <tr> <th>(tsf)</th> <th>HP</th> <th>GR</th> <th>CS</th> <th>FS</th> <th>SI</th> <th>CL</th> <th>LL</th> <th>PL</th> <th>WC</th> </tr> </thead> <tbody> <tr> <td>10 inches Asphalt</td> <td>637.4</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>8 inches Concrete</td> <td>635.9</td> <td></td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>MEDIUM DENSE, BROWN AND DARK BROWN, SANDY SILT LITTLE CLAY, DAMP</td> <td>633.9</td> <td>4 6 11</td> <td>3 4</td> <td>SS-1</td> <td>24</td> <td>0</td> <td>1</td> <td>47</td> <td>39</td> <td>13</td> <td>NP</td> <td>NP</td> <td>15</td> <td>A-4a (3)</td> </tr> <tr> <td>STIFF TO VERY STIFF, BROWN TO ORANGISH-BROWN, SILT AND CLAY TRACE GRAVEL, SOME SAND, DAMP</td> <td></td> <td>7 5 7</td> <td>4</td> <td>SS-2</td> <td>17</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>20</td> <td>A-6a (V)</td> </tr> <tr> <td></td> <td></td> <td>7 4 6</td> <td>5 6</td> <td>SS-3</td> <td>14</td> <td>100</td> <td>2.50</td> <td>10</td> <td>15</td> <td>20</td> <td>32</td> <td>23</td> <td>34</td> <td>20</td> <td>14</td> <td>16</td> <td>A-6a (6)</td> </tr> <tr> <td></td> <td></td> <td>3 4 6</td> <td>6</td> <td>SS-4</td> <td>14</td> <td>44</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>12</td> <td>A-6a (V)</td> </tr> <tr> <td></td> <td>629.9</td> <td>4 6</td> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				MATERIAL DESCRIPTION AND NOTES	ELEV.	SPT / RQD	DEPTHS	REC SAMPLE ID	REC N ₆₀ (%)	GRADATION (%)			ATTERBERG			SO ₄ ppm	GR	CS	FS	SI	CL	LL	PL	WC	(tsf)	HP	GR	CS	FS	SI	CL	LL	PL	WC	10 inches Asphalt	637.4		1											8 inches Concrete	635.9		2											MEDIUM DENSE, BROWN AND DARK BROWN, SANDY SILT LITTLE CLAY, DAMP	633.9	4 6 11	3 4	SS-1	24	0	1	47	39	13	NP	NP	15	A-4a (3)	STIFF TO VERY STIFF, BROWN TO ORANGISH-BROWN, SILT AND CLAY TRACE GRAVEL, SOME SAND, DAMP		7 5 7	4	SS-2	17	-	-	-	-	-	-	-	20	A-6a (V)			7 4 6	5 6	SS-3	14	100	2.50	10	15	20	32	23	34	20	14	16	A-6a (6)			3 4 6	6	SS-4	14	44	-	-	-	-	-	-	-	-	12	A-6a (V)		629.9	4 6	7														
MATERIAL DESCRIPTION AND NOTES	ELEV.	SPT / RQD	DEPTHS							REC SAMPLE ID	REC N ₆₀ (%)	GRADATION (%)			ATTERBERG			SO ₄ ppm																																																																																																																															
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STIFF TO VERY STIFF, BROWN TO ORANGISH-BROWN, SILT AND CLAY TRACE GRAVEL, SOME SAND, DAMP		7 5 7	4	SS-2	17	-	-	-	-	-	-	-	20	A-6a (V)																																																																																																																																			
		7 4 6	5 6	SS-3	14	100	2.50	10	15	20	32	23	34	20	14	16	A-6a (6)																																																																																																																																
		3 4 6	6	SS-4	14	44	-	-	-	-	-	-	-	-	12	A-6a (V)																																																																																																																																	
	629.9	4 6	7																																																																																																																																														


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\WORKING\ENGINEAS\T01D1910318120200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	STATION / OFFSET: 279+52, 7' LT.	EXPLORATION ID																																																																																																																															
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	ALIGNMENT: SR 7	B-040-0-20																																																																																																																															
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	ELEVATION: 639.0 (MSL)	7.7 ft.																																																																																																																															
START: 1/18/21	SAMPLING METHOD: SPT	LAT / LONG: 39.598128, -80.965654	PAGE 1 OF 1																																																																																																																															
<table border="1"> <thead> <tr> <th rowspan="3">MATERIAL DESCRIPTION AND NOTES</th> <th rowspan="3">ELEV.</th> <th rowspan="3">SPT / RQD</th> <th rowspan="3">DEPTHS</th> <th rowspan="3">REC SAMPLE ID</th> <th rowspan="3">REC N₆₀ (%)</th> <th colspan="3">GRADATION (%)</th> <th colspan="3">ATTERBERG</th> <th rowspan="3">SO₄ ppm</th> </tr> <tr> <th>GR</th> <th>CS</th> <th>FS</th> <th>SI</th> <th>CL</th> <th>LL</th> <th>PL</th> <th>WC</th> </tr> <tr> <th>(tsf)</th> <th>HP</th> <th>GR</th> <th>CS</th> <th>FS</th> <th>SI</th> <th>CL</th> <th>LL</th> <th>PL</th> <th>WC</th> </tr> </thead> <tbody> <tr> <td>12 inches Asphalt</td> <td>639.0</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>8 inches Concrete</td> <td>637.3</td> <td></td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>STIFF DARK BROWN, SILTY CLAY SOME SAND TRACE GRAVEL AND STONE FRAGMENTS, DAMP</td> <td>635.8</td> <td>4 4 5</td> <td>3 4</td> <td>SS-1</td> <td>13</td> <td>56</td> <td>3.00</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>19</td> <td>A-6b (V)</td> </tr> <tr> <td>MEDIUM STIFF TO STIFF, BROWN TRACE GRAY, SILT AND CLAY TRACE GRAVEL, SOME SAND, DAMP</td> <td></td> <td>4 4 3</td> <td>4</td> <td>SS-2</td> <td>10</td> <td>78</td> <td>1.00</td> <td>6</td> <td>7</td> <td>29</td> <td>32</td> <td>26</td> <td>31</td> <td>19</td> <td>12</td> <td>15</td> <td>A-6a (5)</td> </tr> <tr> <td></td> <td></td> <td>2 2 2</td> <td>5</td> <td>SS-3</td> <td>6</td> <td>78</td> <td>0.50</td> <td>0</td> <td>2</td> <td>25</td> <td>37</td> <td>36</td> <td>30</td> <td>18</td> <td>12</td> <td>21</td> <td>A-6a (8)</td> </tr> <tr> <td>Below 6.2' : Trace Light Brown Stone Fragments</td> <td>631.3</td> <td>4 5 5</td> <td>6 7</td> <td>SS-4</td> <td>14</td> <td>89</td> <td>2.50</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>19</td> <td>A-6a (V)</td> </tr> </tbody> </table>				MATERIAL DESCRIPTION AND NOTES	ELEV.	SPT / RQD	DEPTHS	REC SAMPLE ID	REC N ₆₀ (%)	GRADATION (%)			ATTERBERG			SO ₄ ppm	GR	CS	FS	SI	CL	LL	PL	WC	(tsf)	HP	GR	CS	FS	SI	CL	LL	PL	WC	12 inches Asphalt	639.0		1											8 inches Concrete	637.3		2											STIFF DARK BROWN, SILTY CLAY SOME SAND TRACE GRAVEL AND STONE FRAGMENTS, DAMP	635.8	4 4 5	3 4	SS-1	13	56	3.00	-	-	-	-	-	19	A-6b (V)	MEDIUM STIFF TO STIFF, BROWN TRACE GRAY, SILT AND CLAY TRACE GRAVEL, SOME SAND, DAMP		4 4 3	4	SS-2	10	78	1.00	6	7	29	32	26	31	19	12	15	A-6a (5)			2 2 2	5	SS-3	6	78	0.50	0	2	25	37	36	30	18	12	21	A-6a (8)	Below 6.2' : Trace Light Brown Stone Fragments	631.3	4 5 5	6 7	SS-4	14	89	2.50	-	-	-	-	-	-	-	19	A-6a (V)
MATERIAL DESCRIPTION AND NOTES	ELEV.	SPT / RQD	DEPTHS							REC SAMPLE ID	REC N ₆₀ (%)	GRADATION (%)			ATTERBERG			SO ₄ ppm																																																																																																																
												GR	CS	FS	SI		CL		LL	PL	WC																																																																																																													
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MEDIUM STIFF TO STIFF, BROWN TRACE GRAY, SILT AND CLAY TRACE GRAVEL, SOME SAND, DAMP		4 4 3	4	SS-2	10	78	1.00	6	7	29	32	26	31	19	12	15	A-6a (5)																																																																																																																	
		2 2 2	5	SS-3	6	78	0.50	0	2	25	37	36	30	18	12	21	A-6a (8)																																																																																																																	
Below 6.2' : Trace Light Brown Stone Fragments	631.3	4 5 5	6 7	SS-4	14	89	2.50	-	-	-	-	-	-	-	19	A-6a (V)																																																																																																																		

