

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2514C	1	138
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34442.1.2		P.E.	
		RAW & UTIL.	

NOTE: SEE SHEET 2A FOR PLAN SHEET LAYOUT AT TIME OF INVESTIGATION

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
GEOTECHNICAL ENGINEERING UNIT

ROADWAY  
SUBSURFACE INVESTIGATION

PROJ. REFERENCE NO. 34442.1.2 (R-2514C) F.A. PROJ. \_\_\_\_\_  
COUNTY JONES  
PROJECT DESCRIPTION US 17 FROM NORTH OF MAYSVILLE TO SOUTH OF NC 58

INVENTORY

CONTENTS

LINE	STATION	PLAN	PROFILE
-L-	10+00 TO 300+00	4-25	28-38
-LBUS-	10+00 TO 14+26	4	39
-Y-	24+24 TO 25+40	19	40
-YA-	10+00 TO 11+78	27	42
-YI-	14+10 TO 21+23	20,27	41
-YIA-	10+00 TO 14+79	27	42
-Y2-	13+87 TO 15+08	23	43
-Y2-	19+31 TO 20+54	22-23	43
-DRVI-	10+00 TO 19+00	26	44
-DRV2-	10+00 TO 13+11	9	45
-DRV2A-	10+00 TO 10+88	9	46

CROSS SECTIONS

LINE	STATION	SHEET
-L-	21+00 TO 22+50	47-50
-L-	29+50 TO 31+00	51-54
-L-	32+00 TO 34+00	55-59
-L-	43+50 TO 47+00	60-67
-L-	78+50 TO 82+05	68-75
-L-	86+00 TO 87+15	76-78
-L-	160+00	79
-L-	161+00	80
-L-	162+50 TO 172+50	81-97
-L-	173+50 TO 175+25	97-100
-L-	176+00 TO 176+50	101
-L-	177+50 TO 179+00	102-104
-L-	180+00 TO 181+50	105-107
-L-	183+00 TO 186+00	108-112
-L-	187+00 TO 187+50	113
-L-	230+95 TO 241+50	114-122
-LBUS-	11+07 TO 13+00	123-124
-Y-	24+80 TO 25+15	125
-YI-	15+49 TO 21+23	126-128
-YIA-	10+00 TO 14+00	129-131
-Y2-	14+18 TO 14+49	132
-Y2-	19+90 TO 20+21	132
-DRVI-	10+45 TO 18+30	133-136
-DRVI-	18+96	136
-DRV2-	10+50 TO 11+00	137
-DRV2A-	10+14 TO 10+50	138

APPENDIX 1

APPENDIX 1	SHEET
CPT LOGS	I-60

CAUTION NOTICE

THE SUBSURFACE INFORMATION AND THE SUBSURFACE INVESTIGATION ON WHICH IT IS BASED WERE MADE FOR THE PURPOSE OF STUDY, PLANNING, AND DESIGN, AND NOT FOR CONSTRUCTION OR PAY PURPOSES. THE VARIOUS FIELD BORING LOGS, ROCK CORES, AND SOIL TEST DATA AVAILABLE MAY BE REVIEWED OR INSPECTED IN RALEIGH BY CONTACTING THE N. C. DEPARTMENT OF TRANSPORTATION, GEOTECHNICAL ENGINEERING UNIT AT (919) 707-6850. NEITHER THE SUBSURFACE PLANS AND REPORTS, NOR THE FIELD BORING LOGS, ROCK CORES, OR SOIL TEST DATA ARE PART OF THE CONTRACT.

GENERAL SOIL AND ROCK STRATA DESCRIPTIONS AND INDICATED BOUNDARIES ARE BASED ON A GEOTECHNICAL INTERPRETATION OF ALL AVAILABLE SUBSURFACE DATA AND MAY NOT NECESSARILY REFLECT THE ACTUAL SUBSURFACE CONDITIONS BETWEEN BORINGS OR BETWEEN SAMPLED STRATA WITHIN THE BOREHOLE. THE LABORATORY SAMPLE DATA AND THE IN SITU (IN-PLACE) TEST DATA CAN BE RELIED ON ONLY TO THE DEGREE OF RELIABILITY INHERENT IN THE STANDARD TEST METHOD. THE OBSERVED WATER LEVELS OR SOIL MOISTURE CONDITIONS INDICATED IN THE SUBSURFACE INVESTIGATIONS ARE AS RECORDED AT THE TIME OF THE INVESTIGATION. THESE WATER LEVELS OR SOIL MOISTURE CONDITIONS MAY VARY CONSIDERABLY WITH TIME ACCORDING TO CLIMATIC CONDITIONS INCLUDING TEMPERATURES, PRECIPITATION, AND WIND, AS WELL AS OTHER NON-CLIMATIC FACTORS.

THE BIDDER OR CONTRACTOR IS CAUTIONED THAT DETAILS SHOWN ON THE SUBSURFACE PLANS ARE PRELIMINARY ONLY AND IN MANY CASES THE FINAL DESIGN DETAILS ARE DIFFERENT. FOR BIDDING AND CONSTRUCTION PURPOSES, REFER TO THE CONSTRUCTION PLANS AND DOCUMENTS FOR FINAL DESIGN INFORMATION ON THIS PROJECT. THE DEPARTMENT DOES NOT WARRANT OR GUARANTEE THE SUFFICIENCY OR ACCURACY OF THE INVESTIGATION MADE, NOR THE INTERPRETATIONS MADE, OR OPINION OF THE DEPARTMENT AS TO THE TYPE OF MATERIALS AND CONDITIONS TO BE ENCOUNTERED. THE BIDDER OR CONTRACTOR IS CAUTIONED TO MAKE SUCH INDEPENDENT SUBSURFACE INVESTIGATIONS AS HE DEEMS NECESSARY TO SATISFY HIMSELF AS TO CONDITIONS TO BE ENCOUNTERED ON THIS PROJECT. THE CONTRACTOR SHALL HAVE NO CLAIM FOR ADDITIONAL COMPENSATION OR FOR AN EXTENSION OF TIME FOR ANY REASON RESULTING FROM THE ACTUAL CONDITIONS ENCOUNTERED AT THE SITE DIFFERING FROM THOSE INDICATED IN THE SUBSURFACE INFORMATION.

PERSONNEL

JRS

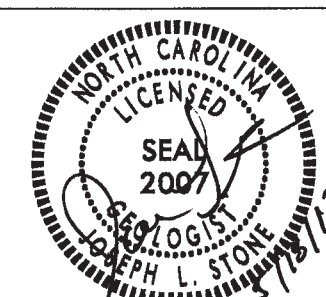
CATLIN

INVESTIGATED BY J.L. STONE

CHECKED BY D.N. ARGENBRIGHT

SUBMITTED BY D.N. ARGENBRIGHT

DATE APRIL 2012



CONTRACT: 34442.1.2 ID: R-2514C

DRAWN BY: C.P. TURNER

NOTE - THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N. C. DEPARTMENT OF TRANSPORTATION AS BEING ACCURATE NOR IT IS CONSIDERED TO BE PART OF THE PLANS, SPECIFICATIONS, OR CONTRACT FOR THE PROJECT.

NOTE - BY HAVING REQUESTED THIS INFORMATION THE CONTRACTOR SPECIFICALLY WAIVES ANY CLAIMS FOR INCREASED COMPENSATION OR EXTENSION OF TIME BASED ON DIFFERENCES BETWEEN THE CONDITIONS INDICATED HEREIN AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**  
**GEOTECHNICAL ENGINEERING UNIT**

PROJECT REFERENCE NO. R-2514C	SHEET NO. 2
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**SUBSURFACE INVESTIGATION**

**SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS**

SOIL DESCRIPTION		GRADATION		ROCK DESCRIPTION		TERMS AND DEFINITIONS																																																																																																																																																																																																																																																			
<p>SOIL IS CONSIDERED TO BE THE UNCONSOLIDATED, SEMI-CONSOLIDATED, OR WEATHERED EARTH MATERIALS THAT CAN BE PENETRATED WITH A CONTINUOUS FLIGHT POWER AUGER, AND YIELD LESS THAN 100 BLOWS PER FOOT ACCORDING TO STANDARD PENETRATION TEST (ASTM D-1586). SOIL CLASSIFICATION IS BASED ON THE AASHTO SYSTEM. BASIC DESCRIPTIONS GENERALLY SHALL INCLUDE: CONSISTENCY, COLOR, TEXTURE, MOISTURE, AASHTO CLASSIFICATION, AND OTHER PERTINENT FACTORS SUCH AS MINERALOGICAL COMPOSITION, ANGULARITY, STRUCTURE, PLASTICITY, ETC. EXAMPLE:</p> <p align="center"><i>VERY STIFF, GRAY, SILTY CLAY, MOST WITH INTERBEDDED FINE SAND LAYERS, HIGHLY PLASTIC, A-7-6</i></p>		<p><b>WELL GRADED</b> - INDICATES A GOOD REPRESENTATION OF PARTICLE SIZES FROM FINE TO COARSE. UNIFORM - INDICATES THAT SOIL PARTICLES ARE ALL APPROXIMATELY THE SAME SIZE. (ALSO POORLY GRADED)</p> <p><b>GAP-GRADED</b> - INDICATES A MIXTURE OF UNIFORM PARTICLES OF TWO OR MORE SIZES.</p> <p align="center"><b>ANGULARITY OF GRAINS</b></p> <p>THE ANGULARITY OR ROUNDNESS OF SOIL GRAINS IS DESIGNATED BY THE TERMS: <b>ANGULAR</b>, <b>SUBANGULAR</b>, <b>SUBROUNDED</b>, OR <b>ROUNDED</b>.</p>		<p>HARD ROCK IS NON-COASTAL PLAIN MATERIAL THAT IF TESTED, WOULD YIELD SPT REFUSAL. AN INFERRED ROCK LINE INDICATES THE LEVEL, AT WHICH NON-COASTAL PLAIN MATERIAL WOULD YIELD SPT REFUSAL. SPT REFUSAL IS PENETRATION BY A SPLIT SPOON SAMPLER EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS. IN NON-COASTAL PLAIN MATERIAL, THE TRANSITION BETWEEN SOIL AND ROCK IS OFTEN REPRESENTED BY A ZONE OF WEATHERED ROCK. ROCK MATERIALS ARE TYPICALLY DIVIDED AS FOLLOWS:</p>		<p><b>ALLUVIUM (ALLUV.)</b> - SOILS THAT HAVE BEEN TRANSPORTED BY WATER.</p> <p><b>AQUIFER</b> - A WATER BEARING FORMATION OR STRATA.</p> <p><b>ARENACEOUS</b> - APPLIED TO ROCKS THAT HAVE BEEN DERIVED FROM SAND OR THAT CONTAIN SAND.</p> <p><b>ARGILLACEOUS</b> - APPLIED TO ALL ROCKS OR SUBSTANCES COMPOSED OF CLAY MINERALS, OR HAVING A NOTABLE PROPORTION OF CLAY IN THEIR COMPOSITION, AS SHALE, SLATE, ETC.</p> <p><b>ARTESIAN</b> - GROUND WATER THAT IS UNDER SUFFICIENT PRESSURE TO RISE ABOVE THE LEVEL AT WHICH IT IS ENCOUNTERED, BUT WHICH DOES NOT NECESSARILY RISE TO OR ABOVE THE GROUND SURFACE.</p> <p><b>CALCAREOUS (CALC.)</b> - SOILS THAT CONTAIN APPRECIABLE AMOUNTS OF CALCIUM CARBONATE.</p> <p><b>COLLUVIUM</b> - ROCK FRAGMENTS MIXED WITH SOIL DEPOSITED BY GRAVITY ON SLOPE OR AT BOTTOM OF SLOPE.</p> <p><b>CORE RECOVERY (REC.)</b> - TOTAL LENGTH OF ALL MATERIAL RECOVERED IN THE CORE BARREL DIVIDED BY TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.</p> <p><b>DIKE</b> - A TABULAR BODY OF IGNEOUS ROCK THAT CUTS ACROSS THE STRUCTURE OF ADJACENT ROCKS OR CUTS MASSIVE ROCK.</p> <p><b>DIP</b> - THE ANGLE AT WHICH A STRATUM OR ANY PLANAR FEATURE IS INCLINED FROM THE HORIZONTAL.</p> <p><b>DIP DIRECTION (DIP AZIMUTH)</b> - THE DIRECTION OR BEARING OF THE HORIZONTAL TRACE OF THE LINE OF DIP, MEASURED CLOCKWISE FROM NORTH.</p> <p><b>FAULT</b> - A FRACTURE OR FRACTURE ZONE ALONG WHICH THERE HAS BEEN DISPLACEMENT OF THE SIDES RELATIVE TO ONE ANOTHER PARALLEL TO THE FRACTURE.</p> <p><b>FISSILE</b> - A PROPERTY OF SPLITTING ALONG CLOSELY SPACED PARALLEL PLANES.</p> <p><b>FLOAT</b> - ROCK FRAGMENTS ON SURFACE NEAR THEIR ORIGINAL POSITION AND DISLOADED FROM PARENT MATERIAL.</p> <p><b>FLOOD PLAIN (FP)</b> - LAND BORDERING A STREAM, BUILT OF SEDIMENTS DEPOSITED BY THE STREAM.</p> <p><b>FORMATION (FM)</b> - A MAPPABLE GEOLOGIC UNIT THAT CAN BE RECOGNIZED AND TRACED IN THE FIELD.</p> <p><b>JOINT</b> - FRACTURE IN ROCK ALONG WHICH NO APPRECIABLE MOVEMENT HAS OCCURRED.</p> <p><b>LEDGE</b> - A SHELF-LIKE RIDGE OR PROJECTION OF ROCK WHOSE THICKNESS IS SMALL COMPARED TO ITS LATERAL EXTENT.</p> <p><b>LENS</b> - A BODY OF SOIL OR ROCK THAT THINS OUT IN ONE OR MORE DIRECTIONS.</p> <p><b>MOTTLED (MOT.)</b> - IRREGULARLY MARKED WITH SPOTS OF DIFFERENT COLORS, MOTTLING IN SOILS USUALLY INDICATES POOR AERATION AND LACK OF GOOD DRAINAGE.</p> <p><b>PERCHED WATER</b> - WATER MAINTAINED ABOVE THE NORMAL GROUND WATER LEVEL BY THE PRESENCE OF AN INTERVENING IMPERVIOUS STRATUM.</p> <p><b>RESIDUAL (RES.) SOIL</b> - SOIL FORMED IN PLACE BY THE WEATHERING OF ROCK.</p> <p><b>ROCK QUALITY DESIGNATION (RQD)</b> - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.</p> <p><b>SAPROLITE (SAP.)</b> - RESIDUAL SOIL THAT RETAINS THE RELIC STRUCTURE OR FABRIC OF THE PARENT ROCK.</p> <p><b>SILL</b> - AN INTRUSIVE BODY OF IGNEOUS ROCK OF APPROXIMATELY UNIFORM THICKNESS AND RELATIVELY THIN COMPARED WITH ITS LATERAL EXTENT, THAT HAS BEEN EMPLACED PARALLEL TO THE BEDDING OR SCHISTOSITY OF THE INTRUDED ROCKS.</p> <p><b>SLICKENSIDE</b> - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR SLIP PLANE.</p> <p><b>STANDARD PENETRATION TEST (PENETRATION RESISTANCE) (SPT)</b> - NUMBER OF BLOWS IN OR BPF) OF A 140 LB. HAMMER FALLING 30 INCHES REQUIRED TO PRODUCE A PENETRATION OF 1 FOOT INTO SOIL WITH A 2 INCH OUTSIDE DIAMETER SPLIT SPOON SAMPLER. SPT REFUSAL IS PENETRATION EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS.</p> <p><b>STRATA CORE RECOVERY (SCREC.)</b> - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE.</p> <p><b>STRATA ROCK QUALITY DESIGNATION (SRQD)</b> - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS WITHIN A STRATUM EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF STRATA AND EXPRESSED AS A PERCENTAGE.</p> <p><b>TOPSOIL (TS.)</b> - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER.</p>																																																																																																																																																																																																																																																			
<p align="center"><b>SOIL LEGEND AND AASHTO CLASSIFICATION</b></p> <table border="1"> <tr> <th rowspan="2">GENERAL CLASS.</th> <th colspan="7">GRANULAR MATERIALS (&lt;= 35% PASSING #200)</th> <th colspan="7">SILT-CLAY MATERIALS (&gt; 35% PASSING #200)</th> <th colspan="3">ORGANIC MATERIALS</th> </tr> <tr> <th>A-1</th><th>A-3</th><th>A-2</th><th>A-4</th><th>A-5</th><th>A-6</th><th>A-7</th> <th>A-1, A-2</th><th>A-3</th><th>A-4, A-5</th><th>A-6, A-7</th> <th>A-1</th><th>A-2</th><th>A-3</th><th>A-4</th><th>A-5</th><th>A-6</th><th>A-7</th> <th>A-1, A-2</th><th>A-3</th><th>A-4, A-5</th><th>A-6, A-7</th> </tr> <tr> <td>GROUP CLASS.</td> <td>A-1-a</td><td>A-1-b</td><td>A-2-4</td><td>A-2-5</td><td>A-2-6</td><td>A-2-7</td><td>A-4</td><td>A-5</td><td>A-6</td><td>A-7</td> <td>A-1, A-2</td><td>A-3</td><td>A-4, A-5</td><td>A-6, A-7</td> <td>A-1</td><td>A-2</td><td>A-3</td><td>A-4</td><td>A-5</td><td>A-6</td><td>A-7</td> <td>A-1, A-2</td><td>A-3</td><td>A-4, A-5</td><td>A-6, A-7</td> </tr> <tr> <td>SYMBOL</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> <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>% PASSING</td> <td>50</td><td>30</td><td>10</td><td>10</td><td>10</td><td>10</td><td>10</td><td>10</td><td>10</td><td>10</td> <td>10</td><td>10</td><td>10</td><td>10</td> <td>10</td><td>10</td><td>10</td><td>10</td><td>10</td><td>10</td><td>10</td><td>10</td><td>10</td><td>10</td> <td>10</td><td>10</td><td>10</td><td>10</td> </tr> <tr> <td>LIQUID LIMIT</td> <td>5</td><td>10</td><td>15</td><td>20</td><td>25</td><td>30</td><td>35</td><td>40</td><td>45</td><td>50</td> <td>5</td><td>10</td><td>15</td><td>20</td> <td>5</td><td>10</td><td>15</td><td>20</td><td>25</td><td>30</td><td>35</td><td>40</td><td>45</td><td>50</td> <td>5</td><td>10</td><td>15</td><td>20</td> </tr> <tr> <td>PLASTIC INDEX</td> <td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td> <td>0</td><td>0</td><td>0</td><td>0</td> <td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td> <td>0</td><td>0</td><td>0</td><td>0</td> </tr> <tr> <td>USUAL TYPES OF MAJOR MATERIALS</td> <td>STONE FRAGS, GRAVEL, AND SAND</td><td>FINE SAND</td><td>SILTY OR CLAYEY GRAVEL AND SAND</td><td>SILTY SOILS</td><td>CLAYEY SOILS</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><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>GEN. RATING AS A SUBGRADE</td> <td colspan="7">EXCELLENT TO GOOD</td> <td colspan="7">FAIR TO POOR</td> <td colspan="3">FAIR TO POOR</td> <td colspan="3">POOR</td> <td colspan="3">UNSATISFACTORY</td> </tr> </table> <p align="center">PI OF A-7-5 SUBGROUP IS ≤ LL - 30 ; PI OF A-7-6 SUBGROUP IS &gt; LL - 30</p>		GENERAL CLASS.	GRANULAR MATERIALS (<= 35% PASSING #200)							SILT-CLAY MATERIALS (> 35% PASSING #200)							ORGANIC MATERIALS			A-1	A-3	A-2	A-4	A-5	A-6	A-7	A-1, A-2	A-3	A-4, A-5	A-6, A-7	A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-1, A-2	A-3	A-4, A-5	A-6, A-7	GROUP CLASS.	A-1-a	A-1-b	A-2-4	A-2-5	A-2-6	A-2-7	A-4	A-5	A-6	A-7	A-1, A-2	A-3	A-4, A-5	A-6, A-7	A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-1, A-2	A-3	A-4, A-5	A-6, A-7	SYMBOL																										% PASSING	50	30	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	LIQUID LIMIT	5	10	15	20	25	30	35	40	45	50	5	10	15	20	5	10	15	20	25	30	35	40	45	50	5	10	15	20	PLASTIC INDEX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	USUAL TYPES OF MAJOR MATERIALS	STONE FRAGS, GRAVEL, AND SAND	FINE SAND	SILTY OR CLAYEY GRAVEL AND SAND	SILTY SOILS	CLAYEY SOILS																									GEN. RATING AS A SUBGRADE	EXCELLENT TO GOOD							FAIR TO POOR							FAIR TO POOR			POOR			UNSATISFACTORY			<p align="center"><b>MINERALOGICAL COMPOSITION</b></p> <p>MINERAL NAMES SUCH AS QUARTZ, FELDSPAR, MICA, TALC, KAOLIN, ETC. ARE USED IN DESCRIPTIONS WHENEVER THEY ARE CONSIDERED OF SIGNIFICANCE.</p>		<p align="center"><b>COMPRESSION</b></p> <p>SLIGHTLY COMPRESSIBLE MODERATELY COMPRESSIBLE HIGHLY COMPRESSIBLE</p> <p>LIQUID LIMIT LESS THAN 31 LIQUID LIMIT EQUAL TO 31-50 LIQUID LIMIT GREATER THAN 50</p>		<p align="center"><b>WEATHERED ROCK (WR)</b></p> <p>NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT N VALUES &gt; 100 BLOWS PER FOOT IF TESTED.</p>		<p align="center"><b>CRYSTALLINE ROCK (CR)</b></p> <p>FINE TO COARSE GRAIN IGNEOUS AND METAMORPHIC ROCK THAT WOULD YIELD SPT REFUSAL IF TESTED. ROCK TYPE INCLUDES GRANITE, GNEISS, GABBRO, SCHIST, ETC.</p>		<p align="center"><b>NON-CRYSTALLINE ROCK (NCR)</b></p> <p>FINE TO COARSE GRAIN METAMORPHIC AND NON-COASTAL PLAIN SEDIMENTARY ROCK THAT WOULD YIELD SPT REFUSAL IF TESTED. ROCK TYPE INCLUDES PHYLLITE, SLATE, SANDSTONE, ETC.</p>		<p align="center"><b>COASTAL PLAIN SEDIMENTARY ROCK (CP)</b></p> <p>COASTAL PLAIN SEDIMENTS CEMENTED INTO ROCK, BUT MAY NOT YIELD SPT REFUSAL. ROCK TYPE INCLUDES LIMESTONE, SANDSTONE, CEMENTED SHELL BEDS, ETC.</p>	
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SOIL</b> - SOIL FORMED IN PLACE BY THE WEATHERING OF ROCK.</p> <p><b>ROCK QUALITY DESIGNATION (RQD)</b> - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.</p> <p><b>SAPROLITE (SAP.)</b> - RESIDUAL SOIL THAT RETAINS THE RELIC STRUCTURE OR FABRIC OF THE PARENT ROCK.</p> <p><b>SILL</b> - AN INTRUSIVE BODY OF IGNEOUS ROCK OF APPROXIMATELY UNIFORM THICKNESS AND RELATIVELY THIN COMPARED WITH ITS LATERAL EXTENT, THAT HAS BEEN EMPLACED PARALLEL TO THE BEDDING OR SCHISTOSITY OF THE INTRUDED ROCKS.</p> <p><b>SLICKENSIDE</b> - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR SLIP PLANE.</p> <p><b>STANDARD PENETRATION TEST (PENETRATION RESISTANCE) (SPT)</b> - NUMBER OF BLOWS IN OR BPF) OF A 140 LB. HAMMER FALLING 30 INCHES REQUIRED TO PRODUCE A PENETRATION OF 1 FOOT INTO SOIL WITH A 2 INCH OUTSIDE DIAMETER SPLIT SPOON SAMPLER. SPT REFUSAL IS PENETRATION EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS.</p> <p><b>STRATA CORE RECOVERY (SCREC.)</b> - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE.</p> <p><b>STRATA ROCK QUALITY DESIGNATION (SRQD)</b> - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS WITHIN A STRATUM EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF STRATA AND EXPRESSED AS A PERCENTAGE.</p> <p><b>TOPSOIL (TS.)</b> - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER.</p>																																																																																																																																																																																																																																				
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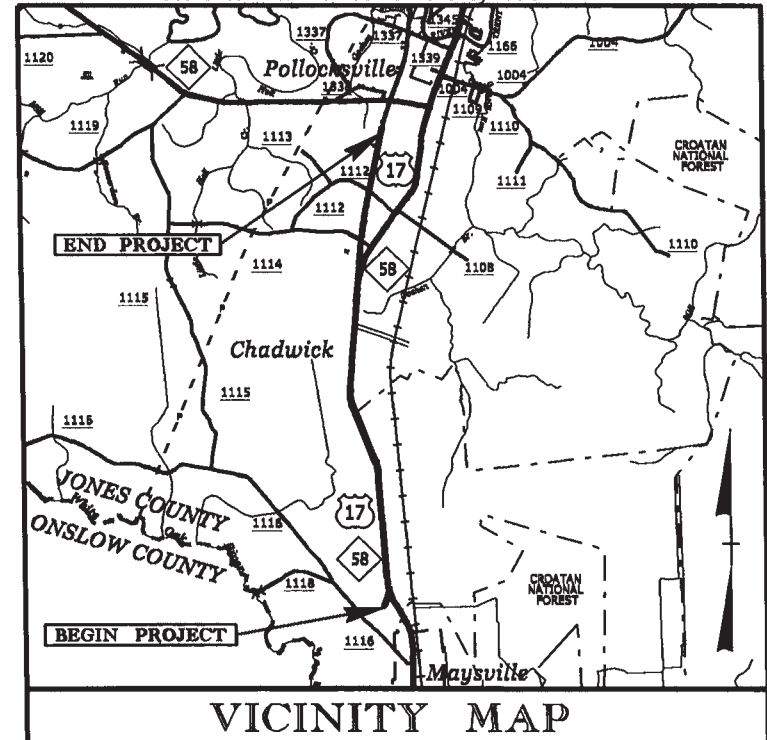
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**TIP PROJECT: R-2514C**

**CONTRACT:**

See Sheet 1-A For Index of Sheets  
See Sheet 1-B For Conventional Symbols

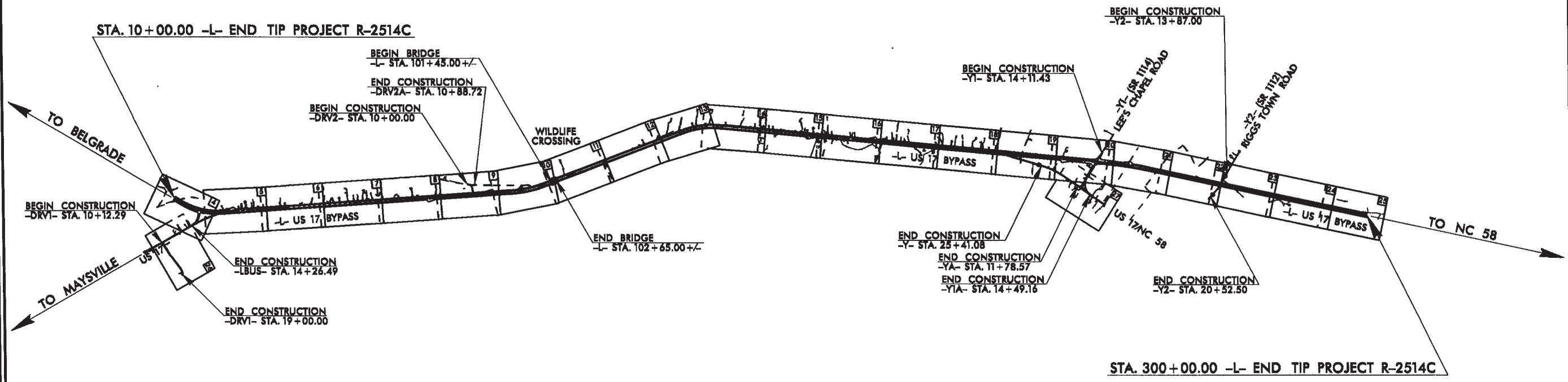


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
**JONES COUNTY**

**LOCATION: US 17 FROM NORTH OF MAYSVILLE  
TO SOUTH OF NC 58**

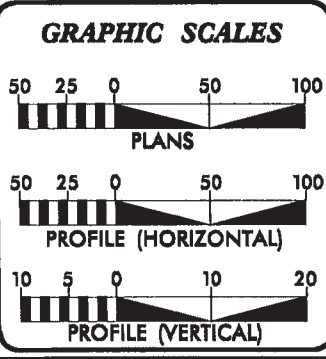
**TYPE OF WORK: GRADING, PAVING, DRAINAGE,  
AND STRUCTURES**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2514C	2A	138
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34442.1.1		PE	



THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.  
THIS IS A PARTIAL CONTROLLED-ACCESS PROJECT WITH ACCESS BEING AT DESIGNATED POINTS ONLY.  
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO LIMITS ESTABLISHED BY METHOD

**INCOMPLETE PLANS**  
DO NOT USE FOR R/W ACQUISITION  
**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION



**DESIGN DATA**

ADT 2015 =	12,000
ADT 2035 =	17,700
DHV =	12 %
D =	60 %
T =	9 % *
V =	60 MPH
* TTST =	5 % DUAL=4 %
FUNC CLASS =	EXPRESSWAY
	STATEWIDE TIER

**PROJECT LENGTH**

LENGTH ROADWAY TIP PROJECT R-2514C	=	5.469 MILES
LENGTH STRUCTURE OF TIP PROJECT R-2514C	=	0.023 MILES
TOTAL LENGTH OF TIP PROJECT R-2514C	=	5.492 MILES

Prepared In the Office of:  
**DIVISION OF HIGHWAYS**  
1000 Birch Ridge Dr., Raleigh NC, 27610

2006 STANDARD SPECIFICATIONS

**RIGHT OF WAY DATE:**  
JUNE 21, 2013

**LETTING DATE:**  
JUNE 16, 2015

**JAMES A. SPEER, PE**  
PROJECT ENGINEER

**DANIEL W. GARDNER, JR., PE**  
PROJECT DESIGN ENGINEER

**HYDRAULICS ENGINEER**

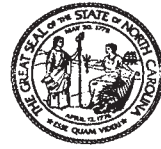
SIGNATURE: \_\_\_\_\_ P.E.

**ROADWAY DESIGN ENGINEER**

SIGNATURE: \_\_\_\_\_ P.E.

**DIVISION OF HIGHWAYS**  
STATE OF NORTH CAROLINA

STATE HIGHWAY DESIGN ENGINEER P.E.



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE  
GOVERNOR

EUGENE A. CONTI, JR.  
SECRETARY

May 18, 2012

STATE PROJECT: 34442.1.2 (R-2514C)  
F.A. PROJECT: N/A  
COUNTY: Jones  
DESCRIPTION: US 17 from North of Maysville to South of NC 58

SUBJECT: Geotechnical Inventory Report

**Project Description**

This project begins just west of the existing NC 17 corridor, approximately 1 mile north of Maysville in Jones County, and extends northward approximately 5.4 miles. This geotechnical investigation was confined to the areas of proposed construction.

Fieldwork was conducted in December 2011 through March of 2012. CPT, SPT, and hand auger borings were completed at various offsets along the project corridor. Representative soil samples were collected for visual classification in the field and for laboratory analysis by the Materials and Tests Unit.

The following alignments were investigated. Subsurface profiles and selected cross sections of these alignments are included in this report.

<u>Line</u>	<u>Station(±)</u>
-L-	10+00 to 300+00
-LBUS-	10+00 to 14+26
-Y-	24+24 to 25+40
-YA-	10+00 to 11+78
-Y1-	14+10 to 21+23
-Y1A-	10+00 to 14+79
-Y2-	13+87 to 15+08
-Y2-	19+31 to 20+54

-DRV1-	10+00 to 19+00
-DRV2-	10+00 to 13+11
-DRV2A-	10+00 to 10+88

**Areas of Special Geotechnical Interest**

- 1) The entire project was found to exhibit seasonal high ground water.
- 2) All but the following section contains cohesive soils which have the potential to cause embankment/subgrade and or slope stability problems during construction.

<u>Line</u>	<u>Station(±)</u>
-L-	14+00 to 35+40

- 3) The following sections contain organic soils that have the potential to cause embankment/subgrade and or slope stability problems during construction.

<u>Line</u>	<u>Station(±)</u>
-L-	21+21 to 22+41
-L-	29+67 to 30+80
-L-	32+08 to 33+95
-L-	43+68 to 45+84
-L-	78+74 to 79+84
-L-	80+34 to 81+74
-L-	86+10 to 86+80
-LBUS-	11+23 to 12+78

- 4) An existing water supply well was encountered within the proposed construction limits at the following location.

<u>Line</u>	<u>Station(±)</u>
-L-	231+73, 60' RT

**Physiography and Geology**

This project corridor is located within the Coastal Plain Physiographic Province. Topography along the project is nearly flat to gently sloping. Natural ground elevations ranged from 21± to 41± feet above sea level.

Surficial soils in this area are generally classified as undivided coastal plain sediments and are underlain by formational soils belonging to the Belgrade and Riverbend Formations.

MAILING ADDRESS:  
NC DEPARTMENT OF TRANSPORTATION  
GEOTECHNICAL ENGINEERING UNIT  
1589 MAIL SERVICE CENTER  
RALEIGH NC 27699-1589

TELEPHONE: 919-707-6850  
FAX: 919-250-4237

WEBSITE: WWW.DOH.DOT.STATE.NC.US

LOCATION:  
CENTURY CENTER COMPLEX  
ENTRANCE B-2  
1020 BIRCH RIDGE DRIVE  
RALEIGH NC

### Ground Water

Ground water data was collected from December 2011 through March 2012, during a time of normal precipitation. Ground water elevations ranged from 20± to 38± feet above sea level.

### Soils

Soils encountered within this project area have been divided into three categories, undivided coastal plain soils, formational soils, and roadway embankment.

Soils identified as undivided coastal plain are composed of 2± to 17± feet of very loose to medium dense sand and clayey sand (A-2-6, A-2-4, A-3), with 2± to 11± feet of very soft to stiff sandy and silty clay (A-6, A-7-6) and 2± to 5± feet of very soft to stiff sandy and clayey silt (A-4). Moisture samples taken within these cohesive units returned a natural moisture content from 16% to 31%. Surficial organic soils were also identified. These soils were typically 1± to 5± feet thick and composed of very soft silts (A-4), along with very loose sands (A-2-4). Organic samples taken within these soils returned organic percentages ranging from 3% to 38%.

Formational soils belonging to the Belgrade Formation and the River Bend Formation were also encountered. The Belgrade Formation was found to be 2± to 14± feet of loose sand and clayey sand (A-2-4, A-2-6); whereas the River Bend Formation was composed of 5± to 7 or more feet of soft limestone.

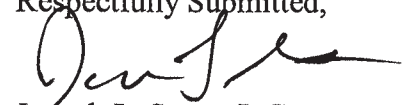
Roadway embankment soils were found along the existing US 17 corridor and associated intersecting roads. Where encountered it was composed of 1± to 3± feet of loose sand (A-2-4, A-2-6) and sandy clay (A-6).

### Undisturbed Samples

Undisturbed thin wall Shelby tube samples were collected at the following locations and submitted for testing.

<u>Sample No.</u>	<u>Station</u>	<u>Depth</u>	<u>Test</u>
ST-1	-L- 285+05 CL	7.5-9.5	Consolidation
ST-8	-LBus- 12+55 CL	8.0-10.0	Consolidation
ST-9	-L- 153+05 CL	8.0-10.0	Consolidation
ST-10	-L- 55+05 CL	4.0-6.0	Tri-axial/Consol.
ST-12	-L- 103+05 CL	0.5-2.5	Tri-axial/Consol.

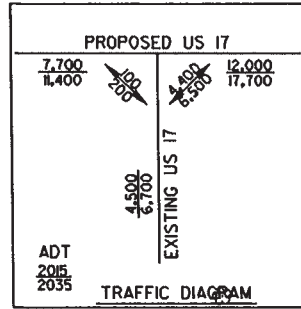
Respectfully Submitted,



Joseph L. Stone, L.G.  
Project Engineering Geologist

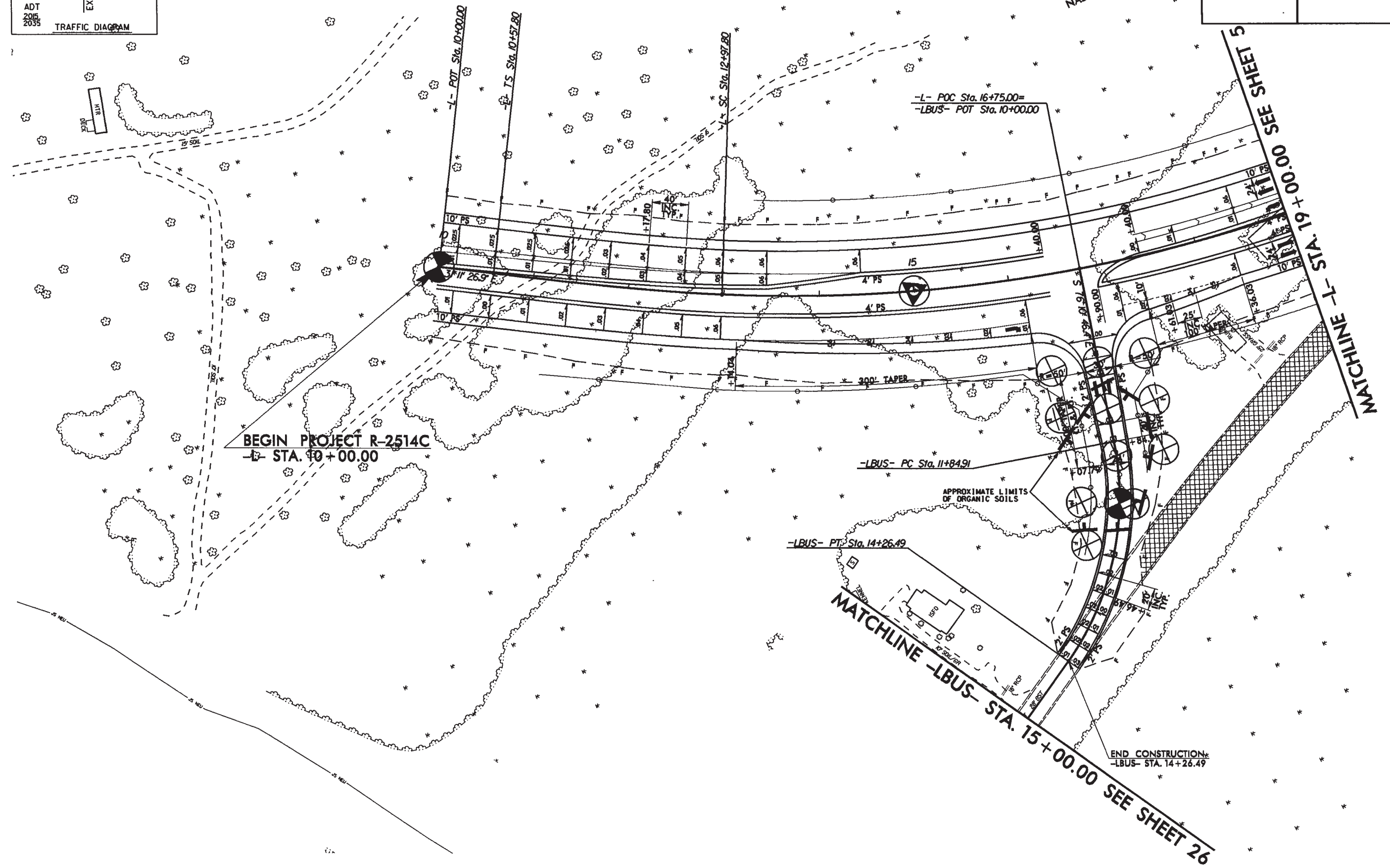
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-L-		-LBUS-
PI Sta 12+17.85	PI Sta 16+95.31	PI Sta 13+12.68
Os = 4' 11" 32.5"	Δ = 27' 14" 57.6" (LT)	Δ = 46' 08" 20.6" (RT)
Ls = 240.00'	D = 3' 29' 37.1"	D = 19' 05' 54.9"
LT = 160.04'	L = 779.91'	L = 241.58'
ST = 80.04'	T = 397.51'	T = 127.77'
	R = 1640.00'	R = 300.00'
	SE = .06	SE = SEE PLANS
	RO = 240'	

PROJECT REFERENCE NO. R-2514C	SHEET NO. 4
BY SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

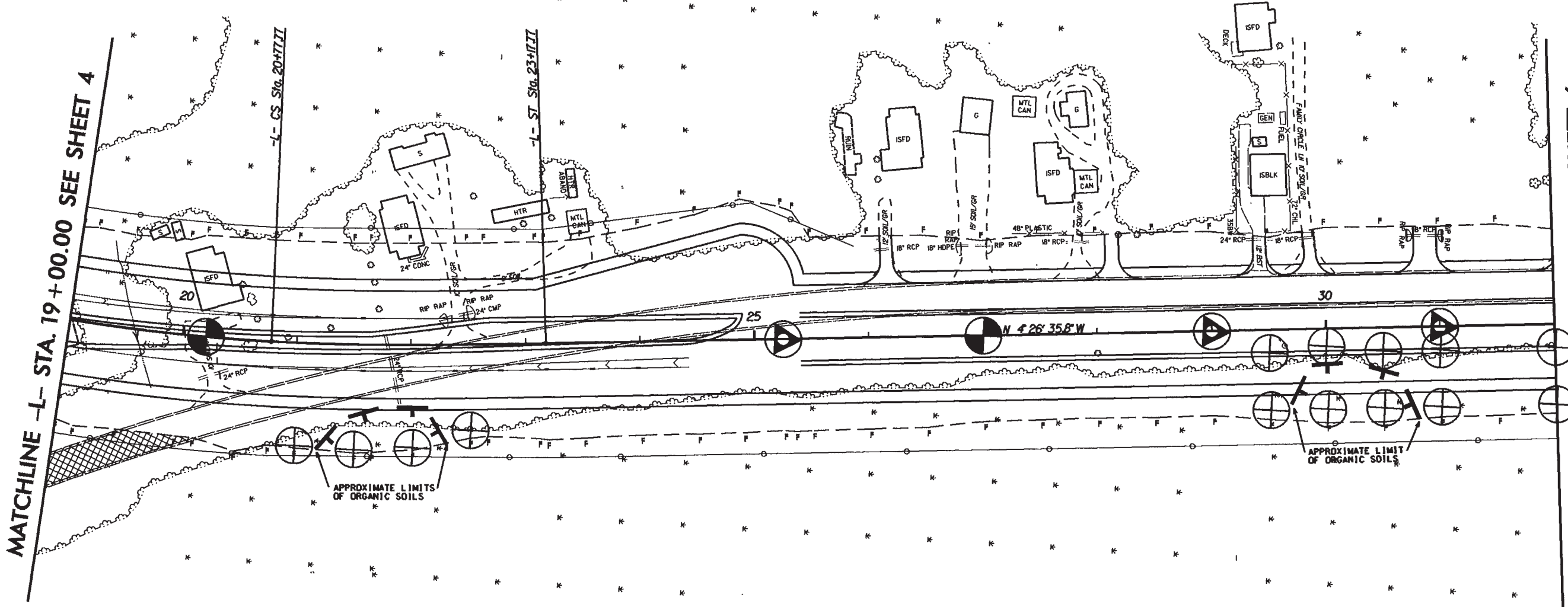


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PROJECT REFERENCE NO. R-2514C	SHEET NO. 5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

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MATCHLINE -L- STA. 19+00.00 SEE SHEET 4

MATCHLINE -L- STA. 32+00.00 SEE SHEET 6

APPROXIMATE LIMITS OF ORGANIC SOILS

APPROXIMATE LIMIT OF ORGANIC SOILS

-L-	
PI Sta 16+95.31	PIs Sta 21+57.81
$\Delta = 27^{\circ} 14' 57.6''$ (LT)	$\Theta_s = 4^{\circ} 11' 32.5''$
$D = 3^{\circ} 29' 37.7''$	$L_s = 240.00'$
$L = 779.91'$	$LT = 160.04'$
$T = 397.51'$	$ST = 80.04'$
$R = 1,640.00'$	
$SE = .06$	
$RO = 240'$	

REVISIONS

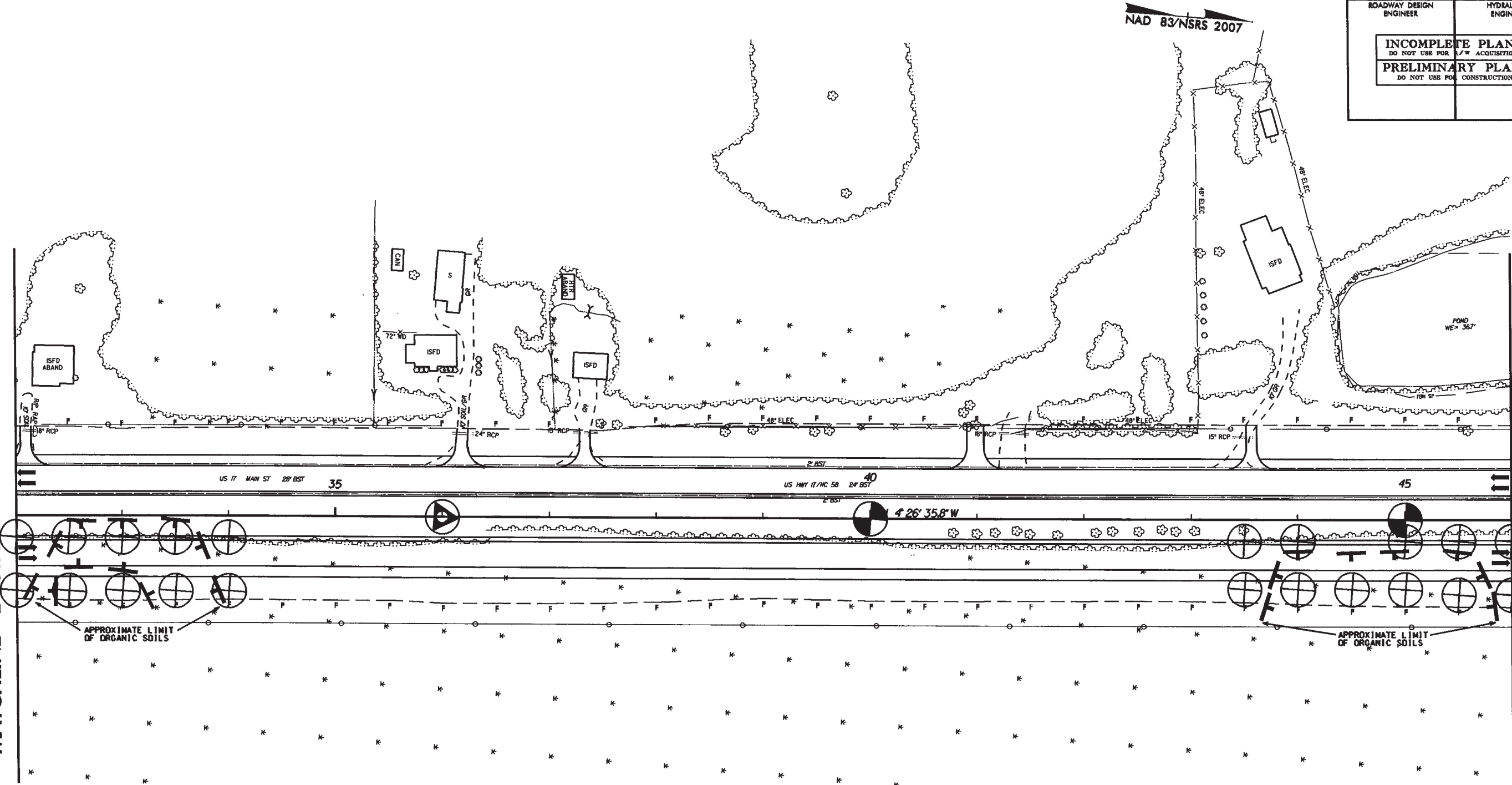
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PROJECT REFERENCE NO. R-2514C	SHEET NO. 6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

MATCHLINE -L- STA. 32 + 00.00 SEE SHEET 5

MATCHLINE -L- STA. 46 + 00.00 SEE SHEET 7



APPROXIMATE LIMIT OF ORGANIC SOILS

APPROXIMATE LIMIT OF ORGANIC SOILS

REVISIONS

NAD 83/NSRS 2007

POND WE= 36.7'

4 26' 35.8\"/>



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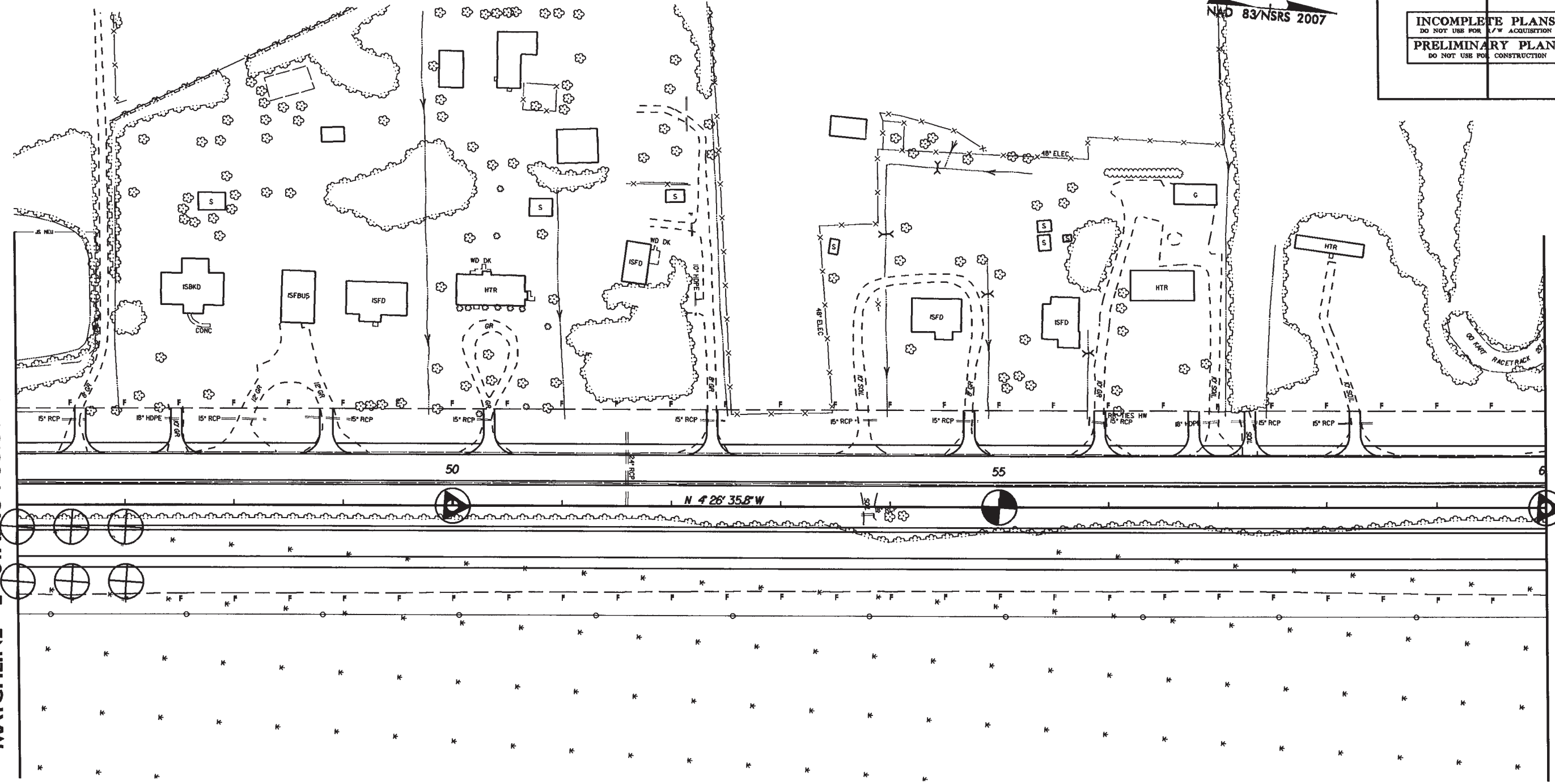
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PROJECT REFERENCE NO. R-2514C	SHEET NO. 7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

NAD 83/NRS 2007

MATCHLINE -L- STA. 46+00.00 SEE SHEET 6

MATCHLINE -L- STA. 60+00.00 SEE SHEET 8



REVISIONS

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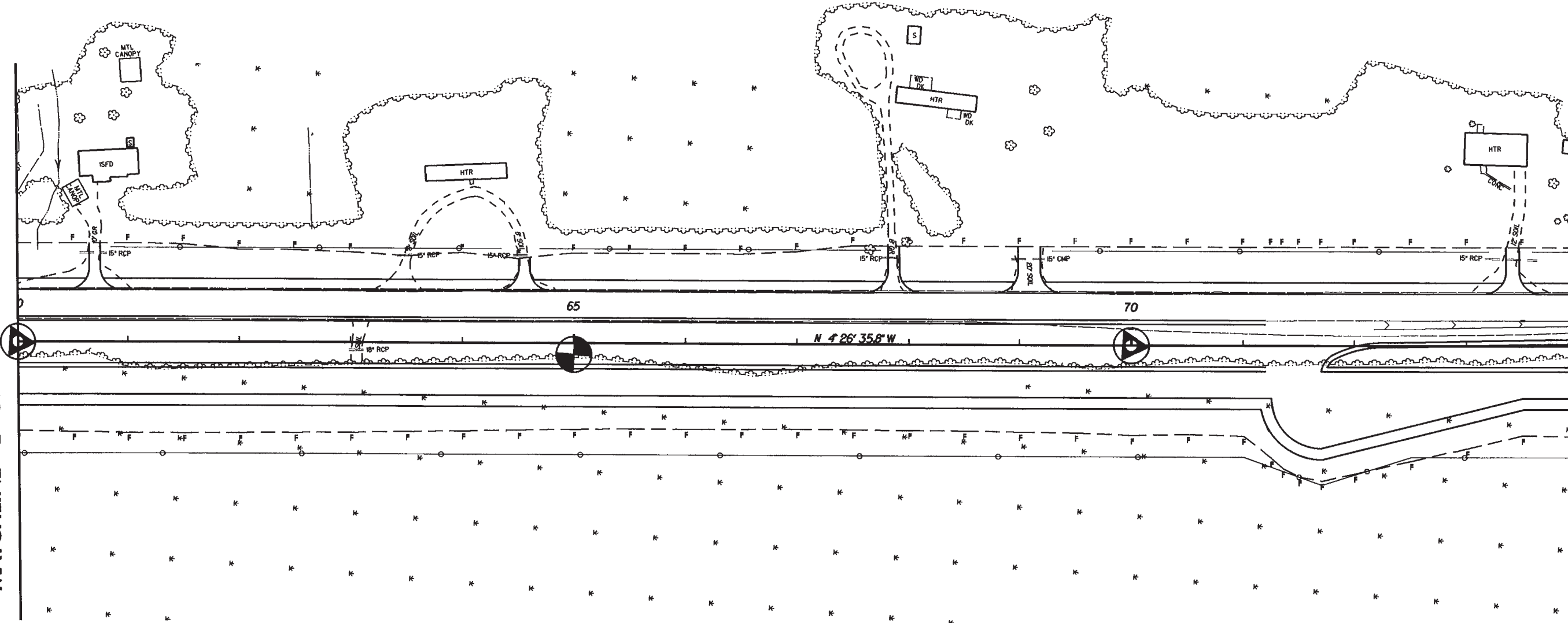
04/11/06

PROJECT REFERENCE NO. <i>R-2514C</i>	SHEET NO. <i>8</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

NAD 83/NSRS 2007

MATCHLINE -L- STA. 60+00.00 SEE SHEET 7

MATCHLINE -L- STA. 74+00.00 SEE SHEET 9



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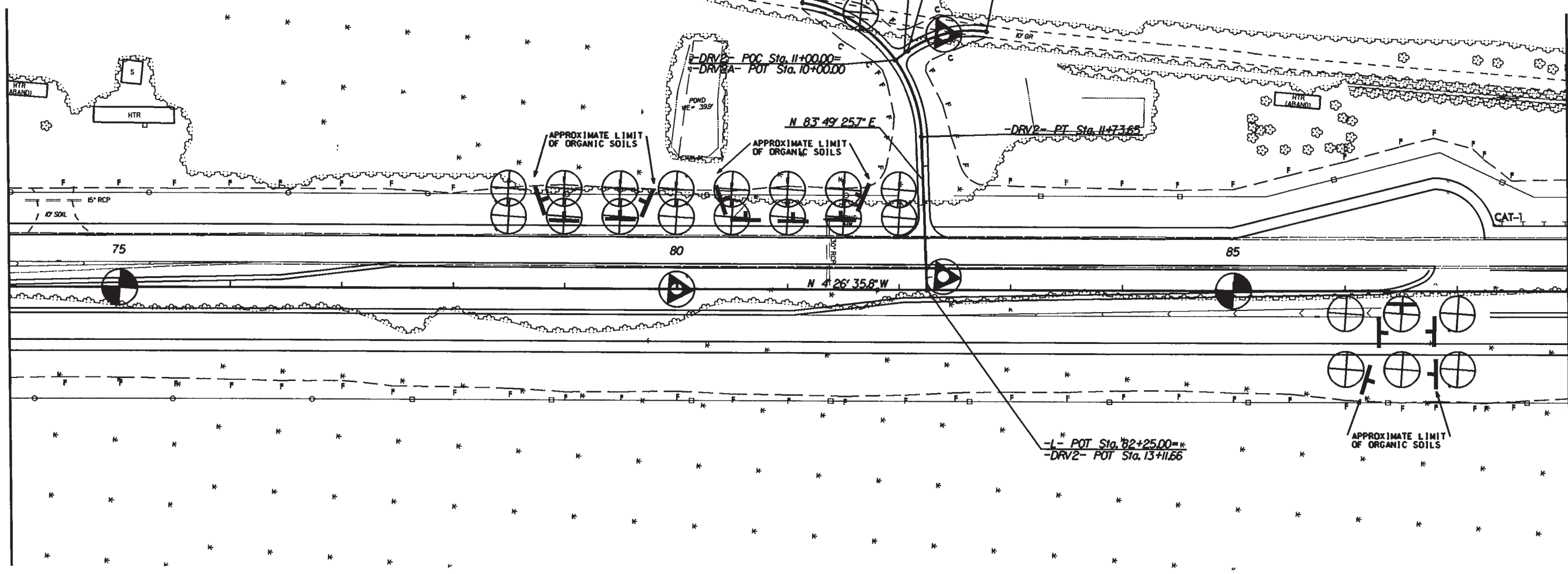
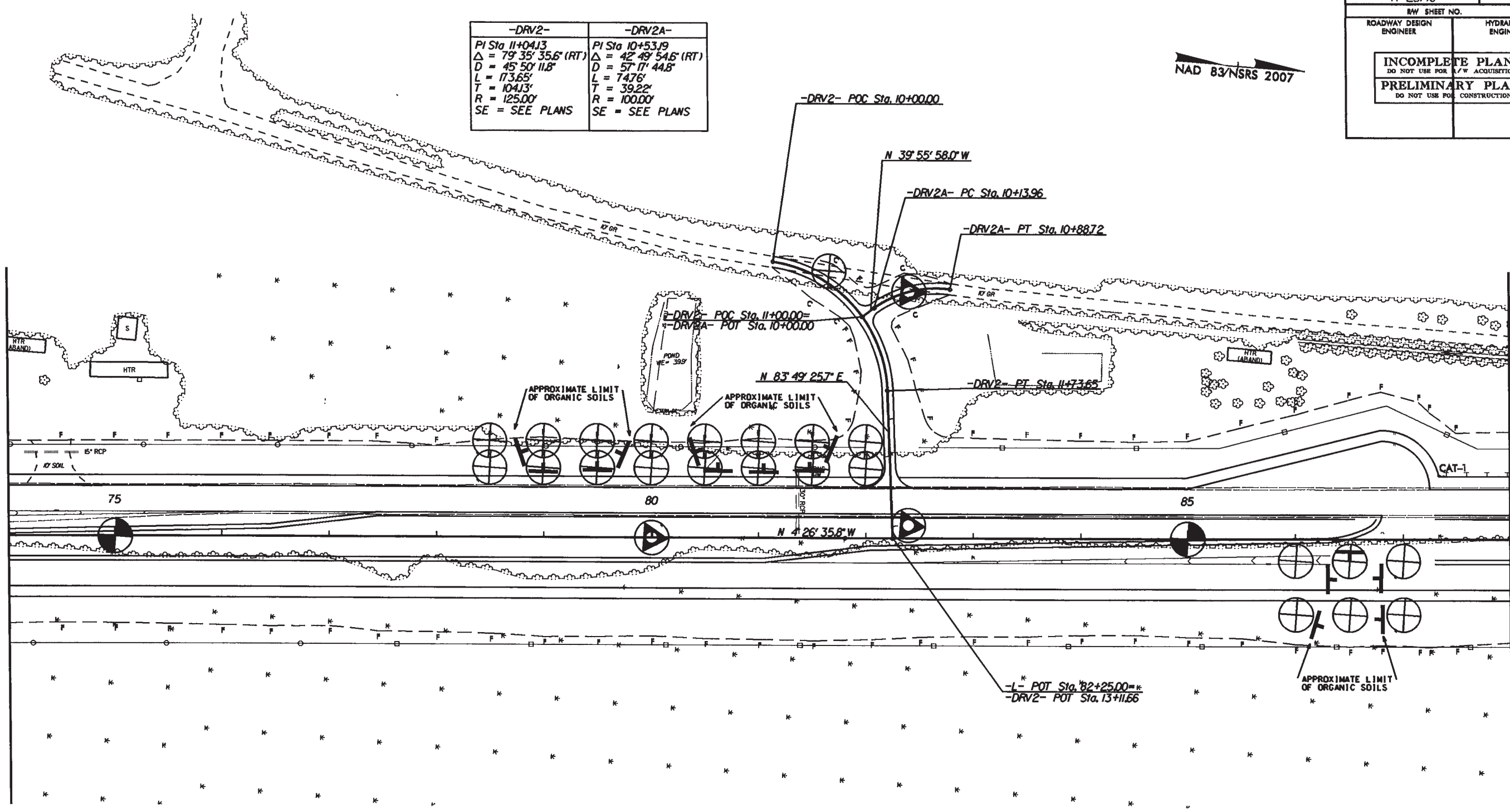
PROJECT REFERENCE NO. R-2514C	SHEET NO. 9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

-DRV2-	-DRV2A-
PI Sta. 11+04.13	PI Sta. 10+53.19
$\Delta = 79^\circ 35' 35.6" (RT)$	$\Delta = 42^\circ 49' 54.6" (RT)$
D = 45' 50" 11.8"	D = 57' 17" 44.8"
L = 173.65'	L = 74.76'
T = 104.13'	T = 39.22'
R = 125.00'	R = 100.00'
SE = SEE PLANS	SE = SEE PLANS

NAD 83/NSRS 2007

MATCHLINE -L- STA. 74 + 00.00 SEE SHEET 8

MATCHLINE -L- STA. 88 + 00.00 SEE SHEET 10



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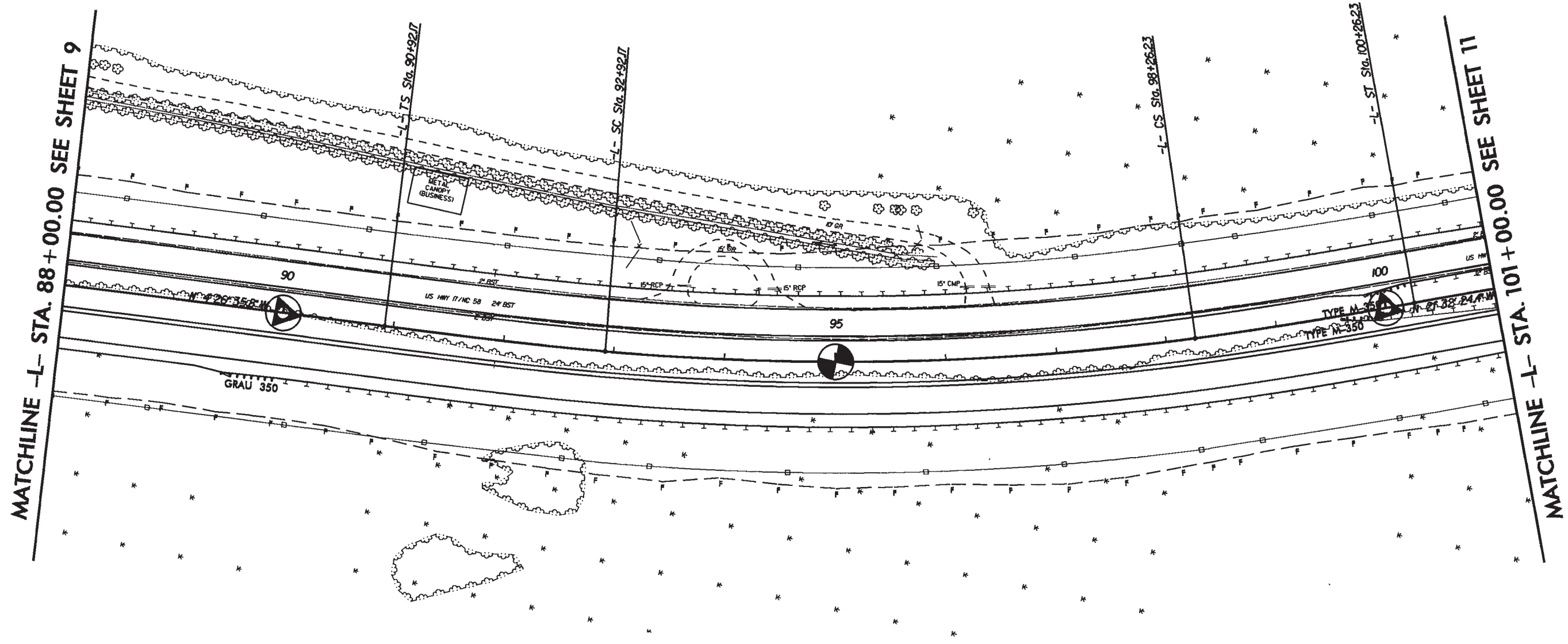
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PROJECT REFERENCE NO.	SHEET NO.
R-2514C	10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

-L-		
PIs Sta 92+25.52	PI Sta 95+60.26	PIs Sta 98+92.91
$\Theta_s = 2' 19' 44.7''$	$\Delta = 12' 26' 19.1''$ (LT)	$\Theta_s = 2' 19' 44.7''$
LS = 200.00'	D = 2' 19' 44.7''	LS = 200.00'
LT = 133.34'	L = 534.05'	LT = 133.34'
ST = 66.68'	T = 268.08'	ST = 66.68'
	R = 2,460.00'	
	SE = .05	
	RO = 200'	

NAD 83/NSRS 2007

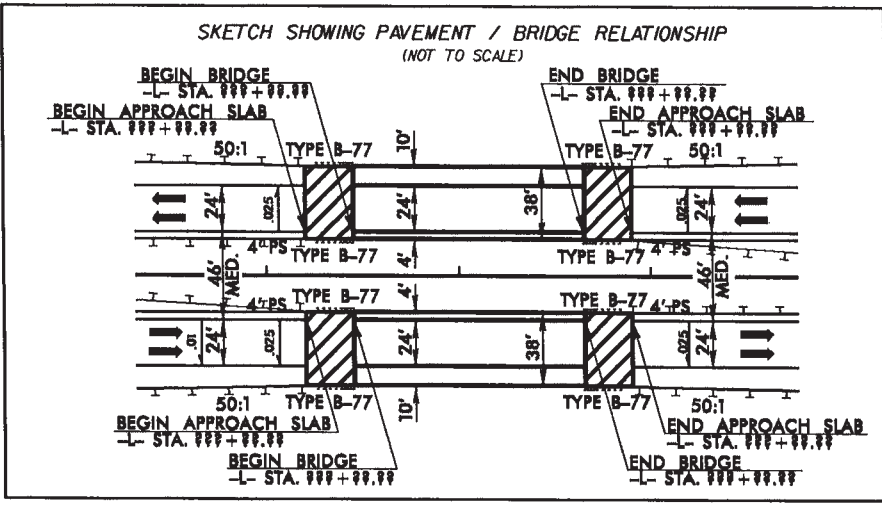


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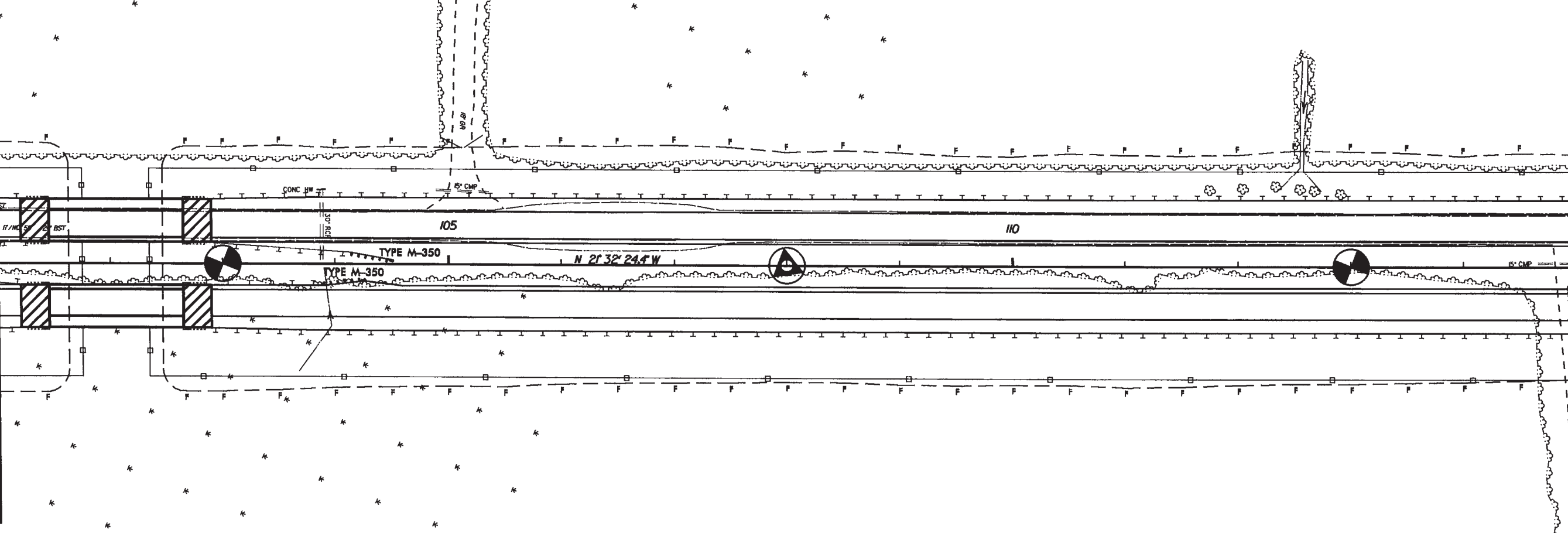
PROJECT REFERENCE NO. R-2514C	SHEET NO. 11
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



NAD 83/NSRS 2007

MATCHLINE -L- STA. 101 + 00.00 SEE SHEET 10

MATCHLINE -L- STA. 115 + 00.00 SEE SHEET 12



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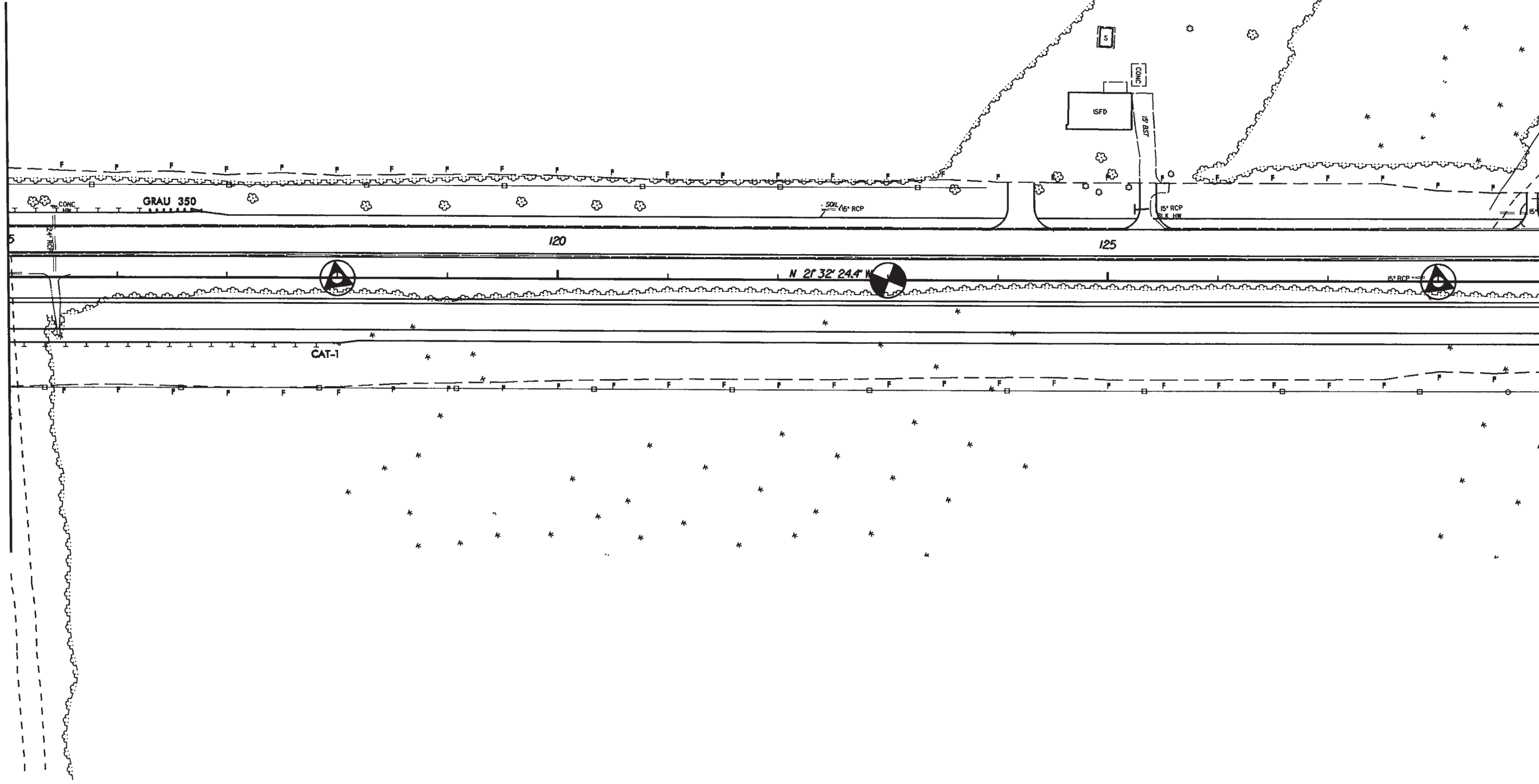
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PROJECT REFERENCE NO. R-2514C	SHEET NO. 12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

NAD 83/NSRS 2007

MATCHLINE -L- STA. 115 + 00.00 SEE SHEET 11

MATCHLINE -L- STA. 129 + 00.00 SEE SHEET 13



REVISIONS

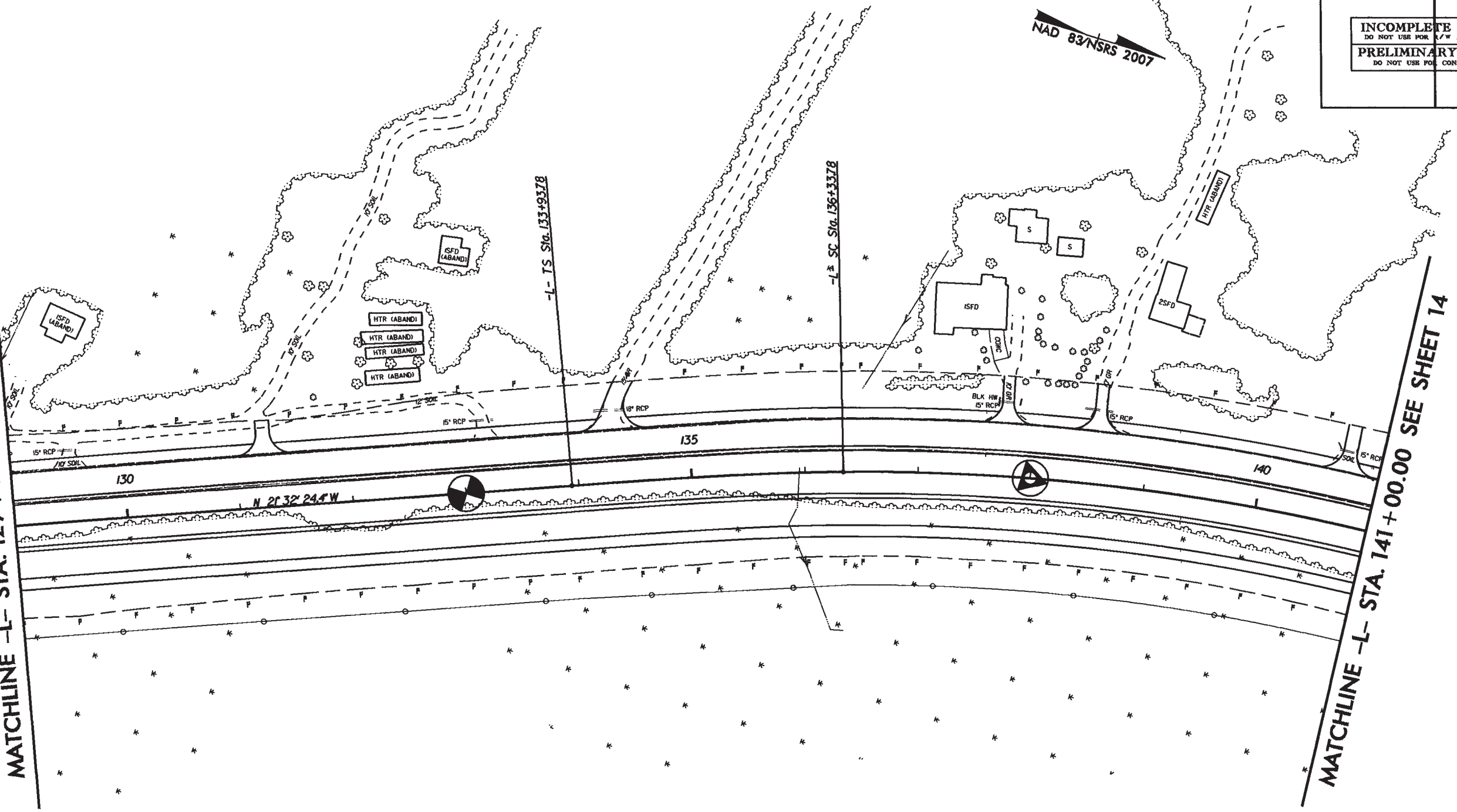
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PROJECT REFERENCE NO. R-2514C	SHEET NO. 13
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

MATCHLINE -L- STA. 129 + 00.00 SEE SHEET 12

MATCHLINE -L- STA. 141 + 00.00 SEE SHEET 14



NAD 83/NSRS 2007

-L- TS Sta. 133+93.78

-L- SC Sta. 136+33.78

-L-	
PIs Sta 135+53.82	PI Sta 139+50.54
$\Theta_s = 3^\circ 38' 50.9''$	$\Delta = 19^\circ 04' 40.6''$ (RT)
$L_s = 240.00'$	$D = 3^\circ 02' 22.4''$
$LT = 160.03'$	$L = 627.65'$
$ST = 80.03'$	$T = 316.76'$
	$R = 1,885.00'$
	$SE = .06$
	$RO = 240'$

REVISIONS

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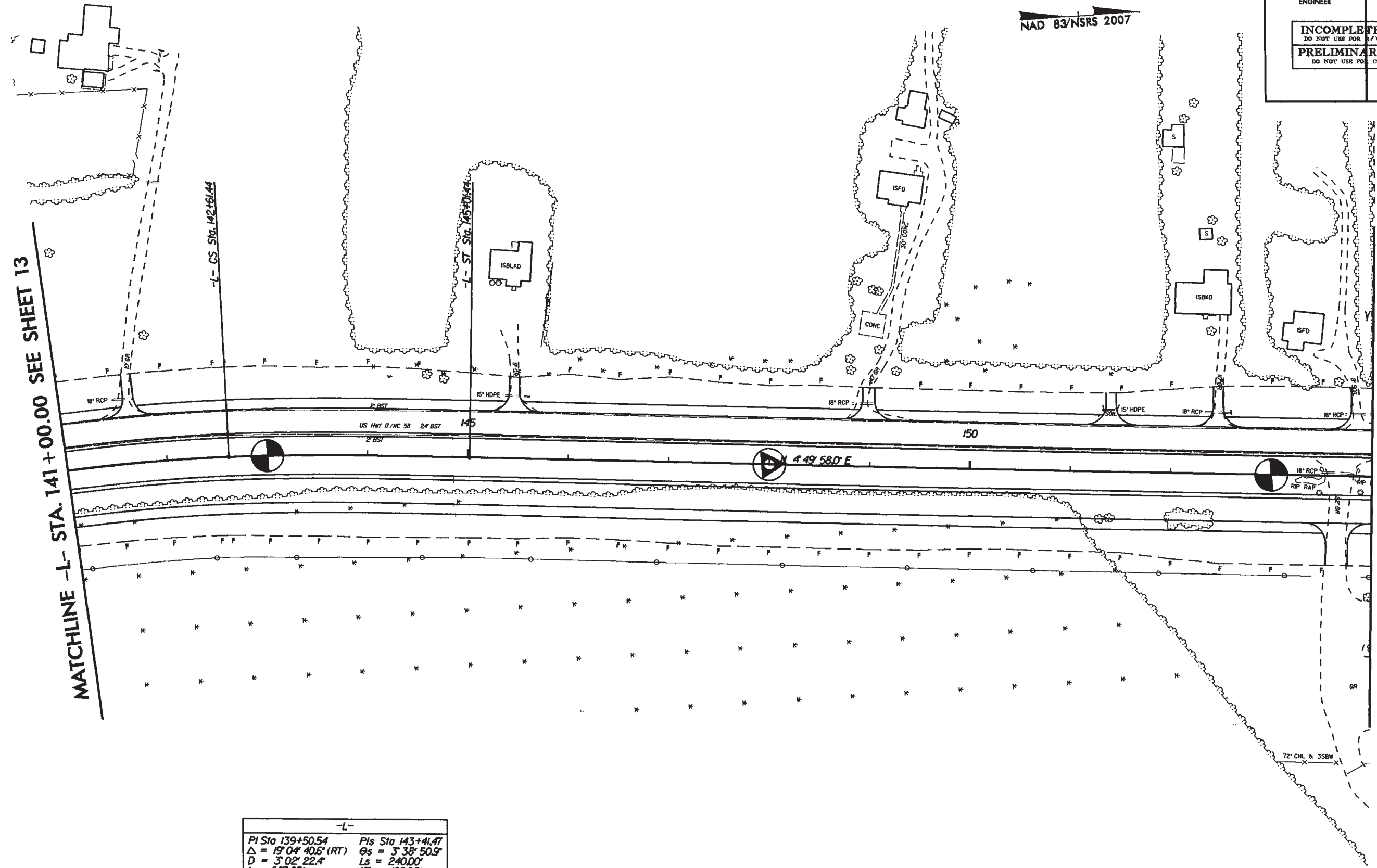
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PROJECT REFERENCE NO. R-2514C	SHEET NO. 14
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

NAD 83/NSRS 2007

MATCHLINE -L- STA. 141+00.00 SEE SHEET 13

MATCHLINE -L- STA. 154+00.00 SEE SHEET 15



-L-	
PI Sta 139+50.54	Pis Sta 143+41.47
$\Delta = 19^{\circ}04'40.6''$ (RT)	$\Theta_s = 3^{\circ}38'50.9''$
D = 3'02" 22.4"	Ls = 240.00'
L = 627.65'	LT = 160.03'
T = 316.76'	ST = 80.03'
R = 1,885.00'	
SE = .06	
RO = 240'	

REVISIONS



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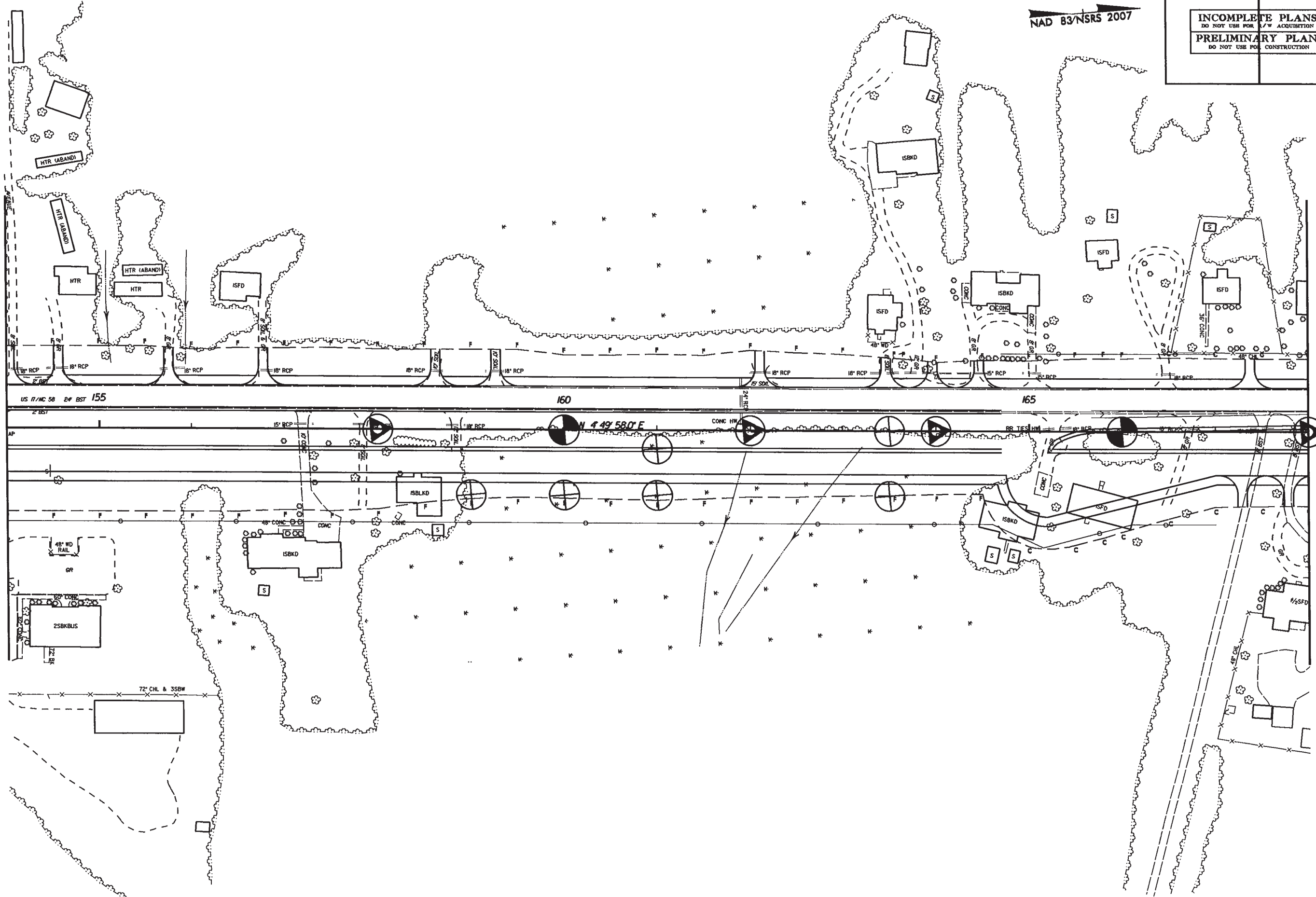
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PROJECT REFERENCE NO. R-2514C	SHEET NO. 15
RAW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

NAD 83/NSRS 2007

MATCHLINE -L- STA. 154 + 00.00 SEE SHEET 14

MATCHLINE -L- STA. 168 + 00.00 SEE SHEET 16



REVISIONS

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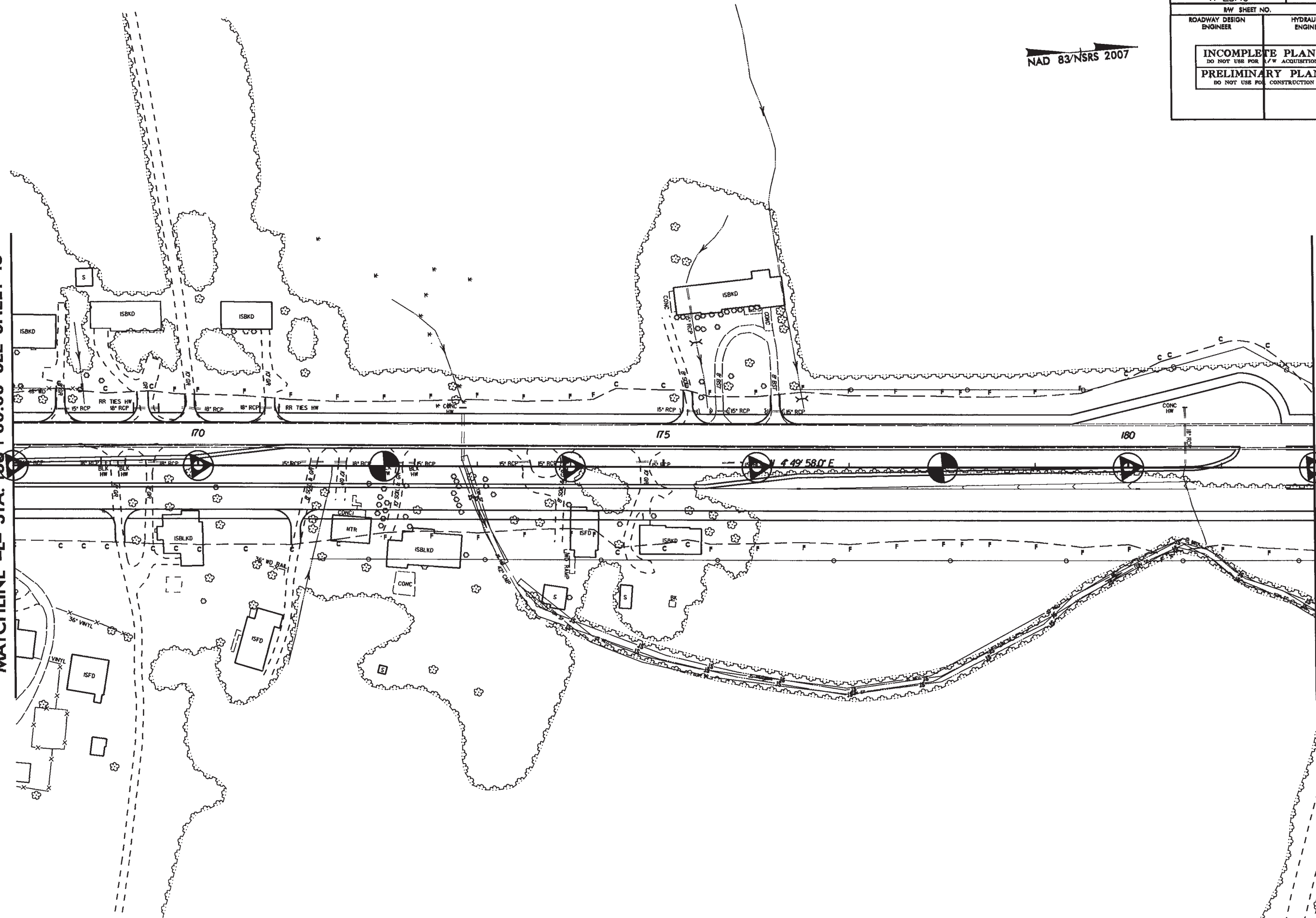
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PROJECT REFERENCE NO. <i>R-2514C</i>	SHEET NO. <i>16</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

NAD 83/NSRS 2007

MATCHLINE -L- STA. 168 + 00.00 SEE SHEET 15

MATCHLINE -L- STA. 182 + 00.00 SEE SHEET 17



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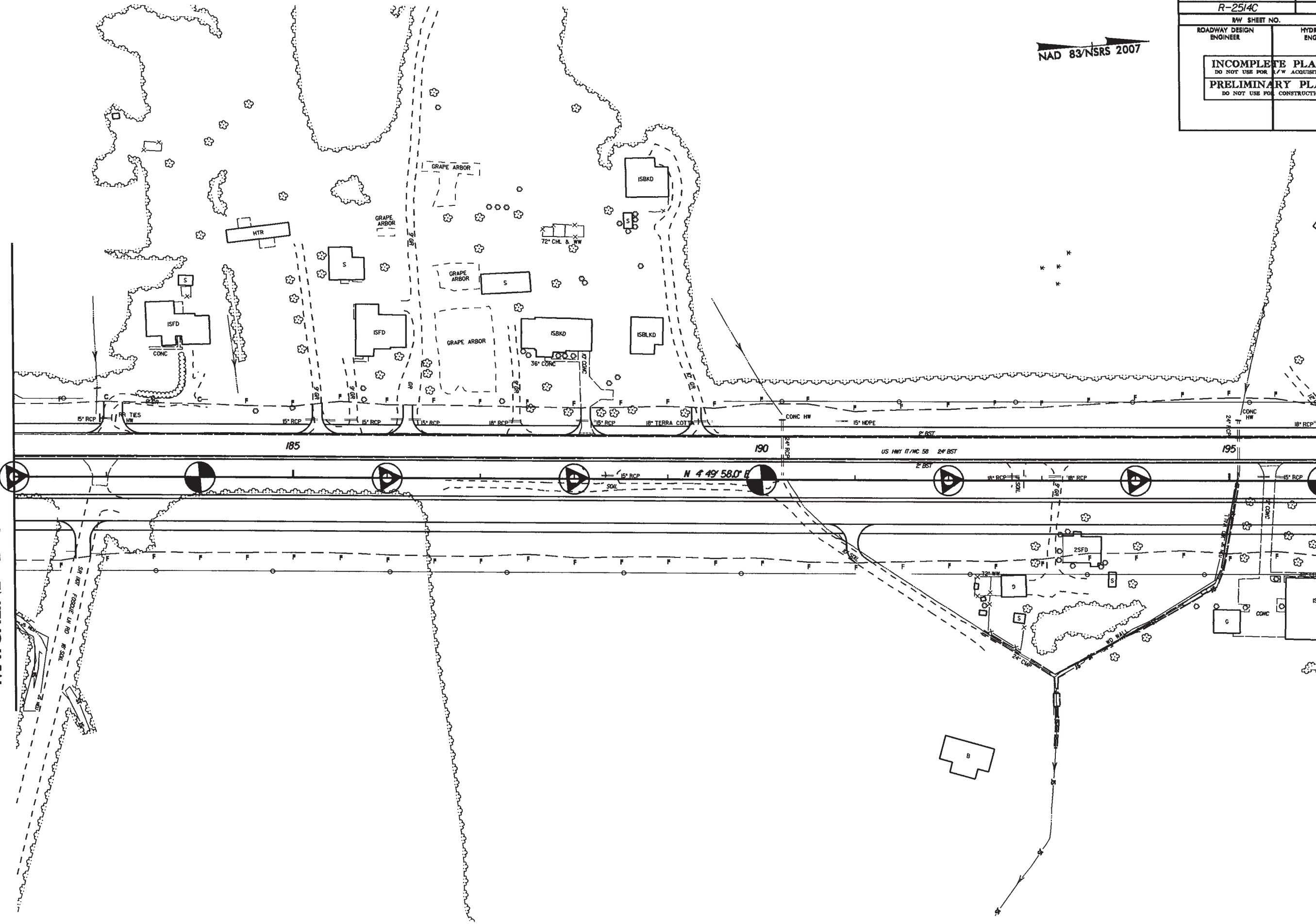
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Author: A11605466

PROJECT REFERENCE NO.	SHEET NO.
R-2514C	17
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

