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REFERENCE: R-5819/R-5820

PROJECT: 47091/47092

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-5819/R-5820	1	341

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ROADWAY SUBSURFACE INVESTIGATION

COUNTY COLUMBUS
PROJECT DESCRIPTION SR 1740 (OLD LAKE ROAD)
CONVERT AT-GRADE INTERSECTION TO GRADE
SEPARATION

SR 1735 (CHAUNCEY TOWN ROAD) CONVERT
AT-GRADE INTERSECTION TO INTERCHANGE

CONTENTS

LINE	STATION	PLAN
-LEB-	18+50.00 - 39+47.20	4-6
-LWB-	18+50.00 - 39+38.57	4-6
-L-	10+00.00 - 108+00.00	6-12
-YI-	10+00.00 - 58+39.24	6, 13-15
-YIRPA-	10+00.00 - 30+80.29	6-7
-YIRPB-	10+00.00 - 32+27.89	5-6
-YIRPC-	10+00.00 - 30+82.54	5-6
-YIRPD-	10+00.00 - 32+03.25	6-7
-YIA-	10+00.00 - 16+88.71	13
-Y2-	28+10.00 - 78+50.00	11, 16-19
-Y3-	13+40.00 - 21+23.00	13
-Y7-	10+00.00 - 99+51.30	15, 19-25
-DETI-	10+00.00 - 42+19.07	6, 14-15
-DET2-	10+00.00 - 41+46.42	11, 16-17

CROSS SECTIONS

LINE	STATION	SHEETS
-LWB-	20+00.00	26
-LWB-	21+50.00	27
-LWB-	23+50.00	28
-LWB-	25+50.00	29
-LWB-	27+50.00	30
-LWB-	29+50.00	31
-LWB-	31+50.00	32
-LWB-	32+00.00 - 39+00.00	33-55
-L-	12+50.00	56
-L-	14+50.00	57
-L-	16+50.00 - 20+50.00	58-61
-L-	21+50.00 - 22+00.00	62-63
-L-	23+50.00 - 26+50.00	64-70
-L-	28+50.00	71
-L-	30+50.00	72
-L-	32+50.00 - 40+50.00	73-98
-L-	42+50.00	99
-L-	44+50.00	100
-L-	46+50.00 - 54+50.00	101-117
-L-	56+50.00	118
-L-	58+50.00	119
-L-	60+50.00	120
-L-	62+50.00	121
-L-	64+50.00	122
-L-	66+50.00	123
-L-	68+50.00	124
-L-	70+50.00	125
-L-	72+50.00	126
-L-	74+50.00	127
-L-	76+50.00	128
-L-	78+50.00	129
-L-	80+50.00	130
-L-	82+50.00	131
-L-	84+50.00	132
-L-	86+50.00 - 89+50.00	133-139
-L-	90+50.00 - 91+00.00	140-141
-L-	92+50.00	142
-L-	94+50.00	143
-L-	96+50.00	144
-L-	98+50.00	145
-L-	100+50.00 - 104+50.00	146-154
-YI-	12+00.00 - 27+50.00	155-163
-YI-	29+50.00	164
-YI-	32+50.00	165
-YI-	35+00.00	166
-YI-	37+00.00	167
-YI-	39+50.00	168
-YI-	42+50.00	169
-YI-	45+50.00	170
-YI-	47+93.29	171
-YI-	49+00.00 - 52+00.00	172-174
-YIRPA-	18+50.00 - 19+00.00	175
-YIRPA-	22+00.00	176
-YIRPA-	25+00.00	177
-YIRPA-	28+00.00	178
-YIRPB-	20+00.00	179

CROSS SECTIONS

LINE	STATION	SHEETS
-YIRPB-	22+00.00 - 26+00.00	180-181
-YIRPB-	28+00.00	182
-YIRPB-	31+00.00	183
-YIRPC-	18+00.00	184
-YIRPC-	20+00.00	185
-YIRPC-	22+00.00	186
-YIRPC-	25+00.00	187
-YIRPC-	28+00.00	188
-YIRPD-	19+50.00 - 21+00.00	189
-YIRPD-	22+50.00	190
-YIRPD-	25+50.00	191
-YIRPD-	28+50.00	192
-YIA-	13+00.00 - 16+00.00	193-194
-Y2-	26+00.00	195
-Y2-	28+10.00	196
-Y2-	31+00.00	197
-Y2-	34+00.00	198
-Y2-	36+00.00	199
-Y2-	39+00.00	200
-Y2-	42+00.00	201
-Y2-	44+00.00	202
-Y2-	47+00.00	203
-Y2-	50+00.00 - 68+00.00	204-212
-Y2-	71+00.00	213
-Y2-	74+50.00 - 79+00.00	214-216
-Y3-	14+00.00	217
-Y3-	16+00.00	218
-Y3-	18+00.00 - 21+50.00	219-221
-Y7-	10+00.00 - 20+50.00	222-226
-Y7-	22+50.00	227
-Y7-	23+50.00 - 30+00.00	228-231
-Y7-	31+50.00	232
-Y7-	34+50.00 - 39+00.00	233-235
-Y7-	40+50.00	236
-Y7-	43+50.00	237
-Y7-	46+50.00	238
-Y7-	49+50.00	239
-Y7-	52+50.00	240
-Y7-	54+00.00 - 58+50.00	241-243
-Y7-	60+00.00 - 64+50.00	244-246
-Y7-	66+50.00 - 75+50.00	247-251
-Y7-	76+50.00	252
-Y7-	79+50.00	253
-Y7-	81+00.00 - 83+50.00	254-255
-Y7-	84+50.00 - 96+50.00	256-261
-DETI-	16+00.00	262
-DETI-	17+50.00 - 25+50.00	263-269
-DETI-	26+73.98	270
-DETI-	29+00.00	271

INVENTORY

CROSS SECTIONS

LINE	STATION	SHEETS
-DETI-	32+00.00	272
-DETI-	35+00.00 - 40+50.00	273-276
-DET2-	14+00.00 - 20+00.00	277-279
-DET2-	22+00.00	280
-DET2-	23+50.00	281
-DET2-	26+00.00	282
-DET2-	28+00.00 - 39+00.00	283-287

APPENDICES

APPENDIX	TITLE	SHEETS
A	LABORATORY RESULTS	288-341

PERSONNEL

C. DRISCOLL

C. REYNOLDS

N. EVANS

TRIGON EXPLORATIONS

INVESTIGATED BY C. DRISCOLL

DRAWN BY C. REYNOLDS/C. DRISCOLL

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SUBMITTED BY KLEINFELDER, INC.

DATE FEBRUARY 2021

Prepared in the Office of:



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Thomas R. Wells 2/23/2021

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

SUBSURFACE INVESTIGATION

SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

SOIL DESCRIPTION
SOIL IS CONSIDERED 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 THE STANDARD PENETRATION TEST (AASHTO T 208, ASTM D1586). SOIL CLASSIFICATION IS BASED ON THE AASHTO SYSTEM. BASIC DESCRIPTIONS GENERALLY INCLUDE THE FOLLOWING: CONSISTENCY, COLOR, TEXTURE, MOISTURE, AASHTO CLASSIFICATION, AND OTHER PERTINENT FACTORS SUCH AS MINERALOGICAL COMPOSITION, ANGULARITY, STRUCTURE, PLASTICITY, ETC. FOR EXAMPLE, VERY STIFF, GRAY, SILTY CLAY, MOIST WITH INTERBEDDED FINE SAND LAYERS, HIGHLY PLASTIC, A-7-6

SOIL LEGEND AND AASHTO CLASSIFICATION

GENERAL CLASS.	GRANULAR MATERIALS (≤ 35% PASSING #200)						SILT-CLAY MATERIALS (> 35% PASSING #200)						ORGANIC MATERIALS					
GROUP CLASS.	A-1	A-2	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				
SYMBOL	[Pattern]		[Pattern]		[Pattern]	[Pattern]	[Pattern]	[Pattern]	[Pattern]	[Pattern]	[Pattern]	[Pattern]	[Pattern]	[Pattern]	[Pattern]	[Pattern]	[Pattern]	
% PASSING #10 #40 #200	50 30 15	60 40 25	65 45 30	65 45 30	65 45 30	65 45 30	65 45 30	65 45 30	65 45 30	65 45 30	65 45 30	65 45 30	65 45 30	65 45 30				
MATERIAL PASSING #40 LL PI	- - -			40 10	41 10	42 10	43 10	44 10	45 10	46 10	47 10	48 10	49 10	50 10				
GROUP INDEX	0			0	0	0	1	2	3	4	5	6	7	8				
USUAL TYPES OF MAJOR MATERIALS	FINE SAND			SILTY OR CLAYEY SAND			SANDY SILT			SILT			CLAYEY SILT					
GEN. RATING AS SUBGRADE	EXCELLENT TO GOOD						FAIR TO POOR						FAIR TO POOR			POOR UNSUITABLE		

PI OF A-7-5 SUBGROUP IS ≤ LL - 30 ; PI OF A-7-6 SUBGROUP IS > LL - 30

CONSISTENCY OR DENSENESS

PRIMARY SOIL TYPE	COMPACTNESS OR CONSISTENCY	RANGE OF STANDARD PENETRATION RESISTANCE (N-VALUE)	RANGE OF UNCONFINED COMPRESSIVE STRENGTH (TONS/FT²)
GENERALLY GRANULAR MATERIAL (NON-COHESIVE)	VERY LOOSE LOOSE MEDIUM DENSE DENSE VERY DENSE	< 4 4 TO 10 10 TO 30 30 TO 50 > 50	N/A
GENERALLY SILT-CLAY MATERIAL (COHESIVE)	VERY SOFT SOFT MEDIUM STIFF STIFF VERY STIFF HARD	< 2 2 TO 4 4 TO 8 8 TO 15 15 TO 30 > 30	< 0.25 0.25 TO 0.5 0.5 TO 1.0 1 TO 2 2 TO 4 > 4

TEXTURE OR GRAIN SIZE

U.S. STD. SIEVE SIZE (OPENING IN MM)	4	10	40	60	200	270
	4.75	2.00	0.42	0.25	0.075	0.053
Boulder (BLDR.)	Cobble (COB.)	Gravel (GR.)	Coarse Sand (CS, SD.)	Fine Sand (F SD.)	Silt (SL.)	Clay (CL.)
GRAIN SIZE MM	305	75	2.0	0.25	0.05	0.005
SIZE IN.	12	3				

SOIL MOISTURE - CORRELATION OF TERMS

SOIL MOISTURE SCALE (ATTERBERG LIMITS)	FIELD MOISTURE DESCRIPTION	GUIDE FOR FIELD MOISTURE DESCRIPTION
LL	- SATURATED - (SAT.)	USUALLY LIQUID; VERY WET, USUALLY FROM BELOW THE GROUND WATER TABLE
PL	- WET - (W)	SEMISOLID; REQUIRES DRYING TO ATTAIN OPTIMUM MOISTURE
OM	- MOIST - (M)	SOLID; AT OR NEAR OPTIMUM MOISTURE
SL	- DRY - (D)	REQUIRES ADDITIONAL WATER TO ATTAIN OPTIMUM MOISTURE

PLASTICITY

PLASTICITY INDEX (PI)		DRY STRENGTH
NON PLASTIC	0-5	VERY LOW
SLIGHTLY PLASTIC	6-15	SLIGHT
MODERATELY PLASTIC	16-25	MEDIUM
HIGHLY PLASTIC	26 OR MORE	HIGH

COLOR

DESCRIPTIONS MAY INCLUDE COLOR OR COLOR COMBINATIONS (TAN, RED, YELLOW-BROWN, BLUE-BROWN). MODIFIERS SUCH AS LIGHT, DARK, STREAKED, ETC. ARE USED TO DESCRIBE APPEARANCE.

GRADATION

WELL GRADED - INDICATES A GOOD REPRESENTATION OF PARTICLE SIZES FROM FINE TO COARSE.
UNIFORMLY GRADED - INDICATES THAT SOIL PARTICLES ARE ALL APPROXIMATELY THE SAME SIZE.
GAP-GRADED - INDICATES A MIXTURE OF UNIFORM PARTICLE SIZES OF TWO OR MORE SIZES.

ANGULARITY OF GRAINS

THE ANGULARITY OR ROUNDNESS OF SOIL GRAINS IS DESIGNATED BY THE TERMS: **ANGULAR, SUBANGULAR, SUBROUNDED, OR ROUNDED.**

MINERALOGICAL COMPOSITION

MINERAL NAMES SUCH AS QUARTZ, FELDSPAR, MICA, TALC, KAOLIN, ETC. ARE USED IN DESCRIPTIONS WHEN THEY ARE CONSIDERED OF SIGNIFICANCE.

COMPRESSIBILITY

SLIGHTLY COMPRESSIBLE LL < 31
MODERATELY COMPRESSIBLE LL = 31 - 50
HIGHLY COMPRESSIBLE LL > 50

PERCENTAGE OF MATERIAL

	GRANULAR SOILS	SILT - CLAY SOILS	OTHER MATERIAL
TRACE OF ORGANIC MATTER	2 - 3%	3 - 5%	TRACE
LITTLE ORGANIC MATTER	3 - 5%	5 - 12%	LITTLE
MODERATELY ORGANIC	5 - 10%	12 - 20%	SOME
HIGHLY ORGANIC	> 10%	> 20%	HIGHLY

GROUND WATER

▽ WATER LEVEL IN BORE HOLE IMMEDIATELY AFTER DRILLING
▽/24 STATIC WATER LEVEL AFTER 24 HOURS
▽/PW PERCHED WATER, SATURATED ZONE, OR WATER BEARING STRATA
○ SPRING OR SEEP

MISCELLANEOUS SYMBOLS

[Symbol] ROADWAY EMBANKMENT (RE) WITH SOIL DESCRIPTION	[Symbol] DIP & DIP DIRECTION OF ROCK STRUCTURES	[Symbol] SLOPE INDICATOR INSTALLATION
[Symbol] SOIL SYMBOL	[Symbol] TEST BORING	[Symbol] CONE PENETROMETER TEST
[Symbol] ARTIFICIAL FILL (AF) OTHER THAN ROADWAY EMBANKMENT	[Symbol] AUGER BORING	[Symbol] SOUNDING ROD
[Symbol] INFERRED SOIL BOUNDARY	[Symbol] CORE BORING	[Symbol] TEST BORING WITH CORE
[Symbol] INFERRED ROCK LINE	[Symbol] MONITORING WELL	[Symbol] SPT N-VALUE
[Symbol] ALLUVIAL SOIL BOUNDARY	[Symbol] PIEZOMETER INSTALLATION	

RECOMMENDATION SYMBOLS

[Symbol] UNDERCUT	[Symbol] UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE	[Symbol] UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL
[Symbol] SHALLOW UNDERCUT	[Symbol] UNCLASSIFIED EXCAVATION - ACCEPTABLE DEGRADABLE ROCK	

ABBREVIATIONS

AR - AUGER REFUSAL	MED. - MEDIUM	VST - VANE SHEAR TEST
BT - BORING TERMINATED	MICA - MICACEOUS	WEA. - WEATHERED
CL. - CLAY	MOD. - MODERATELY	UNIT WEIGHT
CPT - CONE PENETRATION TEST	NP - NON PLASTIC	DRY UNIT WEIGHT
CSE. - COARSE	ORG. - ORGANIC	
DMT - DILATOMETER TEST	PMT - PRESSUREMETER TEST	SAMPLE ABBREVIATIONS
DPT - DYNAMIC PENETRATION TEST	SAP. - SAPROLITIC	S - BULK
e - VOID RATIO	SD. - SAND, SANDY	SS - SPLIT SPOON
F - FINE	SL. - SILT, SILTY	ST - SHELBY TUBE
FOSS. - FOSSILIFEROUS	SLI. - SLIGHTLY	RS - ROCK
FRAC. - FRACTURED, FRACTURES	TCR - TRICONE REFUSAL	RT - RECOMPACTED TRIAXIAL
FRAGS. - FRAGMENTS	W - MOISTURE CONTENT	CBR - CALIFORNIA BEARING RATIO
HI. - HIGHLY	V - VERY	

EQUIPMENT USED ON SUBJECT PROJECT

DRILL UNITS:	ADVANCING TOOLS:	HAMMER TYPE:
<input type="checkbox"/> CME-45C	<input type="checkbox"/> CLAY BITS	<input checked="" type="checkbox"/> AUTOMATIC <input type="checkbox"/> MANUAL
<input checked="" type="checkbox"/> CME-55	<input type="checkbox"/> 6" CONTINUOUS FLIGHT AUGER	CORE SIZE:
<input type="checkbox"/> CME-55B	<input checked="" type="checkbox"/> 8" HOLLOW AUGERS	<input type="checkbox"/> -B <input type="checkbox"/> -H
<input type="checkbox"/> VANE SHEAR TEST	<input type="checkbox"/> HARD FACED FINGER BITS	<input type="checkbox"/> -N
<input type="checkbox"/> PORTABLE HOIST	<input type="checkbox"/> TUNG-CARBIDE INSERTS	HAND TOOLS:
<input type="checkbox"/>	<input checked="" type="checkbox"/> CASING <input type="checkbox"/> W/ ADVANCER	<input type="checkbox"/> POST HOLE DIGGER
<input type="checkbox"/>	<input type="checkbox"/> TRICONE <input type="checkbox"/> STEEL TEETH	<input checked="" type="checkbox"/> HAND AUGER
<input type="checkbox"/>	<input checked="" type="checkbox"/> TRICONE <input type="checkbox"/> TUNG-CARB.	<input type="checkbox"/> SOUNDING ROD
<input type="checkbox"/>	<input type="checkbox"/> CORE BIT	<input type="checkbox"/> VANE SHEAR TEST

ROCK DESCRIPTION

HARD ROCK IS NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT REFUSAL IF TESTED, 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 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:

WEATHERED ROCK (WR)	[Symbol]	NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT N VALUES > 100 BLOWS PER FOOT IF TESTED.
CRYSTALLINE ROCK (CR)	[Symbol]	FINE TO COARSE GRAIN IGNEOUS AND METAMORPHIC ROCK THAT WOULD YIELD SPT REFUSAL IF TESTED. ROCK TYPE INCLUDES GRANITE, GNEISS, GABBRO, SCHIST, ETC.
NON-CRYSTALLINE ROCK (NCR)	[Symbol]	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.
COASTAL PLAIN SEDIMENTARY ROCK (CP)	[Symbol]	COASTAL PLAIN SEDIMENTS CEMENTED INTO ROCK, BUT MAY NOT YIELD SPT REFUSAL. ROCK TYPE INCLUDES LIMESTONE, SANDSTONE, CEMENTED SHELL BEDS, ETC.
WEATHERING		
FRESH	[Symbol]	ROCK FRESH, CRYSTALS BRIGHT, FEW JOINTS MAY SHOW SLIGHT STAINING, ROCK RINGS UNDER HAMMER IF CRYSTALLINE.
VERY SLIGHT (V SL.)	[Symbol]	ROCK GENERALLY FRESH, JOINTS STAINED, SOME JOINTS MAY SHOW THIN CLAY COATINGS IF OPEN, CRYSTALS ON A BROKEN SPECIMEN FACE SHINE BRIGHTLY, ROCK RINGS UNDER HAMMER BLOWS IF OF A CRYSTALLINE NATURE.
SLIGHT (SL.)	[Symbol]	ROCK GENERALLY FRESH, JOINTS STAINED AND DISCOLORATION EXTENDS INTO ROCK UP TO 1 INCH, OPEN JOINTS MAY CONTAIN CLAY, IN GRANITOID ROCKS SOME OCCASIONAL FELDSPAR CRYSTALS ARE DULL AND DISCOLORED, CRYSTALLINE ROCKS RING UNDER HAMMER BLOWS.
MODERATE (MOD.)	[Symbol]	SIGNIFICANT PORTIONS OF ROCK SHOW DISCOLORATION AND WEATHERING EFFECTS, IN GRANITOID ROCKS, MOST FELDSPARS ARE DULL AND DISCOLORED, SOME SHOW CLAY, ROCK HAS DULL SOUND UNDER HAMMER BLOWS AND SHOWS SIGNIFICANT LOSS OF STRENGTH AS COMPARED WITH FRESH ROCK.
MODERATELY SEVERE (MOD. SEV.)	[Symbol]	ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED, IN GRANITOID ROCKS, ALL FELDSPARS DULL AND DISCOLORED AND A MAJORITY SHOW KAOINIZATION, ROCK SHOWS SEVERE LOSS OF STRENGTH AND CAN BE EXCAVATED WITH A GEOLOGIST'S PICK, ROCK GIVES "CLUNK" SOUND WHEN STRUCK, IF TESTED, WOULD YIELD SPT REFUSAL
SEVERE (SEV.)	[Symbol]	ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED, ROCK FABRIC CLEAR AND EVIDENT BUT REDUCED IN STRENGTH TO STRONG SOIL, IN GRANITOID ROCKS ALL FELDSPARS ARE KAOINIZED TO SOME EXTENT, SOME FRAGMENTS OF STRONG ROCK USUALLY REMAIN, IF TESTED, WOULD YIELD SPT N VALUES > 100 BPF
VERY SEVERE (V SEV.)	[Symbol]	ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED, ROCK FABRIC ELEMENTS ARE DISCERNIBLE BUT MASS IS EFFECTIVELY REDUCED TO SOIL STATUS, WITH ONLY FRAGMENTS OF STRONG ROCK REMAINING, SAPROLITE IS AN EXAMPLE OF ROCK WEATHERED TO A DEGREE THAT ONLY MINOR VESTIGES OF ORIGINAL ROCK FABRIC REMAIN, IF TESTED, WOULD YIELD SPT N VALUES < 100 BPF
COMPLETE	[Symbol]	ROCK REDUCED TO SOIL, ROCK FABRIC NOT DISCERNIBLE, OR DISCERNIBLE ONLY IN SMALL AND SCATTERED CONCENTRATIONS, FABRIC MAY BE PRESENT AS DIKES OR STRINGERS, SAPROLITE IS ALSO AN EXAMPLE.

ROCK HARDNESS

VERY HARD	CANNOT BE SCRATCHED BY KNIFE OR SHARP PICK, BREAKING OF HAND SPECIMENS REQUIRES SEVERAL HARD BLOWS OF THE GEOLOGIST'S PICK.
HARD	CAN BE SCRATCHED BY KNIFE OR PICK ONLY WITH DIFFICULTY, HARD HAMMER BLOWS REQUIRED TO DETACH HAND SPECIMEN.
MODERATELY HARD	CAN BE SCRATCHED BY KNIFE OR PICK, GOUGES OR GROOVES TO 0.25 INCHES DEEP CAN BE EXCAVATED BY HARD BLOW OF A GEOLOGIST'S PICK, HAND SPECIMENS CAN BE DETACHED BY MODERATE BLOWS.
MEDIUM HARD	CAN BE GROOVED OR GOUGED 0.05 INCHES DEEP BY FIRM PRESSURE OF KNIFE OR PICK POINT, CAN BE EXCAVATED IN SMALL CHIPS TO PEICES 1 INCH MAXIMUM SIZE BY HARD BLOWS OF THE POINT OF A GEOLOGIST'S PICK.
SOFT	CAN BE GROOVED OR GOUGED READILY BY KNIFE OR PICK, CAN BE EXCAVATED IN FRAGMENTS FROM CHIPS TO SEVERAL INCHES IN SIZE BY MODERATE BLOWS OF A PICK POINT, SMALL, THIN PIECES CAN BE BROKEN BY FINGER PRESSURE.
VERY SOFT	CAN BE CARVED WITH KNIFE, CAN BE EXCAVATED READILY WITH POINT OF PICK, PIECES 1 INCH OR MORE IN THICKNESS CAN BE BROKEN BY FINGER PRESSURE, CAN BE SCRATCHED READILY BY FINGERNAIL.

FRACTURE SPACING		BEDDING	
TERM	SPACING	TERM	THICKNESS
VERY WIDE	MORE THAN 10 FEET	VERY THICKLY BEDDED	4 FEET
WIDE	3 TO 10 FEET	THICKLY BEDDED	1.5 - 4 FEET
MODERATELY CLOSE	1 TO 3 FEET	THINLY BEDDED	0.16 - 1.5 FEET
CLOSE	0.16 TO 1 FOOT	VERY THINLY BEDDED	0.03 - 0.16 FEET
VERY CLOSE	LESS THAN 0.16 FEET	THICKLY LAMINATED	0.008 - 0.03 FEET
		THINLY LAMINATED	< 0.008 FEET

INDURATION

FOR SEDIMENTARY ROCKS, INDURATION IS THE HARDENING OF MATERIAL BY CEMENTING, HEAT, PRESSURE, ETC.

FRIABLE	RUBBING WITH FINGER FREES NUMEROUS GRAINS; GENTLE BLOW BY HAMMER DISINTEGRATES SAMPLE.
MODERATELY INDURATED	GRAINS CAN BE SEPARATED FROM SAMPLE WITH STEEL PROBE; BREAKS EASILY WHEN HIT WITH HAMMER.
INDURATED	GRAINS ARE DIFFICULT TO SEPARATE WITH STEEL PROBE; DIFFICULT TO BREAK WITH HAMMER.
EXTREMELY INDURATED	SHARP HAMMER BLOWS REQUIRED TO BREAK SAMPLE; SAMPLE BREAKS ACROSS GRAINS.

TERMS AND DEFINITIONS

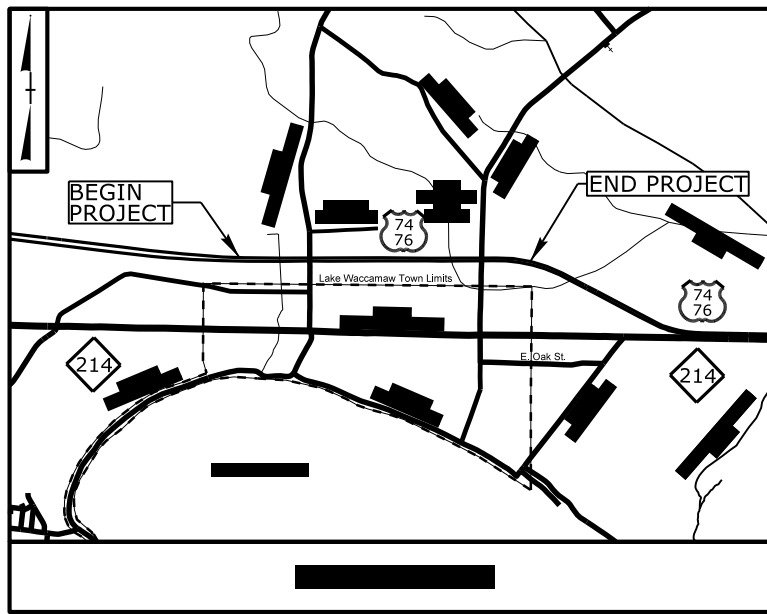
ALLUVIUM (ALLUV.) - SOILS THAT HAVE BEEN TRANSPORTED BY WATER.
AQUIFER - A WATER BEARING FORMATION OR STRATA.
ARENACEOUS - APPLIED TO ROCKS THAT HAVE BEEN DERIVED FROM SAND OR THAT CONTAIN SAND.
ARGILLACEOUS - APPLIED TO ALL ROCKS OR SUBSTANCES COMPOSED OF CLAY MINERALS, OR HAVING A NOTABLE PROPORTION OF CLAY IN THEIR COMPOSITION, SUCH AS SHALE, SLATE, ETC.
ARTESIAN - 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.
CALCAREOUS (CALC.) - SOILS THAT CONTAIN APPRECIABLE AMOUNTS OF CALCIUM CARBONATE.
COLLUVIUM - ROCK FRAGMENTS MIXED WITH SOIL DEPOSITED BY GRAVITY ON SLOPE OR AT BOTTOM OF SLOPE.
CORE RECOVERY (REC.) - TOTAL LENGTH OF ALL MATERIAL RECOVERED IN THE CORE BARREL DIVIDED BY TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.
DIKE - A TABULAR BODY OF IGNEOUS ROCK THAT CUTS ACROSS THE STRUCTURE OF ADJACENT ROCKS OR CUTS MASSIVE ROCK.
DIP - THE ANGLE AT WHICH A STRATUM OR ANY PLANAR FEATURE IS INCLINED FROM THE HORIZONTAL.
DIP DIRECTION (DIP AZIMUTH) - THE DIRECTION OR BEARING OF THE HORIZONTAL TRACE OF THE LINE OF DIP, MEASURED CLOCKWISE FROM NORTH.
FAULT - A FRACTURE OR FRACTURE ZONE ALONG WHICH THERE HAS BEEN DISPLACEMENT OF THE SIDES RELATIVE TO ONE ANOTHER PARALLEL TO THE FRACTURE.
FISSILE - A PROPERTY OF SPLITTING ALONG CLOSELY SPACED PARALLEL PLANES.
FLOAT - ROCK FRAGMENTS ON SURFACE NEAR THEIR ORIGINAL POSITION AND DISLOADED FROM PARENT MATERIAL.
FLOOD PLAIN (FP) - LAND BORDERING A STREAM, BUILT OF SEDIMENTS DEPOSITED BY THE STREAM.
FORMATION (FM) - A MAPPABLE GEOLOGIC UNIT THAT CAN BE RECOGNIZED AND TRACED IN THE FIELD.
JOINT - FRACTURE IN ROCK ALONG WHICH NO APPRECIABLE MOVEMENT HAS OCCURRED.
LEDGE - A SHELF-LIKE RIDGE OR PROJECTION OF ROCK WHOSE THICKNESS IS SMALL COMPARED TO ITS LATERAL EXTENT.
LENS - A BODY OF SOIL OR ROCK THAT THINS OUT IN ONE OR MORE DIRECTIONS.
MOTTLED (MOT.) - IRREGULARLY MARKED WITH SPOTS OF DIFFERENT COLORS, MOTTLING IN SOILS USUALLY INDICATES POOR AERATION AND LACK OF GOOD DRAINAGE.
PERCHED WATER - WATER MAINTAINED ABOVE THE NORMAL GROUND WATER LEVEL BY THE PRESENCE OF AN INTERVENING IMPERVIOUS STRATUM.
RESIDUAL (RES.) SOIL - SOIL FORMED IN PLACE BY THE WEATHERING OF ROCK.
ROCK QUALITY DESIGNATION (ROD) - 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.
SAPROLITE (SAP.) - RESIDUAL SOIL THAT RETAINS THE RELIC STRUCTURE OR FABRIC OF THE PARENT ROCK.
SILL - AN INTRUSIVE BODY OF IGNEOUS ROCK OF APPROXIMATELY UNIFORM THICKNESS AND RELATIVELY THIN COMPARED WITH ITS LATERAL EXTENT, THAT HAS BEEN EMBLACED PARALLEL TO THE BEDDING OR SCHISTOSITY OF THE INTRUDED ROCKS.
SLICKENSIDE - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR SLIP PLANE.
STANDARD PENETRATION TEST (PENETRATION RESISTANCE) (SPT) - NUMBER OF BLOWS (N 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 60 BLOWS PER FOOT PER 60 BLOWS.
STRATA CORE RECOVERY (SREC.) - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE.
STRATA ROCK QUALITY DESIGNATION (SROD) - 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.
TOPSOIL (TS.) - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER.

ELEVATION: N/A FEET

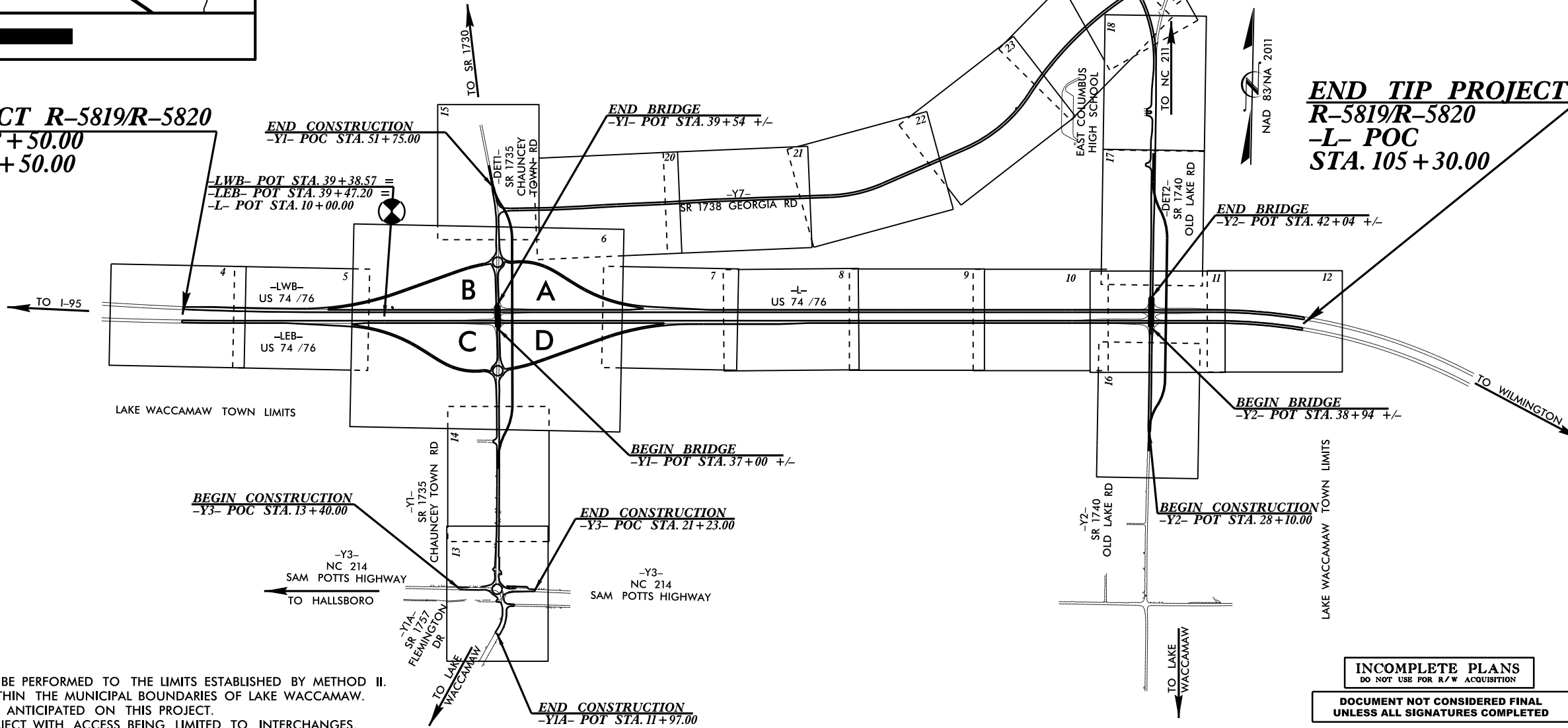
NOTES:
ROADWAY BORING ELEVATIONS OBTAINED FROM PROJECT TIN FILE R5819-R5820.LS.TIN, RECEIVED ON JULY 20, 2019
FIAD - FILLED IMMEDIATELY AFTER DRILLING

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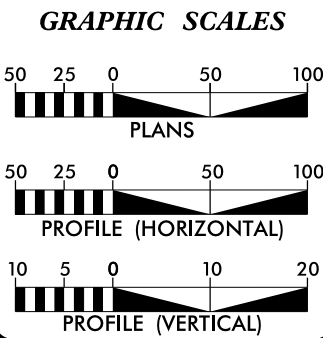
CONTRACT: R-5819/R-5820



BEGIN TIP PROJECT R-5819/R-5820
 -LWB- POC STA. 18+50.00
 -LEB- POC STA. 18+50.00



- NOTES:
- CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.
 - A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF LAKE WACCAMAW.
 - THERE ARE NO DESIGN EXCEPTIONS ANTICIPATED ON THIS PROJECT.
 - THIS IS A CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.



DESIGN DATA

ADT 2022	=	14,400
ADT 2042	=	18,000
K	=	8 %
D	=	55 %
T	=	20 % *
V	=	75 MPH
* 16% TTST + 4% DUAL		
FUNC CLASS=INTERSTATE STATEWIDE TIER		

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-5819/R-5820	=	2.202 MILES
TOTAL LENGTH TIP PROJECT R-5819/R-5820	=	2.202 MILES

Prepared in the Office of:

ICALYX
ENGINEERS + CONSULTANTS

FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JANUARY 17, 2020

LETTING DATE:
JANUARY 18, 2022

NCDOT CONTACT:

JOHNNY BANKS
PROJECT MANAGER

STEPHEN C. BROWDE, PE
PROJECT DESIGN ENGINEER

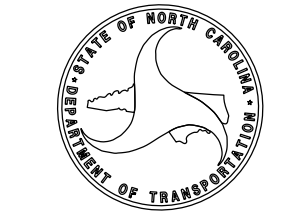
JOHN GAUTHIER
PROJECT MANAGER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

COLUMBUS COUNTY

25% PLANS

LOCATION: SR 1740 (OLD LAKE ROAD) CONVERT AT-GRADE INTERSECTION TO GRADE SEPARATION (R-5819)
SR 1735 (CHAUNCEY TOWN ROAD) CONVERT AT-GRADE INTERSECTION TO INTERCHANGE (R-5820)
TYPE OF WORK: GRADING, PAVING, DRAINAGE, STRUCTURES

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5819/R-5820	3	341
STATE WBS NO.	F.A. PROJ. NO.	DESCRIPTION	
47091.1/47092.1.1		PE	

END TIP PROJECT R-5819/R-5820
 -L- POC STA. 105+30.00

INCOMPLETE PLANS
 DO NOT USE FOR R/W ACQUISITION
DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED



February 20, 2021

STATE PROJECT: 47091.1.1 / 47092.1.1 (R-5819 and R-5820)
 COUNTY: Columbus
 DESCRIPTION: SR 1740 (Old Lake Road) Convert at-grade Intersection to grade separation and SR 1735 (Chauncey Town Road) convert at-grade Intersection to Interchange
 SUBJECT: **GEOTECHNICAL REPORT - INVENTORY**

PROJECT DESCRIPTION

This project consists of a widening of existing US 74 (-L-) from west of Chauncey Town Road to east of Old Lake Road. This project will also include a widening of Chauncey Town Road (-Y1-) and Old Lake Road (-Y2-), construction of a roundabout at the intersection of Sam Potts Highway (-Y3-) and Flemington Drive (-Y1A-), several ramps (-Y1RPA-, -Y1RPB-, -Y1RPC-, -Y1RPD-) and the creation of a new alignment (-Y7-). In addition, there will be a detour of Chauncey Town Road (-DET1-) to facilitate construction of the bridge on Chauncey Town Road over US 74 as well as a detour of Old Lake Road (-DET2-) to facilitate construction of the bridge on Old Lake Road over US 74.

The geotechnical investigation was conducted between February 2020 and March 2020. The majority of borings were performed using a hand auger while additional Standard Penetration Test borings were advanced with a CME-55 drill rig with an automatic hammer. Representative soil samples were collected for visual classification in the field and selected samples were submitted for laboratory analysis by Geotechnics, Inc.

The following alignments, totaling 7.02 miles, were investigated. Plan sheets and cross sections of these alignments are included in this report.

<u>LINE</u>	<u>STATIONS</u>
-LWB-	18+50 to 39+38
-L-	10+00 to 123+71
-Y1-	10+00 to 58+39
-Y1RPA-	10+00 to 30+80
-Y1RPB-	10+00 to 32+27
-Y1RPC-	10+00 to 30+82
-Y1RPD-	10+00 to 32+03
-Y1A-	10+00 to 16+88
-Y2-	28+10 to 83+58
-Y3-	13+40 to 23+92
-Y7-	10+00 to 99+51
-DET1-	10+00 to 42+19
-DET2-	10+00 to 41+46

PHYSIOGRAPHY AND GEOLOGY

The project is located in the Coastal Plain Physiographic Province. The project corridor is comprised primarily of residential properties, agricultural land and undeveloped wooded areas. The general topography along the project is generally flat to gently sloping.

Geologically, the project area consists of Coastal Plain soils belonging to the Undivided Coastal Plain, the Waccamaw Formation, and the Peedee Formation consisting of sand, clayey sand, and clay, greenish gray to olive black, locally fossiliferous and calcareous. Patches of sandy molluscan-mold limestone from the Waccamaw Formation are found in upper part.

SOIL PROPERTIES

Soils encountered during this investigation are separated into four categories based on origin. They consist of roadway embankment, artificial fill, undivided coastal plain and formational soils.

Roadway Embankment soils are present along the existing roadways on the project. The roadway embankment encountered generally consist of moist to wet, loose to medium dense, coarse and fine sands (A-1) to silty coarse to fine sands (A-2-4) to clayey coarse to fine sands (A-2-6) and moist to wet, soft to stiff, coarse to fine sandy silts (A-4) to coarse to fine sandy clays (A-6). The plasticity index of the fine-grained soils tested ranged from non-plastic to 32. Organic contents of soils tested ranged from 3.0 to 8.9 percent.

Artificial Fill soils are present along some of the existing roadways on the project and in certain wooded areas. The artificial fill encountered generally consist of dry to moist, loose to medium dense, silty coarse to fine sand (A-2-4) to fine sand (A-3) and moist, medium stiff to stiff, moderately to highly plastic, sandy clay (A-6) to silty clay (A-7). No Artificial Fill soils were tested.

Coastal Plain soils are identified as Undivided Coastal Plain soils, the Waccamaw Formation, and the Peedee Formation. Undivided Coastal Plain soils and Peedee Formation soils generally consist of moist to saturated, very loose to medium dense, silty sands (A-2-4) with trace to little organic matter, moist to saturated, very loose to medium dense, slightly to highly plastic, clayey sands (A-2-6), moist to wet, loose to medium dense, fine sands (A-3), dry to wet, soft to stiff, non-plastic to slightly plastic, sandy silts (A-4) with trace organic matter to moderately organic soils and moist to saturated, very loose to medium dense, slightly to highly plastic, sandy clays to silty clays (A-6, A-7). The Waccamaw Formation consists of soft to medium hard, limestone with shell fragments. The plasticity index of the fine-grained soils tested ranged from non-plastic to 42. Organic contents of soils tested ranged from 1.5 to 10.6 percent.

GROUNDWATER

Groundwater was encountered at elevations ranging from 68.7 to 48.1 feet and typically ranges from 0.0 to 6.3 feet below the existing ground surface.

AREAS OF SPECIAL GEOTECHNICAL INTEREST

1) Moderately and Highly Plastic Clays: Moderately and highly plastic clays (PI > 16) and/or soils with more than 50% passing a 200 sieve were encountered on the project at the following locations:

<u>LINE</u>	<u>STATIONS</u>	<u>OFFSETS</u>
-LWB-	31+75 to 39+38	LT to RT
-L-	16+75 to 20+25	LT to RT
-L-	23+75 to 26+25	LT to RT
-L-	46+75 to 50+25	LT to RT
-L-	50+75 to 54+25	LT to RT
-L-	86+75 to 89+25	LT to RT
-L-	100+75 to 104+25	LT to RT

-Y1-	12+25 to 26+75	LT to RT
-Y1-	49+25 to 51+75	LT to RT
-Y1A-	13+25 to 16+25	LT to RT
-Y1RPA-	15+25 to 19+25	LT to RT
-Y1RPD-	15+25 to 20+75	LT to RT
-Y2-	50+25 to 67+75	LT to RT
-Y2-	74+75 to 78+75	LT to RT
-Y3-	18+25 to 21+40	LT to RT
-Y7-	23+75 to 29+75	LT to RT
-Y7-	54+25 to 57+75	LT to RT
-Y7-	60+25 to 64+25	LT to RT
-Y7-	87+75 to 96+25	LT to RT
-DET1-	21+25 to 21+75	LT to RT
-DET1-	22+75 to 25+75	LT to RT
-DET1-	35+25 to 36+75	LT to RT
-DET1-	37+25 to 40+40	LT to RT
-DET2-	14+75 to 19+25	LT to RT
-DET2-	28+25 to 38+51	LT to RT

-DET2-	26+25 to 27+75	LT AND RT
-DET2-	32+25 to 38+75	LT AND RT

3) Alluvial Soil: Alluvial soil was encountered on the project at the following locations:

<u>LINE</u>	<u>STATIONS</u>	<u>OFFSETS</u>
-Y2-	27+00 to 29+00	LT, RT
-DET2-	27+50 to 28+50	LT, RT

4) Organic Soil: Organic soils were encountered on the project at the following locations:

<u>LINE</u>	<u>STATIONS</u>	<u>OFFSETS</u>
-Y1-	29+50 to 35+50	RT
-Y1-	23+50 to 23+50	LT, RT
-Y2-	28+25 to 30+50	RT
-Y2-	55+00 to 56+50	RT
-Y2-	59+50 to 60+75	LT
-Y2-	61+75 to 67+75	LT
-Y7-	12+25 to 21+50	LT, RT
-Y7-	24+75 to 27+25	RT
-Y7-	33+00 to 40+00	LT, RT
-Y7-	65+50 to 74+50	LT, RT
-Y7-	80+75 to 83+00	LT, RT
-Y7-	84+50 to 93+00	LT, RT

2) Groundwater: The following areas exhibit a high water table, seasonal high groundwater or the potential for groundwater related construction problems:

<u>LINE</u>	<u>STATIONS</u>	<u>OFFSETS</u>
-LWB-	18+25 to 34+75	LT AND RT
-L-	10+00 to 87+50	LT AND RT
-L-	89+75 to 92+25	LT AND RT
-L-	95+75 to 103+75	LT AND RT
-Y1-	11+00 to 27+75	LT AND RT
-Y1-	48+25 to 52+00	LT AND RT
-Y1RPA-	18+50 to 19+75	LT AND RT
-Y1RPC-	18+00 to 21+75	LT AND RT
-Y1RPD-	19+50 to 22+75	LT AND RT
-Y1A-	11+97 to 16+25	LT AND RT
-Y2-	28+10 to 31+25	LT AND RT
-Y2-	52+75 to 57+75	LT AND RT
-Y2-	62+25 to 78+75	LT AND RT
-Y3-	13+40 to 16+75	LT AND RT
-Y3-	18+25 to 21+25	LT AND RT
-Y7-	10+25 to 96+25	LT AND RT
-DET1-	21+75 to 25+40	LT AND RT
-DET1-	26+70 to 29+25	LT AND RT
-DET1-	35+25 to 40+35	LT AND RT
-DET2-	12+25 to 23+75	LT AND RT

5) Artificial Fill: Artificial fill was encountered on the project at the following locations:

<u>LINE</u>	<u>STATIONS</u>	<u>OFFSETS</u>
-Y1-	48+70 to 49+60	LT
-Y1RPC-	27+00 to 30+30	LT AND RT
-DET1-	18+00 to 21+80	LT AND RT

Prepared by,
KLEINFELDER, INC.
NC License No. F-1312



F. Christopher Driscoll, PG
Staff Professional

FCD/TRW:cas



Thomas R. Wells, PE
Senior Professional

Bulk and Undisturbed Samples

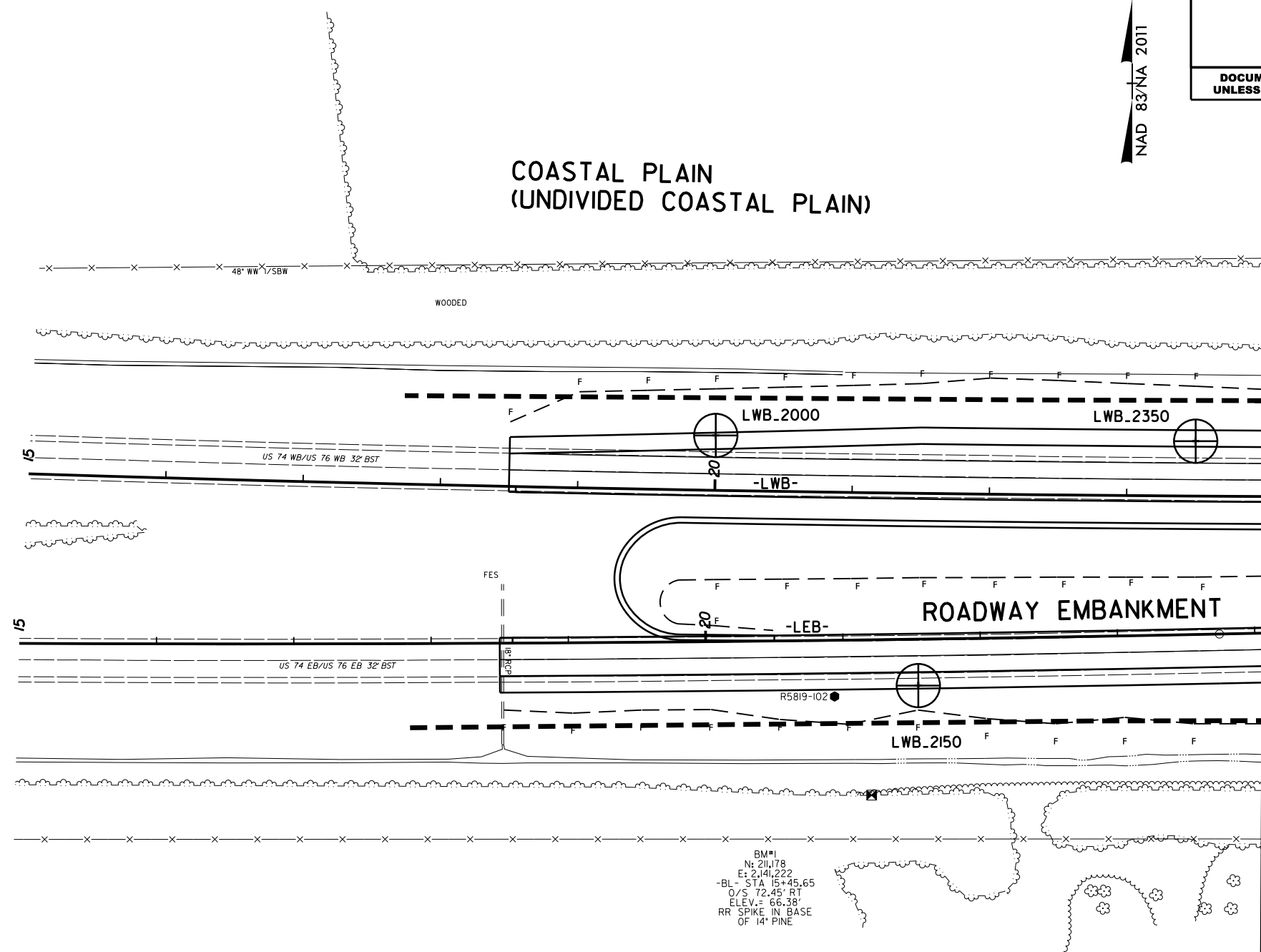
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ST-1	-Y1-	37+04	15' LT	15.0-17.0	N/A
ST-2	-Y1-	39+54	15' RT	10.0-12.0	Consolidation, CU Triaxial
ST-3	-Y1-	42+62	43' RT	10.0-12.1	Consolidation, CU Triaxial
ST-4	-Y1RPA-	28+00	CL	5.0-7.0	Consolidation, CU Triaxial
ST-5	-Y1RPC-	28+00	CL	10.0-12.0	Consolidation, CU Triaxial
ST-6	-Y2-	35+90	3' RT	5.0-7.0	Consolidation, CU Triaxial

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PROJECT REFERENCE NO. R-5819/R-5820		SHEET NO. 4
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		



**COASTAL PLAIN
(UNDIVIDED COASTAL PLAIN)**



**COASTAL PLAIN
(UNDIVIDED COASTAL PLAIN)**

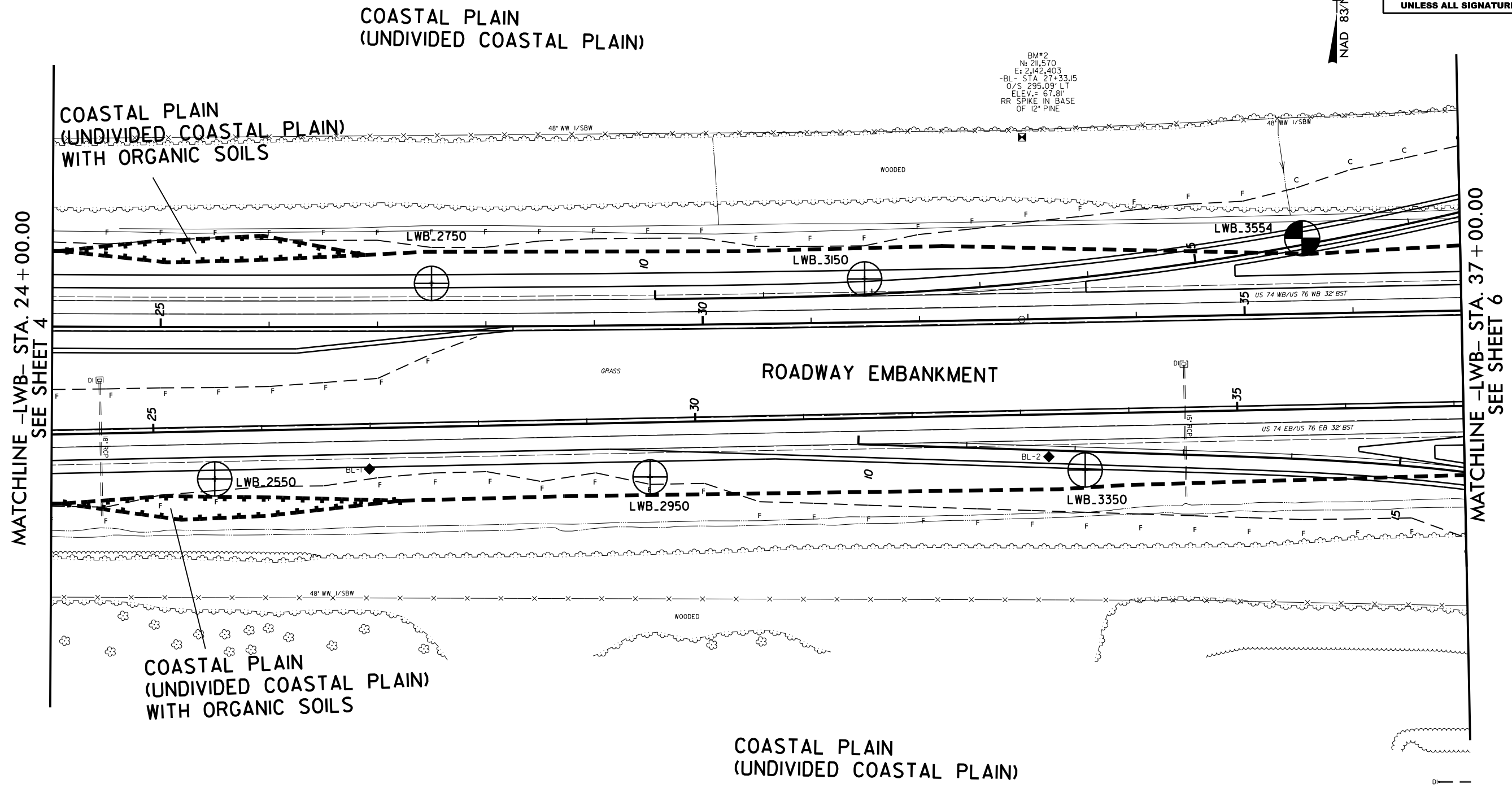
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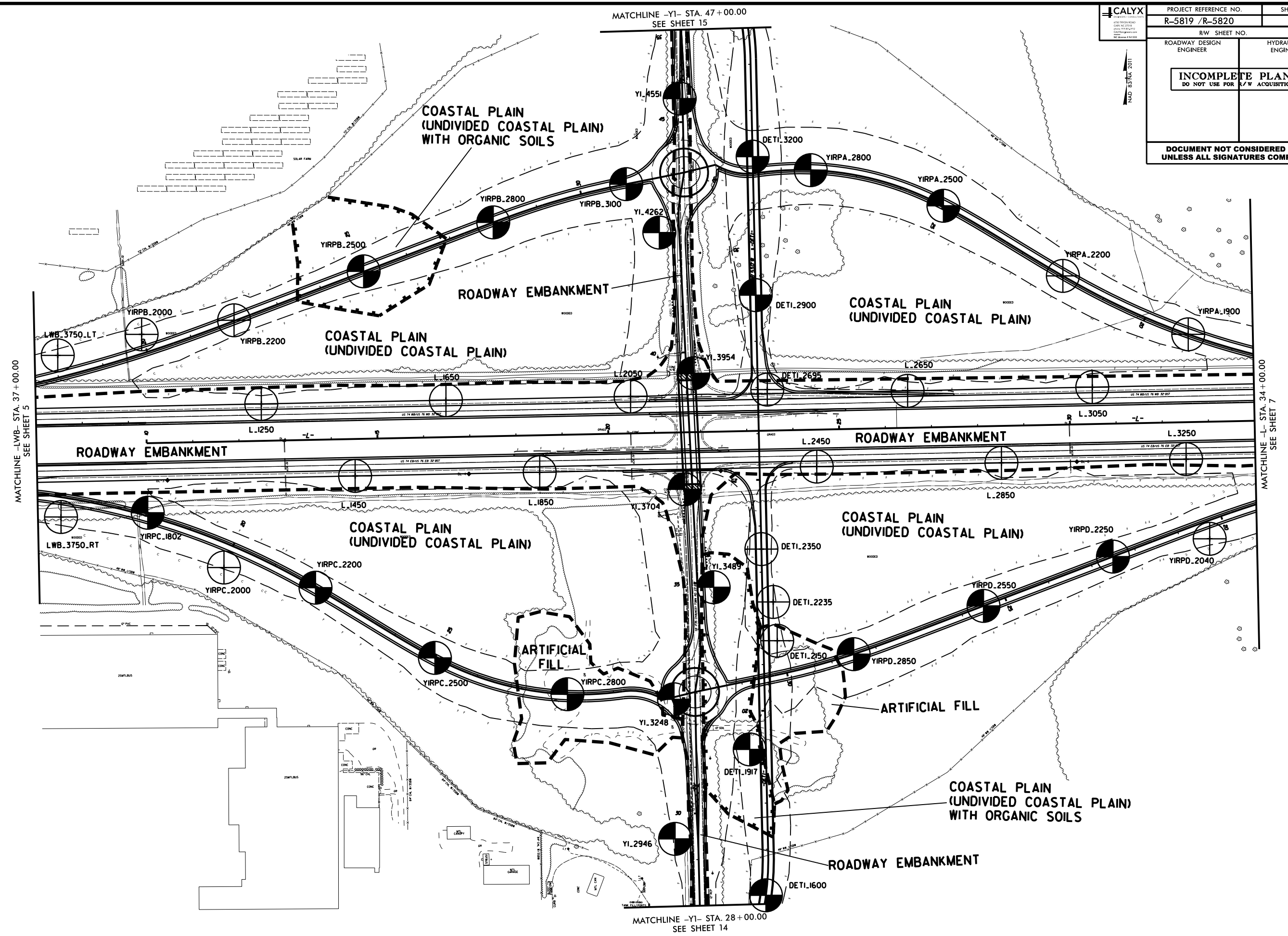
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O/S 295.09' LT
ELEV. = 67.81'
RR SPIKE IN BASE
OF 12' PINE

MATCHLINE -LWB- STA. 24 + 00.00
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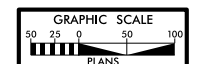
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ROADWAY DESIGN ENGINEER		
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 Walls - 8/14/18



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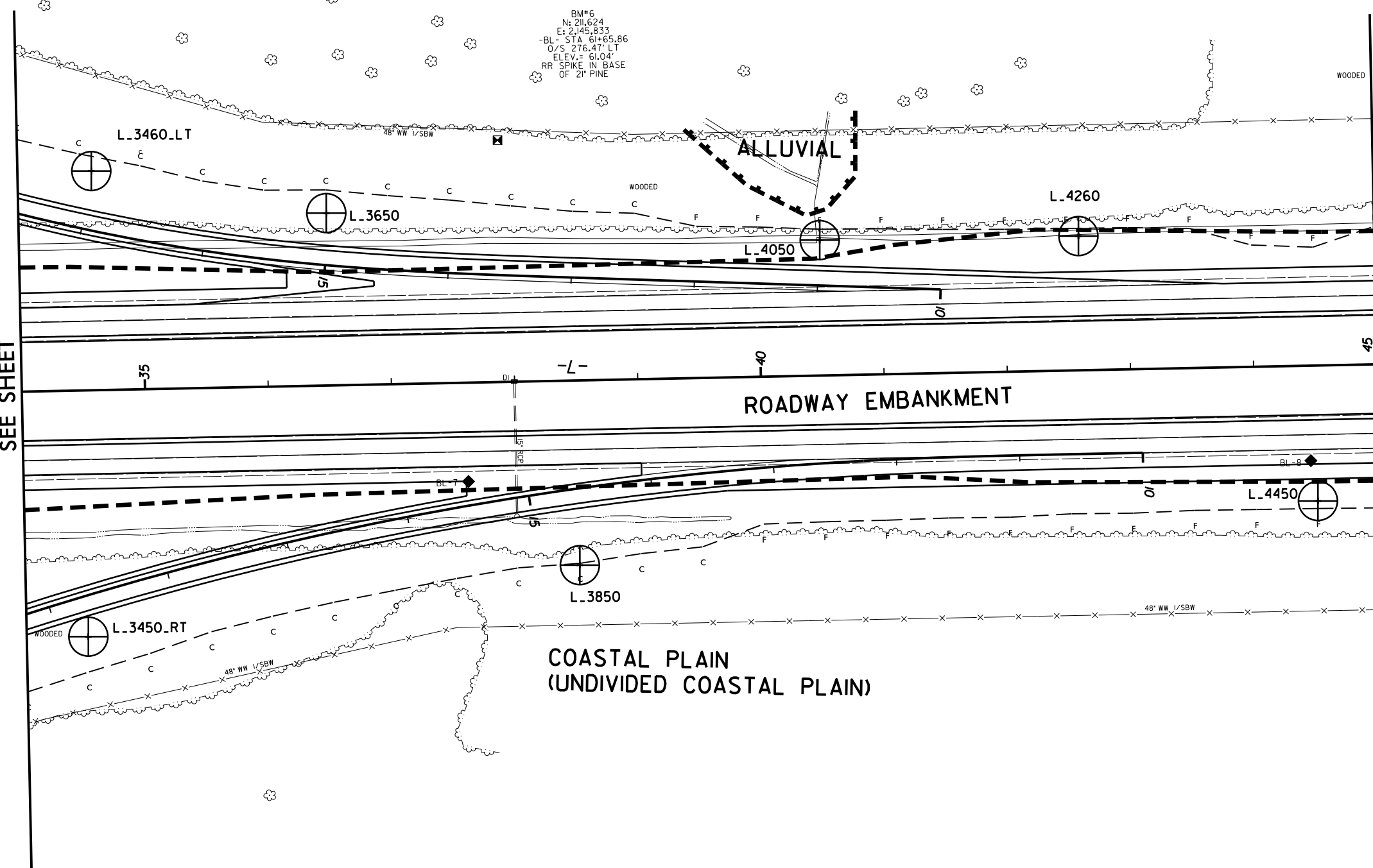
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PROJECT REFERENCE NO. R-5819/R-5820	SHEET NO. 7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
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SEE SHEET

MATCHLINE -L- STA. 45 + 00.00
SEE SHEET 8



NAD 83/NA 2011

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RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

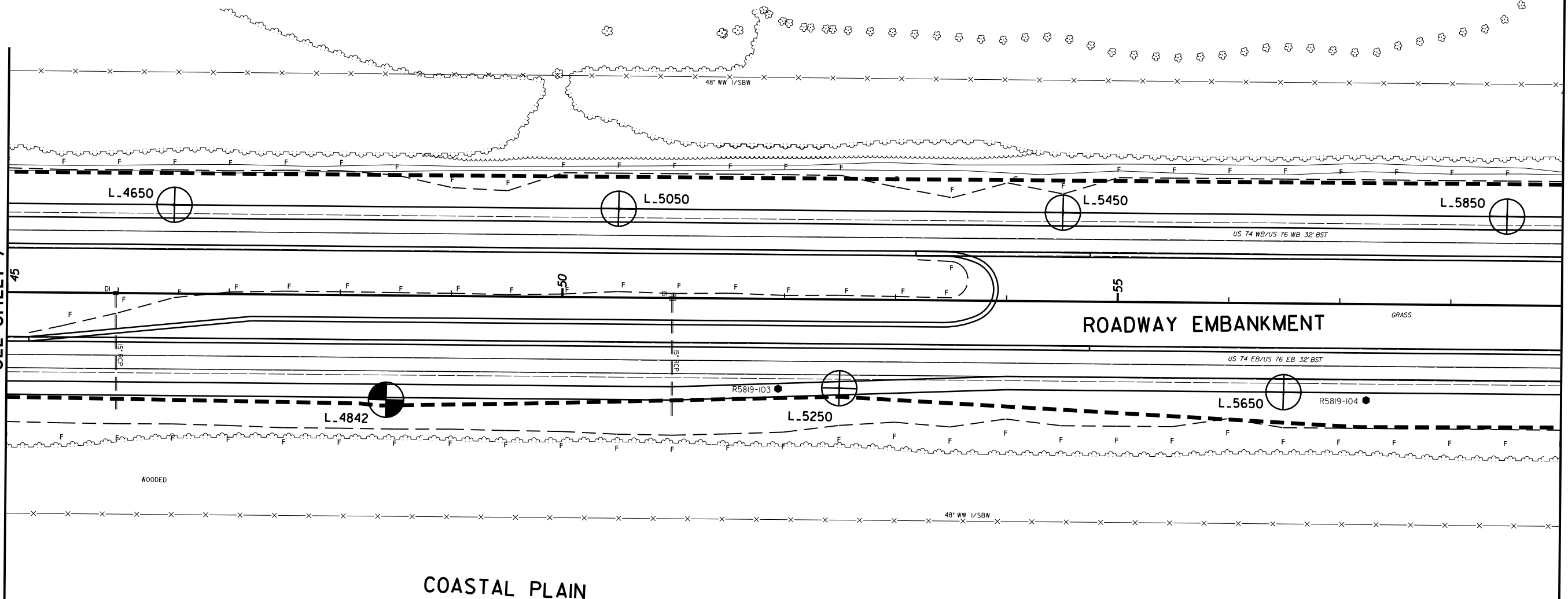
COASTAL PLAIN
(UNDIVIDED COASTAL PLAIN)

WOODED

WOODED

MATCHLINE -L- STA. 45 + 00.00
SEE SHEET 7

MATCHLINE -L- STA. 59 + 00.00
SEE SHEET 7



COASTAL PLAIN
(UNDIVIDED COASTAL PLAIN)

BM#7
N: 214.47
E: 2147.536
-BL- STA 78+60.16
O/S: 230.78' RT
ELEV.: 59.25'
RR SPIKE IN BASE
OF 48' PINE

I5-FEB-2021 15:54
W:\shere\GEO\TECHNICAL\Projects\Active Projects\20190942.024A R-5819 & R-5820 Roadway\5819-R5820_GEO_RDWY\CADD_GEO\TECHNICAL\Prof\NR5819_R5820_GEO_mv8.dgn
Walls - 8/17/99

8/17/99

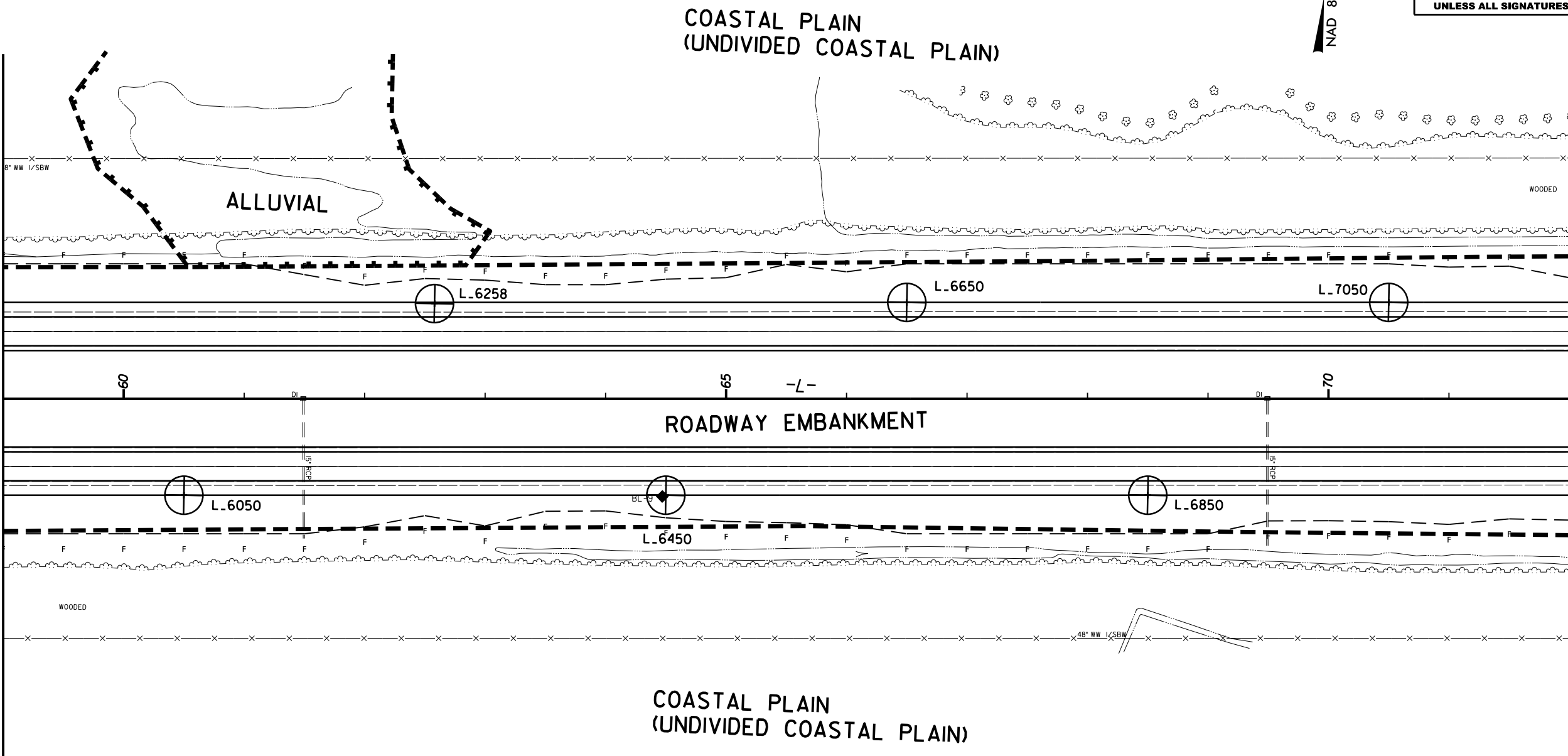
CALYX
ENGINEERS + CONSULTANTS
6750 TRYON ROAD
CARY, NC 27518
phone: 919.851.1912
CALYXengineers.com
NC License # F-1333

PROJECT REFERENCE NO. R-5819/R-5820		SHEET NO. 9
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

NAD 83/NA 2011

MATCHLINE -L- STA. 59 + 00.00
SEE SHEET 8

MATCHLINE -L- STA. 72 + 00.00
SEE SHEET 10



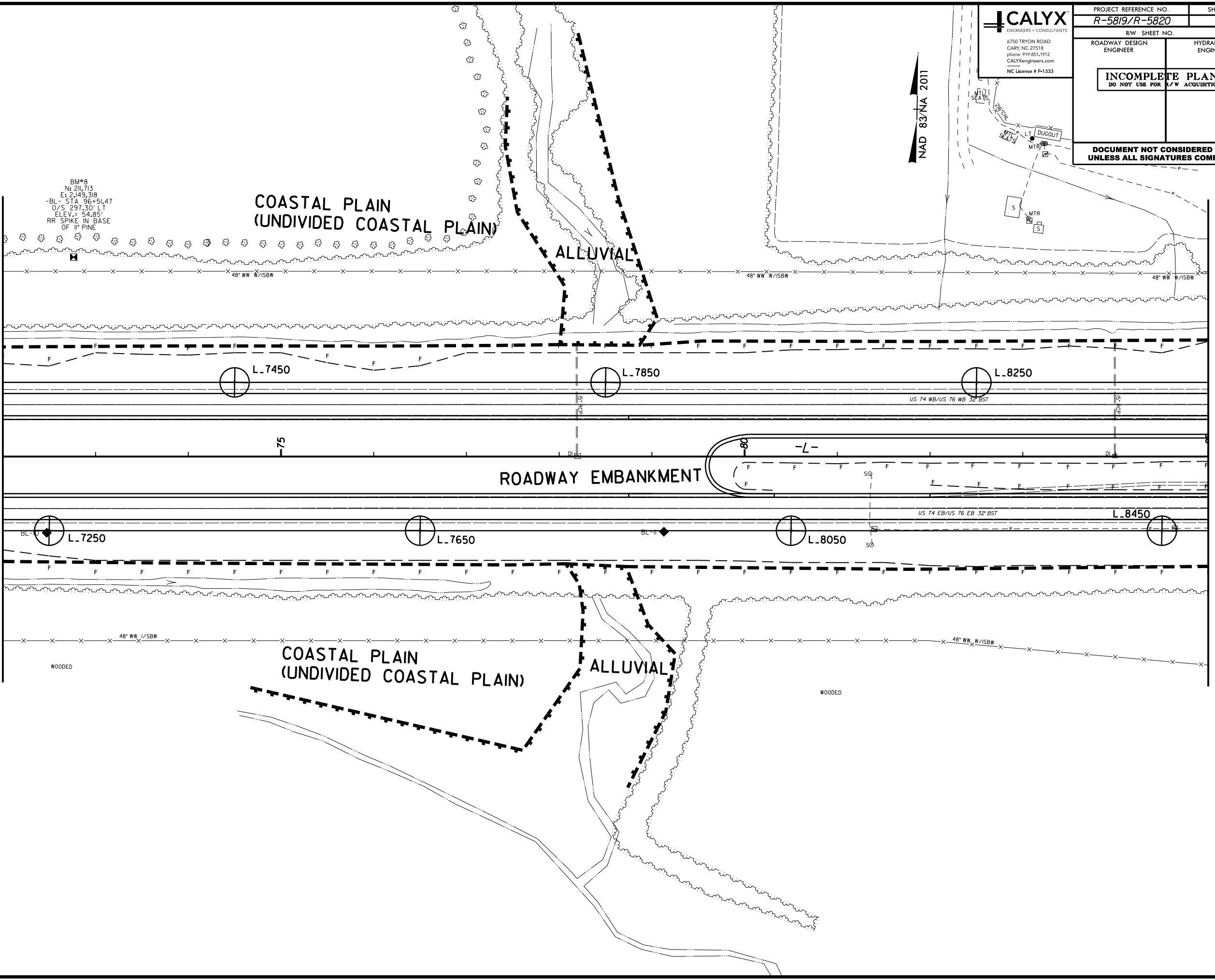
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Walls - 8/17/99



PROJECT REFERENCE NO. R-5819/R-5820	SHEET NO. 10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

15-FEB-2021 5:55
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8/17/99

MATCHLINE -L- STA. 72 + 00.00
SEE SHEET 9



NAD 83/NA 2011

MATCHLINE -L- STA. 85 + 00.00
SEE SHEET 11



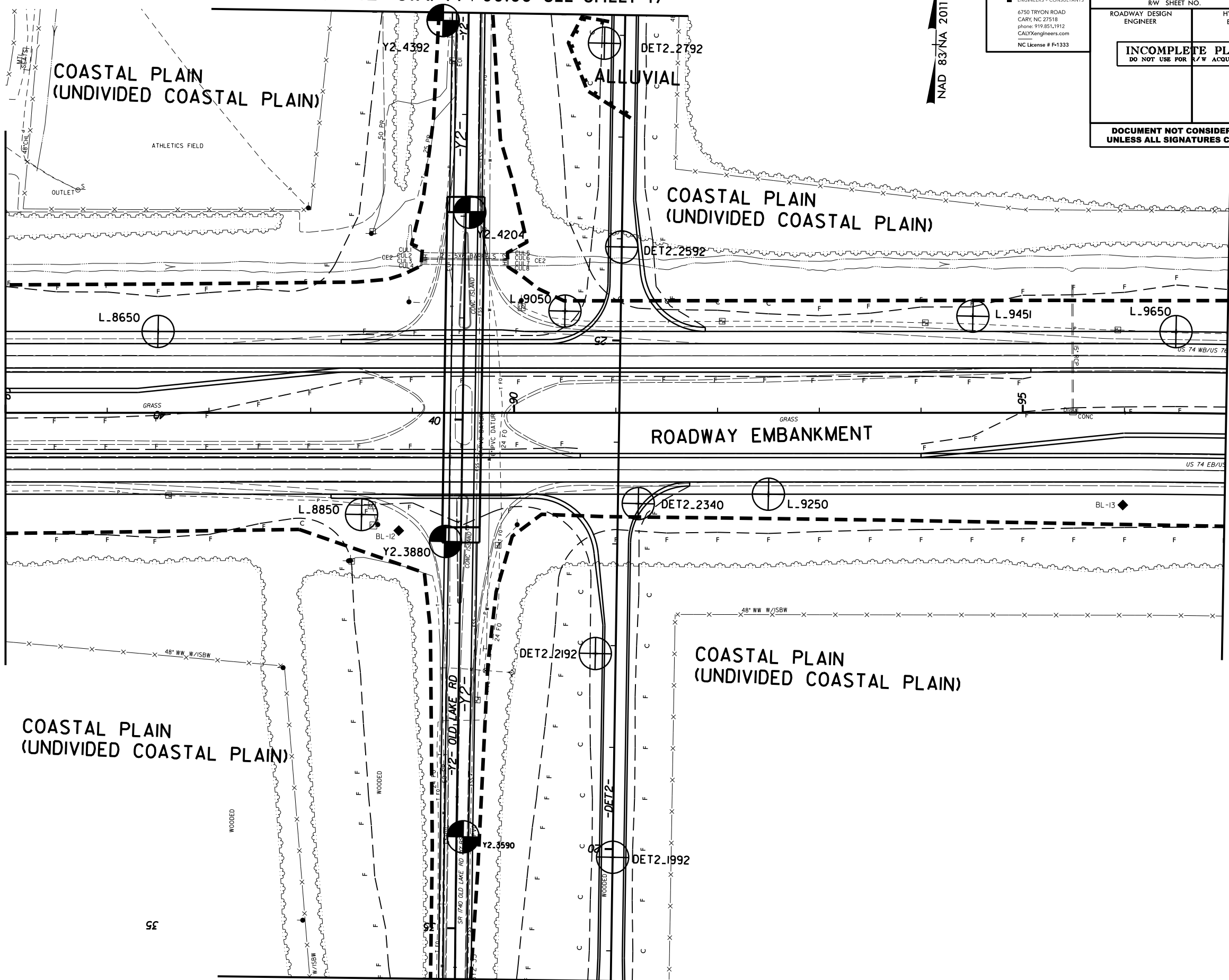
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RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



MATCHLINE -Y2- STA. 44 + 00.00 SEE SHEET 17

MATCHLINE -L- STA. 85 + 00.00
SEE SHEET 10

MATCHLINE -L- STA. 97 + 00.00
SEE SHEET 12

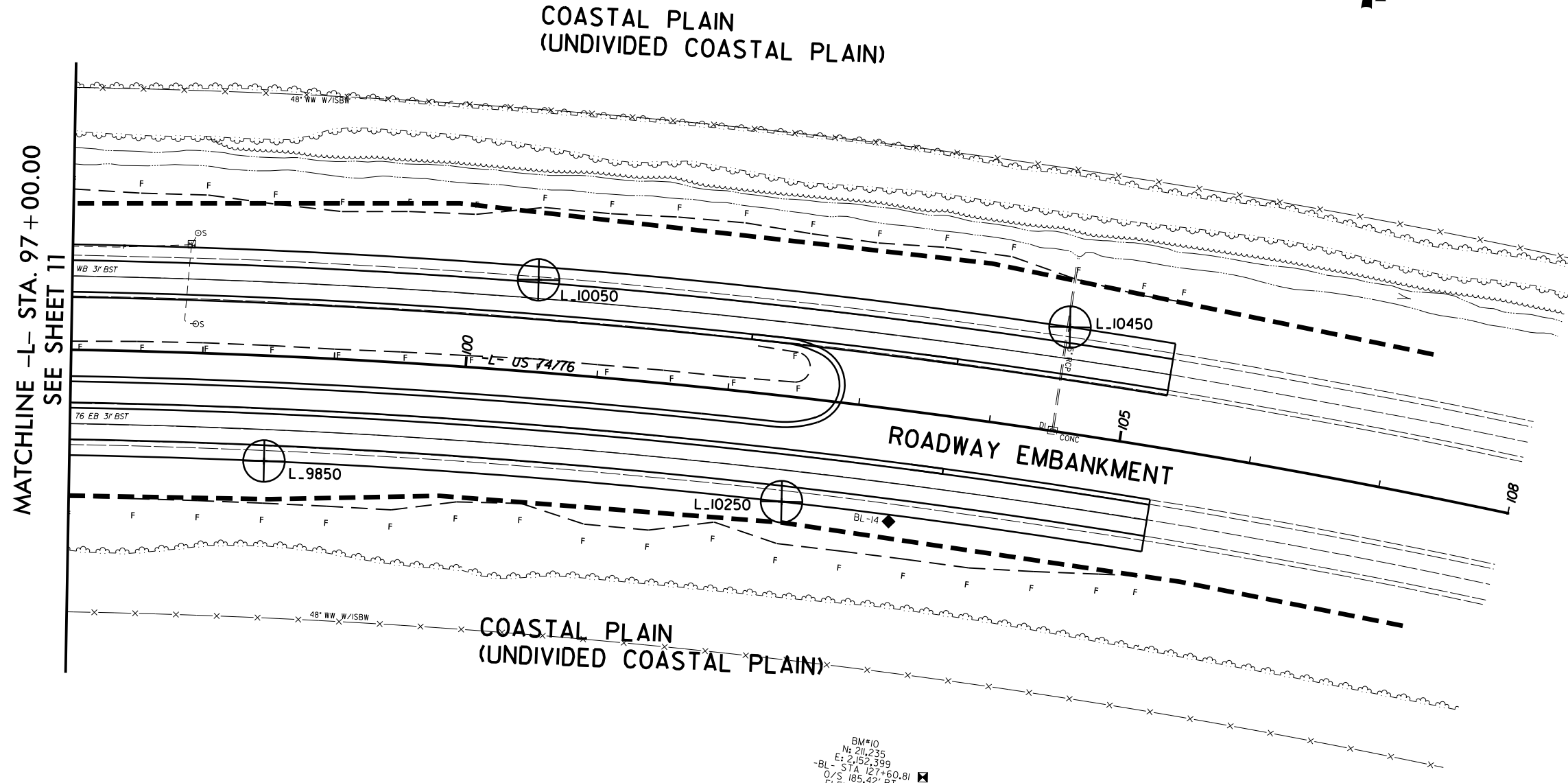


MATCHLINE -Y2- STA. 34 + 50.00
SEE SHEET 16

15-FEB-2021 15:55
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 Walls - 8/17/99

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CARY, NC 27518
phone: 919.851.1912
CALYXengineers.com
NC License # F-1333

PROJECT REFERENCE NO. R-5819/R-5820	SHEET NO. 12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

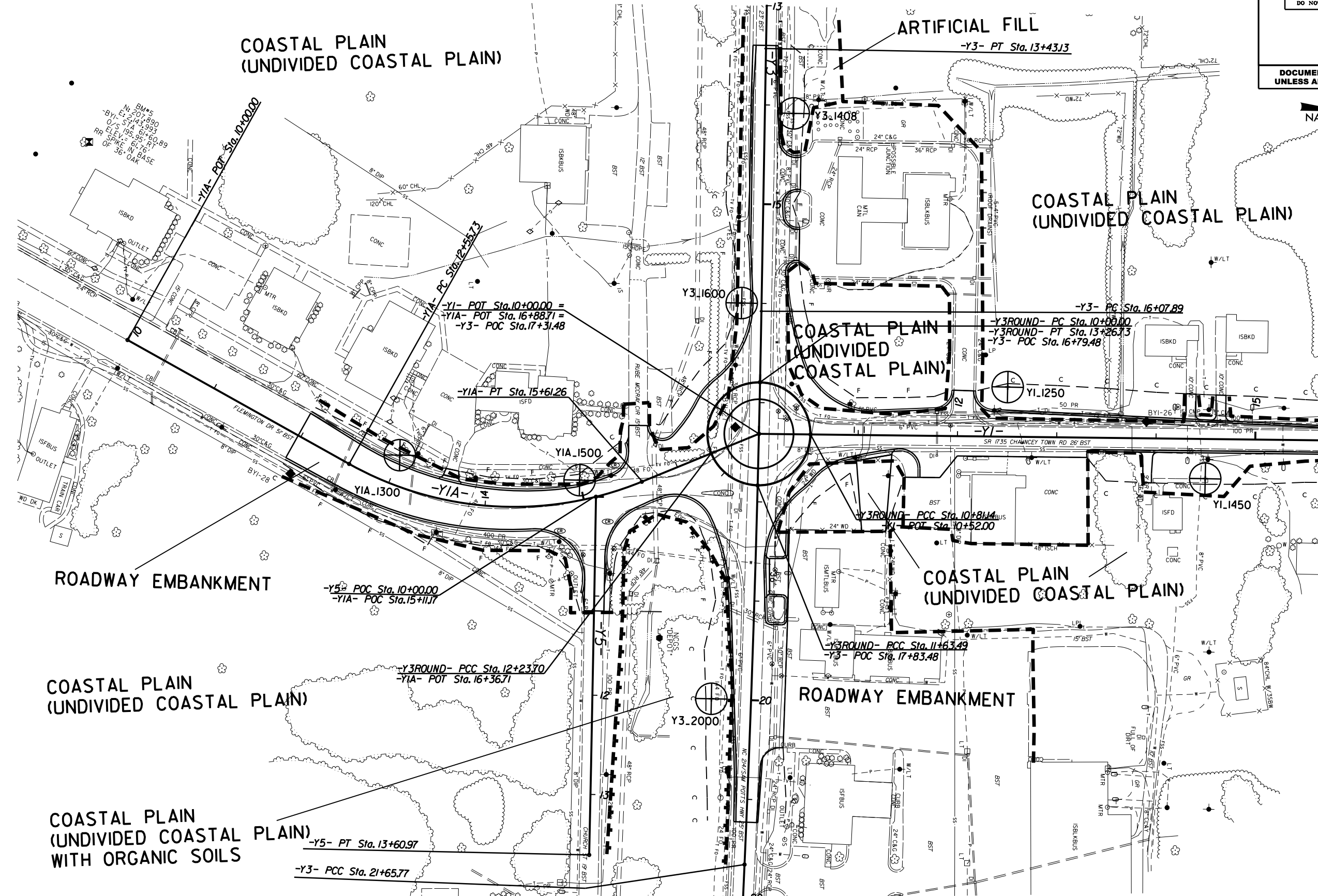


BM#10
N: 211.235
E: 2,152.399
BL - STA 127+60.81
O/S 185.42' RT
ELEV. = 56.25'
RR SPIKE IN BASE
OF 9" PINE

ED

PROJECT REFERENCE NO. R-5819/R-5820	SHEET NO. 13
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

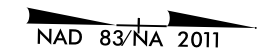
NAD 83/NA 2011



MATCHLINE -Y1- STA. 16+00.00
SEE SHEET 14

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PROJECT REFERENCE NO. R-5819/R-5820	SHEET NO. 14
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



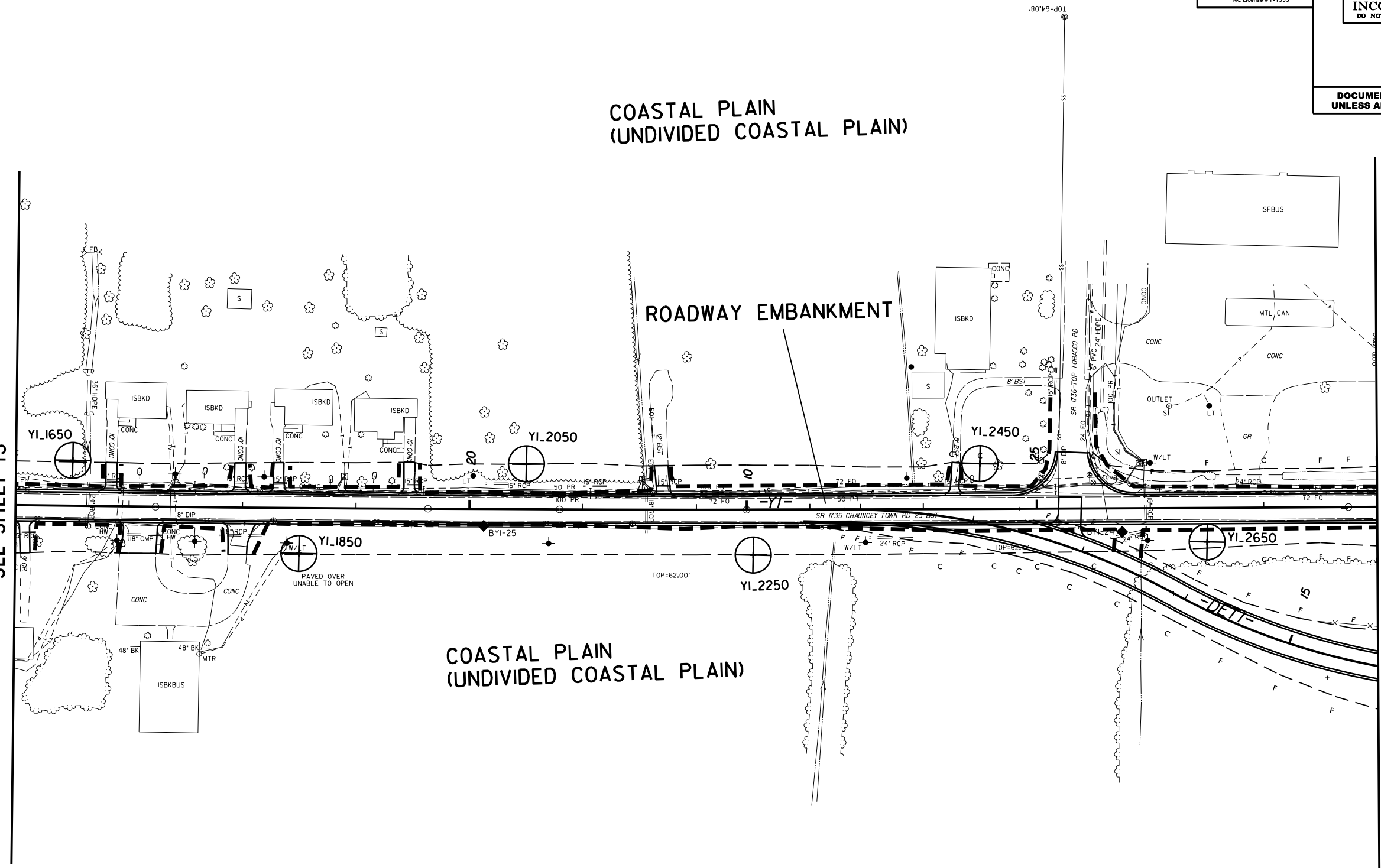
MATCHLINE -Y1- STA. 16 + 00.00
SEE SHEET 13

MATCHLINE -Y1- STA. 28 + 00.00
SEE SHEET 6

COASTAL PLAIN
(UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN
(UNDIVIDED COASTAL PLAIN)

ROADWAY EMBANKMENT



BM#4
N: 209.571
E: 2,144.683
-BYI- STA 43+34.75
O/S 405.00' LT
ELEV. = 63.28'
RR SPIKE IN BASE
OF 48\"/>

15-FEB-2021 15:55
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Walls - 8/17/99

8/17/99

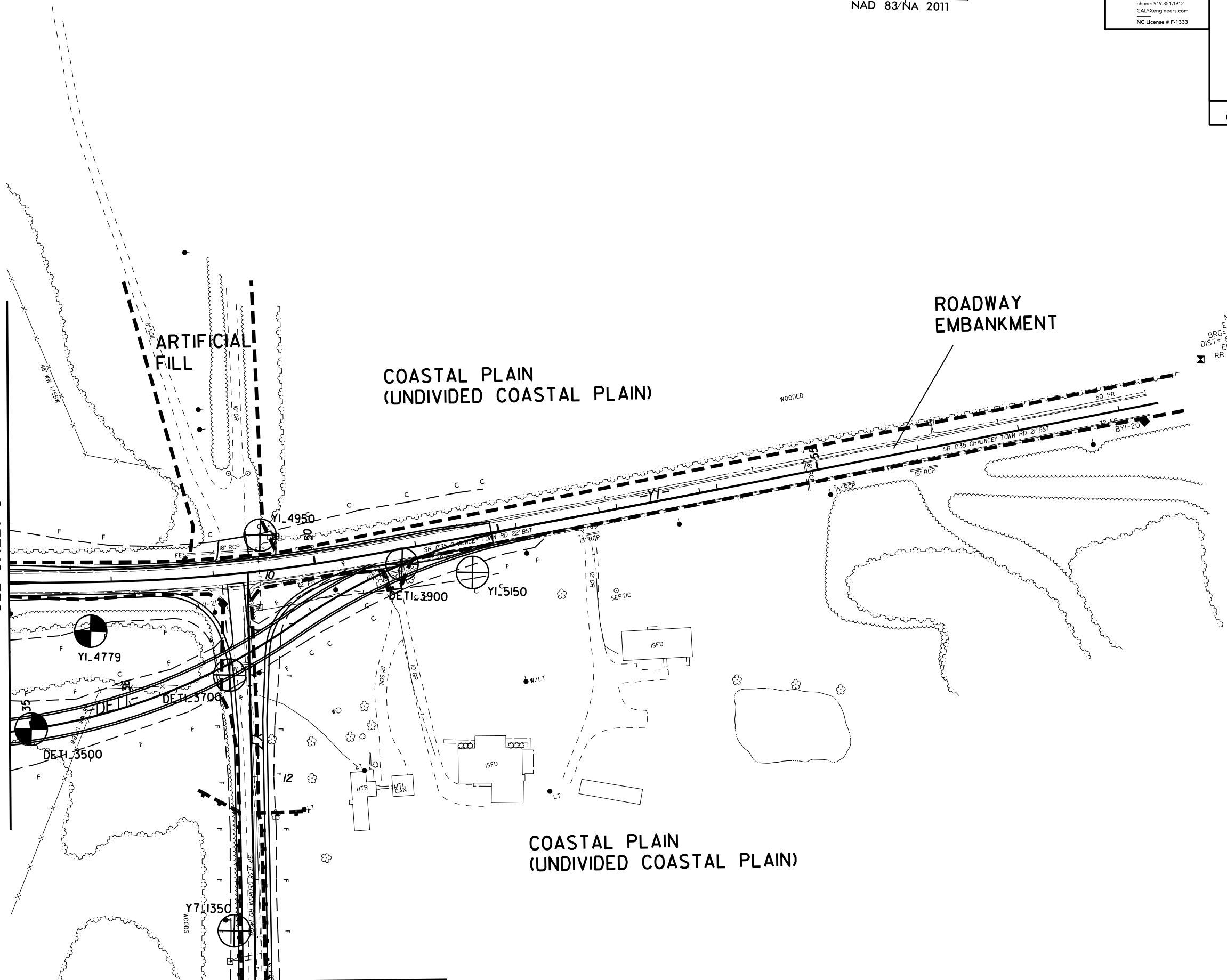
CALYX
ENGINEERS + CONSULTANTS
6750 TRYON ROAD
CARY, NC 27518
phone: 919.851.1912
CALYXengineers.com
NC License # F-1333

PROJECT REFERENCE NO. R-5819 /R-5820	SHEET NO. 15
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

NAD 83/NA 2011

MATCHLINE -Y1- STA. 47 + 00.00
SEE SHEET 6

MATCH LINE -Y7- STA 14 + 00.00
SEE SHEET 20



BM#3
N: 213.427
E: 2143.962
BRC = N 49°03'41" W
DIST = 81.5' FROM BYI-20
ELEV. = 65.10'
RR SPIKE IN BASE
OF 18" PINE

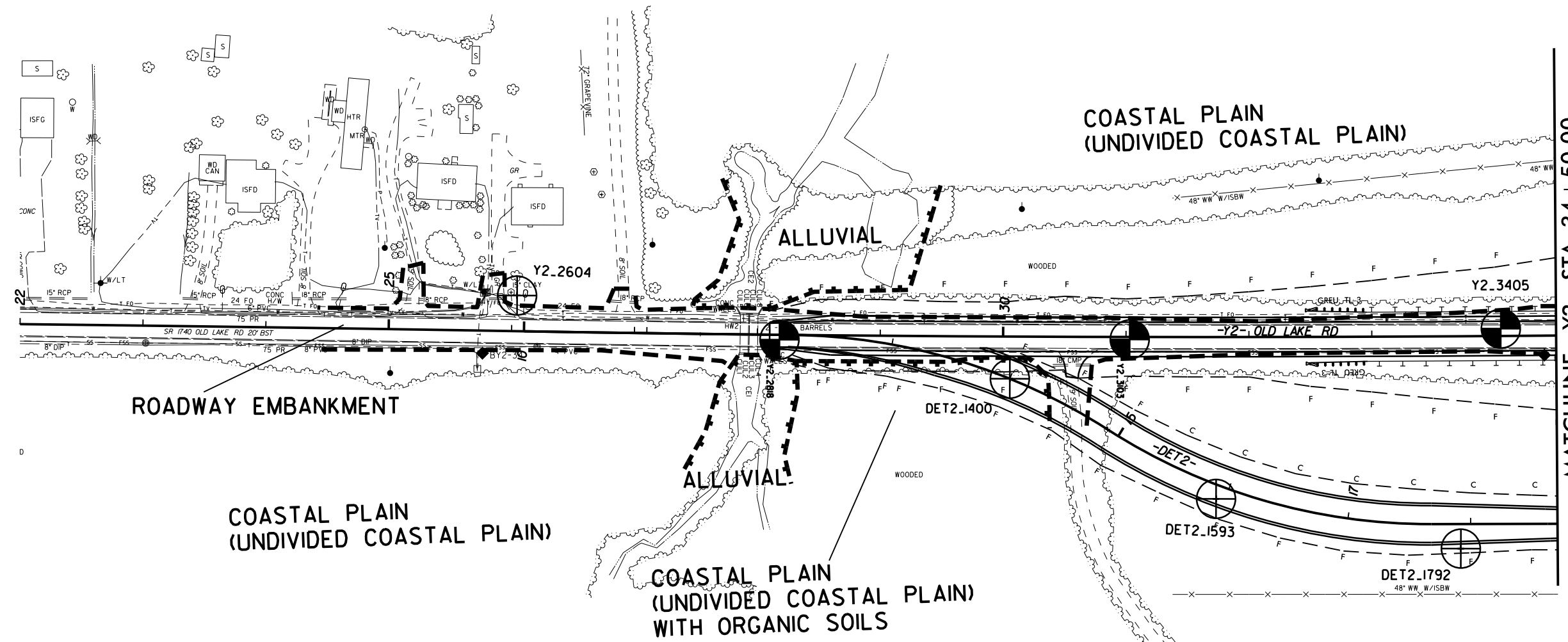
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 Walls - 8/17/99

8/17/99

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 6750 TRYON ROAD
 CARY, NC 27518
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 CALYXengineers.com
 NC License # F-1333

PROJECT REFERENCE NO. R-5819 /R-5820	SHEET NO. 16
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

NAD 83/NA 2011



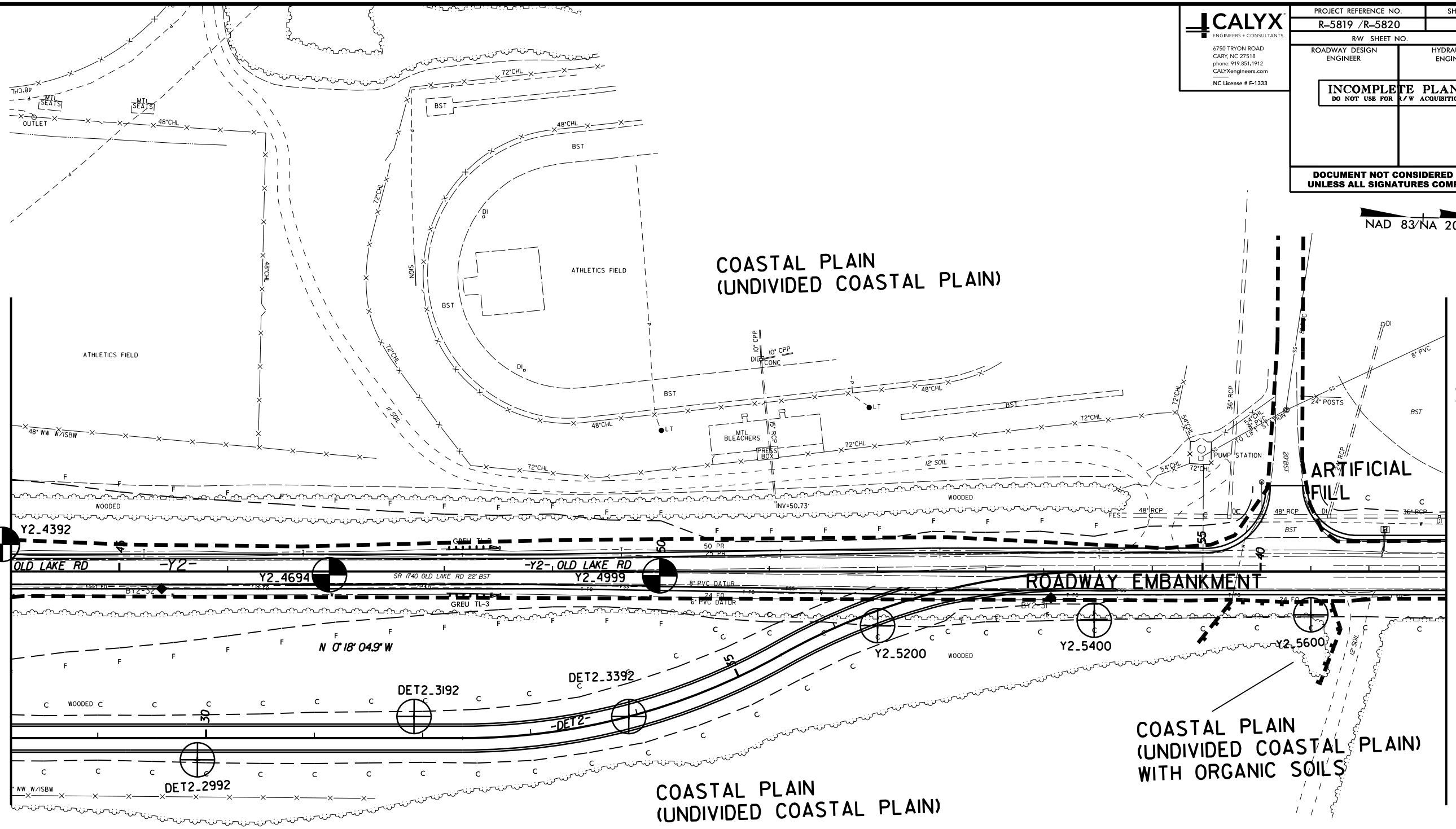
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 Walls - 8/17/99

PROJECT REFERENCE NO. R-5819 /R-5820	SHEET NO. 17
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

NAD 83/NA 2011

MATCHLINE -Y2- STA. 44 + 00.00
SEE SHEET 11

MATCHLINE -Y2- STA. 57 + 25.00
SEE SHEET 18



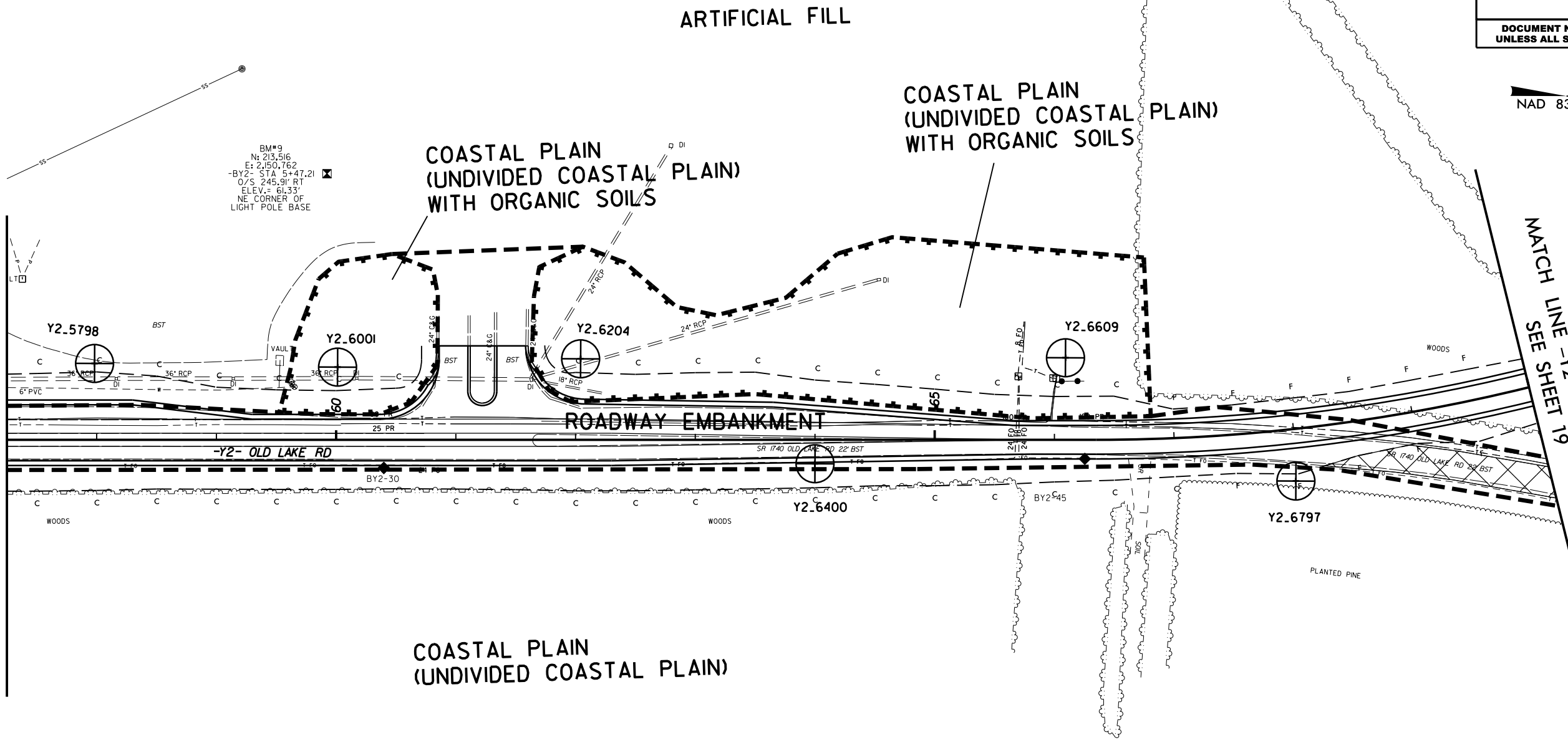
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Walls - 8/17/99

PROJECT REFERENCE NO. R-5819 /R-5820	SHEET NO. 18
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

NAD 83/NA 2011

MATCH LINE -Y2- STA 57+25.00
SEE SHEET 17

MATCH LINE -Y2- STA 70+00.00
SEE SHEET 19



BM#9
N: 213,516
E: 2,150,762
-BY2- STA 57+47.21
O/S 245.91' RT
ELEV. = 61.33'
NE CORNER OF
LIGHT POLE BASE

ARTIFICIAL FILL

COASTAL PLAIN
(UNDIVIDED COASTAL PLAIN)
WITH ORGANIC SOILS

COASTAL PLAIN
(UNDIVIDED COASTAL PLAIN)
WITH ORGANIC SOILS

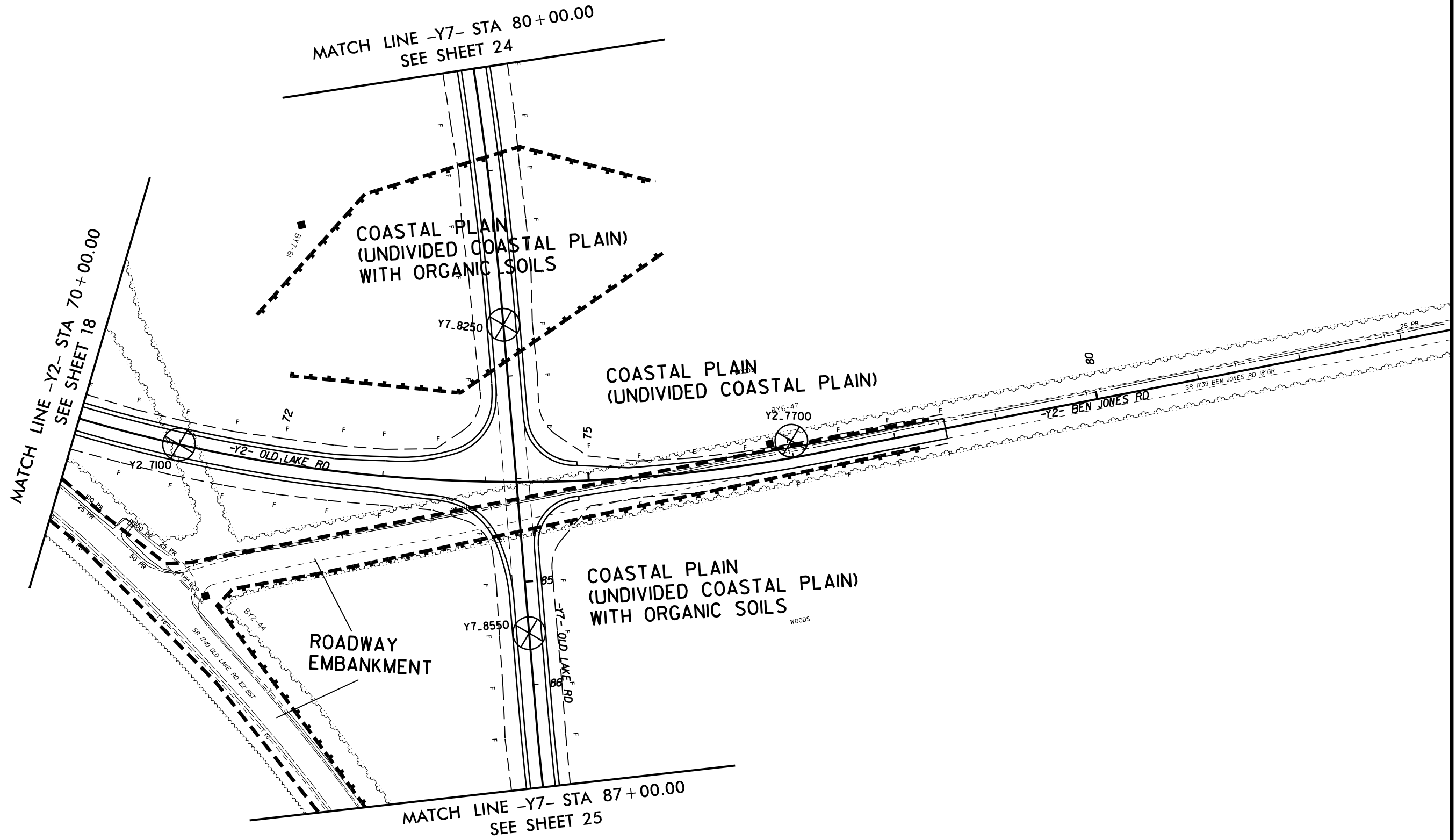
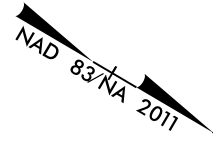
COASTAL PLAIN
(UNDIVIDED COASTAL PLAIN)

ROADWAY EMBANKMENT

-Y2- OLD LAKE RD

15-FEB-2021 15:55
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 8/17/99

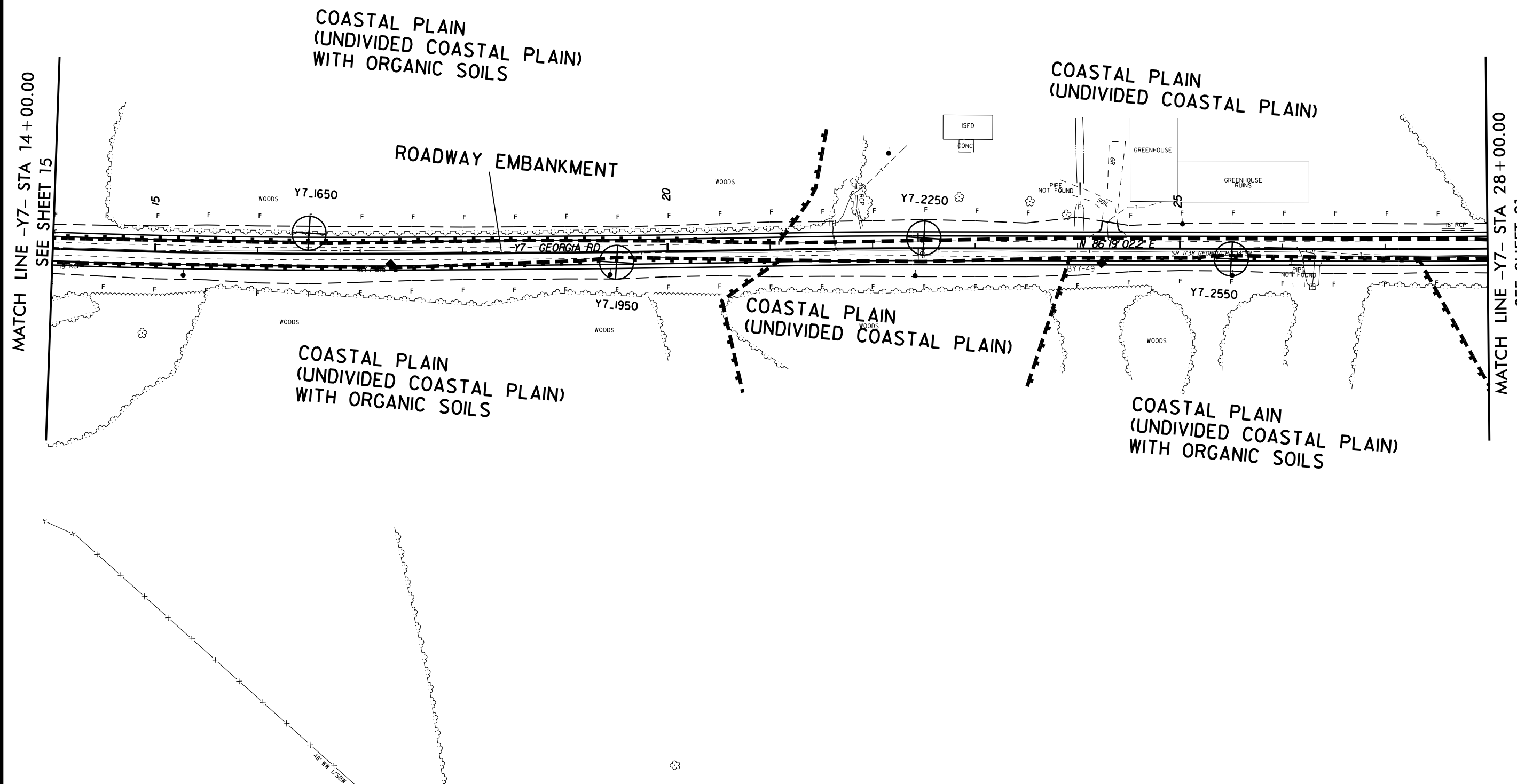
PROJECT REFERENCE NO.	SHEET NO.
R-5819 /R-5820	19
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



15-FEB-2021 15:55
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 Walls - 8/17/99



PROJECT REFERENCE NO. R-5819 /R-5820	SHEET NO. 20
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



MATCH LINE -Y7- STA 14+00.00
SEE SHEET 15

MATCH LINE -Y7- STA 28+00.00
SEE SHEET 21

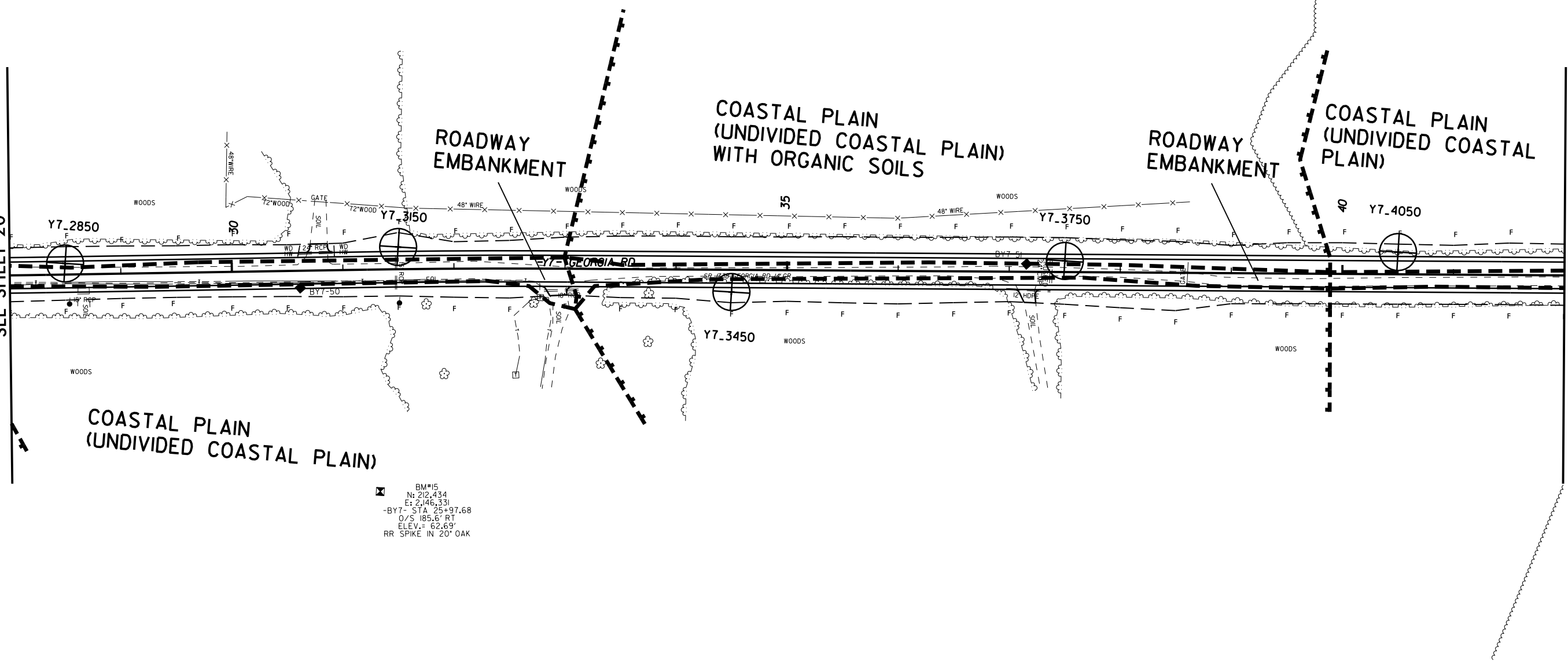
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Walls - 8/17/99

PROJECT REFERENCE NO. R-5819 /R-5820	SHEET NO. 21
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

NAD 83 NA 2011

MATCH LINE -Y7- STA 28+00.00
SEE SHEET 20

MATCH LINE -Y7- STA 42+00.00
SEE SHEET 22



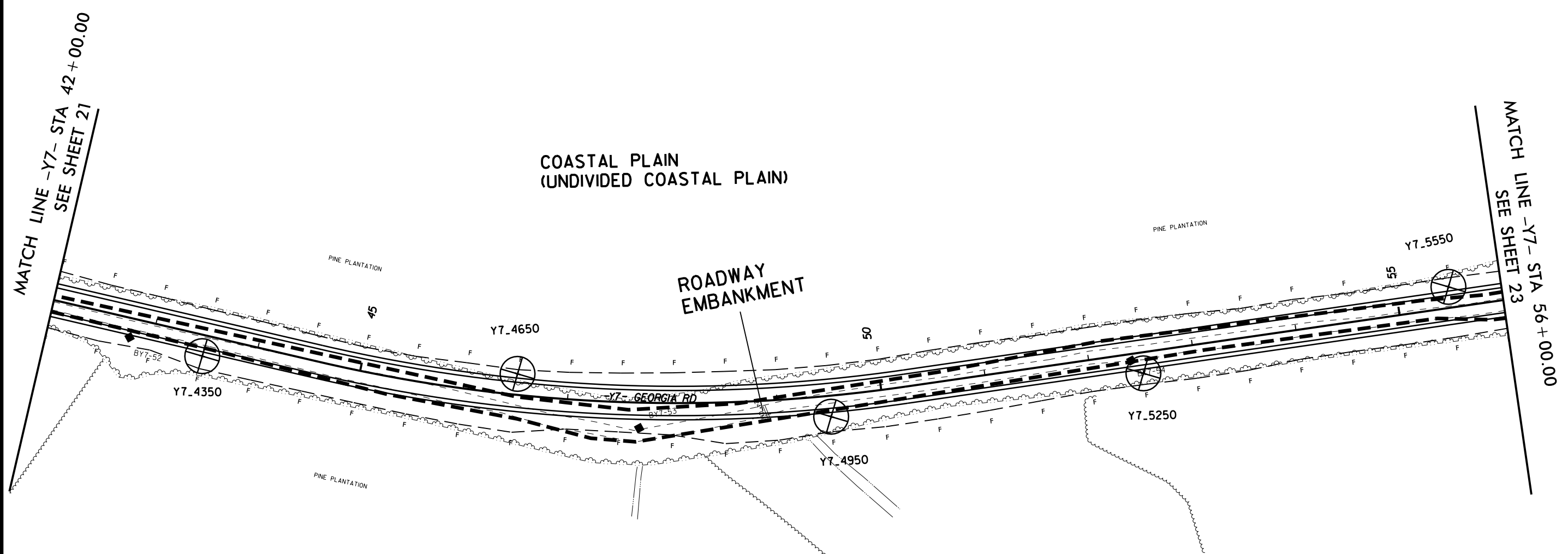
BM#15
N: 212.434
E: 2146.331
-BY7- STA. 25+97.68
O/S 185.6' RT
ELEV. = 62.69'
RR SPIKE IN 20' OAK

8/17/99

I5-FEB-2021 5:55
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Walls - 8/17/99

PROJECT REFERENCE NO. R-5819 /R-5820	SHEET NO. 22
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

NAD 83/NA 2011



MATCH LINE -Y7- STA 42+00.00
SEE SHEET 21

MATCH LINE -Y7- STA 56+00.00
SEE SHEET 23

COASTAL PLAIN
(UNDIVIDED COASTAL PLAIN)

ROADWAY
EMBANKMENT

PINE PLANTATION

PINE PLANTATION

PINE PLANTATION

Y7.4350

Y7.4650

Y7.4950

Y7.5250

Y7.5550

Y7 - GEORGIA RD

BY7-52

BY7-53

55

50

45

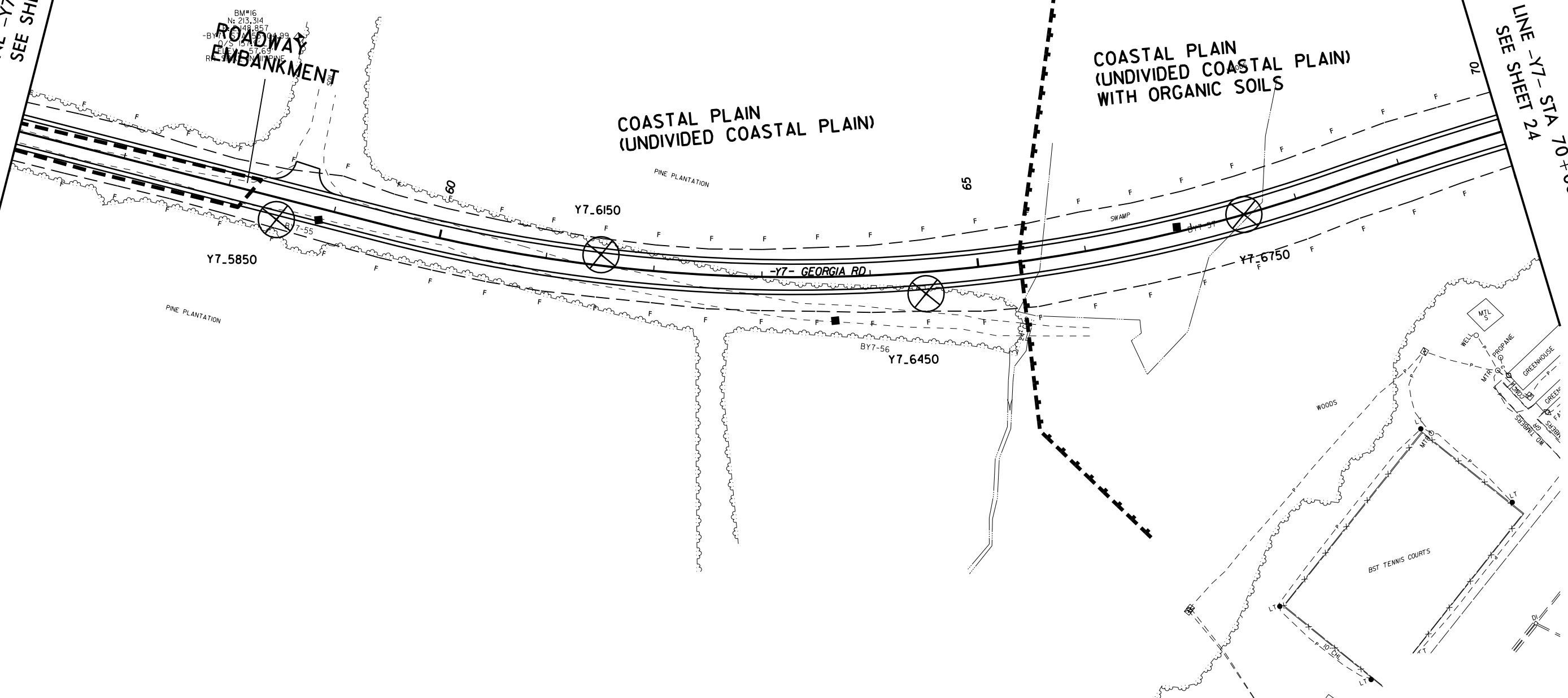
PROJECT REFERENCE NO.		SHEET NO.	
R-5819 /R-5820		23	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



15-FEB-2021 15:55
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 Walls - 8/17/99

MATCH LINE -Y7- STA 56+00.00
SEE SHEET 22

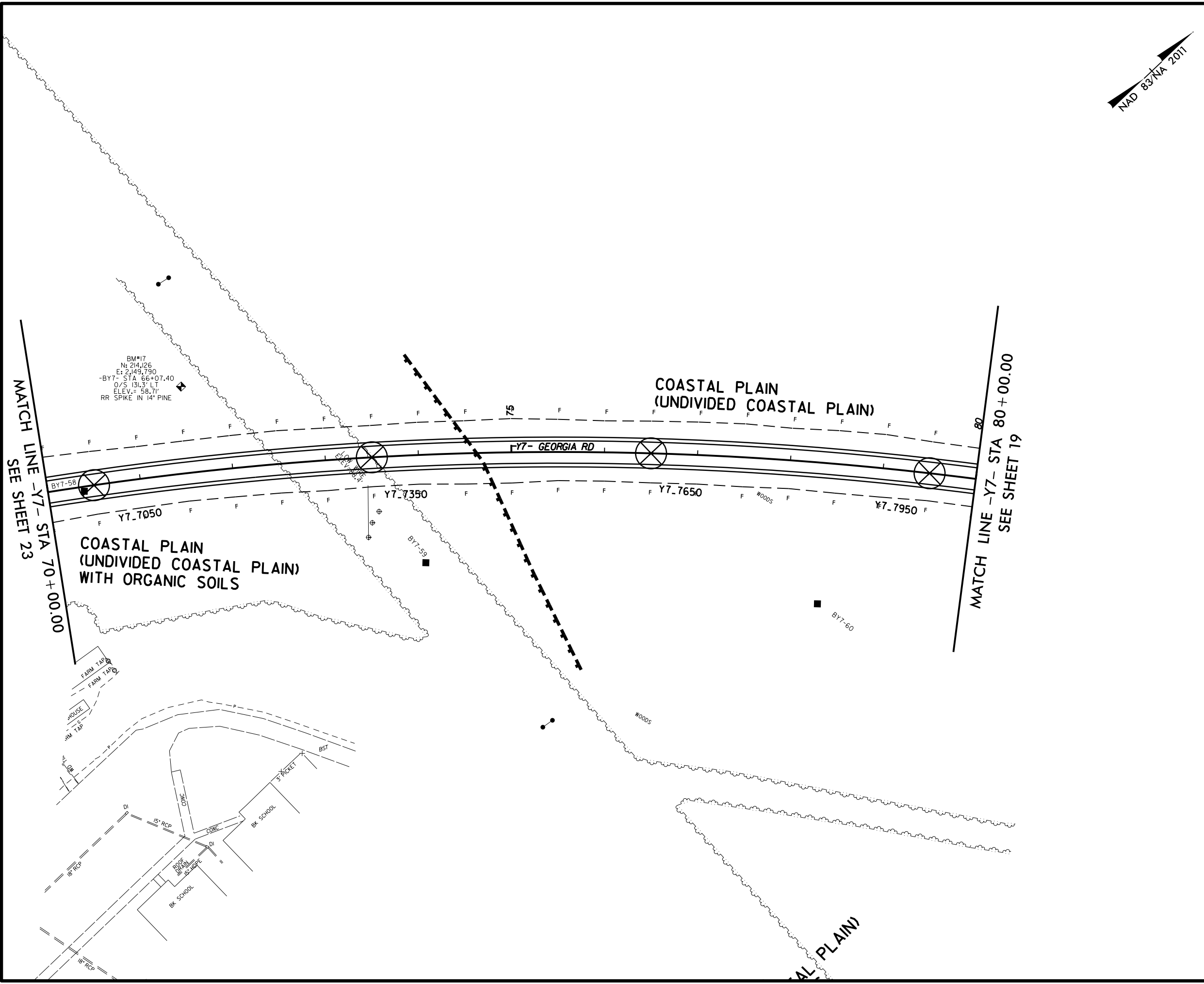
MATCH LINE -Y7- STA 70+00.00
SEE SHEET 24



PROJECT REFERENCE NO.	SHEET NO.
R-5819 /R-5820	24
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