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\WORKING\ENGINEAS\T01D1910318120200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY

 DESIGNER: DCM
 REVIEWER: DMV 09/03/21
 PROJECT ID: 109278
 SUBSET TOTAL: 46 68
 SHEET TOTAL: _____

SOIL PROFILE - ROADWAY
BORING LOGS B-039-0-20 & B-040-0-20

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 10:02:32 PM DATE: 9/3/2021 TIME: 6:34:32 PM USER: SKIRK
 pw:\ohlodot-pw-bentley.com\ohlodot-pw-02\Documents\01Active Projects\Distric ID\Monroe\109278\402-Engineer\ing_HDR\Geotechnical\Sheets\109278_IL02.dgn

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 283+53, 7' RT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-041-0-20
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 637.2 (MSL) EOB: 7.6 ft.	PAGE
START: 1/12/21 END: 1/12/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.598754, -80.964484	1 OF 1
MATERIAL DESCRIPTION AND NOTES				
12 inches Asphalt	ELEV: 637.2	REC SAMPLE ID	GRADATION (%)	ATTERBERG
7 inches Concrete	635.6	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
MEDIUM DENSE, ORANGISH-BROWN TO BROWN, SANDY SILT TRACE GRAVEL, SOME CLAY, DAMP	634.2	11 61	1 9 27 35 28 26 16 10 16	A-4a (6)
MEDIUM DENSE, BROWN, SANDY SILT TRACE GRAVEL, LITTLE CLAY, DAMP		18 100	1 1 37 47 14 22 17 5 15	A-4a (5)
		20 100	- - - - - - - -	A-4a (V)
		14 78	- - - - - - - -	A-4a (V)
@ 7.5' - 7.6' : Gray	629.6	5	- - - - - - - -	-
		5	- - - - - - - -	-

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\ENGINEAS\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 287+62, 6' LT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-042-0-20
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 637.7 (MSL) EOB: 7.5 ft.	PAGE
START: 1/15/21 END: 1/15/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.599447, -80.963342	1 OF 1
MATERIAL DESCRIPTION AND NOTES				
8 inches Asphalt	ELEV: 637.7	REC SAMPLE ID	GRADATION (%)	ATTERBERG
8 inches Concrete	636.4	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
MEDIUM DENSE, BROWN, SILT, "AND" SAND, LITTLE CLAY, TRACE GRAVEL, DAMP		29 89	1 1 35 50 13 NP NP NP 14	A-4b (6)
MEDIUM STIFF, DARK REDDISH-BROWN, SILT AND CLAY, TRACE GRAVEL, SOME SAND, DAMP		18 100	- - - - - - - -	A-4b (V)
MEDIUM STIFF, BROWN, SILT AND CLAY LITTLE SAND, TRACE GRAVEL, DAMP		7 100	1 9 17 35 38 35 21 14 25	A-6a (9)
		6 100	- - - - - - - -	A-6a (V)
		2	- - - - - - - -	-
		2	- - - - - - - -	-
		2	- - - - - - - -	-

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\ENGINEAS\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	STATION / OFFSET: 291+64, 5' RT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	ALIGNMENT: SR 7	B-043-0-20
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	ELEVATION: 637.1 (MSL)	EOB: 7.5 ft.
START: 1/12/21	SAMPLING METHOD: SPT	LAT / LONG: 39.600028, -80.962127	PAGE 1 OF 1
MATERIAL DESCRIPTION AND NOTES			
8 inches Asphalt	ELEV: 637.1	SPT / RQD	DEPTHS
7 inches Concrete	635.8	1	1
VERY STIFF, DARK BROWN, SILTY CLAY, TRACE GRAVEL, SOME SAND, DAMP		2	4
		3	8
		4	10
	632.1	5	8
VERY STIFF, REDDISH-BROWN AND BROWN, SANDY SILT, TRACE GRAVEL, LITTLE CLAY, DAMP		6	7
		4	4
	629.6	5	5
		7	
EOB			


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\ENGINEAS\T01D19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	STATION / OFFSET: 295+63, 7' LT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	ALIGNMENT: SR 7	B-044-0-20
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	ELEVATION: 633.5 (MSL)	EOB: 7.5 ft.
START: 1/15/21	SAMPLING METHOD: SPT	LAT / LONG: 39.600596, -80.960917	PAGE 1 OF 1
MATERIAL DESCRIPTION AND NOTES			
8 inches Asphalt	ELEV: 633.5	SPT / RQD	DEPTHS
8 inches Concrete	632.2	1	1
STIFF TO VERY STIFF, DARK BROWN TRACE GRAY, CLAY, AND SILT, TRACE GRAVEL, SOME SAND, DAMP		2	4
		3	4
		3	5
		4	10
	628.5	5	7
LOOSE TO MEDIUM DENSE, BROWN, SANDY SILT, TRACE CLAY, DAMP		6	9
		3	3
	626.0	3	3
		7	
EOB			

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\ENGINEAS\T01D19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY

 DESIGNER: DCM
 REVIEWER: DMV 09/03/21
 PROJECT ID: 109278
 SUBSET TOTAL: 48 68
 SHEET TOTAL:

SOIL PROFILE - ROADWAY
BORING LOGS B-043-0-20 & B-044-0-20

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 10:02:25 AM DATE: 9/3/2021 TIME: 6:35:25 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55-TRUCK	STATION / OFFSET: 299+64, 5' RT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-045-0-20	
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 628.9 (MSL) EOB: 7.5 ft.	PAGE	
START: 1/12/21 END: 1/12/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.601051, -80.959619	1 OF 1	
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm
8.5 inches Asphalt	628.9	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	LL PL PI WC	
7.5 inches Concrete	627.5				
STIFF, DARK BROWN TRACE GRAY, SILT AND CLAY, LITTLE SAND, LITTLE GRAVEL, DAMP	625.9	11 56	- - - - -	- - - - -	-
MEDIUM DENSE, BROWN, SILT, "AND" SAND, TRACE CLAY, DAMP	624.4	21 100	0 0 36 54 10 NP NP NP	NP NP NP	<100
STIFF TO VERY STIFF, BROWN, SILT AND CLAY TRACE GRAVEL, LITTLE SAND, DAMP	621.4	32 100	- - - - -	- - - - -	-
		10 67	1 5 6 35 53 37 23 14 26	14 26	-


STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\ENG\EA\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55-TRUCK	STATION / OFFSET: 303+67, 7' LT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-046-0-20	
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 626.2 (MSL) EOB: 7.5 ft.	PAGE	
START: 1/15/21 END: 1/15/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.601559, -80.958346	1 OF 1	
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm
9 inches Asphalt	626.2	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	LL PL PI WC	
8 inches Concrete	624.8				
STIFF TO VERY STIFF, DARK BROWN, SILT AND CLAY, TRACE GRAVEL, SOME SAND, DAMP	621.7	29 50	- - - - -	- - - - -	-
MEDIUM STIFF TO STIFF, DARK BROWN TO BROWN MOTTLED GRAY, SILTY CLAY, LITTLE SAND, TRACE GRAVEL, DAMP		14 72	11 14 47 24 33 21 12 17	12 17	<100
		8 100	- - - - -	26 26	-
		11 61	- - - - -	- - - - -	-