NAD 83/NSRS 2007

MATCHLINE -L- STA. 182 + 00.00 SEE SHEET 16

MATCHLINE -L- STA. 196 + 00.00 SEE SHEET 18



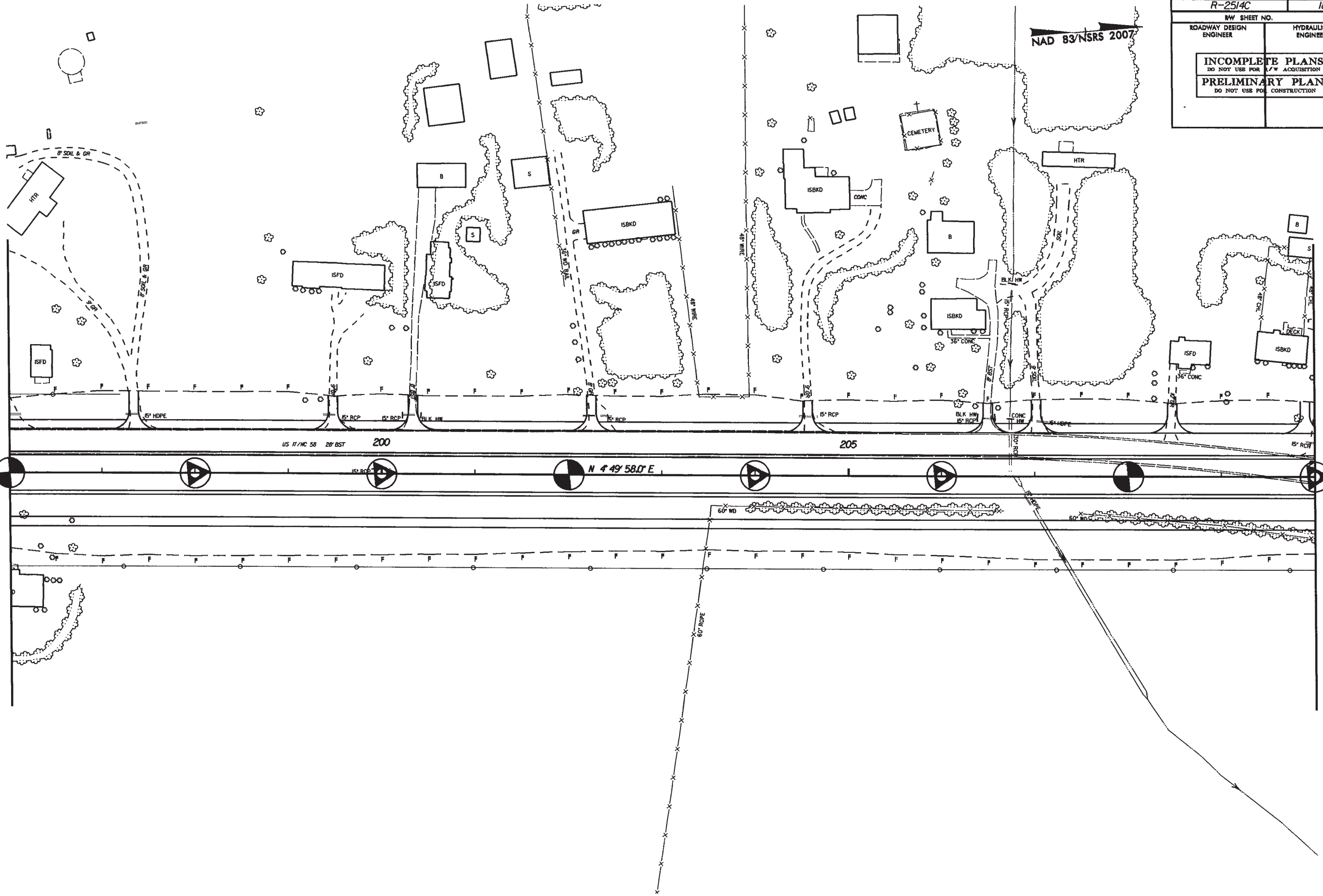
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PROJECT REFERENCE NO. <i>R-2514C</i>	SHEET NO. <i>18</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

NAD 83/NSRS 2007

MATCHLINE -L- STA. 196 + 00.00 SEE SHEET 17

MATCHLINE -L- STA. 210 + 00.00 SEE SHEET 19



REVISIONS

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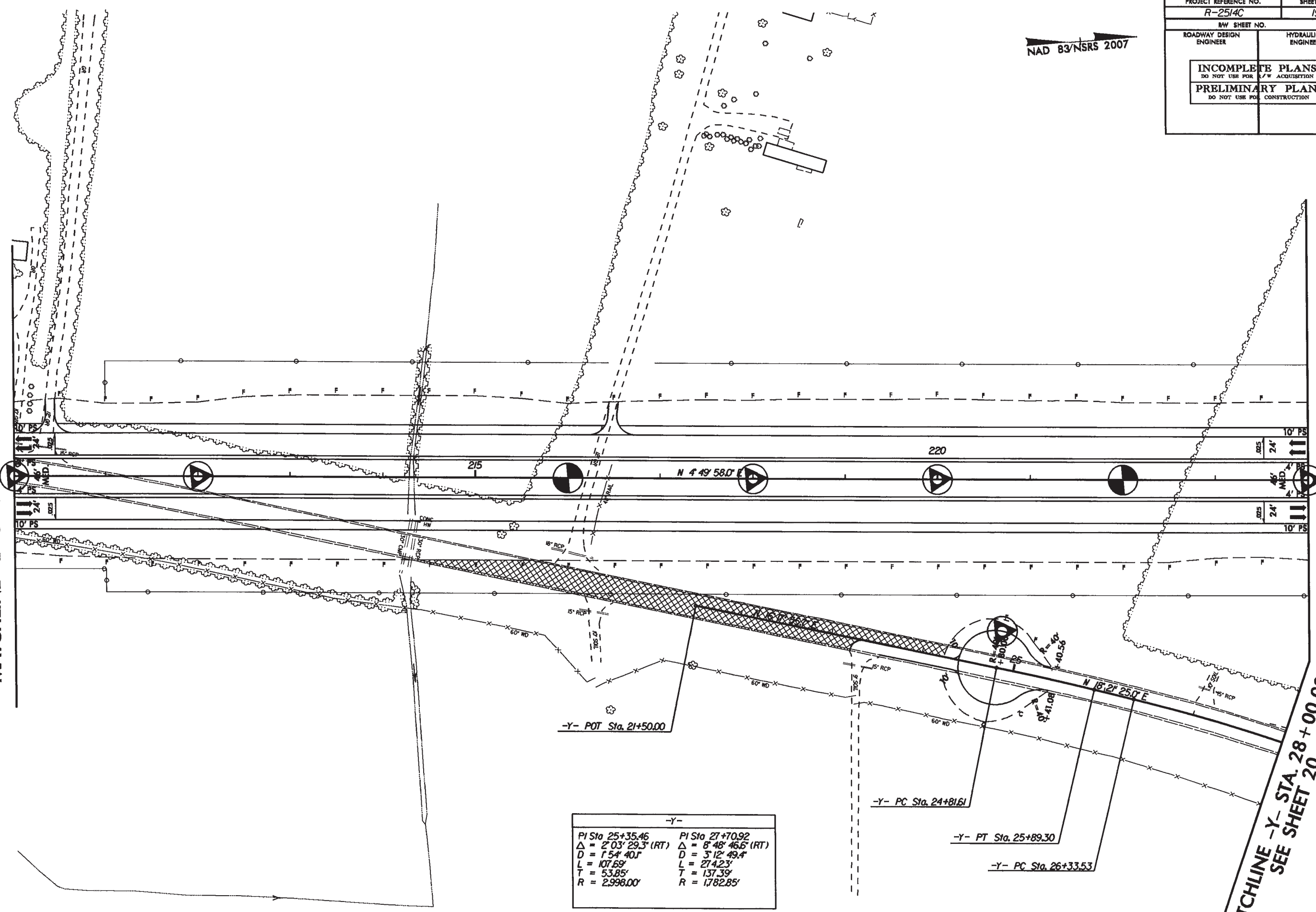
PROJECT REFERENCE NO. R-2514C	SHEET NO. 19
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

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MATCHLINE -L- STA. 210 + 00.00 SEE SHEET 18

MATCHLINE -L- STA. 224 + 00.00 SEE SHEET 20

MATCHLINE -Y- STA. 28 + 00.00 SEE SHEET 20



-Y-	
PI Sta 25+35.46	PI Sta 27+70.92
$\Delta = 2' 03' 29.3''$ (RT)	$\Delta = 8' 48' 46.6''$ (RT)
$D = 1' 54' 40.1''$	$D = 3' 12' 49.4''$
$L = 107.69'$	$L = 274.23'$
$T = 53.85'$	$T = 137.39'$
$R = 2,998.00'$	$R = 1,782.85'$

REVISIONS

8/17/99  
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-L-		-Y-		
PIs Sta 237+12.25	PI Sta 241+42.88	PI Sta 27+70.92	PI Sta 30+24.50	PI Sta 32+43.19
$\Theta_s = 0^\circ 33' 43.5''$	$\Delta = 5^\circ 42' 02.2''$ (RT)	$\Delta = 6^\circ 48' 46.6''$ (RT)	$\Delta = 6^\circ 31' 30.1''$ (RT)	$\Delta = 1^\circ 03' 35.2''$ (RT)
LS = 150.00'	D = 0' 44' 58.0"	D = 3' 12' 49.4"	D = 2' 47' 51.9"	D = 0' 31' 06.4"
LT = 100.00'	L = 760.63'	L = 274.23'	L = 233.22'	L = 204.41'
ST = 50.00'	T = 380.63'	T = 137.39'	T = 116.74'	T = 102.21'
	R = 7,645.00'	R = 1782.85'	R = 2,047.92'	R = 11,051.47'
	SE = 0.3			
	RO = 150'			

NAD 83/NSRS 2007

PROJECT REFERENCE NO. R-2514C	SHEET NO. 20
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

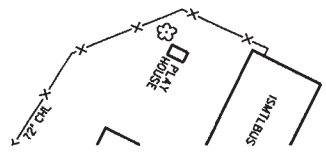
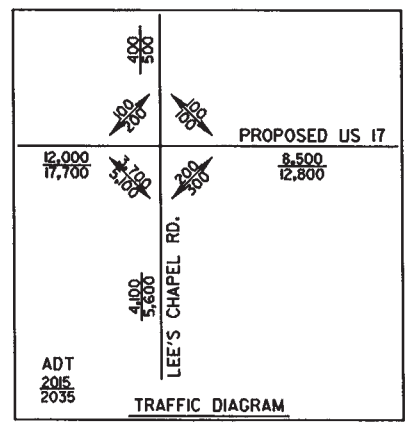
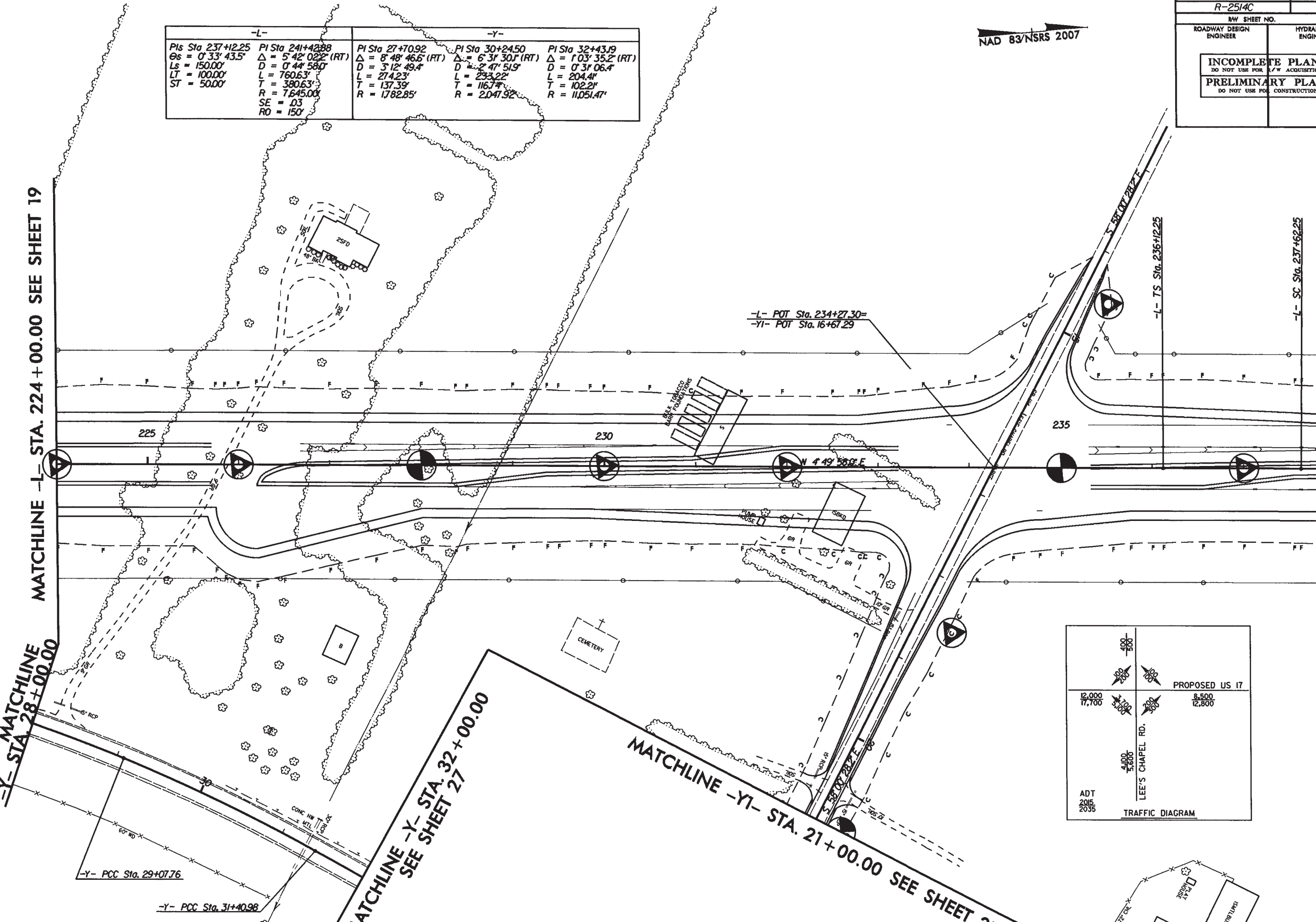
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MATCHLINE -Y- STA. 28 + 00.00

MATCHLINE -Y- STA. 32 + 00.00 SEE SHEET 27

MATCHLINE -Y1- STA. 21 + 00.00 SEE SHEET 27

MATCHLINE -L- STA. 238 + 00.00 SEE SHEET 21



REVISIONS

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Author: AT

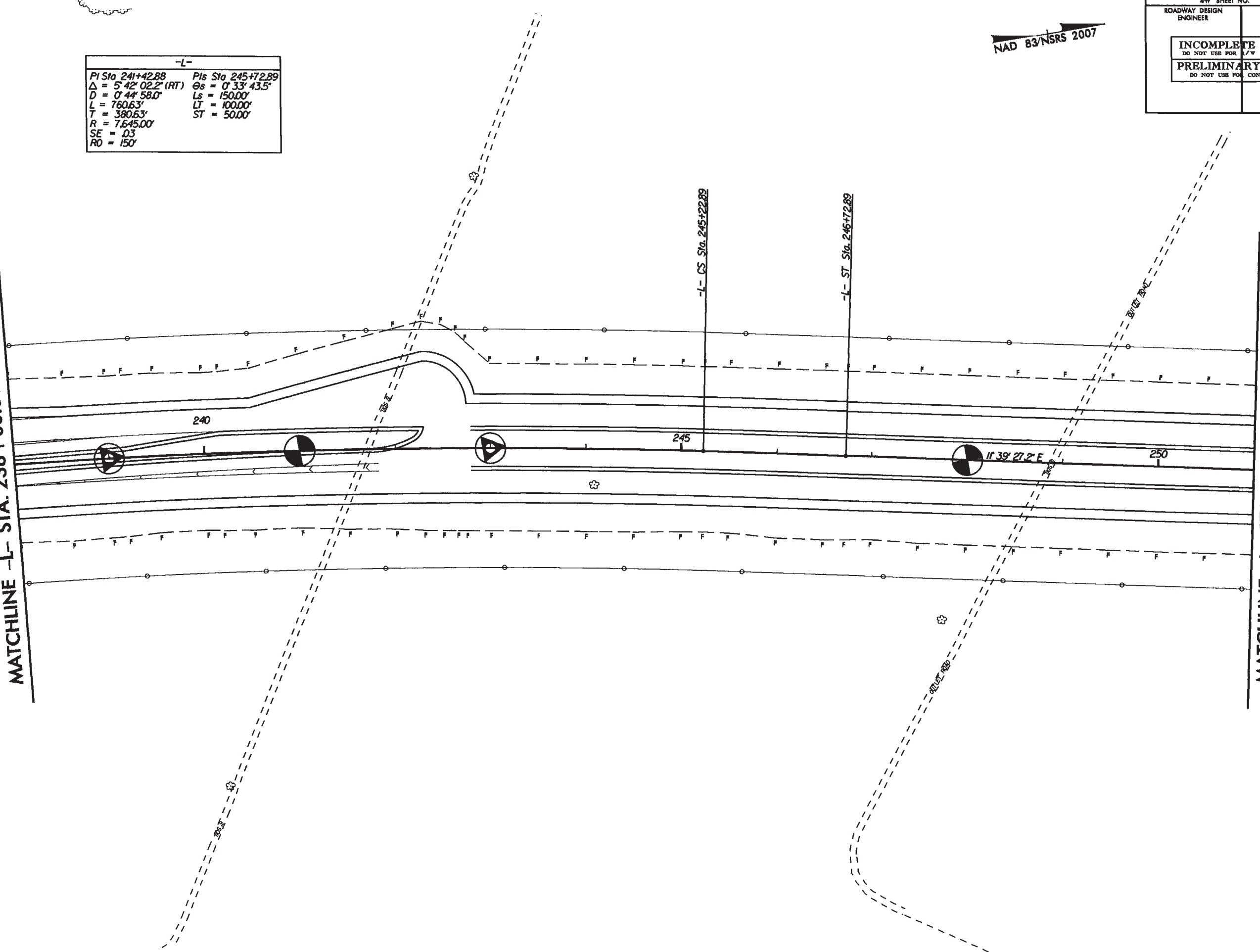
PROJECT REFERENCE NO. R-2514C	SHEET NO. 21
RAW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

NAD 83/NSRS 2007

-L-	
PI Sta 241+42.88	PIs Sta 245+72.89
$\Delta = 5^{\circ} 42' 02.2''$ (RT)	$\Theta_s = 0^{\circ} 33' 43.5''$
$D = 0^{\circ} 44' 58.0''$	$L_s = 150.00'$
$L = 760.63'$	$LT = 100.00'$
$T = 380.63'$	$ST = 50.00'$
$R = 7,645.00'$	
$SE = .03$	
$RO = 150'$	

MATCHLINE -L- STA. 238+00.00 SEE SHEET 20

MATCHLINE -L- STA. 251+00.00 SEE SHEET 22



REVISIONS

8/17/99

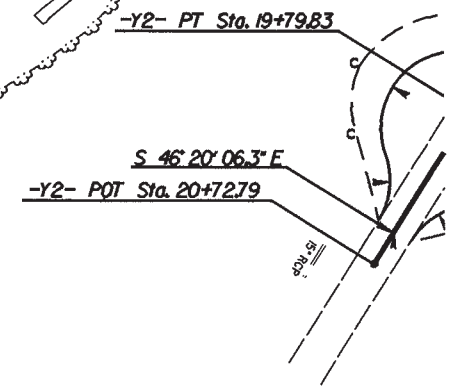
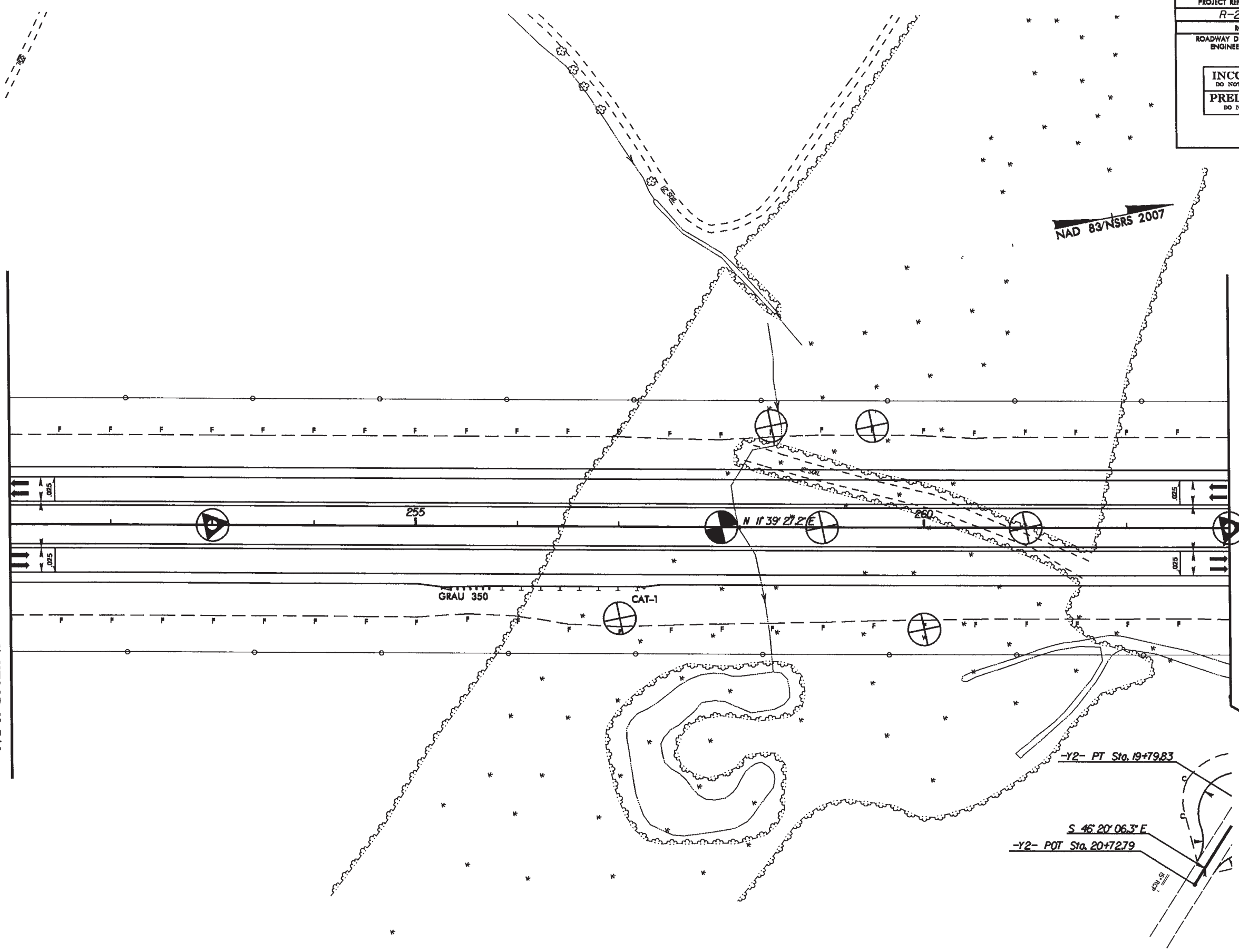
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PROJECT REFERENCE NO. R-2514C	SHEET NO. 22
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

MATCHLINE -L- STA. 251 + 00.00 SEE SHEET 21

MATCHLINE -L- STA. 263 + 00.00 SEE SHEET 23



REVISIONS



8/17/99

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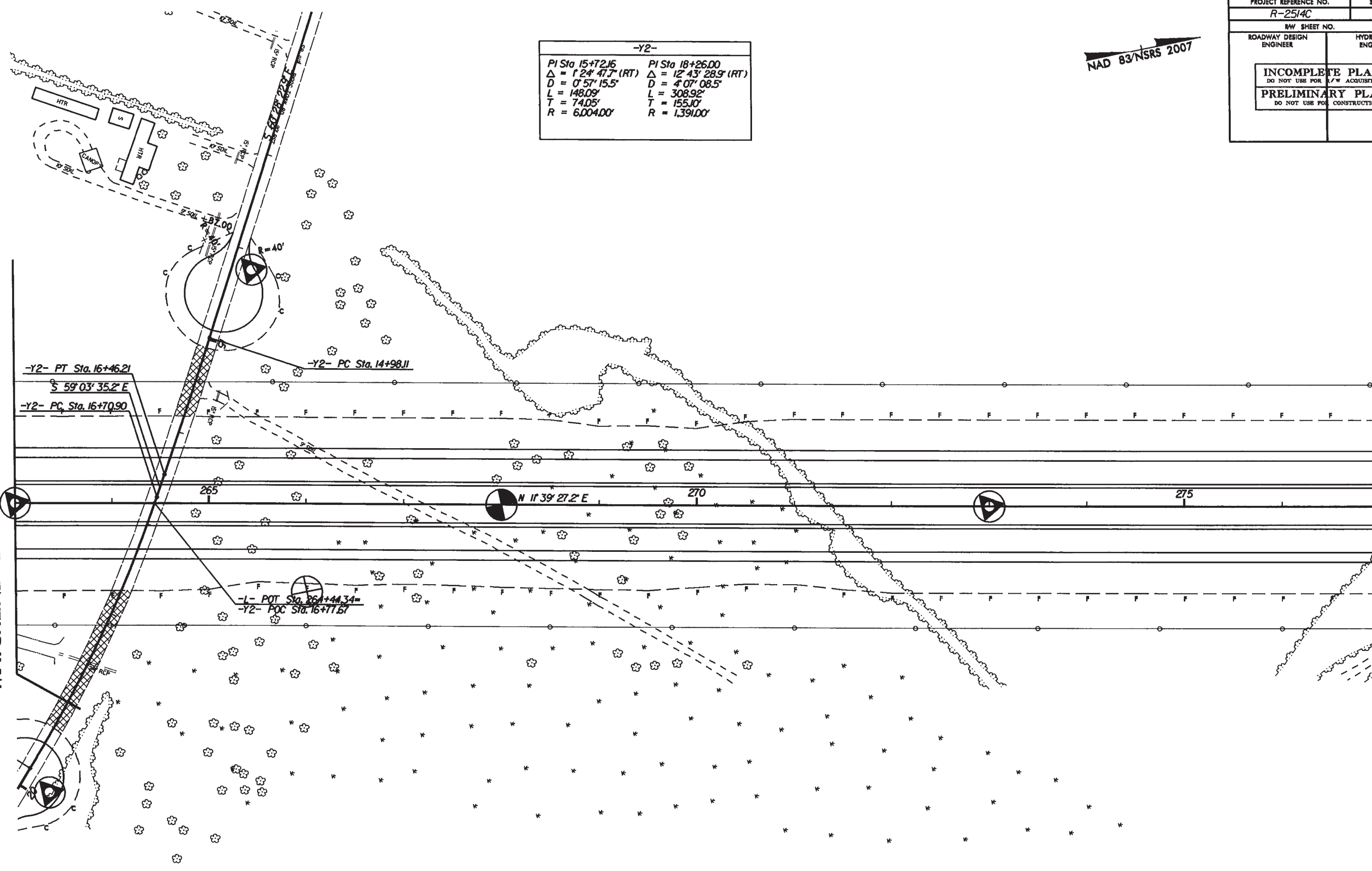
PROJECT REFERENCE NO. R-2514C	SHEET NO. 23
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

NAD 83/NSRS 2007

-Y2-	
PI Sta 15+72.16	PI Sta 18+26.00
$\Delta = 1^{\circ}24'47.7''$ (RT)	$\Delta = 12^{\circ}43'28.9''$ (RT)
D = 0'57'15.5"	D = 4'07'08.5"
L = 148.09'	L = 308.92'
T = 74.05'	T = 155.10'
R = 6,004.00'	R = 1,391.00'

MATCHLINE -L- STA. 263 + 00.00 SEE SHEET 22

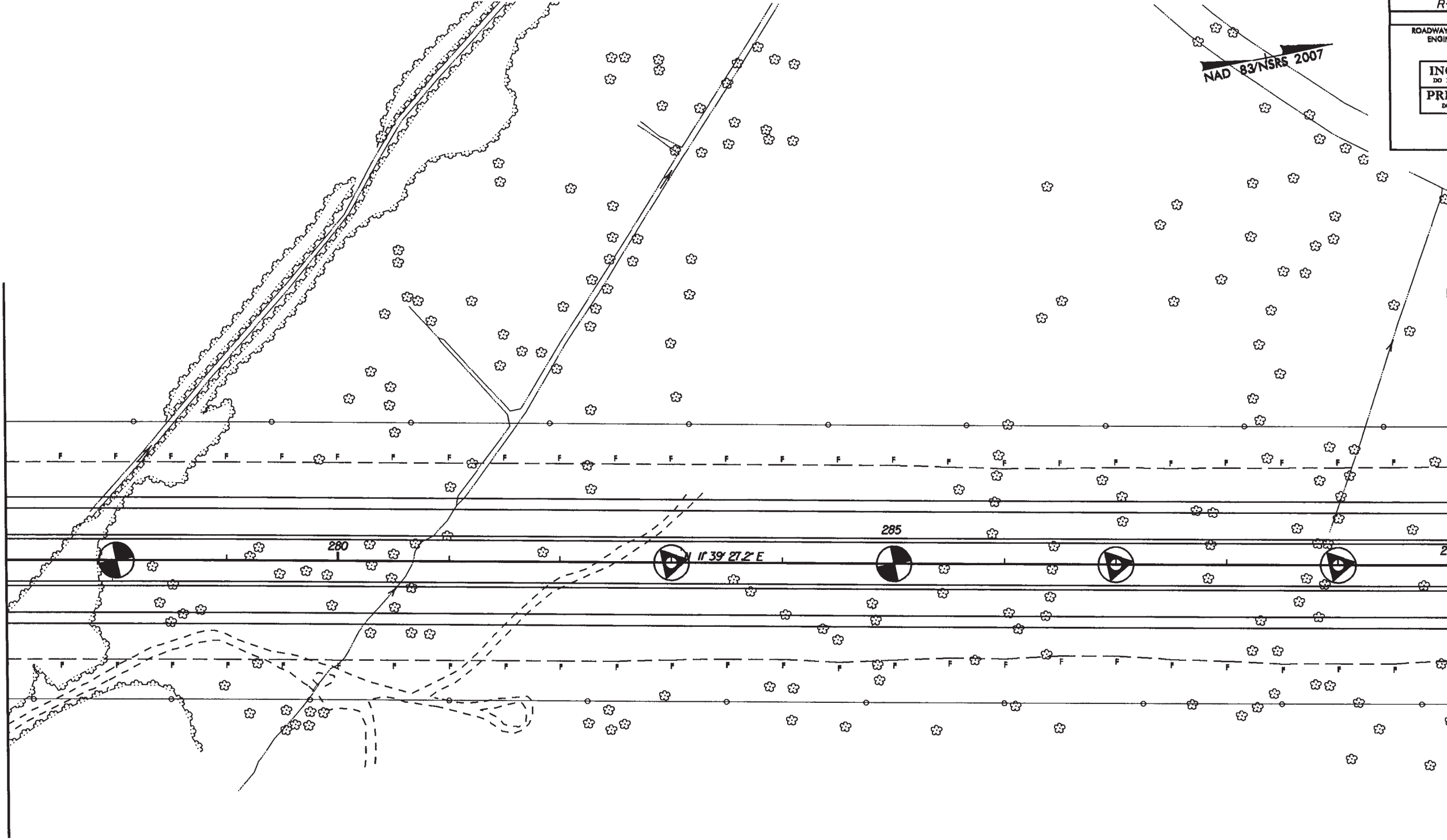
MATCHLINE -L- STA. 277 + 00.00 SEE SHEET 24



REVISIONS

8/17/99  
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REVISIONS

MATCHLINE -L- STA. 277 + 00.00 SEE SHEET 23



MATCHLINE -L- STA. 290 + 00.00 SEE SHEET 25

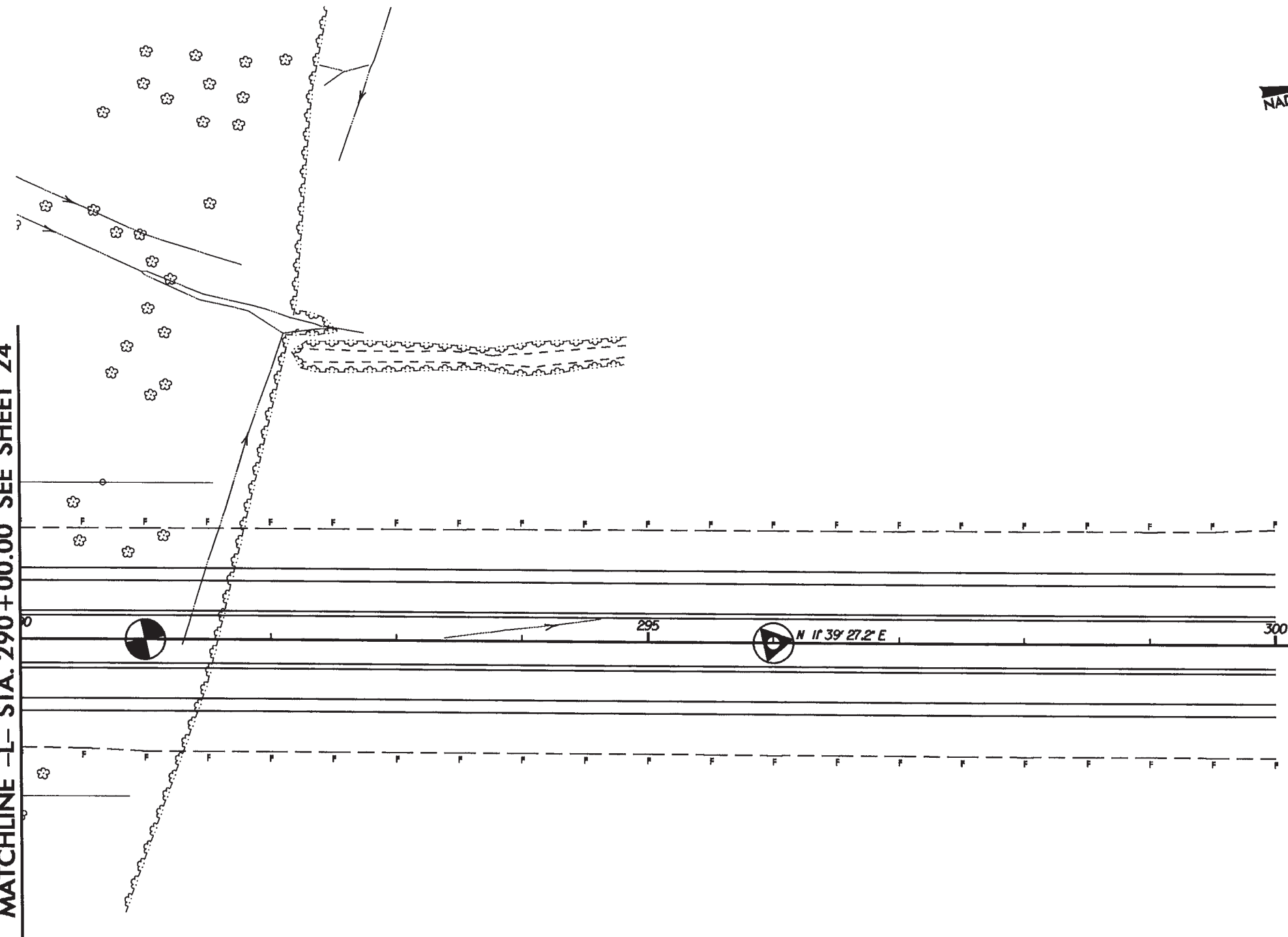
PROJECT REFERENCE NO. R-2514C	SHEET NO. 24
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

8/17/99

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Author: A. J. [unreadable]

REVISIONS

MATCHLINE -L- STA. 290 + 00.00 SEE SHEET 24



NAD 83/NSRS 2007

PROJECT REFERENCE NO. R-2514C	SHEET NO. 25
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

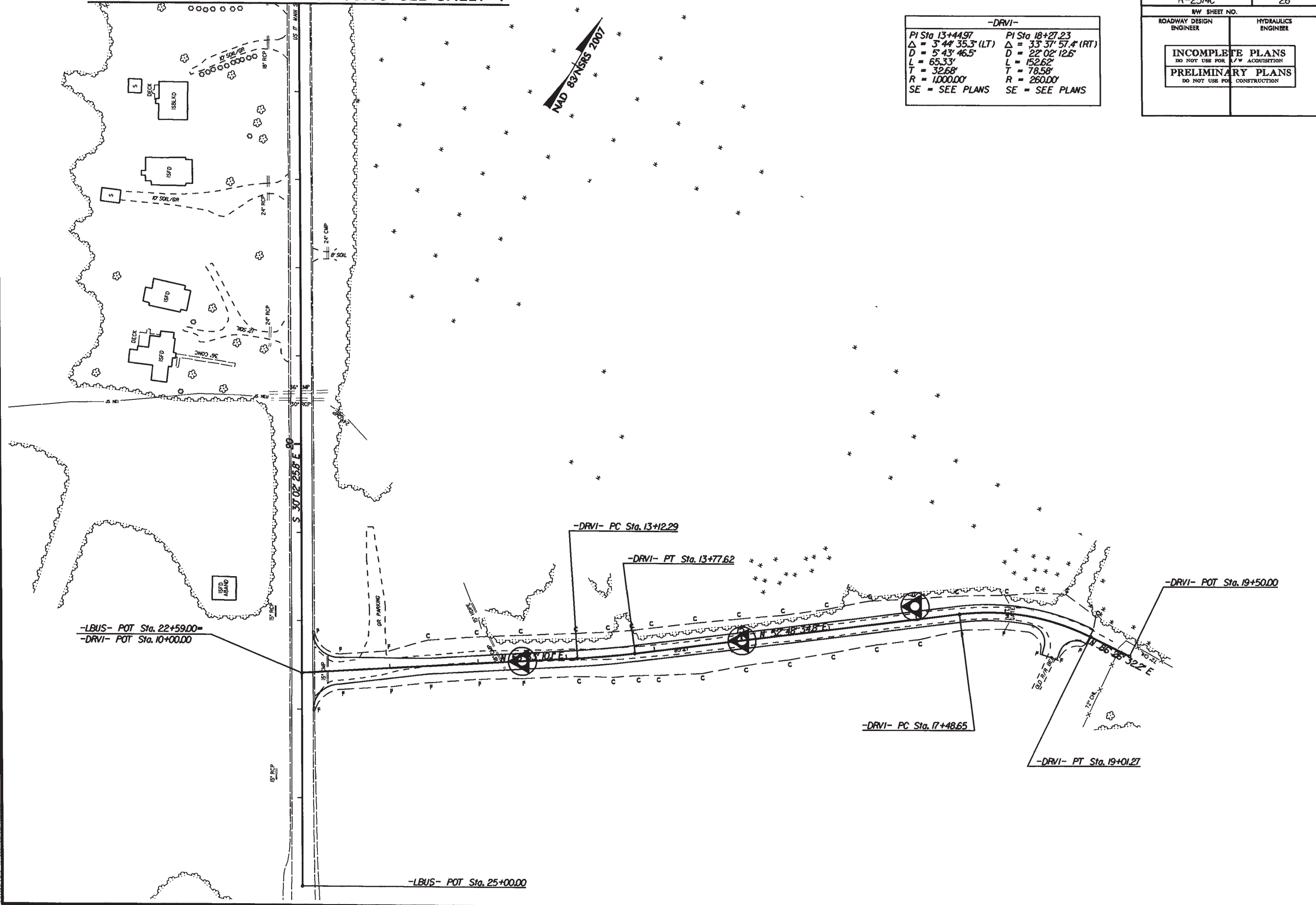
END PROJECT R-2514C  
BEGIN PROJECT R-2514D  
-L- STA. 300 + 00.00

8/17/99  
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 Author: AL (116)

**MATCHLINE -LBUS- STA. 15+00.00 SEE SHEET 4**

PROJECT REFERENCE NO. <b>R-2514C</b>	SHEET NO. <b>26</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

-DRVI-	
PI Sta 13+44.97	PI Sta 18+27.23
$\Delta = 3^{\circ} 44' 35.3"$ (LT)	$\Delta = 33^{\circ} 37' 57.4"$ (RT)
D = 5' 43' 46.5"	D = 22' 02' 12.6"
L = 65.33'	L = 152.62'
T = 32.68'	T = 78.58'
R = 1000.00'	R = 260.00'
SE = SEE PLANS	SE = SEE PLANS



REVISIONS

8/17/99

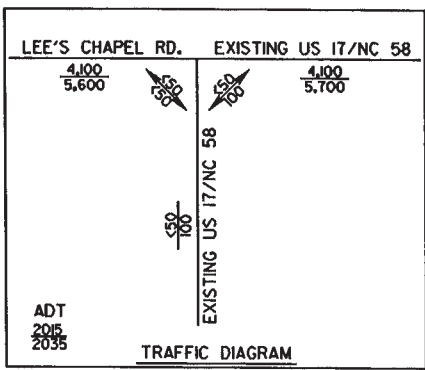
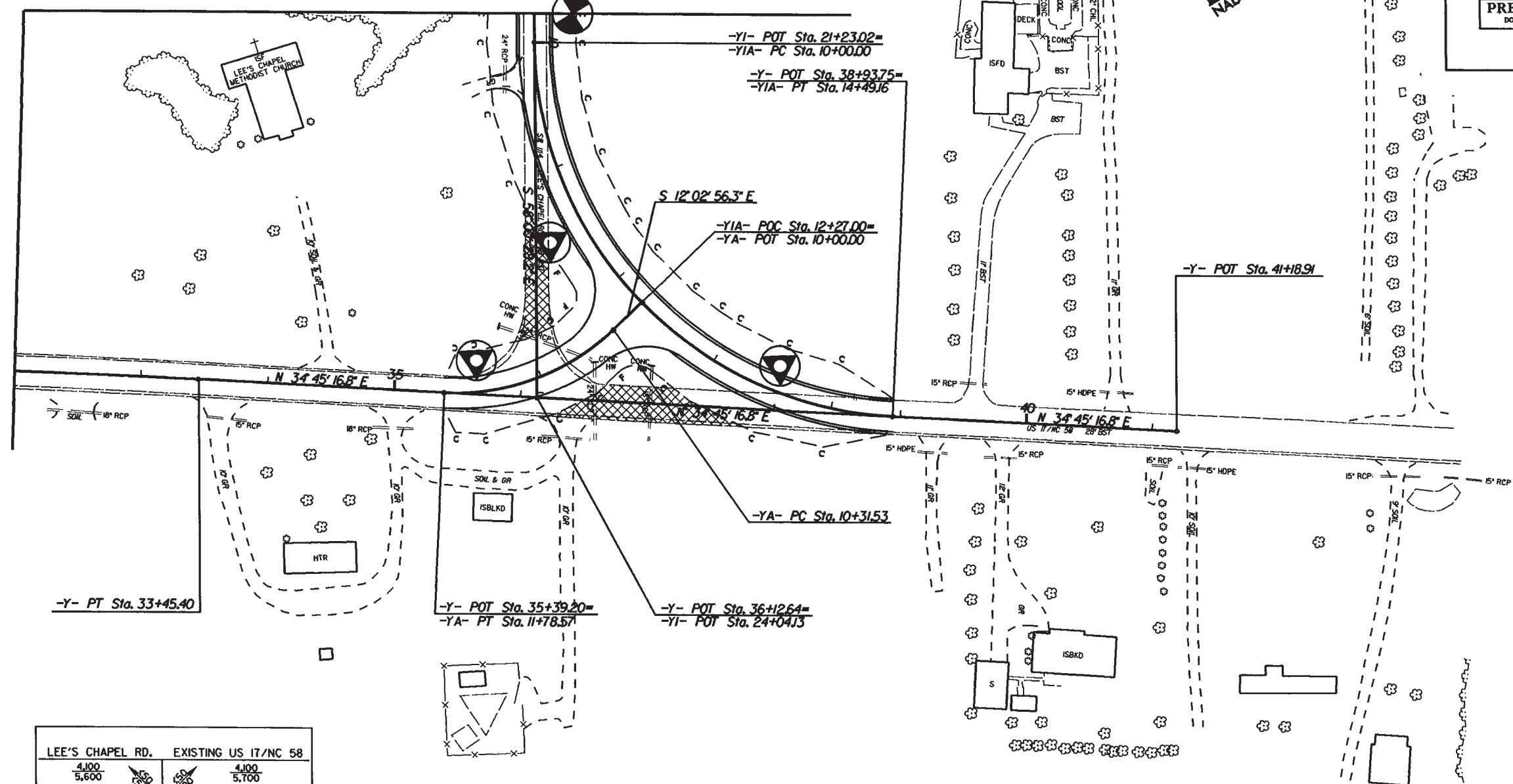
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PROJECT REFERENCE NO. R-2514C	SHEET NO. 27
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

MATCHLINE -Y1- STA. 21+00.00 SEE SHEET 20

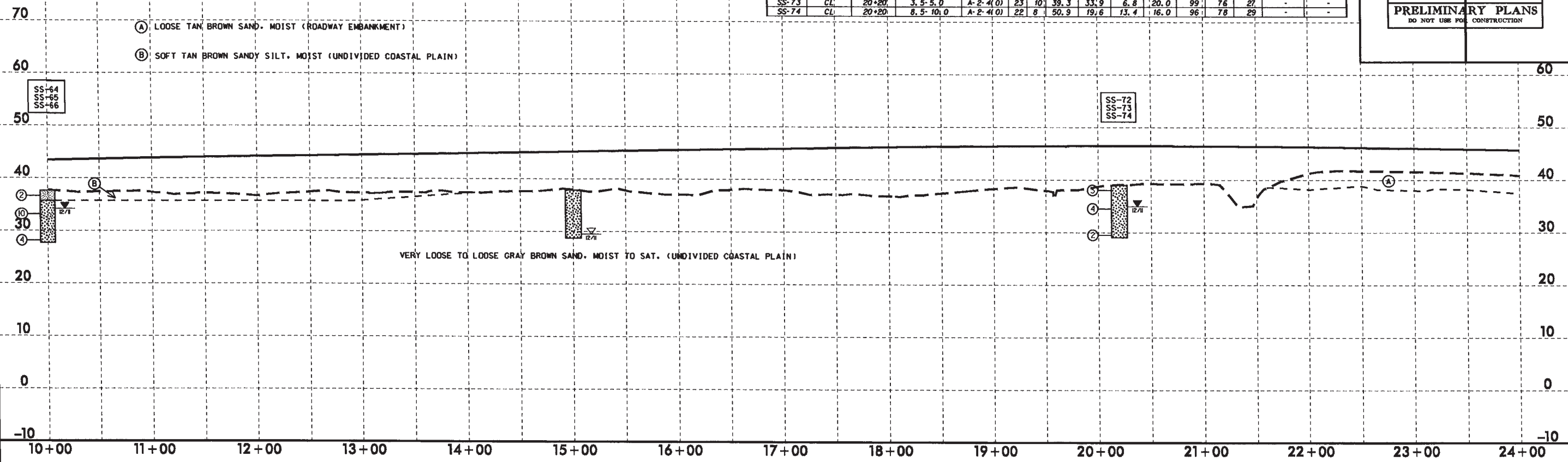
MATCHLINE -Y- STA. 32+00.00  
SEE SHEET 20



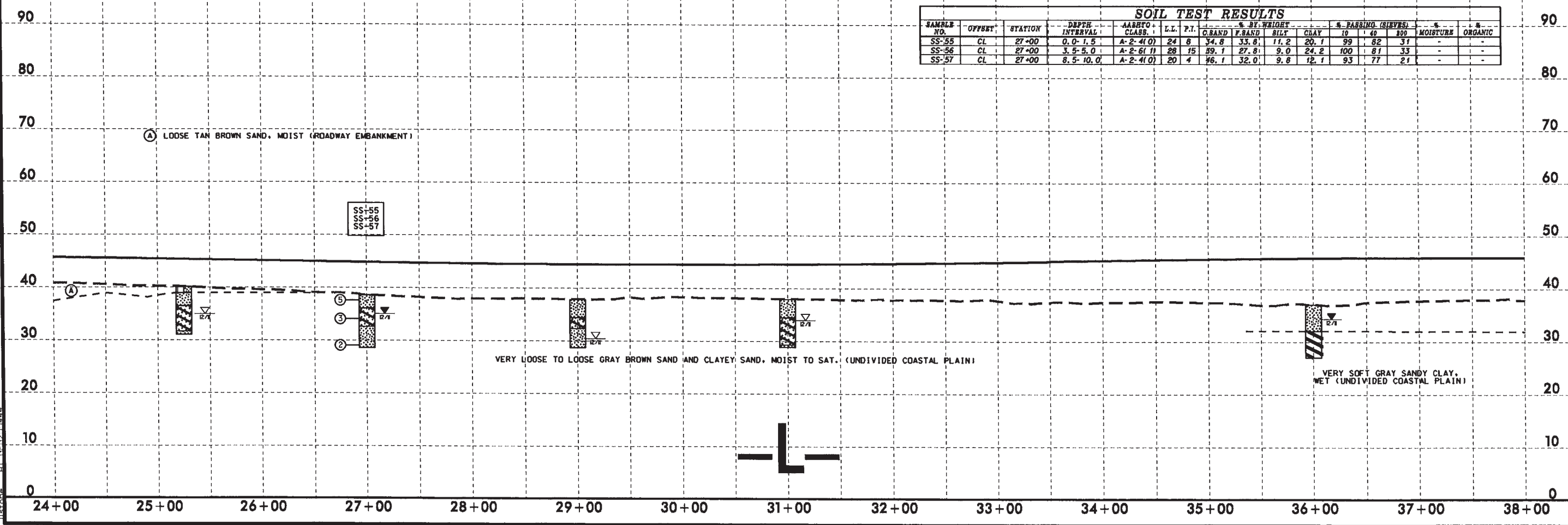
-Y-	-YA-	-YIA-
PI Sta 32+43.19	PI Sta 11+09.43	PI Sta 12+81.11
$\Delta = 1^{\circ}03'35.2"$ (RT)	$\Delta = 46^{\circ}48'13.2"$ (RT)	$\Delta = 87^{\circ}14'15.0"$ (LT)
D = 0'31'06.4"	D = 31'49'51.6"	D = 19'25'20.3"
L = 204.41'	L = 147.04'	L = 449.16'
T = 102.21'	T = 77.90'	T = 281.11'
R = 11,051.47'	R = 180.00'	R = 295.00'
	SE = SEE PLANS	SE = SEE PLANS

SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	ABRTO CLASS.	L.L.	P.I.	% BY WEIGHT			% PASSING (SIEVES)			% MOISTURE	% ORGANIC	
							G.SAND	F.SAND	SILT	10	40	200			
SS-64	CL	10+00	0.0-1.5	A-4(D)	27	6	26.0	30.4	25.5	18.1	100	87	44	-	-
SS-65	CL	10+00	3.5-5.0	A-2-4(0)	18	NP	41.9	38.5	7.6	12.1	98	75	20	-	-
SS-66	CL	10+00	8.5-10.0	A-2-4(0)	22	NP	70.7	17.3	10.0	2.0	97	73	12	-	-
SS-72	CL	20+20	0.0-1.5	A-2-4(0)	26	5	31.1	41.7	15.2	12.0	97	81	27	-	-
SS-73	CL	20+20	3.5-5.0	A-2-4(0)	23	10	39.3	33.9	6.8	20.0	99	76	27	-	-
SS-74	CL	20+20	8.5-10.0	A-2-4(0)	22	8	50.9	19.6	13.4	16.0	96	78	29	-	-

PROJECT REFERENCE NO. <b>R-2514C</b>	SHEET NO. <b>28</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR L/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	ABRTO CLASS.	L.L.	P.I.	% BY WEIGHT			% PASSING (SIEVES)			% MOISTURE	% ORGANIC	
							G.SAND	F.SAND	SILT	10	40	200			
SS-55	CL	27+00	0.0-1.5	A-2-4(0)	24	8	34.8	33.8	11.2	20.1	99	82	31	-	-
SS-56	CL	27+00	3.5-5.0	A-2-6(1)	28	15	39.1	27.8	9.0	24.2	100	81	33	-	-
SS-57	CL	27+00	8.5-10.0	A-2-4(0)	20	4	36.1	32.0	9.8	12.1	93	77	21	-	-

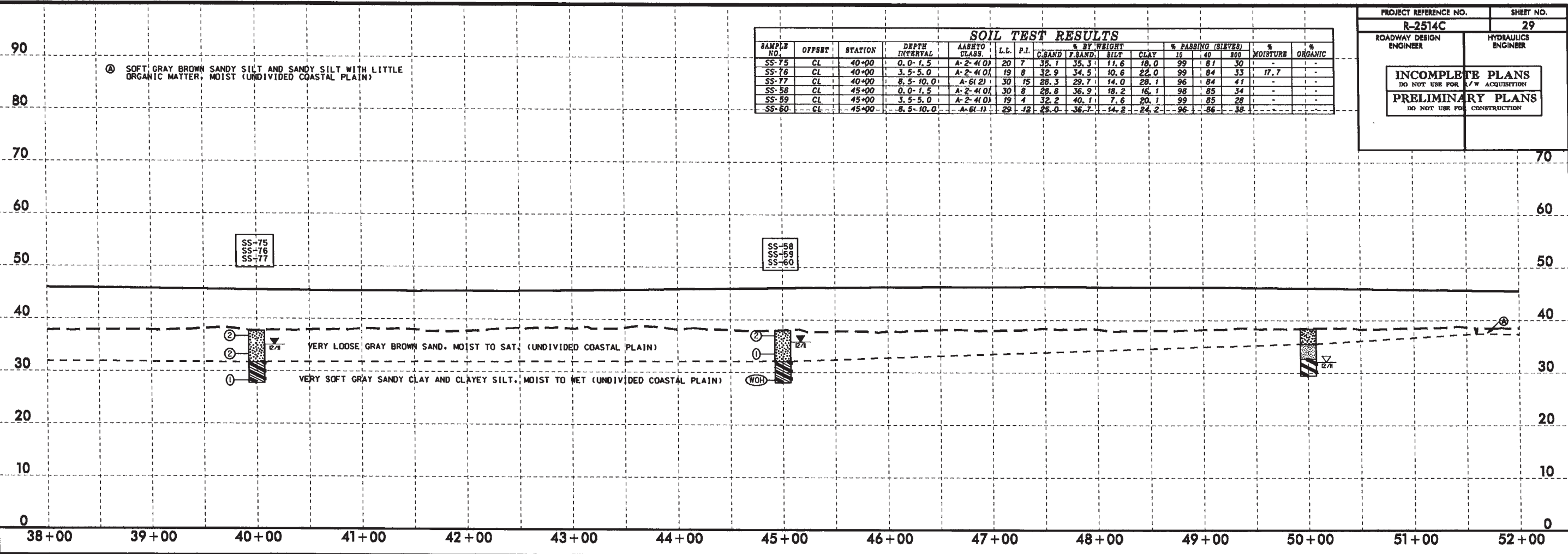


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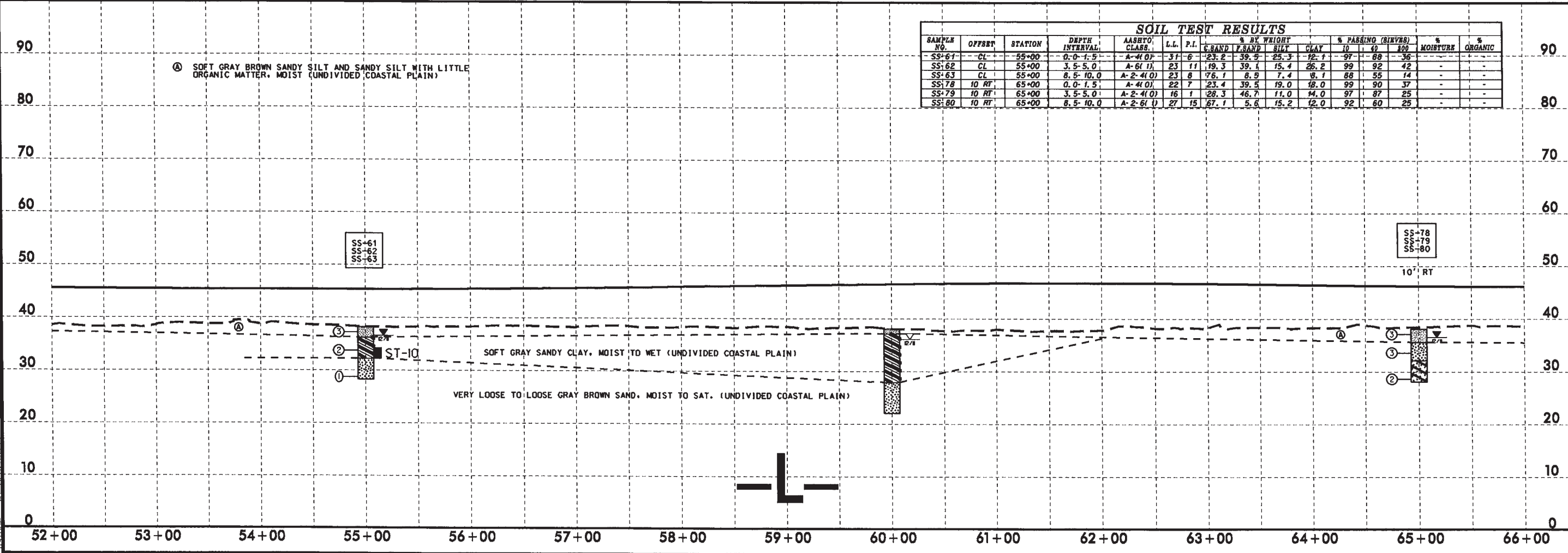
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 AT 15:25:44

PROJECT REFERENCE NO. <b>R-2514C</b>	SHEET NO. <b>29</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	ASHFTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C SAND	F SAND	SILT	CLAY	10	40	60		
SS-75	CL	40+00	0.0-1.5	A-2-4(0)	20	7	35.1	35.3	11.6	18.0	99	81	30	-	-
SS-76	CL	40+00	3.5-5.0	A-2-4(0)	19	8	32.9	34.5	10.6	22.0	99	84	33	17.7	-
SS-77	CL	40+00	8.5-10.0	A-6(2)	30	15	28.3	29.7	14.0	28.1	96	84	41	-	-
SS-58	CL	45+00	0.0-1.5	A-2-4(0)	30	8	28.8	36.9	18.2	16.1	98	85	34	-	-
SS-59	CL	45+00	3.5-5.0	A-2-4(0)	19	4	32.2	40.1	7.6	20.1	99	85	28	-	-
SS-60	CL	45+00	8.5-10.0	A-6(1)	29	12	25.0	36.7	14.2	24.2	96	86	38	-	-



SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	ASHFTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C SAND	F SAND	SILT	CLAY	10	40	60		
SS-61	CL	55+00	0.0-1.5	A-4(0)	31	6	23.2	39.5	25.3	12.1	97	88	36	-	-
SS-62	CL	55+00	3.5-5.0	A-6(1)	23	11	19.3	39.1	15.4	26.2	99	92	42	-	-
SS-63	CL	55+00	8.5-10.0	A-2-4(0)	23	8	17.6	8.9	7.4	8.1	88	55	14	-	-
SS-78	10 RT	65+00	0.0-1.5	A-4(0)	22	7	23.4	39.5	19.0	18.0	99	90	37	-	-
SS-79	10 RT	65+00	3.5-5.0	A-2-4(0)	16	1	28.3	46.7	11.0	14.0	97	87	25	-	-
SS-80	10 RT	65+00	8.5-10.0	A-2-6(1)	27	15	17.1	5.6	15.2	12.0	92	60	25	-	-

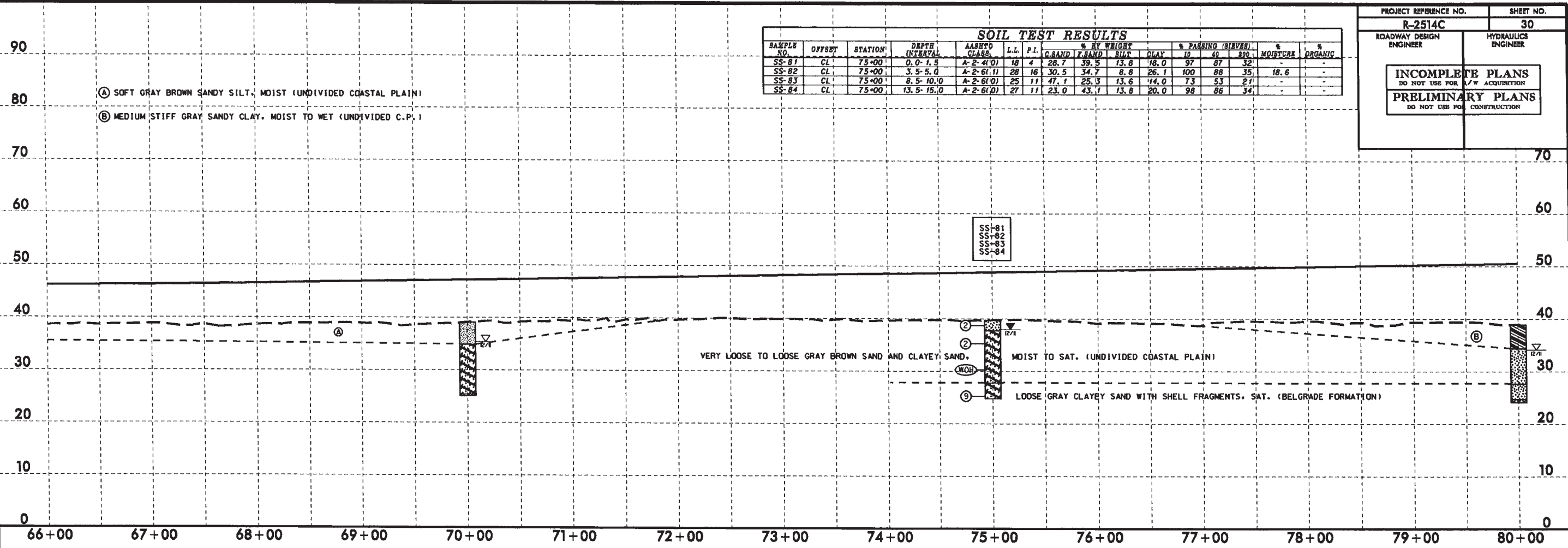


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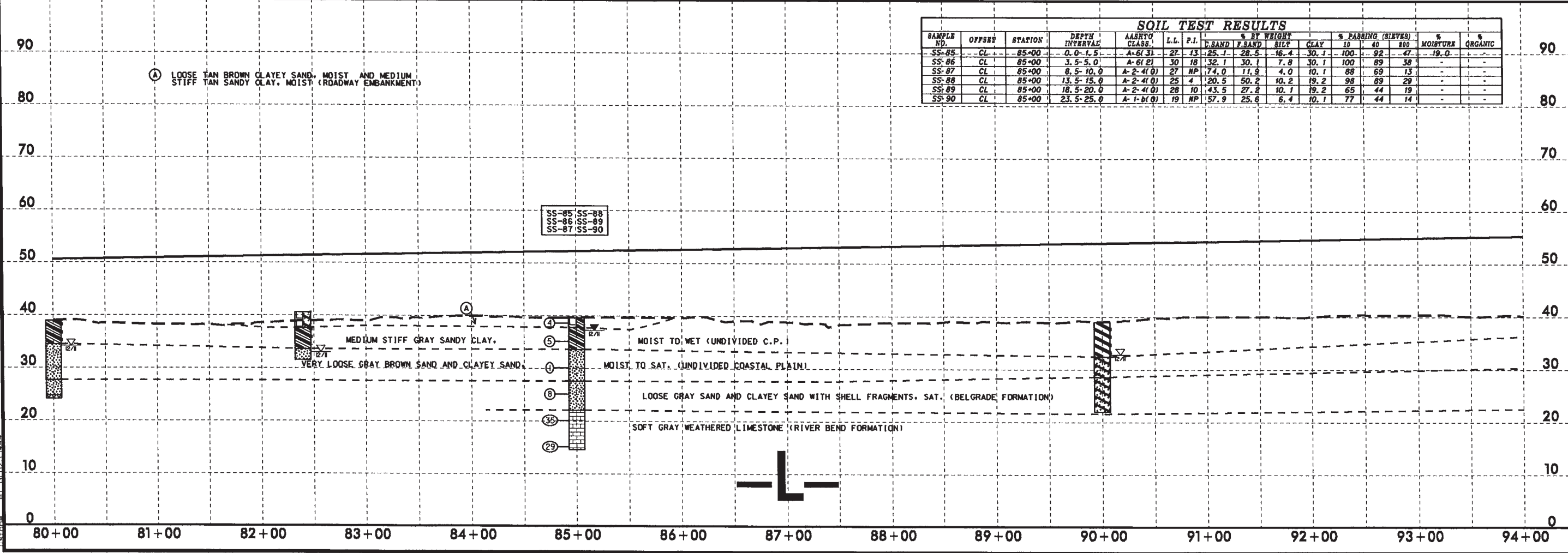
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PROJECT REFERENCE NO.	SHEET NO.
R-2514C	30
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)		% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	200		
SS-81	CL	75+00	0.0-1.5	A-2-4(0)	18	4	28.7	39.9	13.8	16.0	97	87	32	-
SS-82	CL	75+00	3.5-5.0	A-2-6(1)	28	16	30.5	34.7	8.8	26.1	100	88	35	18.6
SS-83	CL	75+00	8.5-10.0	A-2-6(0)	25	11	47.1	25.3	13.6	14.0	73	53	21	-
SS-84	CL	75+00	13.5-15.0	A-2-6(0)	27	11	23.0	43.1	13.8	20.0	98	86	34	-



SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)		% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	200		
SS-85	CL	85+00	0.0-1.5	A-6(3)	27	13	25.1	28.5	16.4	30.1	100	92	47	19.0
SS-86	CL	85+00	3.5-5.0	A-6(2)	30	18	32.1	30.1	7.8	30.1	100	89	38	-
SS-87	CL	85+00	8.5-10.0	A-2-4(0)	27	NP	74.0	11.9	4.0	10.1	88	69	13	-
SS-88	CL	85+00	13.5-15.0	A-2-4(0)	25	4	20.5	50.2	10.2	19.2	98	89	29	-
SS-89	CL	85+00	18.5-20.0	A-2-4(0)	28	10	43.5	27.2	10.1	19.2	65	44	19	-
SS-90	CL	85+00	23.5-25.0	A-1-b(0)	19	NP	57.9	25.6	6.4	10.1	77	44	14	-

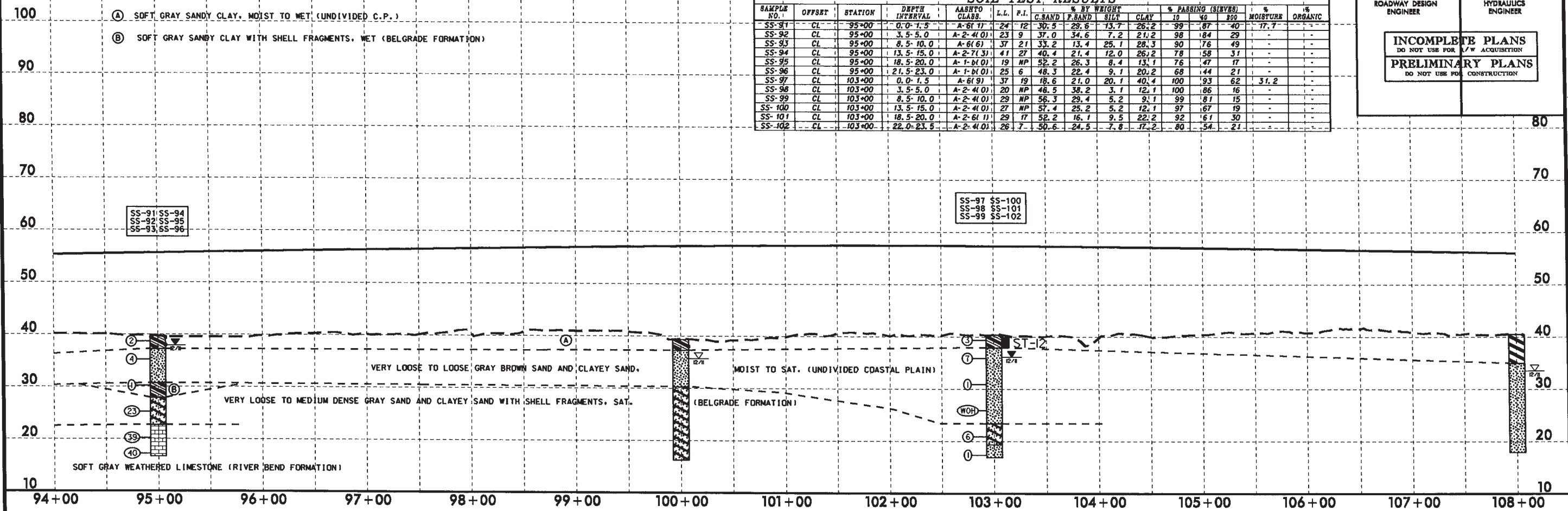




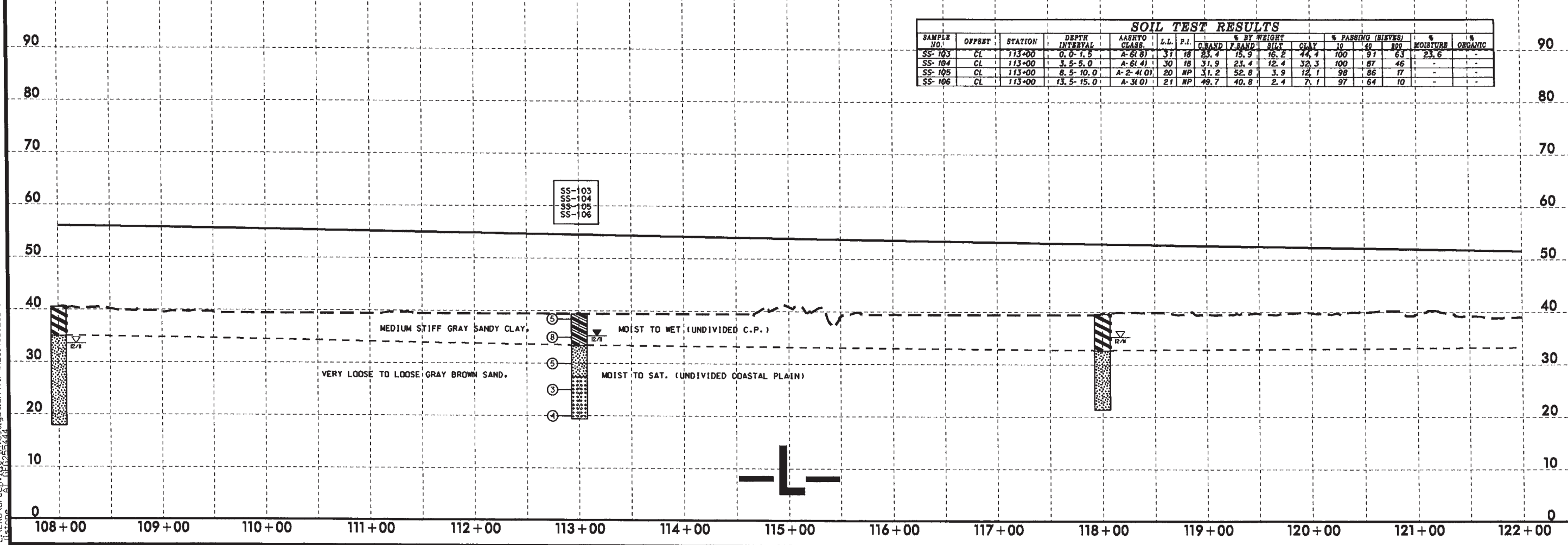
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PROJECT REFERENCE NO. <b>R-2514C</b>	SHEET NO. <b>31</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-91	CL	95+00	0.0-1.5	A-6(11)	24	12	30.5	29.6	13.7	26.2	99	87	40	17.7	-
SS-92	CL	95+00	3.5-5.0	A-2(4(0))	23	9	37.0	34.6	7.2	21.2	98	84	29	-	-
SS-93	CL	95+00	8.5-10.0	A-6(6)	37	21	33.2	13.4	25.1	28.3	90	76	49	-	-
SS-94	CL	95+00	13.5-15.0	A-2(7(3))	41	27	40.4	21.4	12.0	26.2	78	58	31	-	-
SS-95	CL	95+00	18.5-20.0	A-1(4(0))	19	NP	52.2	26.3	8.4	13.1	76	47	17	-	-
SS-96	CL	95+00	21.5-23.0	A-1(4(0))	25	6	48.3	22.4	9.1	20.2	68	44	21	-	-
SS-97	CL	103+00	0.0-1.5	A-6(9)	37	19	18.6	21.0	20.1	40.4	100	93	62	31.2	-
SS-98	CL	103+00	3.5-5.0	A-2(4(0))	20	NP	48.5	38.2	3.1	12.1	100	86	16	-	-
SS-99	CL	103+00	8.5-10.0	A-2(4(0))	29	NP	56.3	29.4	5.2	9.1	99	81	15	-	-
SS-100	CL	103+00	13.5-15.0	A-2(4(0))	27	NP	57.4	25.2	5.2	12.1	97	67	19	-	-
SS-101	CL	103+00	18.5-20.0	A-2(6(1))	29	17	52.2	16.1	9.5	22.2	92	61	30	-	-
SS-102	CL	103+00	22.0-23.5	A-2(4(0))	26	7	50.6	24.5	7.8	17.2	80	54	21	-	-



SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-103	CL	113+00	0.0-1.5	A-6(8)	37	18	23.4	15.9	16.2	44.4	100	91	63	23.6	-
SS-104	CL	113+00	3.5-5.0	A-6(4)	30	18	31.9	23.4	12.4	32.3	100	87	46	-	-
SS-105	CL	113+00	8.5-10.0	A-2(4(0))	20	NP	31.2	52.8	3.9	12.1	98	86	17	-	-
SS-106	CL	113+00	13.5-15.0	A-3(0)	21	NP	49.7	40.8	2.4	7.1	97	64	10	-	-



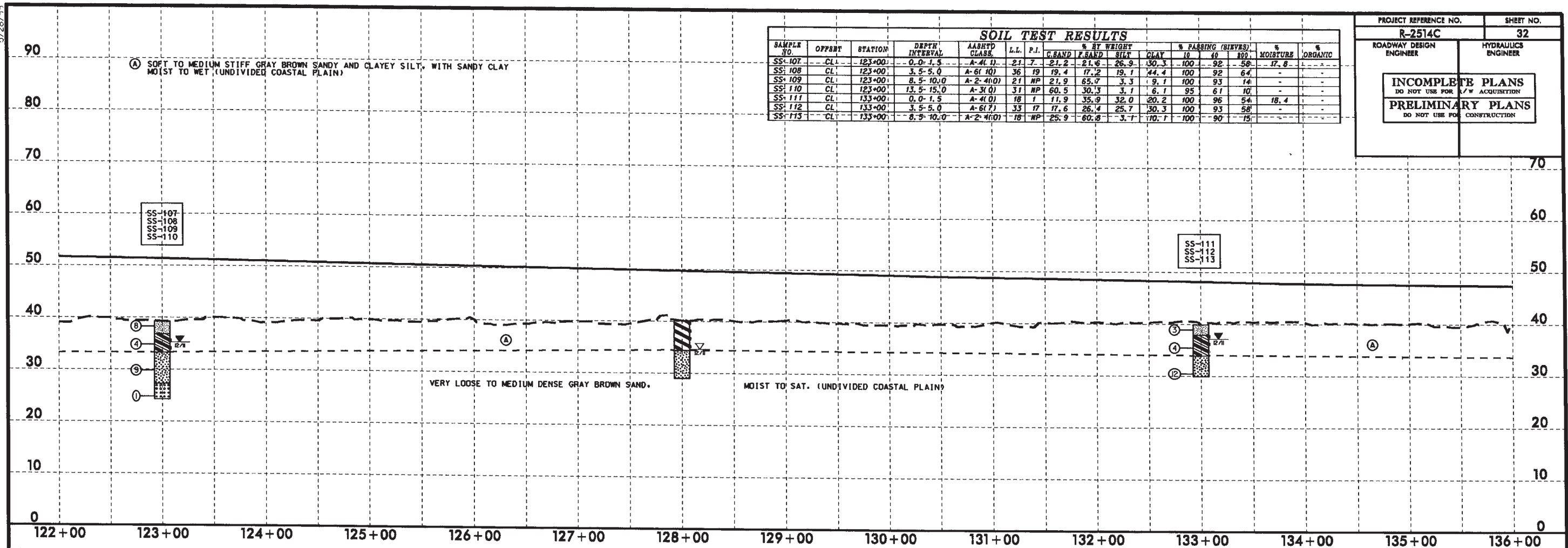
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5/28/99

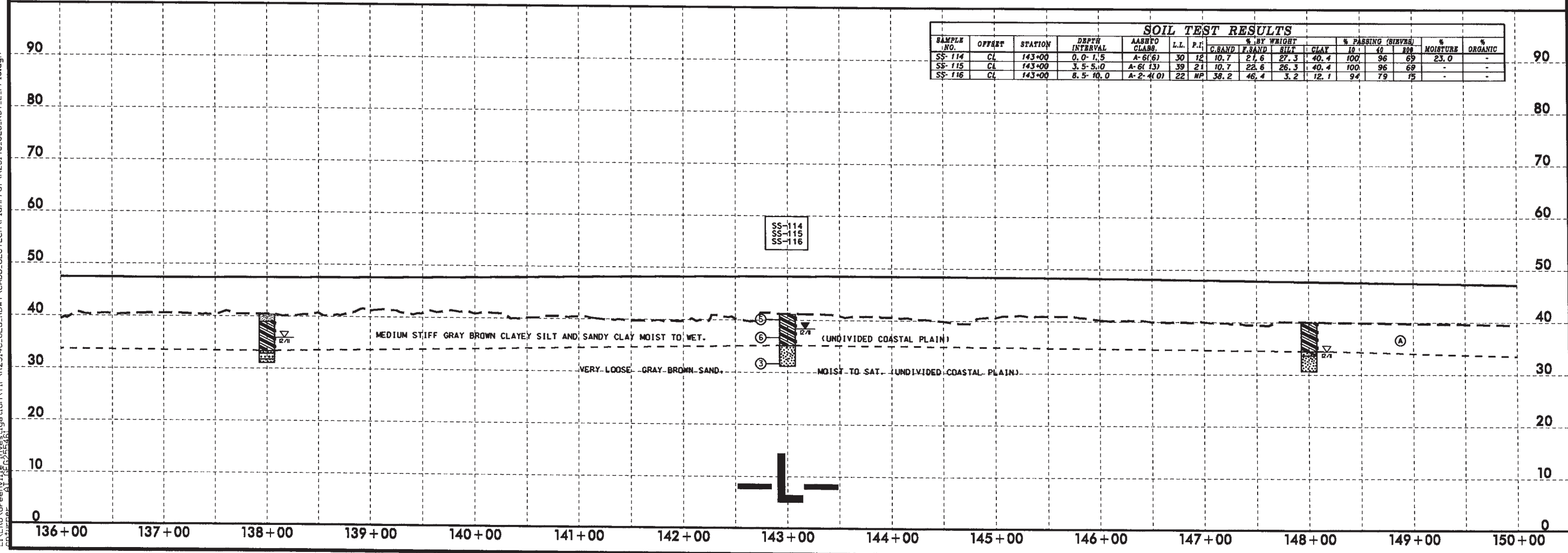
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 AT: R2514C

PROJECT REFERENCE NO. <b>R-2514C</b>	SHEET NO. <b>32</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							G.SAND	F.SAND	SILT	CLAY	10	40	200		
SS-107	CL	123+00	0.0-1.5	A-4(1)	21	7	21.2	21.6	26.9	30.3	100	92	58	17.8	-
SS-108	CL	123+00	3.5-5.0	A-6(10)	36	19	19.4	17.2	19.1	44.4	100	92	64	-	-
SS-109	CL	123+00	8.5-10.0	A-2-4(0)	21	NP	21.9	65.7	3.3	9.1	100	93	14	-	-
SS-110	CL	123+00	13.5-15.0	A-3(0)	31	NP	60.5	30.3	3.1	6.1	95	61	10	-	-
SS-111	CL	133+00	0.0-1.5	A-4(0)	18	1	11.9	35.9	32.0	20.2	100	96	54	18.4	-
SS-112	CL	133+00	3.5-5.0	A-6(7)	33	17	17.6	26.4	25.7	30.3	100	93	58	-	-
SS-113	CL	133+00	8.5-10.0	A-2-4(0)	18	NP	25.9	60.8	3.1	10.1	100	90	15	-	-



SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							G.SAND	F.SAND	SILT	CLAY	10	40	200		
SS-114	CL	143+00	0.0-1.5	A-6(6)	30	12	10.7	21.6	27.3	40.4	100	96	69	23.0	-
SS-115	CL	143+00	3.5-5.0	A-6(13)	39	21	10.7	22.6	26.3	40.4	100	96	69	-	-
SS-116	CL	143+00	8.5-10.0	A-2-4(0)	22	NP	38.2	46.4	3.2	12.1	94	79	15	-	-

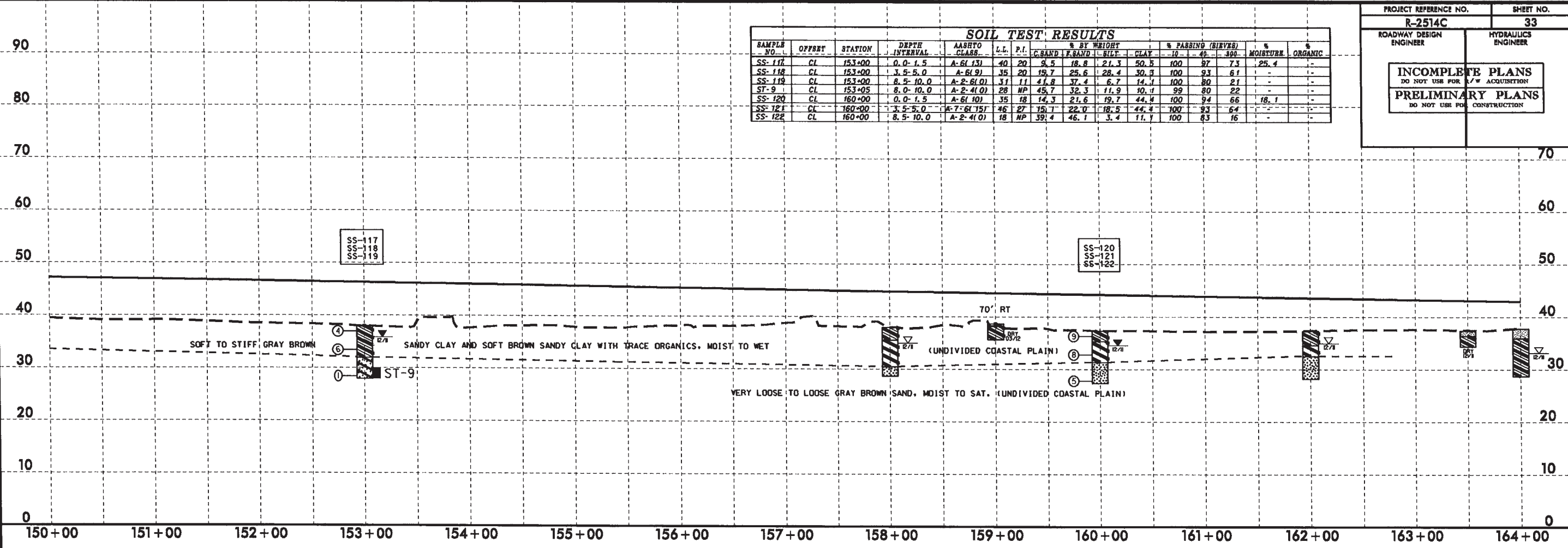


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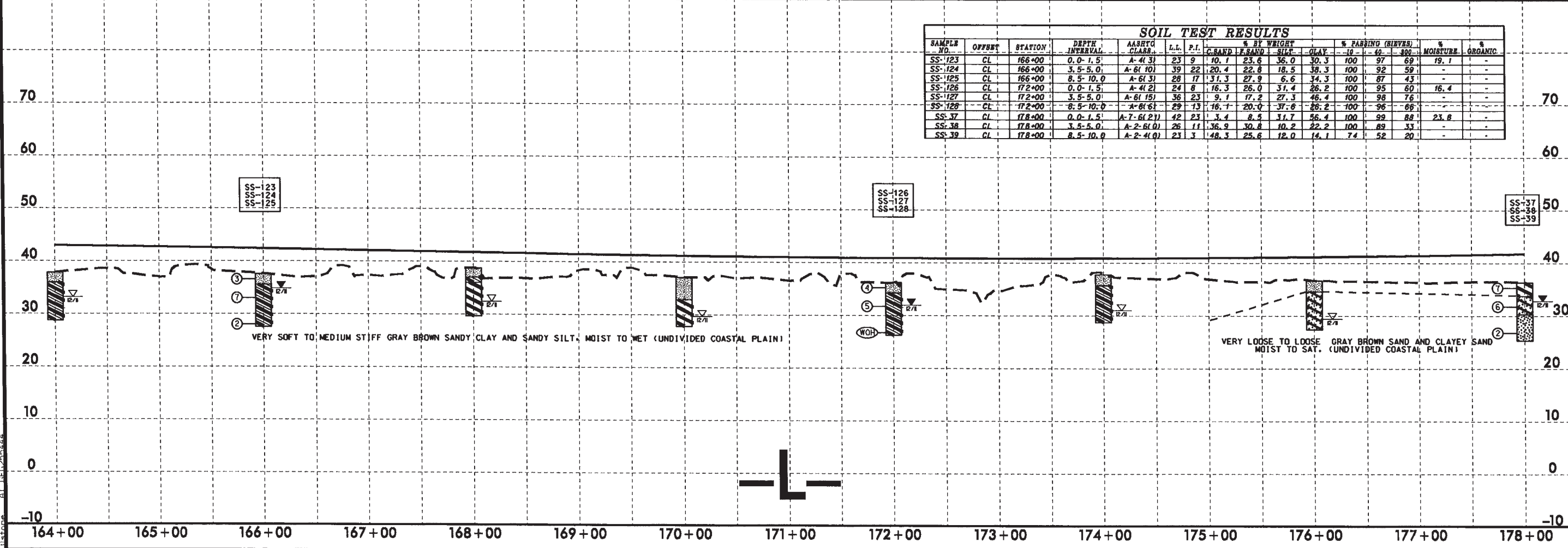
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PROJECT REFERENCE NO. <b>R-2514C</b>	SHEET NO. <b>33</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C-SAND	F-SAND	SILT	CLAY	-10	-40	-200		
SS-117	CL	153+00	0.0-1.5	A-6(13)	40	20	8.5	18.8	21.3	50.5	100	97	7.3	25.4	-
SS-118	CL	153+00	3.5-5.0	A-6(9)	35	20	19.7	25.6	28.4	30.3	100	81	6.1	-	-
SS-119	CL	153+00	8.5-10.0	A-2-6(0)	11	11	44.2	37.4	6.7	14.3	100	80	21	-	-
ST-9	CL	153+05	8.0-10.0	A-2-4(0)	28	NP	45.7	32.3	11.9	10.0	99	80	22	-	-
SS-120	CL	160+00	0.0-1.5	A-6(10)	35	18	14.3	21.6	19.7	44.4	100	94	6.6	18.1	-
SS-121	CL	160+00	3.5-5.0	A-7-6(2)	46	27	19.7	22.0	18.5	44.4	100	83	6.4	-	-
SS-122	CL	160+00	8.5-10.0	A-2-4(0)	18	NP	39.4	46.1	3.4	11.7	100	83	16	-	-

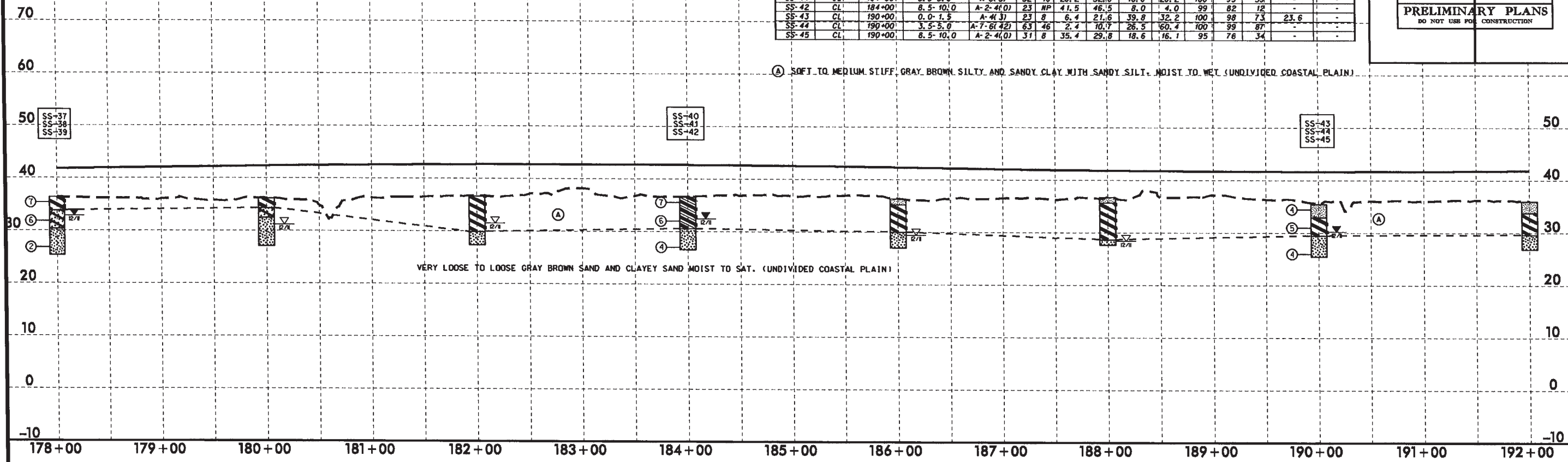


SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C-SAND	F-SAND	SILT	CLAY	-10	-40	-200		
SS-123	CL	166+00	0.0-1.5	A-4(3)	23	9	10.7	23.6	36.0	30.3	100	97	6.9	19.1	-
SS-124	CL	166+00	3.5-5.0	A-6(10)	39	22	20.4	22.8	18.5	38.3	100	92	5.9	-	-
SS-125	CL	166+00	8.5-10.0	A-6(3)	28	17	37.3	27.9	6.6	34.3	100	87	4.3	-	-
SS-126	CL	172+00	0.0-1.5	A-4(2)	24	8	16.3	26.0	31.4	26.2	100	95	6.0	16.4	-
SS-127	CL	172+00	3.5-5.0	A-6(15)	36	23	9.7	17.2	27.3	46.4	100	98	7.6	-	-
SS-128	CL	172+00	8.5-10.0	A-6(6)	29	13	16.7	20.0	37.6	26.2	100	96	6.6	-	-
SS-37	CL	178+00	0.0-1.5	A-7-6(2)	42	23	3.4	8.5	31.7	56.4	100	99	8.8	23.8	-
SS-38	CL	178+00	3.5-5.0	A-2-6(0)	26	11	36.9	30.8	10.2	22.2	100	89	3.3	-	-
SS-39	CL	178+00	8.5-10.0	A-2-4(0)	23	3	48.3	25.6	12.0	14.1	74	52	2.0	-	-

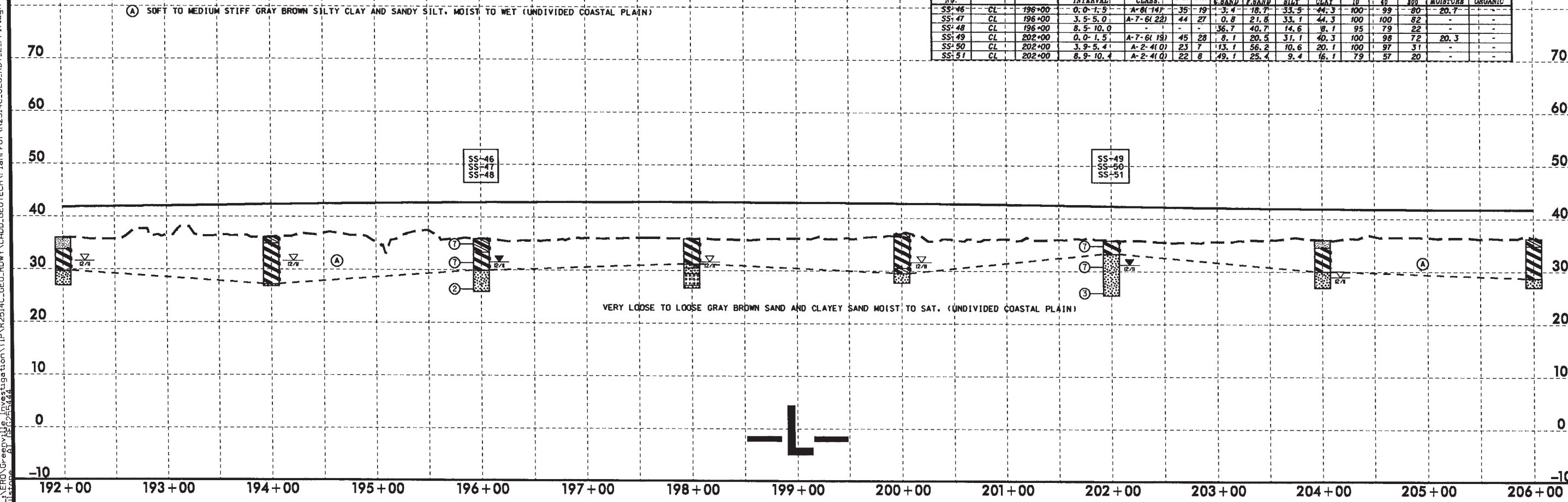


SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							G.BAND	F.BAND	SILT	CLAY	10	40	800		
SS-37	CL	178+00	0.0-1.5	A-7-(6) (2) I	42	23	3.4	8.5	31.7	56.4	100	99	88	23.8	-
SS-38	CL	178+00	3.5-5.0	A-2-(6) (0)	26	11	36.9	30.8	10.2	22.2	100	89	33	-	-
SS-39	CL	178+00	8.5-10.0	A-2-(4) (0)	23	3	48.3	25.6	12.0	14.1	74	52	20	-	-
SS-40	CL	184+00	0.0-1.5	A-6 (8)	35	19	19.3	24.8	19.6	36.3	100	93	57	17.9	-
SS-41	CL	184+00	3.5-5.0	A-6 (3)	32	18	28.2	32.8	10.8	28.2	100	93	38	-	-
SS-42	CL	184+00	8.5-10.0	A-2-(4) (0)	23	NP	41.5	46.5	8.0	4.0	99	82	12	-	-
SS-43	CL	190+00	0.0-1.5	A-4 (3)	23	8	6.4	21.6	39.8	32.2	100	98	73	23.6	-
SS-44	CL	190+00	3.5-5.0	A-7-(6) (2) I	63	46	2.4	10.7	26.5	60.4	100	99	87	-	-
SS-45	CL	190+00	8.5-10.0	A-2-(4) (0)	31	8	35.4	29.8	18.6	16.1	95	78	34	-	-

PROJECT REFERENCE NO. <b>R-2514C</b>	SHEET NO. <b>34</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



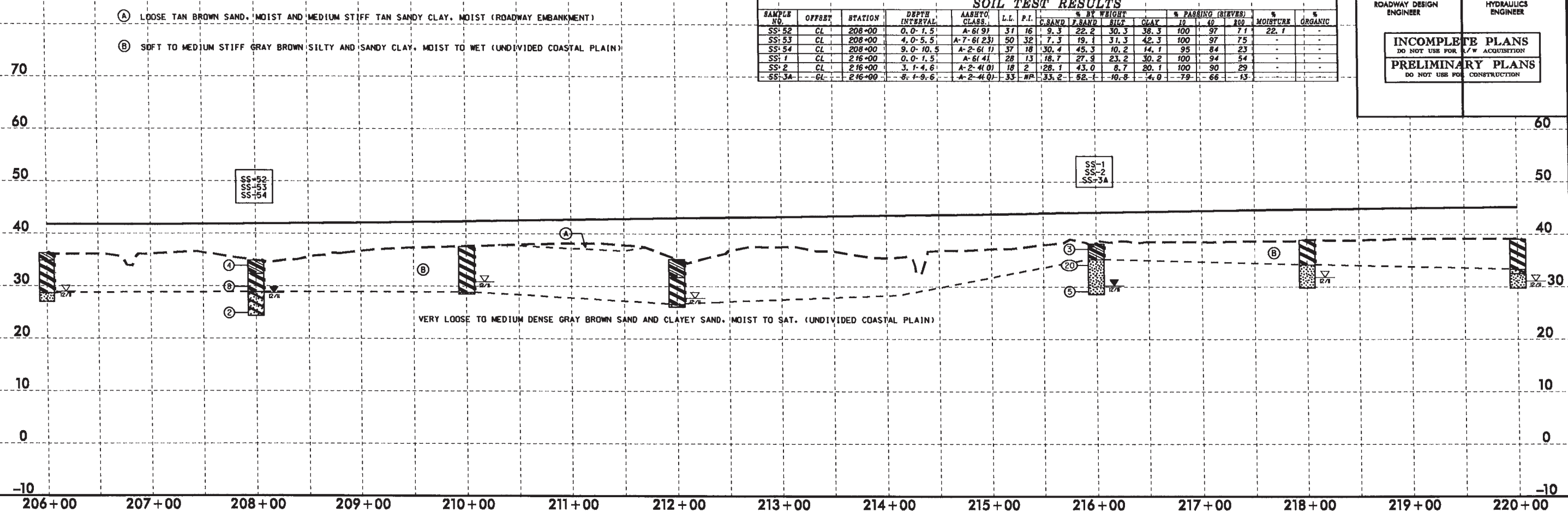
SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							G.BAND	F.BAND	SILT	CLAY	10	40	800		
SS-46	CL	196+00	0.0-1.5	A-6 (14)	35	19	3.4	18.7	33.5	44.3	100	99	80	20.7	-
SS-47	CL	196+00	3.5-5.0	A-7-(6) (2) I	44	27	0.8	21.8	33.1	44.3	100	100	82	-	-
SS-48	CL	196+00	8.5-10.0	-	-	-	36.7	40.7	14.6	8.1	95	79	22	-	-
SS-49	CL	202+00	0.0-1.5	A-7-(6) (1) I	45	28	8.1	20.5	31.1	40.3	100	98	72	20.3	-
SS-50	CL	202+00	3.9-5.4	A-2-(4) (0)	23	7	13.1	56.2	10.6	20.1	100	97	31	-	-
SS-51	CL	202+00	8.9-10.4	A-2-(4) (0)	22	8	49.1	25.4	9.4	16.1	79	57	20	-	-