15-FEB-2021 15:55
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 8/17/99



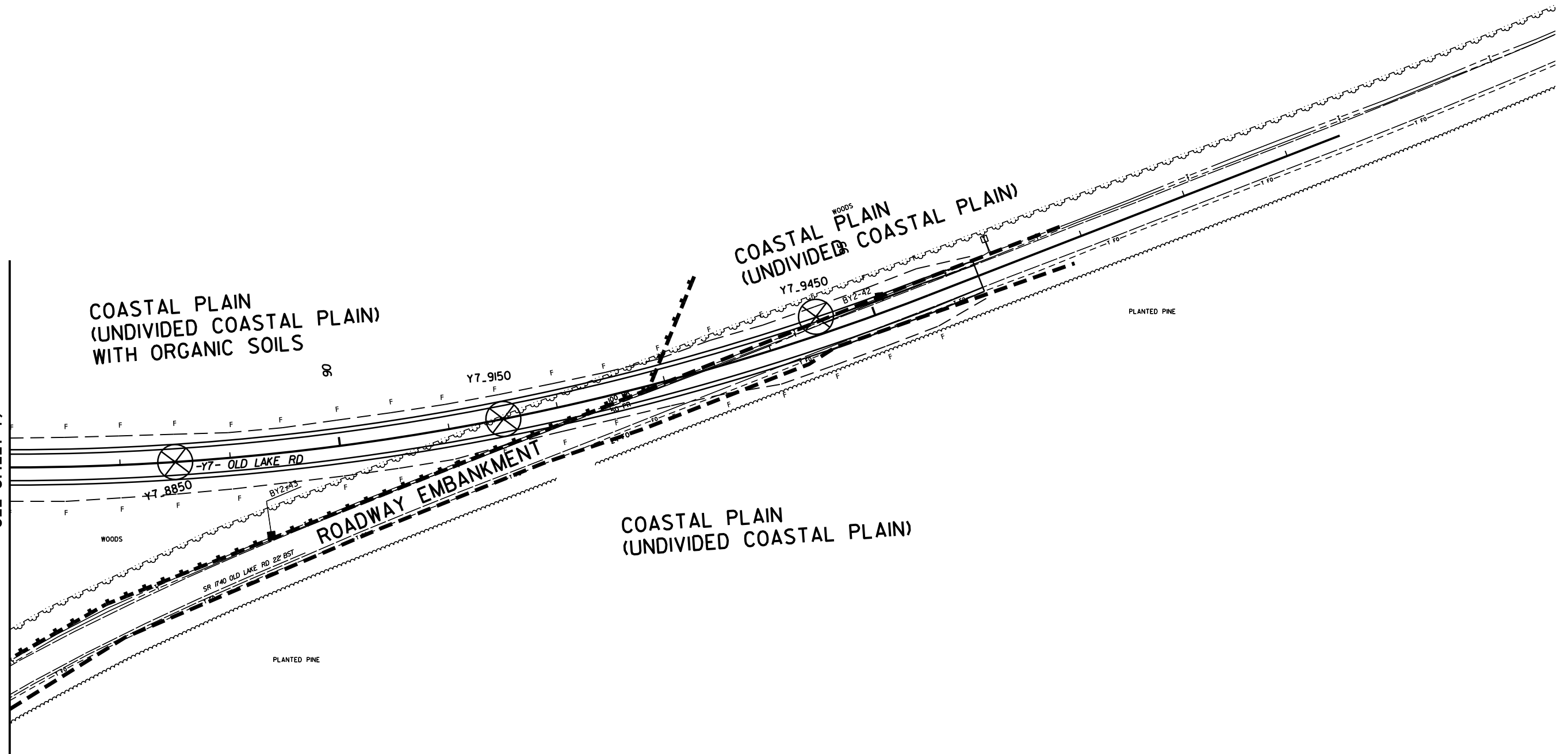
8/17/99

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Walls - 8/17/99

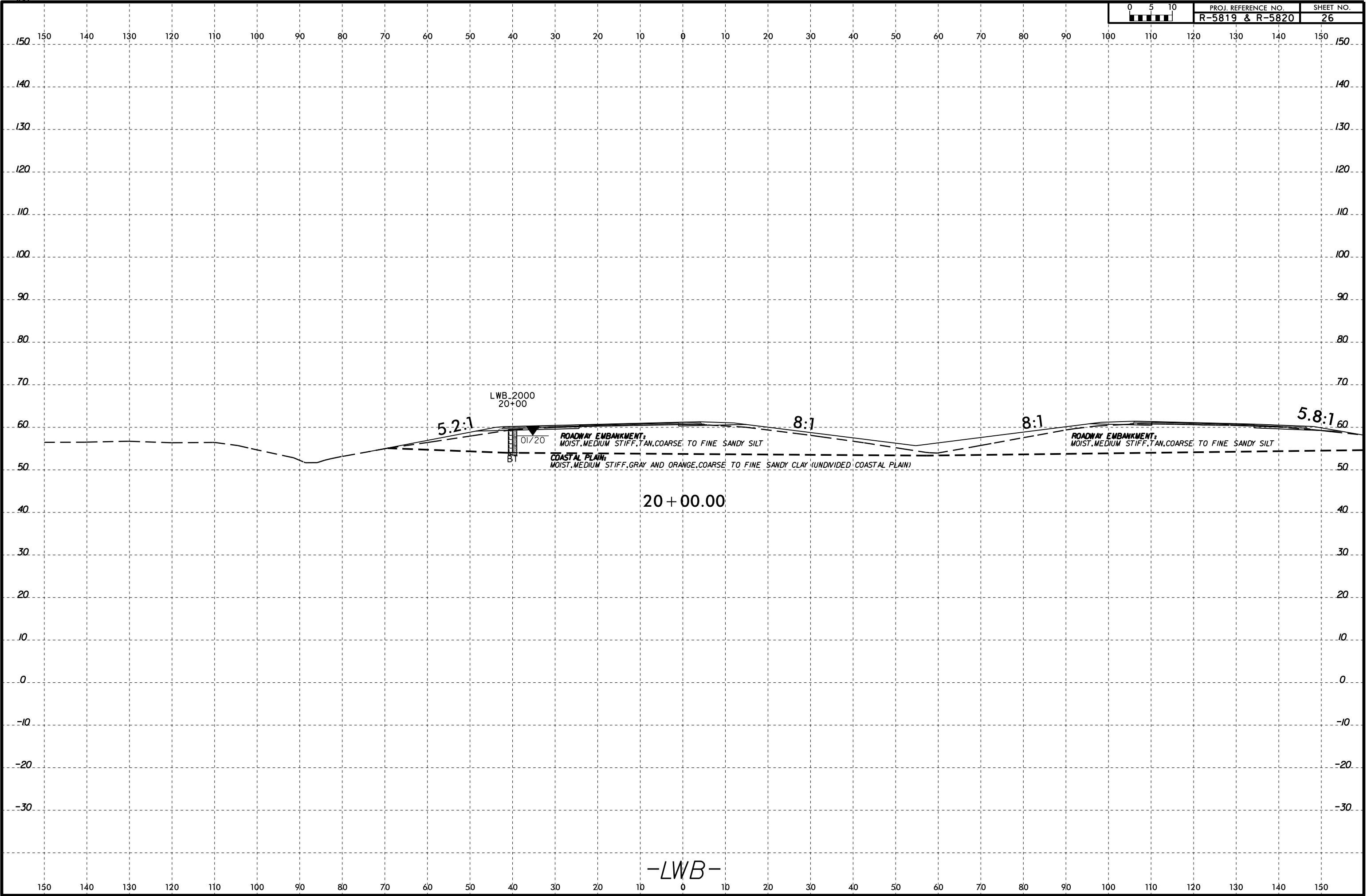
PROJECT REFERENCE NO. R-5819 /R-5820		SHEET NO. 25	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



MATCH LINE -Y7- STA 87 + 00.00
SEE SHEET 19



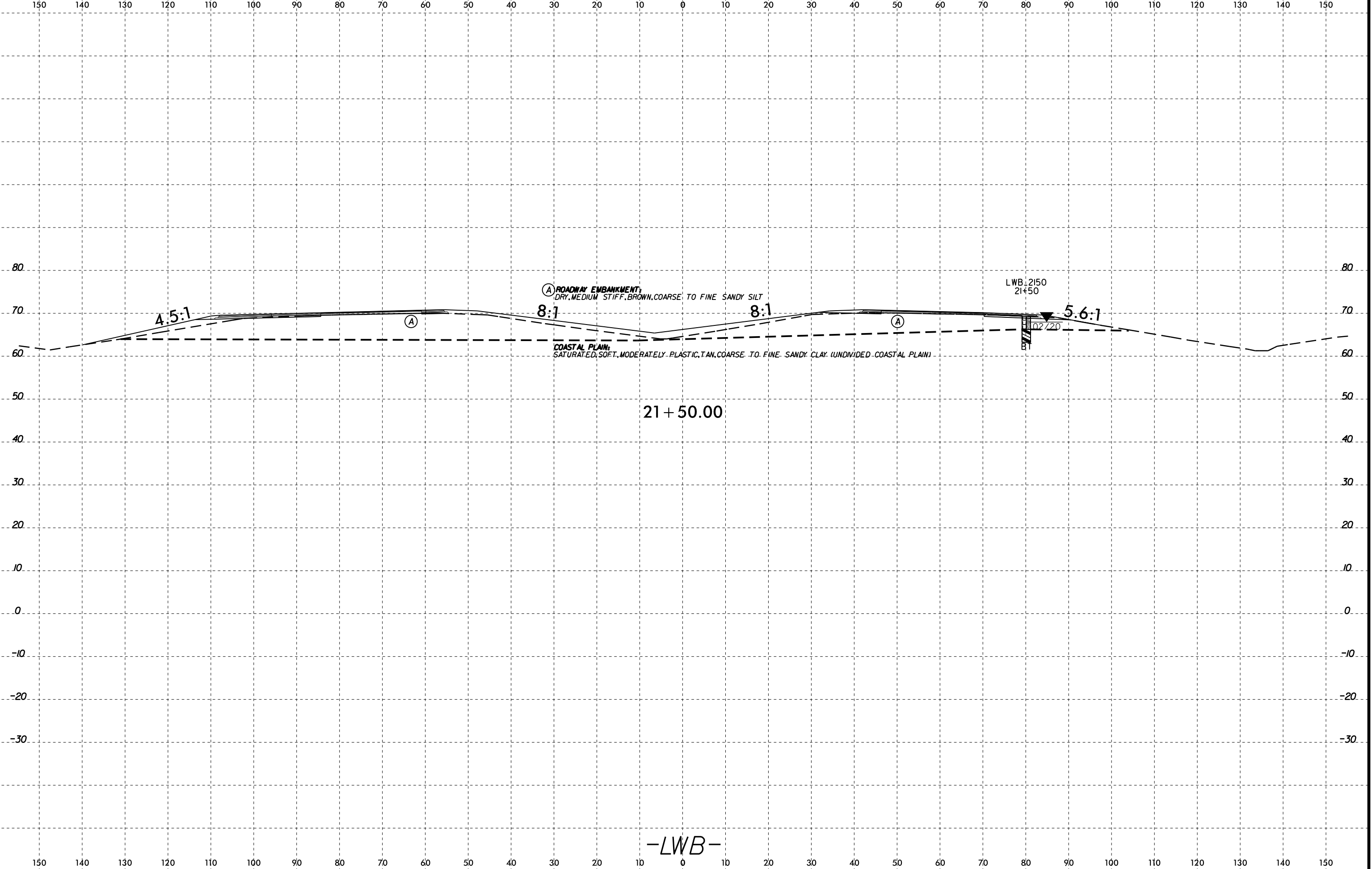
6/23/16



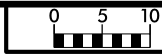
-LWB-

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Wells - At KA211387

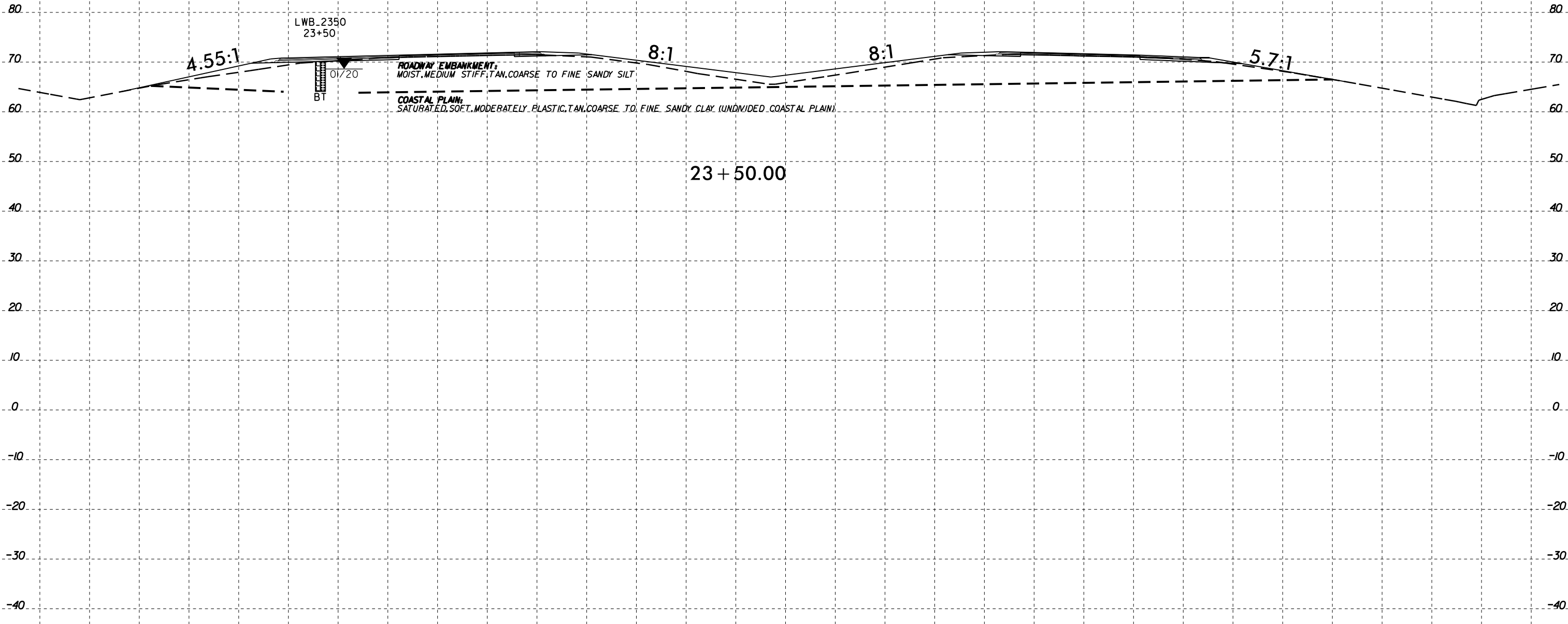
6/23/16
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-LWB-

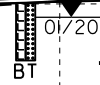


150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



LWB_2350
23+50

4.55:1



01/20

ROADWAY EMBANKMENT:
MOIST, MEDIUM STIFF, TAN, COARSE TO FINE SANDY SILT

COASTAL PLAIN:
SATURATED, SOFT, MODERATELY PLASTIC, TAN, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

8:1

8:1

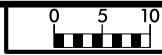
5.7:1

23 + 50.00

-LWB-

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

6/23/16



PROJ. REFERENCE NO.
R-5819 & R-5820

SHEET NO.
29

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

90 80 70 60 50 40 30 20 10 0 -10 -20 -30 -40

4.35:1

ROADWAY EMBANKMENT:
MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT

8:1

COASTAL PLAIN:
SATURATED, SOFT, MODERATELY PLASTIC, TAN, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

A

8:1

ROADWAY EMBANKMENT:
MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT

6:1

S-1
S-2

LWB_2550
25+50

B1 02/20

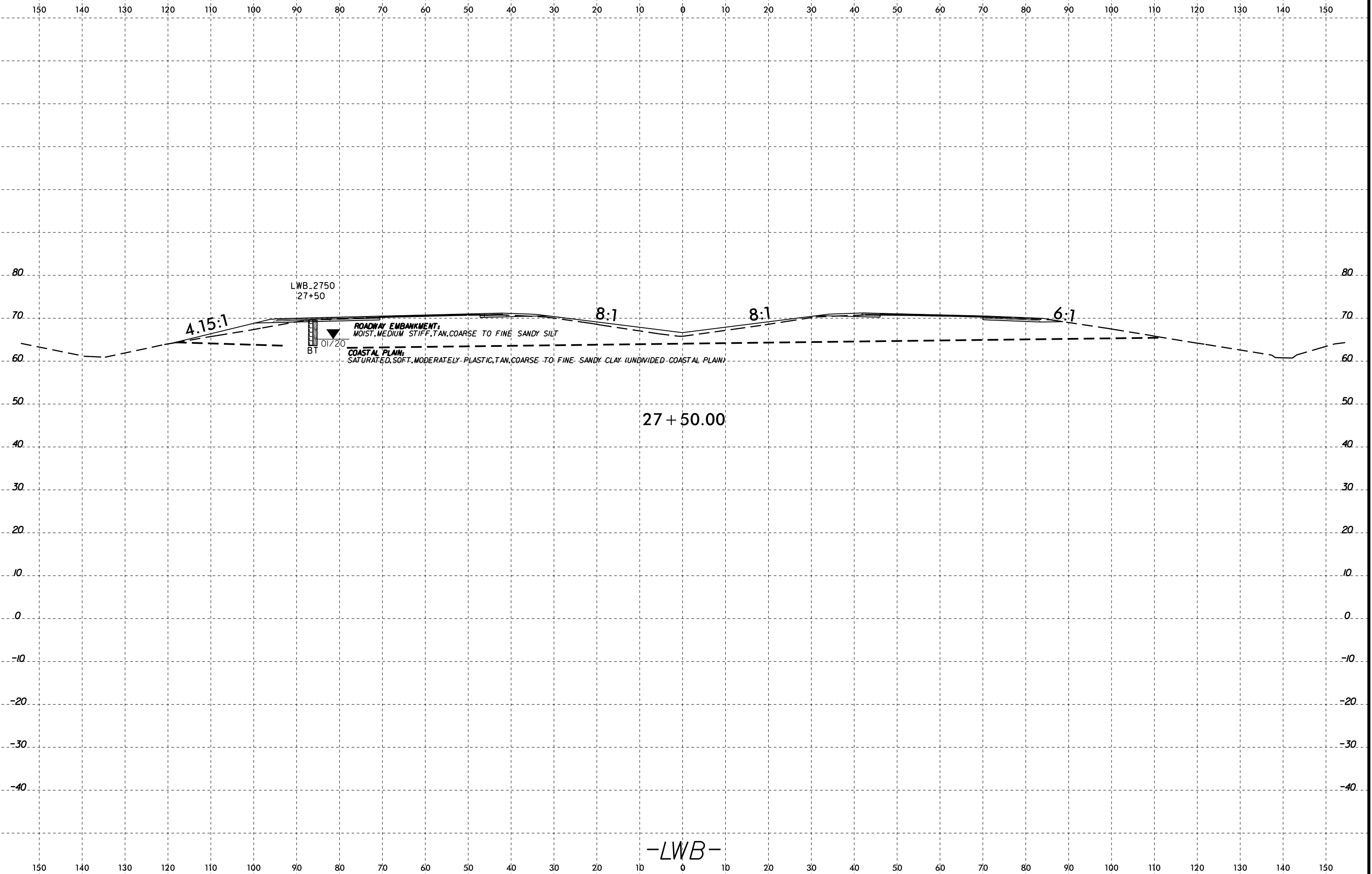
25 + 50.00

-LWB-

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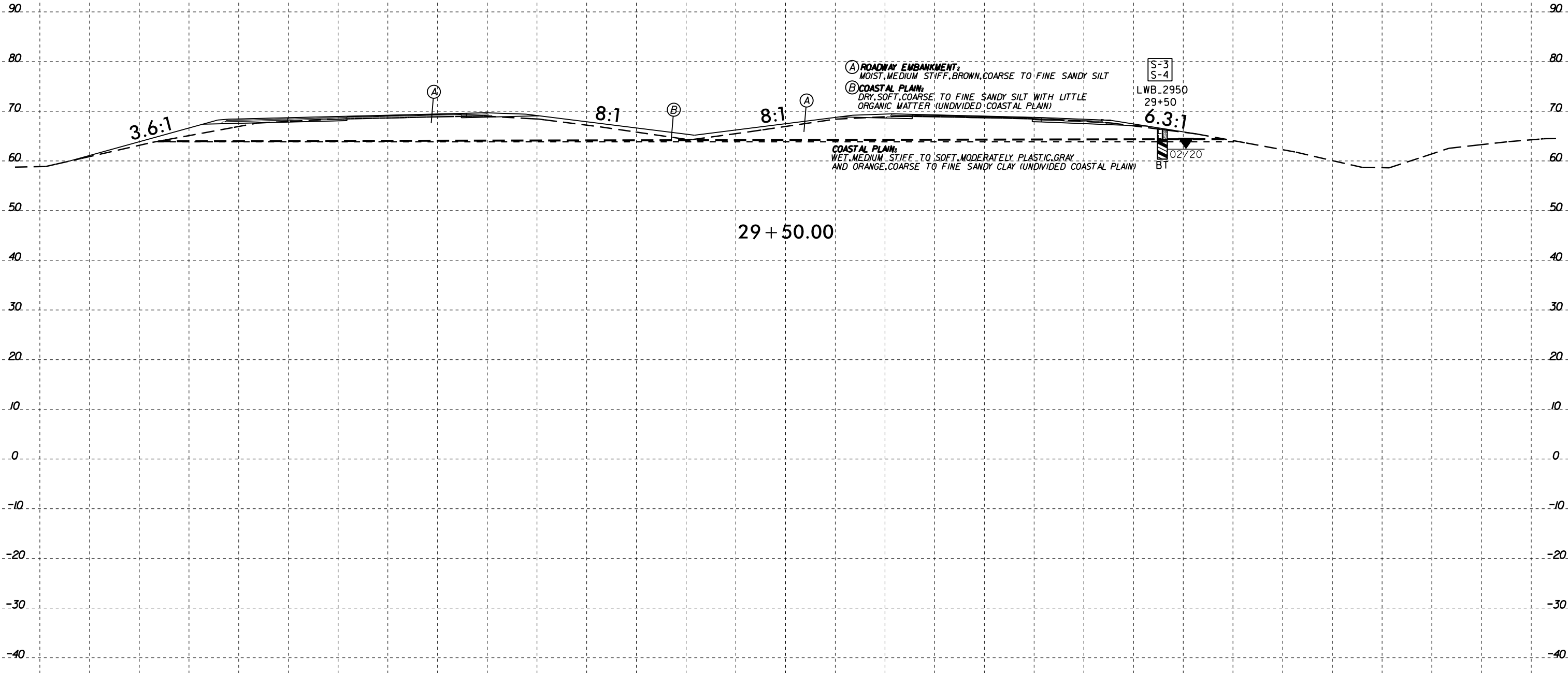
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Wells - At KA211387

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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



(A) ROADWAY EMBANKMENT:
MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT

(B) COASTAL PLAIN:
DRY, SOFT, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
WET, MEDIUM STIFF TO SOFT, MODERATELY PLASTIC, GRAY AND ORANGE, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

S-3
S-4

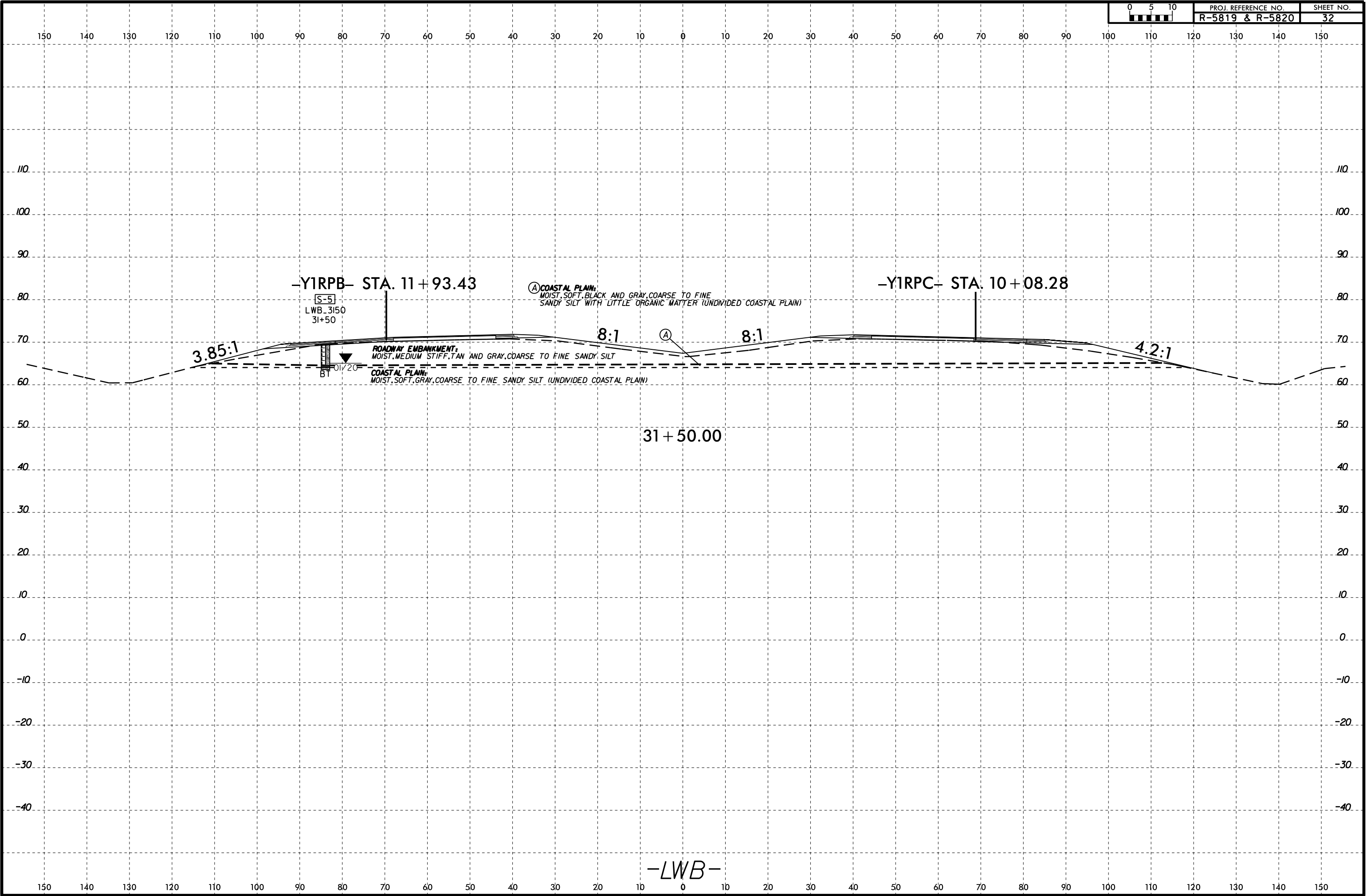
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29+50

BT
02/20

29 + 50.00

-LWB-

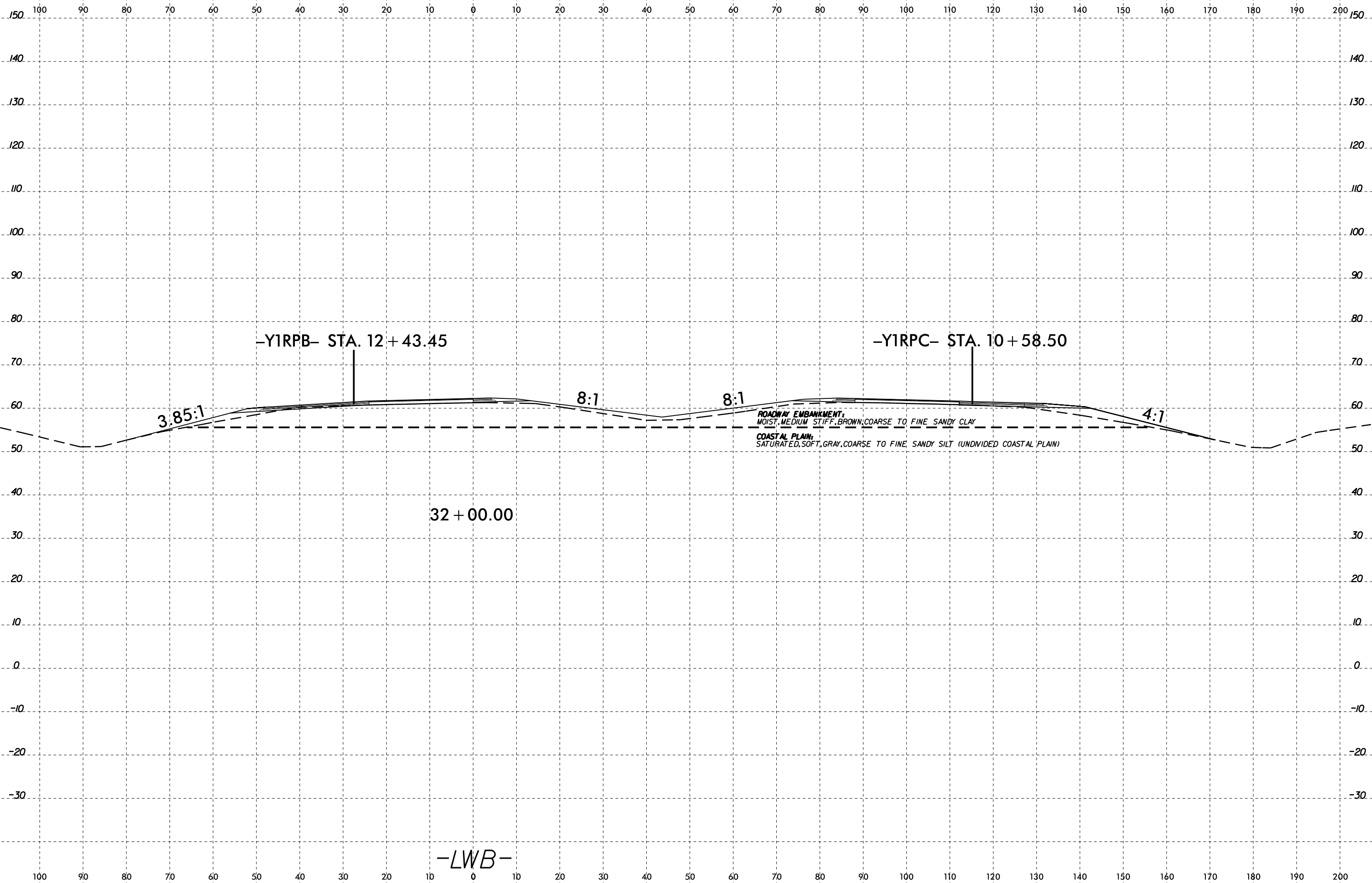
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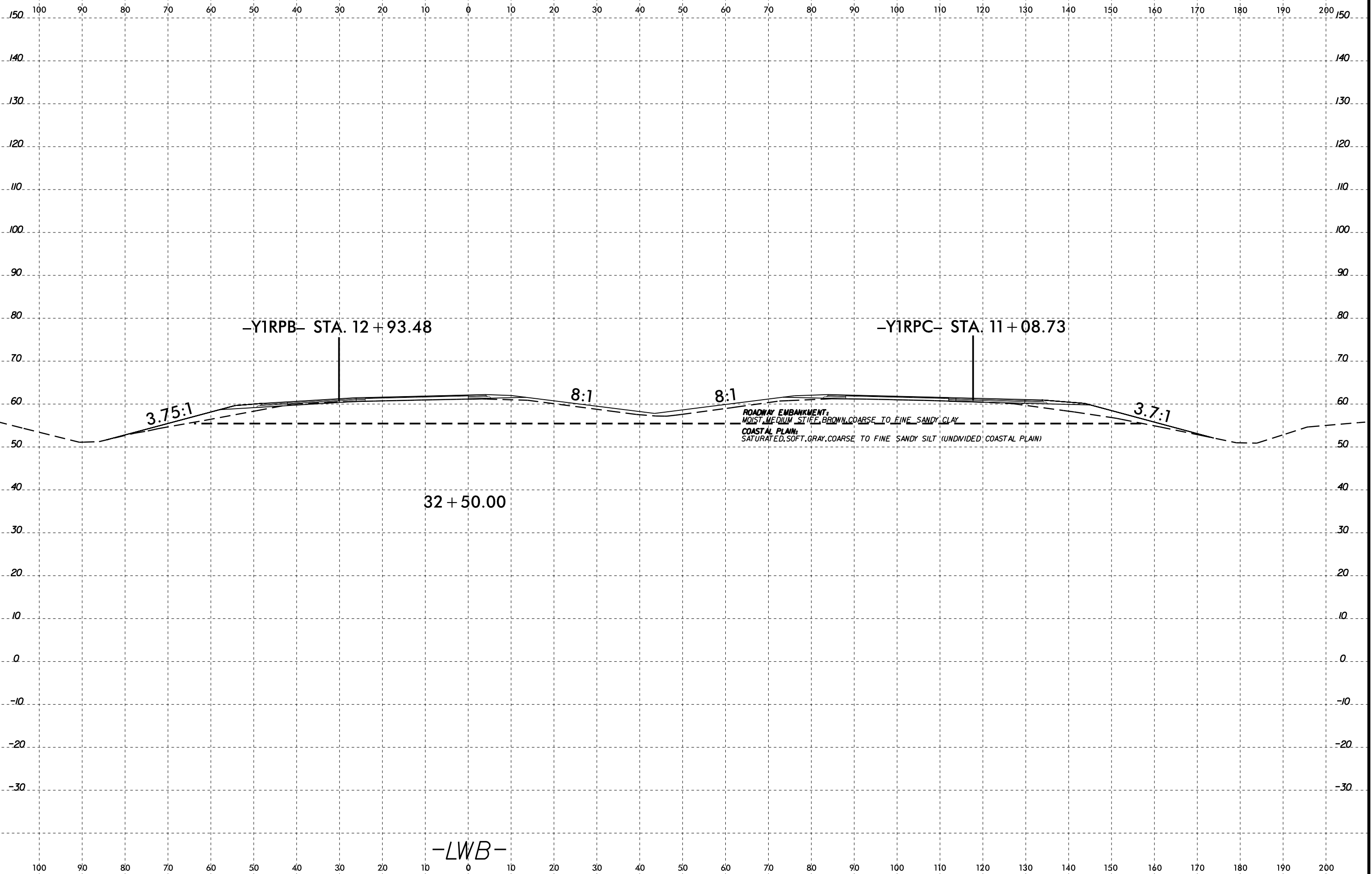
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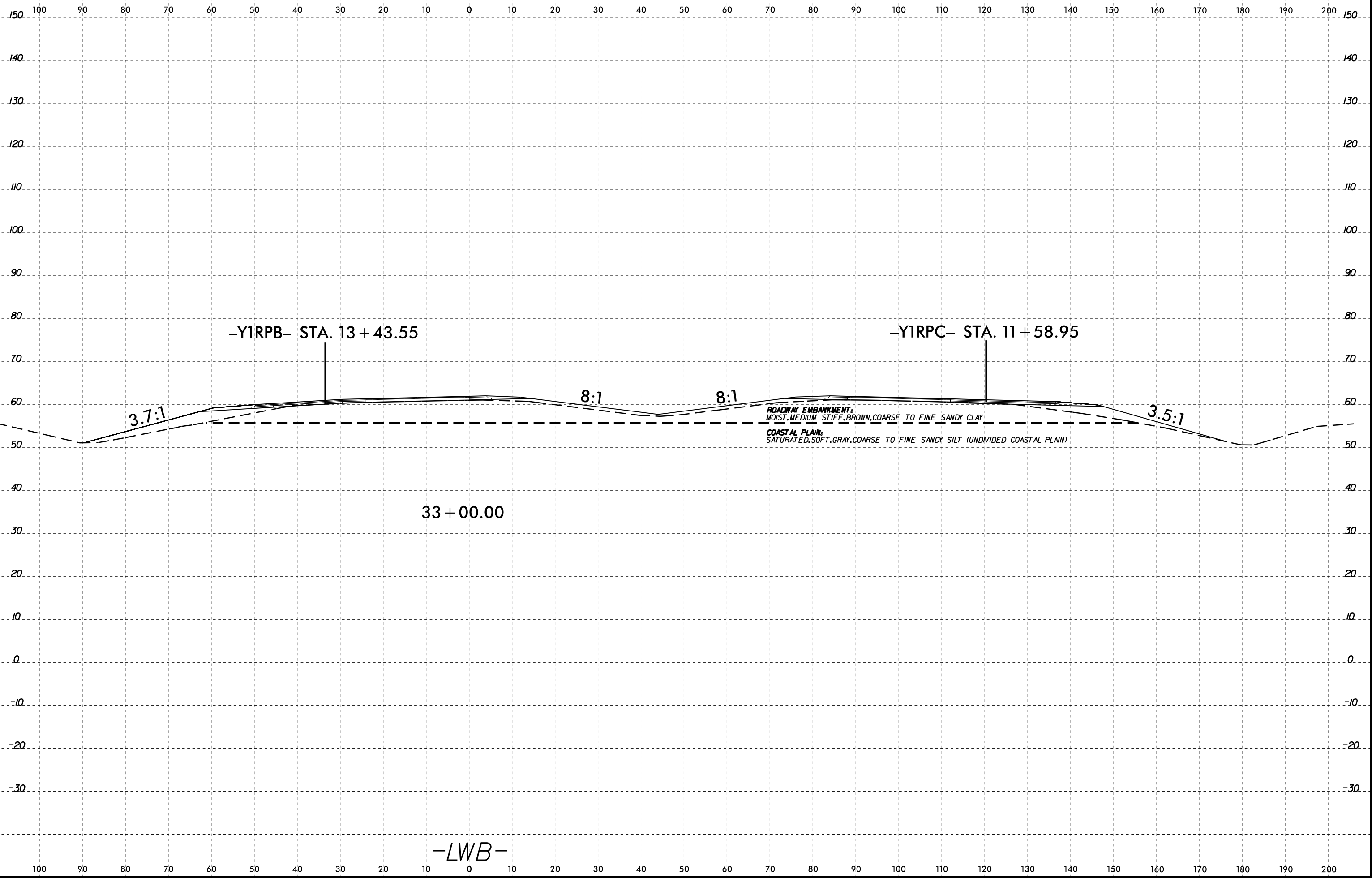
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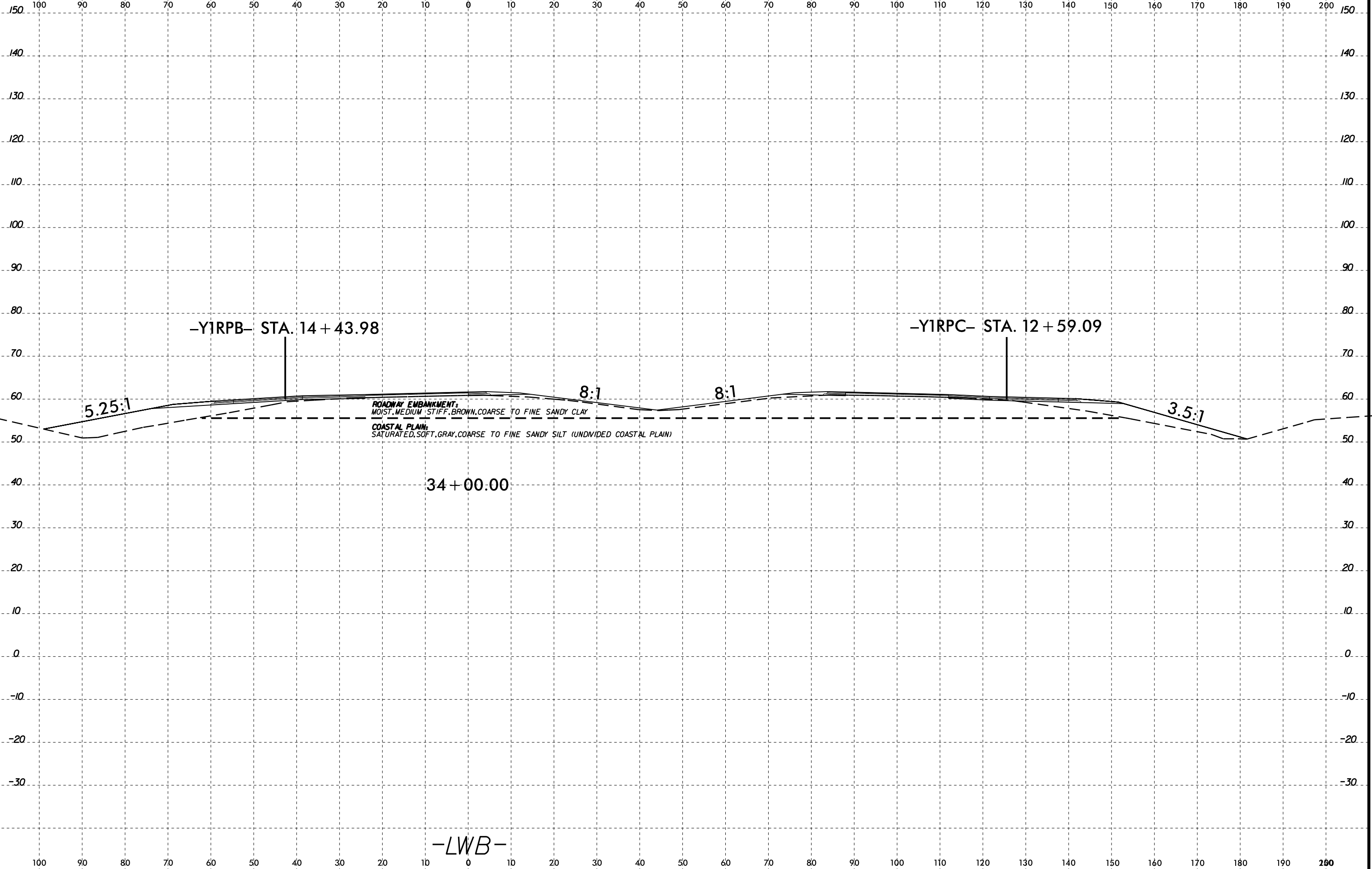


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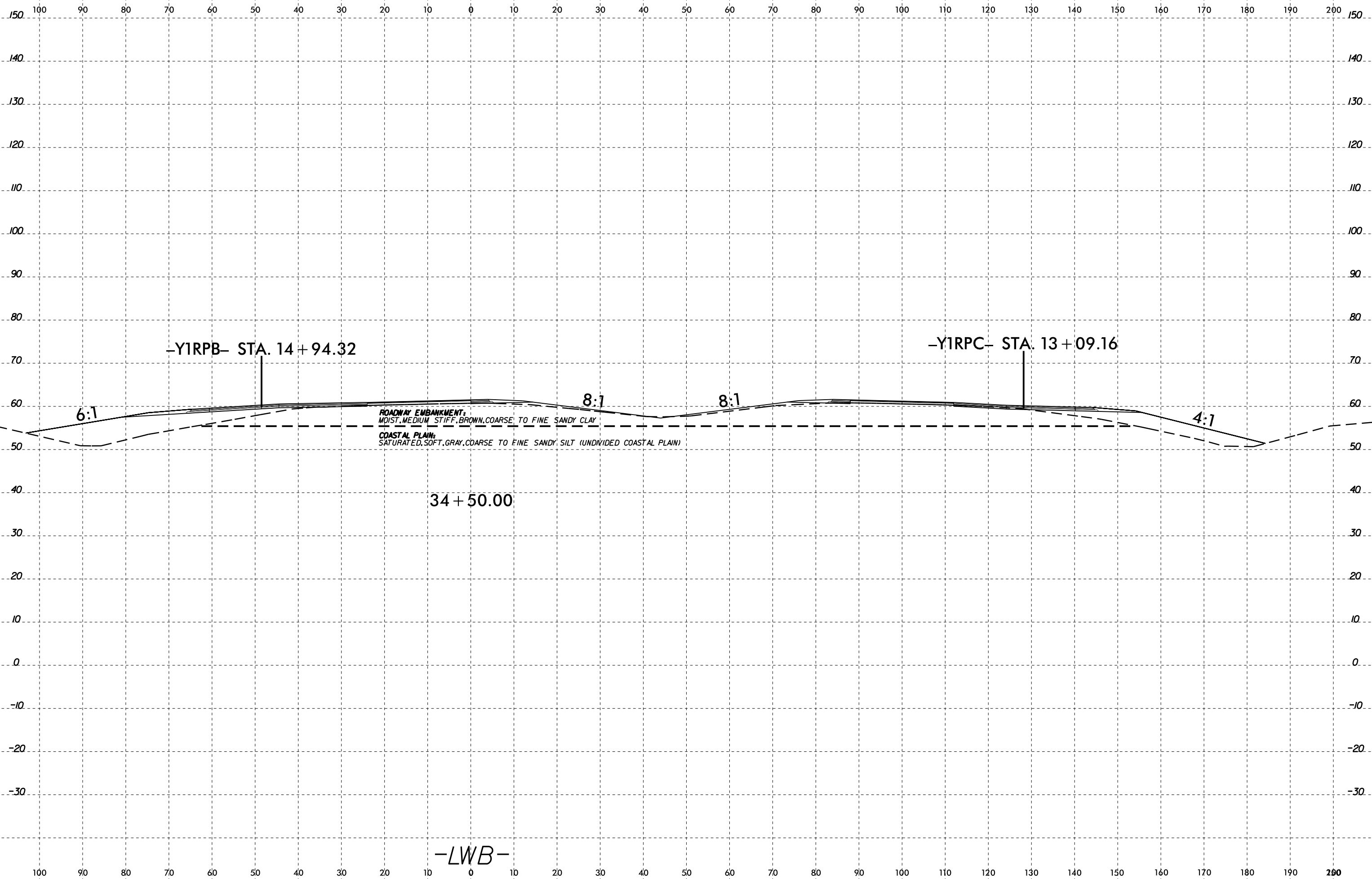


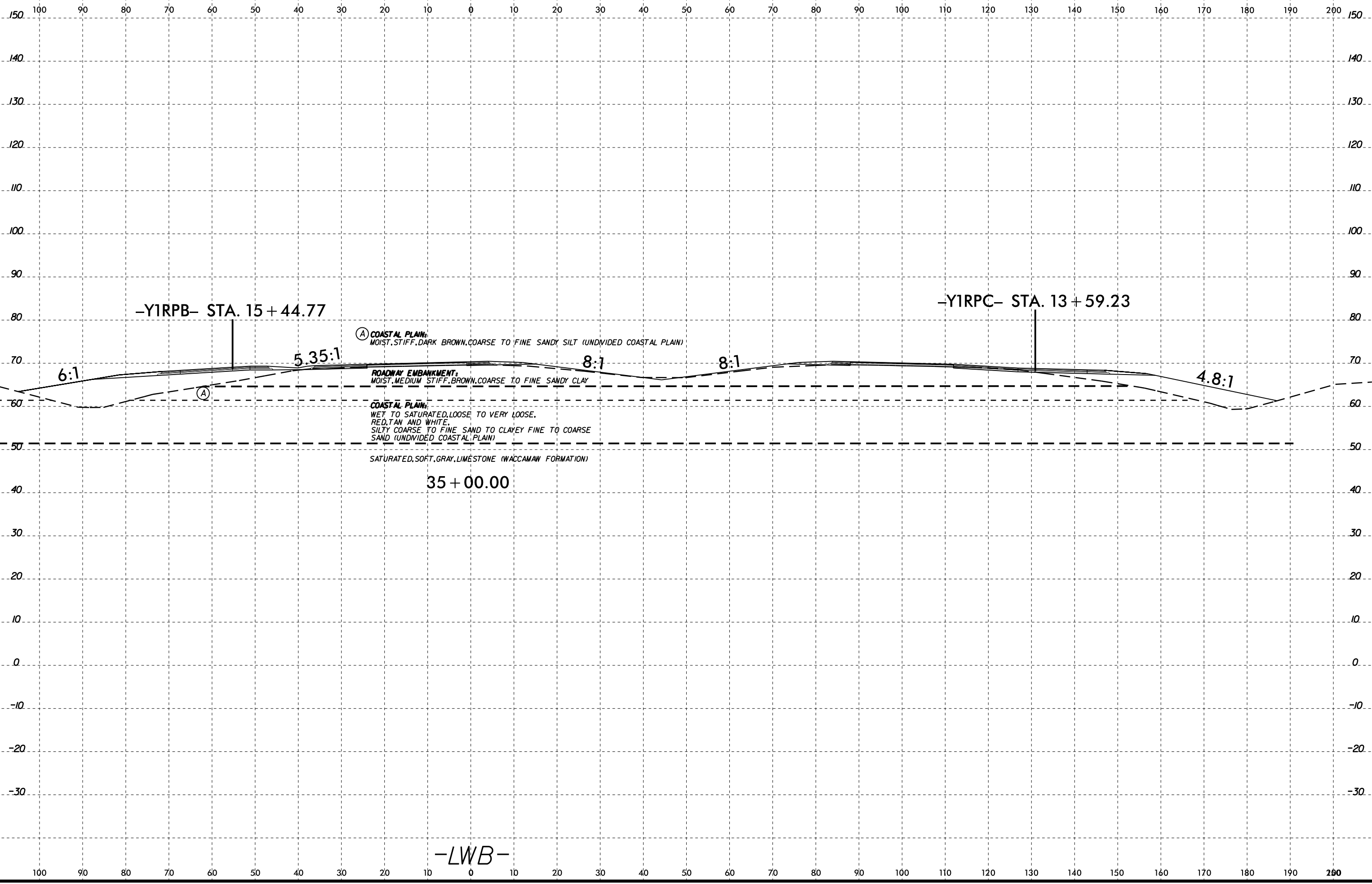
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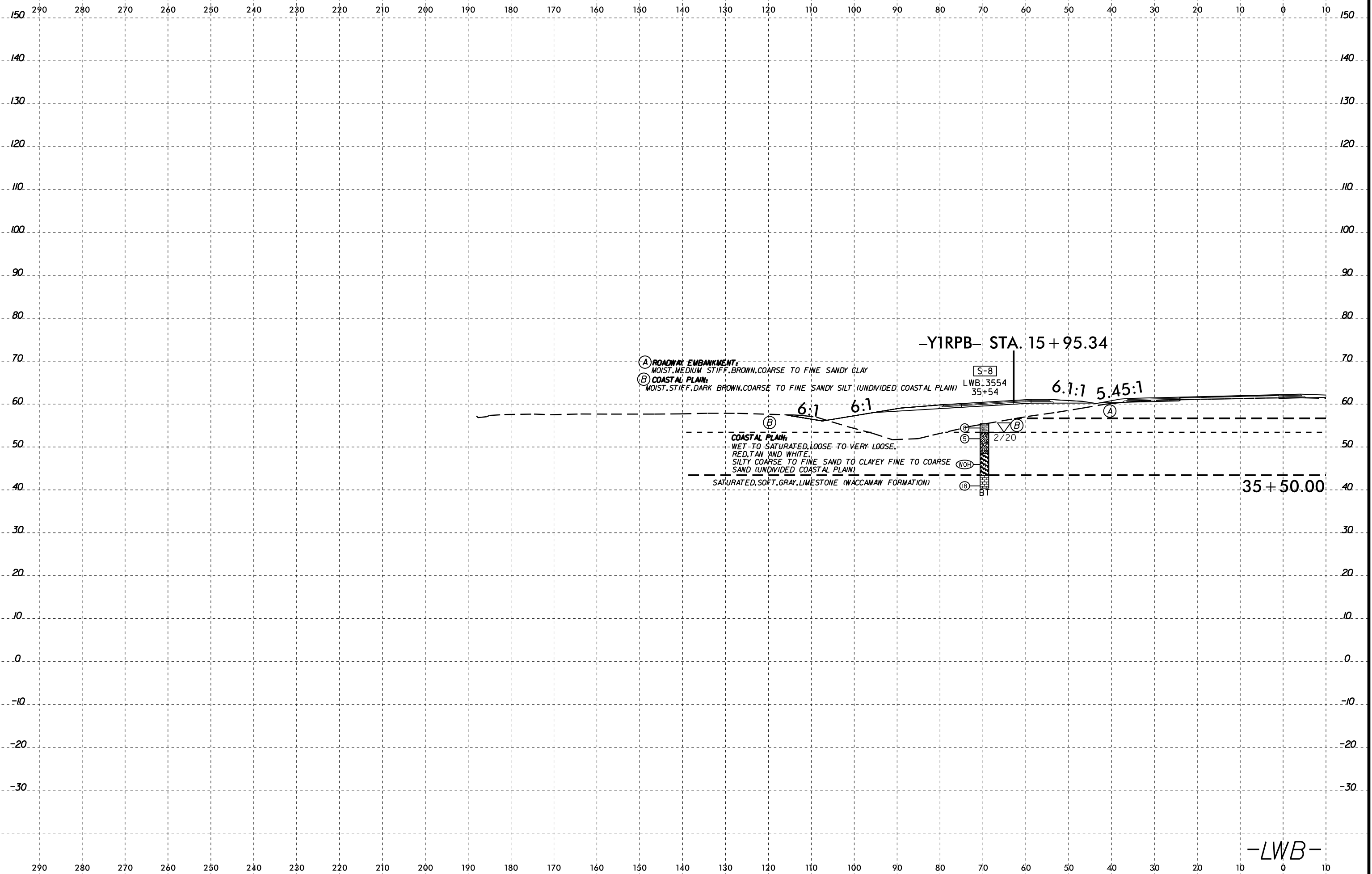
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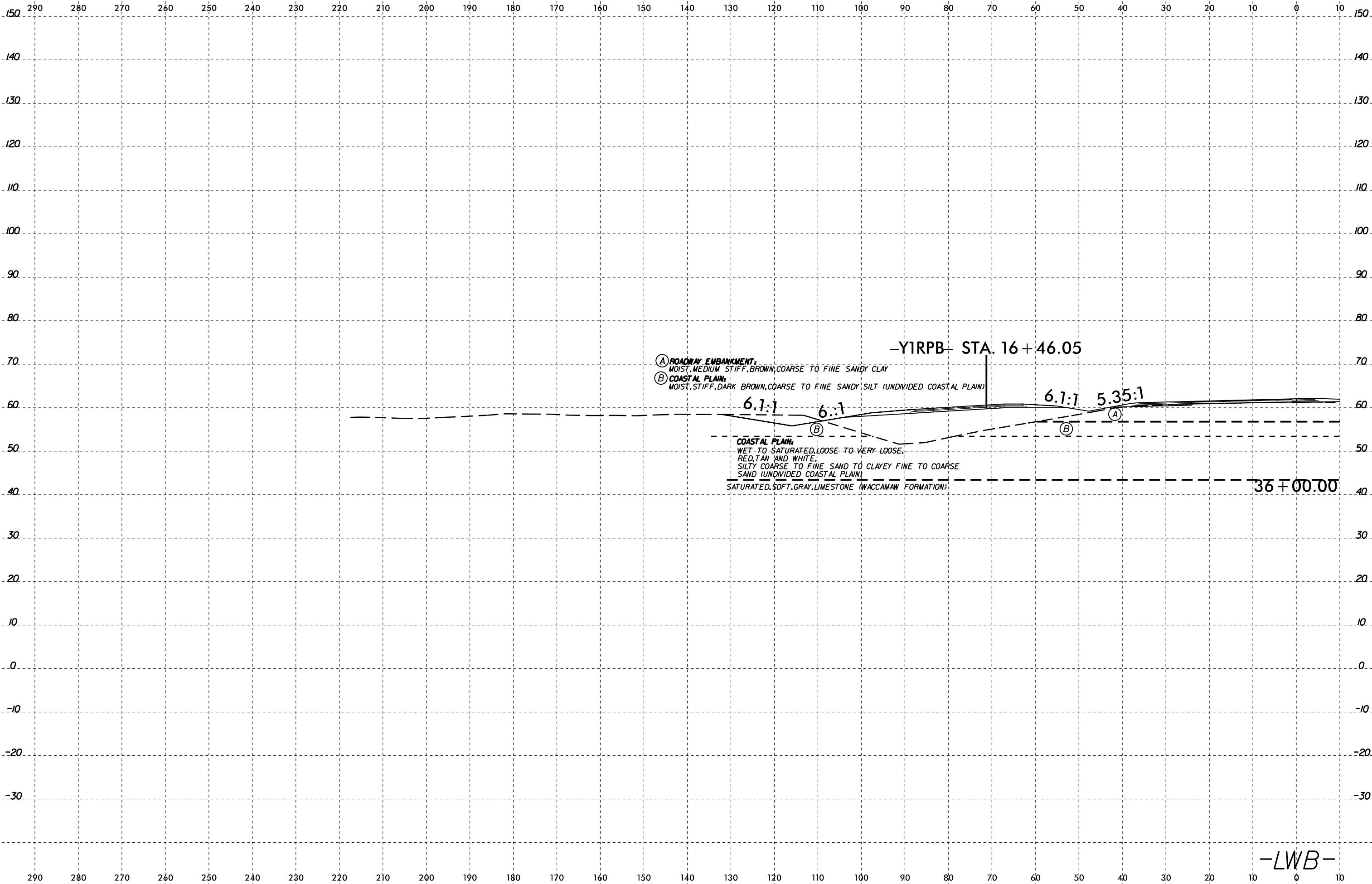
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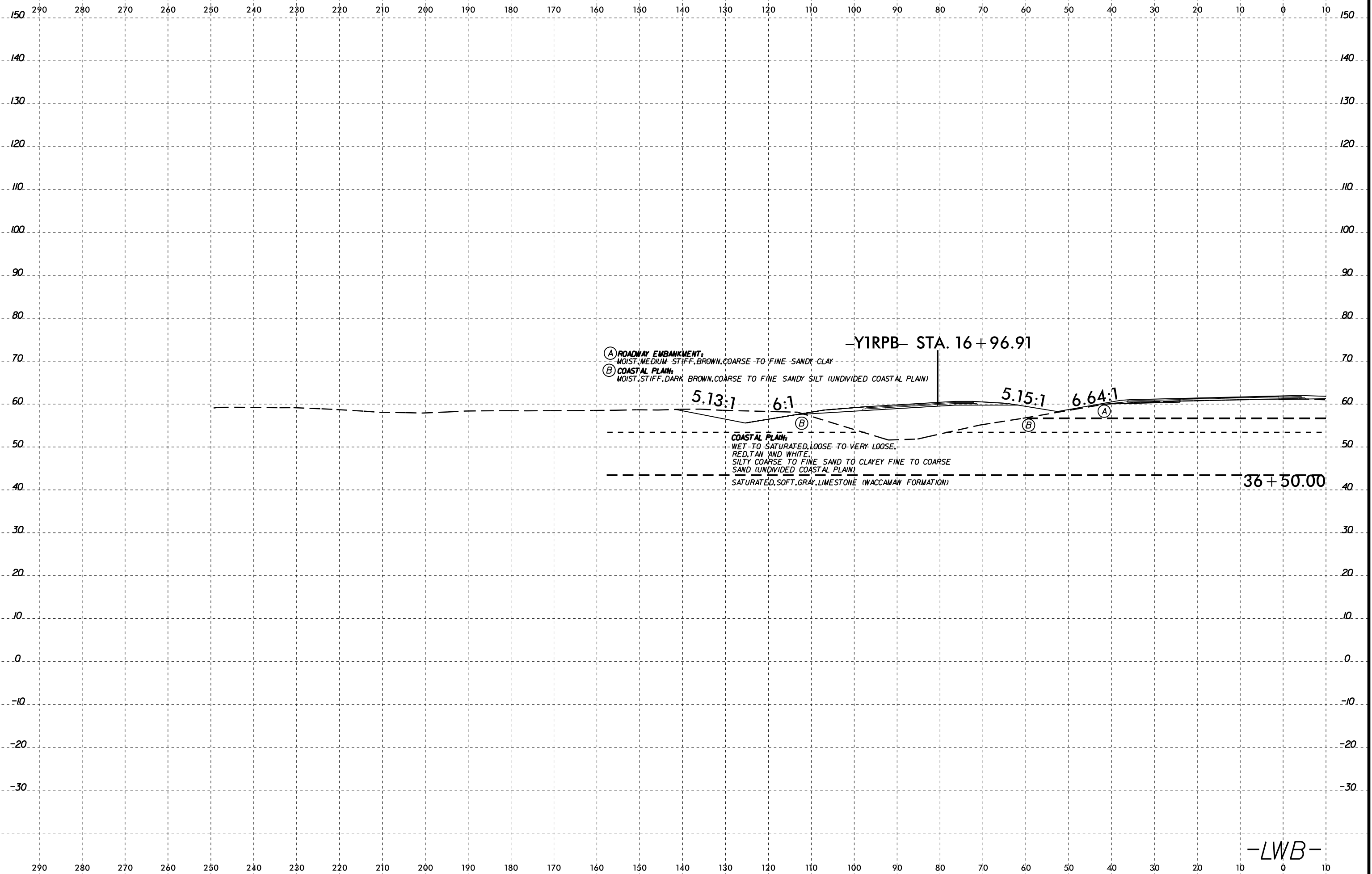
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 Wells - At KA211387

-LWB-





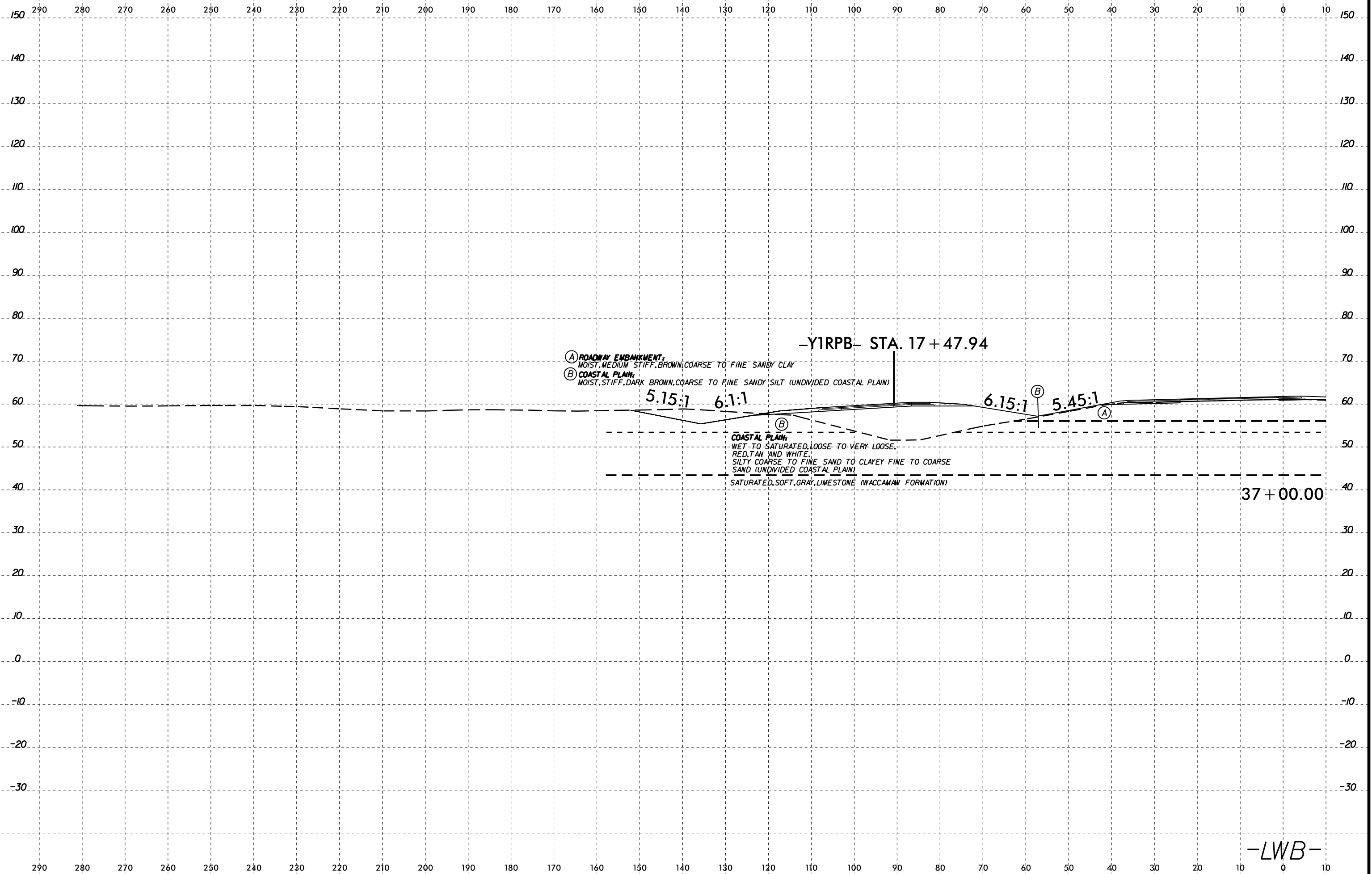
(A) ROADWAY EMBANKMENT:
 MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY CLAY
 (B) COASTAL PLAIN:
 MOIST, STIFF, DARK BROWN, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
 WET TO SATURATED, LOOSE TO VERY LOOSE,
 RED, TAN AND WHITE,
 SILTY COARSE TO FINE SAND TO CLAYEY FINE TO COARSE
 SAND (UNDIVIDED COASTAL PLAIN)
 SATURATED, SOFT, GRAY, LIMESTONE (WACCAMAW FORMATION)

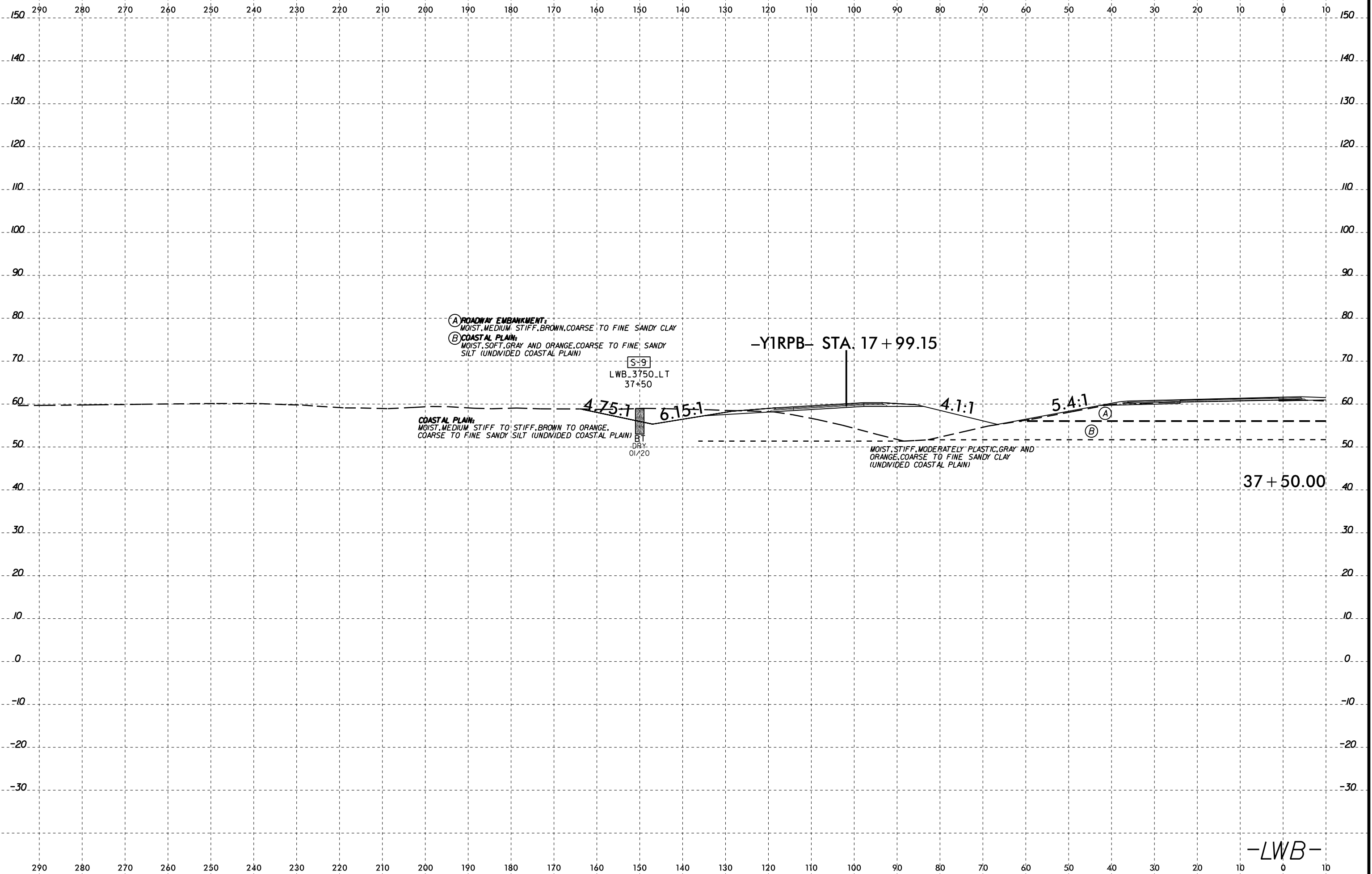
-YIRPB- STA. 16 + 96.91

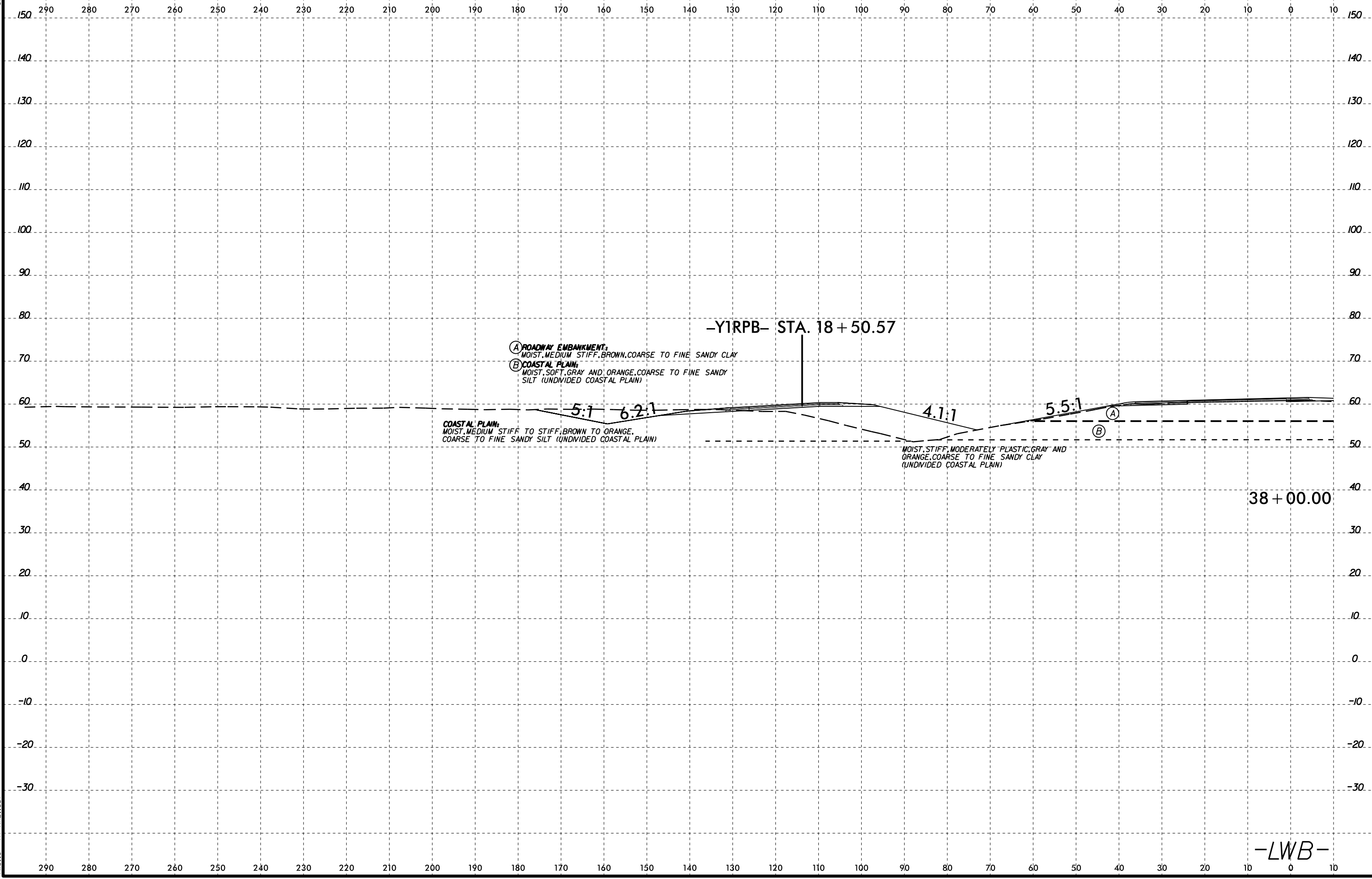
36 + 50.00

-LWB-

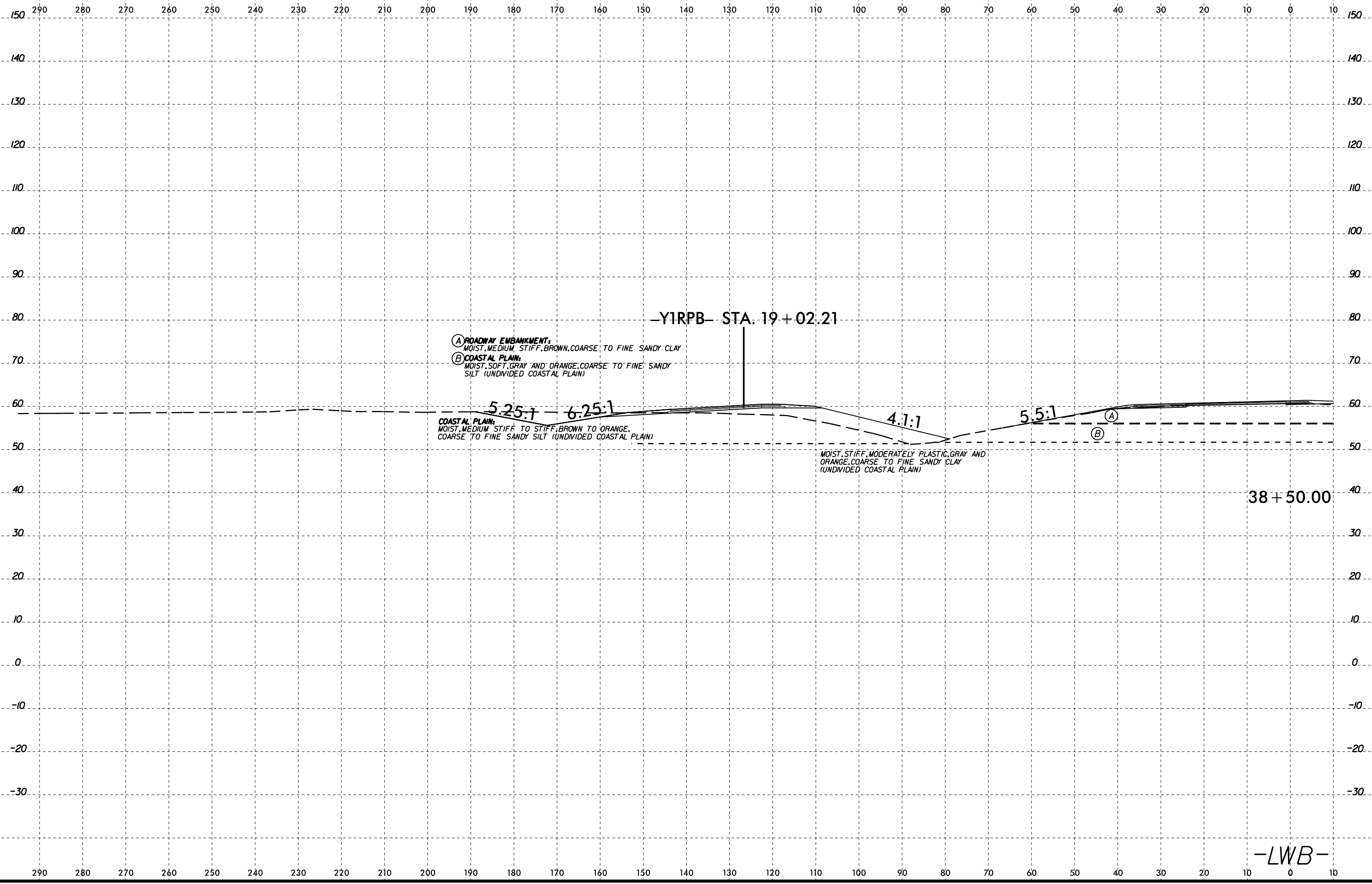


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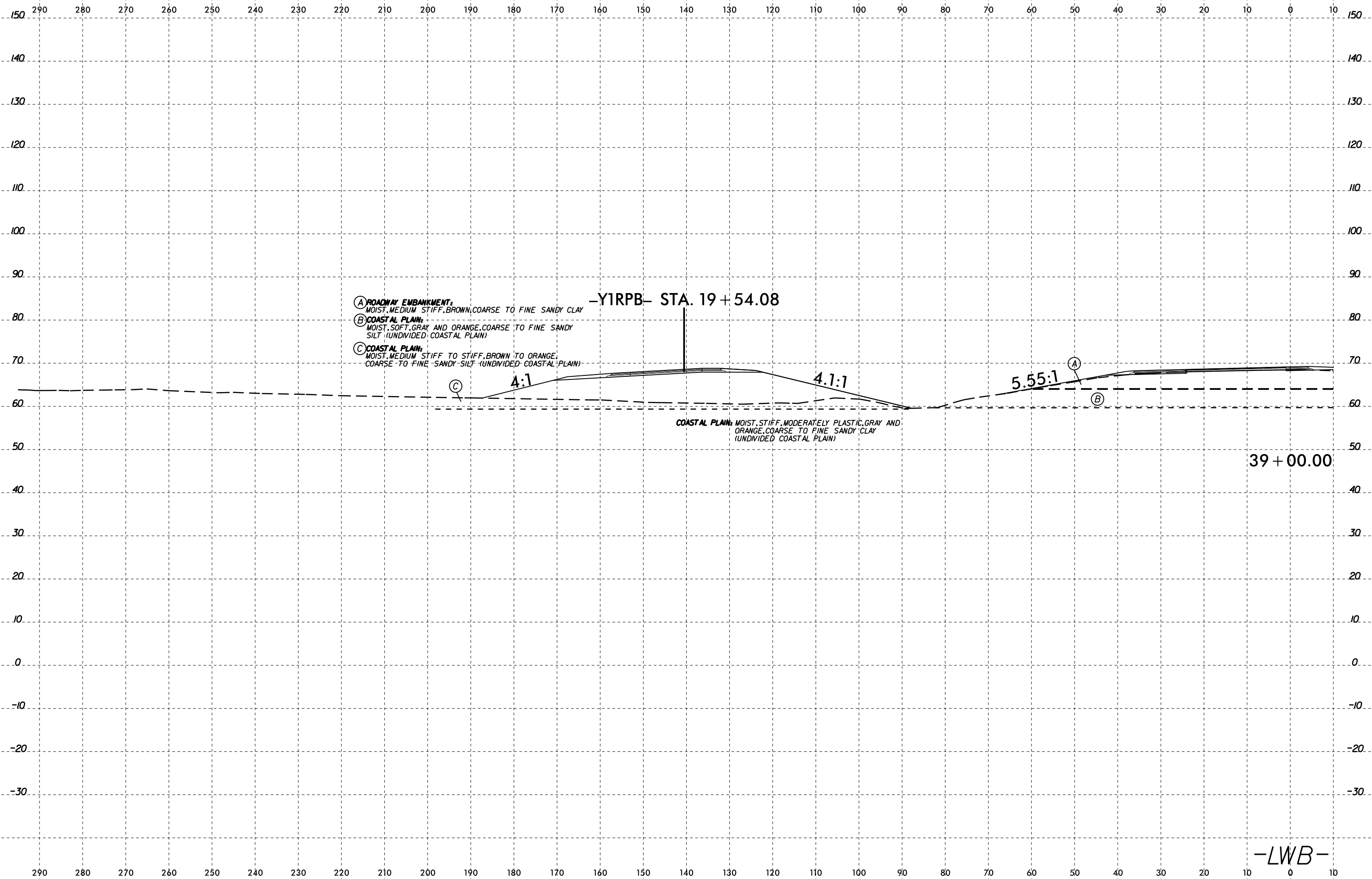
- (A) ROADWAY EMBANKMENT:
MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY CLAY
- (B) COASTAL PLAIN:
MOIST, SOFT, GRAY AND ORANGE, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
MOIST, MEDIUM STIFF TO STIFF, BROWN TO ORANGE,
COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

MOIST, STIFF, MODERATELY PLASTIC, GRAY AND
ORANGE, COARSE TO FINE SANDY CLAY
(UNDIVIDED COASTAL PLAIN)

38 + 50.00

-LWB-



- Ⓐ ROADWAY EMBANKMENT:
MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY CLAY
- Ⓑ COASTAL PLAIN:
MOIST, SOFT, GRAY AND ORANGE, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)
- Ⓒ COASTAL PLAIN:
MOIST, MEDIUM STIFF TO STIFF, BROWN TO ORANGE, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

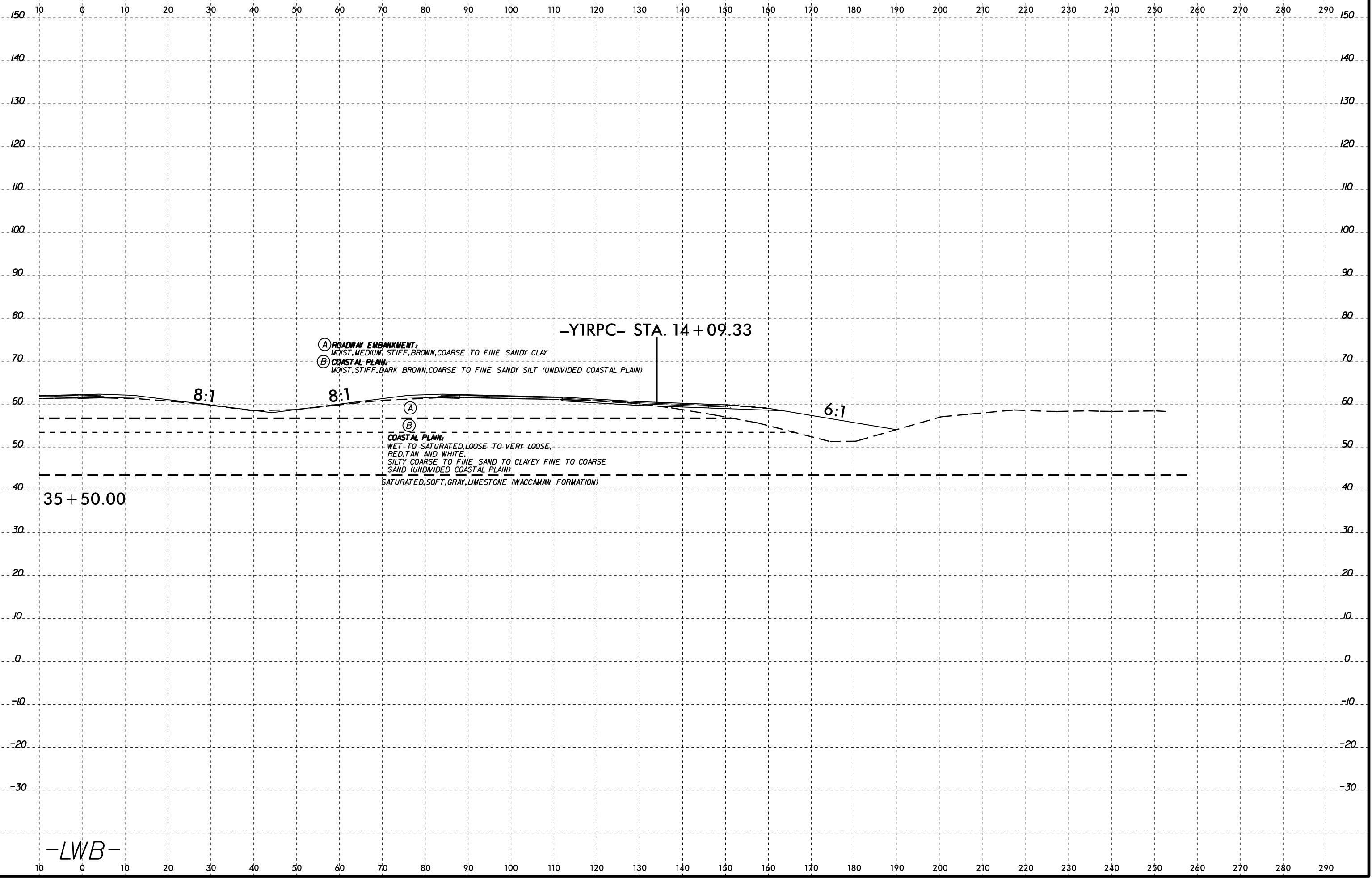
-Y1RPB- STA. 19 + 54.08

COASTAL PLAIN: MOIST, STIFF, MODERATELY PLASTIC, GRAY AND ORANGE, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

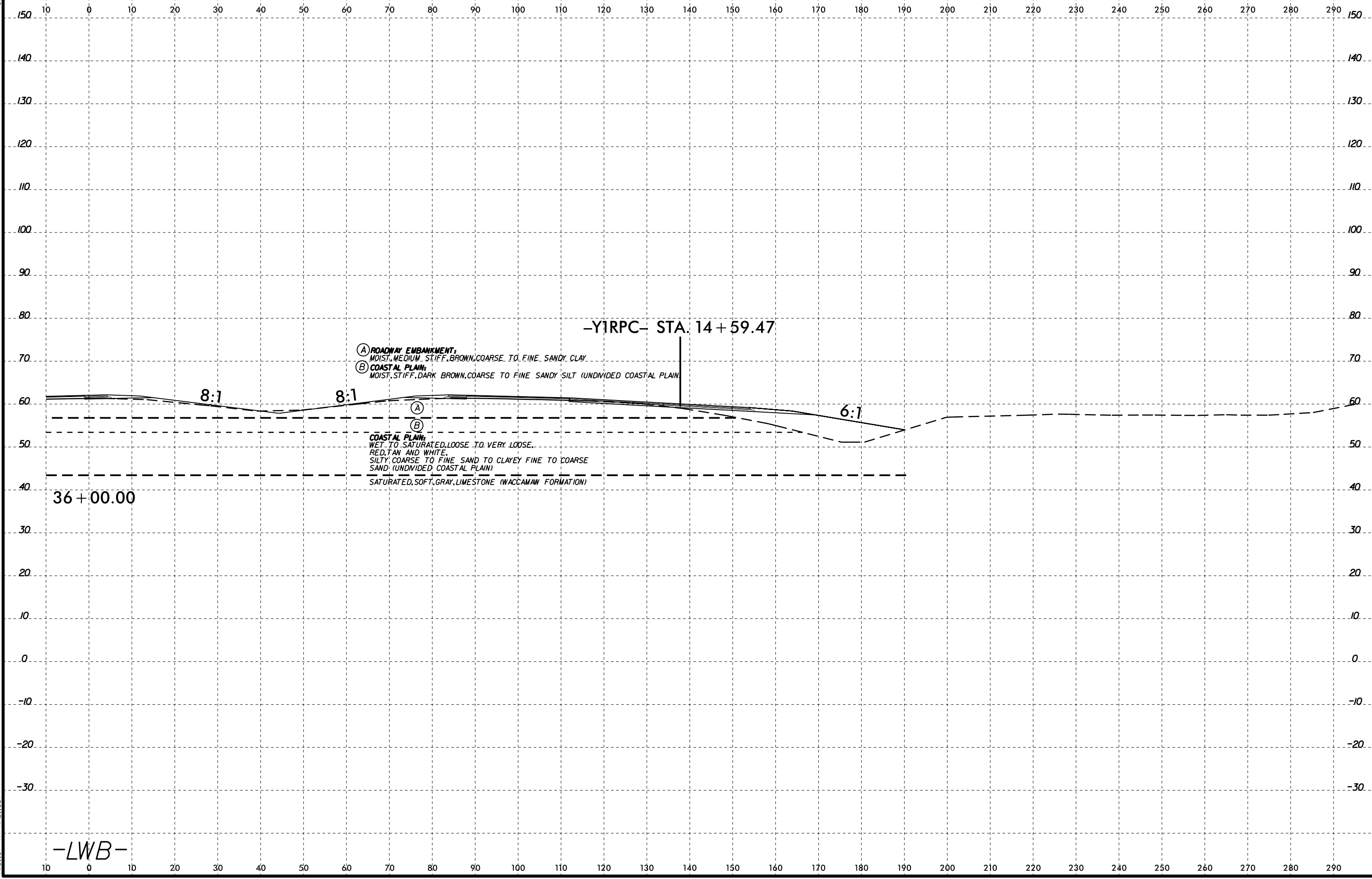
39 + 00.00

-LWB-

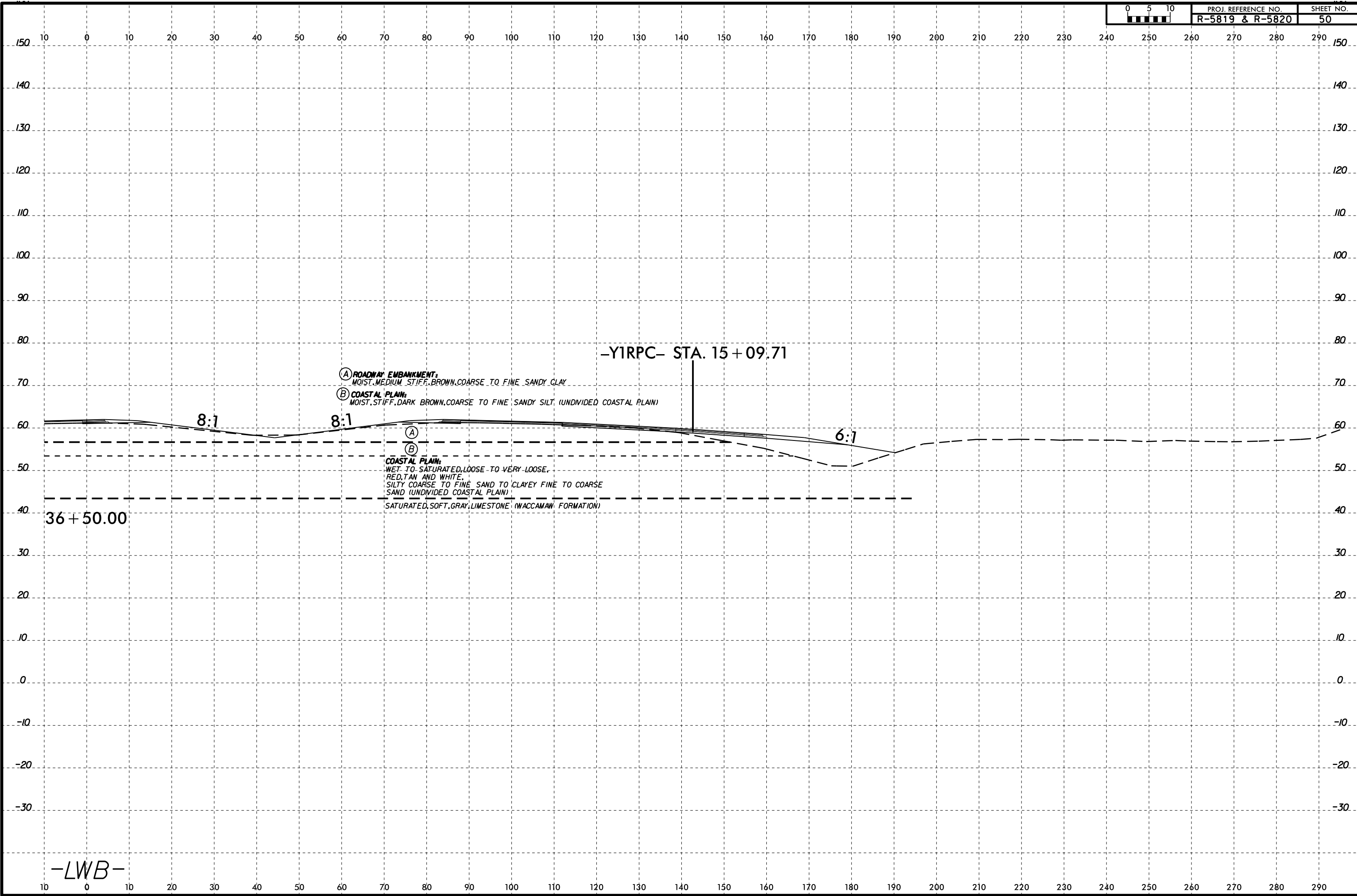
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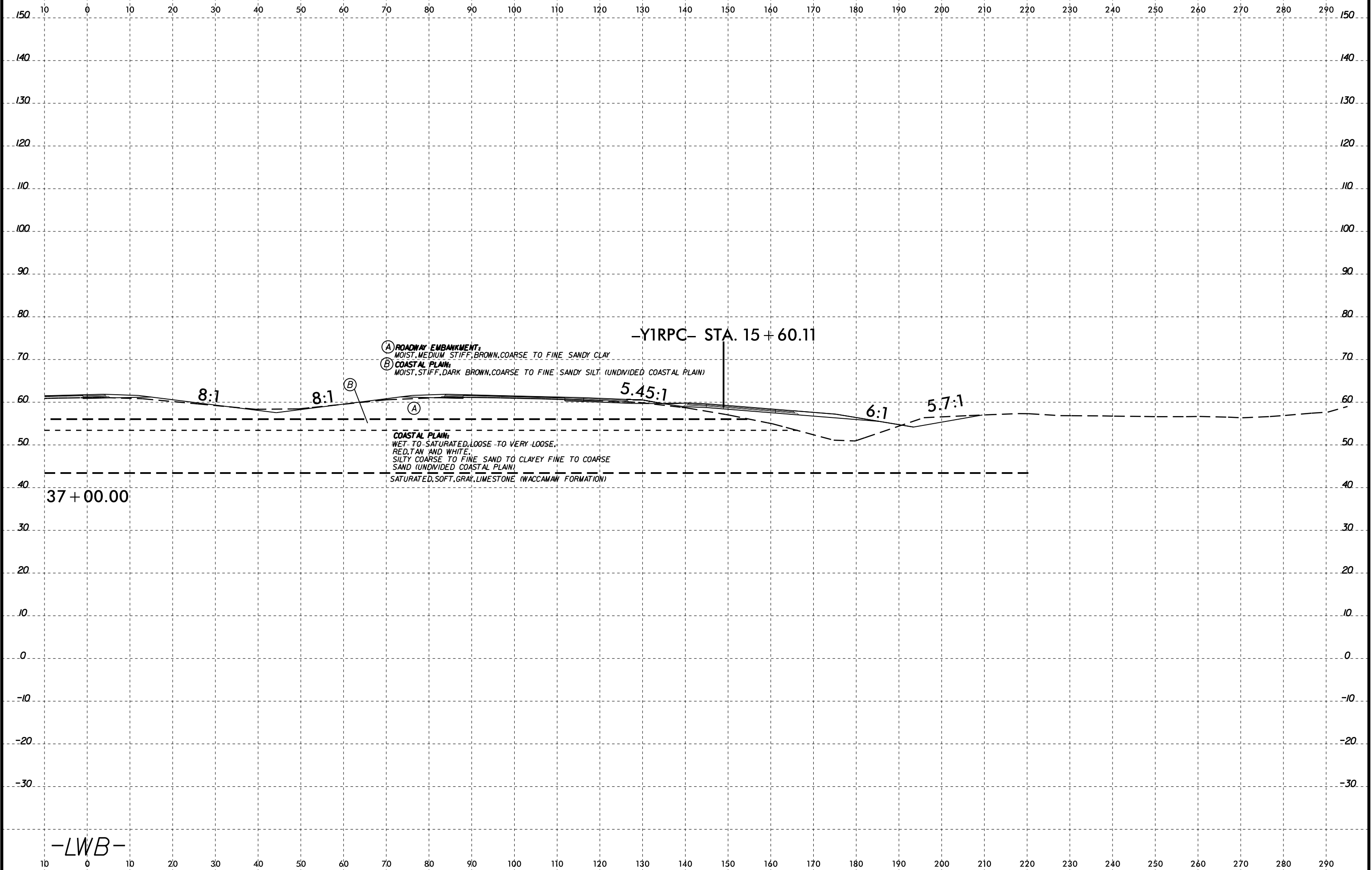


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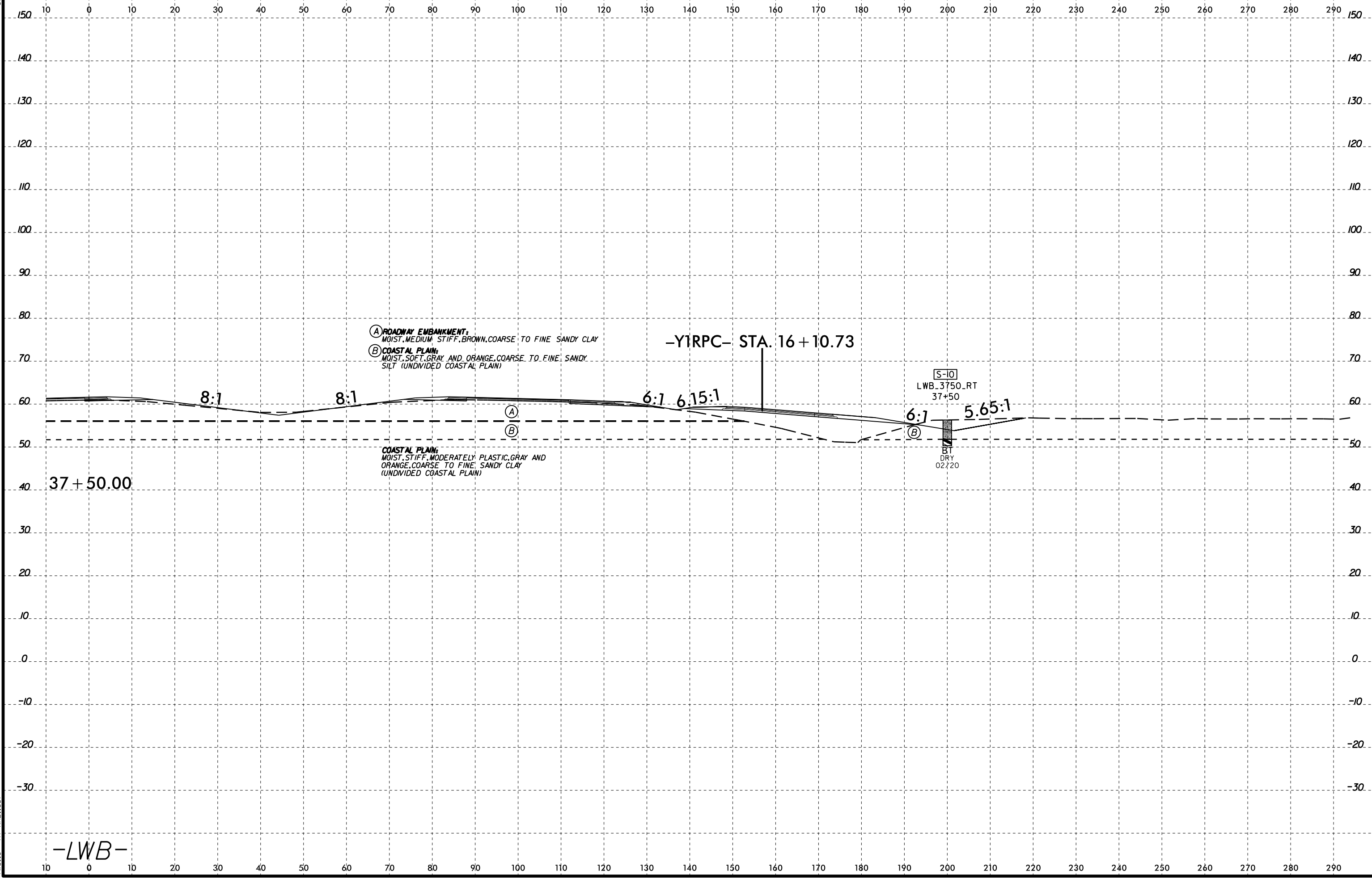


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37 + 50.00

(A) ROADWAY EMBANKMENT:
MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY CLAY
(B) COASTAL PLAIN:
MOIST, SOFT, GRAY AND ORANGE, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

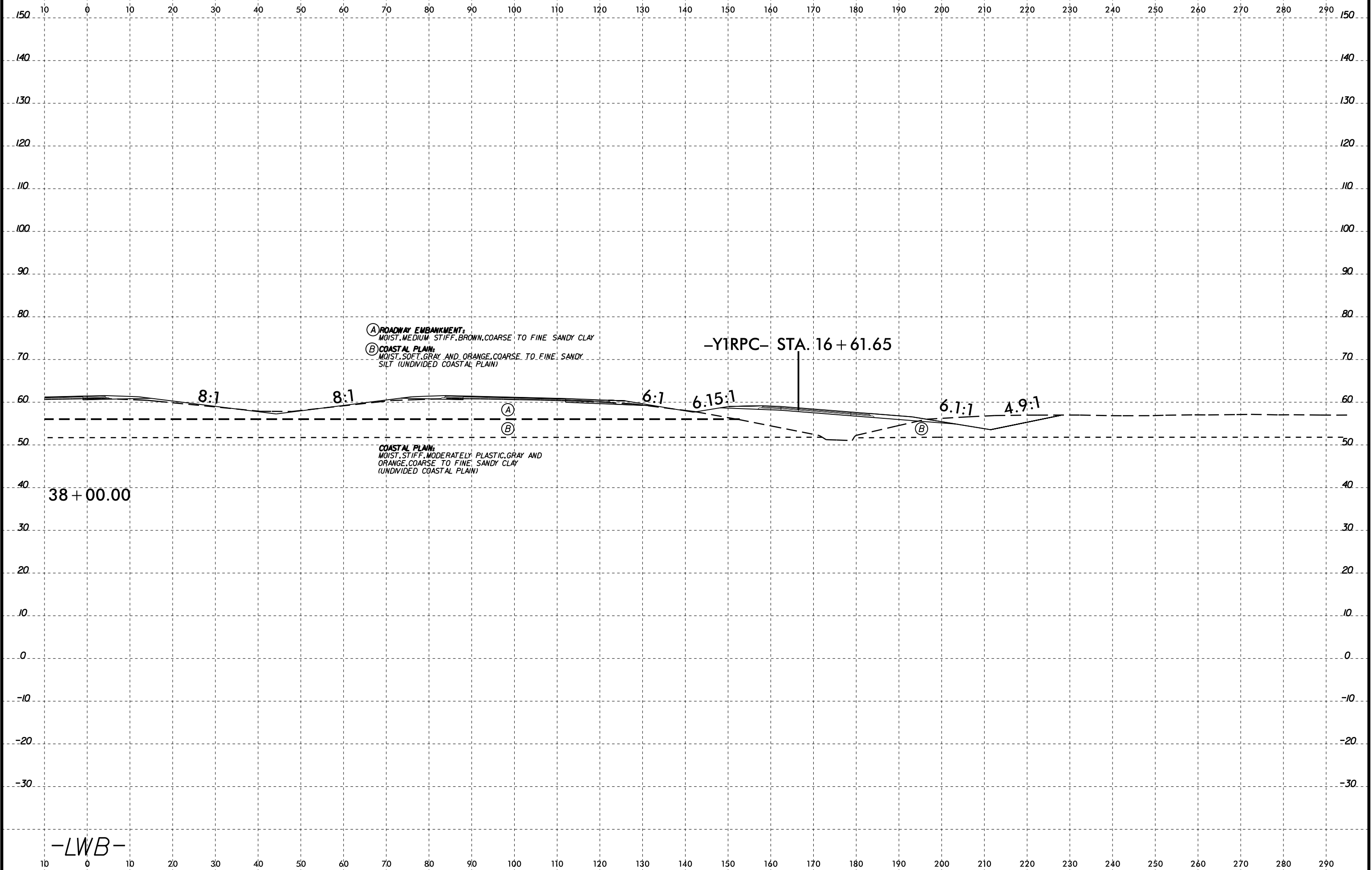
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MOIST, STIFF, MODERATELY PLASTIC, GRAY AND ORANGE, COARSE TO FINE, SANDY CLAY (UNDIVIDED COASTAL PLAIN)

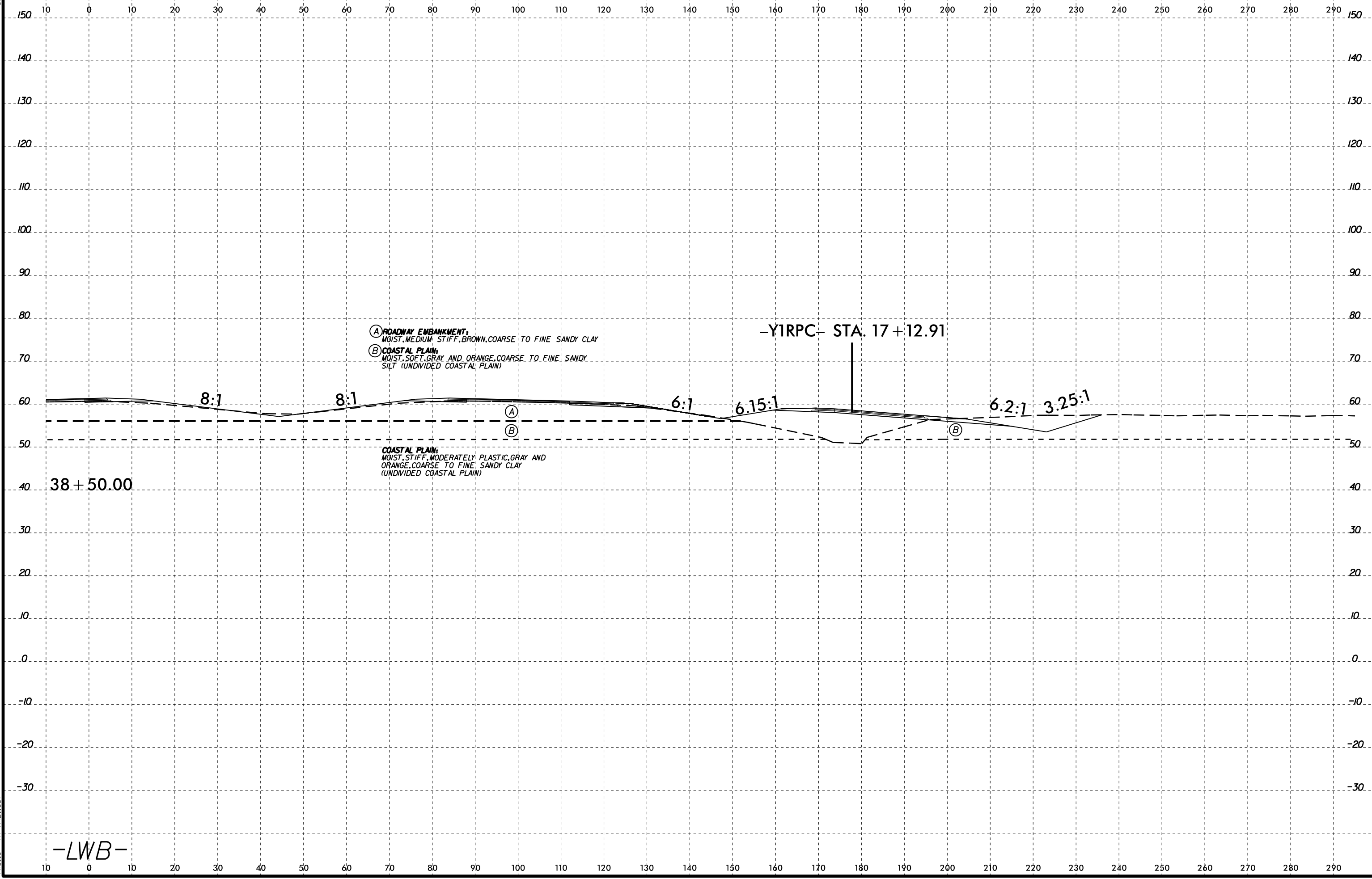
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S-10
LWB_3750.RT
37+50

BT
DRY
02720

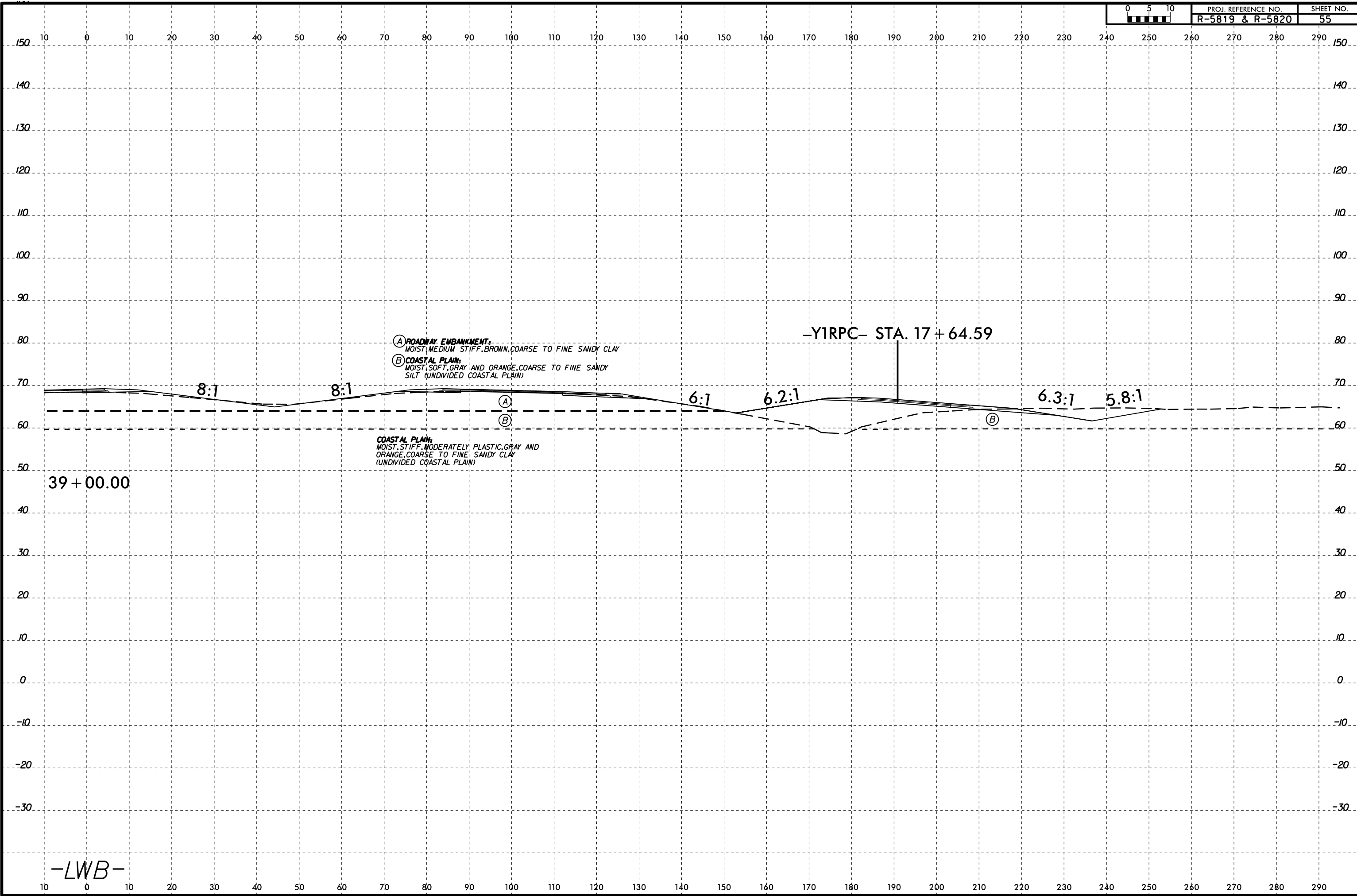
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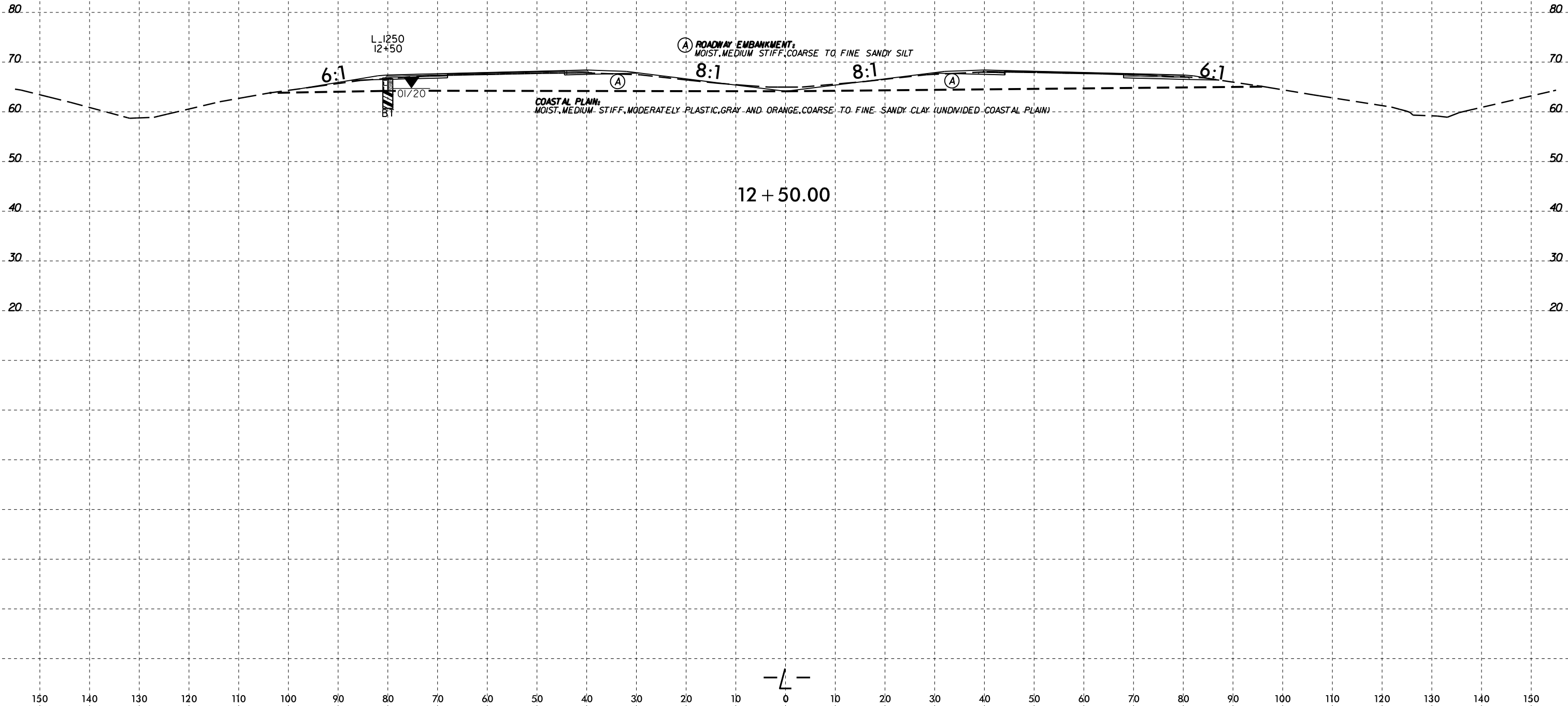
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 Wells - AT KA211387

-LWB-





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 1250
12+50

6:1

BT

01/20

(A)

(A) ROADWAY EMBANKMENT:
MOIST, MEDIUM STIFF, COARSE TO FINE SANDY SILT

8:1

8:1

(A)

6:1

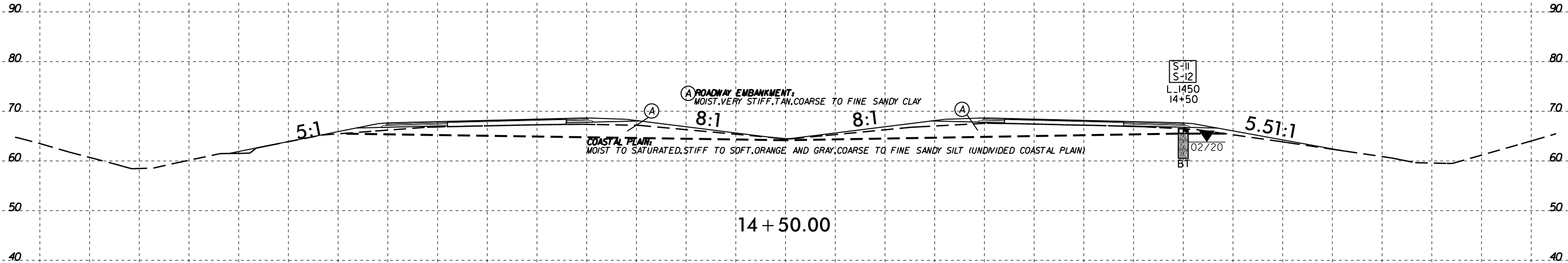
COASTAL PLAIN:
MOIST, MEDIUM STIFF, MODERATELY PLASTIC, GRAY AND ORANGE, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

12 + 50.00

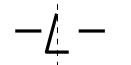
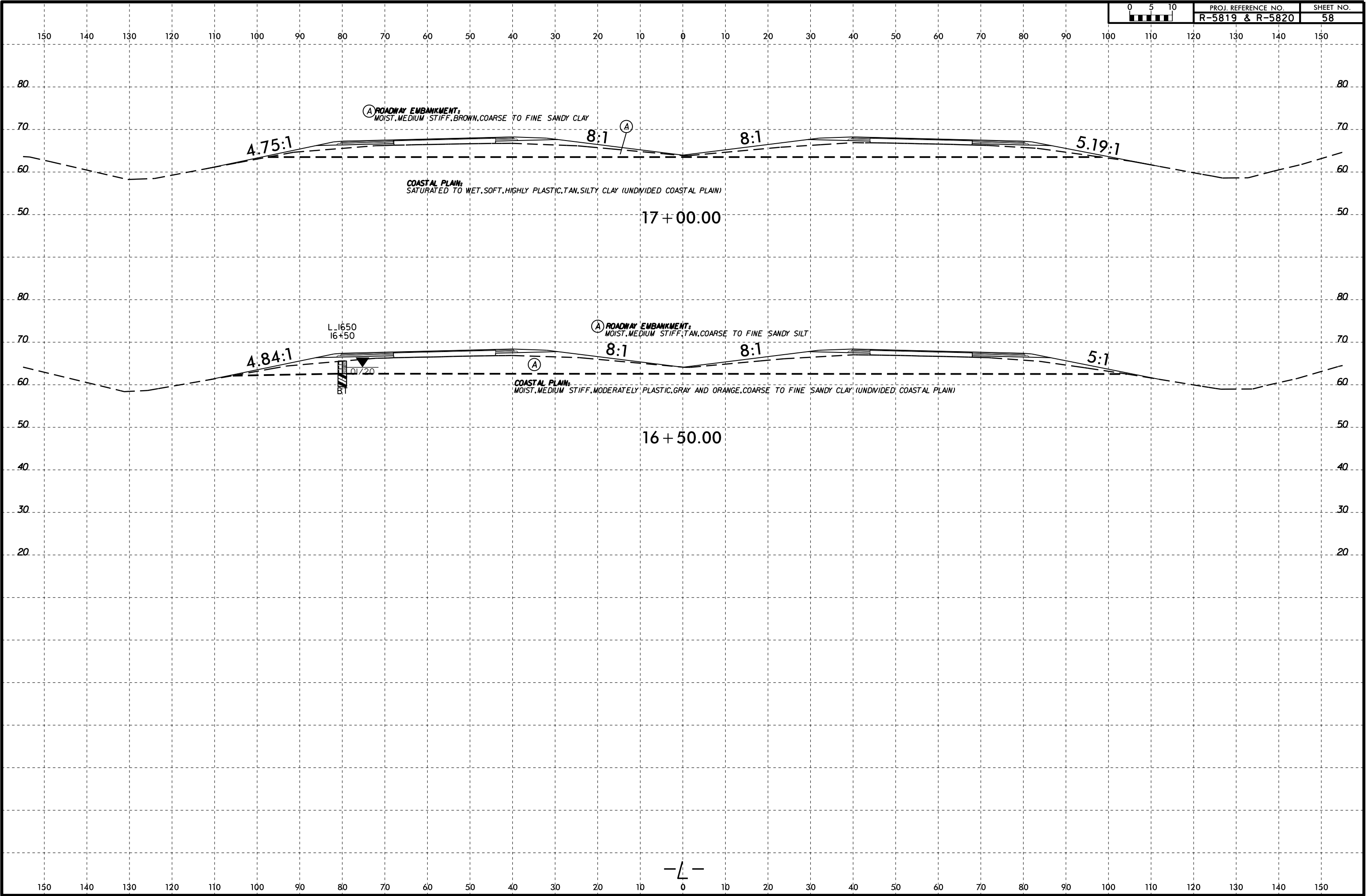


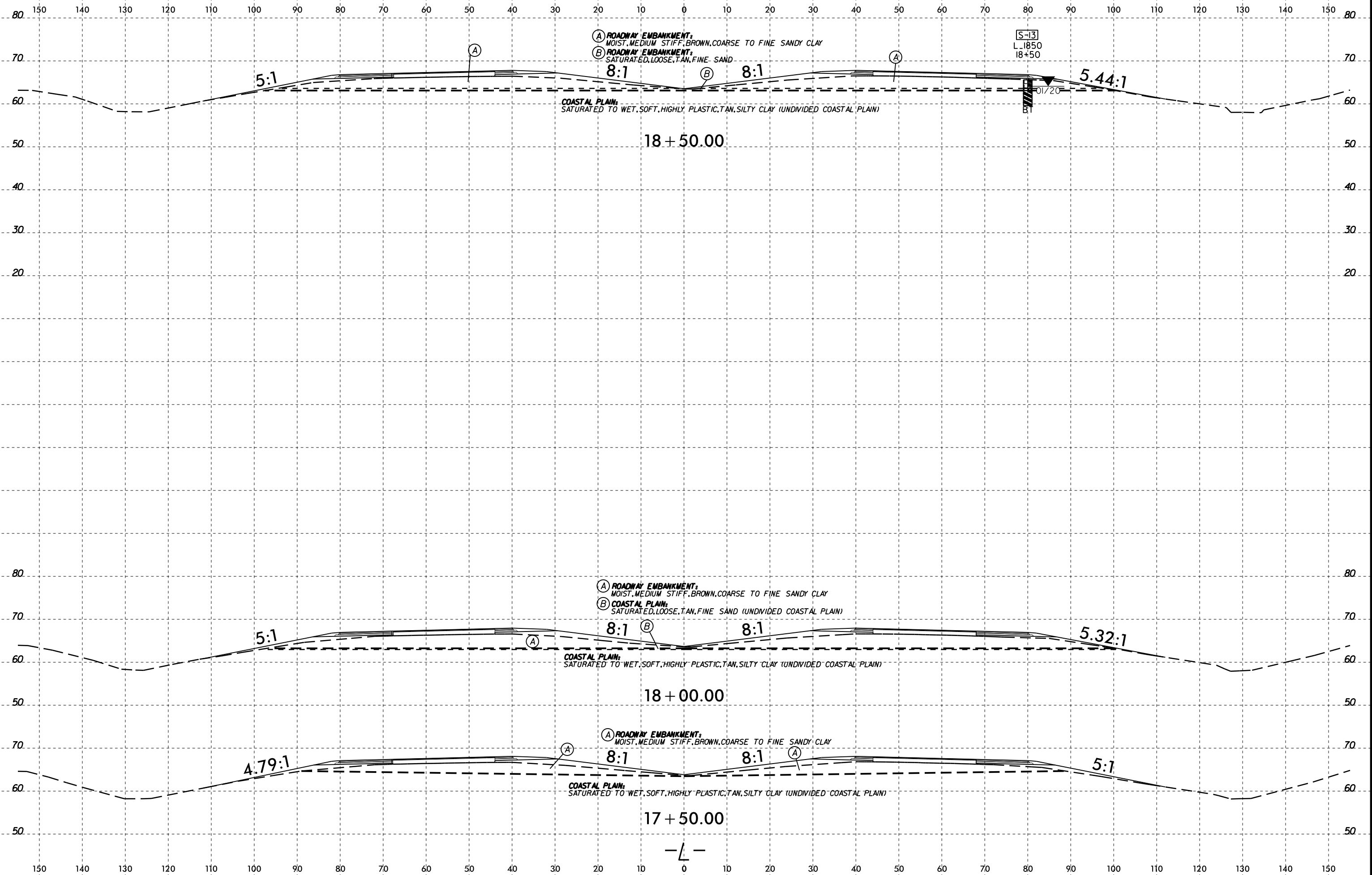


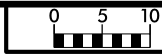
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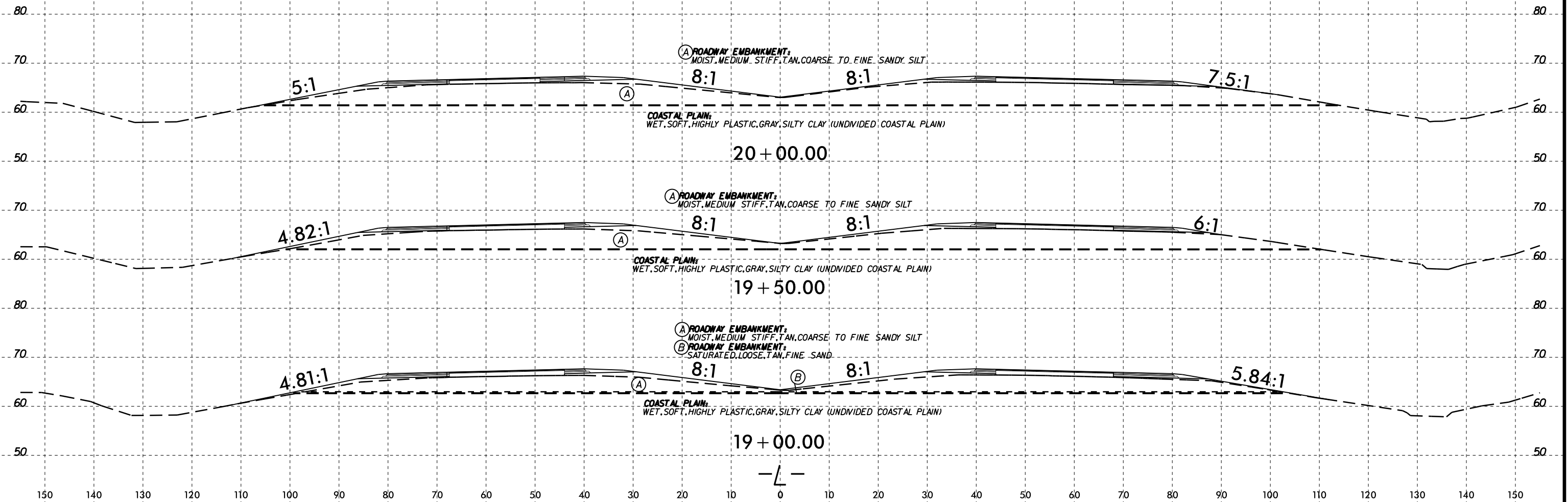






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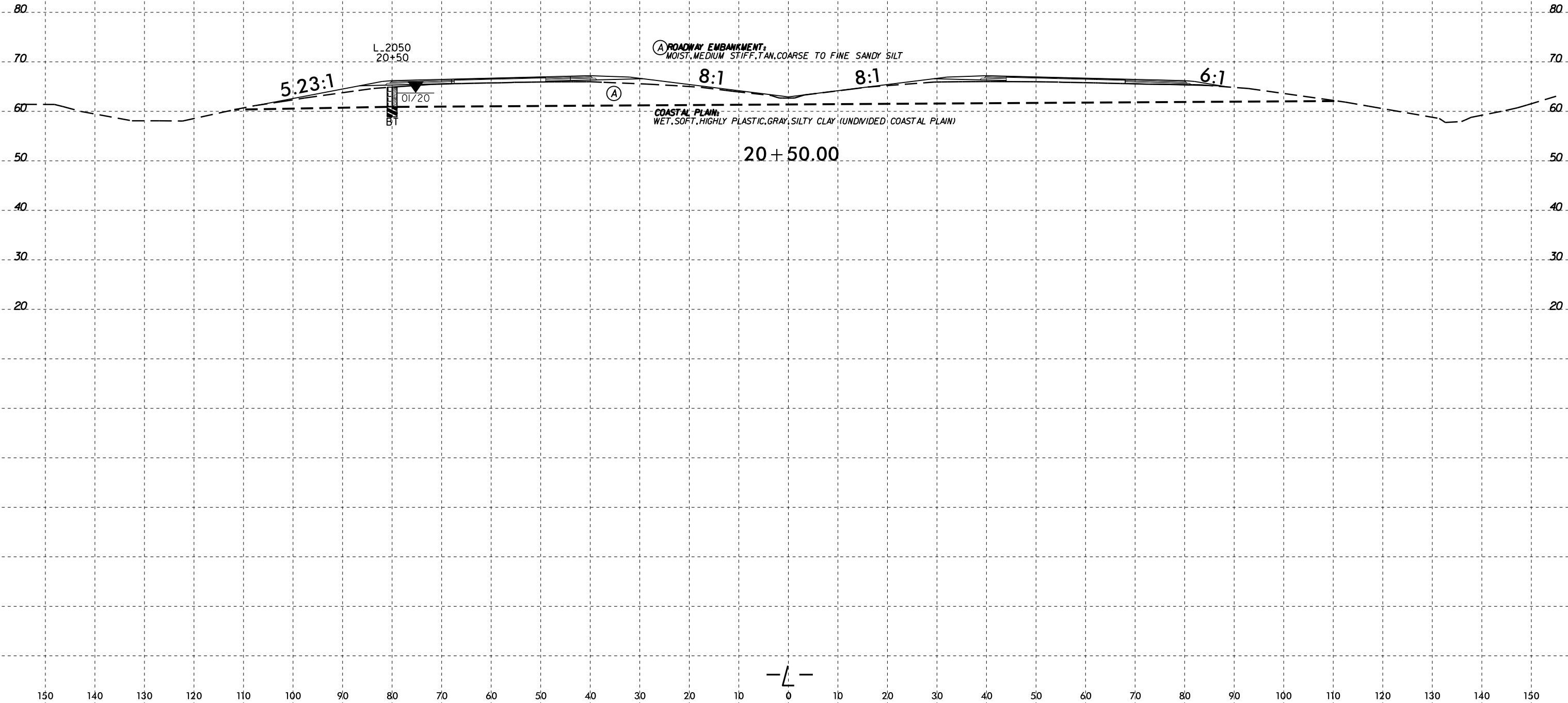
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Wells - A1 KA211387





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L_2050
20+50



5.23:1

Ⓐ ROADWAY EMBANKMENT:
MOIST, MEDIUM STIFF, TAN, COARSE TO FINE SANDY SILT

8:1

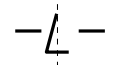
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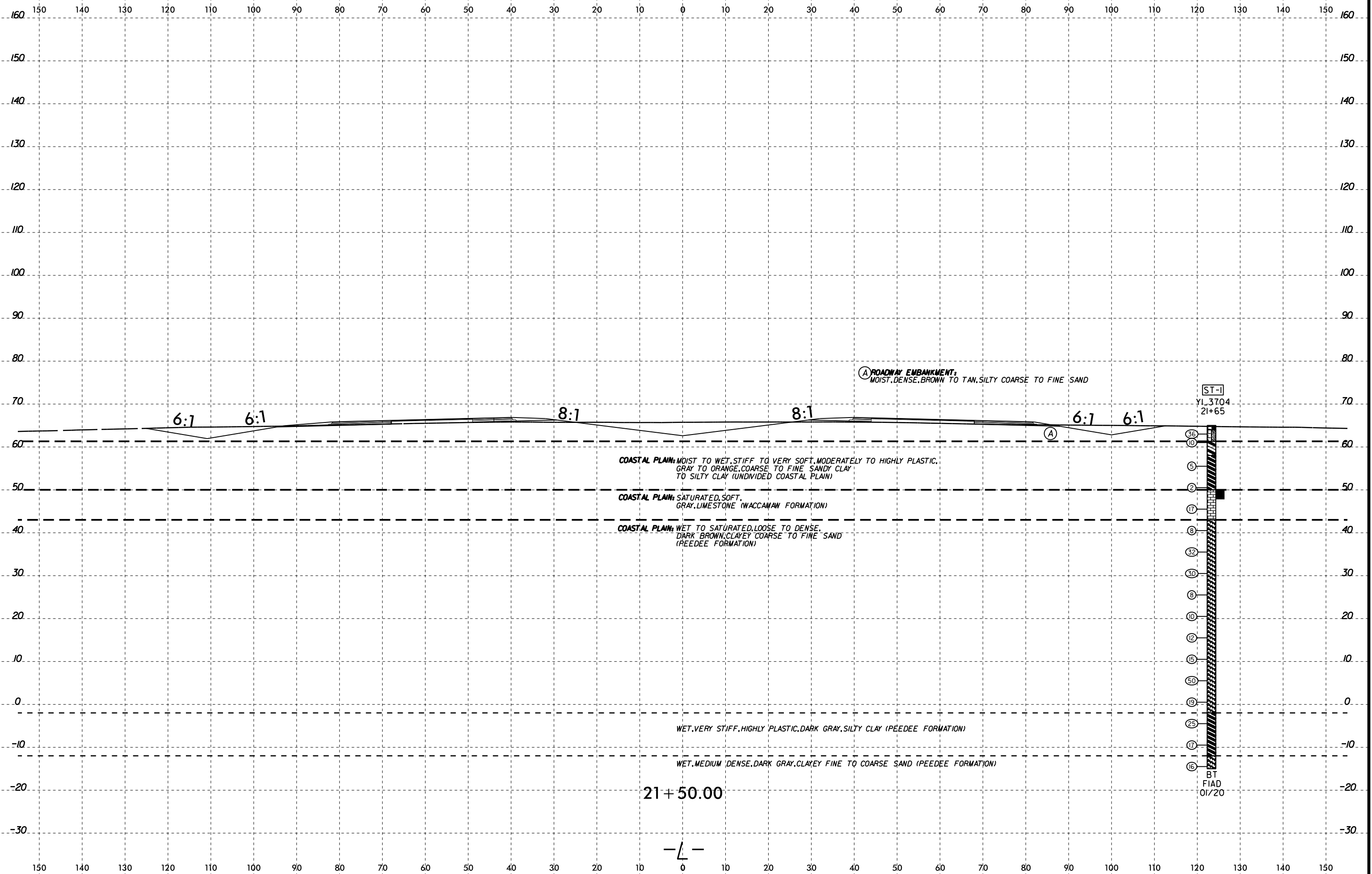
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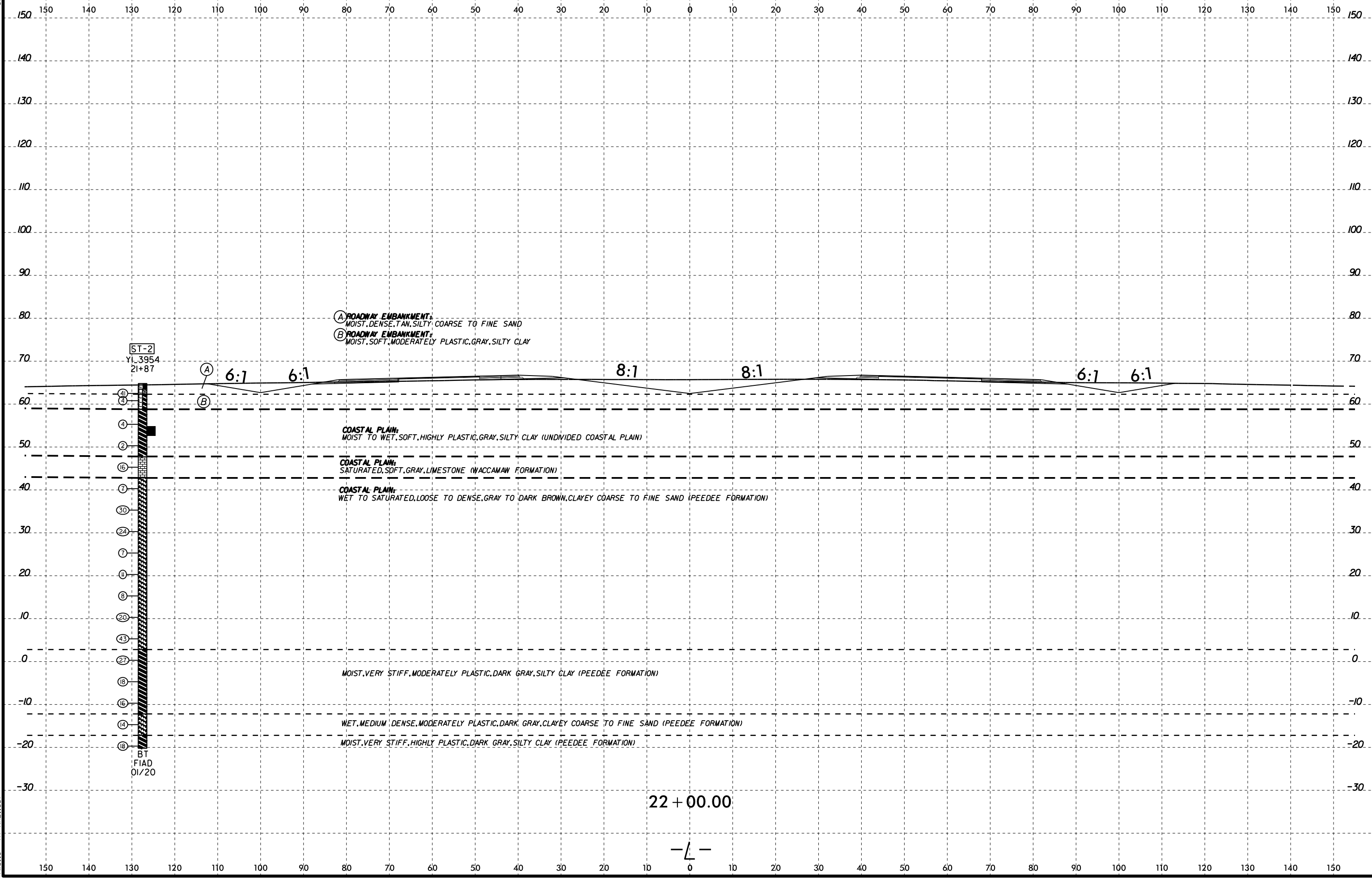
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COASTAL PLAIN:
WET, SOFT, HIGHLY PLASTIC, GRAY, SILTY CLAY (UNDIVIDED COASTAL PLAIN)

