REFERENCE: I-5986B

PROJECT: 47532

SEE SHEET 3 FOR PLAN SHEET LAYOUT AT TIME OF INVESTIGATION

CROSS SECTIONS

LINE	STATION	SHEETS
-L-	1063+00 - 1070+50	3 - 8
-L-	1076+00 - 1081+00	9 - 14
-L-	1086+00 - 1101+00	15 - 28
-L-	1103+50 - 1107+00	29 - 31
-L-	1109+00 - 1122+00	32 - 43
-L-	1133+00 - 1147+00	44 - 53
-L-	1148+00 - 1152+00	53 - 56
-L-	1157+00 - 1161+00	57 - 60
-L-	1166+00 - 1172+50	61 - 68
-L-	1184+00 - 1190+50	69 - 73
-L-	1196+50 - 1221+00	74 - 90
-L-	1226+00 - 1230+00	91 - 95
-Y16-	11+50 - 18+00	96 - 100
-Y16-	40+00 - 44+00	101 - 103
-Y16RPA-	18+43.96 - 25+50	104 - 108
-Y16RPB-	15+10 - 20+00	109 - 112
-Y16RPC-	15+91.71 - 17+43.50	113
-Y17-	13+50 - 20+00	114 - 118
-Y17-	33+50 - 40+50	118 - 122
-Y17RPA-	15+14 - 21+50	123 - 127
-Y17RPB-	26+00 - 27+50	128 - 129
-Y17RPD-	14+85.50 - 18+00	130 - 132
-Y26-	24+50 - 28+50	133 - 135
-SRI3-	44+00 - 44+50	136
-SRI5-	14+50 - 18+50	137 - 139
-SRI5-	38+71.05 - 57+71.05	139 - 151
-SRI5-	68+21.05 - 72+21.59	151 - 154
-SRI5-	77+25.55 - 79+27.14	154 - 155
-SRI5-	88+84.68 - 90+86.32	156 - 157
-SRI6-	12+00 - 15+00	158 - 159
-SRI6-	61+50 - 85+50	160 - 173
-SRI7-	13+00 - 28+74.60	174 - 183
-SRI7-	30+60 - 34+86.16	184 - 187

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

ROADWAY SUBSURFACE INVESTIGATION

COUNTY *CUMBERLAND, HARNETT, AND JOHNSTON*

PROJECT DESCRIPTION *IMPROVE I-95 INTERCHANGES AT SR 1811 (BUD HAWKINS ROAD) (EXIT 70) AND SR 1002 (LONG BRANCH ROAD) (EXIT 71)*

SITE DESCRIPTION *SECTION 3 of 4; I-5883 PORTION, -L- STATION 1063+00 TO 1232+00*

RECOMMENDATIONS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5986B	1	187

CAUTION NOTICE

THE SUBSURFACE INFORMATION AND THE SUBSURFACE INVESTIGATION ON WHICH IT IS BASED WERE MADE FOR THE PURPOSE OF STUDY, PLANNING AND DESIGN, AND NOT FOR CONSTRUCTION OR PAY PURPOSES. THE VARIOUS FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA AVAILABLE MAY BE REVIEWED OR INSPECTED IN RALEIGH BY CONTACTING THE N. C. DEPARTMENT OF TRANSPORTATION, GEOTECHNICAL ENGINEERING UNIT AT (919) 707-6850. THE SUBSURFACE PLANS AND REPORTS, FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA ARE NOT PART OF THE CONTRACT.

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

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

NOTES:
1. THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N. C. DEPARTMENT OF TRANSPORTATION AS ACCURATE NOR IS IT CONSIDERED PART OF THE PLANS, SPECIFICATIONS OR CONTRACT FOR THE PROJECT.
2. BY HAVING REQUESTED THIS INFORMATION, THE CONTRACTOR SPECIFICALLY WAIVES ANY CLAIMS FOR INCREASED COMPENSATION OR EXTENSION OF TIME BASED ON DIFFERENCES BETWEEN THE CONDITIONS INDICATED HEREIN AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

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INVESTIGATED BY *S&ME, INC.*

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DATE *DECEMBER 2019*

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NORTH CAROLINA PROFESSIONAL SEAL 032125 ENGINEER STACIE E. MITCHELL

DocuSigned by:
Stacie Mitchell 12/2/2019
BBC611B64F19458...
SIGNATURE DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO.	SHEET NO.
I-5986B	2

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 206, 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-3	A-2				A-4	A-5	A-6	A-7	A-1, A-2 A-3	A-4, A-5 A-6, A-7	
	A-1-a	A-1-b		A-2-4	A-2-5	A-2-6	A-2-7				A-7-5, A-7-6			
SYMBOL														
% PASSING #10 #40 #200	50 MX 30 MX 15 MX	50 MX 25 MX	51 MN 10 MX	35 MX	35 MX	35 MX	35 MX	36 MN	36 MN	36 MN	36 MN	GRANULAR SOILS	SILT-CLAY SOILS	MUCK, PEAT
MATERIAL PASSING #40 LL PI	— 6 MX		— NP	40 MX 10 MX	41 MN 10 MX	40 MX 11 MN	41 MN 11 MN	40 MX 10 MX	41 MN 10 MX	40 MX 11 MN	41 MN 11 MN	SOILS WITH LITTLE OR MODERATE AMOUNTS OF ORGANIC MATTER		HIGHLY ORGANIC SOILS
GROUP INDEX	0		0	0		4 MX		8 MX	12 MX	16 MX	NO MX			
USUAL TYPES OF MAJOR MATERIALS	STONE FRAGS. GRAVEL, AND SAND		FINE SAND	SILTY OR CLAYEY GRAVEL AND SAND				SILTY SOILS		CLAYEY SOILS				
GEN. RATING AS 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 RESISTENCE (N-VALUE)	RANGE OF UNCONFINED COMPRESSIVE STRENGTH ($TONS/FT^2$)
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	4	10	40	60	200	270
OPENING (MM)	4.76	2.00	0.42	0.25	0.075	0.053

BOULDER (BLDR.)	COBBLE (COB.)	GRAVEL (GR.)	COARSE SAND (CSE. SD.)	FINE SAND (F SD.)	SILT (SL.)	CLAY (CL.)

GRAIN SIZE	MM	305	75	2.0	0.25	0.05	0.005
	IN.	12	3				

SOIL MOISTURE - CORRELATION OF TERMS

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

ORGANIC MATERIAL	GRANULAR SOILS	SILT - CLAY SOILS	OTHER MATERIAL	
TRACE OF ORGANIC MATTER	2 - 3%	3 - 5%	TRACE	1 - 10%
LITTLE ORGANIC MATTER	3 - 5%	5 - 12%	LITTLE	10 - 20%
MODERATELY ORGANIC	5 - 10%	12 - 20%	SOME	20 - 35%
HIGHLY ORGANIC	> 10%	> 20%	HIGHLY	35% AND ABOVE

GROUND WATER

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

MISCELLANEOUS SYMBOLS

- ROADWAY EMBANKMENT (RE) WITH SOIL DESCRIPTION
- SOIL SYMBOL
- ARTIFICIAL FILL (AF) OTHER THAN ROADWAY EMBANKMENT
- INFERRED SOIL BOUNDARY
- INFERRED ROCK LINE
- ALLUVIAL SOIL BOUNDARY
- 25/025 — DIP & DIP DIRECTION OF ROCK STRUCTURES
- SPT, DPT, DMT, VST, PMT — TEST BORING
- AUGER BORING
- CORE BORING
- MW — MONITORING WELL
- PIEZOMETER INSTALLATION
- SLOPE INDICATOR INSTALLATION
- CONE PENETROMETER TEST
- SOUNDING ROD
- TEST BORING WITH CORE
- SPT N-VALUE

RECOMMENDATION SYMBOLS

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

ABBREVIATIONS

AR - AUGER REFUSAL
BT - BORING TERMINATED
CL. - CLAY
CPT - CONE PENETRATION TEST
CSE. - COARSE
DMT - DILATOMETER TEST
DPT - DYNAMIC PENETRATION TEST
e - VOID RATIO
F - FINE
FOSS. - FOSSILIFEROUS
FRAC. - FRACTURED, FRACTURES
FRAGS. - FRAGMENTS
HI. - HIGHLY
MED. - MEDIUM
MICA. - MICACEOUS
MOD. - MODERATELY
NP - NON PLASTIC
ORG. - ORGANIC
PMT - PRESSUREMETER TEST
SAP. - SAPROLITIC
SD. - SAND, SANDY
SL. - SILT, SILTY
SLI. - SLIGHTLY
TCR - TRICONE REFUSAL
w - MOISTURE CONTENT
V - VERY
VST - VANE SHEAR TEST
WEA. - WEATHERED
γ - UNIT WEIGHT
γ_d - DRY UNIT WEIGHT

SAMPLE ABBREVIATIONS

S - BULK
SS - SPLIT SPOON
ST - SHELBY TUBE
RS - ROCK
RT - RECOMPACTED TRIAXIAL
CBR - CALIFORNIA BEARING RATIO

EQUIPMENT USED ON SUBJECT PROJECT

DRILL UNITS:
- [ ] CME-45C
- [ ] CME-55
- [X] CME-550
- [ ] VANE SHEAR TEST
- [ ] PORTABLE HOIST
- [ ] _____
- [ ] _____

ADVANCING TOOLS:
- [ ] CLAY BITS
- [ ] 6" CONTINUOUS FLIGHT AUGER
- [X] 8" HOLLOW AUGERS
- [ ] HARD FACED FINGER BITS
- [ ] TUNG.-CARBIDE INSERTS
- [X] CASING [ ] W/ ADVANCER
- [X] TRICONE 2 15/16 " STEEL TEETH
- [ ] TRICONE _____ " TUNG.-CARB.
- [ ] CORE BIT
- [ ] _____

HAMMER TYPE:
- [X] AUTOMATIC [ ] MANUAL

CORE SIZE:
- [ ] -B _____ [ ] -H _____
- [ ] -N _____

HAND TOOLS:
- [ ] POST HOLE DIGGER
- [ ] HAND AUGER
- [ ] SOUNDING ROD
- [ ] 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 0.1 FOOT PER 60 BLOWS IN NON-COASTAL PLAIN MATERIAL, THE TRANSITION BETWEEN SOIL AND ROCK IS OFTEN REPRESENTED BY A ZONE OF WEATHERED ROCK.
ROCK MATERIALS ARE TYPICALLY DIVIDED AS FOLLOWS:

WEATHERED ROCK (WR)	NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT N VALUES > 100 BLOWS PER FOOT IF TESTED.
CRYSTALLINE ROCK (CR)	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)	FINE TO COARSE GRAIN METAMORPHIC AND NON-COASTAL PLAIN SEDIMENTARY ROCK THAT WOULD YEILD SPT REFUSAL IF TESTED. ROCK TYPE INCLUDES PHYLLITE, SLATE, SANDSTONE, ETC.
COASTAL PLAIN SEDIMENTARY ROCK (CP)	COASTAL PLAIN SEDIMENTS CEMENTED INTO ROCK, BUT MAY NOT YIELD SPT REFUSAL. ROCK TYPE INCLUDES LIMESTONE, SANDSTONE, CEMENTED SHELL BEDS, ETC.

WEATHERING

FRESH	ROCK FRESH, CRYSTALS BRIGHT, FEW JOINTS MAY SHOW SLIGHT STAINING. ROCK RINGS UNDER HAMMER IF CRYSTALLINE.
VERY SLIGHT (V SLI.)	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 (SLI.)	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.)	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.)	ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. IN GRANITOID ROCKS, ALL FELDSPARS DULL AND DISCOLORED AND A MAJORITY SHOW KAOLINIZATION. 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.)	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 KAOLINIZED TO SOME EXTENT. SOME FRAGMENTS OF STRONG ROCK USUALLY REMAIN. *IF TESTED, WOULD YIELD SPT N VALUES > 100 BPF*
VERY SEVERE (V SEV.)	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	ROCK REDUCED TO SOIL. ROCK FABRIC NOT DISCERNIBLE, OR DISCERNIBLE ONLY IN SMALL AND SCATTERED CONCENTRATIONS. QUARTZ 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 GROVED 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

TERM	SPACING
VERY WIDE	MORE THAN 10 FEET
WIDE	3 TO 10 FEET
MODERATELY CLOSE	1 TO 3 FEET
CLOSE	0.16 TO 1 FOOT
VERY CLOSE	LESS THAN 0.16 FEET

BEDDING

TERM	THICKNESS
VERY THICKLY BEDDED	4 FEET
THICKLY BEDDED	1.5 - 4 FEET
THINLY BEDDED	0.16 - 1.5 FEET
VERY THINLY BEDDED	0.03 - 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 DISLODGED 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 (RQD) - 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 EMPLACED 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 0.1 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 (SRQD) - 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.

BENCH MARK: • SEE NOTE

ELEVATION: FEET

NOTES:

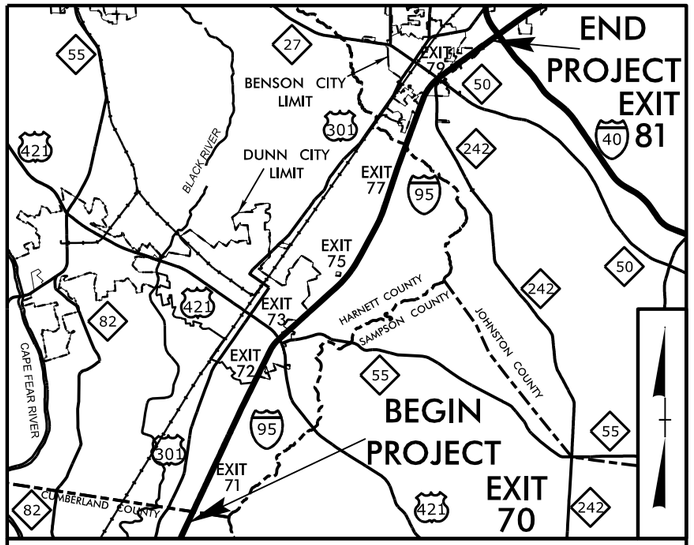
• Elevations derived from geopak and the .tin file 15896b_2_ls_tin.tin dated 06/18/18

DATE: 8-15-14

05/08/69

TIP PROJECT: I-5986B

CONTRACT:



VICINITY MAP
(Not to Scale)

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CUMBERLAND, HARNETT, AND JOHNSTON COUNTIES

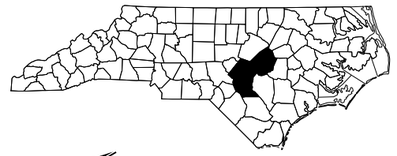
LOCATION: *I–95 FROM SR 1811 (BUD HAWKINS ROAD) (EXIT 70) TO I–40 (EXIT 81). WIDEN TO EIGHT LANES.*

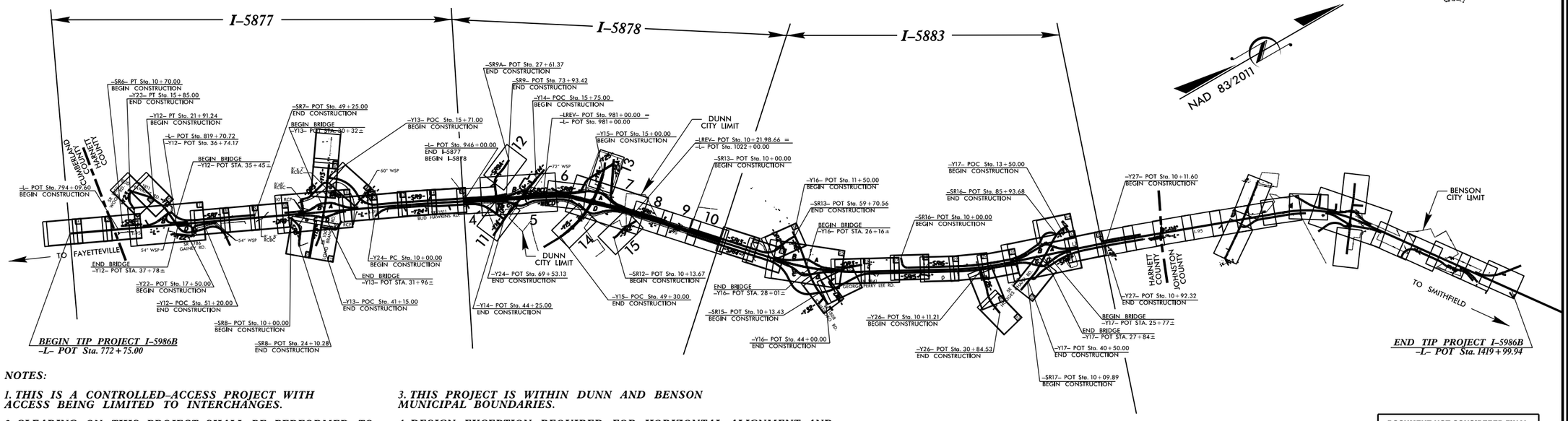
TYPE OF WORK: *GRADING, PAVING, DRAINAGE, SIGNALS, CULVERTS, AND STRUCTURES*

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I–5986B	3	95

PROJ. REFERENCE NO.	STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
I–5986B	47532.1.3		PE
I–5986B	47532.2.3		R/W
I–5877	53077.1.1	NHPP–0095(032)69	PE
I–5877	53077.1.2		PE
I–5877	53077.2.1		R/W
I–5877	53077.2.2		UTIL
I–5878	53078.1.1	NHPP–0095(007)73	PE
I–5878	53078.1.2		PE
I–5878	53078.2.1		R/W
I–5878	53078.2.2	NHPP–0095(017)73	R/W
I–5883	53083.1.1	NHPP–0095(033)74	PE
I–5883	53083.1.2		PE
I–5883	53083.2.1		R/W
I–5883	53083.2.2	NHPP–0095(033)74	R/W

25% PLANS (I–5878 Section)





NOTES:

1. THIS IS A CONTROLLED–ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.

2. CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

3. THIS PROJECT IS WITHIN DUNN AND BENSON MUNICIPAL BOUNDARIES.

4. DESIGN EXCEPTION REQUIRED FOR HORIZONTAL ALIGNMENT AND HORIZONTAL STOPPING SIGHT DISTANCE ON SR 1811 (BUD HAWKINS ROAD) AND SR 1785 (ELM ST. EXT.). (SEE PLAN SHEETS 7, 12 & 13)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

PLANS: 50 25 0 50 100

PROFILE (HORIZONTAL): 50 25 0 50 100

PROFILE (VERTICAL): 10 5 0 10 20

DESIGN DATA

ADT 2020 = 58,900
ADT 2040 = 75,700
K = 7 %
D = 55 %
T = 24 % *
V = 70 MPH
* (17% TTST + 7% DUALS)
FUNC CLASS = INTERSTATE
STATEWIDE TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT I 5986B = 11.865 MILES

LENGTH STRUCTURE TIP PROJECT I–5986B = 0.020 MILES

TOTAL LENGTH TIP PROJECT I–5986B = 11.885 MILES

Prepared In the Office of:
Michael Baker
Michael Baker Engineering, Inc.
8000 Regency Parkway, Suite 600
Cary, NC 27518
Professional Corporation License Number: F-1084

FOR DIVISION OF HIGHWAYS

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: MAY 1, 2019

LETTING DATE: JULY 21, 2020

SUSAN C. LANCASTER, P.E.
PROJECT ENGINEER

CURTIS TILLMAN, P.E.
PROJECT DESIGN ENGINEER

STEVE D. KENDALL, P.E.
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	3

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

220 210 200 190 180

–SR13–
26+51.47

3:1 3.80:1 6:1 6:1 6:1

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE CLAYEY SAND AND SILTY SAND MOIST

COASTAL PLAIN
ORANGE,GRAY,TAN — MEDIUM STIFF TO HARD SANDY CLAY MOIST — [MIDDENDORF FORMATION]

RED,TAN MEDIUM DENSE
CLAYEY SAND AND SAND MOIST

1064+00.00

–SR13–
26+01.47

3:1 3.85:1 6:1 6:1 6:1

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE CLAYEY SAND AND SILTY SAND MOIST

COASTAL PLAIN
ORANGE,GRAY,TAN — MEDIUM STIFF TO HARD SANDY CLAY MOIST — [MIDDENDORF FORMATION]

RED,TAN MEDIUM DENSE
CLAYEY SAND AND SAND MOIST

1063+50.00

230 220 210 200 190 180 170

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) #10	% PASSING (SIEVES) #40	% PASSING (SIEVES) #200	% MOISTURE	% ORGANIC
SS-1005	64 LT	1063+00	3.6-5.1	A-6-(2)	40	14	37	22	12	28	98	88	41.1	23.1	ND

–SR13–
25+51.47

3:1 3.83:1 6:1 6:1 6:1

SS-1005

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE CLAYEY SAND AND SILTY SAND MOIST

ROADWAY EMBANKMENT
BROWN LOOSE CLAYEY SAND MOIST

COASTAL PLAIN
ORANGE,GRAY,TAN — MEDIUM STIFF TO HARD SANDY CLAY MOIST — [MIDDENDORF FORMATION]

RED,TAN MEDIUM DENSE
CLAYEY SAND AND SAND MOIST

(7) (20) (22) BT FIAD
(8) (9) (15) BT FIAD
(7) (31) (18) BT DRY

BEGIN UNDERCUT -SR13- STA. 25+51.47

BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 1063+00

1063+00.00

–L–

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

$$$$$$$$SYSTIME$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	4

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

220 210 200 190 180

–SR13–
28+01.47

3:1 3.36:1 6:1

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE CLAYEY SAND AND SILTY SAND MOIST

ROADWAY EMBANKMENT
BROWN LOOSE CLAYEY SAND MOIST

COASTAL PLAIN
TAN,RED STIFF SILTY CLAY MOIST [MIDDENDORF FORMATION]

6:1 6:1

COASTAL PLAIN
GRAY,TAN,ORANGE VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
RED,TAN MEDIUM DENSE TO DENSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

1065+50.00

–SR13–
27+51.47

3:1 3.55:1 6:1

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE CLAYEY SAND AND SILTY SAND MOIST

ROADWAY EMBANKMENT
BROWN LOOSE CLAYEY SAND MOIST

COASTAL PLAIN
TAN,RED STIFF SILTY CLAY MOIST [MIDDENDORF FORMATION]

6:1 6:1

COASTAL PLAIN
GRAY,TAN,ORANGE VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
RED,TAN MEDIUM DENSE TO DENSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

1065+00.00

–SR13–
27+01.47

3:1 3.70:1 6:1

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE CLAYEY SAND AND SILTY SAND MOIST

ROADWAY EMBANKMENT
BROWN LOOSE CLAYEY SAND MOIST

COASTAL PLAIN
TAN,RED STIFF SILTY CLAY MOIST [MIDDENDORF FORMATION]

6:1 6:1

COASTAL PLAIN
GRAY,TAN,ORANGE VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
RED,TAN MEDIUM DENSE TO DENSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

1064+50.00

–L–

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

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	5

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

220 210 200 190

–SR13–
29+51.47

3:1 3:1 3.12:1 6:1

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE CLAYEY SAND AND SILTY SAND MOIST

ROADWAY EMBANKMENT
BROWN LOOSE CLAYEY SAND MOIST

COASTAL PLAIN
TAN,RED STIFF SILTY CLAY MOIST
[MIDDENDORF FORMATION]

6:1 6:1

COASTAL PLAIN
GRAY,TAN,ORANGE VERY STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]

COASTAL PLAIN
RED,TAN MEDIUM DENSE TO DENSE CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

1067+00.00

220 210 200 190 180

–SR13–
29+01.47

3:1 3:1 3.12:1 6:1

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE CLAYEY SAND AND SILTY SAND MOIST

ROADWAY EMBANKMENT
BROWN LOOSE CLAYEY SAND MOIST

COASTAL PLAIN
TAN,RED STIFF SILTY CLAY MOIST
[MIDDENDORF FORMATION]

6:1 6:1

COASTAL PLAIN
GRAY,TAN,ORANGE VERY STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]

COASTAL PLAIN
RED,TAN MEDIUM DENSE TO DENSE CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

1066+50.00

220 210 200 190 180

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-316	60' RT	1066+00	0 - 1.5	A-7-6([10]48	19	22	15	11	49	96	86	61.1	26.7	ND

220 210 200 190 180

–SR13–
28+51.47

3:1 3:1 3.20:1 6:1

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE CLAYEY SAND AND SILTY SAND MOIST

ROADWAY EMBANKMENT
BROWN LOOSE CLAYEY SAND MOIST

SS-316

COASTAL PLAIN
TAN,RED STIFF SILTY CLAY MOIST
[MIDDENDORF FORMATION]

6:1 6:1

COASTAL PLAIN
GRAY,TAN,ORANGE VERY STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]

16 29 11 BT FIAD

6 39 21 BT FIAD

COASTAL PLAIN
RED,TAN MEDIUM DENSE TO DENSE CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

14 30 12 BT FIAD

1066+00.00

220 210 200 190 180

–L–

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

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	6

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

220 210 200 190 180

–SR13–
31+01.47

3:1 3.64:1 6:1 6:1 6:1

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE CLAYEY SAND AND SILTY SAND MOIST

ROADWAY EMBANKMENT
BROWN LOOSE CLAYEY SAND MOIST

COASTAL PLAIN
TAN,RED MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

RED,TAN,WHITE,AND PINK LOOSE TO MEDIUM DENSE SAND, SILTY SAND AND CLAYEY SAND MOIST TO WET

1068+50.00

–SR13–
30+51.47

3:1 3.36:1 6:1 6:1 6:1

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE CLAYEY SAND AND SILTY SAND MOIST

ROADWAY EMBANKMENT
BROWN LOOSE CLAYEY SAND MOIST

COASTAL PLAIN
TAN,RED MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

RED,TAN,WHITE,AND PINK LOOSE TO MEDIUM DENSE SAND, SILTY SAND AND CLAYEY SAND MOIST TO WET

1068+00.00

–SR13–
30+01.47

3:1 3.20:1 6:1 6:1 6:1

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE CLAYEY SAND AND SILTY SAND MOIST

ROADWAY EMBANKMENT
BROWN LOOSE CLAYEY SAND MOIST

COASTAL PLAIN
TAN,RED MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

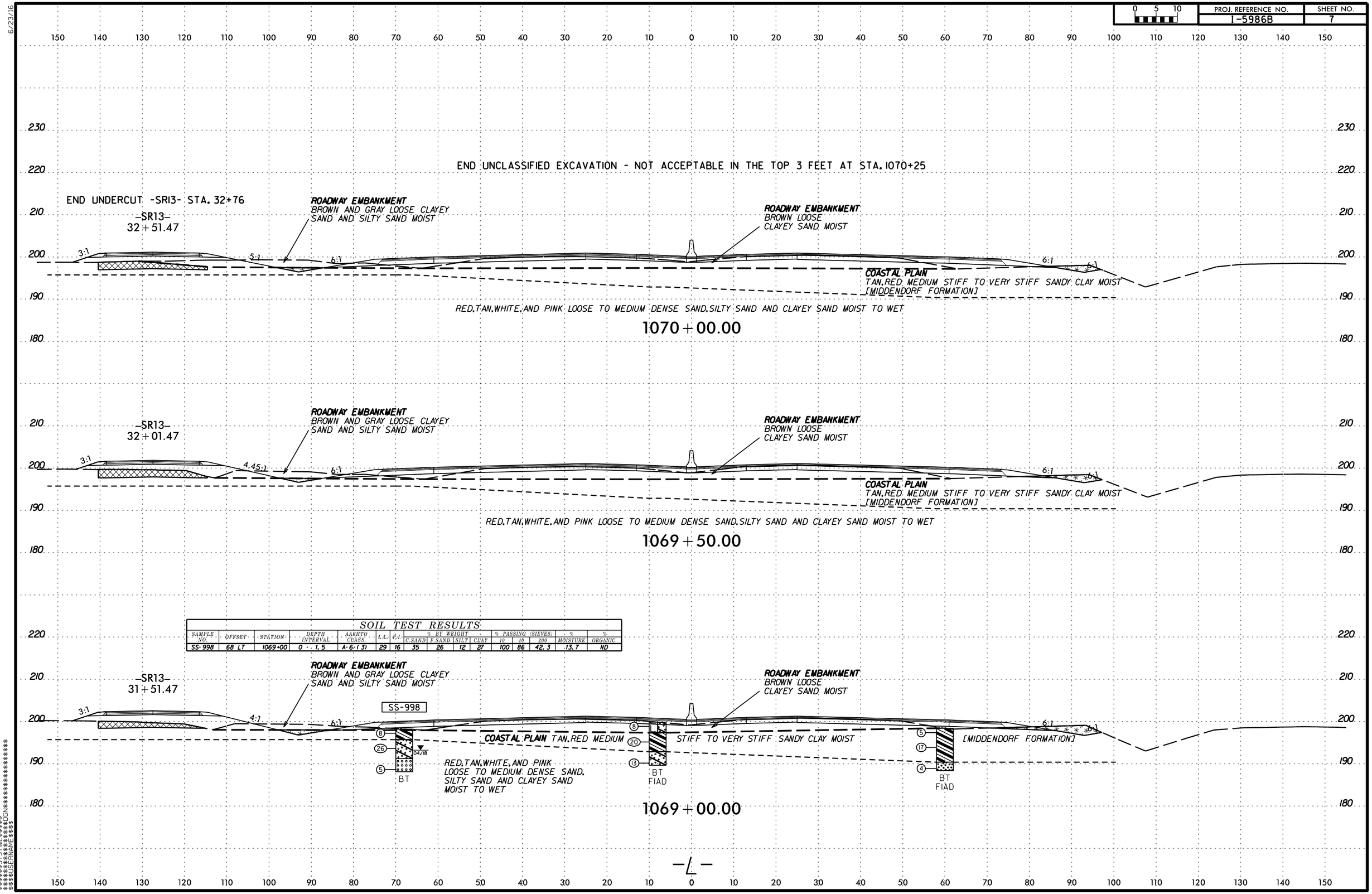
RED,TAN,WHITE,AND PINK LOOSE TO MEDIUM DENSE SAND, SILTY SAND AND CLAYEY SAND MOIST TO WET

1067+50.00

–L–

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

PROJ. REFERENCE NO. I-5986B | SHEET NO. 7



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-998	68 LT	1069+00	0 - 1.5	A-6-(3)	29	16	35	26	12	27	100	86	42.3	13.7	ND

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	8

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

220
210
200
190
180

–SR13–
33+01.47

3:1 4.27:1 6:1

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE CLAYEY SAND AND SILTY SAND MOIST

BROWN, RED AND WHITE MEDIUM DENSE SILTY SAND WET TO SAT.

6:1 6:1

COASTAL PLAIN
GRAY AND BROWN SOFT TO STIFF SANDY CLAY MOIST TO WET (MIDDENDORF FORMATION)

1070+50.00

–L–

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

220
210
200
190
180

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	9

END UNDERCUT -SR13- STA. 39+26

–SR13–
39+01.47

ROADWAY EMBANKMENT
BROWN MEDIUM STIFF
SANDY CLAY MOIST

ROADWAY EMBANKMENT
BROWN MEDIUM STIFF
SANDY CLAY MOIST

COASTAL PLAIN
BROWN AND BLACK MEDIUM
STIFF SANDY SILT MOIST
[MIDDENDORF FORMATION]

3:1 4.1+:1 6:1 6:1 6:1

COASTAL PLAIN
TAN MEDIUM STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

COASTAL PLAIN
GRAY, BROWN, PINK, TAN
AND WHITE LOOSE TO VERY
DENSE CLAYEY SAND, SILTY
SAND AND SAND DRY TO WET
[MIDDENDORF FORMATION]

1076+50.00

BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 1076+25

BEGIN UNDERCUT -SR13- STA. 38+76

–SR13–
38+51.47

ROADWAY EMBANKMENT
BROWN LOOSE
SILTY SAND MOIST

ROADWAY EMBANKMENT
BROWN LOOSE
CLAYEY SAND MOIST

3:1 4.3+:1 6:1 6:1

ORANGE, BLACK SOFT SANDY SILT WET WITH ORGANICS

COASTAL PLAIN
WHITE, TAN, ORANGE, GRAY, BROWN, AND BLACK LOOSE TO MEDIUM DENSE CLAYEY SAND, SILTY SAND AND SAND MOIST TO WET [MIDDENDORF FORMATION]

1076+00.00

220 210 200 190 180

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

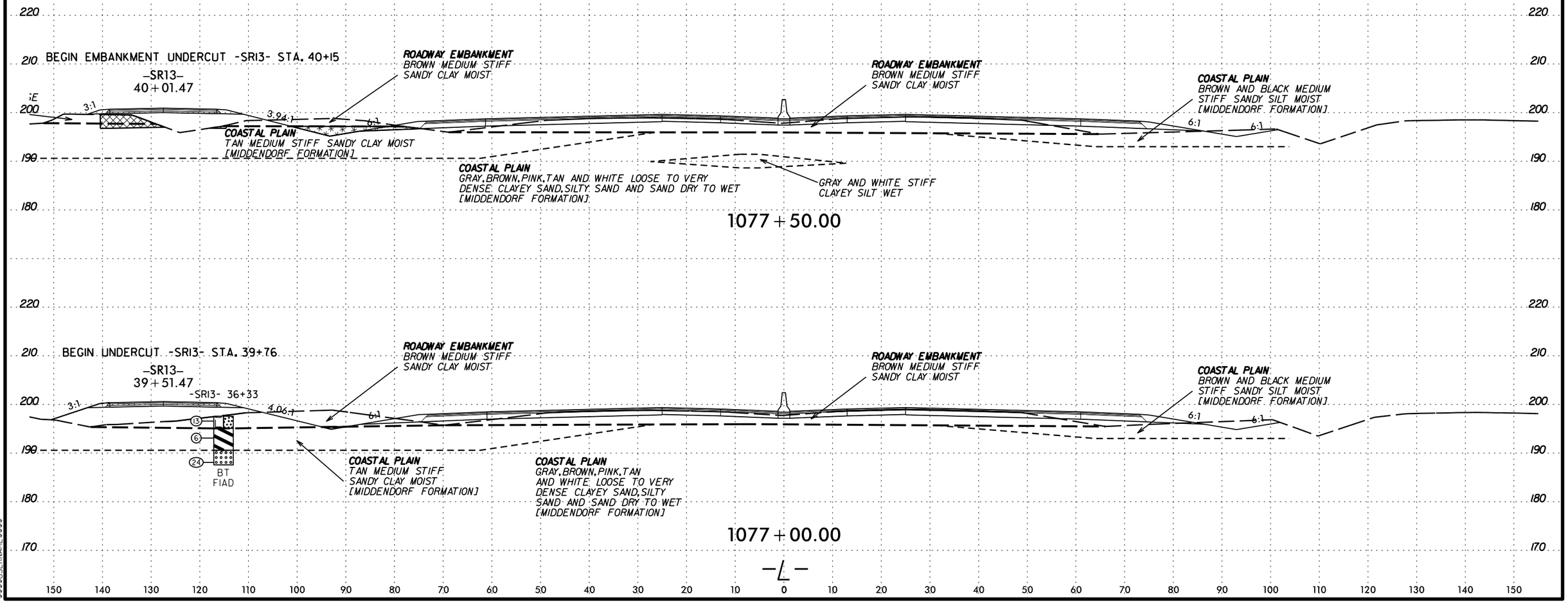
–℄–

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	10

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



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	11

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
TAN MEDIUM STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

COASTAL PLAIN
GRAY, BROWN, PINK, TAN AND WHITE LOOSE TO VERY DENSE CLAYEY SAND, SILTY SAND AND SAND DRY TO WET
[MIDDENDORF FORMATION]

MATCH LINE 150' LEFT

200
190
180

210
200
190
180

–SR13–
41+01.47

ARTIFICIAL FILL
GRAY AND BROWN MEDIUM DENSE SILTY SAND MOIST

ROADWAY EMBANKMENT
BROWN MEDIUM STIFF
SANDY CLAY MOIST

COASTAL PLAIN
TAN MEDIUM STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
BROWN MEDIUM STIFF
SANDY CLAY MOIST

COASTAL PLAIN
BROWN AND BLACK MEDIUM STIFF SANDY SILT MOIST
[MIDDENDORF FORMATION]

3:1 3:1 6:1 6:1 6:1

COASTAL PLAIN
GRAY, BROWN, PINK, TAN AND WHITE LOOSE TO VERY DENSE CLAYEY SAND, SILTY SAND AND SAND DRY TO WET
[MIDDENDORF FORMATION]

GRAY AND WHITE STIFF CLAYEY SILT WET

1078+50.00

COASTAL PLAIN
TAN MEDIUM STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

COASTAL PLAIN
GRAY, BROWN, PINK, TAN AND WHITE LOOSE TO VERY DENSE CLAYEY SAND, SILTY SAND AND SAND DRY TO WET
[MIDDENDORF FORMATION]

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-328	66' RT	1078+00	0 - 1.5	A-4-(0)	26	6	32	24	22	22	100	87	47.3	22	ND
SS-989	65' LT	1078+00	0 - 1.5	A-6-(5)	36	18	35	19	10	36	99	83	47.6	21.1	ND

COASTAL PLAIN
TAN MEDIUM STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

COASTAL PLAIN
GRAY, BROWN, PINK, TAN AND WHITE LOOSE TO VERY DENSE CLAYEY SAND, SILTY SAND AND SAND DRY TO WET
[MIDDENDORF FORMATION]

MATCH LINE 150' LEFT

210
200
190
180

–SR13–
40+51.47

ARTIFICIAL FILL
GRAY AND BROWN MEDIUM DENSE SILTY SAND MOIST

ROADWAY EMBANKMENT
BROWN MEDIUM STIFF
SANDY CLAY MOIST

SS-989

COASTAL PLAIN
TAN MEDIUM STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
BROWN MEDIUM STIFF
SANDY CLAY MOIST

SS-328

COASTAL PLAIN
BROWN AND BLACK MEDIUM STIFF SANDY SILT MOIST
[MIDDENDORF FORMATION]

3:1 3.48:1 6:1 6:1 6:1

5 8 10 04/18 BT DRY

8 10 12 04/18 BT FIAD

6 100/1.0 02/18 21 BT

COASTAL PLAIN
GRAY, BROWN, PINK, TAN AND WHITE LOOSE TO VERY DENSE CLAYEY SAND, SILTY SAND AND SAND DRY TO WET
[MIDDENDORF FORMATION]

GRAY AND WHITE STIFF CLAYEY SILT WET

1078+00.00

–L–

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

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	12

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

210
200
190
180

MATCH LINE 150' LEFT

COASTAL PLAIN
GRAY, WHITE, BROWN AND TAN VERY LOOSE TO DENSE SILTY SAND, SAND AND CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

3:1

-SR13-
42+01.47

ARTIFICIAL FILL
BROWN LOOSE SILTY SAND MOIST

ROADWAY EMBANKMENT
BROWN MEDIUM STIFF SANDY CLAY MOIST

3:1 6:1

ROADWAY EMBANKMENT
BROWN MEDIUM STIFF SANDY CLAY MOIST

COASTAL PLAIN
BROWN AND BLACK MEDIUM STIFF SANDY SILT MOIST [MIDDENDORF FORMATION]

6:1 6:1

COASTAL PLAIN
TAN MEDIUM STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
GRAY, WHITE, BROWN AND TAN VERY LOOSE TO DENSE SILTY SAND, SAND AND CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

1079+50.00

MATCH LINE 150' LEFT

COASTAL PLAIN
GRAY, WHITE, BROWN AND TAN VERY LOOSE TO DENSE SILTY SAND, SAND AND CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

3:1

-SR13-
41+51.47

ARTIFICIAL FILL
BROWN LOOSE SILTY SAND MOIST

ROADWAY EMBANKMENT
BROWN MEDIUM STIFF SANDY CLAY MOIST

3:1 6:1

ROADWAY EMBANKMENT
BROWN MEDIUM STIFF SANDY CLAY MOIST

COASTAL PLAIN
BROWN AND BLACK MEDIUM STIFF SANDY SILT MOIST [MIDDENDORF FORMATION]

6:1 6:1

COASTAL PLAIN
TAN MEDIUM STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
GRAY, WHITE, BROWN AND TAN VERY LOOSE TO DENSE SILTY SAND, SAND AND CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

1079+00.00

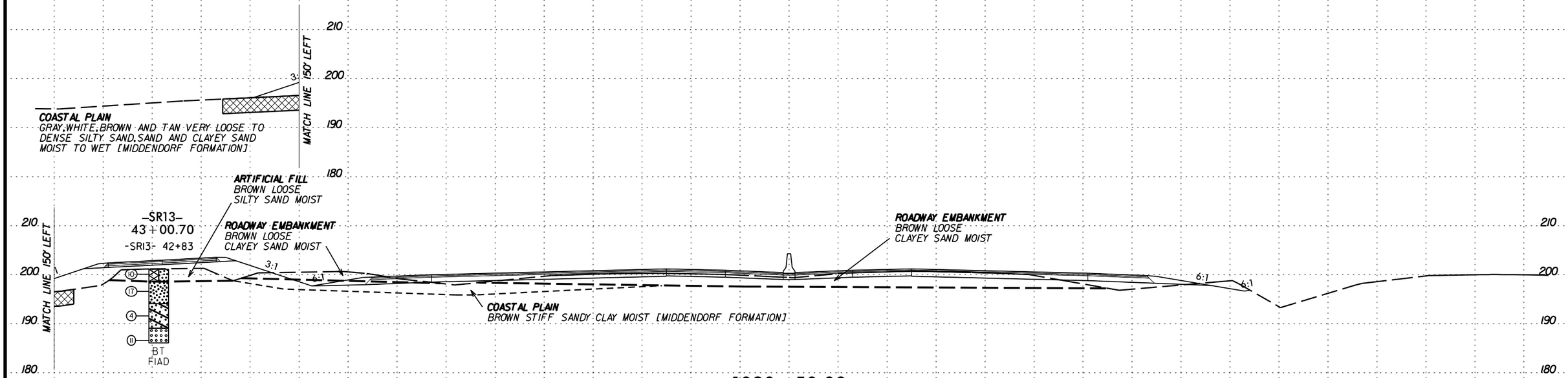
-L-

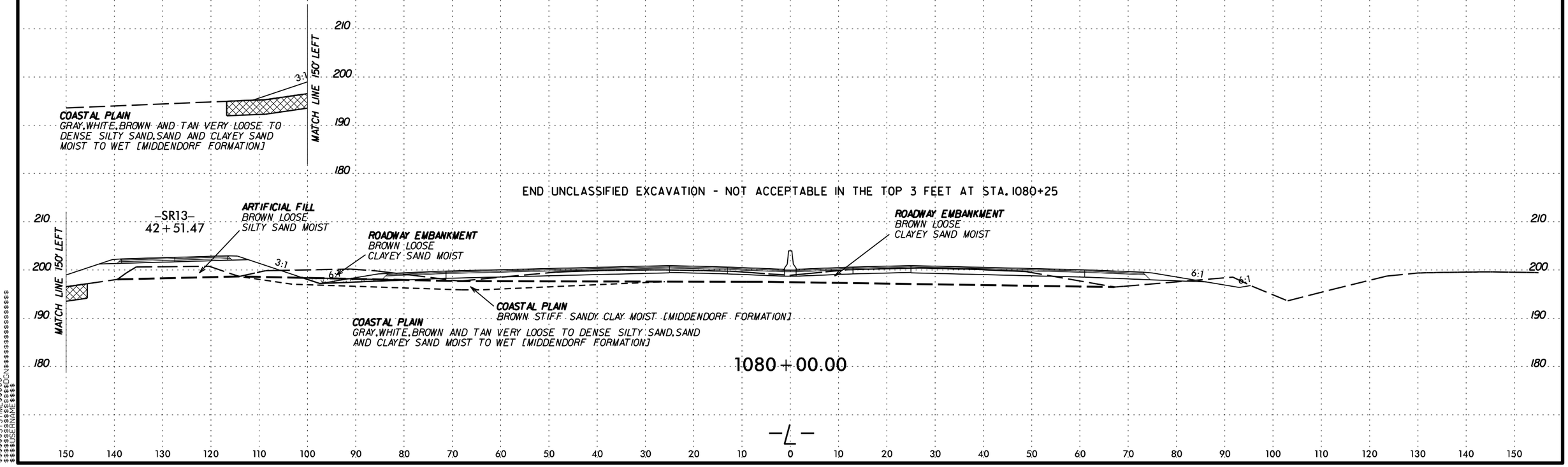
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	13

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

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	14

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

CONTINUE EMBANKMENT UNDERCUT
SEE -SRI3- SECTIONS

3:1

MATCH LINE 150' LEFT

210
200
190
180

COASTAL PLAIN
GRAY, WHITE, BROWN AND TAN VERY LOOSE TO DENSE SILTY SAND, SAND AND CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

CONTINUE EMBANKMENT UNDERCUT
SEE -SRI3- SECTIONS

-SR13-
43+50.00

MATCH LINE 150' LEFT

210
200
190
180
170

ROADWAY EMBANKMENT
BROWN LOOSE CLAYEY SAND MOIST

3:1

6:1

ARTIFICIAL FILL
BROWN LOOSE SILTY SAND MOIST

9
5
10
BT
04/18

COASTAL PLAIN
BROWN STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
GRAY, WHITE, BROWN AND TAN VERY LOOSE TO DENSE SILTY SAND, SAND AND CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

7
21
17
BT
FIAD

ROADWAY EMBANKMENT
BROWN LOOSE CLAYEY SAND MOIST

6:1

9
32
1
13
BT
02/18

1081+00.00

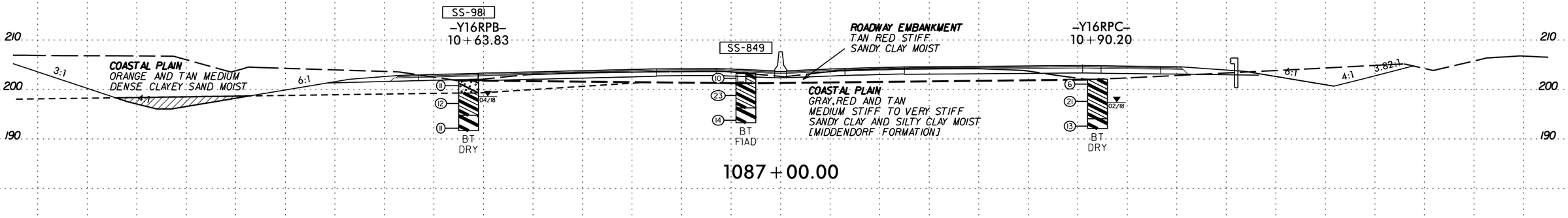
-L-

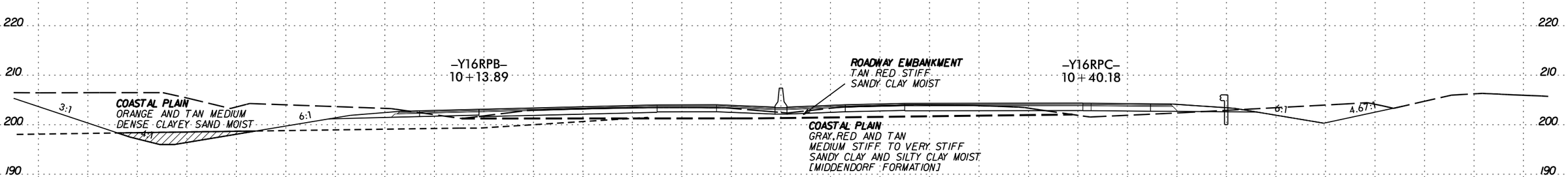
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

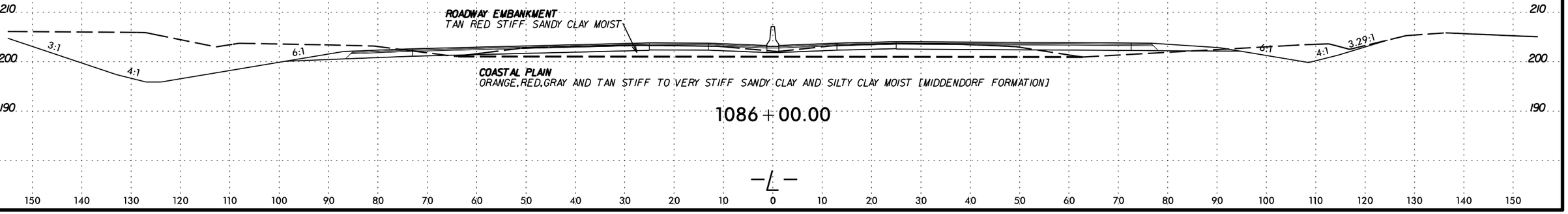
SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-849	7 LT	1087+00	3.5-5.0	A-6-(11)	33	14	47	19	9	25	100	78	35.8	18.1	ND
SS-981	63 LT	1087+00	3.6-5.1	A-6-(4)	38	23	44	18	8	30	100	79	39.5	18.8	ND





BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT -Y16RPB- STA. 10+00



-L-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	16

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

220 210 200 190

BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT -Y16RPC- STA. 12+65

-Y16RPB-
12+13.05

-Y16RPC-
12+40.68

COASTAL PLAIN
ORANGE AND TAN MEDIUM DENSE CLAYEY SAND MOIST

3:1 6:1 4:1

ROADWAY EMBANKMENT
TAN RED STIFF SANDY CLAY MOIST

COASTAL PLAIN
BROWN LOOSE SILTY SAND MOIST [MIDDENDORF FORMATION]

6:1 4:1 3.49:1

COASTAL PLAIN
GRAY,RED AND TAN MEDIUM STIFF TO VERY STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

1088+50.00

-Y16RPB-
11+63.42

-Y16RPC-
11+90.48

COASTAL PLAIN
ORANGE AND TAN MEDIUM DENSE CLAYEY SAND MOIST

3:1 6:1 4:1

ROADWAY EMBANKMENT
TAN RED STIFF SANDY CLAY MOIST

6:1 4:1 3.76:1

COASTAL PLAIN
GRAY,RED AND TAN MEDIUM STIFF TO VERY STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

1088+00.00

-Y16RPB-
11+13.68

-Y16RPC-
11+40.30

COASTAL PLAIN
ORANGE AND TAN MEDIUM DENSE CLAYEY SAND MOIST

3:1 6:1 4:1

ROADWAY EMBANKMENT
TAN RED STIFF SANDY CLAY MOIST

6:1 4:1 3.56:1

COASTAL PLAIN
ORANGE,RED,GRAY AND TAN STIFF TO VERY STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

1087+50.00

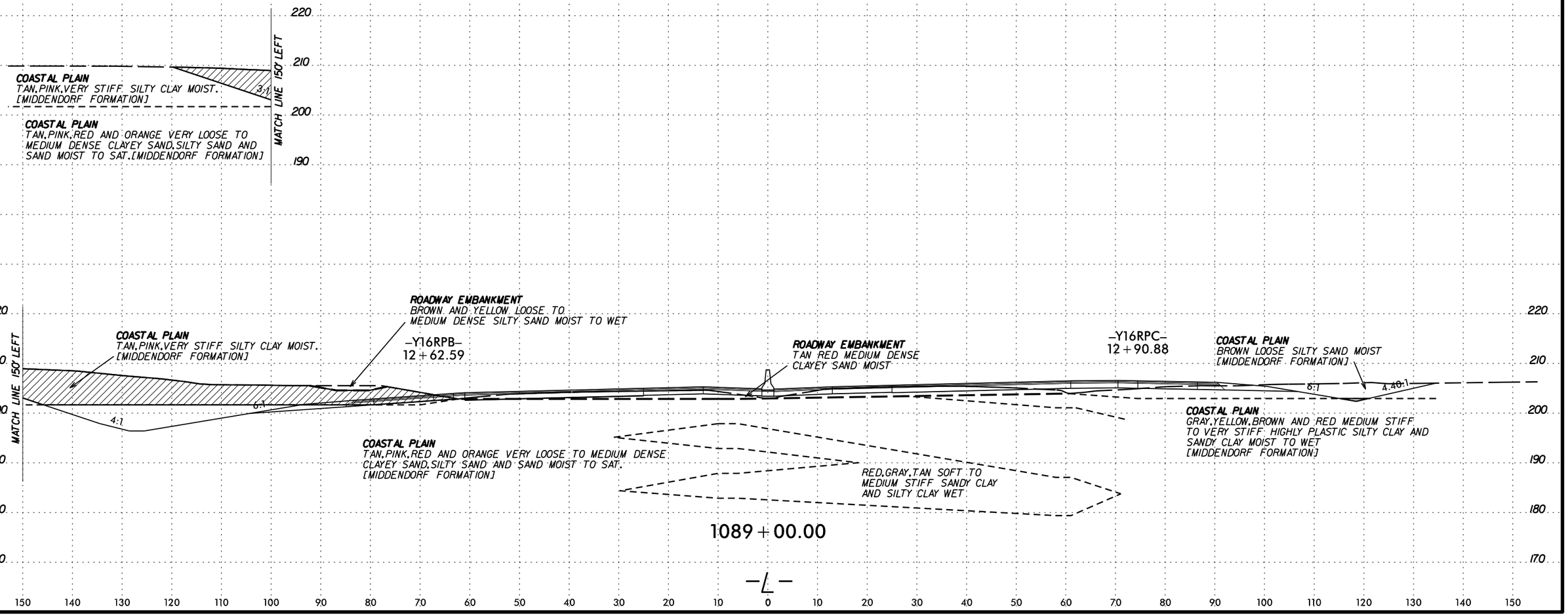
-L-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	17

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



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	18

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

220
210
200
190
180
170

MATCH LINE 150' LEFT

COASTAL PLAIN
TAN,PINK,VERY STIFF SILTY CLAY MOIST.
[MIDDENDORF FORMATION]

3:1

COASTAL PLAIN
TAN,PINK,RED AND ORANGE
VERY LOOSE TO MEDIUM DENSE
CLAYEY SAND,SILTY SAND AND SAND
MOIST TO SAT.
[MIDDENDORF FORMATION]

MATCH LINE 150' LEFT

COASTAL PLAIN
TAN,PINK,VERY STIFF SILTY CLAY MOIST.
[MIDDENDORF FORMATION]

6:1

4:1

ROADWAY EMBANKMENT
BROWN AND YELLOW LOOSE TO
MEDIUM DENSE SILTY SAND MOIST TO WET

–Y16RPB–
13+11.97

ROADWAY EMBANKMENT
TAN RED MEDIUM DENSE
CLAYEY SAND MOIST

–Y16RPC–
13+41.05

COASTAL PLAIN
BROWN LOOSE SILTY SAND MOIST
[MIDDENDORF FORMATION]

6:1

4.2:1

COASTAL PLAIN
TAN,PINK,RED AND ORANGE
VERY LOOSE TO MEDIUM DENSE
CLAYEY SAND,SILTY SAND AND SAND
MOIST TO SAT.
[MIDDENDORF FORMATION]

RED,GRAY,TAN SOFT TO
MEDIUM STIFF SANDY CLAY
AND SILTY CLAY WET

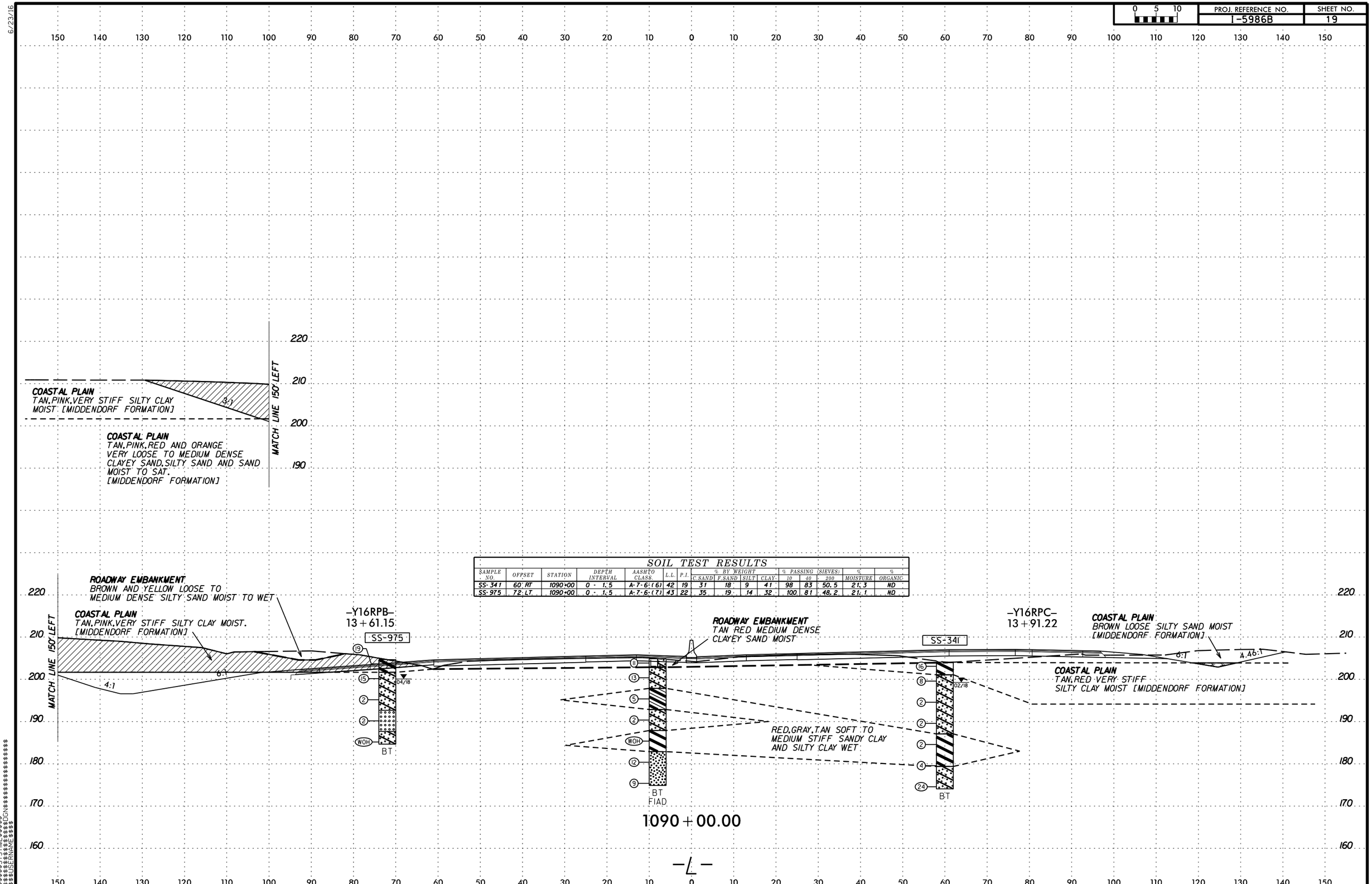
COASTAL PLAIN
GRAY,YELLOW,BROWN AND RED MEDIUM STIFF
TO VERY STIFF HIGHLY PLASTIC SILTY CLAY AND
SANDY CLAY MOIST TO WET
[MIDDENDORF FORMATION]