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\ENG\EA\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY	
	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
49	68
SHEET	TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-045-0-20 & B-046-0-20

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 307+67, 5' RT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-047-0-20
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 627.4 (MSL) EOB: 7.5 ft.	PAGE
START: 1/12/21 END: 1/12/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.601999, -80.957047	1 OF 1
MATERIAL DESCRIPTION AND NOTES				
7.5 inches Asphalt	ELEV: 627.4	GRADATION (%)	ATTERBERG	SO4
7.5 inches Concrete	626.1	GR CS FS SI CL LL PL PI WC	LL PL PI WC	ppm
STIFF TO VERY STIFF, BROWN MOTTLED GRAY, SILTY CLAY LITTLE GRAVEL, SOME SAND, DAMP		18 12 9 32 29 40 21 19 17	17	<100
		3 4 5	- -	-
	622.9	3 4 5	16	-
STIFF, BROWN MOTTLED GRAY, CLAY TRACE GRAVEL, SOME SAND, SOME SILT, DAMP		4 6 5	20	-
		4 4 4	- -	-
	619.9	4 4 4	20	-

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 311+66, 7' LT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-048-0-20
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 629.1 (MSL) EOB: 7.5 ft.	PAGE
START: 1/15/21 END: 1/15/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.602500, -80.955787	1 OF 1
MATERIAL DESCRIPTION AND NOTES				
8.5 inches Asphalt	ELEV: 629.1	GRADATION (%)	ATTERBERG	SO4
7.5 inches Concrete	627.8	GR CS FS SI CL LL PL PI WC	LL PL PI WC	ppm
MEDIUM STIFF TO STIFF, ORANGISH-BROWN AND LIGHT BROWN, SILTY CLAY TRACE GRAVEL, LITTLE SAND, DAMP		3 5 10 46 36 39 22 17 21	21	140
		2 2 3	- -	-
	624.6	3 3 6	20	-
STIFF TO VERY STIFF, ORANGISH-BROWN AND LIGHT BROWN, CLAY, AND SILT, LITTLE SAND, DAMP		3 5 8	19	-
		5 7 11	- -	-
	621.6	5 7 11	23	-

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 315+68, 6' RT.	EXPLORATION ID		
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-049-0-20		
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 629.0 (MSL) EOB: 7.5 ft.	PAGE		
START: 1/13/21 END: 1/13/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.602944, -80.954478	1 OF 1		
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm	BACK FILL
8 inches Asphalt	629.0	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	FS SI CL LL PL PI WC	ppm	
7 inches Concrete	627.7	10				
STIFF, DARK BROWN, CLAY, "AND" SILT, TRACE GRAVEL, LITTLE SAND, DAMP		2				
		5				
		3				
		4				
		5				
		6				
		7				
		8				
		9				
VERY STIFF, BROWN MOTTLED GRAY, CLAY, "AND" SILT, TRACE SAND, DAMP	624.5	14				
		67				
		20				
		56				
		83				
		22				
		83				
		3.50				
		3.50				
		3.50				
		3.50				
		21				
		A-7-6 (V)				
		A-7-6 (16)				
		A-7-6 (V)				
		A-7-6 (V)				

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\PWORKING\ENGINEERING\AS\T01\19103\18182020\11 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE


ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 319+62, 7' LT.	EXPLORATION ID		
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-050-0-20		
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 627.8 (MSL) EOB: 7.5 ft.	PAGE		
START: 1/15/21 END: 1/15/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.603439, -80.953236	1 OF 1		
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm	BACK FILL
8 inches Asphalt	627.8	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	FS SI CL LL PL PI WC	ppm	
8 inches Concrete	626.5	20				
STIFF TO VERY STIFF, ORANGISH-BROWN TO BROWN MOTTLED GRAY, SILTY CLAY, TRACE GRAVEL, LITTLE SAND, DAMP		33				
		89				
		29				
		100				
		28				
		100				
		0				
		0				
		8				
		15				
		A-6b (V)				
		A-6b (11)				
		A-6b (V)				
		A-4a (6)				

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\PWORKING\ENGINEERING\AS\T01\19103\18182020\11 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY	
	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
51	68
SHEET	TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-049-0-20 & B-050-0-20

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 10:02:33 PM DATE: 9/3/2021 TIME: 6:36:33 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	STATION / OFFSET: 323+67, 5' RT.	EXPLORATION ID: B-051-0-20
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	ALIGNMENT: SR 7	
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	ELEVATION: 625.8 (MSL) EOB: 7.5 ft.	PAGE 1 OF 1
START: 1/14/21 END: 1/14/21	SAMPLING METHOD: SPT	LAT / LONG: 39.603888, -80.951920	
MATERIAL DESCRIPTION AND NOTES			
7.5 inches Asphalt	ELEV: 625.8	GRADATION (%):	ATTERBERG
7.5 inches Concrete	624.6	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
STIFF TO VERY STIFF BROWN, SILTY CLAY, LITTLE GRAVEL, SOME SAND, DAMP		13 19 14 27 27 35 18 17	14 A-6b (7)
		20 44 SS-2	22 A-6b (V)
	621.3	22 89 SS-3	18 A-6a (8)
STIFF TO VERY STIFF BROWN MOTTLED GRAY, SILT AND CLAY TRACE GRAVEL, SOME SAND, DAMP		15 100 SS-4	21 A-6a (V)
	618.3		


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\T01D1910318120200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	STATION / OFFSET: 327+62, 7' LT.	EXPLORATION ID: B-052-0-20
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	ALIGNMENT: SR 7	
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	ELEVATION: 623.8 (MSL) EOB: 7.5 ft.	PAGE 1 OF 1
START: 1/15/21 END: 1/15/21	SAMPLING METHOD: SPT	LAT / LONG: 39.604412, -80.950691	
MATERIAL DESCRIPTION AND NOTES			
14 inches Asphalt	ELEV: 623.8	GRADATION (%):	ATTERBERG
(No apparent underlying concrete)	622.6	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
STIFF, DARK BROWN TRACE GRAY, SILTY CLAY, LITTLE GRAVEL, SOME SAND, DAMP TO MOIST		11 50 SS-1	16 A-6b (7)
		11 17 SS-2	17 A-6b (V)
	619.3	13 89 SS-3	24 A-7-6 (14)
STIFF, DARK BROWN TRACE GRAY, CLAY TRACE GRAVEL, SOME SAND, SOME SILT, DAMP TO MOIST		11 50 SS-4	19 A-7-6 (V)
@ 5.7' - 5.8' : Noted Organic Material	616.3		

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\T01D1910318120200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: SS-1 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY

 DESIGNER: DCM
 REVIEWER: DMV 09/03/21
 PROJECT ID: 109278
 SUBSET TOTAL: 52 68
 SHEET TOTAL:

**SOIL PROFILE - ROADWAY
 BORING LOGS B-051-0-20 & B-052-0-20**

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 331+68, 8' RT.	EXPLORATION ID									
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-053-0-20									
PID: 109278_SF1	DRILLING METHOD: 3" SAMPLER	CALIBRATION DATE: 11/20/19	ELEVATION: 627.1 (MSL) EOB: 7.5 ft.	PAGE									
START: 1/14/21 END: 1/14/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.604929, -80.949413	1 OF 1									
MATERIAL DESCRIPTION AND NOTES													
7.5 inches Asphalt 8 inches Concrete STIFF, BROWN, REDDISH-BROWN TRACE GRAY, CLAY, LITTLE GRAVEL, LITTLE SAND, SOME SILT, DAMP MEDIUM STIFF TO STIFF, BROWN, REDDISH-BROWN TRACE GRAY, SILT AND CLAY "AND" SAND, LITTLE GRAVEL, DAMP	ELEV.	SPT / RQD	GRADATION (%)		ATTERBERG	WC	SO4 ppm						
	627.1	DEPTHS	GR	CS	FS	SI	CL	LL	PL	PI	VC	ODOT CLASS (GI)	
	625.8	1											
		2	4										
		3	5										
		4	5										
		5	4										
622.6	6	5											
	7	3											
619.6	EOB	3											


