

PROJECT DESCRIPTION

THIS PROJECT ROS-US23/SR159 INTERCHANGE TP 26 (PID NO. 122886) FOR TRUCK PARKING SITE #7 IS LOCATED AT THE INTERCHANGE OF U.S. 23 AND S.R. 159 IN ROSS COUNTY, OHIO. THE PROJECT AIMS TO DEVELOP CONSTRUCTION PLANS FOR A NEW TRUCK PARKING LOT AND ASSOCIATED FACILITIES DESIGNED TO ACCOMMODATE WB-67 TRUCKS.

HISTORIC RECORDS

ACCORDING TO ODOT’S TRANSPORTATION INFORMATION MAPPING SYSTEM (TIMS), VARIOUS SETS OF REPORTS/PLANS WERE AVAILABLE FOR REVIEW AND EVALUATION. HISTORICAL SOIL BORINGS ASSOCIATED WITH THE PROJECTS WERE REVIEWED; HOWEVER, THEY WERE NOT UTILIZED FOR THE CURRENT DESIGN.

GEOLOGY

THE PROJECT SITE IS LOCATED WITHIN THE COLUMBUS LOWLAND TILL PLAINS, A SUBDIVISION OF THE SOUTHERN OHIO LOAMY TILL PLAIN. BASED ON THE QUATERNARY GEOLOGY MAP OF OHIO, THE OVERBURDEN SOILS ARE GENERALLY MADE UP OF ALLUVIUM AND ALLUVIAL TERRACES, DEPOSITED IN PRESENT AND FORMER FLOODPLAINS RANGES FROM SILTY CLAY IN AREAS OF FINE-GRAINED DEPOSITS TO COARSE SAND, GRAVEL, OR COBBLES IN AREAS OF SHALLOW BEDROCK. BASED ON THE BEDROCK GEOLOGIC UNITS MAP OF OHIO (USGS & ODGS, 2006), BEDROCK WITHIN THE PROJECT AREA CONSISTS OF SHALE OF THE OHIO SHALE GROUP. THIS GROUP IS OF DEVONIAN-AGE.

RECONNAISSANCE

A FIELD RECONNAISSANCE VISIT WAS CONDUCTED BY NEAS PERSONNEL ON SEPETEMBER 02, 2025. THE PROJECT IS LOCATED AT INTERCHANGE OF U.S. 23 AND S.R. 159. THE ADJACENT LAND USAGE WAS NOTED TO CONSIST MAINLY OF ODOT ROW (RIGHT OF WAY) AND AGRICULTURAL FARMLAND. IN GENERAL, THE PAVEMENT CONDITIONS WITHIN THE PROJECT AREA WERE OBSERVED TO BE IN FAIR TO POOR CONDITION, EXHIBITING SOME SIGNS OF WEATHERING AND SURFACE WEAR. EXTENSIVE HIGH SEVERITY LONGITUDINAL, BLOCK, TRANSVERSE, AND EDGE CRACKING WERE OBSERVED, WITH FREQUENT HIGH SEVERITY RAVELING ALONG THE OVERBRIDGE ROAD. OVERBRIDGE ROAD SLOPES EAST TOWARD S.R. 159, WITH DRAINAGE DIRECTED INTO DITCHES ON BOTH SIDES OF THE ROADWAY. ALL DRAINAGE DITCHES OBSERVED DURING THE SITE VISIT WERE CLEAR AND FREE OF STANDING WATER. EMBANKMENTS ALONG OVERBRIDGE ROAD AND S.R. 159 EXHIBIT SIDE SLOPES OF APPROXIMATELY 2H:1V TOWARD BOTH ROADWAYS. THE TRUCK PARKING AREA WAS COVERED WITH TALL GRASSES, SHRUBS, AND YOUNG TO MEDIUM- AGED DECIDUOUS TREES. THE TERRAIN NEAR B-005-0-25 REPRESENT THE HIGHEST ELEVATION WITHIN THE PROJECT AREA, GRADUALLY SLOPING DOWNWARD IN ALL DIRECTIONS FROM THAT POINT. NO SIGNS OF GEOTECHNICAL INSTABILITY WERE PRESENT AT THE TIME OF RECONNAISSANCE.

