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7/2/98

**SEE SHEET 3 FOR PLAN SHEET LAYOUT
AT TIME OF INVESTIGATION**

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5812	1	36

CONTENTS

LINE	STATION	PLAN	PROFILE
-L-	10+37 - 73+83	4-8	9-11
-YI-	10+00 - 17+50	5-6	12
-YISPUR-	10+18 - 12+20	6	12

CROSS SECTIONS

LINE	STATION	SHEETS
-L-	18+50 - 25+00	13-19
-L-	26+00	20
-L-	28+00	21
-L-	30+00	22
-L-	33+50 - 34+00	23-24
-L-	36+50	25
-L-	38+00	26
-L-	43+50	27
-L-	50+50 - 51+50	28-30
-L-	53+00 - 53+50	31-32
-L-	55+00	33
-L-	56+50 - 57+00	34-35
-L-	61+50	36

**ROADWAY
SUBSURFACE INVESTIGATION**

COUNTY GREENE
PROJECT DESCRIPTION US 13 BYPASS FROM NC 58
(KINGOLD BOULEVARD) TO NC 91

INVENTORY

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. THE SUBSURFACE PLANS AND REPORTS, FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA ARE NOT 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 THE 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.

- NOTES:
1. THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N. C. DEPARTMENT OF TRANSPORTATION AS ACCURATE NOR IS IT CONSIDERED PART OF THE PLANS, SPECIFICATIONS OR CONTRACT FOR THE PROJECT.
 2. 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.

PERSONNEL

S. ABERNATHY

CATLIN INC.

INVESTIGATED BY J.K. CRENSHAW

DRAWN BY J.K. CRENSHAW

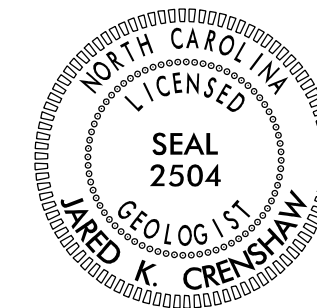
CHECKED BY E.C. HOWEY

SUBMITTED BY D. WAINWRIGHT

DATE MARCH, 2019

REFERENCE: R-5812

PROJECT: 46981



Jared K. Crenshaw 3/5/2019

SIGNATURE DATE

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT
SUBSURFACE INVESTIGATION
SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

Table with 4 main sections: SOIL DESCRIPTION, SOIL LEGEND AND AASHTO CLASSIFICATION, TEXTURE OR GRAIN SIZE, and SOIL MOISTURE - CORRELATION OF TERMS. Includes various soil classification codes and moisture scale descriptions.

Table with 4 main sections: GRADATION, MINERALOGICAL COMPOSITION, GROUND WATER, and RECOMMENDATION SYMBOLS. Includes gradation categories, mineral names, groundwater symbols, and symbols for excavation and equipment.

Table with 4 main sections: ROCK DESCRIPTION, WEATHERING, ROCK HARDNESS, and INDURATION. Includes rock types, weathering grades, hardness levels, and induration descriptions.

Table with 3 main sections: TERMS AND DEFINITIONS, BENCH MARK, and NOTES. Contains definitions for various geotechnical terms, a bench mark diagram, and project notes regarding data sources.

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

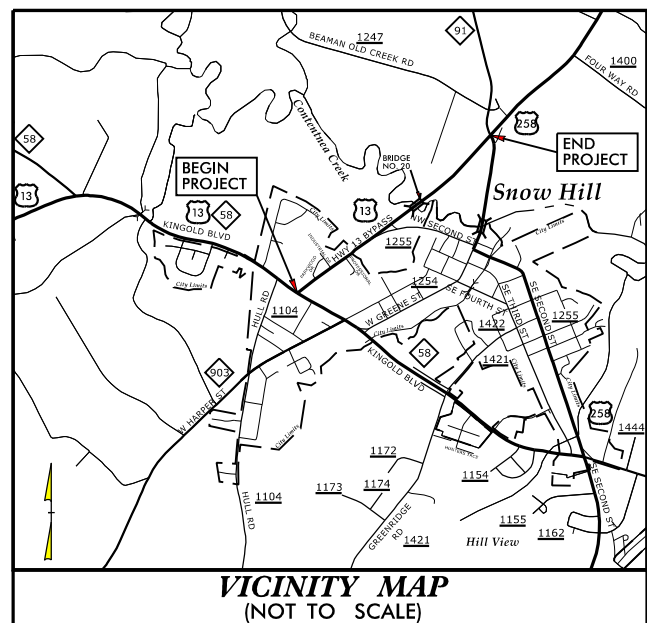
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

GREENE COUNTY

LOCATION: US 13 BYPASS FROM NC 58 (KINGOLD BOULEVARD) TO NC 91

TYPE OF WORK: GRADING, PAVING, DRAINAGE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5812	3	36
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
46981.1.1	N/A	P.E.	
46981.2.1	N/A	R/W	
		UTILITIES	

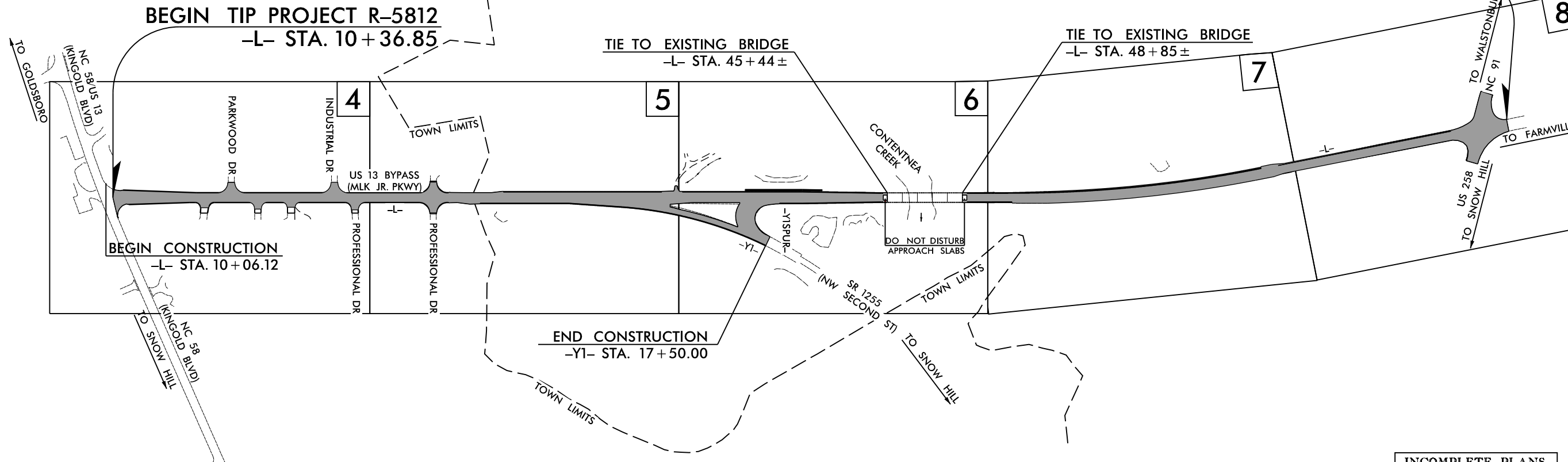


75% PLANS



END TIP PROJECT R-5812
-L- STA. 73 + 83.06

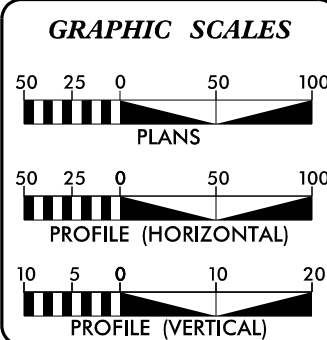
TIP PROJECT: R-5812



A PORTION OF THIS PROJECT IS WITHIN THE TOWN OF SNOW HILL.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
DOCUMENT NOT CONSIDERED FINAL
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CONTRACT:



DESIGN DATA

ADT 2019 =	12,750
ADT 2040 =	17,300
K =	8 %
D =	55 %
T =	12 % *
V =	60 MPH
(* TTST 7% + DUAL 5%)	
FUNC CLASS =	MINOR ARTERIAL
STATEWIDE TIER	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-5812 =	1.137 MILES
LENGTH STRUCTURE TIP PROJECT R-5812 =	0.000 MILES
TOTAL LENGTH TIP PROJECT R-5812 =	1.137 MILES

Prepared by the Office of:

HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
NOVEMBER 16, 2018

LETTING DATE:
JUNE 18, 2019

DOMINIC WAINWRIGHT, PE
PROJECT ENGINEER

T. NATHAN BEDENBAUGH, PE
PROJECT DESIGN ENGINEER

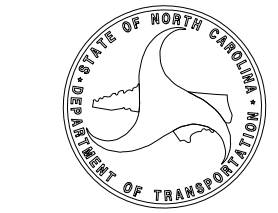
CASEY WHITLEY, PE
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



PLOT DRIVER: \$PLTDVRS\$
USER: \$USER\$
DATE: \$DATES\$
TIME: \$TIME\$
FILE: \$PNVAVRVAULTPATHDESC\$

March 4, 2019

STATE PROJECT: 46981.1.1

TIP NUMBER: R-5812

COUNTY: Greene

DESCRIPTION: US 13 Bypass from NC 58 (Kingold Boulevard) to NC 91

SUBJECT: Geotechnical Roadway Inventory report

PROJECT DESCRIPTION

The R-5812 project is designed to improve traffic flow and ease congestion in the Town of Snow Hill, NC. The project consists of widening a portion of US 13 (Martin Luther King Jr. Parkway), from NC 58 to NC 91.

The field investigation was conducted in September and October of 2018 using a track mounted CME-45B with an automatic hammer. Standard Penetration Tests (SPT) were performed at selected locations. Borings were advanced with mud rotary equipment and hand augers. Representative soil samples were collected and forwarded to an NCDOT M&T approved testing facility for soil quality analysis, moisture content, and AASHTO classification.

The following alignments were investigated

Line	Station			Length (ft)
-L-	10+37	to	73+83	6,346
-Y1-	10+00	to	17+50	750
-Y1SPUR-	10+18	to	12+20	202
			Total =	7,298 (~1.38 miles)

PHYSIOGRAPHY AND GEOLOGY

Physiography and Geology

The project is located in the Coastal Plain Physiographic Province. Topography along the project corridor is gently rolling. Natural ground elevations range from 111± feet above sea level near the existing SR 2667 roadway to 29± feet above sea level at the bottom of Contentnea Creek.

Soil Properties

Soils encountered along the project corridor are divided into three categories based on origin: Roadway Embankment soils, Alluvial Soils, and Undivided Coastal Plain soils.

Roadway embankment soils consisting of loose to very dense SAND and clayey SAND (A-2-6, A-2-4, A-3, A-1-b), with some gravel were encountered at several locations throughout the project corridor. Roadway embankment soils ranged in thickness from less than one foot thick to approximately 21 feet thick.

Alluvial soils consisting of loose to medium dense SAND (A-2-4, A-3, A-1-b), with gravel were encountered in the vicinity of Contentnea Creek. These soils are at least 9 feet thick.

Undivided Coastal Plain soils were encountered at most locations throughout the project corridor. These soils were comprised of medium dense to dense SAND and clayey SAND (A-2-6, A-2-7, A-2-4, A-3), and soft to medium stiff SILT, CLAY, and sandy CLAY (A-4, A-6, A-7-6). Undivided Coastal Plain soils are at least 10 feet thick. Within the cohesive soils, plasticity indices and moisture contents ranged from 9 to 23 and 22% to 55% respectively.

Ground Water

All SPT borings were left open for at least 24 hours to allow ground water levels within the borehole to equilibrate with the surrounding hydrologic conditions. Ground water data were collected in October of 2018, during a time of normal precipitation. Ground water elevations generally varied with topography, and ranged from 36± feet to 79± feet above sea level.

Areas of Special Geotechnical Interest

Ponds occur in the following areas within or near the proposed right of way.

Alignment	Station	Offset
-L-	58+00	100' LT

Sincerely,
HDR ENGINEERING, INC.
 3/5/2019

3/5/2019



Jared K. Crenshaw
 Jared K. Crenshaw, L.G.
 Professional Geologist
 HDR Engineering



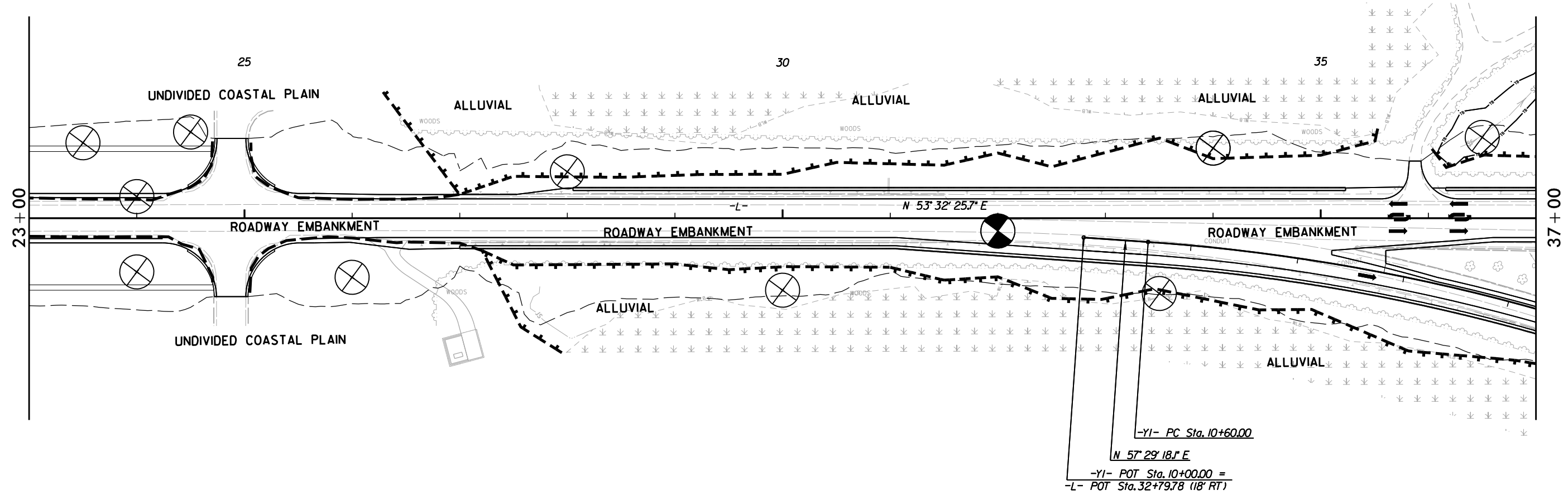
Elizabeth C. Howey
 Elizabeth Howey, L.G, P.E.
 Senior Geotechnical Project Manager
 HDR Engineering

8/17/09

PROJECT REFERENCE NO. <i>R-5812</i>	SHEET NO. <u>5</u>
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