20+50.00





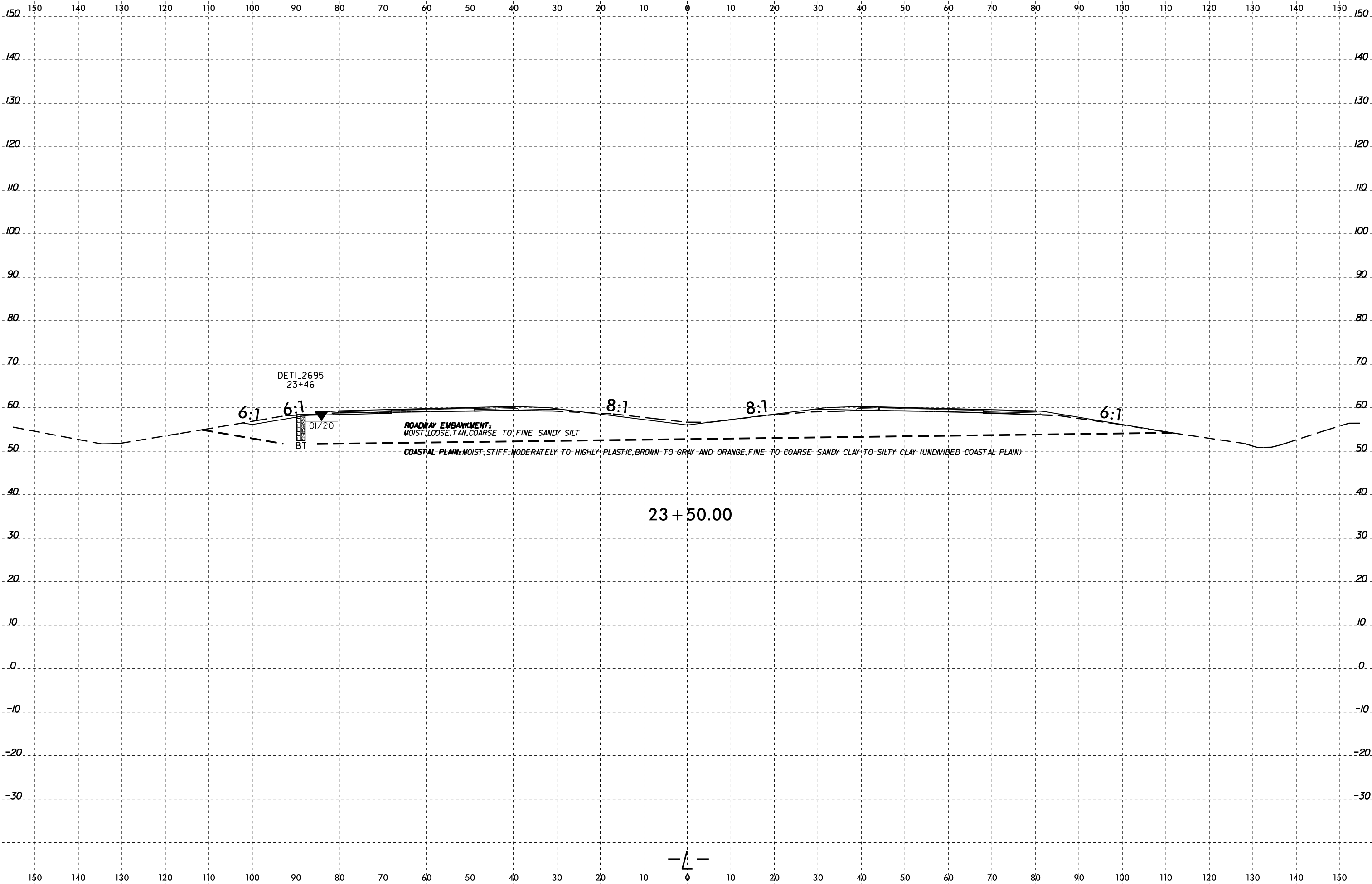


6/23/16



PROJ. REFERENCE NO.
R-5819 & R-5820

SHEET NO.
64



DET. 2695
23+46

6:1

6:1

01/20
BT

8:1

8:1

6:1

ROADWAY EMBANKMENT
MOIST, LOOSE, TAN, COARSE TO FINE SANDY SILT

COASTAL PLAIN, MOIST, STIFF, MODERATELY TO HIGHLY PLASTIC, BROWN TO GRAY AND ORANGE, FINE TO COARSE SANDY CLAY TO SILTY CLAY (UNDIVIDED COASTAL PLAIN)

23 + 50.00

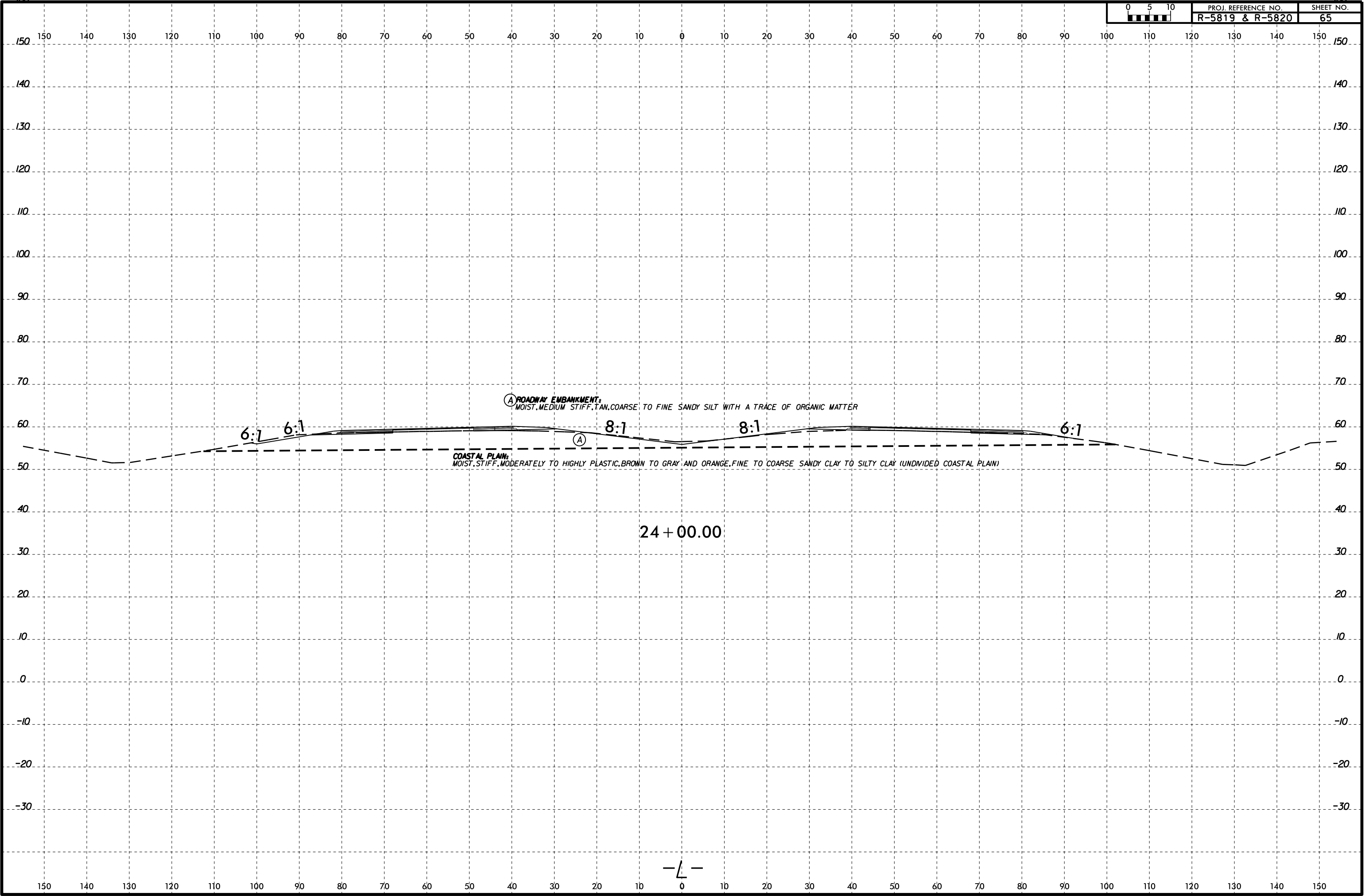
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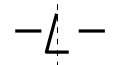
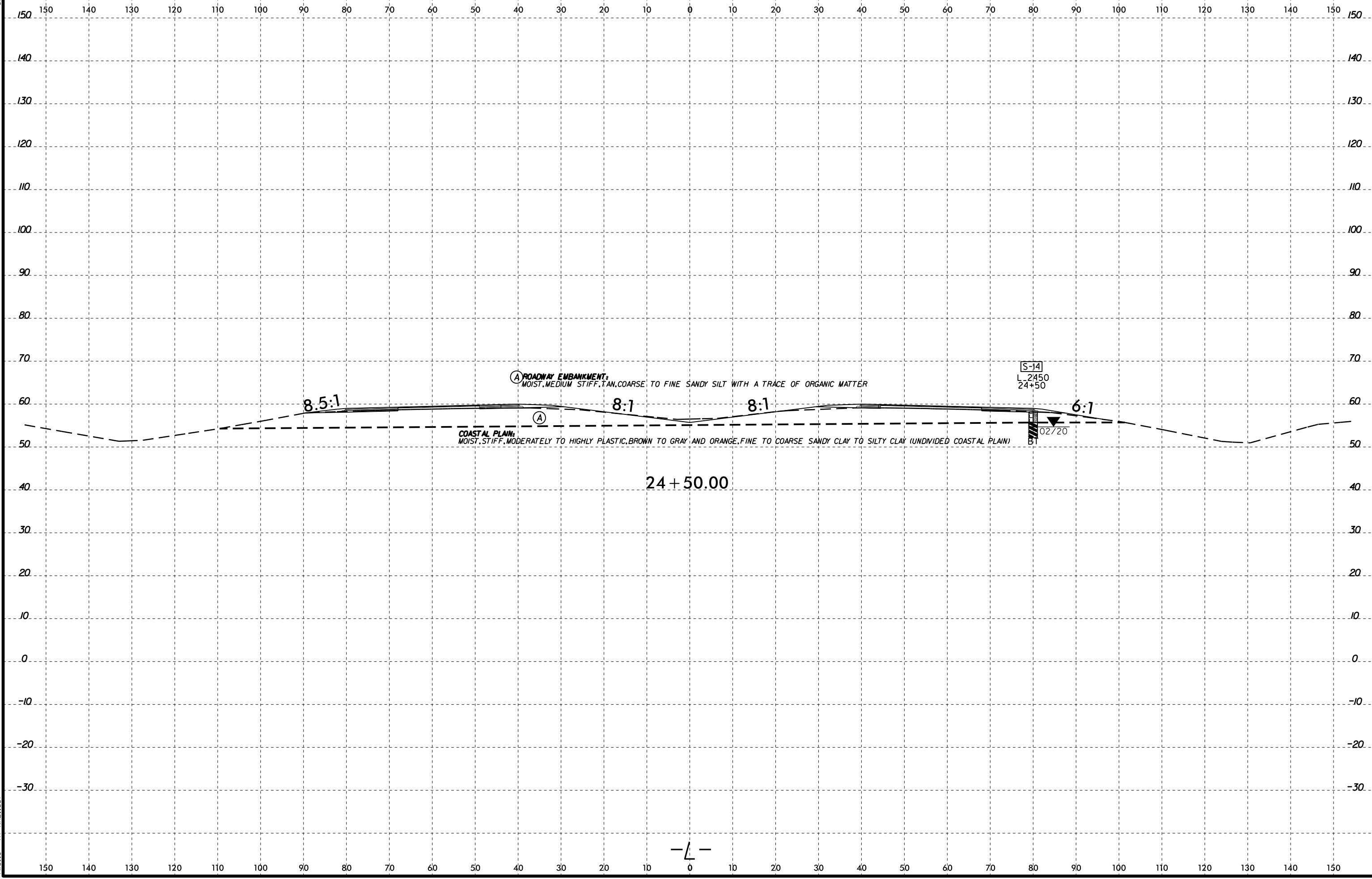
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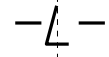
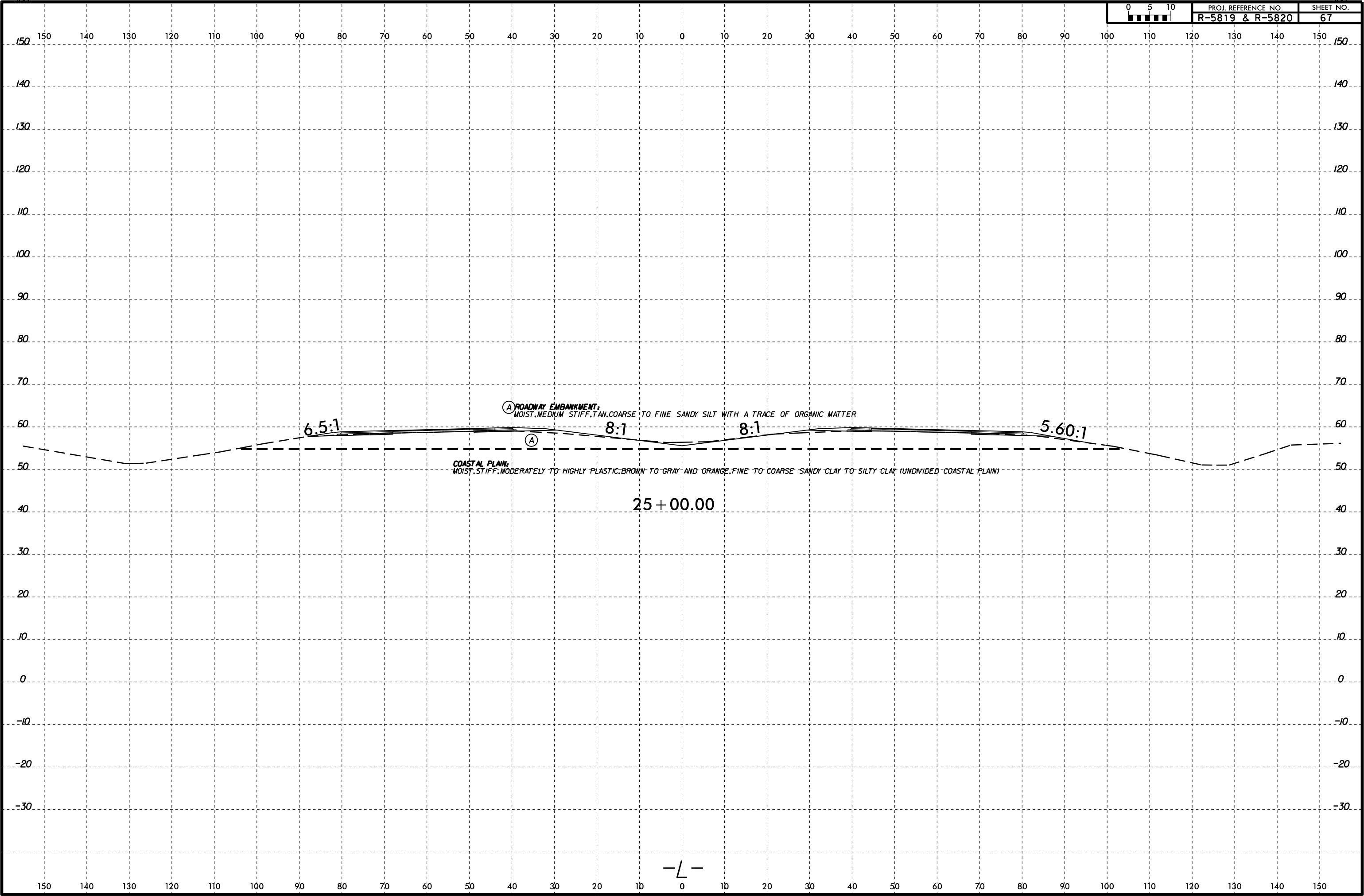
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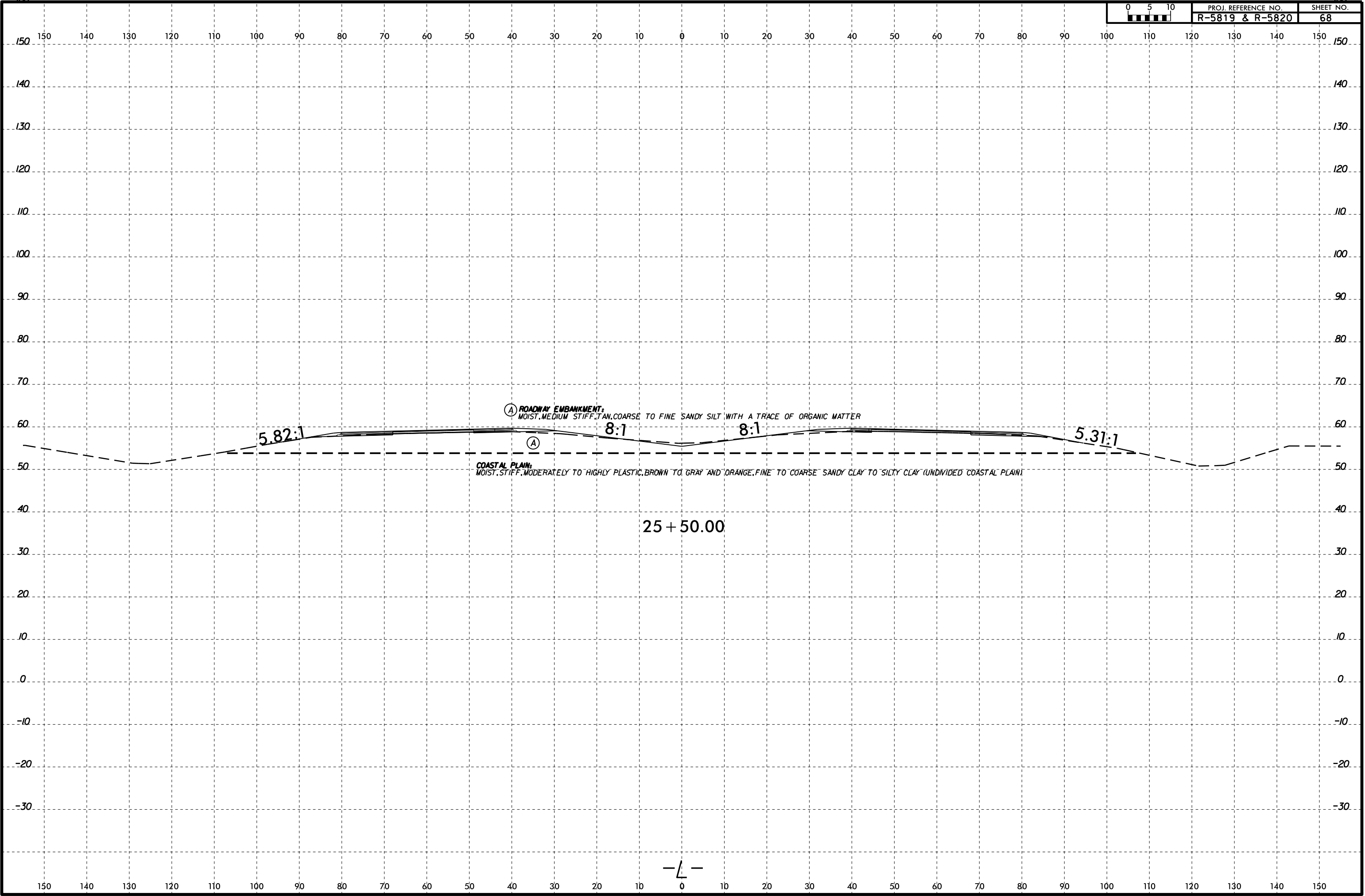
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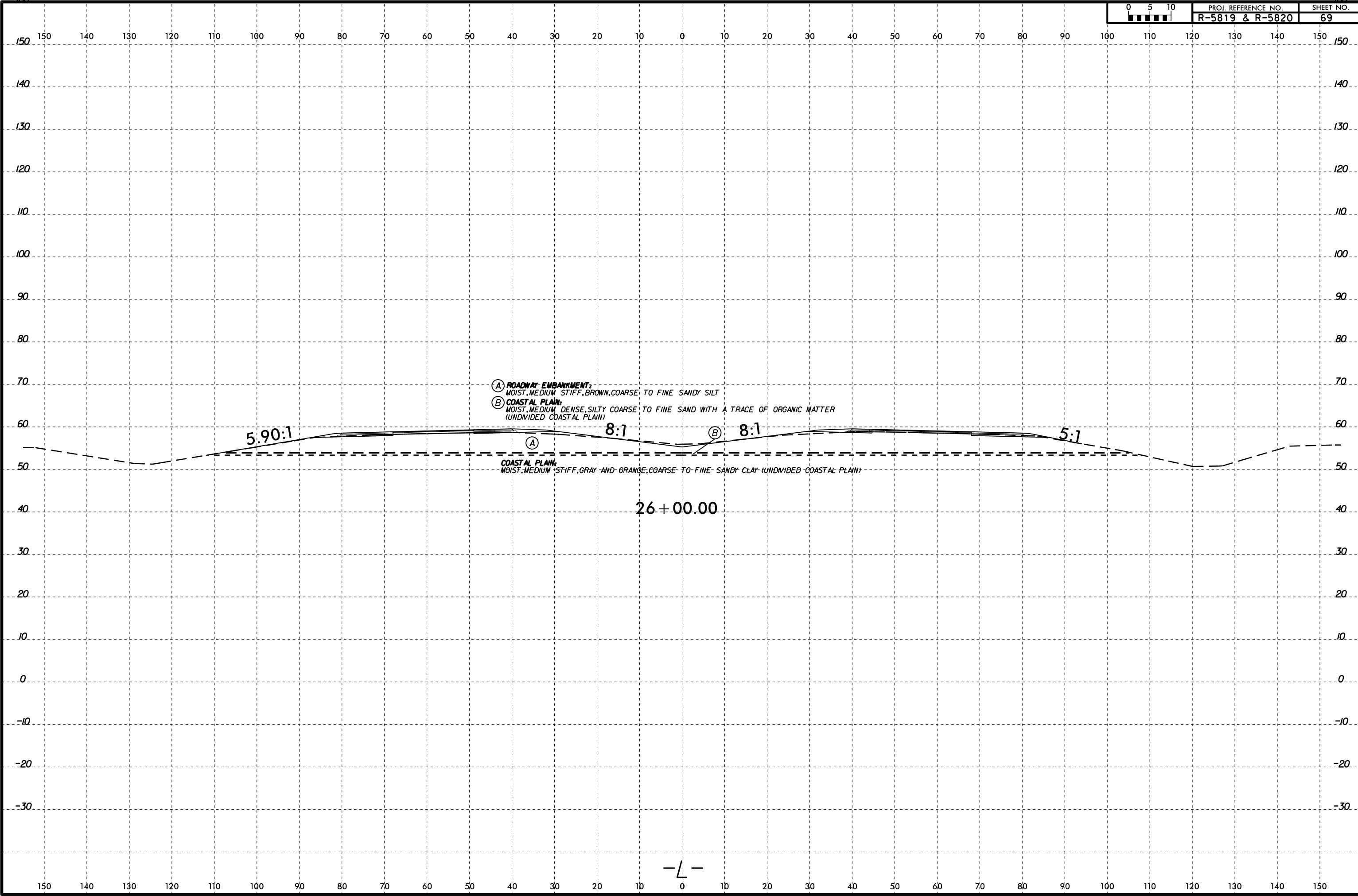
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	R-5819 & R-5820	65

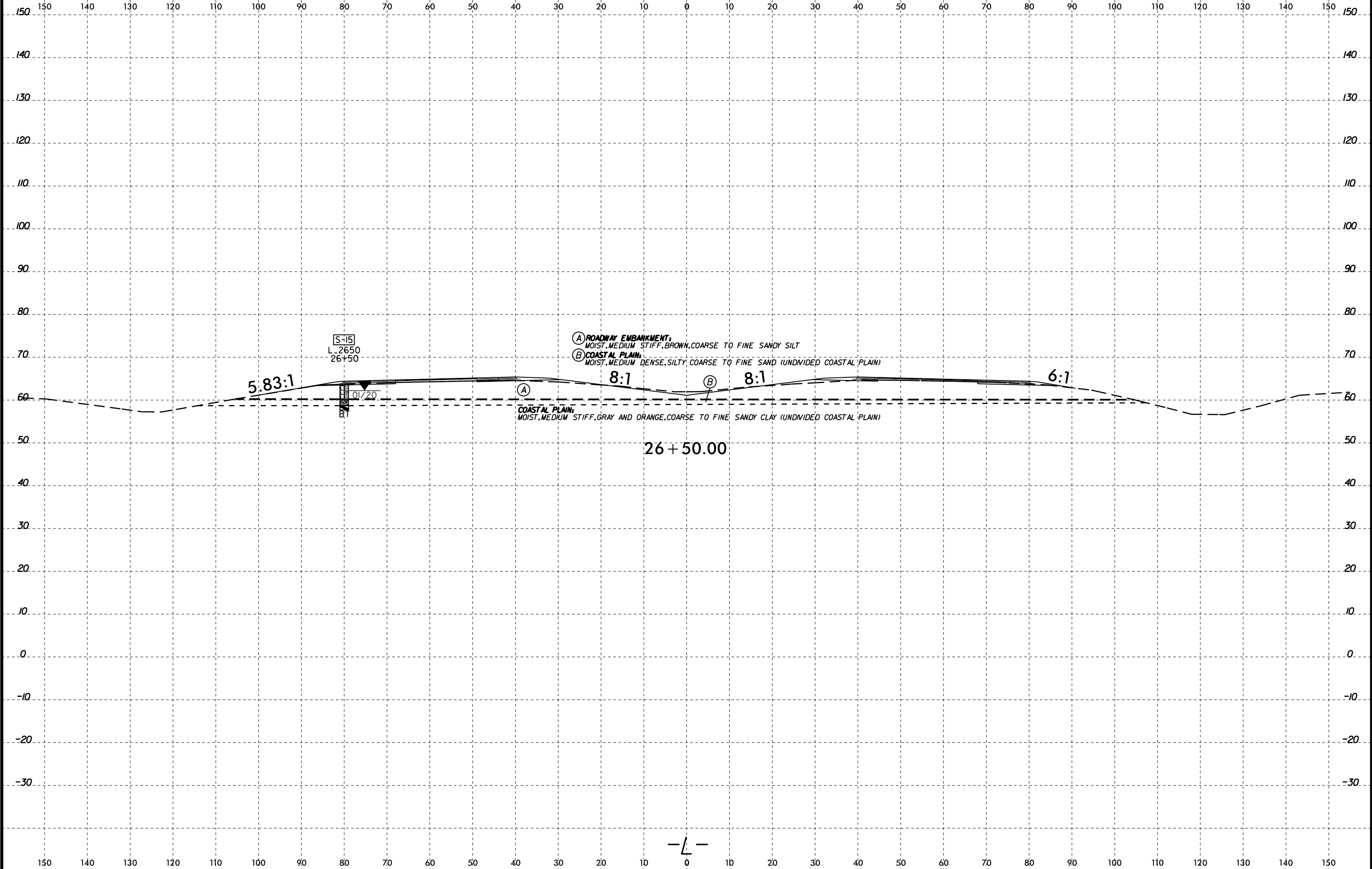


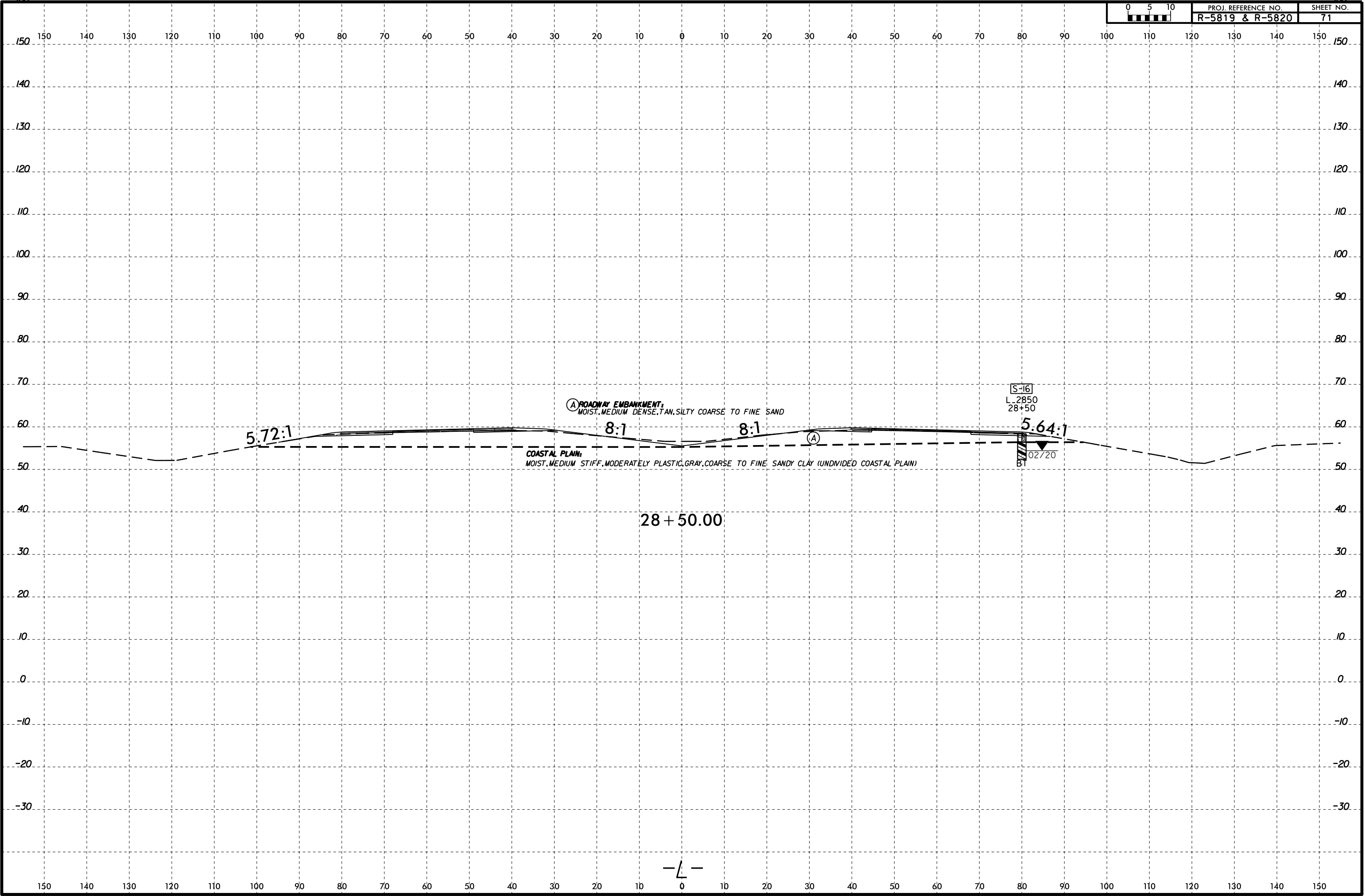


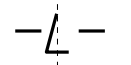
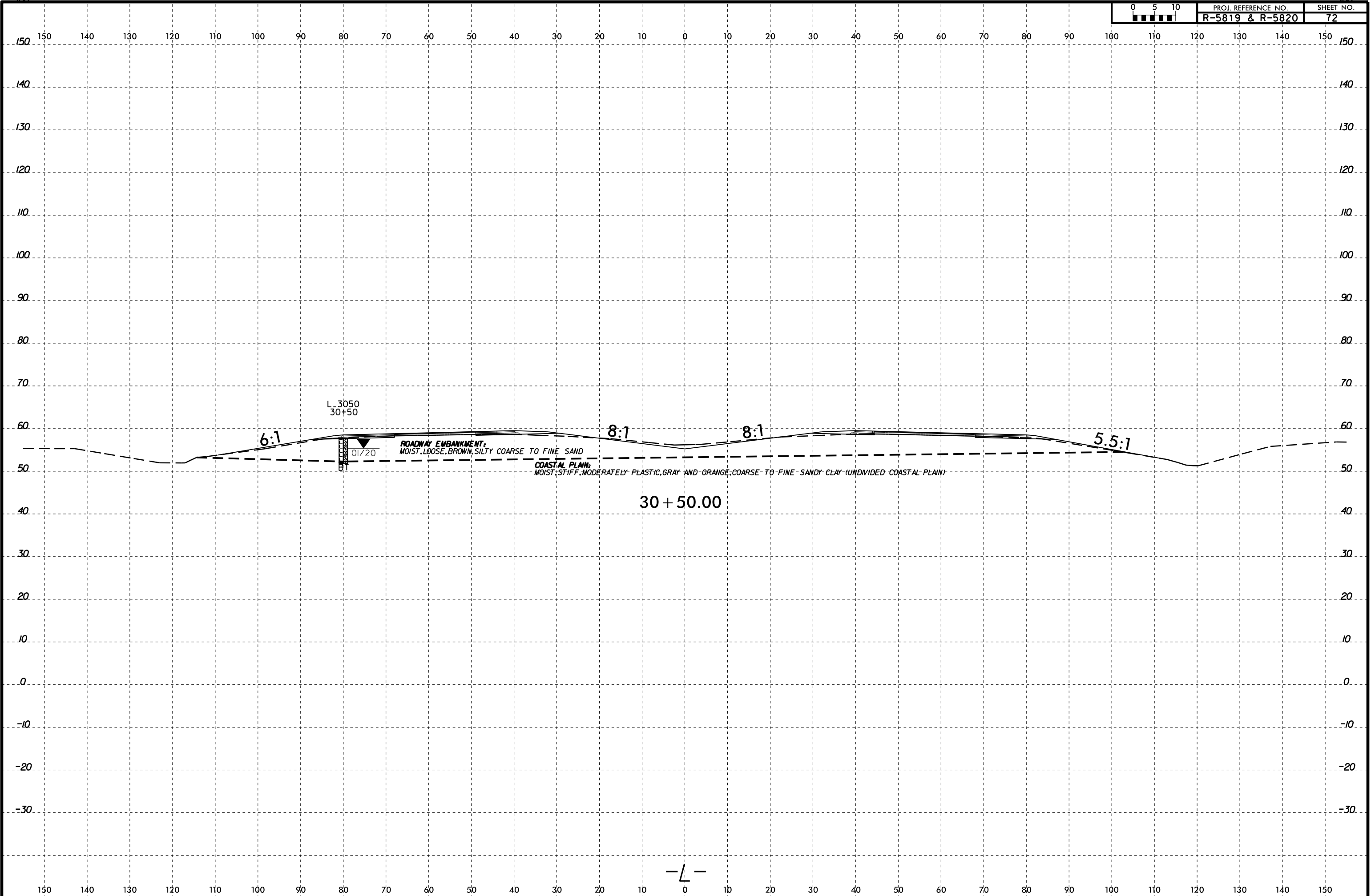








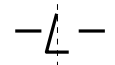
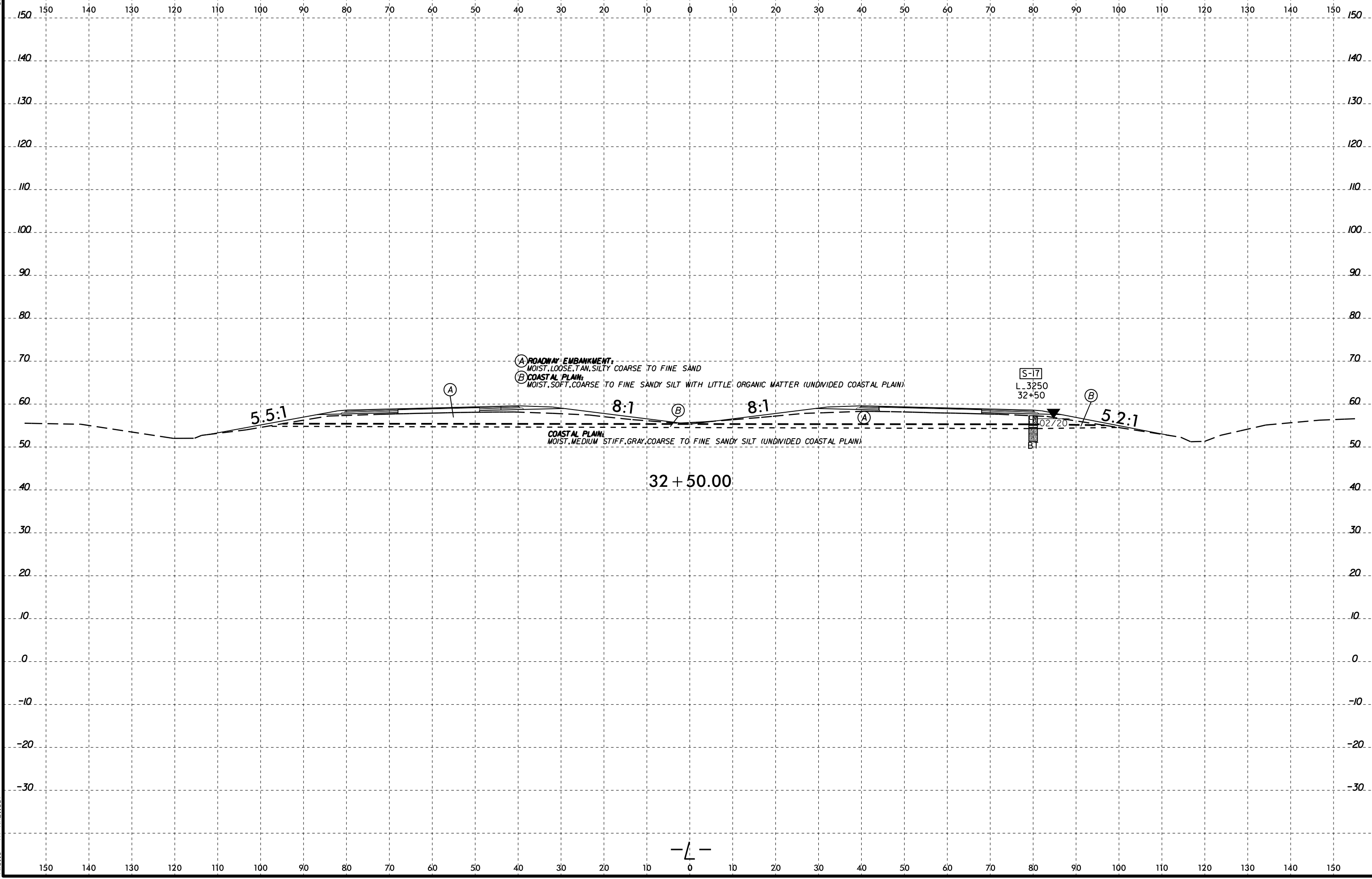


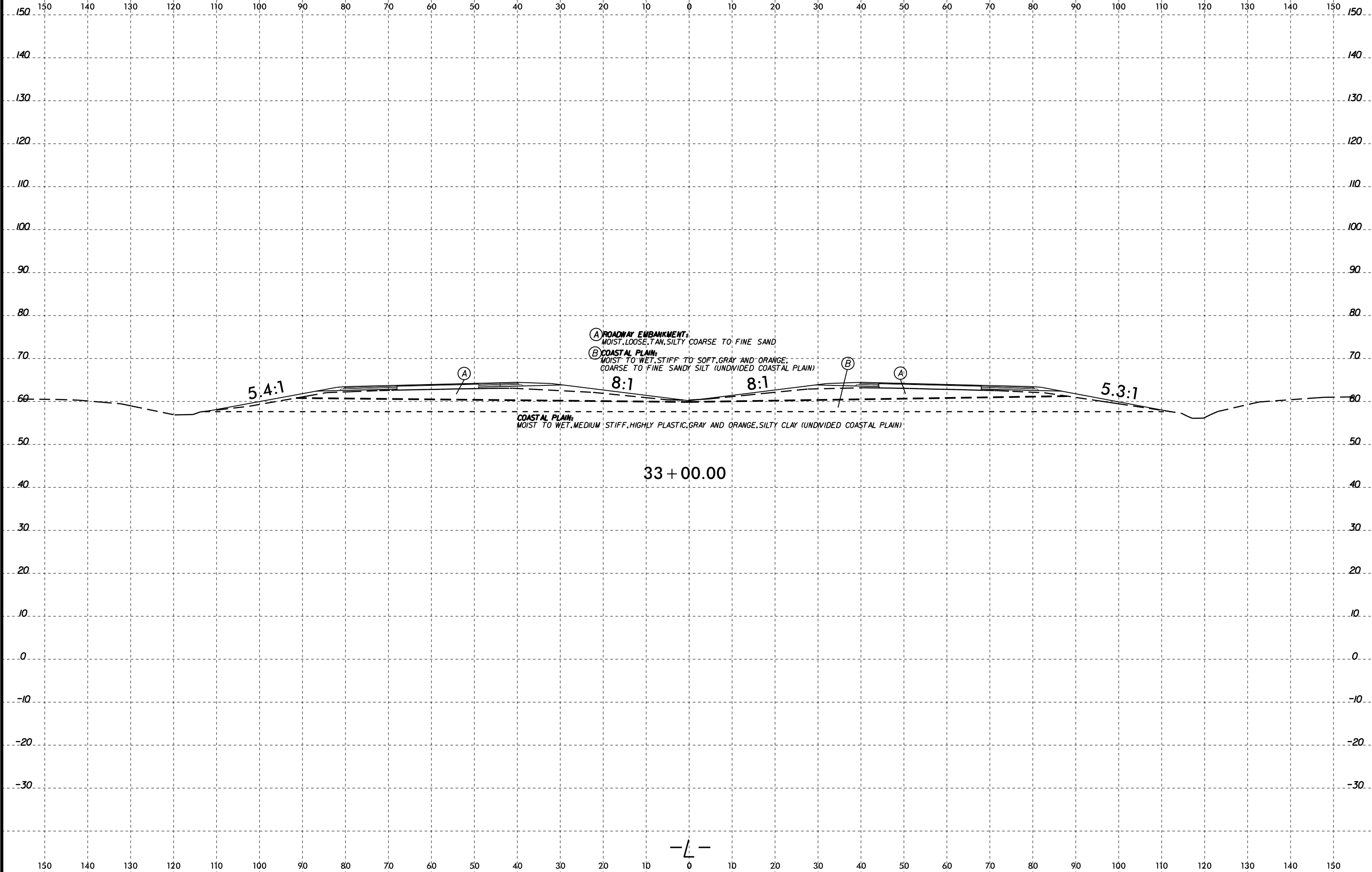


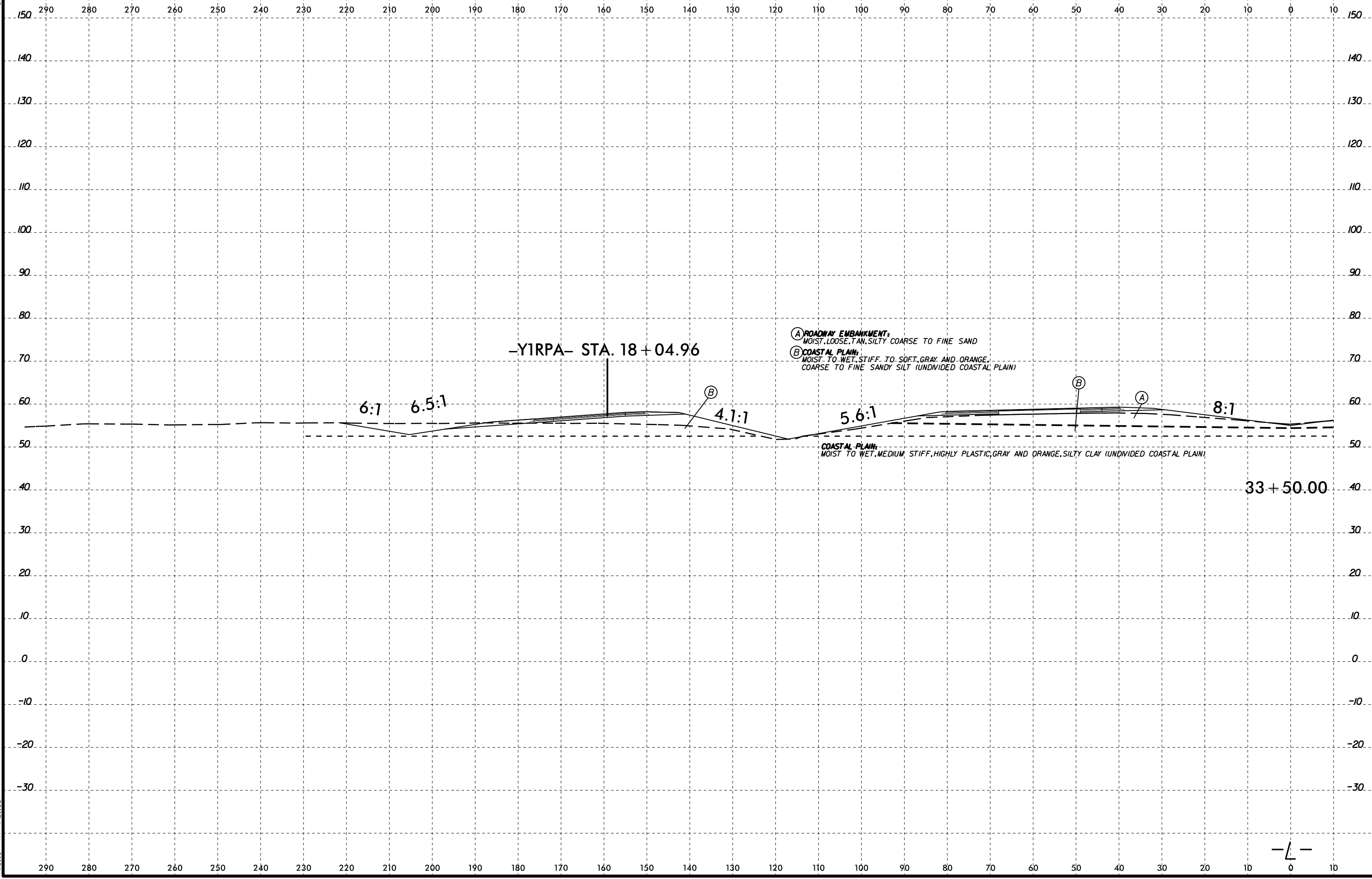
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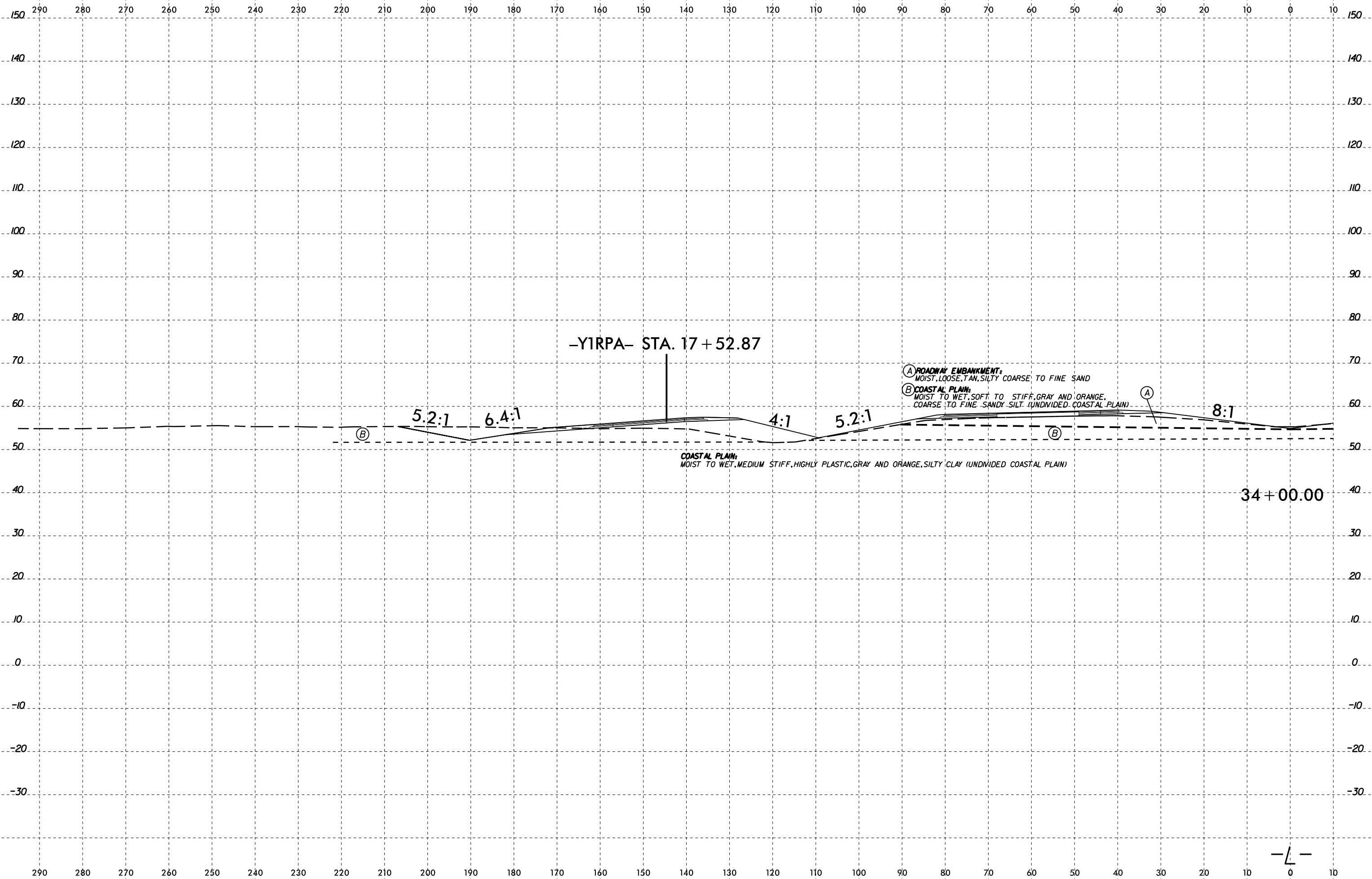
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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5819 & R-5820	73

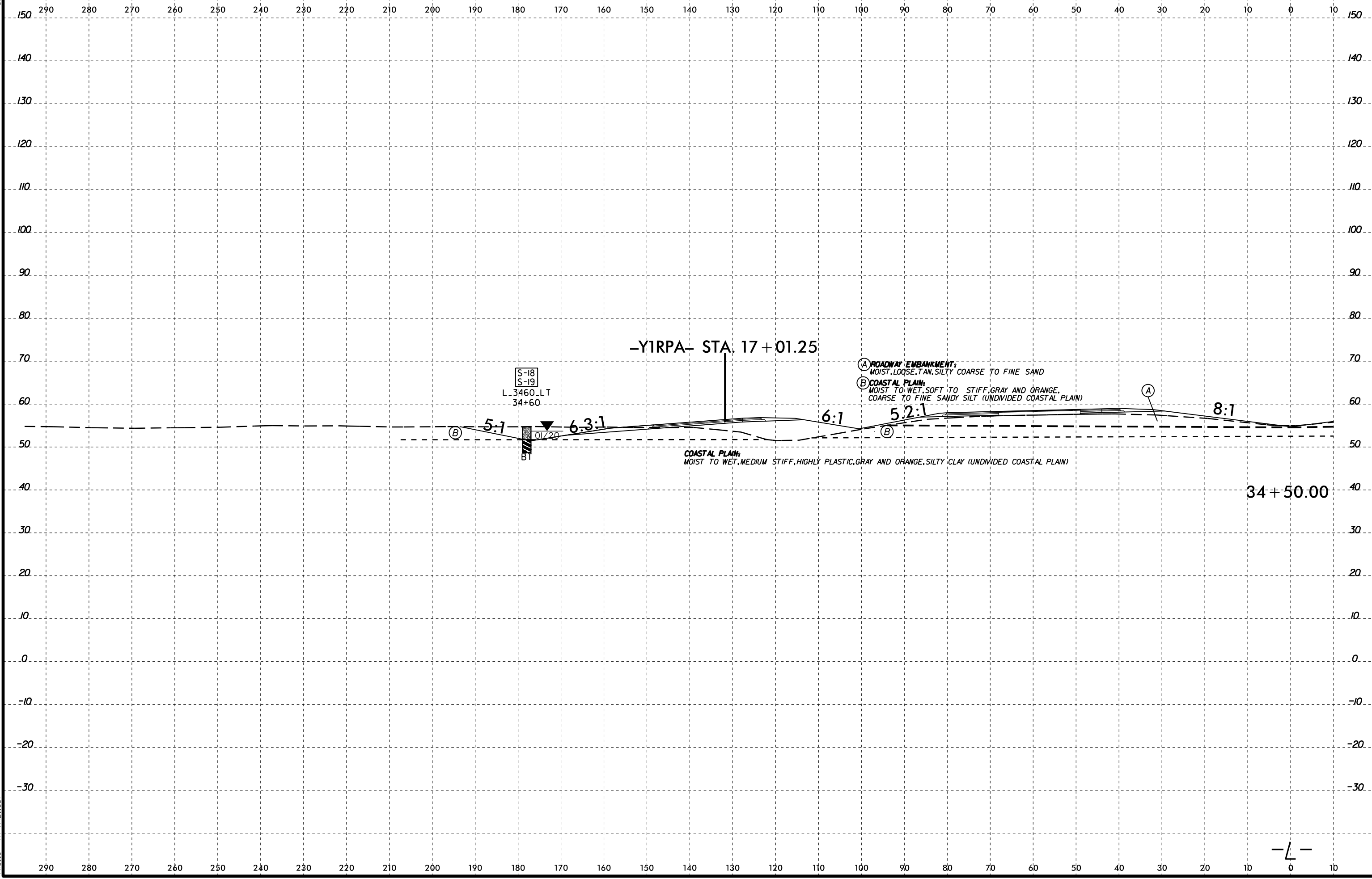






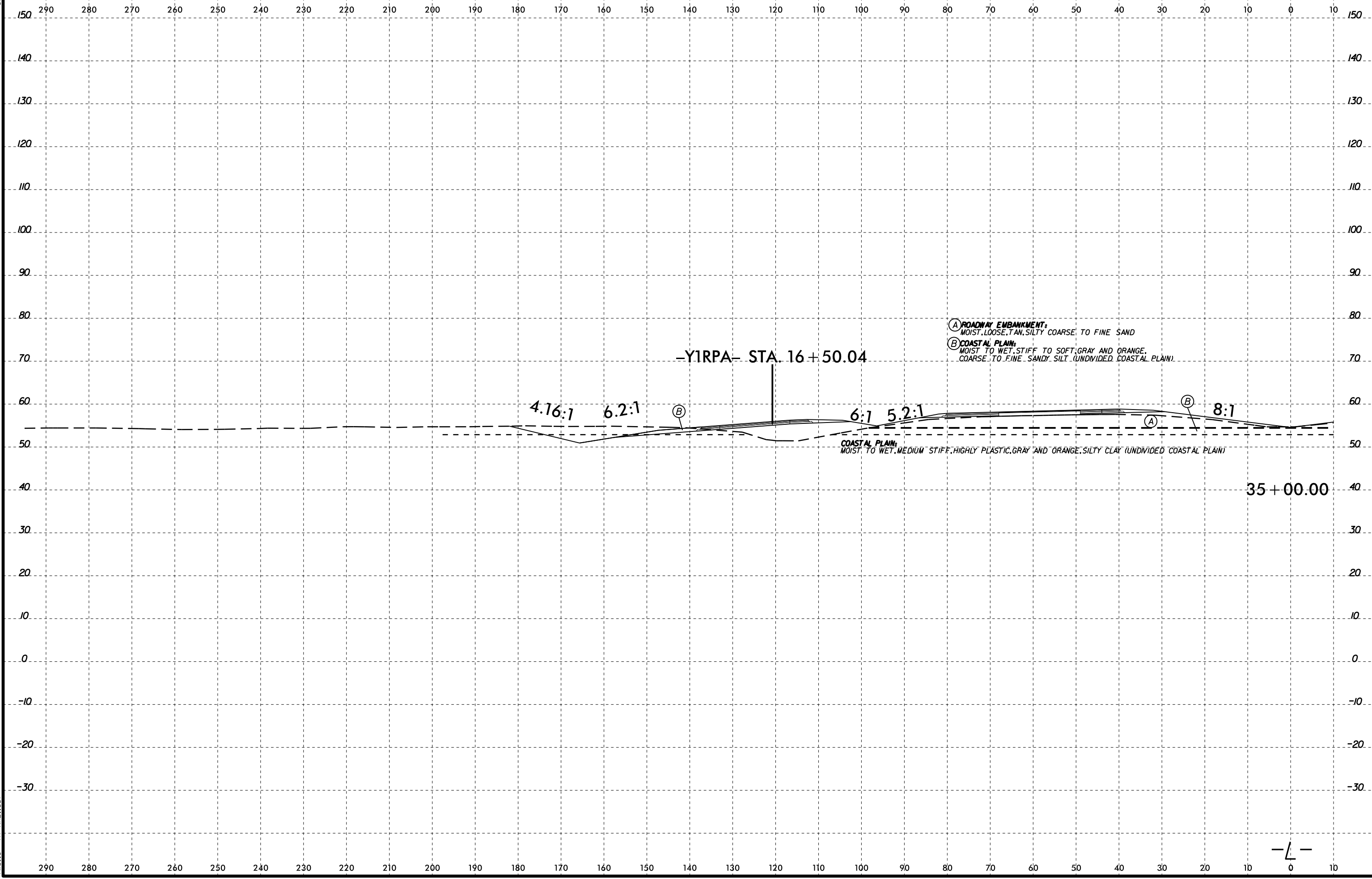


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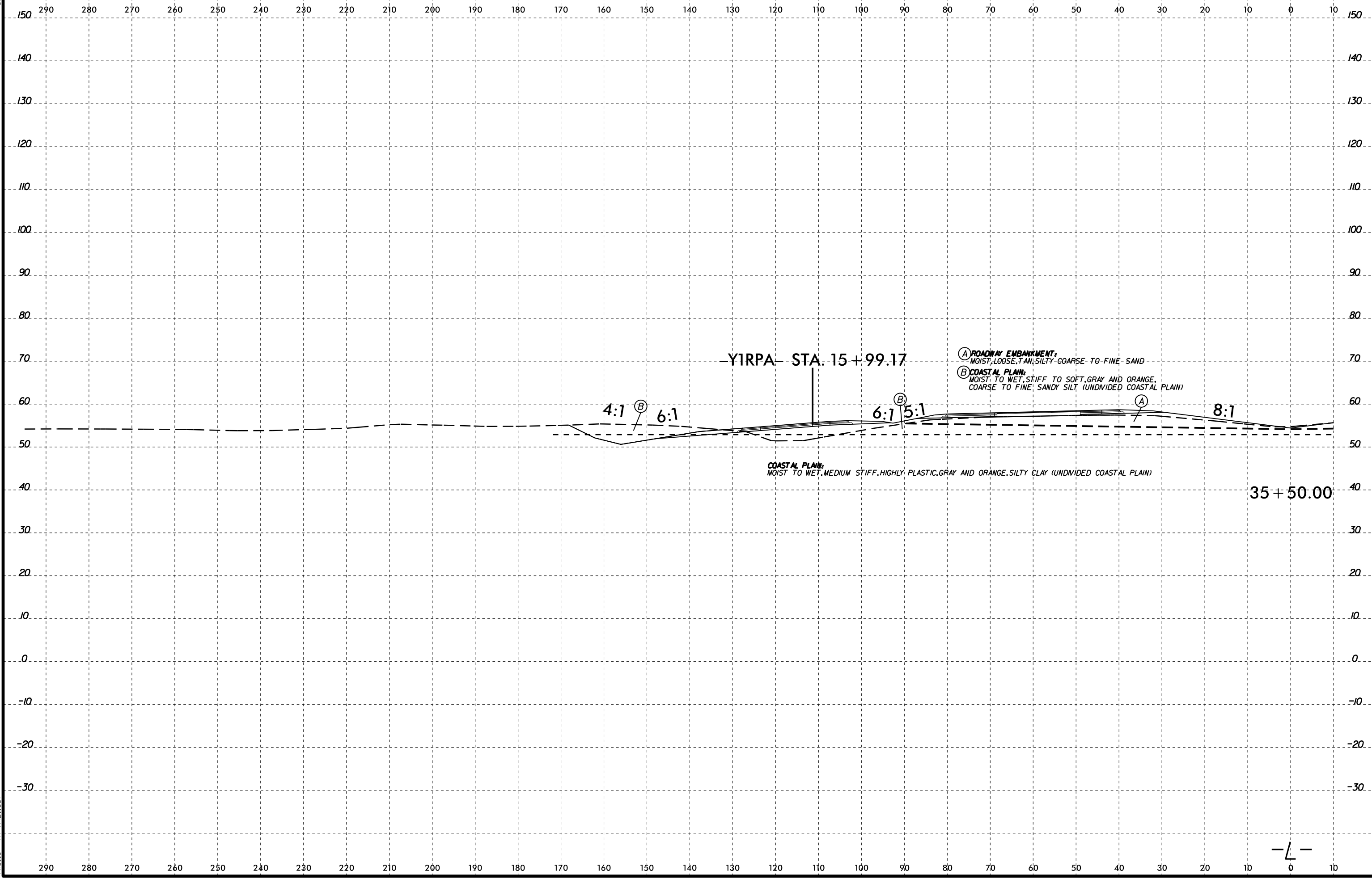


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-L-



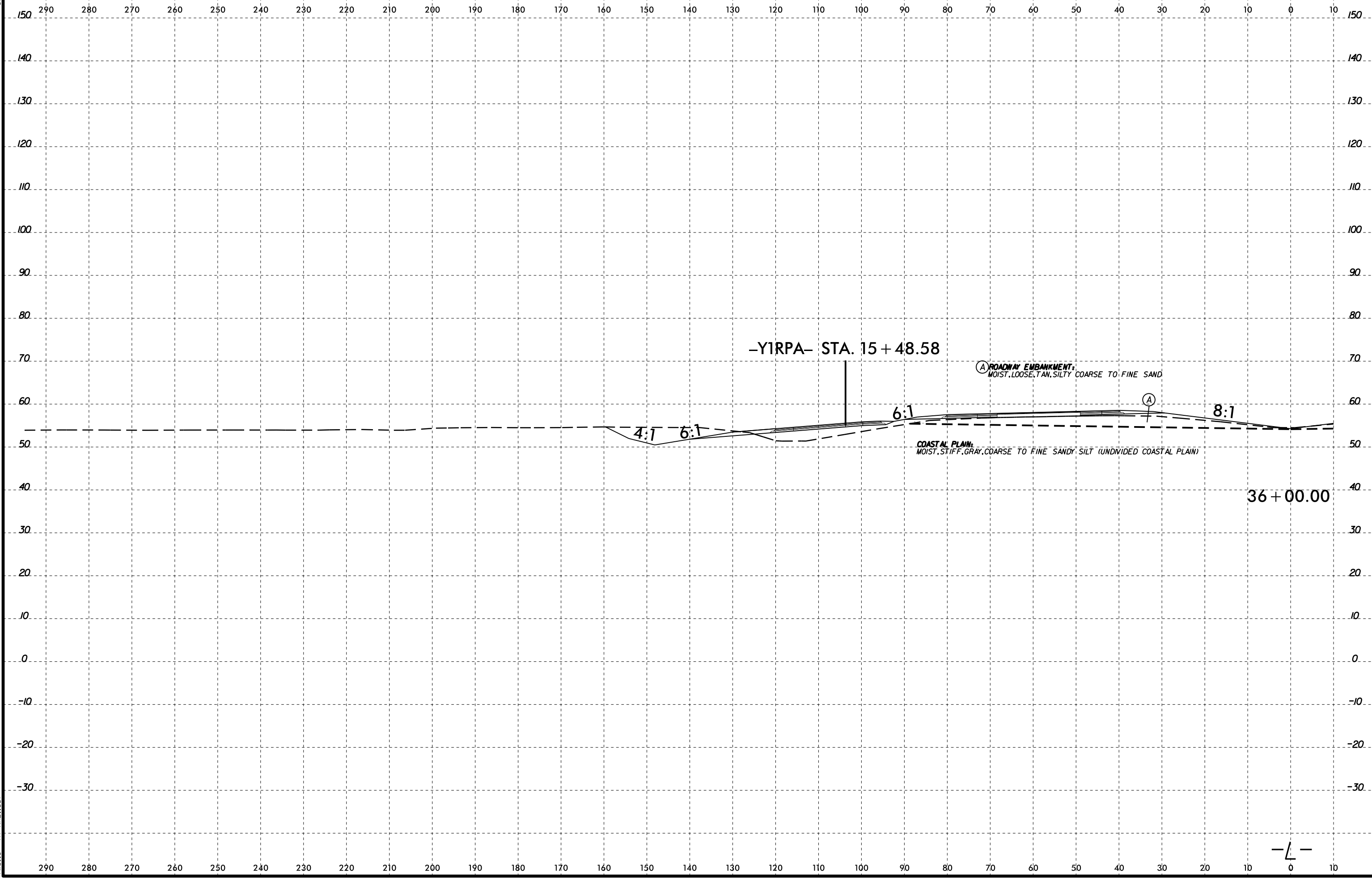
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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5819 & R-5820	80

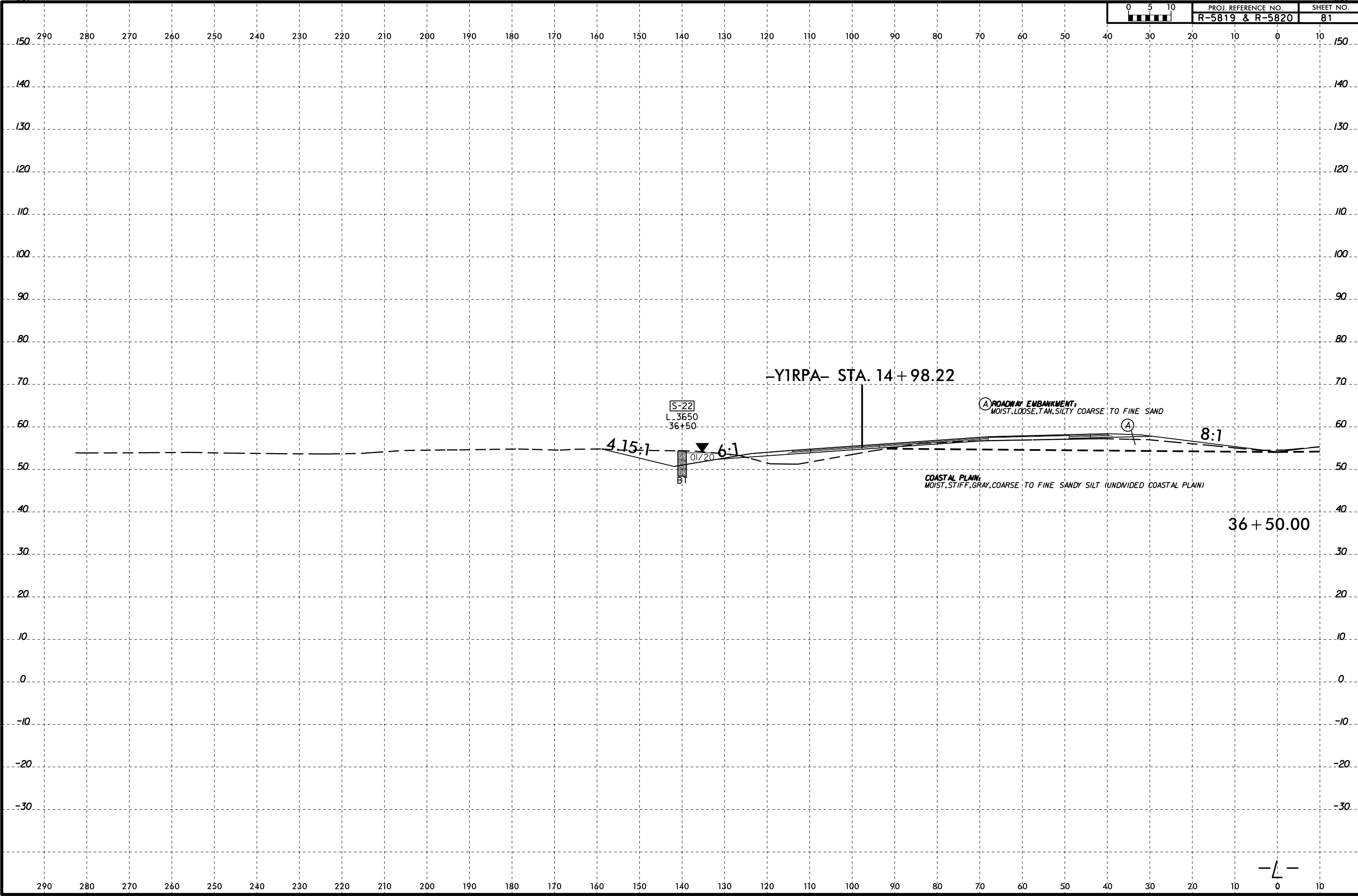


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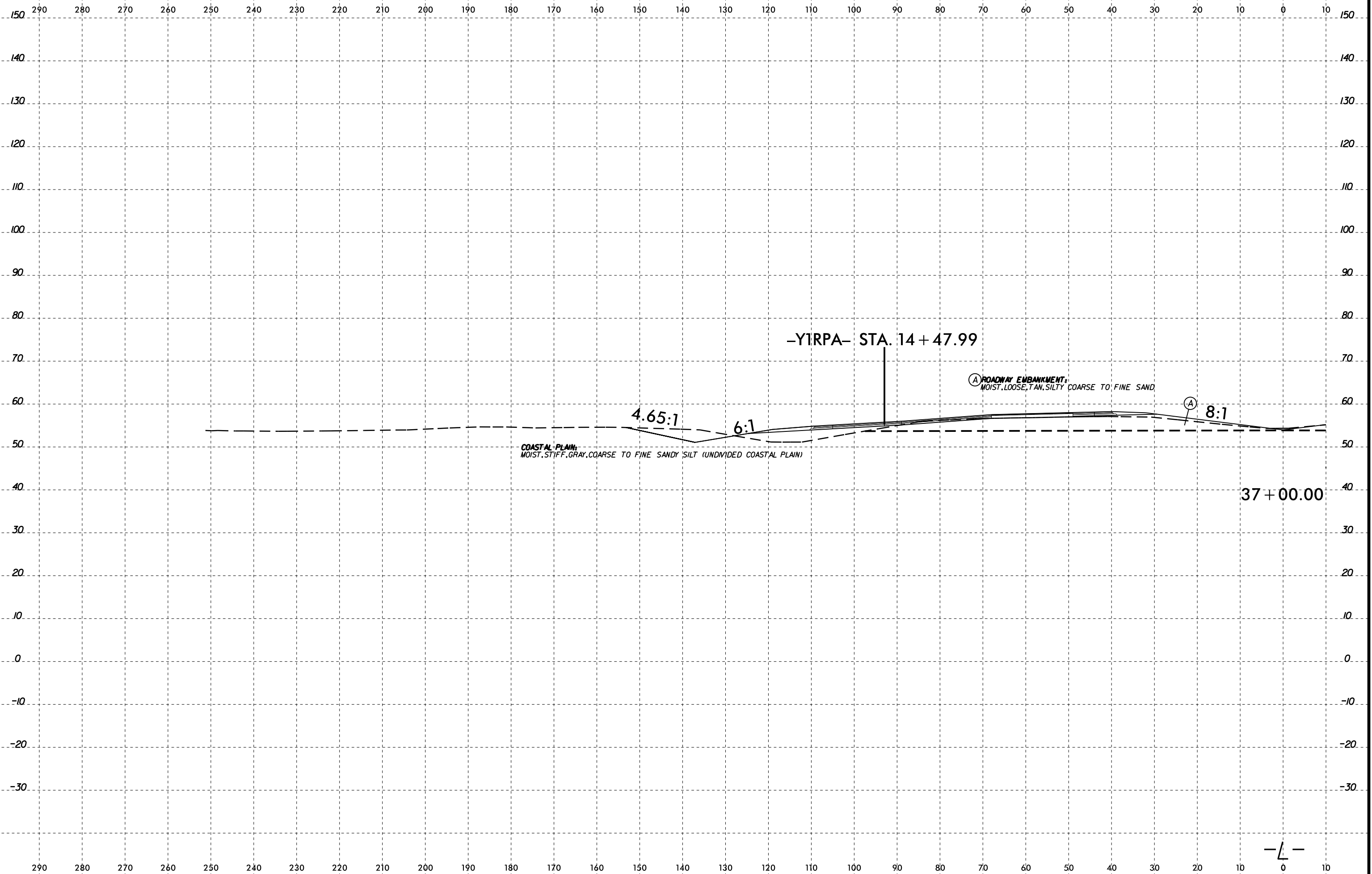
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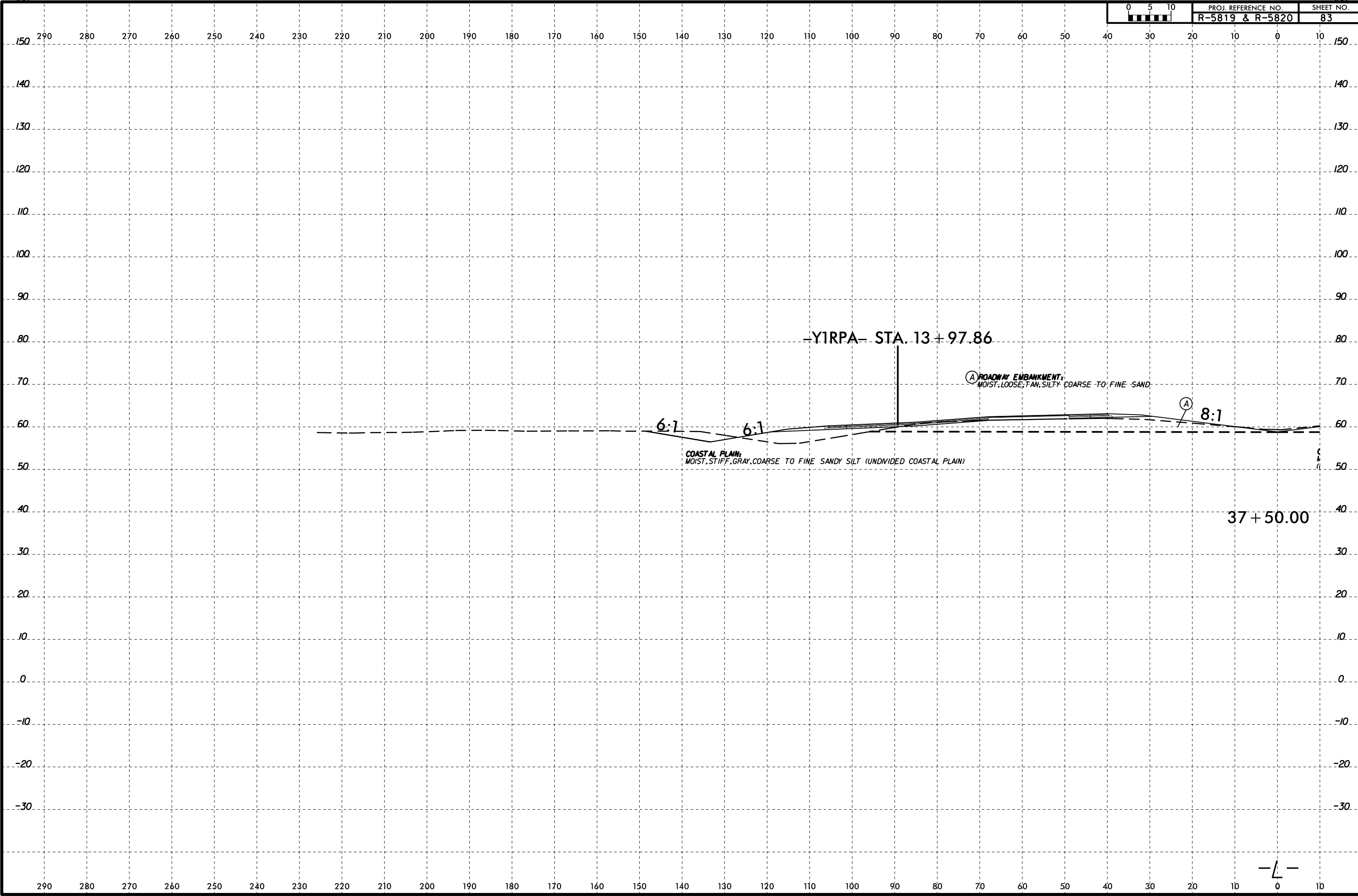
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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5819 & R-5820	81

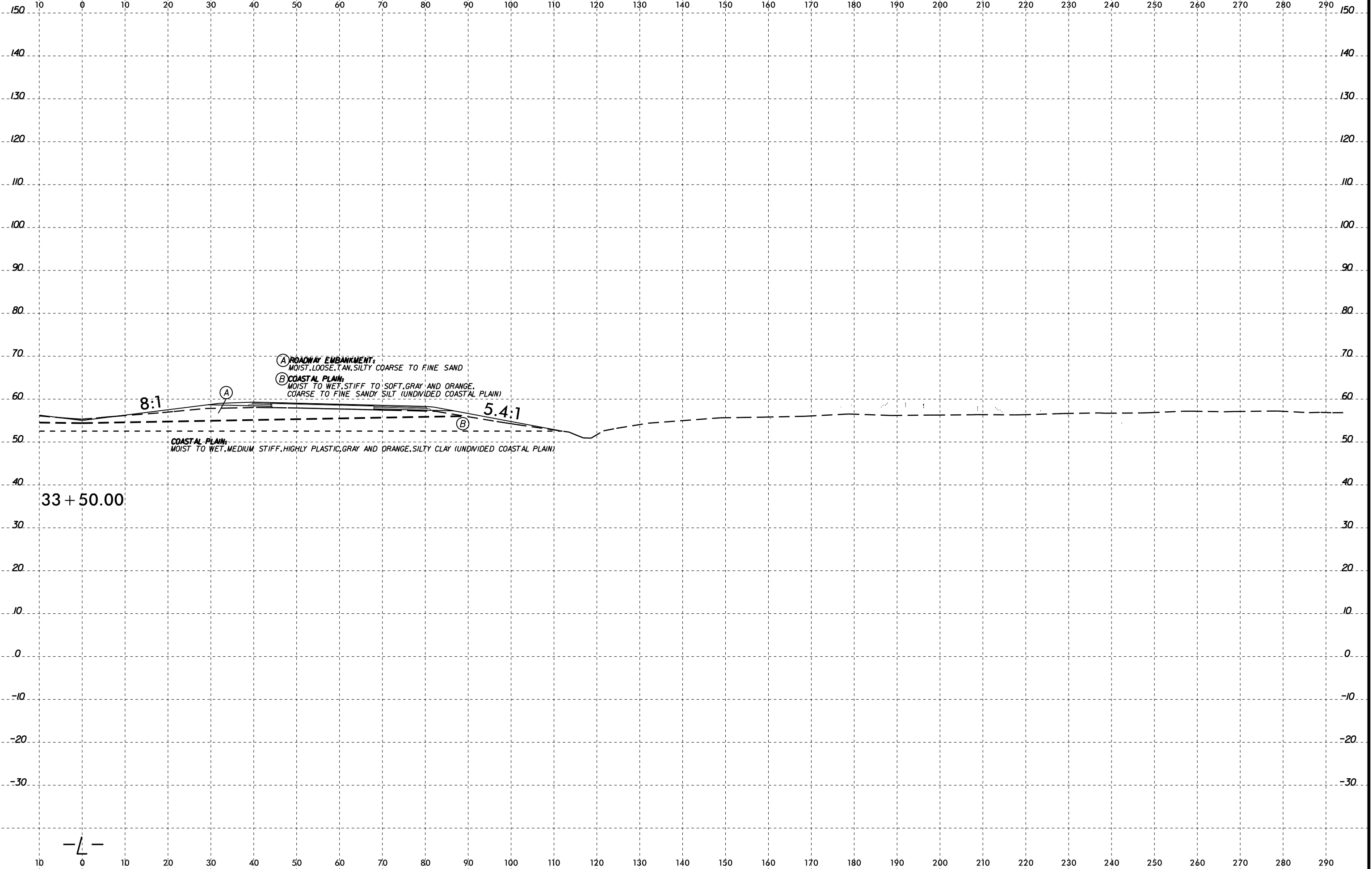


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(A) ROADWAY EMBANKMENT;
MOIST, LOOSE, TAN, SILTY COARSE TO FINE SAND

(B) COASTAL PLAIN;
MOIST TO WET, STIFF TO SOFT, GRAY AND ORANGE,
COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN;
MOIST TO WET, MEDIUM STIFF, HIGHLY PLASTIC, GRAY AND ORANGE, SILTY CLAY (UNDIVIDED COASTAL PLAIN)

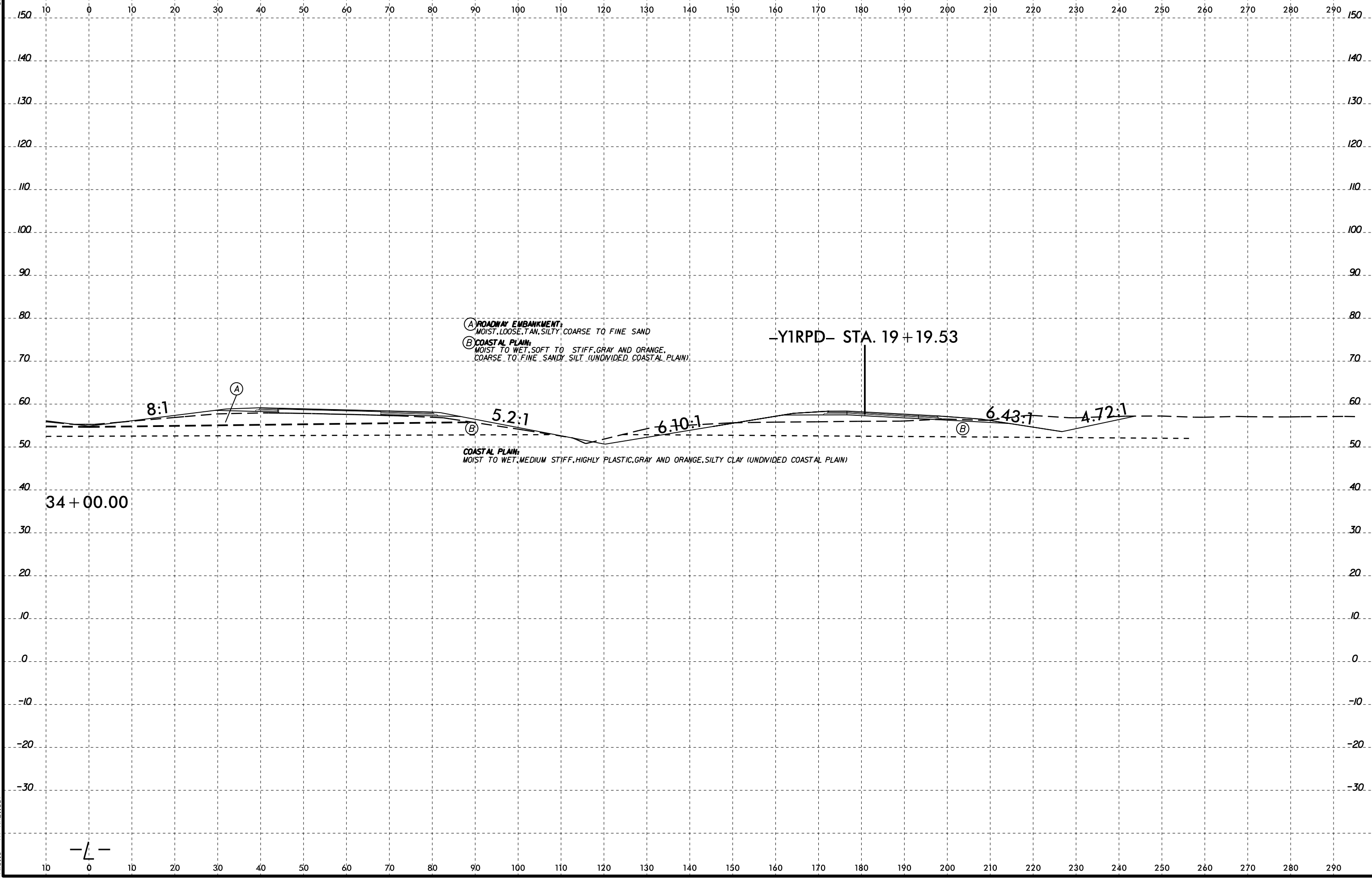
8:1

5.4:1

33 + 50.00



6/23/16
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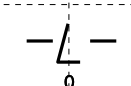


(A) ROADWAY EMBANKMENT:
MOIST, LOOSE, TAN, SILTY, COARSE TO FINE SAND
(B) COASTAL PLAIN:
MOIST TO WET, SOFT TO STIFF, GRAY AND ORANGE,
COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

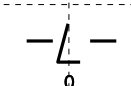
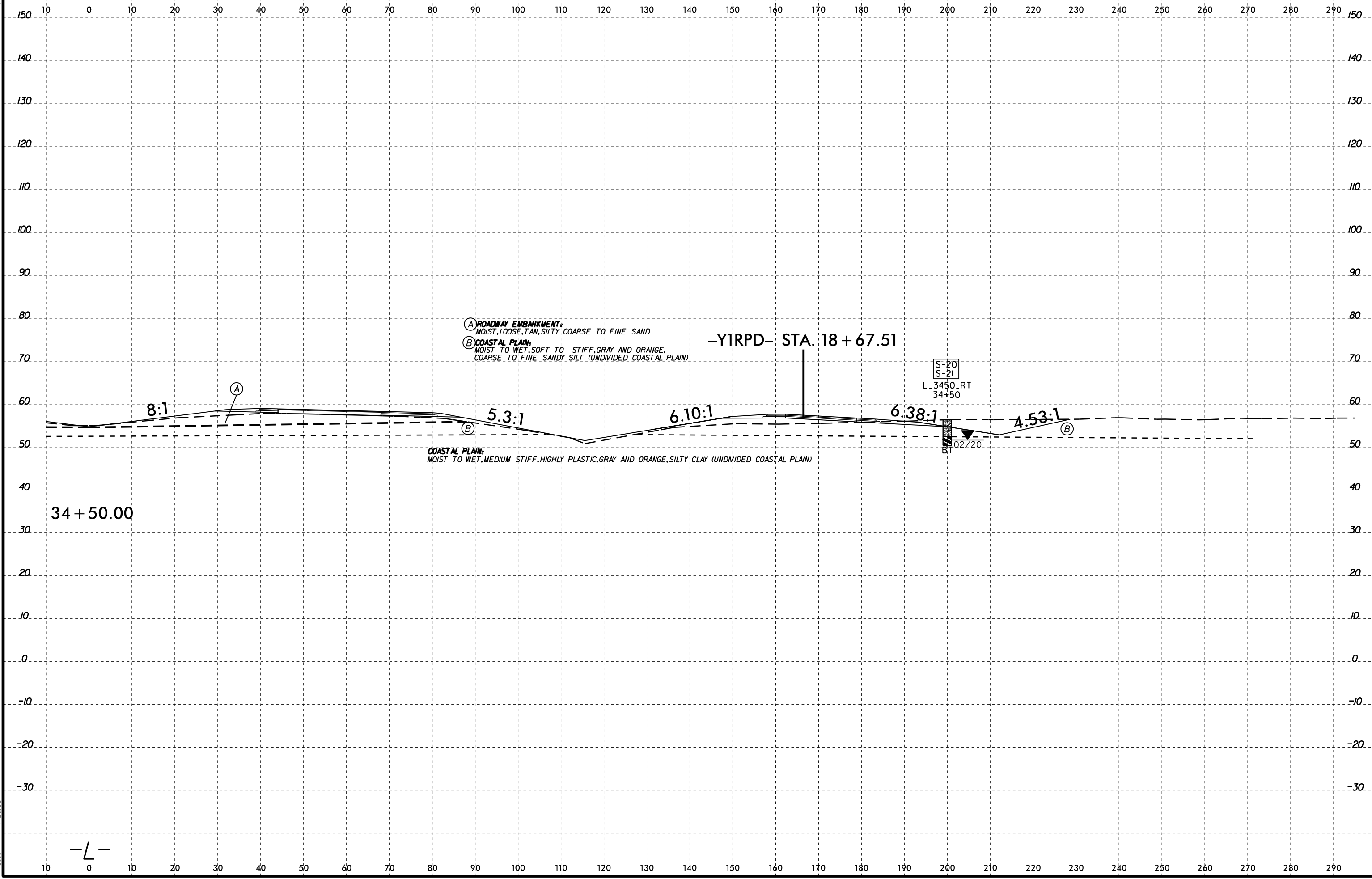
COASTAL PLAIN:
MOIST TO WET, MEDIUM STIFF, HIGHLY PLASTIC, GRAY AND ORANGE, SILTY CLAY (UNDIVIDED COASTAL PLAIN)

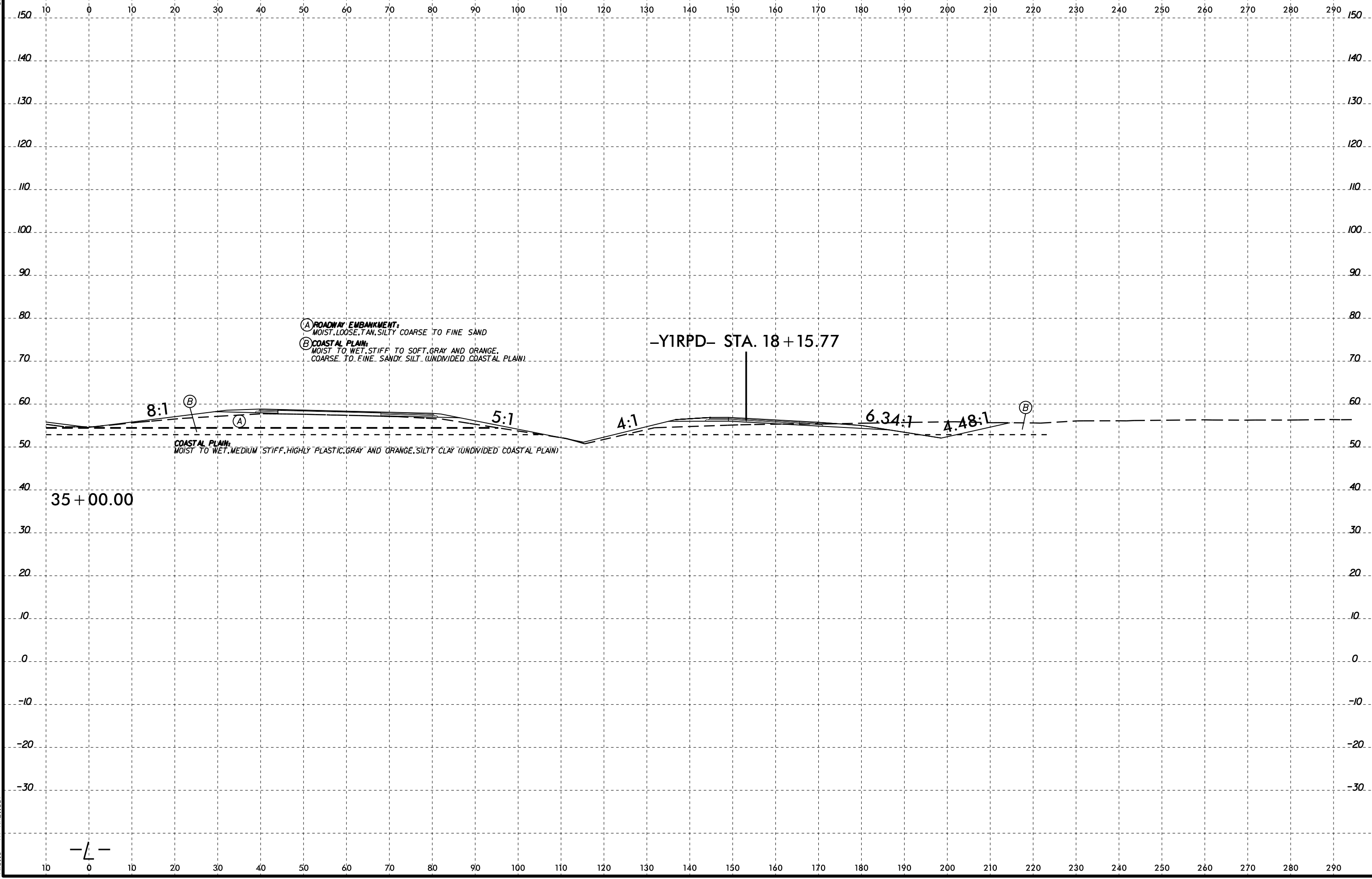
-YIRPD- STA. 19+19.53

34+00.00



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Winters\GEO\TECHNICAL\Projects\Active Projects\20190942.024A R-5819 & R-5820 Roadway\Roadway\5819-R5820_GEO\RDW\CADD_GEO\RDW\CADD_GEO\RDW\XSL\LDgm





(A) ROADWAY EMBANKMENT:
MOIST, LOOSE, TAN, SILTY COARSE TO FINE SAND

(B) COASTAL PLAIN:
MOIST TO WET, STIFF TO SOFT, GRAY AND ORANGE,
COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

8:1 (B)

(A)

5:1

4:1

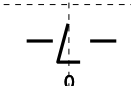
6.34:1

4.48:1 (B)

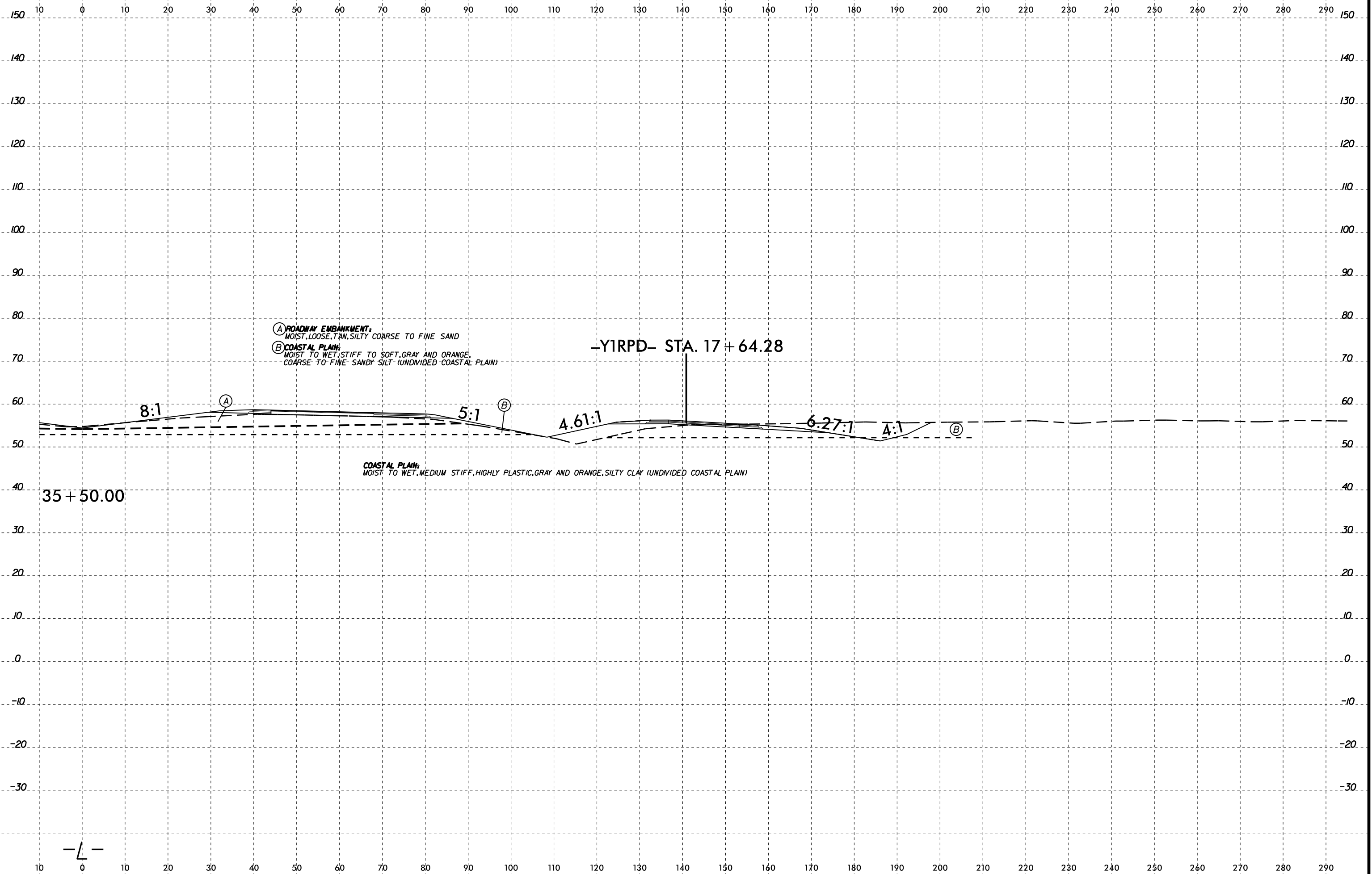
COASTAL PLAIN:
MOIST TO WET, MEDIUM STIFF, HIGHLY PLASTIC, GRAY AND ORANGE, SILTY CLAY (UNDIVIDED COASTAL PLAIN)

-Y1RPD- STA. 18+15.77

35+00.00



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- (A) ROADWAY EMBANKMENT;
MOIST, LOOSE, TAN, SILTY COARSE TO FINE SAND
- (B) COASTAL PLAIN;
MOIST TO WET, STIFF TO SOFT, GRAY AND ORANGE,
COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

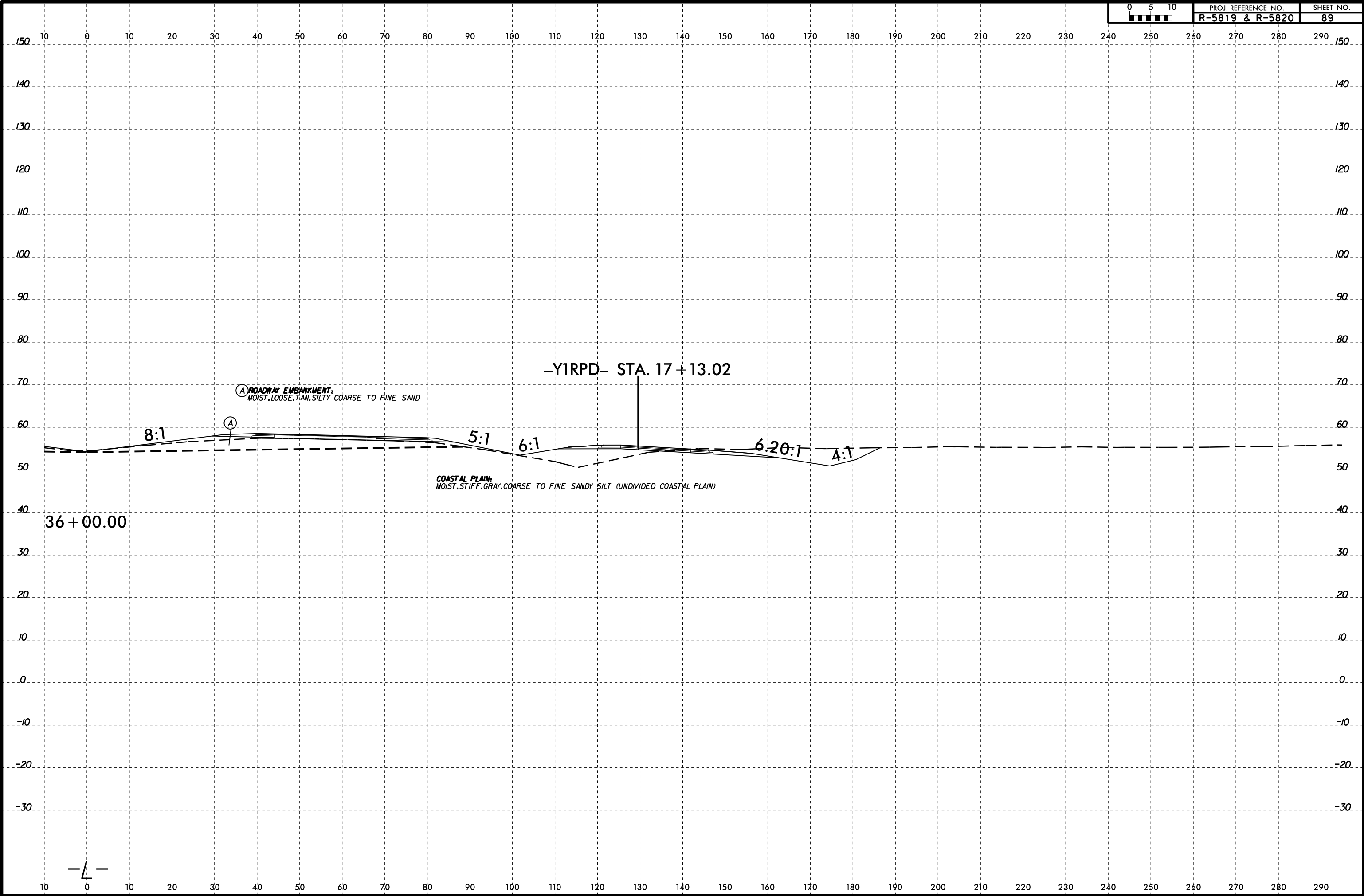
-YIRPD- STA. 17 + 64.28

COASTAL PLAIN;
MOIST TO WET, MEDIUM STIFF, HIGHLY PLASTIC, GRAY AND ORANGE, SILTY CLAY (UNDIVIDED COASTAL PLAIN)

35 + 50.00



6/23/16
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-Y1RPD- STA. 17+13.02

ROADWAY EMBANKMENT:
MOIST, LOOSE, TAN, SILTY COARSE TO FINE SAND

COASTAL PLAIN:
MOIST, STIFF, GRAY, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

8:1

5:1

6:1

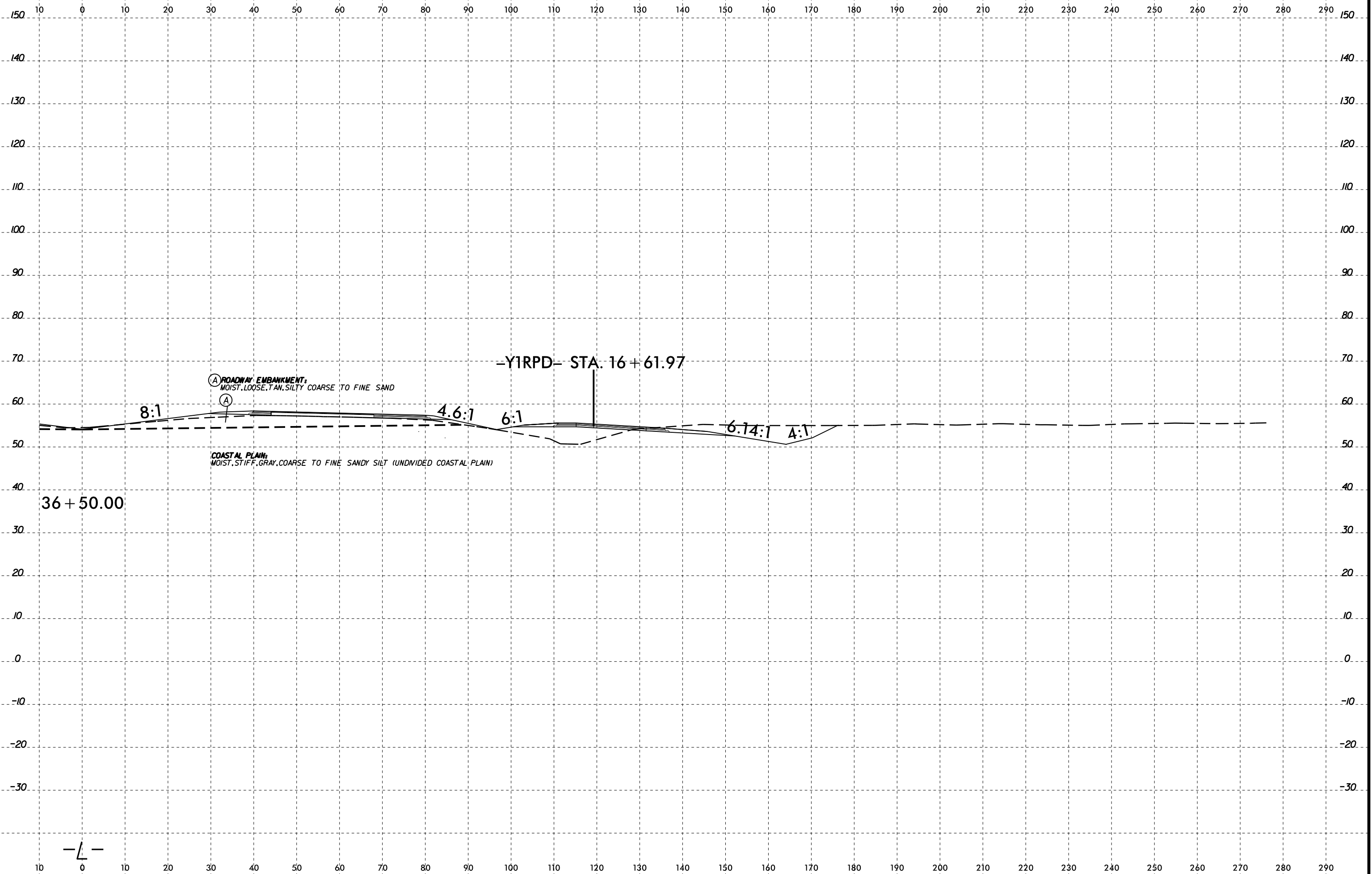
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4:1

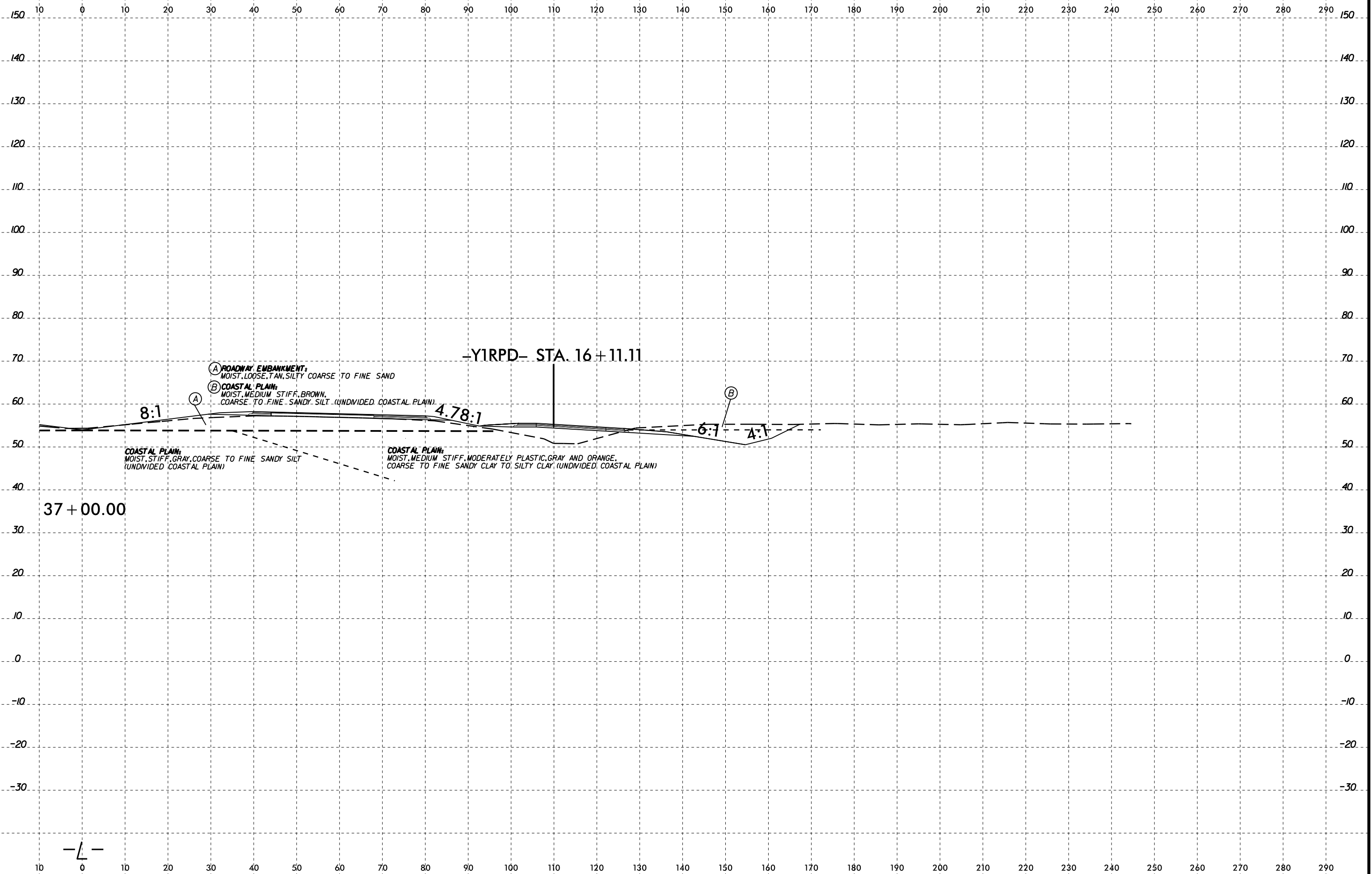
36+00.00

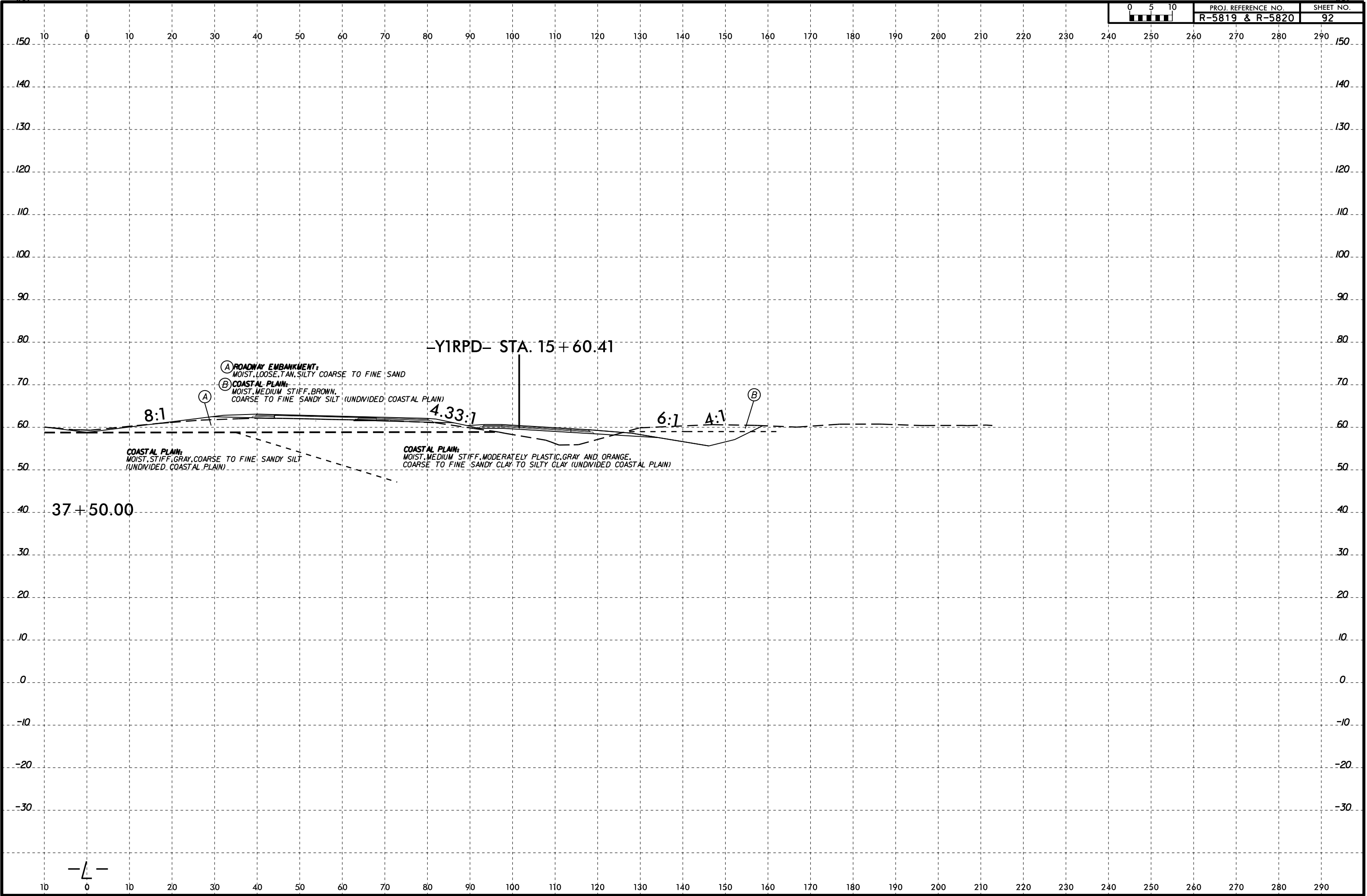


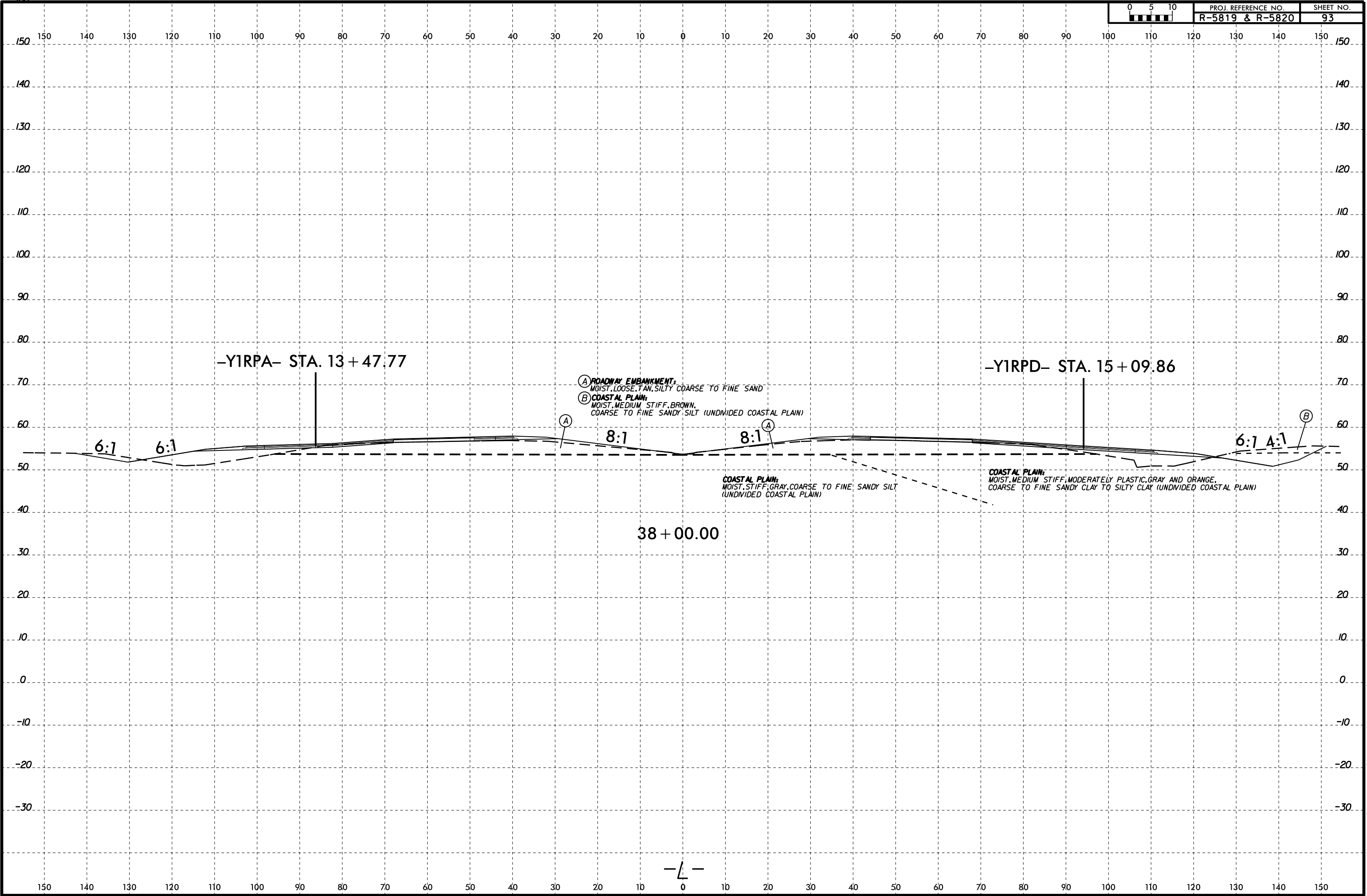
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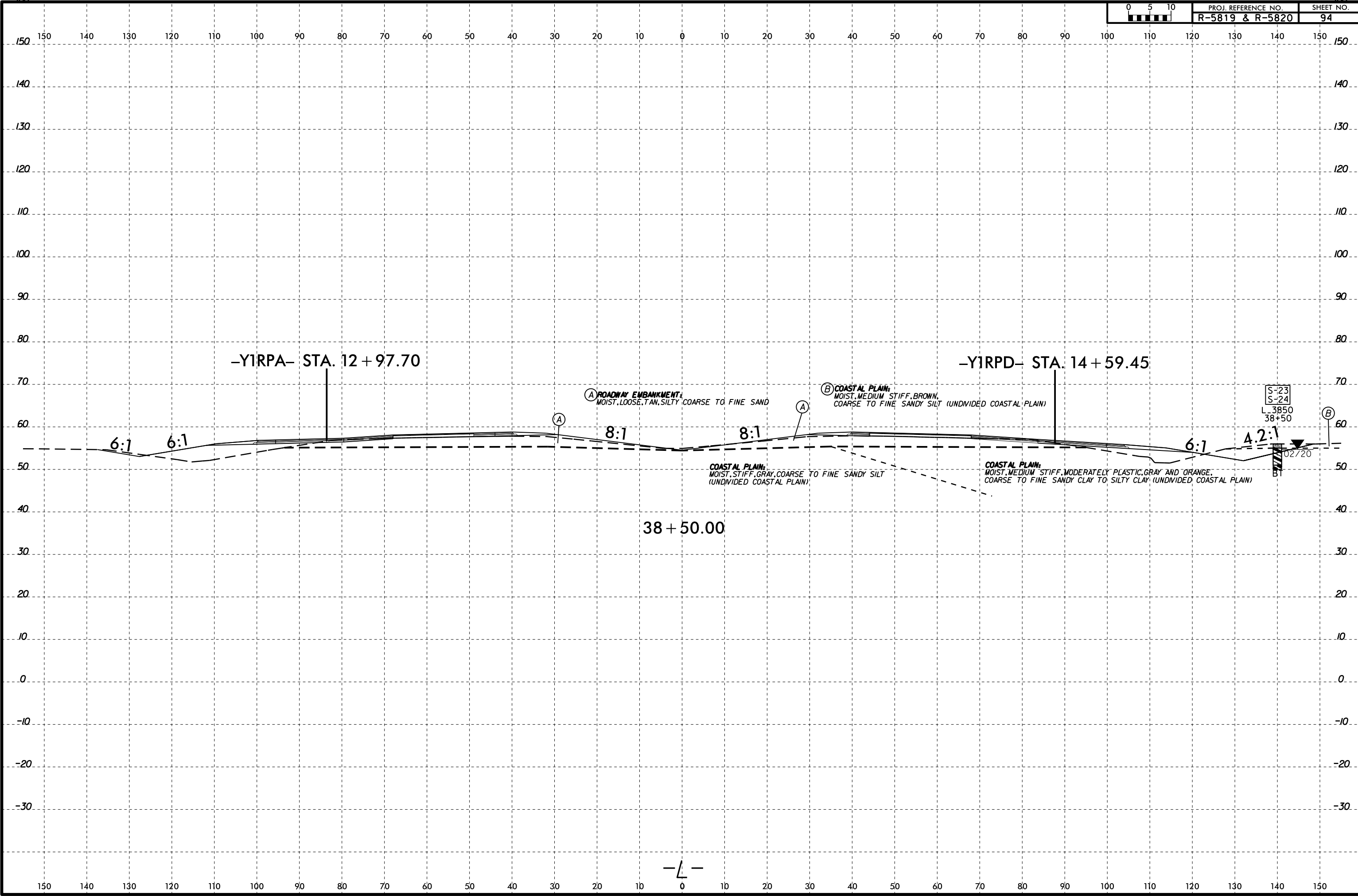


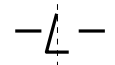
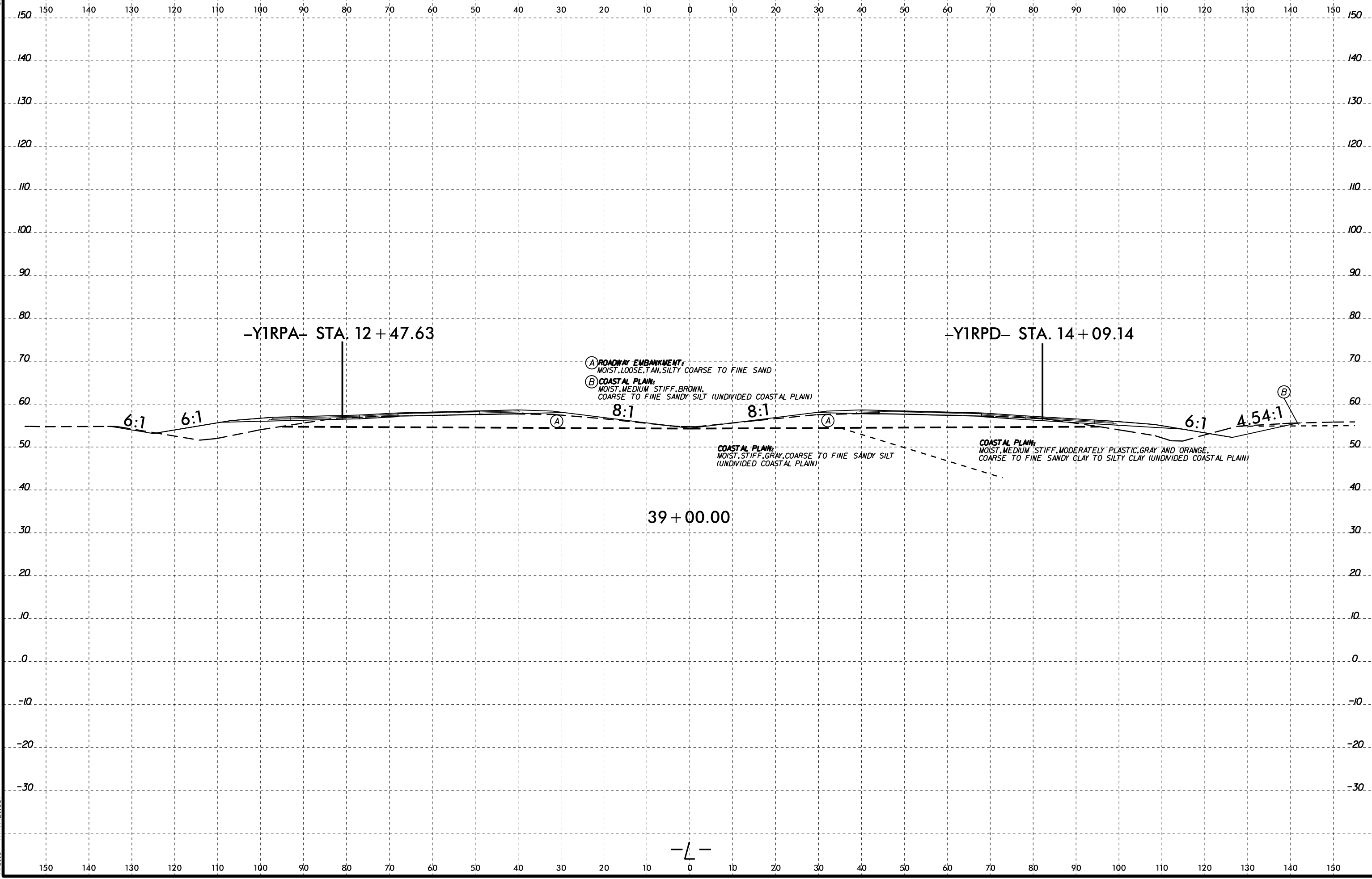


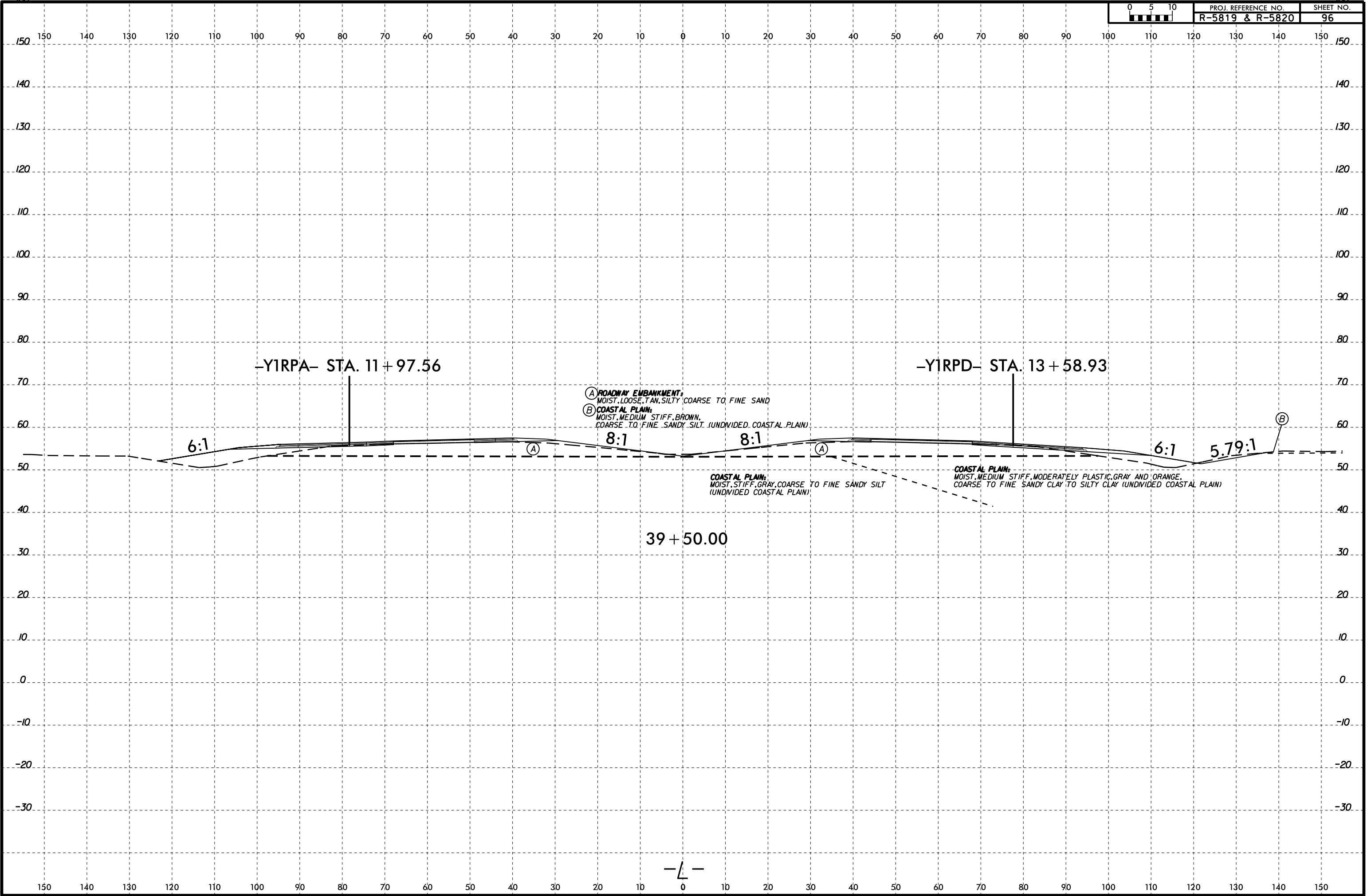


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 Wells - A1 KA211387









(A) ROADWAY EMBANKMENT:
MOIST, LOOSE, TAN, SILTY, COARSE TO FINE SAND
(B) COASTAL PLAIN:
MOIST, MEDIUM STIFF, BROWN,
COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
MOIST, STIFF, GRAY, COARSE TO FINE SANDY SILT
(UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
MOIST, MEDIUM STIFF, MODERATELY PLASTIC, GRAY AND ORANGE,
COARSE TO FINE SANDY CLAY TO SILTY CLAY (UNDIVIDED COASTAL PLAIN)