SUBSURFACE EXPLORATION

THE SUBSURFACE EXPLORATION WAS CONDUCTED BY NEAS ON AUGUST 27, 2025, WHICH INCLUDED 6 BORINGS DRILLED TO DEPTHS OF 7.5 FT BELOW GROUND SURFACE (BGS). BORINGS WERE DRILLED USING A CME 45B TRUCK-MOUNTED DRILLING RIGS UTILIZING 2.25- INCH (INNER DIAMETER) HOLLOW STEM AUGERS. SOIL SAMPLES FOR SUBGRADE BORINGS WERE TYPICALLY RECOVERED CONTINUOUSLY TO END OF BORING DEPTH (EOB). EACH BORING WAS SAMPLED USING AN 18-INCH SPLIT SPOON SAMPLER (AASHTO T-206 “STANDARD METHOD FOR PENETRATION TEST AND SPLIT BARREL SAMPLING OF SOILS.”). THE SOIL SAMPLES OBTAINED FROM THE EXPLORATION PROGRAM WERE VISUALLY OBSERVED IN THE FIELD BY NEAS FIELD REPRESENTATIVE AND PRESERVED FOR REVIEW BY A GEOLOGIST FOR POSSIBLE LABORATORY TESTING. STANDARD PENETRATION TESTS (SPT) WERE CONDUCTED USING A CME AUTO HAMMER THAT HAS BEEN CALIBRATED ON MARCH 08, 2024, TO BE 79 % EFFICIENT.

EXPLORATION FINDINGS

THE SUBGRADE CONDITIONS IN THE PROJECT AREA ARE RELATIVELY CONSISTENT, CONSISTING PRIMARILY OF COHESIVE FINE-GRAINED AND COHESIVE COARSE-GRAINED SOILS, WITH MINOR OCCURRENCES OF GRANULAR SOILS. THE COHESIVE FINE-GRAINED SOILS ARE CLASSIFIED AS A-4b, A-6a, A-6b, AND A-7-6, WHILE THE COHESIVE COARSE-GRAINED SOILS ARE DESCRIBED AS A-4a. THE GRANULAR SOILS ARE CLASSIFIED AS A-1-b AND A-2-4.

SPECIFICATIONS

THIS GEOTECHNICAL EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING, SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED JULY 2025 .