REVISIONS



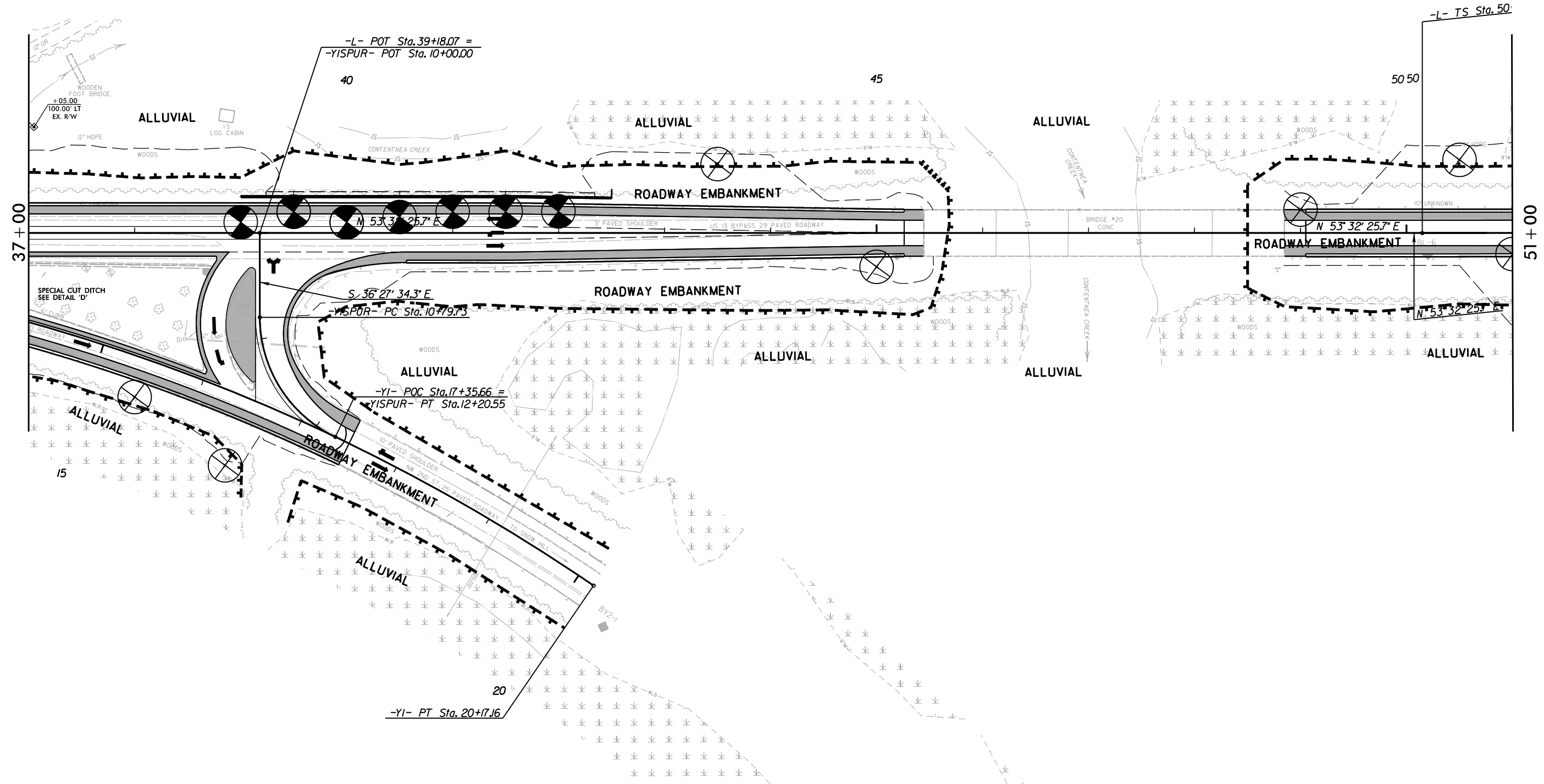
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8/17/09

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REVISIONS



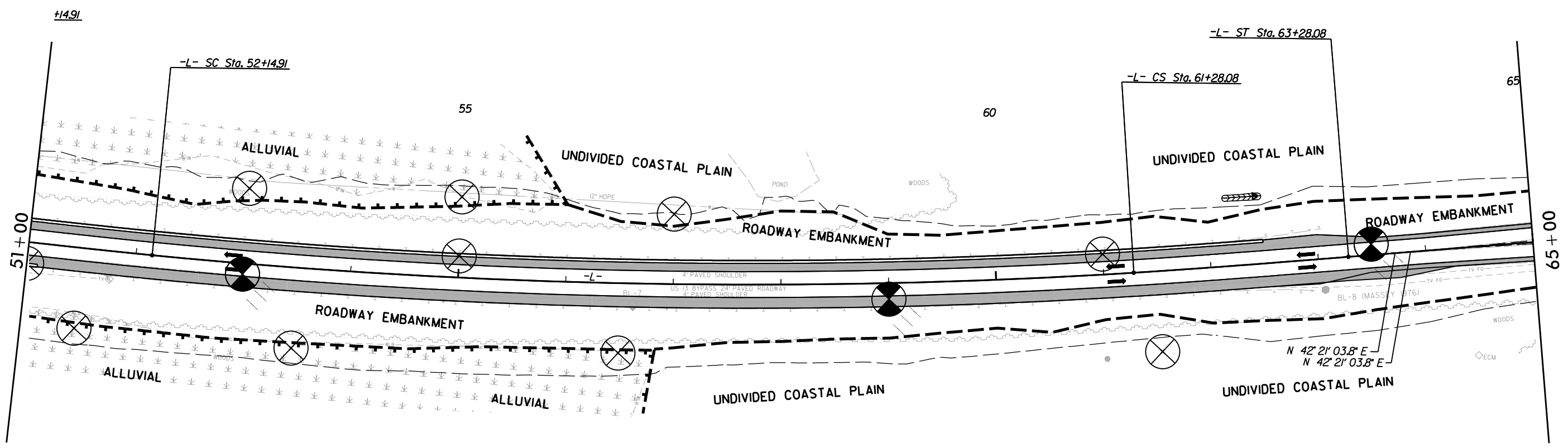
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8/17/09

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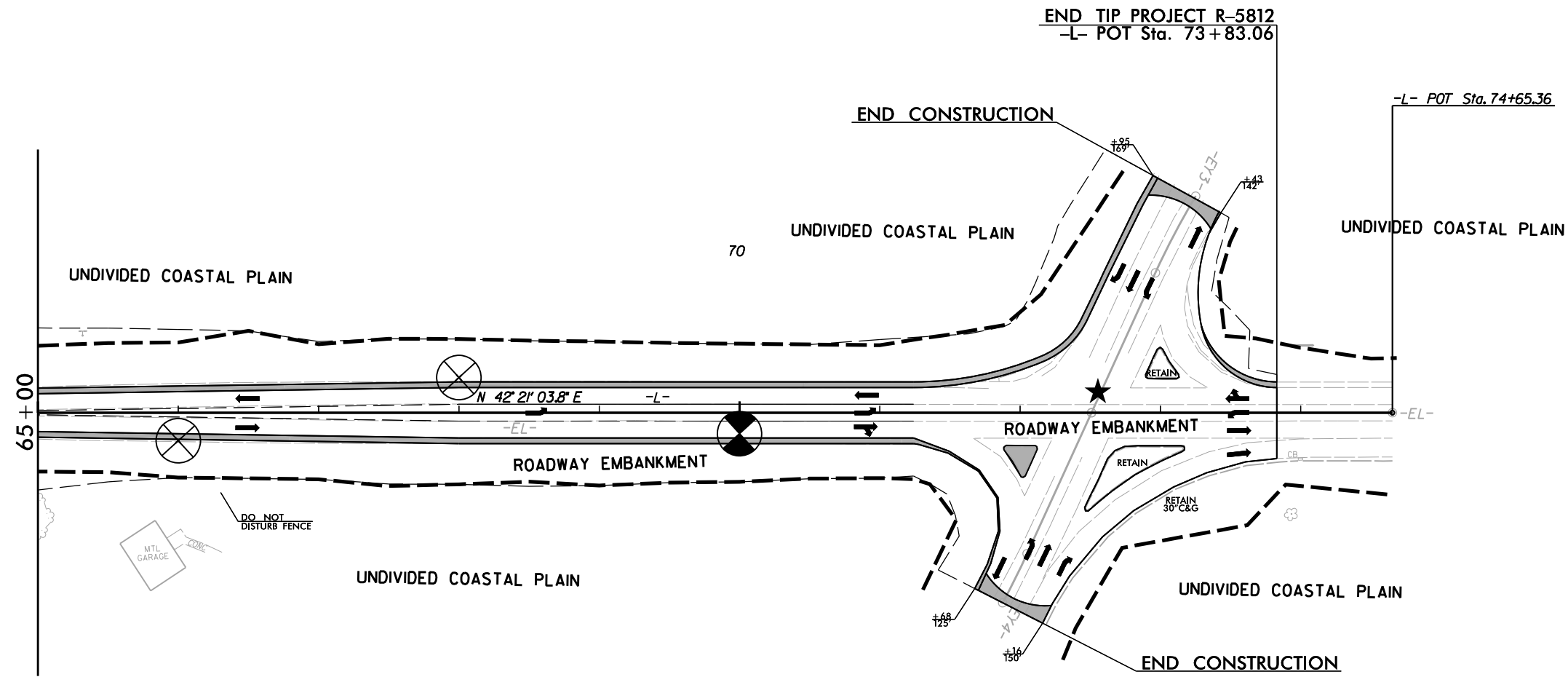
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8/17/09

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REVISIONS



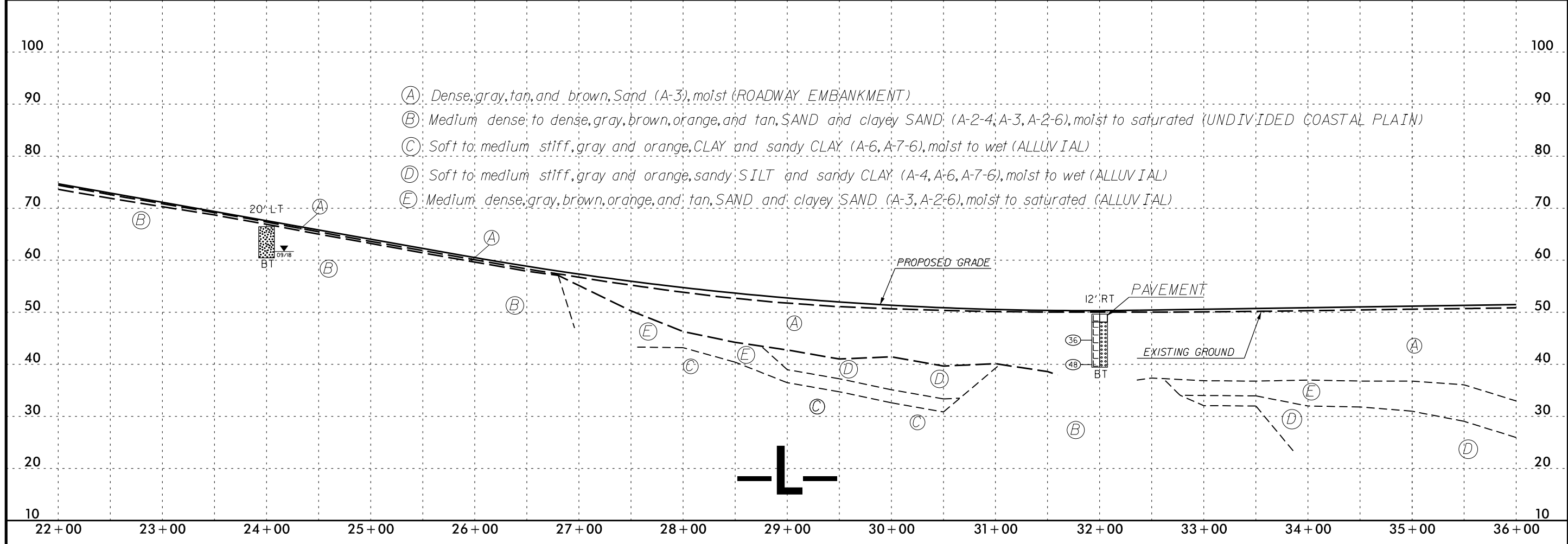
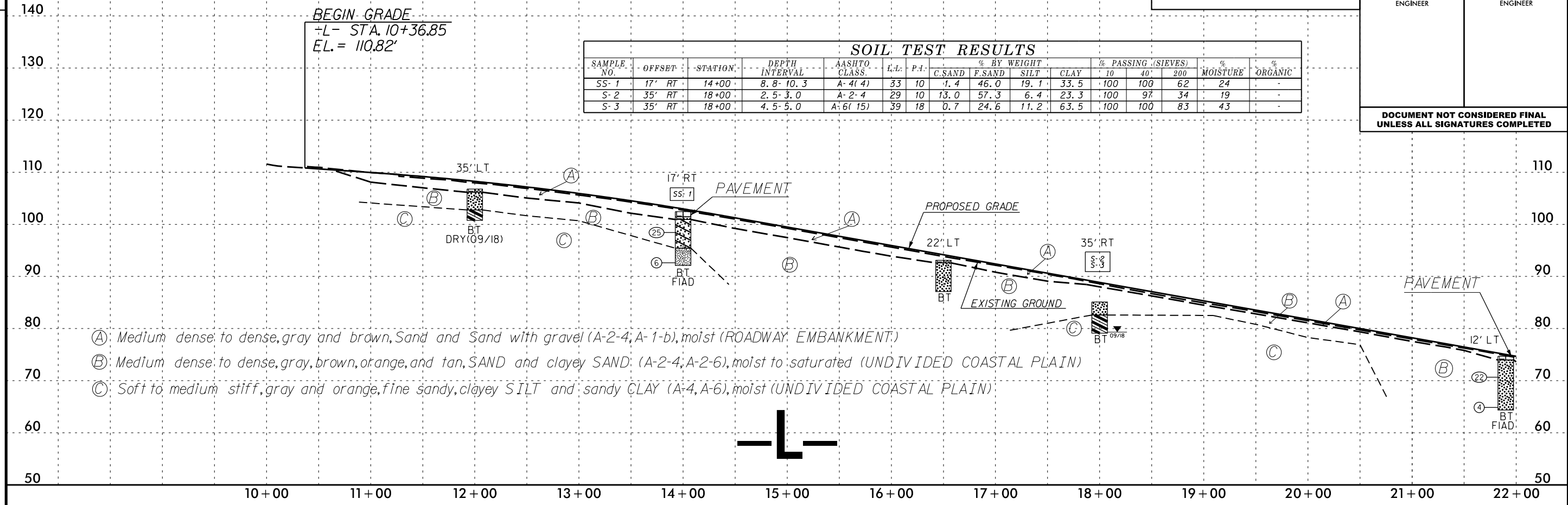
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★ - Existing Traffic Signal

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ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

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-1	17' RT	14+00	8.8-10.3	A-4(4)	33	10	1.4	46.0	19.1	33.5	100	100	62	24	-
S-2	35' RT	18+00	2.5-3.0	A-2-4	29	10	13.0	57.3	6.4	23.3	100	97	34	19	-
S-3	35' RT	18+00	4.5-5.0	A-6(15)	39	18	0.7	24.6	11.2	63.5	100	100	83	43	-

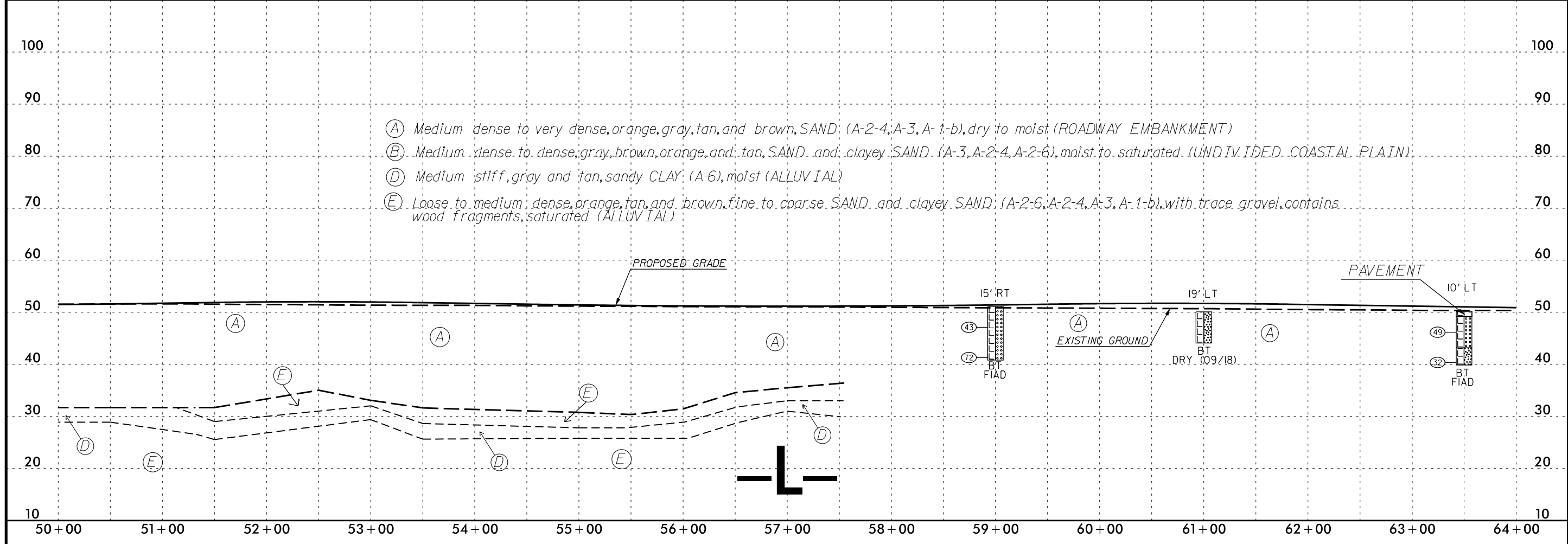
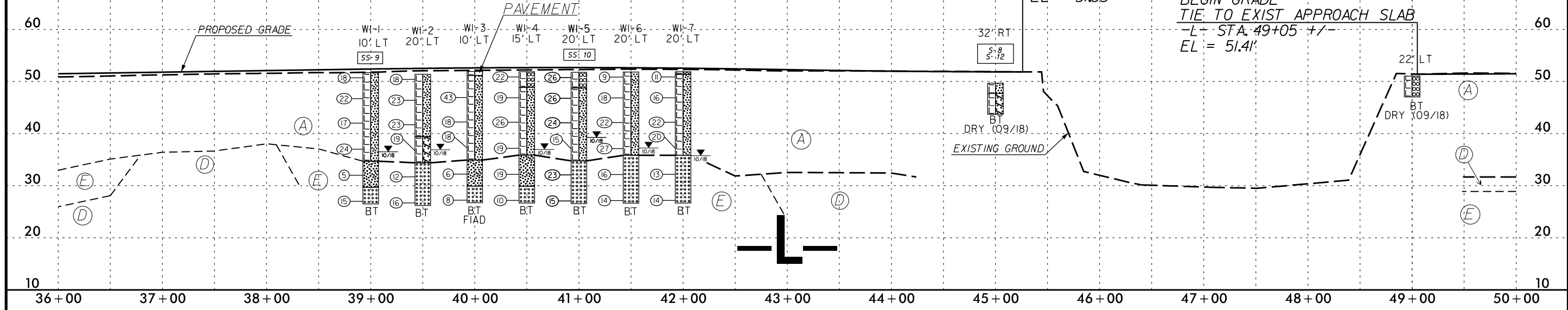