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/22/16 25 - C:\P\MWORKING\ENG\EAST\10\19\103\18\2020\111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 335+63, 7' LT.	EXPLORATION ID									
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-054-0-20									
PID: 109278_SF1	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 632.7 (MSL) EOB: 7.5 ft.	PAGE									
START: 1/15/21 END: 1/15/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.605546, -80.948258	1 OF 1									
MATERIAL DESCRIPTION AND NOTES													
8 inches Asphalt 8 inches Concrete STIFF TO VERY STIFF, REDDISH-BROWN, CLAY, TRACE GRAVEL, SOME SAND, SOME SILT, DAMP STIFF, DARK BROWN TRACE GRAY, CLAY, TRACE GRAVEL, SOME SAND, SOME SILT, DAMP	ELEV.	SPT / RQD	GRADATION (%)		ATTERBERG	WC	SO4 ppm						
	632.7	DEPTHS	GR	CS	FS	SI	CL	LL	PL	PI	VC	ODOT CLASS (GI)	
	631.4	1											
		2	3										
		3	6										
		4	7										
		5	9										
628.7	6	4											
	7	5											
625.2	EOB	5											

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/22/16 25 - C:\P\MWORKING\ENG\EAST\10\19\103\18\2020\111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: SS-1 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY	
	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
53	68
SHEET	TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-053-0-20 & B-054-0-20

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 10:02:11 AM DATE: 9/3/2021 TIME: 6:37:47 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55-TRUCK	STATION / OFFSET: 339+66, 6' RT.	EXPLORATION ID		
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-055-0-20		
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 636.2 (MSL) EOB: 7.5 ft.	PAGE		
START: 1/13/21 END: 1/13/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.606164, -80.947074	1 OF 1		
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm	
9 inches Asphalt	636.2	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	LL PL PI WC		
7 inches Concrete	634.9	7				
VERY STIFF, BROWN, CLAY, LITTLE GRAVEL, SOME SAND, SOME SILT, DAMP		2				
		3				
		4				
		5				
STIFF TO VERY STIFF, REDDISH-BROWN AND BROWN, SILTY CLAY, TRACE GRAVEL, SOME SAND, DAMP	631.7	6	13 15 12 24 36 44 22 22	19	A-7-6 (10)	<100
		7				
		8				
		EOB				


STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: SS-1 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55-TRUCK	STATION / OFFSET: 343+64, 6' LT.	EXPLORATION ID		
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-056-0-20		
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 635.3 (MSL) EOB: 7.5 ft.	PAGE		
START: 1/14/21 END: 1/14/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.606853, -80.945975	1 OF 1		
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm	
8.5 inches Asphalt	635.3	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	LL PL PI WC		
8 inches Concrete	633.9	15				
STIFF TO VERY STIFF, REDDISH-BROWN AND BROWN, SILTY CLAY, LITTLE TO TRACE GRAVEL, SOME SAND, DAMP		4				
		5				
		6				
		7				
	627.8	17	11 11 11 32 33 39 21 18	16	A-6b (9)	<100
		17				
		17				
		EOB				

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY	
	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
54	68
SHEET	TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-055-0-20 & B-056-0-20

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 10:36:36 AM DATE: 9/3/2021 TIME: 6:37:36 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 347+64, 5' RT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-057-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 630.9 (MSL) EOB: 7.5 ft.	PAGE	
START: 1/13/21 END: 1/13/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.607496, -80.944822	1 OF 1	
MATERIAL DESCRIPTION AND NOTES					
8.5 inches Asphalt	ELEV: 630.9	REC SAMPLE ID	GRADATION (%)	ATTERBERG	
7.5 inches Concrete	629.6	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)	
VERY STIFF, REDDISH-BROWN TRACE GRAY, SILTY CLAY LITTLE GRAVEL, SOME SAND, DAMP		4 5 11	- - - - -	- - - - -	
		4	14 13 17 28 28 38 20 18	20	A-6b (V)
	626.4	7 7	0 1 28 41 30 29 19 10	14	A-6b (7)
STIFF TO VERY STIFF, BROWN, SANDY SILT, SOME CLAY, DAMP		5 4 5	- - - - -	19	A-4a (7)
		10 5 8	- - - - -	19	A-4a (V)
	623.4	7	- - - - -	-	-
		8	- - - - -	-	-
		EOB	- - - - -	-	-


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\WORKING\ENGINEAS\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: SS-2 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 351+63, 6' LT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-058-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 628.4 (MSL) EOB: 7.5 ft.	PAGE	
START: 1/14/21 END: 1/14/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.608183, -80.943721	1 OF 1	
MATERIAL DESCRIPTION AND NOTES					
8 inches Asphalt	ELEV: 628.4	REC SAMPLE ID	GRADATION (%)	ATTERBERG	
8 inches Concrete	627.1	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)	
HARD, DARK BROWN TRACE GRAY, ELASTIC CLAY, TRACE GRAVEL, LITTLE SAND, SOME SILT, DAMP		17 20 25	- - - - -	- - - - -	
		7 8 13	- - - - -	12	A-7-5 (V)
	623.9	4 5 10	9 9 26 46 59 30 29 25	25	A-7-5 (19)
VERY STIFF, DARK BROWN TRACE GRAY, CLAY LITTLE GRAVEL, SOME SAND, SOME SILT, DAMP		4 6 7	- - - - -	24	A-7-6 (V)
Below 6.0' : Orangish Brown		4 6 7	- - - - -	21	A-7-6 (10)
	620.9	7	- - - - -	-	-
		8	- - - - -	-	-
		EOB	- - - - -	-	-

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\WORKING\ENGINEAS\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY	
	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
55	68
SHEET	TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-057-0-20 & B-058-0-20

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	STATION / OFFSET: 355+65, 6' RT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	ALIGNMENT: SR 7	B-059-0-20
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	ELEVATION: 631.2 (MSL) EOB: 7.5 ft.	PAGE
START: 1/13/21 END: 1/13/21	SAMPLING METHOD: SPT	LAT / LONG: 39.608864, -80.942599	1 OF 1
MATERIAL DESCRIPTION AND NOTES			
9.5 inches Asphalt	ELEV. 631.2	GRADATION (%)	ATTERBERG
STIFF, REDDISH-BROWN AND LIGHT BROWN CLAY, LITTLE GRAVEL, SOME SAND, SOME SILT, DAMP	630.4	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
STIFF, REDDISH-BROWN AND LIGHT BROWN, SILTY CLAY, LITTLE GRAVEL, SOME SAND, DAMP	628.2	13 17 11 27 32 43 20 23	A-7-6 (10)
			A-6b (V)
			A-6b (8)
			A-6b (V)

SPT / RQD	DEPTHS	REC SAMPLE ID	REC (%)	HP (tsf)	GRADATION (%)	ATTERBERG							SO4 ppm		
						GR	CS	FS	SI	CL	LL	PL		PI	WC
3	1														
3	2	SS-1	17		13 17 11 27 32 43 20 23										
5	3	SS-2	50	3.00	- - - - -										
3	4	SS-3	11	3.00	11 20 35 40 21 19 21										
4	5	SS-4	13	2.50	- - - - -										
5	6														
4	7														
EOB															

NOTES: SS-1 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	STATION / OFFSET: 360+14, 6' LT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	ALIGNMENT: SR 7	B-060-0-20
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	ELEVATION: 635.8 (MSL) EOB: 7.5 ft.	PAGE
START: 1/14/21 END: 1/14/21	SAMPLING METHOD: SPT	LAT / LONG: 39.609786, -80.941540	1 OF 1
MATERIAL DESCRIPTION AND NOTES			
10 inches Asphalt	ELEV. 635.8	GRADATION (%)	ATTERBERG
8 inches Concrete	634.3	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
STIFF, REDDISH-BROWN AND BROWN, CLAY, LITTLE GRAVEL, LITTLE SAND, SOME SILT, DAMP	632.8	10 9 29 37 47 22 25	A-7-6 (13)
MEDIUM STIFF TO STIFF, REDDISH-BROWN AND BROWN, SILTY CLAY, TRACE GRAVEL, SOME SAND, DAMP			A-6b (V)
			A-6b (10)
			A-6b (V)