1089+50.00

–L–

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

PROJ. REFERENCE NO. I-5986B | SHEET NO. 19



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-341	60 RT	1090+00	0 - 1.5	A-7-6-(6)	42	19	31	18	9	41	98	83	50.5	21.3	ND
SS-975	72 LT	1090+00	0 - 1.5	A-7-6-(7)	43	22	35	19	14	32	100	81	48.2	21.1	ND

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	20

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**
RED,YELLOW,TAN AND BROWN MEDIUM STIFF TO HARD HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
TAN,PINK,RED AND ORANGE VERY LOOSE TO MEDIUM DENSE CLAYEY SAND,SILTY SAND AND SAND MOIST TO SAT. [MIDDENDORF FORMATION]

MATCH LINE 150' LEFT

220 210 200 190

SOIL TEST RESULTS																
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			%	%
							C.SAND	F.SAND	SILT	CLAY	10	40	200	MOISTURE	ORGANIC
SS-278	96' LT.	1090+64	3.5-5.0	A-7-5-(12)	57	26	31	17	5	47	100	86	54.4	26.8	ND

220 210 200 190 180 170

ROADWAY EMBANKMENT
BROWN AND YELLOW LOOSE TO MEDIUM DENSE SILTY SAND MOIST TO WET

1090+64
SS-278

–Y16RPB–
14+10.09

Ⓐ **COASTAL PLAIN**
RED,YELLOW,TAN AND BROWN MEDIUM STIFF TO HARD HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
TAN RED MEDIUM DENSE CLAYEY SAND MOIST

COASTAL PLAIN
TAN,RED VERY STIFF SILTY CLAY MOIST [MIDDENDORF FORMATION]

–Y16RPC–
14+41.37

COASTAL PLAIN
BROWN LOOSE SILTY SAND [MIDDENDORF FORMATION]

MATCH LINE 150' LEFT

6:1 4:1 Ⓐ 6:1 4:1 6:1 4:1

9 22 10 2 1 WOH 2

RED AND BROWN SOFT SILTY CLAY WET

BT
FIAD

COASTAL PLAIN
TAN,PINK,RED AND ORANGE VERY LOOSE TO MEDIUM DENSE CLAYEY SAND,SILTY SAND AND SAND MOIST TO SAT. [MIDDENDORF FORMATION]

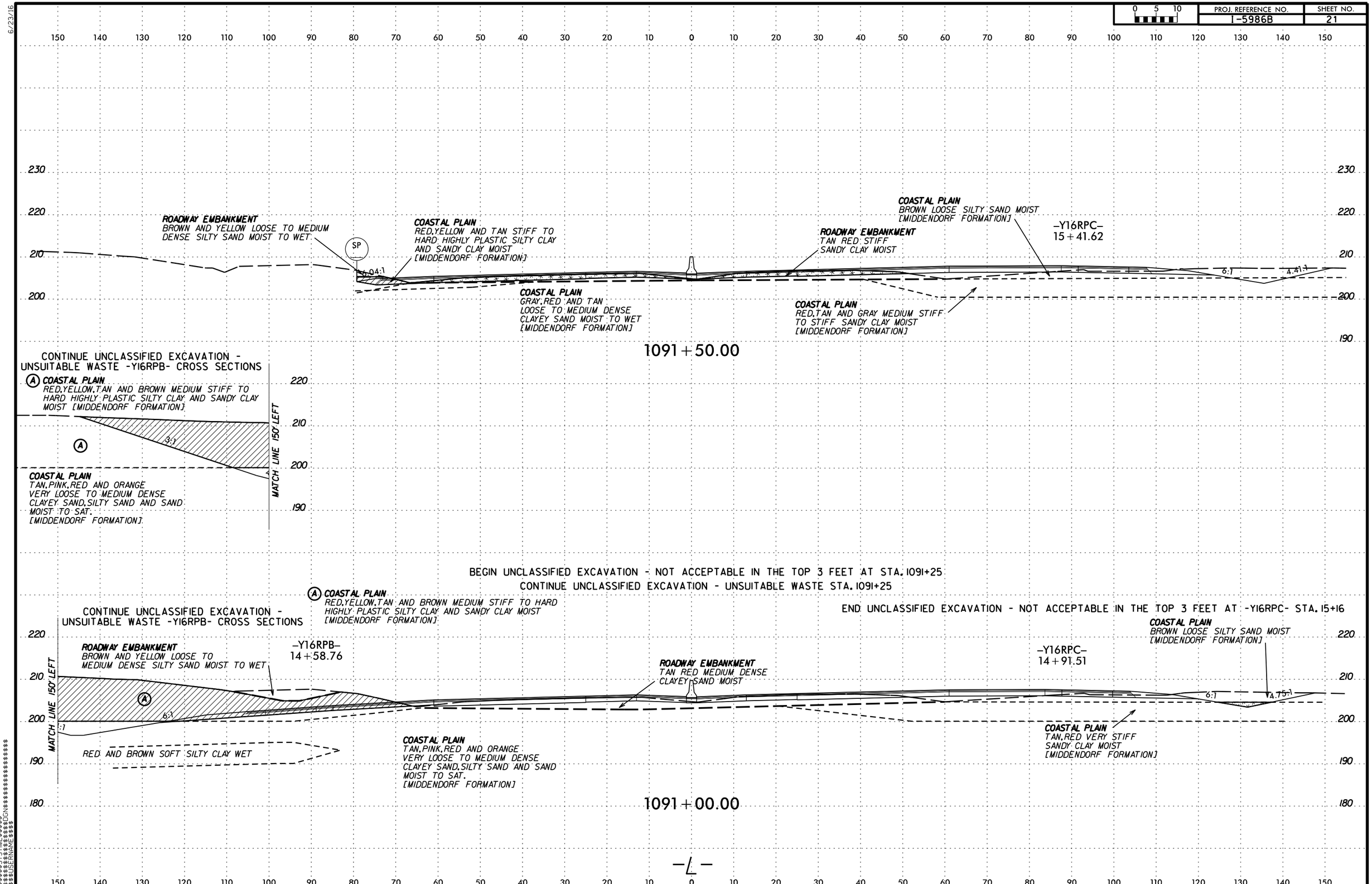
RED,GRAY,TAN SOFT TO MEDIUM STIFF SANDY CLAY AND SILTY CLAY WET

1090+50.00

–L–

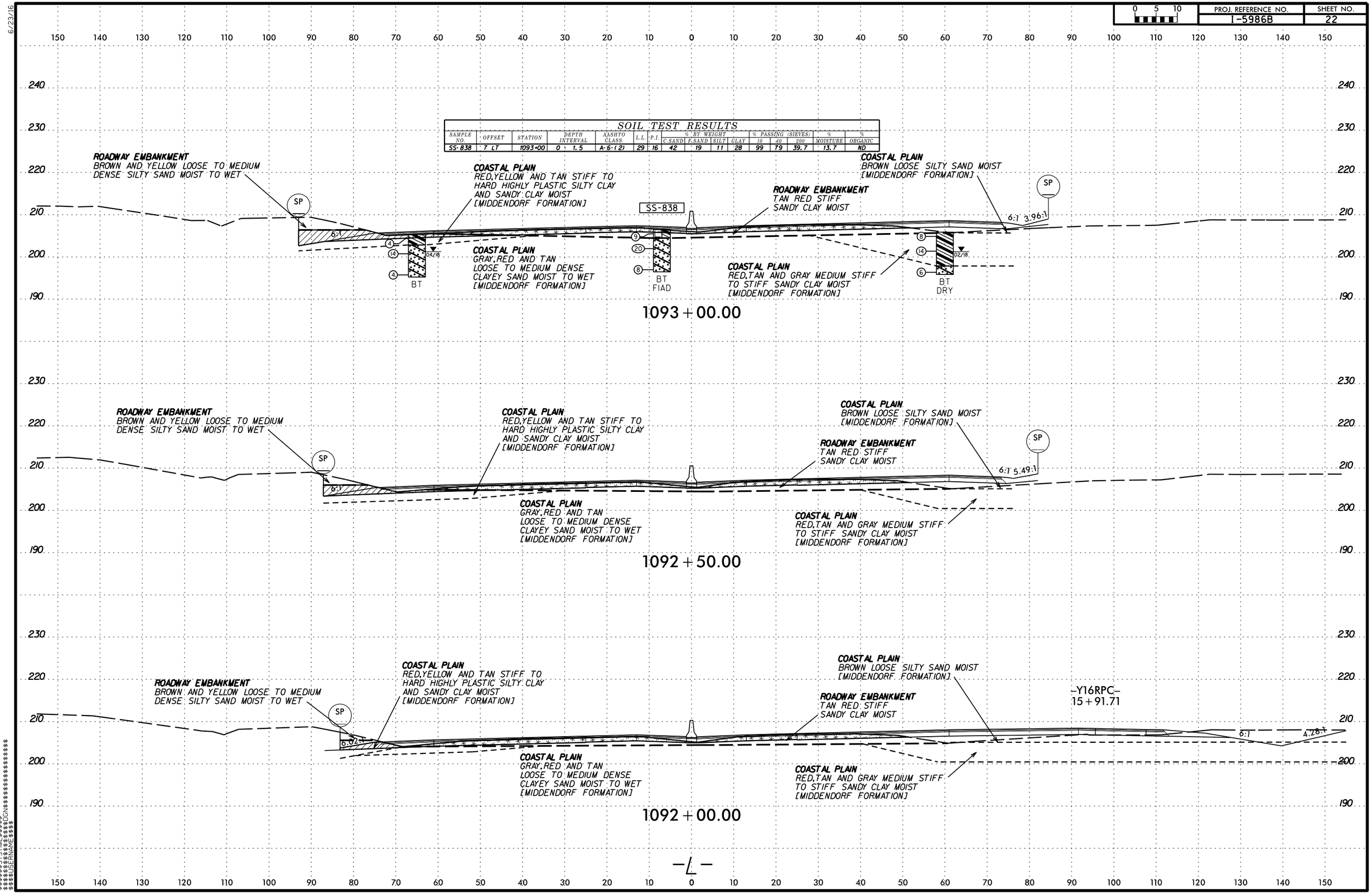
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$



PROJ. REFERENCE NO.
I-5986B
SHEET NO.
21
ROADWAY EMBANKMENT
BROWN AND YELLOW LOOSE TO MEDIUM DENSE SILTY SAND MOIST TO WET
SP
COASTAL PLAIN
RED,YELLOW AND TAN STIFF TO HARD HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]
COASTAL PLAIN
GRAY,RED AND TAN LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]
ROADWAY EMBANKMENT
TAN RED STIFF SANDY CLAY MOIST
COASTAL PLAIN
BROWN LOOSE SILTY SAND MOIST [MIDDENDORF FORMATION]
-Y16RPC-
15+41.62
COASTAL PLAIN
RED,TAN AND GRAY MEDIUM STIFF TO STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]
1091+50.00
CONTINUE UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE -Y16RPB- CROSS SECTIONS
A COASTAL PLAIN
RED,YELLOW,TAN AND BROWN MEDIUM STIFF TO HARD HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]
COASTAL PLAIN
TAN,PINK,RED AND ORANGE VERY LOOSE TO MEDIUM DENSE CLAYEY SAND,SILTY SAND AND SAND MOIST TO SAT. [MIDDENDORF FORMATION]
MATCH LINE 150' LEFT
BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 1091+25
CONTINUE UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA. 1091+25
END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT -Y16RPC- STA. 15+16
CONTINUE UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE -Y16RPB- CROSS SECTIONS
ROADWAY EMBANKMENT
BROWN AND YELLOW LOOSE TO MEDIUM DENSE SILTY SAND MOIST TO WET
-Y16RPB-
14+58.76
ROADWAY EMBANKMENT
TAN RED MEDIUM DENSE CLAYEY SAND MOIST
-Y16RPC-
14+91.51
COASTAL PLAIN
BROWN LOOSE SILTY SAND MOIST [MIDDENDORF FORMATION]
RED AND BROWN SOFT SILTY CLAY WET
COASTAL PLAIN
TAN,PINK,RED AND ORANGE VERY LOOSE TO MEDIUM DENSE CLAYEY SAND,SILTY SAND AND SAND MOIST TO SAT. [MIDDENDORF FORMATION]
COASTAL PLAIN
TAN,RED VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]
1091+00.00
-L-

PROJ. REFERENCE NO. I-5986B | SHEET NO. 22



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-838	7 LT	1093+00	0 - 1.5	A-6-(2)	29	16	42	19	11	28	99	79	39.7	13.7	ND

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	23

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

230 220 210 200 190

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

3:1 4:1 6:1 6:1 4:1 SP

COASTAL PLAIN
GRAY,RED,ORANGE AND TAN VERY LOOSE TO MEDIUM DENSE
CLAYEY SAND MOIST TO WET
[MIDDENDORF FORMATION]

COASTAL PLAIN
BROWN MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]

1094+50.00

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 1094+25

ROADWAY EMBANKMENT
BROWN AND YELLOW LOOSE TO MEDIUM
DENSE SILTY SAND MOIST TO WET

SP 6:1

COASTAL PLAIN
RED,YELLOW AND TAN STIFF TO
HARD HIGHLY PLASTIC SILTY CLAY
AND SANDY CLAY MOIST
[MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

6:1 3.62:1 SP

COASTAL PLAIN
GRAY,RED AND TAN
LOOSE TO MEDIUM DENSE
CLAYEY SAND MOIST TO WET
[MIDDENDORF FORMATION]

1094+00.00

ROADWAY EMBANKMENT
BROWN AND YELLOW LOOSE TO MEDIUM
DENSE SILTY SAND MOIST TO WET

SP 6:1

COASTAL PLAIN
RED,YELLOW AND TAN STIFF TO
HARD HIGHLY PLASTIC SILTY CLAY
AND SANDY CLAY MOIST
[MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

COASTAL PLAIN
BROWN LOOSE SILTY SAND MOIST
[MIDDENDORF FORMATION]

6:1 3.58:1 SP

COASTAL PLAIN
GRAY,RED AND TAN
LOOSE TO MEDIUM DENSE
CLAYEY SAND MOIST TO WET
[MIDDENDORF FORMATION]

COASTAL PLAIN
RED,TAN AND GRAY MEDIUM STIFF
TO STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]

1093+50.00

180

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$$$USERNAME$$$$

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

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	24

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

240 230 220 210 200 190

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING SIEVES: 10	40	200	% MOISTURE	% ORGANIC
SS-351	69 RT	1096+00	0 - 1.5	A-6-(3)	35	13	32	19	6	42	98	83	48.9	22.4	ND

3:1 4:1 6:1

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

SS-351

6:1

COASTAL PLAIN
GRAY,RED,ORANGE AND TAN
VERY LOOSE TO MEDIUM DENSE
CLAYEY SAND MOIST TO WET
[MIDDENDORF FORMATION]

9 25 3 04/18 BT

11 14 11 BT FIAD

5 26 5 02/18 BT FIAD

COASTAL PLAIN
BROWN MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]

1096+00.00

3:1 4:1 6:1

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

6:1 4.44:1

COASTAL PLAIN
GRAY,RED,ORANGE AND TAN VERY LOOSE TO MEDIUM DENSE
CLAYEY SAND MOIST TO WET
[MIDDENDORF FORMATION]

COASTAL PLAIN
BROWN MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]

1095+50.00

3:1 4:1 6:1

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

SP.

6:1 4.05:1

COASTAL PLAIN
GRAY,RED,ORANGE AND TAN VERY LOOSE TO MEDIUM DENSE
CLAYEY SAND MOIST TO WET
[MIDDENDORF FORMATION]

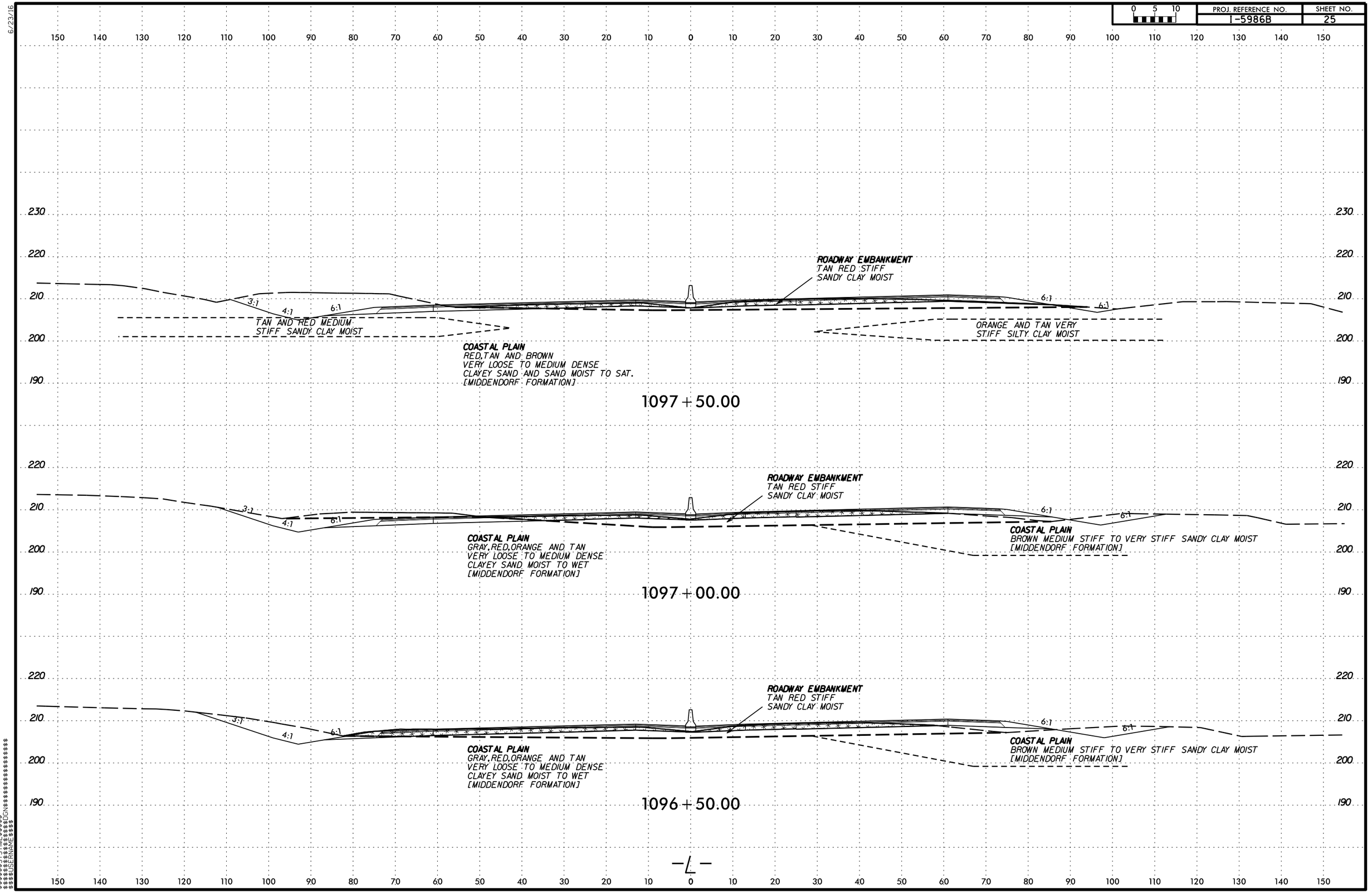
COASTAL PLAIN
BROWN MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]

1095+00.00

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	25



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
I-5986B	26

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

230 220 210 200 190

3:1 4:1 6:1

TAN AND RED MEDIUM STIFF SANDY CLAY MOIST

COASTAL PLAIN
RED,TAN AND BROWN
VERY LOOSE TO MEDIUM DENSE
CLAYEY SAND AND SAND MOIST TO SAT.
[MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

6:1 6:1

ORANGE AND TAN VERY STIFF SILTY CLAY MOIST

1098+50.00

220 210 200 190 180

3:1 4:1 6:1

TAN AND RED MEDIUM STIFF SANDY CLAY MOIST

COASTAL PLAIN
RED,TAN AND BROWN
VERY LOOSE TO MEDIUM DENSE
CLAYEY SAND AND SAND MOIST TO SAT.
[MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

6:1 6:1

ORANGE AND TAN VERY STIFF SILTY CLAY MOIST

1098+00.00

-L-

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

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	27

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

220 210 200 190

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

3:1 4:1 6:1

TAN AND RED MEDIUM
STIFF SANDY CLAY MOIST

COASTAL PLAIN
RED,TAN AND BROWN
VERY LOOSE TO MEDIUM DENSE
CLAYEY SAND AND SAND MOIST TO SAT.
[MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

6:1

ORANGE AND TAN VERY
STIFF SILTY CLAY MOIST

1100+00.00

220 210 200 190 180

3:1

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

4:1 6:1

TAN AND RED MEDIUM
STIFF SANDY CLAY MOIST

COASTAL PLAIN
RED,TAN AND BROWN
VERY LOOSE TO MEDIUM DENSE
CLAYEY SAND AND SAND MOIST TO SAT.
[MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

6:1 4:1 3:1

ORANGE AND TAN VERY
STIFF SILTY CLAY MOIST

1099+50.00

230 220 210 200 190 180 170

SOIL TEST RESULTS																
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) #10	#40	#200	% MOISTURE	% ORGANIC
SS-828	7 LT	1099+00	0 - 1.5	A-6-(2)	30	17	41	20	10	28	96	78	38.8	11.2	ND
SS-964	62 LT	1099+00	0 - 1.5	A-6-(3)	33	15	35	22	10	33	100	85	45.4	18.4	ND

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

3:1 4:1 6:1

SS-964

7 8 3 1 2 — 04/18 — BT

TAN AND RED MEDIUM
STIFF SANDY CLAY MOIST

COASTAL PLAIN
RED,TAN AND BROWN
VERY LOOSE TO MEDIUM DENSE
CLAYEY SAND AND SAND MOIST TO SAT.
[MIDDENDORF FORMATION]

SS-828

12 19 3 2 4 3 9 — 04/18 — BT FIAD

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

6:1 4.15:1

8 21 3 2 WOH 1 — 02/18 — BT

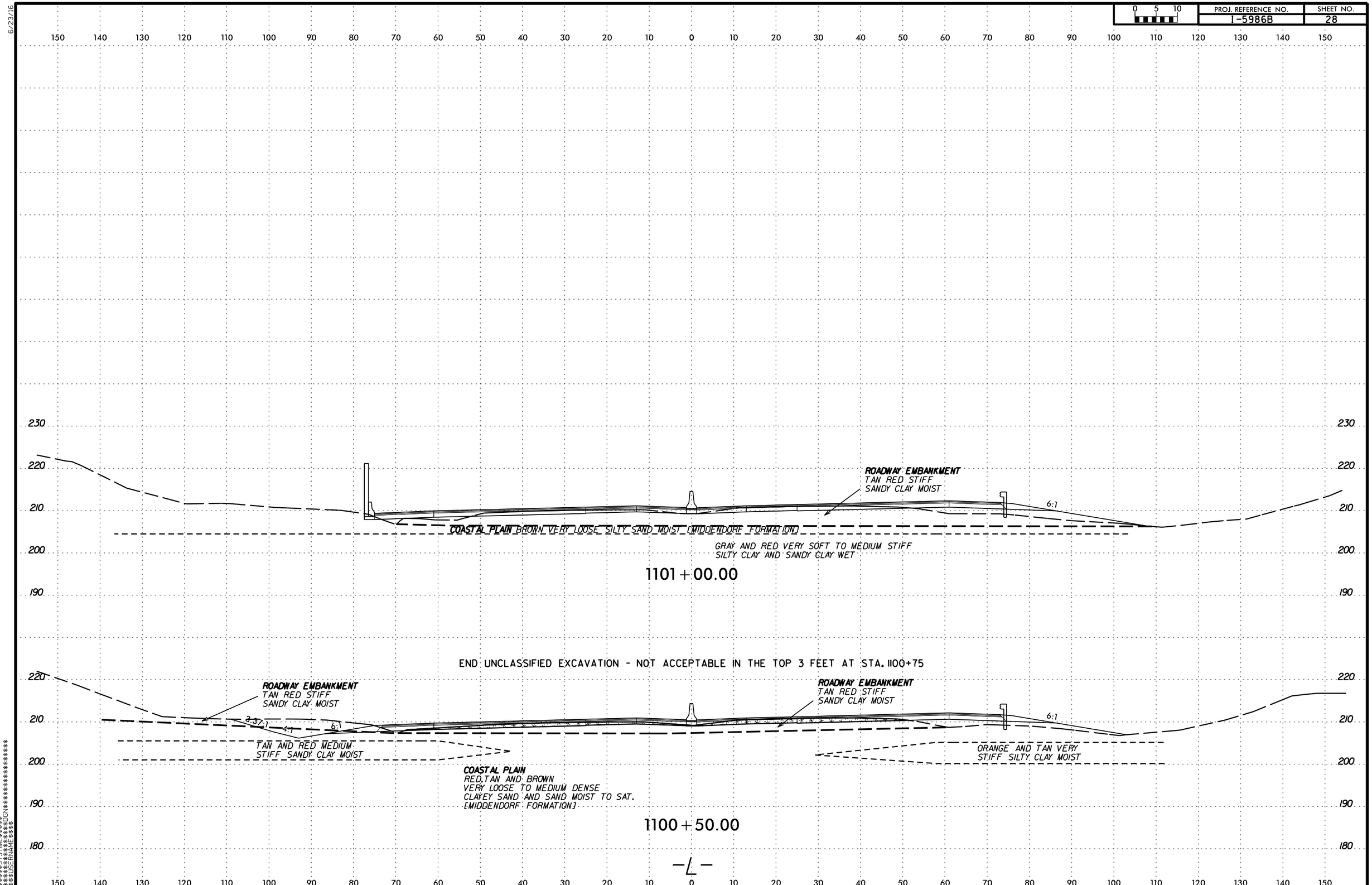
ORANGE AND TAN VERY
STIFF SILTY CLAY MOIST

1099+00.00

—℄—

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

$$$$$$$SYSTIME$$$$$
$$$$$$$



PROJ. REFERENCE NO.
I-5986B
SHEET NO.
28
ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST
6:1
COASTAL PLAIN BROWN VERY LOOSE SILTY SAND MOIST [MIDDENDORF FORMATION]
GRAY AND RED VERY SOFT TO MEDIUM STIFF
SILTY CLAY AND SANDY CLAY WET
1101+00.00
END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 1100+75
ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST
3.37:1
4:1
6:1
TAN AND RED MEDIUM
STIFF SANDY CLAY MOIST
COASTAL PLAIN
RED,TAN AND BROWN
VERY LOOSE TO MEDIUM DENSE
CLAYEY SAND AND SAND MOIST TO SAT.
[MIDDENDORF FORMATION]
ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST
6:1
ORANGE AND TAN VERY
STIFF SILTY CLAY MOIST
1100+50.00
-L-

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	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

230
220
210
200

ROADWAY EMBANKMENT
BROWN RED STIFF
SANDY CLAY MOIST

6:1 6:1

COASTAL PLAIN RED,TAN,BROWN AND GRAY
STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

GRAY AND RED LOOSE CLAYEY SAND MOIST

1104+00.00

BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 1103+75

ROADWAY EMBANKMENT
BROWN RED MEDIUM DENSE
CLAYEY SAND MOIST

3:1 4:1 6:1

COASTAL PLAIN
GRAY,TAN,RED LOOSE
CLAYEY SAND MOIST

1103+50.00

ROADWAY EMBANKMENT
BROWN GRAY TAN LOOSE TO MEDIUM DENSE
SILTY SAND AND CLAYEY SAND MOIST

6:1 4:1 3:1

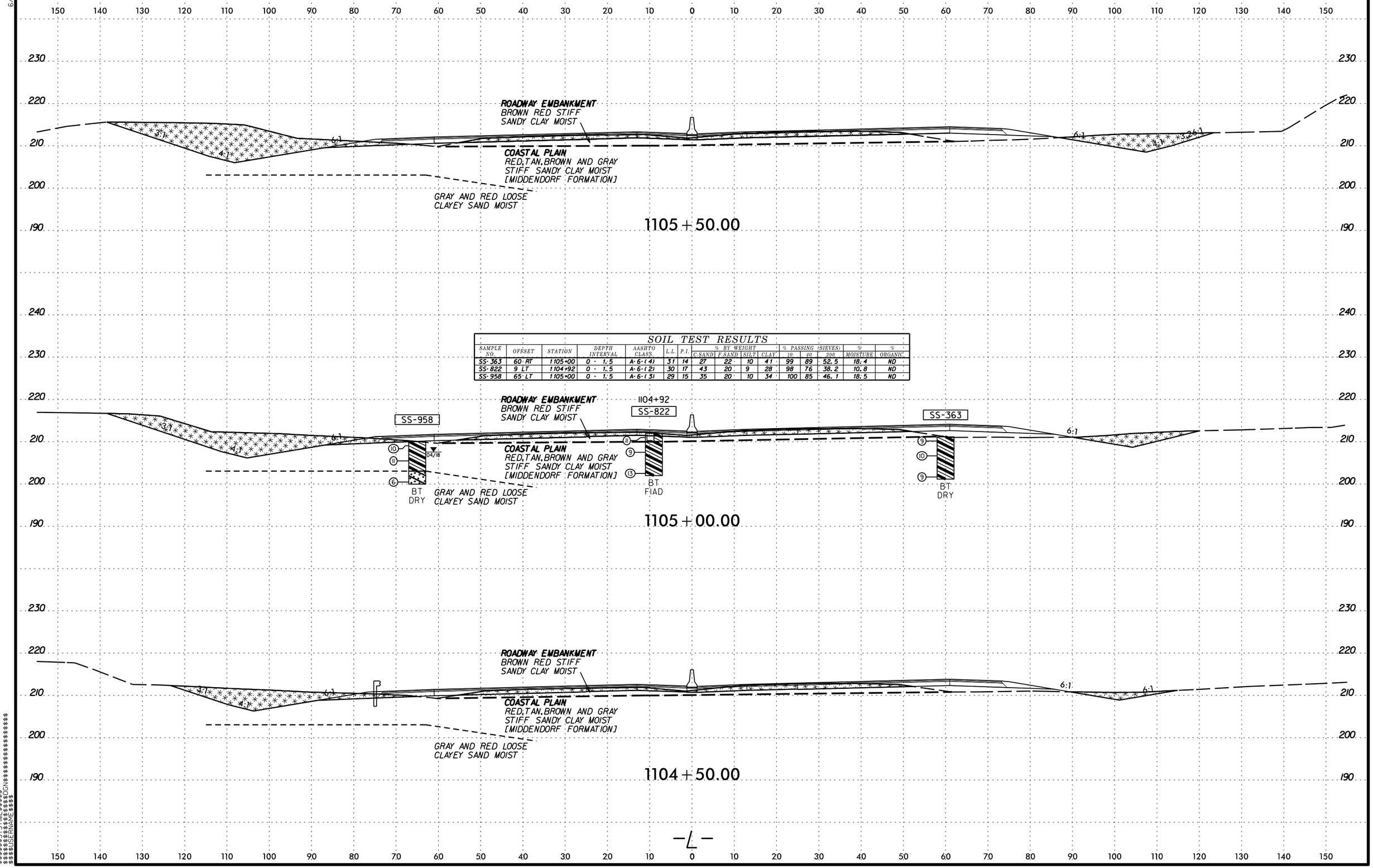
230
220
210
200
190

—L—

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

$$$$USERNAME$$$$ $$$$SYSTIME$$$$

PROJ. REFERENCE NO. I-5986B | SHEET NO. 30



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-363	60 RT	1105+00	0 - 1.5	A-6-(4)	31	14	27	22	10	41	99	89	52.5	18.4	ND
SS-822	9 LT	1104+92	0 - 1.5	A-6-(2)	30	17	43	20	9	28	98	76	38.2	10.8	ND
SS-958	65 LT	1105+00	0 - 1.5	A-6-(3)	29	15	35	20	10	34	100	85	46.1	18.5	ND

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	31

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

230 220 210 200 190

SP

ROADWAY EMBANKMENT
BROWN RED STIFF
SANDY CLAY MOIST

6:1

COASTAL PLAIN
RED,TAN,GRAY LOOSE
TO MEDIUM DENSE
CLAYEY SAND MOIST TO SAT.
[MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
BROWN MEDIUM DENSE
SILTY SAND MOIST

6:1 4:1 3:1

COASTAL PLAIN
BROWN LOOSE TO MEDIUM DENSE
CLAYEY SAND AND SILTY SAND MOIST
[MIDDENDORF FORMATION]

GRAY,RED AND BROWN MEDIUM STIFF
TO TO VERY STIFF SILTY CLAY MOIST

1107+00.00

END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 1106+75

SP

ROADWAY EMBANKMENT
BROWN RED STIFF
SANDY CLAY MOIST

4.00%

6:1 4:1

1106+29

ROADWAY EMBANKMENT
BROWN RED STIFF
SANDY CLAY MOIST

7
9
11

B.T
DRY

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF
TO STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

GRAY MEDIUM DENSE CLAYEY SAND MOIST

6:1 4:1 3:1

1106+50.00

ROADWAY EMBANKMENT
BROWN RED STIFF
SANDY CLAY MOIST

3:1 4:1 6:1

COASTAL PLAIN RED,TAN,BROWN AND GRAY
STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

GRAY AND RED LOOSE
CLAYEY SAND MOIST

6:1 4:1 3:1 3:2:1

1106+00.00

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

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

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	32

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

240
230
220
210
200

ROADWAY EMBANKMENT
GRAY STIFF TO MEDIUM STIFF CLAYEY SAND MOIST

PAVEMENT

–Y16RPA–
18+43.96

COASTAL PLAIN
GRAY SOFT TO STIFF SILTY SAND MOIST TO WET [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
TAN,RED,BROWN STIFF TO MEDIUM STIFF SANDY CLAY MOIST

3:1 4:1 6:1

COASTAL PLAIN
TAN,RED,GRAY SOFT TO STIFF SANDY CLAY AND SILTY CLAY MOIST TO WET [MIDDENDORF FORMATION]

1109+50.00

–Y16RPD–
14+00.36

COASTAL PLAIN
GRAY,RED AND BROWN SOFT TO STIFF SILTY SAND MOIST TO WET [MIDDENDORF FORMATION]

6:1 4:1 3

230
220
210
200
190

ROADWAY EMBANKMENT
GRAY STIFF TO MEDIUM STIFF CLAYEY SAND MOIST

PAVEMENT

SP

6 11:1

ROADWAY EMBANKMENT
TAN,RED,BROWN STIFF TO MEDIUM STIFF SANDY CLAY MOIST

SP

6:1 3:1

COASTAL PLAIN
GRAY SOFT TO STIFF SILTY SAND MOIST TO WET [MIDDENDORF FORMATION]

TAN,RED,GRAY SOFT TO STIFF SANDY CLAY AND SILTY CLAY MOIST TO WET [MIDDENDORF FORMATION]

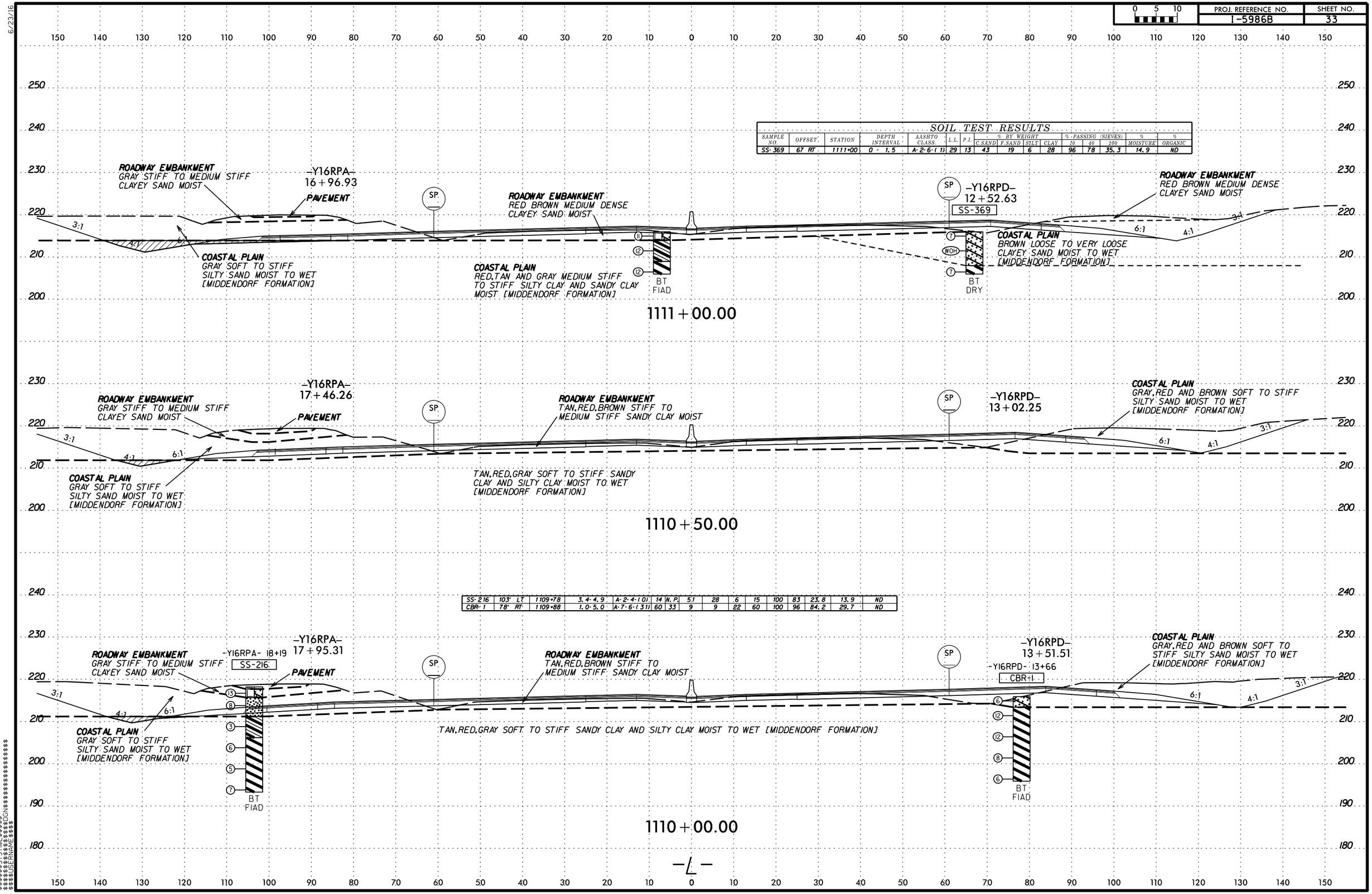
1109+00.00

–L–

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

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

PROJ. REFERENCE NO.	SHEET NO.
I-5986B	33



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-369	67 RT	1111+00	0 - 1.5	A-2-6-(1)	29	13	43	19	6	28	96	78	35.3	14.9	ND
SS-216	103' LT	1109+78	3.4-4.9	A-2-4-(0)	14	N.P.	51	28	6	15	100	83	23.8	13.9	ND
CBR-1	78' RT	1109+88	1.0-5.0	A-7-6-(31)	60	33	9	9	22	60	100	96	84.2	29.7	ND

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	34

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

250 240 230 220 210 200

Ⓐ **COASTAL PLAIN**
GRAY,TAN AND RED LOOSE TO MEDIUM DENSE CLAYEY SAND AND SILTY SAND MOIST [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE TO MEDIUM DENSE SILTY SAND AND CLAYEY SAND MOIST

–Y16RPA–
15+47.90

PAVEMENT

SP

ROADWAY EMBANKMENT
RED BROWN MEDIUM STIFF SANDY CLAY MOIST

SP

–Y16RPD–
11+02.44

PAVEMENT

3:1 Ⓐ 4:1 6:1 6:1 4:1 3:1

COASTAL PLAIN
TAN,RED,GRAY SOFT TO STIFF SANDY CLAY AND SILTY CLAY MOIST TO WET [MIDDENDORF FORMATION]

COASTAL PLAIN
BROWN LOOSE TO VERY LOOSE CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

1112+50.00

240 230 220 210 200

Ⓐ **COASTAL PLAIN**
GRAY,TAN AND RED LOOSE TO MEDIUM DENSE CLAYEY SAND AND SILTY SAND MOIST [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE TO MEDIUM DENSE SILTY SAND AND CLAYEY SAND MOIST

–Y16RPA–
15+97.62

PAVEMENT

SP

ROADWAY EMBANKMENT
RED BROWN MEDIUM DENSE CLAYEY SAND MOIST

SP

–Y16RPD–
11+52.65

ROADWAY EMBANKMENT
RED BROWN MEDIUM DENSE CLAYEY SAND MOIST

3:1 Ⓐ 4:1 6:1 6:1 4:1 3:1

COASTAL PLAIN
RED,TAN AND GRAY MEDIUM STIFF TO STIFF SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
BROWN LOOSE TO VERY LOOSE CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

1112+00.00

240 230 220 210 200

Ⓐ **COASTAL PLAIN**
GRAY,TAN AND RED LOOSE TO MEDIUM DENSE CLAYEY SAND AND SILTY SAND MOIST [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE TO MEDIUM DENSE SILTY SAND AND CLAYEY SAND MOIST

–Y16RPA–
16+47.34

PAVEMENT

SP

ROADWAY EMBANKMENT
RED BROWN MEDIUM DENSE CLAYEY SAND MOIST

SP

–Y16RPD–
12+02.74

ROADWAY EMBANKMENT
RED BROWN MEDIUM DENSE CLAYEY SAND MOIST

3:1 Ⓐ 4:1 6:1 6:1 4:1 3:1

COASTAL PLAIN
RED,TAN AND GRAY MEDIUM STIFF TO STIFF SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
BROWN LOOSE TO VERY LOOSE CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

1111+50.00

–L–

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

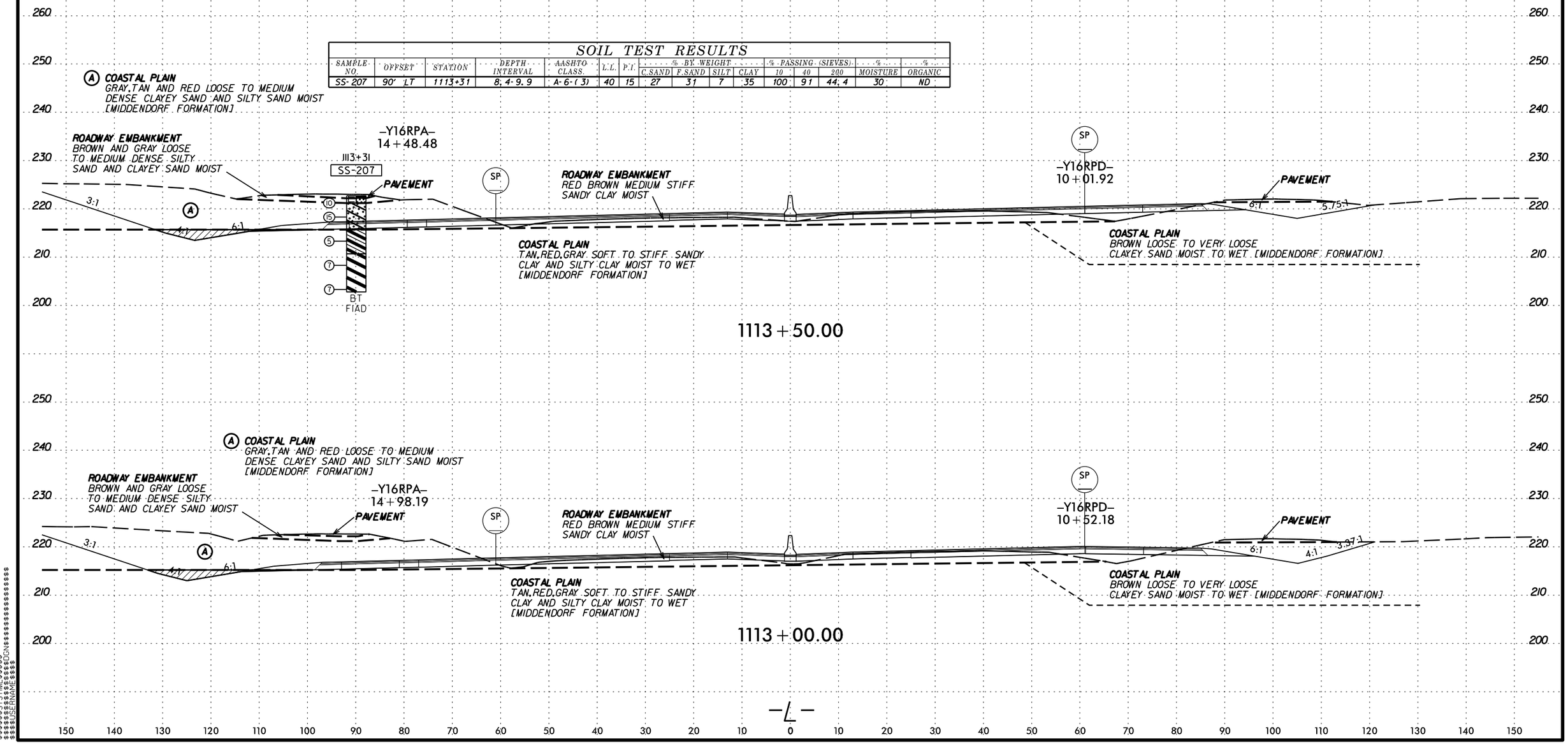
$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	35

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-207	90' LT	1113+31	8.4-9.9	A-6-(3)	40	15	27	31	7	35	100	91	44.4	30	ND



$$$$$$$SYSTIME$$$$$$
$$$$$$$

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	36

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

250 240 230 220 210 200 190

Ⓐ **COASTAL PLAIN**
GRAY,TAN AND RED LOOSE TO MEDIUM DENSE CLAYEY SAND AND SILTY SAND MOIST [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE TO MEDIUM DENSE SILTY SAND AND CLAYEY SAND MOIST

–Y16RPA–
13+49.12

PAVEMENT

SP

ROADWAY EMBANKMENT
RED BROWN MEDIUM STIFF SANDY CLAY MOIST

3:1 4:1 6:1 6:1 5.18:1

COASTAL PLAIN
TAN AND GRAY LOOSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
RED,TAN AND GRAY VERY SOFT TO MEDIUM STIFF SILTY CLAY AND SANDY CLAY MOIST TO WET [MIDDENDORF FORMATION]

COASTAL PLAIN
RED,TAN AND GRAY VERY SOFT TO MEDIUM STIFF SILTY CLAY AND SANDY CLAY MOIST TO WET [MIDDENDORF FORMATION]

TAN LOOSE SILTY SAND SAT.

1114+50.00

Ⓐ **COASTAL PLAIN**
GRAY,TAN AND RED LOOSE TO MEDIUM DENSE CLAYEY SAND AND SILTY SAND MOIST [MIDDENDORF FORMATION]

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS	L.L.	P.I.	% BY WEIGHT C SAND	F SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-811	7 LT	1114+00	3.5-5.0	A-6(9)	38	21	18	27	14	41	100	95	58.3	25.3	ND

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE TO MEDIUM DENSE SILTY SAND AND CLAYEY SAND MOIST

–Y16RPA–
13+98.78

PAVEMENT

SP

ROADWAY EMBANKMENT
RED BROWN MEDIUM STIFF SANDY CLAY MOIST

SS-811

3:1 4:1 6:1 6:1 4:1 3.51:1

COASTAL PLAIN
TAN AND GRAY LOOSE CLAYEY SAND MOIST [

COASTAL PLAIN
RED,TAN AND GRAY VERY SOFT TO MEDIUM STIFF SILTY CLAY AND SANDY CLAY MOIST TO WET [MIDDENDORF FORMATION]

8 5 3 3 4 6 — BT FIAD — TAN LOOSE SILTY SAND SAT.

10/17

10 10 3 3 2 — BT

02/18

1114+00.00

–L–

$$$$$$$SYSTIME$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	37

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

240 230 220 210 200 190

ROADWAY EMBANKMENT
BROWN AND GRAY MEDIUM DENSE SILTY SAND MOIST

3:1 4:1 6:1

PAVEMENT

–Y16RPA–
12+49.85
SP.

ROADWAY EMBANKMENT
RED BROWN MEDIUM STIFF SANDY CLAY MOIST

6:1 4.73:1

COASTAL PLAIN
GRAY,TAN,RED SOFT TO STIFF SILTY CLAY MOIST TO WET [MIDDENDORF FORMATION]

TAN AND PINK LOOSE SILTY SAND WET

GRAY,TAN,RED MEDIUM STIFF SILTY CLAY MOIST TO WET [MIDDENDORF FORMATION]

1115+50.00

Ⓐ **COASTAL PLAIN**
GRAY,TAN AND RED LOOSE TO MEDIUM DENSE CLAYEY SAND AND SILTY SAND MOIST [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
BROWN AND GRAY LOOSE TO MEDIUM DENSE SILTY SAND AND CLAYEY SAND MOIST

–Y16RPA–
12+99.49
SP.