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							C.SAND	F.SAND	SILT	CLAY	10	40	200		
SS-9	10' LT	39+00	8.7-10.2	A-2-4(0)	21	4	44.3	37.2	5.3	13.1	100	78	21	17	-
SS-10	20' LT	41+00	13.7-15.2	A-2-4(0)	25	6	13.7	66.0	3.2	17.1	100	97	23	25	-
S-8	32' RT	45+00	0.5-1.0	A-2-4(0)	19	2	13.4	69.1	1.7	15.5	100	96	20	10	-
S-12	32' RT	45+00	4.0-4.5	A-2-7(4)	45	29	23.7	60.8	-	-	100	96	17	11	-

- (A) Dense, gray, tan, and brown, fine to coarse SAND and clayey SAND (A-1-b, A-2-4, A-2-6, A-2-7), dry to saturated (ROADWAY EMBANKMENT)
- (E) Loose to medium dense, orange, tan, and brown, fine to coarse SAND and clayey SAND (A-2-4, A-3, A-1-b), with trace gravel, contains wood fragments, saturated (ALLUVIAL)
- (D) Medium stiff, gray, brown and orange, clayey SILT and sandy CLAY (A-4, A-6), moist to wet (ALLUVIAL)

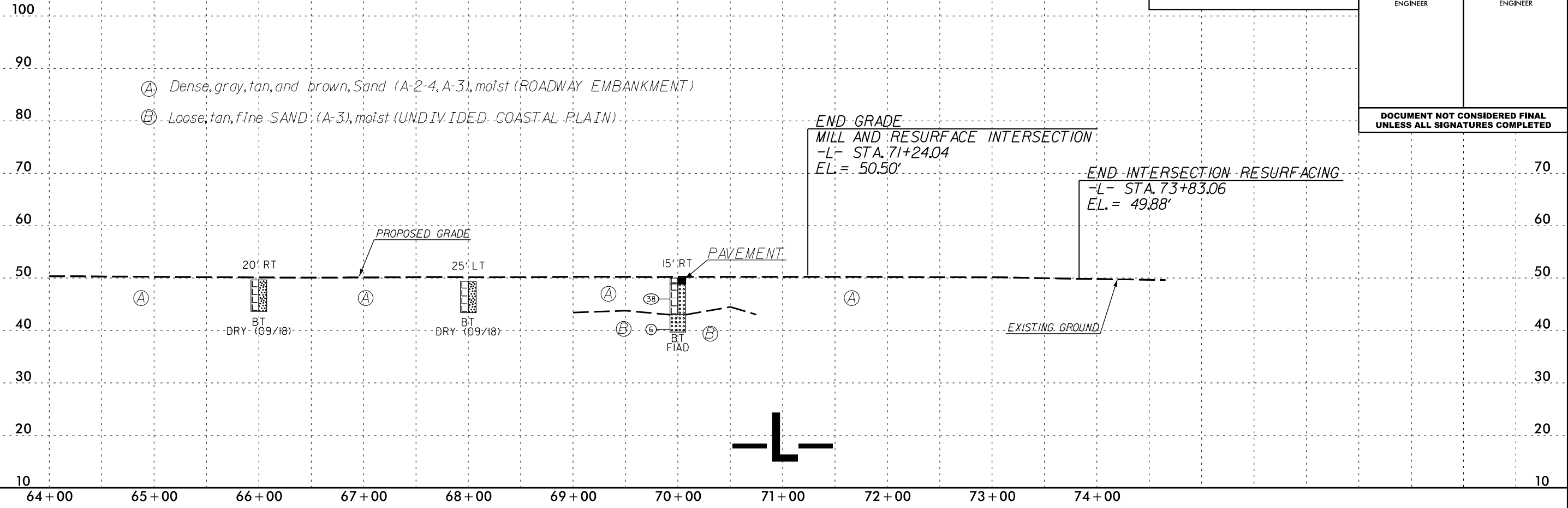


- (A) Medium dense to very dense, orange, gray, tan, and brown, SAND (A-2-4, A-3, A-1-b), dry to moist (ROADWAY EMBANKMENT)
- (B) Medium dense to dense, gray, brown, orange, and tan, SAND and clayey SAND (A-3, A-2-4, A-2-6), moist to saturated (UNDIVIDED COASTAL PLAIN)
- (D) Medium stiff, gray and tan, sandy CLAY (A-6), moist (ALLUVIAL)
- (E) Loose to medium dense, orange, tan, and brown, fine to coarse SAND and clayey SAND (A-2-6, A-2-4, A-3, A-1-b), with trace gravel, contains wood fragments, saturated (ALLUVIAL)

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REVISIONS

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R-5812	11
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



- Ⓐ Dense, gray, tan, and brown, Sand (A-2-4, A-3), moist (ROADWAY EMBANKMENT)
- Ⓑ Loose, tan, fine SAND (A-3), moist (UNDIVIDED COASTAL PLAIN)

END GRADE
MILL AND RESURFACE INTERSECTION
-L- STA. 71+24.04
EL. = 50.50'

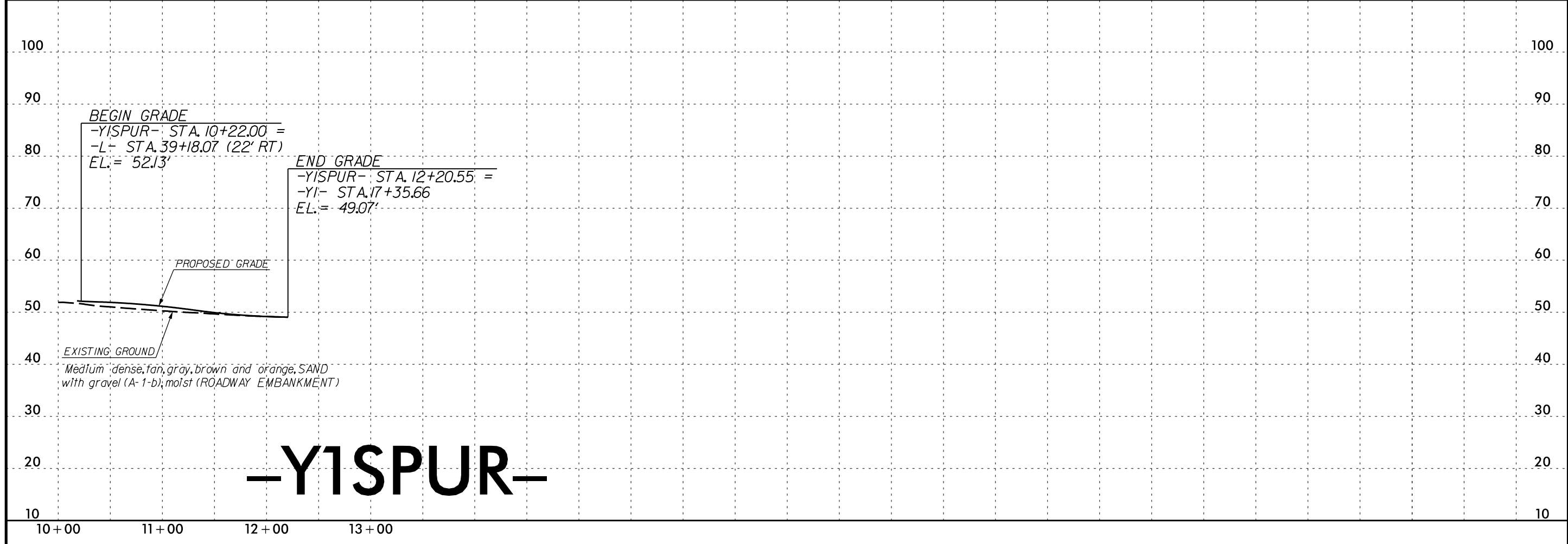
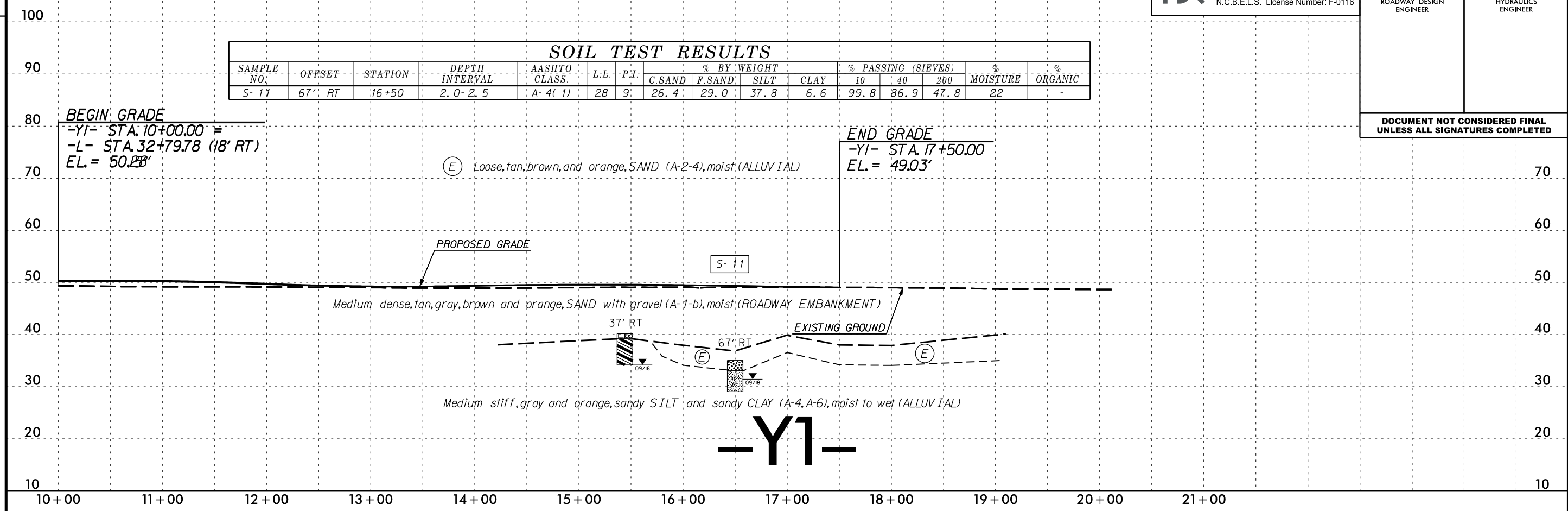
END INTERSECTION RESURFACING
-L- STA. 73+83.06
EL. = 49.88'

REVISIONS

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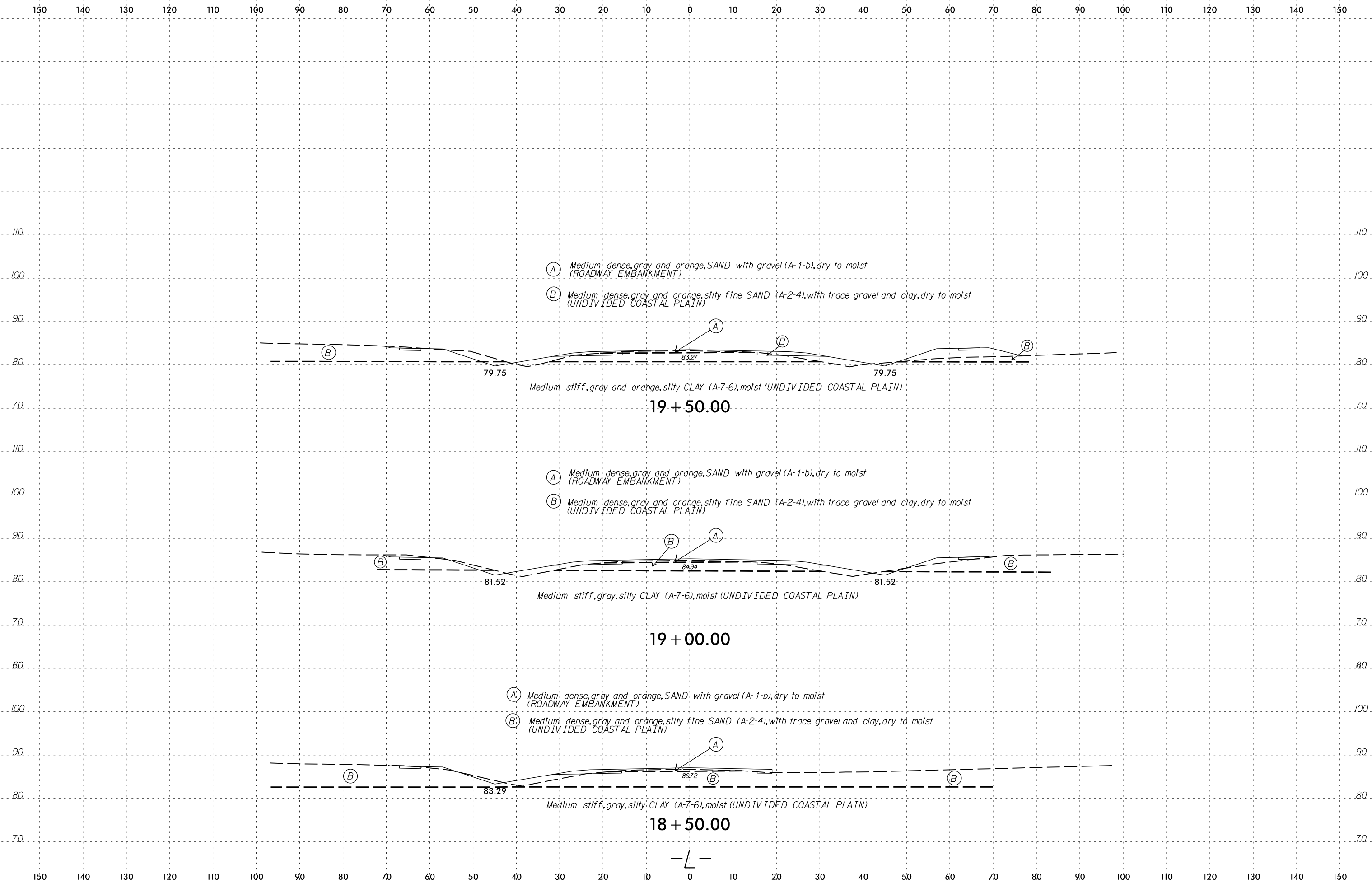
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R-5812	12
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SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L:L	P:P	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	40	200		
S-11	67' RT	16+50	2.0-2.5	A-4(1)	28	9	26.4	29.0	37.8	6.6	99.8	86.9	47.8	22	-