SPT / RQD	DEPTHS	REC SAMPLE ID	REC (%)	HP (tsf)	GRADATION (%)	ATTERBERG							SO4 ppm		
						GR	CS	FS	SI	CL	LL	PL		PI	WC
3	1														
4	2	SS-1	50	2.00	10 9 29 37 47 22 25										
3	3	SS-2	17	2.00	- - - - -										
3	4	SS-3	8	2.00	18 9 27 40 22 18 20										
4	5	SS-4	13	2.50	- - - - -										
4	6														
5	7														
EOB															

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55-TRUCK	STATION / OFFSET: 364+15, 7 RT.	EXPLORATION ID											
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-061-0-20											
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 640.2 (MSL) EOB: 7.5 ft.	PAGE											
START: 1/13/21 END: 1/13/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.610600, -80.940579	1 OF 1											
MATERIAL DESCRIPTION AND NOTES															
9.5 inches Asphalt	ELEV. 640.2	SPT/ RQD	GRADATION (%)	ATTERBERG											
8.5 inches Concrete	638.7	DEPTHS	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)											
STIFF TO VERY STIFF, BROWN TO REDDISH-BROWN AND LIGHT BROWN, CLAY, LITTLE TO TRACE GRAVEL, SOME SAND, SOME SILT, DAMP	1	4	13	12	27	35	45	22	23	18	A-7-6 (11)	100			
	2	3	4	-	-	-	-	-	-	15	A-7-6 (V)	-			
	3	4	4	44	SS-2	-	-	-	-	17	A-7-6 (9)	-			
	4	4	5	50	SS-3	2.50	9	15	11	23	42	41	23	18	A-7-6 (V)
	5	5	7	100	SS-4	2.00	-	-	-	-	-	-	-	17	A-7-6 (V)
	6	11	6	18	SS-4	2.00	-	-	-	-	-	-	-	-	-
	7	7	7												
		EOB													

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\M\WORKING\EA\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: SS-1 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55-TRUCK	STATION / OFFSET: 369+11, 6' LT.	EXPLORATION ID											
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-062-0-20											
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 645.2 (MSL) EOB: 7.5 ft.	PAGE											
START: 1/14/21 END: 1/14/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.611646, -80.939455	1 OF 1											
MATERIAL DESCRIPTION AND NOTES															
14 inches Asphalt	ELEV. 645.2	SPT/ RQD	GRADATION (%)	ATTERBERG											
3 inches Granular Base	643.8	DEPTHS	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)											
VERY STIFF, REDDISH-BROWN, CLAY, LITTLE GRAVEL, LITTLE SAND, SOME SILT, DAMP DENSE TO VERY DENSE, LIGHT BROWN, STONE FRAGMENTS WITH SAND/DAMP	1	17	14	10	7	21	48	21	25	18	A-7-6 (14)	-			
	2	7	43	SS-1A	2.00	-	-	-	-	4	A-1-b (V)	-			
	3	7	18	SS-2	-	-	-	-	-	10	A-1-b (V)	-			
	4	7	6	SS-3	2.00	9	12	11	25	43	21	22	17	A-7-6 (12)	
	5	5	6	SS-4	2.50	-	-	-	-	-	-	-	-	14	A-7-6 (V)
	6	4	4	15	SS-4	2.50	-	-	-	-	-	-	-	-	-
	7	7	7												
		EOB													

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\M\WORKING\EA\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS



MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 10:02:38 AM DATE: 9/3/2021 TIME: 6:38:38 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 372+70, 7' RT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-063-0-20
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 646.3 (MSL) EOB: 7.0 ft.	PAGE
START: 1/13/21 END: 1/13/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.612366, -80.938582	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	REC SAMPLE ID (%)	HP (tsf)	GRADATION (%)				WC	SO4 ppm	BACK FILL
						GR	CS	FS	SI			
12 inches Asphalt	646.3	1	4									
STIFF, REDDISH-BROWN AND BROWN, SILTY CLAY, TRACE GRAVEL, SOME SAND, DAMP	645.3	2	6	15	39							
		3	5	14	33							
		4	5	15	72							
		5	6	14	61							
STIFF, REDDISH-BROWN AND BROWN, CLAY, SOME GRAVEL, LITTLE SAND, LITTLE SILT, DAMP	642.3	6	5									
		7	3									
		EOB	5									

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\T01D19103181820200111 MOE-7-2-21 BORING LOGS.GPJ


NOTES: SS-2 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 376+68, 6' LT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-064-0-20
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 642.4 (MSL) EOB: 7.5 ft.	PAGE
START: 1/14/21 END: 1/14/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.613213, -80.937687	1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	REC SAMPLE ID (%)	HP (tsf)	GRADATION (%)				WC	SO4 ppm	BACK FILL
						GR	CS	FS	SI			
8 inches Asphalt	642.4	1	3									
7 inches Concrete MEDIUM STIFF TO STIFF, REDDISH-BROWN AND BROWN, CLAY, TRACE GRAVEL, LITTLE SAND, SOME SILT, DAMP	641.2	2	3	10	56							
		3	4	10	67							
		4	3									
		5	4	11	50							
	634.9	6	3	8	56							
		7	3									
		EOB	3									

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\T01D19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: SS-1 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY	
	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
58	68
SHEET	TOTAL

**SOIL PROFILE - ROADWAY
 BORING LOGS B-063-0-20 & B-064-0-20**

MOE-7-2-21

MODEL: Sheet PAPER SIZE: Txl (in.) DATE: 9/3/2021 TIME: 6:38:58 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 380+69, 6' RT.	EXPLORATION ID		
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-065-0-20		
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 636.3 (MSL) EOB: 7.5 ft.	PAGE		
START: 1/13/21 END: 1/13/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.614024, -80.936721	1 OF 1		
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm	BACK FILL
9 inches Asphalt	636.3	N ₆₀ (%)	GR CS FS	CL LL PL PI WC	ODOT CLASS (GI)	
8 inches Concrete	634.9					
STIFF TO VERY STIFF, DARK BROWN TRACE GRAY AND BROWN, CLAY, LITTLE SAND, LITTLE STONE FRAGMENTS, DAMP						
DENSE TO VERY DENSE, BROWN, STONE FRAGMENTS WITH SAND AND SILTY LITTLE CLAY, (SANDSTONE FRAGMENTS), DAMP	631.8					
	628.8					


STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\ENG\EA\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: SS-1 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 384+77, 5' LT.	EXPLORATION ID		
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-066-0-20		
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 630.3 (MSL) EOB: 7.5 ft.	PAGE		
START: 1/14/21 END: 1/14/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.614820, -80.935707	1 OF 1		
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm	BACK FILL
15 inches Asphalt	630.3	N ₆₀ (%)	GR CS FS	CL LL PL PI WC	ODOT CLASS (GI)	
STIFF, REDDISH-BROWN AND BROWN, SILTY CLAY, SOME GRAVEL, LITTLE SAND, DAMP	629.1					
MEDIUM STIFF TO STIFF, REDDISH-BROWN AND BROWN, SILT AND CLAY TRACE GRAVEL, SOME SAND, DAMP	625.8					
	622.8					

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\ENG\EA\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: SS-1 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY	
	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
59	68
SHEET	TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-065-0-20 & B-066-0-20

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 DATE: 9/3/2021 TIME: 6:39:20 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 388+77, 7' RT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-067-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 628.4 (MSL) EOB: 7.5 ft.	PAGE	
START: 1/13/21 END: 1/13/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.615396, -80.934500	1 OF 1	
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm
9 inches Asphalt	628.4	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)	BACK FILL
8 inches Concrete	627.0				
STIFF TO VERY STIFF, DARK BROWN WITH GRAY AND REDDISH-BROWN, SANDY SILT, LITTLE GRAVEL, LITTLE CLAY, DAMP		11	- - - - -	- - - - -	-
		14	23 31 14 27 21 6	15	A-4a (V)
		24	23 31 14 27 21 6	16	A-4a (2)
	622.9	67	- - - - -	- - - - -	-
VERY STIFF, BROWN AND LIGHT BROWN, SILT AND CLAY, TRACE GRAVEL, SOME SILT, DAMP		20	14 29 36 34 21 13	11	A-6a (V)
	620.9	6	15 14 29 36 34 21 13	16	A-6a (7)
		8			