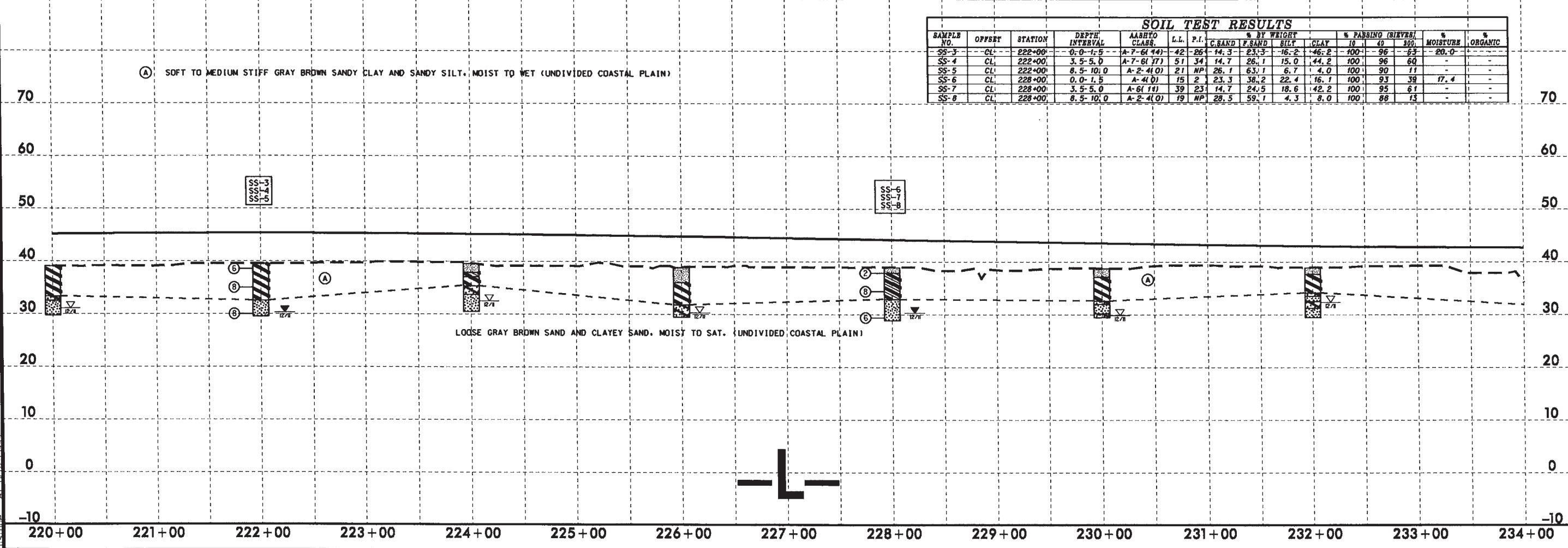
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PROJECT REFERENCE NO. <b>R-2514C</b>	SHEET NO. <b>35</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	ASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	40	200		
SS-52	CL	208+00	0.0-1.5	A-6(9)	31	16	9.3	22.2	30.3	38.3	100	97	77	22.1	-
SS-53	CL	208+00	4.0-5.5	A-7-6(23)	50	32	7.3	19.1	31.3	42.3	100	97	75	-	-
SS-54	CL	208+00	9.0-10.5	A-2-6(1)	37	18	30.4	45.3	10.2	14.1	95	84	23	-	-
SS-7	CL	216+00	0.0-1.5	A-6(4)	28	13	18.7	27.9	23.2	30.2	100	94	54	-	-
SS-2	CL	216+00	3.1-4.6	A-2-4(0)	18	2	28.1	43.0	8.7	20.1	100	90	29	-	-
SS-3A	CL	216+00	8.1-9.6	A-2-4(0)	33	NP	33.2	52.1	10.8	4.0	79	66	13	-	-



SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	ASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	40	200		
SS-3	CL	222+00	0.0-1.5	A-7-6(14)	42	26	14.3	23.3	16.2	46.2	100	96	53	20.0	-
SS-4	CL	222+00	3.5-5.0	A-7-6(17)	51	34	14.7	26.1	15.0	44.2	100	96	60	-	-
SS-5	CL	222+00	8.5-10.0	A-2-4(0)	21	NP	26.1	63.1	6.7	4.0	100	90	11	-	-
SS-6	CL	228+00	0.0-1.5	A-4(0)	15	2	23.3	36.2	22.4	16.1	100	93	38	17.4	-
SS-7	CL	228+00	3.5-5.0	A-6(1)	39	23	14.7	24.5	18.6	42.2	100	95	61	-	-
SS-8	CL	228+00	8.5-10.0	A-2-4(0)	19	NP	28.5	59.1	4.3	8.0	100	88	13	-	-



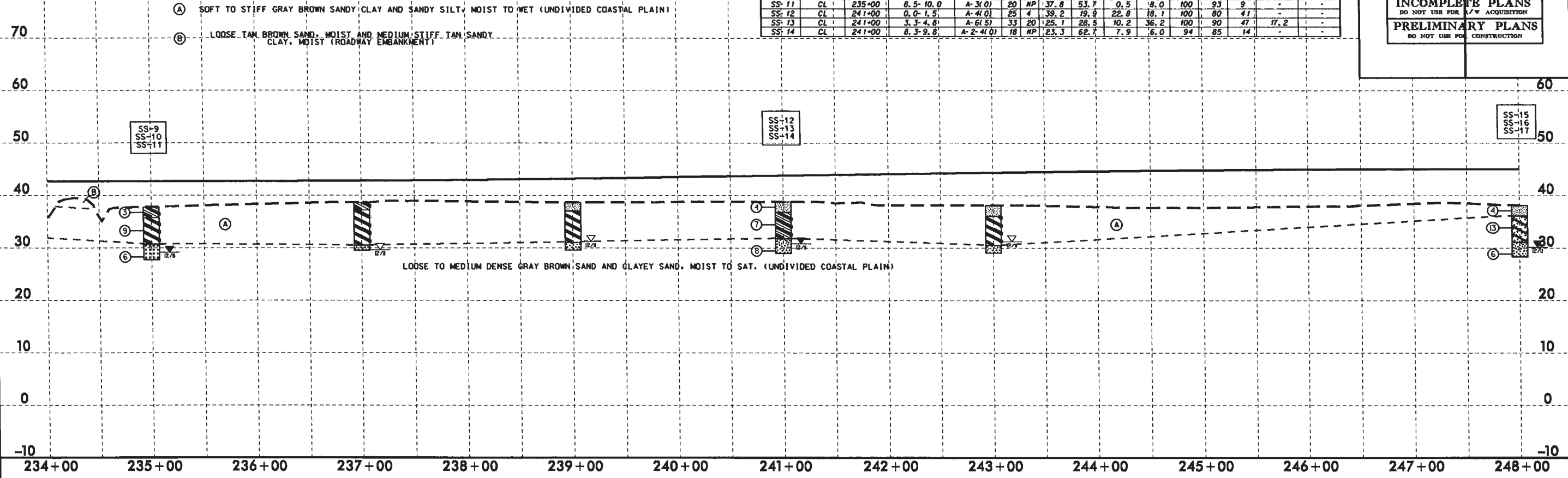
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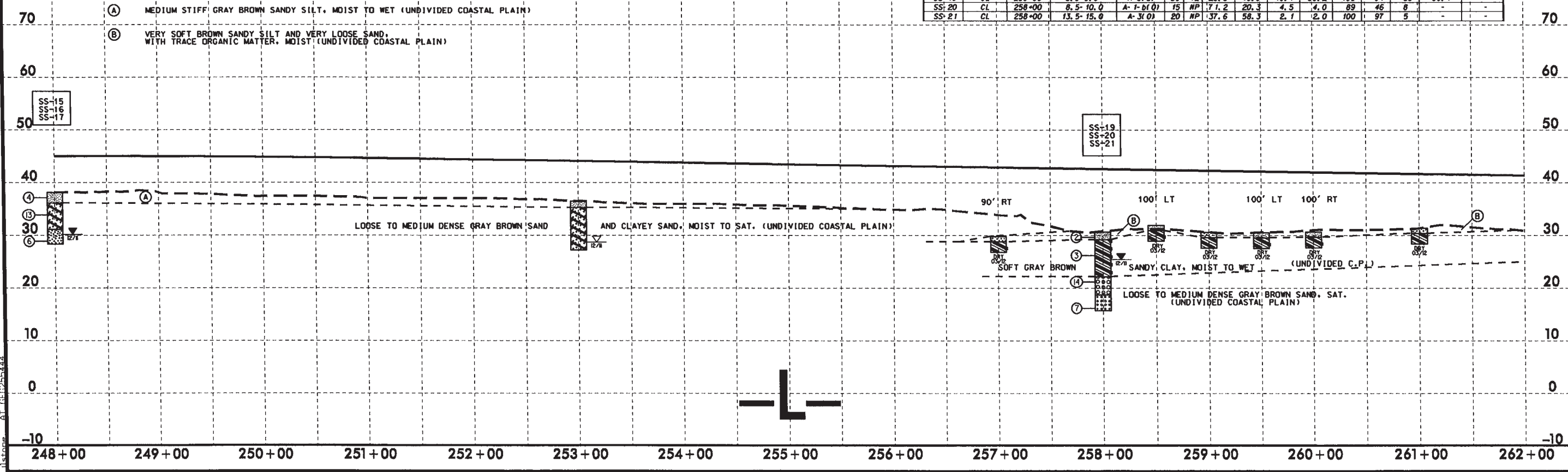
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PROJECT REFERENCE NO. <b>R-2514C</b>	SHEET NO. <b>36</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							F.SAND	F.SAND	SILT	CLAY	10	40	60		
SS-9	GL	235+00	0.0-1.5'	A-6(2)	23	11	23.3	21.5	21.0	29.1	100	92	50	16.4	-
SS-10	CL	235+00	3.5-5.0'	A-7(618)	52	34	17.7	21.1	15.0	46.2	100	94	62	-	-
SS-11	CL	235+00	8.5-10.0'	A-3(0)	20	NP	37.8	53.7	0.5	8.0	100	93	9	-	-
SS-12	CL	241+00	0.0-1.5'	A-4(0)	25	4	39.2	19.9	22.8	18.1	100	80	41	-	-
SS-13	CL	241+00	3.3-4.8'	A-6(5)	33	20	25.1	28.5	10.2	36.2	100	90	47	17.2	-
SS-14	CL	241+00	8.3-9.8'	A-2(4(0))	18	NP	23.3	62.7	7.9	6.0	94	85	14	-	-



SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							F.SAND	F.SAND	SILT	CLAY	10	40	60		
SS-15	CL	248+00	0.0-0.0'	A-4(0)	19	6	33.8	29.1	17.0	20.1	100	85	34	-	-
SS-16	CL	248+00	3.3-4.8'	A-2(61(1))	28	14	40.0	31.0	6.9	22.1	100	81	29	-	-
SS-17	CL	248+00	8.3-9.8'	A-2(4(0))	18	NP	30.6	57.1	4.3	8.0	100	97	13	-	-
SS-19	CL	258+00	3.5-5.0'	A-6(5)	38	12	26.5	18.9	16.4	38.2	100	91	55	38.1	-
SS-20	CL	258+00	8.5-10.0'	A-1(6(0))	15	NP	17.1	20.3	4.5	4.0	89	46	8	-	-
SS-21	CL	258+00	13.5-15.0'	A-3(0)	20	NP	37.6	58.3	2.1	2.0	100	97	5	-	-

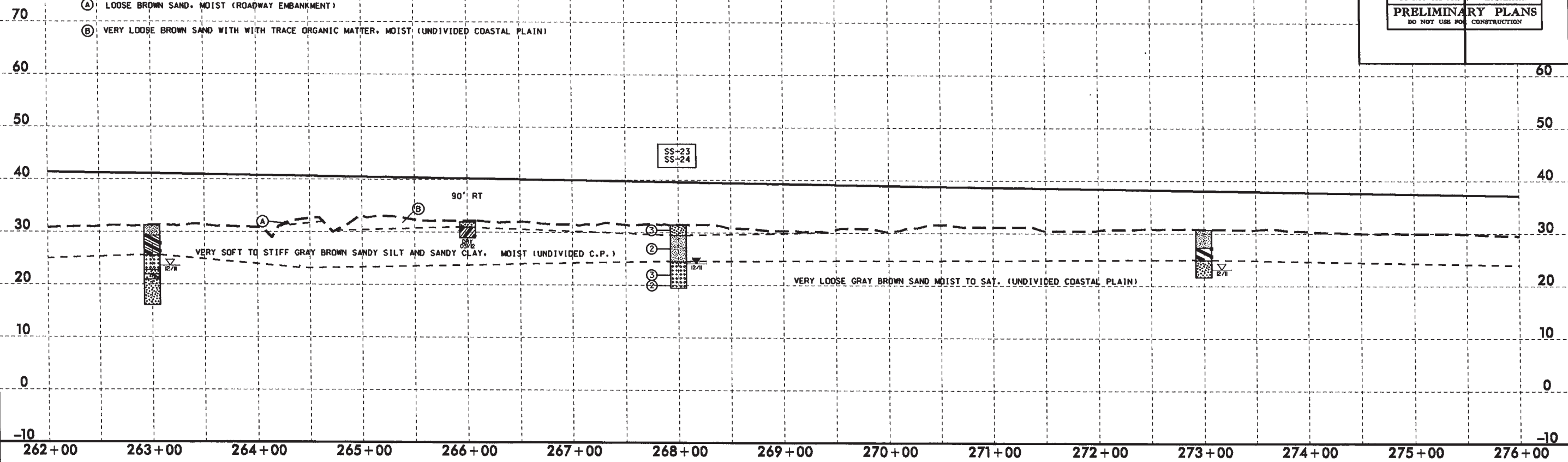


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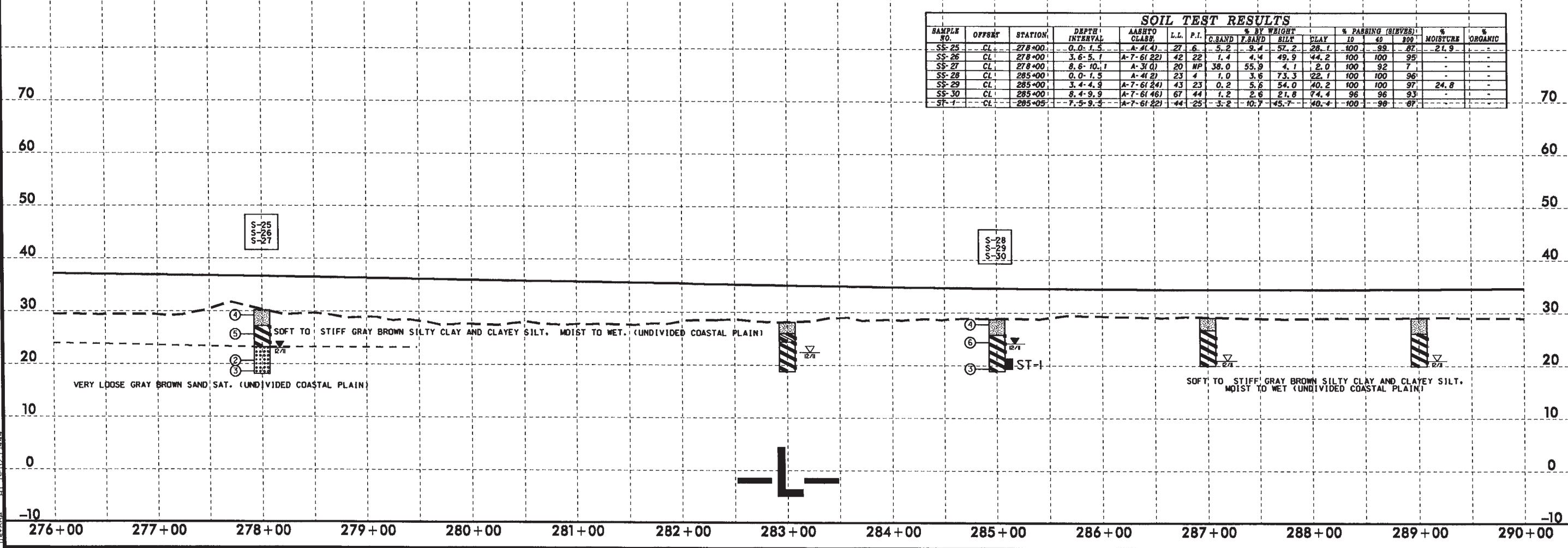
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PROJECT REFERENCE NO. <b>R-2514C</b>	SHEET NO. <b>37</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

SOIL TEST RESULTS														
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)		% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	200		
SS-23	CL	268+00	3.5-5.0	A-4(4)	32	10	15.9	21.7	32.3	30.2	100	96	65	-
SS-24	CL	268+00	8.5-10.0	A-3(0)	18	NP	43.8	47.8	4.3	4.0	100	88	9	-



SOIL TEST RESULTS														
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)		% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	200		
SS-25	CL	278+00	0.0-1.5	A-4(4)	27	6	5.2	9.4	57.2	28.1	100	99	87	21.9
SS-26	CL	278+00	3.6-5.1	A-7-6(22)	42	22	1.4	4.4	49.9	44.2	100	100	95	-
SS-27	CL	278+00	8.6-10.1	A-3(0)	20	NP	38.0	55.9	4.1	2.0	100	92	7	-
SS-28	CL	285+00	0.0-1.5	A-4(2)	23	4	1.0	3.6	73.3	22.1	100	100	96	-
SS-29	CL	285+00	3.4-4.9	A-7-6(24)	43	23	0.2	5.6	54.0	40.2	100	97	24.8	-
SS-30	CL	285+00	8.4-9.9	A-7-6(46)	67	44	1.2	2.6	21.8	74.4	96	96	93	-
ST-1	CL	285+05	7.5-9.5	A-7-6(22)	44	25	3.2	10.7	45.7	40.4	100	98	87	-

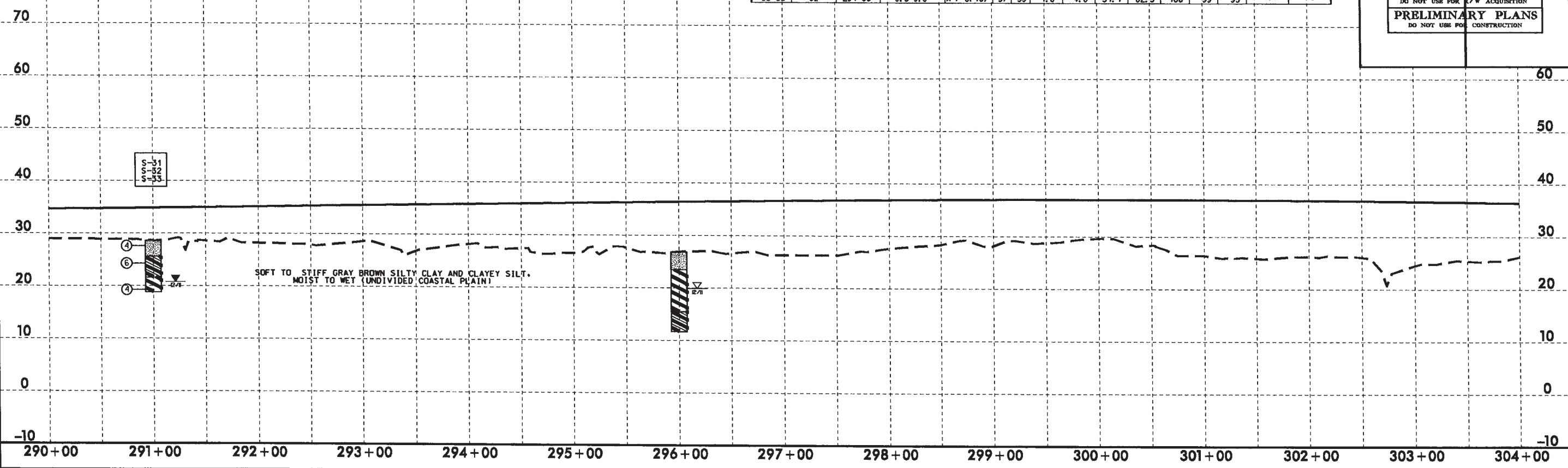


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Author: AT

SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							G. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-31	CL	291+00	0.0-1.5	A-4(6)	28	7	0.6	2.6	66.6	30.2	100	100	98	20.4	-
SS-32	CL	291+00	3.3-4.8	A-6(11)	31	12	0.4	3.6	65.8	30.2	100	100	97	-	-
SS-35	CL	291+00	8.3-9.8	A-7-6(40)	57	39	1.8	4.8	31.1	62.3	100	99	95	-	-

PROJECT REFERENCE NO. <b>R-2514C</b>	SHEET NO. <b>38</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



SOFT TO STIFF GRAY BROWN SILTY CLAY AND CLAYEY SILT.  
MOIST TO WET (UNDIVIDED COASTAL PLAIN)



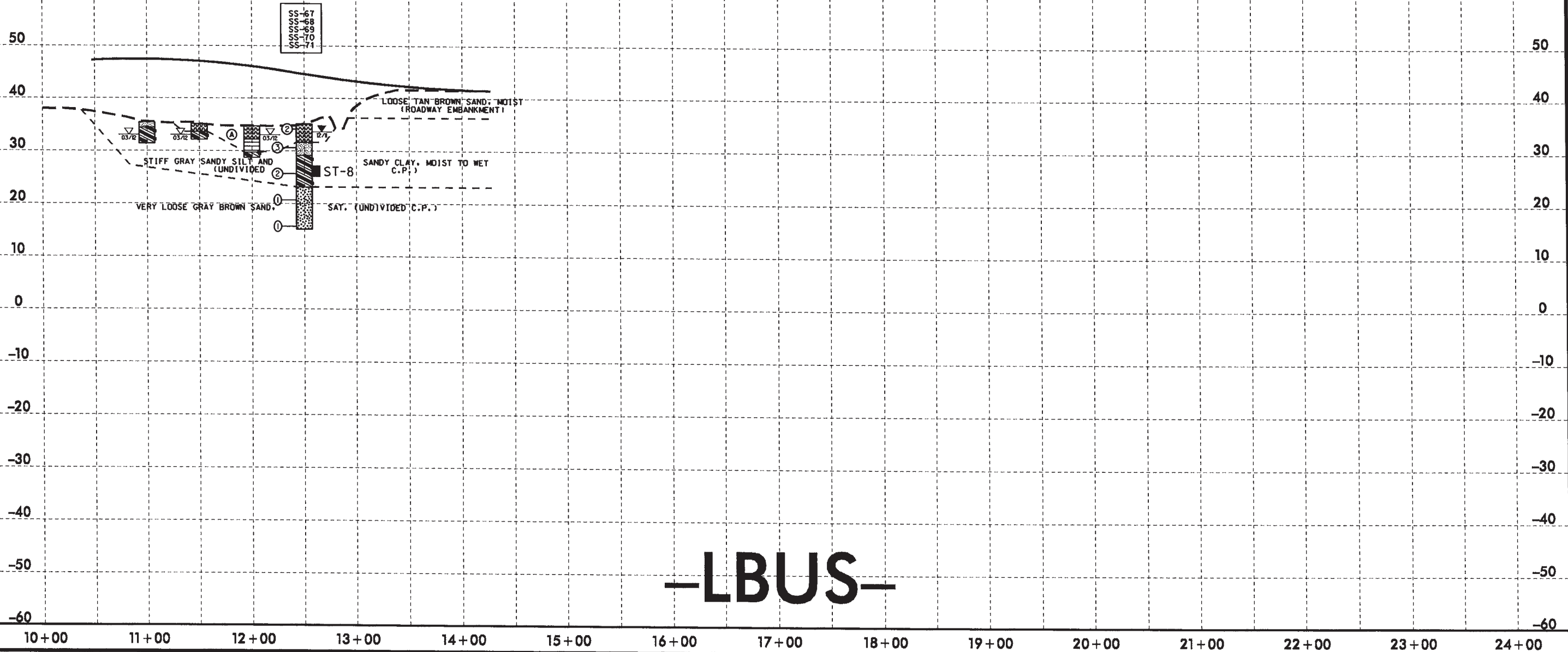


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PROJECT REFERENCE NO. <b>R-2514C</b>	SHEET NO. <b>39</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-67	CL	12+50	0.0-1.5'	A-7-5(14)	80	18	23.2	16.3	28.3	32.2	100	86	61	-	30.4
SS-68	CL	12+50	3.5-5.0'	A-4(1)	26	10	29.8	26.0	18.0	26.2	100	83	44	-	-
SS-69	CL	12+50	8.5-10.0'	A-6(3)	34	17	31.4	29.0	11.4	28.2	100	82	40	-	-
SS-70	CL	12+50	13.5-15.0'	A-2-4(0)	29	NP	32.4	29.4	18.0	20.1	89	78	34	-	-
SS-71	CL	12+50	18.5-20.0'	A-2-4(0)	33	NP	77.5	7.7	8.8	6.0	96	56	14	-	-

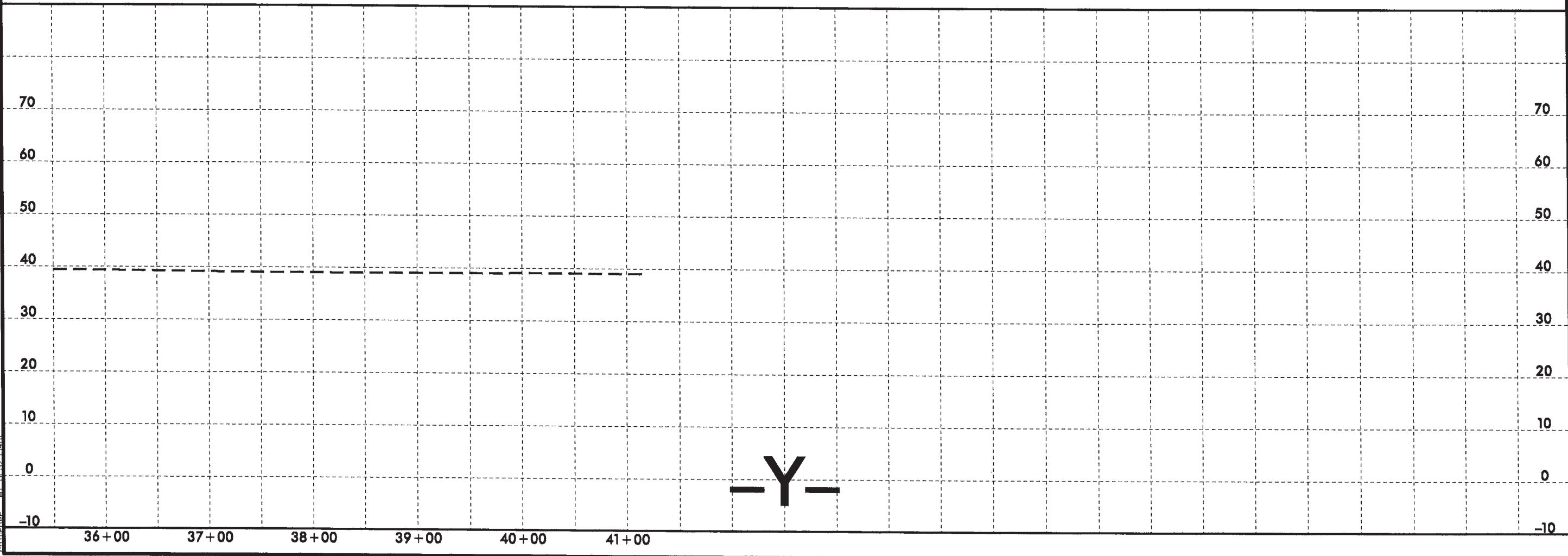
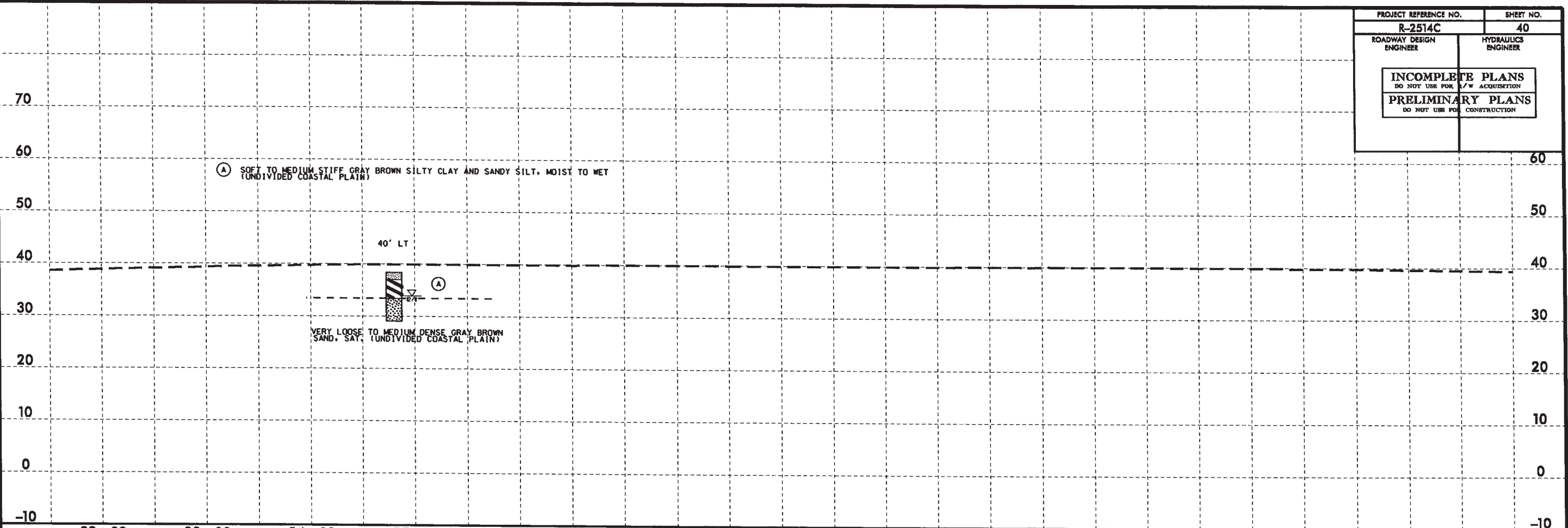
Ⓐ VERY SOFT BROWN MUCK AND MODERATELY ORGANIC SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)



-LBUS-

5/28/95

PROJECT REFERENCE NO. <b>R-2514C</b>	SHEET NO. <b>40</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



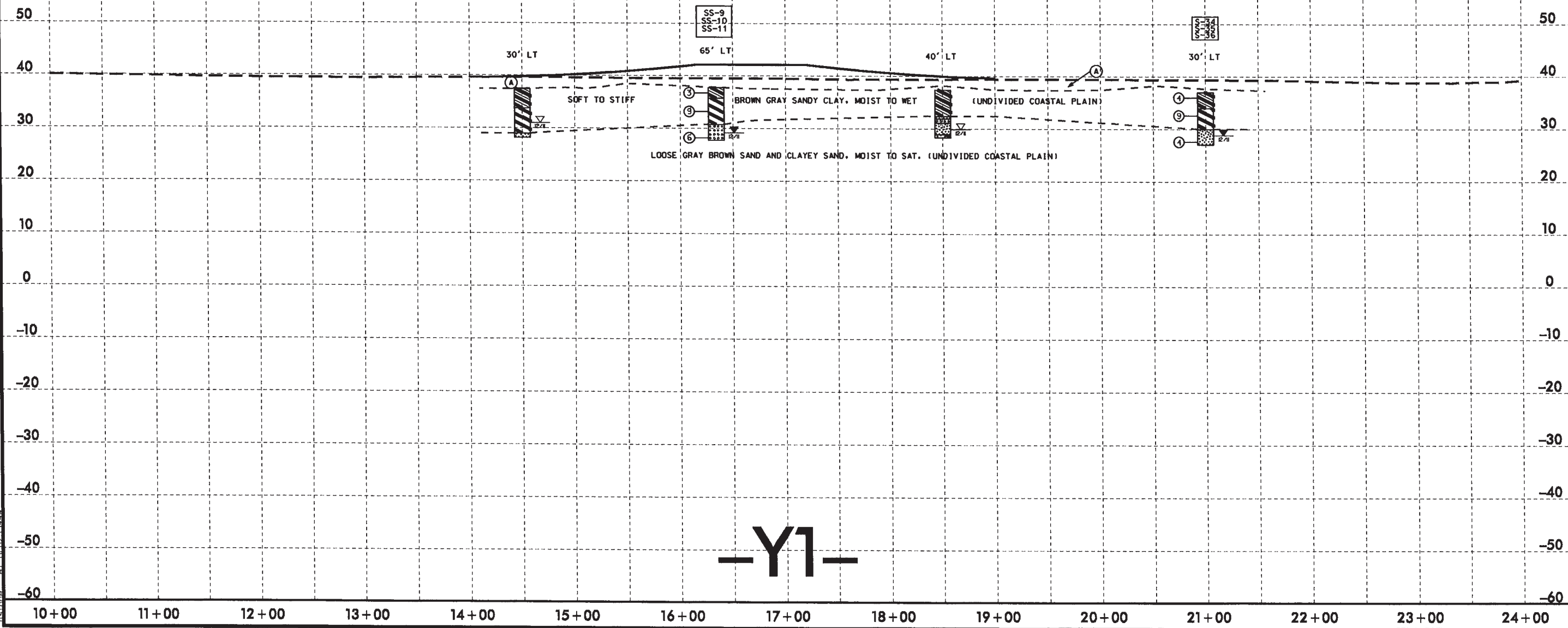
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Author: [unreadable]

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 11:50:00 AM 5/14/99

PROJECT REFERENCE NO. <b>R-2514C</b>	SHEET NO. <b>41</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-9	65' LT	16+34	0.0-1.5	A-6(2)	23	11	23.3	27.5	21.0	28.1	100	92	50	16.4	-
SS-10	65' LT	16+34	3.5-5.0	A-7(6/18)	52	34	17.7	21.1	15.0	46.2	100	94	62	-	-
SS-11	65' LT	16+34	8.5-10.0	A-3(0)	20	NP	37.8	53.7	0.5	8.0	100	93	9	-	-
SS-34	30' LT	21+00	0.0-1.5	A-6(7)	35	19	28.7	16.1	16.0	36.2	100	87	54	19.9	-
SS-35	30' LT	21+00	3.4-4.9	A-7(6/10)	47	27	33.8	14.7	13.4	36.2	100	83	52	-	-
SS-36	30' LT	21+00	8.4-9.8	A-2-4(0)	20	NP	26.5	55.5	6.1	12.1	94	83	18	-	-

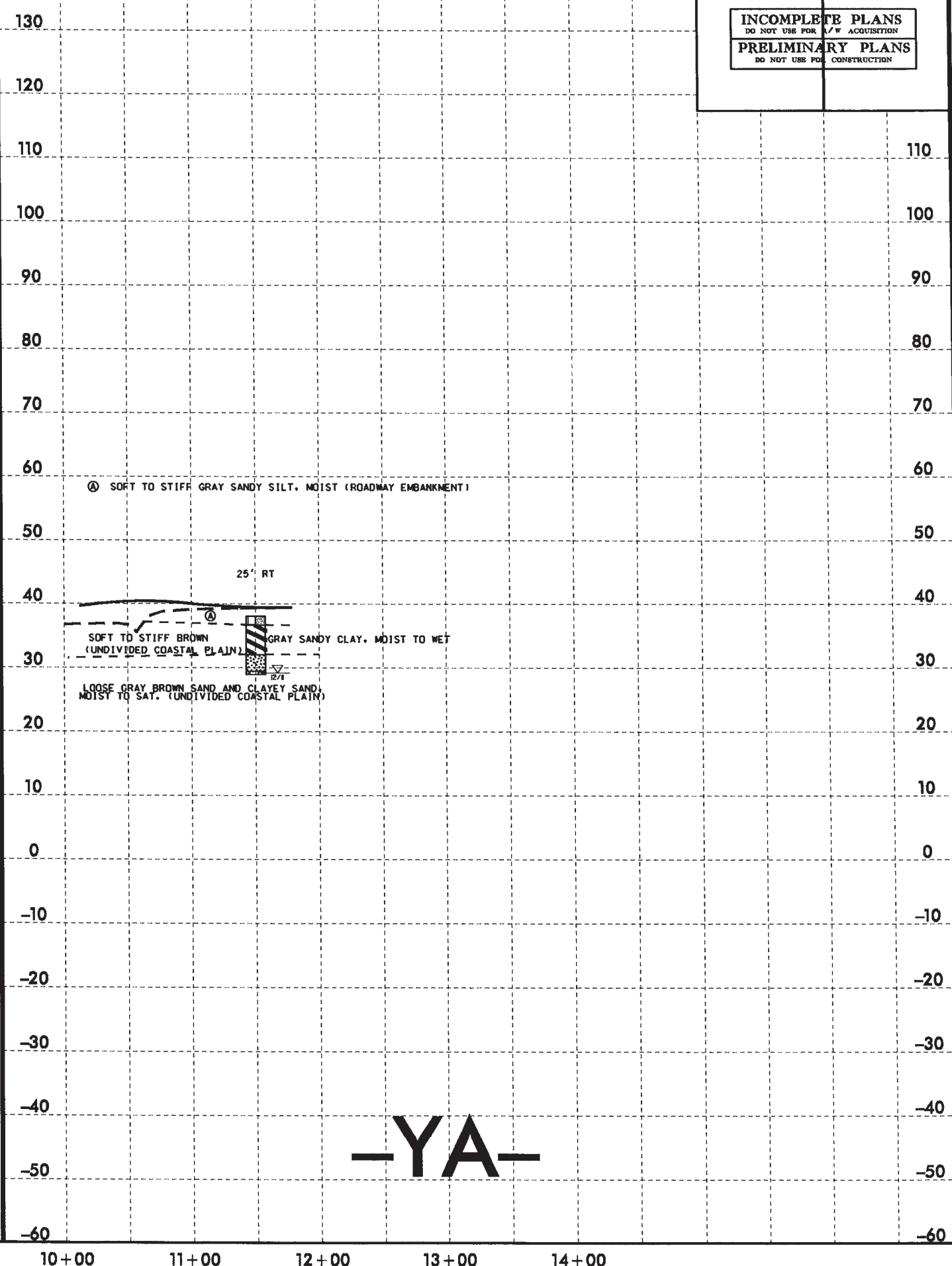
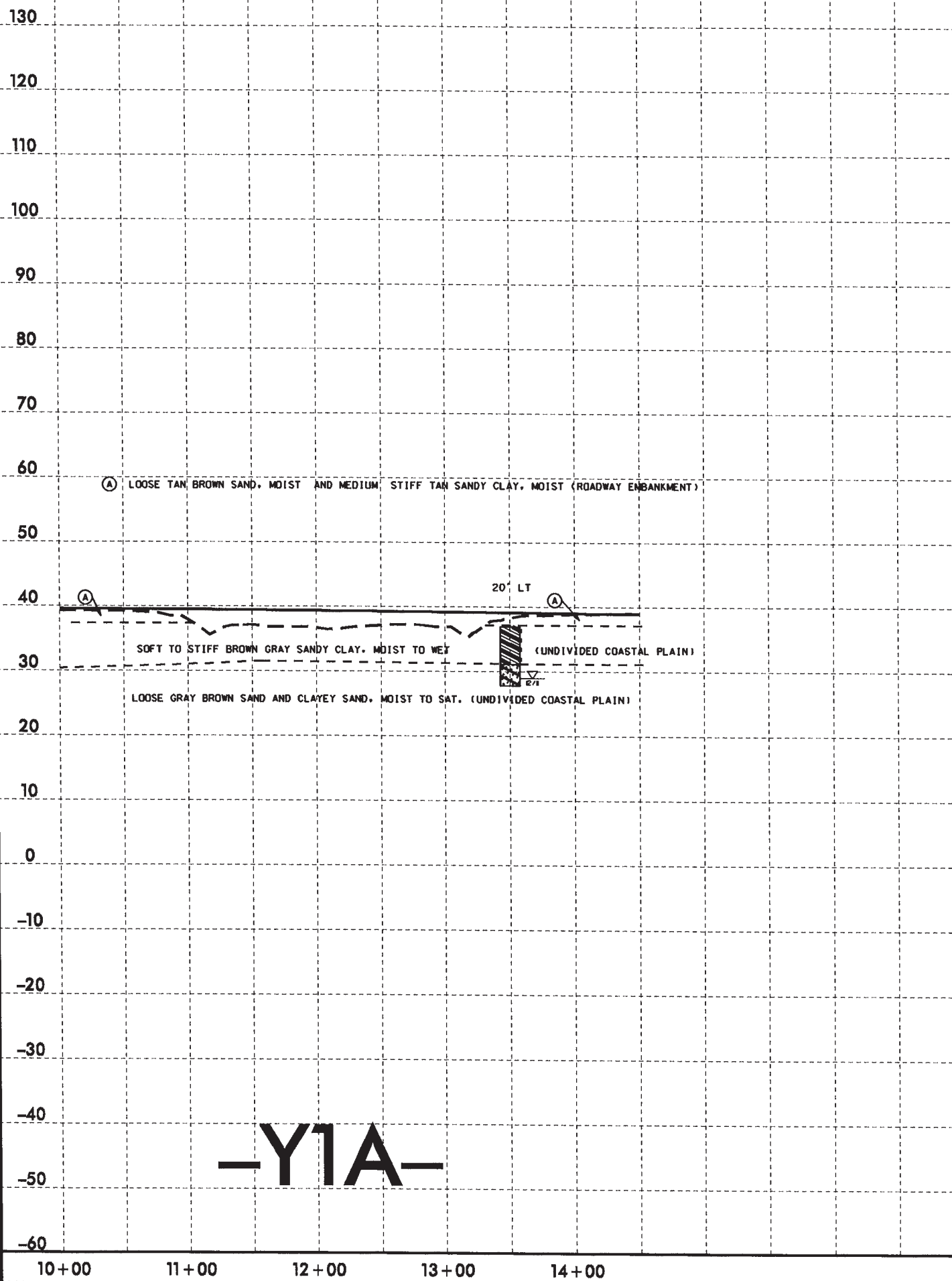
(A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM  
 STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)



-Y1-

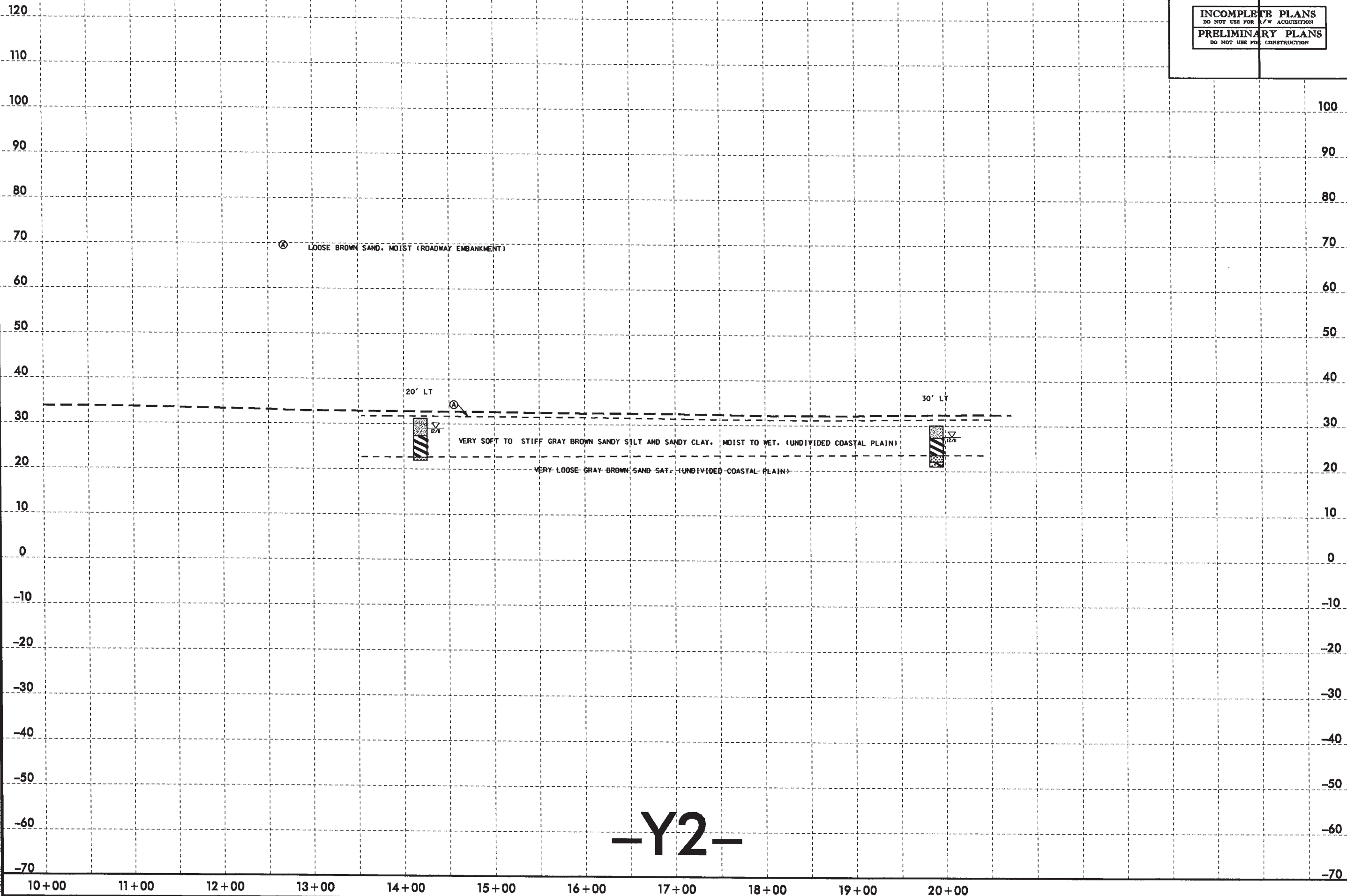
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PROJECT REFERENCE NO. R-2514C	SHEET NO. 42
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



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1324

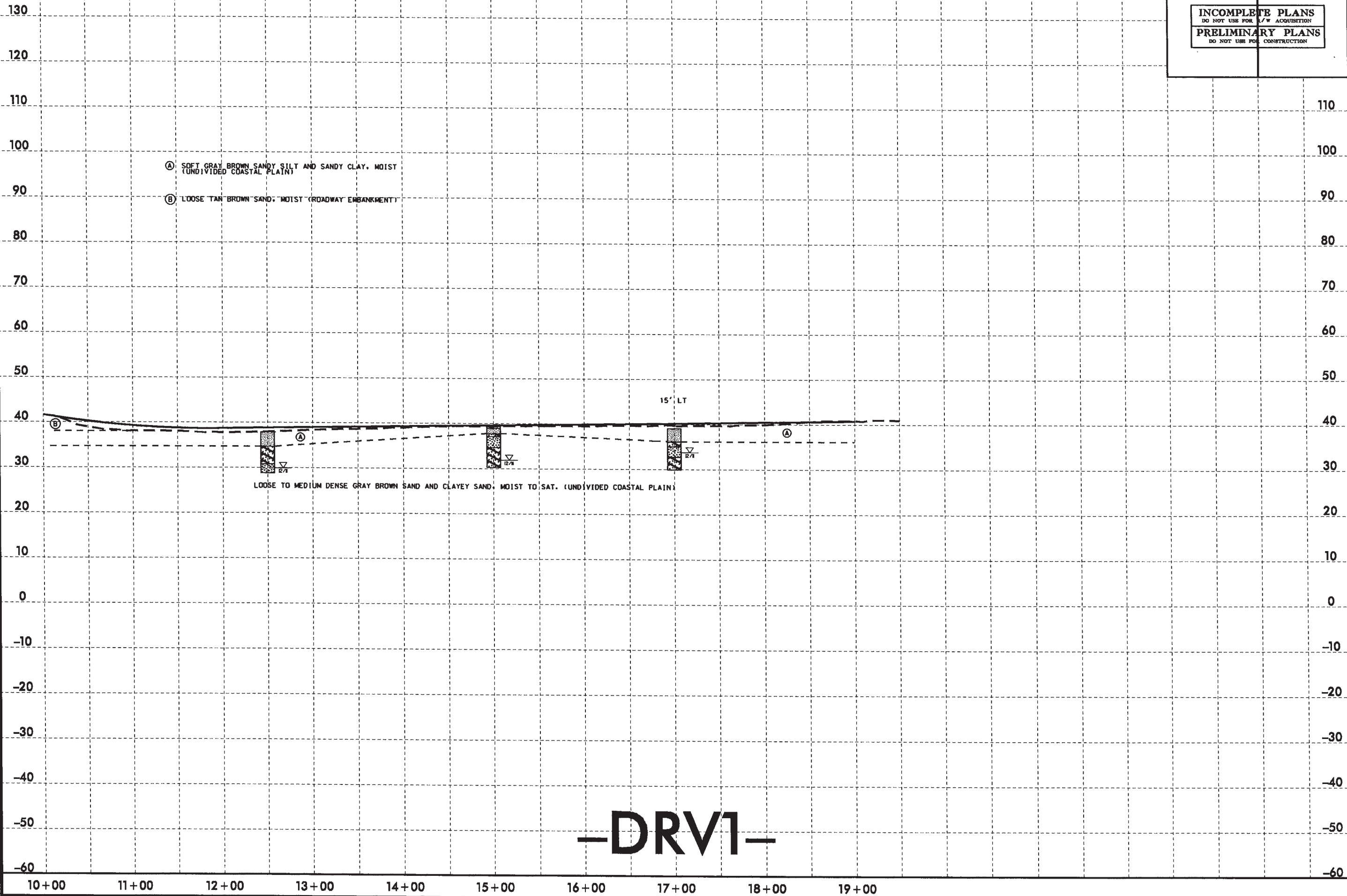
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ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



**-Y2-**

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PROJECT REFERENCE NO. <b>R-2514C</b>	SHEET NO. <b>44</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

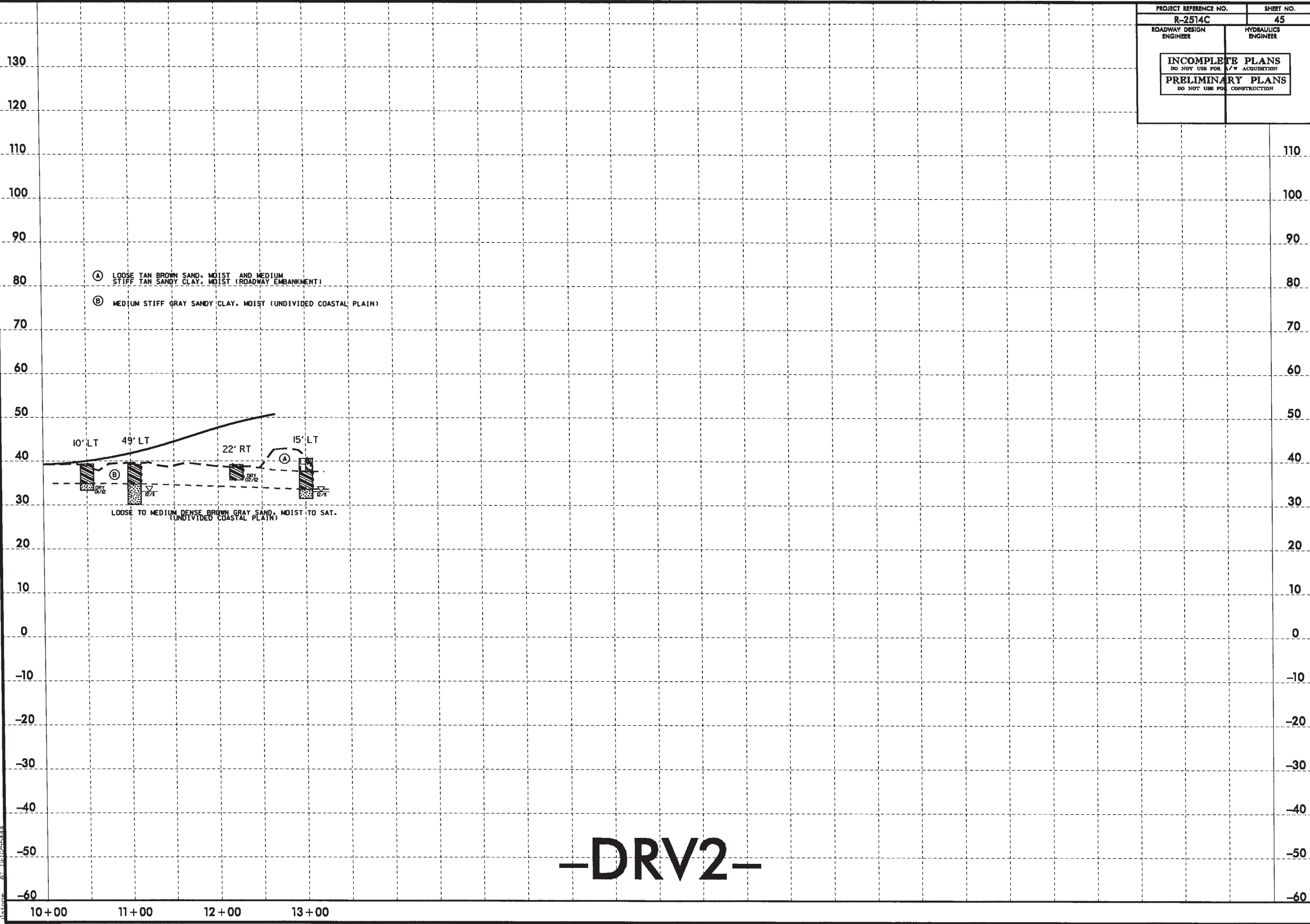


**-DRV1-**

5/14/99

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PROJECT REFERENCE NO. <b>R-2514C</b>	SHEET NO. <b>45</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

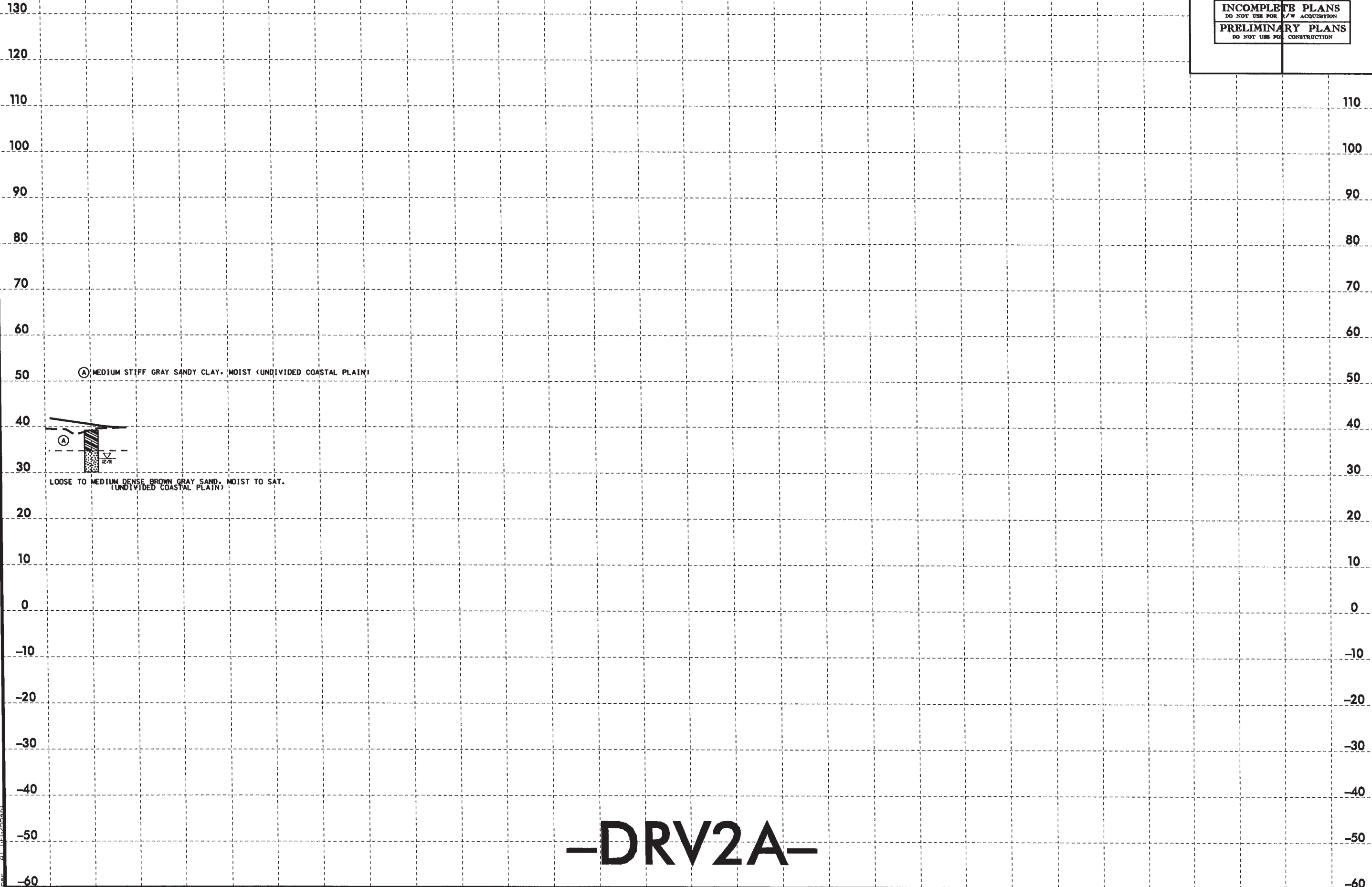


**-DRV2-**

5/14/99

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PROJECT REFERENCE NO.		SHEET NO.	
R-2514C		46	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION		PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



**-DRV2A-**

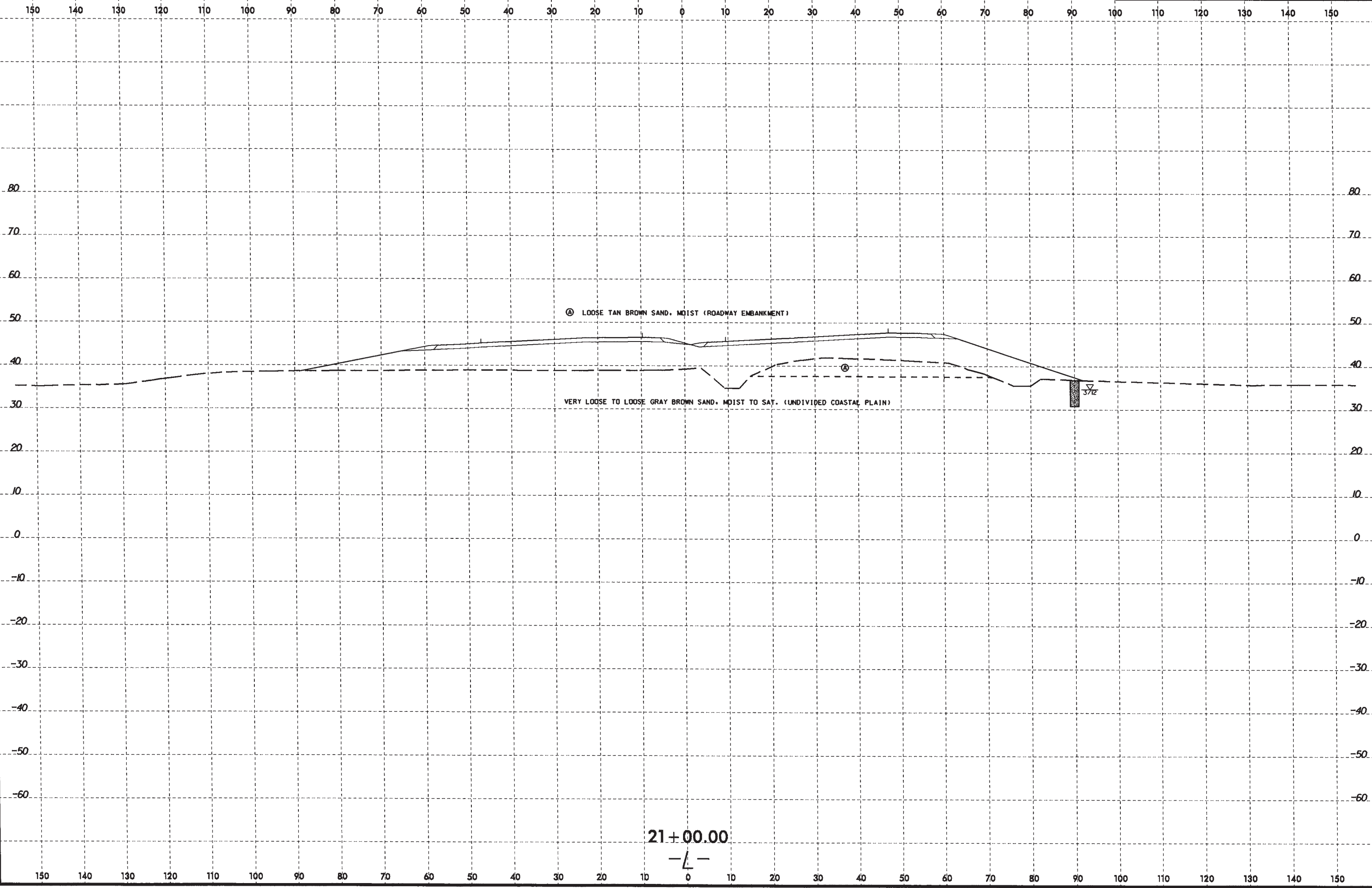
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gpurner AT 06/25/2011



PROJ. REFERENCE NO.	SHEET NO.
R-2514C	47



21+00.00  
-L-

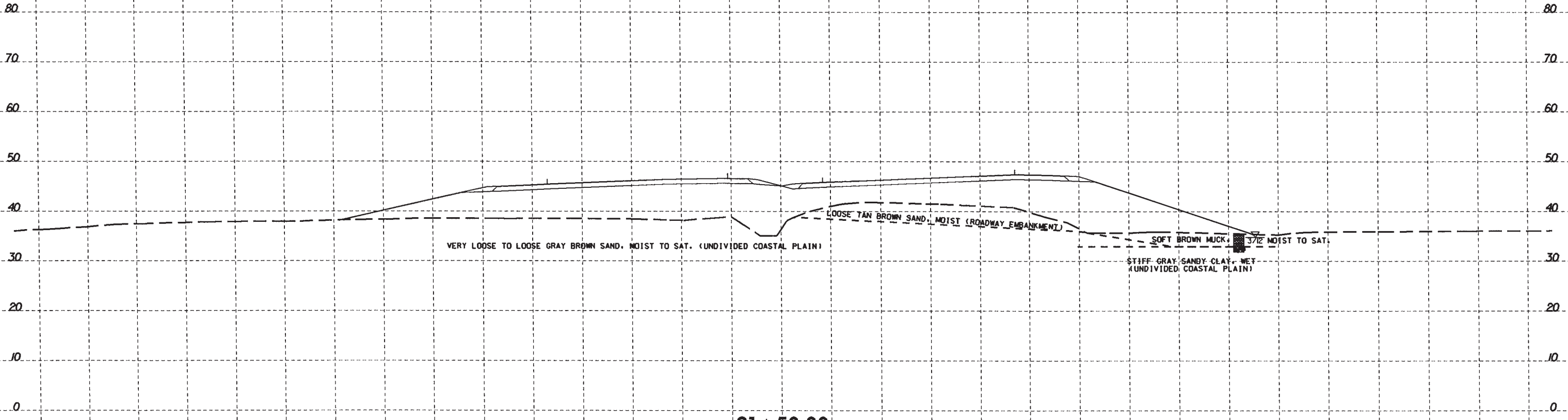
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PROJ. REFERENCE NO.	SHEET NO.
R-2514C	48

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



VERY LOOSE TO LOOSE GRAY BROWN SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

LOOSE TAN BROWN SAND, MOIST (ROADWAY EMBANKMENT)

SOFT BROWN MUCK, 37% MOIST TO SAT.

STIFF GRAY SANDY CLAY, WET (UNDIVIDED COASTAL PLAIN)

21+50.00

-L-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

8/23/99



PROJ. REFERENCE NO. R-2514C SHEET NO. 49

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

80 80

70 70

60 60

50 50

40 40

30 30

20 20

10 10

0 0

-10 -10

-20 -20

-30 -30

-40 -40

-50 -50

-60 -60

SOIL TEST RESULTS														
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)		% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	40		
S-500	92 FT.	22+00	0.0-2.5											38.3

VERY LOOSE TO LOOSE GRAY BROWN SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

LOOSE TAN BROWN SAND, MOIST (ROADWAY EMBANKMENT)

SOFT BROWN MUCK, 3/2 MOIST TO SAT.

STIFF GRAY SANDY CLAY, WET (UNDIVIDED COASTAL PLAIN)

S-500

22 + 00.00

-L-

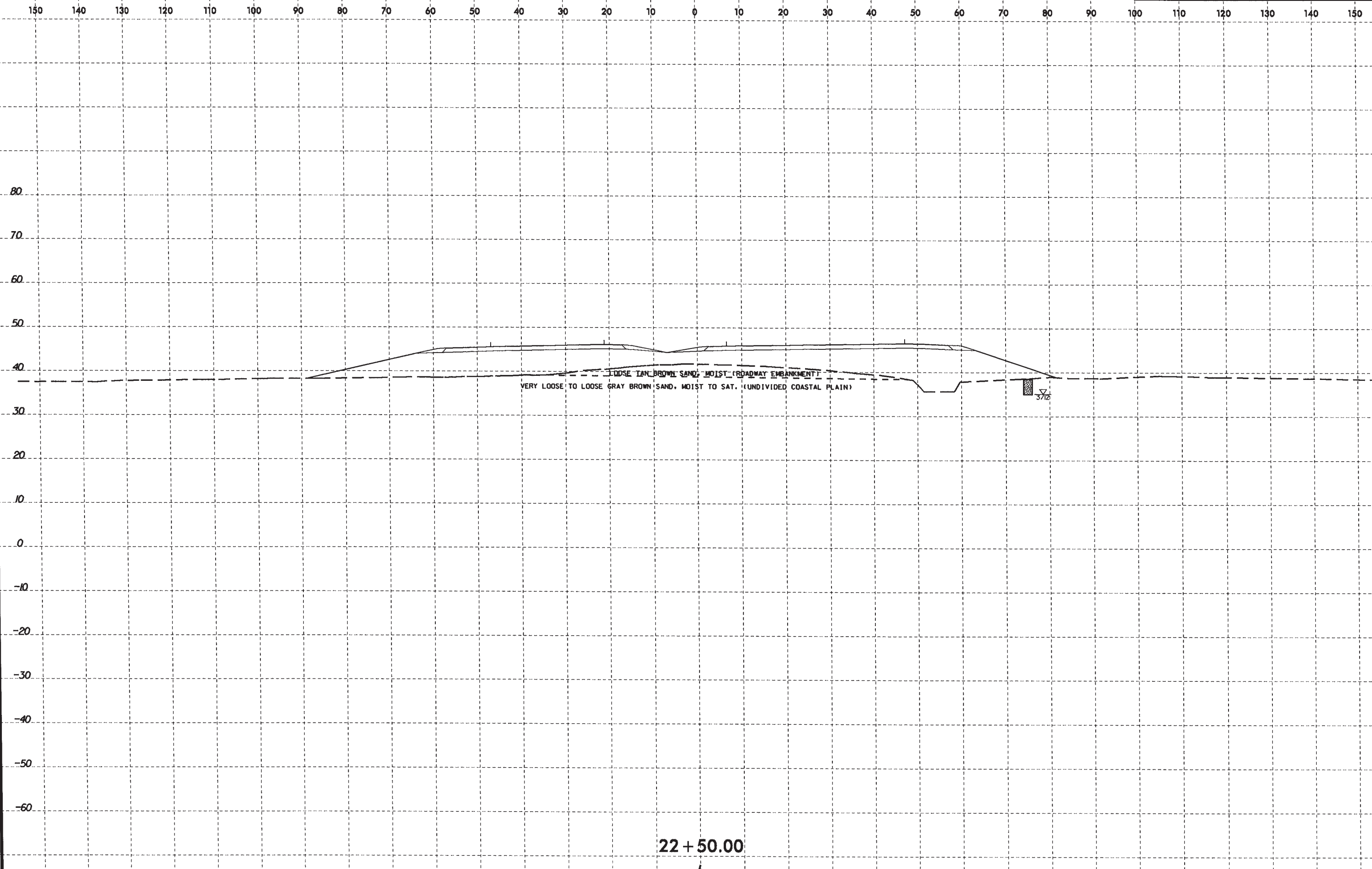
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8/23/99



PROJ. REFERENCE NO.	SHEET NO.
R-2514C	50



LOOSE TAN BROWN SAND, MOIST (ROADWAY EMBANKMENT)  
 VERY LOOSE TO LOOSE GRAY BROWN SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

3712

22 + 50.00

-L-

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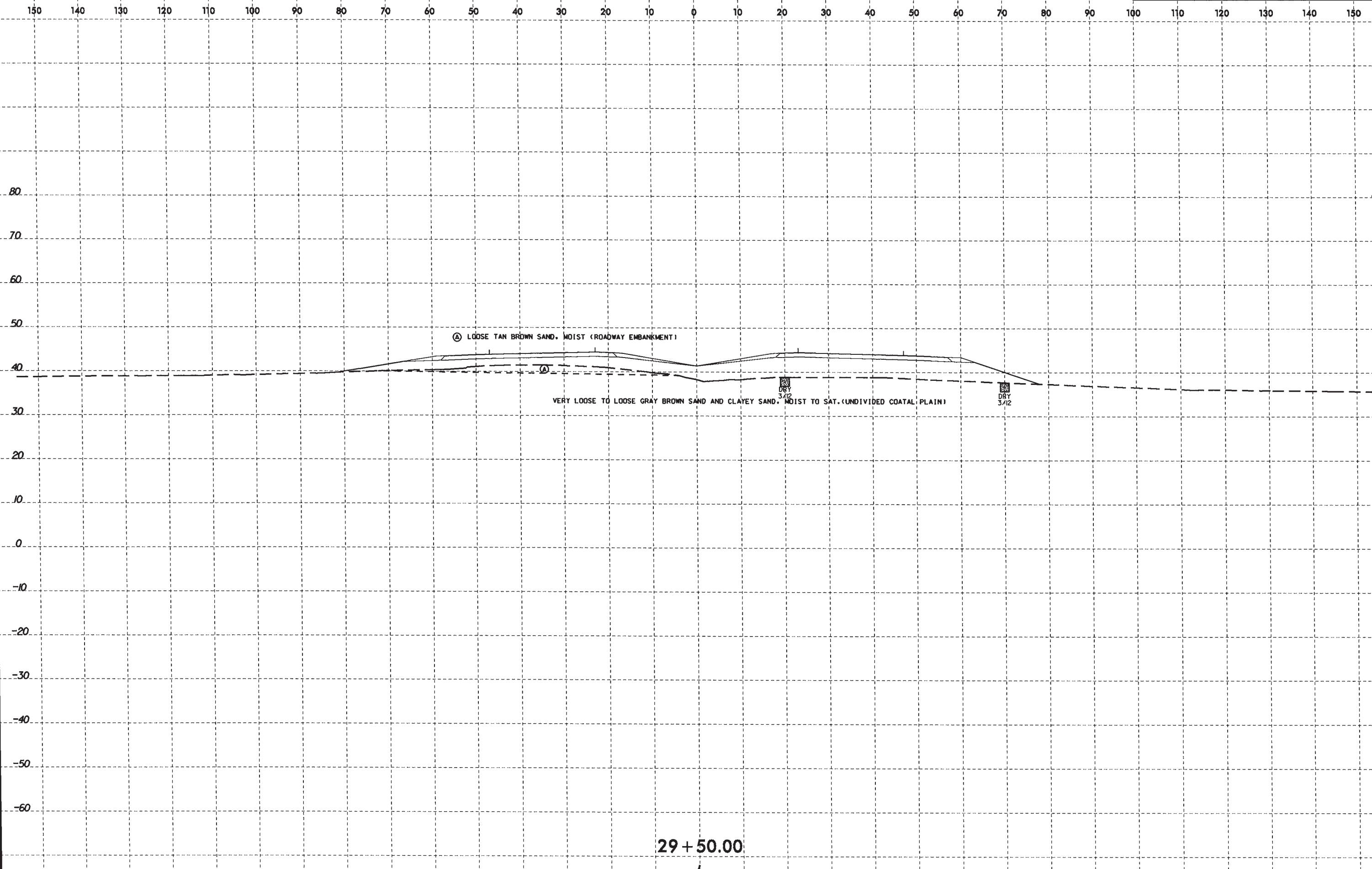
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PROJ. REFERENCE NO.
R-2514C

SHEET NO.
51



29 + 50.00

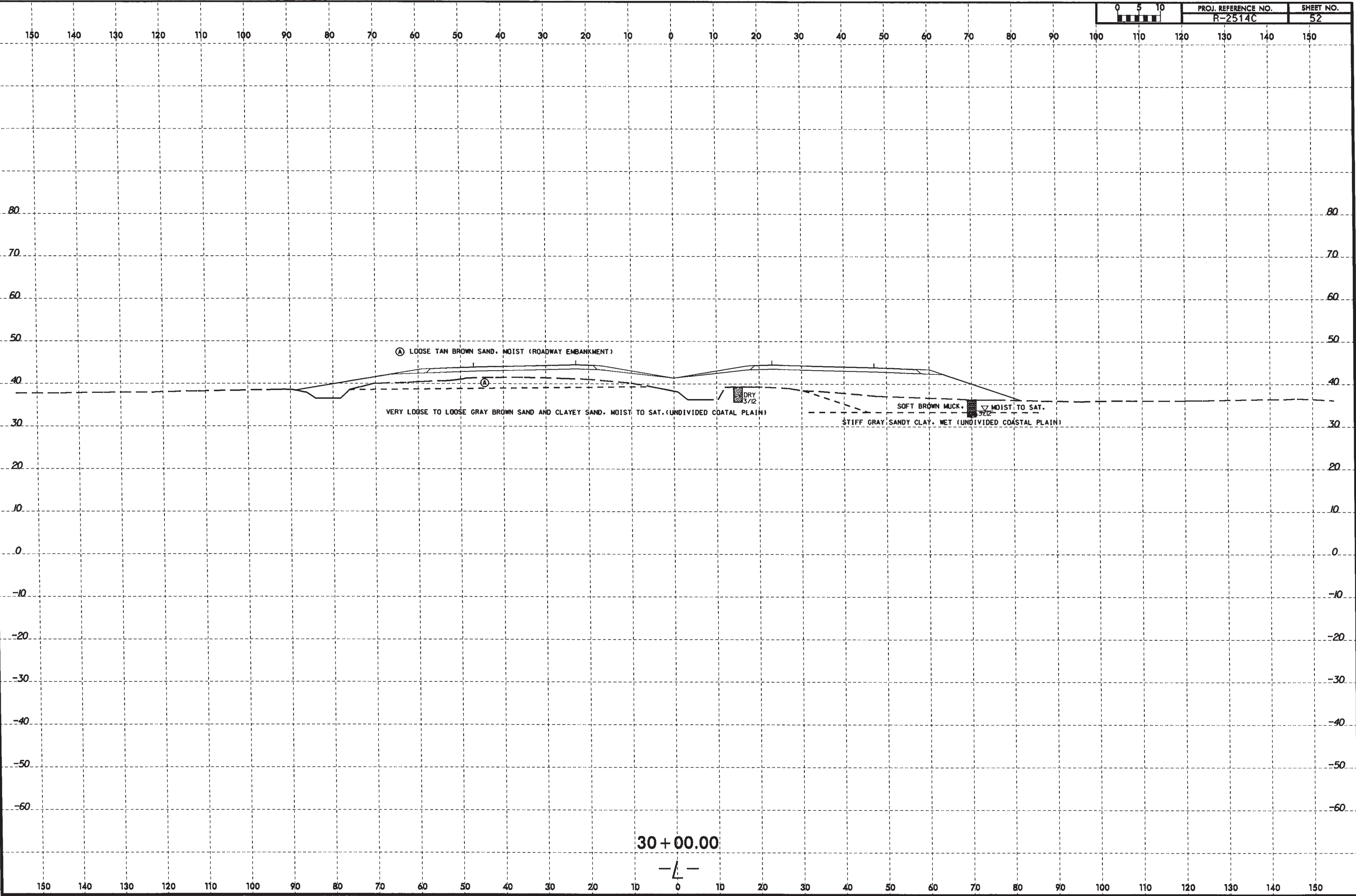
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8/23/99

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SPURNER AT 08055461

0 5 10	PROJ. REFERENCE NO. R-2514C	SHEET NO. 52
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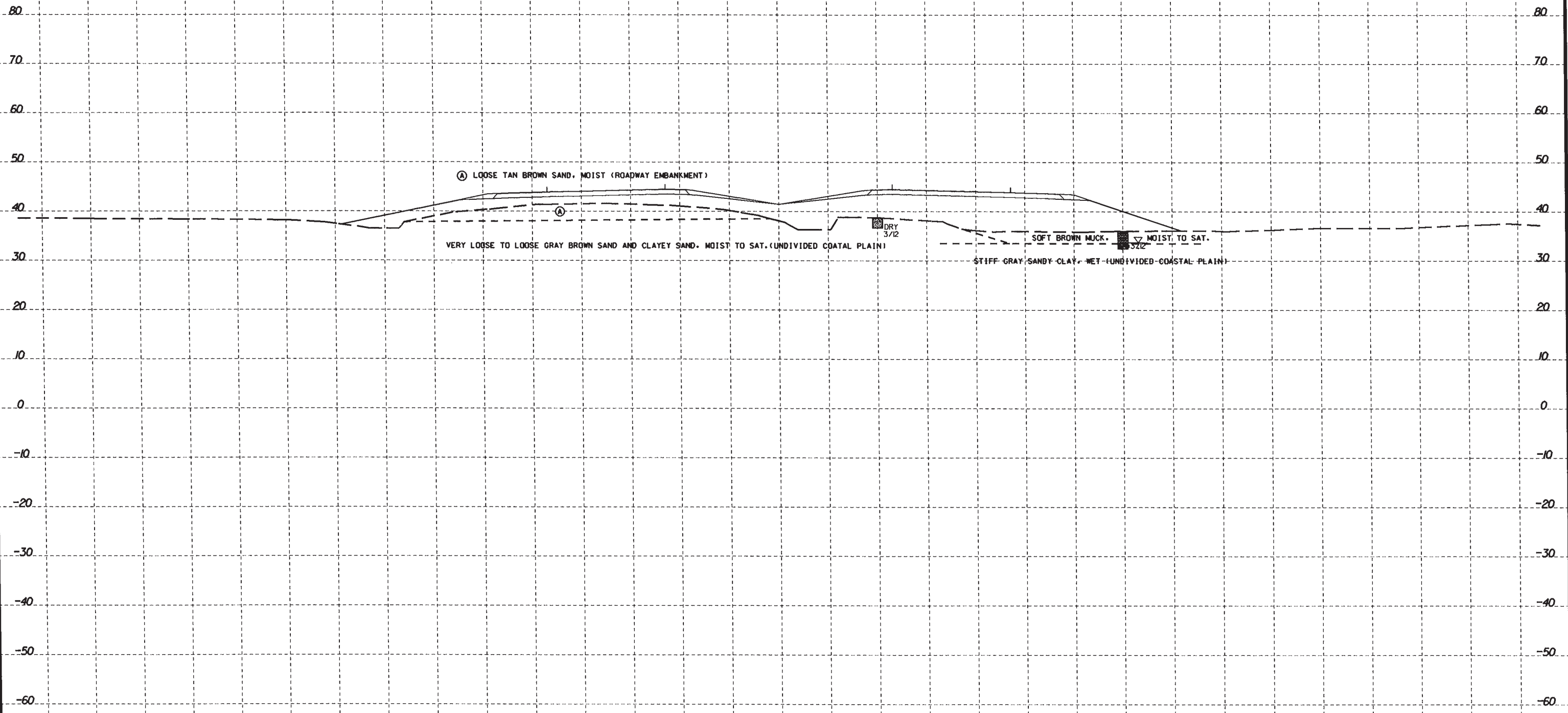
8/23/99



PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
53

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30 + 50.00

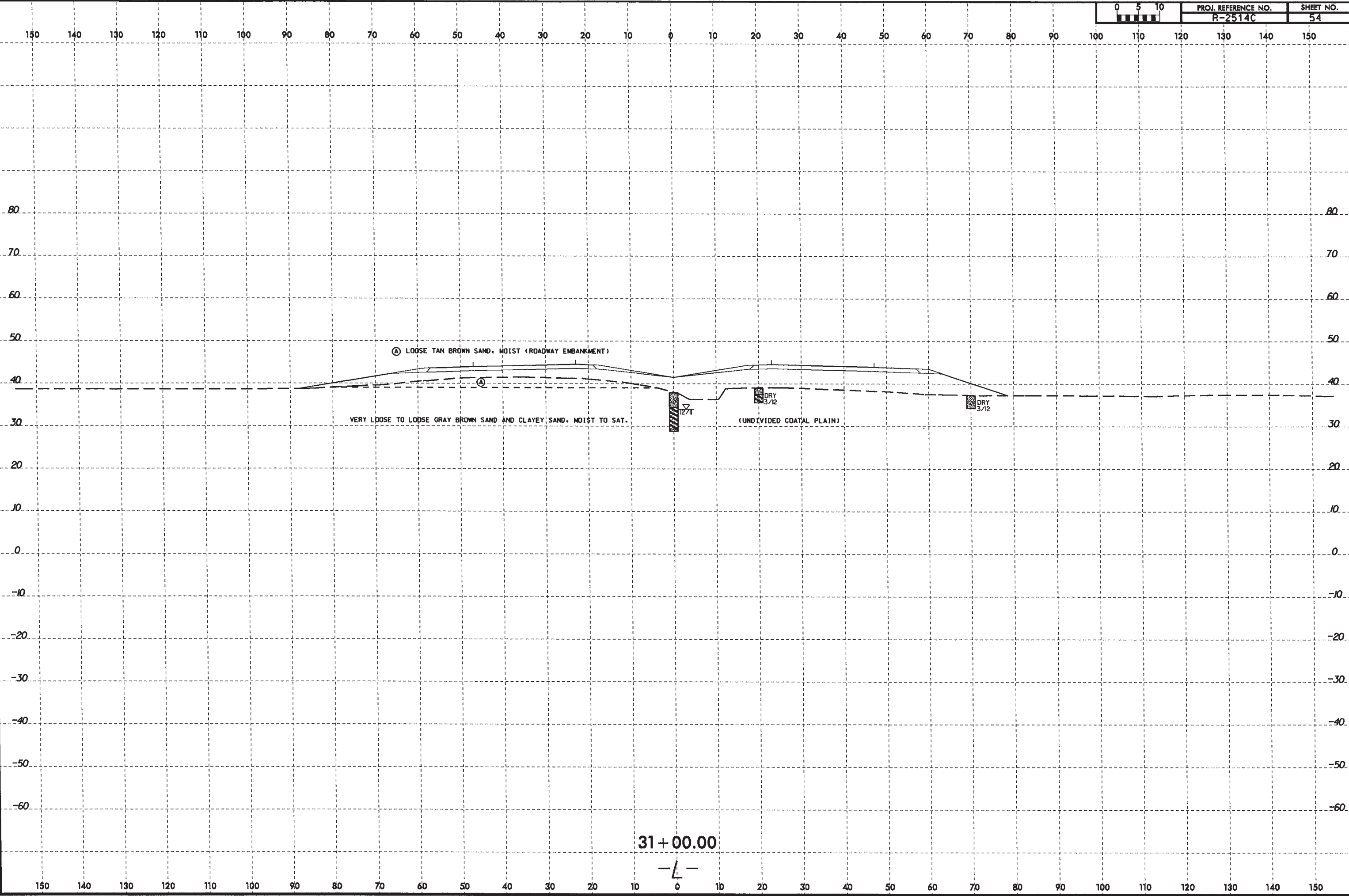
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8/23/99

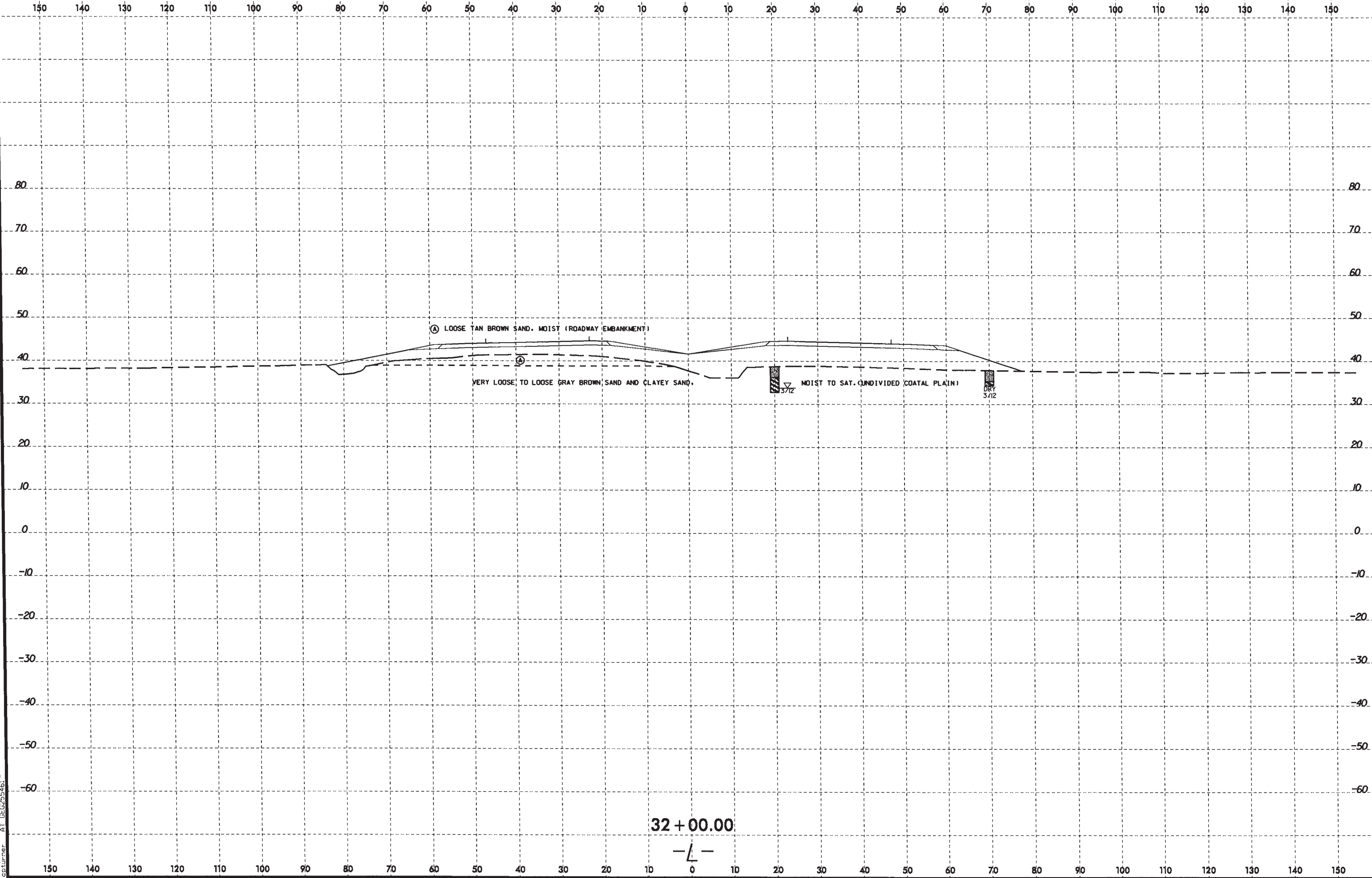
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gturner AT GGG2514C



31 + 00.00

-L-



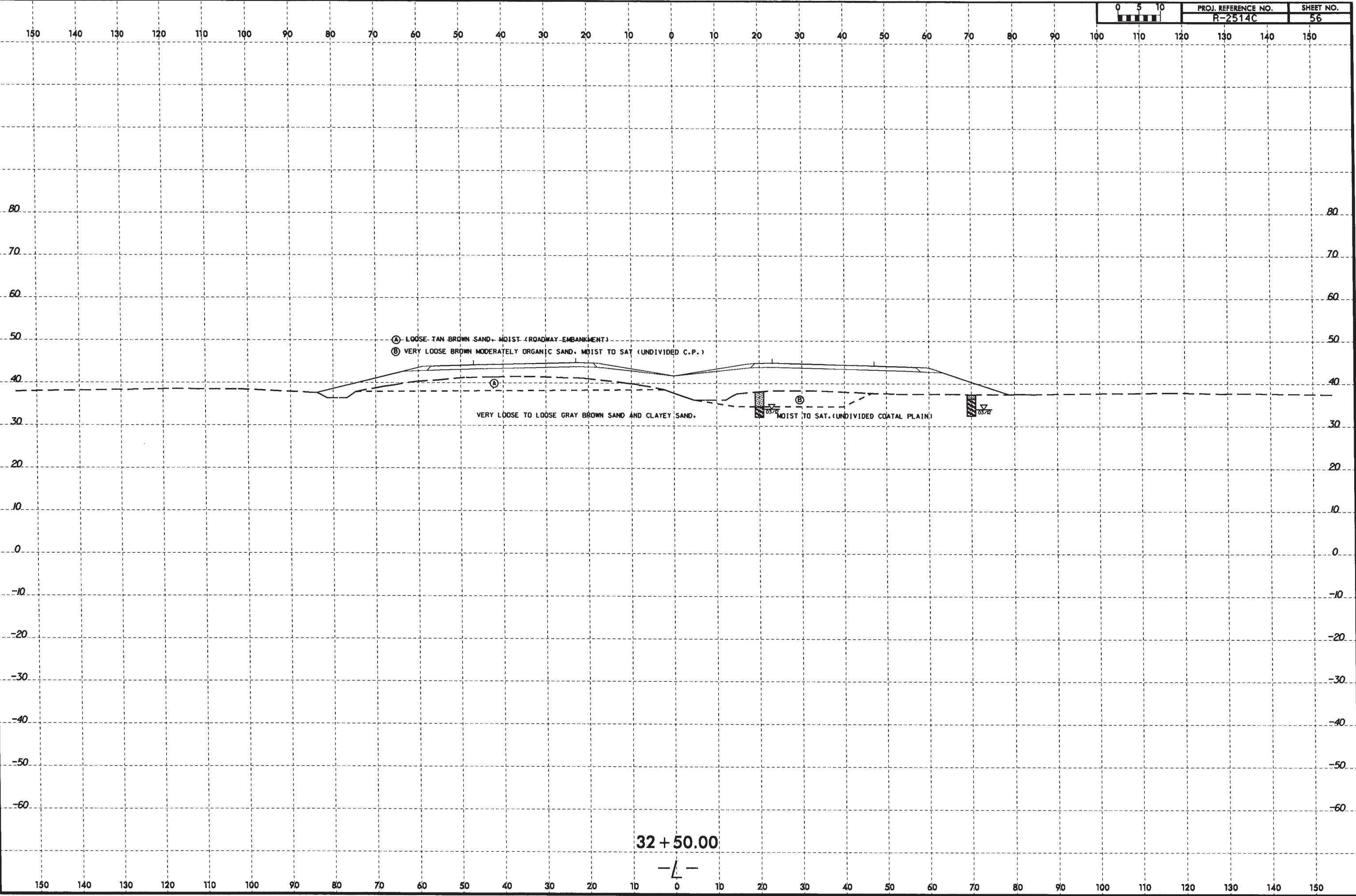


32 + 00.00

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gpcurner AT GEG2514C



32 + 50.00

-L-

8/23/99



PROJ. REFERENCE NO. R-2514C SHEET NO. 57

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

80 80

70 70

60 60

SOIL TEST RESULTS														
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT			% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							G.SAND	F.SAND	SILT	CLAY	10	40		
S-501	20' RT	33+00	1.0'-2.5'											9.5

- (A) LOOSE TAN BROWN SAND, MOIST (ROADWAY EMBANKMENT)
- (B) VERY LOOSE BROWN MODERATELY ORGANIC SAND, MOIST TO SAT (UNDIVIDED C.P.)

S-501

50 50

40 40

VERY LOOSE TO LOOSE GRAY BROWN SAND AND CLAYEY SAND.