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REVISIONS



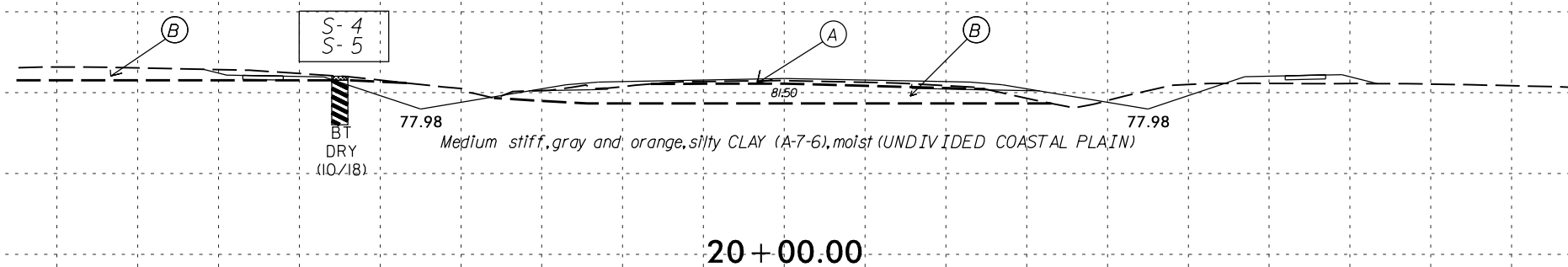
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SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	40	200		
S-4	12' LT	20+00	0.5-1.0	A-7-6(13)	42	16	8.3	12.0	27.3	48.8	96	95	77	32	-
S-5	12' LT	20+00	2.0-3.0	A-7-6(18)	48	18	4.4	8.7	31.4	55.5	100	98	88	55	-

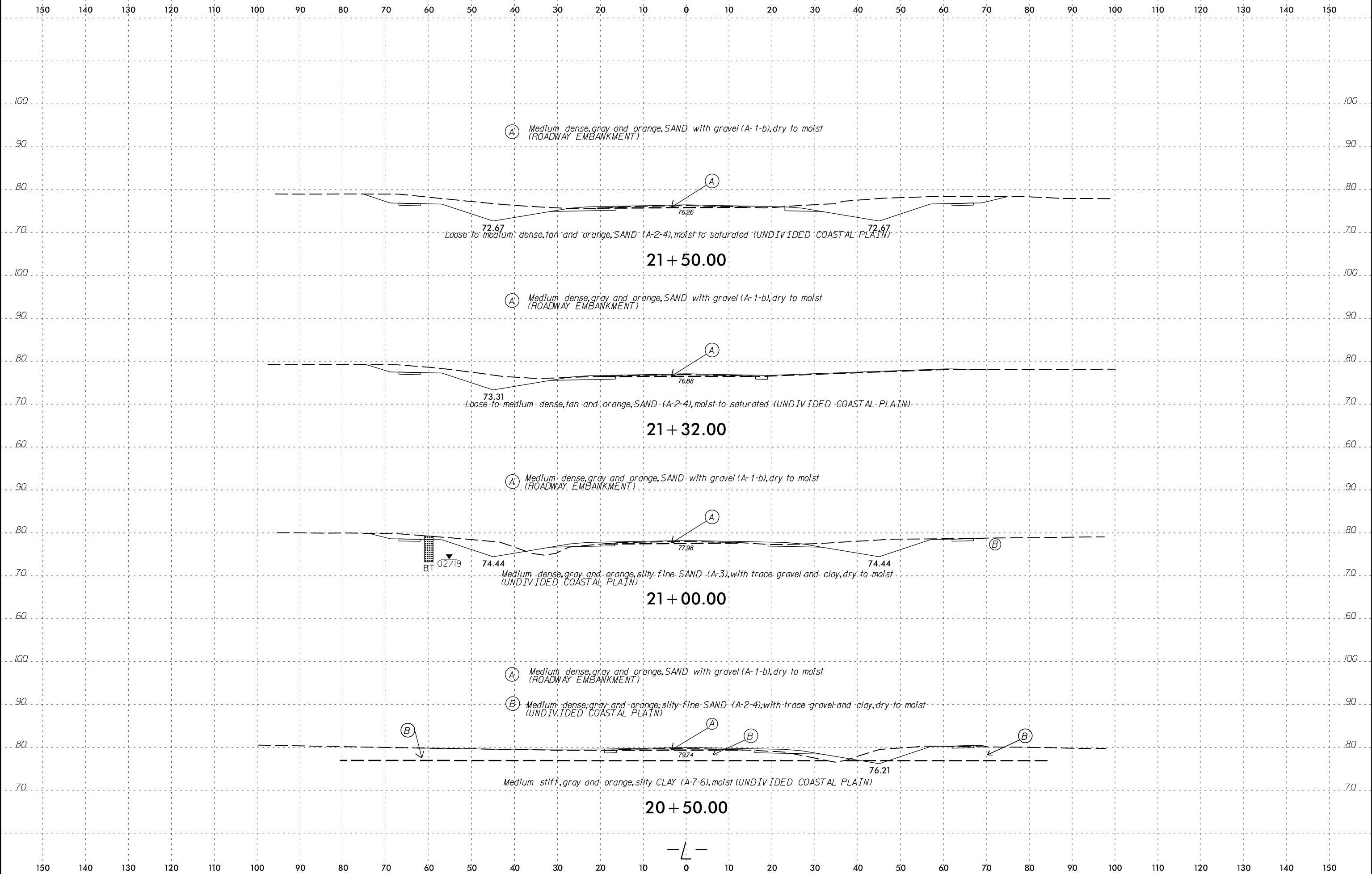
(A) Medium dense, gray and orange, SAND with gravel (A-1-b), dry to moist (ROADWAY EMBANKMENT)

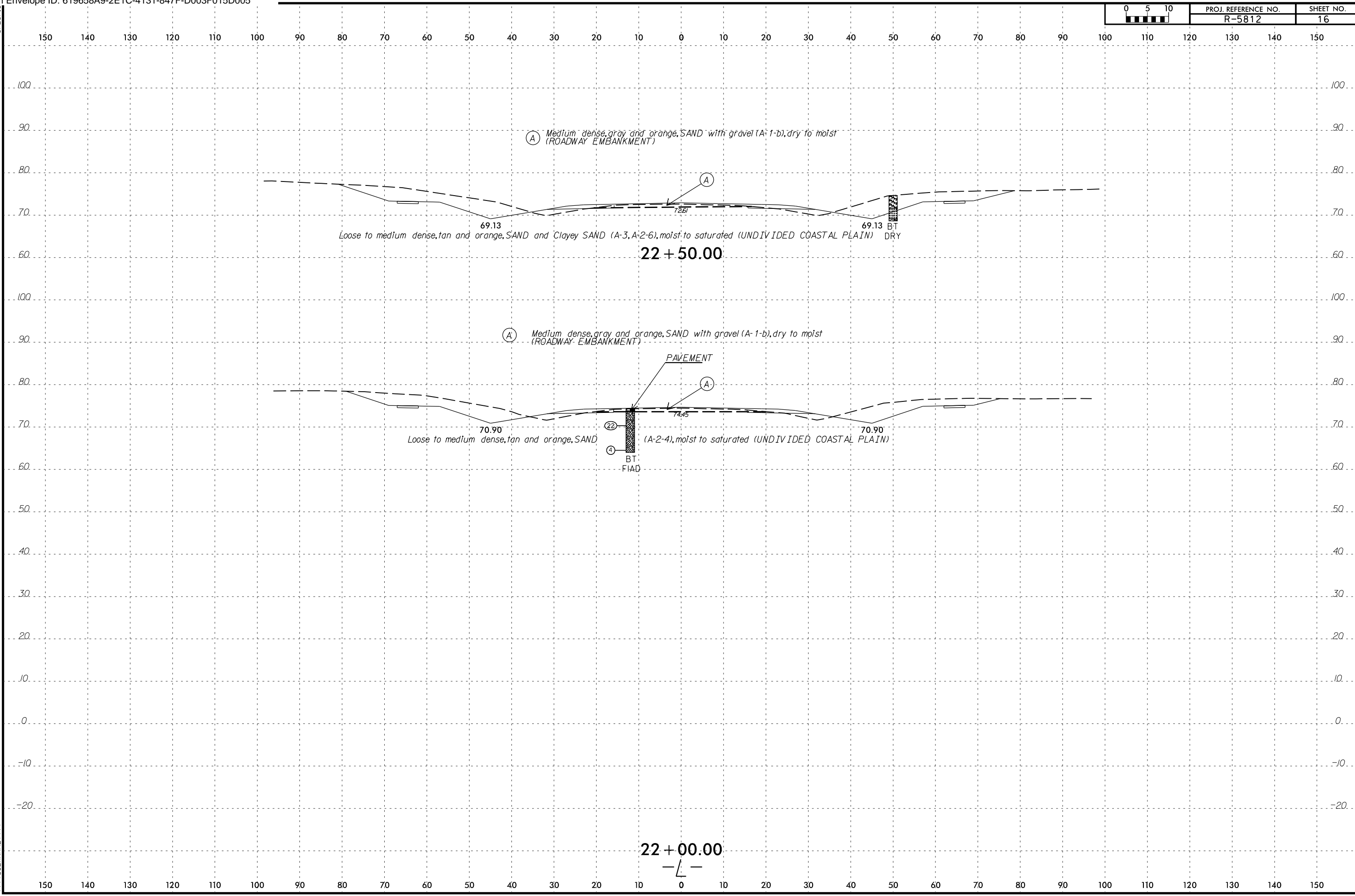
(B) Medium dense, gray and orange, silty fine SAND (A-2-4), with trace gravel and clay, dry to moist (UNDIVIDED COASTAL PLAIN)





6/23/16
8:00:25 AM XP L1850-2450.dgn
SUBSTRATE





6/23/16
12:02:41 PM
R-5812 RDY_XPL_L1850-2450.dgn
\$\$\$\$\$USERNAME\$\$\$\$\$

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

100 100

90 90

80 80

70 70

60 60

50 50

100 100

90 90

80 80

70 70

60 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

BT
DRY
02/19

(A) Medium dense, gray and orange, SAND with gravel (A-1-b), dry to moist (ROADWAY EMBANKMENT)

65.58 69.14 65.58
Medium dense, gray and tan, fine to coarse SAND (A-3), dry to saturated (UNDIVIDED COASTAL PLAIN)

23 + 50.00

(A) Medium dense, gray and orange, SAND with gravel (A-1-b), dry to moist (ROADWAY EMBANKMENT)

67.35 70.86 67.35
Medium dense, gray and tan, fine to coarse clayey SAND and SAND (A-2-4), dry to saturated (UNDIVIDED COASTAL PLAIN)

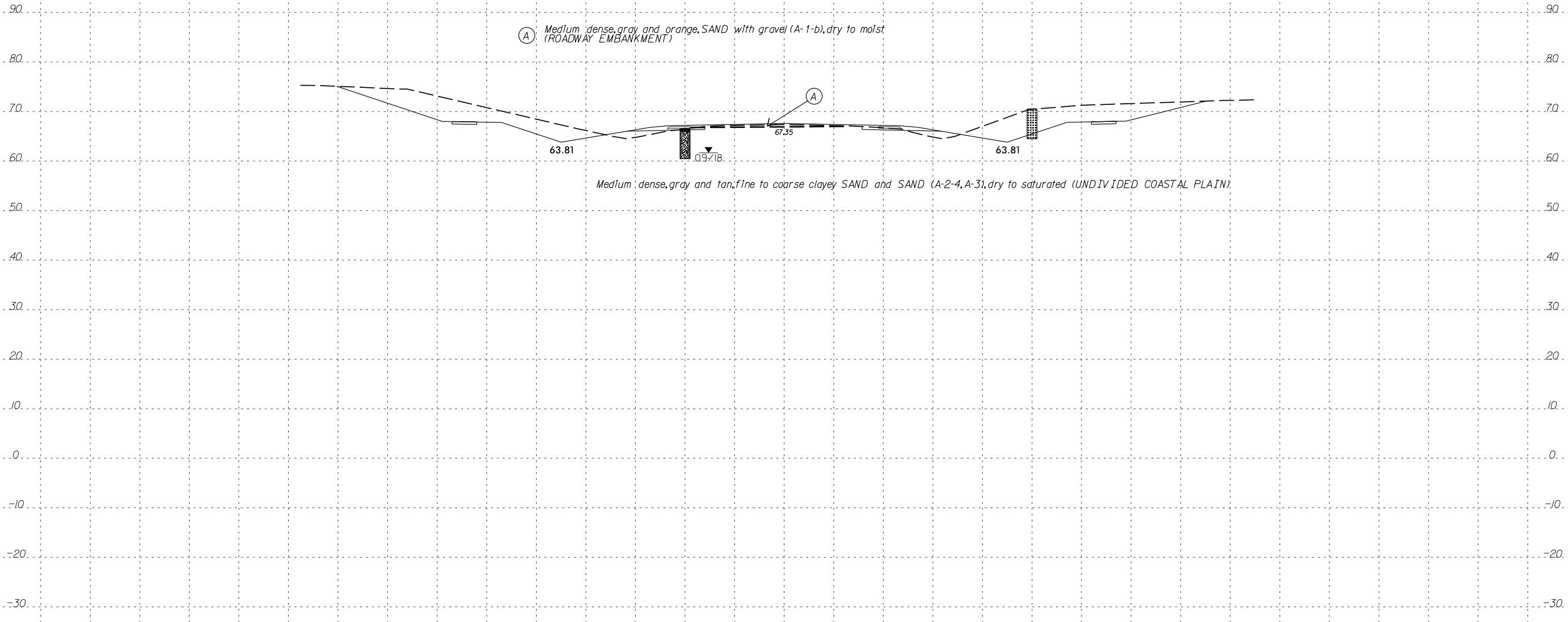
23 + 00.00

6/23/16
12:02:42 PM
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6/23/16

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



Ⓐ Medium dense, gray and orange, SAND with gravel (A-1-b), dry to moist (ROADWAY EMBANKMENT)

63.81

09.78

67.35

63.81

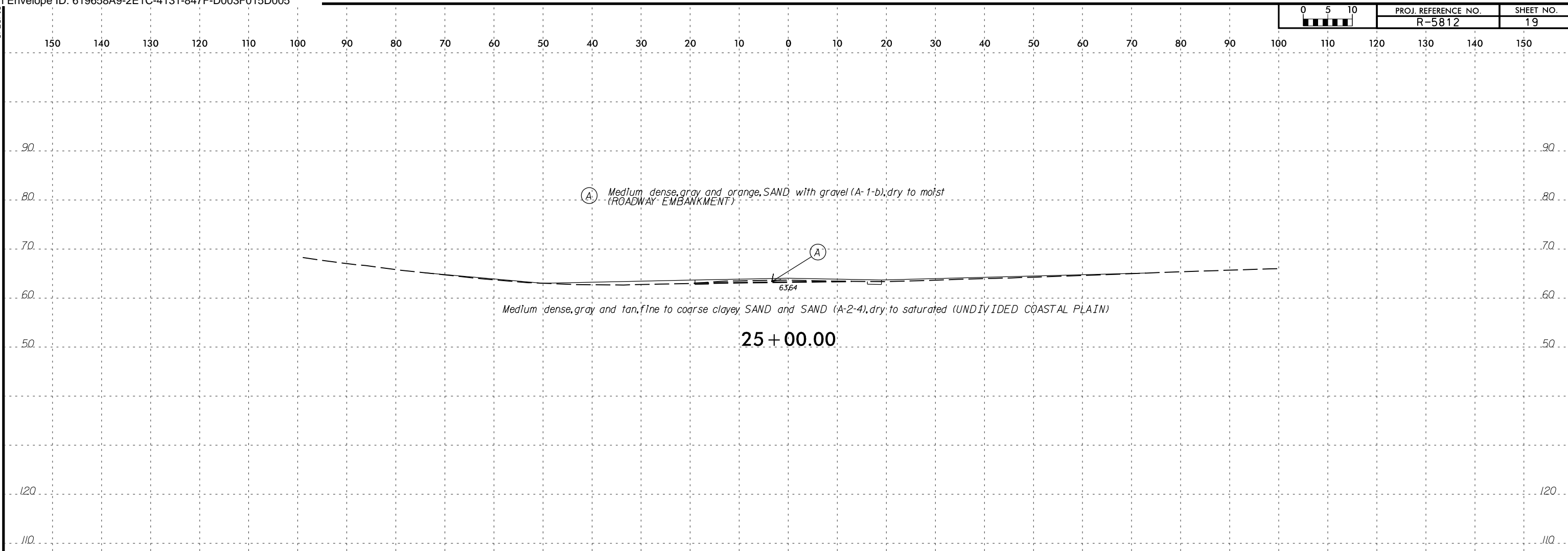
Medium dense, gray and tan, fine to coarse clayey SAND and SAND (A-2-4, A-3), dry to saturated (UNDIVIDED COASTAL PLAIN)