PAVEMENT

3:1 Ⓐ 4:1 6:1

ROADWAY EMBANKMENT
RED BROWN MEDIUM STIFF SANDY CLAY MOIST

6:1 5.10:1

COASTAL PLAIN
TAN AND GRAY LOOSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
RED,TAN AND GRAY VERY SOFT TO MEDIUM STIFF SILTY CLAY AND SANDY CLAY MOIST TO WET [MIDDENDORF FORMATION]

TAN AND PINK LOOSE SILTY SAND WET

GRAY,TAN,RED MEDIUM STIFF SILTY CLAY MOIST TO WET [MIDDENDORF FORMATION]

1115+00.00

–℄–

180

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	38

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

240
230
220
210
200
190

ROADWAY EMBANKMENT
BROWN AND GRAY MEDIUM DENSE SILTY SAND MOIST

PAVEMENT

SP
–Y16RPA–
11+50.54

3:1
4:1
6:1

COASTAL PLAIN
GRAY,TAN,RED SOFT TO STIFF SILTY CLAY MOIST TO WET
[MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
BROWN RED LOOSE CLAYEY SAND MOIST

6:1
4.66:1

COASTAL PLAIN
RED,TAN ORANGE,PINK AND WHITE VERY LOOSE TO LOOSE SILTY SAND AND CLAYEY SAND MOIST TO WET
[MIDDENDORF FORMATION]

RED,TAN AND GRAY SOFT SILTY CLAY WET

1116+50.00

260
250
240
230
220
210
200
190

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) #10	#40	#200	% MOISTURE	% ORGANIC
SS-211	93' LT	1115+82	3.4-4.9	A-7-6-(7)	47	25	34	22	4	40	100	91	44.5	22.7	ND

ROADWAY EMBANKMENT
BROWN AND GRAY MEDIUM DENSE SILTY SAND MOIST

1115+82
SS-211

PAVEMENT

–Y16RPA–
12+00.20
SP

3:1
4:1
6:1

24
12
4
4
6

ROADWAY EMBANKMENT
BROWN,RED,TAN LOOSE TO MEDIUM DENSE CLAYEY SAND AND SILTY SAND MOIST

COASTAL PLAIN
TAN,WHITE,RED,GRAY VERY LOOSE TO LOOSE SILTY SAND AND CLAYEY SAND MOIST TO SAT.
[MIDDENDORF FORMATION]

6:1
4.33:1

COASTAL PLAIN
GRAY,TAN,RED SOFT TO STIFF SILTY CLAY MOIST TO WET
[MIDDENDORF FORMATION]

TAN AND PINK LOOSE SILTY SAND WET

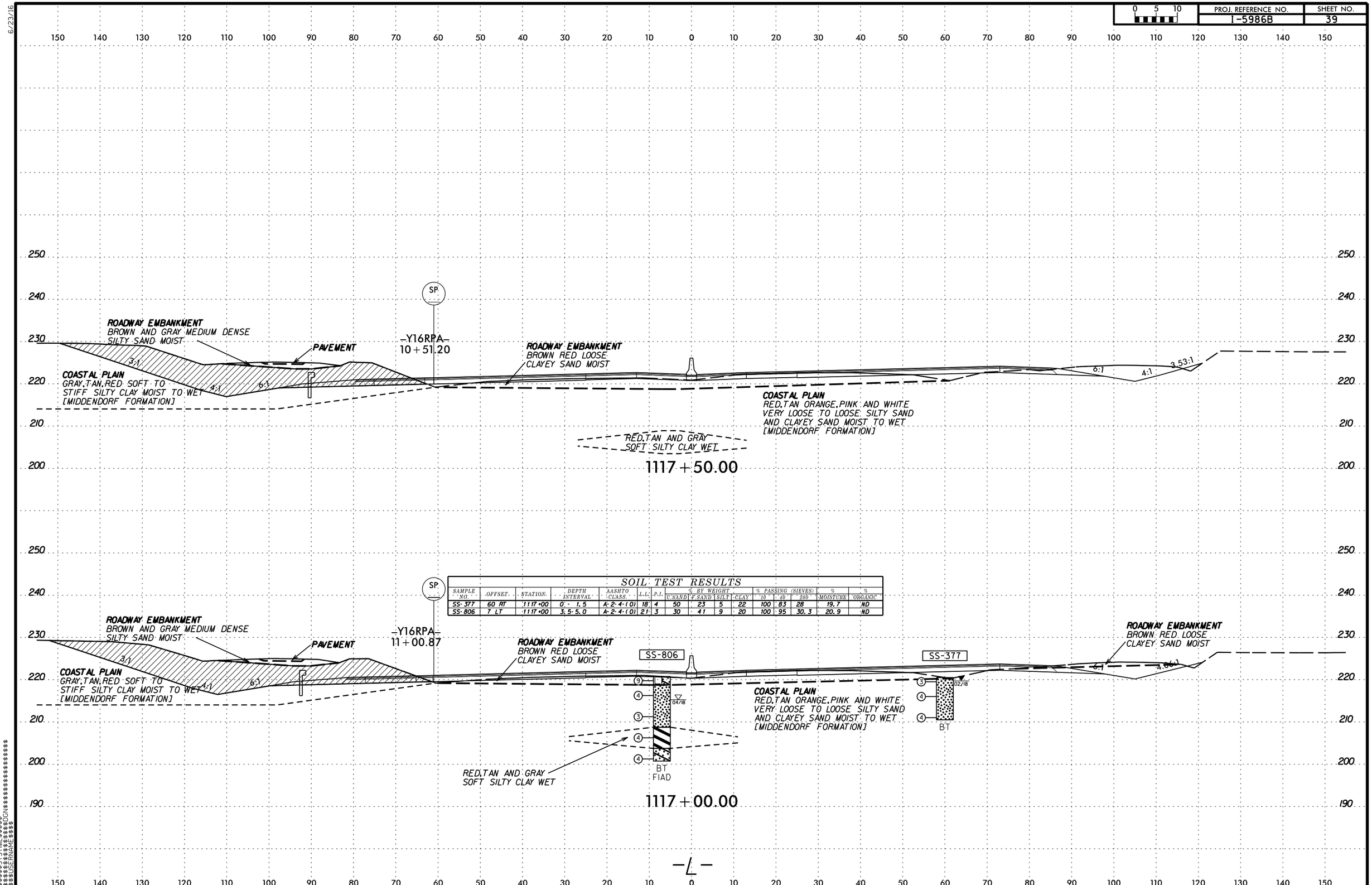
BT
FIAD

GRAY,TAN,RED MEDIUM STIFF SILTY CLAY MOIST TO WET
[MIDDENDORF FORMATION]

1116+00.00

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

PROJ. REFERENCE NO.	SHEET NO.
I-5986B	39



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-377	60 RT	1117+00	0 - 1.5	A-2-4-(0)	18	4	50	23	5	22	100	83	28	19.7	ND
SS-806	7 LT	1117+00	3.5-5.0	A-2-4-(0)	21	3	30	41	9	20	100	95	30.3	20.9	ND

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	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

240
230
220
210

ROADWAY EMBANKMENT
BROWN AND GRAY MEDIUM DENSE
SILTY SAND MOIST

PAVEMENT

3:1
4:1
6:1

ROADWAY EMBANKMENT
BROWN RED LOOSE
SILTY SAND MOIST

6:1
6:1

COASTAL PLAIN RED,TAN AND GRAY VERY LOOSE TO LOOSE SILTY SAND AND CLAYEY SAND MOIST TO SAT.
[MIDDENDORF FORMATION]

RED AND ORANGE MEDIUM
DENSE CLAYEY SAND WET

COASTAL PLAIN
RED,ORANGE AND GRAY SOFT TO MEDIUM STIFF
SILTY CLAY AND SANDY CLAY MOIST TO WET
[MIDDENDORF FORMATION]

1119+00.00

240
230
220
210

ROADWAY EMBANKMENT
BROWN AND GRAY MEDIUM DENSE
SILTY SAND MOIST

PAVEMENT

3:1
4:1
6:1

ROADWAY EMBANKMENT
BROWN RED LOOSE
SILTY SAND MOIST

6:1
6:1

COASTAL PLAIN RED,TAN AND GRAY VERY LOOSE TO LOOSE SILTY SAND AND CLAYEY SAND MOIST TO SAT.
[MIDDENDORF FORMATION]

RED AND ORANGE MEDIUM
DENSE CLAYEY SAND WET

COASTAL PLAIN
RED,ORANGE AND GRAY SOFT TO MEDIUM STIFF
SILTY CLAY AND SANDY CLAY MOIST TO WET
[MIDDENDORF FORMATION]

1118+50.00

250
240
230
220
210
200
190

UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT -Y16RPA- STA. 10+00

SP

-Y16RPA-
10+01.51

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 1118+25

ROADWAY EMBANKMENT
BROWN AND GRAY MEDIUM DENSE
SILTY SAND MOIST

PAVEMENT

3:1
4:1
6:1

COASTAL PLAIN
GRAY,TAN,RED SOFT TO
STIFF SILTY CLAY MOIST TO WET
[MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
BROWN RED LOOSE
CLAYEY SAND MOIST

6:1
4:1
3.37:1

COASTAL PLAIN
RED,TAN ORANGE,PINK AND WHITE
VERY LOOSE TO LOOSE SILTY SAND
AND CLAYEY SAND MOIST TO WET
[MIDDENDORF FORMATION]

RED,TAN AND GRAY
SOFT SILTY CLAY WET

1118+00.00

-L-

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

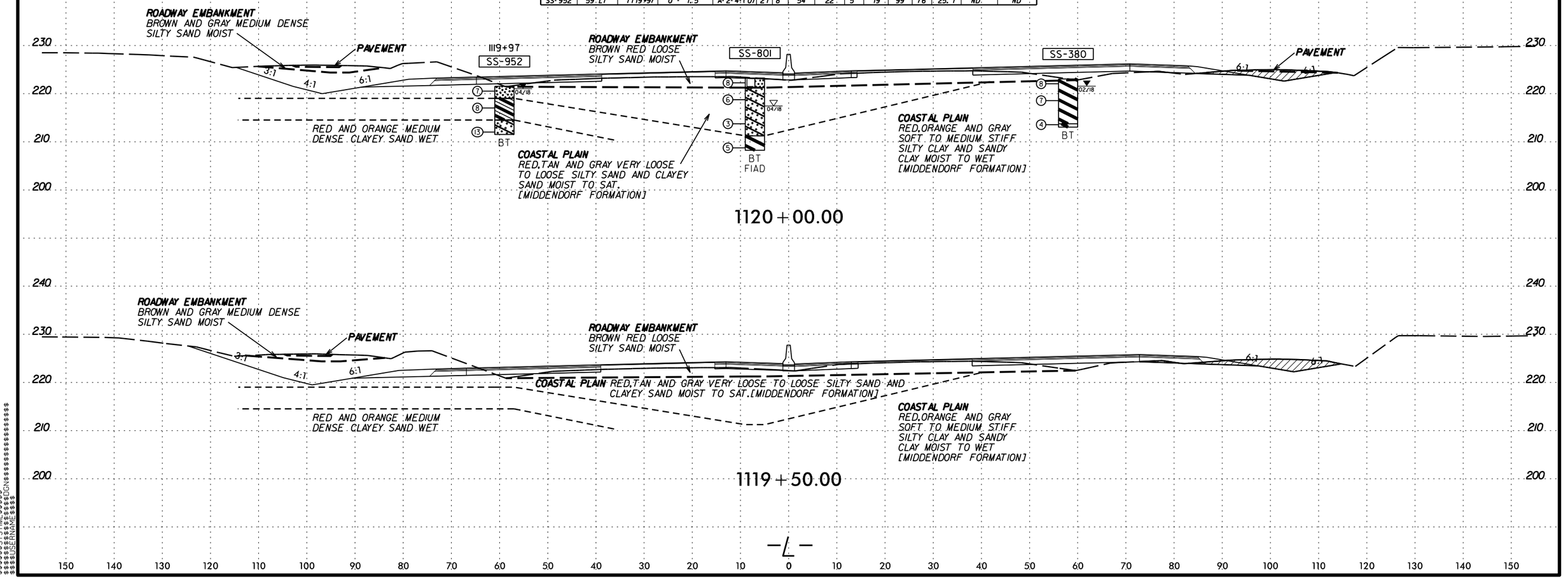
$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	41

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-380	58' RT	1120+00	0 - 1.5	A-7-6:(8)	55	35	47	13	4	36	100	78	41.1	24.2	ND
SS-801	7' LT	1120+00	0 - 1.5	A-2-4:(0)	23	10	58	17	6	19	96	59	25.7	ND	ND
SS-952	59' LT	1119+97	0 - 1.5	A-2-4:(0)	21	8	54	22	5	19	99	76	25.1	ND	ND



$$$$$$$SYSTIME$$$$$$
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6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	42

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

240
230
220
210
200

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 1121+75

PAVEMENT

3.02:1 4:1 6:1

ROADWAY EMBANKMENT
BROWN RED LOOSE
SILTY SAND MOIST

6:1 6:1

PAVEMENT

RED AND ORANGE MEDIUM
DENSE CLAYEY SAND WET

COASTAL PLAIN
RED,TAN AND GRAY VERY LOOSE
TO LOOSE SILTY SAND AND CLAYEY
SAND MOIST TO SAT.
[MIDDENDORF FORMATION]

COASTAL PLAIN
RED,ORANGE AND GRAY
SOFT TO MEDIUM STIFF
SILTY CLAY AND SANDY
CLAY MOIST TO WET
[MIDDENDORF FORMATION]

1121+50.00

PAVEMENT

3:1 4:1 6:1

ROADWAY EMBANKMENT
BROWN RED LOOSE
SILTY SAND MOIST

6:1 6:1

PAVEMENT

COASTAL PLAIN RED,TAN AND GRAY VERY LOOSE TO LOOSE SILTY SAND AND
CLAYEY SAND MOIST TO SAT.[MIDDENDORF FORMATION]

RED AND ORANGE MEDIUM
DENSE CLAYEY SAND WET

COASTAL PLAIN
RED,ORANGE AND GRAY
SOFT TO MEDIUM STIFF
SILTY CLAY AND SANDY
CLAY MOIST TO WET
[MIDDENDORF FORMATION]

1121+00.00

ROADWAY EMBANKMENT
BROWN AND GRAY MEDIUM DENSE
SILTY SAND MOIST

PAVEMENT

3:1 4:1 6:1

ROADWAY EMBANKMENT
BROWN RED LOOSE
SILTY SAND MOIST

6:1 6:1

PAVEMENT

COASTAL PLAIN RED,TAN AND GRAY VERY LOOSE TO LOOSE SILTY SAND AND
CLAYEY SAND MOIST TO SAT.[MIDDENDORF FORMATION]

RED AND ORANGE MEDIUM
DENSE CLAYEY SAND WET

COASTAL PLAIN
RED,ORANGE AND GRAY
SOFT TO MEDIUM STIFF
SILTY CLAY AND SANDY
CLAY MOIST TO WET
[MIDDENDORF FORMATION]

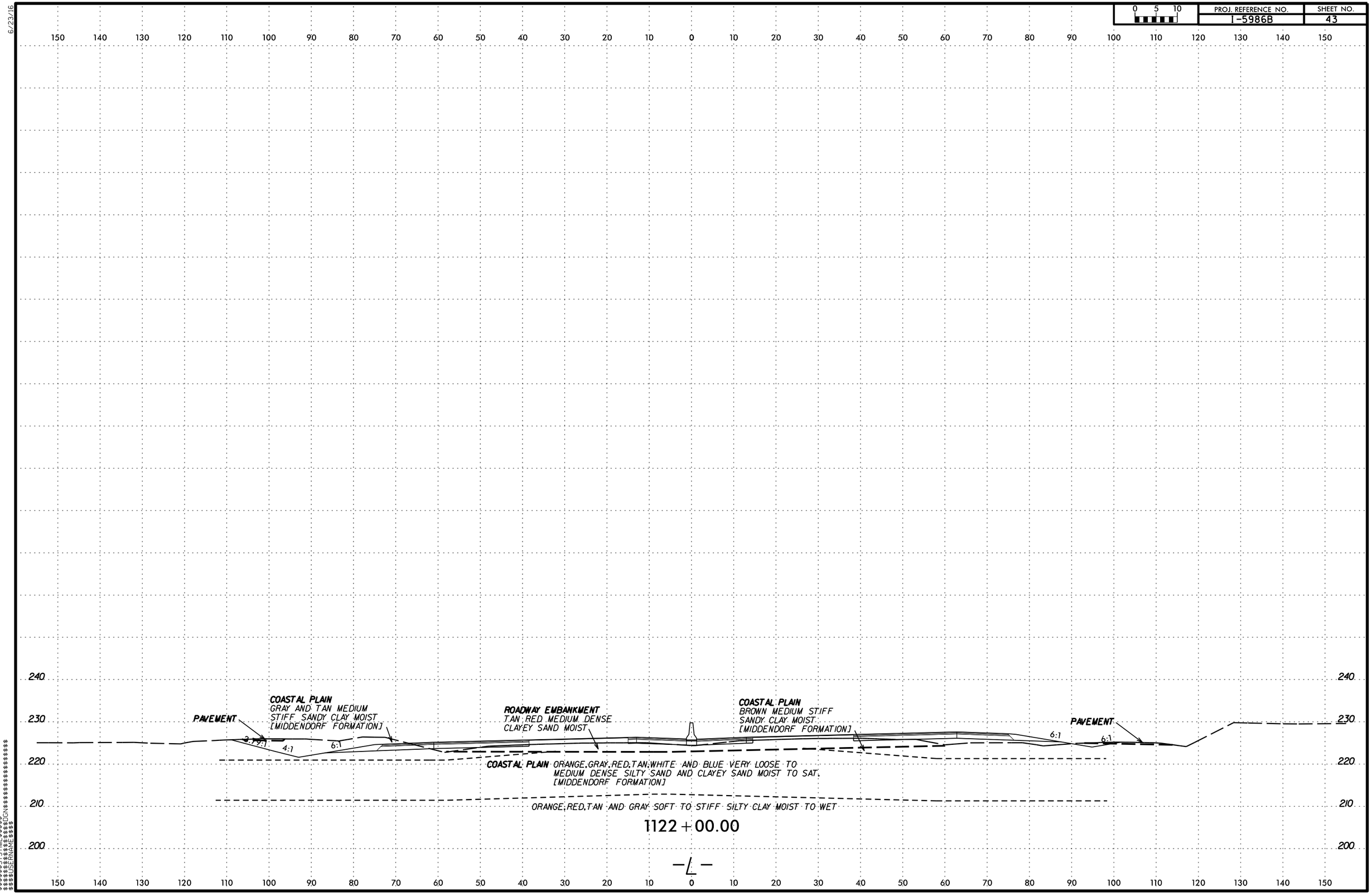
1120+50.00

—L—

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	43



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	44

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

250 240 230 220 210

COASTAL PLAIN
ORANGE AND RED STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

6:1 6:1

ROADWAY EMBANKMENT
BROWN RED LOOSE
CLAYEY SAND MOIST

COASTAL PLAIN
ORANGE,TAN,GRAY,PINK AND RED LOOSE TO MEDIUM
DENSE CLAYEY SAND AND SAND MOIST TO WET
[MIDDENDORF FORMATION]

MATCH TO -SR15-

COASTAL PLAIN
GRAY AND BROWN MEDIUM STIFF
TO VERY STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]

1134+00.00

250 240 230 220 210

COASTAL PLAIN
ORANGE AND RED STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

6:1 6:1

ROADWAY EMBANKMENT
BROWN RED LOOSE
CLAYEY SAND MOIST

COASTAL PLAIN
ORANGE,TAN,GRAY,PINK AND RED
LOOSE TO MEDIUM DENSE
CLAYEY SAND AND SAND MOIST TO WET
[MIDDENDORF FORMATION]

MATCH TO -SR15-

COASTAL PLAIN
GRAY AND BROWN MEDIUM STIFF
TO VERY STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]

1133+50.00

BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 1133+25

250 240 230 220 210

COASTAL PLAIN
ORANGE AND TAN MEDIUM
STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]

6:1

ROADWAY EMBANKMENT
TAN RED LOOSE
CLAYEY SAND MOIST

COASTAL PLAIN
ORANGE,TAN,GRAY AND RED VERY LOOSE TO DENSE
CLAYEY SAND,SILTY SAND AND SAND MOIST TO SAT.
[MIDDENDORF FORMATION]

GRAY,RED AND TAN SOFT
SANDY CLAY MOIST

MATCH TO -SR15-

COASTAL PLAIN
BROWN SOFT TO STIFF SANDY CLAY AND
SANDY SILT MOIST [MIDDENDORF FORMATION]

1133+00.00

—L—

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

$$$$$$$SYSTIME$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	45

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

250 240 230 220 210

COASTAL PLAIN
ORANGE AND RED STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

5.0:1 6:1

ROADWAY EMBANKMENT
BROWN RED LOOSE
CLAYEY SAND MOIST

COASTAL PLAIN
ORANGE,TAN,GRAY,PINK AND RED
LOOSE TO MEDIUM DENSE
CLAYEY SAND AND SAND MOIST TO WET
[MIDDENDORF FORMATION]

COASTAL PLAIN
GRAY AND BROWN VERY STIFF SILTY CLAY MOIST

GRAY,WHITE,RED AND TAN
VERY LOOSE TO DENSE SAND
AND CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

MATCH TO -SR15-

1135+50.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C SAND	F SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-396	60' RT	1135+00	0 - 1.5	A-6-(1)	27	12	35	19	9	28	91	72	38.8	13.4	ND
SS-784	7' LT	1135+00	0 - 1.5	A-2-6-(1)	31	17	45	17	9	29	88	61	35	9.8	ND

COASTAL PLAIN
ORANGE AND RED STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

5.0:1 6:1

(12) (25) (8) 04/18 BT

ROADWAY EMBANKMENT
BROWN RED LOOSE
CLAYEY SAND MOIST

SS-784

(10) (12) (27) BT FIAD

SS-396

(5) (17) (9) 02/18 BT

COASTAL PLAIN
ORANGE,TAN,GRAY,PINK AND RED
LOOSE TO MEDIUM DENSE
CLAYEY SAND AND SAND MOIST TO WET
[MIDDENDORF FORMATION]

COASTAL PLAIN
GRAY AND BROWN MEDIUM STIFF
TO VERY STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]

MATCH TO -SR15-

1135+00.00

COASTAL PLAIN
ORANGE AND RED STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

5.0:1 6:1

ROADWAY EMBANKMENT
BROWN RED LOOSE
CLAYEY SAND MOIST

COASTAL PLAIN
ORANGE,TAN,GRAY,PINK AND RED
LOOSE TO MEDIUM DENSE
CLAYEY SAND AND SAND MOIST TO WET
[MIDDENDORF FORMATION]

COASTAL PLAIN
GRAY AND BROWN MEDIUM STIFF
TO VERY STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]

MATCH TO -SR15-

1134+50.00

-L-

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

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	46

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

250 240 230 220 210

ROADWAY EMBANKMENT
BROWN LOOSE
SILTY SAND MOIST

4:1

6:1

COASTAL PLAIN
ORANGE AND TAN MEDIUM STIFF
SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
RED BROWN MEDIUM STIFF
SANDY CLAY MOIST

COASTAL PLAIN
ORANGE, RED, YELLOW, AND TAN MEDIUM DENSE
CLAYEY SAND MOIST [MIDDENDORF FORMATION]

MATCH TO -SR15-

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO
VERY STIFF SILTY CLAY AND SANDY SILT MOIST
[MIDDENDORF FORMATION]

1137+00.00

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 1136+75

COASTAL PLAIN
ORANGE AND RED STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

4:1

6:1

ROADWAY EMBANKMENT
BROWN RED LOOSE
CLAYEY SAND MOIST

COASTAL PLAIN
ORANGE, TAN, GRAY, PINK AND RED LOOSE TO MEDIUM DENSE
CLAYEY SAND AND SAND MOIST TO WET [MIDDENDORF FORMATION]

MATCH TO -SR15-

COASTAL PLAIN
GRAY AND BROWN VERY STIFF SILTY CLAY MOIST

GRAY, WHITE, RED AND TAN
VERY LOOSE TO DENSE SAND
AND CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

1136+50.00

COASTAL PLAIN
ORANGE AND RED STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

4:1

6:1

ROADWAY EMBANKMENT
BROWN RED LOOSE
CLAYEY SAND MOIST

COASTAL PLAIN
ORANGE, TAN, GRAY, PINK AND RED LOOSE TO MEDIUM DENSE
CLAYEY SAND AND SAND MOIST TO WET [MIDDENDORF FORMATION]

MATCH TO -SR15-

COASTAL PLAIN
GRAY AND BROWN VERY STIFF SILTY CLAY MOIST

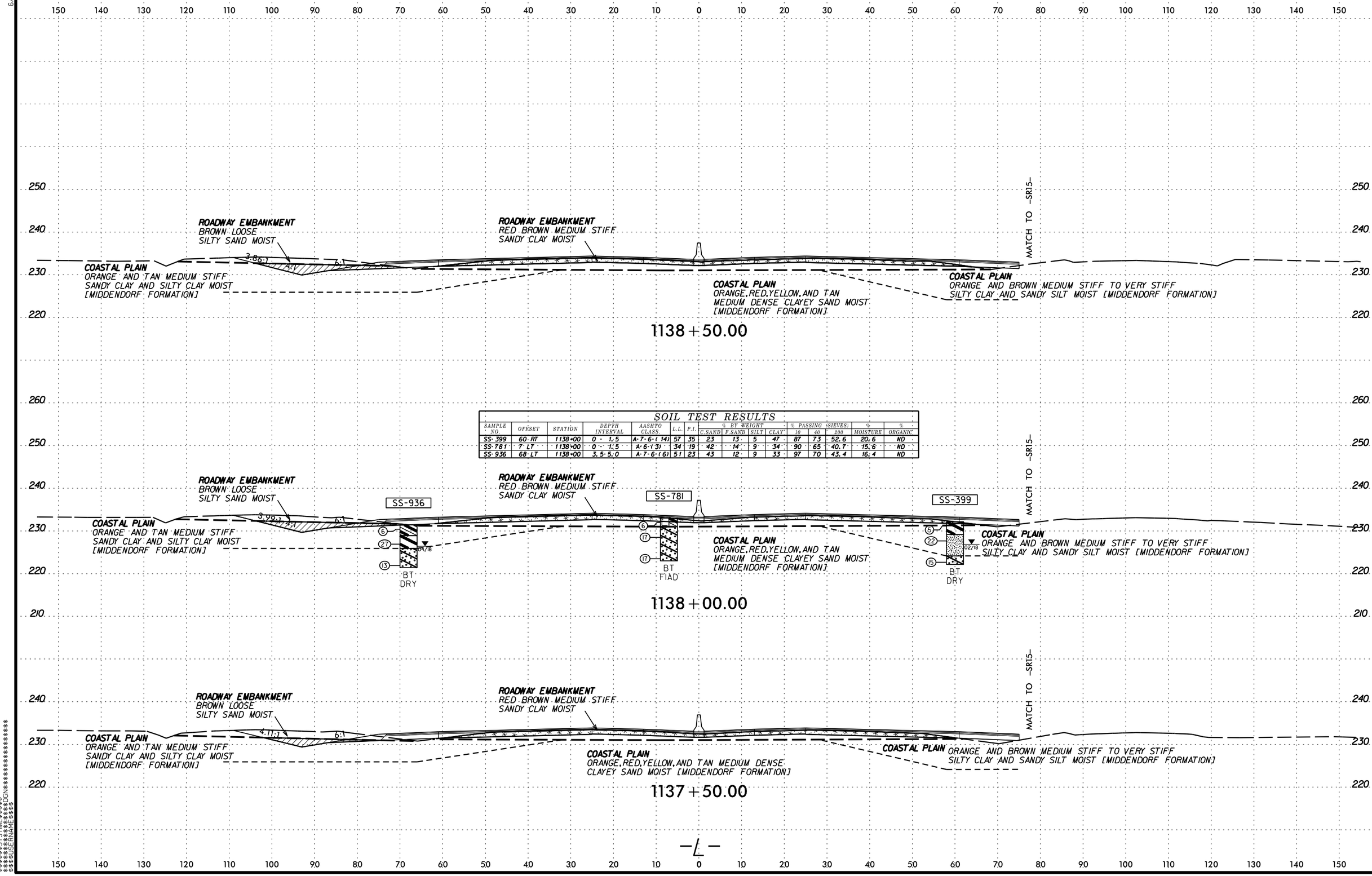
GRAY, WHITE, RED AND TAN
VERY LOOSE TO DENSE SAND
AND CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

1136+00.00

-L-

$$$$$$SYSTIME$$$$$$
$$$$$$

PROJ. REFERENCE NO.	SHEET NO.
I-5986B	47



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-399	60 RT	1138+00	0 - 1.5	A-7-6-(14)	57	35	23	13	5	47	87	73	52.6	20.6	ND
SS-781	7 LT	1138+00	0 - 1.5	A-6-(3)	34	19	42	14	9	34	90	65	40.7	15.6	ND
SS-936	68 LT	1138+00	3.5-5.0	A-7-6-(6)	51	23	43	12	9	33	97	70	43.4	16.4	ND

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	48

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

250 240 230 220

ROADWAY EMBANKMENT
BROWN LOOSE
SILTY SAND MOIST

3.56:1 4:1 6:1

ORANGE,GRAY AND RED MEDIUM
DENSE CLAYEY SAND MOIST

ROADWAY EMBANKMENT
RED BROWN STIFF
SANDY CLAY MOIST

COASTAL PLAIN
RED,TAN,ORANGE,BROWN AND GRAY
STIFF TO MEDIUM STIFF SANDY CLAY
AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

ORANGE,TAN AND GRAY MEDIUM
DENSE CLAYEY SAND MOIST

MATCH TO -SR15-

1140+50.00

ROADWAY EMBANKMENT
BROWN LOOSE
SILTY SAND MOIST

3.63:1 4:1 6:1

ORANGE,GRAY AND RED MEDIUM
DENSE CLAYEY SAND MOIST

ROADWAY EMBANKMENT
RED BROWN STIFF
SANDY CLAY MOIST

COASTAL PLAIN
RED,TAN,ORANGE,BROWN AND GRAY
STIFF TO MEDIUM STIFF SANDY CLAY
AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

ORANGE,TAN AND GRAY MEDIUM
DENSE CLAYEY SAND MOIST

MATCH TO -SR15-

1140+00.00

ROADWAY EMBANKMENT
BROWN LOOSE
SILTY SAND MOIST

3.67:1 4:1 6:1

ROADWAY EMBANKMENT
RED BROWN STIFF
SANDY CLAY MOIST

COASTAL PLAIN RED,TAN,ORANGE,BROWN AND GRAY STIFF TO MEDIUM STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

ORANGE,TAN,GRAY AND RED
MEDIUM DENSE CLAYEY SAND MOIST

MATCH TO -SR15-

1139+50.00

ROADWAY EMBANKMENT
BROWN LOOSE
SILTY SAND MOIST

3.7:1 4:1 6:1

ROADWAY EMBANKMENT
RED BROWN MEDIUM STIFF
SANDY CLAY MOIST

COASTAL PLAIN
ORANGE AND TAN MEDIUM STIFF
SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

COASTAL PLAIN
ORANGE,RED,YELLOW, AND TAN MEDIUM DENSE
CLAYEY SAND MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO VERY STIFF
SILTY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

MATCH TO -SR15-

1139+00.00

-L-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	49

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

250 240 230 220 210

ROADWAY EMBANKMENT
BROWN LOOSE
SILTY SAND MOIST

3:1 4:1 6:1

ORANGE,GRAY AND RED MEDIUM
DENSE CLAYEY SAND MOIST

ROADWAY EMBANKMENT
RED BROWN STIFF
SANDY CLAY MOIST

COASTAL PLAIN
RED,TAN,ORANGE,BROWN AND GRAY
STIFF TO MEDIUM STIFF SANDY CLAY
AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

ORANGE,TAN AND GRAY MEDIUM
DENSE CLAYEY SAND MOIST

MATCH TO -SR15-

1142+00.00

ROADWAY EMBANKMENT
BROWN LOOSE
SILTY SAND MOIST

3:1 4:1 6:1

ORANGE,GRAY AND RED MEDIUM
DENSE CLAYEY SAND MOIST

ROADWAY EMBANKMENT
RED BROWN STIFF
SANDY CLAY MOIST

COASTAL PLAIN
RED,TAN,ORANGE,BROWN AND GRAY
STIFF TO MEDIUM STIFF SANDY CLAY
AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

ORANGE,TAN AND GRAY MEDIUM
DENSE CLAYEY SAND MOIST

MATCH TO -SR15-

1141+50.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C. SAND	F. SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-932	68 LT	1141+00	0 - 1.5	A-7-6(13)	48	27	27	15	9	47	98	82	57.3	28.2	ND

ROADWAY EMBANKMENT
BROWN LOOSE
SILTY SAND MOIST

3:1 4:1 6:1

SS-932

ORANGE,GRAY AND RED MEDIUM
DENSE CLAYEY SAND MOIST

7 23 11 — 04/18 — BT DRY

ROADWAY EMBANKMENT
RED BROWN STIFF
SANDY CLAY MOIST

11 13 14 — BT FIAD.

COASTAL PLAIN
RED,TAN,ORANGE,BROWN AND GRAY
STIFF TO MEDIUM STIFF SANDY CLAY
AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

6 34 12 — 02/18 — BT DRY

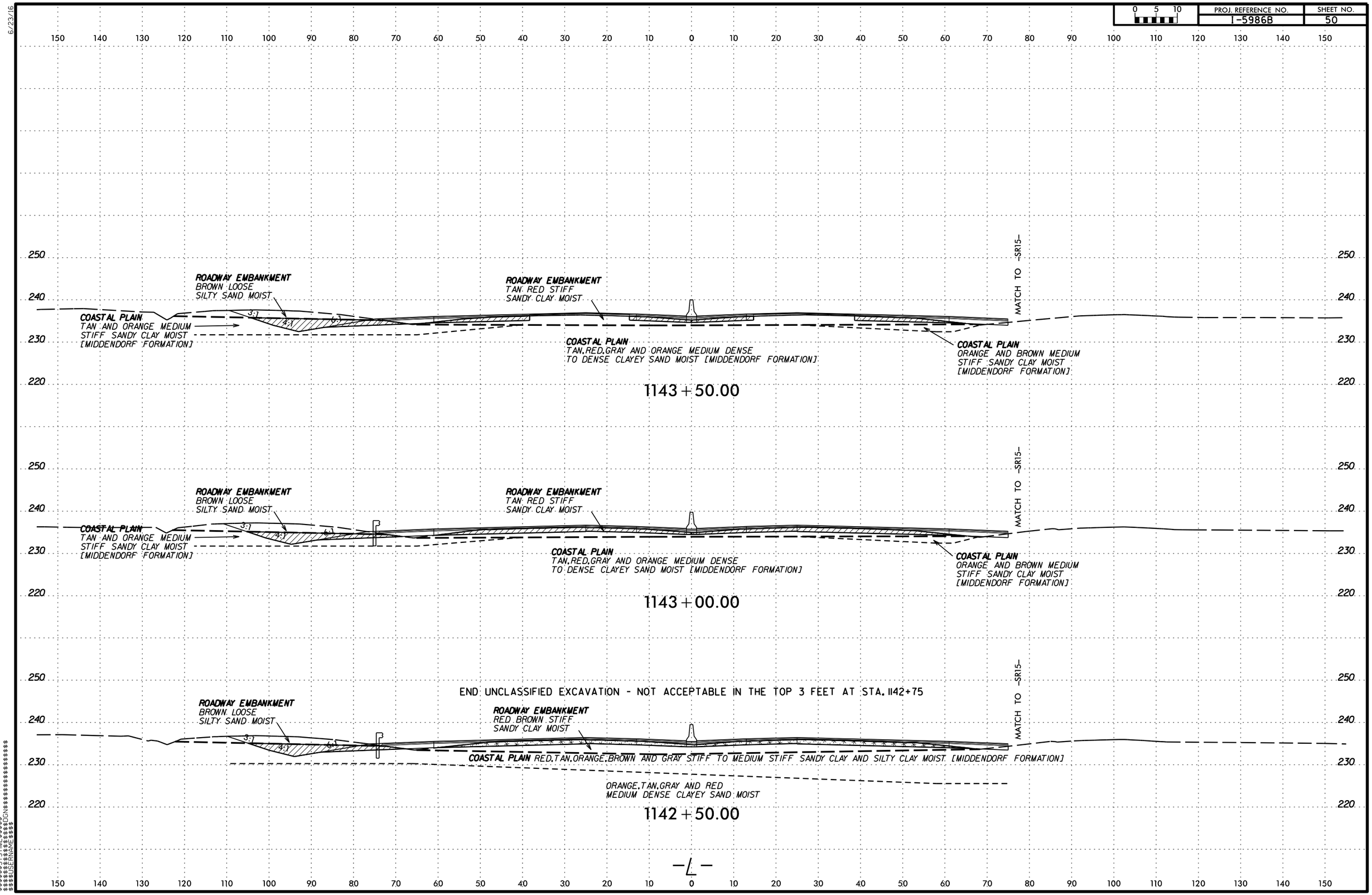
ORANGE,TAN AND GRAY MEDIUM
DENSE CLAYEY SAND MOIST

MATCH TO -SR15-

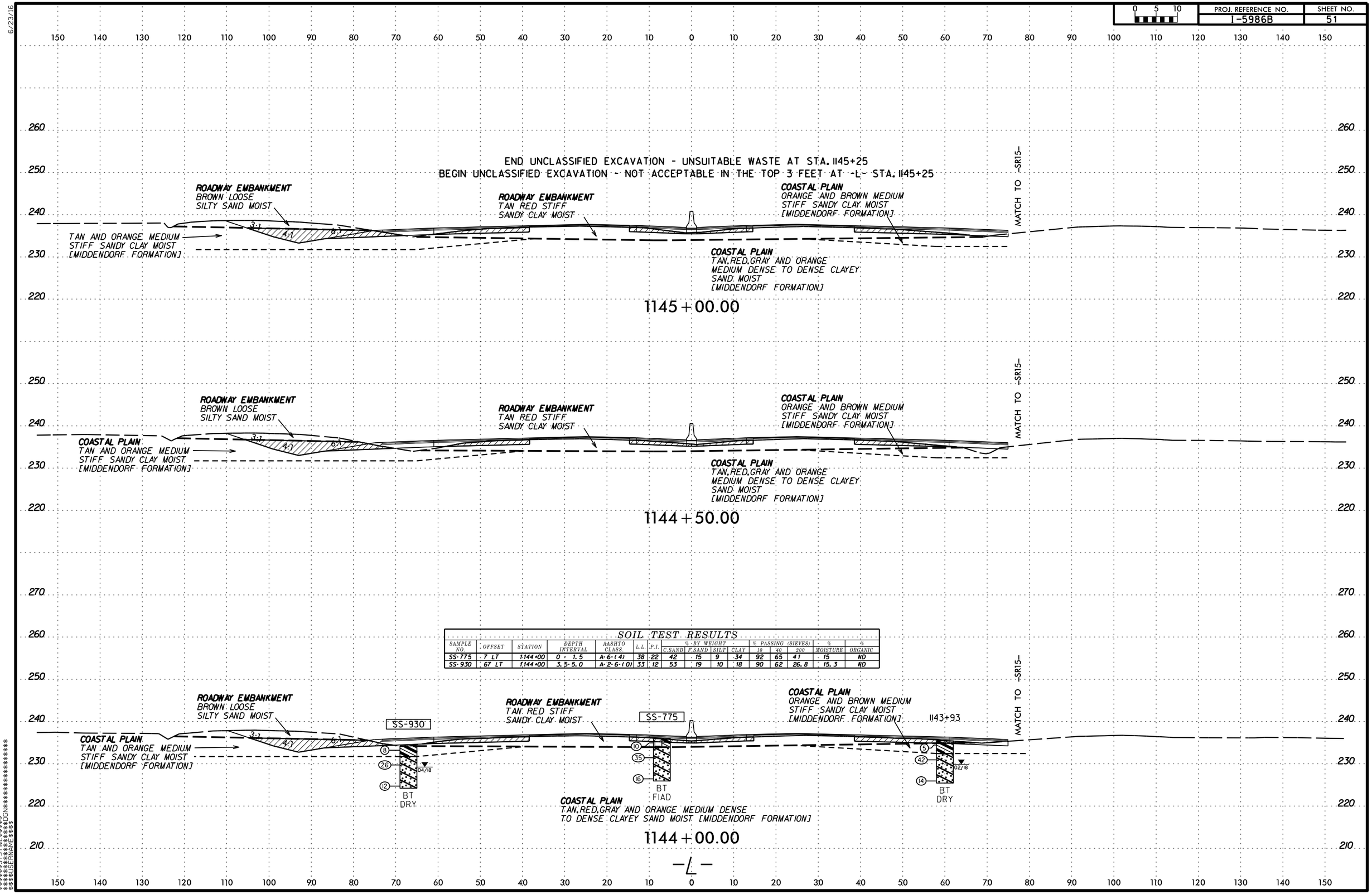
1141+00.00

-L-

$$$$$$$SYSTIME$$$$$$
$$$$$$$



PROJ. REFERENCE NO.
I-5986B
SHEET NO.
50
0 5 10
ROADWAY EMBANKMENT
BROWN LOOSE
SILTY SAND MOIST
ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST
COASTAL PLAIN
TAN AND ORANGE MEDIUM
STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]
COASTAL PLAIN
TAN,RED,GRAY AND ORANGE MEDIUM DENSE
TO DENSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]
COASTAL PLAIN
ORANGE AND BROWN MEDIUM
STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]
MATCH TO -SR15-
1143+50.00
1143+00.00
END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 1142+75
ROADWAY EMBANKMENT
BROWN LOOSE
SILTY SAND MOIST
ROADWAY EMBANKMENT
RED BROWN STIFF
SANDY CLAY MOIST
COASTAL PLAIN RED,TAN,ORANGE,BROWN AND GRAY STIFF TO MEDIUM STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]
ORANGE,TAN,GRAY AND RED
MEDIUM DENSE CLAYEY SAND MOIST
1142+50.00
-L-



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-775	7 LT	1144+00	0 - 1.5	A-6-(4)	38	22	42	15	9	34	92	65	41	15	ND
SS-930	67 LT	1144+00	3.5-5.0	A-2-6-(0)	33	12	53	19	10	18	90	62	26.8	15.3	ND

6/23/16
$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	52

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

260 250 240 230 220

END UNDERCUT -SR16- STA. 16+85

-SR16-
16+61.81

3:1

ROADWAY EMBANKMENT
BROWN LOOSE SILTY SAND MOIST

3:1

6:1

COASTAL PLAIN
TAN AND ORANGE STIFF HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT -L- STA. 1146+75

ROADWAY EMBANKMENT
TAN, RED, BROWN MEDIUM STIFF TO STIFF SANDY CLAY MOIST

MATCH TO -SR15-

COASTAL PLAIN
BROWN, GRAY, TAN, RED, ORANGE VERY LOOSE TO MEDIUM DENSE SILTY SAND AND CLAYEY SAND MOIST TO SAT. [MIDDENDORF FORMATION]

1146+50.00

260 250 240 230 220

-SR16-
16+11.81

-SR16- 16+30

⑧ ⑫ ⑲

BT. FIAD

3:1

ROADWAY EMBANKMENT
BROWN LOOSE SILTY SAND MOIST

3:1

6:1

COASTAL PLAIN
TAN AND ORANGE STIFF HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
TAN, RED, BROWN MEDIUM STIFF TO STIFF SANDY CLAY MOIST

MATCH TO -SR15-

COASTAL PLAIN
BROWN, GRAY, TAN, RED, ORANGE VERY LOOSE TO MEDIUM DENSE SILTY SAND AND CLAYEY SAND MOIST TO SAT. [MIDDENDORF FORMATION]

1146+00.00

260 250 240 230 220

BEGIN UNDERCUT -SR16- STA. 15+40

-SR16-
15+63.50

3:1

ROADWAY EMBANKMENT
BROWN LOOSE SILTY SAND MOIST

3:1

6:1

COASTAL PLAIN
TAN AND ORANGE STIFF HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
TAN, RED, BROWN MEDIUM STIFF TO STIFF SANDY CLAY MOIST

MATCH TO -SR15-

COASTAL PLAIN
BROWN, GRAY, TAN, RED, ORANGE VERY LOOSE TO MEDIUM DENSE SILTY SAND AND CLAYEY SAND MOIST TO SAT. [MIDDENDORF FORMATION]

1145+50.00

-L-

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

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	53

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

260 250 240 230 220

-SR16-
18+61.81

3:1 3:1 3:1 6:1

ROADWAY EMBANKMENT
TAN BROWN STIFF
SANDY CLAY MOIST

ORANGE,RED AND TAN MEDIUM
DENSE CLAYEY SAND MOIST

COASTAL PLAIN
ORANGE,TAN,GRAY,BROWN AND RED SOFT TO
VERY STIFF SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

MATCH TO -SR15-

1148+50.00

BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 1148+25

-SR16-
18+11.81

COASTAL PLAIN
ORANGE AND TAN STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

3:1 3:07:1 6:1

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

COASTAL PLAIN
GRAY,RED AND TAN MEDIUM DENSE
TO DENSE CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

MATCH TO -SR15-

COASTAL PLAIN
BROWN SOFT SILTY CLAY MOIST
[MIDDENDORF FORMATION]

1148+00.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-408	60 RT	1147+00	0 - 1.5	A-7-6-(10)	46	20	23	13	6	53	95	82	60.2	27.4	ND

-SR16-
17+11.81

COASTAL PLAIN
ORANGE AND TAN STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

3:1 3:1 6:1

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

SS-408

11 19 15 04/18 BT DRY

11 34 24 BT FIAD

4 26 27 02/18 BT DRY

COASTAL PLAIN
GRAY,RED AND TAN MEDIUM DENSE
TO DENSE CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

MATCH TO -SR15-

COASTAL PLAIN
BROWN SOFT SILTY CLAY MOIST
[MIDDENDORF FORMATION]

1147+00.00

-L-

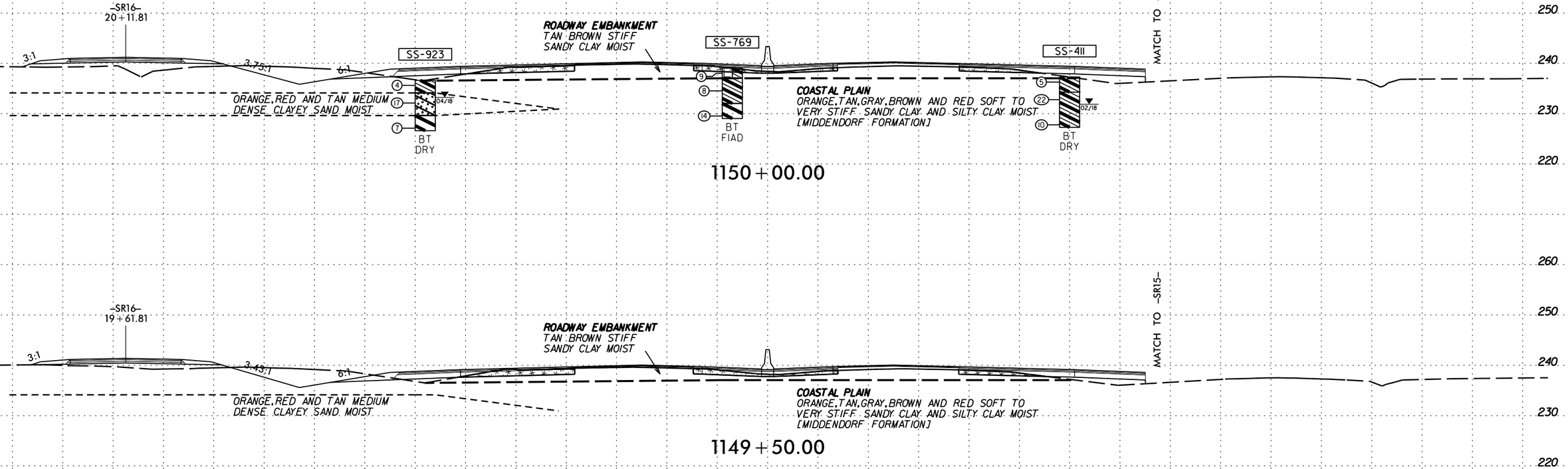
$$$$$$$SYSTIME$$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	54

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-411	60 RT	1150+00	0 - 1.5	A-6-(6)	40	18	27	18	6	44	95	81	52.3	17.5	ND
SS-769	7 LT	1150+00	0 - 1.5	A-6-(2)	27	15	37	22	10	31	95	76	41.5	13.2	ND
SS-923	68 LT	1150+00	0 - 1.5	A-6-(1)	32	12	34	19	12	27	91	73	40.3	19.9	ND



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	55

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

260 250 240 230 220

END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 1151+75

-SR16-
21+61.81

3:1 6.03:1 6:1

ROADWAY EMBANKMENT
TAN BROWN STIFF
SANDY CLAY MOIST

ORANGE,RED AND TAN MEDIUM
DENSE CLAYEY SAND MOIST

COASTAL PLAIN
ORANGE,TAN,GRAY,BROWN AND RED SOFT TO
VERY STIFF SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

MATCH TO -SR15-

1151+50.00

-SR16-
21+11.81

3:1 5:1 6:1

ROADWAY EMBANKMENT
TAN BROWN STIFF
SANDY CLAY MOIST

ORANGE,RED AND TAN MEDIUM
DENSE CLAYEY SAND MOIST

COASTAL PLAIN
ORANGE,TAN,GRAY,BROWN AND RED SOFT TO
VERY STIFF SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

MATCH TO -SR15-

1151+00.00

-SR16-
20+61.81

3:1 4.27:1 6:1

ROADWAY EMBANKMENT
TAN BROWN STIFF
SANDY CLAY MOIST

ORANGE,RED AND TAN MEDIUM
DENSE CLAYEY SAND MOIST

COASTAL PLAIN
ORANGE,TAN,GRAY,BROWN AND RED SOFT TO
VERY STIFF SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

MATCH TO -SR15-

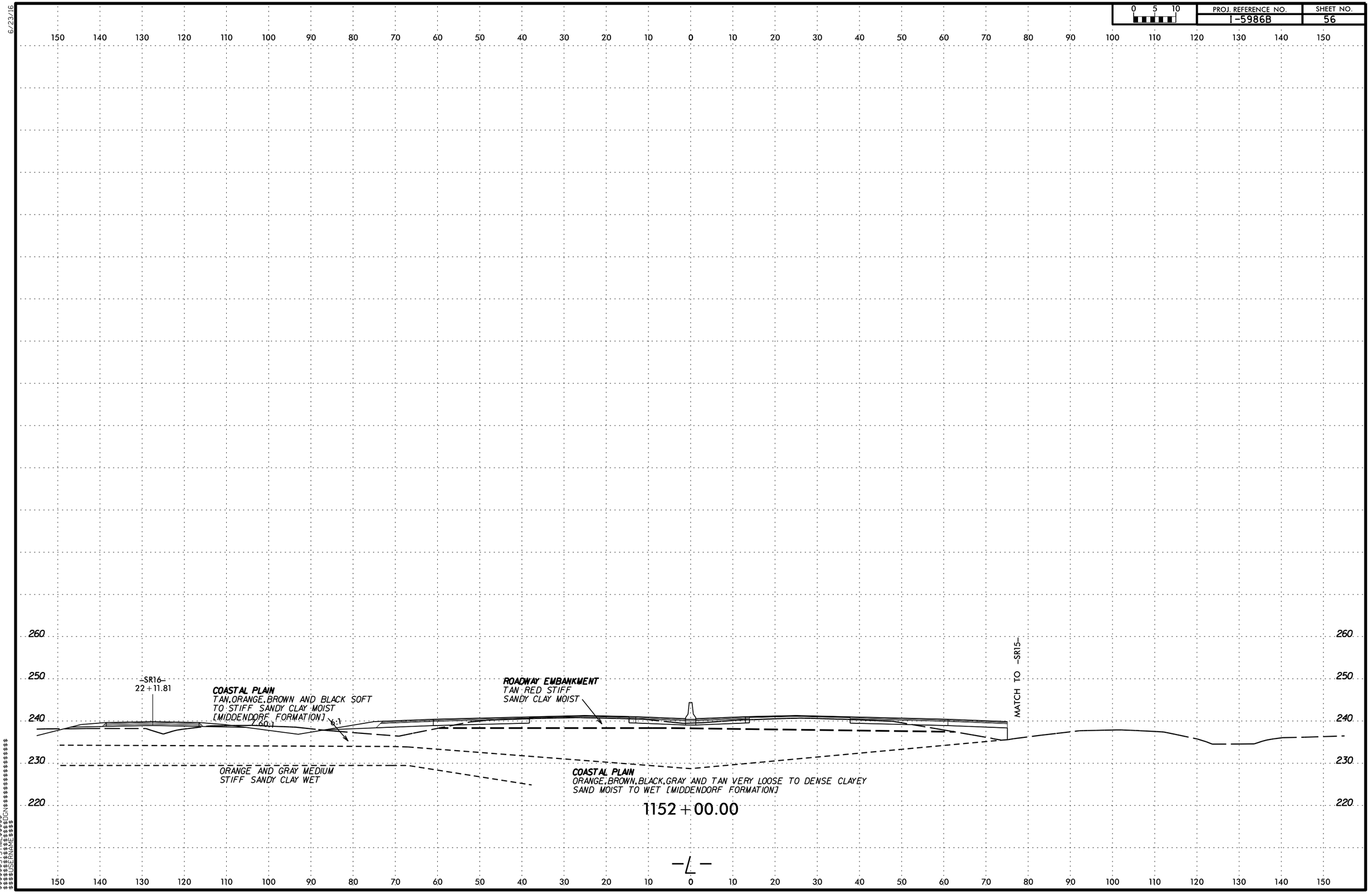
1150+50.00

-L-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	56



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	57

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

270
260
250
240
230
220

BEGIN UNDERCUT AT -SR16- STA. 27+36

BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT -SR16- STA. 27+36

-SR16-
27+11.81

4:1
5.05:1
6:1

ROADWAY EMBANKMENT
RED TAN STIFF SANDY CLAY MOIST

MATCH TO -SR15-

COASTAL PLAIN
RED,TAN,LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

1157+00.00

-L-

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	58

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

260 250 240 230

-SR16-
28+61.81

3:1 3.5:1 6:1

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

COASTAL PLAIN
BROWN AND TAN LOOSE
CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

MATCH TO -SR15-

RED AND GRAY
MEDIUM DENSE
CLAYEY SAND MOIST

COASTAL PLAIN
RED,ORANGE,BROWN AND TAN STIFF TO
VERY STIFF SILTY CLAY AND
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

RED,ORANGE,AND TAN
MEDIUM DENSE CLAYEY
SAND MOIST
[MIDDENDORF FORMATION]

1158+50.00

260 250 240 230

-SR16-
28+11.81

3:1 3.97:1 6:1

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

COASTAL PLAIN
BROWN AND TAN LOOSE
CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

MATCH TO -SR15-

RED AND GRAY MEDIUM DENSE
CLAYEY SAND MOIST

COASTAL PLAIN
RED,ORANGE,BROWN AND TAN STIFF TO VERY STIFF SILTY CLAY AND
SANDY CLAY MOIST [MIDDENDORF FORMATION]

RED,ORANGE,AND TAN MEDIUM DENSE CLAYEY
SAND MOIST [MIDDENDORF FORMATION]

1158+00.00

220 270 260 250 240 230 220

-SR16-
27+61.81

3:1 4:1 4.47:1 6:1

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

COASTAL PLAIN
BROWN AND TAN LOOSE
CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

MATCH TO -SR15-

RED AND GRAY MEDIUM DENSE
CLAYEY SAND MOIST

COASTAL PLAIN
RED,ORANGE,BROWN AND TAN STIFF TO VERY STIFF SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

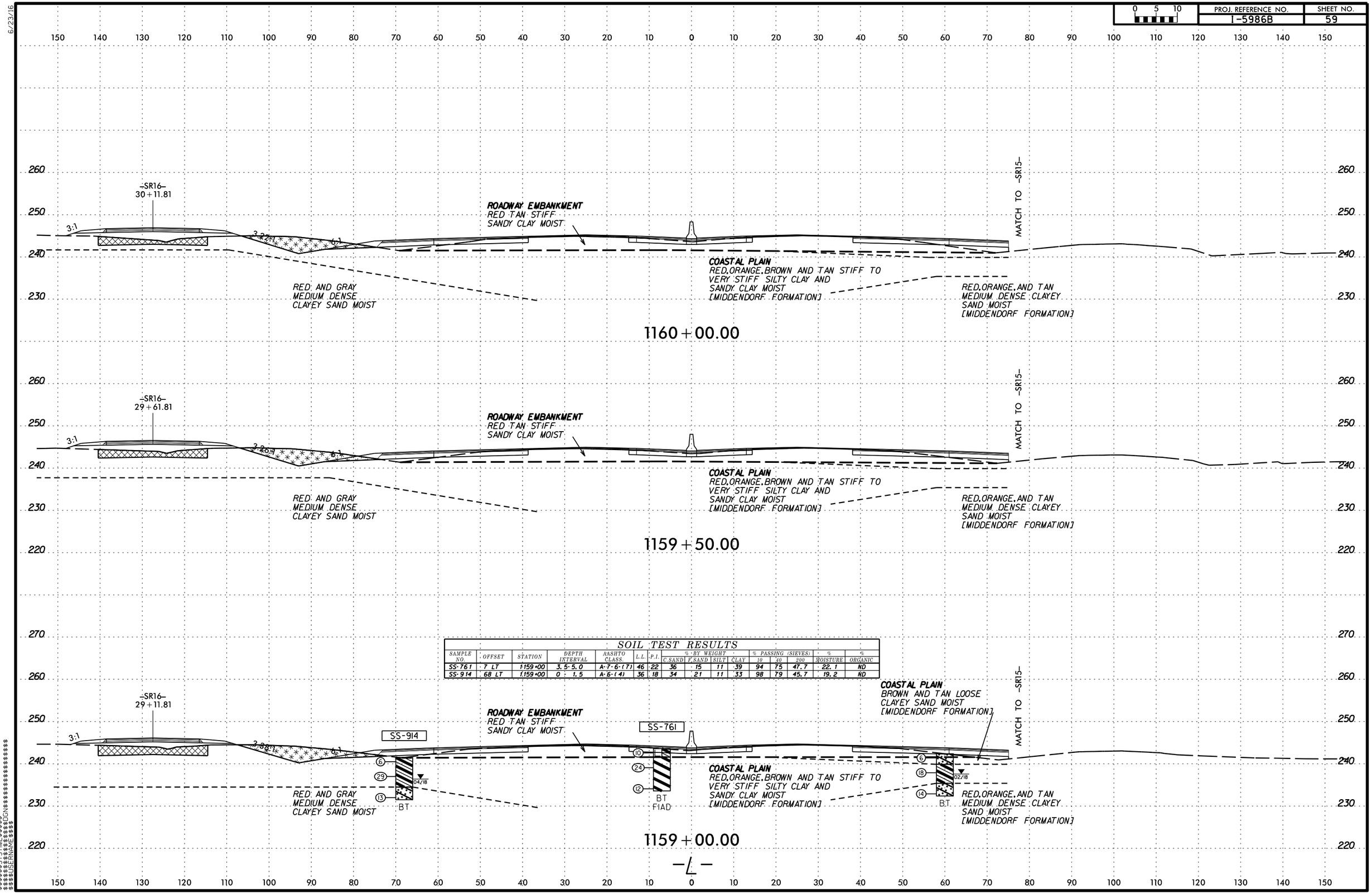
RED,ORANGE,AND TAN
MEDIUM DENSE CLAYEY
SAND MOIST
[MIDDENDORF FORMATION]

1157+50.00

-L-

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

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-761	7 LT	1159+00	3.5-5.0	A-7-6-(7)	46	22	36	15	11	39	94	75	47.7	22.1	ND
SS-914	68 LT	1159+00	0 - 1.5	A-6-(4)	36	18	34	21	11	33	98	79	45.7	19.2	ND

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	60

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

260 250 240 230 220

-SR16-
31+11.81

3:1 3:1 6:1

PAVEMENT

ROADWAY EMBANKMENT
RED BROWN STIFF
SANDY CLAY MOIST

COASTAL PLAIN
ORANGE AND TAN LOOSE
TO MEDIUM DENSE
CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

COASTAL PLAIN
TAN RED MEDIUM STIFF
TO VERY STIFF SANDY
CLAY MOIST
[MIDDENDORF FORMATION]

COASTAL PLAIN
GRAY,BROWN,TAN AND
ORANGE LOOSE TO MEDIUM
DENSE SILTY SAND AND
CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

MATCH TO -SR15-

1161+00.00

END UNDERCUT -SR16- STA. 30+86

END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE
IN THE TOP 3 FEET AT -SR16- STA. 30+86

-SR16-
30+61.81

3:1 3:1 6:1

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

COASTAL PLAIN
RED AND GRAY
MEDIUM DENSE
CLAYEY SAND MOIST

COASTAL PLAIN
RED,ORANGE,BROWN AND TAN STIFF TO
VERY STIFF SILTY CLAY AND
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

RED,ORANGE,AND TAN
MEDIUM DENSE CLAYEY
SAND MOIST
[MIDDENDORF FORMATION]

MATCH TO -SR15-

1160+50.00

-L-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	61

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

270
260
250
240
230

BEGIN UNDERCUT -SR16- STA. 36+36

BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE
IN THE TOP 3 FEET AT -SR16- STA. 36+36

-SR16-
36+11.81

ROADWAY EMBANKMENT
BROWN LOOSE TO MEDIUM DENSE SILTY SAND MOIST

COASTAL PLAIN
TAN LOOSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
RED TAN STIFF CLAYEY SAND MOIST

4:1 4:1 21.36:1 6:1

MATCH TO -SR15-

COASTAL PLAIN
RED,TAN,BROWN,GRAY AND ORANGE MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

RED,TAN,GRAY AND ORANGE MEDIUM DENSE CLAYEY SAND MOIST

1166+00.00

270
260
250
240
230

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

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	62

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

260
250
240
230

MATCH LINE 150' LEFT

COASTAL PLAIN
RED, TAN, BROWN, GRAY AND ORANGE
MEDIUM STIFF TO VERY STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

3:1

260
250
240
230

MATCH LINE 150' LEFT

–SR16–
37+11.50

ROADWAY EMBANKMENT
BROWN LOOSE TO MEDIUM DENSE
SILTY SAND MOIST

4:1

8.49

6:1

ROADWAY EMBANKMENT
RED TAN MEDIUM STIFF
SANDY CLAY MOIST

MATCH TO –SR15–

260
250
240
230

COASTAL PLAIN
RED, TAN, BROWN, GRAY AND ORANGE
MEDIUM STIFF TO VERY STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

COASTAL PLAIN
RED, TAN, AND GRAY VERY LOOSE TO
MEDIUM DENSE SILTY SAND AND
CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

1167+00.00

260
250
240
230

MATCH LINE 150' LEFT

COASTAL PLAIN
RED, TAN, BROWN, GRAY AND ORANGE
MEDIUM STIFF TO VERY STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

3:1

260
250
240
230

MATCH LINE 150' LEFT

–SR16–
36+61.75

ROADWAY EMBANKMENT
BROWN LOOSE TO MEDIUM DENSE
SILTY SAND MOIST

4:1

2.40

6:1

ROADWAY EMBANKMENT
RED TAN MEDIUM STIFF
SANDY CLAY MOIST

MATCH TO –SR15–

260
250
240
230
220

COASTAL PLAIN
RED, TAN, BROWN, GRAY AND ORANGE
MEDIUM STIFF TO VERY STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

COASTAL PLAIN
RED, TAN, AND GRAY VERY LOOSE TO
MEDIUM DENSE SILTY SAND AND
CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

1166+50.00

–L–

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

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	63

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

MATCH LINE 150' LEFT

COASTAL PLAIN
RED,TAN,BROWN,GRAY AND ORANGE
MEDIUM STIFF TO VERY STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C SAND	F SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-905	70 LT	1168+00	0 - 1.5	A-6-(6)	36	19	31	20	13	35	99	84	50.3	23	ND