MOIST TO SAT, (UNDIVIDED COATAL PLAIN)

30 30

20 20

10 10

0 0

-10 -10

-20 -20

-30 -30

-40 -40

-50 -50

-60 -60

33 + 00.00

-L-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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8/23/99



PROJ. REFERENCE NO. R-2514C SHEET NO. 58

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

80 80

70 70

60 60

50 50

40 40

30 30

20 20

10 10

0 0

-10 -10

-20 -20

-30 -30

-40 -40

-50 -50

-60 -60

SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	ASTM CLASS.	L.L.	P.L.	% BY WEIGHT				% FABBING (SINUS)			% MOISTURE	% ORGANIC
							G.SAND	F.SAND	SILT	CLAY	10	40	80		
S-502	20: RT	33+50	0.5-2.0		-	-									6.9

(A) LOOSE TAN BROWN SAND, MOIST (ROADWAY EMBANKMENT)  
 (B) VERY LOOSE BROWN MODERATELY ORGANIC SAND, MOIST TO SAT (UNDIVIDED C.P. 1)

S-502

VERY LOOSE TO LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT (UNDIVIDED COATAL PLAIN)

03/2

03/2

33 + 50.00

-L-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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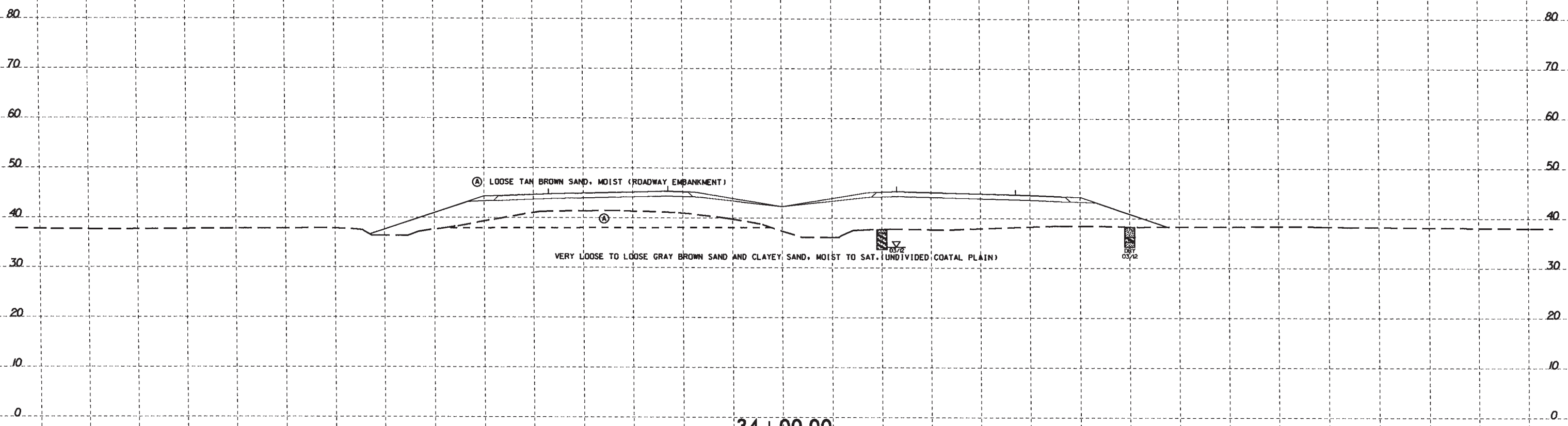
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getrunner AT GEO\2514C]



PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
59

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



(A) LOOSE TAN BROWN SAND, MOIST (ROADWAY EMBANKMENT)

VERY LOOSE TO LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COATAL PLAIN)

34 + 00.00

-L-

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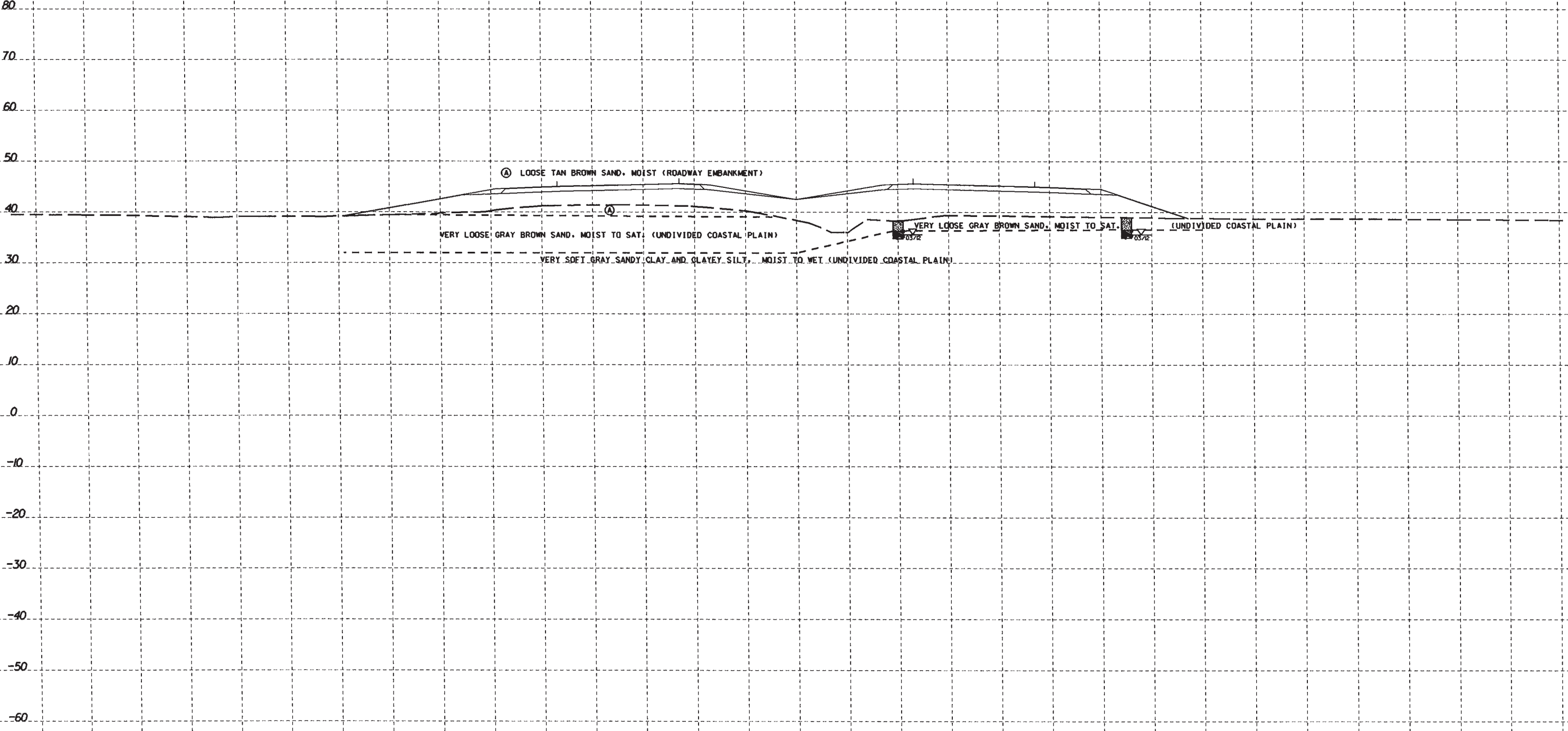
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PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
60

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



43 + 50.00

-L-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
61

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80 80

70 70

60 60

50 50

40 40

30 30

20 20

10 10

0 0

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
S-503	65 FT	44+00	1.0-3.0	-	-	-	C.SAND	F.SAND	SILT	CLAY	10	40	200	-	5.9

- Ⓐ LOOSE TAN BROWN SAND, MOIST (ROADWAY EMBANKMENT)
- Ⓑ VERY LOOSE BROWN MODERATELY ORGANIC SAND, MOIST TO SAT (UNDIVIDED C.P. 1)

VERY LOOSE GRAY BROWN SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

VERY SOFT GRAY SANDY CLAY AND CLAYEY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

S-503

44 + 00.00

-L-

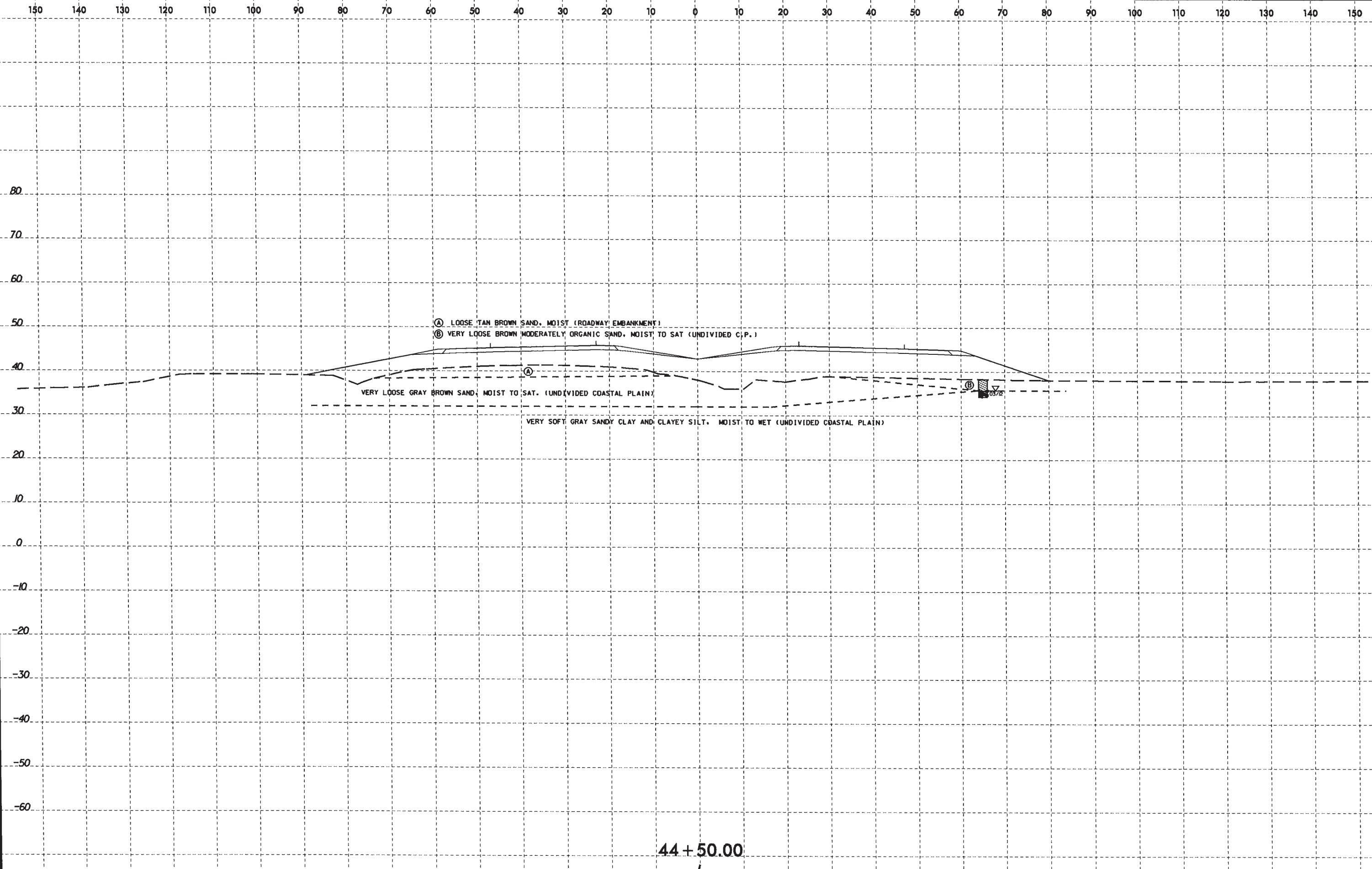
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PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
62



44 + 50.00

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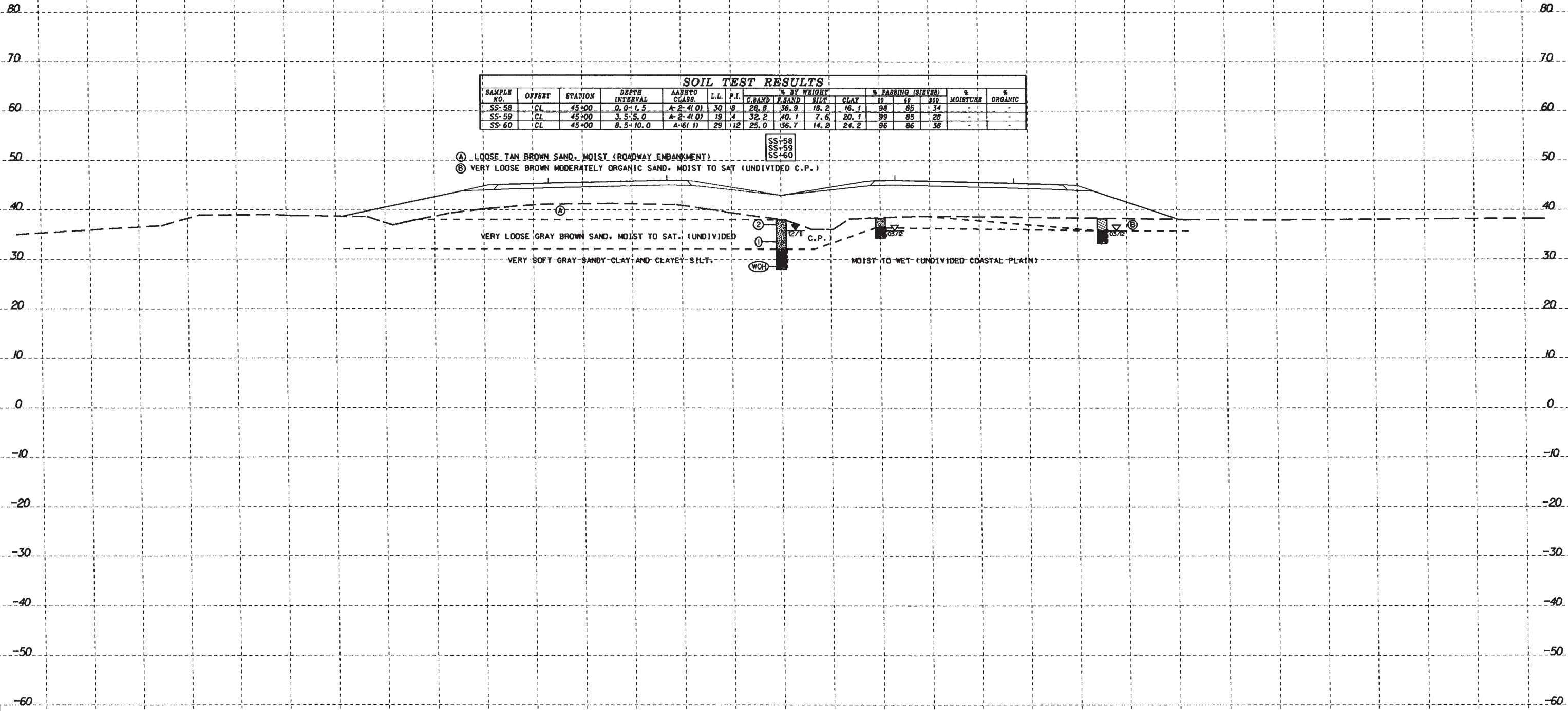




SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AAHTO CLASS.	L.L.	P.I.	% BY WEIGHT			% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	10	40	60		
SS-58	CL	45+00	0.0-1.5	A-2-4(0)	30	8	28.8	36.9	18.2	16.1	98	85	34	-
SS-59	CL	45+00	3.5-5.0	A-2-4(0)	19	4	32.2	40.1	7.6	20.1	99	85	28	-
SS-60	CL	45+00	8.5-10.0	A-6(1)	29	12	25.0	36.7	14.2	24.2	96	86	38	-

SS-58  
SS-59  
SS-60

- Ⓐ LOOSE TAN BROWN SAND, MOIST (ROADWAY EMBANKMENT)
- Ⓑ VERY LOOSE BROWN MODERATELY ORGANIC SAND, MOIST TO SAT (UNDIVIDED C.P.)



VERY LOOSE GRAY BROWN SAND, MOIST TO SAT. (UNDIVIDED)

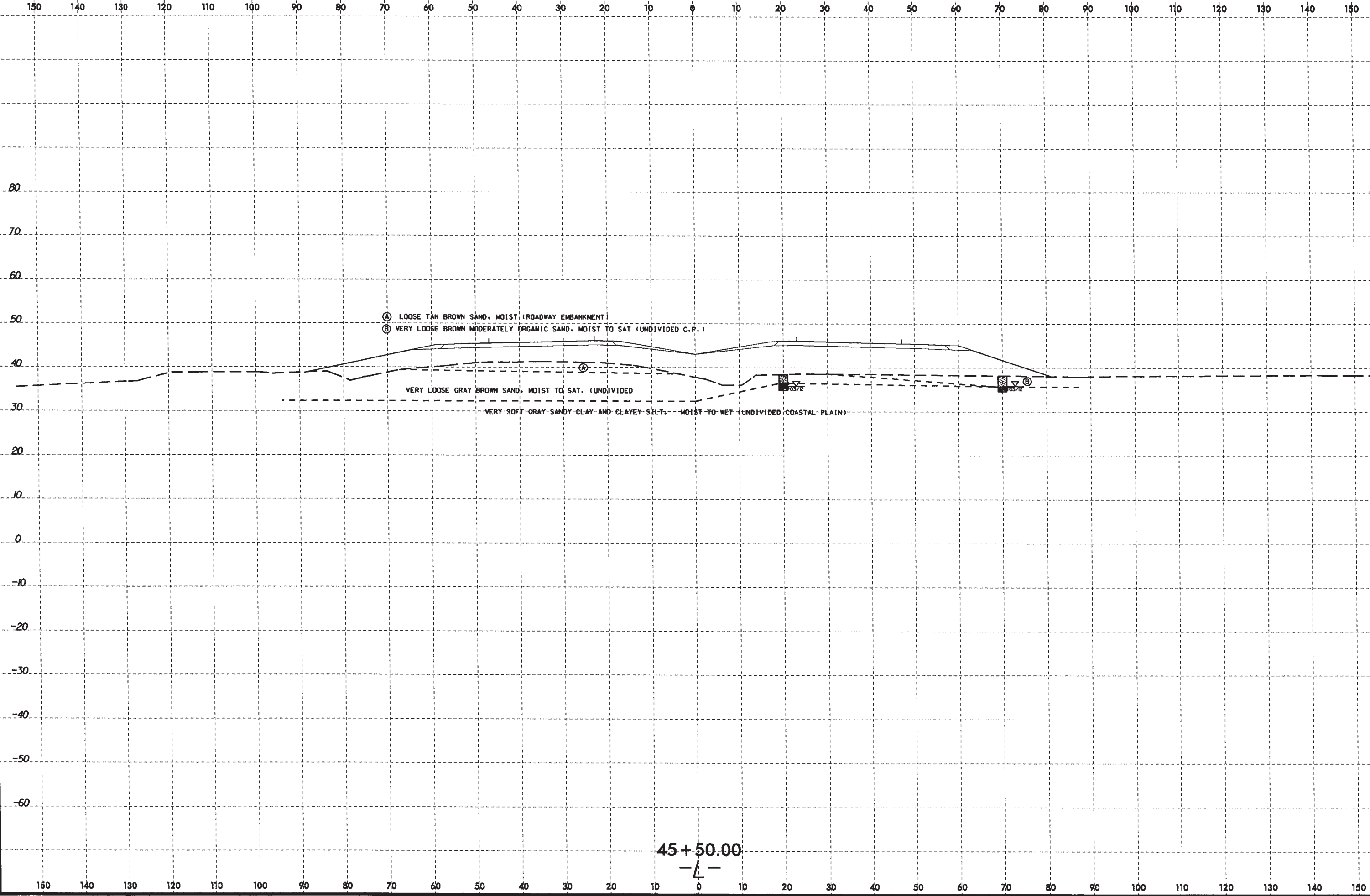
VERY SOFT GRAY SANDY CLAY AND CLAYEY SILT.

MOIST TO WET (UNDIVIDED COASTAL PLAIN)

45 + 00.00

-L-

8/23/99  
10-APR-2012 12:56  
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45 + 50.00  
-L-

8/23/99

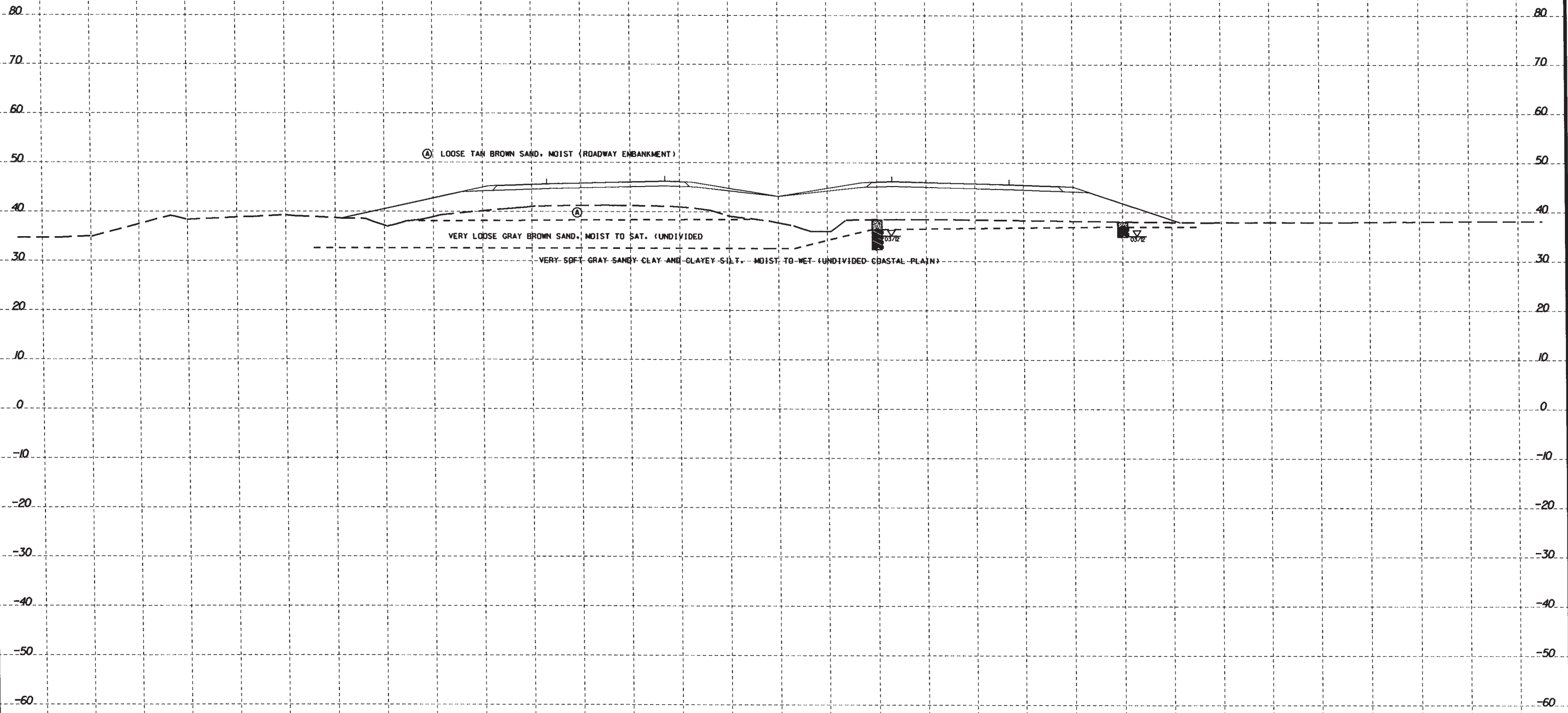
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gturner PI 06/23/2011



PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
65

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



Ⓐ LOOSE TAN BROWN SAND, MOIST (ROADWAY EMBANKMENT)

Ⓐ VERY LOOSE GRAY BROWN SAND, MOIST TO SAT. (UNDIVIDED)

VERY SOFT GRAY SANDY CLAY AND CLAYEY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

46 + 00.00

-L-

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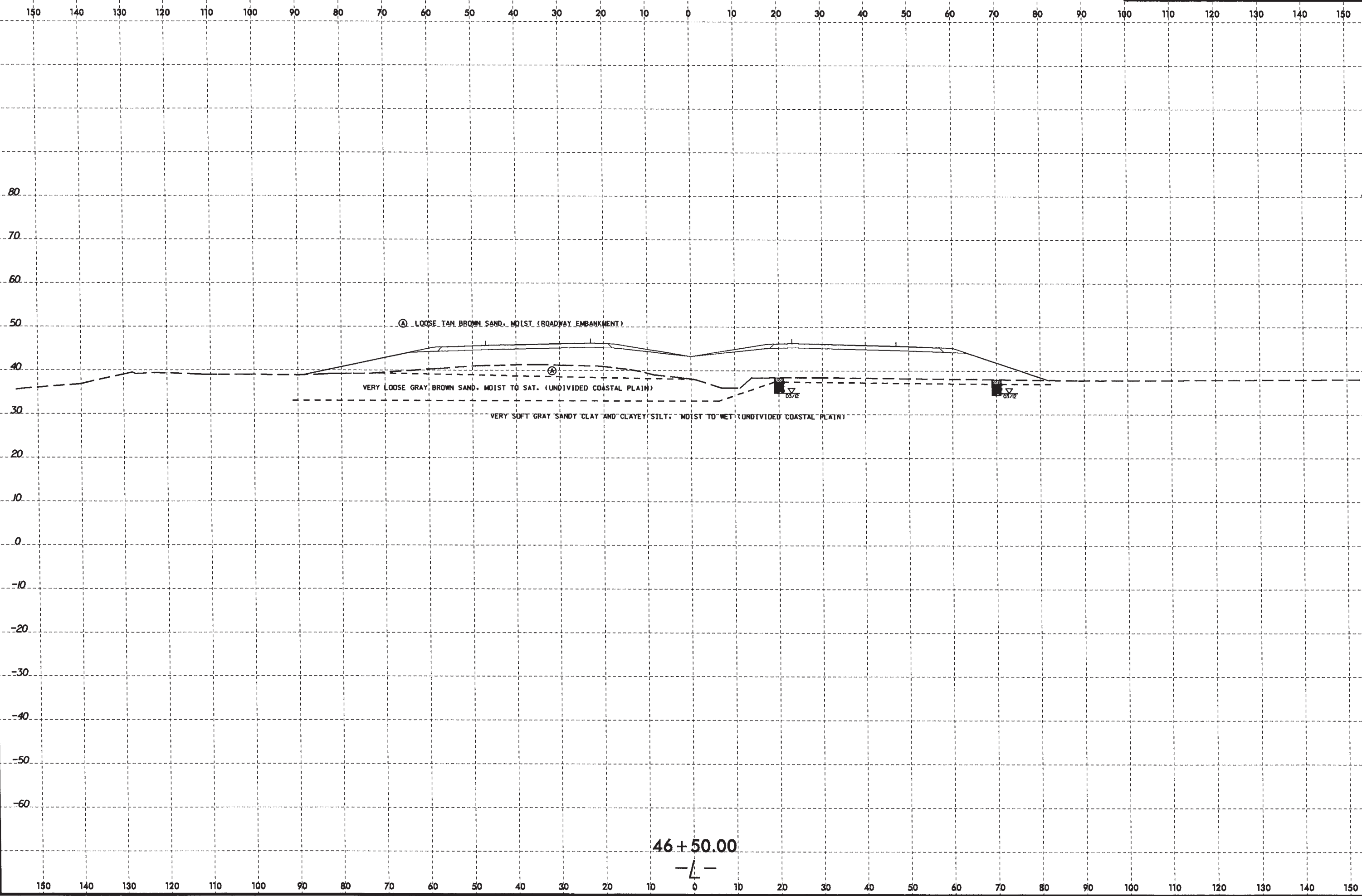
8/23/99

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PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
66



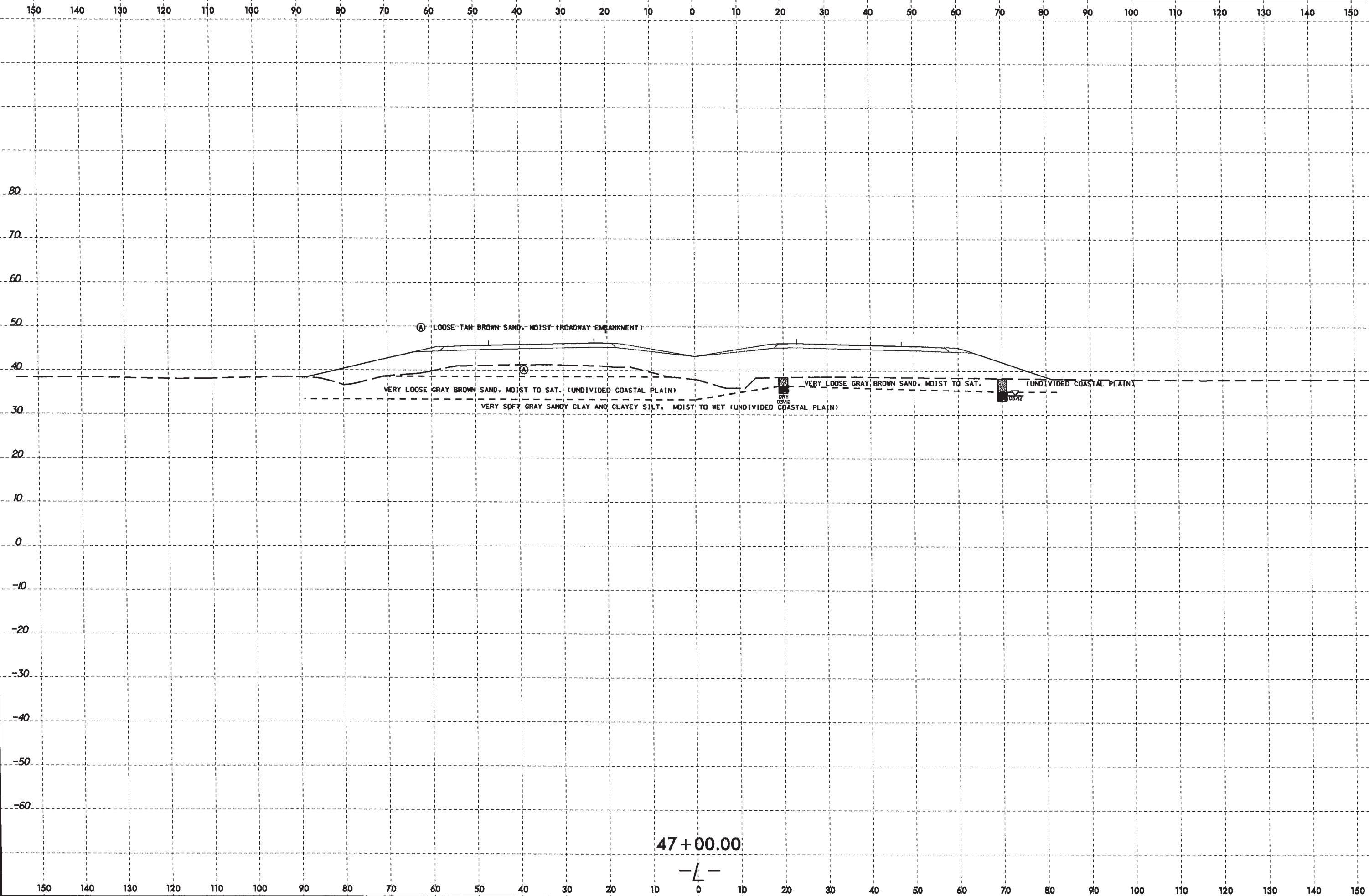
Ⓐ LOOSE TAN BROWN SAND, MOIST (ROADWAY EMBANKMENT)

VERY LOOSE GRAY BROWN SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

VERY SOFT GRAY SANDY CLAY AND CLAYEY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

46 + 50.00

-L-



47 + 00.00

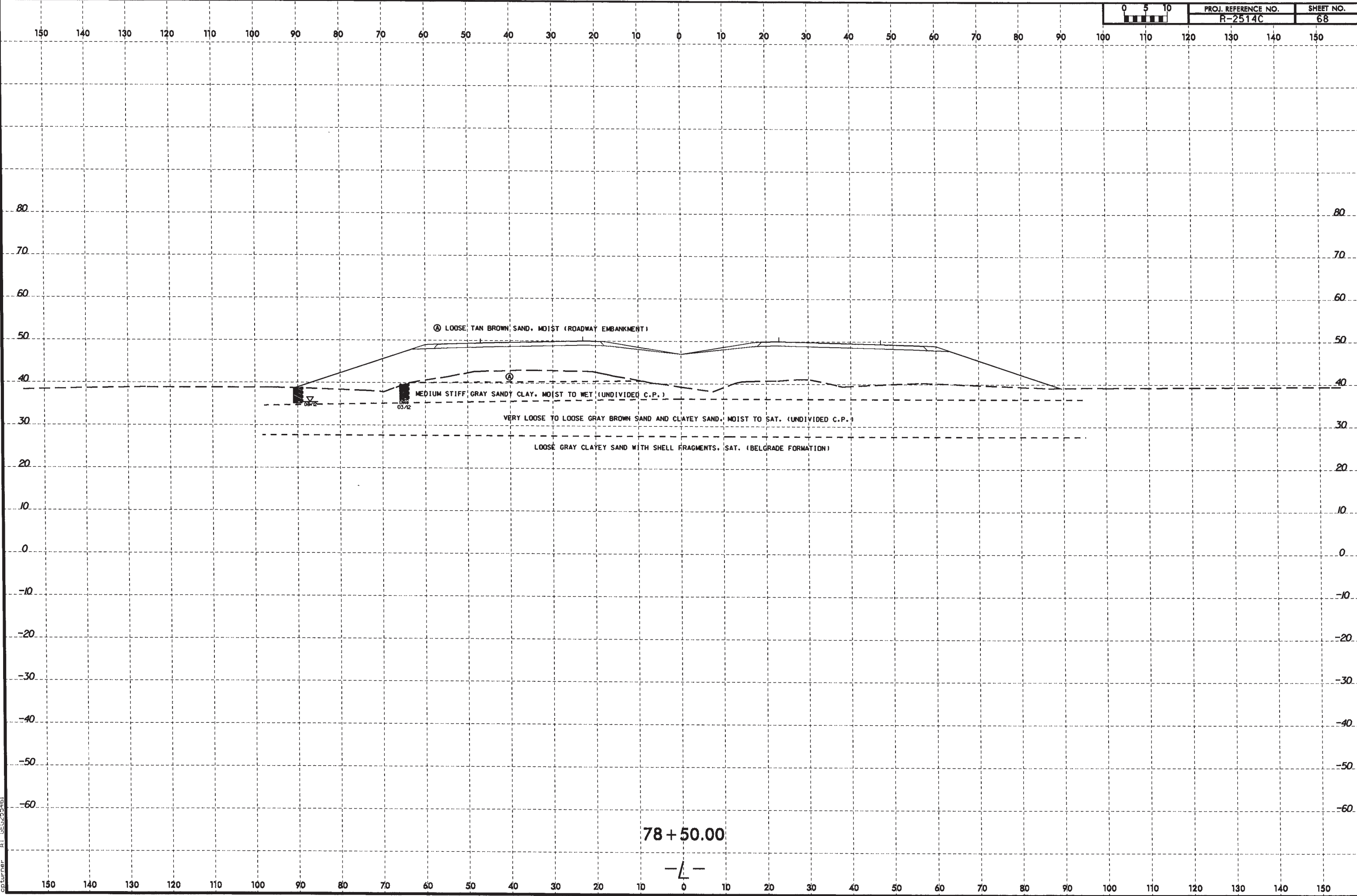
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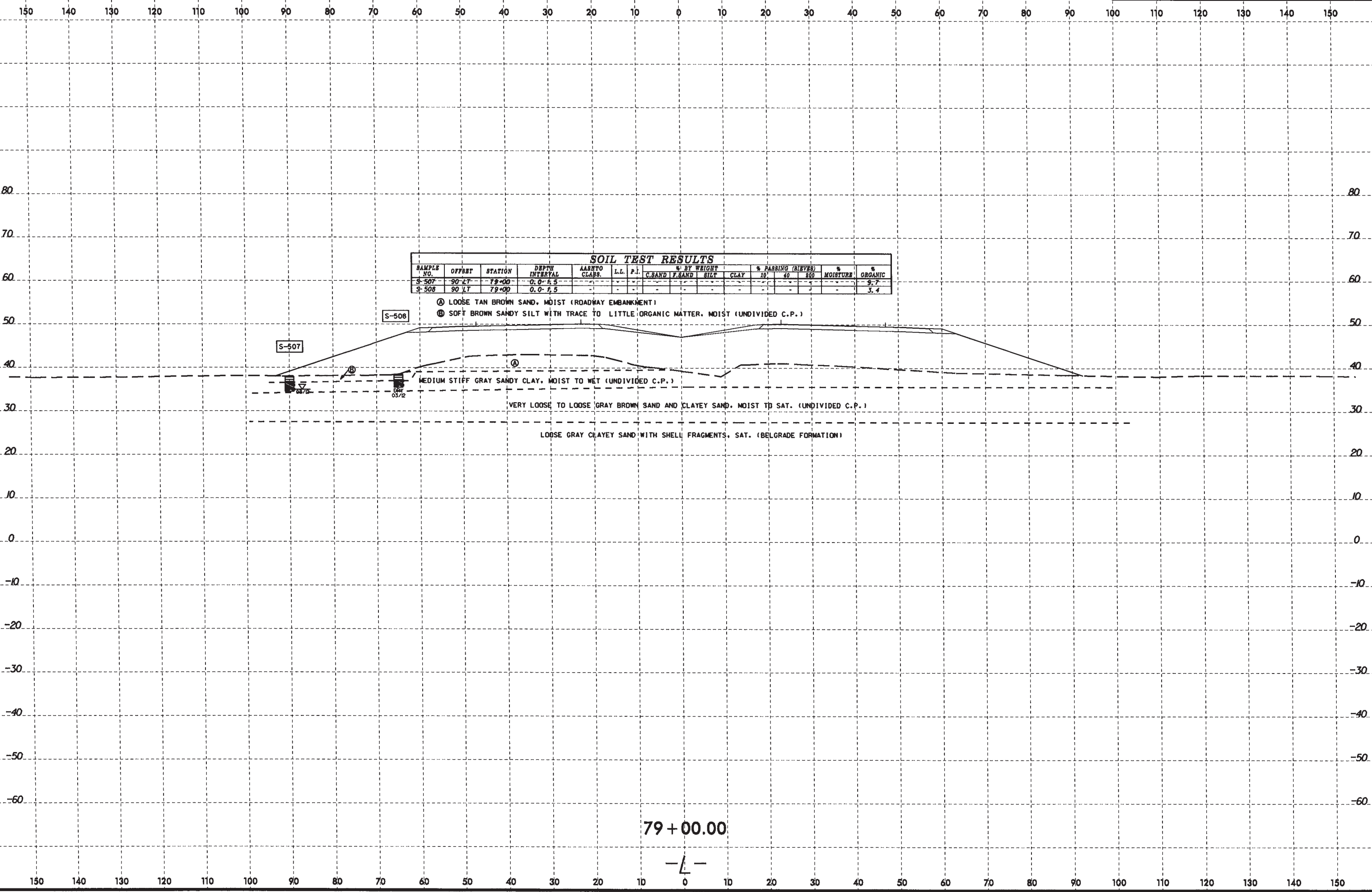


PROJ. REFERENCE NO.	SHEET NO.
R-2514C	68



78 + 50.00

-L-



SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.L.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	40	800		
S-507	90 LT	79+00	0.0-1.5	-	-	-	-	-	-	-	-	-	-	-	-
S-508	90 LT	79+00	0.0-1.5	-	-	-	-	-	-	-	-	-	-	-	3.4

Ⓐ LOOSE TAN BROWN SAND, MOIST (ROADWAY EMBANKMENT)  
 Ⓑ SOFT BROWN SANDY SILT WITH TRACE TO LITTLE ORGANIC MATTER, MOIST (UNDIVIDED C.P.)

MEDIUM STIFF GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

LOOSE GRAY CLAYEY SAND WITH SHELL FRAGMENTS, SAT. (BELGRADE FORMATION)

79+00.00

— L —

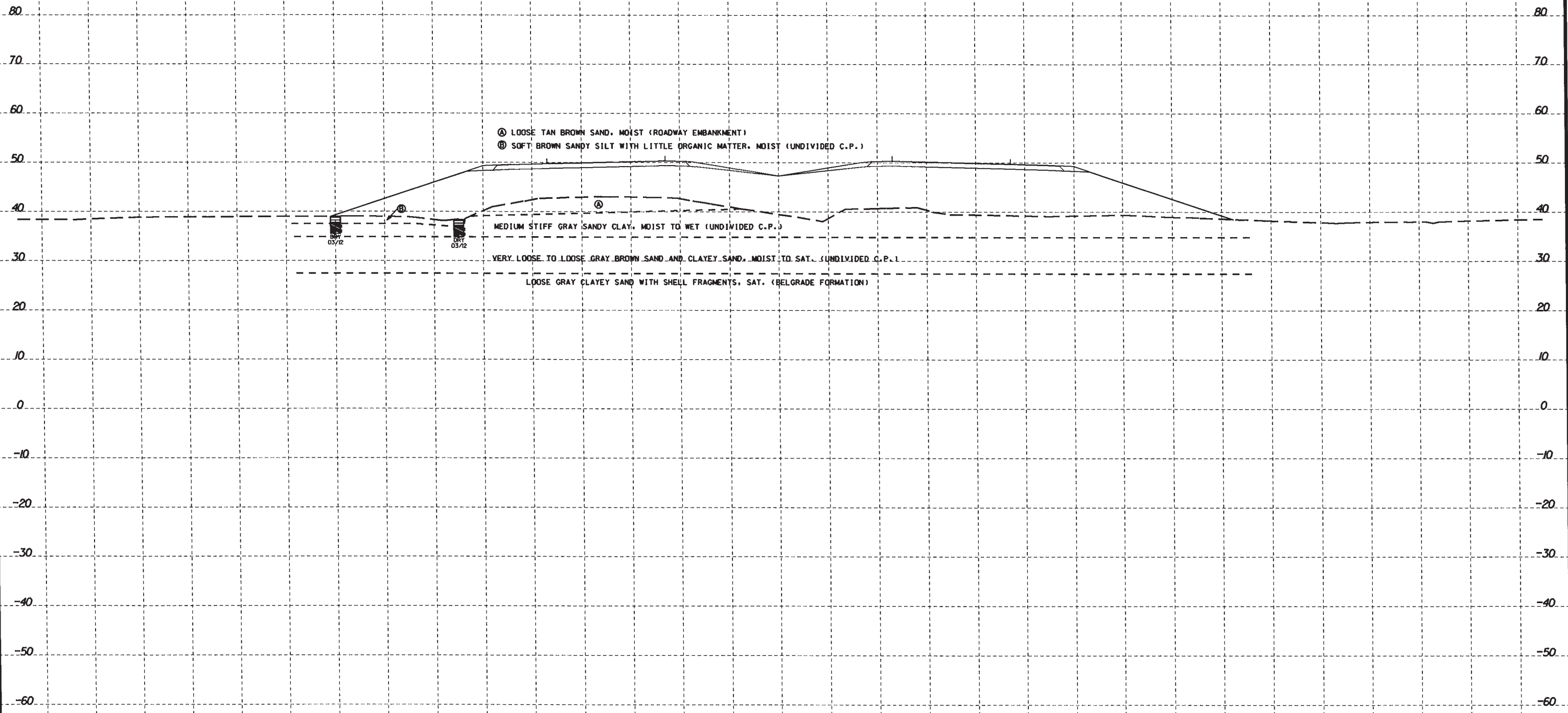
8/23/99



PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
70

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



(A) LOOSE TAN BROWN SAND, MOIST (ROADWAY EMBANKMENT)  
 (B) SOFT BROWN SANDY SILT WITH LITTLE ORGANIC MATTER, MOIST (UNDIVIDED C.P.)  
 MEDIUM STIFF GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED C.P.)  
 VERY LOOSE TO LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED C.P.)  
 LOOSE GRAY CLAYEY SAND WITH SHELL FRAGMENTS, SAT. (BELGRADE FORMATION)

79 + 50.00

-L-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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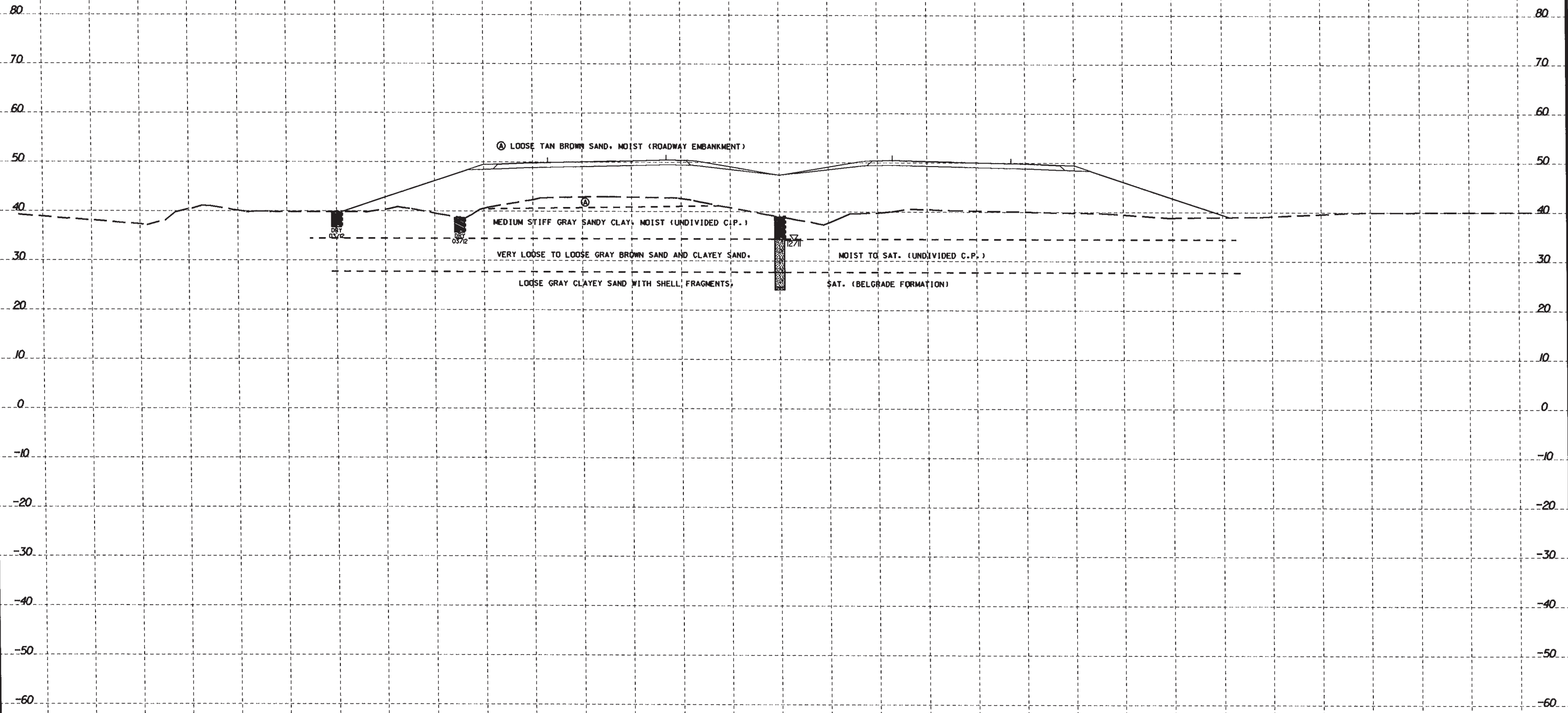
8/23/99



PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
71

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④ LOOSE TAN BROWN SAND, MOIST (ROADWAY EMBANKMENT)

④ MEDIUM STIFF GRAY SANDY CLAY, MOIST (UNDIVIDED C.P.)

VERY LOOSE TO LOOSE GRAY BROWN SAND AND CLAYEY SAND.

LOOSE GRAY CLAYEY SAND WITH SHELL FRAGMENTS.

MOIST TO SAT. (UNDIVIDED C.P.)

SAT. (BELGRADE FORMATION)

80 + 00.00

-L-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

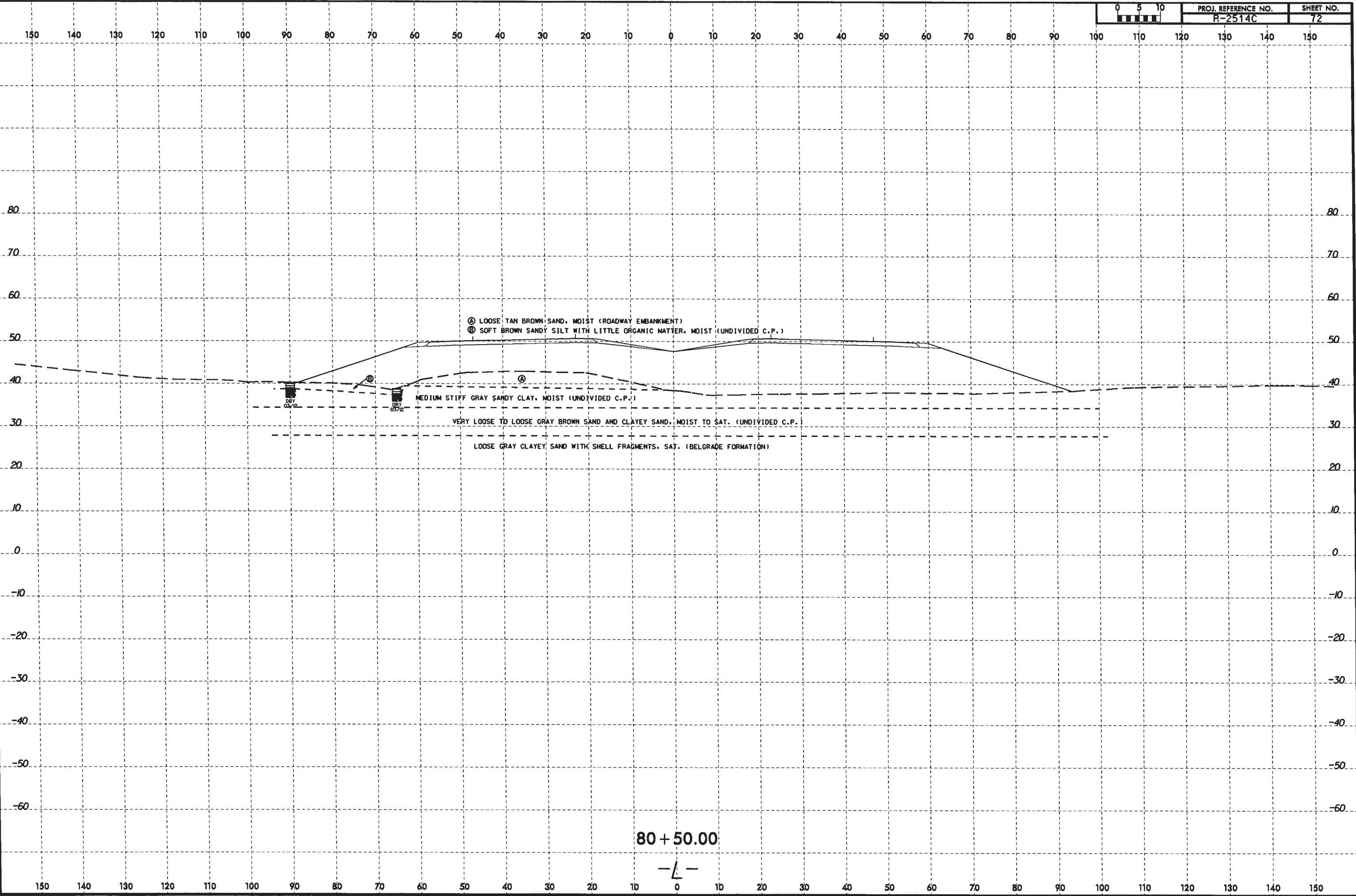
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PROJ. REFERENCE NO. R-2514C SHEET NO. 72

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Ⓐ LOOSE TAN BROWN SAND, MOIST (ROADWAY EMBANKMENT)  
Ⓑ SOFT BROWN SANDY SILT WITH LITTLE ORGANIC MATTER, MOIST (UNDIVIDED C.P.)

MEDIUM STIFF GRAY SANDY CLAY, MOIST (UNDIVIDED C.P.)

VERY LOOSE TO LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

LOOSE GRAY CLAYEY SAND WITH SHELL FRAGMENTS, SAT. (BELGRADE FORMATION)

80 + 50.00

-L-

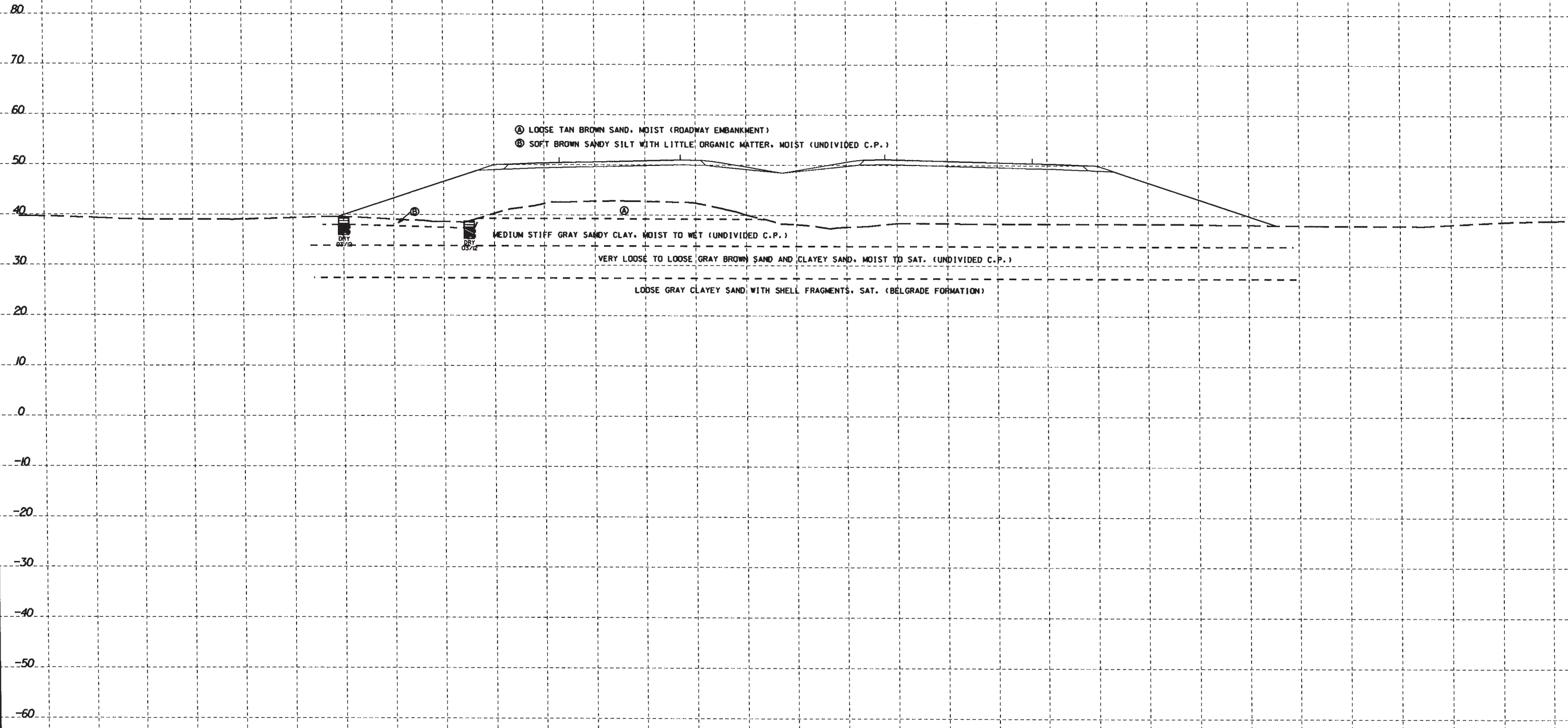


8/23/99



PROJ. REFERENCE NO. R-2514C SHEET NO. 74

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



81 + 50.00

-L-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

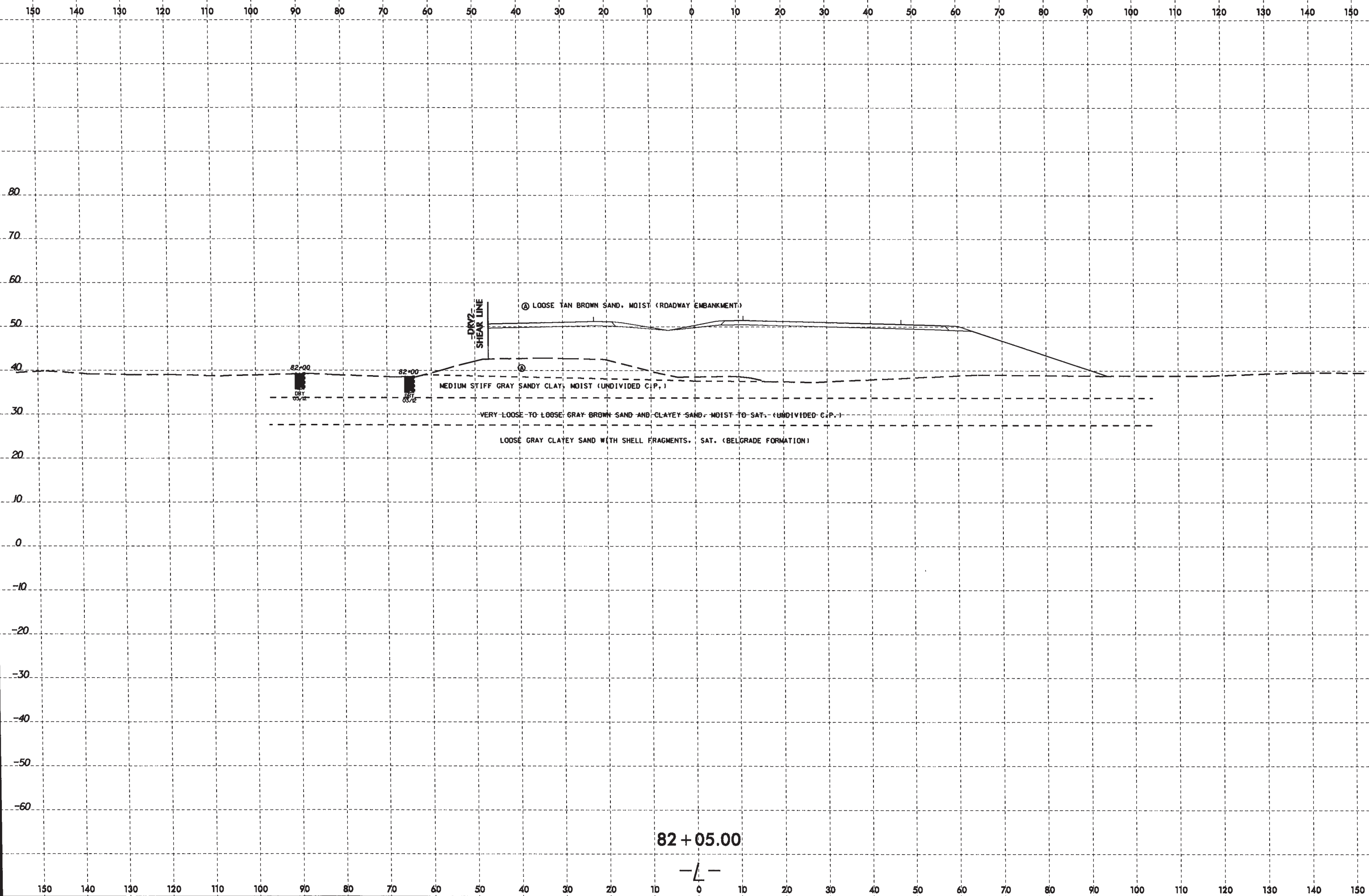
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8/23/99



PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
75



① LOOSE TAN BROWN SAND, MOIST (ROADWAY EMBANKMENT)

MEDIUM STIFF GRAY SANDY CLAY, MOIST (UNDIVIDED C.P.)

VERY LOOSE TO LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

LOOSE GRAY CLAYEY SAND WITH SHELL FRAGMENTS, SAT. (BELGRADE FORMATION)

82+00  
DRY

82+00  
DRY

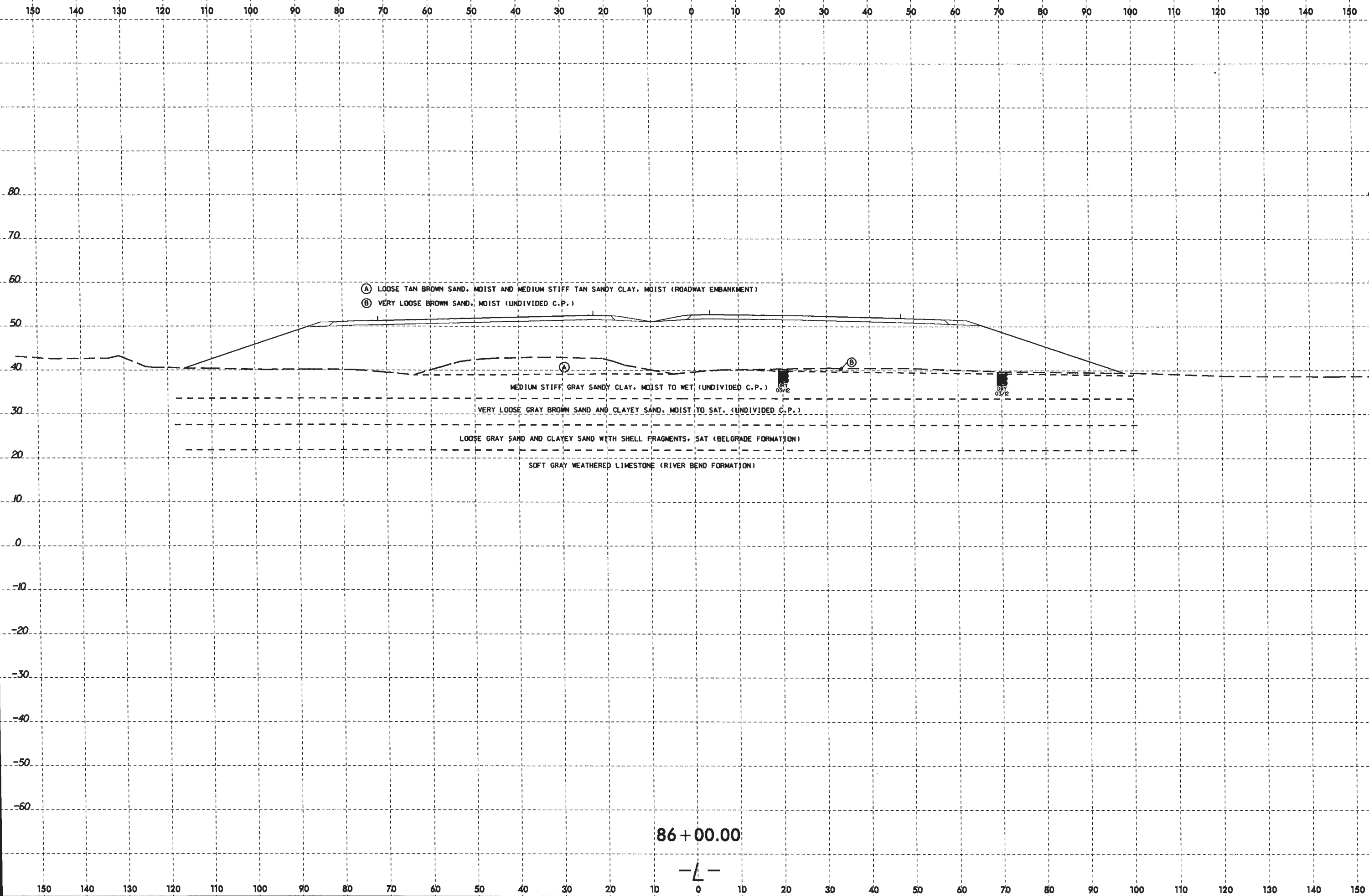
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SHEAR LINE

82 + 05.00

-L-

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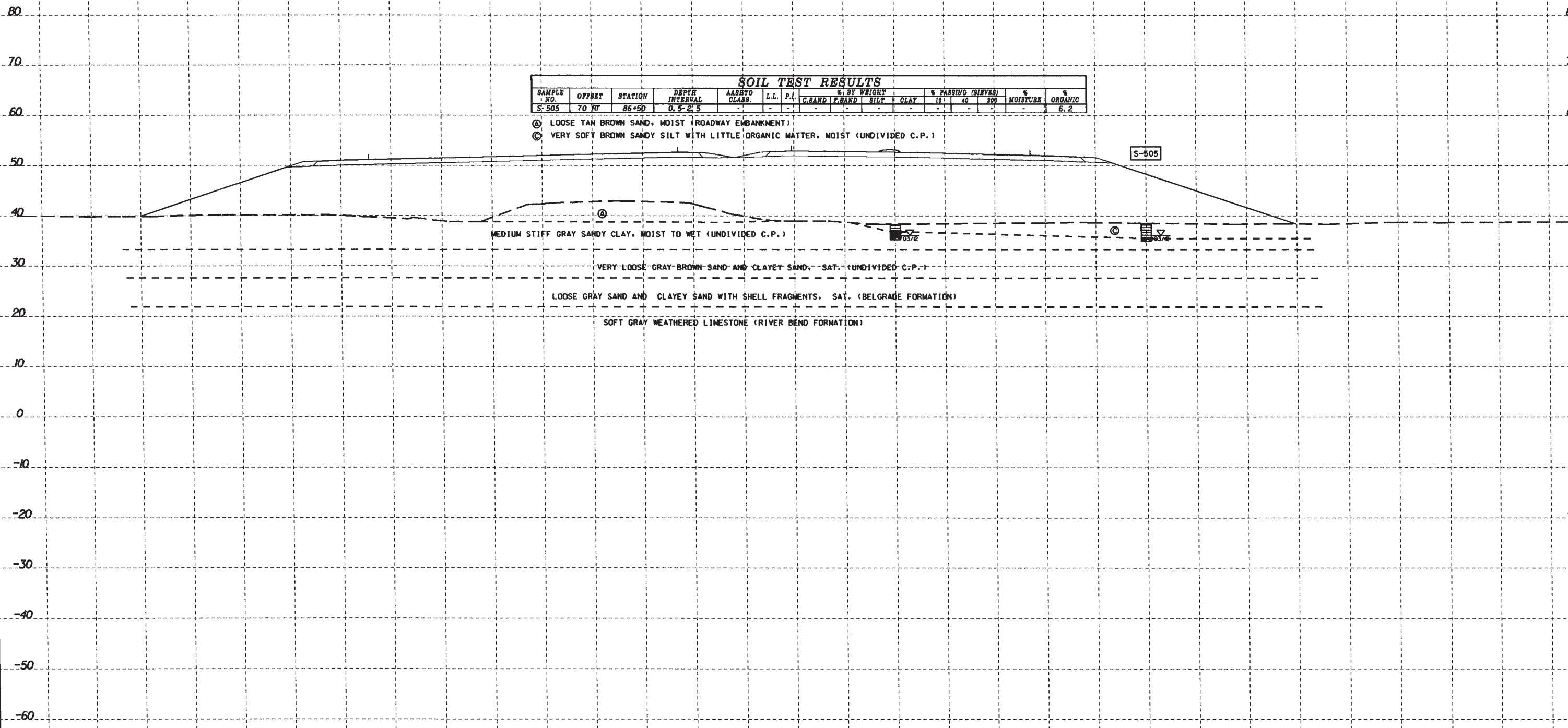
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PROJ. REFERENCE NO. R-2514C SHEET NO. 77

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	40	200		
S-505	70 FT	86+50	0.5-2.5	-	-	-	-	-	-	-	-	-	-	-	6.2

- Ⓐ LOOSE TAN BROWN SAND, MOIST (ROADWAY EMBANKMENT)
- Ⓒ VERY SOFT BROWN SANDY SILT WITH LITTLE ORGANIC MATTER, MOIST (UNDIVIDED C.P.)

86 + 50.00

-L-

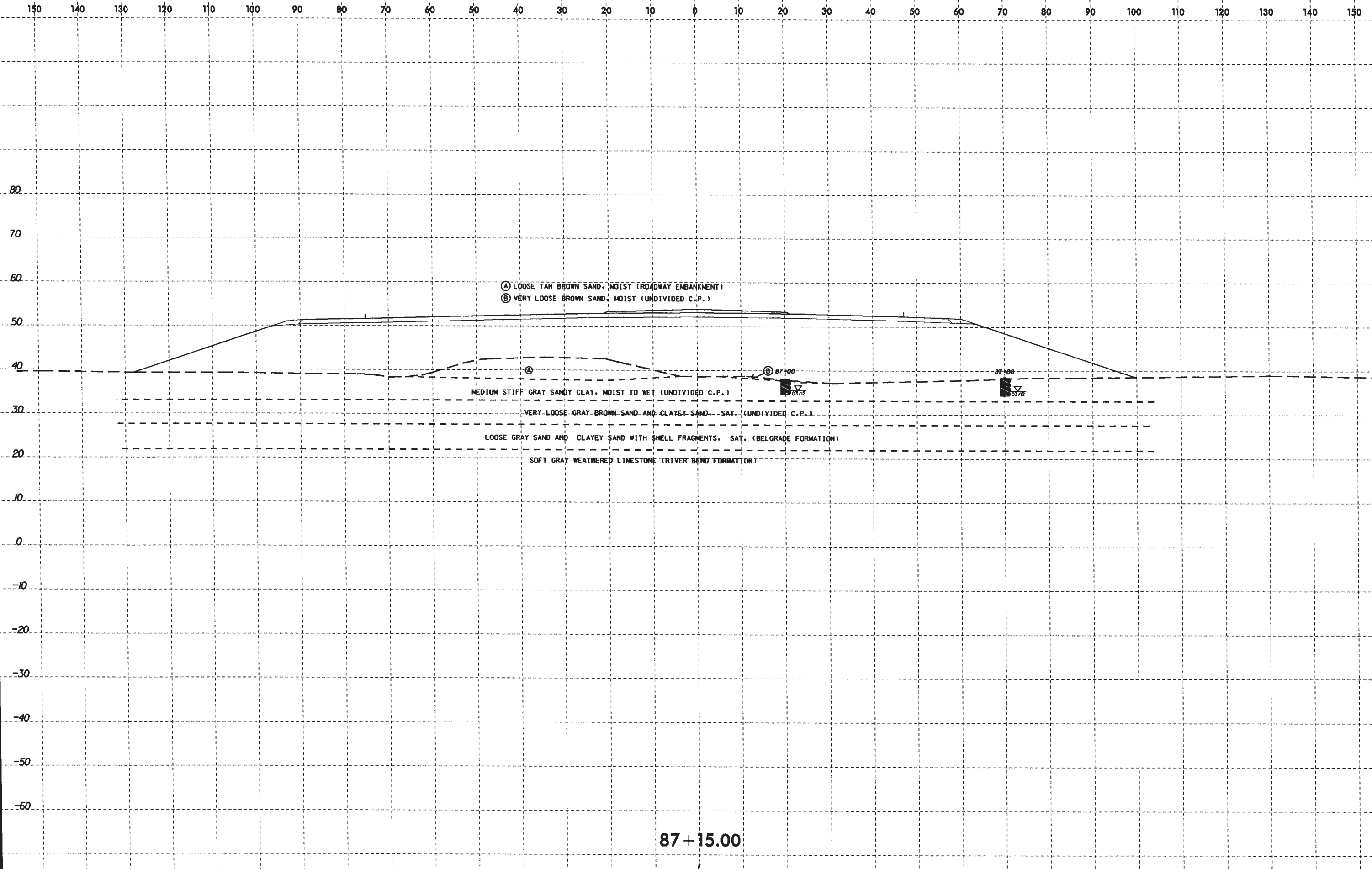
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8/23/99



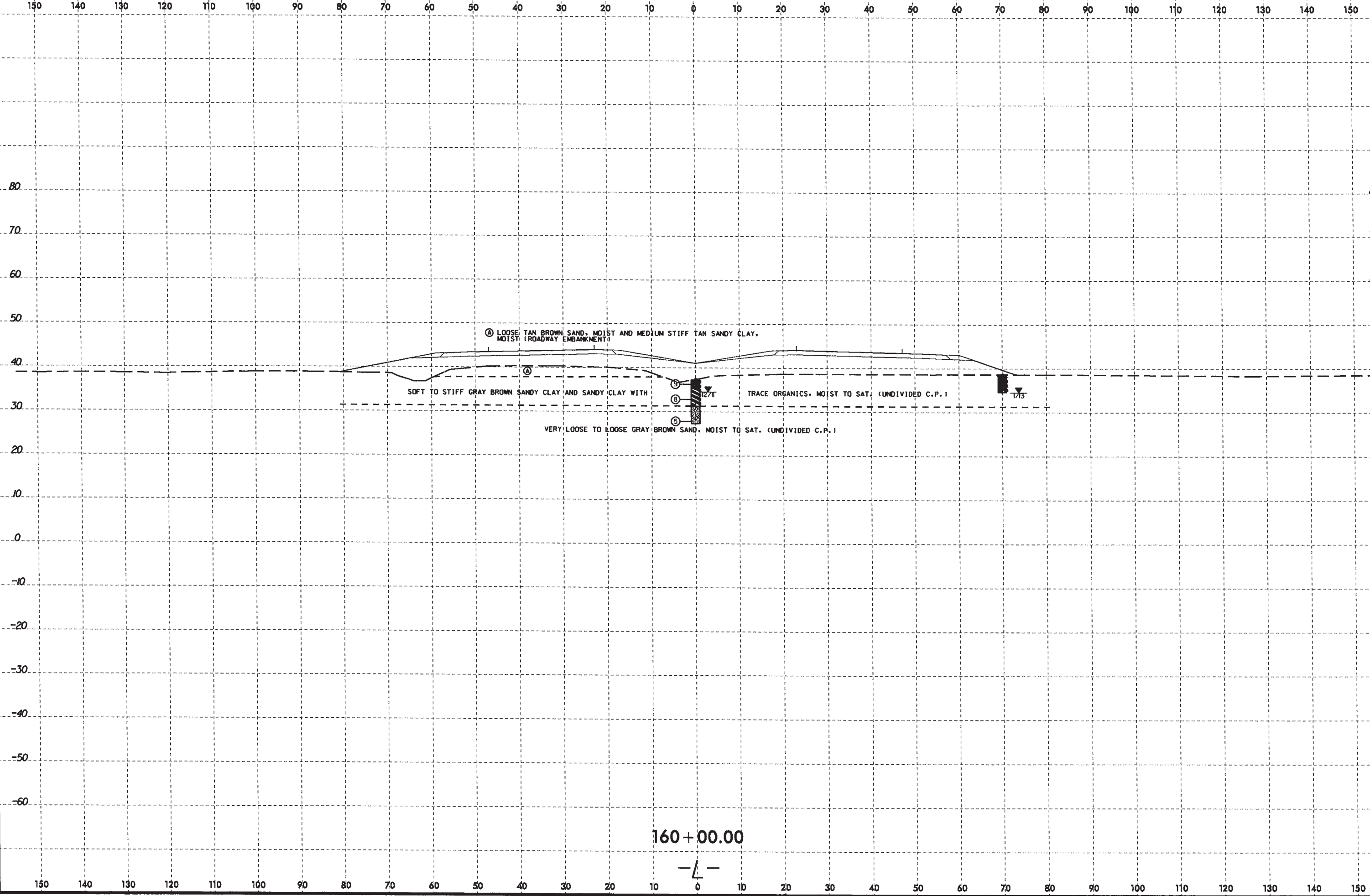
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R-2514C	78



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160+00.00

-L-

8/23/99

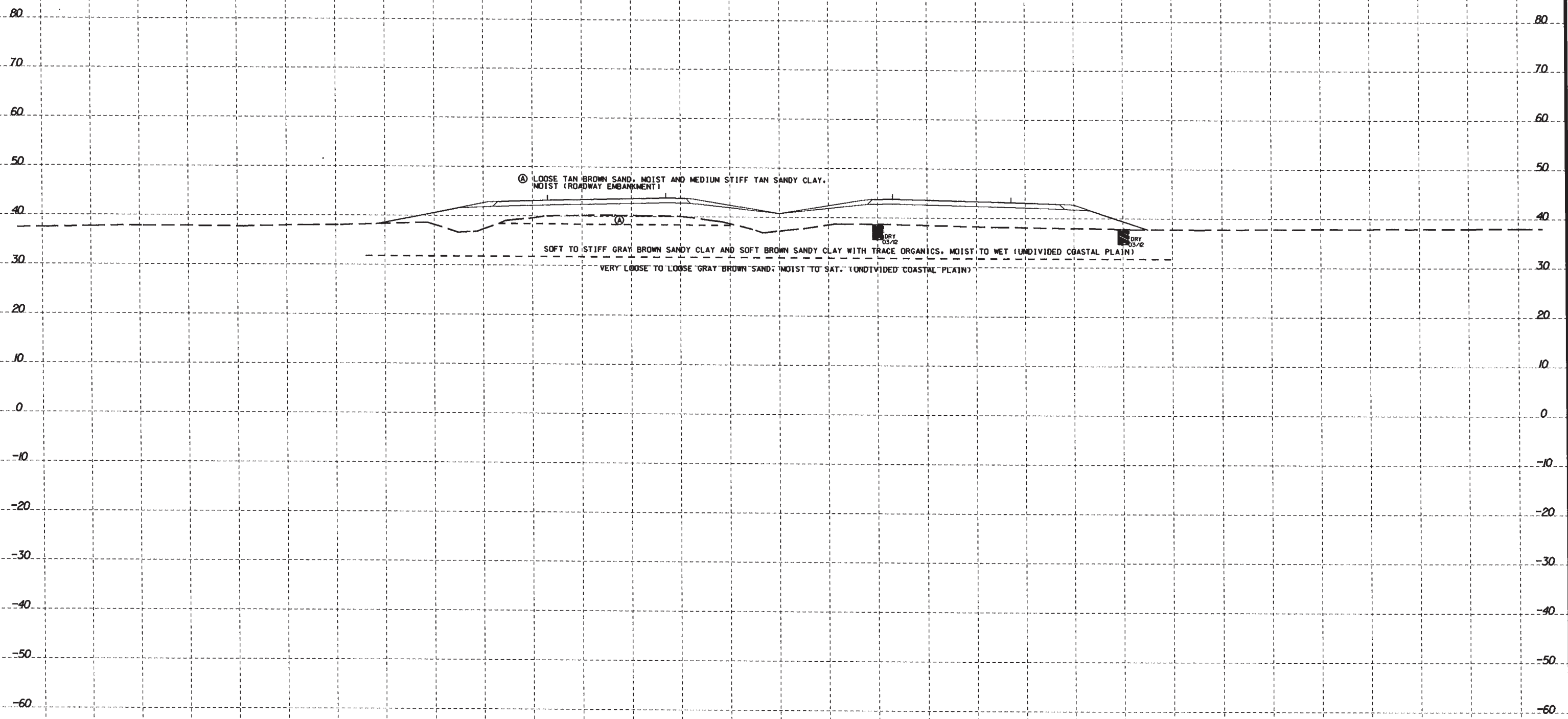
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PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
80

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



161 + 00.00

- 4 -

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

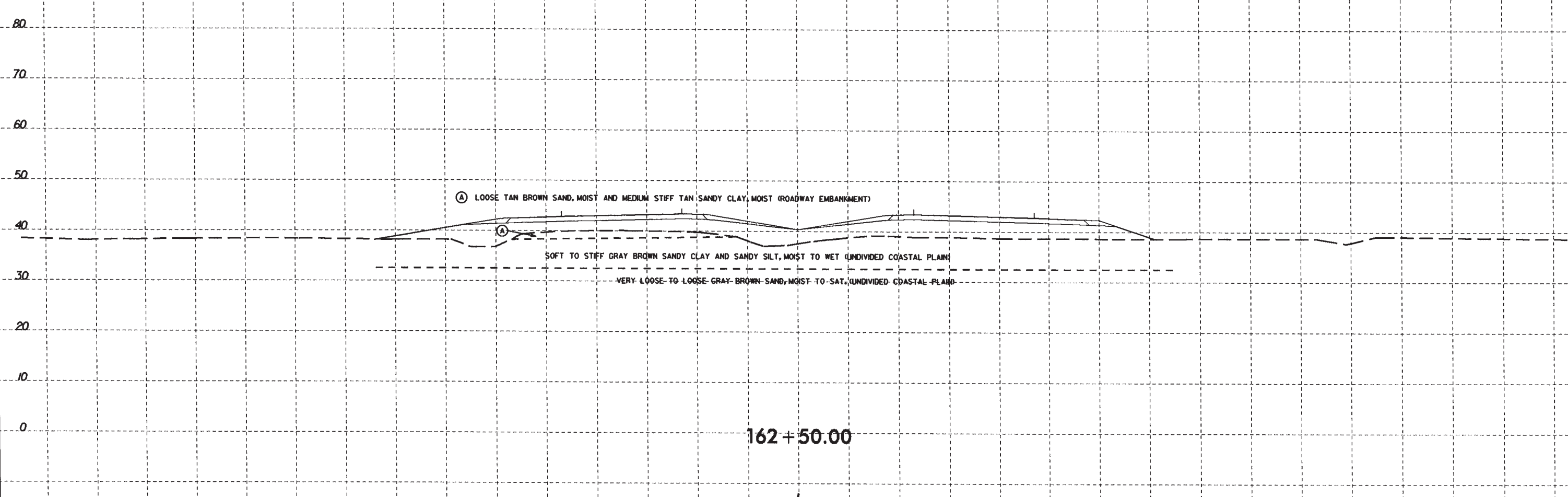
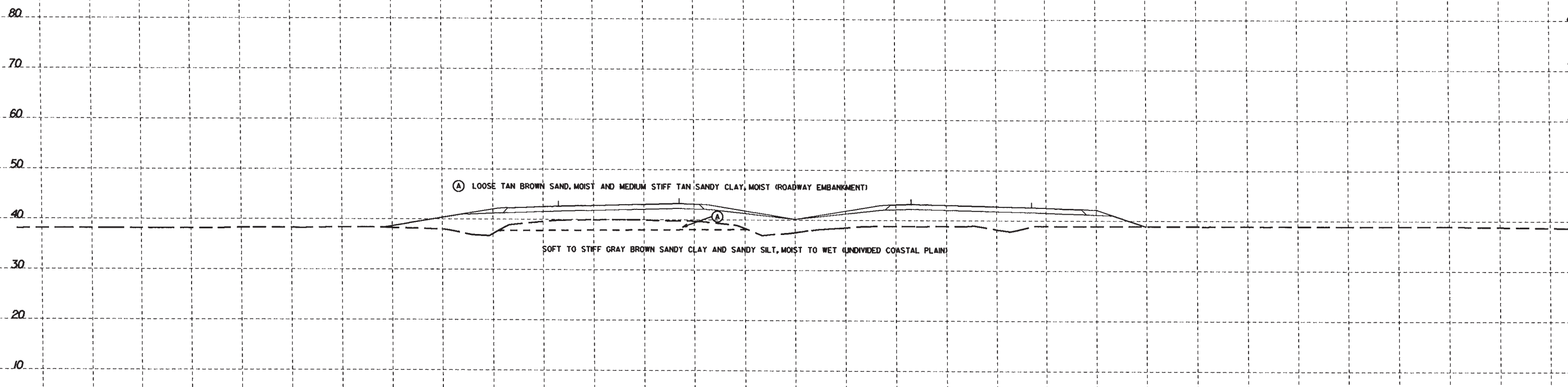
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SHEET NO.  
81

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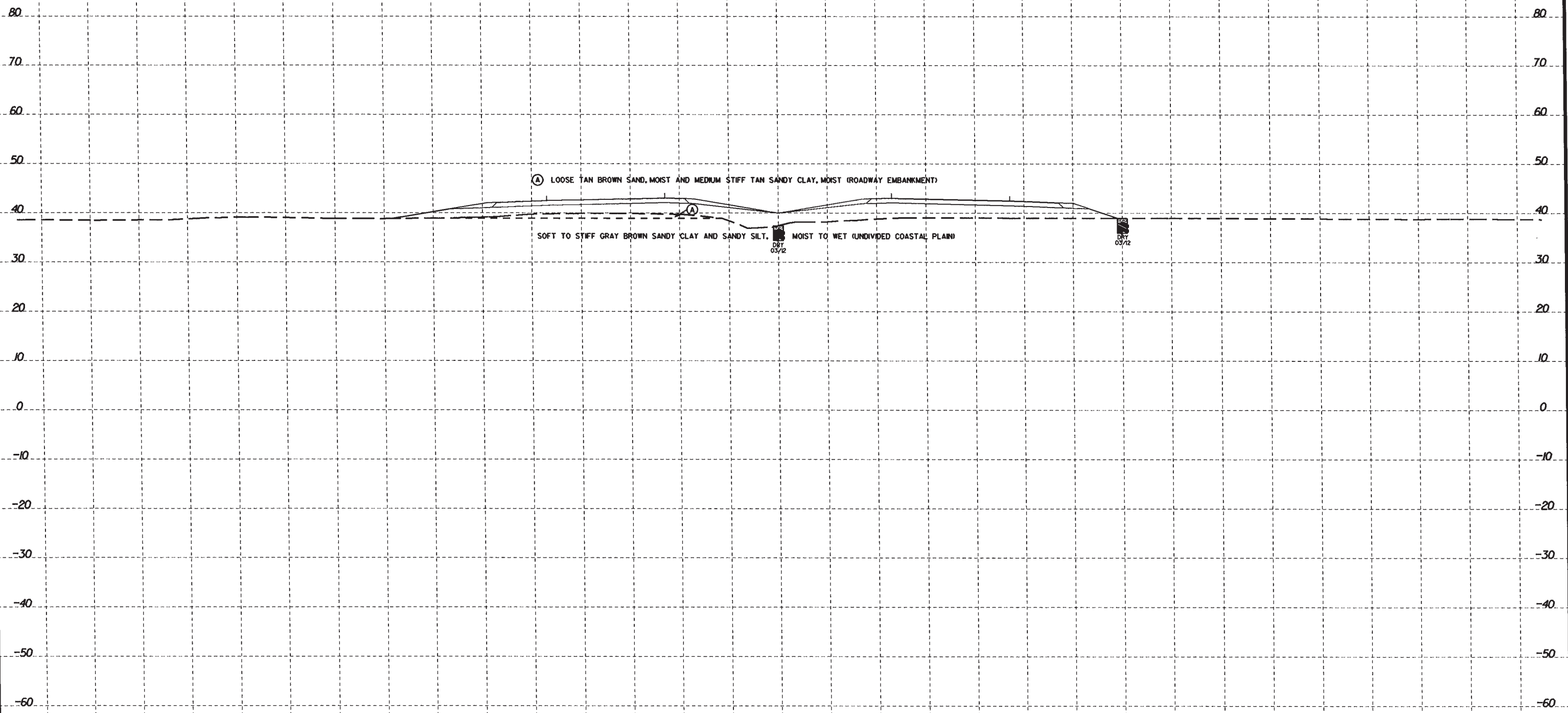
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PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
82

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



Ⓐ LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

SOFT TO STIFF GRAY BROWN SANDY CLAY AND SANDY SILT. MOIST TO WET (UNDIVIDED COASTAL PLAIN)

DRY  
03/12

DRY  
03/12

163 + 55.00

-L-

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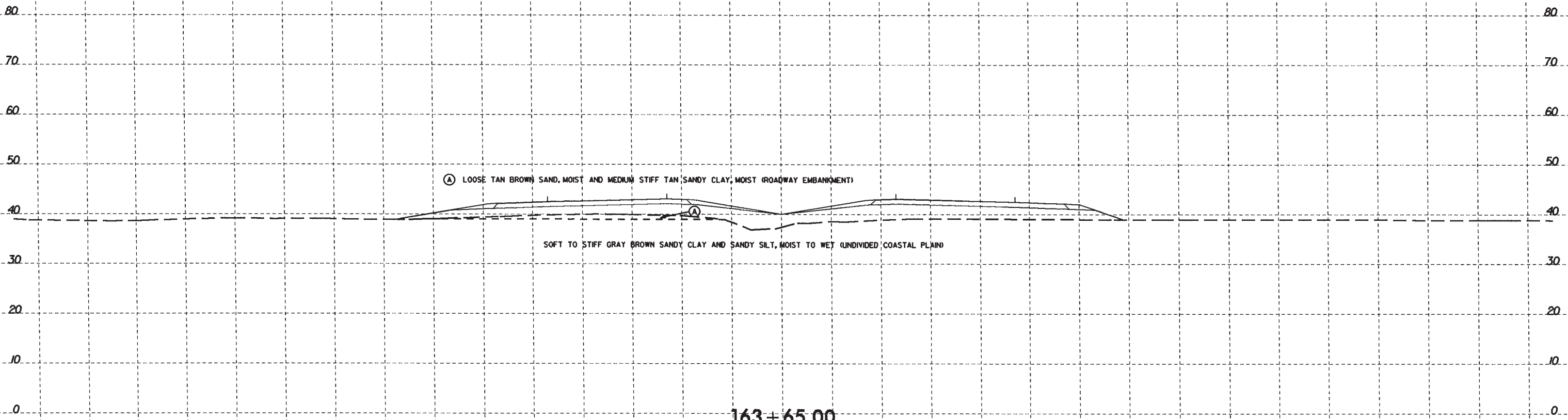
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8/23/99

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0 5 10	PROJ. REFERENCE NO. R-2514C	SHEET NO. 83
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150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

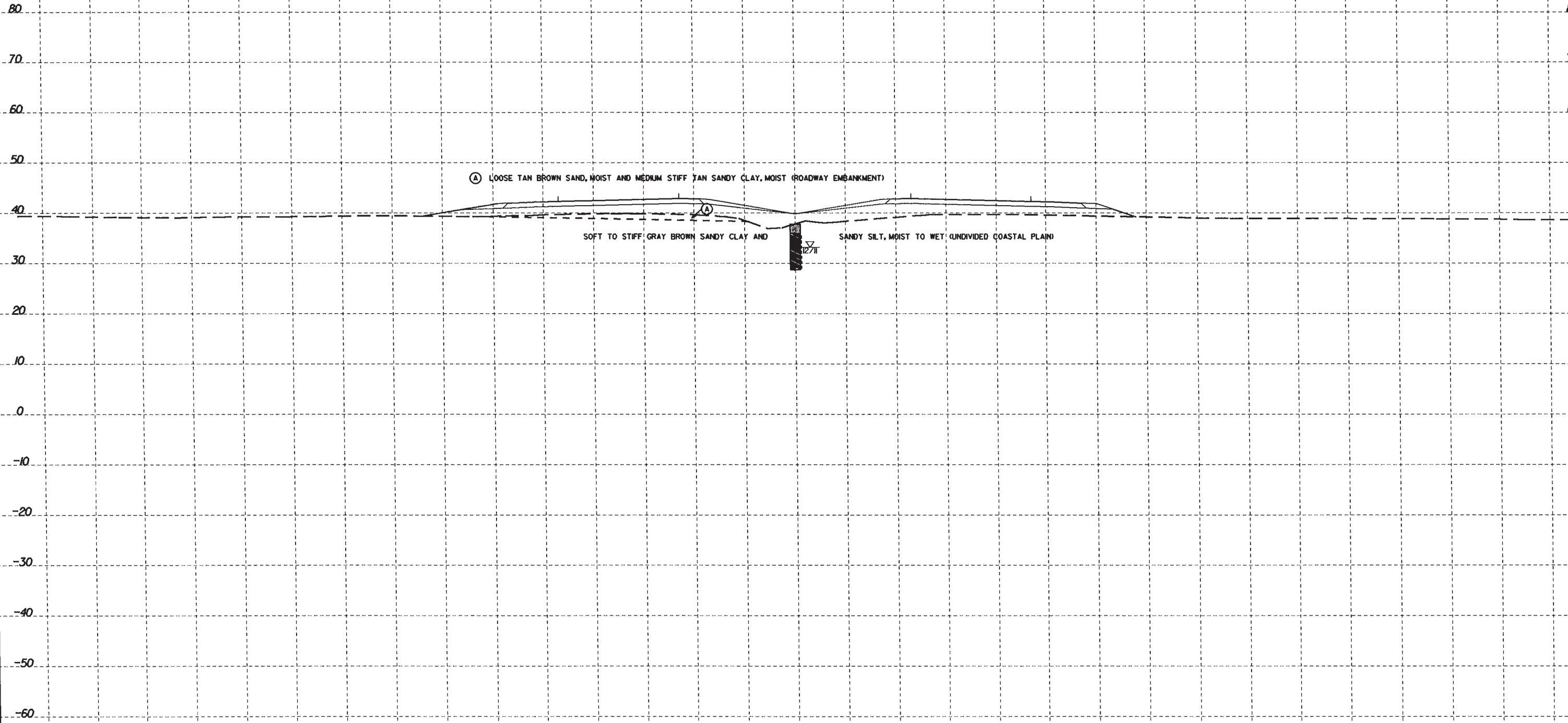
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PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
84

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Ⓐ LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

SOFT TO STIFF GRAY BROWN SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

12.7 ft

164+00.00

-L-

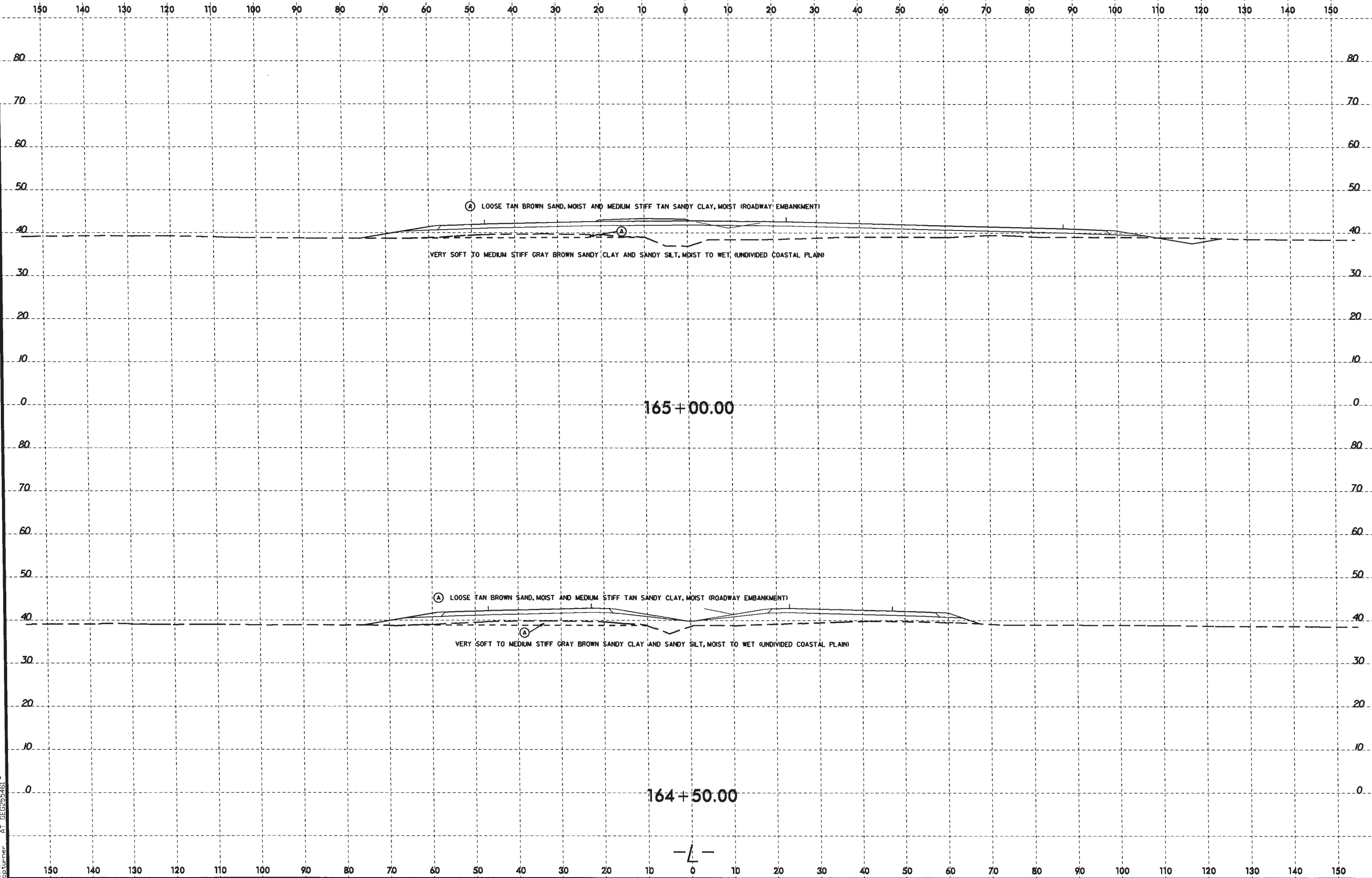
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PROJ. REFERENCE NO. R-2514C	SHEET NO. 85
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165+00.00

164+50.00

-L-

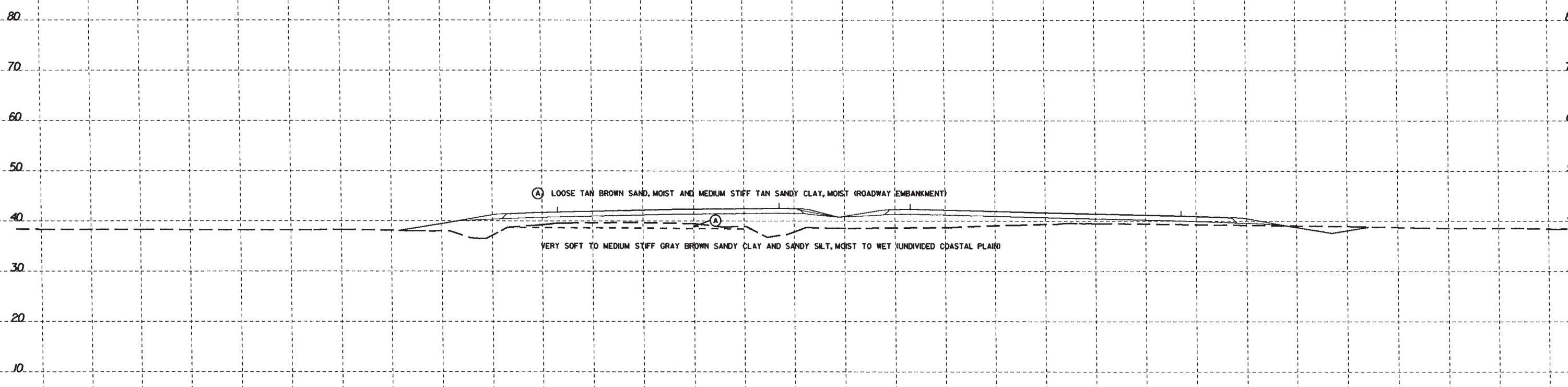
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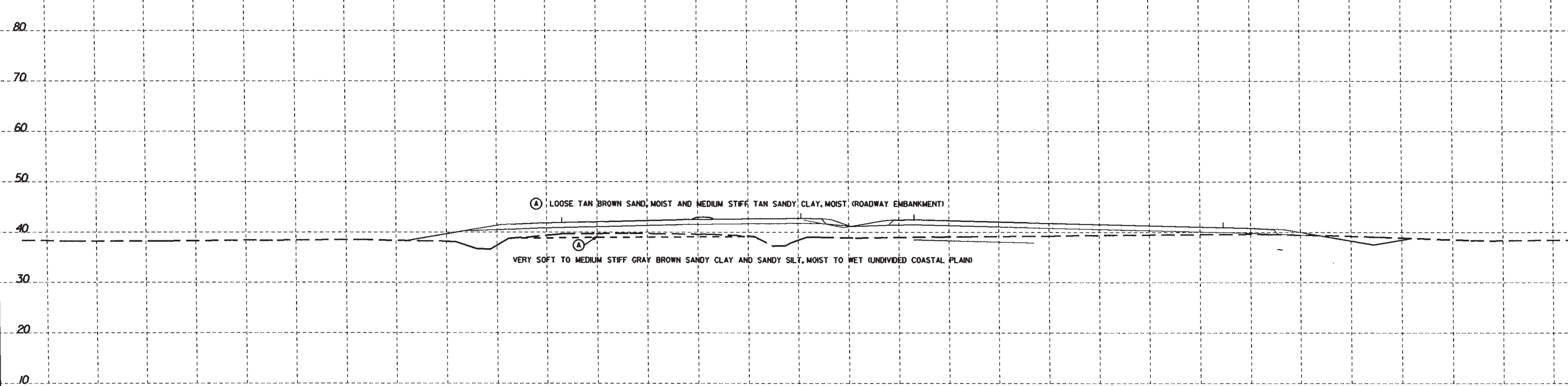
PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
86