24 + 00.00



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

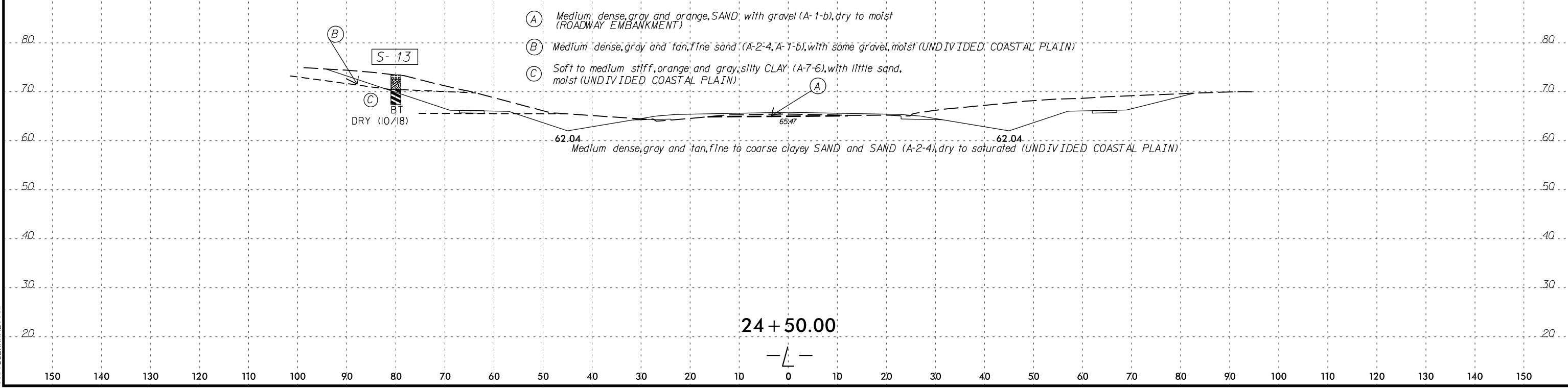
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R-5812-CP
SUBSTRATE



25 + 00.00

SOIL TEST RESULTS

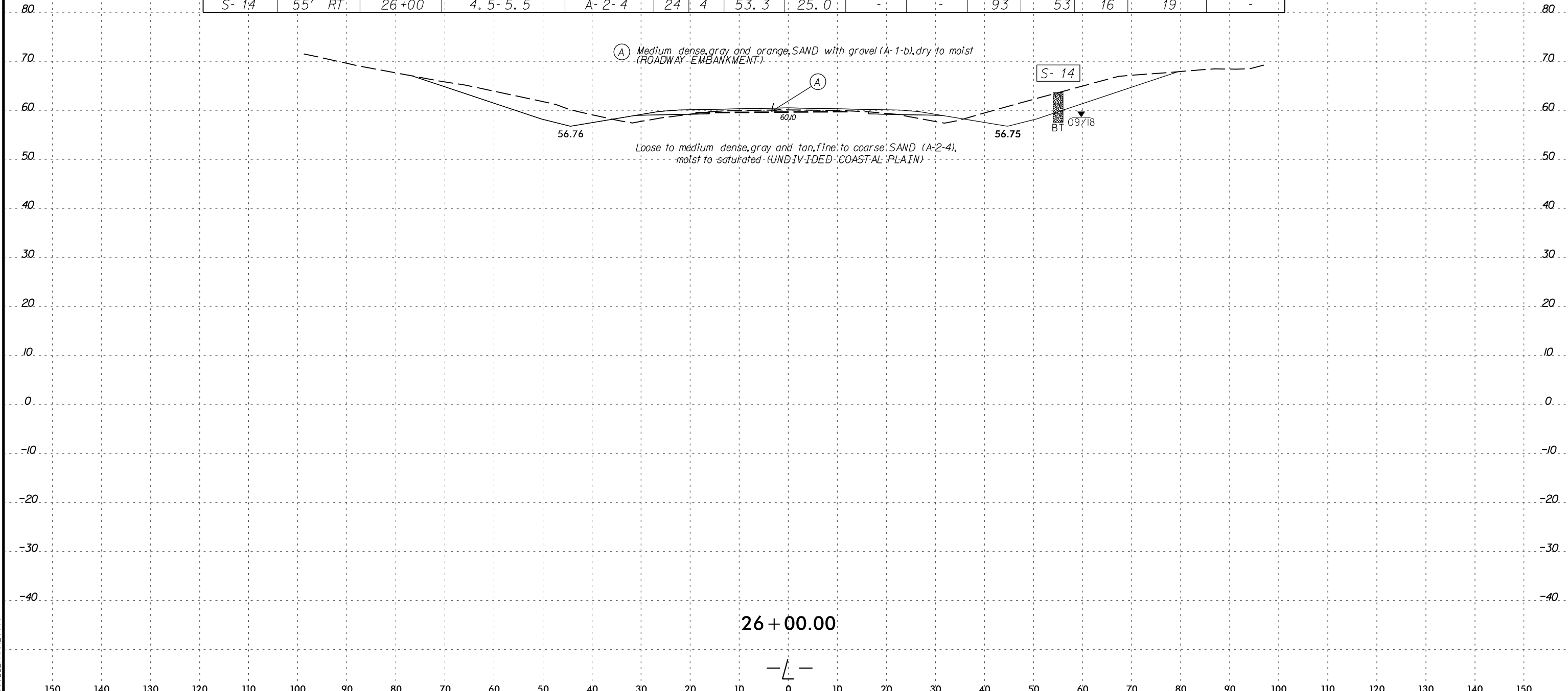
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	40	200		
S-13	80' LT	24+50	5.0'-6.0'	A-7-6(24)	50	23	3.9	7.8	43.2	45.1	100	98	91	44	-



24 + 50.00

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

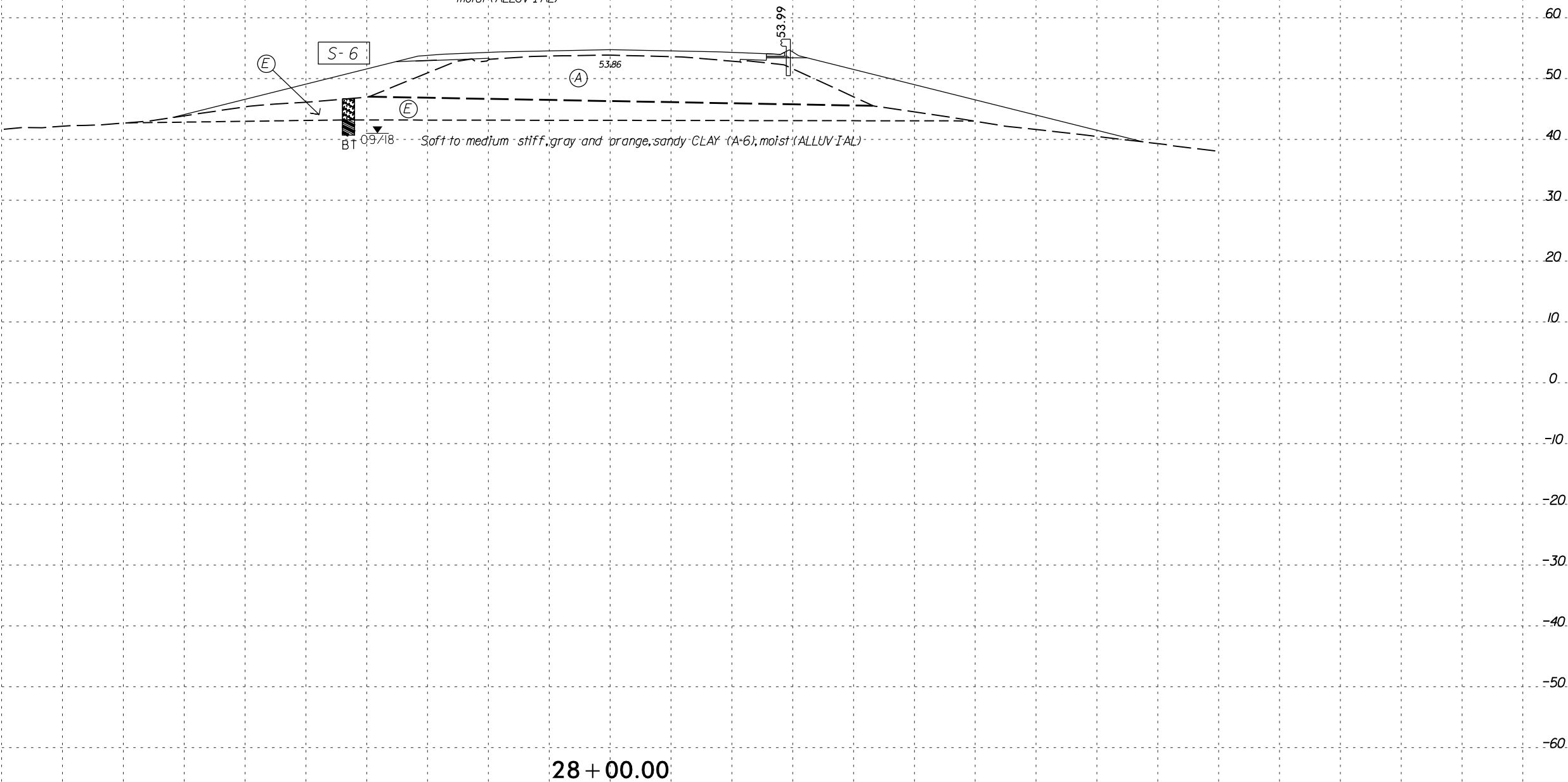
SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
S-14	55' RT	26+00	4.5-5.5	A-2-4	24	4	53.3	25.0	-	-	93	53	16	19	-



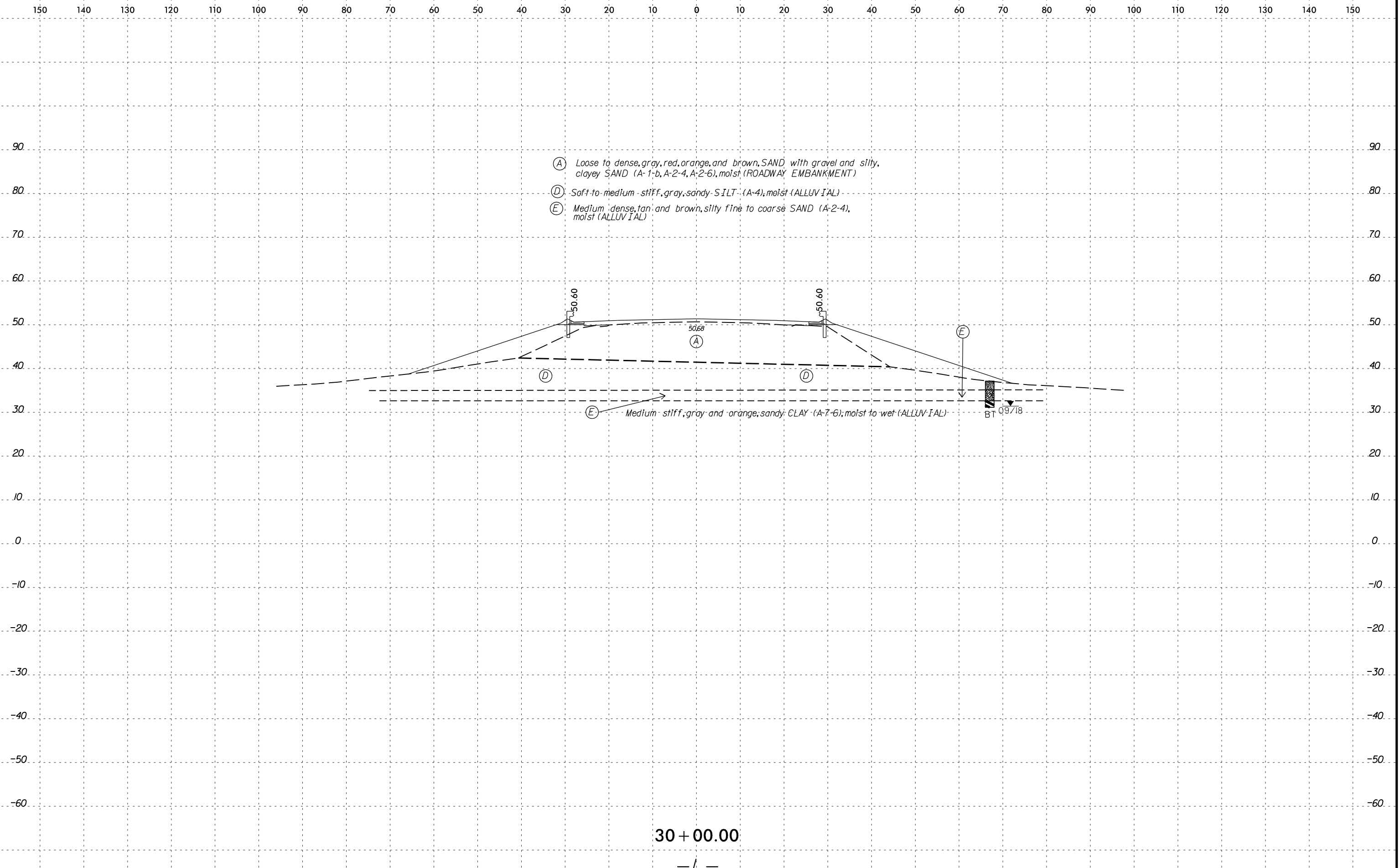
12:02:47 PM R5812 RDY_XPL_L2600.dgn

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-6	43' LT	28+00	3.5-4.0	A-6(2)	30	12	13.2	44.7	12.9	29.1	100	95	46	17	-

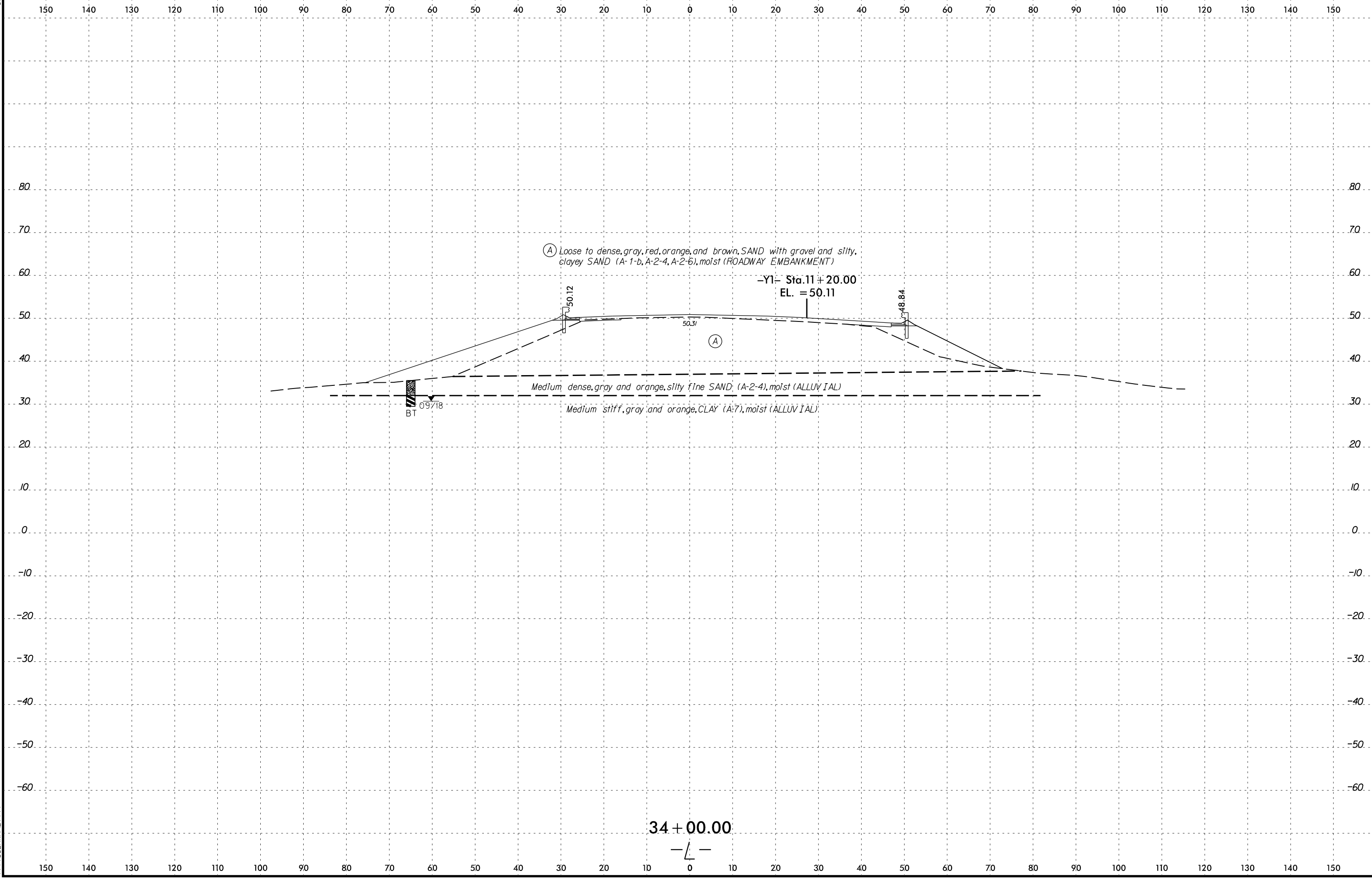
- (A) Loose to dense, gray, red, orange, and brown, SAND with gravel and silty, clayey, SAND (A-1-b, A-2-4, A-2-6), moist (ROADWAY EMBANKMENT)
- (E) Medium dense, brown, gray and orange, clayey fine to coarse SAND (A-2-6), moist (ALLUVIAL)