MATCH LINE 150' LEFT

-SR16-
38+10.52

ROADWAY EMBANKMENT
BROWN LOOSE TO MEDIUM DENSE
SILTY SAND MOIST

SS-905

6:1

COASTAL PLAIN
RED,TAN,BROWN,GRAY AND ORANGE
MEDIUM STIFF TO VERY STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

BT
DRY
04/18

ROADWAY EMBANKMENT
RED TAN MEDIUM STIFF SANDY CLAY MOIST

COASTAL PLAIN
BROWN AND ORANGE LOOSE CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

BT
DRY
02/18

MATCH TO -SR15-

COASTAL PLAIN
RED,ORANGE,TAN AND GRAY VERY SOFT TO
VERY STIFF SANDY CLAY AND
SILTY CLAY MOIST TO WET
[MIDDENDORF FORMATION]

1168+00.00

MATCH LINE 150' LEFT

COASTAL PLAIN
RED,ORANGE,TAN AND GRAY VERY SOFT TO
VERY STIFF SANDY CLAY AND SILTY CLAY MOIST
TO WET [MIDDENDORF FORMATION]

-SR16-
37+61.07

ROADWAY EMBANKMENT
BROWN LOOSE TO MEDIUM DENSE
SILTY SAND MOIST

6:1

ROADWAY EMBANKMENT
RED TAN MEDIUM STIFF
SANDY CLAY MOIST

1167+59

COASTAL PLAIN
RED,TAN,AND GRAY VERY LOOSE TO
MEDIUM DENSE SILTY SAND AND
CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

BT
FIAD

MATCH TO -SR15-

COASTAL PLAIN
RED,ORANGE,TAN AND GRAY VERY SOFT TO
VERY STIFF SANDY CLAY AND SILTY CLAY MOIST TO WET
[MIDDENDORF FORMATION]

1167+50.00

-L-

260 250 240 230 220

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

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	64

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

BEGIN UNCLASSIFIED EXCAVATION -
UNSUITABLE WASTE AT -SR16- STA. 39+34

END UNCLASSIFIED EXCAVATION -
NOT ACCEPTABLE IN THE TOP 3 FEET
AT -SR16- STA. 39+34

3:1

COASTAL PLAIN
RED,TAN,BROWN,GRAY AND ORANGE MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

MATCH LINE 150' LEFT

260
250
240
230

270
260
250
240
230

BEGIN UNCLASSIFIED EXCAVATION -
UNSUITABLE WASTE AT -SR16- STA. 39+34

END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE
IN THE TOP 3 FEET AT -SR16- STA. 39+34

MATCH LINE 150' LEFT

-SR16-
39+09.43

ROADWAY EMBANKMENT
BROWN LOOSE TO MEDIUM DENSE SILTY SAND MOIST

4:1 4:1 3:1 6:1

COASTAL PLAIN
RED,TAN,BROWN,GRAY AND ORANGE MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
RED TAN MEDIUM STIFF SANDY CLAY MOIST

COASTAL PLAIN
BROWN AND ORANGE LOOSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

MATCH TO -SR15-

COASTAL PLAIN
RED,ORANGE,TAN AND GRAY VERY SOFT TO VERY STIFF SANDY CLAY AND SILTY CLAY MOIST TO WET [MIDDENDORF FORMATION]

270
260
250
240
230

1169+00.00

260
250
240
230

COASTAL PLAIN
RED,TAN,BROWN,GRAY AND ORANGE MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

MATCH LINE 150' LEFT

260
250
240
230

MATCH LINE 150' LEFT

-SR16-
38+59.98

ROADWAY EMBANKMENT
BROWN LOOSE TO MEDIUM DENSE SILTY SAND MOIST

4:1 3:1 4:1 6:1

COASTAL PLAIN
RED,TAN,BROWN,GRAY AND ORANGE MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
RED TAN MEDIUM STIFF SANDY CLAY MOIST

COASTAL PLAIN
BROWN AND ORANGE LOOSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

MATCH TO -SR15-

COASTAL PLAIN
RED,ORANGE,TAN AND GRAY VERY SOFT TO VERY STIFF SANDY CLAY AND SILTY CLAY MOIST TO WET [MIDDENDORF FORMATION]

260
250
240
230
220

1168+50.00

-L-

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

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	65

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

260
250
240
230

MATCH LINE 150' LEFT

RED, TAN, BROWN, GRAY AND ORANGE MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

3:1

–SR16–
40+08.34

COASTAL PLAIN
RED, ORANGE, GRAY, BROWN, AND TAN MEDIUM STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
RED BROWN STIFF SANDY CLAY MOIST

COASTAL PLAIN
BROWN AND TAN VERY LOOSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

MATCH TO –SR15–

4:1 4:1 3:1 6:1

RED, TAN, BROWN, GRAY AND ORANGE MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

TAN, RED, ORANGE AND GRAY MEDIUM DENSE TO LOOSE CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

1170+00.00

COASTAL PLAIN
RED, ORANGE, GRAY, BROWN, AND TAN MEDIUM STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
RED, TAN, BROWN, GRAY AND ORANGE MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
BROWN LOOSE TO MEDIUM DENSE SILTY SAND MOIST

–SR16–
39+58.88

ROADWAY EMBANKMENT
RED BROWN STIFF SANDY CLAY MOIST

COASTAL PLAIN
BROWN AND TAN VERY LOOSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

MATCH TO –SR15–

COASTAL PLAIN
RED, ORANGE, GRAY, BROWN, AND TAN MEDIUM STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
RED, TAN, BROWN, GRAY AND ORANGE MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

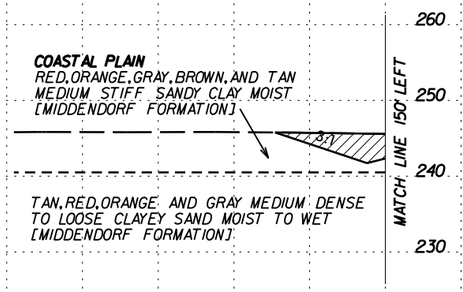
TAN, RED, ORANGE AND GRAY MEDIUM DENSE TO LOOSE CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

1169+50.00

–L–

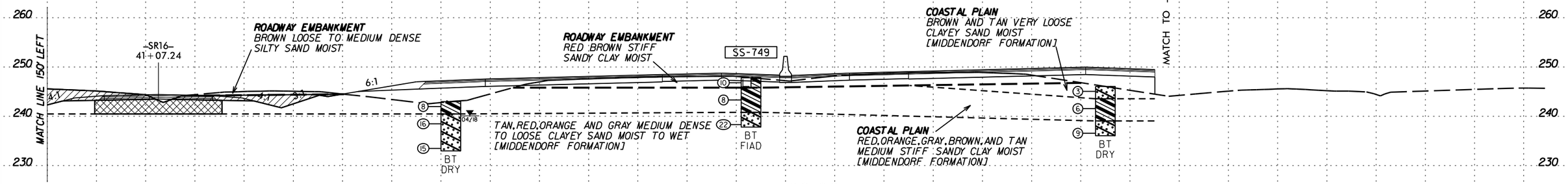
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

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

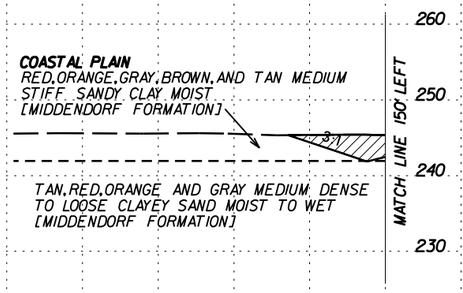


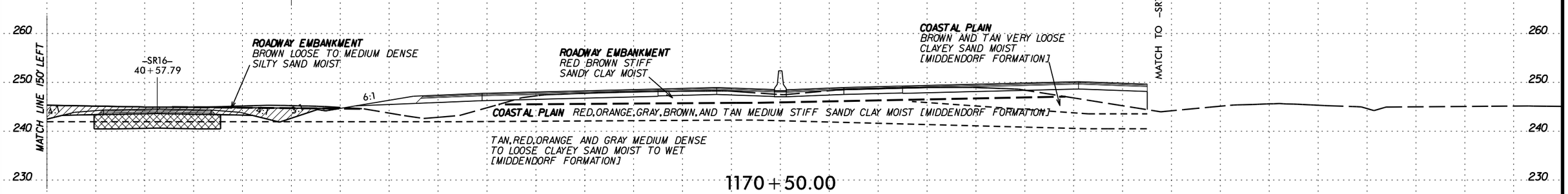
SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) #10	% PASSING (SIEVES) #40	% PASSING (SIEVES) #200	% MOISTURE	% ORGANIC
SS-749	7 LT	1171+00	3.5-5.0	A-6-(9)	38	22	25	22	13	40	100	88	55.9	22.9	ND



1171+00.00





1170+50.00

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	67

END UNDERCUT -SR16- STA. 42+31

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT -SR16- STA. 42+31

MATCH LINE 150' LEFT

3:1

TAN, RED, ORANGE AND GRAY MEDIUM DENSE TO LOOSE CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

-SR16-
42+06.15

ROADWAY EMBANKMENT
BROWN LOOSE TO MEDIUM DENSE SILTY SAND MOIST

4:1

3:1

6:1

ROADWAY EMBANKMENT
RED BROWN STIFF SANDY CLAY MOIST

TAN, RED, ORANGE AND GRAY MEDIUM DENSE TO LOOSE CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

COASTAL PLAIN
BROWN AND TAN VERY LOOSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
RED, ORANGE, GRAY, BROWN, AND TAN MEDIUM STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

MATCH TO -SR15-

1172+00.00

COASTAL PLAIN
RED, ORANGE, GRAY, BROWN, AND TAN MEDIUM STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

MATCH LINE 150' LEFT

3:1

TAN, RED, ORANGE AND GRAY MEDIUM DENSE TO LOOSE CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

-SR16-
41+56.70

ROADWAY EMBANKMENT
BROWN LOOSE TO MEDIUM DENSE SILTY SAND MOIST

4:1

3:1

6:1

ROADWAY EMBANKMENT
RED BROWN STIFF SANDY CLAY MOIST

COASTAL PLAIN RED, ORANGE, GRAY, BROWN, AND TAN MEDIUM STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

TAN, RED, ORANGE AND GRAY MEDIUM DENSE TO LOOSE CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

COASTAL PLAIN
BROWN AND TAN VERY LOOSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

MATCH TO -SR15-

1171+50.00

-L-

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

260 250 240 230 280 270 310 300 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	68

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

260
250
240
230

-SR16-
42+55.60

ROADWAY EMBANKMENT
BROWN LOOSE TO MEDIUM DENSE SILTY SAND MOIST

4:1 4:1 3:1 6:1

ROADWAY EMBANKMENT
RED BROWN STIFF SANDY CLAY MOIST

MATCH TO -SR15-

COASTAL PLAIN
RED,ORANGE,GRAY AND BROWN MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
ORANGE,GRAY AND BROWN VERY LOOSE TO LOOSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

1172+50.00

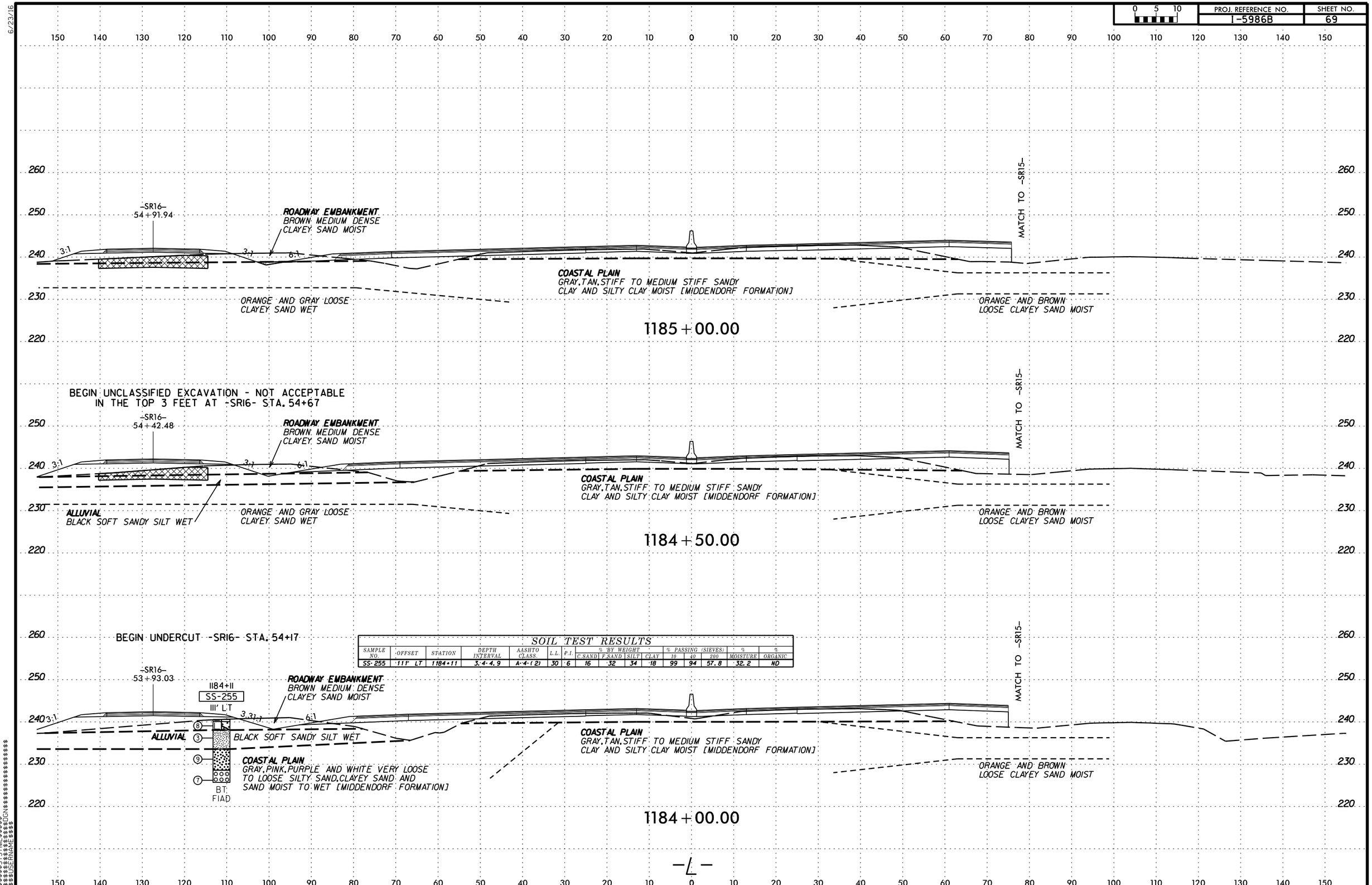
-L-

260
250
240
230

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

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

PROJ. REFERENCE NO. I-5986B | SHEET NO. 69



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-255	111' LT	1184+11	3.4-4.9	A-4-(2)	30	6	16	32	34	18	99	94	57.8	32.2	ND

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	70

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

260 250 240 230 220

-SR16-
56+40.30

3:1 3:1 6:1

ROADWAY EMBANKMENT
BROWN MEDIUM DENSE
CLAYEY SAND MOIST

COASTAL PLAIN
GRAY, RED, BROWN AND TAN STIFF SANDY CLAY AND HIGHLY PLASTIC SILTY CLAY MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
GRAY, PINK, PURPLE AND WHITE VERY LOOSE TO LOOSE SILTY SAND, CLAYEY SAND AND SAND MOIST TO WET [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

COASTAL PLAIN
TAN, ORANGE, BROWN AND GRAY MEDIUM SOFT TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

MATCH TO -SR15-

COASTAL PLAIN
BROWN AND BLACK LOOSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

ORANGE AND BROWN LOOSE CLAYEY SAND MOIST

1186+50.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-887	68 LT	1186+00	0 - 1.5	A-6-(4)	32	18	32	24	16	28	98	81	46.6	19.6	ND

BEGIN UNCLASSIFIED EXCAVATION -
UNSUITABLE WASTE AT -SR16- STA. 56+16
END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE
IN THE TOP 3 FEET AT -SR16- STA. 56+16

-SR16-
55+90.84

SS-887

5 4 7 BT 04/18

ORANGE AND GRAY LOOSE CLAYEY SAND WET

9 7 6 BT FIAD

6 6 9 BT DRY 02/18

1186+00.00

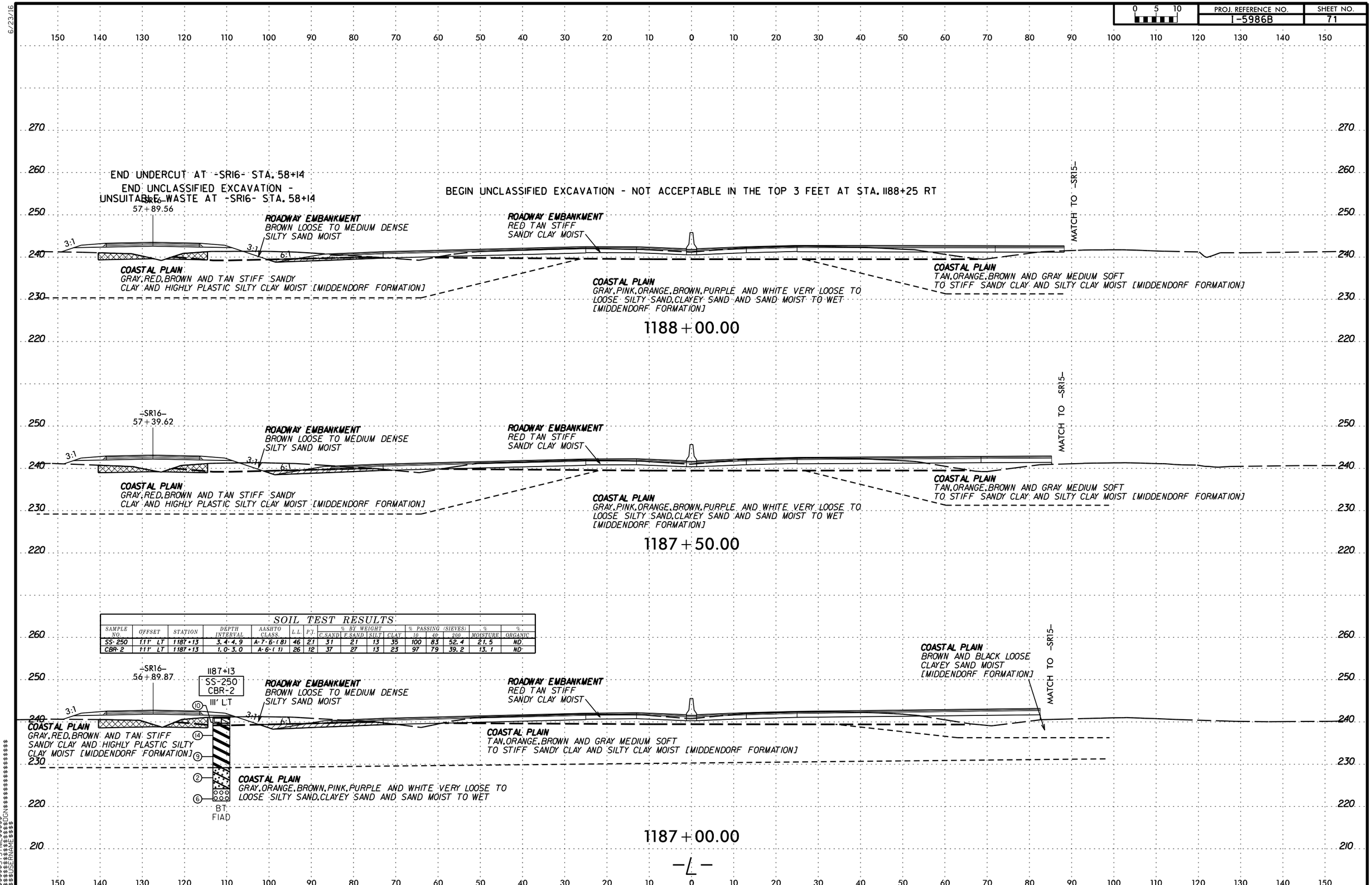
-SR16-
55+41.39

COASTAL PLAIN
TAN, ORANGE, BROWN AND GRAY MEDIUM SOFT TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

1185+50.00

-L-

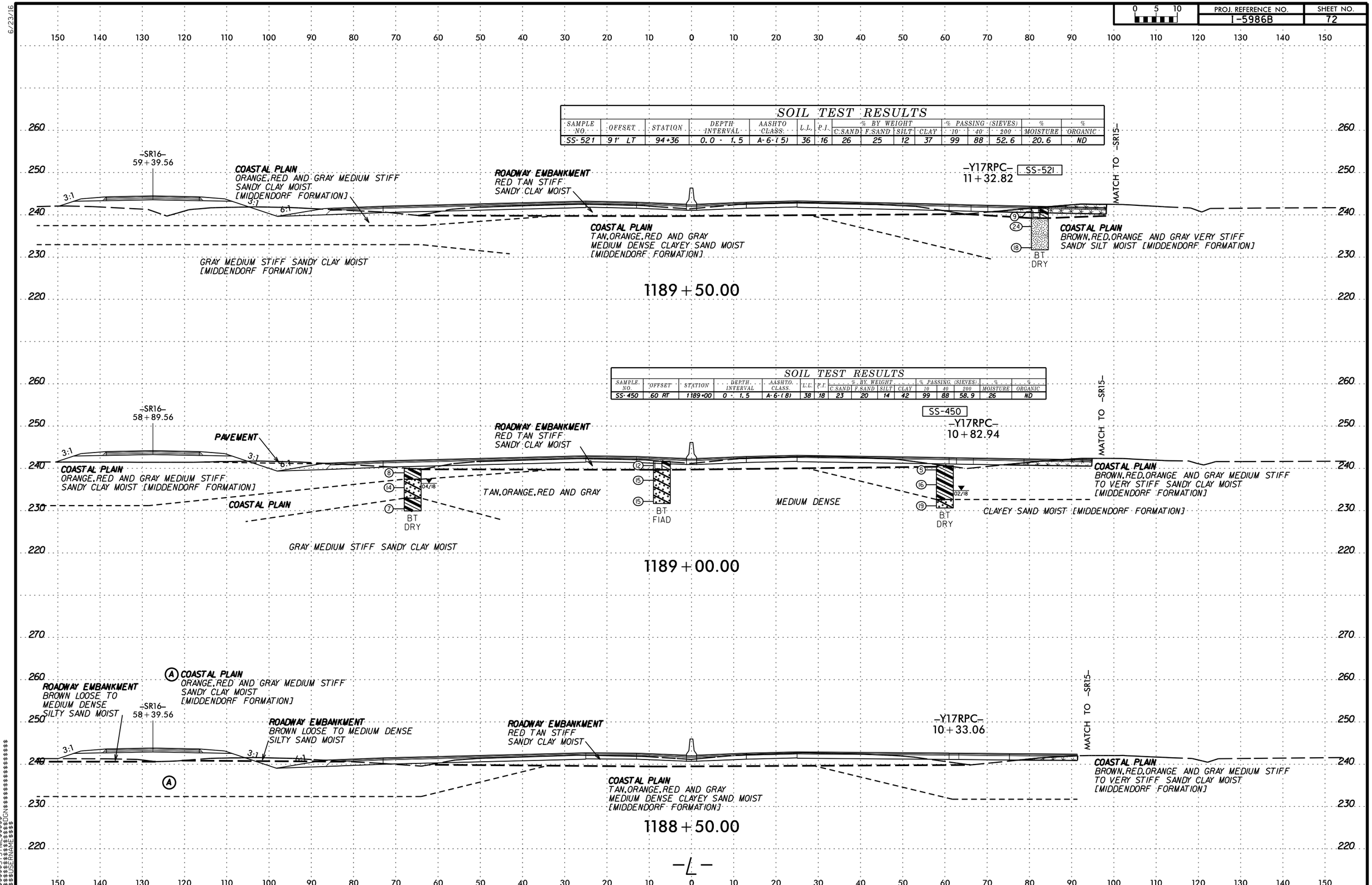
$$$$$$$SYSTIME$$$$$$$
$$$$$$$



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-250	1.11' LT	1187+13	3.4-4.9	A-7-6-(8)	46	21	31	21	13	35	100	83	52.4	21.5	ND.
CBR-2	1.11' LT	1187+13	1.0-3.0	A-6-(1)	26	12	37	27	13	23	97	79	39.2	13.1	ND

PROJ. REFERENCE NO. I-5986B | SHEET NO. 72



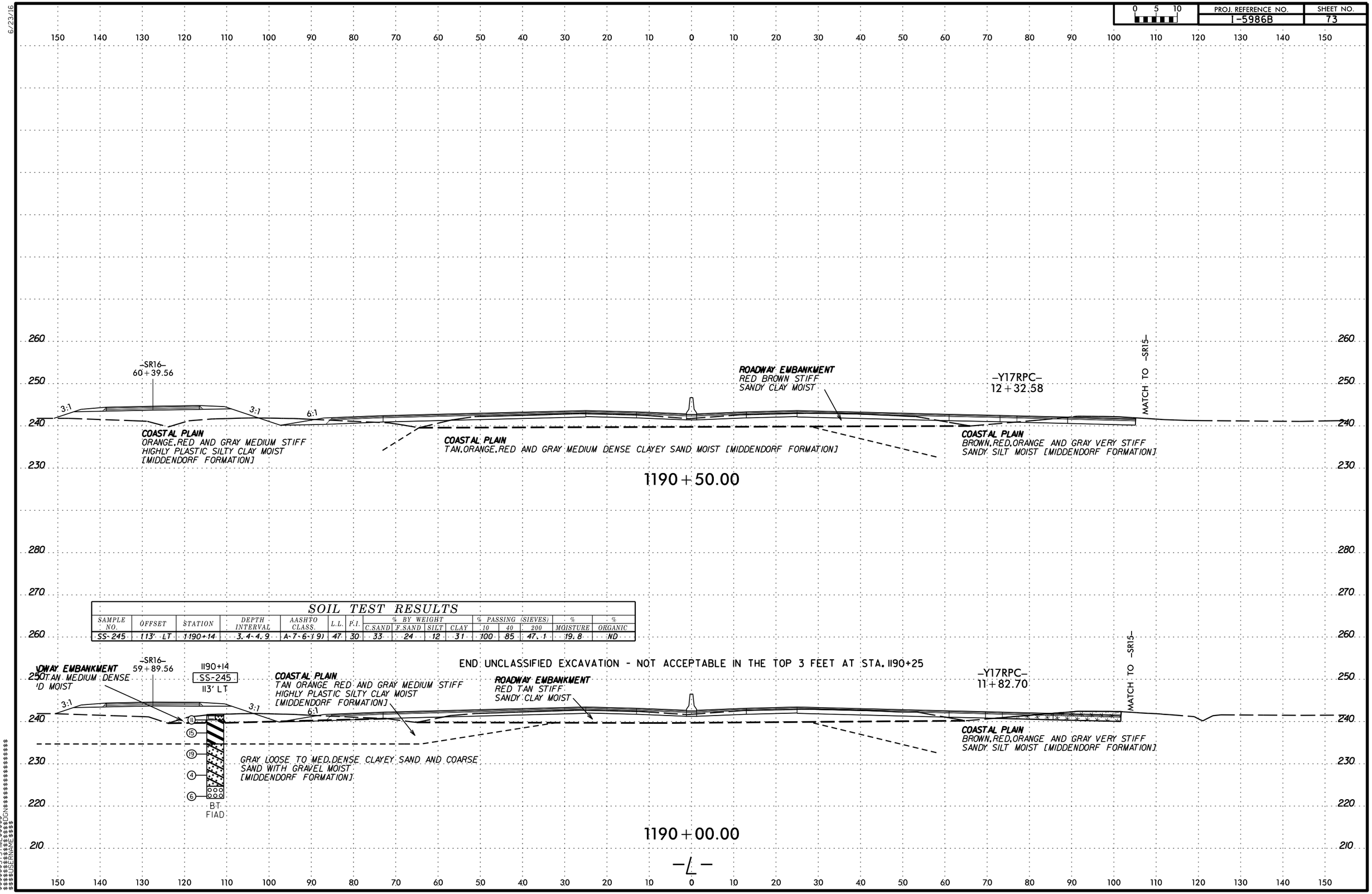
SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-521	91' LT	94+36	0.0 - 1.5	A-6-(5)	36	16	26	25	12	37	99	88	52.6	20.6	ND

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-450	60 RT	1189+00	0 - 1.5	A-6-(8)	38	18	23	20	14	42	99	88	58.9	26	ND

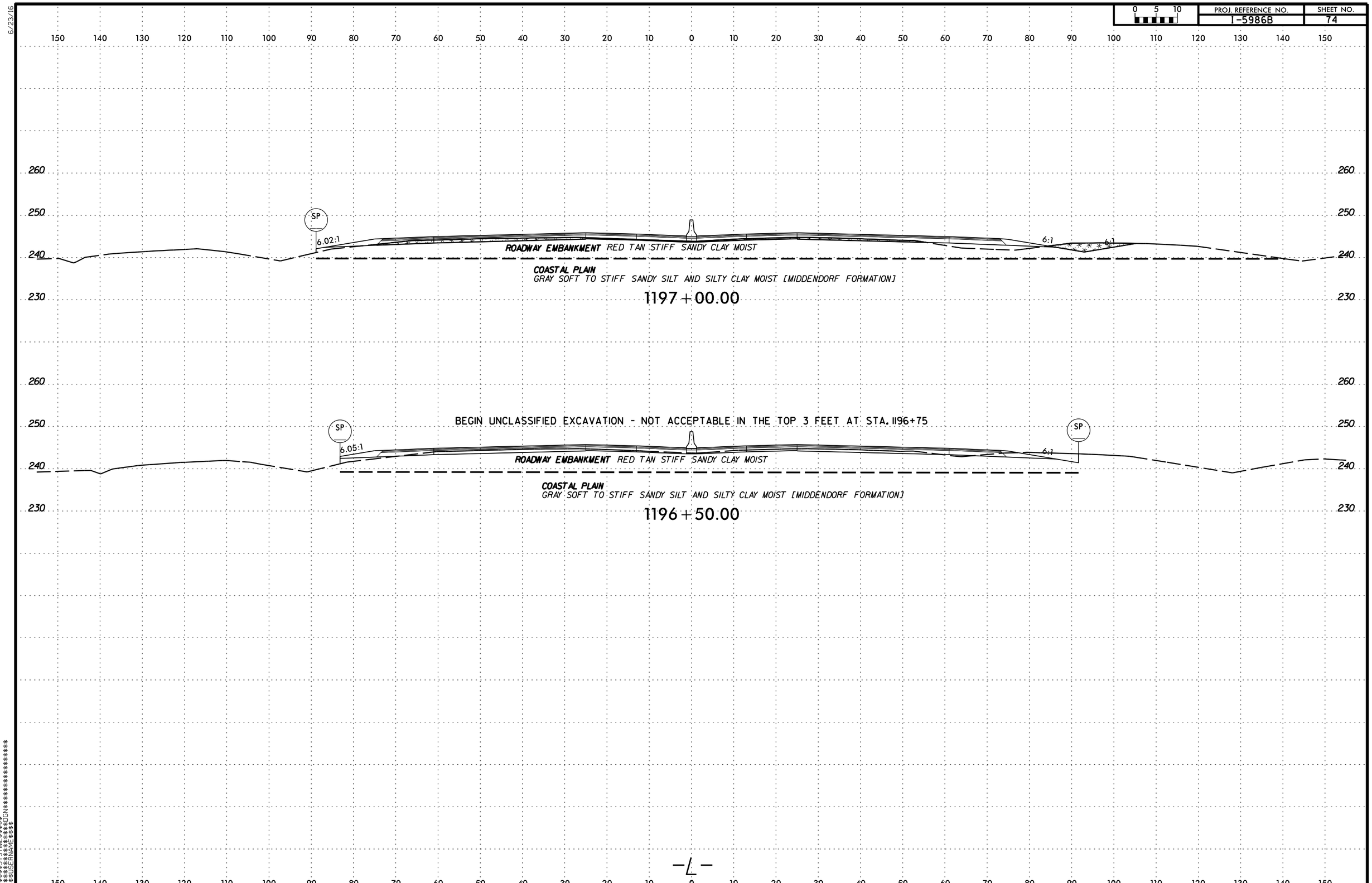
PROJ. REFERENCE NO. I-5986B | SHEET NO. 73



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-245	113' LT	1190+14	3.4-4.9	A-7-6-(9)	47	30	33	24	12	31	100	85	47.1	19.8	ND

END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 1190+25



PROJ. REFERENCE NO.
I-5986B
SHEET NO.
74
0 5 10
SP
6.02:1
6:1
6:1
ROADWAY EMBANKMENT RED TAN STIFF SANDY CLAY MOIST
COASTAL PLAIN
GRAY SOFT TO STIFF SANDY SILT AND SILTY CLAY MOIST [MIDDENDORF FORMATION]
1197+00.00
BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 1196+75
SP
6.05:1
SP
6:1
ROADWAY EMBANKMENT RED TAN STIFF SANDY CLAY MOIST
COASTAL PLAIN
GRAY SOFT TO STIFF SANDY SILT AND SILTY CLAY MOIST [MIDDENDORF FORMATION]
1196+50.00
-L-

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	75

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

250 240 230

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

6:1 6:1 5.5:1 3:1

COASTAL PLAIN ORANGE AND GRAY LOOSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

1199+00.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-878	60' LT	1198+57	0 - 1.5	A-2-6(11)	30	15	41	22	7	24	94	71	32.5	13.6	ND

250 240 230

1198+57
SS-878

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

6:1 6:1 6:1

(9) (7) (14) 04/18

COASTAL PLAIN ORANGE AND GRAY LOOSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

ORANGE,GRAY AND BLACK MEDIUM STIFF
TO STIFF SANDY CLAY AND SILTY CLAY MOIST

BT
DRY

1198+50.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-725	7 LT	1198+00	3.5-5.0	A-4-(0)	23	9	39	23	14	24	99	78	40.3	23	ND

270 260 250 240 230

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

SS-725

6:1 6:1

(11) (4) (11) 04/18

BT
FIAD

COASTAL PLAIN
GRAY SOFT TO STIFF
SANDY SILT AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

COASTAL PLAIN
BROWN LOOSE CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

6:1

(5) (8) (13) 02/18

BT
DRY

TAN AND GRAY MEDIUM DENSE
CLAYEY SAND MOIST

1198+00.00

250 240 230

5.92:1 6:1 6:1

ROADWAY EMBANKMENT RED TAN STIFF SANDY CLAY MOIST

COASTAL PLAIN
GRAY SOFT TO STIFF SANDY SILT AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

1197+50.00

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

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

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	76

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

270 260 250 240 230 220

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-462	65 RT	1201+00	0 - 1.5	A-2-4 (0)	15	N.P.	37	38	11	14	99	83	28	12.3	ND

COASTAL PLAIN
ORANGE AND GRAY SOFT SANDY CLAY MOIST
[MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

SS-462

5.5:1 3:1

COASTAL PLAIN
WHITE,TAN,ORANGE,BROWN
AND GRAY VERY LOOSE TO DENSE
CLAYEY SAND AND SILTY SAND MOIST
[MIDDENDORF FORMATION]

4 10 25 04/18 BT DRY

10 6 31 BT FIAD

4 9 22 02/18 BT DRY

1201+00.00

ROADWAY EMBANKMENT RED TAN STIFF SANDY CLAY MOIST
COASTAL PLAIN ORANGE AND GRAY LOOSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]
5.5:1 3:1

1200+50.00

ROADWAY EMBANKMENT RED TAN STIFF SANDY CLAY MOIST
COASTAL PLAIN ORANGE AND GRAY LOOSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]
5.59:1 6:1 5.5:1 3:1

1200+00.00

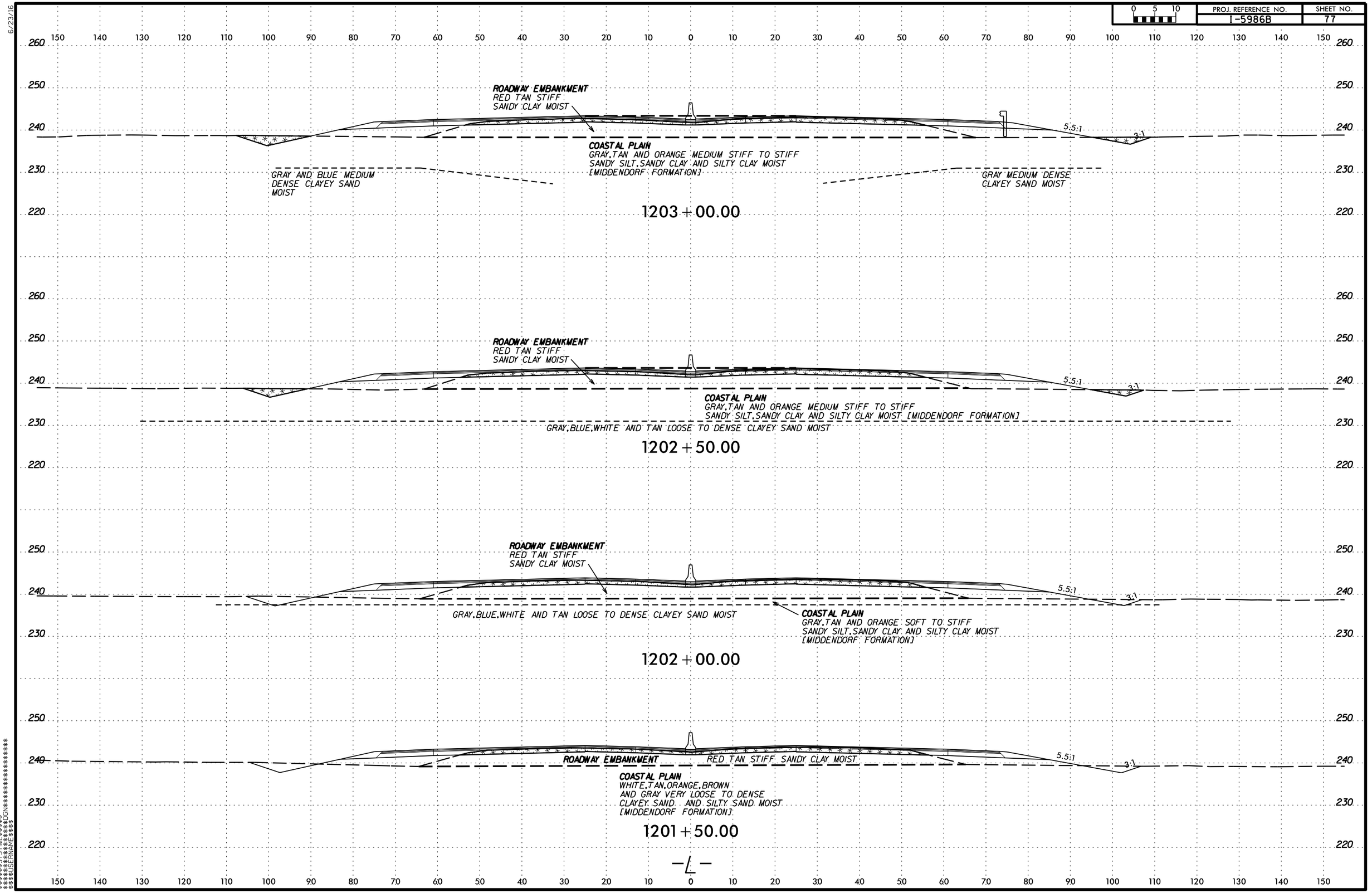
ROADWAY EMBANKMENT RED TAN STIFF SANDY CLAY MOIST
COASTAL PLAIN ORANGE AND GRAY LOOSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]
4.49:1 6:1 5.5:1 3:1

1199+50.00

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	77



$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	78

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

260 250 240 230 220 270 260

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

COASTAL PLAIN
GRAY,TAN AND ORANGE MEDIUM STIFF TO STIFF
SANDY SILT,SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

6:1 6:1

GRAY AND BLUE MEDIUM
DENSE CLAYEY SAND
MOIST

GRAY MEDIUM DENSE
CLAYEY SAND MOIST

1204+50.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-718	7 LT	1204+00	0 - 1.5	A-6-(5)	30	18	27	24	17	32	99	86	51.1	16.2	ND
SS-870	66 LT	1204+00	3.5-5.0	A-7-6-(13)	53	36	32	20	7	41	98	83	49	21.5	ND

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

SS-870 SS-718

6 8 13 04/18 BT

9 5 15 BT FIAD

7 7 13 BT DRY

COASTAL PLAIN
GRAY,TAN AND ORANGE MEDIUM STIFF TO STIFF
SANDY SILT,SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

6:1 5.96:1

GRAY AND BLUE MEDIUM
DENSE CLAYEY SAND
MOIST

GRAY MEDIUM DENSE
CLAYEY SAND MOIST

1204+00.00

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

COASTAL PLAIN
GRAY,TAN AND ORANGE MEDIUM STIFF TO STIFF
SANDY SILT,SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

5.5:1 3:1

GRAY AND BLUE MEDIUM
DENSE CLAYEY SAND
MOIST

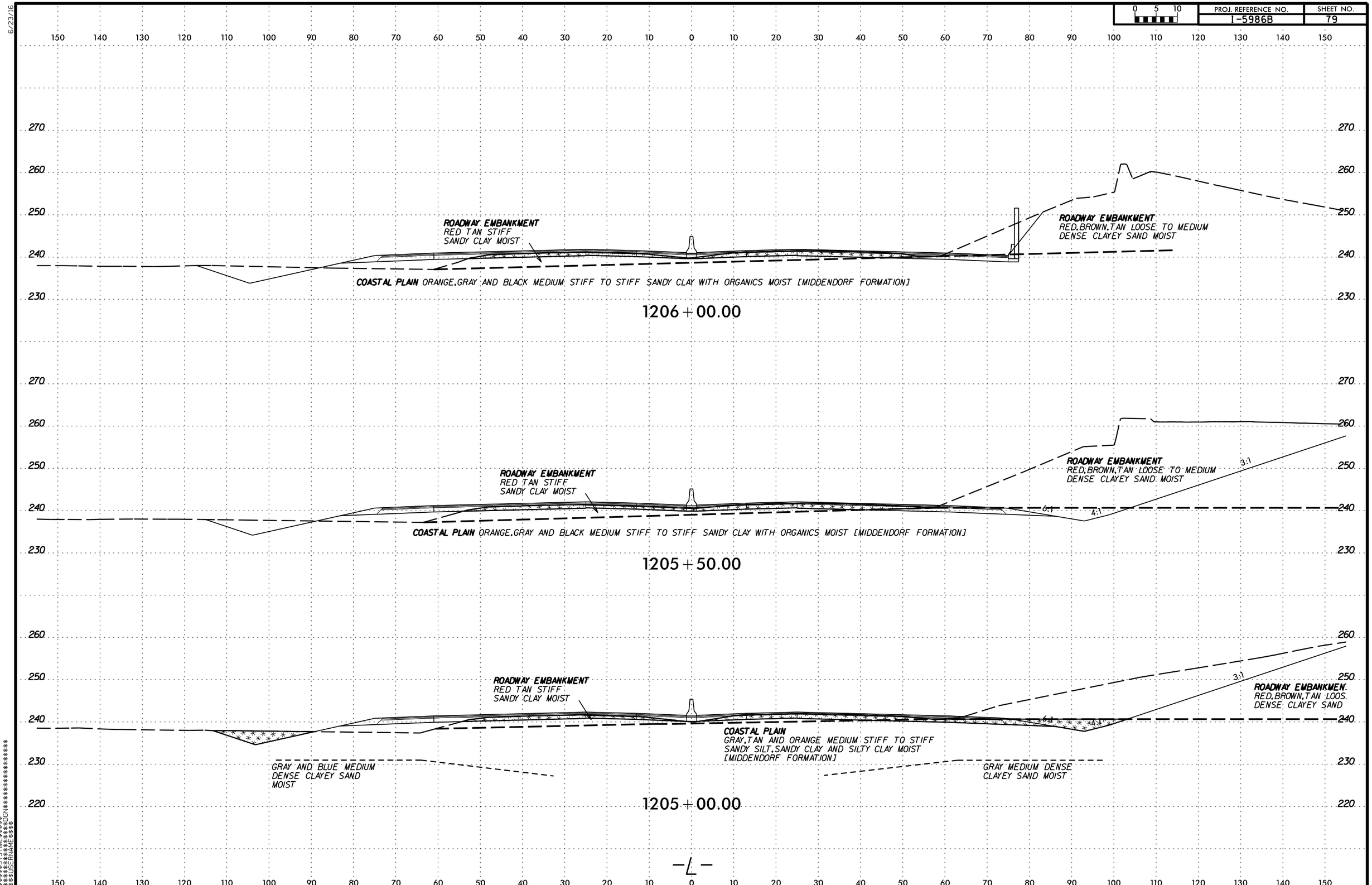
GRAY MEDIUM DENSE
CLAYEY SAND MOIST

1203+50.00

—L—

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

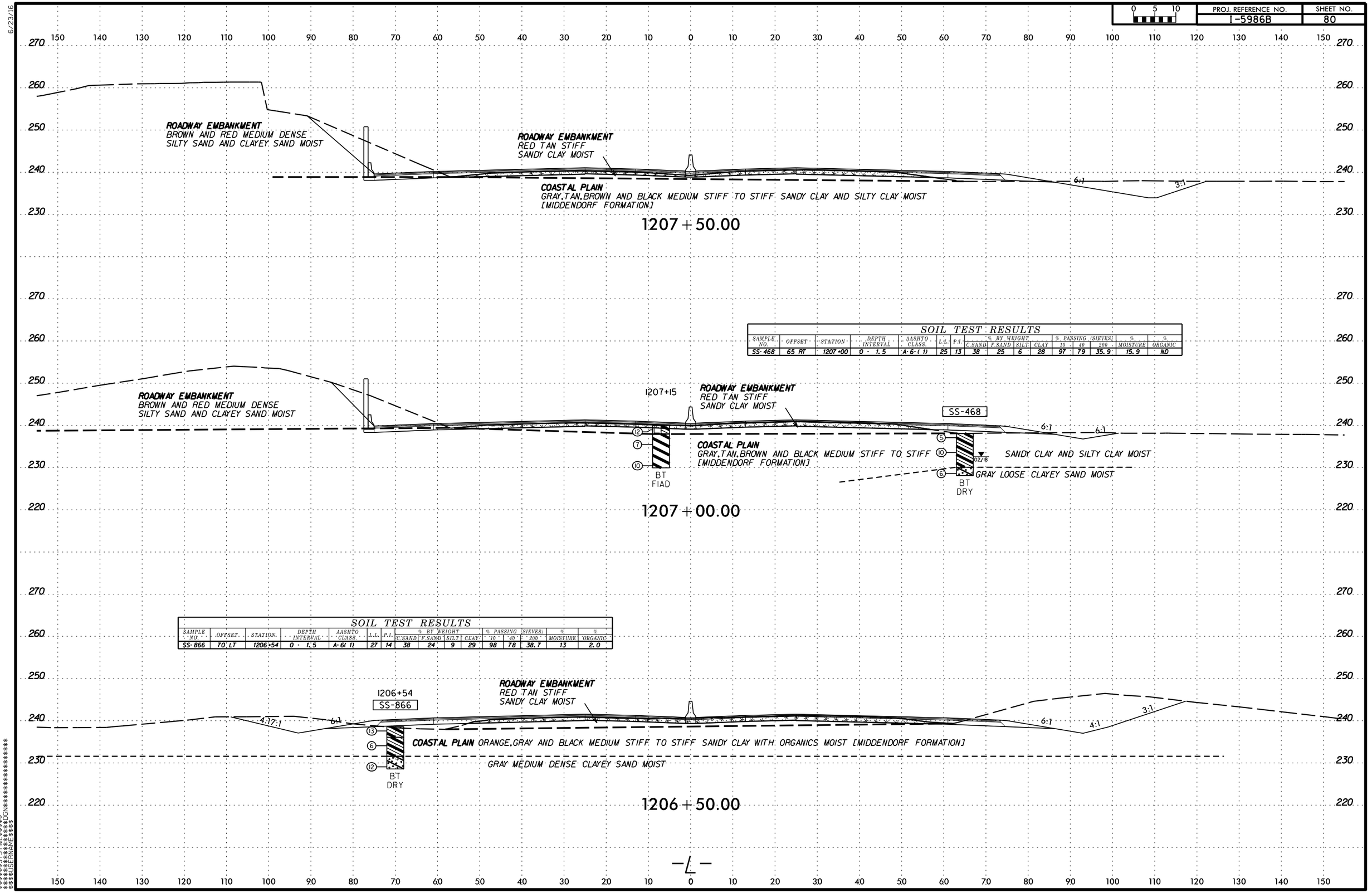
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$



PROJ. REFERENCE NO.
I-5986B
SHEET NO.
79
ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST
ROADWAY EMBANKMENT
RED,BROWN,TAN LOOSE TO MEDIUM
DENSE CLAYEY SAND MOIST
COASTAL PLAIN ORANGE,GRAY AND BLACK MEDIUM STIFF TO STIFF SANDY CLAY WITH ORGANICS MOIST [MIDDENDORF FORMATION]
1206+00.00
ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST
ROADWAY EMBANKMENT
RED,BROWN,TAN LOOSE TO MEDIUM
DENSE CLAYEY SAND MOIST
3:1
6:1
4:1
COASTAL PLAIN ORANGE,GRAY AND BLACK MEDIUM STIFF TO STIFF SANDY CLAY WITH ORGANICS MOIST [MIDDENDORF FORMATION]
1205+50.00
ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST
ROADWAY EMBANKMEN
RED,BROWN,TAN LOOS
DENSE CLAYEY SAND
3:1
6:1
4:1
COASTAL PLAIN
GRAY,TAN AND ORANGE MEDIUM STIFF TO STIFF
SANDY SILT,SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]
GRAY AND BLUE MEDIUM
DENSE CLAYEY SAND
MOIST
GRAY MEDIUM DENSE
CLAYEY SAND MOIST
1205+00.00
-L-

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	80



$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	81

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

250
240
230
220

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

3:1 6:1 6:1 3:1

COASTAL PLAIN
GRAY,TAN,BROWN AND BLACK MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

1209+50.00

240
230

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

5.53:1 6:1 6:1 3:1

COASTAL PLAIN
GRAY,TAN,BROWN AND BLACK MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

1209+00.00

280
250
240

ROADWAY EMBANKMENT
BROWN AND RED MEDIUM DENSE
SILTY SAND AND CLAYEY SAND MOIST

4:1 6:1

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

6:1 3:1

COASTAL PLAIN
GRAY,TAN,BROWN AND BLACK MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

1208+50.00

270
260
250
240
230

3:1

ROADWAY EMBANKMENT
BROWN AND RED MEDIUM DENSE
SILTY SAND AND CLAYEY SAND MOIST

4:1 6:1

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

6:1 3:1

COASTAL PLAIN
GRAY,TAN,BROWN AND BLACK MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

1208+00.00

$$$$$$$$SYSTIME$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	82

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

250 240 230 220

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

6:1 3:1 6:1 3:1

COASTAL PLAIN
ORANGE,TAN AND GRAY MEDIUM STIFF
SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

1211+00.00

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

6:1 3:1 6:1 3:1

COASTAL PLAIN
ORANGE,TAN AND GRAY MEDIUM STIFF
SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

1210+50.00

270 260 250 240 230 220

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-471	60. RT	1210+00	0 - 1.5	A-6-(2)	30	14	35	19.	8	33	95	76	42.2	16.6	ND

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

SS-471

6:1 3:1 6:1 3:1

GRAY AND BLUE LOOSE
CLAYEY SAND MOIST

BT
DRY

04/18

COASTAL PLAIN
ORANGE,TAN AND GRAY MEDIUM STIFF
SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

BT
FIAD

02/18

GRAY AND RED LOOSE
CLAYEY SAND MOIST TO WET

BT

1210+00.00

—L—

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

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	83

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

250
240
230
220

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

3:1 6:1

COASTAL PLAIN
GRAY TAN AND BROWN MEDIUM STIFF TO
STIFF SILTY CLAY AND SANDY SILT MOIST
[MIDDENDORF FORMATION]

GRAY LOOSE CLAYEY SAND WET

SP

6:1 14:1

COASTAL PLAIN
GRAY LOOSE TO MEDIUM DENSE
CLAYEY SAND MOIST TO WET
[MIDDENDORF FORMATION]

1212+50.00

250
240
230
220

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

3:1 6:1

COASTAL PLAIN
GRAY TAN AND BROWN MEDIUM STIFF TO
STIFF SILTY CLAY AND SANDY SILT MOIST
[MIDDENDORF FORMATION]

GRAY LOOSE CLAYEY SAND WET

SP

6:1 6.66:1

COASTAL PLAIN
GRAY LOOSE TO MEDIUM DENSE
CLAYEY SAND MOIST TO WET
[MIDDENDORF FORMATION]

1212+00.00

260
250
240
230
220

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 1211+75

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

3:1 6:1

COASTAL PLAIN
ORANGE,TAN AND GRAY MEDIUM STIFF
SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

GRAY AND BLUE LOOSE
CLAYEY SAND MOIST

6:1 3:1

GRAY AND RED LOOSE
CLAYEY SAND MOIST TO WET

1211+50.00

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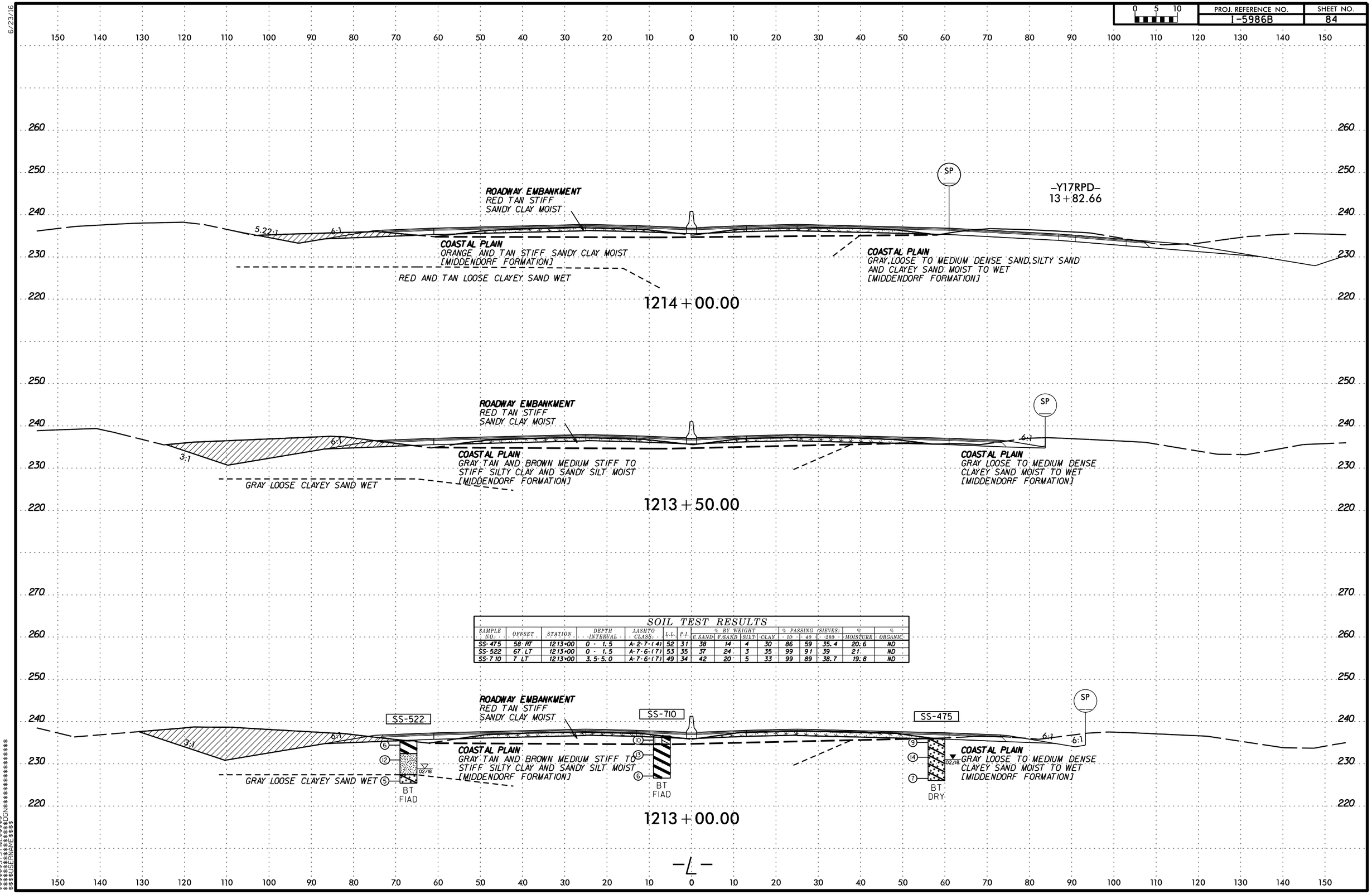
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$$SYSTIME$$$$$
$$$$$$$$

PROJ. REFERENCE NO. I-5986B | SHEET NO. 84



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-475	58 RT	1213+00	0 - 1.5	A-2-7-(4)	52	31	38	14	4	30	86	59	35.4	20.6	ND
SS-522	67 LT	1213+00	0 - 1.5	A-7-6-(7)	53	35	37	24	3	35	99	91	39	21.	ND
SS-710	7 LT	1213+00	3.5-5.0	A-7-6-(7)	49	34	42	20	5	33	99	89	38.7	19.8	ND