-YIRPA- STA. 11+97.56

-YIRPD- STA. 13+58.93

39+50.00

6:1

8:1

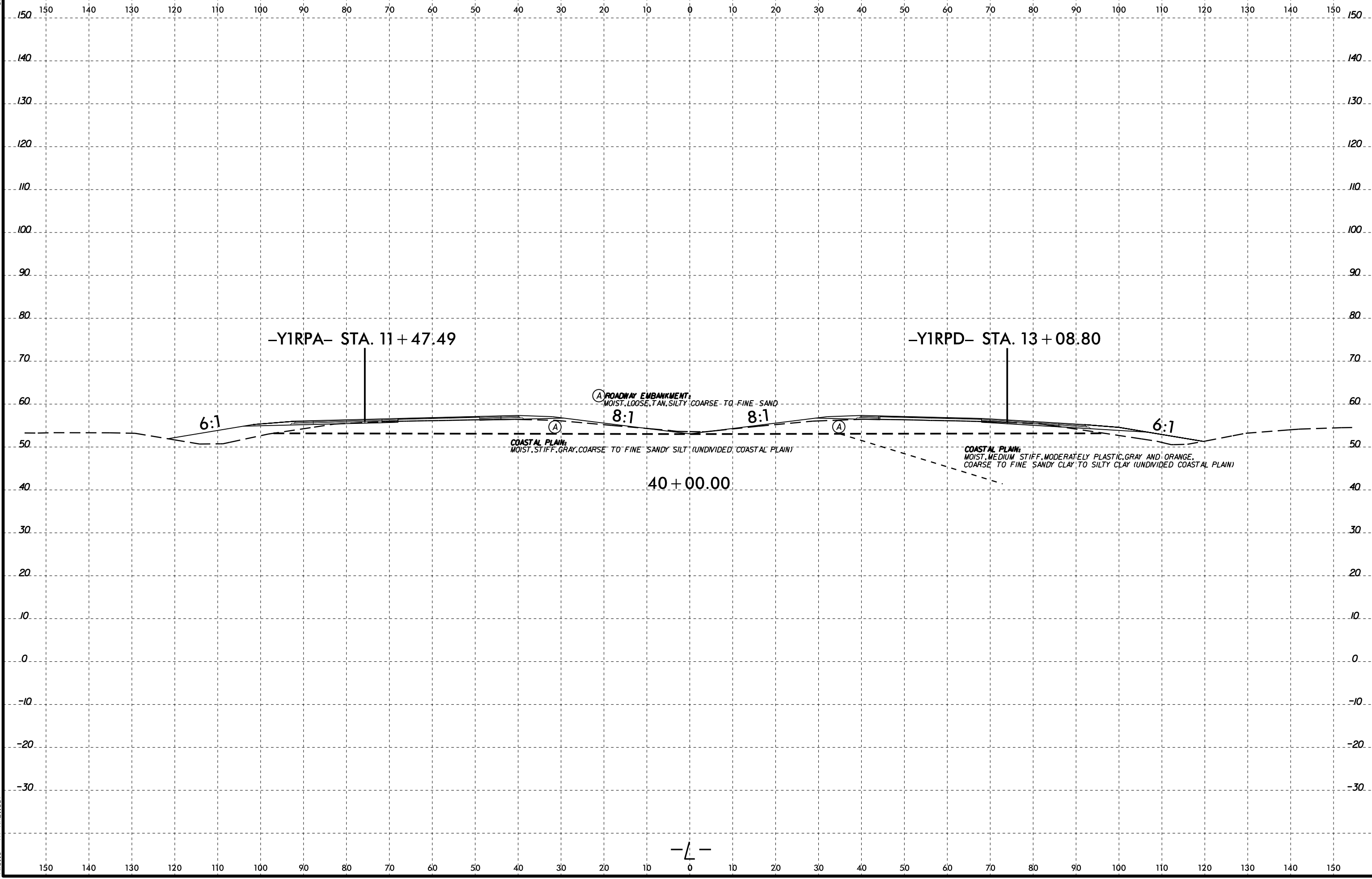
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6:1

5.79:1



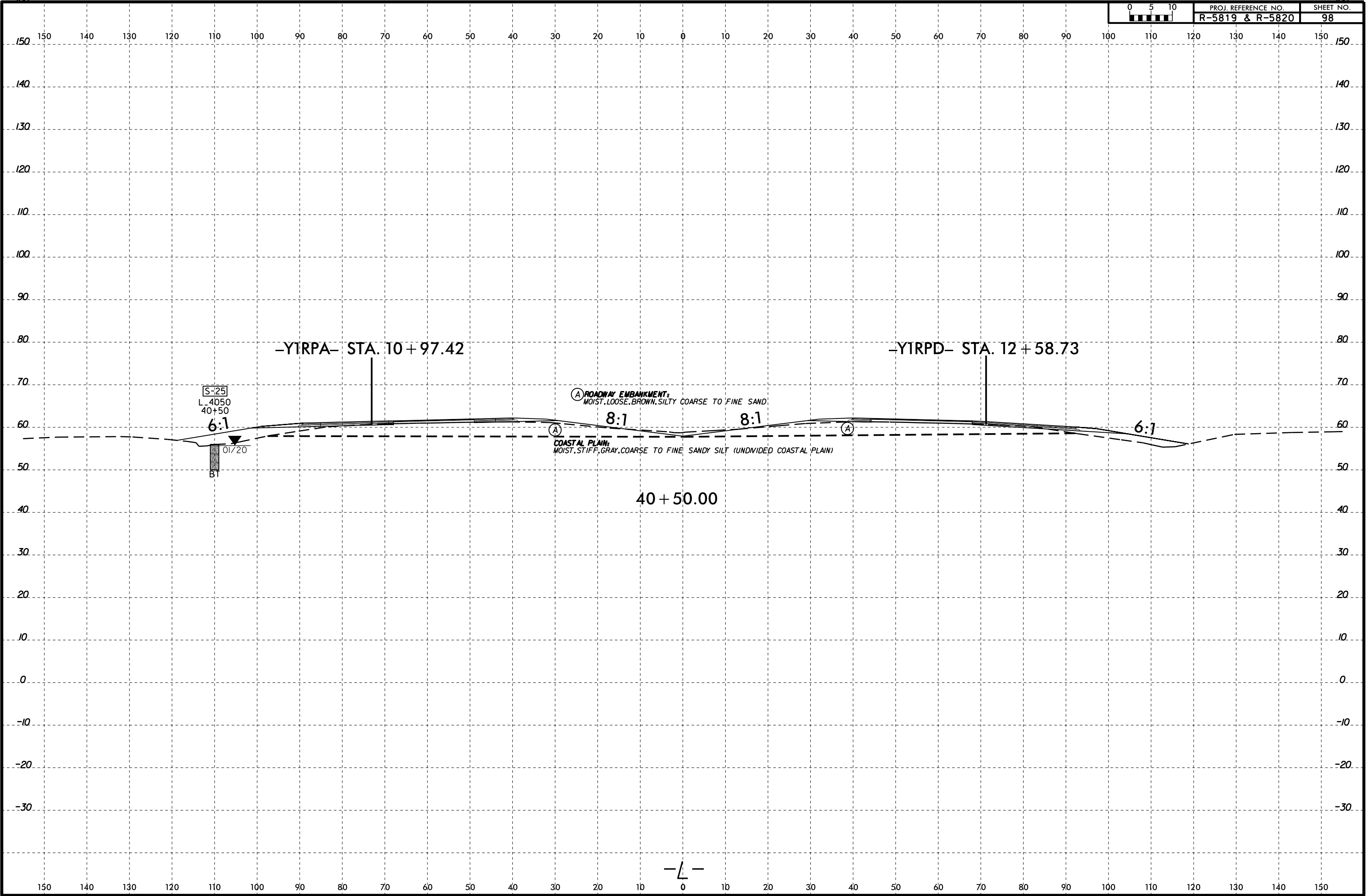
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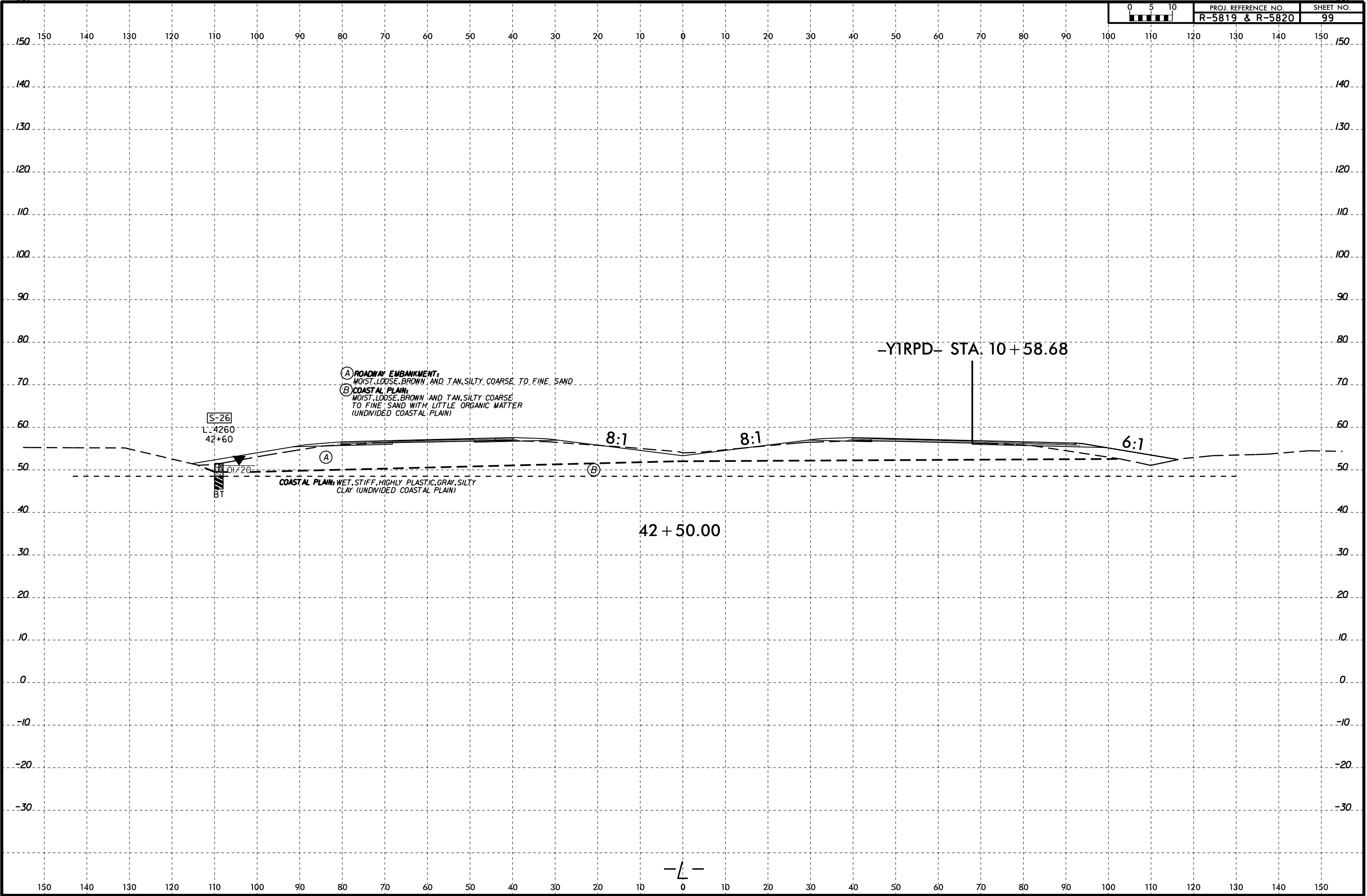
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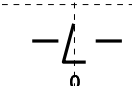
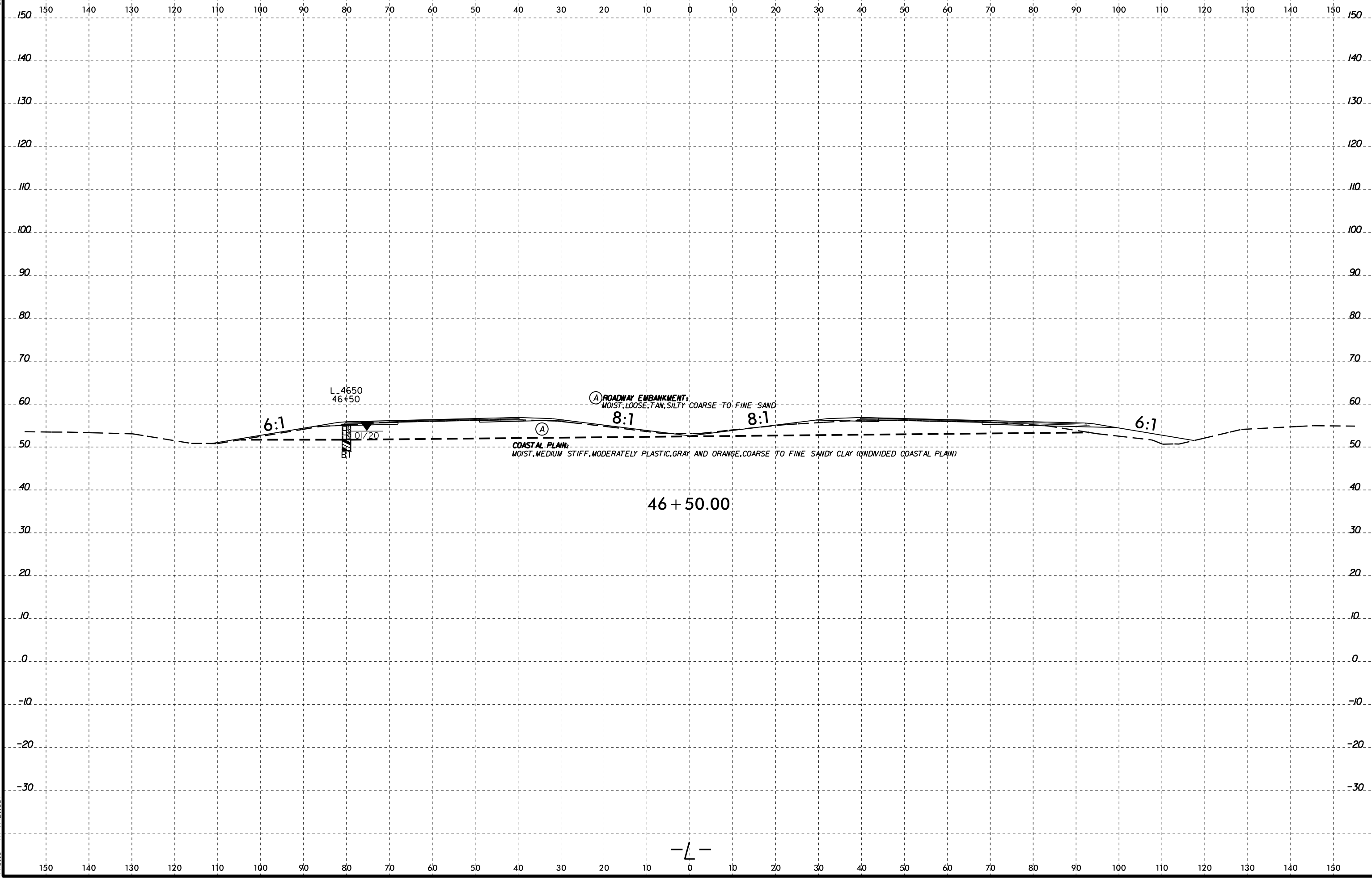
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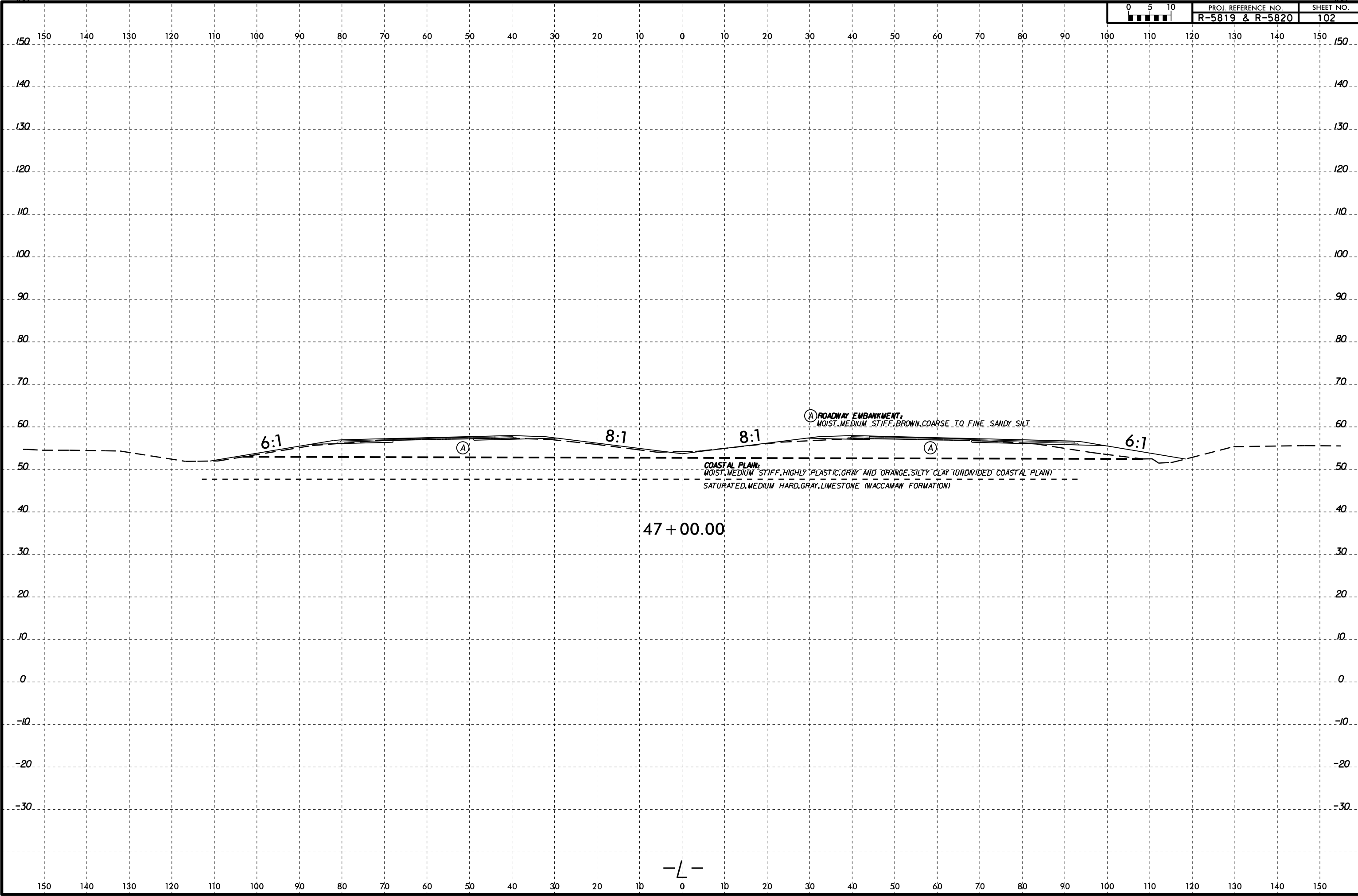


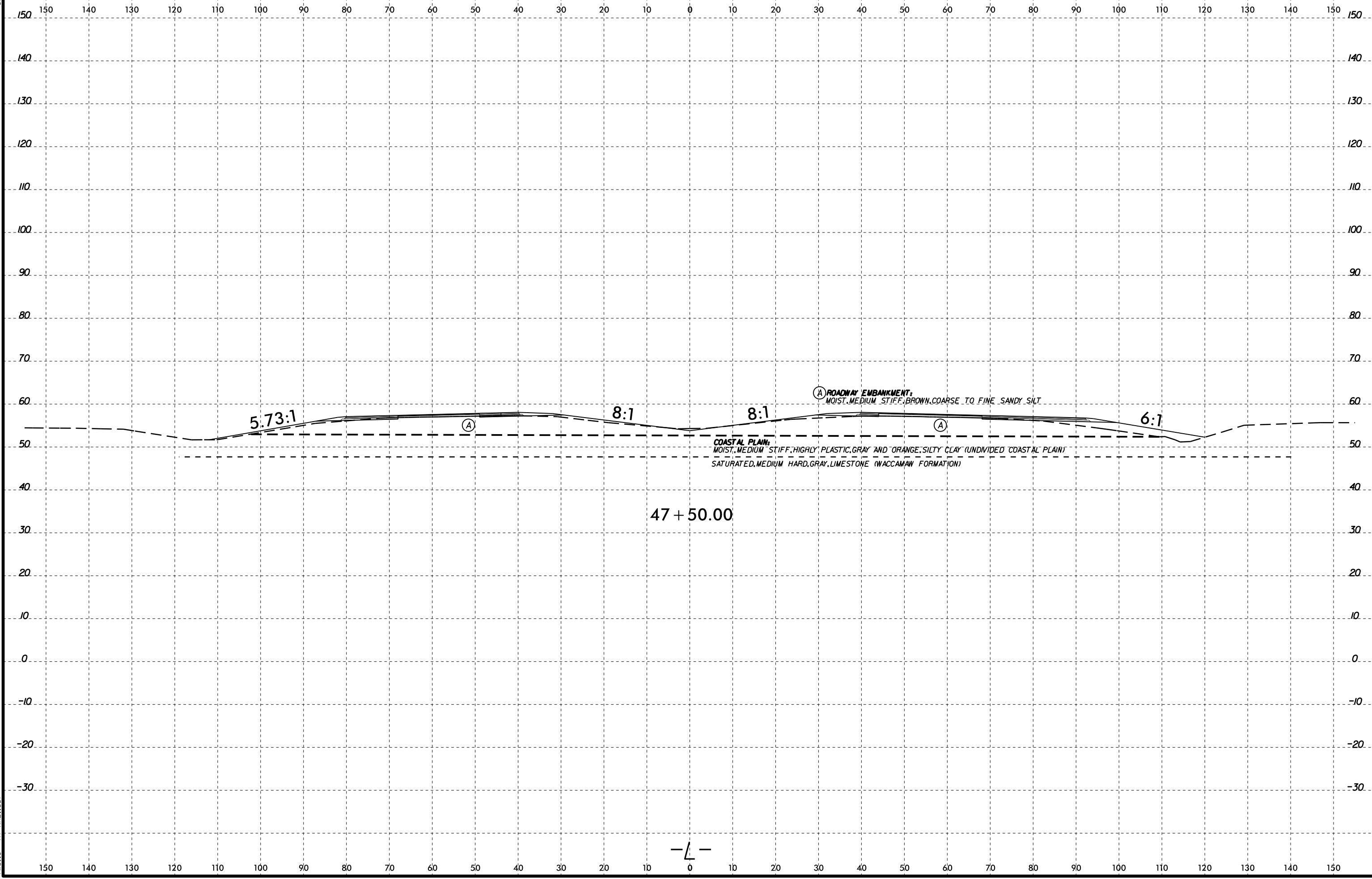
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47 + 50.00

(A) ROADWAY EMBANKMENT:
MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT

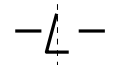
COASTAL PLAIN:
MOIST, MEDIUM STIFF, HIGHLY PLASTIC, GRAY AND ORANGE, SILTY CLAY (UNDIVIDED COASTAL PLAIN)
SATURATED, MEDIUM HARD, GRAY, LIMESTONE (WACCAMAW FORMATION)

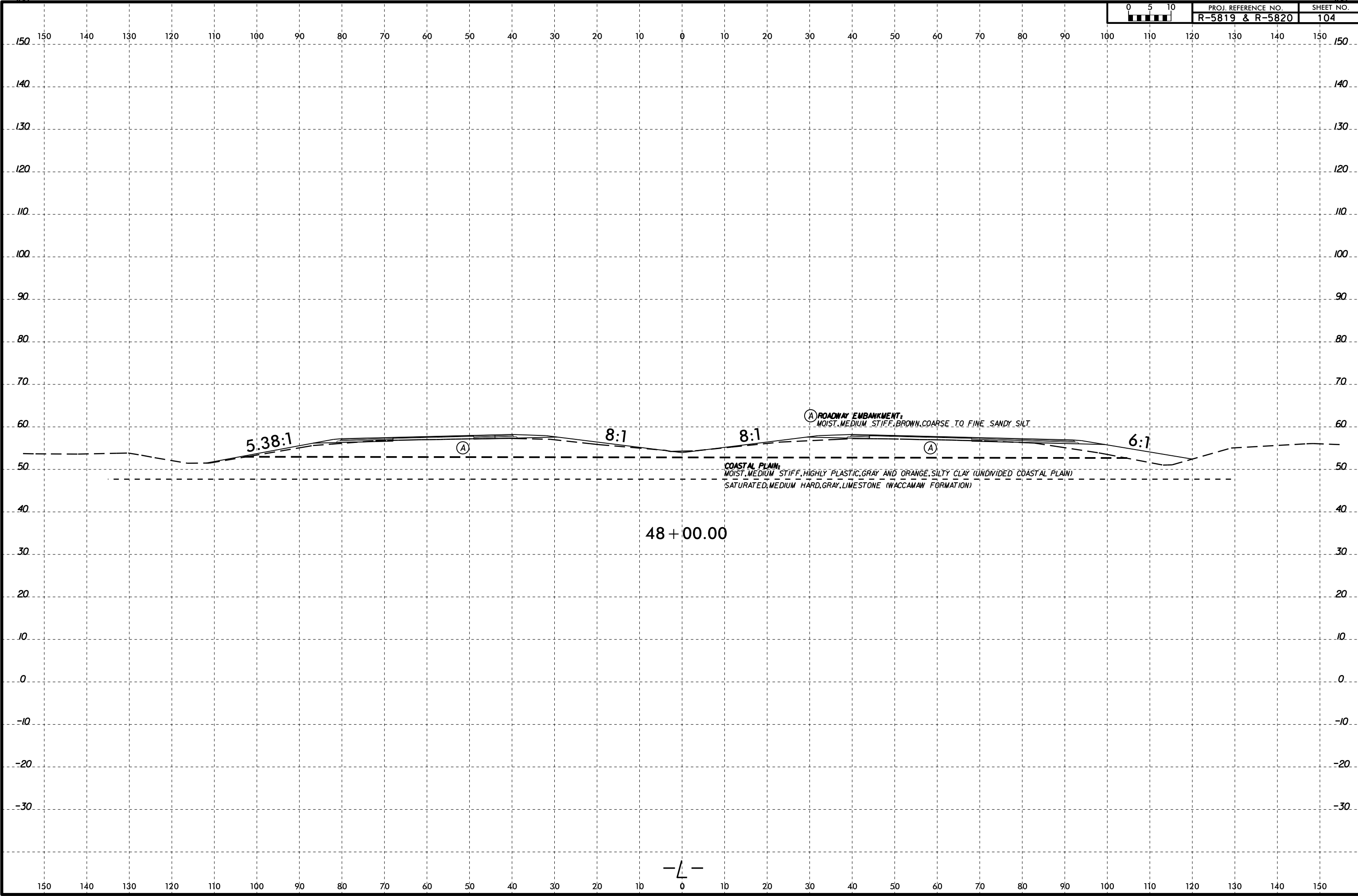
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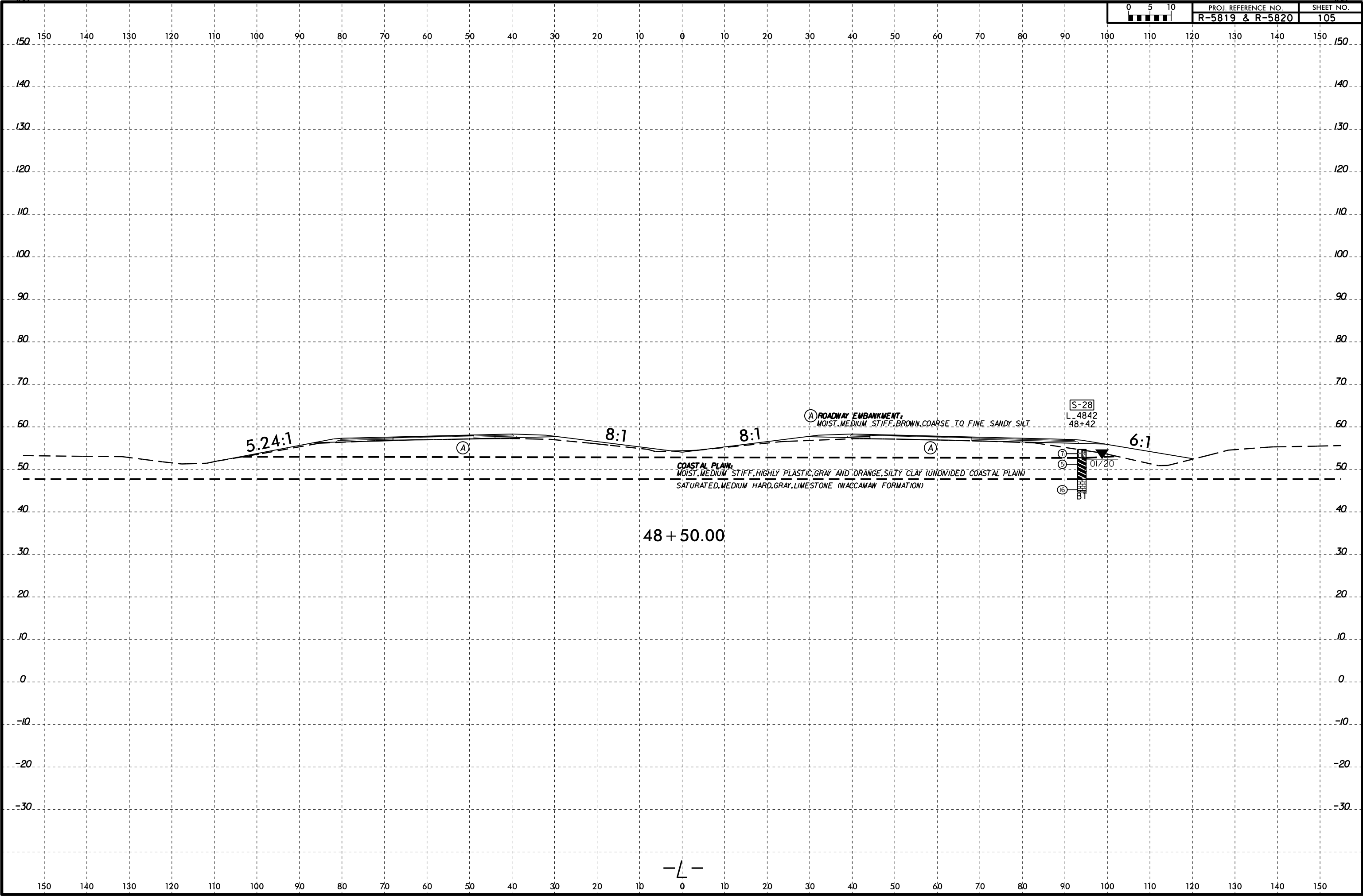
8:1

8:1

6:1







48 + 50.00

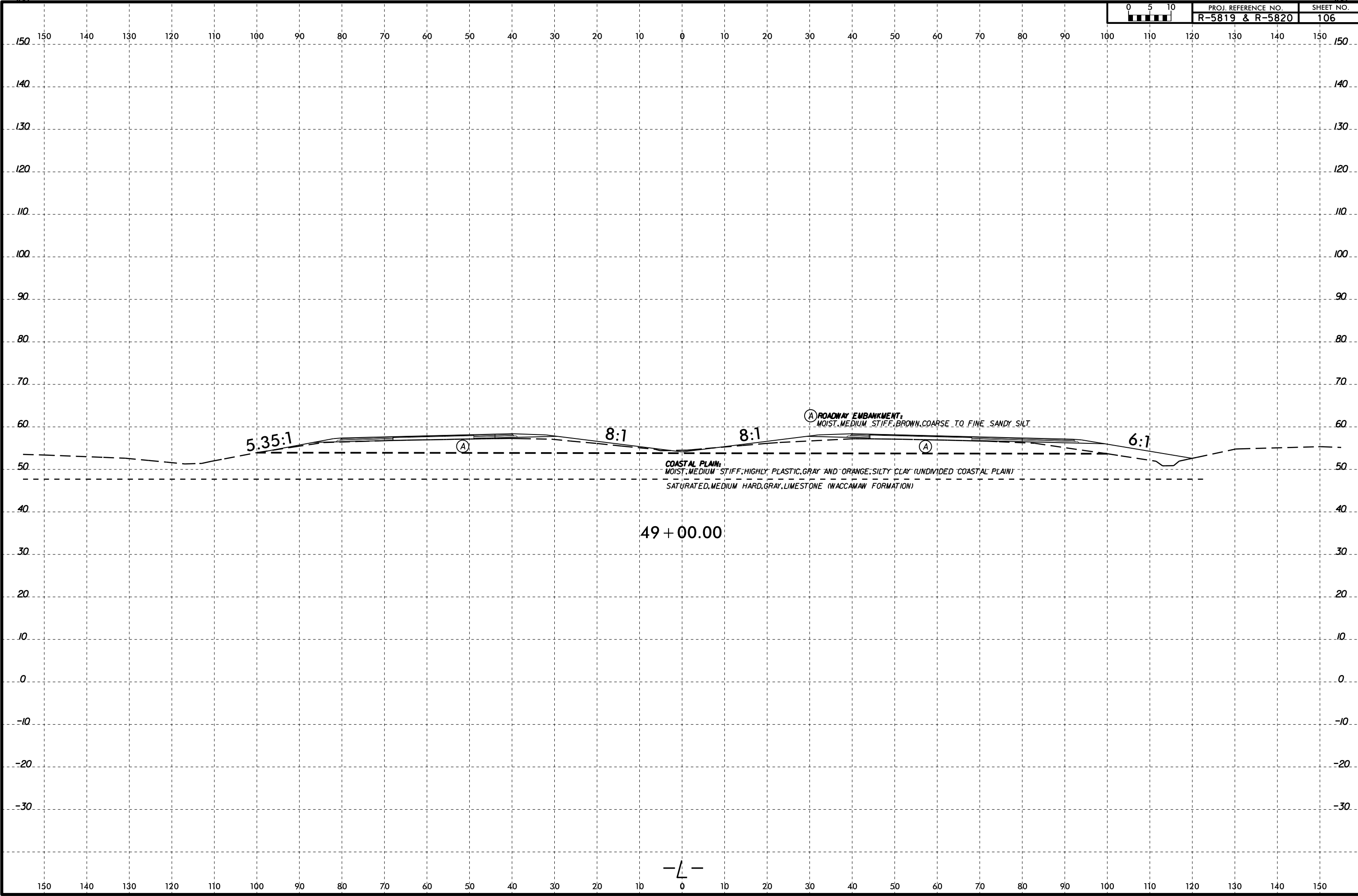
(A) ROADWAY EMBANKMENT:
MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT

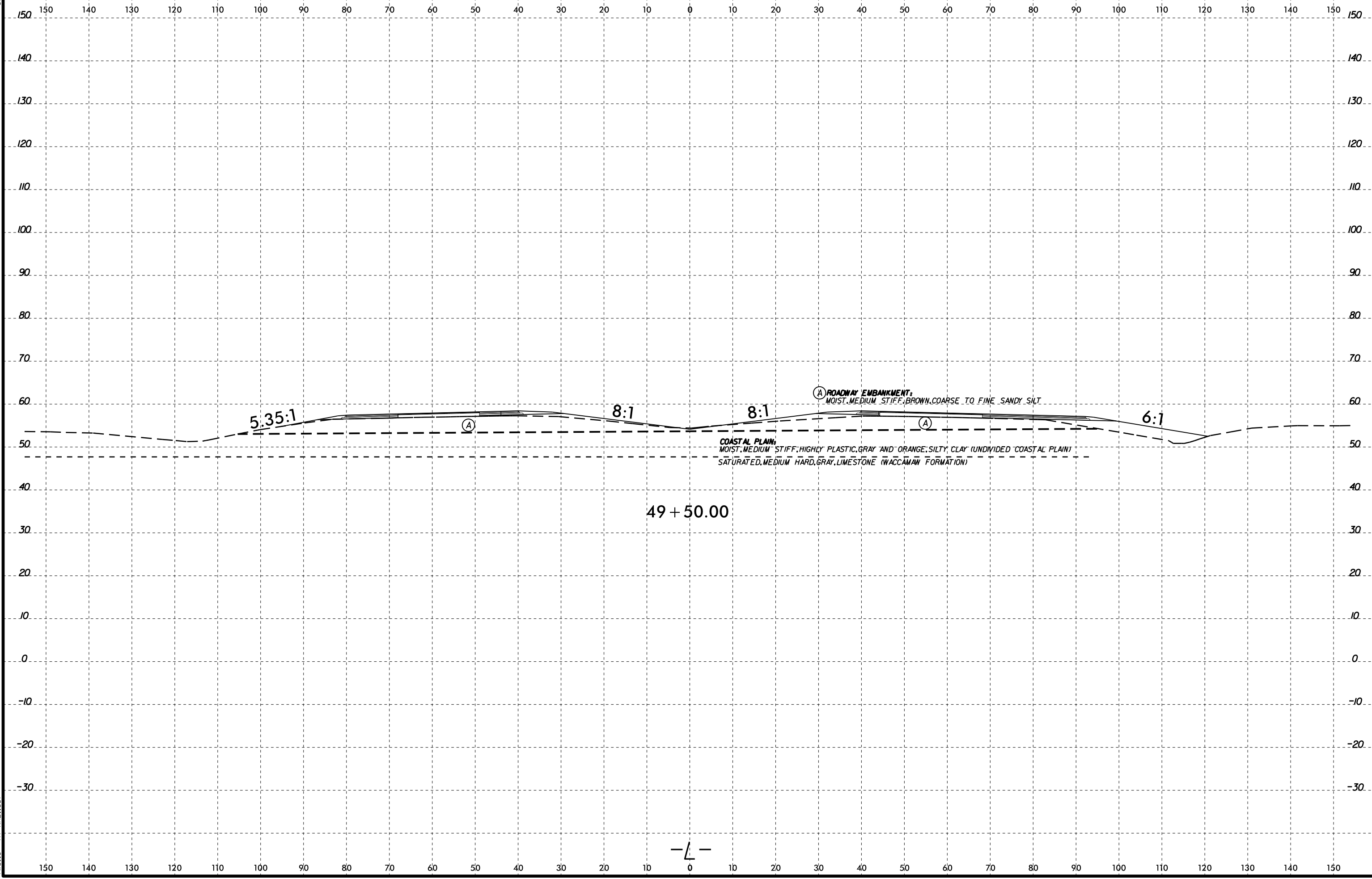
S-28
L 4842
48+42

COASTAL PLAIN:
MOIST, MEDIUM STIFF, HIGHLY PLASTIC, GRAY AND ORANGE, SILTY CLAY (UNDIVIDED COASTAL PLAIN)
SATURATED, MEDIUM HARD, GRAY, LIMESTONE (WACCAMAW FORMATION)

7
5
16
BT

01/20





5.35:1

8:1

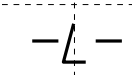
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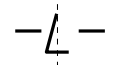
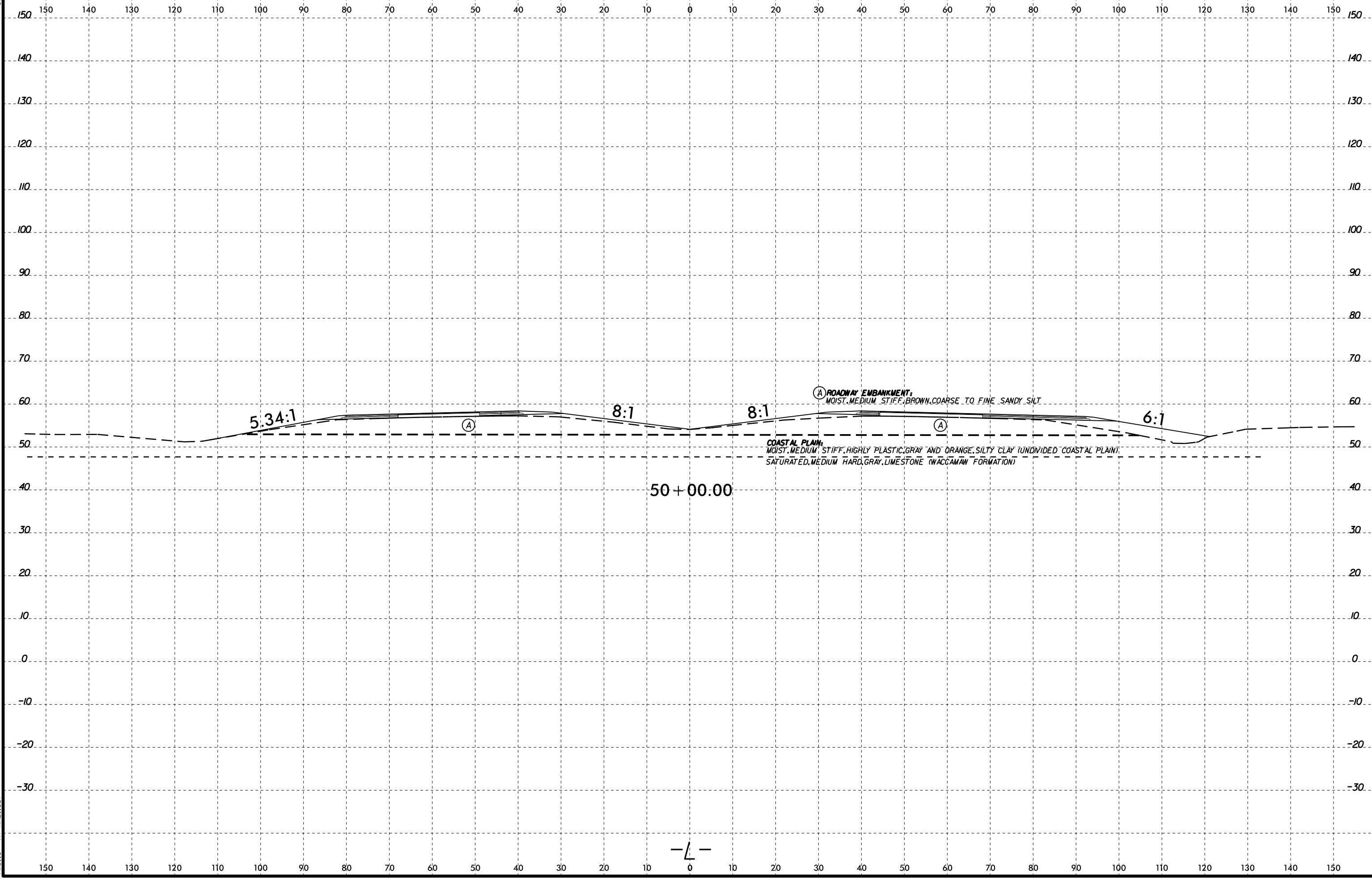
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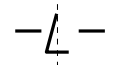
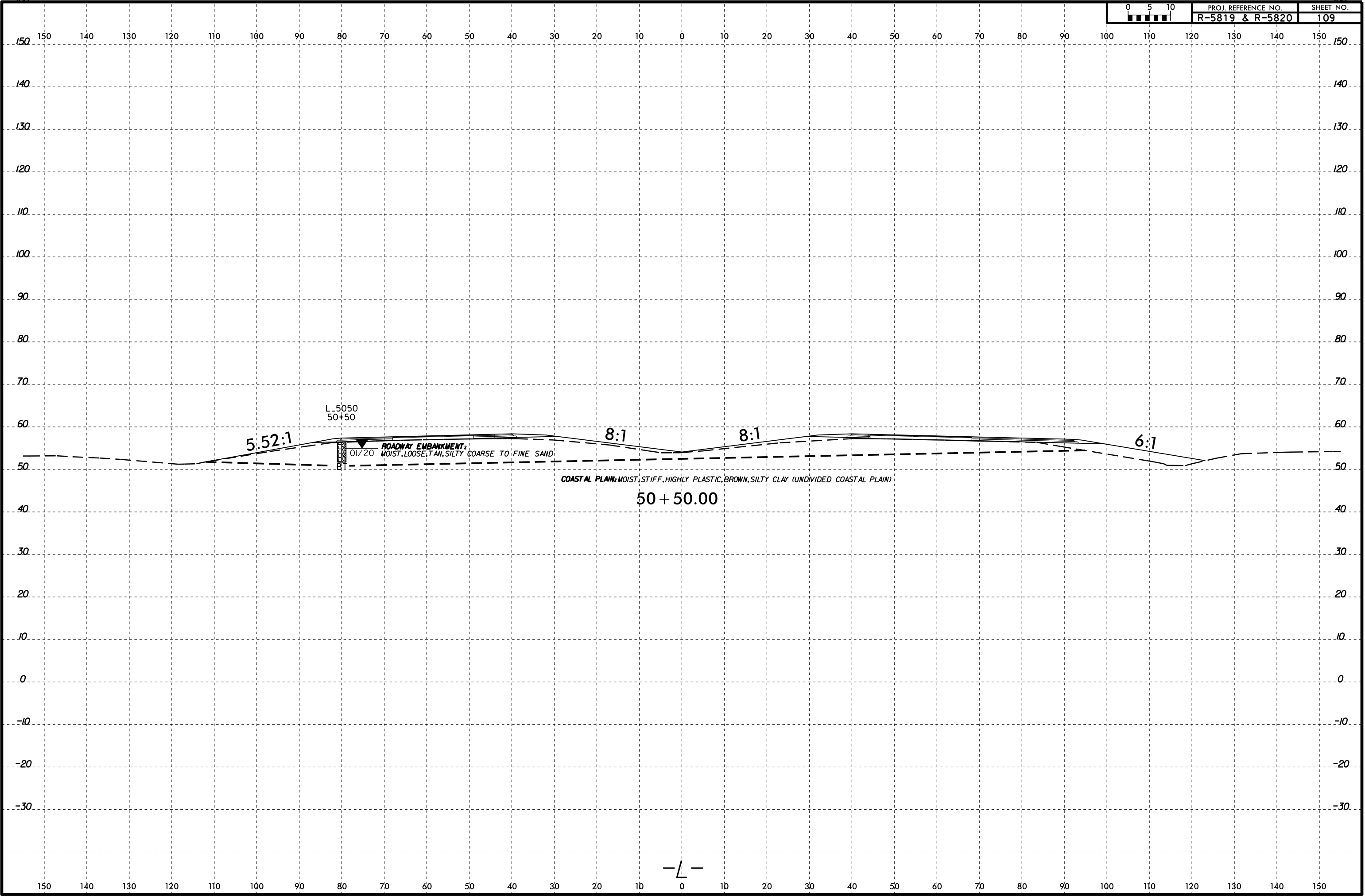
(A) ROADWAY EMBANKMENT:
MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT

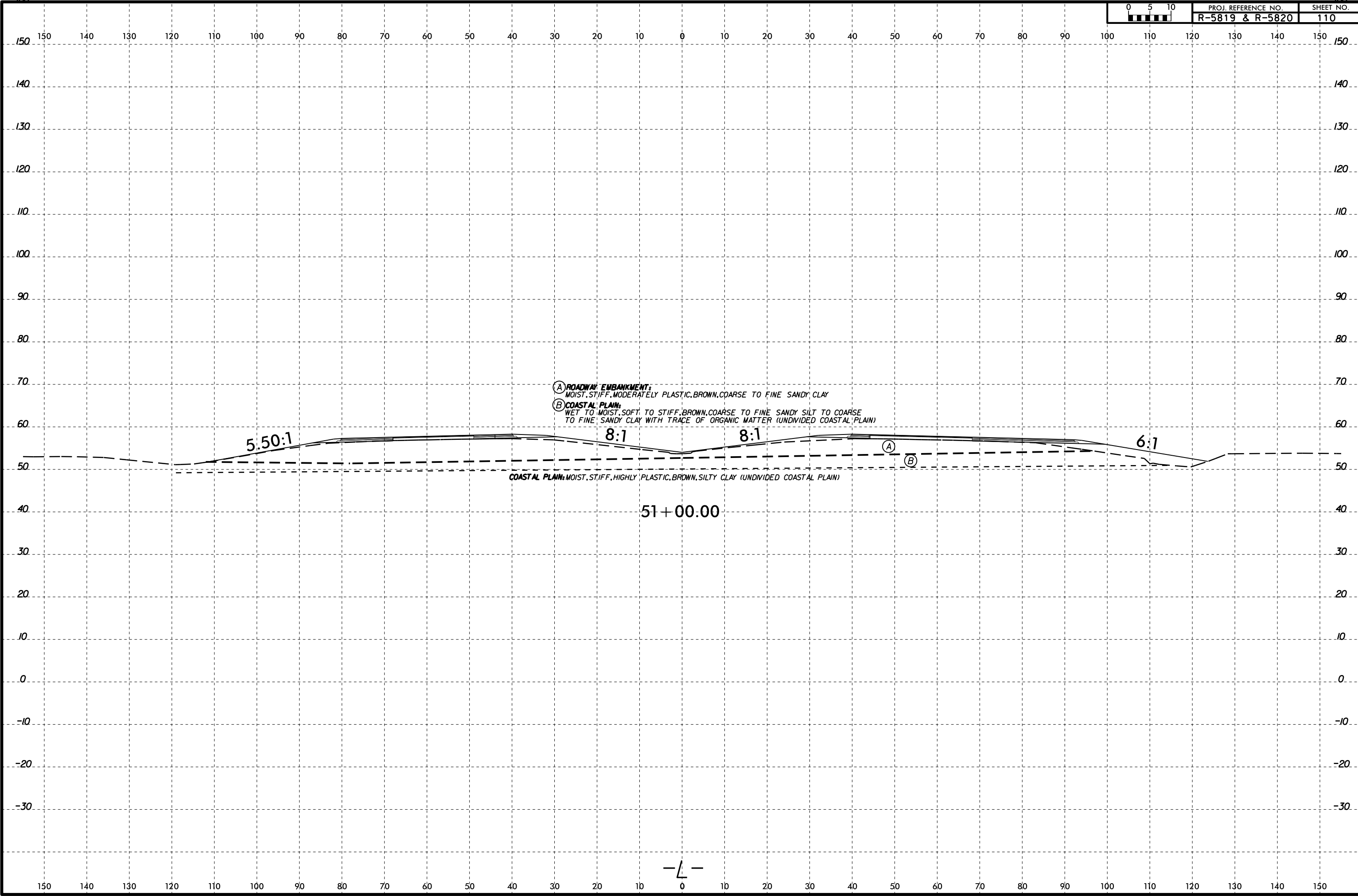
COASTAL PLAIN:
MOIST, MEDIUM STIFF, HIGHLY PLASTIC, GRAY AND ORANGE, SILTY CLAY (UNDIVIDED COASTAL PLAIN)
SATURATED, MEDIUM HARD, GRAY, LIMESTONE (WACCAMAN FORMATION)

49 + 50.00









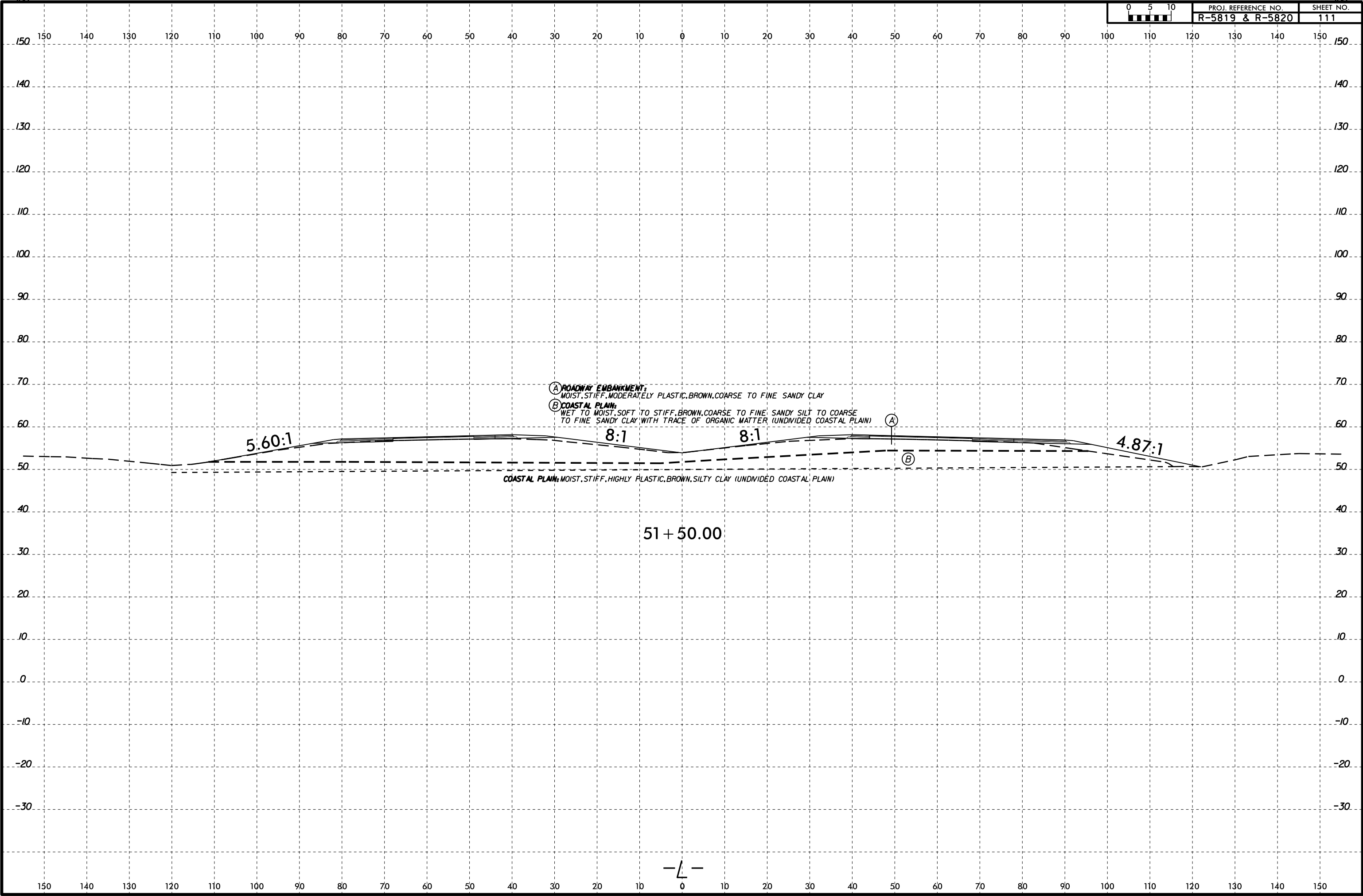
(A) ROADWAY EMBANKMENT:
MOIST, STIFF, MODERATELY PLASTIC, BROWN, COARSE TO FINE SANDY CLAY

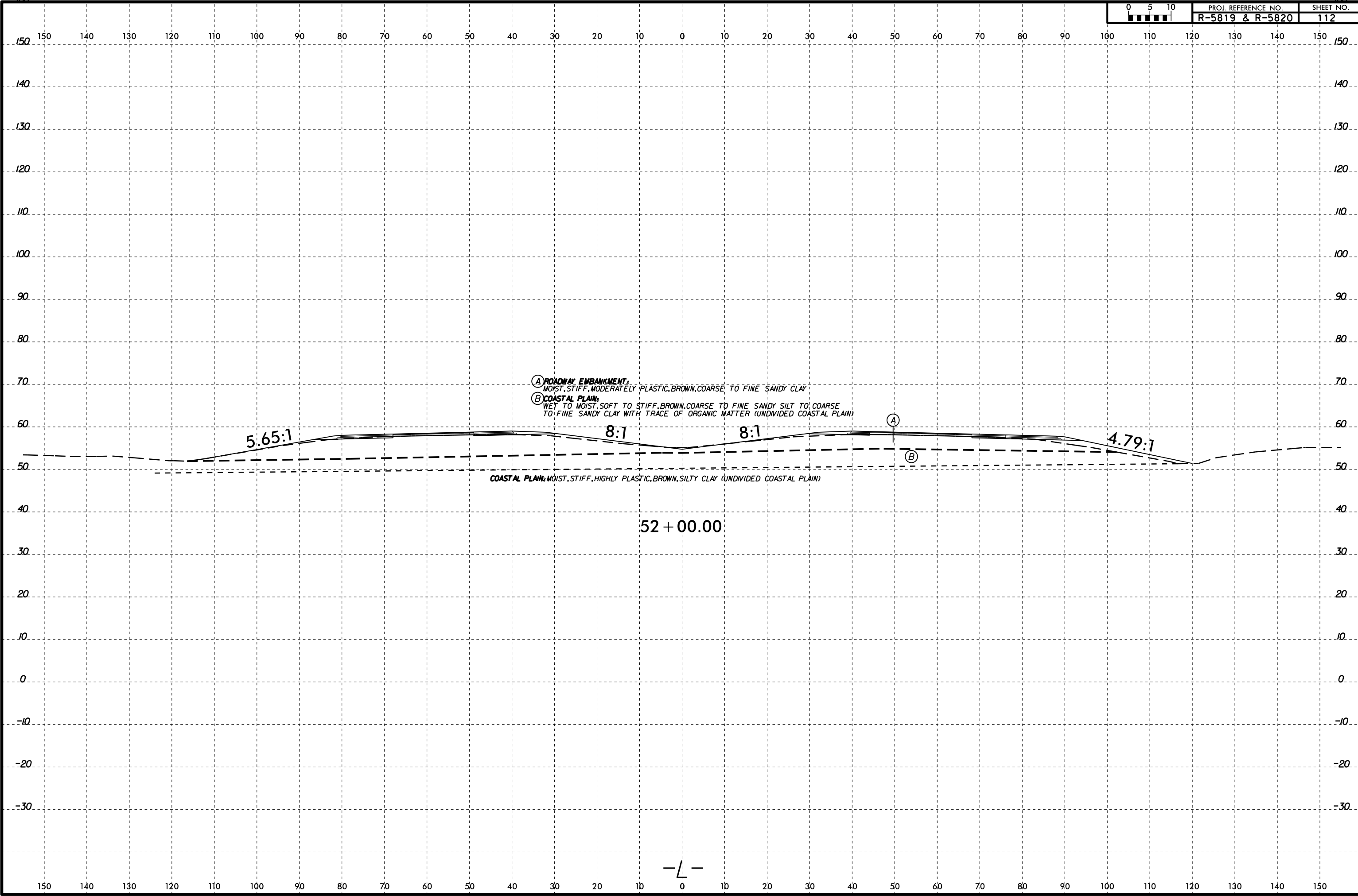
(B) COASTAL PLAIN:
WET TO MOIST, SOFT TO STIFF, BROWN, COARSE TO FINE SANDY SILT TO COARSE
TO FINE SANDY CLAY WITH TRACE OF ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN: MOIST, STIFF, HIGHLY PLASTIC, BROWN, SILTY CLAY (UNDIVIDED COASTAL PLAIN)

51+00.00





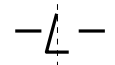


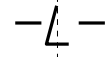
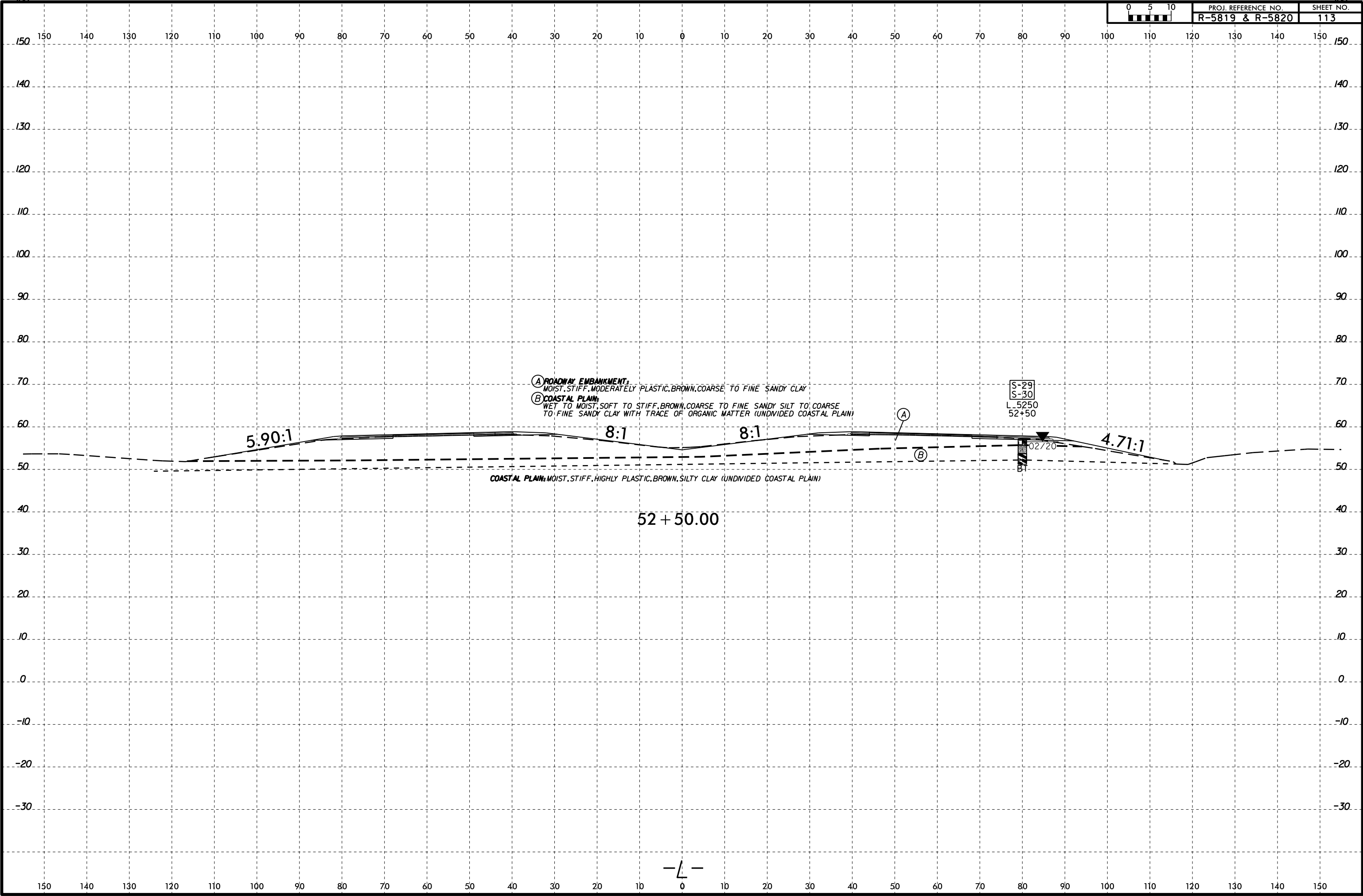
(A) **ROADWAY EMBANKMENT:**
MOIST, STIFF, MODERATELY PLASTIC, BROWN, COARSE TO FINE SANDY CLAY

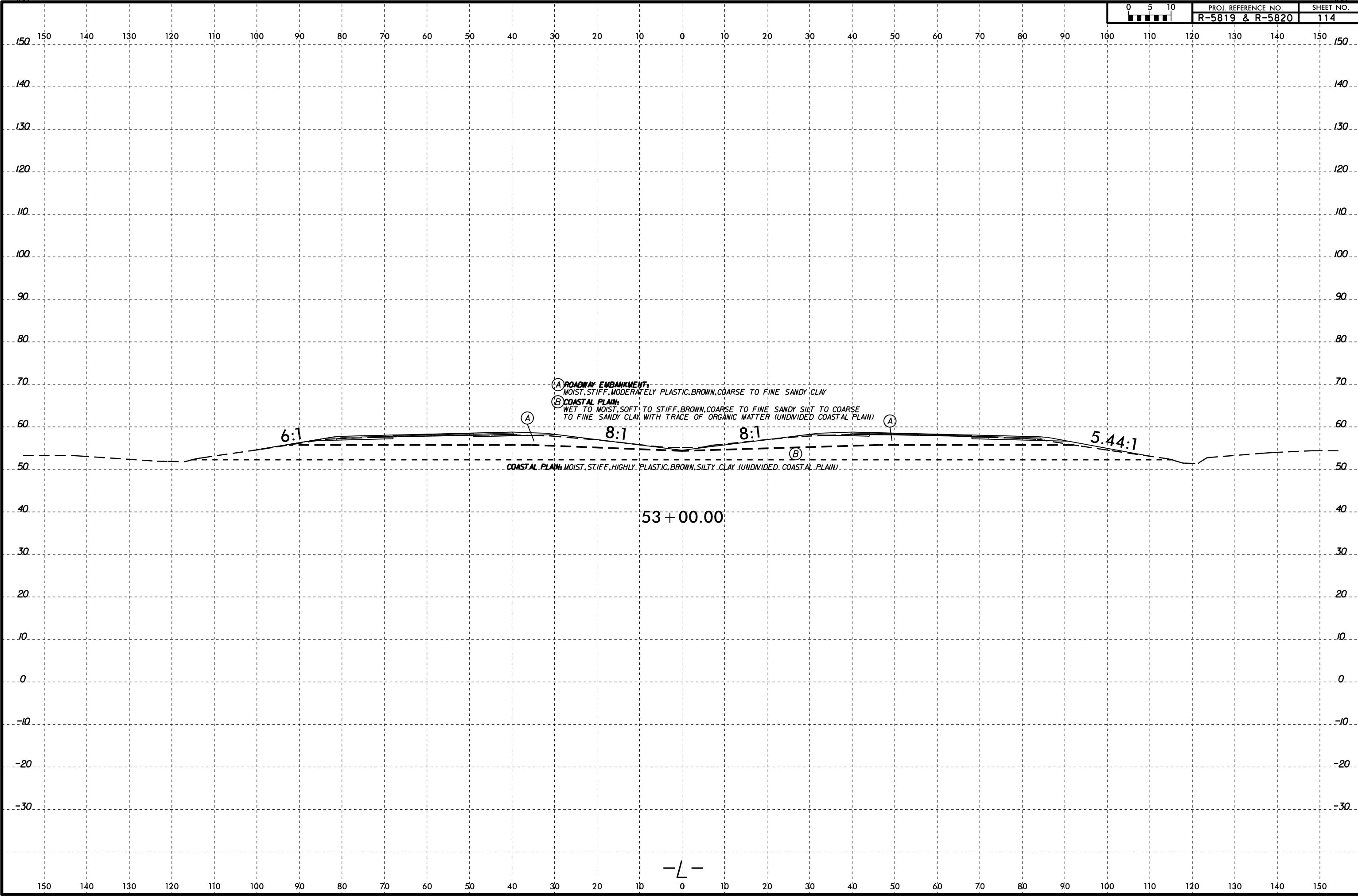
(B) **COASTAL PLAIN:**
WET TO MOIST, SOFT TO STIFF, BROWN, COARSE TO FINE SANDY SILT TO COARSE TO FINE SANDY CLAY WITH TRACE OF ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

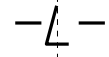
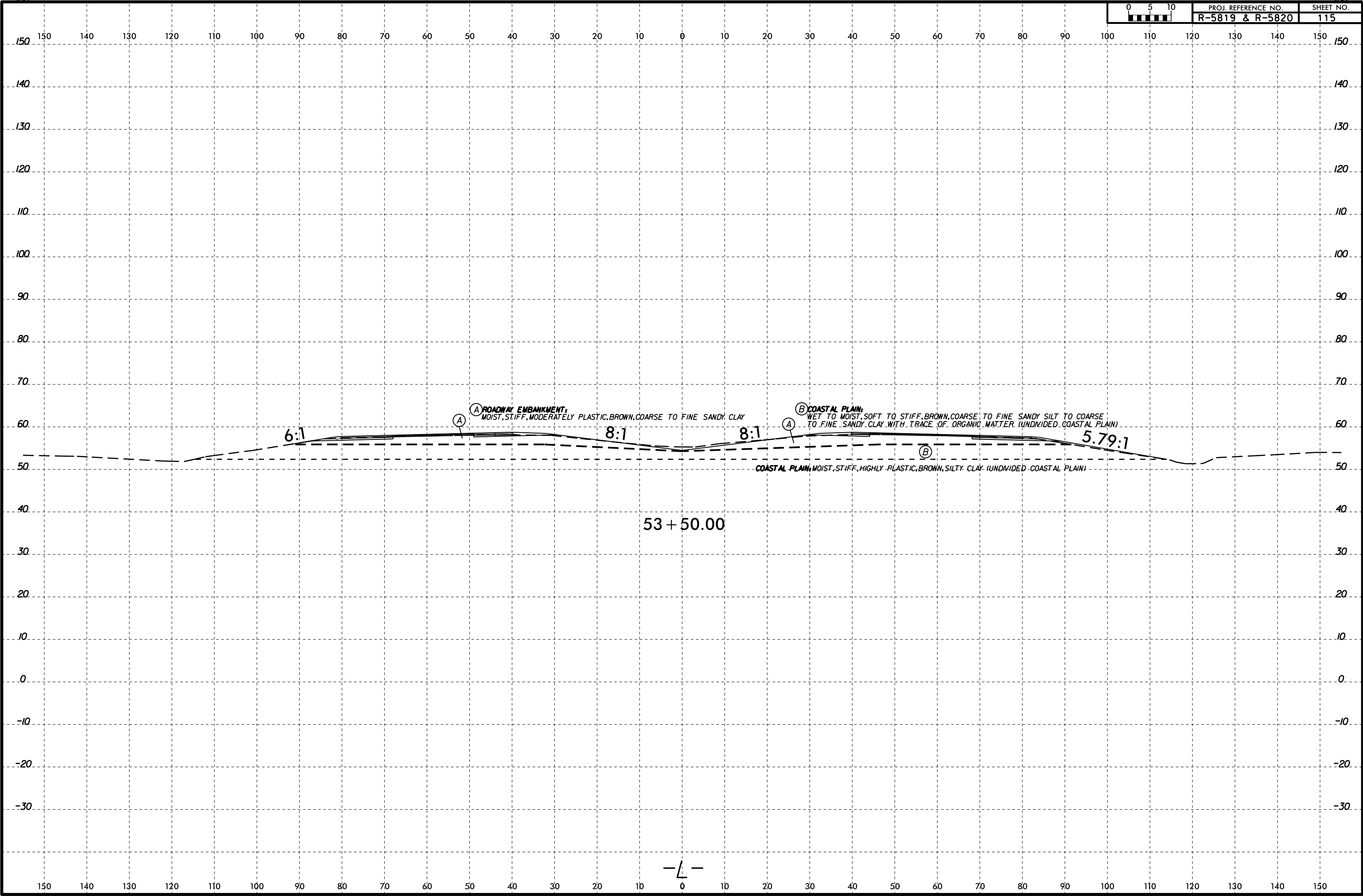
COASTAL PLAIN, MOIST, STIFF, HIGHLY PLASTIC, BROWN, SILTY CLAY (UNDIVIDED COASTAL PLAIN)

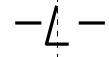
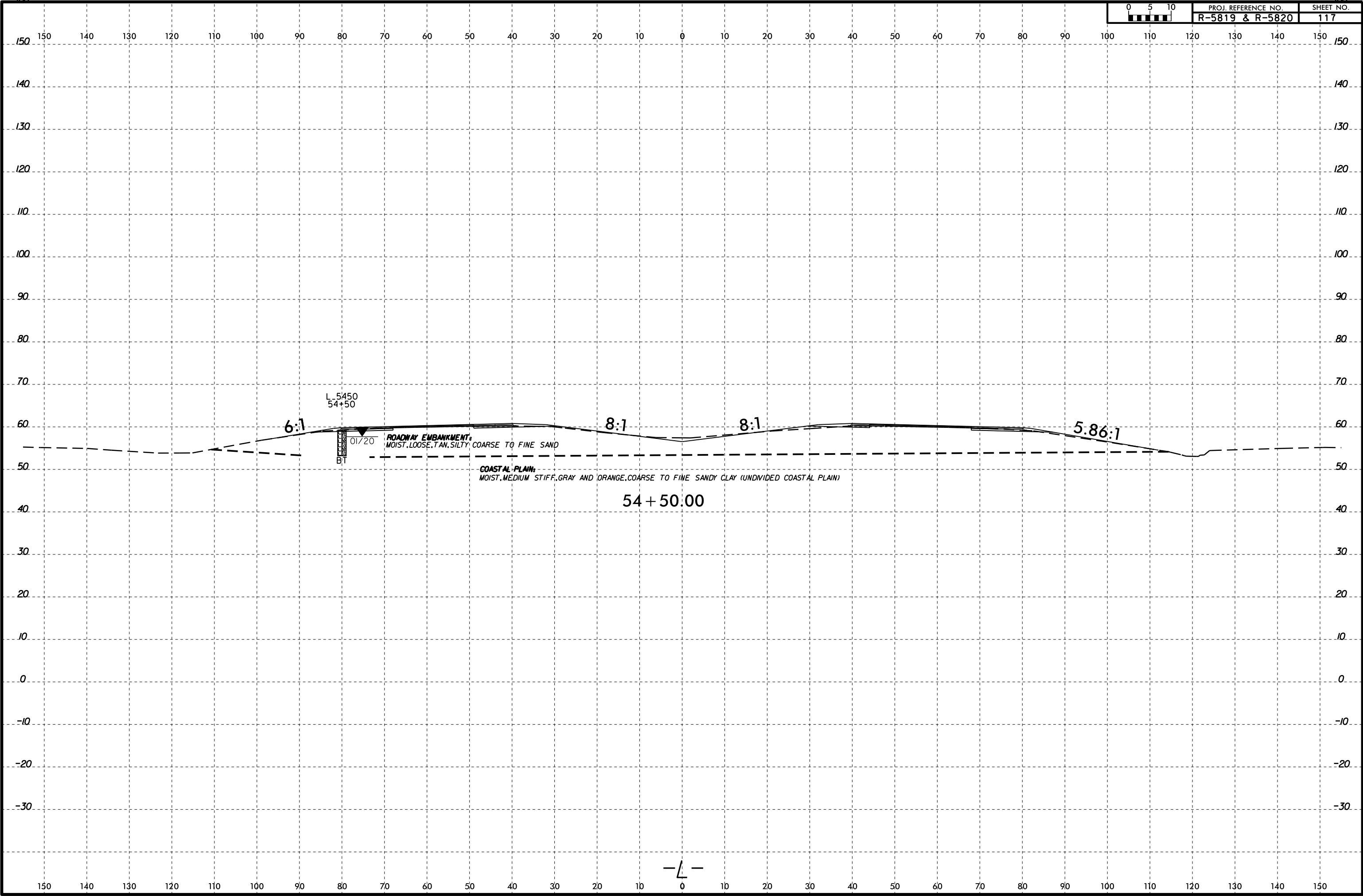
52 + 00.00







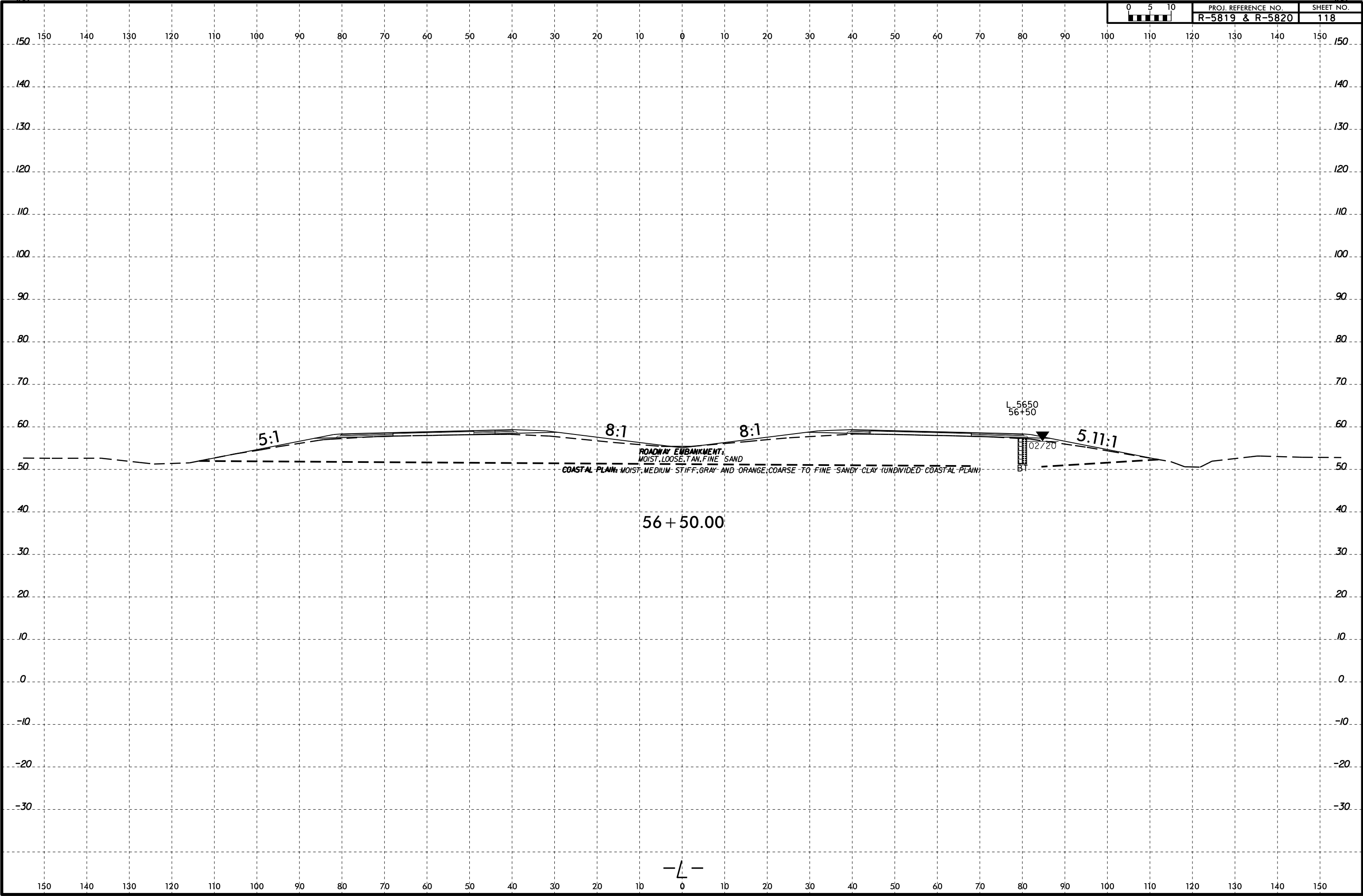




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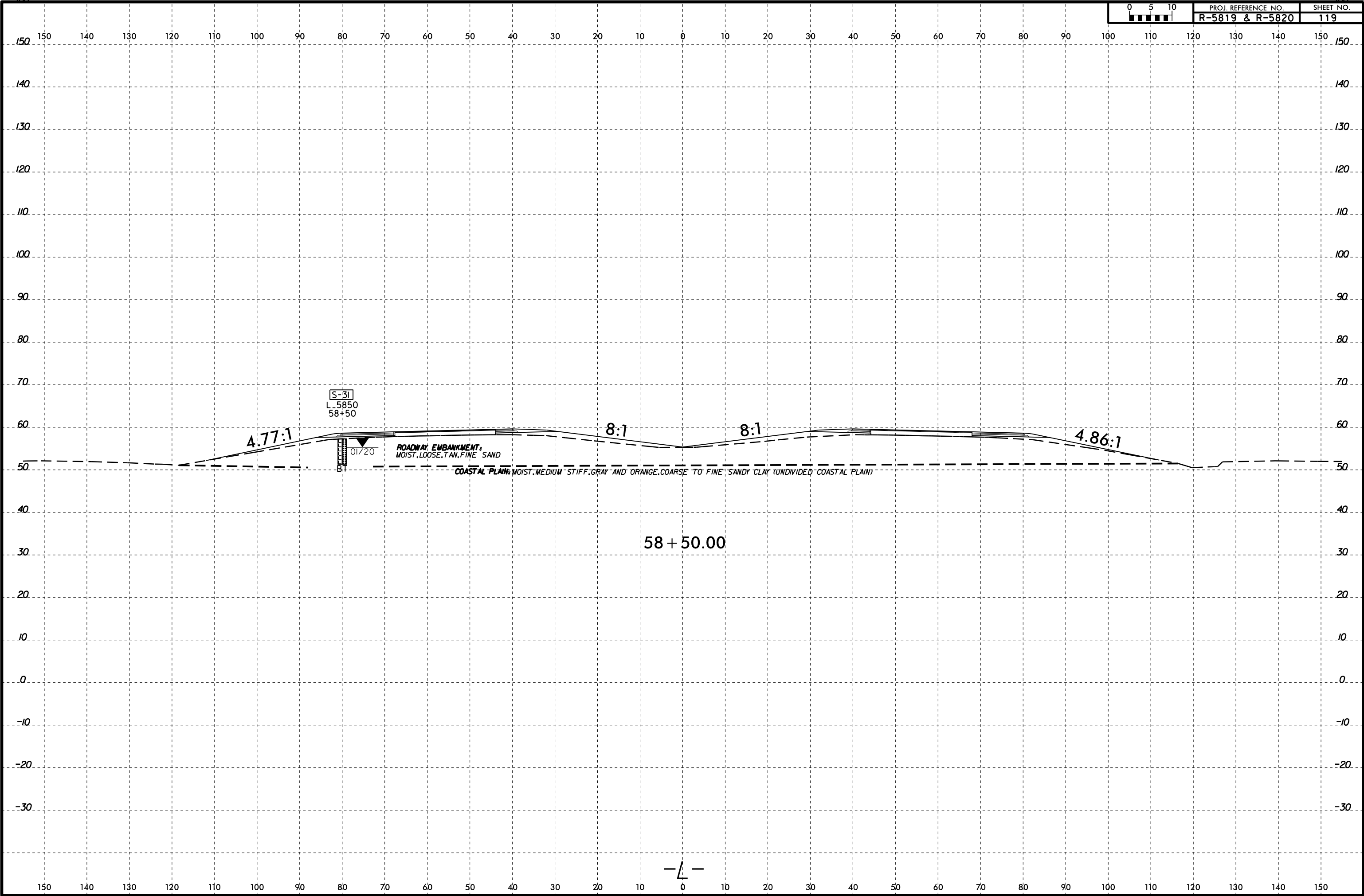
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Wells - At KA211387

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5819 & R-5820	118



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Winters\GEO\TECHNICAL\Projects\Active Projects\20190942.024A R-5819 & R-5820 Roadway\R5819-R5820_GEO\RDW\CADD_GEO\RDW\CADD_GEO\TECH\XSC\R5819_R5820_GEO_XS1.L(2).dgn

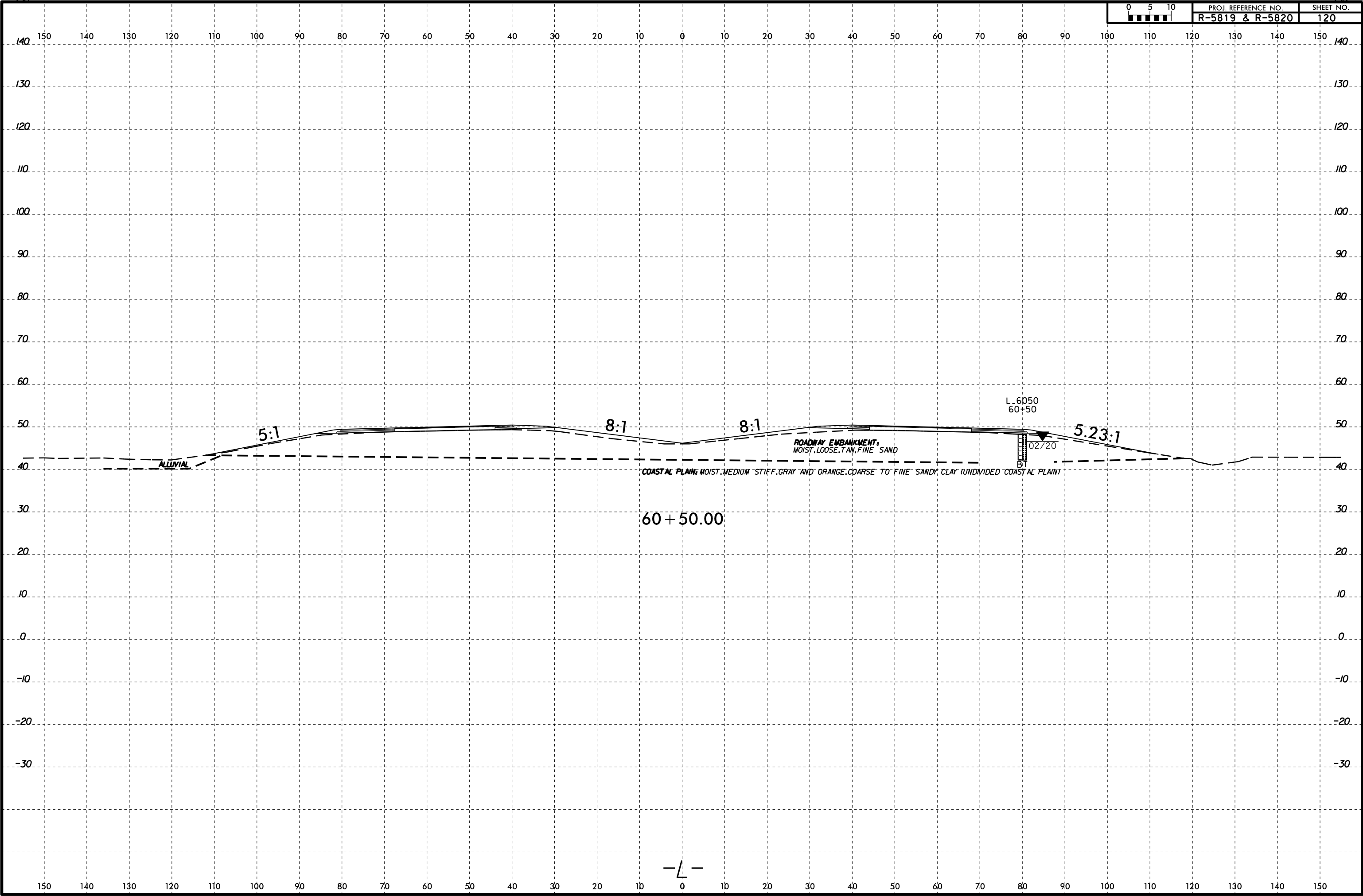
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	R-5819 & R-5820	119

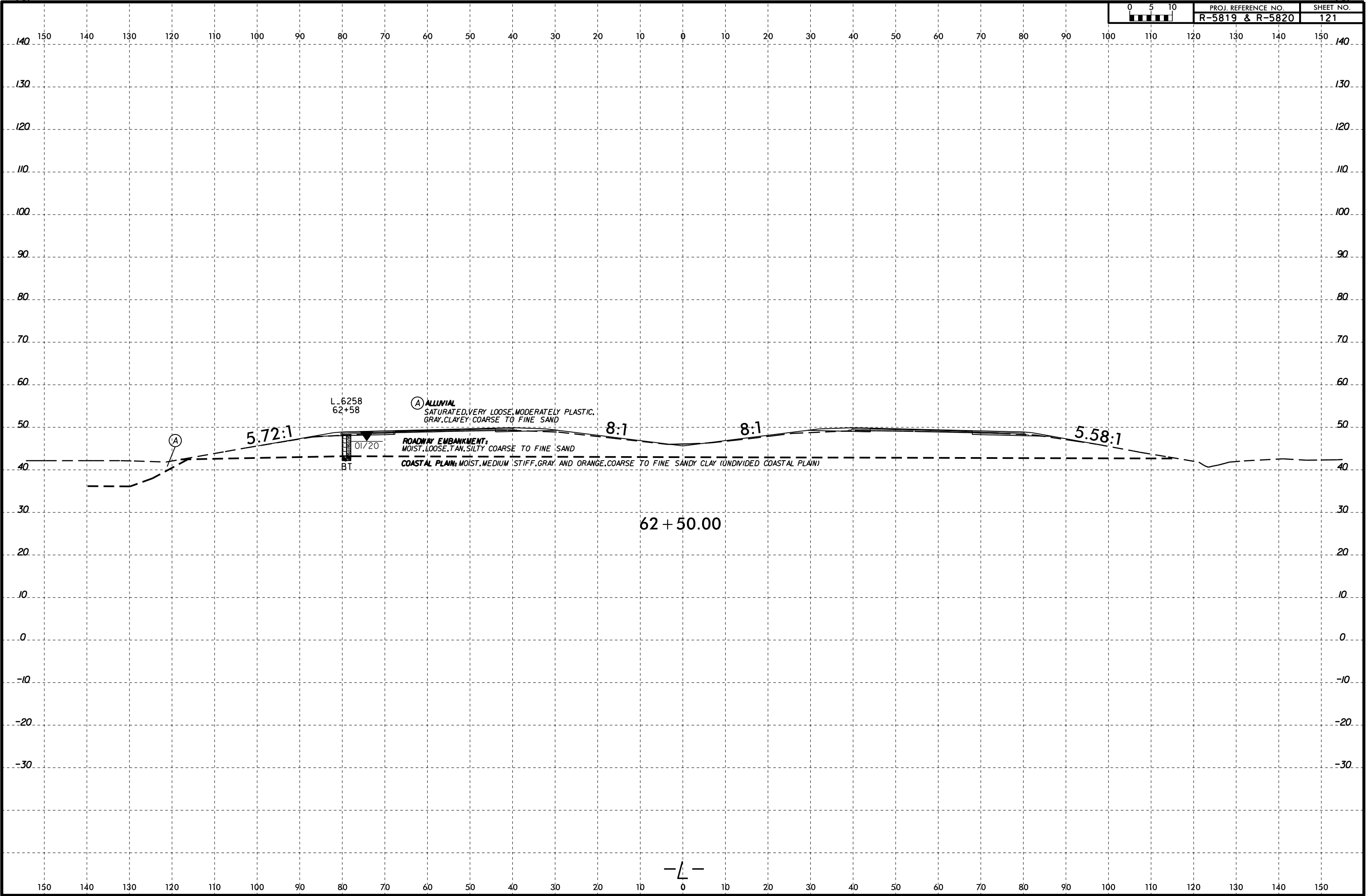


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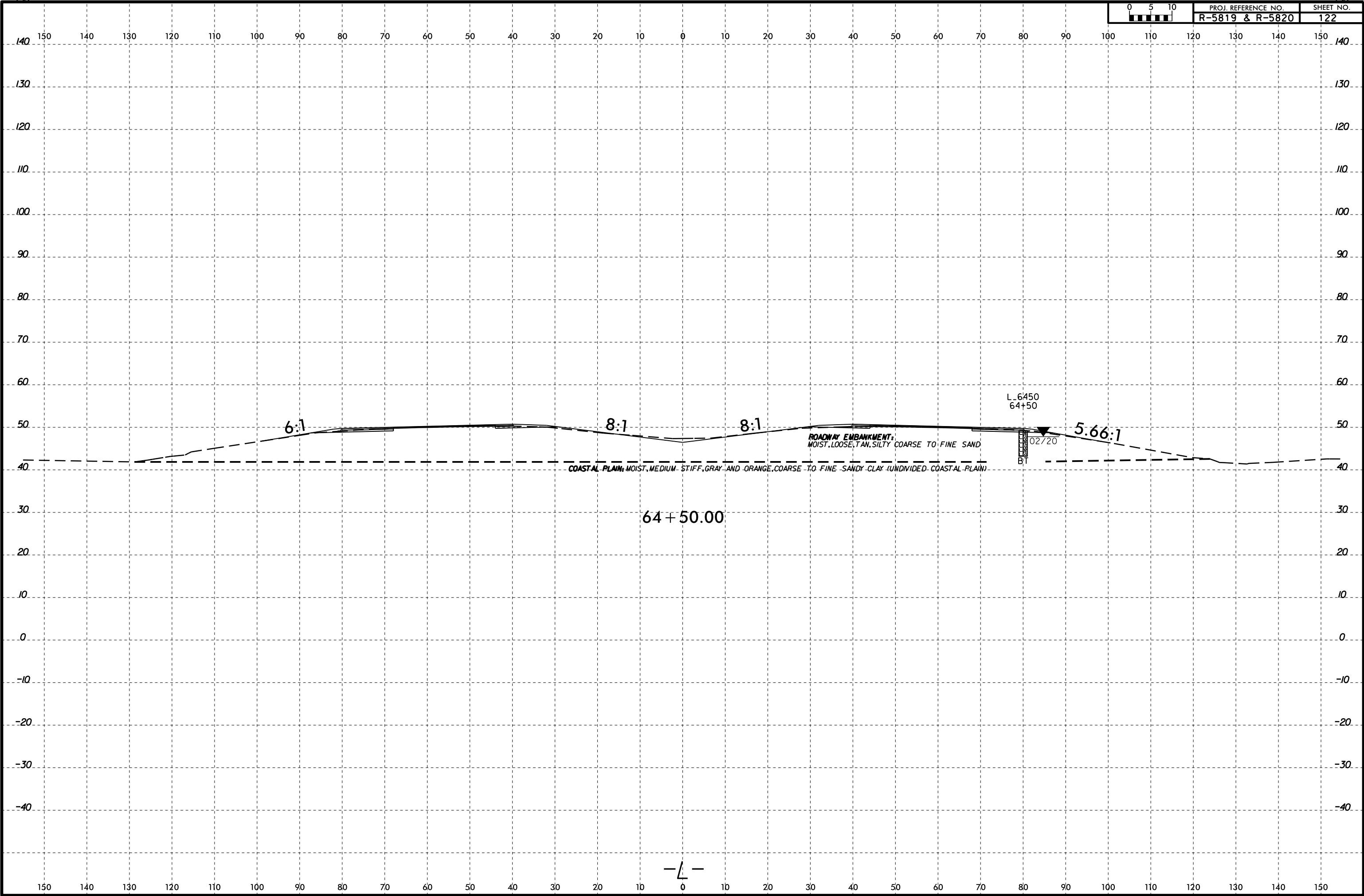
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5819 & R-5820	120





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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5819 & R-5820	122



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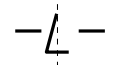
ROADWAY EMBANKMENT:
MOIST, LOOSE, TAN, SILTY COARSE TO FINE SAND

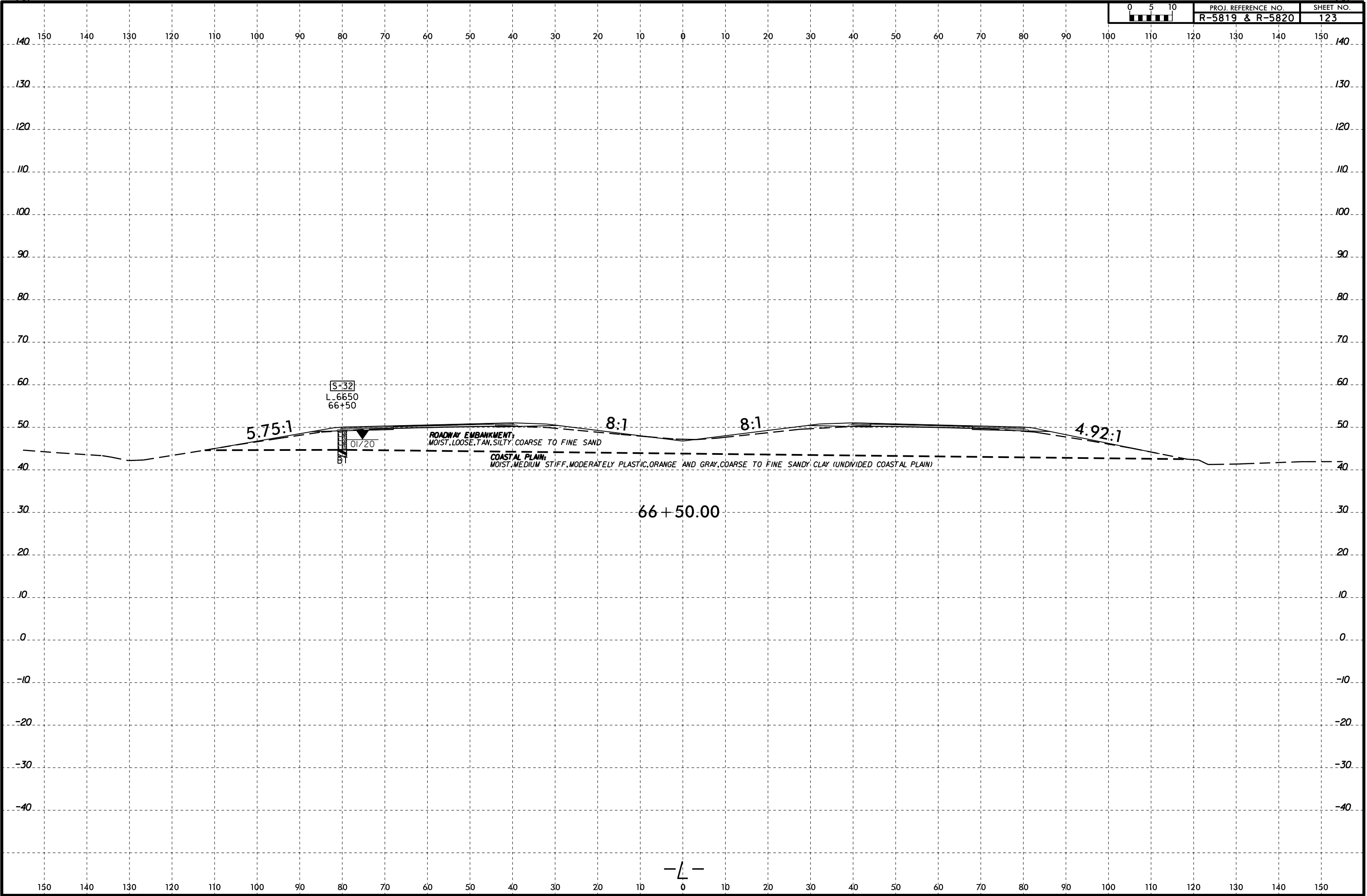
COASTAL PLAIN: MOIST, MEDIUM STIFF, GRAY AND ORANGE, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

L_6450
64+50

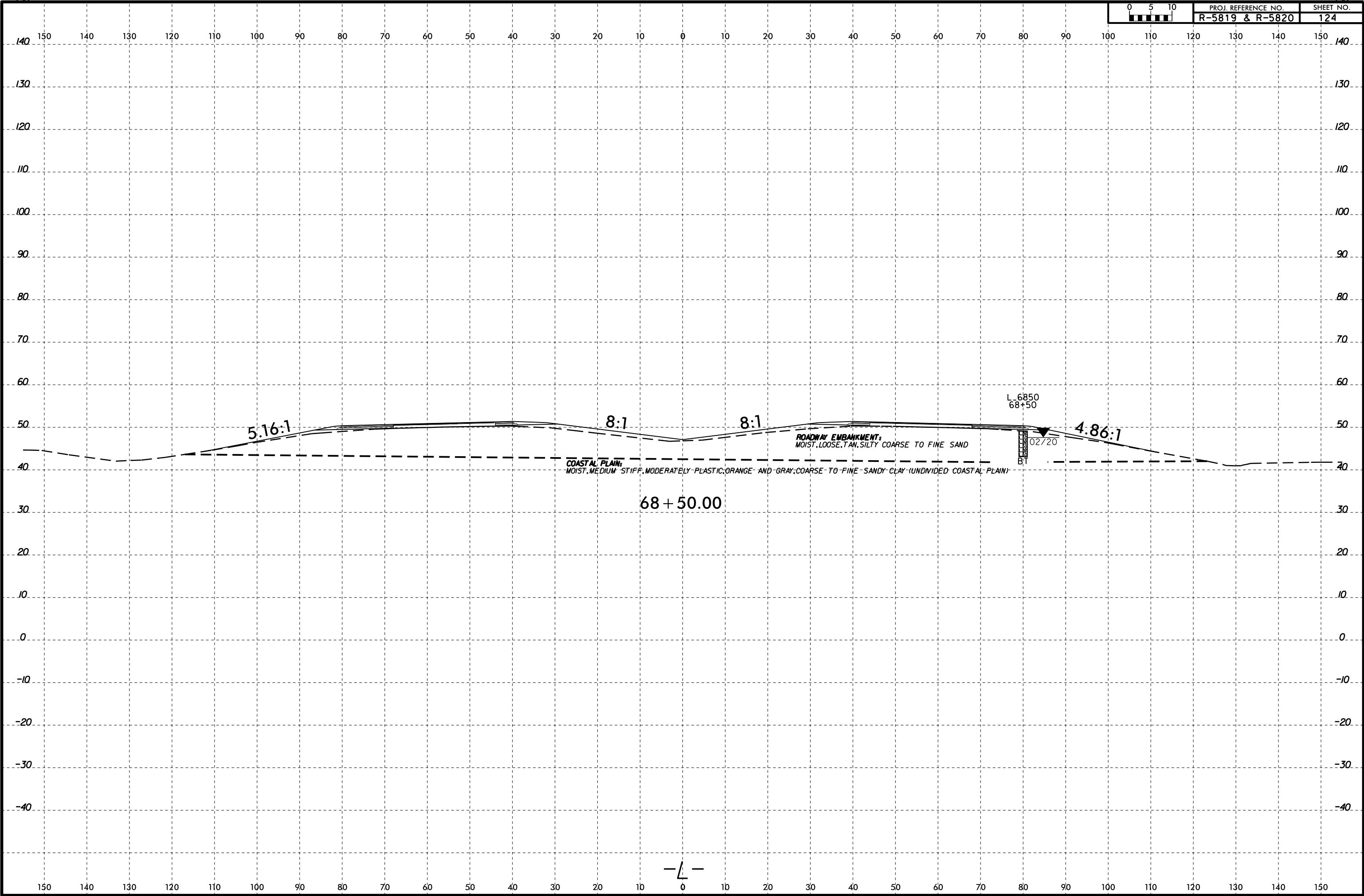
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64 + 50.00



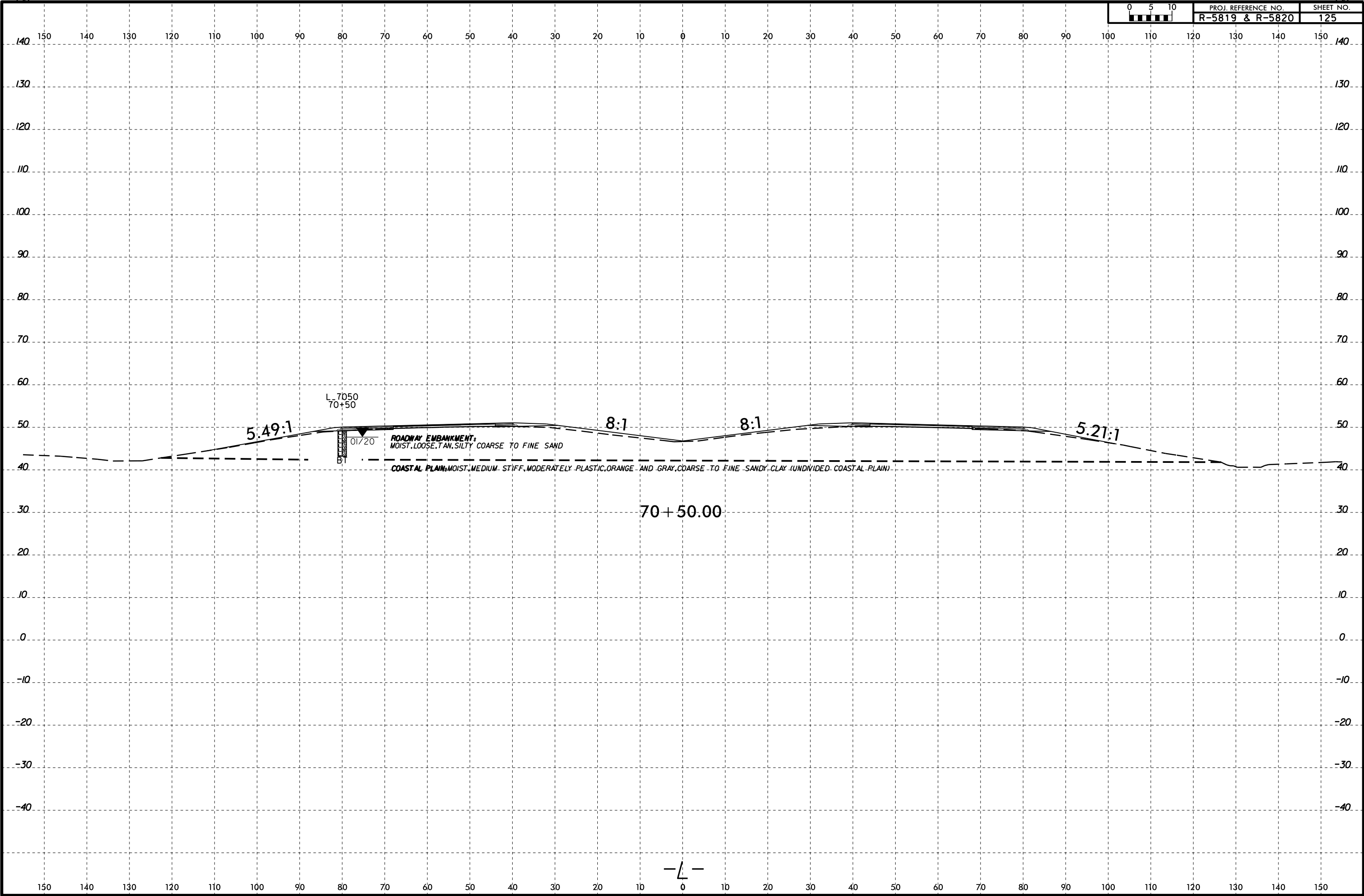


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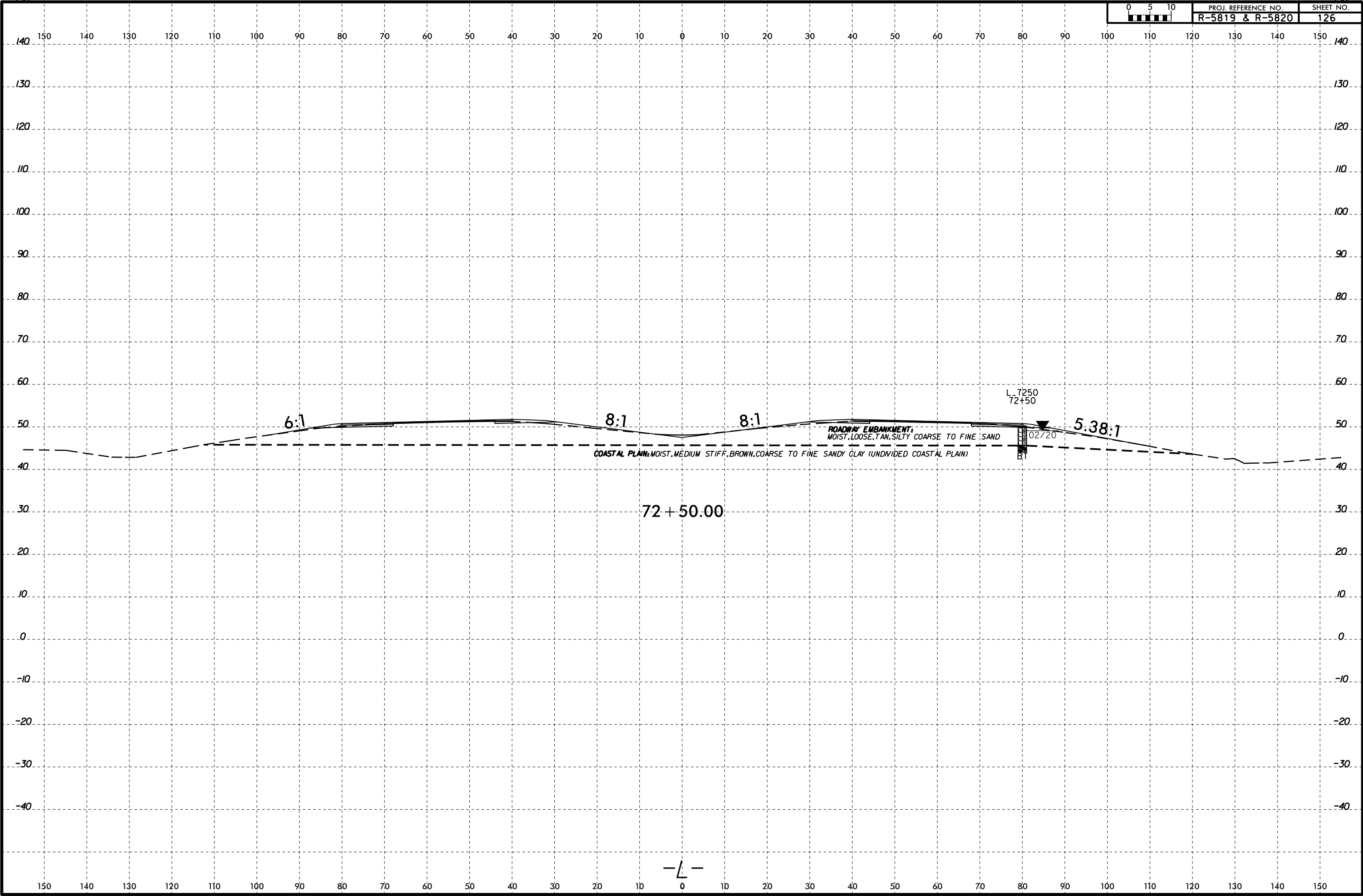
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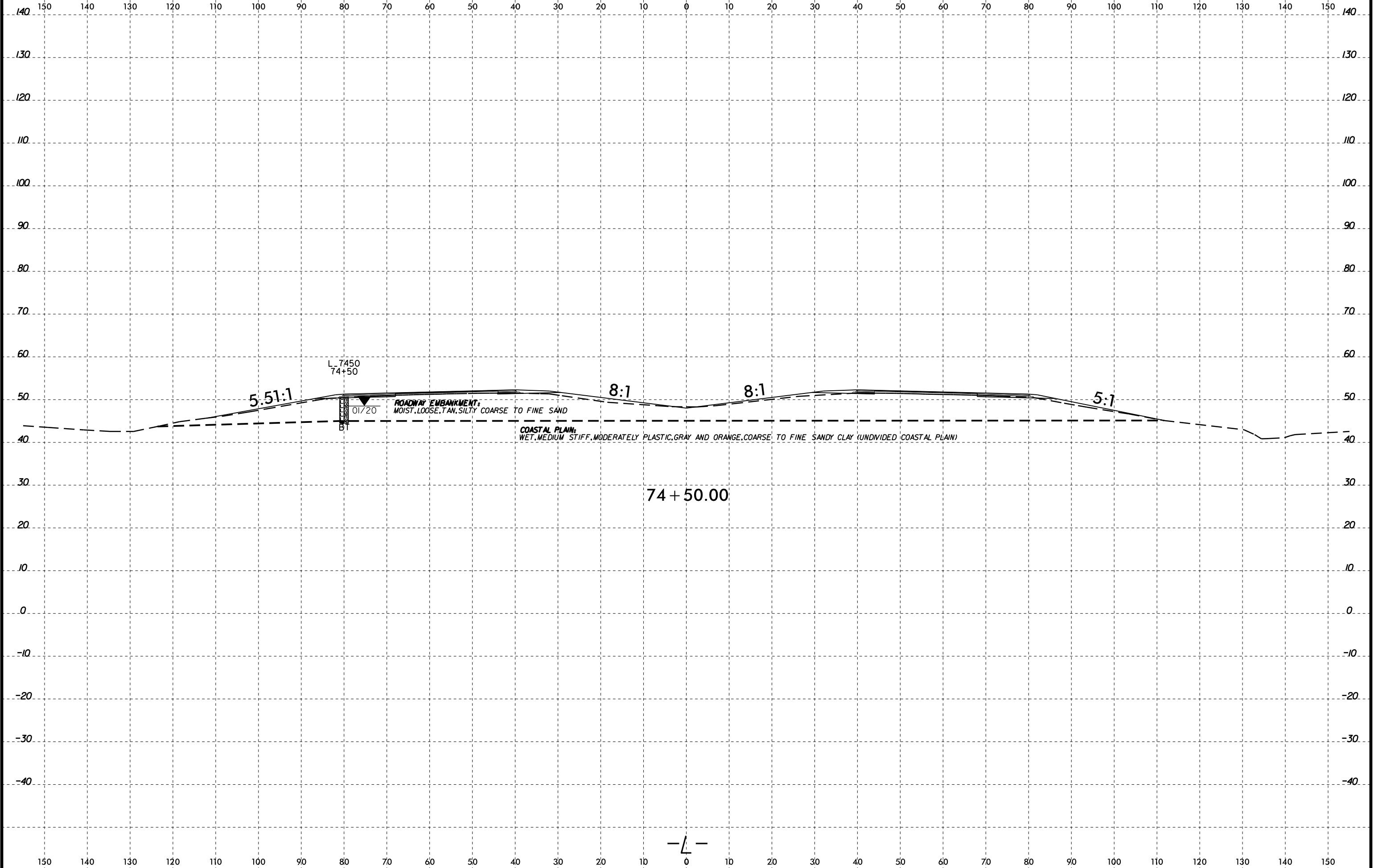


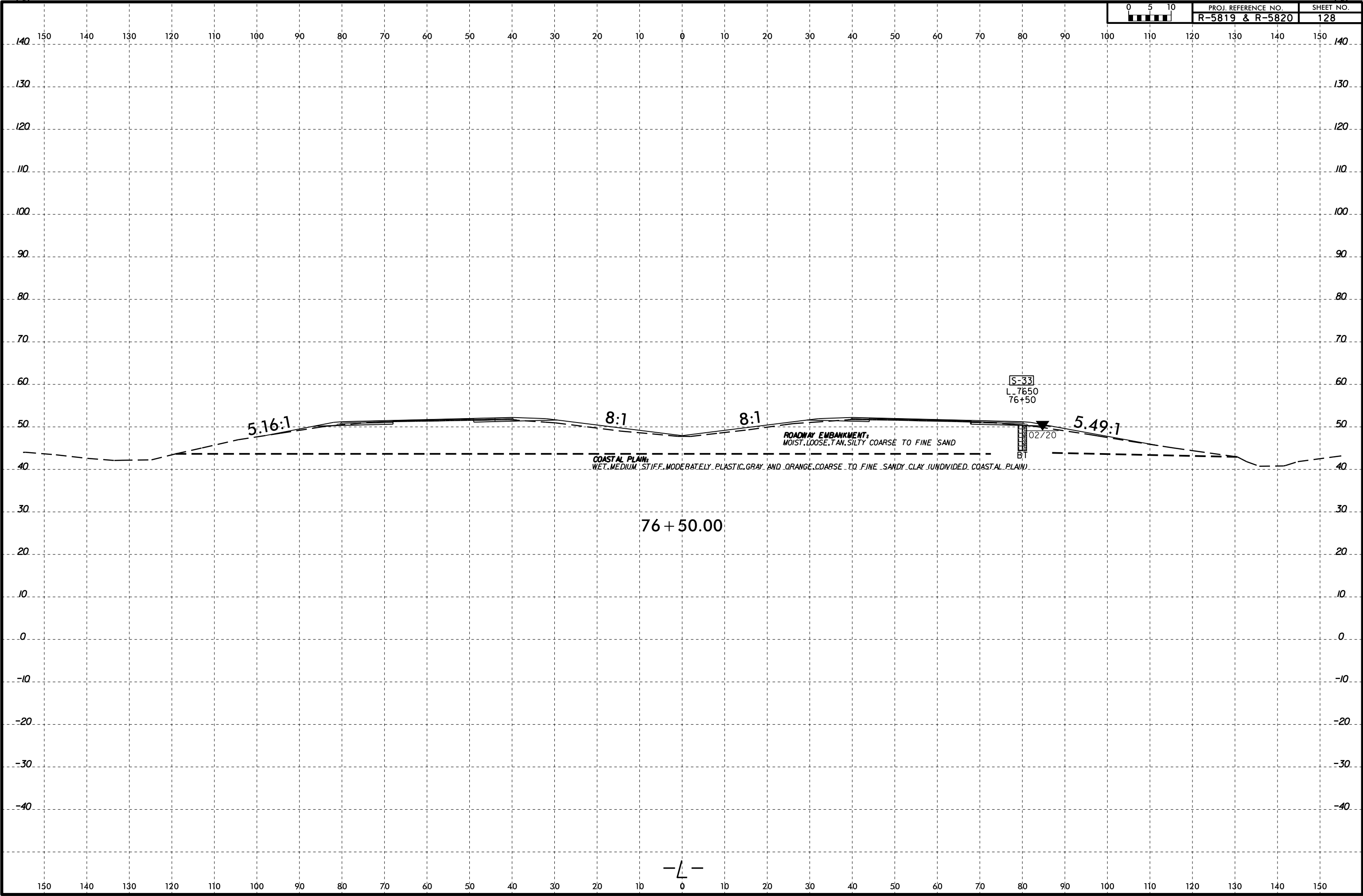
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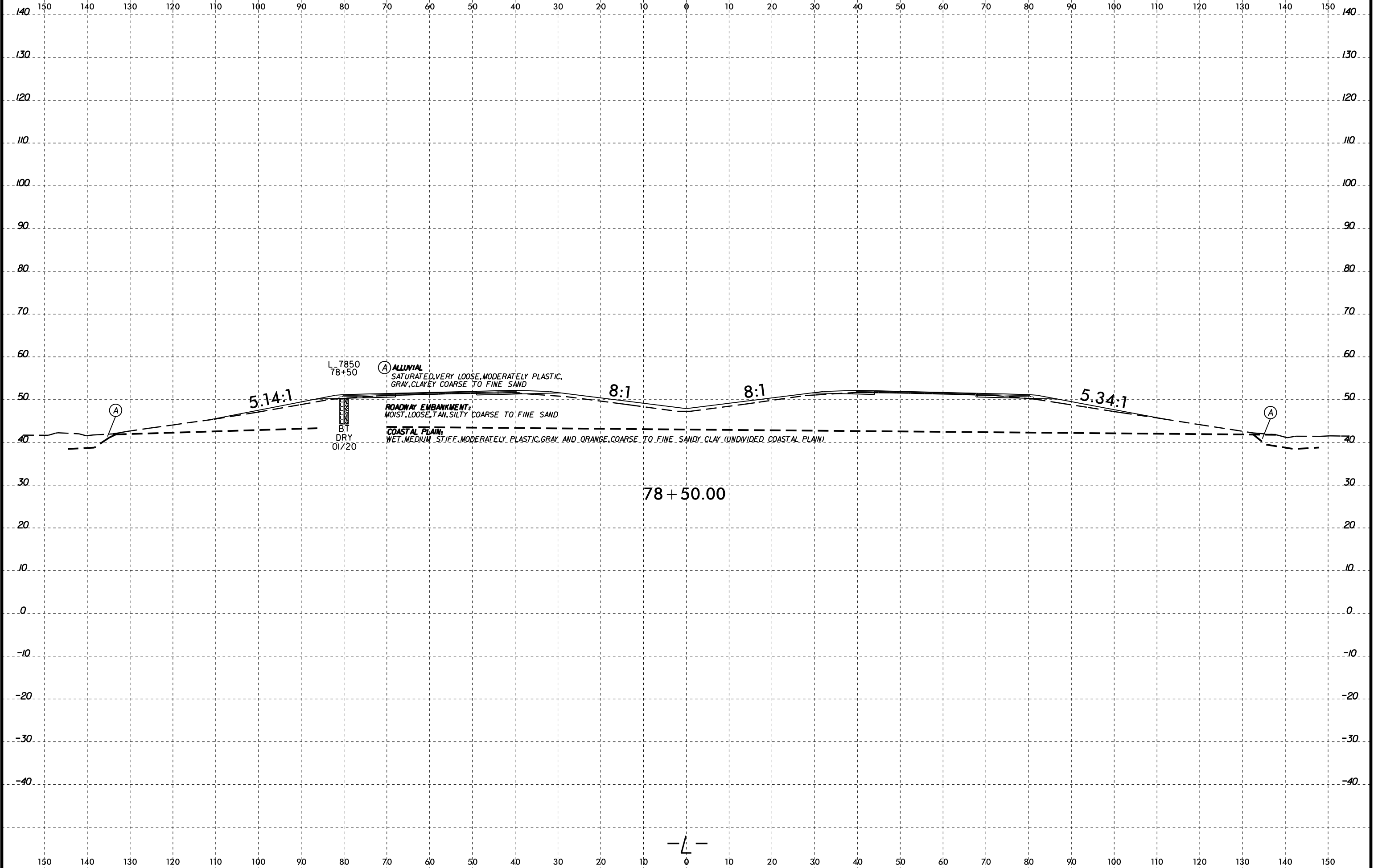
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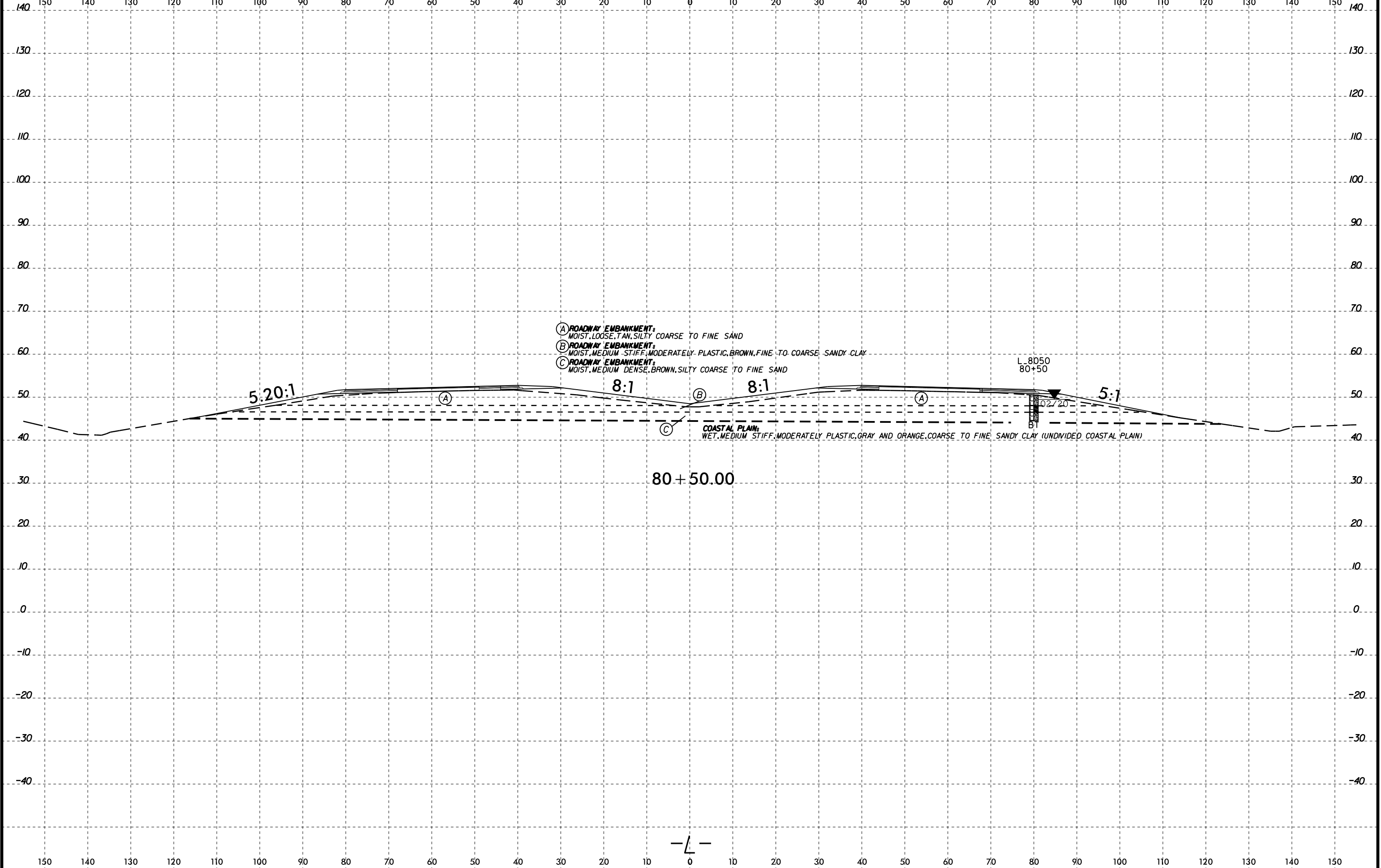
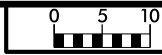
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5819 & R-5820	126