- (A) Loose to dense, gray, red, orange, and brown, SAND with gravel and silty, clayey SAND (A-1-b, A-2-4, A-2-6), moist (ROADWAY EMBANKMENT)
- (D) Soft to medium stiff, gray, sandy SILT (A-4), moist (ALLUVIAL)
- (E) Medium dense, tan and brown, silty fine to coarse SAND (A-2-4), moist (ALLUVIAL)

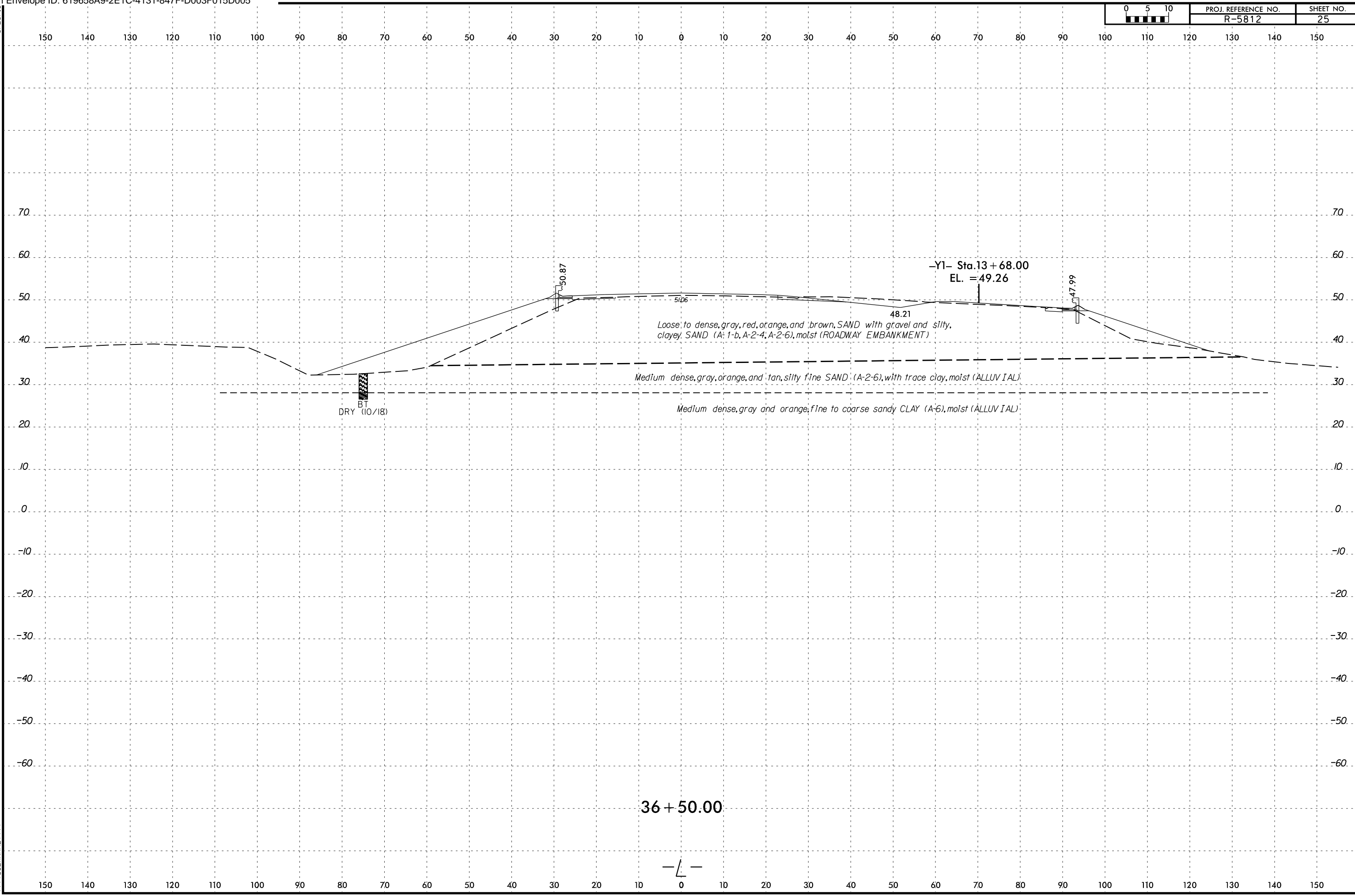


6/23/16
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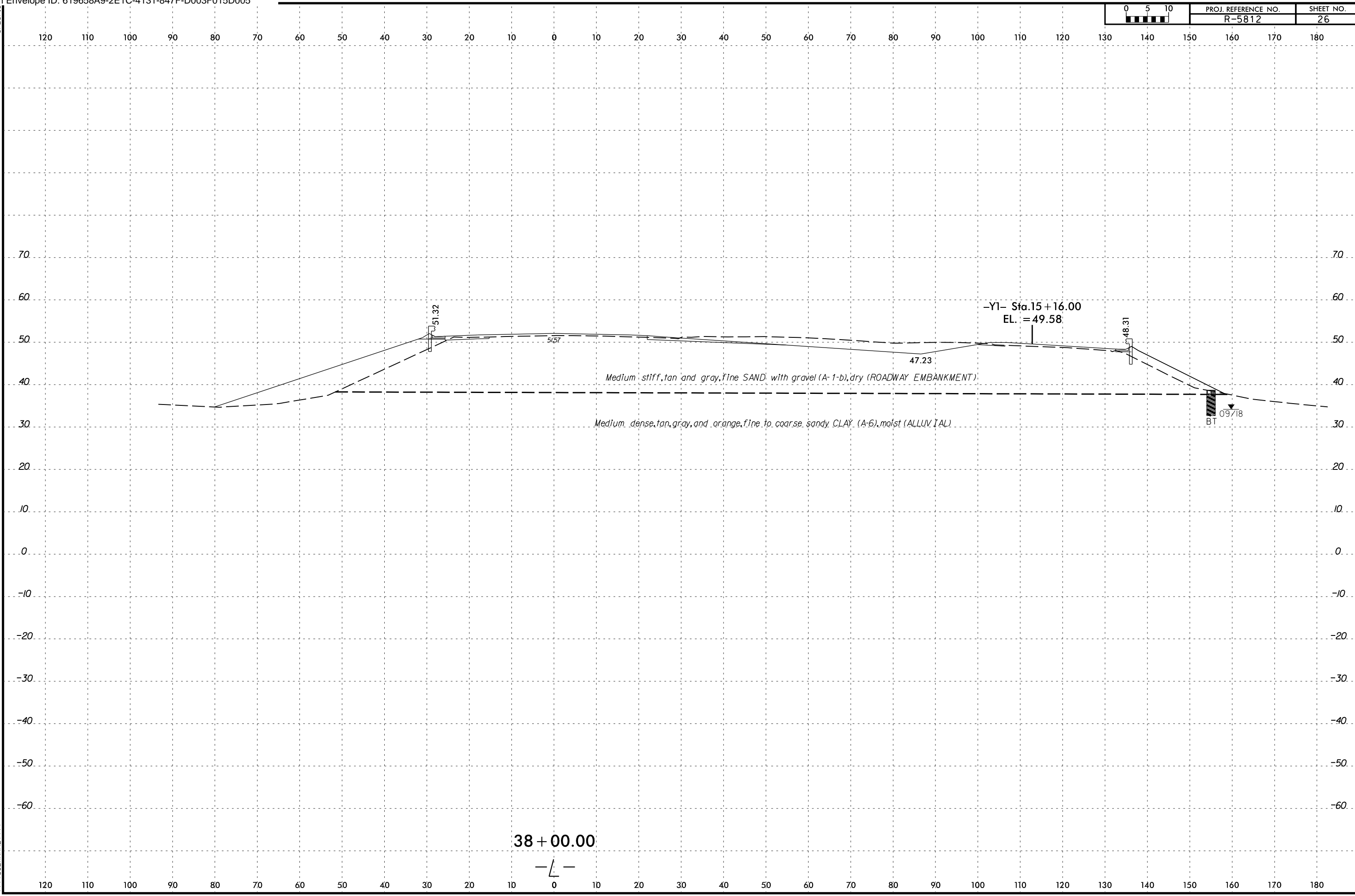
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34 + 00.00
— L —



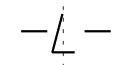
6/23/16

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6/23/16
12:03:04 PM
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38 + 00.00

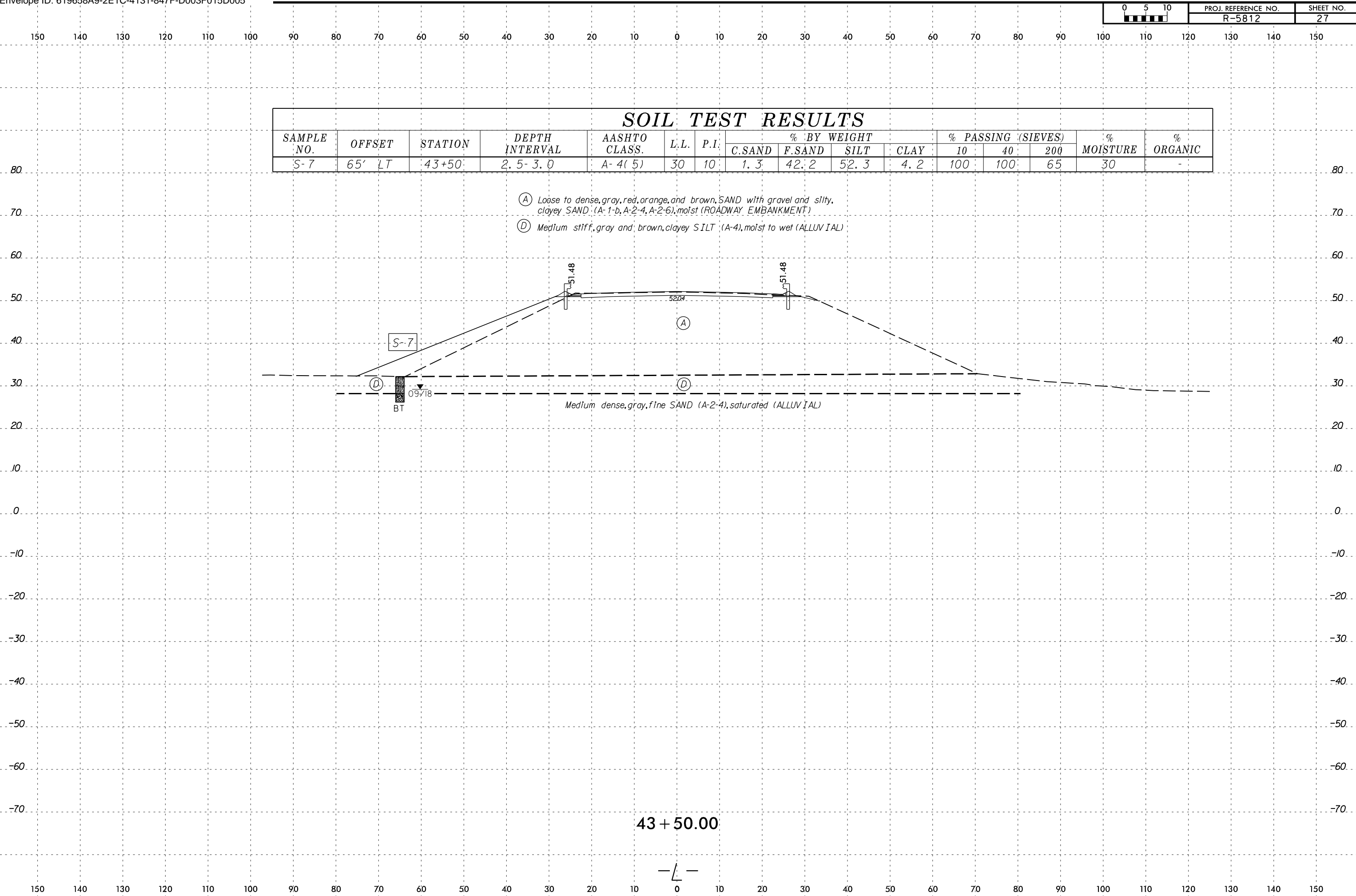


SOIL TEST RESULTS

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-7	65' LT	43+50	2.5-3.0	A-4(5)	30	10	1.3	42.2	52.3	4.2	100	100	65	30	-

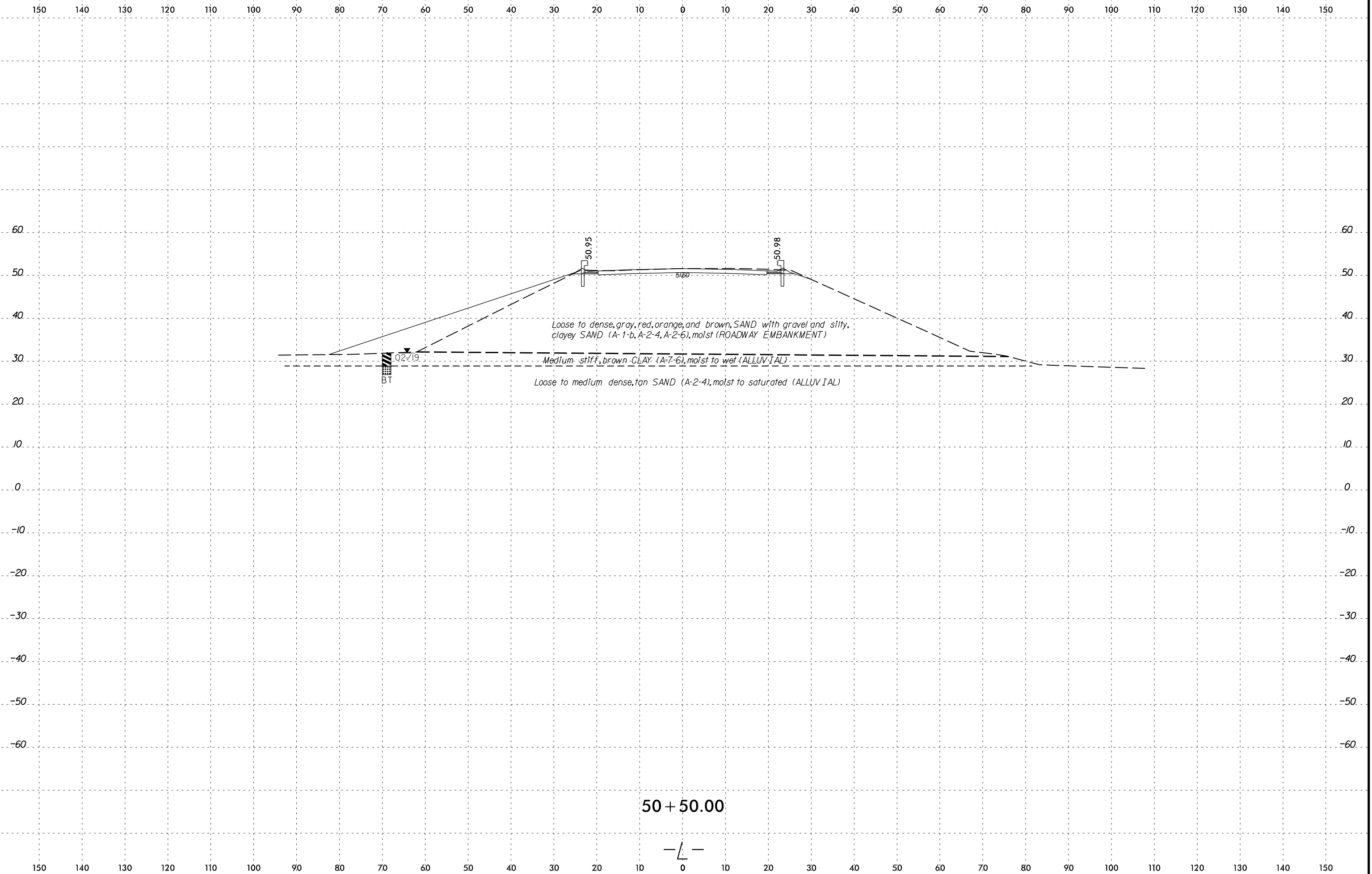
(A) Loose to dense, gray, red, orange, and brown, SAND with gravel and silty, clayey SAND (A-1-b, A-2-4, A-2-6), moist (ROADWAY EMBANKMENT)