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	85

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

260 250 240 230 220 210

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 1215+75

SP

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

6:1

COASTAL PLAIN
RED,TAN AND GRAY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

TAN MEDIUM STIFF SILTY CLAY WET

1215+50.00

SP
-Y17RPD-
12+36.28

SP

COASTAL PLAIN
RED,ORANGE AND TAN LOOSE TO MEDIUM DENSE
CLAYEY SAND MOIST TO SAT.
[MIDDENDORF FORMATION]

SP

1215+24

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

6:1

10
14
6
01/18
BT
FIAD

RED AND TAN LOOSE CLAYEY SAND WET

COASTAL PLAIN
ORANGE AND TAN STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]

1215+00.00

SP
-Y17RPD-
12+85.58

SP

COASTAL PLAIN
GRAY,LOOSE TO MEDIUM DENSE SAND,SILTY SAND
AND CLAYEY SAND MOIST TO WET
[MIDDENDORF FORMATION]

SP

ROADWAY EMBANKMENT
RED TAN STIFF
SANDY CLAY MOIST

4.0%

6:1

RED AND TAN LOOSE CLAYEY SAND WET

COASTAL PLAIN
ORANGE AND TAN STIFF SANDY CLAY MOIST
[MIDDENDORF FORMATION]

1214+50.00

SP
-Y17RPD-
13+34.42

-Y17RPD- 13+50

7
14
6
8
01/18

6:1

3:1

SP

COASTAL PLAIN
GRAY,LOOSE TO MEDIUM DENSE SAND,SILTY SAND
AND CLAYEY SAND MOIST TO WET
[MIDDENDORF FORMATION]

—L—

$$$$USERNAME$$$$
$$$$SYSTIME$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	86

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
YELLOW,GRAY,RED,TAN AND BROWN STIFF TO HARD SANDY CLAY,SILTY CLAY AND CLAYEY SILT MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
YELLOW,ORANGE,TAN,BROWN,RED,GRAY AND PINK LOOSE TO MEDIUM DENSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO SAT [MIDDENDORF FORMATION]

MATCH LINE 150' LEFT

240 230 220

(A) COASTAL PLAIN
YELLOW,GRAY,RED,TAN AND BROWN STIFF TO HARD SANDY CLAY, SILTY CLAY AND CLAYEY SILT MOIST [MIDDENDORF FORMATION]

-Y17RPA-
14+62.55

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

-Y17RPD-
11+36.75

SP SP

240 230 220 210 200

YELLOW,TAN AND BROWN MEDIUM STIFF TO STIFF SILTY CLAY WET

1216+50.00

260 250 240 230 220 210 200

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C SAND	F SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-705	7 LT	1216+00	3.5-5.0	A-6-(9)	39	24	32	17	15	36	99	81	53	17.7	ND

UNCLASSIFIED EXCAVATION CONTINUED FROM -Y17RPA- CROSS SECTIONS

SP

ROADWAY EMBANKMENT
TAN RED STIFF
SANDY CLAY MOIST

6.02:1

SS-705

COASTAL PLAIN
RED,TAN AND GRAY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

11 14 5 13 7

04/18

BT FIAD

TAN MEDIUM STIFF SILTY CLAY WET

COASTAL PLAIN
RED,ORANGE AND TAN LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST TO SAT. [MIDDENDORF FORMATION]

9 17 3 3 4

02/18

BT DRY

-Y17RPD-
11+86.63

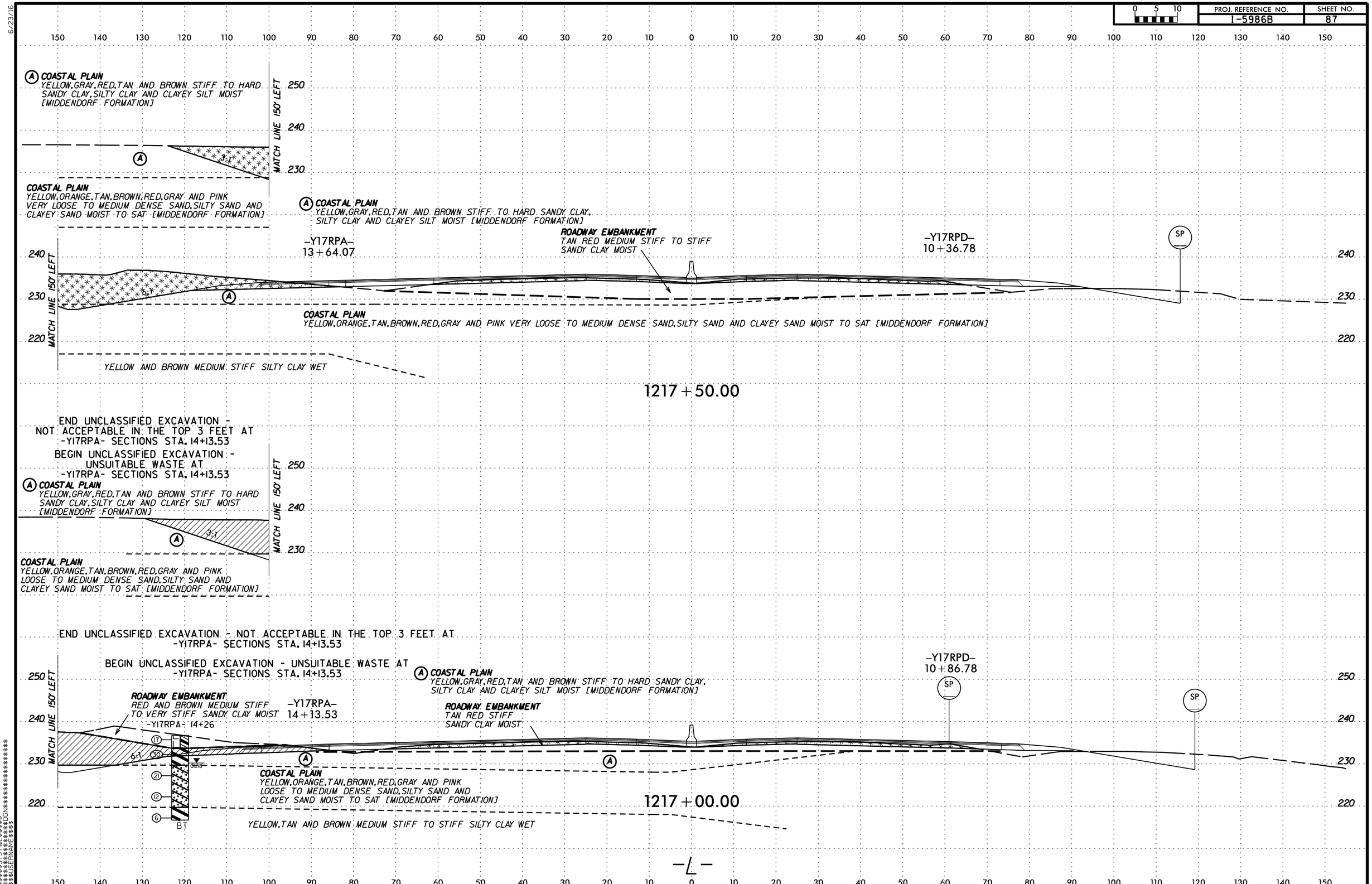
SP SP

1216+00.00

-L-

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

$$$$$$$SYSTIME$$$$$$
$$$$$$$

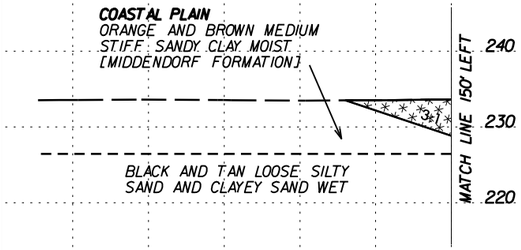


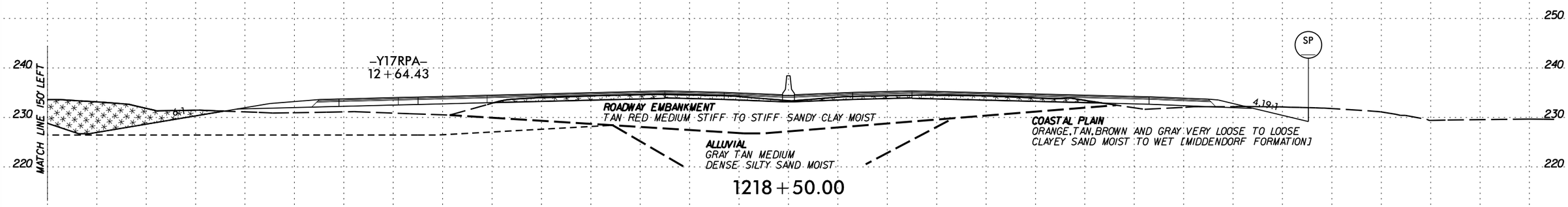
PROJ. REFERENCE NO.
I-5986B
SHEET NO.
87
0 5 10
A COASTAL PLAIN
YELLOW,GRAY,RED,TAN AND BROWN STIFF TO HARD SANDY CLAY,SILTY CLAY AND CLAYEY SILT MOIST [MIDDENDORF FORMATION]
MATCH LINE 150' LEFT
COASTAL PLAIN
YELLOW,ORANGE,TAN,BROWN,RED,GRAY AND PINK VERY LOOSE TO MEDIUM DENSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO SAT [MIDDENDORF FORMATION]
A COASTAL PLAIN
YELLOW,GRAY,RED,TAN AND BROWN STIFF TO HARD SANDY CLAY, SILTY CLAY AND CLAYEY SILT MOIST [MIDDENDORF FORMATION]
-Y17RPA-
13+64.07
ROADWAY EMBANKMENT
TAN RED MEDIUM STIFF TO STIFF SANDY CLAY MOIST
-Y17RPD-
10+36.78
SP
COASTAL PLAIN
YELLOW,ORANGE,TAN,BROWN,RED,GRAY AND PINK VERY LOOSE TO MEDIUM DENSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO SAT [MIDDENDORF FORMATION]
YELLOW AND BROWN MEDIUM STIFF SILTY CLAY WET
1217+50.00
END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT -Y17RPA- SECTIONS STA. 14+13.53
BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT -Y17RPA- SECTIONS STA. 14+13.53
A COASTAL PLAIN
YELLOW,GRAY,RED,TAN AND BROWN STIFF TO HARD SANDY CLAY,SILTY CLAY AND CLAYEY SILT MOIST [MIDDENDORF FORMATION]
COASTAL PLAIN
YELLOW,ORANGE,TAN,BROWN,RED,GRAY AND PINK LOOSE TO MEDIUM DENSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO SAT [MIDDENDORF FORMATION]
END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT -Y17RPA- SECTIONS STA. 14+13.53
BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT -Y17RPA- SECTIONS STA. 14+13.53
A COASTAL PLAIN
YELLOW,GRAY,RED,TAN AND BROWN STIFF TO HARD SANDY CLAY, SILTY CLAY AND CLAYEY SILT MOIST [MIDDENDORF FORMATION]
-Y17RPD-
10+86.78
ROADWAY EMBANKMENT
RED AND BROWN MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST
-Y17RPA- 14+26
-Y17RPA-
14+13.53
ROADWAY EMBANKMENT
TAN RED STIFF SANDY CLAY MOIST
COASTAL PLAIN
YELLOW,ORANGE,TAN,BROWN,RED,GRAY AND PINK LOOSE TO MEDIUM DENSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO SAT [MIDDENDORF FORMATION]
1217+00.00
YELLOW,TAN AND BROWN MEDIUM STIFF TO STIFF SILTY CLAY WET
BT
-L-

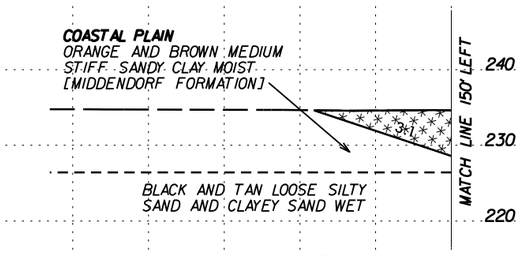
6/23/16

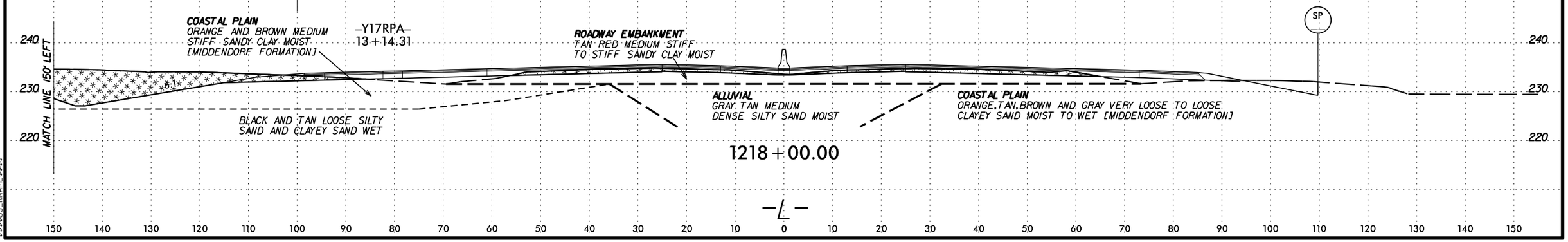
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	88

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









–L–

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

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	89

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

250 240 230 220 210

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

–Y17RPA–
11+14.77

ROADWAY EMBANKMENT
TAN RED MEDIUM STIFF TO STIFF SANDY CLAY MOIST

SP

6:1 6:1 6:1 6:1

BLACK AND TAN LOOSE SILTY SAND AND CLAYEY SAND WET

ALLUVIAL
GRAY TAN MEDIUM DENSE SILTY SAND MOIST

COASTAL PLAIN
ORANGE,TAN,BROWN AND GRAY VERY LOOSE TO LOOSE CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

1220+00.00

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

–Y17RPA–
11+64.66

ROADWAY EMBANKMENT
TAN RED MEDIUM STIFF TO STIFF SANDY CLAY MOIST

SP

6:1 6:1 6:1 6:1

BLACK AND TAN LOOSE SILTY SAND AND CLAYEY SAND WET

ALLUVIAL
GRAY TAN MEDIUM DENSE SILTY SAND MOIST

COASTAL PLAIN
ORANGE,TAN,BROWN AND GRAY VERY LOOSE TO LOOSE CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

1219+50.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C SAND	F SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-515	73 LT	1219+00	0 - 1.5	A-6-(3)	33	17	33	21	8	32	93	74	41.6	18.1	ND

SS-515

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

–Y17RPA–
12+14.54

ROADWAY EMBANKMENT
TAN RED MEDIUM STIFF TO STIFF SANDY CLAY MOIST

SP

6:1 6:1 6:1 6:1

BLACK AND TAN LOOSE SILTY SAND AND CLAYEY SAND WET

BT FIAD

ALLUVIAL
GRAY TAN MEDIUM DENSE SILTY SAND MOIST

BT

COASTAL PLAIN
ORANGE,TAN,BROWN AND GRAY VERY LOOSE TO LOOSE CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

1219+00.00

–L–

$$$$$$$SYSTIME$$$$$
$$$$$$$

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
I-5986B	90

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

250 240 230 220 260 250 240 230 220 210

-Y17RPA-
10+15.00

ROADWAY EMBANKMENT
TAN RED LOOSE CLAYEY SAND MOIST

3:1 6:1 6:1 6:1 SP

COASTAL PLAIN
GRAY,TAN,RED,AND BROWN VERY LOOSE TO MEDIUM DENSE SILTY SAND AND CLAYEY SAND MOIST TO SAT.[MIDDENDORF FORMATION]

1221+00.00

BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT -Y17RPA- SECTIONS STA. 10+40

END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 1220+75

-Y17RPA-
10+64.89

ROADWAY EMBANKMENT
TAN RED MEDIUM STIFF TO STIFF SANDY CLAY MOIST

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

3:1 6:1 6:1 6:1 4:1 SP

BLACK AND TAN LOOSE SILTY SAND AND CLAYEY SAND WET

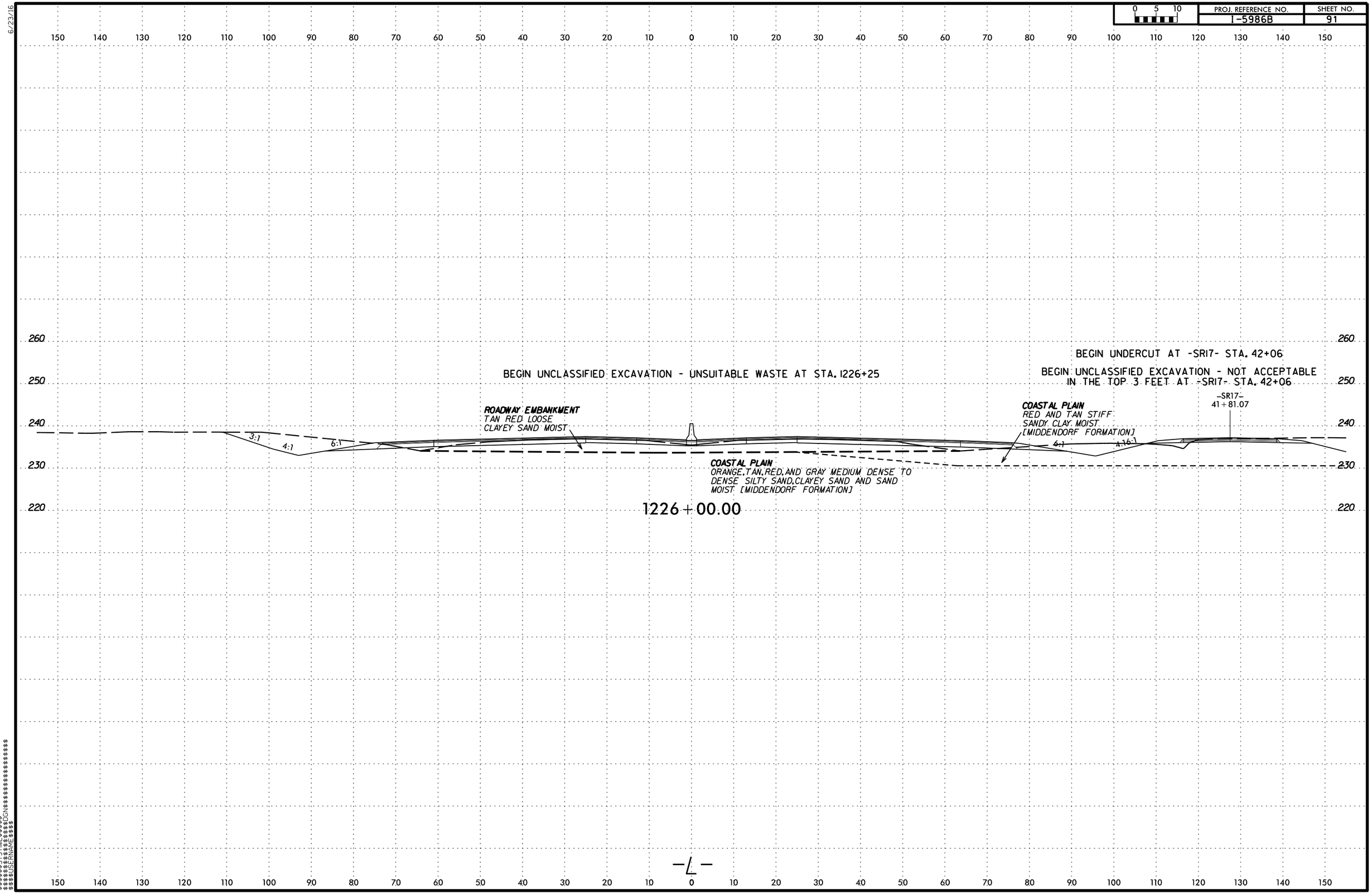
ALLUVIAL
GRAY TAN MEDIUM DENSE SILTY SAND MOIST

COASTAL PLAIN
ORANGE,TAN,BROWN AND GRAY VERY LOOSE TO LOOSE CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

1220+50.00

-L-

$$$$$$$SYSTIME$$$$$$
$$$$$$$

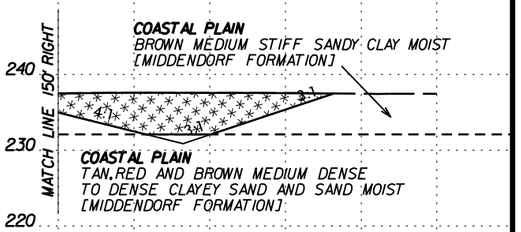


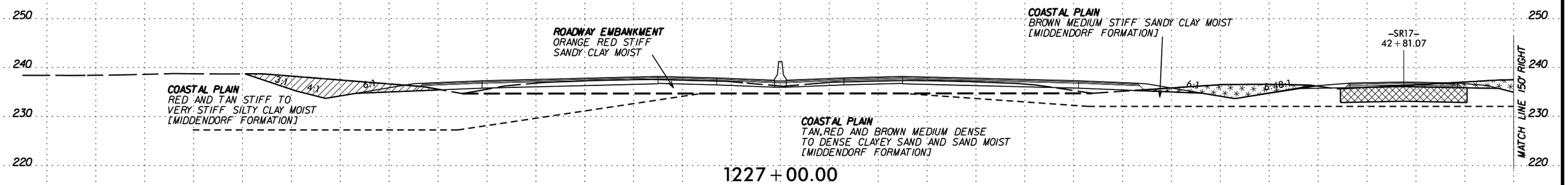
PROJ. REFERENCE NO.
I-5986B
SHEET NO.
91
BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 1226+25
BEGIN UNDERCUT AT -SR17- STA. 42+06
BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT -SR17- STA. 42+06
-SR17-
41+81.07
ROADWAY EMBANKMENT
TAN RED LOOSE
CLAYEY SAND MOIST
COASTAL PLAIN
RED AND TAN STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]
COASTAL PLAIN
ORANGE, TAN, RED, AND GRAY MEDIUM DENSE TO
DENSE SILTY SAND, CLAYEY SAND AND SAND
MOIST [MIDDENDORF FORMATION]
3:1
4:1
6:1
6:1
4:16:1
1226+00.00
-L-

6/23/16

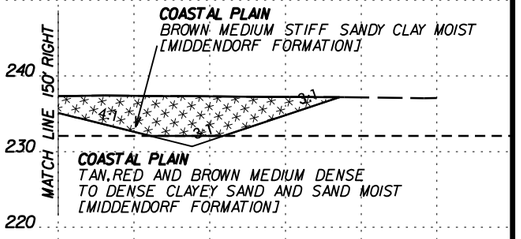
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	92

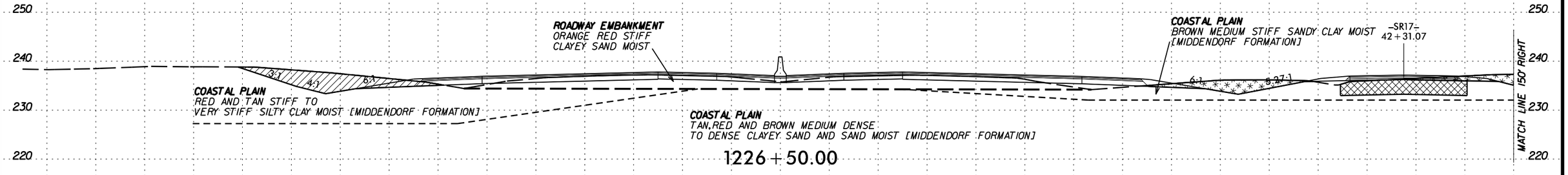
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150





1227+00.00





1226+50.00

–L–

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

$$$$$$$SYSTIME$$$$$$
$$$$$$$

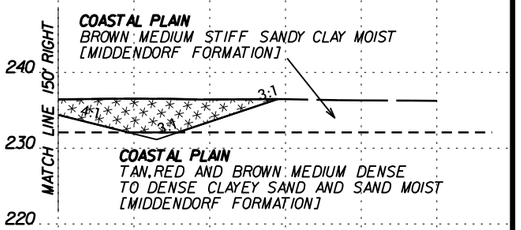
6/23/16

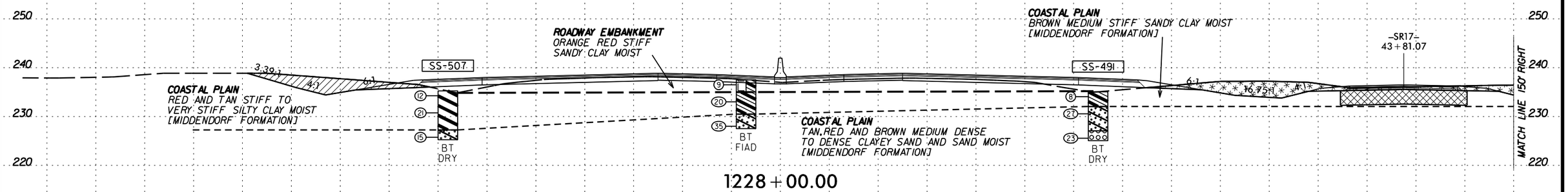
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	93

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

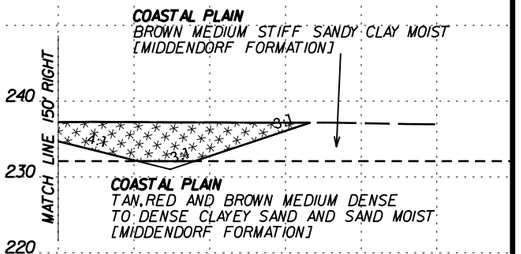
SOIL TEST RESULTS

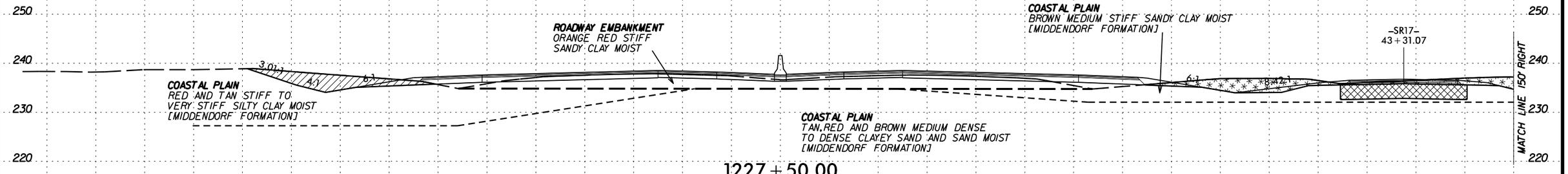
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-491	65' RT	1228+00	0 - 1.5	A-6-(3)	36	16	34	20	6	36	96	77	44.2	16.4	ND
SS-507	68' LT	1228+00	0 - 1.5	A-7-6-(11)	48	24	18	28	8	45	99	92	55.3	25	ND





1228+00.00





1227+50.00

-L-

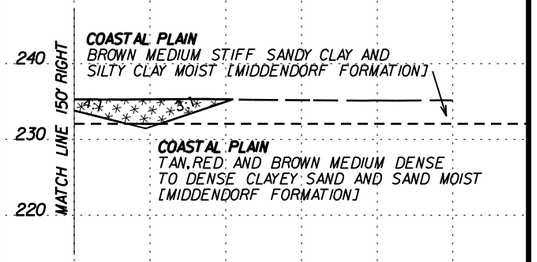
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

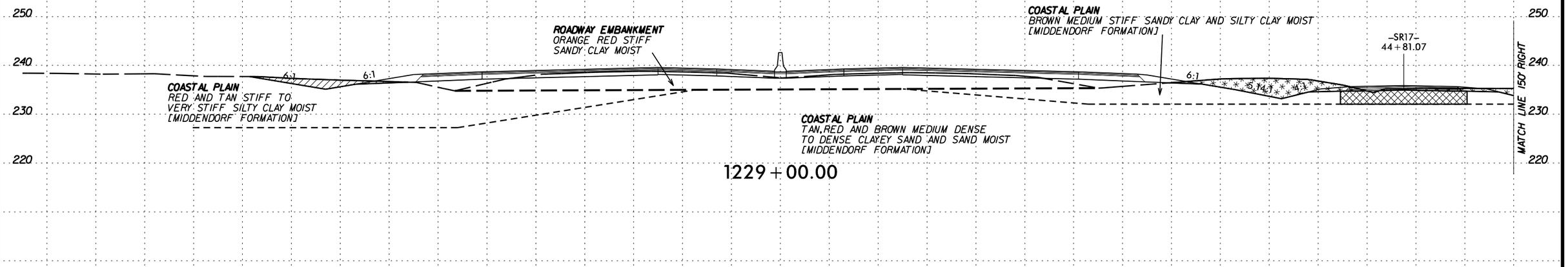
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

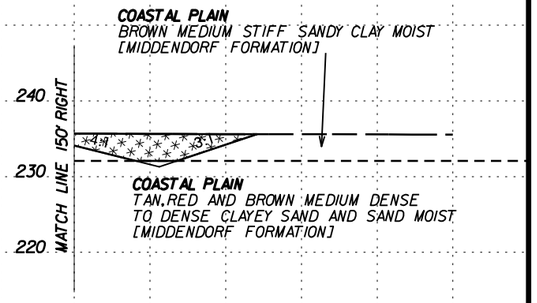
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	94

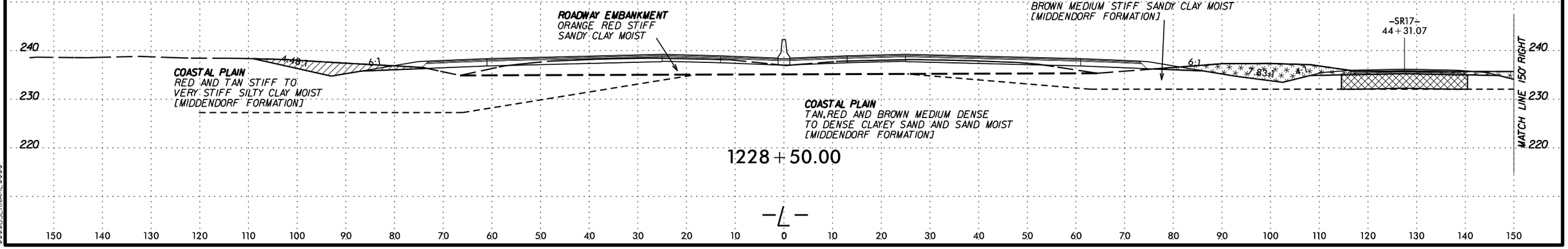
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150





1229+00.00





1228+50.00

–L–

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

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	95

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

260 250 240 230 220

ROADWAY EMBANKMENT
ORANGE TAN STIFF
SANDY CLAY MOIST

-SR17-
45+81.07

6:1 6:1 6:1 3.24:1 4:1 4:1

COASTAL PLAIN
BROWN LOOSE TO MEDIUM DENSE SILTY SAND MOIST
[MIDDENDORF FORMATION]

RED AND TAN MEDIUM
DENSE SILTY SAND MOIST

COASTAL PLAIN
GRAY,RED,BROWN AND TAN SOFT TO
VERY STIFF SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

RED AND TAN DENSE
CLAYEY SAND MOIST

1230+00.00

END UNDERCUT AT -SRI7- STA. 45+56
END UNCLASSIFIED EXCAVATION -
NOT ACCEPTABLE
IN THE TOP 3 FEET AT -SRI7- STA. 45+56

240 MATCH LINE 150' RIGHT 230 220

COASTAL PLAIN
BROWN MEDIUM STIFF SANDY CLAY
AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

3:1 3:1

COASTAL PLAIN
TAN,RED AND BROWN MEDIUM DENSE
TO DENSE CLAYEY SAND AND SAND MOIST
[MIDDENDORF FORMATION]

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 1229+75

END UNDERCUT AT -SRI7- STA. 45+56
END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE
IN THE TOP 3 FEET AT -SRI7- STA. 45+56

250 240 230 220

ROADWAY EMBANKMENT
ORANGE RED STIFF
SANDY CLAY MOIST

-SR17-
45+31.07

6:1 6:1 6:1 3.97:1 4:1

COASTAL PLAIN
RED AND TAN STIFF TO VERY STIFF SILTY CLAY MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
TAN,RED AND BROWN MEDIUM DENSE
TO DENSE CLAYEY SAND AND SAND MOIST
[MIDDENDORF FORMATION]

COASTAL PLAIN
BROWN MEDIUM STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

1229+50.00

MATCH LINE 150' RIGHT

-L-

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

$$$$$$$SYSTIME$$$$$
$$$$$$$

6/23/16

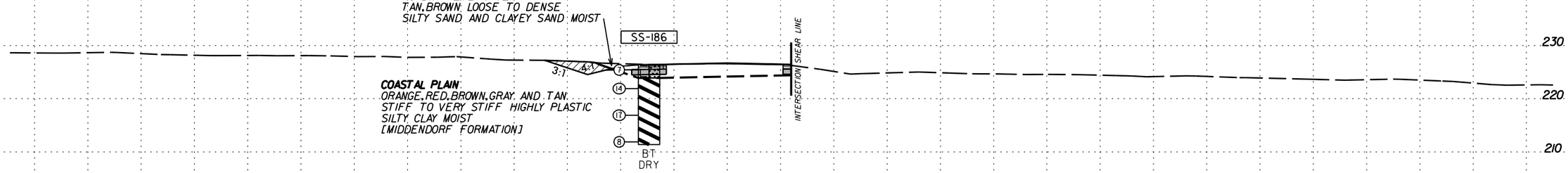
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	96

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

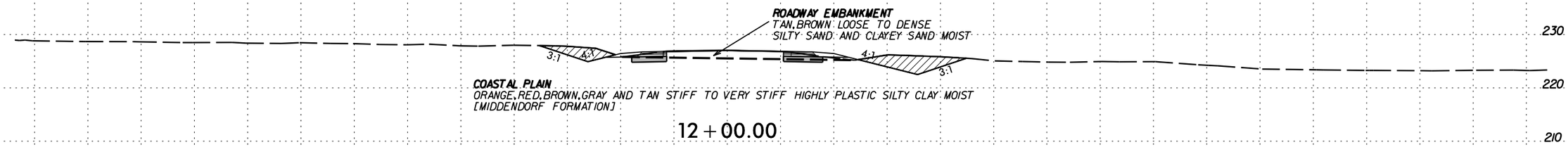
260 250 240 230 220 210 200

SOIL TEST RESULTS

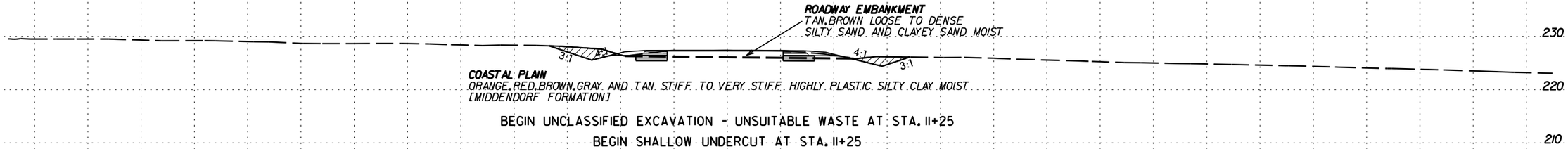
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-186	15' LT	12+50	3.5-5.0	A-7-6-(8)	50	29	39	20	5	36	100	83	44.5	20	ND



12 + 50.00



12 + 00.00



BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 11+25

BEGIN SHALLOW UNDERCUT AT STA. 11+25

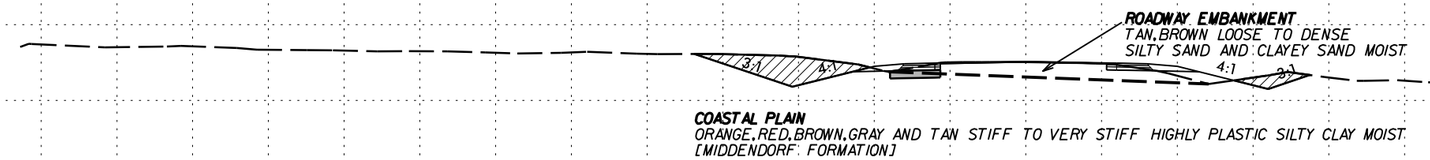
11 + 50.00

-Y16-

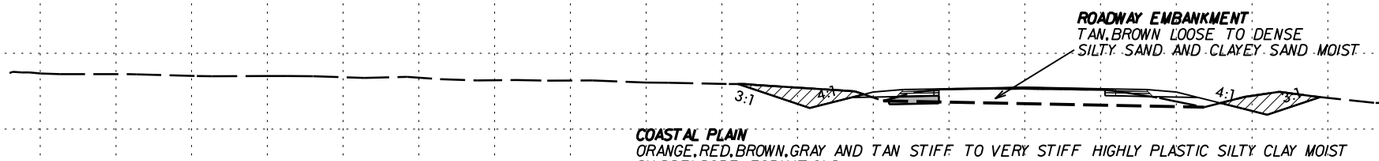
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	97

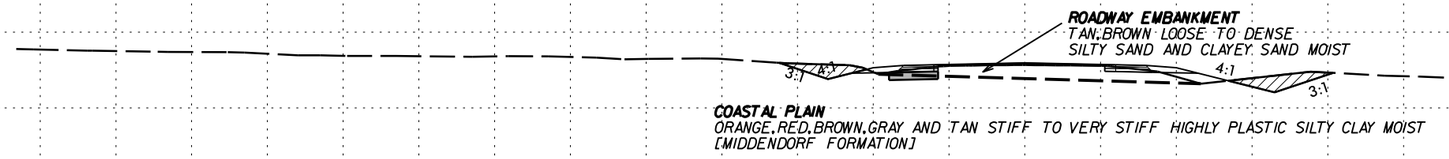
END SHALLOW UNDERCUT AT STA. 14+75



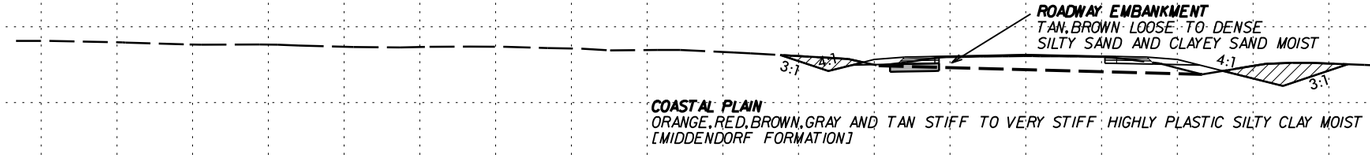
14+50.00



14+00.00



13+50.00



13+00.00

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

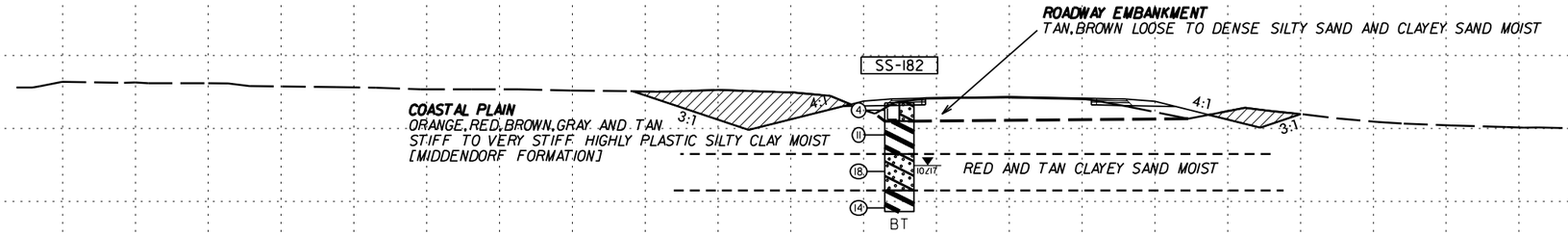
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	98

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

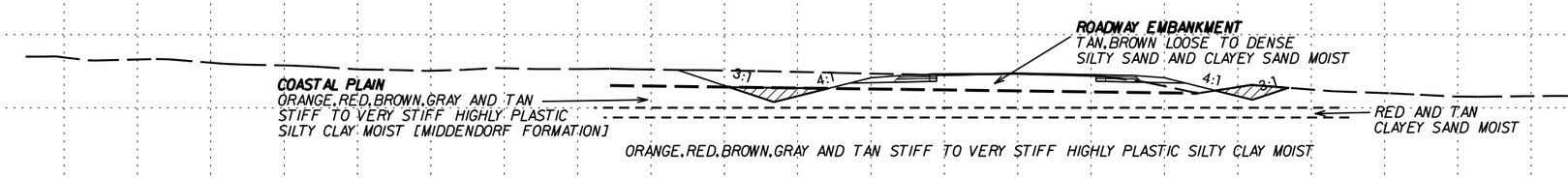
260 250 240 230 220 210 200 190

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C SAND	F SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-182	15' LT	15+50	3.4-4.9	A-7-6-(7)	46	19	33	17	3	47	100	87	51.6	21.5	ND



15+50.00



15+00.00

-Y16-

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	99

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

240
230
220
210
200

ROADWAY EMBANKMENT
TAN,BROWN LOOSE TO DENSE SILTY SAND AND CLAYEY SAND MOIST

3:1 4:1 4:1 3:1

COASTAL PLAIN
ORANGE,RED,BROWN,GRAY AND TAN
STIFF TO VERY STIFF HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST
[MIDDENDORF FORMATION]

17+00.00

ROADWAY EMBANKMENT
TAN,BROWN LOOSE TO DENSE
SILTY SAND AND CLAYEY SAND MOIST

3:1 4:1 4:1 3:1

COASTAL PLAIN
ORANGE,RED,BROWN,GRAY AND TAN STIFF TO VERY STIFF HIGHLY PLASTIC SILTY CLAY MOIST
[MIDDENDORF FORMATION]

16+50.00

INTERSECTION SHEAR LINE

ROADWAY EMBANKMENT
TAN,BROWN LOOSE TO DENSE
SILTY SAND AND CLAYEY SAND MOIST

4:1 3:1

COASTAL PLAIN
ORANGE,RED,BROWN,GRAY AND TAN
STIFF TO VERY STIFF HIGHLY PLASTIC
SILTY CLAY MOIST
[MIDDENDORF FORMATION]

RED AND TAN CLAYEY SAND MOIST

ORANGE,RED,BROWN,GRAY AND TAN STIFF TO VERY STIFF
HIGHLY PLASTIC SILTY CLAY MOIST

16+00.00

-Y16-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
I-5986B	100

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

240
230
220
210
200
250
240
230
220
210

INTERSECTION SHEAR LINE

ROADWAY EMBANKMENT
TAN,BROWN LOOSE TO DENSE
SILTY SAND AND CLAYEY SAND MOIST

4:1
3:1

COASTAL PLAIN
ORANGE,RED,BROWN,GRAY AND TAN STIFF TO
VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

18+00.00

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 17+75

ROADWAY EMBANKMENT
TAN,BROWN LOOSE TO DENSE
SILTY SAND AND CLAYEY SAND MOIST

4:1
3:1
4:1
3:1

COASTAL PLAIN
ORANGE,RED,BROWN,GRAY AND TAN STIFF TO VERY STIFF HIGHLY PLASTIC SILTY CLAY MOIST
[MIDDENDORF FORMATION]

17+50.00

-Y16-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	101

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

240
230
220
210
200
190

ROADWAY EMBANKMENT
TAN LOOSE SILTY SAND MOIST

COASTAL PLAIN
TAN MEDIUM STIFF SILTY CLAY MOIST
[MIDDENDORF FORMATION]

3:1 4:1 4:1 3:1

RED, BROWN, GRAY, TAN LOOSE TO MEDIUM DENSE
SILTY SAND AND CLAYEY SAND MOIST

GRAY, TAN, BROWN, PINK AND RED MEDIUM STIFF TO VERY STIFF,
SANDY SILT, SANDY CLAY AND SILTY CLAY MOIST

40+50.00

250
240
230
220
210
200
190

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-300	25' RT	40+00	0-1.5	A-2-4 (0)	18	1	40	39	8	13	100	87	26.4	12.7	ND

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 40+15

INTERSECTION SHEAR LINE

TIE TO SR14 DRIVEWAY

SS-300

COASTAL PLAIN
RED, BROWN, GRAY, TAN
LOOSE TO MEDIUM DENSE
SILTY SAND AND CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

7
18
11
BT
DRY

GRAY, TAN, BROWN, PINK AND RED MEDIUM STIFF TO VERY STIFF,
SANDY SILT, SANDY CLAY AND SILTY CLAY MOIST

40+00.00

250
240
230
220
210
200
190

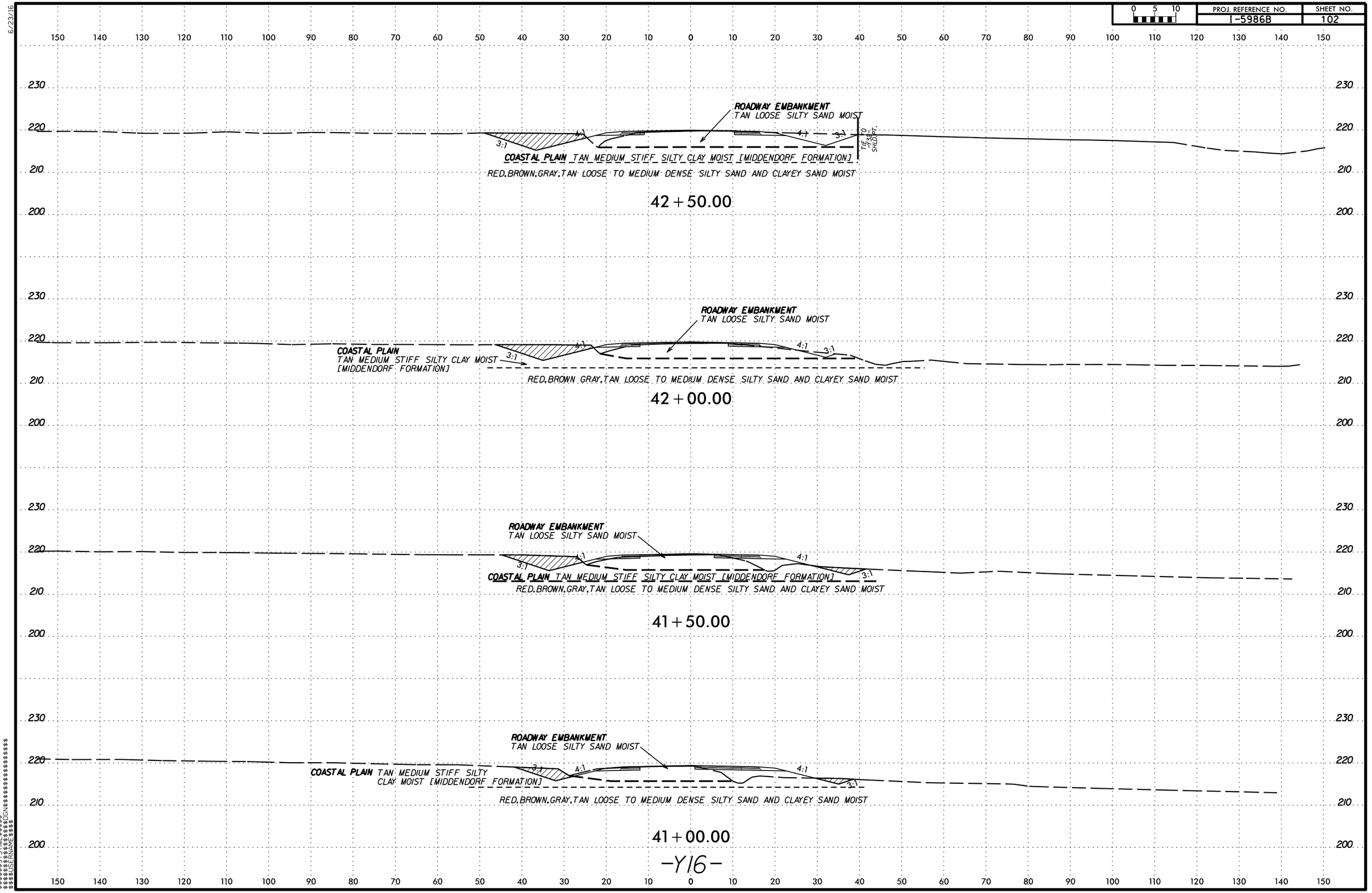
-Y16-

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

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

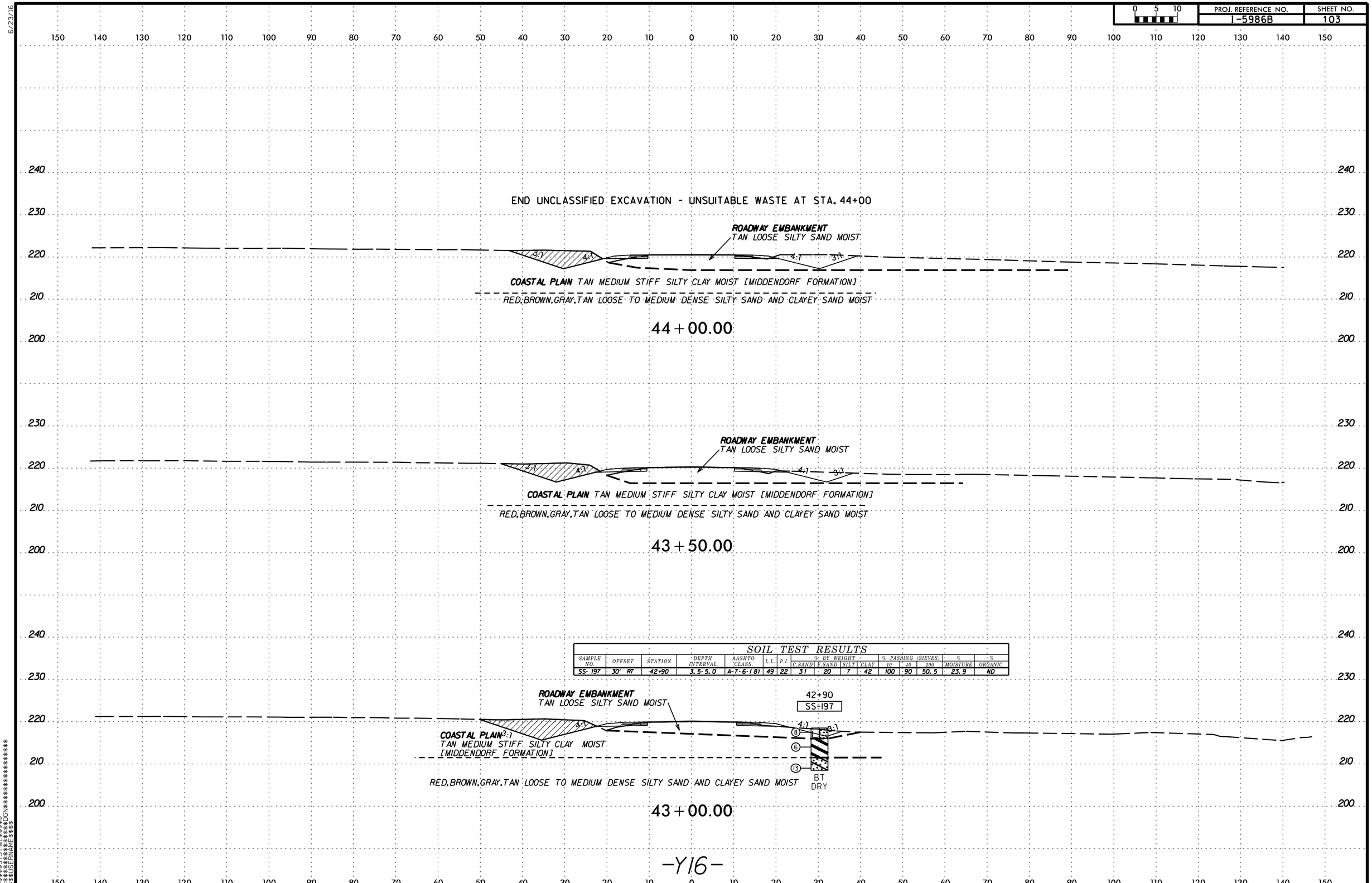
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	102



-Y16-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

PROJ. REFERENCE NO. I-5986B | SHEET NO. 103

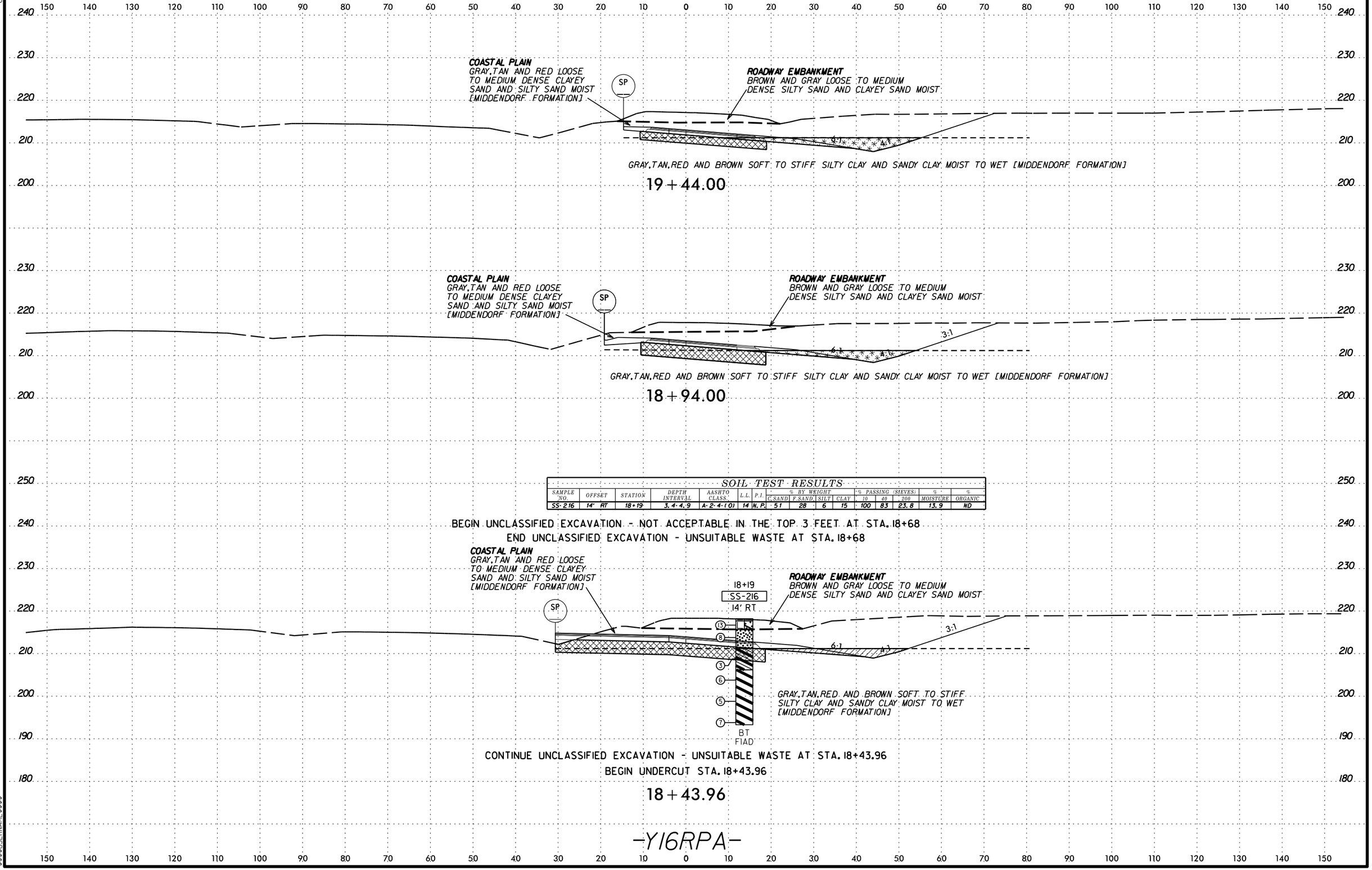


SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-197	30' RT	42+90	3.5-5.0	A-7-6-(8)	49	22	31	20	7	42	100	90	50.5	23.9	ND

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	104



-Y16RPA-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

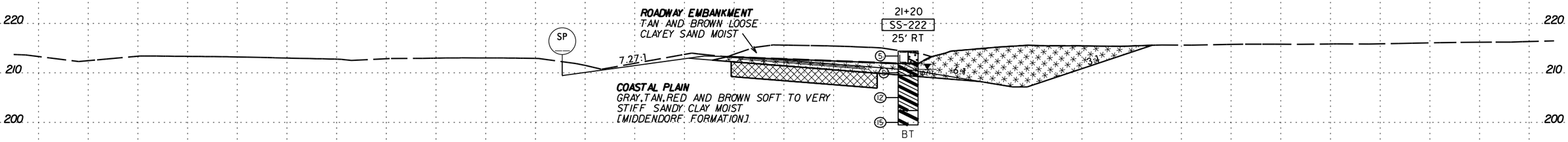
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	105