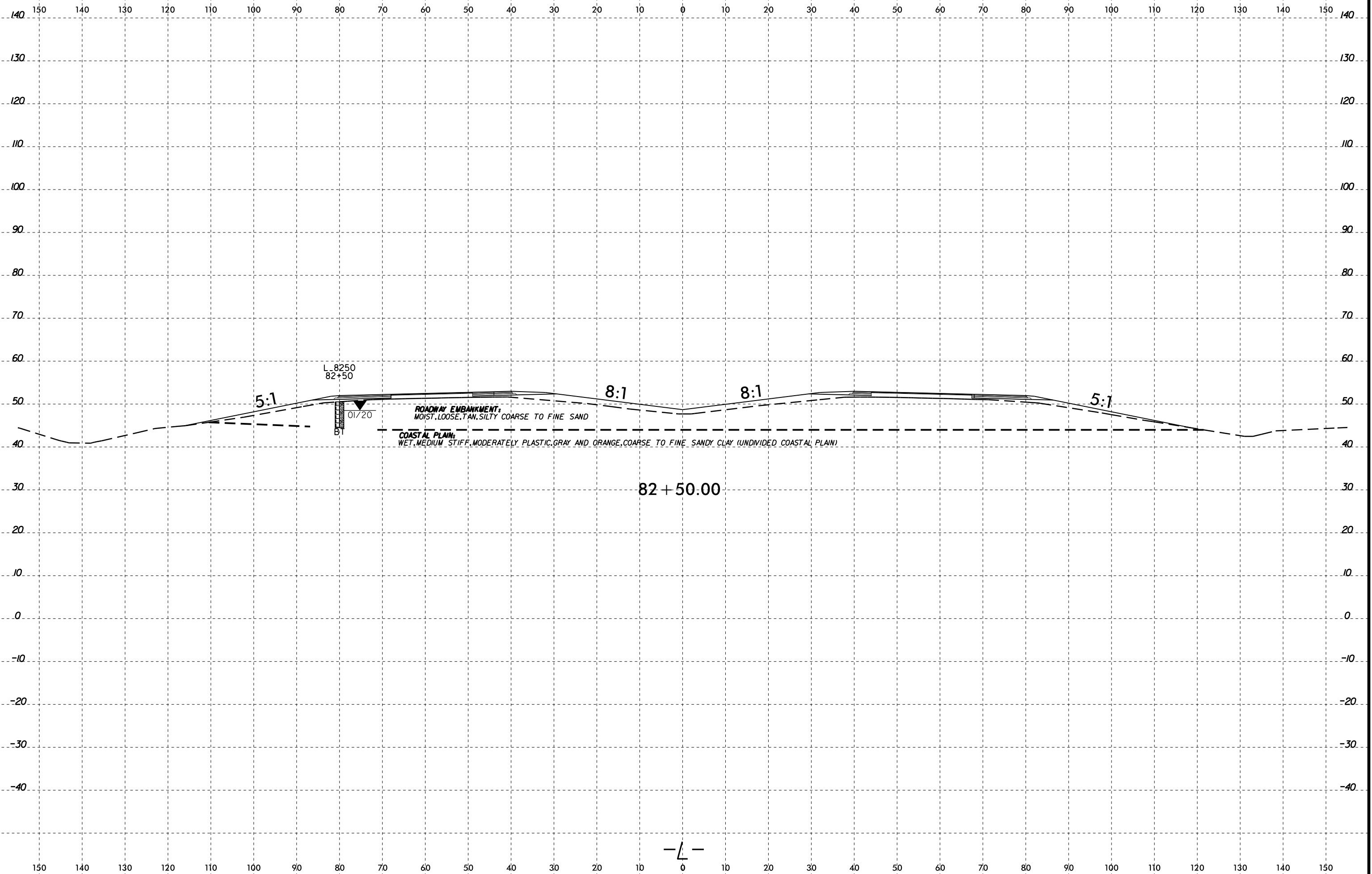




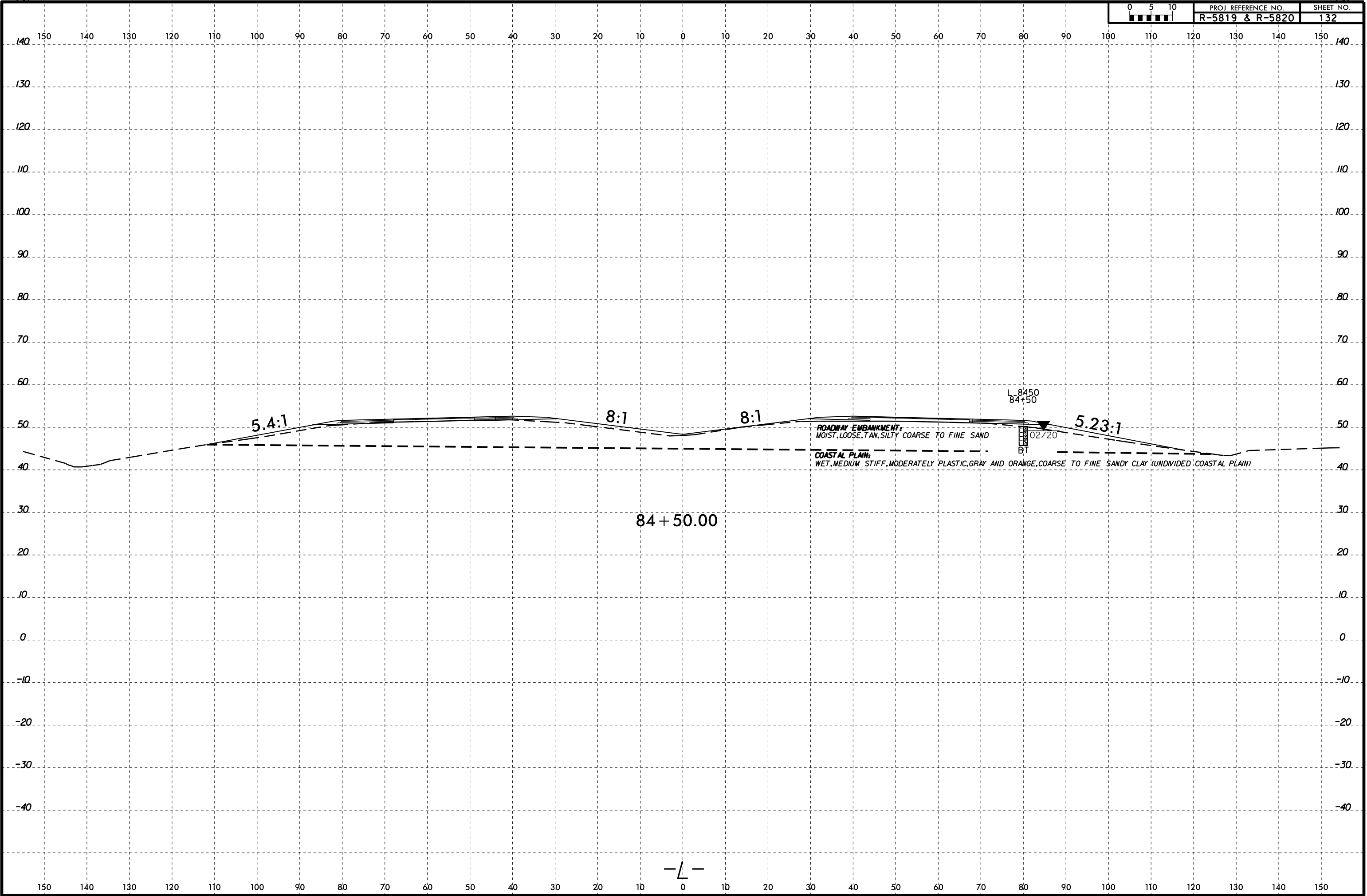


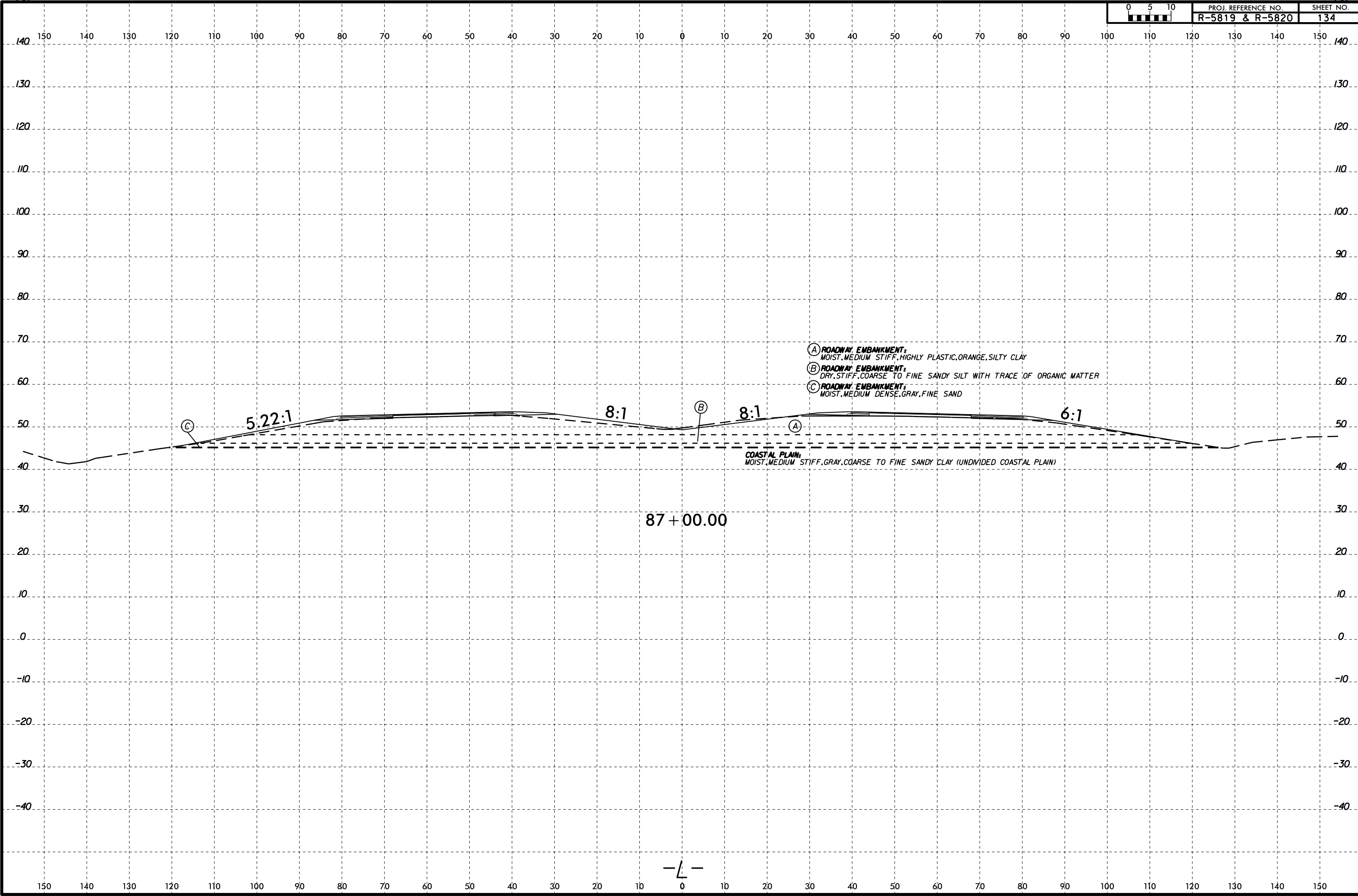


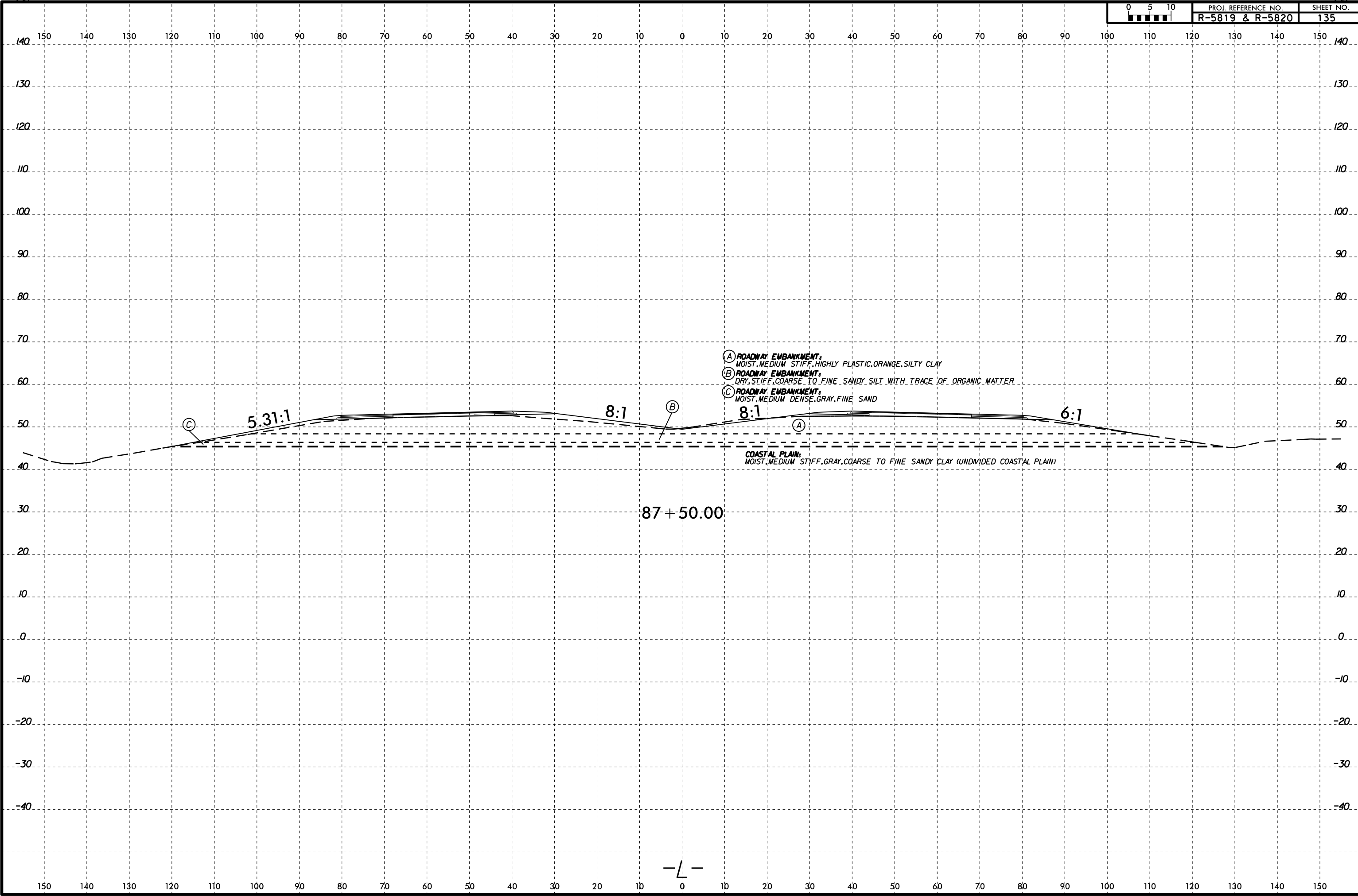


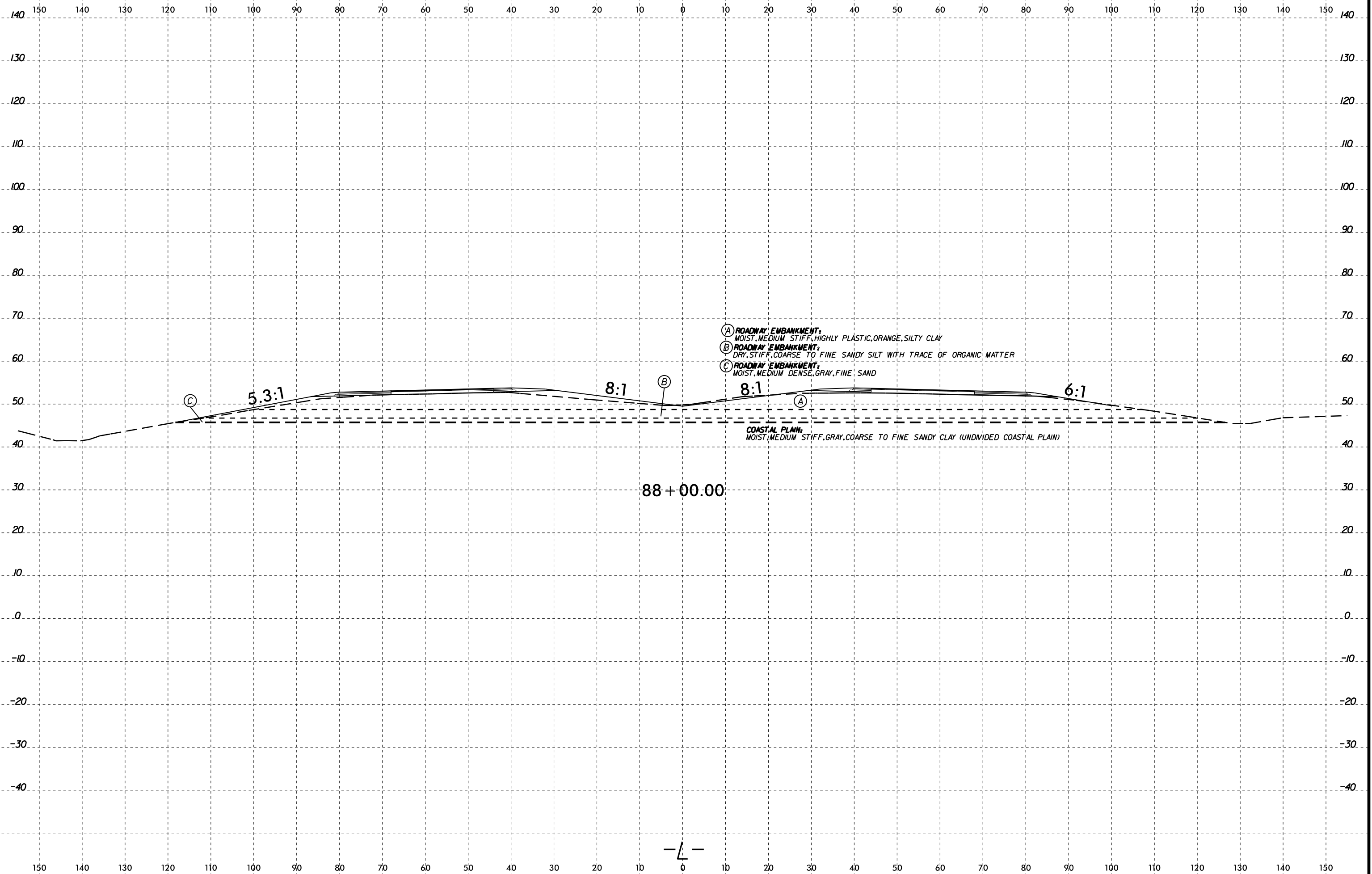


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Wells - At KA211387





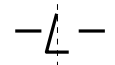


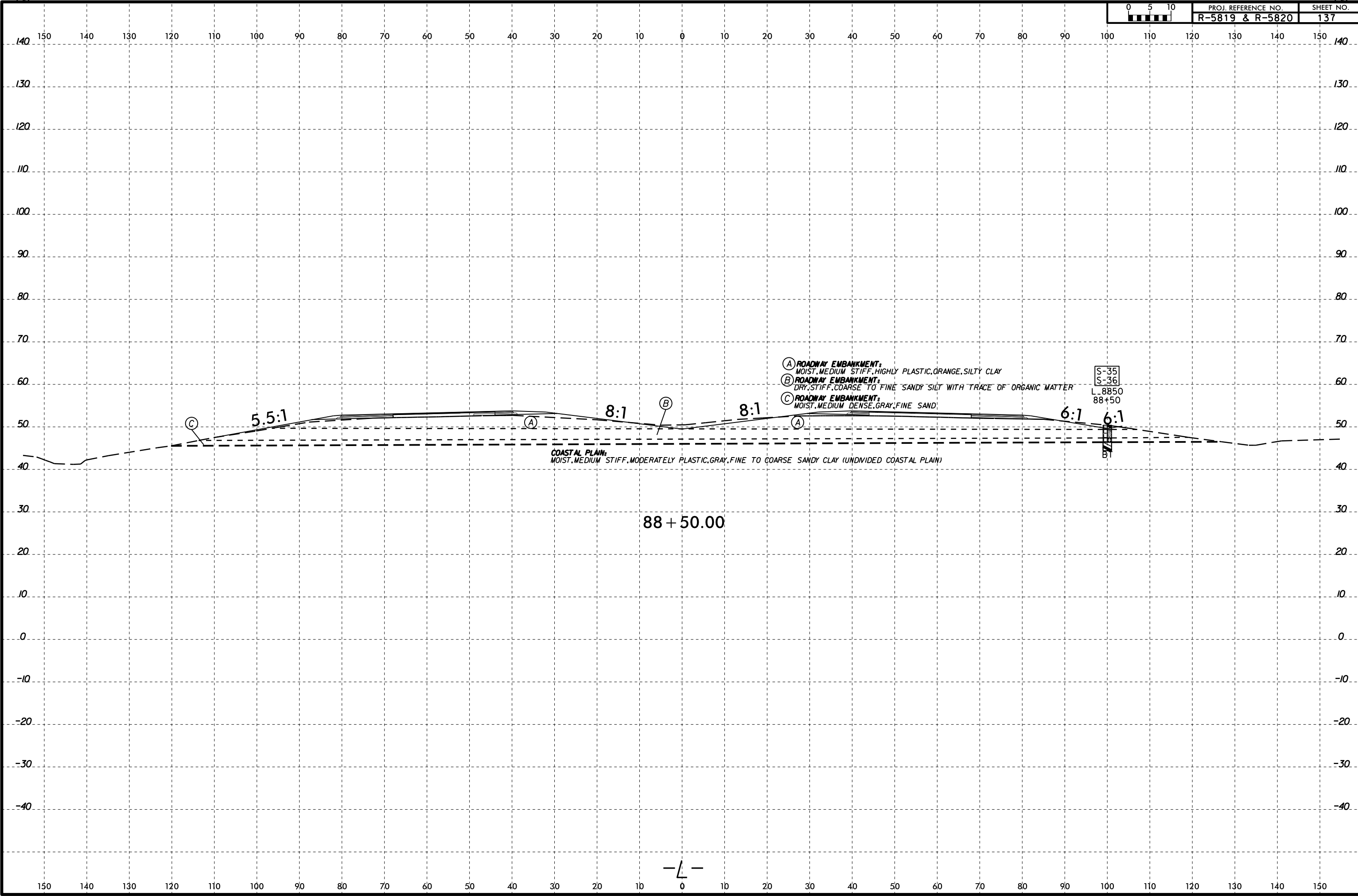


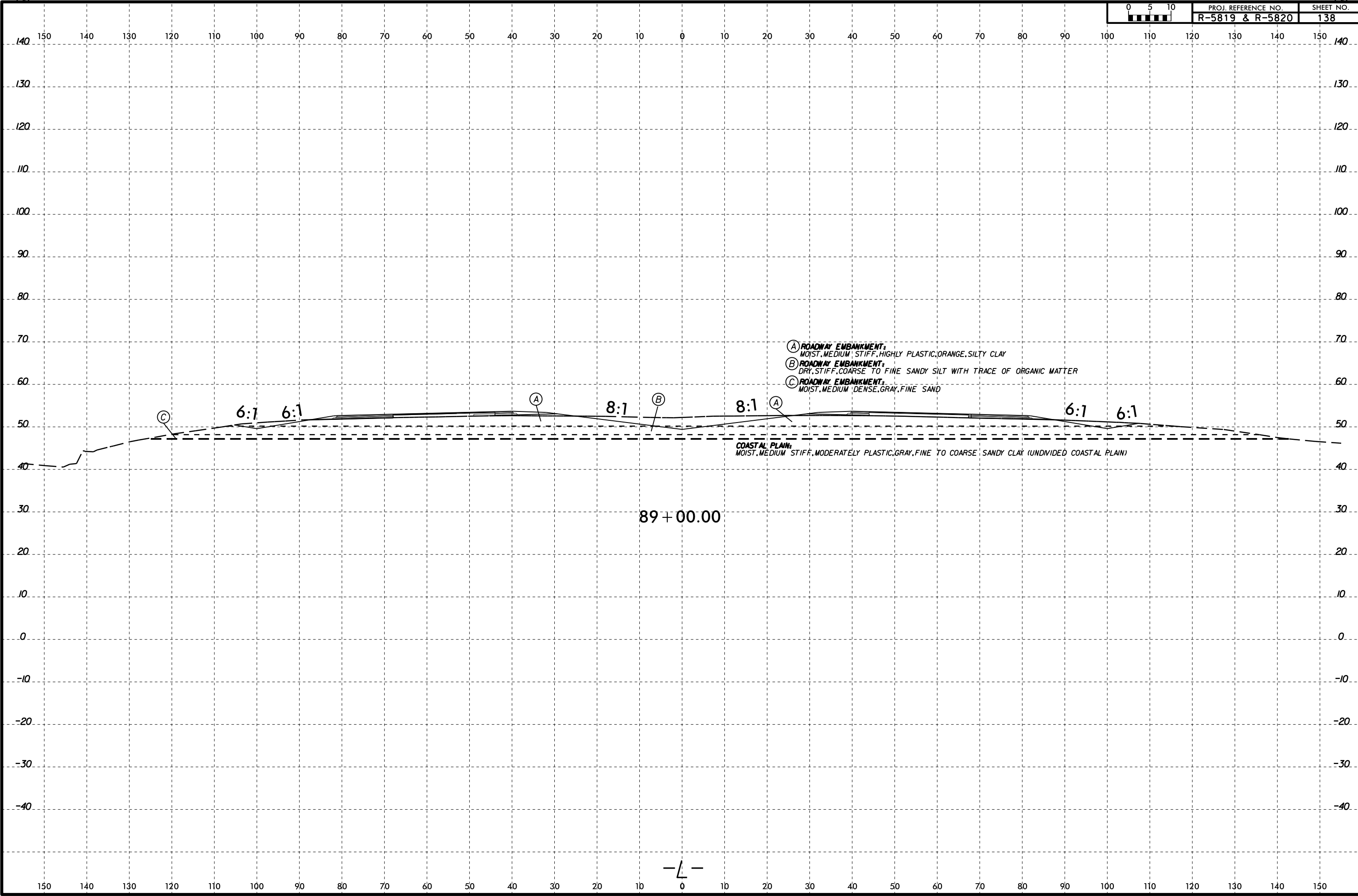
- (A) ROADWAY EMBANKMENT:
MOIST, MEDIUM STIFF, HIGHLY PLASTIC, ORANGE, SILTY CLAY
- (B) ROADWAY EMBANKMENT:
DRY, STIFF, COARSE TO FINE SANDY SILT WITH TRACE OF ORGANIC MATTER
- (C) ROADWAY EMBANKMENT:
MOIST, MEDIUM DENSE, GRAY, FINE SAND

COASTAL PLAIN:
MOIST, MEDIUM STIFF, GRAY, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

88+00.00



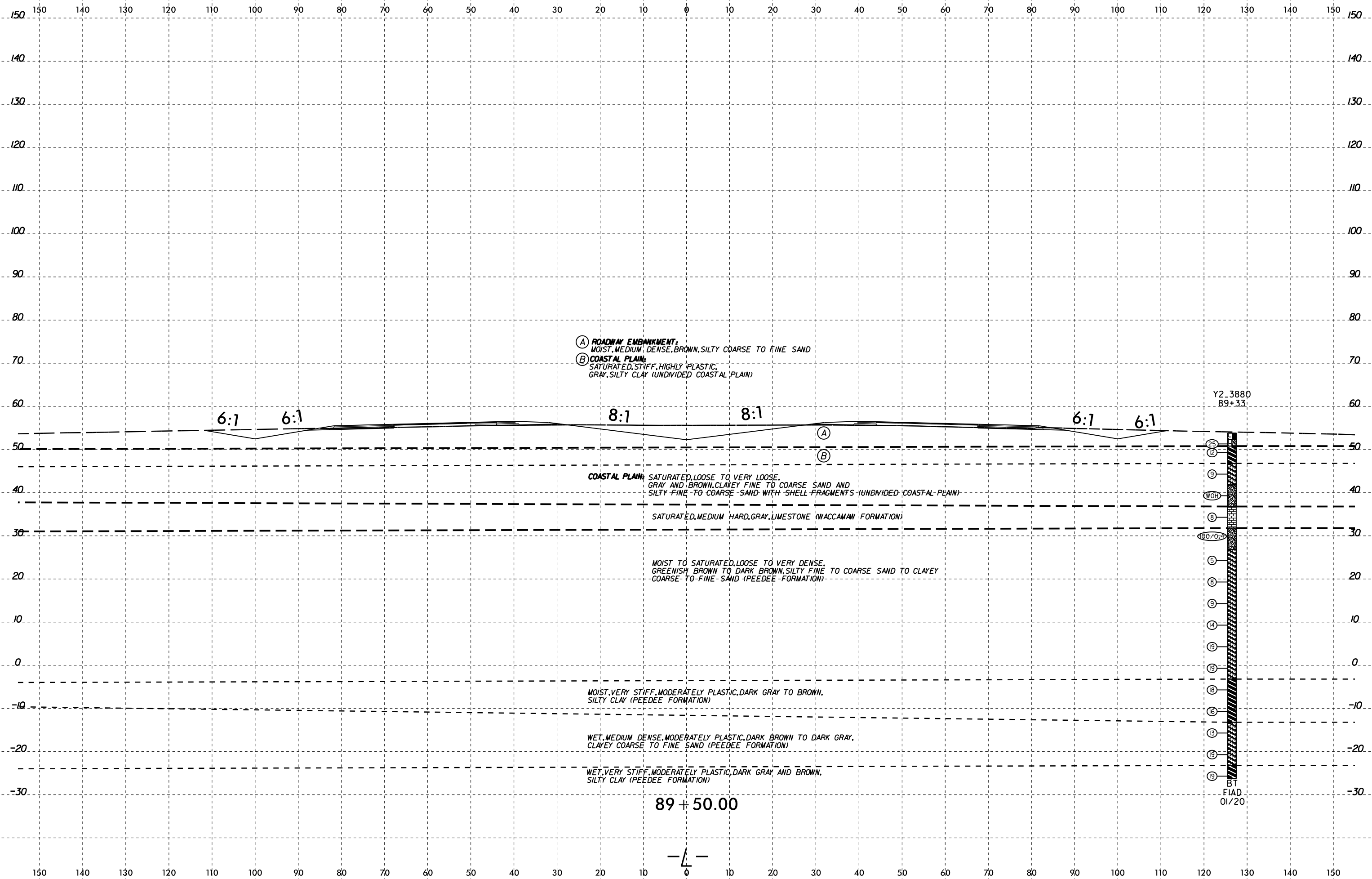




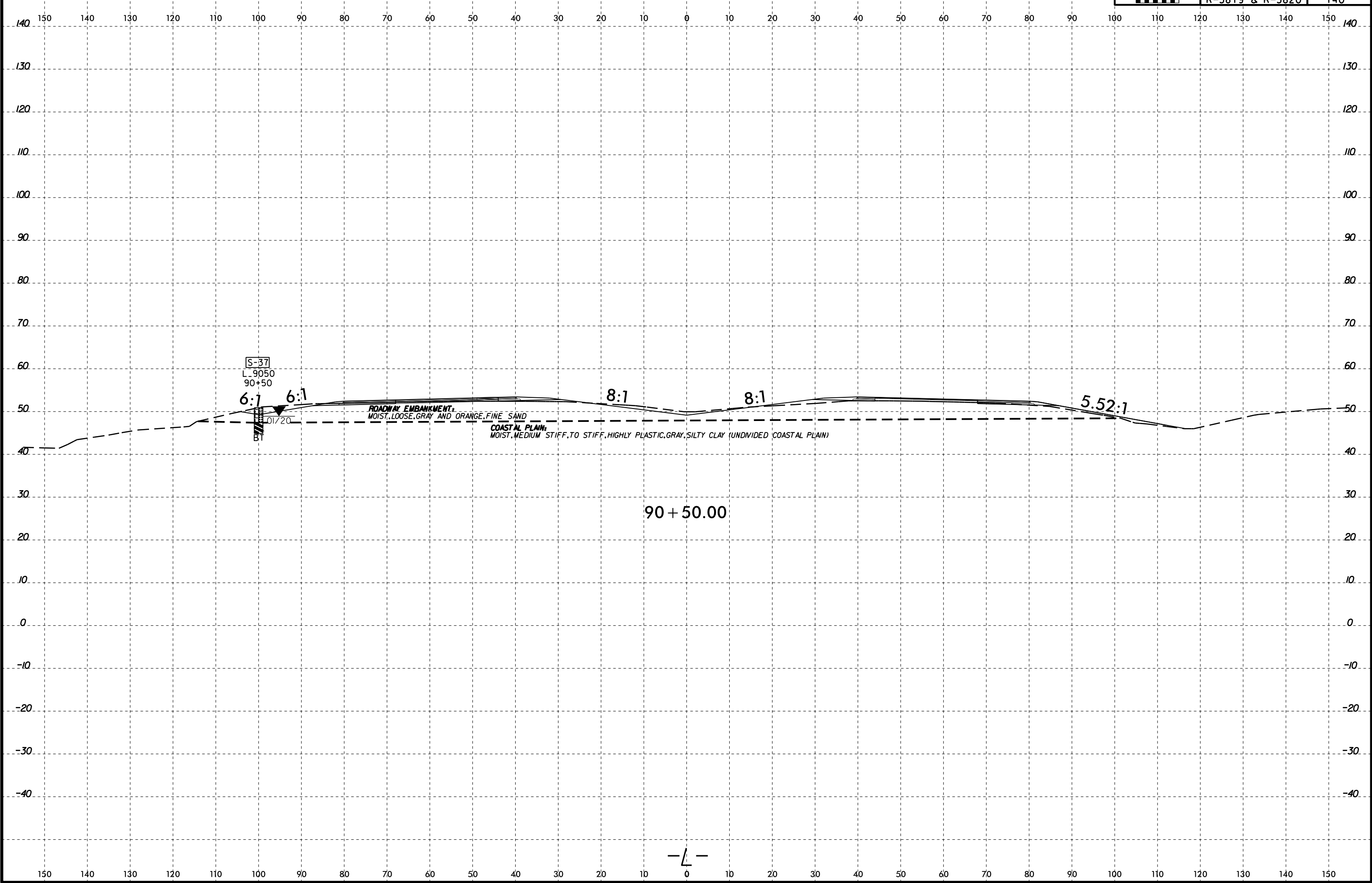
- (A) ROADWAY EMBANKMENT:
MOIST, MEDIUM STIFF, HIGHLY PLASTIC, ORANGE, SILTY CLAY
 - (B) ROADWAY EMBANKMENT:
DRY, STIFF, COARSE TO FINE SANDY SILT WITH TRACE OF ORGANIC MATTER
 - (C) ROADWAY EMBANKMENT:
MOIST, MEDIUM DENSE, GRAY, FINE SAND
- COASTAL PLAIN:
MOIST, MEDIUM STIFF, MODERATELY PLASTIC, GRAY, FINE TO COARSE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

89+00.00



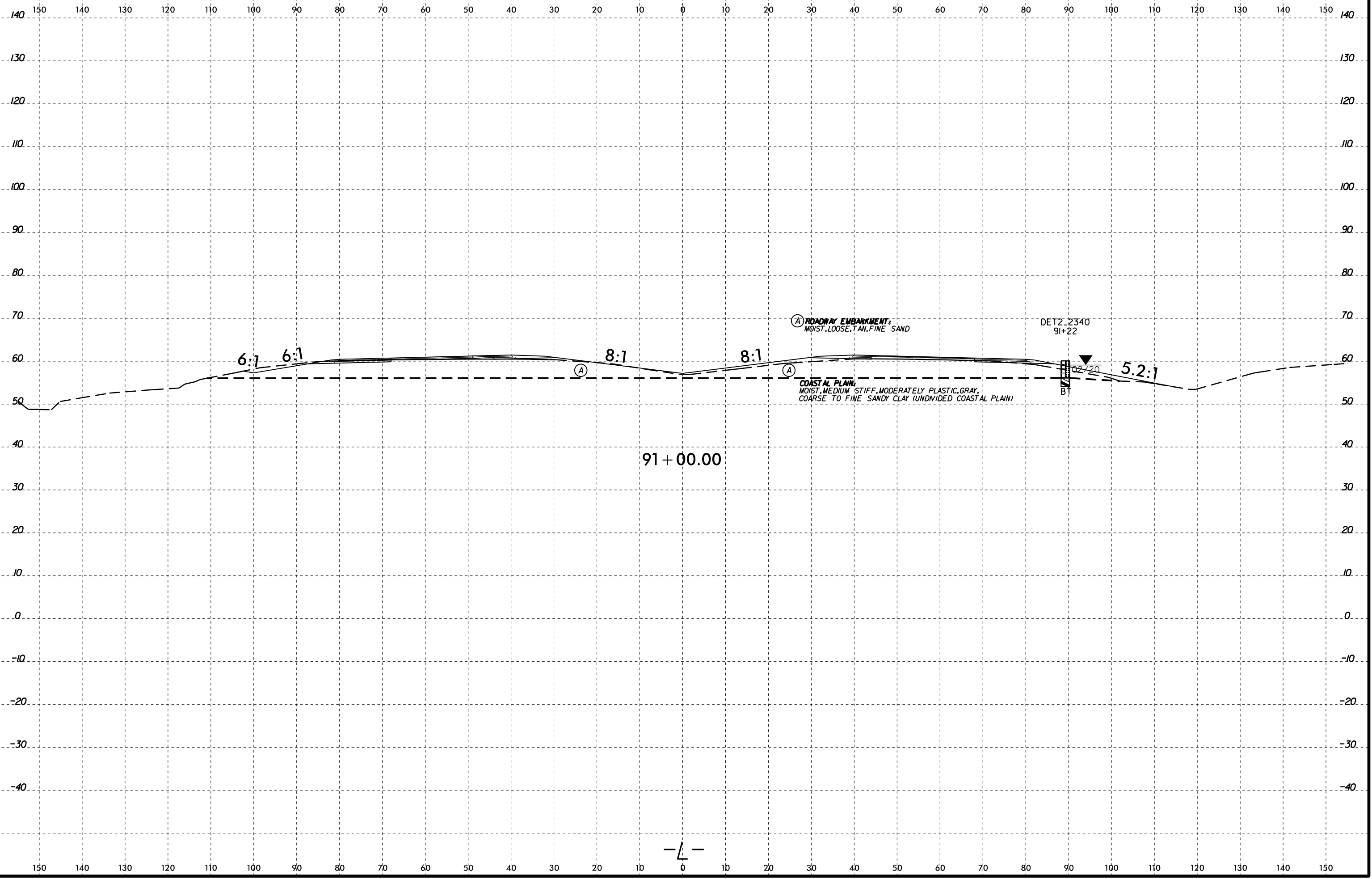


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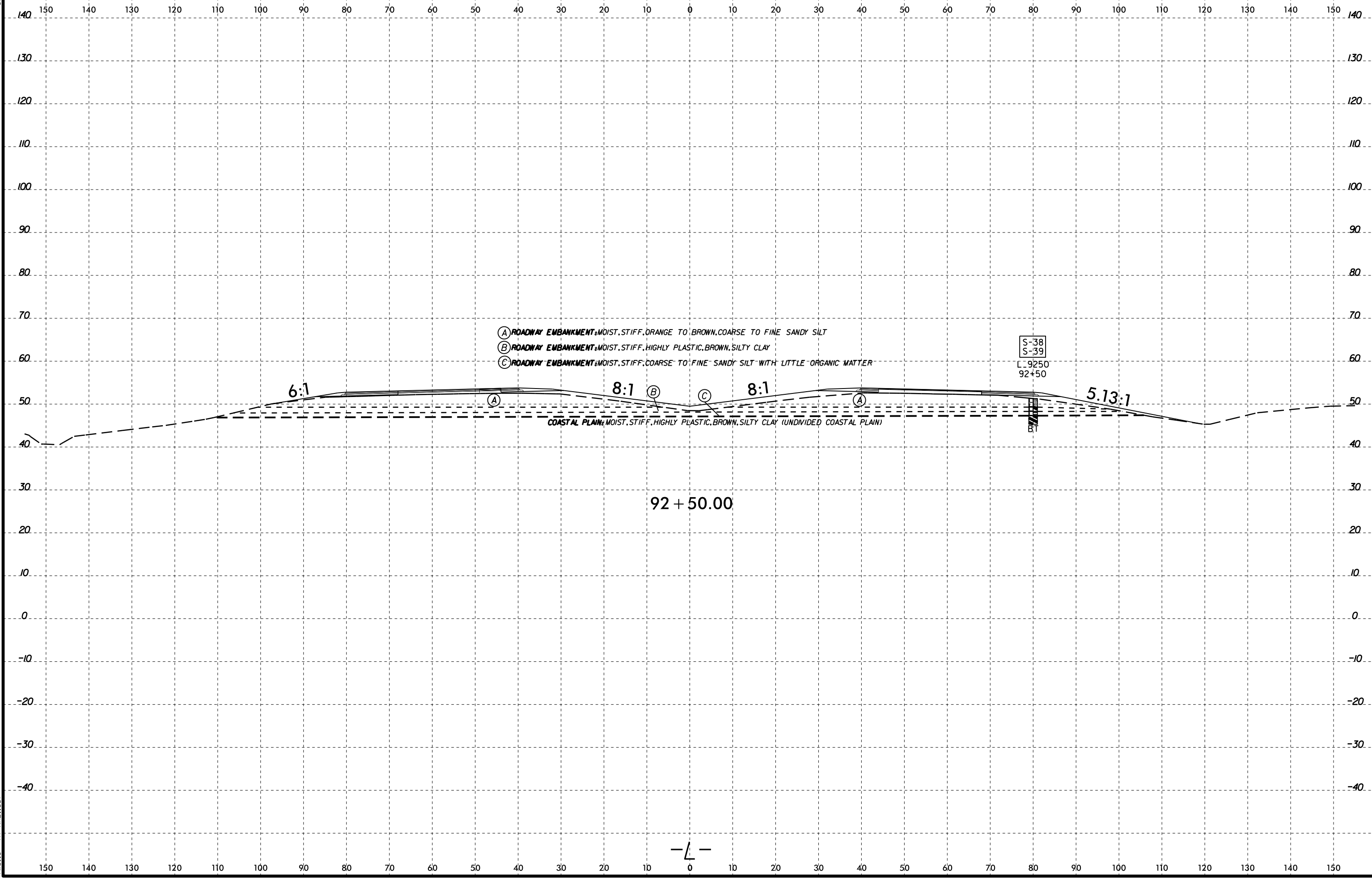


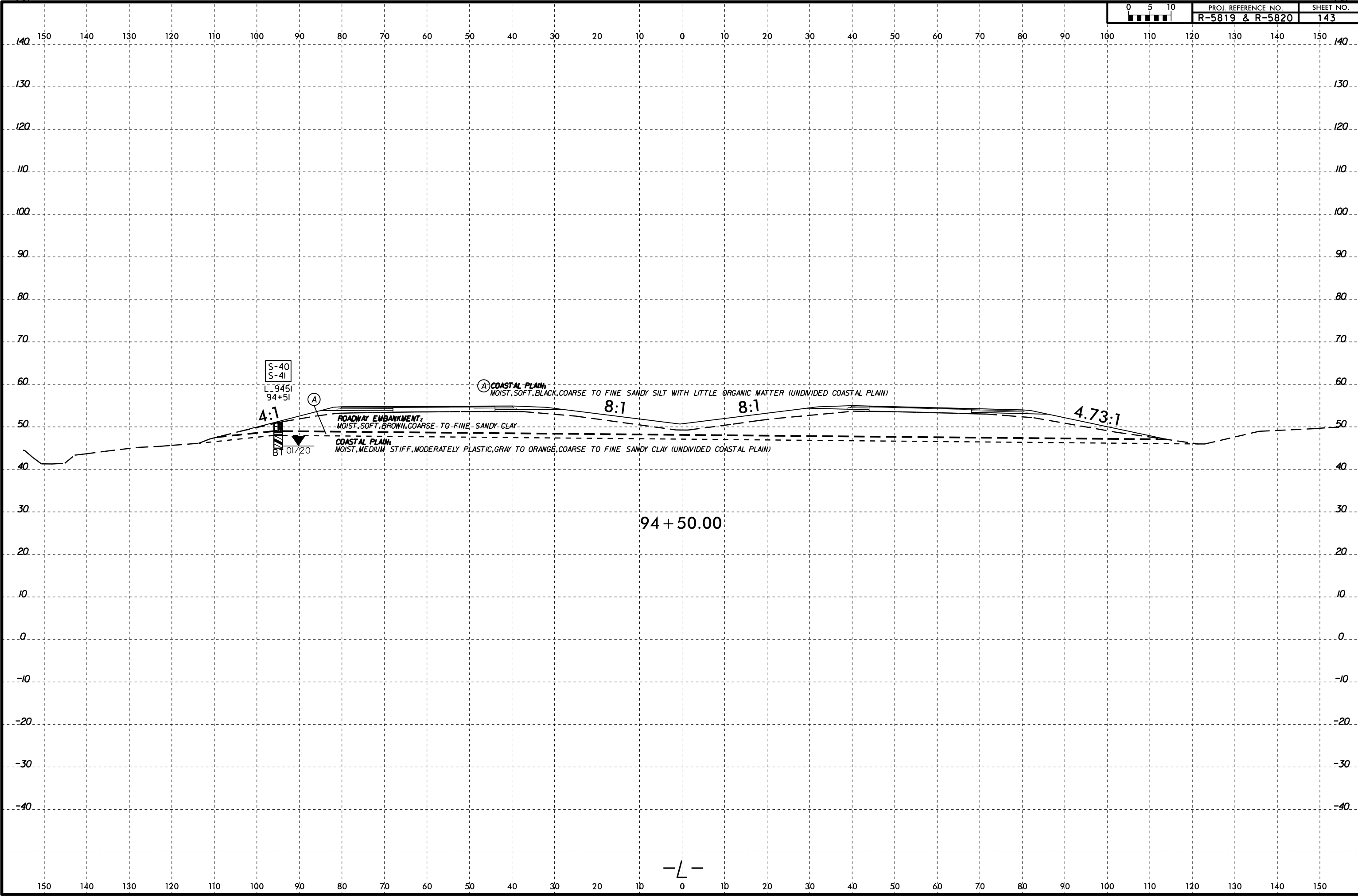
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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5819 & R-5820	141

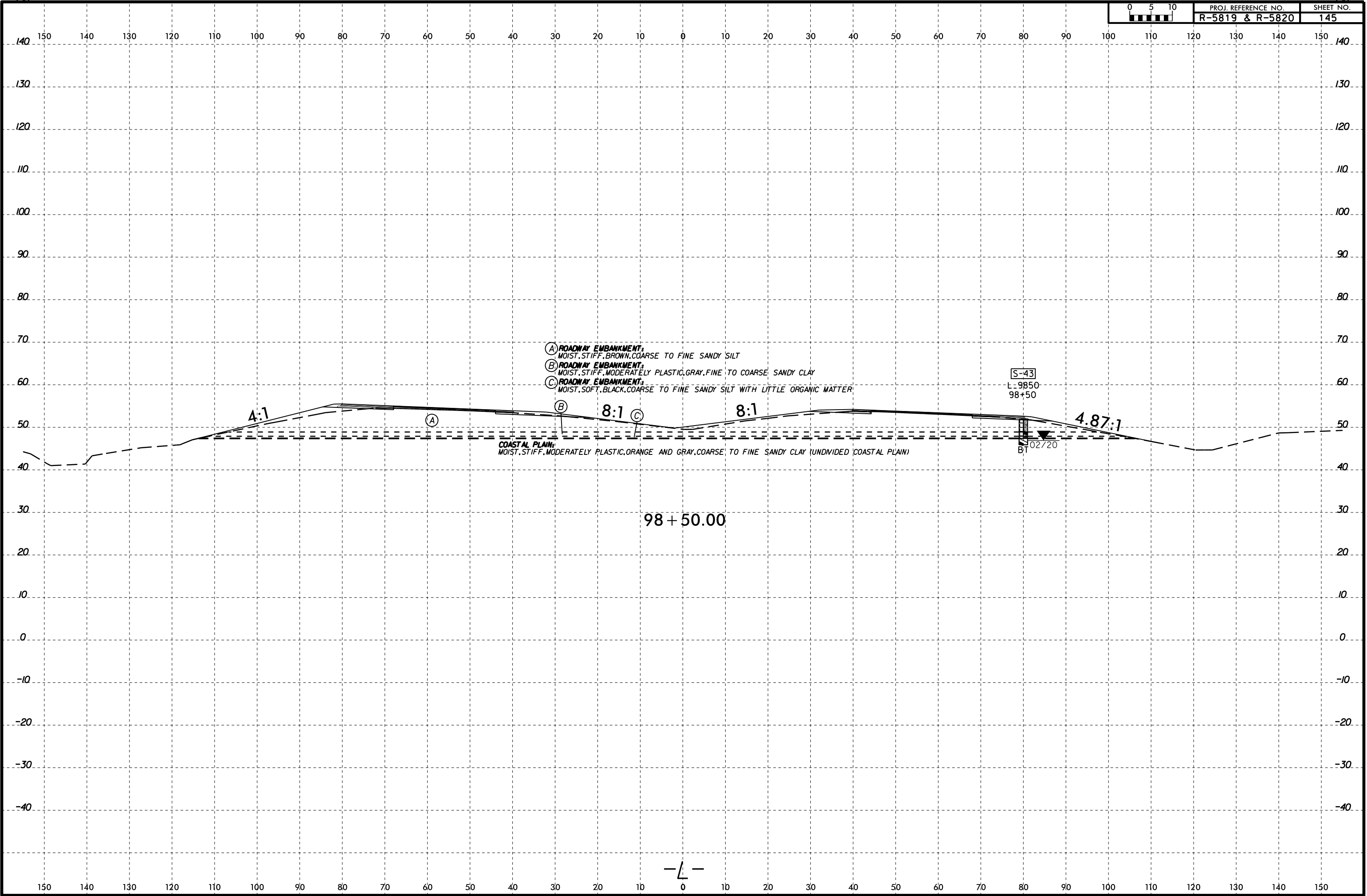


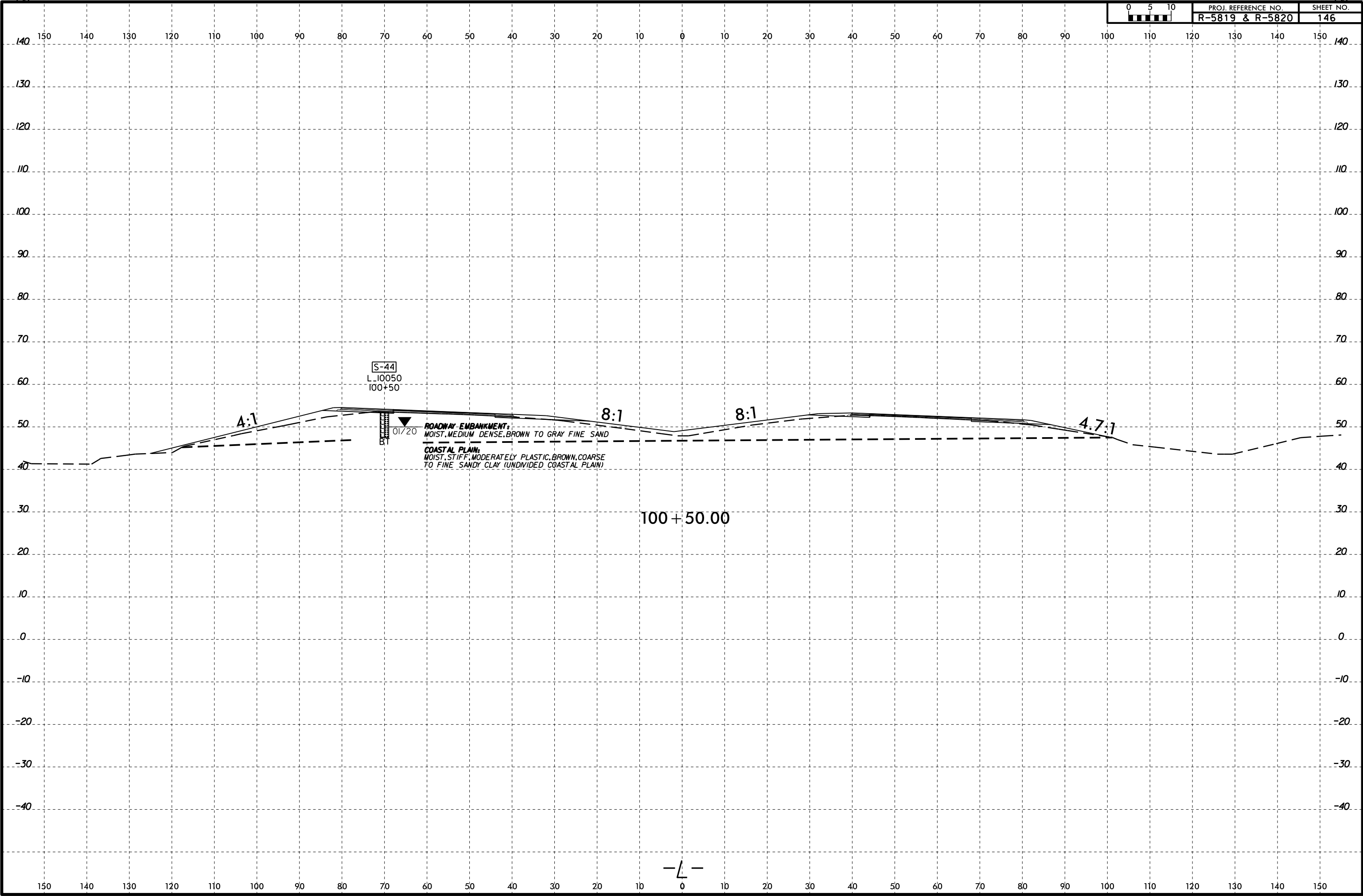
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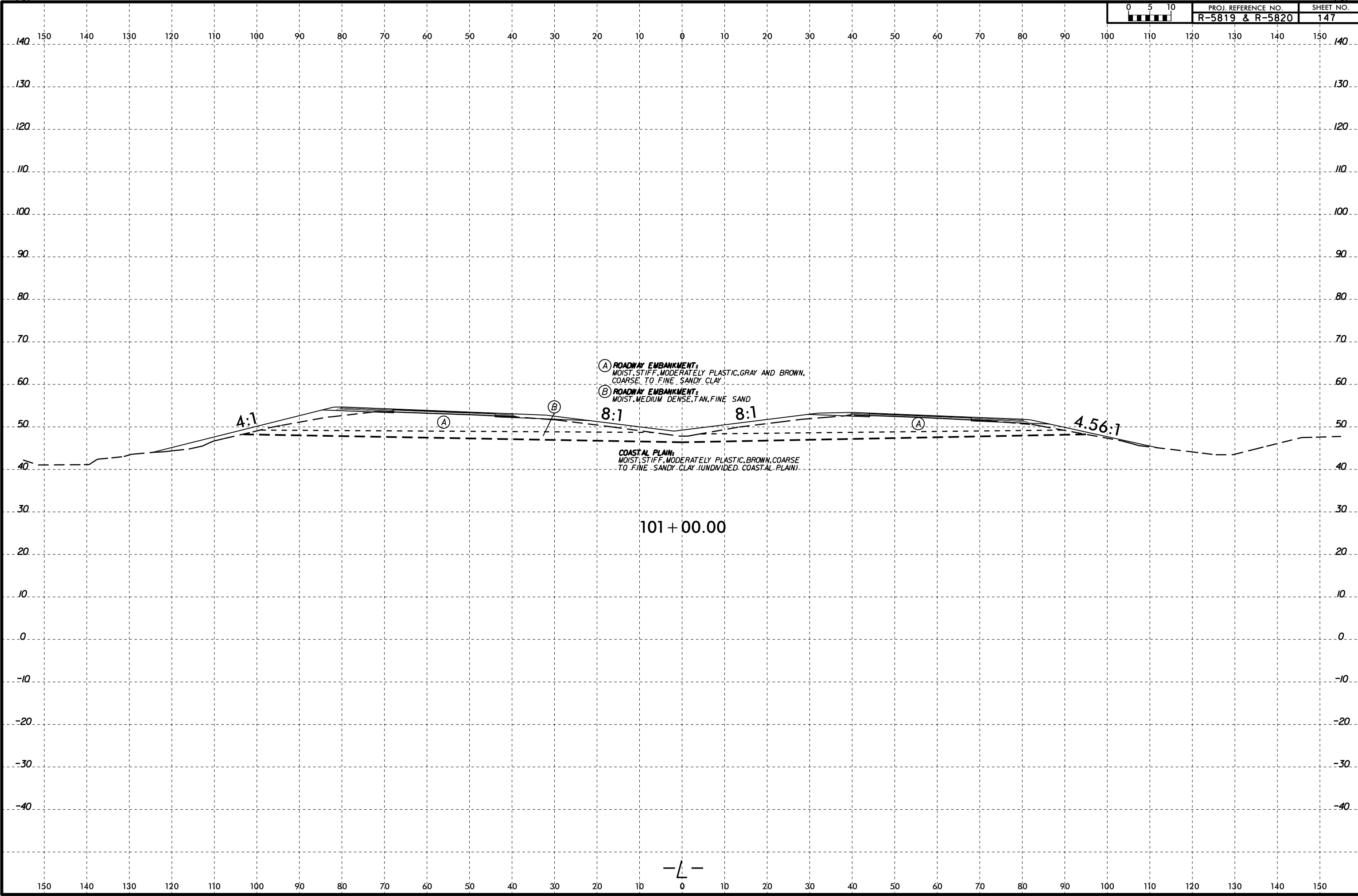


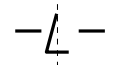
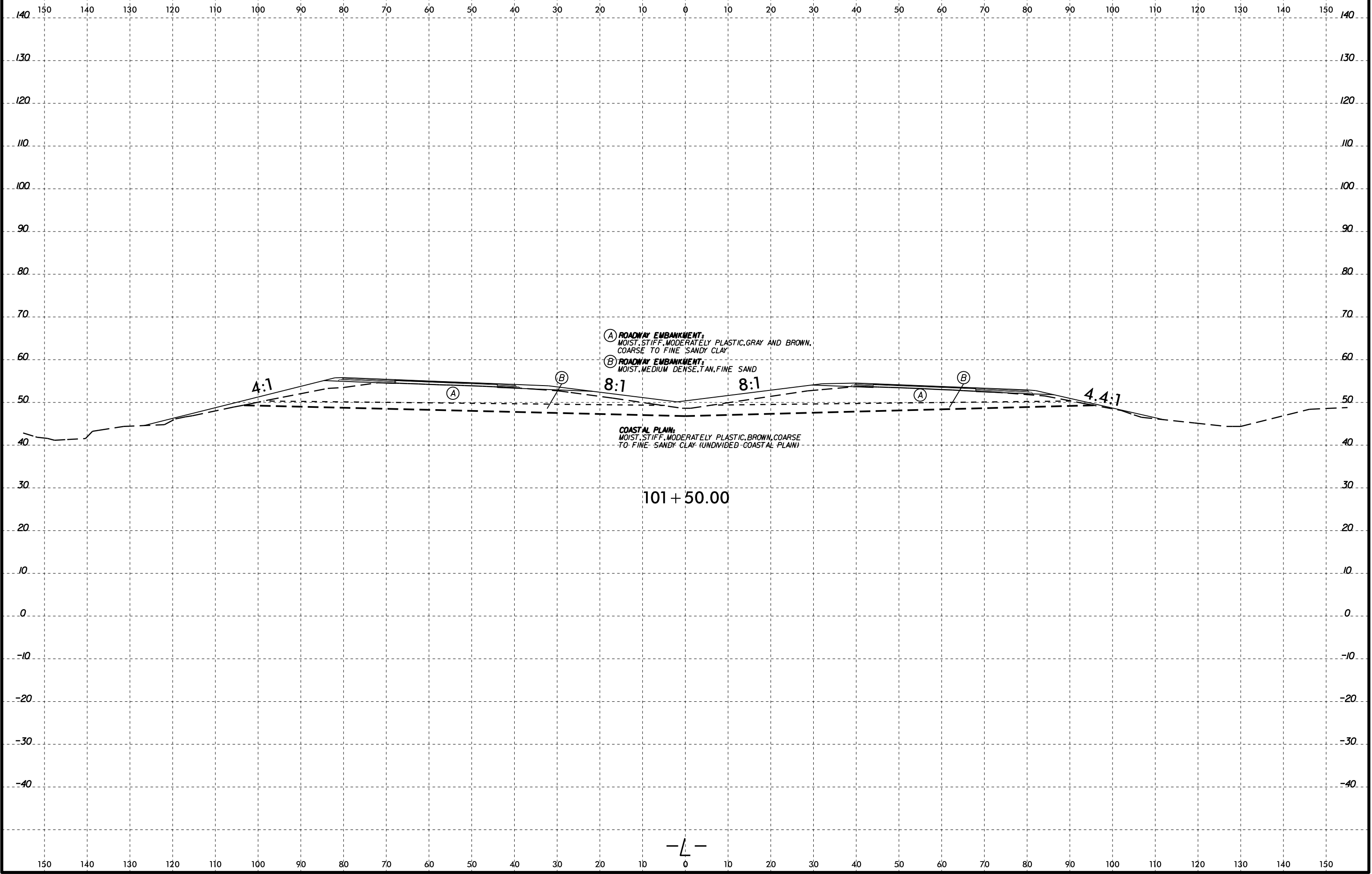


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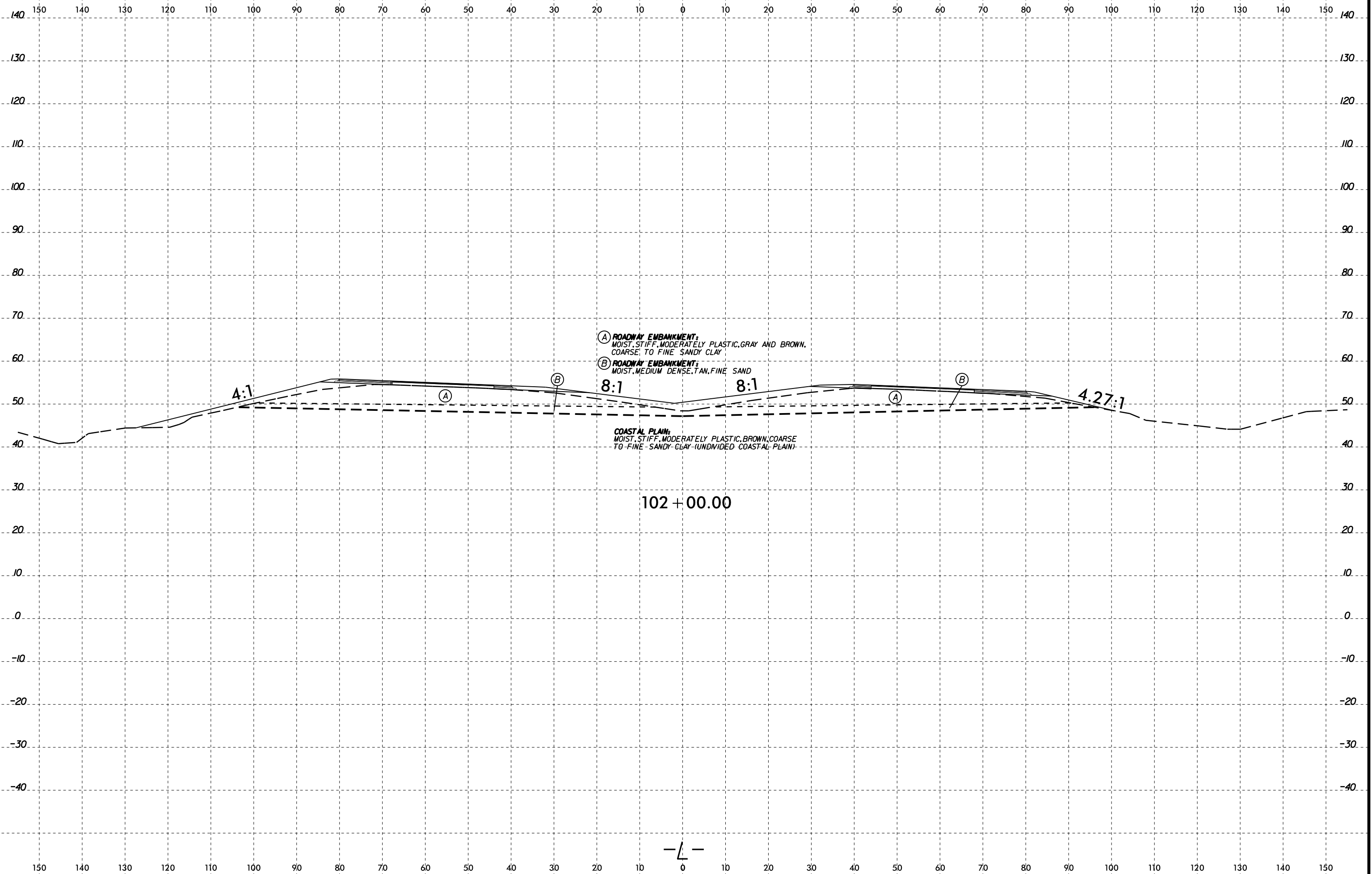








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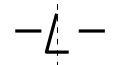


(A) ROADWAY EMBANKMENT:
MOIST, STIFF, MODERATELY PLASTIC, GRAY AND BROWN,
COARSE TO FINE SANDY CLAY

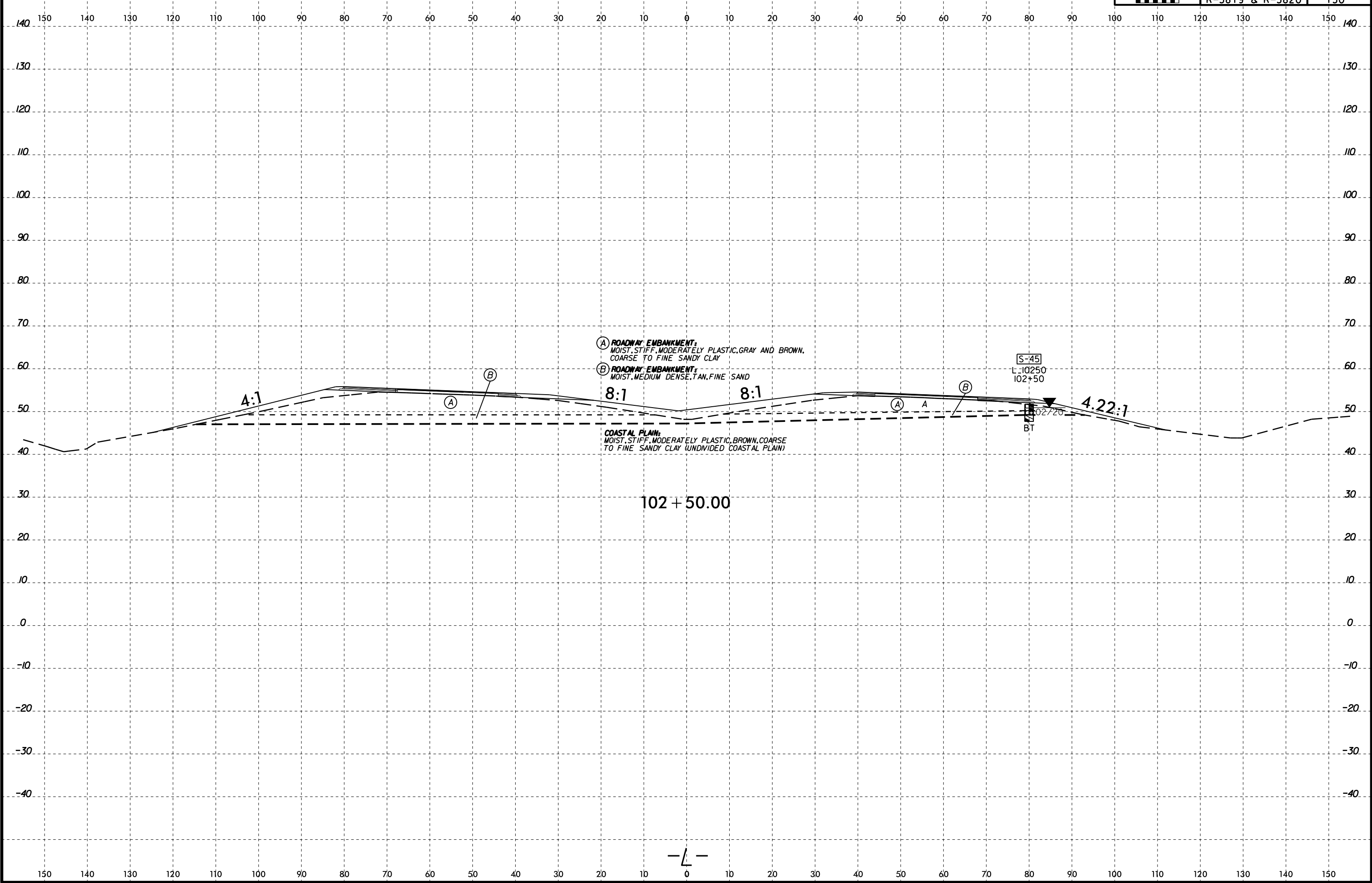
(B) ROADWAY EMBANKMENT:
MOIST, MEDIUM DENSE, TAN, FINE SAND

COASTAL PLAIN:
MOIST, STIFF, MODERATELY PLASTIC, BROWN, COARSE
TO FINE SANDY CLAY - (UNDIVIDED COASTAL PLAIN)

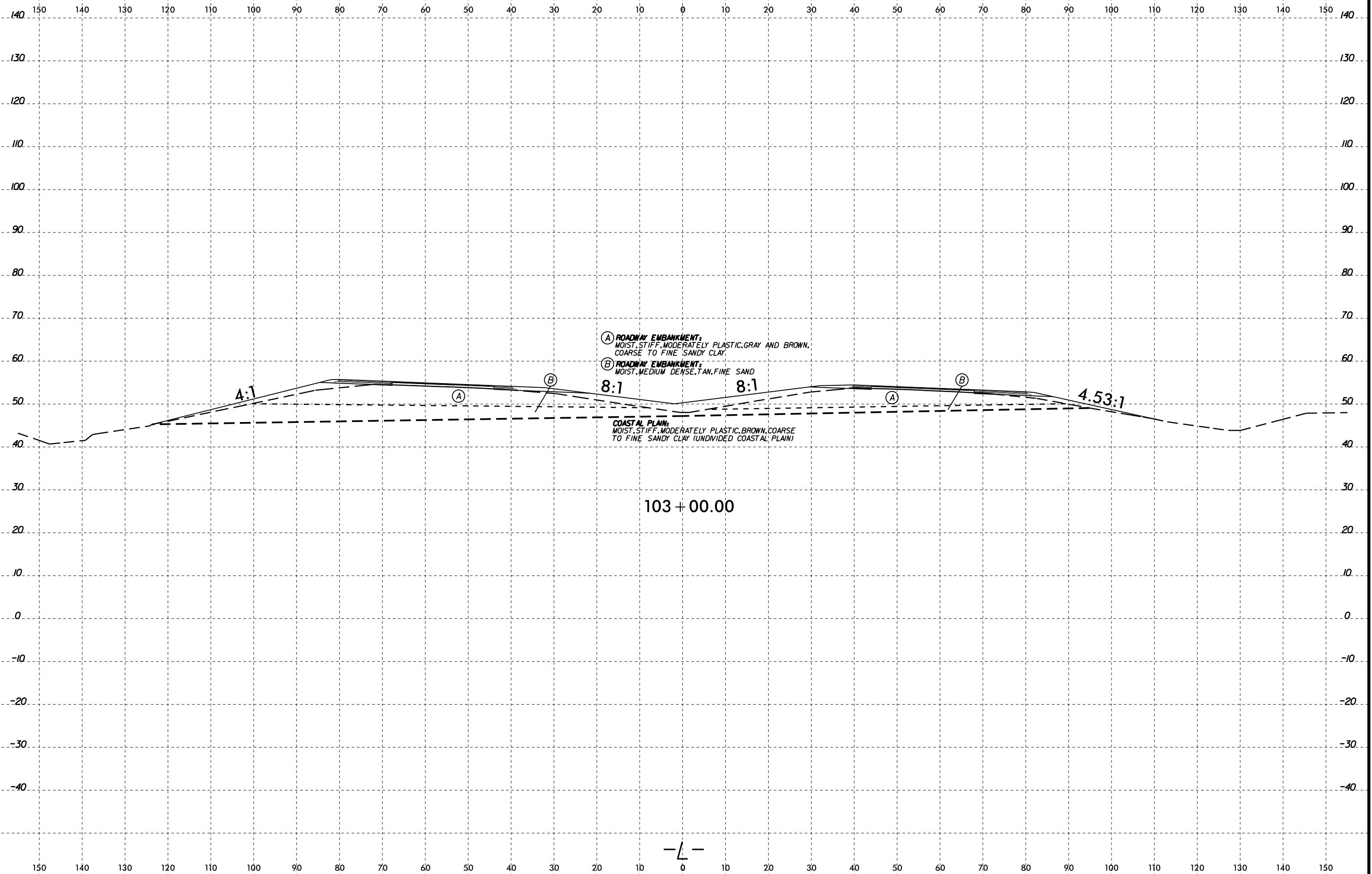
102 + 00.00



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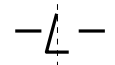


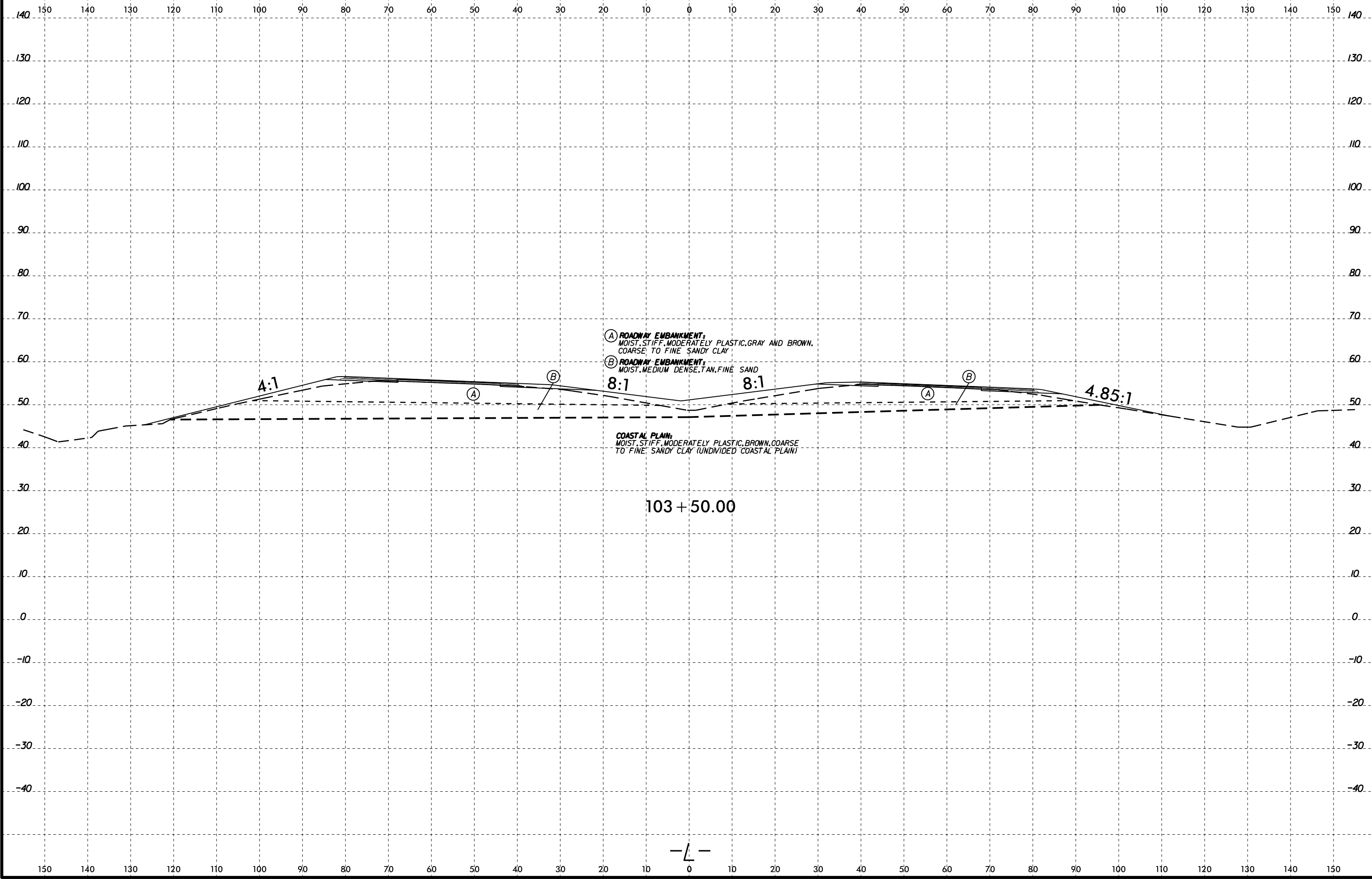
(A) ROADWAY EMBANKMENT:
MOIST, STIFF, MODERATELY PLASTIC, GRAY AND BROWN,
COARSE TO FINE SANDY CLAY

(B) ROADWAY EMBANKMENT:
MOIST, MEDIUM DENSE, TAN, FINE SAND

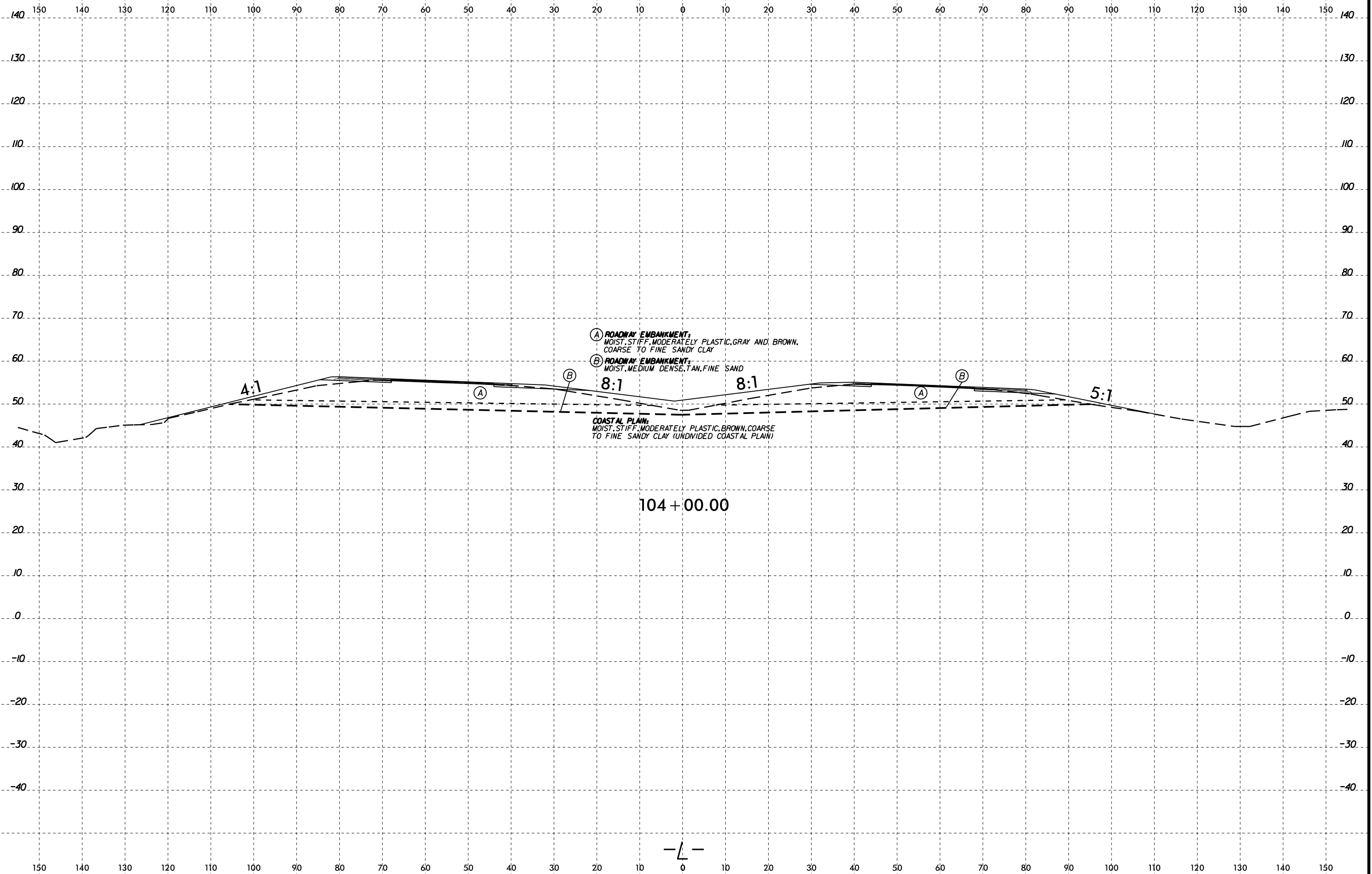
COASTAL PLAIN:
MOIST, STIFF, MODERATELY PLASTIC, BROWN, COARSE
TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

103 + 00.00





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TECHNICAL\Projects\Active Projects\20190942.024A R-5819 & R-5820 Roadway\Roadway\GEO\RDW\CADD_GEO\RDW\CADD_GEO_XS1.LL(3).dgn



(A) ROADWAY EMBANKMENT:
MOIST, STIFF, MODERATELY PLASTIC, GRAY AND BROWN,
COARSE TO FINE SANDY CLAY

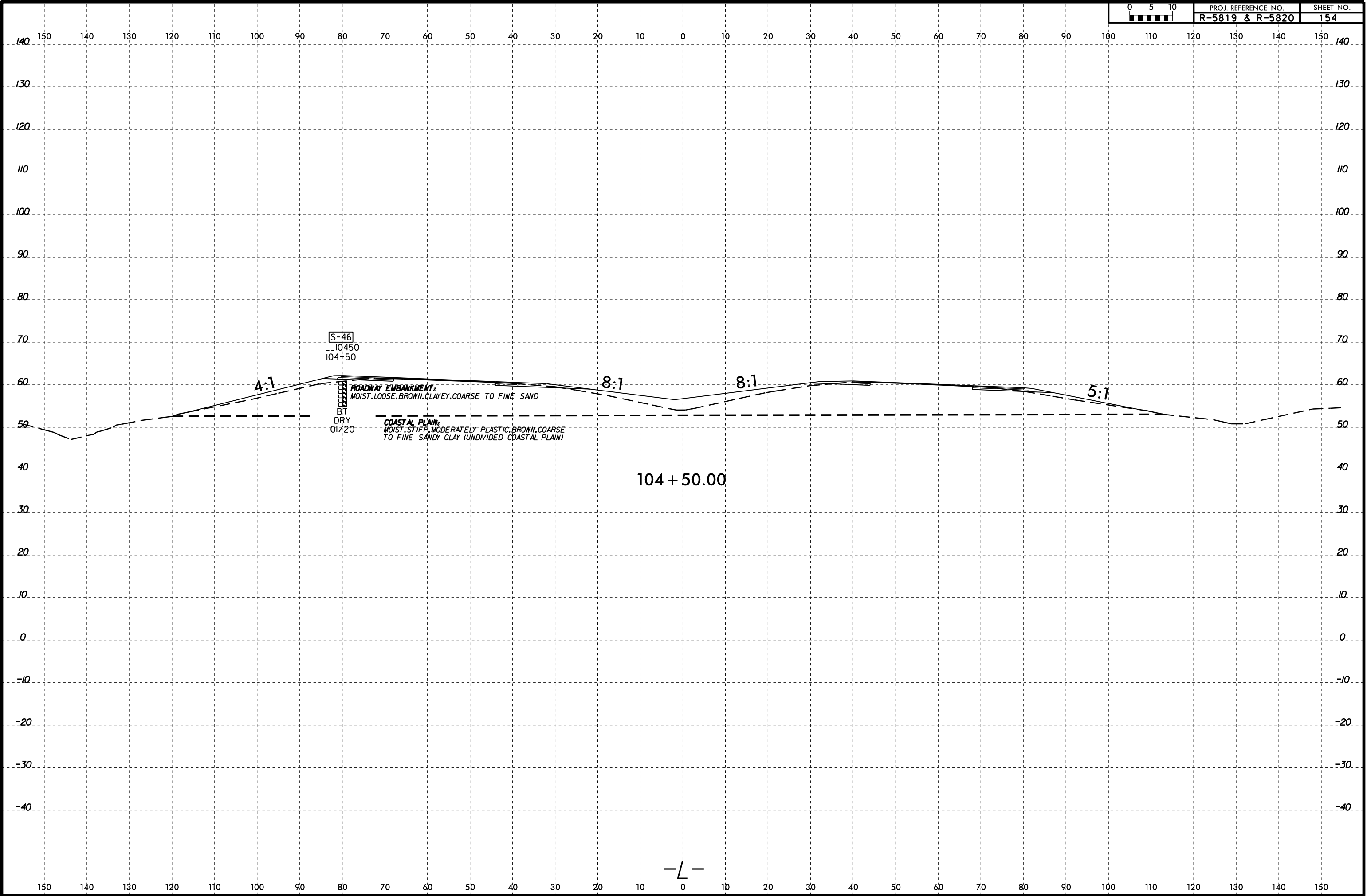
(B) ROADWAY EMBANKMENT:
MOIST, MEDIUM DENSE, TAN, FINE SAND

COASTAL PLAIN:
MOIST, STIFF, MODERATELY PLASTIC, BROWN, COARSE
TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

104 + 00.00



6/23/16
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END UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE USED IN THE TOP
3 FEET OF EMBANKMENT OR BACKFILL AT STA. 13+75

- (A) COASTAL PLAIN:
MOIST, SOFT, COARSE TO FINE
SANDY SILT (UNDIVIDED COASTAL PLAIN)
- (B) ROADWAY EMBANKMENT:
MOIST, SOFT, TAN, COARSE TO FINE SANDY SILT

COASTAL PLAIN:
SATURATED, MEDIUM STIFF TO STIFF,
MODERATELY PLASTIC, ORANGE AND GRAY,
COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

13 + 50.00

- (A) COASTAL PLAIN:
MOIST, SOFT, COARSE TO FINE
SANDY SILT (UNDIVIDED COASTAL PLAIN)
- (B) ROADWAY EMBANKMENT:
MOIST, SOFT, TAN, COARSE TO FINE SANDY SILT

COASTAL PLAIN:
SATURATED, MEDIUM STIFF TO STIFF,
MODERATELY PLASTIC, ORANGE AND GRAY,
COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

13 + 00.00

S-47
S-48
Y1, I250
I2+50

- (A) COASTAL PLAIN:
MOIST, SOFT, COARSE TO FINE
SANDY SILT (UNDIVIDED COASTAL PLAIN)
- (B) ROADWAY EMBANKMENT:
MOIST, SOFT, TAN, COARSE TO FINE SANDY SILT

COASTAL PLAIN:
SATURATED, MEDIUM STIFF TO STIFF,
MODERATELY PLASTIC, ORANGE AND GRAY,
COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

12 + 50.00

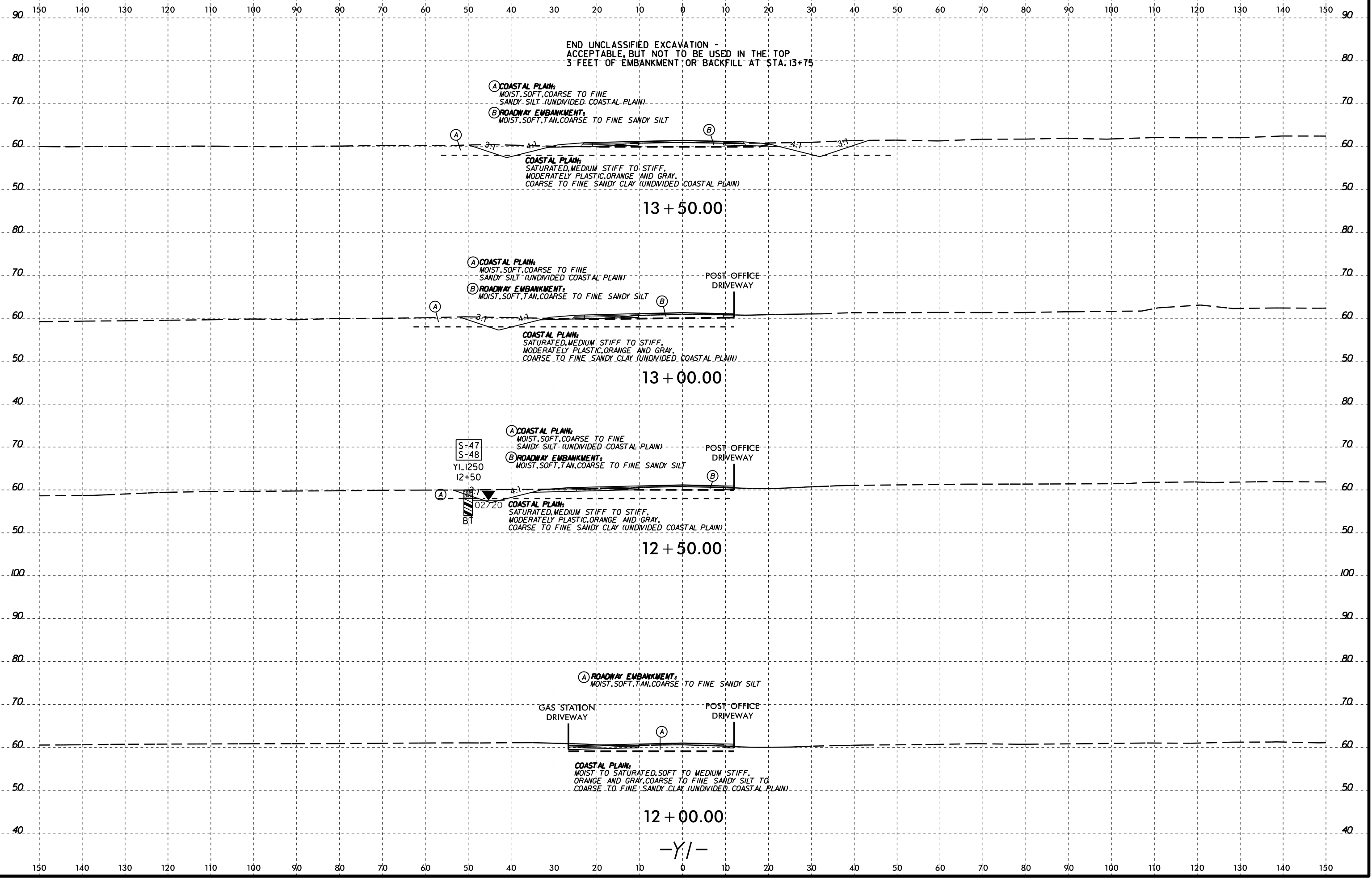
- (A) ROADWAY EMBANKMENT:
MOIST, SOFT, TAN, COARSE TO FINE SANDY SILT

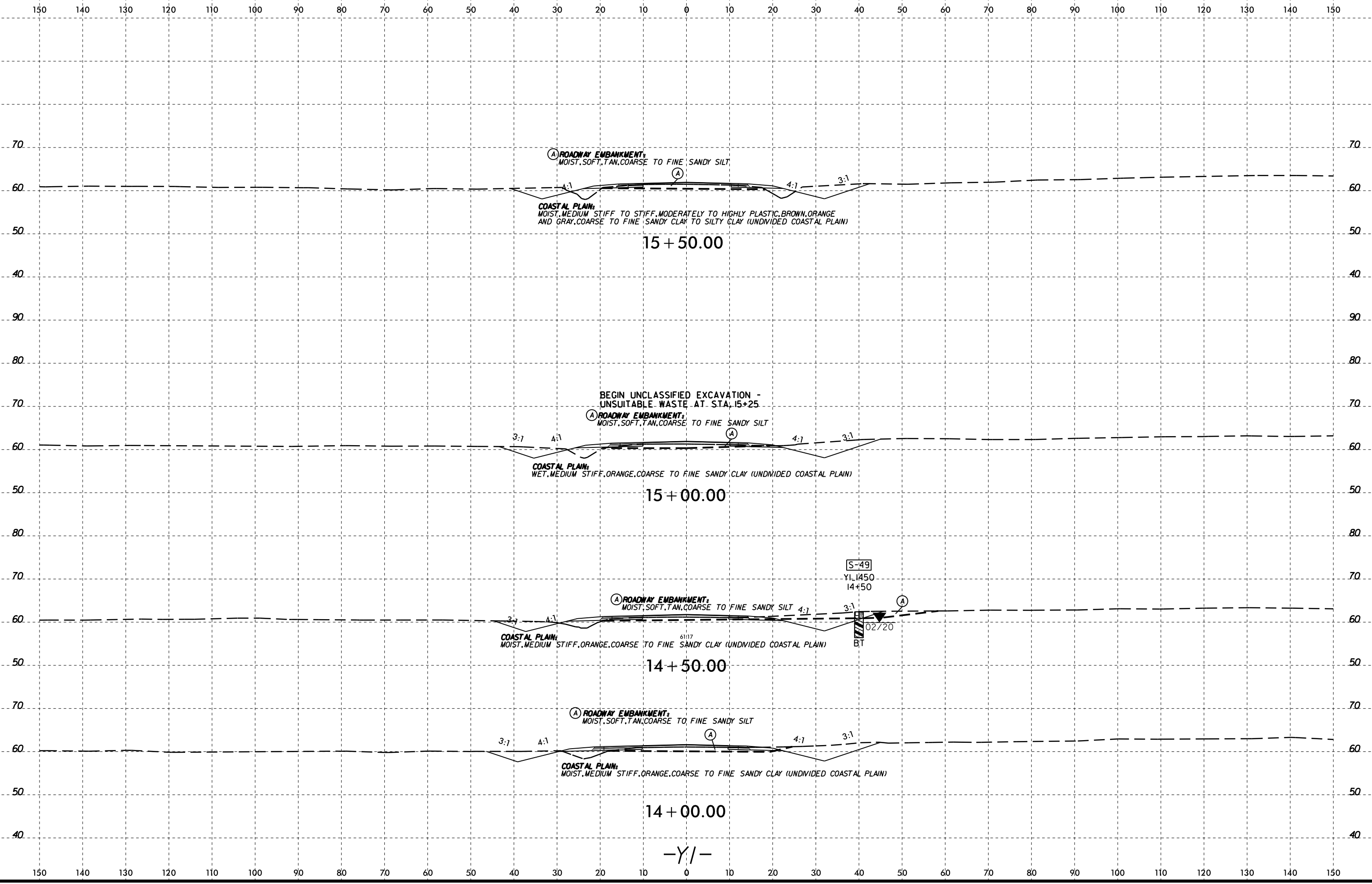
GAS STATION DRIVEWAY POST OFFICE DRIVEWAY

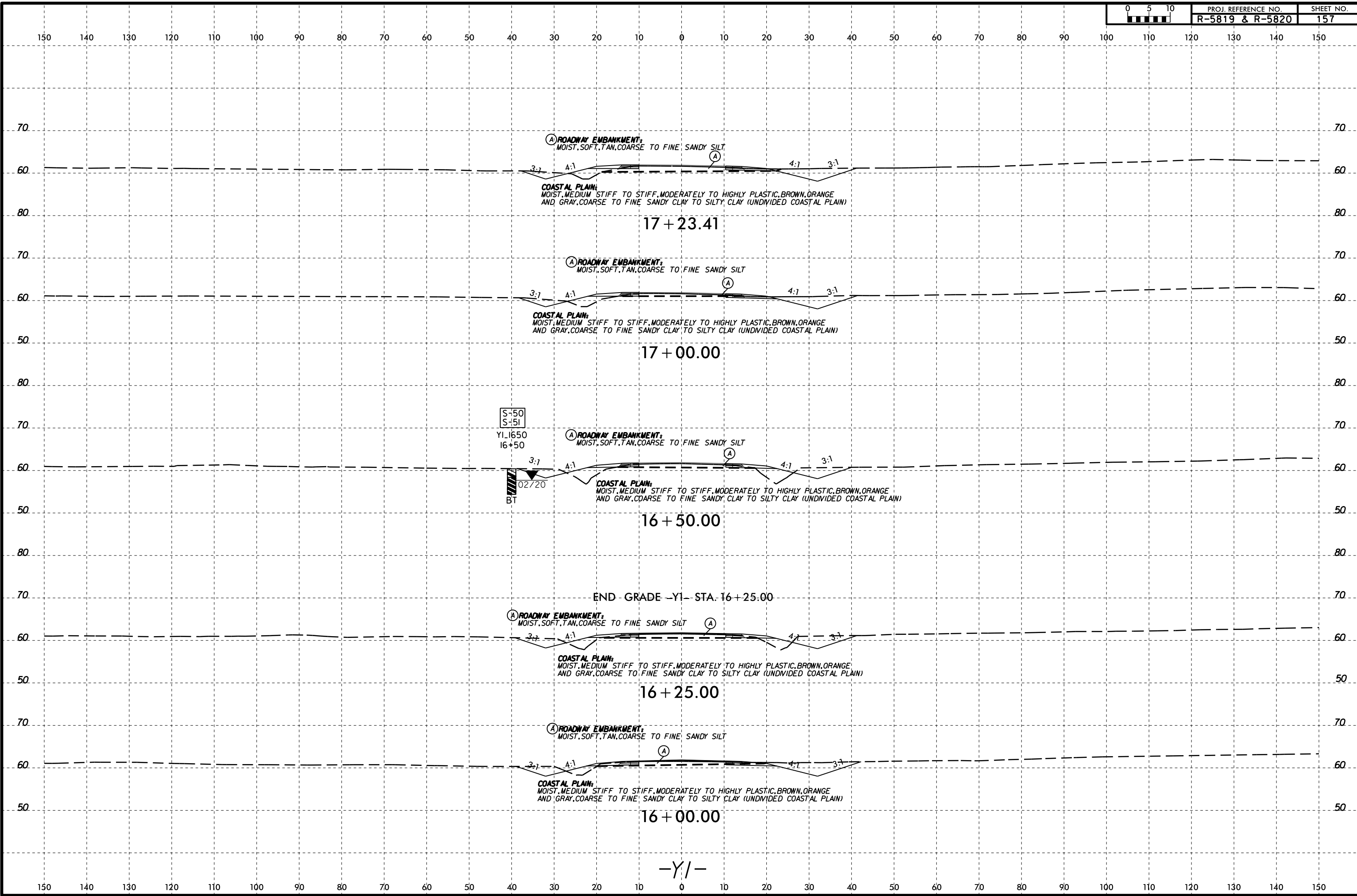
COASTAL PLAIN:
MOIST TO SATURATED, SOFT TO MEDIUM STIFF,
ORANGE AND GRAY, COARSE TO FINE SANDY SILT TO
COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

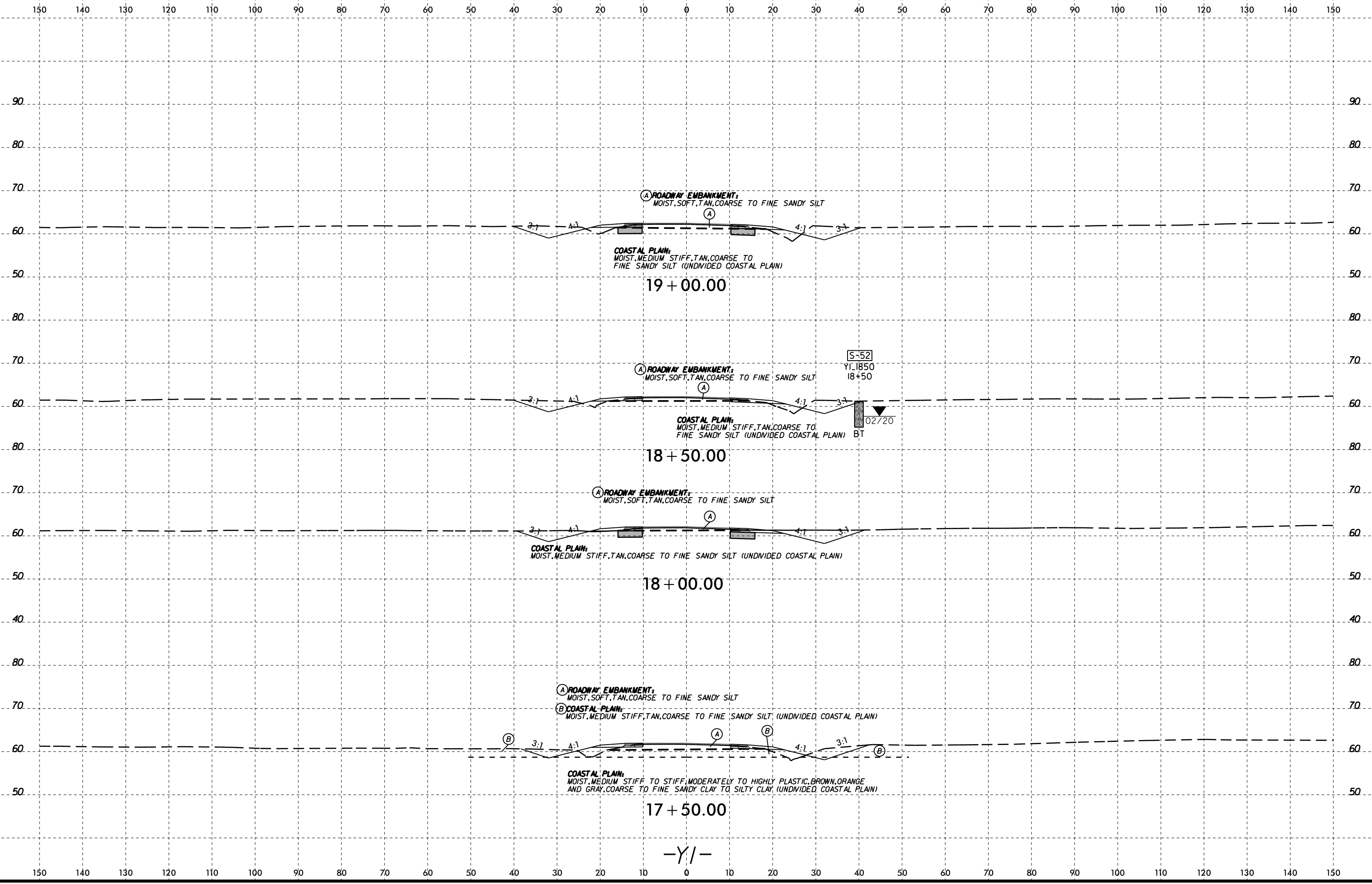
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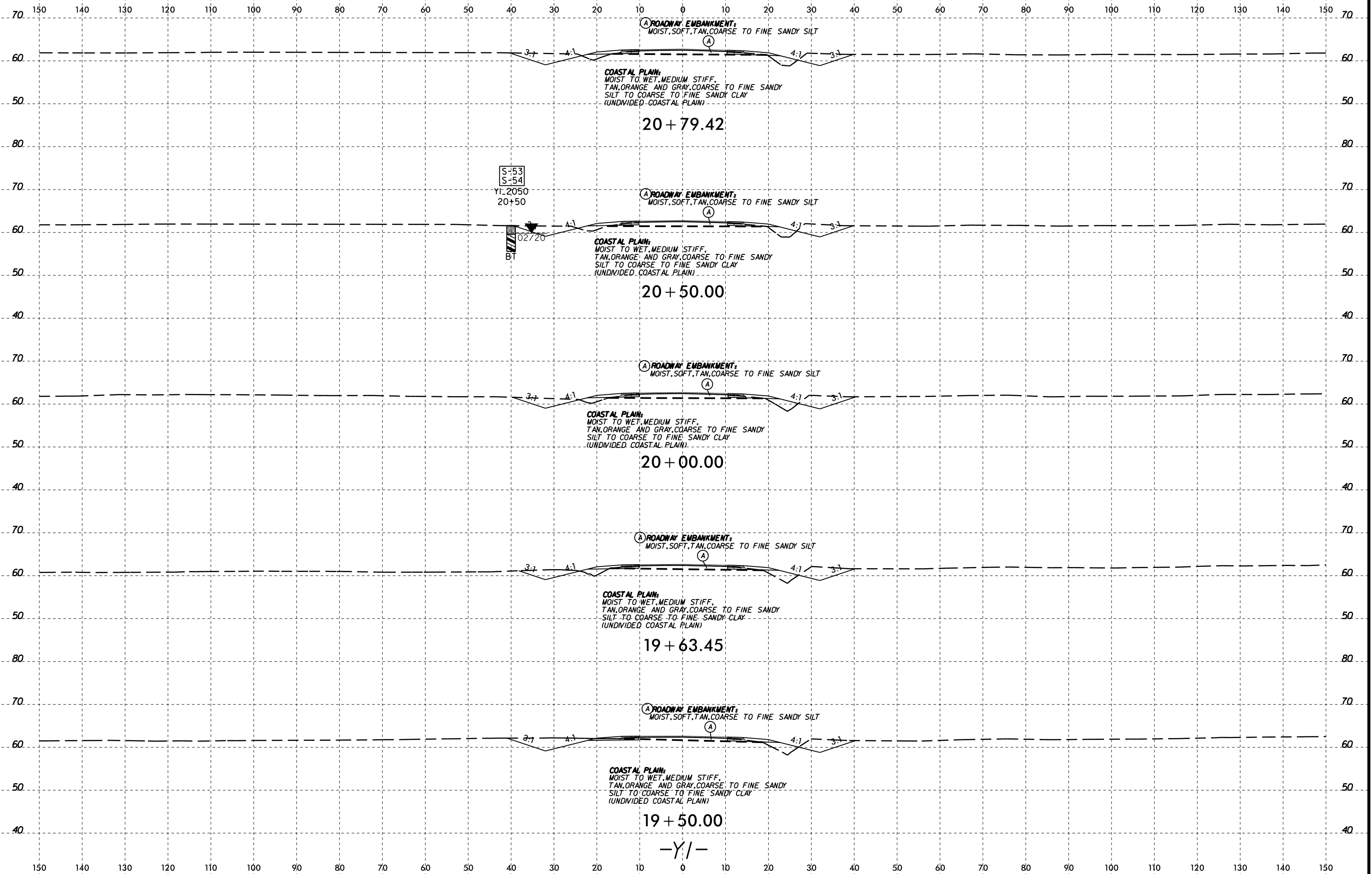
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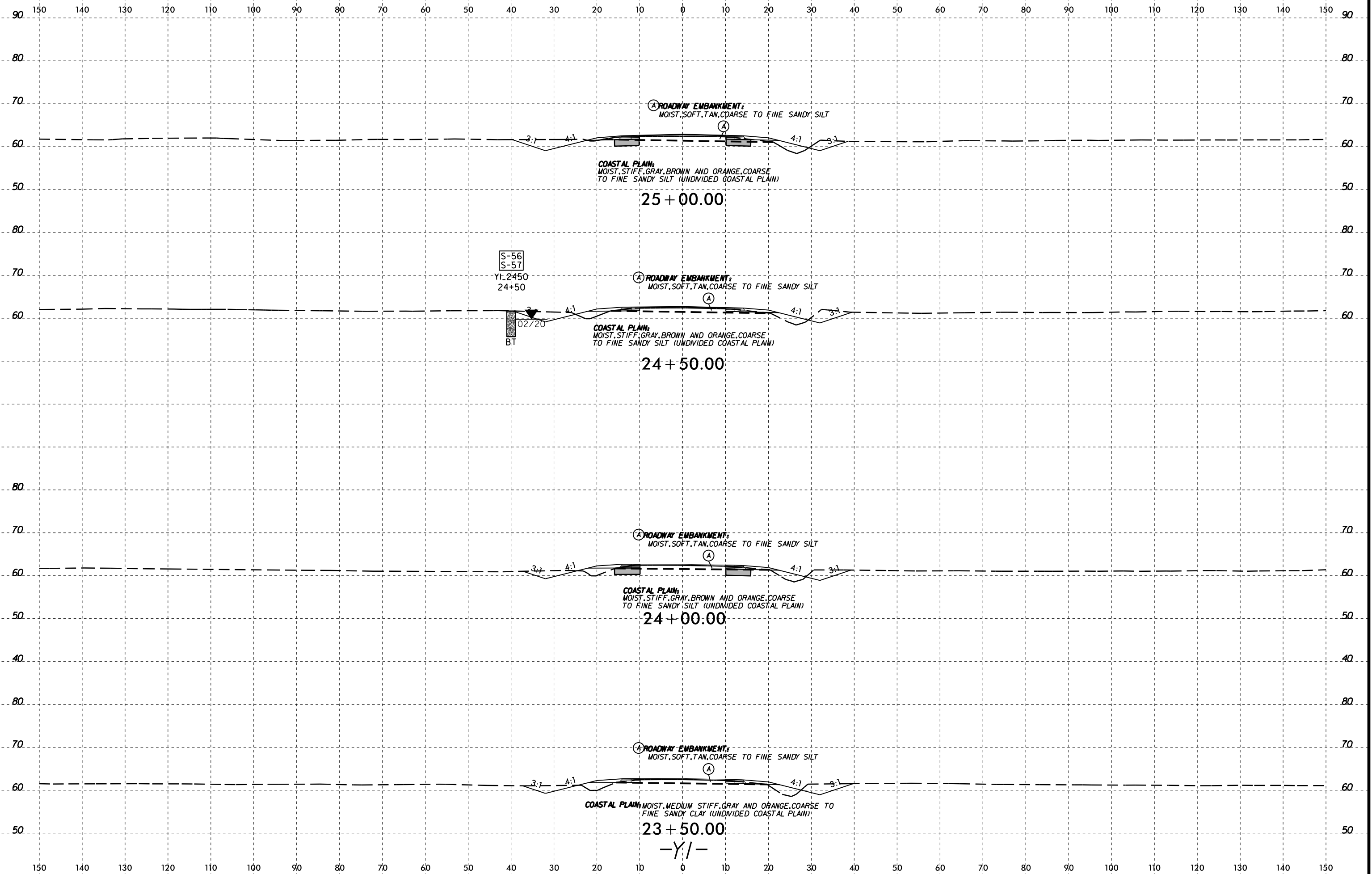




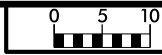




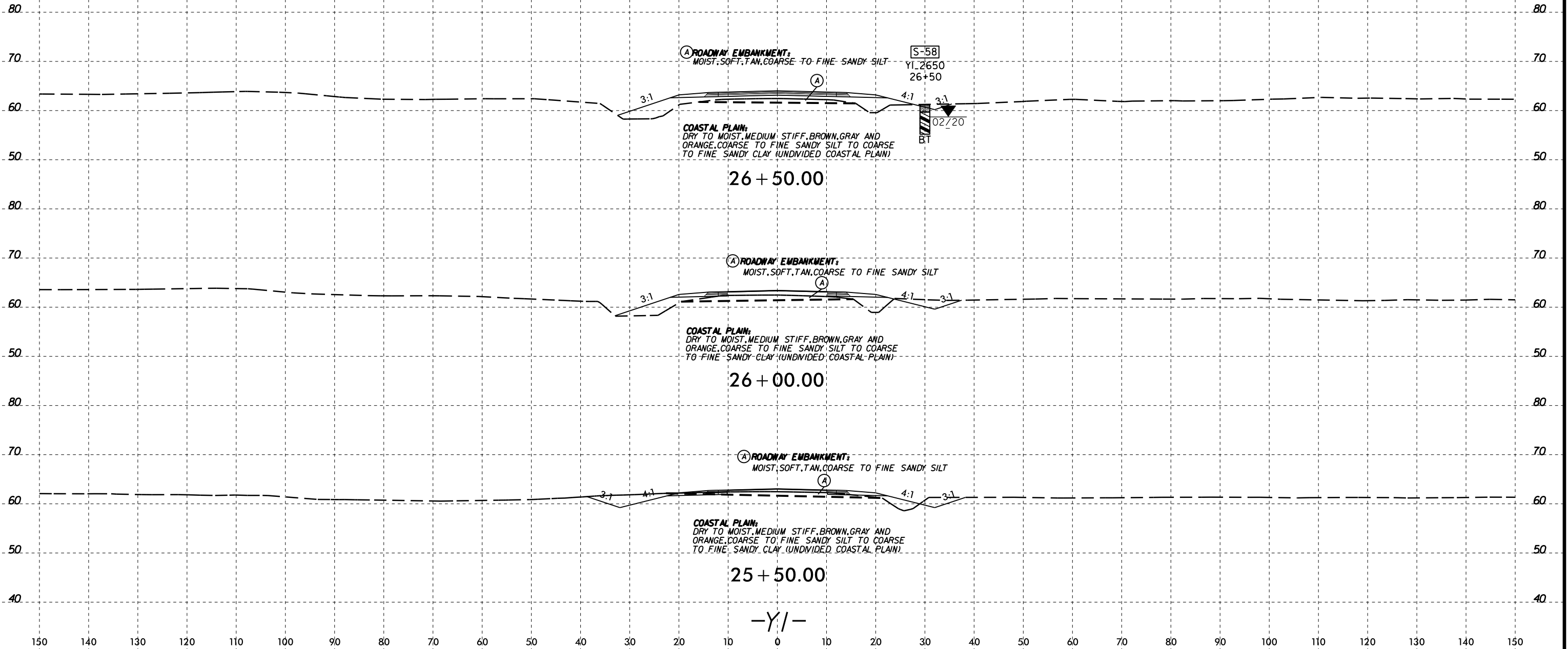




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 Wells - At KA211387

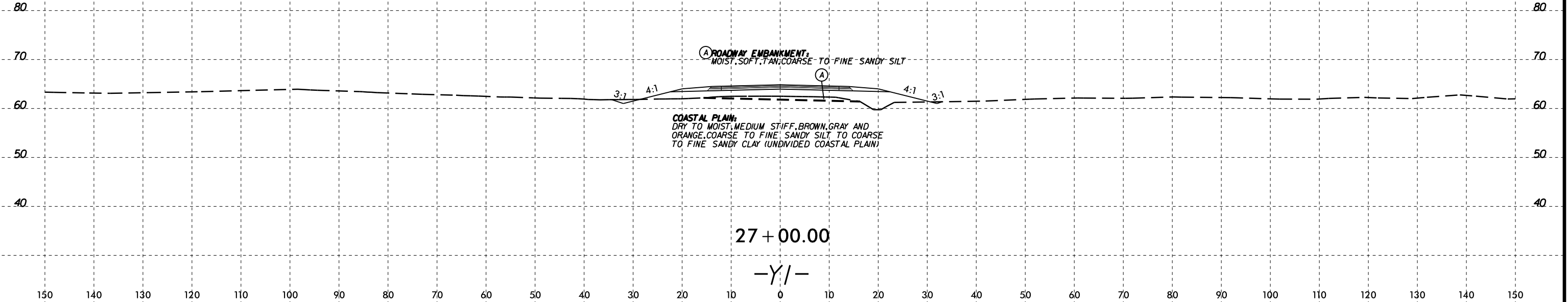


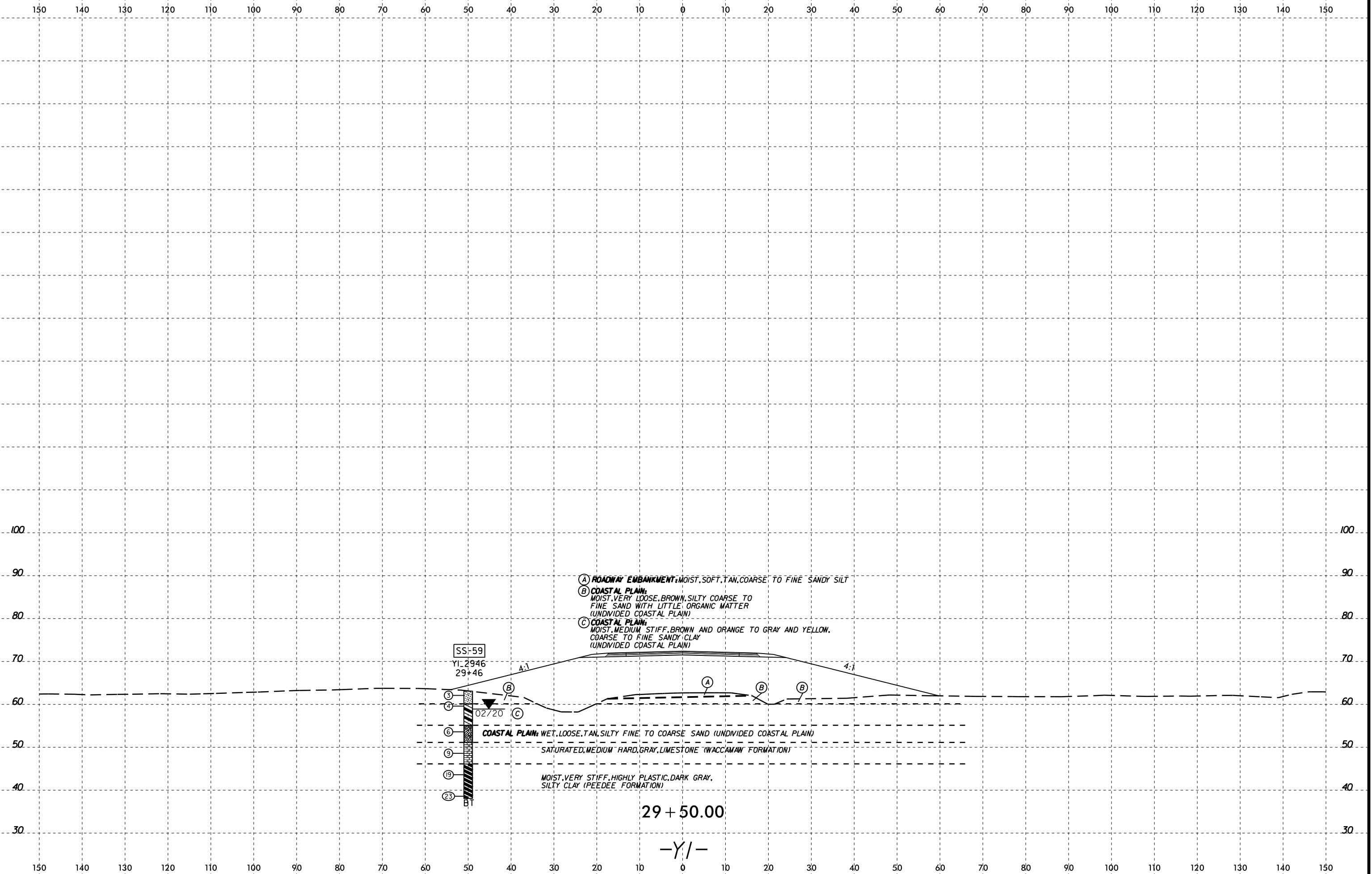
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150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150





- (A) ROADWAY EMBANKMENT: MOIST, SOFT, TAN, COARSE TO FINE SANDY SILT
- (B) COASTAL PLAIN: MOIST, VERY LOOSE, BROWN, SILTY COARSE TO FINE SAND WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)
- (C) COASTAL PLAIN: MOIST, MEDIUM STIFF, BROWN AND ORANGE TO GRAY AND YELLOW, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN: WET, LOOSE, TAN, SILTY FINE TO COARSE SAND (UNDIVIDED COASTAL PLAIN)

SATURATED, MEDIUM HARD, GRAY, LIMESTONE (WACCAMAW FORMATION)

MOIST, VERY STIFF, HIGHLY PLASTIC, DARK GRAY, SILTY CLAY (PEEDEE FORMATION)

SS-59

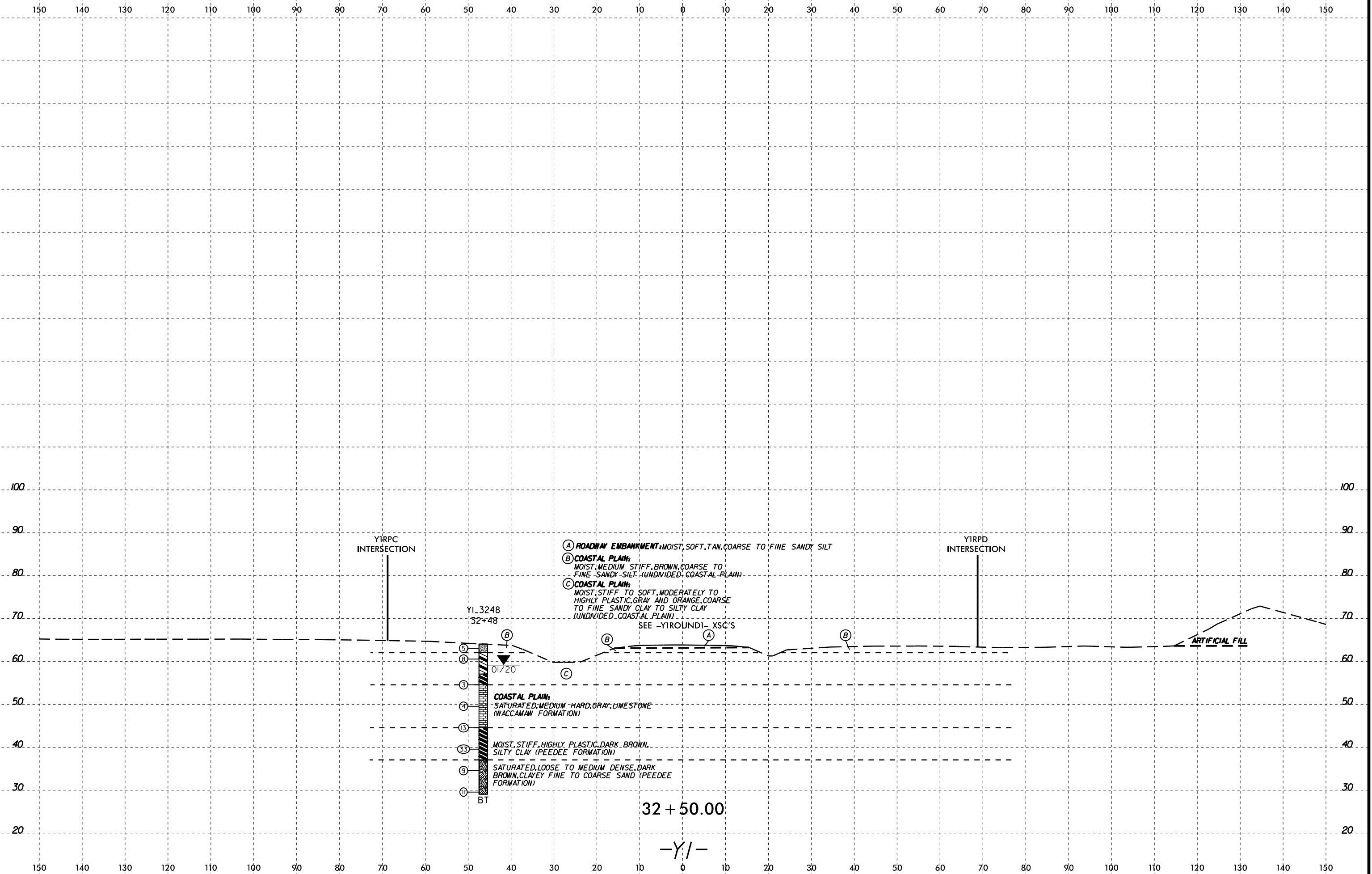
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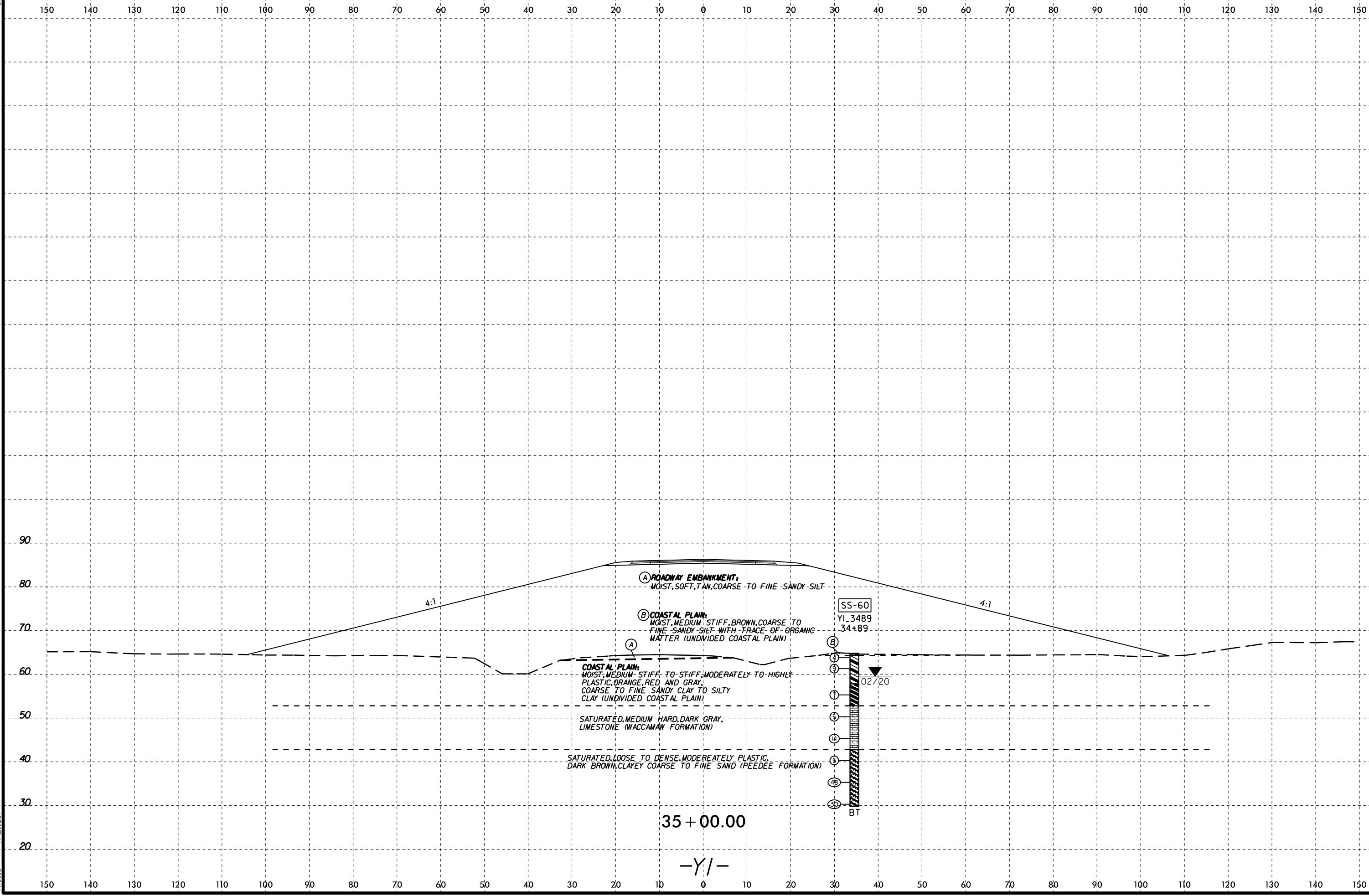
29+46

02/20

29 + 50.00

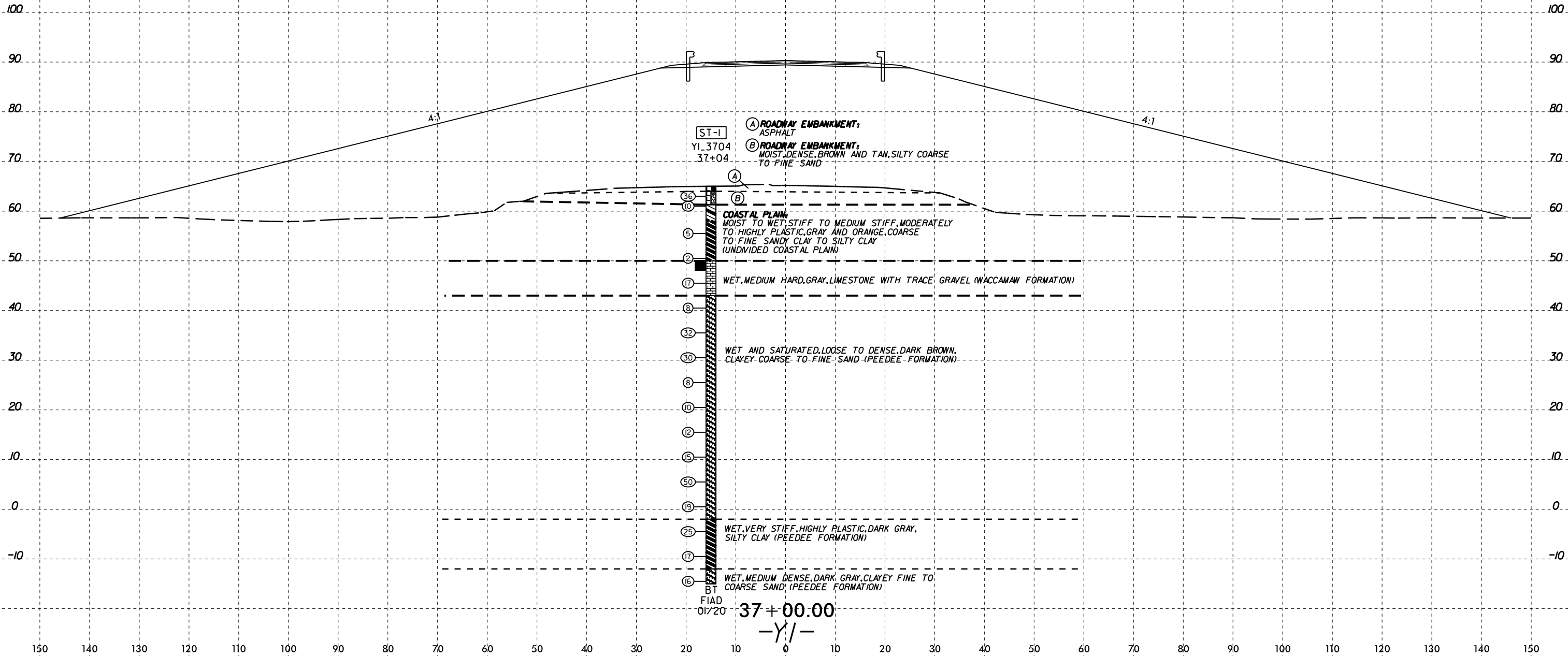
-Y/-







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



ST-1
Y1_3704
37+04

- (A) ROADWAY EMBANKMENT:
ASPHALT
- (B) ROADWAY EMBANKMENT:
MOIST, DENSE, BROWN AND TAN, SILTY COARSE
TO FINE SAND

COASTAL PLAIN:
MOIST TO WET, STIFF TO MEDIUM STIFF, MODERATELY
TO HIGHLY PLASTIC, GRAY AND ORANGE, COARSE
TO FINE SANDY CLAY TO SILTY CLAY
(UNDIVIDED COASTAL PLAIN)

WET, MEDIUM HARD, GRAY, LIMESTONE WITH TRACE GRAVEL (WACCAMAW FORMATION)

WET AND SATURATED, LOOSE TO DENSE, DARK BROWN,
CLAYEY-COARSE TO FINE SAND (PEEDEE FORMATION)

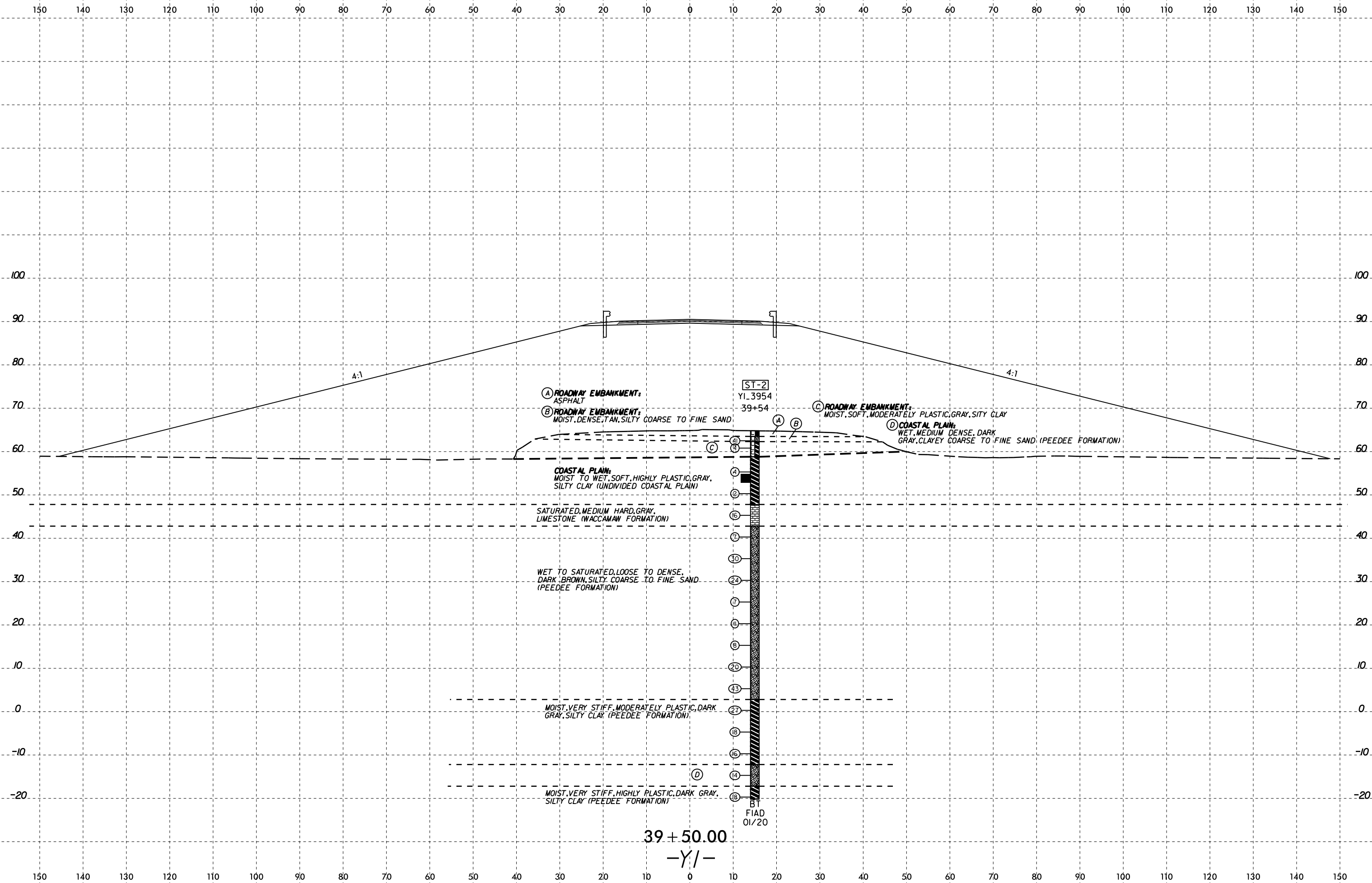
WET, VERY STIFF, HIGHLY PLASTIC, DARK GRAY,
SILTY CLAY (PEEDEE FORMATION)

WET, MEDIUM DENSE, DARK GRAY, CLAYEY FINE TO
COARSE SAND (PEEDEE FORMATION)

BT
FIAD
01/20

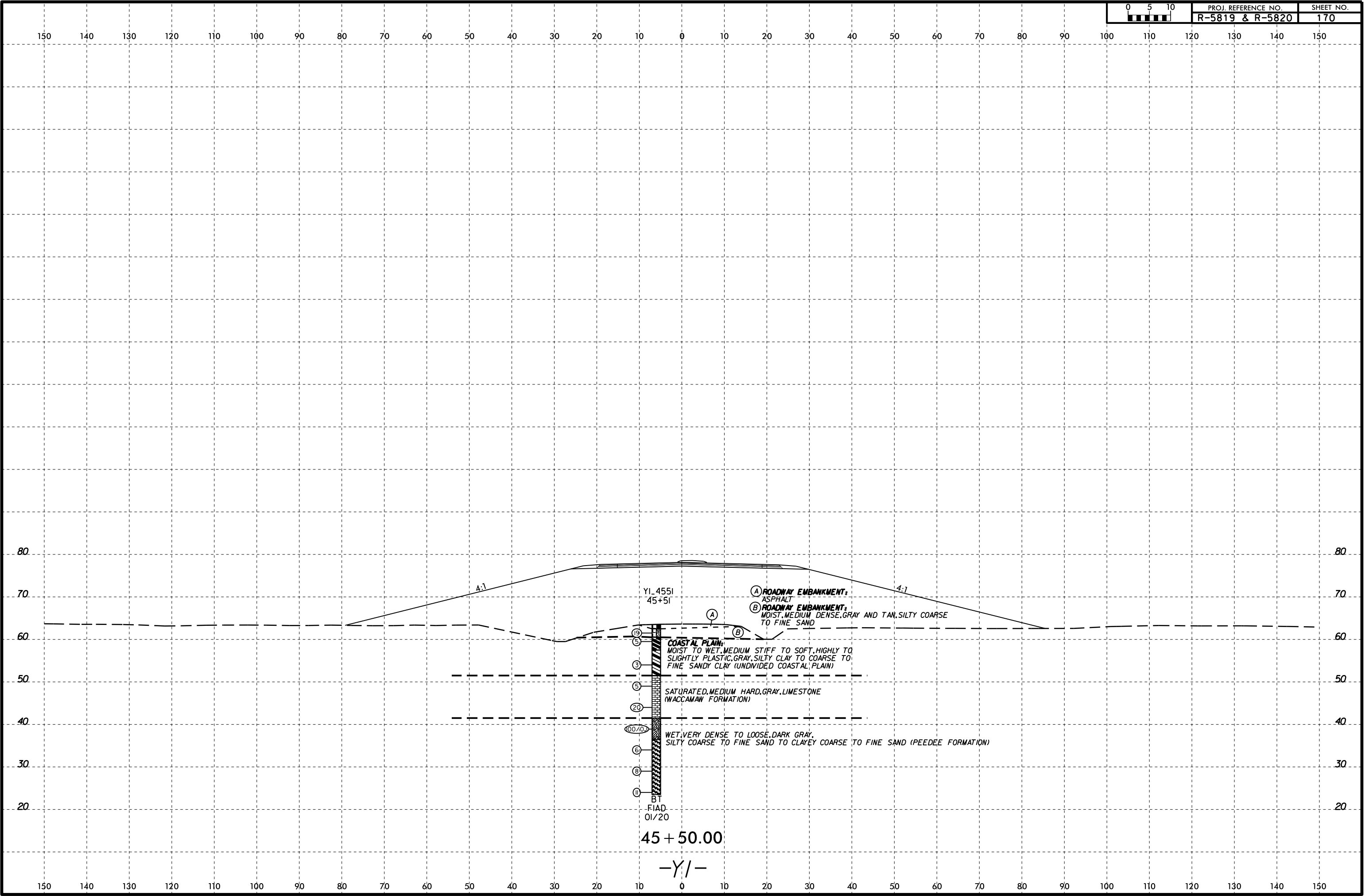
37+00.00

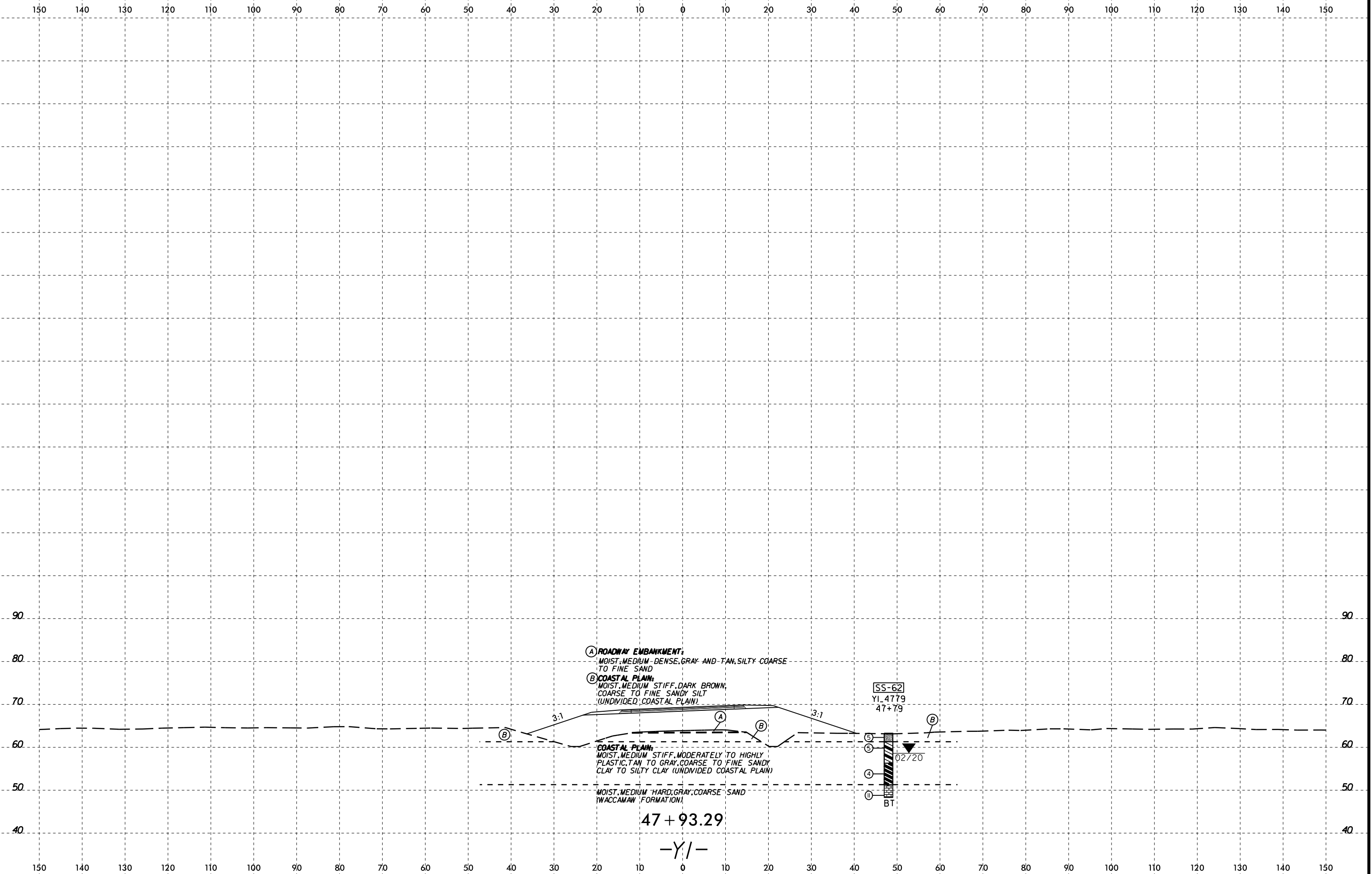
-Y/-

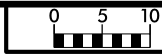


39 + 50.00
-Y/-

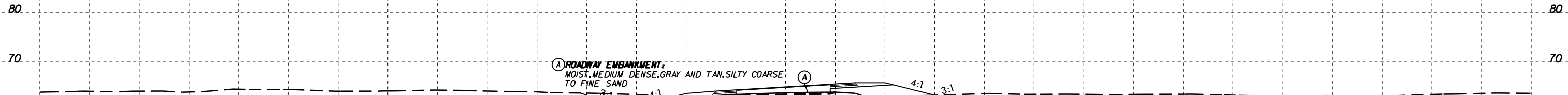
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Wells - A1 KA211387