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165+80.00



165+50.00

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70 70

60 60

50 50

40 40

30 30

20 20

10 10

0 0

-10 -10

-20 -20

-30 -30

-40 -40

-50 -50

-60 -60

SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							G. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-123	CL	166+00	0.0-1.5	A-4(3)	23	9	10.7	23.6	36.0	30.3	100	97	69	19.1	-
SS-124	CL	166+00	3.5-5.0	A-6(10)	39	22	20.4	22.8	18.5	34.3	100	92	59	-	-
SS-125	CL	166+00	8.5-10.0	A-6(3)	28	17	31.3	27.9	6.6	34.3	100	87	43	-	-

SS-123  
SS-124  
SS-125

(A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

VERY SOFT TO MEDIUM STIFF GRAY BROWN SANDY

CLAY, AND SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

166+00.00

-L-

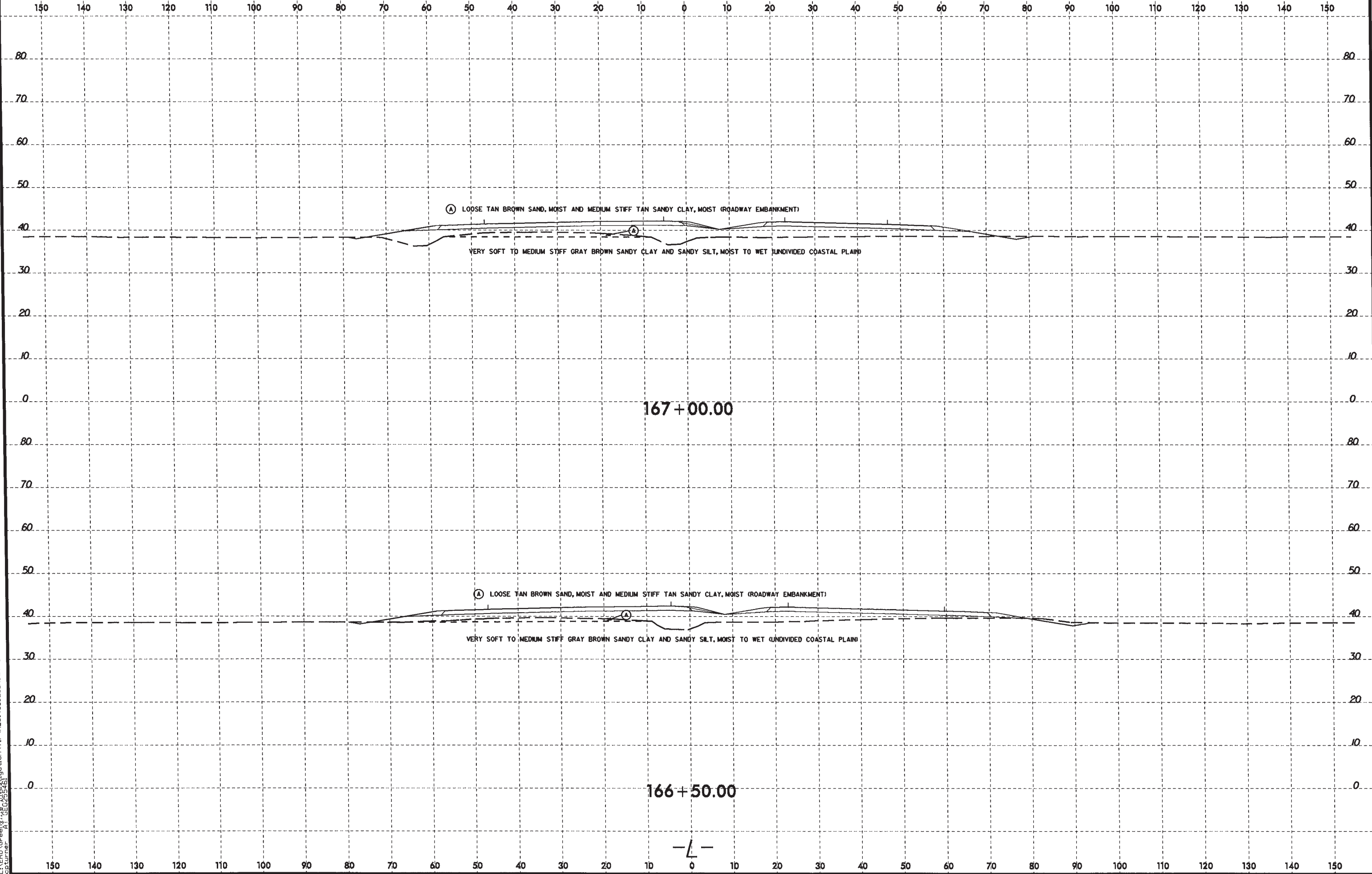
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PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
88



(A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

VERY SOFT TO MEDIUM STIFF GRAY BROWN SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

167+00.00

(A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

VERY SOFT TO MEDIUM STIFF GRAY BROWN SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

166+50.00

-L-

8/23/99



PROJ. REFERENCE NO.	SHEET NO.
R-2514C	89

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

80 80

70 70

60 60

50 50

40 40

30 30

20 20

10 10

0 0

80 80

70 70

60 60

50 50

40 40

30 30

20 20

10 10

0 0

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

(A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

(A)

VERY SOFT TO MEDIUM STIFF GRAY BROWN SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)



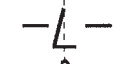
168+00.00

(A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

(A)

VERY SOFT TO MEDIUM STIFF GRAY BROWN SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

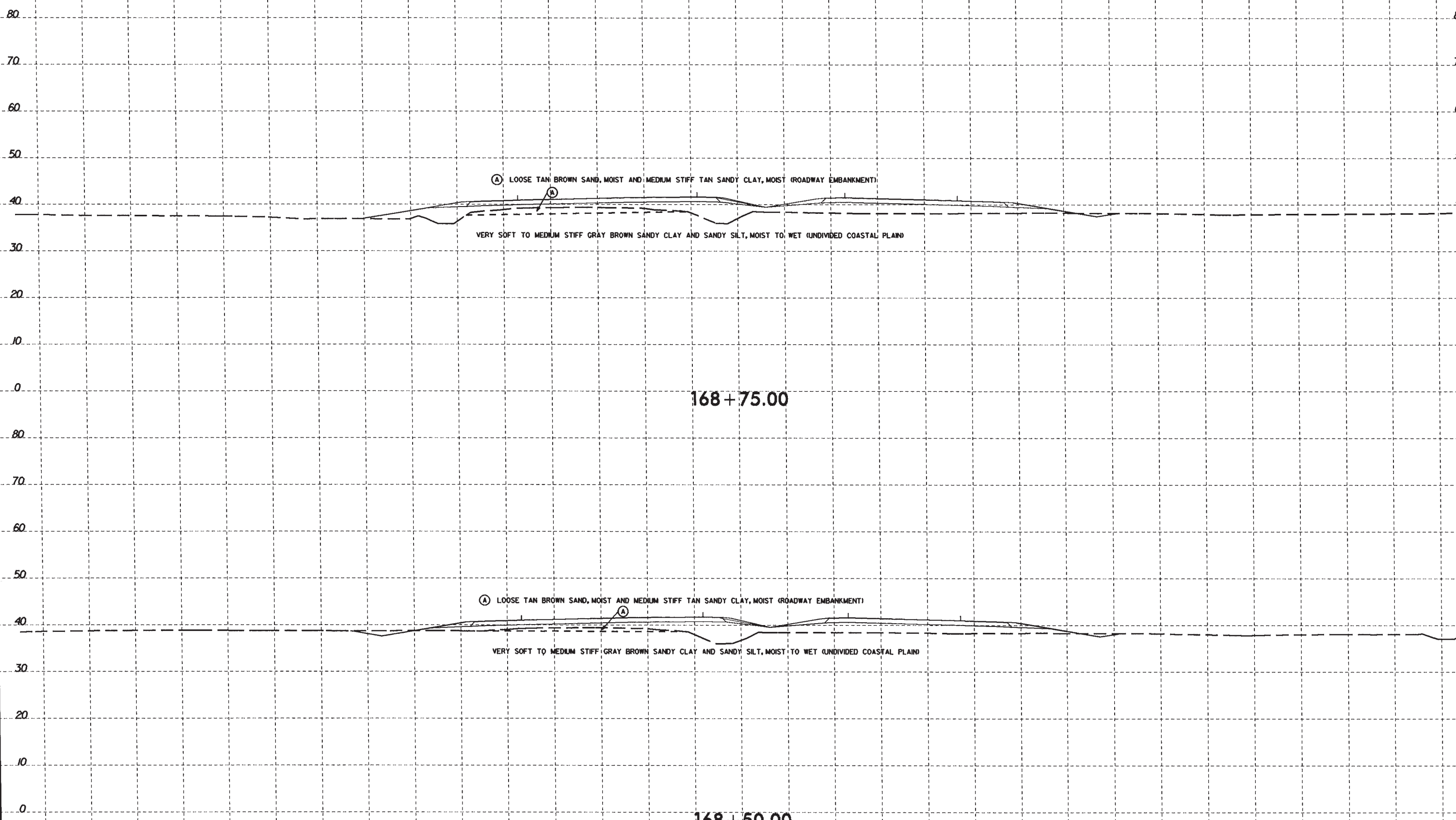
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 gpturner AT 06025481



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



(A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

VERY SOFT TO MEDIUM STIFF GRAY BROWN SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

168+75.00

(A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

VERY SOFT TO MEDIUM STIFF GRAY BROWN SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

168+50.00

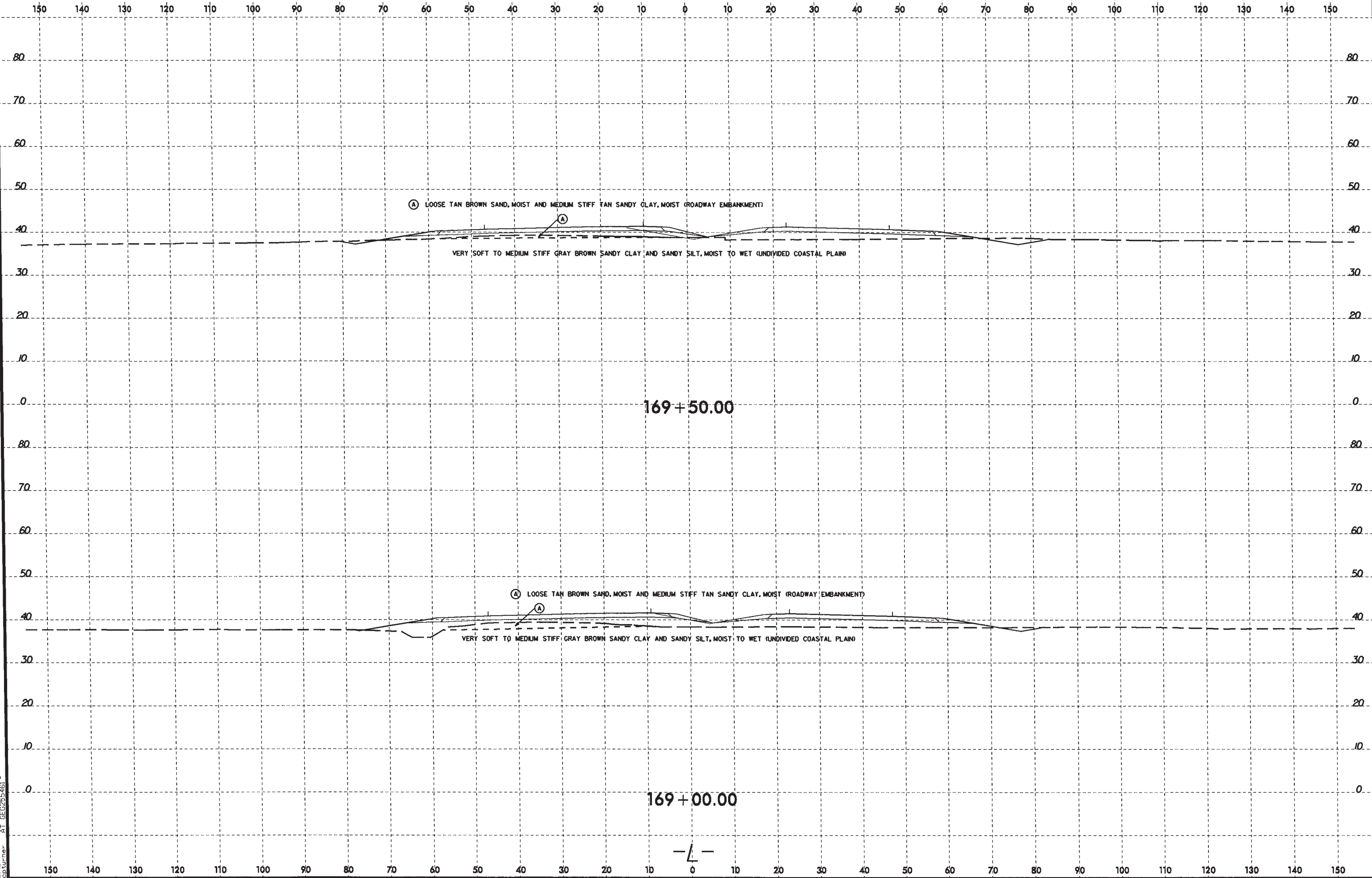
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150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

8/23/99



PROJ. REFERENCE NO.	SHEET NO.
R-2514C	91



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 spturner HT 06253461

-L-

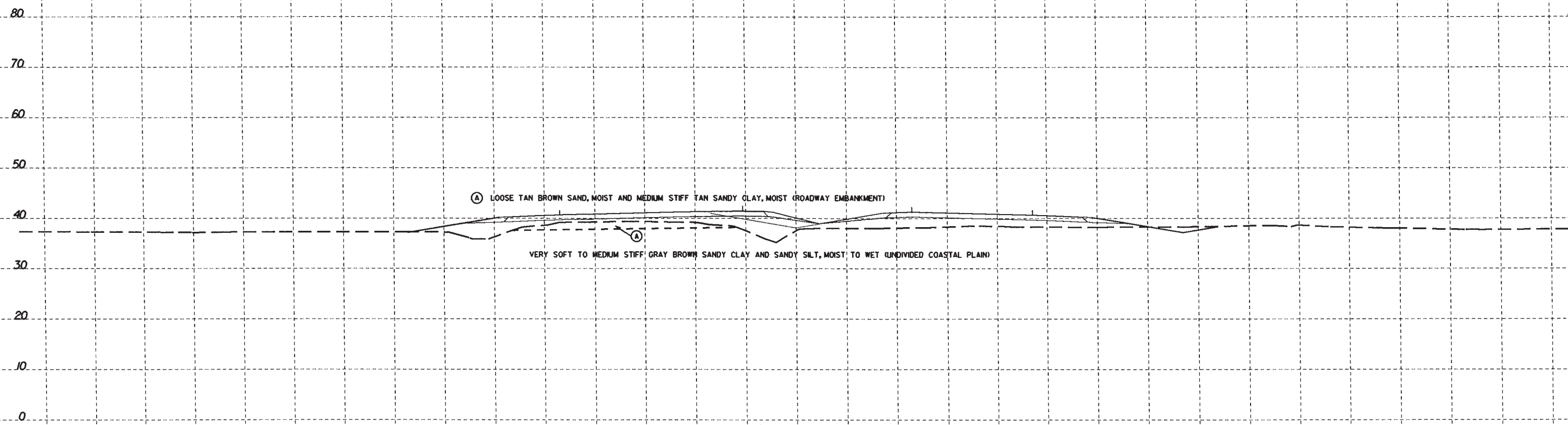
8/23/99

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L:\VRD\Prep\116\2514C\plan\116\_2514C.dwg



PROJ. REFERENCE NO.	SHEET NO.
R-2514C	92

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



(A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

VERY SOFT TO MEDIUM STIFF GRAY BROWN SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

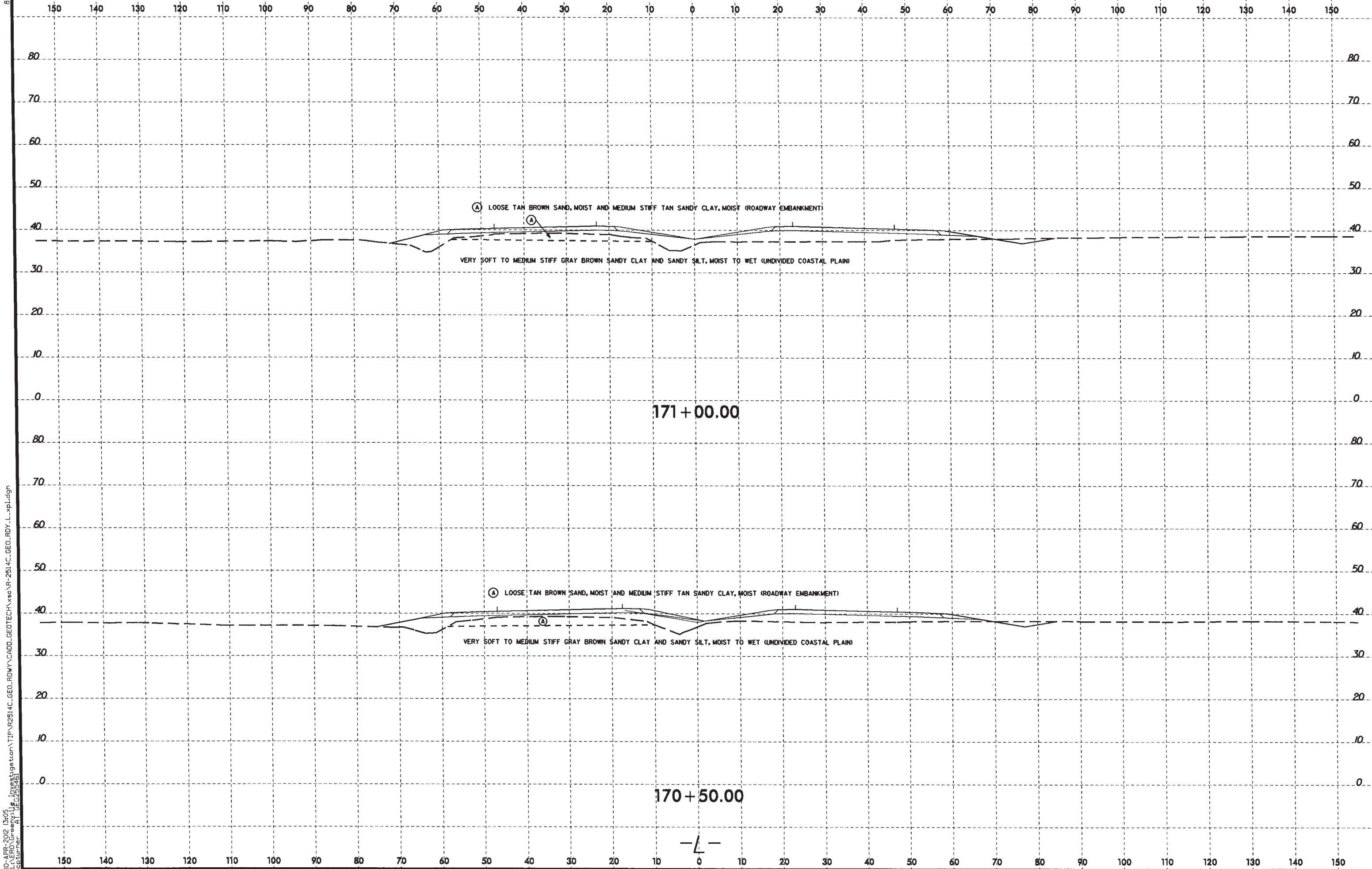
169 + 75.00

-L-

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8/23/99



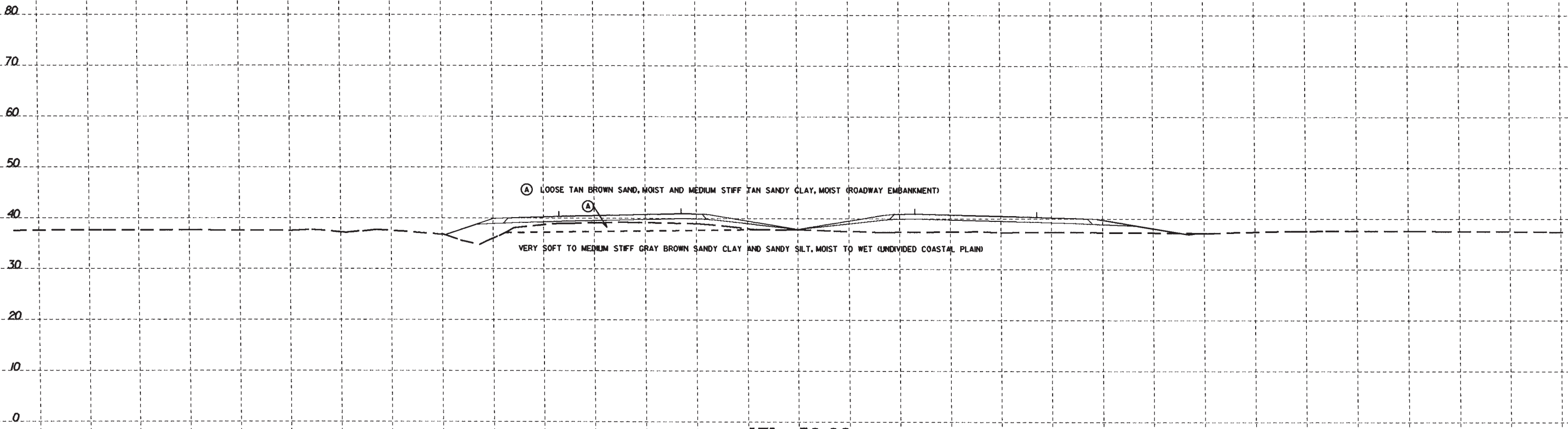
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 gturner



8/23/99

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gs:turner AT 03/24/01

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



171 + 50.00

—L—

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

8/23/99



PROJ. REFERENCE NO. R-2514C SHEET NO. 96

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

80 80

70 70

60 60

SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-126	CL	172+00	0.0-1.5	A-1(2)	24	8	16.3	26.0	31.4	26.2	100	95	60	16.4	-
SS-127	CL	172+00	3.5-5.0	A-6(15)	36	23	9.1	17.2	27.3	46.4	100	98	76	-	-
SS-128	CL	172+00	8.5-10.0	A-6(5)	29	13	16.1	20.0	37.6	26.2	100	96	66	-	-

SS-126  
SS-127  
SS-128

(A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

VERY SOFT TO MEDIUM STIFF GRAY BROWN SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

172 + 00.00

-L-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

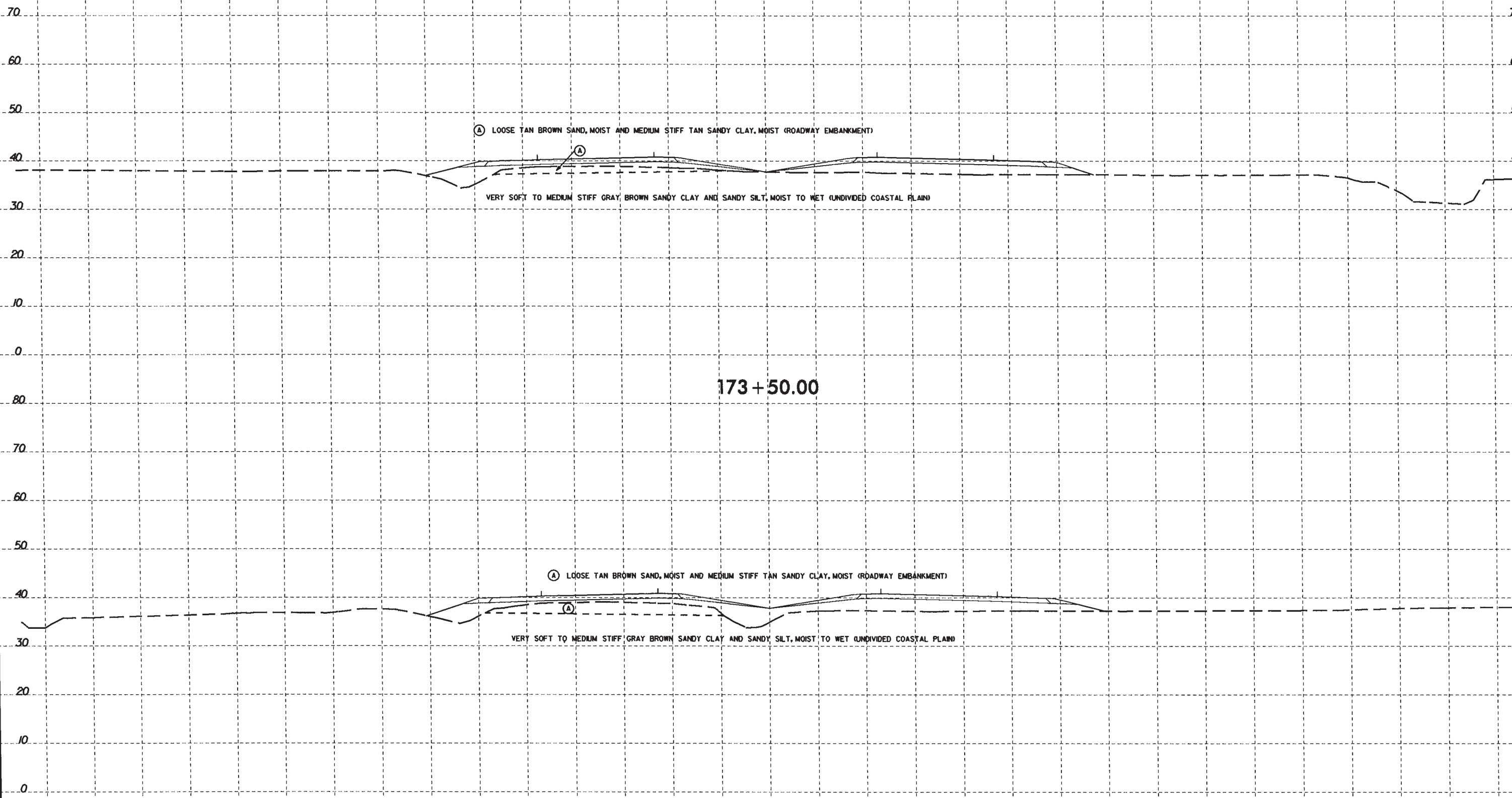
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8/23/99



PROJ. REFERENCE NO.	SHEET NO.
R-2514C	97

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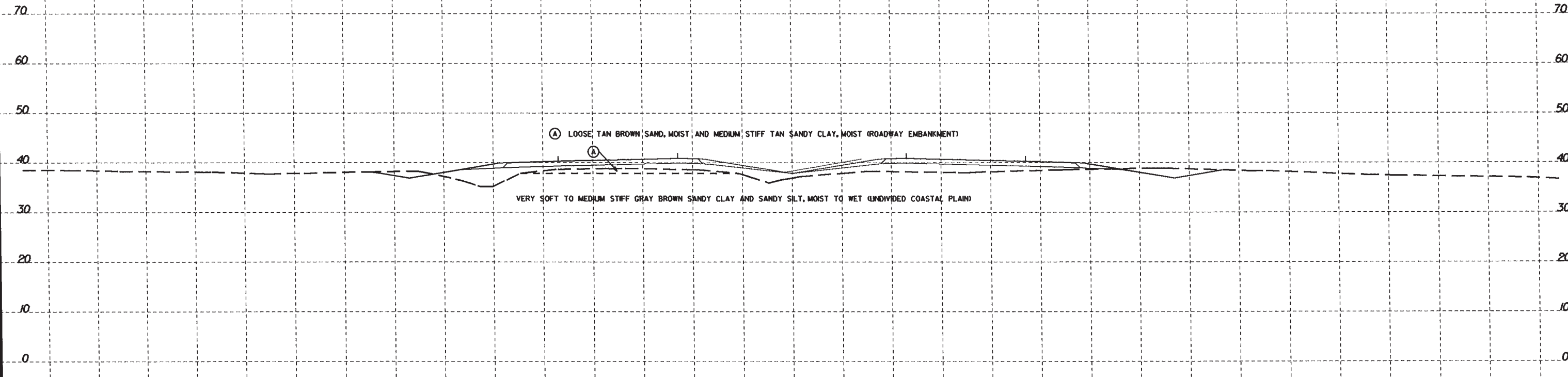
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 spturner AT 02/25/16

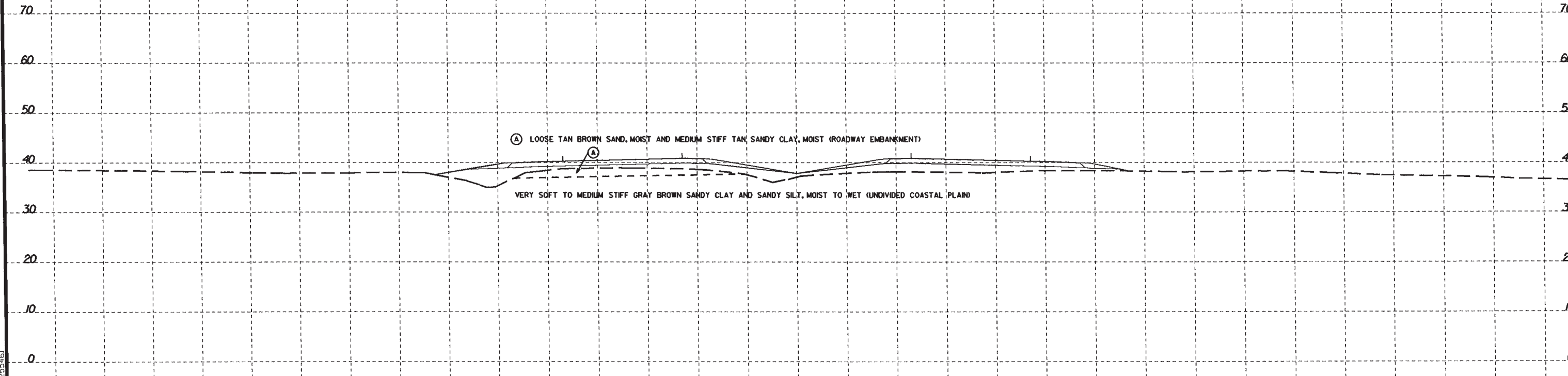




150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



174+50.00

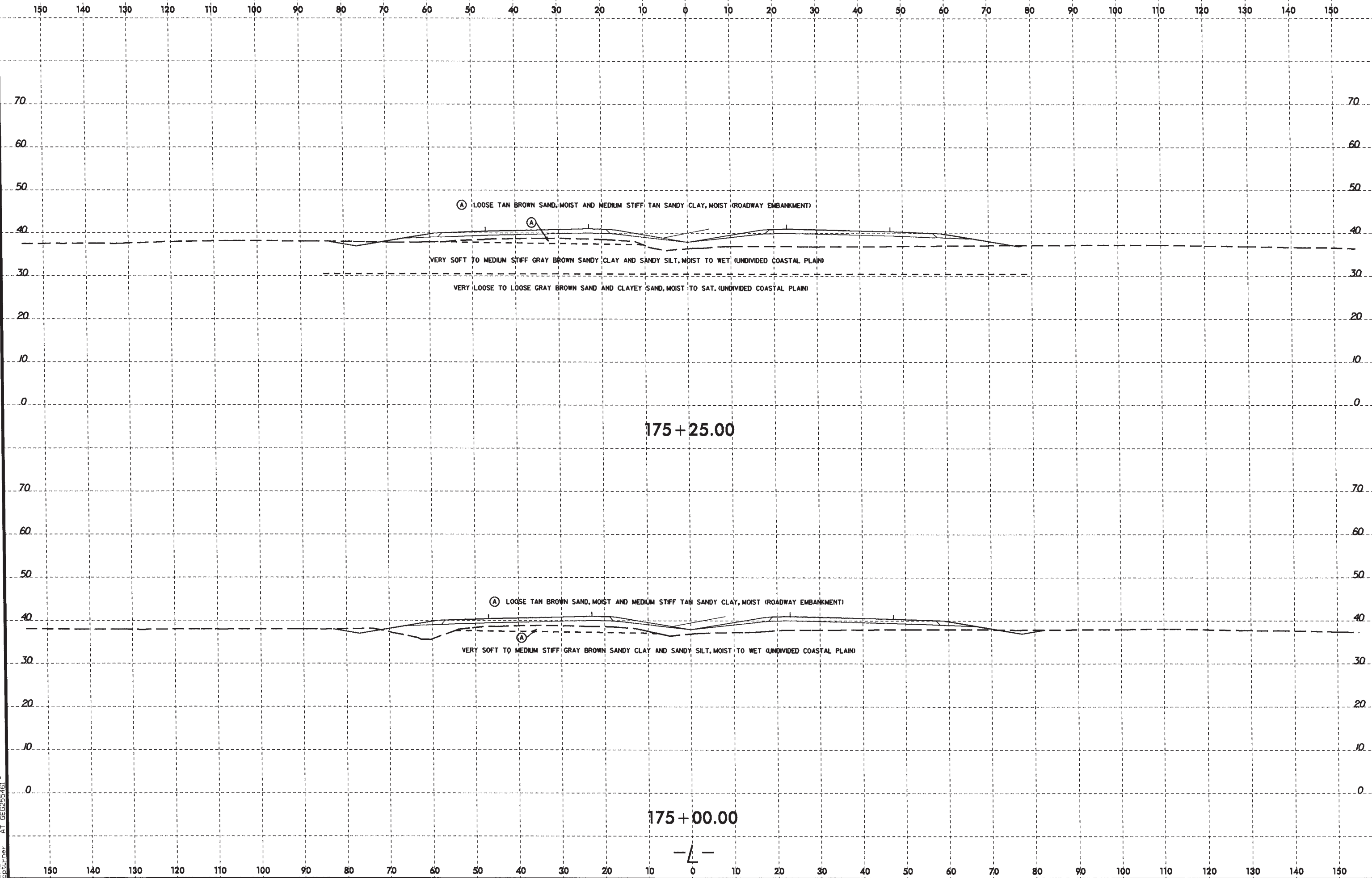


174+25.00

-L-

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8/23/99



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 spturner HT 0629481

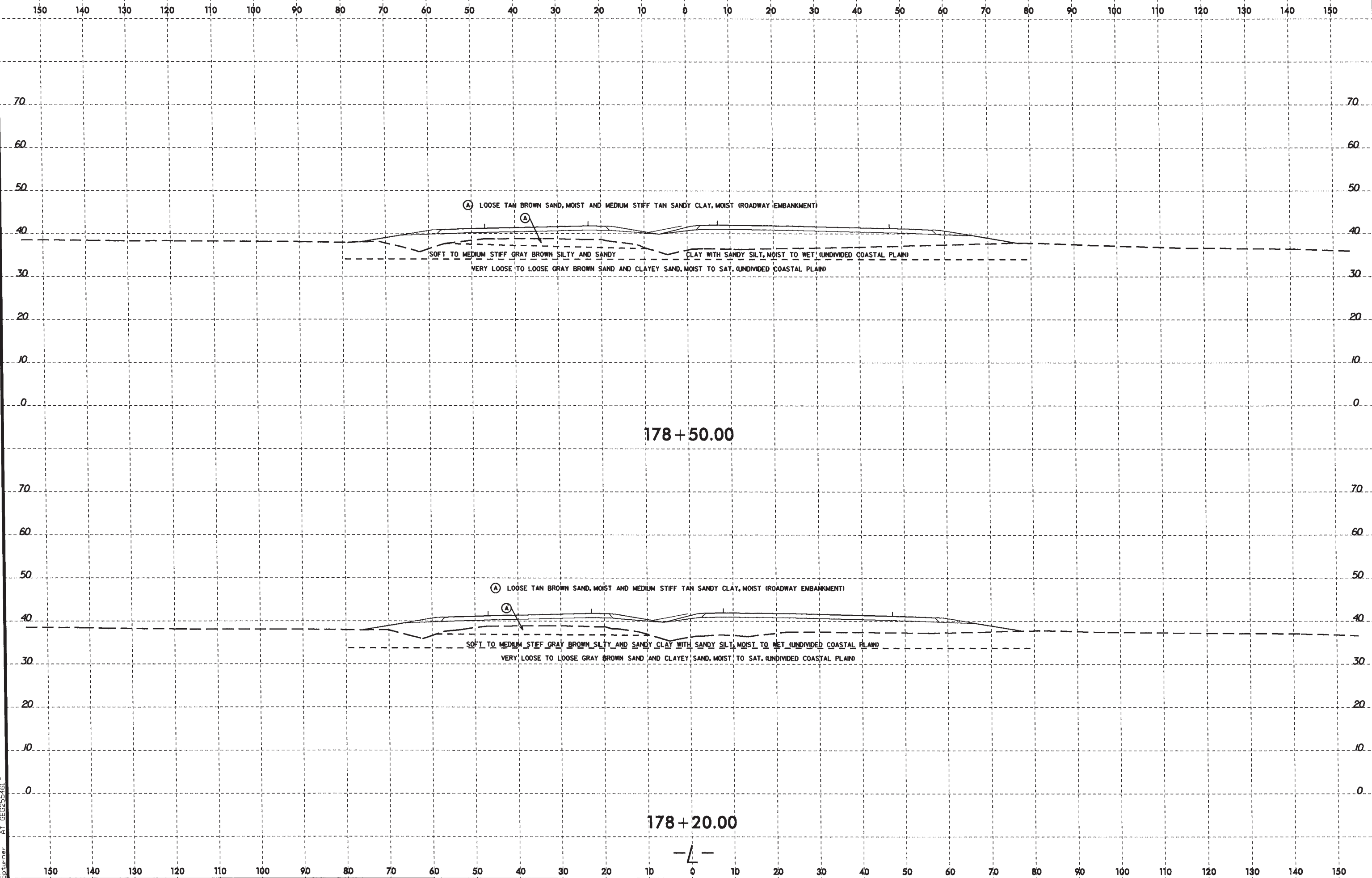
-L-





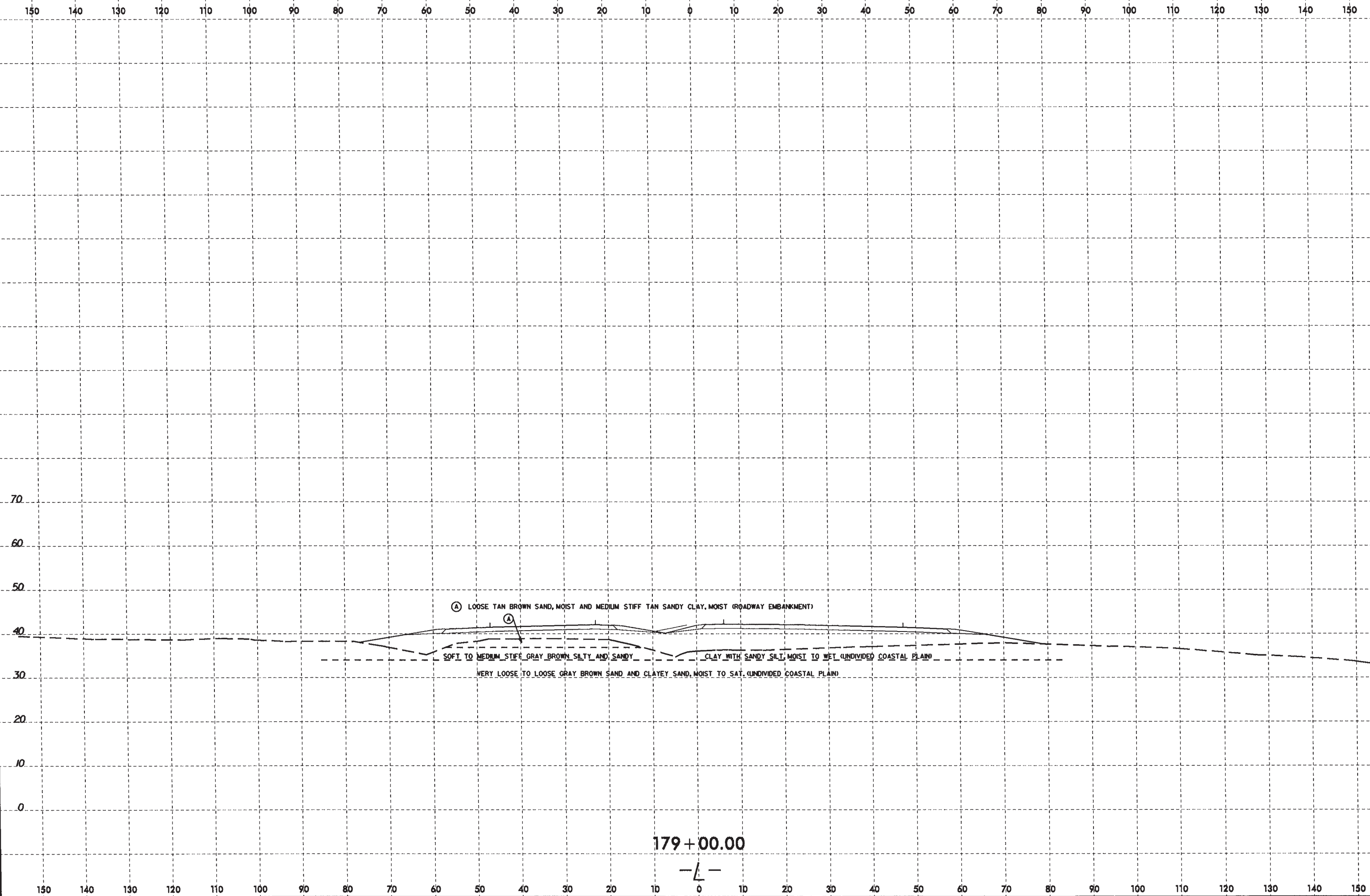


8/23/99



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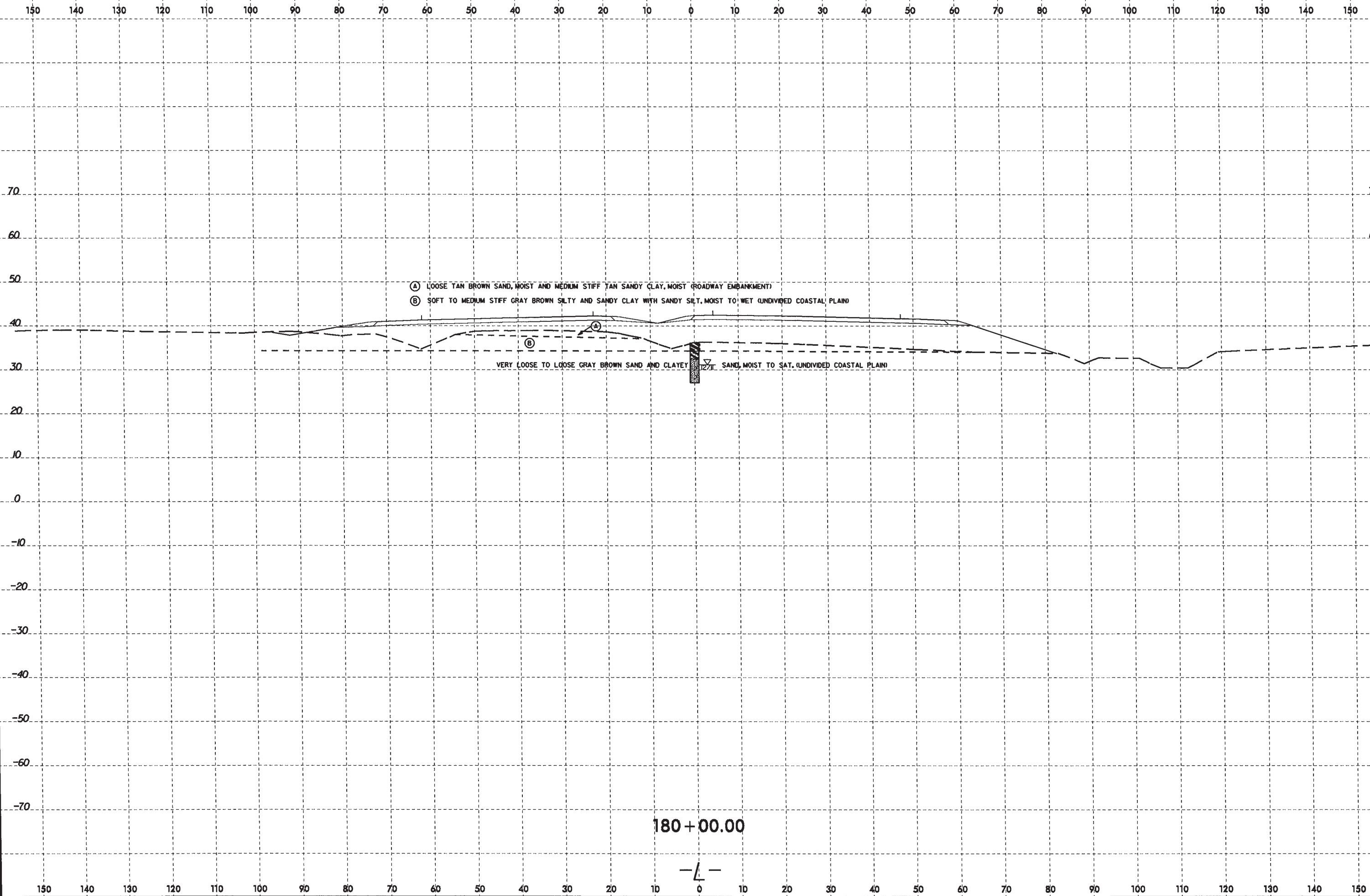
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gsburner AT 0629348J



8/23/99



PROJ. REFERENCE NO.	SHEET NO.
R-2514C	105



- (A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)
- (B) SOFT TO MEDIUM STIFF GRAY BROWN SILTY AND SANDY CLAY WITH SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

VERY LOOSE TO LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

180+00.00

-L-

I:\APR-2002\13r07  
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 spturner AT 02/23/99



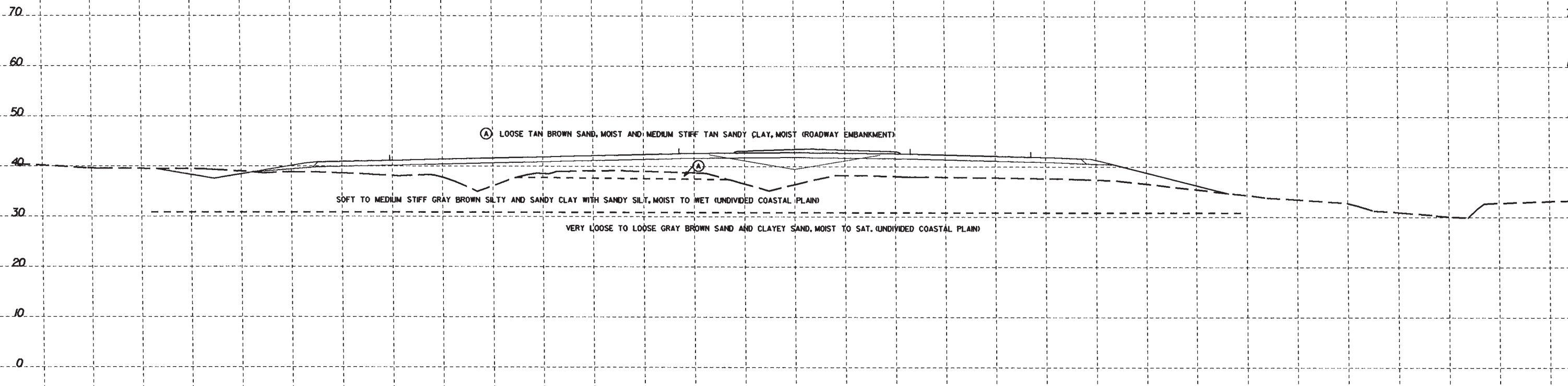
8/23/99



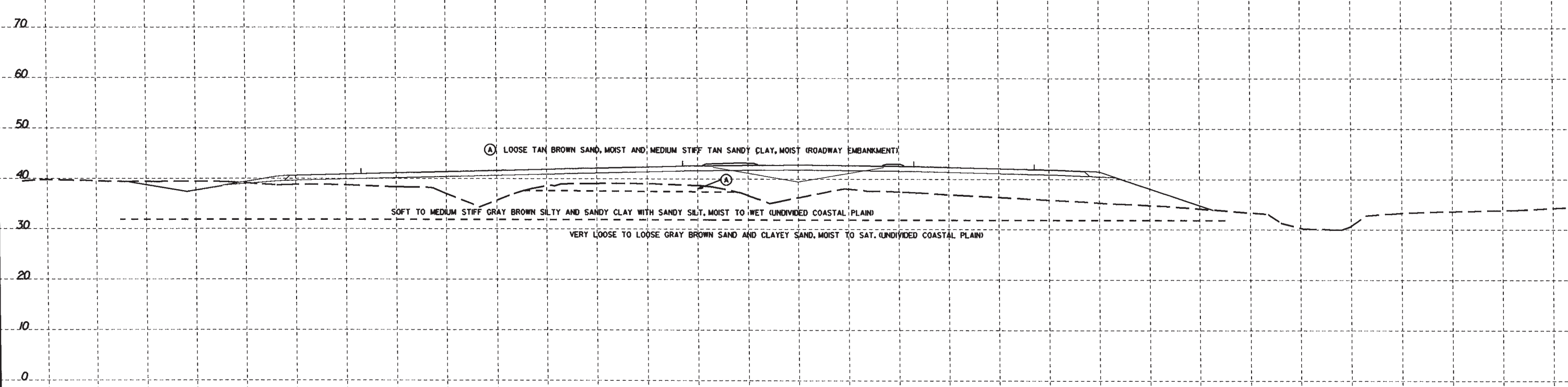
PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
107

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



181 + 50.00



181 + 00.00

-L-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

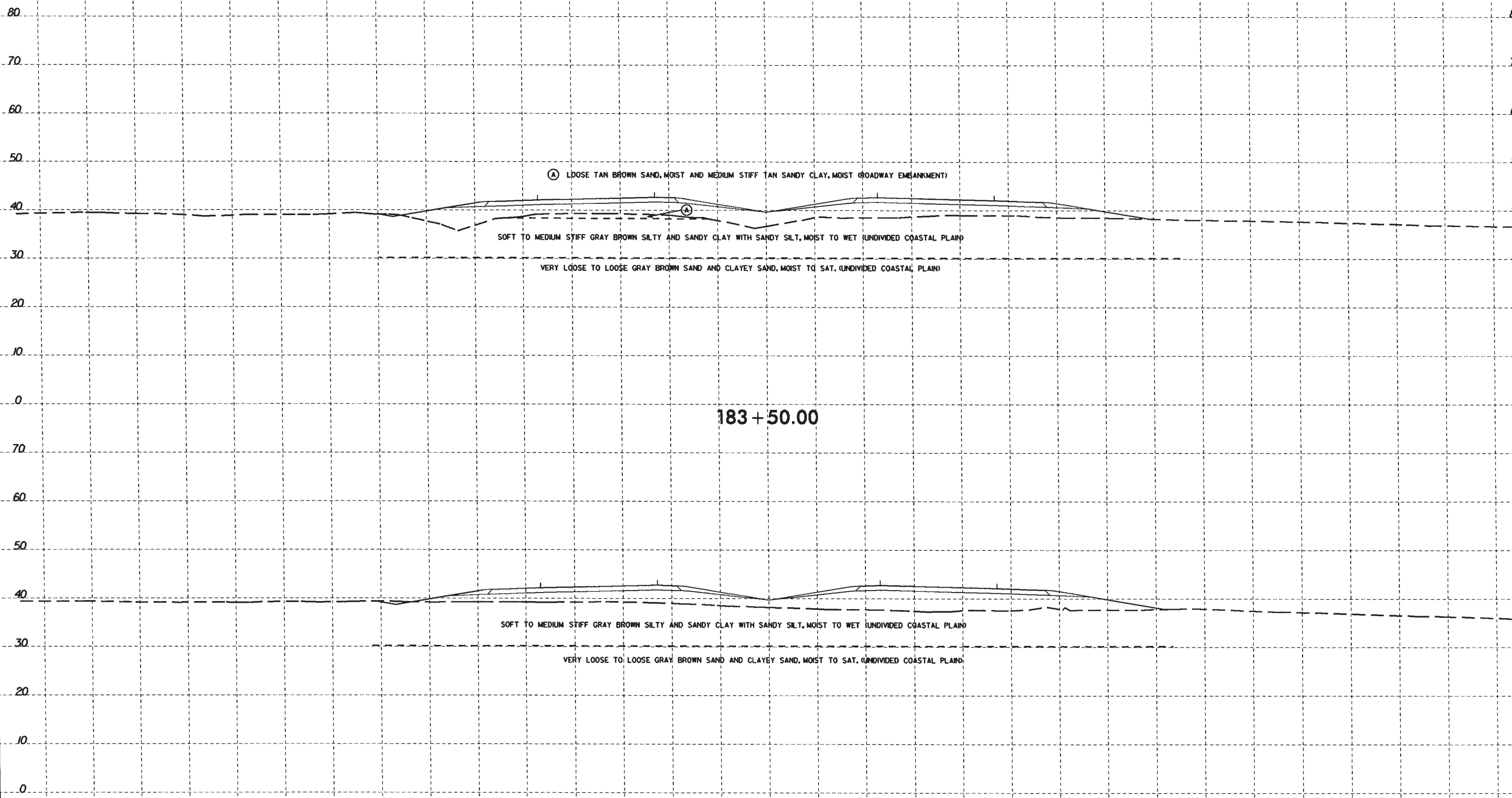
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8/23/99



PROJ. REFERENCE NO.	SHEET NO.
R-2514C	108

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



Ⓐ LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

SOFT TO MEDIUM STIFF GRAY BROWN SILTY AND SANDY CLAY WITH SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

VERY LOOSE TO LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

183 + 50.00

SOFT TO MEDIUM STIFF GRAY BROWN SILTY AND SANDY CLAY WITH SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

VERY LOOSE TO LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

183 + 00.00

-L-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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 gburner RT GE2514B1

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

80 80

70 70

60 60

50 50

40 40

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20 20

10 10

0 0

-10 -10

-20 -20

-30 -30

-40 -40

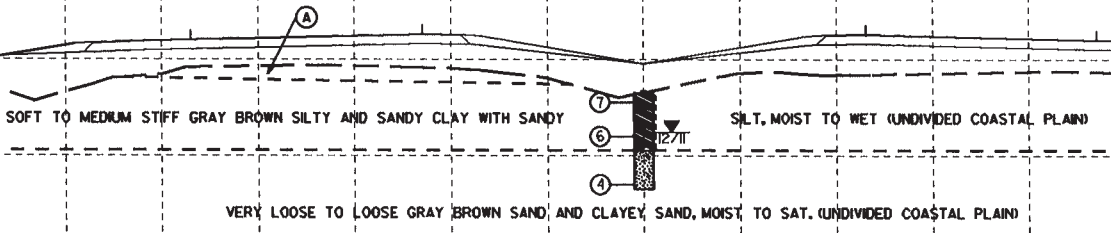
-50 -50

-60 -60

SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	40	200		
SS-40	CL	184+00	0.0-1.5	A-6(8)	35	19	89.3	24.8	19.6	36.3	100	93	57	17.9	-
SS-41	CL	184+00	3.5-5.0	A-6(3)	32	18	28.2	32.8	10.8	28.2	100	93	39	-	-
SS-42	CL	184+00	8.5-10.0	A-2-4(0)	23	NP	41.5	46.5	8.0	4.0	99	82	12	-	-

SS-40  
SS-41  
SS-42

(A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

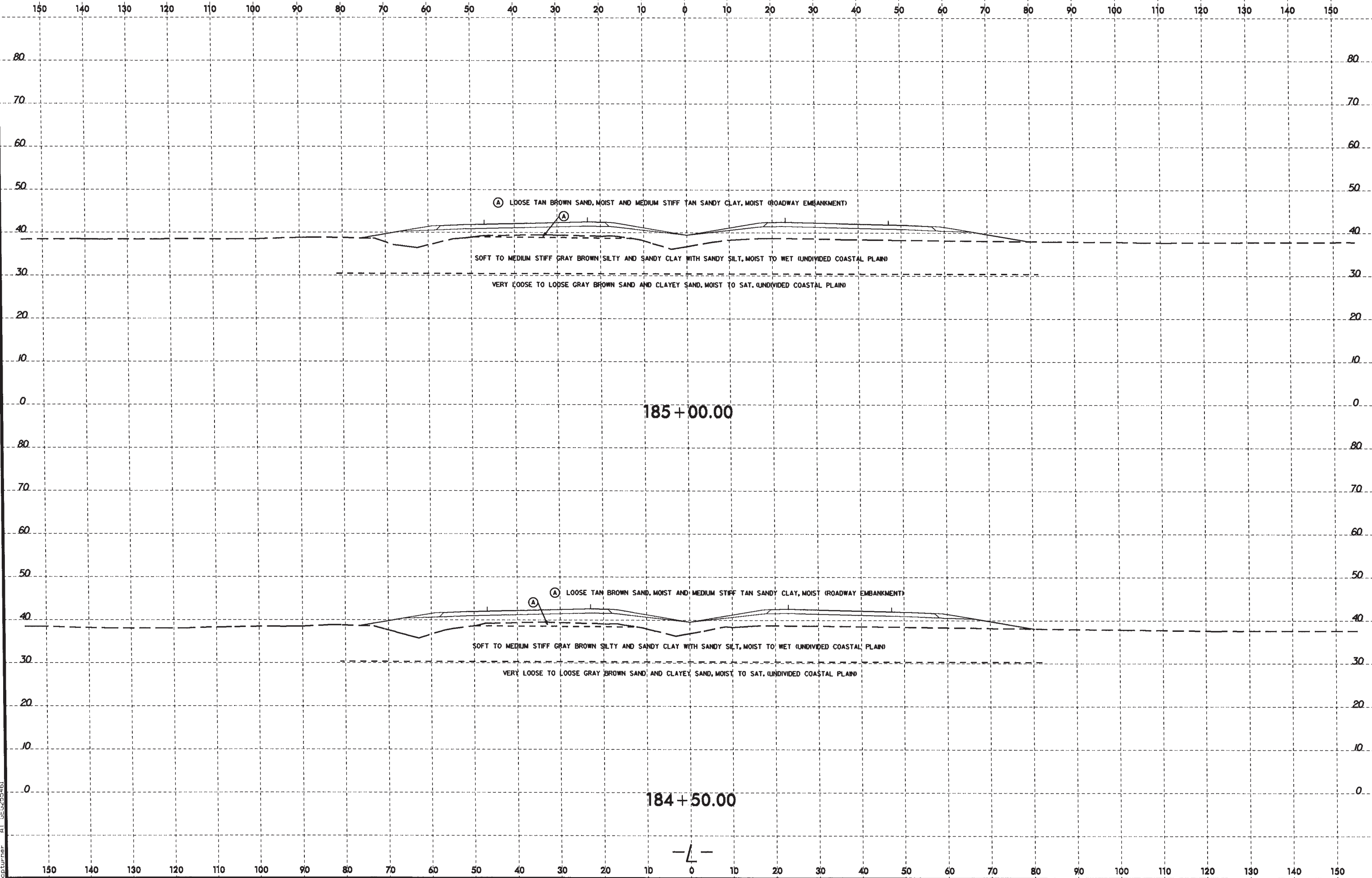


184+00.00

-L-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

8/23/99



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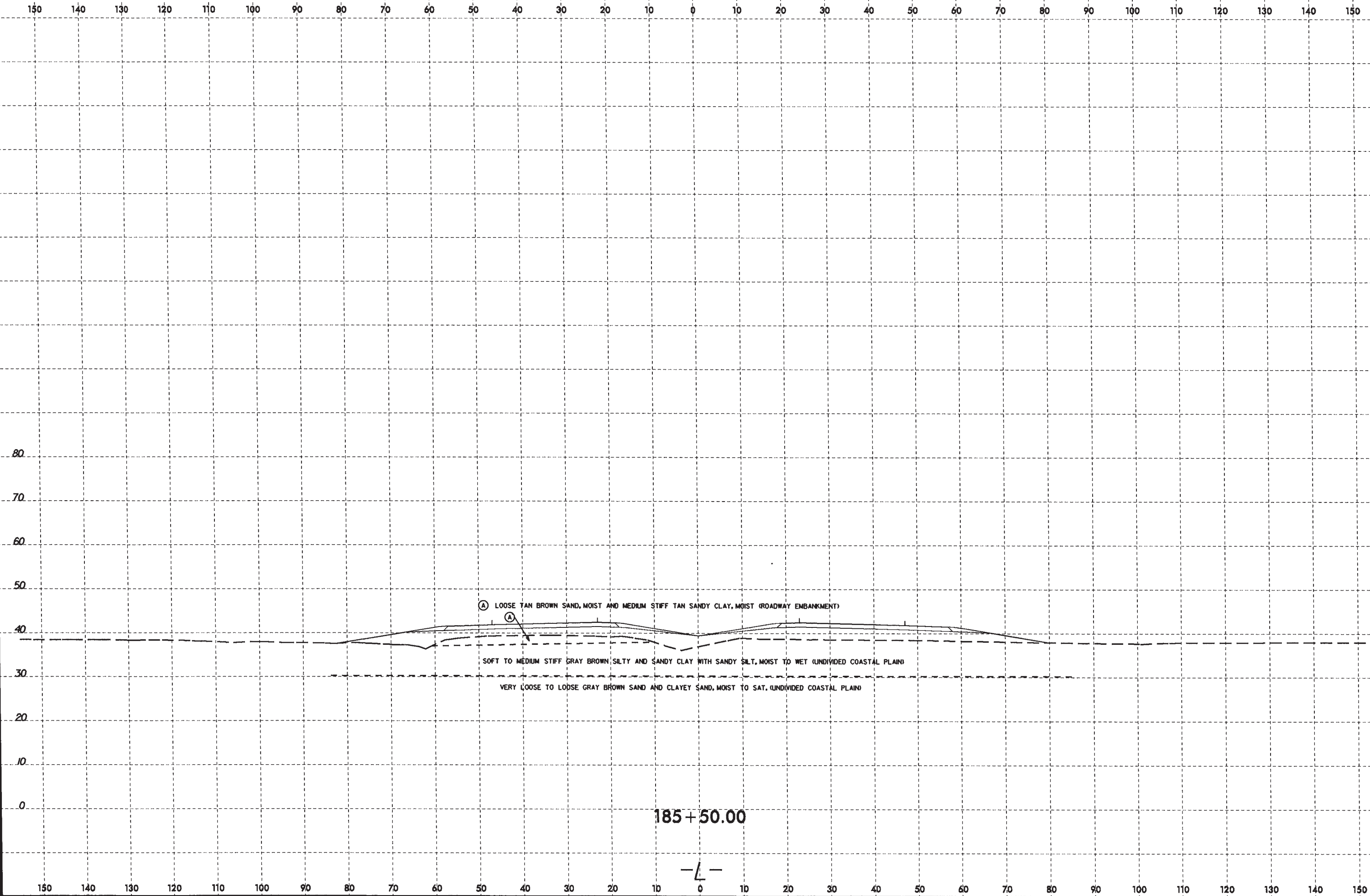




8/23/99

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spturner AT 0625461

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-2514C	111



Ⓐ LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

Ⓐ SOFT TO MEDIUM STIFF GRAY BROWN SILTY AND SANDY CLAY WITH SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

VERY LOOSE TO LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

185+50.00

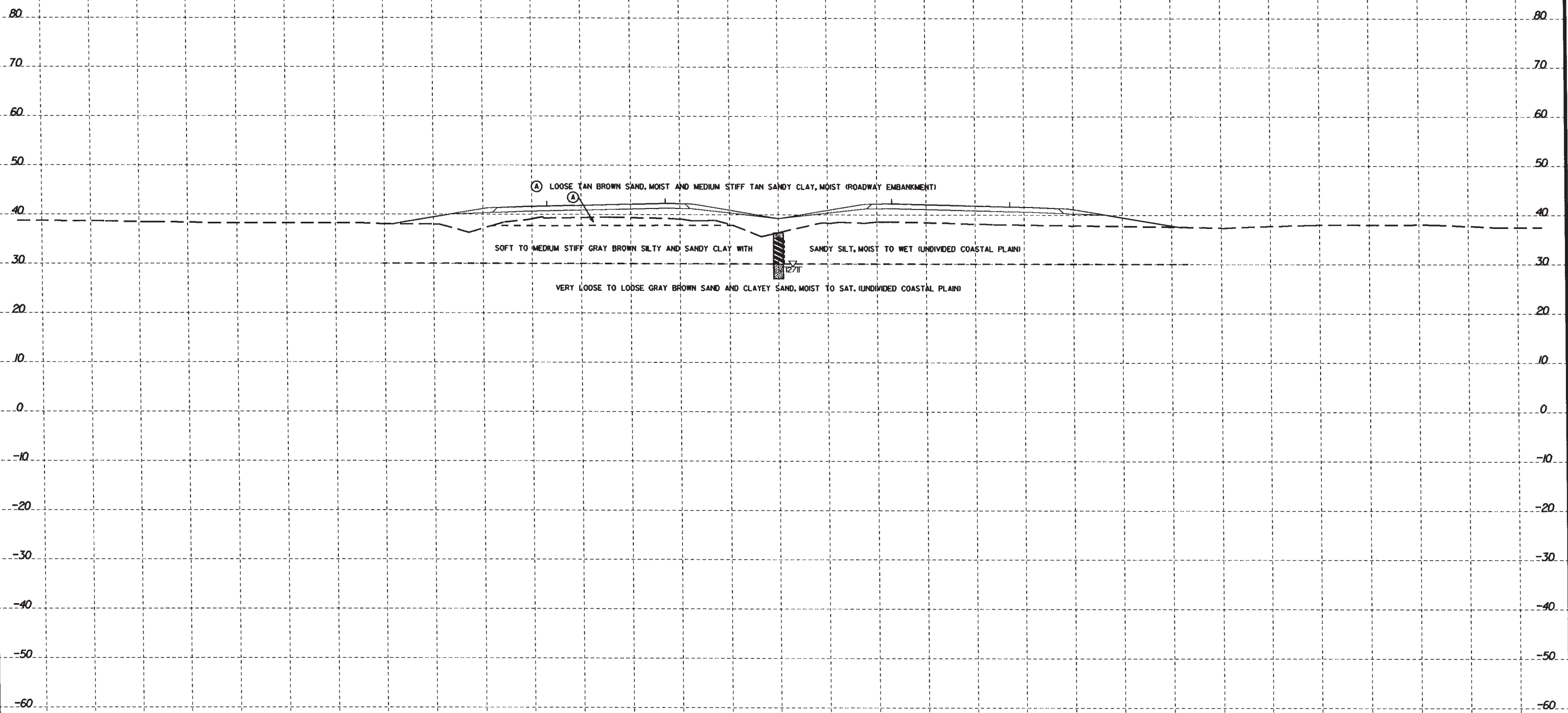


8/23/99



PROJ. REFERENCE NO.	SHEET NO.
R-2514C	112

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



(A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)  
 (A)  
 SOFT TO MEDIUM STIFF GRAY BROWN SILTY AND SANDY CLAY WITH SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)  
 VERY LOOSE TO LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

186+00.00

— L —

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

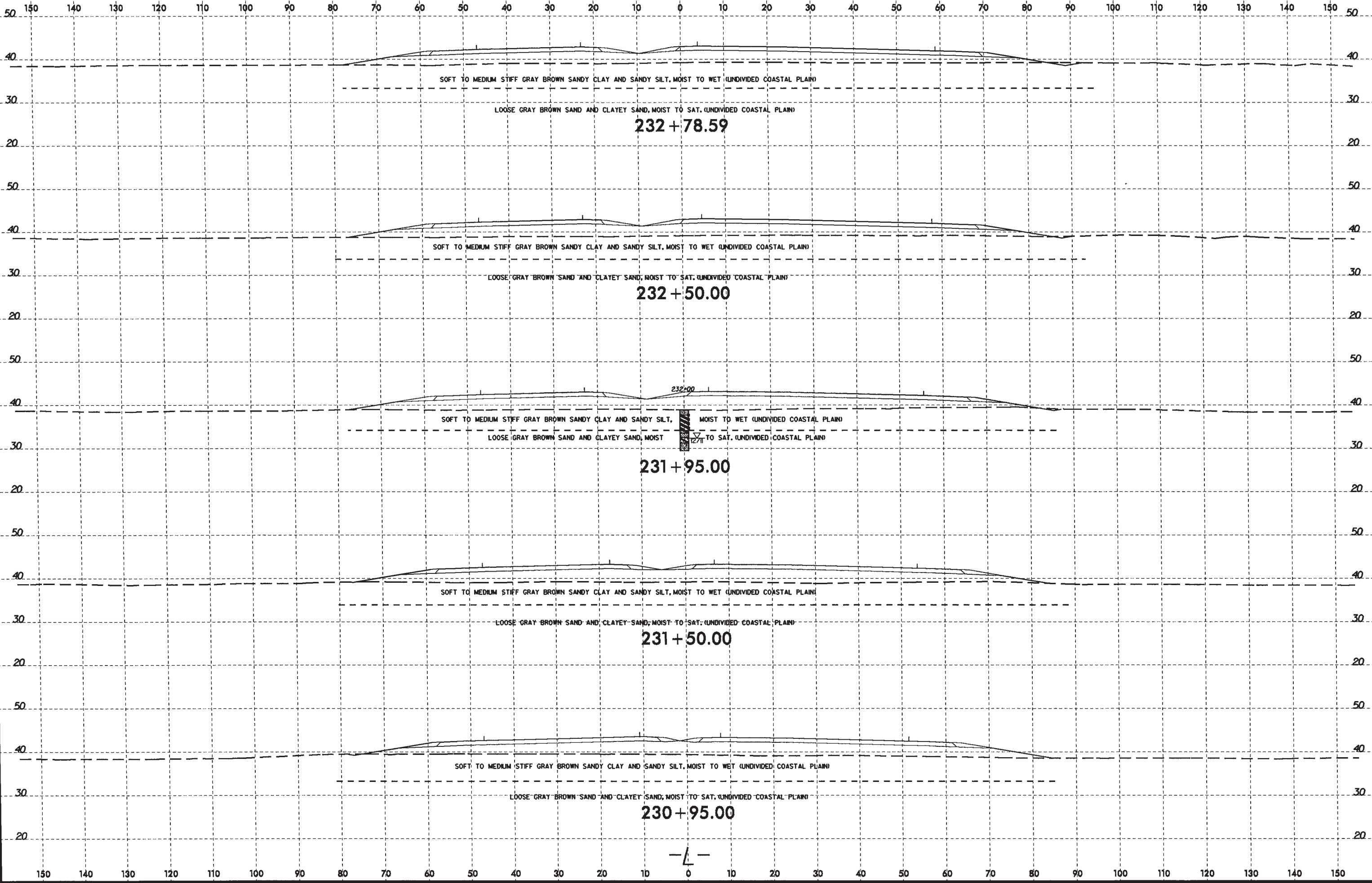
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8/23/99



PROJ. REFERENCE NO.  
R-2514C  
SHEET NO.  
114



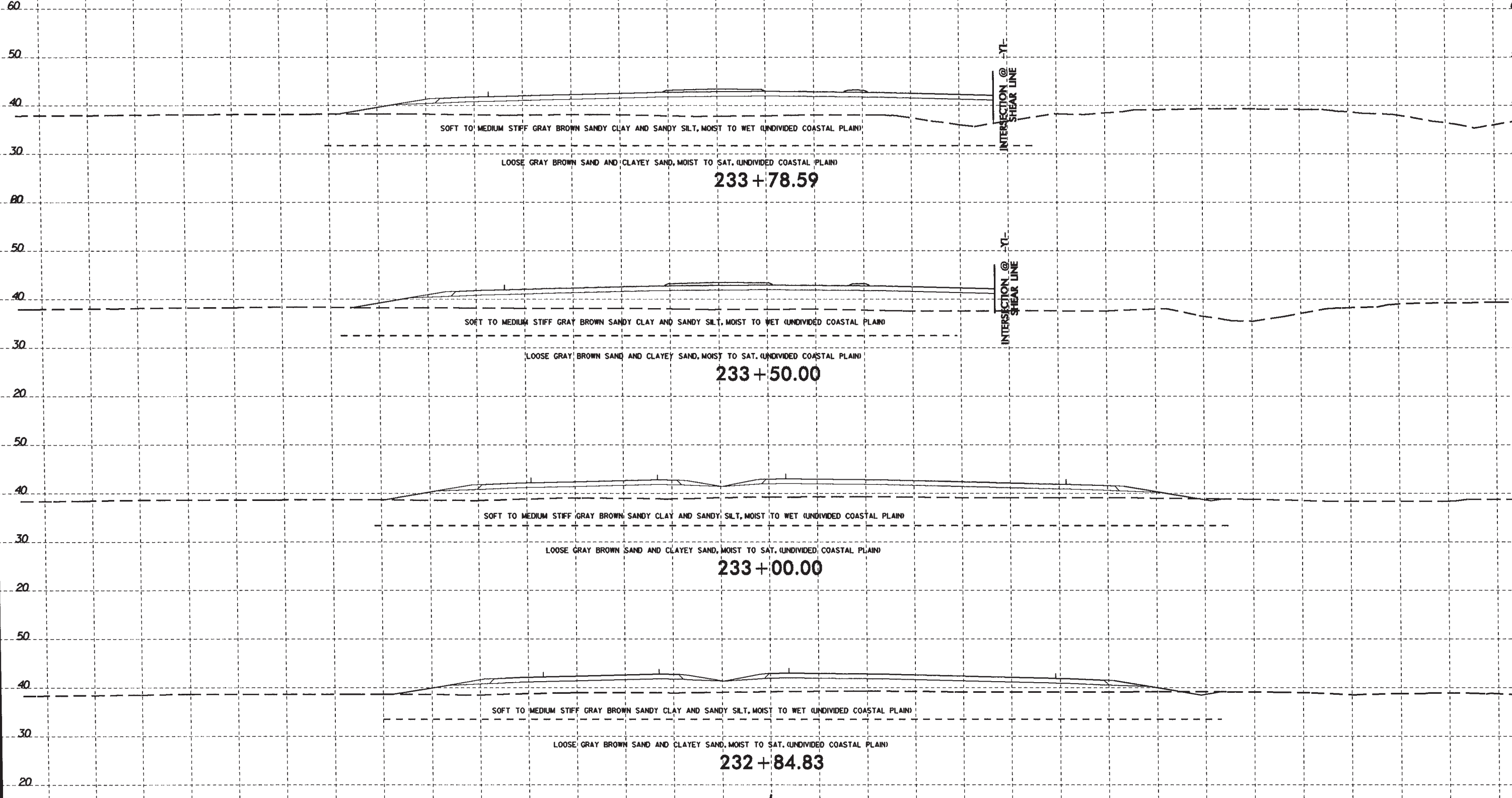
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8/23/99



PROJ. REFERENCE NO. R-2514C	SHEET NO. 115
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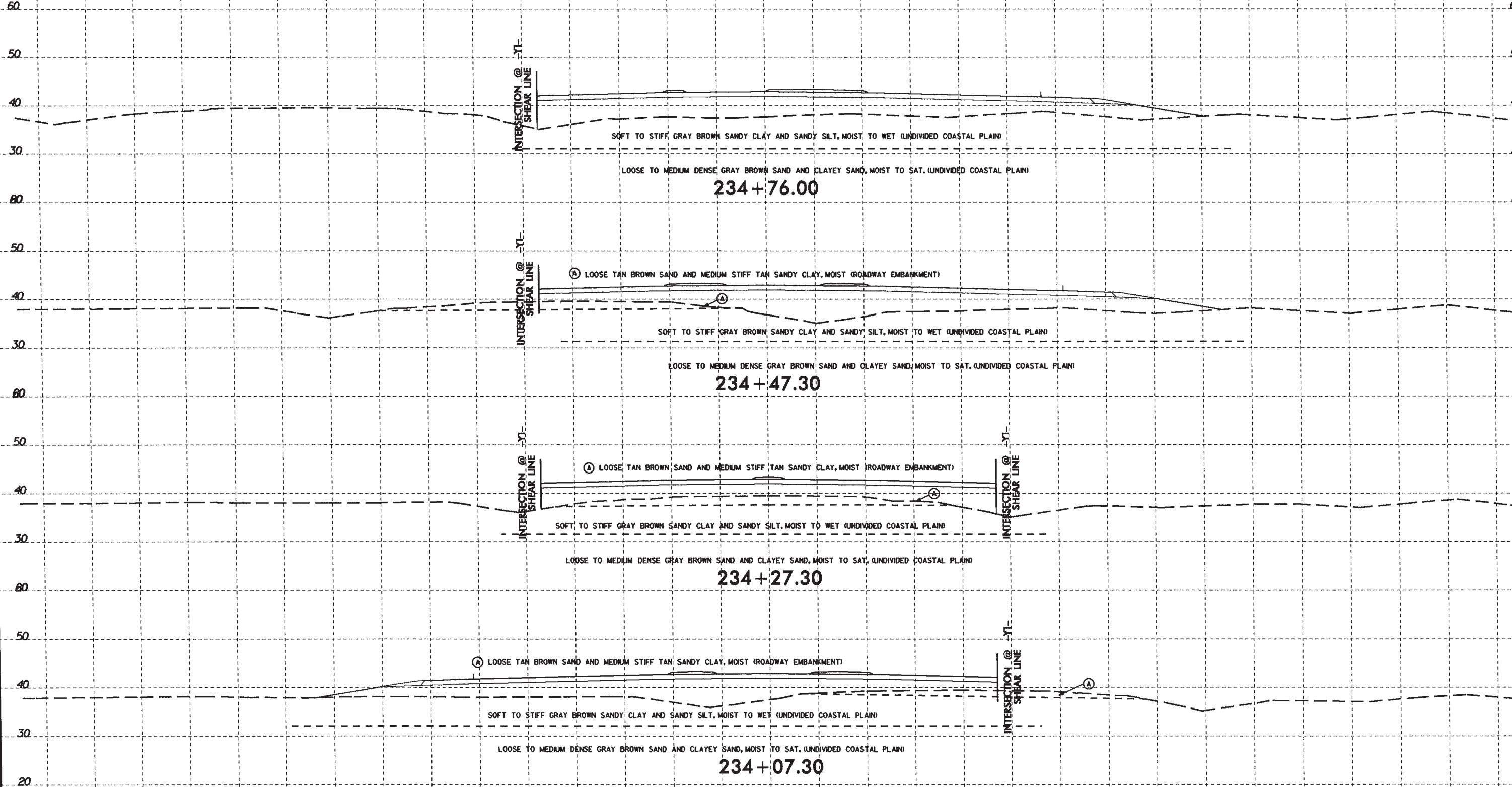
-L-

8/23/99



PROJ. REFERENCE NO. R-2514C SHEET NO. 116

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234+76.00

234+47.30

234+27.30

234+07.30

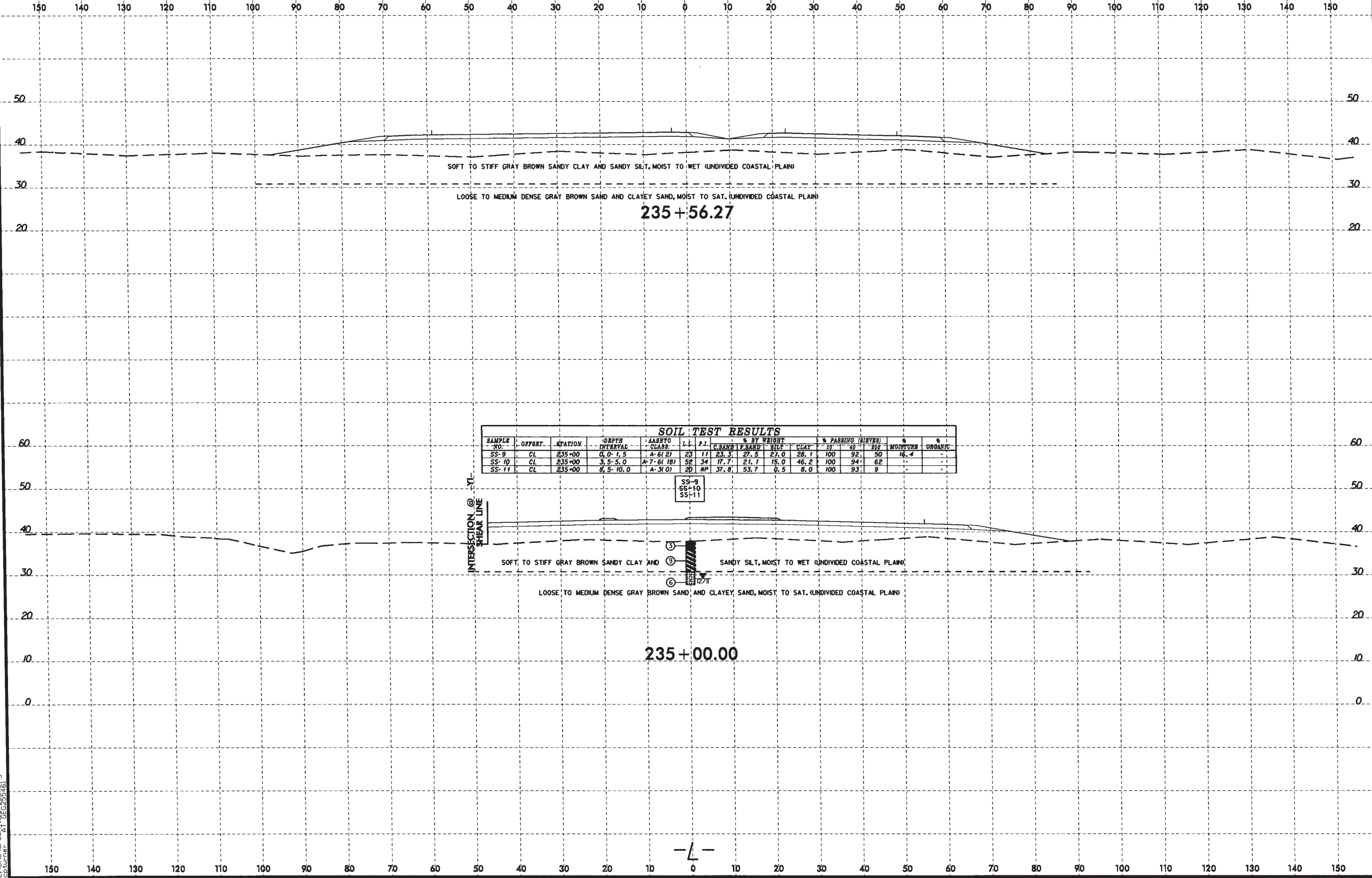
-L-

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8/23/99



PROJ. REFERENCE NO. R-2514C SHEET NO. 117



SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-9	CL	235+00	0.0-1.5	A-6(2)	23	11	23.3	27.5	27.0	28.1	100	92	50	16.4	-
SS-10	CL	235+00	3.5-5.0	A-7-6(18)	52	34	17.7	21.1	15.0	46.2	100	94	62	-	-
SS-11	CL	235+00	8.5-10.0	A-3(0)	20	NP	37.8	53.7	0.5	8.0	100	93	9	-	-

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GPturner A1\_GEG2514C1

-L-

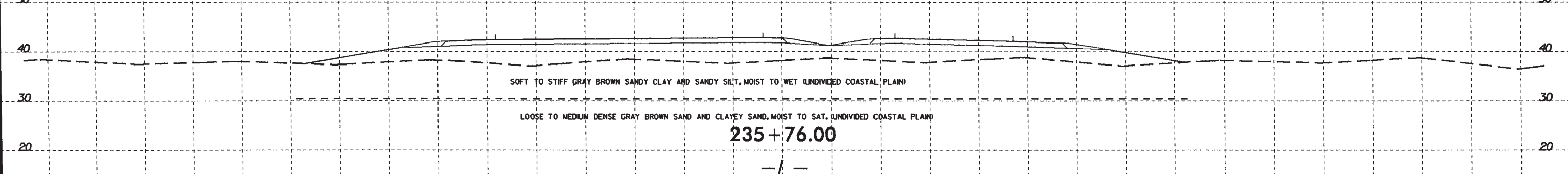
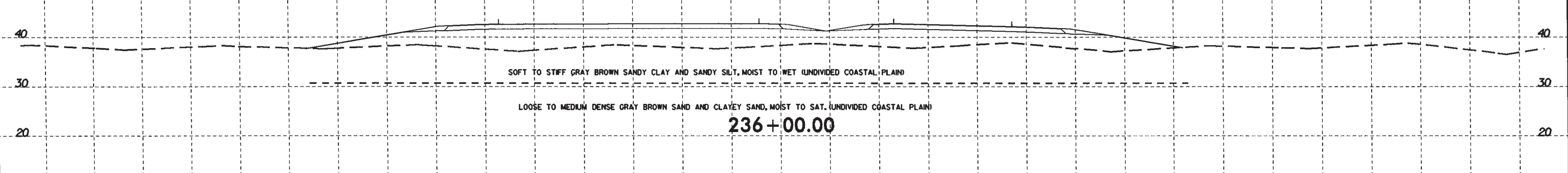
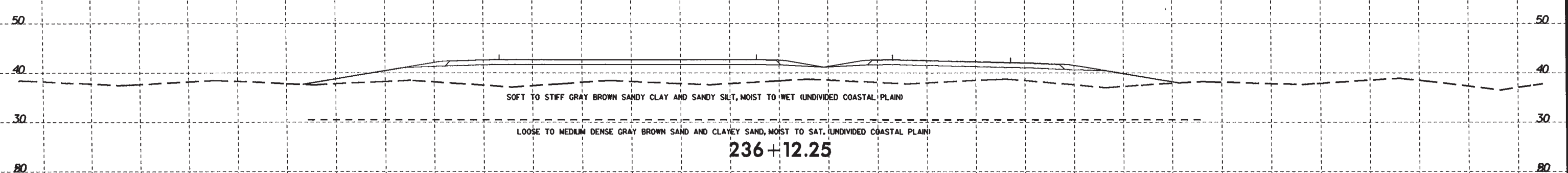
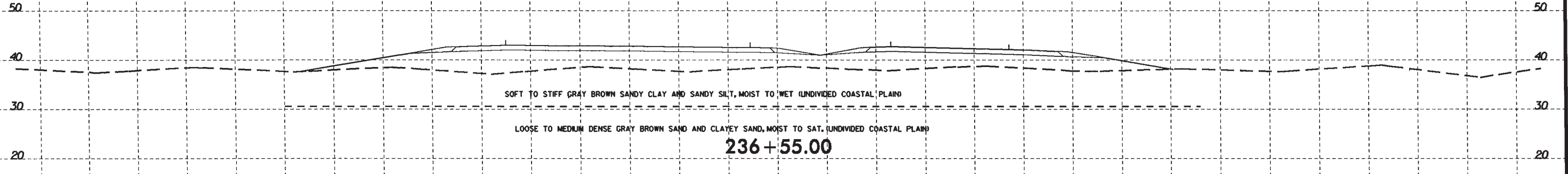
8/23/99



PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
118

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



-L-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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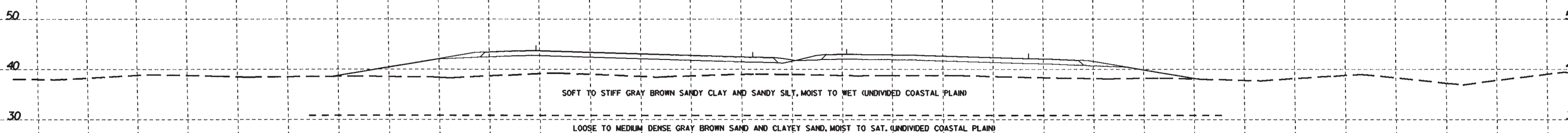


8/23/99

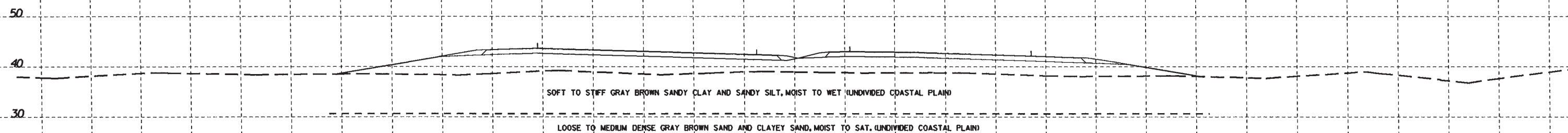


PROJ. REFERENCE NO. R-2514C SHEET NO. 119

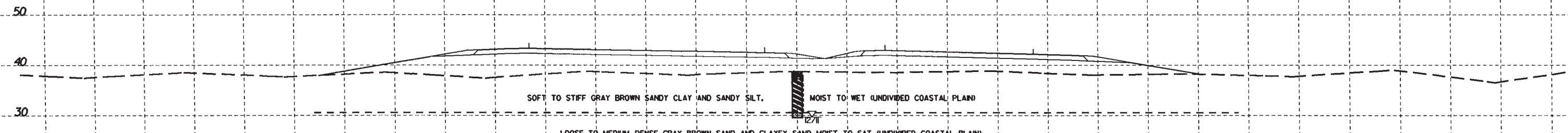
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237+62.25



237+55.00



237+00.00

-L-

10-APR-2012 13:10 L:\ERD\br-ee\11g\investigation\TIP\2514C\_GEO\_RDWY\_CADD\_GEO\TECH\asc\R-2514C\_GEO\_RDWY\_L\_xpl.dgn  
cbturner AT 06/25/2011

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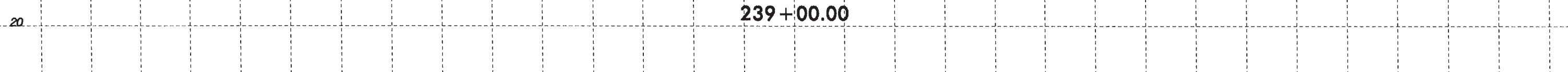
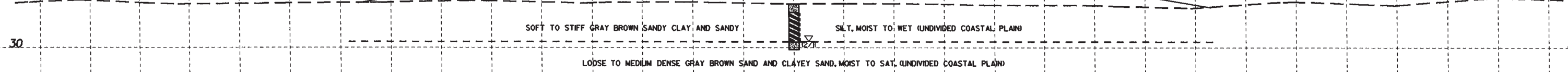
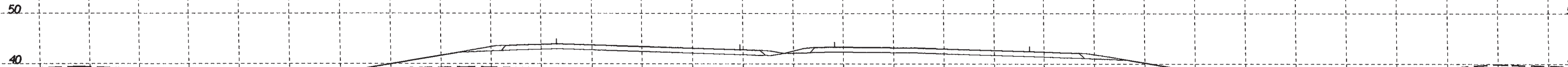
8/23/99



PROJ. REFERENCE NO.  
R-2514C

SHEET NO.  
120

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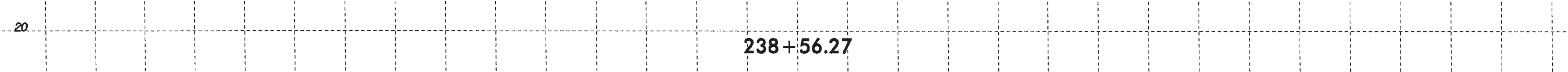
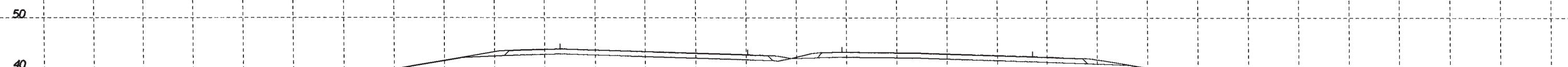


SOFT TO STIFF GRAY BROWN SANDY CLAY AND SANDY

SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

LOOSE TO MEDIUM DENSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

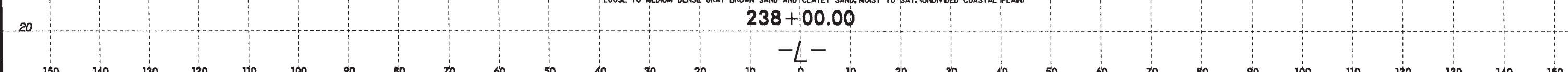
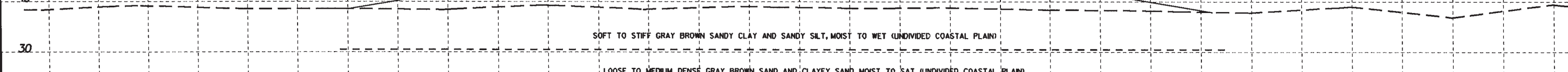
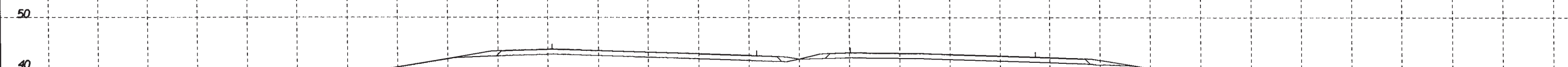
239+00.00