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

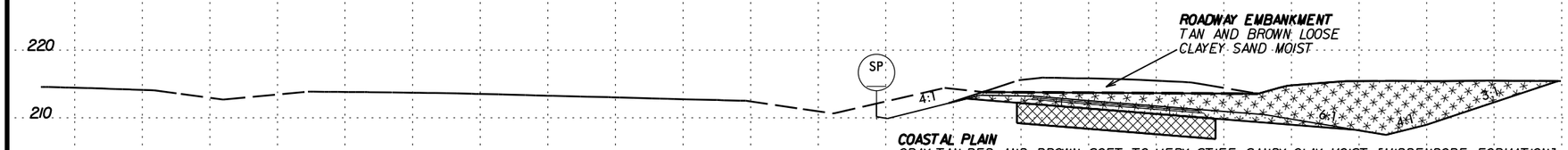
240 230 220 210 200 190

SOIL TEST RESULTS

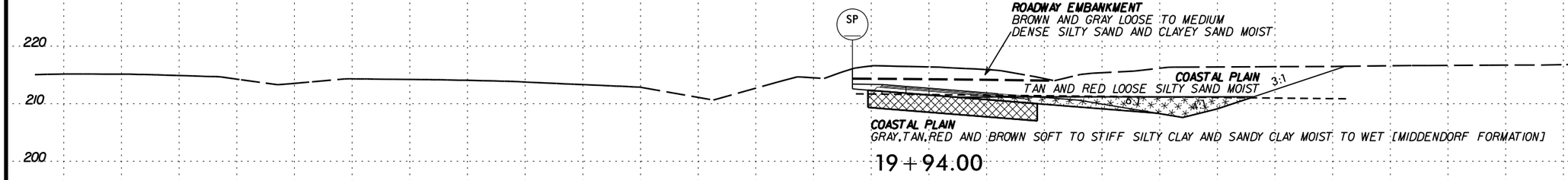
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING SIEVES 10	40	200	% MOISTURE	% ORGANIC
SS-222	25' RT	21+20	3.4-4.9	A-6-(4)	30	15	32	22	13	33	100	88	48.7	21	ND



21+00.00



20+50.00



19+94.00

-Y16RPA-

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

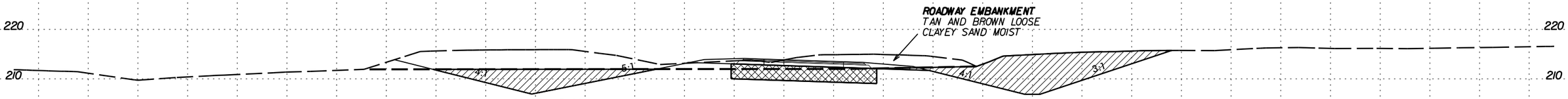
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	106

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

230 220 210 200

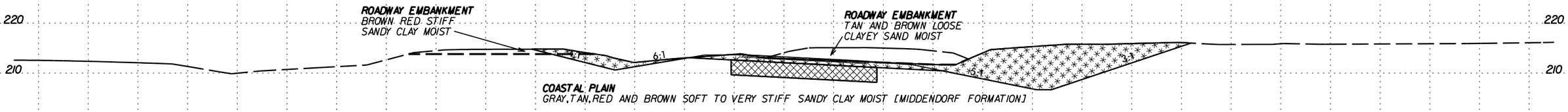


22+50.00

240 230 220 210 200

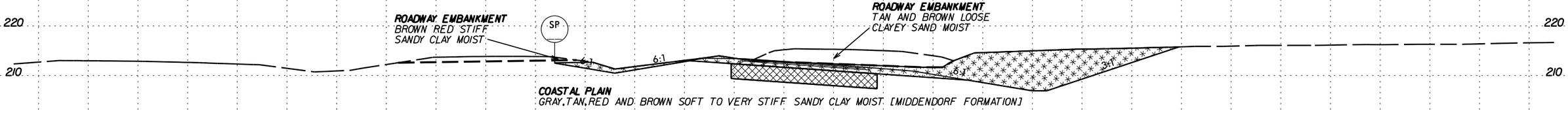
BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 22+25

END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 22+25



22+00.00

230 220 210 200



21+50.00

230 220 210 200

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

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

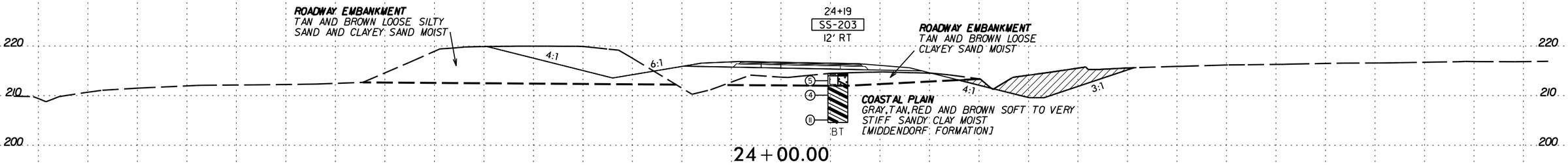
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	107

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

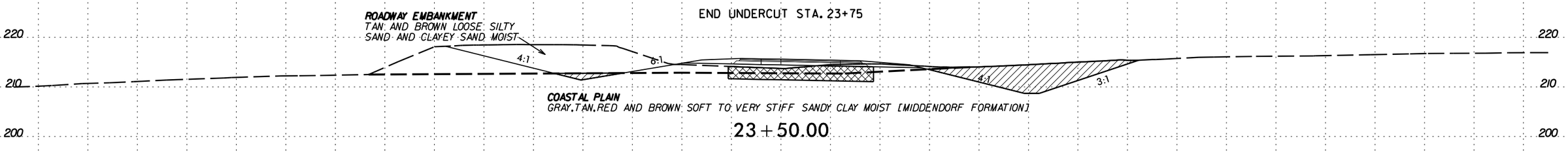
250 240 230 220 210 200

SOIL TEST RESULTS

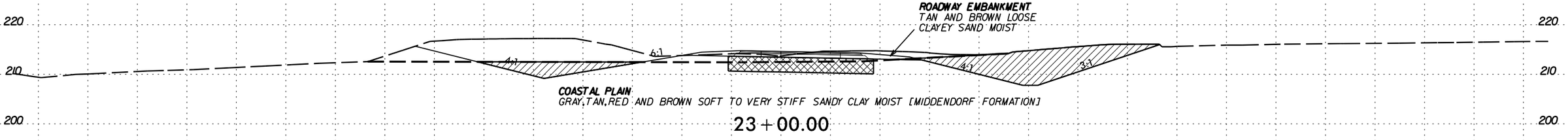
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-203	12' RT	24+19	3.4-4.9	A-6-(9)	40	22	26	21	12	41	100	91	56.1	24.2	ND



24+00.00



23+50.00



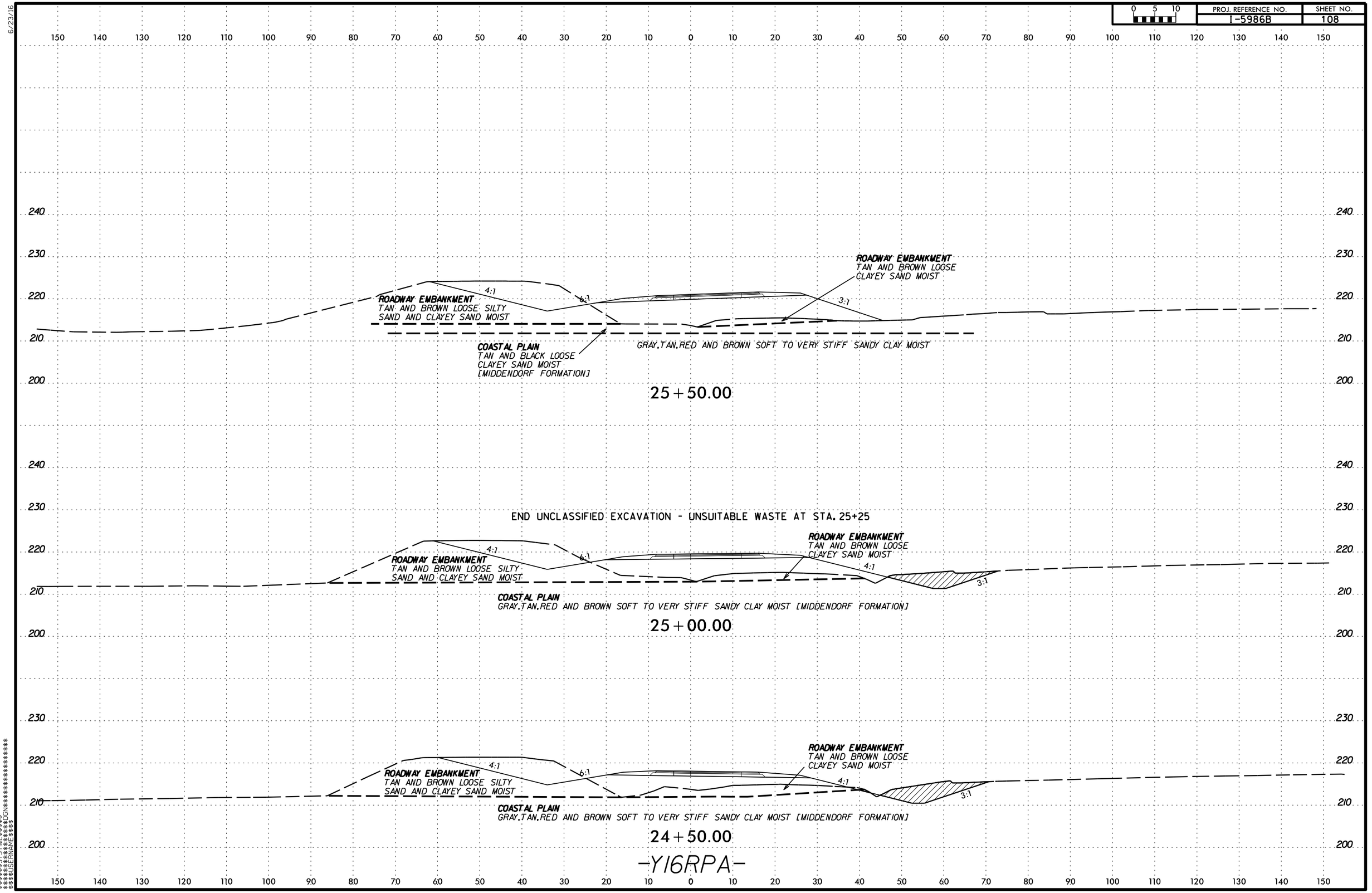
23+00.00

-Y16RPA-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	108



-Y16RPA-

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	109

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

230 220 210 200 190

Ⓐ **COASTAL PLAIN**
RED,YELLOW,TAN AND BROWN MEDIUM STIFF TO HARD HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
BROWN AND YELLOW LOOSE TO MEDIUM DENSE SILTY SAND MOIST TO WET

SP

6.02 ft

6:1

Ⓐ

BROWN,YELLOW,RED AND PINK MEDIUM DENSE TO VERY LOOSE SILTY SAND AND CLAYEY SAND MOIST TO WET

15+60.00

230 220 210 200 190 180 170

Ⓐ **COASTAL PLAIN**
RED,YELLOW,TAN AND BROWN MEDIUM STIFF TO HARD HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
BROWN AND YELLOW LOOSE TO MEDIUM DENSE SILTY SAND MOIST TO WET

SP

6:1

6:1

Ⓐ

BROWN,YELLOW,RED AND PINK MEDIUM DENSE TO VERY LOOSE SILTY SAND AND CLAYEY SAND MOIST TO WET

RED AND BROWN SOFT SILTY CLAY WET

BROWN,YELLOW,RED AND PINK MEDIUM DENSE TO VERY LOOSE SILTY SAND AND CLAYEY SAND MOIST TO WET

BEGIN UNDERCUT STA. 14+75
BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 14+75

15+10.00

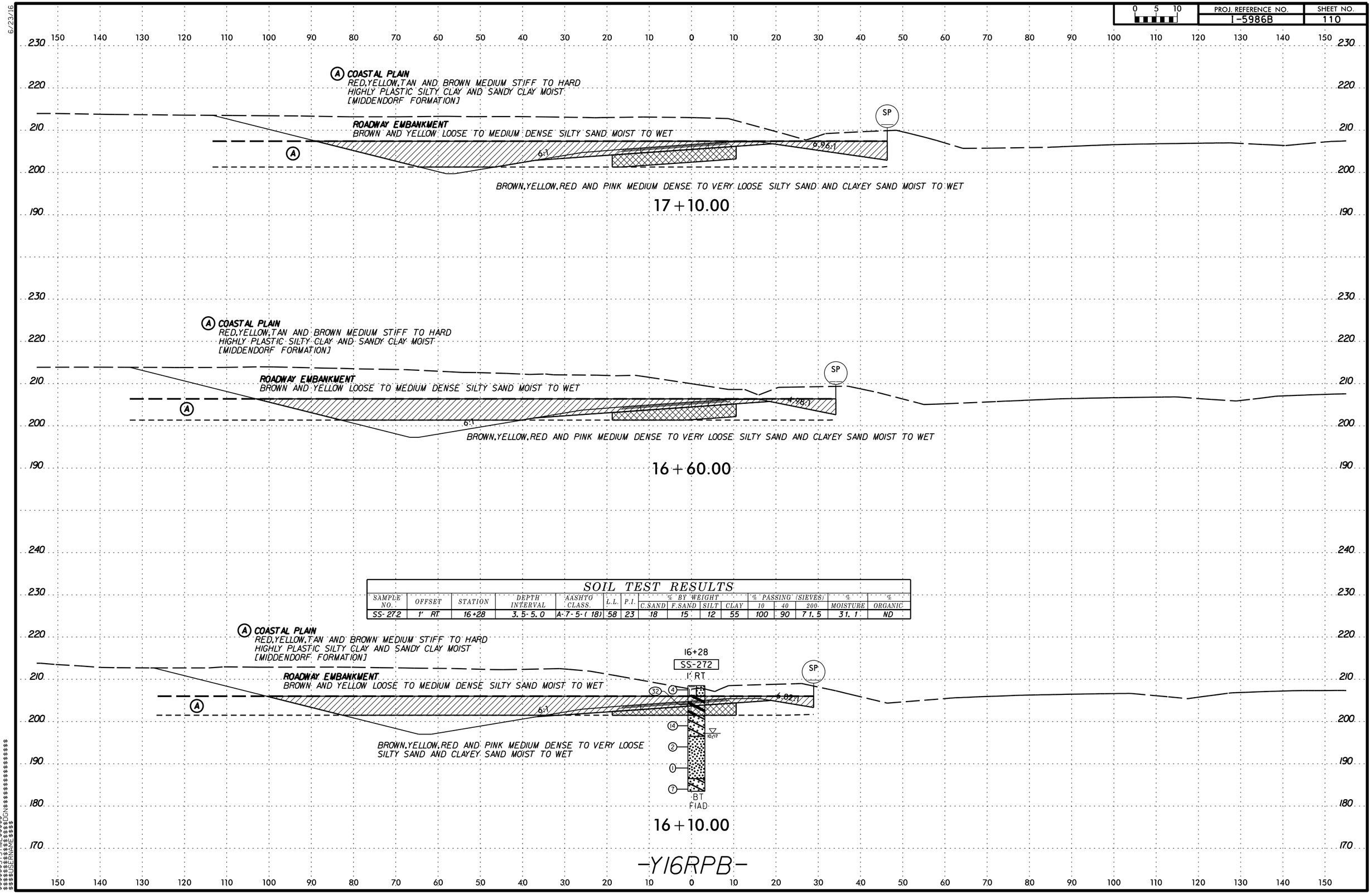
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

-Y16RPB-

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	110



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	111

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

230
220
210
200
190

(A) **COASTAL PLAIN**
RED,YELLOW,TAN AND BROWN MEDIUM STIFF TO HARD
HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST
[MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
BROWN AND YELLOW LOOSE TO MEDIUM
DENSE SILTY SAND MOIST TO WET

3:1 4:1 6:1 6:1 5.99:1

(A)

BROWN,YELLOW,RED AND PINK MEDIUM DENSE TO VERY LOOSE SILTY SAND AND CLAYEY SAND MOIST TO WET

18+50.00

(A) **COASTAL PLAIN**
RED,YELLOW,TAN AND BROWN MEDIUM STIFF TO HARD
HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST
[MIDDENDORF FORMATION]

3:1 **ROADWAY EMBANKMENT** BROWN AND YELLOW LOOSE TO MEDIUM DENSE SILTY SAND MOIST TO WET 6:1 4.37:1

4:1 6:1

(A)

BROWN,YELLOW,RED AND PINK MEDIUM DENSE TO VERY LOOSE SILTY SAND AND CLAYEY SAND MOIST TO WET

18+00.00

(A) **COASTAL PLAIN**
RED,YELLOW,TAN AND BROWN MEDIUM STIFF TO HARD
HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST
[MIDDENDORF FORMATION]

ROADWAY EMBANKMENT
BROWN AND YELLOW LOOSE TO MEDIUM DENSE SILTY SAND MOIST TO WET

SP

6:1 6.31:1

(A)

BROWN,YELLOW,RED AND PINK MEDIUM DENSE TO VERY LOOSE SILTY SAND AND CLAYEY SAND MOIST TO WET

17+60.00

-Y16RPB-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	112

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

230
220
210
200
190

ROADWAY EMBANKMENT
BROWN AND YELLOW LOOSE TO MEDIUM DENSE SILTY SAND MOIST TO WET

4:1 4.12:1 6:1 4:1

COASTAL PLAIN
RED,YELLOW,TAN AND BROWN MEDIUM STIFF TO HARD HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

BROWN,YELLOW,RED AND PINK MEDIUM DENSE TO VERY LOOSE SILTY SAND AND CLAYEY SAND MOIST TO WET

20+00.00

END UNDERCUT STA. 19+75
END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 19+75

ROADWAY EMBANKMENT
BROWN AND YELLOW LOOSE TO MEDIUM DENSE SILTY SAND MOIST TO WET

3:1 4:1 6:1 6:1 5.99:1

COASTAL PLAIN
RED,YELLOW,TAN AND BROWN MEDIUM STIFF TO HARD HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

BROWN,YELLOW,RED AND PINK MEDIUM DENSE TO VERY LOOSE SILTY SAND AND CLAYEY SAND MOIST TO WET

19+50.00

ROADWAY EMBANKMENT
BROWN AND YELLOW LOOSE TO MEDIUM DENSE SILTY SAND MOIST TO WET

3:1 4:1 6:1 6:1 5.99:1

COASTAL PLAIN
RED,YELLOW,TAN AND BROWN MEDIUM STIFF TO HARD HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

BROWN,YELLOW,RED AND PINK MEDIUM DENSE TO VERY LOOSE SILTY SAND AND CLAYEY SAND MOIST TO WET

19+00.00

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

-Y16RPB-

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	113

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

220 210 200 190

SP

3.58:1 6:1 6:1

COASTAL PLAIN
BROWN LOOSE SILTY SAND MOIST
[MIDDENDORF FORMATION]

GRAY,YELLOW,BROWN AND RED MEDIUM STIFF TO VERY STIFF SILTY CLAY AND SANDY CLAY MOIST TO WET
[MIDDENDORF FORMATION]

BROWN,YELLOW,PINK AND RED VERY LOOSE TO LOOSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO WET

17+43.50

SP

4.62:1 6:1 4.96:1

COASTAL PLAIN
BROWN LOOSE SILTY SAND MOIST
[MIDDENDORF FORMATION]

GRAY,YELLOW,BROWN AND RED MEDIUM STIFF TO VERY STIFF SILTY CLAY AND SANDY CLAY MOIST TO WET
[MIDDENDORF FORMATION]

BROWN,YELLOW,PINK AND RED VERY LOOSE TO LOOSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO WET

16+93.50

SP

5.49:1 6:1 4.36:1

COASTAL PLAIN
BROWN LOOSE SILTY SAND MOIST
[MIDDENDORF FORMATION]

GRAY,YELLOW,BROWN AND RED MEDIUM STIFF TO VERY STIFF SILTY CLAY AND SANDY CLAY MOIST TO WET [MIDDENDORF FORMATION]

BROWN,YELLOW,PINK AND RED VERY LOOSE TO LOOSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO WET

16+43.50

SP

6:1 4.28:1

COASTAL PLAIN
BROWN LOOSE SILTY SAND MOIST
[MIDDENDORF FORMATION]

GRAY,YELLOW,BROWN AND RED MEDIUM STIFF TO VERY STIFF SILTY CLAY AND SANDY CLAY MOIST TO WET [MIDDENDORF FORMATION]

BROWN,YELLOW,PINK AND RED VERY LOOSE TO LOOSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO WET

15+91.71

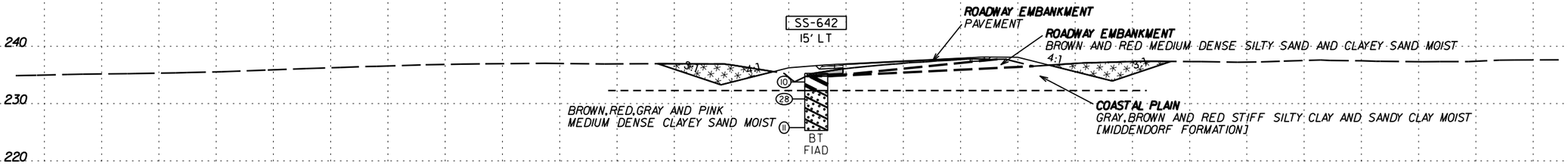
-Y16RPC-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

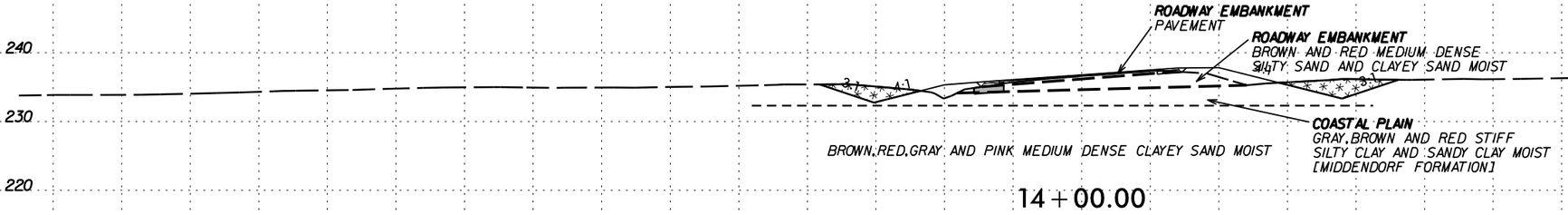
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	114

SOIL TEST RESULTS

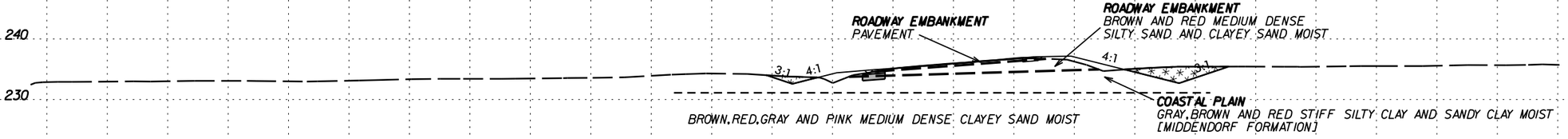
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			%	%
							C.SAND	F.SAND	SILT	CLAY	10	40	200	MOISTURE	ORGANIC
SS-642	15' LT	14+50	0.5-2.0	A-7-6 (7)	44	16	23	25	6	46	100	90	55.5	23.8	ND



14+50.00



14+00.00



BEGIN SHALLOW UNDERCUT STA. 13+50

BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 13+50

13+50.00

-Y17-

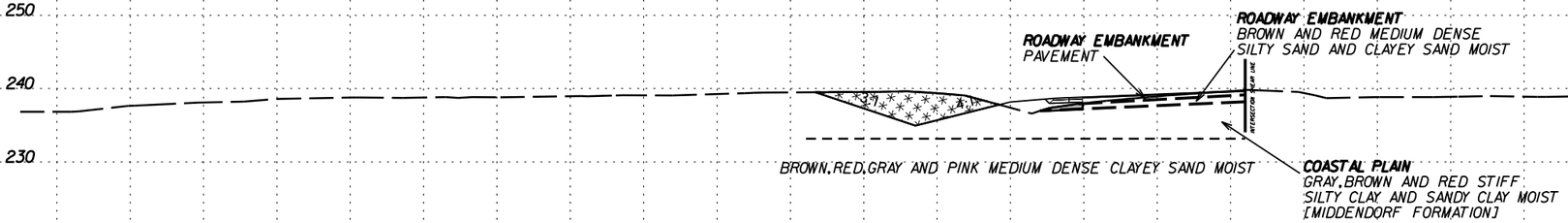
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

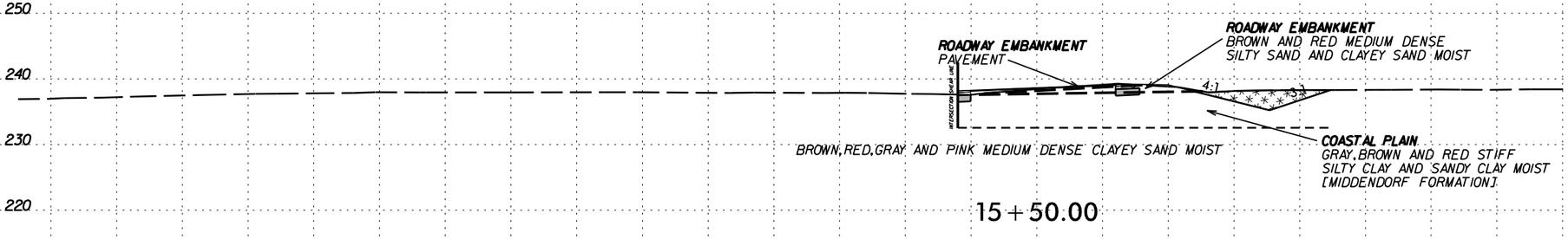
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	115

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

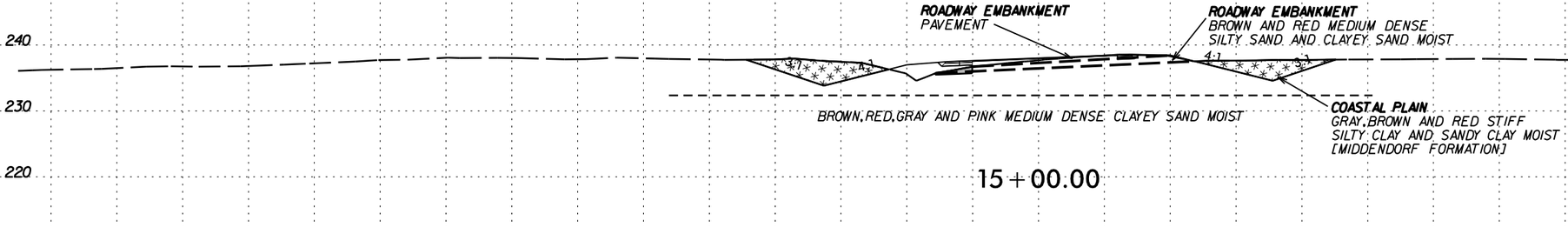
260 250 240 230 220



16+00.00



15+50.00



15+00.00

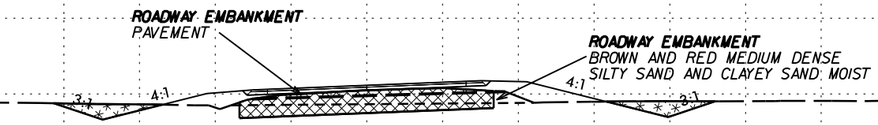
-Y17-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

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

260 250 240 230 220



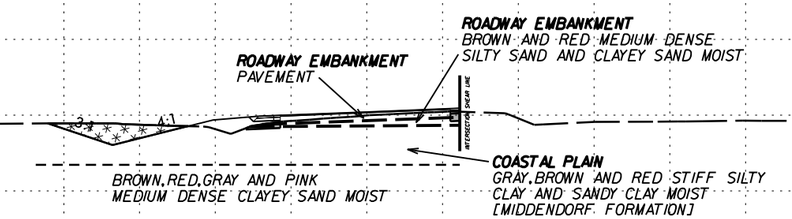
COASTAL PLAIN GRAY, BROWN AND RED STIFF SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

BROWN, RED, GRAY AND PINK MEDIUM DENSE CLAYEY SAND MOIST

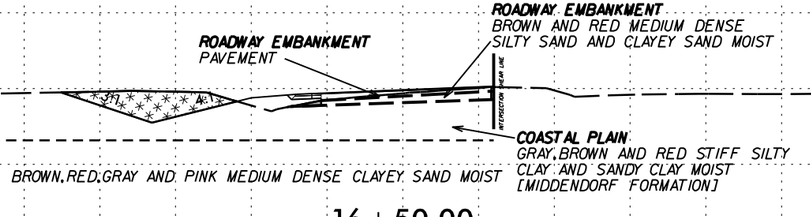
17 + 50.00

BEGIN UNDERCUT STA. 17+25

END SHALLOW UNDERCUT STA. 17+25



17 + 00.00



16 + 50.00

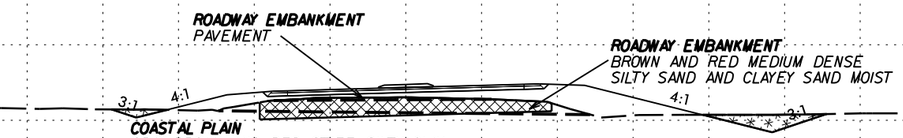
-Y17-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

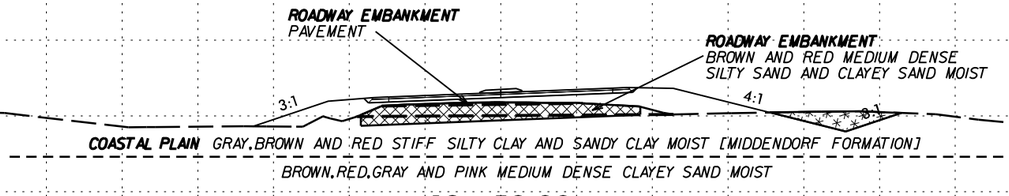
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	117

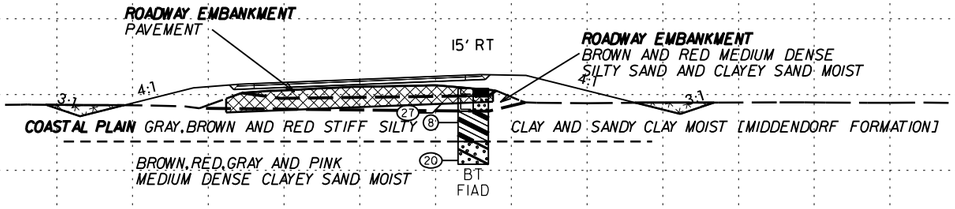
END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 19+25



19 + 00.00



18 + 50.00



18 + 00.00

-Y17-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	118

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

270 260 250 240 230 220

BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 33+75

ROADWAY EMBANKMENT
RED,BROWN,TAN LOOSE TO MEDIUM DENSE
CLAYEY SAND MOIST

3:1

3:1

BROWN STIFF SANDY CLAY MOIST

COASTAL PLAIN
BROWN,GRAY MEDIUM STIFF TO SOFT SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

GRAY BROWN RED YELLOW WHITE TAN ORANGE AND PURPLE LOOSE TO DENSE COARSE SAND WITH GRAVEL,SILTY SAND AND CLAYEY SAND

33+50.00

ROADWAY EMBANKMENT
PAVEMENT

ROADWAY EMBANKMENT
BROWN AND RED MEDIUM DENSE
SILTY SAND AND CLAYEY SAND MOIST

3:1

INTERSECTION SIDE LINE

COASTAL PLAIN
GRAY,BROWN AND RED STIFF SILTY CLAY
AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

BROWN,RED,GRAY AND PINK MEDIUM DENSE CLAYEY SAND MOIST

20+00.00

END UNDERCUT STA. 19+75

ROADWAY EMBANKMENT
PAVEMENT

ROADWAY EMBANKMENT
BROWN AND RED MEDIUM DENSE
SILTY SAND AND CLAYEY SAND MOIST

3:1

INTERSECTION SIDE LINE

COASTAL PLAIN
GRAY,BROWN AND RED STIFF SILTY CLAY
AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

BROWN,RED,GRAY AND PINK MEDIUM DENSE CLAYEY SAND MOIST

19+50.00

-Y17-

$$$$$$$SYSTIME$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	119

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

260
250
240
230

ROADWAY EMBANKMENT
RED,BROWN,TAN LOOSE TO MEDIUM DENSE
CLAYEY SAND MOIST

3:1 3:1 3:1 3:1

COASTAL PLAIN
BROWN,GRAY MEDIUM STIFF TO SOFT SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

35+00.00

260
250
240
230
220

ROADWAY EMBANKMENT
RED,BROWN,TAN LOOSE TO MEDIUM DENSE
CLAYEY SAND MOIST

3:1 3:1 3:1 3:1

COASTAL PLAIN
BROWN,GRAY MEDIUM STIFF TO SOFT SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

GRAY BROWN RED YELLOW WHITE TAN ORANGE AND PURPLE LOOSE TO DENSE COARSE SAND WITH GRAVEL,SILTY SAND AND CLAYEY SAND

34+50.00

260
250
240
230
220

ROADWAY EMBANKMENT
RED,BROWN,TAN LOOSE TO MEDIUM DENSE
CLAYEY SAND MOIST

3:1 3:1 3:1 3:1

COASTAL PLAIN
BROWN,GRAY MEDIUM STIFF TO SOFT SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

GRAY BROWN RED YELLOW WHITE TAN ORANGE AND PURPLE LOOSE TO DENSE COARSE SAND WITH GRAVEL,SILTY SAND AND CLAYEY SAND

34+00.00

-Y17-

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

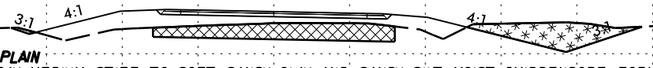
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	120

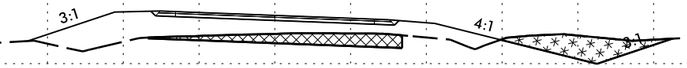
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

250
240
230



COASTAL PLAIN
BROWN,GRAY MEDIUM STIFF TO SOFT SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

37+00.00

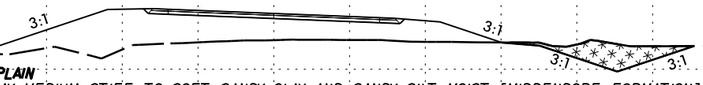


COASTAL PLAIN
BROWN,GRAY MEDIUM STIFF TO SOFT SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

36+50.00

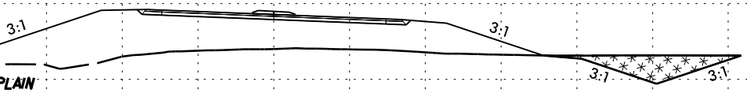
260
250
240
230

BEGIN UNDERCUT STA. 36+25



COASTAL PLAIN
BROWN,GRAY MEDIUM STIFF TO SOFT SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

36+00.00



COASTAL PLAIN
BROWN,GRAY MEDIUM STIFF TO SOFT SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

35+50.00

-Y17-

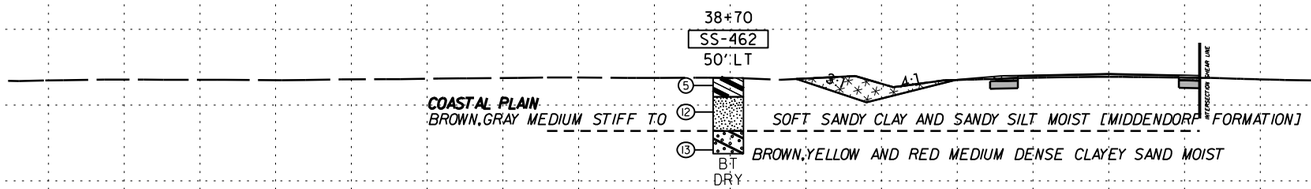
$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$

6/23/16

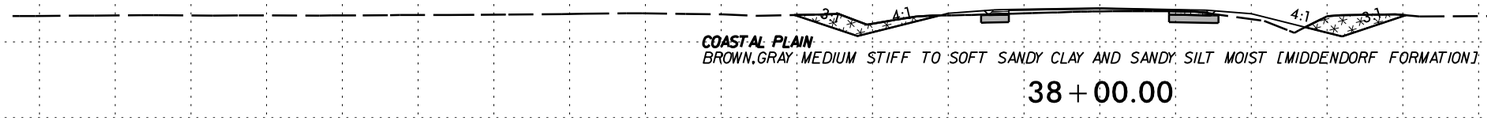
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	121

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-462	50' LT	38+70	0.0-1.5	A-6-(8)	40	21	24	26	9	41	100	90	53.2	20.4	ND

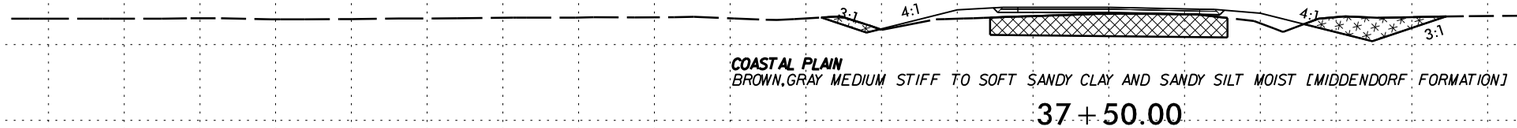


38+50.00



38+00.00

BEGIN SHALLOW UNDERCUT STA. 37+75
END UNDERCUT STA. 37+75



37+50.00

-Y17-

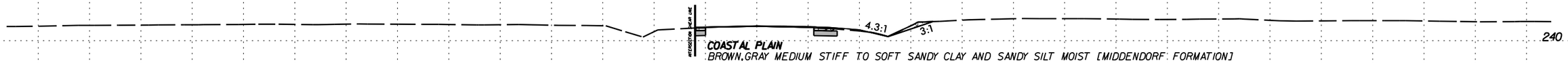
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	122

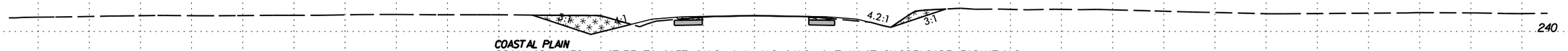
END SHALLOW UNDERCUT STA. 40+50

END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 40+50



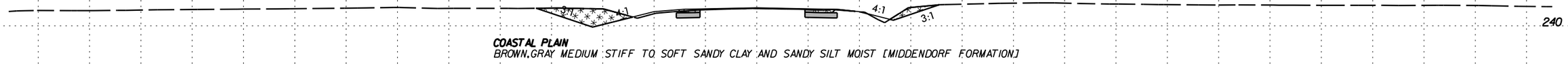
COASTAL PLAIN
BROWN,GRAY MEDIUM STIFF TO SOFT SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

40+50.00



COASTAL PLAIN
BROWN,GRAY MEDIUM STIFF TO SOFT SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

40+00.00



COASTAL PLAIN
BROWN,GRAY MEDIUM STIFF TO SOFT SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

39+50.00

COASTAL PLAIN
BROWN,GRAY MEDIUM STIFF TO SOFT SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

39+00.00

-Y17-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	123

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

250 240 230 220

ROADWAY EMBANKMENT
RED AND BROWN MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST

SP

6.02:1

6:1

3:1

COASTAL PLAIN
YELLOW,GRAY AND BROWN AND RED STIFF TO HARD SILTY CLAY AND CLAYEY SILT MOIST

YELLOW,BROWN,RED,GRAY AND PINK LOOSE TO MEDIUM DENSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO WET

16+14.00

250 240 230 220

ROADWAY EMBANKMENT
RED AND BROWN MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST

SP

6.02:1

6:1

3:1

COASTAL PLAIN
YELLOW,GRAY AND BROWN AND RED STIFF TO HARD SILTY CLAY AND CLAYEY SILT MOIST

YELLOW,BROWN,RED,GRAY AND PINK LOOSE TO MEDIUM DENSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO WET

15+64.00

250 240 230 220

ROADWAY EMBANKMENT
RED AND BROWN MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST

SP

6:1

6:1

3:1

COASTAL PLAIN
YELLOW,GRAY AND BROWN AND RED STIFF TO HARD SILTY CLAY AND CLAYEY SILT MOIST

YELLOW,BROWN,RED,GRAY AND PINK LOOSE TO MEDIUM DENSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO WET

YELLOW AND BROWN MEDIUM STIFF SILTY CLAY WET

BEGIN UNDERCUT STA. 15+00

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 15+00

BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT -Y17RPA- SECTIONS STA. 15+00

15+14.00

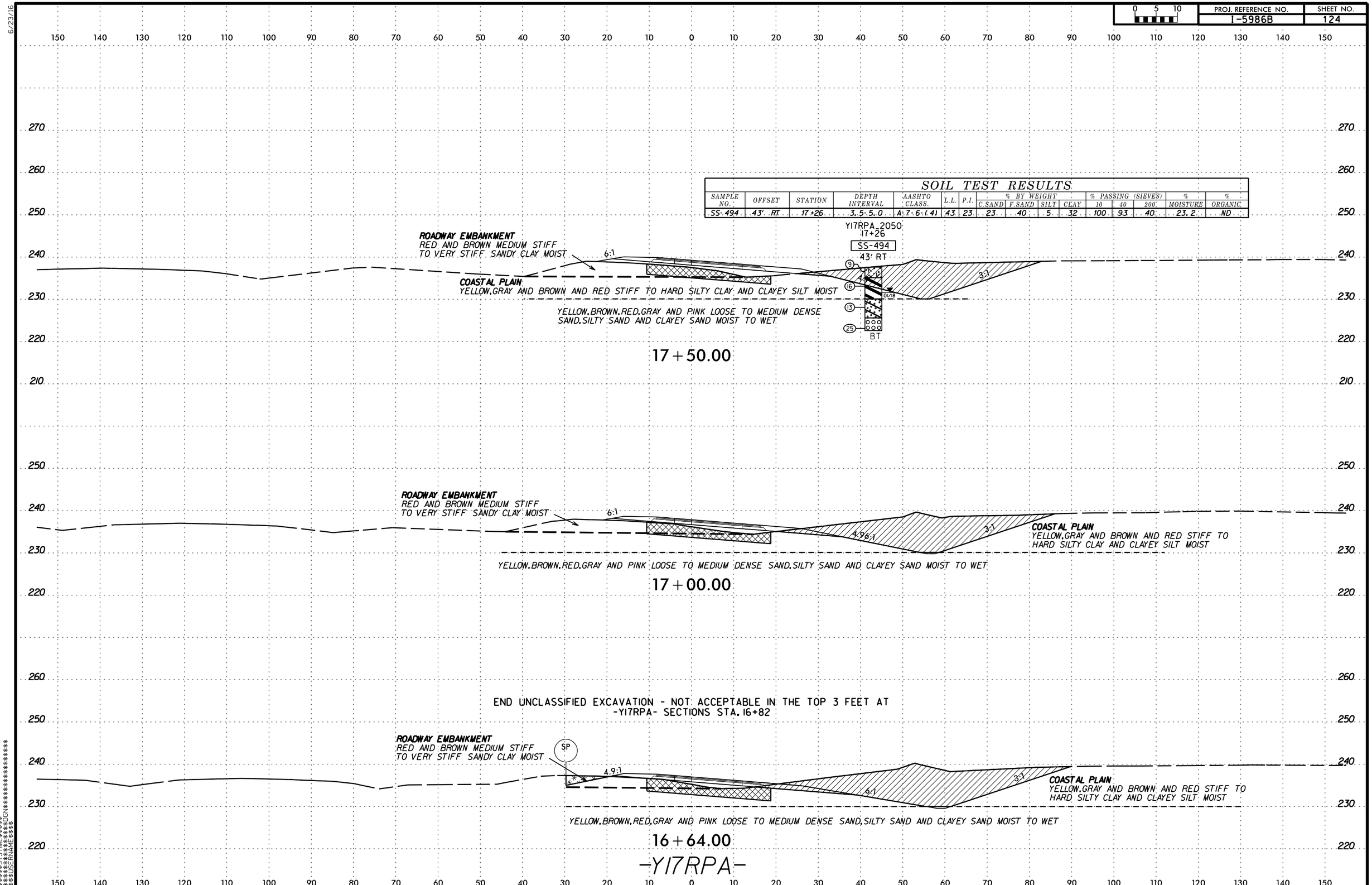
210 200 190

-Y17RPA-

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

$$$$$$$SYSTIME$$$$$$
$$$$$$$

PROJ. REFERENCE NO. I-5986B | SHEET NO. 124



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-494	43' RT	17+26	3.5-5.0	A-7-6-(4)	43	23	23	40	5	32	100	93	40	23.2	ND

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	125

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

260 250 240 230 220

ROADWAY EMBANKMENT
RED AND BROWN MEDIUM STIFF
TO VERY STIFF SANDY CLAY MOIST

4.04:1

6:1

3:1

COASTAL PLAIN
YELLOW,GRAY AND BROWN AND RED STIFF TO HARD
SILTY CLAY AND CLAYEY SILT MOIST [MIDDENDORF FORMATION]

YELLOW,BROWN,RED,GRAY AND PINK LOOSE TO MEDIUM DENSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

19+00.00

ROADWAY EMBANKMENT
RED AND BROWN MEDIUM STIFF
TO VERY STIFF SANDY CLAY MOIST

4.77:1

6:1

3:1

COASTAL PLAIN
YELLOW,GRAY AND BROWN AND RED
STIFF TO HARD SILTY CLAY AND CLAYEY SILT MOIST

YELLOW,BROWN,RED,GRAY AND PINK LOOSE TO MEDIUM DENSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO WET

18+50.00

END UNDERCUT STA. 18+25

ROADWAY EMBANKMENT
RED AND BROWN MEDIUM STIFF
TO VERY STIFF SANDY CLAY MOIST

6:1

4:1

3:1

COASTAL PLAIN
YELLOW,GRAY AND BROWN AND RED STIFF TO HARD SILTY CLAY AND CLAYEY SILT MOIST

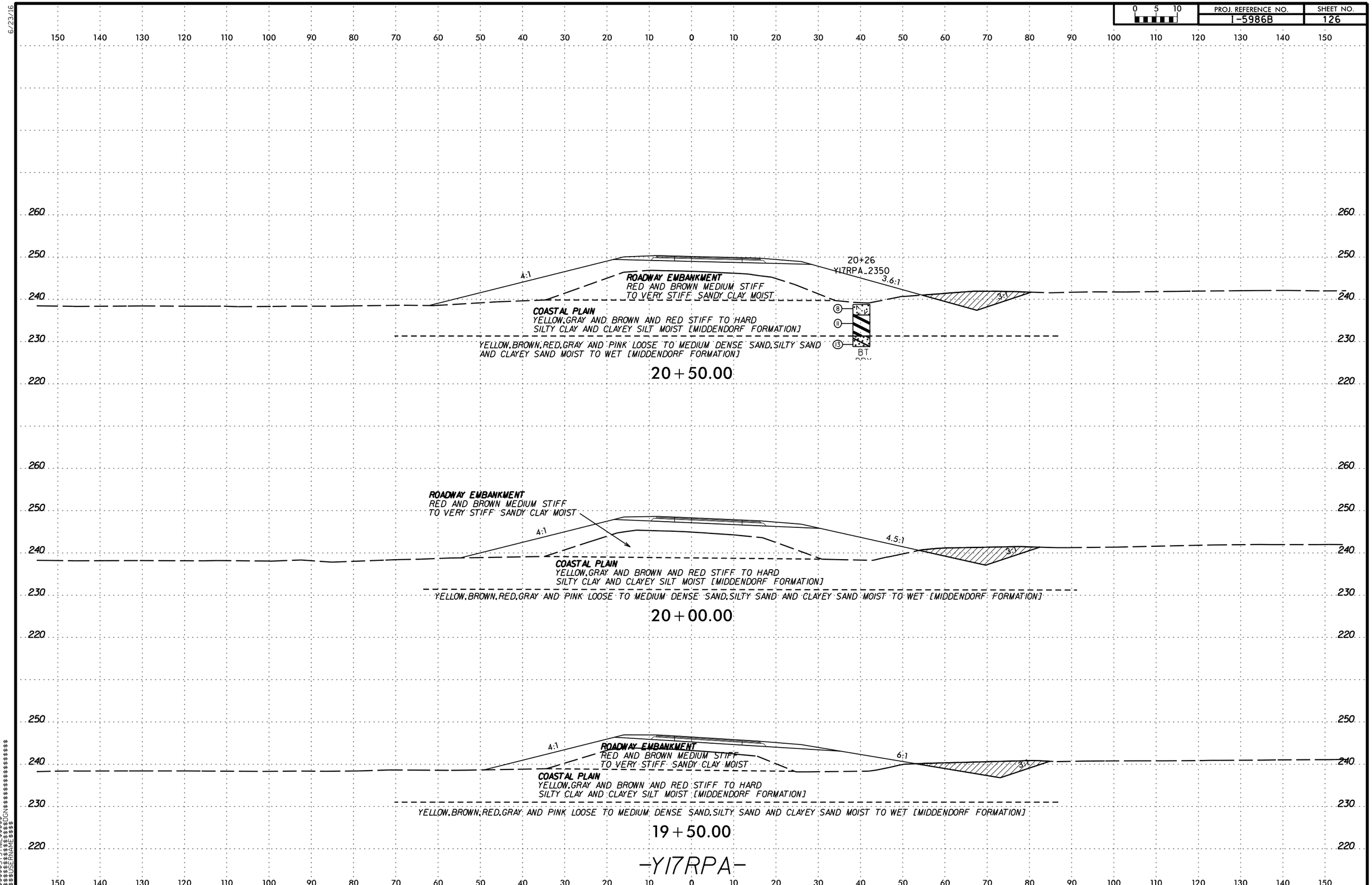
YELLOW,BROWN,RED,GRAY AND PINK LOOSE TO MEDIUM DENSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO WET

18+00.00

-Y17RPA-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

PROJ. REFERENCE NO.	SHEET NO.
I-5986B	126



6/23/16
$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

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

260
250
240
230
220

4:1

3:1

ROADWAY EMBANKMENT
RED AND BROWN MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST

COASTAL PLAIN
YELLOW,GRAY AND BROWN AND RED STIFF TO HARD SILTY CLAY AND CLAYEY SILT MOIST [MIDDENDORF FORMATION]

YELLOW,BROWN,RED,GRAY AND PINK LOOSE TO MEDIUM DENSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

21+50.00

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 21+25

4:1

3:1

2:1

ROADWAY EMBANKMENT
RED AND BROWN MEDIUM STIFF TO VERY STIFF SANDY CLAY MOIST

COASTAL PLAIN
YELLOW,GRAY AND BROWN AND RED STIFF TO HARD SILTY CLAY AND CLAYEY SILT MOIST [MIDDENDORF FORMATION]

YELLOW,BROWN,RED,GRAY AND PINK LOOSE TO MEDIUM DENSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

21+00.00

-Y17RPA-

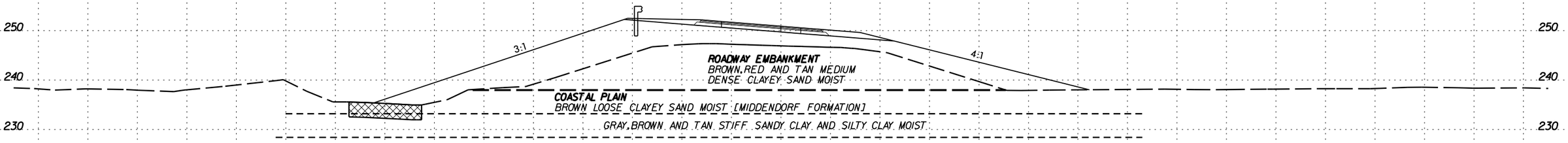
$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	128

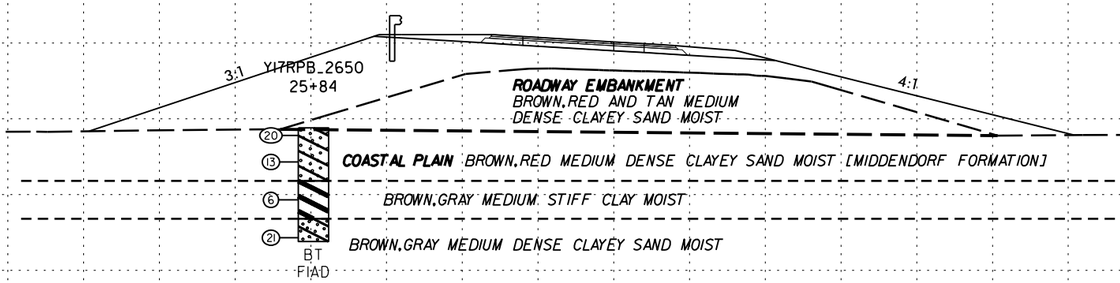
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

260
250
240
230
220



26+50.00

BEGIN EMBANKMENT UNDERCUT STA. 26+49 LT

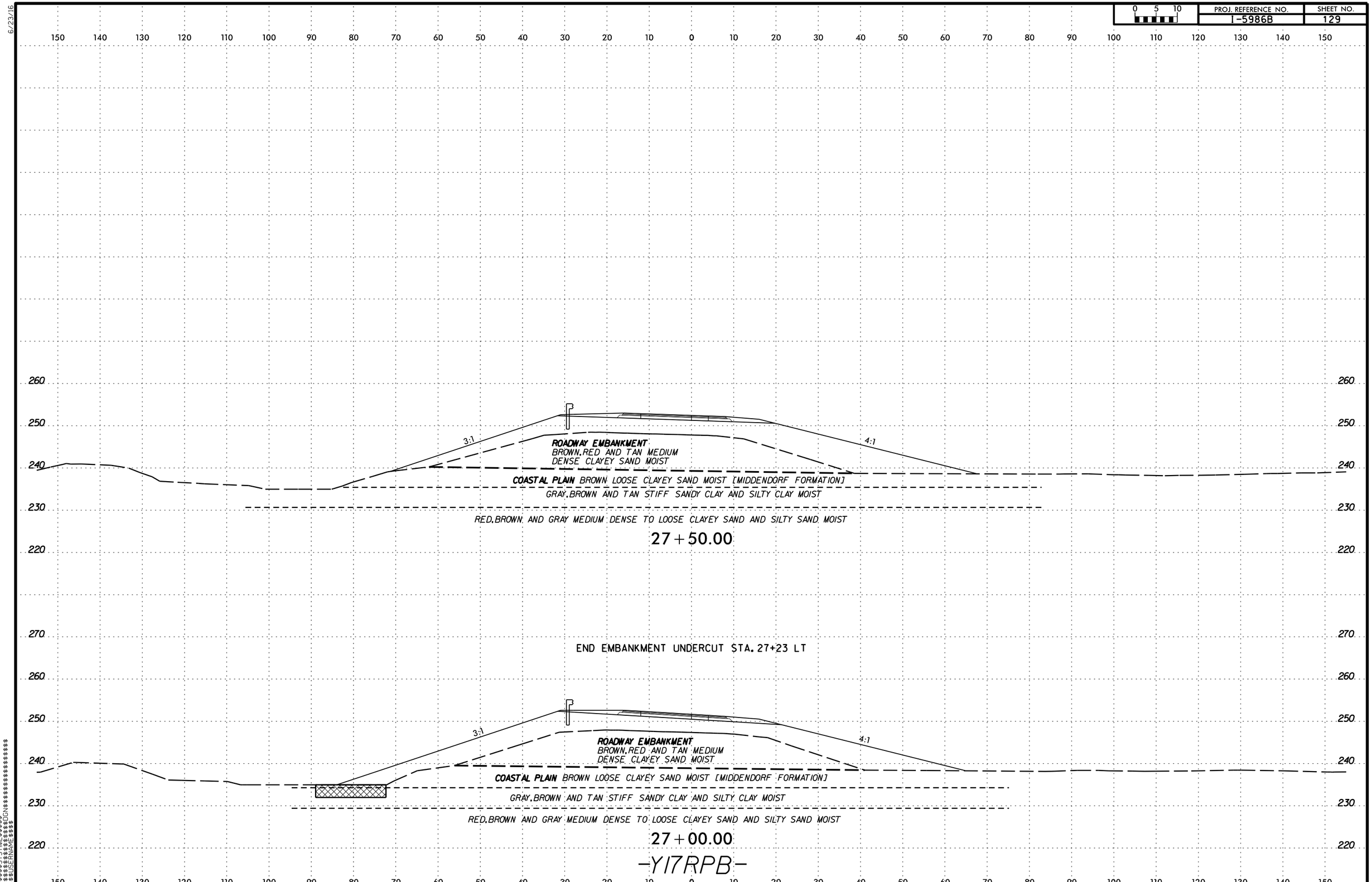


26+00.00

-Y17RPB-

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

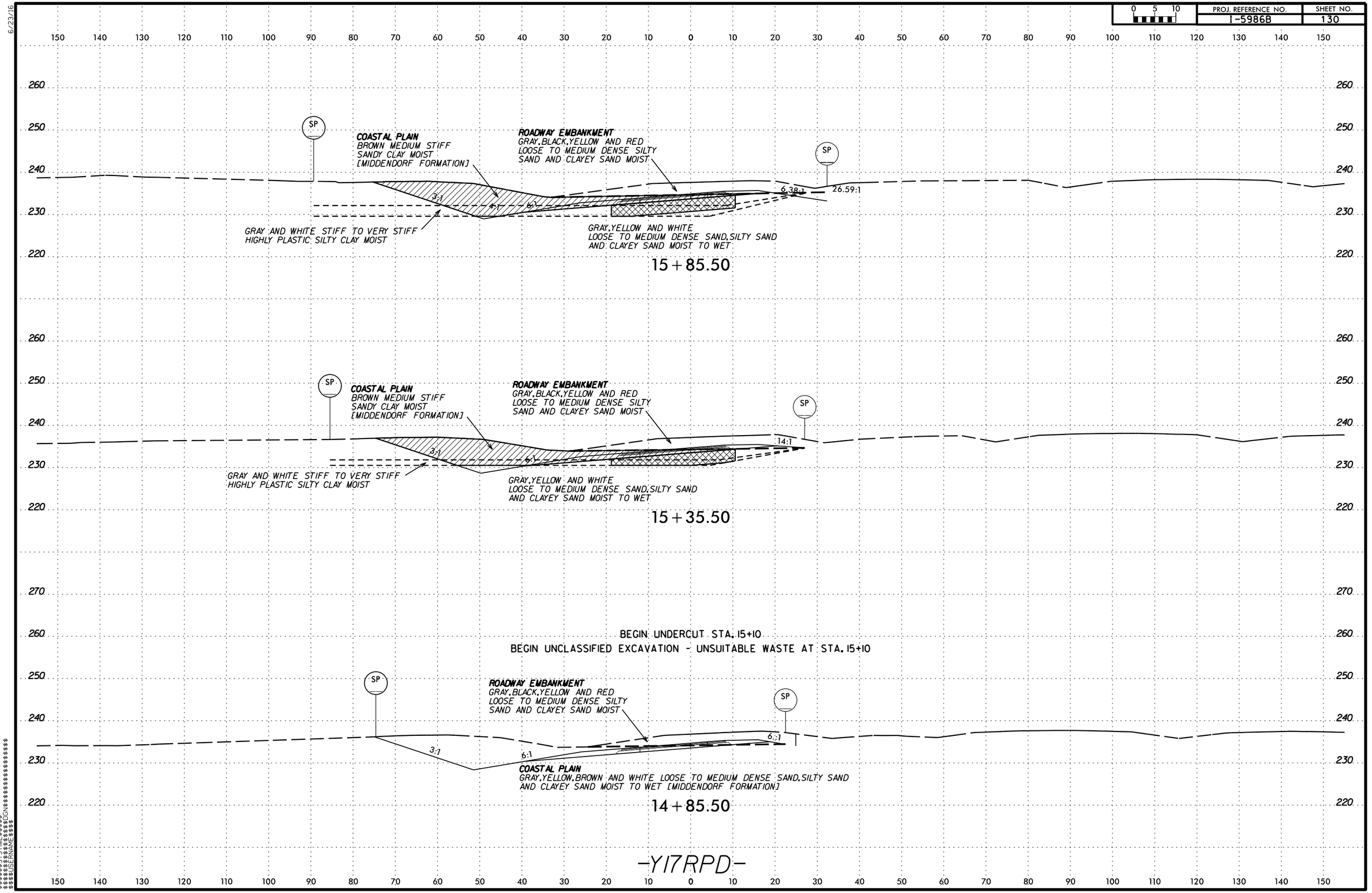
PROJ. REFERENCE NO.	SHEET NO.
I-5986B	129