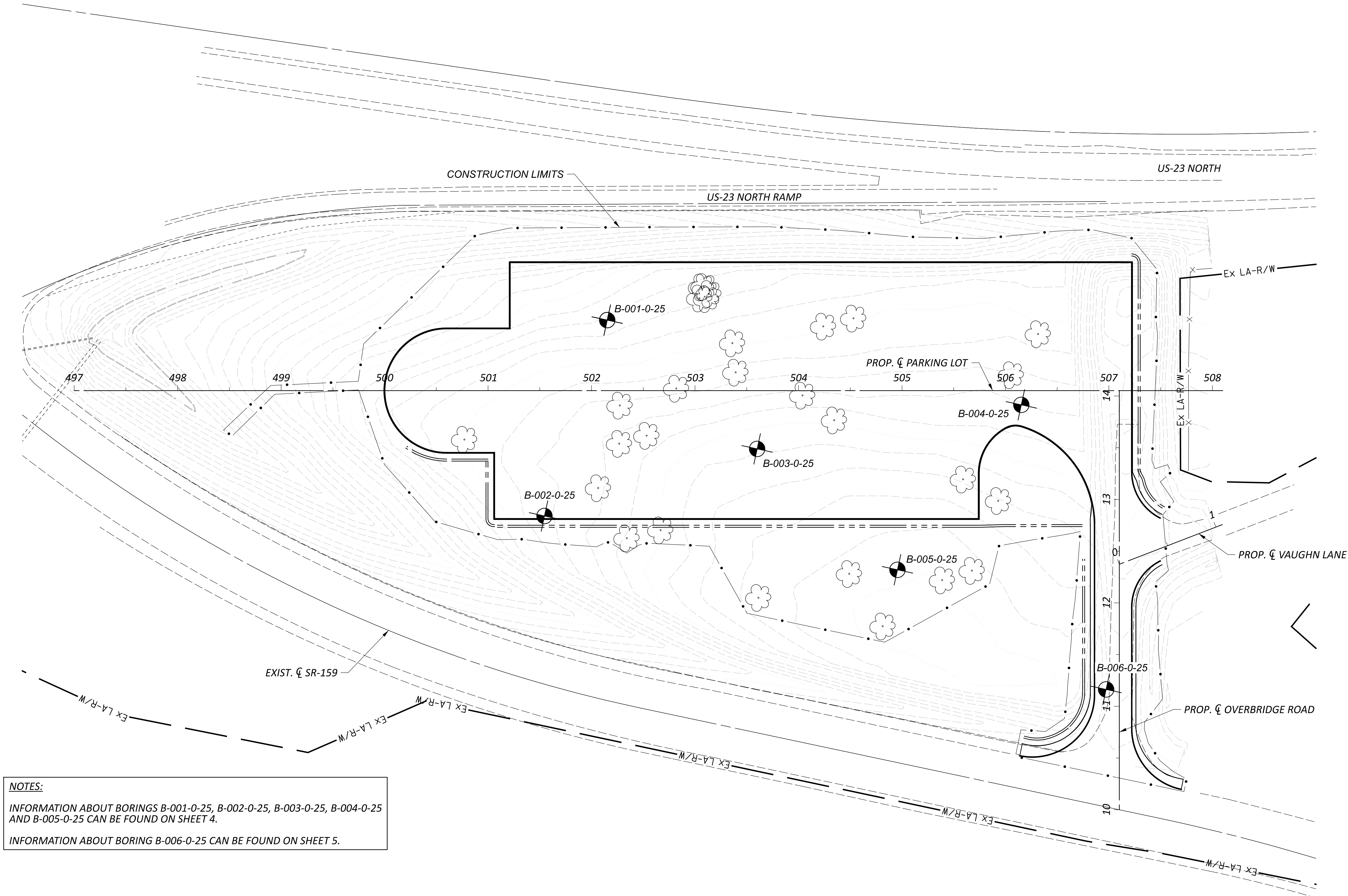
AVAILABLE INFORMATION

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

ROS-US23/SR159 INTERCHANGE TP 26

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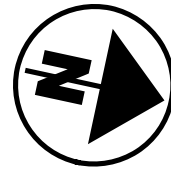
SUMMARY OF SOIL TEST DATA PARKING LOT															
EXPLORATION NO., STATION & OFFSET	FROM	TO	SAMPLE ID	% REC	HP tsf	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ppm SO4
B-001-0-25 STA. 502+15, 68' LT. LATITUDE = 39.390657 LONGITUDE = -82.969201	00.00	- 01.50	SS-1	21	4.5	4	7	15	34	40	47	21	26	15	A-7-6 (16) 0
	01.50	- 03.00	SS-2	30	4.5	9	13	22	42	14	22	16	6	12	A-4a (4) -
	03.00	- 04.50	SS-3	25	3.5				SAME AS SS-2					12	A-4a (VISUAL) -
	04.50	- 06.00	SS-4	34	4.5				SAME AS SS-2					14	A-4a (VISUAL) -
	06.00	- 07.50	SS-5	30	100	-		BROWN, GRAVEL WITH SAND, LITTLE SILT, TRACE CLAY						5	A-1-b (VISUAL) -
B-002-0-25 STA. 501+55, 121' RT. LATITUDE = 39.390603 LONGITUDE = -82.968501	00.00	- 01.50	SS-1	36	-	19	18	15	34	14	27	19	8	6	A-4a (3) 7
	01.50	- 03.00	SS-2	12	-	17	22	21	27	13	27	19	8	7	A-4a (1) -
	03.00	- 04.50	SS-3	9	-				SAME AS SS-2					15	A-4a (VISUAL) -
	04.50	- 06.00	SS-4	8	-				SAME AS SS-2					16	A-4a (VISUAL) -
	06.00	- 07.50	SS-5	12	39	-		BROWN, GRAVEL WITH SAND, LITTLE SILT, TRACE CLAY						9	A-1-b (VISUAL) -
B-003-0-25 STA. 503+60, 56' RT. LATITUDE = 39.391118 LONGITUDE = -82.968878	00.00	- 01.50	SS-1	68	4.5	17	16	13	36	18	33	21	12	7	A-6a (5) 7
	01.50	- 03.00	SS-2	43	4.5	13	8	11	44	24	32	19	13	13	A-6a (8) -
	03.00	- 04.50	SS-3	71	4				SAME AS SS-2					18	A-6a (VISUAL) -
	04.50	- 06.00	SS-4	14	3.5			BROWN, SILTY CLAY, LITTLE SAND, TRACE GRAVEL						23	A-6b (VISUAL) -
	06.00	- 07.50	SS-5	24	100	4.5		BROWN, SANDY SILT, LITTLE CLAY, TRACE GRAVEL						11	A-4a (VISUAL) -
B-004-0-25 STA. 506+15, 14' RT. LATITUDE = 39.391778 LONGITUDE = -82.969216	00.00	- 01.50	SS-1	12	4.5	0	2	6	65	27	31	21	10	15	A-4b (8) 0