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\T01D19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: SS-2 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 392+74, 7' LT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-068-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 632.3 (MSL) EOB: 7.5 ft.	PAGE	
START: 1/14/21 END: 1/14/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.615897, -80.933249	1 OF 1	
MATERIAL DESCRIPTION AND NOTES	ELEV.	REC SAMPLE ID	GRADATION (%)	ATTERBERG	SO4 ppm
7.5 inches Asphalt	632.3	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)	BACK FILL
8 inches Concrete	631.0				
STIFF, DARK REDDISH-BROWN, CLAY, SOME GRAVEL, LITTLE SAND, SOME SILT, DAMP		13	- - - - -	- - - - -	-
		10	11 28 28 45 24 21	20	A-7-6 (V)
	627.8	67	11 28 28 45 24 21	21	A-7-6 (9)
SOFT TO MEDIUM STIFF, DARK BROWN MOTTLED GRAY, SILTY CLAY LITTLE GRAVEL, SOME SAND, MOIST		4	16 34 28 37 24 13	28	A-6a (7)
	625.8	6	- - - - -	- - - - -	-
STIFF, BROWN MOTTLED GRAY, SILTY CLAY, LITTLE SAND, TRACE STONE FRAGMENTS, DAMP		6	- - - - -	- - - - -	-
	624.8	2	- - - - -	- - - - -	-
		2			

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\T01D19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY	
	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
60	68
SHEET	TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-067-0-20 & B-068-0-20

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 DATE: 9/3/2021 TIME: 6:39:40 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	STATION / OFFSET: 396+81, 6' RT.	EXPLORATION ID: B-069-0-20
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	ALIGNMENT: SR 7	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	ELEVATION: 639.9 (MSL) EOB: 7.5 ft.	PAGE 1 OF 1
START: 1/13/21 END: 1/13/21	SAMPLING METHOD: SPT	LAT / LONG: 39.616332, -80.931917	
MATERIAL DESCRIPTION AND NOTES			
9 inches Asphalt	ELEV: 639.9	GRADATION (%)	ATTERBERG
8 inches Concrete	638.5	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
VERY STIFF, BROWN TO REDDISH-BROWN, CLAY, TRACE GRAVEL, LITTLE SAND, SOME SILT, DAMP	636.4	9 9 9 28 45 49 23 26	20 A-7-6 (16)
MEDIUM DENSE LIGHT BROWN, STONE FRAGMENTS WITH SAND AND SILT DAMP	634.9	- - - - - - - - - -	- A-7-6 (V)
STIFF, BROWN TO REDDISH-BROWN, CLAY, TRACE GRAVEL, SOME SAND, SOME SILT, DAMP	632.4	7 11 23 42 41 21 20	15 A-7-6 (10)
		- - - - -	15 A-7-6 (V)


STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\ST01D19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	STATION / OFFSET: 400+73, 5' LT.	EXPLORATION ID: B-070-0-20
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	ALIGNMENT: SR 7	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	ELEVATION: 642.9 (MSL) EOB: 7.5 ft.	PAGE 1 OF 1
START: 1/14/21 END: 1/14/21	SAMPLING METHOD: SPT	LAT / LONG: 39.616865, -80.930711	
MATERIAL DESCRIPTION AND NOTES			
9.5 inches Asphalt	ELEV: 642.9	GRADATION (%)	ATTERBERG
8 inches Concrete	641.4	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
MEDIUM STIFF TO STIFF, REDDISH-BROWN, CLAY, LITTLE GRAVEL, SOME SAND, SOME SILT, DAMP		8 27 37 47 23 24	19 A-7-6 (12)
		- - - - -	15 A-7-6 (V)
		7 9 20 41 44 20 24	22 A-7-6 (V)
		- - - - -	19 A-7-6 (11)

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\ST01D19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY

 DESIGNER: DCM
 REVIEWER: DMV 09/03/21
 PROJECT ID: 109278
 SUBSET TOTAL: 61 68
 SHEET TOTAL:

**SOIL PROFILE - ROADWAY
 BORING LOGS B-069-0-20 & B-070-0-20**

MOE-7-2.21

MODEL: Sheet PAPER: 9/3/2021 DATE: 9/3/2021 TIME: 6:39:59 PM USER: SKIRK
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PROJECT: MOE-7-02.21		DRILLING FIRM / OPERATOR: CENTRAL STAR / TS		STATION / OFFSET: 404+79, 6' RT.		EXPLORATION ID												
TYPE: SUBGRADE		SAMPLING FIRM / LOGGER: HDR / DM		DRILL RIG: CME 55-TRUCK		B-071-0-20												
PID: 109278 SFN:		5.5" FLIGHT AUGER		HAMMER: CME AUTOMATIC		ALIGNMENT: SR 7												
START: 1/13/21 END: 1/13/21		SPT		CALIBRATION DATE: 11/20/19		ELEVATION: 640.9 (MSL) EOB: 7.5 ft.												
SAMPLING METHOD:				ENERGY RATIO (%): 84		LAT / LONG: 39.617461, -80.929490												
						PAGE 1 OF 1												
MATERIAL DESCRIPTION AND NOTES		ELEV.		GRADATION (%)		ATTERBERG		BACK FILL										
9 inches Asphalt		640.9	SPT/ RQD	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	SO4 ppm				
7 inches Concrete		639.6	DEPTHS															
STIFF, REDDISH-BROWN AND LIGHT BROWN, CLAY, LITTLE TO TRACE GRAVEL, SOME TO LITTLE SAND, SOME SILT, DAMP			1															
			2	11	78	SS-1	1.50	14	14	11	28	33	42	22	20	17	A-7-6 (9)	<100
			3	15	72	SS-2	2.00	-	-	-	-	-	-	-	-	16	A-7-6 (V)	-
			4	5	6													
			5	11	50	SS-3	3.00	3	7	8	27	55	46	22	24	20	A-7-6 (15)	-
			6	13	89	SS-4	2.00	-	-	-	-	-	-	-	-	18	A-7-6 (V)	-
		633.4	7	5														
				-EOB-														

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\M\WORKING\EAST01D\19103181820200111 MOE-7-2.21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21		DRILLING FIRM / OPERATOR: CENTRAL STAR / TS		STATION / OFFSET: 409+43, 6' LT.		EXPLORATION ID												
TYPE: SUBGRADE		SAMPLING FIRM / LOGGER: HDR / DM		DRILL RIG: CME 55-TRUCK		B-072-0-20												
PID: 109278 SFN:		3" SAMPLER		HAMMER: CME AUTOMATIC		ALIGNMENT: SR 7												
START: 1/14/21 END: 1/14/21		SPT		CALIBRATION DATE: 11/20/19		ELEVATION: 632.6 (MSL) EOB: 7.5 ft.												
SAMPLING METHOD:				ENERGY RATIO (%): 84		LAT / LONG: 39.618225, -80.928170												
						PAGE 1 OF 1												
MATERIAL DESCRIPTION AND NOTES		ELEV.		GRADATION (%)		ATTERBERG		BACK FILL										
8 inches Asphalt		632.6	SPT/ RQD	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	SO4 ppm				
8 inches Concrete		631.3	DEPTHS															
STIFF TO VERY STIFF, REDDISH-BROWN, CLAY, TRACE GRAVEL, LITTLE SAND, SOME SILT, DAMP			1															
			2	18	56	SS-1	2.00	-	-	-	-	-	-	-	16	A-7-6 (V)	-	
			3	7	50	SS-2	1.00	10	12	11	28	39	47	22	25	21	A-7-6 (14)	<100
			4	3	2													
			5	13	67	SS-3	2.00	-	-	-	-	-	-	-	-	22	A-7-6 (V)	-
			6	10	72	SS-4	1.50	5	11	10	24	50	42	21	21	22	A-7-6 (13)	-
		625.1	7	4														
				-EOB-														