6/23/16
$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

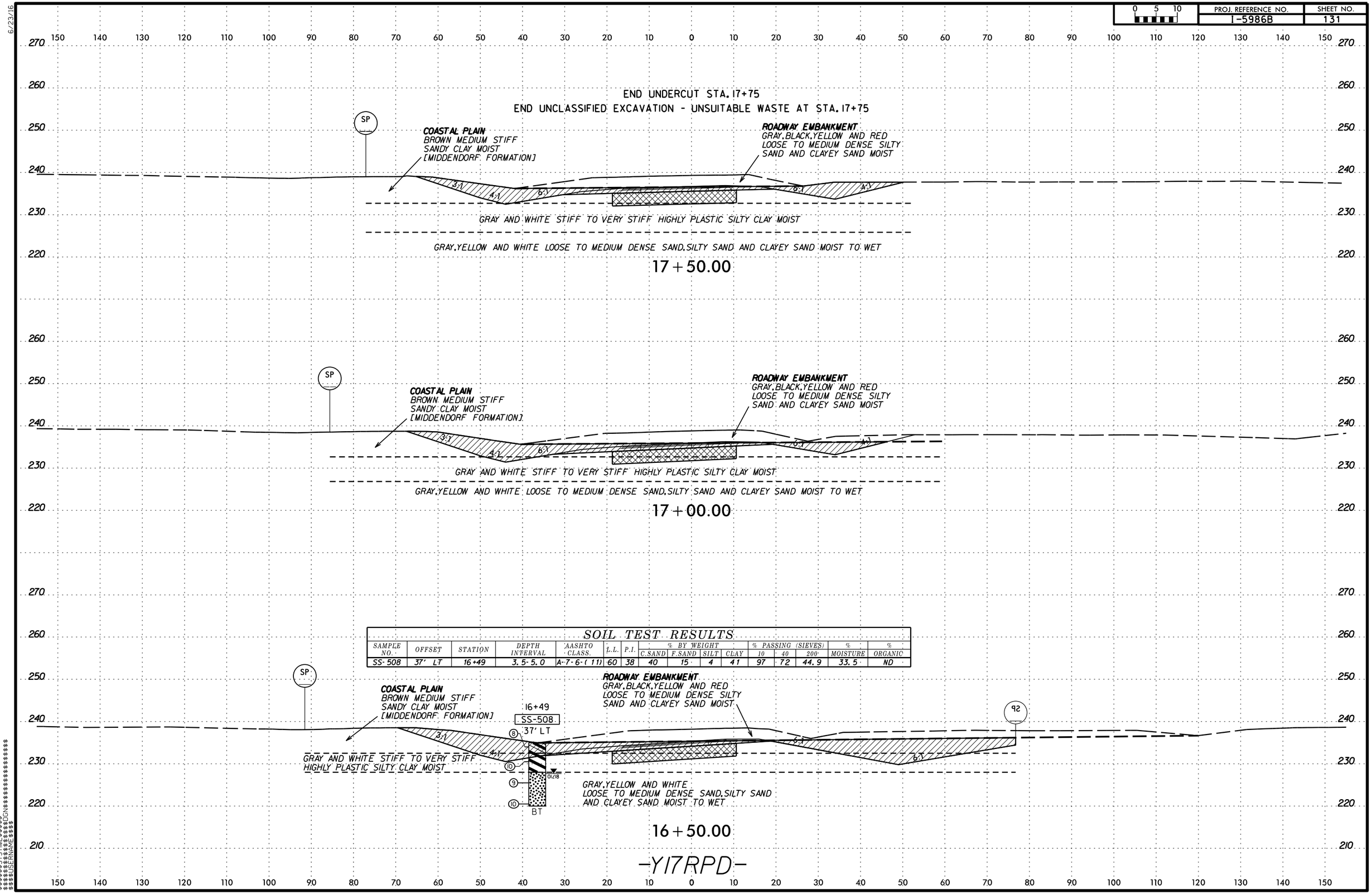
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	130



-Y17RPD-

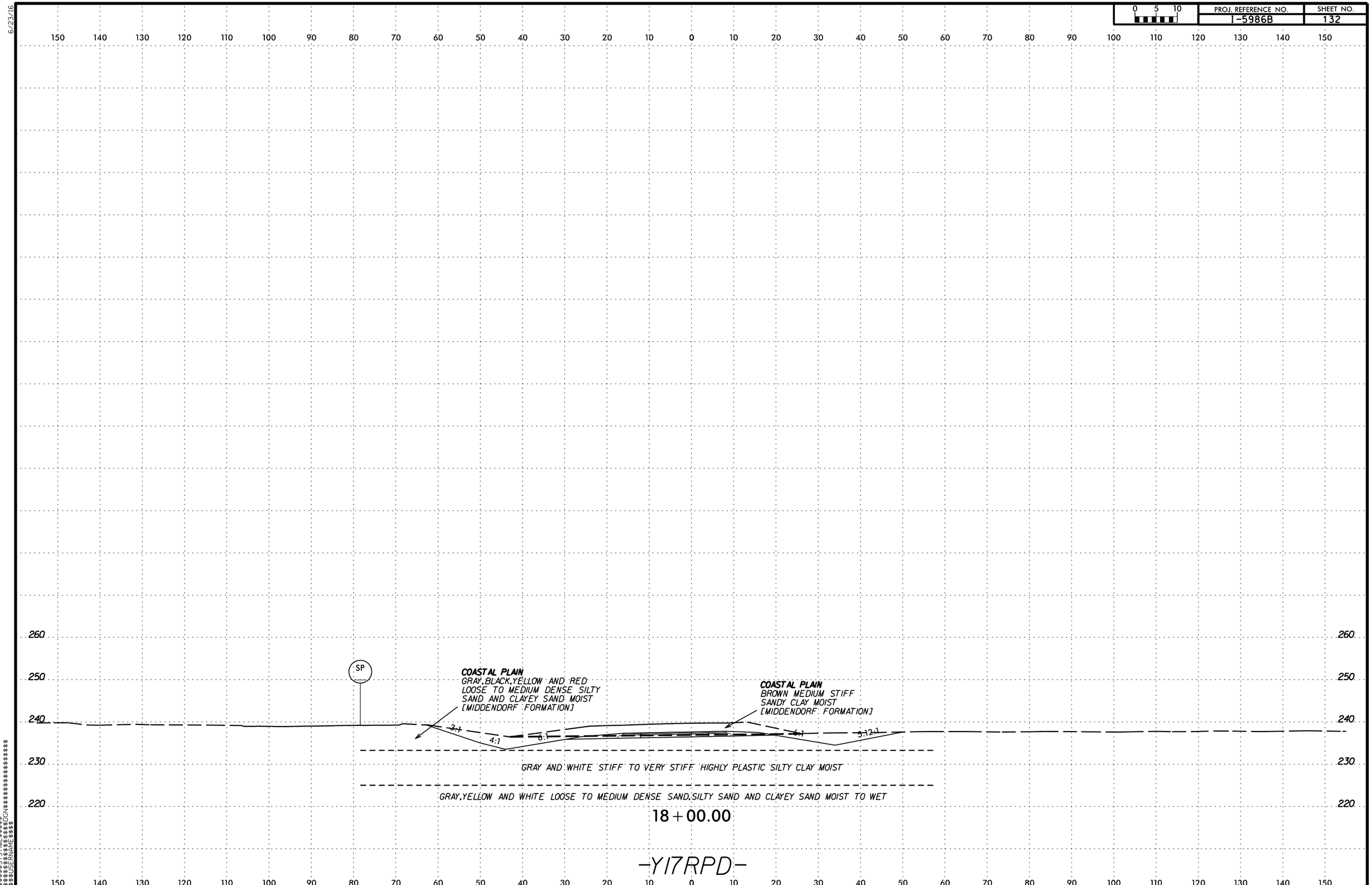
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

PROJ. REFERENCE NO. I-5986B | SHEET NO. 131



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-508	37' LT	16+49	3.5-5.0	A-7-6-(11)	60	38	40	15	4	41	97	72	44.9	33.5	ND



PROJ. REFERENCE NO.
I-5986B
SHEET NO.
132
0 5 10
SP
COASTAL PLAIN
GRAY,BLACK,YELLOW AND RED
LOOSE TO MEDIUM DENSE SILTY
SAND AND CLAYEY SAND MOIST
[MIDDENDORF FORMATION]
COASTAL PLAIN
BROWN MEDIUM STIFF
SANDY CLAY MOIST
[MIDDENDORF FORMATION]
3:1
4:1
6:1
6:1
5.12:1
GRAY AND WHITE STIFF TO VERY STIFF HIGHLY PLASTIC SILTY CLAY MOIST
GRAY,YELLOW AND WHITE LOOSE TO MEDIUM DENSE SAND,SILTY SAND AND CLAYEY SAND MOIST TO WET
18+00.00
-Y17RPD-

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	133

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

250
240
230
220

3:1 4:1 4:1 3:1

GRAY AND BROWN MEDIUM VERY SOFT TO VERY STIFF HIGHLY PLASTIC SILTY CLAY, SANDY CLAY AND SANDY SILT MOIST

COASTAL PLAIN
GRAY, BROWN, TAN AND YELLOW VERY LOOSE TO LOOSE
SAND AND CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

25+50.00

250
240
230
220

3:1 4:1 4:1 3:1

COASTAL PLAIN
GRAY AND BROWN MEDIUM VERY SOFT TO VERY STIFF HIGHLY PLASTIC SILTY CLAY, SANDY CLAY AND SANDY SILT MOIST

COASTAL PLAIN
GRAY, BROWN, TAN AND YELLOW VERY LOOSE TO LOOSE
SAND AND CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

25+00.00

260
250
240
230
220
210

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 24+75
BEGIN UNDERCUT STA. 24+75

24+29

3:1 4:1 4:1 3:1

COASTAL PLAIN
GRAY AND BROWN MEDIUM VERY SOFT TO VERY STIFF SANDY SILT AND SANDY CLAY MOIST

6 9 7 1 6 — 01/18 — BT

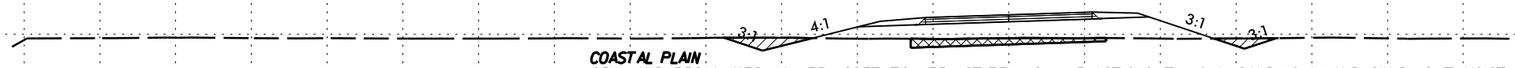
GRAY, BROWN, TAN AND YELLOW
VERY LOOSE TO LOOSE SAND
AND CLAYEY SAND MOIST TO WET
[MIDDENDORF FORMATION]

24+50.00

-Y26-

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

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$



COASTAL PLAIN
GRAY AND BROWN MEDIUM VERY SOFT TO VERY STIFF HIGHLY PLASTIC SILTY CLAY, SANDY CLAY AND SANDY SILT MOIST

COASTAL PLAIN
GRAY, BROWN, TAN AND YELLOW VERY LOOSE TO LOOSE
SAND AND CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

27+00.00

SOIL TEST RESULTS

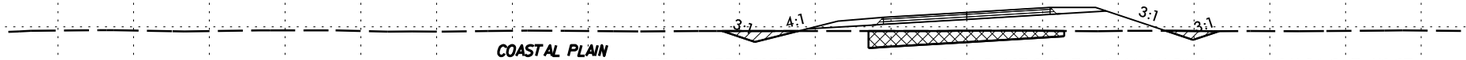
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	40	200		
SS-536	15' LT	26+29	3.5-5.0	A-7-6 (10)	54	34	39	17	6	38	97	79	44.6	20.5	ND

26+29
SS-536
15' LT

COASTAL PLAIN
GRAY AND BROWN MEDIUM VERY SOFT TO VERY STIFF HIGHLY PLASTIC SILTY CLAY, SANDY CLAY AND SANDY SILT MOIST

COASTAL PLAIN
GRAY, BROWN, TAN AND YELLOW VERY LOOSE TO
LOOSE SAND AND CLAYEY SAND MOIST TO WET
[MIDDENDORF FORMATION]

26+50.00



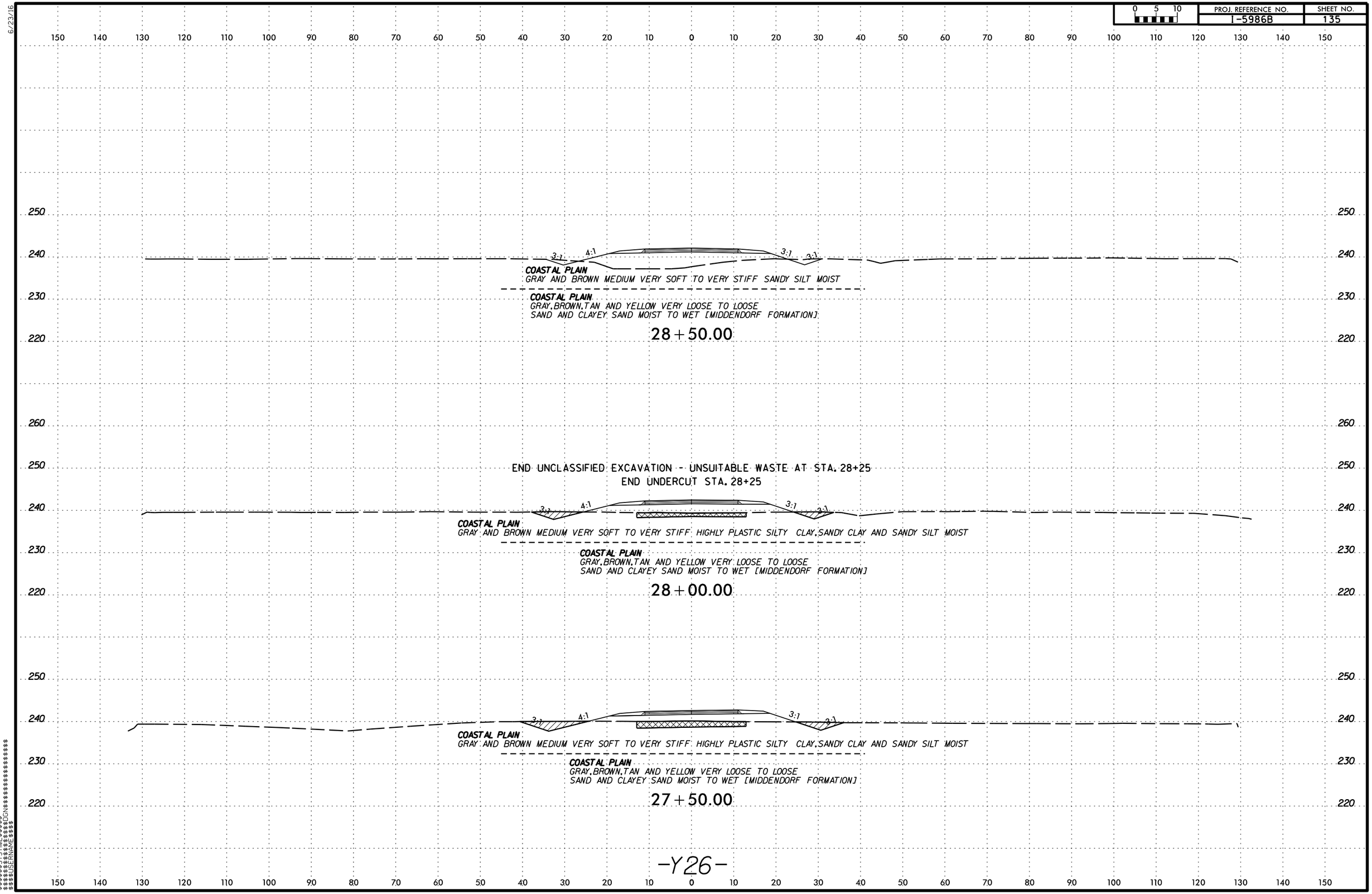
COASTAL PLAIN
GRAY AND BROWN MEDIUM VERY SOFT TO VERY STIFF HIGHLY PLASTIC SILTY CLAY, SANDY CLAY AND SANDY SILT MOIST

COASTAL PLAIN
GRAY, BROWN, TAN AND YELLOW VERY LOOSE TO LOOSE
SAND AND CLAYEY SAND MOIST TO WET [MIDDENDORF FORMATION]

26+00.00

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	135



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	136

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

220
210
200
190
180

SP

4:1

3:1

4:1

COASTAL PLAIN
BROWN AND GRAY MEDIUM DENSE TO DENSE SAND,
CLAYEY SAND AND SILTY SAND WET TO MOIST [MIDDENDORF FORMATION]

BROWN AND GRAY SOFT TO STIFF SANDY SILT AND SILTY CLAY WET TO MOIST

44+50.00

SP

END EMBANKMENT UNDERCUT STA. 44+17 LT

3:1

COASTAL PLAIN
BROWN AND GRAY MEDIUM DENSE TO DENSE SAND,CLAYEY SAND AND SILTY SAND WET TO MOIST [MIDDENDORF FORMATION]

44+00.00

-SR13-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	137

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

240
230
220
210

SHEAR LINE

3:1

COASTAL PLAIN
RED,TAN,BROWN AND GRAY SOFT TO VERY STIFF
SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

16+00.00

3:1 3:1

COASTAL PLAIN
RED,TAN,BROWN AND GRAY SOFT TO VERY STIFF
SANDY SILT,SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

15+50.00

3:1 3:1

COASTAL PLAIN
RED,TAN,BROWN AND GRAY SOFT TO VERY STIFF
SANDY SILT,SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

15+00.00

BEGIN UNDERCUT STA. 14+75

3:1 3:1

COASTAL PLAIN
RED,TAN,BROWN AND GRAY SOFT TO VERY STIFF
SANDY SILT,SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

14+50.00

-SR15-

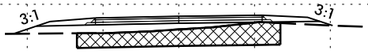
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	138

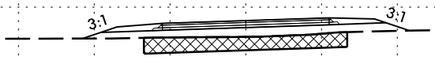
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

240
230
220
210



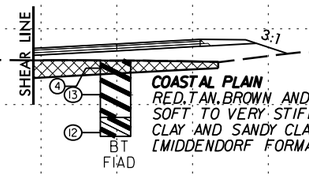
COASTAL PLAIN
RED,TAN,BROWN AND GRAY SOFT TO VERY STIFF SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

17+50.00



COASTAL PLAIN
RED,TAN,BROWN AND GRAY SOFT TO VERY STIFF SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

17+00.00



COASTAL PLAIN
RED,TAN,BROWN AND GRAY SOFT TO VERY STIFF SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

16+50.00

-SR15-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	139

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

260 250 240 230 220 210

BEGIN UNDERCUT STA. 38+75

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 38+75

MATCH TO -L-

ROADWAY EMBANKMENT
BROWN AND TAN MEDIUM DENSE
CLAYEY SAND AND SILTY SAND MOIST

4:1

3:1

COASTAL PLAIN
GRAY,WHITE,RED AND TAN VERY LOOSE TO DENSE SAND
AND CLAYEY SAND MOIST [MIDDENDORF FORMATION]

38 + 71.05

3:1 3:1

COASTAL PLAIN BROWN AND YELLOW VERY LOOSE TO LOOSE SILTY SAND AND CLAYEY SAND MOIST [MIDDENDORF FORMATION]
ORANGE,BROWN,TAN,GRAY AND RED MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST

18 + 50.00

END UNDERCUT STA. 18+25

3:1 3:1

COASTAL PLAIN
RED,TAN,BROWN AND GRAY SOFT TO VERY STIFF
SANDY SILT,SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

18 + 00.00

-SR15-

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

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	140

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

250
240
230
220

MATCH TO

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO HARD SILTY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

4:1 3:1

GRAY,WHITE,RED AND TAN VERY LOOSE TO DENSE SAND AND CLAYEY SAND MOIST

40+21.05

MATCH TO -L-

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO HARD SILTY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

4:1 3:1

GRAY,WHITE,RED AND TAN VERY LOOSE TO DENSE SAND AND CLAYEY SAND MOIST

39+71.05

MATCH TO -

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO HARD SILTY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

4:1 3:1

GRAY,WHITE,RED AND TAN VERY LOOSE TO DENSE SAND AND CLAYEY SAND MOIST

39+21.05

-SR15-

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	141

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

250 240 230 220

MATCH TO

Ⓐ **COASTAL PLAIN**
ORANGE AND BROWN MEDIUM STIFF TO HARD SILTY CLAY AND SANDY SILT MOIST
[MIDDENDORF FORMATION]

1:1 2:1

Ⓐ

GRAY,WHITE,RED AND TAN VERY LOOSE TO DENSE SAND AND CLAYEY SAND MOIST

41+71.05

250 240 230 220

MATCH TO

Ⓐ **COASTAL PLAIN**
ORANGE AND BROWN MEDIUM STIFF TO HARD SILTY CLAY AND SANDY SILT MOIST
[MIDDENDORF FORMATION]

1:1 2:1

Ⓐ

GRAY,WHITE,RED AND TAN VERY LOOSE TO DENSE SAND AND CLAYEY SAND MOIST

41+21.05

270 260 250 240 230 220 210

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-617	20' LT	40+49	3.6-5.1	A-7-6-(4)	47	22	42	18	4	36	93	71	39.4	21.5	ND

40+49
SS-617
20' LT

ROADWAY EMBANKMENT
RED,TAN,AND BROWN LOOSE SILTY SAND AND CLAYEY SAND MOIST

MATCH TO -L-

14 27 25

BT
FIAD

Ⓐ **COASTAL PLAIN**
ORANGE AND BROWN MEDIUM STIFF TO HARD SILTY CLAY AND SANDY SILT MOIST
[MIDDENDORF FORMATION]

1:1 2:1

Ⓐ

GRAY,WHITE,RED AND TAN VERY LOOSE TO DENSE SAND AND CLAYEY SAND MOIST

40+71.05

-SR15-

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

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	142

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

240
230
220

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO VERY STIFF HIGHLY PLASTIC SILTY CLAY AND SANDY SILT MOIST
[MIDDENDORF FORMATION]

ORANGE, RED, YELLOW, AND TAN MEDIUM DENSE CLAYEY SAND MOIST

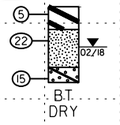
43 + 21.05

260
250
240

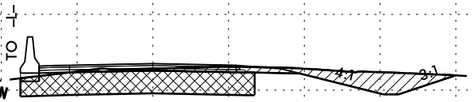
SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) #10	#40	#200	% MOISTURE	% ORGANIC
SS-399	68' LT	42+63	0 - 1.5	A-7-6-(14)	57	35	23	13	5	47	87	73	52.6	20.6	ND

42+63
SS-399



MATCH TO



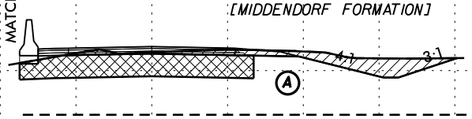
COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO VERY STIFF HIGHLY PLASTIC SILTY CLAY AND SANDY SILT MOIST
[MIDDENDORF FORMATION]

ORANGE, RED, YELLOW, AND TAN MEDIUM DENSE CLAYEY SAND MOIST

42 + 71.05

250
240
230
220
210

MATCH TO



Ⓐ **COASTAL PLAIN**
ORANGE AND BROWN MEDIUM STIFF TO HARD SILTY CLAY AND SANDY SILT MOIST
[MIDDENDORF FORMATION]

GRAY, WHITE, RED AND TAN VERY LOOSE TO DENSE SAND AND CLAYEY SAND MOIST

42 + 21.05

250
240
230
220

-SR15-

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

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	143

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

240
230
220

MAT

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO VERY STIFF SILTY CLAY AND SANDY SILT MOIST
[MIDDENDORF FORMATION]

ORANGE,RED,YELLOW,AND TAN MEDIUM DENSE CLAYEY SAND MOIST

45+21.05

240
230
220

MAT

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO VERY STIFF SILTY CLAY AND SANDY SILT MOIST
[MIDDENDORF FORMATION]

ORANGE,RED,YELLOW,AND TAN MEDIUM DENSE CLAYEY SAND MOIST

44+71.05

240
230
220

MAT

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO VERY STIFF SILTY CLAY AND SANDY SILT MOIST
[MIDDENDORF FORMATION]

ORANGE,RED,YELLOW,AND TAN MEDIUM DENSE CLAYEY SAND MOIST

44+21.05

240
230
220

MAT

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO VERY STIFF HIGHLY PLASTIC SILTY CLAY AND SANDY SILT MOIST
[MIDDENDORF FORMATION]

ORANGE,RED,YELLOW,AND TAN MEDIUM DENSE CLAYEY SAND MOIST

43+71.05

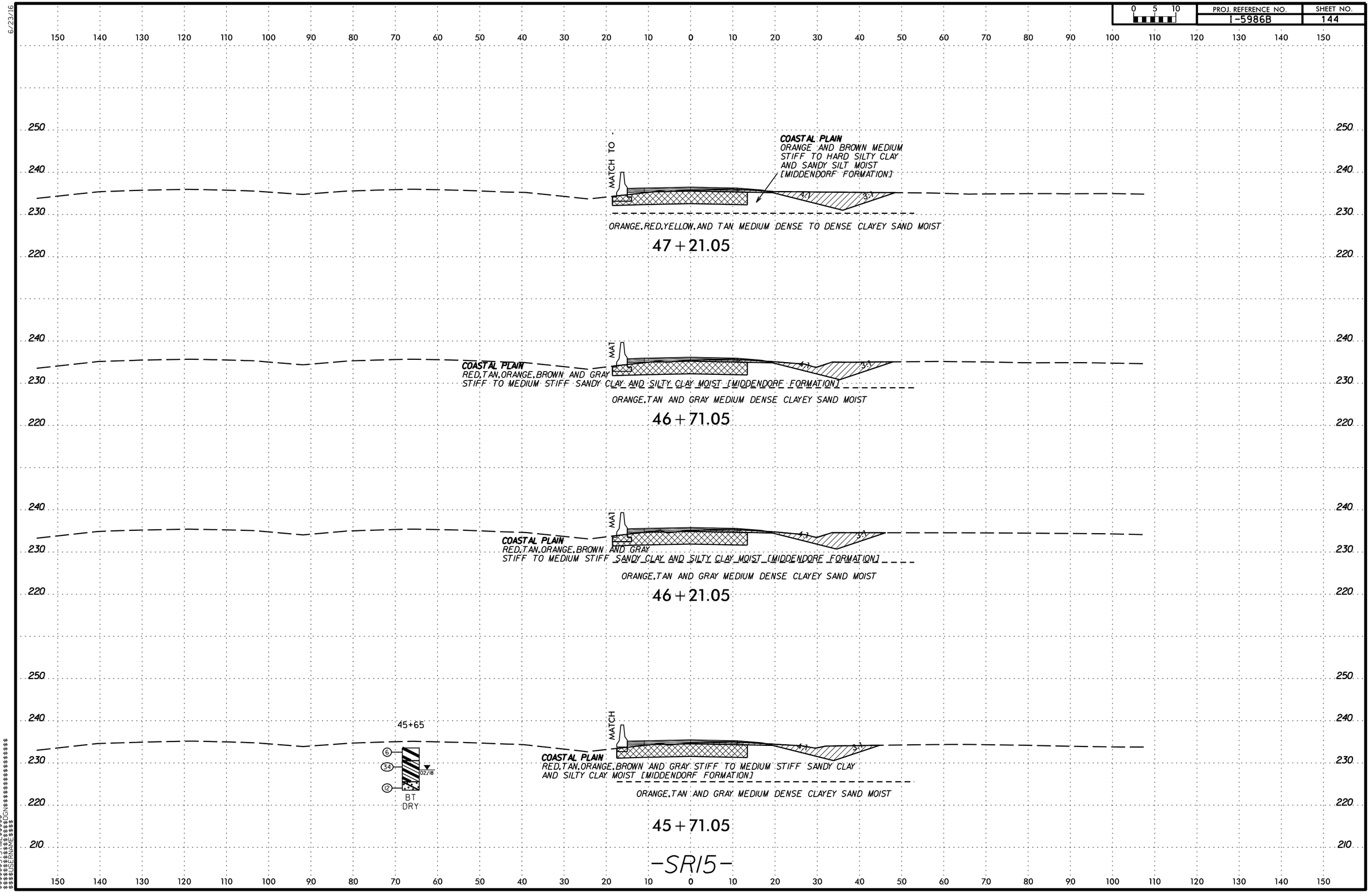
-SR15-

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

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	144



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	145

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

260 250 240 230 220

48+60

5
42
14
02/18
BT
DRY

MATCH TO -L-

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO HARD SILTY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

4:1 3:1

ORANGE, RED, YELLOW, AND TAN MEDIUM DENSE CLAYEY SAND MOIST

48 + 71.05

MATCH TO -L-

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO HARD SILTY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

4:1 3:1

ORANGE, RED, YELLOW, AND TAN MEDIUM DENSE CLAYEY SAND MOIST

48 + 21.05

MATCH TO -

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO HARD SILTY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

4:1 3:1

ORANGE, RED, YELLOW, AND TAN MEDIUM DENSE TO DENSE CLAYEY SAND MOIST

47 + 71.05

-SR15-

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	146

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

260 250 240 230 220

MATCH TO –

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO HARD SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

4:1 3:1

ORANGE, RED, YELLOW, AND TAN MEDIUM DENSE CLAYEY SAND MOIST

50 + 21.05

MATCH TO –

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO HARD SILTY CLAY AND SANDY CLAY MOIST [MIDDENDORF FORMATION]

4:1 3:1

ORANGE, RED, YELLOW, AND TAN MEDIUM DENSE CLAYEY SAND MOIST

49 + 71.05

MATCH TO –

COASTAL PLAIN
ORANGE AND BROWN MEDIUM STIFF TO HARD SILTY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

4:1 3:1

ORANGE, RED, YELLOW, AND TAN MEDIUM DENSE CLAYEY SAND MOIST

49 + 21.05

–SR15–

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	147

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

270 260 250 240 230 220

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) #10	#40	#200	% MOISTURE	% ORGANIC
SS-408	32' LT	51+65	0.0 - 1.5	A-7-6-(10)	46	20	23	13	6	53	95	82	60.2	27.4	ND

51+65
SS-408
4
26
27
02/18
BT
DRY

MATCH TO -L-

COASTAL PLAIN
BROWN SOFT SILTY CLAY MOIST
[MIDDENDORF FORMATION]

4:1 3:1

GRAY, RED AND TAN MEDIUM DENSE TO DENSE CLAYEY SAND MOIST

51+71.05

MATCH TO -L-

COASTAL PLAIN
ORANGE AND BROWN MEDIUM
STIFF TO HARD SILTY CLAY
AND SANDY CLAY MOIST
[MIDDENDORF FORMATION]

4:1 3:1

ORANGE, RED, YELLOW, AND TAN MEDIUM DENSE CLAYEY SAND MOIST

51+21.05

MATCH TO -L-

COASTAL PLAIN
ORANGE AND BROWN MEDIUM
STIFF TO HARD SILTY CLAY
AND SANDY CLAY MOIST
[MIDDENDORF FORMATION]

4:1 3:1

ORANGE, RED, YELLOW, AND TAN MEDIUM DENSE CLAYEY SAND MOIST

50+71.05

-SR15-

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	148

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

250 240 230 220

MA 3:1

COASTAL PLAIN
GRAY, RED AND TAN MEDIUM DENSE TO DENSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

53 + 71.05

250 240 230 220

MA 3:1

COASTAL PLAIN
ORANGE, TAN, GRAY, BROWN AND RED SOFT TO VERY STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

53 + 21.05

260 250 240 230 220

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 52+96

MATCH TO -L- 4:1 3:1

COASTAL PLAIN BROWN SOFT SILTY CLAY MOIST [MIDDENDORF FORMATION]
GRAY, RED AND TAN MEDIUM DENSE TO DENSE CLAYEY SAND MOIST

52 + 71.05

250 240 230 220

MATCH T 4:1 3:1

COASTAL PLAIN
BROWN SOFT SILTY CLAY MOIST
[MIDDENDORF FORMATION]

GRAY, RED AND TAN MEDIUM DENSE TO DENSE CLAYEY SAND MOIST

52 + 21.05

-SR15-

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

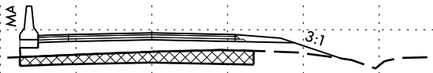
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	149

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

250 240 230 220 270 260

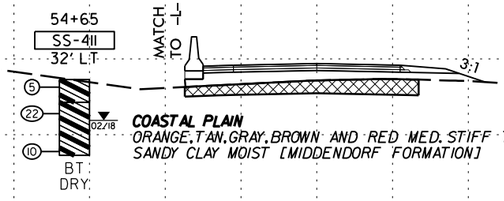


COASTAL PLAIN
ORANGE,TAN,GRAY,BROWN AND RED SOFT TO VERY STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

55+21.05

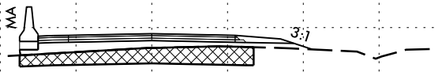
SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-411	32' LT	54+65	0 - 1.5	A-6-(6)	40	18	27	18	6	44	95	81	52.3	17.5	ND



COASTAL PLAIN
ORANGE,TAN,GRAY,BROWN AND RED MED. STIFF TO VERY STIFF
SANDY CLAY MOIST [MIDDENDORF FORMATION]

54+71.05



COASTAL PLAIN
ORANGE,TAN,GRAY,BROWN AND RED SOFT TO VERY STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

54+21.05

-SR15-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	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

250
240
230
220

MA

3:1

3:1

COASTAL PLAIN
ORANGE,TAN,GRAY,BROWN AND RED SOFT TO VERY STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

GRAY,BROWN,TAN AND ORANGE VERY LOOSE TO MEDIUM
DENSE SILTY SAND AND CLAYEY SAND MOIST

56+71.05

MA

3:1

COASTAL PLAIN
ORANGE,TAN,GRAY,BROWN AND RED SOFT TO VERY STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

56+21.05

MA

3:1

COASTAL PLAIN
ORANGE,TAN,GRAY,BROWN AND RED SOFT TO VERY STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

55+71.05

-SR15-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	151

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

270
260
250
240
230
220

MATCH TO -L- BEGIN UNDERCUT STA. 68+46

3:1

COASTAL PLAIN
GRAY, BROWN, TAN AND ORANGE LOOSE TO MEDIUM DENSE SILTY SAND AND CLAYEY SAND MOIST [MIDDENDORF FORMATION]

68+21.05

57+65
24' LT

MATCH TO -L-

3:1

3:1

7
3
4
BT

02/18

COASTAL PLAIN
GRAY, BROWN, TAN AND ORANGE VERY LOOSE TO MEDIUM DENSE SILTY SAND AND CLAYEY SAND MOIST [MIDDENDORF FORMATION]

57+71.05

MATCH TO -L- END UNDERCUT STA. 57+46

COASTAL PLAIN
ORANGE, TAN; GRAY, BROWN AND RED SOFT TO VERY STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

3:1

3:1

GRAY, BROWN, TAN AND ORANGE VERY LOOSE TO MEDIUM DENSE SILTY SAND AND CLAYEY SAND MOIST

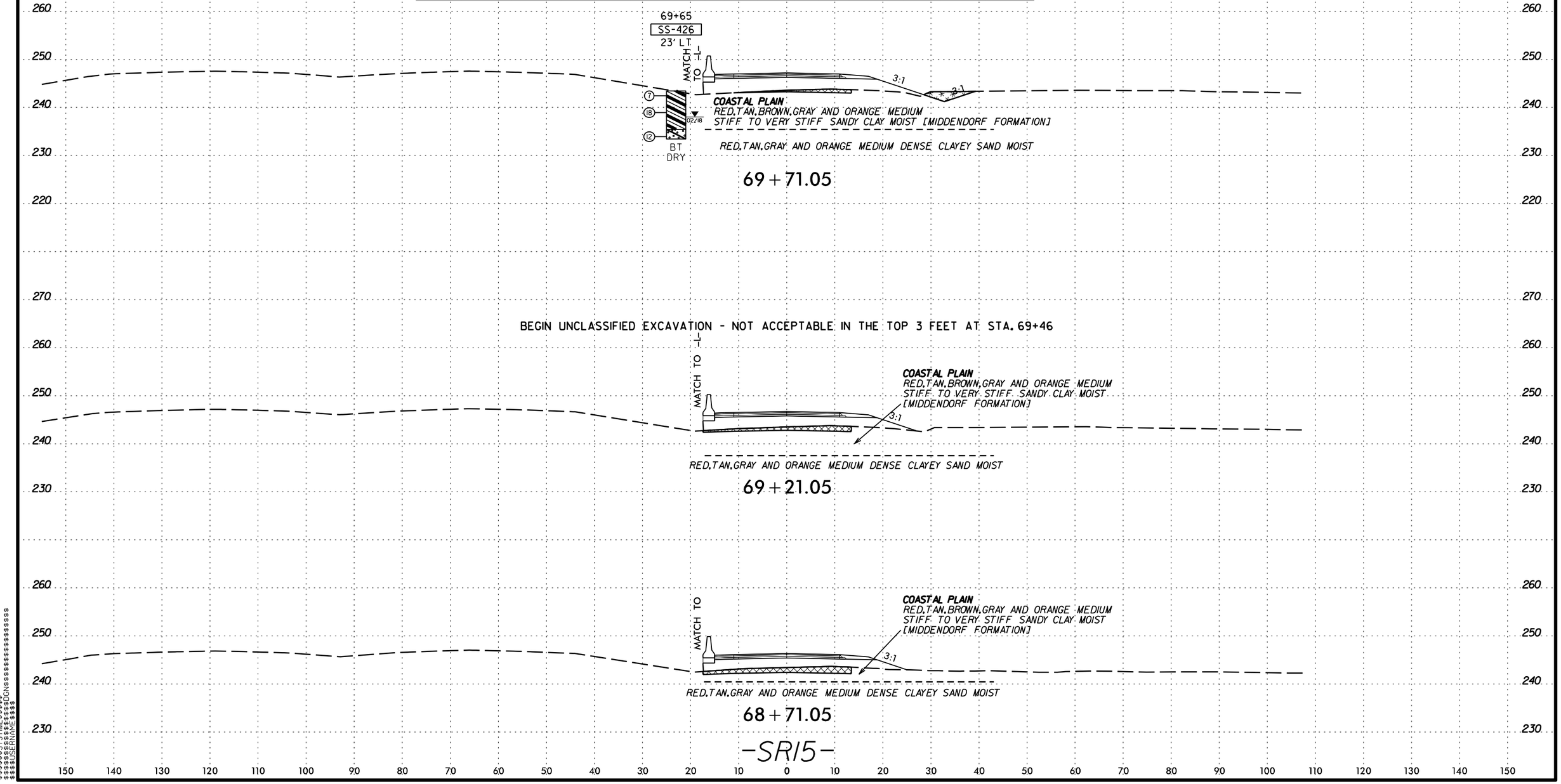
57+21.05

-SR15-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-426	23' LT	69+65	0 - 1.5	A-6-(6)	39	16	26	22	10	41	99	88	53.7	22.5	ND



6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	153

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

260 250 240 230

MA

3:1 3:1

COASTAL PLAIN
RED,TAN,BROWN,GRAY AND ORANGE MEDIUM
STIFF TO VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

71+71.27

MA

3:1 3:1

COASTAL PLAIN
RED,TAN,BROWN,GRAY AND ORANGE MEDIUM
STIFF TO VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

71+21.09

MA

3:1 3:1

COASTAL PLAIN
RED,TAN,BROWN,GRAY AND ORANGE MEDIUM
STIFF TO VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

70+71.05

END UNDERCUT STA. 70+46

MATCH TO -L-

3:1 3:1

COASTAL PLAIN
RED,TAN,BROWN,GRAY AND ORANGE MEDIUM
STIFF TO VERY STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]

RED,TAN,GRAY AND ORANGE MEDIUM DENSE CLAYEY SAND MOIST

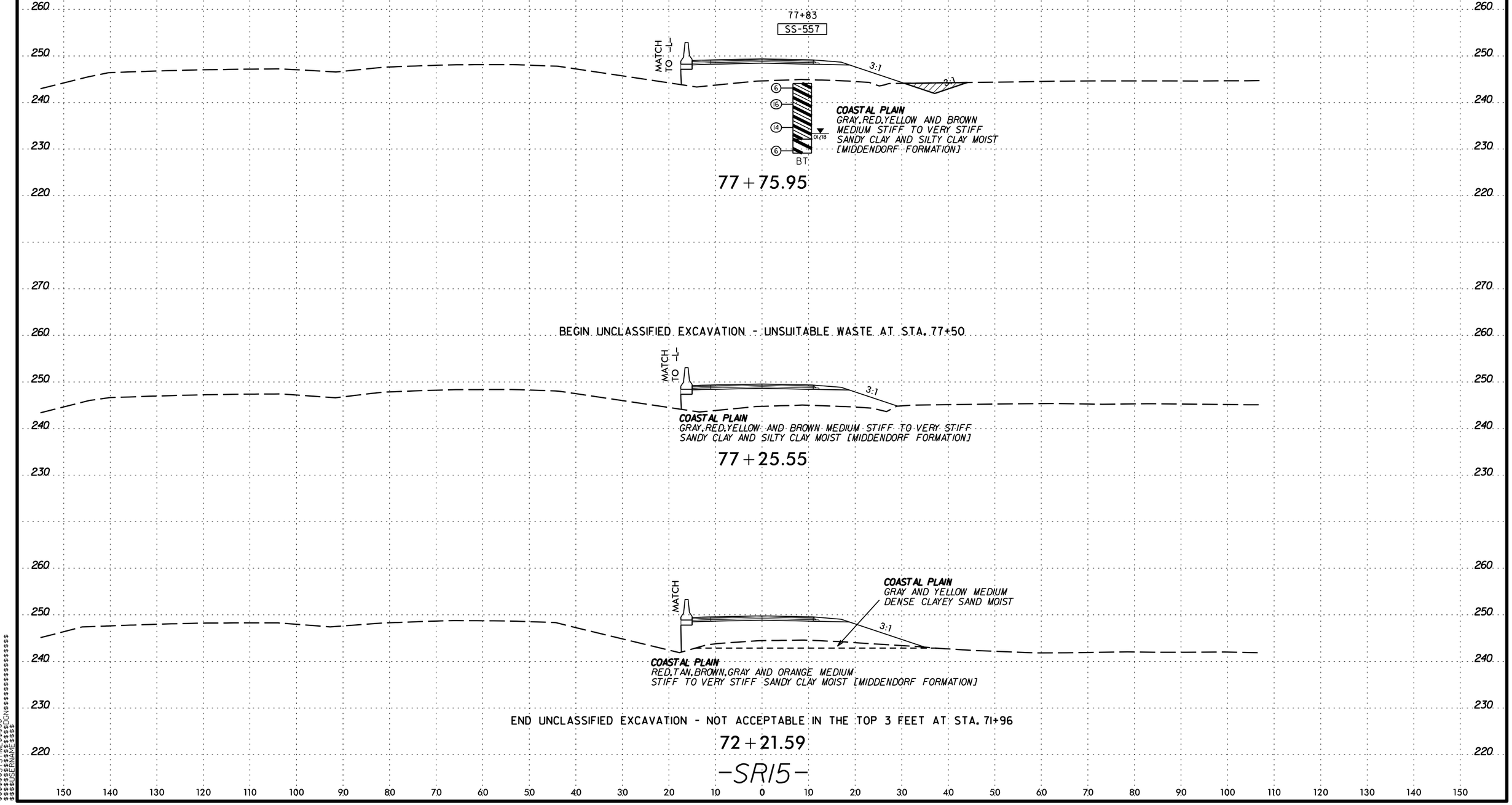
70+21.05

-SR15-

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-557	9' RT	77+83	0-1.5	A-6-(2)	26	13	28	32	13	27	100	89	45.3	11.4	ND



6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	155

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

260
250
240
230

MATCH

COASTAL PLAIN
GRAY,TAN AND PINK LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

3:1

3:1

GRAY,RED,YELLOW AND BROWN MEDIUM STIFF TO VERY STIFF SANDY CLAY AND SILTY CLAY MOIST

79+27.14

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 79+01

MATCH TO -L-

3:1

3:1

COASTAL PLAIN
GRAY,RED,YELLOW AND BROWN MEDIUM STIFF TO VERY STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

78+76.74

MA

3:1

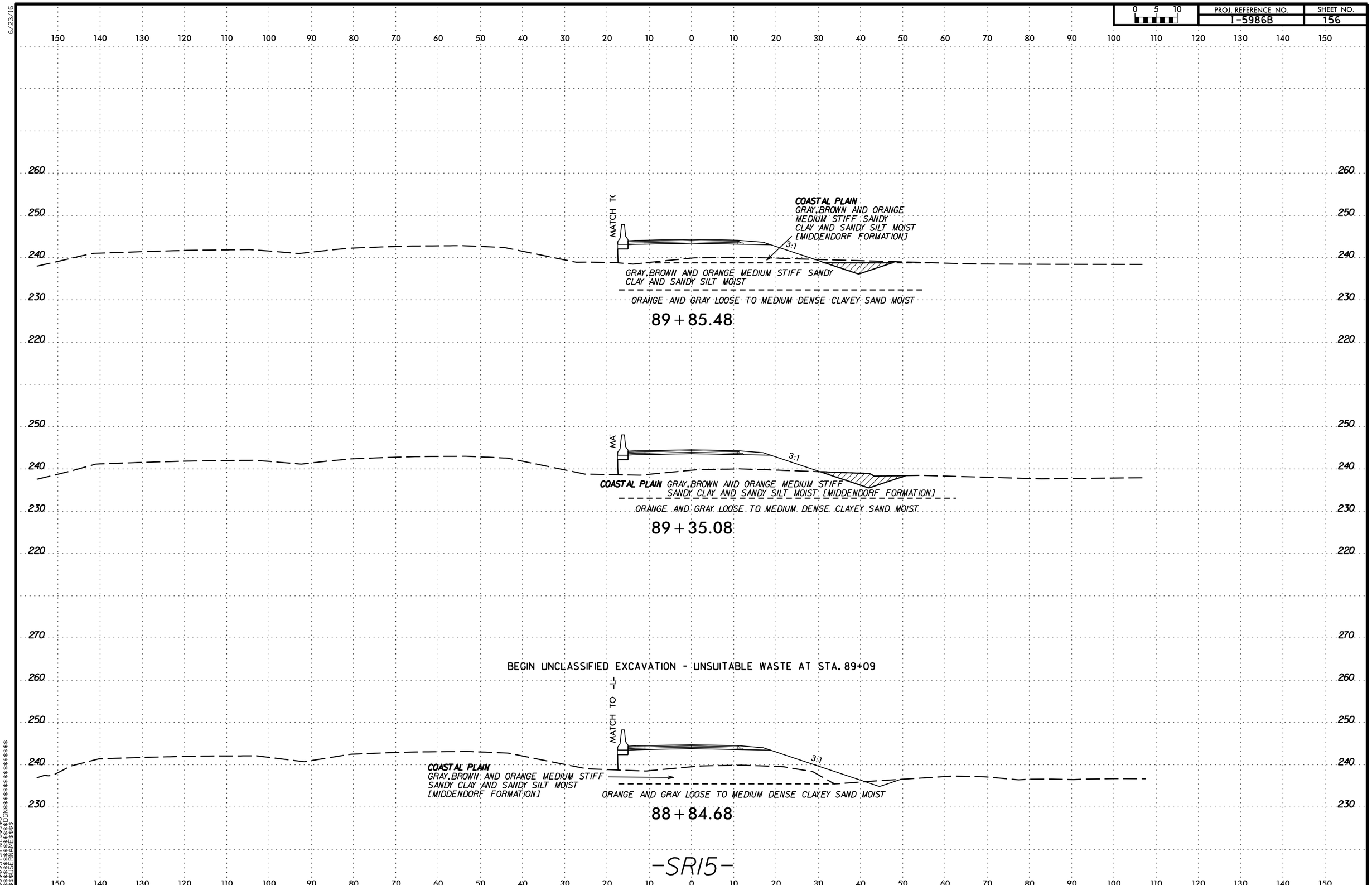
3:1

COASTAL PLAIN
GRAY,RED,YELLOW AND BROWN MEDIUM STIFF TO VERY STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

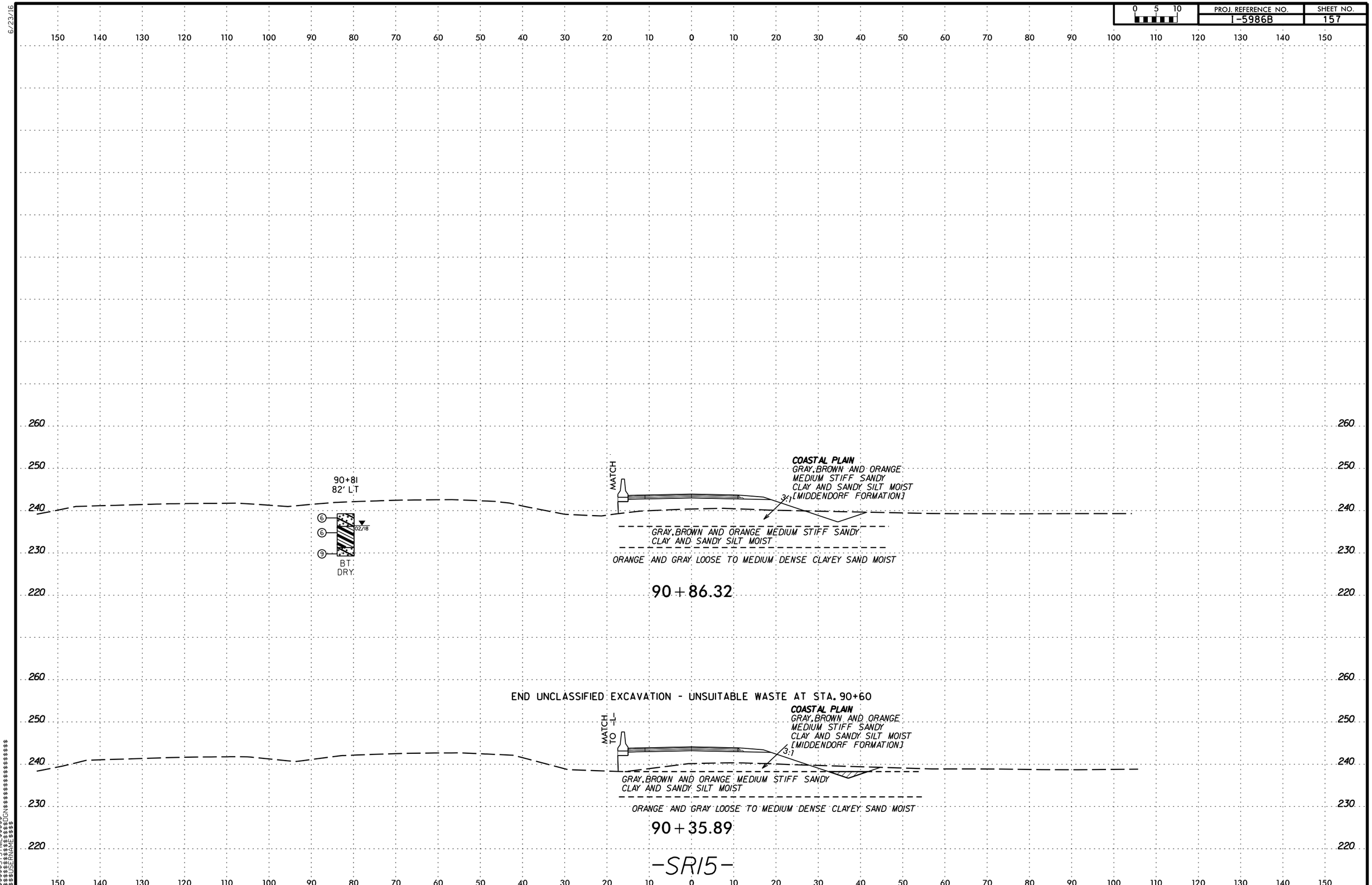
78+26.35

-SR15-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$



PROJ. REFERENCE NO.
I-5986B
SHEET NO.
156
0 5 10
MATCH TO
COASTAL PLAIN
GRAY,BROWN AND ORANGE MEDIUM STIFF SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]
3:1
GRAY,BROWN AND ORANGE MEDIUM STIFF SANDY CLAY AND SANDY SILT MOIST
ORANGE AND GRAY LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST
89+85.48
MA
3:1
COASTAL PLAIN GRAY,BROWN AND ORANGE MEDIUM STIFF SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]
ORANGE AND GRAY LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST
89+35.08
BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 89+09
MATCH TO -L-
3:1
COASTAL PLAIN
GRAY,BROWN AND ORANGE MEDIUM STIFF SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]
ORANGE AND GRAY LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST
88+84.68
-SR15-



PROJ. REFERENCE NO.
I-5986B
SHEET NO.
157
0 5 10
90+81
82' LT
BT
DRY
02/18
MATCH
COASTAL PLAIN
GRAY, BROWN AND ORANGE
MEDIUM STIFF SANDY
CLAY AND SANDY SILT MOIST
[MIDDENDORF FORMATION]
3:1
GRAY, BROWN AND ORANGE MEDIUM STIFF SANDY
CLAY AND SANDY SILT MOIST
ORANGE AND GRAY LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST
90+86.32
END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 90+60
MATCH TO -L-
COASTAL PLAIN
GRAY, BROWN AND ORANGE
MEDIUM STIFF SANDY
CLAY AND SANDY SILT MOIST
[MIDDENDORF FORMATION]
3:1
GRAY, BROWN AND ORANGE MEDIUM STIFF SANDY
CLAY AND SANDY SILT MOIST
ORANGE AND GRAY LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST
90+35.89
-SR15-

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	158

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

240
230
220

COASTAL PLAIN
YELLOW,RED AND BROWN SOFT TO STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]
RED AND BROWN MEDIUM DENSE CLAYEY SAND MOIST

13+00.00

240
230
220

COASTAL PLAIN
YELLOW,RED AND BROWN SOFT TO STIFF SANDY CLAY MOIST [MIDDENDORF FORMATION]
RED AND BROWN MEDIUM DENSE CLAYEY SAND MOIST

12+50.00

250
240
230
220

BEGIN UNDERCUT STA. 12+25
BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 12+25