	01.50	- 03.00	SS-2	18	4.5	1	7	16	42	34	47	21	26	19	A-7-6 (16) -
	03.00	- 04.50	SS-3	14	4.5				SAME AS SS-2					17	A-7-6 (VISUAL) -
	04.50	- 06.00	SS-4	12	100	4.25		BROWN, SILT AND CLAY, LITTLE SAND, TRACE GRAVEL						19	A-6a (VISUAL) -
	06.00	- 07.50	SS-5	42	100	4.5		LIGHT BROWN, SANDY SILT, LITTLE CLAY, TRACE GRAVEL						13	A-4a (VISUAL) -
B-005-0-25 STA. 504+96, 173' RT. LATITUDE = 39.391549 LONGITUDE = -82.968575	00.00	- 01.50	SS-1	53	-	40	20	13	18	9	NP	NP	NP	6	A-2-4 (0) 320
	01.50	- 03.00	SS-2	28	4.5	0	3	9	65	23	32	22	10	12	A-4b (8) -
	03.00	- 04.50	SS-3	22	4.5				SAME AS SS-2					15	A-4b (VISUAL) -
	04.50	- 06.00	SS-4	16	100	4.5		BROWN, SILT AND CLAY, LITTLE SAND, TRACE GRAVEL						20	A-6a (VISUAL) -
	06.00	- 07.50	SS-5	37	100	4.5		BROWN, SILT AND CLAY, LITTLE SAND, TRACE GRAVEL						10	A-6a (VISUAL) -
SUMMARY OF SOIL TEST DATA OVERBRIDGE ROAD															
EXPLORATION NO., STATION & OFFSET	FROM	TO	SAMPLE ID	% REC	HP tsf	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ppm SO4
B-006-0-25 STA. 11+16, 13' LT. LATITUDE = 39.392157 LONGITUDE = -82.968325	00.00	- 01.50	SS-1	21	4.5	10	12	19	33	26	36	18	18	13	A-6b (8) 40
	01.50	- 03.00	SS-2	8	2.75	0	1	4	70	25	43	21	22	24	A-7-6 (13) -
	03.00	- 04.50	SS-3	4	100	2.25			SAME AS SS-2					24	A-7-6 (VISUAL) -
	04.50	- 06.00	SS-4	9	100	-		BROWN, GRAVEL WITH SAND AND SILT, TRACE CLAY						12	A-2-4 (VISUAL) -
	06.00	- 07.50	SS-5	12	100	-		BROWN, GRAVEL WITH SAND AND SILT, TRACE CLAY						13	A-2-4 (VISUAL) -



NOTES:

INFORMATION ABOUT BORINGS B-001-0-25, B-002-0-25, B-003-0-25, B-004-0-25 AND B-005-0-25 CAN BE FOUND ON SHEET 4.

INFORMATION ABOUT BORING B-006-0-25 CAN BE FOUND ON SHEET 5.



GEOTECHNICAL PROFILE - ROADWAY
PARKING LOT 7 - STA. 497+00 TO END

DESIGN AGENCY



DESIGNER

RS

REVIEWER

CH 01/12/25

PROJECT ID

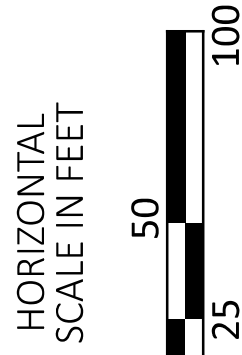
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SUBSET TOTAL