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\M\WORKING\EAST01D\19103181820200111 MOE-7-2.21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY



DESIGNER

DCM

REVIEWER

DMV 09/03/21

PROJECT ID

109278

SUBSET TOTAL

62 68

SHEET TOTAL

-

SOIL PROFILE - ROADWAY
BORING LOGS B-071-0-20 & B-072-0-20

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 6:40:19 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 413+45, 6' RT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-073-0-20
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 628.4 (MSL) EOB: 7.5 ft.	PAGE
START: 1/18/21 END: 1/18/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.618834, -80.926982	1 OF 1
MATERIAL DESCRIPTION AND NOTES				
9.5 inches Asphalt 8 inches Concrete	ELEV: 628.4	REC SAMPLE ID (%)	GRADATION (%)	ATTERBERG
	DEPTHS	N ₆₀	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
	1			
STIFF TO VERY STIFF, REDDISH-BROWN AND LIGHT BROWN, SILT AND CLAY LITTLE TO TRACE GRAVEL, SOME SAND, DAMP	2	13	17 14 19 29 21 35 20 15	15 A-6a (5)
	3	4		
	4	10		13 A-6a (V)
	5	18		11 A-6a (V)
	6	17		19 A-6a (8)
	7			
	EOB	620.9		


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\WORKING\ENG\EA\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 417+61, 6' LT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-074-0-20
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 629.4 (MSL) EOB: 7.5 ft.	PAGE
START: 1/14/21 END: 1/14/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.619518, -80.925800	1 OF 1
MATERIAL DESCRIPTION AND NOTES				
9 inches Asphalt 8 inches Concrete	ELEV: 629.4	REC SAMPLE ID (%)	GRADATION (%)	ATTERBERG
	DEPTHS	N ₆₀	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
	1			
VERY STIFF, REDDISH-BROWN TO BROWN, CLAY, TRACE GRAVEL, LITTLE SAND, SOME SILT, DAMP	2	18	2.50	30 A-7-6 (V)
	3	20		
	4	67		25 A-7-6 (19)
	5	13		21 A-6b (V)
	6	14		20 A-6b (11)
	7			
	EOB	621.9		

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\WORKING\ENG\EA\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY	
	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
63	68
SHEET	TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-073-0-20 & B-074-0-20

MOE-7-2-21

MODEL: Sheet PAPER: 9/3/2021 6:40:39 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	STATION / OFFSET: 421+62, 5' RT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	ALIGNMENT: SR 7	B-075-0-20
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	ELEVATION: 632.2 (MSL) EOB: 7.5 ft.	PAGE
START: 1/18/21 END: 1/18/21	SAMPLING METHOD: SPT	LAT / LONG: 39.620106, -80.924595	1 OF 1
MATERIAL DESCRIPTION AND NOTES			
9.5 inches Asphalt	ELEV: 632.2	GRADATION (%)	ATTERBERG
8.5 inches Concrete	630.8	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
STIFF, BROWN TO DARK REDDISH-BROWN TRACE GRAY, CLAY, TRACE GRAVEL, SOME SAND, SOME SILT, DAMP		10 12 33 36 47 24 23	18 A-7-6 (V)
	627.7	9 10 14 31 42 37 19 18	22 A-7-6 (13)
STIFF TO VERY STIFF, BROWN TO DARK REDDISH-BROWN TRACE GRAY, SILTY CLAY, TRACE GRAVEL, SOME SAND, DAMP		3 4 6 7 8	19 A-6b (11)
Below 6.5' : Orangish-Brown	624.7	20 72 3.00	20 A-6b (V)


STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\ST01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: SS-2 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	STATION / OFFSET: 425+66, 7' LT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	ALIGNMENT: SR 7	B-076-0-20
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	ELEVATION: 632.5 (MSL) EOB: 7.5 ft.	PAGE
START: 1/14/21 END: 1/14/21	SAMPLING METHOD: SPT	LAT / LONG: 39.620696, -80.923388	1 OF 1
MATERIAL DESCRIPTION AND NOTES			
8 inches Asphalt	ELEV: 632.5	GRADATION (%)	ATTERBERG
8 inches Concrete	631.2	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
STIFF TO VERY STIFF, DARK REDDISH-BROWN, TRACE GRAY, CLAY, LITTLE GRAVEL, SOME SAND, SOME SILT, DAMP		11 12 35 46 23 23	21 A-7-6 (13)
VERY STIFF, REDDISH-BROWN AND BROWN MOTTLED GRAY, CLAY, TRACE GRAVEL, LITTLE SAND, SOME SILT, DAMP	629.5	6 7 32 53 49 24 25	24 A-7-6 (V)
	625.0	2 6 7 32 53 49 24 25	23 A-7-6 (16)
		20 100 3.00	24 A-7-6 (V)

STANDARD ODOT LOG W/ SULFATES (6.5 X 11) - OH DOT GDT - 8/2/21 16:25 - C:\P\MWORKING\EA\ST01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY	
	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
64	68
SHEET	TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-075-0-20 & B-076-0-20

MOE-7-2.21

MODEL: Sheet PAPER: 9/3/2021 10:59:59 AM DATE: 9/3/2021 TIME: 6:40:59 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55-TRUCK	STATION / OFFSET: 429+68, 6' RT.	EXPLORATION ID								
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-077-0-20								
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 630.5 (MSL) EOB: 7.5 ft.	PAGE								
START: 1/18/21 END: 1/18/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.621162, -80.922086	1 OF 1								
MATERIAL DESCRIPTION AND NOTES		GRADATION (%)										
ELEV.	DEPTHS	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	SO4 ppm
630.5	1											
629.2	2											
	3											
	4											
	5											
	6											
	7											
623.0												
@ 7.0' - 7.5': Asphalt and Gravel Fragments												
Elevations from EOB												


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 8/2/21 16:25 - C:\PWORKING\ENGINEAS\T01D19103181820200111 MOE-7-2.21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55-TRUCK	STATION / OFFSET: 434+14, 7' LT.	EXPLORATION ID								
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-078-0-20								
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 629.1 (MSL) EOB: 7.5 ft.	PAGE								
START: 1/14/21 END: 1/14/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.621622, -80.920787	1 OF 1								
MATERIAL DESCRIPTION AND NOTES		GRADATION (%)										
ELEV.	DEPTHS	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	SO4 ppm
629.1	1											
627.6	2											
	3											
	4											
	5											
	6											
	7											
624.6												
621.6												
Elevations from EOB												

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT.GDT - 8/2/21 16:25 - C:\PWORKING\ENGINEAS\T01D19103181820200111 MOE-7-2.21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY	
	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
65	68
SHEET	TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-077-0-20 & B-078-0-20

MOE-7-2.21

MODEL: Sheet PAPER: 9/3/2021 6:41:59 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	STATION / OFFSET: 437+72, 6' RT.	EXPLORATION ID: B-079-0-20
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	ALIGNMENT: SR 7	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	ELEVATION: 627.4 (MSL) EOB: 7.5 ft.	PAGE 1 OF 1
START: 1/18/21 END: 1/18/21	SAMPLING METHOD: SPT	LAT / LONG: 39.621955, -80.919428	
MATERIAL DESCRIPTION AND NOTES			
8.5 inches Asphalt	ELEV: 627.4	GRADATION (%)	ATTERBERG
8 inches Concrete	626.0	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI) SO4 ppm
MEDIUM DENSE, BROWN, COARSE AND FINE SAND, LITTLE GRAVEL, LITTLE SILT, TRACE CLAY, DAMP		20 25 32 18 5 NP NP NP 6	A-3a (0) <100
STIFF, DARK BROWN TRACE REDDISH-BROWN AND GRAY, SILTY CLAY, SOME SAND, DAMP	622.9	- - - - - - - - - - - - - - - -	A-3a (V) -
		3 4 5 3 4 5 3 4 6	A-6b (V) -
	619.9	0 9 17 34 40 20 20 18	A-6b (12) -
	EOB		