COASTAL PLAIN *BROWN VERY LOOSE SILTY SAND MOIST [MIDDENDORF FORMATION]*
GRAY,TAN,YELLOW,BROWN AND RED SOFT TO VERY STIFF HIGHLY PLASTIC SILTY CLAY AND SANDY CLAY MOIST[MIDDENDORF FORMATION]
BROWN,GRAY AND RED MEDIUM DENSE CLAYEY SAND MOIST TO WET

12+00.00

-SR16-

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

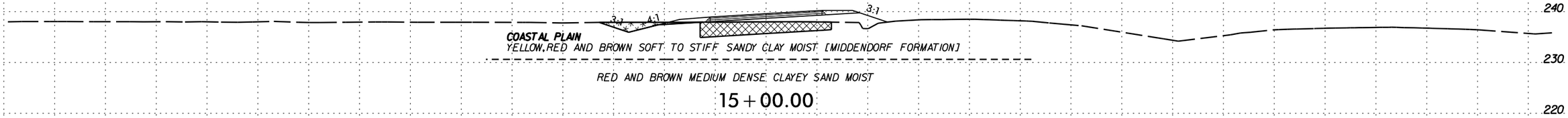
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

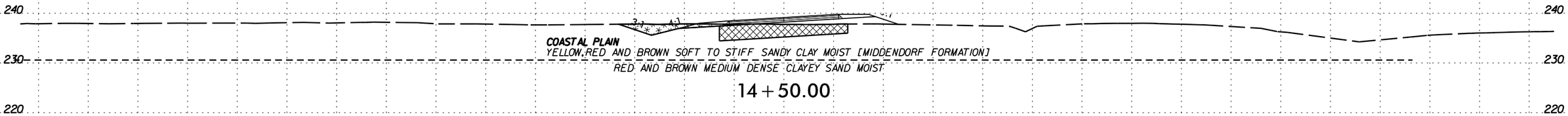
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	159

END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 15+25

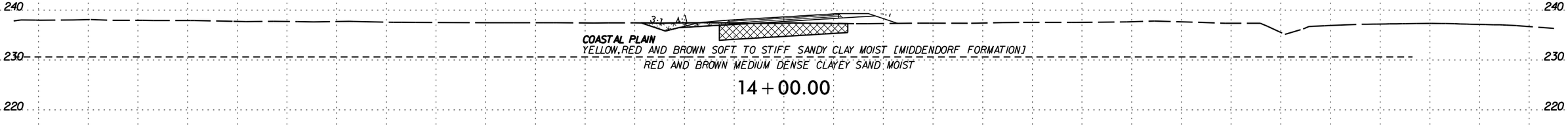
CONTINUE UNDERCUT ON -L- SECTIONS STA. 1145+50



15 + 00.00



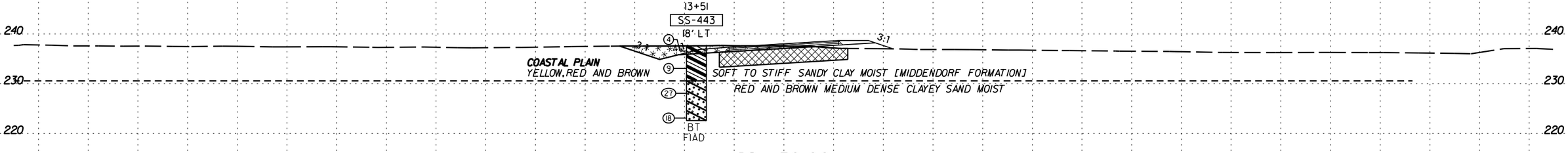
14 + 50.00



14 + 00.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) #10	#40	#200	% MOISTURE	% ORGANIC
SS-443	18' LT	13+51	0-1.5	A-6-(5)	33	17	32	19	9	40	94	77	48.5	19.9	ND



13 + 50.00

-SR16-

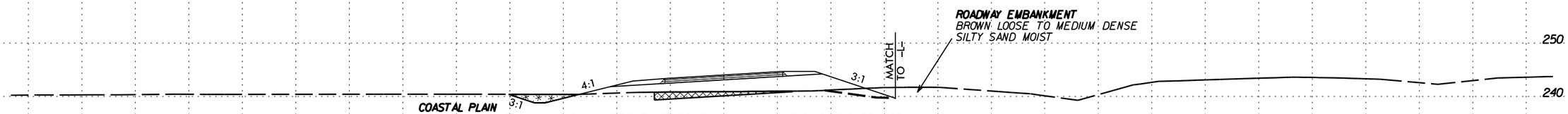
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

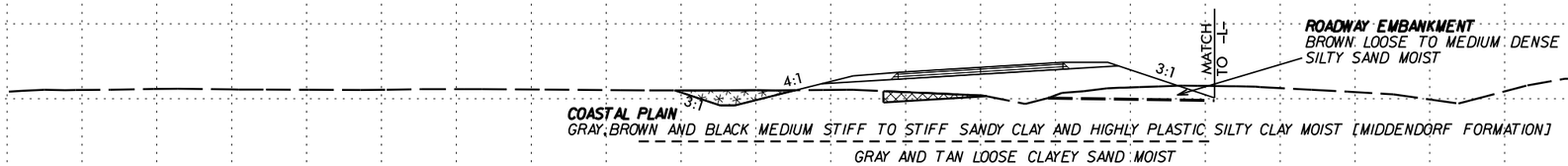
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	160

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

260 250 240 230

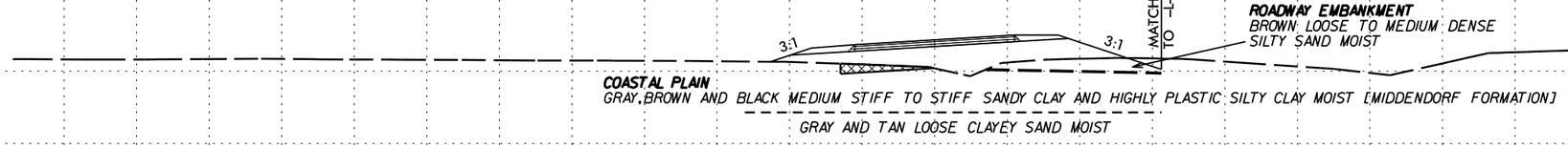


62 + 50.00



62 + 00.00

BEGIN UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 61+75



BEGIN UNDERCUT STA. 61+44

61 + 50.00

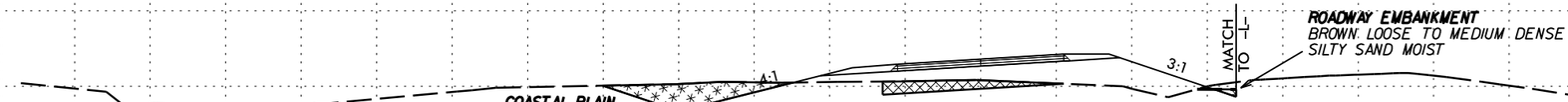
-SR16-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

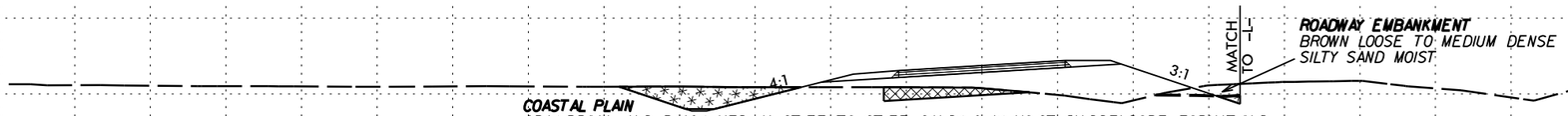
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	161

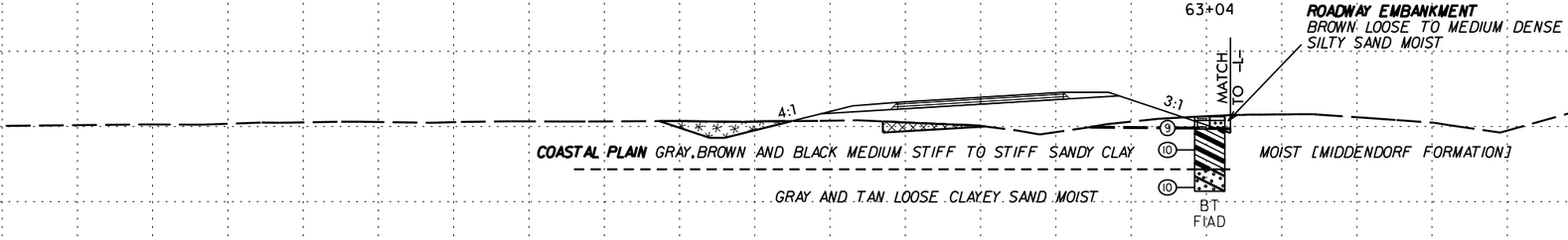
END UNCLASSIFIED EXCAVATION - NOT ACCEPTABLE IN THE TOP 3 FEET AT STA. 64+25



64+00.00



63+50.00



63+00.00

-SR16-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	162

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

250 240 230 220

66+03

3:1 3:1

7 7 10 01/18 BT

COASTAL PLAIN
GRAY, BROWN AND BLACK MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

66+00.00

3:1 3:1

COASTAL PLAIN
GRAY, BROWN AND BLACK MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

65+50.00

3:1 3:1

COASTAL PLAIN
GRAY, BROWN AND BLACK MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

65+00.00

3:1 3:1

COASTAL PLAIN
GRAY, BROWN AND BLACK MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

64+50.00

-SR16-

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	163

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

250
240
230
220

3:1 3:1

COASTAL PLAIN
GRAY, BROWN AND BLACK MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

GRAY, YELLOW, BROWN AND RED MEDIUM DENSE CLAYEY SAND MOIST

68 + 00.00

3:1 3:1

COASTAL PLAIN
GRAY, BROWN AND BLACK MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

67 + 50.00

3:1 3:1

COASTAL PLAIN
GRAY, BROWN AND BLACK MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

67 + 00.00

3:1 3:1

COASTAL PLAIN
GRAY, BROWN AND BLACK MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

66 + 50.00

-SR16-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	164

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

250
240
230
220

3:1 3:1

COASTAL PLAIN
GRAY,BROWN AND BLACK MEDIUM STIFF TO STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

GRAY,YELLOW,BROWN AND RED MEDIUM DENSE CLAYEY SAND MOIST

70+00.00

3:1 3:1

COASTAL PLAIN
GRAY,BROWN AND BLACK MEDIUM STIFF TO STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

GRAY,YELLOW,BROWN AND RED MEDIUM DENSE CLAYEY SAND MOIST

69+50.00

69+03

3:1 3:1

COASTAL PLAIN
GRAY,BROWN AND BLACK MEDIUM STIFF TO STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

⑦ ⑧ ⑯ BT DRY

GRAY,YELLOW,BROWN AND RED MEDIUM DENSE CLAYEY SAND MOIST

69+00.00

3:1 3:1

COASTAL PLAIN
GRAY,BROWN AND BLACK MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

GRAY,YELLOW,BROWN AND RED MEDIUM DENSE CLAYEY SAND MOIST

68+50.00

-SR16-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	165

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

250
240
230
220

3:1 3:1

COASTAL PLAIN
GRAY,BROWN AND BLACK MEDIUM STIFF TO STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

GRAY,YELLOW,BROWN AND RED MEDIUM DENSE CLAYEY SAND MOIST

71+50.00

260
250
240
230
220

71+04

3:1 3:1

COASTAL PLAIN
GRAY,BROWN AND BLACK MEDIUM STIFF TO STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

8
18
21
BT
DRY

GRAY,YELLOW,BROWN AND RED MEDIUM DENSE CLAYEY SAND MOIST

71+00.00

250
240
230
220

3:1 3:1

COASTAL PLAIN
GRAY,BROWN AND BLACK MEDIUM STIFF TO STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

GRAY,YELLOW,BROWN AND RED MEDIUM DENSE CLAYEY SAND MOIST

70+50.00

-SR16-

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

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	166

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 73+75

COASTAL PLAIN
GRAY VERY LOOSE CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

GRAY,BROWN AND BLACK MEDIUM STIFF TO STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

73+50.00

COASTAL PLAIN
GRAY,BROWN AND BLACK MEDIUM STIFF TO STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

73+00.00

END UNDERCUT STA. 72+75

COASTAL PLAIN
GRAY,BROWN AND BLACK MEDIUM STIFF TO STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

72+50.00

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 72+25

COASTAL PLAIN
GRAY,BROWN AND BLACK MEDIUM STIFF TO STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

GRAY,YELLOW,BROWN AND RED MEDIUM DENSE CLAYEY SAND MOIST

72+00.00

-SR16-

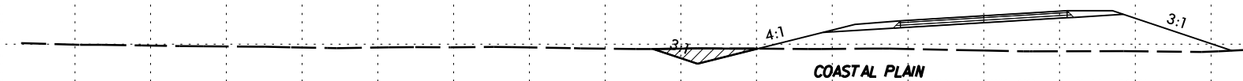
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	167

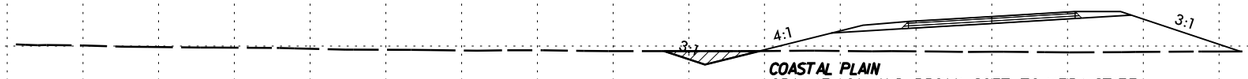
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

250
240
230



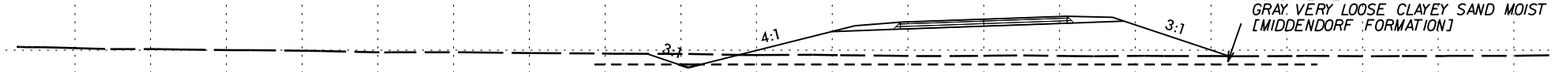
COASTAL PLAIN
GRAY,YELLOW AND BROWN SOFT TO VERY STIFF
SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

75+50.00



COASTAL PLAIN
GRAY,YELLOW AND BROWN SOFT TO VERY STIFF
SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

75+00.00



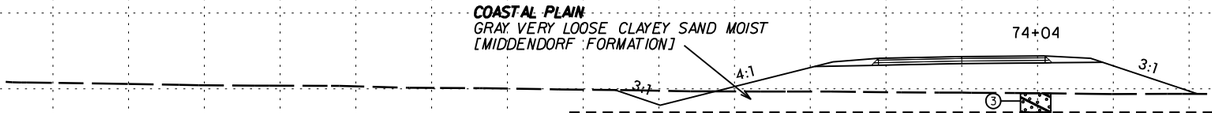
COASTAL PLAIN
GRAY VERY LOOSE CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

GRAY,YELLOW AND BROWN SOFT TO VERY STIFF
SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

74+50.00

260
250
240
230
220

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 74+25



COASTAL PLAIN
GRAY VERY LOOSE CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

GRAY,YELLOW,BROWN AND RED MEDIUM
STIFF TO VERY STIFF SILTY CLAY AND
SANDY CLAY MOIST
[MIDDENDORF FORMATION]

74+00.00

-SR16-

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

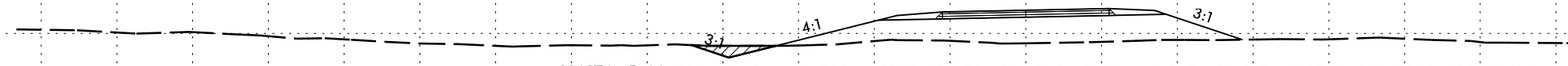
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	168

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

250
240
230
220



COASTAL PLAIN *GRAY,YELLOW AND BROWN SOFT TO VERY STIFF SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]*

GRAY,YELLOW,RED AND BROWN LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST

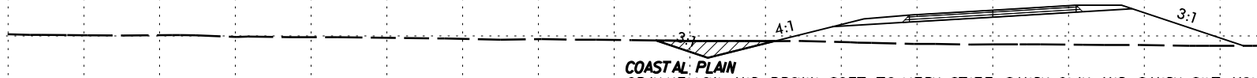
77+50.00

77+03

COASTAL PLAIN *GRAY,YELLOW AND BROWN SOFT TO VERY STIFF SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]*

GRAY,YELLOW,RED AND BROWN LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST

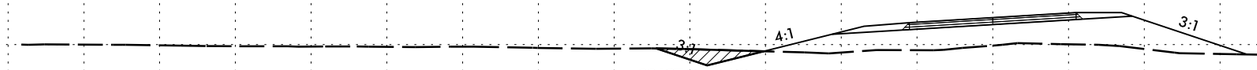
77+00.00



COASTAL PLAIN
GRAY,YELLOW AND BROWN SOFT TO VERY STIFF SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

GRAY,YELLOW,RED AND BROWN LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST

76+50.00



COASTAL PLAIN
GRAY,YELLOW AND BROWN SOFT TO VERY STIFF SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

GRAY,YELLOW,RED AND BROWN LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST

76+00.00

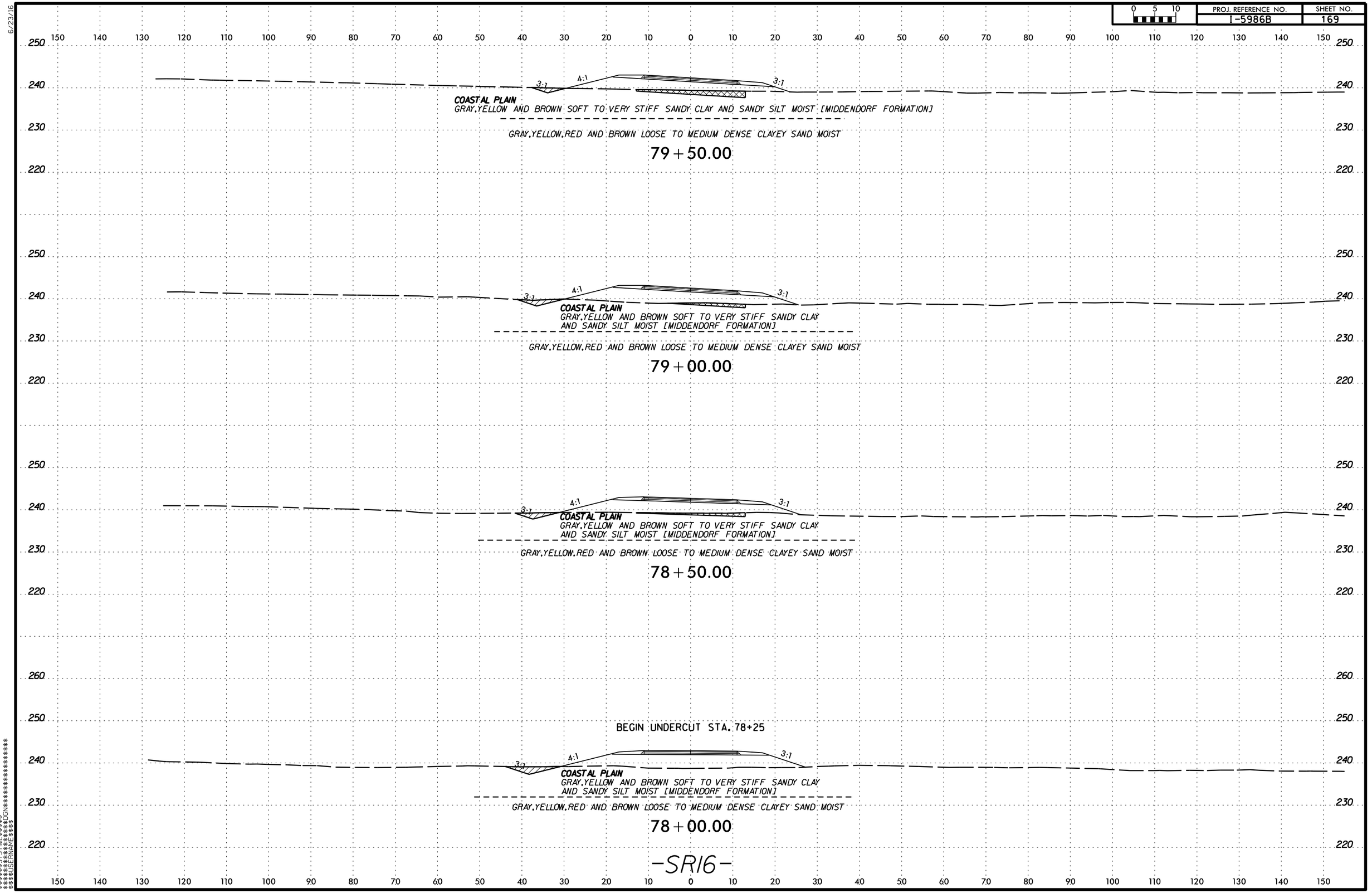
-SR16-

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

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	169

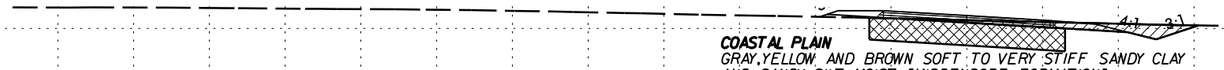


$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	170

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

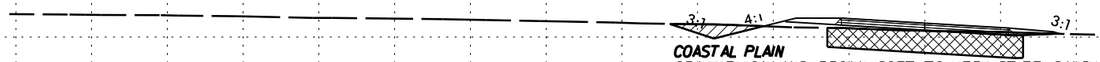
250
240
230
220



COASTAL PLAIN
GRAY,YELLOW AND BROWN SOFT TO VERY STIFF SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

GRAY,YELLOW,RED AND BROWN LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST

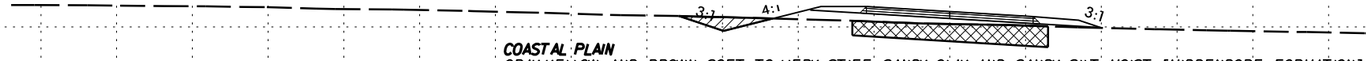
81+50.00



COASTAL PLAIN
GRAY,YELLOW AND BROWN SOFT TO VERY STIFF SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

GRAY,YELLOW,RED AND BROWN LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST

81+00.00

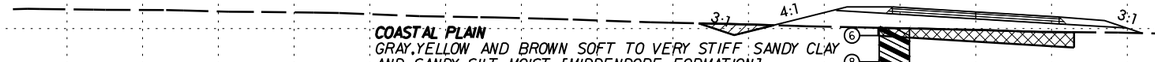


COASTAL PLAIN
GRAY,YELLOW AND BROWN SOFT TO VERY STIFF SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

GRAY,YELLOW,RED AND BROWN LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST

80+50.00

80+04



COASTAL PLAIN
GRAY,YELLOW AND BROWN SOFT TO VERY STIFF SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

BT
DRY

GRAY,YELLOW,RED AND BROWN LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST

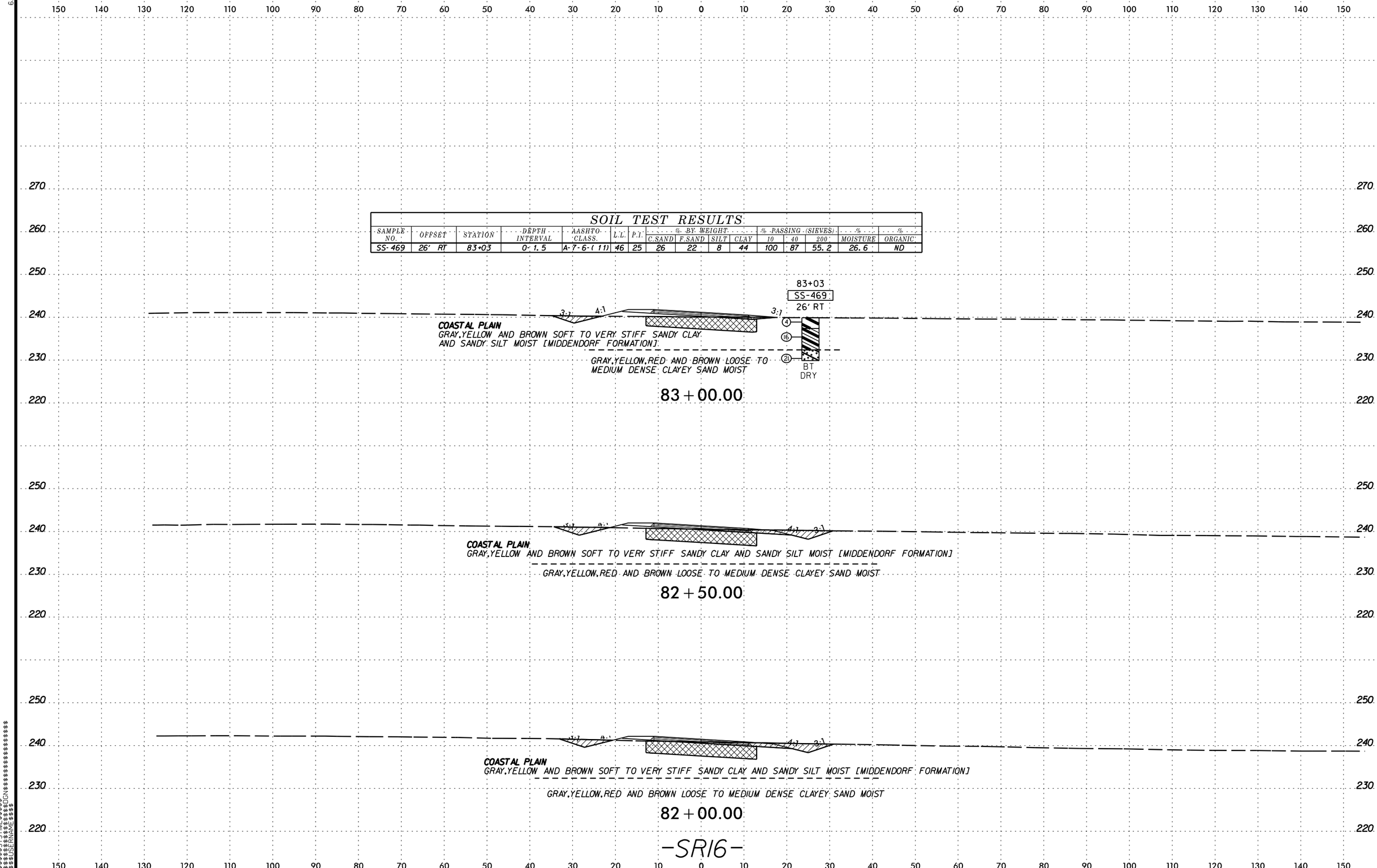
80+00.00

-SR16-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-469	26' RT	83+03	0-1.5	A-7-6-(11)	46	25	26	22	8	44	100	87	55.2	26.6	ND



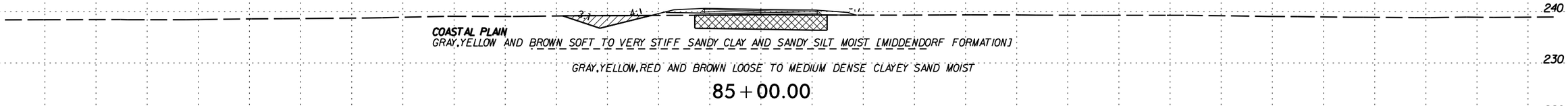
6/23/16
$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	172

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

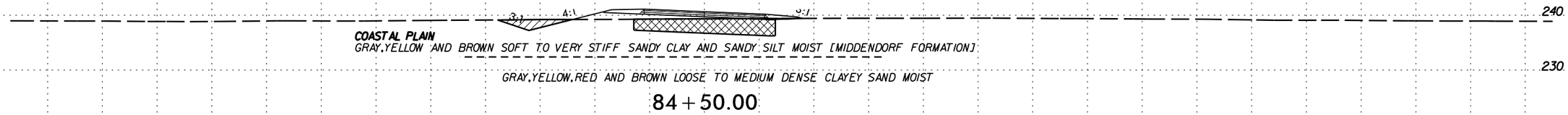
250
240
230
220



COASTAL PLAIN
GRAY,YELLOW AND BROWN SOFT TO VERY STIFF SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

GRAY,YELLOW,RED AND BROWN LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST

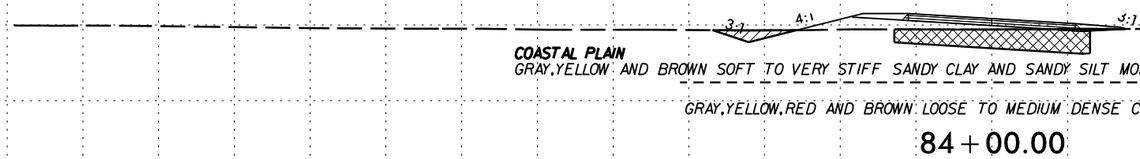
85+00.00



COASTAL PLAIN
GRAY,YELLOW AND BROWN SOFT TO VERY STIFF SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

GRAY,YELLOW,RED AND BROWN LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST

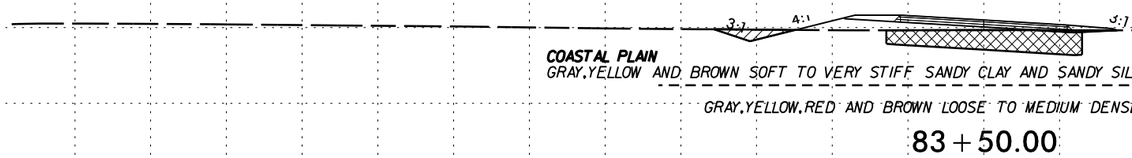
84+50.00



COASTAL PLAIN
GRAY,YELLOW AND BROWN SOFT TO VERY STIFF SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

GRAY,YELLOW,RED AND BROWN LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST

84+00.00



COASTAL PLAIN
GRAY,YELLOW AND BROWN SOFT TO VERY STIFF SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

GRAY,YELLOW,RED AND BROWN LOOSE TO MEDIUM DENSE CLAYEY SAND MOIST

83+50.00

-SR16-

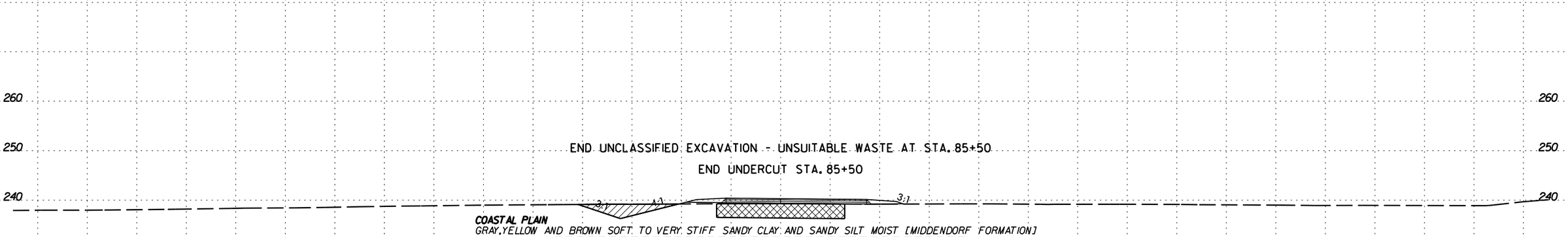
$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	173

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 85+50

END UNDERCUT STA. 85+50



85+50.00

-SR16-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	174

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

250

240

230

COASTAL PLAIN
YELLOW AND BROWN MEDIUM STIFF TO STIFF SANDY CLAY AND SANDY SILT MOIST [MIDDENDORF FORMATION]

BROWN AND RED MEDIUM DENSE CLAYEY SAND MOIST

BEGIN UNDERCUT STA. 12+52.18

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 12+52.18

13+00.00

250

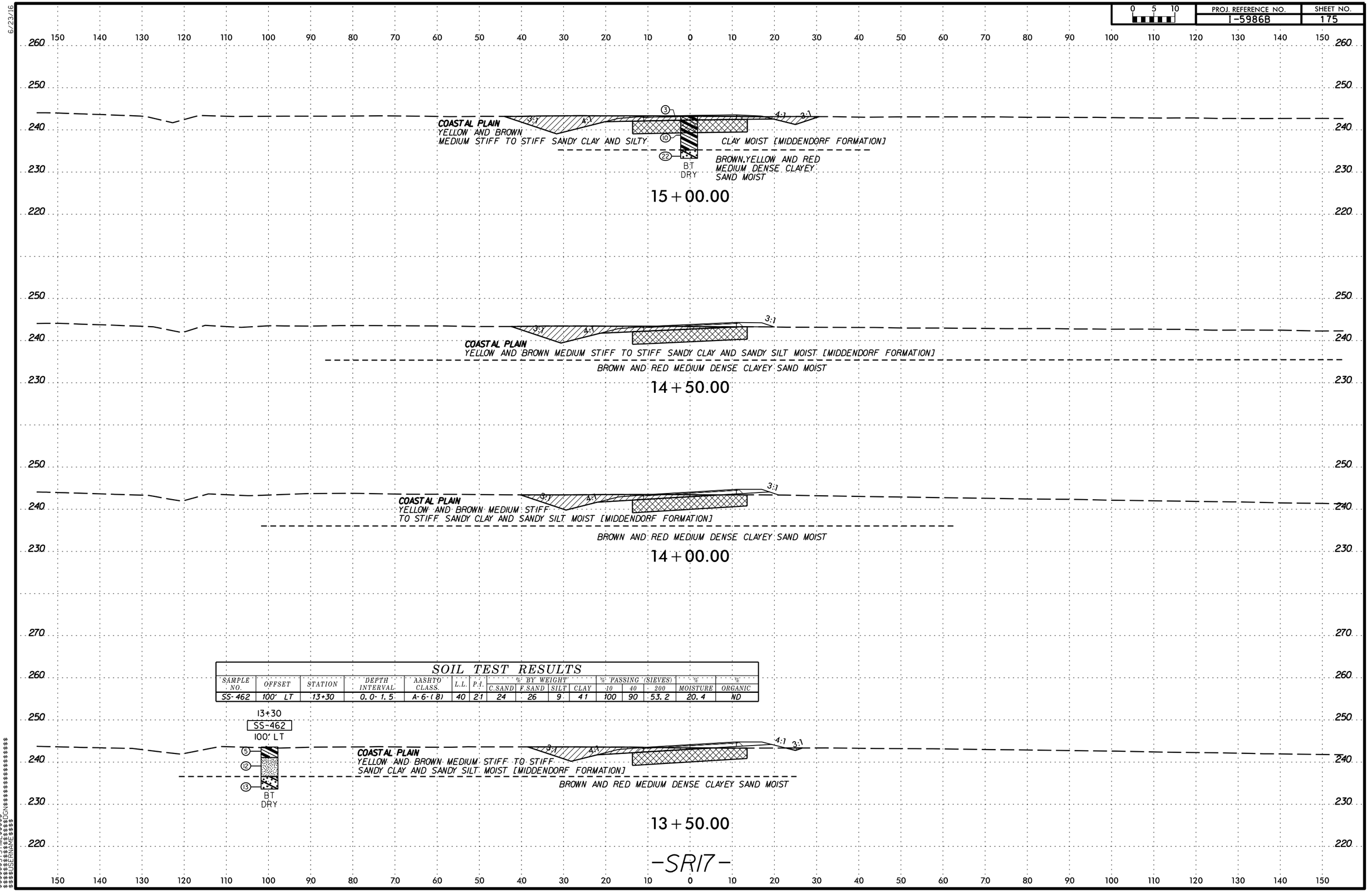
240

230

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

-SR17-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) #10	#40	#200	% MOISTURE	% ORGANIC
SS-462	100' LT	13+30	0.0-1.5	A-6-(8)	40	21	24	26	9	41	100	90	53.2	20.4	ND

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

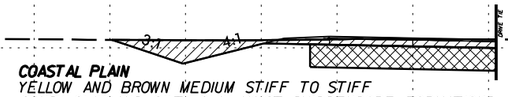
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	176

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

250
240
230
220

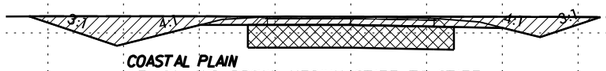
COASTAL PLAIN
YELLOW AND BROWN MEDIUM STIFF TO STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

17 + 00.00



COASTAL PLAIN
YELLOW AND BROWN MEDIUM STIFF TO STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

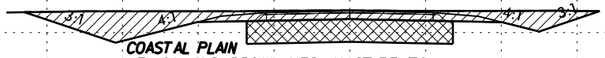
16 + 50.00



COASTAL PLAIN
YELLOW AND BROWN MEDIUM STIFF TO STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

BROWN,YELLOW AND RED MEDIUM DENSE CLAYEY SAND MOIST

16 + 00.00



COASTAL PLAIN
YELLOW AND BROWN MEDIUM STIFF TO
STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

BROWN,YELLOW AND RED MEDIUM DENSE CLAYEY SAND MOIST

15 + 50.00

-SR17-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	177

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

250
240
230
220

3:1 4:1

COASTAL PLAIN
GRAY,TAN MEDIUM STIFF TO STIFF SANDY CLAY
AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 18+25

18+50.00

260
250
240
230
220

COASTAL PLAIN
DARK GRAY,VERY LOOSE
CLAYEY SAND MOIST
[MIDDENDORF FORMATION]

3:1 4:1 4:1 3:1

② ⑥ ⑦

GRAY,TAN MEDIUM STIFF TO STIFF
SANDY CLAY AND SILTY CLAY MOIST
[MIDDENDORF FORMATION]

BT
DRY

18+00.00

250
240
230
220

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 17+75

3:1 4:1 4:1 3:1

COASTAL PLAIN
YELLOW AND BROWN MEDIUM STIFF TO STIFF
SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

17+50.00

-SR17-

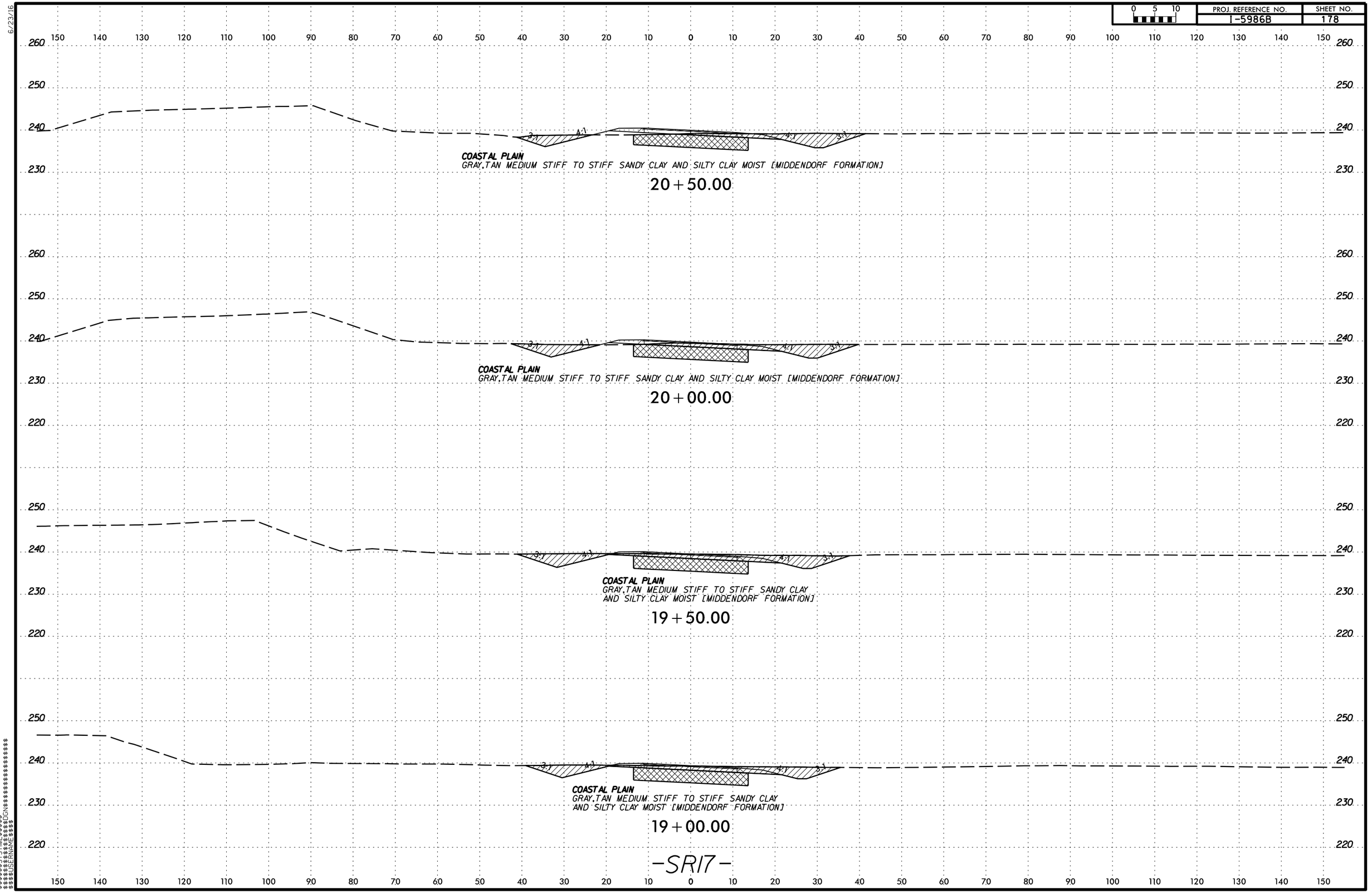
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
I-5986B	178



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	179

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

260 250 240 230 220

ARTIFICIAL FILL
DARK GRAY STIFF TO MEDIUM STIFF SANDY CLAY MOIST TO SAT

3:1 4:1 4:1 2:1

COASTAL PLAIN
GRAY,TAN MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

22+25.00

ARTIFICIAL FILL
DARK GRAY STIFF TO MEDIUM STIFF SANDY CLAY MOIST TO SAT

3:1 4:1 4:1 2:1

COASTAL PLAIN
GRAY,TAN MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

21+70.30

ARTIFICIAL FILL
DARK GRAY STIFF TO MEDIUM STIFF SANDY CLAY MOIST TO SAT

20+99

3:1 4:1 4:1 2:1

9 6 13

GRAY,TAN MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

LIGHT GRAY MEDIUM DENSE CLAYEY SAND MOIST

BT
DRY

21+11.90

-SR17-

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

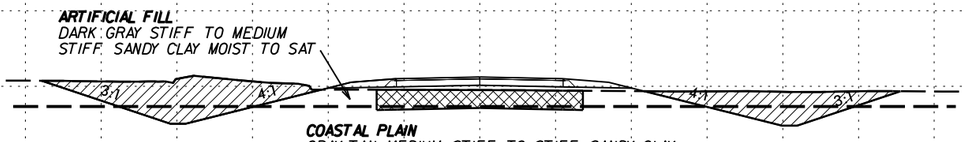
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	180

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

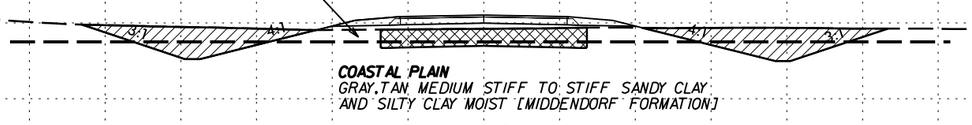
260 250 240 230 220



ARTIFICIAL FILL
DARK GRAY STIFF TO MEDIUM
STIFF SANDY CLAY MOIST TO SAT

COASTAL PLAIN
GRAY,TAN MEDIUM STIFF TO STIFF SANDY CLAY
AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

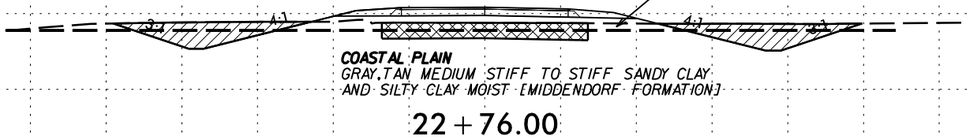
23+76.00



ARTIFICIAL FILL
DARK GRAY STIFF TO MEDIUM
STIFF SANDY CLAY MOIST TO SAT

COASTAL PLAIN
GRAY,TAN MEDIUM STIFF TO STIFF SANDY CLAY
AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

23+26.00



ARTIFICIAL FILL
DARK GRAY STIFF TO MEDIUM
STIFF SANDY CLAY MOIST TO SAT

COASTAL PLAIN
GRAY,TAN MEDIUM STIFF TO STIFF SANDY CLAY
AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

22+76.00

-SR17-

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	181

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

250
240
230
220

ARTIFICIAL FILL
DARK GRAY STIFF TO MEDIUM
STIFF SANDY CLAY MOIST TO SAT

PAVEMENT

3:1 4:1 4:1 3:1

COASTAL PLAIN
GRAY TAN MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

25+26.00

250
240
230
220

ARTIFICIAL FILL
DARK GRAY STIFF TO MEDIUM
STIFF SANDY CLAY MOIST TO SAT

PAVEMENT

3:1 4:1 4:1 3:1

COASTAL PLAIN
GRAY TAN MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

24+76.00

270
260
250
240
230
220

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-13	CL	24+10	0.0-1.5	A-6-(2)	35	20	36	24	12	28	90	74	38.3	16.5	ND

24+10
SS-13

ARTIFICIAL FILL
DARK GRAY STIFF TO MEDIUM
STIFF SANDY CLAY MOIST TO SAT

5
6
8
BT
FIAD

3:1 4:1 4:1 3:1

COASTAL PLAIN
GRAY TAN MEDIUM STIFF TO STIFF SANDY CLAY
AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

24+26.00

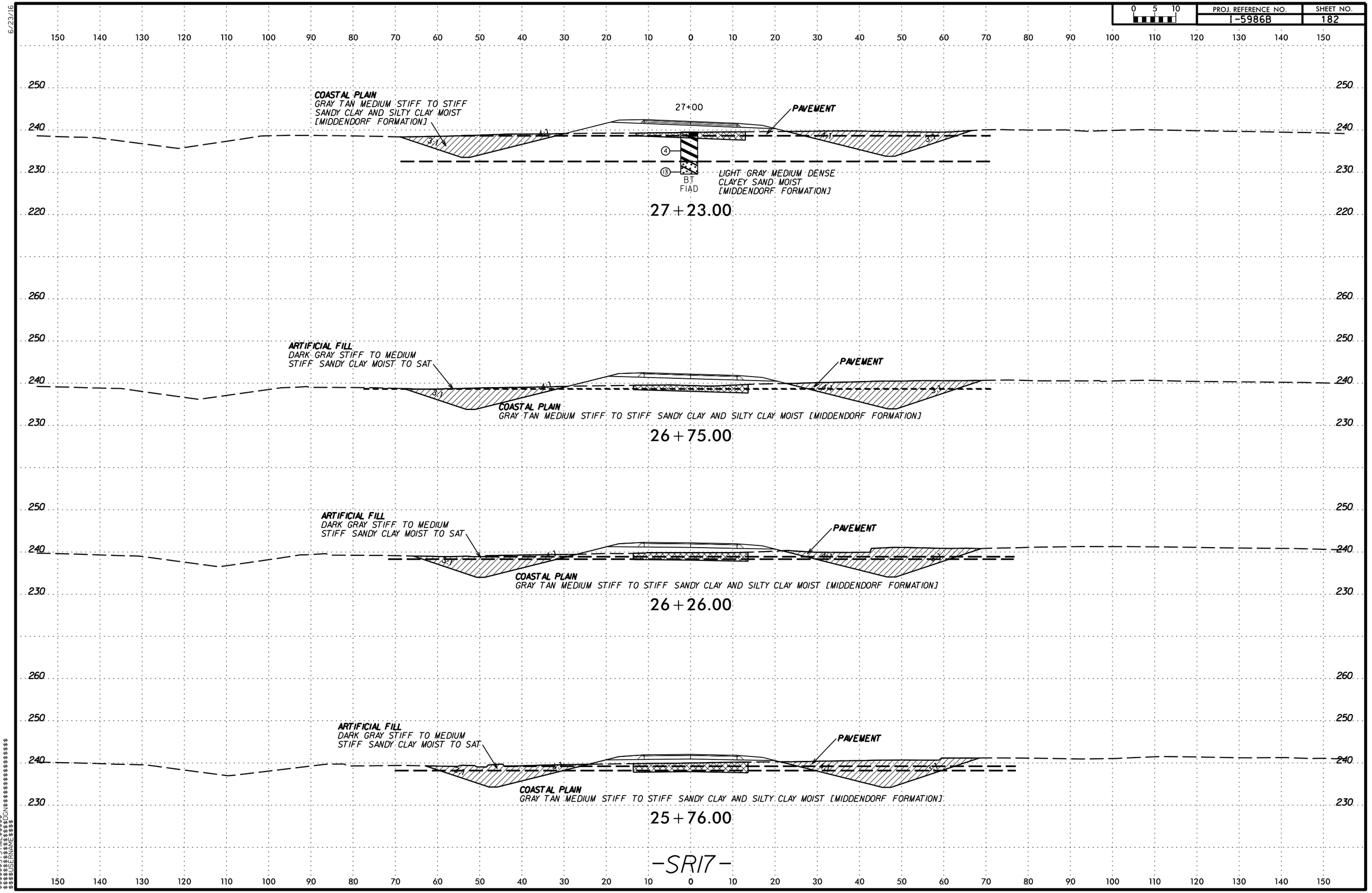
-SR17-

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

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	182



-SR17-

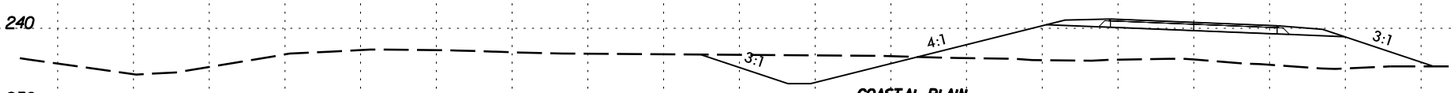
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	183

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

250 240 230 220

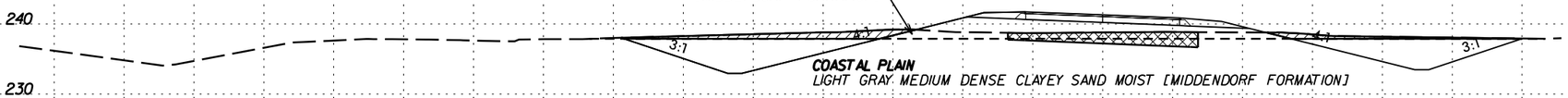


COASTAL PLAIN
LIGHT GRAY MEDIUM DENSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

28+74.60

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE AT STA. 28+54
END UNDERCUT STA. 28+54

260 250 240 230 220

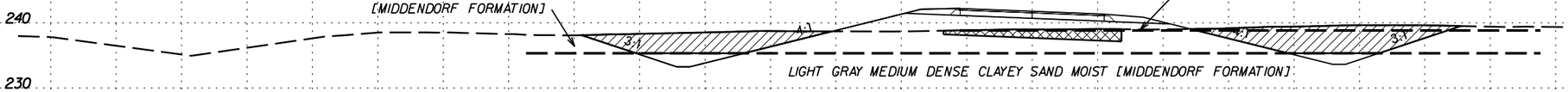


COASTAL PLAIN
GRAY TAN MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

COASTAL PLAIN
LIGHT GRAY MEDIUM DENSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

28+29.00

250 240 230



COASTAL PLAIN
GRAY TAN MEDIUM STIFF TO STIFF SANDY CLAY AND SILTY CLAY MOIST [MIDDENDORF FORMATION]

PAVEMENT

LIGHT GRAY MEDIUM DENSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

27+70.00

-SR17-

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

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
I-5986B	184

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

250 240 230 220 210

SP 136

3:1 3:1 4:1 3:1

COASTAL PLAIN
LIGHT GRAY MEDIUM DENSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

31+50.00

SP 135

3:1 3:1 4:1 3:1

COASTAL PLAIN
LIGHT GRAY MEDIUM DENSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

31+05.00

260 250 240 230 220

SP 134

BEGIN EMBANKMENT UNDERCUT STA. 30+73

3:1 3:1 4:1 3:1

COASTAL PLAIN
LIGHT GRAY MEDIUM DENSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

30+60.00

-SR17-

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

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	185

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

250 240 230 220 210

SP 138

3:1 3:1 4:1 3:1

COASTAL PLAIN
RED TAN LOOSE TO MEDIUM DENSE CLAYEY SAND AND SAND MOIST TO SAT.
[MIDDENDORF FORMATION]

32 + 91.00

SP 137

3:1 4:1 3:1

COASTAL PLAIN
RED TAN LOOSE TO MEDIUM DENSE CLAYEY SAND AND SAND MOIST TO SAT.
[MIDDENDORF FORMATION]

32 + 42.00

3:1 4:1 3:1

COASTAL PLAIN
LIGHT GRAY MEDIUM DENSE CLAYEY SAND MOIST [MIDDENDORF FORMATION]

31 + 95.00

-SR17-

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	186

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

250 240 230 220 210

SP 141

4.08:1

4:1

3:1

COASTAL PLAIN
RED TAN LOOSE TO MEDIUM DENSE CLAYEY SAND AND SAND MOIST TO SAT.[MIDDENDORF FORMATION]

34+37.75

SP 140

33+69

4.88:1

4:1

3:1

7
8
7
BT

COASTAL PLAIN
RED TAN LOOSE TO MEDIUM DENSE CLAYEY SAND AND SAND MOIST TO SAT.
[MIDDENDORF FORMATION]

PINK MEDIUM STIFF CLAY SAT.

33+88.52

SP 139

END EMBANKMENT UNDERCUT STA. 33+56

5.87:1

4:1

3:1

COASTAL PLAIN
RED TAN LOOSE TO MEDIUM DENSE CLAYEY SAND AND SAND MOIST TO SAT.
[MIDDENDORF FORMATION]

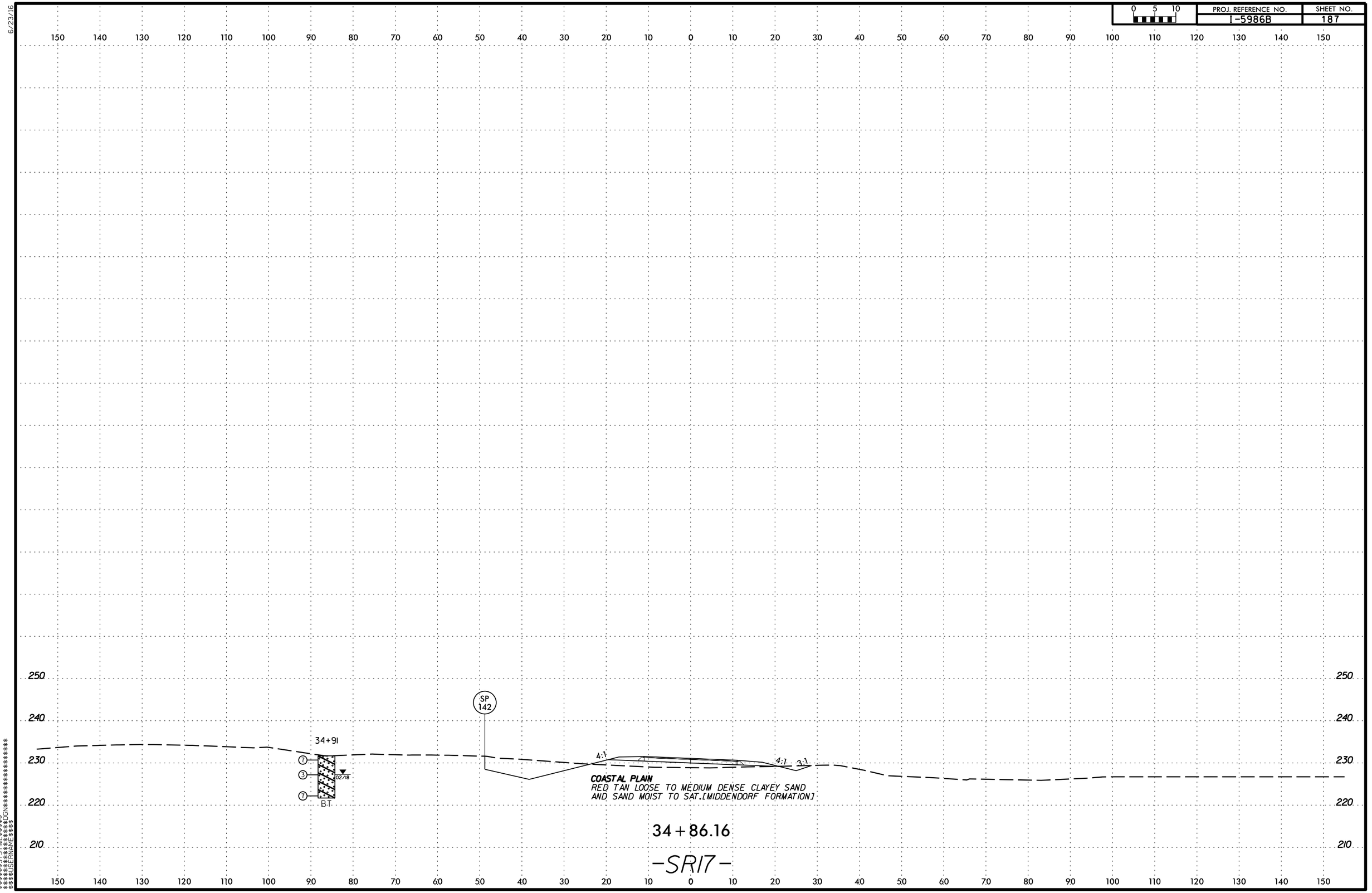
33+39.25

-SR17-

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5986B	187



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$