SOFT TO STIFF GRAY BROWN SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

LOOSE TO MEDIUM DENSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

238+56.27



SOFT TO STIFF GRAY BROWN SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

LOOSE TO MEDIUM DENSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

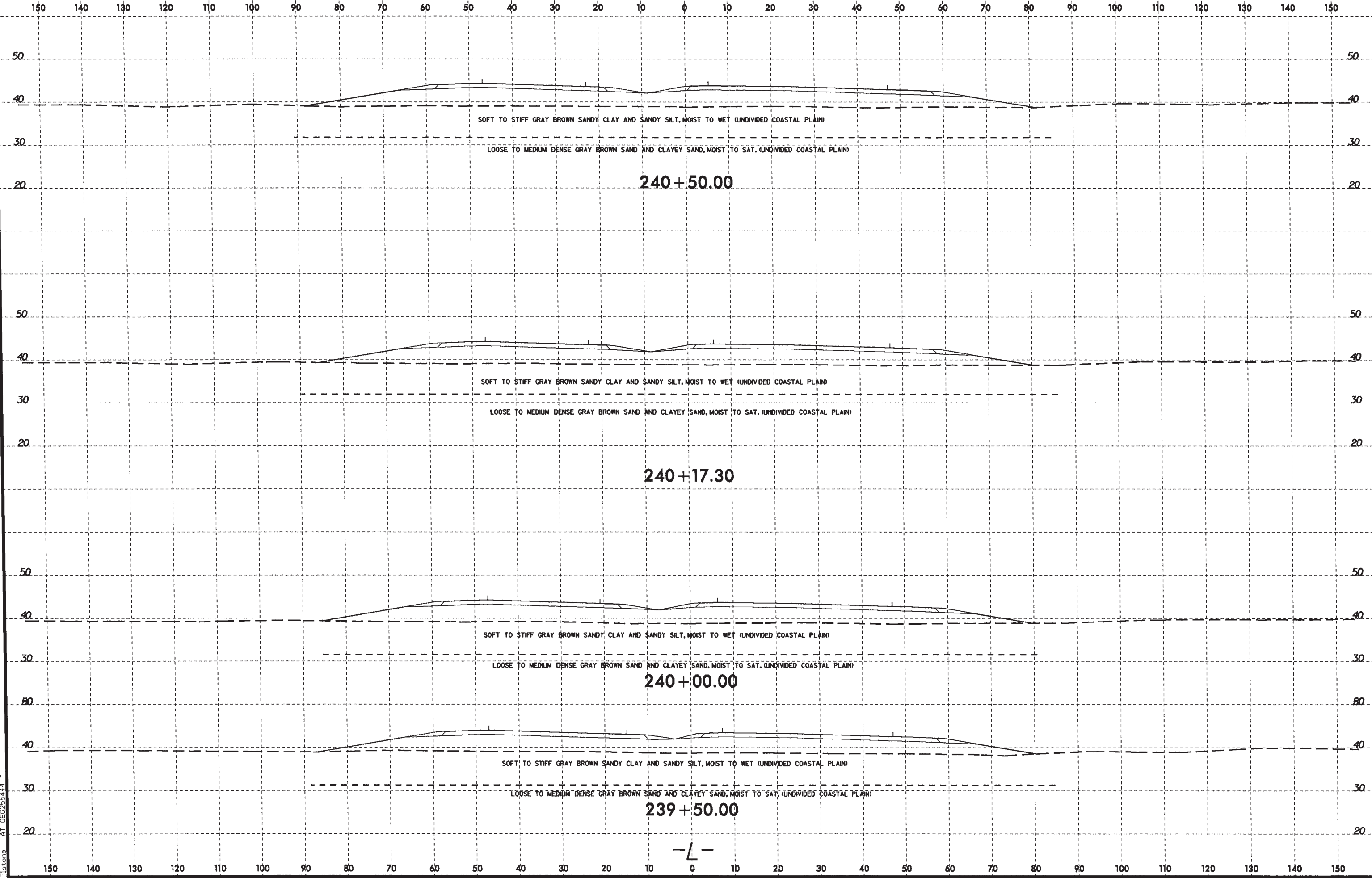
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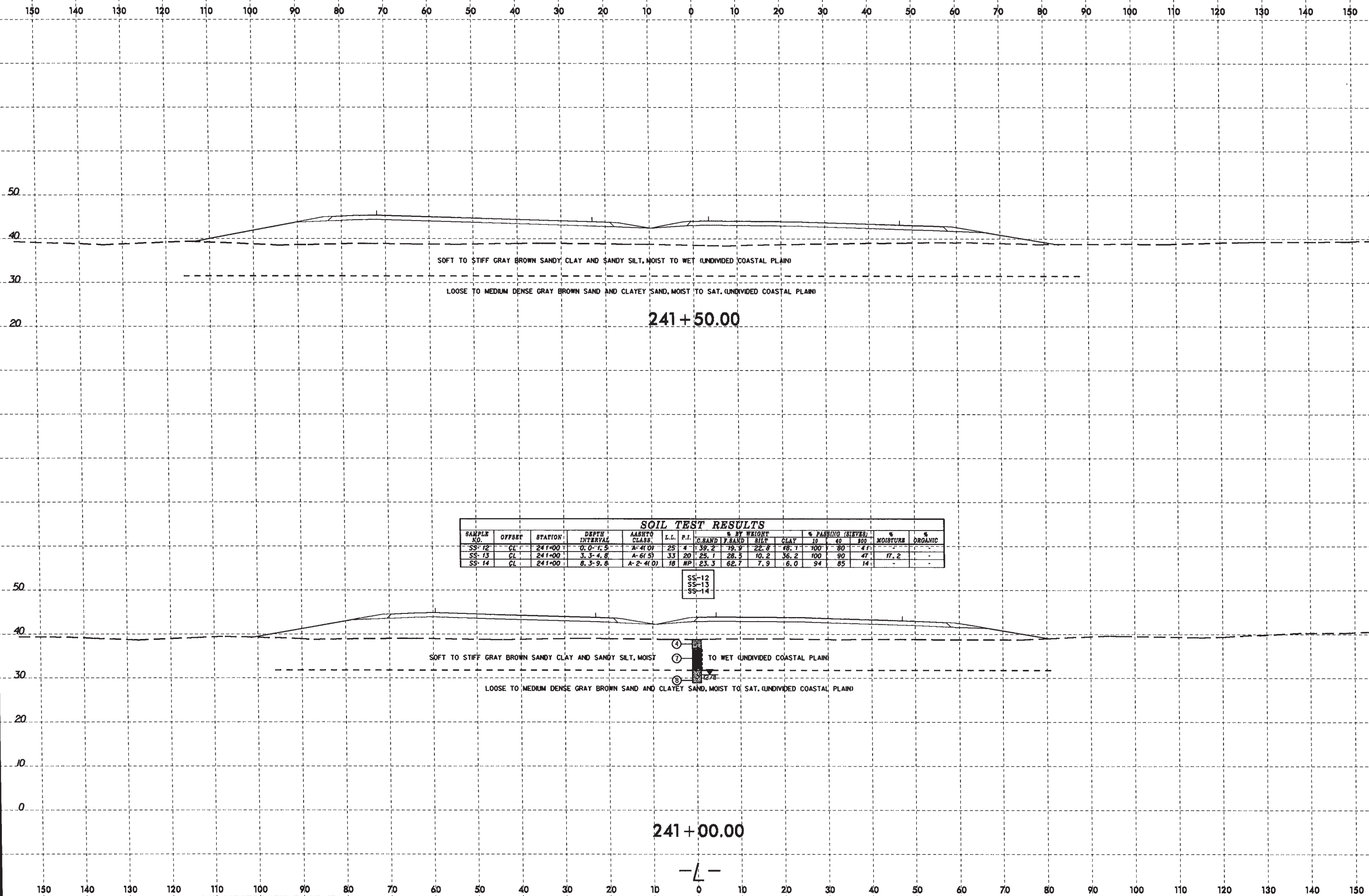
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8/23/99



SOFT TO STIFF GRAY BROWN SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

LOOSE TO MEDIUM DENSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

241+50.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT			% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							G. SAND	F. SAND	SILT	10	60	200		
SS-12	CL	241+00	0.0-1.5	A-4(0)	25	4	39.2	79.9	22.8	48.1	100	80	47	-
SS-13	CL	241+00	3.3-4.8	A-6(5)	33	20	25.1	28.5	10.2	36.2	100	90	47	-
SS-14	CL	241+00	8.3-9.8	A-2-4(0)	16	NP	23.3	62.7	7.9	8.0	94	85	14	-

SS-12  
SS-13  
SS-14

SOFT TO STIFF GRAY BROWN SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

LOOSE TO MEDIUM DENSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

241+00.00

-L-

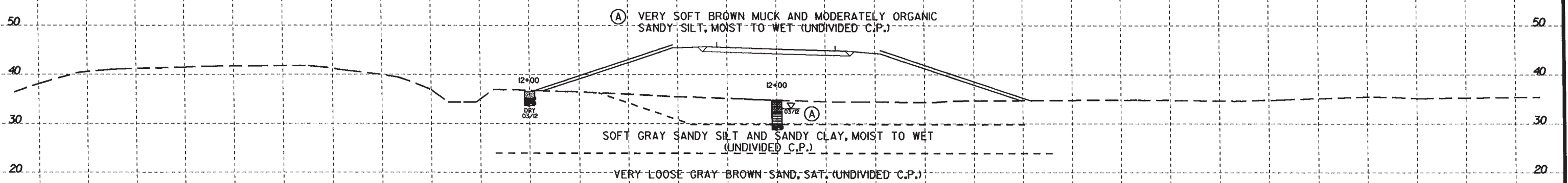
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8/23/99

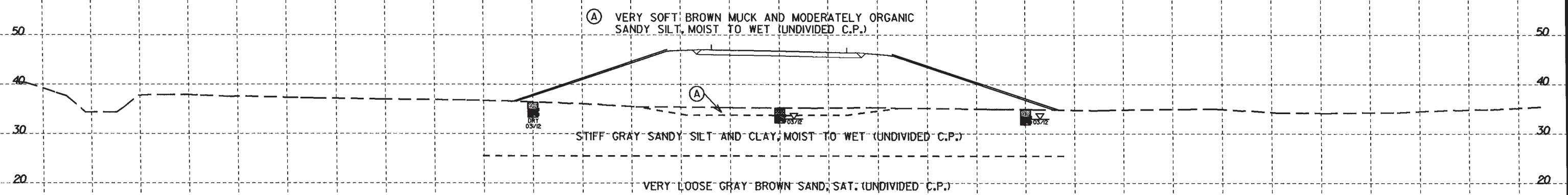


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R-2514C	123

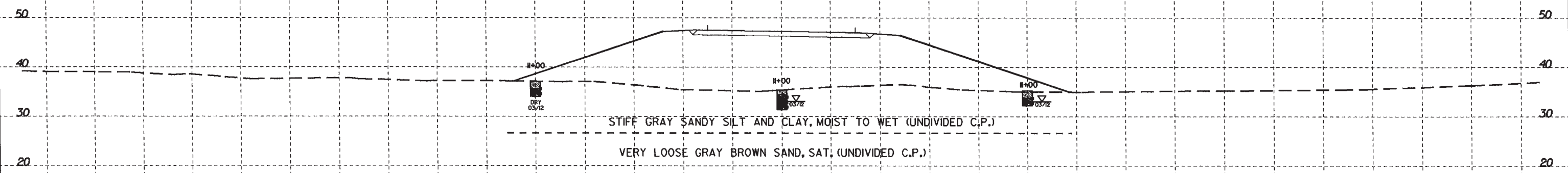
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12 + 07.79



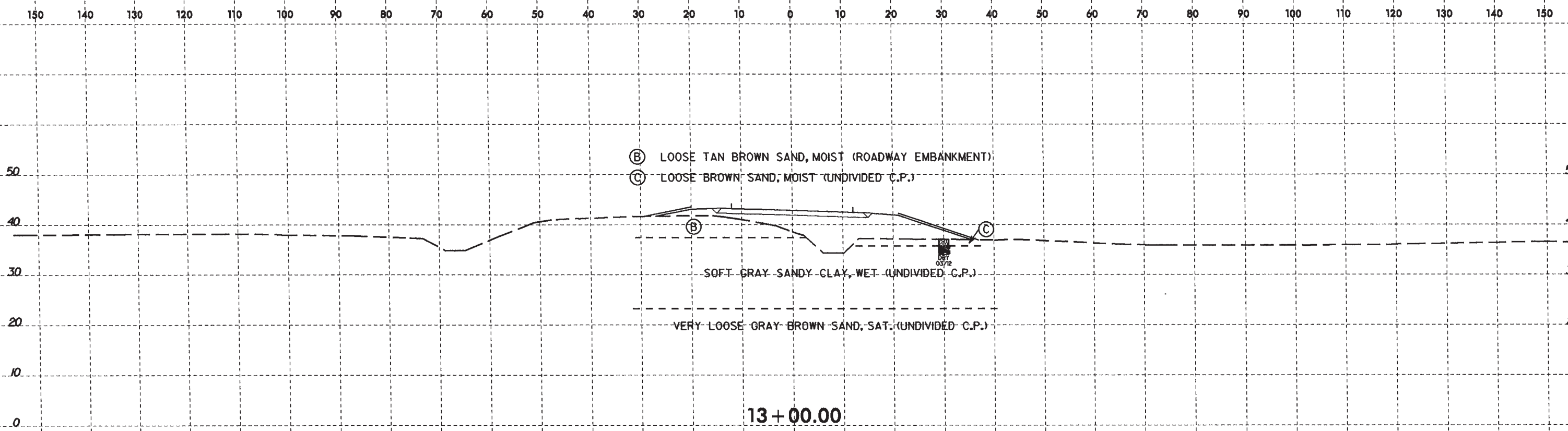
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11 + 07.79

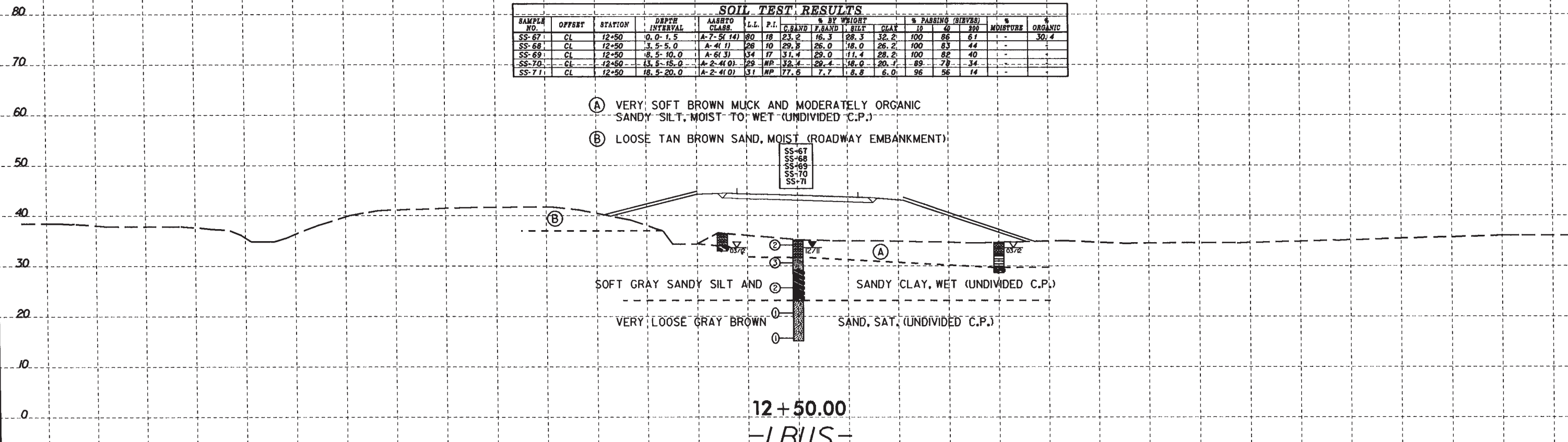
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13+00.00

SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% ORGANIC	
							C. SAND	F. SAND	SILT	CLAY	10	40	200		MOISTURE
SS-67	CL	12+50	0.0-1.5	A-7-5(14)	90	18	23.2	16.3	28.3	32.2	100	86	61	-	30.4
SS-68	CL	12+50	3.5-5.0	A-4(1)	28	10	29.8	26.0	18.0	26.2	100	83	44	-	-
SS-69	CL	12+50	8.5-10.0	A-6(3)	34	17	31.4	29.0	11.4	28.2	100	82	40	-	-
SS-70	CL	12+50	13.5-15.0	A-2-4(0)	29	NP	32.4	29.4	18.0	20.1	89	78	34	-	-
SS-71	CL	12+50	18.5-20.0	A-2-4(0)	31	NP	77.6	7.7	8.8	6.0	96	56	14	-	-



12+50.00

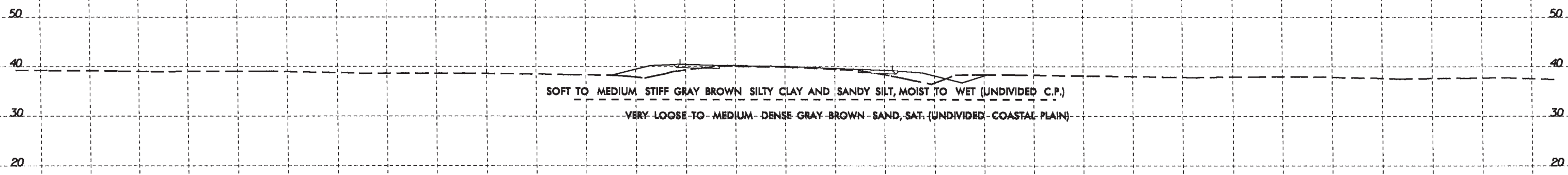
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8/23/99

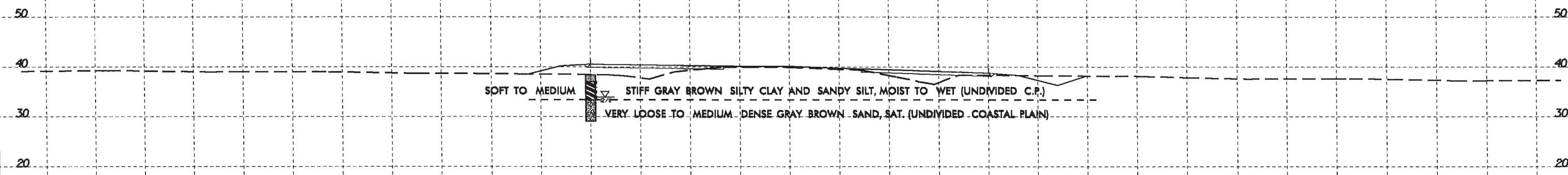


PROJ. REFERENCE NO.  
R-2514C  
SHEET NO.  
125

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25 + 15.00



24 + 80.00

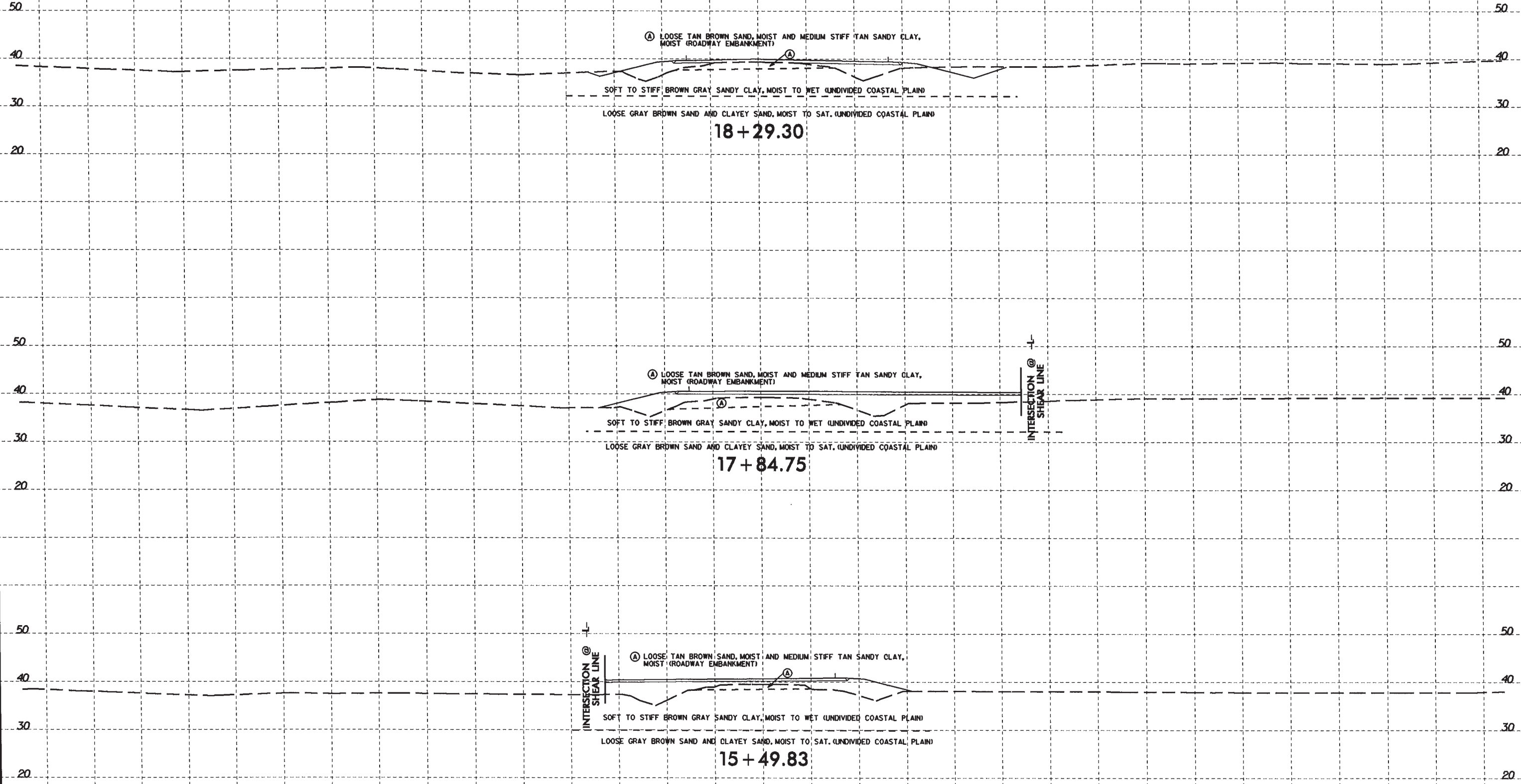
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Ⓐ LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

18 + 29.30

Ⓐ LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

17 + 84.75

INTERSECTION @ SHEAR LINE

Ⓐ LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

15 + 49.83

INTERSECTION @ SHEAR LINE

-Y/-

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150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

Ⓐ LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

19 + 50.00

Ⓐ LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

19 + 00.00

Ⓐ LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

18 + 50.00

-Y/-

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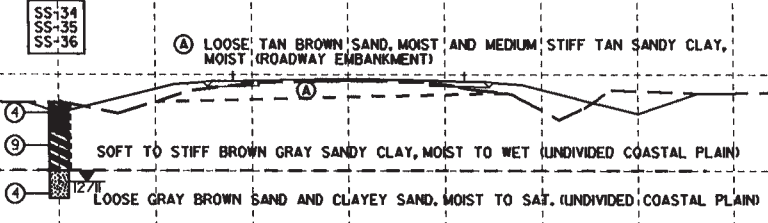
Ⓐ LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

21+23.02

SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	ASTM CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-34	30 LT	21+00	0.0-1.5	A-6(7)	35	19	28.7	18.1	15.0	38.2	100	87	54	19.9	-
SS-35	30 LT	21+00	3.4-4.9	A-7-6(10)	47	27	33.8	14.7	13.4	38.2	100	83	52	-	-
SS-36	30 LT	21+00	8.4-9.9	A-2-6(10)	20	NP	26.5	55.3	6.1	12.1	94	83	18	-	-



21+00.00

Ⓐ LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

20+54.30

Ⓐ LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)

LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

20+00.00

-Y/-

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8/23/99

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40  
 (A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)  
 40

30  
 SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)  
 30

20  
 LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)  
 20

11 + 70.81

40  
 (A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)  
 40

30  
 SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)  
 30

20  
 LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)  
 20

11 + 50.00

40  
 (A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)  
 40

30  
 SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)  
 30

20  
 LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)  
 20

11 + 00.00

40  
 (A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)  
 40

30  
 SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)  
 30

20  
 LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)  
 20

10 + 50.00

40  
 (A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)  
 40

30  
 SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)  
 30

20  
 LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)  
 20

10 + 00.00

-Y/A-

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40 (A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)  
 LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

13 + 00.00

40 (A) LOOSE TAN BROWN SAND, MOIST AND MEDIUM STIFF TAN SANDY CLAY, MOIST (ROADWAY EMBANKMENT)

SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)  
 LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

12 + 79.93

50 INTERSECTION @ -YA- SHEAR LINE

SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)  
 LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

12 + 50.00

50 INTERSECTION @ -YA- SHEAR LINE

SOFT TO STIFF BROWN GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED COASTAL PLAIN)  
 LOOSE GRAY BROWN SAND AND CLAYEY SAND, MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

12 + 00.00

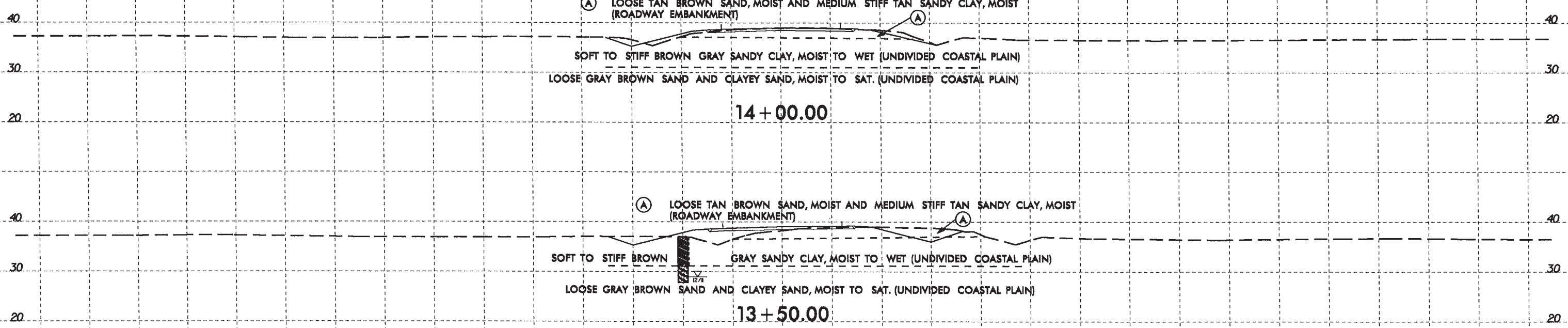
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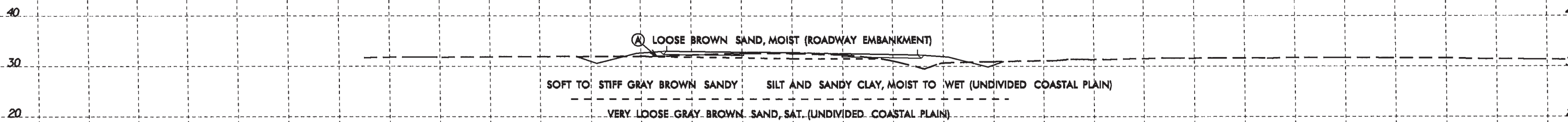
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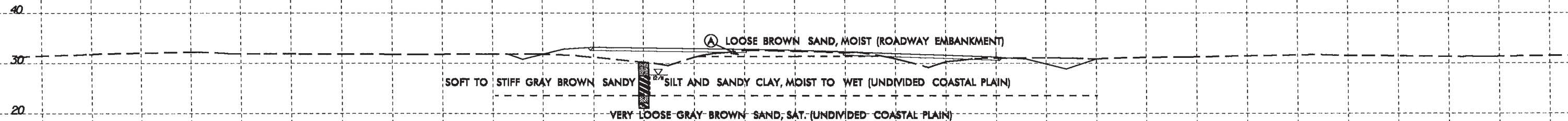
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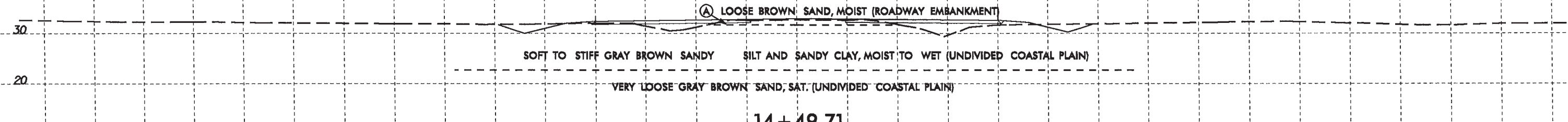
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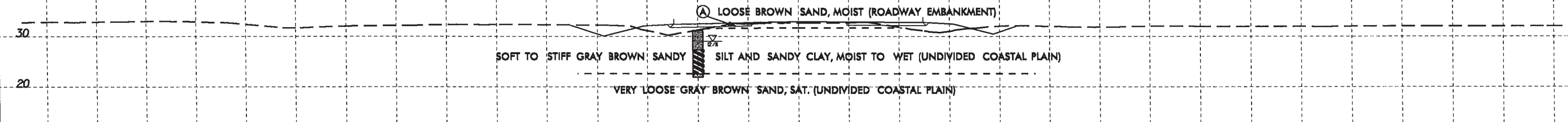
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19 + 90.00



14 + 49.71



14 + 18.28

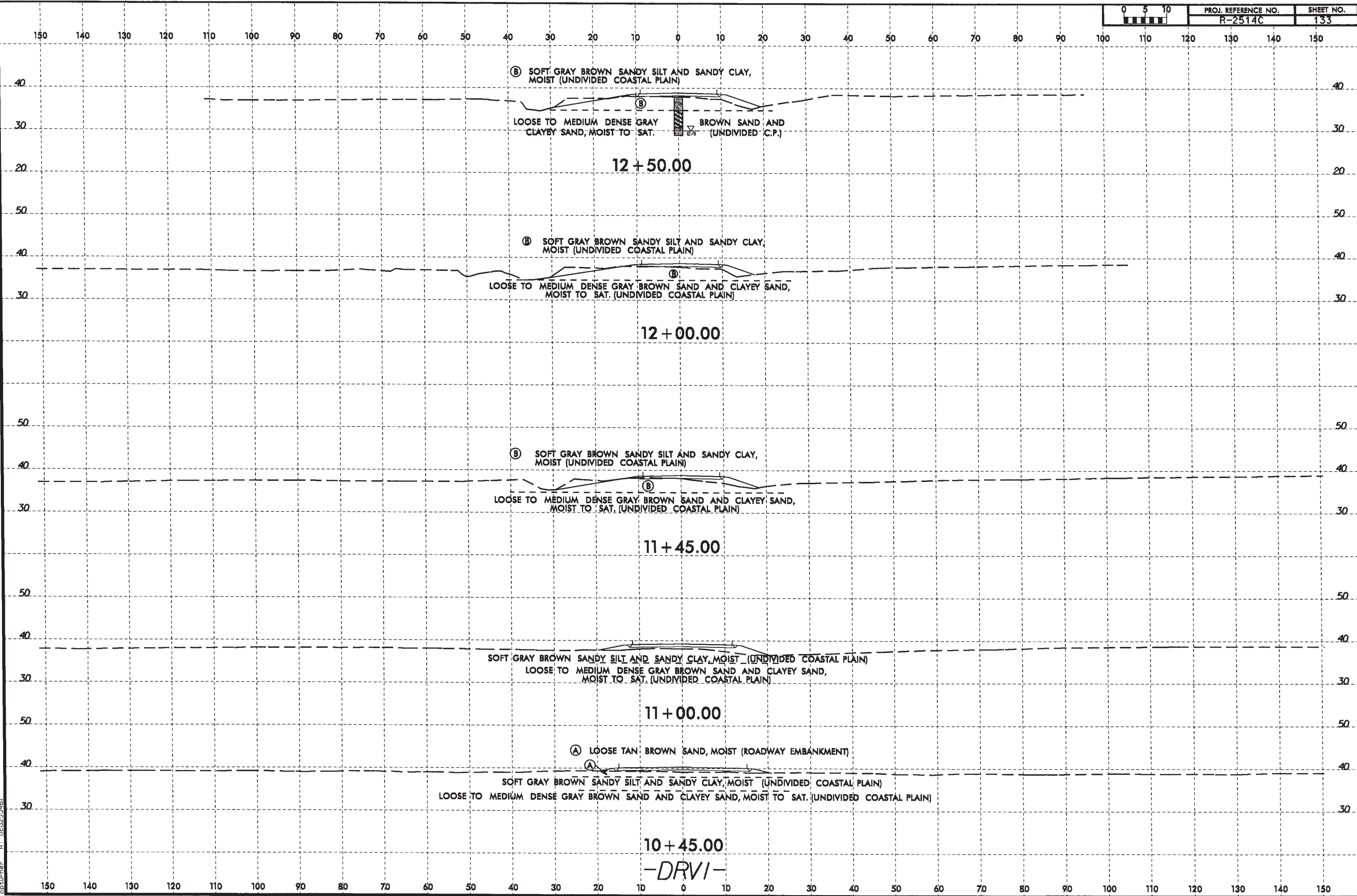
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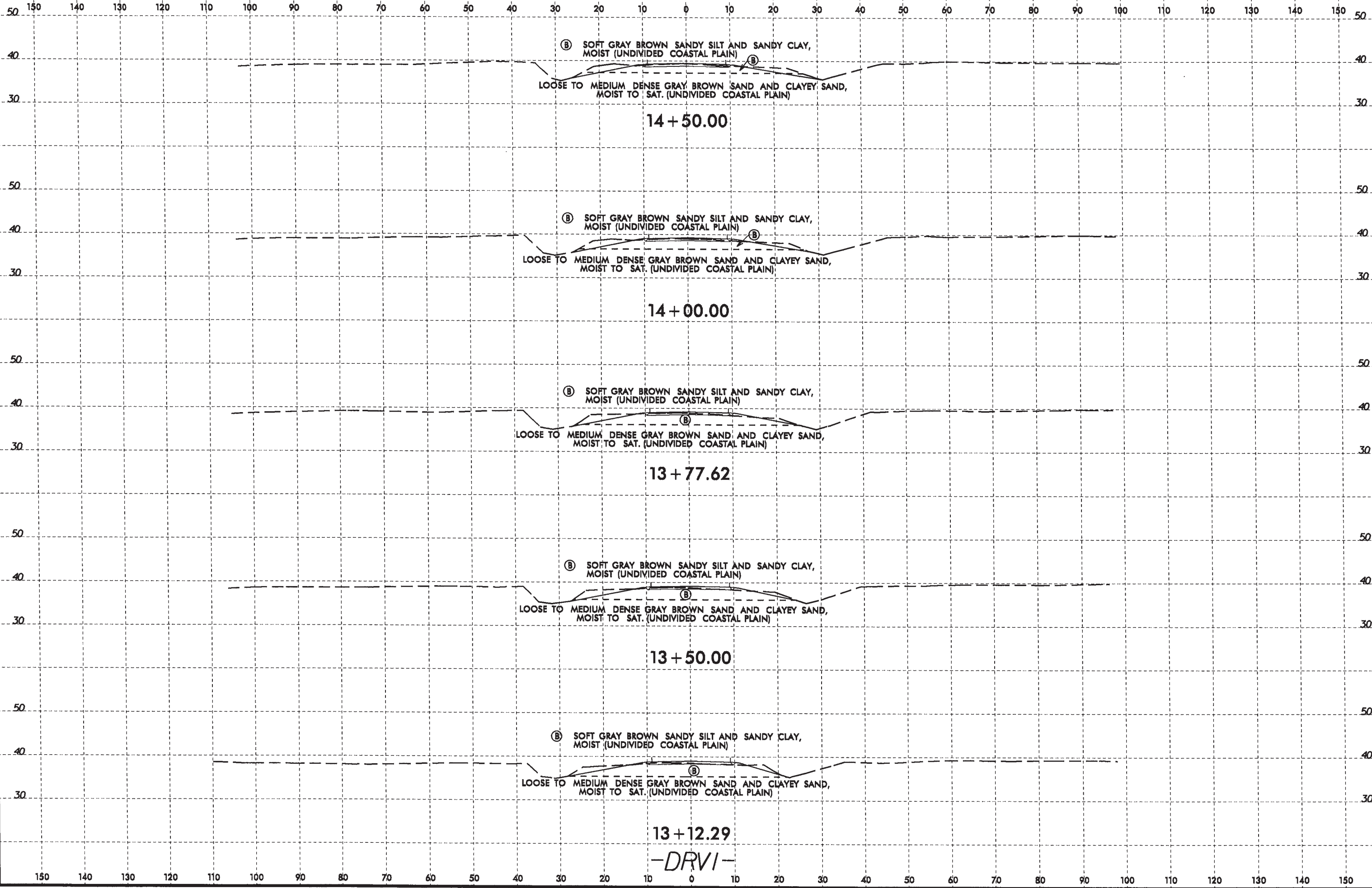
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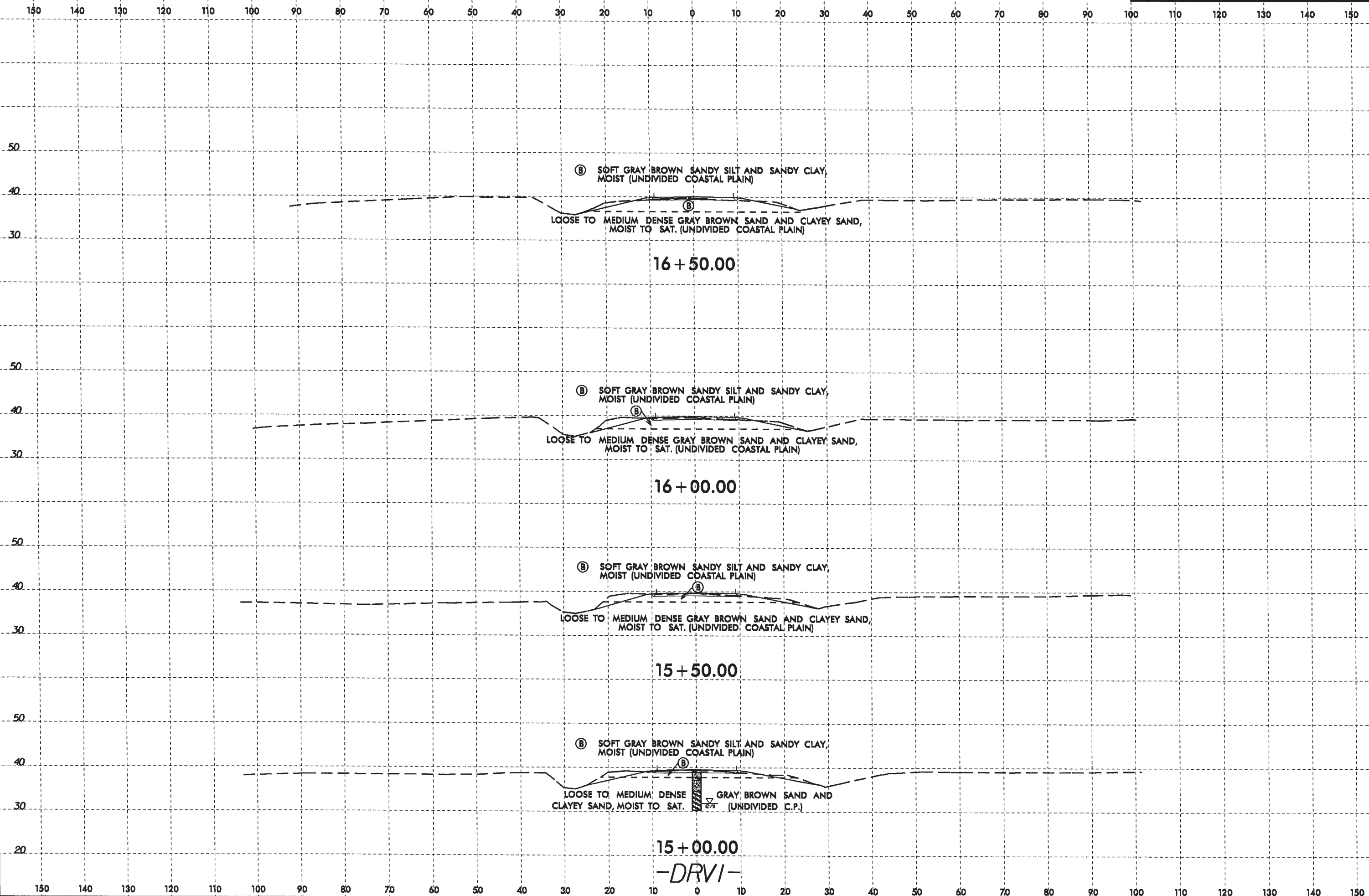


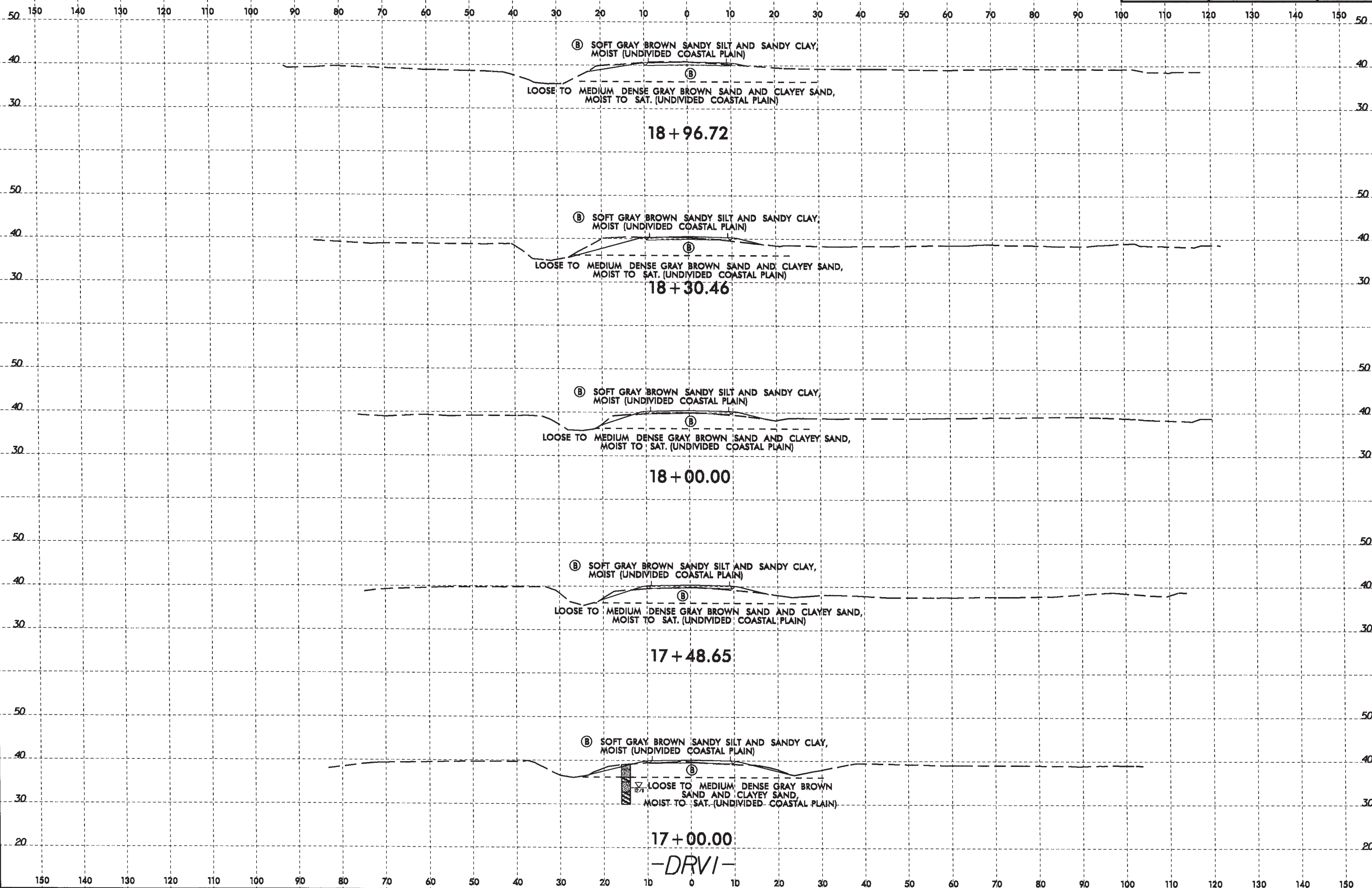


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ⓑ SOFT GRAY BROWN SANDY SILT AND SANDY CLAY,  
MOIST (UNDIVIDED COASTAL PLAIN)

LOOSE TO MEDIUM DENSE GRAY BROWN SAND AND CLAYEY SAND,  
MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

18 + 96.72

ⓑ SOFT GRAY BROWN SANDY SILT AND SANDY CLAY,  
MOIST (UNDIVIDED COASTAL PLAIN)

LOOSE TO MEDIUM DENSE GRAY BROWN SAND AND CLAYEY SAND,  
MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

18 + 30.46

ⓑ SOFT GRAY BROWN SANDY SILT AND SANDY CLAY,  
MOIST (UNDIVIDED COASTAL PLAIN)

LOOSE TO MEDIUM DENSE GRAY BROWN SAND AND CLAYEY SAND,  
MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

18 + 00.00

ⓑ SOFT GRAY BROWN SANDY SILT AND SANDY CLAY,  
MOIST (UNDIVIDED COASTAL PLAIN)

LOOSE TO MEDIUM DENSE GRAY BROWN SAND AND CLAYEY SAND,  
MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

17 + 48.65

ⓑ SOFT GRAY BROWN SANDY SILT AND SANDY CLAY,  
MOIST (UNDIVIDED COASTAL PLAIN)

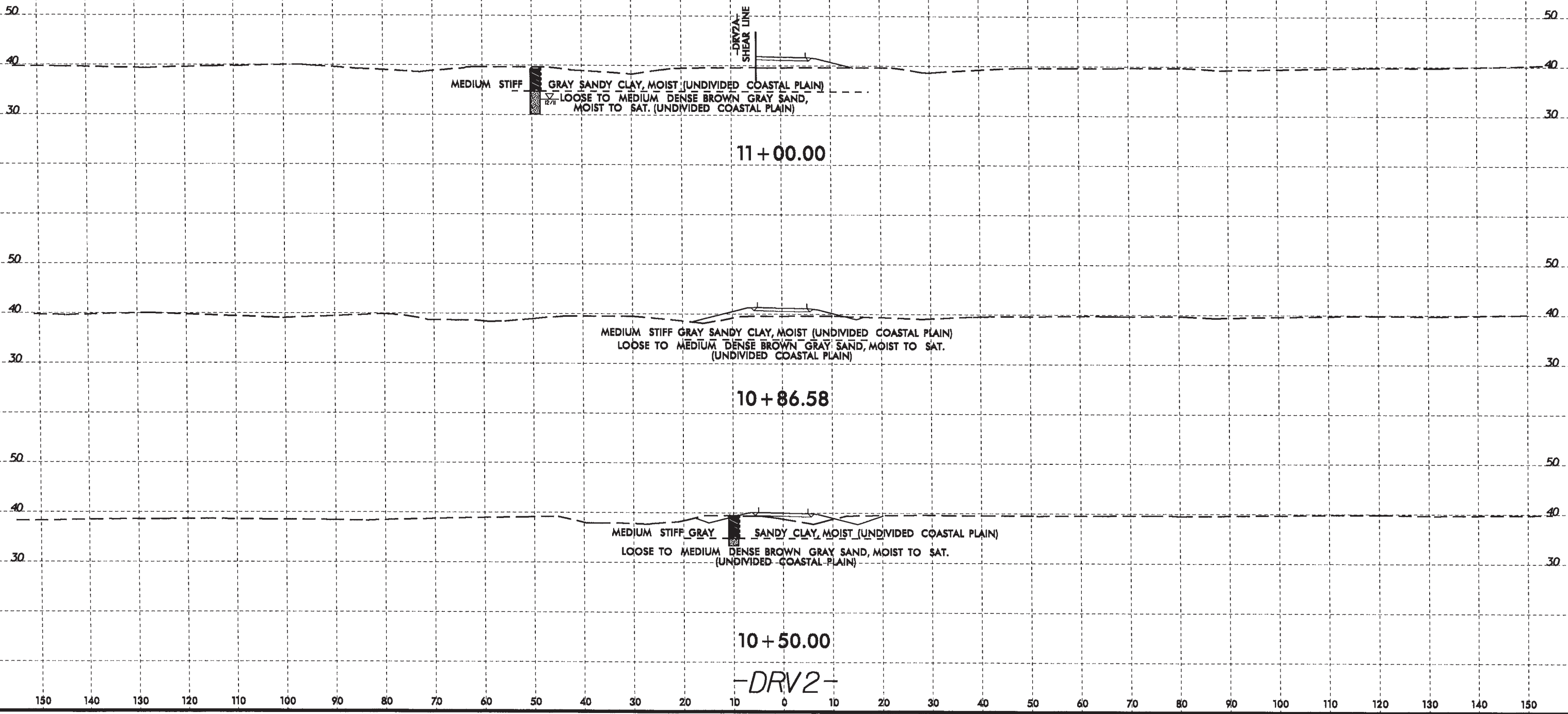
LOOSE TO MEDIUM DENSE GRAY BROWN  
SAND AND CLAYEY SAND,  
MOIST TO SAT. (UNDIVIDED COASTAL PLAIN)

17 + 00.00

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50 50

40 40

MEDIUM STIFF GRAY SANDY CLAY, MOIST (UNDIVIDED COASTAL PLAIN)

LOOSE TO MEDIUM DENSE BROWN GRAY SAND, MOIST TO SAT.  
(UNDIVIDED COASTAL PLAIN)

10 + 50.00

30 30

20 20

50 50

40 40

MEDIUM STIFF GRAY SANDY CLAY, MOIST (UNDIVIDED COASTAL PLAIN)

LOOSE TO MEDIUM DENSE BROWN GRAY SAND, MOIST TO SAT.  
(UNDIVIDED COASTAL PLAIN)

10 + 14.23

-DRV2A-

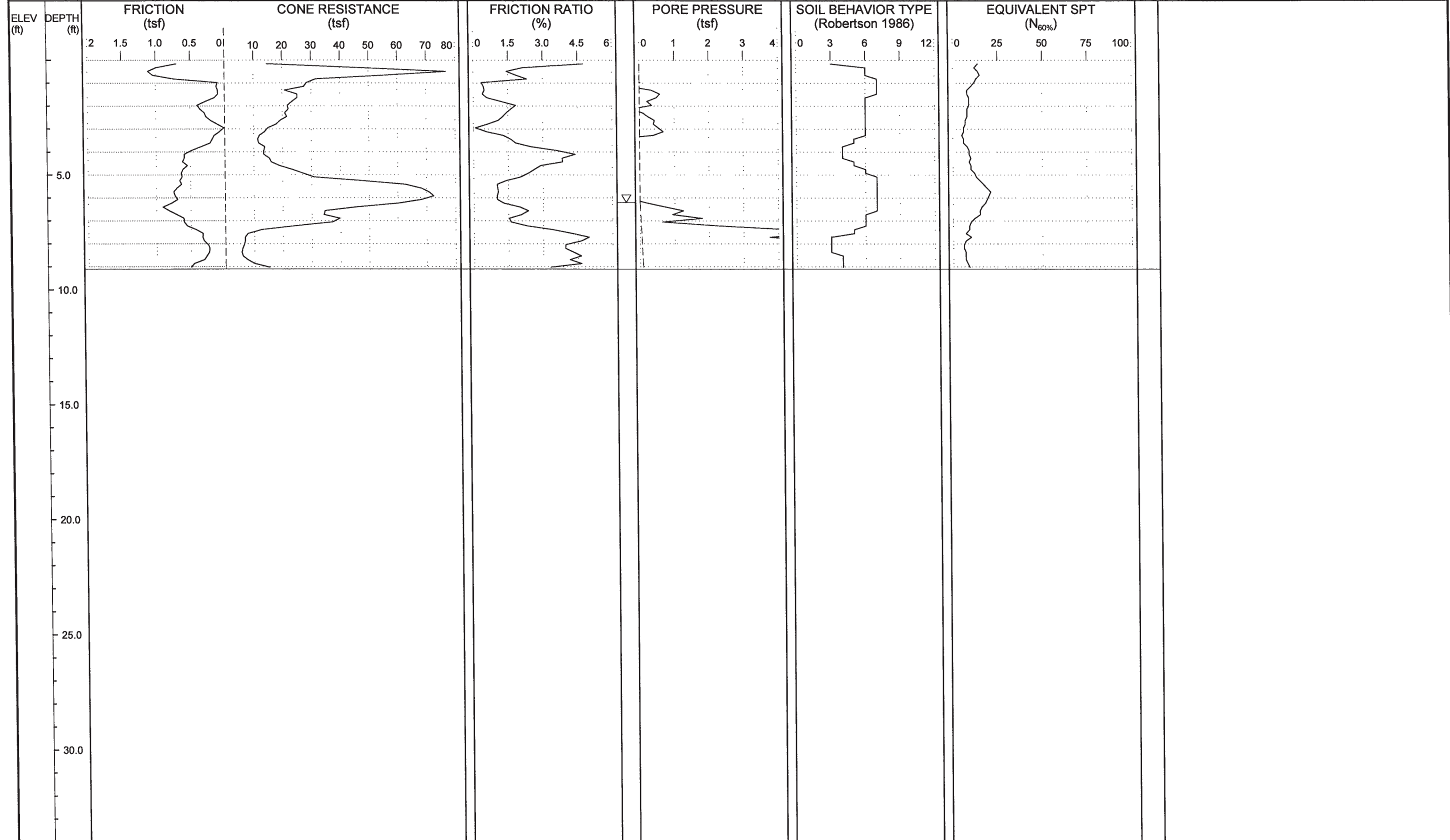
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150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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 AT: GEG3461



PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: DRV2A-1050	STATION: 10+50	OFFSET: 0ft CL	ALIGNMENT: -DRV2A-	0 HR. 6.2	ROD TYPE: Pre-Strung
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 436,083	EASTING: 2,528,070	24 HR. FIAD	START DATE: 12/16/11
				COMP. DATE: 12/16/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



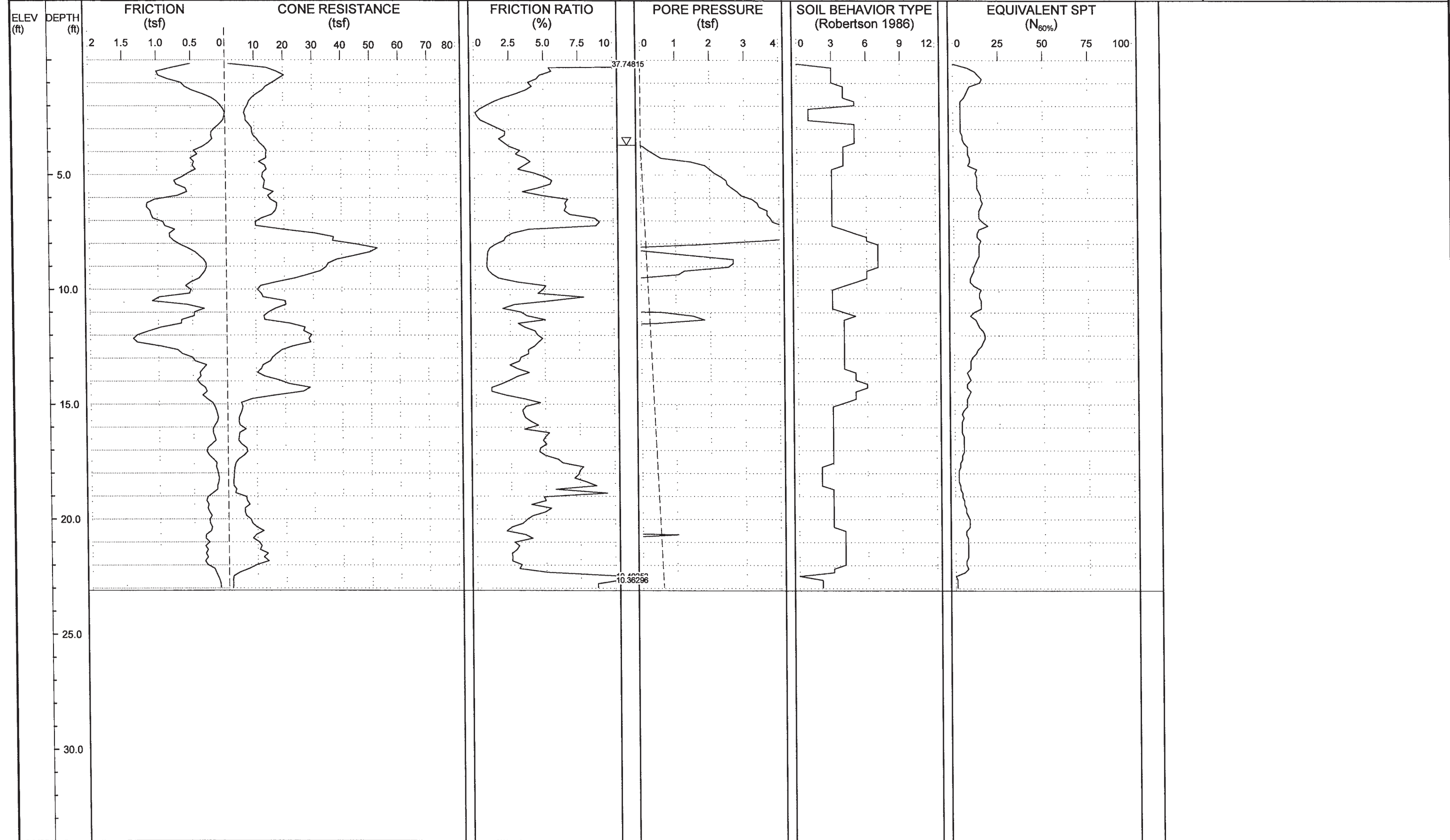


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.:	2
PROJ. NO.:	34442.1.1
TIP NO.:	R-2514C
COUNTY:	Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft): 0 HR. 3.7	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: L-10000	STATION: 100+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-Strung	CONE ID: DSA1123
COLLAR ELEV.: N/A	TOTAL DEPTH: 23.1 ft	NORTHING: 437,830	EASTING: 2,528,034	24 HR. FIAD	START DATE: 12/16/11
				COMP. DATE: 12/16/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



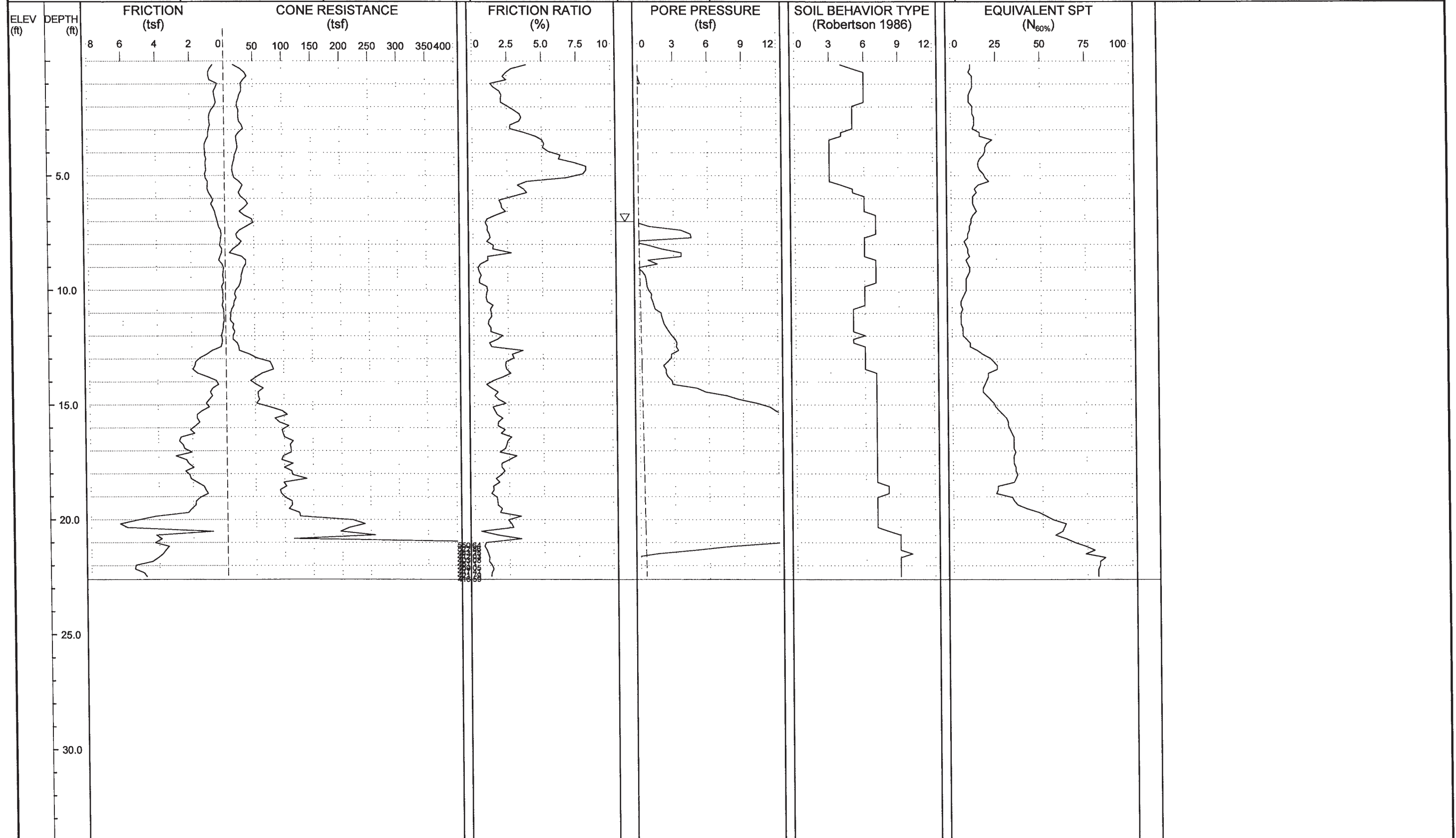


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

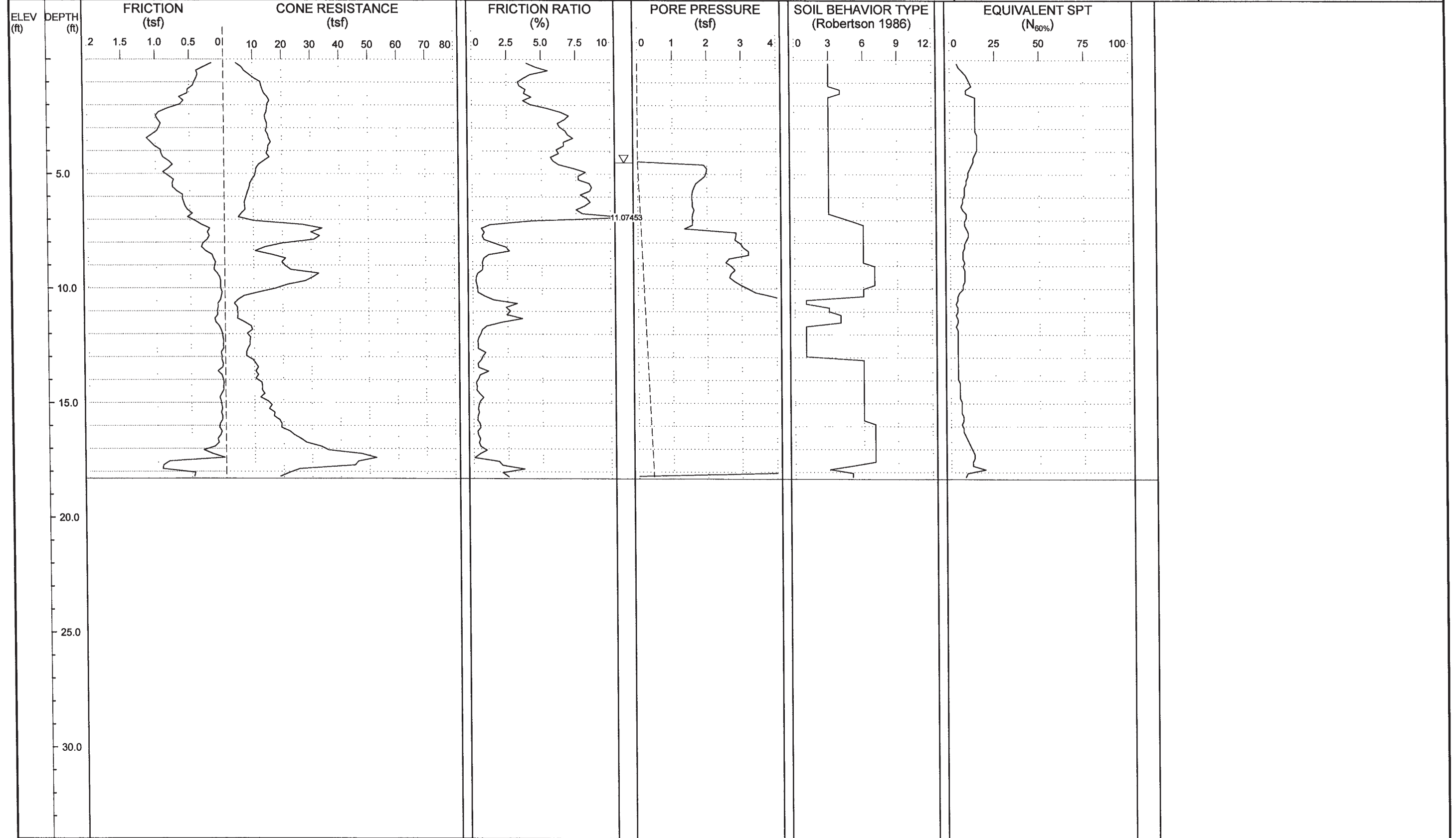
SHEET NO.:	3
PROJ. NO.:	34442.1.1
TIP NO.:	R-2514C
COUNTY:	Jones

PROJECT NO.: 34442.1.1	ID: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 7.0	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-10800	STATION: 108+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 22.6 ft	NORTHING: 438,574	EASTING: 2,527,741	START DATE: 12/16/11	COMP. DATE: 12/16/11	SURFACE WATER DEPTH: N/A	





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 4.5	DRILL METHOD: Direct Push
BORING NO.: L-11800	STATION: 118+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-Strung	CONE TYPE: Piezocone
COLLAR ELEV.: N/A	TOTAL DEPTH: 18.3 ft	NORTHING: 439,504	EASTING: 2,527,373	24 HR. FIAD	CONE ID: DSA1123
				START DATE: 12/16/11	DRILLER: Cory Robinson
				COMP. DATE: 12/16/11	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	





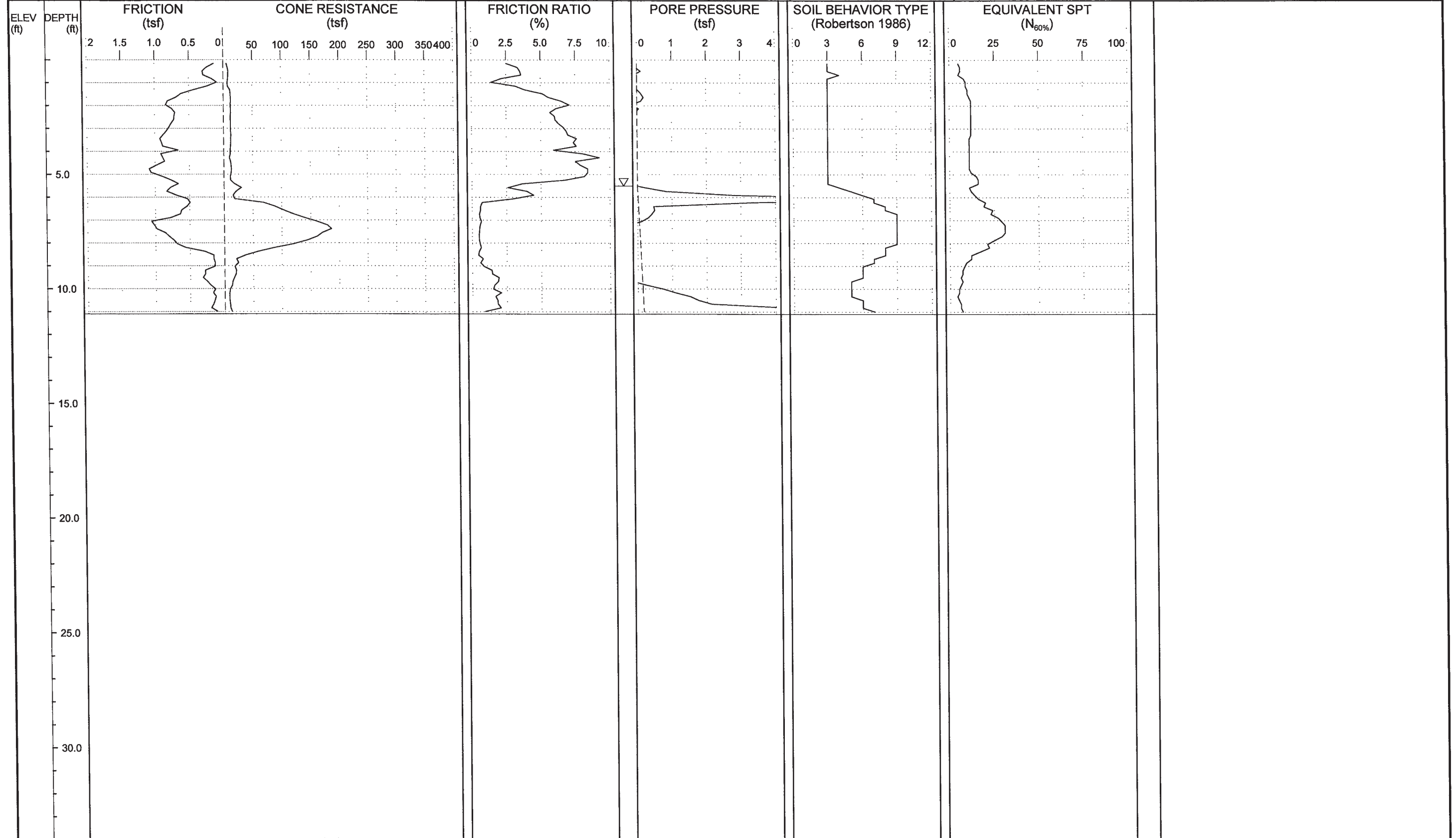


# NCDOT GEOTECHNICAL ENGINEERING UNIT



SHEET NO.:	5
PROJ. NO.:	34442.1.1
TIP NO.:	R-2514C
COUNTY:	Jones

PROJECT NO.: 34442.1.1	ID: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 5.5	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-12800	STATION: 128+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 11.1 ft	NORTHING: 440,434	EASTING: 2,527,006	START DATE: 12/16/11	COMP. DATE: 12/16/11	SURFACE WATER DEPTH: N/A	



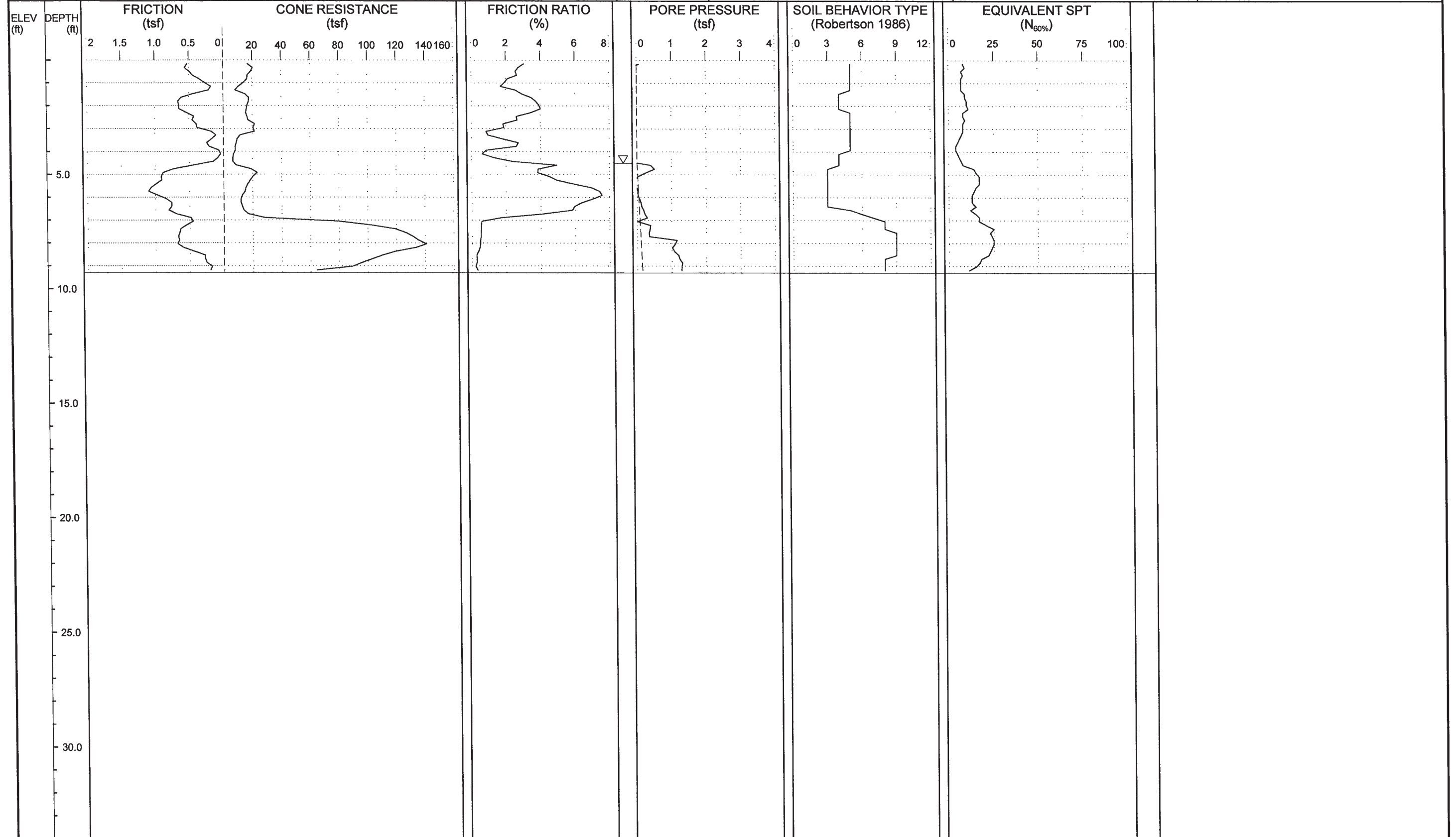


# NCDOT GEOTECHNICAL ENGINEERING UNIT



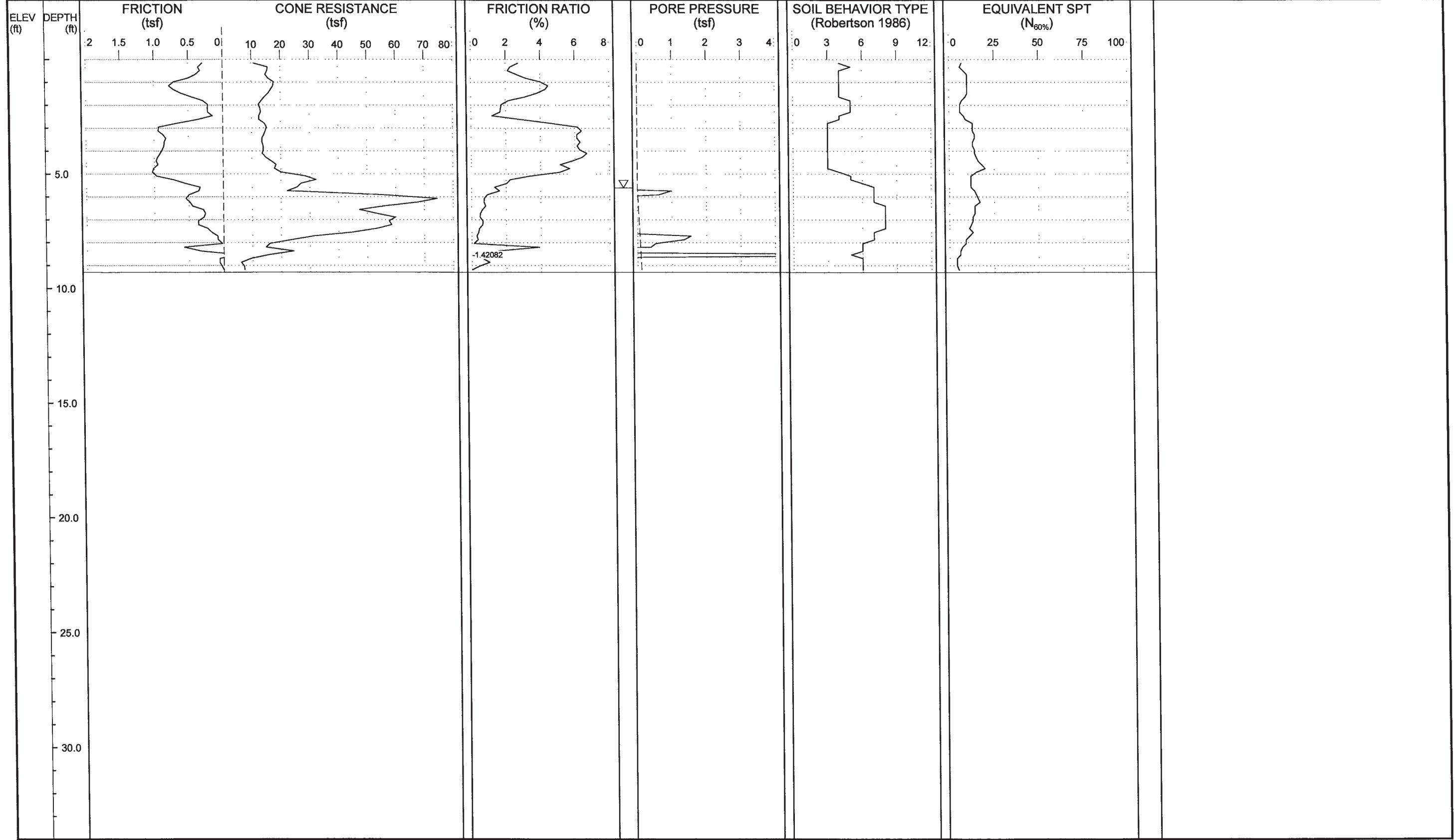
SHEET NO.: 6  
 PROJ. NO.: 34442.1.1  
 TIP NO.: R-2514C  
 COUNTY: Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: L-13800	STATION: 138+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 4.5	ROD TYPE: Pre-Strung
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 441,372	EASTING: 2,526,661	24 HR. FIAD	START DATE: 12/15/11
				COMP. DATE: 12/15/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	

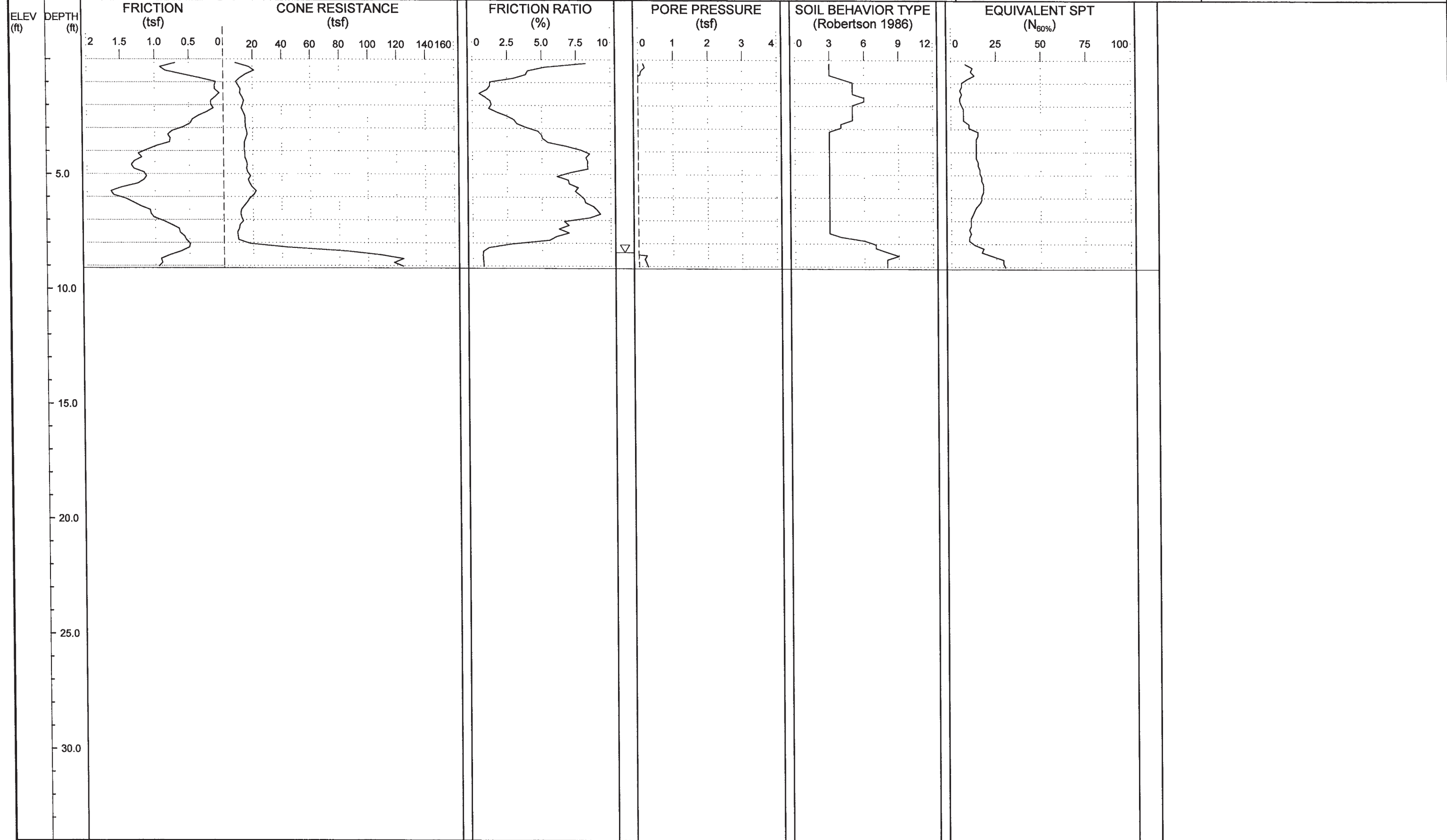




PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-14800	STATION: 148+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 5.6	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 442,367	EASTING: 2,526,654	24 HR. FIAD	START DATE: 12/15/11	COMP. DATE: 12/15/11	SURFACE WATER DEPTH: N/A



PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft): 0 HR. 8.4	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: L-1500	STATION: 15+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-Strung	DRILLER: Cory Robinson
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 429,389	EASTING: 2,528,673	24 HR. FIAD	START DATE: 12/16/11
				COMP. DATE: 12/16/11	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	



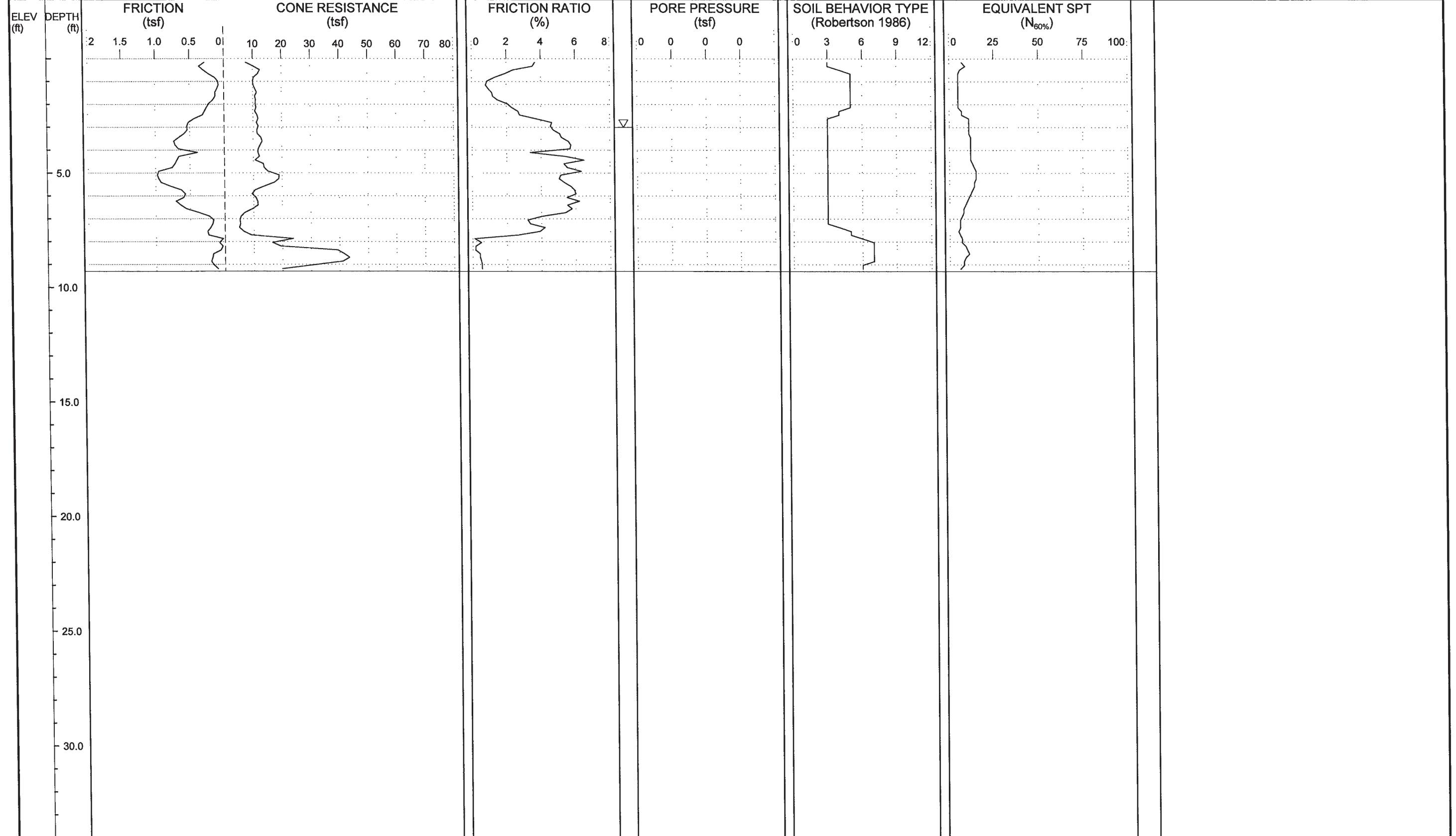


# NCDOT GEOTECHNICAL ENGINEERING UNIT



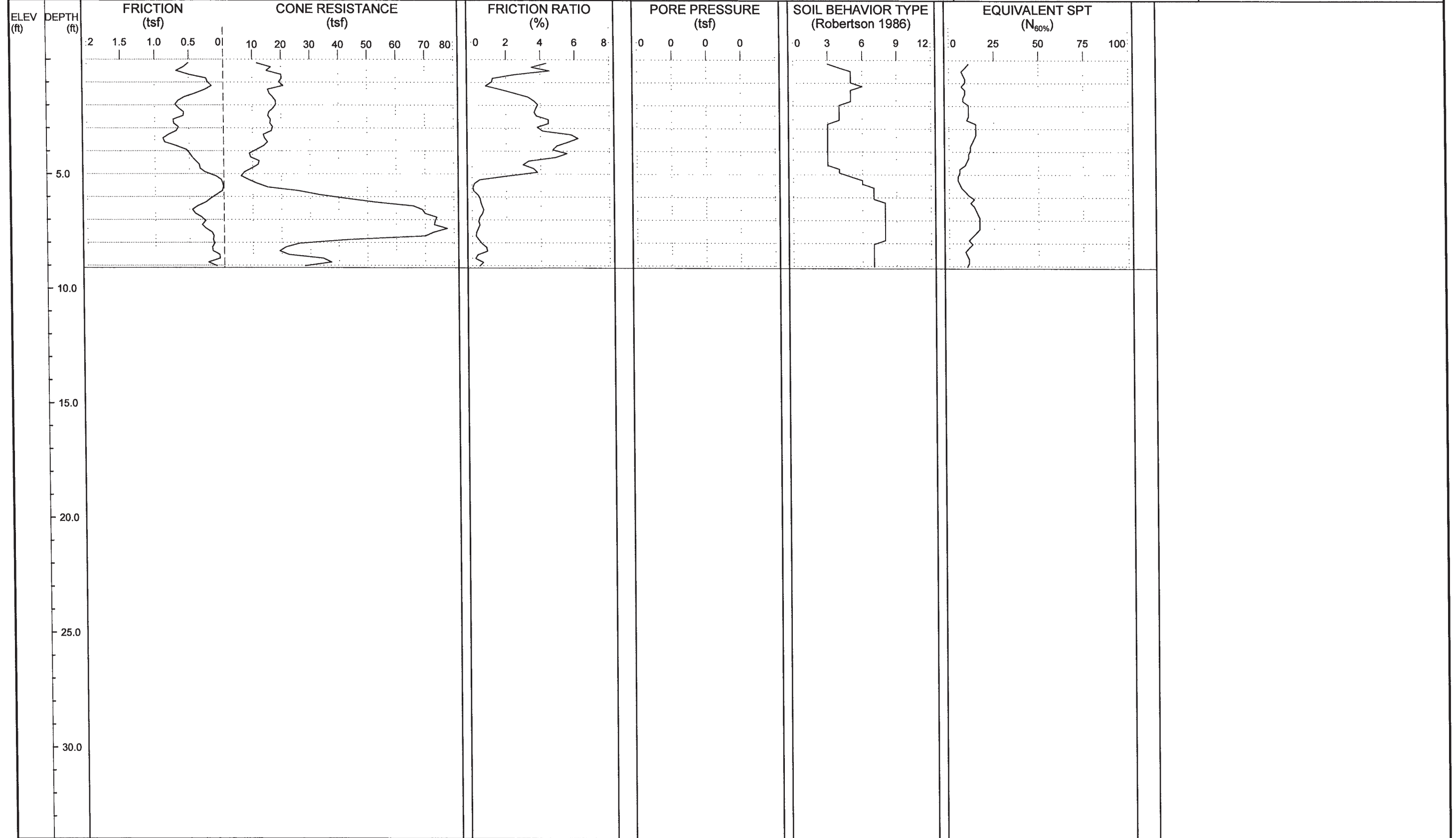
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 PROJ. NO.: 34442.1.1  
 TIP NO.: R-2514C  
 COUNTY: Jones

PROJECT NO.: 34442.1.1	ID: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 3.0	DRILL METHOD: Direct Push
BORING NO.: L-15800	STATION: 158+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	CONE TYPE: Piezocone
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 443,363	EASTING: 2,526,739	START DATE: 12/15/11	CONE ID: DSA1123
					DRILLER: Cory Robinson
					TECHNICIAN: M.A.D.
					COMP. DATE: 12/15/11
					SURFACE WATER DEPTH: N/A



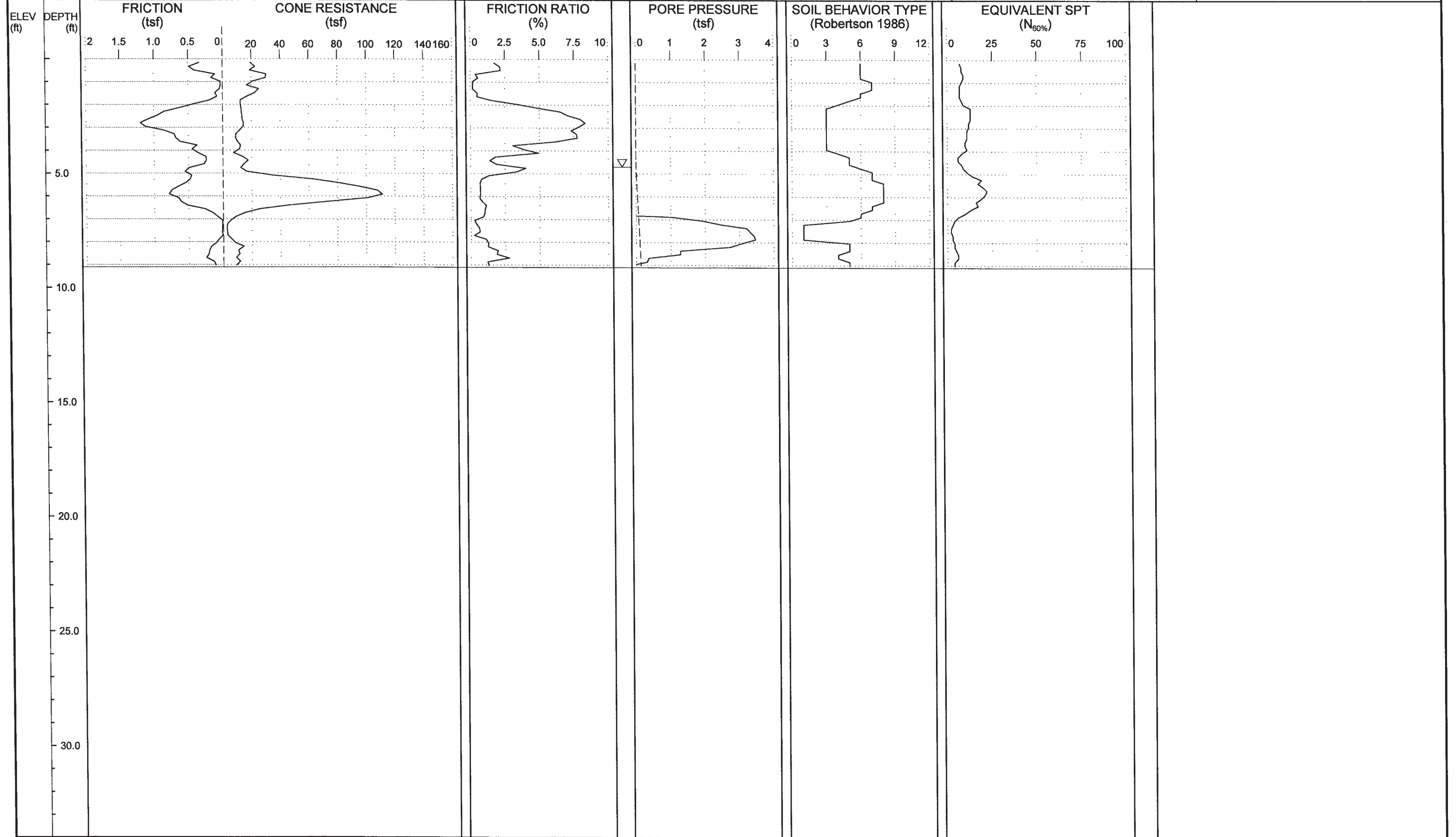


PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft): 0 HR. N/A	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: L-16200	STATION: 162+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-Strung	DRILLER: Cory Robinson
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 443,762	EASTING: 2,526,772	24 HR. FIAD	START DATE: 12/15/11
				COMP. DATE: 12/15/11	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft)	DRILL METHOD: Direct Push
BORING NO.: L-16400	STATION: 164+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 4.7	DRILLER: Cory Robinson
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 443,961	EASTING: 2,526,789	24 HR. FIAD	ROD TYPE: Pre-Strung
				START DATE: 12/15/11	TECHNICIAN: M.A.D.
				COMP. DATE: 12/15/11	SURFACE WATER DEPTH: N/A

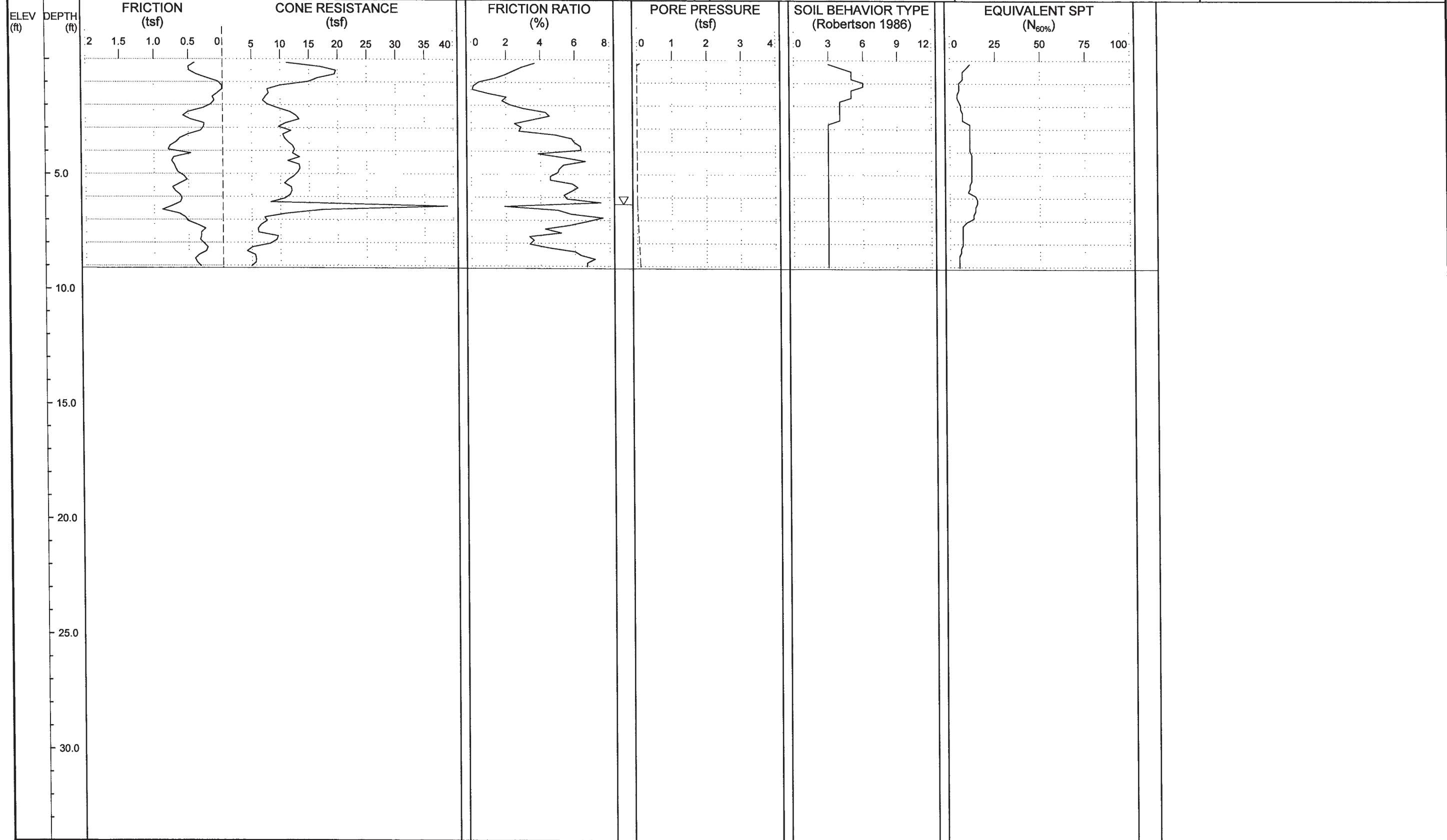




# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH	SHEET NO.: 12
	PROJ. NO.: 34442.1.1
	TIP NO.: R-2514C
	COUNTY: Jones