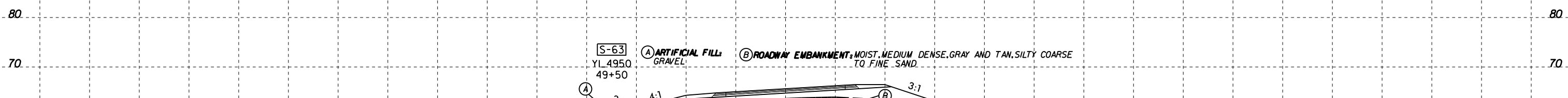




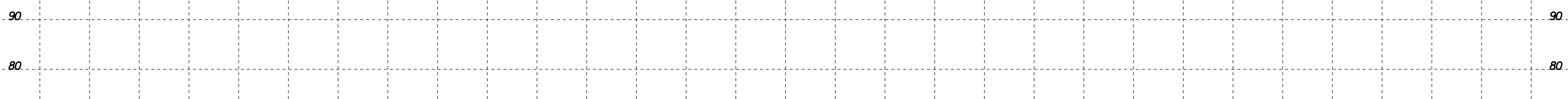
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50 + 00.00



49 + 50.00

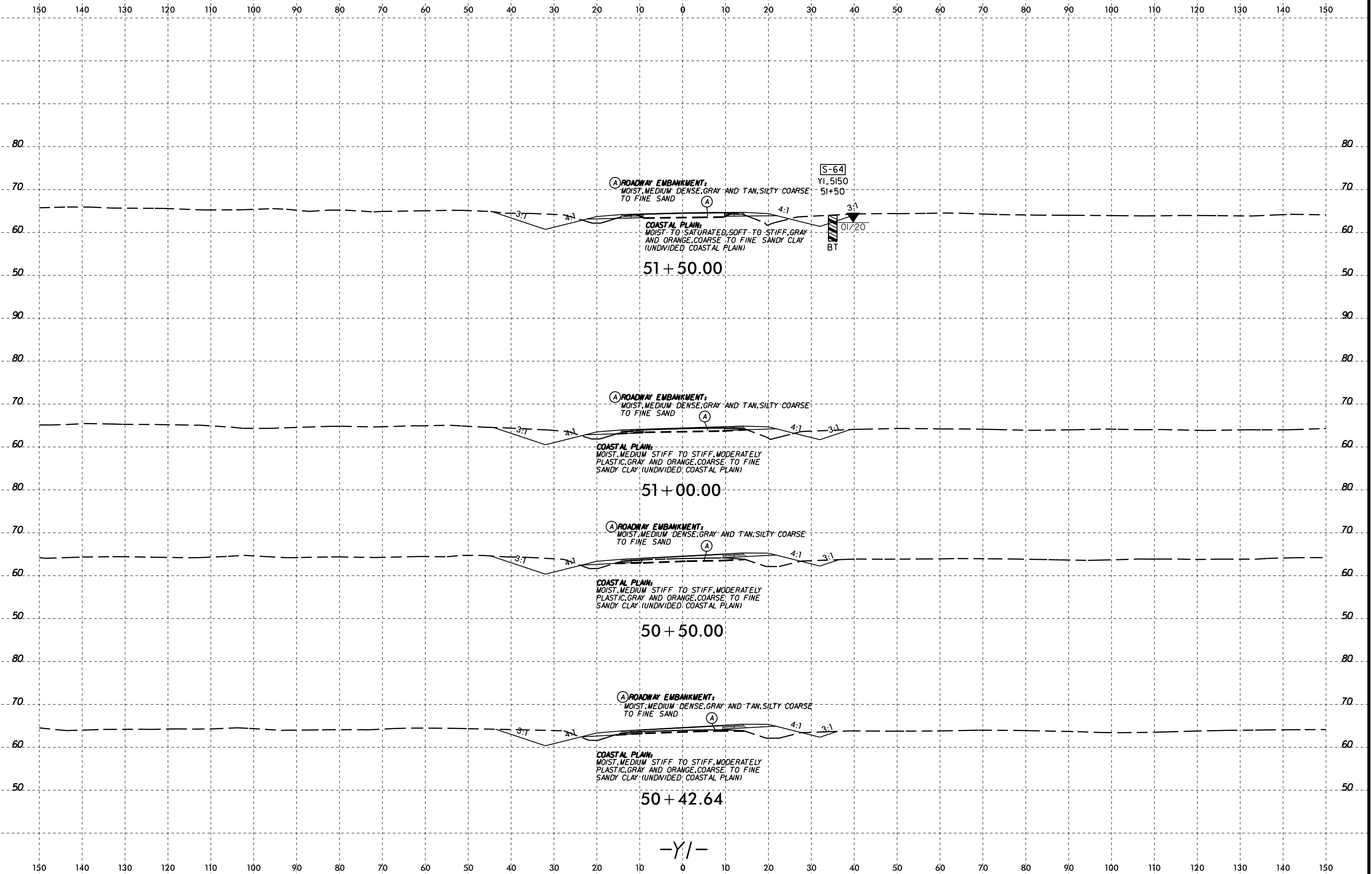


49 + 00.00

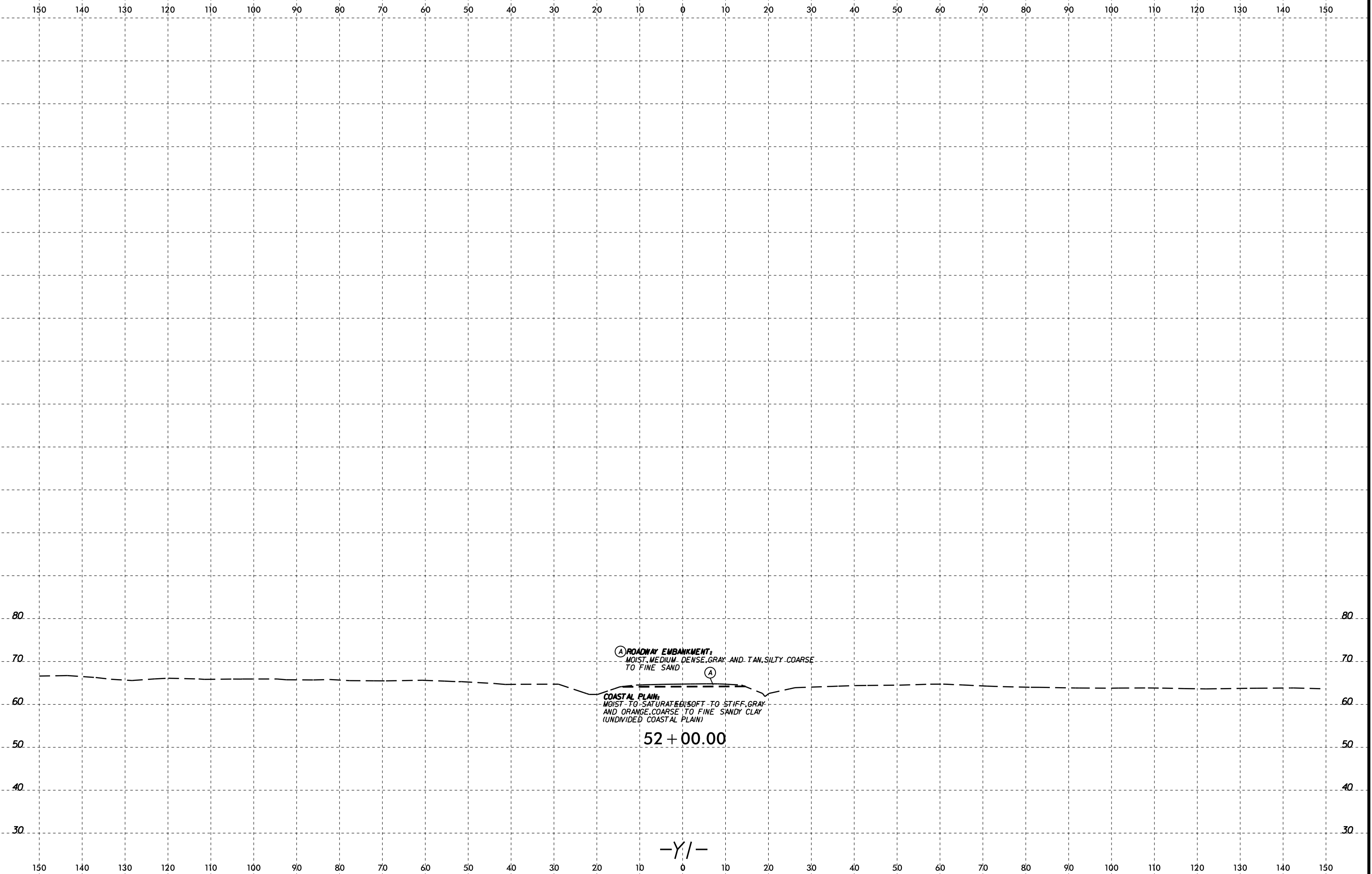
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 Wells - A1 KA211387



A ROADWAY EMBANKMENT:
MOIST MEDIUM DENSE GRAY AND TAN SILTY COARSE
TO FINE SAND

A
COASTAL PLAIN:
MOIST TO SATURATED SOFT TO STIFF GRAY
AND ORANGE COARSE TO FINE SANDY CLAY
(UNDIVIDED COASTAL PLAIN)

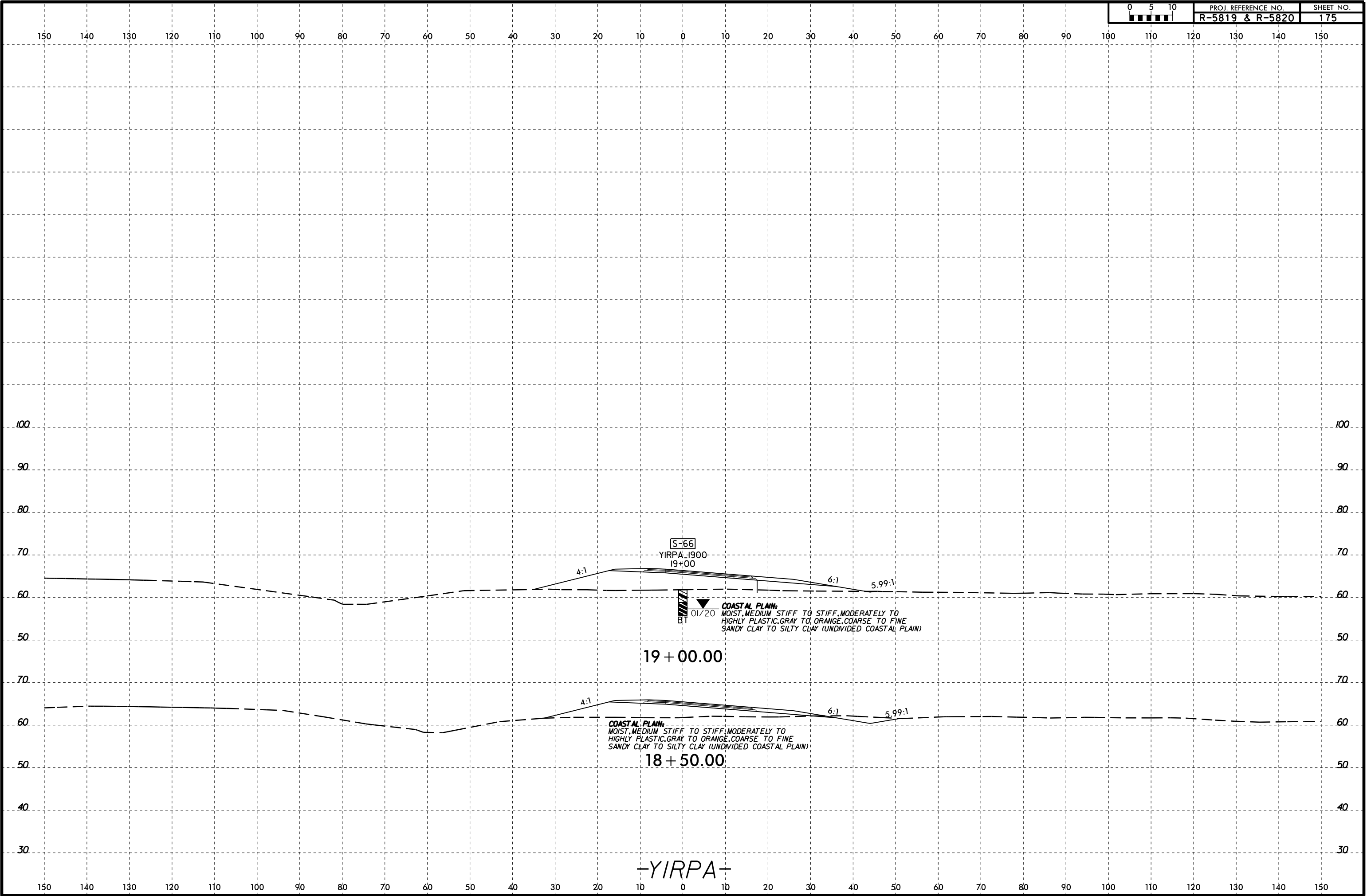
52 + 00.00

-Y/-

6/23/16

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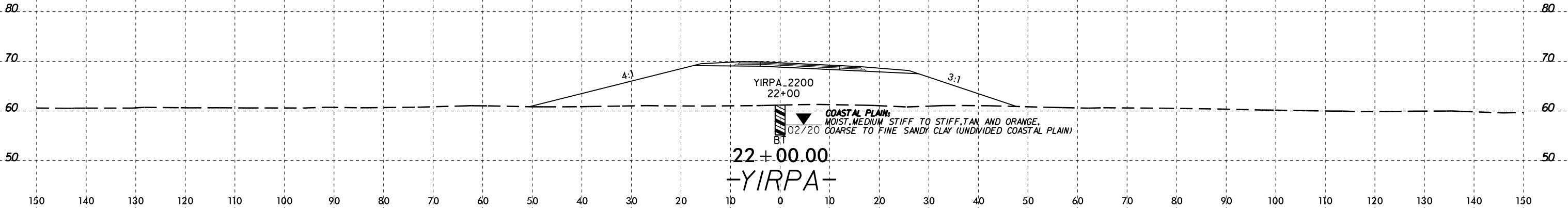
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	R-5819 & R-5820	175

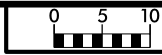




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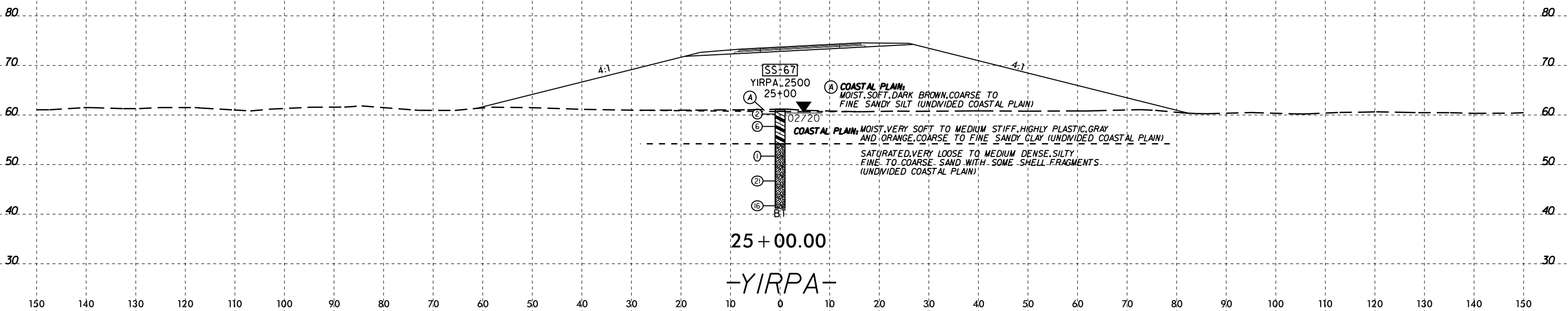
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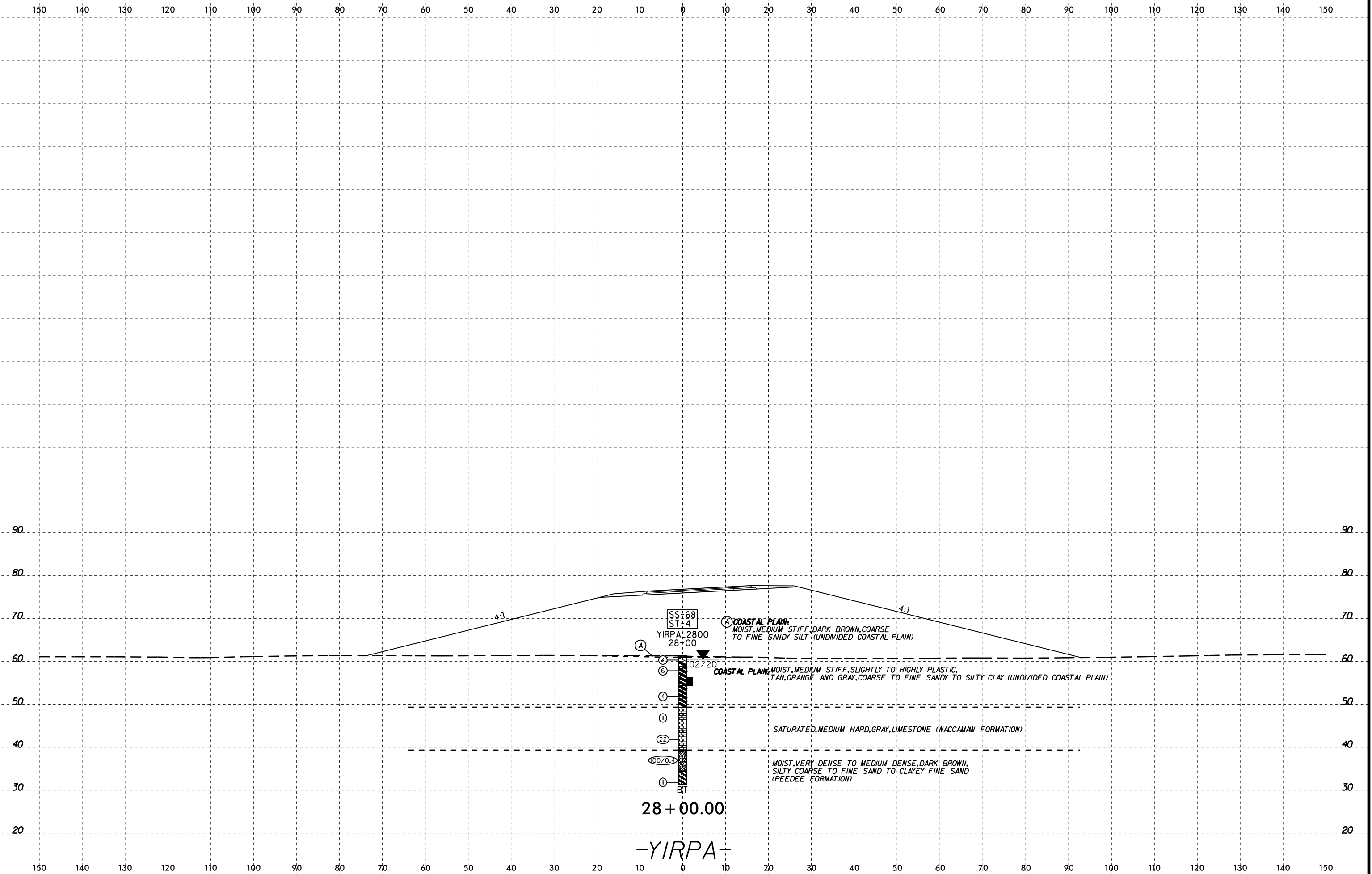




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SS+68
ST+4
YIRPA 2800
28+00

① COASTAL PLAIN;
MOIST, MEDIUM STIFF, DARK BROWN, COARSE
TO FINE SANDY SILT (UNDIVIDED, COASTAL PLAIN)

② COASTAL PLAIN; MOIST, MEDIUM STIFF, SLIGHTLY TO HIGHLY PLASTIC,
TAN, ORANGE AND GRAY, COARSE TO FINE SANDY TO SILTY CLAY (UNDIVIDED COASTAL PLAIN)

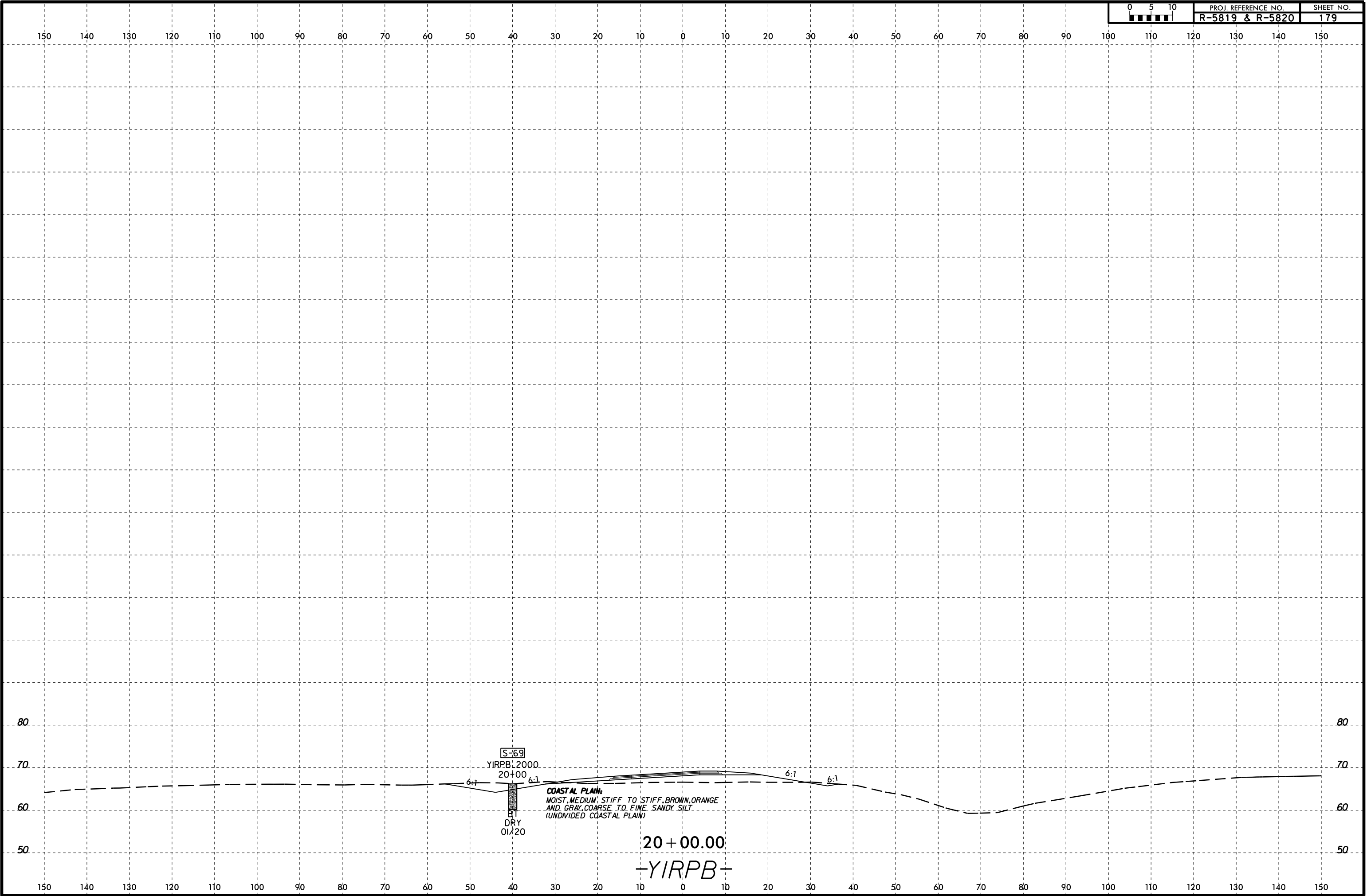
SATURATED, MEDIUM HARD, GRAY, LIMESTONE (WACCAMAW FORMATION)

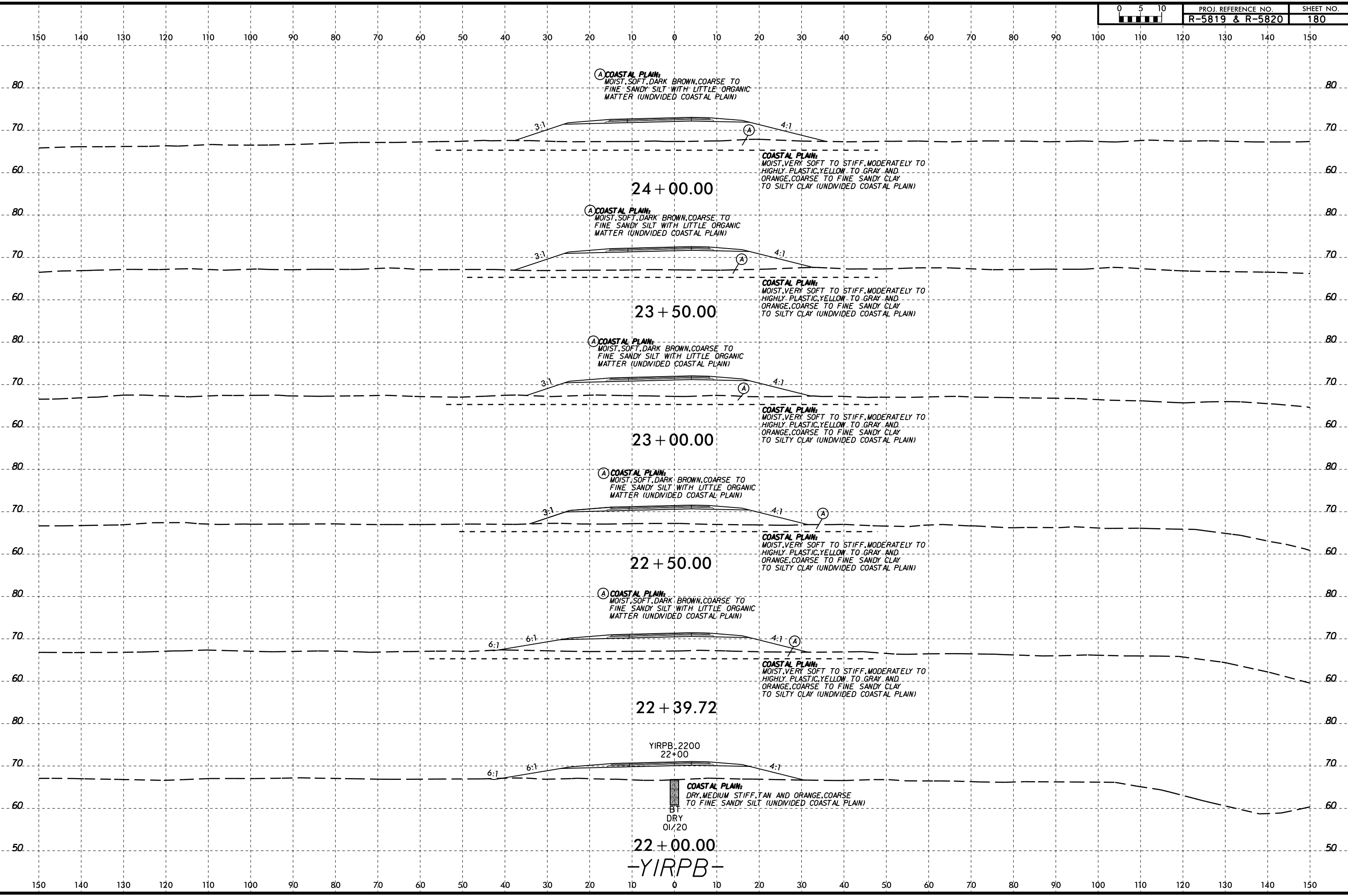
④ MOIST, VERY DENSE TO MEDIUM DENSE, DARK BROWN,
SILTY COARSE TO FINE SAND TO CLAYEY FINE SAND
(PEEDEE FORMATION)

28 + 00.00

-YIRPA-

6/23/16
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Wells - At KA211387





(A) COASTAL PLAIN:
 MOIST, SOFT, DARK BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
 MOIST, VERY SOFT TO STIFF, MODERATELY TO HIGHLY PLASTIC, YELLOW TO GRAY AND ORANGE, COARSE TO FINE SANDY CLAY TO SILTY CLAY (UNDIVIDED COASTAL PLAIN)

(A) COASTAL PLAIN:
 MOIST, SOFT, DARK BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
 MOIST, VERY SOFT TO STIFF, MODERATELY TO HIGHLY PLASTIC, YELLOW TO GRAY AND ORANGE, COARSE TO FINE SANDY CLAY TO SILTY CLAY (UNDIVIDED COASTAL PLAIN)

(A) COASTAL PLAIN:
 MOIST, SOFT, DARK BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
 MOIST, VERY SOFT TO STIFF, MODERATELY TO HIGHLY PLASTIC, YELLOW TO GRAY AND ORANGE, COARSE TO FINE SANDY CLAY TO SILTY CLAY (UNDIVIDED COASTAL PLAIN)

(A) COASTAL PLAIN:
 MOIST, SOFT, DARK BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
 MOIST, VERY SOFT TO STIFF, MODERATELY TO HIGHLY PLASTIC, YELLOW TO GRAY AND ORANGE, COARSE TO FINE SANDY CLAY TO SILTY CLAY (UNDIVIDED COASTAL PLAIN)

(A) COASTAL PLAIN:
 MOIST, SOFT, DARK BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

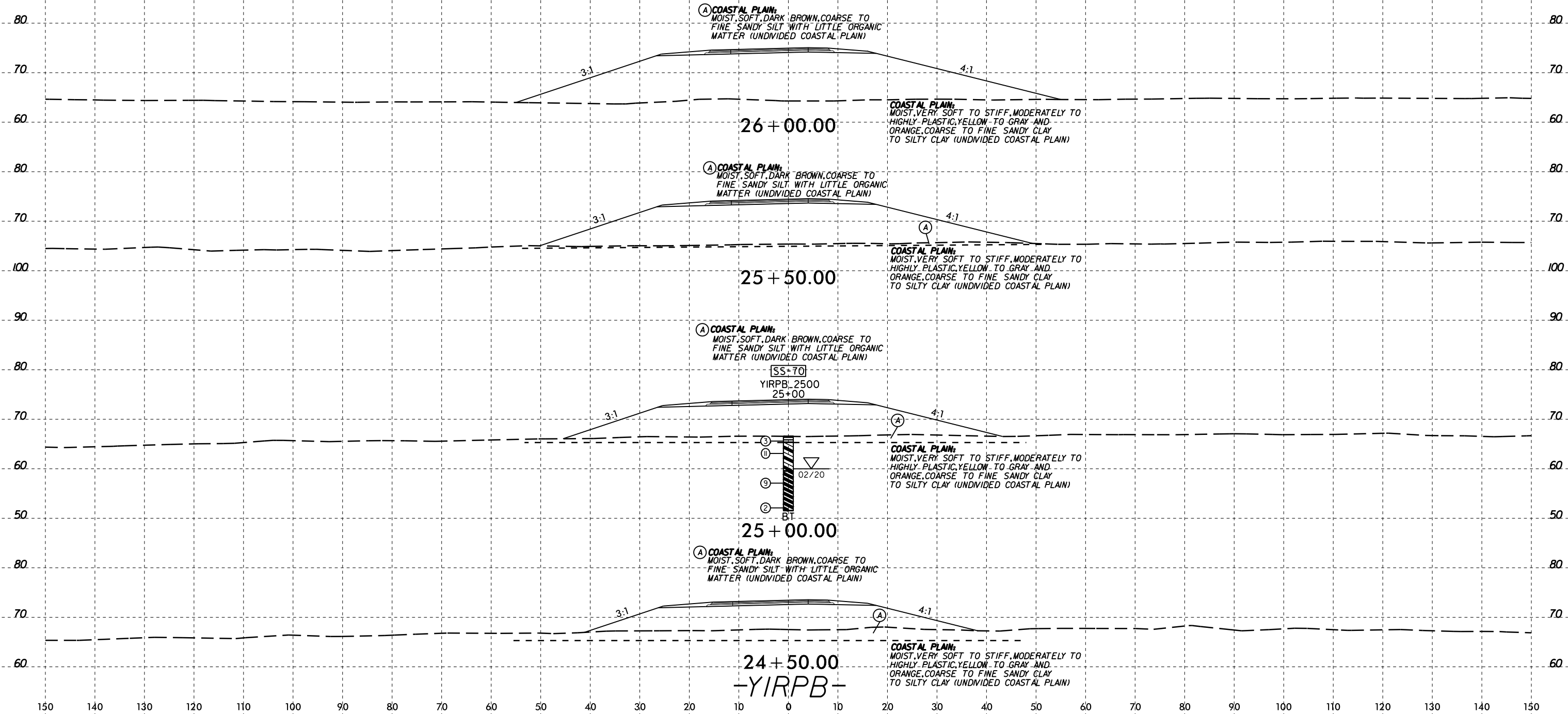
COASTAL PLAIN:
 MOIST, VERY SOFT TO STIFF, MODERATELY TO HIGHLY PLASTIC, YELLOW TO GRAY AND ORANGE, COARSE TO FINE SANDY CLAY TO SILTY CLAY (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
 DRY, MEDIUM STIFF, TAN AND ORANGE, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

BT
 DRY
 01/20
 22 + 00.00
 -YIRPB-



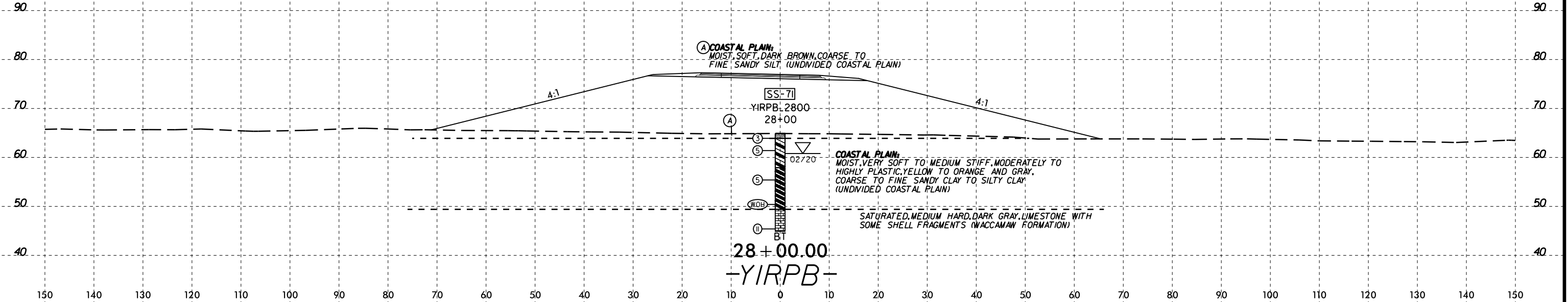
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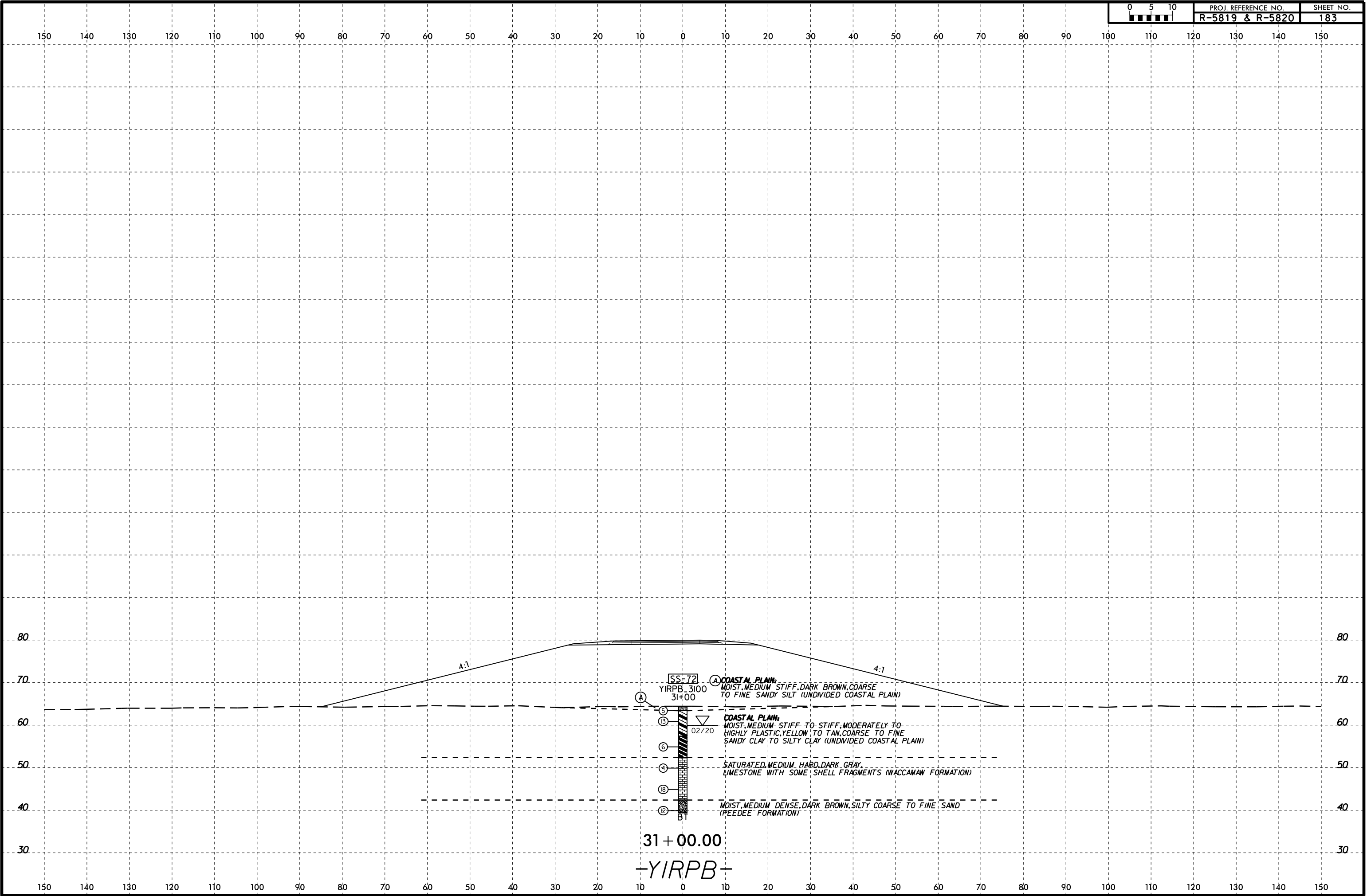


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Wells - At KA211387



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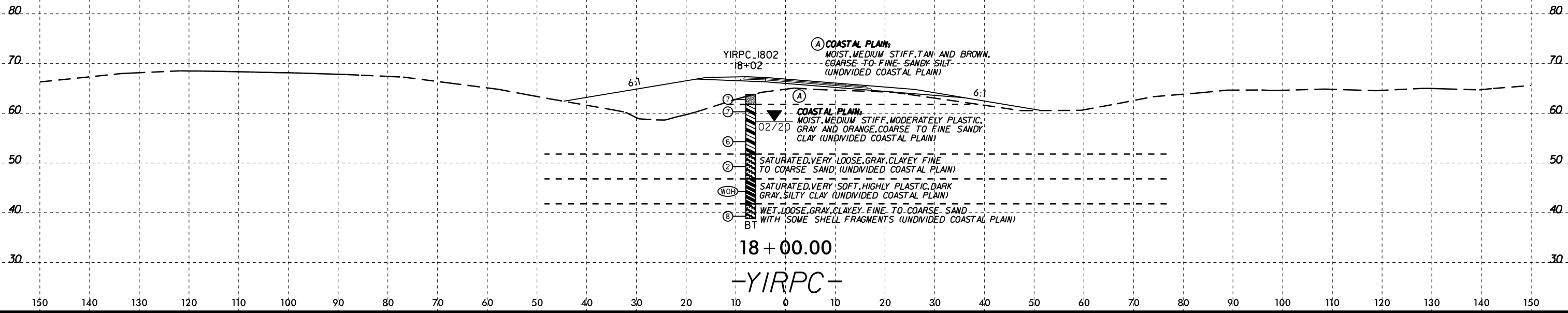


31 + 00.00
 -YIRPB-



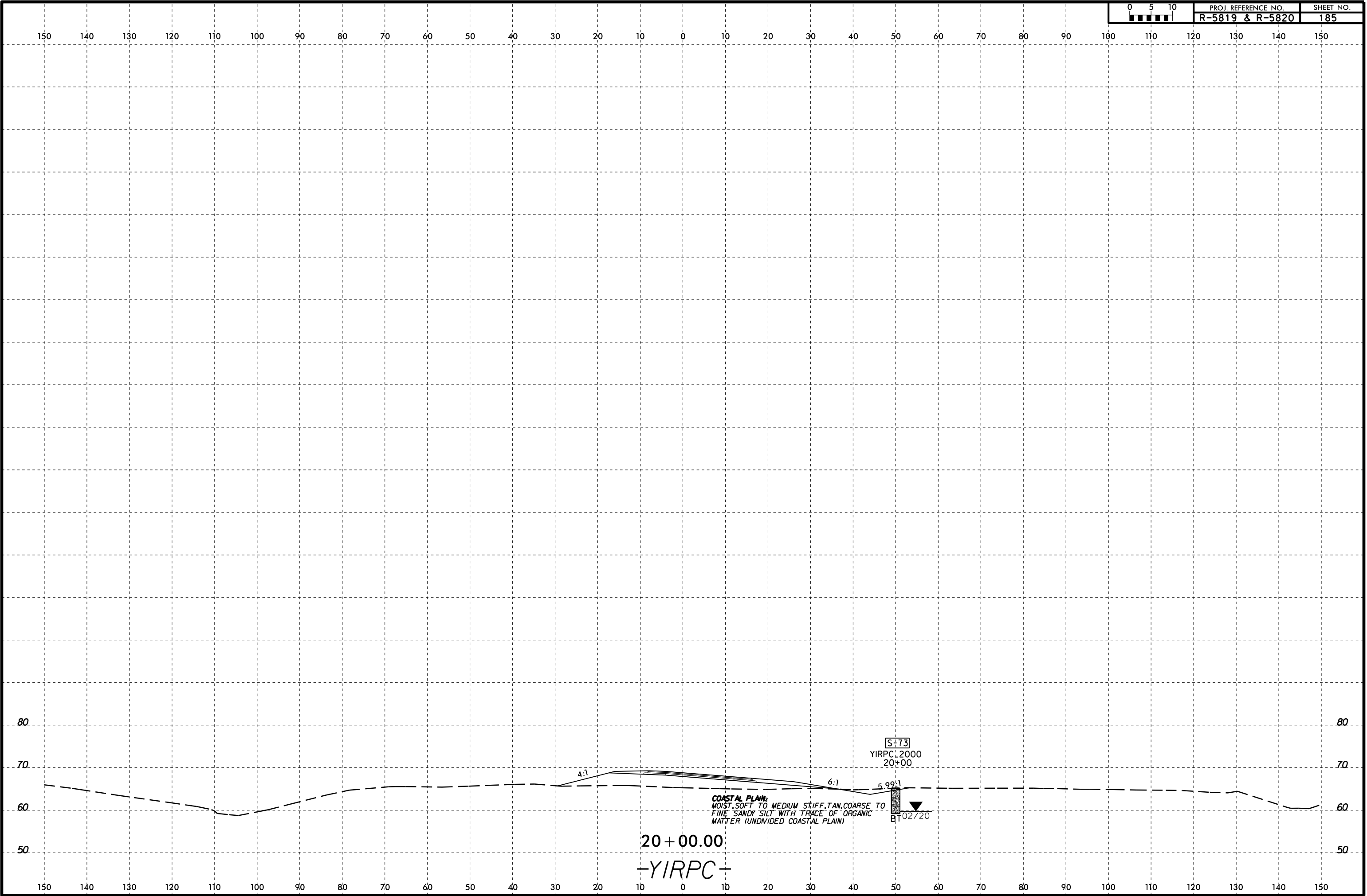
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Wells - A1 KA211387

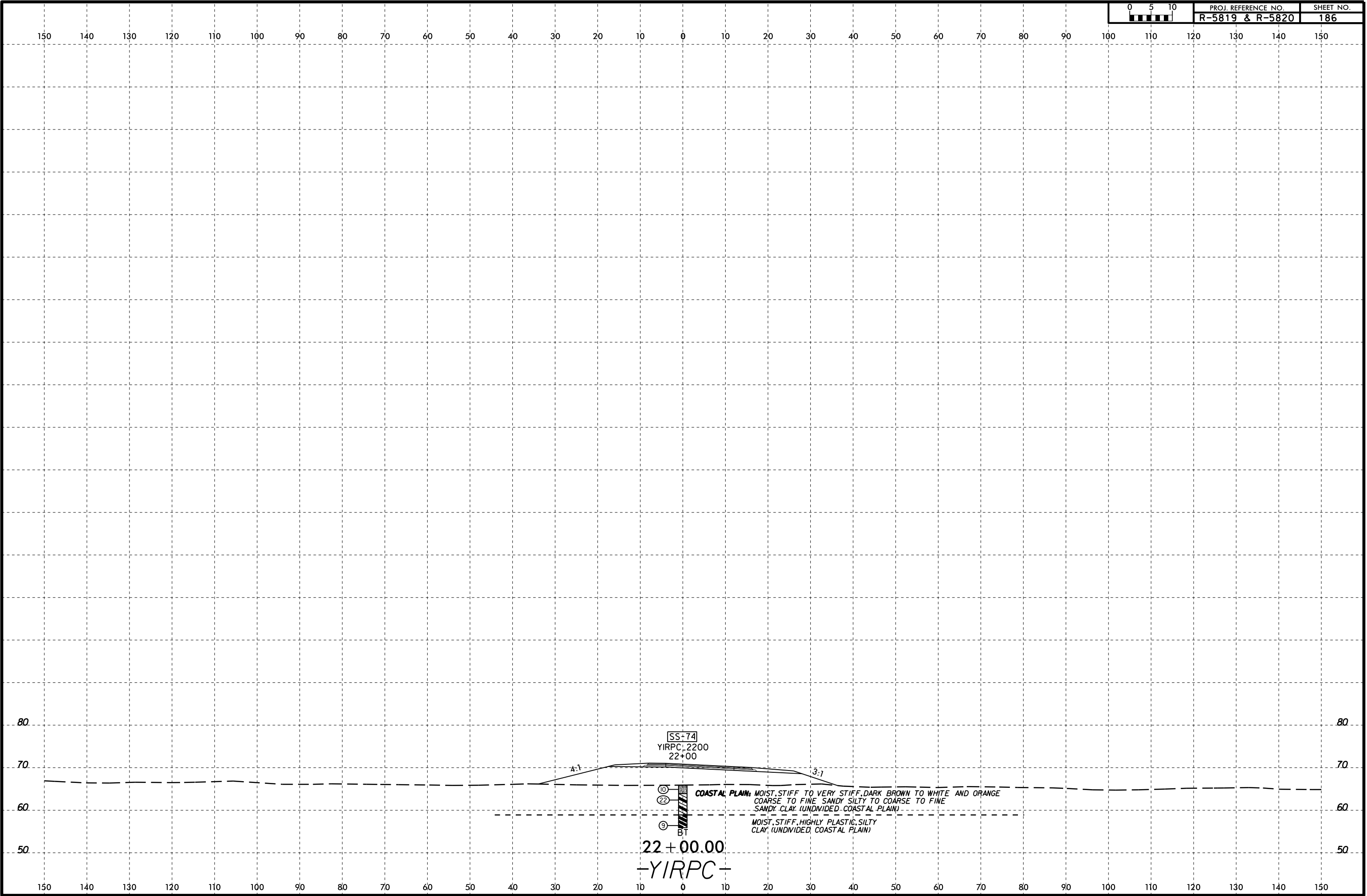


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	R-5819 & R-5820	185



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SS+74
YIRPC: 2200
22+00

4:1

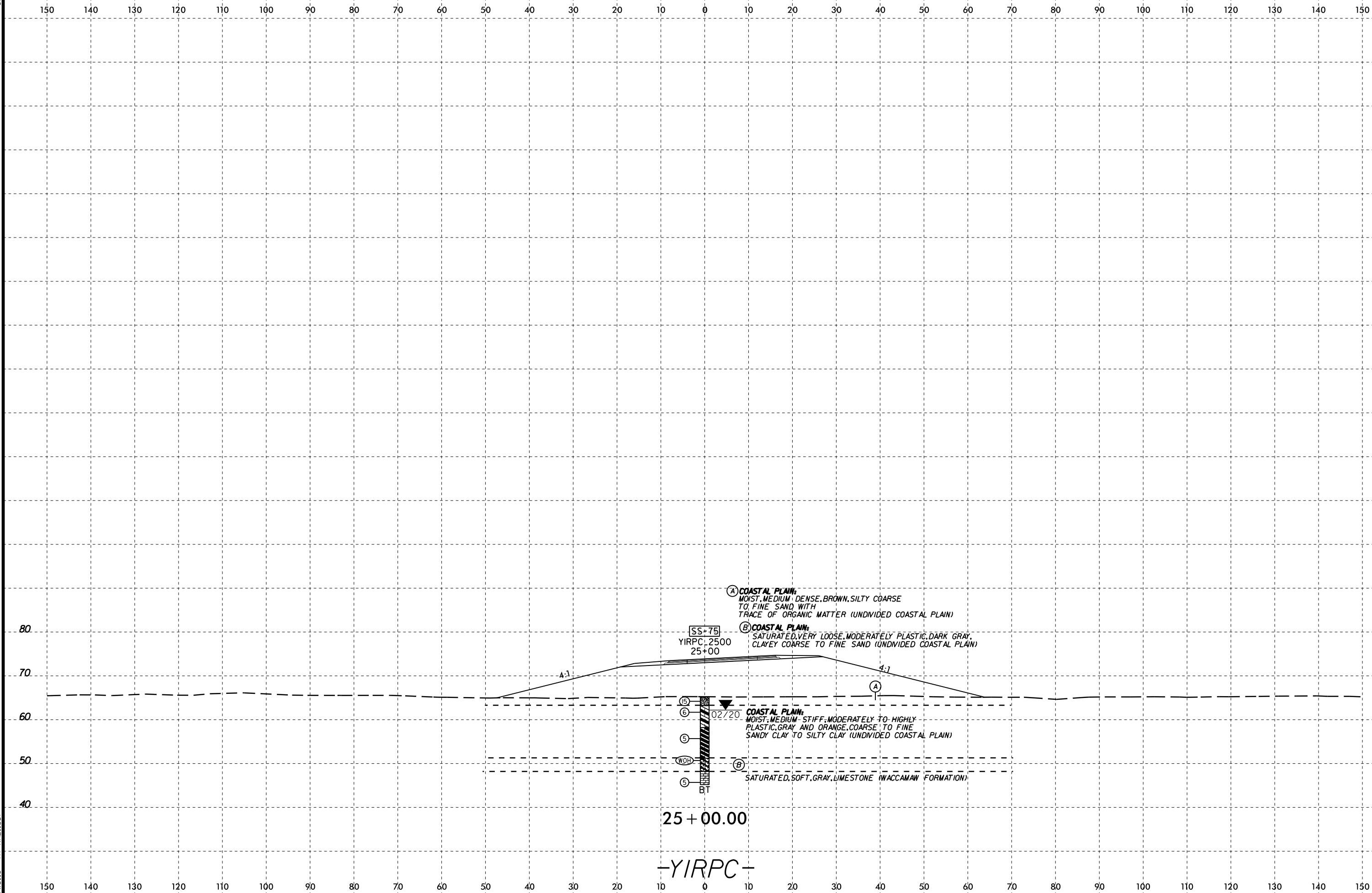
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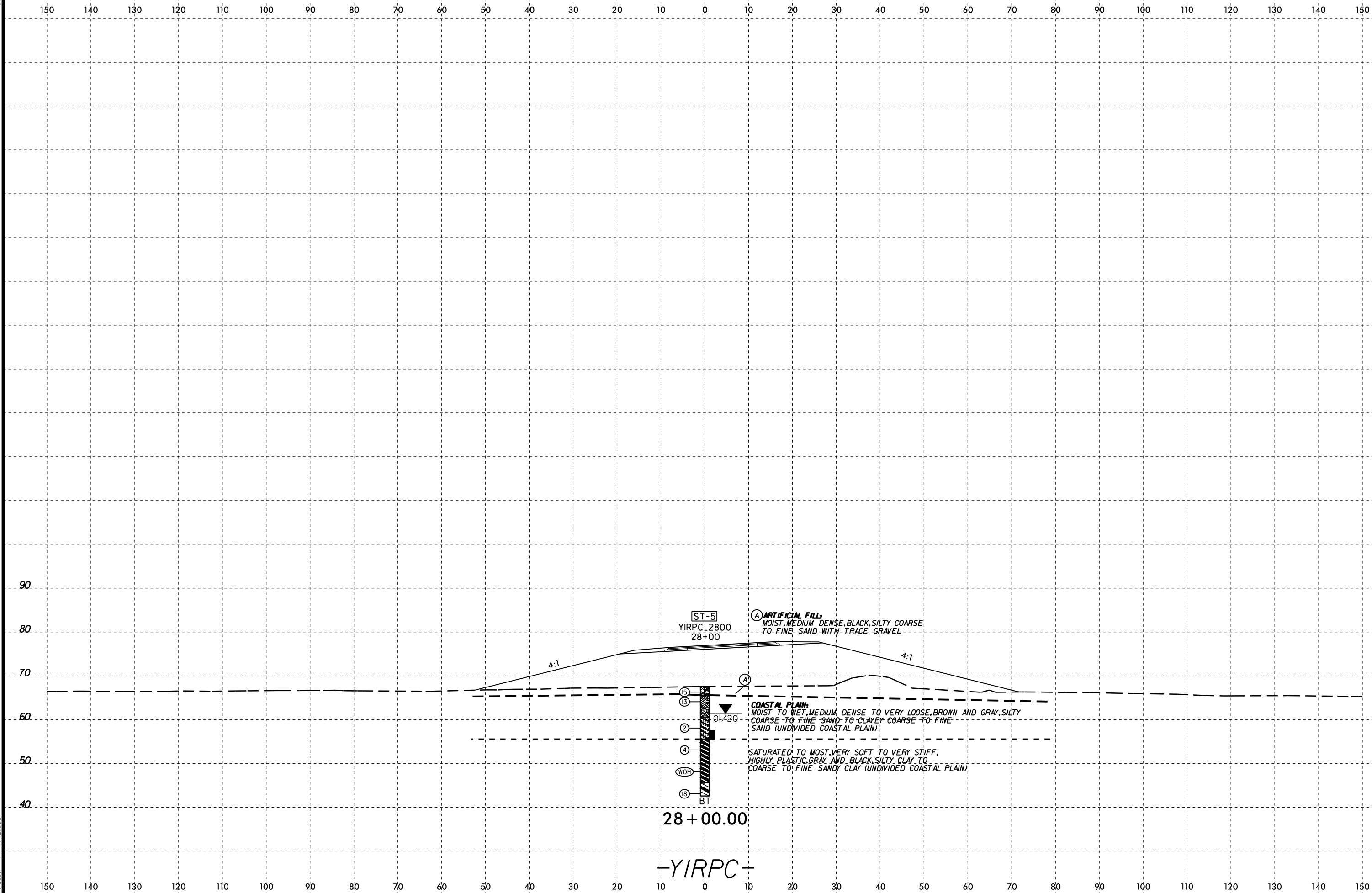
10
22
9
BT

COASTAL PLAIN: MOIST, STIFF TO VERY STIFF, DARK BROWN TO WHITE AND ORANGE
COARSE TO FINE SANDY SILTY TO COARSE TO FINE
SANDY CLAY (UNDIVIDED, COASTAL PLAIN)

MOIST, STIFF, HIGHLY PLASTIC, SILTY
CLAY (UNDIVIDED, COASTAL PLAIN)

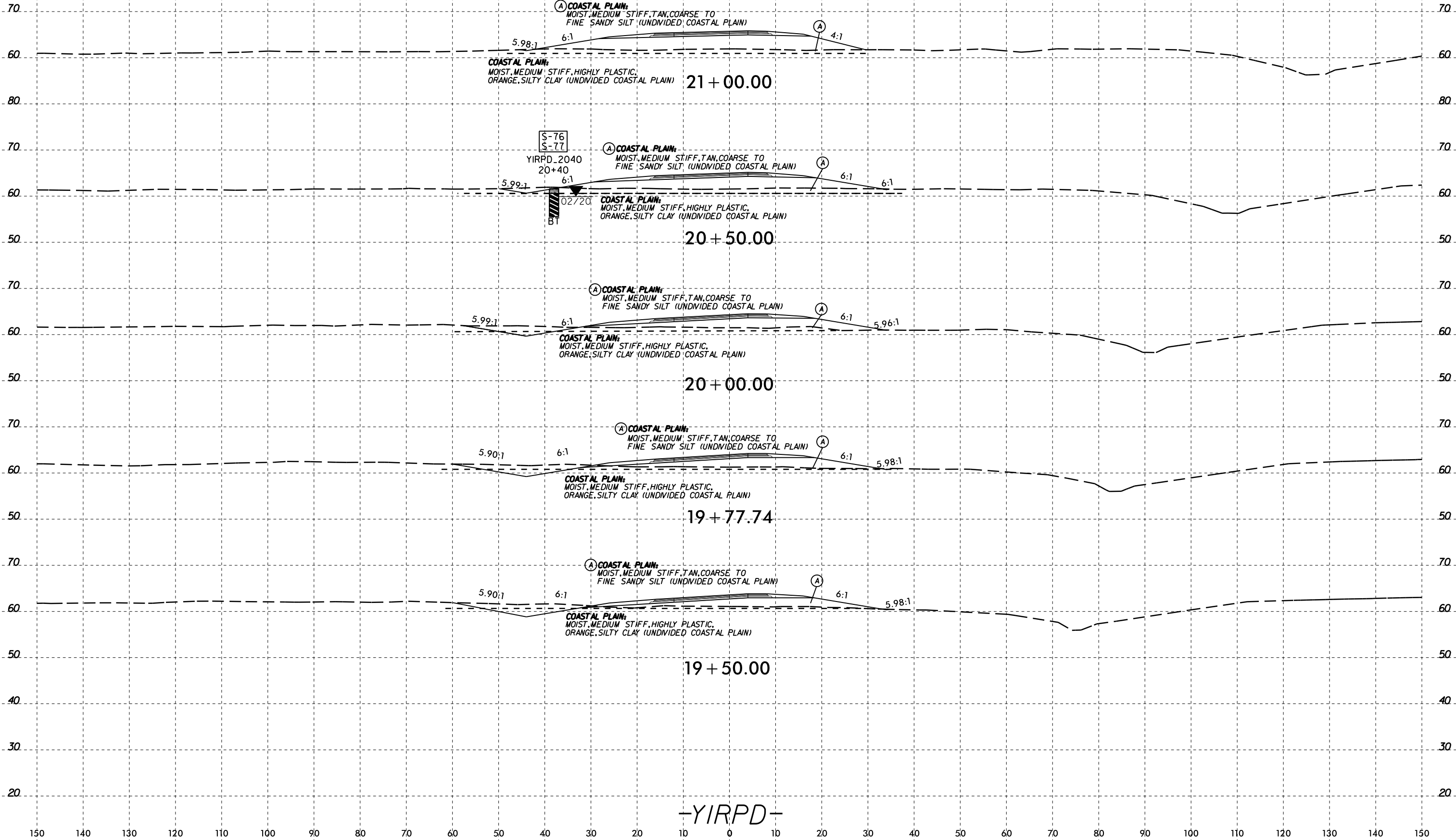
22 + 00.00
-YIRPC-

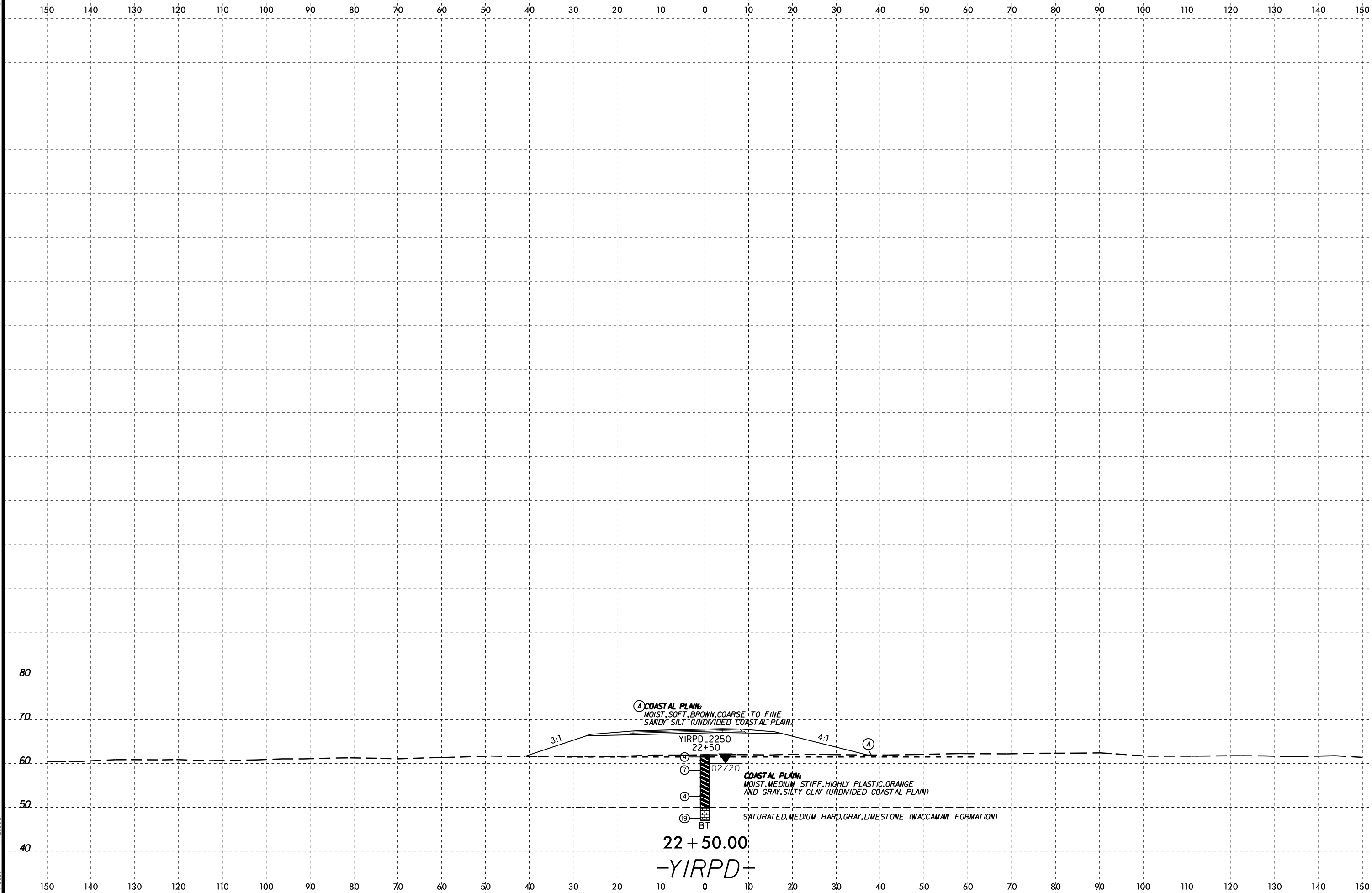


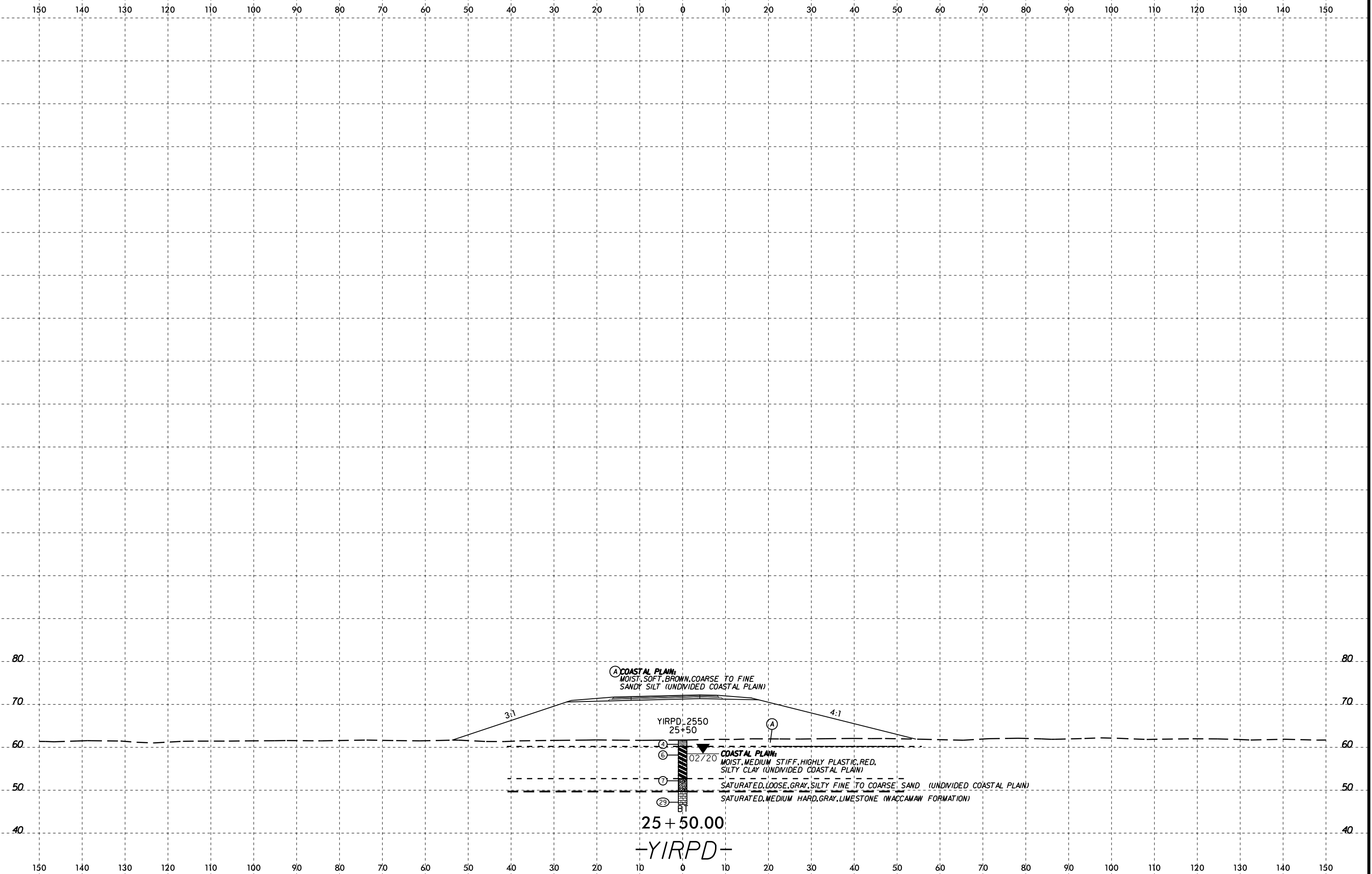




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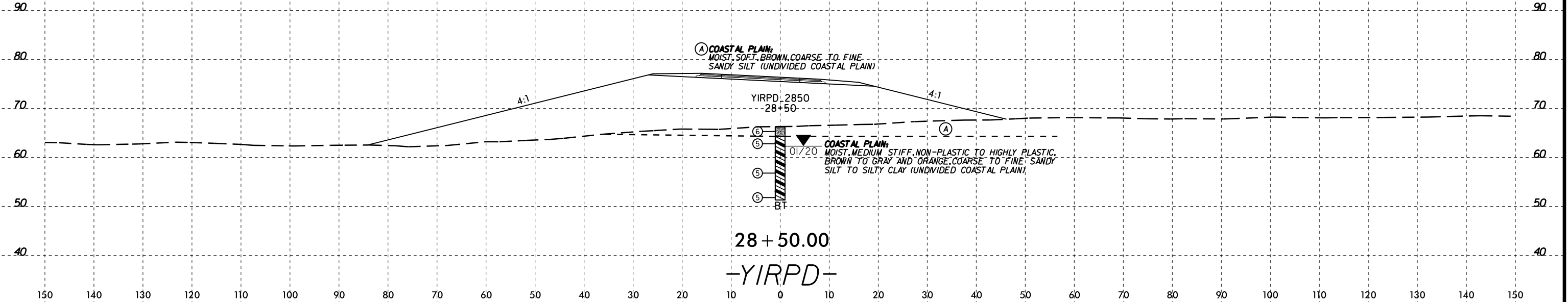






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Wells - At KA211387





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



COASTAL PLAIN:
MOIST TO WET, MEDIUM STIFF TO VERY STIFF,
SLIGHTLY TO HIGHLY PLASTIC, GRAY AND ORANGE,
COARSE TO FINE SANDY SILT TO SILTY CLAY
(UNDIVIDED COASTAL PLAIN)

14 + 50.00



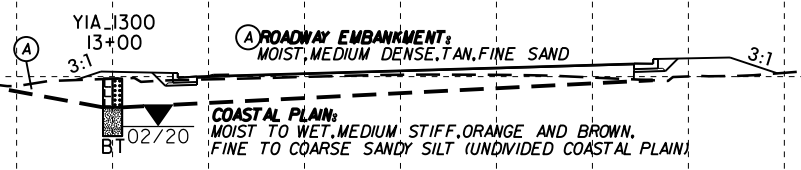
COASTAL PLAIN:
MOIST TO WET, MEDIUM STIFF, ORANGE AND BROWN,
FINE TO COARSE SANDY SILT (UNDIVIDED COASTAL PLAIN)

14 + 00.00



COASTAL PLAIN:
MOIST TO WET, MEDIUM STIFF, ORANGE AND BROWN,
FINE TO COARSE SANDY SILT (UNDIVIDED COASTAL PLAIN)

13 + 50.00



COASTAL PLAIN:
MOIST TO WET, MEDIUM STIFF, ORANGE AND BROWN,
FINE TO COARSE SANDY SILT (UNDIVIDED COASTAL PLAIN)

13 + 00.00

-Y/A-

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



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) ROADWAY EMBANKMENT:
MOIST, MEDIUM DENSE, TAN, FINE SAND

COASTAL PLAIN:
MOIST TO WET, MEDIUM STIFF TO VERY STIFF,
SLIGHTLY TO HIGHLY PLASTIC, GRAY AND ORANGE,
COARSE TO FINE SANDY SILT TO SILTY CLAY
(UNDIVIDED COASTAL PLAIN)

16 + 00.00

(A) ROADWAY EMBANKMENT:
MOIST, MEDIUM DENSE, TAN, FINE SAND

COASTAL PLAIN:
MOIST TO WET, MEDIUM STIFF TO VERY STIFF,
SLIGHTLY TO HIGHLY PLASTIC, GRAY AND ORANGE,
COARSE TO FINE SANDY SILT TO SILTY CLAY
(UNDIVIDED COASTAL PLAIN)

15 + 50.00

(A) ROADWAY EMBANKMENT:
MOIST, MEDIUM DENSE, TAN, FINE SAND

S-65
YIA 1500
15+00

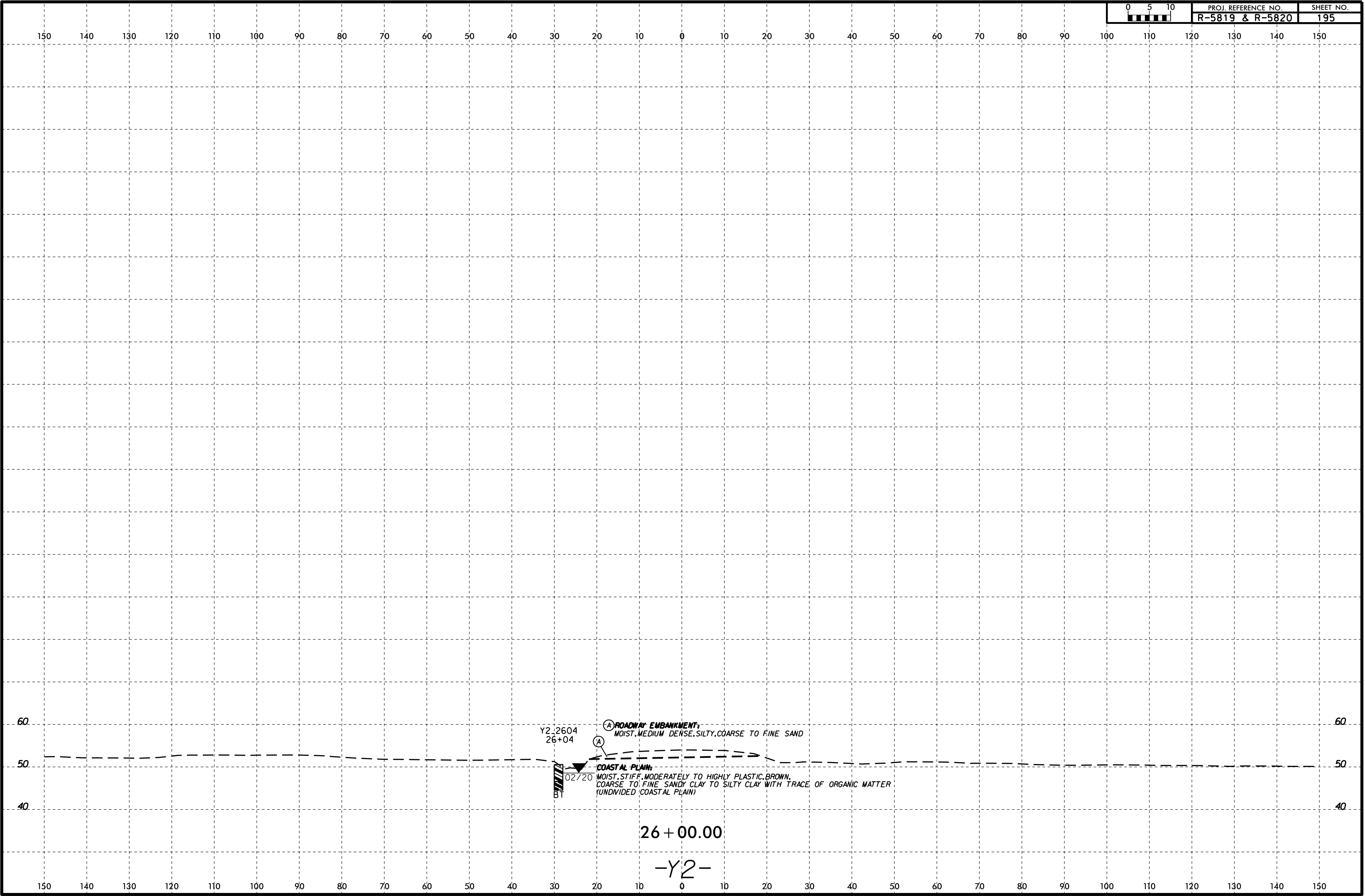
-Y5- CHURCH ST
INTERSECTION

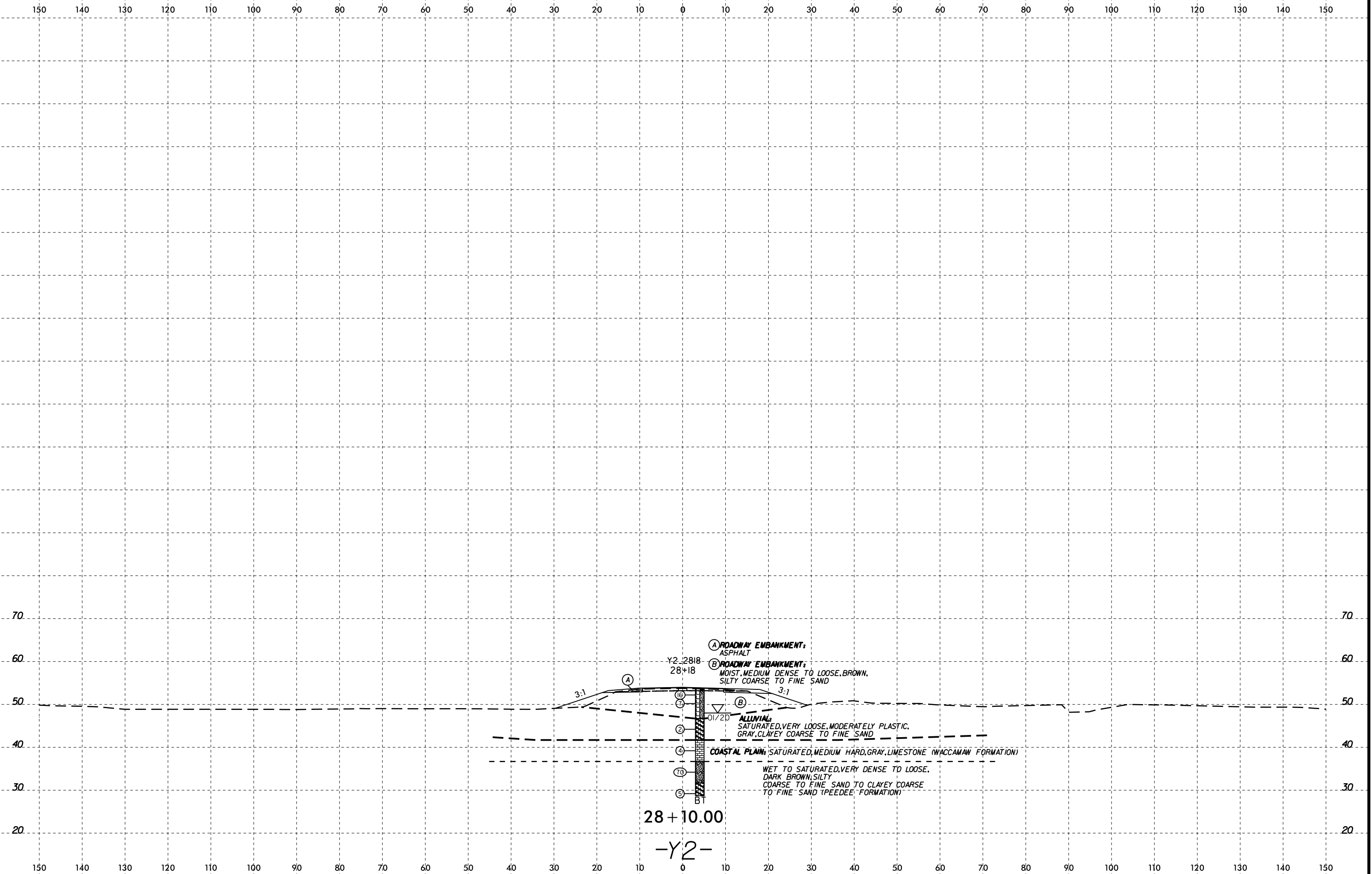
COASTAL PLAIN:
MOIST TO WET, MEDIUM STIFF TO VERY STIFF,
SLIGHTLY TO HIGHLY PLASTIC, GRAY AND ORANGE,
COARSE TO FINE SANDY SILT TO SILTY CLAY
(UNDIVIDED COASTAL PLAIN)

15 + 00.00

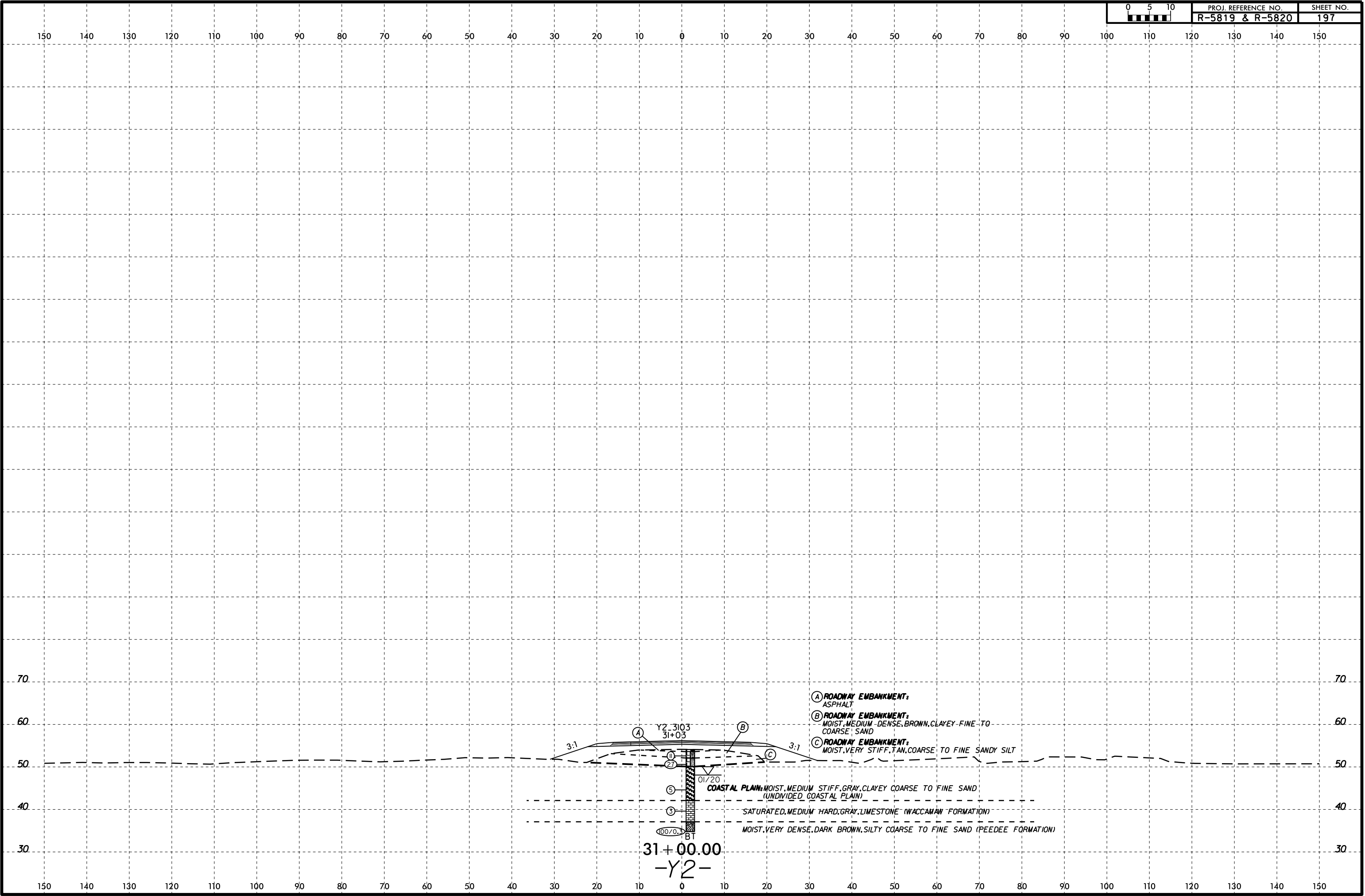
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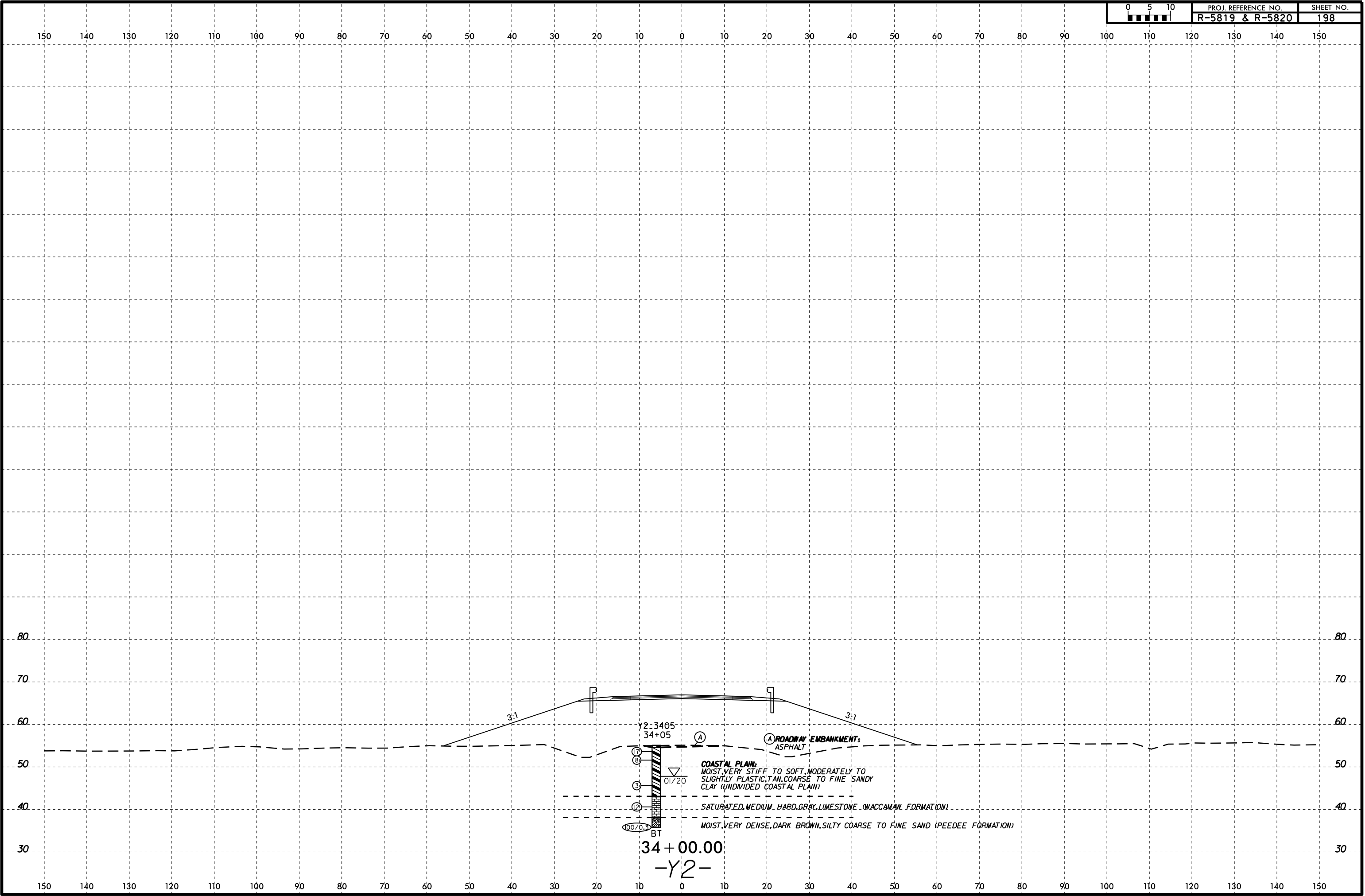


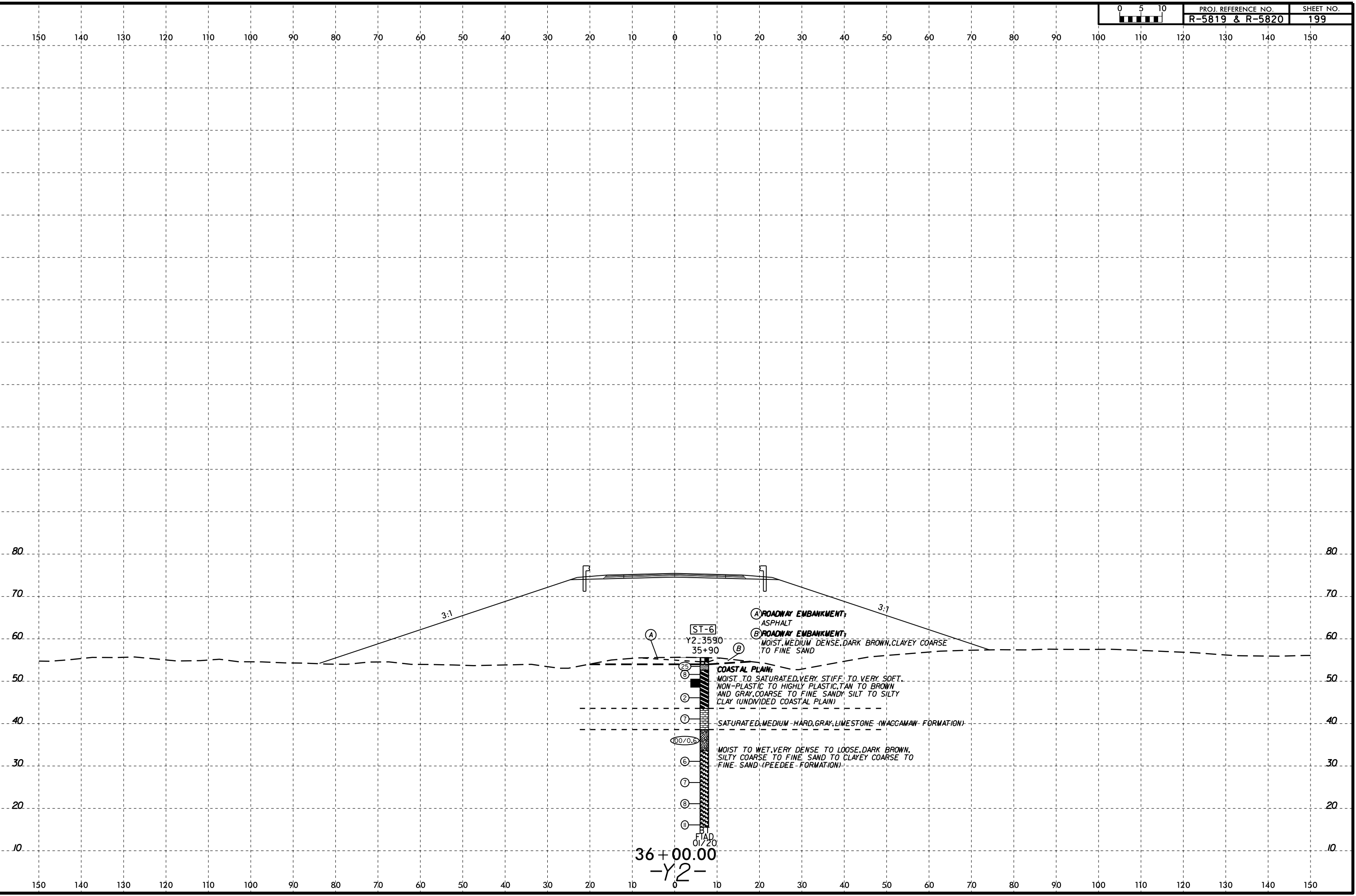
28 + 10.00
-Y2-



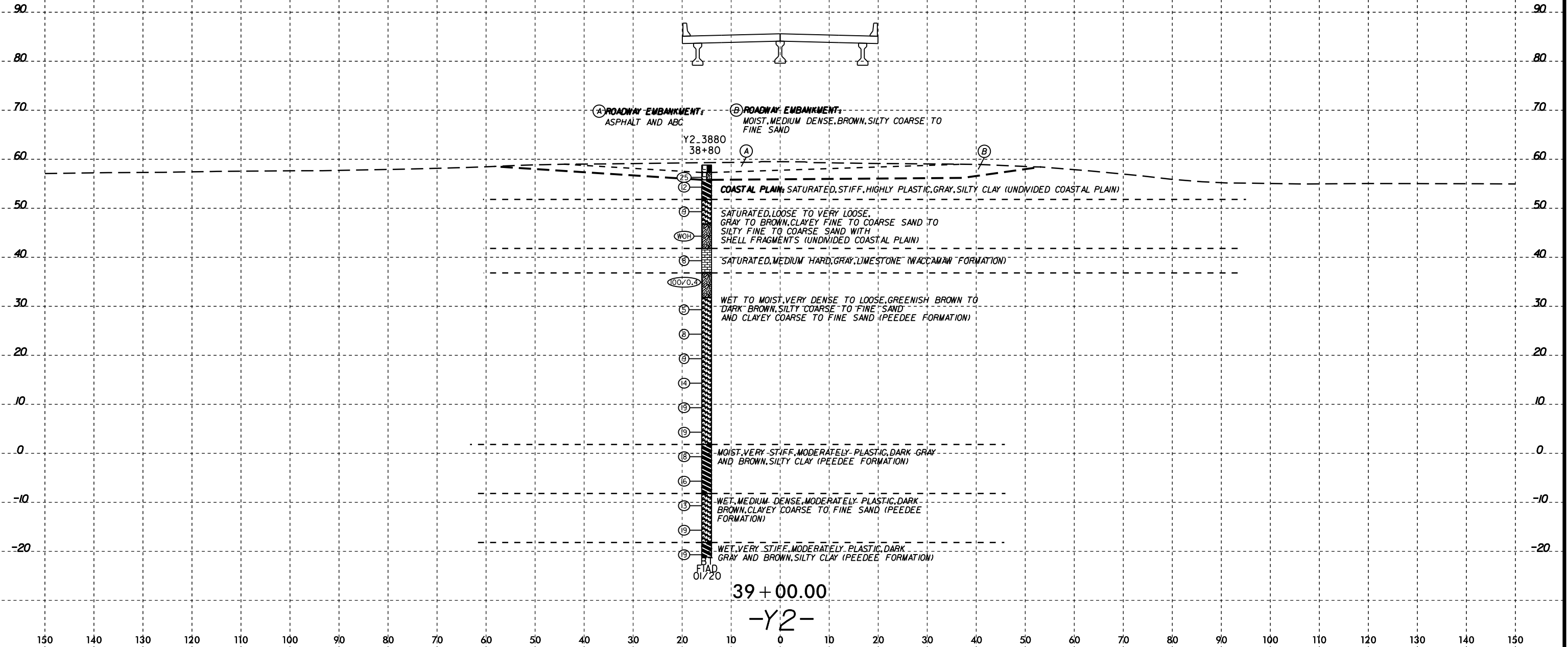
(A) ROADWAY EMBANKMENT:
 ASPHALT
 (B) ROADWAY EMBANKMENT:
 MOIST, MEDIUM-DENSE, BROWN, CLAYEY-FINE TO
 COARSE SAND
 (C) ROADWAY EMBANKMENT:
 MOIST, VERY STIFF, TAN, COARSE TO FINE SANDY SILT
 COASTAL PLAIN, MOIST, MEDIUM STIFF, GRAY, CLAYEY COARSE TO FINE SAND
 (UNDIVIDED COASTAL PLAIN)
 SATURATED, MEDIUM HARD, GRAY, LIMESTONE (WACCAMAW FORMATION)
 MOIST, VERY DENSE, DARK BROWN, SILTY COARSE TO FINE SAND (PEEDEE FORMATION)

31+00.00
 -Y2-

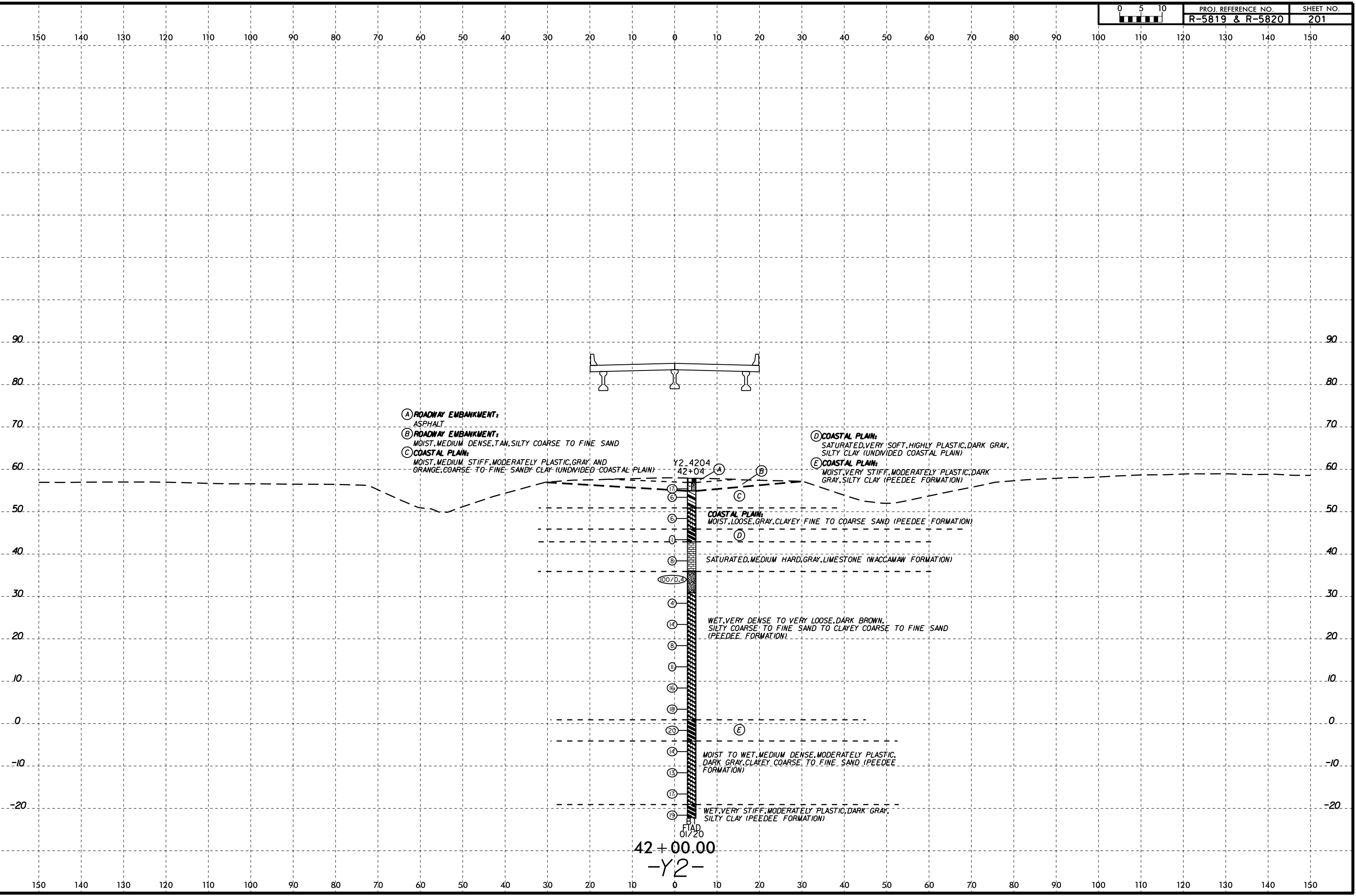


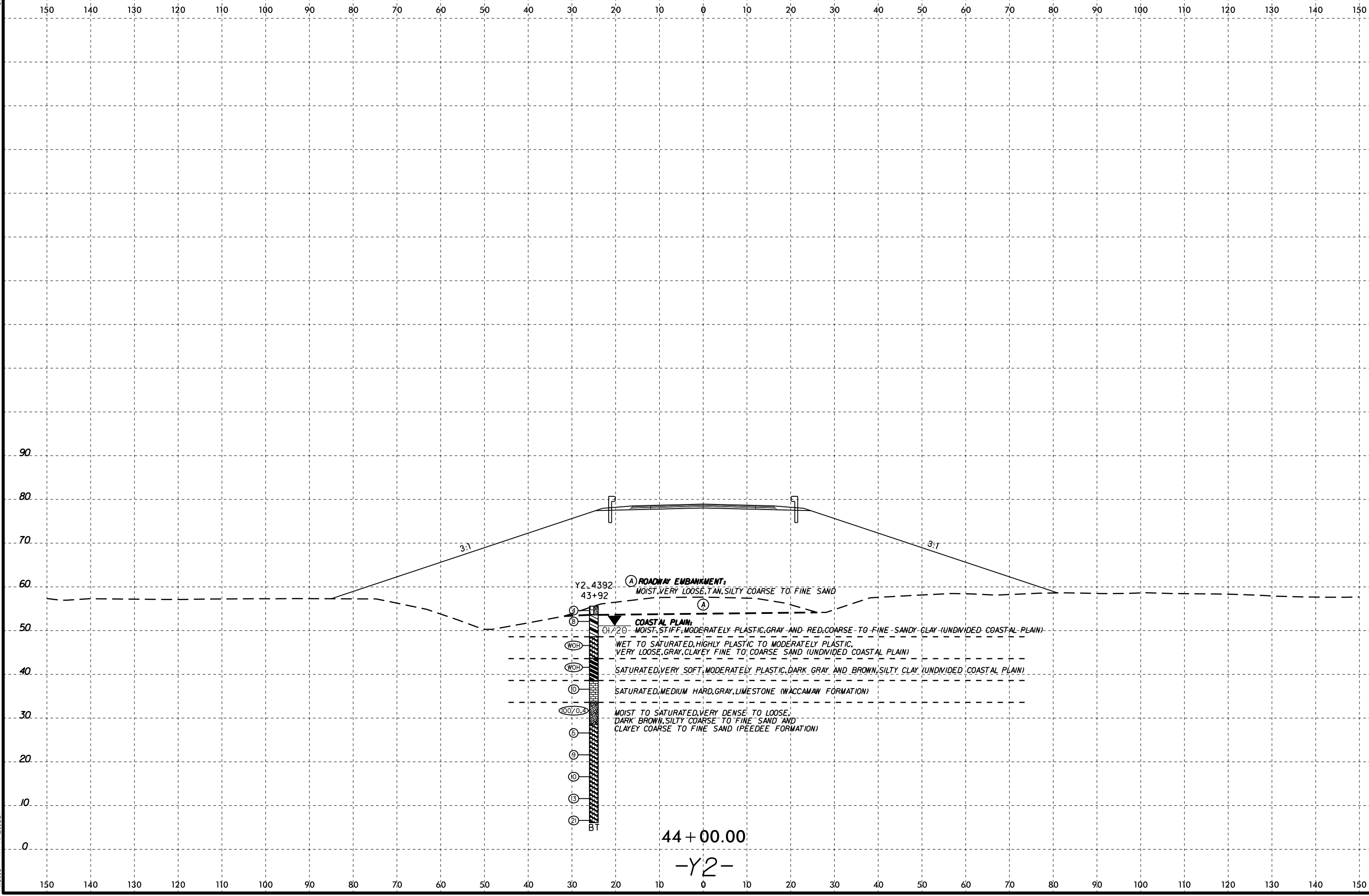


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Y2_4392
43+92

(A) ROADWAY EMBANKMENT:
MOIST, VERY LOOSE, TAN, SILTY COARSE TO FINE SAND

(A)

COASTAL PLAIN:
MOIST, STIFF, MODERATELY PLASTIC, GRAY AND RED, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

W01
WET TO SATURATED, HIGHLY PLASTIC TO MODERATELY PLASTIC, VERY LOOSE, GRAY, CLAYEY FINE TO COARSE SAND (UNDIVIDED COASTAL PLAIN)

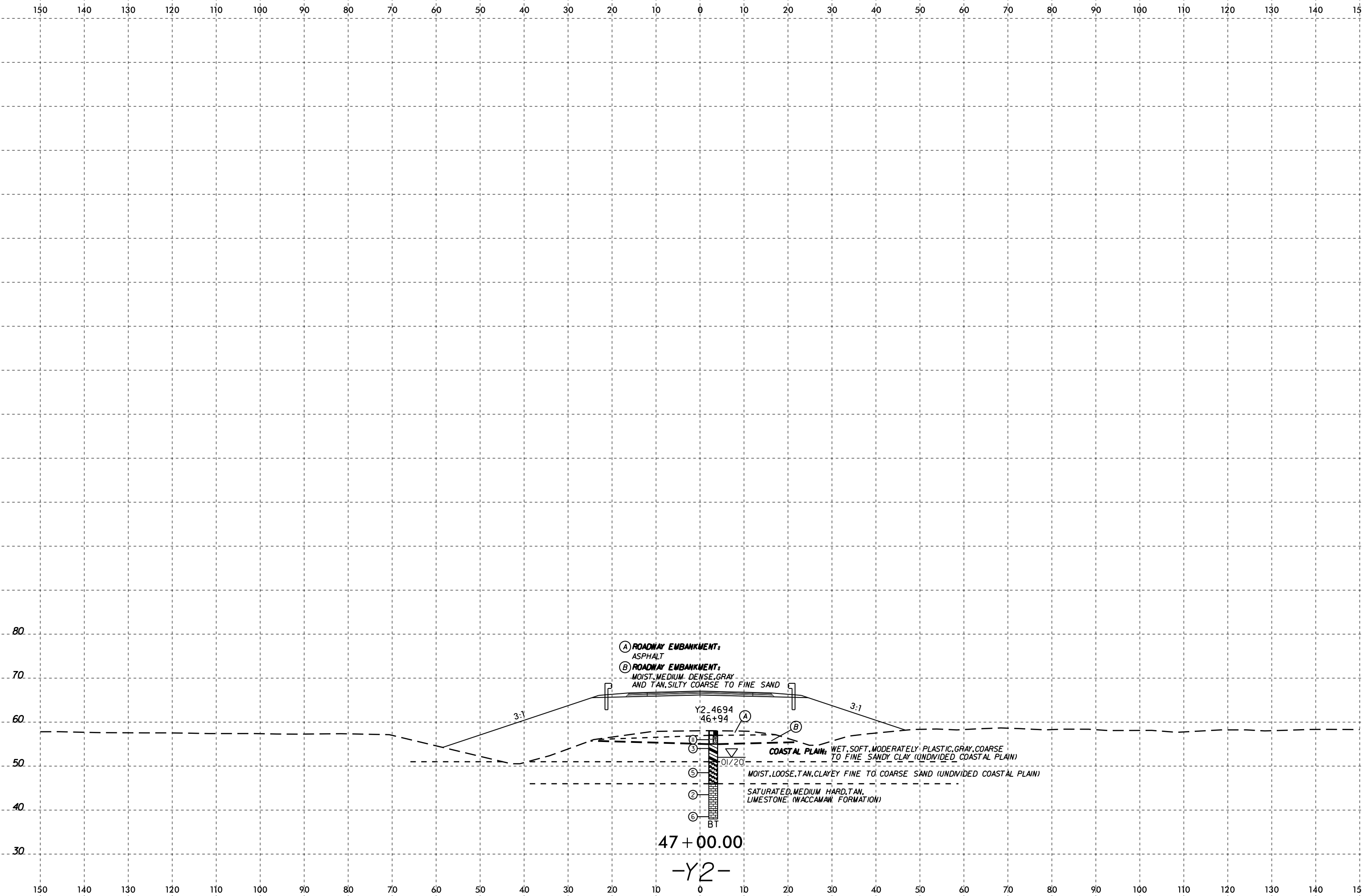
W01
SATURATED, VERY SOFT, MODERATELY PLASTIC, DARK GRAY AND BROWN, SILTY CLAY (UNDIVIDED COASTAL PLAIN)

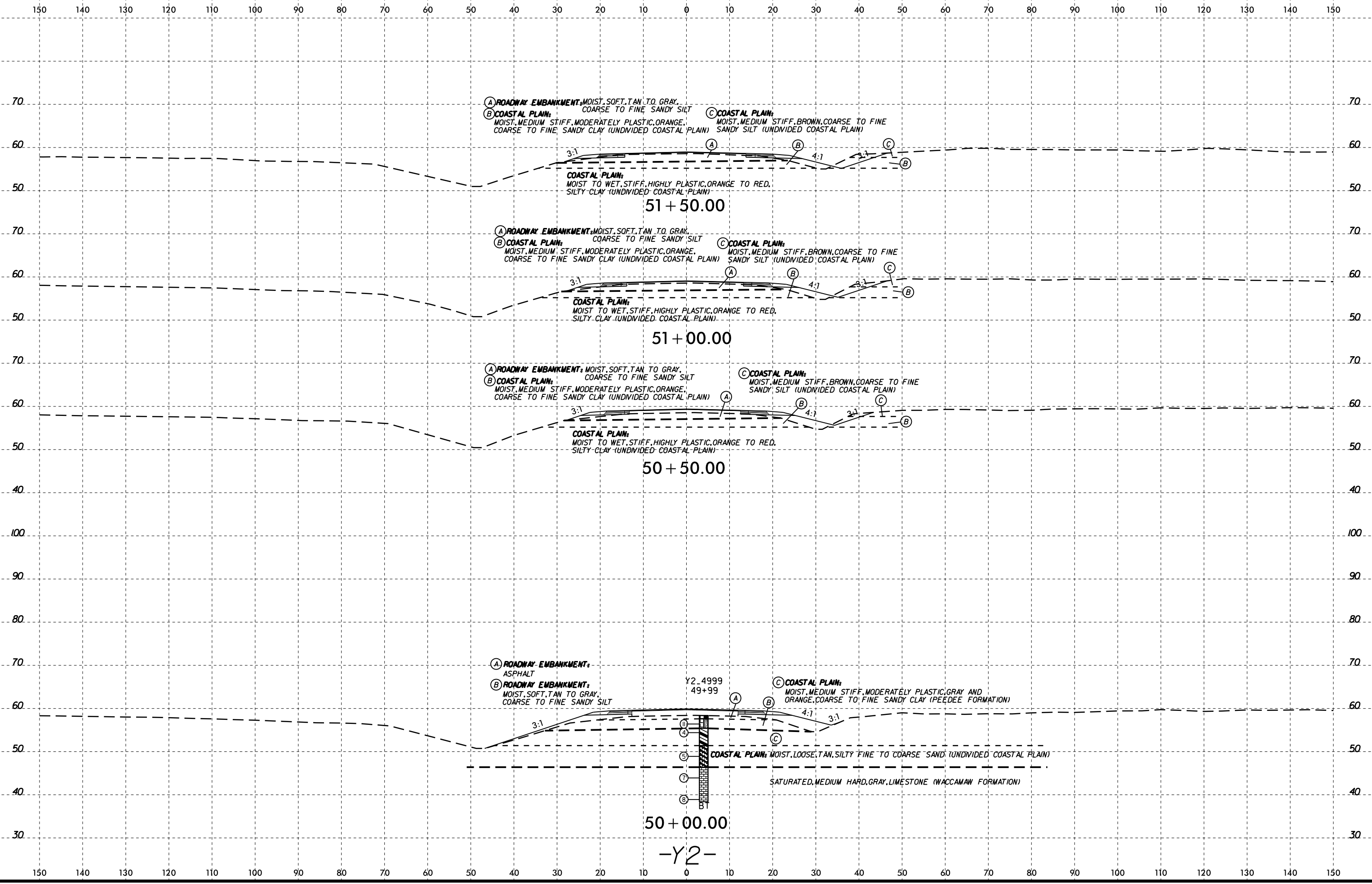
10
SATURATED, MEDIUM HARD, GRAY, LIMESTONE (WACCAMAN FORMATION)

100/0.4
MOIST TO SATURATED, VERY DENSE TO LOOSE, DARK BROWN, SILTY COARSE TO FINE SAND AND CLAYEY COARSE TO FINE SAND (PEEDEE FORMATION)

5
6
10
13
20
BT

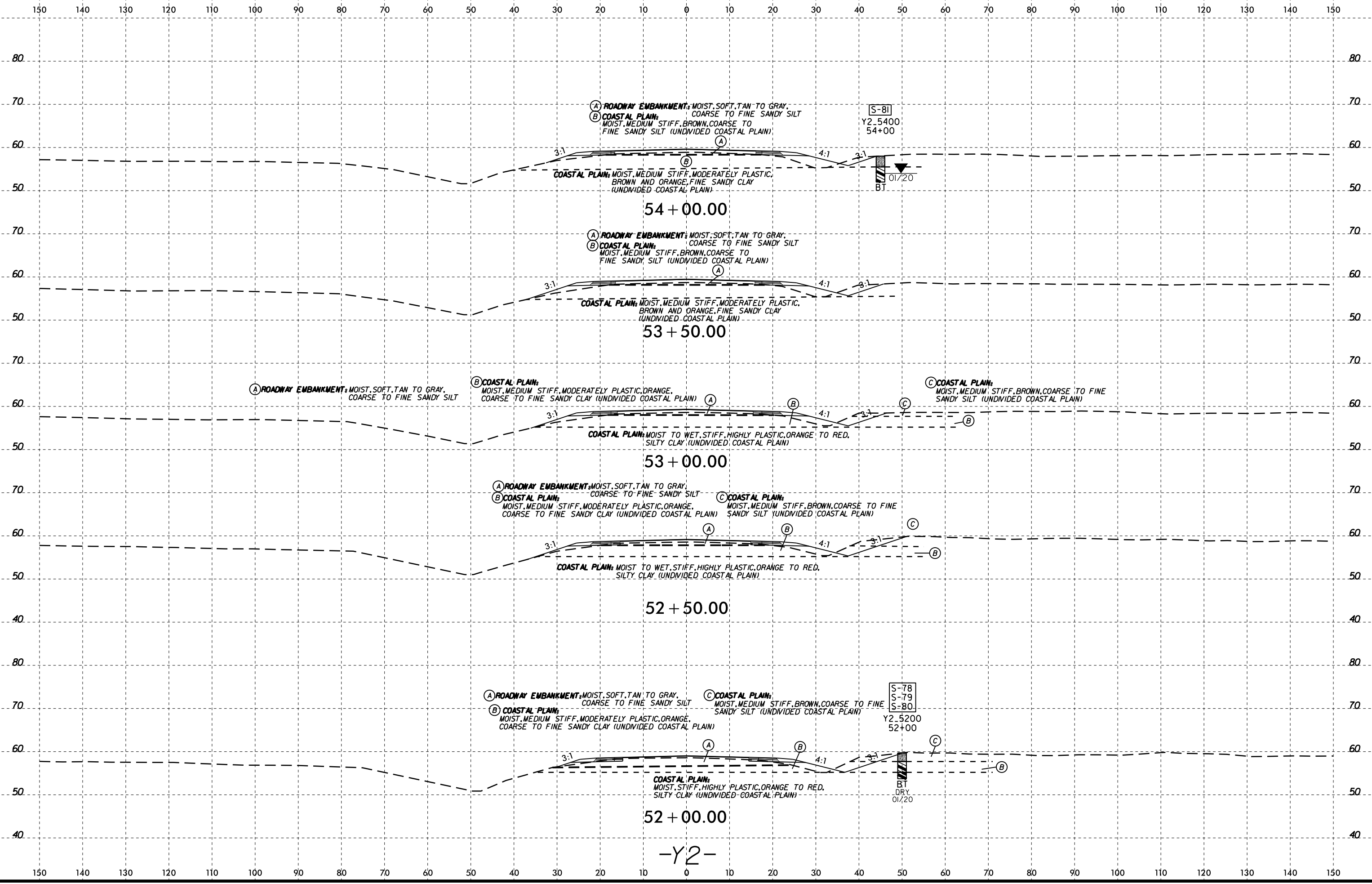
44 + 00.00
-Y2-

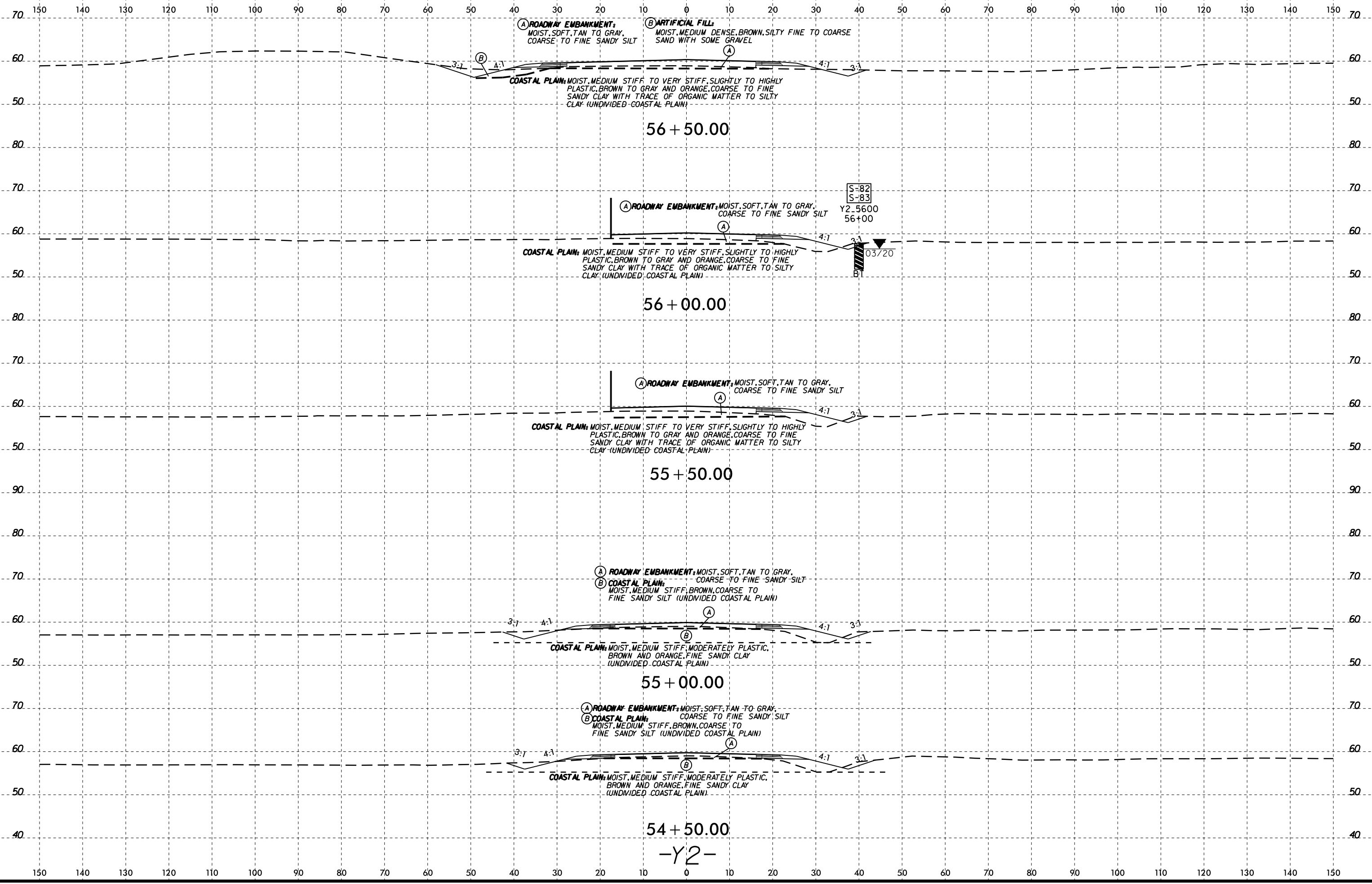




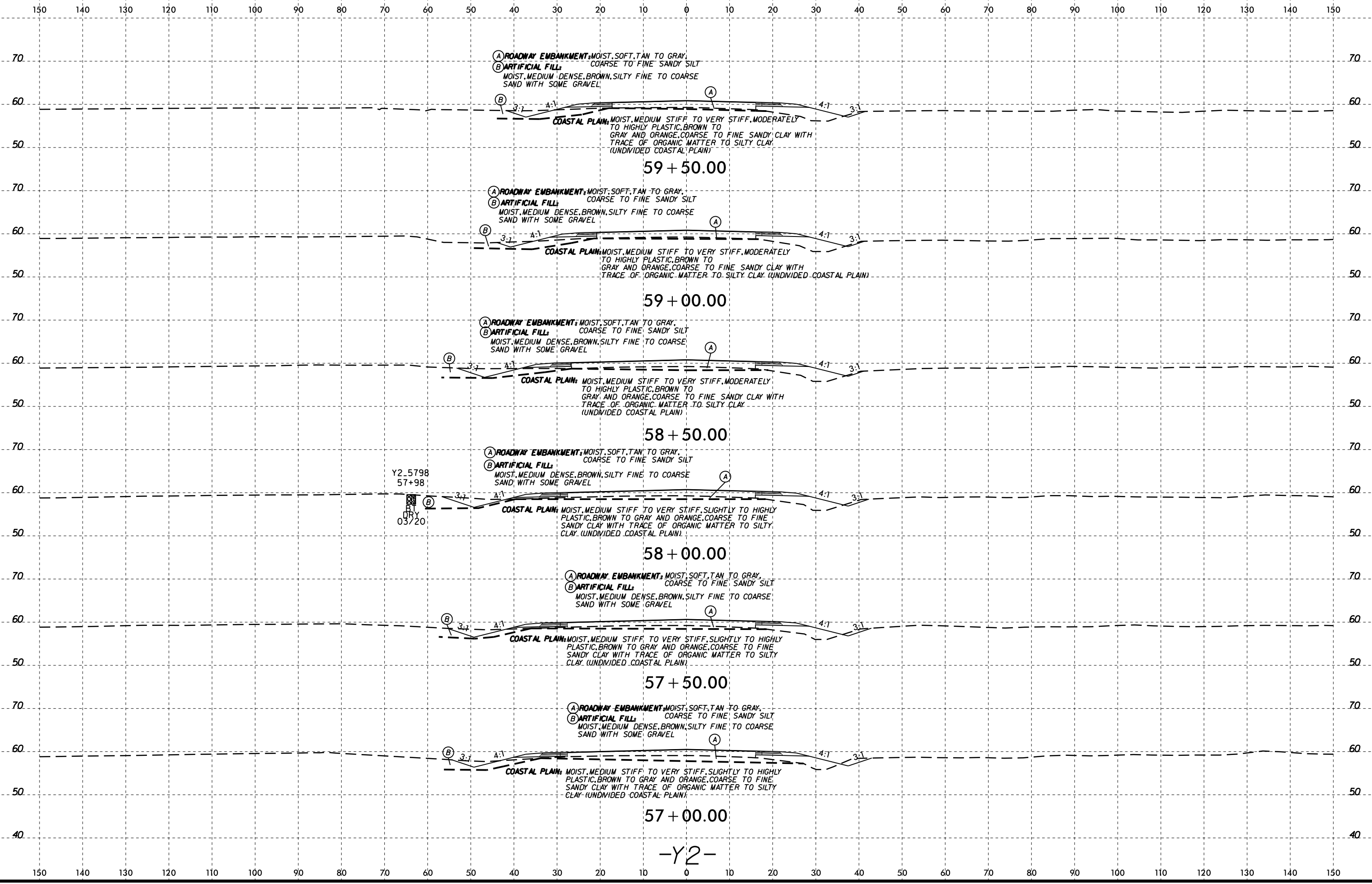
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 Wells - At KA211387

6/23/16
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6/23/16
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(A) ROADWAY EMBANKMENT: MOIST, SOFT, TAN TO GRAY,
COARSE TO FINE SANDY SILT
(B) ARTIFICIAL FILL: MOIST, MEDIUM DENSE, BROWN, SILTY FINE TO COARSE
SAND WITH SOME GRAVEL

COASTAL PLAIN: MOIST, MEDIUM STIFF TO VERY STIFF, MODERATELY
TO HIGHLY PLASTIC, BROWN TO
GRAY AND ORANGE, COARSE TO FINE SANDY CLAY WITH
TRACE OF ORGANIC MATTER TO SILTY CLAY
(UNDIVIDED COASTAL PLAIN)

59 + 50.00

(A) ROADWAY EMBANKMENT: MOIST, SOFT, TAN TO GRAY,
COARSE TO FINE SANDY SILT
(B) ARTIFICIAL FILL: MOIST, MEDIUM DENSE, BROWN, SILTY FINE TO COARSE
SAND WITH SOME GRAVEL

COASTAL PLAIN: MOIST, MEDIUM STIFF TO VERY STIFF, MODERATELY
TO HIGHLY PLASTIC, BROWN TO
GRAY AND ORANGE, COARSE TO FINE SANDY CLAY WITH
TRACE OF ORGANIC MATTER TO SILTY CLAY (UNDIVIDED COASTAL PLAIN)

59 + 00.00

(A) ROADWAY EMBANKMENT: MOIST, SOFT, TAN TO GRAY,
COARSE TO FINE SANDY SILT
(B) ARTIFICIAL FILL: MOIST, MEDIUM DENSE, BROWN, SILTY FINE TO COARSE
SAND WITH SOME GRAVEL

COASTAL PLAIN: MOIST, MEDIUM STIFF TO VERY STIFF, MODERATELY
TO HIGHLY PLASTIC, BROWN TO
GRAY AND ORANGE, COARSE TO FINE SANDY CLAY WITH
TRACE OF ORGANIC MATTER TO SILTY CLAY (UNDIVIDED COASTAL PLAIN)

58 + 50.00

(A) ROADWAY EMBANKMENT: MOIST, SOFT, TAN TO GRAY,
COARSE TO FINE SANDY SILT
(B) ARTIFICIAL FILL: MOIST, MEDIUM DENSE, BROWN, SILTY FINE TO COARSE
SAND WITH SOME GRAVEL

Y2.5798
57+98
BT
03/20

COASTAL PLAIN: MOIST, MEDIUM STIFF TO VERY STIFF, SLIGHTLY TO HIGHLY
PLASTIC, BROWN TO GRAY AND ORANGE, COARSE TO FINE
SANDY CLAY WITH TRACE OF ORGANIC MATTER TO SILTY
CLAY (UNDIVIDED COASTAL PLAIN)

58 + 00.00

(A) ROADWAY EMBANKMENT: MOIST, SOFT, TAN TO GRAY,
COARSE TO FINE SANDY SILT
(B) ARTIFICIAL FILL: MOIST, MEDIUM DENSE, BROWN, SILTY FINE TO COARSE
SAND WITH SOME GRAVEL

COASTAL PLAIN: MOIST, MEDIUM STIFF TO VERY STIFF, SLIGHTLY TO HIGHLY
PLASTIC, BROWN TO GRAY AND ORANGE, COARSE TO FINE
SANDY CLAY WITH TRACE OF ORGANIC MATTER TO SILTY
CLAY (UNDIVIDED COASTAL PLAIN)

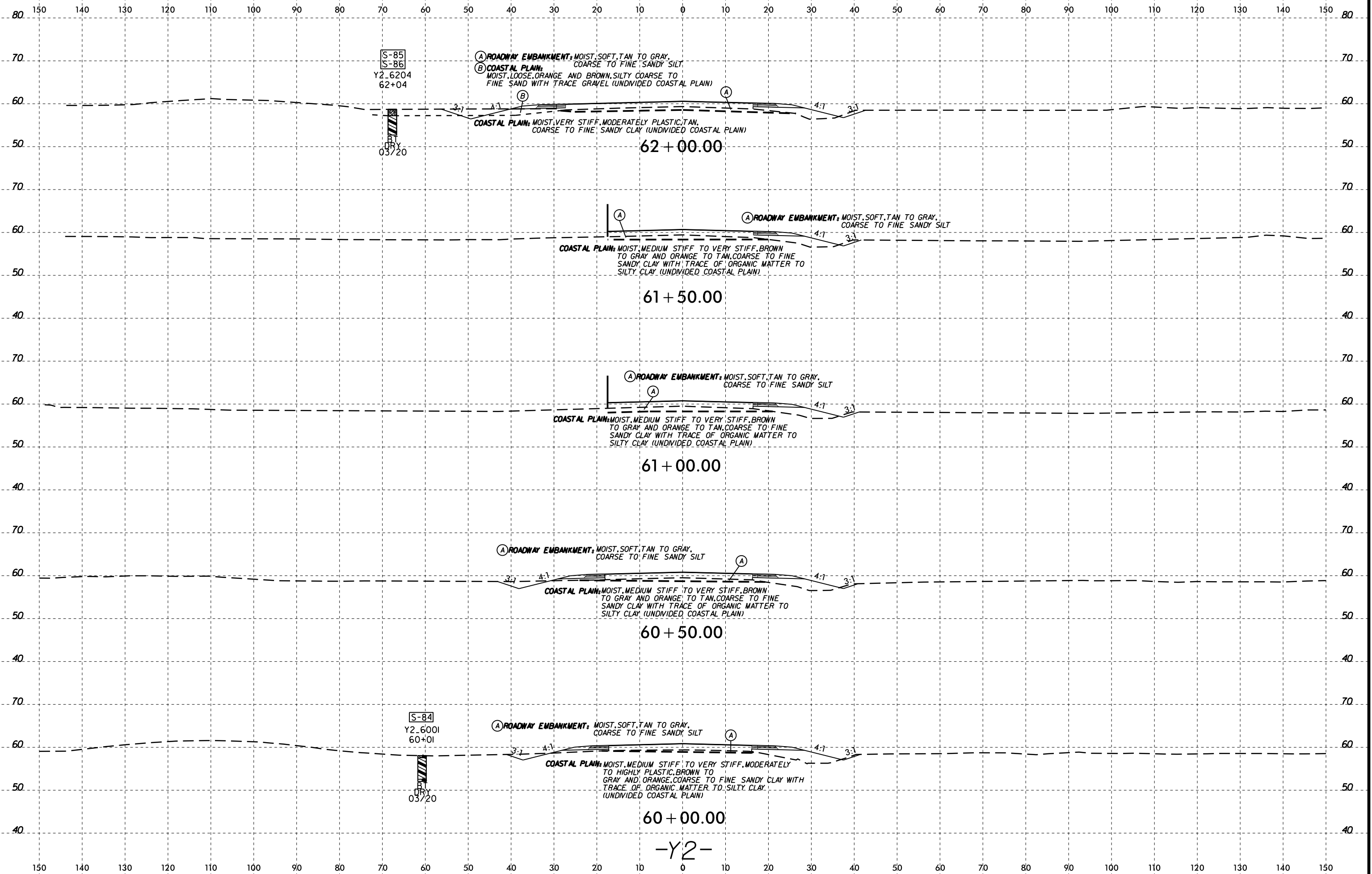
57 + 50.00

(A) ROADWAY EMBANKMENT: MOIST, SOFT, TAN TO GRAY,
COARSE TO FINE SANDY SILT
(B) ARTIFICIAL FILL: MOIST, MEDIUM DENSE, BROWN, SILTY FINE TO COARSE
SAND WITH SOME GRAVEL