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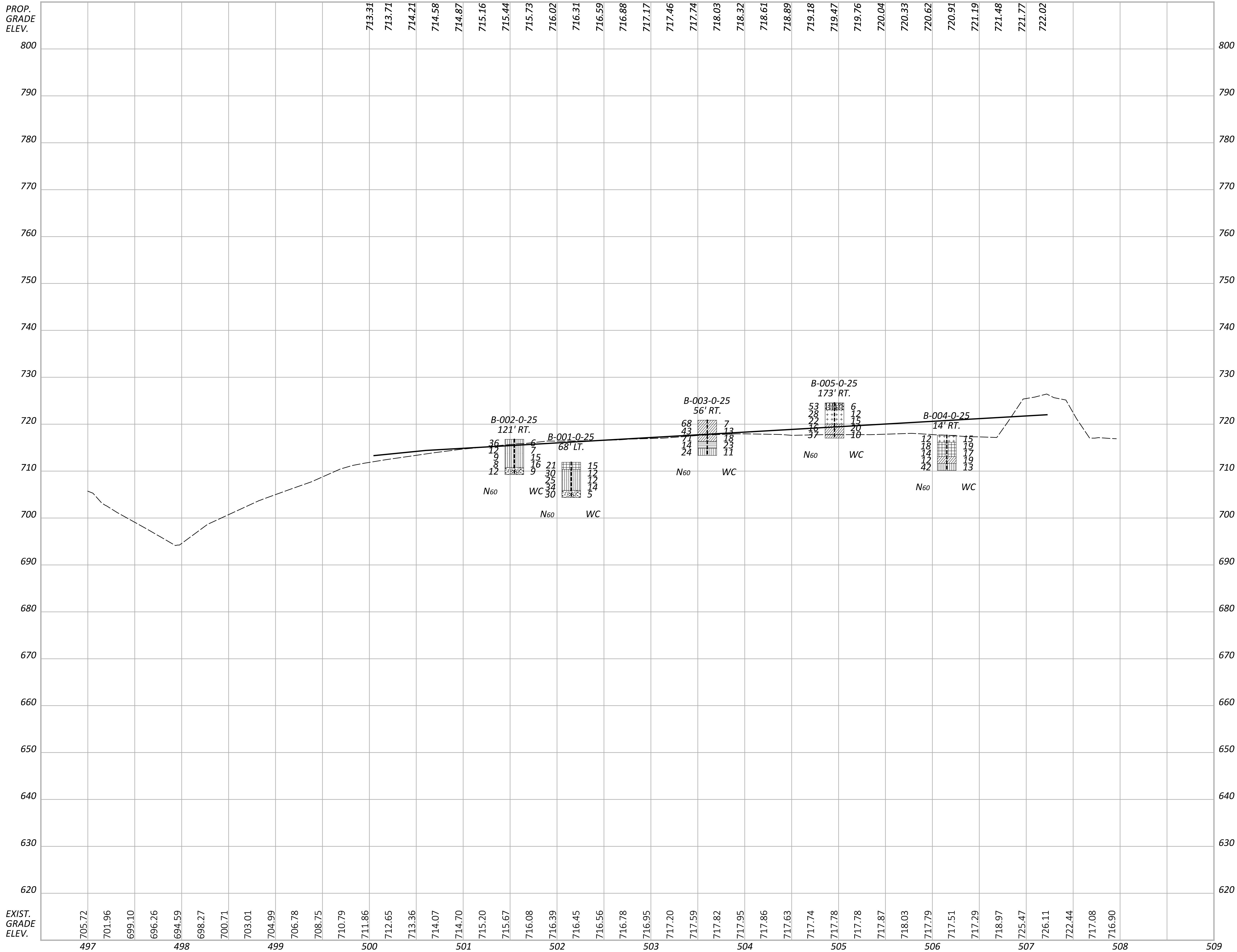
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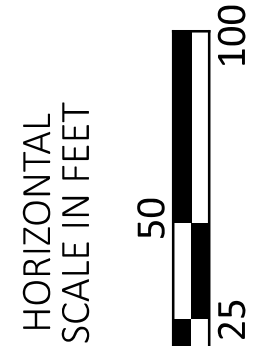