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:26 - C:\P\WORKING\ENGINEERING\AS101D19103181820200111 MOE-7-2.21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	STATION / OFFSET: 441+71, 7' LT.	EXPLORATION ID: B-080-0-20
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	ALIGNMENT: SR 7	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	ELEVATION: 627.4 (MSL) EOB: 7.5 ft.	PAGE 1 OF 1
START: 1/14/21 END: 1/14/21	SAMPLING METHOD: SPT	LAT / LONG: 39.622280, -80.918074	
MATERIAL DESCRIPTION AND NOTES			
8 inches Asphalt	ELEV: 627.4	GRADATION (%)	ATTERBERG
8 inches Concrete	626.1	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI) SO4 ppm
VERY STIFF, DARK BROWN TRACE GRAY, SILTY CLAY, TRACE GRAVEL, SOME SAND, DAMP		- - - - - - - - - - - - - - - -	A-6b (V) -
STIFF, RED-BROWN AND BROWN, CLAY, "AND" SILT, LITTLE SAND, DAMP	622.9	5 14 20 30 31 37 19 18 15	A-6b (8) <100
		8 8 9 6 6 7 4 5 6 6 5 6	A-7-6 (V) -
	619.9	0 6 11 36 47 48 24 23	A-7-6 (15) -
	EOB		

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:26 - C:\P\WORKING\ENGINEERING\AS101D19103181820200111 MOE-7-2.21 BORING LOGS.GPJ

NOTES: SS-2 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY	
	
DESIGNER	DCM
REVIEWER	DMV 09/03/21
PROJECT ID	109278
SUBSET	TOTAL
66	68
SHEET	TOTAL

SOIL PROFILE - ROADWAY
BORING LOGS B-079-0-20 & B-080-0-20

MOE-7-2.21

MODEL: Sheet PAPER: 9/3/2021 10:04:39 AM DATE: 9/3/2021 TIME: 6:41:39 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 445+77, 6' RT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-081-0-20	
PID: 109278_SFN:	DRILLING METHOD: 3" SAMPLER	CALIBRATION DATE: 11/20/19	ELEVATION: 634.1 (MSL) EOB: 8.0 ft.	PAGE	
START: 1/18/21 END: 1/18/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.622468, -80.916653	1 OF 1	
MATERIAL DESCRIPTION AND NOTES					
9 inches Asphalt 12 inches Concrete	ELEV: 634.1	SPT / RQD	GRADATION (%)	ATTERBERG	
		DEPTHS	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)	
		1			SO4 ppm
		2			BACK FILL
MEDIUM DENSE, BROWN, GRAVEL WITH SAND LITTLE SILT, TRACE CLAY, DAMP	ELEV: 632.4	7 6 7	23 28 34 12 3 NP NP NP	7	A-1-b (0)
		3			
		4			
		5			
MEDIUM DENSE TO DENSE, BROWN, GRAVEL WITH SAND AND SILT TRACE CLAY, DAMP	ELEV: 629.1	5 6 6			7
		38			
		23			
		16			
		5 5 3			9
		5 5 3			10
		8			10
		EOB			


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:26 - C:\P\WORKING\ENGINEERING\AS101D19103181820200111 MOE-7-2.21 BORING LOGS.GPJ

NOTES: REBAR IN CONCRETE PREVENTED PENETRATION OF FLIGHT AUGER. 3" SAMPLER WAS USED TO ADVANCE BORING.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 450+48, 6' LT.	EXPLORATION ID	
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-082-0-20	
PID: 109278_SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 650.8 (MSL) EOB: 7.5 ft.	PAGE	
START: 1/14/21 END: 1/14/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.622673, -80.915001	1 OF 1	
MATERIAL DESCRIPTION AND NOTES					
10 inches Asphalt 8 inches Concrete	ELEV: 650.8	SPT / RQD	GRADATION (%)	ATTERBERG	
		DEPTHS	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)	
		1			SO4 ppm
		2			BACK FILL
MEDIUM DENSE, BROWN, COARSE AND FINE SAND, TRACE GRAVEL, TRACE SILT, TRACE CLAY, DAMP	ELEV: 649.3	8 10 11	5 43 40 9 3 NP NP NP	4	A-3a (0)
		6 4 4			
		4 4 4			
		4 4 4			
MEDIUM DENSE BROWN, GRAVEL AND/OR STONE FRAGMENTS WITH SAND TRACE SILT, TRACE CLAY, DAMP	ELEV: 646.3	4 3 4			5
		3 4 4			
		6 4 6			9
		6 4 6			9
		7			
		EOB			

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:26 - C:\P\WORKING\ENGINEERING\AS101D19103181820200111 MOE-7-2.21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY

 DESIGNER: DCM
 REVIEWER: DMV 09/03/21
 PROJECT ID: 109278
 SUBSET TOTAL: 67 68
 SHEET TOTAL: 67 68

**SOIL PROFILE - ROADWAY
 BORING LOGS B-081-0-20 & B-082-0-20**

MOE-7-2.21

MODEL: Sheet PAPER: 9/3/2021 10:02:11 AM DATE: 9/3/2021 TIME: 6:41:58 PM USER: SKIRK
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PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 454+46, 6' RT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-083-0-20
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 662.1 (MSL) EOB: 7.5 ft.	PAGE
START: 1/13/21 END: 1/13/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.622710, -80.913588	1 OF 1
MATERIAL DESCRIPTION AND NOTES				
9 inches Asphalt	ELEV: 662.1	REC SAMPLE ID	GRADATION (%)	ATTERBERG
8 inches Concrete	660.7	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
MEDIUM DENSE, BROWN, GRAVEL WITH SAND		21	43 22 20 12 3 NP NP NP 5	A-1-b (0)
LITTLE SILT, TRACE CLAY, DAMP		13	- - - - - - - - -	A-1-b (V)
		17	- - - - - - - - -	A-1-b (V)
		14	48 15 27 8 2 NP NP NP 6	A-1-b (0)
	654.6			


STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:26 - C:\P\WORKING\ENGINEAS\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: SS-1 SAMPLE QUANTITY SUPPLEMENTED WITH GRAB SAMPLE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PROJECT: MOE-7-02.21	DRILLING FIRM / OPERATOR: CENTRAL STAR / TS	DRILL RIG: CME 55- TRUCK	STATION / OFFSET: 458+51, 6' LT.	EXPLORATION ID
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: HDR / DM	HAMMER: CME AUTOMATIC	ALIGNMENT: SR 7	B-084-0-20
PID: 109278 SFN:	DRILLING METHOD: 5.5" FLIGHT AUGER	CALIBRATION DATE: 11/20/19	ELEVATION: 667.1 (MSL) EOB: 7.5 ft.	PAGE
START: 1/14/21 END: 1/14/21	SAMPLING METHOD: SPT	ENERGY RATIO (%): 84	LAT / LONG: 39.622742, -80.912153	1 OF 1
MATERIAL DESCRIPTION AND NOTES				
10 inches Asphalt	ELEV: 667.1	REC SAMPLE ID	GRADATION (%)	ATTERBERG
8 inches Concrete	665.6	N ₆₀ (%)	GR CS FS SI CL LL PL PI WC	ODOT CLASS (GI)
MEDIUM DENSE, BROWN, GRAVEL WITH SAND		14	- - - - - - - - -	A-1-b (V)
LITTLE TO TRACE SILT, TRACE CLAY, LITTLE		15	- - - - - - - - -	A-1-b (0)
ROUNDED GRAVEL		14	49 18 18 11 4 NP NP NP 7	A-1-b (V)
		18	- - - - - - - - -	A-1-b (0)
	659.6		38 28 21 9 4 NP NP NP 9	A-1-b (0)

STANDARD ODOT LOG W/ SULFATES (8.5 X 11) - OH DOT GDT - 8/2/21 16:26 - C:\P\WORKING\ENGINEAS\T01D\19103181820200111 MOE-7-2-21 BORING LOGS.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

DESIGN AGENCY		
DESIGNER		
REVIEWER	DCM	
PROJECT ID	DMV	09/03/21
SUBSET	TOTAL	
68	68	
SHEET	TOTAL	

SOIL PROFILE - ROADWAY
BORING LOGS B-083-0-20 & B-084-0-20