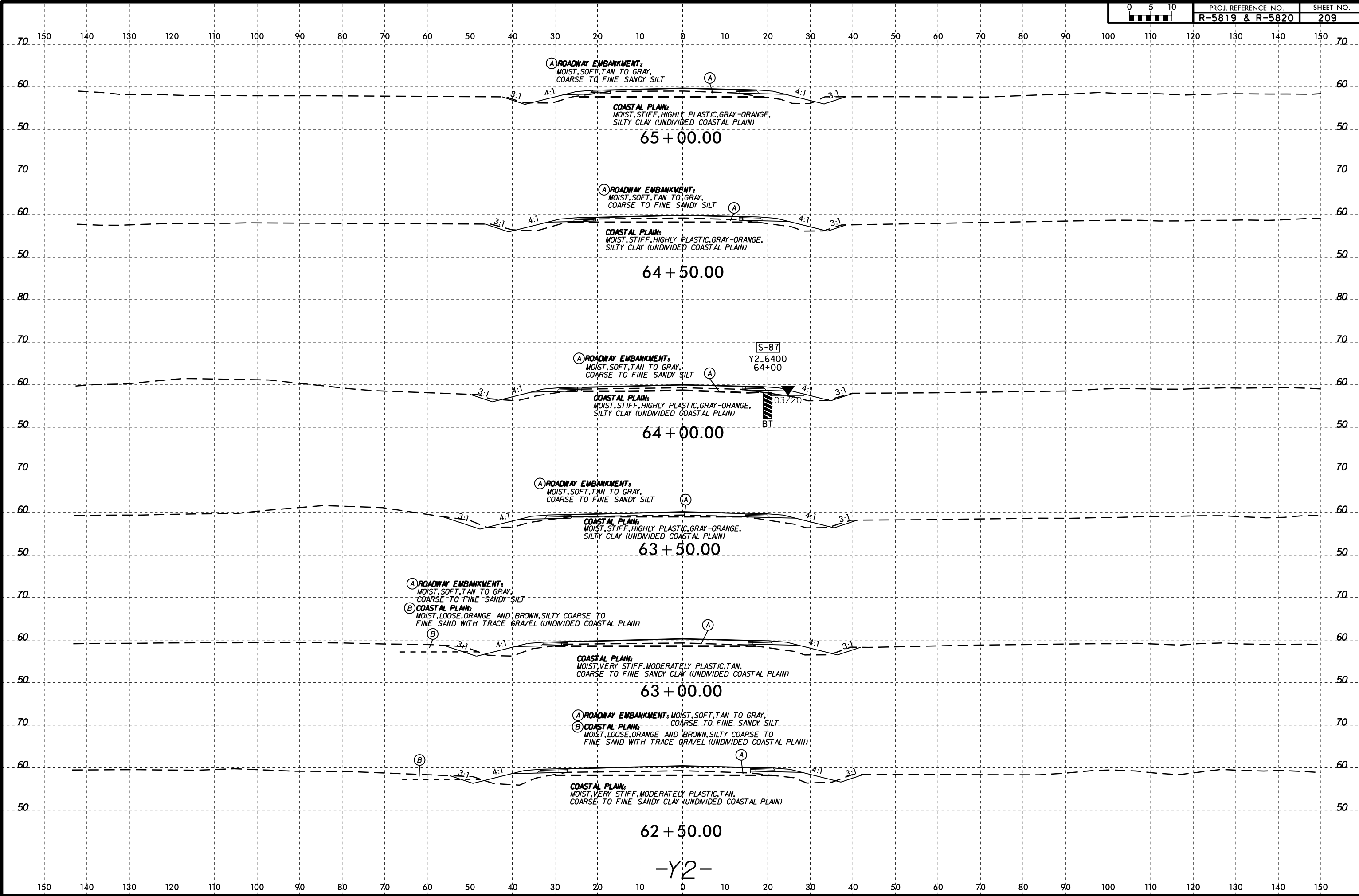
COASTAL PLAIN: MOIST, MEDIUM STIFF TO VERY STIFF, SLIGHTLY TO HIGHLY
PLASTIC, BROWN TO GRAY AND ORANGE, COARSE TO FINE
SANDY CLAY WITH TRACE OF ORGANIC MATTER TO SILTY
CLAY (UNDIVIDED COASTAL PLAIN)

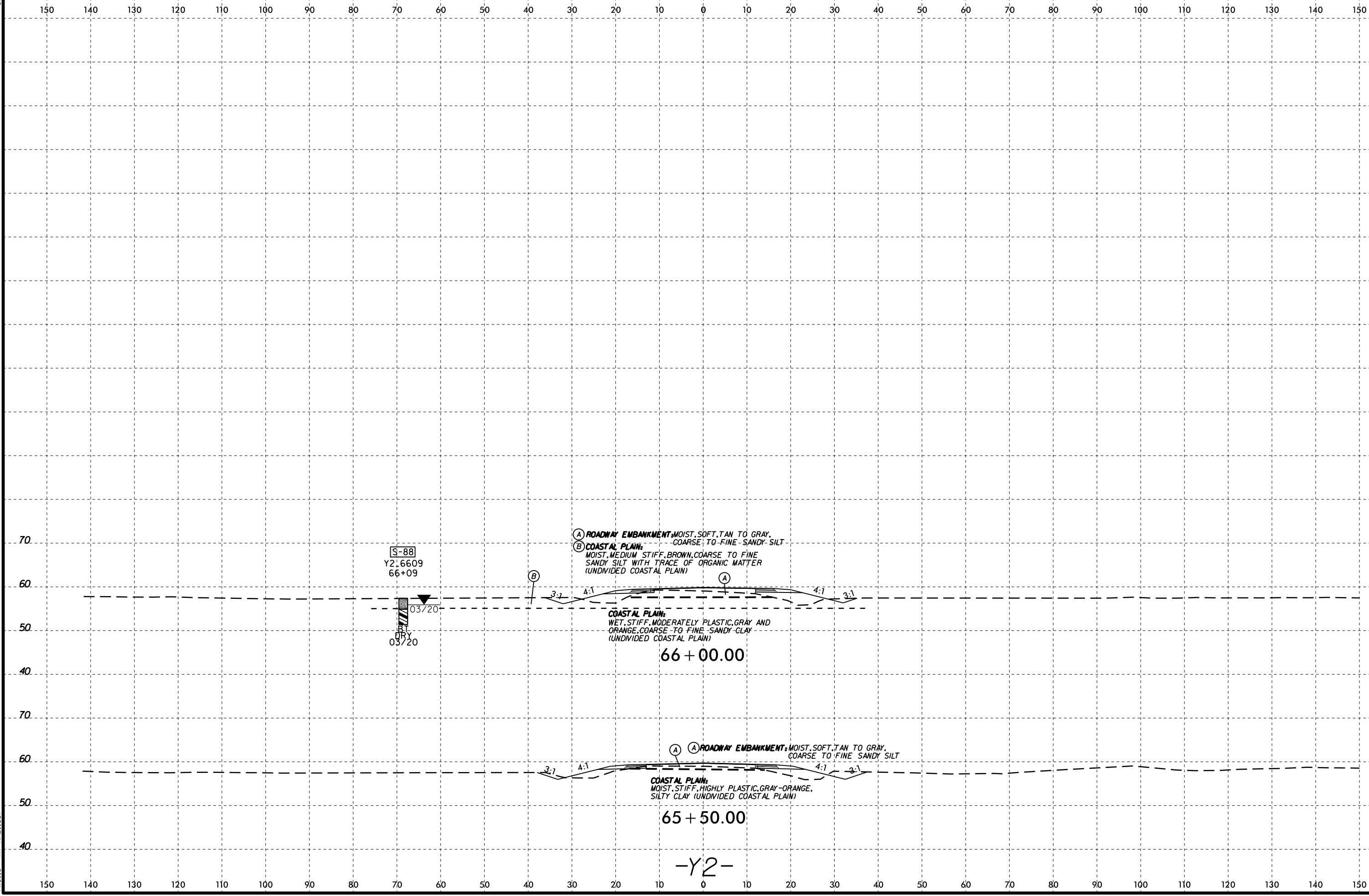
57 + 00.00

-Y2-



-Y2-





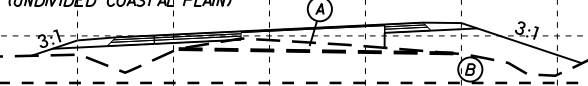
66 + 00.00

65 + 50.00

-Y2-

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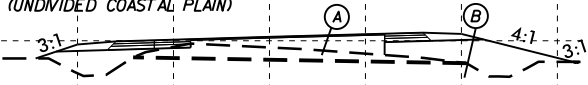
(A) ROADWAY EMBANKMENT: MOIST, SOFT, TAN TO GRAY,
 COARSE TO FINE SANDY SILT
 (B) COASTAL PLAIN:
 MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE
 SANDY SILT WITH TRACE OF ORGANIC MATTER
 (UNDIVIDED COASTAL PLAIN)



COASTAL PLAIN:
 WET, STIFF, MODERATELY PLASTIC, GRAY AND
 ORANGE, COARSE TO FINE SANDY-CLAY
 (UNDIVIDED COASTAL PLAIN)

67 + 50.00

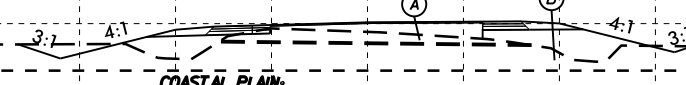
(A) ROADWAY EMBANKMENT: MOIST, SOFT, TAN TO GRAY,
 COARSE TO FINE SANDY SILT
 (B) COASTAL PLAIN:
 MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE
 SANDY SILT WITH TRACE OF ORGANIC MATTER
 (UNDIVIDED COASTAL PLAIN)



COASTAL PLAIN:
 WET, STIFF, MODERATELY PLASTIC, GRAY AND
 ORANGE, COARSE TO FINE SANDY-CLAY
 (UNDIVIDED COASTAL PLAIN)

67 + 00.00

(A) ROADWAY EMBANKMENT: MOIST, SOFT, TAN TO GRAY,
 COARSE TO FINE SANDY SILT
 (B) COASTAL PLAIN:
 MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE
 SANDY SILT WITH TRACE OF ORGANIC MATTER
 (UNDIVIDED COASTAL PLAIN)

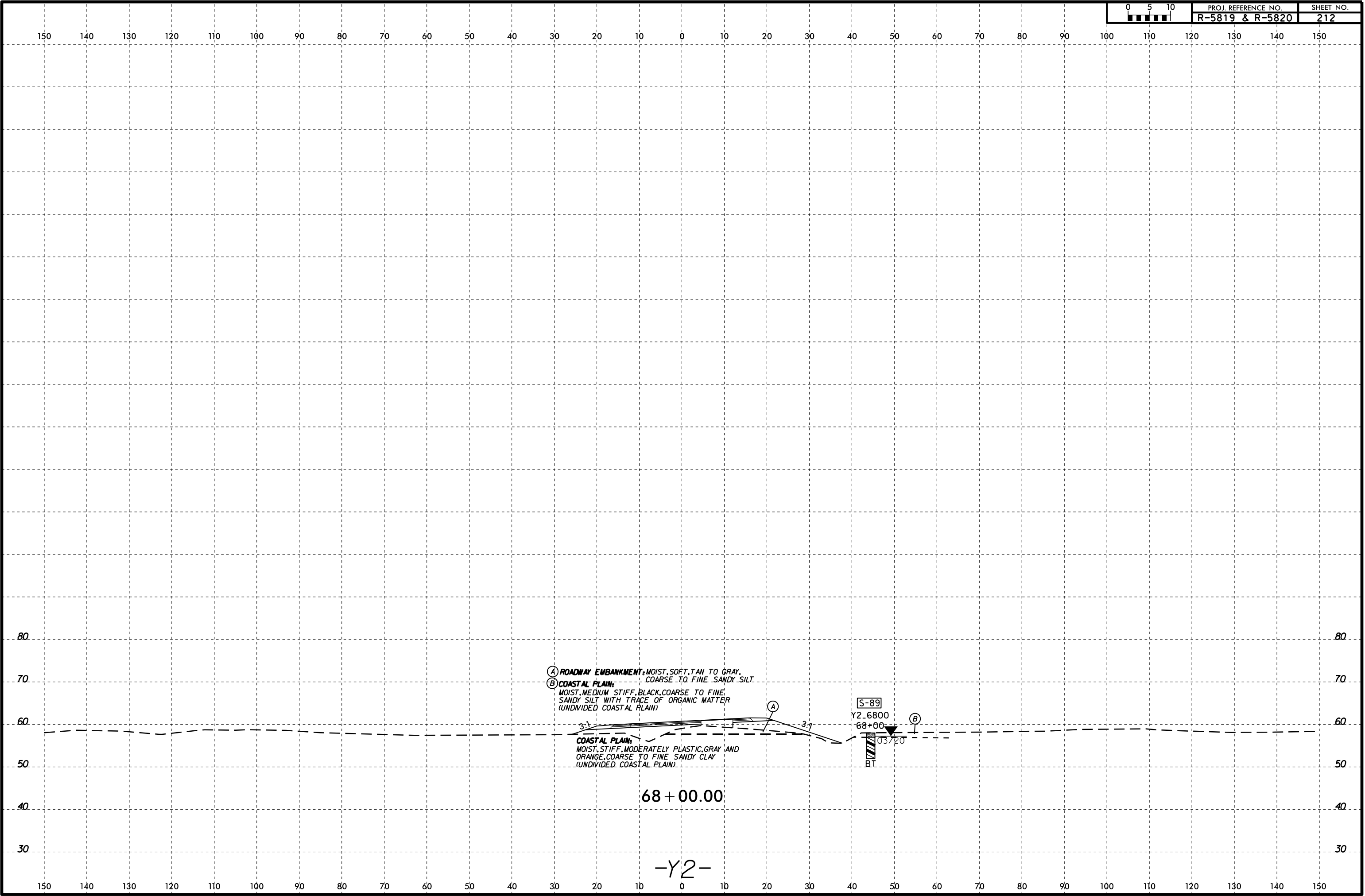


COASTAL PLAIN:
 WET, STIFF, MODERATELY PLASTIC, GRAY AND
 ORANGE, COARSE TO FINE SANDY-CLAY
 (UNDIVIDED COASTAL PLAIN)

66 + 50.00

-Y2-

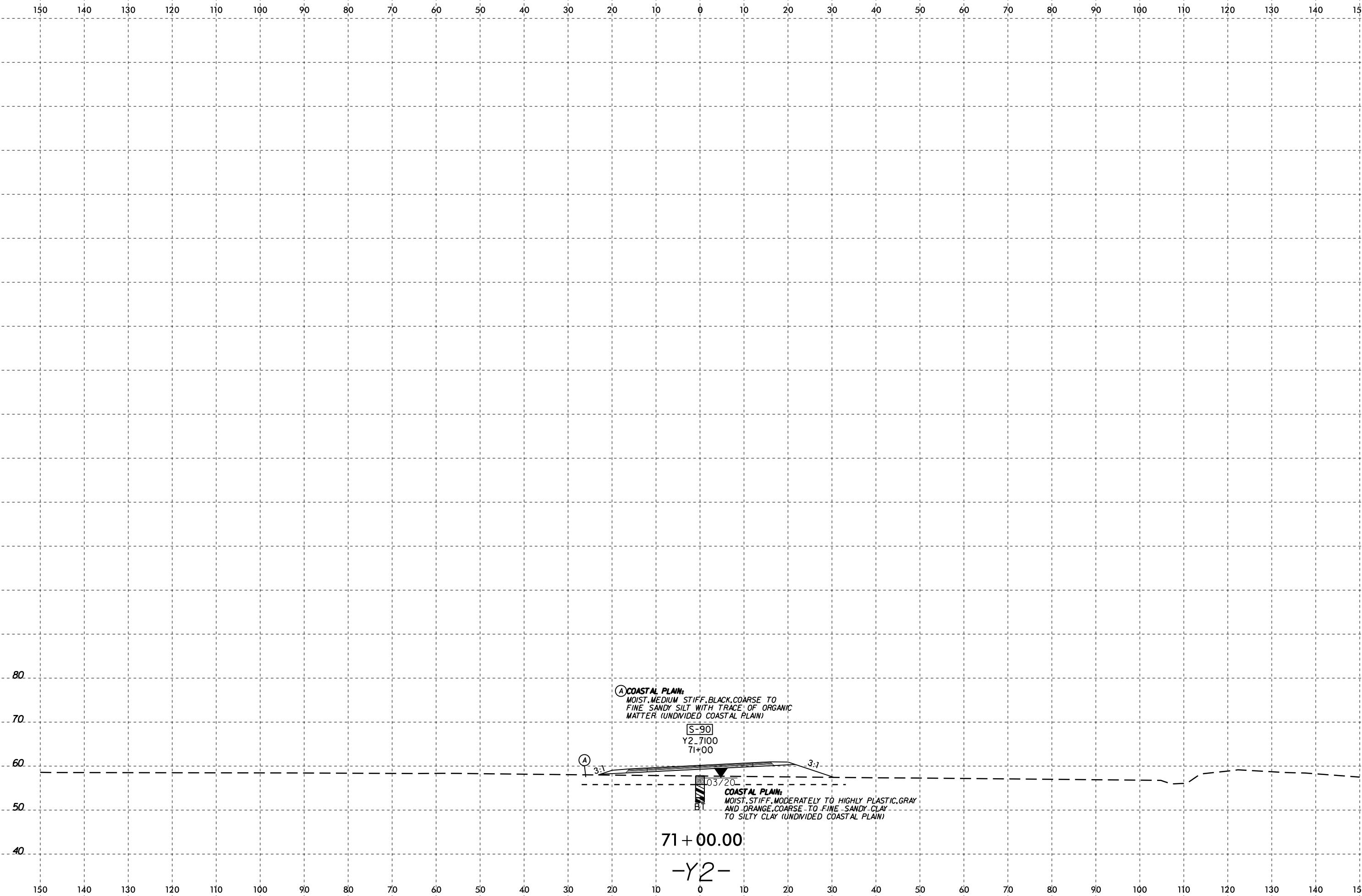
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68 + 00.00

-Y2-

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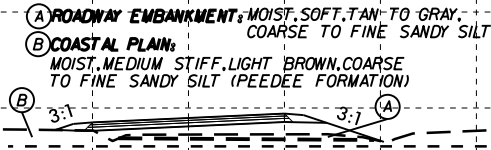
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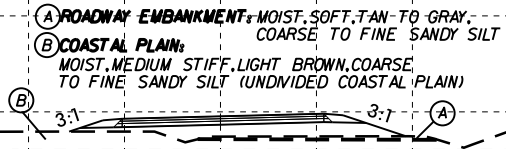
40 40

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



COASTAL PLAIN:
WET, STIFF, GRAY-ORANGE, COARSE TO FINE SANDY CLAY (PEEDEE FORMATION)

76 + 00.00



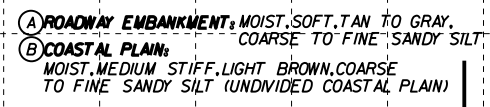
COASTAL PLAIN:
WET, STIFF, GRAY-ORANGE, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

75 + 50.00



COASTAL PLAIN:
WET, STIFF, GRAY-ORANGE, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

75 + 00.00

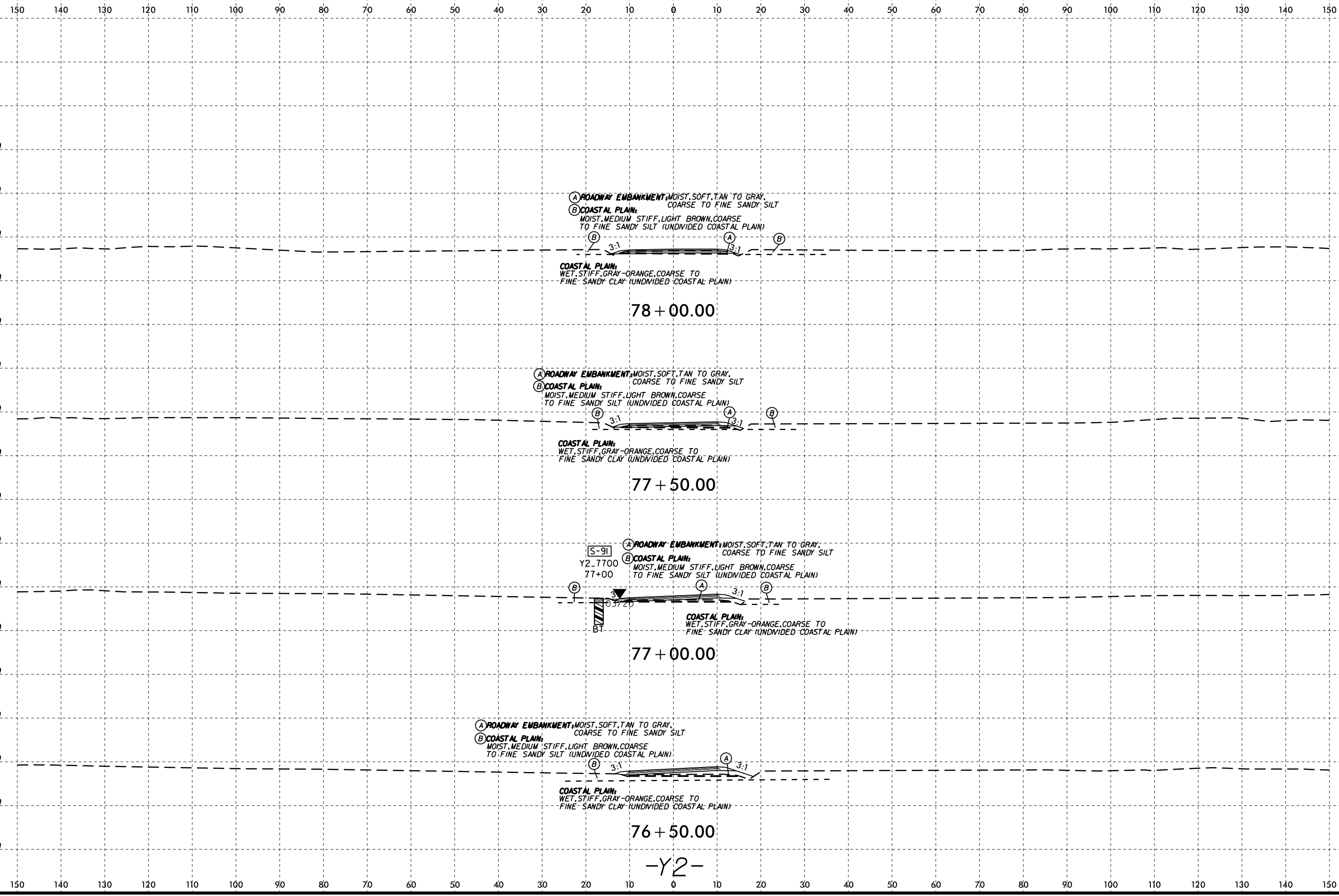


COASTAL PLAIN:
WET, STIFF, GRAY-ORANGE, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

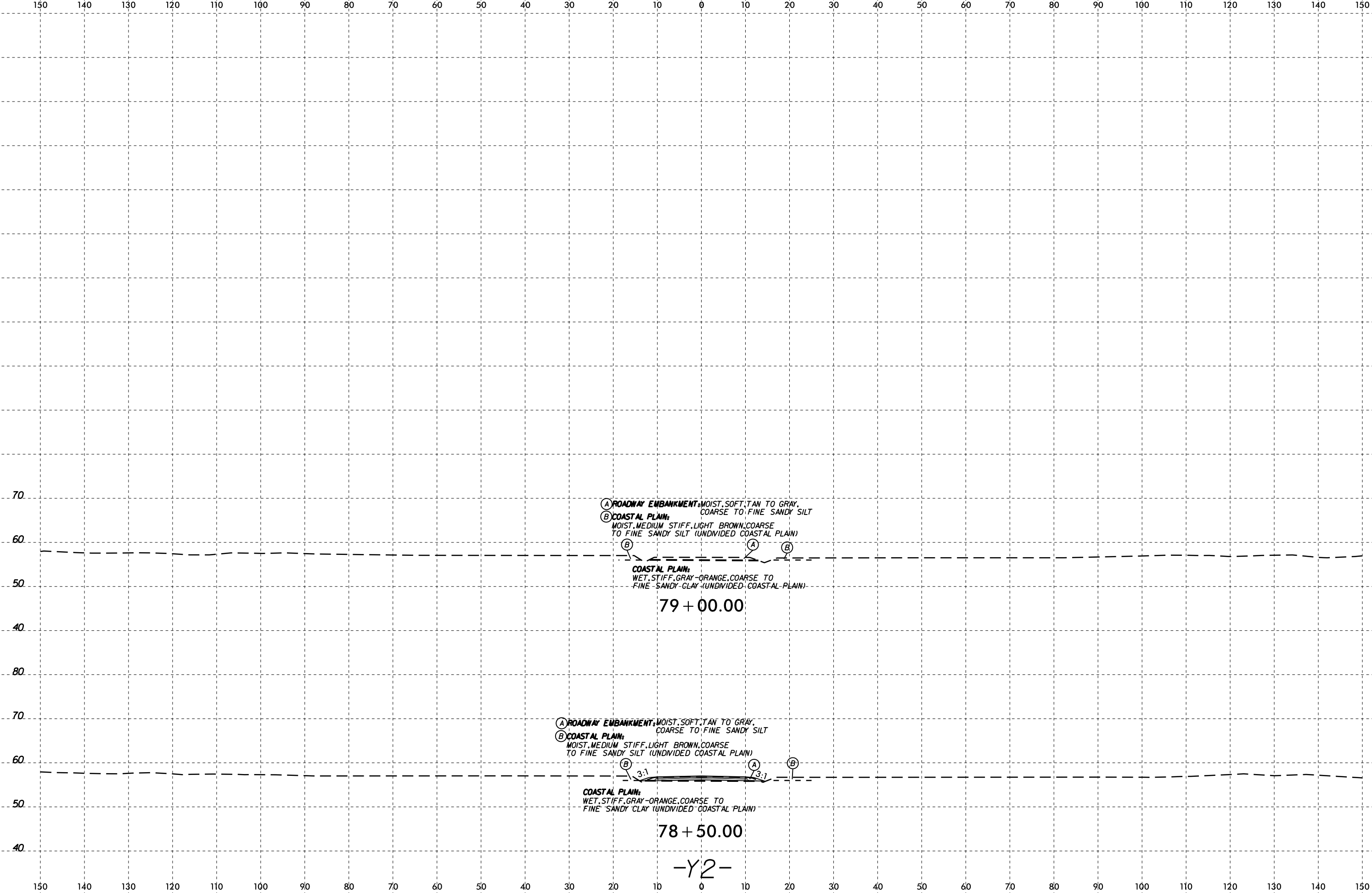
74 + 50.00

-Y2-

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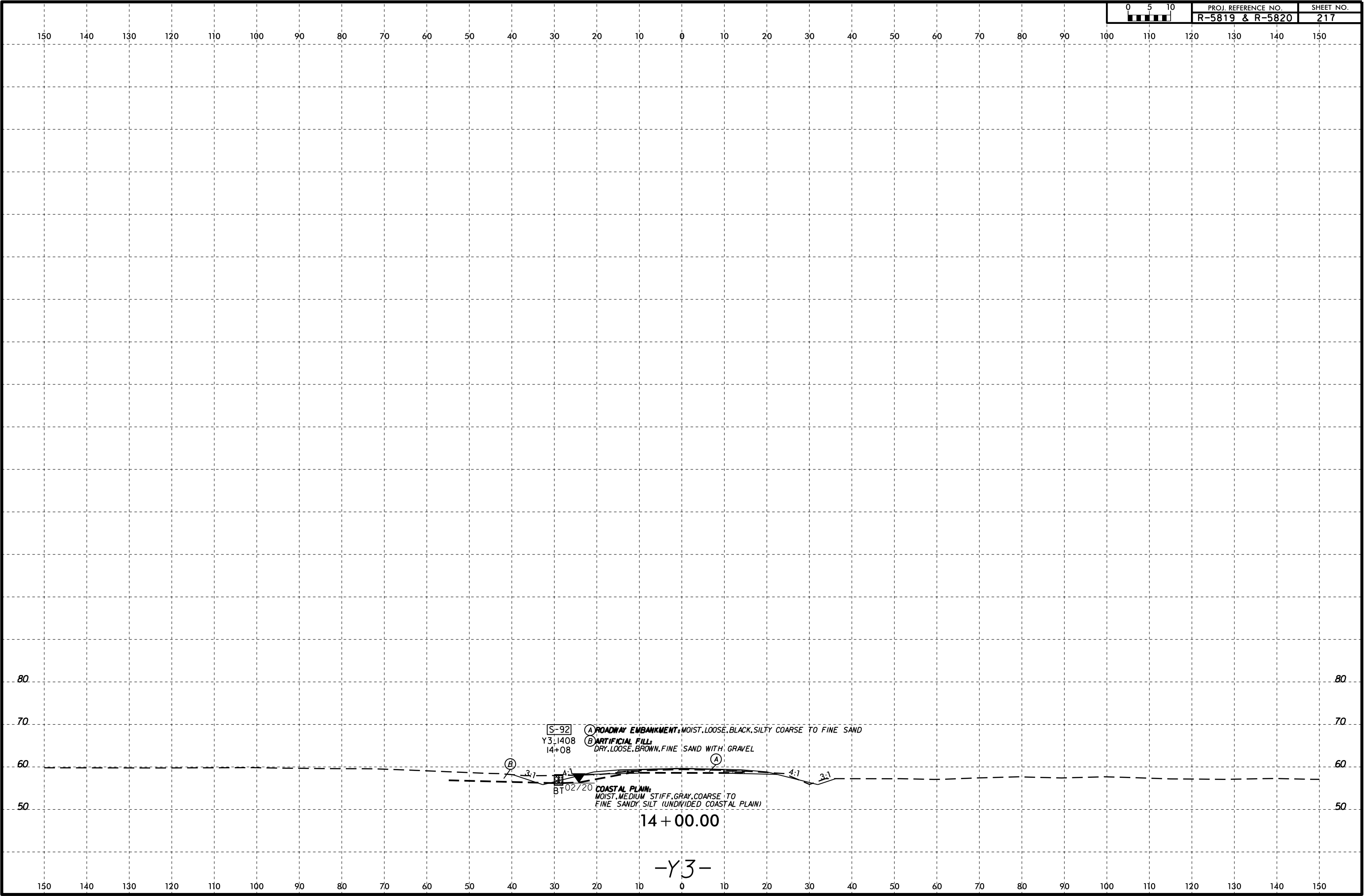
(A) ROADWAY EMBANKMENT, MOIST, SOFT, TAN TO GRAY, COARSE TO FINE SANDY SILT
 (B) COASTAL PLAIN, MOIST, MEDIUM STIFF, LIGHT BROWN, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)
 COASTAL PLAIN, WET, STIFF, GRAY-ORANGE, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

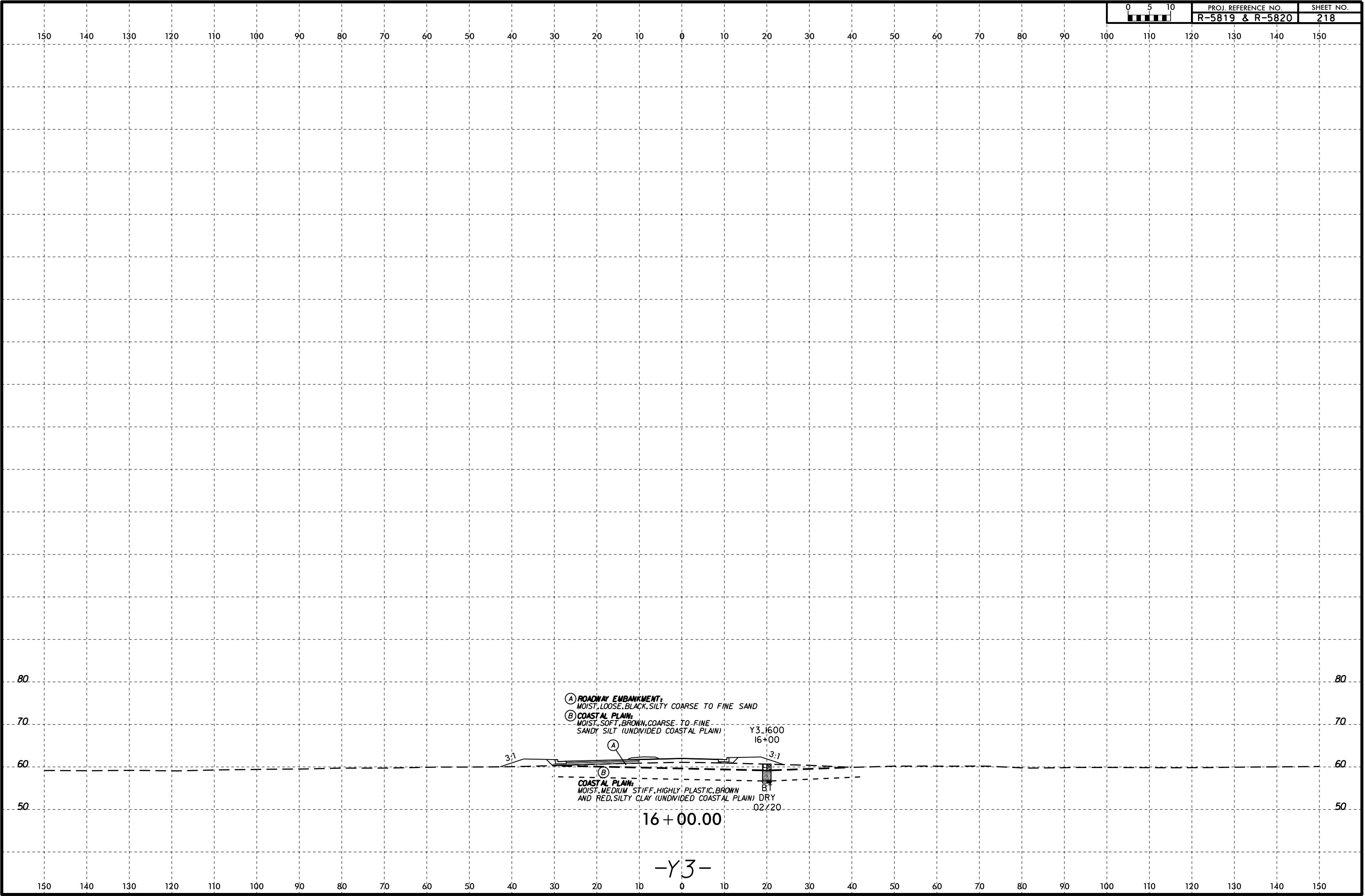
79 + 00.00

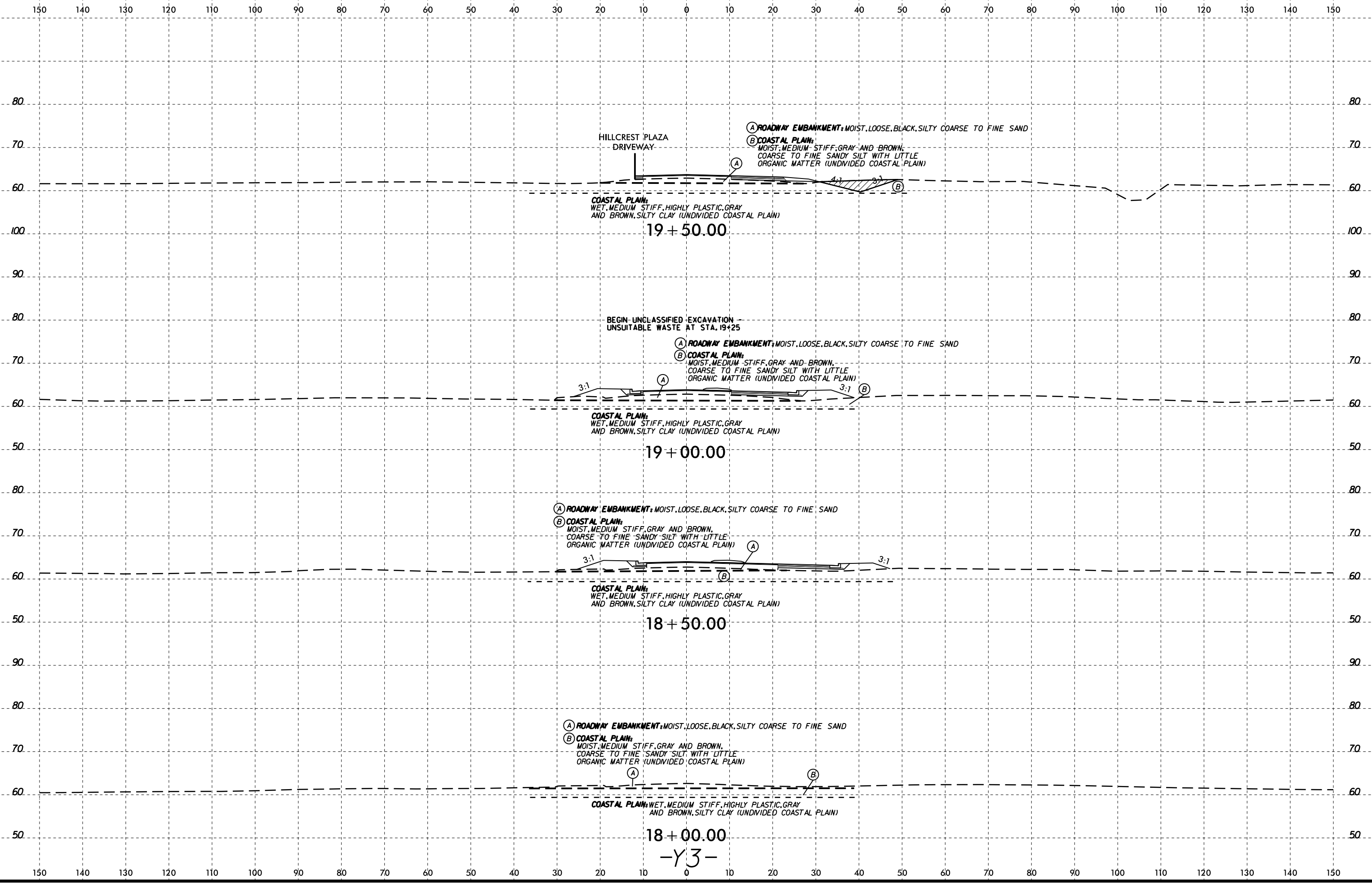
(A) ROADWAY EMBANKMENT, MOIST, SOFT, TAN TO GRAY, COARSE TO FINE SANDY SILT
 (B) COASTAL PLAIN, MOIST, MEDIUM STIFF, LIGHT BROWN, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)
 COASTAL PLAIN, WET, STIFF, GRAY-ORANGE, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

78 + 50.00

-Y2-

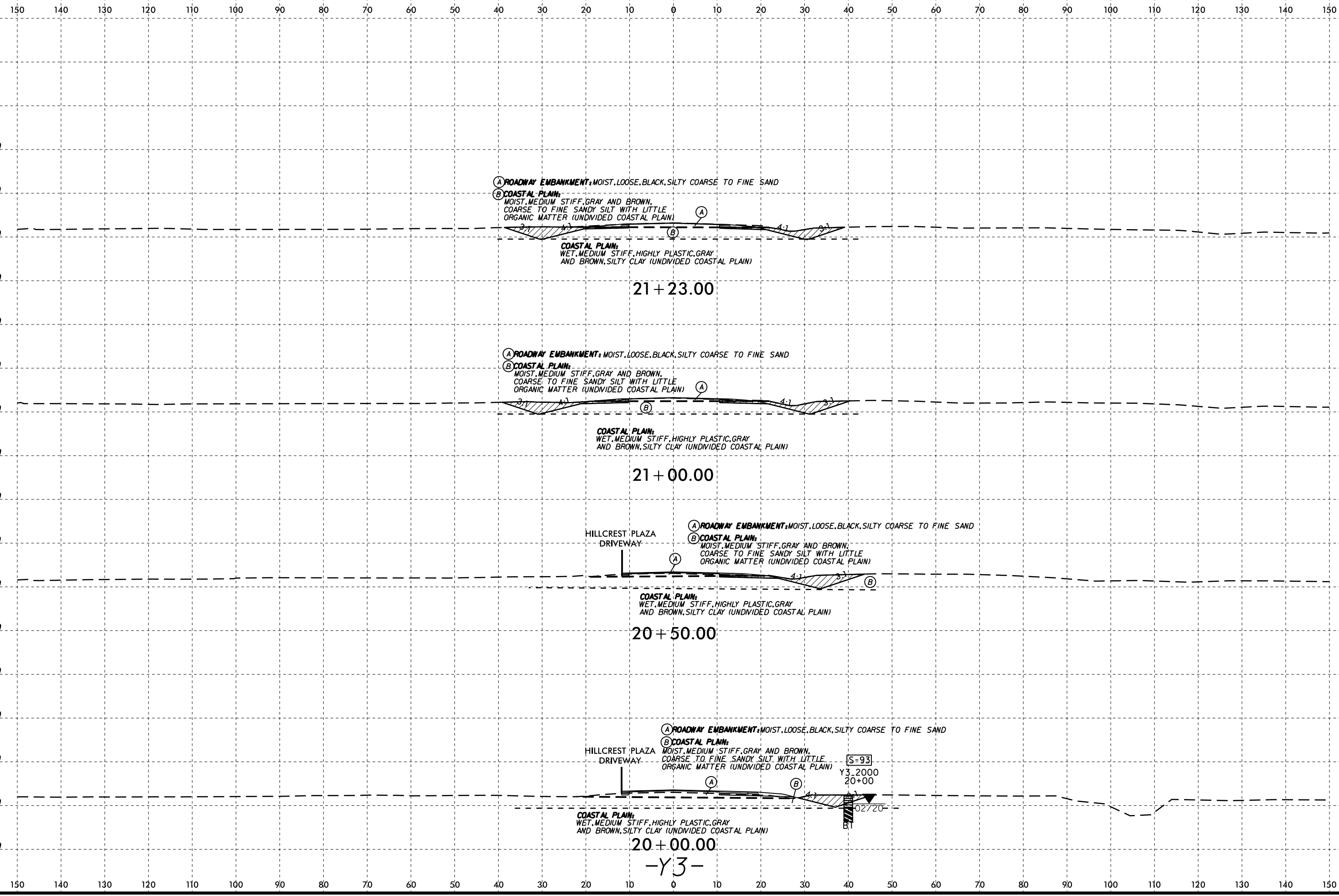




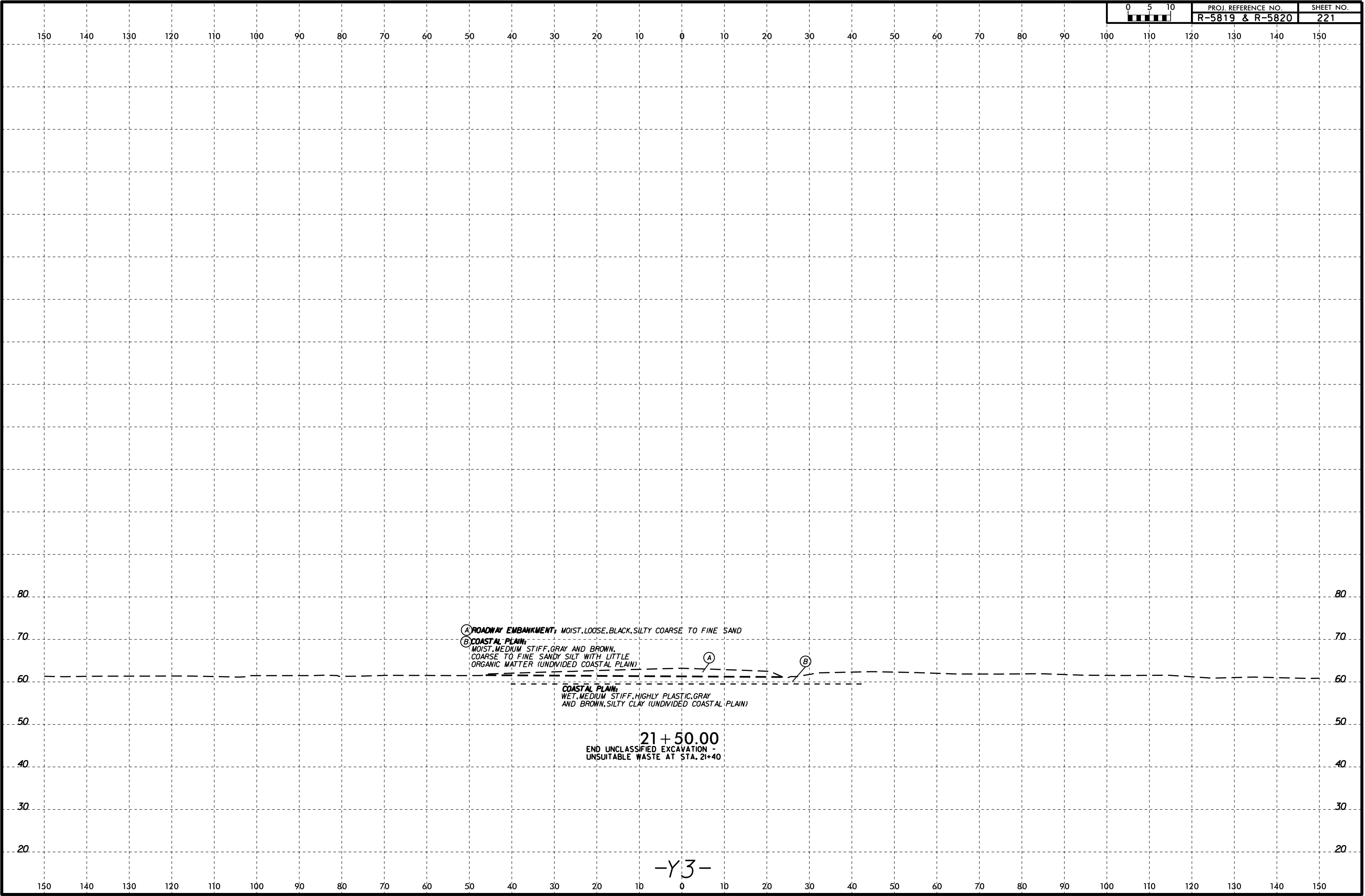


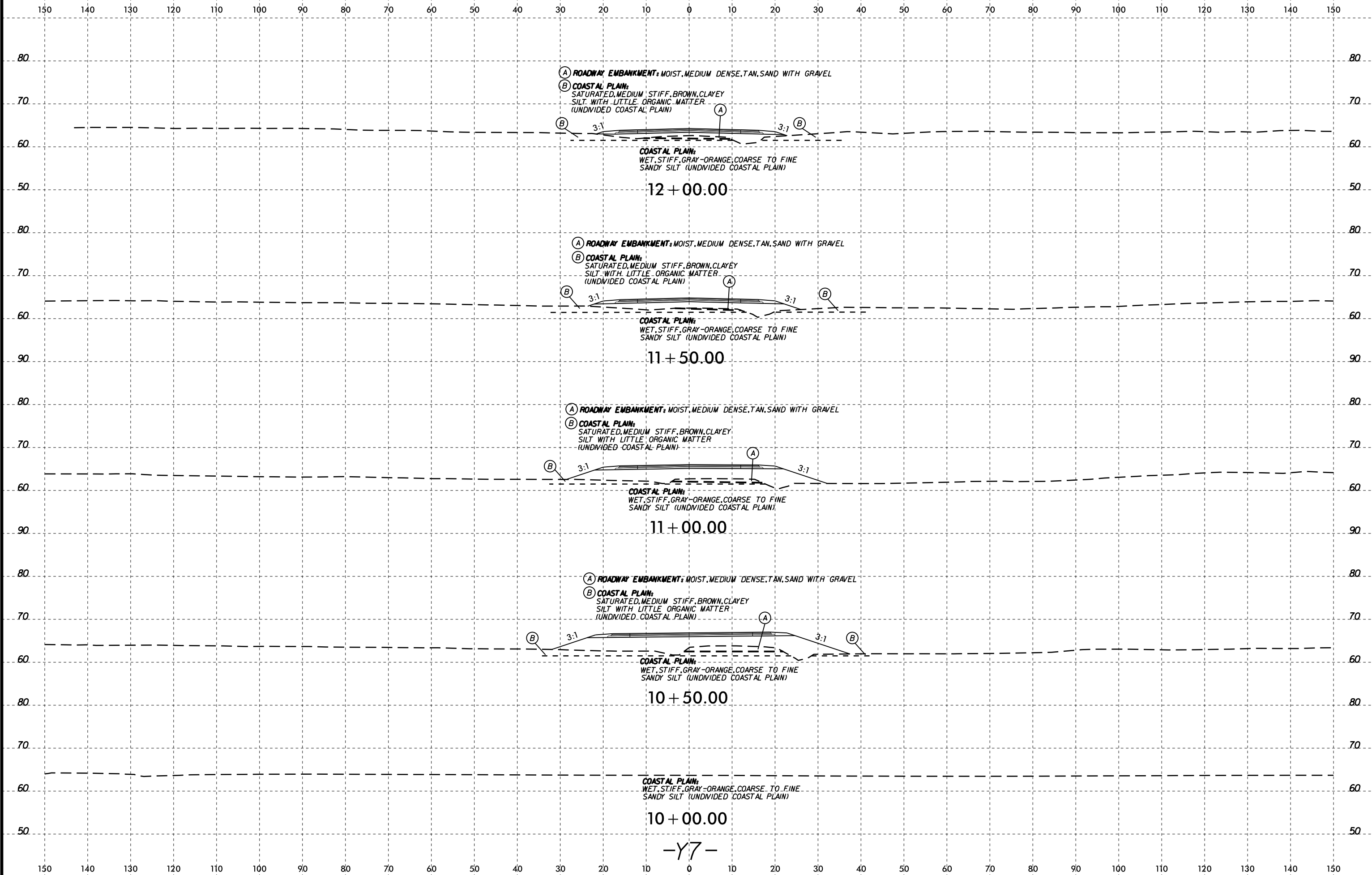
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 Wells - A1 KA211387

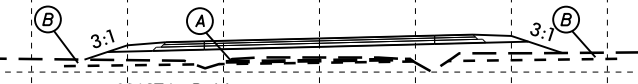




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-Y7-

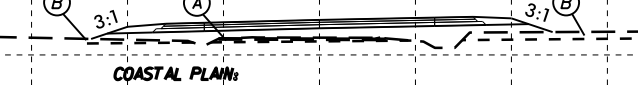
(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL
 (B) COASTAL PLAIN: SATURATED, MEDIUM STIFF, BROWN, CLAYEY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)



COASTAL PLAIN:
 WET, STIFF, GRAY-ORANGE, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

14 + 50.00

(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL
 (B) COASTAL PLAIN: SATURATED, MEDIUM STIFF, BROWN, CLAYEY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)



COASTAL PLAIN:
 WET, STIFF, GRAY-ORANGE, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

14 + 00.00

(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL
 (B) COASTAL PLAIN: SATURATED, MEDIUM STIFF, BROWN, CLAYEY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)



COASTAL PLAIN:
 WET, STIFF, GRAY-ORANGE, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

13 + 50.00

S-94
 S-95
 Y7.1350
 13+50
 03/20
 BT

(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL
 (B) COASTAL PLAIN: SATURATED, MEDIUM STIFF, BROWN, CLAYEY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)



COASTAL PLAIN:
 WET, STIFF, GRAY-ORANGE, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

13 + 00.00

(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL
 (B) COASTAL PLAIN: SATURATED, MEDIUM STIFF, BROWN, CLAYEY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)



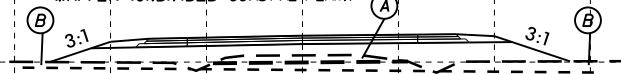
COASTAL PLAIN:
 WET, STIFF, GRAY-ORANGE, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

12 + 50.00

-Y7-

(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL

(B) COASTAL PLAIN: WET, MEDIUM STIFF, DARK BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)



COASTAL PLAIN: SATURATED, MEDIUM STIFF, DARK BROWN TO GRAY ORANGE, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

17 + 00.00

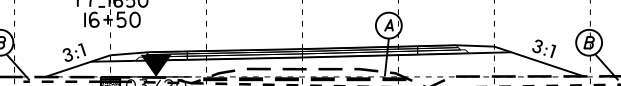
S-96

Y7_1650

16 + 50

(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL

(B) COASTAL PLAIN: WET, MEDIUM STIFF, DARK BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

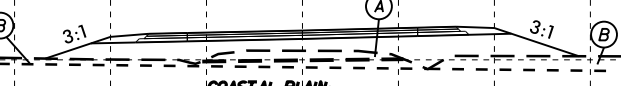


COASTAL PLAIN: SATURATED, MEDIUM STIFF, DARK BROWN TO GRAY ORANGE, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

16 + 50.00

(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL

(B) COASTAL PLAIN: WET, MEDIUM STIFF, DARK BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

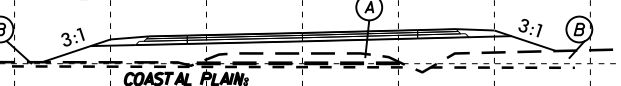


COASTAL PLAIN: SATURATED, MEDIUM STIFF, GRAY AND ORANGE, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

16 + 00.00

(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL

(B) COASTAL PLAIN: WET, MEDIUM STIFF, DARK BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)



COASTAL PLAIN: SATURATED, MEDIUM STIFF, GRAY AND ORANGE, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

15 + 50.00

(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL

(B) COASTAL PLAIN: SATURATED, MEDIUM STIFF, BROWN, CLAYEY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)



COASTAL PLAIN: WET, STIFF, GRAY-ORANGE, COARSE TO FINE SANDY SILT (UNDIVIDED COASTAL PLAIN)

15 + 00.00

-Y7-

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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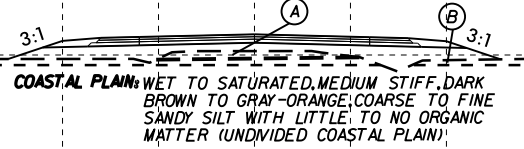
70 70

60 60

50 50

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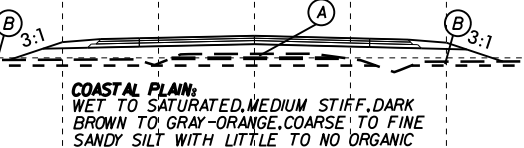
(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL
 (B) COASTAL PLAIN: SATURATED, MEDIUM STIFF, HIGHLY PLASTIC, BROWN, SILTY CLAY WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)



COASTAL PLAIN: WET TO SATURATED, MEDIUM STIFF, DARK BROWN TO GRAY-ORANGE, COARSE TO FINE SANDY SILT WITH LITTLE TO NO ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

19 + 00.00

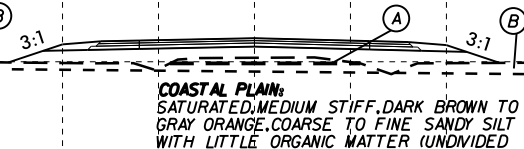
(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL
 (B) COASTAL PLAIN: SATURATED, MEDIUM STIFF, HIGHLY PLASTIC, BROWN, SILTY CLAY WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)



COASTAL PLAIN: WET TO SATURATED, MEDIUM STIFF, DARK BROWN TO GRAY-ORANGE, COARSE TO FINE SANDY SILT WITH LITTLE TO NO ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

18 + 50.00

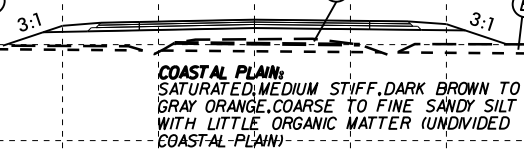
(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL
 (B) COASTAL PLAIN: WET, MEDIUM STIFF, DARK BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)



COASTAL PLAIN: SATURATED, MEDIUM STIFF, DARK BROWN TO GRAY ORANGE, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

18 + 00.00

(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL
 (B) COASTAL PLAIN: WET, MEDIUM STIFF, DARK BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)



COASTAL PLAIN: SATURATED, MEDIUM STIFF, DARK BROWN TO GRAY ORANGE, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

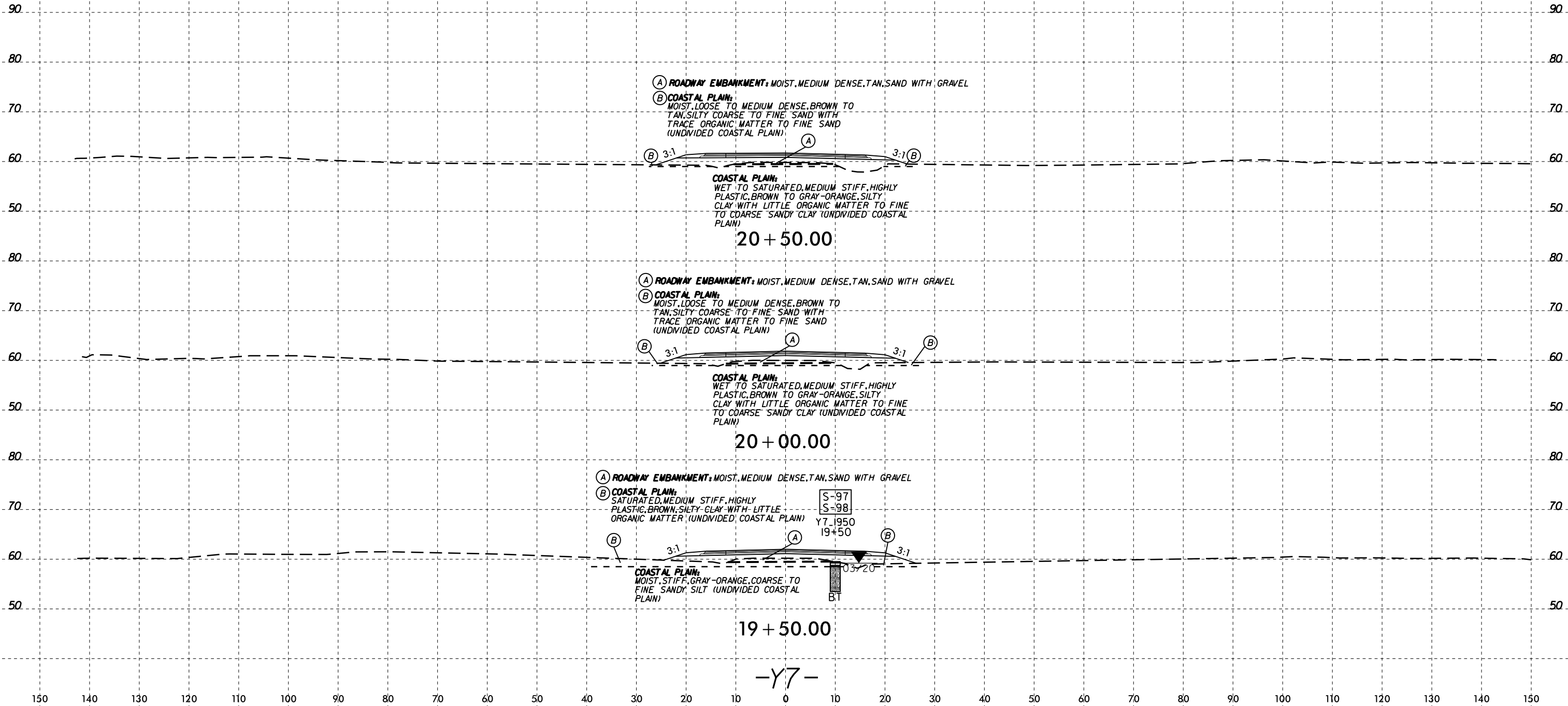
17 + 50.00

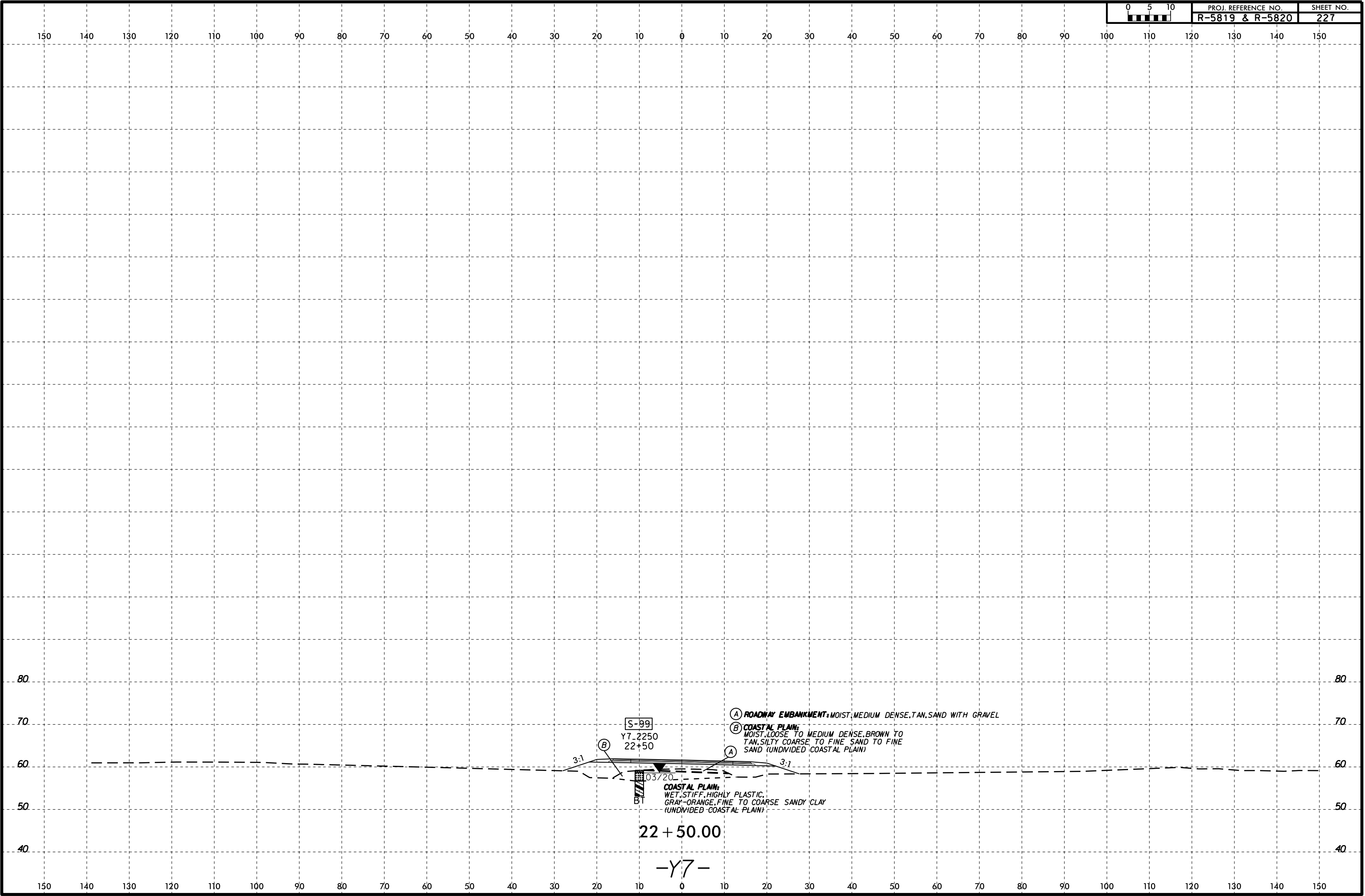
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S-99

Y7_2250
22+50

03/20

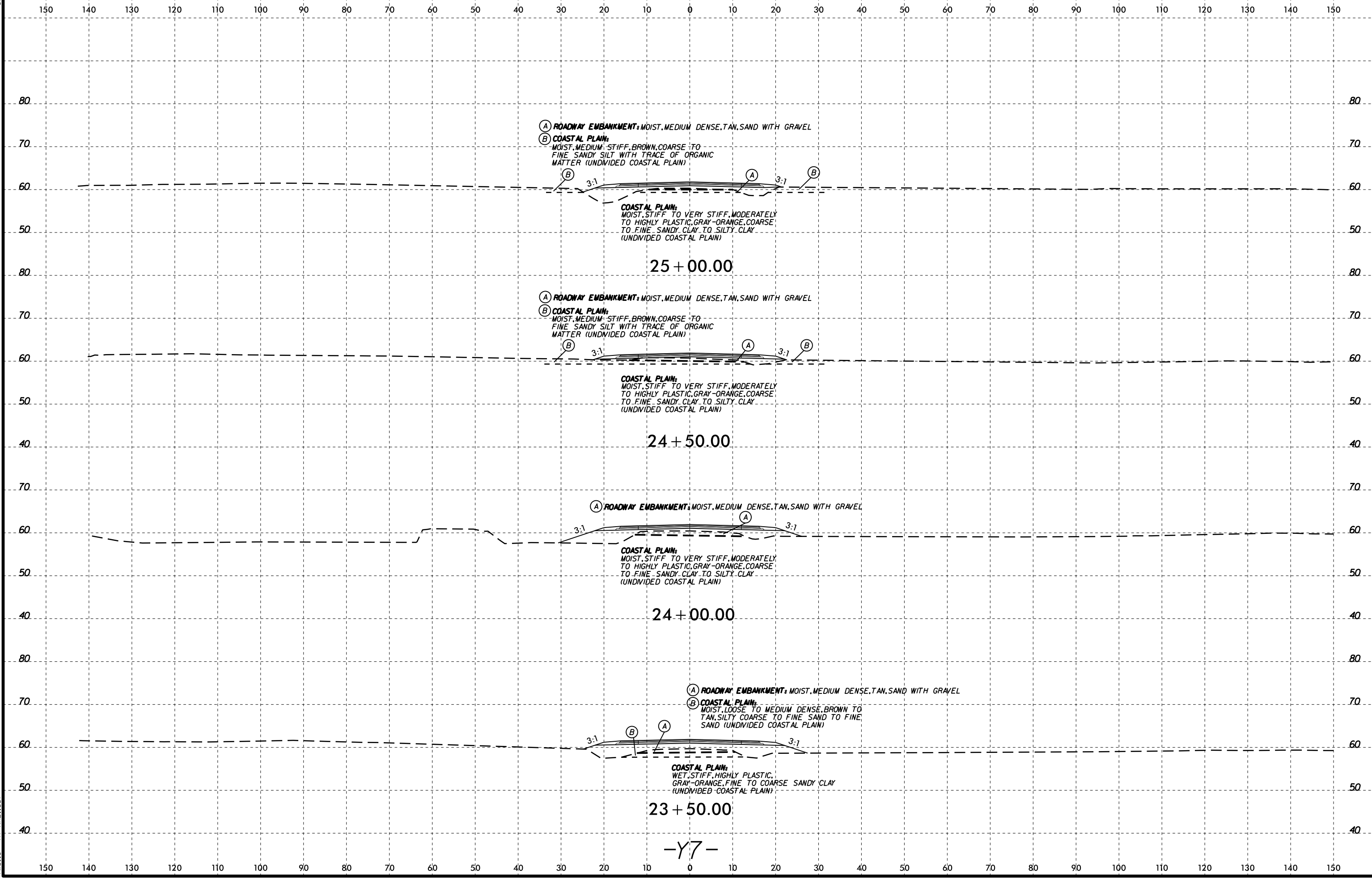
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COASTAL PLAIN:
WET, STIFF, HIGHLY PLASTIC,
GRAY-ORANGE, FINE TO COARSE SANDY CLAY
(UNDIVIDED COASTAL PLAIN)

(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN. SAND WITH GRAVEL

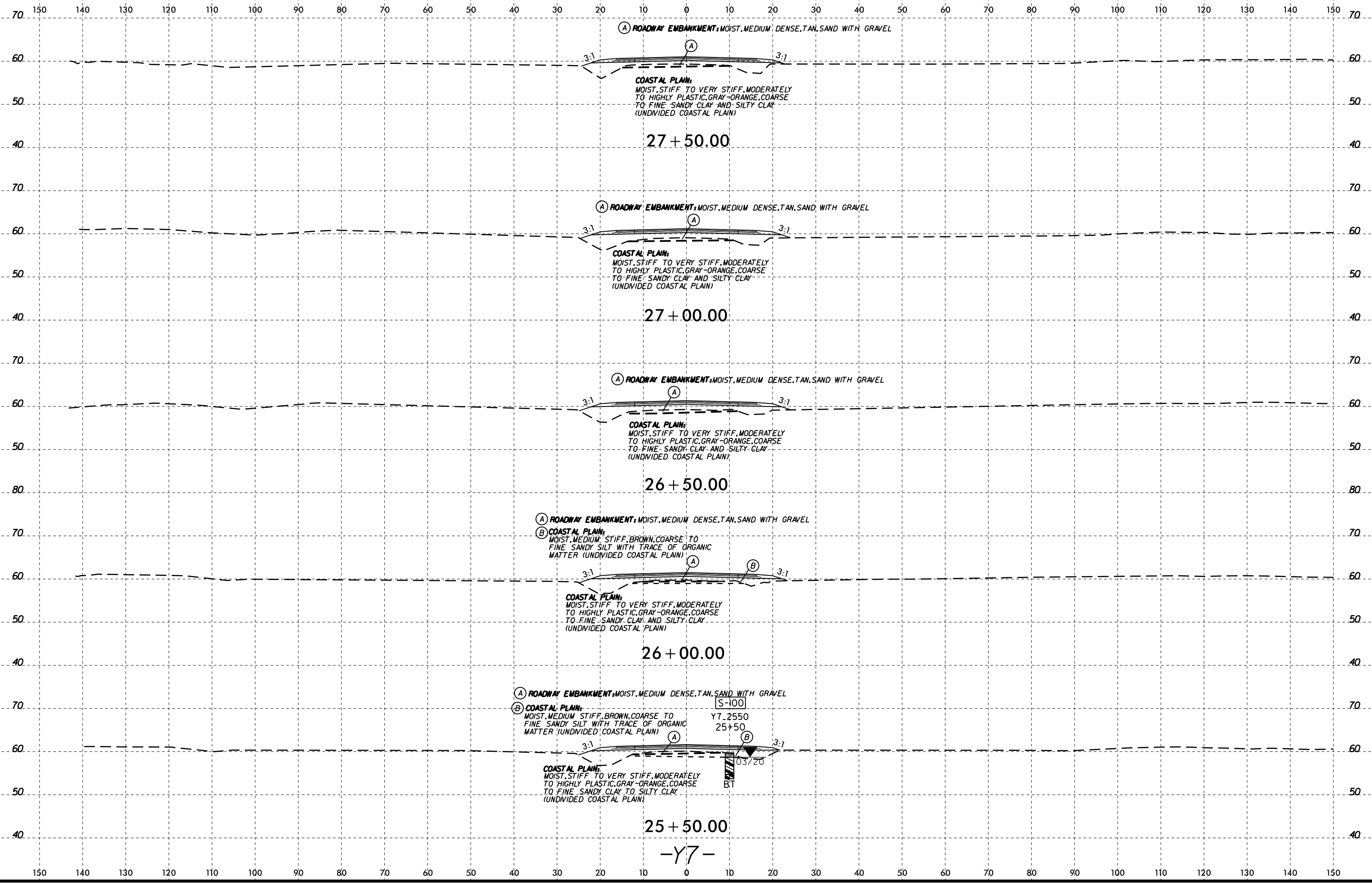
(B) COASTAL PLAIN:
MOIST, LOOSE TO MEDIUM DENSE, BROWN TO
TAN, SILTY COARSE TO FINE SAND TO FINE
SAND (UNDIVIDED COASTAL PLAIN)

22 + 50.00

-Y7-



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 Wells



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 Wells - A1 KA211387



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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60 60

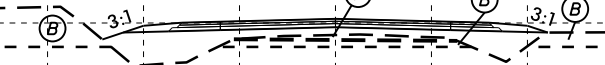
50 50

40 40

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) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL

(B) COASTAL PLAIN: MEDIUM DENSE TO LOOSE, BROWN TO TAN, SILTY COARSE TO FINE SAND (UNDIVIDED COASTAL PLAIN)



COASTAL PLAIN: MOIST, STIFF TO VERY STIFF, MODERATELY TO HIGHLY PLASTIC, GRAY-ORANGE, COARSE TO FINE SANDY CLAY AND SILTY CLAY (UNDIVIDED COASTAL PLAIN)

29 + 50.00

(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL

(B) COASTAL PLAIN: MOIST, MEDIUM DENSE TO LOOSE, BROWN TO TAN, SILTY COARSE TO FINE SAND (UNDIVIDED COASTAL PLAIN)



COASTAL PLAIN: MOIST, STIFF TO VERY STIFF, MODERATELY TO HIGHLY PLASTIC, GRAY-ORANGE, COARSE TO FINE SANDY CLAY AND SILTY CLAY (UNDIVIDED COASTAL PLAIN)

29 + 00.00

S-101
S-102

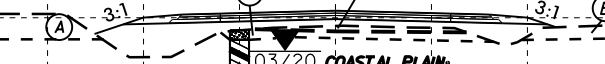
Y7 2850

28+50



(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL

(B) COASTAL PLAIN: MOIST, LOOSE, BROWN, SILTY COARSE TO FINE SAND WITH TRACE OF ORGANIC MATTER AND TRACE GRAVEL (UNDIVIDED COASTAL PLAIN)



COASTAL PLAIN: MOIST, STIFF TO VERY STIFF, MODERATELY TO HIGHLY PLASTIC, GRAY-ORANGE, COARSE TO FINE SANDY CLAY AND SILTY CLAY (UNDIVIDED COASTAL PLAIN)

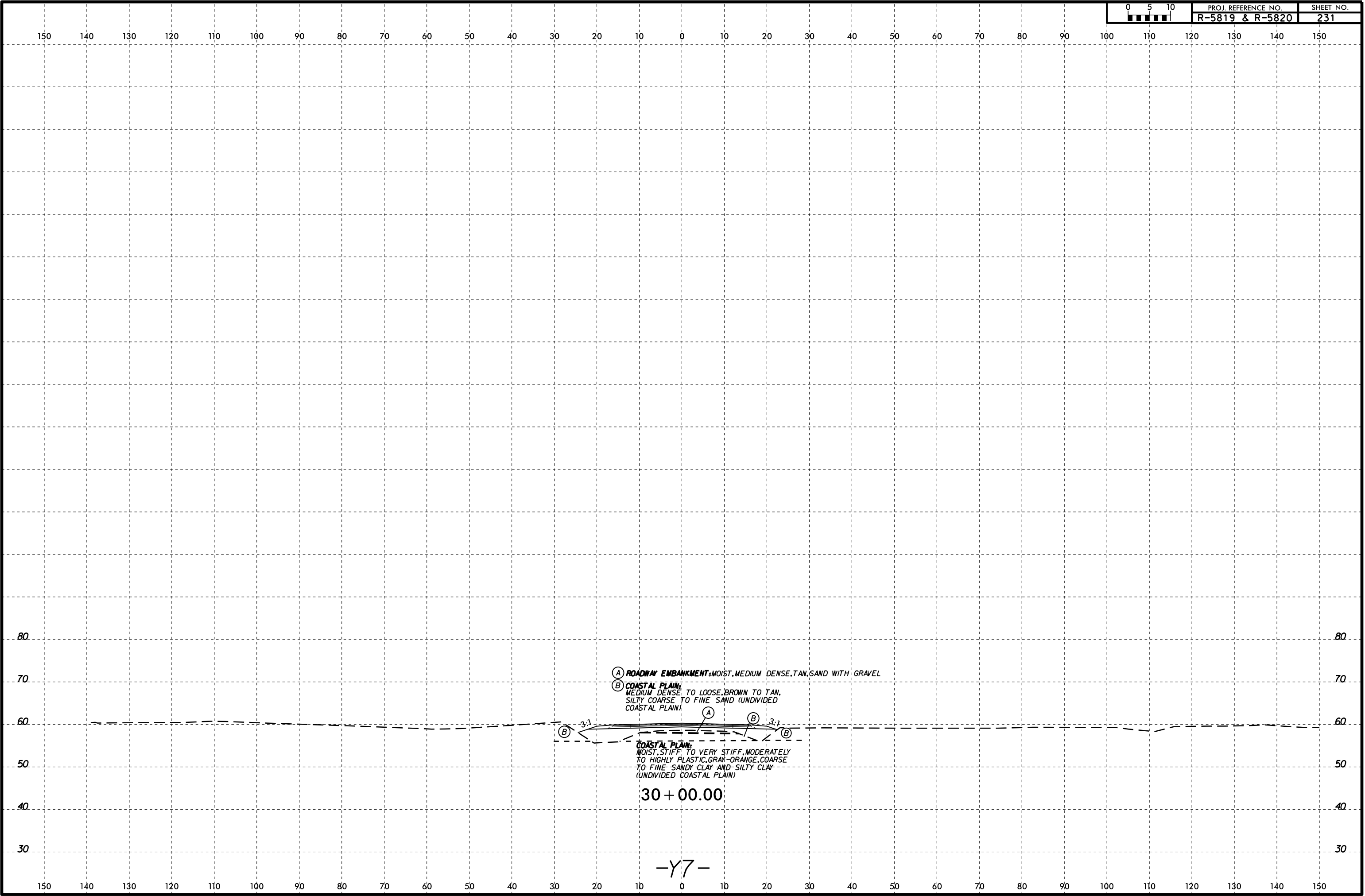
28 + 50.00

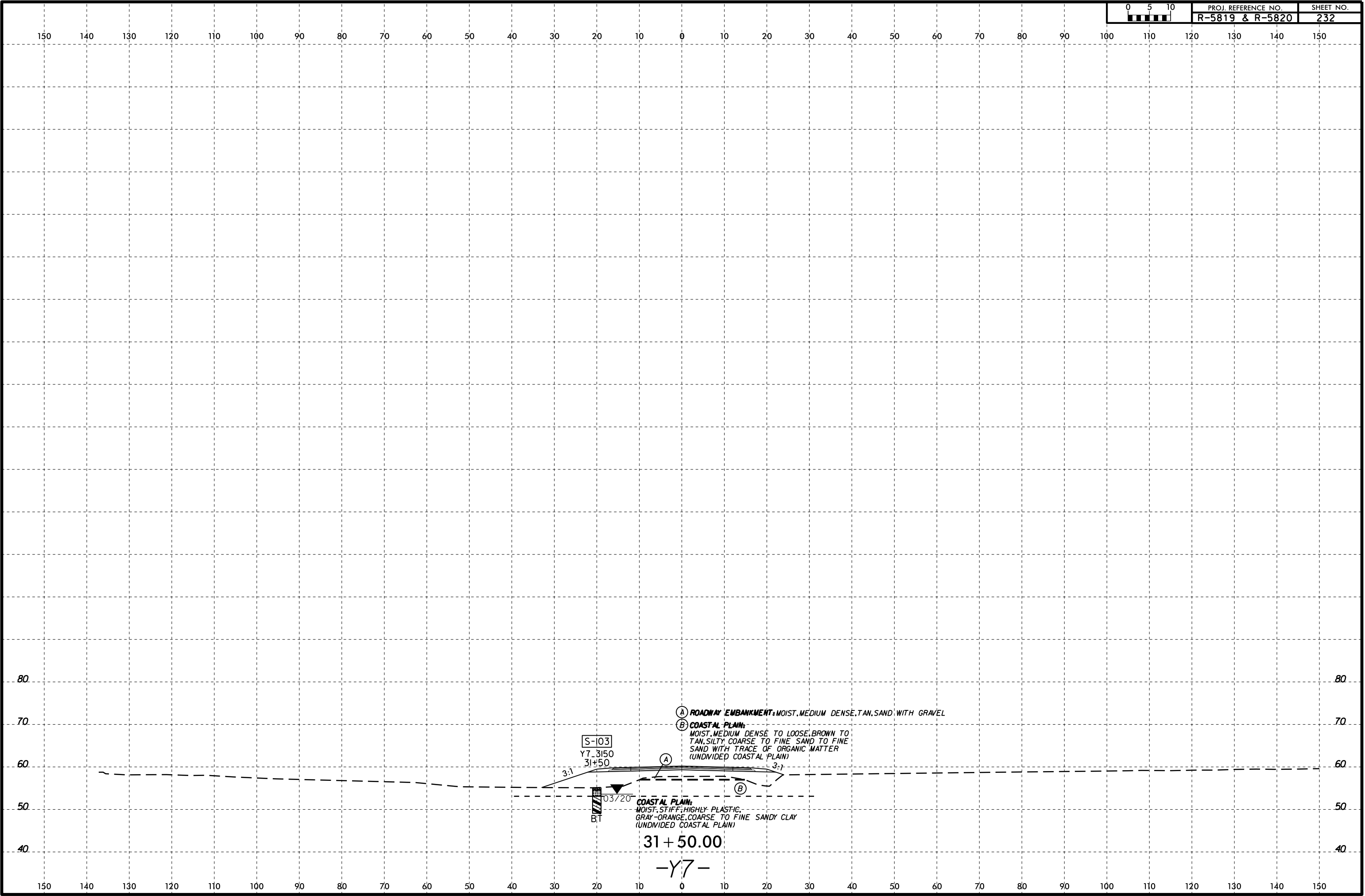
(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND WITH GRAVEL

COASTAL PLAIN: MOIST, STIFF TO VERY STIFF, MODERATELY TO HIGHLY PLASTIC, GRAY-ORANGE, COARSE TO FINE SANDY CLAY AND SILTY CLAY (UNDIVIDED COASTAL PLAIN)

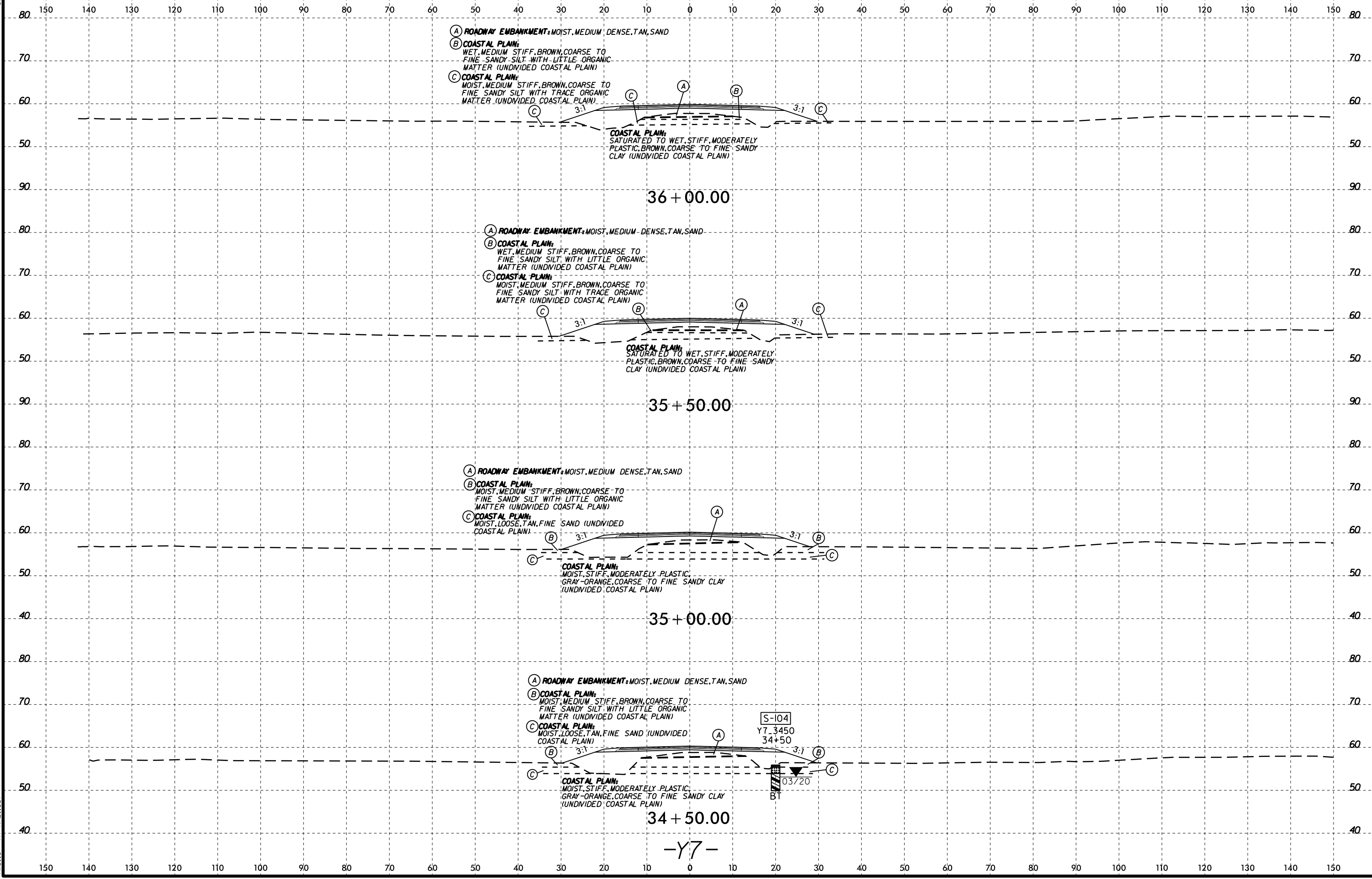
28 + 00.00

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6/23/16



- (A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND
- (B) COASTAL PLAIN: MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)
- (C) COASTAL PLAIN: MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH TRACE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
SATURATED TO WET, STIFF, MODERATELY PLASTIC, BROWN, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

- (A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND
- (B) COASTAL PLAIN: MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)
- (C) COASTAL PLAIN: MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH TRACE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
SATURATED TO WET, STIFF, MODERATELY PLASTIC, BROWN, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

- (A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND
- (B) COASTAL PLAIN: MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)
- (C) COASTAL PLAIN: MOIST, LOOSE, TAN, FINE SAND (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
MOIST, STIFF, MODERATELY PLASTIC, GRAY-ORANGE, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

- (A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND
- (B) COASTAL PLAIN: MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)
- (C) COASTAL PLAIN: MOIST, LOOSE, TAN, FINE SAND (UNDIVIDED COASTAL PLAIN)

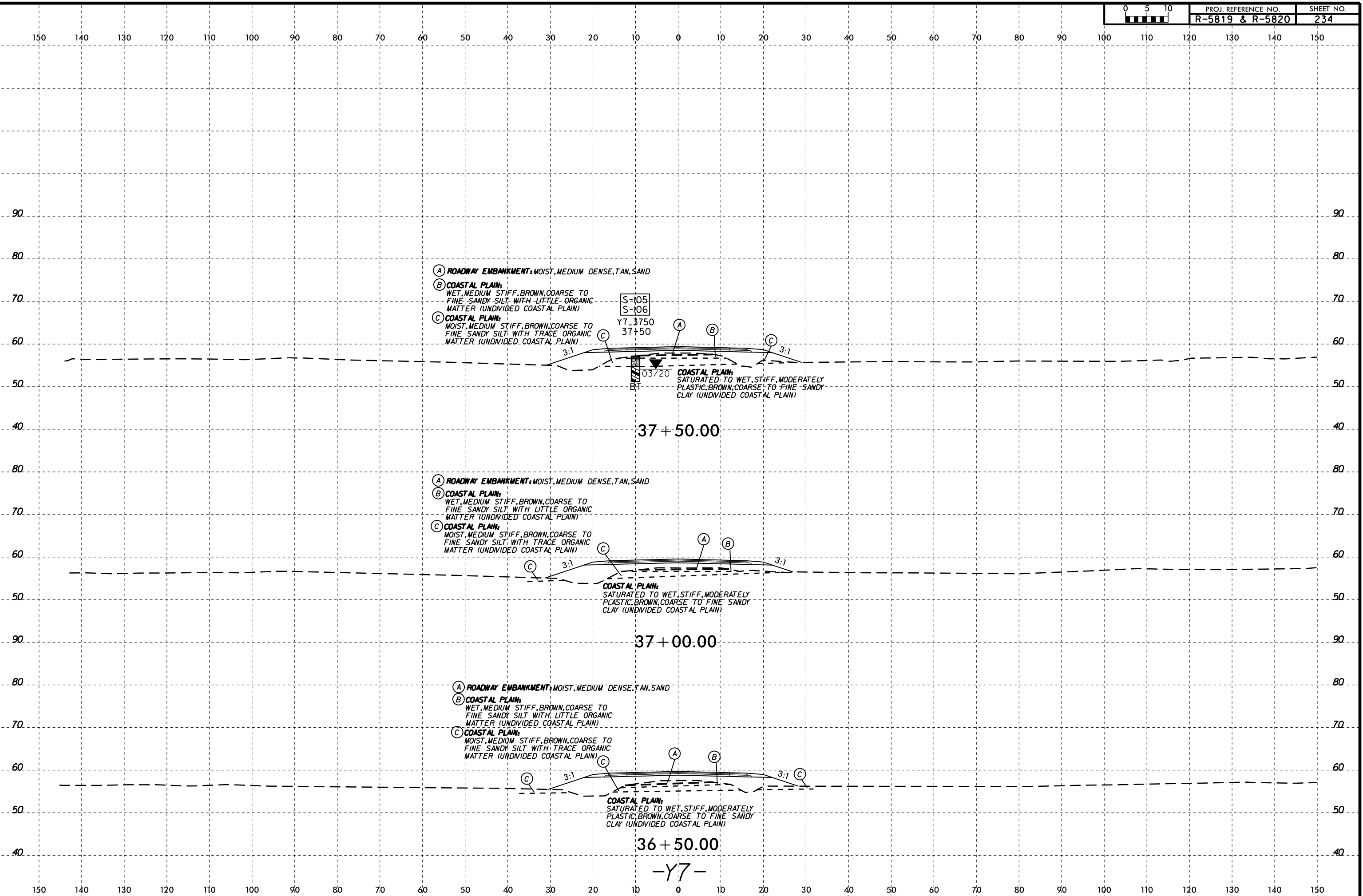
COASTAL PLAIN:
MOIST, STIFF, MODERATELY PLASTIC, GRAY-ORANGE, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

S-104
Y7_3450
34+50

BT
03.720

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6/23/16
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- (A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN. SAND
- (B) COASTAL PLAIN: WET, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)
- (C) COASTAL PLAIN: MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH TRACE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

S-105
S-106

Y7_3750
37+50

37+50.00

- (A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN. SAND
- (B) COASTAL PLAIN: WET, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)
- (C) COASTAL PLAIN: MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH TRACE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

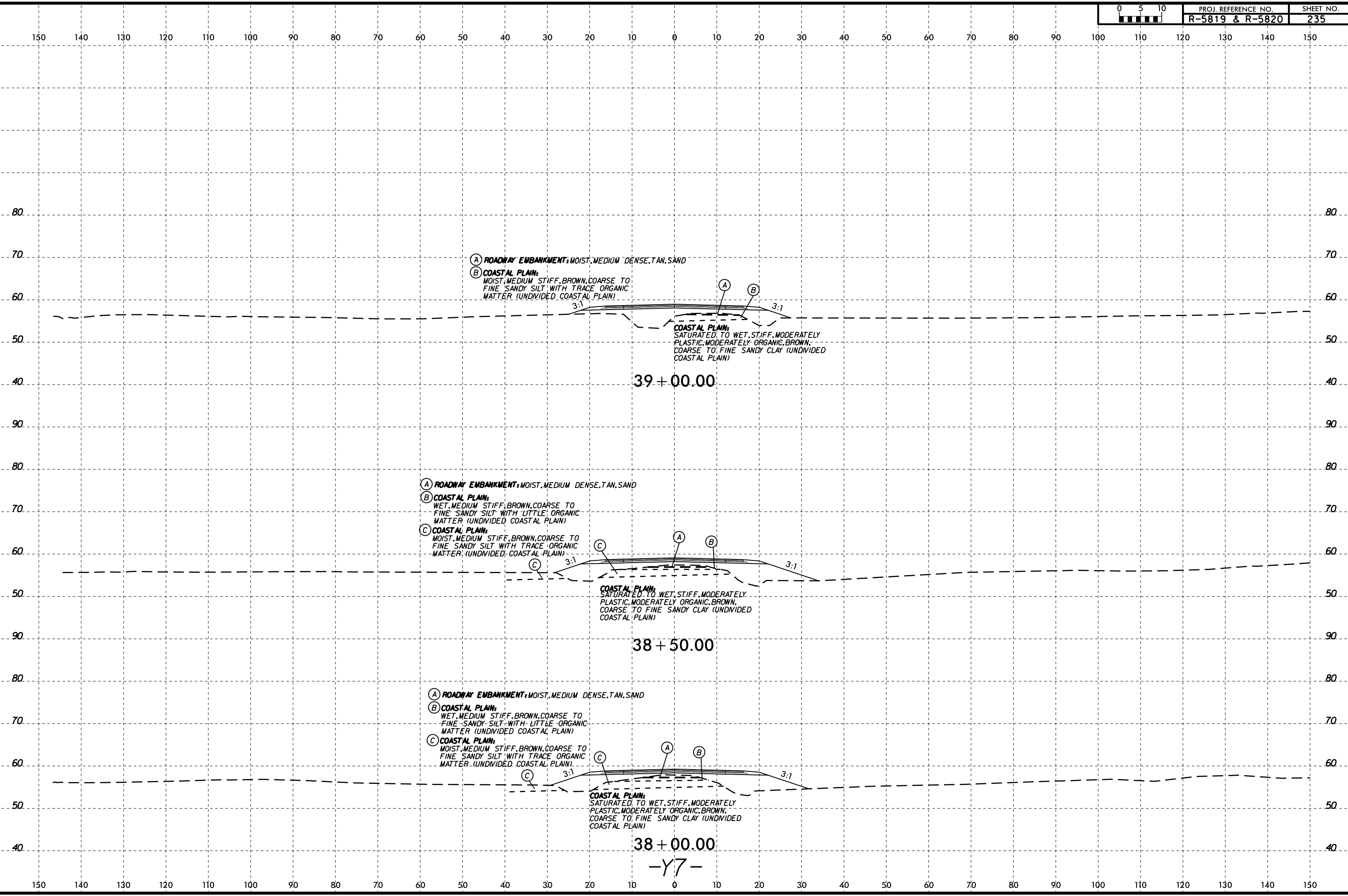
37+00.00

- (A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN. SAND
- (B) COASTAL PLAIN: WET, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)
- (C) COASTAL PLAIN: MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH TRACE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

36+50.00

-Y7-

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Wells - A1 KA211387



(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND
(B) COASTAL PLAIN: MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH TRACE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN: SATURATED TO WET, STIFF, MODERATELY PLASTIC, MODERATELY ORGANIC, BROWN, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

39+00.00

(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND
(B) COASTAL PLAIN: WET, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)
(C) COASTAL PLAIN: MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH TRACE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN: SATURATED TO WET, STIFF, MODERATELY PLASTIC, MODERATELY ORGANIC, BROWN, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

38+50.00

(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND
(B) COASTAL PLAIN: WET, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH LITTLE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)
(C) COASTAL PLAIN: MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH TRACE ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN: SATURATED TO WET, STIFF, MODERATELY PLASTIC, MODERATELY ORGANIC, BROWN, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

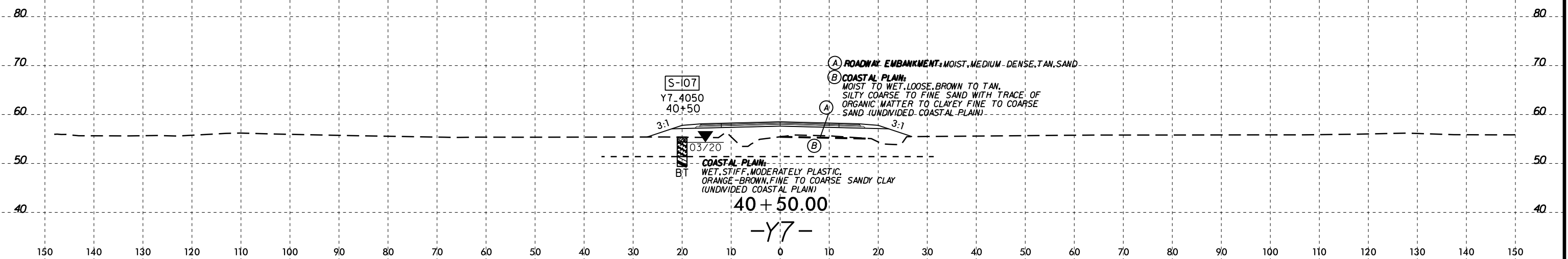
38+00.00

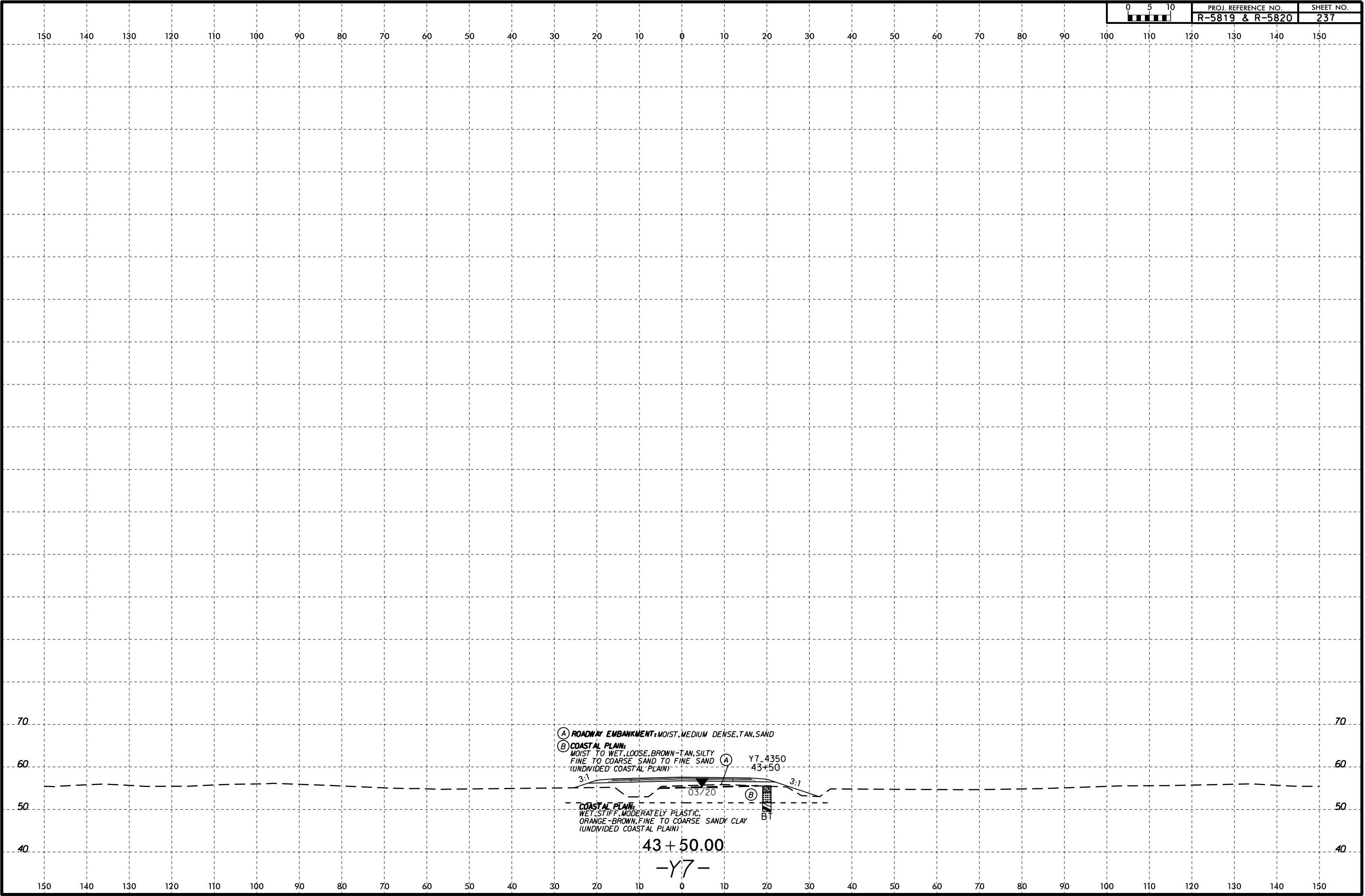
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(A) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN, SAND
 (B) COASTAL PLAIN: MOIST TO WET, LOOSE, BROWN-TAN, SILTY FINE TO COARSE SAND TO FINE SAND (UNDIVIDED COASTAL PLAIN)
 COASTAL PLAIN: WET, STIFF, MODERATELY PLASTIC, ORANGE-BROWN, FINE TO COARSE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

43 + 50.00
 -Y7-



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80

70

60

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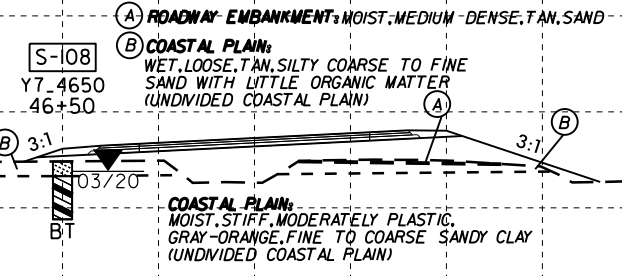
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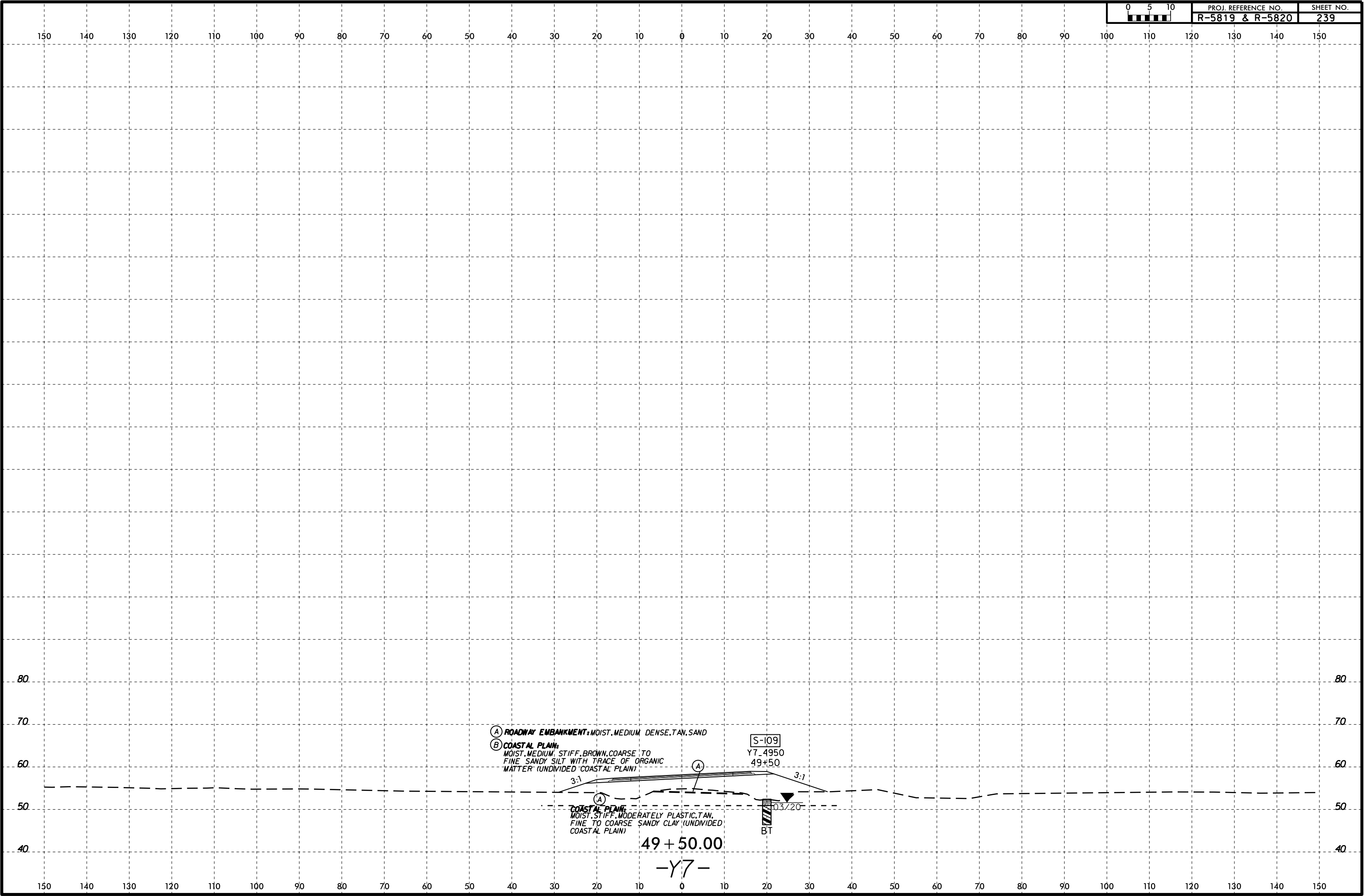
50



46 + 50.00

-Y7-

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) ROADWAY EMBANKMENT: MOIST, MEDIUM DENSE, TAN. SAND

(B) COASTAL PLAIN: MOIST, MEDIUM STIFF, BROWN, COARSE TO FINE SANDY SILT WITH TRACE OF ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

(A) COASTAL PLAIN: MOIST, STIFF, MODERATELY PLASTIC, TAN, FINE TO COARSE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

S-109
Y7_4950
49+50

BT
03/20

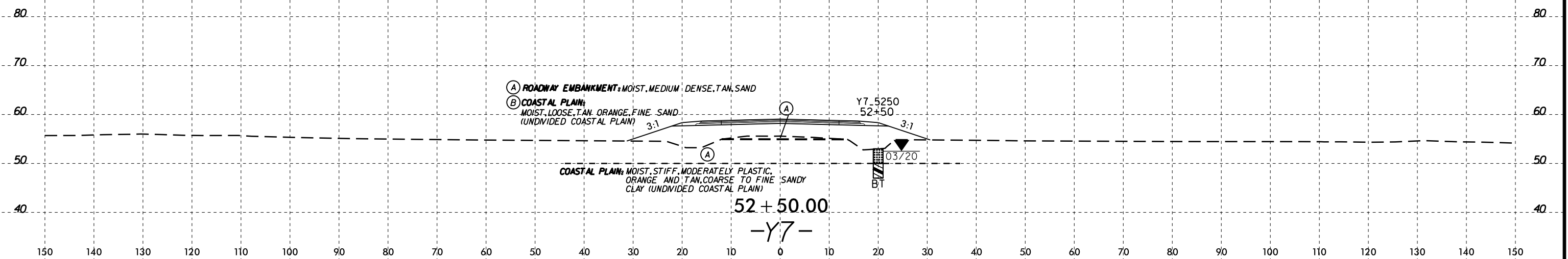
49 + 50.00

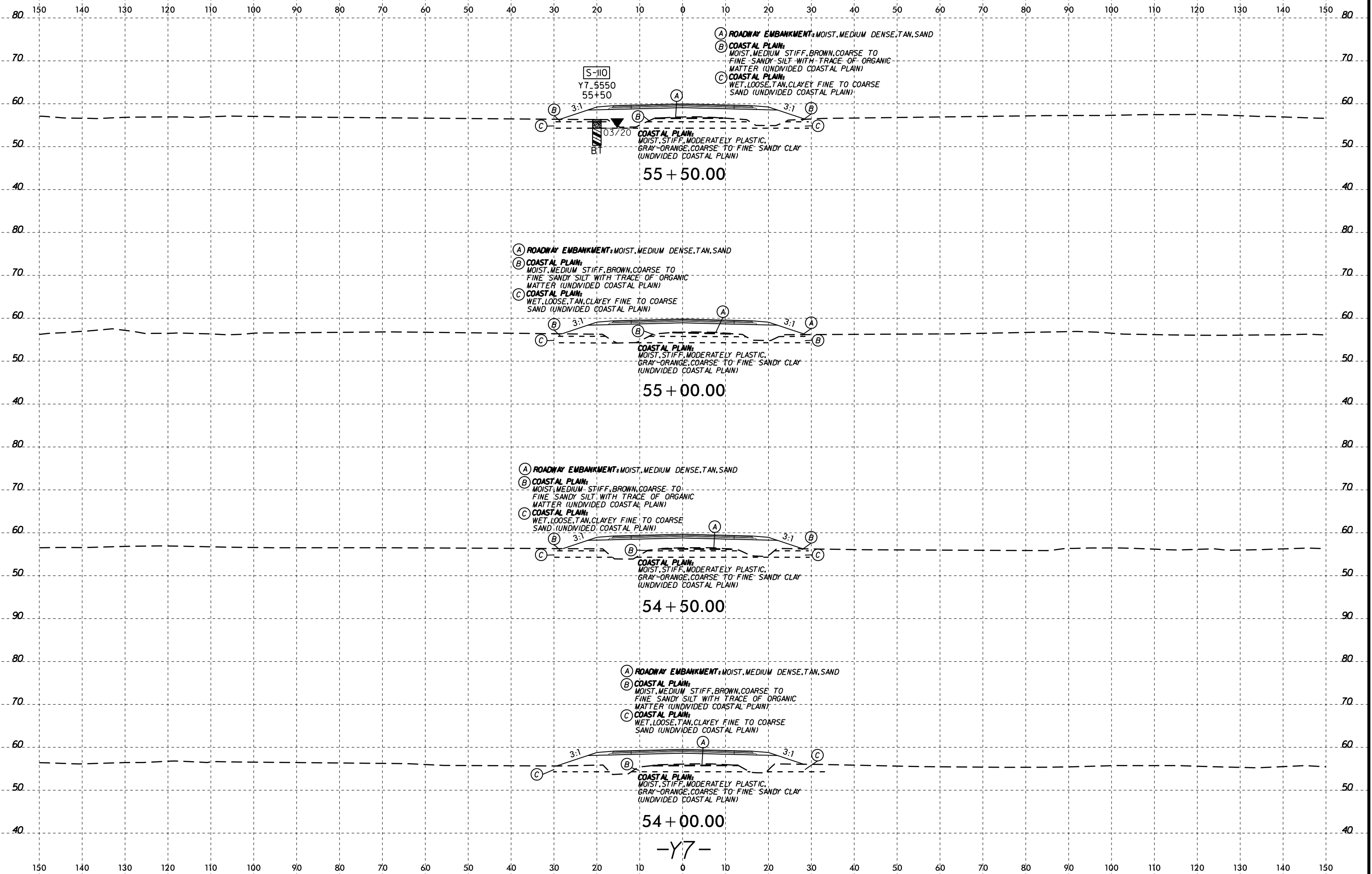
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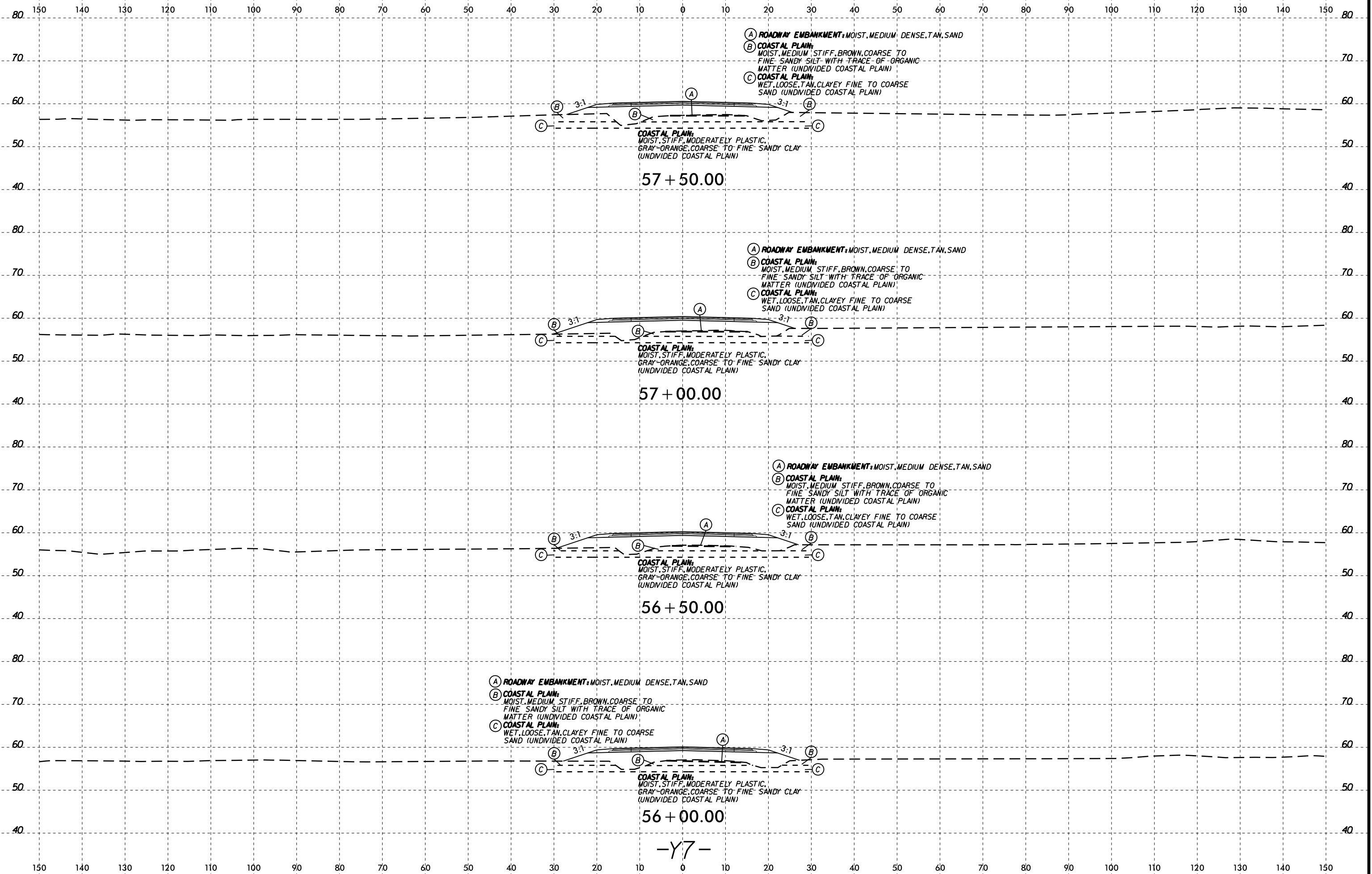


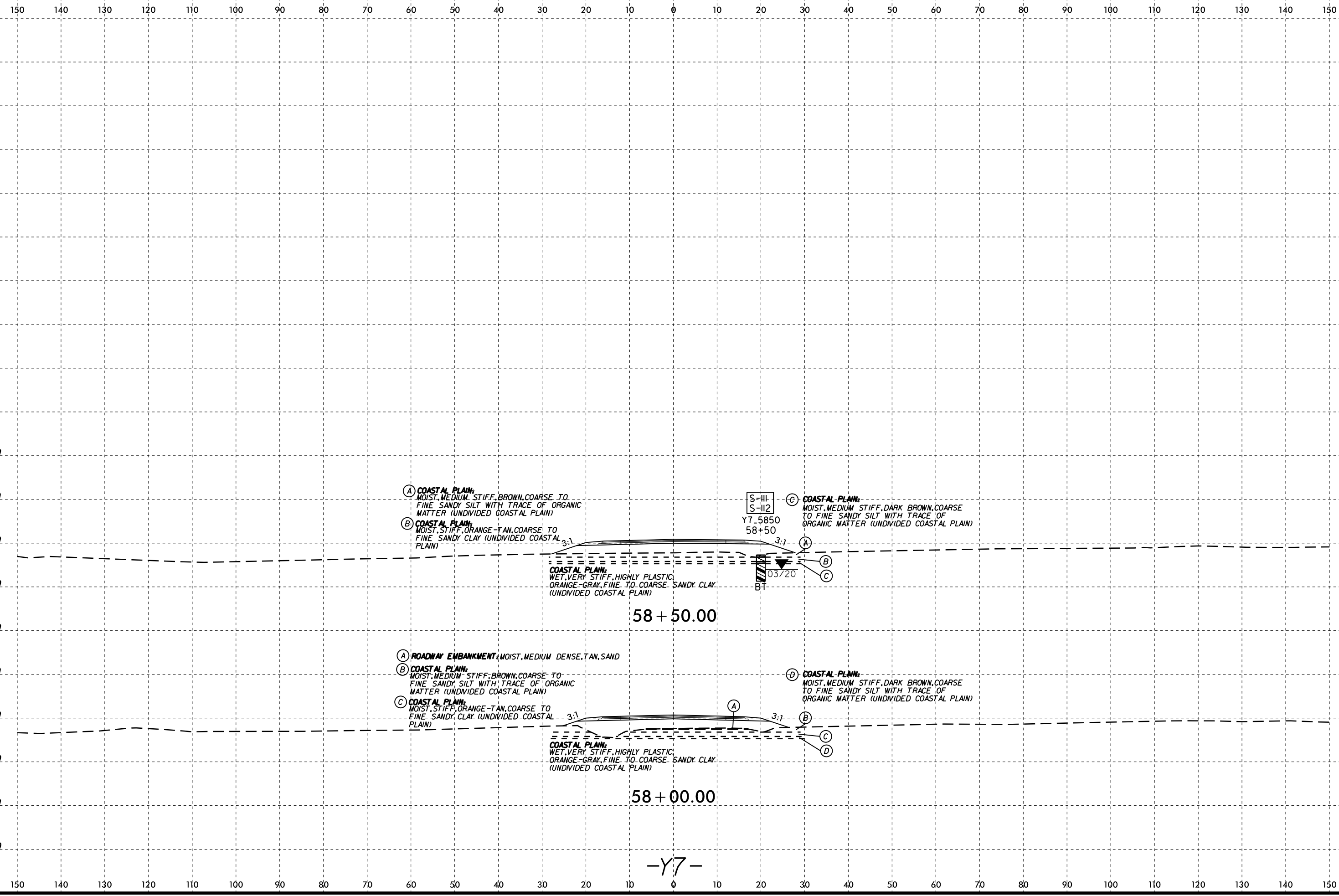
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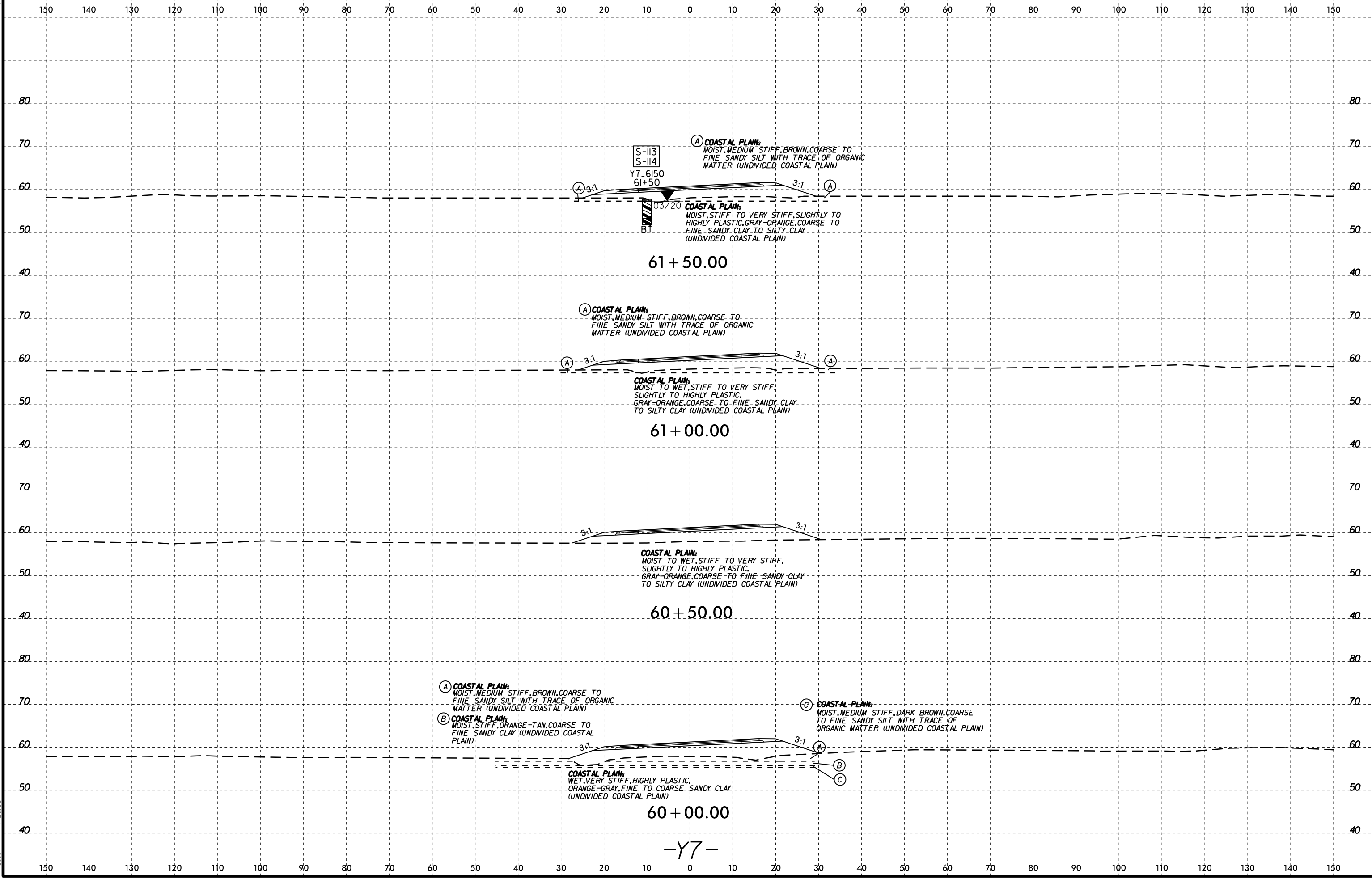


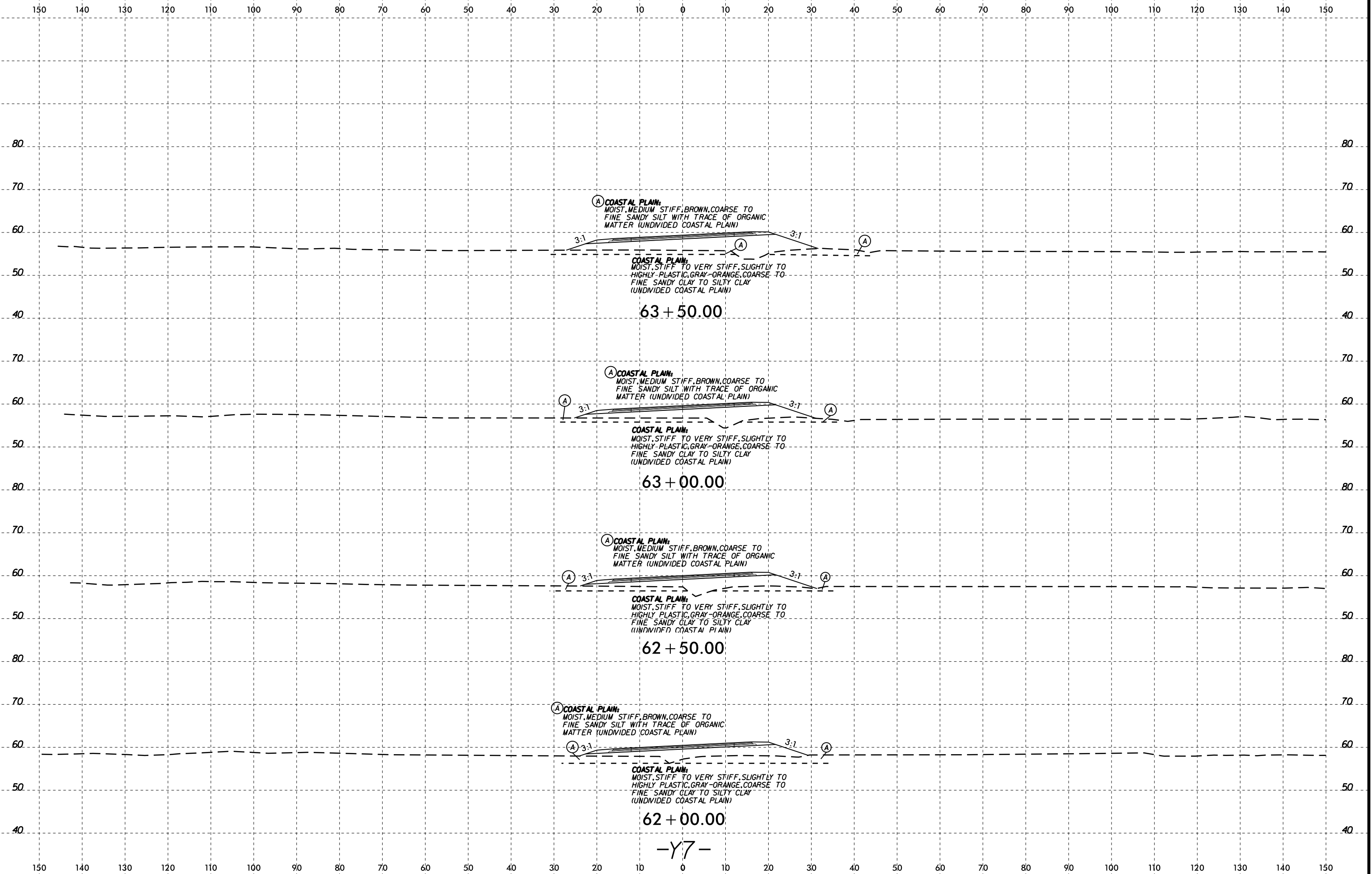


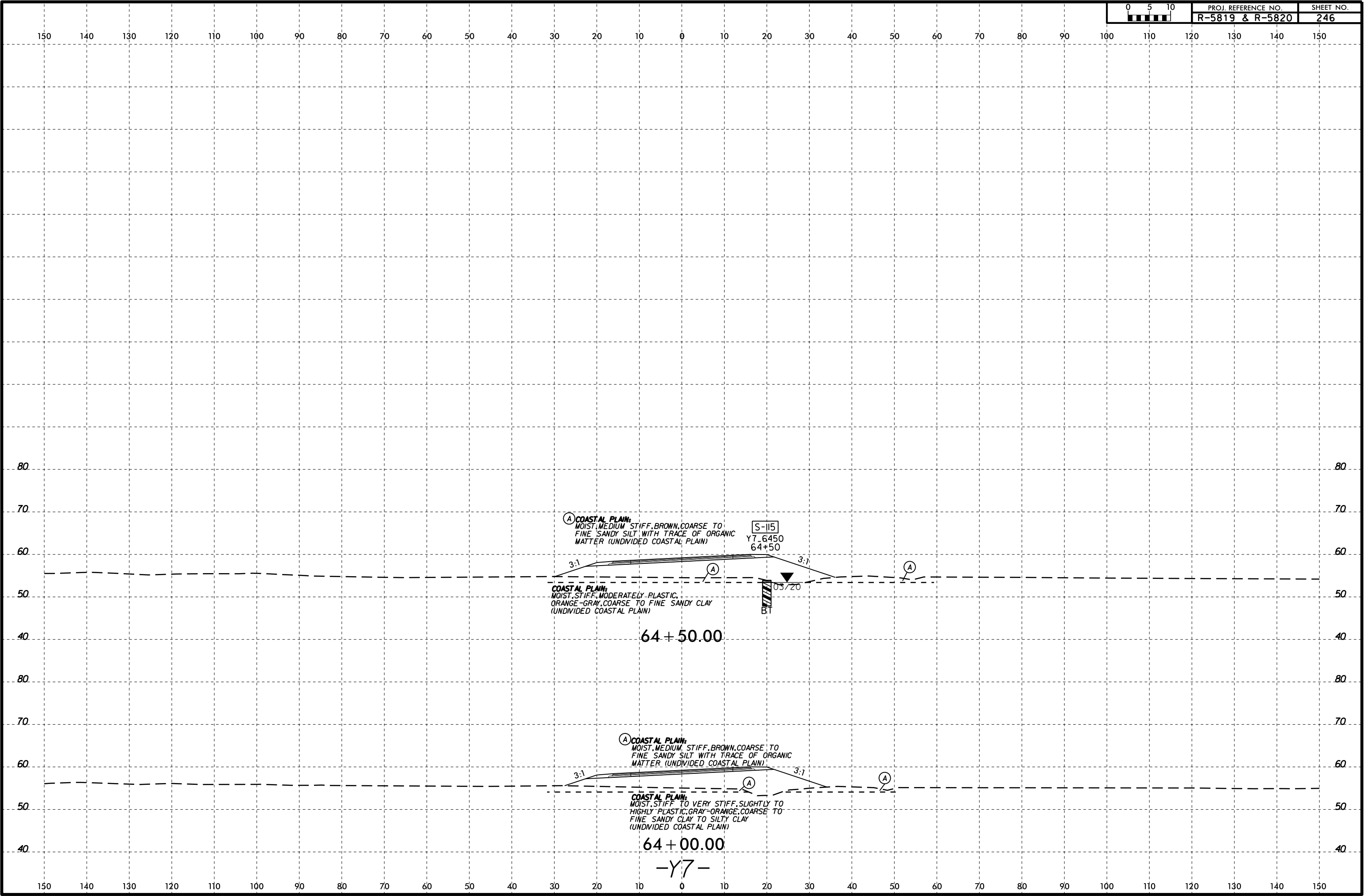


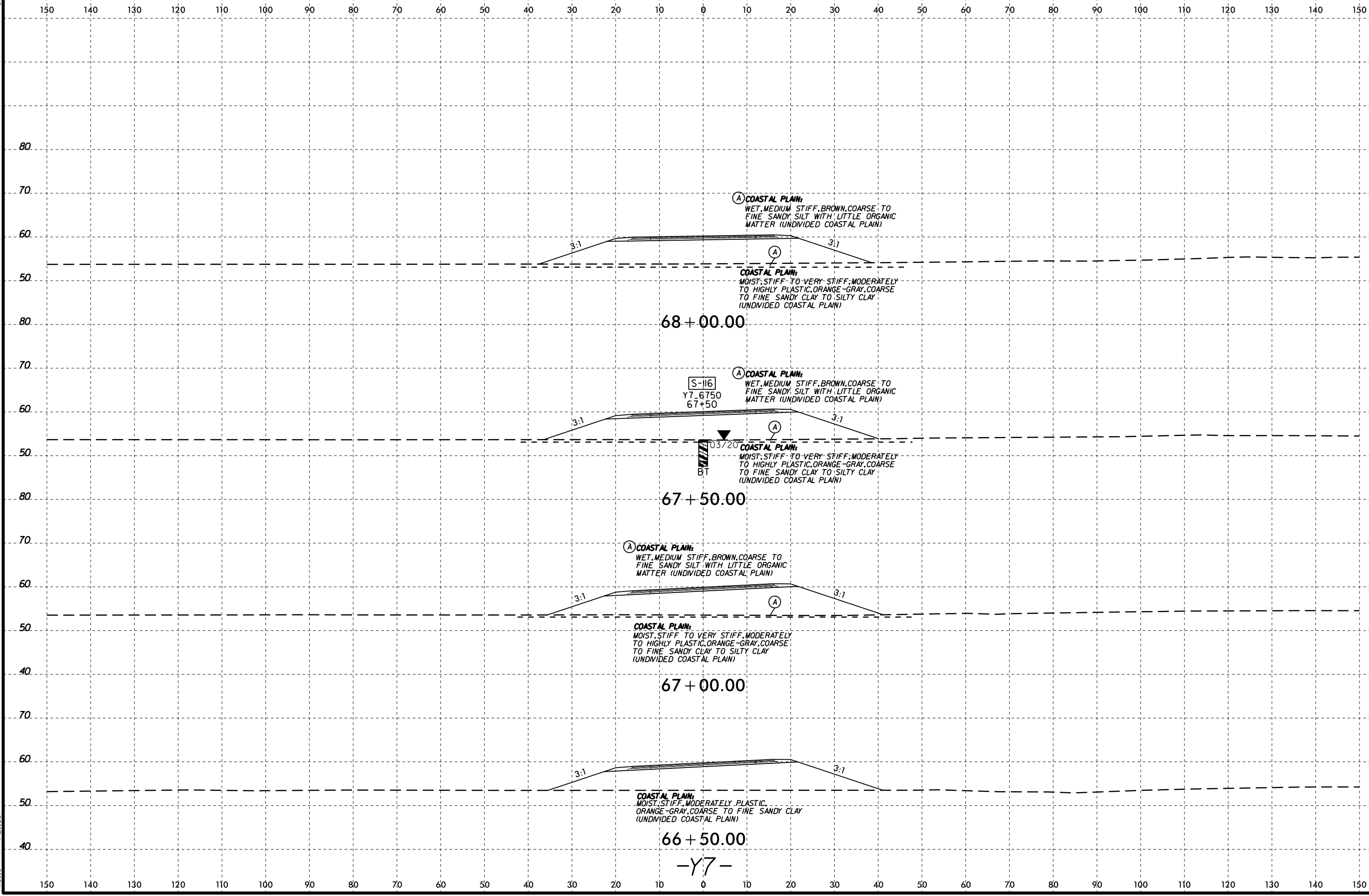
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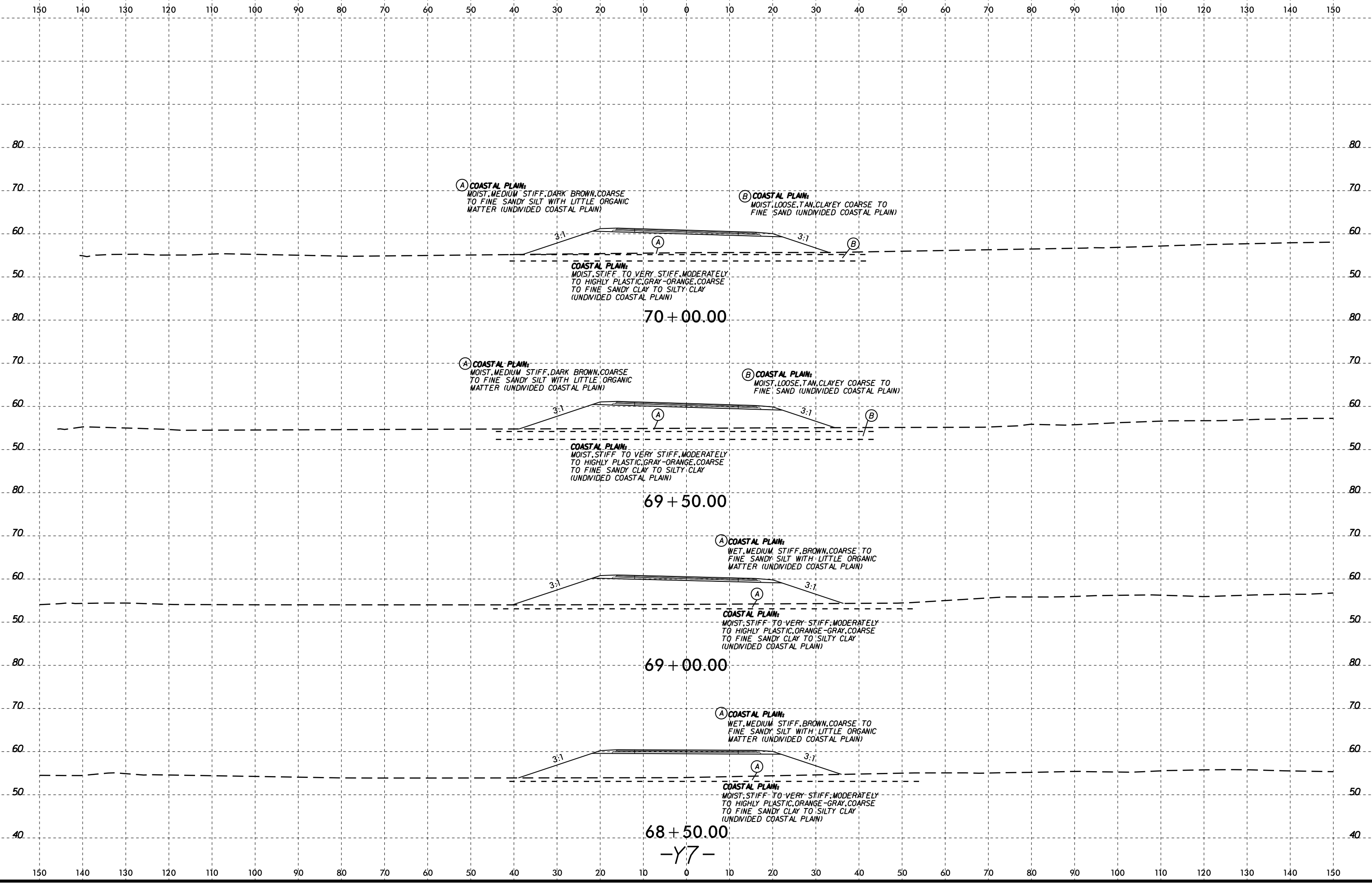
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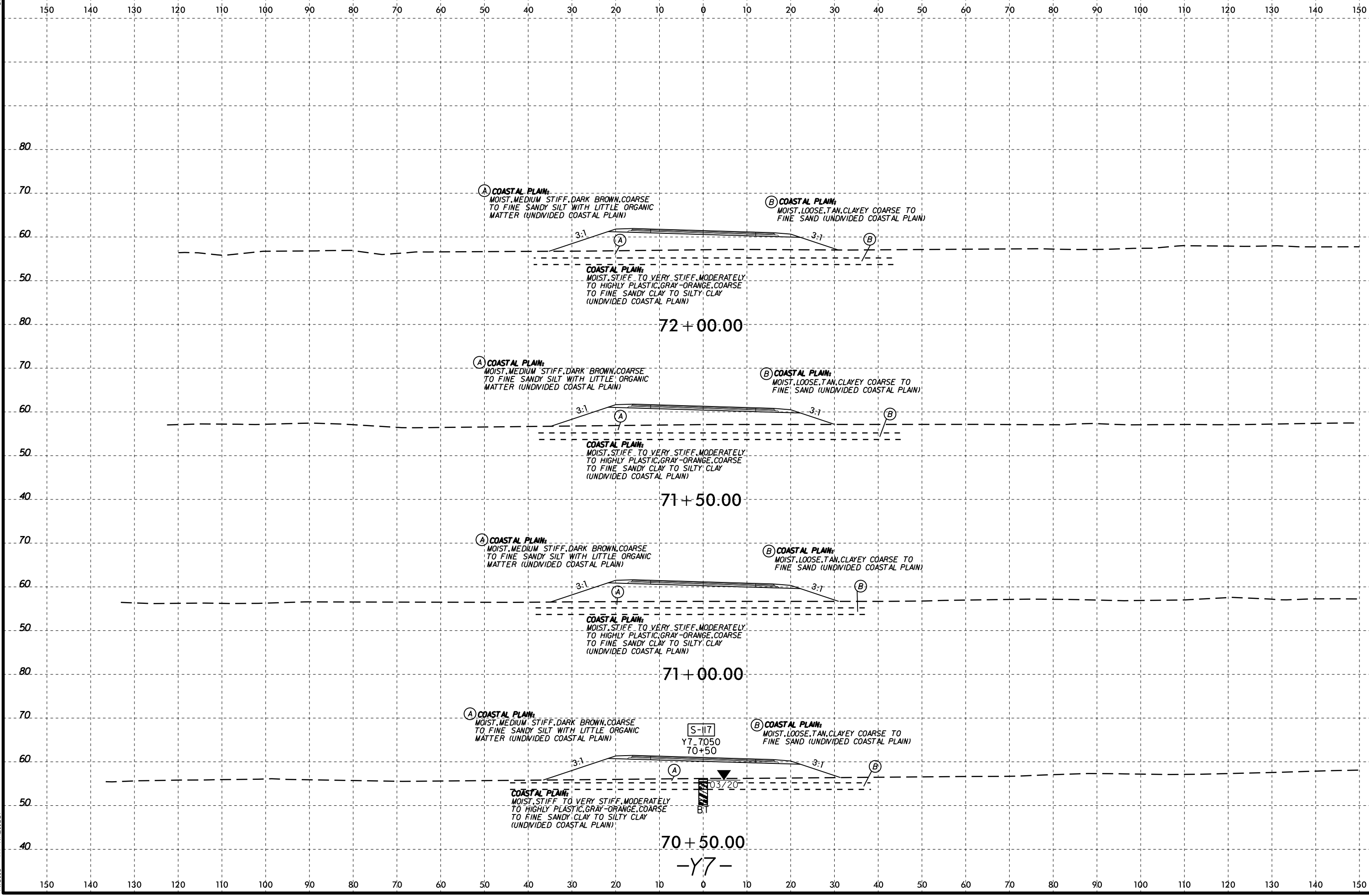