(D) Medium stiff, gray and brown, clayey SILT (A-4), moist to wet (ALLUVIAL)

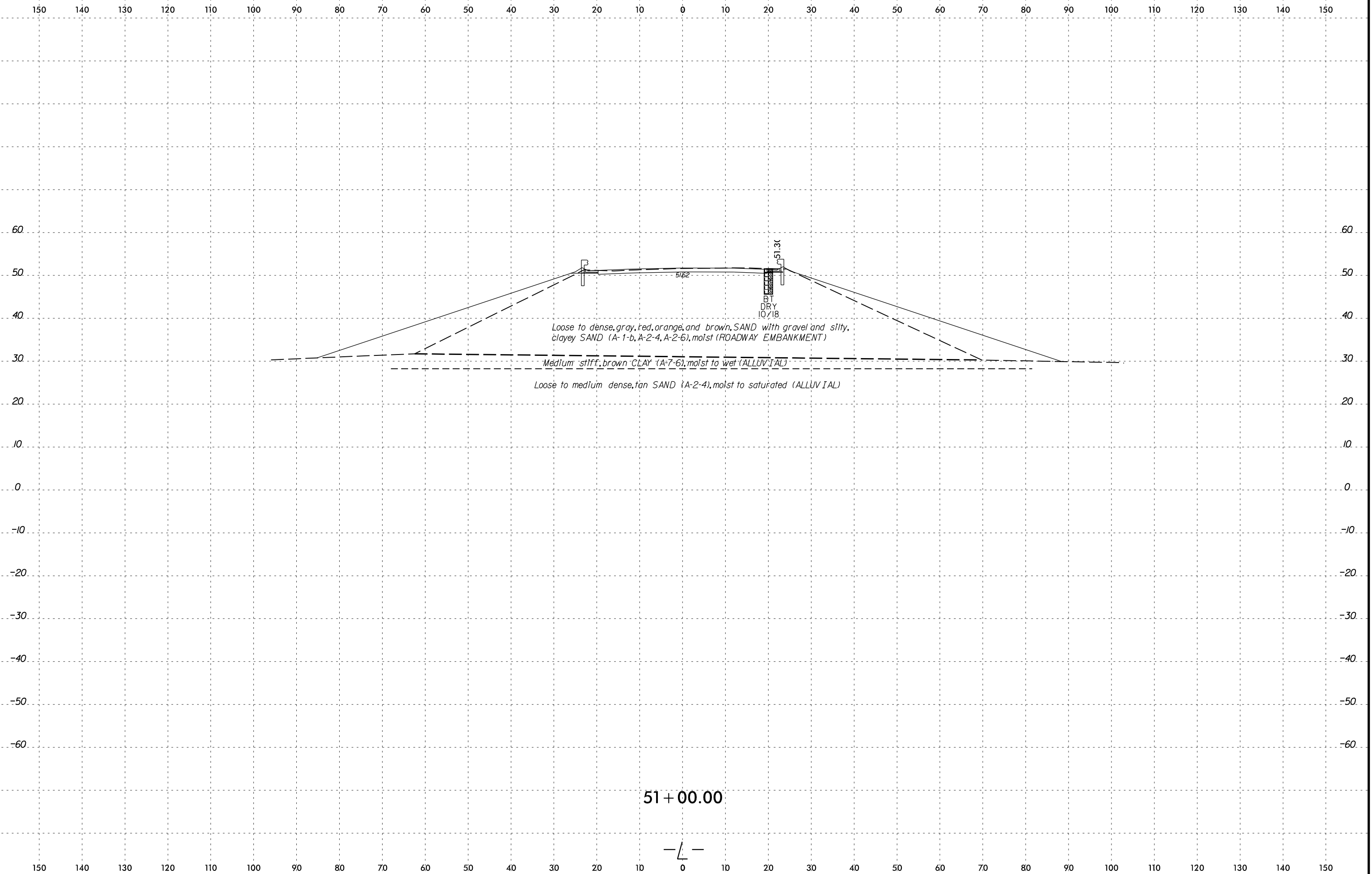


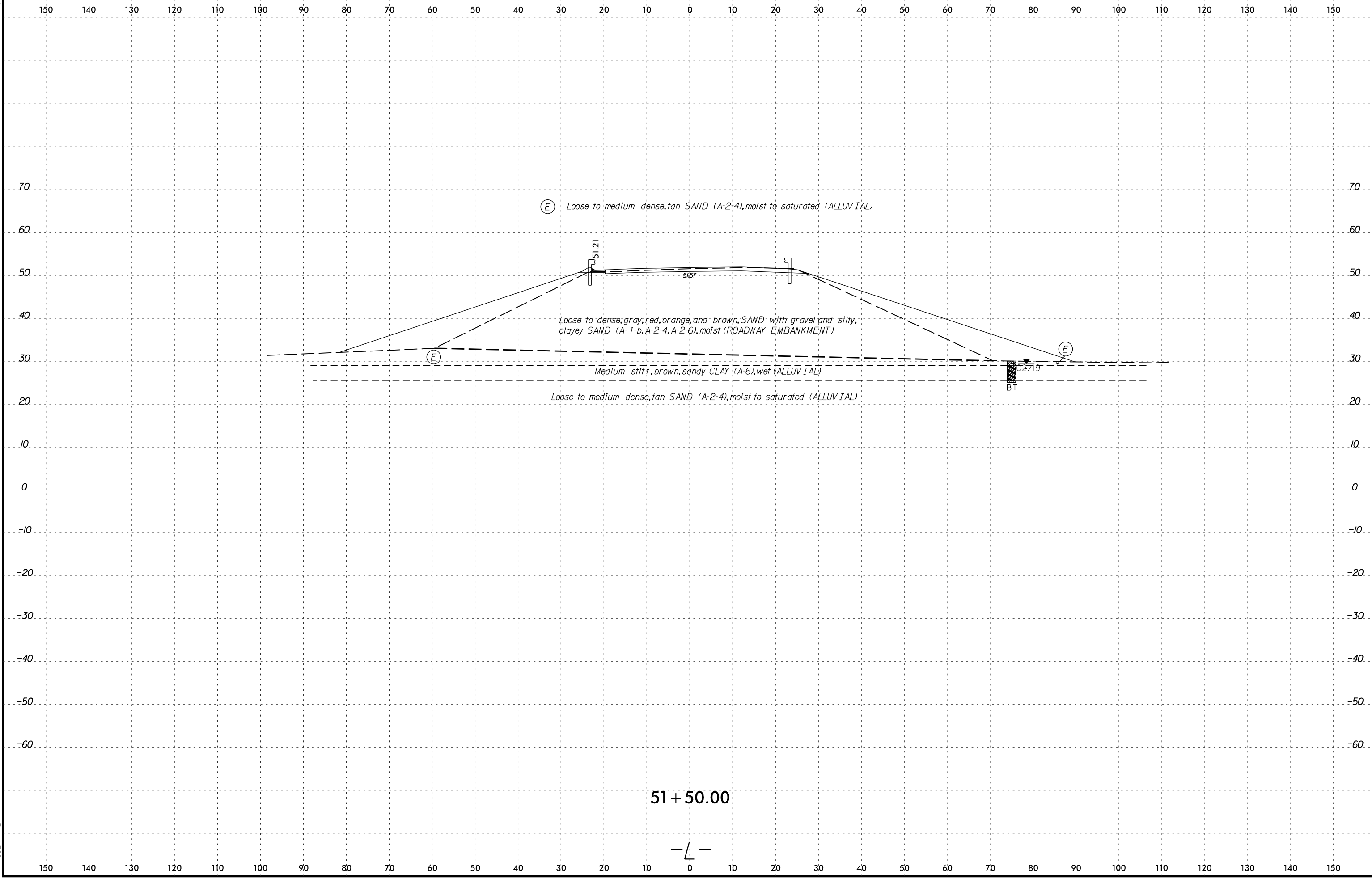
43 + 50.00





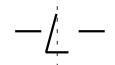
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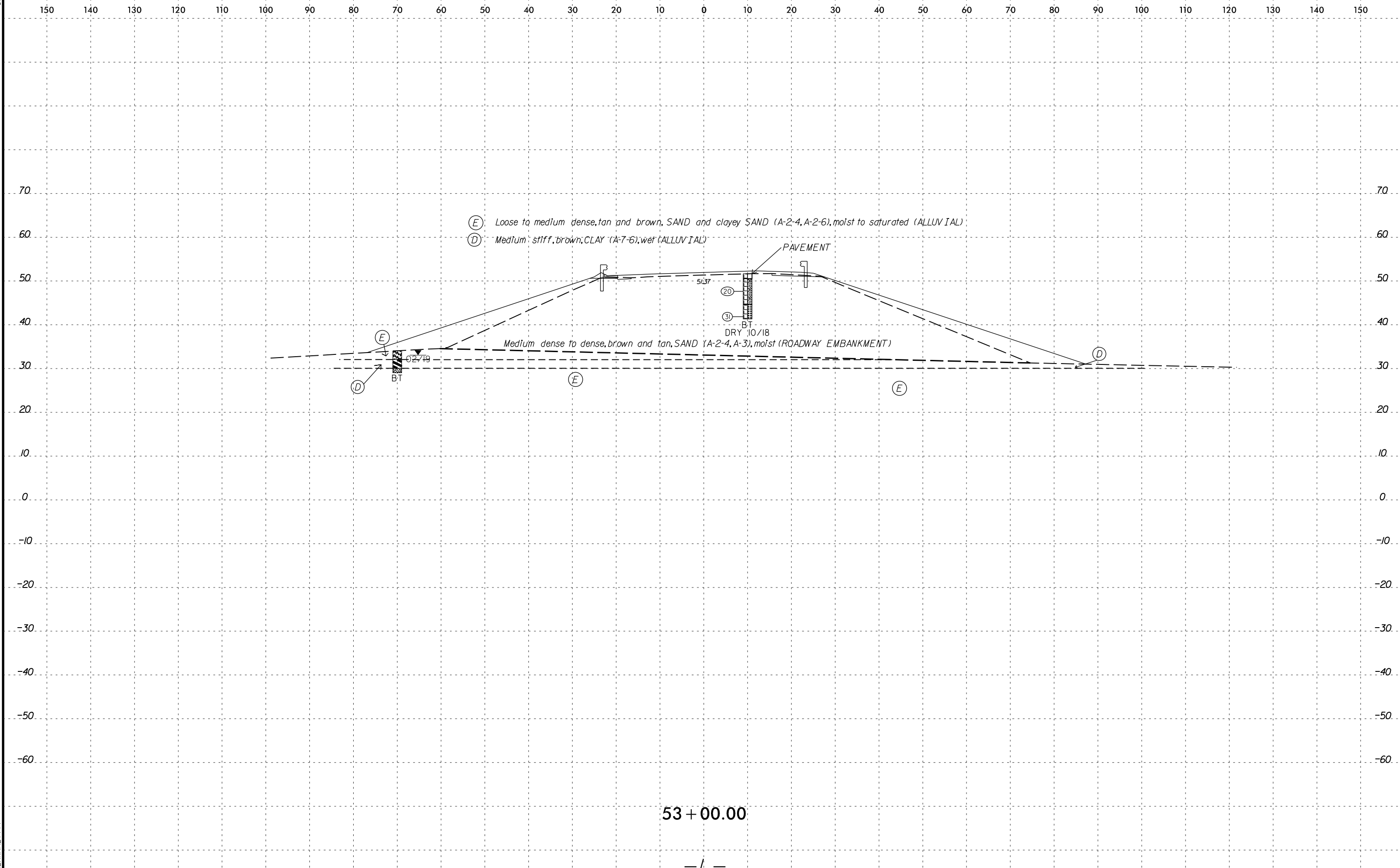




6/23/16
8:12 AM
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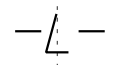
51 + 50.00