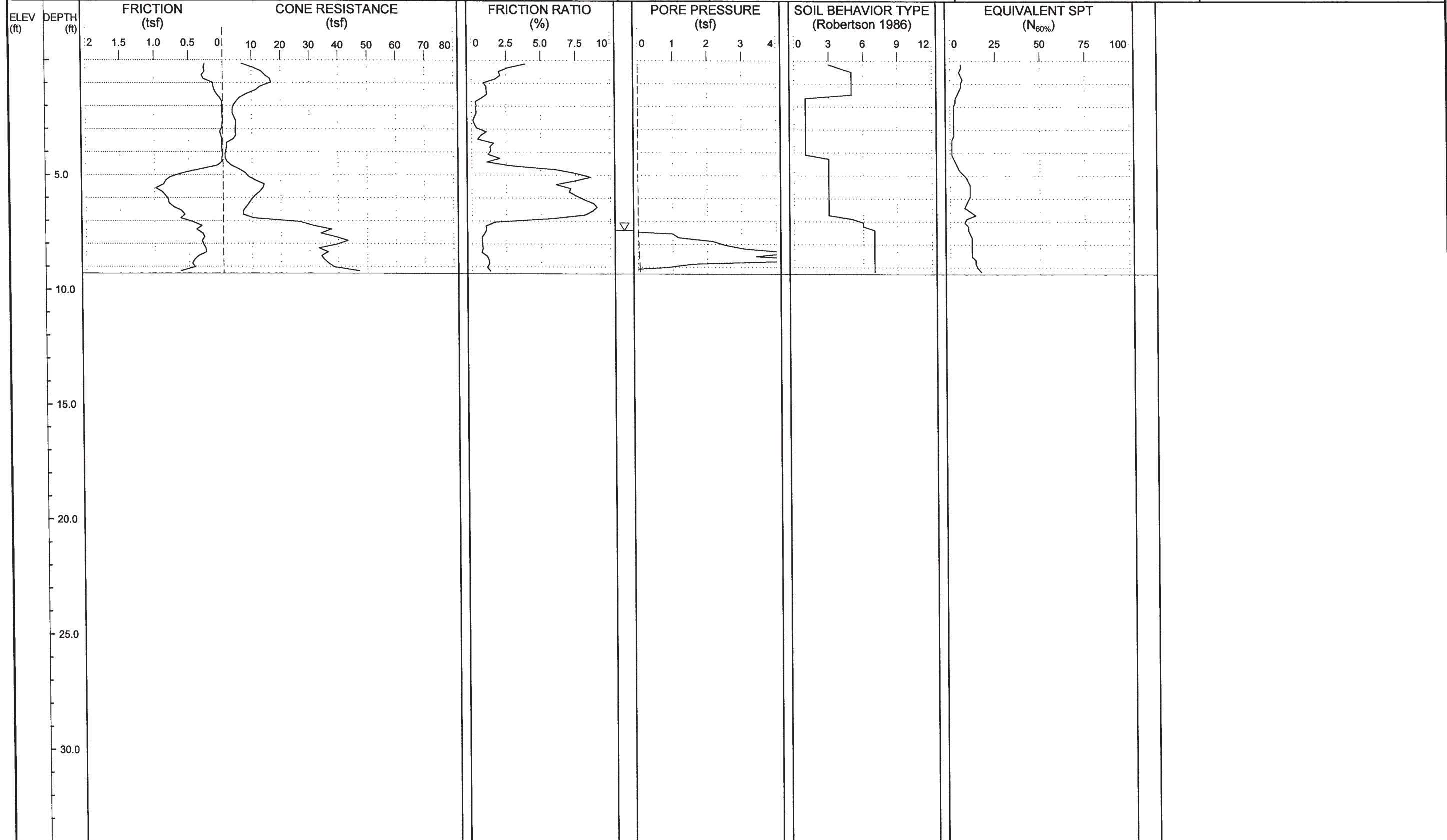
PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: L-16800	STATION: 168+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 6.3	ROD TYPE: Pre-Strung
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 444,359	EASTING: 2,526,823	24 HR. FIAD	START DATE: 12/15/11
				COMP. DATE: 12/15/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





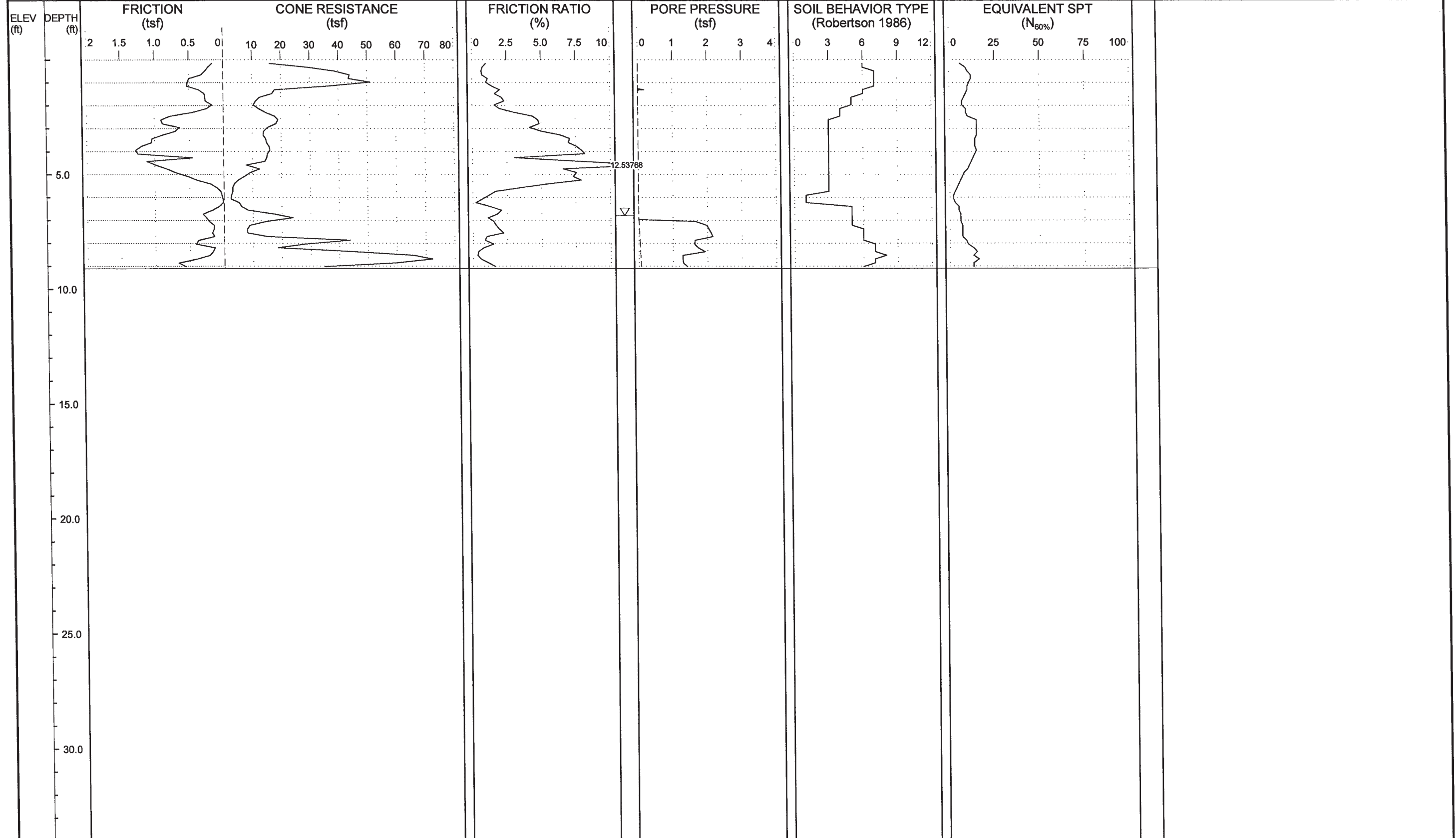


PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: L-17000	STATION: 170+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 7.4	ROD TYPE: Pre-Strung
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 444,559	EASTING: 2,526,840	24 HR. FIAD	START DATE: 12/15/11
				COMP. DATE: 12/15/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-17400	STATION: 174+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 6.8	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 444,957	EASTING: 2,526,873	24 HR. FIAD	START DATE: 12/15/11	COMP. DATE: 12/15/11	SURFACE WATER DEPTH: N/A



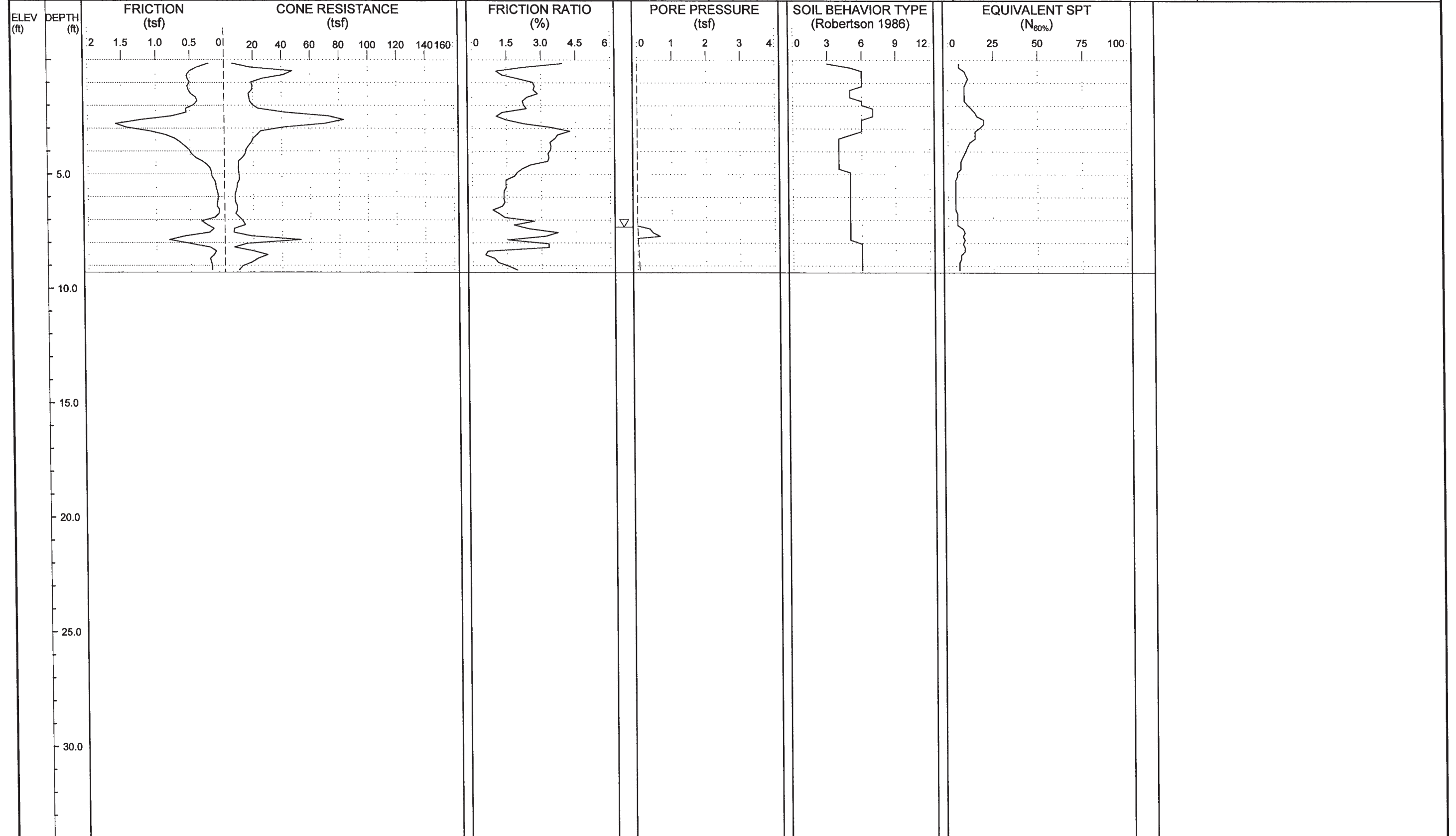


# NCDOT GEOTECHNICAL ENGINEERING UNIT



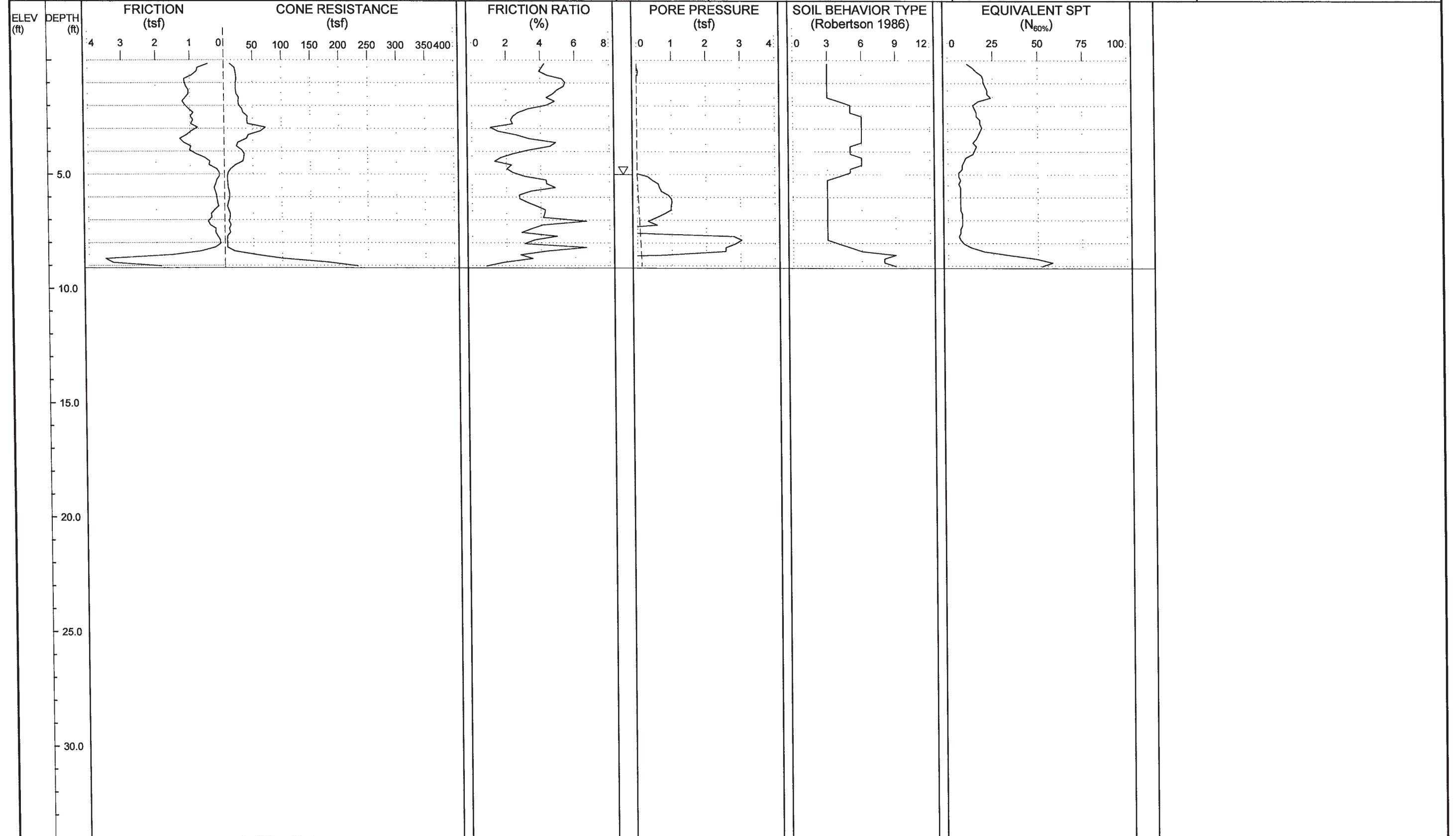
SHEET NO.:	15
PROJ. NO.:	34442.1.1
TIP NO.:	R-2514C
COUNTY:	Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 7.3	DRILL METHOD: Direct Push
BORING NO.: L-17600	STATION: 176+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 445,157	EASTING: 2,526,890	START DATE: 12/15/11	DRILLER: Cory Robinson
				COMP. DATE: 12/15/11	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft): 0 HR. 5.0	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: L-18000	STATION: 180+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-Strung	CONE ID: DSA1123
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 445,555	EASTING: 2,526,924	24 HR. FIAD	START DATE: 12/15/11
				COMP. DATE: 12/15/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



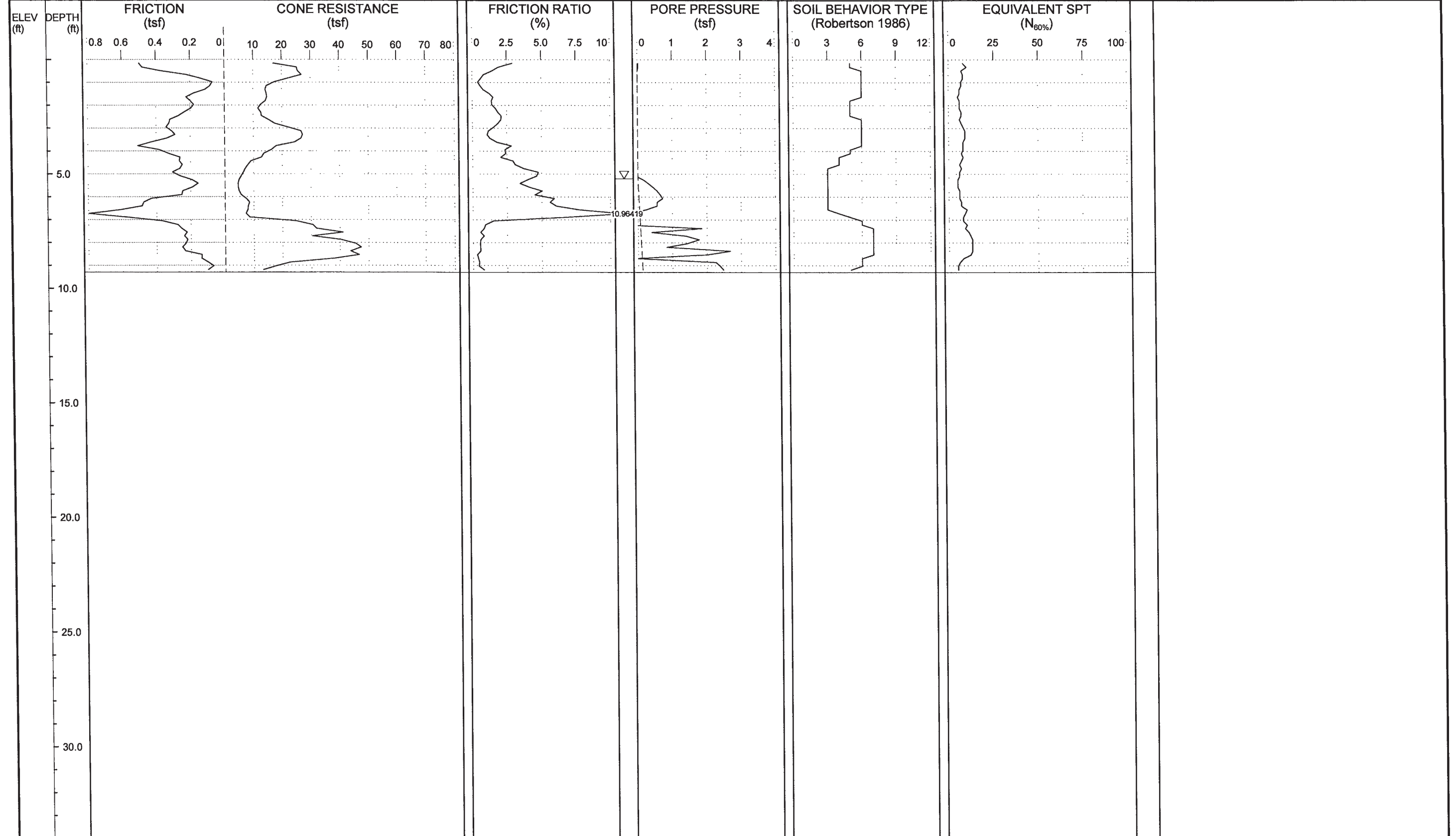


# NCDOT GEOTECHNICAL ENGINEERING UNIT



SHEET NO.: 17  
 PROJ. NO.: 34442.1.1  
 TIP NO.: R-2514C  
 COUNTY: Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 5.2	DRILL METHOD: Direct Push
BORING NO.: L-18200	STATION: 182+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-Strung	CONE TYPE: Piezocone
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 445,755	EASTING: 2,526,941	24 HR. FIAD	START DATE: 12/15/11
				CONC. DATE: 12/15/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	

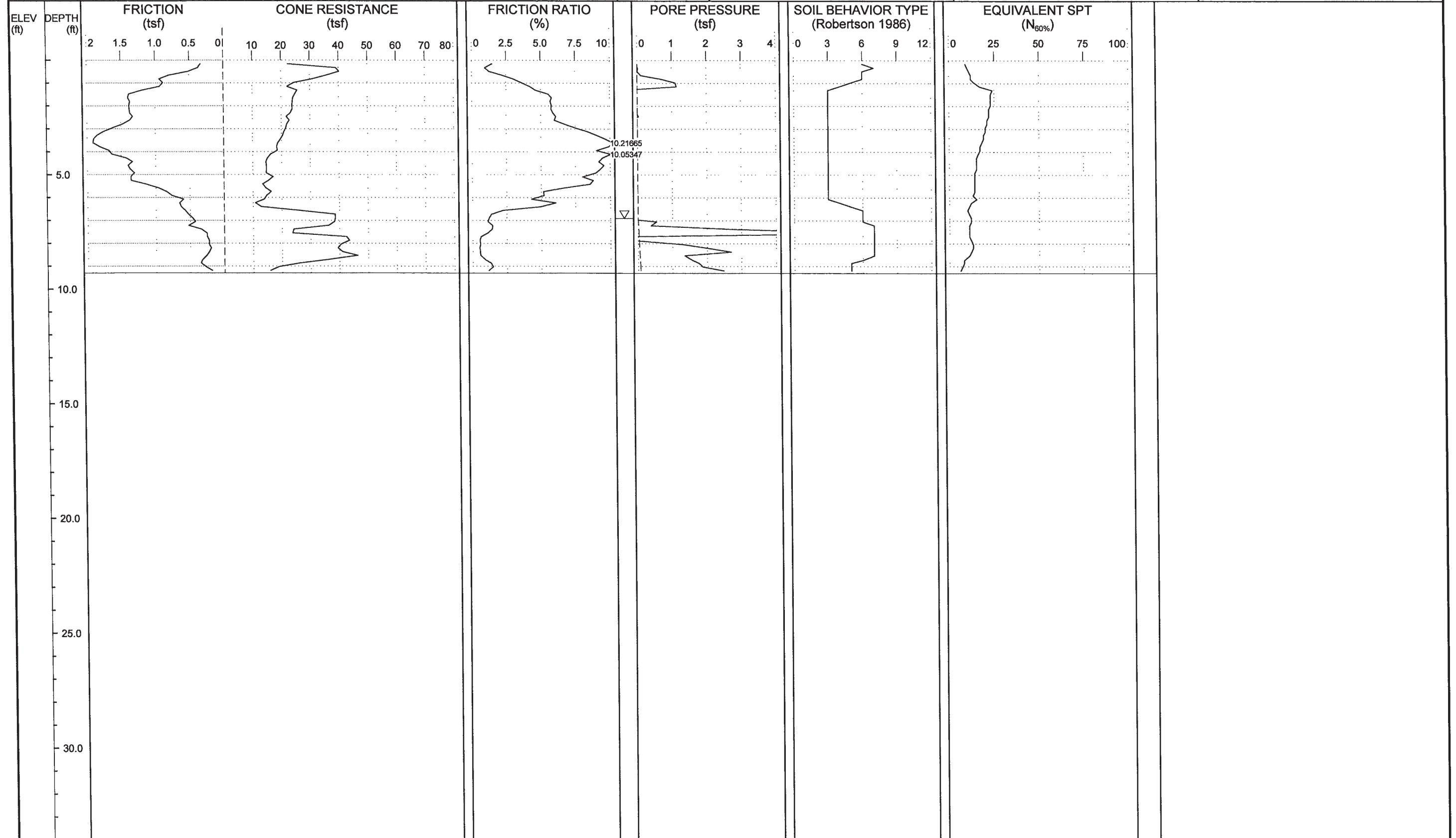




# NCDOT GEOTECHNICAL ENGINEERING UNIT

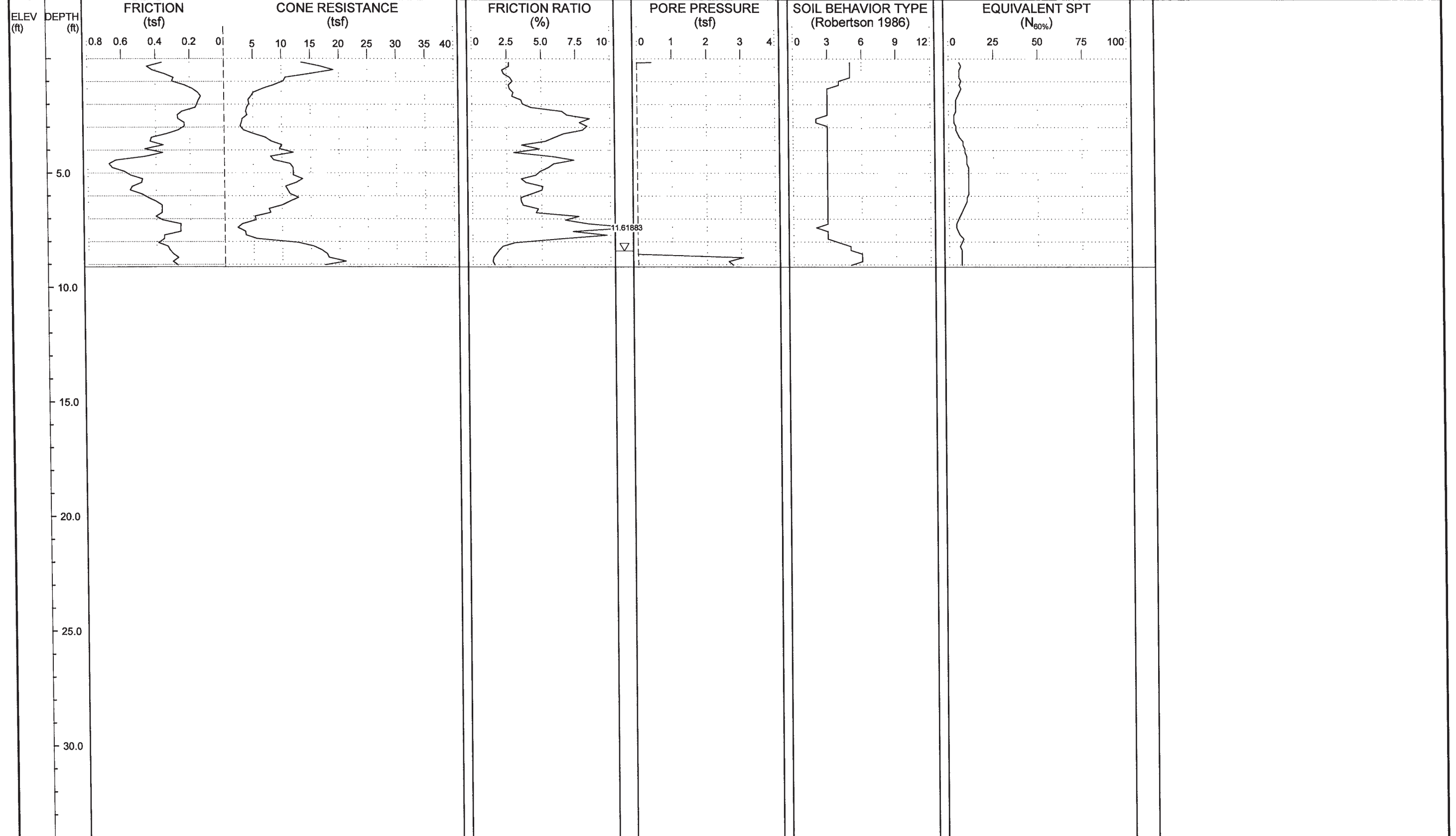
ENGLISH	SHEET NO.: 18
	PROJ. NO.: 34442.1.1
	TIP NO.: R-2514C
	COUNTY: Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 6.9	DRILL METHOD: Direct Push
BORING NO.: L-18600	STATION: 186+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-Strung	CONE TYPE: Piezocone
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 446,153	EASTING: 2,526,975	24 HR. FIAD	START DATE: 12/15/11
				COMP. DATE: 12/15/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 8.4	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-18800	STATION: 188+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 446,352	EASTING: 2,526,991	START DATE: 12/15/11	COMP. DATE: 12/15/11	SURFACE WATER DEPTH: N/A	

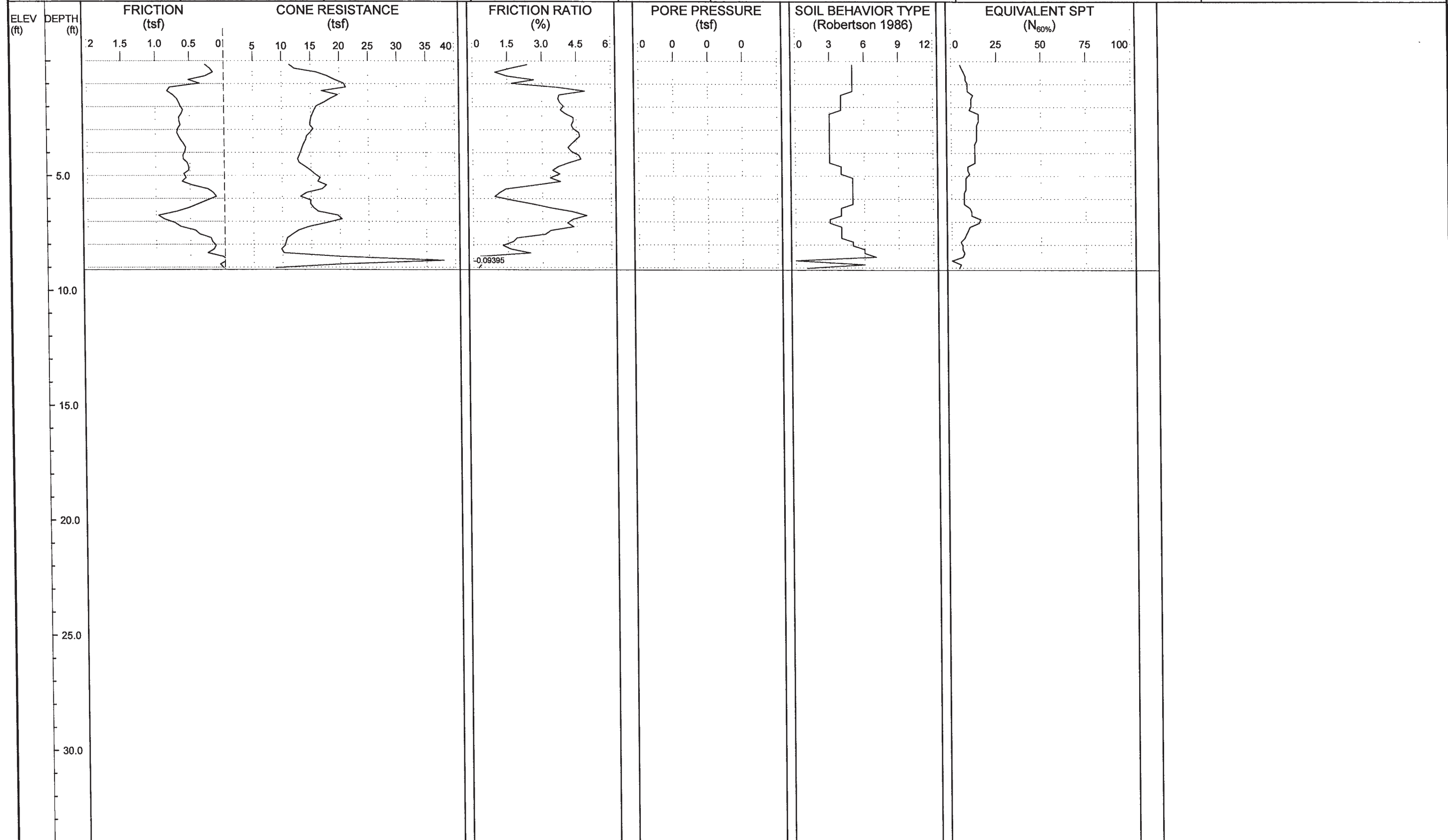




# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH	SHEET NO.: 20
	PROJ. NO.: 34442.1.1
	TIP NO.: R-2514C
	COUNTY: Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. N/A	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-19200	STATION: 192+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 446,751	EASTING: 2,527,025	START DATE: 12/15/11	COMP. DATE: 12/15/11	SURFACE WATER DEPTH: N/A	





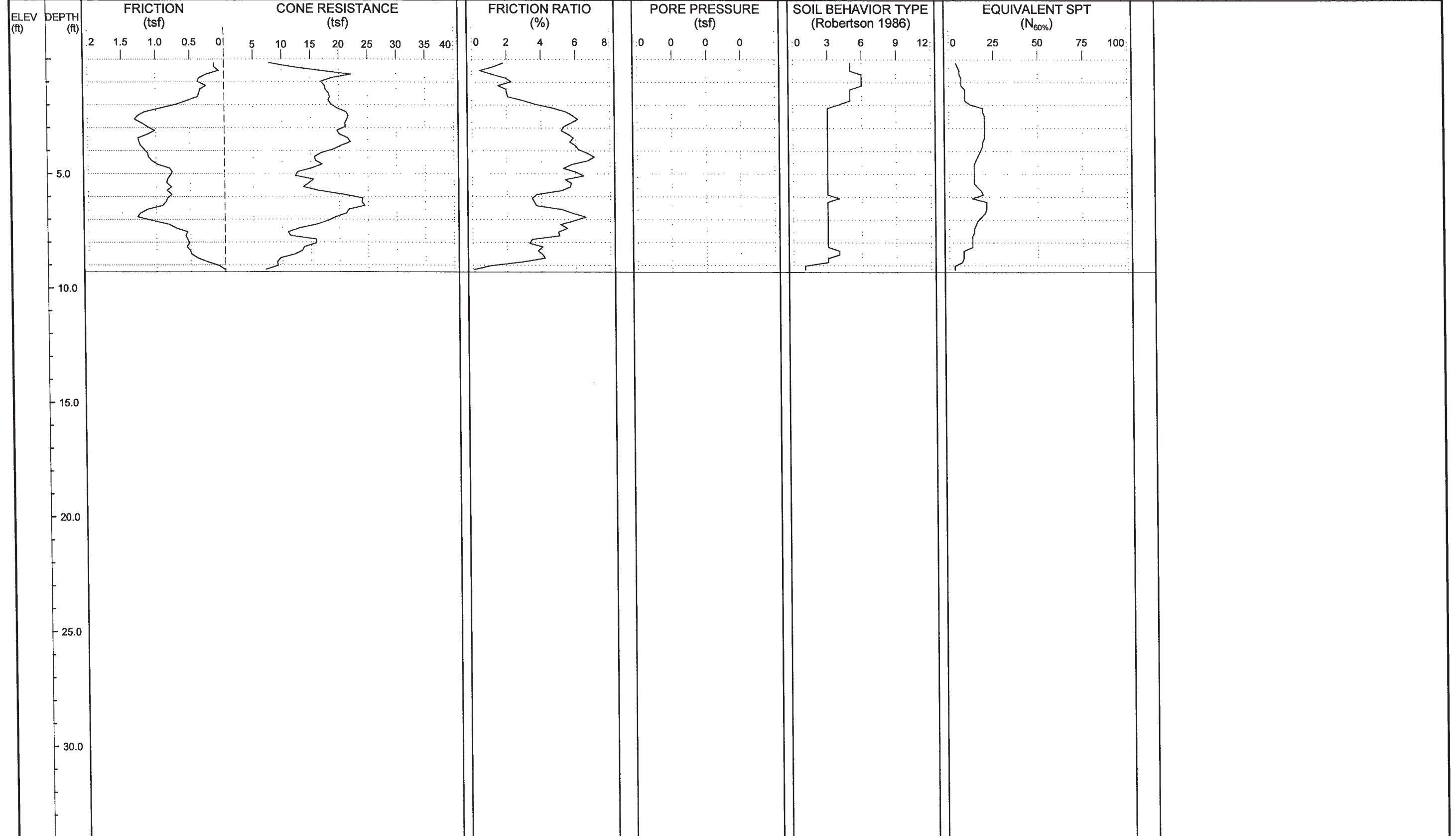


# NCDOT GEOTECHNICAL ENGINEERING UNIT



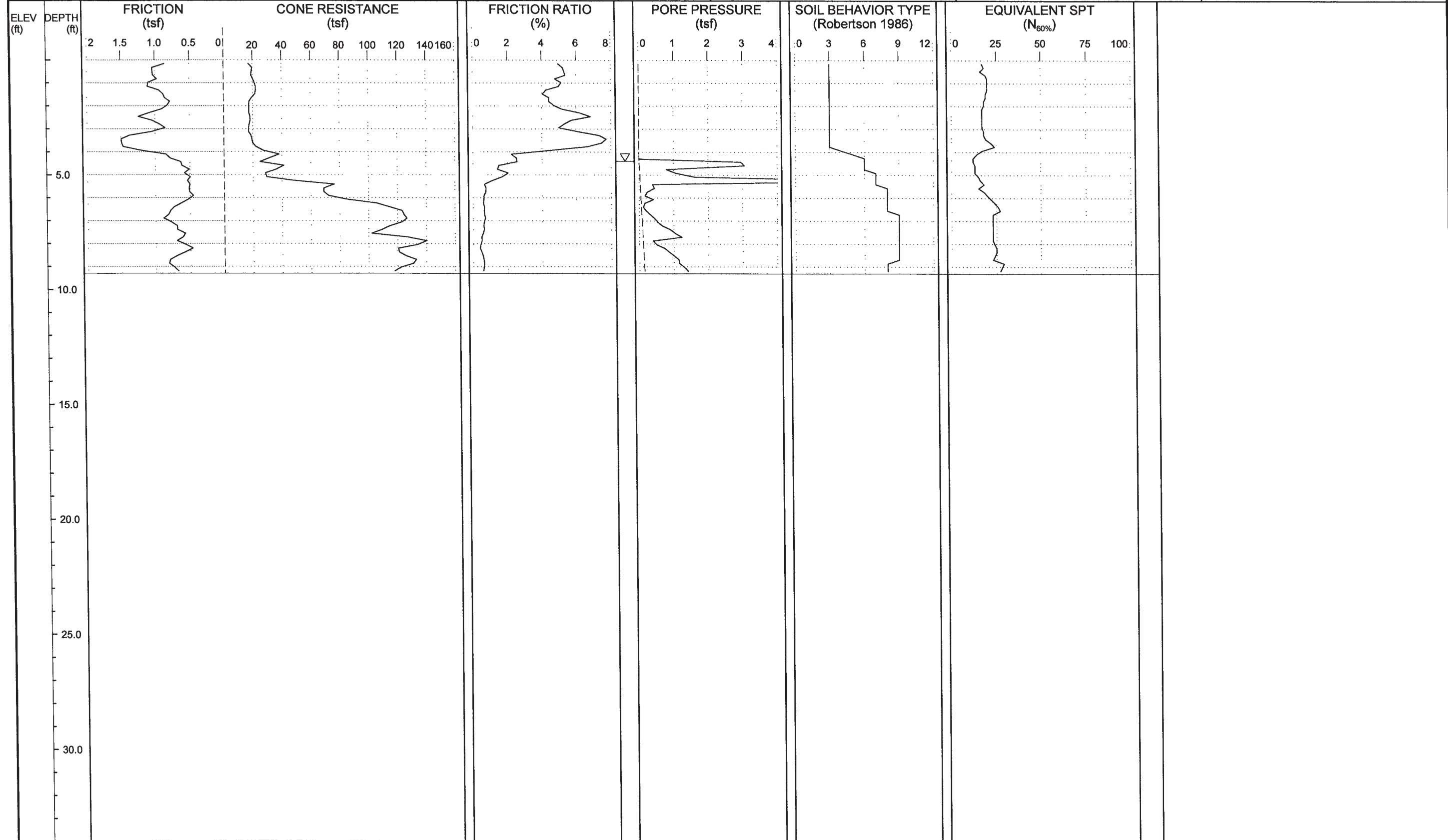
SHEET NO.:	21
PROJ. NO.:	34442.1.1
TIP NO.:	R-2514C
COUNTY:	Jones

PROJECT NO.: 34442.1.1	ID: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. N/A	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-19400	STATION: 194+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 446,950	EASTING: 2,527,042	START DATE: 12/15/11	COMP. DATE: 12/15/11	SURFACE WATER DEPTH: N/A	





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft): 0 HR. 4.4	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: L-19800	STATION: 198+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-Strung	CONE ID: DSA1123
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 447,349	EASTING: 2,527,076	START DATE: 12/15/11	COMP. DATE: 12/15/11
					DRILLER: Cory Robinson
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



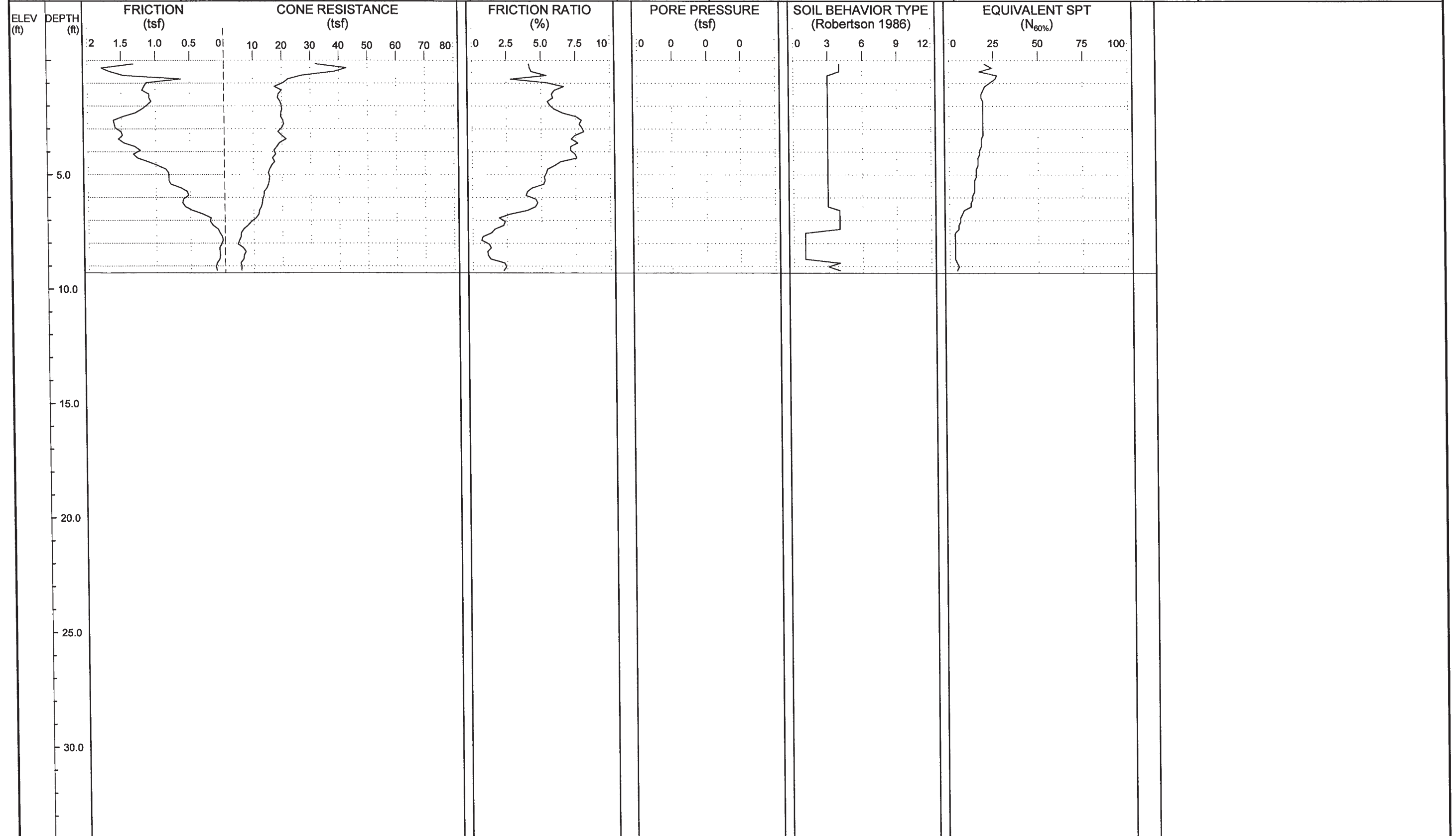


# NCDOT GEOTECHNICAL ENGINEERING UNIT



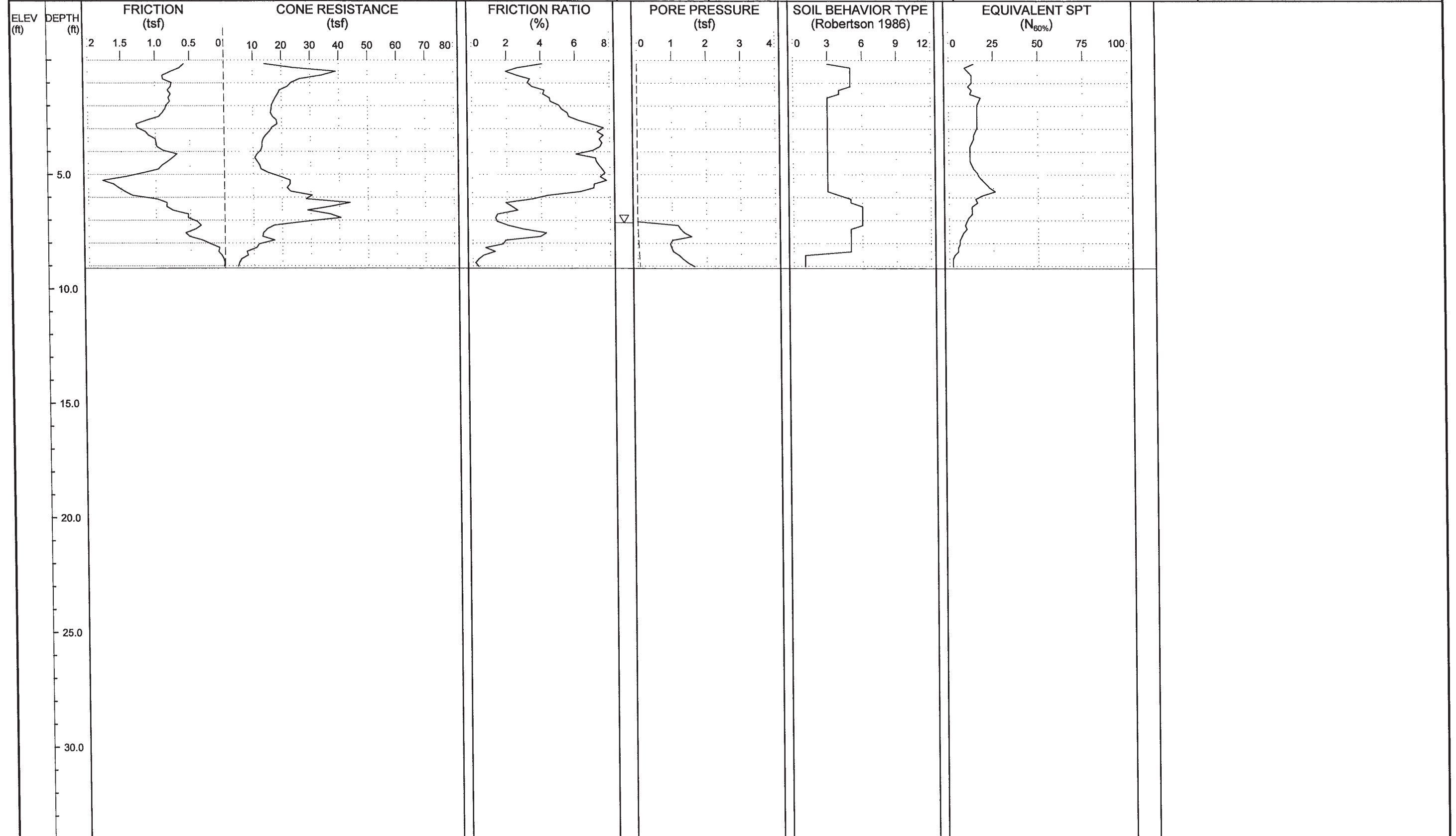
SHEET NO.:	23
PROJ. NO.:	34442.1.1
TIP NO.:	R-2514C
COUNTY:	Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. N/A	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-20000	STATION: 200+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 447,548	EASTING: 2,527,093	START DATE: 12/15/11	COMP. DATE: 12/15/11	SURFACE WATER DEPTH: N/A	





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 7.1	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-20400	STATION: 204+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 447,947	EASTING: 2,527,126	START DATE: 12/15/11	COMP. DATE: 12/15/11	SURFACE WATER DEPTH: N/A	



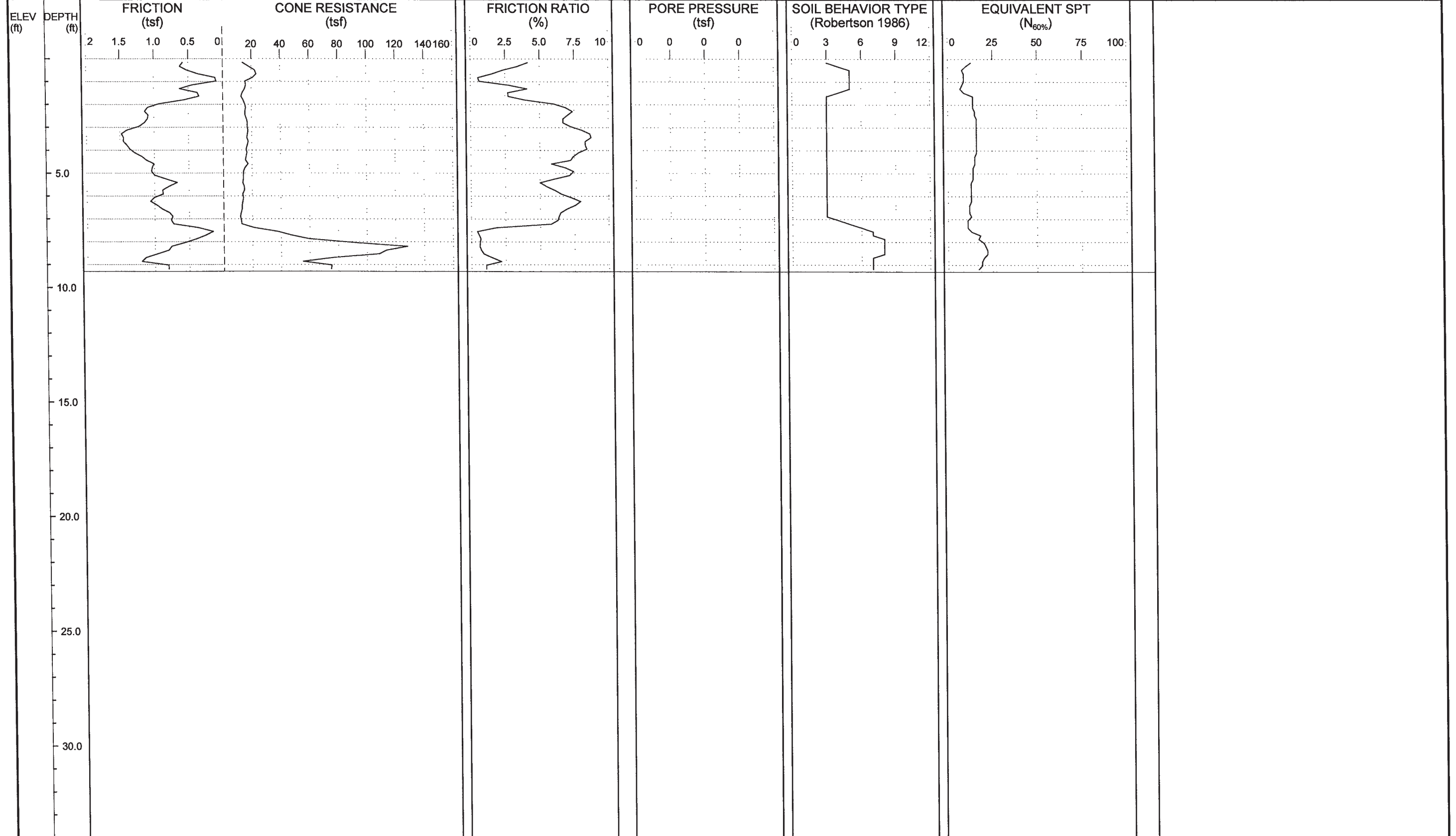


# NCDOT GEOTECHNICAL ENGINEERING UNIT



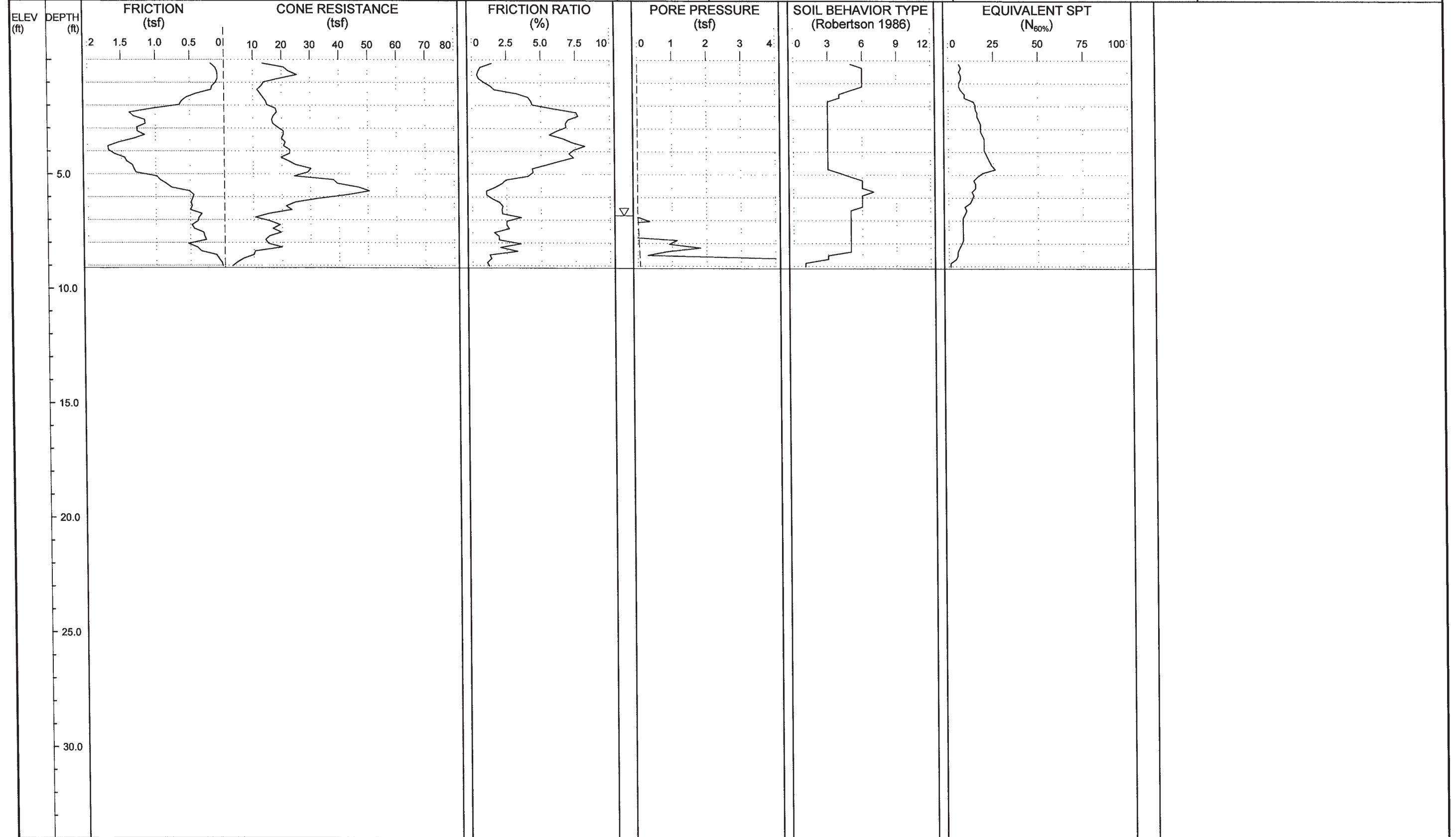
SHEET NO.: 25  
 PROJ. NO.: 34442.1.1  
 TIP NO.: R-2514C  
 COUNTY: Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-20600	STATION: 206+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. N/A	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 448,146	EASTING: 2,527,143	24 HR. FIAD	START DATE: 12/15/11	COMP. DATE: 12/15/11	SURFACE WATER DEPTH: N/A





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: L-21000	STATION: 210+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 6.8	ROD TYPE: Pre-Strung
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 448,545	EASTING: 2,527,177	24 HR. FIAD	START DATE: 12/15/11
				COMP. DATE: 12/15/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



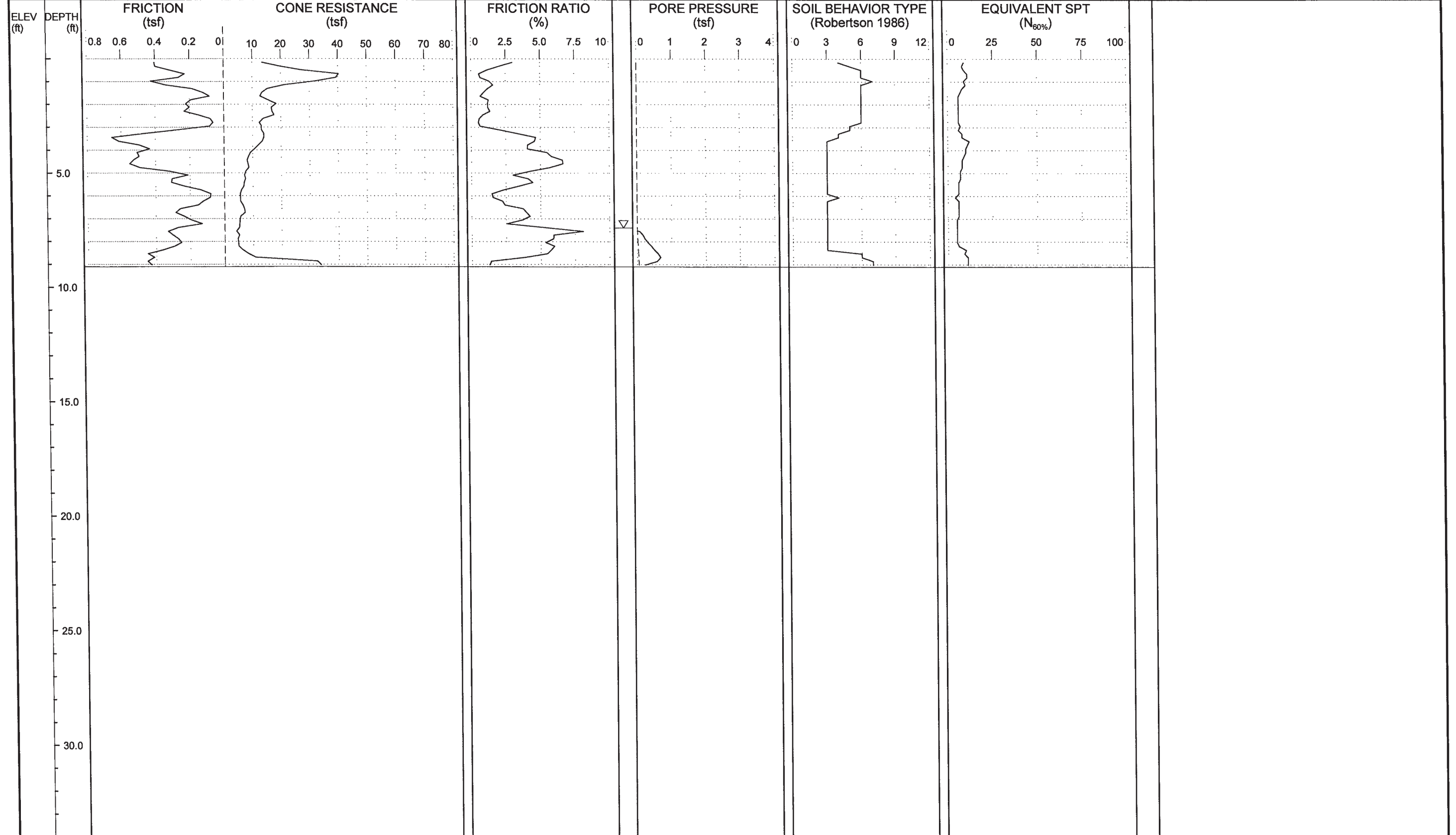


# NCDOT GEOTECHNICAL ENGINEERING UNIT



SHEET NO.:	27
PROJ. NO.:	34442.1.1
TIP NO.:	R-2514C
COUNTY:	Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 7.4	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-21200	STATION: 212+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 448,744	EASTING: 2,527,194	START DATE: 12/15/11	COMP. DATE: 12/15/11	SURFACE WATER DEPTH: N/A	



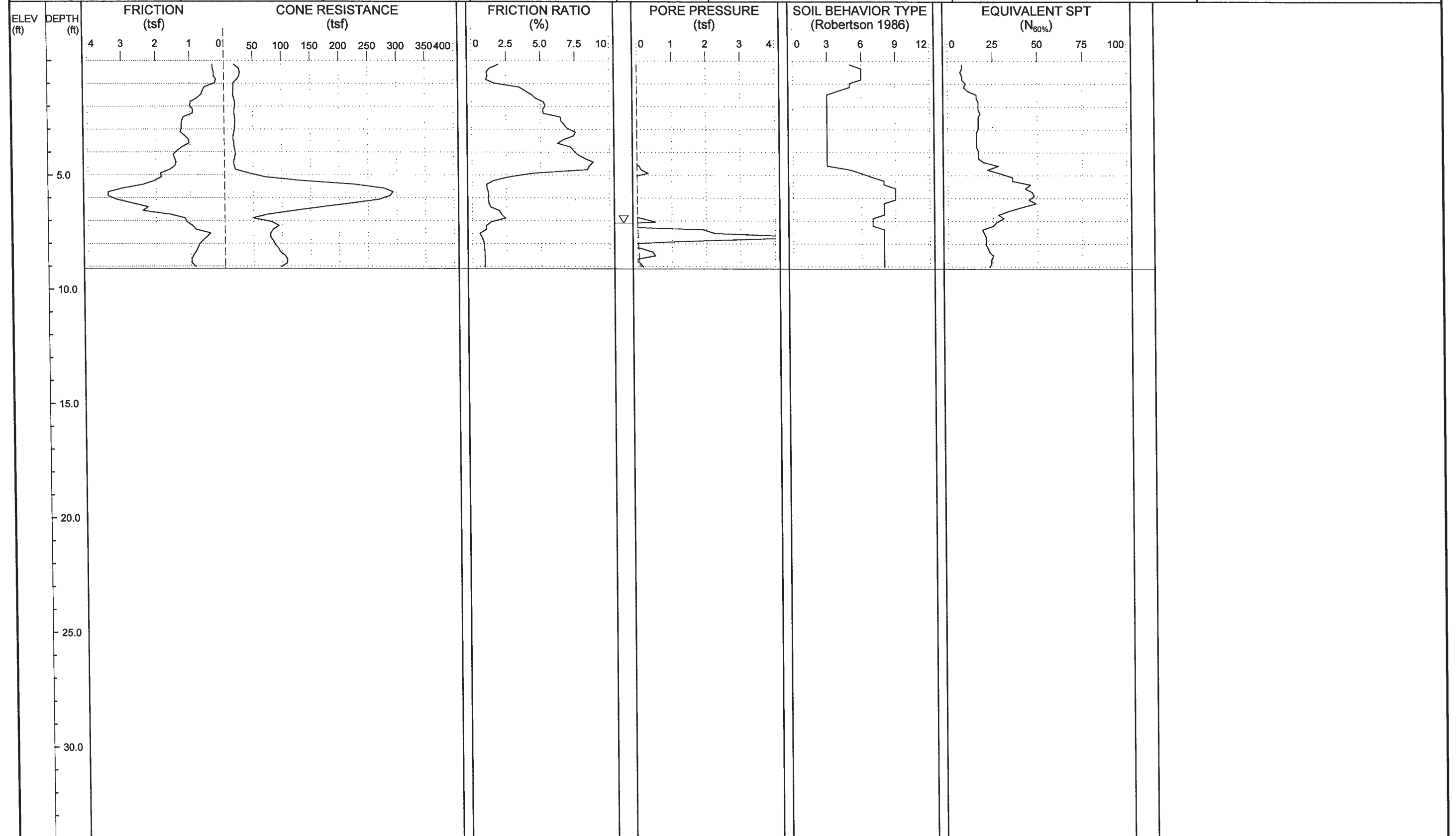


# NCDOT GEOTECHNICAL ENGINEERING UNIT



SHEET NO.: 28  
 PROJ. NO.: 34442.1.1  
 TIP NO.: R-2514C  
 COUNTY: Jones

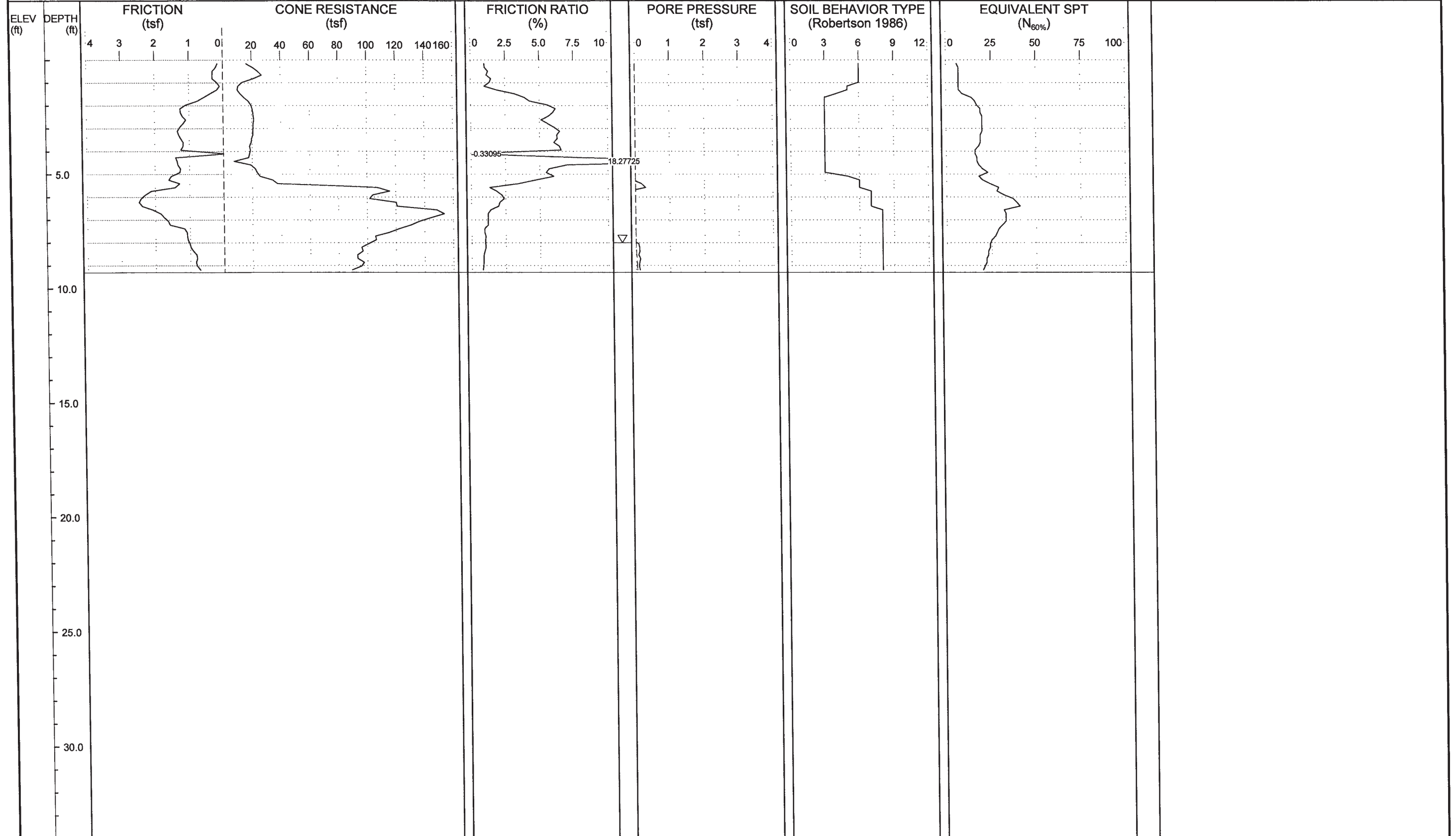
PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 7.1	DRILL METHOD: Direct Push
BORING NO.: L-21800	STATION: 218+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-Strung	CONE TYPE: Piezocone
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 449,342	EASTING: 2,527,244	24 HR. FIAD	START DATE: 12/15/11
				COMP. DATE: 12/15/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	







PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-22000	STATION: 220+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 8.0	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 449,541	EASTING: 2,527,261	24 HR. FIAD	START DATE: 12/15/11	COMP. DATE: 12/15/11	SURFACE WATER DEPTH: N/A

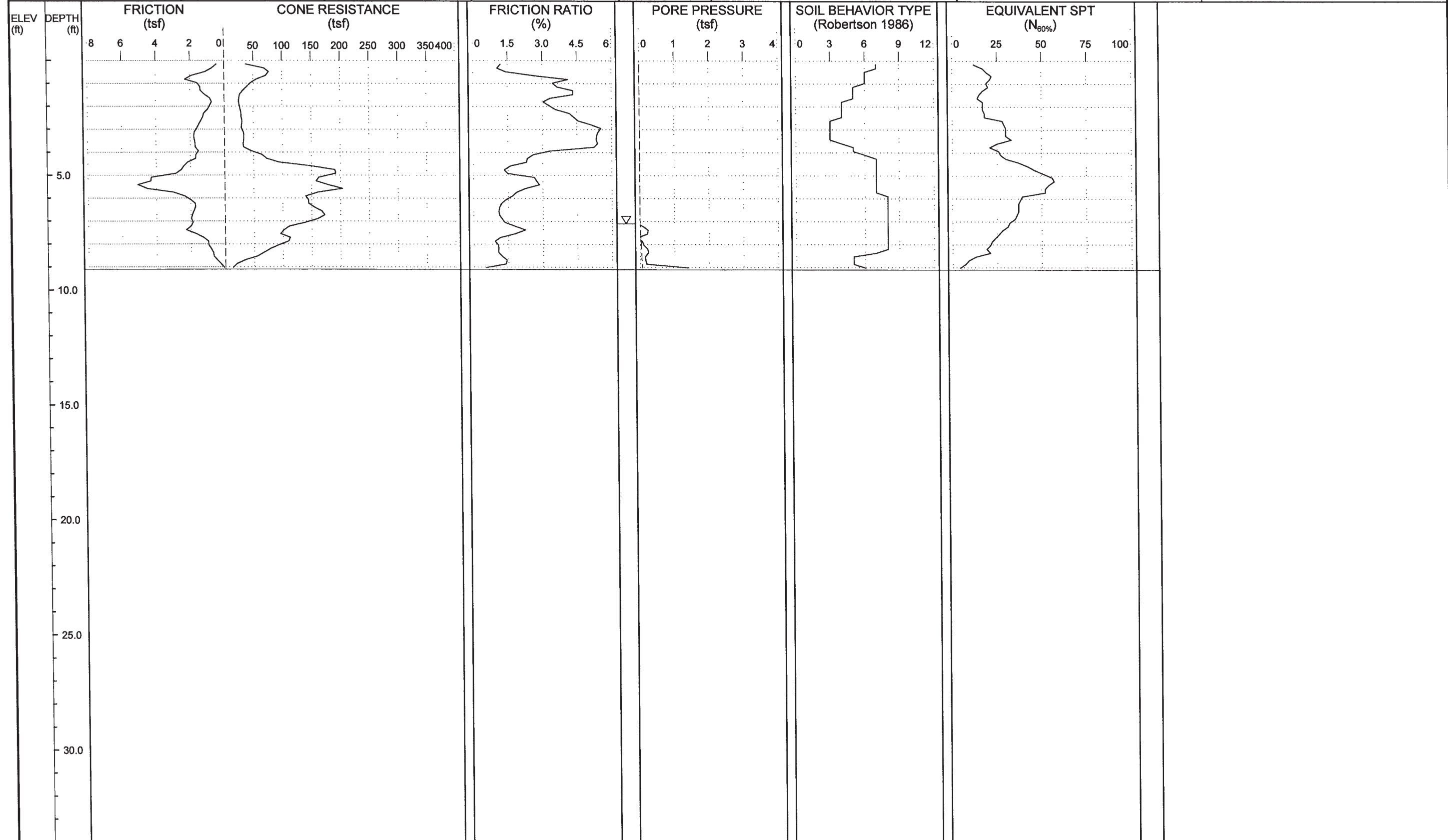




# NCDOT GEOTECHNICAL ENGINEERING UNIT

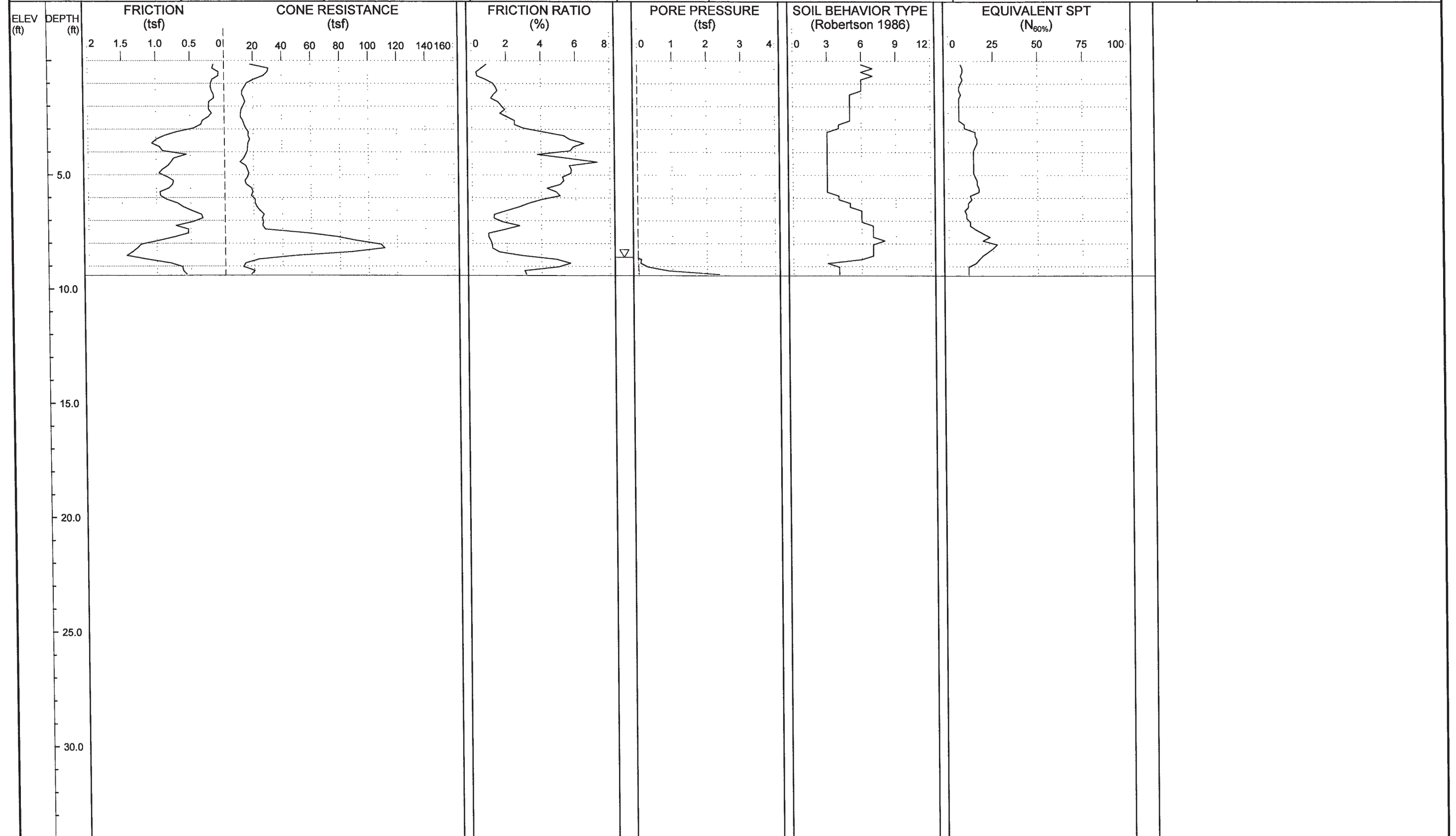
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	PROJ. NO.: 34442.1.1
	TIP NO.: R-2514C
	COUNTY: Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 7.1	DRILL METHOD: Direct Push
BORING NO.: L-22400	STATION: 224+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-Strung	CONE TYPE: Piezocone
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 449,940	EASTING: 2,527,295	24 HR. FIAD	START DATE: 12/15/11
				COMP. DATE: 12/15/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-22600	STATION: 226+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 8.6	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.4 ft	NORTHING: 450,139	EASTING: 2,527,312	24 HR. FIAD	START DATE: 12/15/11	COMP. DATE: 12/15/11	SURFACE WATER DEPTH: N/A

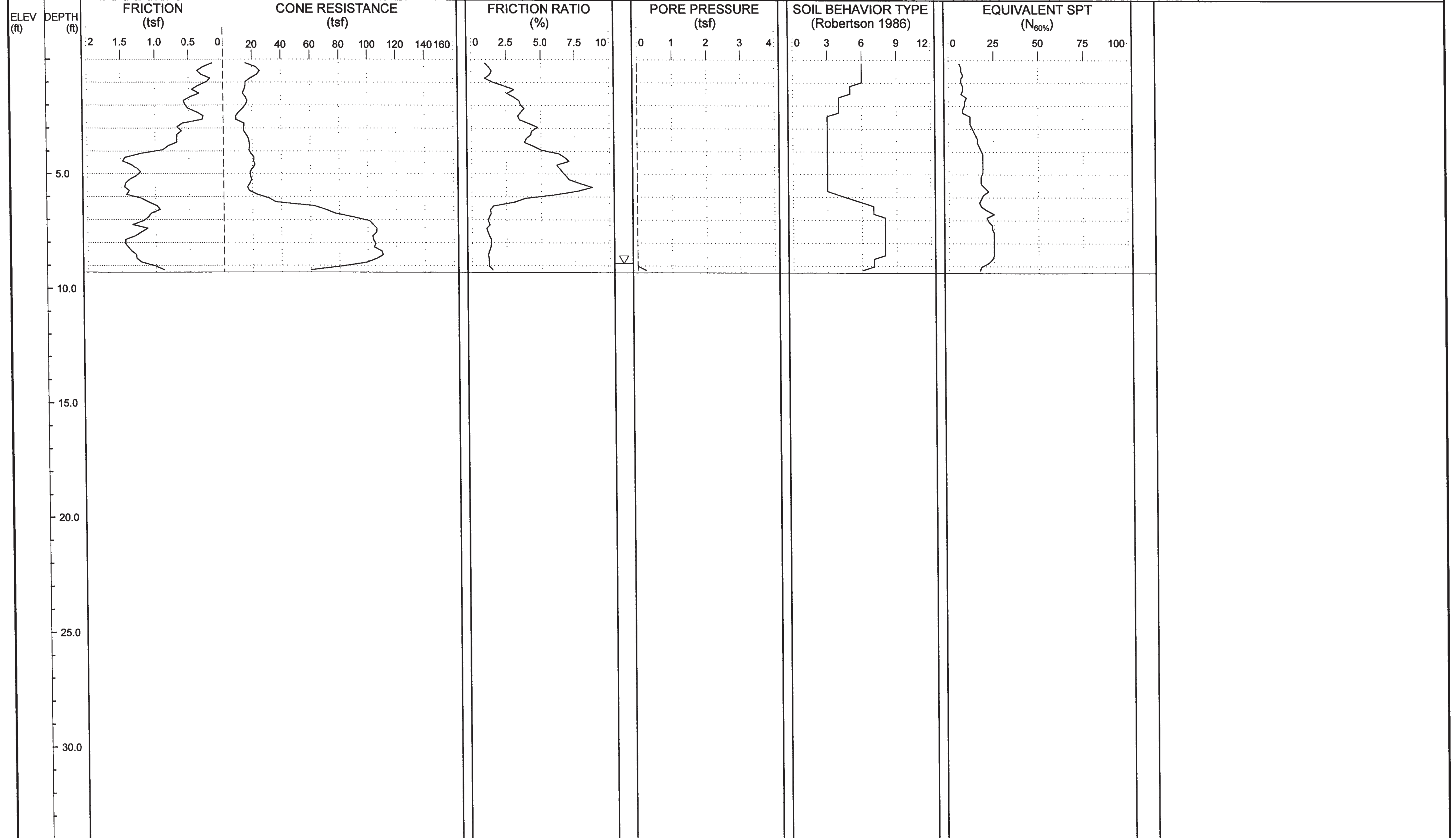




# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH	SHEET NO.: 32
	PROJ. NO.: 34442.1.1
	TIP NO.: R-2514C
	COUNTY: Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: L-23000	STATION: 230+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 8.9	ROD TYPE: Pre-Strung
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 450,537	EASTING: 2,527,345	24 HR. FIAD	START DATE: 12/15/11
				COMP. DATE: 12/15/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	

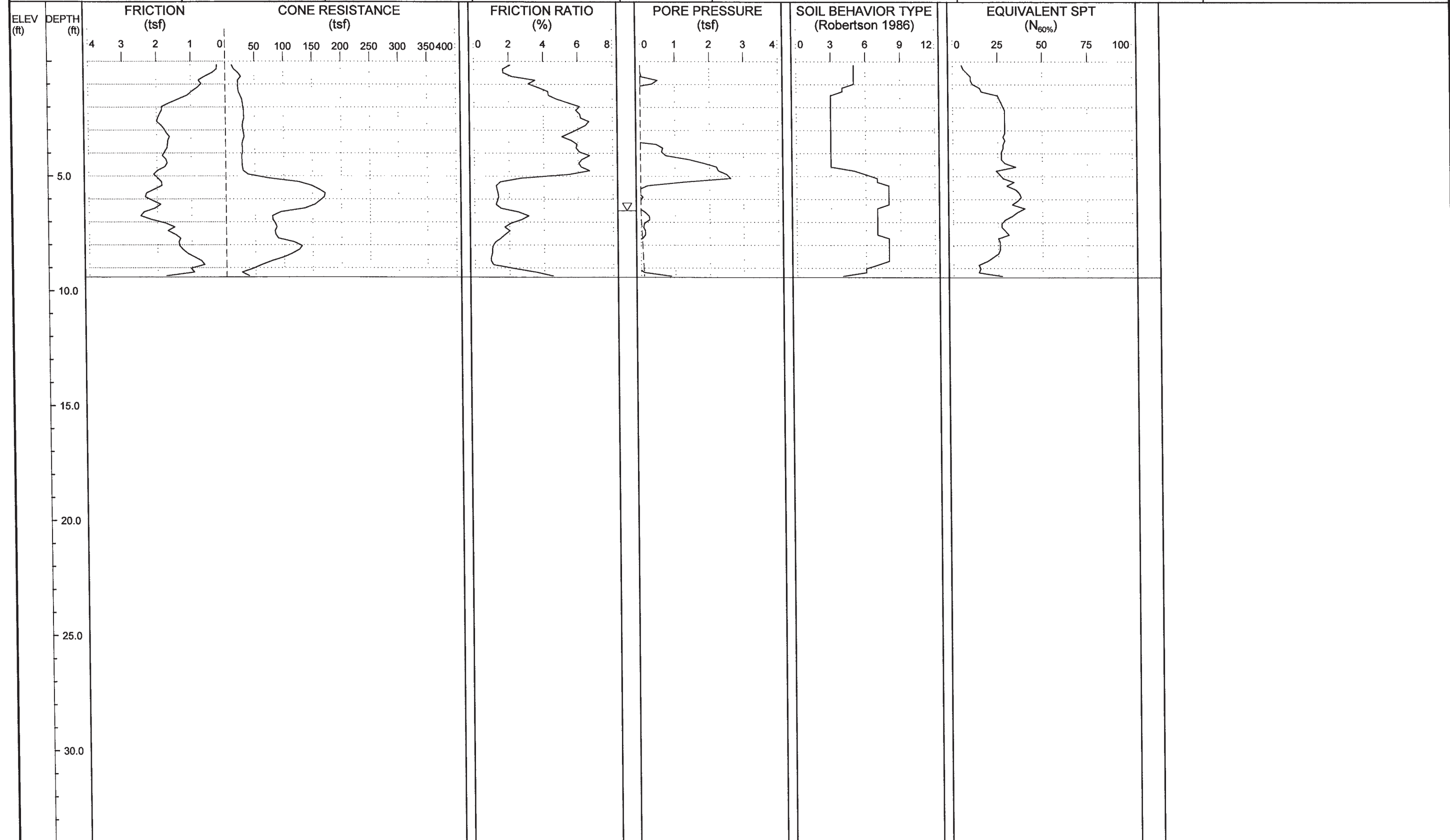




# NCDOT GEOTECHNICAL ENGINEERING UNIT

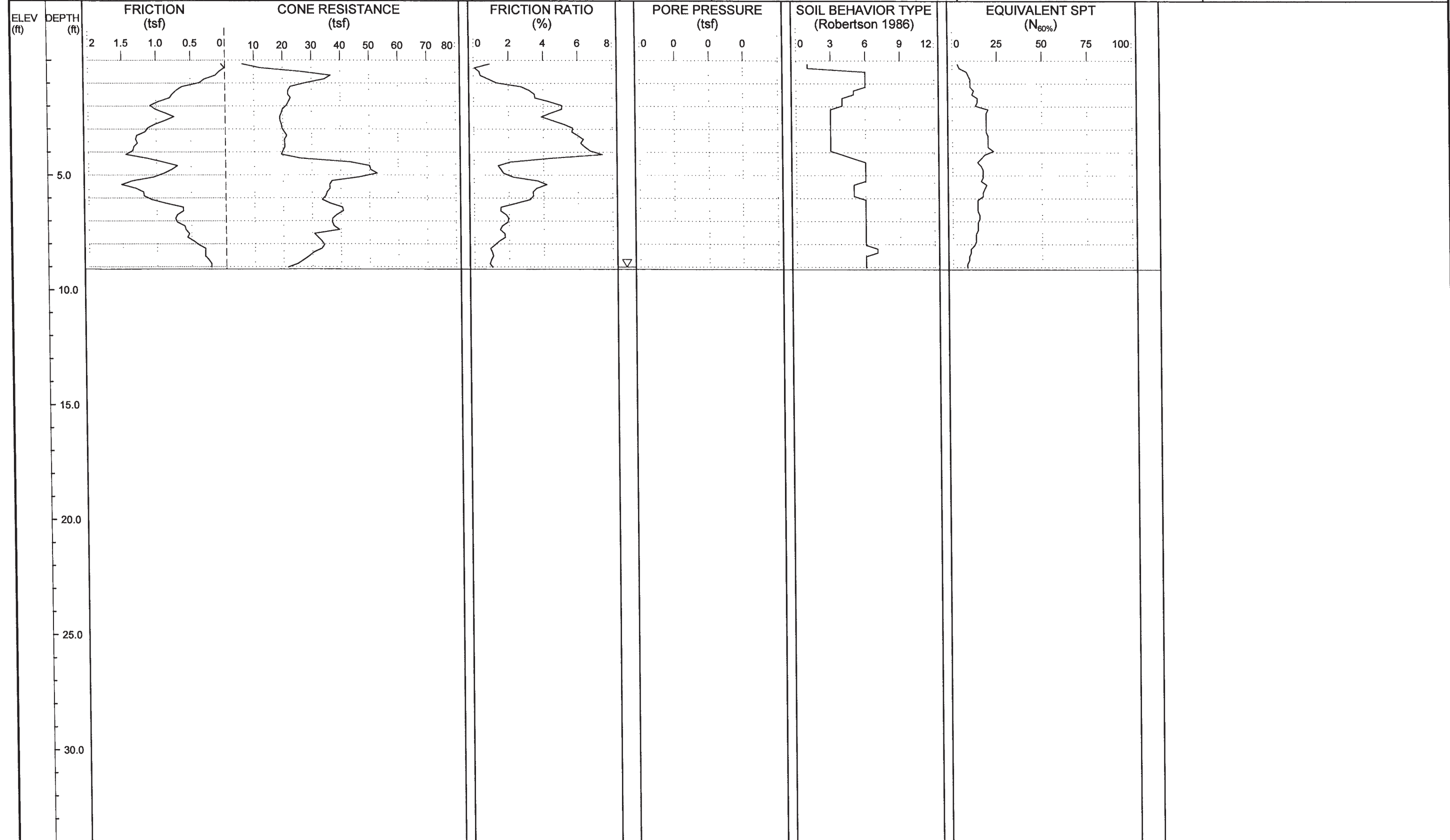
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	PROJ. NO.:	34442.1.1
	TIP NO.:	R-2514C
	COUNTY:	Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 6.5	DRILL METHOD: Direct Push
BORING NO.: L-23200	STATION: 232+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-Strung	CONE TYPE: Piezocone
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.4 ft	NORTHING: 450,737	EASTING: 2,527,362	24 HR. FIAD	CONE ID: DSA1123
				START DATE: 12/15/11	DRILLER: Cory Robinson
				COMP. DATE: 12/15/11	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	



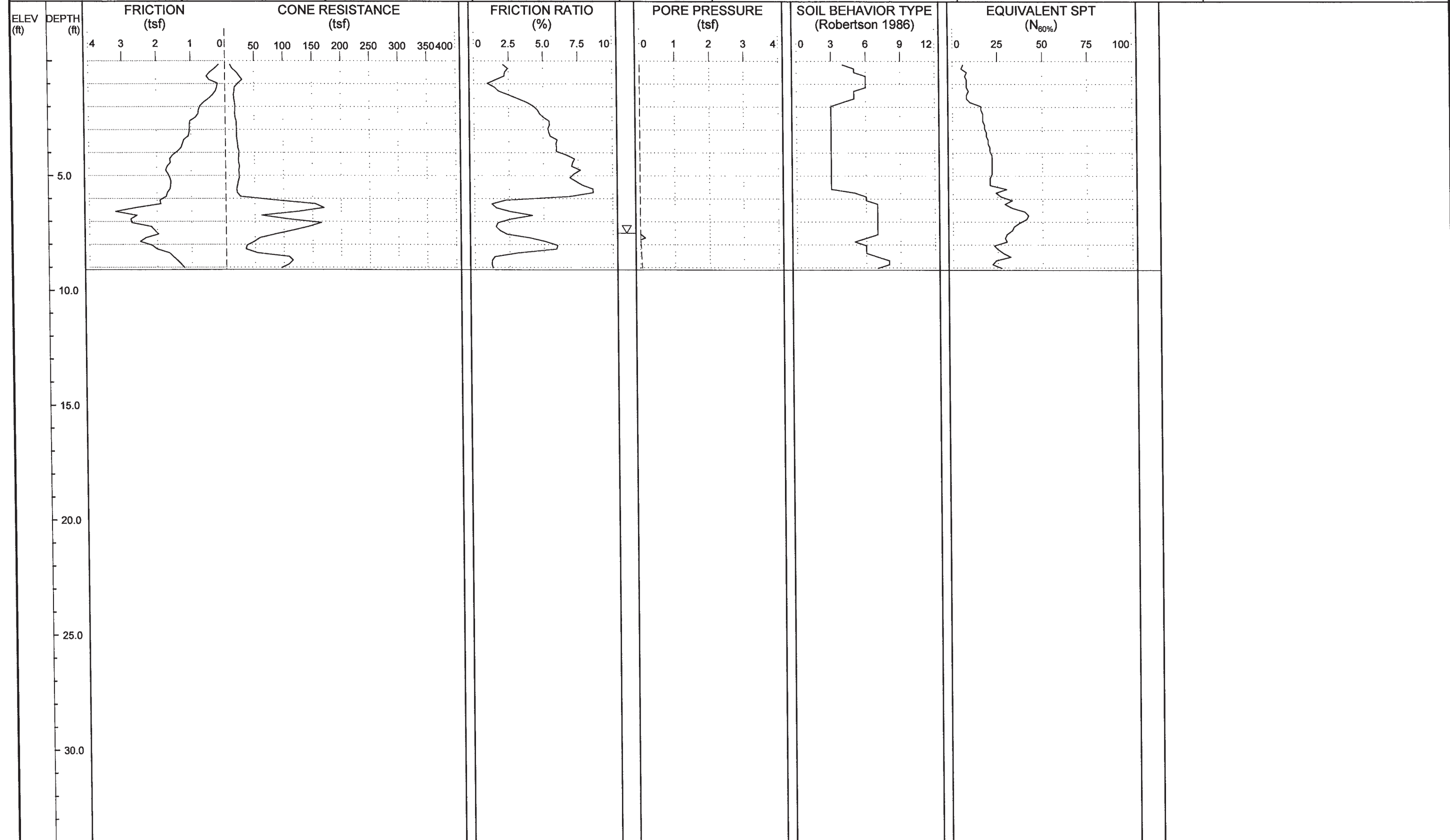


PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 9.0	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-23700	STATION: 237+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 451,235	EASTING: 2,527,404	START DATE: 12/14/11	COMP. DATE: 12/14/11	SURFACE WATER DEPTH: N/A	



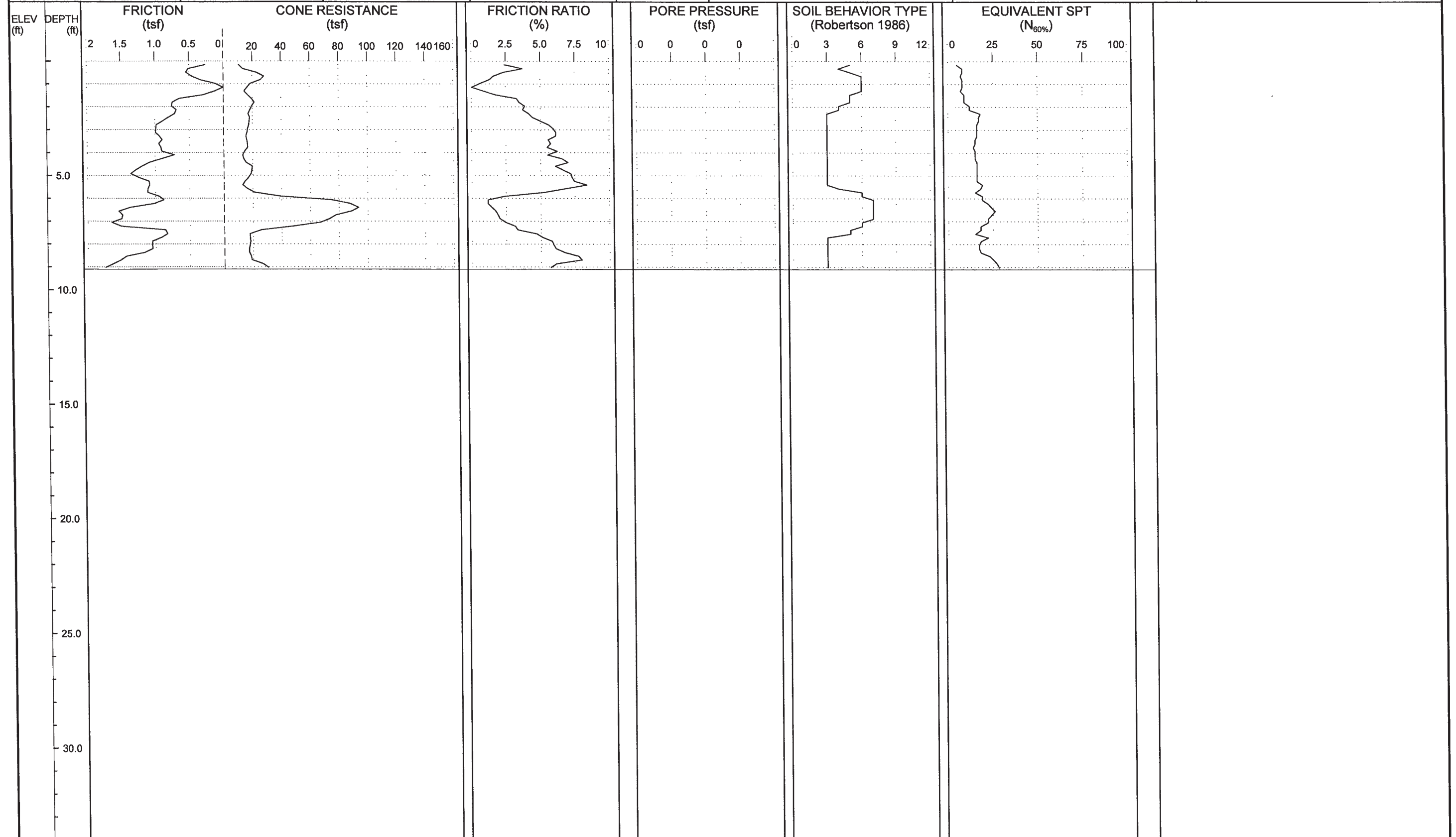


PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 7.5	DRILL METHOD: Direct Push
BORING NO.: L-23900	STATION: 239+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-Strung	CONE TYPE: Piezocone
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 451,434	EASTING: 2,527,424	24 HR. FIAD	CONE ID: DSA1123
				START DATE: 12/14/11	DRILLER: Cory Robinson
				COMP. DATE: 12/14/11	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	