68+50.00
-Y7-



70 + 50.00
-Y7-

71 + 00.00

71 + 50.00

72 + 00.00

(A) COASTAL PLAIN:
MOIST, MEDIUM STIFF, DARK BROWN, COARSE
TO FINE SANDY SILT WITH LITTLE ORGANIC
MATTER (UNDIVIDED COASTAL PLAIN)

(B) COASTAL PLAIN:
MOIST, LOOSE, TAN, CLAYEY COARSE TO
FINE SAND (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
MOIST, STIFF TO VERY STIFF, MODERATELY
TO HIGHLY PLASTIC, GRAY-ORANGE, COARSE
TO FINE SANDY CLAY TO SILTY CLAY
(UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
MOIST, STIFF TO VERY STIFF, MODERATELY
TO HIGHLY PLASTIC, GRAY-ORANGE, COARSE
TO FINE SANDY CLAY TO SILTY CLAY
(UNDIVIDED COASTAL PLAIN)

(B) COASTAL PLAIN:
MOIST, LOOSE, TAN, CLAYEY COARSE TO
FINE SAND (UNDIVIDED COASTAL PLAIN)

(A) COASTAL PLAIN:
MOIST, MEDIUM STIFF, DARK BROWN, COARSE
TO FINE SANDY SILT WITH LITTLE ORGANIC
MATTER (UNDIVIDED COASTAL PLAIN)

(A) COASTAL PLAIN:
MOIST, MEDIUM STIFF, DARK BROWN, COARSE
TO FINE SANDY SILT WITH LITTLE ORGANIC
MATTER (UNDIVIDED COASTAL PLAIN)

(B) COASTAL PLAIN:
MOIST, LOOSE, TAN, CLAYEY COARSE TO
FINE SAND (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
MOIST, STIFF TO VERY STIFF, MODERATELY
TO HIGHLY PLASTIC, GRAY-ORANGE, COARSE
TO FINE SANDY CLAY TO SILTY CLAY
(UNDIVIDED COASTAL PLAIN)

S-117
Y7 7050
70+50

BT

3:1

3:1

3:1

3:1

3:1

3:1



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

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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

(A) COASTAL PLAIN:
WET, MEDIUM STIFF, DARK BROWN, COARSE
TO FINE SANDY SILT WITH LITTLE ORGANIC
MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
WET, STIFF, MODERATELY PLASTIC,
RED-TAN, COARSE TO FINE SANDY CLAY
(UNDIVIDED COASTAL PLAIN)

74 + 00.00

(A) COASTAL PLAIN:
WET, MEDIUM STIFF, DARK BROWN, COARSE
TO FINE SANDY SILT WITH LITTLE ORGANIC
MATTER (UNDIVIDED COASTAL PLAIN)

S-118
Y7.7350
73+50

COASTAL PLAIN:
WET, STIFF, MODERATELY PLASTIC,
RED-TAN, COARSE TO FINE SANDY CLAY
(UNDIVIDED COASTAL PLAIN)

73 + 50.00

(A) COASTAL PLAIN:
WET, MEDIUM STIFF, DARK BROWN, COARSE
TO FINE SANDY SILT WITH LITTLE ORGANIC
MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
WET, STIFF, MODERATELY PLASTIC,
RED-TAN, COARSE TO FINE SANDY CLAY
(UNDIVIDED COASTAL PLAIN)

73 + 00.00

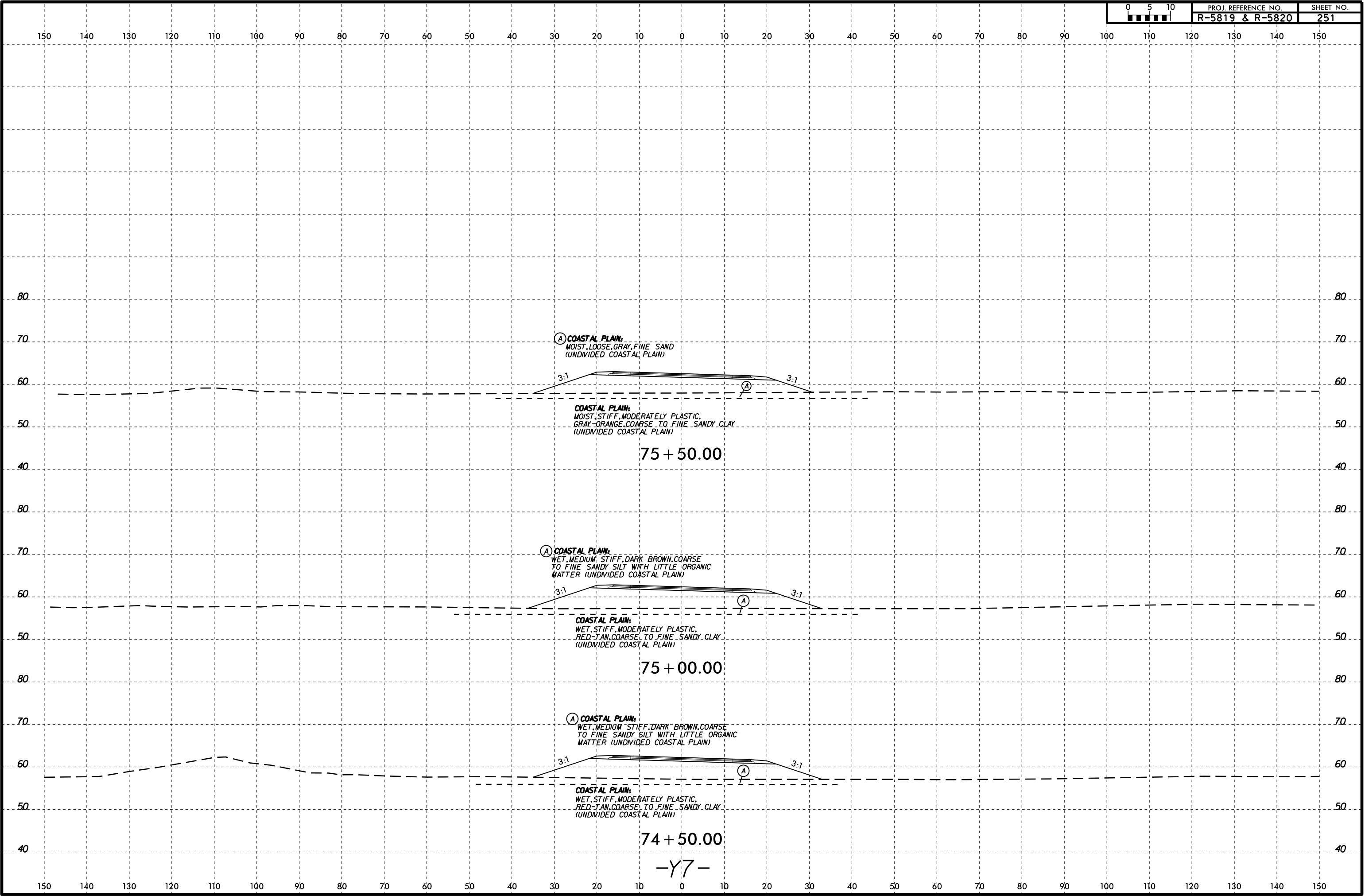
(A) COASTAL PLAIN:
WET, MEDIUM STIFF, DARK BROWN, COARSE
TO FINE SANDY SILT WITH LITTLE ORGANIC
MATTER (UNDIVIDED COASTAL PLAIN)

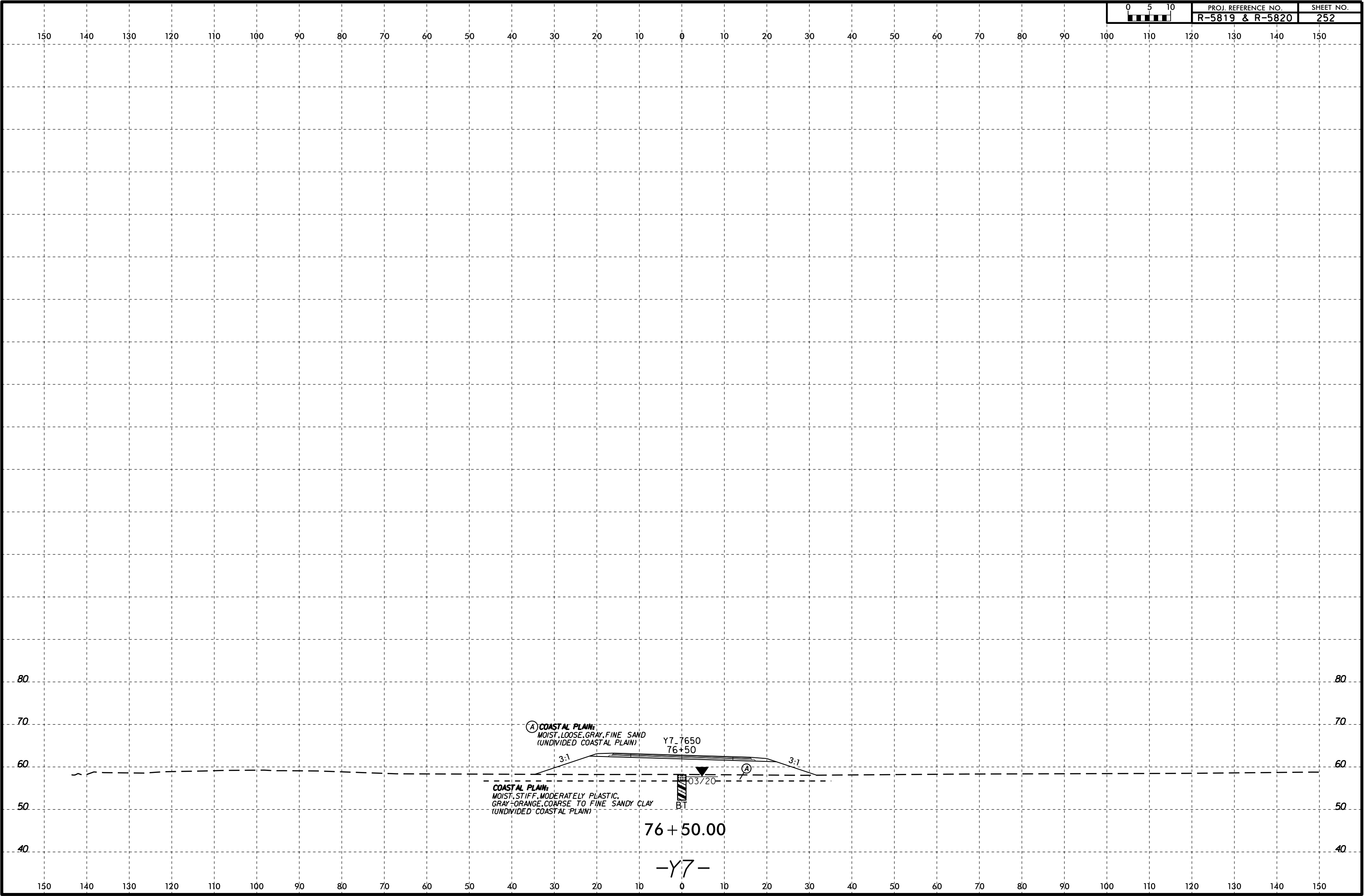
COASTAL PLAIN:
WET, STIFF, MODERATELY PLASTIC,
RED-TAN, COARSE TO FINE SANDY CLAY
(UNDIVIDED COASTAL PLAIN)

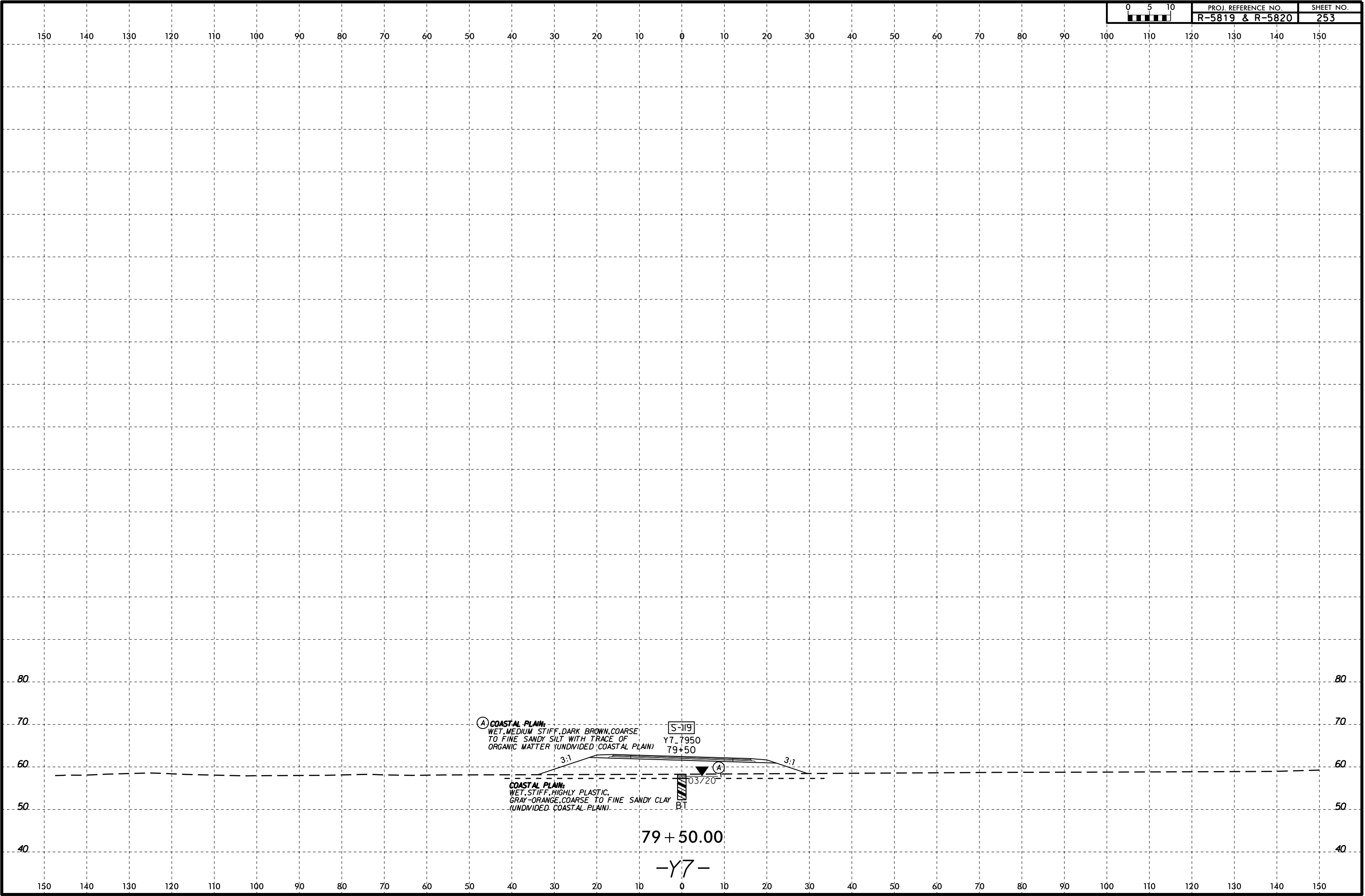
72 + 50.00

-Y7-

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Wells - A1 KA211387







Ⓐ **COASTAL PLAIN:**
 WET, MEDIUM STIFF, DARK BROWN, COARSE
 TO FINE SANDY SILT WITH TRACE OF
 ORGANIC MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
 WET, STIFF, HIGHLY PLASTIC,
 GRAY-ORANGE, COARSE TO FINE SANDY CLAY
 (UNDIVIDED COASTAL PLAIN)

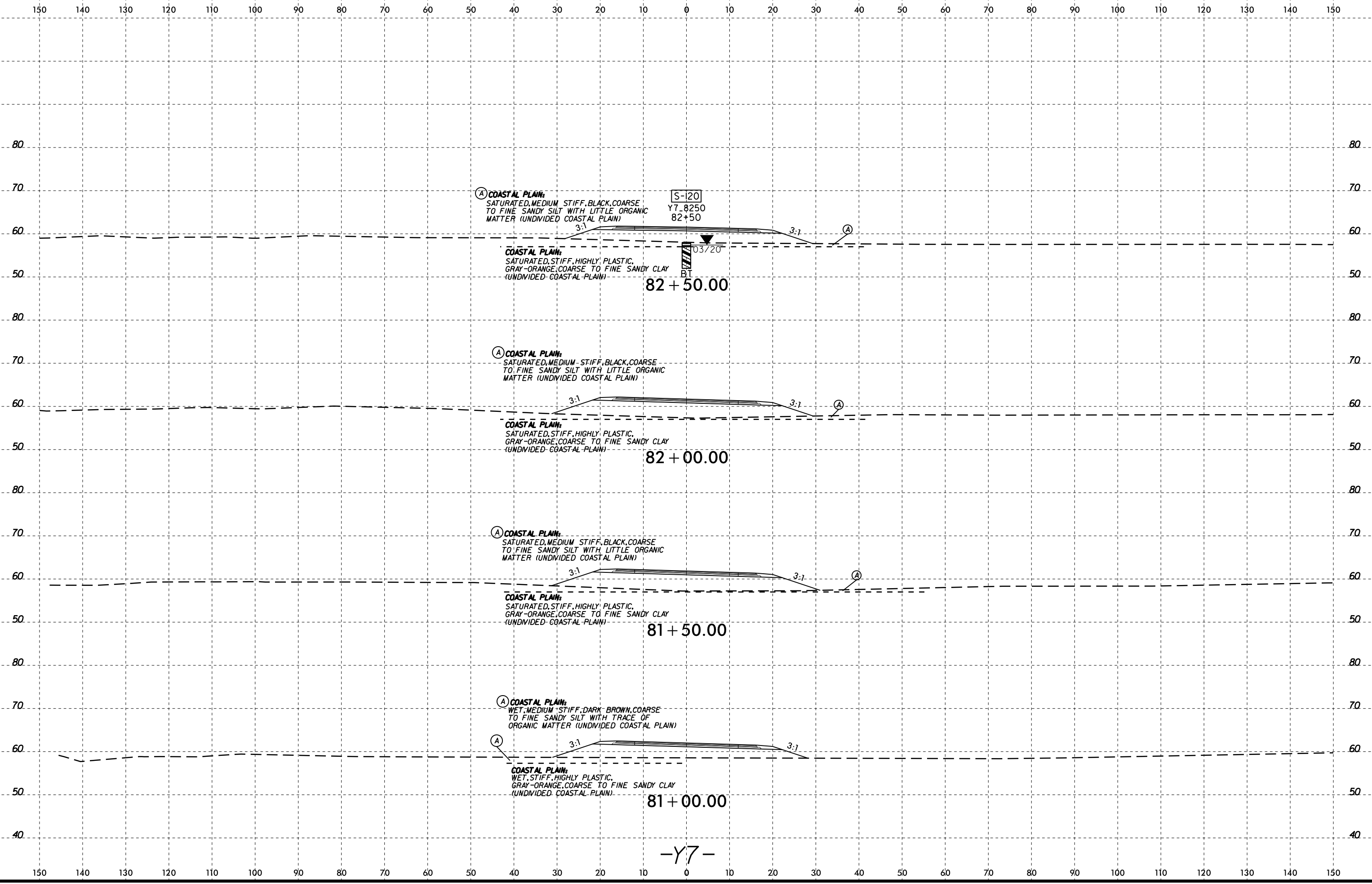
S-119

Y7-7950
79+50

03/20

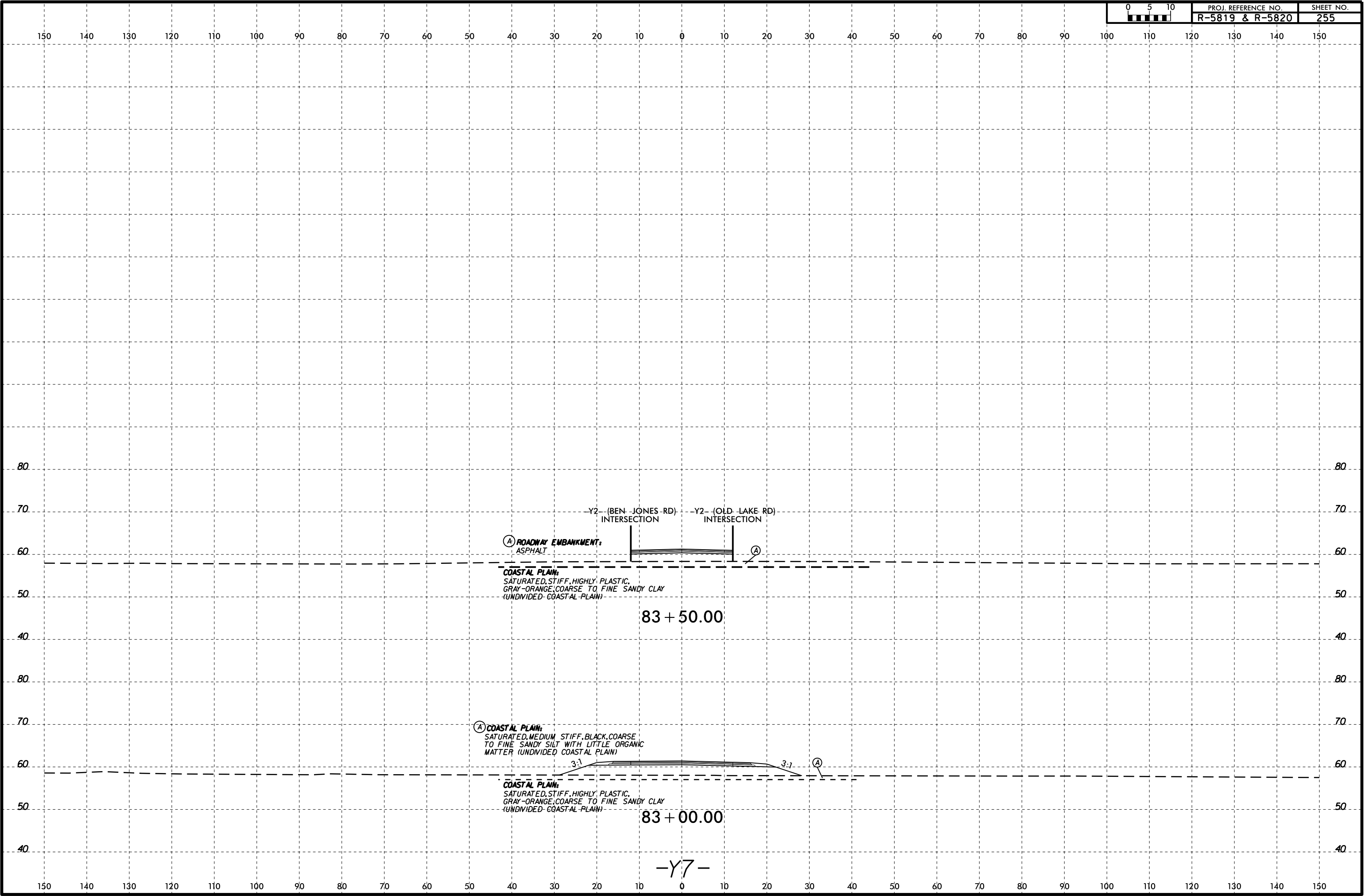
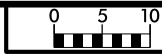
79 + 50.00

-Y7-



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 Wells - A1 KA211387

-Y7-



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

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80 80

70 70

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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



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

(A) COASTAL PLAIN:
SATURATED, MEDIUM STIFF, BLACK, COARSE
TO FINE SANDY SILT WITH LITTLE ORGANIC
MATTER (UNDIVIDED COASTAL PLAIN)

(B) COASTAL PLAIN:
WET, MEDIUM DENSE, MODERATELY PLASTIC,
GRAY, CLAYEY FINE TO COARSE SAND
(UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
WET, STIFF, HIGHLY PLASTIC,
GRAY-ORANGE, COARSE TO FINE SANDY CLAY
(UNDIVIDED COASTAL PLAIN)

86 + 00.00

70 70

60 60

(A) COASTAL PLAIN:
SATURATED, MEDIUM STIFF, BLACK, COARSE
TO FINE SANDY SILT WITH LITTLE ORGANIC
MATTER (UNDIVIDED COASTAL PLAIN)

(B) COASTAL PLAIN:
WET, MEDIUM DENSE, MODERATELY PLASTIC,
GRAY, CLAYEY FINE TO COARSE SAND
(UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
WET, STIFF, HIGHLY PLASTIC,
GRAY-ORANGE, COARSE TO FINE SANDY CLAY
(UNDIVIDED COASTAL PLAIN)

S-121
Y7-8550
85+50

BT

03/20

85 + 50.00

80 80

70 70

60 60

(A) COASTAL PLAIN:
SATURATED, MEDIUM STIFF, BLACK, COARSE
TO FINE SANDY SILT WITH LITTLE ORGANIC
MATTER (UNDIVIDED COASTAL PLAIN)

(B) COASTAL PLAIN:
WET, MEDIUM DENSE, MODERATELY PLASTIC,
GRAY, CLAYEY FINE TO COARSE SAND
(UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
WET, STIFF, HIGHLY PLASTIC,
GRAY-ORANGE, COARSE TO FINE SANDY CLAY
(UNDIVIDED COASTAL PLAIN)

85 + 00.00

80 80

70 70

60 60

(A) ROADWAY EMBANKMENT

(B) COASTAL PLAIN:
WET, MEDIUM DENSE, MODERATELY PLASTIC,
GRAY, CLAYEY FINE TO COARSE SAND
(UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
WET, STIFF, HIGHLY PLASTIC,
GRAY-ORANGE, COARSE TO FINE SANDY CLAY
(UNDIVIDED COASTAL PLAIN)

-Y2- (BEN JONES RD) INTERSECTION

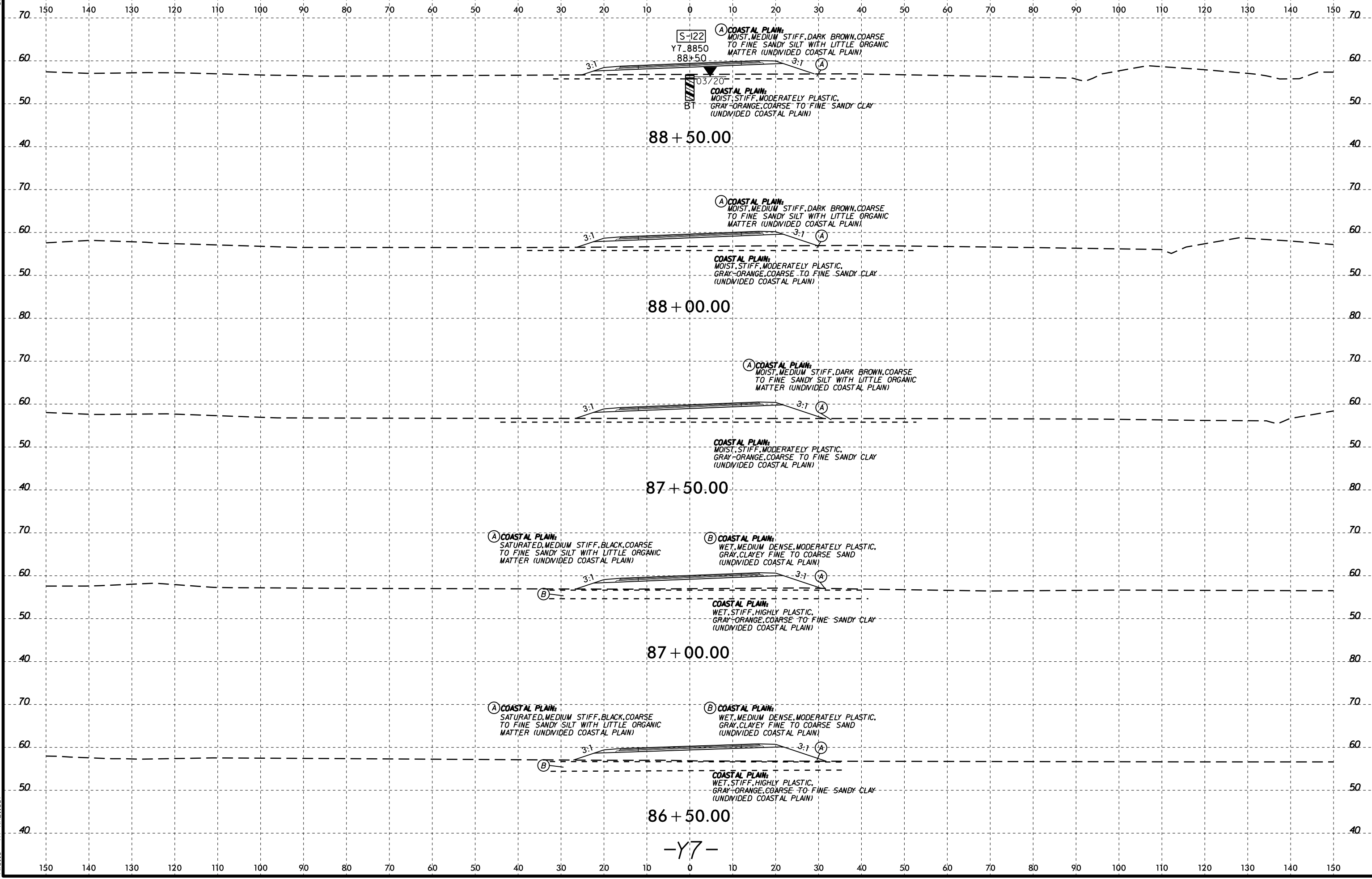
-Y2- (OLD LAKE RD) INTERSECTION

84 + 50.00

50 50

40 40

-Y7-

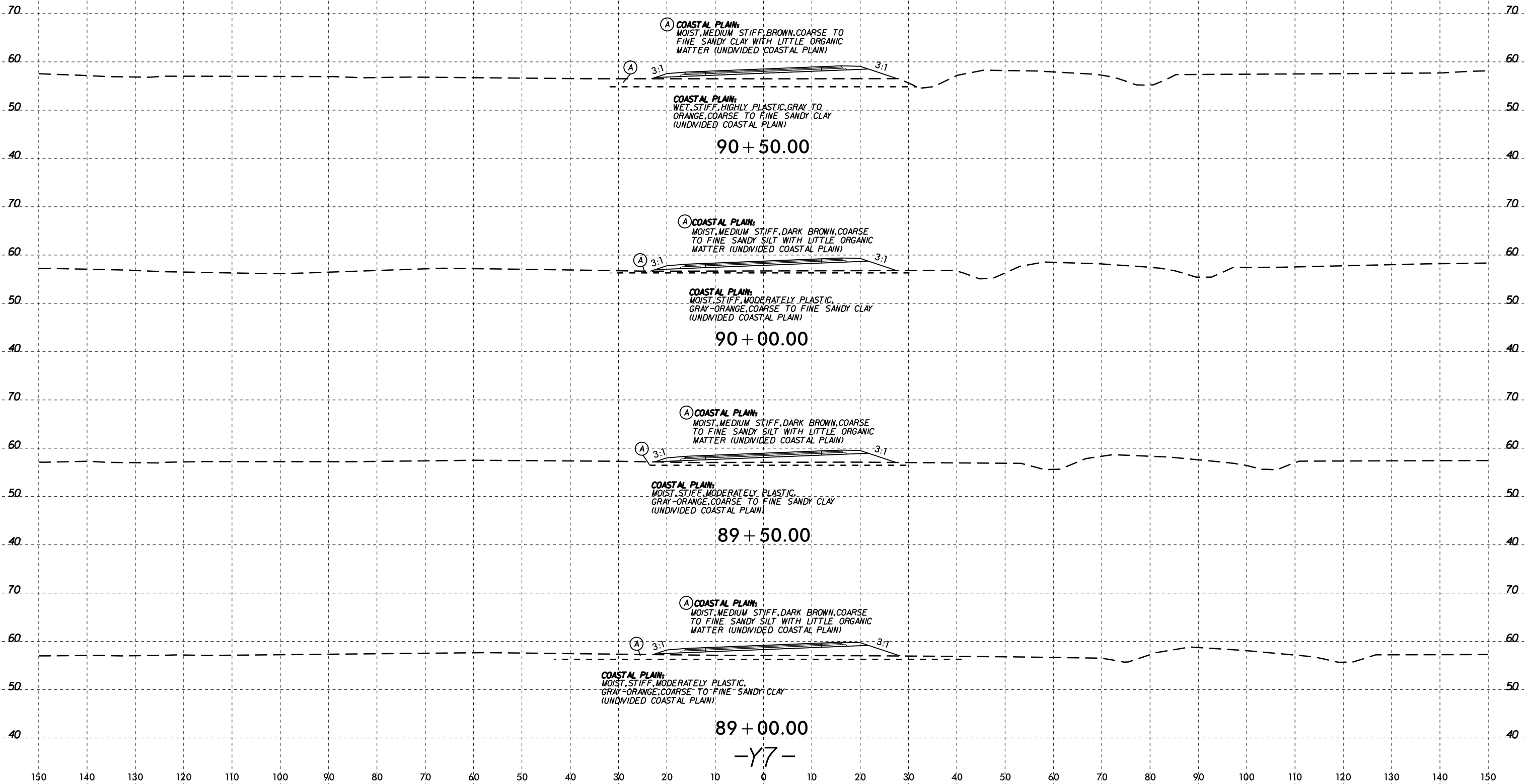


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150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



(A) **COASTAL PLAIN:**
MOIST, MEDIUM STIFF, BROWN, COARSE TO
FINE SANDY CLAY WITH LITTLE ORGANIC
MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
WET, STIFF, HIGHLY PLASTIC, GRAY TO
ORANGE, COARSE TO FINE SANDY CLAY
(UNDIVIDED COASTAL PLAIN)

90 + 50.00

(A) **COASTAL PLAIN:**
MOIST, MEDIUM STIFF, DARK BROWN, COARSE
TO FINE SANDY SILT WITH LITTLE ORGANIC
MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
MOIST, STIFF, MODERATELY PLASTIC,
GRAY-ORANGE, COARSE TO FINE SANDY CLAY
(UNDIVIDED COASTAL PLAIN)

90 + 00.00

(A) **COASTAL PLAIN:**
MOIST, MEDIUM STIFF, DARK BROWN, COARSE
TO FINE SANDY SILT WITH LITTLE ORGANIC
MATTER (UNDIVIDED COASTAL PLAIN)

COASTAL PLAIN:
MOIST, STIFF, MODERATELY PLASTIC,
GRAY-ORANGE, COARSE TO FINE SANDY CLAY
(UNDIVIDED COASTAL PLAIN)

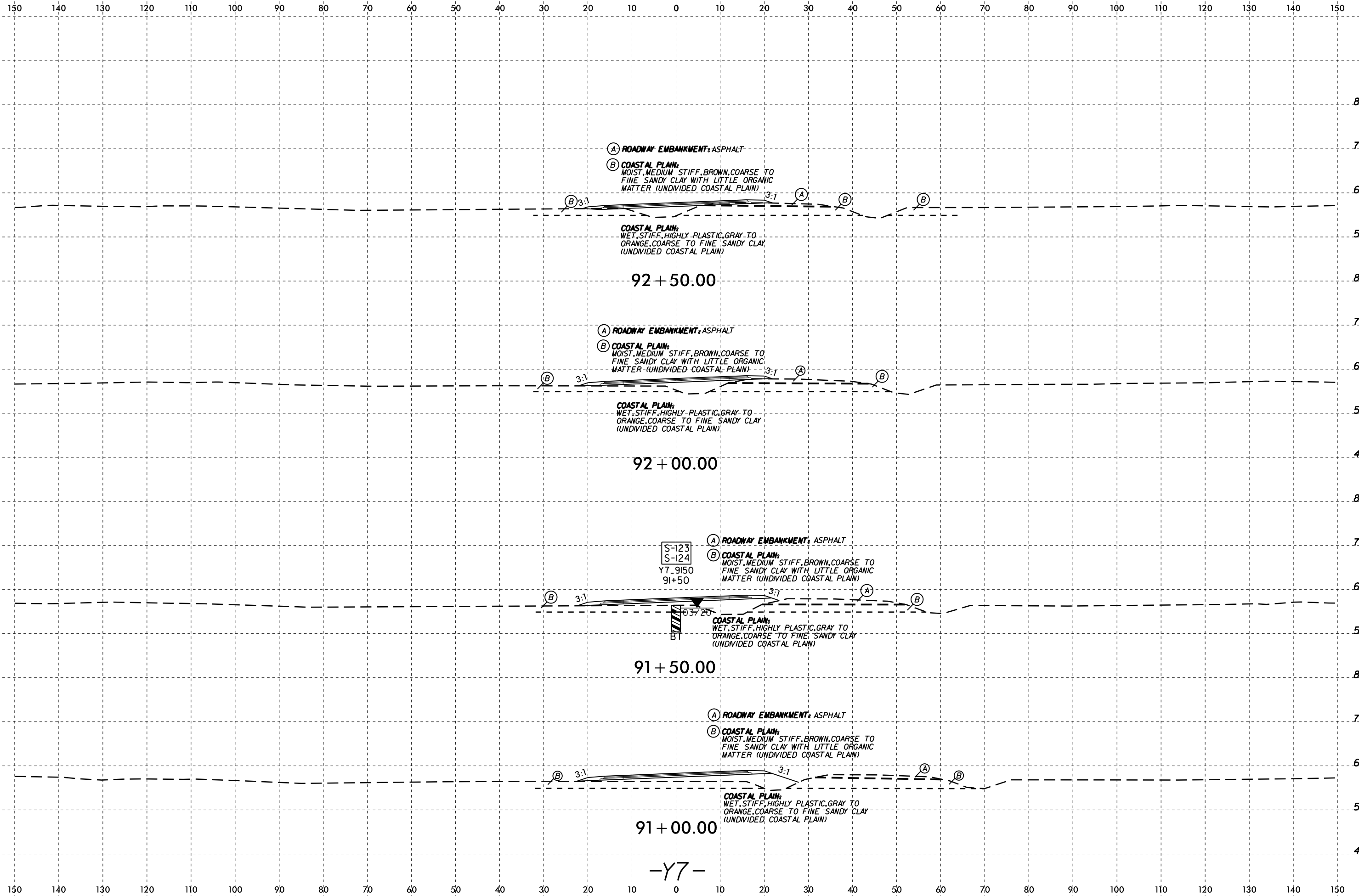
89 + 50.00

(A) **COASTAL PLAIN:**
MOIST, MEDIUM STIFF, DARK BROWN, COARSE
TO FINE SANDY SILT WITH LITTLE ORGANIC
MATTER (UNDIVIDED COASTAL PLAIN)

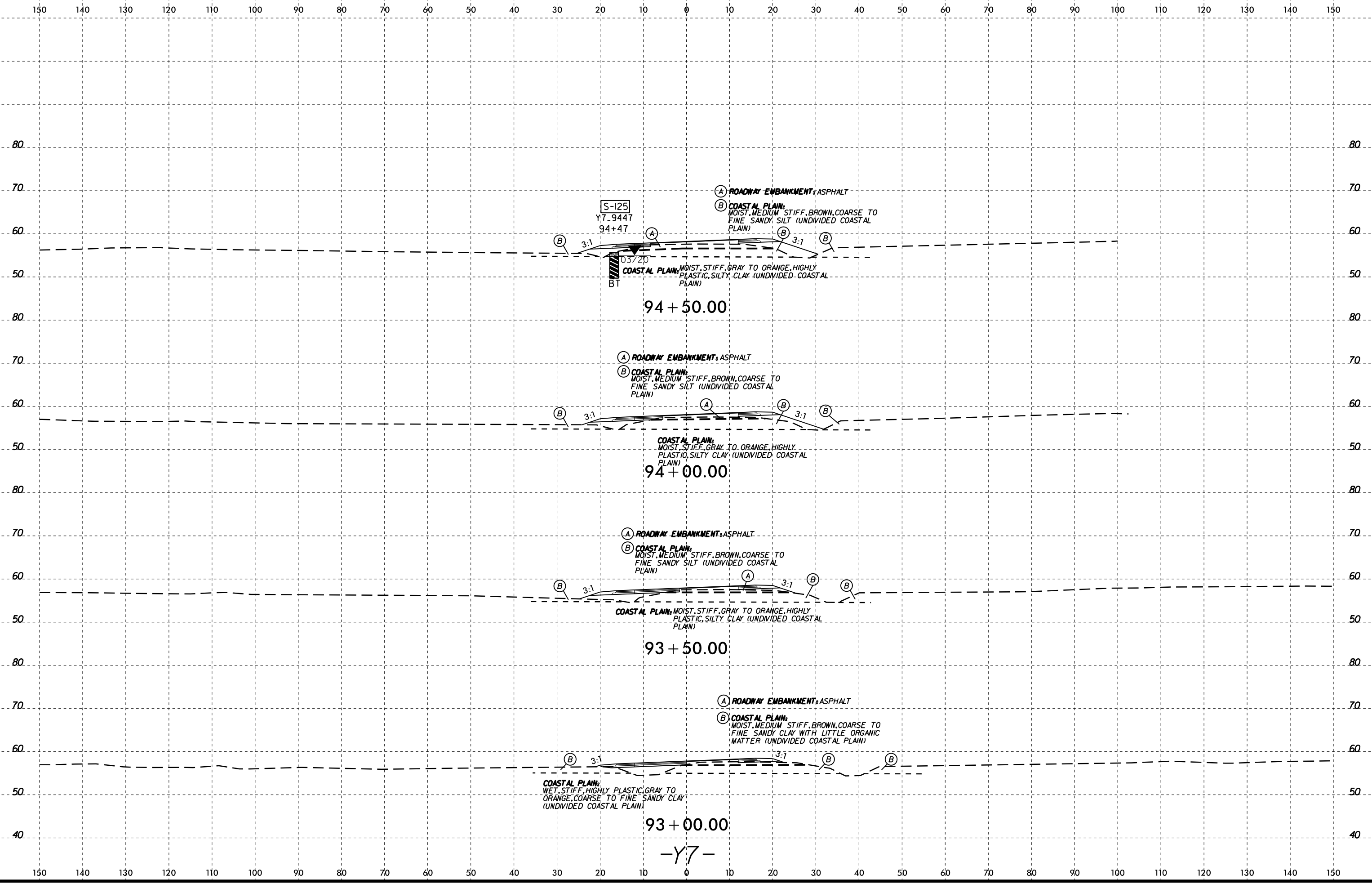
COASTAL PLAIN:
MOIST, STIFF, MODERATELY PLASTIC,
GRAY-ORANGE, COARSE TO FINE SANDY CLAY
(UNDIVIDED COASTAL PLAIN)

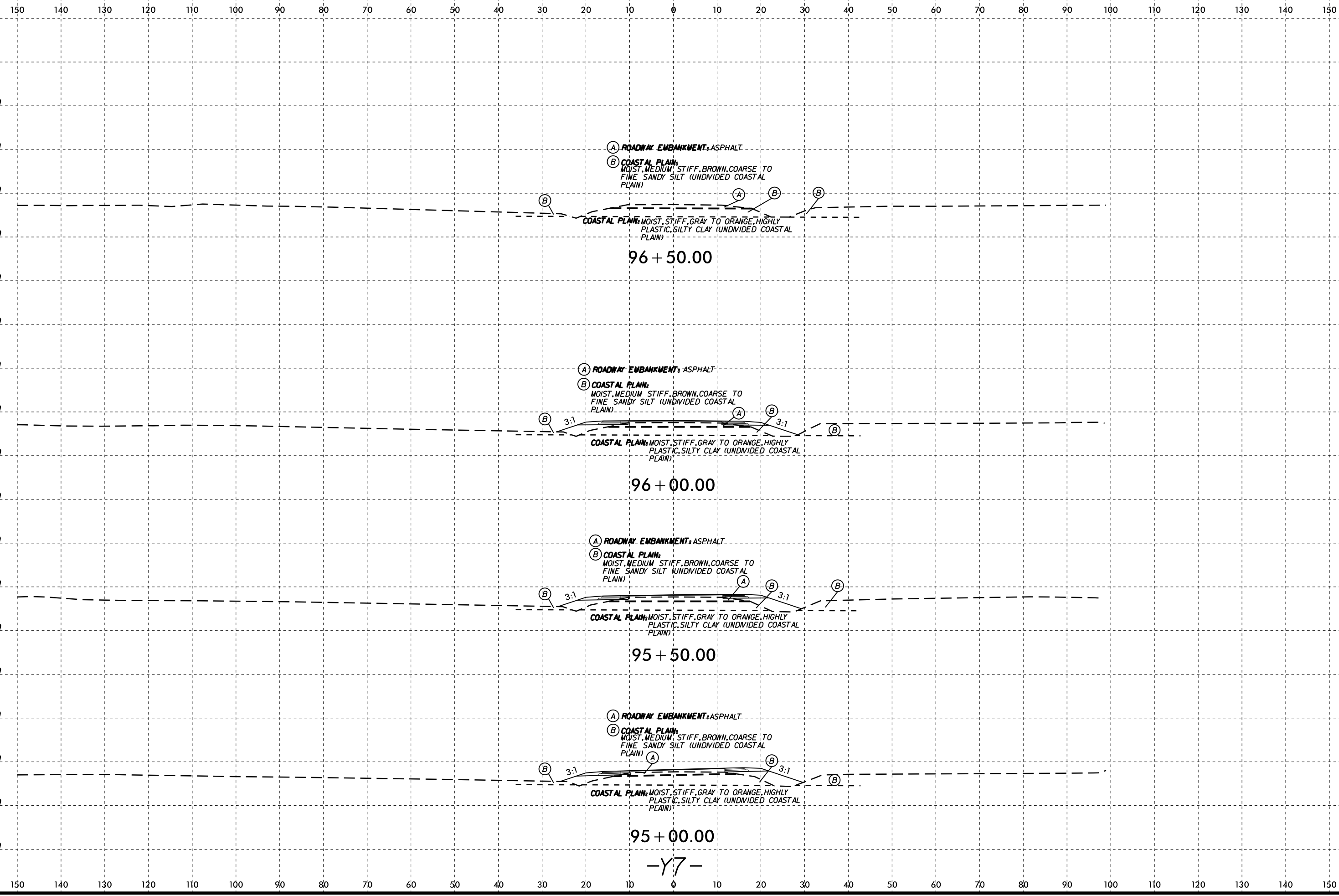
89 + 00.00

-Y7-



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 Wells - A1 KA211387





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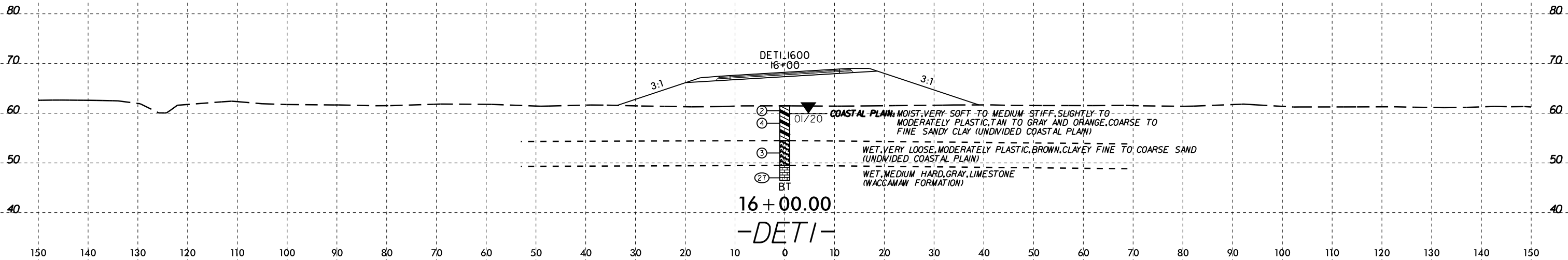
96 + 50.00
 96 + 00.00
 95 + 50.00
 95 + 00.00
 -Y7-

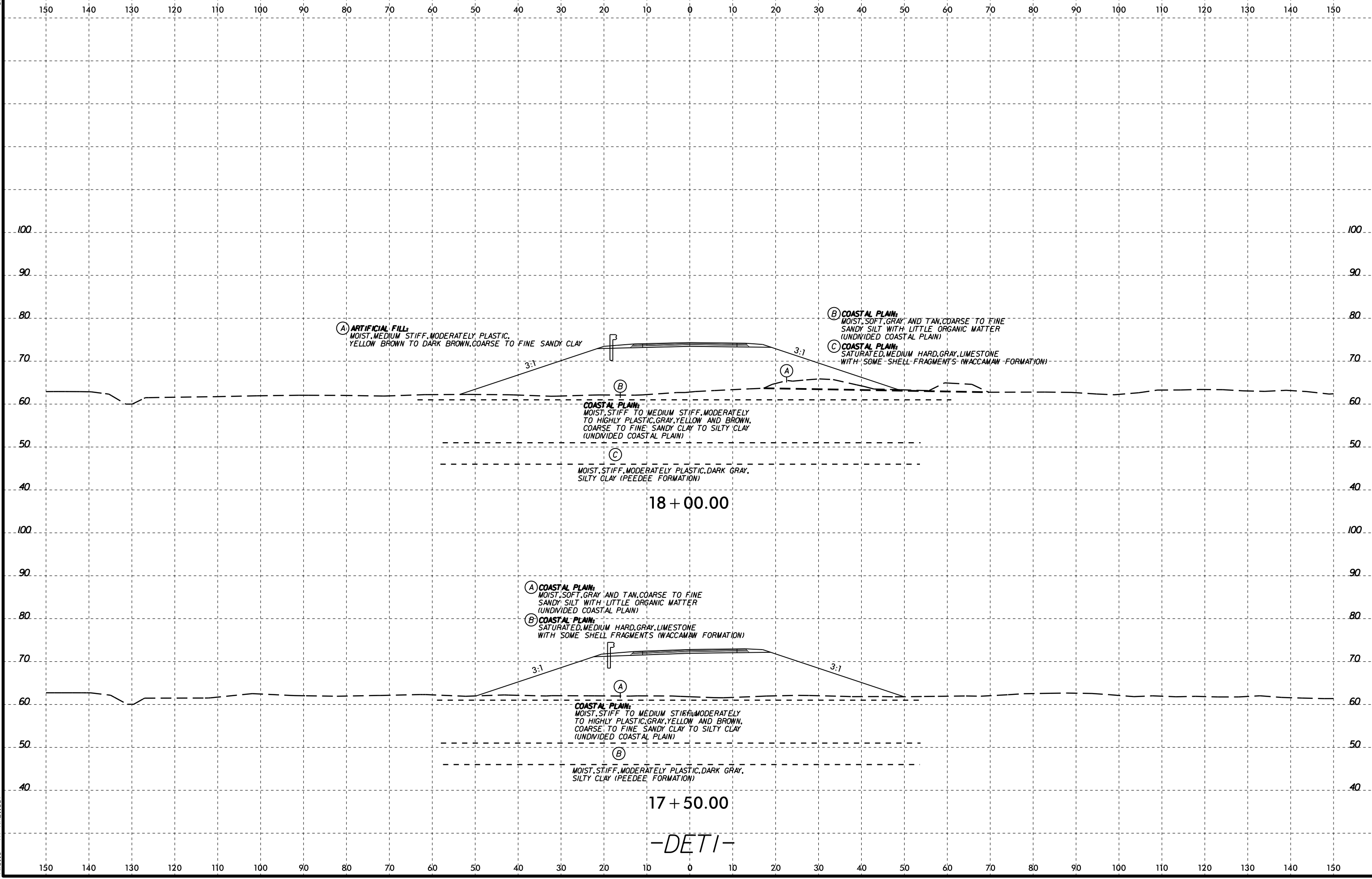
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PROJ. REFERENCE NO.	SHEET NO.
R-5819 & R-5820	262

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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-DETI-



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 90 80 70 60 50 40

(A) **ARTIFICIAL FILL:**
MOIST, MEDIUM STIFF, MODERATELY PLASTIC,
YELLOW BROWN TO DARK BROWN, COARSE TO FINE SANDY CLAY

(B) **COASTAL PLAIN:**
MOIST, SOFT, GRAY AND TAN, COARSE TO FINE
SANDY SILT WITH LITTLE ORGANIC MATTER
(UNDIVIDED COASTAL PLAIN)

(C) **COASTAL PLAIN:**
SATURATED, MEDIUM HARD, GRAY, LIMESTONE
WITH SOME SHELL FRAGMENTS (WACCAMAW FORMATION)

SS-126
DETI.1917
19+17

3:1

3:1



(B) **COASTAL PLAIN:**
MOIST, STIFF TO MEDIUM STIFF, MODERATELY
TO HIGHLY PLASTIC, GRAY, YELLOW AND BROWN,
COARSE TO FINE SANDY CLAY TO SILTY CLAY
(UNDIVIDED COASTAL PLAIN)

(C) **COASTAL PLAIN:**
MOIST, STIFF, MODERATELY PLASTIC, DARK GRAY,
SILTY CLAY (PEEDEE FORMATION)

19 + 00.00

100 90 80 70 60 50 40

(A) **ARTIFICIAL FILL:**
MOIST, MEDIUM STIFF, MODERATELY PLASTIC,
YELLOW BROWN TO DARK BROWN, COARSE TO FINE SANDY CLAY

(C) **COASTAL PLAIN:**
MOIST, SOFT, GRAY AND TAN, COARSE TO FINE
SANDY SILT WITH LITTLE ORGANIC MATTER
(UNDIVIDED COASTAL PLAIN)

(D) **COASTAL PLAIN:**
SATURATED, MEDIUM HARD, GRAY, LIMESTONE
WITH SOME SHELL FRAGMENTS (WACCAMAW FORMATION)

3:1

3:1

(B) **COASTAL PLAIN:**
MOIST, STIFF TO MEDIUM STIFF, MODERATELY
TO HIGHLY PLASTIC, GRAY, YELLOW AND BROWN,
COARSE TO FINE SANDY CLAY TO SILTY CLAY
(UNDIVIDED COASTAL PLAIN)

(C) **COASTAL PLAIN:**
MOIST, STIFF, MODERATELY PLASTIC, DARK GRAY,
SILTY CLAY (PEEDEE FORMATION)

18 + 50.00

-DETI-

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



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 90 80 70 60 50 40

(A) **ARTIFICIAL FILL:**
MOIST, MEDIUM STIFF, MODERATELY PLASTIC,
YELLOW BROWN TO DARK BROWN, COARSE TO FINE SANDY CLAY

(B) **COASTAL PLAIN:**
MOIST, SOFT, GRAY AND TAN, COARSE TO FINE
SANDY SILT WITH LITTLE ORGANIC MATTER
(UNDIVIDED COASTAL PLAIN)

(C) **COASTAL PLAIN:**
SATURATED, MEDIUM HARD, GRAY, LIMESTONE
WITH SOME SHELL FRAGMENTS (WACCAMAW FORMATION)

3:1

(B)

COASTAL PLAIN:
MOIST, STIFF TO MEDIUM STIFF, MODERATELY
TO HIGHLY PLASTIC, GRAY, YELLOW AND BROWN,
COARSE TO FINE SANDY CLAY TO SILTY CLAY
(UNDIVIDED COASTAL PLAIN)

(C)

MOIST, STIFF, MODERATELY PLASTIC, DARK GRAY,
SILTY CLAY (PEEDEE FORMATION)

20 + 00.00

100 90 80 70 60 50 40

(A) **ARTIFICIAL FILL:**
MOIST, MEDIUM STIFF, MODERATELY PLASTIC,
YELLOW BROWN TO DARK BROWN, COARSE TO FINE SANDY CLAY

(B) **COASTAL PLAIN:**
MOIST, SOFT, GRAY AND TAN, COARSE TO FINE
SANDY SILT WITH LITTLE ORGANIC MATTER
(UNDIVIDED COASTAL PLAIN)

(C) **COASTAL PLAIN:**
SATURATED, MEDIUM HARD, GRAY, LIMESTONE
WITH SOME SHELL FRAGMENTS (WACCAMAW FORMATION)

3:1

(A)

COASTAL PLAIN:
MOIST, STIFF TO MEDIUM STIFF, MODERATELY
TO HIGHLY PLASTIC, GRAY, YELLOW AND BROWN,
COARSE TO FINE SANDY CLAY TO SILTY CLAY
(UNDIVIDED COASTAL PLAIN)

(C)

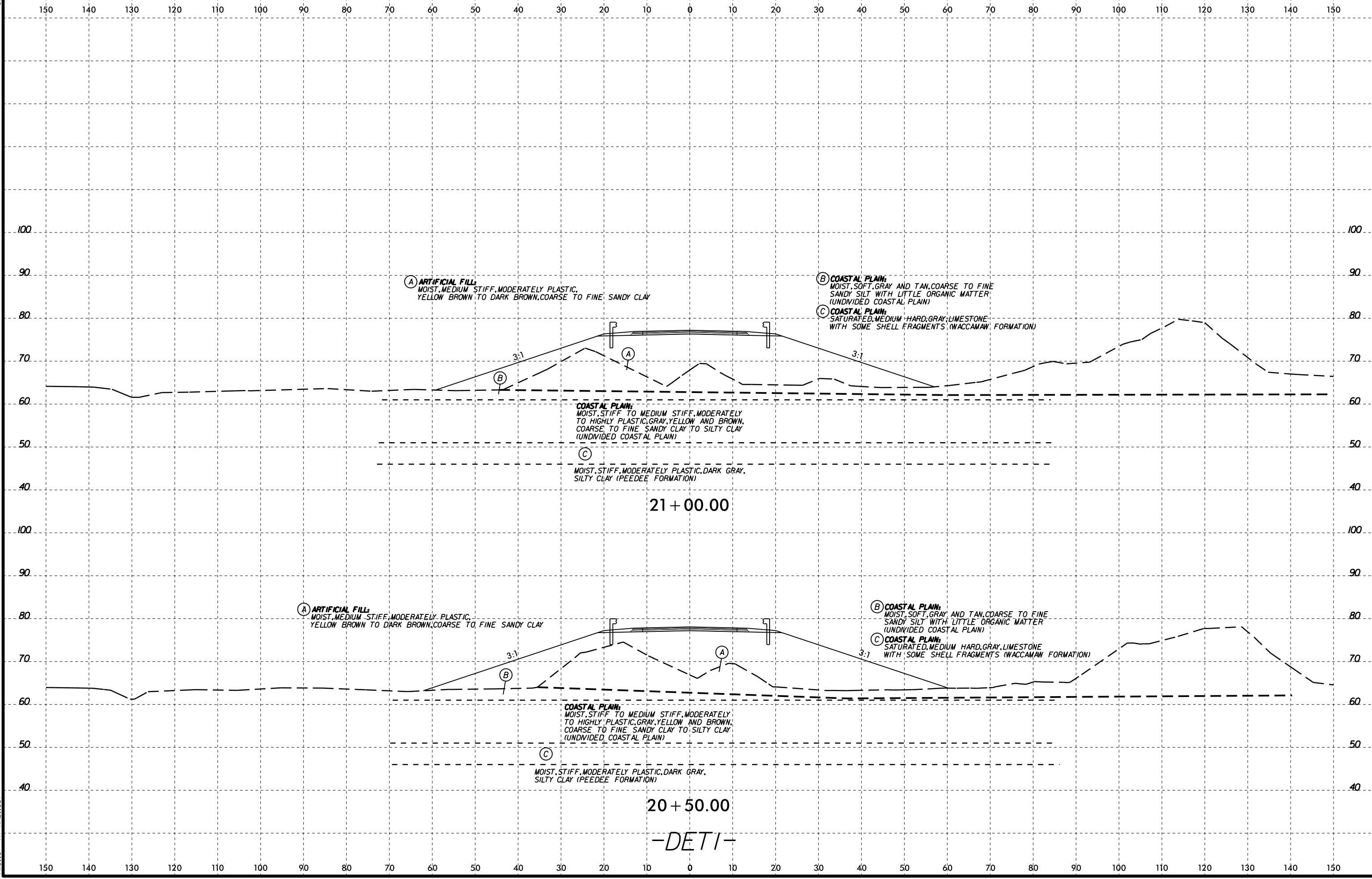
MOIST, STIFF, MODERATELY PLASTIC, DARK GRAY,
SILTY CLAY (PEEDEE FORMATION)

19 + 50.00

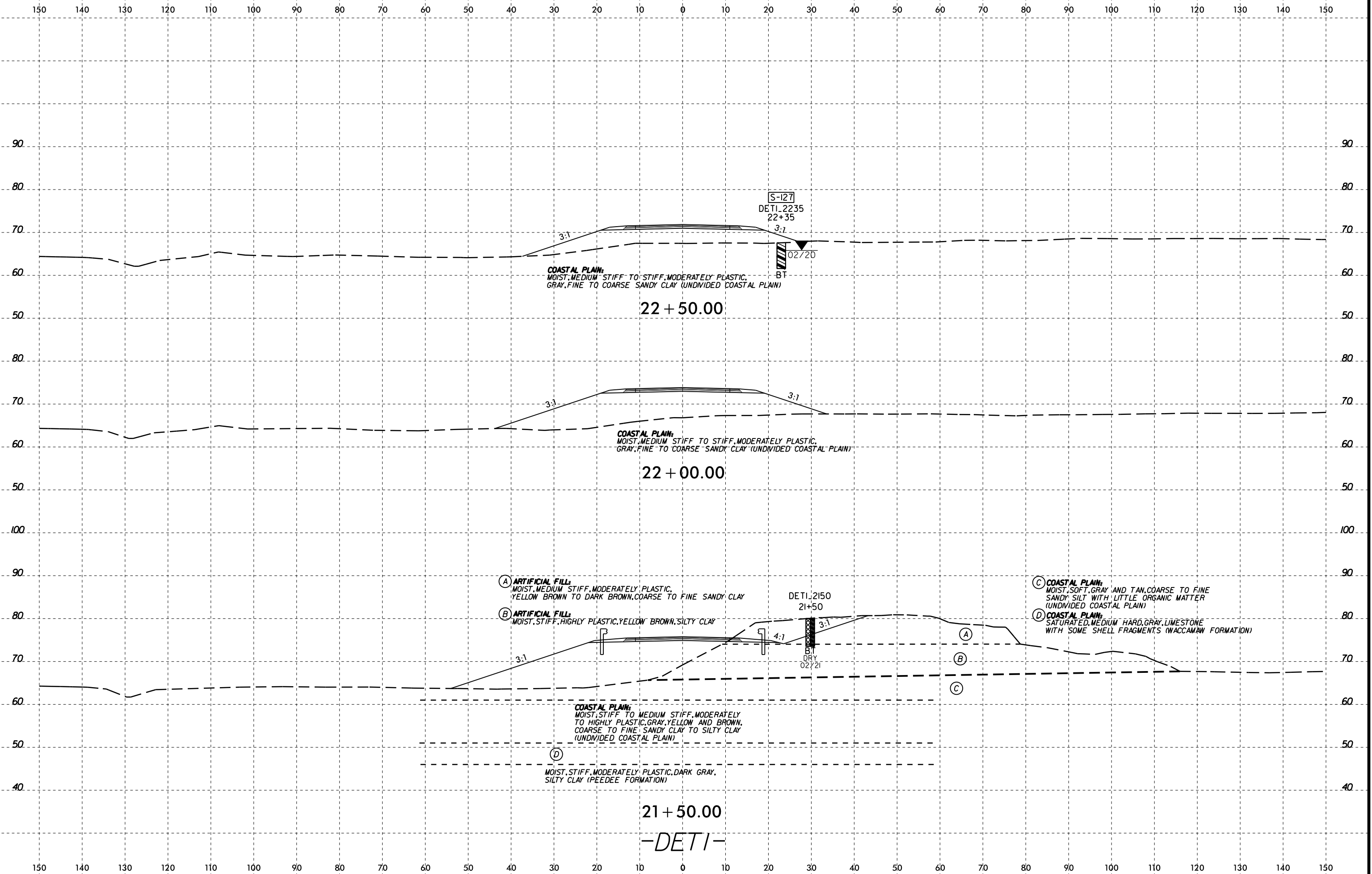
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Wells - A1 KA211387

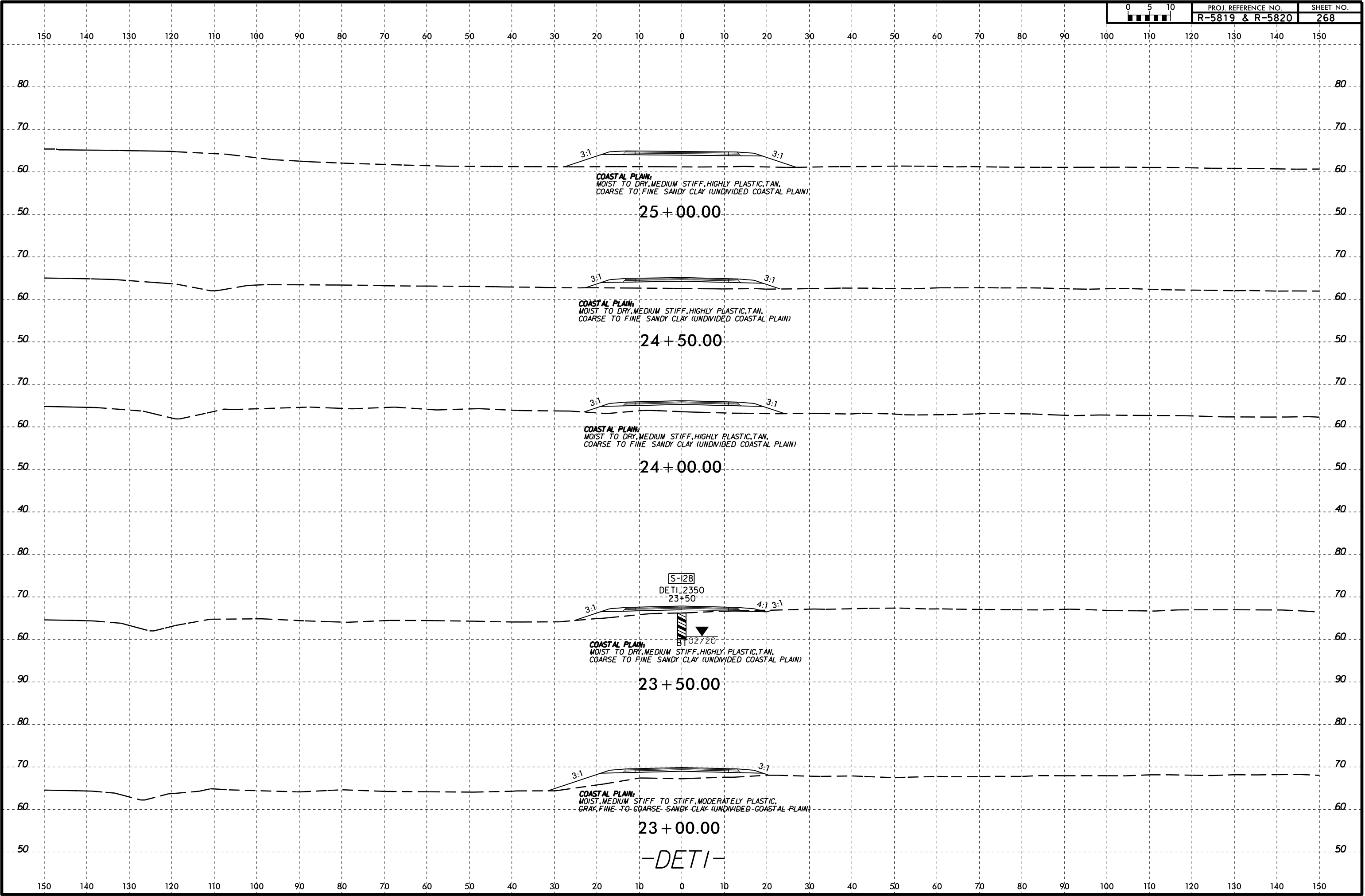


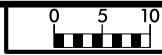
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 Wells - A1 KA211387

-DET1-





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

70 70

60 60

50 50

40 40

70 70

60 60

50 50

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

COASTAL PLAIN;
MOIST TO DRY, MEDIUM STIFF, HIGHLY PLASTIC, TAN,
COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

25 + 50.00



COASTAL PLAIN;
MOIST TO DRY, MEDIUM STIFF, HIGHLY PLASTIC, TAN,
COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

25 + 37.81

-DETI-

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Wells - At KA211387

6/23/16



PROJ. REFERENCE NO.
R-5819 & R-5820

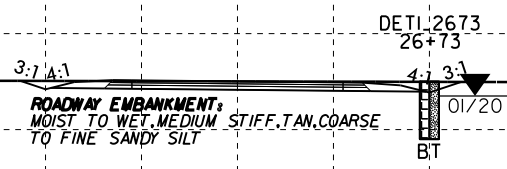
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270

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80
70
60
50

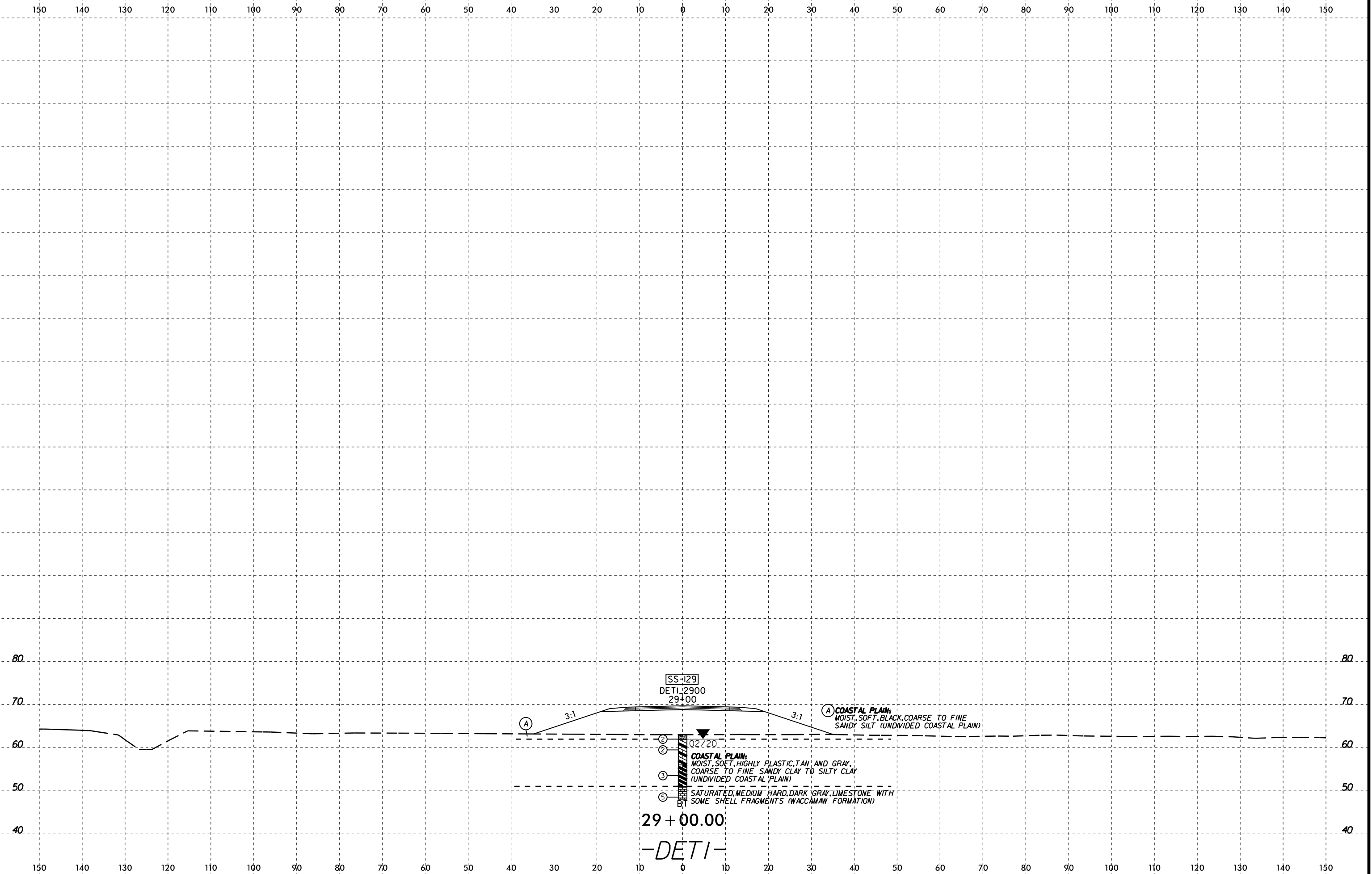
80
70
60
50



26+73.98
-DETI-

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SS-129
DETI_2900
29+00

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3:1

A

3:1

02720

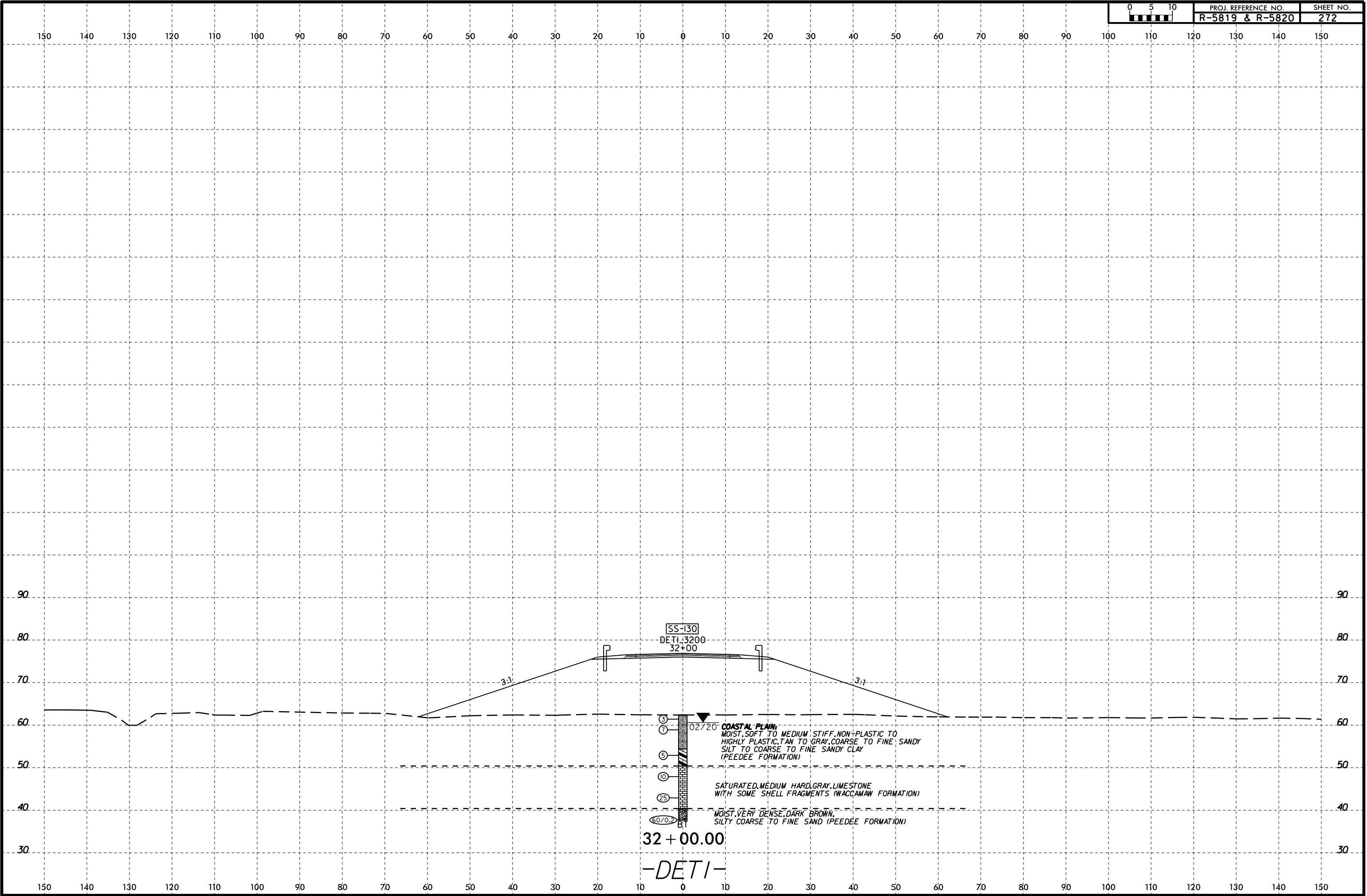
COASTAL PLAIN:
MOIST, SOFT, HIGHLY PLASTIC, TAN AND GRAY,
COARSE TO FINE SANDY CLAY TO SILTY CLAY
(UNDIVIDED COASTAL PLAIN)

SATURATED, MEDIUM HARD, DARK GRAY, LIMESTONE WITH
SOME SHELL FRAGMENTS (WACCAMAW FORMATION)

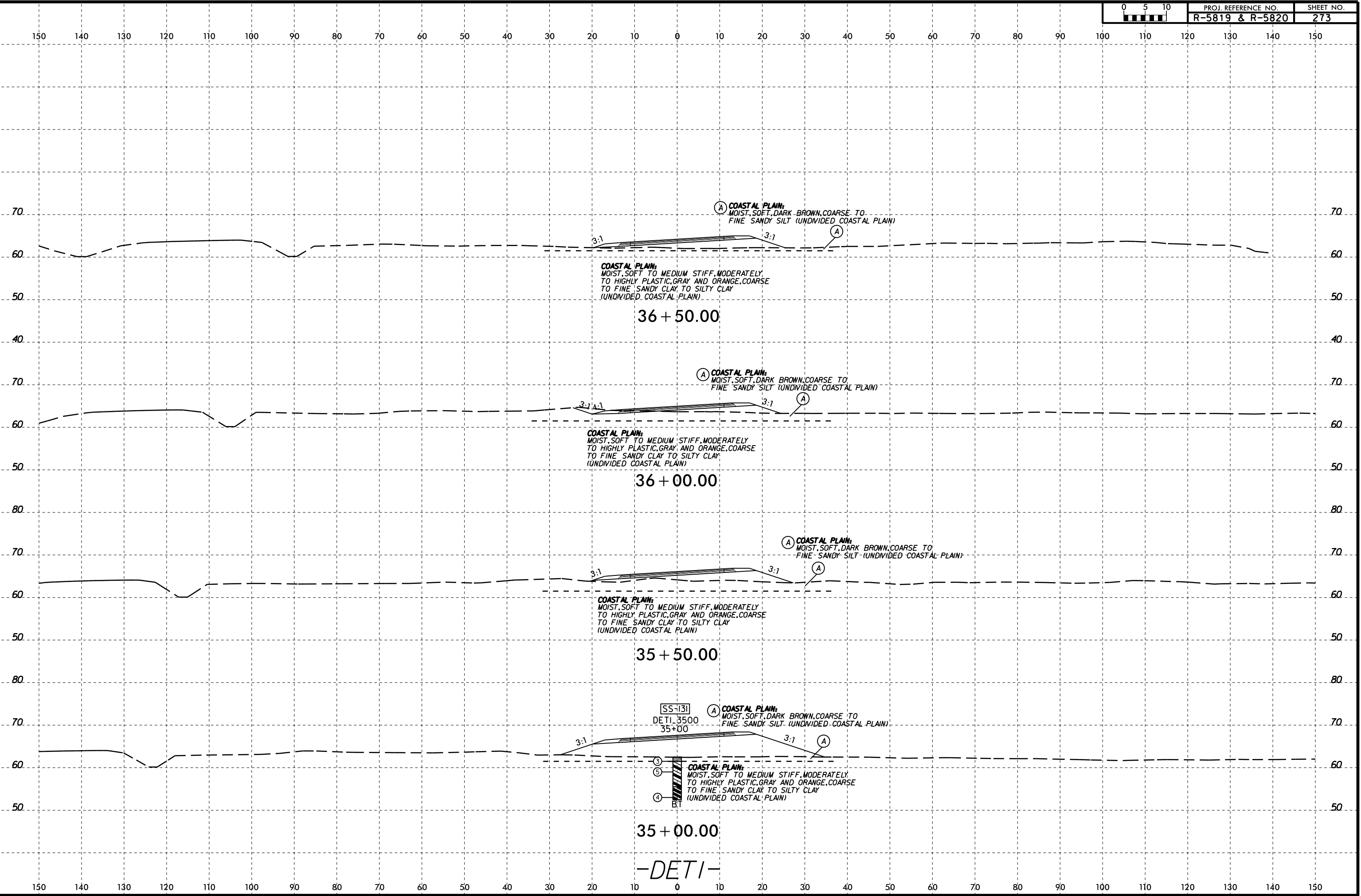
29 + 00.00

-DETI-

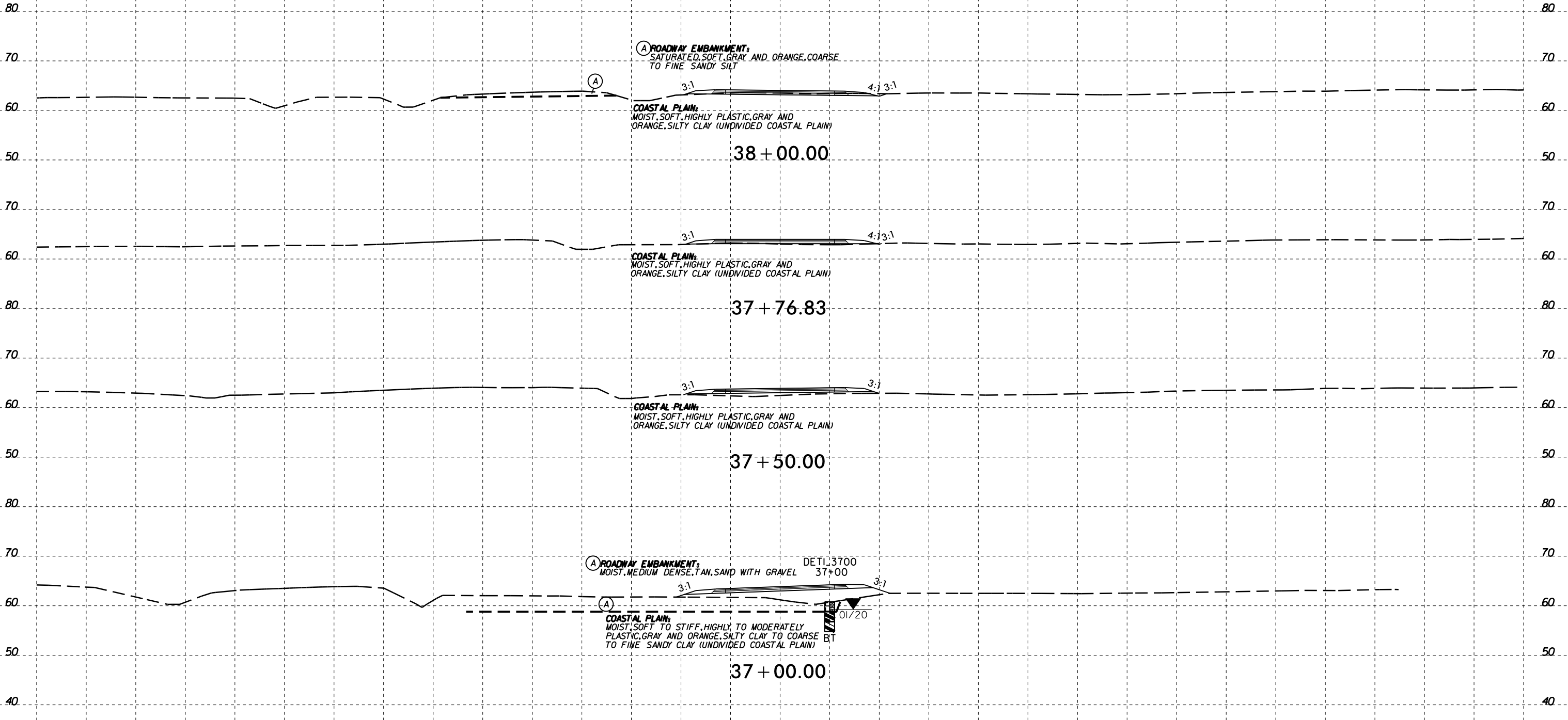
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Wells - At KA211387



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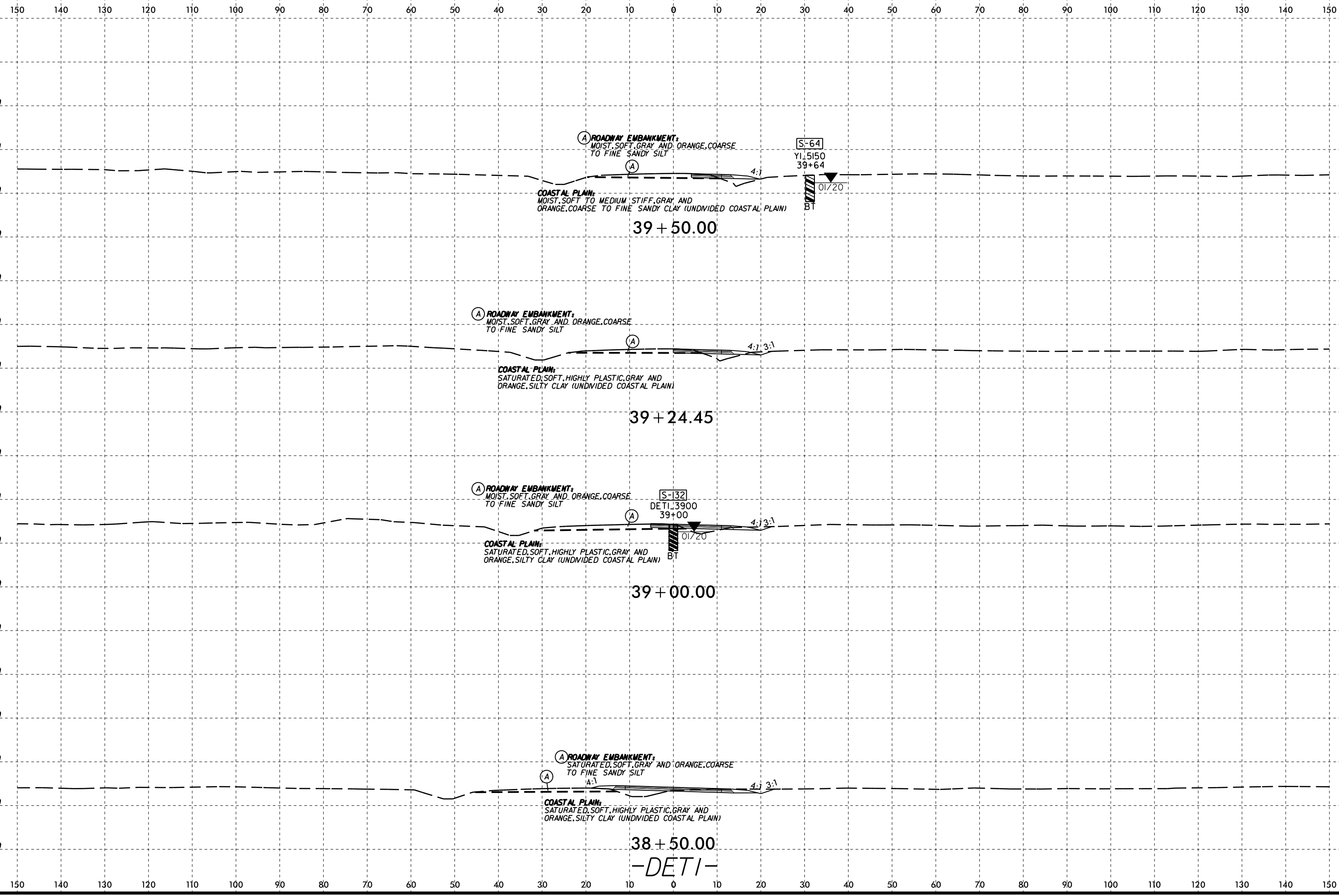


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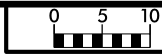
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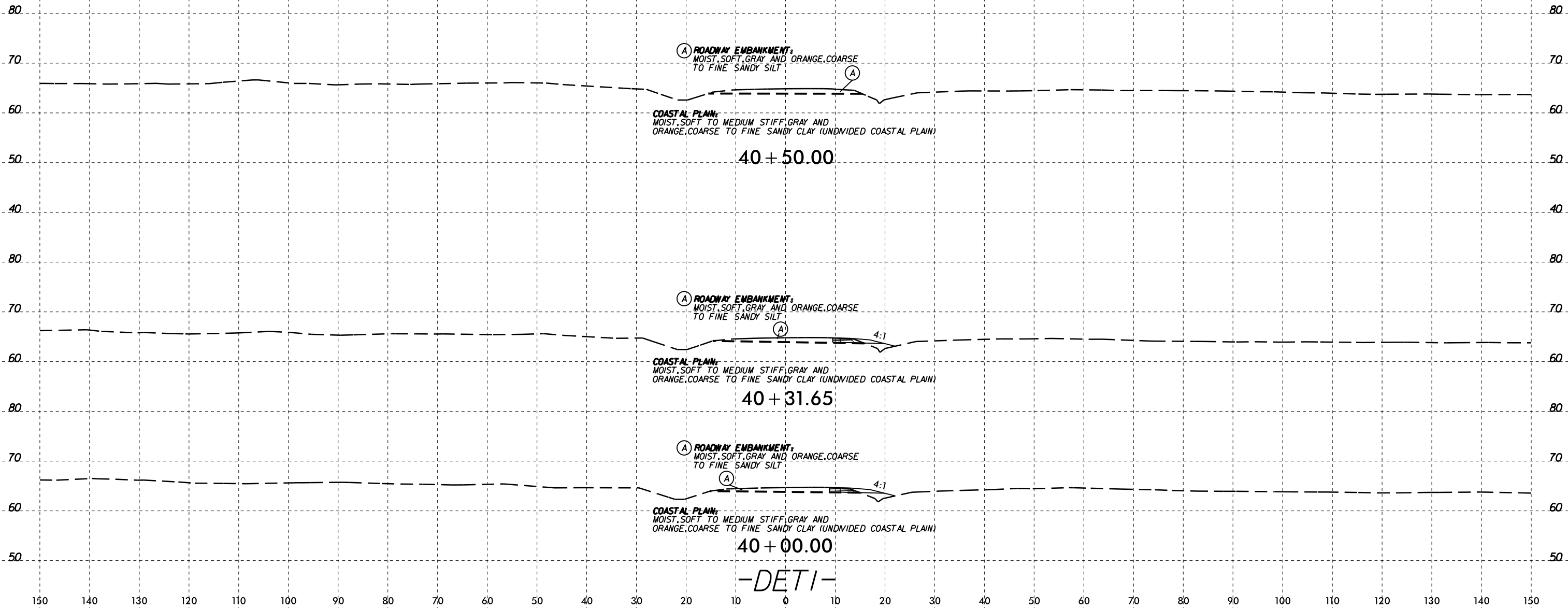


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 Wells - A1 KA211387

-DET1-



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) ROADWAY EMBANKMENT:
MOIST, SOFT, GRAY AND ORANGE, COARSE
TO FINE SANDY SILT

COASTAL PLAIN:
MOIST, SOFT TO MEDIUM STIFF, GRAY AND
ORANGE, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

40 + 50.00

(A) ROADWAY EMBANKMENT:
MOIST, SOFT, GRAY AND ORANGE, COARSE
TO FINE SANDY SILT

COASTAL PLAIN:
MOIST, SOFT TO MEDIUM STIFF, GRAY AND
ORANGE, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

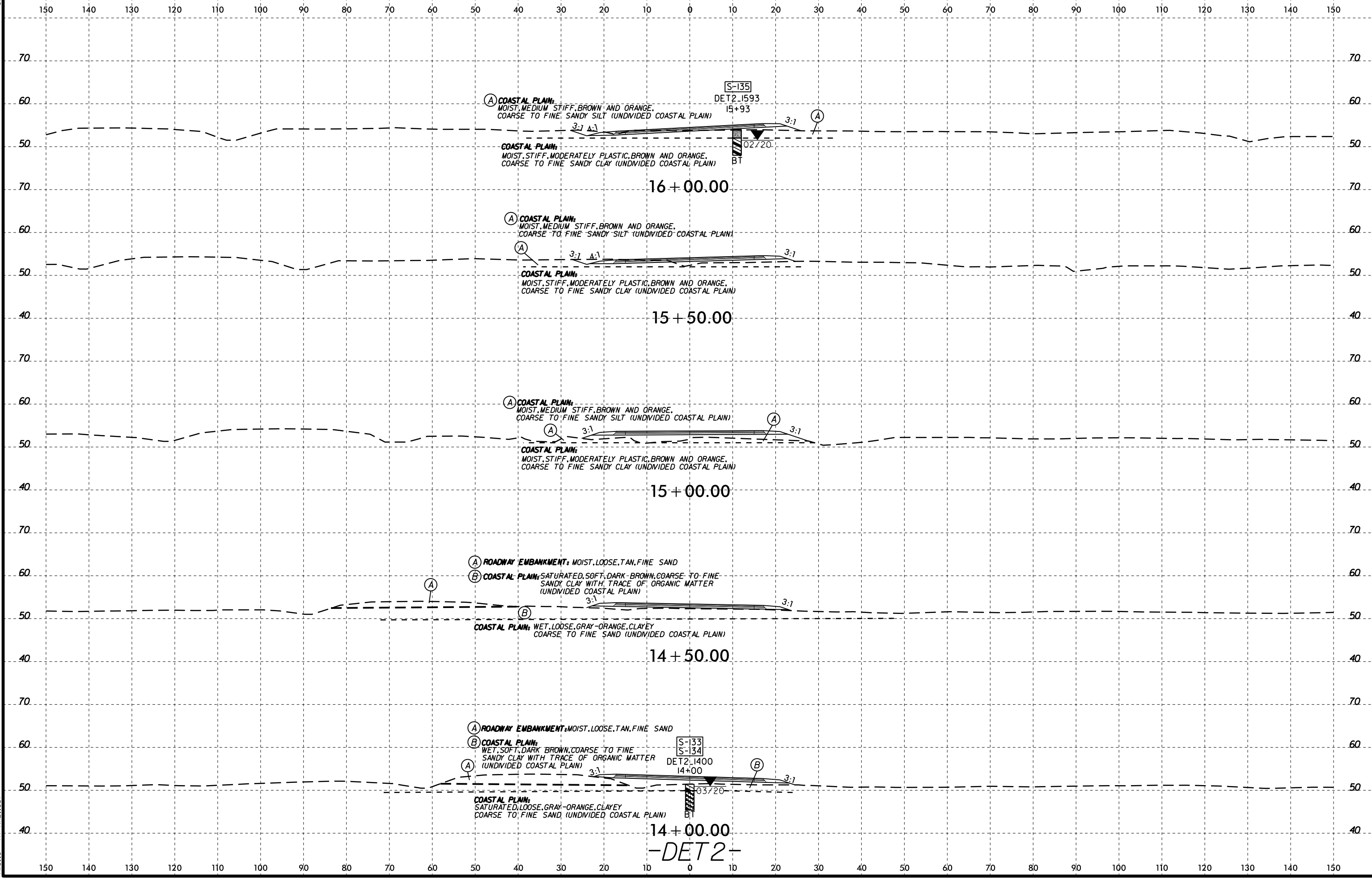
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(A) ROADWAY EMBANKMENT:
MOIST, SOFT, GRAY AND ORANGE, COARSE
TO FINE SANDY SILT

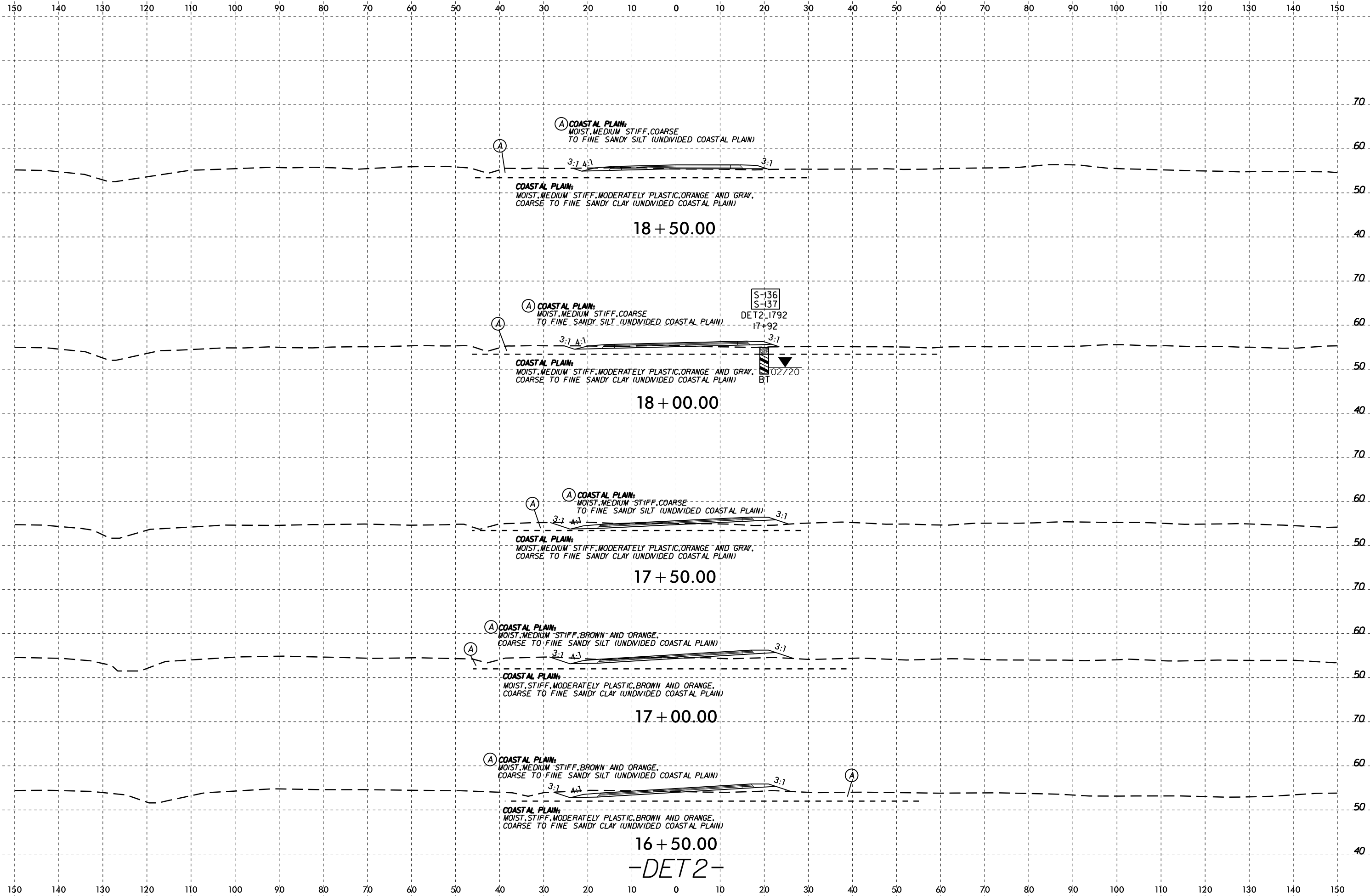
COASTAL PLAIN:
MOIST, SOFT TO MEDIUM STIFF, GRAY AND
ORANGE, COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)

40 + 00.00

-DETI-



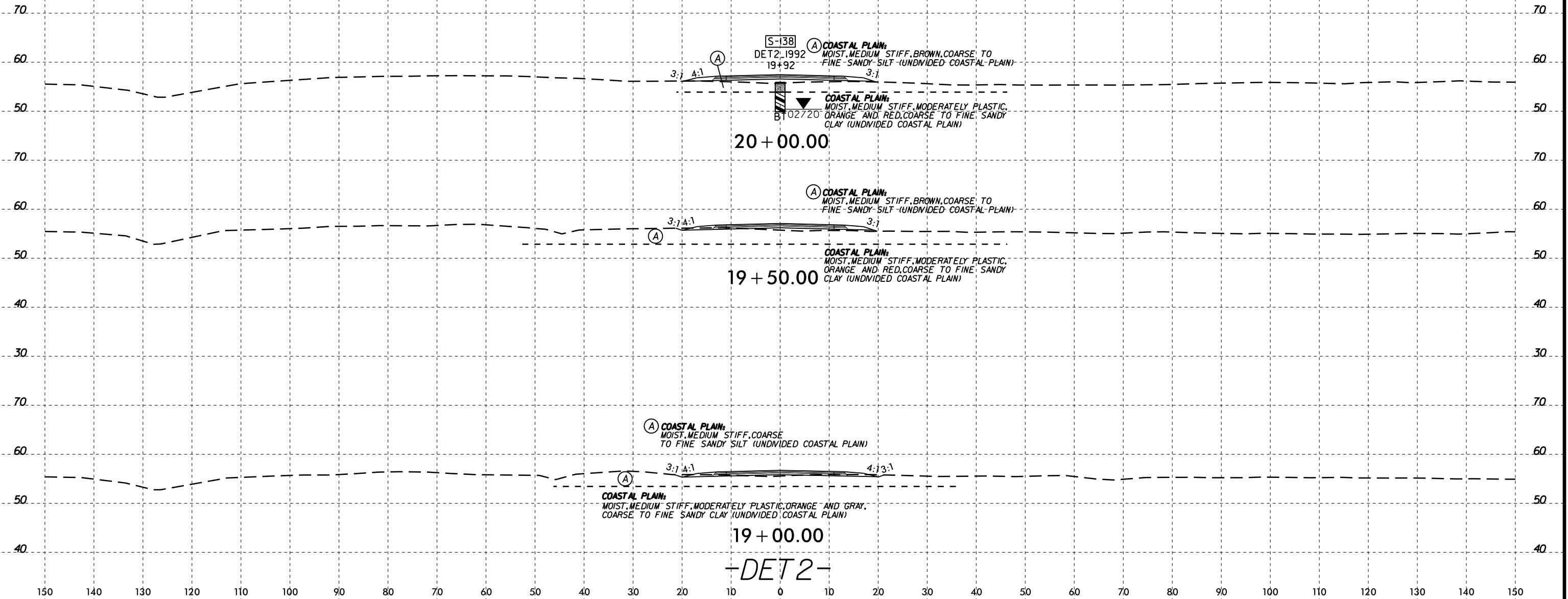
16+00.00
15+50.00
15+00.00
14+50.00
14+00.00
-DET2-





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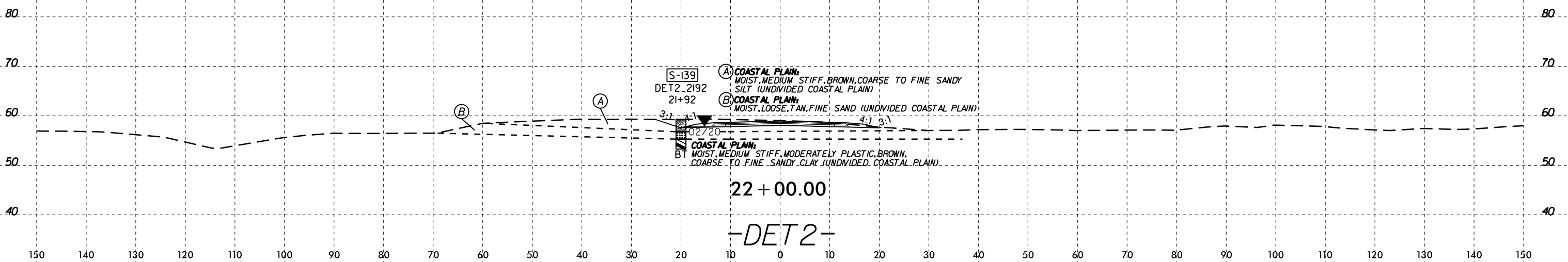
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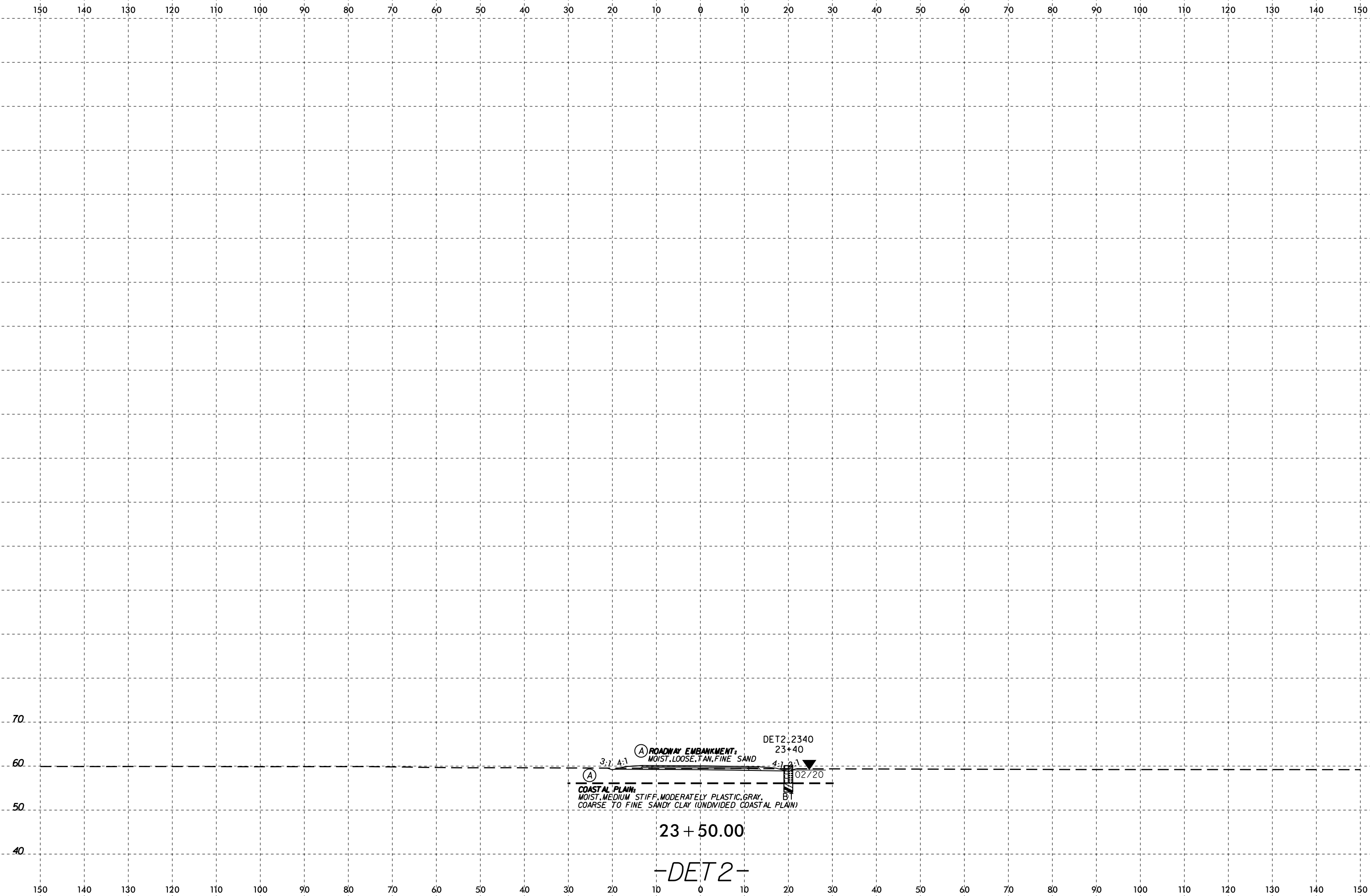
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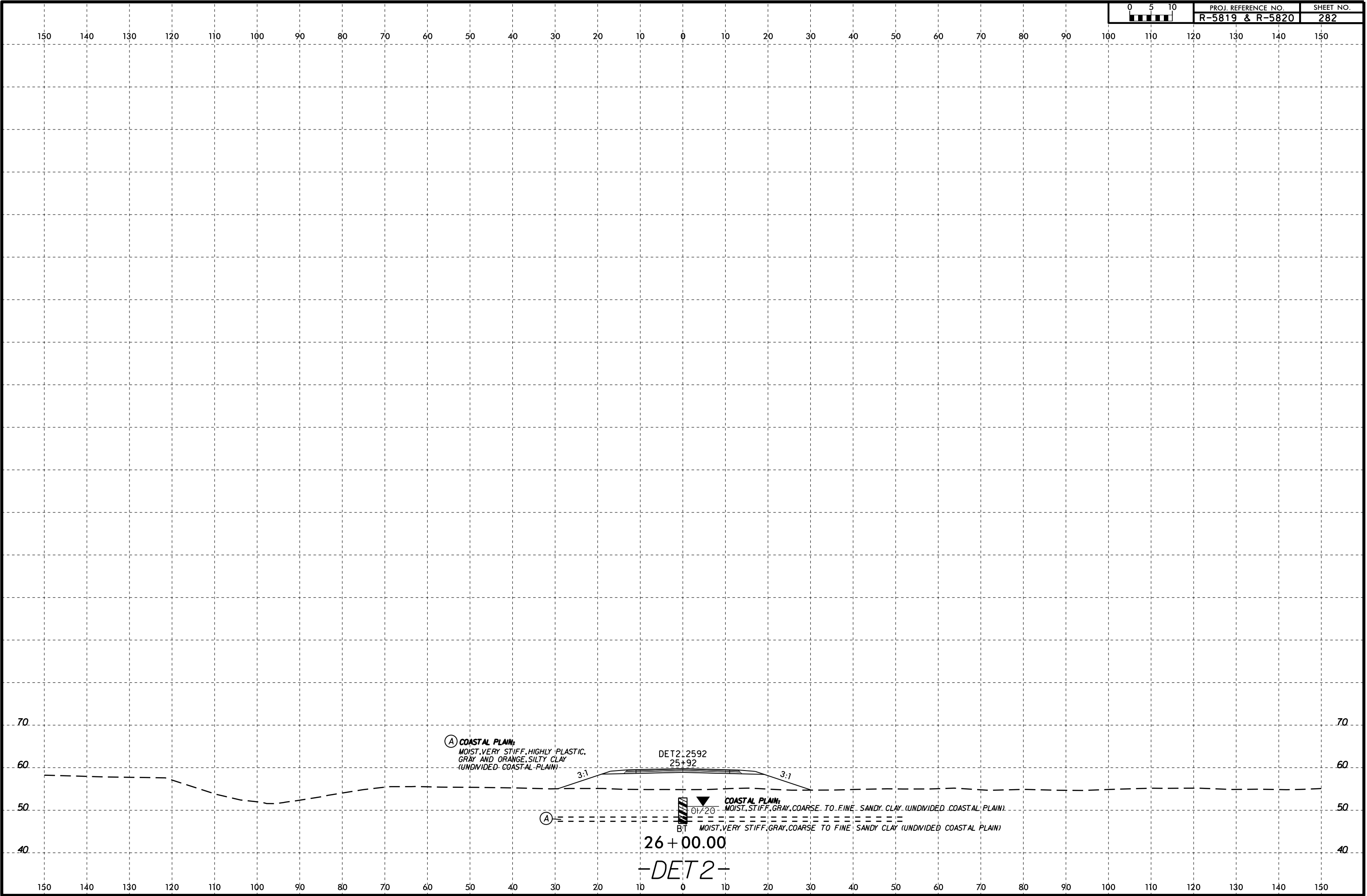
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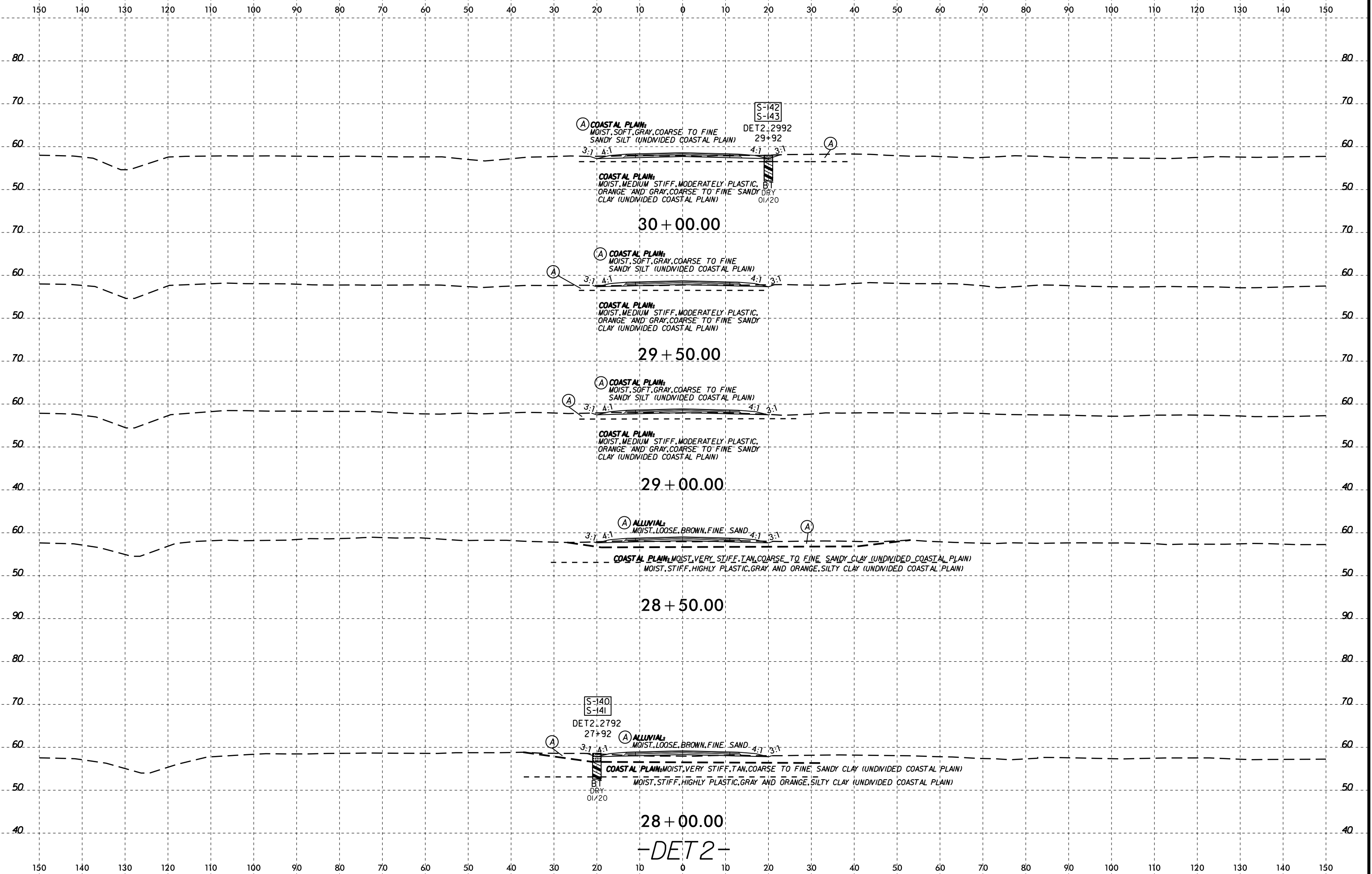
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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5819 & R-5820	281

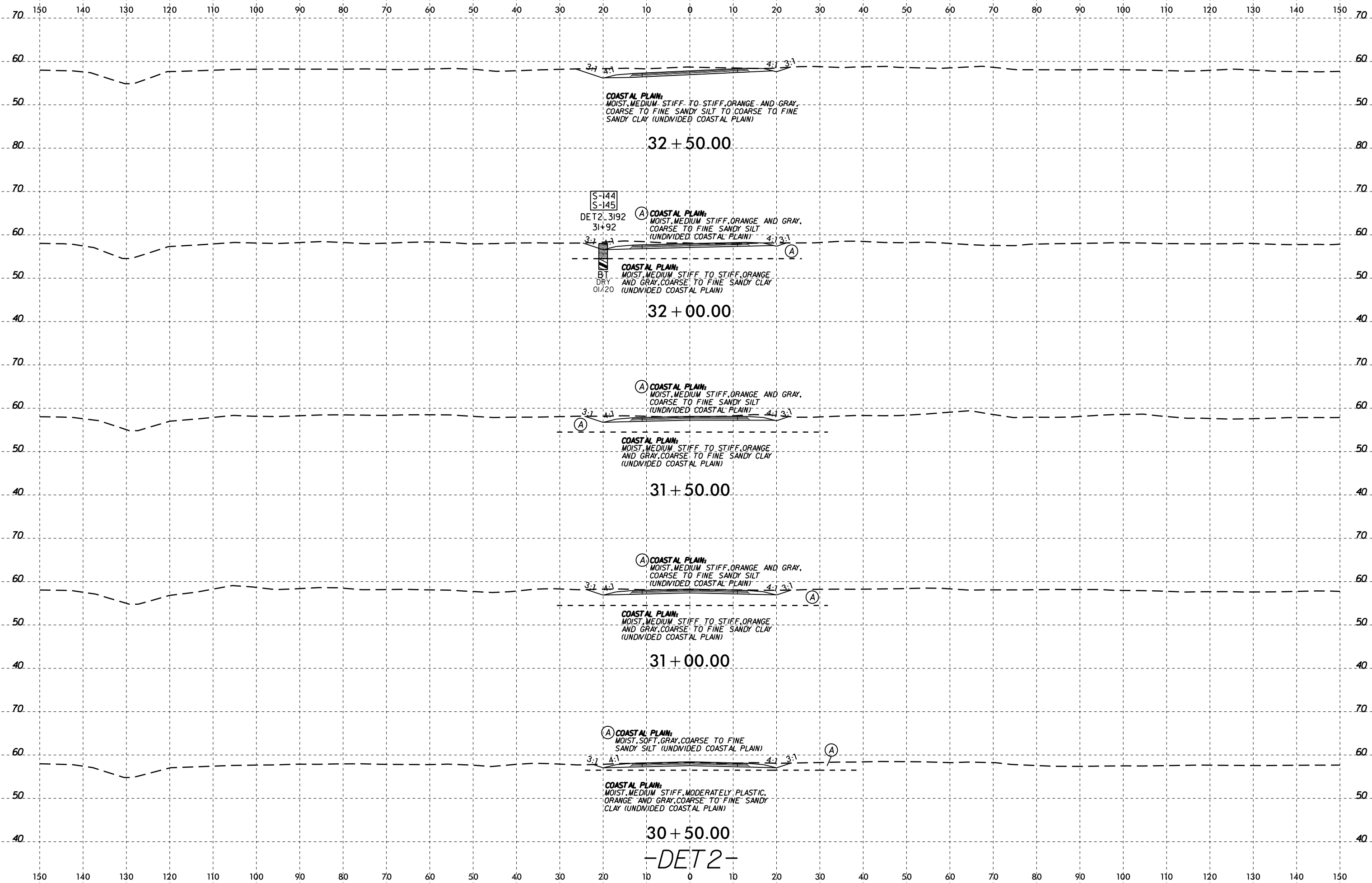


(A) ROADWAY EMBANKMENT,
 MOIST, LOOSE, TAN, FINE SAND
 3:1 A:1
 DET2:2340
 23+40
 4:1 A:1
 02/20
 (A)
 COASTAL PLAIN,
 MOIST, MEDIUM STIFF, MODERATELY PLASTIC, GRAY,
 COARSE TO FINE SANDY CLAY (UNDIVIDED COASTAL PLAIN)
 B1
 23 + 50.00
 -DET2-

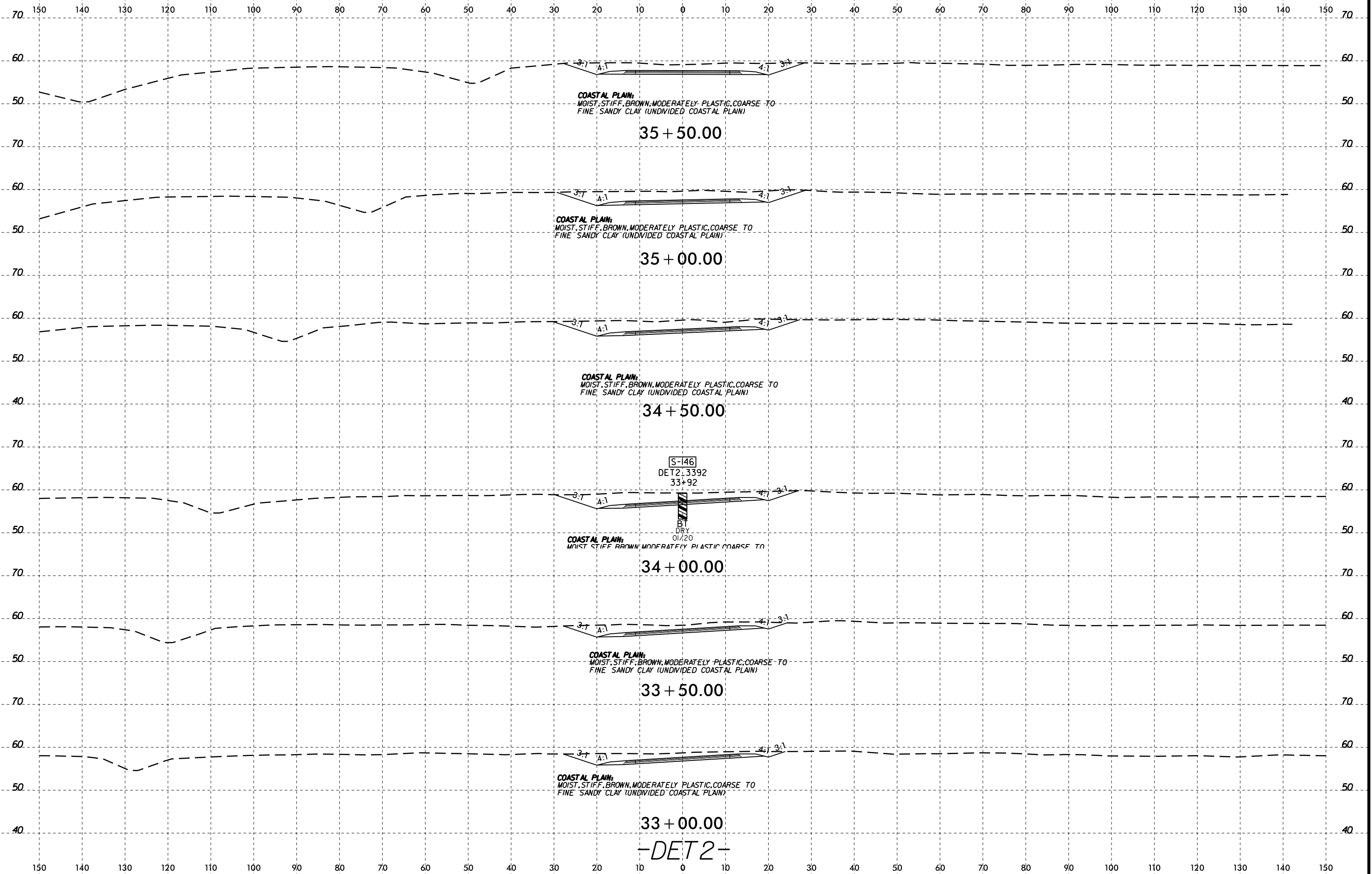




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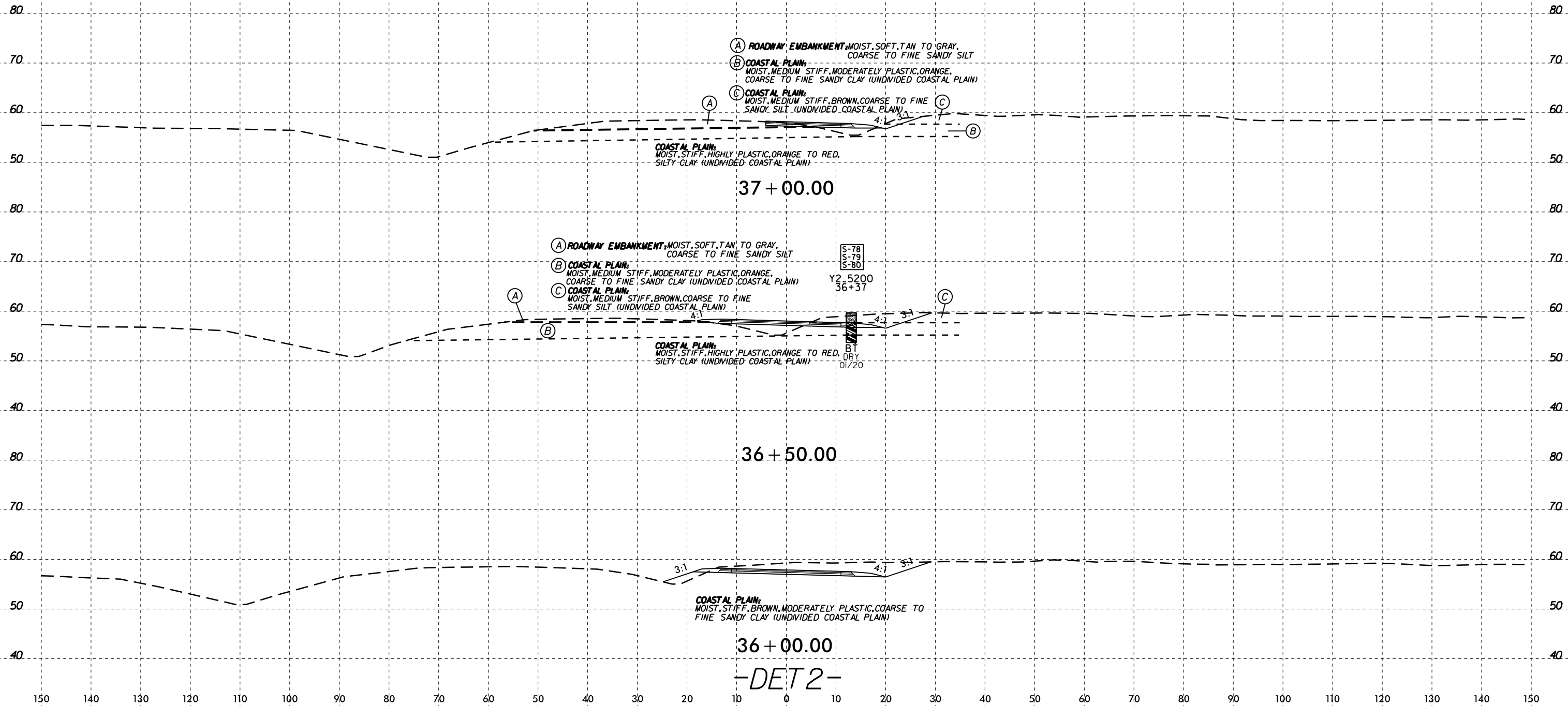


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