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GEOTECHNICAL PROFILE - ROADWAY
PARKING LOT 7 - STA. 497+00 TO END



DESIGN AGENCY



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DESIGNER

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REVIEWER

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PROJECT ID

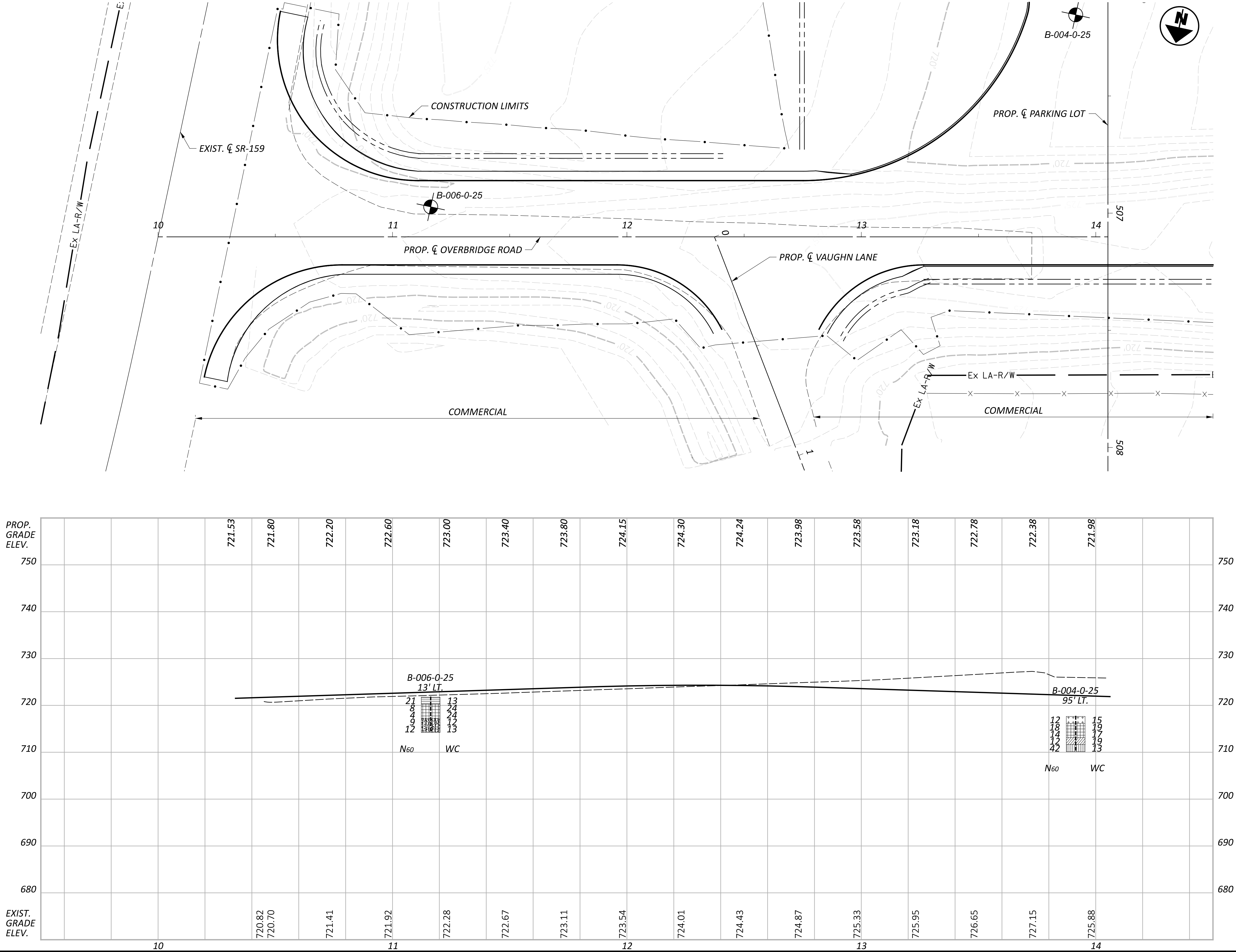
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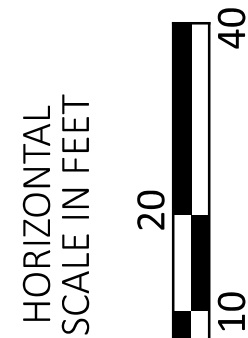
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SHEET TOTAL

P.44 45



GEOTECHNICAL PROFILE - ROADWAY
OVERBRIDGE ROAD - STA. 10+00 TO END



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PROJECT ID

122886

SUBSET TOTAL

5 5

SHEET TOTAL

P.45 45