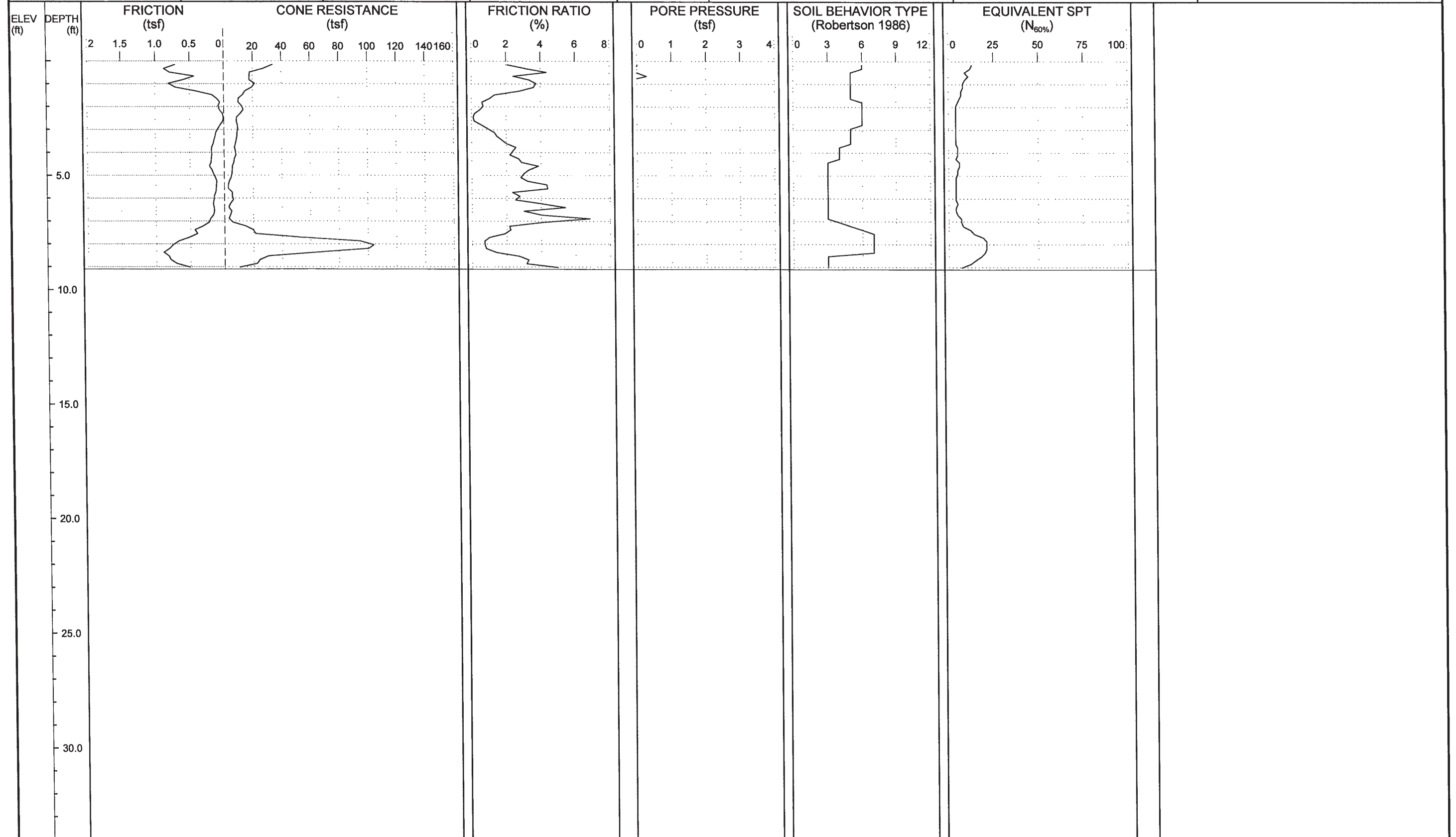
PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-24300	STATION: 243+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. N/A	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 451,830	EASTING: 2,527,479	24 HR. FIAD	START DATE: 12/14/11	COMP. DATE: 12/14/11	SURFACE WATER DEPTH: N/A





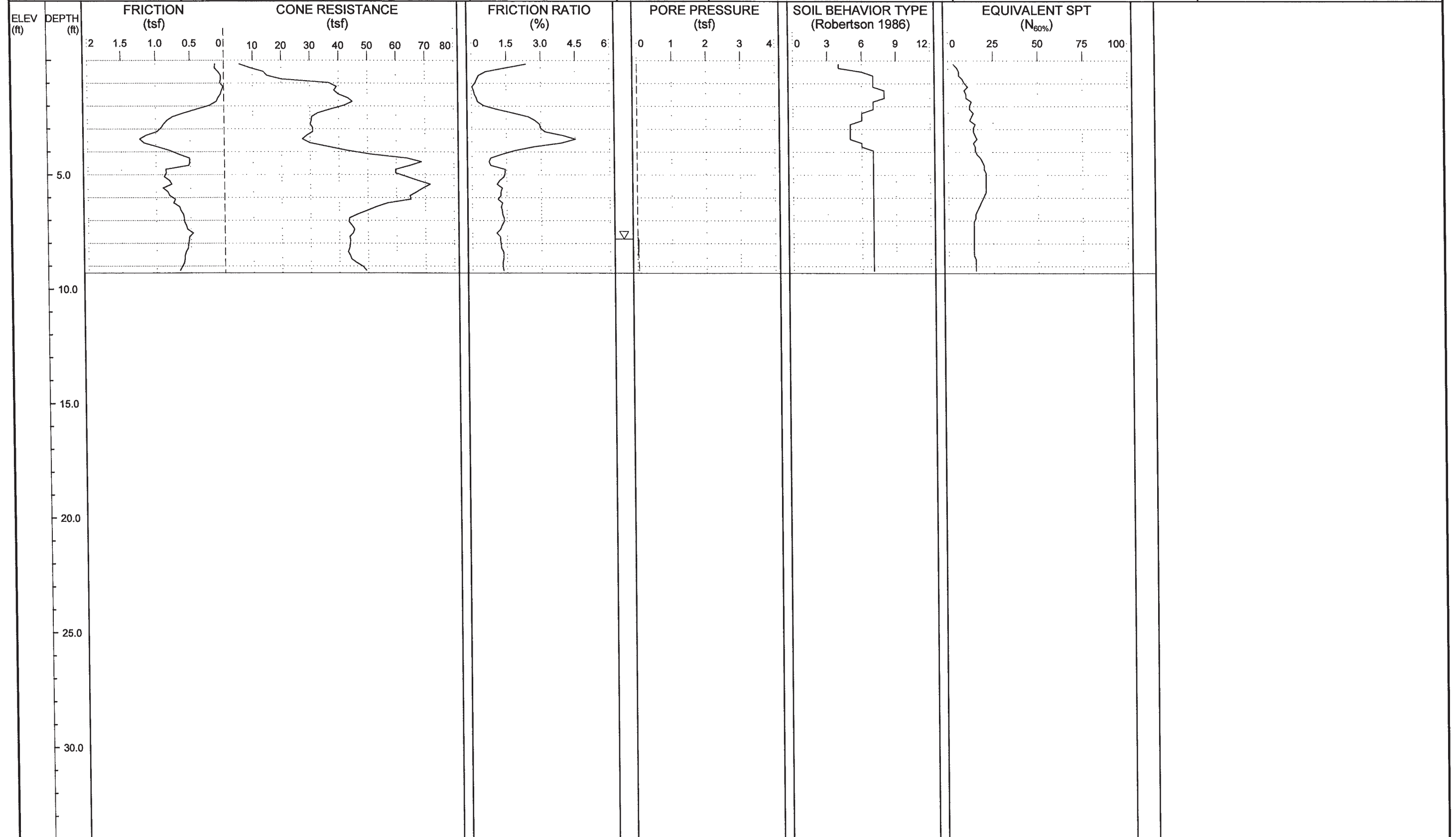


PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-2525	STATION: 25+25	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. N/A	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 430,401	EASTING: 2,528,742	24 HR. FIAD	START DATE: 12/16/11	COMP. DATE: 12/16/11	SURFACE WATER DEPTH: N/A



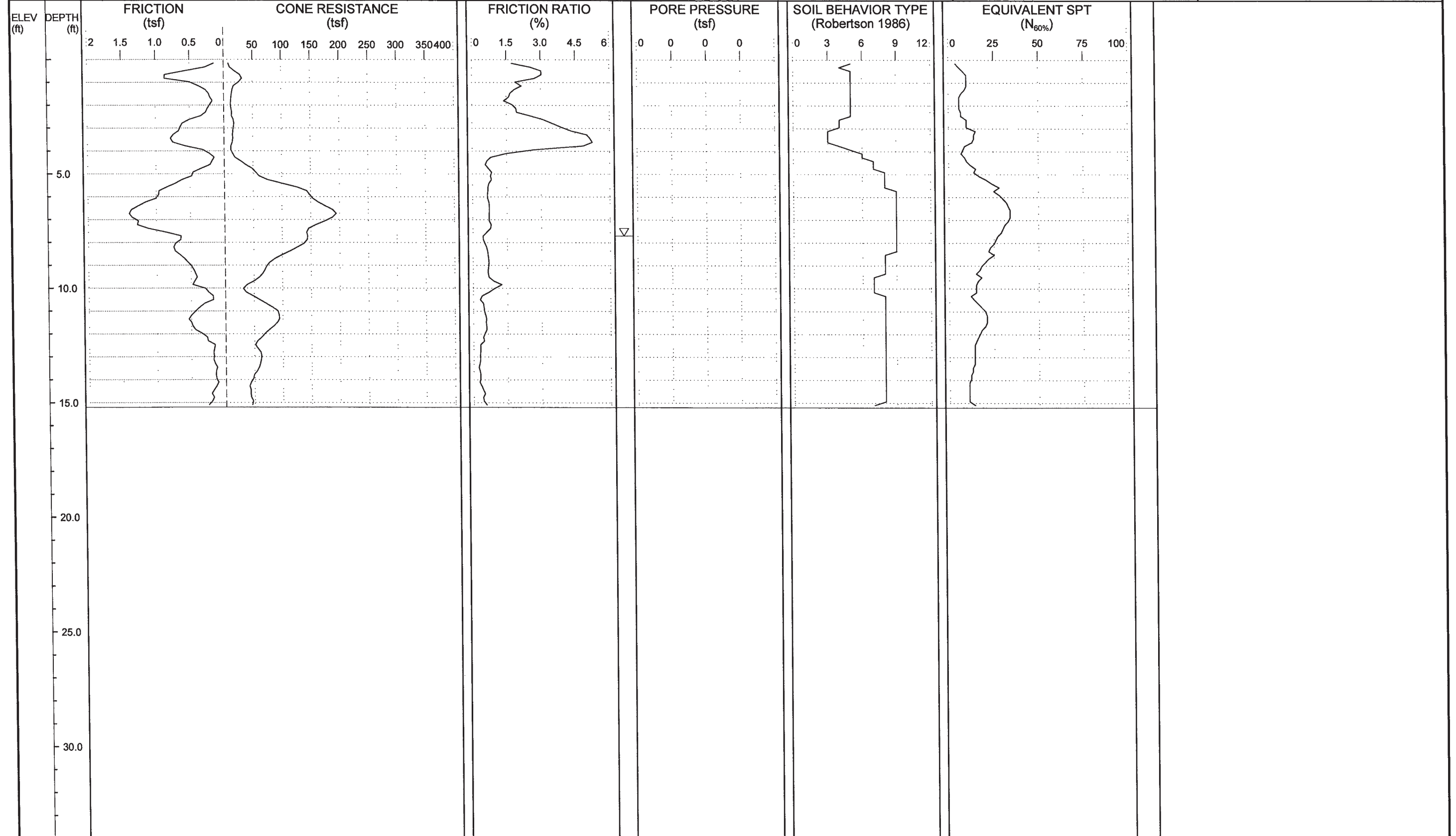


PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 7.8	DRILL METHOD: Direct Push
BORING NO.: L-25300	STATION: 253+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 452,811	EASTING: 2,527,676	START DATE: 12/14/11	DRILLER: Cory Robinson
				COMP. DATE: 12/14/11	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	



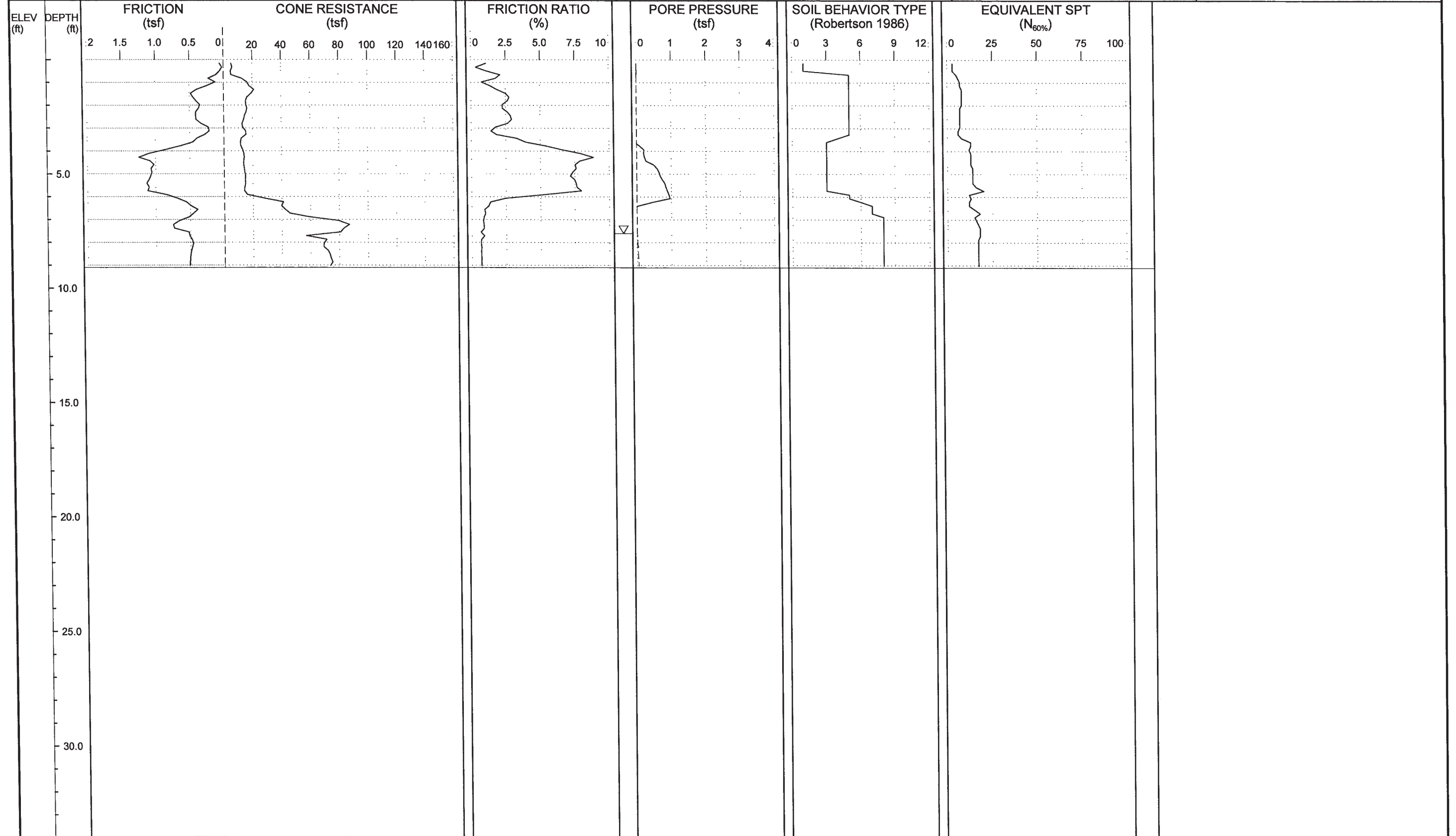


PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: L-26300	STATION: 263+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 7.7	ROD TYPE: Pre-Strung
COLLAR ELEV.: N/A	TOTAL DEPTH: 15.2 ft	NORTHING: 453,790	EASTING: 2,527,878	24 HR. FIAD	START DATE: 12/14/11
				COMP. DATE: 12/14/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: L-27300	STATION: 273+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 7.6	ROD TYPE: Pre-Strung
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 454,769	EASTING: 2,528,080	24 HR. FIAD	START DATE: 12/14/11
				COMP. DATE: 12/14/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



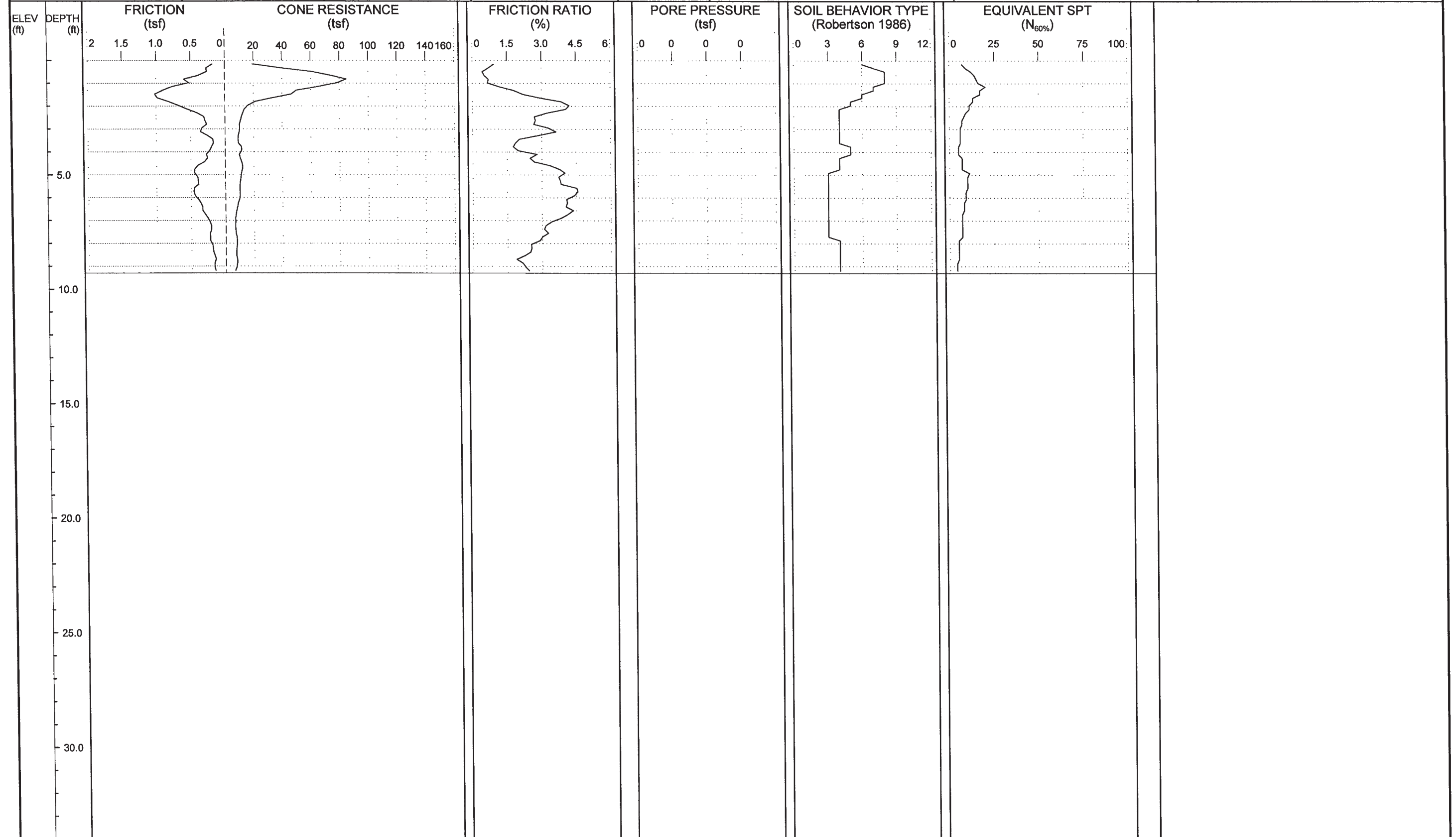


# NCDOT GEOTECHNICAL ENGINEERING UNIT



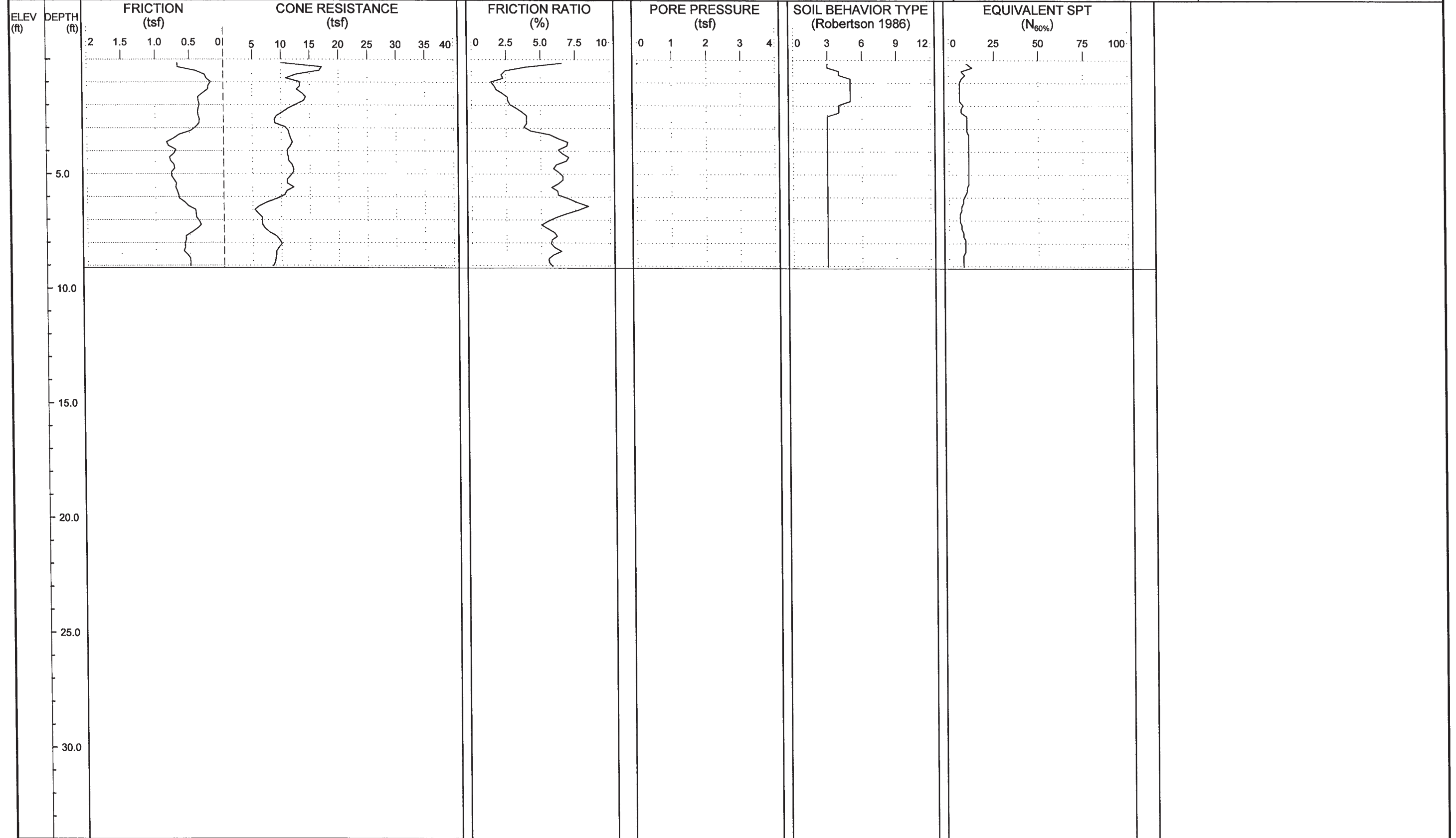
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PROJ. NO.:	34442.1.1
TIP NO.:	R-2514C
COUNTY:	Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. N/A	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-28300	STATION: 283+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 455,749	EASTING: 2,528,282	START DATE: 12/14/11	COMP. DATE: 12/14/11	SURFACE WATER DEPTH: N/A	





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. N/A	DRILL METHOD: Direct Push
BORING NO.: L-28700	STATION: 287+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-Strung	CONE TYPE: Piezocone
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 456,140	EASTING: 2,528,363	24 HR. FIAD	START DATE: 12/14/11
				COMP. DATE: 12/14/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



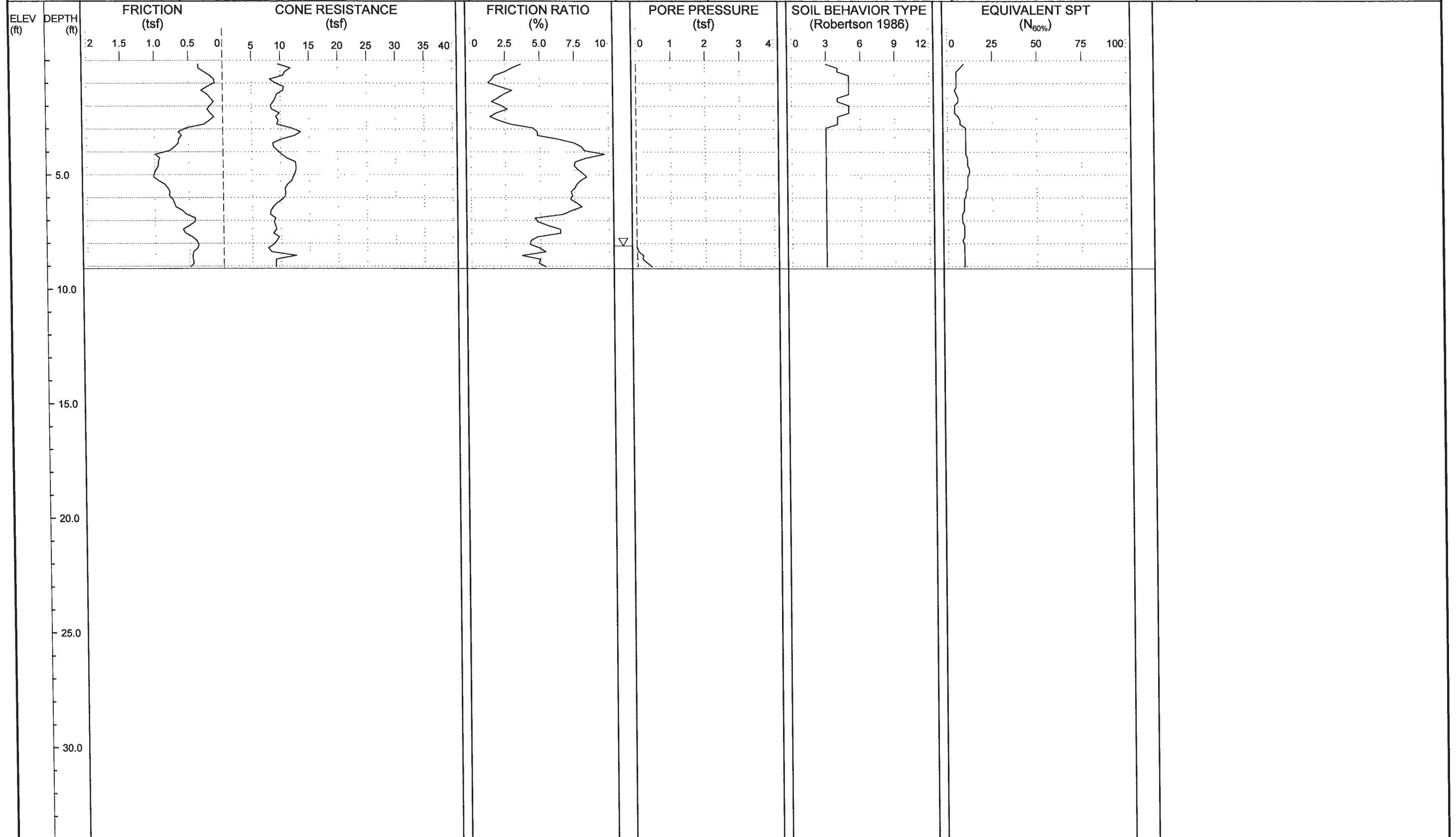


# NCDOT GEOTECHNICAL ENGINEERING UNIT



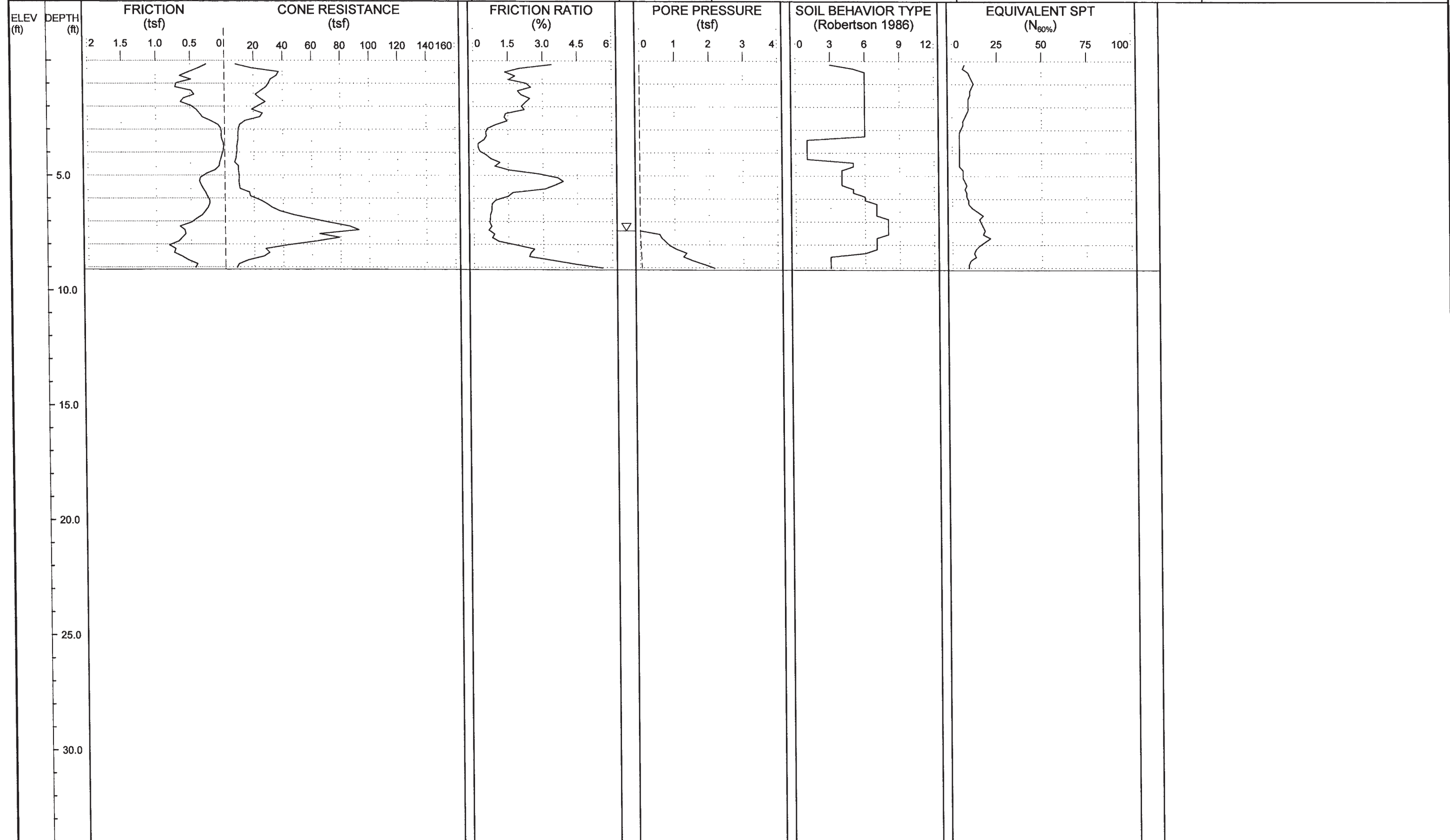
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 PROJ. NO.: 34442.1.1  
 TIP NO.: R-2514C  
 COUNTY: Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 8.1	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-28900	STATION: 289+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 456,336	EASTING: 2,528,403	START DATE: 12/14/11	COMP. DATE: 12/14/11	SURFACE WATER DEPTH: N/A	





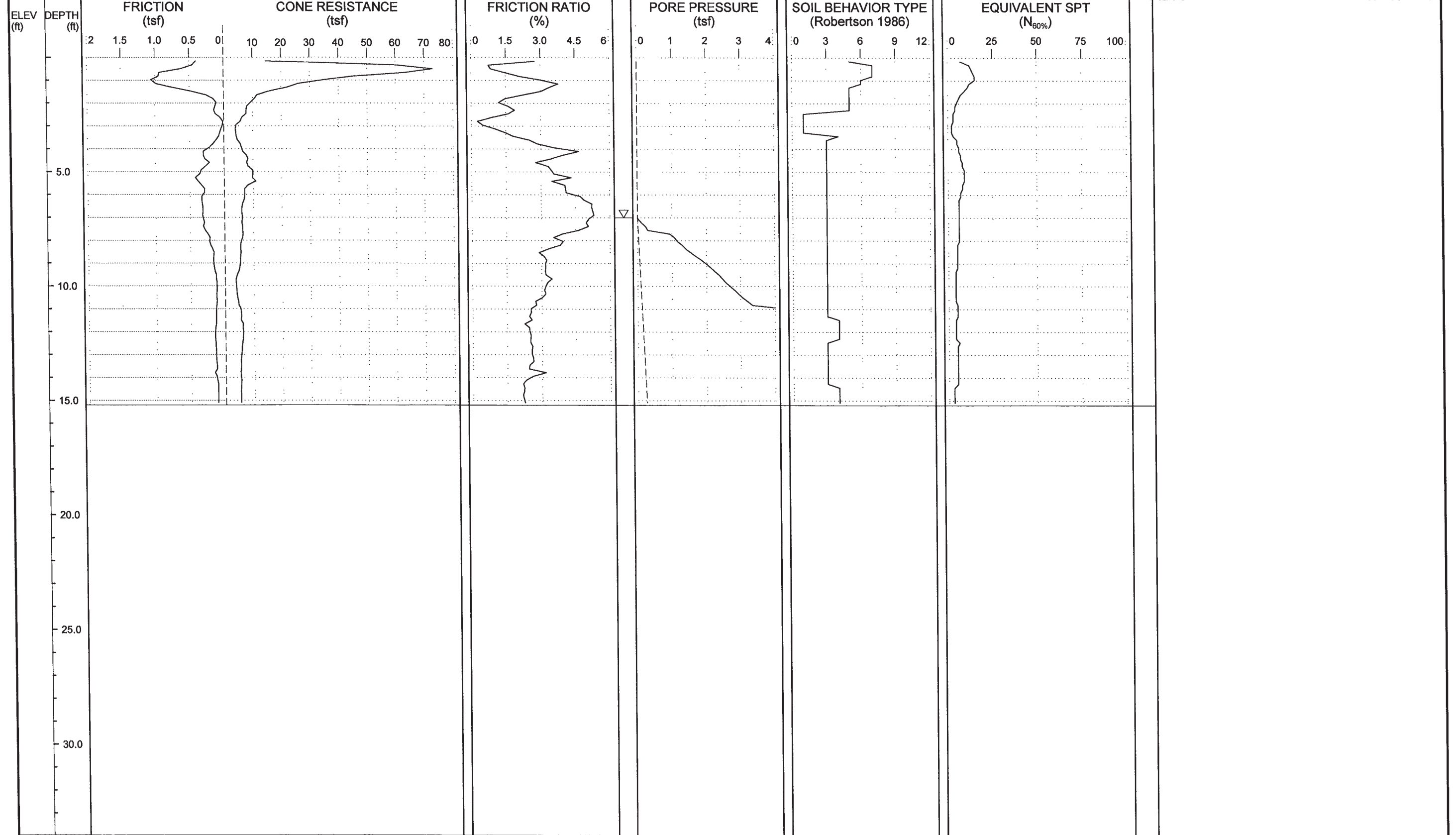
PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: L-2900	STATION: 29+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 7.4	ROD TYPE: Pre-Strung
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 430,775	EASTING: 2,528,713	24 HR. FIAD	START DATE: 12/16/11
				COMP. DATE: 12/16/11	DRILLER: Cory Robinson
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A





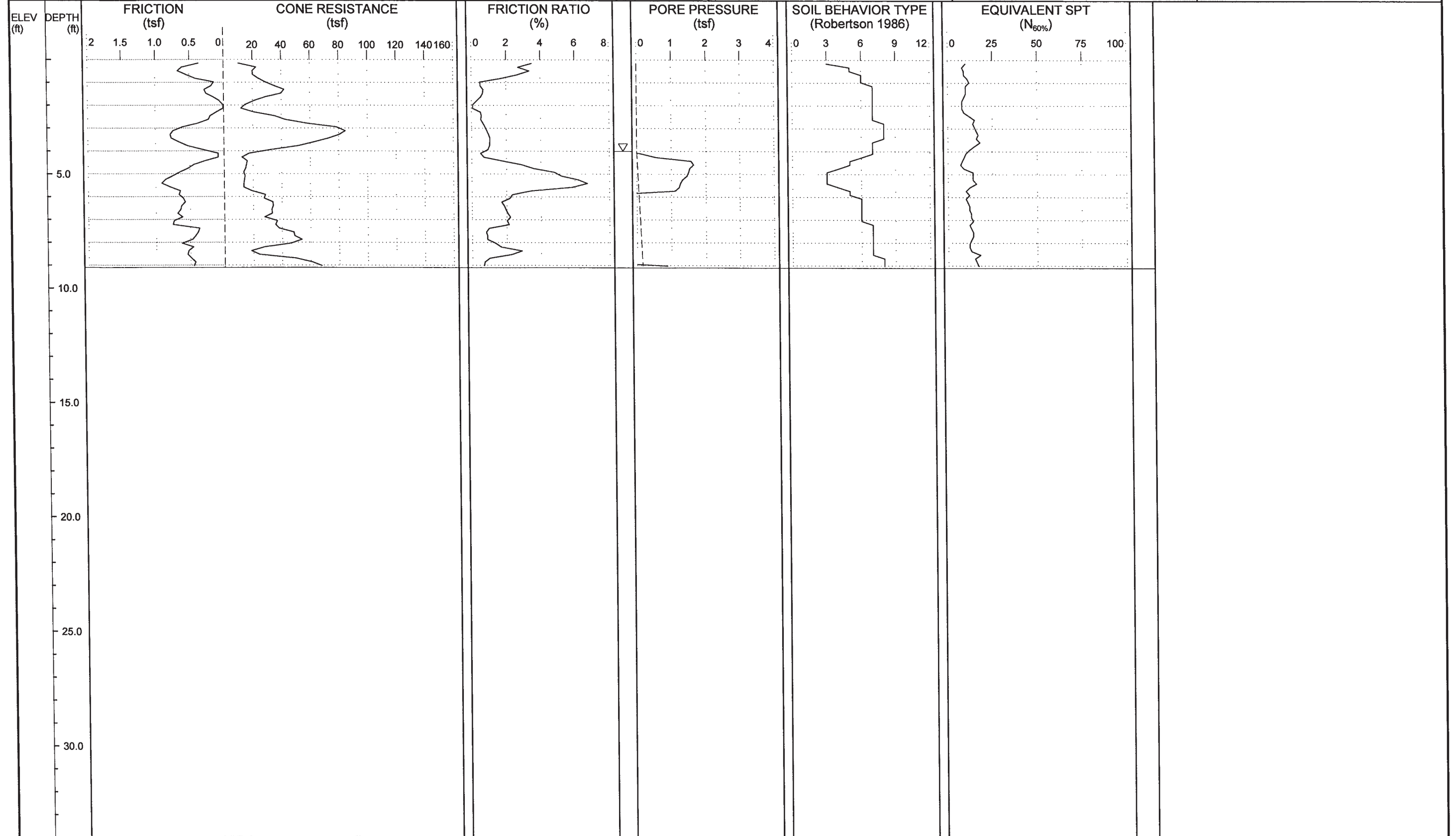


PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 7.0	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-29600	STATION: 296+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 15.2 ft	NORTHING: 457,022	EASTING: 2,528,544	START DATE: 12/14/11	COMP. DATE: 12/14/11	SURFACE WATER DEPTH: N/A	





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 4.0	DRILL METHOD: Direct Push
BORING NO.: L-3100	STATION: 31+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-Strung	CONE TYPE: Piezocone
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 430,974	EASTING: 2,528,698	24 HR. FIAD	START DATE: 12/16/11
				COMP. DATE: 12/16/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



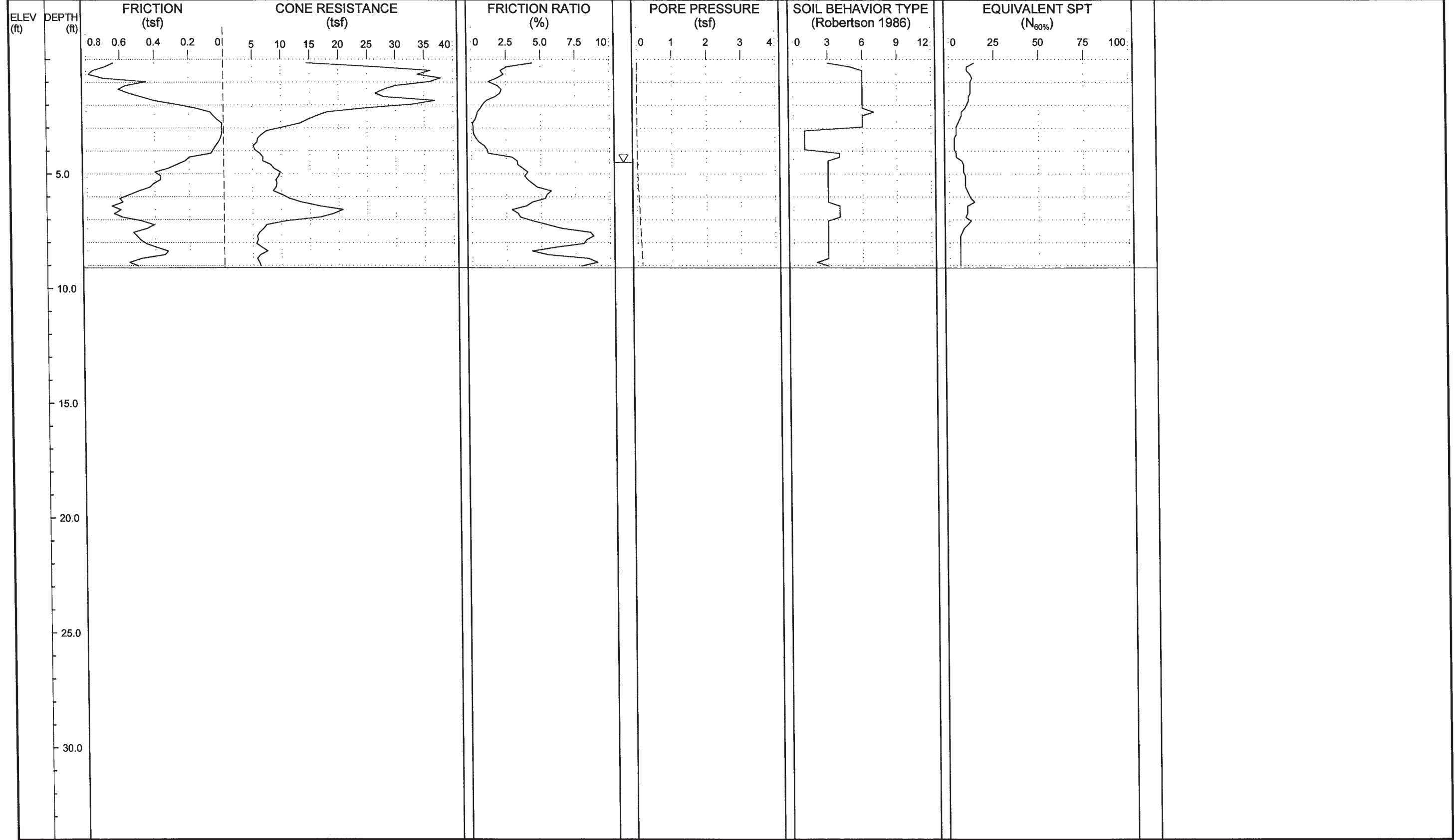


# NCDOT GEOTECHNICAL ENGINEERING UNIT



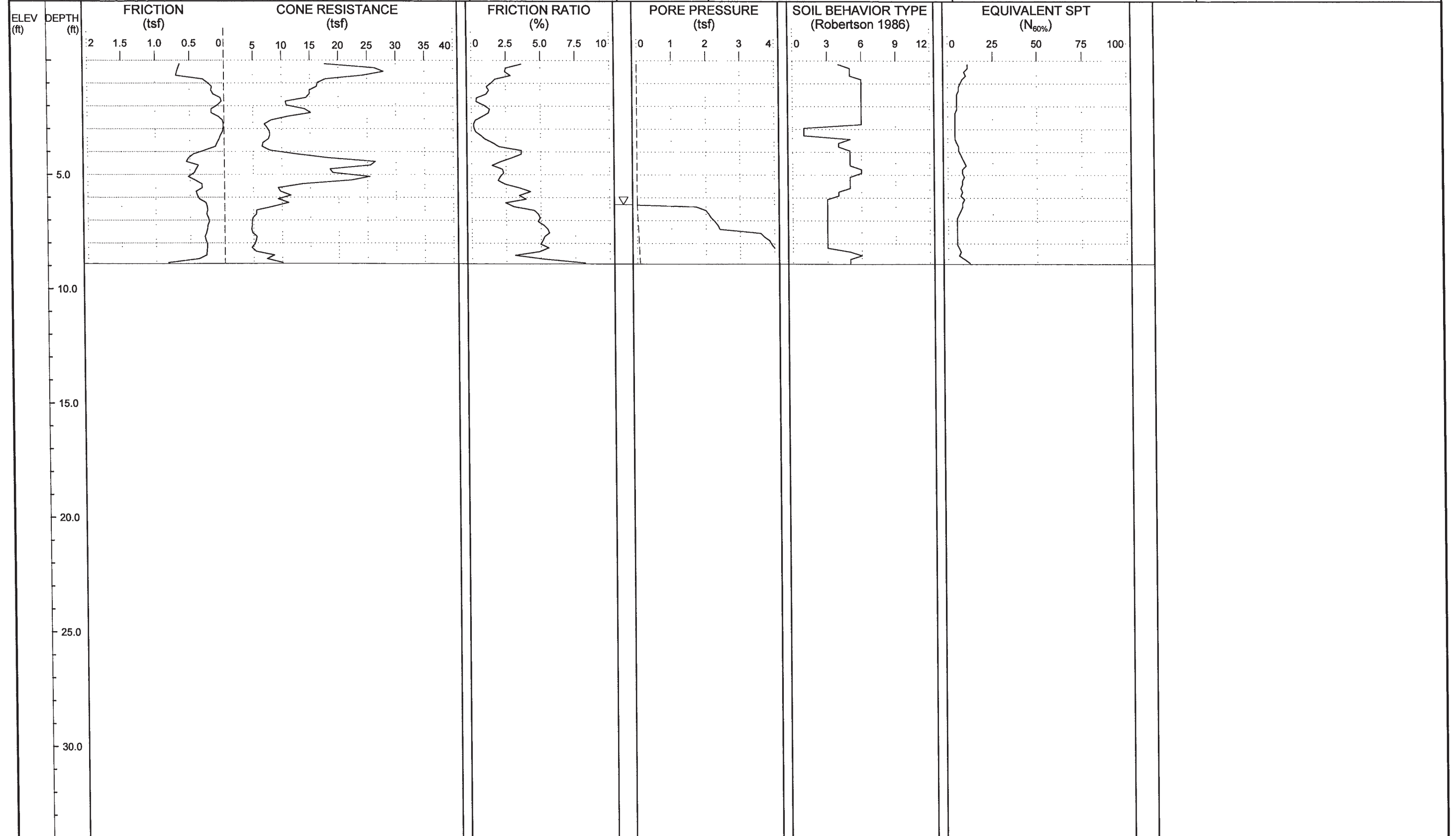
SHEET NO.:	47
PROJ. NO.:	34442.1.1
TIP NO.:	R-2514C
COUNTY:	Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 4.5	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-3600	STATION: 40+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 431,473	EASTING: 2,528,659	START DATE: 12/16/11	COMP. DATE: 12/16/11	SURFACE WATER DEPTH: N/A	





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-5000	STATION: 50+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 6.3	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 8.9 ft	NORTHING: 432,869	EASTING: 2,528,551	24 HR. FIAD	START DATE: 12/16/11	COMP. DATE: 12/16/11	SURFACE WATER DEPTH: N/A



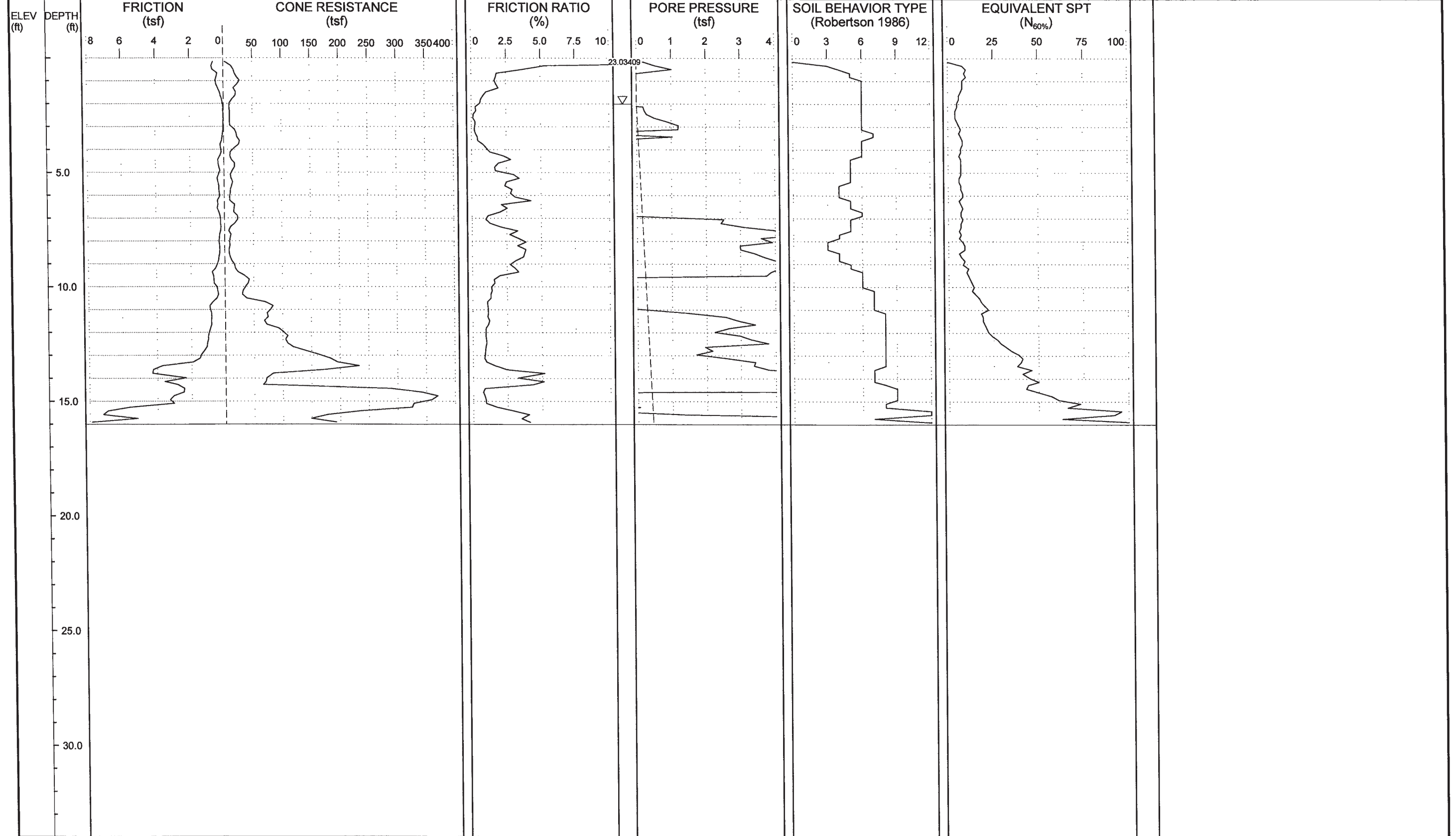


# NCDOT GEOTECHNICAL ENGINEERING UNIT



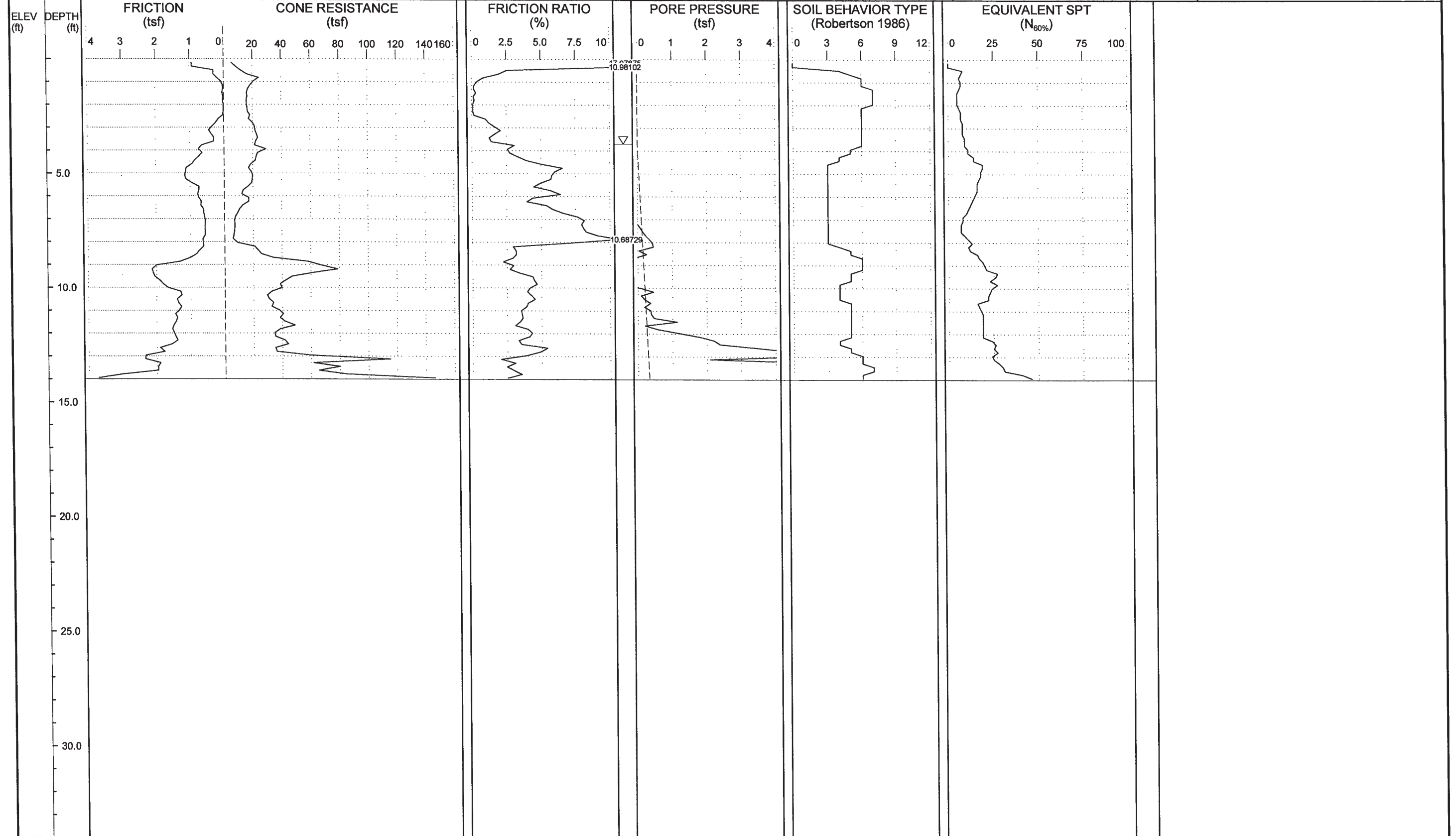
SHEET NO.:	49
PROJ. NO.:	34442.1.1
TIP NO.:	R-2514C
COUNTY:	Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 2.0	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-6000	STATION: 60+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 16.0 ft	NORTHING: 433,866	EASTING: 2,528,473	START DATE: 12/16/11	COMP. DATE: 12/16/11	SURFACE WATER DEPTH: N/A	





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft): 0 HR. 3.7	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: L-7000	STATION: 70+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-Strung	CONE ID: DSA1123
COLLAR ELEV.: N/A	TOTAL DEPTH: 14.0 ft	NORTHING: 434,863	EASTING: 2,528,396	24 HR. FIAD	START DATE: 12/16/11
				COMP. DATE: 12/16/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



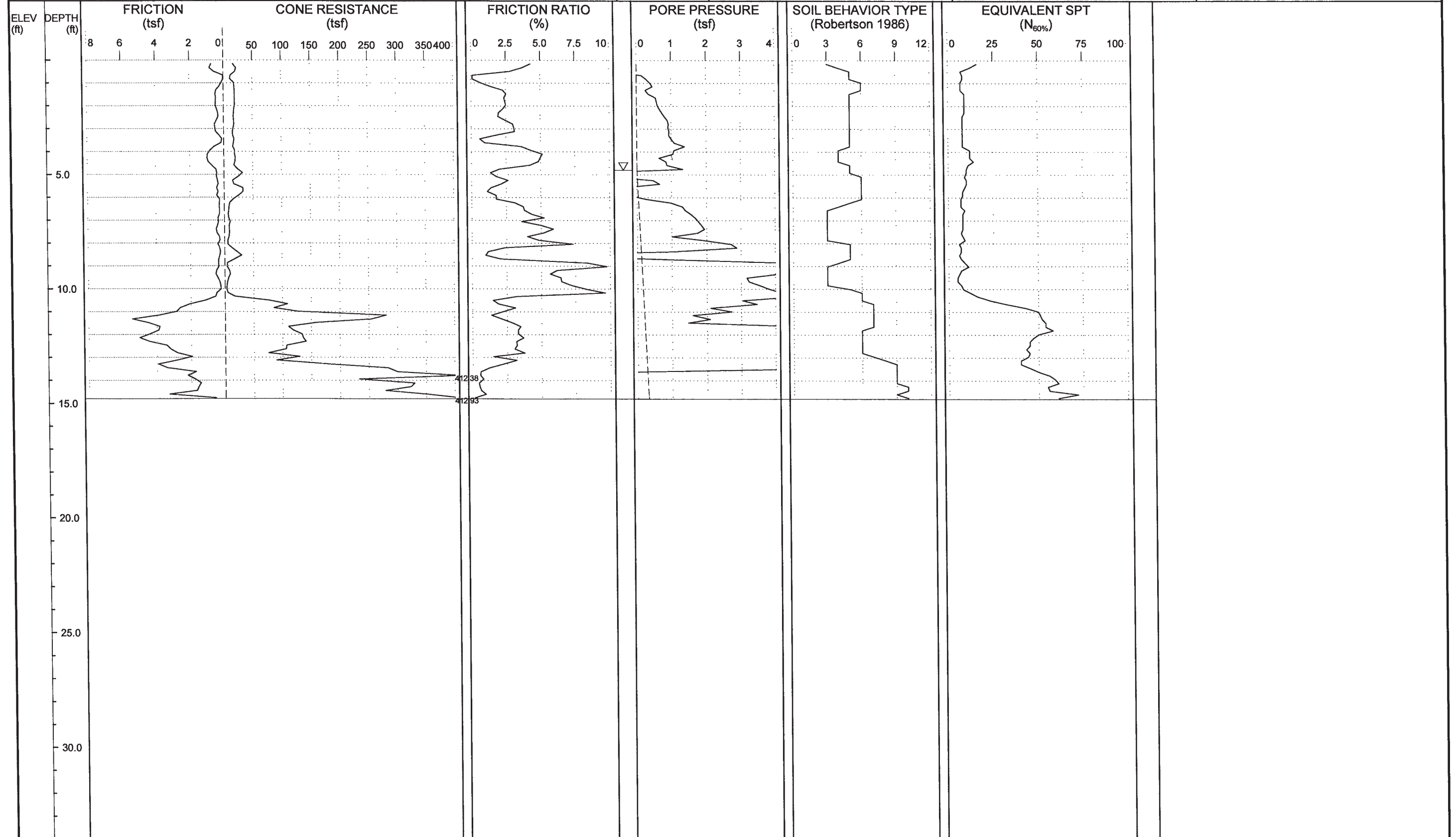


# NCDOT GEOTECHNICAL ENGINEERING UNIT



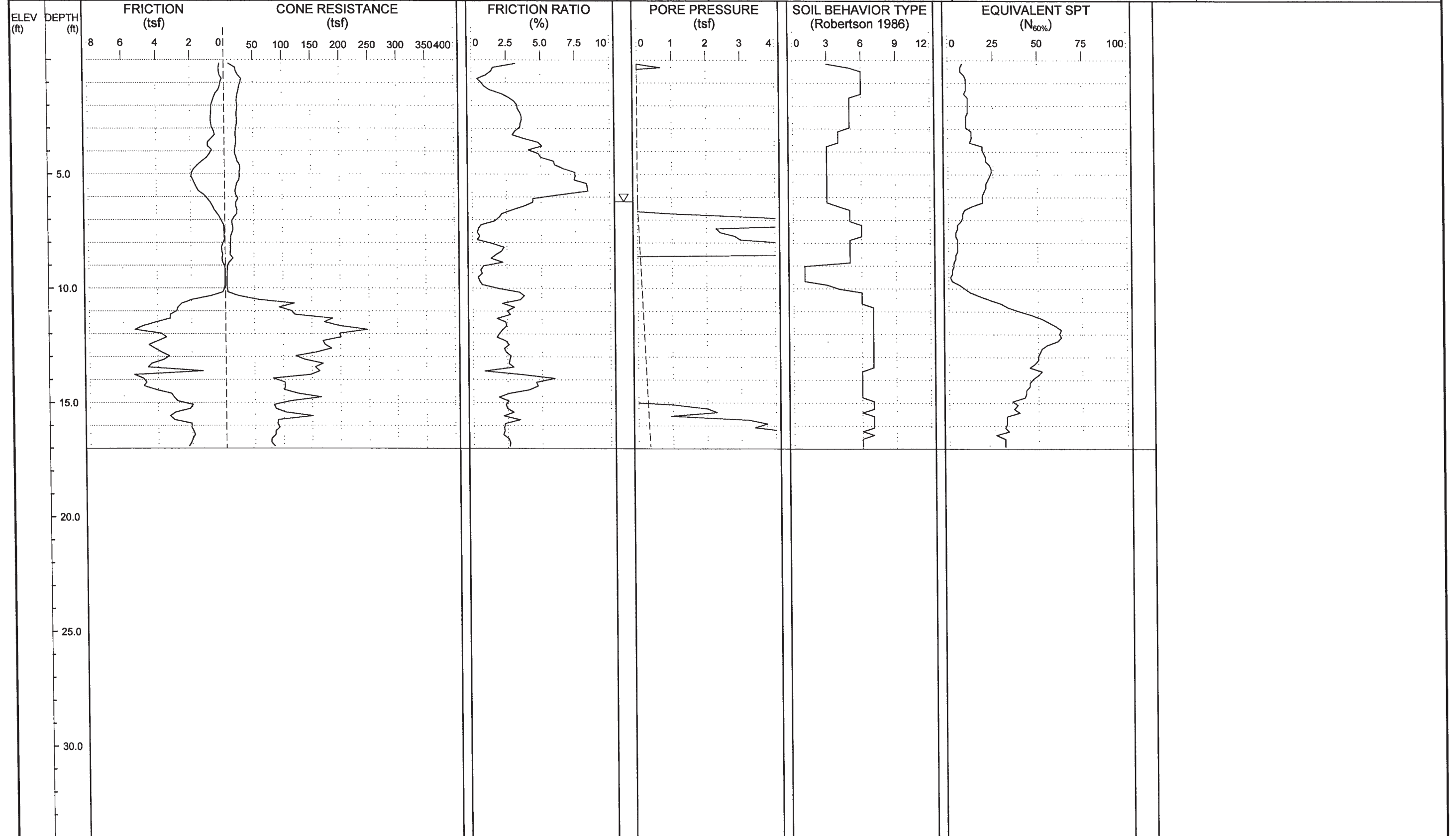
SHEET NO.:	51
PROJ. NO.:	34442.1.1
TIP NO.:	R-2514C
COUNTY:	Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 4.8	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-8000	STATION: 80+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 14.8 ft	NORTHING: 435,860	EASTING: 2,528,318	START DATE: 12/16/11	COMP. DATE: 12/16/11	SURFACE WATER DEPTH: N/A	





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000		
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 6.2	DRILL METHOD: Direct Push	CONE TYPE: Piezocone	DRILLER: Cory Robinson
BORING NO.: L-9000	STATION: 90+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. FIAD	ROD TYPE: Pre-Strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: N/A	TOTAL DEPTH: 17.0 ft	NORTHING: 436,857	EASTING: 2,528,241	START DATE: 12/16/11	COMP. DATE: 12/16/11	SURFACE WATER DEPTH: N/A	





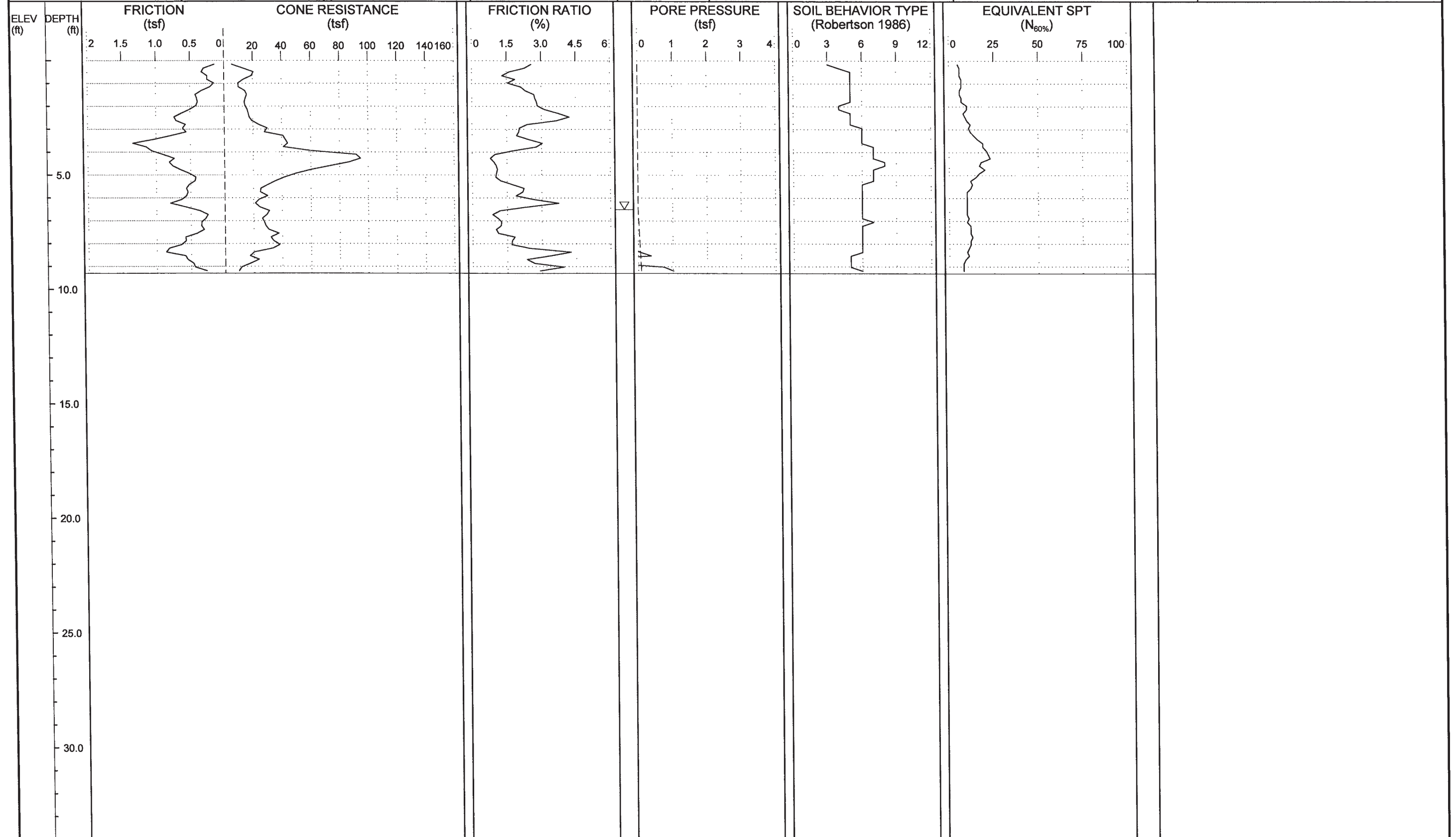


# NCDOT GEOTECHNICAL ENGINEERING UNIT



SHEET NO.: 53  
 PROJ. NO.: 34442.1.1  
 TIP NO.: R-2514C  
 COUNTY: Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft): 0 HR. 6.5	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: Y1-1450	STATION: 14+50	OFFSET: 30ft LT	ALIGNMENT: -Y1-	ROD TYPE: Pre-Strung	CONE ID: DSA1123
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 451,104	EASTING: 2,527,213	24 HR. FIAD	START DATE: 12/14/11
				COMP. DATE: 12/14/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



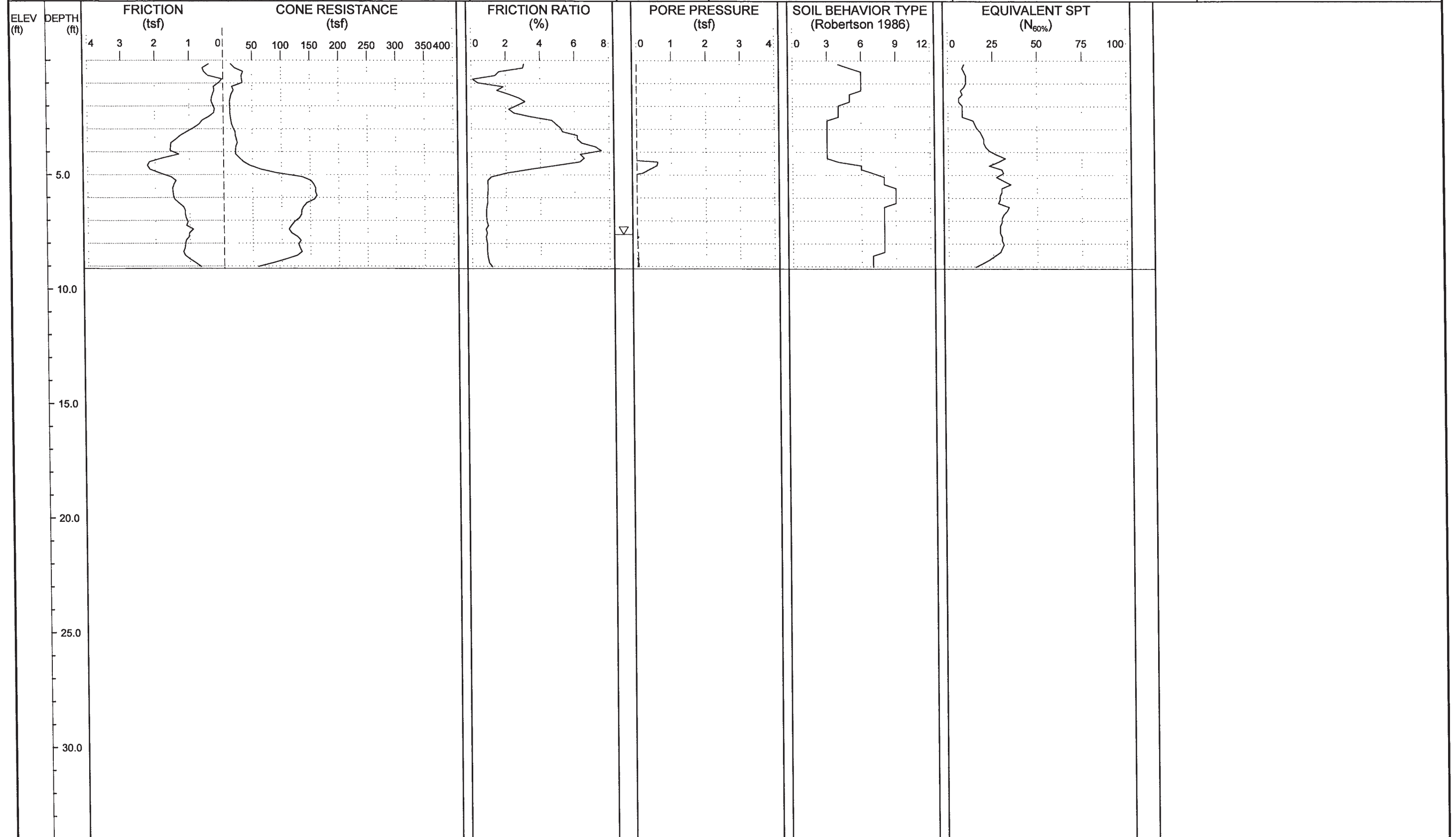


# NCDOT GEOTECHNICAL ENGINEERING UNIT



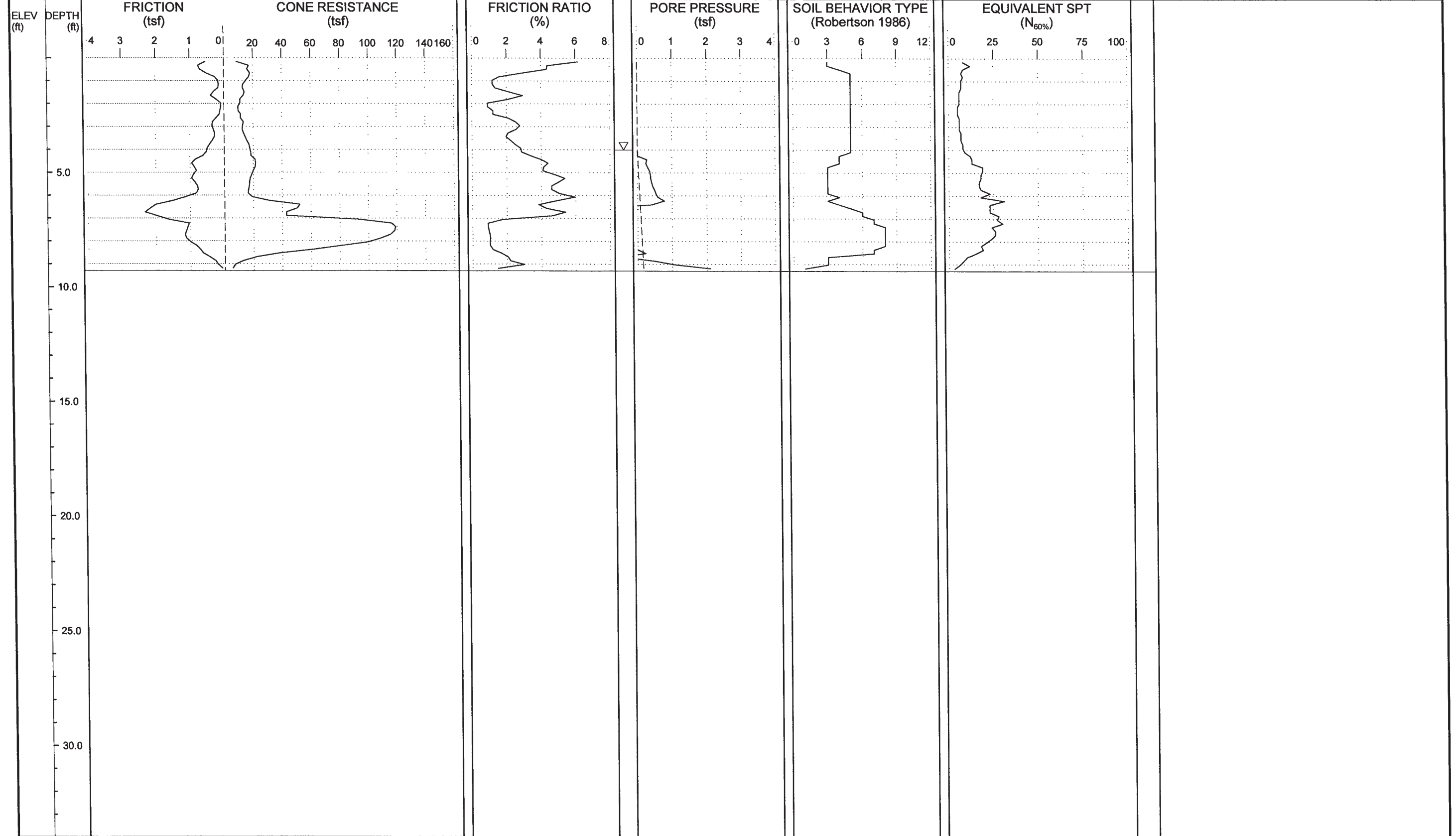
SHEET NO.: 54  
 PROJ. NO.: 34442.1.1  
 TIP NO.: R-2514C  
 COUNTY: Jones

PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 7.6	DRILL METHOD: Direct Push
BORING NO.: Y1-1850	STATION: 18+50	OFFSET: 40ft LT	ALIGNMENT: -Y1-	ROD TYPE: Pre-Strung	CONE TYPE: Piezocone
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 450,832	EASTING: 2,527,515	24 HR. FIAD	START DATE: 12/15/11
				COMP. DATE: 12/15/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	

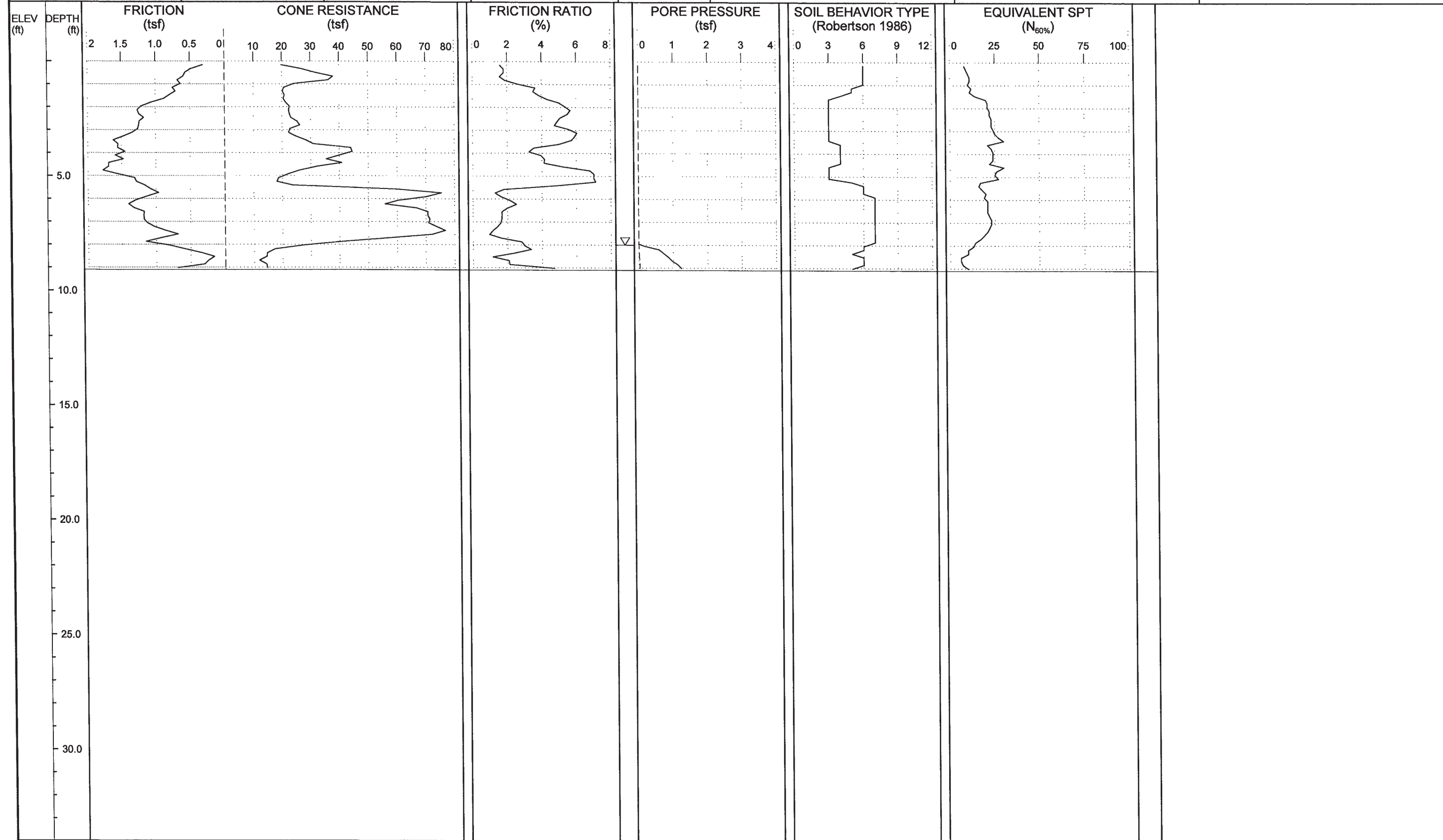




PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 4.0	DRILL METHOD: Direct Push
BORING NO.: Y1A-1150	STATION: 11+50	OFFSET: 30ft RT	ALIGNMENT: -Y1A-	ROD TYPE: Pre-Strung	CONE TYPE: Piezocone
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 450,647	EASTING: 2,527,908	24 HR. FIAD	START DATE: 12/14/11
				COMP. DATE: 12/14/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	

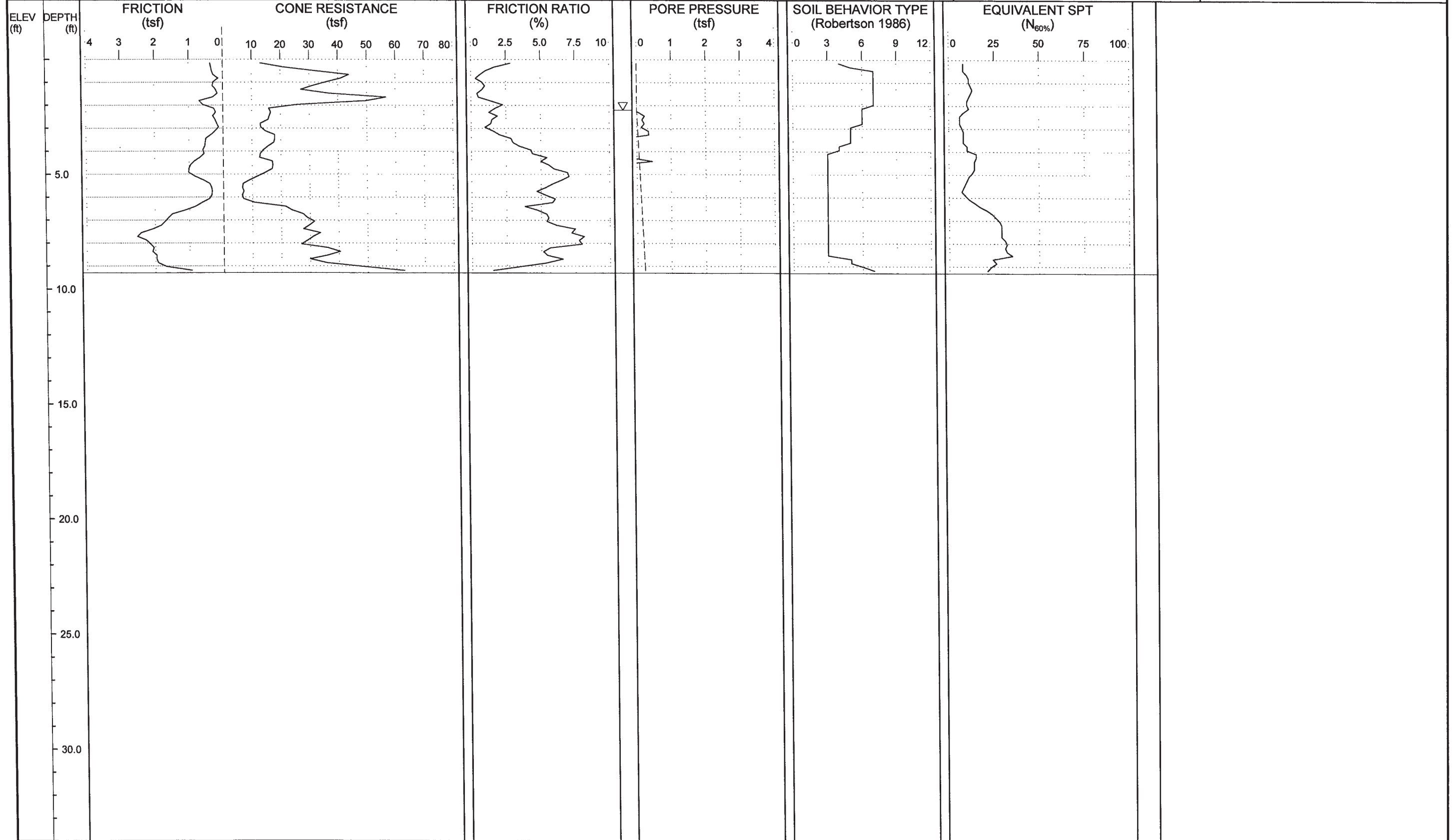


PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft): 0 HR. 8.0	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: Y1A-1350	STATION: 13+50	OFFSET: 20ft LT	ALIGNMENT: -Y1A-	ROD TYPE: Pre-Strung	CONE ID: DSA1123
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 450,749	EASTING: 2,528,086	24 HR. FIAD	START DATE: 12/14/11
				COMP. DATE: 12/14/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



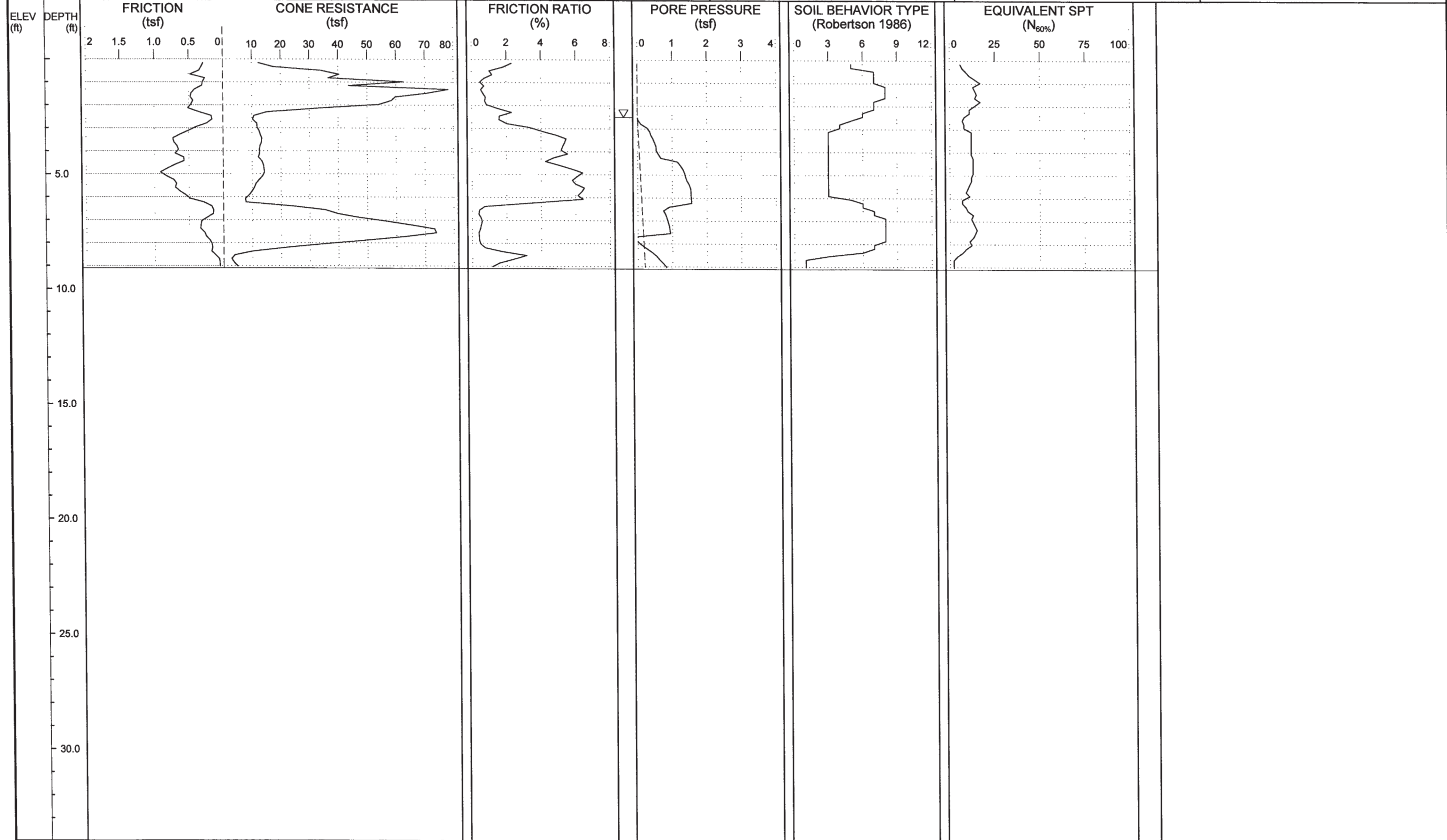


PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58				GROUND WTR (ft): 0 HR. 2.2	DRILL METHOD: Direct Push
BORING NO.: Y2-1418	STATION: 14+18	OFFSET: 20ft LT	ALIGNMENT: -Y2-	ROD TYPE: Pre-Strung	CONE TYPE: Piezocone
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 454,079	EASTING: 2,527,692	24 HR. FIAD	CONE ID: DSA1123
				START DATE: 12/14/11	DRILLER: Cory Robinson
				COMP. DATE: 12/14/11	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	



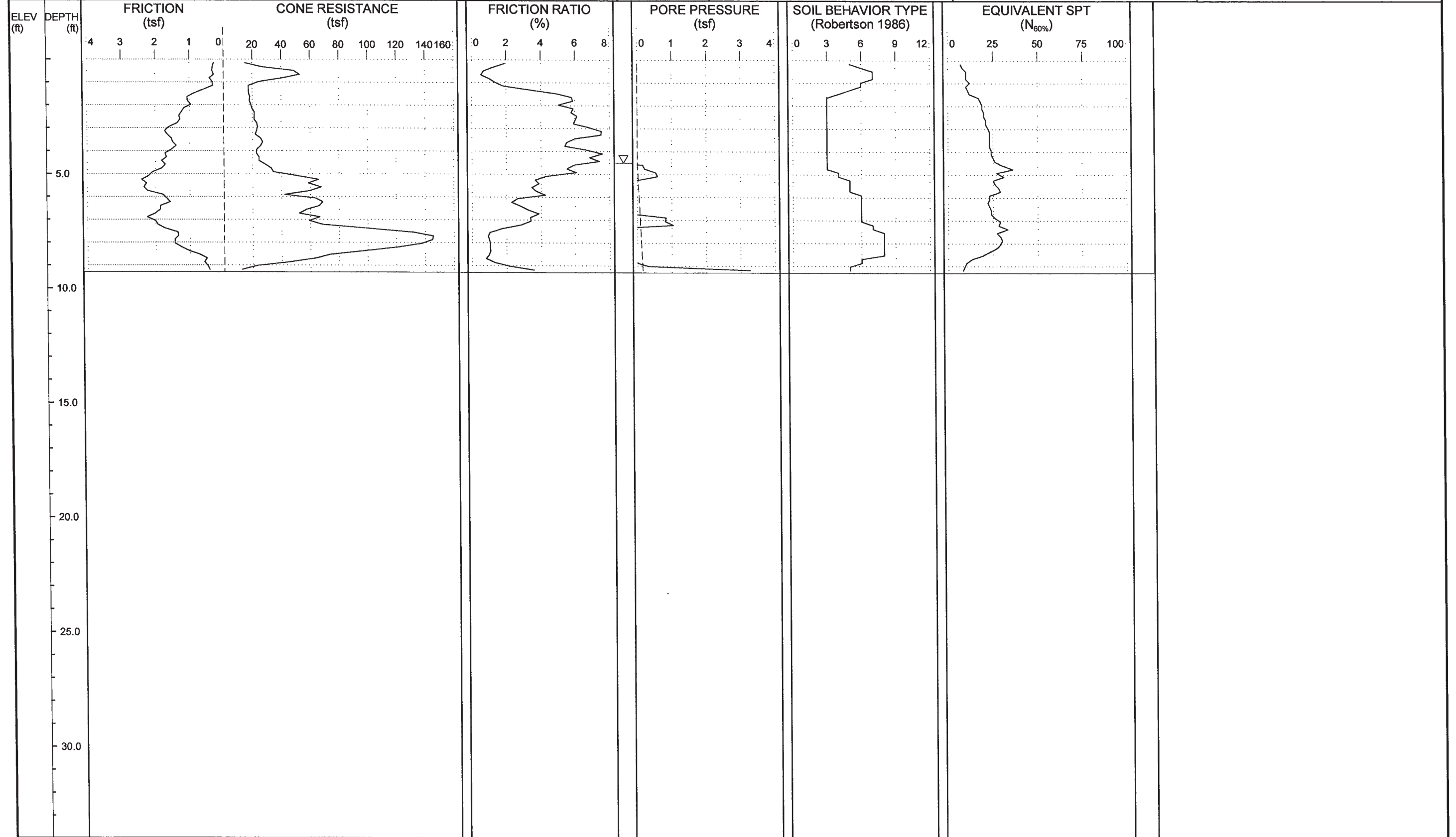


PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: Y2-1990	STATION: 19+90	OFFSET: 30ft LT	ALIGNMENT: -Y2-	0 HR. 2.5	ROD TYPE: Pre-Strung
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 453,763	EASTING: 2,528,174	24 HR. FIAD	START DATE: 12/14/11
				COMP. DATE: 12/14/11	DRILLER: Cory Robinson
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: Y-2480	STATION: 24+80	OFFSET: 40ft LT	ALIGNMENT: -Y-	ROD TYPE: Pre-Strung	CONE ID: DSA1123
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.3 ft	NORTHING: 449,584	EASTING: 2,527,468	START DATE: 12/15/11	COMP. DATE: 12/15/11
			0 HR. 4.5	DRILLER: Cory Robinson	
			24 HR. FIAD	TECHNICIAN: M.A.D.	
					SURFACE WATER DEPTH: N/A





PROJECT NO.: 34442.1.1	ID.: R-2514C	COUNTY: Jones	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10,000
SITE DESCRIPTION: US 17 from North of Maysville to South of NC 58			GROUND WTR (ft)	DRILL METHOD: Direct Push	CONE TYPE: Piezocone
BORING NO.: YA-1150	STATION: 11+50	OFFSET: 25ft RT	ALIGNMENT: -YA-	0 HR. 8.9	ROD TYPE: Pre-Strung
COLLAR ELEV.: N/A	TOTAL DEPTH: 9.1 ft	NORTHING: 450,550	EASTING: 2,527,952	24 HR. FIAD	START DATE: 12/14/11
				COMP. DATE: 12/14/11	DRILLER: Cory Robinson
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A