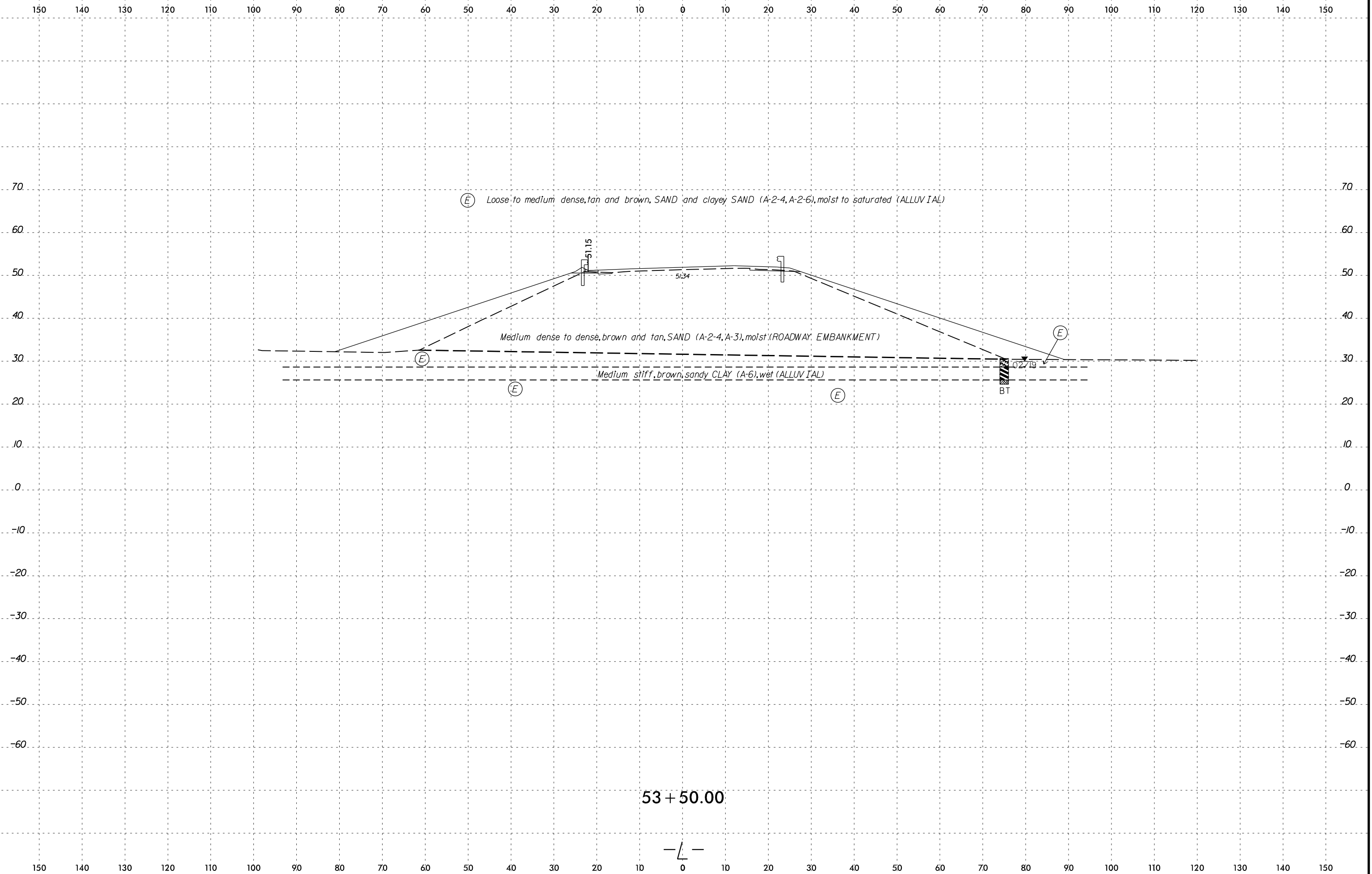




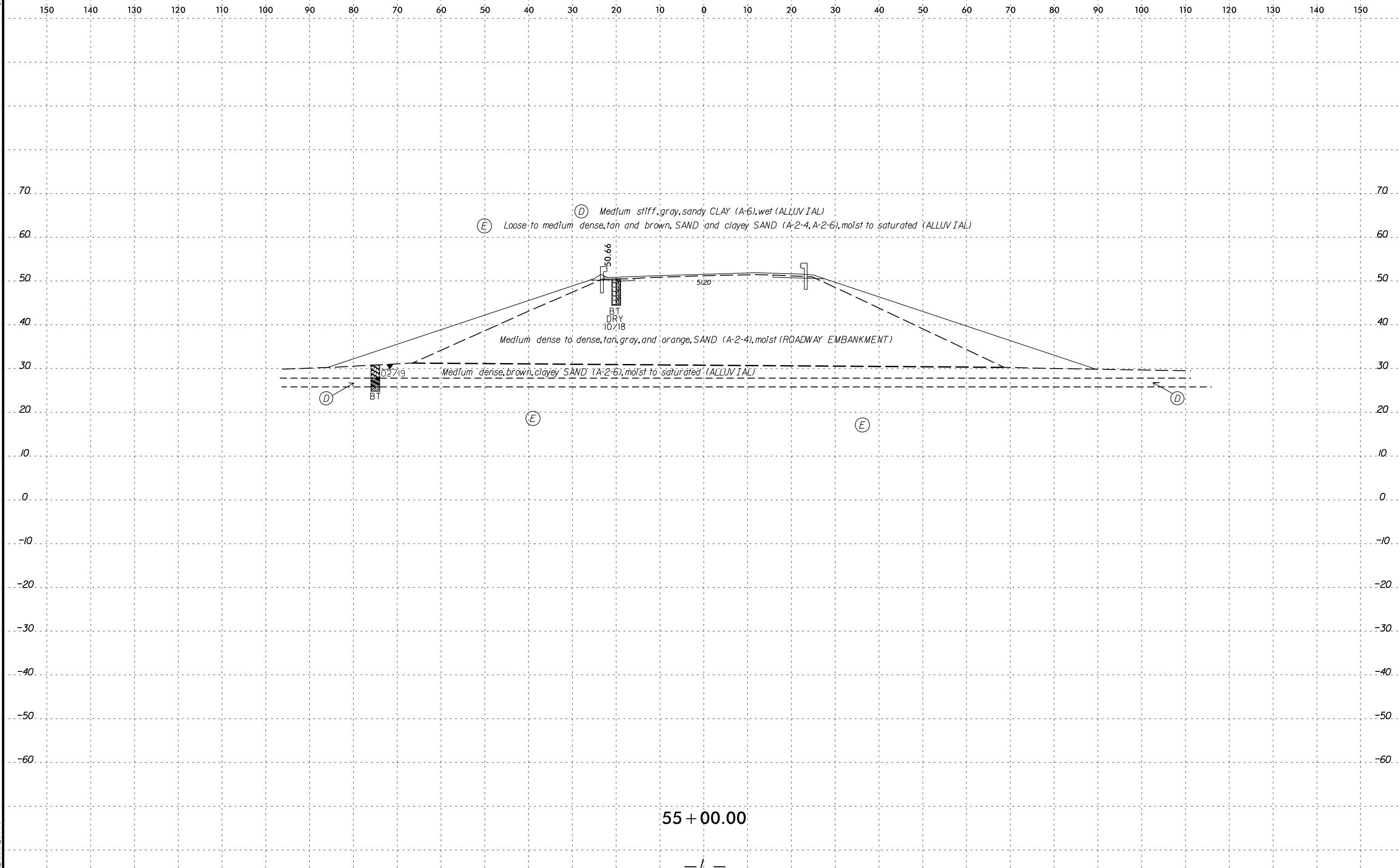
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53 + 00.00

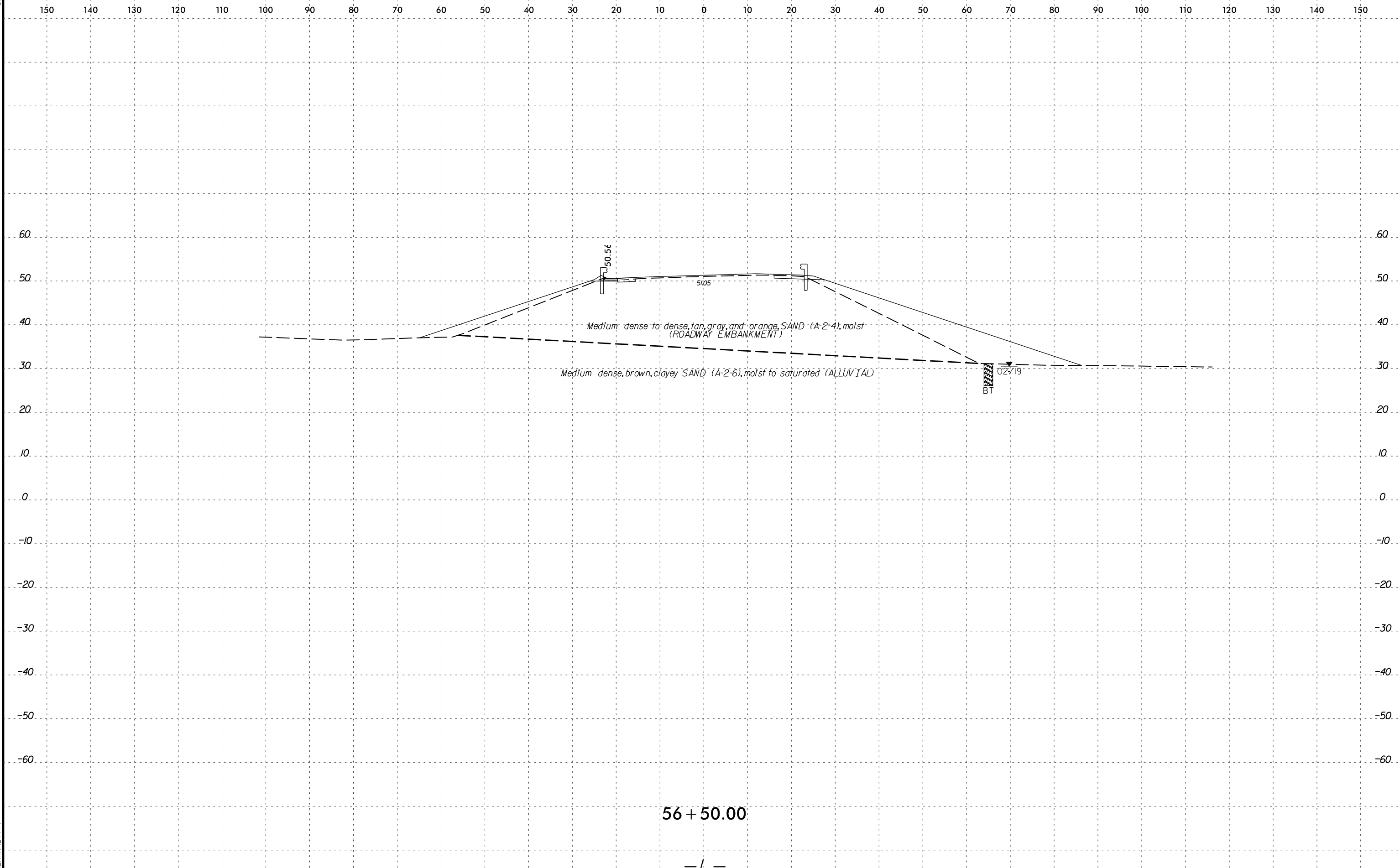




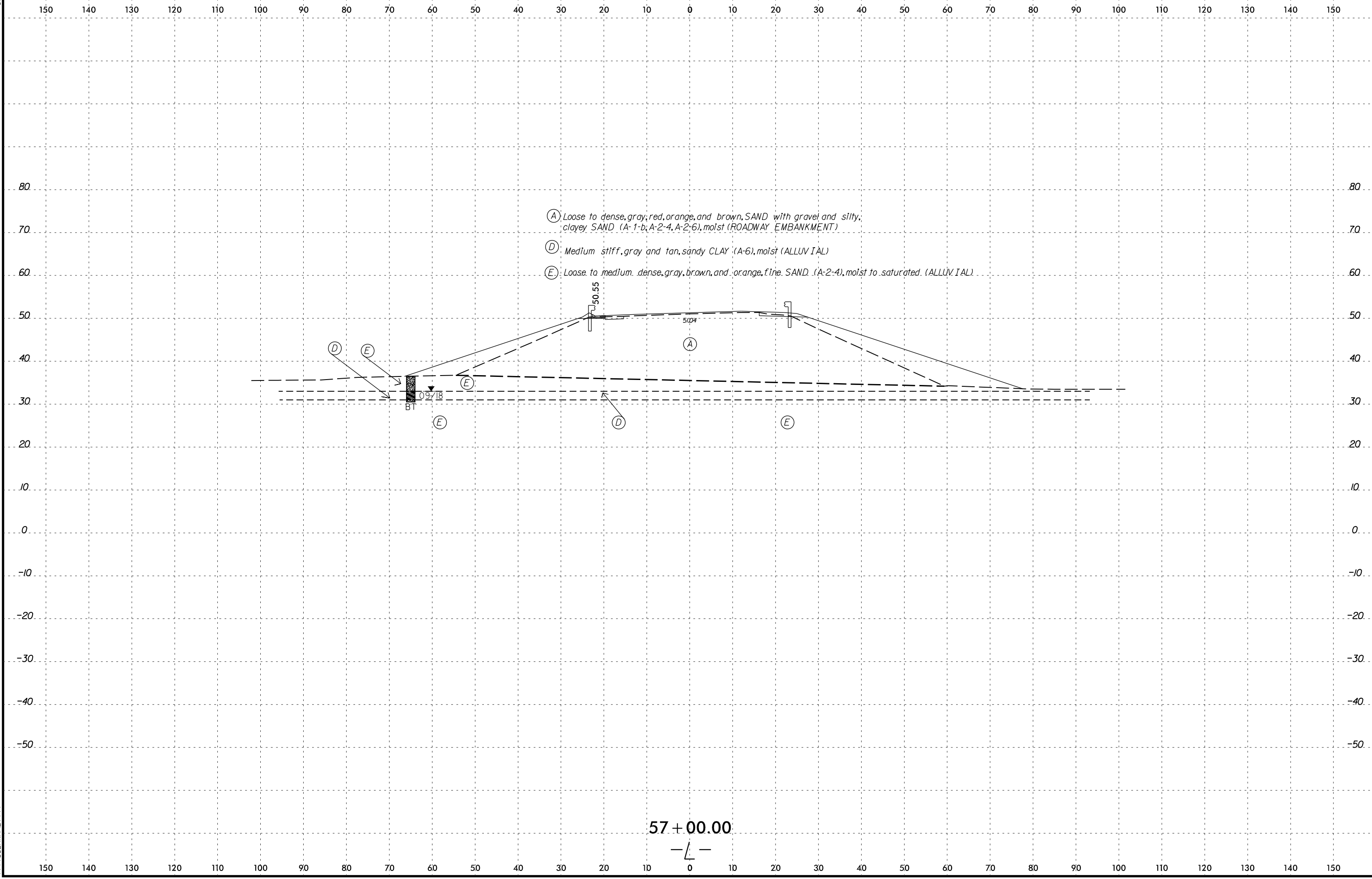
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8:16:07 AM
R-5812_RDY_XPL_15300.dgn
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6/23/16
8:17:27 AM
R-5812_P01_XPL_15500.dgn
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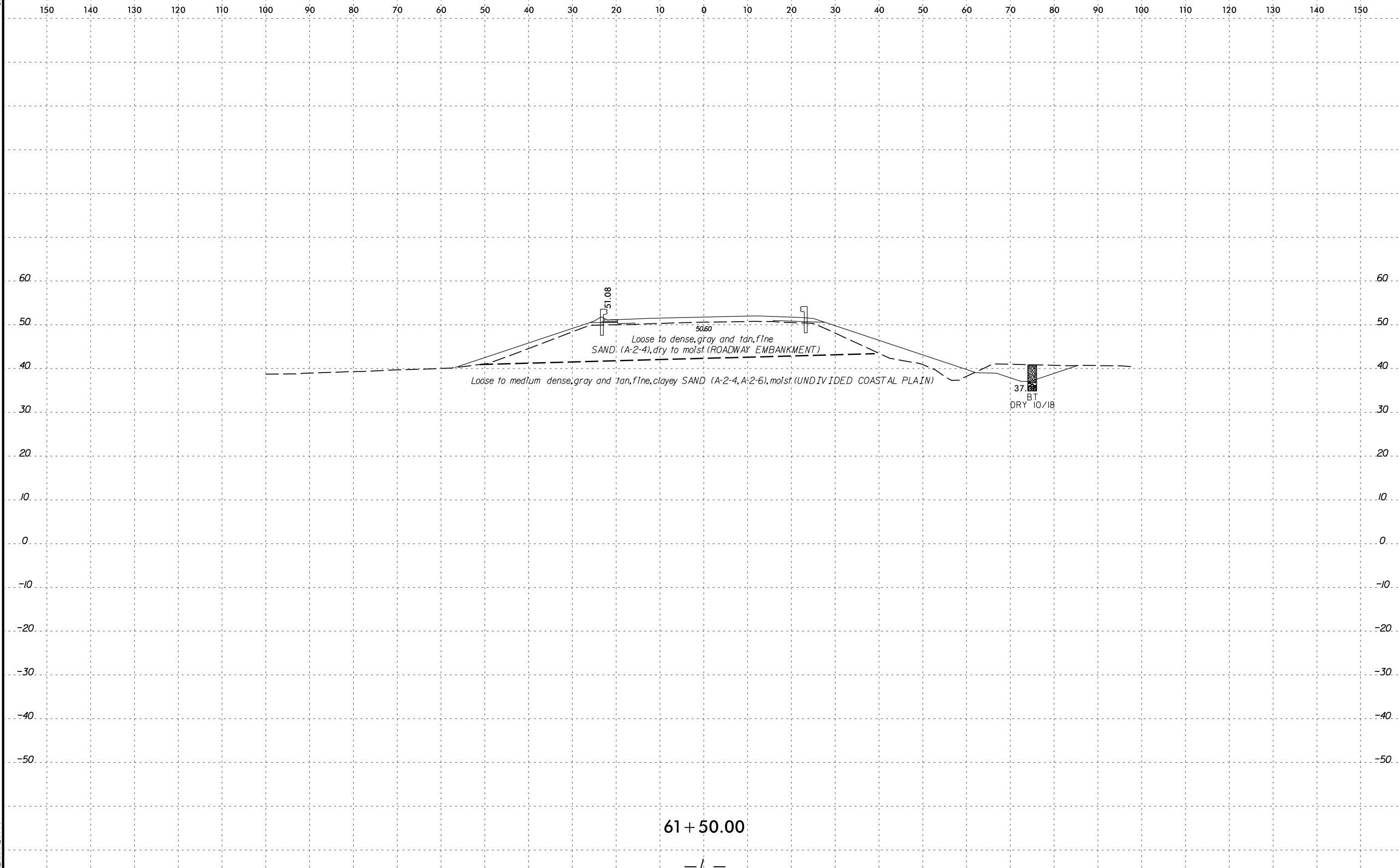


6/23/16 AM 8:18:56
R-5812 RDY_XPL_15650.dgn
\$\$\$\$\$USERNAME\$\$\$\$\$



- (A) Loose to dense, gray, red, orange, and brown, SAND with gravel and silty, clayey SAND (A-1-b, A-2-4, A-2-6), moist (ROADWAY EMBANKMENT)
- (D) Medium stiff, gray and tan, sandy CLAY (A-6), moist (ALLUVIAL)
- (E) Loose to medium dense, gray, brown, and orange, fine SAND (A-2-4), moist to saturated (ALLUVIAL)

57 + 00.00
— L —



8/23/16
6/23/16
8:21:03 AM
R-5812_RDY_XPL_L16150.dgn
\$\$\$\$\$USERNAME\$\$\$\$\$